October 30, 2001

PERSONAL AND CONFIDENTIAL

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Members of the Board:

The forty-fifth annual actuarial valuation of the Kentucky Employees Retirement System, the forty-second annual actuarial valuation of the County Employees Retirement System, and the forty-third annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. The valuations were made on the basis of data provided by the Retirement System as of June 30, 2001.

On the basis of the assumptions as stated in each report and the data furnished us by the Administration of the Retirement Systems, it is certified that the valuations have been made by the use of generally accepted actuarial principles and that, if the recommendations of the reports are followed, adequate provision will be made for the funding of future benefits.

The three Retirement Systems are actuarially sound based on the continuation of current funding policies adopted by the Board. Adequate provision is being made for the funding of the Actuarial Accrued Liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes, as appropriate funding rates have been established by the Board for this purpose.

Respectfully Submitted,
WILLIAM M. MERCER, INCORPORATED

By
Stephen A. Gagel, F.S.A.

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ANNUAL ACTUARIAL VALUATION

JUNE 30, 2001

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

COUNTY EMPLOYEES RETIREMENT SYSTEM

STATE POLICE RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

Prepared by:

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462 South Fourth Avenue, Suite 1500
Louisville, Kentucky 40202-3431

October, 2001

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

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COUNTY EMPLOYEES RETIREMENT SYSTEM

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STATE POLICE RETIREMENT SYSTEM

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FORTY-FIFTH ANNUAL ACTUARIAL VALUATION

JUNE 30, 2001

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the forty-fifth annual actuarial valuation of the Kentucky Employees Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2001.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contributions for the ensuing fiscal year required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding, as defined in KRS 61.565, provides that the actuarial valuation method is uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System to the financing required during years of active service to accumulate the funds needed to provide member's benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the "level-percentage-of-payroll" method. Under the "level-percentage-of-payroll" method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate was increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus any reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less

than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the medical insurance contribution rate is to be increased at the start of each biennium (coincides with valuations in odd numbered years) by the percentage amount necessary to raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016. There will be no change in the even numbered years unless there are actuarial gains relative to the retirement funding which will then be used to increase the medical insurance funding rate for the next year only.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation, as allocated between Hazardous position and Non-Hazardous position employees.

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase.
In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. Actuarial assumptions used for hazardous position employees are similar to actuarial assumptions adopted for the State Police Retirement System (with the exception of the rate of retirement). The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:

1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.

2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.

3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.

4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.

5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	RETIREMENT FUND		INSURANCE FUND	
	Non Hazardous	Hazardous	Non Hazardous	Hazardous
June 30, 2000 Valuation Assets	6,806,675,460	336,213,464	399,560,252	102,212,237
Cash Flows				
> Employer Contributions	21,911,066	10,377,708	66,874,871	13,226,298
> Member Contributions	104,125,142	10,545,410		
> Retirement Benefits	291,704,431	7,995,608		
> Net Refunds	4,529,059	1,221,586		
> Insurance Premiums			37,286,345	1,982,382
> Administrative Expenses	3,826,370	302,411	308,411	24,658
> Investment Manager Fees	2,148,031	109,545	35,681	8,588
Valuation Interest Assumption	8.25%	8.25%	8.25%	8.25%
Expected Return on Valuation Assets Reflecting Actual Cash Flows *	554,283,644	28,203,487	34,170,054	8,894,950
Expected Valuation Assets	7,184,787,421	375,710,919	462,974,740	122,317,857
Actual Market Value of Assets	5,484,563,749	305,543,701	396,254,063	107,592,284
Investment Gain/(Loss)	(1,700,223,672)	(70,167,218)	(66,720,677)	(14,725,573)
Amortization Amounts From Prior Valuations				
> Valuation Year - 1				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 2				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 3				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 4				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
Unamortized Amount of Gain/(Loss) From Prior Valuations	0	0	0	0
Investment Gain/(Loss) to be Amortized from Current Valuation Date				
> Amount	(1,700,223,672)	(70,167,218)	(66,720,677)	(14,725,573)
> Amortization	(340,044,734)	(14,033,444)	(13,344,135)	(2,945,115)
June 30, 2001 Valuation Assets				
> Expected Assets	7,184,787,421	375,710,919	462,974,740	122,317,857
> Amortization Amounts	(340,044,734)	(14,033,444)	(13,344,135)	(2,945,115)
> Valuation Assets	6,844,742,687	361,677,475	449,630,605	119,372,742

* Cash flows are assumed equally spread throughout the year

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1) Mortality:

(a) Active & retired lives - 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees.

(b) Disabled lives - Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).

(2) Disablement - Graduated rates based on 2000 experience study (no change from 1995 experience study).

(3) Termination of employment # - Graduated select (non-hazardous and hazardous) and ultimate rates based on 2000 experience study.

(4) Retirement # - Non-Hazardous:

Age	Retirement Rate
55-57	.04
58-59	.05
60-61	.06
62	.25
63-64	.10
65	.50
66-67	.20
68	.25
69	.40
70 & Over	1.00

At age 55-64 in lieu of the age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits.

Hazardous: Assumed that 50% will retire as soon as eligible for unreduced benefits and balance will continue to age 60.

(5) Marital status

(a) Percentage married - 100%.

(b) Age difference - Males are assumed to be 3 years older than their spouses.

(6) Dependent children - For hazardous position employees under duty related death benefits, it is assumed that the employee is survived by 2 dependent children, each age 6.

(7) Investment return - 8.25% per year, net of investment related expenses, compounded annually.

(8) Compensation progression # - 1st year: 12.00%
2nd year: 10.00%
3rd year: 8.00%
Thereafter: 6.50%, compounded annually.

(9) Underlying Inflation Rate - 3.5% per year; reflected in investment return and compensation progression assumptions.

(10) Retiree Medical Insurance # - It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution rates were assumed to be as follows:

Plan Type	Rate in Effect on Valuation Date
Single	
- Region 1	$252.46
- Region 2	293.46
- Region 3	273.52
- All Others	234.00
Family	577.00
Parent Plus	350.00
Couple	525.00
Medicare*	
- Low Option	96.41
- High Option	229.03

Region 1: Boyd, Carter, Elliott, Greenup

Region 2: Christian, Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Todd, Trigg, Union, Webster

Region 3: Harlan, Lewis, Mason, Perry, Roberston

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem BC/BS	101.26	231.35	2,839	17,314
Bankers Life	91.78	216.94	272	156
Option 2000	83.05	216.51	504	1,767
Humana	85.00	247.00	490	1,729
Humana Gold Plus	85.00	136.00	17	507

*Weighted average of current rates available from different carriers; weighting based on number of contracts in force.

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

Years	Medical Increase
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

(11) Missing data - For those active members with incomplete data, the following assumptions were made:

. If reported salary was zero or blank, then monthly salary was assumed to be $887.58

. If reported age was blank, then assume current age equal to age 18 plus years of service reported

(12) Members with Multiple Service Records

- For active members with service in more than one system, the liability has been valued as follows:

  . Service under all systems is aggregated for purposes of determining benefit eligibility.

  . Future service is projected only under the system in which the member is currently active.

  . The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.

  . The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

  For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Changes in assumptions from those used in 2000 valuation.

B. SAMPLE RATES FOR NON-HAZARDOUS POSITION EMPLOYEES*

(1) Annual Rates of Mortality:

	Active Mortality		Disabled Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

(2) Annual Rates of Decrement:

Age	Disablement	Ultimate Termination
25	0.033%	2.40%
30	0.039%	2.40%
40	0.105%	2.00%
50	0.423%	1.60%
55	0.794%	1.20%
60	1.395%	0.20%

(3) Select Rates of Termination:

Years of Service	Select Termination	
	Non-Hazardous	Hazardous
1	35.0%	30.0%
2	10.0%	8.0%
3	7.0%	4.0%
4	5.0%	4.0%
5	4.0%	4.0%

(4) Compensation Progression (after 1st 3 Years):

Age	Rate of Annual Increase	Compensation at Normal Retirement as Percentage Of Current Annual Compensation
25	6.50%	1,241.6%
30	6.50%	906.2%
40	6.50%	482.8%
50	6.50%	257.2%
55	6.50%	187.7%
60	6.50%	137.0%

*Sample rates for hazardous position employees (other than select termination) are included in the State Police Retirement System valuation.

SECTION III

RESULTS OF THE 2001 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the State required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the Normal Cost, medical insurance and the expenses of administration, is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated annual State payroll as of June 30, 2001.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2001 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate of the State is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the Kentucky Employees Retirement System as of June 30, 2001 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements for the Retirement Fund.

Table X contains information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT AND INSURANCE FUND
DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2001

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND		
		Percent *
Total Actuarial Accrued Liability	$ 5,729,229,055	347.49%
Assets at Actuarial Value	7,206,420,161	437.09%
Unfunded Actuarial Accrued Liability	$ (1,477,191,106)	(89.60%)
Contribution - Payment on Unfunded Actuarial Accrued Liability	$ (75,262,003)	(4.56%)
NORMAL COST - RETIREMENT FUND		
Retirement Benefits	$ 132,622,005	8.04%
Disability Benefits	16,000,088	0.97%
Withdrawal Benefits (Vested and Refund of Contributions)	11,052,931	0.67%
Survivor Benefits	8,420,856	0.51%
Total Normal Cost	$ 168,095,880	10.19%
Less: Employee Contributions	85,224,762	5.17%
Normal Cost - State	$ 82,871,118	5.02%
TOTAL ANNUAL EMPLOYER COST - RETIREMENT AND INSURANCE FUND		
Non-Hazardous Duty Cost		
Normal Cost	$ 71,104,685	4.66% **
Payment on Unfunded Actuarial Accrued Liability	(71,246,407)	(4.67%) **
Administrative Expense	5,364,981	0.35% **
Subtotal - Retirement Fund (Not Less Than Zero)	$ 5,223,259	0.34% **
Group Hospital and Medical Insurance Premiums	84,642,494	5.55% **
Total Annual Cost	$ 89,865,753	5.89% **
Hazardous Duty Cost		
Normal Cost	$ 11,766,433	9.52% ***
Payment on Unfunded Actuarial Accrued Liability	(4,015,596)	(3.25%) ***
Administrative Expense	374,301	0.30% ***
Subtotal - Retirement Fund (Not Less Than Zero)	$ 8,125,138	6.57% ***
Group Hospital and Medical Insurance Premiums	15,171,537	12.27% ***
Total Annual Cost	$ 23,296,675	18.84% ***
Based on estimated annual salaries		
* Total	$ 1,648,737,395	
** Non-Hazardous Position Employees	$ 1,525,089,988	
*** Hazardous Position Employees	$ 123,647,407	

TABLE II
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2001

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members			
Retirement Benefits	$ 2,382,224,431	$ 180,582,151	$ 2,562,806,582
Disability Benefits	157,611,834	10,217,619	167,829,453
Withdrawal Benefits (Vested and Refund of Contributions)	85,133,457	904,066	86,037,523
Survivor Benefits	149,310,476	7,117,656	156,428,132
Total - Actives	$ 2,774,280,198	$ 198,821,492	$ 2,973,101,690
Inactive Members			
Retired Members and Beneficiaries	$ 2,621,725,952	$ 83,538,933	$ 2,705,264,885
Vested Retirement	34,959,866	2,055,232	37,015,098
Vested Membership	13,069,278	778,104	13,847,382
Total - Inactives	$ 2,669,755,096	$ 86,372,269	$ 2,756,127,365
Total Actuarial Accrued Liability	$ 5,444,035,294	$ 285,193,761	$ 5,729,229,055
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$ 5,444,035,294	$ 285,193,761	$ 5,729,229,055
Less Actuarial Value of Assets	6,844,742,687	361,677,475	7,206,420,161
Unfunded Actuarial Accrued Liability	$ (1,400,707,393)	$ (76,483,714)	$ (1,477,191,106)
NORMAL COST			
Retirement Benefits	$ 115,043,802	$ 17,578,203	$ 132,622,005
Disability Benefits	14,069,688	1,930,400	16,000,088
Withdrawal Benefits (Vested and Refund of Contributions)	10,283,646	769,285	11,052,931
Survivor Benefits	7,497,420	923,436	8,420,856
Total Normal Cost	$ 146,894,556	$ 21,201,324	$ 168,095,880
Less Employee Contributions	75,789,871	9,434,891	85,224,762
Total Normal Cost - State	$ 71,104,685	$ 11,766,433	$ 82,871,118

TABLE III
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2001

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
Non-Hazardous Position Employees				
6/30/1990	$ 256,534,456	$ 320,210,968	$ 21,867,527	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	103,692,389	128,098,504	$ 8,425,551	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(212,448,599)	(259,120,054)	$ (16,455,160)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's; Asset valuation method change
6/30/1993	(57,917,315)	(69,590,195)	$ (4,276,039)	Experience gains/losses for 7/1/1992 to 6/30/1993; State contribution shortfall
6/30/1994	59,519,052	70,310,083	$ 4,188,653	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's; State contribution shortfall
6/30/1995	65,659,241	76,117,631	$ 4,404,471	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(188,573,585)	(214,176,369)	$ (12,057,487)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(277,888,742)	(308,486,216)	$ (16,922,320)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(326,522,755)	(353,786,834)	$ (18,936,794)	Experience gains/losses for 7/1/1997 to 6/30/1998; Increase in death benefit from $2,500 to $5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(362,615,121)	(382,978,122)	$ (20,028,607)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998; Benefit multiplier change effective
6/30/2000	(964,739,576)	(992,010,673)	$ (50,749,282)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	584,703,884	584,703,884	$ 29,293,080	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000; 3-year average earnings window
Total	$ (1,320,596,671)	$ (1,400,707,393)	$ (71,246,407)	

TABLE III (Continued)
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2001

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
Hazardous Position Employees				
6/30/1990	$ (366,782)	$ (457,824)	$ (31,265)	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	8,515,857	10,520,238	691,958	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(2,222,347)	(2,710,559)	(172,131)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's; Asset valuation method change
6/30/1993	1,873,766	2,251,411	138,340	Experience gains/losses for 7/1/1992 to 6/30/1993; State contribution shortfall
6/30/1994	2,736,468	3,232,600	192,579	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's; State contribution shortfall
6/30/1995	4,677,834	5,422,931	313,792	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(33,735,166)	(38,315,417)	(2,157,043)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(7,971,975)	(8,849,744)	(485,462)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(13,896,455)	(15,056,785)	(805,929)	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average salary definition from 5 years to 3 years; Increase in death benefit from $2,500 to $5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(13,902,335)	(14,683,034)	(767,879)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(35,735,060)	(36,745,212)	(1,879,812)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	18,907,681	18,907,681	947,256	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000
Total	$ (71,118,514)	$ (76,483,714)	$ (4,015,596)	

TABLE IV
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
INSURANCE FUND
DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2001

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members	$ 985,035,272	$ 137,293,626	$ 1,122,328,898
Inactive Members			
Retired Members	$ 730,675,961	$ 60,211,381	$ 790,887,342
Beneficiaries	1,126,182	13,157,907	14,284,089
Vested Retirement	52,745,683	3,787,908	56,533,591
Vested Membership	0	0	0
Total - Inactives	$ 784,547,826	$ 77,157,196	$ 861,705,022
Total Actuarial Accrued Liability	$ 1,769,583,098	$ 214,450,822	$ 1,984,033,920
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$ 1,769,583,098	$ 214,450,822	$ 1,984,033,920
Less Actuarial Value of Assets	449,630,605	119,372,742	569,003,346
Unfunded Actuarial Accrued Liability	$ 1,319,952,493	$ 95,078,080	$ 1,415,030,574
NORMAL COST			
Gross Normal Cost	$ 81,313,764	$ 18,122,736	$ 99,436,500
Less Employee Contributions	0	0	0
Net Normal Cost - State	$ 81,313,764	$ 18,122,736	$ 99,436,500
Estimated Annual Salaries	$ 1,525,089,988	$ 123,647,407	$ 1,648,737,395
TOTAL ANNUAL EMPLOYER COST			
Contribution Amount			
Normal Cost	$ 81,313,764	$ 18,122,736	$ 99,436,500
Payment on Unfunded Actuarial Accrued Liability	72,885,260	5,255,159	78,140,419
Total Annual Cost	$ 154,199,024	$ 23,377,895	$ 177,576,919
As Percent of Payroll			
Normal Cost	5.33%	14.66%	6.03%
Payment on Unfunded Actuarial Accrued Liability	4.78%	4.25%	4.74%
Total Annual Cost	10.11%	18.91%	10.77%
INSURANCE FUND SHORTFALL			
Full Entry Age Funding Level	10.11%	18.91%	10.77%
Current Funding Allocation *	4.67%	11.14%	0.00%
Additional to Pick Up By 2016	5.44%	7.77%	10.77%
Expected Increase in Insurance Fund Rate in 2002 Valuation	0.00%	0.00%	N/A

* Without regard to any one-year temporary adjustments for actuarial gains

TABLE V
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2001

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
Non-Hazardous Position Employees				
6/30/1996	$ 988,745,810	$1,122,988,610	$ 63,220,890	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	(31,222,593)	(34,660,416)	(1,901,332)	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	19,914,214	21,577,017	1,154,931	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(69,145,663)	(73,028,604)	(3,819,177)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	44,198,913	45,448,321	2,325,045	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	237,627,565	237,627,565	11,904,903	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
Total	$1,190,118,246	$1,319,952,493	$ 72,885,260	
Hazardous Position Employees				
6/30/1996	$ 61,002,123	$ 69,284,431	$ 3,900,506	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	15,100,456	16,763,122	919,558	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	2,832,306	3,068,799	164,261	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(10,377,564)	(10,960,325)	(573,192)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	(3,445,265)	(3,542,656)	(181,235)	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	20,464,709	20,464,709	1,025,261	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
Total	$ 85,576,765	$ 95,078,080	$ 5,255,159	

TABLE VI
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
BENEFIT PAYMENT PROJECTIONS

RETIREMENT FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2001 to 6/30/2002	314,660,000	11,226,000	325,886,000
7/1/2002 to 6/30/2003	333,058,000	13,008,000	346,066,000
7/1/2003 to 6/30/2004	352,130,000	14,770,000	366,900,000
7/1/2004 to 6/30/2005	373,663,000	16,838,000	390,501,000
7/1/2005 to 6/30/2006	398,377,000	19,125,000	417,502,000
7/1/2006 to 6/30/2007	426,620,000	21,699,000	448,319,000
7/1/2007 to 6/30/2008	456,677,000	25,101,000	481,778,000
7/1/2008 to 6/30/2009	490,726,000	29,156,000	519,882,000
7/1/2009 to 6/30/2010	524,749,000	33,535,000	558,284,000
7/1/2010 to 6/30/2011	561,348,000	37,615,000	598,963,000

INSURANCE FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2001 to 6/30/2002	47,680,000	4,144,000	51,824,000
7/1/2002 to 6/30/2003	54,005,000	4,895,000	58,900,000
7/1/2003 to 6/30/2004	60,485,000	5,697,000	66,182,000
7/1/2004 to 6/30/2005	67,313,000	6,605,000	73,918,000
7/1/2005 to 6/30/2006	75,199,000	7,683,000	82,882,000
7/1/2006 to 6/30/2007	83,779,000	8,849,000	92,628,000
7/1/2007 to 6/30/2008	92,595,000	10,271,000	102,866,000
7/1/2008 to 6/30/2009	102,629,000	11,970,000	114,599,000
7/1/2009 to 6/30/2010	114,124,000	14,088,000	128,212,000
7/1/2010 to 6/30/2011	126,747,000	16,248,000	142,995,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

TABLE VII
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2001

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 7,206,420,161
Actuarial Present Value of Future Member Contributions		984,772,747
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 880,066,904	
For Unfunded Actuarial Accrued Liability	(1,477,191,106)	
Total		$ (597,124,202)
Total Actuarial Assets		$ 7,594,068,706
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 2,705,264,885	
Vested Retirement	37,015,098	
Vested Membership	13,847,382	
Total - Inactive		$ 2,756,127,365
Actuarial Present Value of Future Benefits		
Active Members:		
Retirement Benefits	$ 4,034,992,143	
Disability Benefits	335,398,531	
Withdrawal Benefits (Vested and Refund of Contributions)	219,022,476	
Survivor Benefits	248,528,191	
Total - Active		$ 4,837,941,341
Refunds and Expenses Payable		$ 0
Total Actuarial Liabilities		$ 7,594,068,706

Notes

* Values as of June 30, 2001		
Market value of assets:	Non-Hazardous	$ 5,484,563,749
	Hazardous	$ 305,543,701
	Total	$ 5,790,107,450
Actuarial value of assets:		$ 7,206,420,161
Member's Contribution Account:		$ 895,839,477

** Present value of accrued benefit deferred to normal retirement date.

TABLE VIII
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
INSURANCE FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2001

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 569,003,346
Actuarial Present Value of Future Member Contributions (Note: All Future Member Contributions Credited Against Retirement Fund)		0
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 1,183,577,357	
For Unfunded Actuarial Accrued Liability	1,415,030,574	
Total		$ 2,598,607,931
Total Actuarial Assets		$ 3,167,611,277
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 805,171,431	
Vested Retirement	56,533,591	
Vested Membership	0	
Total - Inactive		$ 861,705,022
Actuarial Present Value of Future Benefits Active Members:		$ 2,305,906,255
Refunds and Expenses Payable		$ 0
Total Actuarial Liabilities		$ 3,167,611,277
Notes		
* Values as of June 30, 2001		
Market value of assets:	Non-Hazardous	$ 396,254,063
	Hazardous	$ 107,592,284
	Total	$ 503,846,347
Actuarial value of assets:		$ 569,003,346

TABLE IX
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2001
GASB DISCLOSURE INFORMATION

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS			
Inactive Members			
Retired Members	21,440	933	22,373
Beneficiaries	3,678	120	3,798
Vested Retirements	3,312	123	3,435
Vested Membership	13,429	799	14,228
Total Inactive Members	41,859	1,975	43,834
Active Members			
Vested Members	31,020	2,138	33,158
Nonvested Members	16,760	2,090	18,850
Total Active Members	47,780	4,228	52,008
Total Members	89,639	6,203	95,842

TABLE X
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2001
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS			
Contracts in Force - Retirees and Dependents			
(1) Single; - 100% Paid	4,091	221	4,312
Pre-Medicare - 75% Paid	232	24	256
- 50% Paid	219	44	263
- 25% Paid	118	12	130
- 0% Paid	539	1	540
(2) Family; - 100% Paid	391	64	455
Pre-Medicare - 75% Paid	7	5	12
- 50% Paid	3	5	8
- 25% Paid	6	3	9
- 0% Paid	1	0	1
(3) Parent +; - 100% Paid	287	33	320
Pre-Medicare - 75% Paid	6	12	18
- 50% Paid	7	3	10
- 25% Paid	2	3	5
- 0% Paid	44	0	44
(4) Couple; - 100% Paid	609	72	681
Pre-Medicare - 75% Paid	20	6	26
- 50% Paid	17	21	38
- 25% Paid	13	9	22
- 0% Paid	3	0	3
(5) Medicare Regular - 100% Paid	712	35	747
- 75% Paid	0	0	0
- 50% Paid	0	0	0
- 25% Paid	396	17	413
- 0% Paid	710	0	710
(6) Medicare High - 100% Paid	5,798	261	6,059
Option - 75% Paid	1,666	59	1,725
- 50% Paid	1,227	72	1,299
- 25% Paid	596	27	623
- 0% Paid	1,820	1	1,821
Vested Retirements	3,312	123	3,435
Vested Membership	13,429	799	14,228
Active Members	47,780	4,228	52,008
UNFUNDED MEDICAL BENEFIT OBLIGATION			
Medical Benefit Obligation			
Retirees, Beneficiaries and			
Vested Terminated Members	$ 784,547,826	$ 77,157,196	$ 861,705,022
Active Members	985,035,272	137,293,626	1,122,328,898
Total Medical Benefit Obligation	$ 1,769,583,098	$ 214,450,822	$ 1,984,033,920
Net Assets at Actuarial Value	$ 449,630,605	$ 119,372,742	$ 569,003,346
Unfunded Medical Benefit Obligation	$ 1,319,952,493	$ 95,078,080	$ 1,415,030,574
NOTE: Medical Benefit Obligation based on Entry Age Normal Actuarial Cost Method			

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from $5,120,191,329 on June 30, 2000 to $5,729,225,055 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from $(2,022,697,595) to $(1,477,191,106). Total actuarial value of assets as of June 30, 2001 was equal to $7,206,420,161. The Unfunded Actuarial Accrued Liability increased from (130.71%) to (89.60%) as a percentage of annual payroll and increased from (39.5%) to (25.8%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from $1,632,642,971 on June 30, 2000 to $1,984,033,920 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from $1,130,870,482 to $1,415,030,574. Total actuarial value of assets as of June 30, 2001 was equal to $569,003,346. The Unfunded Actuarial Accrued Liability increased from 69.3% to 71.3% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

The change in contribution rate between the 2000 and 2001 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

	Non-Hazardous Position Employees	**Hazardous Position Employees**
June 30, 2000 Contribution Rate	5.89%	18.84%
Change in Payment Percentage Due to Covered Payroll Experience	0.10%	0.10%
Investment Return Experience		
> Prior to Asset Valuation Method Change	0.06%	0.04%
> Impact of Asset Valuation Method Change	1.05%	0.53%
Salary Increase Experience	0.28%	0.11%
Decrements Experience*	0.02%	(0.06%)
Change in Insurance Fund Rate		
> One-Year Temporary Funding Rate	(0.57%)	(0.78%)
> Increase in Long Term Funding Rate	0.23%	0.39%
Change in Administrative Expense Rate	(0.13%)	(0.13%)
Retiree COLA Effective 7/1/2000	0.19%	0.07%
Legislated Changes		
> 3 Year Average Window for Nonhazardous	0.25%	0.00%
Change in Actuarial Assumptions	0.13%	(0.27%)
Reduction in Amount Available from Prior Year Retirement Fund Rate to Offset Current Year Increases	(1.61%)	N/A
June 30, 2001 Contribution Rate	5.89%	18.84%
* Includes mortality, disability, termination of employment and retirement experience.		

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Non-Hazardous position employees was determined at 0.34%. An additional 5.55% is required to fund medical insurance for retirees, bringing the required contribution up to 5.89%. This is the same as the current 5.89% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2002 should remain at the 5.89% level, and we so recommend.

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Hazardous position employees was determined at 6.57%. An additional 12.27% is required to fund medical insurance for retirees, bringing the required contribution up to 18.84%. This is the same as the current 18.84% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning
July 1, 2002 should remain at the 18.84% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2002 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - RETIREMENT FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1956	$ 16,200,000	$ 16,200,000	100.0%	$ 0	$ 0
1961	49,201,024	31,670,465	64.4%	17,530,559	4,479,508
1966	127,889,238	72,137,125	56.4%	55,752,113	9,085,814
1971	185,075,453	59,614,477	32.2%	125,460,976*	18,353,116
1975	296,343,758	77,434,549	26.1%	218,909,209*	26,529,526
1976	387,214,910	130,838,120	33.8%	256,376,790*	37,467,581
1977	446,255,236	149,511,331	33.5%	296,743,905*	40,367,115
1978	507,324,915	168,497,917	33.2%	338,826,998*	42,083,093
1979	592,095,113	202,676,662	34.2%	389,418,451*	50,591,453
1980	710,126,703	249,770,835	35.2%	460,355,868*	70,937,417
1981	692,160,395	164,735,129	23.8%	527,425,266	67,069,398
1982	810,250,589	195,803,691	24.2%	614,446,898	87,021,632
1983	862,291,959	152,196,081	17.7%	710,095,878	95,648,980
1984	1,016,088,830	201,535,007	19.8%	814,553,823	104,457,945
1985	1,104,429,988	169,949,215	15.4%	934,480,773	119,926,950
1986	1,245,083,143	166,635,243	13.4%	1,079,353,421	144,872,648
1987	1,384,259,808	120,259,389	8.7%	1,264,000,419	184,646,998
1988	1,561,743,738	135,687,336	8.7%	1,426,056,402	162,055,983
1989	1,734,607,903	145,998,805	8.4%	1,588,609,098	162,552,696
1990	2,055,489,412	256,167,674	12.5%	1,799,321,738	210,712,640
1991	2,288,611,147	375,396,216	16.4%	1,913,214,931	113,893,193
1992**	2,525,190,930	170,708,609	6.8%	2,354,482,321	441,267,390
1993	2,703,771,076	118,561,539	4.4%	2,585,209,537	230,727,216
1994	2,912,050,275	183,001,288	6.3%	2,729,048,987	143,839,450
1995	3,240,852,288	257,038,750	7.9%	2,983,813,538	244,764,551
1996	3,415,404,483	40,108,906	1.2%	3,375,295,577	391,482,039
1997	3,603,966,110	(246,746,133)	(6.8%)	3,850,712,243	475,416,666
1998	3,971,749,822	(596,537,421)	(15.0%)	4,568,287,243	717,575,000
1999	4,531,905,609	(992,274,107)	(21.9%)	5,524,179,716	955,892,473
2000	5,120,191,329	(2,022,697,595)	(39.5%)	7,142,888,924	1,618,709,208
2001***	5,729,229,055	(1,477,191,106)	(25.8%)	7,206,420,161	63,531,237
*Includes capitalized appreciation of investments.					
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - INSURANCE FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1990	$ 719,493,806	$ 686,770,874	95.5%	$ 32,722,932	$ N/A
1991	804,674,050	758,124,715	94.2%	46,549,335	13,826,403
1992	1,001,703,695	939,238,069	93.8%	62,465,626	15,916,291
1993	1,177,861,283	1,100,187,708	93.4%	77,673,575	15,207,949
1994	1,444,612,678	1,345,529,145	93.1%	99,083,533	21,409,958
1995	1,462,174,101	1,334,881,910	91.3%	127,292,191	28,208,658
1996**	1,222,394,138	1,049,747,933	85.9%	172,646,205	45,354,014
1997	1,274,464,242	1,063,299,895	83.4%	211,164,347	38,518,142
1998	1,379,578,155	1,114,866,185	80.8%	264,711,970	53,547,623
1999	1,422,523,386	1,064,238,850	74.8%	358,284,536	93,572,566
2000	1,632,642,971	1,130,870,482	69.3%	501,772,489	143,487,953
2001***	1,984,033,920	1,415,030,574	71.3%	569,003,346	67,230,857
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the Kentucky Employees Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding polices adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Stephen A. Gagel, F.S.A. Date

Edward W. Maynard, F.S.A. Date

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SECTION V

STATISTICAL DATA

AS OF

JUNE 30, 2001

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

EARNINGS BY AGE GROUPS

AGE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	858	16,520,472	19,255	91	1,536,756	16,887	949	18,057,228	19,028
20-24	1,432	31,304,532	21,861	1,097	19,710,446	17,968	2,529	51,014,978	20,172
25-29	1,446	35,273,198	24,394	2,656	59,307,067	22,329	4,102	94,580,265	23,057
30-34	1,987	57,667,238	29,022	3,248	82,720,424	25,468	5,235	140,387,662	26,817
35-39	2,233	75,641,508	33,874	3,607	100,308,362	27,809	5,840	175,949,870	30,128
40-44	2,696	100,328,858	37,214	4,366	131,174,848	30,045	7,062	231,503,706	32,782
45-49	3,085	124,411,140	40,328	4,801	158,086,052	32,928	7,886	282,497,192	35,823
50-54	2,921	129,174,165	44,223	4,066	137,359,146	33,782	6,987	266,533,311	38,147
55-59	1,846	81,543,708	44,173	2,454	79,344,055	32,333	4,300	160,887,763	37,416
60-64	906	37,979,239	41,920	1,137	35,891,016	31,566	2,043	73,870,255	36,158
65-69	276	12,279,768	44,492	299	8,438,328	28,222	575	20,718,096	36,031
70-74	103	4,420,752	42,920	96	2,580,948	26,885	199	7,001,700	35,184
75+	38	1,244,568	32,752	35	941,940	26,913	73	2,186,508	29,952
TOTAL	19,827	707,789,146	35,698	27,953	817,399,387	29,242	47,780	1,525,188,532	31,921

EARNINGS BY SERVICE GROUPS

SERVICE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	1,332	26,217,535	19,683	1,542	27,959,768	18,132	2,874	54,177,303	18,851
1	2,229	54,658,046	24,521	3,275	68,450,675	20,901	5,504	123,108,721	22,367
2	2,000	53,557,653	26,779	2,369	55,600,315	23,470	4,369	109,157,968	24,985
3	1,151	34,177,250	29,694	1,457	35,715,523	24,513	2,608	69,892,773	26,799
4	1,046	31,577,676	30,189	1,467	36,585,192	24,939	2,513	68,162,868	27,124
0-4	7,758	200,188,160	25,804	10,110	224,311,472	22,187	17,868	424,499,632	23,758
5-9	3,279	109,226,419	33,311	5,309	146,590,306	27,612	8,588	255,816,725	29,788
10-14	2,871	108,584,724	37,821	4,680	143,239,602	30,607	7,551	251,824,326	33,350
15-19	2,045	86,596,992	42,346	2,875	100,325,556	34,896	4,920	186,922,548	37,992
20-24	1,361	60,142,351	44,190	2,126	77,058,139	36,246	3,487	137,200,490	39,346
25-29	1,469	75,381,828	51,315	1,889	78,185,388	41,390	3,358	153,567,216	45,732
30-34	769	47,655,672	61,971	757	36,595,032	48,342	1,526	84,250,704	55,210
35-39	214	15,094,752	70,536	172	9,056,028	52,651	386	24,150,780	62,567
40+	61	4,918,248	80,627	35	2,037,864	58,225	96	6,956,112	72,460
TOTAL	19,827	707,789,146	35,698	27,953	817,399,387	29,242	47,780	1,525,188,532	31,921

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

EARNINGS BY AGE GROUPS

AGE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	60	894,163	14,903	3	58,104	19,368	63	952,267	15,115
20-24	168	3,148,260	18,740	35	637,920	18,226	203	3,786,180	18,651
25-29	337	7,234,476	21,467	113	2,480,940	21,955	450	9,715,416	21,590
30-34	384	9,370,008	24,401	156	3,663,648	23,485	540	13,033,656	24,136
35-39	399	11,020,116	27,619	160	4,104,156	25,651	559	15,124,272	27,056
40-44	387	11,908,668	30,772	191	5,998,692	31,407	578	17,907,360	30,982
45-49	425	14,221,860	33,463	211	6,634,788	31,444	636	20,856,648	32,793
50-54	505	18,700,344	37,030	162	4,932,132	30,445	667	23,632,476	35,431
55-59	280	10,244,544	36,588	86	2,683,320	31,201	366	12,927,864	35,322
60-64	100	3,473,664	34,737	33	1,076,412	32,619	133	4,550,076	34,211
65-69	21	692,592	32,981	6	217,944	36,324	27	910,536	33,724
70-74	4	159,732	39,933	2	90,924	45,462	6	250,656	41,776
75+	0	0	0	0	0	0	0	0	0
TOTAL	3,070	91,068,427	29,664	1,158	32,578,980	28,134	4,228	123,647,407	29,245

EARNINGS BY SERVICE GROUPS

SERVICE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	278	4,382,383	15,764	113	1,991,496	17,624	391	6,373,879	16,301
1	429	9,288,276	21,651	169	3,769,680	22,306	598	13,057,956	21,836
2	241	5,883,360	24,412	119	3,033,324	25,490	360	8,916,684	24,769
3	290	9,439,380	32,550	91	2,287,200	25,134	381	11,726,580	30,778
4	157	4,252,404	27,085	80	2,069,580	25,870	237	6,321,984	26,675
0-4	1,395	33,245,803	23,832	572	13,151,280	22,992	1,967	46,397,083	23,588
5-9	544	16,465,812	30,268	213	6,171,984	28,976	757	22,637,796	29,905
10-14	864	29,965,080	34,682	309	10,530,924	34,081	1,173	40,496,004	34,523
15-19	179	7,289,772	40,725	41	1,747,224	42,615	220	9,036,996	41,077
20-24	50	2,187,672	43,753	23	977,568	42,503	73	3,165,240	43,359
25-29	32	1,600,368	50,012	0	0	0	32	1,600,368	50,012
30-34	5	239,064	47,813	0	0	0	5	239,064	47,813
35-39	1	74,856	74,856	0	0	0	1	74,856	74,856
40+	0	0	0	0	0	0	0	0	0
TOTAL	3,070	91,068,427	29,664	1,158	32,578,980	28,134	4,228	123,647,407	29,245

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	849	6	1	1	1					858
20-24	1,347	84	1							1,432
25-29	1,152	284	10							1,446
30-34	1,057	623	292	15						1,987
35-39	773	495	625	313	27					2,233
40-44	730	427	539	563	352	85				2,696
45-49	690	444	474	423	402	527	125			3,085
50-54	602	376	386	339	282	491	379	66		2,921
55-59	352	292	277	205	162	242	188	106	22	1,846
60-64	144	159	173	125	105	94	56	33	17	906
65-69	35	59	62	39	20	21	15	7	18	276
70-74	20	20	27	17	7	4	4	1	3	103
75+	7	10	4	5	3	5	2	1	1	38
TOTAL	7,758	3,279	2,871	2,045	1,361	1,469	769	214	61	19,827

FEMALE

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	89				1	1				91
20-24	1,057	36			2	1	1			1,097
25-29	2,155	467	34							2,656
30-34	1,654	1,044	514	36						3,248
35-39	1,347	835	914	453	57	1				3,607
40-44	1,320	865	807	635	569	170				4,366
45-49	1,096	809	799	584	600	736	177			4,801
50-54	795	642	767	531	413	496	370	52		4,066
55-59	416	375	486	365	267	300	141	92	12	2,454
60-64	132	168	251	202	152	146	50	19	17	1,137
65-69	32	50	83	49	42	25	12	4	2	299
70-74	9	16	17	17	16	9	5	4	3	96
75+	8	2	8	3	7	4	1	1	1	35
TOTAL	10,110	5,309	4,680	2,875	2,126	1,889	757	172	35	27,953

TOTAL

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	938	6	1	1	2	1				949
20-24	2,404	120	1		2	1	1			2,529
25-29	3,307	751	44							4,102
30-34	2,711	1,667	806	51						5,235
35-39	2,120	1,330	1,539	766	84	1				5,840
40-44	2,050	1,292	1,346	1,198	921	255				7,062
45-49	1,786	1,253	1,273	1,007	1,002	1,263	302			7,886
50-54	1,397	1,018	1,153	870	695	987	749	118		6,987
55-59	768	667	763	570	429	542	329	198	34	4,300
60-64	276	327	424	327	257	240	106	52	34	2,043
65-69	67	109	145	88	62	46	27	11	20	575
70-74	29	36	44	34	23	13	9	5	6	199
75+	15	12	12	8	10	9	3	2	2	73
TOTAL	17,868	8,588	7,551	4,920	3,487	3,358	1,526	386	96	47,780

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	59	1								60
20-24	161	6	1							168
25-29	288	48	1							337
30-34	211	133	40							384
35-39	170	85	123	21						399
40-44	137	66	138	36	10					387
45-49	136	67	157	42	18	5				425
50-54	130	64	223	53	15	18	2			505
55-59	75	48	125	18	6	6	2			280
60-64	25	22	39	8	1	3	1	1		100
65-69	2	4	14	1						21
70-74	1		3							4
75+										0
TOTAL	1,395	544	864	179	50	32	5	1	0	3,070

FEMALE

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	3									3
20-24	33	2								35
25-29	99	14								113
30-34	101	32	23							156
35-39	81	30	44	4	1					160
40-44	75	40	48	14	14					191
45-49	86	42	63	13	7					211
50-54	60	32	60	9	1					162
55-59	25	14	46	1						86
60-64	7	6	20							33
65-69	2	1	3							6
70-74			2							2
75+										0
TOTAL	572	213	309	41	23	0	0	0	0	1,158

TOTAL

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	62	1								63
20-24	194	8	1							203
25-29	387	62	1							450
30-34	312	165	63							540
35-39	251	115	167	25	1					559
40-44	212	106	186	50	24					578
45-49	222	109	220	55	25	5				636
50-54	190	96	283	62	16	18	2			667
55-59	100	62	171	19	6	6	2			366
60-64	32	28	59	8	1	3	1	1		133
65-69	4	5	17	1						27
70-74	1		5							6
75+										0
TOTAL	1,967	757	1,173	220	73	32	5	1	0	4,228

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	938	6	1	1	2	1				949
	18,764	31,618	98,544	30,024	52,434	33,408				19,028
20-24	2,404	120	1		2	1	1			2,529
	19,907	24,527	26,556		48,636	47,172	45,396			20,172
25-29	3,307	751	44							4,102
	22,354	25,854	28,134							23,057
30-34	2,711	1,667	806	51						5,235
	23,994	29,240	30,886	33,414						26,817
35-39	2,120	1,330	1,539	766	84	1				5,840
	24,942	30,384	33,751	36,179	35,422	32,136				30,128
40-44	2,050	1,292	1,346	1,198	921	255				7,062
	25,438	30,192	34,318	39,936	38,228	43,546				32,782
45-49	1,786	1,253	1,273	1,007	1,002	1,263	302			7,886
	25,905	30,646	34,132	39,004	41,678	45,399	52,997			35,823
50-54	1,397	1,018	1,153	870	695	987	749	118		6,987
	27,227	31,423	33,392	37,803	40,402	48,118	56,461	61,502		38,147
55-59	768	667	763	570	429	542	329	198	34	4,300
	26,579	30,596	32,663	38,018	37,751	44,421	55,428	63,340	71,393	37,416
60-64	276	327	424	327	257	240	106	52	34	2,043
	26,826	30,531	32,922	35,006	36,186	43,334	52,676	64,974	71,004	36,158
65-69	67	109	145	88	62	46	27	11	20	575
	26,108	27,957	33,233	34,521	36,545	47,521	55,453	51,301	77,582	36,031
70-74	29	36	44	34	23	13	9	5	6	199
	26,928	27,777	33,462	32,496	41,749	38,560	50,291	57,626	73,556	35,184
75+	15	12	12	8	10	9	3	2	2	73
	26,509	23,262	25,884	25,790	25,327	39,427	47,320	60,552	60,816	29,952
TOTAL	17,868	8,588	7,551	4,920	3,487	3,358	1,526	386	96	47,780
	23,758	29,788	33,350	37,992	39,346	45,732	55,210	62,567	72,460	31,921

TOTAL EARNINGS	1,525,188,532
AVERAGE SERVICE	42.45
AVERAGE AGE	10.37

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	62	1								63
	14,944	25,728								15,115
20-24	194	8	1							203
	18,428	23,678	21,756							18,651
25-29	387	62	1							450
	20,840	26,156	28,548							21,590
30-34	312	165	63							540
	21,323	27,106	30,291							24,136
35-39	251	115	167	25	1					559
	23,452	28,139	30,322	36,143	34,500					27,056
40-44	212	106	186	50	24					578
	25,885	29,792	34,428	37,409	41,156					30,982
45-49	222	109	220	55	25	5				636
	27,208	31,399	35,182	42,607	43,272	45,749				32,793
50-54	190	96	283	62	16	18	2			667
	29,543	33,541	36,436	44,183	45,210	52,321	41,754			35,431
55-59	100	62	171	19	6	6	2			366
	30,454	36,159	36,356	39,975	45,310	48,226	51,450			35,322
60-64	32	28	59	8	1	3	1	1		133
	31,046	30,282	33,603	49,017	65,976	46,832	52,656	74,856		34,211
65-69	4	5	17	1						27
	19,506	40,476	35,385	28,584						33,724
70-74	1		5							6
	33,276		43,476							41,776
75+										0
TOTAL	1,967	757	1,173	220	73	32	5	1	0	4,228
	23,588	29,905	34,523	41,077	43,359	50,012	47,813	74,856		29,245

TOTAL EARNINGS 123,647,407
AVERAGE SERVICE 41.62
AVERAGE AGE 6.57

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
TABULATION BY MONTHLY SALARY
JUNE 30, 2001

MONTHLY SALARY	NUMBER OF MEMBERS MALES	FEMALES	TOTAL
UNDER $ 500	122	91	213
$ 500 - $ 749	106	143	249
$ 750 - $ 999	249	540	789
$ 1,000 - $ 1,249	757	1,582	2,339
$ 1,250 - $ 1,499	1,692	2,706	4,398
$ 1,500 - $ 1,749	1,829	3,255	5,084
$ 1,750 - $ 1,999	1,719	3,070	4,789
$ 2,000 - $ 2,249	1,665	3,262	4,927
$ 2,250 - $ 2,499	1,502	2,662	4,164
$ 2,500 - $ 2,749	1,387	2,072	3,459
$ 2,750 - $ 2,999	1,234	1,879	3,113
$ 3,000 - $ 3,499	1,939	2,598	4,537
$ 3,500 - $ 3,999	1,461	1,619	3,080
$ 4,000 - $ 4,499	1,085	956	2,041
$ 4,500 - $ 4,999	825	607	1,432
$ 5,000 - $ 5,499	599	373	972
$ 5,500 - $ 5,999	496	218	714
$ 6,000 - $ 6,499	331	110	441
$ 6,500 - $ 6,999	219	74	293
$ 7,000 - $ 7,499	197	47	244
$ 7,500 - $ 7,999	105	21	126
$ 8,000 - $ 8,499	100	21	121
$ 8,500 - $ 8,999	59	11	70
$ 9,000 - $ 9,499	25	5	30
$ 9,500 - $ 9,999	21	8	29
$ 10,000 AND OVER	103	23	126
TOTAL	19,827	27,953	47,780
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF $85,000 AND OVER	572	123	695

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
TABULATION BY MONTHLY SALARY
JUNE 30, 2001

MONTHLY SALARY	NUMBER OF MEMBERS MALES	FEMALES	TOTAL
UNDER $ 500	31	6	37
$ 500 - $ 749	8	2	10
$ 750 - $ 999	42	22	64
$ 1,000 - $ 1,249	51	28	79
$ 1,250 - $ 1,499	186	65	251
$ 1,500 - $ 1,749	405	200	605
$ 1,750 - $ 1,999	431	189	620
$ 2,000 - $ 2,249	429	148	577
$ 2,250 - $ 2,499	287	102	389
$ 2,500 - $ 2,749	292	94	386
$ 2,750 - $ 2,999	208	81	289
$ 3,000 - $ 3,499	301	96	397
$ 3,500 - $ 3,999	153	67	220
$ 4,000 - $ 4,499	109	22	131
$ 4,500 - $ 4,999	48	18	66
$ 5,000 - $ 5,499	29	7	36
$ 5,500 - $ 5,999	23	4	27
$ 6,000 - $ 6,499	15	3	18
$ 6,500 - $ 6,999	6	2	8
$ 7,000 - $ 7,499	2	0	2
$ 7,500 - $ 7,999	2	0	2
$ 8,000 - $ 8,499	0	0	0
$ 8,500 - $ 8,999	1	0	1
$ 9,000 - $ 9,499	3	0	3
$ 9,500 - $ 9,999	1	0	1
$ 10,000 AND OVER	7	2	9
TOTAL	3,070	1,158	4,228
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF $85,000 AND OVER	15	2	17

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2001

MEMBERS CURRENTLY ACTIVE IN KERS NONHAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - HAZARDOUS	0	344	344
CERS - NONHAZARDOUS	542	2,358	2,900
CERS - HAZARDOUS	22	73	95
STATE POLICE	0	13	13
TOTAL - ALL SYSTEMS	564	2,788	3,352

MEMBERS CURRENTLY NOT ACTIVE IN KERS NONHAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - HAZARDOUS	1,606	51	1,657
CERS - NONHAZARDOUS	2,028	209	2,237
CERS - HAZARDOUS	279	29	308
STATE POLICE	109	9	118
TOTAL - ALL SYSTEMS	4,022	298	4,320

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2001

MEMBERS CURRENTLY ACTIVE IN KERS HAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	0	1,606	1,606
CERS - NONHAZARDOUS	21	216	237
CERS - HAZARDOUS	11	33	44
STATE POLICE	1	7	8
TOTAL - ALL SYSTEMS	33	1,862	1,895

MEMBERS CURRENTLY NOT ACTIVE IN KERS HAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	344	51	395
CERS - NONHAZARDOUS	55	58	113
CERS - HAZARDOUS	108	5	113
STATE POLICE	20	1	21
TOTAL - ALL SYSTEMS	527	115	642

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
RETIRED LIVES SUMMARY
JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	2,424	2,288,742.89	5,965	4,907,621.10	8,389	7,196,363.99
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	1,658	1,568,516.05	540	332,839.92	2,198	1,901,355.97
66-2/3% TO BENEFICIARY	683	1,056,366.56	174	204,844.31	857	1,261,210.87
50% TO BENEFICIARY	859	1,160,224.57	545	697,936.35	1,404	1,858,160.92
POP-UP OPTION	1,565	2,166,629.95	868	1,057,130.33	2,433	3,223,760.28
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00
10 YEARS CERTAIN & LIFE	1,100	876,392.79	1,473	1,218,820.42	2,573	2,095,213.21
SOCIAL SECURITY OPTION						
OPTION C	379	608,226.14	855	1,110,990.08	1,234	1,719,216.22
OPTION D	781	1,152,484.56	440	580,213.86	1,221	1,732,698.42
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	0	0.00	1	188.76	1	188.76
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	362	364,149.64	285	258,731.28	647	622,880.92
20 YEARS CERTAIN & LIFE	247	295,755.32	236	257,726.07	483	553,481.39
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	10,058	11,537,488.47	11,382	10,627,042.48	21,440	22,164,530.95

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATIO N
RETIRED LIVES SUMMARY
JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	149	100,814.75	101	51,163.88	250	151,978.63
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	103	67,906.28	4	3,426.95	107	71,333.23
66-2/3% TO BENEFICIARY	37	30,796.55	5	3,880.64	42	34,677.19
50% TO BENEFICIARY	49	43,550.80	5	6,367.98	54	49,918.78
POP-UP OPTION	161	131,870.23	24	16,087.43	185	147,957.66
10 YEARS CERTAIN	16	12,247.76	5	3,146.96	21	15,394.72
10 YEARS CERTAIN & LIFE	64	36,254.87	23	12,733.68	87	48,988.55
SOCIAL SECURITY OPTION						
OPTION C	27	20,191.71	15	9,027.46	42	29,219.17
OPTION D	68	67,955.51	10	4,461.19	78	72,416.70
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	8	1,841.55	10	2,127.82	18	3,969.37
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	20	13,997.01	6	4,657.73	26	18,654.74
20 YEARS CERTAIN & LIFE	22	17,368.88	1	407.10	23	17,775.98
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	724	544,795.90	209	117,488.82	933	662,284.72

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	242	131,433.16	1,669	926,331.14	1,911	1,057,764.30
66-2/3% TO BENEFICIARY	16	8,162.48	255	133,930.48	271	142,092.96
50% TO BENEFICIARY	52	22,529.97	492	176,447.17	544	198,977.14
POP-UP OPTION	35	30,918.93	150	107,724.47	185	138,643.40
10 YEARS CERTAIN	77	59,873.24	65	53,095.53	142	112,968.77
10 YEARS CERTAIN & LIFE	61	39,572.25	82	68,826.22	143	108,398.47
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	19	15,460.80	124	139,374.22	143	154,835.02
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	17	6,871.86	17	6,871.86
DEPENDENT CHILD	0	0.00	0	0.00	0	0.00
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	26	21,505.88	96	71,426.47	122	92,932.35
20 YEARS CERTAIN & LIFE	29	25,267.64	47	40,373.54	76	65,641.18
5 YEARS ONLY	75	61,808.82	49	63,232.97	124	125,041.79
TOTAL	632	416,533.17	3,046	1,787,634.07	3,678	2,204,167.24

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	5	1,601.55	50	29,931.87	55	31,533.42
66-2/3% TO BENEFICIARY	0	0.00	4	2,248.66	4	2,248.66
50% TO BENEFICIARY	0	0.00	8	2,298.69	8	2,298.69
POP-UP OPTION	0	0.00	9	3,137.99	9	3,137.99
10 YEARS CERTAIN	5	2,898.16	4	1,136.25	9	4,034.41
10 YEARS CERTAIN & LIFE	2	2,018.46	8	1,018.66	10	3,037.12
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	1	17.11	7	6,474.01	8	6,491.12
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	2	563.16	0	0.00	2	563.16
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	1	161.73	0	0.00	1	161.73
20 YEARS CERTAIN & LIFE	0	0.00	4	908.62	4	908.62
5 YEARS ONLY	8	1,909.85	2	1,696.59	10	3,606.44
TOTAL	24	9,170.02	96	48,851.34	120	58,021.36

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED RETIREMENT SUMMARY
JUNE 30, 2001

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES MONTHLY BENEFITS	FEMALE LIVES NUMBER	FEMALE LIVES MONTHLY BENEFITS	TOTAL NUMBER	TOTAL MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	5	835.70	3	389.22	8	1,224.92
25-29	26	4,525.08	45	7,657.19	71	12,182.27
30-34	87	19,948.47	253	55,877.87	340	75,826.34
35-39	160	50,805.96	353	99,359.55	513	150,165.51
40-44	177	62,627.69	340	107,286.25	517	169,913.94
45-49	209	99,299.13	448	172,481.56	657	271,780.69
50-54	251	113,721.30	432	157,703.94	683	271,425.24
55-59	134	78,244.48	212	70,473.46	346	148,717.94
60-64	48	22,958.69	81	22,904.66	129	45,863.35
65-69	7	1,613.72	21	3,816.54	28	5,430.26
70-74	6	6,125.43	7	1,257.91	13	7,383.34
75-79	1	67.72	4	1,045.85	5	1,113.57
80-84	1	114.18	1	66.18	2	180.36
85 +	0	0.00	0	0.00	0	0.00
TOTAL	1,112	460,887.55	2,200	700,320.18	3,312	1,161,207.73

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED RETIREMENT SUMMARY
JUNE 30, 2001

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES MONTHLY BENEFITS	FEMALE LIVES NUMBER	FEMALE LIVES MONTHLY BENEFITS	TOTAL NUMBER	TOTAL MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	0	0.00	0	0.00	0	0.00
25-29	3	446.26	0	0.00	3	446.26
30-34	13	2,898.94	5	1,048.31	18	3,947.25
35-39	16	6,200.49	8	2,418.28	24	8,618.77
40-44	14	5,850.58	7	2,165.13	21	8,015.71
45-49	13	3,840.75	6	1,421.15	19	5,261.90
50-54	17	5,179.96	8	1,895.71	25	7,075.67
55-59	4	698.18	5	955.25	9	1,653.43
60-64	2	515.84	1	462.17	3	978.01
65-69	0	0.00	1	11.58	1	11.58
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	82	25,631.00	41	10,377.58	123	36,008.58

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2001

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES ACCUMULATED CONTRIBUTIONS	FEMALE LIVES NUMBER	FEMALE LIVES ACCUMULATED CONTRIBUTIONS	TOTAL NUMBER	TOTAL ACCUMULATED CONTRIBUTIONS
15-19	1,106	201,314.07	74	17,018.53	1,180	218,332.60
20-24	388	386,810.26	386	179,714.03	774	566,524.29
25-29	645	492,130.33	1,131	1,001,727.04	1,776	1,493,857.37
30-34	761	701,314.30	1,270	1,528,377.85	2,031	2,229,692.15
35-39	638	657,758.60	1,014	1,180,250.56	1,652	1,838,009.16
40-44	545	690,588.68	942	1,048,112.09	1,487	1,738,700.77
45-49	599	741,458.05	948	1,449,656.41	1,547	2,191,114.46
50-54	606	966,230.63	756	1,450,332.75	1,362	2,416,563.38
55-59	327	612,879.66	444	934,974.16	771	1,547,853.82
60-64	200	414,290.01	249	415,437.58	449	829,727.59
65-69	115	122,378.46	94	70,100.88	209	192,479.34
70-74	61	37,746.13	47	30,866.27	108	68,612.40
75-79	31	12,888.46	21	10,166.41	52	23,054.87
80-84	10	4,612.97	10	4,532.82	20	9,145.79
85 +	7	1,090.58	4	1,095.63	11	2,186.21
TOTAL	6,039	6,043,491.19	7,390	9,322,363.01	13,429	15,365,854.20

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2001

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES ACCUMULATED CONTRIBUTIONS	FEMALE LIVES NUMBER	FEMALE LIVES ACCUMULATED CONTRIBUTIONS	TOTAL NUMBER	TOTAL ACCUMULATED CONTRIBUTIONS
15-19	97	16,650.50	0	0.00	97	16,650.50
20-24	34	22,989.56	11	7,737.06	45	30,726.62
25-29	107	73,482.01	37	37,607.40	144	111,089.41
30-34	126	119,481.11	30	30,991.38	156	150,472.49
35-39	72	57,537.19	39	64,781.17	111	122,318.36
40-44	41	42,142.92	33	57,937.93	74	100,080.85
45-49	46	33,120.63	19	26,728.11	65	59,848.74
50-54	37	49,073.26	17	23,851.09	54	72,924.35
55-59	20	14,706.93	14	22,095.37	34	36,802.30
60-64	13	15,959.49	3	5,078.32	16	21,037.81
65-69	2	1,335.55	0	0.00	2	1,335.55
70-74	1	211.92	0	0.00	1	211.92
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	596	446,691.07	203	276,807.83	799	723,498.90

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the Kentucky Employees Retirement System in July, 1956. The plan benefits have been improved several times, most recently as of August 1, 2001.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the five highest paid fiscal years for nonhazardous positions. If the months of service credit during the highest five year period is less than forty-eight, one or more additional fiscal years shall be used. For a member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years.

For hazardous positions, final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

(a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1956. In some instances prior service credit is granted for time spent in the military.

(b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1956. Current service credit may be granted for military service and educational leaves if special criteria are met.

(c) Service is increased by unused sick leave, up to a maximum of six months, for purposes of computing eligibility and the amount of benefits.

Eligibility

Any state department, board, or agency shall participate in the System when directed to do so by the Executive Order of the Governor. Membership in the system consists of:

(a) all persons who become employees of a department after such department first participates,

(b) all persons who are employees on the date a department first participates and who elect within thirty days to become members and make contributions,

(c) all persons who are employees of any credit union whose membership is limited to state government employees,

(d) all persons who were professional staff employees of the Council on Public Higher Education or the Higher Education Assistance Authority and were making contributions to the system on the effective date of their respective Executive Order and filed a written election to continue in the System,

(e) all persons who were professional staff employees of the Kentucky Authority for Educational Television on or after July 1, 1974,

(f) members of the General Assembly and Constitutional officers of the General Assembly serving during the January, 1960 session or thereafter, and

(g) officers and employees of the General Assembly and their assistants if employed by the General Assembly during the January, 1960 session and thereafter, but only after serving during six sessions of the General Assembly.

Normal Retirement Date

A member may elect to retire upon: (1) attaining age 65 for non-hazardous positions, or attaining age 55 for hazardous positions, and (2) having contributed to the System. Upon completion of 27 years of service credit, 15 of which are current service for non-hazardous positions, or completion of 20 years of service credit for hazardous positions, a member may elect to retire with an unreduced benefit.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after: (1) for non-hazardous positions, attainment of age 55 and completion of 60 months of service credit at least 12 of which are current, or at any age after 25 years of service, or (2) for hazardous positions, attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

For non-hazardous positions, upon attainment of age 65 and completion of 48 months of service, of which 12 months are current service, a monthly benefit equal to 1.97% of the member's final compensation multiplied by his service will be payable. However, effective February 1, 1999, a member who was participating as of January 1, 1998 and continues to participate through January 1, 1999 shall receive a benefit based on a 2.00% formula rate. In addition, any such member whose effective date of retirement is between February 1, 1999 and January 31, 2009, and who has at least 20 years of service credit, shall receive a retirement allowance based on a 2.20% benefit formula rate. For hazardous positions, a monthly benefit equal to 2.49% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months

are current service. A member, with less than 48 months for non-hazardous positions or 60 months for hazardous positions, who retires on or after the normal retirement date is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a non-hazardous position employee has 27 or more years of service credit, 15 of which are current, or a hazardous position employee has 20 or more years of service credit, an unreduced benefit is payable.

Minimum Benefit

The normal retirement benefit for members with 10 or more years of service, at least one of which is current service, shall not be less than $512 per year.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 65th birthday (55th for members in a hazardous position) up to a maximum of service credited to the last day of paid employment. Except for members with 25 or more (20 or more for hazardous) years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 25 years (20 years for hazardous members). For non-hazardous position employees with 25 or more years of service credit, additional years of service credit will be added up to a maximum combined limit of 30, or actual service if greater. For hazardous position employees with 20 or more years of service credit, actual service will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable to hazardous employees if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, or after 48 months service if the member is age 65 or over, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member in a hazardous position dies in the line of duty and has a spouse as beneficiary, a $5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary, a lump sum payment of $10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a hazardous duty member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee using 2.49% rather than 1.97%.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of $5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include a life annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 5% of gross compensation (8% for hazardous positions). On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The cost of participation for any beneficiaries or dependents is borne by the retiree (except that dependents of hazardous position employees and legislators will have the same percentage paid by the system as the member). The retirement system will pay a portion of the cost of participation for the retiree based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a hazardous member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a hazardous member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contract provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.

FORTY-SECOND ANNUAL ACTUARIAL VALUATION

JUNE 30, 2001

COUNTY EMPLOYEES RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the forty-second annual actuarial valuation of the County Employees Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2001.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contribution for the ensuing fiscal year as required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding is defined in KRS 61.565 and provides that the actuarial valuation method would be uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System to the financing required during years of active service to accumulate the funds needed to provide members' benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the “level-percentage-of-payroll” method. Under the “level-percentage-of-payroll” method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate was increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus any reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the medical insurance contribution rate is to be increased each year by the percentage amount necessary to

raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation as allocated between Hazardous position and Non-Hazardous position employees.

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase. In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. Actuarial assumptions used for hazardous position employees are similar to actuarial assumptions adopted for the State Police Retirement System (with the exception of the rate of retirement). The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for the Retirement Fund and Insurance Fund:

1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.

2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.

3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.

4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.

5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	RETIREMENT FUND		INSURANCE FUND	
	Non Hazardous	Hazardous	Non Hazardous	Hazardous
June 30, 2000 Valuation Assets	5,284,033,534	1,445,542,794	319,642,694	168,659,912
Cash Flows				
> Employer Contributions	48,860,438	20,737,235	62,292,385	32,149,432
> Member Contributions	99,525,931	29,155,004		
> Retirement Benefits	170,256,139	56,519,865		
> Net Refunds	8,245,737	1,285,134		
> Insurance Premiums			27,523,966	11,511,058
> Administrative Expenses	6,174,091	512,265	244,142	108,621
> Investment Manager Fees	1,654,941	464,491	28,832	15,314
Valuation Interest Assumption	8.25%	8.25%	8.25%	8.25%
Expected Return on Valuation Assets Reflecting Actual Cash Flows *	434,367,554	118,890,588	27,793,459	14,760,663
Expected Valuation Assets	5,680,456,549	1,555,543,866	381,931,598	203,935,014
Actual Market Value of Assets	4,397,346,547	1,211,154,618	331,066,746	173,636,191
Investment Gain/(Loss)	(1,283,110,002)	(344,389,248)	(50,864,852)	(30,298,823)
Amortization Amounts From Prior Valuations				
> Valuation Year - 1				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 2				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 3				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 4				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
Unamortized Amount of Gain/(Loss) From Prior Valuations	0	0	0	0
Investment Gain/(Loss) to be Amortized from Current Valuation Date				
> Amount	(1,283,110,002)	(344,389,248)	(50,864,852)	(30,298,823)
> Amortization	(256,622,000)	(68,877,850)	(10,172,970)	(6,059,765)
June 30, 2001 Valuation Assets				
> Expected Assets	5,680,456,549	1,555,543,866	381,931,598	203,935,014
> Amortization Amounts	(256,622,000)	(68,877,850)	(10,172,970)	(6,059,765)
> Valuation Assets	5,423,834,549	1,486,666,016	371,758,628	197,875,249

* Cash flows are assumed equally spread throughout the year.

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1) Mortality:

(a) Active & retired lives - 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees.

(b) Disabled lives - Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).

(2) Disablement - Graduated rates based on 2000 experience study (no change from 1995 experience study).

(3) Termination of employment # - Graduated select (non-hazardous only) and ultimate rates based on 2000 experience study.

(4) Retirement # - Non-Hazardous:

Age	Retirement Rate
55-57	.04
58-59	.05
60-61	.06
62	.25
63-64	.10
65	.50
66-67	.20
68	.25
69	.40
70 and Over	1.00

At age 55-64 in lieu of the age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits.

Hazardous: Assumed that 60% will retire as soon as eligible for unreduced benefits and balance will continue to age 55.

(5) Marital status

(a) Percentage married - 100%.

(b) Age difference - Males are assumed to be 3 years older than their spouses.

(6) Dependent children - For hazardous position employees under duty related death benefits, it is assumed that the employee is survived by 2 dependent children each age 6.

(7) Investment return - 8.25% per year, net of investment related expenses, compounded annually.

(8) Compensation progression # - 1st year: 12.00%
2nd year: 10.00%
3rd year: 8.00%
Thereafter: 6.50%, compounded annually.

(9) Underlying Inflation Rate - 3.5% per year; reflected in investment return and compensation progression assumptions.

(10) Retiree Medical Insurance # - It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution rates were assumed to be as follows:

Plan Type	Rate in Effect on Valuation Date
Single	
- Region 1	$252.46
- Region 2	293.46
- Region 3	273.52
- All Others	234.00
Family	577.00
Parent Plus	350.00
Couple	525.00
Medicare*	
- Low Option	96.41
- High Option	229.03

Region 1: Boyd, Carter, Elliott, Greenup

Region 2: Christian, Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Todd, Trigg, Union, Webster

Region 3: Harlan, Lewis, Mason, Perry, Roberston

	Medicare Rate		Contracts in Force	
	Low	High	Low	High
Carrier	Option	Option	Option	Option
Anthem BC/BS	101.26	231.35	2,839	17,314
Bankers Life	91.78	216.94	272	156
Option 2000	83.05	216.51	504	1,767
Humana	85.00	247.00	490	1,729
Humana Gold Plus	85.00	136.00	17	507

*Weighted average of current rates available from different carriers; weighting based on number of contracts in force.

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

Years	Medical Increase
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

(11) Missing data - For those active members with incomplete data, the following assumptions were made:

. If reported salary was zero or blank, then monthly salary was assumed to be $887.58

. If reported age was blank, then assume current age equal to age 18 plus years of service reported

(12) Members with Multiple Service Records - For active members with service in more than one system, the liability has been valued as

follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.

- Future service is projected only under the system in which the member is currently active.

- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.

- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Changes in assumptions from those used in 2000 valuation.

B. SAMPLE RATES FOR NON-HAZARDOUS POSITION EMPLOYEES*

(1) Annual Rates of Mortality:

	Active Mortality		Disabled Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

(2) Annual Rates of Decrement:

Age	Disablement	Ultimate Termination
25	0.033%	2.40%
30	0.039%	2.40%
40	0.105%	2.00%
50	0.423%	1.60%
55	0.794%	1.20%
60	1.395%	0.20%

(3) Select Rates of Termination:

Years of Service	Select Termination
1	35.0%
2	10.0%
3	7.0%
4	5.0%
5	4.0%

(4) Compensation Progression (after 1st 3 years):

Age	Rate of Annual Increase	Compensation at Normal Retirement as Percentage Of Current Annual Compensation
25	6.50%	1,241.6%
30	6.50%	906.2%
40	6.50%	482.8%
50	6.50%	257.2%
55	6.50%	187.7%
60	6.50%	137.0%

*Sample rates for hazardous position employees are included in the State Police Retirement System valuation.

SECTION III

RESULTS OF THE 2001 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the participating Agencies required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the annual Normal Cost, medical insurance and the administrative costs of the System is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated payroll of the participating Agencies as of June 30, 2001.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2001 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate of the participating Agencies is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the County Employees Retirement System as of June 30, 2001 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements relative to the Retirement Fund.

Table X contains information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT AND INSURANCE FUND
DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2001

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND		
		Percent *
Total Actuarial Accrued Liability	$ 4,900,142,654	255.15%
Assets at Actuarial Value	6,910,500,565	359.83%
Unfunded Actuarial Accrued Liability	$ (2,010,357,911)	(104.68%)
Contribution - Payment on Unfunded Actuarial Accrued Liability	$ (104,138,682)	(5.42%)
NORMAL COST - RETIREMENT FUND		
Retirement Benefits	$ 180,619,180	9.40%
Disability Benefits	20,085,235	1.05%
Withdrawal Benefits (Vested and Refund of Contributions)	13,909,478	0.72%
Survivor Benefits	10,969,310	0.57%
Total Normal Cost	$ 225,583,203	11.74%
Less: Employee Contributions	103,767,361	5.40%
Normal Cost - State	$ 121,815,842	6.34%
TOTAL ANNUAL EMPLOYER COST - RETIREMENT AND INSURANCE FUND		
Non-Hazardous Duty Cost		
Normal Cost	$ 93,608,939	5.86% **
Payment on Unfunded Actuarial Accrued Liability	(90,122,133)	(5.64%) **
Administrative Expense	7,042,404	0.44% **
Subtotal - Retirement Fund (Not Less Than Zero)	$ 10,529,210	0.66% **
Group Hospital and Medical Insurance Premiums	90,746,709	5.68% **
Total Annual Cost	$ 101,275,919	6.34% **
Hazardous Duty Cost		
Normal Cost	$ 28,206,903	8.74% ***
Payment on Unfunded Actuarial Accrued Liability	(14,016,549)	(4.34%) ***
Administrative Expense	887,232	0.27% ***
Subtotal - Retirement Fund (Not Less Than Zero)	$ 15,077,586	4.67% ***
Group Hospital and Medical Insurance Premiums	37,479,293	11.61% ***
Total Annual Cost	$ 52,556,879	16.28% ***
Based on estimated annual salaries		
* Total	$ 1,920,472,384	
** Non-Hazardous Position Employees	$ 1,597,653,320	
*** Hazardous Position Employees	$ 322,819,064	

TABLE II
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2001

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members			
Retirement Benefits	$ 1,808,159,673	$ 573,685,697	$ 2,381,845,370
Disability Benefits	127,412,953	13,821,167	141,234,120
Withdrawal Benefits (Vested and Refund of Contributions)	58,946,158	7,533,279	66,479,437
Survivor Benefits	111,326,728	13,879,321	125,206,049
Total - Actives	$ 2,105,845,512	$ 608,919,464	$ 2,714,764,976
Inactive Members			
Retired Members and Beneficiaries	$ 1,551,618,750	$ 581,315,554	$ 2,132,934,304
Vested Retirement	33,500,336	2,824,220	36,324,556
Vested Membership	15,317,614	801,204	16,118,818
Total - Inactives	$ 1,600,436,700	$ 584,940,978	$ 2,185,377,678
Total Actuarial Accrued Liability	$ 3,706,282,212	$ 1,193,860,442	$ 4,900,142,654
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$ 3,706,282,212	$ 1,193,860,442	$ 4,900,142,654
Less Actuarial Value of Assets	5,423,834,549	1,486,666,016	6,910,500,565
Unfunded Actuarial Accrued Liability	$ (1,717,552,337)	$ (292,805,574)	$ (2,010,357,911)
NORMAL COST			
Retirement Benefits	$ 134,332,071	$ 46,287,109	$ 180,619,180
Disability Benefits	17,889,877	2,195,358	20,085,235
Withdrawal Benefits (Vested and Refund of Contributions)	11,206,818	2,702,660	13,909,478
Survivor Benefits	9,351,952	1,617,358	10,969,310
Total Normal Cost	$ 172,780,718	$ 52,802,485	$ 225,583,203
Less Employee Contributions	79,171,779	24,595,582	103,767,361
Total Normal Cost - State	$ 93,608,939	$ 28,206,903	$ 121,815,842

TABLE III
COUNTY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2001

Date Established	Amount of Base on: Date Established	Amount of Base on: Current Valuation Date	Amortization Payment	Source of Base
Non-Hazardous Position Employees				
6/30/1990	$ 93,672,421	$ 116,923,615	$ 7,984,831	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	61,472,822	75,941,702	4,994,990	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(125,111,651)	(152,596,619)	(9,690,496)	Experience gains/losses for 7/1/1991 to 6/30/1992; Asset valuation method change
6/30/1993	(28,358,370)	(34,073,827)	(2,093,700)	Experience gains/losses for 7/1/1992 to 6/30/1993
6/30/1994	59,026,195	69,727,865	4,153,968	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's
6/30/1995	(35,766,009)	(41,462,920)	(2,399,210)	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(188,502,047)	(214,095,120)	(12,052,913)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(200,122,489)	(222,157,360)	(12,186,664)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(311,976,854)	(338,026,376)	(18,093,200)	Experience gains/losses for 7/1/1997 to 6/30/1998; Increase in death benefit from $2,500 to $5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(379,088,077)	(400,376,132)	(20,938,471)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(804,685,873)	(827,432,598)	(42,329,797)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	250,075,433	250,075,433	12,528,529	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000; 3-year average earnings window
Total	$ (1,609,364,499)	$ (1,717,552,337)	$ (90,122,133)	

TABLE III (Continued)
COUNTY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2001

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
Hazardous Position Employees				
6/30/1990	$ 68,584,978	$ 85,609,017	$ 5,846,325	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	29,934,803	36,980,569	2,432,360	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(12,941,304)	(15,784,295)	(1,002,366)	Experience gains/losses for 7/1/1991 to 6/30/1992; Asset valuation method change
6/30/1993	(7,291,213)	(8,760,711)	(538,311)	Experience gains/losses for 7/1/1992 to 6/30/1993
6/30/1994	1,854,577	2,190,820	130,516	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's
6/30/1995	24,831,672	28,786,931	1,665,727	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(65,565,268)	(74,467,116)	(4,192,275)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(62,908,989)	(69,835,705)	(3,830,907)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(50,329,820)	(54,532,272)	(2,918,894)	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average salary definition from 5 years to 3 years; Increase in death benefit from $2,500 to $5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(97,060,446)	(102,510,969)	(5,361,016)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(194,399,700)	(199,894,958)	(10,226,226)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	79,413,115	79,413,115	3,978,518	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000
Total	$ (285,877,595)	$ (292,805,574)	$ (14,016,549)	

TABLE IV
COUNTY EMPLOYEES RETIREMENT SYSTEM
INSURANCE FUND
DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2001

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members	$ 1,217,873,929	$ 404,967,126	$ 1,622,841,055
Inactive Members			
Retired Members	$ 518,728,694	$ 280,782,555	$ 799,511,249
Beneficiaries	143,179	30,879,713	31,022,892
Vested Retirement	56,964,966	4,975,898	61,940,864
Vested Membership	0	0	0
Total - Inactives	$ 575,836,839	$ 316,638,166	$ 892,475,005
Total Actuarial Accrued Liability	$ 1,793,710,768	$ 721,605,292	$ 2,515,316,060
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$ 1,793,710,768	$ 721,605,292	$ 2,515,316,060
Less Actuarial Value of Assets	371,758,628	197,875,249	569,633,878
Unfunded Actuarial Accrued Liability	$ 1,421,952,140	$ 523,730,043	$ 1,945,682,182
NORMAL COST			
Gross Normal Cost	$ 132,598,044	$ 48,025,531	$ 180,623,575
Less Employee Contributions	0	0	0
Net Normal Cost - State	$ 132,598,044	$ 48,025,531	$ 180,623,575
Estimated Annual Salaries	$ 1,597,653,320	$ 322,819,064	$ 1,920,472,384
TOTAL ANNUAL EMPLOYER COST			
Contribution Amount			
Normal Cost	$ 132,598,044	$ 48,025,531	$ 180,623,575
Payment on Unfunded Actuarial Accrued Liability	77,998,282	28,805,249	106,803,531
Total Annual Cost	$ 210,596,326	$ 76,830,780	$ 287,427,106
As Percent of Payroll			
Normal Cost	8.30%	14.88%	9.41%
Payment on Unfunded Actuarial Accrued Liability	4.88%	8.92%	5.56%
Total Annual Cost	13.18%	23.80%	14.97%
INSURANCE FUND SHORTFALL			
Full Entry Age Funding Level	13.18%	23.80%	14.97%
Current Funding Allocation *	4.60%	11.18%	0.00%
Additional to Pick Up By 2016	8.58%	12.62%	14.97%
Expected Increase in Insurance Fund Rate in 2002 Valuation	0.33%	0.58%	N/A

* Without regard to any one-year temporary adjustments for actuarial gains

TABLE V
COUNTY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2001

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
Non-Hazardous Position Employees				
6/30/1996	$ 901,011,537	$ 1,023,342,585	$ 57,611,118	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	29,886,573	33,177,291	1,819,973	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	62,468,342	67,684,340	3,622,872	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(21,106,379)	(22,291,628)	(1,165,785)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	70,199,744	72,184,139	3,692,796	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	247,855,413	247,855,413	12,417,308	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
Total	$ 1,290,315,230	$ 1,421,952,140	$ 77,998,282	
Hazardous Position Employees				
6/30/1996	$ 318,111,968	$ 361,302,282	$ 20,340,235	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	53,367,623	59,243,767	3,249,876	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	15,379,222	16,663,359	891,923	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(13,162,362)	(13,901,507)	(727,007)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	17,607,673	18,105,404	926,236	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	82,316,738	82,316,738	4,123,986	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
Total	$ 473,620,862	$ 523,730,043	$ 28,805,249	

TABLE VI
COUNTY EMPLOYEES RETIREMENT SYSTEM
BENEFIT PAYMENT PROJECTIONS

RETIREMENT FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2001 to 6/30/2002	191,701,000	63,816,000	255,517,000
7/1/2002 to 6/30/2003	204,575,000	67,846,000	272,421,000
7/1/2003 to 6/30/2004	218,510,000	72,483,000	290,993,000
7/1/2004 to 6/30/2005	234,490,000	78,343,000	312,833,000
7/1/2005 to 6/30/2006	253,500,000	85,906,000	339,406,000
7/1/2006 to 6/30/2007	275,066,000	95,413,000	370,479,000
7/1/2007 to 6/30/2008	298,795,000	105,373,000	404,168,000
7/1/2008 to 6/30/2009	325,005,000	117,618,000	442,623,000
7/1/2009 to 6/30/2010	353,349,000	130,845,000	484,194,000
7/1/2010 to 6/30/2011	384,366,000	144,846,000	529,212,000

INSURANCE FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2001 to 6/30/2002	36,579,000	15,593,000	52,172,000
7/1/2002 to 6/30/2003	42,564,000	17,669,000	60,233,000
7/1/2003 to 6/30/2004	49,193,000	19,991,000	69,184,000
7/1/2004 to 6/30/2005	56,555,000	22,599,000	79,154,000
7/1/2005 to 6/30/2006	65,210,000	25,882,000	91,092,000
7/1/2006 to 6/30/2007	74,785,000	29,610,000	104,395,000
7/1/2007 to 6/30/2008	85,322,000	33,579,000	118,901,000
7/1/2008 to 6/30/2009	97,516,000	38,506,000	136,022,000
7/1/2009 to 6/30/2010	111,674,000	44,274,000	155,948,000
7/1/2010 to 6/30/2011	127,851,000	50,734,000	178,585,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

TABLE VII
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2001

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 6,910,500,565
Actuarial Present Value of Future Member Contributions		1,198,151,209
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 1,314,803,154	
For Unfunded Actuarial Accrued Liability	(2,010,357,911)	
Total		$ (695,554,757)
Total Actuarial Assets		$ 7,413,097,017
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 2,132,934,304	
Vested Retirement	36,324,556	
Vested Membership	16,118,818	
Total - Inactive		$ 2,185,377,678
Actuarial Present Value of Future Benefits		
Active Members:		
Retirement Benefits	$ 4,391,167,713	
Disability Benefits	356,409,233	
Withdrawal Benefits (Vested and Refund of Contributions)	234,476,889	
Survivor Benefits	245,665,504	
Total - Active		$ 5,227,719,339
Refunds and Expenses Payable		$ 0
Total Actuarial Liabilities		$ 7,413,097,017

Notes

* Values as of June 30, 2001		
Market value of assets:	Non-Hazardous	$ 4,397,346,547
	Hazardous	$ 1,211,154,618
	Total	$ 5,608,501,165
Actuarial value of assets:		$ 6,910,500,565
Member's Contribution Account:		$ 855,815,124

** Present value of accrued benefit deferred to normal retirement date.

TABLE VIII
COUNTY EMPLOYEES RETIREMENT SYSTEM
INSURANCE FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2001

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 569,633,878
Actuarial Present Value of Future Member Contributions (Note: All Future Member Contributions Credited Against Retirement Fund)		0
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 2,128,671,358	
For Unfunded Actuarial Accrued Liability	1,945,682,182	
Total		$ 4,074,353,540
Total Actuarial Assets		$ 4,643,987,418
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 830,534,141	
Vested Retirement	61,940,864	
Vested Membership	0	
Total - Inactive		$ 892,475,005
Actuarial Present Value of Future Benefits		
Active Members:		$ 3,751,512,413
Refunds and Expenses Payable		$ 0
Total Actuarial Liabilities		$ 4,643,987,418
Notes		
* Values as of June 30, 2001		
Market value of assets:	Non-Hazardous	$ 331,066,746
	Hazardous	$ 173,636,191
	Total	$ 504,702,937
Actuarial value of assets:		$ 569,633,878

TABLE IX
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2001
GASB DISCLOSURE INFORMATION

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS			
Inactive Members			
Retired Members	21,706	3,004	24,710
Beneficiaries	2,709	217	2,926
Vested Retirements	4,080	148	4,228
Vested Membership	24,276	462	24,738
Total Inactive Members	52,771	3,831	56,602
Active Members			
Vested Members	44,965	4,603	49,568
Nonvested Members	33,808	3,983	37,791
Total Active Members	78,773	8,586	87,359
Total Members	131,544	12,417	143,961

TABLE X
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2001
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS			
Contracts in Force - Retirees and Dependents			
(1) Single; - 100% Paid	2,528	782	3,310
Pre-Medicare - 75% Paid	468	38	506
- 50% Paid	444	35	479
- 25% Paid	249	14	263
- 0% Paid	526	0	526
(2) Family; - 100% Paid	154	499	653
Pre-Medicare - 75% Paid	9	14	23
- 50% Paid	11	10	21
- 25% Paid	8	5	13
- 0% Paid	3	0	3
(3) Parent +; - 100% Paid	138	177	315
Pre-Medicare - 75% Paid	8	16	24
- 50% Paid	2	7	9
- 25% Paid	6	2	8
- 0% Paid	50	0	50
(4) Couple +; - 100% Paid	463	717	1,180
Pre-Medicare - 75% Paid	54	11	65
- 50% Paid	59	10	69
- 25% Paid	27	1	28
- 0% Paid	3	0	3
(5) Medicare Regular - 100% Paid	945	19	964
- 75% Paid	0	0	0
- 50% Paid	0	0	0
- 25% Paid	717	13	730
- 0% Paid	550	0	550
(6) Medicare High - 100% Paid	3,382	559	3,941
Option - 75% Paid	1,626	65	1,691
- 50% Paid	1,736	46	1,782
- 25% Paid	967	21	988
- 0% Paid	1,263	3	1,266
Vested Retirements	4,080	148	4,228
Vested Membership	24,276	462	24,738
Active Members	78,773	8,586	87,359
UNFUNDED MEDICAL BENEFIT OBLIGATION			
Medical Benefit Obligation			
Retirees, Beneficiaries and Vested Terminated Members	$ 575,836,839	$ 316,638,166	$ 892,475,005
Active Members	1,217,873,929	404,967,126	1,622,841,055
Total Medical Benefit Obligation	$ 1,793,710,768	$ 721,605,292	$ 2,515,316,060
Net Assets at Actuarial Value	$ 371,758,628	$ 197,875,249	$ 569,633,878
Unfunded Medical Benefit Obligation	$ 1,421,952,140	$ 523,730,043	$ 1,945,682,182
NOTE: Medical Benefit Obligation based on Entry Age Normal Actuarial Cost Method			

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from $4,453,154,831 on June 30, 2000 to $4,900,142,654 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from $(2,276,421,497) to $(2,010,357,911). Total actuarial value of assets as of June 30, 2001 was equal to $6,910,500,565. The Unfunded Actuarial Accrued Liability increased from (121.95%) to (104.68%) as a percentage of annual payroll and increased from (51.1%) to (41.0%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from $2,066,652,957 on June 30, 2000 to $2,515,316,060 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from $1,578,352,351 to $1,945,682,182. Total actuarial value of assets as of June 30, 2001 was equal to $569,633,878. The Unfunded Actuarial Accrued Liability increased from 76.4% to 77.4% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

The change in contribution rate between the 2000 and 2001 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

	Non-Hazardous Position Employees	**Hazardous Position Employees**
June 30, 2000 Contribution Rate	6.34%	16.28%
Change in Payment Percentage Due to Covered Payroll Experience	(0.23%)	0.32%
Investment Return Experience		
> Prior to Asset Valuation Method Change	0.04%	0.15%
> Impact of Asset Valuation Method Change	0.76%	0.92%
Salary Increase Experience	(0.66%)	0.02%
Decrements Experience*	0.47%	(0.07%)
Change in Insurance Fund Rate		
> One-Year Temporary Funding Rate	(0.77%)	(2.16%)
> Increase in Long Term Funding Rate	0.31%	0.55%
Change in Administrative Expense Rate	(0.11%)	(0.17%)
Retiree COLA Effective 7/1/2000	0.10%	0.19%
Legislated Changes		
> 3 Year Average Window for Nonhazardous	0.09%	0.00%
Change in Actuarial Assumptions	0.00%	0.25%
Reduction in Amount Available from Prior Year Retirement Fund Rate to Offset Current Year Increases	N/A	N/A
June 30, 2001 Contribution Rate	6.34%	16.28%
* Includes mortality, disability, termination of employment and retirement experience.		

The annual contribution rate required by the participating Agencies to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Non-Hazardous position employees is 0.66%. An additional 5.68% is required to fund medical insurance for retirees, bringing the required contribution up to 6.34%. This is the same as the current 6.34% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2002 should remain at the 6.34% level, and we so recommend.

The annual contribution rate required by the participating Agencies to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Hazardous position employees is 4.67%. An additional 11.61% is required to fund medical insurance for retirees, bringing the required contribution up to 16.28%. This is the same as the current 16.28% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2002 should be remain at the 16.28% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2002 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

COUNTY EMPLOYEES RETIREMENT SYSTEM - RETIREMENT FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1960	$ 5,602,131	$ 4,737,680	84.6%	$ 864,451	$ 864,451
1965	12,510,487	6,897,273	55.1%	5,613,214	1,255,742
1971	40,305,948	16,885,927	41.9%	23,420,022*	4,850,170
1975	85,322,085	24,467,454	28.7%	60,854,631*	11,704,780
1976	128,824,236	50,089,614	38.9%	78,734,622*	17,879,991
1977	152,900,347	52,474,756	34.3%	100,425,591*	21,690,969
1978	175,194,867	50,394,913	28.8%	124,799,954*	24,374,363
1979	213,834,377	60,742,472	28.4%	153,091,905*	28,291,951
1980	266,018,621	75,787,680	28.5%	190,230,941*	37,139,036
1981	260,872,162	27,101,917	10.4%	233,770,245	43,539,304
1982	306,087,531	20,552,642	6.7%	285,534,889	51,764,644
1983	340,705,763	(2,450,006)	(0.8%)	343,155,769	57,620,880
1984	421,336,269	15,148,838	3.6%	406,187,431	63,031,662
1985	463,618,532	(14,424,689)	(3.1%)	478,043,221	71,855,790
1986	535,948,094	(67,867,706)	(12.7%)	603,815,800	125,772,579
1987	678,442,760	(49,287,967)	(7.3%)	727,730,727	123,914,927
1988	829,346,323	(10,232,573)	(1.2%)	839,578,896	111,848,169
1989	1,113,868,548	35,815,913	3.2%	1,078,052,635	238,473,739
1990	1,432,323,666	162,257,399	11.3%	1,270,066,267	192,013,632
1991	1,654,338,706	258,111,701	15.6%	1,396,227,005	126,160,738
1992**	1,861,978,403	126,939,495	6.8%	1,735,038,908	338,811,903
1993	2,079,930,047	94,249,338	4.5%	1,985,680,709	250,641,801
1994	2,330,344,241	156,989,469	6.7%	2,173,354,772	187,674,063
1995	2,603,575,921	149,447,861	5.7%	2,454,128,060	280,773,288
1996	2,778,316,473	(101,712,065)	(3.7%)	2,880,028,538	425,900,478
1997	3,144,928,093	(369,096,965)	(11.7%)	3,514,025,868	633,997,330
1998	3,529,912,902	(743,349,593)	(21.1%)	4,273,262,495	759,236,627
1999	3,955,132,659	(1,241,746,262)	(31.4%)	5,196,878,921	923,616,426
2000	4,453,154,831	(2,276,421,497)	(51.1%)	6,729,576,328	1,532,697,407
2001***	4,900,142,654	(2,010,357,911)	(41.0%)	6,910,500,565	180,924,237
*Includes capitalized appreciation of investments.					
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

COUNTY EMPLOYEES RETIREMENT SYSTEM - INSURANCE FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1990	$ 700,151,838	$ 670,720,901	95.8%	$ 29,430,397	$ N/A
1991	823,012,809	780,592,065	94.8%	42,420,744	12,989,807
1992	1,041,905,457	984,949,556	94.5%	56,955,901	14,535,157
1993	1,244,258,042	1,170,004,170	94.0%	74,253,872	17,297,971
1994	1,551,138,800	1,451,623,905	93.6%	99,514,895	25,261,023
1995	1,679,893,225	1,554,439,285	92.5%	125,453,940	25,939,045
1996**	1,386,659,746	1,219,123,505	87.9%	167,536,241	42,082,301
1997	1,541,360,457	1,336,839,680	86.7%	204,520,777	36,984,536
1998	1,706,626,110	1,451,039,735	85.0%	255,586,375	51,065,598
1999	1,801,154,401	1,454,627,009	80.8%	346,527,392	90,941,017
2000	2,066,652,957	1,578,352,351	76.4%	488,300,606	141,773,214
2001***	2,515,316,060	1,954,682,182	77.4%	569,633,878	81,333,272
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the Counties Employees Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding polices adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Stephen A. Gagel, F.S.A — Date

Edward W. Maynard, F.S.A. — Date

William M. Mercer, Incorporated
462 South Fourth Avenue, Suite 1500
Louisville, Kentucky 40202-3431
✆(502) 561-4500

SECTION V

STATISTICAL DATA

AS OF

JUNE 30, 2001

COUNTY EMPLOYEE S RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

EARNINGS BY AGE GROUPS

AGE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	1,866	27,288,499	14,624	102	1,238,508	12,142	1,968	28,527,007	14,495
20-24	3,556	58,604,719	16,481	1,241	17,837,510	14,373	4,797	76,442,229	15,935
25-29	1,985	43,041,614	21,683	2,562	42,206,188	16,474	4,547	85,247,802	18,748
30-34	2,551	64,203,714	25,168	4,372	70,177,649	16,052	6,923	134,381,362	19,411
35-39	3,281	87,788,161	26,757	6,764	107,387,677	15,876	10,045	195,175,837	19,430
40-44	4,016	114,847,326	28,597	8,507	144,882,140	17,031	12,523	259,729,466	20,740
45-49	4,055	120,508,734	29,719	8,492	154,008,749	18,136	12,547	274,517,482	21,879
50-54	3,734	111,879,383	29,962	7,234	135,350,770	18,710	10,968	247,230,152	22,541
55-59	2,623	72,154,065	27,508	4,960	90,918,846	18,330	7,583	163,072,911	21,505
60-64	1,784	44,966,786	25,206	2,681	46,970,534	17,520	4,465	91,937,320	20,591
65-69	734	14,745,264	20,089	865	13,187,100	15,245	1,599	27,932,364	17,469
70-74	308	5,632,963	18,289	280	4,090,188	14,608	588	9,723,151	16,536
75+	114	2,005,992	17,596	106	1,730,244	16,323	220	3,736,236	16,983
TOTAL	30,607	767,667,218	25,081	48,166	829,986,101	17,232	78,773	1,597,653,320	20,282

EARNINGS BY SERVICE GROUPS

SERVICE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	2,378	42,464,564	17,857	2,017	30,641,688	15,192	4,395	73,106,252	16,634
1	4,562	82,953,610	18,184	6,248	80,749,006	12,924	10,810	163,702,616	15,144
2	3,531	71,141,865	20,148	5,284	74,704,876	14,138	8,815	145,846,741	16,545
3	2,862	63,226,010	22,092	4,302	63,358,737	14,728	7,164	126,584,747	17,670
4	1,954	44,705,712	22,879	3,255	49,674,408	15,261	5,209	94,380,120	18,119
0-4	15,287	304,491,761	19,918	21,106	299,128,715	14,173	36,393	603,620,475	16,586
5-9	6,159	160,403,627	26,044	12,713	210,660,322	16,570	18,872	371,063,949	19,662
10-14	4,272	127,975,905	29,957	7,641	150,810,606	19,737	11,913	278,786,511	23,402
15-19	2,437	78,982,387	32,410	3,527	80,574,283	22,845	5,964	159,556,670	26,753
20-24	1,540	55,128,799	35,798	2,166	54,589,939	25,203	3,706	109,718,738	29,606
25-29	714	30,676,284	42,964	792	25,434,060	32,114	1,506	56,110,344	37,258
30-34	154	7,762,632	50,407	175	6,524,856	37,285	329	14,287,488	43,427
35-39	38	1,756,092	46,213	30	1,319,928	43,998	68	3,076,020	45,236
40+	6	489,732	81,622	16	943,392	58,962	22	1,433,124	65,142
TOTAL	30,607	767,667,218	25,081	48,166	829,986,101	17,232	78,773	1,597,653,320	20,282

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

EARNINGS BY AGE GROUPS

AGE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	126	3,055,596	24,251	3	53,652	17,884	129	3,109,248	24,103
20-24	410	11,564,976	28,207	29	684,660	23,609	439	12,249,636	27,903
25-29	1,229	38,964,324	31,704	135	4,089,444	30,292	1,364	43,053,768	31,564
30-34	1,614	58,353,991	36,155	194	6,419,964	33,093	1,808	64,773,955	35,826
35-39	1,495	59,492,510	39,794	175	6,066,444	34,665	1,670	65,558,954	39,257
40-44	1,106	45,638,995	41,265	144	5,532,854	38,423	1,250	51,171,849	40,937
45-49	848	38,273,220	45,134	111	3,989,623	35,943	959	42,262,843	44,070
50-54	494	22,540,891	45,629	72	2,723,628	37,828	566	25,264,519	44,637
55-59	230	9,721,860	42,269	41	1,230,924	30,023	271	10,952,784	40,416
60-64	86	3,119,148	36,269	10	294,804	29,480	96	3,413,952	35,562
65-69	15	442,428	29,495	5	106,728	21,346	20	549,156	27,458
70-74	7	260,832	37,262	1	16,416	16,416	8	277,248	34,656
75+	6	181,152	30,192	0	0	0	6	181,152	30,192
TOTAL	7,666	291,609,923	38,039	920	31,209,141	33,923	8,586	322,819,064	37,598

EARNINGS BY SERVICE GROUPS

SERVICE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	423	10,038,504	23,732	75	1,604,990	21,400	498	11,643,494	23,381
1	973	27,962,438	28,738	158	4,434,060	28,064	1,131	32,396,498	28,644
2	674	21,174,974	31,417	91	2,703,972	29,714	765	23,878,946	31,214
3	705	23,380,956	33,164	112	3,460,428	30,897	817	26,841,384	32,854
4	459	16,155,912	35,198	55	1,872,480	34,045	514	18,028,392	35,075
0-4	3,234	98,712,784	30,523	491	14,075,930	28,668	3,725	112,788,714	30,279
5-9	1,853	71,309,556	38,483	242	8,508,091	35,157	2,095	79,817,647	38,099
10-14	1,398	61,240,332	43,806	108	4,508,748	41,748	1,506	65,749,080	43,658
15-19	587	27,485,815	46,824	45	2,191,068	48,690	632	29,676,883	46,957
20-24	340	17,924,256	52,718	30	1,688,868	56,296	370	19,613,124	53,008
25-29	188	10,998,180	58,501	4	236,436	59,109	192	11,234,616	58,514
30-34	52	3,097,716	59,571	0	0	0	52	3,097,716	59,571
35-39	12	723,396	60,283	0	0	0	12	723,396	60,283
40+	2	117,888	58,944	0	0	0	2	117,888	58,944
TOTAL	7,666	291,609,923	38,039	920	31,209,141	33,923	8,586	322,819,064	37,598

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	1,866									1,866
20-24	3,262	294								3,556
25-29	1,452	513	20							1,985
30-34	1,550	750	241	10						2,551
35-39	1,514	781	691	278	17					3,281
40-44	1,526	887	706	509	348	40				4,016
45-49	1,298	907	703	490	404	234	19			4,055
50-54	1,123	793	751	437	336	221	66	7		3,734
55-59	845	582	491	314	207	121	43	17	3	2,623
60-64	492	377	386	279	147	79	16	7	1	1,784
65-69	247	184	160	71	50	12	7	3		734
70-74	93	68	89	29	19	4	2	2	2	308
75+	19	23	34	20	12	3	1	2		114
TOTAL	15,287	6,159	4,272	2,437	1,540	714	154	38	6	30,607

FEMALE

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	102									102
20-24	1,202	39								1,241
25-29	2,157	389	16							2,562
30-34	3,145	948	256	23						4,372
35-39	4,128	1,772	626	226	12					6,764
40-44	3,871	2,793	1,138	393	278	34				8,507
45-49	2,752	2,793	1,763	615	366	181	22			8,492
50-54	1,867	1,926	1,806	893	465	205	65	7		7,234
55-59	1,111	1,126	1,131	763	563	202	43	16	5	4,960
60-64	522	636	596	401	348	138	30	6	4	2,681
65-69	162	215	214	144	87	26	11	1	5	865
70-74	56	61	77	48	31	4	2		1	280
75+	31	15	18	21	16	2	2		1	106
TOTAL	21,106	12,713	7,641	3,527	2,166	792	175	30	16	48,166

TOTAL

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	1,968									1,968
20-24	4,464	333								4,797
25-29	3,609	902	36							4,547
30-34	4,695	1,698	497	33						6,923
35-39	5,642	2,553	1,317	504	29					10,045
40-44	5,397	3,680	1,844	902	626	74				12,523
45-49	4,050	3,700	2,466	1,105	770	415	41			12,547
50-54	2,990	2,719	2,557	1,330	801	426	131	14		10,968
55-59	1,956	1,708	1,622	1,077	770	323	86	33	8	7,583
60-64	1,014	1,013	982	680	495	217	46	13	5	4,465
65-69	409	399	374	215	137	38	18	4	5	1,599
70-74	149	129	166	77	50	8	4	2	3	588
75+	50	38	52	41	28	5	3	2	1	220
TOTAL	36,393	18,872	11,913	5,964	3,706	1,506	329	68	22	78,773

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	126									126
20-24	402	8								410
25-29	975	252	2							1,229
30-34	775	634	204	1						1,614
35-39	373	443	539	136	4					1,495
40-44	221	204	340	261	79	1				1,106
45-49	141	162	166	119	161	91	8			848
50-54	102	74	93	44	73	80	27	1		494
55-59	79	43	30	20	19	16	15	8		230
60-64	30	26	16	5	3		2	3	1	86
65-69	6	5	4							15
70-74	1		4	1					1	7
75+	3	2			1					6
TOTAL	3,234	1,853	1,398	587	340	188	52	12	2	7,666

FEMALE

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	3									3
20-24	29									29
25-29	119	16								135
30-34	106	75	12	1						194
35-39	73	51	41	10						175
40-44	55	31	28	23	7					144
45-49	51	29	12	6	12	1				111
50-54	29	20	7	4	9	3				72
55-59	20	13	5	1	2					41
60-64	4	3	3							10
65-69	2	3								5
70-74		1								1
75+										0
TOTAL	491	242	108	45	30	4	0	0	0	920

TOTAL

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	129									129
20-24	431	8								439
25-29	1,094	268	2							1,364
30-34	881	709	216	2						1,808
35-39	446	494	580	146	4					1,670
40-44	276	235	368	284	86	1				1,250
45-49	192	191	178	125	173	92	8			959
50-54	131	94	100	48	82	83	27	1		566
55-59	99	56	35	21	21	16	15	8		271
60-64	34	29	19	5	3		2	3	1	96
65-69	8	8	4							20
70-74	1	1	4	1					1	8
75+	3	2			1					6
TOTAL	3,725	2,095	1,506	632	370	192	52	12	2	8,586

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	1,968									1,968
	14,495									14,495
20-24	4,464	333								4,797
	15,673	19,448								15,935
25-29	3,609	902	36							4,547
	17,835	22,175	24,465							18,748
30-34	4,695	1,698	497	33						6,923
	17,014	23,386	27,815	29,313						19,411
35-39	5,642	2,553	1,317	504	29					10,045
	15,724	20,454	28,663	30,917	31,507					19,430
40-44	5,397	3,680	1,844	902	626	74				12,523
	16,373	19,154	25,556	32,411	34,368	40,567				20,740
45-49	4,050	3,700	2,466	1,105	770	415	41			12,547
	17,315	18,893	23,362	29,087	34,531	39,108	46,754			21,879
50-54	2,990	2,719	2,557	1,330	801	426	131	14		10,968
	18,408	19,652	21,967	25,876	30,669	39,854	45,987	43,168		22,541
55-59	1,956	1,708	1,622	1,077	770	323	86	33	8	7,583
	17,107	19,153	21,396	23,649	25,419	35,281	42,006	51,930	53,712	21,505
60-64	1,014	1,013	982	680	495	217	46	13	5	4,465
	16,073	17,729	20,869	22,762	24,250	32,014	39,787	38,179	86,131	20,591
65-69	409	399	374	215	137	38	18	4	5	1,599
	14,592	14,910	17,701	18,999	22,821	30,033	35,783	23,628	60,718	17,469
70-74	149	129	166	77	50	8	4	2	3	588
	15,273	12,731	17,454	17,835	17,216	32,417	39,261	35,418	62,220	16,536
75+	50	38	52	41	28	5	3	2	1	220
	12,654	14,928	13,726	19,785	20,451	31,495	34,140	48,144	82,524	16,983
TOTAL	36,393	18,872	11,913	5,964	3,706	1,506	329	68	22	78,773
	16,586	19,662	23,402	26,753	29,606	37,258	43,427	45,236	65,142	20,282

TOTAL EARNINGS 1,597,653,320
AVERAGE SERVICE 7.29

AVERAGE AGE 43.39

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2001

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	129									129
	24,103									24,103
20-24	431	8								439
	27,834	31,629								27,903
25-29	1,094	268	2							1,364
	30,252	36,886	36,498							31,564
30-34	881	709	216	2						1,808
	30,956	39,385	43,909	46,884						35,826
35-39	446	494	580	146	4					1,670
	30,684	38,503	44,462	47,391	36,639					39,257
40-44	276	235	368	284	86	1				1,250
	31,056	36,797	43,783	47,218	51,070	38,796				40,937
45-49	192	191	178	125	173	92	8			959
	32,185	37,269	42,047	48,328	55,861	57,249	63,596			44,070
50-54	131	94	100	48	82	83	27	1		566
	33,788	39,118	41,990	42,277	52,481	60,150	58,154	66,852		44,637
55-59	99	56	35	21	21	16	15	8		271
	31,007	36,689	45,539	43,244	45,925	58,529	61,444	62,997		40,416
60-64	34	29	19	5	3		2	3	1	96
	31,118	34,352	38,764	39,610	33,608		48,570	50,856	74,628	35,562
65-69	8	8	4							20
	26,895	21,312	40,875							27,458
70-74	1	1	4	1					1	8
	25,776	16,416	28,521	77,712					43,260	34,656
75+	3	2			1					6
	28,156	27,342			42,000					30,192
TOTAL	3,725	2,095	1,506	632	370	192	52	12	2	8,586
	30,279	38,099	43,658	46,957	53,008	58,514	59,571	60,283	58,944	37,598

TOTAL EARNINGS 322,819,064
AVERAGE SERVICE 7.62

AVERAGE AGE 37.17

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
TABULATION BY MONTHLY SALARY
JUNE 30, 2001

MONTHLY SALARY	NUMBER OF MEMBERS MALES	FEMALES	TOTAL
UNDER $ 500	816	1,292	2,108
$ 500 - $ 749	1,778	5,159	6,937
$ 750 - $ 999	2,824	11,740	14,564
$ 1,000 - $ 1,249	2,718	7,509	10,227
$ 1,250 - $ 1,499	3,036	5,451	8,487
$ 1,500 - $ 1,749	3,207	4,354	7,561
$ 1,750 - $ 1,999	2,952	3,327	6,279
$ 2,000 - $ 2,249	2,551	2,633	5,184
$ 2,250 - $ 2,499	2,056	1,983	4,039
$ 2,500 - $ 2,749	1,780	1,405	3,185
$ 2,750 - $ 2,999	1,358	986	2,344
$ 3,000 - $ 3,499	2,011	1,098	3,109
$ 3,500 - $ 3,999	1,188	483	1,671
$ 4,000 - $ 4,499	725	265	990
$ 4,500 - $ 4,999	485	171	656
$ 5,000 - $ 5,499	425	135	560
$ 5,500 - $ 5,999	235	60	295
$ 6,000 - $ 6,499	146	43	189
$ 6,500 - $ 6,999	109	23	132
$ 7,000 - $ 7,499	46	14	60
$ 7,500 - $ 7,999	43	5	48
$ 8,000 - $ 8,499	30	5	35
$ 8,500 - $ 8,999	22	4	26
$ 9,000 - $ 9,499	17	8	25
$ 9,500 - $ 9,999	13	2	15
$ 10,000 AND OVER	36	11	47
TOTAL	30,607	48,166	78,773
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF $80,000 AND OVER	195	45	240

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
TABULATION BY MONTHLY SALARY
JUNE 30, 2001

MONTHLY SALARY	NUMBER OF MEMBERS		
	MALES	FEMALES	TOTAL
UNDER $ 500	41	7	48
$ 500 - $ 749	15	3	18
$ 750 - $ 999	32	7	39
$ 1,000 - $ 1,249	44	14	58
$ 1,250 - $ 1,499	99	19	118
$ 1,500 - $ 1,749	195	32	227
$ 1,750 - $ 1,999	334	90	424
$ 2,000 - $ 2,249	583	123	706
$ 2,250 - $ 2,499	793	97	890
$ 2,500 - $ 2,749	830	90	920
$ 2,750 - $ 2,999	737	80	817
$ 3,000 - $ 3,499	1,314	141	1,455
$ 3,500 - $ 3,999	1,162	112	1,274
$ 4,000 - $ 4,499	720	56	776
$ 4,500 - $ 4,999	376	25	401
$ 5,000 - $ 5,499	167	11	178
$ 5,500 - $ 5,999	100	4	104
$ 6,000 - $ 6,499	67	3	70
$ 6,500 - $ 6,999	33	4	37
$ 7,000 - $ 7,499	8	0	8
$ 7,500 - $ 7,999	7	1	8
$ 8,000 - $ 8,499	6	0	6
$ 8,500 - $ 8,999	1	1	2
$ 9,000 - $ 9,499	1	0	1
$ 9,500 - $ 9,999	0	0	0
$ 10,000 AND OVER	1	0	1
TOTAL	7,666	920	8,586
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF $80,000 AND OVER	22	2	24

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2001

MEMBERS CURRENTLY ACTIVE IN CERS NONHAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	542	2,028	2,570
KERS - HAZARDOUS	21	55	76
CERS - HAZARDOUS	0	264	264
STATE POLICE	6	18	24
TOTAL - ALL SYSTEMS	569	2,365	2,934

MEMBERS CURRENTLY NOT ACTIVE IN CERS NONHAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	2,358	209	2,567
KERS - HAZARDOUS	216	58	274
CERS - HAZARDOUS	2,585	54	2,639
STATE POLICE	93	11	104
TOTAL - ALL SYSTEMS	5,252	332	5,584

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2001

MEMBERS CURRENTLY ACTIVE IN CERS HAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	22	279	301
KERS - HAZARDOUS	11	108	119
CERS - NONHAZARDOUS	0	2,585	2,585
STATE POLICE	3	44	47
TOTAL - ALL SYSTEMS	36	3,016	3,052

MEMBERS CURRENTLY NOT ACTIVE IN CERS HAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	73	29	102
KERS - HAZARDOUS	33	5	38
CERS - NONHAZARDOUS	264	54	318
STATE POLICE	66	4	70
TOTAL - ALL SYSTEMS	436	92	528

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
RETIRED LIVES SUMMARY
JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	2,352	1,481,788.81	7,455	3,304,148.74	9,807	4,785,937.55
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	1,636	1,065,937.33	625	219,624.32	2,261	1,285,561.65
66-2/3% TO BENEFICIARY	458	549,253.97	176	117,906.11	634	667,160.08
50% TO BENEFICIARY	695	676,875.85	437	293,347.66	1,132	970,223.51
POP-UP OPTION	1,433	1,343,458.62	826	519,820.72	2,259	1,863,279.34
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00
10 YEARS CERTAIN & LIFE	1,178	625,182.95	2,031	872,618.43	3,209	1,497,801.38
SOCIAL SECURITY OPTION						
OPTION C	193	271,742.14	318	236,966.09	511	508,708.23
OPTION D	460	624,255.79	174	136,378.31	634	760,634.10
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	1	324.00	1	324.00	2	648.00
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	431	279,775.08	324	148,667.41	755	428,442.49
20 YEARS CERTAIN & LIFE	261	231,092.53	240	138,146.29	501	369,238.82
5 YEARS ONLY	0	0.00	1	124.55	1	124.55
TOTAL	9,098	7,149,687.07	12,608	5,988,072.63	21,706	13,137,759.70

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
RETIRED LIVES SUMMARY
JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	355	582,936.39	88	70,799.69	443	653,736.08
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	332	482,283.01	18	10,412.28	350	492,695.29
66-2/3% TO BENEFICIARY	159	306,674.91	5	7,067.84	164	313,742.75
50% TO BENEFICIARY	239	424,027.21	11	8,767.71	250	432,794.92
POP-UP OPTION	878	1,550,350.51	30	29,857.35	908	1,580,207.86
10 YEARS CERTAIN	40	70,985.30	6	12,446.28	46	83,431.58
10 YEARS CERTAIN & LIFE	120	180,139.02	24	30,532.62	144	210,671.64
SOCIAL SECURITY OPTION						
OPTION C	93	141,763.73	7	6,925.90	100	148,689.63
OPTION D	281	400,220.75	14	10,362.60	295	410,583.35
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	93	26,281.06	72	20,137.34	165	46,418.40
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	40	52,654.05	3	2,544.88	43	55,198.93
20 YEARS CERTAIN & LIFE	80	122,037.19	16	13,216.72	96	135,253.91
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	2,710	4,340,353.13	294	223,071.21	3,004	4,563,424.34

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	197	66,728.89	1,116	397,114.03	1,313	463,842.92
66-2/3% TO BENEFICIARY	19	5,240.09	125	43,188.89	144	48,428.98
50% TO BENEFICIARY	39	9,557.99	234	66,238.26	273	75,796.25
POP-UP OPTION	49	21,353.53	152	85,480.29	201	106,833.82
10 YEARS CERTAIN	49	21,300.97	101	61,776.29	150	83,077.26
10 YEARS CERTAIN & LIFE	71	34,733.11	126	58,358.97	197	93,092.08
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	8	1,800.63	41	43,342.82	49	45,143.45
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	1	393.19	4	615.45	5	1,008.64
DEPENDENT CHILD	0	0.00	0	0.00	0	0.00
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	28	16,750.31	93	47,677.60	121	64,427.91
20 YEARS CERTAIN & LIFE	24	8,329.90	47	32,165.45	71	40,495.35
5 YEARS ONLY	124	48,581.86	61	48,894.97	185	97,476.83
TOTAL	609	234,770.47	2,100	884,853.02	2,709	1,119,623.49

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	2	1,428.12	76	73,161.71	78	74,589.83
66-2/3% TO BENEFICIARY	0	0.00	15	15,063.30	15	15,063.30
50% TO BENEFICIARY	0	0.00	17	9,530.30	17	9,530.30
POP-UP OPTION	0	0.00	36	46,006.80	36	46,006.80
10 YEARS CERTAIN	8	16,024.84	11	16,219.26	19	32,244.10
10 YEARS CERTAIN & LIFE	0	0.00	1	36.88	1	36.88
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	1	3,291.27	33	45,844.74	34	49,136.01
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	3	2,982.82	3	2,982.82
DEPENDENT CHILD	1	290.30	0	0.00	1	290.30
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	0	0.00	1	74.63	1	74.63
20 YEARS CERTAIN & LIFE	1	1,158.96	4	7,039.93	5	8,198.89
5 YEARS ONLY	6	4,964.25	1	566.73	7	5,530.98
TOTAL	19	27,157.74	198	216,527.10	217	243,684.84

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED RETIREMENT SUMMARY
JUNE 30, 2001

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES MONTHLY BENEFITS	FEMALE LIVES NUMBER	FEMALE LIVES MONTHLY BENEFITS	TOTAL NUMBER	TOTAL MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	25	2,703.75	2	230.77	27	2,934.52
25-29	40	6,264.72	40	5,095.28	80	11,360.00
30-34	99	22,147.22	178	29,673.44	277	51,820.66
35-39	173	52,534.39	306	67,684.63	479	120,219.02
40-44	192	72,453.48	484	103,568.52	676	176,022.00
45-49	275	103,121.14	566	133,323.75	841	236,444.89
50-54	282	115,306.04	636	170,080.97	918	285,387.01
55-59	165	58,354.37	305	66,323.35	470	124,677.72
60-64	90	25,815.58	116	24,404.01	206	50,219.59
65-69	31	4,090.26	32	5,989.95	63	10,080.21
70-74	10	862.93	10	2,298.17	20	3,161.10
75-79	14	1,256.73	5	554.93	19	1,811.66
80-84	1	156.92	3	329.62	4	486.54
85 +	0	0.00	0	0.00	0	0.00
TOTAL	1,397	465,067.53	2,683	609,557.39	4,080	1,074,624.92

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED RETIREMENT SUMMARY
JUNE 30, 2001

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES MONTHLY BENEFITS	FEMALE LIVES NUMBER	FEMALE LIVES MONTHLY BENEFITS	TOTAL NUMBER	TOTAL MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	0	0.00	0	0.00	0	0.00
25-29	7	1,371.48	1	190.01	8	1,561.49
30-34	22	7,824.77	3	726.24	25	8,551.01
35-39	21	8,162.63	8	1,942.77	29	10,105.40
40-44	24	10,916.26	5	1,940.02	29	12,856.28
45-49	30	13,058.24	3	1,372.26	33	14,430.50
50-54	11	5,121.22	4	1,015.96	15	6,137.18
55-59	3	836.13	1	70.89	4	907.02
60-64	3	369.97	0	0.00	3	369.97
65-69	2	565.07	0	0.00	2	565.07
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	123	48,225.77	25	7,258.15	148	55,483.92

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2001

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES ACCUMULATED CONTRIBUTIONS	FEMALE LIVES NUMBER	FEMALE LIVES ACCUMULATED CONTRIBUTIONS	TOTAL NUMBER	TOTAL ACCUMULATED CONTRIBUTIONS
15-19	2,321	385,886.36	113	38,853.81	2,434	424,740.17
20-24	738	657,989.04	429	189,866.34	1,167	847,855.38
25-29	966	626,194.68	1,849	1,202,258.60	2,815	1,828,453.28
30-34	1,210	941,610.86	2,723	2,079,874.04	3,933	3,021,484.90
35-39	1,043	827,436.04	2,260	1,830,321.13	3,303	2,657,757.17
40-44	968	746,135.58	2,230	1,840,980.48	3,198	2,587,116.06
45-49	892	800,090.55	1,884	1,912,674.71	2,776	2,712,765.26
50-54	725	917,674.76	1,396	1,515,905.51	2,121	2,433,580.27
55-59	446	599,092.95	726	785,234.03	1,172	1,384,326.98
60-64	307	336,556.05	372	345,498.81	679	682,054.86
65-69	171	167,419.47	160	146,774.47	331	314,193.94
70-74	93	66,820.67	89	44,354.49	182	111,175.16
75-79	61	23,993.72	41	16,323.35	102	40,317.07
80-84	27	15,619.03	17	7,306.33	44	22,925.36
85 +	8	2,277.17	11	3,698.29	19	5,975.46
TOTAL	9,976	7,114,796.93	14,300	11,959,924.39	24,276	19,074,721.32

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2001

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES ACCUMULATED CONTRIBUTIONS	FEMALE LIVES NUMBER	FEMALE LIVES ACCUMULATED CONTRIBUTIONS	TOTAL NUMBER	TOTAL ACCUMULATED CONTRIBUTIONS
15-19	64	15,822.02	0	0.00	64	15,822.02
20-24	33	61,746.22	0	0.00	33	61,746.22
25-29	84	157,207.46	15	38,873.61	99	196,081.07
30-34	79	129,436.87	18	34,820.48	97	164,257.35
35-39	51	92,597.27	14	8,856.86	65	101,454.13
40-44	33	55,104.64	7	3,329.61	40	58,434.25
45-49	20	81,468.39	5	7,144.15	25	88,612.54
50-54	17	27,967.04	5	53,485.16	22	81,452.20
55-59	7	29,108.72	3	5,211.32	10	34,320.04
60-64	2	11,948.61	1	1,009.88	3	12,958.49
65-69	3	1,542.03	0	0.00	3	1,542.03
70-74	1	239.26	0	0.00	1	239.26
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	394	664,188.53	68	152,731.07	462	816,919.60

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the County Employees Retirement System in July, 1958. The plan benefits have been improved several times, most recently as of August 1, 1998.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the five highest paid fiscal years for nonhazardous positions. If the months of service credit during the highest five year period is less than forty-eight, one or more additional fiscal years shall be used. For a member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years.

For hazardous positions, final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

(a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1958. In some instances prior service credit is granted for time spent in the military.

(b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1958. Current service credit may be granted for military service and educational leaves if special criteria are met.

(c) Employers may elect to purchase up to 6 months additional service credit based on an employee's unused sick leave.

Eligibility

Any county or political subdivision or instrumentality, including school boards or urban county government may participate in the System upon approval by the Board. Membership in the system consists of:

(a) all persons who become employees of a county after such county first participates,

(b) all persons who are employees on the date a county first participates and who elect within thirty days to become members and make contributions.

Membership does not include employees of a county who are members of some other state, county, or local retirement system, supported in whole or in part by public funds.

Normal Retirement Date

A member may elect to retire upon: (1) attaining age 65 for non-hazardous positions, or attaining age 55 for hazardous positions, and (2) having contributed to the System. Upon completion of 27 years of service credit, 15 of which are current service for non-hazardous positions, or completion of 20 years of service credit for hazardous positions, a member may elect to retire with an unreduced benefit.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after: (1) for non-hazardous positions, attainment of age 55 and completion of 60 months of service credit at least 12 of which are current, or at any age after 25 years of service, or (2) for hazardous positions, attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

For non-hazardous positions, upon attainment of age 65 and completion of 48 months of service, of which 12 months are current service, a monthly benefit equal to 2.20% of the member's final compensation multiplied by his service will be payable. For hazardous positions, a monthly benefit equal to 2.50% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member, with less than 48 months for non-hazardous positions or 60 months for hazardous positions, who retires on or after the normal retirement date is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a non-hazardous position employee has 27 or more years of service credit, 15 of which are current, or a hazardous position employee has 20 or more years of service credit, an unreduced benefit is payable.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 65th birthday (55th for members in a hazardous position) up to a maximum of service credited to the last day of paid employment. Except for members with 25 or more (20 or more for hazardous) years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 25 years (20 years for

hazardous members). For non-hazardous position employees with 25 or more years of service, additional years of service credit will be added up to maximum combined limit of 30, or actual service if greater. For hazardous position employees with 20 or more years of service credit, actual service will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable to hazardous employees if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, or after 48 months service if the member is age 65 or over, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member in a hazardous position dies in the line of duty and has a spouse as beneficiary, a $5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary, a lump sum payment of $10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a hazardous duty member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee using 2.50% rather than 2.20%.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of $5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include a life annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 5% of gross compensation (8% for hazardous positions). On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The cost of participation for any beneficiaries or dependents is borne by the retiree (except that dependents of hazardous position employees and legislators will have the same percentage paid by the system as the member). The retirement system will pay a portion of the cost of participation for the retiree based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a hazardous member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a hazardous member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contract provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.

FORTY-THIRD ANNUAL ACTUARIAL VALUATION

JUNE 30, 2001

STATE POLICE RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the forty-third annual actuarial valuation of the State Police Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2001.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contribution for the ensuing fiscal year as required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding is defined in KRS 61.565 and provides that the actuarial valuation method would be uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System as to the financing required during years of active service to accumulate the funds needed to provide members' benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the “level-percentage-of-payroll” method. Under the “level-percentage-of-payroll” method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate is being increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus any reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the

medical insurance contribution rate is to be increased at the start of each biennium (coincides with valuations in odd numbered years) by the percentage amount necessary to raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016. There will be no changes in the even numbered years unless there are actuarial gains relative to the retirement funding which will then be used to increase the medical insurance funding rate for the next year only.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase. In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:

1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.

2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.

3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.

4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.

5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	RETIREMENT FUND	INSURANCE FUND
June 30. 2000 Valuation Assets	459.168.574	71.711.712
Cash Flows		
> Employer Contributions	1,516,267	8,113,391
> Member Contributions	4,138,298	
> Retirement Benefits	22,644,170	
> Net Refunds	80,369	
> Insurance Premiums		3,545,672
> Administrative Expenses	64,171	28,055
> Investment Manager Fees	149,945	6,583
Valuation Interest Assumption	8.25%	8.25%
Expected Return on Valuation Assets Reflecting Actual Cash Flows *	37,168,439	6,103,206
Expected Valuation Assets	479,052,923	82,347,999
Actual Market Value of Assets	364,591,852	69,925,891
Investment Gain/(Loss)	(114,461,071)	(12,422,108)
Amortization Amounts From Prior Valuations		
> Valuation Year – 1		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
> Valuation Year – 2		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
> Valuation Year – 3		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
> Valuation Year – 4		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
Unamortized Amount of Gain/(Loss) From Prior Valuations	0	0
Investment Gain/(Loss) to be Amortized from Current Valuation Date		
> Amount	(114,461,071)	(12,422,108)
> Amortization	(22,892,214)	(2,484,422)
June 30. 2001 Valuation Assets		
> Expected Assets	479,052,923	82,347,999
> Amortization Amounts	(22,892,214)	(2,484,422)
> Valuation Assets	456,160,709	79,863,577

*Cash flows are assumed equally spread throughout the year

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1)	Mortality:		
	(a) Active & retired lives	-	1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year.
	(b) Disabled lives	-	Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).
(2)	Disablement	-	Graduated rates based on 2000 experience study (no change from 1995 experience study).
(3)	Termination of employment #	-	Graduated rates based on 2000 experience study.
(4)	Retirement	-	60% will retire as soon as eligible for unreduced benefits and balance will continue to age 55.
(5)	Marital status		
	(a) Percentage married	-	100%.
	(b) Age difference	-	Males are assumed to be 3 years older than their spouses.
(6)	Dependent children	-	For duty related death benefits, it is assumed that the employee is survived by 2 dependent children, each age 6.
(7)	Investment return	-	8.25% per year, net of investment related expenses, compounded annually.
(8)	Compensation progression #	-	1st year: 12.00% 2nd year: 10.00% 3rd year: 8.00% Thereafter: 6.50%, compounded annually.
(9)	Underlying Inflation Rate	-	3.50% per year, reflected in investment return and compensation progression assumptions.
(10)	Retiree Medical Insurance #	-	It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution rates were assumed to be as follows:

Plan Type	Rate in Effect on Valuation Date
Single	
- Region 1	$252.46
- Region 2	293.46
- Region 3	273.52
- All Others	234.00
Family	577.00
Parent Plus	350.00
Couple	525.00
Medicare*	
- Low Option	96.41
- High Option	229.03

Region 1: Boyd, Carter, Elliott, Greenup

Region 2: Christian, Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Todd, Trigg, Union, Webster

Region 3: Harlan, Lewis, Mason, Perry, Roberston

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem BC/BS	101.26	231.35	2,839	17,314
Bankers Life	91.78	216.94	272	156
Option 2000	83.05	216.51	504	1,767
Humana	85.00	247.00	490	1,729
Humana Gold Plus	85.00	136.00	17	507

*Weighted average of current rates available from different carriers; weighting based on number of contracts in force.

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

Years	Medical Increase
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

(11) Missing data

- For those active members with incomplete data, the following assumptions were made:

. If reported salary was zero or blank, then monthly salary was assumed to be $2,139.58.

. If reported age was blank, then assume current age equal to age 18 plus years of service reported

(12) Members with Multiple Service Records

- For active members with service in more than one system, the liability has been valued as follows:

  . Service under all systems is aggregated for purposes of determining benefit eligibility.

  . Future service is projected only under the system in which the member is currently active.

  . The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.

  . The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

  For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Changes in assumptions from those used in 2000 valuation.

B. SAMPLE RATES

(1) Annual Rates of Mortality:

	Active Mortality*		Disabled Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

*Plus 0.05% duty death rate prior to retirement.

(2) Annual Rates of Decrement:

Age	Disablement	Ultimate Termination	
		KERS and CERS Hazardous	SPRS
25	0.042%	3.04%	1.82%
30	0.050%	3.38%	2.03%
40	0.132%	1.50%	0.90%
50	0.530%	0.00%	0.00%
55	0.992%	0.00%	0.00%
60	1.743%	0.00%	0.00%

(3) Compensation Progression (after 1st 3 Years):

Age	Rate of Annual Increase	Compensation at Normal Retirement as Percentage Of Current Annual Compensation
25	6.50%	661.4%
30	6.50%	482.8%
40	6.50%	257.2%
50	6.50%	137.0%

SECTION III

RESULTS OF THE 2001 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the State required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the Normal Cost, medical insurance and the expenses of administration, is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated annual State payroll as of June 30, 2001.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2001 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the State Police Retirement System as of June 30, 2001 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements relative to the Retirement Fund.

Table X contains additional information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I
STATE POLICE RETIREMENT SYSTEM
RETIREMENT AND INSURANCE FUND
DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2001

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND			
			Percent *
Total Actuarial Accrued Liability	$	356,211,860	805.73%
Assets at Actuarial Value		456,160,709	1031.81%
Unfunded Actuarial Accrued Liability	$	(99,948,849)	(226.08%)
Contribution - Payment on Unfunded Actuarial Accrued Liability	$	(5,139,966)	(11.63%)
NORMAL COST - RETIREMENT FUND			
Retirement Benefits	$	6,827,735	15.46%
Disability Benefits		283,201	0.63%
Withdrawal Benefits (Vested and Refund of Contributions)		275,027	0.62%
Survivor Benefits		239,175	0.54%
Total Normal Cost	$	7,625,138	17.25%
Less: Employee Contributions		3,426,389	7.75%
Normal Cost - State	$	4,198,749	9.50%
TOTAL ANNUAL EMPLOYER COST - RETIREMENT AND INSURANCE FUND			
Normal Cost	$	4,198,749	9.50%
Payment on Unfunded Actuarial Accrued Liability		(5,139,966)	(11.63%)
Administrative Expense		194,082	0.44%
Subtotal - Retirement Fund (Not Less Than Zero)	$	0	0.00%
Group Hospital and Medical Insurance Premiums		9,540,506	21.58%
Total Annual Cost	$	9,540,506	21.58%
* Based on estimated annual salaries of	$	44,209,944	

TABLE II
STATE POLICE RETIREMENT SYSTEM
RETIREMENT FUND
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2001

ACTUARIAL ACCRUED LIABILITY		
Active Members		
Retirement Benefits	$	125,496,792
Disability Benefits		2,661,774
Withdrawal Benefits (Vested and Refund of Contributions)		649,894
Survivor Benefits		2,970,628
Total - Actives	$	131,779,088
Inactive Members		
Retired Members and Beneficiaries	$	224,139,350
Vested Retirement		232,861
Vested Membership		60,561
Total - Inactives	$	224,432,772
Total Actuarial Accrued Liability	$	356,211,860
UNFUNDED ACTUARIAL ACCRUED LIABILITY		
Total Actuarial Accrued Liability	$	356,211,860
Less Actuarial Value of Assets		456,160,709
Unfunded Actuarial Accrued Liability	$	(99,948,849)
NORMAL COST		
Retirement Benefits	$	6,827,735
Disability Benefits		283,201
Withdrawal Benefits (Vested and Refund of Contributions)		275,027
Survivor Benefits		239,175
Total Normal Cost	$	7,625,138
Less Employee Contributions		3,426,389
Total Normal Cost - State	$	4,198,749

TABLE III
STATE POLICE RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2001

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
6/30/1990	$ 8,982,071	$ 11,211,586	$ 765,650	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	9,963,656	12,308,804	809,599	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(24,502,117)	(29,884,826)	(1,897,806)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's; Asset valuation method change
6/30/1993	(3,706,436)	(4,453,445)	(273,646)	Experience gains/losses for 7/1/1992 to 6/30/1993; State contribution shortfall
6/30/1994	10,380,135	12,262,095	730,502	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's; State contribution shortfall
6/30/1995	22,729,292	26,349,676	1,524,698	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(17,793,855)	(20,209,741)	(1,137,748)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions
6/30/1997	(31,021,470)	(34,437,148)	(1,889,084)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	12,716,788	13,778,617	737,514	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average salary definition from 5 years to 3 years; Increase in death benefit from $2,500 to $5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(31,317,924)	(33,076,611)	(1,729,808)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(77,707,399)	(79,904,019)	(4,087,730)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	26,106,163	26,106,163	1,307,893	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000
Total	$ (95,171,096)	$ (99,948,849)	$ (5,139,966)	

TABLE IV
STATE POLICE RETIREMENT SYSTEM
INSURANCE FUND
DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2001

ACTUARIAL ACCRUED LIABILITY		
Active Members	$	71,792,369
Inactive Members		
Retired Members	$	74,905,454
Beneficiaries		11,063,908
Vested Retirement		499,748
Vested Membership		0
Total - Inactives	$	86,469,110
Total Actuarial Accrued Liability	$	158,261,479
UNFUNDED ACTUARIAL ACCRUED LIABILITY		
Total Actuarial Accrued Liability	$	158,261,479
Less Actuarial Value of Assets		79,863,577
Unfunded Actuarial Accrued Liability	$	78,397,902
NORMAL COST		
Gross Normal Cost	$	6,258,315
Less Employee Contributions		0
Net Normal Cost - State	$	6,258,315
Estimated Annual Salaries	$	44,209,944
TOTAL ANNUAL EMPLOYER COST		
Contribution Amount		
Normal Cost	$	6,258,315
Payment on Unfunded Actuarial Accrued Liability		4,438,567
Total Annual Cost	$	10,696,882
As Percent of Payroll		
Normal Cost		14.16%
Payment on Unfunded Actuarial Accrued Liability		10.04%
Total Annual Cost		24.20%
INSURANCE FUND SHORTFALL		
Full Entry Age Funding Level		24.20%
Current Funding Allocation *		18.47%
Additional to Pick Up By 2016		5.73%
Expected Increase in Insurance Fund Rate in 2002 Valuation		0.00%

* Without regard to any one-year temporary adjustments for actuarial gains

TABLE V
STATE POLICE RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2001

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
6/30/1996	$ 73,323,619	$ 83,278,826	$ 4,688,348	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	8,088,952	8,979,603	492,585	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	(2,668,212)	(2,891,002)	(154,744)	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(13,378,283)	(14,129,553)	(738,933)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	(6,431,546)	(6,613,352)	(338,326)	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	9,773,380	9,773,380	489,637	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
Total	$ 68,707,910	$ 78,397,902	$ 4,438,567	

TABLE VI
STATE POLICE RETIREMENT SYSTEM
BENEFIT PAYMENT PROJECTIONS

RETIREMENT FUND PAYMENT PROJECTIONS

Plan Year	Total
7/1/2001 to 6/30/2002	24,097,000
7/1/2002 to 6/30/2003	25,621,000
7/1/2003 to 6/30/2004	27,245,000
7/1/2004 to 6/30/2005	29,268,000
7/1/2005 to 6/30/2006	30,727,000
7/1/2006 to 6/30/2007	33,372,000
7/1/2007 to 6/30/2008	35,408,000
7/1/2008 to 6/30/2009	38,393,000
7/1/2009 to 6/30/2010	40,983,000
7/1/2010 to 6/30/2011	43,222,000

INSURANCE FUND PAYMENT PROJECTIONS

Plan Year	Total
7/1/2001 to 6/30/2002	4,403,000
7/1/2002 to 6/30/2003	5,014,000
7/1/2003 to 6/30/2004	5,688,000
7/1/2004 to 6/30/2005	6,392,000
7/1/2005 to 6/30/2006	7,084,000
7/1/2006 to 6/30/2007	8,035,000
7/1/2007 to 6/30/2008	8,832,000
7/1/2008 to 6/30/2009	9,885,000
7/1/2009 to 6/30/2010	11,012,000
7/1/2010 to 6/30/2011	12,175,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

TABLE VII
STATE POLICE RETIREMENT SYSTEM
RETIREMENT FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2001

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 456,160,709
Actuarial Present Value of Future Member Contributions		33,977,686
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 41,422,943	
For Unfunded Actuarial Accrued Liability	(99,948,849)	
Total		$ (58,525,906)
Total Actuarial Assets		$ 431,612,489
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 224,139,350	
Vested Retirement	232,861	
Vested Membership	60,561	
Total - Inactive		$ 224,432,772
Actuarial Present Value of Future Benefits		
Active Members:		
Retirement Benefits	$ 193,083,480	
Disability Benefits	5,395,695	
Withdrawal Benefits (Vested and Refund of Contributions)	3,386,840	
Survivor Benefits	5,313,702	
Total - Active		$ 207,179,717
Refunds and Expenses Payable		$ 0
Total Actuarial Liabilities		$ 431,612,489

Notes

* Values as of June 30, 2001	
Market value of assets:	$ 364,591,852
Actuarial value of assets:	$ 456,160,709
Member's Contribution Account:	$ 34,338,478

** Present value of accrued benefit deferred to normal retirement date.

TABLE VIII
STATE POLICE RETIREMENT SYSTEM
INSURANCE FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2001

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 79,863,577
Actuarial Present Value of Future Member Contributions (Note: All Future Member Contributions Credited Against Retirement Fund)		0
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 69,968,924	
For Unfunded Actuarial Accrued Liability	78,397,902	
Total		$ 148,366,826
Total Actuarial Assets		$ 228,230,403
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 85,969,362	
Vested Retirement	499,748	
Vested Membership	0	
Total - Inactive		$ 86,469,110
Actuarial Present Value of Future Benefits Active Members:		$ 141,761,293
Refunds and Expenses Payable		0
Total Actuarial Liabilities		$ 228,230,403
Notes		
* Values as of June 30, 2001		
Market value of assets:		$ 69,925,891
Actuarial value of assets:		$ 79,863,577

TABLE IX STATE POLICE RETIREMENT SYSTEM ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2001 GASB DISCLOSURE INFORMATION	
NUMBER OF MEMBERS	
Inactive Members	
Retired Members	767
Beneficiaries	75
Vested Retirements	12
Vested Membership	78
Total Inactive Members	932
Active Members	
Vested Members	756
Nonvested Members	260
Total Active Members	1,016
Total Members	1,948

TABLE X
STATE POLICE RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2001
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

NUMBER OF MEMBERS			
Contracts in Force - Retirees and Dependents			
(1) Single;	-	100% Paid	187
Pre-Medicare	-	75% Paid	2
	-	50% Paid	4
	-	25% Paid	1
	-	0% Paid	0
(2) Family;	-	100% Paid	121
Pre-Medicare	-	75% Paid	0
	-	50% Paid	1
	-	25% Paid	0
	-	0% Paid	0
(3) Parent +;	-	100% Paid	47
Pre-Medicare	-	75% Paid	0
	-	50% Paid	0
	-	25% Paid	0
	-	0% Paid	0
(4) Couple;	-	100% Paid	222
Pre-Medicare	-	75% Paid	3
	-	50% Paid	1
	-	25% Paid	2
	-	0% Paid	0
(5) Medicare Regular	-	100% Paid	8
	-	75% Paid	0
	-	50% Paid	0
	-	25% Paid	0
	-	0% Paid	0
(6) Medicare High	-	100% Paid	272
Option	-	75% Paid	3
	-	50% Paid	1
	-	25% Paid	1
	-	0% Paid	1
Vested Retirements			12
Vested Membership			78
Active Members			1,016

UNFUNDED MEDICAL BENEFIT OBLIGATION		
Medical Benefit Obligation		
Retirees, Beneficiaries and Vested Terminated Members	$	86,469,110
Active Members		71,792,369
Total Medical Benefit Obligation	$	158,261,479
Net Assets at Actuarial Value	$	79,863,577
Unfunded Medical Benefit Obligation	$	78,397,902
NOTE: Medical Benefit Obligation based on Entry Age Normal Actuarial Cost Method		

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from $336,579,763 on June 30, 2000 to $356,211,860 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from ($122,588,811) to ($99,948,849). Total actuarial value of assets as of June 30, 2001 was equal to $456,160,709. The Unfunded Actuarial Accrued Liability increased from (281.19%) to (226.08%) as a percentage of annual payroll and increased from (36.4%) to (28.1%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from $138,867,085 on June 30, 2000 to $158,261,479 on June 30, 2001. The Unfunded Actuarial Accrued Liability has increased from $67,155,373 to $78,397,902. Total actuarial value of assets as of June 30, 2001 was equal to $79,863,577. The Unfunded Actuarial Liability increased from 48.4% to 49.5% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2001.

The change in contribution rate between the 2000 and 2001 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

June 30, 2000 Contribution Rate	21.58%
Change in Payment Percentage Due to Covered Payroll Experience	(0.49%)
Investment Return Experience	
> Prior to Asset Valuation Method Change	0.06%
> Impact of Asset Valuation Method Change	2.54%
Salary Increase Experience	0.20%
Decrements Experience*	(0.26%)
Change in Insurance Fund Rate	
> One-Year Temporary Funding Rate	(0.33%)
> Increase in Long Term Funding Rate	0.33%
Change in Administrative Expense Rate	(0.21%)
Retiree COLA Effective 7/1/2000	0.55%
Legislated Changes	
> 3 Year Average Window for Nonhazardous	0.00%
Change in Actuarial Assumptions	1.23%
Reduction in Amount Available from Prior Year Retirement Fund Rate to Offset Current Year Increases	(3.62%)
June 30, 2001 Contribution Rate	21.58%
* Includes mortality, disability, termination of employment and retirement experience.	

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses is 0.00%. An additional 21.58% is required to fund medical insurance for retirees, bringing the required contribution up to 21.58%. This is the same as the current 21.58% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2002 should remain at the 21.58% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2002 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

STATE POLICE RETIREMENT SYSTEM - RETIREMENT FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1958	$ 1,450,000	$ 1,450,000	100.0%	$ 0	$ 0
1963	4,553,258	2,008,476	44.1%	2,544,782	619,167
1968	9,079,139	3,288,103	36.2%	5,791,036	789,709
1971	11,828,727	2,441,888	20.6%	9,386,839*	1,339,726
1974	17,737,434	3,179,448	17.9%	14,557,986*	1,935,105
1975	23,182,081	6,169,445	26.6%	17,012,636*	2,454,650
1976	28,693,129	8,231,367	28.7%	20,461,762*	3,449,126
1977	34,561,413	10,436,161	30.2%	24,125,252*	3,663,490
1978	49,950,102	21,440,957	42.9%	28,509,145*	4,383,893
1979	55,391,206	21,487,985	38.8%	33,903,221*	5,394,076
1980	67,580,562	26,663,397	39.5%	40,917,165*	7,013,944
1981	71,526,728	23,296,425	32.6%	48,230,303	7,313,138
1982	78,713,172	21,383,042	27.2%	57,330,130	9,099,827
1983	81,944,546	16,187,460	19.8%	65,757,086	8,426,956
1984	91,180,668	16,200,151	17.8%	74,980,517	9,223,431
1985	99,269,825	14,253,583	14.4%	85,016,242	10,035,725
1986	105,559,951	8,892,252	8.4%	96,667,699	11,651,457
1987	111,541,989	1,347,385	1.2%	110,194,604	13,526,905
1988	120,128,367	(870,182)	(0.8%)	120,998,549	10,803,945
1989	134,550,773	3,200,220	2.4%	131,350,553	10,352,004
1990	154,007,622	8,982,071	5.8%	145,025,551	13,674,998
1991	170,009,955	1 9,191,881	11.3%	150,818,074	5,792,523
1992**	182,996,056	(4,794,955)	(2.6%)	187,791,011	36,972,937
1993	191,653,594	(8,667,374)	(4.5%)	200,320,968	12,529,957
1994	206,763,310	1,442,801	0.7%	205,320,509	4,999,541
1995	241,690,631	24,186,188	10.0%	217,504,443	12,183,934
1996	244,540,812	7,025,466	2.9%	237,515,346	20,010,903
1997	255,784,758	(23,858,517)	(9.3%)	279,643,275	42,127,929
1998	294,427,019	(11,891,899)	(4.0%)	306,318,918	26,675,643
1999	314,021,673	(43,601,523)	(13.9%)	357,623,196	51,304,278
2000	336,579,763	(122,588,811)	(36.4%)	459,168,574	101,545,378
2001***	356,211,860	(99,948,849)	(28.1%)	456,160,709	(3,007,865)
*Includes capitalized appreciation of investments.					
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

STATE POLICE RETIREMENT SYSTEM - INSURANCE FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1990	$ 64,784,801	$ 58,268,284	89.9%	$ 6,516,517	$ N/A
1991	74,163,248	65,231,704	88.0%	8,931,544	2,415,027
1992	88,407,634	76,689,678	86.7%	11,717,956	2,786,412
1993	95,290,099	81,004,620	85.0%	14,285,479	2,567,523
1994	110,193,139	92,782,467	84.2%	17,410,672	3,125,193
1995	118,995,732	97,795,537	82.2%	21,200,195	3,789,523
1996**	101,132,886	73,323,619	72.5%	27,809,267	6,609,072
1997	117,361,754	83,485,271	71.1%	33,876,483	6,067,216
1998	124,501,076	83,090,576	66.7%	41,410,500	7,534,017
1999	125,797,150	71,867,291	57.1%	53,929,859	12,519,359
2000	138,867,085	67,155,373	48.4%	71,711,712	17,781,853
2001***	158,261,479	78,397,902	49.5%	79,863,577	8,151,865
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the State Police Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding polices adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Stephen A. Gagel, F.S.A. Date

Edward W. Maynard, F.S.A. Date

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SECTION V

STATISTICAL DATA

AS OF

JUNE 30, 2001

STATE POLICE RETIREMENT SYSTEM
JUNE 30, 2001

EARNINGS BY AGE GROUPS

AGE	MALE			FEMALE			TOTAL		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	3	72,000	24,000	0	0	0	3	72,000	24,000
20-24	40	1,022,640	25,566	1	8,256	8,256	41	1,030,896	25,144
25-29	162	5,077,752	31,344	11	357,432	32,494	173	5,435,184	31,417
30-34	230	8,691,300	37,788	11	432,696	39,336	241	9,123,996	37,859
35-39	182	7,875,120	43,270	5	210,468	42,094	187	8,085,588	43,238
40-44	146	7,111,272	48,707	7	332,472	47,496	153	7,443,744	48,652
45-49	126	7,024,380	55,749	2	123,876	61,938	128	7,148,256	55,846
50-54	69	4,490,196	65,075	0	0	0	69	4,490,196	65,075
55-59	20	1,356,264	67,813	0	0	0	20	1,356,264	67,813
60-64	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0
70-74	1	23,820	23,820	0	0	0	1	23,820	23,820
75+	0	0	0	0	0	0	0	0	0
TOTAL	979	42,744,744	43,662	37	1,465,200	39,600	1,016	44,209,944	43,514

EARNINGS BY SERVICE GROUPS

SERVICE	MALE			FEMALE			TOTAL		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	17	291,996	17,176	1	8,256	8,256	18	300,252	16,681
1	117	3,092,172	26,429	3	83,736	27,912	120	3,175,908	26,466
2	48	1,514,400	31,550	4	124,524	31,131	52	1,638,924	31,518
3	0	0	0	0	0	0	0	0	0
4	64	2,136,828	33,388	6	205,152	34,192	70	2,341,980	33,457
0-4	246	7,035,396	28,599	14	421,668	30,119	260	7,457,064	28,681
5-9	209	8,233,812	39,396	9	363,408	40,379	218	8,597,220	39,437
10-14	148	6,556,032	44,298	5	223,776	44,755	153	6,779,808	44,312
15-19	192	9,466,668	49,306	8	378,492	47,312	200	9,845,160	49,226
20-24	69	3,900,252	56,525	1	77,856	77,856	70	3,978,108	56,830
25-29	80	5,108,184	63,852	0	0	0	80	5,108,184	63,852
30-34	32	2,241,336	70,042	0	0	0	32	2,241,336	70,042
35-39	3	203,064	67,688	0	0	0	3	203,064	67,688
40+	0	0	0	0	0	0	0	0	0
TOTAL	979	42,744,744	43,662	37	1,465,200	39,600	1,016	44,209,944	43,514

STATE POLICE RETIREMENT SYSTEM
JUNE 30, 2001

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	3									3
20-24	40									40
25-29	120	42								162
30-34	62	128	39	1						230
35-39	14	35	84	49						182
40-44	5	3	24	101	13					146
45-49	1			40	45	40				126
50-54			1	1	11	38	16	2		69
55-59		1				2	16	1		20
60-64										0
65-69										0
70-74	1									1
75+										0
TOTAL	246	209	148	192	69	80	32	3	0	979

FEMALE

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24	1									1
25-29	9	2								11
30-34	3	6	2							11
35-39	1	1	3							5
40-44				7						7
45-49				1	1					2
50-54										0
55-59										0
60-64										0
65-69										0
70-74										0
75+										0
TOTAL	14	9	5	8	1	0	0	0	0	37

TOTAL

AGE GROUP / SERVICE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	3									3
20-24	41									41
25-29	129	44								173
30-34	65	134	41	1						241
35-39	15	36	87	49						187
40-44	5	3	24	108	13					153
45-49	1			41	46	40				128
50-54			1	1	11	38	16	2		69
55-59		1				2	16	1		20
60-64										0
65-69										0
70-74	1									1
75+										0
TOTAL	260	218	153	200	70	80	32	3	0	1,016

STATE POLICE RETIREMENT SYSTEM
JUNE 30, 2001

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	3									3
	24,000									24,000
20-24	41									41
	25,144									25,144
25-29	129	44								173
	28,960	38,620								31,417
30-34	65	134	41	1						241
	30,144	39,726	43,819	44,844						37,859
35-39	15	36	87	49						187
	30,450	39,268	44,373	48,057						43,238
40-44	5	3	24	108	13					153
	28,973	41,056	44,903	49,818	55,208					48,652
45-49	1			41	46	40				128
	33,492			49,256	56,985	61,849				55,846
50-54			1	1	11	38	16	2		69
			45,132	45,684	58,101	66,386	68,906	67,548		65,075
55-59		1				2	16	1		20
		37,908				55,776	71,177	67,968		67,813
60-64										0
65-69										0
70-74	1									1
	23,820									23,820
75+										0
TOTAL	260	218	153	200	70	80	32	3	0	1,016
	28,681	39,437	44,312	49,226	56,830	63,852	70,042	67,688		43,514

TOTAL EARNINGS	44,209,944
AVERAGE AGE	36.92
AVERAGE SERVICE	11.77

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

STATE POLICE RETIREMENT SYSTEM
TABULATION BY MONTHLY SALARY
JUNE 30, 2001

MONTHLY SALARY	NUMBER OF MEMBERS MALES	FEMALES	TOTAL
UNDER $ 500	3	0	3
$ 500 - $ 749	2	1	3
$ 750 - $ 999	1	0	1
$ 1,000 - $ 1,249	2	0	2
$ 1,250 - $ 1,499	1	0	1
$ 1,500 - $ 1,749	1	0	1
$ 1,750 - $ 1,999	8	0	8
$ 2,000 - $ 2,249	43	0	43
$ 2,250 - $ 2,499	77	3	80
$ 2,500 - $ 2,749	68	9	77
$ 2,750 - $ 2,999	45	0	45
$ 3,000 - $ 3,499	214	9	223
$ 3,500 - $ 3,999	198	10	208
$ 4,000 - $ 4,499	134	4	138
$ 4,500 - $ 4,999	77	0	77
$ 5,000 - $ 5,499	47	0	47
$ 5,500 - $ 5,999	35	0	35
$ 6,000 - $ 6,499	13	1	14
$ 6,500 - $ 6,999	4	0	4
$ 7,000 - $ 7,499	5	0	5
$ 7,500 - $ 7,999	1	0	1
$ 8,000 - $ 8,499	0	0	0
$ 8,500 - $ 8,999	0	0	0
$ 9,000 - $ 9,499	0	0	0
$ 9,500 - $ 9,999	0	0	0
$ 10,000 AND OVER	0	0	0
TOTAL	979	37	1,016
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF $66,000 AND OVER	5	0	5

STATE POLICE RETIREMENT SYSTEM
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2001

MEMBERS CURRENTLY ACTIVE IN SPRS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	0	109	109
KERS - HAZARDOUS	1	20	21
CERS - NONHAZARDOUS	6	93	99
CERS - HAZARDOUS	3	66	69
TOTAL - ALL SYSTEMS	10	288	298

MEMBERS CURRENTLY NOT ACTIVE IN SPRS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	13	9	22
KERS - HAZARDOUS	7	1	8
CERS - NONHAZARDOUS	18	11	29
CERS - HAZARDOUS	44	4	48
TOTAL - ALL SYSTEMS	82	25	107

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

STATE POLICE RETIREMENT SYSTEM
RETIRED LIVES SUMMARY
JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	68	162,680.44	6	5,599.34	74	168,279.78
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	107	229,688.83	1	885.33	108	230,574.16
66-2/3% TO BENEFICIARY	57	151,924.92	0	0.00	57	151,924.92
50% TO BENEFICIARY	56	135,475.08	2	1,989.44	58	137,464.52
POP-UP OPTION	186	488,449.17	1	519.18	187	488,968.35
10 YEARS CERTAIN	5	14,816.15	0	0.00	5	14,816.15
10 YEARS CERTAIN & LIFE	22	54,358.04	0	0.00	22	54,358.04
SOCIAL SECURITY OPTION						
OPTION C	34	72,899.59	1	1,688.19	35	74,587.78
OPTION D	165	345,938.24	5	3,691.45	170	349,629.69
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	8	2,081.00	4	1,073.07	12	3,154.07
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	10	21,371.15	0	0.00	10	21,371.15
20 YEARS CERTAIN & LIFE	25	54,241.14	4	3,342.14	29	57,583.28
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	743	1,733,923.75	24	18,788.14	767	1,752,711.89

STATE POLICE RETIREMENT SYSTEM
BENEFICIARY SUMMARY
JUNE 30, 2001

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	3	4,236.97	45	88,659.27	48	92,896.24
66-2/3% TO BENEFICIARY	0	0.00	1	1,167.87	1	1,167.87
50% TO BENEFICIARY	1	997.32	8	10,492.70	9	11,490.02
POP-UP OPTION	0	0.00	6	15,094.36	6	15,094.36
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00
10 YEARS CERTAIN & LIFE	0	0.00	0	0.00	0	0.00
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	0	0.00	7	15,508.27	7	15,508.27
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	1	248.81	0	0.00	1	248.81
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	1	2,990.97	0	0.00	1	2,990.97
20 YEARS CERTAIN & LIFE	0	0.00	2	7,270.97	2	7,270.97
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	6	8,474.07	69	138,193.44	75	146,667.51

STATE POLICE RETIREMENT SYSTEM
VESTED RETIREMENT SUMMARY
JUNE 30, 2001

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES MONTHLY BENEFITS	FEMALE LIVES NUMBER	FEMALE LIVES MONTHLY BENEFITS	TOTAL NUMBER	TOTAL MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	0	0.00	0	0.00	0	0.00
25-29	0	0.00	0	0.00	0	0.00
30-34	2	837.44	0	0.00	2	837.44
35-39	3	1,007.34	1	279.99	4	1,287.33
40-44	4	2,442.56	0	0.00	4	2,442.56
45-49	0	0.00	0	0.00	0	0.00
50-54	2	996.05	0	0.00	2	996.05
55-59	0	0.00	0	0.00	0	0.00
60-64	0	0.00	0	0.00	0	0.00
65-69	0	0.00	0	0.00	0	0.00
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	11	5,283.39	1	279.99	12	5,563.38

STATE POLICE RETIREMENT SYSTEM
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2001

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES ACCUMULATED CONTRIBUTIONS	FEMALE LIVES NUMBER	FEMALE LIVES ACCUMULATED CONTRIBUTIONS	TOTAL NUMBER	TOTAL ACCUMULATED CONTRIBUTIONS
15-19	8	562.32	0	0.00	8	562.32
20-24	2	774.87	0	0.00	2	774.87
25-29	13	21,192.76	2	73.90	15	21,266.66
30-34	21	22,687.63	1	15.39	22	22,703.02
35-39	16	5,527.88	3	2,727.88	19	8,255.76
40-44	5	3,450.23	1	390.78	6	3,841.01
45-49	4	3,704.33	0	0.00	4	3,704.33
50-54	2	7,363.10	0	0.00	2	7,363.10
55-59	0	0.00	0	0.00	0	0.00
60-64	0	0.00	0	0.00	0	0.00
65-69	0	0.00	0	0.00	0	0.00
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	71	65,263.12	7	3,207.95	78	68,471.07

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the State Police Retirement System in July, 1958. The plan benefits have been improved several times, most recently as of August 1, 2001.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

(a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1958. In some instances prior service credit is granted for time spent in the military.

(b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1958. Current service credit may be granted for military service and educational leaves if special criteria are met.

(c) Service is increased by unused sick leave, up to a maximum of six months, for purposes of computing eligibility and the amount of benefits.

Eligibility

The Bureau of State Police shall participate in the System. Membership in the system consists of all regular full-time officers of the Kentucky State Police who are entitled to exercise the powers of police officers.

Normal Retirement Date

A member may elect to retire upon attaining age 55 and having contributed to the System. Upon completion of 20 years of service credit, 15 of which are current service, a member may declare the normal retirement date to be some date prior to age 55.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

A monthly benefit equal to 2.50% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member who retires on or after the normal retirement date with less than 60 months of service is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a member has 20 or more years of service credit (15 of which are current), an unreduced benefit is payable.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 55th birthday up to a maximum of service credited to the last day of paid employment. Except for members with 20 or more years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 20 years. For members with 20 or more years of service credit, actual service will be used. The retirement benefit shall not be less than 25% of the member's final monthly rate of pay for those disabled in the line of duty. Ten percent of final monthly rate of pay for each dependent child is also payable if disability occurs in line of duty. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, a benefit will be payable to the beneficiary based on the member's age, years of

service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member dies in the line of duty and has a spouse as beneficiary, a $5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member dies in the line of duty and has a dependent as beneficiary, a lump sum payment of $10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee under KERS and CERS, using 2.50% rather than the non-hazardous benefit rate.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of $5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include an annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 8% of gross compensation until age 55. On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The retirement system will pay a portion of the cost of participation for the retiree and dependents based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contact provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.

October 2002

Annual Actuarial Valuation
June 30, 2002
Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

MERCER
Human Resource Consulting

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

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COUNTY EMPLOYEES RETIREMENT SYSTEM

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STATE POLICE RETIREMENT SYSTEM

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FORTY-SIXTH ANNUAL ACTUARIAL VALUATION

JUNE 30, 2002

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

SECTION I

INTRODUCTION

The results of the forty-sixth annual actuarial valuation of the Kentucky Employees Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2002.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contributions for the ensuing fiscal year required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding, as defined in KRS 61.565, provides that the actuarial valuation method is uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System to the financing required during years of active service to accumulate the funds needed to provide member's benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the "level-percentage-of-payroll" method. Under the "level-percentage-of-payroll" method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate was increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus

any reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the medical insurance contribution rate is to be increased at the start of each biennium (coincides with valuations in odd numbered years) by the percentage amount necessary to raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016. There will be no change in the even numbered years unless there are actuarial gains relative to the retirement funding which will then be used to increase the medical insurance funding rate for the next year only.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation, as allocated between Hazardous position and Non-Hazardous position employees.

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase.
In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. Actuarial assumptions used for hazardous position employees are similar to actuarial assumptions adopted for the State Police Retirement System (with the exception of the rate of retirement). The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:

1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.

2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.

3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.

4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.

5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	RETIREMENT FUND		INSURANCE FUND	
	Non Hazardous	Hazardous	Non Hazardous	Hazardous
June 30, 2001 Valuation Assets	6,844,742,687	361,677,475	449,630,605	119,372,742
Cash Flows				
> Employer Contributions	97,946	7,764,651	93,912,017	15,887,398
> Member Contributions	109,485,664	10,740,148		
> Retirement Benefits	345,665,528	10,202,893		
> Net Refunds	4,097,348	1,074,889		
> Insurance Premiums			43,695,857	2,449,250
> Administrative Expenses	4,399,326	288,542	345,297	28,501
> Investment Manager Fees	3,311,221	193,778	163,451	44,787
Valuation Interest Assumption	8.25%	8.25%	8.25%	8.25%
Expected Return on Valuation Assets Reflecting Actual Cash Flows *	554,465,817	30,116,610	39,144,956	10,399,552
Expected Valuation Assets	7,151,318,691	398,538,782	538,482,973	143,137,154
Actual Market Value of Assets	5,005,190,948	301,799,829	465,664,515	109,769,410
Investment Gain/(Loss)	(2,146,127,743)	(96,738,953)	(72,818,458)	(33,367,744)
Valuations				
> Valuation Year - 1				
>> Initial Amount	(1,700,223,672)	(70,167,218)	(66,720,677)	(14,725,573)
>> Current Valuation Amount	(1,360,178,938)	(56,133,774)	(53,376,542)	(11,780,458)
>> Amortization	(340,044,734)	(14,033,444)	(13,344,135)	(2,945,115)
> Valuation Year - 2				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 3				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 4				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
Unamortized Amount of Gain/(Loss) From Prior Valuations	(1,360,178,938)	(56,133,774)	(53,376,542)	(11,780,458)
Investment Gain/(Loss) to be Amortized from Current Valuation Date				
> Amount	(785,948,805)	(40,605,179)	(19,441,916)	(21,587,286)
> Amortization	(157,189,761)	(8,121,036)	(3,888,383)	(4,317,457)
June 30, 2002 Valuation Assets				
> Expected Assets	7,151,318,691	398,538,782	538,482,973	143,137,154
> Amortization Amounts	(497,234,495)	(22,154,480)	(17,232,518)	(7,262,572)
> Valuation Assets	6,654,084,196	376,384,302	521,250,455	135,874,582

* Cash flows are assumed equally spread throughout the year

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1) Mortality:

(a) Active & retired lives - 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees.

(b) Disabled lives - Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).

(2) Disablement - Graduated rates based on 2000 experience study (no change from 1995 experience study).

(3) Termination of employment - Graduated select (non-hazardous and hazardous) and ultimate rates based on 2000 experience study.

(4) Retirement - Non-Hazardous:

Age	Retirement Rate
55-57	.04
58-59	.05
60-61	.06
62	.25
63-64	.10
65	.50
66-67	.20
68	.25
69	.40
70 & Over	1.00

At age 55-64 in lieu of the age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits.

Hazardous: Assumed that 50% will retire as soon as eligible for unreduced benefits and balance will continue to age 60.

(5) Marital status

(a) Percentage married - 100%.

(b) Age difference - Males are assumed to be 3 years older than their spouses.

(6) Dependent children - For hazardous position employees under duty related death benefits, it is assumed that the employee is survived by 2 dependent children, each age 6.

(7) Investment return - 8.25% per year, net of investment related expenses, compounded annually.

(8) Compensation progression - 1st year: 12.00%
2nd year: 10.00%
3rd year: 8.00%
Thereafter: 6.50%, compounded annually.

(9) Underlying Inflation Rate - 3.5% per year; reflected in investment return and compensation progression assumptions.

(10) Retiree Medical Insurance - It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution rates were assumed to be as follows:

Pre-Medicare Coverage - - -
Rate in Effect on Valuation Date

	Single	Couple	Parent Plus	Family
Region 1	$234.00	$473.96	$315.96	$526.60
Region 2	260.44	527.44	351.60	586.04
Region 3	300.64	608.96	405.96	676.60
Region 4	320.96	650.00	433.32	722.24
Region 5	340.48	689.44	459.64	766.04
All others	245.00	522.92	348.64	581.04

Region 1: Boone, Campbell, Gallatin, Grant, Kenton and Pendleton

Region 2: Allen, Ballard, Bell, Caldwell, Calloway, Carlisle, Clay, Crittenden, Fulton, Graves, Harlan, Harrison, Hickman, Hopkins, Knott, Lincoln, Livingston, Lyon, McCracken, Marshall, Perry, Pike, Robertson, Rockcastle, Rowan, Simpson and Webster

Region 3: Lewis, Mason, Morgan and Pulaski

Region 4: Boyd, Carter, Christian, Daviess, Elliott, Greenup, Hancock, Henderson, Lawrence, McLean, Todd, Trigg and Union

Region 5: Breckinridge and Grayson

Carrier	Medicare Rate Low Option	Medicare Rate High Option	Contracts in Force Low Option	Contracts in Force High Option
Anthem BC/BS	103.18	252.56	3,258	20,040
Bankers Life	82.70	195.35	594	331
Option 2000	98.18	247.56	547	1,852

Weighted Medicare Coverage - - -
Rate in Effect on Valuation Date

	Low Option	High Option
All members	$99.79	$251.29

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

Years	Medical Increase
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

(11) Missing data - For those active members with incomplete data, the following assumptions were made:

. If reported salary was zero or blank, then monthly salary was assumed to be $911.64

. If reported age was blank, then assume current age equal to age 18 plus years of service reported

(12) Members with Multiple Service Records

- For active members with service in more than one system, the liability has been valued as follows:

  . Service under all systems is aggregated for purposes of determining benefit eligibility.

  . Future service is projected only under the system in which the member is currently active.

  . The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.

  . The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

  For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

B. SAMPLE RATES FOR NON-HAZARDOUS POSITION EMPLOYEES*

(1) Annual Rates of Mortality:

	Active Mortality		Disabled Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

(2) Annual Rates of Decrement:

Age	Disablement	Ultimate Termination
25	0.033%	2.40%
30	0.039%	2.40%
40	0.105%	2.00%
50	0.423%	1.60%
55	0.794%	1.20%
60	1.395%	0.20%

(3) Select Rates of Termination:

Years of Service	Select Termination	
	Non-Hazardous	Hazardous
1	35.0%	30.0%
2	10.0%	8.0%
3	7.0%	4.0%
4	5.0%	4.0%
5	4.0%	4.0%

(4) Compensation Progression (after 1st 3 Years):

Age	Rate of Annual Increase	Compensation at Normal Retirement as Percentage Of Current Annual Compensation
25	6.50%	1,241.6%
30	6.50%	906.2%
40	6.50%	482.8%
50	6.50%	257.2%
55	6.50%	187.7%
60	6.50%	137.0%

*Sample rates for hazardous position employees (other than select termination) are included in the State Police Retirement System valuation.

SECTION III

RESULTS OF THE 2002 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the State required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the Normal Cost, medical insurance and the expenses of administration, is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated annual State payroll as of June 30, 2002.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2002 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate of the State is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the Kentucky Employees Retirement System as of June 30, 2002 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements for the Retirement Fund.

Table X contains information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT AND INSURANCE FUND
DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2002

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND			
			Percent *
Total Actuarial Accrued Liability	$	6,348,163,928	368.50%
Assets at Actuarial Value		7,030,468,498	408.10%
Unfunded Actuarial Accrued Liability	$	(682,304,570)	(39.60%)
Contribution - Payment on Unfunded Actuarial Accrued Liability	$	(37,177,569)	(2.16%)
NORMAL COST - RETIREMENT FUND			
Retirement Benefits	$	138,184,081	8.02%
Disability Benefits		16,838,158	0.98%
Withdrawal Benefits (Vested and Refund of Contributions)		11,517,878	0.67%
Survivor Benefits		8,679,564	0.50%
Total Normal Cost	$	175,219,681	10.17%
Less: Employee Contributions		88,848,935	5.16%
Normal Cost - State	$	86,370,746	5.01%
TOTAL ANNUAL EMPLOYER COST - RETIREMENT AND INSURANCE FUND			
Non-Hazardous Duty Cost			
Normal Cost	$	74,535,815	4.67% **
Payment on Unfunded Actuarial Accrued Liability		(34,170,196)	(2.14%) **
Administrative Expense		5,213,214	0.33% **
Subtotal - Retirement Fund (Not Less Than Zero)	$	45,578,833	2.86% **
Group Hospital and Medical Insurance Premiums		74,595,988	4.67% **
Total Annual Cost	$	120,174,821	7.53% **
Hazardous Duty Cost			
Normal Cost	$	11,834,931	9.44% ***
Payment on Unfunded Actuarial Accrued Liability		(3,007,373)	(2.40%) ***
Administrative Expense		419,454	0.33% ***
Subtotal - Retirement Fund (Not Less Than Zero)	$	9,247,012	7.37% ***
Group Hospital and Medical Insurance Premiums		14,380,123	11.47% ***
Total Annual Cost	$	23,627,135	18.84% ***
Based on estimated annual salaries			
* Total	$	1,722,716,091	
** Non-Hazardous Position Employees	$	1,597,344,487	
*** Hazardous Position Employees	$	125,371,604	

TABLE II
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2002

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members			
Retirement Benefits	$ 2,391,720,700	$ 193,090,139	$ 2,584,810,839
Disability Benefits	159,191,237	10,607,049	169,798,286
Withdrawal Benefits (Vested and Refund of Contributions)	84,792,416	991,375	85,783,791
Survivor Benefits	148,047,218	7,332,127	155,379,345
Total - Actives	$ 2,783,751,571	$ 212,020,690	$ 2,995,772,261
Inactive Members			
Retired Members and Beneficiaries	$ 3,189,273,887	$ 106,564,057	$ 3,295,837,944
Vested Retirement	38,243,383	2,432,355	40,675,738
Vested Membership	14,825,923	1,052,062	15,877,985
Total - Inactives	$ 3,242,343,193	$ 110,048,474	$ 3,352,391,667
Total Actuarial Accrued Liability	$ 6,026,094,764	$ 322,069,164	$ 6,348,163,928
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$ 6,026,094,764	$ 322,069,164	$ 6,348,163,928
Less Actuarial Value of Assets	6,654,084,196	376,384,302	7,030,468,498
Unfunded Actuarial Accrued Liability	$ (627,989,432)	$ (54,315,138)	$ (682,304,570)
NORMAL COST			
Retirement Benefits	$ 120,522,905	$ 17,661,176	$ 138,184,081
Disability Benefits	14,897,774	1,940,384	16,838,158
Withdrawal Benefits (Vested and Refund of Contributions)	10,717,618	800,260	11,517,878
Survivor Benefits	7,756,666	922,898	8,679,564
Total Normal Cost	$ 153,894,963	$ 21,324,718	$ 175,219,681
Less Employee Contributions	79,359,148	9,489,787	88,848,935
Total Normal Cost - State	$ 74,535,815	$ 11,834,931	$ 86,370,746

TABLE III
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2002

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
Non-Hazardous Position Employees				
6/30/1990	$ 256,534,456	$ 322,956,775	$ 22,960,935	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	103,692,389	129,545,972	$ 8,846,824	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(212,448,599)	(262,684,748)	$ (17,277,827)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's; Asset valuation method change
6/30/1993	(57,917,315)	(70,702,574)	$ (4,489,896)	Experience gains/losses for 7/1/1992 to 6/30/1993; State contribution shortfall
6/30/1994	59,519,052	71,576,448	$ 4,398,086	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's; State contribution shortfall
6/30/1995	65,659,241	77,629,496	$ 4,624,700	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(188,573,585)	(218,793,690)	$ (12,660,278)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(277,888,742)	(315,617,917)	$ (17,768,342)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(326,522,755)	(362,475,168)	$ (19,883,938)	Experience gains/losses for 7/1/1997 to 6/30/1998; Increase in death benefit from $2,500 to $5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(362,615,121)	(392,892,850)	$ (21,029,983)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998; Benefit multiplier change effective
6/30/2000	(964,739,576)	(1,018,915,456)	$ (53,286,222)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	584,703,884	601,232,196	$ 30,757,837	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000; 3-year average earnings window
6/30/2002	811,152,084	811,152,084	$ 40,637,908	Experience gains/losses for 7/1/2001 to 6/30/2002; 3.4% retiree COLA effective 7/1/2001
Total	$ (509,444,587)	$ (627,989,432)	$ (34,170,196)	

TABLE III (Continued)
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2002

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
Hazardous Position Employees				
6/30/1990	$ (366,782)	$ (461,750)	$ (32,829)	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	8,515,857	10,639,113	726,556	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(2,222,347)	(2,747,848)	(180,737)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's; Asset valuation method change
6/30/1993	1,873,766	2,287,399	145,259	Experience gains/losses for 7/1/1992 to 6/30/1993; State contribution shortfall
6/30/1994	2,736,468	3,290,823	202,208	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's; State contribution shortfall
6/30/1995	4,677,834	5,530,643	329,483	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(33,735,166)	(39,141,440)	(2,264,880)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(7,971,975)	(9,054,335)	(509,732)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(13,896,455)	(15,426,552)	(846,239)	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average salary definition from 5 years to 3 years; Increase in death benefit
6/30/1999	(13,902,335)	(15,063,155)	(806,270)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(35,735,060)	(37,741,796)	(1,973,783)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	18,907,681	19,442,160	994,622	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000
6/30/2002	24,131,600	24,131,600	1,208,969	Experience gains/losses for 7/1/2001 to 6/30/2002; 3.4% retiree COLA effective 7/1/2001
Total	$ (46,986,914)	$ (54,315,138)	$ (3,007,373)	

TABLE IV
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
INSURANCE FUND
DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2002

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members	$ 1,007,370,859	$ 145,840,544	$ 1,153,211,403
Inactive Members			
Retired Members	$ 842,074,743	$ 73,001,801	$ 915,076,544
Beneficiaries	1,137,510	13,952,152	15,089,662
Vested Retirement	57,100,769	4,024,553	61,125,322
Vested Membership	0	0	0
Total - Inactives	$ 900,313,022	$ 90,978,506	$ 991,291,528
Total Actuarial Accrued Liability	$ 1,907,683,881	$ 236,819,050	$ 2,144,502,931
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$ 1,907,683,881	$ 236,819,050	$ 2,144,502,931
Less Actuarial Value of Assets	521,250,455	135,874,582	657,125,037
Unfunded Actuarial Accrued Liability	$ 1,386,433,426	$ 100,944,468	$ 1,487,377,894
NORMAL COST			
Gross Normal Cost	$ 86,804,903	$ 18,439,001	$ 105,243,904
Less Employee Contributions	0	0	0
Net Normal Cost - State	$ 86,804,903	$ 18,439,001	$ 105,243,904
Estimated Annual Salaries	$ 1,597,344,487	$ 125,371,604	$ 1,722,716,091
TOTAL ANNUAL EMPLOYER COST			
Contribution Amount			
Normal Cost	$ 86,804,903	$ 18,439,001	$ 105,243,904
Payment on Unfunded Actuarial Accrued Liability	78,356,913	5,703,819	84,060,732
Total Annual Cost	$ 165,161,816	$ 24,142,820	$ 189,304,636
As Percent of Payroll			
Normal Cost	5.43%	14.71%	6.11%
Payment on Unfunded Actuarial Accrued Liability	4.91%	4.55%	4.88%
Total Annual Cost	10.34%	19.26%	10.99%
INSURANCE FUND SHORTFALL			
Full Entry Age Funding Level	10.34%	19.26%	10.99%
Current Funding Allocation *	4.67%	11.14%	5.14%
Additional to Pick Up By 2016	5.67%	8.12%	5.85%
Expected Increase in Insurance Fund Rate in 2003 Valuation	0.27%	0.44%	N/A

* Without regard to any one-year temporary adjustments for actuarial gains

TABLE V
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2002

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
Non-Hazardous Position Employees				
6/30/1996	$ 988,745,810	$ 1,147,198,557	$ 66,381,497	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	(31,222,593)	(35,461,708)	(1,996,388)	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	19,914,214	22,106,908	1,212,697	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(69,145,663)	(74,919,205)	(4,010,125)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	44,198,913	46,680,946	2,441,273	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	237,627,565	244,344,782	12,500,190	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2002	36,483,146	36,483,146	1,827,769	Experience gains/losses for 7/1/2001 to 6/30/2002; Impact of actual insurance fund contributions vs. full entry age amounts
Total	$ 1,226,601,392	$ 1,386,433,426	$ 78,356,913	
Hazardous Position Employees				
6/30/1996	$ 61,002,123	$ 70,778,099	$ 4,095,504	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	15,100,456	17,150,658	965,531	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	2,832,306	3,144,162	172,476	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(10,377,564)	(11,244,071)	(601,850)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	(3,445,265)	(3,638,738)	(190,295)	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	20,464,709	21,043,203	1,076,528	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2002	3,711,155	3,711,155	185,925	Experience gains/losses for 7/1/2001 to 6/30/2002; Impact of actual insurance fund contributions vs. full entry age amounts
Total	$ 89,287,920	$ 100,944,468	$ 5,703,819	

TABLE VI
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
BENEFIT PAYMENT PROJECTIONS

RETIREMENT FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2002 to 6/30/2003	373,616,000	14,105,000	387,721,000
7/1/2003 to 6/30/2004	391,743,000	15,785,000	407,528,000
7/1/2004 to 6/30/2005	410,935,000	17,740,000	428,675,000
7/1/2005 to 6/30/2006	431,342,000	19,998,000	451,340,000
7/1/2006 to 6/30/2007	454,227,000	22,802,000	477,029,000
7/1/2007 to 6/30/2008	477,321,000	25,922,000	503,243,000
7/1/2008 to 6/30/2009	502,305,000	29,684,000	531,989,000
7/1/2009 to 6/30/2010	526,459,000	33,757,000	560,216,000
7/1/2010 to 6/30/2011	551,647,000	37,686,000	589,333,000
7/1/2011 to 6/30/2012	580,208,000	42,084,000	622,292,000

INSURANCE FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2002 to 6/30/2003	54,700,000	4,956,000	59,656,000
7/1/2003 to 6/30/2004	61,103,000	5,720,000	66,823,000
7/1/2004 to 6/30/2005	67,764,000	6,579,000	74,343,000
7/1/2005 to 6/30/2006	75,418,000	7,609,000	83,027,000
7/1/2006 to 6/30/2007	83,743,000	8,825,000	92,568,000
7/1/2007 to 6/30/2008	92,203,000	10,161,000	102,364,000
7/1/2008 to 6/30/2009	101,766,000	11,751,000	113,517,000
7/1/2009 to 6/30/2010	112,735,000	13,717,000	126,452,000
7/1/2010 to 6/30/2011	124,795,000	15,769,000	140,564,000
7/1/2011 to 6/30/2012	138,094,000	18,046,000	156,140,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

TABLE VII
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 7,030,468,498
Actuarial Present Value of Future Member Contributions		1,032,236,660
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 922,165,736	
For Unfunded Actuarial Accrued Liability	(682,304,570)	
Total		$ 239,861,166
Total Actuarial Assets		$ 8,302,566,324
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 3,295,837,944	
Vested Retirement	40,675,738	
Vested Membership	15,877,985	
Total - Inactive		$ 3,352,391,667
Actuarial Present Value of Future Benefits		
Active Members:		
Retirement Benefits	$ 4,127,263,605	
Disability Benefits	346,886,069	
Withdrawal Benefits (Vested and Refund of Contributions)	225,330,993	
Survivor Benefits	250,693,990	
Total - Active		$ 4,950,174,657
Refunds and Expenses Payable		$ 0
Total Actuarial Liabilities		$ 8,302,566,324

Notes

* Values as of June 30, 2002		
Market value of assets:	Non-Hazardous	$ 5,005,190,948
	Hazardous	$ 301,799,829
	Total	$ 5,306,990,777
Actuarial value of assets:		$ 7,030,468,498
Member's Contribution Account:		$ 988,657,330

** Present value of accrued benefit deferred to normal retirement date.

TABLE VIII
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
INSURANCE FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 657,125,037
Actuarial Present Value of Future Member Contributions (Note: All Future Member Contributions Credited Against Retirement Fund)		0
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 1,252,324,898	
For Unfunded Actuarial Accrued Liability	1,487,377,894	
Total		$ 2,739,702,792
Total Actuarial Assets		$ 3,396,827,829
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 930,166,206	
Vested Retirement	61,125,322	
Vested Membership	0	
Total - Inactive		$ 991,291,528
Actuarial Present Value of Future Benefits Active Members:		$ 2,405,536,301
Refunds and Expenses Payable		$ 0
Total Actuarial Liabilities		$ 3,396,827,829
Notes		
* Values as of June 30, 2002		
Market value of assets:	Non-Hazardous	$ 465,664,515
	Hazardous	$ 109,769,410
	Total	$ 575,433,925
Actuarial value of assets:		$ 657,125,037

TABLE IX
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2002
GASB DISCLOSURE INFORMATION

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS			
Inactive Members			
Retired Members	22,948	1,069	24,017
Beneficiaries	3,755	139	3,894
Vested Retirements	3,415	127	3,542
Vested Membership	14,299	946	15,245
Total Inactive Members	44,417	2,281	46,698
Active Members			
Vested Members	30,883	2,174	33,057
Nonvested Members	17,672	2,037	19,709
Total Active Members	48,555	4,211	52,766
Total Members	92,972	6,492	99,464

TABLE X
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2002
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

		Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS				
Contracts in Force - Retirees and Dependents				
(1) Single;	- 100% Paid	4,733	278	5,011
Pre-Medicare	- 75% Paid	217	33	250
	- 50% Paid	212	37	249
	- 25% Paid	100	9	109
	- 0% Paid	560	2	562
(2) Family;	- 100% Paid	453	69	522
Pre-Medicare	- 75% Paid	6	6	12
	- 50% Paid	4	8	12
	- 25% Paid	4	2	6
	- 0% Paid	1	0	1
(3) Parent +;	- 100% Paid	334	32	366
Pre-Medicare	- 75% Paid	4	16	20
	- 50% Paid	6	6	12
	- 25% Paid	1	3	4
	- 0% Paid	51	0	51
(4) Couple;	- 100% Paid	662	81	743
Pre-Medicare	- 75% Paid	25	5	30
	- 50% Paid	13	28	41
	- 25% Paid	11	6	17
	- 0% Paid	3	0	3
(5) Medicare Regular	- 100% Paid	734	46	780
	- 75% Paid	0	0	0
	- 50% Paid	0	0	0
	- 25% Paid	397	20	417
	- 0% Paid	707	0	707
(6) Medicare High	- 100% Paid	6,036	276	6,312
Option	- 75% Paid	1,632	69	1,701
	- 50% Paid	1,180	80	1,260
	- 25% Paid	577	26	603
	- 0% Paid	1,804	0	1,804
Vested Retirements		3,415	127	3,542
Vested Membership		14,299	946	15,245
Active Members		48,555	4,211	52,766
UNFUNDED MEDICAL BENEFIT OBLIGATION				
Medical Benefit Obligation				
Retirees, Beneficiaries and Vested Terminated Members		$ 900,313,022	$ 90,978,506	$ 991,291,528
Active Members		1,007,370,859	145,840,544	1,153,211,403
Total Medical Benefit Obligation		$ 1,907,683,881	$ 236,819,050	$ 2,144,502,931
Net Assets at Actuarial Value		$ 521,250,455	$ 135,874,582	$ 657,125,037
Unfunded Medical Benefit Obligation		$ 1,386,433,426	$ 100,944,468	$ 1,487,377,894
NOTE: Medical Benefit Obligation based on Entry Age Normal Actuarial Cost Method				

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from $5,729,225,055 on June 30, 2001 to $6,348,163,928 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from $(1,477,191,106) to $(682,304,570). Total actuarial value of assets as of June 30, 2002 was equal to $7,030,468,498. The Unfunded Actuarial Accrued Liability increased from (89.60%) to (39.60%) as a percentage of annual payroll and increased from (25.8%) to (10.7%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from $1,984,033,920 on June 30, 2001 to $2,144,502,931 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from $1,415,030,574 to $1,487,377,894. Total actuarial value of assets as of June 30, 2002 was equal to $657,125,037. The Unfunded Actuarial Accrued Liability decreased from 71.3% to 69.4% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

The change in contribution rate between the 2001 and 2002 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

	Non-Hazardous Position Employees	**Hazardous Position Employees**
June 30, 2001 Contribution Rate	5.89%	18.84%
Change in Payment Percentage Due to Covered Payroll Experience	(0.01%)	(0.11%)
Investment Return Experience	1.56%	0.85%
Salary Increase Experience	0.10%	(0.10%)
Decrements Experience*	0.59%	0.01%
Change in Insurance Fund Rate		
> One-Year Temporary Funding Rate	(0.88%)	(0.80%)
> Increase in Long Term Funding Rate	0.00%	0.00%
Change in Administrative Expense Rate	(0.02%)	0.03%
Retiree COLA Effective 7/1/2001	0.30%	0.12%
Legislated Changes	None	None
Reduction in Amount Available from Prior Year Retirement Fund Rate to Offset Current Year Increases	N/A	N/A
June 30, 2002 Contribution Rate	7.53%	18.84%
* Includes mortality, disability, termination of employment and retirement experience.		

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Non-Hazardous position employees was determined at 2.86%. An additional 4.67% is required to fund medical insurance for retirees, bringing the required contribution up to 7.53%. This is greater than the current 5.89% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2003 should be increased to the 7.53% level, and we so recommend.

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Hazardous position employees was determined at 7.37%. An additional 11.47% is required to fund medical insurance for retirees, bringing the required contribution up to 18.84%. This is the same as the current 18.84% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning
July 1, 2003 should remain at the 18.84% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2003 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - RETIREMENT FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1956	$ 16,200,000	$ 16,200,000	100.0%	$ 0	$ 0
1961	49,201,024	31,670,465	64.4%	17,530,559	4,479,508
1966	127,889,238	72,137,125	56.4%	55,752,113	9,085,814
1971	185,075,453	59,614,477	32.2%	125,460,976*	18,353,116
1975	296,343,758	77,434,549	26.1%	218,909,209*	26,529,526
1976	387,214,910	130,838,120	33.8%	256,376,790*	37,467,581
1977	446,255,236	149,511,331	33.5%	296,743,905*	40,367,115
1978	507,324,915	168,497,917	33.2%	338,826,998*	42,083,093
1979	592,095,113	202,676,662	34.2%	389,418,451*	50,591,453
1980	710,126,703	249,770,835	35.2%	460,355,868*	70,937,417
1981	692,160,395	164,735,129	23.8%	527,425,266	67,069,398
1982	810,250,589	195,803,691	24.2%	614,446,898	87,021,632
1983	862,291,959	152,196,081	17.7%	710,095,878	95,648,980
1984	1,016,088,830	201,535,007	19.8%	814,553,823	104,457,945
1985	1,104,429,988	169,949,215	15.4%	934,480,773	119,926,950
1986	1,245,083,143	166,635,243	13.4%	1,079,353,421	144,872,648
1987	1,384,259,808	120,259,389	8.7%	1,264,000,419	184,646,998
1988	1,561,743,738	135,687,336	8.7%	1,426,056,402	162,055,983
1989	1,734,607,903	145,998,805	8.4%	1,588,609,098	162,552,696
1990	2,055,489,412	256,167,674	12.5%	1,799,321,738	210,712,640
1991	2,288,611,147	375,396,216	16.4%	1,913,214,931	113,893,193
1992**	2,525,190,930	170,708,609	6.8%	2,354,482,321	441,267,390
1993	2,703,771,076	118,561,539	4.4%	2,585,209,537	230,727,216
1994	2,912,050,275	183,001,288	6.3%	2,729,048,987	143,839,450
1995	3,240,852,288	257,038,750	7.9%	2,983,813,538	244,764,551
1996	3,415,404,483	40,108,906	1.2%	3,375,295,577	391,482,039
1997	3,603,966,110	(246,746,133)	(6.8%)	3,850,712,243	475,416,666
1998	3,971,749,822	(596,537,421)	(15.0%)	4,568,287,243	717,575,000
1999	4,531,905,609	(992,274,107)	(21.9%)	5,524,179,716	955,892,473
2000	5,120,191,329	(2,022,697,595)	(39.5%)	7,142,888,924	1,618,709,208
2001***	5,729,229,055	(1,477,191,106)	(25.8%)	7,206,420,161	63,531,237
2002	6,348,163,928	(682,304,570)	(10.7%)	7,030,468,498	(175,951,663)
*Includes capitalized appreciation of investments.					
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - INSURANCE FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1990	$ 719,493,806	$ 686,770,874	95.5%	$ 32,722,932	$ N/A
1991	804,674,050	758,124,715	94.2%	46,549,335	13,826,403
1992	1,001,703,695	939,238,069	93.8%	62,465,626	15,916,291
1993	1,177,861,283	1,100,187,708	93.4%	77,673,575	15,207,949
1994	1,444,612,678	1,345,529,145	93.1%	99,083,533	21,409,958
1995	1,462,174,101	1,334,881,910	91.3%	127,292,191	28,208,658
1996**	1,222,394,138	1,049,747,933	85.9%	172,646,205	45,354,014
1997	1,274,464,242	1,063,299,895	83.4%	211,164,347	38,518,142
1998	1,379,578,155	1,114,866,185	80.8%	264,711,970	53,547,623
1999	1,422,523,386	1,064,238,850	74.8%	358,284,536	93,572,566
2000	1,632,642,971	1,130,870,482	69.3%	501,772,489	143,487,953
2001***	1,984,033,920	1,415,030,574	71.3%	569,003,346	67,230,857
2002	2,144,502,931	1,487,377,894	69.4%	657,125,037	88,121,691
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the Kentucky Employees Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding polices adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Stephen A. Gagel, F.S.A. Date

Edward W. Maynard, F.S.A. Date

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SECTION V

STATISTICAL DATA

AS OF

JUNE 30, 2002

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

EARNINGS BY AGE GROUPS

AGE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	1,347	25,892,187	19,222	188	3,532,824	18,792	1,535	29,425,011	19,169
20-24	1,193	26,897,232	22,546	1,526	31,266,144	20,489	2,719	58,163,376	21,391
25-29	1,649	43,752,192	26,533	2,915	72,755,640	24,959	4,564	116,507,832	25,528
30-34	2,076	65,200,587	31,407	3,459	95,357,514	27,568	5,535	160,558,101	29,008
35-39	2,292	81,472,964	35,547	3,770	111,518,984	29,581	6,062	192,991,947	31,836
40-44	2,738	106,362,884	38,847	4,522	143,014,819	31,626	7,260	249,377,702	34,350
45-49	3,014	126,802,283	42,071	4,818	164,607,763	34,165	7,832	291,410,046	37,208
50-54	2,734	123,670,415	45,234	3,910	134,673,481	34,443	6,644	258,343,896	38,884
55-59	1,659	74,234,832	44,747	2,292	75,240,044	32,827	3,951	149,474,876	37,832
60-64	777	33,524,024	43,145	966	31,730,948	32,848	1,743	65,254,971	37,438
65-69	242	10,803,816	44,644	235	6,701,480	28,517	477	17,505,296	36,699
70-74	93	4,122,660	44,330	78	2,240,460	28,724	171	6,363,120	37,211
75+	33	1,217,148	36,883	29	854,640	29,470	62	2,071,788	33,416
TOTAL	19,847	723,953,224	36,477	28,708	873,494,739	30,427	48,555	1,597,447,963	32,900

EARNINGS BY SERVICE GROUPS

SERVICE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	1,281	23,795,671	18,576	1,167	22,540,615	19,315	2,448	46,336,285	18,928
1	2,184	55,016,216	25,191	3,377	76,639,327	22,695	5,561	131,655,542	23,675
2	1,734	49,298,435	28,430	2,810	68,132,495	24,246	4,544	117,430,930	25,843
3	1,664	48,822,084	29,340	2,134	55,367,348	25,945	3,798	104,189,432	27,433
4	996	32,468,124	32,599	1,375	36,929,304	26,858	2,371	69,397,428	29,269
0-4	7,859	209,400,529	26,645	10,863	259,609,088	23,898	18,722	469,009,618	25,051
5-9	3,517	122,012,267	34,692	5,631	161,549,829	28,689	9,148	283,562,096	30,997
10-14	2,712	105,682,140	38,968	4,512	145,551,091	32,259	7,224	251,233,231	34,778
15-19	2,167	94,560,860	43,637	3,104	111,855,692	36,036	5,271	206,416,551	39,161
20-24	1,245	56,580,548	45,446	1,825	68,931,980	37,771	3,070	125,512,527	40,884
25-29	1,313	68,742,912	52,356	1,781	76,823,160	43,135	3,094	145,566,072	47,048
30-34	783	48,370,344	61,776	792	38,235,576	48,277	1,575	86,605,920	54,988
35-39	208	15,011,964	72,173	171	9,244,404	54,061	379	24,256,368	64,001
40+	43	3,591,660	83,527	29	1,693,920	58,411	72	5,285,580	73,411
TOTAL	19,847	723,953,224	36,477	28,708	873,494,739	30,427	48,555	1,597,447,963	32,900

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

EARNINGS BY AGE GROUPS

AGE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	123	1,529,052	12,431	3	41,544	13,848	126	1,570,596	12,465
20-24	131	2,637,960	20,137	31	614,520	19,823	162	3,252,480	20,077
25-29	305	6,915,060	22,672	111	2,556,660	23,033	416	9,471,720	22,769
30-34	390	9,948,960	25,510	144	3,596,892	24,978	534	13,545,852	25,367
35-39	405	11,442,900	28,254	159	4,135,896	26,012	564	15,578,796	27,622
40-44	385	11,701,424	30,393	190	5,932,344	31,223	575	17,633,768	30,667
45-49	403	13,468,536	33,421	218	7,286,160	33,423	621	20,754,696	33,421
50-54	443	16,670,796	37,632	169	5,184,900	30,680	612	21,855,696	35,712
55-59	316	11,897,772	37,651	96	3,060,960	31,885	412	14,958,732	36,308
60-64	123	4,501,260	36,596	31	1,046,268	33,751	154	5,547,528	36,023
65-69	21	656,340	31,254	5	149,184	29,837	26	805,524	30,982
70-74	5	208,956	41,791	3	159,684	53,228	8	368,640	46,080
75+	0	0	0	1	27,576	27,576	1	27,576	27,576
TOTAL	3,050	91,579,016	30,026	1,161	33,792,588	29,106	4,211	125,371,604	29,772

EARNINGS BY SERVICE GROUPS

SERVICE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	270	3,890,424	14,409	81	1,663,212	20,533	351	5,553,636	15,822
1	311	6,897,276	22,178	144	3,447,660	23,942	455	10,344,936	22,736
2	336	8,256,180	24,572	136	3,259,716	23,969	472	11,515,896	24,398
3	207	5,431,332	26,238	110	3,016,344	27,421	317	8,447,676	26,649
4	241	8,230,488	34,151	86	2,178,084	25,327	327	10,408,572	31,830
0-4	1,365	32,705,700	23,960	557	13,565,016	24,354	1,922	46,270,716	24,074
5-9	587	18,035,972	30,726	243	6,996,192	28,791	830	25,032,164	30,159
10-14	829	29,272,032	35,310	289	10,070,220	34,845	1,118	39,342,252	35,190
15-19	188	7,661,844	40,754	48	2,096,760	43,683	236	9,758,604	41,350
20-24	50	2,236,260	44,725	21	919,356	43,779	71	3,155,616	44,445
25-29	18	921,252	51,181	3	145,044	48,348	21	1,066,296	50,776
30-34	11	607,476	55,225	0	0	0	11	607,476	55,225
35-39	2	138,480	69,240	0	0	0	2	138,480	69,240
40+	0	0	0	0	0	0	0	0	0
TOTAL	3,050	91,579,016	30,026	1,161	33,792,588	29,106	4,211	125,371,604	29,772

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	1,336	5	3	1	1		1			1,347
20-24	1,059	134								1,193
25-29	1,243	383	23							1,649
30-34	1,020	665	349	42						2,076
35-39	731	537	563	411	50					2,292
40-44	733	443	487	550	360	165				2,738
45-49	660	454	431	424	370	476	199			3,014
50-54	553	404	360	338	245	382	360	92		2,734
55-59	331	284	259	212	124	185	163	84	17	1,659
60-64	126	146	146	132	70	80	44	22	11	777
65-69	41	38	63	36	16	17	12	8	11	242
70-74	19	17	23	18	7	4	2	1	2	93
75+	7	7	5	3	2	4	2	1	2	33
TOTAL	7,859	3,517	2,712	2,167	1,245	1,313	783	208	43	19,847

FEMALE

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	182	3	2	1						188
20-24	1,450	75			1					1,526
25-29	2,198	659	58							2,915
30-34	1,694	1,107	577	81						3,459
35-39	1,406	867	882	542	72	1				3,770
40-44	1,365	932	763	658	547	256	1			4,522
45-49	1,143	816	784	616	477	699	283			4,818
50-54	823	611	724	590	338	429	319	76		3,910
55-59	426	360	442	368	235	257	127	71	6	2,292
60-64	130	146	196	196	112	108	46	14	18	966
65-69	31	38	67	36	30	15	11	5	2	235
70-74	10	15	10	15	8	10	4	4	2	78
75+	5	2	7	1	5	6	1	1	1	29
TOTAL	10,863	5,631	4,512	3,104	1,825	1,781	792	171	29	28,708

TOTAL

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	1,518	8	5	2	1		1			1,535
20-24	2,509	209			1					2,719
25-29	3,441	1,042	81							4,564
30-34	2,714	1,772	926	123						5,535
35-39	2,137	1,404	1,445	953	122	1				6,062
40-44	2,098	1,375	1,250	1,208	907	421	1			7,260
45-49	1,803	1,270	1,215	1,040	847	1,175	482			7,832
50-54	1,376	1,015	1,084	928	583	811	679	168		6,644
55-59	757	644	701	580	359	442	290	155	23	3,951
60-64	256	292	342	328	182	188	90	36	29	1,743
65-69	72	76	130	72	46	32	23	13	13	477
70-74	29	32	33	33	15	14	6	5	4	171
75+	12	9	12	4	7	10	3	2	3	62
TOTAL	18,722	9,148	7,224	5,271	3,070	3,094	1,575	379	72	48,555

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	122		1							123
20-24	127	4								131
25-29	251	53	1							305
30-34	221	138	31							390
35-39	152	104	127	22						405
40-44	143	68	131	35	8					385
45-49	127	71	152	34	17	1	1			403
50-54	115	64	178	54	19	10	3			443
55-59	71	53	145	33	5	3	6			316
60-64	31	27	50	8		4	1	2		123
65-69	4	5	11		1					21
70-74	1		2	2						5
75+										0
TOTAL	1,365	587	829	188	50	18	11	2	0	3,050

FEMALE

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	3									3
20-24	31									31
25-29	93	18								111
30-34	99	31	14							144
35-39	74	36	46	3						159
40-44	75	39	49	17	9	1				190
45-49	77	60	53	16	10	2				218
50-54	64	34	61	8	2					169
55-59	33	18	41	4						96
60-64	4	6	21							31
65-69	3	1	1							5
70-74			3							3
75+	1									1
TOTAL	557	243	289	48	21	3	0	0	0	1,161

TOTAL

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	125		1							126
20-24	158	4								162
25-29	344	71	1							416
30-34	320	169	45							534
35-39	226	140	173	25						564
40-44	218	107	180	52	17	1				575
45-49	204	131	205	50	27	3	1			621
50-54	179	98	239	62	21	10	3			612
55-59	104	71	186	37	5	3	6			412
60-64	35	33	71	8		4	1	2		154
65-69	7	6	12		1					26
70-74	1		5	2						8
75+	1									1
TOTAL	1,922	830	1,118	236	71	21	11	2	0	4,211

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	1,518	8	5	2	1		1			1,535
	18,843	35,018	62,686	43,872	62,352		77,928			19,169
20-24	2,509	209			1					2,719
	21,015	25,761			52,572					21,391
25-29	3,441	1,042	81							4,564
	24,837	27,440	30,252							25,528
30-34	2,714	1,772	926	123						5,535
	25,968	31,033	33,068	36,330						29,008
35-39	2,137	1,404	1,445	953	122	1				6,062
	25,977	32,352	35,117	38,518	37,477	33,744				31,836
40-44	2,098	1,375	1,250	1,208	907	421	1			7,260
	26,764	31,018	36,154	41,265	40,296	45,037	28,020			34,350
45-49	1,803	1,270	1,215	1,040	847	1,175	482			7,832
	27,345	31,856	35,450	39,661	43,080	47,316	52,377			37,208
50-54	1,376	1,015	1,084	928	583	811	679	168		6,644
	28,610	32,034	34,355	38,479	42,156	48,856	56,959	63,323		38,884
55-59	757	644	701	580	359	442	290	155	23	3,951
	27,938	31,213	34,166	38,625	38,554	45,302	55,640	64,794	79,525	37,832
60-64	256	292	342	328	182	188	90	36	29	1,743
	28,212	32,808	34,738	36,830	36,791	46,486	52,860	67,180	64,855	37,438
65-69	72	76	130	72	46	32	23	13	13	477
	27,510	30,518	32,486	35,637	38,000	49,274	58,189	56,829	78,030	36,699
70-74	29	32	33	33	15	14	6	5	4	171
	23,570	31,950	36,389	36,403	49,630	43,921	41,132	59,851	87,426	37,211
75+	12	9	12	4	7	10	3	2	3	62
	30,699	27,656	28,736	24,390	26,081	39,815	33,752	59,250	70,544	33,416
TOTAL	18,722	9,148	7,224	5,271	3,070	3,094	1,575	379	72	48,555
	25,051	30,997	34,778	39,161	40,884	47,048	54,988	64,001	73,411	32,900

TOTAL EARNINGS 1,597,447,963
AVERAGE AGE 41.46
AVERAGE SERVICE 10.10

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	125		1							126
	12,091		59,232							12,465
20-24	158	4								162
	19,899	27,108								20,077
25-29	344	71	1							416
	22,111	25,855	29,976							22,769
30-34	320	169	45							534
	23,504	27,377	31,062							25,367
35-39	226	140	173	25						564
	23,260	29,558	31,193	31,499						27,622
40-44	218	107	180	52	17	1				575
	25,528	29,037	34,326	39,414	39,631	59,676				30,667
45-49	204	131	205	50	27	3	1			621
	28,348	31,459	35,311	44,721	45,121	39,420	39,276			33,421
50-54	179	98	239	62	21	10	3			612
	30,539	33,519	36,906	42,149	46,885	51,536	56,876			35,712
55-59	104	71	186	37	5	3	6			412
	30,388	36,068	37,053	43,499	45,708	55,156	57,046			36,308
60-64	35	33	71	8		4	1	2		154
	29,326	33,112	36,903	50,879		51,882	55,296	69,240		36,023
65-69	7	6	12		1					26
	23,772	26,116	35,995		50,484					30,982
70-74	1		5	2						8
	35,760		55,402	27,936						46,080
75+	1									1
	27,576									27,576
TOTAL	1,922	830	1,118	236	71	21	11	2	0	4,211
	24,074	30,159	35,190	41,350	44,445	50,776	55,225	69,240		29,772

TOTAL EARNINGS 125,371,604
AVERAGE AGE 41.76
AVERAGE SERVICE 6.90

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
TABULATION BY MONTHLY SALARY - JUNE 30, 2002

MONTHLY SALARY	NUMBER OF MEMBERS MALES	FEMALES	TOTAL
UNDER $ 500	117	72	189
$ 500 - $ 749	137	94	231
$ 750 - $ 999	237	313	550
$ 1,000 - $ 1,249	589	1,223	1,812
$ 1,250 - $ 1,499	1,358	2,424	3,782
$ 1,500 - $ 1,749	1,915	3,258	5,173
$ 1,750 - $ 1,999	1,779	3,141	4,920
$ 2,000 - $ 2,249	1,572	3,091	4,663
$ 2,250 - $ 2,499	1,482	2,987	4,469
$ 2,500 - $ 2,749	1,516	2,578	4,094
$ 2,750 - $ 2,999	1,307	2,034	3,341
$ 3,000 - $ 3,499	2,089	2,883	4,972
$ 3,500 - $ 3,999	1,437	1,791	3,228
$ 4,000 - $ 4,499	1,130	1,120	2,250
$ 4,500 - $ 4,999	862	666	1,528
$ 5,000 - $ 5,499	596	406	1,002
$ 5,500 - $ 5,999	470	245	715
$ 6,000 - $ 6,499	359	144	503
$ 6,500 - $ 6,999	245	67	312
$ 7,000 - $ 7,499	192	51	243
$ 7,500 - $ 7,999	101	27	128
$ 8,000 - $ 8,499	122	23	145
$ 8,500 - $ 8,999	50	17	67
$ 9,000 - $ 9,499	46	16	62
$ 9,500 - $ 9,999	29	7	36
$ 10,000 AND OVER	110	30	140
TOTAL	19,847	28,708	48,555
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF $85,000 AND OVER	625	162	787

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
TABULATION BY MONTHLY SALARY - JUNE 30, 2002

MONTHLY SALARY	NUMBER OF MEMBERS MALES	FEMALES	TOTAL
UNDER $ 500	48	4	52
$ 500 - $ 749	6	2	8
$ 750 - $ 999	37	10	47
$ 1,000 - $ 1,249	50	12	62
$ 1,250 - $ 1,499	95	49	144
$ 1,500 - $ 1,749	460	206	666
$ 1,750 - $ 1,999	364	171	535
$ 2,000 - $ 2,249	413	171	584
$ 2,250 - $ 2,499	380	127	507
$ 2,500 - $ 2,749	267	80	347
$ 2,750 - $ 2,999	247	79	326
$ 3,000 - $ 3,499	292	112	404
$ 3,500 - $ 3,999	150	69	219
$ 4,000 - $ 4,499	84	33	117
$ 4,500 - $ 4,999	64	14	78
$ 5,000 - $ 5,499	34	11	45
$ 5,500 - $ 5,999	15	5	20
$ 6,000 - $ 6,499	16	1	17
$ 6,500 - $ 6,999	7	3	10
$ 7,000 - $ 7,499	4	0	4
$ 7,500 - $ 7,999	4	0	4
$ 8,000 - $ 8,499	1	0	1
$ 8,500 - $ 8,999	0	0	0
$ 9,000 - $ 9,499	1	0	1
$ 9,500 - $ 9,999	1	0	1
$ 10,000 AND OVER	10	2	12
TOTAL	3,050	1,161	4,211
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF $85,000 AND OVER	20	2	22

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2002

MEMBERS CURRENTLY ACTIVE IN KERS NONHAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - HAZARDOUS	0	371	371
CERS - NONHAZARDOUS	482	2,618	3,100
CERS - HAZARDOUS	20	81	101
STATE POLICE	3	14	17
TOTAL - ALL SYSTEMS	505	3,084	3,589

MEMBERS CURRENTLY NOT ACTIVE IN KERS NONHAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - HAZARDOUS	1,496	53	1,549
CERS - NONHAZARDOUS	2,138	203	2,341
CERS - HAZARDOUS	290	33	323
STATE POLICE	112	13	125
TOTAL - ALL SYSTEMS	4,036	302	4,338

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2002

MEMBERS CURRENTLY ACTIVE IN KERS HAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	0	1,496	1,496
CERS - NONHAZARDOUS	23	230	253
CERS - HAZARDOUS	11	45	56
STATE POLICE	0	10	10
TOTAL - ALL SYSTEMS	34	1,781	1,815

MEMBERS CURRENTLY NOT ACTIVE IN KERS HAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	371	53	424
CERS - NONHAZARDOUS	64	75	139
CERS - HAZARDOUS	109	6	115
STATE POLICE	24	1	25
TOTAL - ALL SYSTEMS	568	135	703

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
RETIRED LIVES SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	2,530	2,780,084.56	6,343	5,812,065.71	8,873	8,592,150.27
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	1,704	1,826,880.37	563	393,064.72	2,267	2,219,945.09
66-2/3% TO BENEFICIARY	707	1,232,278.81	199	283,036.86	906	1,515,315.67
50% TO BENEFICIARY	900	1,359,425.72	629	908,095.96	1,529	2,267,521.68
POP-UP OPTION	1,810	2,855,099.17	1,085	1,487,480.37	2,895	4,342,579.54
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00
10 YEARS CERTAIN & LIFE	1,094	965,975.80	1,552	1,455,325.03	2,646	2,421,300.83
SOCIAL SECURITY OPTION						
OPTION C	404	694,267.54	886	1,213,703.27	1,290	1,907,970.81
OPTION D	814	1,272,500.92	470	656,794.44	1,284	1,929,295.36
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	1	483.07	2	678.25	3	1,161.32
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	367	420,253.82	325	340,406.04	692	760,659.86
20 YEARS CERTAIN & LIFE	287	401,777.21	276	358,062.19	563	759,839.40
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	10,618	13,809,026.99	12,330	12,908,712.84	22,948	26,717,739.83

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
RETIRED LIVES SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	169	127,654.98	113	67,282.37	282	194,937.35
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	114	91,892.11	5	3,913.61	119	95,805.72
66-2/3% TO BENEFICIARY	39	30,845.77	7	6,941.39	46	37,787.16
50% TO BENEFICIARY	56	54,033.87	6	3,704.37	62	57,738.24
POP-UP OPTION	196	177,839.26	32	23,296.24	228	201,135.50
10 YEARS CERTAIN	17	13,313.01	5	3,253.96	22	16,566.97
10 YEARS CERTAIN & LIFE	67	41,847.26	32	18,030.12	99	59,877.38
SOCIAL SECURITY OPTION						
OPTION C	31	27,315.58	17	11,801.95	48	39,117.53
OPTION D	74	78,746.89	11	4,782.09	85	83,528.98
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	7	1,668.06	11	2,422.69	18	4,090.75
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	23	17,794.80	9	6,841.53	32	24,636.33
20 YEARS CERTAIN & LIFE	26	22,966.24	2	1,266.34	28	24,232.58
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	819	685,917.83	250	153,536.66	1,069	839,454.49

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	253	150,660.82	1,677	1,003,027.27	1,930	1,153,688.09
66-2/3% TO BENEFICIARY	16	8,298.58	267	148,590.33	283	156,888.91
50% TO BENEFICIARY	58	24,082.96	483	180,625.88	541	204,708.84
POP-UP OPTION	45	47,567.64	173	129,832.27	218	177,399.91
10 YEARS CERTAIN	73	60,773.00	61	53,639.19	134	114,412.19
10 YEARS CERTAIN & LIFE	61	42,958.38	84	76,292.52	145	119,250.90
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	21	20,080.49	143	171,246.57	164	191,327.06
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	16	5,582.18	16	5,582.18
DEPENDENT CHILD	0	0.00	0	0.00	0	0.00
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	28	25,069.07	102	85,610.58	130	110,679.65
20 YEARS CERTAIN & LIFE	32	28,417.68	53	50,730.66	85	79,148.34
5 YEARS ONLY	66	54,558.40	43	62,263.59	109	116,821.99
TOTAL	653	462,467.02	3,102	1,967,441.04	3,755	2,429,908.06

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	5	1,656.00	61	36,545.78	66	38,201.78
66-2/3% TO BENEFICIARY	0	0.00	3	1,629.50	3	1,629.50
50% TO BENEFICIARY	0	0.00	10	2,837.58	10	2,837.58
POP-UP OPTION	0	0.00	12	5,971.06	12	5,971.06
10 YEARS CERTAIN	5	2,996.69	6	2,787.41	11	5,784.10
10 YEARS CERTAIN & LIFE	2	2,087.09	8	1,964.59	10	4,051.68
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	1	17.70	7	6,694.11	8	6,711.81
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	2	582.30	0	0.00	2	582.30
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	2	670.29	0	0.00	2	670.29
20 YEARS CERTAIN & LIFE	0	0.00	4	939.53	4	939.53
5 YEARS ONLY	8	1,974.77	3	4,462.40	11	6,437.17
TOTAL	25	9,984.84	114	63,831.96	139	73,816.80

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED RETIREMENT SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES MONTHLY BENEFITS	FEMALE LIVES NUMBER	FEMALE LIVES MONTHLY BENEFITS	TOTAL NUMBER	TOTAL MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	4	733.77	1	90.87	5	824.64
25-29	22	3,711.73	40	7,075.50	62	10,787.23
30-34	85	22,033.79	225	53,224.51	310	75,258.30
35-39	153	48,192.71	370	106,890.17	523	155,082.88
40-44	174	67,343.68	364	124,868.37	538	192,212.05
45-49	208	91,353.85	476	179,511.30	684	270,865.15
50-54	253	132,686.48	455	178,667.16	708	311,353.64
55-59	155	88,764.41	235	75,934.63	390	164,699.04
60-64	53	29,950.24	93	28,139.22	146	58,089.46
65-69	13	3,231.90	17	3,596.65	30	6,828.55
70-74	3	583.61	9	1,457.37	12	2,040.98
75-79	1	67.72	3	1,005.20	4	1,072.92
80-84	1	114.18	2	106.83	3	221.01
85 +	0	0.00	0	0.00	0	0.00
TOTAL	1,125	488,768.07	2,290	760,567.78	3,415	1,249,335.85

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED RETIREMENT SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES MONTHLY BENEFITS	FEMALE LIVES NUMBER	FEMALE LIVES MONTHLY BENEFITS	TOTAL NUMBER	TOTAL MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	0	0.00	0	0.00	0	0.00
25-29	5	1,016.71	1	132.12	6	1,148.83
30-34	8	1,730.46	5	1,090.63	13	2,821.09
35-39	15	4,469.53	12	3,359.26	27	7,828.79
40-44	13	5,706.97	9	3,794.20	22	9,501.17
45-49	17	5,296.12	5	537.79	22	5,833.91
50-54	14	6,171.46	6	1,928.56	20	8,100.02
55-59	9	2,162.09	7	1,773.25	16	3,935.34
60-64	1	292.80	0	0.00	1	292.80
65-69	0	0.00	0	0.00	0	0.00
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	82	26,846.14	45	12,615.81	127	39,461.95

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES ACCUMULATED CONTRIBUTIONS	FEMALE LIVES NUMBER	FEMALE LIVES ACCUMULATED CONTRIBUTIONS	TOTAL NUMBER	TOTAL ACCUMULATED CONTRIBUTIONS
15-19	1,211	238,131.21	72	19,486.24	1,283	257,617.45
20-24	419	428,718.54	402	187,622.56	821	616,341.10
25-29	658	497,809.88	1,216	1,123,856.98	1,874	1,621,666.86
30-34	818	857,902.54	1,438	1,774,906.29	2,256	2,632,808.83
35-39	633	660,897.57	1,094	1,379,686.35	1,727	2,040,583.92
40-44	557	698,766.80	979	1,220,097.57	1,536	1,918,864.37
45-49	598	820,401.13	994	1,524,092.32	1,592	2,344,493.45
50-54	607	989,361.35	805	1,656,608.67	1,412	2,645,970.02
55-59	364	659,418.34	540	1,141,646.63	904	1,801,064.97
60-64	211	504,979.67	266	389,859.88	477	894,839.55
65-69	119	187,397.36	106	185,516.33	225	372,913.69
70-74	63	54,101.51	46	27,828.25	109	81,929.76
75-79	29	11,496.23	25	11,198.81	54	22,695.04
80-84	9	5,113.18	11	3,695.13	20	8,808.31
85 +	5	153.47	4	20,937.48	9	21,090.95
TOTAL	6,301	6,614,648.78	7,998	10,667,039.49	14,299	17,281,688.27

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES ACCUMULATED CONTRIBUTIONS	FEMALE LIVES NUMBER	FEMALE LIVES ACCUMULATED CONTRIBUTIONS	TOTAL NUMBER	TOTAL ACCUMULATED CONTRIBUTIONS
15-19	113	21,929.20	0	0.00	113	21,929.20
20-24	41	37,002.31	12	4,680.04	53	41,682.35
25-29	124	85,526.36	39	47,691.49	163	133,217.85
30-34	137	128,913.18	42	46,707.93	179	175,621.11
35-39	92	89,765.91	42	67,349.05	134	157,114.96
40-44	58	53,445.89	42	65,224.94	100	118,670.83
45-49	47	34,174.94	25	47,489.86	72	81,664.80
50-54	46	73,909.87	23	42,586.43	69	116,496.30
55-59	23	31,873.74	16	27,279.13	39	59,152.87
60-64	17	17,087.27	5	13,354.53	22	30,441.80
65-69	2	1,388.97	0	0.00	2	1,388.97
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	700	575,017.64	246	362,363.40	946	937,381.04

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the Kentucky Employees Retirement System in July, 1956. The plan benefits have been improved several times, most recently as of August 1, 2002.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the five highest paid fiscal years for nonhazardous positions. If the months of service credit during the highest five year period is less than forty-eight, one or more additional fiscal years shall be used. For a member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years.

For hazardous positions, final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

(a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1956. In some instances prior service credit is granted for time spent in the military.

(b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1956. Current service credit may be granted for military service and educational leaves if special criteria are met.

(c) Service is increased by unused sick leave, up to a maximum of six months, for purposes of computing eligibility and the amount of benefits.

Eligibility

Any state department, board, or agency shall participate in the System when directed to do so by the Executive Order of the Governor. Membership in the system consists of:

(a) all persons who become employees of a department after such department first participates,

(b) all persons who are employees on the date a department first participates and who elect within thirty days to become members and make contributions,

(c) all persons who are employees of any credit union whose membership is limited to state government employees,

(d) all persons who were professional staff employees of the Council on Public Higher Education or the Higher Education Assistance Authority and were making contributions to the system on the effective date of their respective Executive Order and filed a written election to continue in the System,

(e) all persons who were professional staff employees of the Kentucky Authority for Educational Television on or after July 1, 1974,

(f) members of the General Assembly and Constitutional officers of the General Assembly serving during the January, 1960 session or thereafter, and

(g) officers and employees of the General Assembly and their assistants if employed by the General Assembly during the January, 1960 session and thereafter, but only after serving during six sessions of the General Assembly.

Normal Retirement Date

A member may elect to retire upon: (1) attaining age 65 for non-hazardous positions, or attaining age 55 for hazardous positions, and (2) having contributed to the System. Upon completion of 27 years of service credit, 15 of which are current service for non-hazardous positions, or completion of 20 years of service credit for hazardous positions, a member may elect to retire with an unreduced benefit.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after: (1) for non-hazardous positions, attainment of age 55 and completion of 60 months of service credit at least 12 of which are current, or at any age after 25 years of service, or (2) for hazardous positions, attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

For non-hazardous positions, upon attainment of age 65 and completion of 48 months of service, of which 12 months are current service, a monthly benefit equal to 1.97% of the member's final compensation multiplied by his service will be payable. However, effective February 1, 1999, a member who was participating as of January 1, 1998 and continues to participate through January 1, 1999 shall receive a benefit based on a 2.00% formula rate. In addition, any such member whose effective date of retirement is between February 1, 1999 and January 31, 2009, and who has at least 20 years of service credit, shall receive a retirement allowance based on a 2.20% benefit formula rate. For hazardous positions, a monthly benefit equal to 2.49% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member, with less than 48 months for non-hazardous positions or 60 months for hazardous positions, who retires on or after the normal retirement date is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a non-hazardous position employee has 27 or more years of service credit, 15 of which are current, or a hazardous position employee has 20 or more years of service credit, an unreduced benefit is payable.

Minimum Benefit

The normal retirement benefit for members with 10 or more years of service, at least one of which is current service, shall not be less than $512 per year.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 65th birthday (55th for members in a hazardous position) up to a maximum of service credited to the last day of paid employment. Except for members with 25 or more (20 or more for hazardous) years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 25 years (20 years for hazardous members). For non-hazardous position employees with 25 or more years of service credit, additional years of service credit will be added up to a maximum combined limit of 30, or actual service if greater. For hazardous position employees with 20 or more years of service credit, actual service will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable to hazardous employees if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, or after 48 months service if the member is age 65 or over, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member in a hazardous position dies in the line of duty and has a spouse as beneficiary, a $5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary, a lump sum payment of $10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a hazardous duty member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee using 2.49% rather than 1.97%.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of $5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include a life annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 5% of gross compensation (8% for hazardous positions). On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The cost of participation for any beneficiaries or dependents is borne by the retiree (except that dependents of hazardous position employees and legislators will have the same percentage paid by the system as the member). The retirement system will pay a portion of the cost of participation for the retiree based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a hazardous member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a hazardous member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contract provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.

FORTY-THIRD ANNUAL ACTUARIAL VALUATION

JUNE 30, 2002

COUNTY EMPLOYEES RETIREMENT SYSTEM

SECTION I

INTRODUCTION

The results of the forty-third annual actuarial valuation of the County Employees Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2002.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contribution for the ensuing fiscal year as required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding is defined in KRS 61.565 and provides that the actuarial valuation method would be uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System to the financing required during years of active service to accumulate the funds needed to provide members' benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the "level-percentage-of-payroll" method. Under the "level-percentage-of-payroll" method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate was increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new

medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus any reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the medical insurance contribution rate is to be increased each year by the percentage amount necessary to raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation as allocated between Hazardous position and Non-Hazardous position employees.

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase. In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. Actuarial assumptions used for hazardous position employees are similar to actuarial assumptions adopted for the State Police Retirement System (with the exception of the rate of retirement). The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for the Retirement Fund and Insurance Fund:

1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.

2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.

3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.

4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.

5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	RETIREMENT FUND		INSURANCE FUND	
	Non Hazardous	Hazardous	Non Hazardous	Hazardous
June 30, 2001 Valuation Assets	5,423,834,549	1,486,666,016	371,758,628	197,875,249
Cash Flows				
> Employer Contributions	4,663,371	10,904,214	102,150,788	45,730,333
> Member Contributions	121,573,670	35,164,272		
> Retirement Benefits	196,658,618	63,494,374		
> Net Refunds	7,520,556	1,641,709		
> Insurance Premiums			32,694,301	13,095,137
> Administrative Expenses	7,187,049	634,783	260,214	115,183
> Investment Manager Fees	2,842,513	748,070	141,757	72,119
Valuation Interest Assumption	8.25%	8.25%	8.25%	8.25%
Expected Return on Valuation Assets Reflecting Actual Cash Flows *	443,837,518	121,806,365	33,518,586	17,663,184
Expected Valuation Assets	5,779,700,372	1,588,021,931	474,331,730	247,986,327
Actual Market Value of Assets	4,126,756,301	1,144,349,093	365,332,585	187,533,847
Investment Gain/(Loss)	(1,652,944,071)	(443,672,838)	(108,999,145)	(60,452,480)
Valuations				
> Valuation Year - 1				
>> Initial Amount	(1,283,110,002)	(344,389,248)	(50,864,852)	(30,298,823)
>> Current Valuation Amount	(1,026,488,002)	(275,511,398)	(40,691,882)	(24,239,058)
>> Amortization	(256,622,000)	(68,877,850)	(10,172,970)	(6,059,765)
> Valuation Year - 2				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 3				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 4				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
Unamortized Amount of Gain/(Loss) From Prior Valuations	(1,026,488,002)	(275,511,398)	(40,691,882)	(24,239,058)
Investment Gain/(Loss) to be Amortized from Current Valuation Date				
> Amount	(626,456,069)	(168,161,440)	(68,307,263)	(36,213,422)
> Amortization	(125,291,214)	(33,632,288)	(13,661,453)	(7,242,684)
June 30, 2002 Valuation Assets				
> Expected Assets	5,779,700,372	1,588,021,931	474,331,730	247,986,327
> Amortization Amounts	(381,913,214)	(102,510,138)	(23,834,423)	(13,302,449)
> Valuation Assets	5,397,787,158	1,485,511,793	450,497,307	234,683,878

* Cash flows are assumed equally spread throughout the year

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1) Mortality:

(a) Active & retired lives - 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees.

(b) Disabled lives - Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).

(2) Disablement - Graduated rates based on 2000 experience study (no change from 1995 experience study).

(3) Termination of employment - Graduated select (non-hazardous only) and ultimate rates based on 2000 experience study.

(4) Retirement - Non-Hazardous:

Age	Retirement Rate
55-57	.04
58-59	.05
60-61	.06
62	.25
63-64	.10
65	.50
66-67	.20
68	.25
69	.40
70 and Over	1.00

At age 55-64 in lieu of the age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits.

Hazardous: Assumed that 60% will retire as soon as eligible for unreduced benefits and balance will continue to age 55.

(5) Marital status

(a) Percentage married - 100%.

(b) Age difference - Males are assumed to be 3 years older than their spouses.

(6) Dependent children - For hazardous position employees under duty related death benefits, it is assumed that the employee is survived by 2 dependent children each age 6.

(7) Investment return - 8.25% per year, net of investment related expenses, compounded annually.

(8) Compensation progression - 1st year: 12.00%
2nd year: 10.00%
3rd year: 8.00%
Thereafter: 6.50%, compounded annually.

(9) Underlying Inflation Rate - 3.5% per year; reflected in investment return and compensation progression assumptions.

(10) Retiree Medical Insurance - It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution rates were assumed to be as follows:

Pre-Medicare Coverage - - -
Rate in Effect on Valuation Date

	Single	Couple	Parent Plus	Family
Region 1	$234.00	$473.96	$315.96	$526.60
Region 2	260.44	527.44	351.60	586.04
Region 3	300.64	608.96	405.96	676.60
Region 4	320.96	650.00	433.32	722.24
Region 5	340.48	689.44	459.64	766.04
All others	245.00	522.92	348.64	581.04

Region 1: Boone, Campbell, Gallatin, Grant, Kenton and Pendleton

Region 2: Allen, Ballard, Bell, Caldwell, Calloway, Carlisle, Clay, Crittenden, Fulton, Graves, Harlan, Harrison, Hickman, Hopkins, Knott, Lincoln, Livingston, Lyon, McCracken, Marshall, Perry, Pike, Robertson, Rockcastle, Rowan, Simpson and Webster

Region 3: Lewis, Mason, Morgan and Pulaski

Region 4: Boyd, Carter, Christian, Daviess, Elliott, Greenup, Hancock, Henderson, Lawrence, McLean, Todd, Trigg and Union

Region 5: Breckinridge and Grayson

Carrier	Medicare Rate Low Option	Medicare Rate High Option	Contracts in Force Low Option	Contracts in Force High Option
Anthem BC/BS	103.18	252.56	3,258	20,040
Bankers Life	82.70	195.35	594	331
Option 2000	98.18	247.56	547	1,852

Weighted Medicare Coverage - - - Rate in Effect on Valuation Date

	Low Option	High Option
All members	$99.79	$251.29

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

Years	Medical Increase
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

(11) Missing data - For those active members with incomplete data, the following assumptions were made:

. If reported salary was zero or blank, then monthly salary was assumed to be $911.64

. If reported age was blank, then assume current age equal to age 18 plus years of service reported

(12) Members with Multiple Service Records

- For active members with service in more than one system, the liability has been valued as follows:

  . Service under all systems is aggregated for purposes of determining benefit eligibility.

  . Future service is projected only under the system in which the member is currently active.

  . The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.

  . The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

  For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

B. SAMPLE RATES FOR NON-HAZARDOUS POSITION EMPLOYEES*

(1) Annual Rates of Mortality:

	Active Mortality		Disabled Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

(2) Annual Rates of Decrement:

Age	Disablement	Ultimate Termination
25	0.033%	2.40%
30	0.039%	2.40%
40	0.105%	2.00%
50	0.423%	1.60%
55	0.794%	1.20%
60	1.395%	0.20%

(3) Select Rates of Termination:

Years of Service	Select Termination
1	35.0%
2	10.0%
3	7.0%
4	5.0%
5	4.0%

(4) Compensation Progression (after 1st 3 years):

Age	Rate of Annual Increase	Compensation at Normal Retirement as Percentage Of Current Annual Compensation
25	6.50%	1,241.6%
30	6.50%	906.2%
40	6.50%	482.8%
50	6.50%	257.2%
55	6.50%	187.7%
60	6.50%	137.0%

*Sample rates for hazardous position employees are included in the State Police Retirement System valuation.

SECTION III

RESULTS OF THE 2002 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the participating Agencies required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the annual Normal Cost, medical insurance and the administrative costs of the System is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated payroll of the participating Agencies as of June 30, 2002.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2002 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate of the participating Agencies is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the County Employees Retirement System as of June 30, 2002 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements relative to the Retirement Fund.

Table X contains information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT AND INSURANCE FUND
DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2002

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND			
			Percent *
Total Actuarial Accrued Liability	$	5,492,646,422	269.94%
Assets at Actuarial Value		6,883,298,951	338.28%
Unfunded Actuarial Accrued Liability	$	(1,390,652,529)	(68.34%)
Contribution - Payment on Unfunded Actuarial Accrued Liability	$	(75,636,941)	(3.72%)
NORMAL COST - RETIREMENT FUND			
Retirement Benefits	$	192,289,479	9.45%
Disability Benefits		21,520,895	1.06%
Withdrawal Benefits (Vested and Refund of Contributions)		14,772,987	0.73%
Survivor Benefits		11,541,944	0.57%
Total Normal Cost	$	240,125,305	11.81%
Less: Employee Contributions		109,975,311	5.40%
Normal Cost - State	$	130,149,994	6.41%
TOTAL ANNUAL EMPLOYER COST - RETIREMENT AND INSURANCE FUND			
Non-Hazardous Duty Cost			
Normal Cost	$	99,975,323	5.92% **
Payment on Unfunded Actuarial Accrued Liability		(68,112,351)	(4.03%) **
Administrative Expense		8,508,924	0.50% **
Subtotal - Retirement Fund (Not Less Than Zero)	$	40,371,896	2.39% **
Group Hospital and Medical Insurance Premiums		83,578,809	4.95% **
Total Annual Cost	$	123,950,705	7.34% **
Hazardous Duty Cost			
Normal Cost	$	30,174,671	8.71% ***
Payment on Unfunded Actuarial Accrued Liability		(7,524,590)	(2.17%) ***
Administrative Expense		749,025	0.22% ***
Subtotal - Retirement Fund (Not Less Than Zero)	$	23,399,106	6.76% ***
Group Hospital and Medical Insurance Premiums		40,692,500	11.75% ***
Total Annual Cost	$	64,091,606	18.51% ***
Based on estimated annual salaries			
* Total	$	2,034,779,935	
** Non-Hazardous Position Employees	$	1,688,460,789	
*** Hazardous Position Employees	$	346,319,146	

TABLE II
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2002

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members			
Retirement Benefits	$ 1,981,355,918	$ 625,350,420	$ 2,606,706,338
Disability Benefits	139,143,952	14,674,137	153,818,089
Withdrawal Benefits (Vested and Refund of Contributions)	63,036,065	8,390,929	71,426,994
Survivor Benefits	120,399,697	14,686,925	135,086,622
Total - Actives	$ 2,303,935,632	$ 663,102,411	$ 2,967,038,043
Inactive Members			
Retired Members and Beneficiaries	$ 1,806,732,142	$ 660,258,433	$ 2,466,990,575
Vested Retirement	37,094,732	2,935,600	40,030,332
Vested Membership	17,592,643	994,829	18,587,472
Total - Inactives	$ 1,861,419,517	$ 664,188,862	$ 2,525,608,379
Total Actuarial Accrued Liability	$ 4,165,355,149	$ 1,327,291,273	$ 5,492,646,422
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$ 4,165,355,149	$ 1,327,291,273	$ 5,492,646,422
Less Actuarial Value of Assets	5,397,787,158	1,485,511,793	6,883,298,951
Unfunded Actuarial Accrued Liability	$ (1,232,432,009)	$ (158,220,520)	$ (1,390,652,529)
NORMAL COST			
Retirement Benefits	$ 142,794,586	$ 49,494,893	$ 192,289,479
Disability Benefits	19,177,403	2,343,492	21,520,895
Withdrawal Benefits (Vested and Refund of Contributions)	11,866,751	2,906,236	14,772,987
Survivor Benefits	9,813,545	1,728,399	11,541,944
Total Normal Cost	$ 183,652,285	$ 56,473,020	$ 240,125,305
Less Employee Contributions	83,676,962	26,298,349	109,975,311
Total Normal Cost - State	$ 99,975,323	$ 30,174,671	$ 130,149,994

TABLE III
COUNTY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2002

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
Non-Hazardous Position Employees				
6/30/1990	$ 93,672,421	$ 117,926,234	$ 8,384,084	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	61,472,822	76,799,816	5,244,736	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(125,111,651)	(154,695,878)	(10,174,967)	Experience gains/losses for 7/1/1991 to 6/30/1992; Asset valuation method change
6/30/1993	(28,358,370)	(34,618,487)	(2,198,412)	Experience gains/losses for 7/1/1992 to 6/30/1993
6/30/1994	59,026,195	70,983,744	4,361,667	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's
6/30/1995	(35,766,009)	(42,286,466)	(2,519,174)	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(188,502,047)	(218,710,689)	(12,655,475)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(200,122,489)	(227,293,278)	(12,795,930)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(311,976,854)	(346,327,663)	(18,998,150)	Experience gains/losses for 7/1/1997 to 6/30/1998; Increase in death benefit from $2,500 to $5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(379,088,077)	(410,741,268)	(21,985,337)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(804,685,873)	(849,873,782)	(44,445,849)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	250,075,433	257,144,523	13,155,000	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000; 3-year average earnings window
6/30/2002	529,261,185	529,261,185	26,515,456	Experience gains/losses for 7/1/2001 to 6/30/2002; 3.4% retiree COLA effective 7/1/2001
Total	$ (1,080,103,314)	$ (1,232,432,009)	$ (68,112,351)	

TABLE III (Continued)
COUNTY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2002

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
Hazardous Position Employees				
6/30/1990	$ 68,584,978	$ 86,343,114	$ 6,138,650	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	29,934,803	37,398,436	2,553,977	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(12,941,304)	(16,001,438)	(1,052,479)	Experience gains/losses for 7/1/1991 to 6/30/1992; Asset valuation method change
6/30/1993	(7,291,213)	(8,900,748)	(565,233)	Experience gains/losses for 7/1/1992 to 6/30/1993
6/30/1994	1,854,577	2,230,279	137,042	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's
6/30/1995	24,831,672	29,358,703	1,749,015	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(65,565,268)	(76,072,515)	(4,401,860)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(62,908,989)	(71,450,194)	(4,022,432)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(50,329,820)	(55,871,482)	(3,064,886)	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average salary definition from 5 years to 3 years; Increase in death benefit from $2,500 to $5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(97,060,446)	(105,164,824)	(5,629,052)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(194,399,700)	(205,316,402)	(10,737,432)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	79,413,115	81,657,951	4,177,457	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000
6/30/2002	143,568,600	143,568,600	7,192,643	Experience gains/losses for 7/1/2001 to 6/30/2002; 3.4% retiree COLA effective 7/1/2001
Total	$ (142,308,995)	$ (158,220,520)	$ (7,524,590)	

TABLE IV
COUNTY EMPLOYEES RETIREMENT SYSTEM
INSURANCE FUND
DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2002

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members	$ 1,320,764,138	$ 437,363,297	$ 1,758,127,435
Inactive Members			
Retired Members	$ 591,973,204	$ 303,932,683	$ 895,905,887
Beneficiaries	127,079	34,990,269	35,117,348
Vested Retirement	64,712,617	4,898,725	69,611,342
Vested Membership	0	0	0
Total - Inactives	$ 656,812,900	$ 343,821,677	$ 1,000,634,577
Total Actuarial Accrued Liability	$ 1,977,577,038	$ 781,184,974	$ 2,758,762,012
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$ 1,977,577,038	$ 781,184,974	$ 2,758,762,012
Less Actuarial Value of Assets	450,497,307	234,683,878	685,181,185
Unfunded Actuarial Accrued Liability	$ 1,527,079,731	$ 546,501,096	$ 2,073,580,827
NORMAL COST			
Gross Normal Cost	$ 140,324,978	$ 50,974,605	$ 191,299,583
Less Employee Contributions	0	0	0
Net Normal Cost - State	$ 140,324,978	$ 50,974,605	$ 191,299,583
Estimated Annual Salaries	$ 1,688,460,789	$ 346,319,146	$ 2,034,779,935
TOTAL ANNUAL EMPLOYER COST			
Contribution Amount			
Normal Cost	$ 140,324,978	$ 50,974,605	$ 191,299,583
Payment on Unfunded Actuarial Accrued Liability	85,517,492	30,783,688	116,301,180
Total Annual Cost	$ 225,842,470	$ 81,758,293	$ 307,600,763
As Percent of Payroll			
Normal Cost	8.31%	14.72%	9.40%
Payment on Unfunded Actuarial Accrued Liability	5.06%	8.89%	5.72%
Total Annual Cost	13.37%	23.61%	15.12%
INSURANCE FUND SHORTFALL			
Full Entry Age Funding Level	13.37%	23.61%	15.12%
Current Funding Allocation *	4.95%	11.75%	6.11%
Additional to Pick Up By 2016	8.42%	11.86%	9.01%
Expected Increase in Insurance Fund Rate in 2003 Valuation	0.36%	0.60%	N/A

* Without regard to any one-year temporary adjustments for actuarial gains

TABLE V
COUNTY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2002

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
Non-Hazardous Position Employees				
6/30/1996	$ 901,011,537	$ 1,045,404,313	$ 60,491,275	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	29,886,573	33,944,297	1,910,962	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	62,468,342	69,346,539	3,804,074	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(21,106,379)	(22,868,725)	(1,224,071)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	70,199,744	74,141,879	3,877,398	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	247,855,413	254,861,748	13,038,217	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2002	72,249,680	72,249,680	3,619,637	Experience gains/losses for 7/1/2001 to 6/30/2002; Impact of actual insurance fund contributions vs. full entry age amounts
Total	$ 1,362,564,910	$ 1,527,079,731	$ 85,517,492	
Hazardous Position Employees				
6/30/1996	$ 318,111,968	$ 369,091,416	$ 21,357,106	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	53,367,623	60,613,387	3,412,352	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	15,379,222	17,072,579	936,533	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(13,162,362)	(14,261,396)	(763,355)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	17,607,673	18,596,449	972,538	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	82,316,738	84,643,654	4,330,200	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2002	10,745,007	10,745,007	538,314	Experience gains/losses for 7/1/2001 to 6/30/2002; Impact of actual insurance fund contributions vs. full entry age amounts
Total	$ 484,365,869	$ 546,501,096	$ 30,783,688	

TABLE VI
COUNTY EMPLOYEES RETIREMENT SYSTEM
BENEFIT PAYMENT PROJECTIONS

RETIREMENT FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2002 to 6/30/2003	221,313,000	72,781,000	294,094,000
7/1/2003 to 6/30/2004	235,682,000	77,219,000	312,901,000
7/1/2004 to 6/30/2005	251,877,000	82,665,000	334,542,000
7/1/2005 to 6/30/2006	270,223,000	90,062,000	360,285,000
7/1/2006 to 6/30/2007	291,625,000	98,916,000	390,541,000
7/1/2007 to 6/30/2008	315,352,000	108,480,000	423,832,000
7/1/2008 to 6/30/2009	341,182,000	119,682,000	460,864,000
7/1/2009 to 6/30/2010	369,495,000	132,735,000	502,230,000
7/1/2010 to 6/30/2011	400,532,000	146,203,000	546,735,000
7/1/2011 to 6/30/2012	434,944,000	159,327,000	594,271,000

INSURANCE FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2002 to 6/30/2003	42,240,000	17,234,000	59,474,000
7/1/2003 to 6/30/2004	48,735,000	19,368,000	68,103,000
7/1/2004 to 6/30/2005	55,927,000	21,797,000	77,724,000
7/1/2005 to 6/30/2006	64,328,000	24,875,000	89,203,000
7/1/2006 to 6/30/2007	73,728,000	28,341,000	102,069,000
7/1/2007 to 6/30/2008	83,982,000	32,089,000	116,071,000
7/1/2008 to 6/30/2009	95,779,000	36,607,000	132,386,000
7/1/2009 to 6/30/2010	109,489,000	42,044,000	151,533,000
7/1/2010 to 6/30/2011	125,158,000	48,040,000	173,198,000
7/1/2011 to 6/30/2012	142,265,000	54,157,000	196,422,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

TABLE VII
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 6,883,298,951
Actuarial Present Value of Future Member Contributions		1,259,879,144
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 1,394,774,783	
For Unfunded Actuarial Accrued Liability	(1,390,652,529)	
Total		$ 4,122,254
Total Actuarial Assets		$ 8,147,300,349
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 2,466,990,575	
Vested Retirement	40,030,332	
Vested Membership	18,587,472	
Total - Inactive		$ 2,525,608,379
Actuarial Present Value of Future Benefits		
Active Members:		
Retirement Benefits	$ 4,729,475,482	
Disability Benefits	383,047,138	
Withdrawal Benefits (Vested and Refund of Contributions)	248,656,200	
Survivor Benefits	260,513,150	
Total - Active		$ 5,621,691,970
Refunds and Expenses Payable		$ 0
Total Actuarial Liabilities		$ 8,147,300,349

Notes

* Values as of June 30, 2002		
Market value of assets:	Non-Hazardous	$ 4,126,756,301
	Hazardous	$ 1,144,349,093
	Total	$ 5,271,105,394
Actuarial value of assets:		$ 6,883,298,951
Member's Contribution Account:		$ 1,007,019,339

** Present value of accrued benefit deferred to normal retirement date.

TABLE VIII
COUNTY EMPLOYEES RETIREMENT SYSTEM
INSURANCE FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 685,181,185
Actuarial Present Value of Future Member Contributions (Note: All Future Member Contributions Credited Against Retirement Fund)		0
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 2,230,358,954	
For Unfunded Actuarial Accrued Liability	2,073,580,827	
Total		$ 4,303,939,781
Total Actuarial Assets		$ 4,989,120,966
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 931,023,235	
Vested Retirement	69,611,342	
Vested Membership	0	
Total - Inactive		$ 1,000,634,577
Actuarial Present Value of Future Benefits Active Members:		$ 3,988,486,389
Refunds and Expenses Payable		$ 0
Total Actuarial Liabilities		$ 4,989,120,966
Notes		
* Values as of June 30, 2002		
Market value of assets:	Non-Hazardous	$ 365,332,585
	Hazardous	$ 187,533,847
	Total	$ 552,866,432
Actuarial value of assets:		$ 685,181,185

TABLE IX
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2002
GASB DISCLOSURE INFORMATION

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS			
Inactive Members			
Retired Members	23,296	3,246	26,542
Beneficiaries	2,851	237	3,088
Vested Retirements	4,470	148	4,618
Vested Membership	26,508	552	27,060
Total Inactive Members	57,125	4,183	61,308
Active Members			
Vested Members	46,937	4,855	51,792
Nonvested Members	32,913	4,094	37,007
Total Active Members	79,850	8,949	88,799
Total Members	136,975	13,132	150,107

TABLE X
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2002
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

		Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS				
Contracts in Force - Retirees and Dependents				
(1) Single;	- 100% Paid	2,903	870	3,773
Pre-Medicare	- 75% Paid	422	38	460
	- 50% Paid	419	34	453
	- 25% Paid	207	14	221
	- 0% Paid	579	0	579
(2) Family;	- 100% Paid	173	523	696
Pre-Medicare	- 75% Paid	8	18	26
	- 50% Paid	8	9	17
	- 25% Paid	3	6	9
	- 0% Paid	3	0	3
(3) Parent +;	- 100% Paid	155	183	338
Pre-Medicare	- 75% Paid	5	15	20
	- 50% Paid	2	6	8
	- 25% Paid	2	6	8
	- 0% Paid	60	0	60
(4) Couple +;	- 100% Paid	487	733	1,220
Pre-Medicare	- 75% Paid	43	10	53
	- 50% Paid	50	16	66
	- 25% Paid	23	6	29
	- 0% Paid	2	0	2
(5) Medicare Regular	- 100% Paid	1,055	27	1,082
	- 75% Paid	0	0	0
	- 50% Paid	0	0	0
	- 25% Paid	768	11	779
	- 0% Paid	623	0	623
(6) Medicare High	- 100% Paid	3,631	603	4,234
Option	- 75% Paid	1,841	64	1,905
	- 50% Paid	1,796	45	1,841
	- 25% Paid	974	20	994
	- 0% Paid	1,275	2	1,277
Vested Retirements		4,470	148	4,618
Vested Membership		26,508	552	27,060
Active Members		79,850	8,949	88,799

UNFUNDED MEDICAL BENEFIT OBLIGATION			
Medical Benefit Obligation			
Retirees, Beneficiaries and Vested Terminated Members	$ 656,812,900	$ 343,821,677	$ 1,000,634,577
Active Members	1,320,764,138	437,363,297	1,758,127,435
Total Medical Benefit Obligation	$ 1,977,577,038	$ 781,184,974	$ 2,758,762,012
Net Assets at Actuarial Value	$ 450,497,307	$ 234,683,878	$ 685,181,185
Unfunded Medical Benefit Obligation	$ 1,527,079,731	$ 546,501,096	$ 2,073,580,827
NOTE: Medical Benefit Obligation based on Entry Age Normal Actuarial Cost Method			

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from $4,900,142,654 on June 30, 2001 to $5,492,646,422 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from $(2,010,357,911) to $(1,390,652,529). Total actuarial value of assets as of June 30, 2002 was equal to $6,883,298,951. The Unfunded Actuarial Accrued Liability increased from (104.68%) to (68.34%) as a percentage of annual payroll and increased from (41.0%) to (25.3%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from $2,515,316,060 on June 30, 2001 to $2,758,762,012 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from $1,945,682,182 to $2,073,580,827. Total actuarial value of assets as of June 30, 2002 was equal to $685,181,185. The Unfunded Actuarial Accrued Liability decreased from 76.4% to 75.2% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

The change in contribution rate between the 2001 and 2002 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

	Non-Hazardous Position Employees	**Hazardous Position Employees**
June 30, 2001 Contribution Rate	6.34%	16.28%
Change in Payment Percentage Due to Covered Payroll Experience	0.04%	0.09%
Investment Return Experience	1.15%	1.52%
Salary Increase Experience	(0.02%)	(0.02%)
Decrements Experience*	0.33%	0.24%
Change in Insurance Fund Rate		
> One-Year Temporary Funding Rate	(1.08%)	(0.43%)
> Increase in Long Term Funding Rate	0.35%	0.57%
Change in Administrative Expense Rate	0.06%	(0.05%)
Retiree COLA Effective 7/1/2001	0.17%	0.31%
Legislated Changes	None	None
Reduction in Amount Available from Prior Year Retirement Fund Rate to Offset Current Year Increases	N/A	N/A
June 30, 2002 Contribution Rate	7.34%	18.51%
* Includes mortality, disability, termination of employment and retirement experience.		

The annual contribution rate required by the participating Agencies to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Non-Hazardous position employees is 2.39%. An additional 4.95% is required to fund medical insurance for retirees, bringing the required contribution up to 7.34%. This is greater than the current 6.34% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2003 should be increased to the 7.34% level, and we so recommend.

The annual contribution rate required by the participating Agencies to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Hazardous position employees is 6.76%. An additional 11.75% is required to fund medical insurance for retirees, bringing the required contribution up to 18.51%. This is greater than the current 16.28% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2003 should be increased to the 18.51% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2003 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

COUNTY EMPLOYEES RETIREMENT SYSTEM - RETIREMENT FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1960	$ 5,602,131	$ 4,737,680	84.6%	$ 864,451	$ 864,451
1965	12,510,487	6,897,273	55.1%	5,613,214	1,255,742
1971	40,305,948	16,885,927	41.9%	23,420,022*	4,850,170
1975	85,322,085	24,467,454	28.7%	60,854,631*	11,704,780
1976	128,824,236	50,089,614	38.9%	78,734,622*	17,879,991
1977	152,900,347	52,474,756	34.3%	100,425,591*	21,690,969
1978	175,194,867	50,394,913	28.8%	124,799,954*	24,374,363
1979	213,834,377	60,742,472	28.4%	153,091,905*	28,291,951
1980	266,018,621	75,787,680	28.5%	190,230,941*	37,139,036
1981	260,872,162	27,101,917	10.4%	233,770,245	43,539,304
1982	306,087,531	20,552,642	6.7%	285,534,889	51,764,644
1983	340,705,763	(2,450,006)	(0.8%)	343,155,769	57,620,880
1984	421,336,269	15,148,838	3.6%	406,187,431	63,031,662
1985	463,618,532	(14,424,689)	(3.1%)	478,043,221	71,855,790
1986	535,948,094	(67,867,706)	(12.7%)	603,815,800	125,772,579
1987	678,442,760	(49,287,967)	(7.3%)	727,730,727	123,914,927
1988	829,346,323	(10,232,573)	(1.2%)	839,578,896	111,848,169
1989	1,113,868,548	35,815,913	3.2%	1,078,052,635	238,473,739
1990	1,432,323,666	162,257,399	11.3%	1,270,066,267	192,013,632
1991	1,654,338,706	258,111,701	15.6%	1,396,227,005	126,160,738
1992**	1,861,978,403	126,939,495	6.8%	1,735,038,908	338,811,903
1993	2,079,930,047	94,249,338	4.5%	1,985,680,709	250,641,801
1994	2,330,344,241	156,989,469	6.7%	2,173,354,772	187,674,063
1995	2,603,575,921	149,447,861	5.7%	2,454,128,060	280,773,288
1996	2,778,316,473	(101,712,065)	(3.7%)	2,880,028,538	425,900,478
1997	3,144,928,093	(369,096,965)	(11.7%)	3,514,025,868	633,997,330
1998	3,529,912,902	(743,349,593)	(21.1%)	4,273,262,495	759,236,627
1999	3,955,132,659	(1,241,746,262)	(31.4%)	5,196,878,921	923,616,426
2000	4,453,154,831	(2,276,421,497)	(51.1%)	6,729,576,328	1,532,697,407
2001***	4,900,142,654	(2,010,357,911)	(41.0%)	6,910,500,565	180,924,237
2002	5,492,646,422	(1,390,652,529)	(25.3%)	6,883,298,951	(27,201,614)
*Includes capitalized appreciation of investments.					
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

COUNTY EMPLOYEES RETIREMENT SYSTEM - INSURANCE FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1990	$ 700,151,838	$ 670,720,901	95.8%	$ 29,430,397	$ N/A
1991	823,012,809	780,592,065	94.8%	42,420,744	12,989,807
1992	1,041,905,457	984,949,556	94.5%	56,955,901	14,535,157
1993	1,244,258,042	1,170,004,170	94.0%	74,253,872	17,297,971
1994	1,551,138,800	1,451,623,905	93.6%	99,514,895	25,261,023
1995	1,679,893,225	1,554,439,285	92.5%	125,453,940	25,939,045
1996**	1,386,659,746	1,219,123,505	87.9%	167,536,241	42,082,301
1997	1,541,360,457	1,336,839,680	86.7%	204,520,777	36,984,536
1998	1,706,626,110	1,451,039,735	85.0%	255,586,375	51,065,598
1999	1,801,154,401	1,454,627,009	80.8%	346,527,392	90,941,017
2000	2,066,652,957	1,578,352,351	76.4%	488,300,606	141,773,214
2001***	2,515,316,060	1,954,682,182	77.4%	569,633,878	81,333,272
2002	2,758,762,012	2,073,580,827	75.2%	685,181,185	115,547,307
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the Counties Employees Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding polices adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Stephen A. Gagel, F.S.A — Date

Edward W. Maynard, F.S.A. — Date

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SECTION V

STATISTICAL DATA

AS OF

JUNE 30, 2002

COUNTY EMPLOYEE S RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

EARNINGS BY AGE GROUPS

AGE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	2,327	34,575,116	14,858	222	3,019,752	13,602	2,549	37,594,868	14,749
20-24	2,265	42,490,991	18,760	1,539	23,987,567	15,586	3,804	66,478,558	17,476
25-29	2,031	47,876,339	23,573	2,940	51,215,167	17,420	4,971	99,091,506	19,934
30-34	2,699	71,795,881	26,601	4,846	81,821,861	16,884	7,545	153,617,742	20,360
35-39	3,390	96,175,267	28,370	7,236	121,033,492	16,727	10,626	217,208,759	20,441
40-44	4,137	123,343,932	29,815	8,938	159,783,331	17,877	13,075	283,127,264	21,654
45-49	4,075	124,821,181	30,631	8,626	163,256,582	18,926	12,701	288,077,763	22,682
50-54	3,799	115,927,314	30,515	7,281	142,181,725	19,528	11,080	258,109,039	23,295
55-59	2,604	72,812,282	27,962	4,783	91,217,162	19,071	7,387	164,029,445	22,205
60-64	1,628	41,508,279	25,496	2,393	42,639,567	17,818	4,021	84,147,847	20,927
65-69	658	13,497,696	20,513	733	11,576,384	15,793	1,391	25,074,080	18,026
70-74	278	5,116,107	18,403	246	3,715,188	15,102	524	8,831,295	16,854
75+	98	1,809,684	18,466	78	1,262,940	16,192	176	3,072,624	17,458
TOTAL	29,989	791,750,071	26,401	49,861	896,710,718	17,984	79,850	1,688,460,789	21,145

EARNINGS BY SERVICE GROUPS

SERVICE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	1,771	28,178,827	15,911	1,227	17,465,895	14,235	2,998	45,644,722	15,225
1	4,126	78,518,113	19,030	5,949	81,803,744	13,751	10,075	160,321,858	15,913
2	3,210	70,282,167	21,895	5,280	78,518,222	14,871	8,490	148,800,390	17,527
3	2,746	62,601,819	22,797	4,845	74,142,299	15,303	7,591	136,744,118	18,014
4	2,355	58,930,526	25,024	4,092	65,212,412	15,937	6,447	124,142,938	19,256
0-4	14,208	298,511,454	21,010	21,393	317,142,572	14,825	35,601	615,654,026	17,293
5-9	6,461	173,157,816	26,800	13,087	227,036,764	17,348	19,548	400,194,580	20,472
10-14	4,210	131,138,002	31,149	8,103	162,711,622	20,080	12,313	293,849,624	23,865
15-19	2,544	86,318,335	33,930	3,950	92,908,002	23,521	6,494	179,226,336	27,599
20-24	1,547	56,666,000	36,630	2,143	54,982,391	25,657	3,690	111,648,391	30,257
25-29	789	33,827,796	42,874	933	31,251,900	33,496	1,722	65,079,696	37,793
30-34	182	9,414,312	51,727	207	8,314,008	40,164	389	17,728,320	45,574
35-39	42	2,295,240	54,649	31	1,438,944	46,418	73	3,734,184	51,153
40+	6	421,116	70,186	14	924,516	66,037	20	1,345,632	67,282
TOTAL	29,989	791,750,071	26,401	49,861	896,710,718	17,984	79,850	1,688,460,789	21,145

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

EARNINGS BY AGE GROUPS

AGE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	237	5,651,388	23,846	5	106,776	21,355	242	5,758,164	23,794
20-24	497	15,001,092	30,183	59	1,500,204	25,427	556	16,501,296	29,679
25-29	1,353	45,898,488	33,923	160	5,000,652	31,254	1,513	50,899,140	33,641
30-34	1,704	64,820,360	38,040	206	7,039,020	34,170	1,910	71,859,380	37,623
35-39	1,529	63,608,000	41,601	181	6,528,240	36,068	1,710	70,136,240	41,015
40-44	1,086	46,884,416	43,172	143	5,675,372	39,688	1,229	52,559,787	42,766
45-49	792	37,060,692	46,794	117	4,309,604	36,834	909	41,370,296	45,512
50-54	449	20,777,420	46,275	64	2,306,520	36,039	513	23,083,940	44,998
55-59	206	8,576,304	41,633	41	1,233,360	30,082	247	9,809,664	39,715
60-64	78	3,051,996	39,128	10	300,084	30,008	88	3,352,080	38,092
65-69	15	465,828	31,055	5	108,708	21,742	20	574,536	28,727
70-74	5	204,108	40,822	2	39,852	19,926	7	243,960	34,851
75+	5	170,664	34,133	0	0	0	5	170,664	34,133
TOTAL	7,956	312,170,755	39,237	993	34,148,391	34,389	8,949	346,319,146	38,699

EARNINGS BY SERVICE GROUPS

SERVICE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	434	10,357,256	23,865	66	1,457,816	22,088	500	11,815,071	23,630
1	770	21,911,168	28,456	158	4,097,748	25,935	928	26,008,916	28,027
2	805	26,265,032	32,627	138	4,347,648	31,505	943	30,612,680	32,463
3	633	21,917,112	34,624	79	2,491,560	31,539	712	24,408,672	34,282
4	661	23,682,696	35,829	106	3,437,460	32,429	767	27,120,156	35,359
0-4	3,303	104,133,263	31,527	547	15,832,232	28,944	3,850	119,965,495	31,160
5-9	1,807	71,307,668	39,462	208	7,458,680	35,859	2,015	78,766,347	39,090
10-14	1,567	69,841,188	44,570	159	6,681,612	42,023	1,726	76,522,800	44,335
15-19	729	35,382,612	48,536	49	2,387,340	48,721	778	37,769,952	48,547
20-24	278	15,028,296	54,059	23	1,324,032	57,567	301	16,352,328	54,327
25-29	193	11,521,080	59,695	7	464,496	66,357	200	11,985,576	59,928
30-34	65	4,053,444	62,361	0	0	0	65	4,053,444	62,361
35-39	12	779,616	64,968	0	0	0	12	779,616	64,968
40+	2	123,588	61,794	0	0	0	2	123,588	61,794
TOTAL	7,956	312,170,755	39,237	993	34,148,391	34,389	8,949	346,319,146	38,699

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	2,327									2,327
20-24	1,846	419								2,265
25-29	1,445	539	47							2,031
30-34	1,541	833	305	20						2,699
35-39	1,518	811	676	330	55					3,390
40-44	1,506	946	705	514	371	95				4,137
45-49	1,254	906	720	502	392	256	45			4,075
50-54	1,165	805	712	479	335	227	66	10		3,799
55-59	846	583	459	340	194	117	46	17	2	2,604
60-64	452	349	347	251	134	71	16	6	2	1,628
65-69	211	186	133	61	39	16	6	5	1	658
70-74	80	68	75	29	16	4	3	2	1	278
75+	17	16	31	18	11	3		2		98
TOTAL	14,208	6,461	4,210	2,544	1,547	789	182	42	6	29,989

FEMALE

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	222									222
20-24	1,445	94								1,539
25-29	2,389	522	29							2,940
30-34	3,343	1,132	334	37						4,846
35-39	4,092	2,071	751	286	36					7,236
40-44	3,771	2,944	1,386	472	276	89				8,938
45-49	2,599	2,702	1,946	755	389	195	40			8,626
50-54	1,794	1,782	1,785	1,073	516	235	85	11		7,281
55-59	1,038	1,042	1,109	772	518	242	44	14	4	4,783
60-64	478	582	508	362	298	131	29	2	3	2,393
65-69	143	163	179	130	70	34	6	3	5	733
70-74	55	44	64	50	27	3	2		1	246
75+	24	9	12	13	13	4	1	1	1	78
TOTAL	21,393	13,087	8,103	3,950	2,143	933	207	31	14	49,861

TOTAL

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	2,549									2,549
20-24	3,291	513								3,804
25-29	3,834	1,061	76							4,971
30-34	4,884	1,965	639	57						7,545
35-39	5,610	2,882	1,427	616	91					10,626
40-44	5,277	3,890	2,091	986	647	184				13,075
45-49	3,853	3,608	2,666	1,257	781	451	85			12,701
50-54	2,959	2,587	2,497	1,552	851	462	151	21		11,080
55-59	1,884	1,625	1,568	1,112	712	359	90	31	6	7,387
60-64	930	931	855	613	432	202	45	8	5	4,021
65-69	354	349	312	191	109	50	12	8	6	1,391
70-74	135	112	139	79	43	7	5	2	2	524
75+	41	25	43	31	24	7	1	3	1	176
TOTAL	35,601	19,548	12,313	6,494	3,690	1,722	389	73	20	79,850

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

SERVICE GROUPS BY AGE GROUPS

MALE

AGE	SERVICE GROUP									
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	237									237
20-24	480	17								497
25-29	986	359	8							1,353
30-34	705	670	320	9						1,704
35-39	345	376	574	230	4					1,529
40-44	198	173	315	294	93	13				1,086
45-49	123	113	199	118	126	94	19			792
50-54	105	44	101	45	43	70	35	6		449
55-59	83	32	28	22	10	16	11	4		206
60-64	34	17	13	10	1			2	1	78
65-69	5	3	7							15
70-74		1	2	1					1	5
75+	2	2			1					5
TOTAL	3,303	1,807	1,567	729	278	193	65	12	2	7,956

FEMALE

AGE	SERVICE GROUP									
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	5									5
20-24	59									59
25-29	128	32								160
30-34	101	77	27	1						206
35-39	78	34	56	12	1					181
40-44	59	19	30	24	9	2				143
45-49	58	19	21	8	8	3				117
50-54	26	15	14	3	4	2				64
55-59	24	7	8	1	1					41
60-64	6	1	3							10
65-69	2	3								5
70-74	1	1								2
75+										0
TOTAL	547	208	159	49	23	7	0	0	0	993

TOTAL

AGE	SERVICE GROUP									
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	242									242
20-24	539	17								556
25-29	1,114	391	8							1,513
30-34	806	747	347	10						1,910
35-39	423	410	630	242	5					1,710
40-44	257	192	345	318	102	15				1,229
45-49	181	132	220	126	134	97	19			909
50-54	131	59	115	48	47	72	35	6		513
55-59	107	39	36	23	11	16	11	4		247
60-64	40	18	16	10	1			2	1	88
65-69	7	6	7							20
70-74	1	2	2	1					1	7
75+	2	2			1					5
TOTAL	3,850	2,015	1,726	778	301	200	65	12	2	8,949

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	2,549									2,549
	14,749									14,749
20-24	3,291	513								3,804
	17,111	19,818								17,476
25-29	3,834	1,061	76							4,971
	18,651	24,187	25,299							19,934
30-34	4,884	1,965	639	57						7,545
	17,641	24,088	28,794	30,271						20,360
35-39	5,610	2,882	1,427	616	91					10,626
	16,675	20,595	29,024	32,169	33,742					20,441
40-44	5,277	3,890	2,091	986	647	184				13,075
	17,108	19,641	25,565	32,440	36,155	41,357				21,654
45-49	3,853	3,608	2,666	1,257	781	451	85			12,701
	17,957	19,714	23,262	29,356	33,864	41,263	44,560			22,682
50-54	2,959	2,587	2,497	1,552	851	462	151	21		11,080
	18,765	20,688	22,341	26,412	30,241	39,714	48,009	45,460		23,295
55-59	1,884	1,625	1,568	1,112	712	359	90	31	6	7,387
	17,660	19,846	22,048	24,082	26,291	33,607	47,277	58,024	53,062	22,205
60-64	930	931	855	613	432	202	45	8	5	4,021
	15,724	18,090	20,558	24,808	24,816	32,583	39,483	49,578	84,602	20,927
65-69	354	349	312	191	109	50	12	8	6	1,391
	14,583	16,283	18,053	18,748	21,517	29,886	36,885	47,256	59,246	18,026
70-74	135	112	139	79	43	7	5	2	2	524
	14,389	13,656	17,280	19,763	17,809	30,039	37,574	36,138	79,926	16,854
75+	41	25	43	31	24	7	1	3	1	176
	13,068	12,921	15,606	21,866	18,818	23,042	29,244	44,612	88,920	17,458
TOTAL	35,601	19,548	12,313	6,494	3,690	1,722	389	73	20	79,850
	17,293	20,472	23,865	27,599	30,257	37,793	45,574	51,153	67,282	21,145

TOTAL EARNINGS 1,688,460,789
AVERAGE AGE 43.03
AVERAGE SERVICE 7.58

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	242									242
	23,794									23,794
20-24	539	17								556
	29,561	33,401								29,679
25-29	1,114	391	8							1,513
	31,863	38,483	44,639							33,641
30-34	806	747	347	10						1,910
	31,807	40,017	45,714	46,746						37,623
35-39	423	410	630	242	5					1,710
	31,799	39,198	45,142	49,469	40,656					41,015
40-44	257	192	345	318	102	15				1,229
	31,775	39,264	43,882	48,533	54,063	51,162				42,766
45-49	181	132	220	126	134	97	19			909
	34,874	36,987	42,202	49,282	56,217	61,342	63,078			45,512
50-54	131	59	115	48	47	72	35	6		513
	32,486	38,857	43,401	44,651	53,526	60,760	60,787	63,894		44,998
55-59	107	39	36	23	11	16	11	4		247
	31,067	39,597	40,441	47,163	45,837	55,828	66,130	68,928		39,715
60-64	40	18	16	10	1			2	1	88
	33,214	39,169	43,878	38,227	34,488			60,270	79,116	38,092
65-69	7	6	7							20
	30,319	20,806	33,924							28,727
70-74	1	2	2	1					1	7
	22,488	23,022	26,712	77,532					44,472	34,851
75+	2	2			1					5
	34,782	27,048			47,004					34,133
TOTAL	3,850	2,015	1,726	778	301	200	65	12	2	8,949
	31,160	39,090	44,335	48,547	54,327	59,928	62,361	64,968	61,794	38,699

TOTAL EARNINGS 346,319,146
AVERAGE AGE 36.27
AVERAGE SERVICE 7.76

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

COUNTY EMPLOYEES RETIREMENT SYSTEM - NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
TABULATION BY MONTHLY SALARY - JUNE 30, 2002

MONTHLY SALARY	NUMBER OF MEMBERS MALES	FEMALES	TOTAL
UNDER $ 500	590	1,000	1,590
$ 500 - $ 749	1,423	4,552	5,975
$ 750 - $ 999	2,509	11,899	14,408
$ 1,000 - $ 1,249	2,439	7,629	10,068
$ 1,250 - $ 1,499	2,827	5,770	8,597
$ 1,500 - $ 1,749	3,050	4,598	7,648
$ 1,750 - $ 1,999	2,967	3,712	6,679
$ 2,000 - $ 2,249	2,682	2,876	5,558
$ 2,250 - $ 2,499	2,192	2,239	4,431
$ 2,500 - $ 2,749	1,757	1,545	3,302
$ 2,750 - $ 2,999	1,527	1,211	2,738
$ 3,000 - $ 3,499	2,160	1,290	3,450
$ 3,500 - $ 3,999	1,253	637	1,890
$ 4,000 - $ 4,499	819	318	1,137
$ 4,500 - $ 4,999	543	193	736
$ 5,000 - $ 5,499	397	142	539
$ 5,500 - $ 5,999	283	96	379
$ 6,000 - $ 6,499	192	52	244
$ 6,500 - $ 6,999	112	34	146
$ 7,000 - $ 7,499	80	23	103
$ 7,500 - $ 7,999	45	11	56
$ 8,000 - $ 8,499	32	6	38
$ 8,500 - $ 8,999	34	7	41
$ 9,000 - $ 9,499	18	4	22
$ 9,500 - $ 9,999	12	4	16
$ 10,000 AND OVER	46	13	59
TOTAL	29,989	49,861	79,850
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF $85,000 AND OVER	240	63	303

COUNTY EMPLOYEES RETIREMENT SYSTEM - HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
TABULATION BY MONTHLY SALARY - JUNE 30, 2002

MONTHLY SALARY	NUMBER OF MEMBERS		
	MALES	FEMALES	TOTAL
UNDER $ 500	44	2	46
$ 500 - $ 749	13	5	18
$ 750 - $ 999	38	5	43
$ 1,000 - $ 1,249	45	10	55
$ 1,250 - $ 1,499	55	22	77
$ 1,500 - $ 1,749	163	49	212
$ 1,750 - $ 1,999	319	87	406
$ 2,000 - $ 2,249	486	114	600
$ 2,250 - $ 2,499	802	112	914
$ 2,500 - $ 2,749	802	110	912
$ 2,750 - $ 2,999	768	92	860
$ 3,000 - $ 3,499	1,388	140	1,528
$ 3,500 - $ 3,999	1,282	128	1,410
$ 4,000 - $ 4,499	809	66	875
$ 4,500 - $ 4,999	453	23	476
$ 5,000 - $ 5,499	209	9	218
$ 5,500 - $ 5,999	121	8	129
$ 6,000 - $ 6,499	64	4	68
$ 6,500 - $ 6,999	54	3	57
$ 7,000 - $ 7,499	26	2	28
$ 7,500 - $ 7,999	5	1	6
$ 8,000 - $ 8,499	6	0	6
$ 8,500 - $ 8,999	2	1	3
$ 9,000 - $ 9,499	1	0	1
$ 9,500 - $ 9,999	1	0	1
$ 10,000 AND OVER	0	0	0
TOTAL	7,956	993	8,949
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF $85,000 AND OVER	37	4	41

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2002

MEMBERS CURRENTLY ACTIVE IN CERS NONHAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	482	2,138	2,620
KERS - HAZARDOUS	23	64	87
CERS - HAZARDOUS	0	293	293
STATE POLICE	6	19	25
TOTAL - ALL SYSTEMS	511	2,514	3,025

MEMBERS CURRENTLY NOT ACTIVE IN CERS NONHAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	2,618	203	2,821
KERS - HAZARDOUS	230	75	305
CERS - HAZARDOUS	2,688	68	2,756
STATE POLICE	109	14	123
TOTAL - ALL SYSTEMS	5,645	360	6,005

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2002

MEMBERS CURRENTLY ACTIVE IN CERS HAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	20	290	310
KERS - HAZARDOUS	11	109	120
CERS - NONHAZARDOUS	0	2,688	2,688
STATE POLICE	4	45	49
TOTAL - ALL SYSTEMS	35	3,132	3,167

MEMBERS CURRENTLY NOT ACTIVE IN CERS HAZARDOUS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	81	33	114
KERS - HAZARDOUS	45	6	51
CERS - NONHAZARDOUS	293	68	361
STATE POLICE	73	3	76
TOTAL - ALL SYSTEMS	492	110	602

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
RETIRED LIVES SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	2,520	1,742,392.36	7,972	3,777,541.65	10,492	5,519,934.01
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	1,679	1,198,478.29	652	252,192.01	2,331	1,450,670.30
66-2/3% TO BENEFICIARY	477	607,177.07	188	139,359.90	665	746,536.97
50% TO BENEFICIARY	721	749,760.88	495	364,877.31	1,216	1,114,638.19
POP-UP OPTION	1,636	1,706,166.09	973	665,044.00	2,609	2,371,210.09
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00
10 YEARS CERTAIN & LIFE	1,205	693,871.93	2,150	1,006,808.94	3,355	1,700,680.87
SOCIAL SECURITY OPTION						
OPTION C	213	312,986.02	344	274,804.01	557	587,790.03
OPTION D	484	690,346.70	195	165,142.55	679	855,489.25
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	1	335.02	1	335.02	2	670.04
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	457	317,859.08	370	188,254.95	827	506,114.03
20 YEARS CERTAIN & LIFE	288	261,984.27	274	164,236.43	562	426,220.70
5 YEARS ONLY	0	0.00	1	128.78	1	128.78
TOTAL	9,681	8,281,357.71	13,615	6,998,725.55	23,296	15,280,083.26

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
RETIRED LIVES SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	381	645,180.89	109	106,207.10	490	751,387.99
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	361	553,210.34	18	13,441.64	379	566,651.98
66-2/3% TO BENEFICIARY	172	347,047.60	5	7,308.15	177	354,355.75
50% TO BENEFICIARY	252	470,500.60	12	9,805.78	264	480,306.38
POP-UP OPTION	996	1,854,748.03	34	37,539.54	1,030	1,892,287.57
10 YEARS CERTAIN	38	67,135.63	5	11,530.59	43	78,666.22
10 YEARS CERTAIN & LIFE	126	197,295.71	27	35,308.12	153	232,603.83
SOCIAL SECURITY OPTION						
OPTION C	91	141,286.94	7	7,161.39	98	148,448.33
OPTION D	283	416,893.66	14	10,378.64	297	427,272.30
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	96	28,429.59	73	21,394.32	169	49,823.91
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	42	59,888.34	4	5,753.26	46	65,641.60
20 YEARS CERTAIN & LIFE	84	132,361.54	16	13,709.58	100	146,071.12
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	2,922	4,913,978.87	324	279,538.11	3,246	5,193,516.98

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	209	73,353.33	1,176	443,996.43	1,385	517,349.76
66-2/3% TO BENEFICIARY	20	5,611.05	135	51,743.74	155	57,354.79
50% TO BENEFICIARY	43	10,724.49	238	71,297.20	281	82,021.69
POP-UP OPTION	57	24,930.03	173	99,562.45	230	124,492.48
10 YEARS CERTAIN	56	26,377.07	98	64,378.38	154	90,755.45
10 YEARS CERTAIN & LIFE	71	34,770.82	132	59,930.90	203	94,701.72
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	10	2,751.39	44	44,232.55	54	46,983.94
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	1	406.56	4	636.37	5	1,042.93
DEPENDENT CHILD	0	0.00	0	0.00	0	0.00
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	29	17,252.87	87	49,135.16	116	66,388.03
20 YEARS CERTAIN & LIFE	28	12,538.24	50	38,271.06	78	50,809.30
5 YEARS ONLY	130	65,689.87	60	51,413.48	190	117,103.35
TOTAL	654	274,405.72	2,197	974,597.72	2,851	1,249,003.44

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	3	1,702.09	81	82,497.40	84	84,199.49
66-2/3% TO BENEFICIARY	0	0.00	17	20,418.41	17	20,418.41
50% TO BENEFICIARY	0	0.00	18	10,571.64	18	10,571.64
POP-UP OPTION	0	0.00	40	54,272.10	40	54,272.10
10 YEARS CERTAIN	12	17,704.33	10	13,490.12	22	31,194.45
10 YEARS CERTAIN & LIFE	1	1,632.78	1	38.72	2	1,671.50
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	1	3,403.17	34	47,439.21	35	50,842.38
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	3	3,084.24	3	3,084.24
DEPENDENT CHILD	1	300.17	0	0.00	1	300.17
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	0	0.00	0	0.00	0	0.00
20 YEARS CERTAIN & LIFE	1	1,198.36	7	11,819.97	8	13,018.33
5 YEARS ONLY	6	2,580.57	1	586.00	7	3,166.57
TOTAL	25	28,521.47	212	244,217.81	237	272,739.28

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED RETIREMENT SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES MONTHLY BENEFITS	FEMALE LIVES NUMBER	FEMALE LIVES MONTHLY BENEFITS	TOTAL NUMBER	TOTAL MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	27	3,158.35	5	732.92	32	3,891.27
25-29	44	7,359.09	41	6,178.38	85	13,537.47
30-34	102	23,935.29	199	35,633.96	301	59,569.25
35-39	192	58,309.40	323	72,550.78	515	130,860.18
40-44	202	69,221.76	499	105,424.97	701	174,646.73
45-49	292	116,880.45	673	168,545.68	965	285,426.13
50-54	293	117,035.20	669	169,617.32	962	286,652.52
55-59	173	64,118.89	395	91,775.59	568	155,894.48
60-64	102	28,066.36	138	29,882.54	240	57,948.90
65-69	26	2,813.91	26	3,888.43	52	6,702.34
70-74	11	1,597.91	13	3,419.98	24	5,017.89
75-79	11	480.67	8	1,499.73	19	1,980.40
80-84	2	396.01	3	355.51	5	751.52
85 +	0	0.00	1	50.59	1	50.59
TOTAL	1,477	493,373.29	2,993	689,556.38	4,470	1,182,929.67

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED RETIREMENT SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES MONTHLY BENEFITS	FEMALE LIVES NUMBER	FEMALE LIVES MONTHLY BENEFITS	TOTAL NUMBER	TOTAL MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	0	0.00	0	0.00	0	0.00
25-29	3	550.87	0	0.00	3	550.87
30-34	18	5,108.38	3	262.81	21	5,371.19
35-39	22	6,685.21	9	2,704.67	31	9,389.88
40-44	26	12,957.33	4	2,226.99	30	15,184.32
45-49	34	14,199.31	5	1,854.58	39	16,053.89
50-54	14	5,808.21	4	1,015.96	18	6,824.17
55-59	3	1,137.52	0	0.00	3	1,137.52
60-64	2	253.21	0	0.00	2	253.21
65-69	1	198.57	0	0.00	1	198.57
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	123	46,898.61	25	8,065.01	148	54,963.62

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES ACCUMULATED CONTRIBUTIONS	FEMALE LIVES NUMBER	FEMALE LIVES ACCUMULATED CONTRIBUTIONS	TOTAL NUMBER	TOTAL ACCUMULATED CONTRIBUTIONS
15-19	2,656	461,225.54	128	45,368.67	2,784	506,594.21
20-24	847	805,234.41	444	232,598.13	1,291	1,037,832.54
25-29	979	668,314.11	1,772	1,164,464.94	2,751	1,832,779.05
30-34	1,293	1,027,408.22	3,040	2,425,519.30	4,333	3,452,927.52
35-39	1,117	953,587.88	2,520	2,109,663.73	3,637	3,063,251.61
40-44	1,028	838,406.93	2,386	2,102,716.32	3,414	2,941,123.25
45-49	965	935,928.64	2,136	2,245,256.49	3,101	3,181,185.13
50-54	767	958,193.31	1,522	1,701,563.48	2,289	2,659,756.79
55-59	515	771,943.60	892	1,028,891.69	1,407	1,800,835.29
60-64	328	382,923.61	438	424,555.00	766	807,478.61
65-69	175	142,918.31	190	185,375.29	365	328,293.60
70-74	109	83,312.57	100	41,863.83	209	125,176.40
75-79	58	26,588.08	40	24,506.33	98	51,094.41
80-84	23	11,537.02	17	8,595.12	40	20,132.14
85 +	11	5,865.59	12	3,654.35	23	9,519.94
TOTAL	10,871	8,073,387.82	15,637	13,744,592.67	26,508	21,817,980.49

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES ACCUMULATED CONTRIBUTIONS	FEMALE LIVES NUMBER	FEMALE LIVES ACCUMULATED CONTRIBUTIONS	TOTAL NUMBER	TOTAL ACCUMULATED CONTRIBUTIONS
15-19	70	19,023.58	1	517.91	71	19,541.49
20-24	35	74,143.54	4	1,245.58	39	75,389.12
25-29	97	183,307.69	25	61,068.23	122	244,375.92
30-34	99	172,840.17	20	52,072.68	119	224,912.85
35-39	69	145,411.31	15	20,715.80	84	166,127.11
40-44	31	73,149.32	13	9,549.86	44	82,699.18
45-49	30	89,522.41	5	11,794.37	35	101,316.78
50-54	19	32,195.82	3	50,360.97	22	82,556.79
55-59	9	23,737.33	3	5,370.69	12	29,108.02
60-64	1	3,676.02	1	1,050.28	2	4,726.30
65-69	1	8,750.54	0	0.00	1	8,750.54
70-74	1	248.83	0	0.00	1	248.83
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	462	826,006.56	90	213,746.37	552	1,039,752.93

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the County Employees Retirement System in July, 1958. The plan benefits have been improved several times, most recently as of August 1, 1998.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the five highest paid fiscal years for nonhazardous positions. If the months of service credit during the highest five year period is less than forty-eight, one or more additional fiscal years shall be used. For a member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years.

For hazardous positions, final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

(a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1958. In some instances prior service credit is granted for time spent in the military.

(b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1958. Current service credit may be granted for military service and educational leaves if special criteria are met.

(c) Employers may elect to purchase up to 6 months additional service credit based on an employee's unused sick leave.

Eligibility

Any county or political subdivision or instrumentality, including school boards or urban county government may participate in the System upon approval by the Board. Membership in the system consists of:

(a) all persons who become employees of a county after such county first participates,

(b) all persons who are employees on the date a county first participates and who elect within thirty days to become members and make contributions.

Membership does not include employees of a county who are members of some other state, county, or local retirement system, supported in whole or in part by public funds.

Normal Retirement Date

A member may elect to retire upon: (1) attaining age 65 for non-hazardous positions, or attaining age 55 for hazardous positions, and (2) having contributed to the System. Upon completion of 27 years of service credit, 15 of which are current service for non-hazardous positions, or completion of 20 years of service credit for hazardous positions, a member may elect to retire with an unreduced benefit.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after: (1) for non-hazardous positions, attainment of age 55 and completion of 60 months of service credit at least 12 of which are current, or at any age after 25 years of service, or (2) for hazardous positions, attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

For non-hazardous positions, upon attainment of age 65 and completion of 48 months of service, of which 12 months are current service, a monthly benefit equal to 2.20% of the member's final compensation multiplied by his service will be payable. For hazardous positions, a monthly benefit equal to 2.50% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member, with less than 48 months for non-hazardous positions or 60 months for hazardous positions, who retires on or after the normal retirement date is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a non-hazardous position employee has 27 or more years of service credit, 15 of which are current, or a hazardous position employee has 20 or more years of service credit, an unreduced benefit is payable.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 65th birthday (55th for members in a hazardous position) up to a maximum of service credited to the last day of paid employment. Except for members with 25 or more (20 or more for hazardous) years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 25 years (20 years for hazardous members). For non-hazardous position employees with 25 or more years of service, additional years of service credit will be added up to maximum combined limit of 30, or actual service if greater. For hazardous position employees with 20 or more years of service credit, actual service will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable to hazardous employees if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, or after 48 months service if the member is age 65 or over, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member in a hazardous position dies in the line of duty and has a spouse as beneficiary, a $5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary, a lump sum payment of $10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a hazardous duty member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee using 2.50% rather than 2.20%.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of $5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include a life annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 5% of gross compensation (8% for hazardous positions). On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The cost of participation for any beneficiaries or dependents is borne by the retiree (except that dependents of hazardous position employees and legislators will have the same percentage paid by the system as the member). The retirement system will pay a portion of the cost of participation for the retiree based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a hazardous member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a hazardous member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contract provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.

FORTY-FOURTH ANNUAL ACTUARIAL VALUATION

JUNE 30, 2002

STATE POLICE RETIREMENT SYSTEM

SECTION I

INTRODUCTION

The results of the forty-fourth annual actuarial valuation of the State Police Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2002.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contribution for the ensuing fiscal year as required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding is defined in KRS 61.565 and provides that the actuarial valuation method would be uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System as to the financing required during years of active service to accumulate the funds needed to provide members' benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the "level-percentage-of-payroll" method. Under the "level-percentage-of-payroll" method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate is being increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new

medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus any

reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the medical insurance contribution rate is to be increased at the start of each biennium (coincides with valuations in odd numbered years) by the percentage amount necessary to raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016. There will be no changes in the even numbered years unless there are actuarial gains relative to the retirement funding which will then be used to increase the medical insurance funding rate for the next year only.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase. In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:

1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.

2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.

3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.

4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.

5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	RETIREMENT FUND	INSURANCE FUND
June 30, 2001 Valuation Assets	456,160,709	79,863,577
Cash Flows		
> Employer Contributions	(17,643)	9,579,899
> Member Contributions	4,417,691	
> Retirement Benefits	24,839,051	
> Net Refunds	(4,234)	
> Insurance Premiums		4,014,728
> Administrative Expenses	75,908	29,022
> Investment Manager Fees	197,765	28,911
Valuation Interest Assumption	8.25%	8.25%
Expected Return on Valuation Assets Reflecting Actual Cash Flows *	36,779,035	6,815,919
Expected Valuation Assets	472,231,302	92,186,734
Actual Market Value of Assets	328,744,331	68,074,444
Investment Gain/(Loss)	(143,486,971)	(24,112,290)
Amortization Amounts From Prior Valuations		
> Valuation Year - 1		
>> Initial Amount	(114,461,071)	(12,422,108)
>> Current Valuation Amount	(91,568,857)	(9,937,686)
>> Amortization	(22,892,214)	(2,484,422)
> Valuation Year - 2		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
> Valuation Year - 3		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
> Valuation Year - 4		
>> Initial Amount	N/A	N/A
	N/A	N/A
	N/A	N/A
Unamortized Amount of Gain/(Loss) From Prior Valuations	(91,568,857)	(9,937,686)
Valuation Date		
> Amount	(51,918,114)	(14,174,604)
> Amortization	(10,383,623)	(2,834,921)
June 30, 2002 Valuation Assets		
> Expected Assets	472,231,302	92,186,734
> Amortization Amounts	(33,275,837)	(5,319,343)
> Valuation Assets	438,955,465	86,867,391

* Cash flows are assumed equally spread throughout the year

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1)	Mortality:		
	(a) Active & retired lives	-	1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year.
	(b) Disabled lives	-	Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).
(2)	Disablement	-	Graduated rates based on 2000 experience study (no change from 1995 experience study).
(3)	Termination of employment	-	Graduated rates based on 2000 experience study.
(4)	Retirement	-	60% will retire as soon as eligible for unreduced benefits and balance will continue to age 55.
(5)	Marital status		
	(a) Percentage married	-	100%.
	(b) Age difference	-	Males are assumed to be 3 years older than their spouses.
(6)	Dependent children	-	For duty related death benefits, it is assumed that the employee is survived by 2 dependent children, each age 6.
(7)	Investment return	-	8.25% per year, net of investment related expenses, compounded annually.
(8)	Compensation progression	-	1st year: 12.00% 2nd year: 10.00% 3rd year: 8.00% Thereafter: 6.50%, compounded annually.
(9)	Underlying Inflation Rate	-	3.50% per year, reflected in investment return and compensation progression assumptions.

(10) Retiree Medical Insurance - It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution rates were assumed to be as follows:

Pre-Medicare Coverage - - -
Rate in Effect on Valuation Date

	Single	Couple	Parent Plus	Family
Region 1	$234.00	$473.96	$315.96	$526.60
Region 2	260.44	527.44	351.60	586.04
Region 3	300.64	608.96	405.96	676.60
Region 4	320.96	650.00	433.32	722.24
Region 5	340.48	689.44	459.64	766.04
All others	245.00	522.92	348.64	581.04

Region 1: Boone, Campbell, Gallatin, Grant, Kenton and Pendleton

Region 2: Allen, Ballard, Bell, Caldwell, Calloway, Carlisle, Clay, Crittenden, Fulton, Graves, Harlan, Harrison, Hickman, Hopkins, Knott, Lincoln, Livingston, Lyon, McCracken, Marshall, Perry, Pike, Robertson, Rockcastle, Rowan, Simpson and Webster

Region 3: Lewis, Mason, Morgan and Pulaski

Region 4: Boyd, Carter, Christian, Daviess, Elliott, Greenup, Hancock, Henderson, Lawrence, McLean, Todd, Trigg and Union

Region 5: Breckinridge and Grayson

	Medicare Rate		Contracts in Force	
	Low	High	Low	High
Carrier	Option	Option	Option	Option
Anthem BC/BS	103.18	252.56	3,258	20,040
Bankers Life	82.70	195.35	594	331
Option 2000	98.18	247.56	547	1,852

Weighted Medicare Coverage - - -
Rate in Effect on Valuation Date

	Low Option	High Option
All members	$99.79	$251.29

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

Years	Medical Increase
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

(11) Missing data

- For those active members with incomplete data, the following assumptions were made:

  . If reported salary was zero or blank, then monthly salary was assumed to be $2,139.72.

  . If reported age was blank, then assume current age equal to age 18 plus years of service reported

(12) Members with Multiple Service Records

- For active members with service in more than one system, the liability has been valued as follows:

  . Service under all systems is aggregated for purposes of determining benefit eligibility.

  . Future service is projected only under the system in which the member is currently active.

  . The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.

  . The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

  For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the

valuation of the system in which the service was earned.

B. SAMPLE RATES

(1) Annual Rates of Mortality:

	Active Mortality*		Disabled Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

*Plus 0.05% duty death rate prior to retirement.

(2) Annual Rates of Decrement:

Age	Disablement	Ultimate Termination	
		KERS and CERS Hazardous	SPRS
25	0.042%	3.04%	1.82%
30	0.050%	3.38%	2.03%
40	0.132%	1.50%	0.90%
50	0.530%	0.00%	0.00%
55	0.992%	0.00%	0.00%
60	1.743%	0.00%	0.00%

(3) Compensation Progression (after 1st 3 Years):

Age	Rate of Annual Increase	Compensation at Normal Retirement as Percentage Of Current Annual Compensation
25	6.50%	661.4%
30	6.50%	482.8%
40	6.50%	257.2%
50	6.50%	137.0%

SECTION III

RESULTS OF THE 2002 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the State required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the Normal Cost, medical insurance and the expenses of administration, is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated annual State payroll as of June 30, 2002.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2002 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the State Police Retirement System as of June 30, 2002 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements relative to the Retirement Fund.

Table X contains additional information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I
STATE POLICE RETIREMENT SYSTEM
RETIREMENT AND INSURANCE FUND
DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2002

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND			
			Percent *
Total Actuarial Accrued Liability	$	380,790,346	866.18%
Assets at Actuarial Value		438,955,465	998.49%
Unfunded Actuarial Accrued Liability	$	(58,165,119)	(132.31%)
Contribution - Payment on Unfunded Actuarial Accrued Liability	$	(3,169,195)	(7.21%)
NORMAL COST - RETIREMENT FUND			
Retirement Benefits	$	6,855,316	15.59%
Disability Benefits		289,030	0.65%
Withdrawal Benefits (Vested and Refund of Contributions)		276,188	0.63%
Survivor Benefits		240,783	0.55%
Total Normal Cost	$	7,661,317	17.42%
Less: Employee Contributions		3,417,599	7.77%
Normal Cost - State	$	4,243,718	9.65%
TOTAL ANNUAL EMPLOYER COST - RETIREMENT AND INSURANCE FUND			
Normal Cost	$	4,243,718	9.65%
Payment on Unfunded Actuarial Accrued Liability		(3,169,195)	(7.21%)
Administrative Expense		89,883	0.20%
Subtotal - Retirement Fund (Not Less Than Zero)	$	1,164,406	2.64%
Group Hospital and Medical Insurance Premiums		8,326,374	18.94%
Total Annual Cost	$	9,490,780	21.58%
* Based on estimated annual salaries of	$	43,961,844	

TABLE II
STATE POLICE RETIREMENT SYSTEM
RETIREMENT FUND
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2002

ACTUARIAL ACCRUED LIABILITY		
Active Members		
Retirement Benefits	$	122,166,424
Disability Benefits		2,579,547
Withdrawal Benefits (Vested and Refund of Contributions)		724,415
Survivor Benefits		2,821,347
Total - Actives	$	128,291,733
Inactive Members		
Retired Members and Beneficiaries	$	252,056,847
Vested Retirement		376,376
Vested Membership		65,390
Total - Inactives	$	252,498,613
Total Actuarial Accrued Liability	$	380,790,346
UNFUNDED ACTUARIAL ACCRUED LIABILITY		
Total Actuarial Accrued Liability	$	380,790,346
Less Actuarial Value of Assets		438,955,465
Unfunded Actuarial Accrued Liability	$	(58,165,119)
NORMAL COST		
Retirement Benefits	$	6,855,316
Disability Benefits		289,030
Withdrawal Benefits (Vested and Refund of Contributions)		276,188
Survivor Benefits		240,783
Total Normal Cost	$	7,661,317
Less Employee Contributions		3,417,599
Total Normal Cost - State	$	4,243,718

TABLE III
STATE POLICE RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2002

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
6/30/1990	$ 8,982,071	$ 11,307,726	$ 803,934	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	9,963,656	12,447,889	850,079	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(24,502,117)	(30,295,949)	(1,992,686)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's; Asset valuation method change
6/30/1993	(3,706,436)	(4,524,632)	(287,332)	Experience gains/losses for 7/1/1992 to 6/30/1993; State contribution shortfall
6/30/1994	10,380,135	12,482,949	767,027	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's; State contribution shortfall
6/30/1995	22,729,292	26,873,039	1,600,934	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(17,793,855)	(20,645,432)	(1,194,627)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions
6/30/1997	(31,021,470)	(35,233,279)	(1,983,528)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	12,716,788	14,116,994	774,402	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average salary definition from 5 years to 3 years; Increase in death benefit from $2,500 to $5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(31,317,924)	(33,932,914)	(1,816,293)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(77,707,399)	(82,071,133)	(4,292,074)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	26,106,163	26,844,128	1,373,292	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000
6/30/2002	(99,948,849)	44,465,495	2,227,677	Experience gains/losses for 7/1/2001 to 6/30/2002; 3.4% retiree COLA effective 7/1/2001

TABLE IV STATE POLICE RETIREMENT SYSTEM INSURANCE FUND DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2002		
ACTUARIAL ACCRUED LIABILITY		
Active Members	$	71,240,175
Inactive Members		
Retired Members	$	81,435,378
Beneficiaries		11,941,286
Vested Retirement		828,573
Vested Membership		0
Total - Inactives	$	94,205,237
Total Actuarial Accrued Liability	$	165,445,412
UNFUNDED ACTUARIAL ACCRUED LIABILITY		
Total Actuarial Accrued Liability	$	165,445,412
Less Actuarial Value of Assets		86,867,391
Unfunded Actuarial Accrued Liability	$	78,578,021
NORMAL COST		
Gross Normal Cost	$	6,485,122
Less Employee Contributions		0
Net Normal Cost - State	$	6,485,122
Estimated Annual Salaries	$	43,961,844
TOTAL ANNUAL EMPLOYER COST		
Contribution Amount		
Normal Cost	$	6,485,122
Payment on Unfunded Actuarial Accrued Liability		4,586,170
Total Annual Cost	$	11,071,292
As Percent of Payroll		
Normal Cost		14.75%
Payment on Unfunded Actuarial Accrued Liability		10.43%
Total Annual Cost		25.18%
INSURANCE FUND SHORTFALL		
Full Entry Age Funding Level		25.18%
Current Funding Allocation *		18.47%
Additional to Pick Up By 2016		6.71%
Expected Increase in Insurance Fund Rate in 2003 Valuation		0.41%
* Without regard to any one-year temporary adjustments for actuarial gains		

TABLE V
STATE POLICE RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2002

Date Established	Amount of Base on Date Established	Amount of Base on Current Valuation Date	Amortization Payment	Source of Base
6/30/1996	$ 73,323,619	$ 85,074,192	$ 4,922,733	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	8,088,952	9,187,197	517,212	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	(2,668,212)	(2,961,999)	(162,483)	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(13,378,283)	(14,495,346)	(775,878)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	(6,431,546)	(6,792,716)	(355,239)	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	9,773,380	10,049,652	514,120	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2002	(1,482,959)	(1,482,959)	(74,295)	Experience gains/losses for 7/1/2001 to 6/30/2002; Impact of actual insurance fund contributions vs. full entry age amounts
Total	$ 67,224,951	$ 78,578,021	$ 4,586,170	

TABLE VI
STATE POLICE RETIREMENT SYSTEM
BENEFIT PAYMENT PROJECTIONS

RETIREMENT FUND PAYMENT PROJECTIONS

Plan Year	Total
7/1/2002 to 6/30/2003	27,270,000
7/1/2003 to 6/30/2004	28,808,000
7/1/2004 to 6/30/2005	30,376,000
7/1/2005 to 6/30/2006	31,758,000
7/1/2006 to 6/30/2007	34,209,000
7/1/2007 to 6/30/2008	36,049,000
7/1/2008 to 6/30/2009	38,504,000
7/1/2009 to 6/30/2010	40,923,000
7/1/2010 to 6/30/2011	43,177,000
7/1/2011 to 6/30/2012	45,626,000

INSURANCE FUND PAYMENT PROJECTIONS

Plan Year	Total
7/1/2002 to 6/30/2003	4,942,000
7/1/2003 to 6/30/2004	5,580,000
7/1/2004 to 6/30/2005	6,189,000
7/1/2005 to 6/30/2006	6,846,000
7/1/2006 to 6/30/2007	7,724,000
7/1/2007 to 6/30/2008	8,465,000
7/1/2008 to 6/30/2009	9,385,000
7/1/2009 to 6/30/2010	10,427,000
7/1/2010 to 6/30/2011	11,526,000
7/1/2011 to 6/30/2012	12,699,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

TABLE VII
STATE POLICE RETIREMENT SYSTEM
RETIREMENT FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 438,955,465
Actuarial Present Value of Future Member Contributions		33,841,590
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 41,893,803	
For Unfunded Actuarial Accrued Liability	(58,165,119)	
Total		$ (16,271,316)
Total Actuarial Assets		$ 456,525,739
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 252,056,847	
Vested Retirement	376,376	
Vested Membership	65,390	
Total - Inactive		$ 252,498,613
Actuarial Present Value of Future Benefits		
Active Members:		
Retirement Benefits	$ 189,982,523	
Disability Benefits	5,380,521	
Withdrawal Benefits (Vested and Refund of Contributions)	3,481,314	
Survivor Benefits	5,182,768	
Total - Active		$ 204,027,126
Refunds and Expenses Payable		$ 0
Total Actuarial Liabilities		$ 456,525,739
Notes		
* Values as of June 30, 2002		
Market value of assets:		$ 328,744,331
Actuarial value of assets:		$ 438,955,465
Member's Contribution Account:		$ 36,886,477
** Present value of accrued benefit deferred to normal retirement date.		

TABLE VIII
STATE POLICE RETIREMENT SYSTEM
INSURANCE FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		$ 86,867,391
Actuarial Present Value of Future Member Contributions (Note: All Future Member Contributions Credited Against Retirement Fund)		0
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 72,085,305	
For Unfunded Actuarial Accrued Liability	78,578,021	
Total		$ 150,663,326
Total Actuarial Assets		$ 237,530,717
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 93,376,664	
Vested Retirement	828,573	
Vested Membership	0	
Total - Inactive		$ 94,205,237
Actuarial Present Value of Future Benefits Active Members:		$ 143,325,480
Refunds and Expenses Payable		0
Total Actuarial Liabilities		$ 237,530,717
Notes		
* Values as of June 30, 2002		
Market value of assets:		$ 68,074,444
Actuarial value of assets:		$ 86,867,391

TABLE IX STATE POLICE RETIREMENT SYSTEM ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2002 GASB DISCLOSURE INFORMATION	
NUMBER OF MEMBERS	
Inactive Members	
Retired Members	819
Beneficiaries	78
Vested Retirements	20
Vested Membership	83
Total Inactive Members	1,000
Active Members	
Vested Members	696
Nonvested Members	306
Total Active Members	1,002
Total Members	2,002

TABLE X
STATE POLICE RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2002
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

NUMBER OF MEMBERS			
Contracts in Force - Retirees and Dependents			
(1) Single;	-	100% Paid	193
Pre-Medicare	-	75% Paid	1
	-	50% Paid	4
	-	25% Paid	1
	-	0% Paid	0
(2) Family;	-	100% Paid	129
Pre-Medicare	-	75% Paid	2
	-	50% Paid	0
	-	25% Paid	0
	-	0% Paid	0
(3) Parent +;	-	100% Paid	50
Pre-Medicare	-	75% Paid	0
	-	50% Paid	0
	-	25% Paid	0
	-	0% Paid	0
(4) Couple;	-	100% Paid	231
Pre-Medicare	-	75% Paid	3
	-	50% Paid	0
	-	25% Paid	1
	-	0% Paid	0
(5) Medicare Regular	-	100% Paid	11
	-	75% Paid	0
	-	50% Paid	0
	-	25% Paid	0
	-	0% Paid	0
(6) Medicare High	-	100% Paid	295
Option	-	75% Paid	4
	-	50% Paid	2
	-	25% Paid	2
	-	0% Paid	0
Vested Retirements			20
Vested Membership			83
Active Members			1,002

UNFUNDED MEDICAL BENEFIT OBLIGATION		
Medical Benefit Obligation		
Retirees, Beneficiaries and Vested Terminated Members	$	94,205,237
Active Members		71,240,175
Total Medical Benefit Obligation	$	165,445,412
Net Assets at Actuarial Value	$	86,867,391
Unfunded Medical Benefit Obligation	$	78,578,021
NOTE: Medical Benefit Obligation based on Entry Age Normal Actuarial Cost Method		

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from $356,211,860 on June 30, 2001 to $380,790,346 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from ($99,948,849) to ($58,165,119). Total actuarial value of assets as of June 30, 2002 was equal to $438,955,465. The Unfunded Actuarial Accrued Liability increased from (226.08%) to (132.31%) as a percentage of annual payroll and increased from (28.1%) to (15.3%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from $158,261,479 on June 30, 2001 to $165,445,412 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from $78,397,902 to $78,578,021. Total actuarial value of assets as of June 30, 2002 was equal to $86,867,391. The Unfunded Actuarial Liability decreased from 49.5% to 47.5% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

The change in contribution rate between the 2001 and 2002 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

June 30, 2001 Contribution Rate	21.58%
Change in Payment Percentage Due to Covered Payroll Experience	(0.65%)
Investment Return Experience	3.59%
Salary Increase Experience	(0.11%)
Decrements Experience*	0.87%
Change in Insurance Fund Rate > One-Year Temporary Funding Rate > Increase in Long Term Funding Rate	 (2.64%) 0.00%
Change in Administrative Expense Rate	(0.24%)
Retiree COLA Effective 7/1/2001	0.87%
Legislated Changes	None
Reduction in Amount Available from Prior Year Retirement Fund Rate to Offset Current Year Increases	(1.69%)
June 30, 2002 Contribution Rate	21.58%
* Includes mortality, disability, termination of employment and retirement experience.	

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses is 2.64%. An additional 18.94% is required to fund medical insurance for retirees, bringing the required contribution up to 21.58%. This is the same as the current 21.58% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2003 should remain at the 21.58% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2003 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

STATE POLICE RETIREMENT SYSTEM - RETIREMENT FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1958	$ 1,450,000	$ 1,450,000	100.0%	$ 0	$ 0
1963	4,553,258	2,008,476	44.1%	2,544,782	619,167
1968	9,079,139	3,288,103	36.2%	5,791,036	789,709
1971	11,828,727	2,441,888	20.6%	9,386,839*	1,339,726
1974	17,737,434	3,179,448	17.9%	14,557,986*	1,935,105
1975	23,182,081	6,169,445	26.6%	17,012,636*	2,454,650
1976	28,693,129	8,231,367	28.7%	20,461,762*	3,449,126
1977	34,561,413	10,436,161	30.2%	24,125,252*	3,663,490
1978	49,950,102	21,440,957	42.9%	28,509,145*	4,383,893
1979	55,391,206	21,487,985	38.8%	33,903,221*	5,394,076
1980	67,580,562	26,663,397	39.5%	40,917,165*	7,013,944
1981	71,526,728	23,296,425	32.6%	48,230,303	7,313,138
1982	78,713,172	21,383,042	27.2%	57,330,130	9,099,827
1983	81,944,546	16,187,460	19.8%	65,757,086	8,426,956
1984	91,180,668	16,200,151	17.8%	74,980,517	9,223,431
1985	99,269,825	14,253,583	14.4%	85,016,242	10,035,725
1986	105,559,951	8,892,252	8.4%	96,667,699	11,651,457
1987	111,541,989	1,347,385	1.2%	110,194,604	13,526,905
1988	120,128,367	(870,182)	(0.8%)	120,998,549	10,803,945
1989	134,550,773	3,200,220	2.4%	131,350,553	10,352,004
1990	154,007,622	8,982,071	5.8%	145,025,551	13,674,998
1991	170,009,955	1 9,191,881	11.3%	150,818,074	5,792,523
1992**	182,996,056	(4,794,955)	(2.6%)	187,791,011	36,972,937
1993	191,653,594	(8,667,374)	(4.5%)	200,320,968	12,529,957
1994	206,763,310	1,442,801	0.7%	205,320,509	4,999,541
1995	241,690,631	24,186,188	10.0%	217,504,443	12,183,934
1996	244,540,812	7,025,466	2.9%	237,515,346	20,010,903
1997	255,784,758	(23,858,517)	(9.3%)	279,643,275	42,127,929
1998	294,427,019	(11,891,899)	(4.0%)	306,318,918	26,675,643
1999	314,021,673	(43,601,523)	(13.9%)	357,623,196	51,304,278
2000	336,579,763	(122,588,811)	(36.4%)	459,168,574	101,545,378
2001***	356,211,860	(99,948,849)	(28.1%)	456,160,709	(3,007,865)
2002	380,790,346	(58,165,119)	(15.3%)	438,955,465	(17,205,244)
*Includes capitalized appreciation of investments.					
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

STATE POLICE RETIREMENT SYSTEM - INSURANCE FUND					
July 1 of Year Shown	**Total Actuarial Accrued Liability**	**Unfunded Actuarial Accrued Liability**	**Percent Unfunded**	**Actuarial Value of Assets**	**Increase in Assets**
1990	$ 64,784,801	$ 58,268,284	89.9%	$ 6,516,517	$ N/A
1991	74,163,248	65,231,704	88.0%	8,931,544	2,415,027
1992	88,407,634	76,689,678	86.7%	11,717,956	2,786,412
1993	95,290,099	81,004,620	85.0%	14,285,479	2,567,523
1994	110,193,139	92,782,467	84.2%	17,410,672	3,125,193
1995	118,995,732	97,795,537	82.2%	21,200,195	3,789,523
1996**	101,132,886	73,323,619	72.5%	27,809,267	6,609,072
1997	117,361,754	83,485,271	71.1%	33,876,483	6,067,216
1998	124,501,076	83,090,576	66.7%	41,410,500	7,534,017
1999	125,797,150	71,867,291	57.1%	53,929,859	12,519,359
2000	138,867,085	67,155,373	48.4%	71,711,712	17,781,853
2001***	158,261,479	78,397,902	49.5%	79,863,577	8,151,865
2002	165,445,412	78,578,021	47.5%	86,867,391	7,003,814
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the State Police Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding polices adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Stephen A. Gagel, F.S.A. Date

Edward W. Maynard, F.S.A. Date

Mercer Human Resource Consulting
462 South Fourth Street, Suite 1500
Louisville, Kentucky 40202-3415
✆(502) 561-4500

SECTION V

STATISTICAL DATA

AS OF

JUNE 30, 2002

STATE POLICE RETIREMENT SYSTEM
JUNE 30, 2002

EARNINGS BY AGE GROUPS

AGE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	2	25,284	12,642	0	0	0	2	25,284	12,642
20-24	65	1,782,144	27,418	3	43,200	14,400	68	1,825,344	26,843
25-29	173	5,680,968	32,838	12	398,832	33,236	185	6,079,800	32,864
30-34	234	9,137,916	39,051	12	516,120	43,010	246	9,654,036	39,244
35-39	182	8,277,960	45,483	5	229,896	45,979	187	8,507,856	45,497
40-44	133	6,730,932	50,609	7	361,092	51,585	140	7,092,024	50,657
45-49	108	6,289,620	58,237	3	189,216	63,072	111	6,478,836	58,368
50-54	50	3,423,312	68,466	0	0	0	50	3,423,312	68,466
55-59	12	845,556	70,463	0	0	0	12	845,556	70,463
60-64	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0
70-74	1	29,796	29,796	0	0	0	1	29,796	29,796
75+	0	0	0	0	0	0	0	0	0
TOTAL	960	42,223,488	43,983	42	1,738,356	41,389	1,002	43,961,844	43,874

EARNINGS BY SERVICE GROUPS

SERVICE	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
GROUP	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	64	1,370,196	21,409	4	68,580	17,145	68	1,438,776	21,158
1	12	354,900	29,575	0	0	0	12	354,900	29,575
2	109	3,284,928	30,137	3	91,296	30,432	112	3,376,224	30,145
3	46	1,507,056	32,762	4	127,104	31,776	50	1,634,160	32,683
4	2	68,664	34,332	0	0	0	2	68,664	34,332
0-4	233	6,585,744	28,265	11	286,980	26,089	244	6,872,724	28,167
5-9	257	10,232,892	39,817	16	653,688	40,856	273	10,886,580	39,878
10-14	150	6,973,116	46,487	5	247,380	49,476	155	7,220,496	46,584
15-19	149	7,681,632	51,555	8	417,804	52,226	157	8,099,436	51,589
20-24	77	4,370,460	56,759	2	132,504	66,252	79	4,502,964	57,000
25-29	59	3,882,324	65,802	0	0	0	59	3,882,324	65,802
30-34	33	2,356,344	71,404	0	0	0	33	2,356,344	71,404
35-39	2	140,976	70,488	0	0	0	2	140,976	70,488
40+	0	0	0	0	0	0	0	0	0
TOTAL	960	42,223,488	43,983	42	1,738,356	41,389	1,002	43,961,844	43,874

STATE POLICE RETIREMENT SYSTEM
JUNE 30, 2002

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	2									2
20-24	65									65
25-29	101	72								173
30-34	48	142	43	1						234
35-39	11	38	82	50	1					182
40-44	5	3	24	72	25	4				133
45-49		1		26	45	33	3			108
50-54			1		6	22	19	2		50
55-59		1					11			12
60-64										0
65-69										0
70-74	1									1
75+										0
TOTAL	233	257	150	149	77	59	33	2	0	960

FEMALE

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24	3									3
25-29	6	6								12
30-34	2	8	2							12
35-39		2	3							5
40-44				7						7
45-49				1	2					3
50-54										0
55-59										0
60-64										0
65-69										0
70-74										0
75+										0
TOTAL	11	16	5	8	2	0	0	0	0	42

TOTAL

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	2									2
20-24	68									68
25-29	107	78								185
30-34	50	150	45	1						246
35-39	11	40	85	50	1					187
40-44	5	3	24	79	25	4				140
45-49		1		27	47	33	3			111
50-54			1		6	22	19	2		50
55-59		1					11			12
60-64										0
65-69										0
70-74	1									1
75+										0
TOTAL	244	273	155	157	79	59	33	2	0	1,002

STATE POLICE RETIREMENT SYSTEM
JUNE 30, 2002

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	2									2
	12,642									12,642
20-24	68									68
	26,843									26,843
25-29	107	78								185
	28,982	38,189								32,864
30-34	50	150	45	1						246
	28,740	40,742	45,752	46,824						39,244
35-39	11	40	85	50	1					187
	28,643	40,035	47,108	50,622	56,064					45,497
40-44	5	3	24	79	25	4				140
	27,828	39,516	46,334	52,310	54,731	55,386				50,657
45-49		1		27	47	33	3			111
		37,116		51,445	58,104	64,382	65,740			58,368
50-54			1		6	22	19	2		50
			45,432		57,956	69,826	71,210	70,488		68,466
55-59		1					11			12
		39,420					73,285			70,463
60-64										0
65-69										0
70-74	1									1
	29,796									29,796
75+										0
TOTAL	244	273	155	157	79	59	33	2	0	1,002
	28,167	39,878	46,584	51,589	57,000	65,802	71,404	70,488		43,874

TOTAL EARNINGS 43,961,844
AVERAGE AGE 35.71
AVERAGE SERVICE 11.40

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

STATE POLICE RETIREMENT SYSTEM
TABULATION BY MONTHLY SALARY - JUNE 30, 2002

MONTHLY SALARY	NUMBER OF MEMBERS MALES	FEMALES	TOTAL
UNDER $ 500	9	1	10
$ 500 - $ 749	1	0	1
$ 750 - $ 999	1	0	1
$ 1,000 - $ 1,249	3	0	3
$ 1,250 - $ 1,499	0	1	1
$ 1,500 - $ 1,749	1	0	1
$ 1,750 - $ 1,999	0	0	0
$ 2,000 - $ 2,249	50	2	52
$ 2,250 - $ 2,499	58	0	58
$ 2,500 - $ 2,749	97	8	105
$ 2,750 - $ 2,999	48	4	52
$ 3,000 - $ 3,499	182	5	187
$ 3,500 - $ 3,999	189	10	199
$ 4,000 - $ 4,499	137	4	141
$ 4,500 - $ 4,999	70	6	76
$ 5,000 - $ 5,499	54	0	54
$ 5,500 - $ 5,999	29	0	29
$ 6,000 - $ 6,499	20	0	20
$ 6,500 - $ 6,999	6	0	6
$ 7,000 - $ 7,499	0	1	1
$ 7,500 - $ 7,999	4	0	4
$ 8,000 - $ 8,499	1	0	1
$ 8,500 - $ 8,999	0	0	0
$ 9,000 - $ 9,499	0	0	0
$ 9,500 - $ 9,999	0	0	0
$ 10,000 AND OVER	0	0	0
TOTAL	960	42	1,002
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF $85,000 AND OVER	5	0	5

STATE POLICE RETIREMENT SYSTEM
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2002

MEMBERS CURRENTLY ACTIVE IN SPRS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	3	112	115
KERS - HAZARDOUS	0	24	24
CERS - NONHAZARDOUS	6	109	115
CERS - HAZARDOUS	4	73	77
TOTAL - ALL SYSTEMS	13	318	331

MEMBERS CURRENTLY NOT ACTIVE IN SPRS

SERVICE IN	ACTIVE IN OTHER SYSTEM	INACTIVE IN OTHER SYSTEM	TOTAL
KERS - NONHAZARDOUS	14	13	27
KERS - HAZARDOUS	10	1	11
CERS - NONHAZARDOUS	19	14	33
CERS - HAZARDOUS	45	3	48
TOTAL - ALL SYSTEMS	88	31	119

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

STATE POLICE RETIREMENT SYSTEM
RETIRED LIVES SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	71	174,843.84	6	5,789.72	77	180,633.56
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	111	255,236.49	1	915.43	112	256,151.92
66-2/3% TO BENEFICIARY	62	176,360.21	0	0.00	62	176,360.21
50% TO BENEFICIARY	62	164,887.12	2	2,057.08	64	166,944.20
POP-UP OPTION	215	597,639.04	2	1,163.17	217	598,802.21
10 YEARS CERTAIN	5	18,627.56	1	2,335.00	6	20,962.56
10 YEARS CERTAIN & LIFE	23	60,250.90	0	0.00	23	60,250.90
SOCIAL SECURITY OPTION						
OPTION C	34	72,439.57	1	1,745.59	35	74,185.16
OPTION D	164	349,955.26	5	3,816.96	169	353,772.22
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	8	2,151.76	5	1,481.35	13	3,633.11
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	10	22,097.76	0	0.00	10	22,097.76
20 YEARS CERTAIN & LIFE	27	62,046.43	4	3,455.77	31	65,502.20
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	792	1,956,535.94	27	22,760.07	819	1,979,296.01

STATE POLICE RETIREMENT SYSTEM
BENEFICIARY SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	2	3,331.99	47	97,452.40	49	100,784.39
66-2/3% TO BENEFICIARY	0	0.00	1	1,207.58	1	1,207.58
50% TO BENEFICIARY	1	1,031.23	8	10,849.46	9	11,880.69
POP-UP OPTION	0	0.00	6	15,608.71	6	15,608.71
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00
10 YEARS CERTAIN & LIFE	0	0.00	0	0.00	0	0.00
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	0	0.00	10	21,003.04	10	21,003.04
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	1	257.27	0	0.00	1	257.27
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	0	0.00	0	0.00	0	0.00
20 YEARS CERTAIN & LIFE	0	0.00	2	7,518.19	2	7,518.19
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	4	4,620.49	74	153,639.38	78	158,259.87

STATE POLICE RETIREMENT SYSTEM
VESTED RETIREMENT SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES MONTHLY BENEFITS	FEMALE LIVES NUMBER	FEMALE LIVES MONTHLY BENEFITS	TOTAL NUMBER	TOTAL MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	0	0.00	0	0.00	0	0.00
25-29	2	822.70	0	0.00	2	822.70
30-34	7	2,909.54	0	0.00	7	2,909.54
35-39	2	767.20	1	279.99	3	1,047.19
40-44	5	2,682.70	1	1,357.13	6	4,039.83
45-49	0	0.00	0	0.00	0	0.00
50-54	2	996.05	0	0.00	2	996.05
55-59	0	0.00	0	0.00	0	0.00
60-64	0	0.00	0	0.00	0	0.00
65-69	0	0.00	0	0.00	0	0.00
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	18	8,178.19	2	1,637.12	20	9,815.31

STATE POLICE RETIREMENT SYSTEM
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES NUMBER	MALE LIVES ACCUMULATED CONTRIBUTIONS	FEMALE LIVES NUMBER	FEMALE LIVES ACCUMULATED CONTRIBUTIONS	TOTAL NUMBER	TOTAL ACCUMULATED CONTRIBUTIONS
15-19	6	74.15	0	0.00	6	74.15
20-24	2	264.98	0	0.00	2	264.98
25-29	16	22,848.18	4	3,602.11	20	26,450.29
30-34	21	16,752.60	1	16.01	22	16,768.61
35-39	16	11,527.11	2	2,509.24	18	14,036.35
40-44	7	3,885.90	1	406.41	8	4,292.31
45-49	3	3,669.13	0	0.00	3	3,669.13
50-54	2	222.23	0	0.00	2	222.23
55-59	1	58.57	0	0.00	1	58.57
60-64	1	7,599.05	0	0.00	1	7,599.05
65-69	0	0.00	0	0.00	0	0.00
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	75	66,901.90	8	6,533.77	83	73,435.67

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the State Police Retirement System in July, 1958. The plan benefits have been improved several times, most recently as of August 1, 2002.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

(a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1958. In some instances prior service credit is granted for time spent in the military.

(b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1958. Current service credit may be granted for military service and educational leaves if special criteria are met.

(c) Service is increased by unused sick leave, up to a maximum of six months, for purposes of computing eligibility and the amount of benefits.

Eligibility

The Bureau of State Police shall participate in the System. Membership in the system consists of all regular full-time officers of the Kentucky State Police who are entitled to exercise the powers of police officers.

Normal Retirement Date

A member may elect to retire upon attaining age 55 and having contributed to the System. Upon completion of 20 years of service credit, 15 of which are current service, a member may declare the normal retirement date to be some date prior to age 55.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

A monthly benefit equal to 2.50% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member who retires on or after the normal retirement date with less than 60 months of service is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a member has 20 or more years of service credit (15 of which are current), an unreduced benefit is payable.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 55th birthday up to a maximum of service credited to the last day of paid employment. Except for members with 20 or more years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 20 years. For members with 20 or more years of service credit, actual service will be used. The retirement benefit shall not be less than 25% of the member's final monthly rate of pay for those disabled in the line of duty. Ten percent of final monthly rate of pay for each dependent child is also payable if disability occurs in line of duty. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member dies in the line of duty and has a spouse as beneficiary, a $5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member dies in the line of duty and has a dependent as beneficiary, a lump sum payment of $10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee under KERS and CERS, using 2.50% rather than the non-hazardous benefit rate.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of $5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include an annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 8% of gross compensation until age 55. On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The retirement system will pay a portion of the cost of participation for the retiree and dependents based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contact provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.

Kentucky Employees Retirement System

Actuarial Valuation and Review
as of June 30, 2003

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THE PARENT OF THE SEGAL COMPANY
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SEGAL

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November 6, 2003

Board of Trustees Kentucky Retirement Systems
Kentucky Employees Retirement System
Perimeter Park West 1260 Louisville Road
Frankfort, Kentucky 40601-6124

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2003. It summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July1, 2004 and analyzes the preceding year's experience.

The census information on which our calculations were based was prepared by the System and the financial information was provided by the Auditor. That assistance is gratefully acknowledged.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By: _____ _____

Leon F. (Rocky) Joyner, Jr., ASA, MAAA
Vice President and Actuary

K. Eric Fredén, FSA, MAAA
Associate Actuary

SECTION 1

VALUATION SUMMARY

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SECTION 2

VALUATION RESULTS

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Purpose

This report has been prepared by The Segal Company to present a valuation of the Kentucky Employees Retirement System as of June 30, 2003. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2003, provided by the Board;
- The assets of the Plan as of June 30, 2003, provided by the Auditor;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

- The Kentucky Employees Retirement System's basic financial goal is to establish contributions which fully fund the system's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.
- The retirement contribution rate is determined using the Entry Age Normal Cost (EANC) Method. Under this method the employer contribution required is the sum of the normal cost, administration expenses and the sum of the 30-year amortization payments established each valuation due to changes in the Unfunded Actuarial Accrued Liability.
- The medical insurance contribution rate is determined in a similar method except that the actual contribution rate is determined by increasing the prior biennium rate by an amount necessary to raise the insurance rate to the full EANC amount by the year 2016.
- The rates calculated in this report may be adopted by the Board for July 1, 2004 through June 30, 2005.

- The following summarizes the required contributions for the year beginning July 1, 2004 and compares them to the prior valuation amounts.

Non-Hazardous

Plan	July 1, 2004 Rate	July 1, 2003 Rate
Retirement	5.11%	2.86%
Insurance	5.18	4.67
Total	10.29%	7.53%

Hazardous

Plan	July 1, 2004 Rate	July 1, 2003 Rate
Retirement	7.26%	7.37%
Insurance	12.21	11.47
Total	19.47%	18.84%

- The increase in total rate is due to:

Non-Hazardous	
Investment loss	1.71%
Retiree COLA	.33
Insurance Phase-in	.51
Other experience	.21
Total change	2.76%

Hazardous	
Investment loss	.99%
Retiree COLA	.15
Insurance Phase-in	.74
Other experience	-1.25
Total change	.63%

- The actuarial valuation report as of June 30, 2003 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent they exist, are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan. Because the actuarial value of assets involves a smoothing method, changes in market value are not fully reflected immediately in the actuarial value of assets. Rather, that effect is spread over a period of years.
- As indicated in Section 2, Subsection B of this report, the total unrecognized investment losses as of June 30, 2003 are

Non-Hazardous

Plan	Unrecognized investment losses as of 6/30/2003
Retirement	$1,421,875,647
Insurance	66,610,109

Hazardous

Plan	Unrecognized investment losses as of 6/30/2003
Retirement	$65,401,031
Insurance	25,926,087

These investment losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.25% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.25% rate and all other actuarial assumptions are met, the contribution requirements would still increase in each of the next few years.

Summary of Key Valuation Results Non – Hazardous	Valuation Date	
	June 30, 2003	June 30, 2002
Contribution rates for next fiscal year:		
Retirement	5.11%	2.86%
Insurance	5.18	4.67
Total	10.29%	7.53%
Funded status as of valuation date:		
Retirement		
Actuarial Accrued Liability	$6,520,463,188	$6,026,094,764
Actuarial Value of Assets	$6,351,318,832	$6,654,084,196
Funded Ratio on Actuarial Value of Assets	97.41%	110.42%
Market Value of Assets	$4,929,443,185	$5,005,190,948
Funded Ratio on Market Value of Assets	75.60%	83.06%
Insurance		
Actuarial Accrued Liability	$2,093,210,321	$1,907,683,881
Actuarial Value of Assets	$553,885,082	$521,250,455
Funded Ratio on Actuarial Value of Assets	26.46%	27.32%
Market Value of Assets	$487,274,973	$465,664,515
Funded Ratio on Market Value of Assets	23.28%	24.41%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	27,233	26,703
Number of vested former members	3,456	3,415
Number of former members due a refund	5,785	14,299
Number of active members	49,158	48,555
Total salary	$1,658,604,696	$1,597,344,487
Average salary	$33,740	$32,898

Summary of Key Valuation Results Hazardous	Valuation Date	
	June 30, 2003	June 30, 2002
Contribution rates for next fiscal year:		
Retirement	7.26%	7.37%
Insurance	12.21	11.47
Total	19.47%	18.84%
Funded status as of valuation date:		
Retirement		
Actuarial Accrued Liability	$356,879,133	$322,069,164
Actuarial Value of Assets	$385,925,722	$376,384,302
Funded Ratio using Actuarial Value of Assets	108.14%	116.86%
Market Value of Assets	$320,524,691	$301,799,829
Funded Ratio on Market Value of Assets	89.81%	93.71%
Insurance		
Actuarial Accrued Liability	$283,178,335	$236,819,050
Actuarial Value of Assets	$151,459,500	$135,874,582
Funded Ratio on Actuarial Value of Assets	53.49%	57..37%
Market Value of Assets	$125,533,413	$109,769,410
Funded Ratio on Market Value of Assets	44.33%	46.35%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,357	1,208
Number of vested former members	145	127
Number of former member due a refund	637	946
Number of active members	4,189	4,211
Total salary	$129,088,956	$125,371,604
Average salary	$30,816	$29,772

A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

Active Members

Plan costs are affected by the age, years of service and salaries of active members. In this year's non-hazardous valuation, there were 49,158 active members with an average age of 42.2, average years of service of 10.0 years and average salaries of $33,740. The 48,555 active members in the prior valuation had an average age of 41.5, average service of 10.1 years and average salaries of $32,898.

In the hazardous plan there were 4,189 active members with an average age of 41.6, average years of service of 7.2 years and average salaries of $30,816. The 4,211 active members in the prior valuation had an average age of 41.8, average service of 6.9 years and average salaries of $29,772.

Inactive Members

There were 3,456 non-hazardous members with a vested right to a deferred or immediate vested benefit.

In addition, there were 5,785 members entitled to a return of their employee contributions.

For the hazardous plan there were 145 members with a vested right to a deferred or immediate vested benefit.

In addition, there were 637 members entitled to a return of their employee contributions.

Retired Participants and Beneficiaries

As of June 30, 2003, 23,476 non-hazardous retired participants and 3,757 beneficiaries were receiving total monthly benefits of $32,754,064. For comparison, in the previous valuation, there were 22,948 retired participants and 3,755 beneficiaries receiving monthly benefits of $29,147,648.

For the hazardous plan there were 1,185 retired participants and 172 beneficiaries receiving total monthly benefits of $1,081,227. For comparison, in the previous valuation, there were 1,069 retired participants and 139 beneficiaries receiving monthly benefits of $913,271.

A historical perspective of how the member population has changed over the past eight valuations can be seen in this chart.

CHART 1A Non-Hazardous

Member Population: 1996 – 2003

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1996	47,145	2,416	19,468	0.46
1997	46,073	2,550	20,540	0.50
1998	46,342	2,735	20,955	0.51
1999	45,824	2,978	21,941	0.54
2000	46,897	3,073	23,760	0.57
2001	47,780	3,312	25,118	0.60
2002	48,555	3,415	26,703	0.62
2003	49,158	3,456	27,233	0.62

CHART 1B Hazardous

Member Population: 1996 – 2003

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1996	3,452	68	502	0.17
1997	3,532	77	585	0.19
1998	3,582	96	671	0.21
1999	3,889	96	780	0.23
2000	4,007	113	924	0.26
2001	4,228	123	1,053	0.28
2002	4,211	127	1,208	0.32
2003	4,189	145	1,357	0.36

**Excludes terminated members due a refund of employee contributions*

These graphs show a distribution of active members by age and by years of service.

CHART 2A Non - Hazardous

Distribution of Active Members by Age as of June 30, 2003

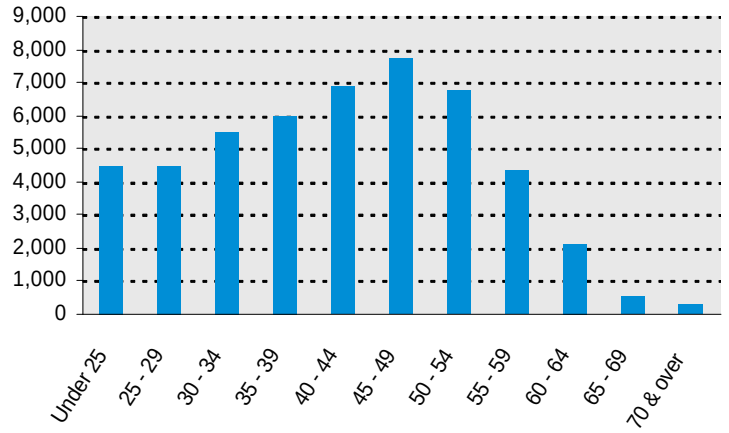
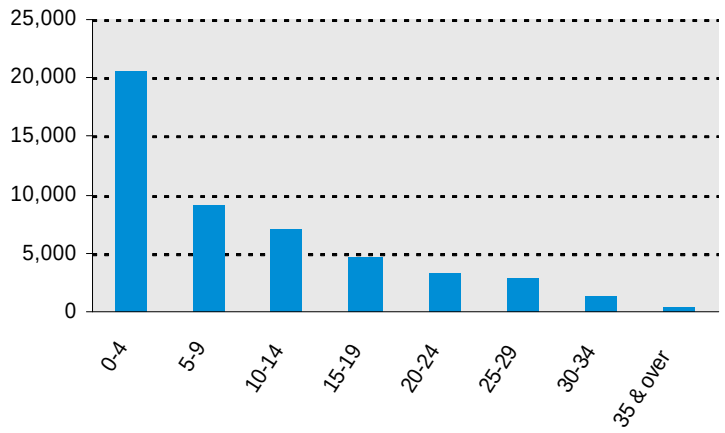


CHART 3A Non - Hazaradous

Distribution of Active Members by Years of Service as of June 30, 2003



These graphs show a distribution of the current retired participants based on their monthly amount and age, by type of pension.

CHART 4A Non - Hazardous

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2003

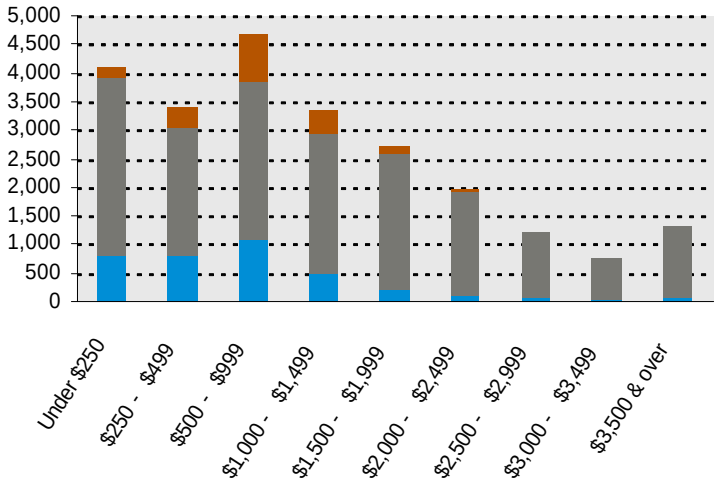
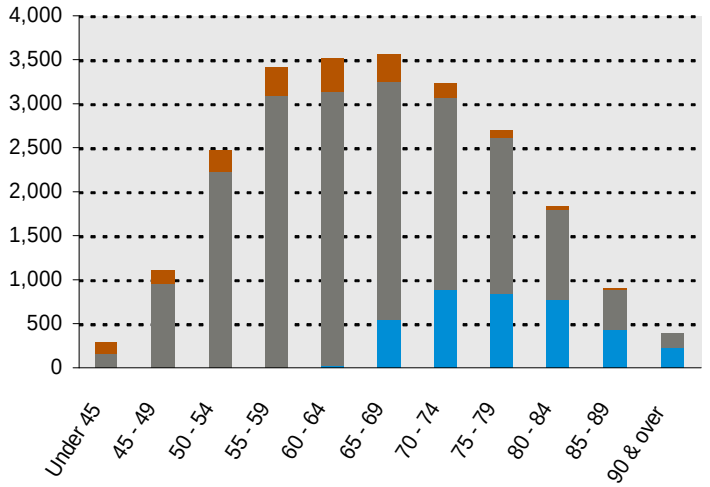


CHART 5A Non - Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2003



These graphs show a distribution of active members by age and by years of service

CHART 2B Hazardous

Distribution of Active Members by Age as of June 30, 2003

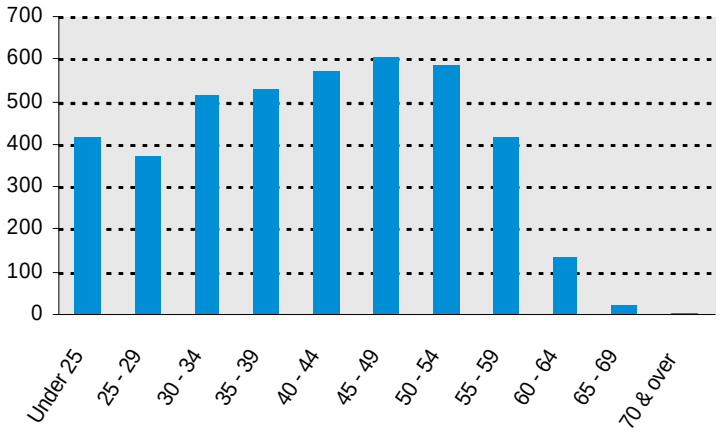
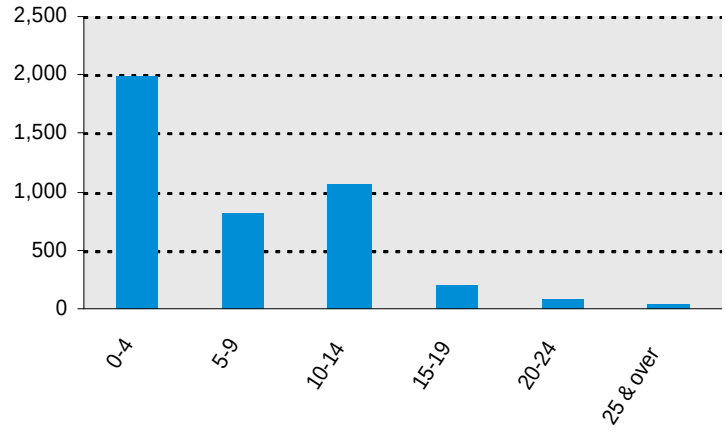


CHART 3B Hazardous

Distribution of Active Members by Years of Service as of June 30, 2003



These graphs show a distribution of the current retired participants based on their monthly amount and age, by type of pension.

CHART 4B Hazardous

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2003

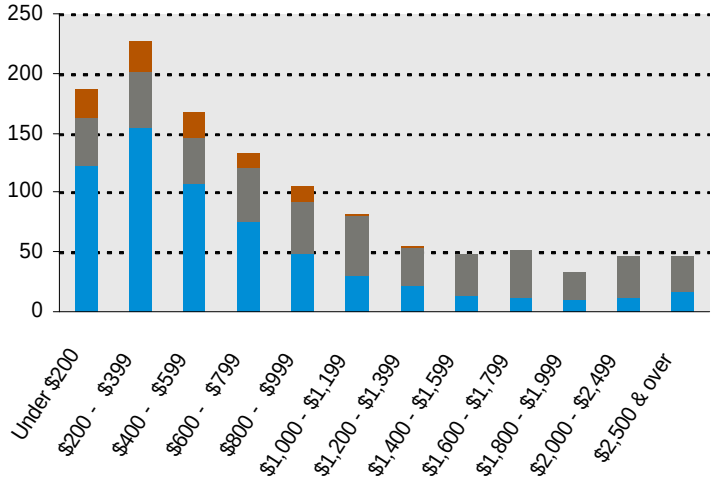
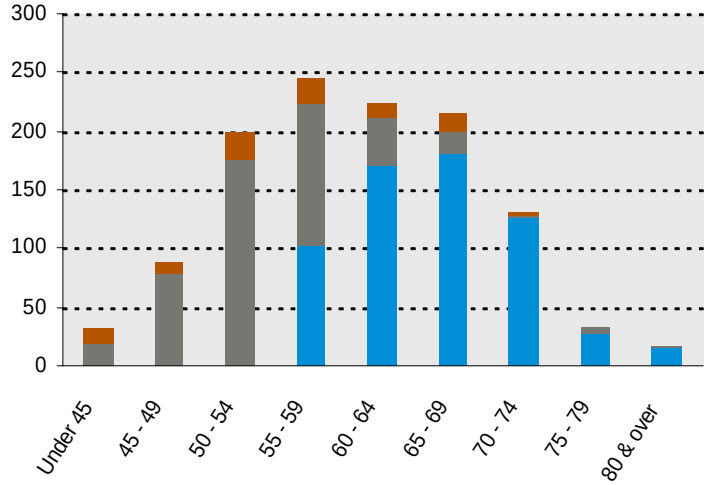


CHART 5B Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2003



B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative expenses) and net investment earnings (less investment fees) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The chart depicts the components of changes in the actuarial value of assets over the last seven years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6A Non - Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2003

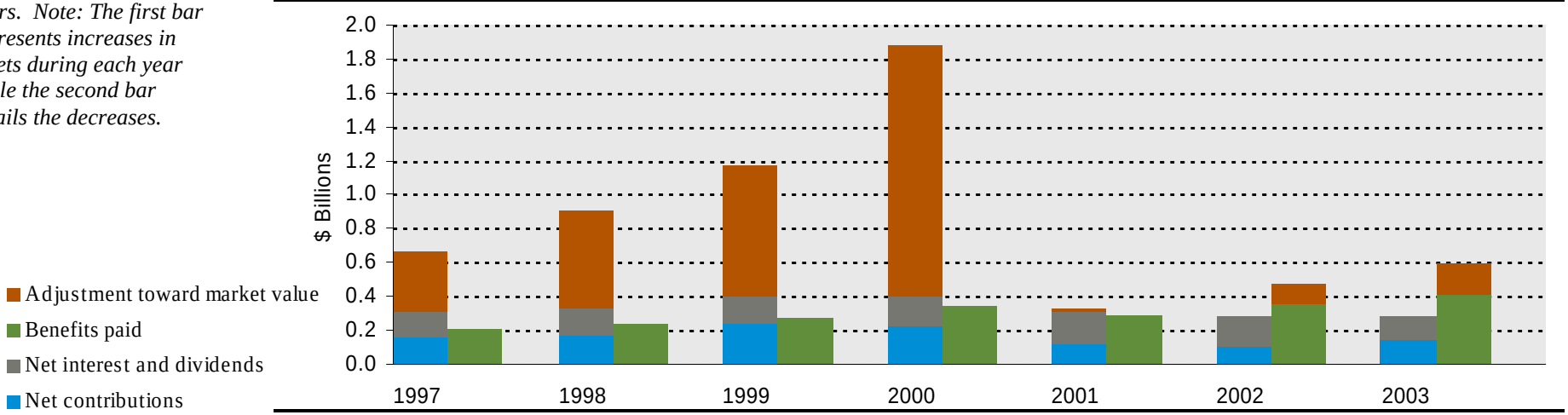
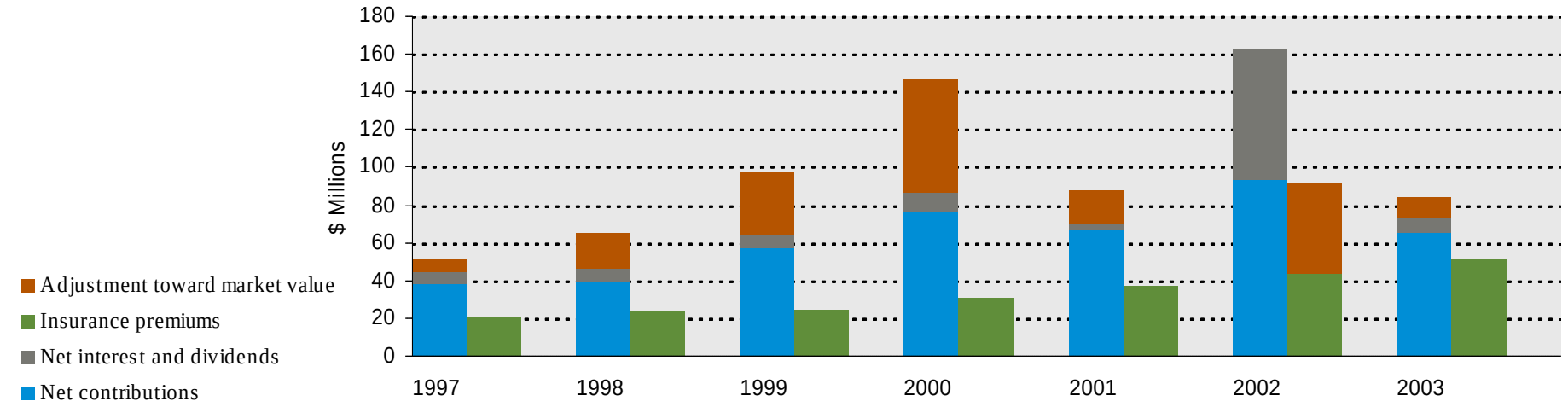


CHART 6B Non - Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2003



The chart depicts the components of changes in the actuarial value of assets over the last seven years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6C Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 - 2003

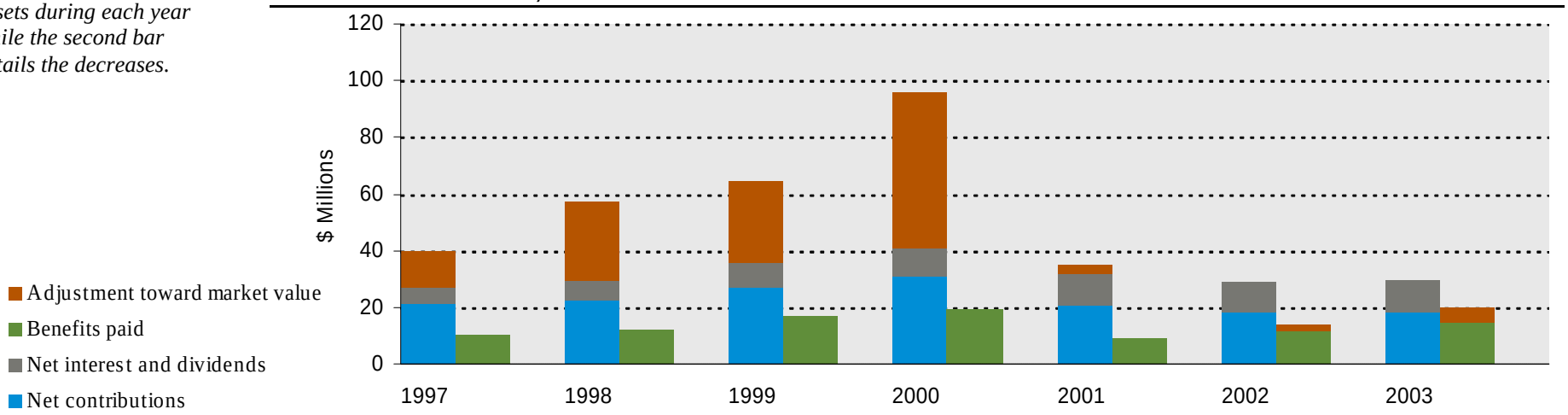
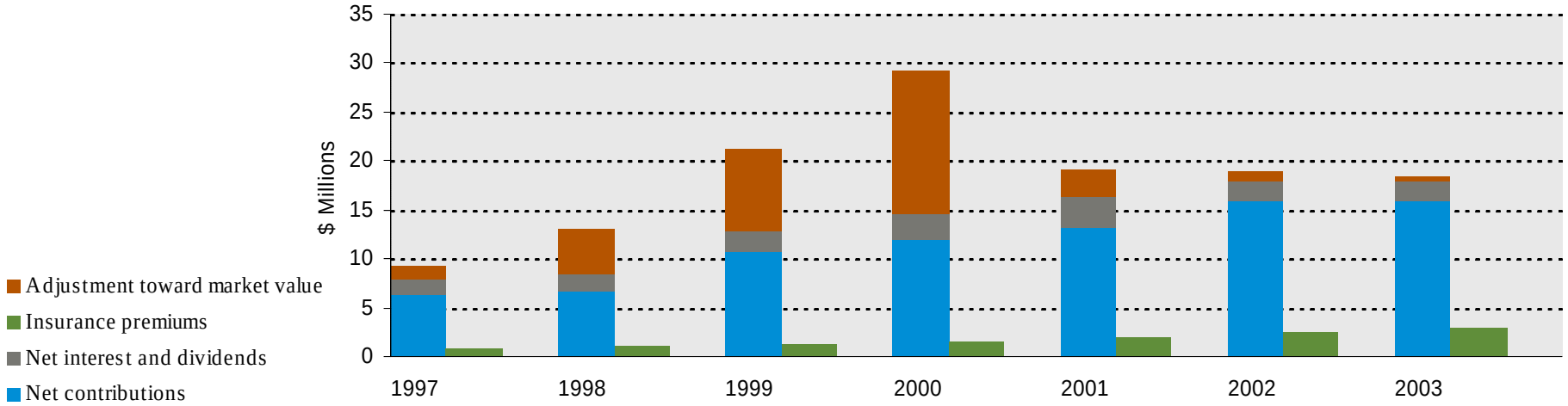


CHART 6D Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 - 2003



The chart shows the determination of the actuarial value of assets as of the valuation date

CHART 7A Non – Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2003

1. Actuarial value of Assets of June 30, 2002			$6,654,084,196
2. Net Cash flow			(275,571,276)
3. Expected return on valuation assets			537,594,631
4. Expected valuation assets			6,916,107,552
5. Investment gain/(loss) for year ending:	**Initial Amount**	**Amortization**	
June 30, 2003	($337,771,120)	($67,554,224)	
June 30, 2002	(785,948,805)	(157,189,761)	
June 30, 2001	(1,700,223,672)	(340,044,734)	
Total amortization amount			($564,788,719)
6. Actuarial value of assets as of June 30, 2003			$6,351,318,832
7. Market value of assets			$4,929,443,185
8. Actuarial value as a percentage of market value			128.8%

The chart shows the determination of the actuarial value of assets as of the valuation date

CHART 7B Non – Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2003

1.	Actuarial value of Assets of June 30, 2002		$521,250,455
2.	Net Cash flow		13,376,380
3.	Expected return on valuation assets		43,554,937
4.	Expected valuation assets		578,181,772
5.	Investment gain/(loss) for year ending:	**Initial Amount** / **Amortization**	
	June 30, 2003	($35,320,860) / ($7,064,172)	
	June 30, 2002	(19,441,916) / (3,888,383)	
	June 30, 2001	(66,720,677) / (13,344,135)	
	Total amortization amount		($24,296,690)
6.	Actuarial value of assets as of June 30, 2003		$553,885,082
7.	Market value of assets		$487,274,973
8.	Actuarial value as a percentage of market value		113.7%

The chart shows the determination of the actuarial value of assets as of the valuation date

CHART 7C Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2003

1.	Actuarial value of Assets of June 30, 2002		$376,384,302
2.	Net Cash flow		3,732,968
3.	Expected return on valuation assets		31,205,691
4.	Expected valuation assets		411,322,961
5.	Investment gain/(loss) for year ending:	**Initial Amount** / **Amortization**	
	June 30, 2003	($16,213,796) / ($3,242,759)	
	June 30, 2002	(40,605,179) / (8,121,036)	
	June 30, 2001	(70,167,218) / (14,033,444)	
	Total amortization amount		($25,397,239)
6.	Actuarial value of assets as of June 30, 2003		$385,925,722
7.	Market value of assets		$320,524,691
8.	Actuarial value as a percentage of market value		120.4%

The chart shows the determination of the actuarial value of assets as of the valuation date

CHART 7D Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2003

1.	Actuarial value of Assets of June 30, 2002		$135,874,582
2.	Net Cash flow		12,877,511
3.	Expected return on valuation assets		11,740,850
4.	Expected valuation assets		160,492,944
5.	Investment gain/(loss) for year ending:	**Initial Amount** / **Amortization**	
	June 30, 2003	($8,854,359) / ($1,770,872)	
	June 30, 2002	(21,587,295) / (4,317,457)	
	June 30, 2001	(14,752,573) / (2,945,115)	
	Total amortization amount		($9,033,444)
6.	Actuarial value of assets as of June 30, 2003		$151,459,500
7.	Market value of assets		$125,533,413
8.	Actuarial value as a percentage of market value		120.7%

These charts show the change in the actuarial value of assets versus the market value over the past eight years

CHART 8A Non - Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2003

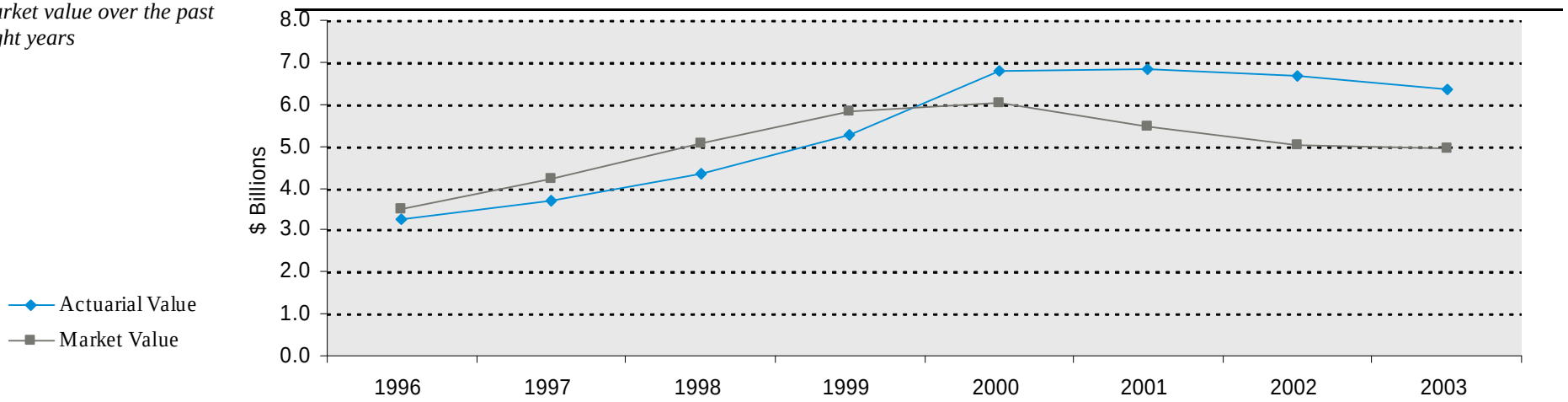
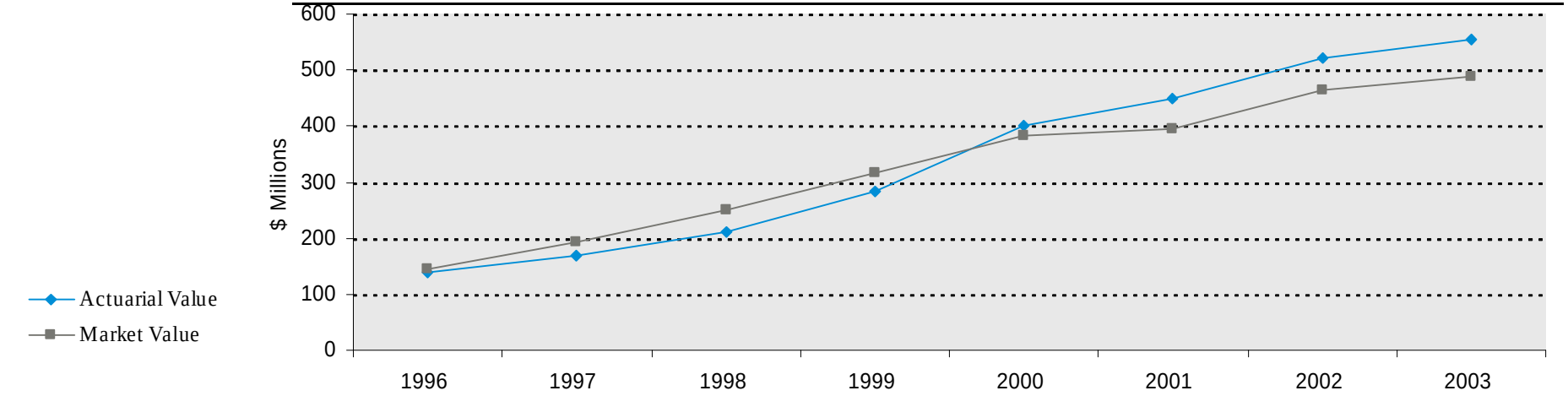


CHART 8B Non – Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2003



These charts show the change in the actuarial value of assets versus the market value over the past eight years.

CHART 8C Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 - 2003

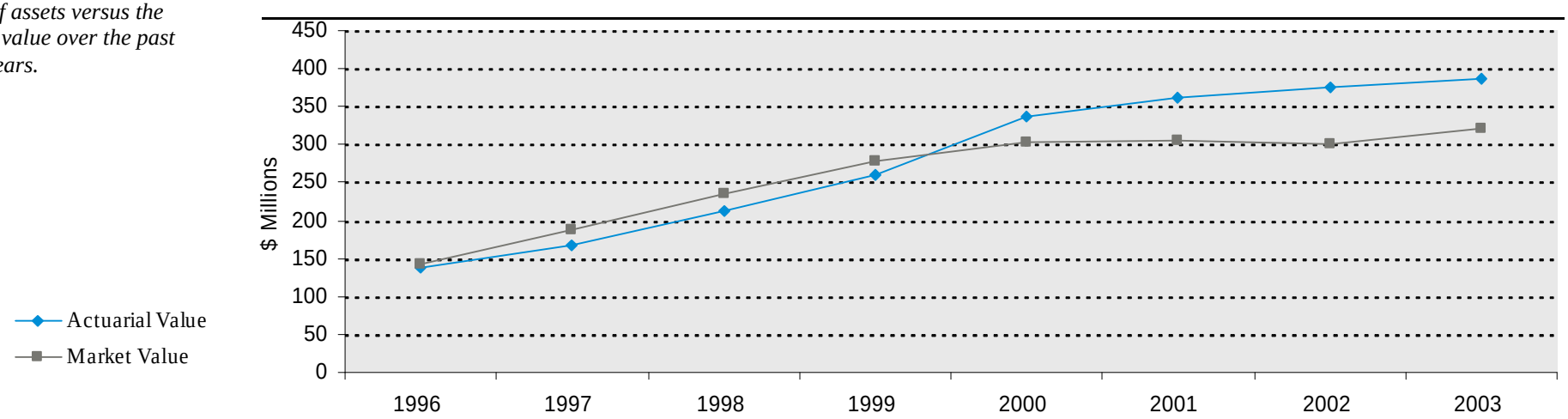
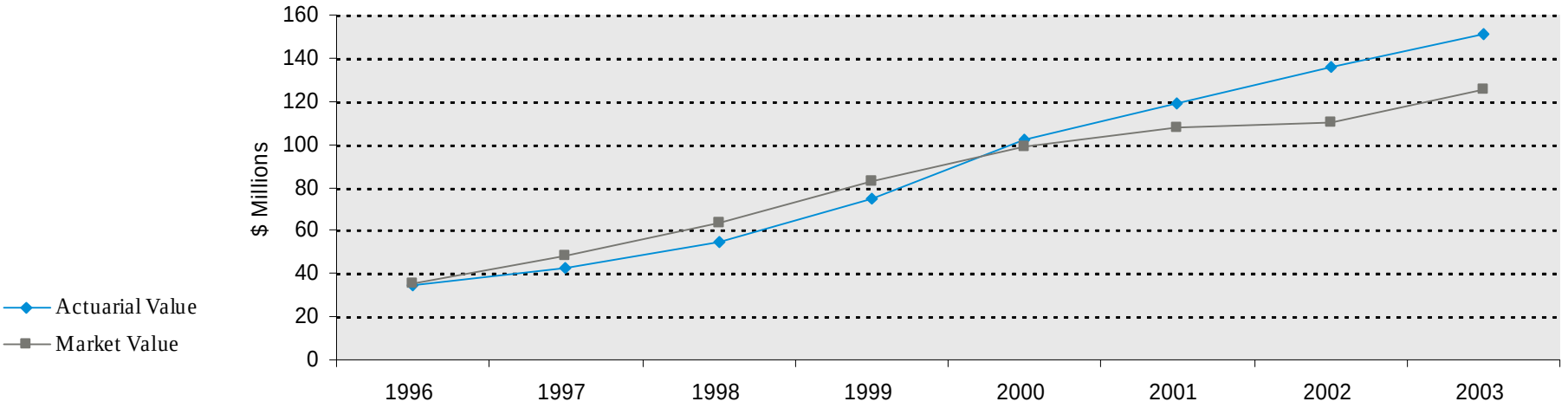


CHART 8D Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 - 2003



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Chart 9 presents a summary of experience for the year. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 9
Actuarial Experience for Year Ended June 30, 2003

	Non - Hazardous Retirement	Non - Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Net gain/(loss) from investments*	-$564,788,719	-$24,296,691	-$25,397,238	-$9,033,443
2. Net gain/(loss) from administrative expenses	410,287	-204,581	27,670	-18,185
3. Net gain/(loss) from other experience**	-262,445,800	12,186,175	-421,336	-9,909,855
4. Net experience gain/(loss): (1) + (2) + (3)	-$826,824,232	-$12,315,097	-$25,790,904	-$18,961,483

** Details in Chart 10*

*** Details in Chart 13*

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.25%. Chart 10 shows the investment experience for each plan for the year.

Since the actual return for the year was less than the assumed return, each plan experienced an actuarial loss during the year ended June 30, 2003 with regard to its investments.

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. Chart 11, which follows, shows the rate of return on an actuarial basis compared to the market value investment return for the last seven years.

This chart shows the gain/(loss) due to investment experience.

CHART 10
Actuarial Value Investment Experience for Year Ended June 30, 2003

	Non - Hazardous Retirement	Non - Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Actual return	-$27,194,088	$19,258,247	$5,808,452	$2,707,407
2. Average value of assets	6,516,298,558	527,938,645	378,250,786	142,313,338
3. Actual rate of return: (1) ÷ (2)	-0.42%	3.65%	1.54%	1.90%
4. Assumed rate of return	8.25%	8.25%	8.25%	8.25%
5. Expected return: (2) x (4)	$537,594,631	$43,554,938	$31,205,690	$11,740,850
6. Actuarial gain/(loss): (1) – (5)	-$564,788,719	-$24,296,691	-$25,397,238	-$9,033,443

CHART 11A Non – Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1997 - 2003

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$146,203,000	4.55%	$353,572,876	11.01%	$734,397,620	20.10%	$910,518,691	21.82%
1998	152,888,000	4.19	581,509,620	15.92	934,160,772	21.51	814,726,366	16.17
1999	156,952,000	3.61	777,208,772	17.90	1,662,814,063	31.95	296,103,000	5.12
2000	182,697,000	3.51	1,480,117,063	28.44	214,238,910	3.19	-356,720,409	-6.02
2001	190,953,000	2.84	23,285,910	0.35	57,231,322	0.85	-234,794,209	-4.38
2002	176,702,012	2.63	-119,470,690	-1.78	-27,194,088	-0.42	196,518,742	4.04
2003	149,729,179	2.30	-176,923,267	-2.72	3,045,965	0.06	159,535,251	3.92
Total	$1,156,124,191		$2,919,300,284		$4,075,424,475		$2,370,871,317	
					Average return	9.29%		2.65%

Note: Each year's yield is weighted by the average asset value in that year.

CHART 11B Non – Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1997 - 2003

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$6,266,000	4.27%	$7,297,760	4.98%	$13,563,760	9.25%	$32,202,859	21.16%
1998	6,681,000	3.78	18,867,211	10.69	25,548,211	14.47	41,655,634	20.75
1999	7,812,000	3.45	33,590,703	14.85	41,402,703	18.30	32,809,846	12.31
2000	9,937,000	3.24	59,527,365	19.40	69,464,365	22.63	21,484,500	6.35
2001	3,134,000	0.76	17,691,919	4.27	20,825,919	5.03	-16,271,591	-4.09
2002	69,396,040	14.63	-47,483,602	-10.01	21,912,438	4.62	19,539,589	4.64
2003	8,087,818	1.53	11,170,430	2.12	19,258,247	3.65	8,051,711	1.70
Total	$111,313,858		$100,661,786		$211,975,643		$139,472,548	
					Average return	8.87%		3.46%

Note: Each year's yield is weighted by the average asset value in that year.

CHART 11C Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1997 - 2003

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$6,235,000	4.37%	$12,614,790	8.85%	$18,849,790	13.22%	$33,085,394	22.25%
1998	7,448,000	4.33	27,633,380	16.07	35,081,380	20.41	37,614,603	19.57
1999	8,129,000	3.74	28,803,701	13.24	36,932,701	16.98	33,133,032	13.78
2000	10,191,000	3.84	55,002,145	20.72	65,193,145	24.56	11,840,783	4.16
2001	11,390,000	3.33	2,780,043	0.81	14,170,043	4.14	-7,670,713	-2.49
2002	10,843,431	2.97	-2,881,301	-0.79	7,962,130	2.18	-10,682,347	-3.46
2003	11,243,712	2.97	-5,435,260	-1.44	5,808,452	1.54	14,775,635	4.86
Total	$65,480,143		$118,517,498		$183,997,641		$112,096,387	
					Average return	8.29%		2.86%

Note: Each year's yield is weighted by the average asset value in that year.

CHART 11D Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1997 - 2003

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$1,598,000	4.32%	$1,417,382	3.83%	$3,015,382	8.16%	$7,814,169	20.54%
1998	1,770,000	3.90	4,654,412	10.24	6,424,412	14.14	9,312,446	18.15
1999	2,065,000	3.48	8,430,863	14.21	10,495,863	17.69	9,787,878	14.37
2000	2,571,000	3.22	14,603,588	18.30	17,174,588	21.52	6,166,757	7.02
2001	3,134,000	2.91	2,815,835	2.61	5,949,835	5.52	-2,878,243	-2.74
2002	2,060,266	1.63	1,076,714	0.85	3,136,980	2.49	-11,232,521	-9.83
2003	2,168,713	1.52	538,694	0.38	2,707,407	1.90	2,834,247	2.44
Total	$15,366,979		$33,537,488		$48,904,467		$21,804,733	
					Average return	7.66%		0.95%

Note: Each year's yield is weighted by the average asset value in that year.

This chart illustrates how this leveling effect has actually worked over the years 1997 - 2003

CHART 12A Non –Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2003

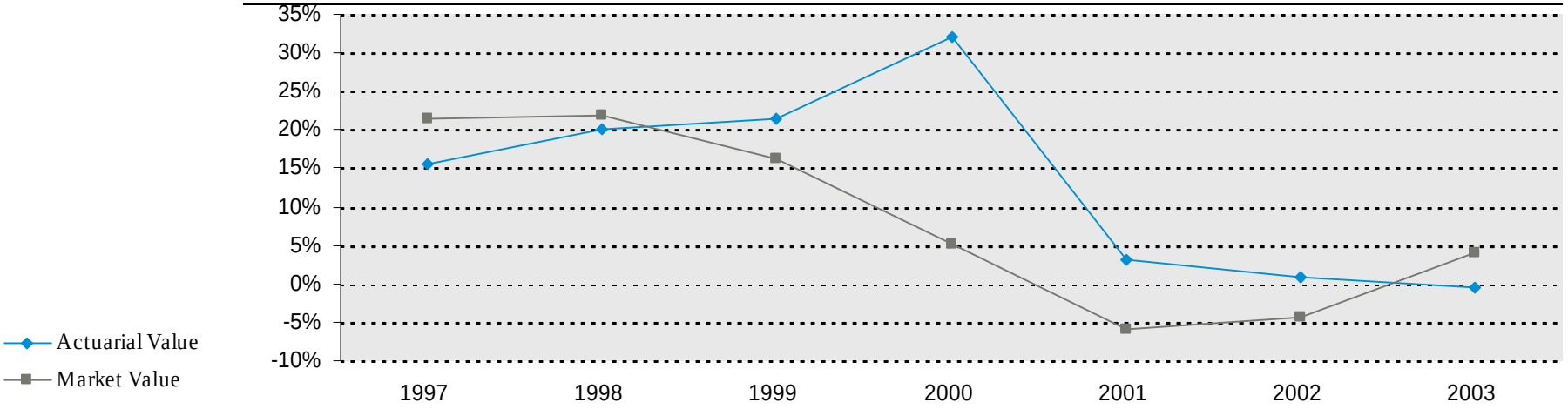
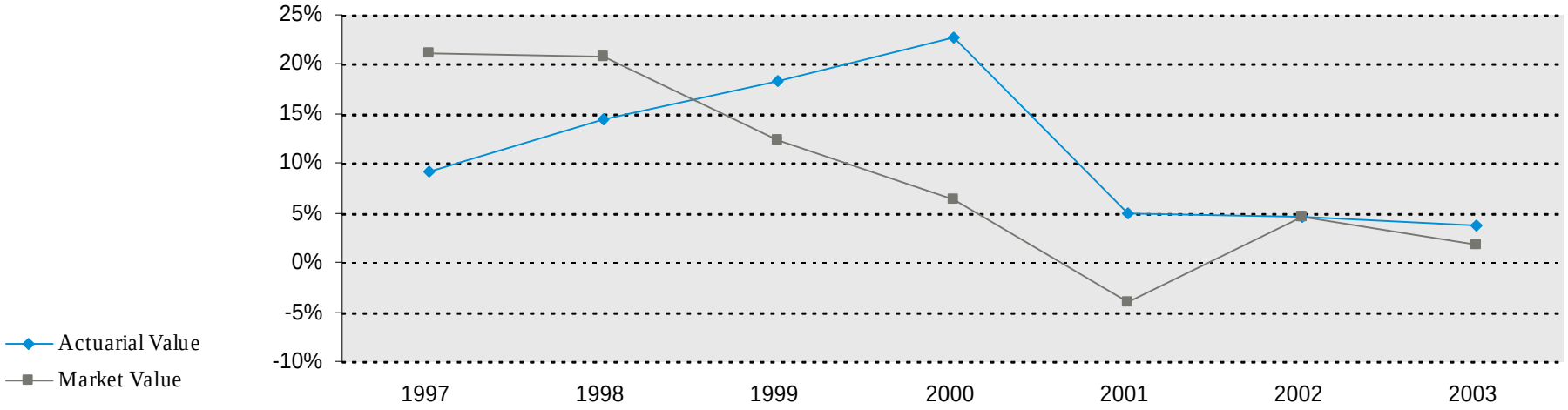


CHART 12B Non – Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2003



This chart illustrates how this leveling effect has actually worked over the years 1997 - 2003 .

CHART 12C Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2003

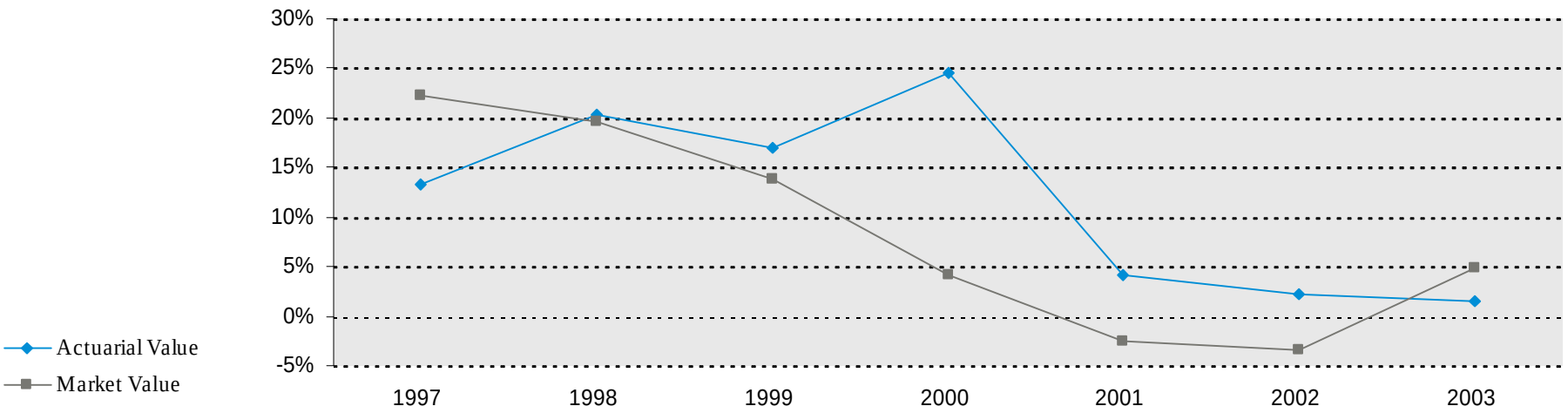
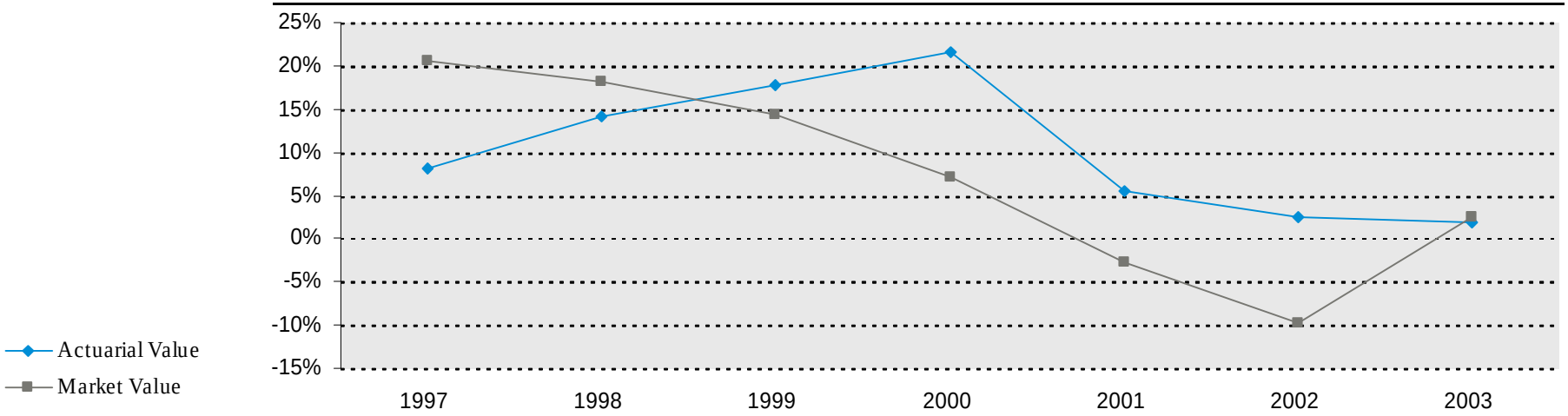


CHART 12D Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2003



Administrative Expenses

Current assumptions include an assumption for the cost of administration for the retirement funds but not for the insurance funds. This assumption is modified with each valuation to estimate expenses for the upcoming fiscal year. The following summarizes the past year's experience and presents the assumptions for the next year.

Plan	Year End 2003 Assumption	Year End 2003 Actual Expense	Gain/Loss* for the Year	Year End 2004 Assumption
Non-Hazardous Retirement	$5,213,214	$4,834,196	$410,287	$5,000,000
Non-Hazardous Insurance	$-0-	$188,989	-$204,581	$-0-
Hazardous Retirement	$419,454	$393,893	$26,670	$400,000
Hazardous Insurance	$-0-	$16,799	-$18,185	$-0-

* *Includes interest to year-end.*

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- COLA's granted in the year,
- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

A brief summary of the demographic gain/(loss) experience of the Funds for the year ended June 30, 2003 is shown in the chart below

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 13 Experience Due to Changes in Demographics for Year Ended June 30, 2003	Non – Hazardous Retirement	Non – Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. COLA	-$92,406,781	N/A	-$3,136,382	N/A
2. Other	-170,039,018	N/A	2,715,046	N/A
3. Total	-$262,445,799	$12,186,714	-$421,336	-$9,909,855
4. Percentage of Actuarial Accrued Liability	4.0%	0.6%	0.1%	3.5%

D. RECOMMENDED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability. This total amount is then divided by the projected salaries for active members to determine the funding rate.

The recommended contribution is based on a 30-year amortization of bases established each year as specified in the law governing the Plan.

Exhibit H provides details on these amortization bases.

The contribution rates as of June 30, 2003 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions

Charts 14 and 15 present the Recommended Contributions and reconciliations from the prior valuation.

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 14A Non-Hazardous Retirement

Recommended Contribution

	As of June 30			
	2003		2002	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$157,362,643	9.49%	$153,894,963	9.63%
2. Administrative expenses	5,000,000	0.30%	5,213,214	0.33%
3. Expected employee contributions	-82,402,448	-4.97%	-79,359,148	-4.97%
4. Employer normal cost: (1) + (2) + (3)	$79,960,195	4.82%	$79,749,029	4.99%
5. Actuarial accrued liability	6,520,463,188		6,026,094,764	
6. Actuarial value of assets	6,351,318,832		6,654,084,196	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	$169,144,356		-$627,989,432	
8. Payment on unfunded/(overfunded) actuarial accrued liability	4,798,737	0.29%	-34,170,196	-2.14%
9. Total recommended contribution: (4) + (8)	$84,758,932	5.11%	$45,578,833	2.86%
10. Projected salary	$1,658,604,696		$1,597,344,487	

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 15A Non – Hazardous Retirement

Reconciliation of Recommended Contribution from June 30, 2002 to June 30, 2003

Recommended Contribution as of June 30, 2002	$45,578,833
Effect of COLA for retirees	$4,629,457
Effect of investment (gain)/loss	28,295,164
Effect of net other changes	$6,255,478
Total change	$39,180,099
Recommended Contribution as of June 30, 2003	$84,758,932

CHART 14B Non-hazardous Insurance

Recommended Contribution

	As of June 30 2003	
	Amount	**% of Salary**
1. Employer normal cost	$99,112,032	5.98%
2. Actuarial accrued liability	2,093,210,321	
3. Actuarial value of assets	553,885,082	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$1,539,325,239	
5. Payment on unfunded/(overfunded) actuarial accrued liability	88,453,158	5.33%
6. Full EANC contribution: (1) + (5)	$187,565,190	11.31%
7. Projected salary	$1,658,604,696	
8. Prior year's funding rate	N/A	4.67%
9. Years to reach full EANC	N/A	13 years
10. Additional amount	N/A	0.51%
11. Total recommended contribution rate	N/A	5.18%

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 14C Hazardous Retirement
Recommended Contribution

	As of June 30			
	2003		2002	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$20,541,359	15.91%	$21,324,718	17.01%
2. Administrative expenses	400,000	0.31%	419,454	0.33%
3. Expected employee contributions	-9,736,239	-7.54%	-9,489,787	-7.57%
4. Employer normal cost: (1) + (2) + (3)	$11,205,120	8.68%	$12,254,385	9.77%
5. Actuarial accrued liability	356,879,133		322,069,164	
6. Actuarial value of assets	385,925,722		376,384,302	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	-$29,046,589		-$54,315,138	
8. Payment on unfunded/(overfunded) actuarial accrued liability	-1,830,431	-1.42%	-3,007,373	-2.40%
9. Total recommended contribution: (4) + (8)	$9,374,689	7.26%	$9,247,012	7.37%
10. Projected salary	$129,088,956		$125,371,604	

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 15B Hazardous Retirement

Reconciliation of Recommended Contribution from June 30, 2002 to June 30, 2003

Recommended Contribution as of June 30, 2002	$9,247,012
Effect of COLA for retirees	$157,129
Effect of investment (gain)/loss	1,272,368
Effect of net other changes	-1,301,820
Total change	$127,677
Recommended Contribution as of June 30, 2003	$9,374,689

CHART 14D Hazardous Insurance

Recommended Contribution

	As of June 30 2003	
	Amount	**% of Salary**
1. Employer normal cost	$19,864,464	15.39%
2. Actuarial accrued liability	283,178,335	
3. Actuarial value of assets	151,459,500	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$131,718,835	
5. Payment on unfunded/(overfunded) actuarial accrued liability	7,422,833	5.75%
6. Full EANC contribution: (1) + (5)	$27,287,297	21.14%
7. Projected salary	$129,088,956	
8. Prior year's funding rate	N/A	11.47%
9. Years to reach full EANC	N/A	13 years
10. Additional amount	N/A	0.74%
11. Total recommended contribution rate	N/A	12.21%

EXHIBIT A – Non-Hazardous

Table of Plan Coverage

Category	Year Ended June 30 2003	2002	Change From Prior Year
Active members in valuation:			
Number	49,158	48,555	1.2%
Average age	42.2	41.5	N/A
Average service	10.0	1.0	N/A
Total salary	$1,658,604,696	$1,597,344,487	3.8%
Average salary	$33,740	$32,898	2.6%
Account balances	$859,895,312	N/A	N/A
Total active vested members	32,229	30,883	4.4%
Vested terminated members	3,456	3,415	1.2%
Retired participants:			
Number in pay status	21,563	20,989	-2.7%
Average age	67.2	N/A	N/A
Average monthly benefit	$1,328	N/A	N/A
Disabled members:			
Number in pay status	1,913	1,959	-2.3%
Average age	60.9	N/A	N/A
Average monthly benefit	$811	N/A	N/A
Beneficiaries in pay status	3,757	3,755	0.1%
Inactive nonvested members due a refund	5,785	14,299	-59.5%

EXHIBIT A – Hazardous

Table of Plan Coverage

Category	Year Ended June 30 2003	2002	Change From Prior Year
Active members in valuation:			
Number	4,189	4,211	-0.5%
Average age	41.6	41.8	N/A
Average service	7.2	6.9	N/A
Total salary	$129,088,956	$125,371,604	3.0%
Average salary	$30,816	$29,772	3.5%
Account balances	$71,414,721	0	N/A
Total active vested members	2,530	2,174	16.4%
Vested terminated members	145	127	14.2%
Retired participants:			
Number in pay status	1,085	961	12.9%
Average age	61.3	N/A	N/A
Average monthly benefit	$870	N/A	N/A
Disabled members:			
Number in pay status	100	108	7.4%
Average age	55.6	N/A	N/A
Average monthly benefit	$464	N/A	N/A
Beneficiaries in pay status	172	139	23.7%
Inactive nonvested members due a refund members	637	946	-32.7%

EXHIBIT B – Non-Hazardous

Members in Active Service as of June 30, 2003 By Age, Years of Service, and Average Salary

		Years of Service								
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	4,468	4,345	123	- -	- -	- -	- -	- -	- -	- -
	$21,312	$21,138	$27,446	- -	- -	- -	- -	- -	- -	- -
25 - 29	4,490	3,681	785	24	- -	- -	- -	- -	- -	- -
	25,989	25,578	27,794	$29,996	- -	- -	- -	- -	- -	- -
30 - 34	5,496	3,003	1,760	690	43	- -	- -	- -	- -	- -
	29,784	27,181	32,199	34,172	$42,385	- -	- -	- -	- -	- -
35 - 39	6,010	2,375	1,410	1,433	700	92	- -	- -	- -	- -
	32,835	27,286	34,255	36,662	39,671	$42,677	- -	- -	- -	- -
40 - 44	6,904	2,203	1,332	1,234	1,064	849	222	- -	- -	- -
	35,341	28,097	32,956	36,744	42,428	44,060	$46,403	- -	- -	- -
45 - 49	7,727	1,965	1,328	1,190	936	909	1,126	273	- -	- -
	37,676	28,615	32,997	36,801	39,756	44,464	48,676	$54,356	- -	- -
50 - 54	6,795	1,545	1,055	1,080	884	690	797	638	106	- -
	39,604	29,517	33,554	35,849	39,847	44,869	49,775	57,722	$63,267	- -
55 - 59	4,337	923	738	787	564	432	443	292	139	19
	39,004	29,162	33,822	34,689	39,803	42,912	47,490	59,386	66,257	$73,978
60 - 64	2,087	402	346	398	358	207	201	106	35	34
	38,534	29,715	34,627	35,620	38,607	39,238	46,792	57,099	72,154	70,336
65 - 69	564	87	97	138	103	55	41	24	9	10
	38,824	31,120	32,972	35,041	38,414	42,550	50,915	62,905	55,769	75,955
70 & over	280	51	44	62	43	27	25	11	7	10
	35,608	22,216	31,681	32,238	32,335	47,178	37,915	47,103	62,714	87,511
Total	49,158	20,580	9,018	7,036	4,695	3,261	2,855	1,344	296	73
	$33,740	$26,184	$32,692	$35,958	$40,211	$43,847	$48,427	$57,356	$65,481	$74,406

EXHIBIT B – Hazardous

Members in Active Service as of June 30, 2003 By Age, Years of Service, and Average Salary

		Years of Service							
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39
Under 25	417	414	3	- -	- -	- -	- -	- -	- -
	$18,695	$18,617	$29,532	- -	- -	- -	- -	- -	- -
25 - 29	371	309	61	1	- -	- -	- -	- -	- -
	23,925	23,360	26,668	$31,248	- -	- -	- -	- -	- -
30 - 34	515	298	182	35	- -	- -	- -	- -	- -
	26,655	24,881	28,191	33,781	- -	- -	- -	- -	- -
35 - 39	531	214	125	172	17	3	- -	- -	- -
	29,573	25,715	30,458	33,368	$31,794	$37,740	- -	- -	- -
40 - 44	573	211	110	178	56	18	- -	- -	- -
	32,555	28,253	30,955	35,325	40,666	40,159	- -	- -	- -
45 - 49	605	190	126	206	46	32	4	1	- -
	35,104	29,168	33,246	36,848	47,221	47,065	$48,441	$44,604	- -
50 - 54	589	196	98	215	43	25	7	5	- -
	36,452	31,477	35,885	37,754	42,227	47,751	52,390	58,150	- -
55 - 59	420	109	77	180	37	12	2	3	- -
	37,139	32,454	31,987	39,726	41,926	50,932	56,040	57,600	- -
60 - 64	137	30	27	67	7	3	1	- -	2
	35,922	29,600	33,583	37,515	39,821	55,764	48,432	- -	$59,304
65 - 69	25	4	8	12	- -	- -	1	- -	- -
	34,709	27,867	31,940	36,935	- -	- -	57,516	- -	- -
70 & over	6	3	- -	1	2	- -	- -	- -	- -
	39,296	33,116	- -	48,480	43,974	- -	- -	- -	- -
Total	4,189	1,978	817	1,067	208	93	15	9	2
	$30,816	$25,355	$31,076	$36,649	$41,941	$46,391	$51,902	$56,461	$59,304

EXHIBIT C – Non-Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Contribution income:				
Employer contributions	$7,597,450		$97,946	
Member contributions	137,124,487		109,485,664	
Less administrative expenses	-4,834,196		-4,399,326	
Net contribution income		$139,887,741		$105,184,284
Investment income:				
Interest, dividends and other income	$162,800,335		$193,696,012	
Adjustment toward market value	-173,618,496		-116,159,469	
Less investment fees	-16,375,927		-20,305,221	
Net investment income		-27,194,088		57,231,322
Total income available for benefits		$112,693,653		$162,415,606
Less benefit payments:				
Benefit payments	$404,896,488		$345,665,528	
Refunds	7,257,758		4,097,348	
Net benefit payments		$412,154,246		$349,762,876
Change in reserve for future benefits		-$299,460,593		-$187,347,270

EXHIBIT C – Non-Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Contribution income:				
Employer contributions	$65,335,219		$93,912,017	
Less administrative expenses	-188,989		-345,297	
Net contribution income		$65,146,230		$93,566,720
Investment income:				
Interest, dividends and other income	$8,936,118		$70,478,040	
Adjustment toward market value	11,352,797		-47,320,151	
Less investment fees	-1,030,667		-1,245,451	
Net investment income		19,258,247		21,912,438
Total income available for benefits		$84,404,477		$115,479,158
Less benefit payments:		$51,587,482		$43,695,857
Change in reserve for future benefits		$32,816,994		$71,783,301

EXHIBIT C – Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Contribution income:				
Employer contributions	$7,322,607		$7,764,651	
Member contributions	11,553,286		10,740,148	
Less administrative expenses	-393,893		-288,542	
Net contribution income		$18,482,000		$18,216,257
Investment income:				
Interest, dividends and other income	$23,004,515		$13,512,431	
Adjustment toward market value	-5,219,001		-2,687,523	
Less investment fees	-11,977,062		-2,862,778	
Net investment income		5,808,452		7,962,130
Total income available for benefits		$24,290,452		$26,178,387
Less benefit payments:				
Benefit payments	$13,372,965		$10,202,893	
Refunds	1,159,808		1,074,889	
Net benefit payments		$14,532,773		$11,277,782
Change in reserve for future benefits		$9,757,679		$14,900,605

EXHIBIT C – Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Contribution income:				
Employer contributions	$15,883,263		$15,887,398	
Less administrative expenses	-16,799		-28,501	
Net contribution income		$15,866,464		$15,858,897
Investment income:				
Interest, dividends and other income	$2,501,945		$2,480,266	
Adjustment toward market value	590,939		1,121,501	
Less investment fees	-385,477		-464,787	
Net investment income		2,707,407		3,136,980
Total income available for benefits		$18,573,871		$18,995,877
Less benefit payments:		$2,936,708		$2,449,250
Change in reserve for future benefits		$15,637,163		$16,546,627

EXHIBIT D - Non-Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Cash equivalents		$386,424		$10,475,948
Accounts receivable:				
Investment accounts receivable	$164,961		$276,000	
Year end interest receivable	27,079,407		32,305,000	
Year end accounts receivable	28,458,448		24,702,000	
Total accounts receivable		55,702,816		57,283,000
Investments:				
Bonds	$1,772,036,808		$1,695,472,000	
Stocks	2,686,553,684		2,702,708,000	
Mortgage	257,880,946		295,890,000	
Real estate	6,641,045		9,057,000	
Fixed assets	348,001		0	
Short-term investments	152,860,643		237,836,000	
Total investments at market value		4,876,321,127		4,940,963,000
Total assets		$4,932,410,367		$5,008,721,948
Less accounts payable:				
Total accounts payable		-$2,967,182		-$3,531,000
Net assets at market value		$4,929,443,185		$5,005,190,948
Net assets at actuarial value		$6,351,318,832		$6,654,084,196

EXHIBIT D – Non-Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Cash equivalents		$31,327		$8,590,515
Accounts receivable:				
Investment accounts receivable	$20,559		$23,000	
Year end interest receivable	1,180,298		1,129,000	
Year end accounts receivable	5,457,039		8,590,000	
Total accounts receivable		6,657,897		9,742,000
Investments:				
Bonds	$48,016,250		$43,160,000	
Stocks	343,727,178		311,828,000	
Short-term investments	89,311,504		93,020,000	
Total investments at market value		481,054,933		448,008,000
Total assets		$487,744,156		$466,340,515
Less accounts payable:		-$469,183		-$676,000
Net assets at market value		$487,274,973		$465,664,515
Net assets at actuarial value		$553,885,082		$521,250,455

EXHIBIT D – Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Cash equivalents		$138,875		$2,105,829
Accounts receivable:				
Investment accounts receivable	$16,612		$24,000	
Year end interest receivable	1,641,693		1,993,000	
Year end accounts receivable	3,035,820		2,871,000	
Total accounts receivable		4,694,125		4,888,000
Investments:				
Bonds	$104,852,057		$99,477,000	
Stocks	175,804,373		153,251,000	
Mortgage	15,234,599		17,449,000	
Real Estate	1,994,056		2,047,000	
Fixed Assets	28,325		0	
Short-term Investments	18,056,968		22,909,000	
Total investments at market value		315,970,378		295,133,000
Total assets		$320,803,378		$302,126,829
Less accounts payable:		-$278,687		-$327,000
Net assets at market value		$320,524,691		$301,799,829
Net assets at actuarial value		$385,925,722		$376,384,302

EXHIBIT D – Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Cash equivalents		$25,058		$1,633,410
Accounts receivable:				
Investment accounts receivable	$6,430		$9,000	
Year end interest receivable	327,938		288,000	
Year end accounts receivable	1,334,207		1,381,000	
Total accounts receivable		1,668,575		1,678,000
Investments:				
Bonds	$12,870,568		$11,569,000	
Short-term investments	8,203,293		7,971,000	
Total investments at market value		123,897,406		106,518,000
Total assets		$125,591,039		$109,829,410
Less accounts payable:		-$57,626		-$60,000
Net assets at market value		$125,533,413		$109,769,410
Net assets at actuarial value		$151,459,500		$135,874,582

EXHIBIT E – Non-Hazardous Retirement

Development of the Fund Through June 30, 2003

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$102,968,000	$62,886,000	$499,775,876	$4,514,000	$215,104,000	$3,683,995,005
1998	112,188,000	67,595,000	734,397,620	5,037,000	237,066,000	4,356,072,625
1999	107,515,000	141,399,000	934,160,772	5,330,000	269,477,000	5,264,340,397
2000	115,055,000	107,824,000	1,662,814,063	5,764,000	337,594,000	6,806,675,460
2001	21,911,066	104,125,142	214,238,910	5,974,401	296,233,490	6,844,742,687
2002	97,946	109,485,664	57,231,322	7,710,547	349,762,876	6,654,084,196
2003	7,597,450	137,124,487	-27,194,088	8,138,967	412,154,246	6,351,318,832

** Net of investment fees*

EXHIBIT E – Non-Hazardous Insurance

Development of the Fund Through June 30, 2003

Year Ended June 30	Employer Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$37,710,000	$13,563,760	$32,000	$21,144,000	$168,479,973
1998	39,504,000	25,548,211	32,000	23,395,000	210,105,184
1999	56,770,000	41,402,703	92,000	24,481,000	283,704,887
2000	76,926,000	69,464,365	171,000	30,364,000	399,560,252
2001	66,874,871	20,825,919	344,092	37,286,345	449,630,605
2002	93,912,017	21,912,438	508,748	43,695,857	521,250,455
2003	65,335,219	19,258,247	371,357	51,587,482	553,885,082

** Net of investment fees*

EXHIBIT E – Hazardous Retirement

Development of the Fund Through June 30, 2003

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$15,151,000	$6,189,000	$18,849,790	$287,000	$10,498,000	$166,717,238
1998	16,033,000	6,520,000	35,081,380	303,000	11,834,000	212,214,618
1999	19,444,000	8,323,000	36,932,701	349,000	16,726,000	259,839,319
2000	21,633,000	9,375,000	65,193,145	415,000	19,412,000	336,213,464
2001	10,377,708	10,545,410	14,170,043	411,956	9,217,194	361,677,475
2002	7,764,651	10,740,148	7,962,130	482,320	11,277,782	376,384,302
2003	7,322,607	11,553,286	5,808,452	610,152	14,532,773	385,925,722

** Net of investment fees*

EXHIBIT E – Hazardous Insurance

Development of the Fund Through June 30, 2003

Year Ended June 30	Employer Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$6,279,000	$3,015,382	$8,000	$866,000	$42,684,374
1998	6,632,000	6,424,412	8,000	1,126,000	54,606,786
1999	10,774,000	10,495,863	13,000	1,284,000	74,579,649
2000	12,047,000	17,174,588	19,000	1,570,000	102,212,237
2001	13,226,298	5,949,835	33,246	1,982,382	119,372,742
2002	15,887,398	3,136,980	73,288	2,449,250	135,874,582
2003	15,883,263	2,707,407	69,044	2,936,708	151,459,500

** Net of investment fees*

EXHIBIT F – Non-Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$256,534,456	$24,108,559	17.00	$324,745,497
06/30/1991	30	103,692,389	9,289,027	18.00	130,656,828
06/30/1992	30	-212,448,599	-18,141,457	19.00	-265,652,992
06/30/1993	30	-57,917,315	-4,714,303	20.00	-71,675,224
06/30/1994	30	59,519,052	4,617,966	21.00	72,720,577
06/30/1995	30	65,659,241	4,855,912	22.00	79,027,692
06/30/1996	30	-188,573,585	-13,293,248	23.00	-223,139,418
06/30/1997	30	-277,888,742	-18,656,579	24.00	-322,422,165
06/30/1998	30	-326,522,755	-20,877,834	25.00	-370,855,006
06/30/1999	30	-362,615,121	-22,081,519	26.00	-402,541,554
06/30/2000	30	-964,739,576	-55,950,476	27.00	-1,045,293,646
06/30/2001	30	584,703,884	32,295,380	28.00	617,538,494
06/30/2002	30	811,152,084	42,669,509	29.00	834,081,596
06/30/2003	30	811,953,677	40,677,800	30.00	811,953,677
Total			$4,798,737		$169,144,356

** Level percentage of salary*

EXHIBIT F – Non-Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$988,745,810	$69,700,344	23.00	$1,169,984,467
06/30/1997	30	-31,222,593	-2,096,187	24.00	-36,226,209
06/30/1998	30	19,914,214	1,273,313	25.00	22,617,983
06/30/1999	30	-69,145,663	-4,210,639	26.00	-76,759,079
06/30/2000	30	44,198,913	2,563,335	27.00	47,889,446
06/30/2001	30	237,627,565	13,125,058	28.00	250,971,771
06/30/2002	30	36,483,146	1,919,144	29.00	37,514,446
06/30/2003	30	123,332,414	6,178,790	30.00	123,332,414
Total			$88,453,158		$1,539,325,239

** Level percentage of salary*

EXHIBIT F – Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	-$366,782	-$34,469	17.00	-$464,307
06/30/1991	30	8,515,857	762,872	18.00	10,730,343
06/30/1992	30	-2,222,347	-189,771	19.00	-2,778,898
06/30/1993	30	1,873,766	152,519	20.00	2,318,867
06/30/1994	30	2,736,468	212,317	21.00	3,343,426
06/30/1995	30	4,677,834	345,955	22.00	5,630,256
06/30/1996	30	-33,735,166	-2,378,117	23.00	-39,918,876
06/30/1997	30	-7,971,975	-535,213	24.00	-9,249,533
06/30/1998	30	-13,896,455	-888,538	25.00	-15,783,189
06/30/1999	30	-13,902,335	-846,585	26.00	-15,433,078
06/30/2000	30	-35,735,060	-2,072,470	27.00	-38,718,874
06/30/2001	30	18,907,681	1,044,342	28.00	19,969,460
06/30/2002	30	24,131,600	1,269,409	29.00	24,813,748
06/30/2003	30	26,494,066	1,327,318	30.00	26,494,066
Total			-$1,830,431		-$29,046,589

** Level percentage of salary*

EXHIBIT F – Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$61,002,123	$4,300,265	23.00	$72,183,909
06/30/1997	30	15,100,456	1,013,797	24.00	17,520,400
06/30/1998	30	2,832,306	181,097	25.00	3,216,850
06/30/1999	30	-10,377,564	-631,944	26.00	-11,520,204
06/30/2000	30	-3,445,265	-199,810	27.00	-3,732,940
06/30/2001	30	20,464,709	1,130,342	28.00	21,613,926
06/30/2002	30	3,711,155	195,220	29.00	3,816,061
06/30/2003	30	28,620,833	1,433,866	30.00	28,620,833
Total			$7,422,833		$131,718,835

** Level percentage of salary*

EXHIBIT G

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

EXHIBIT I – Non-Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 3,757 beneficiaries in pay status)		27,233
2.	Members inactive during year ended June 30, 2003 with vested rights		3,456
3.	Members active during the year ended June 30, 2003		49,158
	Fully vested	32,229	
	Not vested	16,929	
4.	Inactive nonvested members due a refund as of June 30, 2003		5,785

The actuarial factors as of the valuation date are as follows:

1.	Normal cost, including administrative expenses		$162,362,643
2.	Present value of future benefits		8,335,898,846
3.	Present value of future normal costs		1,815,435,658
4.	Actuarial accrued liability		6,520,463,188
	Retired participants and beneficiaries	$3,784,438,563	
	Inactive members with vested rights	40,606,646	
	Active members	2,675,767,039	
	Inactive nonvested members due a refund	19,650,940	
5.	Actuarial value of assets ($4,929,443,185 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		6,351,318,832
6.	Unfunded actuarial accrued liability		-$169,144,356

EXHIBIT I – Non-Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Normal cost		$99,112,032
2.	Present value of future benefits		3,280,459,560
3.	Present value of future normal costs		1,187,249,239
4.	Actuarial accrued liability		2,093,210,321
	Retired participants and beneficiaries	$1,027,275,896	
	Inactive members with vested rights	62,330,226	
	Active members	1,003,604,199	
5.	Actuarial value of assets ($487,274,973 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		553,885,082
6.	Unfunded actuarial accrued liability		$1,539,325,239

EXHIBIT I – Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 172 beneficiaries in pay status		1,357
2.	Members inactive during year ended June 30, 2003 with vested rights		145
3.	Members active during the year ended June 30, 2003		4,189
	Fully vested	2,530	
	Not vested	1,659	
4.	Inactive nonvested members due a refund as of June 30, 2003		637

The actuarial factors as of the valuation date are as follows:

1.	Normal cost, including administrative expenses		$20,941,359
2.	Present value of future benefits		547,388,664
3.	Present value of future normal costs		190,509,531
4.	Actuarial accrued liability		356,879,133
	Retired participants and beneficiaries	$131,807,101	
	Inactive members with vested rights	2,765,028	
	Active members	221,256,800	
	Inactive non-vested members	1,050,204	
5.	Actuarial value of assets ($320,524,691 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		385,925,722
6.	Unfunded actuarial accrued liability		-$29,046,589

EXHIBIT I – Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Normal cost		$19,864,464
2.	Present value of future benefits		482,578,911
3.	Present value of future normal costs		199,400,576
4.	Actuarial accrued liability		283,178,335
	Retired participants and beneficiaries	$109,326,730	
	Inactive members with vested rights	4,652,721	
	Active members	169,198,884	
5.	Actuarial value of assets ($125,533,413 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		151,459,500
6.	Unfunded actuarial accrued liability		$131,718,835

EXHIBIT II – Non-Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ Overfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/1996	$3,237,983,129	$3,295,362,361	$57,379,232	98.26%	$1,232,974,460	4.65%
06/30/1997	3,683,995,005	3,463,047,650	-220,947,355	106.38	1,234,798,738	-17.89
06/30/1998	4,356,072,625	3,800,014,746	-556,057,879	114.63	1,321,004,266	-42.09
06/30/1999	5,264,340,397	4,327,622,821	-936,717,576	121.65	1,330,766,100	-70.39
06/30/2000	6,806,675,460	4,876,825,772	-1,929,849,688	139.57	1,409,504,668	-136.92
06/30/2001	6,844,742,687	5,444,035,294	-1,400,707,393	125.73	1,505,299,220	-93.05
06/30/2002	6,654,084,196	6,026,094,764	-627,989,432	110.42	1,595,809,458	-39.35
06/30/2003	6,351,318,832	6,520,463,188	169,144,356	97.41	1,658,604,696	10.20

EXHIBIT II – Non-Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ Overfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/1996	$138,382,213	$1,127,128,023	$988,745,810	12.28%	$1,232,974,460	80.19%
06/30/1997	168,479,973	1,153,952,891	985,472,918	14.60	1,234,798,738	79.81
06/30/1998	210,105,184	1,242,183,993	1,032,078,809	16.91	1,321,004,266	78.13
06/30/1999	283,704,887	1,273,364,800	989,659,913	22.28	1,330,766,100	74.37
06/30/2000	399,560,252	1,457,475,358	1,057,915,106	27.41	1,409,504,668	75.06
06/30/2001	449,630,605	1,769,583,098	1,319,952,493	25.41	1,505,299,220	87.69
06/30/2002	521,250,455	1,907,683,881	1,386,433,426	27.32	1,595,809,458	86.88
06/30/2003	553,885,082	2,093,210,321	1,539,325,239	26.46	1,658,604,696	92.81

EXHIBIT II – Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ Overfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/1996	$137,312,448	$120,042,122	-$17,270,326	114.39%	$85,933,543	-20.10%
06/30/1997	166,717,238	140,918,460	-25,798,778	118.31	87,757,075	-29.40
06/30/1998	212,214,618	171,735,076	-40,479,542	123.57	93,130,996	-43.47
06/30/1999	259,839,319	204,282,788	-55,556,531	127.20	103,464,123	-53.70
06/30/2000	336,213,464	243,365,557	-92,847,907	138.15	115,639,439	-80.29
06/30/2001	361,677,475	285,193,761	-76,483,714	126.82	122,857,992	-62.25
06/30/2002	376,384,302	322,069,164	-54,315,138	116.86	125,275,925	-43.36
06/30/2003	385,925,722	356,879,133	-29,046,589	108.14	129,088,956	-22.50

EXHIBIT II – Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ Overfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/1996	$34,263,992	$95,266,115	$61,002,123	35.97%	$85,933,543	70.99%
06/30/1997	42,684,374	120,511,351	77,826,977	35.42	87,757,075	88.68
06/30/1998	54,606,786	137,394,162	82,787,376	39.74	93,130,996	88.89
06/30/1999	74,579,649	149,158,586	74,578,937	50.00	103,464,123	72.08
06/30/2000	102,212,237	175,167,613	72,955,376	58.35	115,639,439	63.09
06/30/2001	119,372,742	214,450,822	95,078,080	55.66	122,857,992	77.39
06/30/2002	135,874,582	236,819,050	100,944,468	57.37	125,275,925	80.58
06/30/2003	151,459,500	283,178,335	131,718,835	53.49	129,088,956	102.04

EXHIBIT III – Non - Hazardous

Supplementary Information Required by the GASB

Valuation date	June 30, 2003
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	17 to 30 years 5 year smoothing method
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	27,233
Terminated members entitled to, but not yet receiving benefits	3,456
Active members	49,158
Total	79,847

EXHIBIT III – Non - Hazardous (continued)
Supplementary Information Required by the GASB

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	6,602	5,471	249	212	111	559
Family; Pre-Medicare	542	522	8	6	5	1
Parent Plus, Pre-Medicare	428	361	7	5	2	53
Couple; Pre-Medicare	756	699	26	13	15	3
Medicare Regular	1,855	63	232	427	414	719
Medicare High Option	11,311	6,203	1,584	1,160	550	1,814
Total	21,494	13,319	2,106	1,823	1,097	3,149

EXHIBIT III – Hazardous

Supplementary Information Required by the GASB

Valuation date	June 30, 2003
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	17 to 30 years 5 year smoothing method
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	1,357
Terminated members entitled to, but not yet receiving benefits	145
Active members	4,189
Total	5,691

EXHIBIT III – Hazardous (continued)
Supplementary Information Required by the GASB

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	417	320	39	46	9	3
Family; Pre-Medicare	106	103	1	1	1	- -
Parent Plus, Pre-Medicare	53	45	2	3	3	- -
Couple; Pre-Medicare	128	109	7	8	4	- -
Medicare Regular	62	7	8	27	20	- -
Medicare High Option	494	299	75	95	24	1
Total	1,260	883	132	180	61	4

EXHIBIT IV Non - Hazardous

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: 1983 Group Annuity Mortality Table with margins.

Disabled: Pension Benefit Guaranty Corporation Table for Disabled Lives Receiving Social Security.

Termination Rates before Retirement:

	Rate (%)			
	Mortality		Disability	Withdrawal*
Age	Male	Female		
20	0.04	0.02	0.03	2.40
25	0.05	0.03	0.03	2.40
30	0.06	0.03	0.04	2.40
35	0.09	0.05	0.06	2.40
40	0.12	0.07	0.10	2.00
45	0.22	0.10	0.21	1.80
50	0.39	0.16	0.42	1.60
55	0.61	0.25	0.79	1.20
60	0.92	0.42	1.39	0.20

*Withdrawal rates during the first five years of employment are 35%, 10%, 7%, 5%, and 4%.

Retirement Rates:

Age	Retirement Probability*
55-57	0.04
58-59	0.05
60-61	0.06
62	0.25
63-64	0.10
65	0.50
66-67	0.20
68	0.25
69	0.40
70 and older	1.00

*Retirement probability is 0.25 at first age member is eligible for unreduced retirement benefits.

Retirement Age for Inactive Vested Participants: 65

Percent Married: 100%

Age of Spouse: Females 3 years younger than males.

Net Investment Return: 8.25%

Salary Increases:

Years of Service	Rate (%)
1	12.00
2	10.00
3	8.00
4 or more	6.50

Payroll Growth: 5.0%

Retiree Medical Insurance Election:	Future retirees will select medical coverage in the same proportion that current retirees have selected coverage.

Monthly Contribution Rates:

	Pre-Medicare Coverage Rate in Effect on Valuation Date
Region 1	$278.76
Region 2	292.00
Region 3	397.08
Region 4	269.44

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem Blue Seniors	$103.18	$286.53	3,329	20,772
Anthem Blue Seniors Network	98.18	281.53	539	1,701
Bankers Life Medicare	82.70	195.35	732	410

	Weighted Medicare Coverage Rate in Effect on Valuation Date	
	Low Option	High Option
All Members	$99.34	$284.52

Medical Contribution Rate Increases:

Year	Rate(%)
2003-2005	10.00
2006-2010	9.00
2011-2015	8.00
2016-2020	7.50
2021 and thereafter	7.00

Members with Multiple Service Records: For active members with service in more than one system, the liability has been valued as follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.
- Future service is projected only under the system in which the member is currently active.
- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Administrative Expenses:	$5,000,000
Actuarial Value of Assets:	Sum of expected valuation assets and amortizations of the investment gains/(losses) from the current and four prior years. Expected valuation assets is equal to the actuarial value at the beginning of the year plus the expected return on assets using the assumed valuation interest rate from the prior year plus actual cash flows from the prior year. The current year investment gain/(loss) is determined as the difference between actual market value and expected actuarial value less any unamortized portions of the gain/(loss) from the previous four years.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.

EXHIBIT IV Hazardous

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: 1983 Group Annuity Mortality Table with margins plus 0.05% per year.

Disabled: Pension Benefit Guaranty Corporation Table for Disabled Lives Receiving Social Security plus 0.05% per year.

Termination Rates before Retirement:

	Rate (%)			
	Mortality		Disability	Withdrawal*
Age	Male	Female		
20	0.09	0.07	0.04	3.04
25	0.10	0.08	0.04	3.04
30	0.11	0.08	0.05	3.38
35	0.14	0.10	0.07	2.44
40	0.17	0.12	0.13	1.50
45	0.27	0.15	0.26	0.75
50	0.44	0.21	0.53	0.00
55	0.66	0.30	0.99	0.00
60	0.97	0.47	1.74	0.00

* Withdrawal rates during the first five years of employment are 30%, 8%, 4%, 4%, and 4%.

Retirement Rates: 50% will retire as soon as eligible for unreduced benefit and balance will continue until age 60.

Retirement Age for Inactive Vested Participants: 55

Percent Married: 100%

Age of Spouse: Females 3 years younger than males.

Dependent Children: For duty related death benefits, it is assumed that the employee is survived by two dependent children each age 6.

Net Investment Return: 8.25%

Salary Increases:

Years of Service	Rate (%)
1	12.00
2	10.00
3	8.00
4 or more	6.50

Payroll Growth: 5.0%

Retiree Medical Insurance Election: Future retirees will select medical coverage in the same proportion that current retirees have selected coverage.

Monthly Contribution Rates:

Pre-Medicare Coverage
Rate in Effect on Valuation Date

	Single	Family	Parent Plus	Couple
Region 1	$278.76	$627.24	$376.32	$564.52
Region 2	292.00	657.04	394.24	591.32
Region 3	397.08	893.56	536.12	804.20
Region 4	269.44	606.40	363.84	545.76

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem Blue Seniors	$103.18	$286.53	3,329	20,772
Anthem Blue Seniors Network	98.18	281.53	539	1,701
Bankers Life Medicare	82.70	195.35	732	410

	Weighted Medicare Coverage Rate in Effect on Valuation Date	
	Low Option	**High Option**
All Members	$99.34	$284.52

Medical Contribution Rate Increases:	**Year**	**Rate(%)**
	2003-2005	10.00
	2006-2010	9.00
	2011-2015	8.00
	2016-2020	7.50
	2021 and thereafter	7.00

Members with Multiple Service Records: For active members with service in more than one system, the liability has been valued as follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.
- Future service is projected only under the system in which the member is currently active.
- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Administrative Expenses:	$400,000
Actuarial Value of Assets:	Sum of expected valuation assets and amortization of the investment gains/(losses) from the current and four prior years. Expected valuation assets is equal to the actuarial value at the beginning of the year plus the expected return on assets using the assumed valuation interest rate from the prior year plus actual cash flows from the prior year. The current year investment gain/(loss) is determined as the difference between actual market value and expected actuarial value less any unamortized portions of the gain/(loss) from the previous four years.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.

EXHIBIT V Non – Hazardous

Summary of Plan Provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	June 30 through June 30
Normal Retirement:	
Age Requirement	65
Service Requirement	None
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factors is 2.00%. For these members who retire between January 1, 1999 and January 31, 2009 with at least 240 months service, the benefit factor is 2.20%. Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period is less than forty-eight, one or more additional fiscal years shall be used. For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 48 months service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Early Retirement:	
Requirement	Age 55 with 60 months service or any age with 25 years service
Amount	Normal retirement benefit reduced by 5% per year for the first five years and 4% per year for the next five years for each year the member is younger than age 65 or has less than 27 years service, whichever is smaller.
Disability:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit except that service credit will be added to total service for the period from the last day of paid employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Vesting:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

Lump - sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

EXHIBIT V Hazardous
Summary of Plan Provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	June 30 through June 30
Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.49% times final average compensation times years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Early Retirement:	
Requirement	Age 50 with 15 years service or any age with 20 years service
Amount	Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Disability:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Vesting:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55
Pre-Retirement Death Benefit (not in line of duty):	
Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to benefit member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.
Spouse's Pre-Retirement Death Benefit (in line of duty):	
Requirement	None

Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the members' age, years of service and final compensation at date of death.
Dependent Non – Spouse's Death Benefit (in line of duty):	
Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.
Dependent Child's Death Benefit (in line of duty):	
Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.
Post-Retirement Death Benefit:	
Lump - sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

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County Employees Retirement System

Actuarial Valuation and Review
as of June 30, 2003

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SEGAL

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November 6, 2003

Board of Trustees
County Employees Retirement System
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601-6124

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2003. It summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2004 and analyzes the preceding year's experience.

The census information on which our calculations were based was prepared by the System and the financial information was provided by the Auditor. That assistance is gratefully acknowledged.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By:

Leon F. (Rocky) Joyner, Jr., ASA, MAAA
Vice President and Actuary

K. Eric Fredén, FSA, MAAA
Associate Actuary

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Purpose

This report has been prepared by The Segal Company to present a valuation of the County Employees Retirement System as of June 30, 2003. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2003, provided by the Board;
- The assets of the Plan as of June 30, 2003, provided by the Auditor;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

- The County Employees Retirement System's basic financial goal is to establish contributions which fully fund the system's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.
- The retirement contribution rate is determined using the Entry Age Normal Cost (EANC) Method. Under this method the employer contribution required is the sum of the normal cost, administration expenses and the sum of the 30-year amortization payments established each valuation due to changes in the Unfunded Actuarial Accrued Liability.
- The medical insurance contribution rate is determined in a similar method except that the actual contribution rate is determined by increasing the prior year's rate by an amount necessary to raise the insurance rate to the full EANC amount by the year 2016.
- The rates calculated in this report may be adopted by the Board for July 1, 2004 through June 30, 2005.

- The following summarizes the required contributions for the year beginning July 1, 2004 and compares them to the prior valuation amounts.

Non-Hazardous

Plan	July 1, 2004 Rate	July 1, 2003 Rate
Retirement	2.82%	2.39%
Insurance	5.66	4.95
Total	8.48%	7.34%

Hazardous

Plan	July 1, 2004 Rate	July 1, 2003 Rate
Retirement	9.31%	6.76%
Insurance	12.77	11.75
Total	22.08%	18.51%

- The increase in the total rate is due to:

Non-Hazardous

Investment loss	1.22%
Retiree COLA	0.16
Insurance Phase-in	0.71
Other experience	-0.95
Total change	1.14%

Hazardous

Investment loss	1.57%
Retiree COLA	0.29
Insurance Phase-in	1.02
Other experience	0.69
Total change	3.57%

- The actuarial valuation report as of June 30, 2003 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan. Because the actuarial value of assets involves a smoothing method, changes in market value are not fully reflected immediately in the actuarial value of assets. Rather, that effect is spread over a period of years.
- As indicated in Section 2, Subsection B of this report, the total unrecognized investment losses as of June 30, 2003 are:

Non-Hazardous

Plan	Unrecognized investment losses as of 6/30/2003
Retirement	$1,111,698,930
Insurance	84,392,980

Hazardous

Plan	Unrecognized investment losses as of 6/30/2003
Retirement	$298,210,384
Insurance	45,977,741

These investment losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent they are not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.25% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.25% rate and all other actuarial assumption are met, the contribution requirements would still increase in each of the next few years.

Summary of Key Valuation Results – Non-Hazardous

	Valuation Date	
	June 30, 2003	June 30, 2002
Contributions for next fiscal year:		
Retirement	2.82%	2.39%
Insurance	5.66	4.95
Total	8.48%	7.34%
Funded status as of valuation date:		
Retirement		
Actuarial Accrued Liability	$4,417,597,802	$4,165,355,149
Actuarial Value of Assets	5,286,580,047	5,397,787,158
Funded Ratio on Actuarial Value of Assets	119.67%	129.59%
Market Value of Assets	$4,174,881,117	$4,126,756,301
Funded Ratio on Market Value of Assets	94.51%	99.07%
Insurance		
Actuarial Accrued Liability	$2,176,963,259	$1,977,577,038
Actuarial Value of Assets	520,060,105	450,497,307
Funded Ratio on Actuarial Value of Assets	23.89%	22.78%
Market Value of Assets	$435,667,125	$365,332,585
Funded Ratio on Market Value of Assets	20.01%	18.47%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	27,092	26,147
Number of vested former members	4,692	4,470
Number of former members due a refund	27,634	26,508
Number of active members	82,288	79,850
Total salary	$1,796,451,180	$1,688,460,789
Average salary	21,831	21,145

Summary of Key Valuation Results – Hazardous

	Valuation Date	
	June 30, 2003	June 30, 2002
Contributions for next fiscal year:		
Retirement	9.31%	6.76%
Insurance	12.77	11.75
Total	22.08%	18.51%
Funded status as of valuation date:		
Retirement		
Actuarial Accrued Liability	$1,499,628,782	$1,327,291,273
Actuarial Value of Assets	1,467,004,856	1,485,511,793
Funded Ratio on Actuarial Value of Assets	97.82%	111.92%
Market Value of Assets	$1,168,794,472	$1,144,349,093
Funded Ratio on Market Value of Assets	77.94%	86.22%
Insurance		
Actuarial Accrued Liability	$935,650,662	$781,184,974
Actuarial Value of Assets	269,190,080	234,683,878
Funded Ratio on Actuarial Value of Assets	28.77%	30.04%
Market Value of Assets	223,212,339	187,533,847
Funded Ratio on Market Value of Assets	23.86%	24.01%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	3,737	3,483
Number of vested former members	165	148
Number of former members due a refund	616	552
Number of active member	9,286	8,949
Total salary	$374,700,732	$346,319,146
Average salary	40,351	38,699

A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

Active Members

Plan costs are affected by the age, years of service and salaries of active members. In this year's non-hazardous valuation, there were 82,288 active members with an average age of 43.8, average years of service of 7.6 years and average salaries of $21,831. The 79,850 active members in the prior valuation had an average age of 43.0, average service of 7.6 years and average salaries of $21,145.

In the hazardous plan there were 9,286 active members with an average age of 37.3, average years of service of 7.8 years and average salaries of $40,351. The 8,949 active members in the prior valuation had an average age of 36.3, average service of 7.8 years and average salaries of $38,699.

Inactive Members

There were 4,692 non-hazardous members with a vested right to a deferred or immediate vested benefit.

In addition, there were 27,634 members entitled to a return of their employee contributions.

For the hazardous plan there were 165 members with a vested right to a deferred or immediate vested benefit.

In addition, there were 616 members entitled to a return of their employee contributions.

Retired Participants and Beneficiaries

As of June 30, 2003, 24,121 non-hazardous retired participants and 2,971 beneficiaries were receiving total monthly benefits of $18,320,686. For comparison, in the previous valuation, there were 23,296 retired participants and 2,851 beneficiaries receiving monthly benefits of $16,529,087.

For the hazardous plan there were 3,235 retired participants and 502 beneficiaries receiving total monthly benefits of $6,026,847. For comparison, in the previous valuation, there were 3,246 retired participants and 237 beneficiaries receiving monthly benefits of $5,466,256.

A historical perspective of how the member population has changed over the past eight valuations can be seen in this chart.

CHART 1A Non-Hazardous

Member Population: 1996 – 2003

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1996	66,273	2,254	16,208	0.28
1997	69,219	2,503	17,797	0.29
1998	71,426	2,839	18,976	0.31
1999	74,151	3,238	20,687	0.32
2000	77,419	3,500	22,708	0.34
2001	78,773	4,080	24,415	0.36
2002	79,850	4,470	26,147	0.38
2003	82,288	4,692	27,092	0.39

CHART 1B Hazardous

Member Population: 1996 – 2003

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1996	6,281	85	1,961	0.33
1997	6,513	100	2,217	0.36
1998	6,800	117	2,392	0.37
1999	7,488	128	2,704	0.38
2000	7,951	112	2,984	0.39
2001	8,586	148	3,221	0.39
2002	8,949	148	3,483	0.41
2003	9,286	165	3,737	0.42

**Excludes terminated members due a refund of employee contributions*

These graphs show a distribution of active members by age and by years of service.

CHART 2A Non - Hazardous

Distribution of Active Members by Age as of June 30, 2003

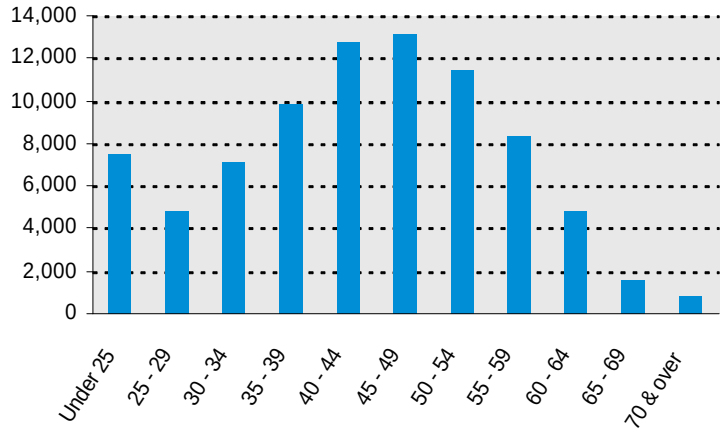
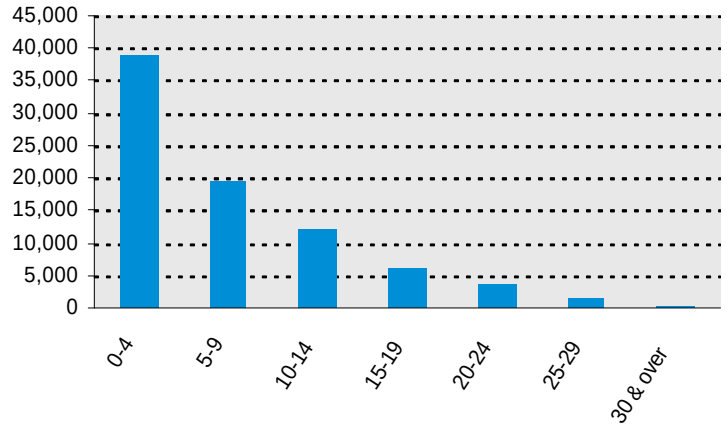


CHART 3A Non - Hazaradous

Distribution of Active Members by Years of Service as of June 30, 2003



These graphs show a distribution of the current retired participants based on their monthly amount and age, by type of pension.

CHART 4A Non - Hazardous

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2003

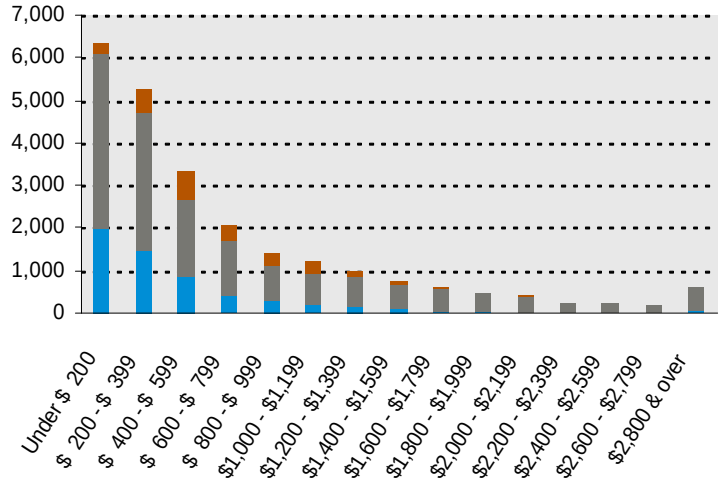
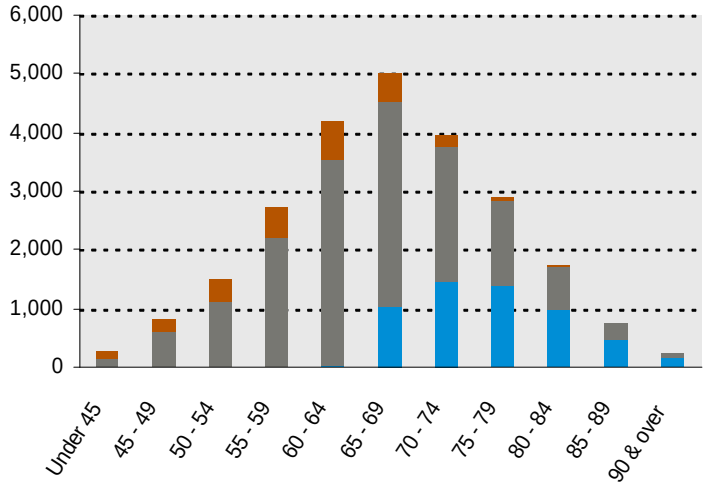


CHART 5A Non - Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2003



These graphs show a distribution of active members by age and by years of service

CHART 2B Hazardous

Distribution of Active Members by Age as of June 30, 2003

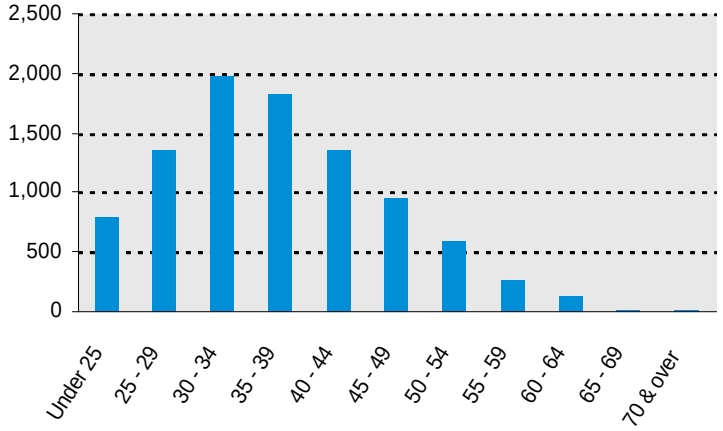
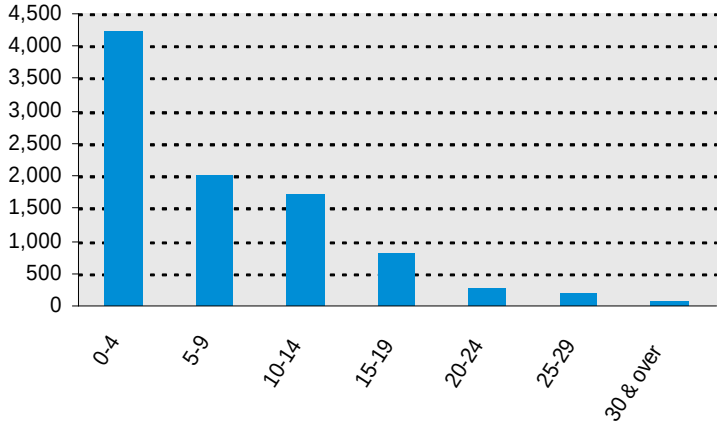


CHART 3B Hazardous

Distribution of Active Members by Years of Service as of June 30, 2003



These graphs show a distribution of the current retired participants based on their monthly amount and age, by type of pension.

CHART 4B Hazardous

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2003

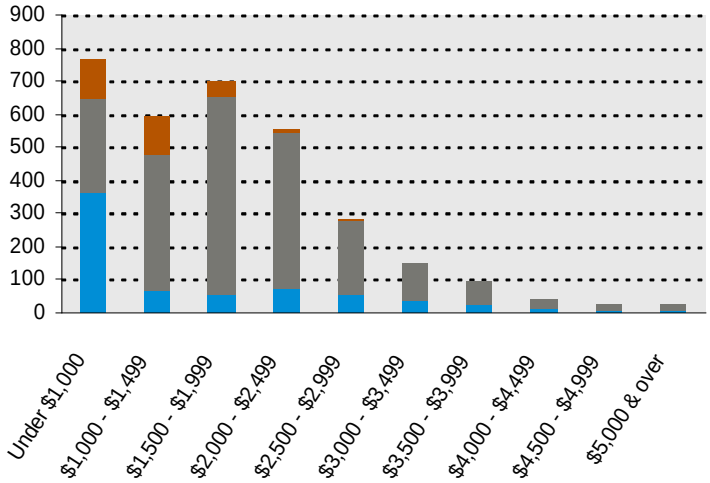
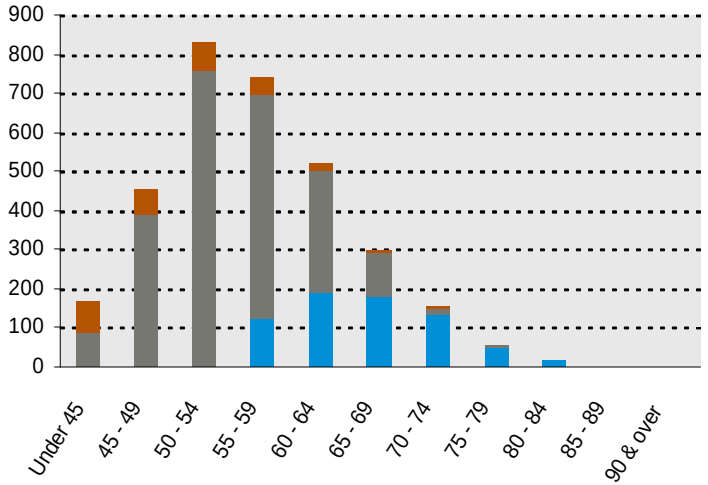


CHART 5B Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2003



B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative expenses) and net investment earnings (less investment fees) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The charts depict the components of changes in the actuarial value of assets over the last seven years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6A Non - Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2003

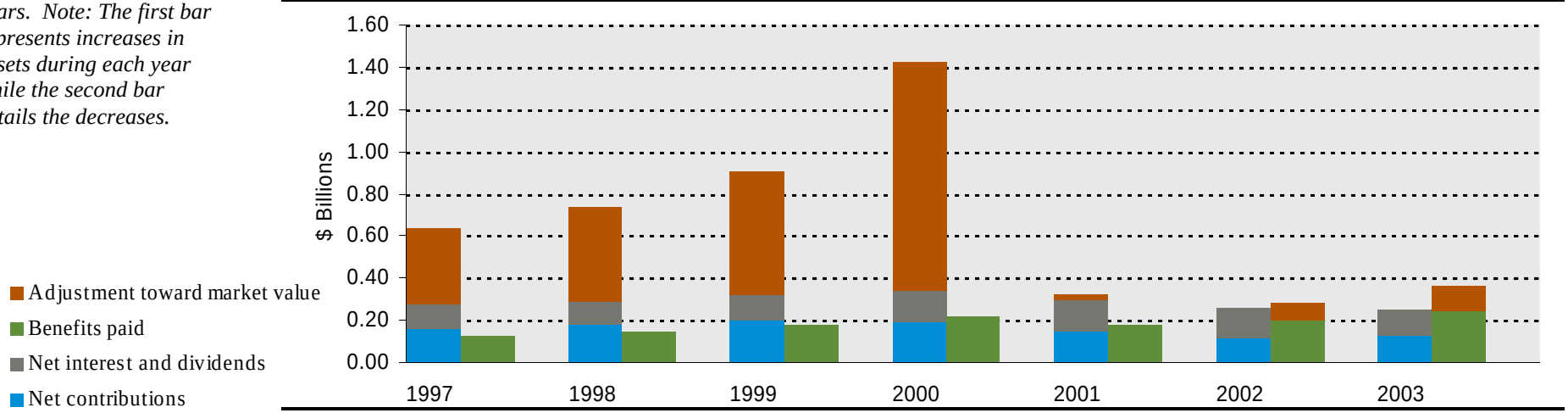
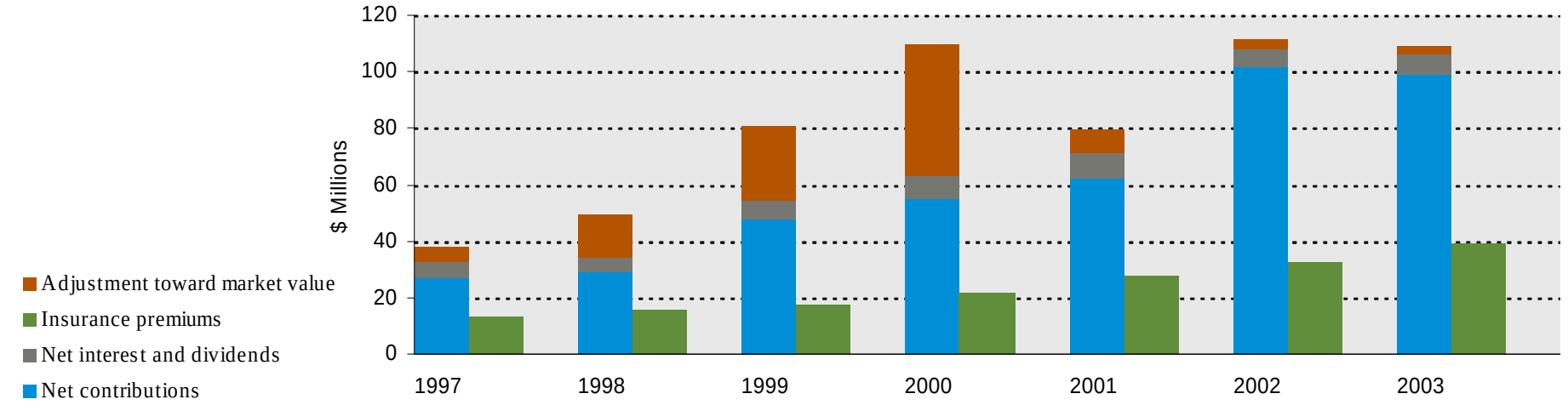


CHART 6B Non - Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2003



The charts depict the components of changes in the actuarial value of assets over the last seven years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6C Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 - 2003

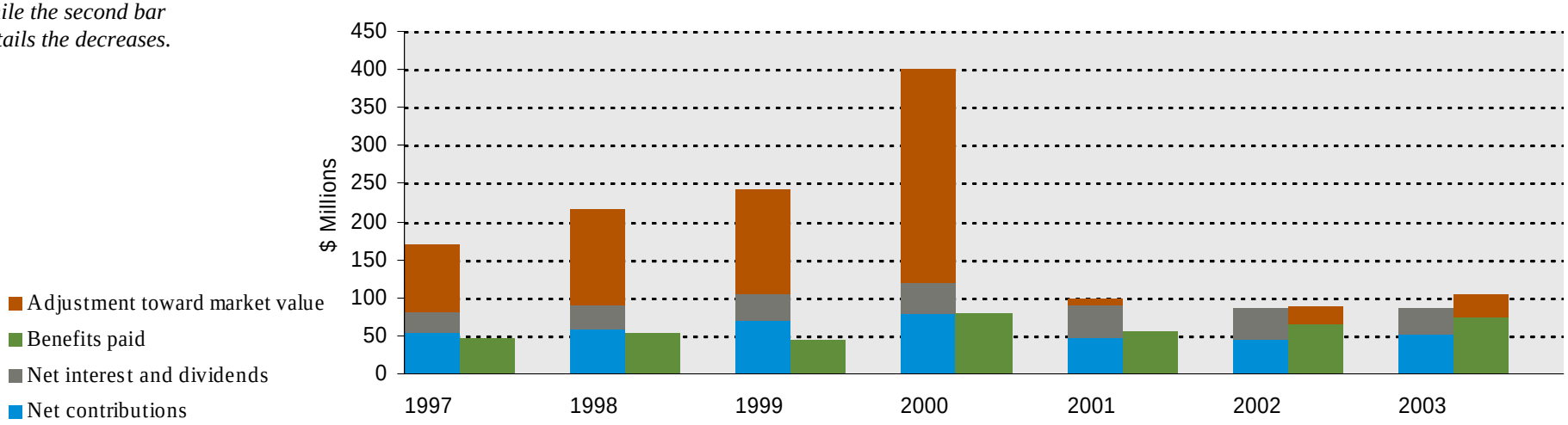
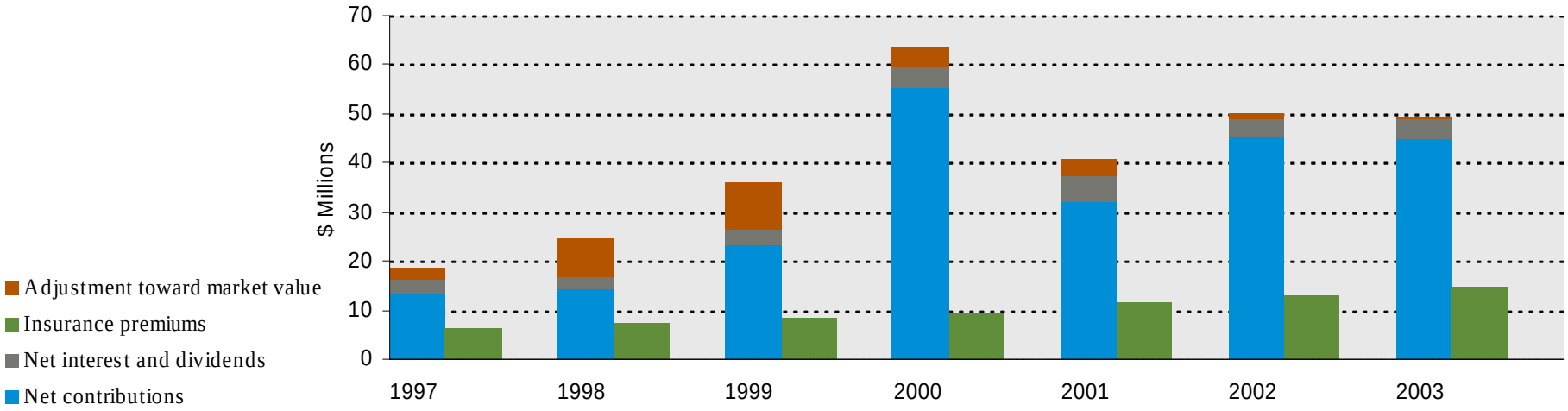


CHART 6D Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 - 2003



The chart shows the determination of the actuarial value of assets as of the valuation date

CHART 7A Non – Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2003

1.	Actuarial Value of Assets of June 30, 2002		$5,397,787,158
2.	Net Cash flow		(114,253,076)
3.	Expected return on valuation assets		440,604,501
4.	Expected valuation assets		5,724,138,583
5.	Investment gain/(loss) for year ending:	**Initial Amount** / **Amortization**	
	June 30, 2003	($278,226,609) / ($55,645,322)	
	June 30, 2002	(626,456,069) / (125,291,214)	
	June 30, 2001	(1,283,110,002) / (256,622,000)	
	Total amortization amount		($437,558,536)
6.	Actuarial value of assets as of June 30, 2003		$5,286,580,047
7.	Market value of assets		$4,174,881,117
8.	Actuarial value as a percentage of market value		126.6%

The chart shows the determination of the actuarial value of assets as of the valuation date

CHART 7B Non – Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2003

1.	Actuarial Value of Assets of June 30, 2002		$450,497,307
2.	Net Cash flow		59,540,807
3.	Expected return on valuation assets		39,622,086
4.	Expected valuation assets		549,660,199
5.	Investment gain/(loss) for year ending:	**Initial Amount** / **Amortization**	
	June 30, 2003	($28,828,353) / ($5,765,671)	
	June 30, 2002	(68,307,263) / (13,661,453)	
	June 30, 2001	(50,864,852) / (10,172,970)	
	Total amortization amount		($29,600,094)
6.	Actuarial value of assets as of June 30, 2003		$520,060,105
7.	Market value of assets		$435,667,125
8.	Actuarial value as a percentage of market value		119.4%

The chart shows the determination of the actuarial value of assets as of the valuation date

CHART 7C Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2003

1.	Actuarial Value of Assets of June 30, 2002		$1,485,511,794
2.	Net Cash flow		(22,724,675)
3.	Expected return on valuation assets		121,617,330
4.	Expected valuation assets		1,584,404,448
5.	Investment gain/(loss) for year ending:	**Initial Amount** / **Amortization**	
	June 30, 2003	($74,447,276) / ($14,889,455)	
	June 30, 2002	(168,161,440) / (33,632,288)	
	June 30, 2001	(344,389,248) / (68,877,850)	
	Total amortization amount		($117,399,593)
6.	Actuarial value of assets as of June 30, 2003		$1,467,004,856
7.	Market value of assets		$1,168,794,472
8.	Actuarial value as a percentage of market value		125.5%

The chart shows the determination of the actuarial value of assets as of the valuation date

CHART 7D Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2003

1.	Actuarial Value of Assets of June 30, 2002		$234,683,878
2.	Net Cash flow		30,232,672
3.	Expected return on valuation assets		20,608,518
4.	Expected valuation assets		285,525,069
5.	Investment gain/(loss) for year ending:	**Initial Amount** / **Amortization**	
	June 30, 2003	($15,162,699) / ($3,032,540)	
	June 30, 2002	(36,213,421) / (7,242,684)	
	June 30, 2001	(30,298,832) / (6,059,765)	
	Total amortization amount		($16,334,989)
6.	Actuarial value of assets as of June 30, 2003		$269,190,080
7.	Market value of assets		$223,212,339
8.	Actuarial value as a percentage of market value		120.6%

These charts show the change in the actuarial value of assets versus the market value over the past eight years

CHART 8A Non - Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2003

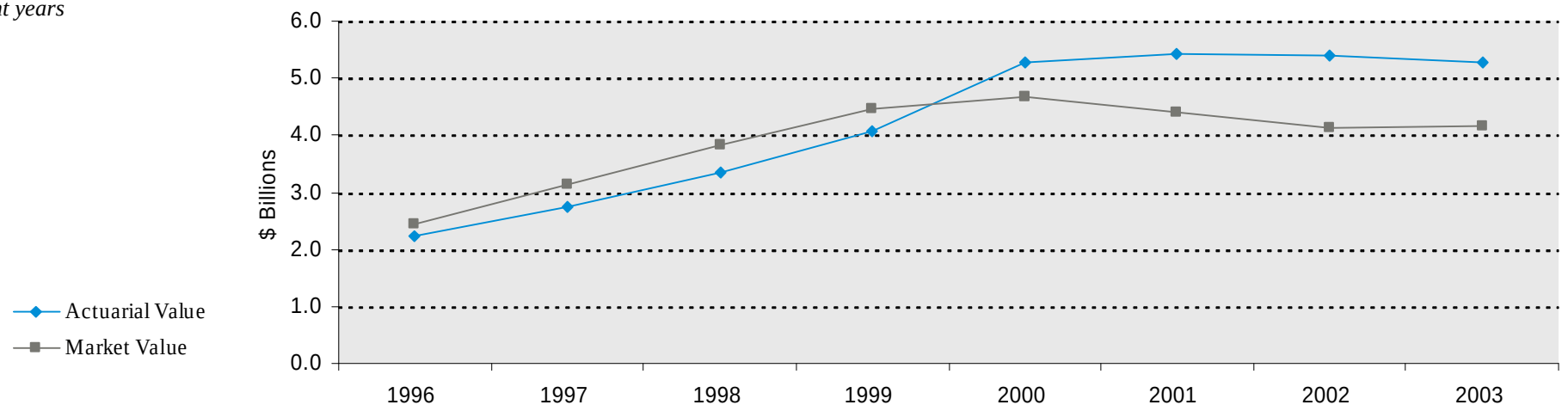
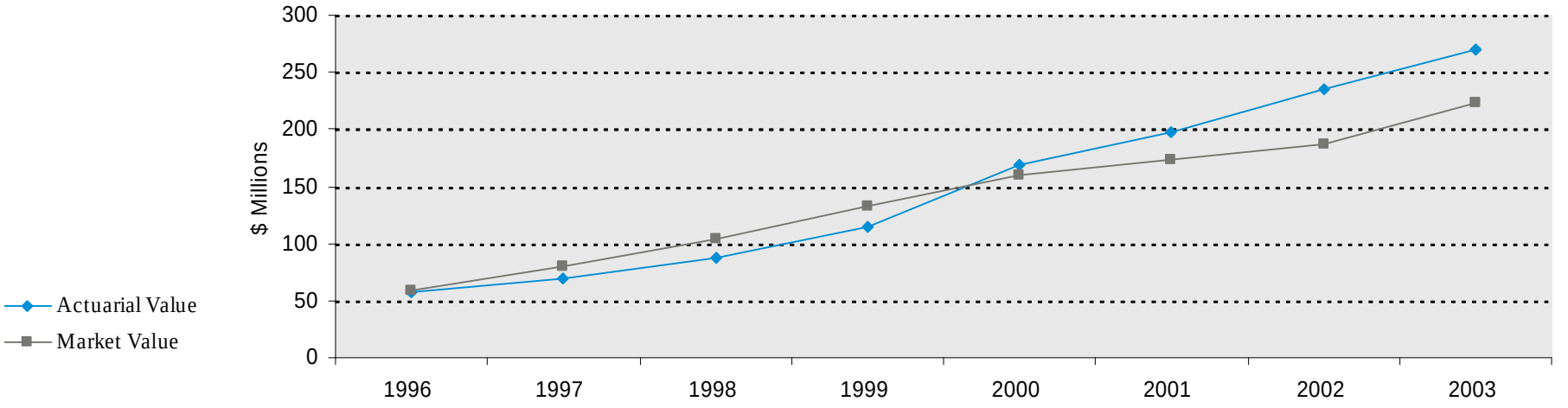


CHART 8B Non – Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2003



These charts show the change in the actuarial value of assets versus the market value over the past eight years

CHART 8C Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 - 2003

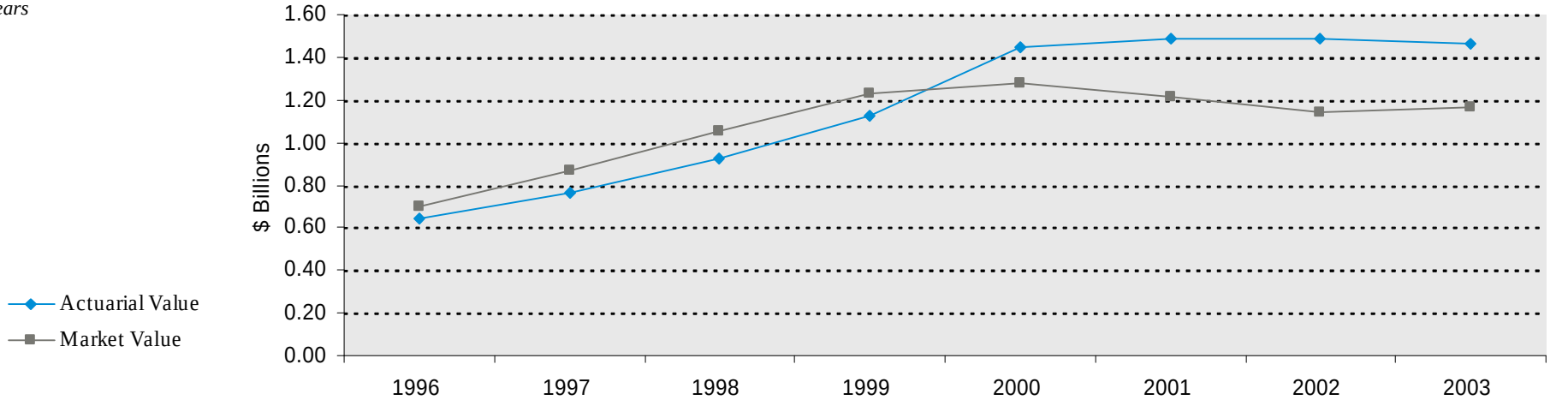
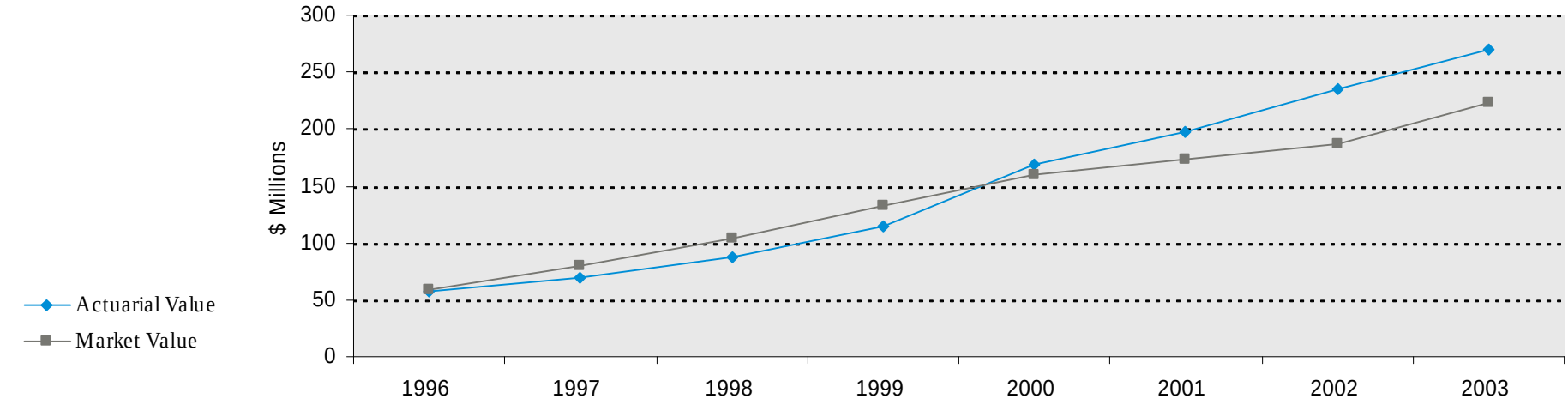


CHART 8D Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 - 2003



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Chart 9 presents a summary of experience for the year. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 9
Actuarial Experience for Year Ended June 30, 2003

	Non - Hazardous Retirement	Non - Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Net gain/(loss) from investments*	-$437,558,536	-$29,600,095	-$117,399,593	-$16,422,357
2. Net gain/(loss) from administrative expenses	511,492	-150,026	32,811	-63,648
3. Net gain/(loss) from other experience**	37,667,871	74,879,106	-79,675,541	-50,137,384
4. Net experience gain/(loss): (1) + (2) + (3)	-$399,379,173	$45,128,985	-$197,042,323	-$66,623,389

** Details in Chart 10*

*** Details in Chart 13*

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.25%. Chart 10 shows the investment experience for each plan for the year.

Since the actual return for the year was less than the assumed return, each plan experienced an actuarial loss during the year ended June 30, 2003 with regard to its investments.

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. Chart 11, which follows, shows the rate of return on an actuarial basis compared to the market value investment return for the last seven years.

This chart shows the gain/(loss) due to investment experience.

CHART 10 Actuarial Value Investment Experience for Year Ended June 30, 2003	Non - Hazardous Retirement	Non - Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Actual return	$3,045,965	$10,021,991	$4,217,738	$4,189,622
2. Average value of assets	5,340,660,620	480,267,711	1,474,149,456	249,842,168
3. Actual rate of return: (1) ÷ (2)	0.06%	2.09%	0.29%	1.68%
4. Assumed rate of return	8.25%	8.25%	8.25%	8.25%
5. Expected return: (2) x (4)	$440,604,501	$39,622,086	$121,617,331	$20,611,979
6. Actuarial gain/(loss): (1) – (5)	-$437,558,536	-$29,600,095	-$117,399,593	-$16,422,357

CHART 11A Non – Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1997 - 2003

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$111,947,000	4.96%	$362,703,525	16.07%	$474,650,525	21.03%	$639,522,469	25.88%
1998	113,937,000	4.12	448,646,445	16.21	562,583,445	20.33	673,873,449	21.42
1999	120,509,000	3.59	582,815,432	17.36	703,324,432	20.95	614,212,590	15.96
2000	143,530,000	3.53	1,086,361,099	26.74	1,229,891,099	30.27	217,824,204	4.88
2001	155,881,000	2.96	20,266,015	0.38	176,147,015	3.35	-239,461,644	-5.14
2002	141,791,936	2.64	-79,867,632	-1.48	61,924,304	1.15	-185,461,064	-4.26
2003	124,381,363	2.33	-121,335,398	-2.27	3,045,965	0.06	159,535,251	3.92
Total	$998,509,245		$4,414,819,055		$5,413,328,300		$2,282,994,019	
					Average return	9.29%		2.65%

Note: Each year's yield is weighted by the average asset value in that year.

CHART 11B Non – Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1997 - 2003

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$5,497,000	4.70%	$5,487,235	4.69%	$10,984,235	9.39%	$25,832,581	21.29%
1998	5,373,000	3.80	14,824,200	10.48	20,197,200	14.27	32,898,822	20.46
1999	6,294,000	3.43	26,753,873	14.56	33,047,873	17.99	26,461,016	12.27
2000	7,965,000	3.21	46,582,525	18.74	54,547,525	21.95	17,083,861	6.24
2001	9,332,000	2.77	8,274,934	2.46	17,606,934	5.23	-10,987,582	-3.38
2002	6,286,566	1.55	3,397,597	0.84	9,684,163	2.38	-34,930,434	-9.55
2003	7,217,788	1.50	2,804,203	0.58	10,021,991	2.09	10,623,304	2.69
Total	$47,965,354		$108,124,567		$156,089,921		$66,981,568	
					Average return	7.54%		0.52%

Note: Each year's yield is weighted by the average asset value in that year.

CHART 11C Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1997 - 2003

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$28,023,000	4.34%	$86,904,805	13.46%	$114,927,805	17.80%	$163,710,501	23.29%
1998	32,158,000	4.20	126,357,182	16.49	158,515,182	20.69	181,742,476	20.83
1999	33,560,000	3.57	137,945,547	14.67	171,505,547	18.24	143,494,373	13.42
2000	39,901,000	3.55	281,307,308	25.02	321,208,308	28.56	54,094,746	4.41
2001	42,810,000	2.97	8,670,222	0.60	51,480,222	3.57	-58,424,532	-4.58
2002	41,988,855	2.84	-22,692,628	-1.54	19,296,227	1.31	-47,103,145	-3.92
2003	34,198,906	2.32	-29,981,168	-2.03	4,217,738	0.29	46,381,709	4.09
Total	$252,639,761		$588,511,268		$841,151,029		$483,896,128	
					Average return	8.79%		2.34%

Note: Each year's yield is weighted by the average asset value in that year.

CHART 11D Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1997 - 2003

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$2,884,000	4.74%	$2,571,301	4.23%	$5,455,301	8.96%	$13,184,665	20.93%
1998	2,782,000	3.80	7,703,398	10.52	10,485,398	14.32	17,075,114	20.56
1999	3,176,000	3.36	9,273,144	9.80	12,449,144	13.16	13,451,746	12.11
2000	4,270,000	3.11	4,232,689	3.08	8,502,689	6.19	-17,918,878	-11.57
2001	5,141,000	2.87	3,567,337	1.99	8,708,337	4.87	-6,560,963	-3.86
2002	3,234,643	1.51	1,053,973	0.49	4,288,616	2.00	-18,622,357	-9.81
2003	3,626,738	1.45	562,884	0.23	4,189,622	1.68	5,361,912	2.65
Total	$25,114,381		$28,964,726		$54,079,107		$5,971,239	
					Average return	4.36%		-2.93%

Note: Each year's yield is weighted by the average asset value in that year.

This chart illustrates how this leveling effect has actually worked over the years 1997 - 2003

CHART 12A Non –Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2003

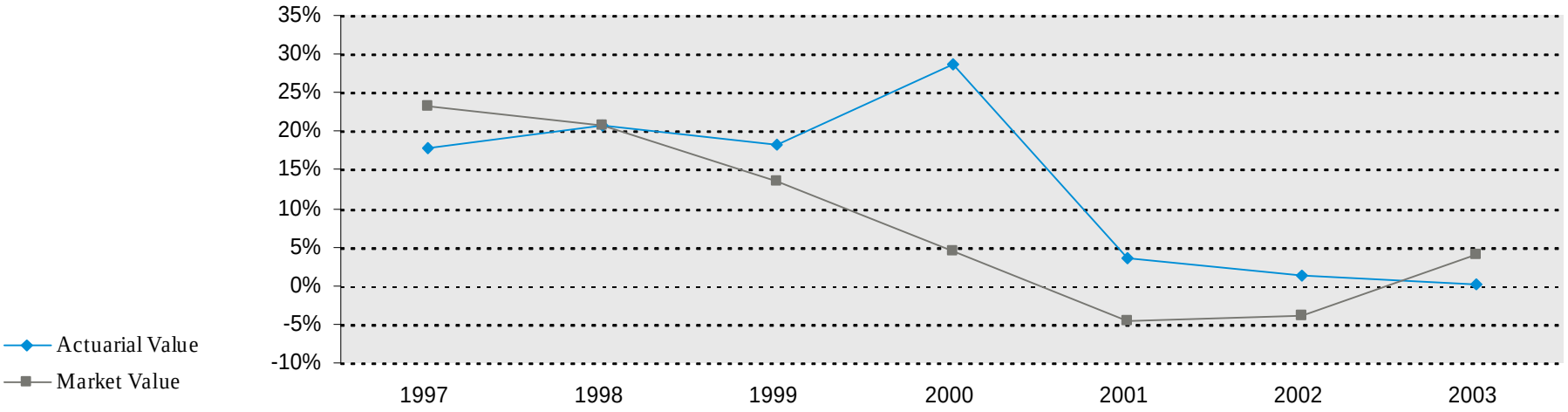
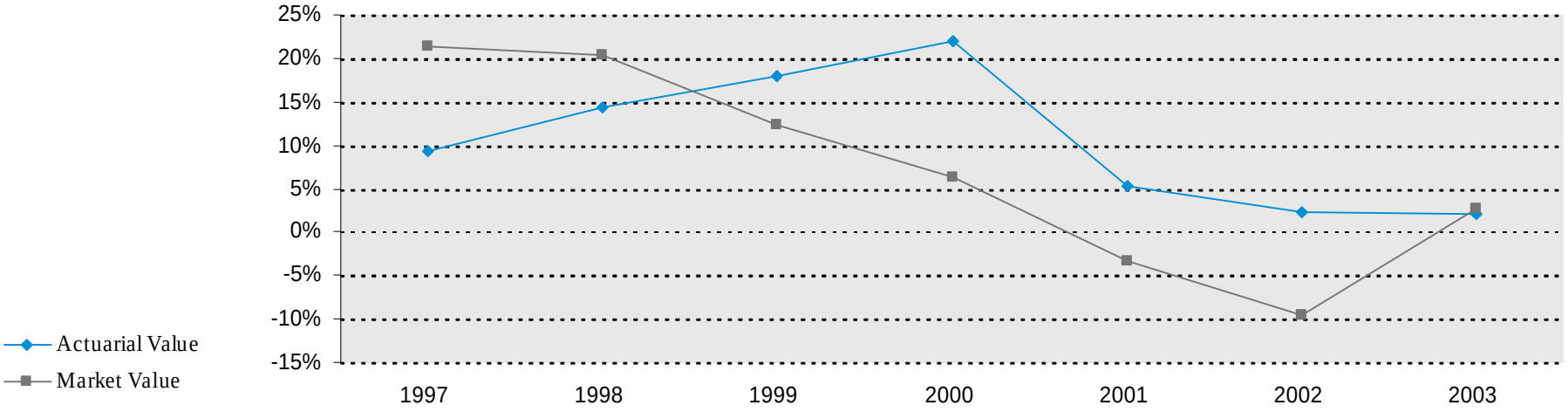


CHART 12B Non –Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2003



This chart illustrates how this leveling effect has actually worked over the years 1997 - 2003 .

CHART 12C Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2003

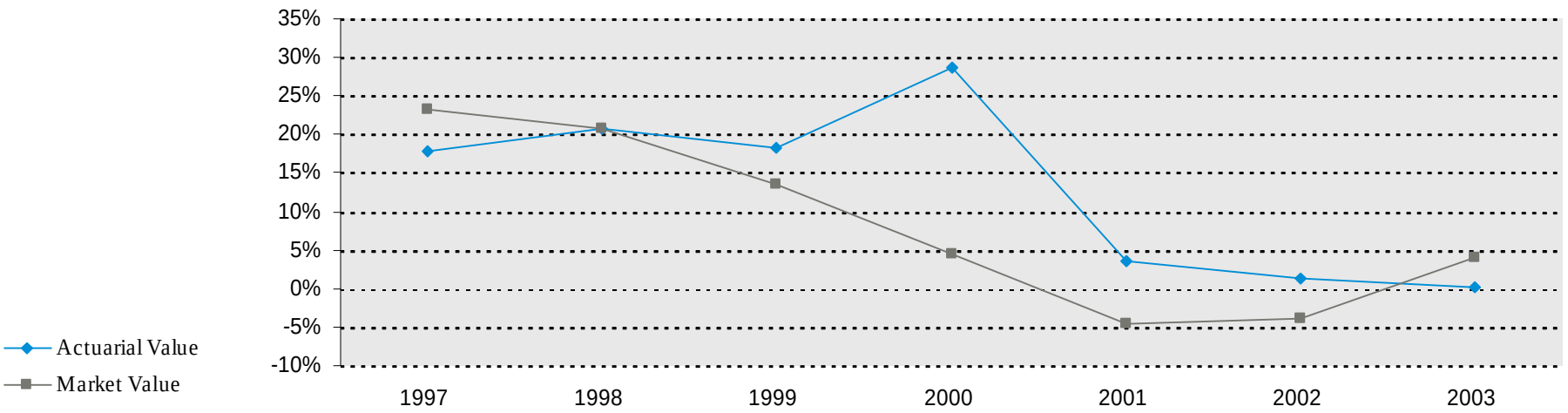
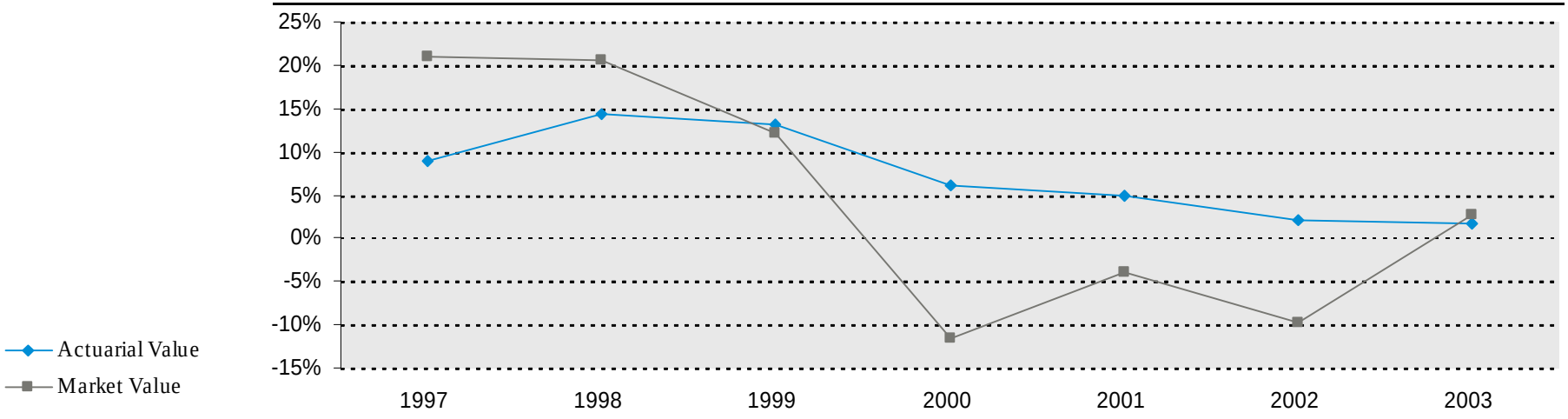


CHART 12D Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2003



Administrative Expenses

Current assumptions include an assumption for the cost of administration for the retirement funds but not for the insurance funds. This assumption is modified with each valuation to estimate expenses for the upcoming fiscal year. The following summarizes the past year's experience and presents the assumptions for the next year.

Plan	Year End 2003 Assumption	Year End 2003 Actual Expense	Gain/(Loss)* for the Year	Year End 2004 Assumption
Non-Hazardous Retirement	$8,508,924	$8,036,414	$511,492	$8,100,000
Non-Hazardous Insurance	$-0-	$138,592	-$150,026	$-0-
Hazardous Retirement	$749,025	$718,715	$32,811	$800,000
Hazardous Insurance	$-0-	$58,797	-$63,648	$-0-

* *Includes interest to year-end.*

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- COLA's granted in the year,
- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

A brief summary of the demographic gain/(loss) experience of the Funds for the year ended June 30, 2003 is shown in the chart below.

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 13 Experience Due to Changes in Demographics for Year Ended June 30, 2003	Non-Hazardous Retirement	Non – Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. COLA	-$53,050,456	N/A	-$18,929,383	N/A
2. Other	94,828,896	N/A	-60,476,158	N/A
3. Total	$37,667,871	$74,879,106	-$79,675,541	-$50,137,384
4. Percentage of Actuarial Accrued Liability	0.9%	3.4%	5.3%	5.4%

D. RECOMMENDED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability. This total amount is then divided by the projected salaries for active members to determine the funding rate.

The recommended contribution is based on a 30-year amortization of bases established each year as specified in the law governing the Plan.

Exhibit G provides details on these amortization bases.

The contribution rates as of June 30, 2003 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Charts 14 and 15 present the Recommended Contributions and reconciliations from the prior valuation.

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 14A Non-Hazardous Retirement

Recommended Contribution

	As of June 30, 2003		As of June 30, 2002	
	Amount	**% of Salary**	**Amount**	**% of Salary**
1. Total normal cost	$183,158,654	10.20%	$183,652,285	10.88%
2. Administrative expenses	8,100,000	0.45%	8,508,924	0.50%
3. Expected employee contributions	-88,681,304	-4.94%	-83,676,962	-4.96%
4. Employer normal cost: (1) + (2) + (3)	$102,577,350	5.71%	$108,484,247	6.42%
5. Actuarial accrued liability	4,417,597,802		4,165,355,149	
6. Actuarial value of assets	5,286,580,047		5,397,787,158	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	-$868,982,245		-$1,232,432,009	
8. Payment on unfunded/(overfunded) actuarial accrued liability	-51,909,585	-2.89%	-68,112,351	-4.03%
9. Total recommended contribution: (4) + (8)	$50,667,765	2.82%	$40,371,896	2.39%
10. Projected salary	$1,796,451,180		$1,688,460,789	

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 15A Non – Hazardous Retirement

Reconciliation of Recommended Contribution from June 30, 2002 to June 30, 2003

Recommended Contribution as of June 30, 2002	$40,371,896
Effect of COLA for retirees	$2,657,757
Effect of investment (gain)/loss	21,921,101
Effect of net other changes	-14,282,989
Total change	$10,295,869
Recommended Contribution as of June 30, 2003	$50,667,765

CHART 14B Non-hazardous Insurance

Recommended Contribution

	As of June 30, 2003	
	Amount	**% of Salary**
1. Employer normal cost	$161,192,881	8.97%
2. Actuarial accrued liability	2,176,963,259	
3. Actuarial value of assets	520,060,105	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$1,656,903,154	
5. Payment on unfunded/(overfunded) actuarial accrued liability	94,623,016	5.27%
6. Full EANC contribution: (1) + (5)	$255,815,897	14.24%
7. Projected salary	$1,796,451,180	
8. Prior year's funding rate	N/A	4.95%
9. Years to reach full EANC	N/A	13
10. Additional amount this year	N/A	.71%
11. Total recommended contribution rate	N/A	5.66%

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 14C Hazardous Retirement
Recommended Contribution

	As of June 30, 2003 Amount	2003 % of Salary	As of June 30, 2002 Amount	2002 % of Salary
1. Total normal cost	$60,890,782	16.25%	$56,473,020	16.31%
2. Administrative expenses	800,000	0.21%	749,025	0.22%
3. Expected employee contributions	-28,714,354	-7.66%	-26,298,349	-7.59%
4. Employer normal cost	$32,976,428	8.80%	$30,923,696	8.93%
5. Actuarial accrued liability	1,499,628,782		1,327,291,273	
6. Actuarial value of assets	1,467,004,856		1,485,511,793	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	$32,623,926		-$158,220,520	
8. Payment on unfunded/(overfunded) actuarial accrued liability	1,905,978	0.51%	-7,524,590	-2.17%
9. Total recommended contribution: (4) + (8)	$34,882,406	9.31%	$23,399,106	6.76%
10. Projected salary	$374,700,732		$346,319,146	

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 15C Hazardous Retirement

Reconciliation of Recommended Contribution from June 30, 2002 to June 30, 2003

Recommended Contribution as of June 30, 2002	$23,399,106
Effect of COLA for retirees	$948,337
Effect of investment (gain)/loss	5,881,564
Effect of net other changes	4,653,399
Total change	$11,483,300
Recommended Contribution as of June 30, 2003	$34,882,406

CHART 14D Hazardous Insurance

Recommended Contribution

	As of June 30, 2003	
	Amount	**% of Salary**
1. Employer normal cost	$55,855,272	14.91%
2. Actuarial accrued liability	935,650,662	
3. Actuarial value of assets	269,190,080	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$666,460,582	
5. Payment on unfunded/(overfunded) actuarial accrued liability	37,743,195	10.07%
6. Full EANC contribution: (1) + (5)	$93,598,467	24.98%
7. Projected salary	$374,700,732	
8. Prior year's funding rate	N/A	11.75%
9. Years to reach full EANC	N/A	13
10. Additional amount this year	N/A	1.02%
11. Total recommended contribution rate	N/A	12.77%

EXHIBIT A – Non-Hazardous

Table of Plan Coverage

Category	Year Ended June 30 2003	2002	Change From Prior Year
Active members in valuation:			
Number	82,288	79,850	3.1%
Average age	43.8	43.0	N/A
Average service	7.6	7.6	N/A
Total salary	$1,796,451,180	$1,688,460,789	6.4%
Average salary	$21,831	$21,145	3.2%
Account balances	$759,938,261	N/A	N/A
Total active vested members	51,009	46,937	8.7%
Vested terminated members	4,692	4,470	5.0%
Retired participants:			
Number in pay status	21,423	20,714	3.4%
Average age	68.5	N/A	N/A
Average monthly benefit	$705	N/A	N/A
Disabled members:			
Number in pay status	2,698	2,582	4.5%
Average age	60.6	N/A	N/A
Average monthly benefit	$682	N/A	N/A
Beneficiaries in pay status	2,971	2,851	4.2%
Inactive nonvested members due a refund	27,634	26,508	4.2%

EXHIBIT A – Hazardous

Table of Plan Coverage

Category	Year Ended June 30 2003	2002	Change From Prior Year
Active members in valuation:			
Number	9,286	8,949	3.8%
Average age	37.3	36.3	N/A
Average service	7.8	7.8	N/A
Total salary	$374,700,732	$346,319,146	8.2%
Average salary	$40,351	$38,699	4.3%
Account balances	$227,629,402	N/A	N/A
Total active vested members	5,904	4,855	21.6%
Vested terminated members	165	148	11.5%
Retired participants:			
Number in pay status	2,942	2,816	4.5%
Average age	57.6	N/A	N/A
Average monthly benefit	$1,804	N/A	N/A
Disabled members:			
Number in pay status	293	430	-31.9%
Average age	50.2	N/A	N/A
Average monthly benefit	$1,095	N/A	N/A
Beneficiaries in pay status	502	237	111.8%
Inactive nonvested members due a refund	616	552	11.6%

EXHIBIT B – Non-Hazardous

Members in Active Service as of June 30, 2003
By Age, Years of Service, and Average Salary

	Years of Service									
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	7,509	7,210	299	- -	- -	- -	- -	- -	- -	- -
	$16,724	$16,590	$19,941	- -	- -	- -	- -	- -	- -	- -
25 - 29	4,758	3,779	946	33	- -	- -	- -	- -	- -	- -
	20,568	19,557	24,273	$30,157	- -	- -	- -	- -	- -	- -
30 - 34	7,187	4,832	1,830	512	13	- -	- -	- -	- -	- -
	21,331	18,840	25,703	28,875	$34,757	- -	- -	- -	- -	- -
35 - 39	9,909	5,622	2,609	1,177	451	50	- -	- -	- -	- -
	21,332	17,604	22,468	31,553	33,040	$35,078	- -	- -	- -	- -
40 - 44	12,818	5,550	3,740	1,975	914	534	105	- -	- -	- -
	22,213	17,809	20,647	26,692	34,091	38,093	$42,314	- -	- -	- -
45 - 49	13,171	4,416	3,695	2,575	1,167	793	476	49	- -	- -
	23,460	18,733	20,610	24,627	30,242	36,388	42,565	$46,790	- -	- -
50 - 54	11,436	3,117	2,788	2,604	1,473	852	447	145	10	- -
	24,129	19,821	21,470	23,234	26,642	32,827	41,803	50,982	$50,665	- -
55 - 59	8,331	2,339	1,813	1,681	1,234	797	360	81	26	- -
	23,061	18,907	20,999	22,792	24,745	28,036	36,876	45,704	63,669	- -
60 - 64	4,747	1,243	1,083	986	681	452	232	49	13	8
	21,619	16,890	19,133	21,329	24,970	25,367	34,051	44,924	49,338	$83,322
65 - 69	1,619	508	380	321	221	116	48	16	5	4
	18,717	14,861	17,095	19,427	21,467	22,462	29,677	44,066	57,022	64,305
70 & over	803	214	183	177	126	64	26	4	5	4
	16,958	14,269	14,187	17,183	18,983	18,108	32,514	25,755	31,015	67,971
Total	82,288	38,830	19,366	12,041	6,280	3,658	1,694	344	59	16
	$21,831	$18,097	$21,465	$24,763	$27,982	$31,847	$39,454	$47,664	$54,977	$74,730

EXHIBIT B – Hazardous

Members in Active Service as of June 30, 2003
By Age, Years of Service, and Average Salary

		Years of Service								
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	792	775	17	- -	- -	- -	- -	- -	- -	- -
	$27,532	$27,325	$36,949	- -	- -	- -	- -	- -	- -	- -
25 - 29	1,363	1,103	255	5	- -	- -	- -	- -	- -	- -
	35,076	33,579	41,351	$45,070	- -	- -	- -	- -	- -	- -
30 - 34	1,980	961	784	233	2	- -	- -	- -	- -	- -
	39,221	34,379	42,302	48,837	$37,050	- -	- -	- -	- -	- -
35 - 39	1,823	512	449	671	178	13	- -	- -	- -	- -
	42,986	33,772	41,222	48,335	52,646	$58,396	- -	- -	- -	- -
40 - 44	1,351	307	232	382	342	77	11	- -	- -	- -
	44,688	34,732	39,164	46,839	51,954	56,079	$58,687	- -	- -	- -
45 - 49	964	216	132	234	179	120	74	9	- -	- -
	46,186	33,898	39,570	45,100	51,141	58,971	61,631	$70,319	- -	- -
50 - 54	579	163	77	113	67	46	81	30	2	- -
	46,545	36,161	40,405	44,980	48,709	53,933	63,616	61,244	$63,306	- -
55 - 59	268	115	42	42	26	11	10	17	5	- -
	40,202	31,881	38,941	39,834	46,182	50,280	53,443	65,714	78,775	- -
60 - 64	131	55	23	22	20	5	1	1	2	2
	39,962	30,865	40,844	44,150	46,615	48,938	70,236	84,432	73,212	$74,322
65 - 69	22	14	3	5	- -	- -	- -	- -	- -	- -
	34,922	30,435	50,516	38,126	- -	- -	- -	- -	- -	- -
70 & over	13	2	4	4	1	1	- -	- -	- -	1
	34,199	26,610	21,669	32,964	73,104	51,996	- -	- -	- -	47,736
Total	9,286	4,223	2,018	1,711	815	273	177	57	9	3
	$40,351	$32,742	$41,170	$47,068	$51,334	$56,720	$61,943	$64,417	$74,101	$65,460

EXHIBIT C – Non-Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Contribution income:				
Employer contributions	$11,855,694		$4,663,371	
Member contributions	125,300,584		121,573,670	
Less administrative expenses	-8,036,414		-7,187,049	
Net contribution income		$129,119,864		$119,049,992
Investment income:				
Interest, dividends and other income	$138,657,919		$164,909,449	
Adjustment toward market value	-118,492,757		-79,867,632	
Less investment fees	-17,119,197		-23,117,513	
Net investment income		3,045,965		61,924,304
Total income available for benefits		$132,165,829		$180,974,296
Less benefit payments:				
Benefit payments	$230,316,847		$196,658,618	
Refunds	10,213,452		7,520,556	
Net benefit payments		$240,530,299		$204,179,174
Change in reserve for future benefits		-$108,364,470		-$23,204,878

EXHIBIT C – Non-Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Contribution income:				
Employer contributions	$99,234,843		$102,150,788	
Less administrative expenses	-138,592		-260,214	
Net contribution income		$99,096,251		$101,890,574
Investment income:				
Interest, dividends and other income	$8,180,059		$7,553,323	
Adjustment toward market value	2,974,632		3,397,597	
Less investment fees	-1,132,700		-1,266,757	
Net investment income		10,021,991		9,684,163
Total income available for benefits		$109,118,242		$111,574,737
Less healthcare premium subsidies:		$39,385,015		$32,694,301
Change in reserve for future benefits		$69,733,227		$78,880,436

EXHIBIT C – Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Contribution income:				
Employer contributions	$16,905,556		$10,904,214	
Member contributions	36,202,579		35,164,272	
Less administrative expenses	-718,715		-634,783	
Net contribution income		$52,389,420		$45,433,703
Investment income:				
Interest, dividends and other income	$39,168,079		$51,140,925	
Adjustment toward market value	-29,981,168		-22,692,628	
Less investment fees	-4,969,173		-9,152,070	
Net investment income		4,217,738		19,296,227
Total income available for benefits		$56,607,158		$64,729,930
Less benefit payments:				
Benefit payments	$72,531,779		$63,494,374	
Refunds	1,793,971		1,641,709	
Net benefit payments		$74,325,750		$65,136,083
Change in reserve for future benefits		-$17,718,592		-$406,153

EXHIBIT C – Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Contribution income:				
Employer contributions	$45,243,950		$45,730,333	
Less administrative expenses	-58,797		-115,183	
Net contribution income		$45,185,153		$45,615,150
Investment income:				
Interest, dividends and other income	$4,216,739		$3,982,762	
Adjustment toward market value	646,792		1,126,092	
Less investment fees	-590,001		-748,119	
Net investment income		4,273,530		4,360,735
Total income available for benefits		$49,458,683		$49,975,885
Less healthcare premium subsidies:		$14,868,573		$13,095,137
Change in reserve for future benefits		$34,590,110		$36,880,748

EXHIBIT D – Non-Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Cash equivalents		$614,921		$11,693,000
Accounts receivable:				
Investment accounts receivable	$225,031		$323,000	
Year end interest receivable	22,423,993		26,609,000	
Year end accounts receivable	21,426,306		19,403,000	
Alternate Plan year end accounts receivable	1,362,202		1,706,000	
Total accounts receivable		45,437,532		48,041,000
Investments:				
Bonds	$1,452,706,088		$1,389,803,000	
Stocks	2,226,016,563		2,222,749,000	
Mortgage	211,499,185		242,677,000	
Real estate	4,741,593		6,200,000	
Fixed assets	577,640		0	
Short-term investments	238,154,160		209,119,000	
Total investments at market value		4,133,695,229		4,070,548,000
Total assets		$4,179,747,682		$4,130,282,000
Less accounts payable:		-$3,714,907		-$3,525,000
Net assets at market value		$4,174,881,117		$4,126,756,301
Net assets at actuarial value		$5,286,580,047		$5,397,787,158

EXHIBIT D – Non-Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Cash equivalents		$63,551		$9,375,000
Accounts receivable:				
Investment accounts receivable	$22,463		$22,000	
Year end interest receivable	1,103,783		948,000	
Year end accounts receivable	10,695,236		11,261,000	
Total accounts receivable		11,821,482		12,231,000
Investments:				
Bonds	$42,819,734		$38,489,000	
Stocks	351,228,039		281,588,000	
Short-term Investments	29,904,766		23,930,000	
Total investments at market value		423,952,539		344,007,000
Total assets		$435,837,572		$365,613,000
Less accounts payable:		-$170,446		-$282,000
Net assets at market value		$435,667,125		$365,332,585
Net assets at actuarial value		$520,060,105		$450,497,307

EXHIBIT D – Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Cash equivalents		$217,552		$2,954,000
Accounts receivable:				
Investment accounts receivable	$63,810		$87,000	
Year end interest receivable	6,180,263		7,403,000	
Year end accounts receivable	8,194,121		8,959,000	
Alternate Plan year end accounts receivable	1,795,357		2,090,000	
Total accounts receivable		16,233,551		18,539,000
Investments:				
Bonds	$398,906,715		$381,820,000	
Stocks	624,403,527		611,186,000	
Motgage	58,421,019		67,019,000	
Real Estate	3,055,076		3,381,000	
Fixed Assets	51,593		0	
Short-term Investments	68,395,341		60,351,000	
Total investments at market value		1,153,233,271		1,123,757,000
Total assets		$1,169,684,374		$1,145,250,000
Less accounts payable:		-$889,902		-$900,000
Net assets at market value		$1,168,794,472		$1,144,349,093
Net assets at actuarial value		$1,467,004,856		$1,485,511,793

EXHIBIT D – Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Cash equivalents		$81,750		$4,358,000
Accounts receivable:				
Investment accounts receivable	$11,584		$12,000	
Year end interest receivable	559,656		481,000	
Year end accounts receivable	3,652,483		4,457,000	
Total accounts receivable		4,223,723		4,950,000
Investments:				
Bonds	$21,287,077		$19,134,000	
Stocks	182,395,584		146,842,000	
Short-term Investments	15,308,134		12,381,000	
Total investments at market value		218,990,795		178,357,000
Total assets		$223,296,268		$187,665,000
Less accounts payable:		-$83,910		-$131,000
Net assets at market value		$223,212,339		$187,533,847
Net assets at actuarial value		$269,190,080		$234,683,878

EXHIBIT E – Non-Hazardous Retirement

Development of the Fund Through June 30, 2003

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1996	$95,660,478	$57,702,044	$2,201,761,515	$4,645,029	$112,670,975	$2,237,808,033
1997	105,774,000	63,590,000	474,650,525	5,268,000	126,358,000	2,750,196,558
1998	107,526,000	74,382,000	562,583,445	5,620,000	142,863,000	3,346,205,003
1999	110,591,000	98,566,000	703,324,432	6,519,000	179,940,000	4,072,227,435
2000	106,587,000	96,676,000	1,229,891,099	7,350,000	213,998,000	5,284,033,534
2001	48,914,000	101,597,000	176,147,015	7,820,000	179,037,000	5,423,834,549
2002	4,663,371	121,573,670	61,924,304	10,029,562	204,179,174	5,397,787,158
2003	11,855,694	125,300,584	3,045,965	10,879,055	240,530,299	5,286,580,047

** Net of investment fees*

EXHIBIT E – Non-Hazardous Insurance

Development of the Fund Through June 30, 2003

Year Ended June 30	Employer Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$27,504,000	$10,502,235	$25,000	$13,497,000	$134,688,096
1998	29,271,000	20,197,200	25,000	15,600,000	168,531,296
1999	47,902,000	33,047,873	52,000	17,492,000	231,937,169
2000	55,214,000	54,547,525	114,000	21,942,000	319,642,694
2001	62,292,000	17,606,934	244,000	27,539,000	371,758,628
2002	102,150,788	9,684,163	401,971	32,694,301	450,497,307
2003	99,234,843	10,021,991	309,021	39,385,015	520,060,105

** Net of investment fees*

EXHIBIT E – Hazardous Retirement

Development of the Fund Through June 30, 2003

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$39,552,000	$15,752,000	$114,927,805	$811,000	$47,812,000	$763,829,310
1998	42,298,000	16,581,000	158,515,182	902,000	53,264,000	927,057,492
1999	48,291,000	22,918,000	171,505,547	939,000	44,181,553	1,124,651,486
2000	51,739,000	28,476,000	321,208,308	1,085,000	79,447,000	1,445,542,794
2001	20,983,000	27,279,000	51,480,222	974,000	57,645,000	1,486,666,016
2002	10,904,214	35,164,272	19,296,227	1,382,853	65,136,083	1,485,511,793
2003	16,905,556	36,202,579	4,217,738	1,507,060	74,325,750	1,467,004,856

** Net of investment fees*

EXHIBIT E – Hazardous Insurance

Development of the Fund Through June 30, 2003

Year Ended June 30	Employer Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$13,305,000	$5,430,301	$25,000	$6,260,000	$69,832,681
1998	14,275,000	10,460,398	25,000	7,538,000	87,055,079
1999	23,383,000	12,449,144	25,000	8,272,000	114,590,223
2000	55,214,000	8,502,689	52,000	9,597,000	168,657,912
2001	32,149,000	8,708,337	109,000	11,531,000	197,875,249
2002	45,730,333	4,360,735	187,302	13,095,137	234,683,878
2003	45,243,950	4,273,530	142,705	14,868,573	269,190,080

** Net of investment fees*

EXHIBIT F – Non-Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$93,672,421	$8,803,133	17.00	$118,579,377
06/30/1991	30	61,472,822	5,506,891	18.00	77,458,374
06/30/1992	30	-125,111,651	-10,683,561	19.00	-156,443,886
06/30/1993	30	-28,358,370	-2,308,290	20.00	-35,094,731
06/30/1994	30	59,026,195	4,579,726	21.00	72,118,398
06/30/1995	30	-35,766,009	-2,645,120	22.00	-43,048,094
06/30/1996	30	-188,502,047	-13,288,206	23.00	-223,054,769
06/30/1997	30	-200,122,489	-13,435,596	24.00	-232,193,379
06/30/1998	30	-311,976,854	-19,947,770	25.00	-354,334,198
06/30/1999	30	-379,088,077	-23,084,643	26.00	-420,828,295
06/30/2000	30	-804,685,873	-46,668,095	27.00	-871,875,737
06/30/2001	30	250,075,433	13,812,600	28.00	264,118,659
06/30/2002	30	529,261,185	27,841,037	29.00	544,222,252
06/30/2003	30	391,393,784	19,608,309	30.00	391,393,784
Total			-$51,909,585		-$868,982,245

** Level percentage of salary*

EXHIBIT F – Non-Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$901,011,537	$63,515,631	23.00	$1,066,168,364
06/30/1997	30	29,886,573	2,006,491	24.00	34,676,085
06/30/1998	30	62,468,342	3,994,220	25.00	70,949,718
06/30/1999	30	-21,106,379	-1,285,277	26.00	-23,430,338
06/30/2000	30	70,199,744	4,071,264	27.00	76,061,301
06/30/2001	30	247,855,413	13,689,980	28.00	261,773,972
06/30/2002	30	72,249,680	3,800,592	29.00	74,292,022
06/30/2003	30	96,412,030	4,830,115	30.00	96,412,030
Total			$94,623,016		$1,656,903,154

** Level percentage of salary*

EXHIBIT F – Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$68,584,978	$6,445,470	17.00	$86,821,332
06/30/1991	30	29,934,803	2,681,635	18.00	37,719,127
06/30/1992	30	-12,941,304	-1,105,087	19.00	-16,182,248
06/30/1993	30	-7,291,213	-593,484	20.00	-9,023,195
06/30/1994	30	1,854,577	143,893	21.00	2,265,929
06/30/1995	30	24,831,672	1,836,457	22.00	29,887,487
06/30/1996	30	-65,565,268	-4,621,938	23.00	-77,583,484
06/30/1997	30	-62,908,989	-4,223,512	24.00	-72,990,552
06/30/1998	30	-50,329,820	-3,218,084	25.00	-57,163,140
06/30/1999	30	-97,060,446	-5,910,515	26.00	-107,747,473
06/30/2000	30	-194,399,700	-11,274,292	27.00	-210,631,735
06/30/2001	30	79,413,115	4,386,283	28.00	83,872,635
06/30/2002	30	143,568,600	7,552,223	29.00	147,626,973
06/30/2003	30	195,752,270	9,806,929	30.00	195,752,270
Total			$1,905,978		$32,623,926

** Level percentage of salary*

EXHIBIT F – Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$318,111,968	$22,424,888	23.00	$376,422,391
06/30/1997	30	53,367,623	3,582,935	24.00	61,920,120
06/30/1998	30	15,379,222	983,346	25.00	17,467,270
06/30/1999	30	-13,162,362	-801,525	26.00	-14,611,629
06/30/2000	30	17,607,673	1,021,164	27.00	19,077,884
06/30/2001	30	82,316,738	4,546,661	28.00	86,939,314
06/30/2002	30	10,745,007	565,226	29.00	11,048,745
06/30/2003	30	108,196,487	5,420,500	30.00	108,196,487
Total			$37,743,195		$666,460,582

** Level percentage of salary*

EXHIBIT G

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability:	Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.
Investment Return:	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

EXHIBIT I – Non-Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 3,757 beneficiaries in pay status)		27,092
2.	Members inactive during year ended June 30, 2003 with vested rights		4,692
3.	Members active during the year ended June 30, 2003		82,288
	Fully vested	51,009	
	Not vested	31,279	
4.	Inactive nonvested members due a refund as of June 30, 2003		27,634

The actuarial factors as of the valuation date are as follows:

1.	Normal cost, including administrative expenses		$191,258,654
2.	Present value of future benefits		6,508,864,976
3.	Present value of future normal costs		2,091,267,175
4.	Actuarial accrued liability		4,417,597,802
	Retired participants and beneficiaries	$2,005,650,002	
	Inactive members with vested rights	39,448,625	
	Active members	2,349,116,216	
	Inactive nonvested members due a refund	23,382,959	
5.	Actuarial value of assets ($4,174,881,117 at market value as reported by Carpenter, Mountjoy & Bressler)		5,286,580,047
6.	Unfunded actuarial accrued liability		-$868,982,245

EXHIBIT I – Non-Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Normal cost, including administrative expenses		$161,192,881
2.	Present value of future benefits		4,034,417,402
3.	Present value of future normal costs		1,857,454,143
4.	Actuarial accrued liability		2,176,963,259
	Retired participants and beneficiaries	$727,125,108	
	Inactive members with vested rights	72,652,156	
	Active members	1,377,185,995	
5.	Actuarial value of assets ($435,667,125 at market value as reported by Carpenter, Mountjoy & Bressler)		520,060,105
6.	Unfunded actuarial accrued liability		$1,656,903,154

EXHIBIT I – Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 502 beneficiaries in pay status)		3,737
2.	Members inactive during year ended June 30, 2003 with vested rights		165
3.	Members active during the year ended June 30, 2003		9,286
	Fully vested	5,904	
	Not vested	3,382	
5.	Inactive nonvested members due a refund as of June 30, 2003		616

The actuarial factors as of the valuation date are as follows:

1.	Normal cost, including administrative expenses		$61,690,782
2.	Present value of future benefits		2,103,191,508
3.	Present value of future normal costs		603,562,725
4.	Actuarial accrued liability		1,499,628,782
	Retired participants and beneficiaries	$765,660,960	
	Inactive members with vested rights	3,207,120	
	Active members	729,824,036	
	Inactive non-vested members	936,666	
5.	Actuarial value of assets ($1,168,794,472 at market value as reported by Carpenter, Mountjoy & Bressler)		1,467,004,856
6.	Unfunded actuarial accrued liability		$32,623,926

EXHIBIT I – Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Normal cost, including administrative expenses		$55,855,272
2.	Present value of future benefits		1,509,475,965
3.	Present value of future normal costs		573,825,304
4.	Actuarial accrued liability		935,650,662
	Retired participants and beneficiaries	$395,406,822	
	Inactive members with vested rights	5,869,525	
	Active members	534,374,315	
5.	Actuarial value of assets ($223,212,339 at market value as reported by Carpenter, Mountjoy & Bressler)		269,190,080
6.	Unfunded actuarial accrued liability		$666,460,582

EXHIBIT II – Non-Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ Overfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)]/ (c)
06/30/1996	$2,237,808,033	$2,083,374,317	-$154,433,716	107.41%	$1,137,192,560	-13.58%
06/30/1997	2,750,196,558	2,390,620,093	-359,576,465	115.04	1,297,116,204	-27.72
06/30/1998	3,346,205,003	2,663,946,276	-682,258,727	125.61	1,437,594,574	-47.46
06/30/1999	4,072,227,435	2,991,420,884	-1,080,806,551	136.13	1,346,601,939	-80.26
06/30/2000	5,284,033,534	3,368,601,134	-1,915,432,400	156.86	1,452,058,248	-131.91
06/30/2001	5,423,834,549	3,706,282,212	-1,717,552,337	146.34	1,544,973,296	-111.17
06/30/2002	5,397,787,158	4,165,355,149	-1,232,432,009	129.59	1,663,183,629	-74.10
06/30/2003	5,286,580,047	4,417,597,802	-868,982,245	119.67	1,796,451,180	-48.37

EXHIBIT II – Non-Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ Overfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)]/ (c)
06/30/1996	$110,203,861	$1,011,215,398	$901,011,537	10.90%	$1,137,192,560	79.23%
06/30/1997	134,688,096	1,091,055,849	956,367,753	12.34	1,297,116,204	73.73
06/30/1998	168,531,296	1,213,339,747	1,044,808,451	13.89	1,437,594,574	72.68
06/30/1999	231,937,169	1,282,874,286	1,050,937,117	18.08	1,346,601,939	78.04
06/30/2000	319,642,694	1,466,716,928	1,147,074,234	21.79	1,452,058,248	79.00
06/30/2001	371,758,628	1,793,710,768	1,421,952,140	20.73	1,544,973,296	92.04
06/30/2002	450,497,307	1,977,577,038	1,527,079,731	22.78	1,663,183,629	91.82
06/30/2003	520,060,105	2,176,963,259	1,656,903,154	23.89	1,796,451,180	92.23

EXHIBIT II – Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ Overfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)]/ (c)
06/30/1996	$642,220,505	$694,942,156	$52,721,651	92.41%	$211,638,457	24.91%
06/30/1997	763,829,310	754,308,810	-9,520,500	101.26	225,094,837	-4.23
06/30/1998	927,057,492	865,966,626	-61,090,866	107.05	236,180,023	-25.87
06/30/1999	1,124,651,486	963,711,775	-160,939,711	116.70	256,201,726	62.82
06/30/2000	1,445,542,794	1,084,553,697	-360,989,097	133.28	288,575,870	-125.09
06/30/2001	1,486,666,016	1,193,860,442	-292,805,574	124.53	316,700,304	-92.46
06/30/2002	1,485,511,793	1,327,291,273	-158,220,520	111.92	345,849,277	-45.75
06/30/2003	1,467,004,856	1,499,628,782	32,623,926	97.82	374,700,732	8.71

EXHIBIT II – Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ Overfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)]/ (c)
06/30/1996	$57,332,380	$375,444,348	$318,111,968	15.27%	$211,638,457	151.31%
06/30/1997	69,832,681	450,304,608	380,471,927	15.51	225,094,837	169.03
06/30/1998	87,055,079	493,286,363	406,231,284	17.65	236,180,023	172.00
06/30/1999	114,590,223	518,280,115	403,689,892	22.11	256,201,726	157.57
06/30/2000	168,657,912	599,936,029	431,278,117	28.11	288,575,870	149.45
06/30/2001	197,875,249	721,605,292	523,730,043	27.42	316,700,304	165.37
06/30/2002	234,683,878	781,184,974	546,501,096	30.04	345,849,277	158.02
06/30/2003	269,190,080	935,650,662	666,460,582	28.77	374,700,732	177.86

EXHIBIT III – Non-Hazardous
Supplementary Information Required by the GASB

Valuation date	June 30, 2003
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	17 to 30 years
Asset valuation method	5 year smoothing method
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	27,092
Terminated members entitled to, but not yet receiving benefits	4,692
Active members	82,288
Total	114,072

EXHIBIT III – Non-Hazardous (continued)
Supplemental Insurance Required by the GASB

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	5,054	3,288	482	466	243	575
Family; Pre-Medicare	213	193	4	8	6	2
Parent Plus; Pre-Medicare	244	169	9	3	4	59
Couple; Pre-Medicare	642	501	53	63	23	2
Medicare Regular	2,630	64	334	729	824	679
Medicare High Option	9,958	4,008	1,907	1,793	925	1,325
Total	18,741	8,223	2,789	3,062	2,025	2,642

EXHIBIT III – Hazardous

Supplementary Information Required by the GASB

Valuation date	June 30, 2003
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	17 to 30 years
Asset valuation method	5 year smoothing method
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	3,737
Terminated members entitled to, but not yet receiving benefits	165
Active members	9,286
Total	13,188

EXHIBIT III – Hazardous (continued)
Supplementary Information Required by the GASB

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	1,010	899	45	45	16	5
Family; Pre-Medicare	557	544	6	5	2	- -
Parent Plus; Pre-Medicare	223	207	6	3	7	- -
Couple; Pre-Medicare	822	804	12	5	1	- -
Medicare Regular	40	4	6	18	12	- -
Medicare High Option	808	666	70	44	25	3
Total	3,460	3,124	145	120	63	8

EXHIBIT IV Non - Hazardous

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: 1983 Group Annuity Mortality Table with margins.

Disabled: Pension Benefit Guaranty Corporation Table for Disabled Lives Receiving Social Security.

Termination Rates before Retirement:

	Rate (%)			
	Mortality		Disability	Withdrawal*
Age	Male	Female		
20	0.04	0.02	0.03	2.40
25	0.05	0.03	0.03	2.40
30	0.06	0.03	0.04	2.40
35	0.09	0.05	0.06	2.40
40	0.12	0.07	0.10	2.00
45	0.22	0.10	0.21	1.80
50	0.39	0.16	0.42	1.60
55	0.61	0.25	0.79	1.20
60	0.92	0.42	1.39	0.20

*Withdrawal rates during the first five years of employment are 35%, 10%, 7%, 5%, and 4%.

Retirement Rates:

Age	Retirement Probability*
55-57	0.04
58-59	0.05
60-61	0.06
62	0.25
63-64	0.10
65	0.50
66-67	0.20
68	0.25
69	0.40
70 and older	1.00

*Retirement probability is 0.25 at first age member is eligible for unreduced retirement benefits.

Retirement Age for Inactive Vested Participants: 65

Percent Married: 100%

Age of Spouse: Females 3 years younger than males.

Net Investment Return: 8.25%

Salary Increases:

Years of Service	Rate (%)
1	12.00
2	10.00
3	8.00
4 or more	6.50

Payroll Growth: 5.0%

Retiree Medical Insurance Election:	Future retirees will select medical coverage in the same proportion that current retirees have selected coverage.

Monthly Contribution Rates:

	Pre-Medicare Coverage Rate in Effect on Valuation Date
Region 1	$278.76
Region 2	292.00
Region 3	397.08
Region 4	269.44

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem Blue Seniors	$103.18	$286.53	3,329	20,772
Anthem Blue Seniors Network	98.18	281.53	539	1,701
Bankers Life Medicare	82.70	195.35	732	410

	Weighted Medicare Coverage Rate in Effect on Valuation Date	
	Low Option	High Option
All Members	$99.34	$284.52

Medical Contribution Rate Increases:	Year	Rate(%)
	2003-2005	10.00
	2006-2010	9.00
	2011-2015	8.00
	2016-2020	7.50
	2021 and thereafter	7.00

Members with Multiple Service Records: For active members with service in more than one system, the liability has been valued as follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.
- Future service is projected only under the system in which the member is currently active.
- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Administrative Expenses: $8,100,000

Actuarial Value of Assets:	Sum of expected valuation assets and amortizations of the investment gains/(losses) from the current and four prior years. Expected valuation assets is equal to the actuarial value at the beginning of the year plus the expected return on assets using the assumed valuation interest rate from the prior year plus actual cash flows from the prior year. The current year investment gain/(loss) is determined as the difference between actual market value and expected actuarial value less any unamortized portions of the gain/(loss) from the previous four years.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.

EXHIBIT IV Hazardous

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: 1983 Group Annuity Mortality Table with margins plus 0.05% per year.

Disabled: Pension Benefit Guaranty Corporation Table for Disabled Lives Receiving Social Security plus 0.05% per year.

Termination Rates before Retirement:

	Rate (%)			
	Mortality		Disability	Withdrawal
Age	Male	Female		
20	0.09	0.07	0.04	3.04
25	0.10	0.08	0.04	3.04
30	0.11	0.08	0.05	3.38
35	0.14	0.10	0.07	2.44
40	0.17	0.12	0.13	1.50
45	0.27	0.15	0.26	0.75
50	0.44	0.21	0.53	0.00
55	0.66	0.30	0.99	0.00
60	0.97	0.47	1.74	0.00

Retirement Rates: 60% will retire as soon as eligible for unreduced benefit and balance will continue until age 55.

Retirement Age for Inactive Vested Participants: 55

Percent Married: 100%

Age of Spouse: Females 3 years younger than males.

Dependent Children: For duty related death benefits, it is assumed that the employee is survived by two dependent children each age 6.

Net Investment Return: 8.25%

Salary Increases:

Years of Service	Rate (%)
1	12.00
2	10.00
3	8.00
4 or more	6.50

Payroll Growth: 5.0%

Retiree Medical Insurance Election: Future retirees will select medical coverage in the same proportion that current retirees have selected coverage.

Monthly Contribution Rates:

Pre-Medicare Coverage
Rate in Effect on Valuation Date

	Single	Family	Parent Plus	Couple
Region 1	$278.76	$627.24	$376.32	$564.52
Region 2	292.00	657.04	394.24	591.32
Region 3	397.08	893.56	536.12	804.20
Region 4	269.44	606.40	363.84	545.76

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem Blue Seniors	$103.18	$286.53	3,329	20,772
Anthem Blue Seniors Network	98.18	281.53	539	1,701
Barkers Life Medicare	82.70	195.35	732	410

		Weighted Medicare Coverage Rate in Effect on Valuation Date	
		Low Option	**High Option**
	All Members	$99.34	$284.52

Medical Contribution Rate Increases:	**Year**	**Rate(%)**
	2003-2005	10.00
	2006-2010	9.00
	2011-2015	8.00
	2016-2020	7.50
	2021 and thereafter	7.00

Members with Multiple Service Records: For active members with service in more than one system, the liability has been valued as follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.
- Future service is projected only under the system in which the member is currently active.
- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Administrative Expenses:	$800,000
Actuarial Value of Assets:	Sum of expected valuation assets and amortization of the investment gains/(losses) from the current and four prior years. Expected valuation assets is equal to the actuarial value at the beginning of the year plus the expected return on assets using the assumed valuation interest rate from the prior year plus actual cash flows from the prior year. The current year investment gain/(loss) is determined as the difference between actual market value and expected actuarial value less any unamortized portions of the gain/(loss) from the previous four years.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.

EXHIBIT V Non – Hazardous
Summary of Plan Provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Normal Retirement:	
Age Requirement	65
Service Requirement	None
Amount	If a member has at least 48 months of service, the monthly benefit is 2.20% times final average compensation times years of service. Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period is less than forty-eight, one or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Early Retirement:	
Requirement	Age 55 with 60 months service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 5% per year for the first five years and 4% per year for the next five years for each year the member is younger than age 65 or has less than 27 years service, whichever is smaller.

Disability:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit except that service credit will be added to total service for the period from the last day of paid employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Vesting:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65

Pre-Retirement Death Benefit (not in line of duty):	
Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.
Spouse's Pre-Retirement Death Benefit (in line of duty):	
Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.
Dependent Child's Death Benefit (in line of duty):	
Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.
Post-Retirement Death Benefit:	
Lump - sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

EXHIBIT V Hazardous

Summary of Plan Provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation times years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Early Retirement:	
Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Disability:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 of more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Vesting:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Pre-Retirement Death Benefit (not in line of duty):	
Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to benefit member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.
Spouse's Pre-Retirement Death Benefit (in line of duty):	
Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.
Dependent Non-Spouse's Death Benefit (in line of duty):	
Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.
Dependent Child's Death Benefit (in line of duty):	
Requirement	None
Amount	10% of member's final monthly
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.
Post-Retirement Death Benefit:	
Lump - sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

State Police Retirement System

Actuarial Valuation and Review
as of June 30, 2003

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THE PARENT OF THE SEGAL COMPANY
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SEGAL

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November 6, 2003

Board of Trustees
State Police Retirement System
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601-6124

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2003. It summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2004 and analyzes the preceding year's experience.

The census information on which our calculations were based was prepared by the System and the financial information was provided by the Auditor. That assistance is gratefully acknowledged.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By: _____ _____

Leon F. (Rocky) Joyner, Jr., ASA, MAAA
Vice President and Actuary

K. Eric Fredén, FSA, MAAA
Associate Actuary

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SECTION 1: Valuation Summary for the State Police Retirement System

Purpose

This report has been prepared by The Segal Company to present a valuation of the State Police Employees Retirement System as of June 30, 2003. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2003, provided by the Board;
- The assets of the Plan as of June 30, 2003, provided by the Auditor;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

- The State Police Retirement System's basic financial goal is to establish contributions which fully fund the system's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.
- The retirement contribution rate is determined using the Entry Age Normal Cost (EANC) Method. Under this method, the employer contribution required is the sum of the normal cost, administration expenses and the sum of the 30-year amortization payments established each valuation due to changes in the Unfunded Actuarial Accrued Liability.
- The medical insurance contribution rate is determined in a similar method except that the actual contribution rate is determined by increasing the prior premium rate by an amount necessary to raise the insurance rate to the full EANC amount by the year 2016.
- The rates calculated in this report may be adopted by the Board for July 1, 2004 through June 30, 2005.

- The following summarizes the required contributions for the year beginning July 1, 2004 and compares them to the prior valuation amounts.

Plan	July 1, 2004 Rate	July 1, 2003 Rate
Retirement	8.49%	2.64%
Insurance	19.59	18.94
Total	28.08%	21.58%

- The increase in total rate is due to:

Investment loss	4.30%
Retiree COLA	0.95
Insurance Phase-in	0.65
Other experience	0.60
Total change	6.50%

- The actuarial valuation report as of June 30, 2003 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan. Because the actuarial value of assets involves a smoothing method, changes in market value are not fully reflected immediately in the actuarial value of assets. Rather, that effect is spread over a period of years.

- As indicated in Section 2, Subsection B of this report, the total unrecognized investment losses as of June 30, 2003 are:

Plan	Unrecognized investment losses as of 6/30/2003
Retirement	$93,947,344
Insurance	$18,194,350

These investment losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.25% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.25% rate and all other actuarial assumptions are met, the contribution requirements would still increase in each of the next few years.

Summary of Key Valuation Results

	Valuation Date	
	June 30, 2003	June 30, 2002
Contribution rates for next fiscal year:		
Retirement	8.49%	2.64%
Insurance	19.59%	18.94%
Total	28.08%	21.58%
Funded status as of valuation date:		
Retirement		
Actuarial Accrued Liability	$414,881,459	$380,790,346
Actuarial Value of Assets	413,063,576	438,955,465
Funded Ratio on Actuarial Value of Assets	99.56%	115.27%
Market Value of Assets	$319,116,232	$328,744,331
Funded Ratio on Market Value of Assets	76.92%	86.33%
Insurance		
Actuarial Accrued Liability	$184,501,205	$165,445,412
Actuarial Value of Assets	90,747,967	86,867,391
Funded Ratio on Actuarial Value of Assets	49.19%	52.51%
Market Value of Assets	$72,553,617	$68,074,444
Funded Ratio on Market Value of Assets	39.32%	41.15%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	941	897
Number of vested former members	21	20
Number of former members due a refund	92	83
Number of active members	1,019	1,002
Total Salary	$43,760,832	$43,961,844
Average Salary	42,945	43,874

A. PARTICIPANT DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

Active Members
Plan costs are affected by the age, years of service and salaries of active members. In this year's valuation, there were 1,019 active members with an average age of 35.9, average years of service of 10.9 years and average salaries of $42,945. The 1,002 active members in the prior valuation had an average age of 43.0, average service of 11.4 years and average salaries of $43,874.

Inactive Members
There were 21 members with a vested right to a deferred or immediate vested benefit.

In addition, there were 92 members entitled to a return of their employee contributions.

Retired Participants and Beneficiaries
As of June 30, 2003, 826 retired participants and 115 beneficiaries were receiving total monthly benefits of $2,342,962. For comparison, in the previous valuation, there were 819 retired participants and 78 beneficiaries receiving monthly benefits of $2,137,556.

A historical perspective of how the member population has changed over the past eight valuations can be seen in this chart.

CHART 1

Member Population: 1996 – 2003

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1996	1,002	8	625	0.63
1997	943	9	669	0.72
1998	954	11	739	0.79
1999	985	14	762	0.79
2000	1,023	9	797	0.79
2001	1,016	12	842	0.84
2002	1,002	20	897	0.92
2003	1,019	21	941	0.94

**Excludes terminated members due a refund of employee contributions*

These graphs show a distribution of active members by age and by years of service.

CHART 2

Distribution of Active Members by Age as of June 30, 2003

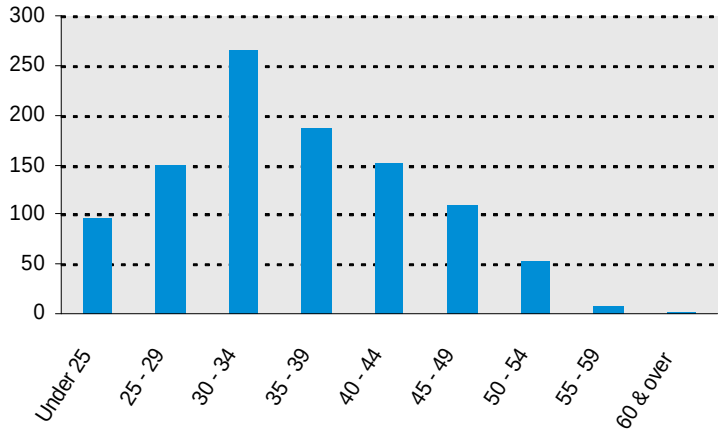
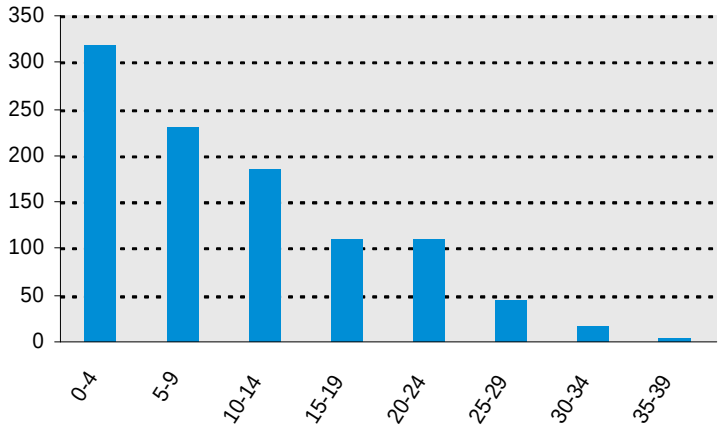


CHART 3

Distribution of Active Members by Years of Service as of June 30, 2003



These graphs show a distribution of the current retired participants based on their monthly amount and age, by type of pension.

CHART 4

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2003

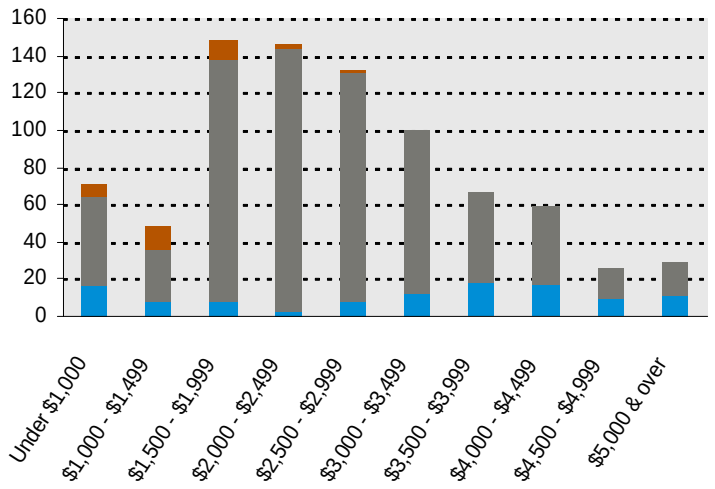
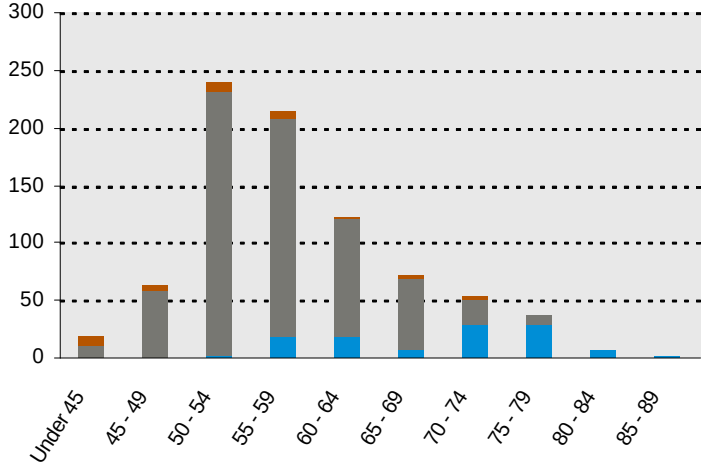


CHART 5

Distribution of Retired Participants by Type and by Age as of June 30, 2003



B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative expenses) and net investment earnings (less investment fees) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

CHART 6A Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 - 2003

The chart depicts the components of changes in the actuarial value of assets over the last eight years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

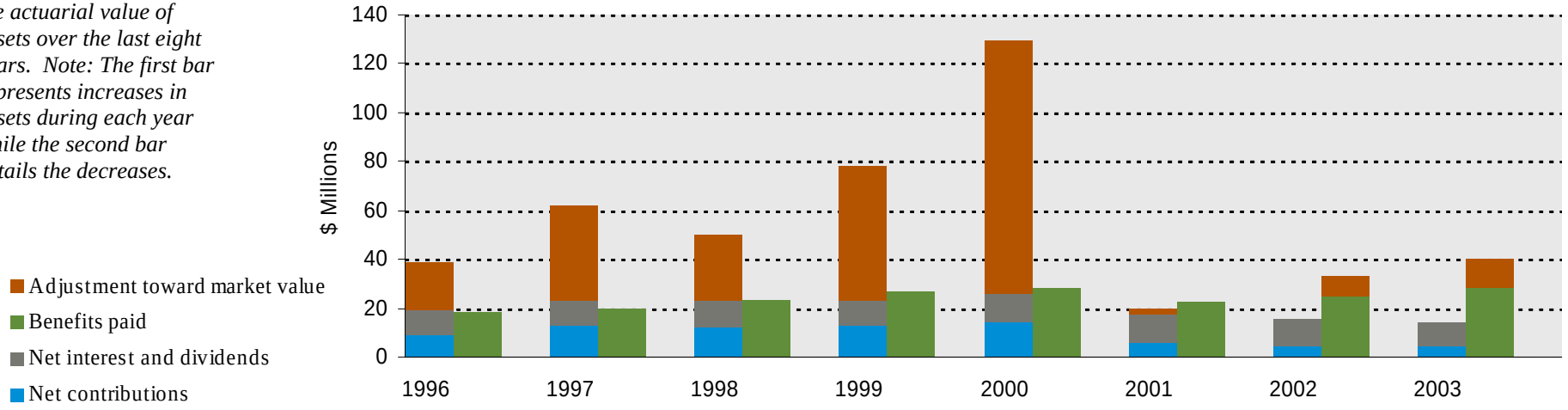
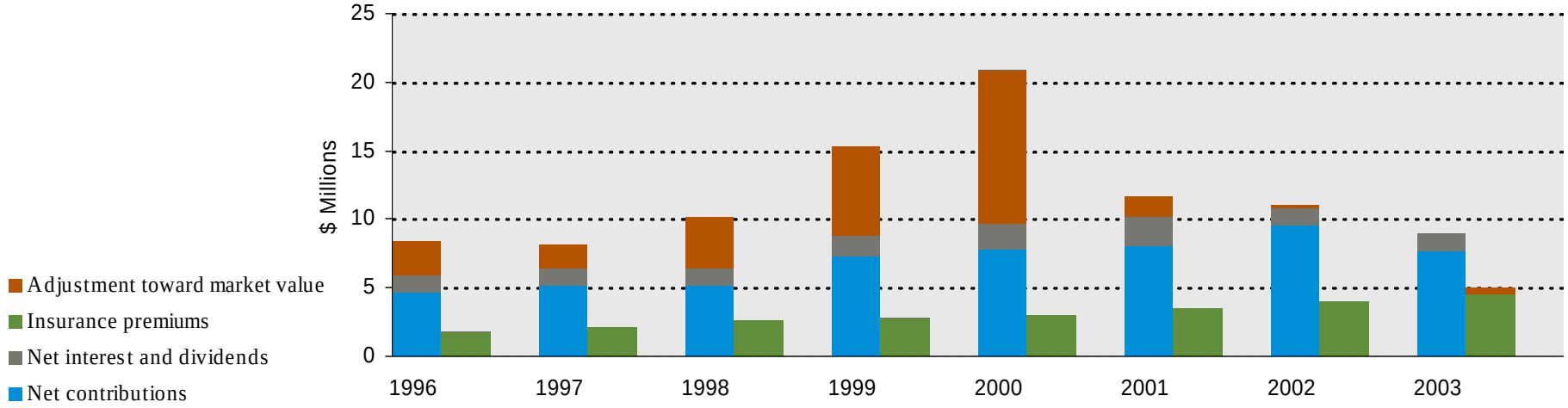


CHART 6B Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 - 2003



The chart shows the determination of the actuarial value of assets as of the valuation date

CHART 7A Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2003

1.	Actuarial Value, June 30, 2002		$438,955,465
2.	Net Cash flow		(23,603,232)
3.	Expected return on valuation assets		35,240,193
4.	Expected valuation assets		450,592,425
5.	Investment gain/(loss) for year ending:	**Initial Amount** / **Amortization**	
	June 30, 2003	($21,265,059) / ($4,253,012)	
	June 30, 2002	(51,918,114) / (10,383,623)	
	June 30, 2001	(114,461,071) / (22,892,214)	
	Total amortization amount		($37,528,849)
6.	Actuarial value of assets as of June 30, 2003		$413,063,576
7.	Market value of assets		$319,116,232
8.	Actuarial value as a percentage of market value		129.4%

The chart shows the determination of the actuarial value of assets as of the valuation date

CHART 7B Insurance

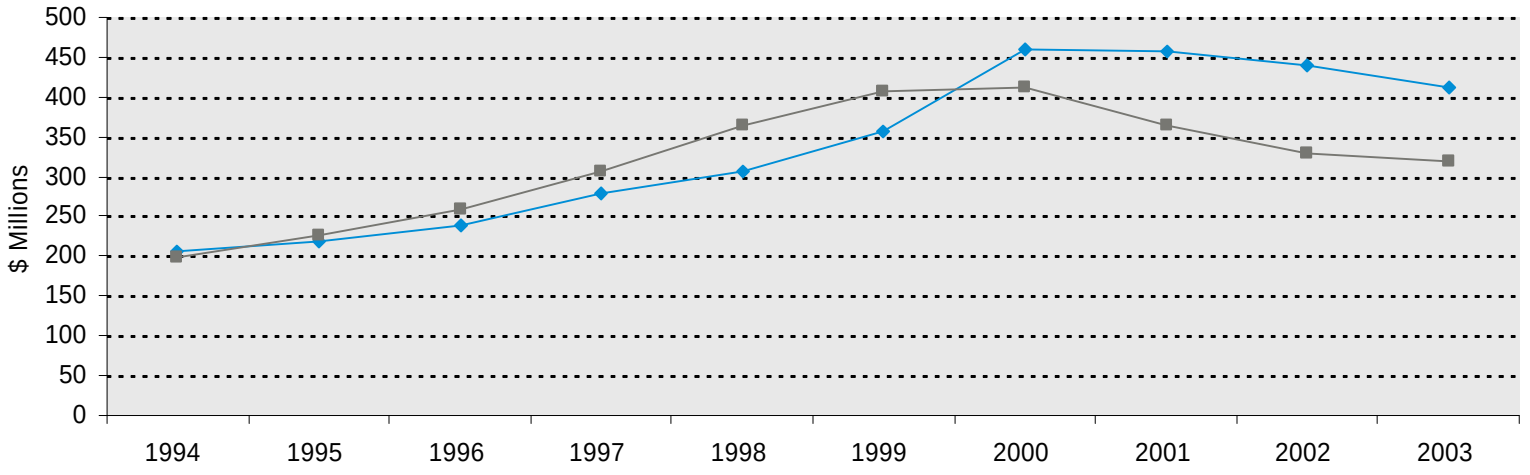
Determination of Actuarial Value of Assets for Year Ended June 30, 2003

1.	Actuarial Value, June 30, 2002		$86,867,391
2.	Net Cash flow		3,086,238
3.	Expected return on valuation assets		7,293,867
4.	Expected valuation assets		97,247,496
5.	Investment gain/(loss) for year ending:	**Initial Amount** / **Amortization**	
	June 30, 2003	($5,900,932) / ($1,180,186)	
	June 30, 2002	(14,174,603) / (2,834,921)	
	June 30, 2001	(12,422,108) / (2,484,422)	
	Total amortization amount		($6,499,529)
6.	Actuarial value of assets as of June 30, 2003		$90,747,967
7.	Market value of assets		$72,553,617
8.	Actuarial value as a percentage of market value		125.1%

This chart shows the change in the actuarial value of assets versus the market value over the past ten years

CHART 8A Retirement

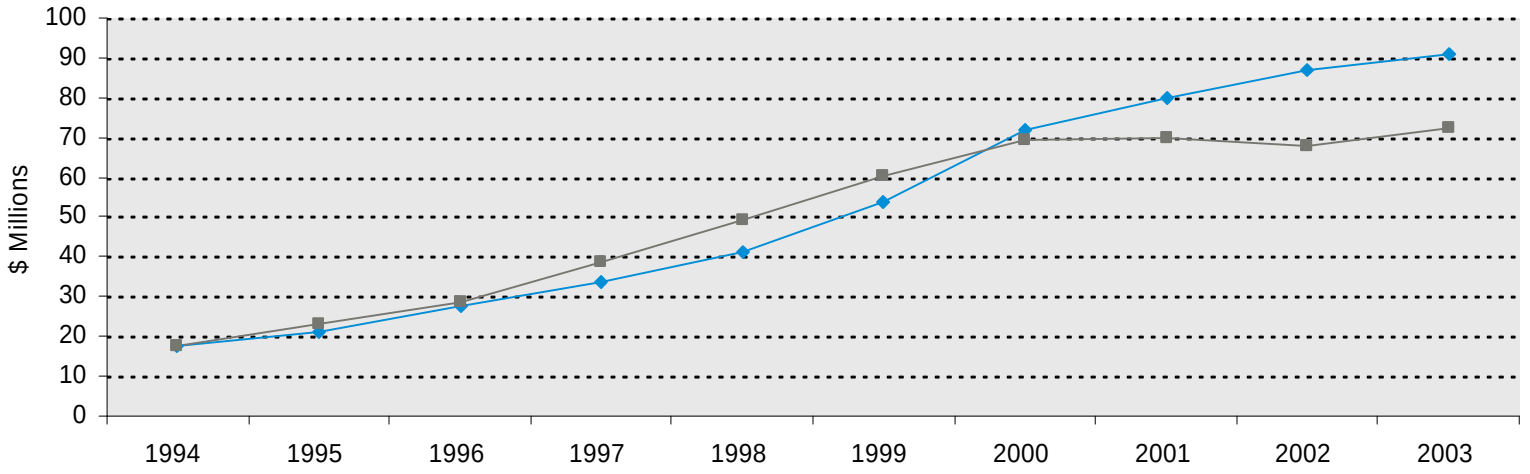
Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1994 – 2003



This chart shows the change in the actuarial value of assets versus the market value over the past ten years.

CHART 8B Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1994 – 2003



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Chart 9 presents a summary of experience for the year. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 9
Actuarial Experience for Year Ended June 30, 2003

	Retirement	Insurance
1. Net gain/(loss) from investments*	-$37,528,850	-$6,499,529
2. Net gain/(loss) from administrative expenses	5,929	-18,185
3. Net gain/(loss) from other experience**	-23,694,947	-3,094,271
4. Net experience gain/(loss): (1) + (2) + (3)	-$61,217,868	-$9,611,985

** Details in Chart 10*

*** Details in Chart 13*

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.25%. Chart 10 shows the investment experience for each plan for the year.

Since the actual return for the year was less than the assumed return, the each plan experienced an actuarial loss during the year ended June 30, 2003 with regard to its investments.

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. Chart 11, which follows, shows the rate of return on an actuarial basis compared to the market value investment return for the last seven years.

This chart shows the gain/(loss) due to investment experience.

CHART 10
Actuarial Value Investment Experience for Year Ended June 30, 2003

	Retirement	Insurance
1. Actual return	-$2,288,657	$794,338
2. Average value of assets	427,153,849	88,410,510
3. Actual rate of return: (1) ÷ (2)	-0.54%	0.90%
4. Assumed rate of return	8.25%	8.25%
5. Expected return: (2) x (4)	$35,240,193	$7,293,867
6. Actuarial gain/(loss): (1) – (5)	-$37,528,850	-$6,499,529

CHART 11A Retirement

Investment Return – Actuarial Value vs. Market Value: 1996 - 2003

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1996	$9,339,000	4.38%	$19,677,903	9.24%	$29,016,903	13.62%	$39,650,476	17.81%
1997	10,892,000	4.66	38,726,929	16.57	49,618,929	21.23	56,720,285	22.33
1998	11,038,000	4.03	26,511,643	9.67	37,549,643	13.69	67,163,306	22.27
1999	10,655,000	3.56	54,221,278	18.10	64,876,278	21.66	56,848,150	15.94
2000	11,938,000	3.40	103,301,378	29.45	115,239,378	32.85	18,631,485	4.66
2001	12,131,000	2.69	2,093,280	0.46	14,224,280	3.16	-29,707,210	-7.37
2002	11,567,921	2.59	-8,064,723	-1.81	3,503,198	0.79	-15,336,844	-4.33
2003	9,860,621	2.31	-12,149,278	-2.84	-2,288,657	-0.54	13,761,273	4.34
Total	$87,421,542		$224,318,410		$311,739,952		$207,730,921	
					Average return	9.91%		2.41%

Note: Each year's yield is weighted by the average asset value in that year.

CHART 11B Insurance

Investment Return – Actuarial Value vs. Market Value: 1996 - 2003

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1996	$1,349,000	5.97%	$2,453,072	10.85%	$3,802,072	16.82%	$3,042,531	12.45%
1997	1,293,000	4.41	1,814,216	6.19	3,107,216	10.61	6,753,913	22.25
1998	1,344,000	3.83	3,687,017	10.50	5,031,017	14.32	8,320,673	20.88
1999	1,537,000	3.52	6,490,359	14.87	8,027,359	18.39	6,577,625	12.73
2000	1,878,000	3.33	11,119,853	19.74	12,997,853	23.08	4,144,524	6.59
2001	2,084,000	2.82	1,534,784	2.07	3,618,784	4.89	-4,023,535	-5.61
2002	1,283,315	1.55	213,261	0.26	1,496,576	1.81	-7,387,596	-10.16
2003	1,296,362	1.47	-502,024	-0.57	794,338	0.90	1,360,031	1.95
Total	$12,064,677		$26,810,538		$38,875,215		$18,788,166	
					Average return	7.81%		0.20%

Note: Each year's yield is weighted by the average asset value in that year.

This chart illustrates how this leveling effect has actually worked over the years 1996 - 2003.

CHART 12A Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1996 - 2003

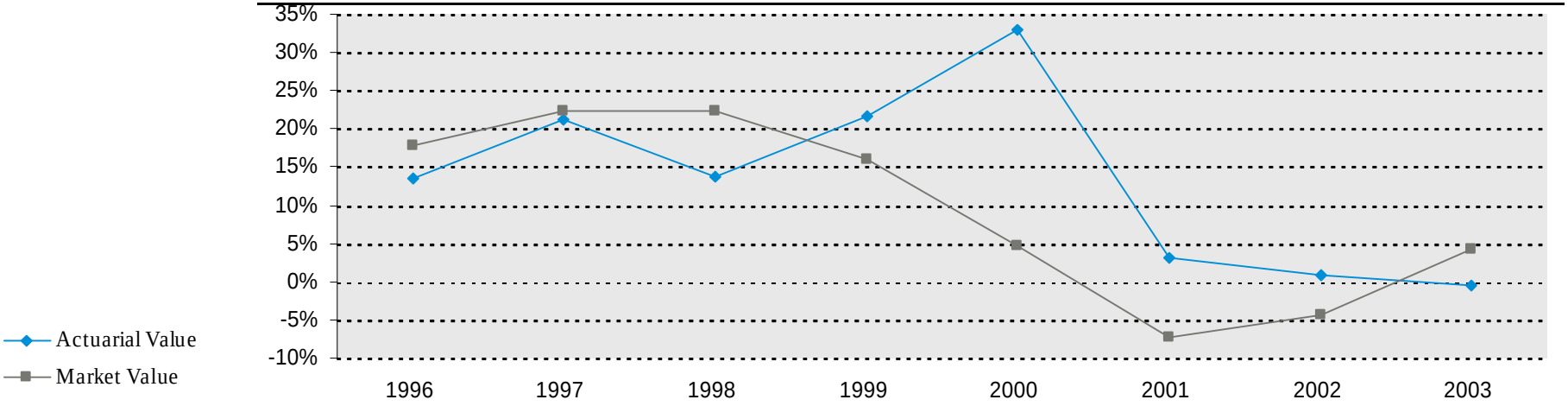
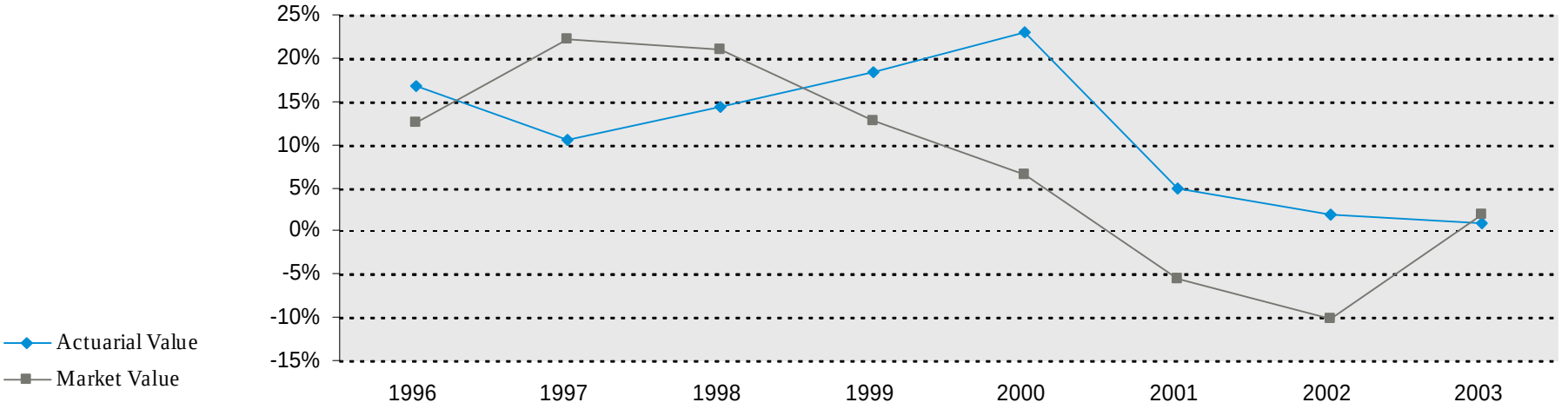


CHART 12B Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1996 - 2003



Administrative Expenses

Current assumptions include an assumption for the cost of administration for the retirement funds but not for the insurance funds. This assumption is modified with each valuation to estimate expenses for the upcoming fiscal year. The following summarizes the past year's experience and presents the assumptions for the next year.

Plan	Year End 2003 Assumption	Year End 2003 Actual Expense	Gain/Loss* for the Year	Year End 2004 Assumption
Retirement	$89,883	$84,406	$5,929	$89,000
Insurance	$-0-	$-0-	$-0-	$-0-

* *Includes interest to year-end.*

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- COLA's granted in the year,
- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

A brief summary of the demographic gain/(loss) experience of the Fund's for the year ended June 30, 2003 is shown in the chart below

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 13
Experience Due to Changes in Demographics for Year Ended June 30, 2003

	Retirement	Insurance
1. COLA	-$8,252,449	N/A
2. Other	-15,442,499	N/A
3. Total	-$23,694,948	-$3,094,271
4. Percentage of Actuarial Accrued Liability	5.7%	1.9%

D. RECOMMENDED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability. This total amount is then divided by the projected salaries for active members to determine the funding rate.

The recommended contribution is based on a 30-year amortization of bases established each year as specified in the law governing the Plan.

Exhibit H provides details on these amortization bases.

The contribution rates as of June 30, 2003 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions

Charts 14 and 15 present the Recommended Contributions and reconciliations from the prior valuation.

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 14 Retirement

Recommended Contribution

	As of June 30, 2003		As of June 30, 2002	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$7,302,221	16.69%	$7,661,317	17.43%
2. Administrative expenses	89,000	0.20%	89,883	0.20%
3. Expected employee contributions	-3,422,969	-7.82%	-3,417,599	-7.77%
4. Employer normal cost: (1) + (2) + (3)	$3,968,252	9.07%	$4,333,601	9.86%
5. Actuarial accrued liability	414,881,459		380,790,346	
6. Actuarial value of assets	413,063,576		438,955,465	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	$1,817,883		-$58,165,119	
8. Payment on unfunded/(overfunded) actuarial accrued liability	-254,076	-0.58%	-3,169,195	-7.21%
9. Total recommended contribution: (4) + (8)	$3,714,176	8.49%	$1,164,406	2.64%*
10. Projected salary	$43,760,832		$43,961,844	

** Components of recommended contribution do not add to prior year's recommended contribution percentage due to prior actuary rounding the net normal cost and adding the rounded components.*

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 15 Retirement

Reconciliation of Recommended Contribution from June 30, 2002 to June 30, 2003

Recommended Contribution as of June 30, 2002	$1,164,406
Effect of COLA for retirees	413,437
Effect of investment (gain)/loss	1,880,146
Effect of net other changes	256,187
Total change	$2,549,770
Recommended Contribution as of June 30, 2003	$3,714,176

CHART 14B Insurance

Recommended Contribution

	As of June 30, 2003	
	Amount	**% of Salary**
1. Employer normal cost	$6,508,043	14.87%
2. Actuarial accrued liability	184,501,205	
3. Actuarial value of assets	90,747,967	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$93,753,238	
5. Payment on unfunded/(overfunded) actuarial accrued liability	5,499,654	12.57%
6. Full EANC Contribution: (1) + (5)	$12,907,697	27.44%
7. Projected salary	$43,760,832	
8. Prior year's funding rate	N/A	18.94%
9. Years to reach full EANC	N/A	13 years
10. Additional amount this year	N/A	.65%
11. Total recommended contribution rate	N/A	19.59%

EXHIBIT A

Table of Plan Coverage

Category	Year Ended June 30 2003	2002	Change From Prior Year
Active members in valuation:			
Number	1,019	1,002	1.7%
Average age	35.9	43.0	N/A
Average service	10.9	11.4	N/A
Total salary	$43,760,832	$43,961,844	-0.5%
Average salary	$42,945	$43,874	-2.1%
Account balances	$35,832,095	0	N/A
Number with unknown age and/or service information	0	0	N/A
Total active vested members	763	696	9.6%
Vested terminated members	21	20	5.0%
Retired participants:			
Number in pay status	792	773	2.5%
Average age	58.8	N/A	N/A
Average monthly benefit	$2,655	N/A	N/A
Disabled members:			
Number in pay status	34	46	26.1%
Average age	53.2	N/A	N/A
Average monthly benefit	$1,357	N/A	N/A
Beneficiaries in pay status	115	78	47.4%
Inactive nonvested members due a refund	92	83	10.8%

EXHIBIT B

Members in Active Service as of June 30, 2003
By Age, Years of Service, and Average Salary

		Years of Service							
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39
Under 25	96	96	- -	- -	- -	- -	- -	- -	- -
	$21,577	$21,577	- -	- -	- -	- -	- -	- -	- -
25 - 29	148	120	28	- -	- -	- -	- -	- -	- -
	32,450	31,088	$38,285	- -	- -	- -	- -	- -	- -
30 - 34	265	78	147	40	- -	- -	- -	- -	- -
	38,548	30,700	40,924	$45,120	- -	- -	- -	- -	- -
35 - 39	188	16	44	98	29	1	- -	- -	- -
	45,331	29,606	40,782	48,089	$51,162	$57,648	- -	- -	- -
40 - 44	151	5	9	44	56	37	- -	- -	- -
	50,956	27,614	39,868	47,957	53,604	56,365	- -	- -	- -
45 - 49	109	1	1	2	24	61	19	1	- -
	57,087	28,272	37,392	45,768	53,018	57,885	$62,849	$67,752	- -
50 - 54	52	- -	- -	1	- -	11	26	12	2
	67,089	- -	- -	47,604	- -	59,155	68,149	71,272	$81,594
55 - 59	8	- -	- -	- -	- -	- -	1	5	2
	83,628	- -	- -	- -	- -	- -	104,220	76,894	90,168
60 - 64	1	- -	1	- -	- -	- -	- -	- -	- -
	44,352	- -	44,352	- -	- -	- -	- -	- -	- -
70 & over	1	1	- -	- -	- -	- -	- -	- -	- -
	30,696	30,696	- -	- -	- -	- -	- -	- -	- -
Total	1,019	317	230	185	109	110	46	18	4
	$42,945	$27,973	$40,534	$47,388	$52,825	$57,499	$66,744	$72,638	$85,881

EXHIBIT C Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Contribution income:				
Employer contributions	-$20,061		-$17,643	
Member contributions	4,673,538		4,417,691	
Less administrative expenses	-84,406		-75,908	
Net contribution income		$4,569,071		$4,324,140
Investment income:				
Interest, dividends and other income	$10,740,596		$13,228,921	
Adjustment toward market value	-11,935,418		-7,866,958	
Less investment fees	-1,093,835		-1,858,765	
Net investment income		-2,288,657		3,503,198
Total income available for benefits		$2,280,414		$7,827,338
Less benefit payments:				
Benefit payments	$27,861,736		$24,839,051	
Net refunds	96,707		-4,234	
Net benefit payments		$27,958,443		$24,834,817
Change in reserve for future benefits		-$25,678,029		-$17,007,479

EXHIBIT C Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Contribution income:				
Employer contributions	$7,654,313		$9,579,899	
Less administrative expenses	-16,799		-29,022	
Net contribution income		$7,637,514		$9,550,877
Investment income:				
Interest, dividends and other income	$1,449,917		$1,490,315	
Adjustment toward market value	-469,120		242,172	
Less investment fees	-186,459		-235,911	
Net investment income		794,338		1,496,576
Total income available for benefits		$8,431,852		$11,047,453
Less healthcare premium subsidies:		$4,518,372		$4,014,728
Change in reserve for future benefits		$3,913,480		$7,032,725

EXHIBIT D Retirement

Table of Financial Information

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Cash equivalents		$134,759		$1,266,331
Accounts receivable:				
Investment accounts receivable	$9,593		$10,000	
Year end interest receivable	1,776,874		2,175,000	
Year end accounts receivable	1,024,040		1,073,000	
Total accounts receivable		2,810,507		3,258,000
Investments:				
Bonds	$116,788,407		$114,103,000	
Stocks	173,423,546		171,937,000	
Mortgage	16,969,831		19,485,000	
Real Estate	823,917		1,015,000	
Fixed Assets	6,070		0	
Short-term Investments	8,285,357		17,843,000	
Total investments at market value		316,297,128		324,383,000
Total assets		$319,242,394		$328,907,331
Less accounts payable:		-$126,162		-$163,000
Net assets at market value		$319,116,232		$328,744,331
Net assets at actuarial value		$413,063,576		$438,955,465

EXHIBIT D Insurance

Table of Financial Information

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Cash equivalents		$13,831		$983,444
Accounts receivable:				
Investment accounts receivable	$2,431		$4,000	
Year end interest receivable	199,642		182,000	
Year end accounts receivable	651,033		805,000	
Total accounts receivable		853,106		991,000
Investments:				
Bonds	$8,247,080		$7,413,000	
Stocks	59,192,228		54,026,000	
Short-term Investments	4,282,323		4,706,000	
Total investments at market value		71,721,631		66,145,000
Total assets		$72,588,568		$68,119,444
Less accounts payable:		-$34,951		-$45,000
Net assets at market value		$72,553,617		$68,074,444
Net assets at actuarial value		$90,747,967		$86,867,391

EXHIBIT E Retirement

Development of the Fund Through June 30, 2003

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1996	$7,089,000	$2,457,000	$29,016,903	$204,000	$18,348,000	$237,515,346
1997	9,628,000	2,958,000	49,618,929	212,000	19,865,000	279,643,275
1998	9,574,000	2,711,000	37,549,643	234,000	22,925,000	306,318,918
1999	9,463,000	3,658,000	64,876,278	214,000	26,479,000	357,623,196
2000	10,216,000	4,202,000	115,239,378	239,000	27,873,000	459,168,574
2001	1,516,267	4,138,298	14,224,280	214,171	22,672,539	456,160,709
2002	-17,643	4,417,691	3,503,198	273,673	24,834,817	438,955,465
2003	-20,061	4,673,538	-2,288,657	298,266	27,958,443	413,063,576

** Net of investment fees*

EXHIBIT E Insurance

Development of the Fund Through June 30, 2003

Year Ended June 30	Employer Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1996	$4,604,000	$3,802,072	$6,000	$1,791,000	$27,809,267
1997	5,126,000	3,107,216	6,000	2,160,000	33,876,483
1998	5,120,000	5,031,017	6,000	2,611,000	41,410,500
1999	7,252,000	8,027,359	13,000	2,747,000	53,929,859
2000	7,818,000	12,997,853	20,000	3,014,000	71,711,712
2001	8,113,391	3,618,784	34,638	3,545,672	79,863,577
2002	9,579,899	1,496,576	57,933	4,014,728	86,867,391
2003	7,654,313	794,338	49,703	4,518,372	90,747,967

** Net of investment fees*

EXHIBIT F Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$8,982,071	$844,116	17.00	$11,370,355
06/30/1991	30	9,963,656	892,569	18.00	12,554,629
06/30/1992	30	-24,502,117	-2,092,290	19.00	-30,638,282
06/30/1993	30	-3,706,436	-301,693	20.00	-4,586,877
06/30/1994	30	10,380,135	805,374	21.00	12,682,486
06/30/1995	30	22,729,292	1,680,973	22.00	27,357,054
06/30/1996	30	-17,793,855	-1,254,355	23.00	-21,055,496
06/30/1997	30	-31,021,470	-2,082,684	24.00	-35,992,855
06/30/1998	30	12,716,788	813,110	25.00	14,443,356
06/30/1999	30	-31,317,924	-1,907,111	26.00	-34,766,242
06/30/2000	30	-77,707,399	-4,506,673	27.00	-84,195,831
06/30/2001	30	26,106,163	1,441,941	28.00	27,572,180
06/30/2002	30	44,465,495	2,339,045	29.00	45,722,438
06/30/2003	30	61,350,968	3,073,602	30.00	61,350,968
Total			-$254,076		$1,817,883

** Level percentage of salary*

EXHIBIT F Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$73,323,619	$5,168,853	23.00	$86,763,954
06/30/1997	30	8,088,952	543,067	24.00	9,385,259
06/30/1998	30	-2,668,212	-170,605	25.00	-3,030,476
06/30/1999	30	-13,378,283	-814,673	26.00	-14,851,324
06/30/2000	30	-6,431,546	-373,000	27.00	-6,968,569
06/30/2001	30	9,773,380	539,820	28.00	10,322,213
06/30/2002	30	-1,482,959	-78,009	29.00	-1,524,879
06/30/2003	30	13,657,060	684,201	30.00	13,657,060
Total			$5,499,654		$93,753,238

** Level percentage of salary*

EXHIBIT G

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

EXHIBIT I – Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:			
1.	Retired participants as of the valuation date (including 115 beneficiaries in pay status)		941
2.	Members inactive during year ended June 30, 2003 with vested rights		21
3.	Members active during the year ended June 30, 2003		1,019
	Fully vested	763	
	Not vested	256	
4.	Inactive nonvested members due a refund as of June 30, 2003		92
The actuarial factors as of the valuation date are as follows:			
1.	Normal cost, including administrative expenses		$7,391,221
2.	Present value of future benefits		488,418,021
3.	Present value of future normal costs		73,536,562
4.	Actuarial accrued liability		414,881,459
	Retired participants and beneficiaries	$289,559,607	
	Inactive members with vested rights	368,644	
	Active members	124,868,667	
	Inactive nonvested members due a refund	84,541	
5.	Actuarial value of assets ($319,116,232 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		413,063,576
6.	Unfunded actuarial accrued liability		$1,817,883

EXHIBIT I – Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Normal cost, including administrative expenses		$6,508,043
2.	Present value of future benefits		255,287,884
3.	Present value of future normal costs		70,786,679
4.	Actuarial accrued liability		184,501,205
	Retired participants and beneficiaries	$105,482,674	
	Inactive members with vested rights	835,076	
	Active members	78,183,455	
5.	Actuarial value of assets ($72,553,617 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		90,747,967
6.	Unfunded actuarial accrued liability		$93,753,238

EXHIBIT II – Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ Overfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/1996	$237,515,346	$244,540,812	$7,025,466	97.13%	$34,698,957	20.25%
06/30/1997	279,643,275	255,784,758	-23,858,517	109.33	41,586,211	-57.37
06/30/1998	306,318,918	294,427,019	-11,891,899	104.04	38,727,361	-30.71
06/30/1999	357,623,196	314,021,673	-43,601,523	113.88	40,433,405	-107.84
06/30/2000	459,168,574	336,579,763	-122,588,811	136.42	43,619,383	-281.04
06/30/2001	456,160,709	356,211,860	-99,948,849	128.06	44,646,678	-223.87
06/30/2002	438,955,465	380,790,346	-58,165,119	115.27	44,314,696	-131.25
06/30/2003	413,063,576	414,881,459	1,817,883	99.56	43,760,832	4.15

EXHIBIT II – Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ Overfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/1996	$27,809,267	$101,132,886	$73,323,619	27.50%	$34,698,957	211.31%
06/30/1997	33,876,483	117,361,754	83,485,271	28.87	41,586,211	200.75
06/30/1998	41,410,500	124,501,076	83,090,576	33.26	38,727,361	214.55
06/30/1999	53,929,859	125,797,150	71,867,291	42.87	40,433,405	177.74
06/30/2000	71,711,712	138,867,085	67,155,373	51.64	43,619,383	153.96
06/30/2001	79,863,577	158,261,479	78,397,902	50.46	44,646,678	175.60
06/30/2002	86,867,391	165,445,412	78,578,021	52.51	44,314,696	177.32
06/30/2003	90,747,967	184,501,205	93,753,238	49.19	43,760,832	214.24

EXHIBIT III

Supplementary Information Required by the GASB

Valuation date	June 30, 2003
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	17 to 30 years
Asset valuation method	5 year smoothing method
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	941
Terminated members entitled to, but not yet receiving benefits	21
Active members	1,019
Total	1,981

EXHIBIT III (continued)
Supplementary Information Required by the GASB

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	218	209	2	6	- -	1
Family; Pre-Medicare	141	141	- -	- -	- -	- -
Parent Plus; Pre-Medicare	44	43	- -	- -	1	- -
Couple; Pre-Medicare	243	240	3	- -	- -	- -
Medicare Regular	13	8	4	4	1	- -
Medicare High Option	312	305	4	1	2	- -
Total	971	946	9	11	4	1

EXHIBIT IV

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: 1983 Group Annuity Mortality Table with margins plus 0.05% per year.

Disabled: Pension Benefit Guaranty Corporation Table for Disabled Lives Receiving Social Security plus 0.05% per year.

Termination Rates before Retirement:

	Rate (%)			
	Mortality		Disability	Withdrawal
Age	Male	Female		
20	0.09	0.07	0.04	1.82
25	0.10	0.08	0.04	1.82
30	0.11	0.08	0.05	2.03
35	0.14	0.10	0.07	1.46
40	0.17	0.12	0.13	0.96
45	0.27	0.15	0.26	0.45
50	0.44	0.21	0.53	0.00
55	0.66	0.30	0.99	0.00
60	0.97	0.47	1.74	0.00

Retirement Rates: 60% will retire as soon as eligible for unreduced benefit and balance will continue until age 55.

Retirement Age for Inactive Vested Participants: 55

Percent Married: 100%

Age of Spouse: Females 3 years younger than males.

Dependent Children: For duty related death benefits, it is assumed that the employee is survived by two dependent children each age 6.

Net Investment Return: 8.25%

Salary Increases:

Years of Service	Rate (%)
1	12.00
2	10.00
3	8.00
4 or more	6.50

Payroll Growth: 5.0%

Retiree Medical Insurance Election: Future retirees will select medical coverage in the same proportion that current retirees have selected coverage.

Monthly Contribution Rates:

Pre-Medicare Coverage
Rate in Effect on Valuation Date

	Single	Family	Parent Plus	Couple
Region 1	$278.76	$627.24	$376.32	$564.52
Region 2	292.00	657.04	394.24	591.32
Region 3	397.08	893.56	536.12	804.20
Region 4	269.44	606.40	363.84	545.76

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem Blue Seniors	$103.18	$286.53	3,329	20,772
Anthem Blue Seniors Network	98.18	281.53	539	1,701
Barkers Life Medicare	82.70	195.35	732	410

		Weighted Medicare Coverage Rate in Effect on Valuation Date	
		Low Option	**High Option**
	All Members	$99.34	$284.52

Medical Contribution Rate Increases:	**Year**	**Rate(%)**
	2003-2005	10.00
	2006-2010	9.00
	2011-2015	8.00
	2016-2020	7.50
	2021 and thereafter	7.00

Members with Multiple Service Records: For active members with service in more than one system, the liability has been valued as follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.
- Future service is projected only under the system in which the member is currently active.
- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Administrative Expenses:	$89,000
Actuarial Value of Assets:	Sum of expected valuation assets and amortization of the investment gains/(losses) from the current and four prior years. Expected valuation assets is equal to the actuarial value at the beginning of the year plus the expected return on assets using the assumed valuation interest rate from the prior year plus actual cash flows from the prior year. The current year investment gain/(loss) is determined as the difference between actual market value and expected actuarial value less any unamortized portions of the gain/(loss) from the previous four years.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.

EXHIBIT V

Summary of Plan Provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	June 30 through June 30
Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation times years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Early Retirement:	
Requirement	Age 50 with 15 years of service or any age with 20 years service
Amount	Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Disability:

Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The maximum amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used. A contributing member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Vesting:

Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to benefit member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non – Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

Lump - sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

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Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

Actuarial Valuation and Review
as of June 30, 2004

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Kentucky Employees Retirement System

Actuarial Valuation and Review
as of June 30, 2004

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SEGAL

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November 11, 2004

Board of Trustees
Kentucky Employees Retirement System
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601-6124

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2004. It summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2005 and analyzes the preceding year's experience.

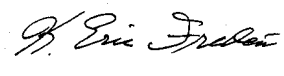
The census information on which our calculations were based was prepared by the System and the financial information was provided by the Auditor. That assistance is gratefully acknowledged.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By: 

Leon F. (Rocky) Joyner, Jr., ASA, MAAA
Vice President and Actuary

K. Eric Fredén, FSA, MAAA
Associate Actuary

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Purpose

This report has been prepared by The Segal Company to present a valuation of the Kentucky Employees Retirement System as of June 30, 2004. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2004, provided by the Board;
- The assets of the Plan as of June 30, 2004, provided by the Auditor;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The Kentucky Employees Retirement System's basic financial goal is to establish contributions which fully fund the System's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.
- The retirement contribution rate is determined using the Entry Age Normal Cost (EANC) Method. Under this method the employer contribution required is the sum of the normal cost, administration expenses and the sum of the 30-year amortization payments established each valuation due to changes in the Unfunded Actuarial Accrued Liability.
- The medical insurance contribution rate is determined in a similar method except that the actual contribution rate is determined by increasing the prior year's rate by an amount necessary to raise the insurance rate to the full EANC amount by the year 2016.
- The rates calculated in this report may be adopted by the Board for July 1, 2005 through June 30, 2006.

- The following summarizes the required contributions for the year beginning July 1, 2005 and compares them to the prior valuation amounts.

Non-Hazardous

Plan	July 1, 2005 Rate	July 1, 2004 Rate
Retirement	7.85%	5.11%
Insurance	5.77	5.18
Total	13.62%	10.29%

Hazardous

Plan	July 1, 2005 Rate	July 1, 2004 Rate
Retirement	8.52%	7.26%
Insurance	13.07	12.21
Total	21.59%	19.47%

- The increase in the total rate is due to:

Non-Hazardous

Retirement plan investment loss	1.63%
Retiree COLA	0.21
Insurance Phase-in*	0.59
Change in administrative expense assumption	0.02
Other experience	0.88
Total change	3.33%

Hazardous

Retirement plan investment loss	0.91%
Retiree COLA	0.10
Insurance Phase-in*	0.86
Other experience	0.25
Total change	2.12%

* Includes a portion of all insurance plan gains and losses for the year.

- The actuarial valuation report as of June 30, 2004 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan. Because the actuarial value of assets involves a smoothing method, changes in market value are not fully reflected immediately in the actuarial value of assets. Rather, that effect is spread over a period of years.

- As indicated in Section 2, Subsection B of this report, the total unrecognized investment losses as of June 30, 2004 are:

Non-Hazardous

Plan	Unrecognized investment losses as of 6/30/2004	Actuarial value as a percentage of market value
Retirement	$741,519,598	114.1%
Insurance	12,906,314	102.2

Hazardous

Plan	Unrecognized investment losses as of 6/30/2004	Actuarial value as a percentage of market value
Retirement	$30,643,256	108.4%
Insurance	7,031,506	104.3

These investment losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent they are not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.25% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.25% rate and all other actuarial assumption are met, the contribution requirements would still increase in each of the next few years.

- The recommended contributions for the KERS Non-Hazardous Retirement Plan for the years ended June 30, 2003 and June 30, 2004 were $45,578,833 and $84,758,932, respectively. Actual contributions were $7,597,450 and $21,696,543. If the actual contributions had been equal to the recommended amounts, the recommended contribution for the upcoming year would have been reduced by approximately $5,219,141, or 0.32% of payroll.

Summary of Key Valuation Results

	Kentucky Non-Hazardous		Kentucky Hazardous		Kentucky Totals	
	June 30, 2004	June 30, 2003	June 30, 2004	June 30, 2003	June 30, 2004	June 30, 2003
Contributions for next fiscal year:						
Retirement	7.85%	5.11%	8.52%	7.26%	N/A	N/A
Insurance	5.77	5.18	13.07	12.21	N/A	N/A
Total	13.62%	10.29%	21.59%	19.47%	N/A	N/A
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$7,049,613,171	$6,520,463,188	$403,578,036	$356,879,133	$7,453,191,207	$6,877,342,321
Actuarial value of assets	6,000,513,743	6,351,318,832	397,212,763	385,925,722	6,397,726,506	6,737,244,554
Funded ratio on actuarial value of assets	85.12%	97.41%	98.42%	108.14%	85.84%	97.96%
Market value of assets	$5,258,994,145	$4,929,443,185	$366,569,507	$320,524,691	5,625,563,652	5,249,967,876
Funded ratio on market value of assets	74.60%	75.60%	90.83%	89.81%	75.48%	76.34%
Insurance						
Actuarial accrued liability	$2,335,905,365	$2,093,210,321	$323,503,563	$283,178,335	$2,659,408,928	$2,376,388,656
Actuarial value of assets	600,586,961	553,885,082	169,158,879	151,459,500	769,745,840	705,344,582
Funded ratio on actuarial value of assets	25.71%	26.46%	52.29%	53.49%	28.94%	29.68%
Market value of assets	$587,680,647	$487,274,973	$162,127,373	$125,533,413	749,808,020	612,808,386
Funded ratio on market value of assets	25.16%	23.28%	50.12%	44.33%	28.19%	25.79%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	28,892	27,233	1,549	1,357	30,441	28,590
Number of vested former members	4,825	3,456	260	145	5,085	3,601
Number of former members due a refund	20,950	15,066	1,772	1,052	22,722	16,118
Number of active members	47,599	49,158	4,014	4,189	51,613	53,347
Total salary	$1,645,412,496	$1,658,604,696	$126,664,812	$129,088,956	$1,772,077,308	$1,787,693,652
Average salary	34,568	33,740	31,556	30,816	34,334	33,511

A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, C, and D.

The ratio of non-actives to actives has slowly but steadily climbed in both groups for the past decade. As the number of annuitants per active employee rises, cash flow is impacted. The system either becomes more dependent on investment income to cover benefit payments, or contributions must rise to meet these obligations. (For the non-hazardous plan, net contributions have been less than benefit payments in each of the last eight years. However, for the hazardous plan, net contributions have exceeded benefit payments in each of the last ten years.)

Active Members

Plan costs are affected by the age, years of service and salaries of active members. In this year's non-hazardous valuation, there were 47,599 active members with an average age of 42.9, average service of 10.0 years and average salaries of $34,568. The 49,158 active members in the prior valuation had an average age of 42.2, average service of 10.0 years and average salaries of $33,740.

In the hazardous plan, there were 4,014 active members with an average age of 42.7, average service of 7.6 years and average salaries of $31,556. The 4,189 active members in the prior valuation had an average age of 41.6, average service of 7.2 years and average salaries of $30,816.

Inactive Members

In this year's valuation, there were 4,825 non-hazardous members with a vested right to a deferred or immediate vested benefit. In addition, there were 20,950 members entitled to a return of their employee contributions.

For the hazardous plan, there were 260 members with a vested right to a deferred or immediate vested benefit. In addition, there were 1,772 members entitled to a return of their employee contributions.

Retired Participants and Beneficiaries

As of June 30, 2004, 25,114 non-hazardous retired participants and 3,778 beneficiaries were receiving total monthly benefits of $37,450,868. For comparison, in the previous valuation, there were 23,476 retired participants and 3,757 beneficiaries receiving monthly benefits of $32,754,064.

For the hazardous plan, there were 1,382 retired participants and 167 beneficiaries were receiving total monthly benefits of $1,341,584. For comparison, in the previous valuation, there were 1,185 retired participants and 172 beneficiaries receiving monthly benefits of $1,081,227.

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A historical perspective of how the member population has changed over the past nine valuations can be seen in these charts.

CHART 1A – Non-Hazardous

Member Population: 1996 – 2004

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1996	47,145	2,416	19,468	0.46
1997	46,073	2,550	20,540	0.50
1998	46,342	2,735	20,955	0.51
1999	45,824	2,978	21,941	0.54
2000	46,897	3,073	23,760	0.57
2001	47,780	3,312	25,118	0.60
2002	48,555	3,415	26,703	0.62
2003	49,158	3,456	27,233	0.62
2004	47,599	4,825	28,892	0.71

CHART 1B – Hazardous

Member Population: 1996 – 2004

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1996	3,452	68	502	0.17
1997	3,532	77	585	0.19
1998	3,582	96	671	0.21
1999	3,889	96	780	0.23
2000	4,007	113	924	0.26
2001	4,228	123	1,053	0.28
2002	4,211	127	1,208	0.32
2003	4,189	145	1,357	0.36
2004	4,014	260	1,549	0.45

**Excludes terminated members due a refund of employee contributions.*

These graphs show a distribution of non-hazardous active members by age and by years of service.

CHART 2A – Non-Hazardous

Distribution of Active Members by Age as of June 30, 2004

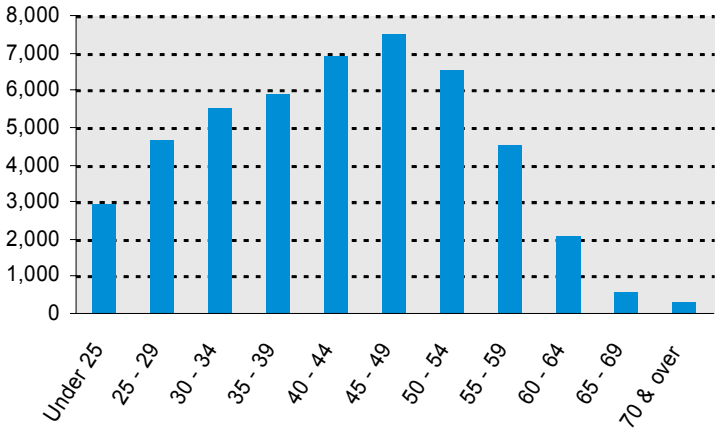
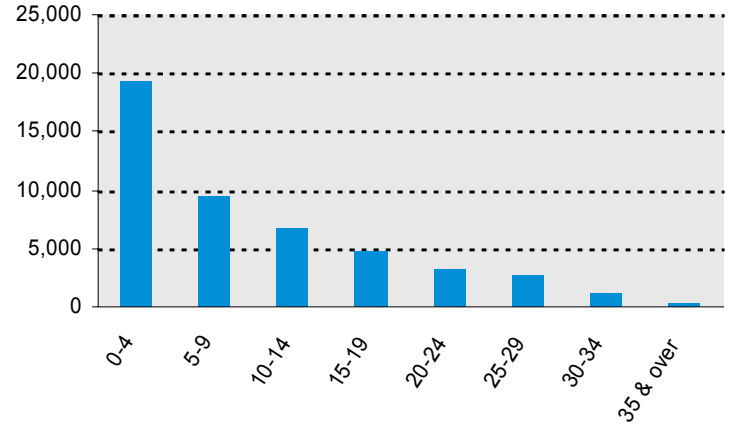


CHART 3A – Non-Hazardous

Distribution of Active Members by Years of Service as of June 30, 2004



These graphs show a distribution of the current non-hazardous retired participants based on their monthly amount and age, by type of pension.

CHART 4A – Non-Hazardous

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2004

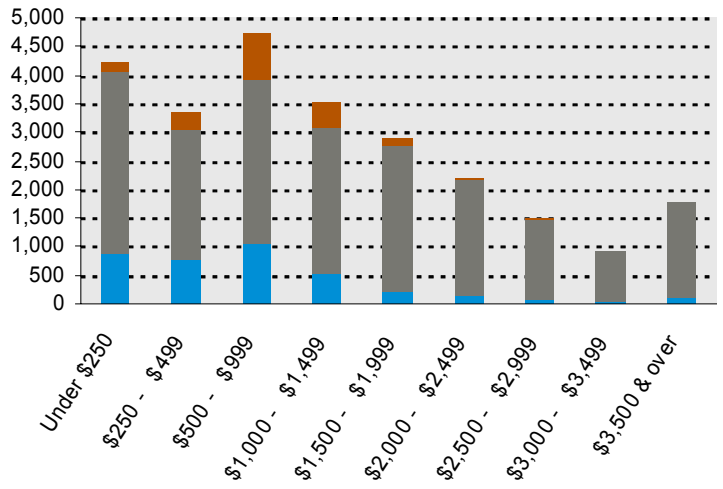
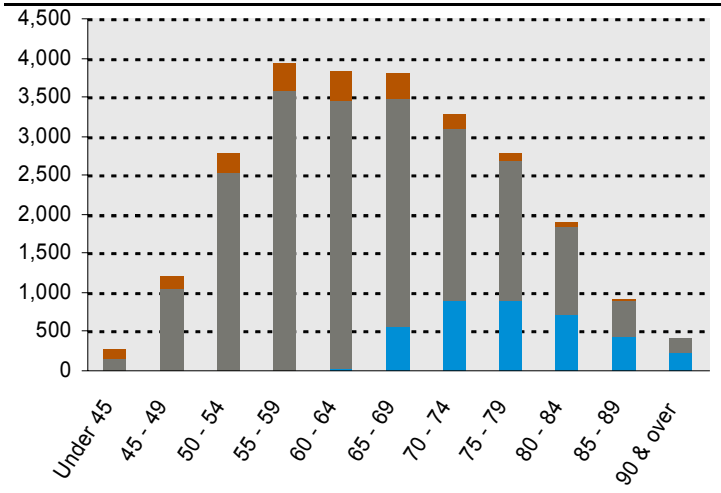


CHART 5A – Non-Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2004



These graphs show a distribution of hazardous active members by age and by years of service.

CHART 2B – Hazardous

Distribution of Active Members by Age as of June 30, 2004

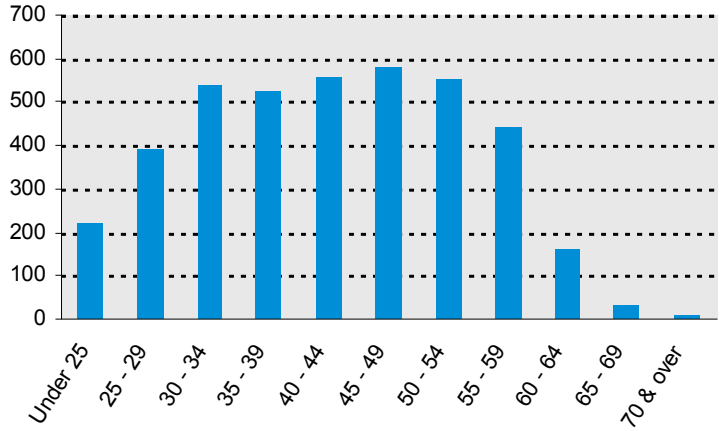
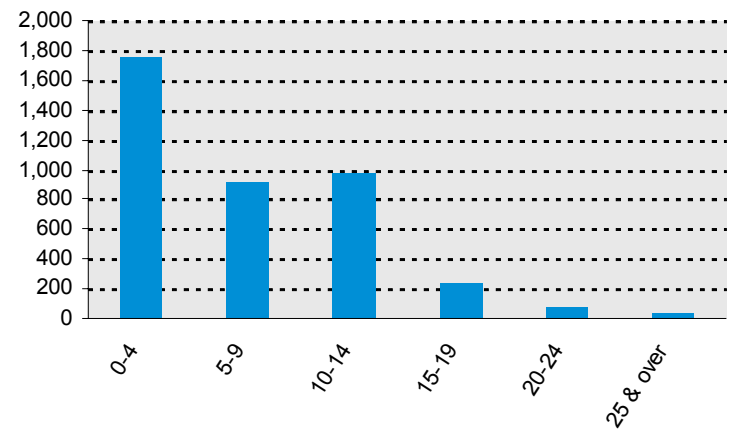


CHART 3B – Hazardous

Distribution of Active Members by Years of Service as of June 30, 2004



These graphs show a distribution of the current hazardous retired participants based on their monthly amount and age, by type of pension.

CHART 4B – Hazardous

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2004

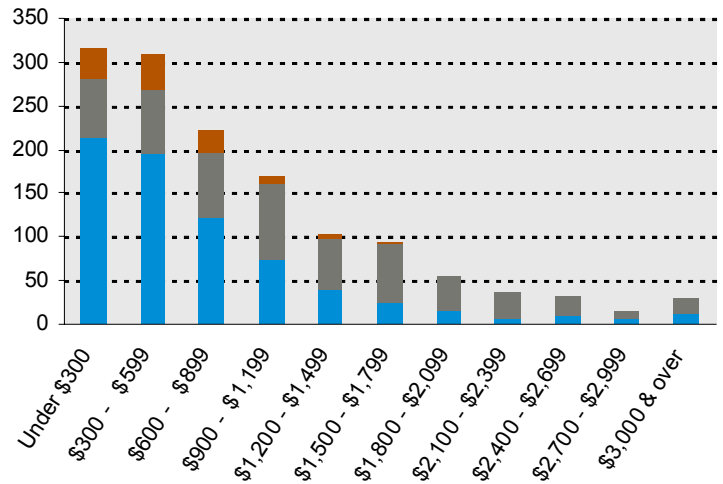
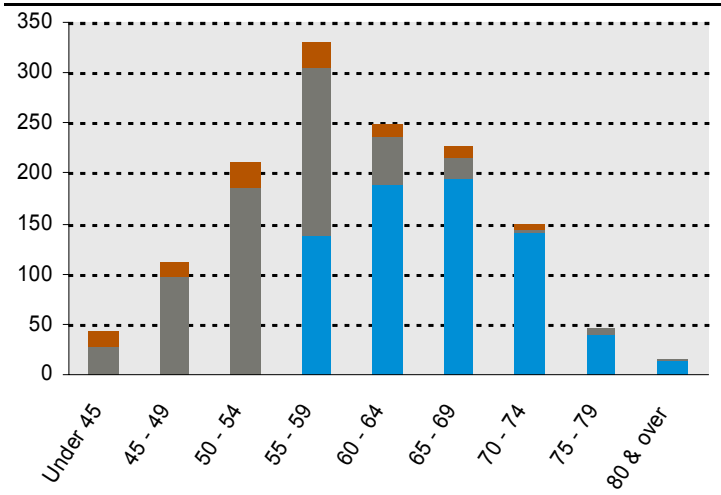


CHART 5B – Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2004



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B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative and investment expenses) and net investment earnings (less common stock commissions and securities lending expense) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits E, F and G.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Both the actuarial value and market value of assets are representations of the System's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the System's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

These charts depict the components of changes in the actuarial value of assets over the last eight years for the two non-hazardous plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6A – Non-Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2004

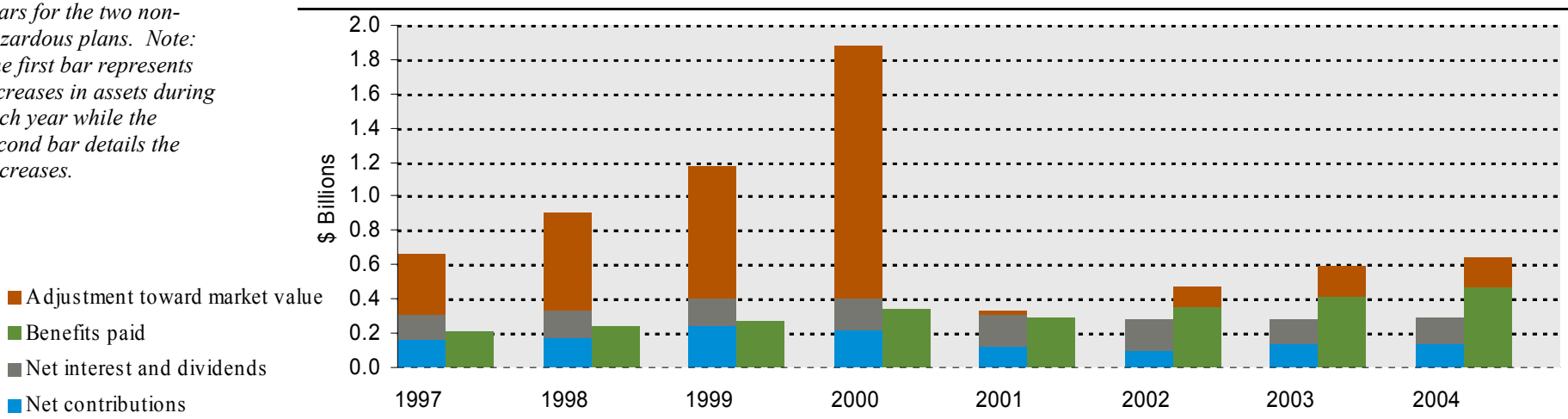
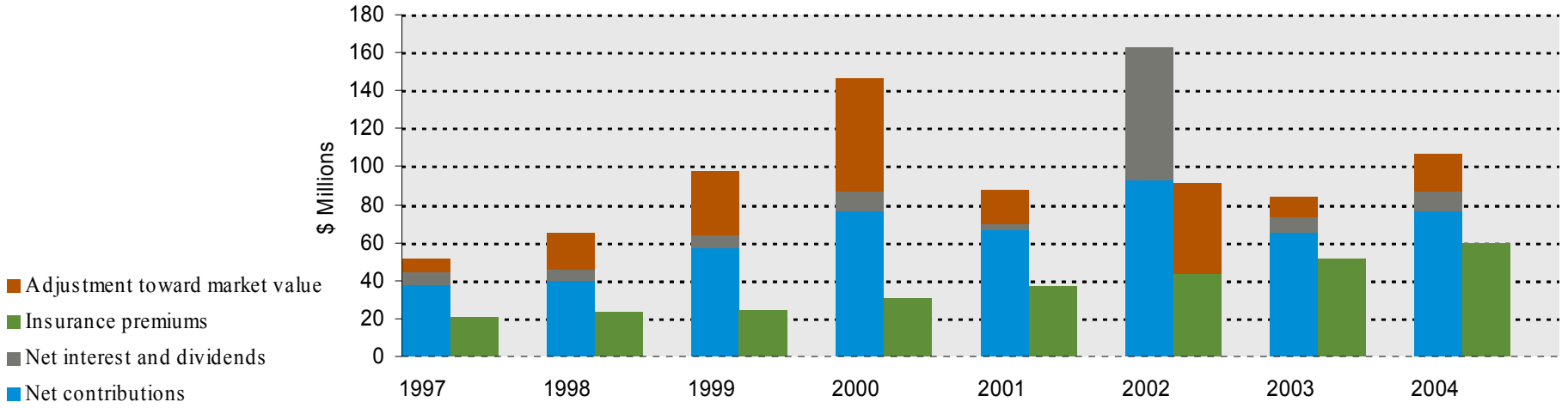


CHART 6B – Non-Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2004



These charts depict the components of changes in the actuarial value of assets over the last eight years for the two hazardous plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6C – Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2004

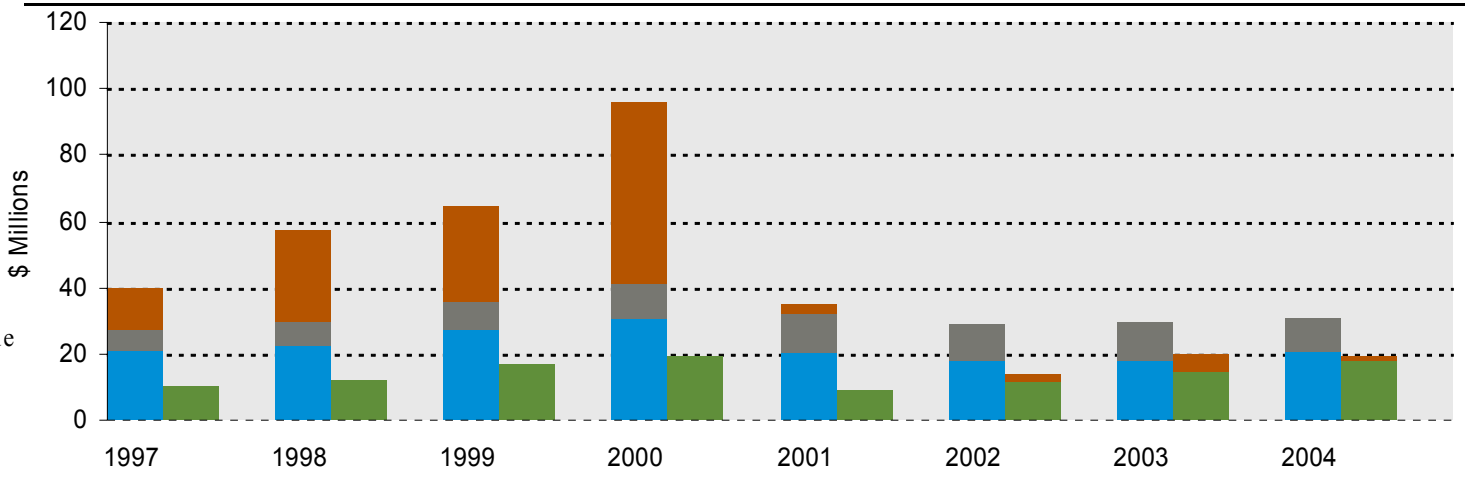
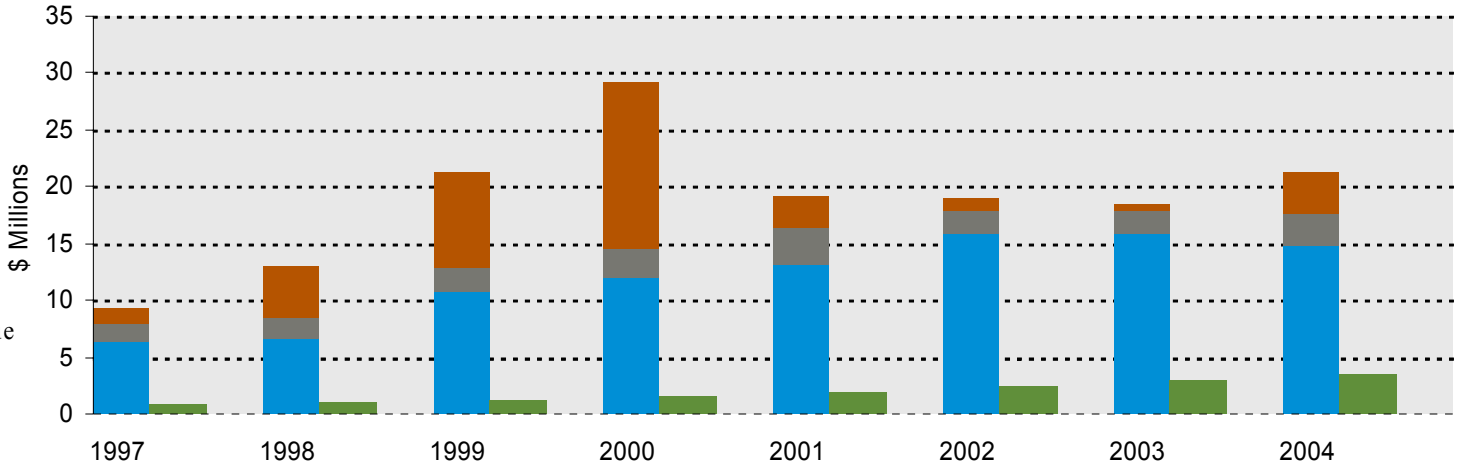


CHART 6D – Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2004



These charts show the determination of the actuarial value of assets as of the valuation date.

CHART 7A – Non-Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2004

1. Market value of assets			$5,258,994,145
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2004	$144,459,162	$28,891,832	$115,567,330
(b) Year ended June 30, 2003	-337,771,120	-67,554,224	-202,662,672
(c) Year ended June 30, 2002	-785,948,805	-157,189,761	-314,379,522
(d) Year ended June 30, 2001	-1,700,223,672	-340,044,734	-340,044,734
(e) Total unrecognized return			-741,519,598
3. Final actuarial value of assets: (1) – (2e)			$6,000,513,743
4. Actuarial value as a percentage of market value: (3) ÷ (1)			114.1%

CHART 7B – Non-Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2004

1. Market value of assets			$587,680,647
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2004	$36,758,879	$7,351,776	$29,407,103
(b) Year ended June 30, 2003	-35,320,860	-7,064,172	-21,192,516
(c) Year ended June 30, 2002	-19,441,916	-3,888,383	-7,776,766
(d) Year ended June 30, 2001	-66,720,677	-13,344,135	-13,344,135
(e) Total unrecognized return			-12,906,314
3. Final actuarial value of assets: (1) – (2e)			$600,586,961
4. Actuarial value as a percentage of market value: (3) ÷ (1)			102.2%

** Total return on market value basis minus expected return on actuarial basis using the net investment return assumption. See Chart 8 for the calculation of unrecognized return for the current year.*

These charts show the determination of the actuarial value of the assets as of the valuation date.

CHART 7C – Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2004

1. Market value of assets			$366,569,507
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2004	$11,700,671	$2,340,134	$9,360,537
(b) Year ended June 30, 2003	-16,213,796	-3,242,759	-9,728,277
(c) Year ended June 30, 2002	-40,605,179	-8,121,036	-16,242,072
(d) Year ended June 30, 2001	-70,167,218	-14,033,444	-14,033,444
(e) Total unrecognized return			-30,643,256
3. Final actuarial value of assets: (1) – (2e)			$397,212,763
4. Actuarial value as a percentage of market value: (3) ÷ (1)			108.4%

CHART 7D – Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2004

1. Market value of assets			$162,127,373
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2004	$12,326,424	$2,465,285	$9,861,139
(b) Year ended June 30, 2003	-8,854,359	-1,770,872	-5,312,616
(c) Year ended June 30, 2002	-21,587,295	-4,317,459	-8,634,914
(d) Year ended June 30, 2001	-14,752,573	-2,950,515	-2,945,115
(e) Total unrecognized return			-7,031,506
3. Final actuarial value of assets: (1) – (2e)			$169,158,879
4. Actuarial value as a percentage of market value: (3) ÷ (1)			104.3%

** Total return on market value basis minus expected return on actuarial basis using the net investment return assumption. See Chart 8 for the calculation of unrecognized return for the current year.*

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CHART 8

Calculation of Unrecognized Return for the Year Ended June 30, 2004

		Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1.	Employer and member contributions	$150,773,681	$78,016,737	$21,316,917	$14,959,617
2.	Benefit payments including refunds, or healthcare premiums	467,368,208	59,989,246	18,272,650	3,536,946
3.	Administrative and investment expenses	8,871,985	787,370	638,243	116,907
4.	Net cash flow: (1) - (2) - (3)	-325,466,512	17,240,121	2,406,024	11,305,764
5.	Market value of assets as of June 30, 2003	4,929,443,185	487,274,973	320,524,691	125,533,413
6.	Market value of assets as of June 30, 2004	5,258,994,145	587,680,647	366,569,507	162,127,373
7.	Actuarial value of assets as of June 30, 2003	6,351,318,832	553,885,082	385,925,722	151,459,500
8.	Average actuarial value of assets: (7) + [0.5 x (4)]	6,188,585,576	562,505,143	387,128,734	157,112,382
9.	Expected return on an actuarial basis: 8.25% of (8)	510,558,310	46,406,674	31,938,121	12,961,772
10.	Gain/(loss) for the year ended June 30, 2004: (6) - (5) - (4) - (9)	144,459,162	36,758,879	11,700,671	12,326,424
11.	Unrecognized return as of June 30, 2004: 80% of (10)	115,567,330	29,407,103	9,360,537	9,861,139

These charts show the change in the actuarial value of assets versus the market value over the past nine years for the non-hazardous plans.

CHART 9A – Non-Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2004

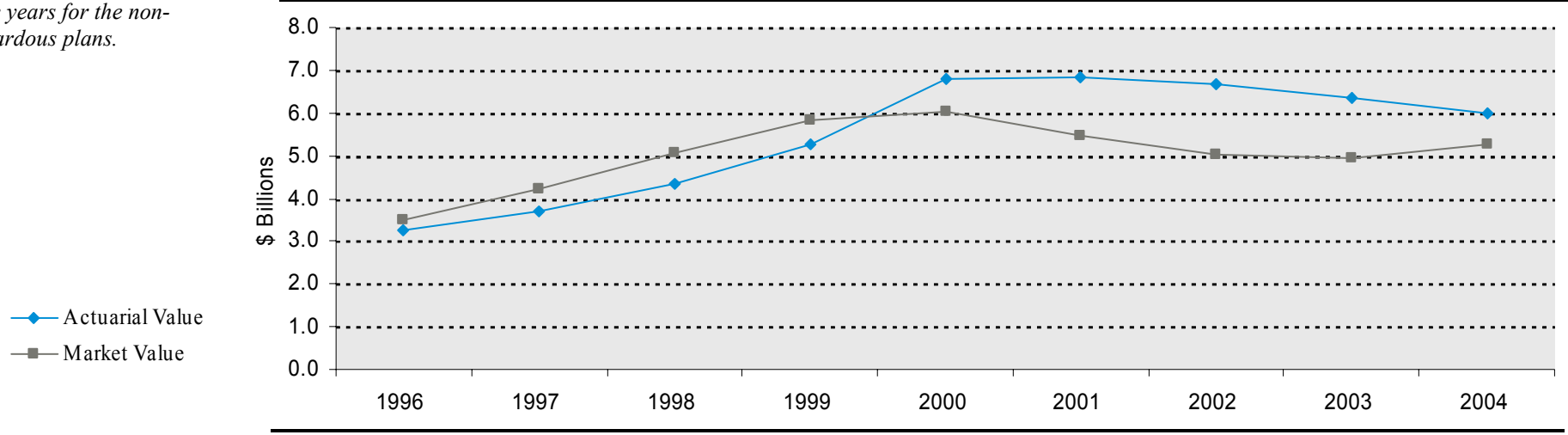
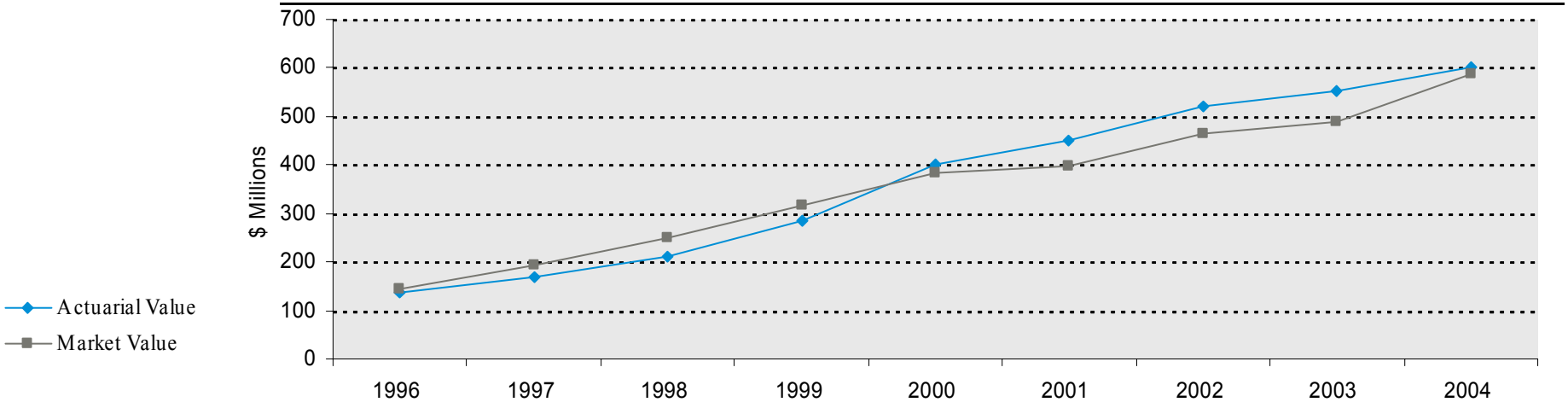


CHART 9B – Non-Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2004



These charts show the change in the actuarial value of assets versus the market value over the past nine years for the hazardous plans.

CHART 9C – Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2004

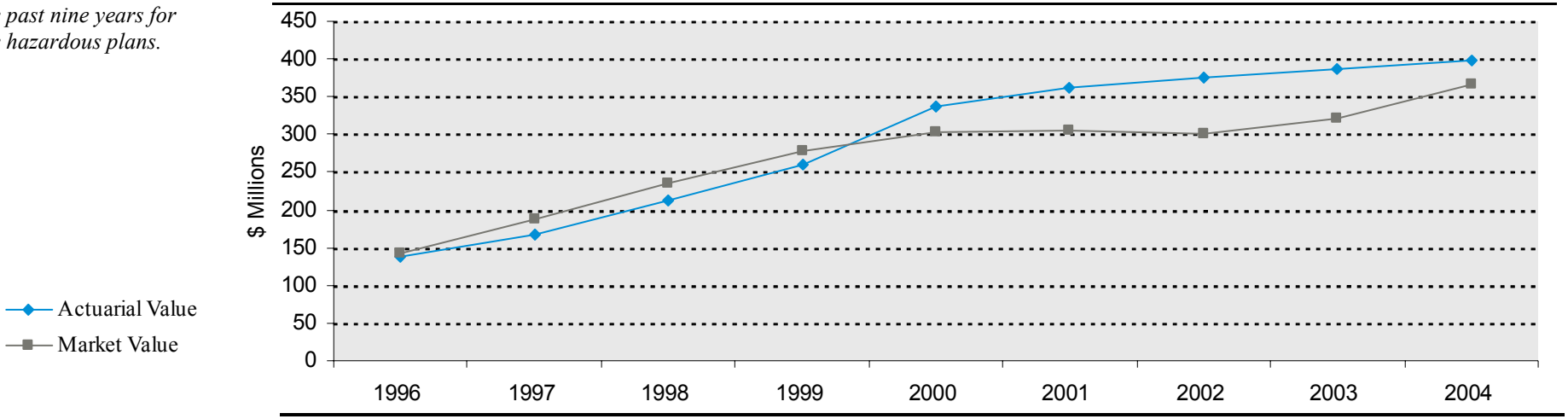
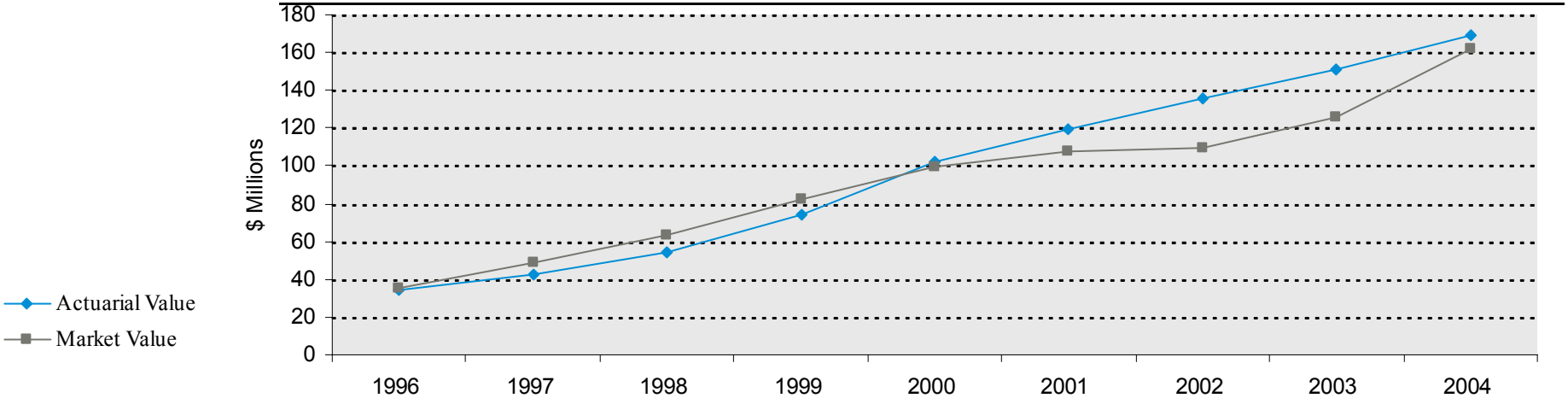


CHART 9D – Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2004



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Chart 10 presents a summary of experience for the year. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 10

Actuarial Experience for Year Ended June 30, 2004

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Net gain/(loss) from investments*	-$535,896,887	-$16,944,916	-$23,057,103	-$6,568,157
2. Net gain/(loss) from administrative expenses	-284,079	-523,725	8,862	-23,266
3. Net gain/(loss) from other experience**	-310,455,353	-25,165,942	-14,202,370	818,478
4. Net experience gain/(loss): (1) + (2) + (3)	-$846,636,319	-$42,634,583	-$37,250,611	-$5,772,945

** Details in Chart 11*

*** Details in Chart 14*

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the System's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.25%. Chart 11 shows the net investment experience for each plan for the year.

Since the actual return for the year was less than the assumed return, each plan experienced an actuarial loss during the year ended June 30, 2004 with regard to its investments.

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. Chart 12, which follows, shows the rate of return on an actuarial basis compared to the market value investment return for the last eight years.

This chart shows the gain/(loss) due to investment experience.

CHART 11

Actuarial Value Investment Experience for Year Ended June 30, 2004

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Actual return	-$25,338,577	$29,461,758	$8,881,017	$6,393,615
2. Average value of assets	6,188,585,576	562,505,143	387,128,734	157,112,382
3. Actual rate of return: (1) ÷ (2)	-0.41%	5.24%	2.29%	4.07%
4. Assumed rate of return	8.25%	8.25%	8.25%	8.25%
5. Expected return: (2) x (4)	$510,558,310	$46,406,674	$31,938,120	$12,961,772
6. Actuarial gain/(loss): (1) – (5)	-$535,896,887	-$16,944,916	-$23,057,103	-$6,568,157

CHART 12A – Non-Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1997 - 2004

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$146,203,000	4.55%	$353,572,876	11.01%	$499,775,876	15.56%	$744,519,136	21.35%
1998	152,888,000	4.19	581,509,620	15.92	734,397,620	20.10	910,518,691	21.82
1999	156,952,000	3.61	777,208,772	17.90	934,160,772	21.51	814,726,366	16.17
2000	182,697,000	3.51	1,480,107,063	28.44	1,662,804,063	31.95	296,093,000	5.12
2001	190,953,000	2.84	23,285,910	0.35	214,238,910	3.19	-356,720,409	-6.02
2002	176,702,012	2.63	-119,470,690	-1.78	57,231,322	0.85	-234,794,209	-4.38
2003	149,729,179	2.30	-176,923,267	-2.72	-27,194,088	-0.42	199,823,513	4.11
2004	147,083,414	2.38	-172,421,991	-2.79	-25,338,577	-0.41	655,017,472	13.74
Total	$1,303,207,605		$2,746,868,293		$4,050,075,898		$3,029,183,560	
					Average return	9.52%		7.69%

CHART 12B – Non-Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1997 - 2004

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$6,266,000	4.27%	$7,297,760	4.98%	$13,563,760	9.25%	$32,202,859	21.16%
1998	6,681,000	3.78	18,867,211	10.69	25,548,211	14.47	41,655,634	20.75
1999	7,812,000	3.45	33,590,703	14.85	41,402,703	18.30	32,809,846	12.31
2000	9,937,000	3.24	59,527,365	19.40	69,464,365	22.63	21,484,500	6.35
2001	3,134,000	0.76	17,691,919	4.27	20,825,919	5.03	-16,271,591	-4.09
2002	69,396,040	14.63	-47,483,602	-10.01	21,912,438	4.62	19,539,589	4.64
2003	8,087,818	1.53	11,170,429	2.12	19,258,247	3.65	8,234,078	1.74
2004	9,553,427	1.70	19,908,331	3.54	29,461,758	5.24	83,165,553	16.77
Total	$120,867,285		$120,570,116		$241,437,400		$222,820,468	
					Average return	8.52%		8.12%

Note: Each year's yield is weighted by the average asset value in that year.

CHART 12C – Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1997 - 2004

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount,	Percent	Amount	Percent
1997	$6,235,000	4.37%	$12,614,790	8.85%	$18,849,790	13.22%	$33,085,394	22.25%
1998	7,448,000	4.33	27,633,380	16.07	35,081,380	20.41	37,614,603	19.57
1999	8,129,000	3.74	28,803,701	13.24	36,932,701	16.98	33,133,032	13.78
2000	10,191,000	3.84	55,002,145	20.72	65,193,145	24.56	11,840,783	4.16
2001	11,390,000	3.33	2,780,043	0.81	14,170,043	4.14	-7,670,713	-2.49
2002	10,843,431	2.97	-2,881,301	-0.79	7,962,130	2.18	-10,682,347	-3.46
2003	11,243,712	2.97	-5,435,260	-1.44	5,808,452	1.54	14,991,894	4.94
2004	10,131,896	2.62	-1,250,879	-0.32	8,881,017	2.29	43,638,792	13.56
Total	$75,612,039		$117,266,619		$192,878,658		$155,951,438	
					Average return	8.50%		7.40%

CHART 12D – Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1997 - 2004

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$1,598,000	4.32%	$1,417,382	3.83%	$3,015,382	8.16%	$7,814,169	20.54%
1998	1,770,000	3.90	4,654,412	10.24	6,424,412	14.14	9,312,446	18.15
1999	2,065,000	3.48	8,430,863	14.21	10,495,863	17.69	9,787,878	14.37
2000	2,571,000	3.22	14,603,588	18.30	17,174,588	21.52	6,166,757	7.02
2001	3,134,000	2.91	2,815,835	2.61	5,949,835	5.52	-2,878,243	-2.74
2002	2,060,266	1.63	1,076,714	0.85	3,136,980	2.49	-11,232,521	-9.83
2003	2,168,713	1.52	538,694	0.38	2,707,407	1.90	2,886,492	2.48
2004	2,831,115	1.80	3,562,500	2.27	6,393,615	4.07	25,288,196	19.28
Total	$18,198,094		$37,099,988		$55,298,082		$47,145,174	
					Average return	7.33%		6.62%

Note: Each year's yield is weighted by the average asset value in that year.

The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. These charts illustrate how this leveling effect has actually worked over the years 1997 - 2004 for the non-hazardous plans.

CHART 13A – Non-Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2004

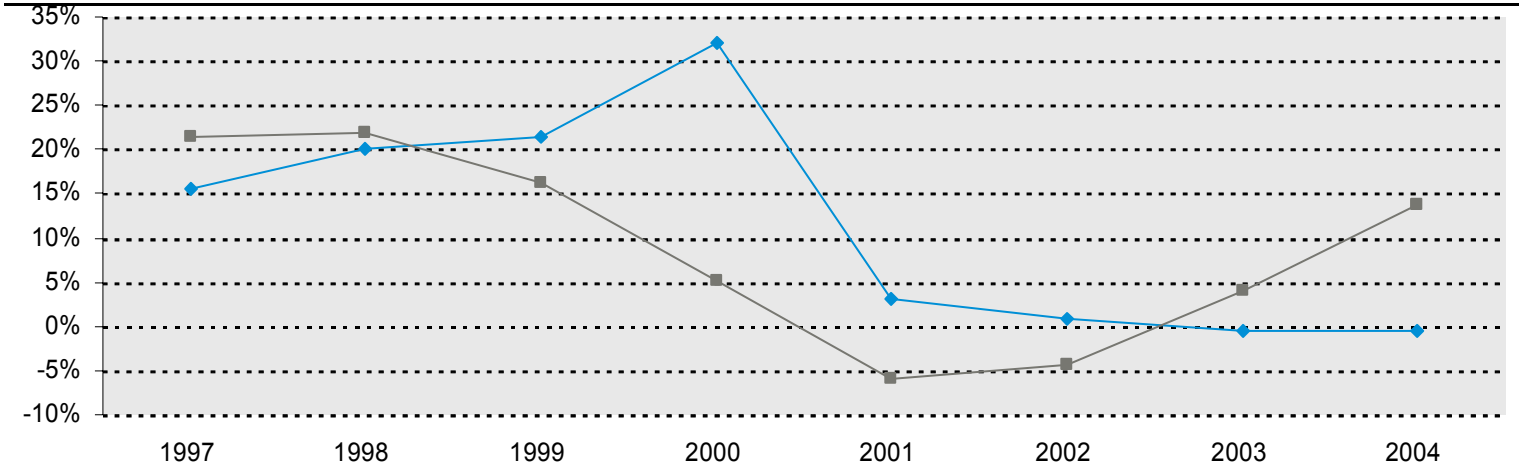
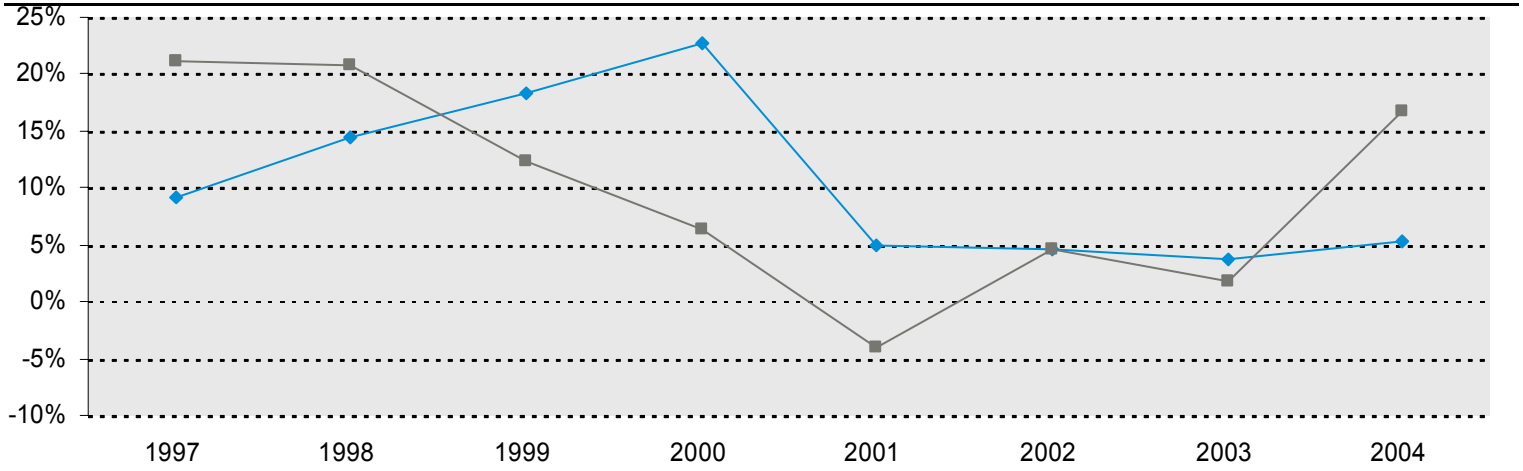


CHART 13B – Non-Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2004



The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. These charts illustrate how this leveling effect has actually worked over the years 1997 – 2004 for the hazardous plans.

CHART 13C – Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2004

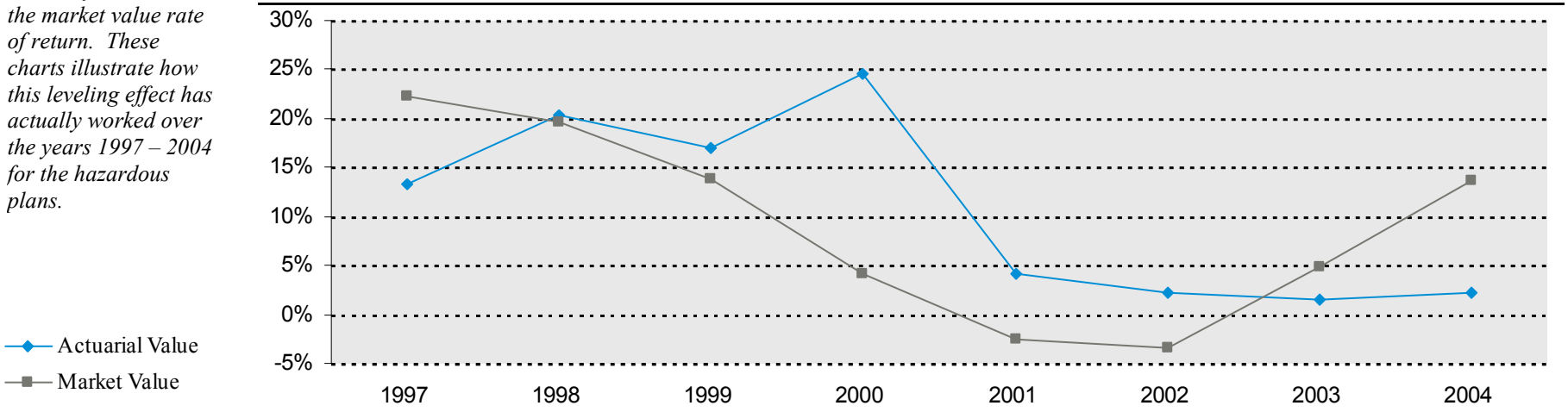
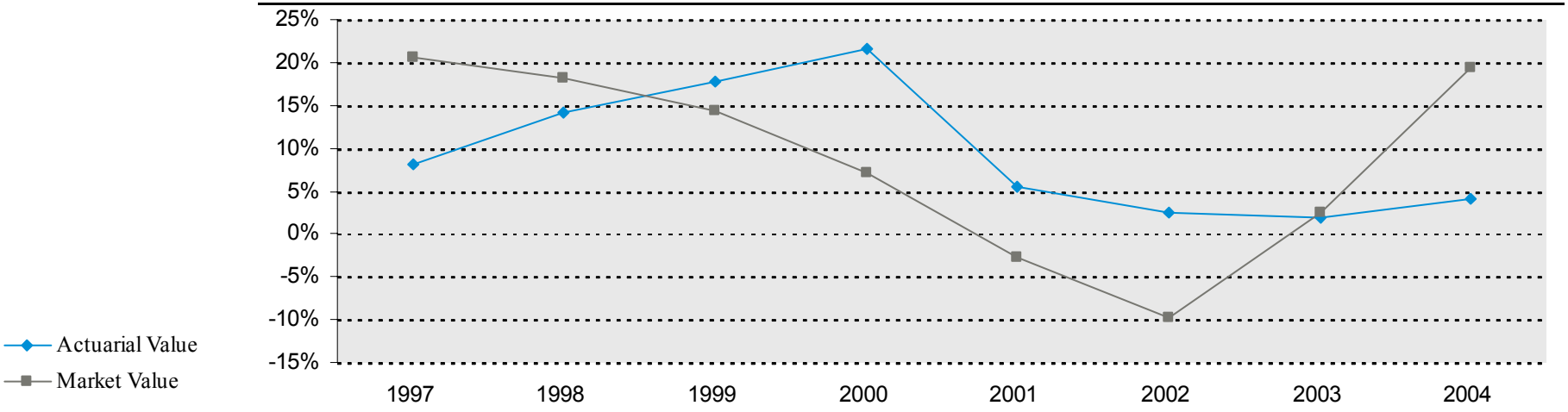


CHART 13D – Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2004



Administrative Expenses

Current methodology includes an assumption for the cost of administration for the retirement funds but not for the insurance funds. This assumption is modified with each valuation to estimate expenses for the upcoming fiscal year. The following summarizes the past year's experience and presents the assumptions for the next year.

Plan	Year End 2004 Assumption	Year End 2004 Actual Experience	Gain/(Loss)* for the Year	Year End 2005 Assumption
Non-Hazardous Retirement	$5,000,000	$5,262,429	-$284,079	$5,300,000
Non-Hazardous Insurance	0	483,811	-523,725	0
Hazardous Retirement	400,000	391,813	8,862	400,000
Hazardous Insurance	0	21,493	-23,266	0

* *Includes interest to year-end.*

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- COLAs granted in the year,
- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

A brief summary of the demographic gain/(loss) experience of the Funds for the year ended June 30, 2004 is shown in the chart below.

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 14

Experience Due to Changes in Demographics for Year Ended June 30, 2004

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. COLA	-$69,474,221	N/A	-$2,628,298	N/A
2. Other	-240,981,132	-$25,165,941	-11,574,072	$818,478
3. Total	-$310,455,353	-$25,165,941	-$14,202,370	$818,478
4. Percentage of actuarial accrued liability	4.4%	1.1%	3.5%	0.3%

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D. RECOMMENDED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability. This total amount is then divided by the projected salaries for active members to determine the funding rate.

The recommended contribution is based on a 30-year amortization of bases established each year as specified in the law governing the Plan.

Exhibit H in Section 3 provides details on these amortization bases.

The contribution rates as of June 30, 2004 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Charts 15 and 16 present the recommended contributions and reconciliations from the prior valuation.

This chart compares this valuation's recommended contribution with the prior valuation.

CHART 15A – Non-Hazardous Retirement
Recommended Contribution

	As of June 30			
	2004		2003	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$156,784,156	9.53%	$157,362,643	9.49%
2. Administrative expenses	5,300,000	0.32%	5,000,000	0.30%
3. Expected employee contributions	-81,642,757	-4.96%	-82,402,448	-4.97%
4. Employer normal cost: (1) + (2) + (3)	$80,441,399	4.89%	$79,960,195	4.82%
5. Actuarial accrued liability	7,049,613,171		6,520,463,188	
6. Actuarial value of assets	6,000,513,743		6,351,318,832	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	$1,049,099,428		$169,144,356	
8. Payment on unfunded/(overfunded) actuarial accrued liability	48,684,401	2.96%	4,798,737	0.29%
9. Total recommended contribution: (4) + (8)	$129,125,800	7.85%	$84,758,932	5.11%
10. Projected salary	$1,645,412,496		$1,658,604,696	

This chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 16A – Non-Hazardous Retirement
Reconciliation of Recommended Contribution from June 30, 2003 to June 30, 2004

Recommended Contribution as of June 30, 2003	$84,758,932
Effect of COLA for retirees	$3,480,566
Effect of investment loss	26,847,722
Effect of change in administrative expense assumption	300,000
Effect of net other changes	13,738,580
Total change	$44,366,868
Recommended Contribution as of June 30, 2004	$129,125,800

The chart compares this valuation's recommended contributions with the prior valuation.

CHART 15B – Non-Hazardous Insurance

Recommended Contribution

	As of June 30			
	2004		2003	
	Amount	% of Salary	Amount	% of Salary
1. Employer normal cost	$101,368,760	6.16%	$99,112,032	5.98%
2. Actuarial accrued liability	2,335,905,365		2,093,210,321	
3. Actuarial value of assets	600,586,961		553,885,082	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$1,735,318,404		$1,539,325,239	
5. Payment on unfunded/(overfunded) actuarial accrued liability	101,129,542	6.15%	88,453,158	5.33%
6. Full EANC contribution: (1) + (5)	$202,498,302	12.31%	$187,565,190	11.31%
7. Projected salary	$1,645,412,496		$1,658,604,696	
8. Prior year's funding rate	N/A	5.18%	N/A	4.67%
9. Years to reach full EANC	N/A	12	N/A	13
10. Additional amount for current year	N/A	0.59%	N/A	0.51%
11. Total recommended contribution rate: (8) + (10)	N/A	5.77%	N/A	5.18%

This chart compares this valuation's recommended contribution with the prior valuation.

CHART 15C – Hazardous Retirement

Recommended Contribution

	As of June 30			
	2004		2003	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$20,076,404	15.85%	$20,541,359	15.91%
2. Administrative expenses	400,000	0.32%	400,000	0.31%
3. Expected employee contributions	-9,561,851	-7.55%	-9,736,239	-7.54%
4. Employer normal cost: (1) + (2) + (3)	$10,914,553	8.62%	$11,205,120	8.68%
5. Actuarial accrued liability	403,578,036		356,879,133	
6. Actuarial value of assets	397,212,763		385,925,722	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	$6,365,273		-$29,046,589	
8. Payment on unfunded/(overfunded) actuarial accrued liability*	-127,081	-0.10%	-1,830,431	-1.42%
9. Total recommended contribution: (4) + (8)	$10,787,472	8.52%	$9,374,689	7.26%
10. Projected salary	$126,664,812		$129,088,956	

This chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 16C – Hazardous Retirement

Reconciliation of Recommended Contribution from June 30, 2003 to June 30, 2004

Recommended Contribution as of June 30, 2003	$9,374,689
Effect of COLA for retirees	$131,674
Effect of investment loss	1,155,130
Effect of net other changes	125,979
Total change	$1,412,783
Recommended Contribution as of June 30, 2004	$10,787,472

** As of the valuation date, the sum of the annual payments on the amortization bases is negative, despite a positive unfunded actuarial accrued liability.*

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 15D – Hazardous Insurance

Recommended Contribution

	As of June 30			
	2004		2003	
	Amount	% of Salary	Amount	% of Salary
1. Employer normal cost	$19,731,921	15.58%	$19,864,464	15.39%
2. Actuarial accrued liability	323,503,563		283,178,335	
3. Actuarial value of assets	169,158,879		151,459,500	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$154,344,684		$131,718,835	
5. Payment on unfunded/(overfunded) actuarial accrued liability	8,785,642	6.93%	7,422,833	5.75%
6. Full EANC contribution: (1) + (5)	$28,517,563	22.51%	$27,287,297	21.14%
7. Projected salary	$126,664,812		$129,088,956	
8. Prior year's funding rate	N/A	12.21%	N/A	11.47%
9. Years to reach full EANC	N/A	12	N/A	13
10. Additional amount for current year	N/A	0.86%	N/A	0.74%
11. Total recommended contribution rate: (8) + (10)	N/A	13.07%	N/A	12.21%

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EXHIBIT A

Table of Plan Coverage

Category	Non-Hazardous Year Ended June 30 2004	Non-Hazardous Year Ended June 30 2003	Non-Hazardous Change From Prior Year	Hazardous Year Ended June 30 2004	Hazardous Year Ended June 30 2003	Hazardous Change From Prior Year
Active members in valuation:						
Number	47,599	49,158	-3.2%	4,014	4,189	-4.2%
Average age	42.9	42.2	N/A	42.7	41.6	N/A
Average service	10.0	10.0	N/A	7.6	7.2	N/A
Total salary	$1,645,412,496	$1,658,604,696	-0.8%	$126,664,812	$129,088,956	-1.9%
Average salary	34,568	33,740	2.5%	31,556	30,816	2.4%
Account balances	915,105,103	859,895,312	6.4%	78,817,575	71,414,721	10.4%
Total active vested members	32,482	32,229	0.8%	2,482	2,530	-1.9%
Vested terminated members	4,825	3,456	39.6%	260	145	79.3%
Retired participants:						
Number in pay status	23,196	21,563	7.6%	1,269	1,085	17.0%
Average age	66.8	67.2	N/A	61.0	61.3	N/A
Average monthly benefit	$1,429	$1,328	7.6%	$935	$870	7.5%
Disabled members:						
Number in pay status	1,918	1,913	0.3%	113	100	13.0%
Average age	61.3	60.9	N/A	55.2	55.6	N/A
Average monthly benefit	$826	$811	1.8%	$513	$464	10.6%
Beneficiaries in pay status	3,778	3,757	0.6%	167	172	-2.9%
Inactive nonvested members due a refund	20,950	15,066	39.1%	1,772	1,052	68.4%

EXHIBIT B – Non-Hazardous

Members in Active Service as of June 30, 2004
By Age, Years of Service, and Average Salary

	Years of Service									
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	2,974	2,862	112	- -	- -	- -	- -	- -	- -	- -
	$22,303	$22,113	$27,180	- -	- -	- -	- -	- -	- -	- -
25 - 29	4,671	3,793	855	23	- -	- -	- -	- -	- -	- -
	26,585	26,161	28,350	$30,863	- -	- -	- -	- -	- -	- -
30 - 34	5,532	2,959	1,854	684	35	- -	- -	- -	- -	- -
	30,716	28,242	32,987	34,807	$39,719	- -	- -	- -	- -	- -
35 - 39	5,913	2,302	1,510	1,300	682	119	- -	- -	- -	- -
	33,643	28,764	34,225	37,733	39,282	$43,649	- -	- -	- -	- -
40 - 44	6,922	2,263	1,374	1,128	1,101	812	242	2	- -	- -
	35,945	28,323	34,709	37,433	42,257	45,227	$47,237	$61,140	- -	- -
45 - 49	7,520	1,948	1,333	1,173	914	832	976	339	5	- -
	37,984	29,145	32,921	37,638	40,785	45,453	48,228	54,014	$70,865	- -
50 - 54	6,543	1,598	1,099	1,015	789	703	729	532	78	- -
	39,407	30,394	33,969	37,778	39,273	44,745	49,855	55,956	64,651	- -
55 - 59	4,518	1,012	800	737	672	464	413	282	120	18
	39,545	30,501	34,311	36,558	39,508	43,983	49,638	59,474	66,117	$69,001
60 - 64	2,104	402	394	375	385	217	189	83	36	23
	38,169	31,578	32,848	35,112	39,493	41,137	45,549	55,340	72,524	67,850
65 - 69	588	92	104	121	117	62	53	20	11	8
	39,539	28,743	34,767	34,889	40,839	43,603	54,710	56,461	59,323	75,540
70 & over	314	49	32	55	56	27	55	21	10	9
	36,741	22,373	31,664	31,928	30,488	39,525	44,163	53,101	61,368	82,076
Total	47,599	19,280	9,467	6,611	4,751	3,236	2,657	1,279	260	58
	$34,568	$27,440	$33,173	$36,965	$40,246	$44,591	$48,658	$56,146	$66,185	$71,476

EXHIBIT B – Hazardous

Members in Active Service as of June 30, 2004
By Age, Years of Service, and Average Salary

	Years of Service								
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**
Under 25	223	214	9	- -	- -	- -	- -	- -	- -
	$20,867	$20,628	$26,563	- -	- -	- -	- -	- -	- -
25 - 29	392	333	59	- -	- -	- -	- -	- -	- -
	24,162	23,716	26,681	- -	- -	- -	- -	- -	- -
30 - 34	540	307	205	28	- -	- -	- -	- -	- -
	26,851	25,103	28,880	$31,159	- -	- -	- -	- -	- -
35 - 39	525	200	133	168	24	- -	- -	- -	- -
	30,279	24,480	31,712	35,303	$35,492	- -	- -	- -	- -
40 - 44	555	192	125	155	62	19	2	- -	- -
	32,441	27,699	30,620	34,933	40,458	$44,638	$43,842	- -	- -
45 - 49	580	184	124	174	61	28	8	1	- -
	35,347	27,988	35,724	37,426	42,481	47,811	52,827	$56,892	- -
50 - 54	553	173	125	190	33	20	10	2	- -
	35,771	28,124	36,045	37,723	48,064	51,265	49,704	67,356	- -
55 - 59	444	103	96	174	48	14	5	4	- -
	37,198	29,103	35,240	39,395	42,801	51,209	58,550	54,156	- -
60 - 64	161	43	33	69	8	4	2	1	1
	36,215	28,021	35,895	38,492	38,423	55,794	70,986	49,728	$63,048
65 - 69	32	4	7	14	4	- -	2	1	- -
	36,572	22,086	32,150	34,660	46,674	- -	63,150	58,656	- -
70 & over	9	1	2	3	3	- -	- -	- -	- -
	37,729	34,344	30,012	39,708	42,024	- -	- -	- -	- -
Total	4,014	1,754	918	975	243	85	29	9	1
	$31,556	$25,412	$32,208	$36,936	$42,026	$48,850	$54,082	$57,401	$63,048

EXHIBIT C – Non-Hazardous

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	2,590	$3,468,443.54	6,912	$7,584,779.86	9,502	$11,053,223.40
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	1,650	2,172,359.00	614	507,668.26	2,264	2,680,027.26
66-2/3% to beneficiary	731	1,518,165.35	243	405,029.62	974	1,923,194.97
50% to beneficiary	947	1,802,438.94	759	1,273,499.51	1,706	3,075,938.45
Pop-up option	2,125	4,117,770.01	1,475	2,375,760.54	3,600	6,493,530.55
10 years certain	0	0.00	0	0.00	0	0.00
10 years certain & life	1,003	1,098,727.35	1,626	1,756,038.94	2,629	2,854,766.29
Social Security option						
Age 62 basic	398	762,734.29	923	1,362,288.84	1,321	2,125,023.13
Age 62 survivorship	829	1,460,009.51	500	764,452.92	1,329	2,224,462.43
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	373	490,682.02	368	446,653.35	741	937,335.37
20 years certain & life	314	545,316.89	312	447,542.86	626	992,859.75
5 years certain	0	0.00	0	0.00	0	0.00
PLSO 12 month basic	17	17,864.58	67	74,160.36	84	92,024.94
PLSO 24 month basic	6	5,418.21	41	36,108.01	47	41,526.22
PLSO 36 month basic	39	21,490.71	72	37,272.17	111	58,762.88
PLSO 12 month survivor	21	27,342.02	22	33,529.90	43	60,871.92
PLSO 24 month survivor	26	26,469.58	20	23,232.88	46	49,702.46
PLSO 36 month survivor	56	45,424.94	35	20,764.20	91	66,189.14
Total	11,125	$17,580,656.94	13,989	$17,148,782.22	25,114	$34,729,439.16

EXHIBIT C – Hazardous

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	211	$171,762.34	150	$90,881.82	361	$262,644.16
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	131	116,343.86	6	5,618.62	137	121,962.48
66-2/3% to beneficiary	44	38,885.33	6	5,910.94	50	44,796.27
50% to beneficiary	78	88,162.09	9	11,336.81	87	99,498.90
Pop-up option	271	291,020.73	43	32,507.82	314	323,528.55
10 years certain	20	24,268.04	3	2,643.94	23	26,911.98
10 years certain & life	79	59,146.98	32	18,448.76	111	77,595.74
Social Security option						
Age 62 basic	39	34,373.84	18	12,239.23	57	46,613.07
Age 62 survivorship	88	105,847.40	10	3,755.82	98	109,603.22
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	31	28,463.58	9	7,149.10	40	35,612.68
20 years certain & life	30	25,075.72	7	10,726.27	37	35,801.99
5 years certain	0	0.00	0	0.00	0	0.00
PLSO 12 month basic	3	2,897.85	5	4,213.52	8	7,111.37
PLSO 24 month basic	7	7,329.28	1	686.47	8	8,015.75
PLSO 36 month basic	12	11,021.21	10	6,758.70	22	17,779.91
PLSO 12 month survivor	5	5,673.43	1	916.47	6	6,589.90
PLSO 24 month survivor	6	6,837.40	3	3,983.55	9	10,820.95
PLSO 36 month survivor	12	6,432.26	2	2,626.90	14	9,059.16
Total	1,067	$1,023,541.34	315	$220,404.74	1,382	$1,243,946.08

EXHIBIT D – Non-Hazardous

Beneficiary Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	2	$331.42	19	$13,936.93	21	$14,268.35
Straight life (old plan)	0	0	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	1,614	1,086,549.54	270	177,477.58	1,884	1,263,997.12
66-2/3% to beneficiary	262	160,972.22	25	14,588.34	287	175,560.56
50% to beneficiary	460	189,691.96	89	40,841.63	549	230,533.59
Pop-up option	223	209,498.10	52	57,204.92	275	266,703.02
10 years certain	62	62,993.05	61	56,477.75	123	119,470.80
10 years certain & life	60	55,951.91	72	67,393.20	132	123,345.11
Social Security option						
Age 62 basic	0	0.00	3	2,308.59	3	2,308.59
Age 62 survivorship	148	195,575.02	36	31,148.25	184	226,723.27
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	15	5,744.46	0	0.00	15	5,744.46
Dependent child	2	502.36	2	708.74	4	1,211.10
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	70	64,382.88	32	30,593.98	102	94,976.86
20 years certain & life	59	67,515.08	44	33,782.71	103	101,297.79
5 years certain	46	43,401.53	45	49,302.13	91	92,703.66
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	1	503.69	0	0.00	1	503.69
PLSO 36 month basic	0	0.00	1	161.84	1	161.84
PLSO 12 month survivor	0	0.00	0	0.00	0	0.00
PLSO 24 month survivor	1	337.91	0	0.00	1	337.91
PLSO 36 month survivor	1	1,166.12	1	414.98	2	1,581.10
Total	3,026	$2,145,117.25	752	$576,311.57	3,778	$2,721,428.82

EXHIBIT D – Hazardous

Beneficiary Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	0	$0.00	2	$262.73	2	$262.73
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	74	45,467.31	2	666.39	76	46,133.70
66-2/3% to beneficiary	3	979.49	1	510.90	4	1,490.39
50% to beneficiary	13	4,236.95	0	0.00	13	4,236.95
Pop-up option	14	7,196.41	2	1,253.47	16	8,449.88
10 years certain	7	4,285.25	1	682.20	8	4,967.45
10 years certain & life	7	6,014.78	4	1,336.15	11	7,350.93
Social Security option						
Age 62 basic	0	0.00	0	0.00	0	0.00
Age 62 survivorship	9	10,004.54	1	18.49	10	10,023.03
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	6	1,632.68	7	1,734.14	13	3,366.82
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	0	0.00	2	700.43	2	700.43
20 years certain & life	4	981.77	0	0.00	4	981.77
5 years certain	5	6,949.30	2	1,688.93	7	8,638.23
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	0	0.00	0	0.00	0	0.00
PLSO 36 month basic	0	0.00	0	0.00	0	0.00
PLSO 12 month survivor	1	1,035.62	0	0.00	1	1,035.62
PLSO 24 month survivor	0	0.00	0	0.00	0	0.00
PLSO 36 month survivor	0	0.00	0	0.00	0	0.00
Total	143	$88,784.10	24	$8,853.83	167	$97,637.93

EXHIBIT E – Non-Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Contribution income:				
Employer contributions	$21,696,543		$7,597,450	
Member contributions	129,077,138		137,124,487	
Less administrative and investment expenses	-8,871,985		-8,138,967	
Net contribution income		$141,901,696		$136,582,970
Investment income:				
Interest, dividends and other income	$158,005,198		$162,800,335	
Recognition of capital appreciation	-172,421,991		-176,923,267	
Less stock commissions and securities lending expense	-10,921,784		-13,071,156	
Net investment income		-25,338,577		-27,194,088
Total income available for benefits		$116,563,119		$109,388,882
Less benefit payments:				
Benefit payments	-$459,367,064		-$404,896,488	
Refunds	-8,001,144		-7,257,758	
Net benefit payments		-$467,368,208		-$412,154,246
Change in reserve for future benefits		-$350,805,089		-$302,765,364

EXHIBIT E – Non-Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Contribution income:				
Employer contributions	$78,016,737		$65,335,219	
Less administrative and investment expenses	-787,370		-371,356	
Net contribution income		$77,229,367		$64,963,863
Investment income:				
Interest, dividends and other income	$10,666,411		$8,936,118	
Recognition of capital appreciation	19,908,331		11,170,429	
Less stock commissions and securities lending expense	-1,112,984		-848,300	
Net investment income		29,461,758		19,258,247
Total income available for benefits		$106,691,125		$84,222,109
Less healthcare premium subsidies		-$59,989,246		-$51,587,482
Change in reserve for future benefits		$46,701,879		$32,634,627

EXHIBIT E – Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Contribution income:				
Employer contributions	$9,769,580		$7,322,607	
Member contributions	11,547,337		11,553,286	
Less administrative and investment expenses	-638,243		-610,152	
Net contribution income		$20,678,674		$18,265,741
Investment income:				
Interest, dividends and other income	$10,891,877		$23,004,515	
Recognition of capital appreciation	-1,250,879		-5,435,260	
Less stock commissions and securities lending expense	-759,981		-11,760,803	
Net investment income		8,881,017		5,808,452
Total income available for benefits		$29,559,691		$24,074,193
Less benefit payments:				
Benefit payments	-$16,862,790		-$13,372,965	
Refunds	-1,409,860		-1,159,808	
Net benefit payments		-$18,272,650		-$14,532,773
Change in reserve for future benefits		$11,287,041		$9,541,420

EXHIBIT E – Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Contribution income:				
Employer contributions	$14,959,617		$15,883,263	
Less administrative and investment expenses	-116,907		-69,044	
Net contribution income		$14,842,710		$15,814,219
Investment income:				
Interest, dividends and other income	$3,145,808		$2,501,945	
Recognition of capital appreciation	3,562,500		538,694	
Less stock commissions and securities lending expense	-314,693		-333,232	
Net investment income		6,393,615		2,707,407
Total income available for benefits		$21,236,325		$18,521,626
Less healthcare premium subsidies		-$3,536,946		-$2,936,708
Change in reserve for future benefits		$17,699,379		$15,584,918

EXHIBIT F – Non-Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Cash equivalents		$760,613		$386,424
Accounts receivable:				
Investment accounts receivable	$177,965		$164,961	
Year-end interest receivable	26,196,011		27,079,407	
Year-end accounts receivable	24,758,644		28,458,448	
Total accounts receivable		51,132,620		55,702,816
Investments:				
Bonds	$1,617,334,320		$1,772,036,808	
Stocks	3,237,197,081		2,686,553,684	
Mortgage	255,569,903		257,880,946	
Short-term investments	98,124,620		152,860,643	
Real estate	2,580,396		6,641,045	
Fixed assets	319,011		348,001	
Total investments at market value		5,211,125,331		4,876,321,127
Total assets		$5,263,018,564		$4,932,410,367
Less accounts payable		-$4,024,419		-$2,967,182
Net assets at market value		$5,258,994,145		$4,929,443,185
Net assets at actuarial value		$6,000,513,743		$6,351,318,832

EXHIBIT F – Non-Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Cash equivalents		$32,779		$31,327
Accounts receivable:				
Investment accounts receivable	$33,862		$20,559	
Year-end interest receivable	1,412,579		1,180,298	
Year-end accounts receivable	3,989,694		5,457,039	
Total accounts receivable		5,436,135		6,657,897
Investments:				
Bonds	$56,753,072		$48,016,250	
Stocks	422,401,561		343,727,178	
Short-term investments	103,360,672		89,311,504	
Total investments at market value		582,515,305		481,054,933
Total assets		$587,984,219		$487,744,156
Less accounts payable		-$303,572		-$469,183
Net assets at market value		$587,680,647		$487,274,973
Net assets at actuarial value		$600,586,961		$553,885,082

EXHIBIT F – Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Cash equivalents		$67,320		$138,875
Accounts receivable:				
Investment accounts receivable	$17,922		$16,612	
Year-end interest receivable	1,729,604		1,641,693	
Year-end accounts receivable	2,046,391		3,035,820	
Total accounts receivable		3,793,917		4,694,125
Investments:				
Bonds	$105,308,294		$104,852,057	
Stocks	227,385,966		175,804,373	
Mortgage	17,062,283		15,234,599	
Short-term investments	11,330,548		18,056,968	
Real estate	1,913,077		1,994,056	
Fixed assets	26,021		28,325	
Total investments at market value		363,026,189		315,970,378
Total assets		$366,887,426		$320,803,378
Less accounts payable		-$317,919		-$278,687
Net assets at market value		$366,569,507		$320,524,691
Net assets at actuarial value		$397,212,763		$385,925,722

EXHIBIT F – Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Cash equivalents		$5,206		$25,058
Accounts receivable:				
Investment accounts receivable	$10,591		$6,430	
Year-end interest receivable	412,749		327,938	
Year-end accounts receivable	616,980		1,334,207	
Total accounts receivable		1,040,320		1,668,575
Investments:				
Bonds	$16,490,660		$12,870,568	
Stocks	129,646,401		102,823,545	
Short-term investments	15,050,638		8,203,293	
Total investments at market value		161,187,699		123,897,406
Total assets		$162,233,225		$125,591,039
Less accounts payable		-$105,852		-$57,626
Net assets at market value		$162,127,373		$125,533,413
Net assets at actuarial value		$169,158,879		$151,459,500

EXHIBIT G – Non-Hazardous Retirement

Development of the Fund Through June 30, 2004

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return*	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$102,968,000	$62,886,000	$499,775,876	$4,514,000	$215,104,000	$3,683,995,005
1998	112,188,000	67,595,000	734,397,620	5,037,000	237,066,000	4,356,072,625
1999	107,515,000	141,399,000	934,160,772	5,330,000	269,477,000	5,264,340,397
2000	115,055,000	107,834,000	1,662,804,063	5,764,000	337,594,000	6,806,675,460
2001	21,911,066	104,125,142	214,238,910	5,974,401	296,233,490	6,844,742,687
2002	97,946	109,485,664	57,231,322	7,710,547	349,762,876	6,654,084,196
2003	7,597,450	137,124,487	-27,194,088	8,138,967	412,154,246	6,351,318,832
2004	21,696,543	129,077,138	-25,338,577	8,871,985	467,368,208	6,000,513,743

EXHIBIT G – Non-Hazardous Insurance

Development of the Fund Through June 30, 2004

Year Ended June 30	Employer Contributions	Net Investment Return*	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$37,710,000	$13,563,760	$32,000	$21,144,000	$168,479,973
1998	39,504,000	25,548,211	32,000	23,395,000	210,105,184
1999	56,770,000	41,402,703	92,000	24,481,000	283,704,887
2000	76,926,000	69,464,365	171,000	30,364,000	399,560,252
2001	66,874,871	20,825,919	344,092	37,286,345	449,630,605
2002	93,912,017	21,912,438	508,748	43,695,857	521,250,455
2003	65,335,219	19,258,247	371,356	51,587,482	553,885,082
2004	78,016,737	29,461,758	787,370	59,989,246	600,586,961

** Net of stock commissions and securities lending expense*

EXHIBIT G – Hazardous Retirement

Development of the Fund Through June 30, 2004

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return*	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$15,151,000	$6,189,000	$18,849,790	$287,000	$10,498,000	$166,717,238
1998	16,033,000	6,520,000	35,081,380	303,000	11,834,000	212,214,618
1999	19,444,000	8,323,000	36,932,701	349,000	16,726,000	259,839,319
2000	21,633,000	9,375,000	65,193,145	415,000	19,412,000	336,213,464
2001	10,377,708	10,545,410	14,170,043	411,956	9,217,194	361,677,475
2002	7,764,651	10,740,148	7,962,130	482,320	11,277,782	376,384,302
2003	7,322,607	11,553,286	5,808,452	610,152	14,532,773	385,925,722
2004	9,769,580	11,547,337	8,881,017	638,243	18,272,650	397,212,763

EXHIBIT G – Hazardous Insurance

Development of the Fund Through June 30, 2004

Year Ended June 30	Employer Contributions	Net Investment Return*	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$6,279,000	$3,015,382	$8,000	$866,000	$42,684,374
1998	6,632,000	6,424,412	8,000	1,126,000	54,606,786
1999	10,774,000	10,495,863	13,000	1,284,000	74,579,649
2000	12,047,000	17,174,588	19,000	1,570,000	102,212,237
2001	13,226,298	5,949,835	33,246	1,982,382	119,372,742
2002	15,887,398	3,136,980	73,288	2,449,250	135,874,582
2003	15,883,263	2,707,407	69,044	2,936,708	151,459,500
2004	14,959,617	6,393,615	116,907	3,536,946	169,158,879

** Net of stock commissions and securities lending expense*

EXHIBIT H – Non-Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$256,534,456	$25,313,987	16	$325,439,485
06/30/1991	30	103,692,389	9,753,478	17	131,380,645
06/30/1992	30	-212,448,599	-19,048,529	18	-267,931,237
06/30/1993	30	-57,917,315	-4,950,018	19	-72,485,197
06/30/1994	30	59,519,052	4,848,865	20	73,721,076
06/30/1995	30	65,659,241	5,098,707	21	80,290,952
06/30/1996	30	-188,573,585	-13,957,911	22	-227,158,479
06/30/1997	30	-277,888,742	-19,589,408	23	-328,826,247
06/30/1998	30	-326,522,755	-21,921,726	24	-378,850,289
06/30/1999	30	-362,615,121	-23,185,595	25	-411,847,988
06/30/2000	30	-964,739,576	-58,748,000	26	-1,070,963,982
06/30/2001	30	584,703,884	33,910,149	27	633,525,671
06/30/2002	30	811,152,084	44,802,985	28	856,703,584
06/30/2003	30	811,953,677	42,711,690	29	834,906,136
06/30/2004	30	871,195,298	43,645,727	30	871,195,298
Total			$48,684,401		$1,049,099,428

** Level percentage of salary*

EXHIBIT H – Non-Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$988,745,810	$73,185,361	22	$1,191,057,563
06/30/1997	30	-31,222,593	-2,200,996	23	-36,945,749
06/30/1998	30	19,914,214	1,336,979	24	23,105,605
06/30/1999	30	-69,145,663	-4,421,171	25	-78,533,686
06/30/2000	30	44,198,913	2,691,501	26	49,065,515
06/30/2001	30	237,627,565	13,781,311	27	257,469,067
06/30/2002	30	36,483,146	2,015,102	28	38,531,914
06/30/2003	30	123,332,414	6,487,730	29	126,818,798
06/30/2004	30	164,749,377	8,253,725	30	164,749,377
Total			$101,129,542		$1,735,318,404

** Level percentage of salary*

EXHIBIT H – Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	-$366,782	-$36,193	16	-$465,300
06/30/1991	30	8,515,857	801,016	17	10,789,787
06/30/1992	30	-2,222,347	-199,260	18	-2,802,730
06/30/1993	30	1,873,766	160,145	19	2,345,072
06/30/1994	30	2,736,468	222,933	20	3,389,425
06/30/1995	30	4,677,834	363,253	21	5,720,256
06/30/1996	30	-33,735,166	-2,497,022	22	-40,637,872
06/30/1997	30	-7,971,975	-561,974	23	-9,433,251
06/30/1998	30	-13,896,455	-932,965	24	-16,123,460
06/30/1999	30	-13,902,335	-888,915	25	-15,789,879
06/30/2000	30	-35,735,060	-2,176,093	26	-39,669,732
06/30/2001	30	18,907,681	1,096,559	27	20,486,440
06/30/2002	30	24,131,600	1,332,879	28	25,486,747
06/30/2003	30	26,494,066	1,393,683	29	27,243,005
06/30/2004	30	35,826,765	1,794,873	30	35,826,765
Total			-$127,081		$6,365,273

** Level percentage of salary*

EXHIBIT H – Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$61,002,123	$4,515,278	22	$73,484,045
06/30/1997	30	15,100,456	1,064,487	23	17,868,398
06/30/1998	30	2,832,306	190,152	24	3,286,203
06/30/1999	30	-10,377,564	-663,541	25	-11,786,541
06/30/2000	30	-3,445,265	-209,800	26	-3,824,613
06/30/2001	30	20,464,709	1,186,860	27	22,173,480
06/30/2002	30	3,711,155	204,981	28	3,919,560
06/30/2003	30	28,620,833	1,505,559	29	29,429,892
06/30/2004	30	19,794,260	991,666	30	19,794,260
Total			$8,785,642		$154,344,684

** Level percentage of salary*

EXHIBIT I

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

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EXHIBIT I – Non-Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:			
1.	Retired participants as of the valuation date (including 3,778 beneficiaries in pay status)		28,892
2.	Members inactive during year ended June 30, 2004 with vested rights		4,825
3.	Members active during the year ended June 30, 2004		47,599
	Fully vested	32,482	
	Not vested	15,117	
4.	Inactive nonvested members due a refund as of June 30, 2004		20,950
The actuarial factors as of the valuation date are as follows:			
1.	Total normal cost, including administrative expenses		$162,084,156
2.	Present value of future benefits		8,846,531,057
3.	Present value of future normal costs		1,796,917,886
4.	Actuarial accrued liability		7,049,613,171
	Retired participants and beneficiaries	$4,342,138,798	
	Inactive members with vested rights	60,967,421	
	Active members	2,596,748,423	
	Inactive nonvested members due a refund	49,758,529	
5.	Actuarial value of assets ($5,258,994,145 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		6,000,513,743
6.	Unfunded actuarial accrued liability		$1,049,099,428

EXHIBIT I – Non-Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$101,368,760
2.	Present value of future benefits		3,538,429,049
3.	Present value of future normal costs		1,202,523,684
4.	Actuarial accrued liability		2,335,905,365
	Retired participants and beneficiaries	$1,190,205,814	
	Inactive members with vested rights	92,008,846	
	Active members	1,053,690,705	
5.	Actuarial value of assets ($587,680,647 at market value as reported by Carpenter, Monuntjoy & Bressler, PSC)		600,586,961
6.	Unfunded actuarial accrued liability		$1,735,318,404

EXHIBIT I – Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:			
1.	Retired participants as of the valuation date (including 167 beneficiaries in pay status)		1,549
2.	Members inactive during year ended June 30, 2004 with vested rights		260
3.	Members active during the year ended June 30, 2004		4,014
	Fully vested	2,482	
	Not vested	1,532	
4.	Inactive nonvested members due a refund as of June 30, 2004		1,772
The actuarial factors as of the valuation date are as follows:			
1.	Total normal cost, including administrative expenses		$20,476,404
2.	Present value of future benefits		587,525,870
3.	Present value of future normal costs		183,947,834
4.	Actuarial accrued liability		403,578,036
	Retired participants and beneficiaries	$164,268,615	
	Inactive members with vested rights	5,364,019	
	Active members	228,475,188	
	Inactive nonvested members due a refund	5,470,214	
5.	Actuarial value of assets ($366,569,507 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		397,212,763
6.	Unfunded actuarial accrued liability		$6,365,273

EXHIBIT I – Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$19,731,921
2.	Present value of future benefits		516,283,035
3.	Present value of future normal costs		192,779,472
4.	Actuarial accrued liability		323,503,563
	Retired participants and beneficiaries	$134,298,187	
	Inactive members with vested rights	8,574,370	
	Active members	180,631,006	
5.	Actuarial value of assets ($162,127,373 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		169,158,879
6.	Unfunded actuarial accrued liability		$154,344,684

EXHIBIT II – Non-Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/1999	$5,264,340,397	$4,327,622,821	-$936,717,576	121.65%	$1,330,937,460	-70.38%
06/30/2000	6,806,675,460	4,876,825,772	-1,929,849,688	139.57%	1,432,316,220	-134.74%
06/30/2001	6,844,742,687	5,444,035,294	-1,400,707,393	125.73%	1,525,089,988	-91.84%
06/30/2002	6,654,084,196	6,026,094,764	-627,989,432	110.42%	1,597,344,487	-39.31%
06/30/2003	6,351,318,832	6,520,463,188	169,144,356	97.41%	1,658,604,696	10.20%
06/30/2004	6,000,513,743	7,049,613,171	1,049,099,428	85.12%	1,645,412,496	63.76%

EXHIBIT II – Non-Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/1999	$283,704,887	$1,273,364,800	$989,659,913	22.28%	$1,330,937,460	74.36%
06/30/2000	399,560,252	1,457,475,358	1,057,915,106	27.41%	1,432,316,220	73.86%
06/30/2001	449,630,605	1,769,583,098	1,319,952,493	25.41%	1,525,089,988	86.55%
06/30/2002	521,250,455	1,907,683,881	1,386,433,426	27.32%	1,597,344,487	86.80%
06/30/2003	553,885,082	2,093,210,321	1,539,325,239	26.46%	1,658,604,696	92.81%
06/30/2004	600,586,961	2,335,905,365	1,735,318,404	25.71%	1,645,412,496	105.46%

EXHIBIT II – Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/1999	$259,839,319	$204,282,788	-$55,556,531	127.20%	$103,970,148	-53.44%
06/30/2000	336,213,464	243,365,557	-92,847,907	138.15%	115,135,008	-80.64%
06/30/2001	361,677,475	285,193,761	-76,483,714	126.82%	123,647,407	-61.86%
06/30/2002	376,384,302	322,069,164	-54,315,138	116.86%	125,371,604	-43.32%
06/30/2003	385,925,722	356,879,133	-29,046,589	108.14%	129,088,956	-22.50%
06/30/2004	397,212,763	403,578,036	6,365,273	98.42%	126,664,812	5.03%

EXHIBIT II – Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/1999	$74,579,649	$149,158,586	$74,578,937	50.00%	$103,970,148	71.73%
06/30/2000	102,212,237	175,167,613	72,955,376	58.35%	115,135,008	63.37%
06/30/2001	119,372,742	214,450,822	95,078,080	55.66%	123,647,407	76.89%
06/30/2002	135,874,582	236,819,050	100,944,468	57.37%	125,371,604	80.52%
06/30/2003	151,459,500	283,178,335	131,718,835	53.49%	129,088,956	102.04%
06/30/2004	169,158,879	323,503,563	154,344,684	52.29%	126,664,812	121.85%

EXHIBIT II – Total Retirement Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a) / (b)]	Increase in Assets
06/30/1956	N/A	$16,200,000	$16,200,000	100.00%	N/A
06/30/1961	17,530,559	49,201,024	31,670,465	64.37%	4,479,508
06/30/1966	55,752,113	127,889,238	72,137,125	56.41%	9,085,814
06/30/1971	125,460,976*	185,075,453	59,614,477	32.21%	18,353,116
06/30/1975	218,909,209*	296,343,758	77,434,549	26.13%	26,529,526
06/30/1976	256,376,790*	387,214,910	130,838,120	33.79%	37,467,581
06/30/1977	296,743,905*	446,255,236	149,511,331	33.50%	40,367,115
06/30/1978	338,826,998*	507,324,915	168,497,917	33.21%	42,083,093
06/30/1979	389,418,451*	592,095,113	202,676,662	34.23%	50,591,453
06/30/1980	460,355,868*	710,126,703	249,770,835	35.17%	70,937,417
06/30/1981	527,425,266	692,160,395	164,735,129	23.80%	67,069,398
06/30/1982	614,446,898	810,250,589	195,803,691	24.17%	87,021,632
06/30/1983	710,095,878	862,291,959	152,196,081	17.65%	95,648,980
06/30/1984	814,553,823	1,016,088,830	201,535,007	19.83%	104,457,945
06/30/1985	934,480,773	1,104,429,988	169,949,215	15.39%	119,926,950
06/30/1986	1,079,353,421	1,245,083,143	166,635,243	13.38%	144,872,648
06/30/1987	1,264,000,419	1,384,259,808	120,259,389	8.69%	184,646,998
06/30/1988	1,426,056,402	1,561,743,738	135,687,336	8.69%	162,055,983
06/30/1989	1,588,609,098	1,734,607,903	145,998,805	8.42%	162,552,696
06/30/1990	1,799,321,738	2,055,489,412	256,167,674	12.46%	210,712,640
06/30/1991	1,913,214,931	2,288,611,147	375,396,216	16.40%	113,893,193
06/30/1992**	2,354,482,321	2,525,190,930	170,708,609	6.76%	441,267,390
06/30/1993	2,585,209,537	2,703,771,076	118,561,539	4.39%	230,727,216
06/30/1994	2,729,048,987	2,912,050,275	183,001,288	6.28%	143,839,450
06/30/1995	2,983,813,538	3,240,852,288	257,038,750	7.93%	244,764,551
06/30/1996	3,375,295,577	3,415,404,483	40,108,906	1.17%	391,482,039

EXHIBIT II – Total Retirement Fund (continued)

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a) / (b)]	Increase in Assets
06/30/1997	3,850,712,243	3,603,966,110	-246,746,133	-6.85%	475,416,666
06/30/1998	4,568,287,243	3,971,749,822	-596,537,421	-15.02%	717,575,000
06/30/1999	5,524,179,716	4,531,905,609	-992,274,107	-21.90%	955,892,473
06/30/2000	7,142,888,924	5,120,191,329	-2,022,697,595	-39.50%	1,618,709,208
06/30/2001***	7,206,420,161	5,729,229,055	-1,477,191,106	-25.78%	63,531,237
06/30/2002	7,030,468,498	6,348,163,928	-682,304,570	-10.75%	-175,951,663
06/30/2003	6,737,244,554	6,877,342,321	140,097,767	2.04%	-293,223,944
06/30/2004	6,397,726,506	7,453,191,207	1,055,464,701	14.16%	-339,518,048

* *Includes capitalized appreciation of investments.*

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

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EXHIBIT II – Total Insurance Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) – (a)/(b)]	Increase in Assets
06/30/1990	$32,722,932	$719,493,806	$686,770,874	95.45%	N/A
06/30/1991	46,549,335	804,674,050	758,124,715	94.22%	13,826,403
06/30/1992	62,465,626	1,001,703,695	939,238,069	93.76%	15,916,291
06/30/1993	77,673,575	1,177,861,283	1,100,187,708	93.41%	15,207,949
06/30/1994	99,083,533	1,444,612,678	1,345,529,145	93.14%	21,409,958
06/30/1995	127,292,191	1,462,174,101	1,334,881,910	91.29%	28,208,658
06/30/1996**	172,646,205	1,222,394,138	1,049,747,933	85.88%	45,354,014
06/30/1997	211,164,347	1,274,464,242	1,063,299,895	83.43%	38,518,142
06/30/1998	264,711,970	1,379,578,155	1,114,866,185	80.81%	53,547,623
06/30/1999	358,284,536	1,422,523,386	1,064,238,850	74.81%	93,572,566
06/30/2000	501,772,489	1,632,642,971	1,130,870,482	69.27%	143,487,953
06/30/2001***	569,003,346	1,984,033,920	1,415,030,574	71.32%	67,230,857
06/30/2002	657,125,037	2,144,502,931	1,487,377,894	69.36%	88,121,691
06/30/2003	705,344,582	2,376,388,656	1,671,044,074	70.32%	48,219,545
06/30/2004	769,745,840	2,659,408,928	1,889,663,088	71.06%	64,401,258

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

EXHIBIT III – Non-Hazardous

Supplementary Information Required by the GASB

Valuation date	June 30, 2004
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	16 to 30 years
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	28,892
Terminated members entitled to, but not yet receiving benefits	4,825
Active members	47,599
Total	81,316

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	7,313	6,157	274	231	112	539
Family; Pre-Medicare	612	593	8	5	4	2
Parent Plus; Pre-Medicare	443	379	7	8	4	45
Couple; Pre-Medicare	850	785	27	18	16	4
Medicare Regular	1,932	73	218	440	419	782
Medicare High Option	11,437	6,473	1,563	1,112	563	1,726
Total	22,587	14,460	2,097	1,814	1,118	3,098

EXHIBIT III – Hazardous

Supplementary Information Required by the GASB

Valuation date	June 30, 2004
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	16 to 30 years
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	1,549
Terminated members entitled to, but not yet receiving benefits	260
Active members	4,014
Total	5,823

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	502	384	49	54	12	3
Family; Pre-Medicare	114	108	4	1	1	0
Parent Plus; Pre-Medicare	65	55	3	3	4	0
Couple; Pre-Medicare	162	143	10	6	2	1
Medicare Regular	65	9	10	30	16	0
Medicare High Option	531	324	77	99	29	2
Total	1,439	1,023	153	193	64	6

EXHIBIT IV

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: 1983 Group Annuity Mortality Table*

Disabled: Pension Benefit Guaranty Corporation Table for Disabled Lives Receiving Social Security

* Rates increased by 0.05% for hazardous plan active members.

Termination Rates before Retirement:

	Non-Hazardous				Hazardous			
	Rate (%)				Rate (%)			
	Mortality		Disability	Withdrawal*	Mortality		Disability	Withdrawal**
Age	Male	Female			Male	Female		
20	0.04	0.02	0.03	2.40	0.09	0.07	0.04	3.04
25	0.05	0.03	0.03	2.40	0.10	0.08	0.04	3.04
30	0.06	0.03	0.04	2.40	0.11	0.08	0.05	3.38
35	0.09	0.05	0.06	2.40	0.14	0.10	0.07	2.44
40	0.12	0.07	0.10	2.00	0.17	0.12	0.13	1.50
45	0.22	0.10	0.21	1.80	0.27	0.15	0.26	0.75
50	0.39	0.16	0.42	1.60	0.44	0.21	0.53	0.00
55	0.61	0.25	0.79	1.20	0.66	0.30	0.99	0.00
60	0.92	0.42	1.39	0.20	0.97	0.47	1.74	0.00

*Withdrawal rates during the first five years of employment are 35%, 10%, 7%, 5%, and 4% for non-hazardous plan members.

**Withdrawal rates during the first five years of employment are 30%, 8%, 4%, 4%, and 4% for hazardous plan members.

Non-Hazardous Retirement Rates:

Age	Retirement Probability*
55-57	0.04
58-59	0.05
60-61	0.06
62	0.25
63-64	0.10
65	0.50
66-67	0.20
68	0.25
69	0.40
70 and older	1.00

*Retirement probability is 0.25 at first age member is eligible for unreduced retirement benefits.

Hazardous Retirement Rates:	50% will retire as soon as eligible for unreduced benefit and balance will continue until age 60.
Non-Hazardous Retirement Age for Inactive Vested Participants:	65
Hazardous Retirement Age for Inactive Vested Participants:	55
Percent Married:	100%
Age of Spouse:	Females 3 years younger than males.
Dependent Children:	For a hazardous employee's duty-related death benefits, it is assumed that the employee is survived by two dependent children each age 6.
Net Investment Return:	8.25%

Salary Increases:

Years of Service	Rate (%)
1	12.00
2	10.00
3	8.00
4 or more	6.50

Payroll Growth: 5.0%

Retiree Medical Insurance Election: Future retirees will select medical coverage in the same proportion that current retirees have selected coverage.

Monthly Contribution Rates:

Pre-Medicare Coverage
Rate in Effect on Valuation Date

	Single	Family	Parent Plus	Couple
Region 1	$288.36	$648.88	$389.32	$584.00
Region 2	312.00	702.00	421.20	631.80
Region 3	436.00	981.20	588.72	883.08
Region 4	286.16	643.92	386.36	579.52

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem Blue Seniors	$110.00	$315.44	3,898	23,013
Bankers Life Medicare	82.70	195.35	913	618

Weighted Medicare Coverage
Rate in Effect on Valuation Date

	Low Option	High Option
All Members	$104.82	$312.30

Medical Contribution Rate Increases:	Year	Rate(%)
	2004-2005	10.00
	2006-2010	9.00
	2011-2015	8.00
	2016-2020	7.50
	2021 and thereafter	7.00

Members with Multiple Service Records:

For active members with service in more than one system, the liability has been valued as follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.
- Future service is projected only under the system in which the member is currently active.
- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Non-Hazardous Administrative Expenses: $5,300,000

Hazardous Administrative Expenses: $400,000

Actuarial Value of Assets:	Market value of assets less unrecognized return in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.

EXHIBIT V

Summary of Plan Provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Non-Hazardous Normal Retirement:	
Age Requirement	65
Service Requirement	None
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For member who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factors is 2.00%. For these members who retire between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20% Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period is less than forty-eight, one or more additional fiscal years shall be used. For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used.

Hazardous Normal Retirement:

Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.49% times final average compensation time years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Early Retirement:

Requirement	Age 55 with 60 months service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 5% per year for the first five years and 4% per year for the next five years for each year the member is younger than age 65 or has less than 27 years service, whichever is smaller.

Hazardous Early Retirement:

Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit except that service credit will be added to total service for the period from the last day of paid employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years service, total service shall be 27

	years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Hazardous Disability:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 of more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Vesting:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):	
Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.
Spouse's Pre-Retirement Death Benefit (in line of duty):	
Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.
Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:	
Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.
Dependent Child's Death Benefit (in line of duty):	
Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.
Post-Retirement Death Benefit:	
Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.
Insurance Plan for Retirees:	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System.

County Employees Retirement System

Actuarial Valuation and Review
as of June 30, 2004

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SEGAL

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November 11, 2004

Board of Trustees
County Employees Retirement System
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601-6124

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2004. It summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2005 and analyzes the preceding year's experience.

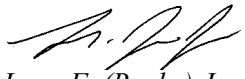
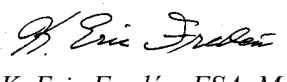
The census information on which our calculations were based was prepared by the System and the financial information was provided by the Auditor. That assistance is gratefully acknowledged.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By:  

Leon F. (Rocky) Joyner, Jr., ASA, MAAA
Vice President and Actuary

K. Eric Fredén, FSA, MAAA
Associate Actuary

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Purpose

This report has been prepared by The Segal Company to present a valuation of the County Employees Retirement System as of June 30, 2004. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2004, provided by the Board;
- The assets of the Plan as of June 30, 2004, provided by the Auditor;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The County Employees Retirement System's basic financial goal is to establish contributions which fully fund the System's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.
- The retirement contribution rate is determined using the Entry Age Normal Cost (EANC) Method. Under this method the employer contribution required is the sum of the normal cost, administration expenses and the sum of the 30-year amortization payments established each valuation due to changes in the Unfunded Actuarial Accrued Liability.
- The medical insurance contribution rate is determined in a similar method except that the actual contribution rate is determined by increasing the prior year's rate by an amount necessary to raise the insurance rate to the full EANC amount by the year 2016.
- The rates calculated in this report may be adopted by the Board for July 1, 2005 through June 30, 2006.

- The following summarizes the required contributions for the year beginning July 1, 2005 and compares them to the prior valuation amounts.

Non-Hazardous

Plan	July 1, 2005 Rate	July 1, 2004 Rate
Retirement	4.55%	2.82%
Insurance	6.43	5.66
Total	10.98%	8.48%

Hazardous

Plan	July 1, 2005 Rate	July 1, 2004 Rate
Retirement	11.22%	9.31%
Insurance	13.79	12.77
Total	25.01%	22.08%

- The increase in the total rate is due to:

Non-Hazardous

Retirement plan investment loss	1.13%
Retiree COLA	0.10
Insurance Phase-in*	0.77
Change in administrative expense assumption	0.03
Other experience	0.47
Total change	2.50%

Hazardous

Retirement plan investment loss	1.41%
Retiree COLA	0.17
Insurance Phase-in*	1.02
Other experience	0.33
Total change	2.93%

* Includes a portion of all insurance plan gains and losses for the year.

- The actuarial valuation report as of June 30, 2004 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan. Because the actuarial value of assets involves a smoothing method, changes in market value are not fully reflected immediately in the actuarial value of assets. Rather, that effect is spread over a period of years.
- As indicated in Section 2, Subsection B of this report, the total unrecognized investment losses as of June 30, 2004 are:

Non-Hazardous

Plan	Unrecognized investment losses as of 6/30/2004	Actuarial value as a percentage of market value
Retirement	$574,515,573	112.5%
Insurance	21,521,478	103.8

Hazardous

Plan	Unrecognized investment losses as of 6/30/2004	Actuarial value as a percentage of market value
Retirement	$152,600,570	111.7%
Insurance	12,843,876	104.3

These investment losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent they are not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.25% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.25% rate and all other actuarial assumption are met, the contribution requirements would still increase in each of the next few years.

Summary of Key Valuation Results

	County Non-Hazardous		County Hazardous		County Totals	
	June 30, 2004	June 30, 2003	June 30, 2004	June 30, 2003	June 30, 2004	June 30, 2003
Contributions for next fiscal year:						
Retirement	4.55%	2.82%	11.22%	9.31%	N/A	N/A
Insurance	6.43	5.66	13.79	12.77	N/A	N/A
Total	10.98%	8.48%	25.01%	22.08%	N/A	N/A
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$4,936,459,488	$4,417,597,802	$1,640,830,120	$1,499,628,782	$6,577,289,608	$5,917,226,584
Actuarial value of assets	5,187,851,530	5,286,580,047	1,457,612,042	1,467,004,856	6,645,463,572	6,753,584,903
Funded ratio on actuarial value of assets	105.09%	119.67%	88.83%	97.82%	101.04%	114.13%
Market value of assets	$4,613,335,957	$4,174,881,117	$1,305,011,472	$1,168,794,472	5,918,347,429	5,343,675,589
Funded ratio on market value of assets	93.45%	94.51%	79.53%	77.94%	89.98%	90.31%
Insurance						
Actuarial accrued liability	$2,438,734,696	$2,176,963,259	$1,025,684,477	$935,650,662	$3,464,419,173	$3,112,613,921
Actuarial value of assets	585,399,072	520,060,105	310,578,162	269,190,080	895,977,234	789,250,185
Funded ratio on actuarial value of assets	24.00%	23.89%	30.28%	28.77%	25.86%	25.36%
Market value of assets	$563,877,594	$435,667,125	$297,734,286	$223,212,339	861,611,880	658,879,464
Funded ratio on market value of assets	23.12%	20.01%	29.03%	23.86%	24.87%	21.17%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	29,129	27,092	4,005	3,737	33,134	30,829
Number of vested former members	6,927	4,692	361	165	7,288	4,857
Number of former members due a refund	37,492	27,634	1,287	616	38,779	28,250
Number of active members	80,922	82,288	9,349	9,286	90,271	91,574
Total salary	$1,826,870,880	$1,796,451,180	$392,562,624	$374,700,732	$2,219,433,504	$2,171,151,912
Average salary	22,576	21,831	41,990	40,351	24,586	23,709

A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, C, and D.

The ratio of non-actives to actives has slowly but steadily climbed in both groups for the past decade. As the number of annuitants per active employee rises, cash flow is impacted. The system either becomes more dependent on investment income to cover benefit payments, or contributions must rise to meet these obligations. (For the two retirement plans, contributions have been less than benefit payments for five consecutive years.)

Active Members

Plan costs are affected by the age, years of service and salaries of active members. In this year's non-hazardous valuation, there were 80,922 active members with an average age of 44.8, average service of 7.9 years and average salaries of $22,576. The 82,288 active members in the prior valuation had an average age of 43.8, average service of 7.6 years and average salaries of $21,831.

In the hazardous plan, there were 9,349 active members with an average age of 38.1, average service of 8.1 years and average salaries of $41,990. The 9,286 active members in the prior valuation had an average age of 37.3, average service of 7.8 years and average salaries of $40,351.

Inactive Members

In this year's valuation, there were 6,927 non-hazardous members with a vested right to a deferred or immediate vested benefit. In addition, there were 37,492 members entitled to a return of their employee contributions.

For the hazardous plan, there were 361 members with a vested right to a deferred or immediate vested benefit. In addition, there were 1,287 members entitled to a return of their employee contributions.

Retired Participants and Beneficiaries

As of June 30, 2004, 26,075 non-hazardous retired participants and 3,054 beneficiaries were receiving total monthly benefits of $20,627,857. For comparison, in the previous valuation, there were 24,121 retired participants and 2,971 beneficiaries receiving monthly benefits of $18,320,686.

For the hazardous plan, there were 3,514 retired participants and 491 beneficiaries were receiving total monthly benefits of $6,629,934. For comparison, in the previous valuation, there were 3,235 retired participants and 502 beneficiaries receiving monthly benefits of $6,026,847.

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A historical perspective of how the member population has changed over the past nine valuations can be seen in these charts.

CHART 1A – Non-Hazardous

Member Population: 1996 – 2004

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1996	66,273	2,254	16,208	0.28
1997	69,219	2,503	17,797	0.29
1998	71,426	2,839	18,976	0.31
1999	74,151	3,238	20,687	0.32
2000	77,419	3,500	22,708	0.34
2001	78,773	4,080	24,415	0.36
2002	79,850	4,470	26,147	0.38
2003	82,288	4,692	27,092	0.39
2004	80,922	6,927	29,129	0.45

CHART 1B – Hazardous

Member Population: 1996 – 2004

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1996	6,281	85	1,961	0.33
1997	6,513	100	2,217	0.36
1998	6,800	117	2,392	0.37
1999	7,488	128	2,704	0.38
2000	7,951	112	2,984	0.39
2001	8,586	148	3,221	0.39
2002	8,949	148	3,483	0.41
2003	9,286	165	3,737	0.42
2004	9,349	361	4,005	0.47

**Excludes terminated members due a refund of employee contributions.*

These graphs show a distribution of non-hazardous active members by age and by years of service.

CHART 2A – Non-Hazardous

Distribution of Active Members by Age as of June 30, 2004

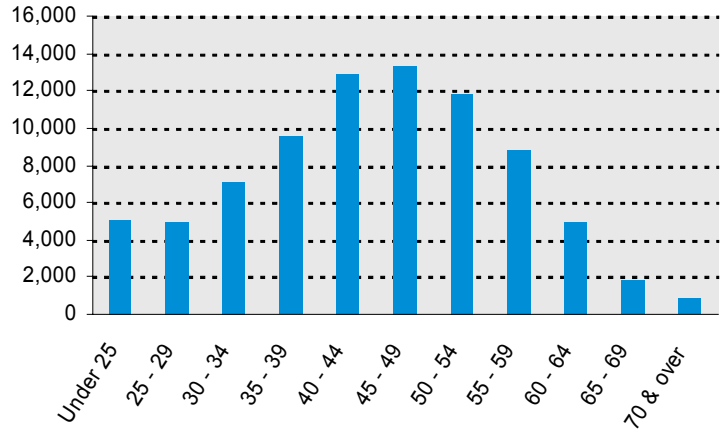
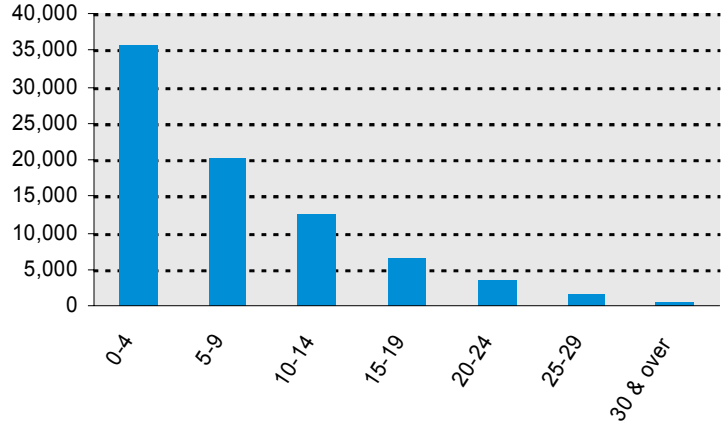


CHART 3A – Non-Hazardous

Distribution of Active Members by Years of Service as of June 30, 2004



These graphs show a distribution of the current non-hazardous retired participants based on their monthly amount and age, by type of pension.

CHART 4A – Non-Hazardous

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2004

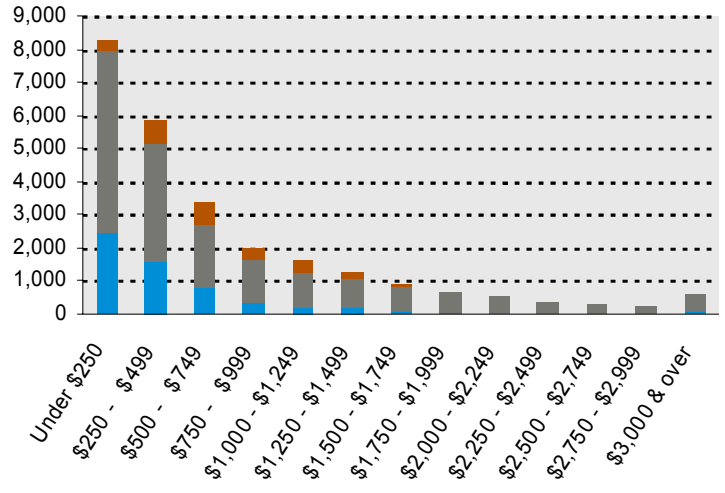
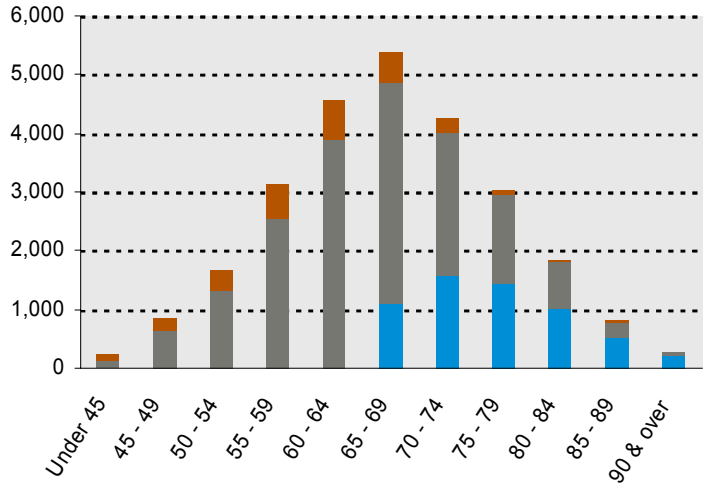


CHART 5A – Non-Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2004



These graphs show a distribution of hazardous active members by age and by years of service.

CHART 2B – Hazardous

Distribution of Active Members by Age as of June 30, 2004

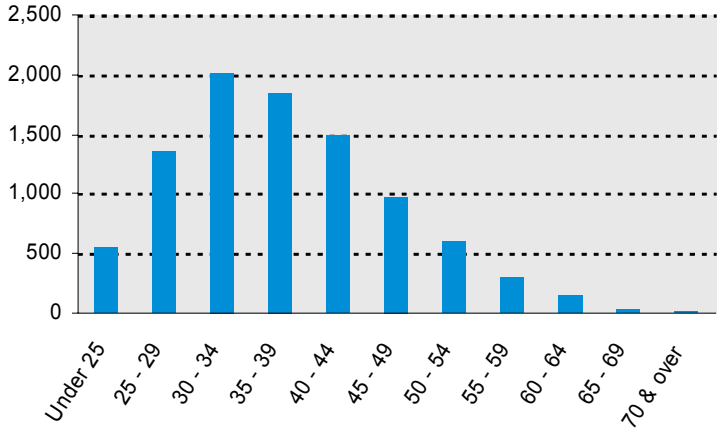
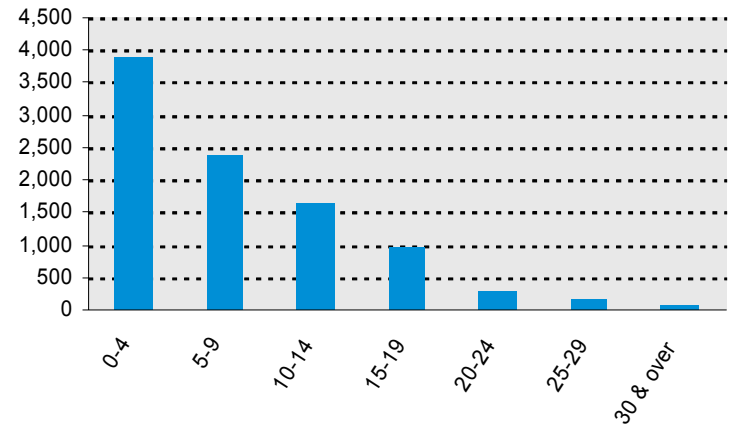


CHART 3B – Hazardous

Distribution of Active Members by Years of Service as of June 30, 2004



These graphs show a distribution of the current hazardous retired participants based on their monthly amount and age, by type of pension.

CHART 4B – Hazardous

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2004

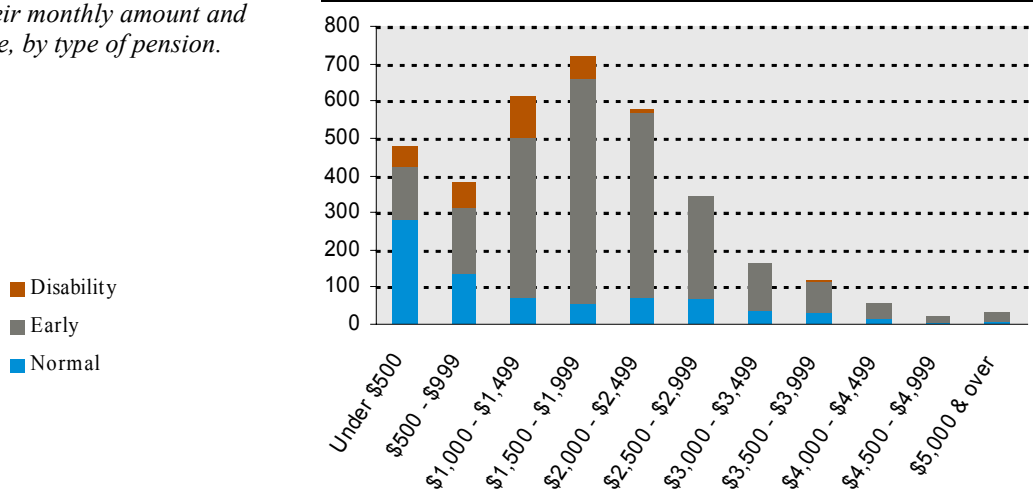
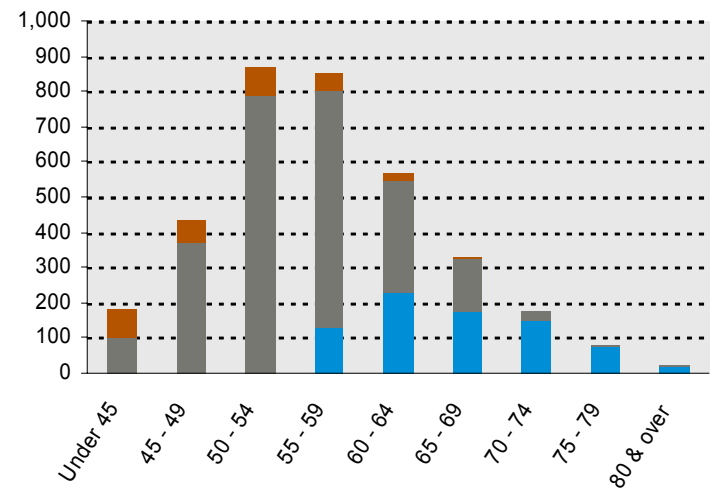


CHART 5B – Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2004



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B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative and investment expenses) and net investment earnings (less common stock commissions and securities lending expense) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits E, F and G.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Both the actuarial value and market value of assets are representations of the System's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the System's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

These charts depict the components of changes in the actuarial value of assets over the last eight years for the two non-hazardous plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6A – Non-Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2004

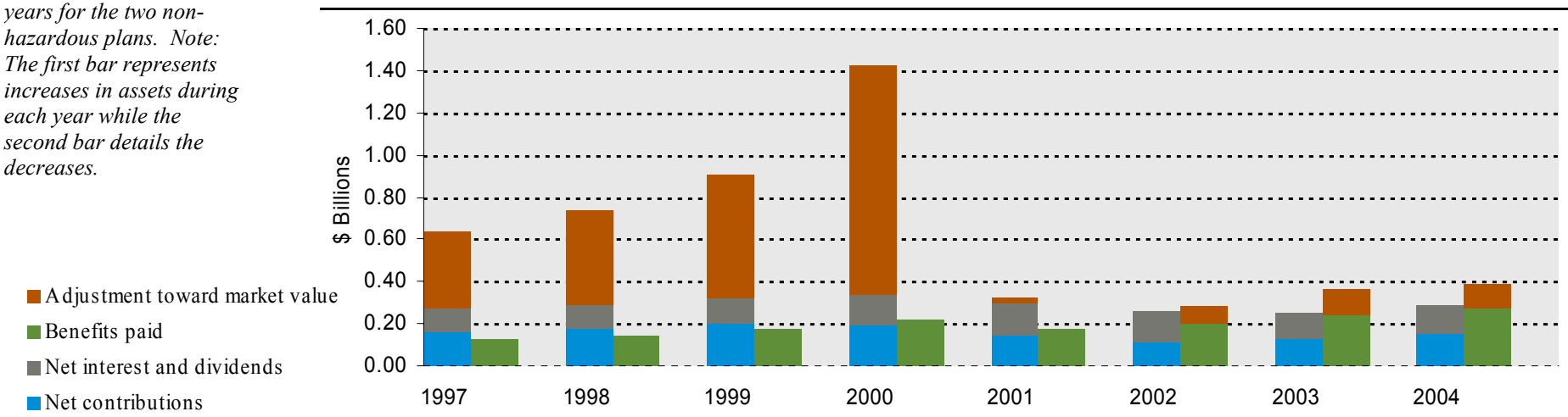
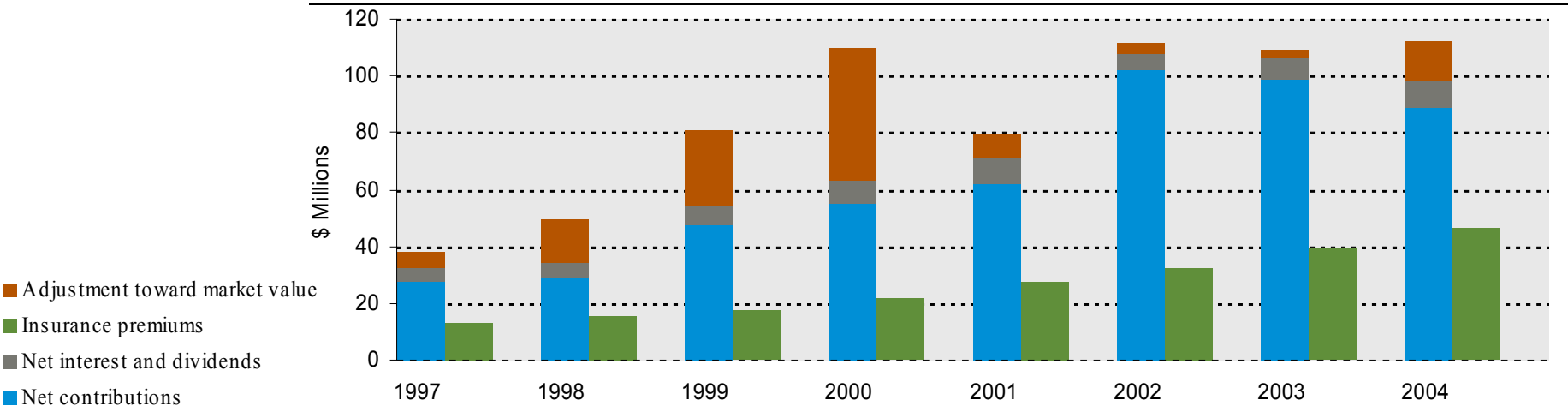


CHART 6B – Non-Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2004



These charts depict the components of changes in the actuarial value of assets over the last eight years for the two hazardous plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6C – Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2004

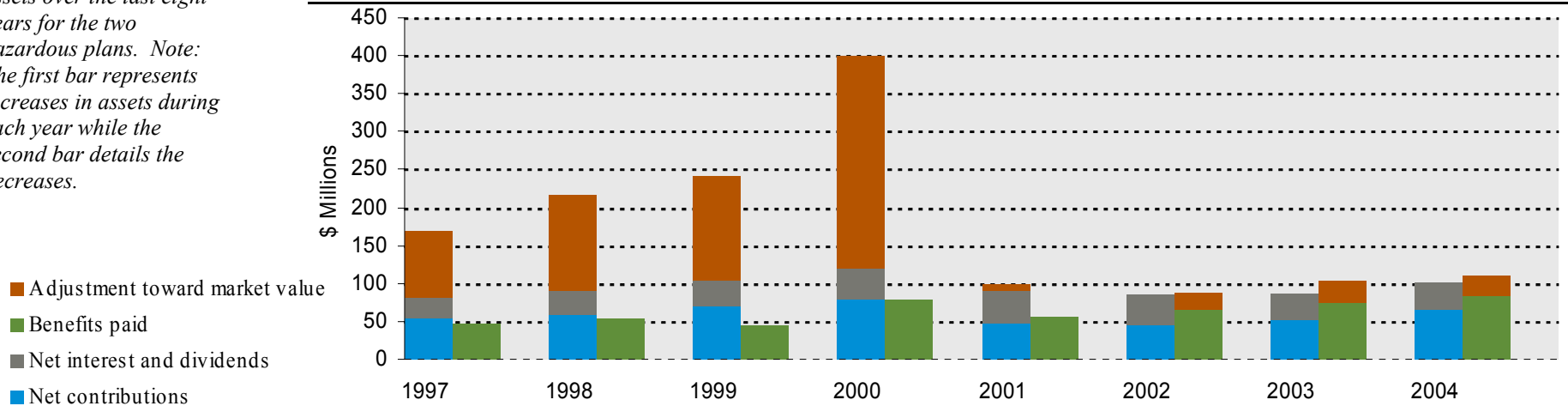
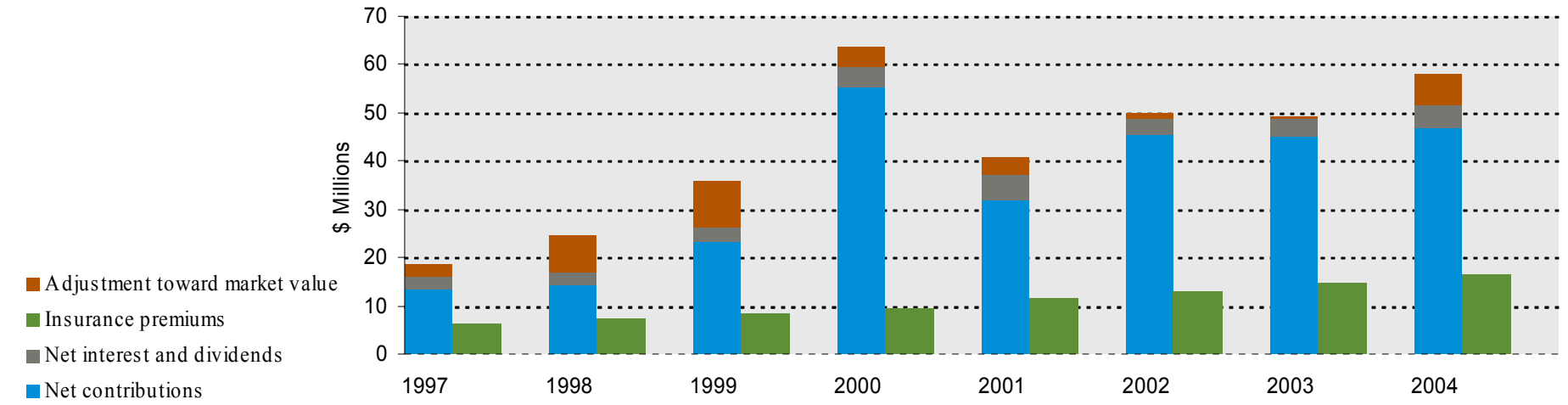


CHART 6D – Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1997 – 2004



These charts show the determination of the actuarial value of assets as of the valuation date.

CHART 7A – Non-Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2004

1. Market value of assets			$4,613,335,957
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2004	$124,531,026	$24,906,205	$99,624,821
(b) Year ended June 30, 2003	-278,226,609	-55,645,322	-166,935,966
(c) Year ended June 30, 2002	-626,456,069	-125,291,214	-250,582,428
(d) Year ended June 30, 2001	-1,283,110,002	-256,622,000	-256,622,000
(e) Total unrecognized return			-574,515,573
3. Final actuarial value of assets: (1) – (2e)			$5,187,851,530
4. Actuarial value as a percentage of market value: (3) ÷ (1)			112.5%

CHART 7B – Non-Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2004

1. Market value of assets			$563,877,594
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2004	$41,589,264	$8,317,853	$33,271,411
(b) Year ended June 30, 2003	-28,828,353	-5,765,671	-17,297,013
(c) Year ended June 30, 2002	-68,307,263	-13,661,453	-27,322,906
(d) Year ended June 30, 2001	-50,864,852	-10,172,970	-10,172,970
(e) Total unrecognized return			-21,521,478
3. Final actuarial value of assets: (1) – (2e)			$585,399,072
4. Actuarial value as a percentage of market value: (3) ÷ (1)			103.8%

** Total return on market value basis minus expected return on actuarial basis using the net investment return assumption. See Chart 8 for the calculation of unrecognized return for the current year.*

These charts show the determination of the actuarial value of the assets as of the valuation date.

CHART 7C – Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2004

1. Market value of assets			$1,305,011,472
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2004	$35,262,776	$7,052,555	$28,210,221
(b) Year ended June 30, 2003	-74,447,276	-14,889,455	-44,668,365
(c) Year ended June 30, 2002	-168,161,440	-33,632,288	-67,264,576
(d) Year ended June 30, 2001	-344,389,248	-68,877,850	-68,877,850
(e) Total unrecognized return			-152,600,570
3. Final actuarial value of assets: (1) – (2e)			$1,457,612,042
4. Actuarial value as a percentage of market value: (3) ÷ (1)			111.7%

CHART 7D – Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2004

1. Market value of assets			$297,734,286
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2004	$20,998,596	$4,199,719	$16,798,877
(b) Year ended June 30, 2003	-15,162,699	-3,032,540	-9,097,620
(c) Year ended June 30, 2002	-36,213,421	-7,242,684	-14,485,368
(d) Year ended June 30, 2001	-30,298,823	-6,059,765	-6,059,765
(e) Total unrecognized return			-12,843,876
3. Final actuarial value of assets: (1) – (2e)			$310,578,162
4. Actuarial value as a percentage of market value: (3) ÷ (1)			104.3%

** Total return on market value basis minus expected return on actuarial basis using the net investment return assumption. See Chart 8 for the calculation of unrecognized return for the current year.*

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CHART 8

Calculation of Unrecognized Return for the Year Ended June 30, 2004

		Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1.	Employer and member contributions	$166,512,893	$89,344,241	$66,308,539	$47,036,777
2.	Benefit payments including refunds, or healthcare premiums	271,977,052	46,651,550	83,942,373	16,701,831
3.	Administrative and investment expenses	11,913,070	708,301	1,644,607	260,354
4.	Net cash flow: (1) - (2) - (3)	-117,377,229	41,984,390	-19,278,441	30,074,592
5.	Market value of assets as of June 30, 2003	4,174,881,117	435,667,125	1,168,794,472	223,212,339
6.	Market value of assets as of June 30, 2004	4,613,335,957	563,877,594	1,305,011,472	297,734,286
7.	Actuarial value of assets as of June 30, 2003	5,286,580,047	520,060,105	1,467,004,856	269,190,080
8.	Average actuarial value of assets: (7) + [0.5 x (4)]	5,227,891,433	541,052,300	1,457,365,636	284,227,376
9.	Expected return on an actuarial basis: 8.25% of (8)	431,301,043	44,636,815	120,232,665	23,448,758
10.	Gain/(loss) for the year ended June 30, 2004: (6) - (5) - (4) - (9)	124,531,026	41,589,264	35,262,776	20,998,596
11.	Unrecognized return as of June 30, 2004: 80% of (10)	99,624,821	33,271,411	28,210,221	16,798,877

These charts show the change in the actuarial value of assets versus the market value over the past nine years for the non-hazardous plans.

CHART 9A – Non-Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2004

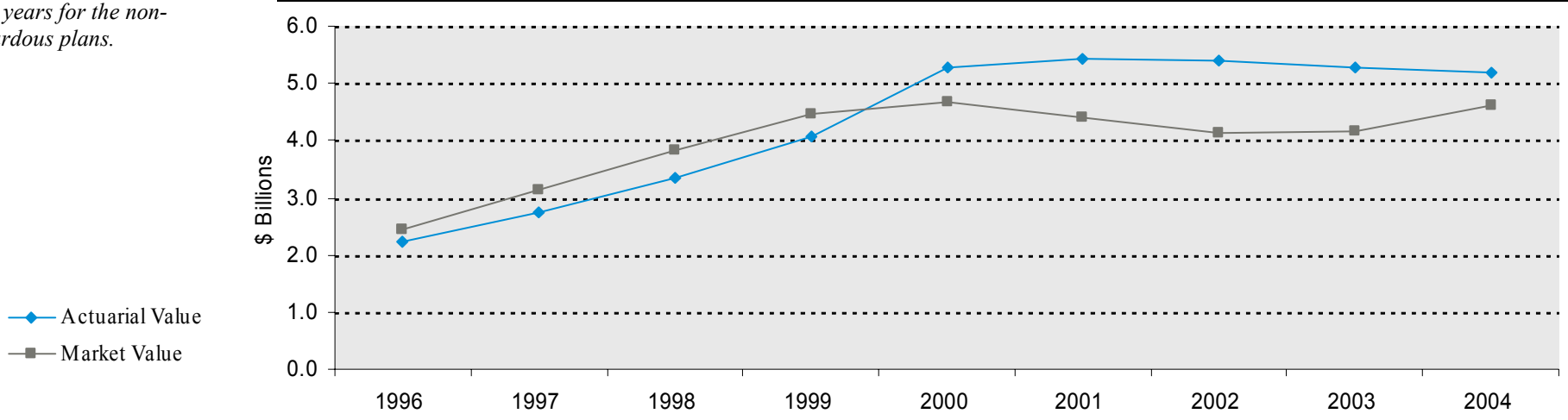
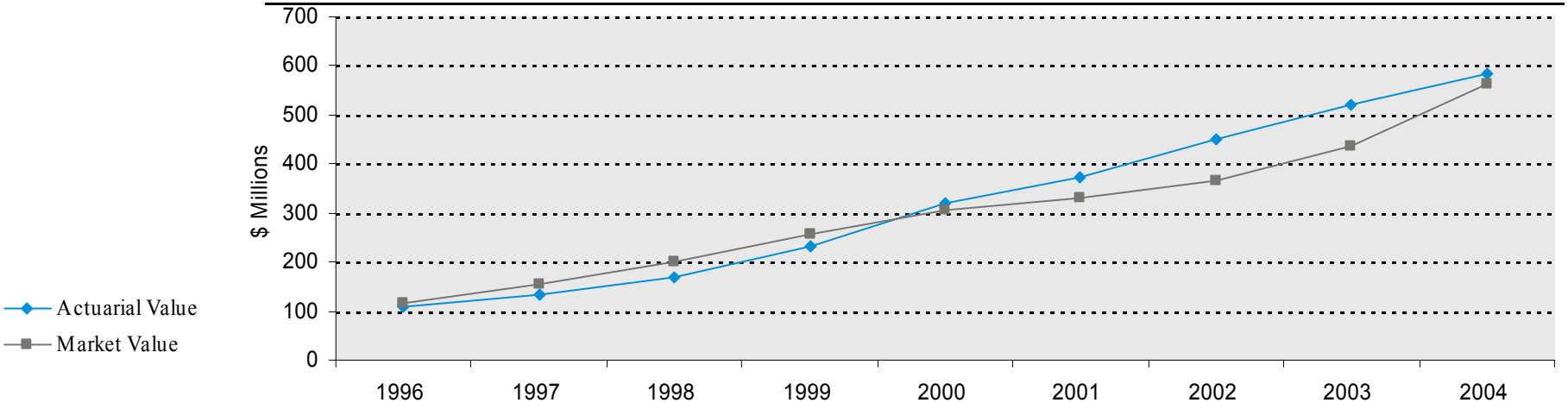


CHART 9B – Non-Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2004



These charts show the change in the actuarial value of assets versus the market value over the past nine years for the hazardous plans.

CHART 9C – Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2004

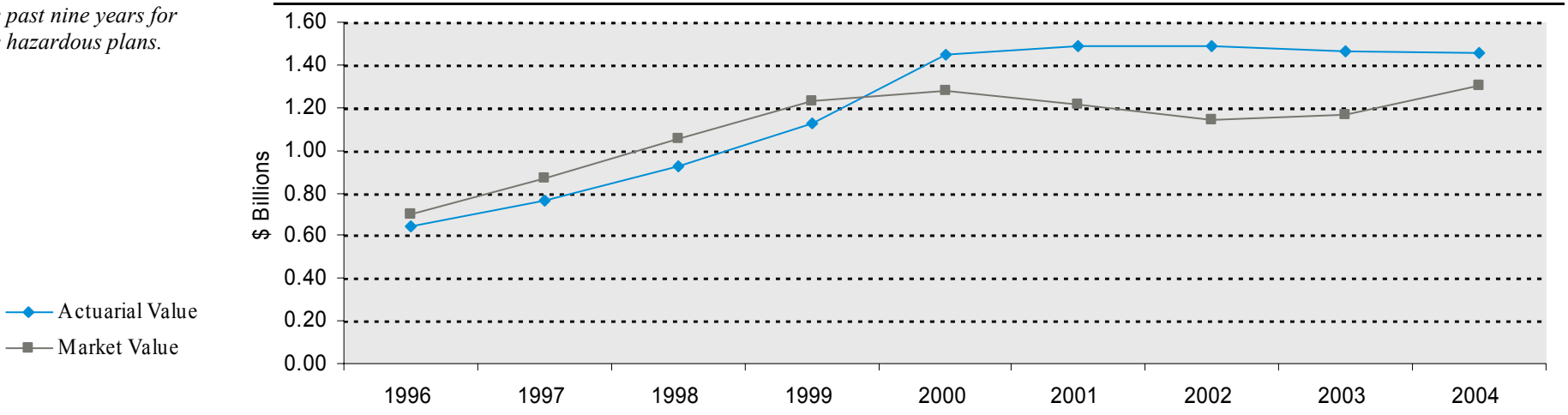
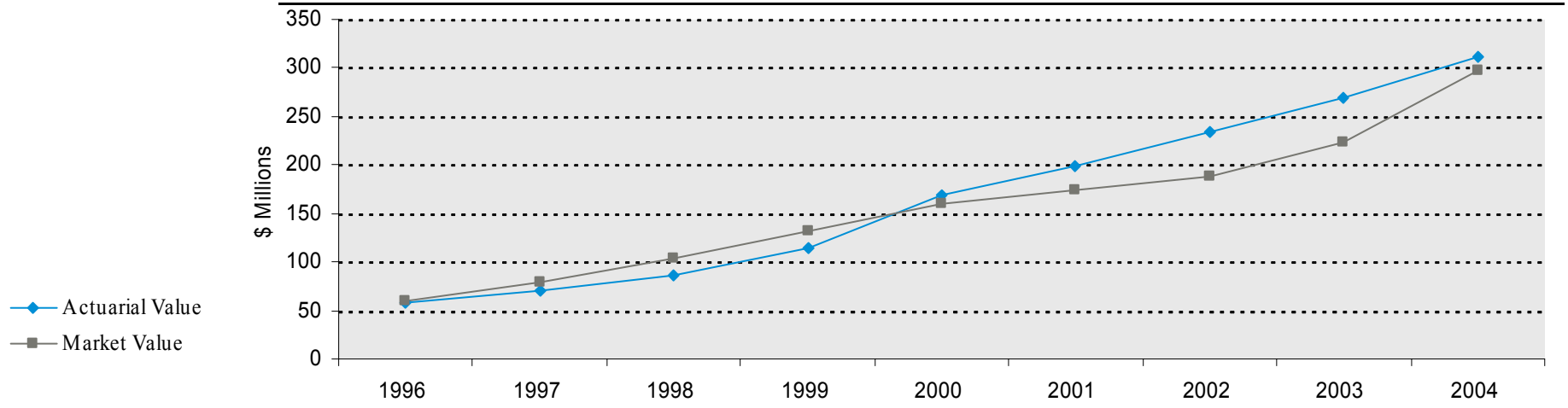


CHART 9D – Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1996 – 2004



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Chart 10 presents a summary of experience for the year. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 10

Actuarial Experience for Year Ended June 30, 2004

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Net gain/(loss) from investments*	-$412,652,331	-$21,282,238	-$110,347,038	-$12,135,268
2. Net gain/(loss) from administrative expenses	-643,319	-425,288	45,403	-113,182
3. Net gain/(loss) from other experience**	-241,667,147	43,786,640	-39,600,718	30,259,146
4. Net experience gain/(loss): (1) + (2) + (3)	-$654,962,797	$22,079,114	-$149,902,353	$18,010,696

** Details in Chart 11*

*** Details in Chart 14*

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the System's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.25%. Chart 11 shows the net investment experience for each plan for the year.

Since the actual return for the year was less than the assumed return, each plan experienced an actuarial loss during the year ended June 30, 2004 with regard to its investments.

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. Chart 12, which follows, shows the rate of return on an actuarial basis compared to the market value investment return for the last eight years.

This chart shows the gain/(loss) due to investment experience.

CHART 11

Actuarial Value Investment Experience for Year Ended June 30, 2004

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Actual return	$18,648,712	$23,354,577	$9,885,627	$11,313,490
2. Average value of assets	5,227,891,433	541,052,300	1,457,365,636	284,227,376
3. Actual rate of return: (1) ÷ (2)	0.36%	4.32%	0.68%	3.98%
4. Assumed rate of return	8.25%	8.25%	8.25%	8.25%
5. Expected return: (2) x (4)	$431,301,043	$44,636,815	$120,232,665	$23,448,758
6. Actuarial gain/(loss): (1) – (5)	-$412,652,331	-$21,282,238	-$110,347,038	-$12,135,268

CHART 12A – Non-Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1997 - 2004

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$111,947,000	4.96%	$362,703,525	16.07%	$474,650,525	21.03%	$639,522,469	25.88%
1998	113,937,000	4.12	448,646,445	16.21	562,583,445	20.33	673,873,449	21.42
1999	120,509,000	3.59	582,815,432	17.36	703,324,432	20.95	614,212,590	15.96
2000	143,530,000	3.53	1,086,361,099	26.74	1,229,891,099	30.27	217,824,204	4.88
2001	155,881,000	2.96	20,266,015	0.38	176,147,015	3.35	-239,461,644	-5.14
2002	141,791,936	2.64	-79,867,632	-1.48	61,924,304	1.15	-185,461,064	-4.26
2003	124,381,363	2.33	-121,335,398	-2.27	3,045,965	0.06	162,377,892	3.99
2004	130,892,445	2.50	-112,243,733	-2.15	18,648,712	0.36	555,832,069	13.50
Total	$1,042,869,744		$2,187,345,753		$3,230,215,497		$2,438,719,965	
					Average return	9.60%		7.84%

CHART 12B – Non-Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1997 - 2004

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$5,015,000	4.28%	$5,487,235	4.68%	$10,502,235	8.96%	$25,350,581	20.85%
1998	5,373,000	3.80	14,824,200	10.48	20,197,200	14.27	32,898,822	20.46
1999	6,294,000	3.43	26,753,873	14.56	33,047,873	17.99	26,461,016	12.27
2000	7,965,000	3.21	46,582,525	18.74	54,547,525	21.95	17,083,861	6.24
2001	9,332,000	2.77	8,274,934	2.46	17,606,934	5.23	-10,987,582	-3.38
2002	6,286,566	1.55	3,397,597	0.84	9,684,163	2.38	-34,930,434	-9.55
2003	7,217,788	1.50	2,804,204	0.58	10,021,992	2.09	10,793,733	2.73
2004	9,549,993	1.77	13,804,584	2.55	23,354,577	4.32	86,226,079	18.88
Total	$57,033,347		$121,929,151		$178,962,498		$152,896,076	
					Average return	7.29%		6.61%

Note: Each year's yield is weighted by the average asset value in that year.

CHART 12C – Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1997 - 2004

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$28,023,000	4.34%	$86,904,805	13.46%	$114,927,805	17.80%	$163,710,501	23.29%
1998	32,158,000	4.20	126,357,182	16.49	158,515,182	20.69	181,742,476	20.83
1999	33,560,000	3.57	137,945,547	14.67	171,505,547	18.24	143,494,373	13.42
2000	39,901,000	3.55	281,307,308	25.02	321,208,308	28.56	54,094,746	4.41
2001	42,810,000	2.97	8,670,222	0.60	51,480,222	3.57	-58,424,532	-4.58
2002	41,988,855	2.84	-22,692,628	-1.54	19,296,227	1.31	-47,103,145	-3.92
2003	34,987,251	2.37	-30,769,513	-2.09	4,217,738	0.29	47,170,054	4.16
2004	36,316,694	2.49	-26,431,067	-1.81	9,885,627	0.68	155,495,441	13.41
Total	$289,744,800		$561,291,856		$851,036,656		$640,179,914	
					Average return	9.13%		7.41%

CHART 12D – Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1997 - 2004

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1997	$2,859,000	4.70%	$2,621,301	4.31%	$5,480,301	9.01%	$13,209,665	20.98%
1998	2,757,000	3.77	7,753,398	10.59	10,510,398	14.36	17,100,114	20.59
1999	3,176,000	3.36	9,273,144	9.80	12,449,144	13.16	13,451,746	12.11
2000	4,270,000	3.11	4,232,689	3.08	8,502,689	6.19	-17,918,878	-11.57
2001	5,141,000	2.87	3,567,337	1.99	8,708,337	4.87	-6,560,963	-3.86
2002	3,234,643	1.51	1,126,092	0.53	4,360,735	2.04	-18,622,357	-9.81
2003	3,710,646	1.49	562,884	0.23	4,273,530	1.71	5,445,820	2.69
2004	5,025,818	1.77	6,287,672	2.21	11,313,490	3.98	44,447,355	18.66
Total	$30,174,107		$35,424,517		$65,598,624		$50,552,502	
					Average return	5.07%		4.17%

Note: Each year's yield is weighted by the average asset value in that year.

The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. These charts illustrate how this leveling effect has actually worked over the years 1997 - 2004 for the non-hazardous plans.

CHART 13A – Non-Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2004

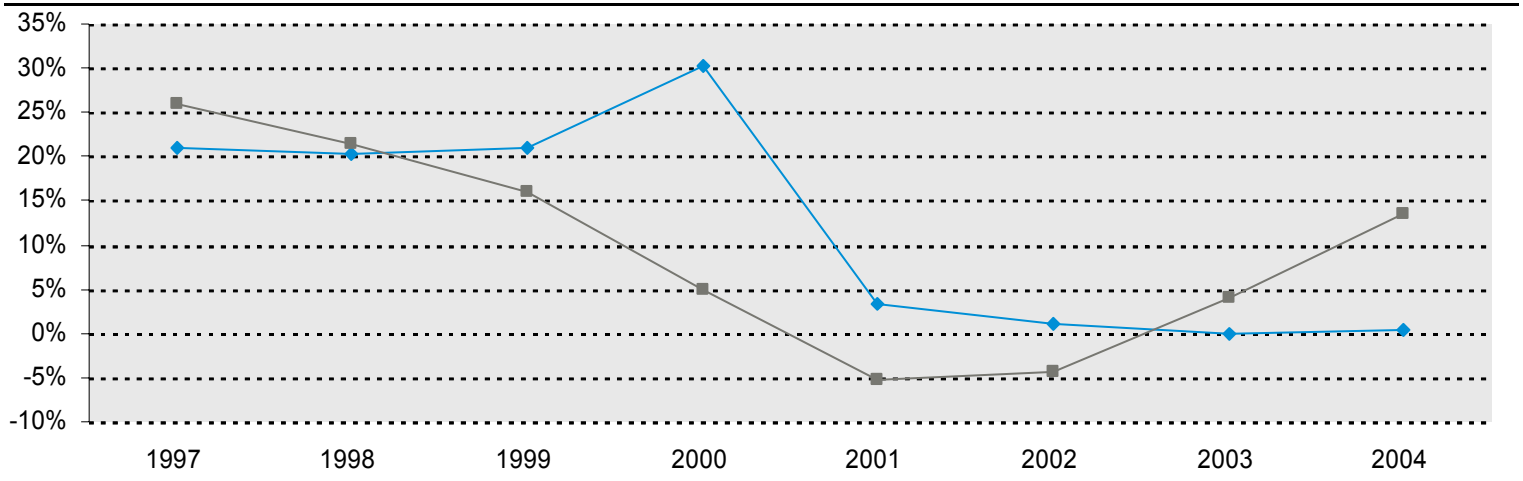
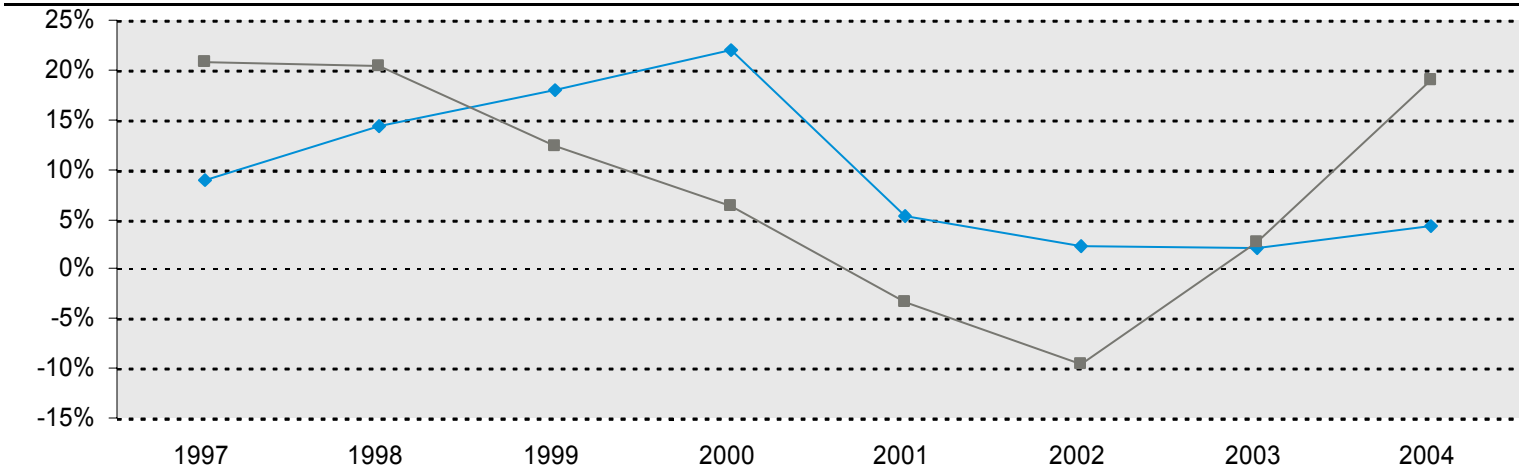


CHART 13B – Non-Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2004



The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. These charts illustrate how this leveling effect has actually worked over the years 1997 – 2004 for the hazardous plans.

CHART 13C – Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2004

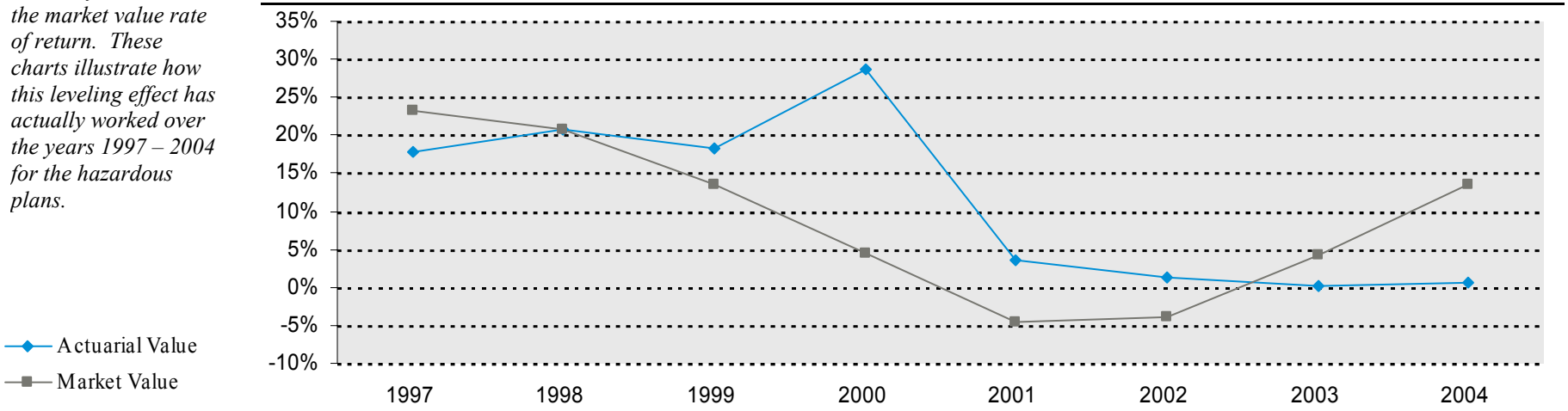
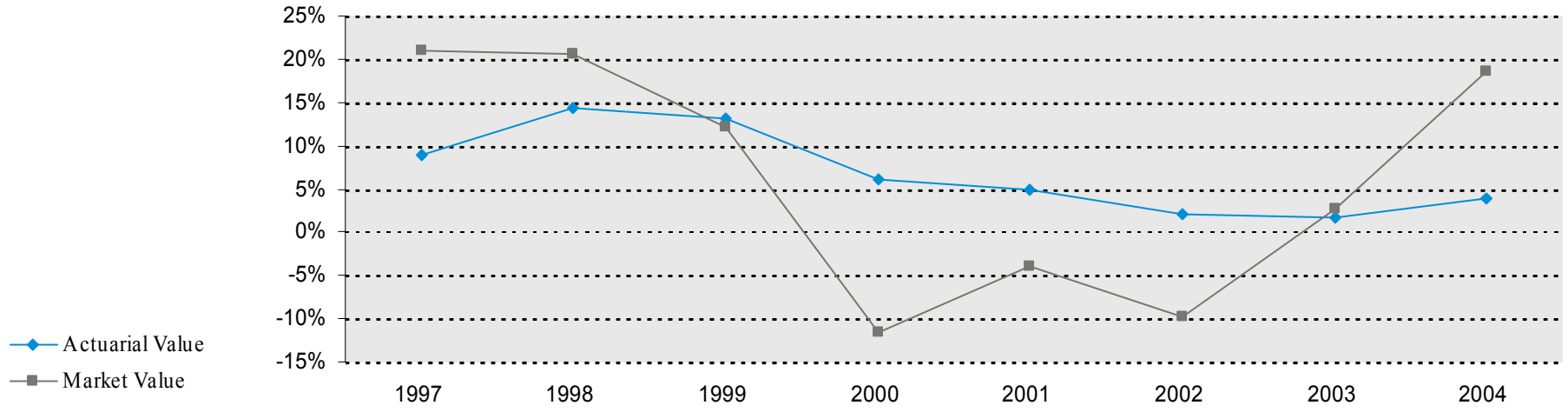


CHART 13D – Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2004



Administrative Expenses
Current methodology includes an assumption for the cost of administration for the retirement funds but not for the insurance funds. This assumption is modified with each valuation to estimate expenses for the upcoming fiscal year. The following summarizes the past year's experience and presents the assumptions for the next year.

Plan	Year End 2004 Assumption	Year End 2004 Actual Experience	Gain/(Loss)* for the Year	Year End 2005 Assumption
Non-Hazardous Retirement	$8,100,000	$8,694,290	-$643,319	$8,700,000
Non-Hazardous Insurance	0	392,876	-425,288	0
Hazardous Retirement	800,000	758,057	45,403	800,000
Hazardous Insurance	0	104,556	-113,182	0

* *Includes interest to year-end.*

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- COLAs granted in the year,
- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

A brief summary of the demographic gain/(loss) experience of the Funds for the year ended June 30, 2004 is shown in the chart below.

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 14

Experience Due to Changes in Demographics for Year Ended June 30, 2004

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. COLA	-$37,631,532	N/A	-$13,436,296	N/A
2. Other	-204,035,615	$43,786,640	-26,164,423	$30,259,146
3. Total	-$241,667,147	$43,786,640	-$39,600,719	$30,259,146
4. Percentage of actuarial accrued liability	4.9%	1.8%	2.4%	3.0%

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D. RECOMMENDED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability. This total amount is then divided by the projected salaries for active members to determine the funding rate.

The recommended contribution is based on a 30-year amortization of bases established each year as specified in the law governing the Plan.

Exhibit H in Section 3 provides details on these amortization bases.

The contribution rates as of June 30, 2004 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Charts 15 and 16 present the recommended contributions and reconciliations from the prior valuation.

This chart compares this valuation's recommended contribution with the prior valuation.

CHART 15A – Non-Hazardous Retirement

Recommended Contribution

	As of June 30			
	2004		2003	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$187,730,598	10.28%	$183,158,654	10.20%
2. Administrative expenses	8,700,000	0.47%	8,100,000	0.45%
3. Expected employee contributions	-90,518,789	-4.95%	-88,681,304	-4.94%
4. Employer normal cost: (1) + (2) + (3)	$105,911,809	5.80%	$102,577,350	5.71%
5. Actuarial accrued liability	4,936,459,488		4,417,597,802	
6. Actuarial value of assets	5,187,851,530		5,286,580,047	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	-$251,392,042		-$868,982,245	
8. Payment on unfunded/(overfunded) actuarial accrued liability	-22,788,140	-1.25%	-51,909,585	-2.89%
9. Total recommended contribution: (4) + (8)	$83,123,669	4.55%	$50,667,765	2.82%
10. Projected salary	$1,826,870,880		$1,796,451,180	

This chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 16A – Non-Hazardous Retirement

Reconciliation of Recommended Contribution from June 30, 2003 to June 30, 2004

Recommended Contribution as of June 30, 2003	$50,667,765
Effect of COLA for retirees	$1,885,290
Effect of investment loss	20,673,334
Effect of change in administrative expense assumption	600,000
Effect of net other changes	9,297,280
Total change	$32,455,904
Recommended Contribution as of June 30, 2004	$83,123,669

The chart compares this valuation's recommended contributions with the prior valuation.

CHART 15B – Non-Hazardous Insurance

Recommended Contribution

	As of June 30			
	2004		2003	
	Amount	% of Salary	Amount	% of Salary
1. Employer normal cost	$165,464,221	9.06%	$161,192,881	8.97%
2. Actuarial accrued liability	2,438,734,696		2,176,963,259	
3. Actuarial value of assets	585,399,072		520,060,105	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$1,853,335,624		$1,656,903,154	
5. Payment on unfunded/(overfunded) actuarial accrued liability	107,478,536	5.88%	94,623,016	5.27%
6. Full EANC contribution: (1) + (5)	$272,942,757	14.94%	$255,815,897	14.24%
7. Projected salary	$1,826,870,880		$1,796,451,180	
8. Prior year's funding rate	N/A	5.66%	N/A	4.95%
9. Years to reach full EANC	N/A	12	N/A	13
10. Additional amount for current year	N/A	0.77%	N/A	0.71%
11. Total recommended contribution rate: (8) + (10)	N/A	6.43%	N/A	5.66%

This chart compares this valuation's recommended contribution with the prior valuation.

CHART 15C – Hazardous Retirement

Recommended Contribution

	As of June 30			
	2004		2003	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$63,548,648	16.19%	$60,890,782	16.25%
2. Administrative expenses	800,000	0.20%	800,000	0.21%
3. Expected employee contributions	-29,803,612	-7.59%	-28,714,354	-7.66%
4. Employer normal cost: (1) + (2) + (3)	$34,545,036	8.80%	$32,976,428	8.80%
5. Actuarial accrued liability	1,640,830,120		1,499,628,782	
6. Actuarial value of assets	1,457,612,042		1,467,004,856	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	$183,218,078		$32,623,926	
8. Payment on unfunded/(overfunded) actuarial accrued liability	9,514,368	2.42%	1,905,978	0.51%
9. Total recommended contribution: (4) + (8)	$44,059,404	11.22%	$34,882,406	9.31%
10. Projected salary	$392,562,624		$374,700,732	

This chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 16C – Hazardous Retirement

Reconciliation of Recommended Contribution from June 30, 2003 to June 30, 2004

Recommended Contribution as of June 30, 2003	$34,882,406
Effect of COLA for retirees	$673,141
Effect of investment loss	5,528,240
Effect of net other changes	2,975,617
Total change	$9,176,998
Recommended Contribution as of June 30, 2004	$44,059,404

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 15D – Hazardous Insurance

Recommended Contribution

	As of June 30			
	2004		2003	
	Amount	% of Salary	Amount	% of Salary
1. Employer normal cost	$56,937,787	14.50%	$55,855,272	14.91%
2. Actuarial accrued liability	1,025,684,477		935,650,662	
3. Actuarial value of assets	310,578,162		269,190,080	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$715,106,315		$666,460,582	
5. Payment on unfunded/(overfunded) actuarial accrued liability	41,359,748	10.54%	37,743,195	10.07%
6. Full EANC contribution: (1) + (5)	98,297,535	25.04%	93,598,4667	24.98%
7. Projected salary	$392,562,624		$374,700,732	
8. Prior year's funding rate	N/A	12.77%	N/A	11.75%
9. Years to reach full EANC	N/A	12	N/A	13
10. Additional amount for current year	N/A	1.02%	N/A	1.02%
11. Total recommended contribution rate: (8) + (10)	N/A	13.79%	N/A	12.77%

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EXHIBIT A

Table of Plan Coverage

Category	Non-Hazardous Year Ended June 30 2004	2003	Change From Prior Year	Hazardous Year Ended June 30 2004	2003	Change From Prior Year
Active members in valuation:						
Number	80,922	82,288	-1.7%	9,349	9,286	0.7%
Average age	44.8	43.8	N/A	38.1	37.3	N/A
Average service	7.9	7.6	N/A	8.1	7.8	N/A
Total salary	$1,826,870,880	$1,796,451,180	1.7%	$392,562,624	$374,700,732	4.8%
Average salary	22,576	21,831	3.4%	41,990	40,351	4.1%
Account balances	814,908,627	759,938,261	7.2%	256,366,204	227,629,402	12.6%
Total active vested members	53,219	51,009	4.3%	6,206	5,904	5.1%
Vested terminated members	6,927	4,692	47.6%	361	165	118.8%
Retired participants:						
Number in pay status	23,274	21,423	8.6%	3,205	2,942	8.9%
Average age	68.3	68.5	N/A	57.9	57.6	N/A
Average monthly benefit	$737	$705	4.5%	$1,828	$1,804	1.3%
Disabled members:						
Number in pay status	2,801	2,698	3.8%	309	293	5.5%
Average age	60.9	60.6	N/A	50.7	50.2	N/A
Average monthly benefit	$699	$682	2.5%	$1,109	$1,095	1.3%
Beneficiaries in pay status	3,054	2,971	2.8%	491	502	-2.2%
Inactive nonvested members due a refund	37,492	27,634	35.7%	1,287	616	108.9%

EXHIBIT B – Non-Hazardous

Members in Active Service as of June 30, 2004
By Age, Years of Service, and Average Salary

	Years of Service									
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	5,087	4,865	222	- -	- -	- -	- -	- -	- -	- -
	$16,858	$16,680	$20,765	- -	- -	- -	- -	- -	- -	- -
25 - 29	4,895	3,845	1,002	48	- -	- -	- -	- -	- -	- -
	21,109	20,074	24,726	$28,485	- -	- -	- -	- -	- -	- -
30 - 34	7,074	4,559	1,975	517	23	- -	- -	- -	- -	- -
	22,255	19,505	26,451	30,003	$32,741	- -	- -	- -	- -	- -
35 - 39	9,513	5,132	2,751	1,141	432	57	- -	- -	- -	- -
	22,047	18,294	22,986	31,311	33,676	$41,041	- -	- -	- -	- -
40 - 44	12,842	5,370	3,916	1,959	951	539	106	1	- -	- -
	22,755	18,416	20,867	27,492	33,753	38,923	$43,874	$25,200	- -	- -
45 - 49	13,361	4,302	3,756	2,775	1,232	758	477	61	- -	- -
	24,026	19,310	21,210	24,942	30,427	37,511	42,497	47,143	- -	- -
50 - 54	11,773	3,131	2,898	2,707	1,610	840	448	127	12	- -
	24,409	19,769	21,916	23,628	27,434	33,168	41,594	51,598	$65,065	- -
55 - 59	8,821	2,381	1,947	1,819	1,349	808	379	118	20	- -
	23,922	19,542	21,591	23,794	25,785	28,823	37,994	46,887	58,141	- -
60 - 64	4,894	1,245	1,204	985	719	433	233	54	14	7
	22,117	17,076	19,650	22,508	25,063	27,229	31,256	47,676	66,351	$79,471
65 - 69	1,792	510	432	378	240	138	68	15	7	4
	19,696	15,527	17,291	20,637	23,033	24,053	29,855	40,411	56,217	57,501
70 & over	870	229	199	184	132	52	50	12	5	7
	17,783	14,542	14,460	16,724	19,261	19,398	32,944	40,991	33,797	46,785
Total	80,922	35,569	20,302	12,513	6,688	3,625	1,761	388	58	18
	$22,576	$18,669	$21,958	$25,251	$28,399	$32,833	$39,134	$48,091	$59,225	$61,877

EXHIBIT B – Hazardous

Members in Active Service as of June 30, 2004
By Age, Years of Service, and Average Salary

	Years of Service									
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	560	550	10	- -	- -	- -	- -	- -	- -	- -
	$29,062	$28,881	$38,977	- -	- -	- -	- -	- -	- -	- -
25 - 29	1,360	1,041	316	3	- -	- -	- -	- -	- -	- -
	35,974	33,997	42,396	$45,204	- -	- -	- -	- -	- -	- -
30 - 34	2,009	930	842	234	3	- -	- -	- -	- -	- -
	40,364	34,823	43,777	49,830	$61,728	- -	- -	- -	- -	- -
35 - 39	1,846	499	526	613	195	13	- -	- -	- -	- -
	43,856	34,622	41,887	49,507	54,629	$49,912	- -	- -	- -	- -
40 - 44	1,491	316	285	373	421	87	9	- -	- -	- -
	46,493	33,829	41,087	48,905	54,765	58,548	$58,795	- -	- -	- -
45 - 49	978	197	157	229	209	120	62	4	- -	- -
	47,393	33,619	41,642	46,024	53,560	59,728	64,185	$77,406	- -	- -
50 - 54	599	154	105	110	75	37	79	35	4	- -
	47,632	34,828	41,842	43,381	51,519	56,669	67,054	71,440	$61,065	- -
55 - 59	307	110	78	39	33	21	12	9	5	- -
	42,455	34,369	38,815	42,952	49,905	49,895	59,843	81,891	80,143	- -
60 - 64	143	49	37	23	18	10	1	2	2	1
	41,051	31,427	40,398	37,942	51,962	57,005	37,968	89,190	85,920	$69,372
65 - 69	40	22	9	5	3	1	- -	- -	- -	- -
	35,731	28,565	42,512	49,308	40,524	50,100	- -	- -	- -	- -
70 & over	16	1	2	1	3	2	4	1	1	1
	48,696	20,004	25,656	35,964	48,952	65,994	51,771	70,884	65,208	49,836
Total	9,349	3,869	2,367	1,630	960	291	167	51	12	2
	$41,990	$33,493	$42,365	$48,176	$53,961	$57,755	$64,486	$74,437	$73,502	$59,604

EXHIBIT C – Non-Hazardous

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	2,640	$2,048,321.39	8,902	$4,687,647.65	11,542	$6,735,969.04
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	1,703	1,381,208.51	702	319,070.23	2,405	1,700,278.74
66-2/3% to beneficiary	501	734,507.12	224	178,999.27	725	913,506.39
50% to beneficiary	733	876,299.22	592	497,159.61	1,325	1,373,458.83
Pop-up option	1,866	2,322,415.22	1,324	1,034,706.53	3,190	3,357,121.75
10 years certain	1	100.94	0	0.00	1	100.94
10 years certain & life	1,173	785,326.89	2,251	1,203,834.98	3,424	1,989,161.87
Social Security option						
Age 62 basic	204	336,307.30	380	318,001.88	584	654,309.18
Age 62 survivorship	459	720,266.71	199	169,685.71	658	889,952.42
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	467	356,433.76	410	240,188.90	877	596,622.66
20 years certain & life	299	313,022.23	320	229,071.69	619	542,093.92
5 years certain	1	283.77	0	0.00	1	283.77
PLSO 12 month basic	28	21,007.38	100	62,754.71	128	83,762.09
PLSO 24 month basic	10	6,224.07	52	26,632.56	62	32,856.63
PLSO 36 month basic	70	28,232.62	169	61,926.85	239	90,159.47
PLSO 12 month survivor	45	41,997.90	33	26,661.58	78	68,659.48
PLSO 24 month survivor	30	19,245.00	14	7,167.84	44	26,412.84
PLSO 36 month survivor	107	45,287.72	66	21,427.21	173	66,714.93
Total	10,337	$10,036,487.75	15,738	$9,084,937.20	26,075	$19,121,424.95

EXHIBIT C – Hazardous

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	444	$788,256.23	116	$141,515.87	560	$929,772.10
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	409	661,879.38	18	12,947.24	427	674,826.62
66-2/3% to beneficiary	180	394,573.85	3	6,864.24	183	401,438.57
50% to beneficiary	273	526,539.98	13	16,480.03	286	543,020.01
Pop-up option	1,187	2,358,628.99	29	46,412.00	1,216	2,405,040.99
10 years certain	31	49,340.18	3	8,579.57	34	57,919.75
10 years certain & life	138	222,150.12	24	35,721.86	162	257,871.98
Social Security option						
Age 62 basic	92	138,710.82	5	6,211.48	97	144,922.30
Age 62 survivorship	286	412,450.27	8	5,572.40	294	418,022.67
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	46	67,629.69	4	4,523.11	50	72,152.80
20 years certain & life	88	145,230.96	8	8,483.68	96	153,714.64
5 years certain	0	0.00	0	0.00	0	0.00
PLSO 12 month basic	10	11,283.43	4	4,453.42	14	15,736.85
PLSO 24 month basic	9	16,807.04	3	3,604.45	12	20,411.49
PLSO 36 month basic	16	13,157.96	1	345.97	17	13,503.93
PLSO 12 month survivor	16	31,731.93	0	0.00	16	31,731.93
PLSO 24 month survivor	16	21,499.66	0	0.00	16	21,499.66
PLSO 36 month survivor	33	41,014.37	1	139.41	34	41,153.78
Total	3,274	$5,900,884.86	240	$301,855.21	3,514	$6,202,740.07

EXHIBIT D – Non-Hazardous

Beneficiary Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	4	$1,189.82	21	$13,203.03	25	$14,392.85
Straight life (old plan)	0	0	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	1,208	521,184.00	230	79,656.55	1,438	600,840.55
66-2/3% to beneficiary	134	62,575.09	31	10,479.94	165	73,055.03
50% to beneficiary	227	76,590.21	72	20,064.42	299	96,654.63
Pop-up option	209	132,250.56	59	27,653.72	268	159,904.28
10 years certain	90	61,592.91	77	38,107.29	167	99,700.20
10 years certain & life	103	55,020.73	99	50,191.28	202	105,212.01
Social Security option						
Age 62 basic	0	0.00	0	0.00	0	0.00
Age 62 survivorship	57	64,335.40	12	8,449.25	69	72,784.65
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	4	664.97	0	0.00	4	664.97
Dependent child	2	601.27	2	352.97	4	954.24
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	81	55,090.07	31	17,737.76	112	72,828.46
20 years certain & life	56	49,123.02	40	18,992.39	96	68,115.41
5 years certain	96	74,981.26	97	57,653.86	193	132,635.12
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	0	0.00	0	0.00	0	0.00
PLSO 36 month basic	0	0.00	3	809.43	3	809.43
PLSO 12 month survivor	4	6,164.01	0	0.00	4	6,164.01
PLSO 24 month survivor	2	633.62	0	0.00	2	633.62
PLSO 36 month survivor	2	867.63	1	215.32	3	1,082.95
Total	2,279	$1,162,865.20	775	$343,567.21	3,054	$1,506,432.41

EXHIBIT D – Hazardous

Beneficiary Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	0	$0.00	20	$17,470.89	20	$17,470.89
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	92	96,323.51	7	4,480.34	99	100,803.85
66-2/3% to beneficiary	22	25,816.26	2	851.04	24	26,667.30
50% to beneficiary	22	12,988.09	5	4,038.63	27	17,026.72
Pop-up option	57	80,945.95	13	8,328.33	70	89,274.28
10 years certain	15	25,935.53	7	3,567.97	22	29,503.50
10 years certain & life	2	1,379.86	6	4,804.31	8	6,184.17
Social Security option						
Age 62 basic	0	0.00	2	637.20	2	637.20
Age 62 survivorship	40	55,303.18	7	5,993.62	47	61,296.80
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	3	2,302.69	0	0.00	3	2,302.69
Dependent child	77	23,963.54	56	17,258.87	133	41,222.41
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	3	3,010.32	2	1,997.51	5	5,007.83
20 years certain & life	11	18,224.23	10	6,193.07	21	24,417.30
5 years certain	5	3,264.27	3	1,111.07	8	4,375.34
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	0	0.00	0	0.00	0	0.00
PLSO 36 month basic	0	0.00	1	862.58	1	862.58
PLSO 12 month survivor	0	0.00	0	0.00	0	0.00
PLSO 24 month survivor	1	141.50	0	0.00	1	141.50
PLSO 36 month survivor	0	0	0	0.00	0	0.00
Total	350	$349,598.93	141	$77,595.43	491	$427,194.36

EXHIBIT E – Non-Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Contribution income:				
Employer contributions	$44,028,465		$11,855,694	
Member contributions	122,484,428		125,300,584	
Less administrative and investment expenses	-11,913,070		-10,879,055	
Net contribution income		$154,599,823		$126,277,223
Investment income:				
Interest, dividends and other income	$140,474,161		$138,657,919	
Recognition of capital appreciation	-112,243,733		-121,335,398	
Less stock commissions and securities lending expense	-9,581,716		-14,276,556	
Net investment income		18,648,712		3,045,965
Total income available for benefits		$173,248,535		$129,323,188
Less benefit payments:				
Benefit payments	-$260,642,995		-$230,316,847	
Refunds	-11,334,057		-10,213,452	
Net benefit payments		-$271,977,052		-$240,530,299
Change in reserve for future benefits		-$98,728,517		-$111,207,111

EXHIBIT E – Non-Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Contribution income:				
Employer contributions	$89,344,241		$99,234,843	
Less administrative and investment expenses	-708,301		-309,021	
Net contribution income		$88,635,940		$98,925,822
Investment income:				
Interest, dividends and other income	$10,625,125		$8,180,059	
Recognition of capital appreciation	13,804,584		2,804,204	
Less stock commissions and securities lending expense	-1,075,132		-962,271	
Net investment income		23,354,577		10,021,992
Total income available for benefits		$111,990,517		$108,947,814
Less healthcare premium subsidies		-$46,651,550		-$39,385,015
Change in reserve for future benefits		$65,338,967		$69,562,799

EXHIBIT E – Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Contribution income:				
Employer contributions	$27,640,775		$16,905,556	
Member contributions	38,667,764		36,202,579	
Less administrative and investment expenses	-1,644,607		-1,507,060	
Net contribution income		$64,663,932		$51,601,075
Investment income:				
Interest, dividends and other income	$39,023,270		$39,168,079	
Recognition of capital appreciation	-26,431,067		-30,769,513	
Less stock commissions and securities lending expense	-2,706,576		-4,180,828	
Net investment income		9,885,627		4,217,738
Total income available for benefits		$74,549,559		$55,818,813
Less benefit payments:				
Benefit payments	-$81,421,925		-$72,531,779	
Refunds	-2,520,448		-1,793,971	
Net benefit payments		-$83,942,373		-$74,325,750
Change in reserve for future benefits		-$9,392,814		-$18,506,937

EXHIBIT E – Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Contribution income:				
Employer contributions	$47,036,777		$45,243,950	
Less administrative and investment expenses	-260,354		-142,705	
Net contribution income		$46,776,423		$45,101,245
Investment income:				
Interest, dividends and other income	$5,589,010		$4,216,739	
Recognition of capital appreciation	6,287,672		562,884	
Less stock commissions and securities lending expense	-563,192		-506,093	
Net investment income		11,313,490		4,273,530
Total income available for benefits		$58,089,913		$49,374,775
Less healthcare premium subsidies		-$16,701,831		-$14,868,573
Change in reserve for future benefits		$41,388,082		$34,506,202

EXHIBIT F – Non-Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Cash equivalents		$813,273		$614,921
Accounts receivable:				
Investment accounts receivable	$242,770		$225,031	
Year-end interest receivable	23,285,315		22,423,993	
Year-end accounts receivable	25,041,039		21,426,306	
Alternate Plan accounts receivable	572,838		1,362,202	
Total accounts receivable		49,141,962		45,437,532
Investments:				
Bonds	$1,443,631,252		$1,452,706,088	
Stocks	2,754,886,293		2,224,864,905	
Mortgage	247,087,021		211,499,185	
Short-term investments	118,667,313		238,154,160	
Real estate	2,495,681		4,741,593	
Fixed assets	531,136		577,640	
Total investments at market value		4,567,298,696		4,132,543,571
Total assets		$4,617,253,931		$4,178,596,024
Less accounts payable		-$3,917,974		-$3,714,907
Net assets at market value		$4,613,335,957		$4,174,881,117
Net assets at actuarial value		$5,187,851,530		$5,286,580,047

EXHIBIT F – Non-Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Cash equivalents		$30,008		$63,550
Accounts receivable:				
Investment accounts receivable	$36,997		$22,463	
Year-end interest receivable	1,364,324		1,103,783	
Year-end accounts receivable	8,363,612		10,695,236	
Total accounts receivable		9,764,933		11,821,482
Investments:				
Bonds	$51,847,439		$42,819,734	
Stocks	450,829,317		351,228,039	
Short-term investments	52,303,176		29,904,766	
Total investments at market value		554,979,932		423,952,539
Total assets		$564,774,873		$435,837,571
Less accounts payable		-$897,279		-$170,446
Net assets at market value		$563,877,594		$435,667,125
Net assets at actuarial value		$585,399,072		$520,060,105

EXHIBIT F – Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Cash equivalents		$227,908		$217,552
Accounts receivable:				
Investment accounts receivable	$68,840		$63,810	
Year-end interest receivable	6,412,170		6,180,263	
Year-end accounts receivable	9,716,164		8,194,121	
Alternate Plan accounts receivable	344,812		1,795,357	
Total accounts receivable		16,541,986		16,233,551
Investments:				
Bonds	$394,924,326		$398,906,715	
Stocks	788,757,059		624,403,527	
Mortgage	69,112,719		58,421,019	
Short-term investments	34,290,213		68,395,341	
Real estate	2,416,314		3,055,076	
Fixed assets	47,562		51,593	
Total investments at market value		1,289,548,193		1,153,233,271
Total assets		$1,306,318,087		$1,169,684,374
Less accounts payable		-$1,306,615		-$889,902
Net assets at market value		$1,305,011,472		$1,168,794,472
Net assets at actuarial value		$1,457,612,042		$1,467,004,856

EXHIBIT F – Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Cash equivalents		$7,071		$81,731
Accounts receivable:				
Investment accounts receivable	$19,080		$11,584	
Year-end interest receivable	745,380		559,656	
Year-end accounts receivable	3,811,142		3,652,483	
Total accounts receivable		4,575,602		4,223,723
Investments:				
Bonds	$30,331,059		$21,287,077	
Stocks	232,519,309		182,395,584	
Short-term investments	30,509,232		15,308,134	
Total investments at market value		293,359,600		218,990,795
Total assets		$297,942,273		$223,296,249
Less accounts payable		-$207,987		-$83,910
Net assets at market value		$297,734,286		$223,212,339
Net assets at actuarial value		$310,578,162		$269,190,080

EXHIBIT G – Non-Hazardous Retirement

Development of the Fund Through June 30, 2004

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return*	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$105,774,000	$63,590,000	$474,650,525	$5,268,000	$126,358,000	$2,750,196,558
1998	107,526,000	74,382,000	562,583,445	5,620,000	142,863,000	3,346,205,003
1999	110,591,000	98,566,000	703,324,432	6,519,000	179,940,000	4,072,227,435
2000	106,587,000	96,676,000	1,229,891,099	7,350,000	213,998,000	5,284,033,534
2001	48,914,000	101,597,000	176,147,015	7,820,000	179,037,000	5,423,834,549
2002	4,663,371	121,573,670	61,924,304	10,029,562	204,179,174	5,397,787,158
2003	11,855,694	125,300,584	3,045,965	10,879,055	240,530,299	5,286,580,047
2004	44,028,465	122,484,428	18,648,712	11,913,070	271,977,052	5,187,851,530

EXHIBIT G – Non-Hazardous Insurance

Development of the Fund Through June 30, 2004

Year Ended June 30	Employer Contributions	Net Investment Return*	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$27,504,000	$10,502,235	$25,000	$13,497,000	$134,688,096
1998	29,271,000	20,197,200	25,000	15,600,000	168,531,296
1999	47,902,000	33,047,873	52,000	17,492,000	231,937,169
2000	55,214,000	54,547,525	114,000	21,942,000	319,642,694
2001	62,292,000	17,606,934	244,000	27,539,000	371,758,628
2002	102,150,788	9,684,163	401,971	32,694,301	450,497,307
2003	99,234,843	10,021,991	309,021	39,385,015	520,060,105
2004	89,344,241	23,354,577	708,301	46,651,550	585,399,072

** Net of stock commissions and securities lending expense*

EXHIBIT G – Hazardous Retirement

Development of the Fund Through June 30, 2004

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return*	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$39,552,000	$15,752,000	$114,927,805	$811,000	$47,812,000	$763,829,310
1998	42,298,000	16,581,000	158,515,182	902,000	53,264,000	927,057,492
1999	48,291,000	22,918,000	171,505,547	939,000	44,181,553	1,124,651,486
2000	51,739,000	28,476,000	321,208,308	1,085,000	79,447,000	1,445,542,794
2001	20,983,000	27,279,000	51,480,222	974,000	57,645,000	1,486,666,016
2002	10,904,214	35,164,272	19,296,227	1,382,853	65,136,083	1,485,511,793
2003	16,905,556	36,202,579	4,217,738	1,507,060	74,325,750	1,467,004,856
2004	27,640,775	38,667,764	9,885,627	1,644,607	83,942,373	1,457,612,042

EXHIBIT G – Hazardous Insurance

Development of the Fund Through June 30, 2004

Year Ended June 30	Employer Contributions	Net Investment Return*	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1997	$13,305,000	$5,480,301	$25,000	$6,260,000	$69,832,681
1998	14,275,000	10,510,398	25,000	7,538,000	87,055,079
1999	23,383,000	12,449,144	25,000	8,272,000	114,590,223
2000	55,214,000	8,502,689	52,000	9,597,000	168,657,912
2001	32,149,000	8,708,337	109,000	11,531,000	197,875,249
2002	45,730,333	4,360,735	187,302	13,095,137	234,683,878
2003	45,243,950	4,273,530	142,705	14,868,573	269,190,080
2004	47,036,777	11,313,490	260,354	16,701,831	310,578,162

** Net of stock commissions and securities lending expense*

EXHIBIT H – Non-Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$93,672,421	$9,243,290	16	$118,832,784
06/30/1991	30	61,472,822	5,782,236	17	77,887,480
06/30/1992	30	-125,111,651	-11,217,739	18	-157,785,552
06/30/1993	30	-28,358,370	-2,423,704	19	-35,491,322
06/30/1994	30	59,026,195	4,808,713	20	73,110,612
06/30/1995	30	-35,766,009	-2,777,376	21	-43,736,219
06/30/1996	30	-188,502,047	-13,952,616	22	-227,072,304
06/30/1997	30	-200,122,489	-14,107,376	23	-236,805,300
06/30/1998	30	-311,976,854	-20,945,159	24	-361,973,308
06/30/1999	30	-379,088,077	-24,238,875	25	-430,557,503
06/30/2000	30	-804,685,873	-49,001,499	26	-893,287,272
06/30/2001	30	250,075,433	14,503,230	27	270,956,309
06/30/2002	30	529,261,185	29,233,088	28	558,982,665
06/30/2003	30	391,393,784	20,588,724	29	402,457,777
06/30/2004	30	633,089,111	31,716,923	30	633,089,111
Total			-$22,788,140		-$251,392,042

** Level percentage of salary*

EXHIBIT H – Non-Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$901,011,537	$66,691,413	22	$1,085,371,583
06/30/1997	30	29,886,573	2,106,815	23	35,364,836
06/30/1998	30	62,468,342	4,193,931	24	72,479,327
06/30/1999	30	-21,106,379	-1,349,541	25	-23,972,029
06/30/2000	30	70,199,744	4,274,827	26	77,929,215
06/30/2001	30	247,855,413	14,374,479	27	268,550,921
06/30/2002	30	72,249,680	3,990,622	28	76,306,973
06/30/2003	30	96,412,030	5,071,620	29	99,137,423
06/30/2004	30	162,167,375	8,124,370	30	162,167,375
Total			$107,478,536		$1,853,335,624

** Level percentage of salary*

EXHIBIT H – Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$68,584,978	$6,767,743	16	$87,006,871
06/30/1991	30	29,934,803	2,815,717	17	37,928,085
06/30/1992	30	-12,941,304	-1,160,341	18	-16,321,027
06/30/1993	30	-7,291,213	-623,158	19	-9,125,162
06/30/1994	30	1,854,577	151,088	20	2,297,104
06/30/1995	30	24,831,672	1,928,280	21	30,365,240
06/30/1996	30	-65,565,268	-4,853,035	22	-78,980,874
06/30/1997	30	-62,908,989	-4,434,688	23	-74,440,321
06/30/1998	30	-50,329,820	-3,378,988	24	-58,395,523
06/30/1999	30	-97,060,446	-6,206,041	25	-110,238,507
06/30/2000	30	-194,399,700	-11,838,007	26	-215,804,432
06/30/2001	30	79,413,115	4,605,597	27	86,043,976
06/30/2002	30	143,568,600	7,929,834	28	151,630,917
06/30/2003	30	195,752,270	10,297,275	29	201,285,832
06/30/2004	30	149,965,899	7,513,092	30	149,965,899
Total			$9,514,368		$183,218,078

** Level percentage of salary*

EXHIBIT H – Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$318,111,968	$23,546,132	22	$383,202,297
06/30/1997	30	53,367,623	3,762,082	23	63,150,003
06/30/1998	30	15,379,222	1,032,513	24	17,843,848
06/30/1999	30	-13,162,362	-841,601	25	-14,949,438
06/30/2000	30	17,607,673	1,072,223	26	19,546,399
06/30/2001	30	82,316,738	4,773,994	27	89,190,047
06/30/2002	30	10,745,007	593,487	28	11,348,409
06/30/2003	30	108,196,487	5,691,525	29	111,255,006
06/30/2004	30	34,519,744	1,729,393	30	34,519,744
Total			$41,359,748		$715,106,315

** Level percentage of salary*

EXHIBIT I

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

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EXHIBIT I – Non-Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:			
1.	Retired participants as of the valuation date (including 3,054 beneficiaries in pay status)		29,129
2.	Members inactive during year ended June 30, 2004 with vested rights		6,927
3.	Members active during the year ended June 30, 2004		80,922
	Fully vested	53,219	
	Not vested	27,703	
4.	Inactive nonvested members due a refund as of June 30, 2004		37,492
The actuarial factors as of the valuation date are as follows:			
1.	Total normal cost, including administrative expenses		$196,430,598
2.	Present value of future benefits		7,040,196,995
3.	Present value of future normal costs		2,103,737,507
4.	Actuarial accrued liability		4,936,459,488
	Retired participants and beneficiaries	$2,351,970,757	
	Inactive members with vested rights	64,833,073	
	Active members	2,458,264,408	
	Inactive nonvested members due a refund	61,391,250	
5.	Actuarial value of assets ($4,613,335,957 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		5,187,851,530
6.	Overfunded actuarial accrued liability		-$251,392,042

EXHIBIT I – Non-Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$165,464,221
2.	Present value of future benefits		4,299,553,283
3.	Present value of future normal costs		1,860,818,587
4.	Actuarial accrued liability		2,438,734,696
	Retired participants and beneficiaries	$840,650,009	
	Inactive members with vested rights	115,280,082	
	Active members	1,482,804,605	
5.	Actuarial value of assets ($563,877,594 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		585,399,072
6.	Unfunded actuarial accrued liability		$1,853,335,624

EXHIBIT I – Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:			
1.	Retired participants as of the valuation date (including 491 beneficiaries in pay status)		4,005
2.	Members inactive during year ended June 30, 2004 with vested rights		361
3.	Members active during the year ended June 30, 2004		9,349
	Fully vested	6,206	
	Not vested	3,143	
4.	Inactive nonvested members due a refund as of June 30, 2004		1,287
The actuarial factors as of the valuation date are as follows:			
1.	Total normal cost, including administrative expenses		$64,348,648
2.	Present value of future benefits		2,263,381,238
3.	Present value of future normal costs		622,551,118
4.	Actuarial accrued liability		1,640,830,120
	Retired participants and beneficiaries	$839,768,502	
	Inactive members with vested rights	6,887,080	
	Active members	789,475,677	
	Inactive nonvested members due a refund	4,698,861	
5.	Actuarial value of assets ($1,305,011,472 at market value as reported Carpenter, Mountjoy & Bressler, PSC)		1,457,612,042
6.	Unfunded actuarial accrued liability		$183,218,078

EXHIBIT I – Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$56,937,787
2.	Present value of future benefits		1,600,503,739
3.	Present value of future normal costs		574,819,262
4.	Actuarial accrued liability		1,025,684,477
	Retired participants and beneficiaries	$437,546,991	
	Inactive members with vested rights	12,741,696	
	Active members	575,395,790	
5.	Actuarial value of assets ($297,734,286 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		310,578,162
6.	Unfunded actuarial accrued liability		$715,106,315

EXHIBIT II – Non-Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/1999	$4,072,227,435	$2,991,420,884	-$1,080,806,551	136.13%	$1,449,817,548	-74.55%
06/30/2000	5,284,033,534	3,368,601,134	-1,915,432,400	156.86%	1,575,632,580	-121.57%
06/30/2001	5,423,834,549	3,706,282,212	-1,717,552,337	146.34%	1,597,653,320	-107.50%
06/30/2002	5,397,787,158	4,165,355,149	-1,232,432,009	129.59%	1,688,460,789	-72.99%
06/30/2003	5,286,580,047	4,417,597,802	-868,982,245	119.67%	1,796,451,180	-48.37%
06/30/2004	5,187,851,530	4,936,459,488	-251,392,042	105.09%	1,826,870,880	-13.76%

EXHIBIT II – Non-Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/1999	$231,937,169	$1,282,874,286	$1,050,937,117	18.08%	$1,449,817,548	72.49%
06/30/2000	319,642,694	1,466,716,928	1,147,074,234	21.79%	1,575,632,580	72.80%
06/30/2001	371,758,628	1,793,710,768	1,421,952,140	20.73%	1,597,653,320	89.00%
06/30/2002	450,497,307	1,977,577,038	1,527,079,731	22.78%	1,688,460,789	90.44%
06/30/2003	520,060,105	2,176,963,259	1,656,903,154	23.89%	1,796,451,180	92.23%
06/30/2004	585,399,072	2,438,734,696	1,853,335,624	24.00%	1,826,870,880	101.45%

EXHIBIT II – Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratiol (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/1999	$1,124,651,486	$963,711,775	-$160,939,711	116.70%	$260,279,940	-61.83%
06/30/2000	1,445,542,794	1,084,553,697	-360,989,097	133.28%	291,062,928	-124.02%
06/30/2001	1,486,666,016	1,193,860,442	-292,805,574	124.53%	322,819,064	-90.70%
06/30/2002	1,485,511,793	1,327,291,273	-158,220,520	111.92%	346,319,146	-45.69%
06/30/2003	1,467,004,856	1,499,628,782	32,623,926	97.82%	374,700,732	8.71%
06/30/2004	1,457,612,042	1,640,830,120	183,218,078	88.83%	392,562,624	46.67%

EXHIBIT II – Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratiol (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/1999	$114,590,223	$518,280,115	$403,689,892	22.11%	$260,279,940	155.10%
06/30/2000	168,657,912	599,936,029	431,278,117	28.11%	291,062,928	148.17%
06/30/2001	197,875,249	721,605,292	523,730,043	27.42%	322,819,064	162.24%
06/30/2002	234,683,878	781,184,974	546,501,096	30.04%	346,319,146	157.80%
06/30/2003	269,190,080	935,650,662	666,460,582	28.77%	374,700,732	177.86%
06/30/2004	310,578,162	1,025,684,477	715,106,315	30.28%	392,562,624	182.16%

EXHIBIT II – Total Retirement Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a) / (b)]	Increase in Assets
06/30/1960	$864,451	$5,602,131	$4,737,680	84.57%	$864,451
06/30/1965	5,613,214	12,510,487	6,897,273	55.13%	1,255,742
06/30/1971	23,420,022*	40,305,948	16,885,927	41.89%	4,850,170
06/30/1975	60,854,631*	85,322,085	24,467,454	28.68%	11,704,780
06/30/1976	78,734,622*	128,824,236	50,089,614	38.88%	17,879,991
06/30/1977	100,425,591*	152,900,347	52,474,756	34.32%	21,690,969
06/30/1978	124,799,954*	175,194,867	50,394,913	28.77%	24,374,363
06/30/1979	153,091,905*	213,834,377	60,742,472	28.41%	28,291,951
06/30/1980	190,230,941*	266,018,621	75,787,680	28.49%	37,139,036
06/30/1981	233,770,245	260,872,162	27,101,917	10.39%	43,539,304
06/30/1982	285,534,889	306,087,531	20,552,642	6.71%	51,764,644
06/30/1983	343,155,769	340,705,763	-2,450,006	-0.72%	57,620,880
06/30/1984	406,187,431	421,336,269	15,148,838	3.60%	63,031,662
06/30/1985	478,043,221	463,618,532	-14,424,689	-3.11%	71,855,790
06/30/1986	603,815,800	535,948,094	-67,867,706	-12.66%	125,772,579
06/30/1987	727,730,727	678,442,760	-49,287,967	-7.26%	123,914,927
06/30/1988	839,578,896	829,346,323	-10,232,573	-1.23%	111,848,169
06/30/1989	1,078,052,635	1,113,868,548	35,815,913	3.22%	238,473,739
06/30/1990	1,270,066,267	1,432,323,666	162,257,399	11.33%	192,013,632
06/30/1991	1,396,227,005	1,654,338,706	258,111,701	15.60%	126,160,738
06/30/1992**	1,735,038,908	1,861,978,403	126,939,495	6.82%	338,811,903
06/30/1993	1,985,680,709	2,079,930,047	94,249,338	4.53%	250,641,801
06/30/1994	2,173,354,772	2,330,344,241	156,989,469	6.74%	187,674,063
06/30/1995	2,454,128,060	2,603,575,921	149,447,861	5.74%	280,773,288
06/30/1996	2,880,028,538	2,778,316,473	-101,712,065	-3.66%	425,900,478
06/30/1997	3,514,025,868	3,144,928,093	-369,096,965	-11.74%	633,997,330

EXHIBIT II – Total Retirement Fund (continued)

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a) / (b)]	Increase in Assets
06/30/1998	4,273,262,495	3,529,912,902	-743,349,593	-21.06%	759,236,627
06/30/1999	5,196,878,921	3,955,132,659	-1,241,746,262	-31.40%	923,616,426
06/30/2000	6,729,576,328	4,453,154,831	-2,276,421,497	-51.12%	1,532,697,407
06/30/2001***	6,910,500,565	4,900,142,654	-2,010,357,911	-41.03%	180,924,237
06/30/2002	6,883,298,951	5,492,646,422	-1,390,652,529	-25.32%	-27,201,614
06/30/2003	6,753,584,903	5,917,226,584	-836,358,319	-14.13%	-129,714,048
06/30/2004	6,645,463,572	6,577,289,608	-68,173,964	-1.04%	-108,121,331

* *Includes capitalized appreciation of investments.*

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

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EXHIBIT II – Total Insurance Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) – (a)/(b)]	Increase in Assets
06/30/1990	$29,430,397	$700,151,838	$670,720,901	95.80%	N/A
06/30/1991	42,420,744	823,012,809	780,592,065	94.85%	12,989,807
06/30/1992	56,955,901	1,041,905,457	984,949,556	94.53%	14,535,157
06/30/1993	74,253,872	1,244,258,042	1,170,004,170	94.03%	17,297,971
06/30/1994	99,514,895	1,551,138,800	1,451,623,905	93.88%	25,261,023
06/30/1995	125,453,940	1,679,893,225	1,554,439,285	92.53%	25,939,045
06/30/1996**	167,536,241	1,386,659,746	1,219,123,505	87.92%	42,082,301
06/30/1997	204,520,777	1,541,360,457	1,336,839,680	86.73%	36,984,536
06/30/1998	255,586,375	1,706,626,110	1,451,039,735	85.02%	51,065,598
06/30/1999	346,527,392	1,801,154,401	1,454,627,009	80.76%	90,941,017
06/30/2000	488,300,606	2,066,652,957	1,578,352,351	76.37%	141,773,214
06/30/2001***	569,633,878	2,515,316,060	1,945,682,182	77.35%	81,333,272
06/30/2002	685,181,185	2,758,762,012	2,073,580,827	75.16%	115,547,307
06/30/2003	789,250,185	3,112,613,921	2,323,363,736	74.64%	104,069,000
06/30/2004	895,977,234	3,464,419,173	2,568,441,939	74.14%	106,727,049

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

EXHIBIT III – Non-Hazardous

Supplementary Information Required by the GASB

Valuation date	June 30, 2004
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	16 to 30 years
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	29,129
Terminated members entitled to, but not yet receiving benefits	6,927
Active members	80,922
Total	116,978

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	5,598	3,732	546	526	250	544
Family; Pre-Medicare	245	220	5	10	8	2
Parent Plus; Pre-Medicare	246	180	5	5	5	51
Couple; Pre-Medicare	701	550	57	64	29	1
Medicare Regular	2,756	68	344	765	847	732
Medicare High Option	10,424	4,363	1,986	1,816	892	1,367
Total	19,970	9,113	2,943	3,186	2,031	2,697

EXHIBIT III – Hazardous

Supplementary Information Required by the GASB

Valuation date	June 30, 2004
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	16 to 30 years
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	4,005
Terminated members entitled to, but not yet receiving benefits	361
Active members	9,349
Total	13,715

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	1,087	962	54	51	15	5
Family; Pre-Medicare	616	601	8	5	2	0
Parent Plus; Pre-Medicare	223	207	7	5	4	0
Couple; Pre-Medicare	847	825	17	3	2	0
Medicare Regular	45	6	7	16	16	0
Medicare High Option	913	761	74	50	23	5
Total	3,731	3,362	167	130	62	10

EXHIBIT IV

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: 1983 Group Annuity Mortality Table*

Disabled: Pension Benefit Guaranty Corporation Table for Disabled Lives Receiving Social Security

* Rates increased by 0.05% for hazardous plan active members.

Termination Rates before Retirement:

	Non-Hazardous				Hazardous			
	Rate (%)				Rate (%)			
	Mortality		Disability	Withdrawal*	Mortality		Disability	Withdrawal
Age	Male	Female			Male	Female		
20	0.04	0.02	0.03	2.40	0.09	0.07	0.04	3.04
25	0.05	0.03	0.03	2.40	0.10	0.08	0.04	3.04
30	0.06	0.03	0.04	2.40	0.11	0.08	0.05	3.38
35	0.09	0.05	0.06	2.40	0.14	0.10	0.07	2.44
40	0.12	0.07	0.10	2.00	0.17	0.12	0.13	1.50
45	0.22	0.10	0.21	1.80	0.27	0.15	0.26	0.75
50	0.39	0.16	0.42	1.60	0.44	0.21	0.53	0.00
55	0.61	0.25	0.79	1.20	0.66	0.30	0.99	0.00
60	0.92	0.42	1.39	0.20	0.97	0.47	1.74	0.00

*Withdrawal rates during the first five years of employment are 35%, 10%, 7%, 5%, and 4% for non-hazardous plan members.

Non-Hazardous Retirement Rates:

Age	Retirement Probability*
55-57	0.04
58-59	0.05
60-61	0.06
62	0.25
63-64	0.10
65	0.50
66-67	0.20
68	0.25
69	0.40
70 and older	1.00

*Retirement probability is 0.25 at first age member is eligible for unreduced retirement benefits.

Hazardous Retirement Rates:	60% will retire as soon as eligible for unreduced benefit and balance will continue until age 55.
Non-Hazardous Retirement Age for Inactive Vested Participants:	65
Hazardous Retirement Age for Inactive Vested Participants:	55
Percent Married:	100%
Age of Spouse:	Females 3 years younger than males.
Dependent Children:	For a hazardous employee's duty-related death benefits, it is assumed that the employee is survived by two dependent children each age 6.
Net Investment Return:	8.25%

Salary Increases:

Years of Service	Rate (%)
1	12.00
2	10.00
3	8.00
4 or more	6.50

Payroll Growth: 5.0%

Retiree Medical Insurance Election: Future retirees will select medical coverage in the same proportion that current retirees have selected coverage.

Monthly Contribution Rates:

Pre-Medicare Coverage
Rate in Effect on Valuation Date

	Single	Family	Parent Plus	Couple
Region 1	$288.36	$648.88	$389.32	$584.00
Region 2	312.00	702.00	421.20	631.80
Region 3	436.00	981.20	588.72	883.08
Region 4	286.16	643.92	386.36	579.52

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem Blue Seniors	$110.00	$315.44	3,898	23,013
Bankers Life Medicare	82.70	195.35	913	618

Weighted Medicare Coverage
Rate in Effect on Valuation Date

	Low Option	High Option
All Members	$104.82	$312.30

Medical Contribution Rate Increases:	Year	Rate(%)
	2004-2005	10.00
	2006-2010	9.00
	2011-2015	8.00
	2016-2020	7.50
	2021 and thereafter	7.00

Members with Multiple Service Records: For active members with service in more than one system, the liability has been valued as follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.
- Future service is projected only under the system in which the member is currently active.
- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Non-Hazardous Administrative Expenses: $8,700,000

Hazardous Administrative Expenses: $800,000

Actuarial Value of Assets:	Market value of assets less unrecognized return in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.

EXHIBIT V

Summary of Plan Provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Non-Hazardous Normal Retirement:	
Age Requirement	65
Service Requirement	None
Amount	If a member has at least 48 months of service, the monthly benefit is 2.20% times final average compensation times years of service. Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period is less than forty-eight, one or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Hazardous Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation time years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Early Retirement:	
Requirement	Age 55 with 60 months service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 5% per year for the first five years and 4% per year for the next five years for each year the member is younger than age 65 or has less than 27 years service, whichever is smaller.
Hazardous Early Retirement:	
Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.
Non-Hazardous Disability:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit except that service credit will be added to total service for the period from the last day of paid employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Hazardous Disability:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 of more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Vesting:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):	
Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.
Spouse's Pre-Retirement Death Benefit (in line of duty):	
Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.
Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:	
Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.
Dependent Child's Death Benefit (in line of duty):	
Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.
Post-Retirement Death Benefit:	
Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.
Insurance Plan for Retirees:	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System.

State Police Retirement System

Actuarial Valuation and Review
as of June 30, 2004

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SEGAL

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November 11, 2004

Board of Trustees
State Police Retirement System
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601-6124

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2004. It summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2005 and analyzes the preceding year's experience.

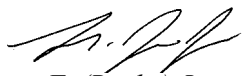
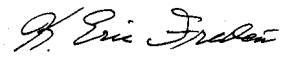
The census information on which our calculations were based was prepared by the System and the financial information was provided by the Auditor. That assistance is gratefully acknowledged.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By:  

Leon F. (Rocky) Joyner, Jr., ASA, MAAA
Vice President and Actuary

K. Eric Fredén, FSA, MAAA
Associate Actuary

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Purpose

This report has been prepared by The Segal Company to present a valuation of the State Police Retirement System as of June 30, 2004. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2004, provided by the Board;
- The assets of the Plan as of June 30, 2004, provided by the Auditor;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The State Police Retirement System's basic financial goal is to establish contributions which fully fund the System's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.
- The retirement contribution rate is determined using the Entry Age Normal Cost (EANC) Method. Under this method the employer contribution required is the sum of the normal cost, administration expenses and the sum of the 30-year amortization payments established each valuation due to changes in the Unfunded Actuarial Accrued Liability.
- The medical insurance contribution rate is determined in a similar method except that the actual contribution rate is determined by increasing the prior year's rate by an amount necessary to raise the insurance rate to the full EANC amount by the year 2016.
- The rates calculated in this report may be adopted by the Board for July 1, 2005 through June 30, 2006.

- The following summarizes the required contributions for the year beginning July 1, 2005 and compares them to the prior valuation amounts.

Plan	July 1, 2005 Rate	July 1, 2004 Rate
Retirement	14.49%	8.49%
Insurance	20.34	19.59
Total	34.83%	28.08%

- The increase in the total rate is due to:

Retirement plan investment loss	4.09%
Retiree COLA	0.58
Insurance Phase-in*	0.75
Change in administrative expense assumption	0.01
Other experience	1.32
Total change	6.75%

* Includes a portion of all insurance plan gains and losses for the year.

- The actuarial valuation report as of June 30, 2004 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan. Because the actuarial value of assets involves a smoothing method, changes in market value are not fully reflected immediately in the actuarial value of assets. Rather, that effect is spread over a period of years.

- As indicated in Section 2, Subsection B of this report, the total unrecognized investment losses as of June 30, 2004 are:

Plan	Unrecognized investment losses as of 6/30/2004	Actuarial value as a percentage of market value
Retirement	$49,356,787	114.7%
Insurance	6,200,828	106.9

These investment losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent they are not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.25% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.25% rate and all other actuarial assumption are met, the contribution requirements would still increase in each of the next few years.

Summary of Key Valuation Results

	June 30, 2004	June 30, 2003
Contributions for next fiscal year:		
Retirement	14.49%	8.49%
Insurance	20.34	19.59
Total	34.83%	28.08%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$437,482,425	$414,881,459
Actuarial value of assets	385,077,195	413,063,576
Funded ratio on actuarial value of assets	88.02%	99.56%
Market value of assets	$335,720,408	$319,116,232
Funded ratio on market value of assets	76.74%	76.92%
Insurance		
Actuarial accrued liability	$197,604,301	$184,501,205
Actuarial value of assets	96,622,908	90,747,967
Funded ratio on actuarial value of assets	48.90%	49.19%
Market value of assets	$90,422,080	$72,553,617
Funded ratio on market value of assets	45.76%	39.32%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	992	941
Number of vested former members	44	21
Number of former members due a refund	199	92
Number of active members	999	1,019
Total salary	$43,835,208	$43,760,832
Average salary	43,879	42,945

A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, C, and D.

The ratio of non-actives to actives has slowly but steadily climbed for the past decade. As the number of annuitants per active employee rises, cash flow is impacted. The system either becomes more dependent on investment income to cover benefit payments, or contributions must rise to meet these obligations. (For the retirement plan, contributions have been less than benefit payments for the past decade.)

Active Members

Plan costs are affected by the age, years of service and salaries of active members. In this year's valuation, there were 999 active members with an average age of 36.4, average service of 10.7 years and average salaries of $43,879. The 1,019 active members in the prior valuation had an average age of 35.9, average service of 10.9 years and average salaries of $42,945.

Inactive Members

In this year's valuation, there were 44 members with a vested right to a deferred or immediate vested benefit. In addition, there were 199 members entitled to a return of their employee contributions.

Retired Participants and Beneficiaries

As of June 30, 2004, 878 retired participants and 114 beneficiaries were receiving total monthly benefits of $2,567,134. For comparison, in the previous valuation, there were 826 retired participants and 115 beneficiaries receiving monthly benefits of $2,342,962.

A historical perspective of how the member population has changed over the past nine valuations can be seen in this chart.

CHART 1

Member Population: 1996 – 2004

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1996	1,002	8	625	0.63
1997	943	9	669	0.72
1998	954	11	739	0.79
1999	985	14	762	0.79
2000	1,023	9	797	0.79
2001	1,016	12	842	0.84
2002	1,002	20	897	0.92
2003	1,019	21	941	0.94
2004	999	44	992	1.04

**Excludes terminated members due a refund of employee contribution.*

These graphs show a distribution of active members by age and by years of service.

CHART 2

Distribution of Active Members by Age as of June 30, 2004

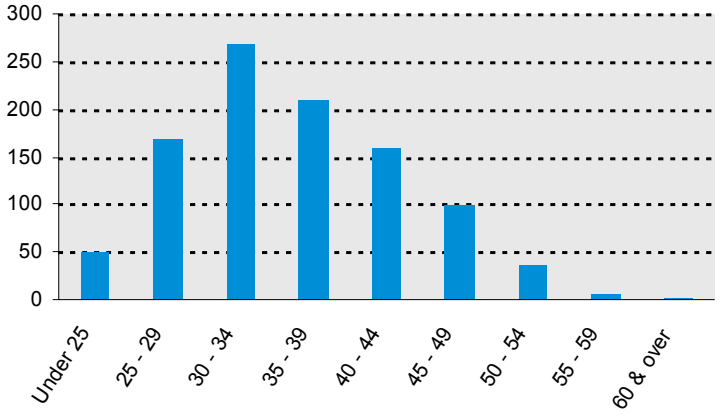
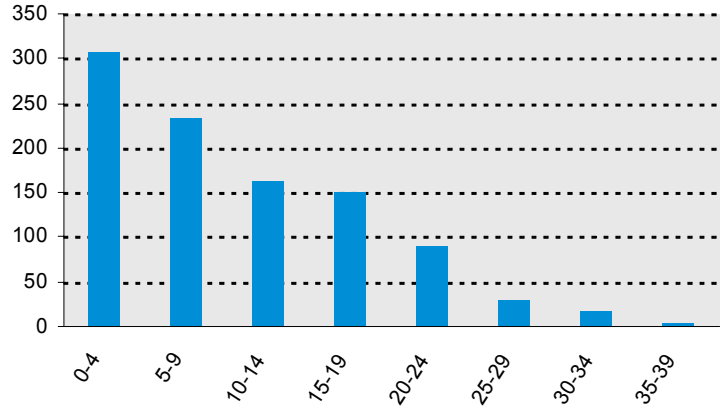


CHART 3

Distribution of Active Members by Years of Service as of June 30, 2004



These graphs show a distribution of the current retired participants based on their monthly amount and age, by type of pension.

CHART 4

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2004

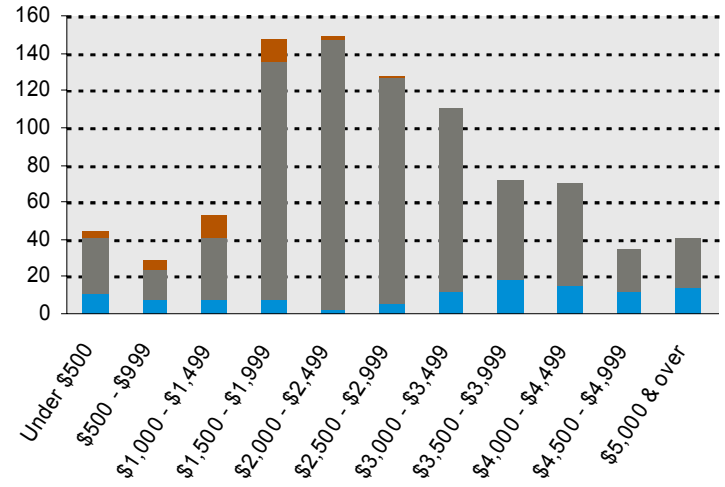
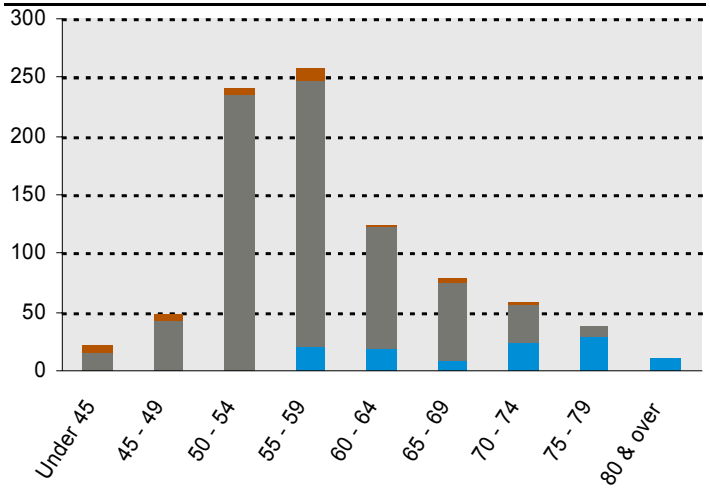


CHART 5

Distribution of Retired Participants by Type and by Age as of June 30, 2004



B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative and investment expenses) and net investment earnings (less common stock commissions and securities lending expense) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits E, F and G.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Both the actuarial value and market value of assets are representations of the System's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the System's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

These charts depict the components of changes in the actuarial value of assets over the last nine years for the two plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6A – Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1996 – 2004

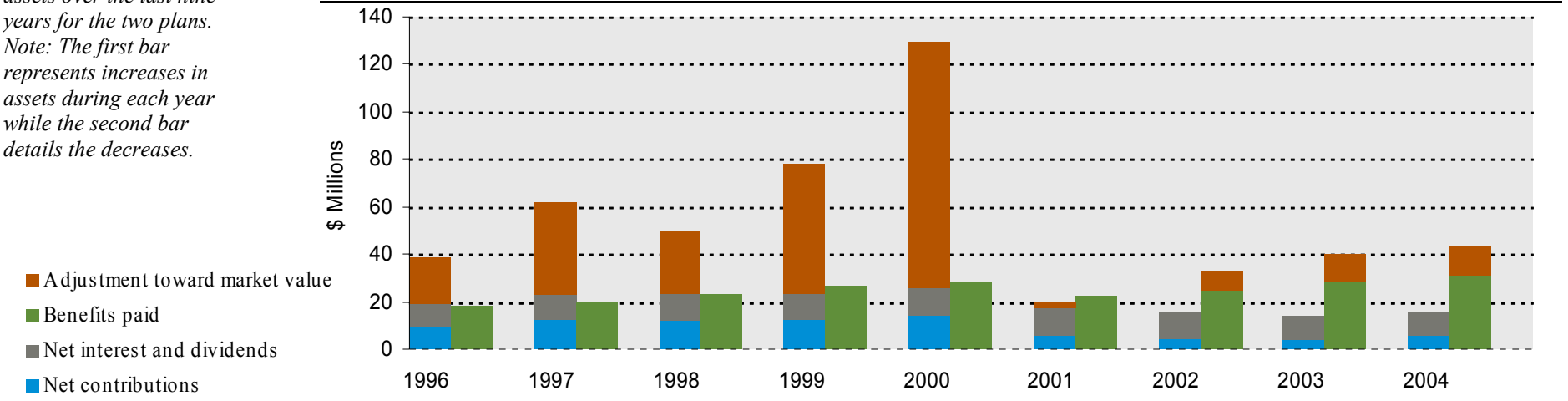
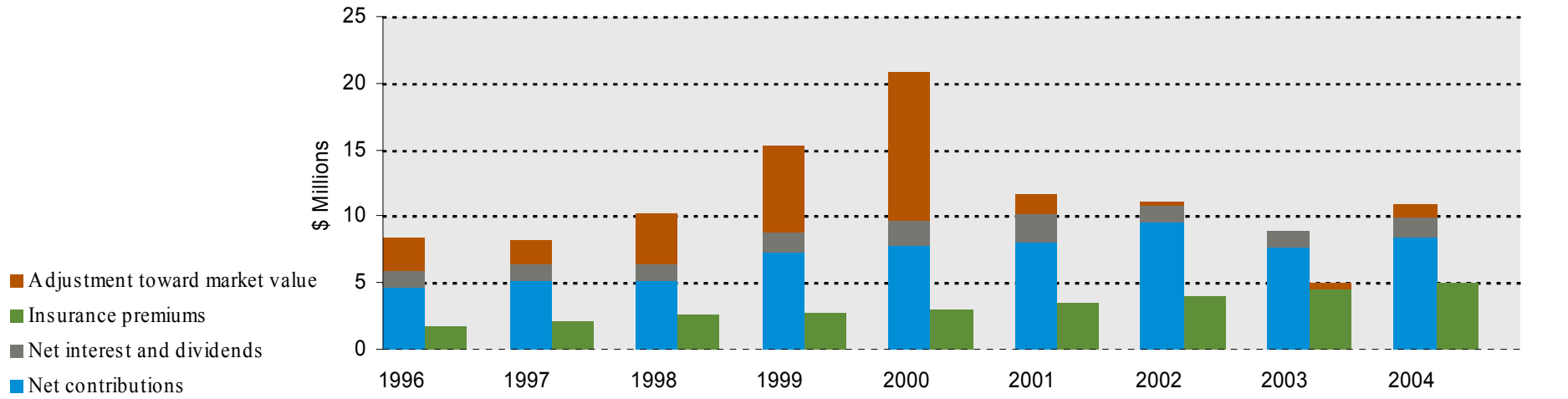


CHART 6B – Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1996 – 2004



These charts show the determination of the actuarial value of assets as of the valuation date.

CHART 7A – Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2004

1. Market value of assets			$335,720,408
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2004	$8,827,136	$1,765,427	$7,061,709
(b) Year ended June 30, 2003	-21,265,059	-4,253,012	-12,759,036
(c) Year ended June 30, 2002	-51,918,114	-10,383,623	-20,767,246
(d) Year ended June 30, 2001	-114,461,071	-22,892,214	-22,892,214
(e) Total unrecognized return			-49,356,787
3. Final actuarial value of assets: (1) – (2e)			$385,077,195
4. Actuarial value as a percentage of market value: (3) ÷ (1)			114.7%

CHART 7B – Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2004

1. Market value of assets			$90,422,080
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2004	$6,867,493	$1,373,499	$5,493,994
(b) Year ended June 30, 2003	-5,900,932	-1,180,186	-3,540,558
(c) Year ended June 30, 2002	-14,174,603	-2,834,921	-5,669,842
(d) Year ended June 30, 2001	-12,422,108	-2,484,422	-2,484,422
(e) Total unrecognized return			-6,200,828
3. Final actuarial value of assets: (1) – (2e)			$96,622,908
4. Actuarial value as a percentage of market value: (3) ÷ (1)			106.9%

** Total return on market value basis minus expected return on actuarial basis using the net investment return assumption. See Chart 8 for the calculation of unrecognized return for the current year.*

CHART 8

Calculation of Unrecognized Return for the Year Ended June 30, 2004

		Retirement	Insurance
1.	Employer and member contributions	$6,027,928	$8,455,498
2.	Benefit payments including refunds, or healthcare premiums	30,973,104	4,992,040
3.	Administrative and investment expenses	313,604	88,416
4.	Net cash flow: (1) - (2) - (3)	-25,258,780	3,375,042
5.	Market value of assets as of June 30, 2003	319,116,232	72,553,617
6.	Market value of assets as of June 30, 2004	335,720,408	90,422,080
7.	Actuarial value of assets as of June 30, 2003	413,063,576	90,747,967
8.	Average actuarial value of assets: (7) + [0.5 x (4)]	400,434,186	92,435,488
9.	Expected return on an actuarial basis: 8.25% of (8)	33,035,820	7,625,928
10.	Gain/(loss) for the year ended June 30, 2004: (6) - (5) - (4) - (9)	8,827,136	6,867,493
11.	Unrecognized return as of June 30, 2004: 80% of (10)	7,061,709	5,493,994

These charts show the change in the actuarial value of assets versus the market value over the past ten years for the plans.

CHART 9A – Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1995– 2004

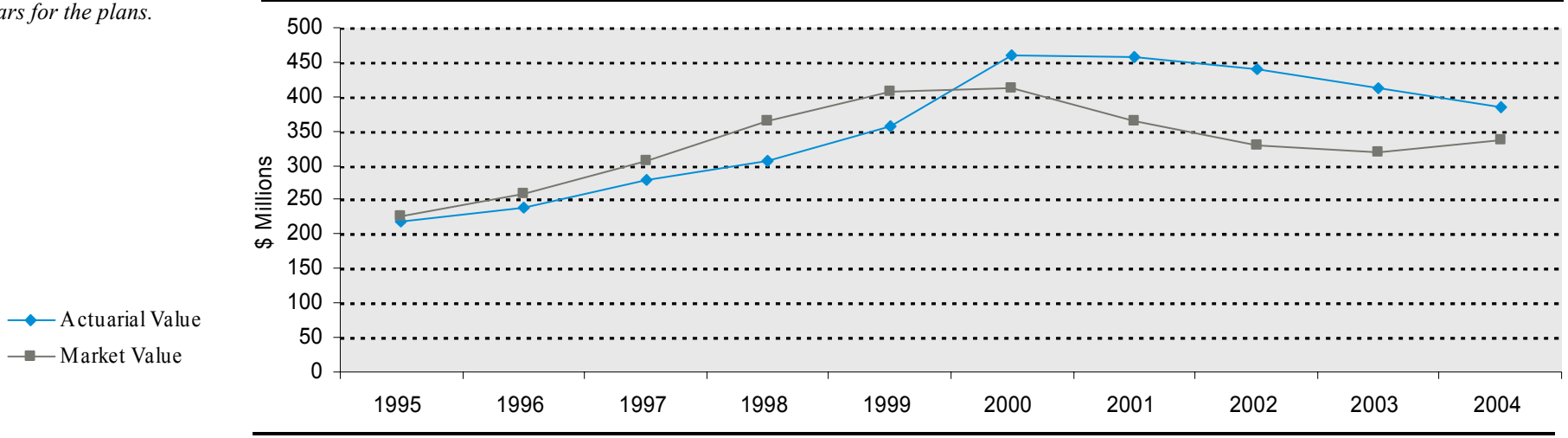
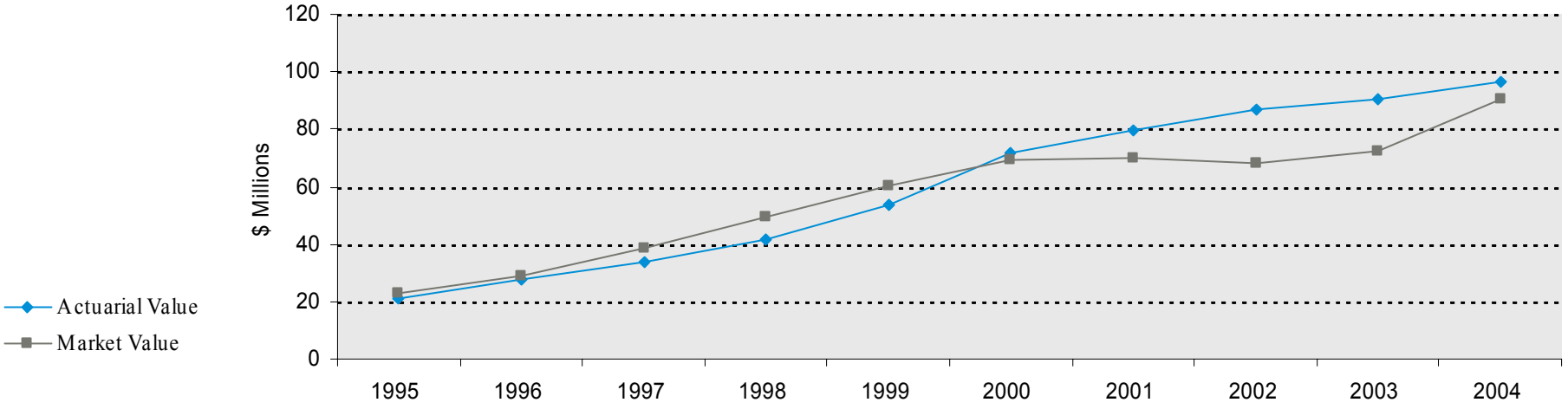


CHART 9B – Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1995 – 2004



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Chart 10 presents a summary of experience for the year. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 10

Actuarial Experience for Year Ended June 30, 2004

	Retirement	Insurance
1. Net gain/(loss) from investments*	-$35,763,421	-$5,126,029
2. Net gain/(loss) from administrative expenses	-2,367	-33,693
3. Net gain/(loss) from other experience**	-12,923,184	3,940,519
4. Net experience gain/(loss): (1) + (2) + (3)	-$48,688,972	-$1,219,203

** Details in Chart 11*

*** Details in Chart 14*

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the System's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.25%. Chart 11 shows the net investment experience for each plan for the year.

Since the actual return for the year was less than the assumed return, each plan experienced an actuarial loss during the year ended June 30, 2004 with regard to its investments.

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. Chart 12, which follows, shows the rate of return on an actuarial basis compared to the market value investment return for the last nine years.

This chart shows the gain/(loss) due to investment experience.

CHART 11

Actuarial Value Investment Experience for Year Ended June 30, 2004

	Retirement	Insurance
1. Actual return	-$2,727,601	$2,499,899
2. Average value of assets	400,434,186	92,435,488
3. Actual rate of return: (1) ÷ (2)	-0.68%	2.70%
4. Assumed rate of return	8.25%	8.25%
5. Expected return: (2) x (4)	$33,035,820	$7,625,928
6. Actuarial gain/(loss): (1) – (5)	-$35,763,421	-$5,126,029

CHART 12A – Retirement

Investment Return – Actuarial Value vs. Market Value: 1996 - 2004

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1996	$9,339,000	4.38%	$19,677,903	9.24%	$29,016,903	13.62%	$39,650,476	17.81%
1997	10,892,000	4.66	38,726,929	16.57	49,618,929	21.23	56,720,285	22.33
1998	11,038,000	4.03	26,511,643	9.67	37,549,643	13.69	67,163,306	22.27
1999	10,655,000	3.56	54,221,278	18.10	64,876,278	21.66	56,848,150	15.94
2000	11,938,000	3.40	103,301,378	29.45	115,239,378	32.85	18,631,485	4.66
2001	12,131,000	2.69	2,093,280	0.46	14,224,280	3.16	-29,707,210	-7.37
2002	11,567,921	2.59	-8,064,723	-1.81	3,503,198	0.79	-15,336,844	-4.33
2003	9,860,621	2.31	-12,149,278	-2.84	-2,288,657	-0.54	13,975,133	4.41
2004	9,595,469	2.40	-12,323,070	-3.08	-2,727,601	-0.68	41,862,956	13.66
Total	$97,017,011		$211,995,340		$309,012,351		$249,807,737	
					Average return	9.98%		8.57%

CHART 12B – Insurance

Investment Return – Actuarial Value vs. Market Value: 1996 - 2004

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1996	$1,349,000	5.97%	$2,453,072	10.85%	$3,802,072	16.82%	$3,042,531	12.45%
1997	1,293,000	4.41	1,814,216	6.19	3,107,216	10.61	6,753,913	22.25
1998	1,344,000	3.83	3,687,017	10.50	5,031,017	14.32	8,320,673	20.88
1999	1,537,000	3.52	6,490,359	14.87	8,027,359	18.39	6,577,625	12.73
2000	1,878,000	3.33	11,119,853	19.74	12,997,853	23.08	4,144,524	6.59
2001	2,084,000	2.82	1,534,784	2.07	3,618,784	4.89	-4,023,535	-5.61
2002	1,283,315	1.55	213,261	0.26	1,496,576	1.81	-7,387,596	-10.16
2003	1,296,362	1.47	-502,024	-0.57	794,338	0.90	1,392,935	2.00
2004	1,614,498	1.75	885,401	0.96	2,499,899	2.70	14,493,421	19.52
Total	$13,679,175		$27,695,939		$41,375,114		$33,314,491	
					Average return	7.89%		6.70%

Note: Each year's yield is weighted by the average asset value in that year.

The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. These charts illustrate how this leveling effect has actually worked over the years 1996 - 2004 for the plans.

CHART 13A – Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1996 - 2004

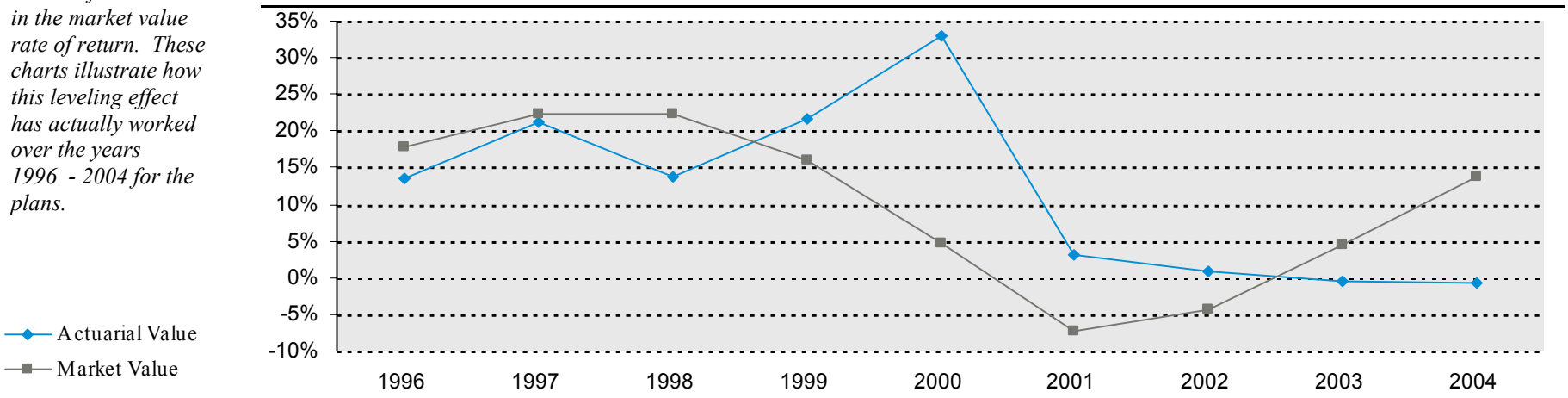
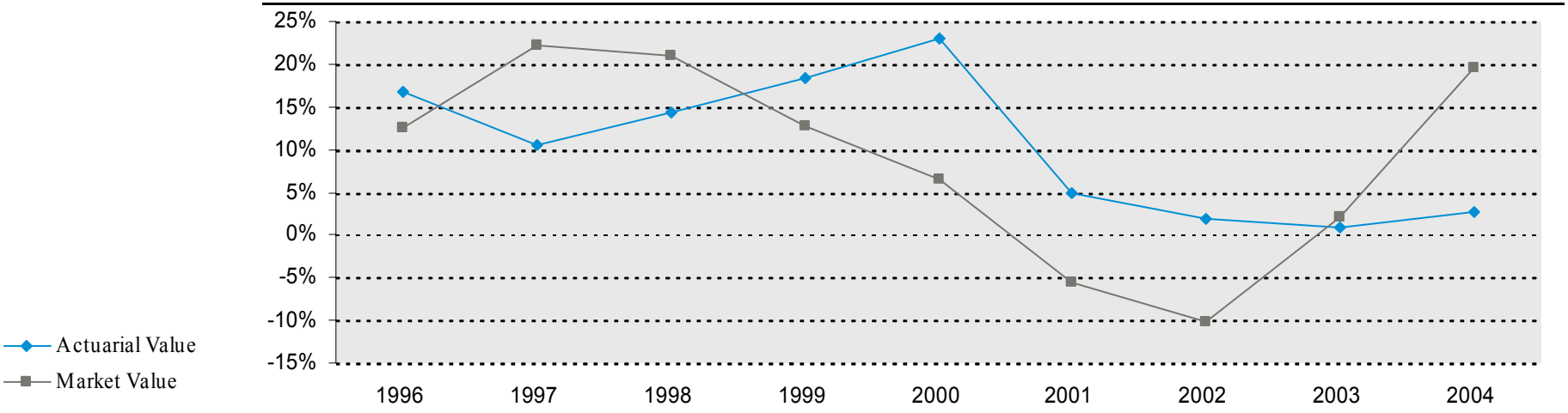


CHART 13B – Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1996 - 2004



Administrative Expenses

Current methodology includes an assumption for the cost of administration for the retirement funds but not for the insurance funds. This assumption is modified with each valuation to estimate expenses for the upcoming fiscal year. The following summarizes the past year's experience and presents the assumptions for the next year.

Plan	Year End 2004 Assumption	Year End 2004 Actual Experience	Gain/(Loss)* for the Year	Year End 2005 Assumption
Retirement	$89,000	$91,187	-$2,367	$92,000
Insurance	0	31,125	-33,693	0

* *Includes interest to year-end.*

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- COLAs granted in the year,
- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

A brief summary of the demographic gain/(loss) experience of the Funds for the year ended June 30, 2004 is shown in the chart below.

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 14

Experience Due to Changes in Demographics for Year Ended June 30, 2004

	Retirement	Insurance
1. COLA	-$5,072,489	N/A
2. Other	-7,850,694	$3,940,519
3. Total	-$12,923,183	$3,940,519
4. Percentage of actuarial accrued liability	3.0%	2.0%

D. RECOMMENDED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability. This total amount is then divided by the projected salaries for active members to determine the funding rate.

The recommended contribution is based on a 30-year amortization of bases established each year as specified in the law governing the Plan.

Exhibit H in Section 3 provides details on these amortization bases.

The contribution rates as of June 30, 2004 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Charts 15 and 16 present the recommended contributions and reconciliations from the prior valuation

This chart compares this valuation's recommended contribution with the prior valuation.

CHART 15A – Retirement

Recommended Contribution

	As of June 30			
	2004		2003	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$7,448,348	16.99%	$7,302,221	16.69%
2. Administrative expenses	92,000	0.21%	89,000	0.20%
3. Expected employee contributions	-3,433,859	-7.83%	-3,422,969	-7.82%
4. Employer normal cost: (1) + (2) + (3)	$4,106,489	9.37%	$3,968,252	9.07%
5. Actuarial accrued liability	437,482,425		414,881,459	
6. Actuarial value of assets	385,077,195		413,063,576	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	$52,405,230		$1,817,883	
8. Payment on unfunded/(overfunded) actuarial accrued liability	2,246,288	5.12%	-254,076	-0.58%
9. Total recommended contribution: (4) + (8)	$6,352,777	14.49%	$3,714,176	8.49%
10. Projected salary	$43,835,208		$43,760,832	

This chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 16A – Retirement

Reconciliation of Recommended Contribution from June 30, 2003 to June 30, 2004

Recommended Contribution as of June 30, 2003	$3,714,176
Effect of COLA for retirees	$254,125
Effect of investment loss	1,791,700
Effect of change in administrative expense assumption	3,000
Effect of net other changes	589,776
Total change	$2,638,601
Recommended Contribution as of June 30, 2004	$6,352,777

The chart compares this valuation's recommended contributions with the prior valuation.

CHART 15B – Insurance
Recommended Contribution

	As of June 30			
	2004		2003	
	Amount	% of Salary	Amount	% of Salary
1. Employer normal cost	$6,507,130	14.84%	$6,508,043	14.87%
2. Actuarial accrued liability	197,604,301		184,501,205	
3. Actuarial value of assets	96,622,908		90,747,967	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$100,981,393		$93,753,238	
5. Payment on unfunded/(overfunded) actuarial accrued liability	6,047,518	13.80%	5,499,654	12.57%
6. Full EANC contribution: (1) + (5)	$12,554,648	28.64%	$12,007,697	27.44%
7. Projected salary	$43,835,208		$43,760,832	
8. Prior year's funding rate	N/A	19.59%	N/A	18.94%
9. Years to reach full EANC	N/A	12	N/A	13
10. Additional amount for current year	N/A	0.75%	N/A	0.65%
11. Total recommended contribution rate: (8) + (10)	N/A	20.34%	N/A	19.59%

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EXHIBIT A

Table of Plan Coverage

Category	Year Ended June 30 2004	2003	Change From Prior Year
Active members in valuation:			
Number	999	1,019	-2.0%
Average age	36.4	35.9	N/A
Average service	10.7	10.9	N/A
Total salary	$43,835,208	$43,760,832	0.2%
Average salary	43,879	42,945	2.2%
Account balances	37,658,106	35,832,095	5.1%
Total active vested members	760	763	-0.4%
Vested terminated members	44	21	109.5%
Retired participants:			
Number in pay status	843	792	6.4%
Average age	59.1	58.8	N/A
Average monthly benefit	$2,744	$2,655	3.4%
Disabled members:			
Number in pay status	35	34	2.9%
Average age	53.6	53.2	N/A
Average monthly benefit	$1,364	$1,357	0.5%
Beneficiaries in pay status	114	115	-0.9%
Inactive nonvested members due a refund	199	92	116.3%

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EXHIBIT B

Members in Active Service as of June 30, 2004
By Age, Years of Service, and Average Salary

	Years of Service								
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39
Under 25	50	50	- -	- -	- -	- -	- -	- -	- -
	$26,025	$26,025	- -	- -	- -	- -	- -	- -	- -
25 - 29	169	142	27	- -	- -	- -	- -	- -	- -
	32,131	30,776	$39,259	- -	- -	- -	- -	- -	- -
30 - 34	267	83	145	39	- -	- -	- -	- -	- -
	39,169	31,209	41,709	$46,666	- -	- -	- -	- -	- -
35 - 39	209	23	44	93	47	2	- -	- -	- -
	46,000	30,920	42,017	48,139	$52,477	$55,422	- -	- -	- -
40 - 44	159	7	14	30	79	25	4	- -	- -
	52,609	31,109	40,400	49,155	55,631	58,604	$61,713	- -	- -
45 - 49	98	- -	3	1	24	56	10	4	- -
	57,456	- -	41,308	43,764	54,151	58,796	63,434	$59,112	- -
50 - 54	37	1	- -	- -	- -	8	16	11	1
	64,517	30,552	- -	- -	- -	58,301	65,985	70,024	$64,152
55 - 59	7	- -	- -	- -	1	- -	- -	2	4
	73,466	- -	- -	- -	49,476	- -	- -	74,484	78,954
60 - 64	1	- -	1	- -	- -	- -	- -	- -	- -
	49,068	- -	49,068	- -	- -	- -	- -	- -	- -
65 - 69	1	- -	- -	- -	- -	- -	- -	1	- -
	52,356	- -	- -	- -	- -	- -	- -	52,356	- -
70 & over	1	1	- -	- -	- -	- -	- -	- -	- -
	33,396	33,396	- -	- -	- -	- -	- -	- -	- -
Total	999	307	234	163	151	91	30	18	5
	$43,879	$30,145	$41,432	$47,947	$54,373	$58,625	$64,565	$67,113	$75,994

EXHIBIT C

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	83	$222,361.75	4	$9,395.97	87	$231,757.72
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	113	279,019.07	1	2,976.00	114	281,995.07
66-2/3% to beneficiary	69	214,124.99	0	0.00	69	214,124.99
50% to beneficiary	69	207,436.76	0	0.00	69	207,436.76
Pop-up option	266	794,136.22	0	0.00	266	794,136.22
10 years certain	5	19,504.99	0	0.00	5	19,504.99
10 years certain & life	25	68,402.24	0	0.00	25	68,402.24
Social Security option						
Age 62 basic	35	76,564.15	0	0.00	35	76,564.15
Age 62 survivorship	161	339,951.83	1	4,387.03	162	344,338.86
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	10	24,860.62	0	0.00	10	24,860.62
20 years certain & life	30	76,113.05	0	0.00	30	76,113.05
5 years certain	0	0.00	0	0.00	0	0.00
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	0	0.00	0	0.00	0	0.00
PLSO 36 month basic	0	0.00	0	0.00	0	0.00
PLSO 12 month survivor	2	8,390.77	0	0.00	2	8,390.77
PLSO 24 month survivor	1	6,095.85	0	0.00	1	6,095.85
PLSO 36 month survivor	3	7,522.69	0	0.00	3	7,522.69
Total	872	$2,344,484.98	6	$16,759.00	878	$2,361,243.98

EXHIBIT D

Beneficiary Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	0	$0.00	4	$2,528.95	4	$2,528.95
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	55	121,652.16	1	956.58	56	122,608.74
66-2/3% to beneficiary	1	1,261.87	0	0.00	1	1,261.87
50% to beneficiary	10	13,846.86	2	2,149.56	12	15,996.42
Pop-up option	6	16,310.41	2	1,215.46	8	17,525.87
10 years certain	0	0.00	1	2,439.97	1	2,439.97
10 years certain & life	0	0.00	0	0.00	0	0.00
Social Security option						
Age 62 basic	0	0.00	1	1,824.07	1	1,824.07
Age 62 survivorship	12	24,301.60	5	3,988.56	17	28,290.16
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	5	1,444.25	2	482.72	7	1,926.97
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	0	0.00	0	0.00	0	0.00
20 years certain & life	2	7,856.18	4	3,611.13	6	11,467.31
5 years certain	1	19.31	0	0.00	1	19.31
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	0	0.00	0	0.00	0	0.00
PLSO 36 month basic	0	0.00	0	0.00	0	0.00
PLSO 12 month survivor	0	0.00	0	0.00	0	0.00
PLSO 24 month survivor	0	0.00	0	0.00	0	0.00
PLSO 36 month survivor	0	0.00	0	0.00	0	0.00
Total	92	$186,692.64	22	$19,197.00	114	$205,889.64

EXHIBIT E – Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Contribution income:				
Employer contributions	$1,152,752		-$20,061	
Member contributions	4,875,176		4,673,538	
Less administrative and investment expenses	-313,604		-298,266	
Net contribution income		$5,714,324		$4,355,211
Investment income:				
Interest, dividends and other income	$10,290,657		$10,740,596	
Recognition of capital appreciation	-12,323,070		-12,149,278	
Less stock commissions and securities lending expense	-695,188		-879,975	
Net investment income		-2,727,601		-2,288,657
Total income available for benefits		$2,986,723		$2,066,554
Less benefit payments:				
Benefit payments	-$30,877,123		-$27,861,736	
Refunds	-95,981		-96,707	
Net benefit payments		-$30,973,104		-$27,958,443
Change in reserve for future benefits		-$27,986,381		-$25,891,889

EXHIBIT E – Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Contribution income:				
Employer contributions	$8,455,498		$7,654,313	
Less administrative and investment expenses	-88,416		-49,703	
Net contribution income		$8,367,082		$7,604,610
Investment income:				
Interest, dividends and other income	$1,792,227		$1,449,917	
Recognition of capital appreciation	885,401		-502,024	
Less stock commissions and securities lending expense	-177,729		-153,555	
Net investment income		2,499,899		794,338
Total income available for benefits		$10,866,981		$8,398,948
Less healthcare premium subsidies		-$4,992,040		-$4,518,372
Change in reserve for future benefits		$5,874,941		$3,880,576

EXHIBIT F – Retirement

Table of Financial Information

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Cash equivalents		$85,665		$134,759
Accounts receivable:				
Investment accounts receivable	$10,349		$9,593	
Year-end interest receivable	1,717,564		1,776,874	
Year-end accounts receivable	965,435		1,024,040	
Total accounts receivable		2,693,348		2,810,507
Investments:				
Bonds	$107,005,876		$116,788,407	
Stocks	205,072,335		173,423,546	
Mortgage	16,860,141		16,969,831	
Short-term investments	3,606,746		8,285,357	
Real estate	493,000		823,917	
Fixed assets	5,576		6,070	
Total investments at market value		333,043,674		316,297,128
Total assets		$335,822,687		$319,242,394
Less accounts payable		-$102,279		-$126,162
Net assets at market value		$335,720,408		$319,116,232
Net assets at actuarial value		$385,077,195		$413,063,576

EXHIBIT F – Insurance

Table of Financial Information

	Year Ended June 30, 2004		Year Ended June 30, 2003	
Cash equivalents		$4,897		$13,831
Accounts receivable:				
Investment accounts receivable	$4,004		$2,431	
Year-end interest receivable	236,497		199,642	
Year-end accounts receivable	352,513		651,033	
Total accounts receivable		593,014		853,106
Investments:				
Bonds	$9,444,815		$8,247,080	
Stocks	73,925,782		59,192,228	
Short-term investments	6,526,520		4,282,323	
Total investments at market value		89,897,117		71,721,631
Total assets		$90,495,028		$72,588,568
Less accounts payable		-$72,948		-$34,951
Net assets at market value		$90,422,080		$72,553,617
Net assets at actuarial value		$96,622,908		$90,747,967

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EXHIBIT G – Retirement

Development of the Fund Through June 30, 2004

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return*	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1996	$7,089,000	$2,457,000	$29,016,903	$204,000	$18,348,000	$237,515,346
1997	9,628,000	2,958,000	49,618,929	212,000	19,865,000	279,643,275
1998	9,574,000	2,711,000	37,549,643	234,000	22,925,000	306,318,918
1999	9,463,000	3,658,000	64,876,278	214,000	26,479,000	357,623,196
2000	10,216,000	4,202,000	115,239,378	239,000	27,873,000	459,168,574
2001	1,516,267	4,138,298	14,224,280	214,171	22,672,539	456,160,709
2002	-17,643	4,417,691	3,503,198	273,673	24,834,817	438,955,465
2003	-20,061	4,673,538	-2,288,657	298,266	27,958,443	413,063,576
2004	1,152,752	4,875,176	-2,727,601	313,604	30,973,104	385,077,195

EXHIBIT G – Insurance

Development of the Fund Through June 30, 2004

Year Ended June 30	Employer Contributions	Net Investment Return*	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1996	$4,604,000	$3,802,072	$6,000	$1,791,000	$27,809,267
1997	5,126,000	3,107,216	6,000	2,160,000	33,876,483
1998	5,120,000	5,031,017	6,000	2,611,000	41,410,500
1999	7,252,000	8,027,359	13,000	2,747,000	53,929,859
2000	7,818,000	12,997,853	20,000	3,014,000	71,711,712
2001	8,113,391	3,618,784	34,638	3,545,672	79,863,577
2002	9,579,899	1,496,576	57,933	4,014,728	86,867,391
2003	7,654,313	794,338	49,703	4,518,372	90,747,967
2004	8,455,498	2,499,899	88,416	4,992,040	96,622,908

** Net of stock commissions and securities lending expense*

EXHIBIT H – Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$8,982,071	$886,322	16	$11,394,654
06/30/1991	30	9,963,656	937,198	17	12,624,180
06/30/1992	30	-24,502,117	-2,196,904	18	-30,901,036
06/30/1993	30	-3,706,436	-316,778	19	-4,638,712
06/30/1994	30	10,380,135	845,643	20	12,856,974
06/30/1995	30	22,729,292	1,765,022	21	27,794,358
06/30/1996	30	-17,793,855	-1,317,072	22	-21,434,735
06/30/1997	30	-31,021,470	-2,186,818	23	-36,707,760
06/30/1998	30	12,716,788	853,766	24	14,754,741
06/30/1999	30	-31,317,924	-2,002,467	25	-35,570,009
06/30/2000	30	-77,707,399	-4,732,007	26	-86,263,514
06/30/2001	30	26,106,163	1,514,038	27	28,285,984
06/30/2002	30	44,465,495	2,455,997	28	46,962,523
06/30/2003	30	61,350,968	3,227,282	29	63,085,249
06/30/2004	30	50,162,333	2,513,066	30	50,162,333
Total			$2,246,288		$52,405,230

** Level percentage of salary*

EXHIBIT H – Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$73,323,619	$5,427,295	22	$88,326,697
06/30/1997	30	8,088,952	570,220	23	9,571,673
06/30/1998	30	-2,668,212	-179,135	24	-3,095,810
06/30/1999	30	-13,378,283	-855,407	25	-15,194,675
06/30/2000	30	-6,431,546	-391,650	26	-7,139,703
06/30/2001	30	9,773,380	566,811	27	10,589,440
06/30/2002	30	-1,482,959	-81,909	28	-1,566,237
06/30/2003	30	13,657,060	718,411	29	14,043,120
06/30/2004	30	5,446,888	272,882	30	5,446,888
Total			$6,047,518		$100,981,393

EXHIBIT I

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

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REPORTING INFORMATION

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EXHIBIT I – Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:			
1.	Retired participants as of the valuation date (including 114 beneficiaries in pay status)		992
2.	Members inactive during year ended June 30, 2004 with vested rights		44
3.	Members active during the year ended June 30, 2004		999
	Fully vested	760	
	Not vested	239	
4.	Inactive nonvested members due a refund as of June 30, 2004		199
The actuarial factors as of the valuation date are as follows:			
1.	Total normal cost, including administrative expenses		$7,540,348
2.	Present value of future benefits		514,392,541
3.	Present value of future normal costs		76,910,116
4.	Actuarial accrued liability		437,482,425
	Retired participants and beneficiaries	$317,030,574	
	Inactive members with vested rights	1,140,194	
	Active members	118,817,731	
	Inactive nonvested members due a refund	493,926	
5.	Actuarial value of assets ($335,720,408 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		385,077,195
6.	Unfunded actuarial accrued liability		$52,405,230

EXHIBIT I – Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$6,507,130
2.	Present value of future benefits		268,659,877
3.	Present value of future normal costs		71,055,576
4.	Actuarial accrued liability		197,604,301
	Retired participants and beneficiaries	$116,813,080	
	Inactive members with vested rights	2,291,771	
	Active members	78,499,450	
5.	Actuarial value of assets ($90,422,080 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		96,622,908
6.	Unfunded actuarial accrued liability		$100,981,393

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EXHIBIT II – Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/1999	$357,623,196	$314,021,673	-$43,601,523	113.88%	$40,548,636	-107.53%
06/30/2000	459,168,574	336,579,763	-122,588,811	136.42%	43,596,396	-281.19%
06/30/2001	456,160,709	356,211,860	-99,948,849	128.06%	44,209,944	-226.08%
06/30/2002	438,955,465	380,790,346	-58,165,119	115.27%	43,961,844	-132.31%
06/30/2003	413,063,576	414,881,459	1,817,883	99.56%	43,760,832	4.15%
06/30/2004	385,077,195	437,482,425	52,405,230	88.02%	43,835,208	119.55%

EXHIBIT II – Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/1999	$53,929,859	$125,797,150	$71,867,291	42.87%	$40,548,636	177.24%
06/30/2000	71,711,712	138,867,085	67,155,373	51.64%	43,596,396	154.04%
06/30/2001	79,863,577	158,261,479	78,397,902	50.46%	44,209,944	177.33%
06/30/2002	86,867,391	165,445,412	78,578,021	52.51%	43,961,844	178.74%
06/30/2003	90,747,967	184,501,205	93,753,238	49.19%	43,760,832	214.24%
06/30/2004	96,622,908	197,604,301	100,981,393	48.90%	43,835,208	230.37%

EXHIBIT II – Retirement Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a) / (b)]	Increase in Assets
06/30/1958	N/A	$1,450,000	$1,450,000	100.00%	N/A
06/30/1963	2,544,782	4,553,258	2,008,476	44.11%	619,167
06/30/1968	5,791,036	9,079,139	3,288,103	36.22%	789,709
06/30/1971	9,386,839*	11,828,727	2,441,888	20.64%	1,339,726
06/30/1974	14,557,986*	17,737,434	3,179,448	17.93%	1,935,105
06/30/1975	17,012,636*	23,182,081	6,169,455	26.61%	2,454,650
06/30/1976	20,461,762*	28,693,129	8,231,367	28.69%	3,449,126
06/30/1977	24,125,252*	34,561,413	10,436,161	30.20%	3,663,490
06/30/1978	28,509,145*	49,950,102	21,440,957	42.92%	4,383,893
06/30/1979	33,903,221*	55,391,206	21,487,985	38.79%	5,394,076
06/30/1980	40,917,165*	67,580,562	26,663,397	39.45%	7,013,944
06/30/1981	48,230,303	71,526,728	23,296,425	32.57%	7,313,138
06/30/1982	57,330,130	78,713,172	21,383,042	27.17%	9,099,827
06/30/1983	65,757,086	81,944,546	16,187,460	19.75%	8,426,956
06/30/1984	74,980,517	91,180,668	16,200,151	17.77%	9,223,431
06/30/1985	85,016,242	99,269,825	14,253,583	14.36%	10,035,725
06/30/1986	96,667,699	105,559,951	8,892,252	8.42%	11,651,457
06/30/1987	110,194,604	111,541,989	1,347,385	1.21%	13,526,905
06/30/1988	120,998,549	120,128,367	-870,182	-0.72%	10,803,945
06/30/1989	131,350,553	134,550,773	3,200,220	2.38%	10,352,004
06/30/1990	145,025,551	154,007,622	8,982,071	5.83%	13,674,998
06/30/1991	150,818,074	170,009,955	19,191,881	11.29%	5,792,523
06/30/1992**	187,791,001	182,996,056	-4,794,955	-2.62%	36,972,937
06/30/1993	200,320,968	191,653,594	-8,667,374	-4.52%	12,529,957
06/30/1994	205,320,509	206,763,310	1,442,801	0.70%	4,999,541
06/30/1995	217,504,443	241,690,631	24,186,188	10.01%	12,183,934
06/30/1996	237,515,346	244,540,812	7,025,466	2.87%	20,010,903

EXHIBIT II – Retirement Fund (continued)

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a) / (b)]	Increase in Assets
06/30/1997	279,643,275	255,784,758	-23,858,517	-9.33%	42,127,929
06/30/1998	306,318,918	294,427,019	-11,891,899	-4.04%	26,675,643
06/30/1999	357,623,196	314,021,673	-43,601,523	-13.88%	51,304,278
06/30/2000	459,168,574	336,579,763	-122,588,811	-36.42%	101,545,378
06/30/2001***	456,160,709	356,211,860	-99,948,849	-28.06%	-3,007,865
06/30/2002	438,955,465	380,790,346	-58,165,119	-15.27%	-17,205,244
06/30/2003	413,063,576	414,881,459	1,817,883	0.44%	-25,891,889
06/30/2004	385,077,195	437,482,425	52,405,230	11.98%	-27,986,381

* *Includes capitalized appreciation of investments.*

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

EXHIBIT II – Insurance Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) – (a)/(b)]	Increase in Assets
06/30/1990	$6,516,517	$64,784,801	$58,268,284	89.94%	N/A
06/30/1991	8,931,544	74,163,248	65,231,704	87.96%	2,415,027
06/30/1992	11,717,956	88,407,634	76,689,678	86.75%	2,786,412
06/30/1993	14,285,479	95,290,099	81,004,620	85.01%	2,567,523
06/30/1994	17,410,672	110,193,139	92,782,467	84.20%	3,125,193
06/30/1995	21,200,195	118,995,732	97,795,537	82.18%	3,789,523
06/30/1996**	27,809,267	101,132,886	73,323,619	72.50%	6,609,072
06/30/1997	33,876,483	117,361,754	83,485,271	71.13%	6,067,216
06/30/1998	41,410,500	124,501,076	83,090,576	66.74%	7,534,017
06/30/1999	53,929,859	125,797,150	71,867,291	57.13%	12,519,359
06/30/2000	71,711,712	138,867,085	67,155,373	48.36%	17,781,853
06/30/2001***	79,863,577	158,261,479	78,397,902	49.54%	8,151,865
06/30/2002	86,867,391	165,445,412	78,578,021	47.49%	7,003,814
06/30/2003	90,747,967	184,501,205	93,753,238	50.81%	3,880,576
06/30/2004	96,622,908	197,604,301	100,981,393	51.10%	5,874,941

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

EXHIBIT III

Supplementary Information Required by the GASB

Valuation date	June 30, 2004
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	16 to 30 years
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	992
Terminated members entitled to, but not yet receiving benefits	44
Active members	999
Total	2,035

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	226	219	1	5	0	1
Family; Pre-Medicare	144	144	0	0	0	0
Parent Plus; Pre-Medicare	45	43	1	0	1	0
Couple; Pre-Medicare	256	253	3	0	0	0
Medicare Regular	13	9	0	3	1	0
Medicare High Option	326	320	3	1	2	0
Total	1,010	988	8	9	4	1

EXHIBIT IV

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy:	1983 Group Annuity Mortality Table*
Disabled:	Pension Benefit Guaranty Corporation Table for Disabled Lives Receiving Social Security

* Rates increased by 0.05% for active members.

Termination Rates before Retirement:

	Rate (%)			
	Mortality		Disability	Withdrawal
Age	Male	Female		
20	0.09	0.07	0.04	1.82
25	0.10	0.08	0.04	1.82
30	0.11	0.08	0.05	2.03
35	0.14	0.10	0.07	1.46
40	0.17	0.12	0.13	0.90
45	0.27	0.15	0.26	0.45
50	0.44	0.21	0.53	0.00
55	0.66	0.30	0.99	0.00
60	0.97	0.47	1.74	0.00

Retirement Rates:	60% will retire as soon as eligible for unreduced benefit and balance will continue until age 55.
Retirement Age for Inactive Vested Participants:	55
Percent Married:	100%
Age of Spouse:	Females 3 years younger than males.
Dependent Children:	For an employee's duty related death benefits, it is assumed that the employee is survived by two dependent children each age 6.
Net Investment Return:	8.25%

Salary Increases:

Years of Service	Rate (%)
1	12.00
2	10.00
3	8.00
4 or more	6.50

Payroll Growth: 5.0%

Retiree Medical Insurance Election: Future retirees will select medical coverage in the same proportion that current retirees have selected coverage.

Monthly Contribution Rates:

Pre-Medicare Coverage
Rate in Effect on Valuation Date

	Single	Family	Parent Plus	Couple
Region 1	$288.36	$648.88	$389.32	$584.00
Region 2	312.00	702.00	421.20	631.80
Region 3	436.00	981.20	588.72	883.08
Region 4	286.16	643.92	386.36	579.52

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem Blue Seniors	$110.00	$315.44	3,898	23,013
Bankers Life Medicare	82.70	195.35	913	618

Weighted Medicare Coverage
Rate in Effect on Valuation Date

	Low Option	High Option
All Members	$104.82	$312.30

Medical Contribution Rate Increases:

Year	Rate(%)
2004-2005	10.00
2006-2010	9.00
2011-2015	8.00
2016-2020	7.50
2021 and thereafter	7.00

Members with Multiple Service Records:	For active members with service in more than one system, the liability has been valued as follows: • Service under all systems is aggregated for purposes of determining benefit eligibility. • Future service is projected only under the system in which the member is currently active. • The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system. • The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned). For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.
Administrative Expenses:	$92,000
Actuarial Value of Assets:	Market value of assets less unrecognized return in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.

EXHIBIT V

Summary of Plan Provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation time years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Early Retirement:	
Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Disability:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 of more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Vesting:	
Age Requirement	None
Service Requirement	60 months
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Pre-Retirement Death Benefit (not in line of duty):	
Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.
Spouse's Pre-Retirement Death Benefit (in line of duty):	
Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.
Dependent Non-Spouse's Death Benefit (in line of duty):	
Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.
Dependent Child's Death Benefit (in line of duty):	
Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.
Post-Retirement Death Benefit:	
Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.
Insurance Plan for Retirees:	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System.

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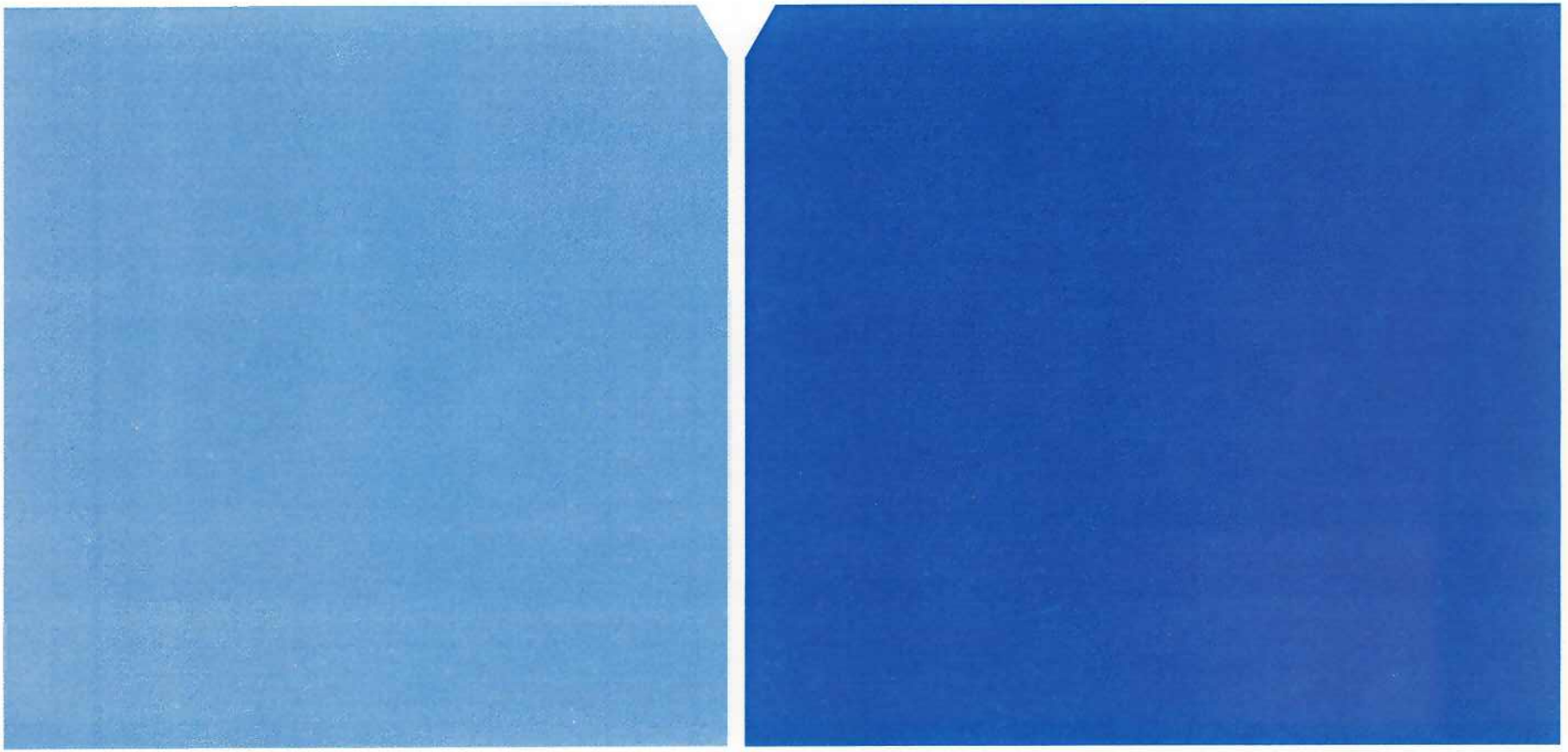
Benefits, Compensation and HR Consulting

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

Actuarial Valuation and Review
as of June 30, 2005



Kentucky Employees Retirement System

Actuarial Valuation and Review
as of June 30, 2005

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SEGAL

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October 13, 2005

Board of Trustees
Kentucky Employees Retirement System
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601-6124

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2005. It summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2006 and analyzes the preceding year's experience.

The census information on which our calculations were based was prepared by the System and the financial information was provided by the Auditor. That assistance is gratefully acknowledged.

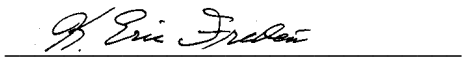
This report is for the purpose of determining statutory funding requirements for the Retirement and Insurance plans. Statutory funding requirements may not take all actuarial liabilities of the plans into account. Specifically, in determining employer funding requirements, state statute limits recognition of retiree and beneficiary Cost of Living Adjustments (COLAs) to only the adjustments granted as of the valuation date. Accordingly, care should be taken in using this report for other purposes.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By: 

Leon F. (Rocky) Joyner, Jr., FCA, ASA, MAAA
Vice President and Actuary

K. Eric Fredén, FSA, MAAA
Associate Actuary

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SECTION 1: Valuation Summary for the Kentucky Employees Retirement System

Purpose

This report has been prepared by The Segal Company to present a valuation of the Kentucky Employees Retirement System as of June 30, 2005. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2005, provided by the Board;
- The assets of the Plan as of June 30, 2005, provided by the Auditor;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The Kentucky Employees Retirement System's basic financial goal is to establish contributions which fully fund the System's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.
- The retirement contribution rate is determined using the Entry Age Normal Cost (EANC) Method. Under this method the employer contribution required is the sum of the normal cost, administration expenses and the sum of the 30-year amortization payments established each valuation due to changes in the Unfunded Actuarial Accrued Liability.
- The medical insurance contribution rate is determined in a similar method except that the actual contribution rate is determined by increasing the prior year's rate by an amount necessary to raise the insurance rate to the full EANC amount by the year 2016.
- The rates calculated in this report may be adopted by the Board for July 1, 2006 through June 30, 2007.

- The following summarizes the required contributions for the year beginning July 1, 2006 and compares them to the prior valuation amounts.

Non-Hazardous

Plan	July 1, 2006 Rate	July 1, 2005 Rate
Retirement	10.68%	7.85%
Insurance	6.45	5.77
Total	17.13%	13.62%

Hazardous

Plan	July 1, 2006 Rate	July 1, 2005 Rate
Retirement	9.28%	8.52%
Insurance	14.04	13.07
Total	23.32%	21.59%

- The increase in the total rate is due to:

Non-Hazardous

Retirement plan investment loss	1.63%
Retiree COLA	0.34
Insurance Phase-in*	0.68
Change in administrative expense assumption	0.04
Changes in plan provisions	-0.06
Other experience	0.88
Total change	3.51%

Hazardous

Retirement plan investment loss	0.87%
Retiree COLA	0.18
Insurance Phase-in*	0.97
Change in administrative expense assumption	0.08
Changes in plan provisions	-0.23
Other experience	-0.14
Total change	1.73%

* Includes a portion of all insurance plan gains and losses for the year.

- Certain plan provisions have changed since the last valuation of the plans. For members whose participation began on or after August 1, 2004, the disability benefit is equal to the benefit calculated as a normal retirement benefit based on service to date of disability retirement, or 20% of the Final Rate of Pay, if larger, for non-hazardous members. For hazardous members, the minimum disability benefit is 25% of the Final Rate of Pay. Disability benefits on this basis may be available even after the normal retirement age. For members whose participation began after July 1, 2003, the Retirement System pays $10 per month per year of service for non-hazardous members, $15 per month per year of service for hazardous duty members and $10 per month per year of service for surviving spouses of hazardous duty members. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of hazardous service. These dollar amounts will be adjusted periodically for general inflation. See Exhibit VI for a summary of all plan provisions. These changes had an immaterial impact on the contribution rate for the Retirement plan, and reduced the contribution rate for the insurance plan by 0.06% of non-hazardous member payroll and by 0.23% of hazardous member payroll .

- As indicated in Section 2, Subsection B of this report, the total unrecognized investment losses as of June 30, 2005 are:

Non-Hazardous

Plan	Unrecognized investment (gains)/losses as of 6/30/2005	Actuarial value as a percentage of market value
Retirement	$216,055,049	104.0%
Insurance	-3,833,272	99.4

Hazardous

Plan	Unrecognized investment (gains)/losses as of 6/30/2005	Actuarial value as a percentage of market value
Retirement	$6,979,765	101.8%
Insurance	-923,582	99.5

The investment losses for the Retirement plans will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent they are not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.25% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.25% rate and all other actuarial assumption are met, the contribution requirements would still increase in each of the next few years.

- The recommended contributions for the KERS Non-Hazardous Retirement Plan for the years ended June 30, 2003, June 30, 2004 and June 30, 2005 were $45,578,833, $84,758,932 and $129,125,800, respectively. Actual contributions were $7,597,450, $21,696,543 and $50,332,750. If the actual contributions had been equal to the recommended amounts, the recommended contribution for the upcoming year would have been reduced by approximately $9,597,147, or 0.58% of payroll.
- The funded ratio for the non-hazardous Retirement Plan on a statutory basis is 73.61%. This ratio is down from 85.12% last year primarily due to the further recognition of deferred investment losses this year. This ratio is based on the actuarial liabilities and asset values computed for the purpose of meeting funding requirements on the basis required by state law. This basis does not take all actuarial liabilities and investment performance to date into account. It also does not consider the contractual nature of the retiree medical benefits provided by KERS. If the Retirement and Insurance results were combined, if the market value instead of actuarial value of assets were used, and if a 3% annual cost-of-living adjustment for retirement benefits were assumed to be in effect for all future years, then the funding ratio for the combined non-hazardous Retirement and Insurance plans would be 47.86%. The corresponding funded ratio for the hazardous plans would be 61.17%.

Summary of Key Valuation Results

	Kentucky Non-Hazardous		Kentucky Hazardous		Kentucky Totals	
	June 30, 2005	June 30, 2004	June 30, 2005	June 30, 2004	June 30, 2005	June 30, 2004
Contributions for next fiscal year:						
Retirement	10.68%	7.85%	9.28%	8.52%	N/A	N/A
Insurance	6.45	5.77	14.04	13.07	N/A	N/A
Total	17.13%	13.62%	23.32%	21.59%	N/A	N/A
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$7,579,074,839	$7,049,613,171	$438,994,257	$403,578,036	$8,018,069,096	$7,453,191,207
Actuarial value of assets	5,578,685,746	6,000,513,743	405,288,662	397,212,763	5,983,974,408	6,397,726,506
Unfunded liability on actuarial value of assets	2,000,389,093	1,049,099,428	33,705,595	6,365,273	2,034,094,688	1,055,464,701
Funded ratio on actuarial value of assets	73.61%	85.12%	92.32%	98.42%	74.63%	85.84%
Market value of assets	$5,362,630,697	$5,258,994,145	$398,308,897	$366,569,507	5,760,939,594	5,625,563,652
Unfunded liability on market value of assets	2,216,444,142	1,790,619,026	40,685,360	37,008,529	2,257,129,502	1,827,627,555
Funded ratio on market value of assets	70.76%	74.60%	90.73%	90.83%	71.85%	75.48%
Insurance						
Actuarial accrued liability	$2,680,559,188	$2,335,905,365	$386,844,695	$323,503,563	$3,067,403,883	$2,659,408,928
Actuarial value of assets	607,068,351	600,586,961	187,947,644	169,158,879	795,015,995	769,745,840
Unfunded liability on actuarial value of assets	2,073,490,837	1,735,318,404	198,897,051	154,344,684	2,272,387,888	1,889,663,088
Funded ratio on actuarial value of assets	22.65%	25.71%	48.58%	52.29%	25.92%	28.94%
Market value of assets	$610,901,623	$587,680,647	$188,871,226	$162,127,373	799,772,849	749,808,020
Unfunded liability on market value of assets	2,069,657,565	1,748,224,718	197,973,469	161,376,190	2,267,631,034	1,909,600,908
Funded ratio on market value of assets	22.79%	25.16%	48.82%	50.12%	26.07%	28.19%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	30,770	28,892	1,752	1,549	32,522	30,441
Number of vested former members	5,240	4,825	307	260	5,547	5,085
Number of former members due a refund	23,105	20,950	1,997	1,772	25,102	22,722
Number of active members	47,118	47,599	4,274	4,014	51,392	51,613
Total salary	$1,655,907,288	$1,645,412,496	$131,687,088	$126,664,812	$1,787,594,376	$1,772,077,308
Average salary	35,144	34,568	30,811	31,556	34,784	34,334

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A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, C, and D.

The ratio of non-actives to actives has slowly but steadily climbed in both groups for the past decade. As the number of annuitants per active employee rises, cash flow is impacted. The system either becomes more dependent on investment income to cover benefit payments, or contributions must rise to meet these obligations. (For the non-hazardous retirement plan, net contributions have been less than benefit payments in each of the last nine years. In addition, for the hazardous retirement plan benefit payments have exceeded net contributions this year for the first time in ten years.

Active Members

Plan costs are affected by the age, years of service and salaries of active members. In this year's non-hazardous valuation, there were 47,118 active members with an average age of 42.9, average years of service of 9.8 years and average salaries of $35,144. The 47,599 active members in the prior valuation had an average age of 42.9, average service of 10.0 years and average salaries of $34,568.

In the hazardous plan, there were 4,274 active members with an average age of 41.9, average years of service of 7.1 years and average salaries of $30,811. The 4,014 active members in the prior valuation had an average age of 42.7, average service of 7.6 years and average salaries of $31,556.

Inactive Members

In this year's valuation, there were 5,240 non-hazardous members with a vested right to a deferred or immediate vested benefit. In addition, there were 23,105 members entitled to a return of their employee contributions.

For the hazardous plan, there were 307 members with a vested right to a deferred or immediate vested benefit. In addition, there were 1,997 members entitled to a return of their employee contributions.

Retired Participants and Beneficiaries

As of June 30, 2005, 26,868 non-hazardous retired participants and 3,902 beneficiaries were receiving total monthly benefits of $42,445,653. For comparison, in the previous valuation, there were 25,114 retired participants and 3,778 beneficiaries receiving monthly benefits of $37,450,868.

For the hazardous plan, there were 1,572 retired participants and 180 beneficiaries were receiving total monthly benefits of $1,636,729. For comparison, in the previous valuation, there were 1,382 retired participants and 167 beneficiaries receiving monthly benefits of $1,341,584.

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A historical perspective of how the member population has changed over the past nine valuations can be seen in these charts.

CHART 1A – Non-Hazardous

Member Population: 1997 – 2005

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1997	46,073	2,550	20,540	0.50
1998	46,342	2,735	20,955	0.51
1999	45,824	2,978	21,941	0.54
2000	46,897	3,073	23,760	0.57
2001	47,780	3,312	25,118	0.60
2002	48,555	3,415	26,703	0.62
2003	49,158	3,456	27,233	0.62
2004	47,599	4,825	28,892	0.71
2005	47,118	5,240	30,770	0.76

CHART 1B – Hazardous

Member Population: 1997 – 2005

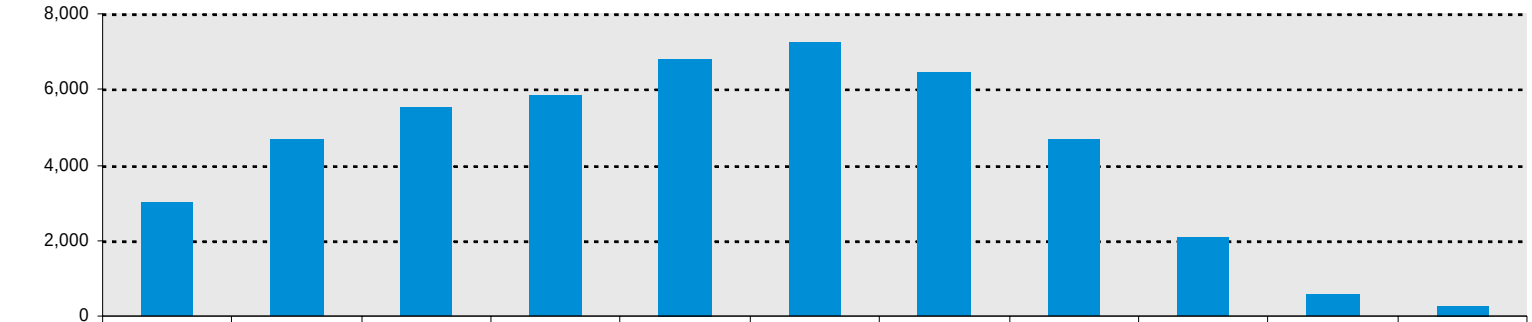
Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1997	3,532	77	585	0.19
1998	3,582	96	671	0.21
1999	3,889	96	780	0.23
2000	4,007	113	924	0.26
2001	4,228	123	1,053	0.28
2002	4,211	127	1,208	0.32
2003	4,189	145	1,357	0.36
2004	4,014	260	1,549	0.45
2005	4,274	307	1,752	0.48

**Excludes terminated members due a refund of employee contributions.*

These graphs show a distribution of non-hazardous active members by age and by years of service.

CHART 2A – Non-Hazardous

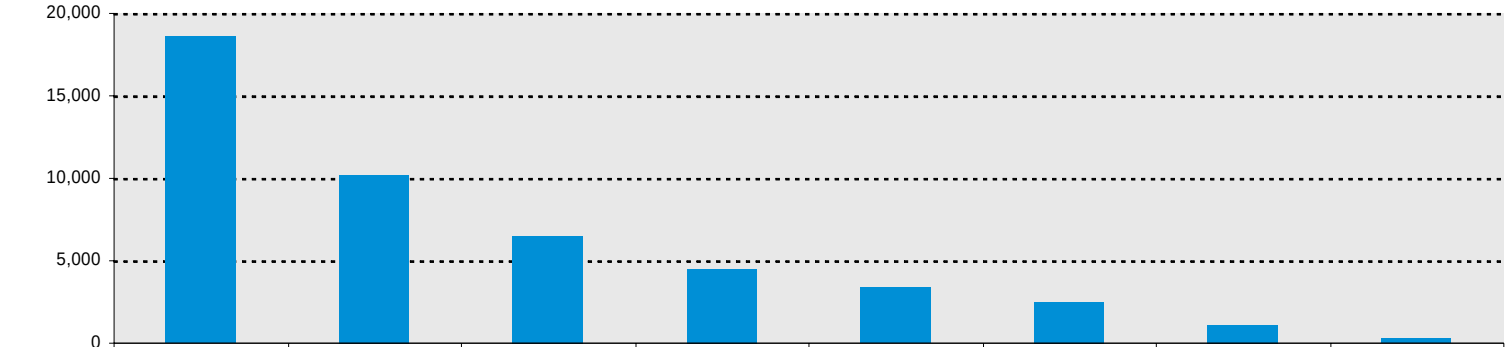
Distribution of Active Members by Age as of June 30, 2005



	Under 25	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 & over
Actives	2,991	4,677	5,512	5,824	6,789	7,266	6,446	4,682	2,089	572	270

CHART 3A – Non-Hazardous

Distribution of Active Members by Years of Service as of June 30, 2005

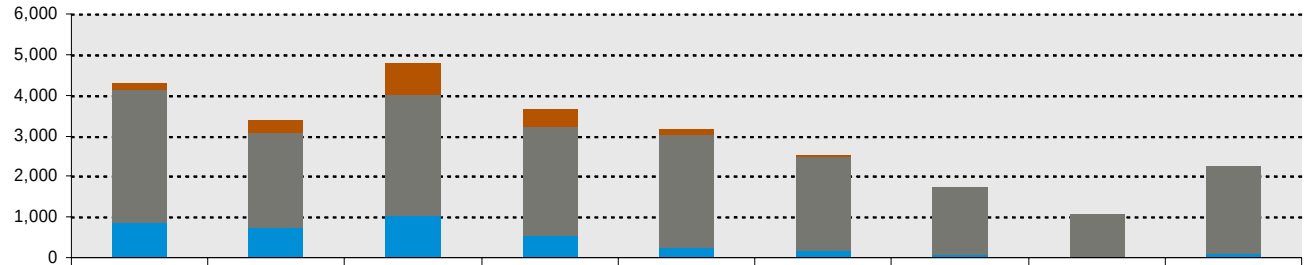


	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39
Actives	18,610	10,175	6,538	4,533	3,424	2,461	1,051	326

These graphs show a distribution of the current non-hazardous retired participants based on their monthly amount and age, by type of pension.

CHART 4A – Non-Hazardous

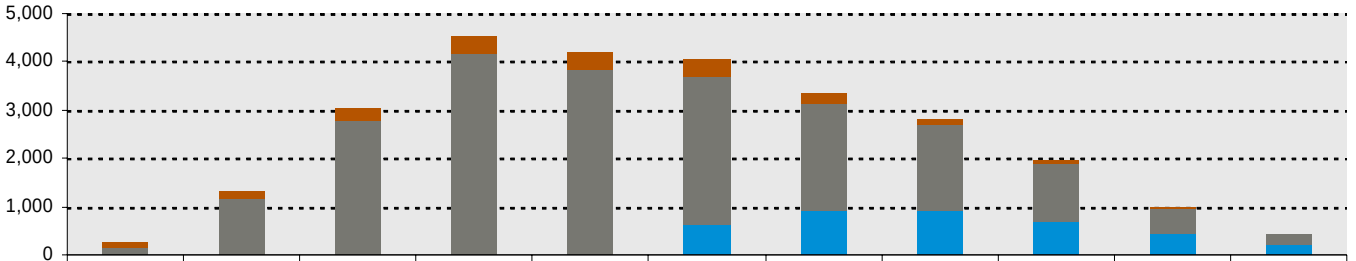
Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2005



	Under $250	$250 - $499	$500 - $999	$1,000 - $1,499	$1,500 - $1,999	$2,000 - $2,499	$2,500 - $2,999	$3,000 - $3,499	$3,500 & over
Disability	167	323	770	462	143	35	8	2	0
Early	3,258	2,330	2,966	2,662	2,752	2,314	1,665	1,008	2,147
Normal	878	741	1,055	544	249	153	71	50	115

CHART 5A – Non-Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2005

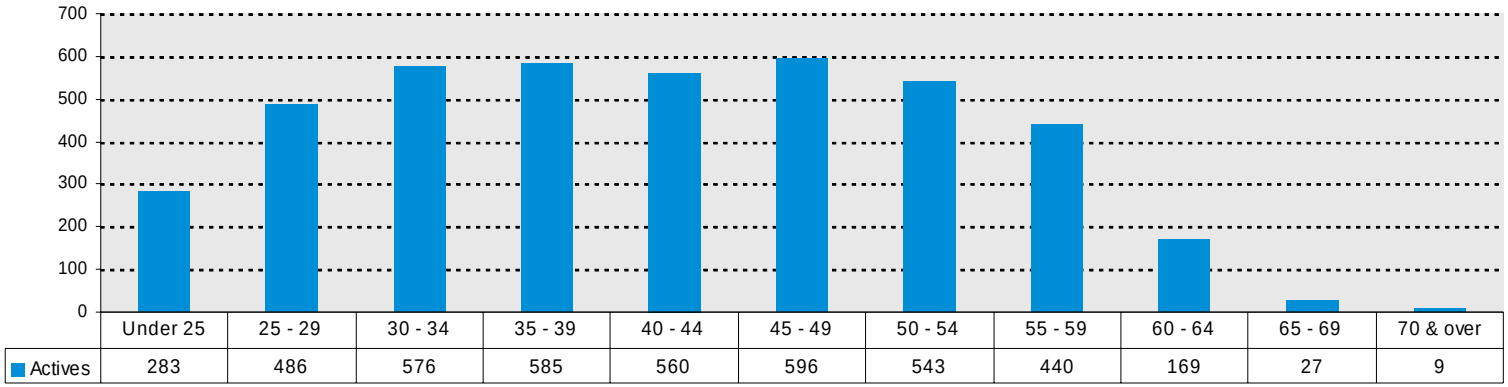


	Under 45	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 & over
Disability	98	134	260	344	347	348	208	86	49	28	8
Early	143	1,182	2,762	4,159	3,830	3,082	2,237	1,793	1,197	518	199
Normal	0	0	0	13	18	606	907	925	709	442	236

These graphs show a distribution of hazardous active members by age and by years of service.

CHART 2B – Hazardous

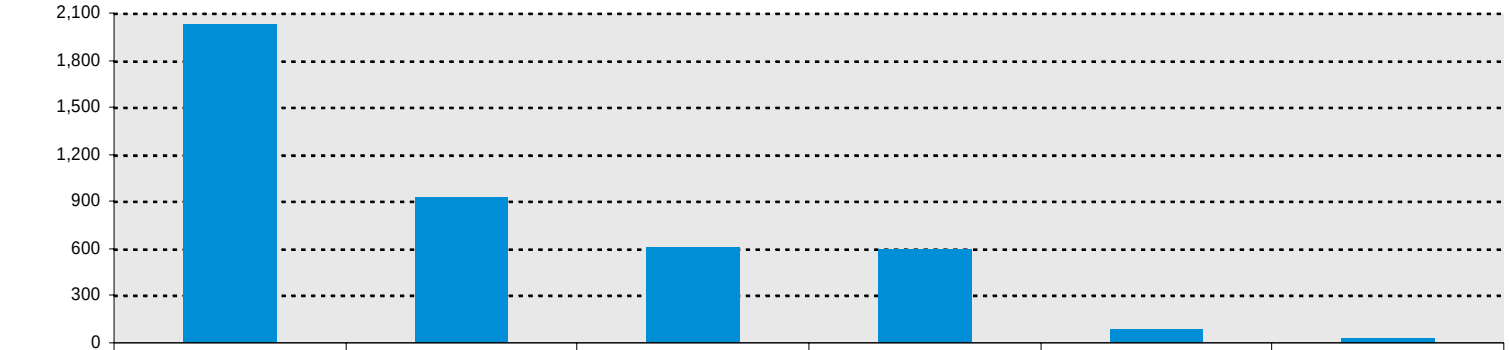
Distribution of Active Members by Age as of June 30, 2005



	Under 25	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 & over
Actives	283	486	576	585	560	596	543	440	169	27	9

CHART 3B – Hazardous

Distribution of Active Members by Years of Service as of June 30, 2005

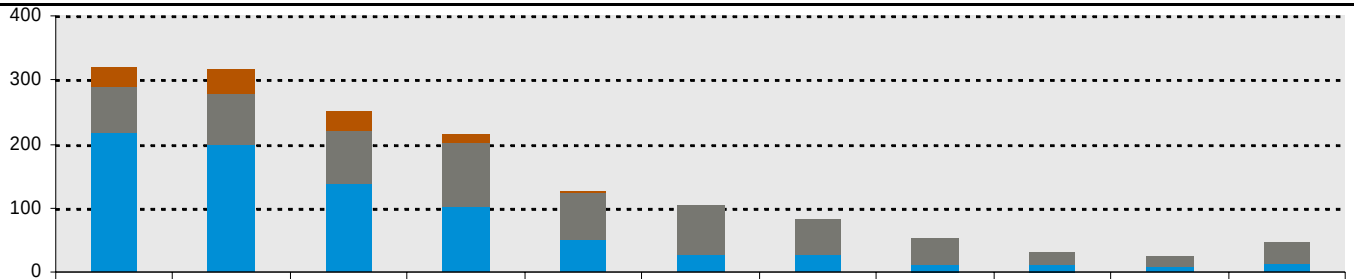


	0-4	5-9	10-14	15-19	20-24	25-29
Actives	2,022	927	614	603	80	28

These graphs show a distribution of the current hazardous retired participants based on their monthly amount and age, by type of pension.

CHART 4B – Hazardous

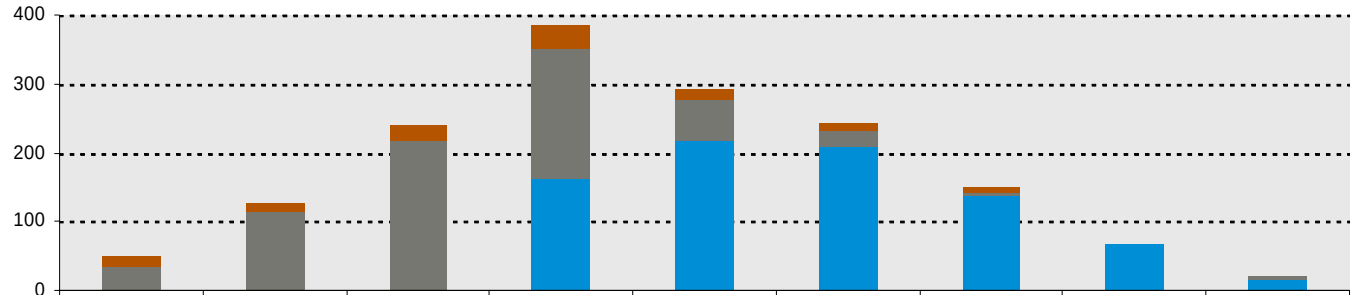
Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2005



	Under $300	$300 - $599	$600 - $899	$900 - $1,199	$1,200 - $1,499	$1,500 - $1,799	$1,800 - $2,099	$2,100 - $2,399	$2,400 - $2,699	$2,700 - $2,999	$3,000 & over
Disability	30	37	31	14	3	2	0	0	0	0	0
Early	72	80	82	101	73	77	55	41	19	17	31
Normal	218	199	138	101	51	27	28	12	10	8	15

CHART 5B – Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2005



	Under 45	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 & over
Disability	16	12	25	32	14	10	8	0	0
Early	34	114	216	190	59	23	5	2	5
Normal	0	0	0	162	218	210	136	66	15

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B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative and investment expenses) and net investment earnings (less common stock commissions and securities lending expense) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits E and F.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

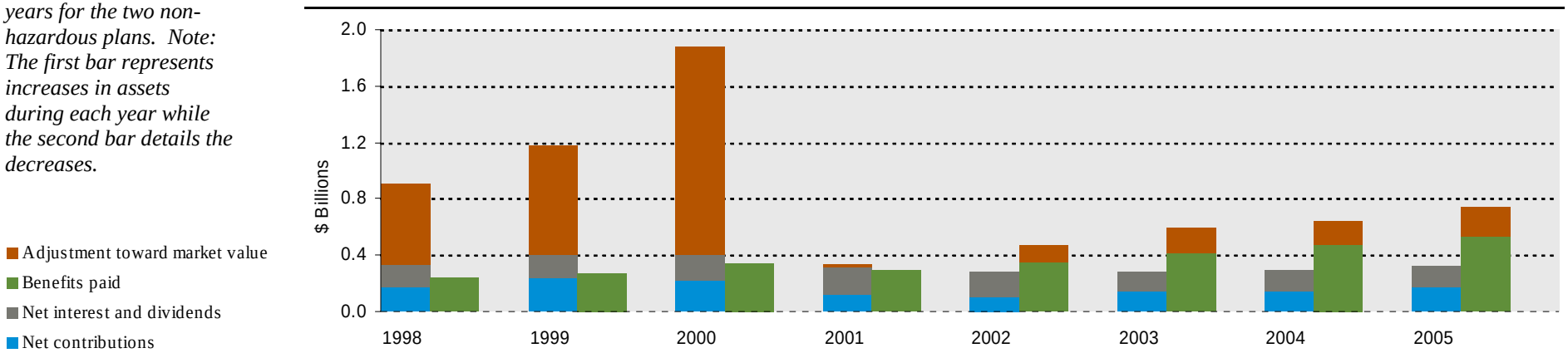
The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Both the actuarial value and market value of assets are representations of the System's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the System's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

These charts depict the components of changes in the actuarial value of assets over the last eight years for the two non-hazardous plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6A – Non-Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1998 – 2005



Non-Hazardous Retirement

Development of the Fund Through June 30, 2005

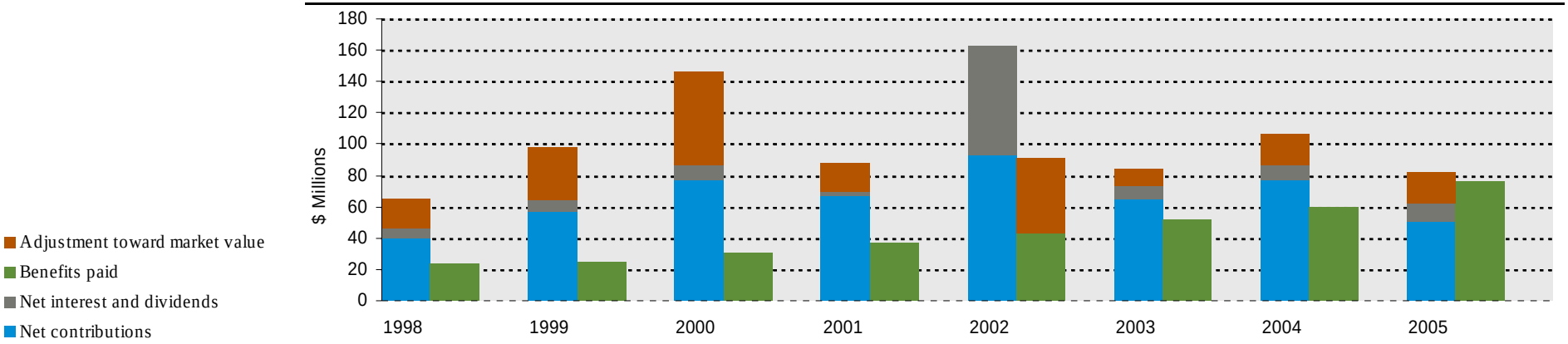
Year Ended June 30	Employer Contributions*	Member Contributions	Net Interest and Dividends**	Adjustment Toward Market Value	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1998	$112,188,000	$67,595,000	$152,888,000	$581,509,620	$5,037,000	$237,066,000	$4,356,072,625
1999	107,515,000	141,399,000	156,952,000	777,208,772	5,330,000	269,477,000	5,264,340,397
2000	115,055,000	107,834,000	182,697,000	1,480,107,063	5,764,000	337,594,000	6,806,675,460
2001	21,911,066	104,125,142	190,953,000	23,285,910	5,974,401	296,233,490	6,844,742,687
2002	97,946	109,485,664	176,702,012	-119,470,690	7,710,547	349,762,876	6,654,084,196
2003	7,597,450	137,124,487	149,729,179	-176,923,267	8,138,967	412,154,246	6,351,318,832
2004	21,696,543	129,077,138	147,083,414	-172,421,991	8,871,985	467,368,208	6,000,513,743
2005	50,332,750	127,801,019	149,248,896	-207,700,749	10,290,307	531,219,607	5,578,685,746

** Net contributions are employer and member contributions minus administrative and investment expenses*

*** Net of stock commissions and securities lending expense*

CHART 6B – Non-Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1998 – 2005



Non-Hazardous Insurance

Development of the Fund Through June 30, 2005

Year Ended June 30	Employer Contributions*	Insurance Appropriation Contributions	Net Interest and Dividends **	Adjustment Toward Market Value	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1998	$39,504,000	$0	$6,681,000	$18,867,211	$32,000	$23,395,000	$210,105,184
1999	56,770,000	0	7,812,000	33,590,703	92,000	24,481,000	283,704,887
2000	76,926,000	0	9,937,000	59,527,365	171,000	30,364,000	399,560,252
2001	66,874,871	0	3,134,000	17,691,919	344,092	37,286,345	449,630,605
2002	93,912,017	0	69,396,040	-47,483,602	508,748	43,695,857	521,250,455
2003	65,335,219	0	8,087,818	11,170,428	371,356	51,587,482	553,885,082
2004	78,016,737	0	9,553,427	19,908,331	787,370	59,989,246	600,586,961
2005	49,909,228	1,522,726	11,773,957	19,745,405	898,850	75,571,076	607,068,351

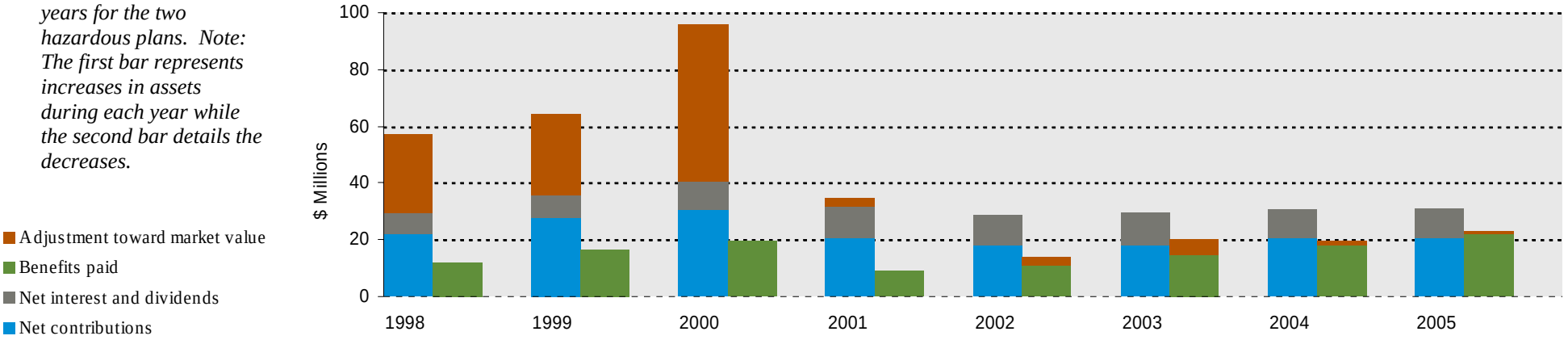
** Net contributions are employer and member contributions minus administrative and investment expenses*

*** Net of stock commissions and securities lending expense*

These charts depict the components of changes in the actuarial value of assets over the last eight years for the two hazardous plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6C – Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1998 – 2005



Hazardous Retirement

Development of the Fund Through June 30, 2005

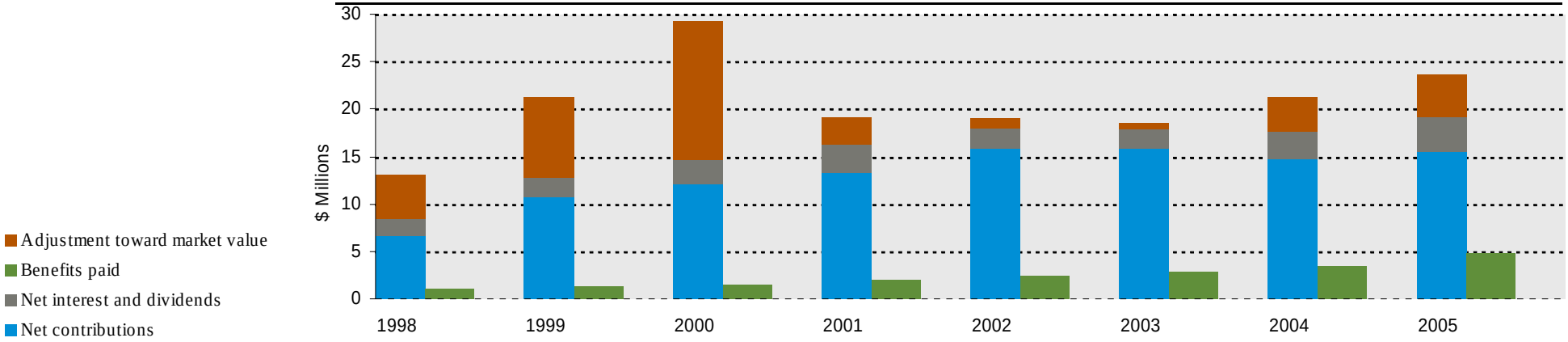
Year Ended June 30	Employer Contributions*	Member Contributions	Net Interest and Dividends **	Adjustment Toward Market Value	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1998	$16,033,000	$6,520,000	$7,448,000	$27,633,380	$303,000	$11,834,000	$212,214,618
1999	19,444,000	8,323,000	8,129,000	28,803,701	349,000	16,726,000	259,839,319
2000	21,633,000	9,375,000	10,191,000	55,002,145	415,000	19,412,000	336,213,464
2001	10,377,708	10,545,410	11,390,000	2,780,043	411,956	9,217,194	361,677,475
2002	7,764,651	10,740,148	10,843,431	-2,881,301	482,320	11,277,782	376,384,302
2003	7,322,607	11,553,286	11,243,712	-5,435,260	610,152	14,532,773	385,925,722
2004	9,769,580	11,547,337	10,131,896	-1,250,879	638,243	18,272,650	397,212,763
2005	9,758,547	11,624,830	10,835,835	-1,042,149	846,095	22,255,069	405,288,662

** Net contributions are employer and member contributions minus administrative and investment expenses*

*** Net of stock commissions and securities lending expense*

CHART 6D – Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1998 – 2005



Hazardous Insurance

Development of the Fund Through June 30, 2005

Year Ended June 30	Employer Contributions*	Insurance Appropriation Contributions	Net Interest and Dividends **	Adjustment Toward Market Value	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1998	$6,632,000	$0	$1,770,000	$4,654,412	$8,000	$1,126,000	$54,606,786
1999	10,774,000	0	2,065,000	8,430,863	13,000	1,284,000	74,579,649
2000	12,047,000	0	2,571,000	14,603,588	19,000	1,570,000	102,212,237
2001	13,226,298	0	3,134,000	2,815,835	33,246	1,982,382	119,372,742
2002	15,887,398	0	2,060,266	1,076,714	73,288	2,449,250	135,874,582
2003	15,883,263	0	2,168,713	538,694	69,044	2,936,708	151,459,500
2004	14,959,617	0	2,831,115	3,562,500	116,907	3,536,946	169,158,879
2005	15,395,977	257,615	3,654,656	4,517,461	183,982	4,852,962	187,947,644

** Net contributions are employer and member contributions minus administrative and investment expenses*

*** Net of stock commissions and securities lending expense*

These charts show the determination of the actuarial value of assets as of the valuation date.

CHART 7A – Non-Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2005

1. Market value of assets			$5,362,630,697
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2005	-$13,040,421	-$2,608,084	-$10,432,337
(b) Year ended June 30, 2004	144,459,162	28,891,832	86,675,497
(c) Year ended June 30, 2003	-337,771,120	-67,554,224	-135,108,448
(d) Year ended June 30, 2002	-785,948,805	-157,189,761	-157,189,761
(e) Year ended June 30, 2001	-1,700,223,672	-340,044,734	0
(f) Total unrecognized return			-216,055,049
3. Final actuarial value of assets: (1) – (2f)			$5,578,685,746
4. Actuarial value as a percentage of market value: (3) ÷ (1)			104.0%

CHART 7B – Non-Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2005

1. Market value of assets			$610,901,623
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2005	-$256,660	-$51,332	-$205,328
(b) Year ended June 30, 2004	36,758,879	7,351,776	22,055,327
(c) Year ended June 30, 2003	-35,320,860	-7,064,172	-14,128,344
(d) Year ended June 30, 2002	-19,441,916	-3,888,383	-3,888,383
(e) Year ended June 30, 2001	-66,720,677	-13,344,135	0
(f) Total unrecognized return			3,833,272
3. Final actuarial value of assets: (1) – (2f)			$607,068,351
4. Actuarial value as a percentage of market value: (3) ÷ (1)			99.4%

** Total return on market value basis minus expected return on actuarial basis using the net investment return assumption. See Chart 8 for the calculation of unrecognized return for the current year.*

These charts show the determination of the actuarial value of the assets as of the valuation date.

CHART 7C – Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2005

1. Market value of assets			$398,308,897
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2005	$757,983	$151,597	$606,386
(b) Year ended June 30, 2004	11,700,671	2,340,134	7,020,403
(c) Year ended June 30, 2003	-16,213,796	-3,242,759	-6,485,518
(d) Year ended June 30, 2002	-40,605,179	-8,121,036	-8,121,036
(e) Year ended June 30, 2001	-70,167,218	-14,033,444	0
(f) Total unrecognized return			-6,979,765
3. Final actuarial value of assets: (1) – (2f)			$405,288,662
4. Actuarial value as a percentage of market value: (3) ÷ (1)			101.8%

CHART 7D – Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2005

1. Market value of assets			$188,871,226
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2005	$1,733,661	$346,732	$1,386,929
(b) Year ended June 30, 2004	12,326,424	2,465,285	7,395,854
(c) Year ended June 30, 2003	-8,854,359	-1,770,872	-3,541,744
(d) Year ended June 30, 2002	-21,587,295	-4,317,459	-4,317,457
(e) Year ended June 30, 2001	-14,752,573	-2,950,515	0
(f) Total unrecognized return			923,582
3. Final actuarial value of assets: (1) – (2f)			$187,947,644
4. Actuarial value as a percentage of market value: (3) ÷ (1)			99.5%

** Total return on market value basis minus expected return on actuarial basis using the net investment return assumption. See Chart 8 for the calculation of unrecognized return for the current year.*

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CHART 8

Calculation of Unrecognized Return for the Year Ended June 30, 2005

		Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1.	Employer and member contributions	$178,133,769	$51,431,954	$21,383,377	$15,653,592
2.	Benefit payments including refunds, or healthcare premiums	531,219,607	75,571,076	22,255,069	4,852,962
3.	Administrative and investment expenses	10,290,307	898,850	846,095	183,982
4.	Net cash flow: (1) - (2) - (3)	-363,376,145	-25,037,972	-1,717,787	10,616,648
5.	Market value of assets as of June 30, 2004	5,258,994,145	587,680,647	366,569,507	162,127,373
6.	Market value of assets as of June 30, 2005	5,362,630,697	610,901,623	398,308,897	188,871,226
7.	Actuarial value of assets as of June 30, 2004	6,000,513,743	600,586,961	397,212,763	169,158,879
8.	Average actuarial value of assets: (7) + [0.5 x (4)]	5,818,825,671	588,067,975	396,353,870	174,467,203
9.	Expected return on an actuarial basis: 8.25% of (8)	480,053,118	48,515,608	32,699,194	14,393,544
10.	Gain/(loss) for the year ended June 30, 2005: (6) - (5) - (4) - (9)	-13,040,421	-256,660	757,983	1,733,661
11.	Unrecognized return as of June 30, 2005: 80% of (10)	-10,432,337	-205,328	606,386	1,386,929

These charts show the change in the actuarial value of assets versus the market value over the past eight years for the non-hazardous plans.

CHART 9A – Non-Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1998 – 2005

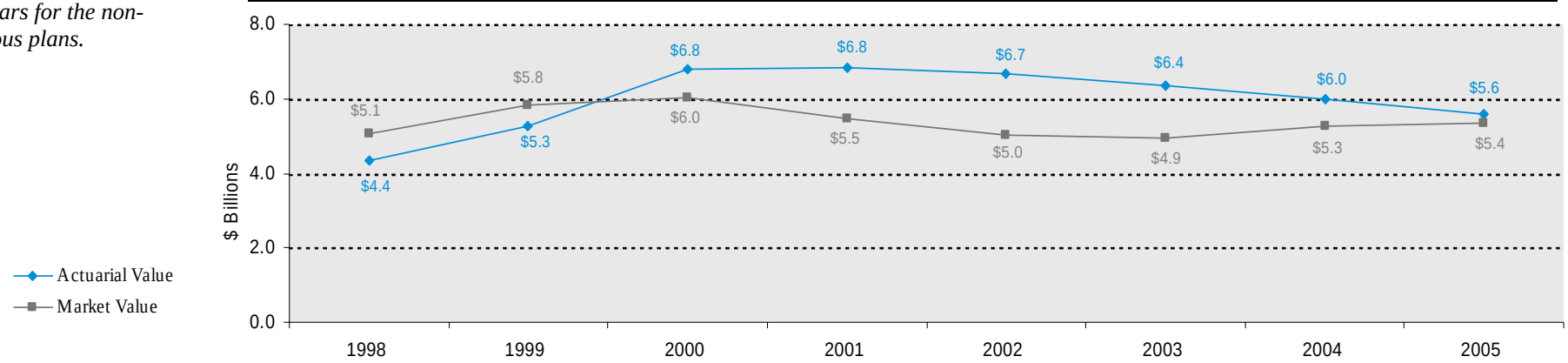
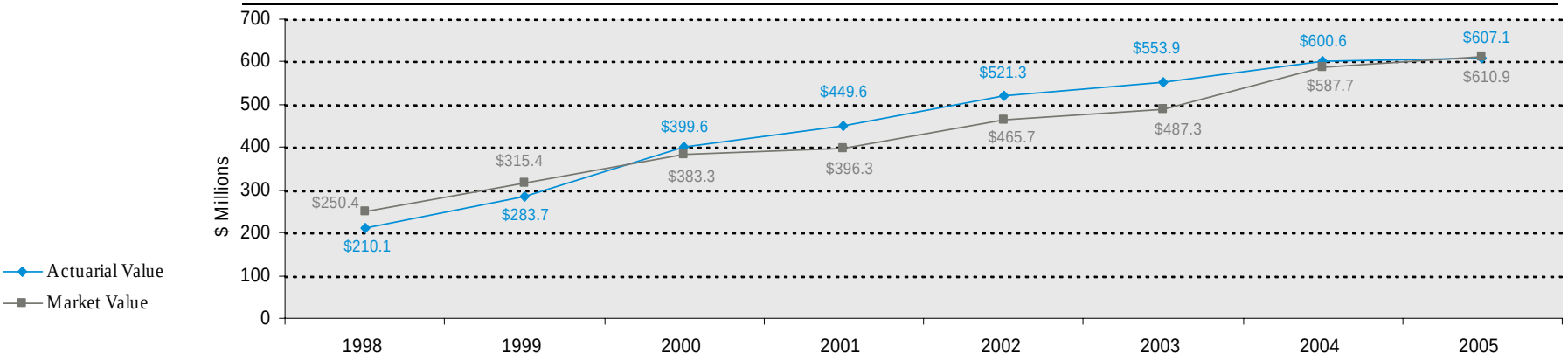


CHART 9B – Non-Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1998 – 2005



These charts show the change in the actuarial value of assets versus the market value over the past eight years for the hazardous plans.

CHART 9C – Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1998 – 2005

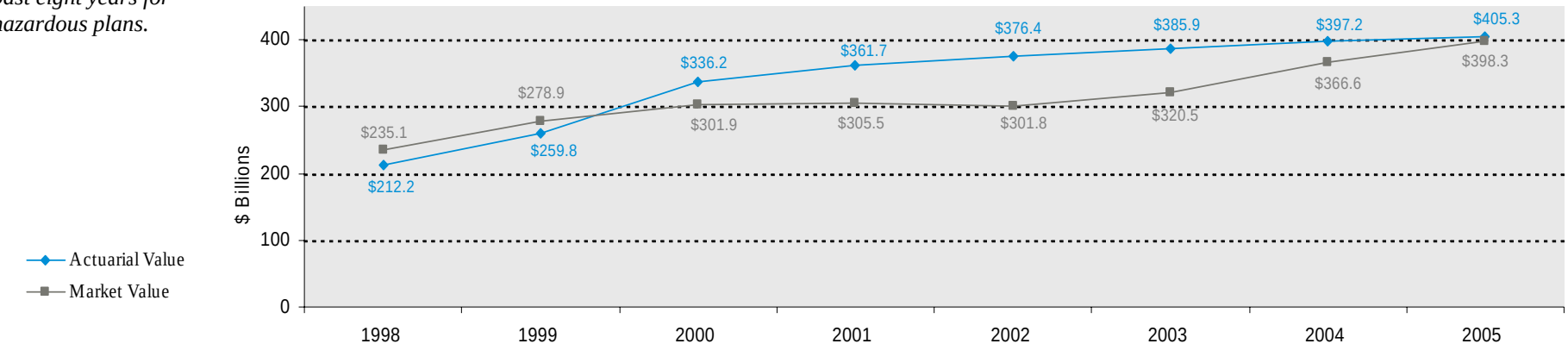
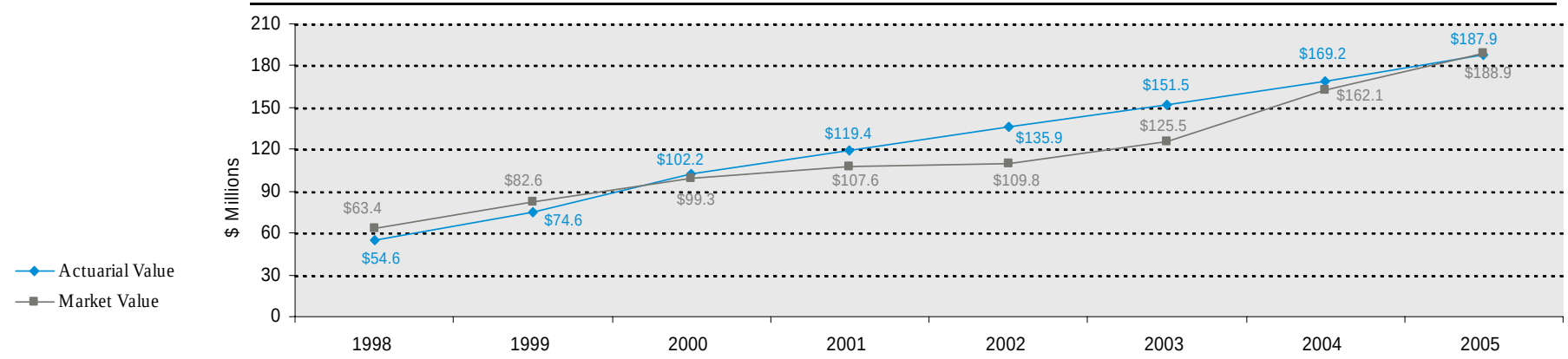


CHART 9D – Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1998 – 2005



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Chart 10 presents a summary of experience for the year. All four plans experienced losses this year. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 10

Actuarial Experience for Year Ended June 30, 2005

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Net gain/(loss) from investments*	-$538,504,971	-$16,996,246	-$22,905,508	-$6,221,427
2. Net gain/(loss) from administrative expenses	-666,823	-501,521	-120,180	-59,148
3. Net gain/(loss) from other experience**	-334,431,254	-37,200,120	-3,755,983	-2,100,650
4. Net experience gain/(loss): (1) + (2) + (3)	-$873,603,048	-$54,697,887	-$26,781,671	-$8,381,225

** Details in Chart 11*

*** Details in Chart 14*

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the System's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.25%. Chart 11 shows the net investment experience for each plan for the year.

Since the actual return for the year was less than the assumed return, each plan experienced an actuarial loss during the year ended June 30, 2005 with regard to its investments.

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. Chart 12, which follows, shows the rate of return on an actuarial basis compared to the market value investment return for the last eight years.

This chart shows the losses due to investment experience.

CHART 11

Actuarial Value Investment Experience for Year Ended June 30, 2005

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Actual return	-$58,451,853	$31,519,362	$9,793,686	$8,172,117
2. Average value of assets	5,818,825,671	588,067,975	396,353,870	174,467,203
3. Actual rate of return: (1) ÷ (2)	-1.00%	5.36%	2.47%	4.68%
4. Assumed rate of return	8.25%	8.25%	8.25%	8.25%
5. Expected return: (2) x (4)	$480,053,118	$48,515,608	$32,699,194	$14,393,544
6. Actuarial gain/(loss): (1) – (5)	-$538,504,971	-$16,996,246	-$22,905,508	-$6,221,427

CHART 12A – Non-Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1998 - 2005

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1998	$152,888,000	4.19%	$581,509,620	15.92%	$734,397,620	20.10%	$910,518,691	21.82%
1999	156,952,000	3.61	777,208,772	17.90	934,160,772	21.51	814,726,366	16.17
2000	182,697,000	3.51	1,480,107,063	28.44	1,662,804,063	31.95	296,093,000	5.12
2001	190,953,000	2.84	23,285,910	0.35	214,238,910	3.19	-356,720,409	-6.02
2002	176,702,012	2.63	-119,470,690	-1.78	57,231,322	0.85	-234,794,209	-4.38
2003	149,729,179	2.30	-176,923,267	-2.72	-27,194,088	-0.42	199,823,513	4.11
2004	147,083,414	2.38	-172,421,991	-2.79	-25,338,577	-0.41	655,017,472	13.74
2005	149,248,896	2.56	-207,700,749	-3.56	-58,451,853	-1.00	467,012,697	9.20
Total	$1,306,253,501		$2,185,594,669		$3,491,848,169		$2,751,677,121	
					Average return	7.73%		6.71%

CHART 12B – Non-Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1998 - 2005

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1998	$6,681,000	3.78%	$18,867,211	10.69%	$25,548,211	14.47%	$41,655,634	20.75%
1999	7,812,000	3.45	33,590,703	14.85	41,402,703	18.30	32,809,846	12.31
2000	9,937,000	3.24	59,527,365	19.40	69,464,365	22.63	21,484,500	6.35
2001	3,134,000	0.76	17,691,919	4.27	20,825,919	5.03	-16,271,591	-4.09
2002	69,396,040	14.63	-47,483,602	-10.01	21,912,438	4.62	19,539,589	4.64
2003	8,087,818	1.53	11,170,428	2.12	19,258,247	3.65	8,234,078	1.74
2004	9,553,427	1.70	19,908,331	3.54	29,461,758	5.24	83,165,553	16.77
2005	11,773,957	2.00	19,745,405	3.36	31,519,362	5.36	48,258,948	8.39
Total	$126,375,242		$133,017,760		$259,393,002		$238,876,557	
					Average return	7.92%		7.54%

Note: Each year's yield is weighted by the average asset value in that year.

CHART 12C – Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1998 - 2005

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount,	Percent	Amount	Percent
1998	$7,448,000	4.33%	$27,633,380	16.07%	$35,081,380	20.41%	$37,614,603	19.57%
1999	8,129,000	3.74	28,803,701	13.24	36,932,701	16.98	33,133,032	13.78
2000	10,191,000	3.84	55,002,145	20.72	65,193,145	24.56	11,840,783	4.16
2001	11,390,000	3.33	2,780,043	0.81	14,170,043	4.14	-7,670,713	-2.49
2002	10,843,431	2.97	-2,881,301	-0.79	7,962,130	2.18	-10,682,347	-3.46
2003	11,243,712	2.97	-5,435,260	-1.44	5,808,452	1.54	14,991,894	4.94
2004	10,131,896	2.62	-1,250,879	-0.32	8,881,017	2.29	43,638,792	13.56
2005	10,835,835	2.73	-1,042,149	-0.26	9,793,686	2.47	33,457,177	9.15
Total	$80,212,874		$103,609,680		$183,822,554		$156,323,221	
					Average return	7.60%		7.66%

CHART 12D – Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1998 - 2005

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1998	$1,770,000	3.90%	$4,654,412	10.24%	$6,424,412	14.14%	$9,312,446	18.15%
1999	2,065,000	3.48	8,430,863	14.21	10,495,863	17.69	9,787,878	14.37
2000	2,571,000	3.22	14,603,588	18.30	17,174,588	21.52	6,166,757	7.02
2001	3,134,000	2.91	2,815,835	2.61	5,949,835	5.52	-2,878,243	-2.74
2002	2,060,266	1.63	1,076,714	0.85	3,136,980	2.49	-11,232,521	-9.83
2003	2,168,713	1.52	538,694	0.38	2,707,407	1.90	2,886,492	2.48
2004	2,831,115	1.80	3,562,500	2.27	6,393,615	4.07	25,288,196	19.28
2005	3,654,656	2.09	4,517,461	2.59	8,172,117	4.68	16,127,205	9.63
Total	$20,254,750		$40,200,067		$60,454,817		$55,458,210	
					Average return	6.77%		6.59%

Note: Each year's yield is weighted by the average asset value in that year.

The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. These charts illustrate how this leveling effect has actually worked over the years 1998 - 2005 for the non-hazardous plans.

CHART 13A – Non-Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1998 - 2005

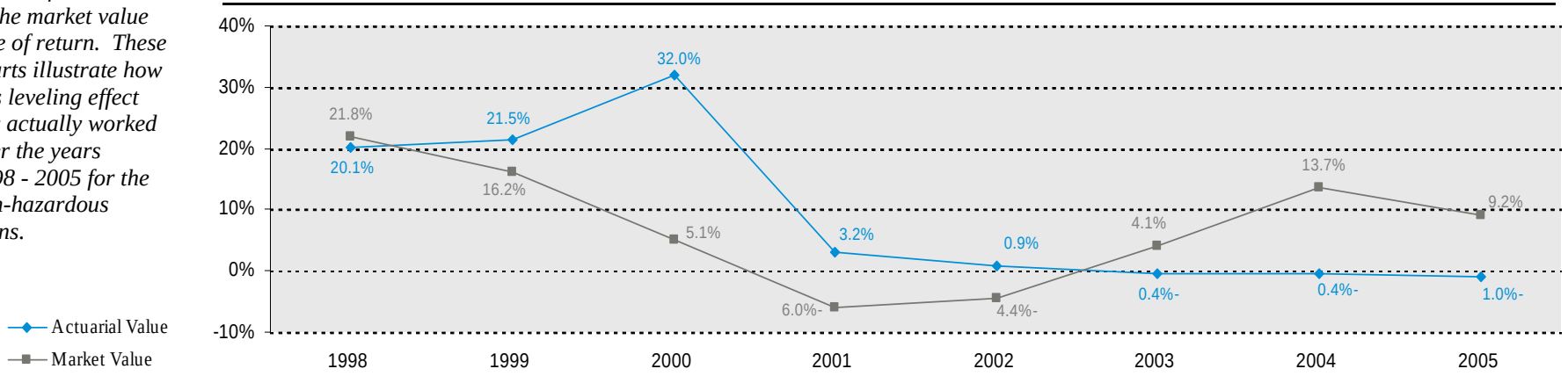
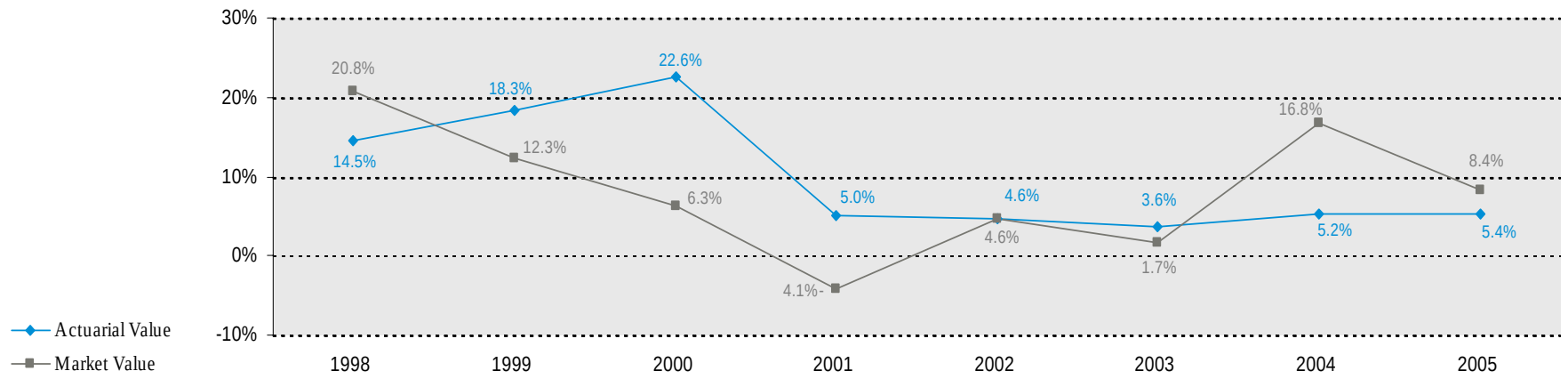


CHART 13B – Non-Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1997 - 2005



The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. These charts illustrate how this leveling effect has actually worked over the years 1998 – 2005 for the hazardous plans.

CHART 13C – Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1998 - 2005

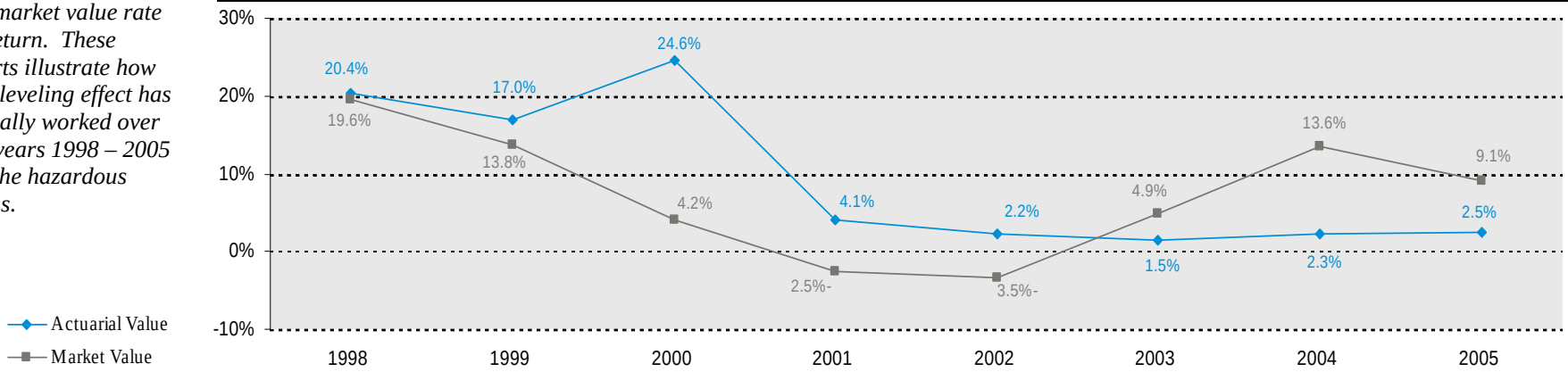
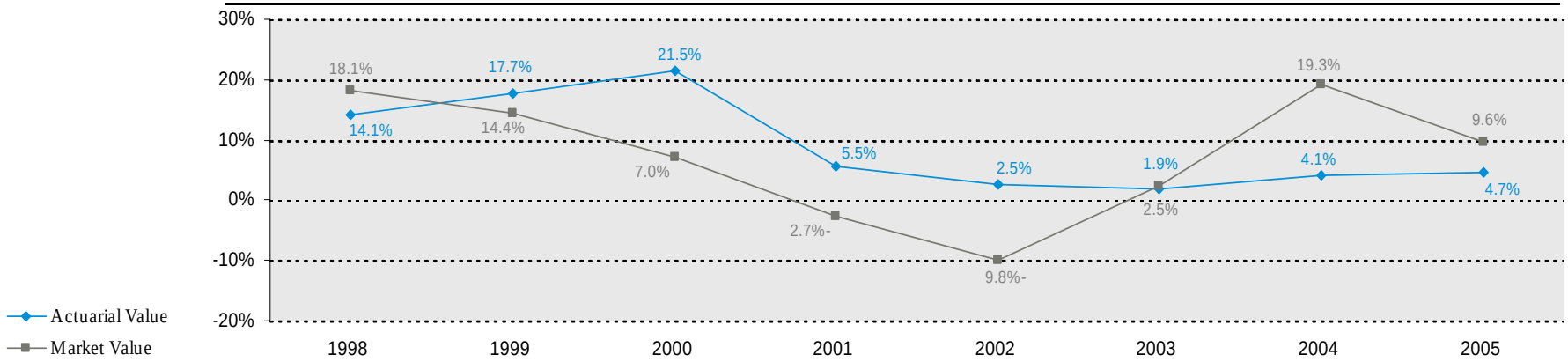


CHART 13D – Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1998 - 2005



Administrative Expenses

Current methodology includes an assumption for the cost of administration for the retirement funds but not for the insurance funds. This assumption is modified with each valuation to estimate expenses for the upcoming fiscal year. The following summarizes the past year's experience and presents the assumptions for the next year.

Plan	Year End 2005 Assumption	Year End 2005 Actual Experience	Gain/(Loss)* for the Year	Year End 2006 Assumption
Non-Hazardous Retirement	$5,300,000	$5,916,003	-$666,823	$6,000,000
Non-Hazardous Insurance	0	463,299	-501,521	0
Hazardous Retirement	400,000	511,021	-120,180	500,000
Hazardous Insurance	0	54,640	-59,148	0

* *Includes interest to year-end.*

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- COLAs granted in the year,
- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

A brief summary of the demographic gain/(loss) experience of the Funds for the year ended June 30, 2005 is shown in the chart below.

The chart shows elements of the experience losses for the most recent year.

CHART 14

Experience Due to Changes in Demographics for Year Ended June 30, 2005

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. COLA	-$113,619,258	N/A	-$4,631,983	N/A
2. Other	-220,811,996	-$37,200,120	876,000	-$2,100,650
3. Total	-$334,431,254	-$37,200,120	-$3,755,983	-$2,100,650
4. Percentage of actuarial accrued liability	4.4%	1.4%	0.9%	0.5%

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D. RECOMMENDED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability. This total amount is then divided by the projected salaries for active members to determine the funding rate.

The recommended contribution is based on a 30-year amortization of bases established each year as specified in the law governing the Plan.

Exhibit G in Section 3 provides details on these amortization bases.

The contribution rates as of June 30, 2005 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Charts 15 and 16 present the recommended contributions and reconciliations from the prior valuation.

This chart compares this valuation's recommended contribution with the prior valuation.

CHART 15A – Non-Hazardous Retirement

Recommended Contribution

	As of June 30			
	2005		2004	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$155,968,793	9.42%	$156,784,156	9.53%
2. Administrative expenses	6,000,000	0.36%	5,300,000	0.32%
3. Expected employee contributions	-82,275,825	-4.97%	-81,642,757	-4.96%
4. Employer normal cost: (1) + (2) + (3)	$79,692,968	4.81%	$80,441,399	4.89%
5. Actuarial accrued liability	7,579,074,839		7,049,613,171	
6. Actuarial value of assets	5,578,685,746		6,000,513,743	
7. Unfunded actuarial accrued liability: (5) - (6)	$2,000,389,093		$1,049,099,428	
8. Payment on unfunded actuarial accrued liability	97,081,138	5.87%	48,684,401	2.96%
9. Total recommended contribution: (4) + (8)	$176,774,106	10.68%	$129,125,800	7.85%
10. Projected salary	$1,655,907,288		$1,645,412,496	

This chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 16A – Non-Hazardous Retirement

Reconciliation of Recommended Contribution from June 30, 2004 to June 30, 2005

Recommended Contribution as of June 30, 2004	$129,125,800
Effect of COLA for retirees	$5,692,174
Effect of investment loss	26,978,384
Effect of change in administrative expense assumption	700,000
Effect of net other changes	14,277,748
Total change	$47,648,306
Recommended Contribution as of June 30, 2005	$176,774,106

The chart compares this valuation's recommended contributions with the prior valuation.

CHART 15B – Non-Hazardous Insurance

Recommended Contribution

	As of June 30			
	2005		2004	
	Amount	% of Salary	Amount	% of Salary
1. Employer normal cost	$98,328,832	5.94%	$101,368,760	6.16%
2. Actuarial accrued liability	2,680,559,188		2,335,905,365	
3. Actuarial value of assets	607,068,351		600,586,961	
4. Unfunded actuarial accrued liability: (2) - (3)	$2,073,490,837		$1,735,318,404	
5. Payment on unfunded actuarial accrued liability	121,440,132	7.33%	101,129,542	6.15%
6. Full EANC contribution: (1) + (5)	$219,768,964	13.27%	$202,498,302	12.31%
7. Projected salary	$1,655,907,288		$1,645,412,496	
8. Prior year's funding rate	N/A	5.77%	N/A	5.18%
9. Years to reach full EANC	N/A	11	N/A	12
10. Additional amount for current year	N/A	0.68%	N/A	0.59%
11. Total recommended contribution rate: (8) + (10)	N/A	6.45%	N/A	5.77%

This chart compares this valuation's recommended contribution with the prior valuation.

CHART 15C – Hazardous Retirement

Recommended Contribution

	As of June 30			
	2005		2004	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$20,486,585	15.56%	$20,076,404	15.85%
2. Administrative expenses	500,000	0.38%	400,000	0.32%
3. Expected employee contributions	-9,969,974	-7.57%	-9,561,851	-7.55%
4. Employer normal cost: (1) + (2) + (3)	$11,016,611	8.37%	$10,914,553	8.62%
5. Actuarial accrued liability	438,994,257		403,578,036	
6. Actuarial value of assets	405,288,662		397,212,763	
7. Unfunded actuarial accrued liability: (5) - (6)	$33,705,595		$6,365,273	
8. Payment on unfunded actuarial accrued liability	1,203,078	0.91%	-127,081	-0.10%
9. Total recommended contribution: (4) + (8)	$12,219,689	9.28%	$10,787,472	8.52%
10. Projected salary	$131,687,088		$126,664,812	

This chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 16C – Hazardous Retirement

Reconciliation of Recommended Contribution from June 30, 2004 to June 30, 2005

Recommended Contribution as of June 30, 2004	$10,787,472
Effect of COLA for retirees	$232,056
Effect of investment loss	1,147,536
Effect of change in administrative expense assumption	100,000
Effect of net other changes	-47,375
Total change	$1,432,217
Recommended Contribution as of June 30, 2005	$12,219,689

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 15D – Hazardous Insurance

Recommended Contribution

	As of June 30			
	2005		2004	
	Amount	% of Salary	Amount	% of Salary
1. Employer normal cost	$20,009,306	15.19%	$19,731,921	15.58%
2. Actuarial accrued liability	386,844,695		323,503,563	
3. Actuarial value of assets	187,947,644		169,158,879	
4. Unfunded actuarial accrued liability: (2) - (3)	$198,897,051		$154,344,684	
5. Payment on unfunded actuarial accrued liability	11,295,472	8.58%	8,785,642	6.93%
6. Full EANC contribution: (1) + (5)	$31,304,778	23.77%	$28,517,563	22.51%
7. Projected salary	$131,687,088		$126,664,812	
8. Prior year's funding rate	N/A	13.07%	N/A	12.21%
9. Years to reach full EANC	N/A	11	N/A	12
10. Additional amount for current year	N/A	0.97%	N/A	0.86%
11. Total recommended contribution rate: (8) + (10)	N/A	14.04%	N/A	13.07%

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EXHIBIT A

Table of Plan Coverage

Category	Non-Hazardous Year Ended June 30 2005	Non-Hazardous Year Ended June 30 2004	Non-Hazardous Change From Prior Year	Hazardous Year Ended June 30 2005	Hazardous Year Ended June 30 2004	Hazardous Change From Prior Year
Active members in valuation:						
Number	47,118	47,599	-1.0%	4,274	4,014	6.5%
Average age	42.9	42.9	N/A	41.9	42.7	N/A
Average service	9.8	10.0	N/A	7.1	7.6	N/A
Total salary	$1,655,907,288	$1,645,412,496	0.6%	$131,687,088	$126,664,812	4.0%
Average salary	35,144	34,568	1.7%	30,811	31,556	-2.4%
Account balances	866,044,474	915,105,103	-5.4%	75,098,321	78,817,575	-4.7%
Total active vested members	32,766	32,482	0.9%	2,494	2,482	0.5%
Vested terminated members	5,240	4,825	8.6%	307	260	18.1%
Retired participants:						
Number in pay status	24,958	23,196	7.6%	1,455	1,269	14.7%
Average age	66.4	66.8	N/A	60.9	61.0	N/A
Average monthly benefit	$1,518	$1,429	6.2%	$1,005	$935	7.5%
Disabled members:						
Number in pay status	1,910	1,918	-0.4%	117	113	3.5%
Average age	61.7	61.3	N/A	55.8	55.2	N/A
Average monthly benefit	$850	$826	2.9%	$568	$513	10.7%
Beneficiaries in pay status	3,902	3,778	3.3%	180	167	7.8%
Inactive nonvested members due a refund	23,105	20,950	10.3%	1997	1,772	12.7%

EXHIBIT B – Non-Hazardous

Members in Active Service as of June 30, 2005
By Age, Years of Service, and Average Salary

	Years of Service									
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	2,991	2,867	124	- -	- -	- -	- -	- -	- -	- -
	$22,762	$22,519	$28,386	- -	- -	- -	- -	- -	- -	- -
25 - 29	4,677	3,643	996	38	- -	- -	- -	- -	- -	- -
	27,232	26,698	28,959	$33,221	- -	- -	- -	- -	- -	- -
30 - 34	5,512	2,810	2,025	630	47	- -	- -	- -	- -	- -
	31,316	29,031	33,002	35,625	$37,528	- -	- -	- -	- -	- -
35 - 39	5,824	2,157	1,548	1,345	616	158	- -	- -	- -	- -
	34,939	30,437	35,059	38,724	39,040	$47,010	- -	- -	- -	- -
40 - 44	6,789	2,118	1,438	1,115	1,008	855	255	- -	- -	- -
	36,481	29,310	34,770	37,749	41,124	46,306	$48,859	- -	- -	- -
45 - 49	7,266	1,851	1,402	1,120	876	852	928	237	- -	- -
	38,464	29,922	34,040	38,149	40,788	46,183	49,300	$54,071	- -	- -
50 - 54	6,446	1,540	1,194	1,010	777	720	662	460	83	- -
	39,653	32,006	33,670	37,658	40,118	45,079	49,636	57,138	$63,911	- -
55 - 59	4,682	1,060	887	742	659	550	395	252	122	15
	40,163	31,117	35,126	38,764	39,361	45,213	49,519	62,149	67,016	$62,470
60 - 64	2,089	409	415	357	382	213	158	81	42	32
	39,111	33,225	33,630	35,547	39,236	42,657	48,279	57,471	69,136	68,954
65 - 69	572	108	109	128	109	48	41	15	10	4
	39,346	36,584	35,942	37,195	39,380	40,836	48,405	50,736	59,198	71,544
70 & over	270	47	37	53	59	28	22	6	9	9
	34,645	27,457	29,984	30,511	30,211	40,208	41,535	55,290	57,413	74,092
Total	47,118	18,610	10,175	6,538	4,533	3,424	2,461	1,051	266	60
	$35,144	$28,351	$33,566	$37,699	$39,967	$45,521	$49,230	$57,572	$65,763	$68,276

EXHIBIT B – Hazardous

Members in Active Service as of June 30, 2005
By Age, Years of Service, and Average Salary

	Years of Service								
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**
Under 25	283	274	9	- -	- -	- -	- -	- -	- -
	$19,443	$19,309	$23,523	- -	- -	- -	- -	- -	- -
25 - 29	486	417	67	2	- -	- -	- -	- -	- -
	23,275	22,598	27,321	$28,788	- -	- -	- -	- -	- -
30 - 34	576	347	184	45	- -	- -	- -	- -	- -
	26,889	24,381	30,209	32,658	- -	- -	- -	- -	- -
35 - 39	585	250	142	135	57	1	- -	- -	- -
	29,939	24,301	31,671	35,972	$35,802	$44,676	- -	- -	- -
40 - 44	560	204	123	103	108	19	3	- -	- -
	32,005	25,693	31,662	35,848	38,410	42,660	$45,276	- -	- -
45 - 49	596	201	120	101	142	24	8	- -	- -
	35,022	27,889	34,531	38,264	39,896	49,493	50,760	- -	- -
50 - 54	543	163	128	108	113	19	9	3	- -
	35,571	27,328	38,066	34,521	42,421	44,265	49,285	$60,544	- -
55 - 59	440	118	92	86	129	12	2	1	- -
	37,394	29,929	36,428	39,863	42,107	45,027	58,908	52,104	- -
60 - 64	169	41	55	28	38	5	1	- -	1
	35,489	27,274	35,214	34,883	41,778	50,213	62,544	- -	$64,740
65 - 69	27	6	4	6	11	- -	- -	- -	- -
	35,236	22,626	36,000	35,968	41,437	- -	- -	- -	- -
70 & over	9	1	3	- -	5	- -	- -	- -	- -
	39,727	19,944	41,076	- -	42,874	- -	- -	- -	- -
Total	4,274	2,022	927	614	603	80	23	4	1
	$30,811	$24,410	$32,971	$36,302	$40,360	$45,944	$50,689	$58,434	$64,740

EXHIBIT C – Non-Hazardous

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	2,734	$3,969,621.58	7,285	$8,528,134.87	10,019	$12,497,756.45
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	1,692	2,360,173.23	636	570,009.70	2,328	2,930,182.93
66-2/3% to beneficiary	763	1,696,875.65	271	473,086.94	1,034	2,169,962.59
50% to beneficiary	987	2,009,179.85	826	1,456,337.47	1,813	3,465,517.32
Pop-up option	2,422	4,991,793.24	1,703	2,889,815.92	4,125	7,881,609.16
10 years certain	0	0.00	0	0.00	0	0.00
10 years certain & life	989	1,173,074.40	1,690	1,989,135.50	2,679	3,162,209.90
Social Security option						
Age 62 basic	407	799,328.86	935	1,418,449.96	1,342	2,217,778.82
Age 62 survivorship	860	1,584,145.77	524	818,867.29	1,384	2,403,013.06
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	381	521,579.22	394	509,675.40	775	1,031,254.62
20 years certain & life	331	605,578.92	333	498,563.24	664	1,104,142.16
5 years certain	0	0.00	0	0.00	0	0.00
PLSO 12 month basic	33	45,948.97	107	130,999.21	140	176,948.18
PLSO 24 month basic	11	10,972.00	70	66,741.77	81	77,713.77
PLSO 36 month basic	65	36,894.86	126	74,453.65	191	111,348.51
PLSO 12 month survivor	35	50,281.82	33	48,826.25	68	99,108.07
PLSO 24 month survivor	34	36,837.44	31	36,343.82	65	73,181.26
PLSO 36 month survivor	102	78,336.24	58	37,672.99	160	116,009.23
Total	11,846	$19,970,622.05	15,022	$19,547,113.98	26,868	$39,517,736.03

EXHIBIT C – Hazardous

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	229	$194,770.49	173	$121,603.13	402	$316,373.62
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	146	140,993.56	10	7,547.92	156	148,541.48
66-2/3% to beneficiary	51	50,006.84	6	4,727.40	57	54,734.24
50% to beneficiary	86	105,628.58	11	14,311.08	97	119,939.66
Pop-up option	315	366,395.80	54	46,604.59	369	413,000.39
10 years certain	18	23,663.45	5	4,988.57	23	28,652.02
10 years certain & life	80	63,832.01	35	22,612.25	115	86,444.26
Social Security option						
Age 62 basic	43	41,460.91	17	12,065.97	60	53,526.88
Age 62 survivorship	97	123,933.31	12	7,325.49	109	131,258.80
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	31	29,324.20	9	8,420.42	40	37,744.62
20 years certain & life	29	25,197.88	11	15,677.30	40	40,875.18
5 years certain	0	0.00	0	0.00	0	0.00
PLSO 12 month basic	5	5,101.62	6	5,508.48	11	10,610.10
PLSO 24 month basic	9	9,496.96	5	3,175.28	14	12,672.24
PLSO 36 month basic	20	19,723.77	11	7,761.68	31	27,485.45
PLSO 12 month survivor	9	11,394.03	2	1,952.51	11	13,346.54
PLSO 24 month survivor	8	8,578.82	3	4,076.74	11	12,655.56
PLSO 36 month survivor	20	15,339.27	6	7,839.20	26	23,178.47
Total	1,196	$1,234,841.50	376	$296,198.01	1,572	$1,531,039.51

EXHIBIT D – Non-Hazardous

Beneficiary Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	3	$1,129.24	19	$16,079.98	22	$17,209.22
Straight life (old plan)	0	0	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	219	149,531.64	1,712	1,204,051.84	1,931	1,353,583.48
66-2/3% to beneficiary	21	15,972.66	280	176,480.54	301	192,453.20
50% to beneficiary	69	34,490.81	501	213,804.80	570	248,295.61
Pop-up option	51	63,739.50	252	248,676.97	303	312,416.47
10 years certain	55	58,621.47	56	56,656.69	111	115,278.16
10 years certain & life	53	41,405.71	87	91,532.51	140	132,938.22
Social Security option						
Age 62 basic	0	0.00	3	2,361.69	3	2,361.69
Age 62 survivorship	27	27,956.85	173	219,009.17	200	246,966.02
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	15	5,851.27	15	5,851.27
Dependent child	2	513.92	2	725.04	4	1,238.96
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	28	30,017.03	79	73,819.92	107	103,836.95
20 years certain & life	32	29,473.45	75	78,010.80	107	107,484.25
5 years certain	39	38,184.70	36	42,277.27	75	80,461.97
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	1	515.27	0	0.00	1	515.27
PLSO 36 month basic	1	544.06	2	284.75	3	828.81
PLSO 12 month survivor	1	1,026.45	1	2,400.48	2	3,426.93
PLSO 24 month survivor	0	0.00	3	930.11	3	930.11
PLSO 36 month survivor	2	585.77	2	1,254.50	4	1,840.27
Total	604	$493,708.53	3,298	$2,434,208.33	3,902	$2,927,916.86

EXHIBIT D – Hazardous

Beneficiary Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	2	$268.77	0	$0.00	2	$268.77
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	7	2,725.62	71	45,579.67	78	48,305.29
66-2/3% to beneficiary	0	0.00	4	2,041.33	4	2,041.33
50% to beneficiary	1	392.63	13	4,062.05	14	4,454.68
Pop-up option	3	1,650.48	19	10,622.56	22	12,273.04
10 years certain	2	2,237.03	7	4,383.81	9	6,620.84
10 years certain & life	3	1,899.63	8	5,436.64	11	7,336.27
Social Security option						
Age 62 basic	0	0.00	0	0.00	0	0.00
Age 62 survivorship	1	18.92	10	8,090.81	11	8,109.73
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	6	1,621.30	7	2,005.42	13	3,626.72
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	3	1,070.60	1	710.14	4	1,780.74
20 years certain & life	0	0.00	4	1,004.35	4	1,004.35
5 years certain	1	777.88	6	8,030.15	7	8,808.03
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	0	0.00	0	0.00	0	0.00
PLSO 36 month basic	0	0.00	0	0.00	0	0.00
PLSO 12 month survivor	0	0.00	1	1,059.44	1	1,059.44
PLSO 24 month survivor	0	0.00	0	0.00	0	0.00
PLSO 36 month survivor	0	0.00	0	0.00	0	0.00
Total	29	$12,662.86	151	$93,026.37	180	$105,689.23

EXHIBIT E – Non-Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Contribution income:				
Employer contributions	$50,332,750		$21,696,543	
Member contributions	127,801,019		129,077,138	
Less administrative and investment expenses	-10,290,307		-8,871,985	
Net contribution income		$167,843,462		$141,901,696
Investment income:				
Interest, dividends and other income	$173,414,480		$158,005,198	
Recognition of capital appreciation	-207,700,749		-172,421,991	
Less stock commissions and securities lending expense	-24,165,584		-10,921,784	
Net investment income		-58,451,853		-25,338,577
Total income available for benefits		$109,391,609		$116,563,119
Less benefit payments:				
Benefit payments	-$522,395,758		-$459,367,064	
Refunds	-8,823,849		-8,001,144	
Net benefit payments		-$531,219,607		-$467,368,208
Change in reserve for future benefits		-$421,827,997		-$350,805,089

EXHIBIT E – Non-Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Contribution income:				
Employer contributions	$49,909,228		$78,016,737	
Insurance appropriation contributions	1,522,726		0	
Less administrative and investment expenses	-898,850		-787,370	
Net contribution income		$50,533,104		$77,229,367
Investment income:				
Interest, dividends and other income	$14,468,835		$10,666,411	
Recognition of capital appreciation	19,745,405		19,908,331	
Less stock commissions and securities lending expense	-2,694,878		-1,112,984	
Net investment income		31,519,362		29,461,758
Total income available for benefits		$82,052,466		$106,691,125
Less healthcare premium subsidies		-$75,571,076		-$59,989,246
Change in reserve for future benefits		$6,481,390		$46,701,879

EXHIBIT E – Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Contribution income:				
Employer contributions	$9,758,547		$9,769,580	
Member contributions	11,624,830		11,547,337	
Less administrative and investment expenses	-846,095		-638,243	
Net contribution income		$20,537,282		$20,678,674
Investment income:				
Interest, dividends and other income	$12,550,643		$10,891,877	
Recognition of capital appreciation	-1,042,149		-1,250,879	
Less stock commissions and securities lending expense	-1,714,808		-759,981	
Net investment income		9,793,686		8,881,017
Total income available for benefits		$30,330,968		$29,559,691
Less benefit payments:				
Benefit payments	-$20,494,754		-$16,862,790	
Refunds	-1,760,315		-1,409,860	
Net benefit payments		-$22,255,069		-$18,272,650
Change in reserve for future benefits		$8,075,899		$11,287,041

EXHIBIT E – Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Contribution income:				
Employer contributions	$15,395,977		$14,959,617	
Insurance appropriation contributions	257,615		0	
Less administrative and investment expenses	-183,982		-116,907	
Net contribution income		$15,469,610		$14,842,710
Investment income:				
Interest, dividends and other income	$4,494,802		$3,145,808	
Recognition of capital appreciation	4,517,461		3,562,500	
Less stock commissions and securities lending expense	-840,146		-314,693	
Net investment income		8,172,117		6,393,615
Total income available for benefits		$23,641,727		$21,236,325
Less healthcare premium subsidies		-$4,852,962		-$3,536,946
Change in reserve for future benefits		$18,788,765		$17,699,379

EXHIBIT F – Non-Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Cash equivalents		$620,035		$760,613
Accounts receivable:				
Investment accounts receivable	$24,572,781		$177,965	
Year-end interest receivable	0		26,196,011	
Year-end accounts receivable	0		24,758,644	
Contributions recievable	26,502,398		0	
Total accounts receivable		51,075,179		51,132,620
Investments:				
Stocks	$3,247,090,425		$3,237,197,081	
Bonds	1,702,654,601		1,617,334,320	
Mortgage	261,910,512		255,569,903	
Short-term investments	101,249,248		98,124,620	
Real estate	2,442,855		2,580,396	
Fixed assets	285,796		319,011	
Total investments at market value		5,315,633,437		5,211,125,331
Total assets		$5,367,328,651		$5,263,018,564
Less accounts payable		-$4,697,954		-$4,024,419
Net assets at market value		$5,362,630,697		$5,258,994,145
Net assets at actuarial value		$5,578,685,746		$6,000,513,743

EXHIBIT F – Non-Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Cash equivalents		$68,321		$32,779
Accounts receivable:				
Investment accounts receivable	$1,589,892		$33,862	
Year-end interest receivable	0		1,412,579	
Year-end accounts receivable	0		3,989,694	
Contributions receivable	2,882,252		0	
Total accounts receivable		4,472,144		5,436,135
Investments:				
Stocks	$457,485,977		$422,401,561	
Bonds	65,541,189		56,753,072	
Short-term investments	84,209,872		103,360,672	
Total investments at market value		607,237,038		582,515,305
Total assets		$611,777,503		$587,984,219
Less accounts payable		-$875,880		-$303,572
Net assets at market value		$610,901,623		$587,680,647
Net assets at actuarial value		$607,068,351		$600,586,961

EXHIBIT F – Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Cash equivalents		$105,988		$67,320
Accounts receivable:				
Investment accounts receivable	$1,694,578		$17,922	
Year-end interest receivable	0		1,729,604	
Year-end accounts receivable	0		2,046,391	
Contributions receivable	2,105,601		0	
Total accounts receivable		3,800,179		3,793,917
Investments:				
Stocks	$241,107,329		$227,385,966	
Bonds	116,546,076		105,308,294	
Mortgage	18,255,371		17,062,283	
Short-term investments	16,899,044		11,330,548	
Real estate	1,941,958		1,913,077	
Fixed assets	23,188		26,021	
Total investments at market value		394,772,966		363,026,189
Total assets		$398,679,133		$366,887,426
Less accounts payable		-$370,236		-$317,919
Net assets at market value		$398,308,897		$366,569,507
Net assets at actuarial value		$405,288,662		$397,212,763

EXHIBIT F – Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Cash equivalents		$40,657		$5,206
Accounts receivable:				
Investment accounts receivable	$488,096		$10,591	
Year-end interest receivable	0		412,749	
Year-end accounts receivable	0		616,980	
Contributions receivable	720,812		0	
Total accounts receivable		1,208,908		1,040,320
Investments:				
Stocks	$150,795,960		$129,646,401	
Bonds	20,078,068		16,490,660	
Short-term investments	16,910,390		15,050,638	
Total investments at market value		187,784,418		161,187,699
Total assets		$189,033,983		$162,233,225
Less accounts payable		-$162,757		-$105,852
Net assets at market value		$188,871,226		$162,127,373
Net assets at actuarial value		$187,947,644		$169,158,879

EXHIBIT G – Non-Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$256,534,456	$26,579,687	15	$324,885,852
06/30/1991	30	103,692,389	10,241,152	16	131,661,408
06/30/1992	30	-212,448,599	-20,000,956	17	-269,415,531
06/30/1993	30	-57,917,315	-5,197,519	18	-73,106,831
06/30/1994	30	59,519,052	5,091,308	19	74,554,168
06/30/1995	30	65,659,241	5,353,642	20	81,395,605
06/30/1996	30	-188,573,585	-14,655,806	21	-230,789,615
06/30/1997	30	-277,888,742	-20,568,878	22	-334,748,878
06/30/1998	30	-326,522,755	-23,017,812	23	-386,375,169
06/30/1999	30	-362,615,121	-24,344,874	24	-420,727,040
06/30/2000	30	-964,739,576	-61,685,400	25	-1,095,723,801
06/30/2001	30	584,703,884	35,605,656	26	649,083,803
06/30/2002	30	811,152,084	47,043,134	27	878,882,398
06/30/2003	30	811,953,677	44,847,275	28	857,550,488
06/30/2004	30	871,195,298	45,828,013	29	895,822,411
06/30/2005	30	917,439,825	45,962,516	30	917,439,825
Total			$97,081,138		$2,000,389,093

** Level percentage of salary*

EXHIBIT G– Non-Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$988,745,810	$76,844,629	21	$1,210,096,659
06/30/1997	30	-31,222,593	-2,311,046	22	-37,611,195
06/30/1998	30	19,914,214	1,403,828	23	23,564,538
06/30/1999	30	-69,145,663	-4,642,229	24	-80,226,797
06/30/2000	30	44,198,913	2,826,076	25	50,199,870
06/30/2001	30	237,627,565	14,470,377	26	263,791,996
06/30/2002	30	36,483,146	2,115,857	27	39,529,449
06/30/2003	30	123,332,414	6,812,116	28	130,258,381
06/30/2004	30	164,749,377	8,666,411	29	169,406,543
06/30/2005	30	304,481,393	15,254,113	30	304,481,393
Total			$121,440,132		$2,073,490,837

** Level percentage of salary*

EXHIBIT G– Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	-$366,782	-$38,003	15	-$464,508
06/30/1991	30	8,515,857	841,066	16	10,812,845
06/30/1992	30	-2,222,347	-209,223	17	-2,818,256
06/30/1993	30	1,873,766	168,152	18	2,365,183
06/30/1994	30	2,736,468	234,080	19	3,427,728
06/30/1995	30	4,677,834	381,415	20	5,798,956
06/30/1996	30	-33,735,166	-2,621,873	21	-41,287,470
06/30/1997	30	-7,971,975	-590,073	22	-9,603,157
06/30/1998	30	-13,896,455	-979,613	23	-16,443,711
06/30/1999	30	-13,902,335	-933,360	24	-16,130,294
06/30/2000	30	-35,735,060	-2,284,898	25	-40,586,864
06/30/2001	30	18,907,681	1,151,387	26	20,989,546
06/30/2002	30	24,131,600	1,399,523	27	26,146,562
06/30/2003	30	26,494,066	1,463,368	28	27,981,891
06/30/2004	30	35,826,765	1,884,617	29	36,839,523
06/30/2005	30	26,677,621	1,336,513	30	26,677,621
Total			$1,203,078		$33,705,595

** Level percentage of salary*

EXHIBIT G– Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$61,002,123	$4,741,042	21	$74,658,690
06/30/1997	30	15,100,456	1,117,712	22	18,190,234
06/30/1998	30	2,832,306	199,660	23	3,351,475
06/30/1999	30	-10,377,564	-696,718	24	-12,040,648
06/30/2000	30	-3,445,265	-220,290	25	-3,913,035
06/30/2001	30	20,464,709	1,246,203	26	22,718,016
06/30/2002	30	3,711,155	215,230	27	4,021,032
06/30/2003	30	28,620,833	1,580,837	28	30,228,090
06/30/2004	30	19,794,260	1,041,249	29	20,353,808
06/30/2005	30	41,329,389	2,070,548	30	41,329,389
Total			$11,295,472		$198,897,051

** Level percentage of salary*

EXHIBIT H

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

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EXHIBIT I – Non-Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 3,902 beneficiaries in pay status)		30,770
2.	Members inactive during year ended June 30, 2005 with vested rights		5,240
3.	Members active during the year ended June 30, 2005		47,118
	Fully vested	32,766	
	Not vested	14,352	
4.	Inactive nonvested members due a refund as of June 30, 2005		23,105

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$161,968,793
2.	Present value of future benefits		9,358,808,243
3.	Present value of future normal costs		1,779,733,404
4.	Actuarial accrued liability		7,579,074,839
	Retired participants and beneficiaries	$4,939,967,757	
	Inactive members with vested rights	67,846,531	
	Active members	2,522,827,231	
	Inactive nonvested members due a refund	48,433,320	
5.	Actuarial value of assets ($5,362,630,697 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		5,578,685,746
6.	Unfunded actuarial accrued liability		$2,000,389,093

EXHIBIT I – Non-Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$98,328,832
2.	Present value of future benefits		3,824,867,897
3.	Present value of future normal costs		1,144,308,709
4.	Actuarial accrued liability		2,680,559,188
	Retired participants and beneficiaries	$1,448,911,773	
	Inactive members with vested rights	101,707,685	
	Active members	1,129,939,730	
5.	Actuarial value of assets ($610,901,623 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		607,068,351
6.	Unfunded actuarial accrued liability		$2,073,490,837

EXHIBIT I – Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 180 beneficiaries in pay status)		1,752
2.	Members inactive during year ended June 30, 2005 with vested rights		307
3.	Members active during the year ended June 30, 2005		4,274
	Fully vested	2,494	
	Not vested	1,780	
4.	Inactive nonvested members due a refund as of June 30, 2005		1,997

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$20,986,585
2.	Present value of future benefits		628,947,978
3.	Present value of future normal costs		189,953,721
4.	Actuarial accrued liability		438,994,257
	Retired participants and beneficiaries	$201,390,551	
	Inactive members with vested rights	6,519,916	
	Active members	225,683,707	
	Inactive nonvested members due a refund	5,400,083	
5.	Actuarial value of assets ($398,308,897 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		405,288,662
6.	Unfunded actuarial accrued liability		$33,705,595

EXHIBIT I – Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$20,009,306
2.	Present value of future benefits		578,347,752
3.	Present value of future normal costs		191,503,057
4.	Actuarial accrued liability		386,844,695
	Retired participants and beneficiaries	$175,343,661	
	Inactive members with vested rights	12,539,989	
	Active members	198,961,045	
5.	Actuarial value of assets ($188,871,226 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		187,947,644
6.	Unfunded actuarial accrued liability		$198,897,051

EXHIBIT II – Non-Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/2000	$6,806,675,460	$4,876,825,772	-$1,929,849,688	139.57%	$1,432,316,220	-134.74%
06/30/2001	6,844,742,687	5,444,035,294	-1,400,707,393	125.73%	1,525,089,988	-91.84%
06/30/2002	6,654,084,196	6,026,094,764	-627,989,432	110.42%	1,597,344,487	-39.31%
06/30/2003	6,351,318,832	6,520,463,188	169,144,356	97.41%	1,658,604,696	10.20%
06/30/2004	6,000,513,743	7,049,613,171	1,049,099,428	85.12%	1,645,412,496	63.76%
06/30/2005	5,578,685,746	7,579,074,839	2,000,389,093	73.61%	1,655,907,288	120.80%

Note: If the actuarial accrued liabilities of the non-hazardous Retirement plan were adjusted to allow for a 3% annual cost-of-living adjustment for all future years and were combined with the actuarial accrued liabilities of the Insurance plan, the funded ratio on a market value basis of the combined plans would be 47.86%.

EXHIBIT II – Non-Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/2000	$399,560,252	$1,457,475,358	$1,057,915,106	27.41%	$1,432,316,220	73.86%
06/30/2001	449,630,605	1,769,583,098	1,319,952,493	25.41%	1,525,089,988	86.55%
06/30/2002	521,250,455	1,907,683,881	1,386,433,426	27.32%	1,597,344,487	86.80%
06/30/2003	553,885,082	2,093,210,321	1,539,325,239	26.46%	1,658,604,696	92.81%
06/30/2004	600,586,961	2,335,905,365	1,735,318,404	25.71%	1,645,412,496	105.46%
06/30/2005	607,068,351	2,680,559,188	2,073,490,837	22.65%	1,655,907,288	125.22%

EXHIBIT II – Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/2000	$336,213,464	$243,365,557	-$92,847,907	138.15%	$115,135,008	-80.64%
06/30/2001	361,677,475	285,193,761	-76,483,714	126.82%	123,647,407	-61.86%
06/30/2002	376,384,302	322,069,164	-54,315,138	116.86%	125,371,604	-43.32%
06/30/2003	385,925,722	356,879,133	-29,046,589	108.14%	129,088,956	-22.50%
06/30/2004	397,212,763	403,578,036	6,365,273	98.42%	126,664,812	5.03%
06/30/2005	405,288,662	438,994,257	33,705,595	92.32%	131,687,088	25.60%

Note: If the actuarial accrued liabilities of the hazardous Retirement plan were adjusted to allow for a 3% annual cost-of-living adjustment for all future years and were combined with the actuarial accrued liabilities of the Insurance plan, the funded ratio on a market value basis of the combined plans would be 61.17%.

EXHIBIT II – Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/2000	$102,212,237	$175,167,613	$72,955,376	58.35%	$115,135,008	63.37%
06/30/2001	119,372,742	214,450,822	95,078,080	55.66%	123,647,407	76.89%
06/30/2002	135,874,582	236,819,050	100,944,468	57.37%	125,371,604	80.52%
06/30/2003	151,459,500	283,178,335	131,718,835	53.49%	129,088,956	102.04%
06/30/2004	169,158,879	323,503,563	154,344,684	52.29%	126,664,812	121.85%
06/30/2005	187,947,644	386,844,695	198,897,051	48.58%	131,687,088	151.04%

EXHIBIT II – Total Retirement Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a)] / (b)	Increase in Assets
06/30/1956	N/A	$16,200,000	$16,200,000	100.00%	N/A
06/30/1961	17,530,559	49,201,024	31,670,465	64.37%	4,479,508
06/30/1966	55,752,113	127,889,238	72,137,125	56.41%	9,085,814
06/30/1971	125,460,976*	185,075,453	59,614,477	32.21%	18,353,116
06/30/1975	218,909,209*	296,343,758	77,434,549	26.13%	26,529,526
06/30/1976	256,376,790*	387,214,910	130,838,120	33.79%	37,467,581
06/30/1977	296,743,905*	446,255,236	149,511,331	33.50%	40,367,115
06/30/1978	338,826,998*	507,324,915	168,497,917	33.21%	42,083,093
06/30/1979	389,418,451*	592,095,113	202,676,662	34.23%	50,591,453
06/30/1980	460,355,868*	710,126,703	249,770,835	35.17%	70,937,417
06/30/1981	527,425,266	692,160,395	164,735,129	23.80%	67,069,398
06/30/1982	614,446,898	810,250,589	195,803,691	24.17%	87,021,632
06/30/1983	710,095,878	862,291,959	152,196,081	17.65%	95,648,980
06/30/1984	814,553,823	1,016,088,830	201,535,007	19.83%	104,457,945
06/30/1985	934,480,773	1,104,429,988	169,949,215	15.39%	119,926,950
06/30/1986	1,079,353,421	1,245,083,143	166,635,243	13.38%	144,872,648
06/30/1987	1,264,000,419	1,384,259,808	120,259,389	8.69%	184,646,998
06/30/1988	1,426,056,402	1,561,743,738	135,687,336	8.69%	162,055,983
06/30/1989	1,588,609,098	1,734,607,903	145,998,805	8.42%	162,552,696
06/30/1990	1,799,321,738	2,055,489,412	256,167,674	12.46%	210,712,640
06/30/1991	1,913,214,931	2,288,611,147	375,396,216	16.40%	113,893,193
06/30/1992**	2,354,482,321	2,525,190,930	170,708,609	6.76%	441,267,390
06/30/1993	2,585,209,537	2,703,771,076	118,561,539	4.39%	230,727,216
06/30/1994	2,729,048,987	2,912,050,275	183,001,288	6.28%	143,839,450
06/30/1995	2,983,813,538	3,240,852,288	257,038,750	7.93%	244,764,551
06/30/1996	3,375,295,577	3,415,404,483	40,108,906	1.17%	391,482,039

EXHIBIT II – Total Retirement Fund (continued)

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a)] / (b)	Increase in Assets
06/30/1997	3,850,712,243	3,603,966,110	-246,746,133	-6.85%	475,416,666
06/30/1998	4,568,287,243	3,971,749,822	-596,537,421	-15.02%	717,575,000
06/30/1999	5,524,179,716	4,531,905,609	-992,274,107	-21.90%	955,892,473
06/30/2000	7,142,888,924	5,120,191,329	-2,022,697,595	-39.50%	1,618,709,208
06/30/2001***	7,206,420,161	5,729,229,055	-1,477,191,106	-25.78%	63,531,237
06/30/2002	7,030,468,498	6,348,163,928	-682,304,570	-10.75%	-175,951,663
06/30/2003	6,737,244,554	6,877,342,321	140,097,767	2.04%	-293,223,944
06/30/2004	6,397,726,506	7,453,191,207	1,055,464,701	14.16%	-339,518,048
06/30/2005	5,983,974,408	8,018,069,096	2,034,094,688	25.37%	-413,752,098

* *Includes capitalized appreciation of investments.*

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

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EXHIBIT II – Total Insurance Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) – (a)] / (b)	Increase in Assets
06/30/1990	$32,722,932	$719,493,806	$686,770,874	95.45%	N/A
06/30/1991	46,549,335	804,674,050	758,124,715	94.22%	13,826,403
06/30/1992	62,465,626	1,001,703,695	939,238,069	93.76%	15,916,291
06/30/1993	77,673,575	1,177,861,283	1,100,187,708	93.41%	15,207,949
06/30/1994	99,083,533	1,444,612,678	1,345,529,145	93.14%	21,409,958
06/30/1995	127,292,191	1,462,174,101	1,334,881,910	91.29%	28,208,658
06/30/1996**	172,646,205	1,222,394,138	1,049,747,933	85.88%	45,354,014
06/30/1997	211,164,347	1,274,464,242	1,063,299,895	83.43%	38,518,142
06/30/1998	264,711,970	1,379,578,155	1,114,866,185	80.81%	53,547,623
06/30/1999	358,284,536	1,422,523,386	1,064,238,850	74.81%	93,572,566
06/30/2000	501,772,489	1,632,642,971	1,130,870,482	69.27%	143,487,953
06/30/2001***	569,003,346	1,984,033,920	1,415,030,574	71.32%	67,230,857
06/30/2002	657,125,037	2,144,502,931	1,487,377,894	69.36%	88,121,691
06/30/2003	705,344,582	2,376,388,656	1,671,044,074	70.32%	48,219,545
06/30/2004	769,745,840	2,659,408,928	1,889,663,088	71.06%	64,401,258
06/30/2005	795,015,995	3,067,403,883	2,272,387,888	74.08%	25,270,155

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

EXHIBIT III – Non-Hazardous

Supplementary Information Required by the GASB

Valuation date	June 30, 2005
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	15 to 30 years
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	30,770
Terminated members entitled to, but not yet receiving benefits	5,240
Active members	47,118
Total	83,128

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	7,927	6,861	270	218	99	479
Family; Pre-Medicare	802	777	11	9	5	0
Parent Plus; Pre-Medicare	461	391	14	9	5	42
Couple; Pre-Medicare	877	824	23	12	15	3
Medicare Regular	1,915	81	213	420	407	794
Medicare High Option	11,765	6,740	1,582	1,134	513	1,796
Total	23,747	15,674	2,113	1,802	1,044	3,108

EXHIBIT III – Hazardous

Supplementary Information Required by the GASB

Valuation date	June 30, 2005
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	15 to 30 years
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	1,752
Terminated members entitled to, but not yet receiving benefits	307
Active members	4,274
Total	6,333

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	570	445	55	52	14	4
Family; Pre-Medicare	145	139	2	3	1	0
Parent Plus; Pre-Medicare	65	58	1	2	3	1
Couple; Pre-Medicare	174	151	9	8	4	2
Medicare Regular	61	5	10	28	18	0
Medicare High Option	567	349	83	108	25	2
Total	1,582	1,147	160	201	65	9

EXHIBIT IV – Non-Hazardous

Supplementary GASB Information - Schedule of Retirees and Beneficiaries

Valuation Date July 1	Added to Rolls		Removed from Rolls		Rolls – End of Year		% Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance		
2003	2,148	$48,272,600	1,618	$13,060,300	27,233	$393,048,800	N/A	$14,400
2004	2,473	57,329,300	814	6,092,500	28,892	449,410,400	14.34%	15,600
2005	2,481	56,489,600	603	5,298,200	30,770	509,347,800	13.34	16,600

EXHIBIT IV – Hazardous

Supplementary GASB Information - Schedule of Retirees and Beneficiaries

Valuation Date July 1	Added to Rolls		Removed from Rolls		Rolls – End of Year		% Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance		
2003	170	$2,333,400	21	$130,400	1,357	$12,974,700	N/A	$9,600
2004	227	3,070,600	35	155,000	1,549	16,099,000	28.08%	10,400
2005	234	3,415,500	31	191,100	1,752	19,640,700	22.00	11,200

EXHIBIT V

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: 1983 Group Annuity Mortality Table*

Disabled: Pension Benefit Guaranty Corporation Table for Disabled Lives Receiving Social Security

* Rates increased by 0.05% for hazardous plan active members.

Termination Rates before Retirement:

	Non-Hazardous				Hazardous			
	Rate (%)				Rate (%)			
	Mortality		Disability	Withdrawal*	Mortality		Disability	Withdrawal**
Age	Male	Female			Male	Female		
20	0.04	0.02	0.03	2.40	0.09	0.07	0.04	3.04
25	0.05	0.03	0.03	2.40	0.10	0.08	0.04	3.04
30	0.06	0.03	0.04	2.40	0.11	0.08	0.05	3.38
35	0.09	0.05	0.06	2.40	0.14	0.10	0.07	2.44
40	0.12	0.07	0.10	2.00	0.17	0.12	0.13	1.50
45	0.22	0.10	0.21	1.80	0.27	0.15	0.26	0.75
50	0.39	0.16	0.42	1.60	0.44	0.21	0.53	0.00
55	0.61	0.25	0.79	1.20	0.66	0.30	0.99	0.00
60	0.92	0.42	1.39	0.20	0.97	0.47	1.74	0.00

*Withdrawal rates during the first five years of employment are 35%, 10%, 7%, 5%, and 4% for non-hazardous plan members.

**Withdrawal rates during the first five years of employment are 30%, 8%, 4%, 4%, and 4% for hazardous plan members.

Non-Hazardous Retirement Rates:

Age	Retirement Probability*
55-57	0.04
58-59	0.05
60-61	0.06
62	0.25
63-64	0.10
65	0.50
66-67	0.20
68	0.25
69	0.40
70 and older	1.00

*Retirement probability is 0.25 at first age member is eligible for unreduced retirement benefits.

Hazardous Retirement Rates:	50% will retire as soon as eligible for unreduced benefit and balance will continue until age 60.
Non-Hazardous Retirement Age for Inactive Vested Participants:	65
Hazardous Retirement Age for Inactive Vested Participants:	55
Percent Married:	100%
Age of Spouse:	Females 3 years younger than males.
Dependent Children:	For a hazardous employee's duty-related death benefits, it is assumed that the employee is survived by two dependent children each age 6.
Net Investment Return:	8.25%

Salary Increases:

Years of Service	Rate (%)
1	12.00
2	10.00
3	8.00
4 or more	6.50

Payroll Growth: 5.0%

Retiree Medical Insurance Election: Future retirees will select medical coverage in the same proportion that current retirees have selected coverage.

Monthly Contribution Rates:

Pre-Medicare Coverage
Rate in Effect on Valuation Date

	Single	Family	Parent Plus	Couple
Region 1	$403.28	$1,008.20	$604.92	$907.38
Region 2	412.53	1,031.33	618.80	928.19
Region 3	394.80	987.02	592.28	888.28
Region 4	403.96	1,009.92	605.96	908.92
Region 5	400.64	1,001.60	600.96	901.44
Region 6	496.28	1,240.52	744.28	1,116.53
Region 7	447.52	1,118.80	671.28	1,006.92
Region 8	405.44	1,013.60	608.16	912.24

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem Blue Seniors	$119.00	$331.30	1,621	11,804
Bankers Life Medicare	103.13	146.54	343	417
The Hartford	135.23	298.98	12	110

	Weighted Medicare Coverage Rate in Effect on Valuation Date	
	Low Option	**High Option**
All Members	$116.00	$323.43

Medical Contribution Rate Increases:	**Year**	**Rate(%)**
	2005	10.00
	2006-2010	9.00
	2011-2015	8.00
	2016-2020	7.50
	2021 and thereafter	7.00

Members with Multiple Service Records: For active members with service in more than one system, the liability has been valued as follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.
- Future service is projected only under the system in which the member is currently active.
- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Non-Hazardous Administrative Expenses:	$6,000,000
Hazardous Administrative Expenses:	$500,000
Actuarial Value of Assets:	Market value of assets less unrecognized return in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.

EXHIBIT VI

Summary of Plan Provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Non-Hazardous Normal Retirement:	
Age Requirement	65
Service Requirement	None
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For member who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factors is 2.00%. For these members who retire between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20% Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period is less than forty-eight, one or more additional fiscal years shall be used. For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used.

Hazardous Normal Retirement:

Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.49% times final average compensation time years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Early Retirement:

Requirement	Age 55 with 60 months service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 5% per year for the first five years and 4% per year for the next five years for each year the member is younger than age 65 or has less than 27 years service, whichever is smaller.

Hazardous Early Retirement:

Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with

	at least 25 years of service but less than 27 years service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.
Hazardous Disability:	
Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 of more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:	
Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.
Insurance Plan for Retirees:	
Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System.
Members whose participation began on or after July 1, 2003	The Retirement System pays $10 per month per year of service toward medical premiums for non-hazardous retirees, $15 per month per year of service for hazardous retirees, and $10 per month per year of service for surviving spouses of hazardous employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of hazardous service.

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County Employees Retirement System

Actuarial Valuation and Review
as of June 30, 2005

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SEGAL

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October 13, 2005

Board of Trustees
County Employees Retirement System
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601-6124

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2005. It summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2006 and analyzes the preceding year's experience.

The census information on which our calculations were based was prepared by the System and the financial information was provided by the Auditor. That assistance is gratefully acknowledged.

This report is for the purpose of determining statutory funding requirements for the Retirement and Insurance Plans. Statutory funding requirements may not take all actuarial liabilities of the plans into account. Specifically, in determining employer funding requirements, state statute limits recognition of retiree and beneficiary Cost of Living Adjustments (COLAs) to only the adjustments granted as of the valuation date. Accordingly, care should be taken in using this report for other purposes.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By: _____ _____

Leon F. (Rocky) Joyner, Jr., FCA, ASA, MAAA
Vice President and Actuary

K. Eric Fredén, FSA, MAAA
Associate Actuary

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SECTION 1: Valuation Summary for the County Employees Retirement System

Purpose

This report has been prepared by The Segal Company to present a valuation of the County Employees Retirement System as of June 30, 2005. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2005, provided by the Board;
- The assets of the Plan as of June 30, 2005, provided by the Auditor;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The County Employees Retirement System's basic financial goal is to establish contributions which fully fund the System's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.
- The retirement contribution rate is determined using the Entry Age Normal Cost (EANC) Method. Under this method the employer contribution required is the sum of the normal cost, administration expenses and the sum of the 30-year amortization payments established each valuation due to changes in the Unfunded Actuarial Accrued Liability.
- The medical insurance contribution rate is determined in a similar method except that the actual contribution rate is determined by increasing the prior year's rate by an amount necessary to raise the insurance rate to the full EANC amount by the year 2016.
- The rates calculated in this report may be adopted by the Board for July 1, 2006 through June 30, 2007.

- The following summarizes the required contributions for the year beginning July 1, 2006 and compares them to the prior valuation amounts.

Non-Hazardous

Plan	July 1, 2006 Rate	July 1, 2005 Rate
Retirement	5.97%	4.55%
Insurance	7.22	6.43
Total	13.19%	10.98%

Hazardous

Plan	July 1, 2006 Rate	July 1, 2005 Rate
Retirement	13.11%	11.22%
Insurance	15.10	13.79
Total	28.21%	25.01%

- The increase in the total rate is due to:

Non-Hazardous

Retirement plan investment loss	1.10%
Retiree COLA	0.16
Insurance Phase-in*	0.79
Change in administrative expense assumption	0.07
Change in plan provisions	-0.15
Other experience	0.24
Total change	2.21%

Hazardous

Retirement plan investment loss	1.34%
Retiree COLA	0.26
Insurance Phase-in*	1.31
Change in administrative expense assumption	0.02
Change in plan provisions	-0.16
Other experience	0.43
Total change	3.20%

* Includes a portion of all insurance plan gains and losses for the year.

- Certain plan provisions have changed since the last valuation of the plans. For members whose participation began on or after August 1, 2004, the non-hazardous normal retirement benefit accrual factor is reduced from 2.20% to 2.00% of final average compensation for each year of service. In addition, the disability benefit for such members is equal to the benefit calculated as a normal retirement benefit based on service to date of disability retirement, or 20% of the Final Rate of Pay, if larger, for non-hazardous members. For hazardous members, the minimum disability benefit is 25% of the Final Rate of Pay. Disability benefits on this basis may be available even after the normal retirement age. For members whose participation began after July 1, 2003, the Insurance plan of the Retirement System pays $10 per month per year of service for non-hazardous members, $15 per month per year of service for hazardous duty members and $10 per month per year of service for surviving spouses of hazardous duty members "Line of Duty" insurance benefits will be calculated as if the member had art least 20 years of hazardous service. These dollar amounts will be adjusted periodically for general inflation. See Exhibit IV for a summary of all plan provisions. These changes reduced the contribution rate for the non-hazardous Retirement plan by 0.05% of payroll, and reduced the contribution rate for the Insurance plan by 0.10% of non-hazardous member payroll and 0.16% of hazardous member payroll.
- As indicated in Section 2, Subsection B of this report, the total unrecognized investment losses as of June 30, 2005 are:

Non-Hazardous

Plan	Unrecognized investment (gains)/losses as of 6/30/2005	Actuarial value as a percentage of market value
Retirement	$165,608,690	103.4%
Insurance	-4,543,418	99.3

Hazardous

Plan	Unrecognized investment (gains)/losses as of 6/30/2005	Actuarial value as a percentage of market value
Retirement	$41,107,304	102.9%
Insurance	-1,758,208	99.5

The investment losses for the Retirement plans will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent they are not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.25% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.25% rate and all other actuarial assumption are met, the contribution requirements would still increase in each of the next few years.

- The funded ratio for the non-hazardous Retirement Plan on a statutory basis is 93.94%. This ratio is down from 105.9% last year primarily due to further recognition of deferred investment losses this year. This ratio is based on the actuarial liabilities and asset values computed for the purpose of meeting funding requirements on the basis required by state law. This basis does not take all actuarial liabilities and investment performance to date into account. It also does not consider the contractual nature of the retiree medical benefits provided by CERS. If the Retirement and Insurance results were combined, if the market value instead of actuarial value of assets were used, and if a 3% annual cost-of living adjustment for retirement benefits were assumed to be in effect for all future years, then the funded ratio for the combined non-hazardous Retirement and Insurance plans would be 57.57%. The corresponding funded ratio for the hazardous plans would be 48.17%

Summary of Key Valuation Results

	County Non-Hazardous		County Hazardous		County Totals	
	June 30, 2005	June 30, 2004	June 30, 2005	June 30, 2004	June 30, 2005	June 30, 2004
Contributions for next fiscal year:						
Retirement	5.97%	4.55%	13.11%	11.22%	N/A	N/A
Insurance	7.22	6.43	15.10	13.79	N/A	N/A
Total	13.19%	10.98%	28.21%	25.01%	N/A	N/A
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$5,385,156,690	$4,936,459,488	$1,795,617,335	$1,640,830,120	$7,180,774,025	$6,577,289,608
Actuarial value of assets	5,059,208,687	5,187,851,530	1,452,353,023	1,457,612,042	6,511,561,710	6,645,463,572
Unfunded liability on actuarial value of assets	325,948,003	-251,392,042	343,264,312	183,218,078	669,212,315	-68,173,964
Funded ratio on actuarial value of assets	93.95%	105.09%	80.88%	88.83%	90.68%	101.04%
Market value of assets	$4,893,599,997	$4,613,335,957	$1,411,245,719	$1,305,011,472	$6,304,845,716	$5,918,347,429
Unfunded liability on market value of assets	491,556,693	323,123,531	384,371,616	335,818,648	875,928,309	658,942,179
Funded ratio on market value of assets	90.87%	93.45%	78.59%	79.53%	87.80%	89.98%
Insurance						
Actuarial accrued liability	$2,788,754,654	$2,438,734,696	$1,283,299,092	$1,025,684,477	$4,072,053,746	$3,464,419,173
Actuarial value of assets	663,941,949	585,399,072	359,180,461	310,578,162	1,023,122,410	895,977,234
Unfunded liability on actuarial value of assets	2,124,812,705	1,853,335,624	924,118,631	715,106,315	3,048,931,336	2,568,441,939
Funded ratio on actuarial value of assets	23.81%	24.00%	27.99%	30.28%	25.13%	25.86%
Market value of assets	$668,485,367	$563,877,594	$360,938,669	$297,734,286	1,029,424,036	861,611,880
Unfunded liability on market value of assets	2,120,269,287	1,874,857,102	922,360,423	727,950,191	3,042,629,710	2,602,807,293
Funded ratio on market value of assets	23.97%	23.12%	28.13%	29.03%	25.28%	24.87%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	31,347	29,129	4,361	4,005	35,708	33,134
Number of vested former members	7,771	6,927	482	361	8,253	7,288
Number of former members due a refund	41,098	37,492	1,489	1,287	42,587	38,779
Number of active members	81,240	80,922	9,464	9,349	90,704	90,271
Total salary	$1,885,275,000	$1,826,870,880	$411,121,728	$392,562,624	$2,296,396,728	$2,219,433,504
Average salary	23,206	22,576	43,441	41,990	25,317	24,586

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A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, C, and D.

The ratio of non-actives to actives has slowly but steadily climbed in both groups for the past decade. As the number of annuitants per active employee rises, cash flow is impacted. The system either becomes more dependent on investment income to cover benefit payments, or contributions must rise to meet these obligations. (For the two retirement plans, contributions have been less than benefit payments for six consecutive years.)

Active Members

Plan costs are affected by the age, years of service and salaries of active members. In this year's valuation, there were 81,240 active members with an average age of 45.0, average years of service of 8.1 years and average salaries of $23,206. The 80,922 active members in the prior valuation had an average age of 44.8, average service of 7.9 years and average salaries of $22,576.

In the hazardous plan, there were 9,464 active members with an average age of 38.0, average years of service of 8.2 years and average salaries of $43,441. The 9,349 active members in the prior valuation had an average age of 38.1, average service of 8.1 years and average salaries of $41,990.

Inactive Members

In this year's valuation, there were 7,771 non-hazardous members with a vested right to a deferred or immediate vested benefit. In addition, there were 41,098 members entitled to a return of their employee contributions.

For the hazardous plan, there were 482 members with a vested right to a deferred or immediate vested benefit. In addition, there were 1,489 members entitled to a return of their employee contributions.

Retired Participants and Beneficiaries

As of June 30, 2005, 28,060 non-hazardous retired participants and 3,287 beneficiaries were receiving total monthly benefits of $23,299,195. For comparison, in the previous valuation, there were 26,075 retired participants and 3,054 beneficiaries receiving monthly benefits of $20,627,857.

For the hazardous plan, 3,839 retired participants and 522 beneficiaries were receiving total monthly benefits of $7,435,388. For comparison, in the previous valuation, there were 3,514 retired participants and 491 beneficiaries receiving monthly benefits of $6,629,934.

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A historical perspective of how the member population has changed over the past nine valuations can be seen in these charts.

CHART 1A – Non-Hazardous

Member Population: 1997 – 2005

Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1997	69,219	2,503	17,797	0.29
1998	71,426	2,839	18,976	0.31
1999	74,151	3,238	20,687	0.32
2000	77,419	3,500	22,708	0.34
2001	78,773	4,080	24,415	0.36
2002	79,850	4,470	26,147	0.38
2003	82,288	4,692	27,092	0.39
2004	80,922	6,927	29,129	0.45
2005	81,240	7,771	31,347	0.48

CHART 1B – Hazardous

Member Population: 1997 – 2005

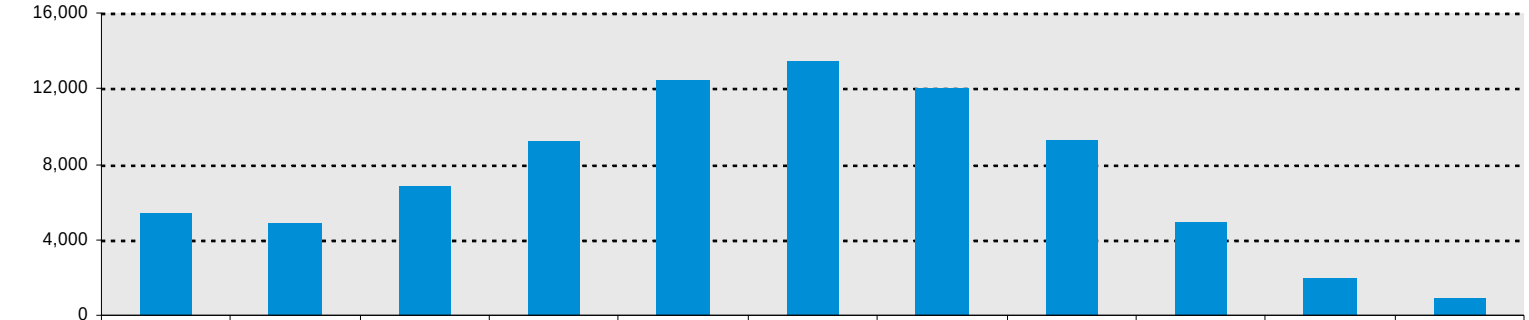
Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1997	6,513	100	2,217	0.36
1998	6,800	117	2,392	0.37
1999	7,488	128	2,704	0.38
2000	7,951	112	2,984	0.39
2001	8,586	148	3,221	0.39
2002	8,949	148	3,483	0.41
2003	9,286	165	3,737	0.42
2004	9,349	361	4,005	0.47
2005	9,464	482	4,361	0.51

**Excludes terminated members due a refund of employee contributions.*

These graphs show a distribution of non-hazardous active members by age and by years of service.

CHART 2A – Non-Hazardous

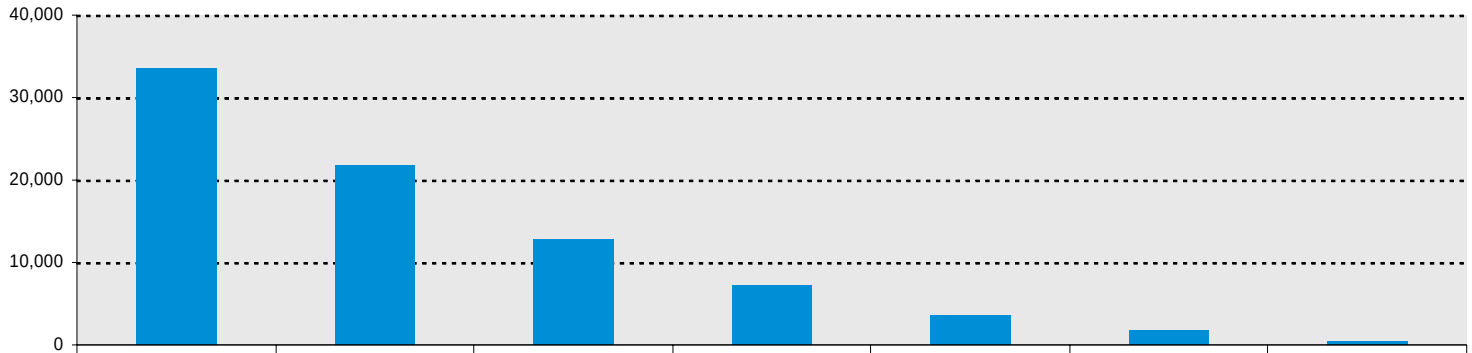
Distribution of Active Members by Age as of June 30, 2005



	Under 25	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 & over
Actives	5,414	4,832	6,816	9,170	12,467	13,415	11,994	9,325	4,985	1,910	912

CHART 3A – Non-Hazardous

Distribution of Active Members by Years of Service as of June 30, 2005

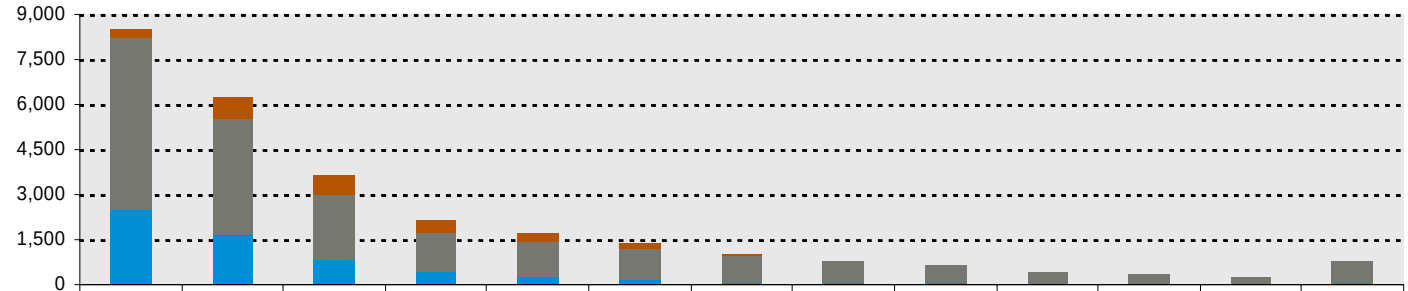


	0-4	5-9	10-14	15-19	20-24	25-29	30 & over
Actives	33,673	21,751	12,744	7,138	3,665	1,796	473

These graphs show a distribution of the current non-hazardous retired participants based on their monthly amount and age, by type of pension.

CHART 4A – Non-Hazardous

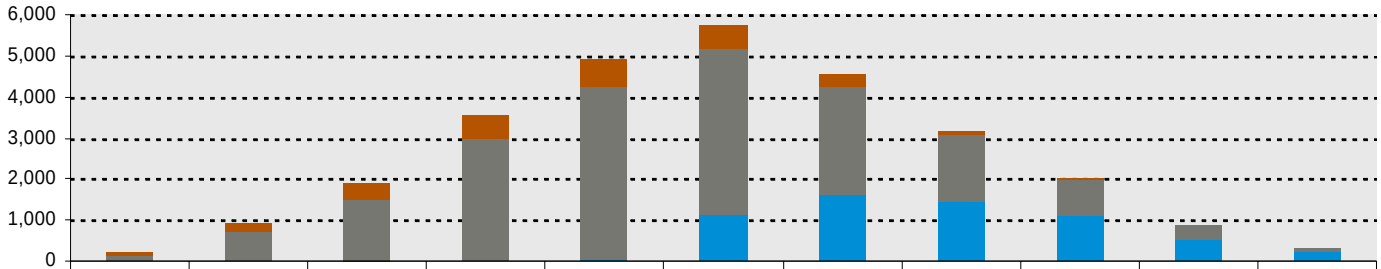
Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2005



	Under $250	$250 - $499	$500 - $749	$750 - $999	$1,000 - $1,249	$1,250 - $1,499	$1,500 - $1,749	$1,750 - $1,999	$2,000 - $2,249	$2,250 - $2,499	$2,500 - $2,749	$2,750 - $2,999	$3,000 & over
Disability	335	728	669	427	343	184	88	32	26	11	6	2	3
Early	5,669	3,828	2,148	1,351	1,178	1,059	861	695	621	381	346	251	703
Normal	2,539	1,679	827	402	235	151	89	59	37	19	15	13	50

CHART 5A – Non-Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2005

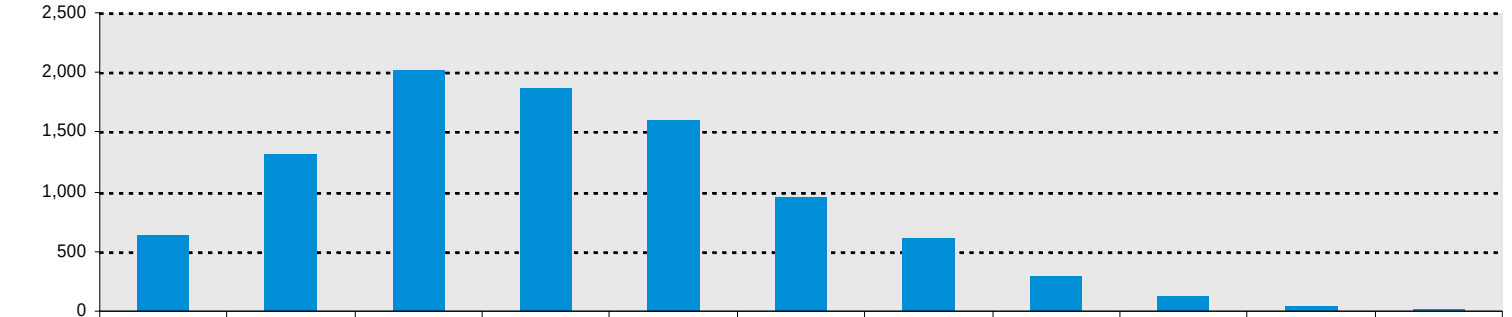


	Under 45	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 & over
Disability	105	186	360	569	644	559	290	80	34	25	2
Early	121	716	1,508	2,985	4,231	4,015	2,617	1,624	874	317	83
Normal	0	0	0	12	27	1,152	1,636	1,438	1,097	543	210

These graphs show a distribution of hazardous active members by age and by years of service.

CHART 2B – Hazardous

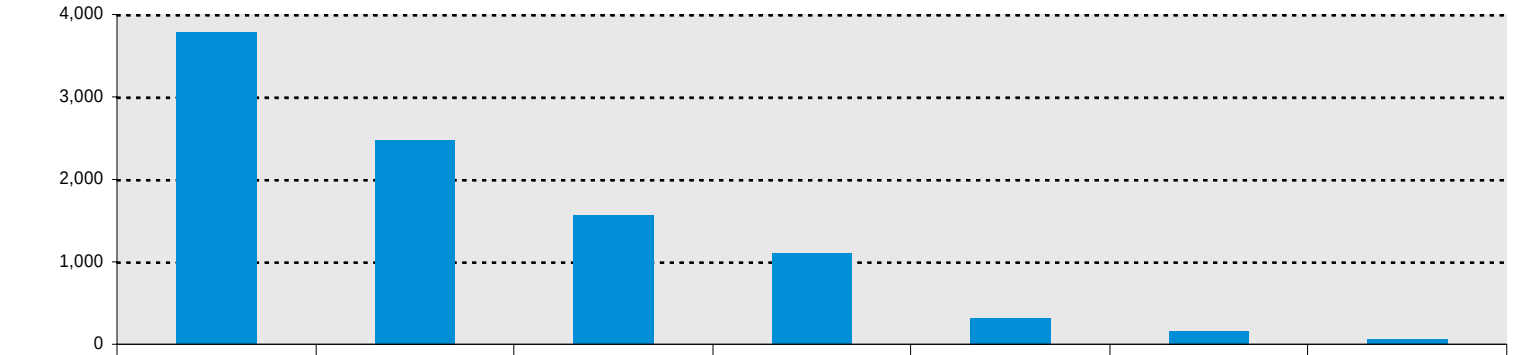
Distribution of Active Members by Age as of June 30, 2005



	Under 25	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 & over
Actives	632	1,318	2,019	1,868	1,602	950	613	285	123	45	9

CHART 3B – Hazardous

Distribution of Active Members by Years of Service as of June 30, 2005

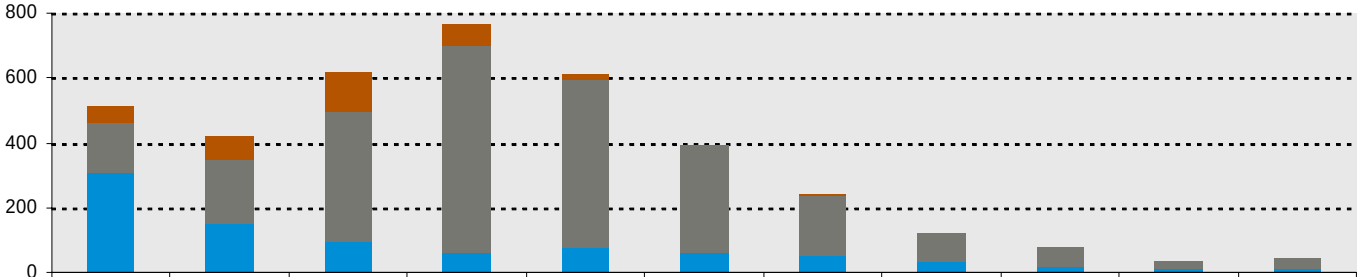


	0-4	5-9	10-14	15-19	20-24	25-29	30 & over
Actives	3,788	2,476	1,565	1,098	327	156	54

These graphs show a distribution of the current hazardous retired participants based on their monthly amount and age, by type of pension.

CHART 4B – Hazardous

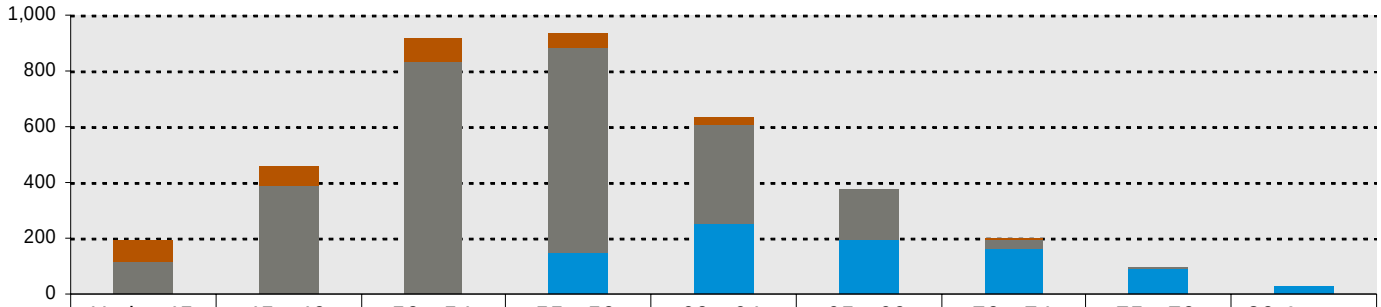
Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2005



	Under $500	$500 - $999	$1,000 - $1,499	$1,500 - $1,999	$2,000 - $2,499	$2,500 - $2,999	$3,000 - $3,499	$3,500 - $3,999	$4,000 - $4,499	$4,500 - $4,999	$5,000 & over
Disability	49	73	119	70	17	2	1	1	0	0	0
Early	153	199	405	637	517	330	188	89	59	22	34
Normal	311	148	93	61	77	59	52	34	19	9	11

CHART 5B – Hazardous

Distribution of Retired Participants by Type and by Age as of June 30, 2005



	Under 45	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 & over
Disability	78	70	88	54	27	5	7	2	1
Early	114	388	830	733	352	177	34	3	2
Normal	0	0	0	151	252	195	160	93	23

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B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative and investment expenses) and net investment earnings (less common stock commissions and securities lending expense) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits E and F.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

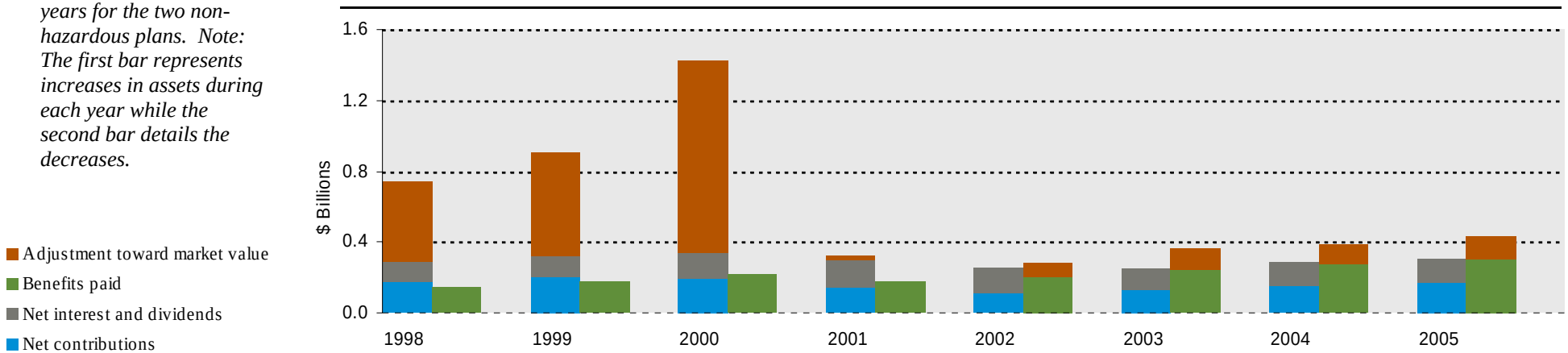
The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Both the actuarial value and market value of assets are representations of the System's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the System's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

These charts depict the components of changes in the actuarial value of assets over the last eight years for the two non-hazardous plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6A – Non-Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1998 – 2005



Non-Hazardous Retirement

Development of the Fund Through June 30, 2005

Year Ended June 30	Employer Contributions*	Member Contributions	Net Interest and Dividends**	Adjustment Toward Market Value	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1998	$107,526,000	$74,382,000	$113,937,000	$448,646,445	$5,620,000	$142,863,000	$3,346,205,003
1999	110,591,000	98,566,000	120,509,000	582,815,432	6,519,000	179,940,000	4,072,227,435
2000	106,587,000	96,676,000	143,530,000	1,086,361,099	7,350,000	213,998,000	5,284,033,534
2001	48,914,000	101,597,000	155,881,000	20,266,015	7,820,000	179,037,000	5,423,834,549
2002	4,663,371	121,573,670	141,791,936	-79,867,632	10,029,562	204,179,174	5,397,787,158
2003	11,855,694	125,300,584	124,381-363	-121,335,398	10,879,055	240,530,299	5,286,580,047
2004	44,028,465	122,484,428	130,892,445	-112,243,733	11,913,070	271,977,052	5,187,851,530
2005	54,616,800	127,636,735	137,162,844	-128,420,908	14,005,886	305,632,428	5,059,208,687

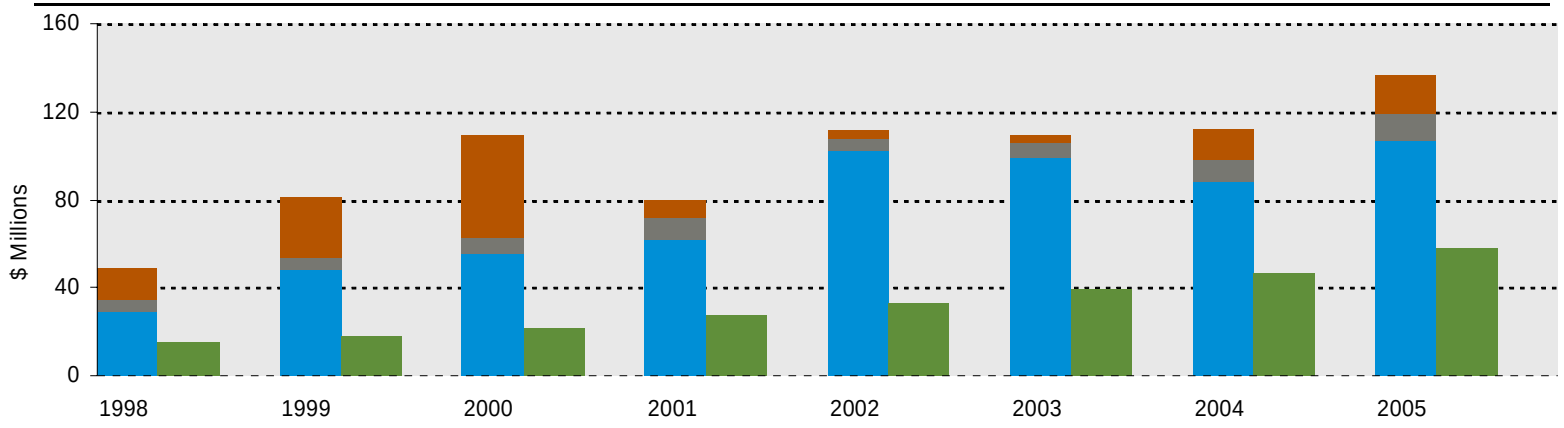
* *Net contributions is the sum of employer and member contributions less administrative and investment expenses.*

** *Net of stock commissions and securities lending expense*

These charts depict the components of changes in the actuarial value of assets over the last eight years for the two non-hazardous plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6B – Non-Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1998 – 2005



Non-Hazardous Insurance

Development of the Fund Through June 30, 2005

Year Ended June 30	Employer Contributions*	Insurance Appropriation Contributions	Net Interest and Dividends**	Adjustment Toward Market Value	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1998	$29,271,000	$0	$5,373,000	$14,824,200	$25,000	$15,600,000	$168,531,296
1999	47,902,000	0	6,294,000	26,753,873	52,000	17,492,000	231,937,169
2000	55,214,000	0	7,965,000	46,582,525	114,000	21,942,000	319,642,694
2001	62,292,000	0	9,332,000	8,274,934	244,000	27,539,000	371,758,628
2002	102,150,788	0	6,286,566	3,397,597	401,971	32,694,301	450,497,307
2003	99,234,843	0	7,217,788	2,804,204	309,021	39,385,015	520,060,105
2004	89,344,241	0	9,549,993	13,804,584	708,301	46,651,550	585,399,072
2005	106,638,253	993,727	12,681,728	17,521,143	1,029,817	58,262,157	663,941,949

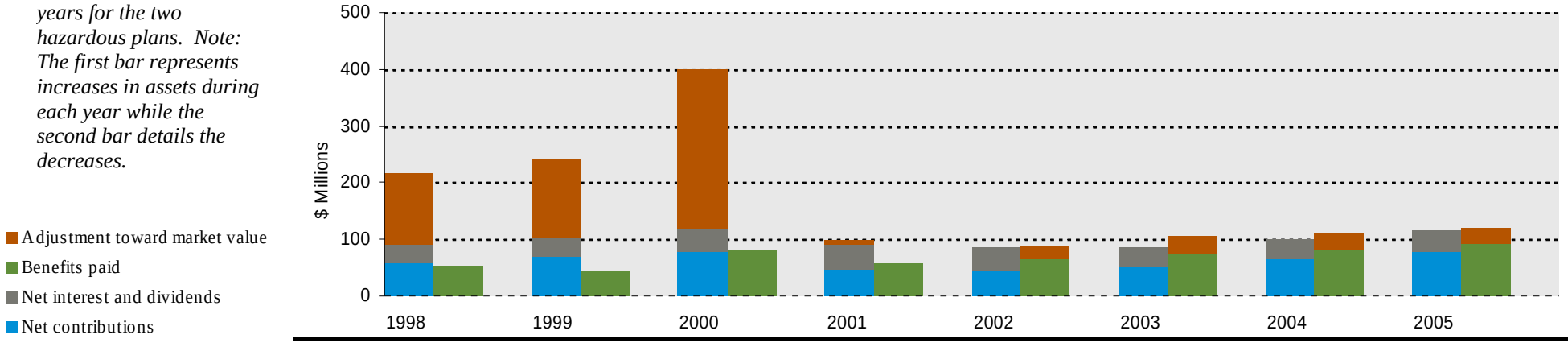
* *Net contributions is the sum of employer contributions less administrative and investment expenses.*

** *Net of stock commissions and securities lending expense*

These charts depict the components of changes in the actuarial value of assets over the last eight years for the two hazardous plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6C – Hazardous Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1998 – 2005



Hazardous Retirement

Development of the Fund Through June 30, 2005

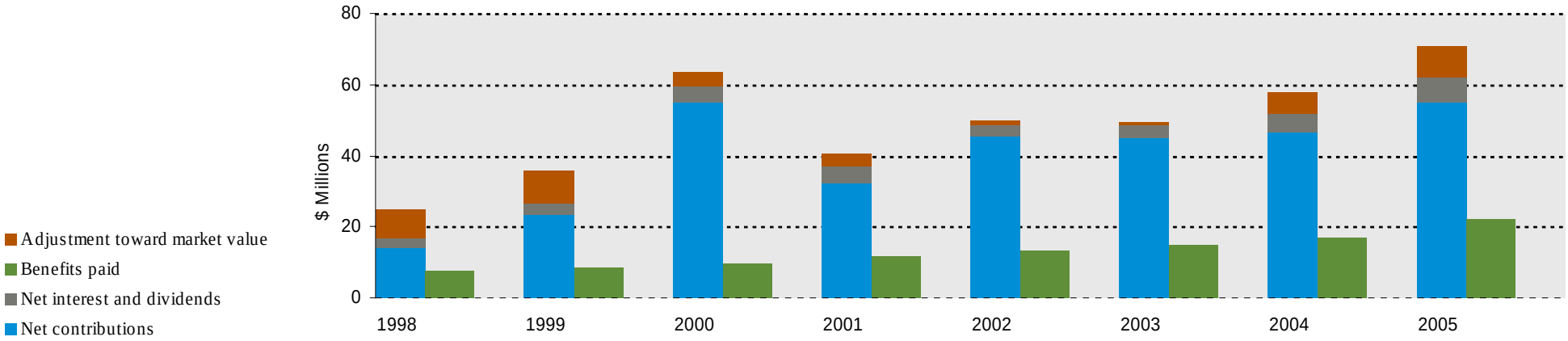
Year Ended June 30	Employer Contributions*	Member Contributions	Net Interest and Dividends**	Adjustment Toward Market Value	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1998	$42,298,000	$16,581,000	$32,158,000	$126,357,182	$902,000	$53,264,000	$927,057,492
1999	48,291,000	22,918,000	33,560,000	137,945,547	939,000	44,181,553	1,124,651,486
2000	51,739,000	28,476,000	39,901,000	281,307,308	1,085,000	79,447,000	1,445,542,794
2001	20,983,000	27,279,000	42,810,000	8,670,222	974,000	57,645,000	1,486,666,016
2002	10,904,214	35,164,272	41,988,855	-22,692,628	1,382,853	65,136,083	1,485,511,793
2003	16,905,556	36,202,579	34,987,251	-30,769,513	1,507,060	74,325,750	1,467,004,856
2004	27,640,775	38,667,764	36,316,694	-26,431,067	1,644,607	83,942,373	1,457,612,042
2005	39,947,747	39,515,038	38,557,672	-28,977,285	2,044,131	92,258,060	1,452,353,023

* *Net contributions is the sum of employer and member contributions less administrative and investment expenses.*

** *Net of stock commissions and securities lending expense*

CHART 6D – Hazardous Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1998 – 2005



Hazardous Insurance

Development of the Fund Through June 30, 2005

Year Ended June 30	Employer Contributions*	Insurance Appropriation Contributions	Net Interest and Dividend**	Adjustment Toward Market Value	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1998	$14,275,000	$0	$2,757,000	$7,753,398	$25,000	$7,538,000	$87,055,079
1999	23,383,000/	0	3,176,000	9,273,144	25,000	8,272,000	114,590,223
2000	55,214,000	0	4,270,000	4,232,689	52,000	9,597,000	168,657,912
2001	32,149,000	0	5,141,000	3,567,337	109,000	11,531,000	197,875,249
2002	45,730,333	0	3,234,643	1,126,092	187,302	13,095,137	234,683,878
2003	45,243,950	0	3,710,646	562,884	142,705	14,868,573	269,190,080
2004	47,036,777	0	5,025,818	6,287,672	260,354	16,701,831	310,578,162
2005	54,106,577	1,445,360	6,864,339	8,606,467	435,800	21,984,644	359,180,461

* *Net contributions is the sum of employer contributions less administrative and investment expenses.*

** *Net of stock commissions and securities lending expense*

These charts show the determination of the actuarial value of assets as of the valuation date.

CHART 7A – Non-Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2005

1. Market value of assets			$4,893,599,997
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2005	-$4,681,810	-$936,362	-$3,745,448
(b) Year ended June 30, 2004	124,531,026	24,906,205	74,718,448
(c) Year ended June 30, 2003	-278,226,609	-55,645,322	-111,290,644
(d) Year ended June 30, 2002	-626,456,069	-125,291,214	-125,291,214
(e) Year ended June 30, 2001	-1,283,110,002	-256,622,000	0
(f) Total unrecognized return			-165,608,690
3. Final actuarial value of assets: (1) – (2f)			$5,059,208,687
4. Actuarial value as a percentage of market value: (3) ÷ (1)			103.4%

CHART 7B – Non-Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2005

1. Market value of assets			$668,485,367
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2005	$5,978,318	$1,195,664	$4,782,654
(b) Year ended June 30, 2004	41,589,264	8,317,853	24,953,558
(c) Year ended June 30, 2003	-28,828,353	-5,765,671	-11,531,342
(d) Year ended June 30, 2002	-68,307,263	-13,661,453	-13,661,453
(e) Year ended June 30, 2001	-50,864,852	-10,172,970	0
(f) Total unrecognized return			4,543,418
3. Final actuarial value of assets: (1) – (2f)			$663,941,949
4. Actuarial value as a percentage of market value: (3) ÷ (1)			99.3%

** Total return on market value basis minus expected return on actuarial basis using the net investment return assumption. See Chart 8 for the calculation of unrecognized return for the current year.*

These charts show the determination of the actuarial value of the assets as of the valuation date.

CHART 7C – Hazardous Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2005

1. Market value of assets			$1,411,245,719
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2005	$1,432,785	$286,557	$1,146,228
(b) Year ended June 30, 2004	35,262,776	7,052,555	21,157,666
(c) Year ended June 30, 2003	-74,447,276	-14,889,455	-29,778,910
(d) Year ended June 30, 2002	-168,161,440	-33,632,288	-33,632,288
(e) Year ended June 30, 2001	-344,389,248	-68,877,850	-0
(f) Total unrecognized return			-41,107,304
3. Final actuarial value of assets: (1) – (2f)			$1,452,353,023
4. Actuarial value as a percentage of market value: (3) ÷ (1)			102.9%

CHART 7D – Hazardous Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2005

1. Market value of assets			$360,938,669
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2005	$3,083,518	$616,704	$2,466,814
(b) Year ended June 30, 2004	20,998,596	4,199,719	12,599,158
(c) Year ended June 30, 2003	-15,162,699	-3,032,540	-6,065,080
(d) Year ended June 30, 2002	-36,213,421	-7,242,684	-7,242,684
(e) Year ended June 30, 2001	-30,298,823	-6,059,765	0
(f) Total unrecognized return			1,758,208
3. Final actuarial value of assets: (1) – (2f)			$359,180,461
4. Actuarial value as a percentage of market value: (3) ÷ (1)			99.5%

** Total return on market value basis minus expected return on actuarial basis using the net investment return assumption. See Chart 8 for the calculation of unrecognized return for the current year.*

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CHART 8

Calculation of Unrecognized Return for the Year Ended June 30, 2005

		Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1.	Employer and member contributions	$182,253,535	$107,631,980	$79,462,785	$55,551,937
2.	Benefit payments including refunds, or healthcare premiums	305,632,428	58,262,157	92,258,060	21,984,644
3.	Administrative and investment expenses	14,005,886	1,029,817	2,044,131	435,800
4.	Net cash flow: (1) - (2) - (3)	-137,384,779	48,340,006	-14,839,406	33,131,493
5.	Market value of assets as of June 30, 2004	4,613,335,957	563,877,594	1,305,011,472	297,734,286
6.	Market value of assets as of June 30, 2005	4,893,599,997	668,485,367	1,411,245,719	360,938,669
7.	Actuarial value of assets as of June 30, 2004	5,187,851,530	585,399,072	1,457,612,042	310,578,162
8.	Average actuarial value of assets: (7) + [0.5 x (4)]	5,119,159,140	609,569,075	1,450,192,339	327,143,909
9.	Expected return on an actuarial basis: 8.25% of (8)	422,330,629	50,289,449	119,640,868	26,989,372
10.	Gain/(loss) for the year ended June 30, 2005: (6) - (5) - (4) - (9)	-4,681,810	5,978,318	1,432,785	3,083,518
11.	Unrecognized return as of June 30, 2005: 80% of (10)	-3,745,448	4,782,654	1,146,228	2,466,814

These charts show the change in the actuarial value of assets versus the market value over the past eight years for the non-hazardous plans.

CHART 9A – Non-Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1998 – 2005

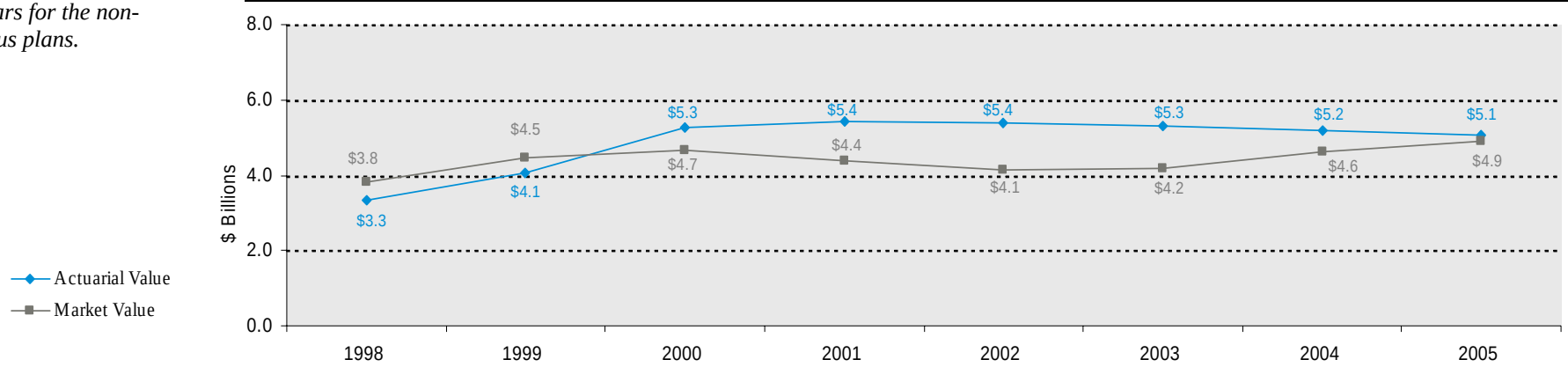
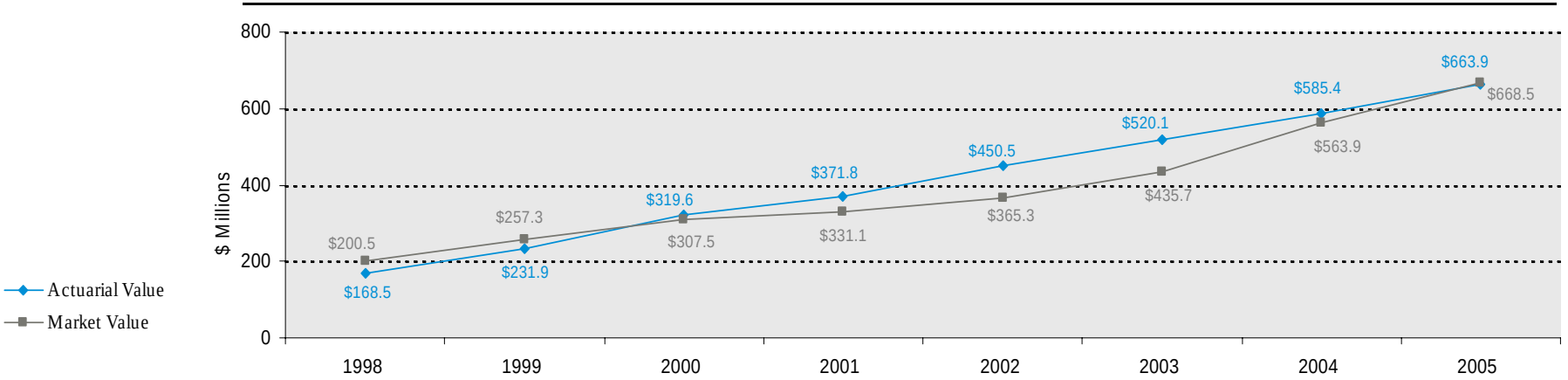


CHART 9B – Non-Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1998 – 2005



These charts show the change in the actuarial value of assets versus the market value over the past eight years for the hazardous plans.

CHART 9C – Hazardous Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1998 – 2005

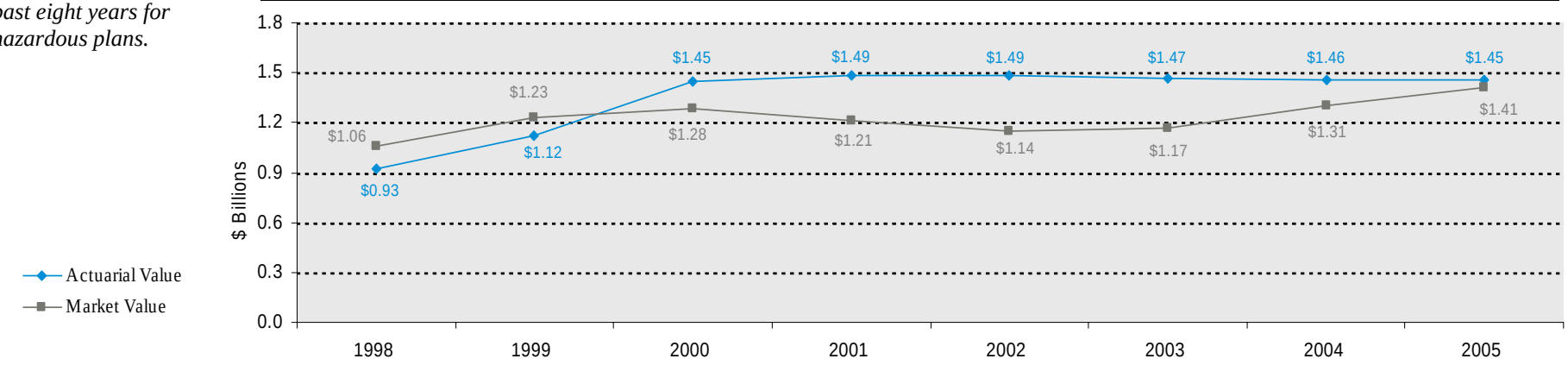
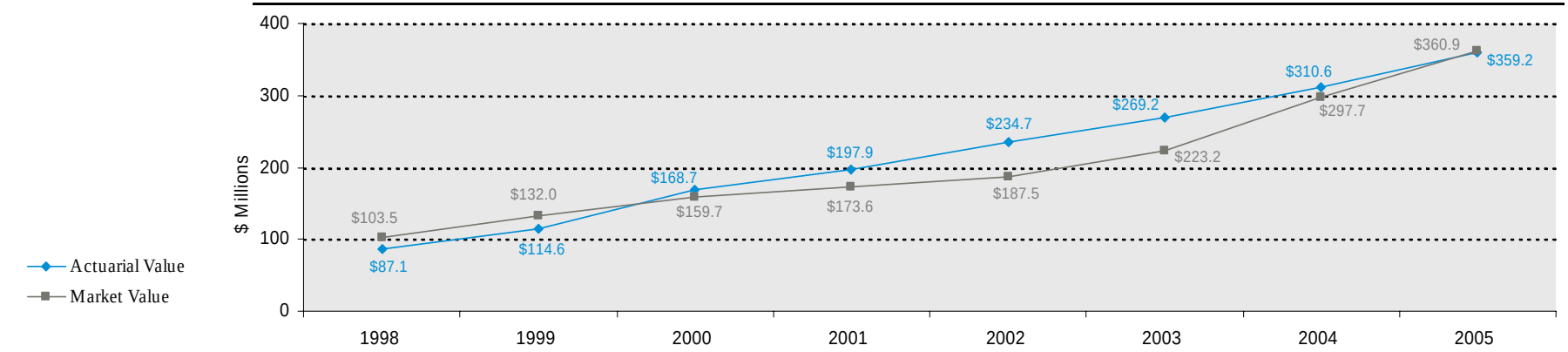


CHART 9D – Hazardous Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1998 – 2005



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Chart 10 presents a summary of experience for the year. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 10

Actuarial Experience for Year Ended June 30, 2005

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Net gain/(loss) from investments*	-$413,588,693	-$20,086,577	-$110,060,481	-$11,518,567
2. Net gain/(loss) from administrative expenses	-1,438,688	-524,828	-77,522	-198,350
3. Net gain/(loss) from other experience**	-158,856,414	30,418,491	-47,369,167	-12,337,614
4. Net experience gain/(loss): (1) + (2) + (3)	-$573,883,795	$9,807,086	-$157,507,170	-$24,054,531

** Details in Chart 11*

*** Details in Chart 14*

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the System's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.25%. Chart 11 shows the net investment experience for each plan for the year.

Since the actual return for the year was less than the assumed return, each plan experienced an actuarial loss during the year ended June 30, 2005 with regard to its investments.

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. Chart 12, which follows, shows the rate of return on an actuarial basis compared to the market value investment return for the last eight years.

This chart shows the losses due to investment experience.

CHART 11

Actuarial Value Investment Experience for Year Ended June 30, 2005

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. Actual return	$8,741,936	$30,202,871	$9,580,387	$15,470,806
2. Average value of assets	5,119,159,140	609,569,075	1,450,192,339	327,143,909
3. Actual rate of return: (1) ÷ (2)	0.17%	4.95%	0.66%	4.73%
4. Assumed rate of return	8.25%	8.25%	8.25%	8.25%
5. Expected return: (2) x (4)	$422,330,629	$50,289,448	$119,640,868	$26,989,373
6. Actuarial gain/(loss): (1) – (5)	-$413,588,693	-$20,086,577	-$110,060,481	-$11,518,567

CHART 12A – Non-Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1998 - 2005

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1998	$113,937,000	4.12%	$448,646,445	16.21%	$562,583,445	21.33%	$673,873,449	21.42%
1999	120,509,000	3.59	582,815,432	17.36	703,324,432	20.95	614,212,590	15.96
2000	143,530,000	3.53	1,086,361,099	26.74	1,229,891,099	30.27	217,824,204	4.88
2001	155,881,000	2.96	20,266,015	0.38	176,147,015	3.35	-239,461,644	-5.14
2002	141,791,936	2.64	-79,867,632	-1.48	61,924,304	1.15	-185,461,064	-4.26
2003	124,381,363	2.33	-121,335,398	-2.27	3,045,965	0.06	162,377,892	3.99
2004	130,892,445	2.50	-112,243,733	-2.15	18,648,712	0.36	555,832,069	13.50
2005	137,162,844	2.68	-128,420,908	-2.51	8,741,936	0.17	417,648,819	9.19
Total	$1,068,085,588		$1,696,221,320		$2,764,306,908		$2,216,846,315	
					Average return	7.57%		6.68%

CHART 12B – Non-Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1998 - 2005

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1998	$5,373,000	3.80%	$14,824,200	10.48%	$20,197,200	14.27%	$32,898,822	20.46%
1999	6,294,000	3.43	26,753,873	14.56	33,047,873	17.99	26,461,016	12.27
2000	7,965,000	3.21	46,582,525	18.74	54,547,525	21.95	17,083,861	6.24
2001	9,332,000	2.77	8,274,934	2.46	17,606,934	5.23	-10,987,582	-3.38
2002	6,286,566	1.55	3,397,597	0.84	9,684,163	2.38	-34,930,434	-9.55
2003	7,217,788	1.50	2,804,204	0.58	10,021,992	2.09	10,793,733	2.73
2004	9,549,993	1.77	13,804,584	2.55	23,354,577	4.32	86,226,079	18.88
2005	12,681,728	2.08	17,521,143	2.87	30,202,871	4095	56,267,767	9.57
Total	$64,700,075		$133,963,059		$198,663,134		$183,813,262	
					Average return	6.74%		6.61%

Note: Each year's yield is weighted by the average asset value in that year.

CHART 12C – Hazardous Retirement

Investment Return – Actuarial Value vs. Market Value: 1998 - 2005

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1998	$32,158,000	4.20%	$126,357,182	16.49%	$158,515,182	20.69%	$181,742,476	20.83%
1999	33,560,000	3.57	137,945,547	14.67	171,505,547	18.24	143,494,373	13.42
2000	39,901,000	3.55	281,307,308	25.02	321,208,308	28.56	54,094,746	4.41
2001	42,810,000	2.97	8,670,222	0.60	51,480,222	3.57	-58,424,532	-4.58
2002	41,988,855	2.84	-22,692,628	-1.54	19,296,227	1.31	-47,103,145	-3.92
2003	34,987,251	2.37	-30,769,513	-2.09	4,217,738	0.29	47,170,054	4.16
2004	36,316,694	2.49	-26,431,067	-1.81	9,885,627	0.68	155,495,441	13.41
2005	38,557,672	2.66	-28,977,285	-2.00	9,580,387	0.66	121,073,653	9.33
Total	$300,279,472		$445,409,766		$745,689,238		$597,543,066	
					Average return	7.36%		6.47%

CHART 12D – Hazardous Insurance

Investment Return – Actuarial Value vs. Market Value: 1998 - 2005

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1998	$2,757,000	3.77%	$7,753,398	10.59%	$10,510,398	14.36%	$17,100,114	20.59%
1999	3,176,000	3.36	9,273,144	9.80	12,449,144	13.16	13,451,746	12.11
2000	4,270,000	3.11	4,232,689	3.08	8,502,689	6.19	-17,918,878	-11.57
2001	5,141,000	2.87	3,567,337	1.99	8,708,337	4.87	-6,560,963	-3.86
2002	3,234,643	1.51	1,126,092	0.53	4,360,735	2.04	-18,622,357	-9.81
2003	3,710,646	1.49	562,884	0.23	4,273,530	1.71	5,445,820	2.69
2004	5,025,818	1.77	6,287,672	2.21	11,313,490	3.98	44,447,355	18.66
2005	6,864,339	2.10	8,606,467	2.63	15,470,806	4.73	30,072,890	9.57
Total	$34,179,446		$41,409,683		$75,589,129		$67,415,727	
					Average return	4.85%		4.61%

Note: Each year's yield is weighted by the average asset value in that year.

The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. These charts illustrate how this leveling effect has actually worked over the years 1998 - 2005 for the non-hazardous plans.

CHART 13A – Non-Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1998 - 2005

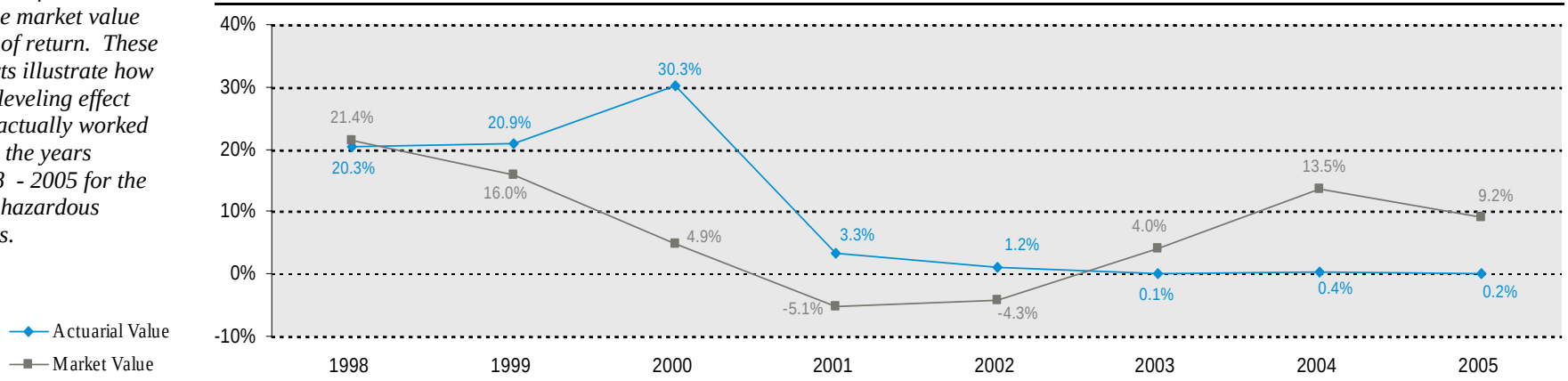
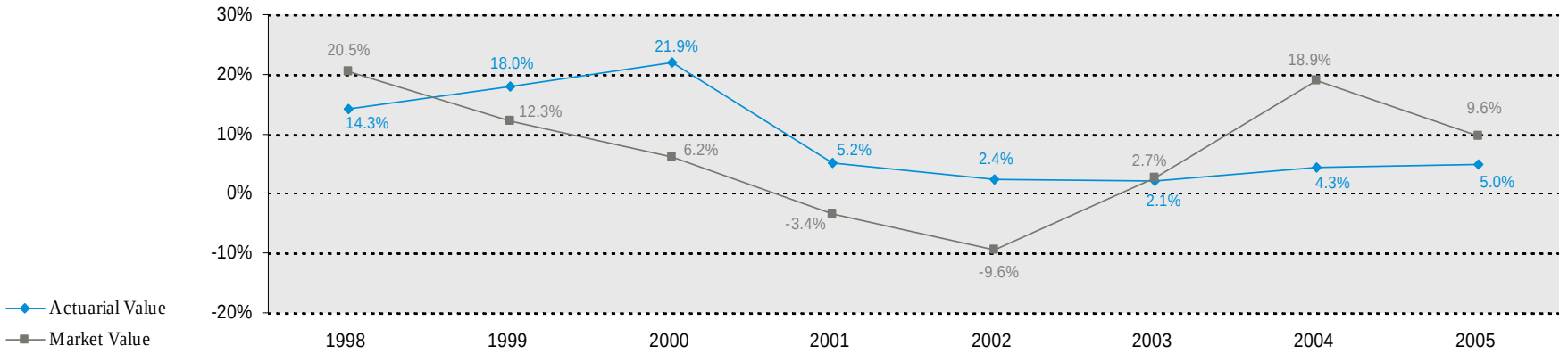


CHART 13B – Non-Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1998 - 2005



The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. These charts illustrate how this leveling effect has actually worked over the years 1998 – 2005 for the hazardous plans.

CHART 13C – Hazardous Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1998 - 2005

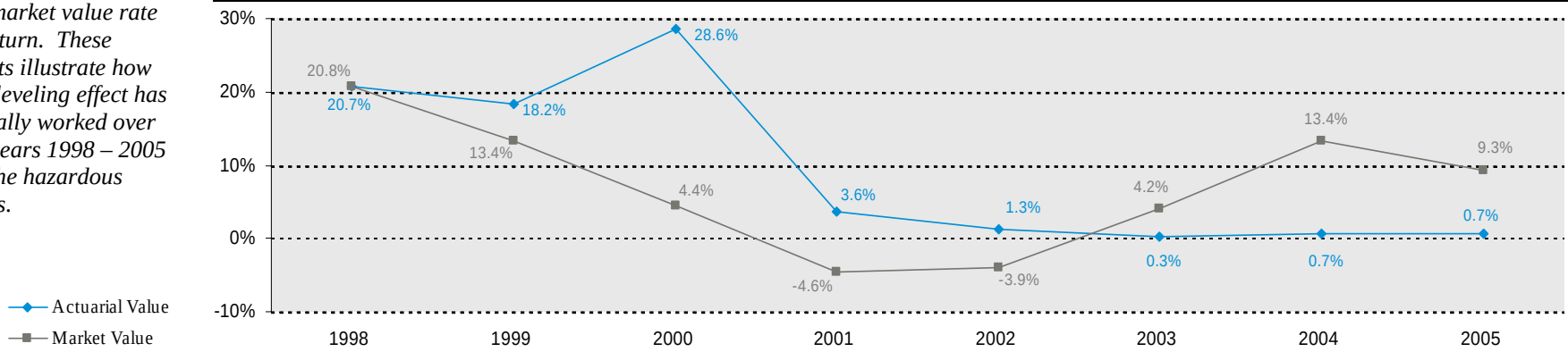
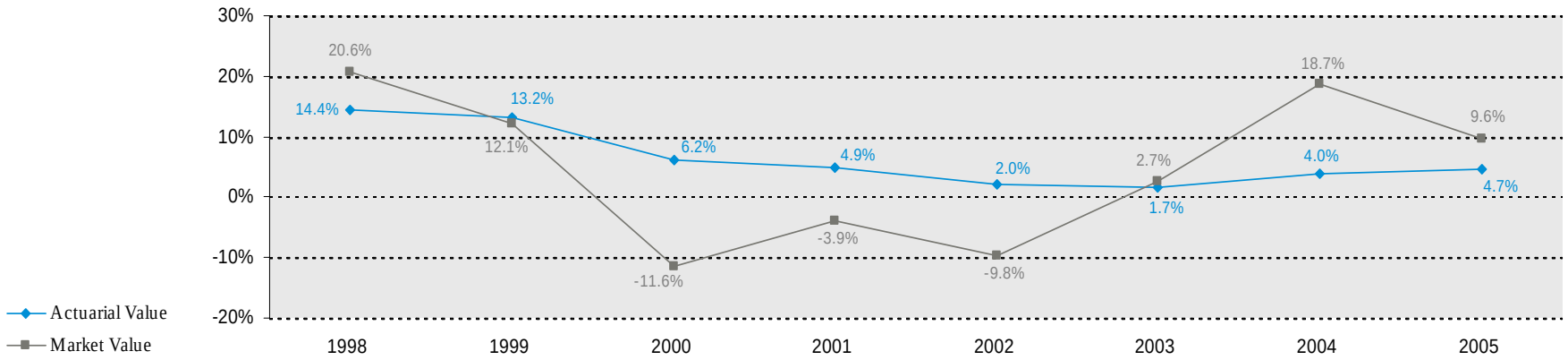


CHART 13D – Hazardous Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1998 - 2005



Administrative Expenses

Current methodology includes an assumption for the cost of administration for the retirement funds but not for the insurance funds. This assumption is modified with each valuation to estimate expenses for the upcoming fiscal year. The following summarizes the past year's experience and presents the assumptions for the next year.

Plan	Year End 2005 Assumption	Year End 2005 Actual Experience	Gain/(Loss)* for the Year	Year End 2006 Assumption
Non-Hazardous Retirement	$8,700,000	$10,029,042	-$1,438,688	$10,000,000
Non-Hazardous Insurance	0	484,830	-524,828	0
Hazardous Retirement	800,000	871,614	-77,522	900,000
Hazardous Insurance	0	183,233	-198,530	0

* *Includes interest to year-end.*

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- COLAs granted in the year,
- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

A brief summary of the demographic gain/(loss) experience of the Funds for the year ended June 30, 2005 is shown in the chart below.

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 14

Experience Due to Changes in Demographics for Year Ended June 30, 2005

	Non-Hazardous Retirement	Non-Hazardous Insurance	Hazardous Retirement	Hazardous Insurance
1. COLA	-$61,490,506	N/A	-$21,728,999	N/A
2. Other	-97,365,908	$30,418,491	-25,640,168	$12,337,614
3. Total	-$158,856,414	$30,418,491	-$47,369,167	$12,337,614
4. Percentage of actuarial accrued liability	2.90%	1.10%	2.60%	1.00%

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D. RECOMMENDED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability. This total amount is then divided by the projected salaries for active members to determine the funding rate.

The recommended contribution is based on a 30-year amortization of bases established each year as specified in the law governing the Plan.

Exhibit G in Section 3 provides details on these amortization bases.

The contribution rates as of June 30, 2005 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Charts 15 and 16 present the recommended contributions and reconciliations from the prior valuation.

This chart compares this valuation's recommended contribution with the prior valuation.

CHART 15A – Non-Hazardous Retirement

Recommended Contribution

	As of June 30			
	2005		2004	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$191,093,390	10.14%	$187,730,598	10.28%
2. Administrative expenses	10,000,000	0.53%	8,700,000	0.48%
3. Expected employee contributions	-93,384,705	-4.95%	-90,518,789	-4.95%
4. Employer normal cost: (1) + (2) + (3)	$107,708,685	5.71%	$105,911,809	5.80%
5. Actuarial accrued liability	5,385,156,690		4,936,459,488	
6. Actuarial value of assets	5,059,208,687		5,187,851,530	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	$325,948,003		-$251,392,042	
8. Payment on unfunded/(overfunded) actuarial accrued liability	4,799,620	0.25%	-22,788,140	-1.25%
9. Total recommended contribution: (4) + (8)	$112,508,305	5.97%	$83,123,669	4.55%
10. Projected salary	$1,885,275,000		$1,826,870,880	

This chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 16A – Non-Hazardous Retirement

Reconciliation of Recommended Contribution from June 30, 2004 to June 30, 2005

Recommended Contribution as of June 30, 2004	$83,123,669
Effect of COLA for retirees	$3,080,593
Effect of investment loss	20,720,244
Effect of change in administrative expense assumption	1,300,000
Effect of net other changes	4,283,799
Total change	$29,384,636
Recommended Contribution as of June 30, 2005	$112,508,305

The chart compares this valuation's recommended contributions with the prior valuation.

CHART 15B – Non-Hazardous Insurance

Recommended Contribution

	As of June 30			
	2005		2004	
	Amount	% of Salary	Amount	% of Salary
1. Employer normal cost	$160,978,728	8.54%	$165,464,221	9.06%
2. Actuarial accrued liability	2,788,754,654		2,438,734,696	
3. Actuarial value of assets	663,941,949		585,399,072	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$2,124,812,705		$1,853,335,624	
5. Payment on unfunded/(overfunded) actuarial accrued liability	124,621,762	6.61%	107,478,536	5.88%
6. Full EANC contribution: (1) + (5)	$285,600,490	15.15%	$272,942,757	14.94%
7. Projected salary	$1,885,275,000		$1,826,870,880	
8. Prior year's funding rate	N/A	6.43%	N/A	5.66%
9. Years to reach full EANC	N/A	11	N/A	12
10. Additional amount for current year	N/A	0.79%	N/A	0.77%
11. Total recommended contribution rate: (8) + (10)	N/A	7.22%	N/A	6.43%

This chart compares this valuation's recommended contribution with the prior valuation.

CHART 15C – Hazardous Retirement
Recommended Contribution

	As of June 30			
	2005		2004	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$66,605,976	16.20%	$63,548,648	16.19%
2. Administrative expenses	900,000	0.22%	800,000	0.20%
3. Expected employee contributions	-31,383,044	-7.63%	-29,803,612	-7.59%
4. Employer normal cost: (1) + (2) + (3)	$36,122,932	8.79%	$34,545,036	8.80%
5. Actuarial accrued liability	1,795,617,335		1,640,830,120	
6. Actuarial value of assets	1,452,353,023		1,457,612,042	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	$343,264,312		$183,218,078	
8. Payment on unfunded/(overfunded) actuarial accrued liability	17,766,906	4.32%	9,514,368	2.42%
9. Total recommended contribution: (4) + (8)	$53,889,838	13.11%	$44,059,404	11.22%
10. Projected salary	$411,121,728		$392,562,624	

This chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 16C – Hazardous Retirement
Reconciliation of Recommended Contribution from June 30, 2004 to June 30, 2005

Recommended Contribution as of June 30, 2004	$44,059,404
Effect of COLA for retirees	$1,088,594
Effect of investment loss	5,513,884
Effect of change in administrative expense assumption	100,000
Effect of net other changes	3,127,956
Total change	$9,830,434
Recommended Contribution as of June 30, 2005	$53,889,838

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 15D – Hazardous Insurance

Recommended Contribution

	As of June 30			
	2005		2004	
	Amount	% of Salary	Amount	% of Salary
1. Employer normal cost	$62,752,542	15.26%	$56,937,787	14.50%
2. Actuarial accrued liability	1,283,299,092		1,025,684,477	
3. Actuarial value of assets	359,180,461		310,578,162	
4. Unfunded/(overfunded) actuarial accrued liability: (2) - (3)	$924,118,631		$715,106,315	
5. Payment on unfunded/(overfunded) actuarial accrued liability	53,186,357	12.94%	41,359,748	10.54%
6. Full EANC contribution: (1) + (5)	$115,938,899	28.20%	$98,297,535	25.04%
7. Projected salary	$411,121,728		$392,562,624	
8. Prior year's funding rate	N/A	13.79%	N/A	12.77%
9. Years to reach full EANC	N/A	11	N/A	12
10. Additional amount for current year	N/A	1.31%	N/A	1.02%
11. Total recommended contribution rate: (8) + (10)	N/A	15.10%	N/A	13.79%

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EXHIBIT A

Table of Plan Coverage

Category	Non-Hazardous			Hazardous		
	Year Ended June 30			Year Ended June 30		
	2005	2004	Change From Prior Year	2005	2004	Change From Prior Year
Active members in valuation:						
Number	81,240	80,922	0.4%	9,464	9,349	1.2%
Average age	45.0	44.8	N/A	38.0	38.1	N/A
Average service	8.1	7.9	N/A	8.2	8.1	N/A
Total salary	$1,885,275,000	$1,826,870,880	3.2%	$411,121,728	$392,562,624	4.7%
Average salary	23,206	22,576	2.8%	43,441	41,990	3.5%
Account balances	837,513,907	814,908,627	2.8%	264,913,465	256,366,204	3.3%
Total active vested members	54,677	53,219	2.7%	6,363	6,206	2.5%
Vested terminated members	7,771	6,927	12.2%	482	361	33.5%
Retired participants:						
Number in pay status	25,206	23,274	8.3%	3,507	3,205	9.4%
Average age	68.1	68.3	N/A	58.2	57.9	N/A
Average monthly benefit	$776	$737	5.3%	$1,875	$1,828	2.6%
Disabled members:						
Number in pay status	2,854	2,801	1.9%	332	309	7.4%
Average age	61.4	60.9	N/A	51.0	50.7	N/A
Average monthly benefit	$720	$699	3.0%	$1,159	$1,109	4.5%
Beneficiaries in pay status	3,287	3,054	7.6%	522	491	6.3%
Inactive nonvested members due a refund	41,098	37,492	9.6%	1,489	1,287	15.7%

EXHIBIT B – Non-Hazardous

Members in Active Service as of June 30, 2005
By Age, Years of Service, and Average Salary

	Years of Service									
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	5,414	5,174	240	- -	- -	- -	- -	- -	- -	- -
	$16,670	$16,476	$20,833	- -	- -	- -	- -	- -	- -	- -
25 - 29	4,832	3,640	1,135	57	- -	- -	- -	- -	- -	- -
	21,633	20,195	25,935	$27,779	- -	- -	- -	- -	- -	- -
30 - 34	6,816	4,133	2,115	551	17	- -	- -	- -	- -	- -
	22,981	19,923	26,818	30,969	$30,347	- -	- -	- -	- -	- -
35 - 39	9,170	4,563	2,987	1,143	410	67	- -	- -	- -	- -
	22,861	19,010	23,428	31,382	35,114	$39,516	- -	- -	- -	- -
40 - 44	12,467	4,788	4,179	1,878	964	550	108	- -	- -	- -
	23,506	18,891	21,679	27,742	34,011	40,567	$44,432	- -	- -	- -
45 - 49	13,415	3,959	3,968	2,869	1,320	755	482	62	- -	- -
	24,769	19,892	21,621	25,387	31,261	38,605	44,391	$49,883	- -	- -
50 - 54	11,994	2,999	3,037	2,767	1,722	862	462	133	12	- -
	25,109	20,472	22,436	23,938	28,439	33,584	41,853	55,985	$57,310	- -
55 - 59	9,325	2,406	2,128	1,917	1,496	819	426	104	26	3
	24,588	20,227	22,221	24,688	25,941	29,725	37,566	48,871	60,118	$67,552
60 - 64	4,985	1,240	1,248	1,008	782	419	212	53	18	5
	22,670	17,741	20,121	23,035	25,176	28,887	32,894	46,442	55,585	90,900
65 - 69	1,910	549	479	382	268	131	67	25	5	4
	20,340	15,483	18,528	20,557	24,725	25,933	28,796	39,254	90,252	58,920
70 & over	912	222	235	172	159	62	39	10	5	8
	18,189	14,490	16,115	17,034	21,379	19,760	29,271	34,009	34,166	47,261
Total	81,240	33,673	21,751	12,744	7,138	3,665	1,796	387	66	20
	$23,206	$19,031	$22,561	$25,661	$28,924	$33,868	$39,855	$50,140	$58,688	$63,546

EXHIBIT B – Hazardous

Members in Active Service as of June 30, 2005
By Age, Years of Service, and Average Salary

	Years of Service									
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	632	615	17	- -	- -	- -	- -	- -	- -	- -
	$29,520	$29,333	$36,278	- -	- -	- -	- -	- -	- -	- -
25 - 29	1,318	998	318	2	- -	- -	- -	- -	- -	- -
	37,424	35,295	44,052	$45,630	- -	- -	- -	- -	- -	- -
30 - 34	2,019	871	893	251	4	- -	- -	- -	- -	- -
	41,676	35,734	44,728	51,338	$48,048	- -	- -	- -	- -	- -
35 - 39	1,868	490	549	589	222	18	- -	- -	- -	- -
	45,329	35,686	43,607	50,803	55,456	$56,293	- -	- -	- -	- -
40 - 44	1,602	319	295	378	466	134	10	- -	- -	- -
	48,175	34,957	42,009	49,394	56,253	61,021	$57,139	- -	- -	- -
45 - 49	950	180	175	179	243	112	56	5	- -	- -
	49,102	37,039	40,916	48,637	54,360	62,741	62,404	$76,512	- -	- -
50 - 54	613	146	107	108	101	44	78	26	3	- -
	49,841	35,828	44,872	46,120	51,204	60,532	71,054	74,486	$75,168	- -
55 - 59	285	99	78	33	35	13	12	7	7	1
	44,140	36,442	39,492	44,597	50,938	50,634	66,180	80,081	75,333	$96,864
60 - 64	123	46	31	17	20	4	- -	2	2	1
	42,995	34,109	42,453	44,651	49,853	50,730	- -	94,440	92,166	71,124
65 - 69	45	22	11	7	5	- -	- -	- -	- -	- -
	37,977	30,631	45,213	43,186	47,088	- -	- -	- -	- -	- -
70 & over	9	2	2	1	2	2	- -	- -	- -	- -
	40,984	21,408	26,400	36,336	46,740	71,712	- -	- -	- -	- -
Total	9,464	3,788	2,476	1,565	1,098	327	156	40	12	2
	$43,441	$34,535	$43,541	$49,730	$54,833	$60,811	$66,682	$76,716	$78,097	$83,994

EXHIBIT C – Non-Hazardous

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	2,797	$2,271,068.74	9,440	$5,250,781.00	12,237	$7,521,849.74
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	1,765	1,542,279.13	725	344,525.86	2,490	1,886,804.99
66-2/3% to beneficiary	523	785,340.77	243	207,062.45	766	992,403.22
50% to beneficiary	768	977,696.61	673	602,725.52	1,441	1,580,422.13
Pop-up option	2,056	2,676,925.07	1,490	1,248,271.89	3,546	3,925,196.96
10 years certain	1	103.26	0	0.00	1	103.26
10 years certain & life	1,172	828,996.53	2,310	1,310,400.64	3,482	2,139,397.17
Social Security option						
Age 62 basic	217	360,167.41	387	323,776.37	604	683,943.78
Age 62 survivorship	489	793,062.30	216	189,787.52	705	982,849.82
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	480	374,847.47	447	271,839.84	927	646,687.31
20 years certain & life	313	340,683.21	352	260,241.78	665	600,924.99
5 years certain	0	0.00	0	0.00	0	0.00
PLSO 12 month basic	49	41,622.13	153	110,269.16	202	151,891.29
PLSO 24 month basic	17	11,676.62	93	54,323.84	110	66,000.46
PLSO 36 month basic	126	48,898.99	271	106,284.91	397	155,183.90
PLSO 12 month survivor	76	76,955.01	46	36,351.70	122	113,306.71
PLSO 24 month survivor	44	29,,825.27	30	13,877.02	74	43,702.29
PLSO 36 month survivor	187	92,152.05	104	34,222.65	291	126,374.70
Total	11,080	$11,252,300.57	16,980	$10,364,742.15	28,060	$21,617,042.72

EXHIBIT C – Hazardous

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	481	$879,591.72	136	$174,835.00	617	$1,054,426.72
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	429	710,823.84	18	14,569.39	447	725,393.23
66-2/3% to beneficiary	188	422,332.54	3	7,022.62	191	429,355.16
50% to beneficiary	285	566,409.41	13	16,859.05	298	583,268.46
Pop-up option	1,323	2,731,076.55	35	54,729.44	1,358	2,785,805.99
10 years certain	29	45,455.84	1	1,285.37	30	46,741.21
10 years certain & life	146	250,709.15	25	39,292.06	171	290,001.21
Social Security option						
Age 62 basic	92	138,607.88	5	5,592.44	97	144,200.32
Age 62 survivorship	282	405,268.10	9	8,059.82	291	413,327.92
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	1	183.10	1	183.10
Dependent child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	47	73,717.83	6	5,383.53	53	79,101.36
20 years certain & life	91	152,676.70	8	8,683.59	99	161,360.29
5 years certain	0	0.00	0	0.00	0	0.00
PLSO 12 month basic	23	23,008.86	5	5,786.13	28	28,794.99
PLSO 24 month basic	13	23,329.35	3	3,711.42	16	27,040.77
PLSO 36 month basic	22	25,482.96	5	2,186.49	27	27,669.45
PLSO 12 month survivor	26	53,194.14	1	2,629.89	27	55,824.03
PLSO 24 month survivor	23	32,310.40	2	1,922.93	25	34,233.33
PLSO 36 month survivor	59	73,419.29	4	2,508.64	63	75,927.93
Total	3,559	6,607,414.56	280	355,240.91	3,839	6,962,655.47

EXHIBIT D – Non-Hazardous

Beneficiary Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	2	$872.07	25	$14,827.74	27	$15,699.81
Straight life (old plan)	0	0	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	230	89,272.23	1,307	583,321.48	1,537	672,593.71
66-2/3% to beneficiary	22	7,598.08	158	77,137.25	180	84,735.33
50% to beneficiary	52	14,574.34	272	94,372.16	324	108,946.50
Pop-up option	64	31,336.91	248	162,663.82	312	194,000.73
10 years certain	72	37,959.48	90	62,308.64	162	100,268.12
10 years certain & life	88	41,499.63	133	74,801.27	221	116,300.90
Social Security option						
Age 62 basic	0	0.00	0	0.00	0	0.00
Age 62 survivorship	11	7,781.48	71	77,432.26	82	85,213.74
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	4	680.26	4	680.26
Dependent child	2	361.09	2	615.10	4	976.19
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	30	21,293.57	90	61,780.58	120	83,074.15
20 years certain & life	37	17,148.34	67	56,981.05	104	74,129.39
5 years certain	95	60,766.79	92	71,137.14	187	131,903.93
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	0	0.00	0	0.00	0	0.00
PLSO 36 month basic	0	0.00	5	1,166.23	5	1,166.23
PLSO 12 month survivor	0	0.00	6	8,295.47	6	8,295.47
PLSO 24 month survivor	0	0.00	2	648.19	2	648.19
PLSO 36 month survivor	6	2,186.29	4	1,333.06	10	3,519.35
Total	711	332,650.30	2,576	1,349,501.70	3,287	1,682,152.00

EXHIBIT D – Hazardous

Beneficiary Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	0	$0.00	20	$16,507.00	20	16,507.00
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	5	3,099.14	103	112,817.45	108	115,916.59
66-2/3% to beneficiary	0	0.00	25	28,300.98	25	28,300.98
50% to beneficiary	0	0.00	31	20,749.28	31	20,749.28
Pop-up option	0	0.00	74	97,277.89	74	97,277.89
10 years certain	9	10,632.48	13	14,740.25	22	25,372.73
10 years certain & life	0	0.00	8	6,326.42	8	6,326.42
Social Security option						
Age 62 basic	0	0.00	2	651.86	2	651.86
Age 62 survivorship	1	2,453.53	51	68,336.88	52	70,790.41
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	3	2,355.65	3	2,355.65
Dependent child	62	20,221.16	74	23,526.21	136	43,747.37
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	0	0.00	5	5,123.03	5	5,123.03
20 years certain & life	2	2,838.65	22	25,256.69	24	28,095.34
5 years certain	5	2,206.73	3	7,331.67	8	9,538.40
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	0	0.00	0	0.00	0	0.00
PLSO 36 month basic	1	810.49	2	1,024.46	3	1,834.95
PLSO 12 month survivor	0	0.00	0	0.00	0	0.00
PLSO 24 month survivor	0	0.00	1	144.76	1	144.76
PLSO 36 month survivor	0	0	0	0.00	0	0.00
Total	85	$42,262.18	437	$430,470.48	522	$472,732.66

EXHIBIT E – Non-Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Contribution income:				
Employer contributions	$54,616,800		$44,028,465	
Member contributions	127,636,735		122,484,428	
Less administrative and investment expenses	-14,005,886		-11,913,070	
Net contribution income		$168,247,649		$154,599,823
Investment income:				
Interest, dividends and other income	$159,018,977		$140,474,161	
Recognition of capital appreciation	-128,420,908		-112,243,733	
Less stock commissions and securities lending expense	-21,856,133		-9,581,716	
Net investment income		8,741,936		18,648,712
Total income available for benefits		$176,989,585		$173,248,535
Less benefit payments:				
Benefit payments	-$294,590,072		-$260,642,995	
Refunds	-11,042,356		-11,334,057	
Net benefit payments		-$305,632,428		-$271,977,052
Change in reserve for future benefits		-$128,642,843		-$98,728,517

EXHIBIT E – Non-Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Contribution income:				
Employer contributions	$106,638,253		$89,344,241	
Insurance Appropriation contributions	993,727		0	
Less administrative and investment expenses	-1,029,817		-708,301	
Net contribution income		$106,602,163		$88,635,940
Investment income:				
Interest, dividends and other income	$15,609,814		$10,625,125	
Recognition of capital appreciation	17,521,143		13,804,584	
Less stock commissions and securities lending expense	-2,928,086		-1,075,132	
Net investment income		30,202,871		23,354,577
Total income available for benefits		$136,805,034		$111,990,517
Less healthcare premium subsidies		-$58,262,157		-$46,651,550
Change in reserve for future benefits		$78,542,877		$65,338,967

EXHIBIT E – Hazardous Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Contribution income:				
Employer contributions	$39,947,747		$27,640,775	
Member contributions	39,515,038		38,667,764	
Less administrative and investment expenses	-2,044,131		-1,644,607	
Net contribution income		$77,418,654		$64,663,932
Investment income:				
Interest, dividends and other income	$44,757,269		$39,023,270	
Recognition of capital appreciation	-28,977,285		-26,431,067	
Less stock commissions and securities lending expense	-6,199,597		-2,706,576	
Net investment income		9,580,387		9,885,627
Total income available for benefits		$86,999,041		$74,549,559
Less benefit payments:				
Benefit payments	-$90,119,217		-$81,421,925	
Refunds	-2,138,843		-2,520,448	
Net benefit payments		-$92,258,060		-$83,942,373
Change in reserve for future benefits		-$5,259,019		-$9,392,814

EXHIBIT E – Hazardous Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Contribution income:				
Employer contributions	$54,106,577		$47,036,777	
Insurance Appropriation contributions	1,445,360			
Less administrative and investment expenses	-435,800		-260,354	
Net contribution income		$55,116,137		$46,776,423
Investment income:				
Interest, dividends and other income	$8,452,232		$5,589,010	
Recognition of capital appreciation	8,606,467		6,287,672	
Less stock commissions and securities lending expense	-1,587,893		-563,192	
Net investment income		15,470,806		11,313,490
Total income available for benefits		$70,586,943		$58,089,913
Less healthcare premium subsidies		-$21,984,644		-$16,701,831
Change in reserve for future benefits		$48,602,299		$41,388,082

EXHIBIT F – Non-Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Cash equivalents		$568,976		$813,273
Accounts receivable:				
Investment accounts receivable	$22,679,788		$242,770	
Year-end interest receivable	0		23,285,315	
Year-end accounts receivable	0		25,041,039	
Contributions receivable	26,845,575		572,838	
Total accounts receivable		49,525,363		49,141,962
Investments:				
Stocks	$2,804,717,023		$2,754,886,293	
Bonds	1,589,888,984		1,443,631,252	
Mortgage	270,871,946		247,087,021	
Short-term investments	179,377,744		118,667,313	
Real estate	2,395,898		2,495,681	
Fixed assets	474,964		531,136	
Total investments at market value		4,847,726,559		4,567,298,696
Total assets		$4,897,820,898		$4,617,253,931
Less accounts payable		-$4,220,901		-$3,917,974
Net assets at market value		$4,893,599,997		$4,613,335,957
Net assets at actuarial value		$5,059,208,687		$5,187,851,530

EXHIBIT F – Non-Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Cash equivalents		$49,843		$30,008
Accounts receivable:				
Investment accounts receivable	$1,651,050		$36,997	
Year-end interest receivable	0		1,364,324	
Year-end accounts receivable	0		8,363,612	
Contributions receivable	10,526,974		0	
Total accounts receivable		12,178,024		9,764,933
Investments:				
Stocks	$526,692,915		$450,829,317	
Bonds	64,851,134		51,847,439	
Short-term investments	65,472,182		52,303,176	
Total investments at market value		657,016,231		554,979,932
Total assets		$669,244,098		$564,774,873
Less accounts payable		-$758,731		-$897,279
Net assets at market value		$668,485,367		$563,877,594
Net assets at actuarial value		$663,941,949		$585,399,072

EXHIBIT F – Hazardous Retirement

Table of Financial Information

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Cash equivalents		$96,951		$227,908
Accounts receivable:				
Investment accounts receivable	$6,227,892		$68,840	
Year-end interest receivable	0		6,412,170	
Year-end accounts receivable	0		9,716,164	
Contributions receivable	10,133,680		344,812	
Total accounts receivable		16,361,572		16,541,986
Investments:				
Stocks	$822,879,336		$788,757,059	
Bonds	434,811,956		394,924,326	
Mortgage	74,211,580		69,112,719	
Short-term investments	61,359,681		34,290,213	
Real estate	2,423,942		2,416,314	
Fixed assets	42,678		47,562	
Total investments at market value		1,395,729,173		1,289,548,193
Total assets		$1,412,187,696		$1,306,318,087
Less accounts payable		-$941,977		-$1,306,615
Net assets at market value		$1,411,245,719		$1,305,011,472
Net assets at actuarial value		$1,452,353,023		$1,457,612,042

EXHIBIT F – Hazardous Insurance

Table of Financial Information

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Cash equivalents		$28,451		$7,071
Accounts receivable:				
Investment accounts receivable	$916,788		$19,080	
Year-end interest receivable	0		745,380	
Year-end accounts receivable	0		3,811,142	
Contributions receivable	4,208,379			
Total accounts receivable		5,125,167		4,575,602
Investments:				
Stocks	$283,617,912		$232,519,309	
Bonds	37,420,652		30,331,059	
Short-term investments	35,090,880		30,509,232	
Total investments at market value		356,129,444		293,359,600
Total assets		$361,283,062		$297,942,273
Less accounts payable		-$344,393		-$207,987
Net assets at market value		$360,938,669		$297,734,286
Net assets at actuarial value		$359,180,461		$310,578,162

EXHIBIT G– Non-Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$93,672,421	$9,705,455	15	$118,630,627
06/30/1991	30	61,472,822	6,071,347	16	78,053,927
06/30/1992	30	-125,111,651	-11,778,626	17	-158,659,658
06/30/1993	30	-28,358,370	-2,544,889	18	-35,795,696
06/30/1994	30	59,026,195	5,049,148	19	73,936,806
06/30/1995	30	-35,766,009	-2,916,245	20	-44,337,948
06/30/1996	30	-188,502,047	-14,650,247	21	-230,702,062
06/30/1997	30	-200,122,489	-14,812,745	22	-241,070,503
06/30/1998	30	-311,976,854	-21,992,417	23	-369,162,971
06/30/1999	30	-379,088,077	-25,450,818	24	-439,839,915
06/30/2000	30	-804,685,873	-51,451,574	25	-913,939,349
06/30/2001	30	250,075,433	15,228,392	26	277,610,458
06/30/2002	30	529,261,185	30,694,743	27	573,453,917
06/30/2003	30	391,393,784	21,618,160	28	413,373,250
06/30/2004	30	633,089,111	33,302,770	29	650,985,394
06/30/2005	30	573,411,726	28,727,166	30	573,411,726
Total			$4,799,620		$325,948,003

** Level percentage of salary*

EXHIBIT G – Non-Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$901,011,537	$70,025,983	21	$1,102,721,284
06/30/1997	30	29,886,573	2,212,156	22	36,001,808
06/30/1998	30	62,468,342	4,403,627	23	73,918,941
06/30/1999	30	-21,106,379	-1,417,018	24	-24,488,843
06/30/2000	30	70,199,744	4,488,568	25	79,730,875
06/30/2001	30	247,855,413	15,093,203	26	275,145,998
06/30/2002	30	72,249,680	4,190,153	27	78,282,450
06/30/2003	30	96,412,030	5,325,201	28	101,826,232
06/30/2004	30	162,167,375	8,530,589	29	166,751,553
06/30/2005	30	234,922,407	11,769,300	30	234,922,407
Total			$124,621,762		$2,124,812,705

** Level percentage of salary*

EXHIBIT G – Hazardous Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$68,584,978	$7,106,130	15	$86,858,856
06/30/1991	30	29,934,803	2,956,503	16	38,009,138
06/30/1992	30	-12,941,304	-1,218,358	17	-16,411,443
06/30/1993	30	-7,291,213	-654,316	18	-9,203,419
06/30/1994	30	1,854,577	158,642	19	2,323,062
06/30/1995	30	24,831,672	2,024,694	20	30,783,009
06/30/1996	30	-65,565,268	-5,095,687	21	-80,243,386
06/30/1997	30	-62,908,989	-4,656,422	22	-75,781,098
06/30/1998	30	-50,329,820	-3,547,938	23	-59,555,399
06/30/1999	30	-97,060,446	-6,516,343	24	-112,615,144
06/30/2000	30	-194,399,700	-12,429,907	25	-220,793,655
06/30/2001	30	79,413,115	4,835,877	26	88,157,045
06/30/2002	30	143,568,600	8,326,326	27	155,556,422
06/30/2003	30	195,752,270	10,812,139	28	206,745,113
06/30/2004	30	149,965,899	7,888,747	29	154,205,164
06/30/2005	30	155,230,047	7,778,819	30	155,230,047
Total			$17,766,906		$343,264,312

** Level percentage of salary*

EXHIBIT G – Hazardous Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$318,111,968	$24,723,439	21	$389,327,799
06/30/1997	30	53,367,623	3,950,186	22	64,287,424
06/30/1998	30	15,379,222	1,084,139	23	18,198,270
06/30/1999	30	-13,162,362	-883,681	24	-15,271,734
06/30/2000	30	17,607,673	1,125,834	25	19,998,296
06/30/2001	30	82,316,738	5,012,694	26	91,380,377
06/30/2002	30	10,745,007	623,162	27	11,642,203
06/30/2003	30	108,196,487	5,976,102	28	114,272,468
06/30/2004	30	34,519,744	1,815,863	29	35,495,555
06/30/2005	30	194,787,973	9,758,619	30	194,787,973
Total			$53,186,357		$924,118,631

** Level percentage of salary*

EXHIBIT H

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

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EXHIBIT I – Non-Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 3,287 beneficiaries in pay status)		31,347
2.	Members inactive during year ended June 30, 2005 with vested rights		7,771
3.	Members active during the year ended June 30, 2005		81,240
	Fully vested	54,677	
	Not vested	26,563	
4.	Inactive nonvested members due a refund as of June 30, 2005		41,098

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$201,093,390
2.	Present value of future benefits		7,498,487,576
3.	Present value of future normal costs		2,113,330,886
4.	Actuarial accrued liability		5,385,156,690
	Retired participants and beneficiaries	$2,673,500,272	
	Inactive members with vested rights	72,328,615	
	Active members	2,570,946,335	
	Inactive nonvested members due a refund	68,381,468	
5.	Actuarial value of assets ($4,893,599,997 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		5,059,208,687
6.	Unfunded actuarial accrued liability		$325,948,003

EXHIBIT I – Non-Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$160,978,728
2.	Present value of future benefits		4,555,347,434
3.	Present value of future normal costs		1,766,592,779
4.	Actuarial accrued liability		2,788,754,654
	Retired participants and beneficiaries	$1,012,106,665	
	Inactive members with vested rights	132,112,442	
	Active members	1,644,535,547	
5.	Actuarial value of assets ($668,485,367 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		663,941,949
6.	Unfunded actuarial accrued liability		$2,124,812,705

EXHIBIT I – Hazardous Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 522 beneficiaries in pay status)		4,361
2.	Members inactive during year ended June 30, 2005 with vested rights		482
3.	Members active during the year ended June 30, 2005		9,464
	Fully vested	6,363	
	Not vested	3,101	
4.	Inactive nonvested members due a refund as of June 30, 2005		1,489

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$67,505,976
2.	Present value of future benefits		2,448,229,718
3.	Present value of future normal costs		652,612,383
4.	Actuarial accrued liability		1,795,617,335
	Retired participants and beneficiaries	$944,739,105	
	Inactive members with vested rights	9,480,734	
	Active members	835,565,030	
	Inactive nonvested members due a refund	5,832,466	
5.	Actuarial value of assets ($1,411,245,719 at market value as reported Carpenter, Mountjoy & Bressler, PSC)		1,452,353,023
6.	Unfunded actuarial accrued liability		$343,264,312

EXHIBIT I – Hazardous Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$62,752,542
2.	Present value of future benefits		1,895,646,984
3.	Present value of future normal costs		612,347,891
4.	Actuarial accrued liability		1,283,299,092
	Retired participants and beneficiaries	$565,434,903	
	Inactive members with vested rights	20,669,223	
	Active members	697,194,966	
5.	Actuarial value of assets ($360,938,669 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		359,180,461
6.	Unfunded actuarial accrued liability		$924,118,631

EXHIBIT II – Non-Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/2000	$5,284,033,534	$3,368,601,134	-$1,915,432,400	156.86%	$1,575,632,580	-121.57%
06/30/2001	5,423,834,549	3,706,282,212	-1,717,552,337	146.34%	1,597,653,320	-107.50%
06/30/2002	5,397,787,158	4,165,355,149	-1,232,432,009	129.59%	1,688,460,789	-72.99%
06/30/2003	5,286,580,047	4,417,597,802	-868,982,245	119.67%	1,796,451,180	-48.37%
06/30/2004	5,187,851,530	4,936,459,488	-251,392,042	105.09%	1,826,870,880	-13.76%
06/30/2005	5,059,208,687	5,385,156,690	325,948,003	93.95%	1,885,275,000	17.29%

Note: If the actuarial accrued liabilities of the non-hazardous Retirement plan were adjusted to allow for a 3% annual cost of living adjustment for all future years and were combined with the actuarial accrued liabilities of the Insurance plan, the funded ratio on a market value basis of the combined plans would be 57.57%.

EXHIBIT II – Non-Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/2000	$319,642,694	$1,466,716,928	$1,147,074,234	21.79%	$1,575,632,580	72.80%
06/30/2001	371,758,628	1,793,710,768	1,421,952,140	20.73%	1,597,653,320	89.00%
06/30/2002	450,497,307	1,977,577,038	1,527,079,731	22.78%	1,688,460,789	90.44%
06/30/2003	520,060,105	2,176,963,259	1,656,903,154	23.89%	1,796,451,180	92.23%
06/30/2004	585,399,072	2,438,734,696	1,853,335,624	24.00%	1,826,870,880	101.45%
06/30/2005	663,941,949	2,788,754,654	2,124,812,705	23.81%	1,885,275,000	112.71%

EXHIBIT II – Hazardous Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/2000	$1,445,542,794	$1,084,553,697	-$360,989,097	133.28%	$291,062,928	-124.02%
06/30/2001	1,486,666,016	1,193,860,442	-292,805,574	124.53%	322,819,064	-90.70%
06/30/2002	1,485,511,793	1,327,291,273	-158,220,520	111.92%	346,319,146	-45.69%
06/30/2003	1,467,004,856	1,499,628,782	32,623,926	97.82%	374,700,732	8.71%
06/30/2004	1,457,612,042	1,640,830,120	183,218,078	88.83%	392,562,624	46.67%
06/30/2005	1,452,353,023	1,795,617,335	343,264,312	80.88%	411,121,728	83.49%

Note: If the actuarial accrued liabilities of the hazardous Retirement plan were adjusted to allow for a 3% annual cost of living adjustment for all future years and were combined with the actuarial accrued liabilities of the Insurance plan, the funded ratio on a market value basis of the combined plans would be 48.17%.

EXHIBIT II – Hazardous Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/2000	$168,657,912	$599,936,029	$431,278,117	28.11%	$291,062,928	148.17%
06/30/2001	197,875,249	721,605,292	523,730,043	27.42%	322,819,064	162.24%
06/30/2002	234,683,878	781,184,974	546,501,096	30.04%	346,319,146	157.80%
06/30/2003	269,190,080	935,650,662	666,460,582	28.77%	374,700,732	177.86%
06/30/2004	310,578,162	1,025,684,477	715,106,315	30.28%	392,562,624	182.16%
06/30/2005	359,180,461	1,283,299,092	924,118,631	27.99%	411,121,728	224.78%

EXHIBIT II – Total Retirement Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a)] / (b)	Increase in Assets
06/30/1960	$864,451	$5,602,131	$4,737,680	84.57%	$864,451
06/30/1965	5,613,214	12,510,487	6,897,273	55.13%	1,255,742
06/30/1971	23,420,022*	40,305,948	16,885,927	41.89%	4,850,170
06/30/1975	60,854,631*	85,322,085	24,467,454	28.68%	11,704,780
06/30/1976	78,734,622*	128,824,236	50,089,614	38.88%	17,879,991
06/30/1977	100,425,591*	152,900,347	52,474,756	34.32%	21,690,969
06/30/1978	124,799,954*	175,194,867	50,394,913	28.77%	24,374,363
06/30/1979	153,091,905*	213,834,377	60,742,472	28.41%	28,291,951
06/30/1980	190,230,941*	266,018,621	75,787,680	28.49%	37,139,036
06/30/1981	233,770,245	260,872,162	27,101,917	10.39%	43,539,304
06/30/1982	285,534,889	306,087,531	20,552,642	6.71%	51,764,644
06/30/1983	343,155,769	340,705,763	-2,450,006	-0.72%	57,620,880
06/30/1984	406,187,431	421,336,269	15,148,838	3.60%	63,031,662
06/30/1985	478,043,221	463,618,532	-14,424,689	-3.11%	71,855,790
06/30/1986	603,815,800	535,948,094	-67,867,706	-12.66%	125,772,579
06/30/1987	727,730,727	678,442,760	-49,287,967	-7.26%	123,914,927
06/30/1988	839,578,896	829,346,323	-10,232,573	-1.23%	111,848,169
06/30/1989	1,078,052,635	1,113,868,548	35,815,913	3.22%	238,473,739
06/30/1990	1,270,066,267	1,432,323,666	162,257,399	11.33%	192,013,632
06/30/1991	1,396,227,005	1,654,338,706	258,111,701	15.60%	126,160,738
06/30/1992**	1,735,038,908	1,861,978,403	126,939,495	6.82%	338,811,903
06/30/1993	1,985,680,709	2,079,930,047	94,249,338	4.53%	250,641,801
06/30/1994	2,173,354,772	2,330,344,241	156,989,469	6.74%	187,674,063
06/30/1995	2,454,128,060	2,603,575,921	149,447,861	5.74%	280,773,288
06/30/1996	2,880,028,538	2,778,316,473	-101,712,065	-3.66%	425,900,478
06/30/1997	3,514,025,868	3,144,928,093	-369,096,965	-11.74%	633,997,330

EXHIBIT II – Total Retirement Fund (continued)

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a)] / (b)	Increase in Assets
06/30/1998	4,273,262,495	3,529,912,902	-743,349,593	-21.06%	759,236,627
06/30/1999	5,196,878,921	3,955,132,659	-1,241,746,262	-31.40%	923,616,426
06/30/2000	6,729,576,328	4,453,154,831	-2,276,421,497	-51.12%	1,532,697,407
06/30/2001***	6,910,500,565	4,900,142,654	-2,010,357,911	-41.03%	180,924,237
06/30/2002	6,883,298,951	5,492,646,422	-1,390,652,529	-25.32%	-27,201,614
06/30/2003	6,753,584,903	5,917,226,584	-836,358,319	-14.13%	-129,714,048
06/30/2004	6,645,463,572	6,577,289,608	-68,173,964	-1.04%	-108,121,331
06/30/2005	6,511,561,710	7,180,774,025	669,212,315	9.32%	-133,901,862

* *Includes capitalized appreciation of investments.*

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

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EXHIBIT II – Total Insurance Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) – (a)] / (b)	Increase in Assets
06/30/1990	$29,430,397	$700,151,838	$670,720,901	95.80%	N/A
06/30/1991	42,420,744	823,012,809	780,592,065	94.85%	12,989,807
06/30/1992	56,955,901	1,041,905,457	984,949,556	94.53%	14,535,157
06/30/1993	74,253,872	1,244,258,042	1,170,004,170	94.03%	17,297,971
06/30/1994	99,514,895	1,551,138,800	1,451,623,905	93.88%	25,261,023
06/30/1995	125,453,940	1,679,893,225	1,554,439,285	92.53%	25,939,045
06/30/1996**	167,536,241	1,386,659,746	1,219,123,505	87.92%	42,082,301
06/30/1997	204,520,777	1,541,360,457	1,336,839,680	86.73%	36,984,536
06/30/1998	255,586,375	1,706,626,110	1,451,039,735	85.02%	51,065,598
06/30/1999	346,527,392	1,801,154,401	1,454,627,009	80.76%	90,941,017
06/30/2000	488,300,606	2,066,652,957	1,578,352,351	76.37%	141,773,214
06/30/2001***	569,633,878	2,515,316,060	1,945,682,182	77.35%	81,333,272
06/30/2002	685,181,185	2,758,762,012	2,073,580,827	75.16%	115,547,307
06/30/2003	789,250,185	3,112,613,921	2,323,363,736	74.64%	104,069,000
06/30/2004	895,977,234	3,464,419,173	2,568,441,939	74.14%	106,727,049
06/30/2005	1,023,122,410	4,072,053,746	3,048,931,336	74.87%	127,145,176

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

EXHIBIT III – Non-Hazardous

Supplementary Information Required by the GASB

Valuation date	June 30, 2005
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	15 to 30 years
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	31,347
Terminated members entitled to, but not yet receiving benefits	7,771
Active members	81,240
Total	120,358

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	6,012	4,203	583	532	239	455
Family; Pre-Medicare	286	263	7	9	5	2
Parent Plus; Pre-Medicare	255	196	8	5	4	42
Couple; Pre-Medicare	736	598	53	56	27	2
Medicare Regular	2,853	76	350	776	863	788
Medicare High Option	11,007	4,733	2,087	1,883	883	1,421
Total	21,149	10,069	3,088	3,261	2,021	2,710

EXHIBIT III – Hazardous

Supplementary Information Required by the GASB

Valuation date	June 30, 2005
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	15 to 30 years
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	4,361
Terminated members entitled to, but not yet receiving benefits	482
Active members	9,464
Total	14,307

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	1,220	1,087	66	46	15	6
Family; Pre-Medicare	661	646	10	4	1	0
Parent Plus; Pre-Medicare	145	177	7	7	4	0
Couple; Pre-Medicare	918	896	17	4	1	0
Medicare Regular	55	7	9	22	17	0
Medicare High Option	1,004	843	73	56	26	6
Total	4,053	3,656	182	139	64	12

EXHIBIT IV – Non-Hazardous

Supplementary Information Required by the GASB - Schedule of Retirees and Beneficiaries

Valuation Date July 1	Added to Rolls		Removed from Rolls		Rolls – End of Year		% Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance		
2003	2,411	$24,855,000	1,466	$8,111,100	27,092	$219,848,200	N/A	$8,100
2004	2,805	28,181,800	768	3,587,800	29,129	247,534,300	12.59%	8,500
2005	2,808	30,397,300	590	3,161,200	31,347	279,590,300	12.95	8,900

EXHIBIT IV – Hazardous

Supplementary Information Required by the GASB - Schedule of Retirees and Beneficiaries

Valuation Date July 1	Added to Rolls		Removed from Rolls		Rolls – End of Year		% Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance		
2003	293	$6,258,300	39	$355,100	3,737	$72,322,200	N/A	$19,400
2004	343	6,712,500	75	605,100	4,005	79,559,200	10.01%	19,900
2005	403	8,536,100	47	502,700	4,361	89,224,700	12.15	20,500

EXHIBIT V

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: 1983 Group Annuity Mortality Table*

Disabled: Pension Benefit Guaranty Corporation Table for Disabled Lives Receiving Social Security

* Rates increased by 0.05% for hazardous plan active members.

Termination Rates before Retirement:

	Non-Hazardous				Hazardous			
	Rate (%)				Rate (%)			
	Mortality		Disability	Withdrawal*	Mortality		Disability	Withdrawal
Age	Male	Female			Male	Female		
20	0.04	0.02	0.03	2.40	0.09	0.07	0.04	3.04
25	0.05	0.03	0.03	2.40	0.10	0.08	0.04	3.04
30	0.06	0.03	0.04	2.40	0.11	0.08	0.05	3.38
35	0.09	0.05	0.06	2.40	0.14	0.10	0.07	2.44
40	0.12	0.07	0.10	2.00	0.17	0.12	0.13	1.50
45	0.22	0.10	0.21	1.80	0.27	0.15	0.26	0.75
50	0.39	0.16	0.42	1.60	0.44	0.21	0.53	0.00
55	0.61	0.25	0.79	1.20	0.66	0.30	0.99	0.00
60	0.92	0.42	1.39	0.20	0.97	0.47	1.74	0.00

*Withdrawal rates during the first five years of employment are 35%, 10%, 7%, 5%, and 4% for non-hazardous plan members.

Non-Hazardous Retirement Rates:

Age	Retirement Probability*
55-57	0.04
58-59	0.05
60-61	0.06
62	0.25
63-64	0.10
65	0.50
66-67	0.20
68	0.25
69	0.40
70 and older	1.00

*Retirement probability is 0.25 at first age member is eligible for unreduced retirement benefits.

Hazardous Retirement Rates: 60% will retire as soon as eligible for unreduced benefit and balance will continue until age 55.

Non-Hazardous Retirement Age for Inactive Vested Participants: 65

Hazardous Retirement Age for Inactive Vested Participants: 55

Percent Married: 100%

Age of Spouse: Females 3 years younger than males.

Dependent Children: For a hazardous employee's duty-related death benefits, it is assumed that the employee is survived by two dependent children each age 6.

Net Investment Return: 8.25%

Salary Increases:

Years of Service	Rate (%)
1	12.00
2	10.00
3	8.00
4 or more	6.50

Payroll Growth: 5.0%

Retiree Medical Insurance Election: Future retirees will select medical coverage in the same proportion that current retirees have selected coverage.

Monthly Contribution Rates:

Pre-Medicare Coverage
Rate in Effect on Valuation Date

	Single	Family	Parent Plus	Couple
Region 1	$403.28	$1,008.20	$604.92	$907.38
Region 2	412.53	1,031.33	618.80	928.19
Region 3	394.80	987.02	592.28	888.28
Region 4	403.96	1,009.92	605.96	908.92
Region 5	400.64	1,001.60	600.96	901.44
Region 6	496.28	1,240.52	744.28	1,116.53
Region 7	447.52	1,118.80	671.28	1,006.92
Region 8	405.44	1,013.60	608.16	912.24

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem Blue Seniors	$119.00	$331.30	2,296	11,283
Bankers Life Medicare	103.13	146.54	603	585
The Hartford	135.23	298.98	9	141

	Weighted Medicare Coverage Rate in Effect on Valuation Date	
	Low Option	**High Option**
All Members	$116.00	$323.43

Medical Contribution Rate Increases:	**Year**	**Rate(%)**
	2005	10.00
	2006-2010	9.00
	2011-2015	8.00
	2016-2020	7.50
	2021 and thereafter	7.00

Members with Multiple Service Records: For active members with service in more than one system, the liability has been valued as follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.
- Future service is projected only under the system in which the member is currently active.
- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Non-Hazardous Administrative Expenses:	$10,000,000
Hazardous Administrative Expenses:	$900,000
Actuarial Value of Assets:	Market value of assets less unrecognized return in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.

EXHIBIT VI

Summary of Plan Provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Non-Hazardous Normal Retirement:	
Age Requirement	65
Service Requirement	None
Members whose participation began before 8/1/2004	If a member has at least 48 months of service, the monthly benefit is 2.20% times final average compensation times years of service. Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period is less than forty-eight, one or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Members whose participation began on or after 8/1/2004	Monthly benefit as calculated above but with a benefit factor of 2.0% instead of 2.2%.
Hazardous Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation times years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used.

	If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Non-Hazardous Early Retirement:	
Requirement	Age 55 with 60 months service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 5% per year for the first five years and 4% per year for the next five years for each year the member is younger than age 65 or has less than 27 years service, whichever is smaller.
Hazardous Early Retirement:	
Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.
Non-Hazardous Disability:	
Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 of more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):	
Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.
Spouse's Pre-Retirement Death Benefit (in line of duty):	
Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.
Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:	
Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.
Dependent Child's Death Benefit (in line of duty):	
Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.
Post-Retirement Death Benefit:	
Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.
Insurance Plan for Retirees:	
Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System.

Members whose participation began on or after July 1, 2003	The Retirement System pays $10 per month per year of service toward medical premiums for non-hazardous retirees, $15 per month per year of service for hazardous retirees, and $10 per month per year of service for surviving spouses of hazardous employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of hazardous service.

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State Police Retirement System

Actuarial Valuation and Review
as of June 30, 2005

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SEGAL

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October 13, 2005

Board of Trustees
State Police Retirement System
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601-6124

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2005. It summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2006 and analyzes the preceding year's experience.

The census information on which our calculations were based was prepared by the System and the financial information was provided by the Auditor. That assistance is gratefully acknowledged.

This report is for the purpose of determining statutory funding requirements for the Retirement and Insurance plans. Statutory funding requirements may not take all actuarial liabilities of the plans into account. Specifically, in determining employer funding requirements, state statute limits recognition of reitree and beneficiary Cost of Living Adjustments (COLAs) to only the adjustments granted as of the valuation date. Accordingly, care should be taken in using this report for other purposes.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By: _____ _____

Leon F. (Rocky) Joyner, Jr., FCA, ASA, MAAA
Vice President and Actuary

K. Eric Fredén, FSA, MAAA
Associate Actuary

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SECTION 1: Valuation Summary for the State Police Retirement System

Purpose

This report has been prepared by The Segal Company to present a valuation of the State Police Retirement System as of June 30, 2005. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2005, provided by the Board;
- The assets of the Plan as of June 30, 2005, provided by the Auditor;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The State Police Retirement System's basic financial goal is to establish contributions which fully fund the System's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.
- The retirement contribution rate is determined using the Entry Age Normal Cost (EANC) Method. Under this method the employer contribution required is the sum of the normal cost, administration expenses and the sum of the 30-year amortization payments established each valuation due to changes in the Unfunded Actuarial Accrued Liability.
- The medical insurance contribution rate is determined in a similar method except that the actual contribution rate is determined by increasing the prior year's rate by an amount necessary to raise the insurance rate to the full EANC amount by the year 2016.
- The rates calculated in this report may be adopted by the Board for July 1, 2006 through June 30, 2007.
- Certain plan provisions have changed since the last valuation of the plans. For members whose participation began on or after August 1, 2004, the disability benefit is equal to the benefit calculated as a normal retirement benefit based on service to date of disability retirement, or 25% of the Final Rate of Pay, if larger. Disability benefits on this basis may be available even after the normal retirement age. For members whose participation began after July 1, 2003, the Retirement System

pays $15 per month per year of service for hazardous duty retirees and $10 per month per year of service for surviving spouses of hazardous duty employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of hazardous service. These dollar amounts will be adjusted periodically for general inflation. See Exhibit VI for a summary of all plan provisions. These changes had an immaterial impact on the contribution rate for the Retirement plan, and reduced the contribution rate for the Insurance plan by 0.10% of payroll.

- The following summarizes the required contributions for the year beginning July 1, 2006 and compares them to the prior valuation amounts.

Plan	July 1, 2006 Rate	July 1, 2005 Rate
Retirement	20.64%	14.49%
Insurance	21.66	20.34
Total	42.30%	34.83%

- The increase in the total rate is due to:

Retirement plan investment loss	4.11%
Retiree COLA	0.90
Insurance Phase-in*	1.32
Change in administrative expense assumption	0.02
Changes in plan provisions	-0.10
Other experience	1.22
Total change	7.47%

* Includes a portion of all insurance plan gains and losses for the year.

- The actuarial valuation report as of June 30, 2005 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan. Because the actuarial value of assets involves a smoothing method, changes in market value are not fully reflected immediately in the actuarial value of assets. Rather, that effect is spread over a period of years.

- As indicated in Section 2, Subsection B of this report, the total unrecognized investment losses as of June 30, 2005 are:

Plan	Unrecognized investment losses as of 6/30/2005	Actuarial value as a percentage of market value
Retirement	$14,105,749	104.2%
Insurance	798,976	100.8

These investment losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent they are not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.25% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.25% rate and all other actuarial assumption are met, the contribution requirements would still increase in each of the next few years.

- The funded ratio for the Retirement Plan on a statutory basis is 77.09%. This ratio is down from 88.02% last year primarily due to the further recognition of deferred investment losses this year. This ratio is based on the actuarial liabilities and asset values computed for the purpose of meeting funding requirements on the basis required by state law. This basis does not take all actuarial liabilities and investment performance to date into account. It also does not consider the contractual nature of the retiree medical benefits provided by SPRS. If the Retirement and Insurance results were combined, if the market value instead of actuarial value of assets were used, and if a 3% annual cost-of-living adjustment for retirement benefits were assumed to be in effect for all future years, then the funded ratio for the combined Retirement and Insurance plans would be 52.03%.

Summary of Key Valuation Results

	June 30, 2005	June 30, 2004
Contributions for next fiscal year:		
Retirement	20.64%	14.49%
Insurance	21.66	20.34
Total	42.30%	34.83%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$458,593,576	$437,482,425
Actuarial value of assets	353,511,622	385,077,195
Unfunded liability on actuarial value of assets	105,081,954	52,405,230
Funded ratio on actuarial value of assets	77.09%	88.02%
Market value of assets	$339,405,873	$335,720,408
Unfunded liability on market value of assets	119,187,703	101,762,017
Funded ratio on market value of assets	74.01%	76.74%
Insurance		
Actuarial accrued liability	$234,159,510	$197,604,301
Actuarial value of assets	100,207,082	96,622,908
Unfunded liability on actuarial value of assets	133,952,428	100,981,393
Funded ratio on actuarial value of assets	42.79%	48.90%
Market value of assets	$99,408,106	$90,422,080
Unfunded liability on market value of assets	134,751,404	107,182,221
Funded ratio on market value of assets	42.45%	45.76%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,036	992
Number of vested former members	42	44
Number of former members due a refund	210	199
Number of active members	987	999
Total salary	$43,720,092	$43,835,208
Average salary	44,296	43,879

A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, C, and D.

The ratio of non-actives to actives has slowly but steadily climbed for the past decade. As the number of annuitants per active employee rises, cash flow is impacted. The system either becomes more dependent on investment income to cover benefit payments, or contributions must rise to meet these obligations. (For the retirement plan, contributions have been less than benefit payments for the past eight years.)

Active Members

Plan costs are affected by the age, years of service and salaries of active members. In this year's valuation, there were 987 active members with an average age of 36.5, average years of service of 10.6 years and average salaries of $44,296. The 999 active members in the prior valuation had an average age of 36.4, average service of 10.7 years and average salaries of $43,879.

Inactive Members

In this year's valuation, there were 42 members with a vested right to a deferred or immediate vested benefit. In addition, there were 210 members entitled to a return of their employee contributions.

Retired Participants and Beneficiaries

As of June 30, 2005, 917 retired participants and 119 beneficiaries were receiving total monthly benefits of $2,748,657. For comparison, in the previous valuation, there were 878 retired participants and 114 beneficiaries receiving monthly benefits of $2,567,134.

A historical perspective of how the member population has changed over the past nine valuations can be seen in this chart.

CHART 1

Member Population: 1997 – 2005

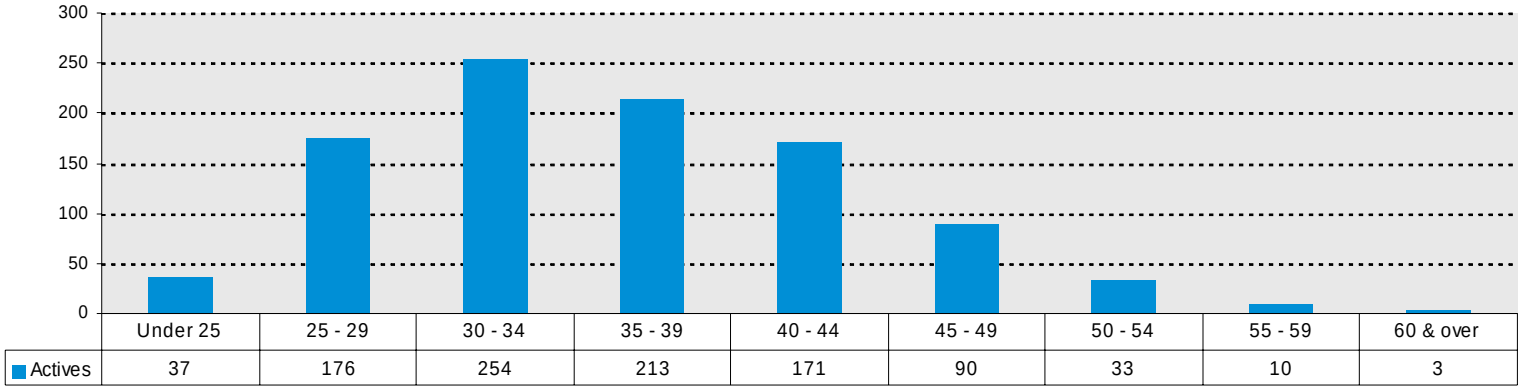
Year Ended June 30	Active Members	Vested Terminated Members*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1997	943	9	669	0.72
1998	954	11	739	0.79
1999	985	14	762	0.79
2000	1,023	9	797	0.79
2001	1,016	12	842	0.84
2002	1,002	20	897	0.92
2003	1,019	21	941	0.94
2004	999	44	992	1.04
2005	987	42	1,036	1.09

**Excludes terminated members due a refund of employee contribution.*

These graphs show a distribution of active members by age and by years of service.

CHART 2

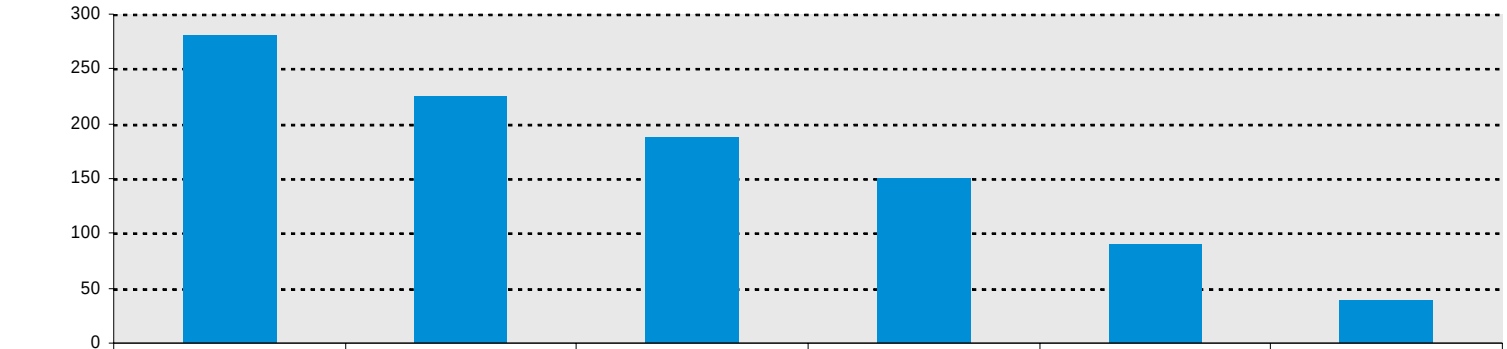
Distribution of Active Members by Age as of June 30, 2005



	Under 25	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 & over
Actives	37	176	254	213	171	90	33	10	3

CHART 3

Distribution of Active Members by Years of Service as of June 30, 2005

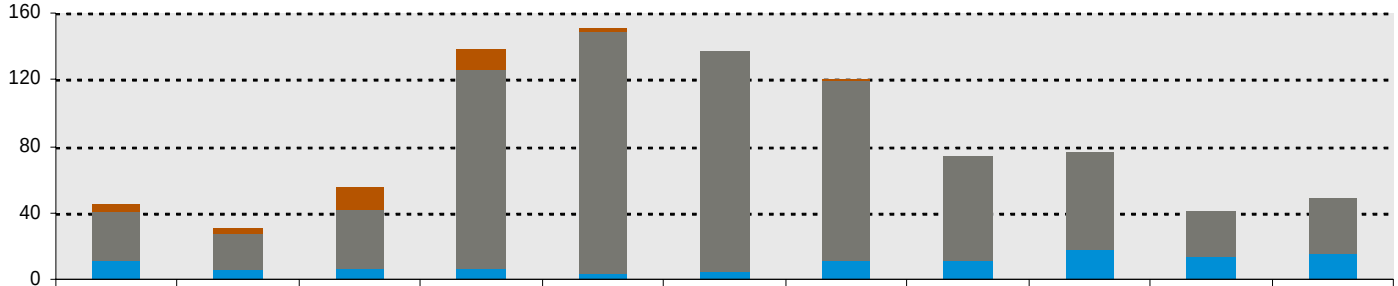


	0-4	5-9	10-14	15-19	20-24	25-29
Actives	281	225	188	150	90	39

These graphs show a distribution of the current retired participants based on their monthly amount and age, by type of pension.

CHART 4

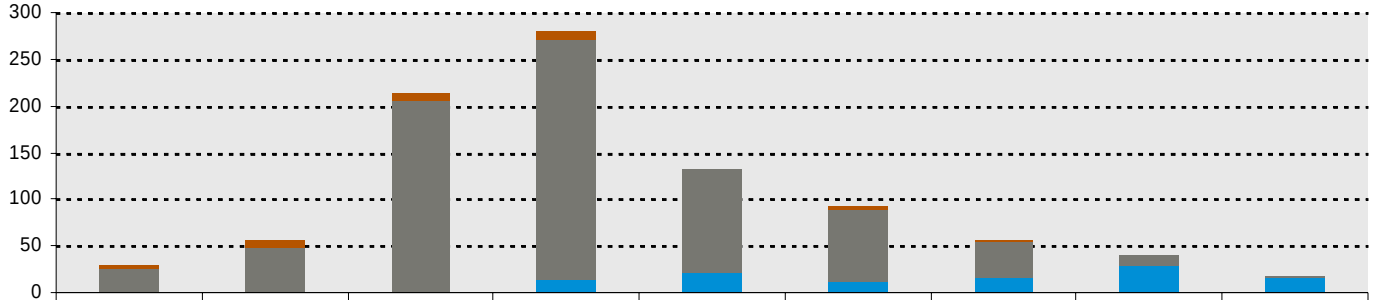
Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2005



	Under $500	$500 - $999	$1,000 - $1,499	$1,500 - $1,999	$2,000 - $2,499	$2,500 - $2,999	$3,000 - $3,499	$3,500 - $3,999	$4,000 - $4,499	$4,500 - $4,999	$5,000 & over
Disability	4	3	13	12	2	0	1	0	0	0	0
Early	30	22	35	119	146	133	108	63	58	28	33
Normal	11	6	7	7	3	4	11	11	18	13	16

CHART 5

Distribution of Retired Participants by Type and by Age as of June 30, 2005



	Under 45	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 & over
Disability	4	7	7	10	1	4	2	0	0
Early	25	49	206	258	110	77	38	11	1
Normal	0	0	0	13	21	12	16	29	16

B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative and investment expenses) and net investment earnings (less common stock commissions and securities lending expense) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits E and F.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

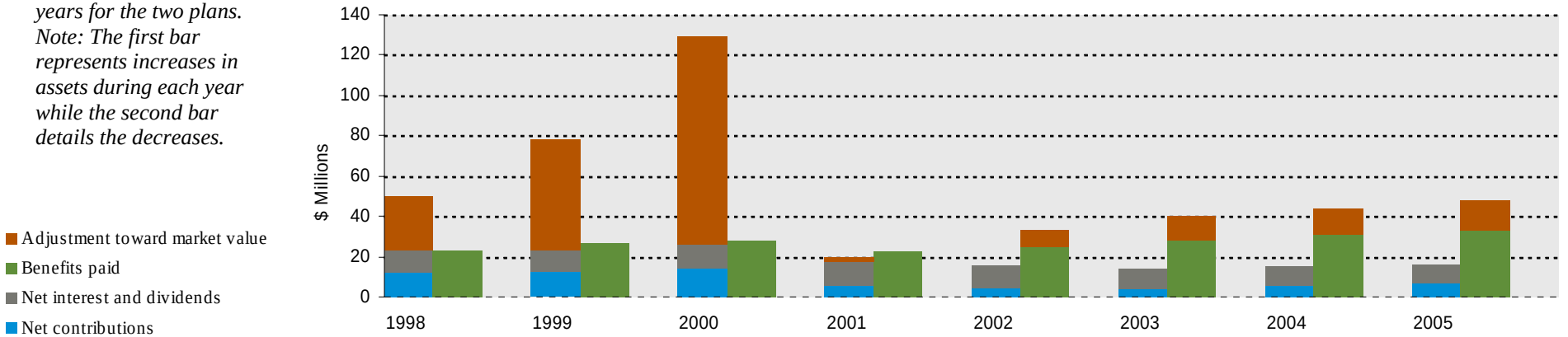
The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Both the actuarial value and market value of assets are representations of the System's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the System's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

These charts depict the components of changes in the actuarial value of assets over the last eight years for the two plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6A – Retirement

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1998 – 2005



Retirement

Development of the Fund Through June 30, 2005

Year Ended June 30	Employer Contributions*	Member Contributions	Net Interest and Dividends **	Adjustment Toward Market Value	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1998	$9,574,000	$2,711,000	$11,038,000	$26,511,643	$234,000	$22,925,000	$306,318,918
1999	9,463,000	3,658,000	10,655,000	54,221,278	214,000	26,479,000	357,623,196
2000	10,216,000	4,202,000	11,938,000	103,301,378	239,000	27,873,000	459,168,574
2001	1,516,267	4,138,298	12,131,000	2,093,280	214,171	22,672,539	456,160,709
2002	-17,643	4,417,691	11,567,921	-8,064,723	273,673	24,834,817	438,955,465
2003	-20,061	4,673,538	9,860,621	-12,149,278	298,266	27,958,443	413,063,576
2004	1,152,752	4,875,176	9,595,469	-12,323,070	313,604	30,973,104	385,077,195
2005	2,851,461	4,228,418	9,597,199	-14,807,023	384,146	33,051,482	353,511,622

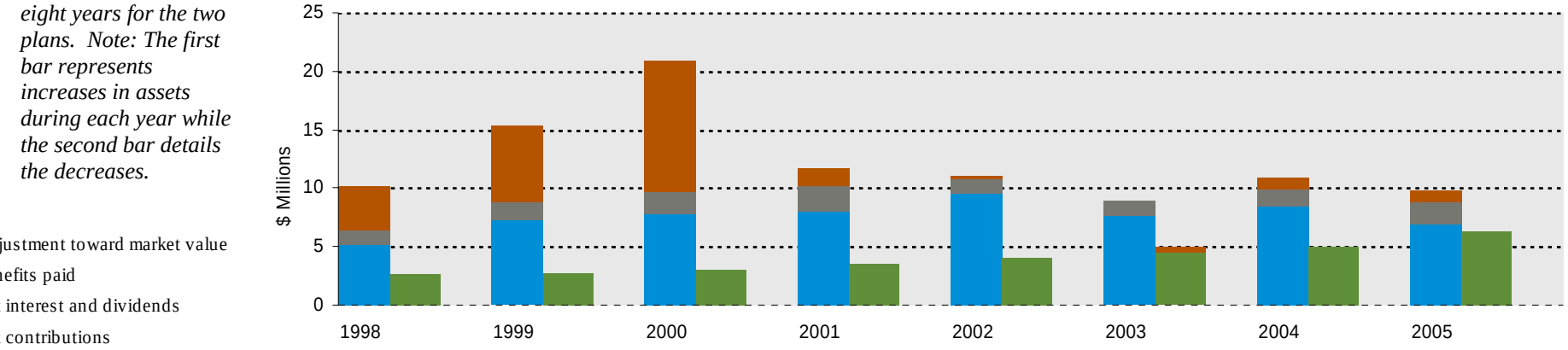
** Net contributions are employer and member contributions minus administrative and investment expenses*

*** Net of stock commissions and securities lending expense*

These charts depict the components of changes in the actuarial value of assets over the last eight years for the two plans. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6B – Insurance

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 1998 – 2005



Insurance

Development of the Fund Through June 30, 2005

Year Ended June 30	Employer Contributions*	Insurance Appropriation Contributions	Net Interest and Dividends**	Adjustment Toward Market Value	Administrative and Investment Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
1998	$5,120,000	$0	$1,344,000	$3,687,017	$6,000	$2,611,000	$41,410,500
1999	7,252,000	0	1,537,000	6,490,359	13,000	2,747,000	53,929,859
2000	7,818,000	0	1,878,000	11,119,853	20,000	3,014,000	71,711,712
2001	8,113,391	0	2,084,000	1,534,784	34,638	3,545,672	79,863,577
2002	9,579,899	0	1,283,315	213,261	57,933	4,014,728	86,867,391
2003	7,654,313	0	1,296,362	-502,024	49,703	4,518,372	90,747,967
2004	8,455,498	0	1,614,498	885,401	88,416	4,992,040	96,622,908
2005	6,631,031	343,071	1,968,913	971,939	109,972	6,220,807	100,207,082

** Net contributions are employer contributions minus administrative and investment expenses*

*** Net of stock commissions and securities lending expense*

These charts show the determination of the actuarial value of assets as of the valuation date.

CHART 7A – Retirement

Determination of Actuarial Value of Assets for Year Ended June 30, 2005

1. Market value of assets			$339,405,873
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2005	-$640,480	-$128,096	-$512,384
(b) Year ended June 30, 2004	8,827,136	1,765,427	5,296,282
(c) Year ended June 30, 2003	-21,265,059	-4,253,012	-8,506,024
(d) Year ended June 30, 2002	-51,918,114	-10,383,623	-10,383,623
(e) Year ended June 30, 2001	-114,461,071	-22,892,214	0
(f) Total unrecognized return			-14,105,749
3. Final actuarial value of assets: (1) – (2f)			$353,511,622
4. Actuarial value as a percentage of market value: (3) ÷ (1)			104.2%

CHART 7B – Insurance

Determination of Actuarial Value of Assets for Year Ended June 30, 2005

1. Market value of assets			$99,408,106
	Original		Unrecognized
2. Unrecognized return*	Amount	Amortization	Return
(a) Year ended June 30, 2005	$344,776	$68,955	$275,821
(b) Year ended June 30, 2004	6,867,493	1,373,499	4,120,496
(c) Year ended June 30, 2003	-5,900,932	-1,180,186	-2,360,372
(d) Year ended June 30, 2002	-14,174,603	-2,834,921	-2,834,921
(e) Year ended June 30, 2001	-12,422,108	-2,484,422	0
(f) Total unrecognized return			-798,976
3. Final actuarial value of assets: (1) – (2f)			$100,207,082
4. Actuarial value as a percentage of market value: (3) ÷ (1)			100.8%

** Total return on market value basis minus expected return on actuarial basis using the net investment return assumption. See Chart 8 for the calculation of unrecognized return for the current year.*

CHART 8

Calculation of Unrecognized Return for the Year Ended June 30, 2005

		Retirement	Insurance
1.	Employer and member contributions	$7,079,879	$6,974,102
2.	Benefit payments including refunds, or healthcare premiums	33,051,482	6,220,807
3.	Administrative and investment expenses	384,146	109,972
4.	Net cash flow: (1) - (2) - (3)	-26,355,749	643,323
5.	Market value of assets as of June 30, 2004	335,720,408	90,422,080
6.	Market value of assets as of June 30, 2005	339,405,873	99,408,106
7.	Actuarial value of assets as of June 30, 2004	385,077,195	96,622,907
8.	Average actuarial value of assets: (7) + [0.5 x (4)]	371,899,321	96,944,569
9.	Expected return on an actuarial basis: 8.25% of (8)	30,681,694	7,997,927
10.	Gain/(loss) for the year ended June 30, 2005: (6) - (5) - (4) - (9)	-640,480	344,776
11.	Unrecognized return as of June 30, 2005: 80% of (10)	-512,384	275,821

These charts show the change in the actuarial value of assets versus the market value over the past eight years for the plans.

CHART 9A – Retirement

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1998– 2005

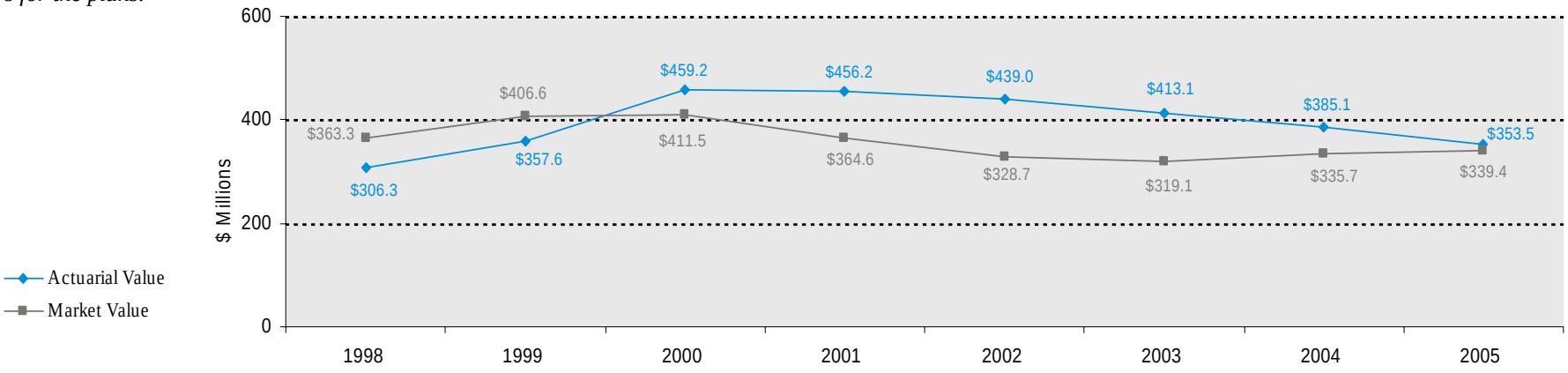
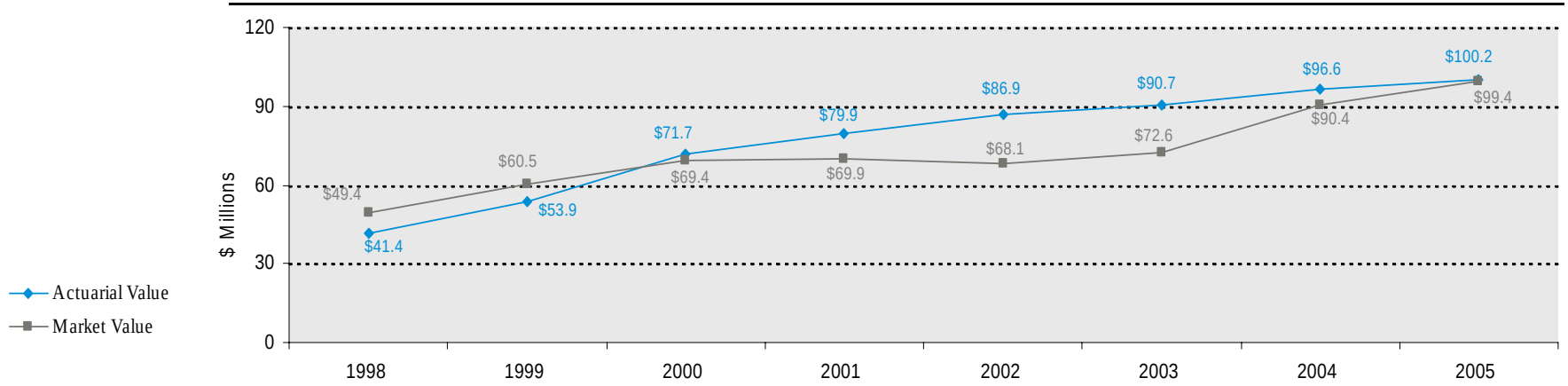


CHART 9B – Insurance

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 1998 – 2005



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Chart 10 presents a summary of experience for the year. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 10

Actuarial Experience for Year Ended June 30, 2005

	Retirement	Insurance
1. Net gain/(loss) from investments*	-$35,891,518	-$5,057,075
2. Net gain/(loss) from administrative expenses	-13,633	-48,262
3. Net gain/(loss) from other experience**	-11,600,737	-2,130,827
4. Net experience gain/(loss): (1) + (2) + (3)	-$47,505,888	-$7,236,164

** Details in Chart 11*

*** Details in Chart 14*

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the System's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.25%. Chart 11 shows the net investment experience for each plan for the year.

Since the actual return for the year was less than the assumed return, each plan experienced an actuarial loss during the year ended June 30, 2005 with regard to its investments.

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. Chart 12, which follows, shows the rate of return on an actuarial basis compared to the market value investment return for the last eight years.

This chart shows the losses due to investment experience.

CHART 11

Actuarial Value Investment Experience for Year Ended June 30, 2005

	Retirement	Insurance
1. Actual return	-$5,209,824	$2,940,852
2. Average value of assets	371,899,321	96,944,569
3. Actual rate of return: (1) ÷ (2)	-1.40%	3.03%
4. Assumed rate of return	8.25%	8.25%
5. Expected return: (2) x (4)	$30,681,694	$7,997,927
6. Actuarial gain/(loss): (1) – (5)	-$35,891,518	-$5,057,075

CHART 12A – Retirement

Investment Return – Actuarial Value vs. Market Value: 1998 - 2005

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1998	$11,038,000	4.03%	$26,511,643	9.67%	$37,549,643	13.69%	$67,163,306	22.27%
1999	10,655,000	3.56	54,221,278	18.10	64,876,278	21.66	56,848,150	15.94
2000	11,938,000	3.40	103,301,378	29.45	115,239,378	32.85	18,631,485	4.66
2001	12,131,000	2.69	2,093,280	0.46	14,224,280	3.16	-29,707,210	-7.37
2002	11,567,921	2.59	-8,064,723	-1.81	3,503,198	0.79	-15,336,844	-4.33
2003	9,860,621	2.31	-12,149,278	-2.84	-2,288,657	-0.54	13,975,133	4.41
2004	9,595,469	2.40	-12,323,070	-3.08	-2,727,601	-0.68	41,862,956	13.66
2005	9,597,199	2.58	-14,807,023	-3.98	-5,209,824	-1.40	30,041,214	9.31
Total	$86,383,210		$138,783,485		$225,166,695		$183,478,190	
					Average return	7.45%		6.65%

CHART 12B – Insurance

Investment Return – Actuarial Value vs. Market Value: 1998 - 2005

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1998	$1,344,000	3.83%	$3,687,017	10.50%	$5,031,017	14.32%	$8,320,673	20.88%
1999	1,537,000	3.52	6,490,359	14.87	8,027,359	18.39	6,577,625	12.73
2000	1,878,000	3.33	11,119,853	19.74	12,997,853	23.08	4,144,524	6.59
2001	2,084,000	2.82	1,534,784	2.07	3,618,784	4.89	-4,023,535	-5.61
2002	1,283,315	1.55	213,261	0.26	1,496,576	1.81	-7,387,596	-10.16
2003	1,296,362	1.47	-502,024	-0.57	794,338	0.90	1,392,935	2.00
2004	1,614,498	1.75	885,401	0.96	2,499,899	2.70	14,493,421	19.52
2005	1,968,913	2.03	971,939	1.00	2,940,851	3.03	8,342,703	9.19
Total	$13,006,088		$24,400,589		$37,406,677		$31,860,750	
					Average return	6.57%		5.97%

Note: Each year's yield is weighted by the average asset value in that year.

The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. These charts illustrate how this leveling effect has actually worked over the years 1996 - 2005 for the plans.

CHART 13A – Retirement

Market and Actuarial Rates of Return for Years Ended June 30, 1996 - 2005

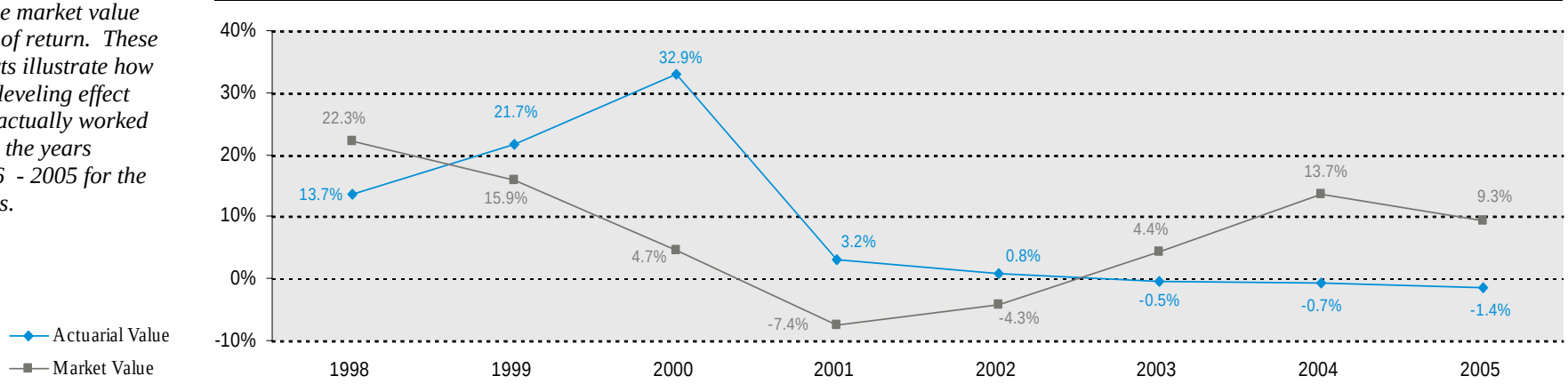
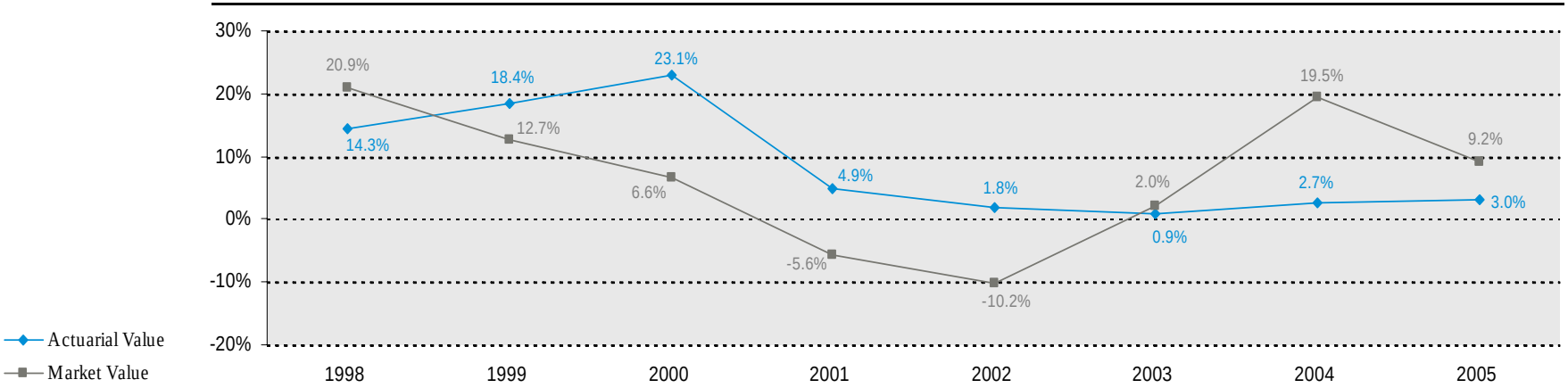


CHART 13B – Insurance

Market and Actuarial Rates of Return for Years Ended June 30, 1996 - 2005



Administrative Expenses

Current methodology includes an assumption for the cost of administration for the retirement funds but not for the insurance funds. This assumption is modified with each valuation to estimate expenses for the upcoming fiscal year. The following summarizes the past year's experience and presents the assumptions for the next year.

Plan	Year End 2005 Assumption	Year End 2005 Actual Experience	Gain/(Loss)* for the Year	Year End 2006 Assumption
Retirement	$92,000	$104,594	-$13,633	$100,000
Insurance	0	44,584	-48,262	0

* *Includes interest to year-end.*

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- COLAs granted in the year,
- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

A brief summary of the demographic gain/(loss) experience of the Funds for the year ended June 30, 2005 is shown in the chart below.

The chart shows elements of the experience losses for the most recent year.

CHART 14

Experience Due to Changes in Demographics for Year Ended June 30, 2005

	Retirement	Insurance
1. COLA	-$7,814,691	N/A
2. Other	-3,786,046	-$2,130,827
3. Total	-$11,600,737	-$2,130,827
4. Percentage of actuarial accrued liability	2.5%	0.9%

D. RECOMMENDED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability. This total amount is then divided by the projected salaries for active members to determine the funding rate.

The recommended contribution is based on a 30-year amortization of bases established each year as specified in the law governing the Plan.

Exhibit G in Section 3 provides details on these amortization bases.

The contribution rates as of June 30, 2005 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Charts 15 and 16 present the recommended contributions and reconciliations from the prior valuation

This chart compares this valuation's recommended contribution with the prior valuation.

CHART 15A – Retirement

Recommended Contribution

	As of June 30			
	2005		2004	
	Amount	% of Salary	Amount	% of Salary
1. Total normal cost	$7,442,581	17.02%	$7,448,348	16.99%
2. Administrative expenses	100,000	0.23%	92,000	0.21%
3. Expected employee contributions	-3,421,774	-7.83%	-3,433,859	-7.83%
4. Employer normal cost: (1) + (2) + (3)	$4,120,807	9.43%	$4,106,489	9.37%
5. Actuarial accrued liability	458,593,576		437,482,425	
6. Actuarial value of assets	353,511,622		385,077,195	
7. Unfunded actuarial accrued liability: (5) - (6)	$105,081,954		$52,405,230	
8. Payment on unfunded actuarial accrued liability	4,902,858	11.21%	2,246,288	5.12%
9. Total recommended contribution: (4) + (8)	$9,023,665	20.64%	$6,352,777	14.49%
10. Projected salary	$43,720,092		$43,835,208	

This chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 16A – Retirement

Reconciliation of Recommended Contribution from June 30, 2004 to June 30, 2005

Recommended Contribution as of June 30, 2004	$6,352,777
Effect of COLA for retirees	$391,506
Effect of investment loss	1,798,117
Effect of change in administrative expense assumption	8,000
Effect of net other changes	473,265
Total change	$2,670,888
Recommended Contribution as of June 30, 2005	$9,023,665

The chart compares this valuation's recommended contributions with the prior valuation.

CHART 15B – Insurance

Recommended Contribution

	As of June 30			
	2005		2004	
	Amount	% of Salary	Amount	% of Salary
1. Employer normal cost	$7,321,024	16.75%	$6,507,130	14.84%
2. Actuarial accrued liability	234,159,510		197,604,301	
3. Actuarial value of assets	100,207,082		96,622,908	
4. Unfunded actuarial accrued liability: (2) - (3)	$133,952,428		$100,981,393	
5. Payment on unfunded actuarial accrued liability	7,912,296	18.09%	6,047,518	13.80%
6. Full EANC contribution: (1) + (5)	$15,233,320	34.84%	$12,554,648	28.64%
7. Projected salary	$43,720,092		$43,835,208	
8. Prior year's funding rate	N/A	20.34%	N/A	19.59%
9. Years to reach full EANC	N/A	11	N/A	12
10. Additional amount for current year	N/A	1.32%	N/A	0.75%
11. Total recommended contribution rate: (8) + (10)	N/A	21.66%	N/A	20.34%

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EXHIBIT A

Table of Plan Coverage

Category	Year Ended June 30 2005	2004	Change From Prior Year
Active members in valuation:			
Number	987	999	-1.2%
Average age	36.5	36.4	N/A
Average service	10.6	10.7	N/A
Total salary	$43,720,092	$43,835,208	-0.3%
Average salary	44,296	43,879	1.0%
Account balances	35,670,717	37,658,106	5.3%
Total active vested members	769	760	1.2%
Vested terminated members	42	44	-4.5%
Retired participants:			
Number in pay status	882	843	4.6%
Average age	59.4	59.1	N/A
Average monthly benefit	$2,811	$2,744	2.4%
Disabled members:			
Number in pay status	35	35	0.0%
Average age	54.8	53.6	N/A
Average monthly benefit	$1,364	$1,364	0.0%
Beneficiaries in pay status	119	114	4.4%
Inactive nonvested members due a refund	210	199	5.5%

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EXHIBIT B

Members in Active Service as of June 30, 2005
By Age, Years of Service, and Average Salary

	Years of Service								
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39
Under 25	37	37	- -	- -	- -	- -	- -	- -	- -
	$26,084	$26,084	- -	- -	- -	- -	- -	- -	- -
25 - 29	176	138	38	- -	- -	- -	- -	- -	- -
	32,105	30,447	$38,126	- -	- -	- -	- -	- -	- -
30 - 34	254	70	125	58	1	- -	- -	- -	- -
	39,581	30,195	41,387	$46,760	$54,504	- -	- -	- -	- -
35 - 39	213	23	45	92	51	2	- -	- -	- -
	46,668	32,356	40,330	49,850	52,699	$53,718	- -	- -	- -
40 - 44	171	11	14	35	78	29	4	- -	- -
	51,969	30,519	38,043	48,874	55,628	58,911	$65,088	- -	- -
45 - 49	90	- -	3	2	17	51	17	- -	- -
	58,325	- -	39,512	44,982	54,455	59,005	65,046	- -	- -
50 - 54	33	1	- -	- -	1	8	15	8	- -
	64,148	31,608	- -	- -	53,400	55,991	67,866	$70,746	- -
55 - 59	10	- -	- -	- -	1	- -	3	1	5
	71,519	- -	- -	- -	50,796	- -	67,756	73,728	$77,479
60 - 64	1	- -	- -	1	- -	- -	- -	- -	- -
	53,724	- -	- -	53,724	- -	- -	- -	- -	- -
65 - 69	1	- -	- -	- -	1	- -	- -	- -	- -
	52,956	- -	- -	- -	52,956	- -	- -	- -	- -
70 & over	1	1	- -	- -	- -	- -	- -	- -	- -
	35,832	35,832	- -	- -	- -	- -	- -	- -	- -
Total	987	281	225	188	150	90	39	9	5
	$44,296	$29,992	$40,392	$48,684	$54,427	$58,589	$66,343	$71,077	$77,479

EXHIBIT C

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	87	$237,211.04	4	$9,612.07	91	$246,823.11
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	115	292,415.11	1	3,044.45	116	295,459.56
66-2/3% to beneficiary	72	230,728.31	1	2,556.66	73	233,284.97
50% to beneficiary	72	220,150.62	0	0.00	72	220,150.62
Pop-up option	289	887,887.92	0	0.00	289	887,887.92
10 years certain	4	15,609.36	0	0.00	4	15,609.36
10 years certain & life	28	79,791.26	0	0.00	28	79,791.26
Social Security option						
Age 62 basic	36	80,672.20	0	0.00	36	80,672.20
Age 62 survivorship	159	336,020.98	1	4,487.93	160	340,508.91
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	10	25,449.08	0	0.00	10	25,449.08
20 years certain & life	29	75,186.79	0	0.00	29	75,186.79
5 years certain	0	0.00	0	0.00	0	0.00
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	0	0.00	0	0.00	0	0.00
PLSO 36 month basic	0	0.00	0	0.00	0	0.00
PLSO 12 month survivor	3	8,748.67	0	0.00	3	8,748.67
PLSO 24 month survivor	1	6,240.34	0	0.00	1	6,240.34
PLSO 36 month survivor	5	11,100.05	0	0.00	5	11,100.05
Total	910	$2,507,211.73	7	$19,701.11	917	$2,526,912.84

EXHIBIT D

Beneficiary Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic form	0	$0.00	4	$2,587.13	4	$2,587.13
Straight life (old plan)	0	0.00	0	0.00	0	0.00
Joint & survivor						
100% to beneficiary	2	3,561.86	52	119,873.09	54	123,434.95
66-2/3% to beneficiary	0	0.00	2	3,341.23	2	3,341.23
50% to beneficiary	1	1,102.37	13	18,762.11	14	19,864.48
Pop-up option	0	0.00	10	24,065.90	10	24,065.90
10 years certain	0	0.00	1	2,496.09	1	2,496.09
10 years certain & life	0	0.00	0	0.00	0	0.00
Social Security option						
Age 62 basic	0	0.00	1	1,866.02	1	1,866.02
Age 62 survivorship	0	0.00	18	27,657.33	18	27,657.33
Partial deferred (old plan)	0	0.00	0	0.00	0	0.00
Widows age 60	0	0.00	0	0.00	0	0.00
Dependent child	5	1,477.46	2	493.82	7	1,971.28
Refund	0	0.00	0	0.00	0	0.00
15 years certain & life	0	0.00	0	0.00	0	0.00
20 years certain & life	0	0.00	7	14,440.10	7	14,440.10
5 years certain	0	0.00	1	19.75	1	19.75
PLSO 12 month basic	0	0.00	0	0.00	0	0.00
PLSO 24 month basic	0	0.00	0	0.00	0	0.00
PLSO 36 month basic	0	0.00	0	0.00	0	0.00
PLSO 12 month survivor	0	0.00	0	0.00	0	0.00
PLSO 24 month survivor	0	0.00	0	0.00	0	0.00
PLSO 36 month survivor	0	0.00	0	0.00	0	0.00
Total	8	$6,141.69	111	$215,602.57	119	$221,744.26

EXHIBIT E – Retirement

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Contribution income:				
Employer contributions	$2,851,461		$1,152,752	
Member contributions	4,228,418		4,875,176	
Less administrative and investment expenses	-384,146		-313,604	
Net contribution income		$6,695,733		$5,714,324
Investment income:				
Interest, dividends and other income	$11,059,954		$10,290,657	
Recognition of capital appreciation	-14,807,023		-12,323,070	
Less stock commissions and securities lending expense	-1,462,755		-695,188	
Net investment income		-5,209,824		-2,727,601
Total income available for benefits		$1,485,909		$2,986,723
Less benefit payments:				
Benefit payments	-$32,920,650		-$30,877,123	
Refunds	-130,832		-95,981	
Net benefit payments		-$33,051,482		-$30,973,104
Change in reserve for future benefits		-$31,565,573		-$27,986,381

EXHIBIT E – Insurance

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Contribution income:				
Employer contributions	$6,631,031		$8,455,498	
Insurance appropriation contributions	343,071		0	
Less administrative and investment expenses	-109,972		-88,416	
Net contribution income		$6,864,130		$8,367,082
Investment income:				
Interest, dividends and other income	$2,411,716		$1,792,227	
Recognition of capital appreciation	971,939		885,401	
Less stock commissions and securities lending expense	-442,803		-177,729	
Net investment income		2,940,852		2,499,899
Total income available for benefits		$9,804,982		$10,866,981
Less healthcare premium subsidies		-$6,220,807		-$4,992,040
Change in reserve for future benefits		$3,584,174		$5,874,941

EXHIBIT F – Retirement

Table of Financial Information

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Cash equivalents		$106,820		$85,665
Accounts receivable:				
Investment accounts receivable	$1,584,556		$10,349	
Year-end interest receivable	0		1,717,564	
Year-end accounts receivable	0		965,435	
Contributions receivable	1,012,310		0	
Total accounts receivable		2,596,866		2,693,348
Investments:				
Stocks	$214,138,647		$205,072,335	
Bonds	111,321,647		107,005,876	
Mortgage	16,699,734		16,860,141	
Real estate	489,665		493,000	
Fixed assets	4,990		5,576	
Short-term investments	-5,830,993		3,606,746	
Total investments at market value		336,823,666		333,043,674
Total assets		$339,527,352		$335,822,687
Less accounts payable		-$121,479		-$102,279
Net assets at market value		$339,405,873		$335,720,408
Net assets at actuarial value		$353,511,622		$385,077,195

EXHIBIT F – Insurance

Table of Financial Information

	Year Ended June 30, 2005		Year Ended June 30, 2004	
Cash equivalents		$19,814		$4,897
Accounts receivable:				
Investment accounts receivable	$263,275		$4,004	
Year-end interest receivable	0		236,497	
Year-end accounts receivable	0		352,513	
Contributions receivable	278,253		0	
Total accounts receivable		541,528		593,014
Investments:				
Stocks	$79,248,508		$73,925,782	
Bonds	11,297,649		9,444,815	
Short-term investments	8,388,693		6,526,520	
Total investments at market value		98,934,850		89,897,117
Total assets		$99,496,192		$90,495,028
Less accounts payable		-$88,086		-$72,948
Net assets at market value		$99,408,106		$90,422,080
Net assets at actuarial value		$100,207,082		$96,622,908

EXHIBIT G – Retirement

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$8,982,071	$930,638	15	$11,375,269
06/30/1991	30	9,963,656	984,058	16	12,651,158
06/30/1992	30	-24,502,117	-2,306,750	17	-31,072,223
06/30/1993	30	-3,706,436	-332,617	18	-4,678,494
06/30/1994	30	10,380,135	887,925	19	13,002,266
06/30/1995	30	22,729,292	1,853,273	20	28,176,756
06/30/1996	30	-17,793,855	-1,382,926	21	-21,777,370
06/30/1997	30	-31,021,470	-2,296,159	22	-37,368,920
06/30/1998	30	12,716,788	896,454	23	15,047,805
06/30/1999	30	-31,317,924	-2,102,590	24	-36,336,864
06/30/2000	30	-77,707,399	-4,968,607	25	-88,257,856
06/30/2001	30	26,106,163	1,589,740	26	28,980,632
06/30/2002	30	44,465,495	2,578,797	27	48,178,314
06/30/2003	30	61,350,968	3,388,646	28	64,796,249
06/30/2004	30	50,162,333	2,638,720	29	51,580,332
06/30/2005	30	50,784,900	2,544,256	30	50,784,900
Total			$4,902,858		$105,081,954

** Level percentage of salary*

EXHIBIT G– Insurance

Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1996	30	$73,323,619	$5,698,660	21	$89,738,603
06/30/1997	30	8,088,952	598,731	22	9,744,073
06/30/1998	30	-2,668,212	-188,092	23	-3,157,301
06/30/1999	30	-13,378,283	-898,177	24	-15,522,258
06/30/2000	30	-6,431,546	-411,233	25	-7,304,767
06/30/2001	30	9,773,380	595,152	26	10,849,496
06/30/2002	30	-1,482,959	-86,005	27	-1,606,785
06/30/2003	30	13,657,060	754,331	28	14,423,997
06/30/2004	30	5,446,888	286,526	29	5,600,861
06/30/2005	30	31,186,509	1,562,403	30	31,186,509
Total			$7,912,296		$133,952,428

** Level percentage of salary*

EXHIBIT H

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

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EXHIBIT I – Retirement

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 119 beneficiaries in pay status)		1,036
2.	Members inactive during year ended June 30, 2005 with vested rights		42
3.	Members active during the year ended June 30, 2005		987
	Fully vested	760	
	Not vested	218	
4.	Inactive nonvested members due a refund as of June 30, 2005		210

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$7,542,581
2.	Present value of future benefits		534,855,363
3.	Present value of future normal costs		76,261,787
4.	Actuarial accrued liability		458,593,576
	Retired participants and beneficiaries	$339,769,169	
	Inactive members with vested rights	1,088,284	
	Active members	117,195,213	
	Inactive nonvested members due a refund	540,910	
5.	Actuarial value of assets ($339,405,873 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		353,511,622
6.	Unfunded actuarial accrued liability		$105,081,954

EXHIBIT I – Insurance

Summary of Actuarial Valuation Results

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost, including administrative expenses		$7,321,024
2.	Present value of future benefits		310,879,331
3.	Present value of future normal costs		76,719,821
4.	Actuarial accrued liability		234,159,510
	Retired participants and beneficiaries	$139,093,506	
	Inactive members with vested rights	2,492,188	
	Active members	92,573,816	
5.	Actuarial value of assets ($99,408,106 at market value as reported by Carpenter, Mountjoy & Bressler, PSC)		100,207,082
6.	Unfunded actuarial accrued liability		$133,952,428

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EXHIBIT II – Retirement

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)]/ (c)
06/30/2000	$459,168,574	$336,579,763	-$122,588,811	136.42%	$43,596,396	-281.19%
06/30/2001	456,160,709	356,211,860	-99,948,849	128.06%	44,209,944	-226.08%
06/30/2002	438,955,465	380,790,346	-58,165,119	115.27%	43,961,844	-132.31%
06/30/2003	413,063,576	414,881,459	1,817,883	99.56%	43,760,832	4.15%
06/30/2004	385,077,195	437,482,425	52,405,230	88.02%	43,835,208	119.55%
06/30/2005	353,511,622	458,593,576	105,081,954	77.09%	43,720,092	240.35%

EXHIBIT II – Insurance

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)]/ (c)
06/30/2000	$71,711,712	$138,867,085	$67,155,373	51.64%	$43,596,396	154.04%
06/30/2001	79,863,577	158,261,479	78,397,902	50.46%	44,209,944	177.33%
06/30/2002	86,867,391	165,445,412	78,578,021	52.51%	43,961,844	178.74%
06/30/2003	90,747,967	184,501,205	93,753,238	49.19%	43,760,832	214.24%
06/30/2004	96,622,908	197,604,301	100,981,393	48.90%	43,835,208	230.37%
06/30/2005	100,207,082	234,159,510	133,952,428	42.79%	43,720,092	306.39%

Note: If the actuarial accrued liabilities of the Retirement plan were adjusted to allow for a 3% annual cost of living adjustment for all future years and were combined with the actuarial accrued liabilities of the Insurance plan, the funded ratio on a market value basis of the combined plans would be 52.03%.

EXHIBIT II – Retirement Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a)] / (b)	Increase in Assets
06/30/1958	N/A	$1,450,000	$1,450,000	100.00%	N/A
06/30/1963	2,544,782	4,553,258	2,008,476	44.11%	619,167
06/30/1968	5,791,036	9,079,139	3,288,103	36.22%	789,709
06/30/1971	9,386,839*	11,828,727	2,441,888	20.64%	1,339,726
06/30/1974	14,557,986*	17,737,434	3,179,448	17.93%	1,935,105
06/30/1975	17,012,636*	23,182,081	6,169,455	26.61%	2,454,650
06/30/1976	20,461,762*	28,693,129	8,231,367	28.69%	3,449,126
06/30/1977	24,125,252*	34,561,413	10,436,161	30.20%	3,663,490
06/30/1978	28,509,145*	49,950,102	21,440,957	42.92%	4,383,893
06/30/1979	33,903,221*	55,391,206	21,487,985	38.79%	5,394,076
06/30/1980	40,917,165*	67,580,562	26,663,397	39.45%	7,013,944
06/30/1981	48,230,303	71,526,728	23,296,425	32.57%	7,313,138
06/30/1982	57,330,130	78,713,172	21,383,042	27.17%	9,099,827
06/30/1983	65,757,086	81,944,546	16,187,460	19.75%	8,426,956
06/30/1984	74,980,517	91,180,668	16,200,151	17.77%	9,223,431
06/30/1985	85,016,242	99,269,825	14,253,583	14.36%	10,035,725
06/30/1986	96,667,699	105,559,951	8,892,252	8.42%	11,651,457
06/30/1987	110,194,604	111,541,989	1,347,385	1.21%	13,526,905
06/30/1988	120,998,549	120,128,367	-870,182	-0.72%	10,803,945
06/30/1989	131,350,553	134,550,773	3,200,220	2.38%	10,352,004
06/30/1990	145,025,551	154,007,622	8,982,071	5.83%	13,674,998
06/30/1991	150,818,074	170,009,955	19,191,881	11.29%	5,792,523
06/30/1992**	187,791,001	182,996,056	-4,794,955	-2.62%	36,972,937
06/30/1993	200,320,968	191,653,594	-8,667,374	-4.52%	12,529,957
06/30/1994	205,320,509	206,763,310	1,442,801	0.70%	4,999,541
06/30/1995	217,504,443	241,690,631	24,186,188	10.01%	12,183,934
06/30/1996	237,515,346	244,540,812	7,025,466	2.87%	20,010,903

EXHIBIT II – Retirement Fund (continued)

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) - (a)] / (b)	Increase in Assets
06/30/1997	279,643,275	255,784,758	-23,858,517	-9.33%	42,127,929
06/30/1998	306,318,918	294,427,019	-11,891,899	-4.04%	26,675,643
06/30/1999	357,623,196	314,021,673	-43,601,523	-13.88%	51,304,278
06/30/2000	459,168,574	336,579,763	-122,588,811	-36.42%	101,545,378
06/30/2001***	456,160,709	356,211,860	-99,948,849	-28.06%	-3,007,865
06/30/2002	438,955,465	380,790,346	-58,165,119	-15.27%	-17,205,244
06/30/2003	413,063,576	414,881,459	1,817,883	0.44%	-25,891,889
06/30/2004	385,077,195	437,482,425	52,405,230	11.98%	-27,986,381
06/30/2005	353,511,622	458,593,576	105,081,954	22.91%	-31,565,573

* *Includes capitalized appreciation of investments.*

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

EXHIBIT II – Insurance Fund

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Percent Unfunded [(b) – (a)]/(b)	Increase in Assets
06/30/1990	$6,516,517	$64,784,801	$58,268,284	89.94%	N/A
06/30/1991	8,931,544	74,163,248	65,231,704	87.96%	2,415,027
06/30/1992	11,717,956	88,407,634	76,689,678	86.75%	2,786,412
06/30/1993	14,285,479	95,290,099	81,004,620	85.01%	2,567,523
06/30/1994	17,410,672	110,193,139	92,782,467	84.20%	3,125,193
06/30/1995	21,200,195	118,995,732	97,795,537	82.18%	3,789,523
06/30/1996**	27,809,267	101,132,886	73,323,619	72.50%	6,609,072
06/30/1997	33,876,483	117,361,754	83,485,271	71.13%	6,067,216
06/30/1998	41,410,500	124,501,076	83,090,576	66.74%	7,534,017
06/30/1999	53,929,859	125,797,150	71,867,291	57.13%	12,519,359
06/30/2000	71,711,712	138,867,085	67,155,373	48.36%	17,781,853
06/30/2001***	79,863,577	158,261,479	78,397,902	49.54%	8,151,865
06/30/2002	86,867,391	165,445,412	78,578,021	47.49%	7,003,814
06/30/2003	90,747,967	184,501,205	93,753,238	50.81%	3,880,576
06/30/2004	96,622,908	197,604,301	100,981,393	51.10%	5,874,941
06/30/2005	100,207,082	234,159,510	133,952,428	57.21%	3,584,174

** *Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.*

*** *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

EXHIBIT III

Supplementary Information Required by the GASB

Valuation date	June 30, 2005
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of salary
Remaining amortization period	15 to 30 years
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	8.25%
Payroll growth	5.00%
Plan membership:	
Retired participants and beneficiaries receiving benefits	1,036
Terminated members entitled to, but not yet receiving benefits	42
Active members	987
Total	2,065

	Contracts in Force – Retirees and Dependents					
Age	**Total**	**100% Paid**	**75% Paid**	**50% Paid**	**25% Paid**	**0% Paid**
Single; Pre-Medicare	257	253	1	2	0	1
Family; Pre-Medicare	149	149	0	0	0	0
Parent Plus; Pre-Medicare	34	31	1	1	1	0
Couple; Pre-Medicare	239	238	1	0	0	0
Medicare Regular	10	6	0	4	0	0
Medicare High Option	348	342	4	1	1	0
Total	1,037	1,019	7	8	2	1

EXHIBIT IV – Retirement

Supplementary GASB Information - Schedule of Retirees and Beneficiaries

Valuation Date July 1	Added to Rolls		Removed from Rolls		Rolls – End of Year		% Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance		
2003	53	$2,040,300	9	$135,000	941	$28,115,500	N/A	$29,900
2004	62	2,580,100	11	189,900	992	30,805,600	9.57%	31,100
2005	50	1,813,000	6	159,600	1,036	32,983,900	7.07	31,800

EXHIBIT V

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy:	1983 Group Annuity Mortality Table*
Disabled:	Pension Benefit Guaranty Corporation Table for Disabled Lives Receiving Social Security

* Rates increased by 0.05% for active members.

Termination Rates before Retirement:

	Rate (%)			
	Mortality		Disability	Withdrawal
Age	Male	Female		
20	0.09	0.07	0.04	1.82
25	0.10	0.08	0.04	1.82
30	0.11	0.08	0.05	2.03
35	0.14	0.10	0.07	1.46
40	0.17	0.12	0.13	0.90
45	0.27	0.15	0.26	0.45
50	0.44	0.21	0.53	0.00
55	0.66	0.30	0.99	0.00
60	0.97	0.47	1.74	0.00

Retirement Rates:	60% will retire as soon as eligible for unreduced benefit and balance will continue until age 55.
Retirement Age for Inactive Vested Participants:	55
Percent Married:	100%
Age of Spouse:	Females 3 years younger than males.
Dependent Children:	For an employee's duty related death benefits, it is assumed that the employee is survived by two dependent children each age 6.
Net Investment Return:	8.25%

Salary Increases:

Years of Service	Rate (%)
1	12.00
2	10.00
3	8.00
4 or more	6.50

Payroll Growth: 5.0%

Retiree Medical Insurance Election: Future retirees will select medical coverage in the same proportion that current retirees have selected coverage.

Monthly Contribution Rates:

Pre-Medicare Coverage
Rate in Effect on Valuation Date

	Single	Family	Parent Plus	Couple
Region 1	$403.28	$1,008.20	$604.92	$907.38
Region 2	412.53	1,031.33	618.80	928.19
Region 3	394.80	987.02	592.28	888.28
Region 4	403.96	1,009.92	605.96	908.92
Region 5	400.64	1,001.60	600.96	901.44
Region 6	496.28	1,240.52	744.28	1,116.53
Region 7	447.52	1,118.80	671.28	1,006.92
Region 8	405.44	1,013.60	608.16	912.24

	Medicare Rate		Contracts in Force	
Carrier	Low Option	High Option	Low Option	High Option
Anthem Blue Seniors	$119.00	$331.30	8	341
Bankers Life Medicare	103.13	146.54	2	6
The Hartford	135.23	298.98	0	1

Weighted Medicare Coverage
Rate in Effect on Valuation Date

	Low Option	High Option
All Members	$116.00	$323.43

Medical Contribution Rate Increases:	Year	Rate(%)
	2005	10.00
	2006-2010	9.00
	2011-2015	8.00
	2016-2020	7.50
	2021 and thereafter	7.00

Members with Multiple Service Records: For active members with service in more than one system, the liability has been valued as follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.
- Future service is projected only under the system in which the member is currently active.
- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

Administrative Expenses: $100,000

Actuarial Value of Assets: Market value of assets less unrecognized return in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period.

Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.

EXHIBIT VI

Summary of Plan Provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation time years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period is less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Early Retirement:	
Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Disability:	
Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 of more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.
Vesting:	
Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Pre-Retirement Death Benefit (not in line of duty):	
Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.
Spouse's Pre-Retirement Death Benefit (in line of duty):	
Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.
Dependent Non-Spouse's Death Benefit (in line of duty):	
Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.
Dependent Child's Death Benefit (in line of duty):	
Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.
Post-Retirement Death Benefit:	
Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.
Insurance Plan for Retirees:	
Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System.

Members whose participation began on or after July 1, 2003	The Retirement System pays $10 per month per year of service toward medical premiums for non-hazardous retirees, $15 per month per year of service for hazardous retirees, and $10 per month per year of service for surviving spouses of hazardous employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of hazardous service.

133569/05392.001

Report on the Annual Valuations of the Kentucky Employees Retirement System County Employees Retirement System State Police Retirement System

Prepared as of June 30, 2006

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 1, 2006

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fiftieth annual actuarial valuation of the Kentucky Employees Retirement System, the forty-seventh annual actuarial valuation of the County Employees Retirement System, and the forty-eighth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2006 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2007 and ending June 30, 2008.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) are established as a new amortization base to be amortized over the following 30 years.

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Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30 year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. Going forward, new UAL bases will be established at each valuation date and will be amortized over the following 30 years.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2006 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	60.0%
KERS Hazardous Pension Fund	84.1%
CERS Non-Hazardous Pension Fund	83.5%
CERS Hazardous Pension Fund	75.0%
SPRS Pension Fund	66.6%

The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. While the funding level relative to the insurance funds has improved steadily since 1990, medical inflation rates in excess of the assumed rates as well as recent employer contribution rate reductions under KERS and SPRS have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level. As of June 30, 2006 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	7.8%
KERS Hazardous Insurance Fund	34.3%
CERS Non-Hazardous Insurance Fund	16.9%
CERS Hazardous Insurance Fund	21.9%
SPRS Insurance Fund	18.1%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data, nor has there been any reconciliation of data used in the prior year's valuation with this current valuation data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on January 19, 2006 based on the experience investigation report dated January 12, 2006, meet the parameters set for disclosure under GASB Statements No. 25 and 43. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in January 2011 and any adjustments will be reflected in the June 30, 2011 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,

Thomas J. Cavanaugh

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Edward A. Macdonald ASA, FCA, MAAA
President

TJC/EAM:sh

Enclosures

Summary of June 30, 2006 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2007-2008)					
Pension Fund Contribution	15.55%	10.20%	6.98%	15.01%	28.95%
Insurance Fund Contribution	32.82	36.91	20.51	39.52	91.05
Recommended Employer Contribution	48.37%	47.11%	27.49%	54.53%	120.00%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$8,994,826,247	$508,655,903	$6,179,569,267	$2,020,142,770	$516,482,298
Actuarial Value of Assets	5,394,086,323	427,984,192	$5,162,894,136	$1,515,075,017	344,016,197
Unfunded Actuarial Liability on Actuarial Value of Assets	3,600,739,924	80,671,711	$1,016,675,131	$505,067,753	172,466,101
Funding Level as a % of Actuarial Value of Assets	59.97%	84.14%	83.55%	75.00%	66.61%
Market Value of Assets	$5,440,132,708	$437,029,583	$5,191,376,948	$1,528,845,357	$352,841,486
Unfunded Actuarial Liability on Market Value of Assets	3,554,693,539	71,626,320	$988,192,319	$491,297,413	163,640,812
Funding Level on Market Value of Assets	60.48%	85.92%	84.01%	75.68%	68.32%
Insurance Fund					
Actuarially Accrued Liability	$7,815,480,774	$621,237,856	$4,607,223,639	$1,928,481,371	$582,580,867
Actuarial Value of Assets	611,350,765	212,833,318	$777,726,590	$422,785,042	105,580,269
Unfunded Actuarial Liability as a % of Actuarial Value of Assets	7,204,130,009	408,404,538	$3,829,497,049	$1,505,696,329	477,000,598
Funding Level as a % of Actuarial Value of Assets	7.82%	34.26%	16.88%	21.92%	18.12%
Market Value of Assets	$632,642,846	$223,523,081	$813,250,744	$441,278,796	$110,491,075
Unfunded Actuarial Liability as a % of Market Value of Assets	7,182,837,928	397,714,775	$3,793,972,895	$1,487,202,575	472,089,792
Funding Level on Market Value of Assets	8.09%	35.98%	17.65%	22.88%	18.97%
Member Data					
Number of Active Members	46,707	4,320	83,694	9,635	1,028
Total Annual Payroll (Active Members)	$1,702,230,777	$138,747,320	$1,982,437,473	$426,927,550	$47,743,865
Average Annual Pay (Active Members)	$36,445	$32,117	$23,687	$44,310	$46,443
Number of Retired Members & Beneficiaries	32,140	1,980	33,102	4,712	1,067
Average Annual Retirement Allowance	$17,616	$11,809	$9,313	$21,284	$32,475
Number of Vested Inactive Members	4,998	265	7,379	393	48

Additional Valuation Notes

In addition to the valuation results presented in the three reports that follow, certain calculations were made to round out the presentation and put the results in greater perspective. That information follows.

- Recent Contribution Shortfall – Although it has happened periodically in the past, there has been an ongoing contribution shortfall for KERS and SPRS since the 2002-2003 fiscal year. That shortfall has placed additional pressure on contribution rates, and that impact is compounding. The table below shows the recommended and budgeted contribution rates as a percent of payroll for KERS and SPRS over the last four fiscal years. The rates shown are the combined rates for retirement and insurance.

Fiscal Year	Recommended Rate	Budgeted Rate
	KERS Non-Hazardous	
2002-2003	5.89%	3.76%
2003-2004	7.53	5.89
2004-2005	10.29	5.89
2005-2006	13.62	5.89
	KERS Hazardous	
2002-2003	18.84%	17.60%
2003-2004	18.84	18.84
2004-2005	19.47	18.84
2005-2006	21.59	18.84
	SPRS	
2002-2003	21.58%	17.37%
2003-2004	21.58	21.58
2004-2005	28.08	21.58
2005-2006	34.83	21.58

Had the recommended contributions been made over this period of time, the contribution rates recommended as a result of the June 30, 2006 valuations would have been reduced by 1.00% of payroll for KERS Non-Hazardous, .29% for KERS Hazardous and 1.43% for SPRS.

- Market Value of Assets and COLA Liability Impact on Funding Ratio - The funding ratio for all the Plans is based on the actuarial liabilities and asset values computed for the purpose of meeting funding requirements on the basis required by state law. This basis does not take all actuarial liabilities and investment performance to date into account. It also does not consider the contractual nature of the retiree medical benefits provided. If the Retirement and Insurance results were combined, if the market value instead of actuarial value of assets were used, and if a 3% annual cost-of-living adjustment for retirement benefits were assumed to be in effect for all future years, then the funding ratio for the combined Retirement and Insurance plans would be lower, as shown in the table below.

System	Reported Funding Ratio	Adjusted Funding Ratio
KERS Non-Hazardous	35.72%	30.86%
KERS Hazardous	56.71	50.98
CERS Non-Hazardous	55.07	47.40
CERS Hazardous	49.08	42.23
SPRS	40.91	36.31

- Impact of Blended Interest Rates on Insurance Valuations - The June 30, 2006 Insurance Plan valuations recognize the parameters required by GASB Statements No. 43 and 45. One of the parameters is that a blended interest rate must be used when the benefits are not being fully funded. This rate reflects the level of advanced funding that is occurring. Because of the contribution rate shortfall noted above, blended rates were required for KERS Non-Hazardous and SPRS. The rate used for the June 30, 2006 valuation is 4.50% for both KERS Non-Hazardous and SPRS. If KERS Non-Hazardous and SPRS were being fully funded, an interest rate of 7.75% would be used, reducing liabilities and therefore contribution rates. The impact on rates is shown in the table below.

Insurance Plan	"Blended" Contribution Rate	"Full Funding" Contribution Rate
KERS Non-Hazardous	32.82%	18.68%
SPRS	91.05	43.05

- Unrecognized Investment Gains and Losses - The actuarial value of assets is determined by smoothing market gains and losses over a five year period. This results in a difference between market value and actuarial value of assets on each valuation date representing the gains and losses that have yet to be recognized in the valuation. The total unrecognized investment loss as of June 30, 2006 for each of the plans is shown in the table below.

Plan	Unrecognized investment gains/(losses)	Actuarial value as a % of market value
	KERS Non-Hazardous	
Retirement	$46,046,385	99.2%
Insurance	21,292,081	96.6
	KERS Hazardous	
Retirement	$9,045,391	97.9%
Insurance	10,689,763	95.2
	CERS Non-Hazardous	
Retirement	$28,482,812	99.5%
Insurance	35,524,154	95.6
	CERS Hazardous	
Retirement	$13,770,340	99.1%
Insurance	18,493,754	95.8
	SPRS	
Retirement	$8,825,289	97.5%
Insurance	4,910,806	95.6

Report on the Annual Valuation of the Kentucky Employees Retirement System

Prepared as of June 30, 2006

November 1, 2006

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2007.

The date of the valuation was June 30, 2006.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

Edward A. Macdonald, ASA, FCA, MAAA
President

TJC/EAM:sh

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REPORT ON THE ANNUAL VALUATION OF THE KENTUCKY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2006

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2006, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/06	6/30/05*	6/30/06	6/30/05*	6/30/06	6/30/05*
Contributions for next fiscal year:						
Retirement	15.55%	10.68%	10.20%	9.28%		
Insurance	32.82	6.45	36.91	14.04	N/A	N/A
Total	48.37%	17.13%	47.11%	23.32%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$8,994,826,247	$7,579,074,839	$508,655,903	$438,994,257	$9,503,482,150	$8,018,069,096
Actuarial value of assets	5,394,086,323	5,578,685,746	427,984,192	405,288,662	5,822,070,515	5,983,974,408
Unfunded liability on actuarial value of assets	3,600,739,924	2,000,389,093	80,671,711	33,705,595	3,681,411,635	2,034,094,688
Funded ratio on actuarial value of assets	59.97%	73.61%	84.14%	92.32%	61.26%	74.63%
Market value of assets	$5,440,132,708	$5,362,630,697	$437,029,583	$398,308,897	5,877,162,291	$5,760,939,594
Unfunded liability on market value of assets	3,554,693,539	2,216,444,142	71,626,320	40,685,360	3,626,319,859	2,257,129,502
Funded ratio on market value of assets	60.48%	70.76%	85.92%	90.73%	61.84%	71.85%
Insurance**						
Actuarial accrued liability	$7,815,480,774	$2,680,559,188	$621,237,856	$386,844,695	$8,436,718,630	$3,067,403,883
Actuarial value of assets	611,350,765	607,068,351	212,833,318	187,947,644	824,184,083	795,015,995
Unfunded liability on actuarial value of assets	7,204,130,009	2,073,490,837	408,404,538	198,897,051	7,612,534,547	2,272,387,888
Funded ratio on actuarial value of assets	7.82%	22.65%	34.26%	48.58%	9.77%	25.92%
Market value of assets	$632,642,846	$610,901,623	$223,523,081	$188,871,226	$856,165,927	$799,772,849
Unfunded liability on market value of assets	7,182,837,928	2,069,657,565	397,714,775	197,973,469	7,580,552,703	2,267,631,034
Funded ratio on market value of assets	8.09%	22.79%	35.98%	48.82%	10.15%	26.07%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	32,140	30,770	1,980	1,752	34,120	32,522
Number of vested former members	4,998	5,240	265	307	5,263	5,547
Number of former members due a refund	24,145	23,105	2,236	1,997	26,381	25,102
Number of active members	46,707	47,118	4,320	4,274	51,027	51,392
Total salary	$1,702,230,777	$1,655,907,288	$138,747,320	$131,687,088	$1,840,978,097	$1,787,594,376
Average salary	36,445	35,144	32,117	30,811	36,079	34,784

*Reported by prior actuarial firm.

**For 6/30/2006 valuation, assumed investment rate of return for insurance liabilities is 4.50% for KERS Non-Hazardous and 7.75% for KERS Hazardous.

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. There were, however, several changes in actuarial assumptions and methods adopted by the Board based on an experience investigation dated January 12, 2006 covering the period July 1, 2000 through June 30, 2005. Since the previous valuation, the assumptions and methods were changed as follows:

   - Investment return was reduced from 8.25% per year to 7.75% per year for retirement benefits, and Hazardous insurance benefits. In addition, the rate of investment return for Non-Hazardous insurance benefits was reduced from 8.25% to 4.50% as required under GASB Statements No. 43 and 45 due to the lack of pre-funding of insurance benefits
   - The mortality table was changed for members who retire after June 30, 2006 from the 1983 GAM table to the 1994 GAM table
   - The mortality table for disabled members was changed from the PBGC Table for Disabled Lives Receiving Social Security to the 1994 GAM table set forward five years
   - The salary scale was changed from a service based scale ranging from 12.0% to 6.5% to a service based scale ranging from 13.5% to 4.0% for Non-Hazardous employees and from 14.5% to 4.0% for Hazardous employees
   - Rates of disablement, termination and retirement were adjusted to more closely reflect the actual experience of the system
   - 6 months additional service credit will be assumed at retirement to reflect unused accumulated sick leave
   - Medical trend rates were increased through 2020 and reduced thereafter in a range starting at 12.0% per year in 2006-2008 and declining to an ultimate rate of 5.5% in 2027 and later
   - The method used to determine the actuarial value of assets has been changed to a method that truly smoothes market fluctuations over the five year smoothing period
   - The insurance accrued liability amortization bases were consolidated and reset to a new 30-year amortization period beginning with the June 30, 2006 valuation.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2006 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

			Group Averages		
Employee Group	Number	Payroll	Salary	Age	Service
Non-Hazardous	46,707	$ 1,702,230,777	$36,445	43.0	9.7
Hazardous	4,320	138,747,320	32,117	41.6	7.0
Total in KERS	51,027	$ 1,840,978,097	$36,079	42.9	9.5

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2001	47,780	$1,525,188,532	$31,921	4.5%
6/30/2002	48,555	1,597,447,963	32,900	3.1
6/30/2003	49,158	1,658,604,696	33,740	2.6
6/30/2004	47,599	1,645,412,496	34,568	2.5
6/30/2005	47,118	1,655,907,288	35,144	1.7
6/30/2006	46,707	1,702,230,777	36,445	3.7

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2001	4,228	$123,647,407	$29,245	1.8%
6/30/2002	4,211	125,371,604	29,772	1.8
6/30/2003	4,189	129,088,956	30,816	3.5
6/30/2004	4,014	126,664,812	31,556	2.4
6/30/2005	4,274	131,687,088	30,811	(2.4)
6/30/2006	4,320	138,747,320	32,117	4.2

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	No.	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	26,486	$510,011,451	$19,256	66.2
Disability	1,879	19,764,770	10,519	62.1
Beneficiary	3,775	36,390,782	9,640	69.1
Total in KERS	32,140	$566,167,003	17,616	66.3

Hazardous Retired Lives

Type of Benefit Payment	No.	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	1,659	$21,117,855	$12,729	61.1
Disability	120	872,900	7,274	56.2
Beneficiary	201	1,390,782	6,919	56.5
Total in KERS	1,980	$23,381,537	11,809	60.4

This valuation also includes 31,644 inactive members (29,143 Non-Hazardous and 2,501 Hazardous; of which 4,998 Non-Hazardous are vested and 265 Hazardous are vested.)

SECTION III – ASSETS

1. As of June 30, 2006 the total market value of assets amounted to $6,733,328,218 as shown in the following table.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2006

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	$5,440,132,708	$632,642,846	$6,072,775,554
Hazardous	437,029,583	223,523,081	660,552,664
Total	$5,877,162,291	$856,165,927	$6,733,328,218

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $6,646,254,598. Schedule B shows the development of the actuarial value of assets as of June 30, 2006. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2006	JUNE 30, 2005
Retirement		
Non-Hazardous	$ 5,394,086,323	$ 5,578,685,746
Hazardous	427,984,192	405,288,662
Total	$ 5,822,070,515	$ 5,983,974,408
Insurance		
Non-Hazardous	$ 611,350,765	$ 607,068,351
Hazardous	212,833,318	187,947,644
Total	$ 824,184,083	$ 795,015,995
KERS Total		
Non-Hazardous	$ 6,005,437,088	$ 6,185,754,097
Hazardous	640,817,510	593,236,306
Total	$ 6,646,254,598	$ 6,778,990,403

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2006. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $10,855,751,619, of which $6,011,881,083 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $132,556,377 is for the prospective benefits payable on account of present inactive members, and $4,711,314,159 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $5,822,070,515 as of June 30, 2006. The difference of $5,033,681,104 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $806,014,046 is the present value of future contributions expected to be made by members, and the balance of $4,227,667,058 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.27% of payroll for non-hazardous members and 6.80% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $546,255,423. When this amount is subtracted from $4,227,667,058, which is the present value of the total future contributions to be made by the employers, there remains $3,681,411,635 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 11.83% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 2.93% of payroll. These rates are based on a 30 year amortization of bases established each year as specified in the law governing the Plan. The bases are amortized on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.

5. The contribution rate for administrative expenses is determined to be 0.45% of payroll for non-hazardous members and 0.47% of payroll for hazardous members.
6. The development of all accrued liability amortization bases is shown in Schedule F.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $11,171,443,911, of which $3,293,611,256 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $483,572,834 is for the prospective benefits payable on account of present inactive members, and $7,394,259,821 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $824,184,083 as of June 30, 2006. The difference of $10,347,259,828 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $0 is the present value of future contributions expected to be made by members, and the balance of $10,347,259,828 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 16.41% of payroll for non-hazardous members and 19.62% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $2,734,725,281. When this amount is subtracted from $10,347,259,828, which is the present value of the total future contributions to be made by the employers, there remains $7,612,534,547 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 16.32% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 17.24% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $7,204,130,009 for non-hazardous members and $408,404,538 for hazardous members over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.

5. The contribution rate for administrative expenses is determined to be 0.09% of payroll for non-hazardous members and 0.05% of payroll for hazardous members.
6. The development of all accrued liability amortization bases is shown in Schedule F.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2006 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/05	$ 2,000.4	$ 33.7	$ 2,034.1
(2)	Normal cost from last valuation	80.5	10.9	91.4
(3)	Actual employer contributions	60.7	10.8	71.5
(4)	Interest accrual: (1) x .0825 + [[(2) – (3)] x .04125]	165.8	2.8	168.6
(5)	Expected UAAL before changes: (1) + (2) – (3) + (4)	$ 2,186.0	$ 36.6	$ 2,222.6
(6)	Change due to plan amendments	133.4	5.4	138.8
(7)	Change due to new actuarial assumptions or methods	702.3	18.1	720.4
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 3,021.7	$ 60.1	$ 3,081.8
(9)	Actual UAAL as of 6/30/06	$ 3,600.7	$ 80.7	$ 3,681.4
(10)	Gain/(loss): (8) – (9)	$ (579.0)	$ (20.6)	$ (599.6)
(11)	Accrued liabilities as of 6/30/05	$ 7,579.1	$ 439.0	$ 8,018.1
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(7.6%)	(4.7)%	(7.5)%

*Unfunded actuarial accrued liability.

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/05	$ 2,073.5	$ 198.9	$ 2,272.4
(2)	Normal cost from last valuation	98.3	20.0	118.3
(3)	Actual employer contributions	53.4	17.1	70.5
(4)	Interest accrual: (1) x .0825 + [[(2) – (3)] x .04125]	172.9	16.5	189.4
(5)	Expected UAAL before changes: (1) + (2) – (3) + (4)	2,291.3	218.3	2,509.6
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumptions or methods	4,617.5	143.7	4,761.2
(8)	Expected UAAL after changes: (5) + (6) + (7)	6,908.8	362.0	7,270.8
(9)	Actual UAAL as of 6/30/06	7,204.1	408.4	7,612.5
(10)	Gain/(loss): (8) – (9)	$ (295.3)	(46.4)	(341.7)
(11)	Accrued liabilities as of 6/30/05	$ 2,680.6	$ 386.8	$ 3,067.4
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(11.0)%	(12.0)%	(11.1)%

*Unfunded actuarial accrued liability.

NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/06	Insurance $ Gain (or Loss) For Year Ending 6/30/06
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (205.8)	$ (193.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(2.6)	(1.9)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.2	0.2
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	16.8	15.8
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	15.3	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(17.9)	(16.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(186.1)	(0.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(1.2)	(1.1)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(197.7)	(97.7)
Gain (or Loss) During Year From Financial Experience	$ (579.0)	$ (295.3)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and contribution timing.	(961.4)	(4,617.5)
Composite Gain (or Loss) During Year	$ (1,540.4)	$ (4,912.8)

HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/06	Insurance $ Gain (or Loss) For Year Ending 6/30/06
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (7.9)	$ (6.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.2	0.2
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.2	(0.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	4.8	4.1
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(2.3)	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(3.5)	(2.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, `a loss.	(7.2)	(1.7)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(1.2)	(1.0)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(3.7)	(38.5)
Gain (or Loss) During Year From Financial Experience	$ (20.6)	$ (46.4)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and contribution timing.	(24.9)	(143.7)
Composite Gain (or Loss) During Year	$ (45.5)	$ (190.1)

TOTAL KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/06	Insurance $ Gain (or Loss) For Year Ending 6/30/06
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (213.7)	$ (200.0)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(2.4)	(1.7)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.4	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	21.6	19.9
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	13.0	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(21.4)	(19.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(193.3)	(1.9)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(2.4)	(2.1)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(201.4)	(136.2)
Gain (or Loss) During Year From Financial Experience	$ (599.6)	$ (341.7)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and contribution timing.	(986.3)	(4,761.2)
Composite Gain (or Loss) During Year	$ (1,585.9)	$ (5,102.9)

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2007/2008 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for	Amount	% of Payroll
A. Normal Cost:		
(1) Service retirement benefits	$ 121,709,501	7.15%
(2) Disability benefits	15,320,077	0.90
(3) Survivor benefits	3,744,907	0.22
(4) Total	$ 140,774,485	8.27%
B. Member Contributions	$ 85,111,539	5.00%
C. Employer Normal Cost: [A(4) – B]	$ 55,662,946	3.27%
D. Administrative Expenses	$ 7,660,038	0.45%
E. Unfunded Actuarial Accrued Liability Contributions*:		
(1) UAAL Contribution Based on 6/30/05 Valuation:	$ 99,920,947	5.87%
(2) Change due to:		
a. Active decrements	$ 10,213,385	0.60%
b. Pay increases	(851,115)	(0.05)
c. Retiree mortality	170,223	0.01
d. Investment return	9,362,269	0.55
e. COLA	6,638,700	0.39
f. Assumption Change	57,365,177	3.37
g. Other	18,600,415	1.09
h. Total Change	$ 101,499,054	5.96%
(3) UAAL Contribution Based on 6/30/06 Valuation: [E(1) + E(2)h]	$ 201,420,001	11.83%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	$ 264,742,985	15.55%

*Development of the amortization bases of the UAAL is provided in Schedule F

Required Contribution Rates
Hazardous Retirement

Contribution for	Amount	% of Payroll
A. Normal Cost:		
(1) Service retirement benefits	$ 17,024,296	12.27%
(2) Disability benefits	2,539,076	1.83
(3) Survivor benefits	971,231	0.70
(4) Total	$ 20,534,603	14.80%
B. Member Contributions	$ 11,099,786	8.00%
C. Employer Normal Cost: [A(4) – B]	$ 9,434,817	6.80%
D. Administrative Expenses	$ 652,112	0.47%
E. Unfunded Actuarial Accrued Liability Contributions:*		
(1) UAAL Contribution based on 6/30/05 Valuation:	$ 1,262,601	0.91%
(2) Changes due to:		
a. Active decrements	$ 305,244	0.22%
b. Pay increases	110,998	0.08
c. Retiree mortality	55,499	0.04
d. Investment return	360,743	0.26
e. COLA	790,860	0.57
f. Assumption Change	1,429,097	1.03
g. Other	(254,630)	(0.18)
h. Total Change	$ 2,797,811	2.00%
(3) UAAL Contribution based on 6/30/06 Valuation: [E(1) + E(2)h]	$ 4,060,412	2.93%
F. Total Recommended Employer Contribution Rate: [C + D + E(3)]	$ 14,147,341	10.20%

*Development of the amortization bases of the UAAL is provided in Schedule F

Required Contribution Rates
Non-Hazardous Insurance

Contribution for	Amount	% of Payroll
A. Normal Cost	$ 279,297,162	16.41%
B. Member Contributions*	$ 0	0.00%
C. Employer Normal Cost: [A – B]	$ 279,297,182	16.41%
D. Administrative Expenses	$ 1,679,307	0.09%
E. Unfunded Actuarial Accrued Liabilities**	$ 277,769,351	16.32%
F. Total Recommended Employer Contribution Rate: [C + D + E]	$ 558,745,820	32.82%

*The liabilities are net of retiree contributions towards their healthcare
**Development of the amortization base of the UAAL is provided in Schedule F

Required Contribution Rates
Hazardous Insurance

Contribution for	Amount	% of Payroll
A. Normal Cost	$ 27,227,885	19.62%
B. Member Contributions*	$ 0	0.00%
C. Employer Normal Cost: [A – B]	$ 27,227,885	19.62%
D. Administrative Expenses	$ 63,250	0.05%
E. Unfunded Actuarial Accrued Liabilities**	$ 23,923,794	17.24%
F. Total Recommended Employer Contribution Rate: [C + D + E]	$ 51,214,929	36.91%

*The liabilities are net of retiree contributions towards their healthcare
**Development of the amortization base of the UAAL is provided in Schedule F

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2006

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	32,140	1,981	34,121
Terminated employees entitled to benefits but not yet receiving benefits	29,143	2,501	31,644
Active members	46,707	4,320	51,027
Total	107,990	8,802	116,792

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
Non-Hazardous Members						
6/30/2001	$6,844,742,687	$5,444,035,294	$(1,400,707,393)	125.7%	$1,525,089,988	(91.8)%
6/30/2002	6,654,084,196	6,026,094,764	(627,989,432)	110.4	1,597,344,487	(39.3)
6/30/2003	6,351,318,832	6,520,463,188	169,144,356	97.4	1,658,604,696	10.2
6/30/2004	6,000,513,743	7,049,613,171	1,049,099,428	85.1	1,645,412,496	63.8
6/30/2005	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
6/30/2006	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
Hazardous Members						
6/30/2001	$361,677,475	$285,193,761	$(76,483,714)	126.8%	$123,647,407	(61.9)%
6/30/2002	376,384,302	322,069,164	(54,315,138)	116.9	125,371,604	(43.3)
6/30/2003	385,925,722	356,879,133	(29,046,589)	108.1	129,088,956	(22.5)
6/30/2004	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
6/30/2005	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
6/30/2006	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
Total KERS Members						
6/30/2001	$7,206,420,161	$5,729,229,055	$ (1,477,191,106)	125.8%	$ 1,648,737,395	(89.6)%
6/30/2002	7,030,468,498	6,348,163,928	(682,304,570)	110.7	1,722,716,091	(39.6)
6/30/2003	6,737,244,554	6,877,342,321	140,097,767	98.0	1,787,693,652	7.8
6/30/2004	6,397,726,506	7,453,191,207	1,055,464,701	85.8	1,772,077,308	59.6
6/30/2005	5,983,974,408	8,018,069,096	2,034,094,688	74.6	1,787,594,376	113.8
6/30/2006	5,822,070,515	9,503,482,151	3,681,411,635	61.3	1,840,978,097	200.0

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
Non-Hazardous Members						
6/30/2001	$449,630,605	$1,769,583,098	$1,319,952,493	25.4%	$1,525,089,988	86.6%
6/30/2002	521,250,455	1,907,683,881	1,386,433,426	27.3	1,597,344,487	86.8
6/30/2003	553,885,082	2,093,210,321	1,539,325,239	26.5	1,658,604,696	92.8
6/30/2004	600,586,961	2,335,905,365	1,735,318,404	25.7	1,645,412,496	105.5
6/30/2005	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
6/30/2006	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
Hazardous Members						
6/30/2001	$119,372,742	$214,450,822	$95,078,080	55.7%	$123,647,407	76.9%
6/30/2002	135,874,582	236,819,050	100,944,468	57.4	125,371,604	80.5
6/30/2003	151,459,500	283,178,335	131,718,835	53.5	129,088,956	102.0
6/30/2004	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
6/30/2005	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
6/30/2006	212,833,318	621,237,856	408,404,538	34.3	138,747,320	294.4
Total KERS Members						
6/30/2001	$569,003,347	$1,984,033,920	$1,415,030,573	28.7%	$ 1,648,737,395	85.8%
6/30/2002	657,125,037	2,144,502,931	1,487,377,894	30.6	1,722,716,091	86.3
6/30/2003	705,344,582	2,376,388,656	1,671,044,074	29.7	1,787,693,652	93.5
6/30/2004	769,745,840	2,659,408,928	1,889,663,088	28.9	1,772,077,308	106.6
6/30/2005	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
6/30/2006	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,978,097	413.5

The final item of required supplementary information, the Schedule of Employer Contributions, is shown in the following tables.

Retirement Benefits

Schedule of Employer Contributions

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2001	$21,787,253	$23,482,080	107.8%
June 30, 2002	0	1,760,328	N/A
June 30, 2003	4,905,399	7,597,450	134.9
June 30, 2004	47,739,067	21,696,543	45.4
June 30, 2005	85,798,943	50,332,750	58.7
June 30, 2006	129,125,800	60,680,607	47.0
	Hazardous Members		
June 30, 2001	$9,920,148	$10,626,663	107.1%
June 30, 2002	7,742,052	17,933,817	102.5
June 30, 2003	8,511,402	7,322,607	86.0
June 30, 2004	9,600,978	9,769,580	101.8
June 30, 2005	9,449,878	9,758,547	103.3
June 30, 2006	10,787,472	10,803,206	100.1
	Total KERS Members		
June 30, 2001	$31,707,401	$34,108,743	107.6%
June 30, 2002	7,742,052	9,694,145	125.2
June 30, 2003	13,416,801	14,920,057	111.2
June 30, 2004	57,340,045	31,466,123	54.9
June 30, 2005	95,248,821	60,091,297	63.1
June 30, 2006	139,913,272	71,483,813	51.1

Insurance Benefits

Schedule of Employer Contributions

Year Ended	Annual Required Contribution*	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2001	$66,874,871	$66,874,871	100.0%
June 30, 2002	93,993,177	93,912,017	99.9
June 30, 2003	92,052,561	65,335,219	71.0
June 30, 2004	77,951,553	78,016,737	100.1
June 30, 2005	86,974,271	49,909,228	57.4
June 30, 2006	202,498,302	47,634,639	23.5
	Hazardous Members		
June 30, 2001	$13,226,298	$13,226,298	100.0%
June 30, 2002	15,859,932	15,887,398	100.2
June 30, 2003	15,839,215	15,883,263	100.3
June 30, 2004	14,942,092	14,959,617	100.1
June 30, 2005	15,892,977	15,395,977	96.9
June 30, 2006	28,517,563	17,011,745	59.7
	Total KERS Members		
June 30, 2001	$80,101,169	$80,101,169	100.0%
June 30, 2002	109,853,109	109,799,416	100.0
June 30, 2003	107,891,776	81,218,482	75.3
June 30, 2004	92,893,645	92,976,354	100.1
June 30, 2005	102,867,248	65,305,205	63.5
June 30, 2006	231,015,865	64,646,384	28.0

* ARC for years after June 30, 2005 are based on GASB Statement 43.

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2006. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2006	6/30/2006
Actuarial cost method	Entry Age	Entry Age
Amortization method	Level percent Closed	Level percent Closed
Remaining amortization period	14 - 30 years	14 - 30 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
Projected salary increases*	4.0% - 13.5%	4.0% - 14.5%
Cost-of-living adjustment	None	None
*Includes inflation at	3.5%	3.5%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2006	6/30/2006
Actuarial cost method	Entry Age	Entry Age
Amortization method	Level percent Closed	Level percent Closed
Remaining amortization period	30 years	30 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption	12.0% - 5.5%	12.0% - 5.5%
Year of Ultimate Trend	2027	2027
Actuarial assumptions:		
Investment rate of return*	4.50%	7.75%
*Includes inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2006 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2005. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 5,394,086,323	$ 5,578,685,746
Prospective contributions		
Member contributions	$ 711,518,422	**
Employer normal contributions	465,884,489	$ 1,779,733,404
Unfunded accrued liability contributions	3,600,739,924	2,000,389,093
Total prospective contributions	$ 4,778,142,835	$ 3,780,122,497
Total assets	$ 10,172,229,158	$ 9,358,808,243
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 5,763,076,811	$ 4,939,967,757
Present value of benefits payable on account of active members	4,290,238,304	4,302,560,635
Present value of benefits payable on account of inactive members	118,914,043	116,279,851
Total liabilities	$ 10,172,229,158	$ 9,358,808,243

*Reported by prior actuarial firm.
**Prospective member contributions and employer normal contributions not reported separately by previous actuary.

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 427,984,192	$ 405,288,662
Prospective contributions		
Member contributions	$ 94,495,624	**
Employer normal contributions	80,370,934	$ 189,953,721
Unfunded accrued liability contributions	80,671,711	33,705,595
Total prospective contributions	$ 255,538,269	$ 223,659,316
Total assets	$ 683,522,461	$ 628,947,978
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 248,804,272	$ 201,390,551
Present value of benefits payable on account of active members	421,075,855	415,637,428
Present value of benefits payable on account of inactive members	13,642,334	11,919,999
Total liabilities	$ 683,522,461	$ 628,947,978

*Reported by prior actuarial firm.
**Prospective member contributions and employer normal contributions not reported separately by previous actuary.

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 5,822,070,515	$ 5,983,974,408
Prospective contributions		
Member contributions	$ 806,014,046	**
Employer normal contributions	546,255,423	$ 1,969,687,125
Unfunded accrued liability contributions	3,681,411,635	2,034,094,688
Total prospective contributions	$ 5,033,681,104	$ 4,003,781,813
Total assets	$ 10,855,751,619	$ 9,987,756,221
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 6,011,881,083	$ 5,141,358,308
Present value of benefits payable on account of active members	4,711,314,159	4,718,198,063
Present value of benefits payable on account of inactive members	132,556,377	128,199,850
Total liabilities	$ 10,855,751,619	$ 9,987,756,221

*Reported by prior actuarial firm.
**Prospective member contributions and employer normal contributions not reported separately by previous actuary.

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 611,350,765	$ 607,068,351
Prospective employer contributions		
Normal contributions	$ 2,538,834,443	$ 1,144,308,709
Unfunded accrued liability contributions	7,204,130,009	2,073,490,837
Total prospective contributions	$ 9,742,964,452	$ 3,217,799,546
Total assets	$ 10,354,315,217	$ 3,824,867,897
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 3,067,574,794	$ 1,448,911,773
Present value of benefits payable on account of active members	6,811,189,842	2,274,248,439
Present value of benefits payable on account of inactive members	475,550,581	101,707,685
Total liabilities	$ 10,354,315,217	$ 3,824,867,897

*Reported by prior actuarial firm.

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 212,833,318	$ 187,947,644
Prospective employer contributions		
Normal contributions	$ 195,890,838	$ 191,503,057
Unfunded accrued liability contributions	408,404,538	198,897,051
Total prospective contributions	$ 604,295,376	$ 390,400,108
Total assets	$ 817,128,694	$ 578,347,752
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 226,036,462	$ 175,343,661
Present value of benefits payable on account of active members	583,069,979	390,464,102
Present value of benefits payable on account of inactive members	8,022,253	12,539,989
Total liabilities	$ 817,128,694	$ 578,347,752

*Reported by prior actuarial firm.

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 824,184,083	$ 795,015,995
Prospective employer contributions		
Normal contributions	$ 2,734,725,281	$ 1,335,811,766
Unfunded accrued liability contributions	7,612,534,547	2,272,387,888
Total prospective contributions	$ 10,347,259,828	$ 3,608,199,654
Total assets	$ 11,171,443,911	$ 4,403,215,649
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 3,293,611,256	$ 1,624,255,434
Present value of benefits payable on account of active members	7,394,259,821	2,664,712,541
Present value of benefits payable on account of inactive members	483,572,834	114,247,674
Total liabilities	$ 11,171,443,911	$ 4,403,215,649

*Reported by prior actuarial firm.

The following tables provide the solvency test for non-hazardous and hazardous KERS members.

Solvency Test
Retirement Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2001*	$825,433,562	$2,669,755,096	$1,948,846,636	$6,844,742,687	100.0%	100.0%	171.9%
6/30/2002*	910,956,664	3,242,343,193	1,872,794,907	6,654,084,196	100.0	100.0	133.5
6/30/2003*	859,895,312	3,844,696,149	1,815,871,727	6,351,318,832	100.0	100.0	90.7
6/30/2004*	915,105,103	4,452,864,748	1,681,643,320	6,000,513,743	100.0	100.0	37.6
6/30/2005*	866,044,474	5,056,247,608	1,656,782,757	5,578,685,746	100.0	93.2	-
6/30/2006	866,050,799	5,881,990,853	2,246,784,595	5,394,086,323	100.0	77.0	-

*Reported by prior actuarial firm.

Solvency Test
Retirement Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2001*	$70,405,915	$86,372,269	$128,415,577	$361,677,475	100.0%	100.0%	159.6%
6/30/2002*	77,700,666	110,048,474	134,320,024	376,384,302	100.0	100.0	140.4
6/30/2003*	71,414,721	135,622,333	149,842,079	385,925,722	100.0	100.0	119.4
6/30/2004*	78,817,575	175,102,848	149,657,613	397,212,763	100.0	100.0	95.7
6/30/2005*	75,098,321	213,310,550	150,585,386	405,288,662	100.0	100.0	77.6
6/30/2006	87,092,538	262,446,606	159,116,759	427,984,192	100.0	100.0	49.3

*Reported by prior actuarial firm.

Solvency Test
Insurance Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2001*	$0	$784,547,826	$985,035,272	$449,630,605	100.0%	57.3%	--
6/30/2002*	0	900,313,022	1,007,370,859	521,250,455	100.0	57.9	--
6/30/2003*	0	1,089,606,122	1,003,604,199	553,885,082	100.0	50.8	--
6/30/2004*	0	1,282,214,660	1,053,690,705	600,586,961	100.0	46.8	--
6/30/2005*	0	1,550,619,458	1,129,939,730	607,068,351	100.0	39.2	--
6/30/2006	0	3,543,125,375	4,272,355,400	611,350,765	100.0	17.3	--

*Reported by prior actuarial firm.

Solvency Test
Insurance Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2001*	$0	$77,157,196	$137,293,626	$119,372,742	100.0%	100.0%	30.7%
6/30/2002*	0	90,978,506	145,840,544	135,874,582	100.0	100.0	30.8
6/30/2003*	0	113,979,451	169,198,884	151,459,500	100.0	100.0	22.2
6/30/2004*	0	142,872,557	180,631,006	169,158,879	100.0	100.0	14.6
6/30/2005*	0	187,883,650	198,961,045	187,947,644	100.0	100.0	--
6/30/2006	0	234,058,715	387,179,141	212,833,318	100.0	90.9	--

*Reported by prior actuarial firm.

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation Date June 30:	2005	2006	2007	2008	2009	2010
A.	Actuarial Value Beginning of Year	$6,000,513,743	$5,578,685,745				
B.	Market Value End of Year	5,362,630,697	5,440,132,708				
C.	Market Value Beginning of Year	5,258,994,145	5,362,630,697				
D.	Cash Flow						
	D1. Contributions	178,133,769	168,287,852				
	D2. Benefit Payments	(531,219,607)	(587,578,810)				
	D3. Administrative Expenses	(5,916,003)	(7,567,641)				
	D4. Investment Expenses	(4,380,304)	(4,466,247)				
	D5. Net	(363,376,145)	(431,324,846)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	467,012,697	508,826,857				
	E2. Assumed Rate	8.25%	8.25%				
	E3. Amount for Immediate Recognition	480,053,118	429,275,362				
	E4. Amount for Phased-In Recognition	(13,040,421)	79,551,495				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(2,608,084)	15,910,299				
	F2. First Prior Year	28,891,832	(2,608,084)	15,910,299			
	F3. Second Prior Year	(67,554,224)	28,891,832	(2,608,084)	15,910,299		
	F4. Third Prior Year	(157,189,761)	(67,554,224)	28,891,832	(2,608,084)	15,910,299	
	F5. Fourth Prior Year	(340,044,734)	(157,189,761)	(67,554,224)	28,891,832	(2,608,084)	15,910,299
	F6. Total Recognized Investment Gain	(538,504,971)	(182,549,938)	(25,360,177)	(42,194,047)	13,302,215	15,910,299
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$5,578,685,745	$5,394,086,323				
H.	Difference Between Market & Actuarial Values	$(216,055,048)	$46,046,385	$71,406,562	$29,212,515	$15,910,299	$0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation Date June 30:	2005	2006	2007	2008	2009	**2010**
A.	Actuarial Value Beginning of Year	$397,212,763	$405,288,662				
B.	Market Value End of Year	398,308,897	437,029,583				
C.	Market Value Beginning of Year	366,569,507	398,308,897				
D.	Cash Flow						
	D1. Contributions	21,383,377	22,858,959				
	D2. Benefit Payments	(22,255,069)	(25,172,682)				
	D3. Administrative Expenses	(511,021)	(645,377)				
	D4. Investment Expenses	(389,065)	(352,105)				
	D5. Net	(1,717,787)	(3,311,205)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	33,457,177	42,031,891				
	E2. Assumed Rate	8.25%	8.25%				
	E3. Amount for Immediate Recognition	32,699,194	33,090,526				
	E4. Amount for Phased-In Recognition	757,983	8,941,365				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	151,597	1,788,273				
	F2. First Prior Year	2,340,134	151,597	1,788,273			
	F3. Second Prior Year	(3,242,759)	2,340,134	151,597	1,788,273		
	F4. Third Prior Year	(8,121,036)	(3,242,759)	2,340,134	151,597	1,788,273	
	F5. Fourth Prior Year	(14,033,444)	(8,121,036)	(3,242,759)	2,340,134	151,597	1,788,273
	F6. Total Recognized Investment Gain	(22,905,508)	(7,083,791)	1,037,245	4,280,004	1,939,870	1,788,273
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$405,288,662	$427,984,192				
H.	Difference Between Market & Actuarial Values	$(6,979,765)	$9,045,391	$8,088146	$3,728142	$1,788,273	$0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

Valuation Date June 30:	2005	2006	2007	2008	2009	2010
A. Actuarial Value Beginning of Year	$600,586,961	$607,068,351				
B. Market Value End of Year	610,901,623	632,642,846				
C. Market Value Beginning of Year	587,680,647	610,901,623				
D. Cash Flow						
D1. Contributions	51,431,954	53,404,601				
D2. Benefit Payments	(75,571,076)	(95,822,805)				
D3. Administrative Expenses	(463,299)	(1,679,307)				
D4. Investment Expenses	(435,551)	(442,465)				
D5. Net	(25,037,972)	(44,539,976)				
E. Investment Income						
E1. Market Total: B.-C.-D5.	48,258,948	66,281,199				
E2. Assumed Rate	8.25%	8.25%				
E3. Amount for Immediate Recognition	48,515,608	49,022,827				
E4. Amount for Phased-In Recognition	(256,660)	17,258,372				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	(51,332)	3,451,674				
F2. First Prior Year	7,351,776	(51,332)	3,451,674			
F3. Second Prior Year	(7,064,172)	7,351,776	(51,332)	3,451,674		
F4. Third Prior Year	(3,888,383)	(7,064,172)	7,351,776	(51,332)	3,451,674	
F5. Fourth Prior Year	(13,344,135)	(3,888,383)	(7,064,172)	7,351,776	(51,332)	3,451,674
F6. Total Recognized Investment Gain	(16,996,246)	(200,437)	3,687,946	10,752,118	3,400,342	3,451,674
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	$607,068,351	$611,350,765				
H. Difference Between Market & Actuarial Values	$3,833,272	$21,292,081	$17,604,135	$6,852,017	$3,451,674	$0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members

	Valuation Date June 30:	2005	2006	2007	2008	2009	2010
A.	Actuarial Value Beginning of Year	$169,158,879	$187,947,644				
B.	Market Value End of Year	188,871,226	223,523,081				
C.	Market Value Beginning of Year	162,127,373	188,871,226				
D.	Cash Flow						
	D1. Contributions	15,653,592	17,100,064				
	D2. Benefit Payments	(4,852,962)	(6,513,266)				
	D3. Administrative Expenses	(54,640)	(63,250)				
	D4. Investment Expenses	(129,342)	(211,889)				
	D5. Net	10,616,648	10,311,659				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	16,127,205	24,340,195				
	E2. Assumed Rate	8.25%	8.25%				
	E3. Amount for Immediate Recognition	14,393,544	16,227,862				
	E4. Amount for Phased-In Recognition	1,733,661	8,112,334				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	346,732	1,622,467				
	F2. First Prior Year	2,465,285	346,732	1,622,467			
	F3. Second Prior Year	(1,770,872)	2,465,285	346,732	1,622,467		
	F4. Third Prior Year	(4,317,459)	(1,770,872)	2,465,285	346,732	1,622,467	
	F5. Fourth Prior Year	(2,950,515)	(4,317,459)	(1,770,872)	2,465,285	346,732	1,622,467
	F6. Total Recognized Investment Gain	(6,226,829)	(1,653,847)	2,663,612	4,434,484	1,969,199	1,622,467
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$187,947,644*	$212,833,318				
H.	Difference Between Market & Actuarial Values	$923,582	$10,689,763	$8,026,151	$3,591,667	$1,622,467	$0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

*This is the actuarial value as reported by the previous actuary. It differs from the method in the table above by $5,402. The difference is not material.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for KERS non-hazardous is 4.50% and for KERS hazardous is 7.75%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 3.50% per annum:

Service	Annual Rates of Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	10.0%	11.0%	3.5%	13.5%	14.5%
1-2	3.5	4.0	3.5	7.0	7.5
2-3	2.0	3.5	3.5	5.5	7.0
3-4	1.5	3.0	3.5	5.0	6.5
4-5	1.5	2.5	3.5	5.0	6.0
5-6	1.0	2.0	3.5	4.5	5.5
6-7	1.0	1.5	3.5	4.5	5.0
7-8	1.0	1.5	3.5	4.5	5.0
8-9	0.5	1.0	3.5	4.0	4.5
9-10	0.5	1.0	3.5	4.0	4.5
10 & over	0.5	0.5	3.5	4.0	4.0

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement**
		Male	Female		
20	6.00%	0.05%	0.03%	0.05%	
25	5.40	0.07	0.03	0.07	
30	4.80	0.08	0.04	0.09	
35	3.60	0.09	0.05	0.13	
40	2.66	0.11	0.07	0.20	
45	1.98	0.16	0.10	0.33	
50	1.92	0.26	0.14	0.56	
55	1.08	0.44	0.23	0.92	8.0%
60	0.75	0.80	0.44	1.46	10.0
65		1.45	0.86		25.0
70		2.37	1.37		25.0
75					100.0

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.

** If service is at least 27 years, the rate is 25%. All rates are doubled during the window period expiring January 1, 2009, for those eligible for enhanced benefits.

Hazardous Members

Age	Withdrawal and Vesting*	Death**			Service Retirement***	
		Male	Female	Disability	Service	Rate
20	6.00%	0.10%	0.08%	0.07%	20	20.0%
25	5.40	0.12	0.08	0.09	25	20.0
30	4.80	0.13	0.09	0.12	30	35.0
35	3.60	0.14	0.10	0.17	35	60.0
40	2.66	0.16	0.12	0.27		
45	1.98	0.21	0.15	0.44		
50	1.92	0.31	0.19	0.75		
55	1.08	0.49	0.28	1.23		
60	0.75	0.85	0.49	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.

** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.

*** The annual rate of service retirement is 100% at age 65.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Trend
2006-08	12.0%
2009-11	11.0
2012-14	10.0
2015-17	9.0
2018-20	8.0
2021-23	7.0
2024-26	6.0
2027 and beyond	5.5

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 – 69	3.0%
70 – 74	2.5%
75 – 79	2.0%
80 – 84	1.0%
85 – 89	0.5%
90 and over	0.0%

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	90%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

July – December 2006				
	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$550.62	$ 845.36	$ 942.72
Enhanced	$432.08	$662.71	$1,014.67	$1,130.82
Premier	$447.20	$688.87	$1,048.68	$1,168.62

MEDICARE ELIGIBLE

Available Plan	Cost
Kentucky Retirement System Health Plan - Medical Only	$143.00
Kentucky Retirement System Health Plan – PLUS	$237.00
Kentucky Retirement System Health Plan – PREMIUM	$310.00
Anthem Senior Advantage (HMO Local Network)	$168.00
Anthem Blue Medicare Access (PPO Regional Network)	$208.00

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

UNUSED SICK LEAVE: It is assumed that a member will be granted one-half year of service credit for unused sick leave at termination of employment.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Non-Hazardous Normal Retirement:	
Age Requirement	65
Service Requirement	None
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For these members who retire between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%. Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period are less than forty-eight, one or more additional fiscal years shall be used. For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.
Hazardous Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.49% times final average compensation times years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Early Retirement:

Requirement — Age 55 with 60 months of service or any age with 25 years of service.

Amount — Normal retirement benefit reduced by 5% per year for the first five years and 4% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Hazardous Early Retirement:

Requirement — Age 50 with 15 years of service or any age with 20 years of service.

Amount — Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement — None

Service Requirement — 60 months

Members whose participation began before 8/1/2004 — Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004 — Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months of service or age 65 with 48 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System.
Members whose participation began on or after July 1, 2003	The Retirement System pays $10 per month per year of service toward medical premiums for non-hazardous retirees, $15 per month per year of service for hazardous retirees, and $10 per month per year of service for surviving spouses of hazardous employees. “Line of duty” insurance benefits will be calculated as if the member had at least 20 years of hazardous service.

Member Contributions:

Non-hazardous Members	5% of salary.
Hazardous Members	8% of salary.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2001	2002	2003*	2004*	2005*	2006
			Number			
Beginning of Year	N/A	N/A	26,703	27,233	28,892	30,770
Added	N/A	N/A	2,148	2,473	2,481	2,481
Removed	N/A	N/A	1,618	814	603	1,111
End of Year	N/A	N/A	27,233	28,892	30,770	32,140
			Annual Allowances			
Beginning of Year	N/A	N/A	N/A	$393,048,800	$449,410,400	$509,347,800
Added	N/A	N/A	48,272,600	57,329,301	56,489,600	65,942,585
Removed	N/A	N/A	13,060,300	6,092,500	5,298,200	9,123,382
End of Year	N/A	N/A	$393,048,800	$449,410,400	$509,347,800	$566,167,003
% Increase in Allowances	N/A	N/A	N/A	14.34%	13.34%	11.31%
Average Annual Allowance	N/A	N/A	$14,433	$15,555	$16,553	$17,611

*Reported by prior actuarial firm.

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2001	2002	2003*	2004*	2005*	2006
			Number			
Beginning of Year	N/A	N/A	1,208	1,357	1,549	1,752
Added	N/A	N/A	170	227	234	256
Removed	N/A	N/A	21	35	31	28
End of Year	N/A	N/A	1,357	1,549	1,752	1,980
			Annual Allowances			
Beginning of Year	N/A	N/A	N/A	$12,974,700	$16,099,000	$19,640,700
Added	N/A	N/A	2,333,400	3,070,600	3,415,500	3,929,666
Removed	N/A	N/A	130,400	155,000	191,000	188,829
End of Year	N/A	N/A	$12,974,700	$16,099,000	$19,640,700	$23,381,537
% Increase in Allowances	N/A	N/A	N/A	24.08%	22.00%	19.25%
Average Annual Allowance	N/A	N/A	$9,561	$10,393	$11,210	$11,809

*Reported by prior actuarial firm.

Non-Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2,783	$4,333,702.22	7,611	$9,531,240.44	10,394	$13,864,942.66
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1721	2,567,728.11	654	634,980.44	2,375	3,202,708.55
66-2/3% to Beneficiary	781	1,831,408.67	297	550,776.23	1,078	2,382,184.90
50% to Beneficiary	1,013	2,178,170.85	924	1,691,633.43	1,937	3,869,804.28
Pop-up Option	2,682	5,855,634.82	1,946	3,447,216.24	4,628	9,302,851.06
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	973	1,286,851.54	1,720	2,147,809.83	2,693	3,434,661.37
Social Security Option						
Age 62 Basic	415	848,310.79	947	1,473,616.80	1,362	2,321,927.59
Age 62 Survivorship	870	1,645,945.57	540	858,935.41	1,410	2,504,880.98
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	1	1,683.30	0	0.00	1	1,683.30
15 Years Certain & Life	380	531,044.36	411	554,131.14	791	1,085,175.50
20 Years Certain & Life	346	666,786.86	363	554,369.99	709	1,221,156.85
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	47	61,778.24	153	195,428.92	200	257,207.16
PLSO 24 Month Basic	18	21,033.62	93	84,157.11	111	105,190.73
PLSO 36 Month Basic	85	60,812.07	179	106,492.55	264	167,304.62
PLSO 12 Month Survivor	55	88,329.08	43	63,871.73	98	152,200.81
PLSO 24 Month Survivor	50	51,108.81	42	52,503.42	92	103,612.23
PLSO 36 Month Survivor	147	120,827.59	75	49,697.94	222	170,525.53
Total	12,367	$22,151,156.50	15,998	$21,996,861.62	28,365	$44,148,018.12

Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	253	$240,459.50	192	$151,188.21	445	$391,647.71
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	152	150,866.42	10	7,751.73	162	158,618.15
66-2/3% to Beneficiary	58	63,077.75	7	6,652.67	65	69,730.42
50% to Beneficiary	98	130,416.57	15	19,824.61	113	150,241.18
Pop-up Option	368	447,549.65	64	63,094.27	432	510,643.92
10 Years Certain	18	23,972.48	5	5,120.26	23	29,092.74
10 Years Certain & Life	86	70,029.17	36	23,602.88	122	93,632.05
Social Security Option						
Age 62 Basic	45	44,964.82	21	15,326.98	66	60,291.80
Age 62 Survivorship	102	132,841.35	12	7,355.41	114	140,196.76
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	33	36,189.32	9	8,647.78	42	44,837.10
20 Years Certain & Life	32	27,628.38	14	19,678.55	46	47,306.93
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	7	6,691.04	8	7,450.41	15	14,141.45
PLSO 24 Month Basic	12	12,294.46	6	3,506.98	18	15,801.44
PLSO 36 Month Basic	27	24,205.03	16	10,477.31	43	34,682.34
PLSO 12 Month Survivor	13	15,877.49	3	2,327.85	16	18,205.34
PLSO 24 Month Survivor	12	12,663.17	6	7,908.15	18	20,571.32
PLSO 36 Month Survivor	28	20,627.94	11	12,292.97	39	32,920.91
Total	1,344	$1,460,354.54	435	$372,207.02	1,779	$1,832,561.56

Non-Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2	$348.20	20	$17,466.98	22	$17,815.18
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	219	159,964.74	1,611	1,216,922.13	1,830	1,376,886.87
66-2/3% to Beneficiary	23	17,857.72	276	181,502.86	299	199,360.58
50% to Beneficiary	72	39,060.14	470	217,819.55	542	256,879.69
Pop-up Option	60	78,739.84	271	282,918.80	331	361,658.64
10 Years Certain	43	44,603.90	59	59,752.45	102	104,356.35
10 Years Certain & Life	40	37,700.17	59	63,593.52	99	101,293.69
Social Security Option						
Age 62 Basic	0	0.00	2	1,105.02	2	1,105.02
Age 62 Survivorship	27	30,180.82	189	257,336.48	216	287,517.30
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	11	3,721.61	11	3,721.61
Dependent Child	3	1,058.14	3	1,360.47	6	2,418.61
Refund	0	0.00	5	4,673.09	5	4,673.09
15 Years Certain & Life	27	31,334.89	60	57,829.52	87	89,164.41
20 Years Certain & Life	33	32,393.55	70	79,127.95	103	111,521.50
5 Years Certain	43	46,079.56	49	49,856.97	92	95,936.53
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	1	529.18	0	0.00	1	529.18
PLSO 36 Month Basic	1	558.75	7	3,104.24	8	3,662.99
PLSO 12 Month Survivor	2	2,763.69	2	2,588.46	4	5,352.15
PLSO 24 Month Survivor	0	0.00	4	1,684.01	4	1,684.01
PLSO 36 Month Survivor	4	1,195.45	7	5,833.50	11	7,028.95
Total	600	$524,368.74	3,175	$2,508,197.61	3,775	$3,032,566.35

Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$0.00	2	$276.03	2	$276.03
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	7	2,799.22	75	49,126.28	82	51,925.50
66-2/3% to Beneficiary	0	0.00	6	2,388.46	6	2,388.46
50% to Beneficiary	1	403.23	15	4,692.12	16	5,095.35
Pop-up Option	3	991.97	23	12,612.99	26	13,604.96
10 Years Certain	2	2,297.43	9	7,064.91	11	9,362.34
10 Years Certain & Life	1	283.92	6	2,909.89	7	3,193.81
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	1	19.43	10	8,309.26	11	8,328.69
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	8	2,376.89	9	2,584.77	17	4,961.66
Refund	0	0.00	3	1,875.88	3	1,875.88
15 Years Certain & Life	3	1,099.51	1	729.32	4	1,828.83
20 Years Certain & Life	0	0.00	4	1,031.46	4	1,031.46
5 Years Certain	2	3,357.59	7	6,559.65	9	9,917.24
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	320.64	0	0.00	1	320.64
PLSO 12 Month Survivor	0	0.00	1	1,088.04	1	1,088.04
PLSO 24 Month Survivor	0	0.00	1	699.69	1	699.69
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	29	$13,949.83	172	$101,948.75	201	$115,898.58

Non-Hazardous Members

Retired and Beneficiary Information June 30, 2006
Tabulated by Attained Ages

	Retirement		Disability Retirement		Survivors and Beneficiaries		Totals	
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	89	$1,697,295	78	$766,487	295	$3,045,576	462	$5,509,358
45-49	1,034	$28,029,748	124	$1,341,815	143	$1,552,510	1,301	$30,924,073
50-54	2,792	$81,525,008	226	$2,657,579	228	$2,320,983	3,246	$86,503,570
55-59	4,553	$124,536,371	333	$3,955,368	271	$3,641,210	5,157	$132,132,949
60-64	4,368	$96,864,488	339	$3,669,747	348	$4,390,163	5,055	$104,924,398
65-69	3,984	$66,102,506	353	$3,662,923	404	$4,607,133	4,741	$74,372,562
70-74	3,267	$44,579,263	238	$2,259,073	460	$5,058,915	3,965	$51,897,251
75-79	2,752	$34,028,654	99	$847,698	510	$4,703,274	3,361	$39,579,626
80-84	2,027	$20,569,101	54	$401,237	504	$3,542,787	2,585	$24,513,125
85-89	1,109	$8,719,978	27	$166,948	378	$2,326,777	1,514	$11,213,703
90 & Over	511	$3,359,039	8	$35,895	234	$1,201,454	753	$4,596,388
Totals	26,486	$510,011,451	1,879	$19,764,770	3,775	$36,390,782	32,140	$566,167,003

Hazardous Members

Retired and Beneficiary Information June 30, 2006
Tabulated by Attained Ages

Attained Age	Retirement		Disability Retirement		Survivors and Beneficiaries		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	34	$582,673	10	$73,682	41	$248,945	85	$905,300
45-49	107	$1,940,819	15	$149,409	12	$67,713	134	$2,157,941
50-54	212	$3,615,850	24	$221,934	18	$145,766	254	$3,983,550
55-59	408	$6,305,434	37	$297,261	24	$180,141	469	$6,782,836
60-64	356	$4,220,147	14	$83,238	30	$244,656	400	$4,548,041
65-69	247	$2,417,835	8	$16,661	27	$152,730	282	$2,587,226
70-74	182	$1,267,743	10	$24,965	22	$157,183	214	$1,449,891
75-79	85	$402,527	2	$5,750	16	$65,831	103	$474,108
80-84	21	$283,394			7	$74,403	28	$357,797
85-89	5	$62,508			4	$53,414	9	$115,922
90 & Over	2	$18,925					2	$18,925
Totals	1,659	$21,117,855	120	$872,900	201	$1,390,782	1,980	$23,381,537

Total Non-Hazardous Active Members as of June 30, 2006
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5-9	10-14	15-19	20-24	25-26	27-29	30+	
Under 20	774								774
Avg. Pay	$24,255								$24,255
20-24	1,568	76							1,644
Avg. Pay	$23,892	$29,030							$24,129
25-29	3,629	890	27						4,546
Avg. Pay	$27,409	$29,440	$30,834						$27,827
30-34	2,678	2,131	459	27					5,295
Avg. Pay	$30,371	$34,029	$36,112	$40,955					$32,395
35-39	2,124	1,879	1,272	553	69				5,897
Avg. Pay	$31,643	$35,498	$40,348	$39,907	$47,609				$35,711
40-44	1,981	1,554	1,029	1,076	793	157			6,590
Avg. Pay	$30,733	$36,433	$40,510	$42,438	$47,879	$52,993			$38,109
45-49	1,776	1,544	976	983	872	395	416	85	7,047
Avg. Pay	$31,178	$34,966	$39,467	$41,775	$47,575	$52,567	$51,289	$56,896	$39,360
50-54	1,524	1,398	948	835	755	291	326	446	6,523
Avg. Pay	$32,804	$34,979	$39,206	$41,990	$46,900	$51,623	$52,558	$59,363	$40,651
55-59	1,116	1,053	772	746	566	216	190	347	5,006
Avg. Pay	$33,597	$35,853	$40,454	$41,071	$44,563	$47,530	$55,091	$63,617	$40,980
60-64	455	553	374	454	258	96	74	140	2,404
Avg. Pay	$33,233	$35,852	$37,568	$40,175	$47,140	$50,258	$51,638	$65,331	$40,429
65-69	104	141	131	142	60	32	25	54	689
Avg. Pay	$36,695	$35,731	$37,450	$43,425	$41,021	$44,330	$45,150	$59,348	$40,842
70 & over	41	54	46	74	31	10	12	24	292
Avg. Pay	$31,182	$26,977	$38,030	$34,322	$40,751	$42,667	$55,173	$68,806	$37,766
Totals	17,770	11,273	6,034	4,890	3,404	1,197	1,043	1,096	46,707
Avg. Pay	$29,724	$34,703	$39,450	$41,421	$46,785	$50,996	$52,301	$61,487	$36,445

Total Hazardous Active Members as of June 30, 2006
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5-9	10-14	15-19	20-24	25-26	27-29	30+	
Under 20	73								73
Avg. Pay	$20,002								$20,002
20-24	209	5							214
Avg. Pay	$22,373	$25,908							$22,456
25-29	428	52							480
Avg. Pay	$24,049	$29,082							$24,594
30-34	348	197	34						579
Avg. Pay	$26,343	$31,736	$34,171						$28,638
35-39	267	167	118	47	1				600
Avg. Pay	$26,446	$32,360	$35,956	$41,558	$45,228				$31,177
40-44	216	133	87	129	16	2			583
Avg. Pay	$26,709	$32,366	$39,247	$39,676	$43,440	$42,240			$33,252
45-49	169	137	68	143	24	3	4		548
Avg. Pay	$28,345	$33,475	$38,952	$42,553	$49,952	$47,112	$71,616		$36,016
50-54	163	135	80	141	21	4	2	2	548
Avg. Pay	$28,209	$37,647	$37,131	$42,080	$48,415	$56,781	$49,512	$48,432	$36,540
55-59	133	106	71	135	16	2	2	1	466
Avg. Pay	$29,241	$38,207	$39,042	$43,298	$48,037	$46,188	$66,744	$59,496	$37,790
60-64	47	56	29	54	4	1		2	193
Avg. Pay	$30,145	$38,051	$39,849	$42,984	$52,947	$46,572		$64,212	$38,400
65-69	5	14	7	6					32
Avg. Pay	$22,231	$31,533	$34,479	$47,704					$33,756
70 & over		2		2					4
Avg. Pay		$29,580		$40,638					$35,109
Totals	2,058	1,004	494	657	82	12	8	5	4,320
Avg. Pay	$25,866	$33,817	$37,667	$42,045	$48,003	$49,324	$64,872	$56,957	$32,117

SCHEDULE F

AMORTIZATION BASES

Non-Hazardous Retirement Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$256,534,456	$29,570,786	14	$322,916,424
06/30/1991	30	103,692,389	11,439,894	15	131,437,427
06/30/1992	30	(212,448,599)	(22,431,577)	16	(269,991,277)
06/30/1993	30	(57,917,315)	(5,852,169)	17	(73,511,830)
06/30/1994	30	59,519,052	5,754,900	18	75,193,546
06/30/1995	30	65,659,241	6,074,652	19	82,315,425
06/30/1996	30	(188,573,585)	(16,692,507)	20	(233,964,848)
06/30/1997	30	(277,888,742)	(23,514,649)	21	(340,099,850)
06/30/1998	30	(326,522,755)	(26,410,970)	22	(393,334,339)
06/30/1999	30	(362,615,121)	(28,034,757)	23	(429,083,695)
06/30/2000	30	(964,739,576)	(71,288,128)	24	(1,119,346,569)
06/30/2001	30	584,703,884	41,292,974	25	664,090,094
06/30/2002	30	811,152,084	54,746,035	26	900,466,003
06/30/2003	30	811,953,677	52,368,341	27	879,751,228
06/30/2004	30	871,195,298	53,692,958	28	920,118,936
06/30/2005	30	917,439,825	54,028,263	29	943,374,187
06/30/2006	30	1,540,409,062	86,675,954	30	1,540,409,062
Total			$201,420,001		$3,600,739,924

* Level percent of salary

Hazardous Retirement Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$(366,782)	$(42,279)	14	$(461,692)
06/30/1991	30	8,515,857	939,515	15	10,794,451
06/30/1992	30	(2,222,347)	(234,648)	16	(2,824,278)
06/30/1993	30	1,873,766	189,332	17	2,378,286
06/30/1994	30	2,736,468	264,589	18	3,457,124
06/30/1995	30	4,677,834	432,783	19	5,864,488
06/30/1996	30	(33,735,166)	(2,986,232)	20	(41,855,509)
06/30/1997	30	(7,971,975)	(674,580)	21	(9,756,663)
06/30/1998	30	(13,896,455)	(1,124,022)	22	(16,739,886)
06/30/1999	30	(13,902,335)	(1,074,827)	23	(16,450,681)
06/30/2000	30	(35,735,060)	(2,640,594)	24	(41,461,878)
06/30/2001	30	18,907,681	1,335,299	25	21,474,807
06/30/2002	30	24,131,600	1,628,683	26	26,788,670
06/30/2003	30	26,494,066	1,708,780	27	28,706,301
06/30/2004	30	35,826,765	2,208,053	28	37,838,686
06/30/2005	30	26,677,621	1,571,052	29	27,431,749
06/30/2006	30	45,487,736	2,559,510	30	45,487,736
Total			$4,060,412		$80,671,711

* Level percent of salary

Non-Hazardous Insurance Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/2006	30	$7,204,130,009	$277,769,351	30	$7,204,130,009
Total		$7,204,130,009	$277,769,351		$7,204,130,009

* Level percent of salary

Hazardous Insurance Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/2006	30	$408,404,538	$23,923,794	30	$408,404,538
Total		$408,404,538	$23,923,794		$408,404,538

* Level percent of salary

Report on the Annual Valuation of the County Employees Retirement System

Prepared as of June 30, 2006

November 1, 2006

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2007.

The date of the valuation was June 30, 2006.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

Edward A. Macdonald, ASA, FCA, MAAA
President

TJC/EAM:sh

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REPORT ON THE ANNUAL VALUATION OF THE COUNTY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2006

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2006, presents the results of the annual actuarial valuation the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/06	6/30/05*	6/30/06	6/30/05*	6/30/06	6/30/05*
Contributions for next fiscal year:						
Retirement	6.98%	5.97%	15.01%	13.11%		
Insurance	20.51	7.22	39.52	15.10	N/A	N/A
Total	27.49%	13.19%	54.53%	28.21%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$6,179,569,267	$5,385,156,690	$2,020,142,770	$1,795,617,335	$8,199,712,037	$7,180,774,025
Actuarial value of assets	$5,162,894,136	$5,059,208,687	$1,515,075,017	$1,452,353,023	$6,677,969,153	$6,511,561,710
Unfunded liability on actuarial value of assets	$1,016,675,131	$325,948,003	$505,067,753	$343,264,312	$1,521,742,884	$669,212,315
Funded ratio on actuarial value of assets	83.55%	93.95%	75.00%	80.88%	81.44%	90.68%
Market value of assets	$5,191,376,948	$4,893,599,997	$1,528,845,357	$1,411,245,719	$6,720,222,305	$6,304,845,716
Unfunded liability on market value of assets	$988,192,319	$491,556,693	$491,297,413	$384,371,616	$1,479,489,732	$875,928,386
Funded ratio on market value of assets	84.01%	90.87%	75.68%	78.59%	81.96%	87.80%
Insurance						
Actuarial accrued liability	$4,607,223,639	$2,788,754,654	$1,928,481,371	$1,283,299,092	$6,535,705,010	$4,072,053,746
Actuarial value of assets	$777,726,590	$663,941,949	$422,785,042	$359,180,461	$1,200,511,632	$1,023,122,410
Unfunded liability on actuarial value of assets	$3,829,497,049	$2,124,812,705	$1,505,696,329	$924,118,631	$5,335,193,378	$3,048,931,336
Funded ratio on actuarial value of assets	16.88%	23.81%	21.92%	27.99%	18.37%	25.13%
Market value of assets	$813,250,744	$668,485,367	$441,278,796	$360,938,669	$1,254,529,540	$1,029,424,036
Unfunded liability on market value of assets	$3,793,972,895	$2,120,269,287	$1,487,202,575	$922,360,423	$5,281,175,470	$3,042,629,710
Funded ratio on market value of assets	17.65%	23.97%	22.88%	28.13%	19.20%	25.28%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	33,102	31,347	4,712	4,361	37,814	35,708
Number of vested former members	7,379	7,771	393	482	7,772	8,253
Number of former members due a refund	42,667	41,098	1,562	1,489	44,229	42,587
Number of active members	83,694	81,240	9,635	9,464	93,329	90,704
Total salary	$1,982,437,473	$1,885,275,000	$426,927,550	$411,121,728	$2,409,365,023	$2,296,396,728
Average salary	$23,687	$23,206	$44,310	$43,441	$25,816	$25,317

*Reported by prior actuarial firm.

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. There were, however, several changes in actuarial assumptions and methods adopted by the Board based on an experience investigation dated January 12, 2006 covering the period July 1, 2000 through June 30, 2005. Since the previous valuation, the assumptions and methods were changed as follows:

   - Investment return was reduced from 8.25% per year to 7.75% per year
   - The mortality table was changed for members who retire after June 30, 2006 from the 1983 GAM table to the 1994 GAM table
   - The mortality table for disabled members was changed from the PBGC Table for Disabled Lives Receiving Social Security to the 1994 GAM table set forward five years
   - The salary scale was changed from a service based scale ranging from 12.0% to 6.5% to a service based scale ranging from 13.5% to 4.0% for Non-Hazardous employees and from 14.5% to 4.0% for Hazardous employees
   - Rates of disablement, termination and retirement were adjusted to more closely reflect the actual experience of the system
   - Medical trend rates were increased through 2020 and reduced thereafter in a range starting at 12.0% per year in 2006-2008 and declining to an ultimate rate of 5.5% in 2027 and later
   - The method used to determine the actuarial value of assets was changed to a method that truly smoothes market fluctuations over a five year smoothing period
   - The insurance accrued liability amortization bases were consolidated and reset to a new 30-year amortization period beginning with the June 30, 2006 valuation.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2006 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

			Group Averages		
Employee Group	Number	Payroll	Salary	Age	Service
Non-Hazardous	83,694	$ 1,982,437,473	$23,687	45.1	8.1
Hazardous	9,635	426,927,550	44,310	37.8	8.3
Total in CERS	93,329	$ 2,409,365,023	$25,816	44.3	8.1

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2001	78,773	$1,597,653,320	$20,282	(0.3)%
6/30/2002	79,850	1,688,460,789	21,145	4.3
6/30/2003	82,288	1,796,451,180	21,831	3.2
6/30/2004	80,922	1,826,870,880	22,576	3.4
6/30/2005	81,240	1,885,275,000	23,206	2.8
6/30/2006	83,694	1,982,437,473	23,687	2.1

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2001	8,586	$322,819,064	$37,598	2.7%
6/30/2002	8,949	346,319,146	38,699	2.9
6/30/2003	9,286	374,700,732	40,351	4.3
6/30/2004	9,349	392,562,624	41,990	4.1
6/30/2005	9,464	411,121,728	43,441	3.5
6/30/2006	9,635	426,927,550	44,310	2.0

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	No.	Annual Benefits	Group Averages Benefit	Group Averages Age
Normal	26,943	$261,654,664	$9,711	68.1
Disability	2,911	25,742,481	8,843	61.9
Beneficiary	3,248	20,872,506	6,426	66.0
Total in CERS	33,102	$308,269,651	$9,313	67.3

Hazardous Retired Lives

Type of Benefit Payment	No.	Annual Benefits	Group Averages Benefit	Group Averages Age
Normal	3,776	$88,848,324	$23,530	58.4
Disability	350	4,985,817	14,245	51.4
Beneficiary	586	6,455,911	11,017	46.2
Total in CERS	4,712	$100,290,052	$21,284	56.3

This valuation also includes 52,001 inactive members (50,046 Non-Hazardous and 1,955 Hazardous; of which 7,379 Non-Hazardous are vested and 393 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2006 the total market value of assets amounted to $7,974,751,845 as shown in the following table.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2006

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	$5,191,376,948	$ 813,250,744	$6,004,627,692
Hazardous	1,528,845,357	441,278,796	1,970,124,153
Total	$6,720,222,305	$1,254,529,540	$7,974,751,845

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $7,878,480,785. Schedule B shows the development of the actuarial value of assets as of June 30, 2006. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2006	JUNE 30, 2005
Retirement		
Non-Hazardous	$ 5,162,894,136	$ 5,059,208,687
Hazardous	1,515,075,017	1,452,353,023
Total	$ 6,677,969,153	$ 6,511,561,710
Insurance		
Non-Hazardous	$ 777,726,590	$ 663,941,949
Hazardous	422,785,042	359,180,461
Total	$ 1,200,511,632	$ 1,023,122,410
CERS Total		
Non-Hazardous	$ 5,940,620,726	$ 5,723,150,636
Hazardous	1,937,860,059	1,811,533,484
Total	$ 7,878,480,785	$ 7,534,684,120

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2006. Separate balance sheets are shown for each employee group as well as in total for all groups.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $10,363,937,042, of which $4,172,113,342 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $166,146,299 is for the prospective benefits payable on account of inactive members and $6,025,677,401 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $6,677,969,153 as of June 30, 2006. The difference of $3,685,967,889 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $1,166,412,934 is the present value of future contributions expected to be made by members, and the balance of $2,519,554,955 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 4.04% of payroll for non-hazardous members and 7.86% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $997,812,071. When this amount is subtracted from $2,519,554,955, which is the present value of the total future contributions to be made by the employers, there remains $1,521,742,884 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 2.29% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 6.89% of payroll. These rates are based on a 30-year amortization of bases established each year as specified in the law governing the plan. The bases are amortized on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.

5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.65% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.26% of payroll.
6. The development of all accrued liability amortization bases is shown in Schedule F.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $8,497,223,674, of which $2,210,799,793 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $271,471,623 is for the prospective benefits payable on account of inactive members and $6,014,952,258 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $1,200,511,632 as of June 30, 2006. The difference of $7,296,712,042 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $0 is the present value of future contributions expected to be made by members, and the balance of $7,296,712,042 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 9.11% of payroll for non-hazardous members and 18.81% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,961,518,664. When this amount is subtracted from $7,296,712,042, which is the present value of the total future contributions to be made by the employers, there remains $5,335,193,378 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 11.32% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 20.66% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $3,829,497,049 for non-hazardous members and $1,505,696,329 for hazardous members over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.08% of payroll for non-hazardous employees and 0.05% of payroll for hazardous employees.
6. The development of all accrued liability amortization bases is shown in Schedule F.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2006 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/05	$ 325.9	$ 343.3	$ 669.2
(2)	Normal cost from last valuation	105.9	34.5	140.4
(3)	Actual employer contributions	90.8	50.0	140.8
(4)	Interest accrual: (1) x .0825 + [[(2) – (3)] x .04125]	27.5	27.7	55.2
(5)	Expected UAAL before changes: (1) + (2) – (3) + (4)	$ 368.5	$ 355.5	$ 724.0
(6)	Change due to plan amendments	72.2	25.5	97.7
(7)	Change due to new actuarial assumptions or methods	313.3	82.7	396.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 754.0	$ 463.7	$ 1,217.7
(9)	Actual UAAL as of 6/30/06	$ 1,016.7	$ 505.1	$ 1,521.8
(10)	Gain/(loss): (8) – (9)	$ (262.7)	$ (41.4)	(304.1)
(11)	Accrued liabilities as of 6/30/05	$ 5,385.2	$ 1,795.6	$ 7,180.8
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(4.9)%	(2.3)%	(4.2)%

*Unfunded actuarial accrued liability.

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/05	$ 2,124.8	$ 924.1	$ 3,048.9
(2)	Normal cost from last valuation	161.0	62.8	223.8
(3)	Actual employer contributions	135.2	65.0	200.2
(4)	Interest accrual: (1) x .0825 + [[(2) – (3)] x .04125]	176.4	76.1	252.5
(5)	Expected UAAL before changes: (1) + (2) – (3) + (4)	$ 2,327.0	$ 998.0	$ 3,325.0
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumptions or methods	869.3	358.7	1,228.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 3,196.3	$ 1,356.7	$ 4,553.0
(9)	Actual UAAL as of 6/30/06	$ 3,829.5	$ 1,505.7	$ 5,335.2
(10)	Gain/(loss): (8) – (9)	$ (633.2)	$ (149.0)	$ (782.2)
(11)	Accrued liabilities as of 6/30/05	$ 2,788.8	$ 1,283.3	$ 4,072.1
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(22.7%)	(11.6%)	(19.2%)

*Unfunded actuarial accrued liability.

NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/06	Insurance $ Gain (or Loss) For Year Ending 6/30/06
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (74.3)	$ (25.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3.0)	(1.0)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.4)	(0.5)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	24.6	8.4
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	32.1	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(19.8)	(6.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(150.4)	(4.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.5	0.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(71.0)	(603.4)
Gain (or Loss) During Year From Financial Experience	$ (262.7)	$ (633.2)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and contribution timing.	(406.3)	(869.3)
Composite Gain (or Loss) During Year	$ (669.0)	$ (1,502.5)

HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/06	Insurance $ Gain (or Loss) For Year Ending 6/30/06
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (21.6)	$ (12.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(1.1)	(0.7)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.5	0.3
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	18.9	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(5.3)	(3.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(38.4)	(2.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(3.9)	(2.3)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	9.5	(127.6)
Gain (or Loss) During Year From Financial Experience	$ (41.4)	$ (149.0)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and contribution timing.	(111.3)	(358.7)
Composite Gain (or Loss) During Year	$ (152.7)	$ (507.7)

TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/06	Insurance $ Gain (or Loss) For Year Ending 6/30/06
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (95.9)	$ (38.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(4.1)	(1.7)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.4)	(0.5)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	25.1	8.7
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	51.0	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(25.1)	(10.0)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(188.8)	(7.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(3.4)	(2.1)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(61.5)	(731.0)
Gain (or Loss) During Year From Financial Experience	$ (304.1)	$ (782.2)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and contribution timing.	(517.6)	(1,228.0)
Composite Gain (or Loss) During Year	$ (821.7)	$ (2,010.2)

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2007/2008 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for	Amount	% of Payroll
A. Normal Cost:		
(1) Service retirement benefits	$ 152,251,198	7.68%
(2) Disability benefits	21,410,325	1.08
(3) Survivor benefits	5,550,825	0.28
(4) Total	$ 179,212,348	9.04%
B. Member Contributions	$ 99,121,874	5.00%
C. Employer Normal Cost: [A(4) – B]	$ 80,090,474	4.04%
D. Administrative Expenses	$ 12,885,844	0.65%
E. Unfunded Actuarial Accrued Liability Contributions*:		
(1) UAAL Contribution Based on 6/30/05 Valuation	$ 4,956,094	0.25%
(2) Change due to:		
a. Active decrements	$ 3,766,631	0.19%
b. Pay increases	(1,585,950)	(0.08)
c. Retiree mortality	198,244	(0.01)
d. Investment return	7,533,262	0.38
e. COLA	3,568,387	0.18
f. Assumption change	22,599,788	1.14
g. Other	4,298,624	0.22
h. Total Change	$ 40,378,986	2.04%
(3) UAAL Contribution Based on 6/30/06 Valuation: [E(1) + E(2)h]	$ 45,335,080	2.29%
F. Total Recommended Employer Contribution: [C + D + E(3)]	$ 138,311,398	6.98%

*Development of the amortization bases of the UAAL is provided in Schedule F

Required Contribution Rates
Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	59,385,622	13.91%
(2) Disability benefits		6,019,678	1.41
(3) Survivor benefits		2,305,409	0.54
(4) Total	$	67,710,709	15.86%
B. Member Contributions	$	34,154,204	8.00%
C. Employer Normal Cost: [A(4) – B]	$	33,556,505	7.86%
D. Administrative Expenses	$	1,110,012	0.26%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/05 Valuation	$	18,443,270	4.32%
(2) Change due to:			
a. Active decrements	$	1,366,168	0.32%
b. Pay increases		(939,241)	(0.22)
c. Retiree mortality		213,464)	0.05
d. Investment return		1,921,174	0.45
e. COLA		1,280,783	0.30
f. Assumption Change		7,257,768	1.70
g. Other		(127,840)	(0.03)
h. Total Change	$	10,972,276	2.57%
(3) UAAL Contribution Based on 6/30/06 Valuation: [E(1) + E(2)h]	$	29,415,546	6.89%
F. Total Recommended Employer Contribution: [C + D + E(3)]	$	64,082,063	15.01%

*Development of the amortization bases of the UAAL is provided in Schedule F

Required Contribution Rates
Non-Hazardous Insurance

Contribution for	Amount	% of Payroll
A. Normal Cost	$ 180,675,380	9.11%
B. Member Contributions*	$ 0	0.00%
C. Employer Normal Cost: [A – B]	$ 180,675,380	9.11%
D. Administrative Expenses	$ 1,539,512	0.08%
E. Unfunded Actuarial Accrued Liability Contributions**	$ 224,326,837	11.32
F. Total Recommended Employer Contribution: [C + D + E]	$ 406,541,729	20.51%

*The liabilities are net of retiree contributions toward their healthcare
**Development of the amortization bases of the UAAL is provided in Schedule F

Required Contribution Rates
Hazardous Insurance

Contribution for	Amount	% of Payroll
A. Normal Cost	$ 80,309,510	18.81%
B. Member Contributions*	$ 0	0.00%
C. Employer Normal Cost: [A – B]	$ 80,309,510	18.81%
D. Administrative Expenses	$ 212,443	0.05%
E. Unfunded Actuarial Accrued Liability Contributions**	$ 88,201,686	20.66%
F. Total Recommended Employer Contribution: [C + D + E]	$ 168,723,639	39.52%

*The liabilities are net of retiree contributions toward their healthcare
**Development of the amortization bases of the UAAL is provided in Schedule F

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2006

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	33,102	4,712	37,814
Terminated employees entitled to benefits but not yet receiving benefits	50,046	1,955	52,001
Active members	83,694	9,635	93,329
Total	166,842	16,302	183,144

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
Non-Hazardous Members						
6/30/2001	$5,423,834,549	$3,706,282,212	$(1,717,552,337)	146.3%	$1,597,653,320	(107.5)%
6/30/2002	5,397,787,158	4,165,355,149	(1,232,432,009)	129.6	1,688,460,789	(73.0)
6/30/2003	5,286,580,047	4,417,597,802	(868,982,245)	119.7	1,796,451,180	(48.4)
6/30/2004	5,187,851,530	4,936,459,488	(251,392,042)	105.1	1,826,870,880	(13.8)
6/30/2005	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
6/30/2006	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
Hazardous Members						
6/30/2001	$1,486,666,016	$1,193,860,442	$(292,805,574)	124.5%	$322,819,064	(90.7)%
6/30/2002	1,485,511,793	1,327,291,273	(158,220,520)	111.9	346,319,146	(45.7)
6/30/2003	1,467,004,856	1,499,628,782	32,623,926	97.8	374,700,732	8.7
6/30/2004	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
6/30/2005	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
6/30/2006	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
Total CERS Members						
6/30/2001	$6,910,500,565	$4,900,142,654	$ (2,010,357,911)	141.0%	$1,920,472,384	(104.7)%
6/30/2002	6,883,298,951	5,492,646,422	(1,390,652,529)	125.3	2,034,779,935	(68.3)
6/30/2003	6,753,584,903	5,917,226,584	(836,358,319)	114.1	2,171,151,912	(38.5)
6/30/2004	6,645,463,572	6,577,289,608	(68,173,964)	101.0	2,219,433,504	(3.1)
6/30/2005	6,511,561,710	7,180,774,025	669,212,315	90.7	2,296,396,728	29.2
6/30/2006	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
Non-Hazardous Members						
6/30/2001	$371,758,628	$1,793,710,768	$1,421,952,140	20.7%	$1,597,653,320	89.0%
6/30/2002	450,497,307	1,977,577,038	1,527,079,731	22.8	1,688,460,789	90.4
6/30/2003	520,060,105	2,176,963,259	1,656,903,154	23.9	1,796,451,180	92.2
6/30/2004	585,399,072	2,438,734,696	1,853,335,624	24.0	1,826,870,880	101.5
6/30/2005	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
6/30/2006	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
Hazardous Members						
6/30/2001	$197,875,249	$721,605,292	$523,730,043	27.4%	$322,819,064	162.2%
6/30/2002	234,683,878	781,184,974	546,501,096	30.0	346,319,146	157.8
6/30/2003	269,190,080	935,650,662	666,460,582	28.8	374,700,732	177.9
6/30/2004	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
6/30/2005	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
6/30/2006	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
Total CERS Members						
6/30/2001	$569,633,877	$2,515,316,060	$1,945,682,183	22.6%	$1,920,472,384	101.3%
6/30/2002	685,181,185	2,758,762,012	2,073,580,827	24.8	2,034,779,935	101.9
6/30/2003	789,250,185	3,112,613,921	2,323,363,736	25.4	2,171,151,912	107.0
6/30/2004	8985,977,234	3,464,419,173	2,568,441,939	25.9	2,219,433,504	115.7
6/30/2005	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
6/30/2006	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4

The final item of required supplementary information, the Schedule of Employer Contributions, is shown in the following tables.

Retirement Benefits

Schedule of Employer Contributions

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2001	$35,658,922	$48,914,435	137.2%
June 30, 2002	3,326,367	5,528,348	166.2
June 30, 2003	8,682,257	11,855,694	136.6
June 30, 2004	43,111,505	44,028,465	102.1
June 30, 2005	53,117,955	54,616,800	102.8
June 30, 2006	83,123,669	90,834,052	109.3
	Hazardous Members		
June 30, 2001	$19,409,377	$20,983,360	108.1%
June 30, 2002	10,582,988	11,054,949	104.5
June 30, 2003	19,920,223	16,905,556	84.9
June 30, 2004	27,050,382	27,640,775	102.2
June 30, 2005	39,437,725	39,947,747	101.3
June 30, 2006	44,059,404	49,976,485	113.4
	Total CERS Members		
June 30, 2001	$55,068,299	$69,897,795	126.9%
June 30, 2002	13,909,355	16,583,297	119.2
June 30, 2003	28,602,480	28,761,250	100.6
June 30, 2004	70,161,887	71,669,240	102.1
June 30, 2005	92,555,680	94,564,547	102.2
June 30, 2006	127,183,073	140,810,537	110.7

Insurance Benefits

Schedule of Employer Contributions

Year Ended	Annual Required Contribution*	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2001	$62,292,385	$62,292,385	100.0%
June 30, 2002	102,119,475	102,150,543	100.0
June 30, 2003	102,038,427	99,234,843	97.3
June 30, 2004	189,289,520	89,344,241	100.1
June 30, 2005	106,612,633	106,638,253	100.0
June 30, 2006	272,942,757	128,867,817	47.2
	Hazardous Members		
June 30, 2001	$32,149,432	$32,149,432	100.0%
June 30, 2002	45,721,274	45,730,333	100.0
June 30, 2003	43,502,755	45,243,950	104.0
June 30, 2004	47,018,046	47,036,777	100.0
June 30, 2005	54,094,495	54,106,577	100.0
June 30, 2006	98,297,535	64,853,778	66.0
	Total CERS Members		
June 30, 2001	$94,441,817	$94,441,817	100.0%
June 30, 2002	147,840,749	147,880,876	100.0
June 30, 2003	145,541,182	144,478,793	99.3
June 30, 2004	136,307,566	136,381,018	100.1
June 30, 2005	160,707,128	160,744,830	100.0
June 30, 2006	371,240,292	193,721,595	52.2

*ARC for years after June 30, 2005 are based on GASB Statement 43. In previous years employers contributed the full contribution requested by the Board in accordance with the insurance benefits funding policy then in effect.

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2006. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2006	6/30/2006
Actuarial cost method	Entry Age	Entry Age
Amortization method	Level percent Closed	Level percent Closed
Remaining amortization period	14 - 30 years	14 - 30 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
Projected salary increases*	4.0% - 13.5%	4.0% - 14.5%
Cost-of-living adjustment	None	None
*Includes inflation at	3.5%	3.5%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2006	6/30/2006
Actuarial cost method	Entry Age	Entry Age
Amortization method	Level percent Closed	Level percent Closed
Remaining amortization period	30 years	30 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption	12.0% - 5.5%	12.0% - 5.5%
Year of Ultimate Trend	2027	2027
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2006 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2005. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 5,162,894,136	$ 5,059,208,687
Prospective employer contributions		
Member contributions	$ 849,924,564	**
Employer normal contributions	686,781,563	$ 2,113,330,886
Unfunded accrued liability contributions	1,016,675,131	325,948,003
Total prospective contributions	$ 2,553,381,258	$ 2,439,278,889
Total assets	$ 7,162,753,922	$ 7,498,487,576
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 3,060,649,619	$ 2,673,500,272
Present value of benefits payable on account of active members	4,506,180,371	4,684,277,221
Present value of benefits payable on account of inactive members	149,445,404	140,710,083
Total liabilities	$ 7,162,753,942	$ 7,498,487,576

*Reported by prior actuarial firm.
**Prospective member normal contributions not reported separately by previous actuary.

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 1,515,075,017	$ 1,452,353,023
Prospective employer contributions		
Member contributions	$ 316,488,370	**
Employer normal contributions	311,030,508	$ 652,612,383
Unfunded accrued liability contributions	505,067,753	343,264,310
Total prospective contributions	$ 1,132,586,631	$ 995,876,693
Total assets	$ 2,647,661,648	$ 2,448,229,716
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,111,463,723	$ 944,739,105
Present value of benefits payable on account of active members	1,519,497,030	1,488,177,411
Present value of benefits payable on account of inactive members	16,700,895	15,313,200
Total liabilities	$ 2,647,661,648	$ 2,448,229,716

*Reported by prior actuarial firm.
**Prospective member contributions and employer normal contributions not reported separately by previous actuary.

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 6,677,969,153	$ 6,511,561,710
Prospective employer contributions		
Member contributions	$ 1,166,412,934	**
Employer normal contributions	997,812,071	$ 2,765,943,269
Unfunded accrued liability contributions	1,521,742,884	669,212,313
Total prospective contributions	$ 3,685,967,889	$ 3,435,155,582
Total assets	$ 10,363,937,042	$ 9,946,717,292
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 4,172,113,342	$ 3,618,239,377
Present value of benefits payable on account of active members	6,025,677,401	6,172,454,632
Present value of benefits payable on account of inactive members	166,146,299	150,023,283
Total liabilities	$ 10,363,937,042	$ 9,946,717,292

*Reported by prior actuarial firm.
**Prospective member contributions not reported separately by previous actuary.

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 777,726,590	$ 663,941,949
Prospective employer contributions		
Normal contributions	$ 1,300,307,643	$ 1,766,592,779
Unfunded accrued liability contributions	3,829,497,049	2,124,812,705
Total prospective contributions	$ 5,129,804,692	$ 3,891,405,484
Total assets	$ 5,907,531,282	$ 4,555,347,433
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,435,145,235	$ 1,012,106,665
Present value of benefits payable on account of active members	4,212,931,139	3,411,128,326
Present value of benefits payable on account of inactive members	259,454,908	132,112,442
Total liabilities	$ 5,907,531,282	$ 4,555,347,433

*Reported by prior actuarial firm.

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 422,785,042	$ 359,180,461
Prospective employer contributions		
Normal contributions	$ 661,211,021	$ 612,347,892
Unfunded accrued liability contributions	1,505,696,329	924,118,631
Total prospective contributions	$ 2,166,907,350	$ 1,536,466,523
Total assets	$ 2,589,692,392	$ 1,895,646,984
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 775,654,558	$ 565,434,903
Present value of benefits payable on account of active members	1,802,021,119	1,309,542,858
Present value of benefits payable on account of inactive members	12,016,715	20,669,223
Total liabilities	$ 2,589,692,392	$ 1,895,646,984

*Reported by prior actuarial firm.

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 1,200,511,632	$ 1,023,122,410
Prospective employer contributions		
Normal contributions	$ 1,961,518,664	$ 2,378,940,671
Unfunded accrued liability contributions	5,335,193,378	3,048,931,336
Total prospective contributions	$ 7,296,712,042	$ 5,427,872,007
Total assets	$ 8,497,223,674	$ 6,450,994,417
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,210,799,793	$ 1,577,541,568
Present value of benefits payable on account of active members	6,014,952,258	4,720,671,184
Present value of benefits payable on account of inactive members	271,471,623	152,781,665
Total liabilities	$ 8,497,223,674	$ 6,450,994,417

*Reported by prior actuarial firm.

The following tables provide the solvency test for non-hazardous and hazardous CERS members.

Solvency Test
Retirement Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2001*	$653,242,370	$1,600,436,700	$1,452,603,142	$5,423,834,549	100.0%	100.0%	218.2%
6/30/2002*	768,656,315	1,861,419,517	1,535,279,317	5,397,787,158	100.0	100.0	180.3
6/30/2003*	759,938,261	2,068,481,586	1,589,177,955	5,286,580,047	100.0	100.0	154.7
6/30/2004*	814,908,627	2,478,195,080	1,643,355,781	5,187,851,530	100.0	100.0	115.3
6/30/2005*	837,513,907	2,814,210,355	1,733,432,428	5,059,208,687	100.0	100.0	81.2
6/30/2006	883,946,564	3,210,095,023	2,085,527,680	5,162,894,136	100.0	100.0	51.3

*Reported by prior actuarial firm.

Solvency Test
Retirement Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2001*	$202,572,754	$584,940,978	$406,346,710	$1,486,666,016	100.0%	100.0%	172.1%
6/30/2002*	238,363,024	664,188,862	424,739,387	1,485,511,793	100.0	100.0	137.3
6/30/2003*	227,629,402	769,804,746	502,194,634	1,467,004,856	100.0	100.0	93.5
6/30/2004*	256,366,204	851,354,443	533,109,473	1,457,612,042	100.0	100.0	65.6
6/30/2005*	264,913,465	960,052,305	570,651,565	1,452,353,023	100.0	100.0	39.8
6/30/2006	300,200,800	1,128,164,618	591,777,352	1,515,075,017	100.0	100.0	14.7

*Reported by prior actuarial firm.

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Solvency Test
Insurance Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2001*	$0	$575,836,839	$1,217,873,929	$371,758,628	100.0%	64.6%	--
6/30/2002*	0	656,812,900	1,320,764,138	450,497,307	100.0	68.6	--
6/30/2003*	0	799,777,264	1,377,185,995	520,060,105	100.0	65.0	--
6/30/2004*	0	955,930,091	1,482,804,605	585,399,072	100.0	61.2	--
6/30/2005*	0	1,144,219,107	1,644,535,547	663,941,949	100.0	58.0	--
6/30/2006	0	1,694,600,143	2,912,623,496	777,726,590	100.0	45.9	--

*Reported by prior actuarial firm.

Solvency Test
Insurance Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2001*	$0	$316,638,166	$404,967,126	$197,875,249	100.0%	62.5%	--
6/30/2002*	0	343,821,677	437,363,297	234,683,878	100.0	68.3	--
6/30/2003*	0	401,276,347	534,374,315	269,190,080	100.0	67.1	--
6/30/2004*	0	450,288,687	575,395,790	310,578,162	100.0	69.0	--
6/30/2005*	0	586,104,126	697,194,966	359,180,461	100.0	61.3	--
6/30/2006	0	787,671,273	1,140,810,098	422,785,042	100.0	53.7	

*Reported by prior actuarial firm.

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation Date June 30:	2005	2006	2007	2008	2009	2010
A.	Actuarial Value Beginning of Year	$5,187,851,530	$5,059,208,687				
B.	Market Value End of Year	4,893,599,997	5,191,376,948				
C.	Market Value Beginning of Year	4,613,335,957	4,893,599,997				
D.	Cash Flow						
	D1. Contributions	182,253,535	203,205,884				
	D2. Benefit Payments	(305,632,428)	(336,724,204)				
	D3. Administrative Expense	(10,029,042)	(12,797,224)				
	D4. Investment Expense	(3,976,844)	(4,251,662)				
	D5. Net	(137,384,779)	(150,567,206)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	417,648,819	448,344,157				
	E2. Assumed Rate	8.25%	8.25%				
	E3. Amount for Immediate Recognition	422,330,629	401,938,146				
	E4. Amount for Phased-In Recognition	(4,681,810)	46,406,011				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(936,362)	9,281,202				
	F2. First Prior Year	24,906,205	(936,362)	9,281,202			
	F3. Second Prior Year	(55,645,322)	24,906,205	(936,362)	9,281,202		
	F4. Third Prior Year	(125,291,214)	(55,645,322)	24,906,205	(936,362)	9,281,202	
	F5. Fourth Prior Year	(256,622,000)	(125,291,214)	(55,645,322)	24,906,205	(936,362)	9,281,202
	F6. Total Recognized Investment Gain	(413,588,693)	(147,685,491)	(22,394,277)	33,251,045	8,344,840	9,281,202
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$5,059,208,687	$5,162,894,136				
H.	Difference Between Market & Actuarial Values	$(165,608,690)	$28,482,812	$50,877,089	$17,626,044	$9,281,202	$0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation Date June 30:	2005	2006	2007	2008	2009	2010
A.	Actuarial Value Beginning of Year	$1,457,612,042	$1,452,353,023				
B.	Market Value End of Year	1,411,245,719	1,528,845,357				
C.	Market Value Beginning of Year	1,305,011,472	1,411,245,719				
D.	Cash Flow						
	D1. Contributions	79,462,785	89,031,633				
	D2. Benefit Payments	(92,258,060)	(103,233,867)				
	D3. Administrative Expenses	(871,614)	(1,112,916)				
	D4. Investment Expenses	(1,172,517)	(1,256,675)				
	D5. Net	(14,839,406)	(16,571,825)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	121,073,653	134,171,463				
	E2. Assumed Rate	8.25%	8.25%				
	E3. Amount for Immediate Recognition	119,640,868	117,052,697				
	E4. Amount for Phased-In Recognition	1,432,785	17,118,766				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	286,557	3,423,753				
	F2. First Prior Year	7,052,555	286,557	3,423,753			
	F3. Second Prior Year	(14,889,455)	7,052,555	286,557	3,423,753		
	F4. Third Prior Year	(33,632,288)	(14,889,455)	7,052,555	286,557	3,423,753	
	F5. Fourth Prior Year	(68,877,850)	(33,632,288)	(14,889,455)	7,052,555	286,557	3,423,753
	F6. Total Recognized Investment Gain	(110,060,481)	(37,758,878)	(4,126,590)	10,762,865	3,710,310	3,423,753
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$1,452,353,023	$1,515,075,017				
H.	Difference Between Market & Actuarial Values	$(41,107,304)	$13,770,340	$17,896,930	$7,134,065	$3,423,753	$0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

Valuation Date June 30:	2005	2006	2007	2008	2009	2010
A. Actuarial Value Beginning of Year	$585,399,072	$663,941,949				
B. Market Value End of Year	668,485,367	813,250,744				
C. Market Value Beginning of Year	563,877,594	668,485,367				
D. Cash Flow						
D1. Contributions	107,631,980	135,232,560				
D2. Benefit Payments	(58,262,157)	(72,918,573)				
D3. Administrative Expenses	(544,987)	(1,539,512)				
D4. Investment Expenses	(484,830)	(741,200)				
D5. Net	48,340,006	60,033,275				
E. Investment Income						
E1. Market Total: B.-C.-D5.	56,267,767	84,732,102				
E2. Assumed Rate	8.25%	8.25%				
E3. Amount for Immediate Recognition	50,289,449	58,398,190				
E4. Amount for Phased-In Recognition	5,978,318	26,333,912				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	1,195,664	5,266,783				
F2. First Prior Year	8,317,853	1,195,664	5,266,783			
F3. Second Prior Year	(5,765,671)	8,317,853	1,195,664	5,266,783		
F4. Third Prior Year	(13,661,453)	(5,765,671)	8,317,853	1,195,664	5,266,783	
F5. Fourth Prior Year	(10,172,970)	(13,661,453)	(5,765,671)	8,317,853	1,195,664	5,266,783
F6. Total Recognized Investment Gain	(20,086,577)	(4,646,824)	9,014,629	14,780,300	6,462,447	5,266,783
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	$663,941,949	$777,726,590				
H. Difference Between Market & Actuarial Values	$4,543,418	$35,524,154	$26,509,525	$11,729,225	$5,266,783	$(0)

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members

	Valuation Date June 30:	2005	2006	2007	2008	2009	2010
A.	Actuarial Value Beginning of Year	$310,578,162	$359,180,461				
B.	Market Value End of Year	360,938,669	441,278,796				
C.	Market Value Beginning of Year	297,734,286	360,938,669				
D.	Cash Flow						
	D1. Contributions	55,551,937	64,952,086				
	D2. Benefit Payments	(21,984,644)	(29,717,549)				
	D3. Administrative Expenses	(252,567)	(212,443)				
	D4. Investment Expenses	(183,233)	(391,835)				
	D5. Net	33,131,493	34,630,259				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	30,072,890	45,709,868				
	E2. Assumed Rate	8.25%	8.25%				
	E3. Amount for Immediate Recognition	26,989,372	31,613,937				
	E4. Amount for Phased-In Recognition	3,083,518	14,095,931				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	616,704	2,819,186				
	F2. First Prior Year	4,199,719	616,704	2,819,186			
	F3. Second Prior Year	(3,032,540)	4,199,719	616,704	2,819,186		
	F4. Third Prior Year	(7,242,684)	(3,032,540)	4,199,719	616,704	2,819,186	
	F5. Fourth Prior Year	(6,059,765)	(7,242,684)	(3,032,540)	4,199,719	616,704	2,819,186
	F6. Total Recognized Investment Gain	(11,518,566)	(2,639,615)	4,603,069	7,635,609	3,434,890	2,819,186
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$359,180,461	$422,785,042				
H.	Difference Between Market & Actuarial Values	$1,758,208	$18,493,754	$13,890,685	$6,255,076	$2,819,186	$(0)

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 3.50% per annum:

Service	Annual Rates of				
	Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	10.0%	11.0%	13.5%	13.5%	14.5%
1-2	3.5%	4.0%	13.5%	7.0%	7.5%
2-3	2.0%	3.5%	13.5%	5.5%	7.0%
3-4	1.5%	3.0%	13.5%	5.0%	6.5%
4-5	1.5%	2.5%	13.5%	5.0%	6.0%
5-6	1.0%	2.0%	13.5%	4.5%	5.5%
6-7	1.0%	1.5%	13.5%	4.5%	5.0%
7-8	1.0%	1.5%	13.5%	4.5%	5.0%
8-9	0.5%	1.0%	13.5%	4.0%	4.5%
9-10	0.5%	1.0%	13.5%	4.0%	4.5%
10 & Over	0.5%	0.5%	13.5%	4.0%	4.0%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

		Death			
Age	Withdrawal and Vesting*	Male	Female	Disability	Service Retirement**
20	6.00%	0.05%	0.03%	0.05%	
25	5.40	0.07	0.03	0.07	
30	4.80	0.08	0.04	0.09	
35	3.60	0.09	0.05	0.13	
40	2.66	0.11	0.07	0.20	
45	1.98	0.16	0.10	0.33	
50	1.92	0.26	0.14	0.56	
55	1.08	0.44	0.23	0.92	8.0%
60	0.75	0.80	0.44	1.46	10.0
65		1.45	0.86		25.0
70		2.37	1.37		25.0
75					100.0

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.
** If service is at least 27 years, the rate is 25%.

Hazardous Members

		Death**			Service Retirement***	
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate
20	4.56%	0.10%	0.08%	0.07%	20	30.0%
25	3.04	0.12	0.08	0.09	25	25.0
30	3.01	0.13	0.09	0.12	30	40.0
35	1.95	0.14	0.10	0.17	35	30.0
40	1.50	0.16	0.12	0.27		
45	0.75	0.21	0.15	0.44		
50	0.50	0.31	0.19	0.75		
55		0.49	0.28	1.23		
60		0.85	0.49	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 10.0%, 7.0%, 5.0%, 4.0% and 3.5%, respectively.
** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.
*** The annual rate of service retirement is 100% at age 62.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Trend
2006-08	12.0%
2009-11	11.0
2012-14	10.0
2015-17	9.0
2018-20	8.0
2021-23	7.0
2024-26	6.0
2027 and beyond	5.5

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 – 69	3.0%
70 – 74	2.5%
75 – 79	2.0%
80 – 84	1.0%
85 – 89	0.5%
90 and over	0.0%

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	85%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

July – December 2006				
	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$550.62	$ 845.36	$ 942.72
Enhanced	$432.08	$662.71	$1,014.67	$1,130.82
Premier	$447.20	$688.87	$1,048.68	$1,168.62

MEDICARE ELIGIBLE

Available Plan	Cost
Kentucky Retirement System Health Plan - Medical Only	$143.00
Kentucky Retirement System Health Plan - PLUS	$237.00
Kentucky Retirement System Health Plan - PREMIUM	$310.00
Anthem Senior Advantage (HMO Local Network)	$168.00
Anthem Blue Medicare Access (PPO Regional Network)	$208.00

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Non-Hazardous Normal Retirement:	
Age Requirement	65
Service Requirement	None
Members whose participation began before 8/1/2004	If a member has at least 48 months of service, the monthly benefit is 2.20% times final average compensation times years of service. Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period are less than forty-eight, one or more additional fiscal years shall be used. For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Members whose participation began on or after 8/1/2004	Monthly benefit as calculated above but with a benefit factor of 2.0% instead of 2.2%.
Hazardous Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation time years of service.

Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Early Retirement:

Requirement — Age 55 with 60 months of service or any age with 25 years of service.

Amount — Normal retirement benefit reduced by 5% per year for the first five years and 4% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Hazardous Early Retirement:

Requirement — Age 50 with 15 years of service or any age with 20 years of service.

Amount — Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement — None

Service Requirement — 60 months

Members whose participation began before 8/1/2004 — Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months of service or age 65 with 48 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System.
Members whose participation began on or after July 1, 2003	The Retirement System pays $10 per month per year of service toward medical premiums for non-hazardous retirees, $15 per month per year of service for hazardous retirees, and $10 per month per year of service for surviving spouses of hazardous employees. “Line of duty” insurance benefits will be calculated as if the member had at least 20 years of hazardous service.

Member Contributions:

Non-hazardous Members	5% of salary.
Hazardous Members	8% of salary.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2001	2002	2003*	2004*	2005*	2006
			Number			
Beginning of Year	N/A	N/A	26,147	27,092	29,129	31,347
Added	N/A	N/A	2,411	2,805	2,808	2,782
Removed	N/A	N/A	1,466	768	590	1,027
End of Year	N/A	N/A	27,092	29,129	31,347	33,102
			Annual Allowances			
Beginning of Year	N/A	N/A	N/A	$219,848,200	$247,534,300	$279,590,300
Added	N/A	N/A	$24,855,000	28,181,800	30,397,300	34,559,599
Removed	N/A	N/A	8,111,100	3,587,800	3,161,200	5,880,248
End of Year	N/A	N/A	$219,848,200	$247,534,300	$279,590,300	$308,269,651
% Increase in Allowances	N/A	N/A	N/A	12.59%	12.95%	10.26%
Average Annual Allowance	N/A	N/A	$8,115	$8,498	$8,919	$9,313

*Reported by prior actuarial firm.

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2001	2002	2003*	2004*	2005*	2006
			Number			
Beginning of Year	N/A	N/A	3,483	3,737	4,005	4,361
Added	N/A	N/A	293	343	403	427
Removed	N/A	N/A	39	75	47	76
End of Year	N/A	N/A	3,737	4,005	4,361	4,712
			Annual Allowances			
Beginning of Year	N/A	N/A	N/A	$72,322,200	$79,559,200	$89,224,700
Added	N/A	N/A	$6,258,300	6,712,500	8,536,100	11,876,922
Removed	N/A	N/A	355,100	605,100	502,700	811,570
End of Year	N/A	N/A	$72,322,200	$79,559,200	$89,224,700	$100,290,052
% Increase in Allowances	N/A	N/A	N/A	10.01%	12.15%	12.40%
Average Annual Allowance	N/A	N/A	$19,353	$19,865	$20,460	$21,284

*Reported by prior actuarial firm.

Non-Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2,897	$2,448,412.37	9,918	$5,798,209.54	12,815	$8,246,621.91
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,803	1,658,892.13	752	375,250.83	2,555	2,034,142.96
66-2/3% to Beneficiary	546	849,394.11	259	230,025.27	805	1,079,419.38
50% to Beneficiary	785	1,037,546.35	735	681,066.46	1,520	1,718,612.81
Pop-up Option	2,284	3,107,476.83	1,667	1,484,831.50	3,951	4,592,308.33
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,161	873,290.15	2,360	1,404,367.76	3,521	2,277,657.91
Social Security Option						
Age 62 Basic	213	353,420.97	404	348,632.64	617	702,053.61
Age 62 Survivorship	505	825,419.90	225	207,869.37	730	1,033,289.27
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	486	392,940.78	472	296,442.55	958	689,383.33
20 Years Certain & Life	317	365,455.34	387	290,876.04	704	656,331.38
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	67	56,655.66	220	152,677.00	287	209,332.66
PLSO 24 Month Basic	29	16,149.62	128	74,191.21	157	90,340.83
PLSO 36 Month Basic	163	67,000.77	400	152,227.02	563	219,227.79
PLSO 12 Month Survivor	99	96,563.00	58	47,543.22	157	144,106.22
PLSO 24 Month Survivor	63	47,791.52	45	23,429.21	108	71,220.73
PLSO 36 Month Survivor	254	134,480.24	152	51,226.95	406	185,707.19
Total	11,672	$12,330,889.74	18,182	$11,618,866.57	29,854	$23,949,756.31

Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	496	$934,500.14	149	$200,651.03	645	$1,135,151.17
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	445	780,655.17	19	16,644.30	464	797,299.47
66-2/3% to Beneficiary	189	439,750.51	3	7,212.23	192	446,962.74
50% to Beneficiary	299	614,646.61	15	22,147.39	314	636,794.00
Pop-up Option	1,477	3,211,911.74	49	78,563.85	1,526	3,290,475.59
10 Years Certain	27	41,262.12	2	1,801.76	29	43,063.88
10 Years Certain & Life	147	260,226.72	28	44,979.24	175	305,205.96
Social Security Option						
Age 62 Basic	92	139,332.02	6	7,345.59	98	146,677.61
Age 62 Survivorship	281	419,840.03	9	8,102.40	290	427,942.43
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	51	79,055.62	7	6,138.14	58	85,193.76
20 Years Certain & Life	93	156,571.30	8	8,203.33	101	164,774.63
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	17	26,405.69	5	5,953.09	22	32,358.78
PLSO 24 Month Basic	15	28,749.81	3	3,811.62	18	32,561.43
PLSO 36 Month Basic	27	33,936.83	7	3,712.32	34	37,649.15
PLSO 12 Month Survivor	37	77,296.57	1	2,700.90	38	79,997.47
PLSO 24 Month Survivor	35	52,533.88	3	2,481.39	38	55,015.27
PLSO 36 Month Survivor	80	99,811.49	4	2,576.37	84	102,387.86
Total	3,808	$7,396,486.25	318	$423,024.95	4,126	$7,819,511.20

Non-Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2	$895.61	24	$15,613.87	26	$16,509.48
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	236	97,627.94	1,307	620,782.26	1,543	718,410.20
66-2/3% to Beneficiary	20	7,083.44	156	80,051.66	176	87,135.10
50% to Beneficiary	53	16,192.38	265	98,950.55	318	115,142.93
Pop-up Option	71	39,211.01	272	185,152.30	343	224,363.31
10 Years Certain	55	34,311.48	106	70,623.73	161	104,935.21
10 Years Certain & Life	61	29,134.88	83	55,937.46	144	85,072.34
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	13	8,847.88	75	83,548.94	88	92,396.82
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	4	698.62	4	698.62
Dependent Child	4	1,365.19	5	1,306.36	9	2,671.55
Refund	0	0.00	4	2,426.11	4	2,426.11
15 Years Certain & Life	25	18,945.68	68	44,248.20	93	63,193.88
20 Years Certain & Life	29	12,901.49	65	56,757.78	94	69,659.27
5 Years Certain	97	54,679.53	112	83,447.67	209	138,127.20
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	8	2,229.97	8	2,229.97
PLSO 12 Month Survivor	2	1,078.64	6	8,519.45	8	9,598.09
PLSO 24 Month Survivor	0	0.00	2	665.69	2	665.69
PLSO 36 Month Survivor	7	2,487.00	11	3,652.95	18	6,139.95
Total	675	$324,762.15	2,573	$1,414,613.57	3,248	$1,739,375.72

Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$0.00	20	$16,952.68	20	$16,952.68
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	5	3,182.82	112	129,387.75	117	132,570.57
66-2/3% to Beneficiary	0	0.00	27	33,454.06	27	33,454.06
50% to Beneficiary	0	0.00	32	22,550.82	32	22,550.82
Pop-up Option	0	0.00	79	107,758.31	79	107,758.31
10 Years Certain	5	14,351.61	16	14,818.69	21	29,170.30
10 Years Certain & Life	0	0.00	3	2,059.84	3	2,059.84
Social Security Option						
Age 62 Basic	0	0.00	2	386.37	2	386.37
Age 62 Survivorship	1	2,519.78	58	79,822.49	59	82,342.27
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	2,419.26	3	2,419.26
Dependent Child	95	31,348.87	80	26,587.51	175	57,936.38
Refund	0	0.00	6	3,914.97	6	3,914.97
15 Years Certain & Life	0	0.00	5	5,261.34	5	5,261.34
20 Years Certain & Life	1	1,599.68	22	25,941.11	23	27,540.79
5 Years Certain	5	2,207.52	4	8,799.97	9	11,007.49
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	3	1,388.33	3	1,388.33
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	1	148.67	1	148.67
PLSO 36 Month Survivor	0	0.00	1	1,129.09	1	1,129.09
Total	112	$55,210.28	474	$482,781.26	586	$537,991.54

Non-Hazardous Members

Retired and Beneficiary Information June 30, 2006
Tabulated by Attained Ages

	Retirement		Disability Retirement		Survivors and Beneficiaries		Totals	
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	67	$1,220,390	76	$681,315	349	$2,170,991	492	$4,072,696
45-49	655	$14,055,400	176	$1,813,585	166	$1,163,437	997	$17,032,422
50-54	1,522	$32,168,836	300	$2,980,824	201	$1,395,877	2,023	$36,545,537
55-59	3,231	$48,254,501	583	$5,890,612	297	$2,374,334	4,111	$56,519,447
60-64	4,386	$47,456,951	625	$5,712,405	305	$2,320,291	5,316	$55,489,647
65-69	5,531	$46,933,086	626	$5,225,294	422	$3,103,957	6,579	$55,262,337
70-74	4,639	$33,598,805	344	$2,401,698	400	$2,680,410	5,383	$38,680,913
75-79	3,360	$21,428,160	110	$687,861	416	$2,387,734	3,886	$24,503,755
80-84	2,119	$10,923,326	38	$203,886	338	$1,856,831	2,495	$12,984,043
85-89	1,052	$4,211,257	29	$126,775	244	$997,459	1,325	$5,335,491
90 & Over	381	$1,403,952	4	$18,226	110	$421,185	495	$1,843,363
Totals	26,943	$261,654,664	2,911	$25,742,481	3,248	$20,872,506	33,102	$308,269,651

Hazardous Members

Retired and Beneficiary Information June 30, 2006
Tabulated by Attained Ages

	Retirement		Disability Retirement		Survivors and Beneficiaries		Totals	
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	137	$3,482,341	73	$1,120,191	210	$1,107,657	4210	$5,710,189
45-49	358	$9,069,648	70	$1,047,180	38	$468,582	466	$10,585,410
50-54	758	$20,680,167	83	$1,164,603	57	$742,409	898	$22,587,179
55-59	1,002	$25,426,942	72	$994,455	60	$853,824	1,134	$27,275,221
60-64	703	$15,155,429	34	$452,882	78	$1,342,414	815	$16,950,725
65-69	436	$8,309,925	8	$112,616	58	$826,290	502	$9,248,831
70-74	239	$4,369,596	7	$61,302	41	$606,504	287	$5,037,402
75-79	107	$1,875,485	2	$15,222	28	$287,453	137	$2,178,160
80-84	31	$471,900	1	$17,366	11	$109,228	43	$598,494
85-89	4	$6,201			3	$22,019	7	$28,220
90 & Over	1	$690			2	$89,531	3	$90,221
Totals	3,776	$88,848,324	350	$4,985,817	586	$6,455,911	4,712	$100,290,052

Total Non-Hazardous Active Members as of June 30, 2006
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5-9	10-14	15-19	20-24	25-26	27-29	30+	
Under 20	2,511								2,511
Avg. Pay	$13,410								$13,410
20-24	2,839	225							3,064
Avg. Pay	$17,916	$22,288							$18,237
25-29	3,538	1,067	64						4,669
Avg. Pay	$20,207	$26,523	$28,370						$21,762
30-34	3,898	1,970	456	12					6,336
Avg. Pay	$19,844	$27,611	$31,625	$31,444					$23,129
35-39	4,707	3,048	1,167	335	26				9,283
Avg. Pay	$18,755	$24,786	$32,140	$36,515	$45,668				$23,134
40-44	4,593	4,070	1,831	943	492	78			12,007
Avg. Pay	$19,194	$22,594	$28,503	$35,779	$42,216	$45,102			$24,180
45-49	4,053	4,189	2,862	1,316	720	250	205	33	13,628
Avg. Pay	$19,564	$22,657	$25,701	$32,193	$40,396	$43,007	$48,259	$53,840	$25,068
50-54	3,211	3,241	2,901	1,818	921	261	183	134	12,670
Avg. Pay	$20,580	$23,190	$24,637	$28,990	$36,162	$40,583	$45,257	$55,080	$25,649
55-59	2,565	2,361	2,067	1,787	873	292	176	160	10,281
Avg. Pay	$20,622	$23,457	$25,277	$27,522	$32,370	$35,863	$44,748	$55,803	$25,799
60-64	1,505	1,427	1,105	938	506	161	108	80	5,830
Avg. Pay	$18,544	$21,636	$23,818	$25,943	$30,175	$34,352	$36,350	$48,441	$23,677
65-69	628	582	416	342	151	53	41	39	2,252
Avg. Pay	$15,960	$19,815	$21,330	$24,747	$27,628	$25,895	$29,730	$48,989	$21,122
70 & over	285	305	225	180	92	20	24	32	1,163
Avg. Pay	$14,141	$16,994	$18,146	$22,676	$22,937	$27,014	$28,511	$46,410	$19,086
Totals	34,333	22,485	13,094	7,671	3,781	1,115	737	478	83,694
Avg. Pay	$18,934	$23,494	$26,156	$29,655	$35,482	$38,365	$43,256	$53,048	$23,687

Total Hazardous Active Members as of June 30, 2006
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5-9	10-14	15-19	20-24	25-26	27-29	30+	
Under 20	168								168
Avg. Pay	$27,226								$27,226
20-24	443	12							455
Avg. Pay	$31,605	$37,132							$31,751
25-29	1,021	247	2						1,270
Avg. Pay	$35,910	$44,658	$47,562						$37,629
30-34	750	907	185	2					1,844
Avg. Pay	$35,904	$45,678	$50,109	$45,936					$42,148
35-39	532	713	615	176	9				2,045
Avg. Pay	$36,377	$44,624	$52,197	$54,633	$60,424				$45,687
40-44	294	371	388	507	118	5			1,683
Avg. Pay	$35,540	$43,339	$50,562	$57,330	$62,296	$55,800			$49,223
45-49	145	202	195	292	152	24	11	2	1,023
Avg. Pay	$37,162	$41,814	$48,699	$55,187	$62,545	$66,757	$61,910	$92,490	$50,265
50-54	147	125	115	127	52	26	32	24	648
Avg. Pay	$38,467	$43,484	$49,160	$52,054	$63,863	$64,638	$71,550	$73,465	$50,013
55-59	81	82	40	51	13	8	14	16	305
Avg. Pay	$36,972	$41,443	$43,619	$53,004	$58,698	$56,331	$71,411	$78,488	$46,919
60-64	44	45	23	10	2	1	2	3	130
Avg. Pay	$32,698	$40,821	$44,606	$56,554	$62,076	$37,020	$55,470	$90,316	$41,617
65-69	22	15	7	3	2				49
Avg. Pay	$37,243	$47,219	$41,203	$36,552	$69,252				$42,127
70 & over	8	1	2	2	2				15
Avg. Pay	$22,209	$26,664	$27,252	$51,768	$74,532				$34,096
Totals	3,655	2,720	1,572	1,170	350	64	59	45	9,635
Avg. Pay	$35,141	$44,358	$50,476	$55,539	$62,564	$63,272	$69,175	$77,220	$44,310

SCHEDULE F

AMORTIZATION BASES

Non-Hazardous Retirement Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$93,672,421	$10,797,641	14	$117,911,499
06/30/1991	30	61,472,822	6,782,007	15	77,921,143
06/30/1992	30	(125,111,651)	(13,210,027)	16	(158,998,717)
06/30/1993	30	(28,358,370)	(2,865,429)	17	(35,993,999)
06/30/1994	30	59,026,195	5,707,245	18	74,570,890
06/30/1995	30	(35,766,009)	(3,308,995)	19	(44,838,993)
06/30/1996	30	(188,502,047)	(16,686,175)	20	(233,876,090)
06/30/1997	30	(200,122,489)	(16,934,151)	21	(244,924,023)
06/30/1998	30	(311,976,854)	(25,234,417)	22	(375,812,125)
06/30/1999	30	(379,088,077)	(29,308,326)	23	(448,576,198)
06/30/2000	30	(804,685,873)	(59,461,176)	24	(933,643,016)
06/30/2001	30	250,075,433	17,660,834	25	284,028,586
06/30/2002	30	529,261,185	35,720,739	26	587,536,806
06/30/2003	30	391,393,784	25,243,612	27	424,074,885
06/30/2004	30	633,089,111	39,018,148	28	668,641,440
06/30/2005	30	573,411,726	33,768,362	29	589,621,036
06/30/2006	30	669,032,006	37,645,187	30	669,032,066
Total			$45,335,080		$1,016,675,131

* Level percent of salary

Hazardous Retirement Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$68,584,978	$7,905,806	14	$86,332,326
06/30/1991	30	29,934,803	3,302,566	15	37,944,477
06/30/1992	30	(12,941,304)	(1,366,419)	16	(16,446,515)
06/30/1993	30	(7,291,213)	(736,729)	17	(9,254,404)
06/30/1994	30	1,854,577	179,319	18	2,342,985
06/30/1995	30	24,831,672	2,297,373	19	31,130,876
06/30/1996	30	(65,565,268)	(5,803,828)	20	(81,347,384)
06/30/1997	30	(62,908,989)	(5,323,292)	21	(76,992,462)
06/30/1998	30	(50,329,820)	(4,070,955)	22	(60,628,077)
06/30/1999	30	(97,060,446)	(7,504,006)	23	(114,851,952)
06/30/2000	30	(194,399,700)	(14,364,903)	24	(225,553,757)
06/30/2001	30	79,413,115	5,608,315	25	90,195,164
06/30/2002	30	143,568,600	9,689,689	26	159,376,579
06/30/2003	30	195,752,270	12,625,377	27	212,097,444
06/30/2004	30	149,965,899	9,242,603	28	158,387,521
06/30/2005	30	155,230,047	9,141,537	29	159,618,119
06/30/2006	30	152,716,813	8,593,091	30	152,716,813
Total			$29,415,596		$505,067,753

* Level percent of salary

Non-Hazardous Insurance Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/2006	30	$3,829,497,049	$224,326,837	30	$3,829,497,049
Total		$3,829,497,049	$224,326,837		$3,829,497,049

* Level percent of salary

Hazardous Insurance Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/2006	30	$1,505,696,329	$88,201,686	30	$1,505,696,329
Total		$1,505,696,329	$88,201,686		$1,505,696,329

* Level percent of salary

Report on the Annual Valuation of the State Police Retirement System

Prepared as of June 30, 2006

November 1, 2006

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2007.

The date of the valuation was June 30, 2006.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 5.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

Edward A. Macdonald, ASA, FCA, MAAA
President

TJC/EAM:sh

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REPORT ON THE ANNUAL VALUATION OF THE STATE POLICE RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2006

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2006, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	6/30/06	6/30/05*
Contributions for next fiscal year:		
Retirement	28.95%	20.64%
Insurance	91.05	21.66
Total	120.00%	42.30%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$516,482,298	$458,593,576
Actuarial value of assets	344,016,197	353,511,622
Unfunded liability on actuarial value of assets	172,466,101	105,081,954
Funded ratio on actuarial value of assets	66.61%	77.09%
Market value of assets	$352,841,486	$339,405,873
Unfunded liability on market value of assets	163,640,812	119,187,703
Funded ratio on market value of assets	68.32%	74.01%
Insurance		
Actuarial accrued liability	$582,580,867	$234,159,510
Actuarial value of assets	105,580,269	100,207,082
Unfunded liability on actuarial value of assets	477,000,598	133,952,428
Funded ratio on actuarial value of assets	18.12%	42.79%
Market value of assets	$110,491,075	$99,408,106
Unfunded liability on market value of assets	472,089,792	134,751,404
Funded ratio on market value of assets	18.97%	42.45%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,067	1,036
Number of vested former members	48	42
Number of former members due a refund	218	210
Number of active members	1,028	987
Total salary	$47,743,865	$43,720,092
Average salary	$46,443	$44,296

*Reported by prior actuarial firm.

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. There were, however, several changes in actuarial assumptions and methods adopted by the Board based on an experience investigation dated January 12, 2006 covering the period July 1, 2000 through June 30, 2005. Since the previous valuation, the assumptions and methods were changed as follows:

   - Investment return was reduced from 8.25% per year to 7.75% per year for retirement benefits. Investment return was reduced from 8.25% per year to 4.50% per year for insurance benefits as required under GASB Statements No. 43 and 45 due to the lack of pre-funding of insurance benefits
   - The mortality table was changed for members who retire after June 30, 2006 from the 1983 GAM table to the 1994 GAM table
   - The mortality table for disabled members was changed from the PBGC Table for Disabled Lives Receiving Social Security to the 1994 GAM table set forward five years
   - The salary scale was changed from a service based scale ranging from 12.0% to 6.5% to a service based scale ranging from 14.5% to 4.0%
   - Rates of disablement, termination and retirement were adjusted to more closely reflect the actual experience of the system
   - 18 months additional service credit will be assumed at retirement to reflect unused accumulated sick leave
   - Medical trend rates were increased through 2020 and reduced thereafter in a range starting at 12.0% per year in 2006-2008 and declining to an ultimate rate of 5.5% in 2027 and later
   - The method used to determine the actuarial value of assets was changed to a method that truly smoothes market fluctuations over the five year smoothing period
   - The insurance accrued liability amortization bases were consolidated and reset to a new 30-year amortization period beginning with the June 30, 2006 valuation.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2006 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

			Group Averages		
Number		Payroll	Salary	Age	Service
1,028	$	47,743,865	$46,443	36.5	10.5

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2001	1,016	$44,209,944	$43,514	2.1%
6/30/2002	1,002	43,961,844	43,874	0.8
6/30/2003	1,019	43,760,832	42,945	(2.1)
6/30/2004	999	43,835,208	43,879	2.2
6/30/2005	987	43,720,092	44,296	1.0
6/30/2006	1,028	47,743,865	46,443	4.8

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

			Group Averages	
Type of Benefit Payment	No.	Annual Benefits	Benefit	Age
Retiree	908	$ 31,323,376	$34,497	59.84
Disability	37	611,513	16,527	55.43
Beneficiary	122	2,716,362	22,265	60.02
Total in SPRS	1,067	$34,651,251	32,475	59.71

This valuation also includes 266 inactive members of which 48 are vested.

SECTION III - ASSETS

1. As of June 30, 2006 the total market value of assets amounted to $463,332,561 as shown in the following table.

Retirement	Insurance	SPRS Total
$352,841,486	$110,491,075	$463,332,561

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $449,596,466. Schedule B shows the development of the actuarial value of assets as of June 30, 2006. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2006	JUNE 30, 2005
Retirement	$ 344,016,197	$ 353,511,622
Insurance	105,580,269	100,207,082
Total	$ 449,596,466	$ 453,718,704

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2006. Separate balance sheets are shown for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $587,666,904, of which $371,485,440 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $2,102,705 is for the prospective benefits payable on account of inactive members, $214,078,759 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $344,016,197 as of June 30, 2006. The difference of $243,650,707 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $33,653,343 is the present value of future contributions expected to be made by members, and the balance of $209,997,364 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 8.92% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $37,531,263. When this amount is subtracted from $209,997,364, which is the present value of the total future contributions to be made by the State, there remains $172,466,101 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 19.75% of payroll. This rate is based on a 30 year amortization of bases established each year as specified in the law governing the Plan. These bases are amortized on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.28% of payroll.
6. The development of all accrued liability amortization bases is shown in Schedule F.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $823,590,001, of which $235,676,003 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $5,237,865 is for the prospective benefits payable to current inactive members, and $582,676,133 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $105,580,269 as of June 30, 2006. The difference of $718,009,732 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $0 is the present value of future contributions expected to be made by members, and the balance of $718,009,732 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 52.38% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $241,009,134. When this amount is subtracted from $718,009,732, which is the present value of the total future contributions to be made by the employers, there remains $477,000,598 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 38.52% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $477,000,598 over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.15% of payroll.
6. The development of the accrued liability amortization bases is shown in Schedule F.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2006 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Amount
(1)	UAAL* as of 6/30/05	$ 105.1
(2)	Normal cost from last valuation	4.1
(3)	Actual employer contributions	4.2
(4)	Interest accrual: (1) x .0825 + [[(2) – (3)] x .04125]	8.7
(5)	Expected UAAL before changes: (1) + (2) – (3) + (4)	$ 113.7
(6)	Change due to plan amendments	9.1
(7)	Change due to new actuarial assumptions or methods	34.6
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 157.4
(9)	Actual UAAL as of 6/30/06	$ 172.5
(10)	Gain/(loss): (8) – (9)	$ (15.1)
(11)	Accrued liabilities as of 6/30/05	$ 458.6
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(3.3)%

*Unfunded actuarial accrued liability.

Experience Gain/(Loss)
Insurance Benefits

		Amount	
(1)	UAAL* as of 6/30/05	$	134.0
(2)	Normal cost from last valuation		7.3
(3)	Actual employer contributions		6.9
(4)	Interest accrual: (1) x .0825 + [[(2) – (3)] x .04125]		11.1
(5)	Expected UAAL before changes: (1) + (2) – (3) + (4)	$	145.5
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumptions or methods		343.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	488.5
(9)	Actual UAAL as of 6/30/06	$	477.0
(10)	Gain/(loss): (8) – (9)	$	11.5
(11)	Accrued liabilities as of 6/30/05	$	234.2
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		4.9%

*Unfunded actuarial accrued liability.

SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/06	Insurance $ Gain (or Loss) For Year Ending 6/30/06
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (3.9)	$ (1.8)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.2)	(0.1)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.6	0.3
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(1.7)	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(0.5)	(0.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(10.7)	(1.8)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.4	0.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	0.9	14.9
Gain (or Loss) During Year From Financial Experience	$ (15.1)	$ 11.5
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes, and contribution shortfall.	(48.9)	(343.0)
Composite Gain (or Loss) During Year	$ (64.0)	$ (331.5)

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2007/2008 fiscal year.

Required Contribution Rates
Retirement

Contribution for	Amount	% of Payroll
A. Normal Cost:		
(1) Service retirement benefits	$ 7,323,909	15.34%
(2) Disability benefits	544,280	1.14
(3) Survivor benefits	210,073	0.44
(4) Total	$ 8,078,262	16.92%
B. Member Contributions	3,819,509	8.00%
C. Employer Normal Cost: [A(4) – B]	$ 4,258,753	8.92%
D. Administrative Expenses	$ 133,683	0.28%
E. Unfunded Actuarial Accrued Liability Contributions*:		
(1) UAAL Contribution Based on 6/30/05 Valuation	$ 5,352,087	11.21%
(2) Change due to:		
a. Active decrements	$ 200,524	0.42%
b. Pay increases	81,165	0.17
c. Retiree mortality	(19,098)	(0.04)
d. Investment return	539,506	1.13
e. COLA	458,341	0.96
f. Assumption change	2,807,339	5.88
g. Other	11,190	0.02
h. Total Change	$ 4,078,967	8.54%
(3) UAAL Contribution Based on 6/30/06 Valuation: [E(1) + E(2)h]	$ 9,431,054	19.75%
F. Total Recommended Employer Contribution Rate: [C + D + E(3)]	$ 13,823,490	28.95%

*Development of the amortization bases of the UAAL is provided in Schedule F

Required Contribution Rates
Insurance

Contribution for	Amount	% of Payroll
A. Normal Cost	$ 25,010,455	52.38%
B. Member Contributions*	$ 0	0.00%
C. Employer Normal Cost: [A – B]	$ 25,010,455	52.38%
D. Administrative Expenses	$ 67,587	0.15%
E. Unfunded Actuarial Accrued Liabilities**	$ 18,391,693	38.52%
F. Total Recommended Employer Contribution Rate: [C + D + E]	$ 43,469,735	91.05%

*The liabilities are net of retiree contributions toward their healthcare.
**Development of the amortization base of the UAAL is provided in Schedule F

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2006

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,067
Terminated employees entitled to benefits but not yet receiving benefits	266
Active members	1,028
Total	2,361

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
6/30/2001	$456,160,709	$356,211,860	$ (99,948,849)	128.1%	$44,209,944	(226.1)%
6/30/2002	438,955,465	380,790,346	(58,165,119)	115.3	43,961,844	(132.3)
6/30/2003	413,063,576	414,881,459	1,817,883	99.6	43,760,832	4.2
6/30/2004	385,077,195	437,482,425	52,405,230	88.0	43,835,208	119.6
6/30/2005	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
6/30/2006	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
6/30/2001	$79,863,577	$158,261,479	$78,397,902	50.5%	$44,209,944	177.3%
6/30/2002	86,867,391	165,445,412	78,578,021	52.5	43,961,844	178.7
6/30/2003	90,747,967	184,501,205	93,753,238	49.2	43,760,832	214.2
6/30/2004	96,622,908	197,604,301	100,981,393	48.9	43,835,208	230.4
6/30/2005	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
6/30/2006	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1

The final item of required supplementary information, the Schedule of Employer Contributions, is shown in the tables below.

Retirement Benefits

Schedule of Employer Contributions

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
June 30, 2001	$1,826,883	$1,811,299	99.0%
June 30, 2002	1,464,204	1,448,864	99.0
June 30, 2003	0	(20,061)	0.0
June 30, 2004	1,175,711	1,152,752	98.0
June 30, 2005	3,730,805	2,851,461	76.4
June 30, 2006	6,352,777	4,244,445	66.8

Insurance Benefits

Schedule of Employer Contributions

Year Ended	Annual Required Contribution*	Actual Contributions	Percentage Contributed
June 30, 2001	$7,807,870	$7,817,613	100.1%
June 30, 2002	8,098,907	8,113,391	100.2
June 30, 2003	9,443,588	9,654,313	81.1
June 30, 2004	8,434,834	8,455,498	100.2
June 30, 2005	8,608,536	6,631,031	77.0
June 30, 2006	12,554,648	6,880,517	54.8

* ARC for years after June 30, 2005 are based on GASB Statement 43.

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2006. Additional information as of the latest actuarial valuation follows.

Retirement Benefits	
Valuation date	6/30/2006
Actuarial cost method	Entry Age
Amortization method	Level Percent Closed
Remaining amortization period	14 to 30 Years
Asset valuation method	5 Year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases*	4.0% - 14.5%
Cost-of-living adjustment	None
*Includes inflation at	3.5%

Insurance Benefits	
Valuation date	6/30/2006
Actuarial cost method	Entry Age
Amortization method	Level Percent Closed
Remaining amortization period	30 Years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption	12.0% - 5.5%
Year of Ultimate Trend	2027
Actuarial assumptions:	
Investment rate of return*	4.50%
*Includes inflation at	3.5%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2006 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2005. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM

RETIREMENT BENEFITS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 344,016,197	$ 353,511,622
Prospective contributions		
Member contributions	$ 33,653,343	$ **
Employer normal contributions	37,531,263	76,261,787
Unfunded accrued liability contributions	172,466,101	105,081,954
Total prospective contributions	$ 243,650,707	$ 181,343,741
Total assets	$ 587,666,904	$ 534,855,363
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 371,485,440	$ 339,769,169
Present value of benefits payable on account of active members	214,078,759	193,457,000
Present value of benefits payable on account of inactive members	2,102,705	1,629,194
Total liabilities	$ 587,666,904	$ 534,855,363

*Reported by prior actuarial firm.

**Prospective member contributions and employer normal contributions not reported separately by previous actuary.

VALUATION BALANCE SHEET
INSURANCE BENEFITS

	JUNE 30, 2006	JUNE 30, 2005*
ASSETS		
Current actuarial value of assets	$ 105,580,269	$ 100,207,082
Prospective employer contributions		
Normal contributions	$ 241,009,134	$ 76,719,821
Unfunded accrued liability contributions	477,000,598	133,952,428
Total prospective contributions	$ 718,009,732	$ 210,672,249
Total assets	$ 823,590,001	$ 310,879,331
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 235,676,003	$ 139,093,506
Present value of benefits payable on account of active members	582,676,133	169,293,637
Present value of benefits payable on account of inactive members	5,237,865	2,492,188
Total liabilities	$ 823,590,001	$ 310,879,331

*Reported by prior actuarial firm.

The following tables provide the solvency test for SPRS members.

Solvency Test
Retirement Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2001*	$34,338,478	$224,432,772	$97,440,610	$456,160,709	100.0%	100.0%	202.6%
6/30/2002*	36,886,477	252,498,613	91,405,256	438,955,613	100.0	100.0	163.6
6/30/2003*	35,832,095	290,012,792	89,036,572	413,063,576	100.0	100.0	98.0
6/30/2004*	37,658,106	318,664,694	81,159,625	385,077,195	100.0	100.0	35.4
6/30/2005*	35,670,717	341,398,363	81,524,496	353,511,622	100.0	93.1	--
6/30/2006	37,866,774	373,588,145	105,027,379	344,016,197	100.0	81.9	--

*Reported by prior actuarial firm.

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Solvency Test
Insurance Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2001*	$0	$86,469,110	$71,792,369	$79,863,577	100.0%	92.4%	--
6/30/2002*	0	94,205,237	71,240,175	86,867,391	100.0	92.2	--
6/30/2003*	0	106,317,750	78,183,455	90,747,967	100.0	85.4	--
6/30/2004*	0	119,104,851	78,499,450	96,622,908	100.0	81.1	--
6/30/2005*	0	141,585,694	92,573,816	100,207,082	100.0	70.8	--
6/30/2006	0	240,913,868	341,666,999	105,580,269	100.0	43.8	--

*Reported by prior actuarial firm.

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits

Valuation Date June 30:	2005	2006	2007	2008	2009	2010
A. Actuarial Value Beginning of Year	$385,077,195	$353,511,622				
B. Market Value End of Year	339,405,873	352,841,486				
C. Market Value Beginning of Year	335,720,408	339,405,873				
D. Cash Flow						
D1. Contributions	7,079,879	9,058,705				
D2. Benefit Payments	(33,051,482)	(34,836,365)				
D3. Administrative Expenses	(104,594)	(133,540)				
D4. Investment Expenses	(279,552)	(284,289)				
D5. Net	(26,355,749)	(26,195,490)				
E. Investment Income						
E1. Market Total: B.-C.-D5.	30,041,214	39,631,102				
E2. Assumed Rate	8.25%	8.25%				
E3. Amount for Immediate Recognition	30,681,694	27,216,436				
E4. Amount for Phased-In Recognition	(640,480)	12,414,667				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	(128,096)	2,482,933				
F2. First Prior Year	1,765,427	(128,096)	2,482,933			
F3. Second Prior Year	(4,253,012)	1,765,427	(128,096)	2,482,933		
F4. Third Prior Year	(10,383,623)	(4,253,012)	1,765,427	(128,096)	2,482,933	
F5. Fourth Prior Year	(22,892,214)	(10,383,623)	(4,253,012)	1,765,427	(128,096)	2,482,933
F6. Total Recognized Investment Gain	(35,891,518)	(10,516,731)	(132,748)	4,120,264	2,354,837	2,482,933
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	$353,511,622	$344,016,197				
H. Difference Between Market & Actuarial Values	$(14,105,749)	$8,825,289	$8,958,037	$4,837,773	$2,482,933	$0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits

Valuation Date June 30:	2005	2006	2007	2008	2009	2010
A. Actuarial Value Beginning of Year	$96,622,908	$100,207,082*				
B. Market Value End of Year	99,408,106	110,491,075				
C. Market Value Beginning of Year	90,422,080	99,408,106				
D. Cash Flow						
D1. Contributions	6,974,102	6,885,334				
D2. Benefit Payments	(6,220,807)	(7,816,174)				
D3. Administrative Expenses	(44,584)	(67,587)				
D4. Investment Expenses	(65,388)	(100,954)				
D5. Net	643,323	(1,099,381)				
E. Investment Income						
E1. Market Total: B.-C.-D5.	8,342,703	12,182,350				
E2. Assumed Rate	8.25%	8.25%				
E3. Amount for Immediate Recognition	7,997,927	8,260,938				
E4. Amount for Phased-In Recognition	344,776	3,921,412				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	68,955	784,282				
F2. First Prior Year	1,373,499	68,955	784,282			
F3. Second Prior Year	(1,180,186)	1,373,499	68,955	784,282		
F4. Third Prior Year	(2,834,921)	(1,180,186)	1,373,499	68,955	784,282	
F5. Fourth Prior Year	(2,484,422)	(2,834,921)	(1,180,186)	1,373,499	68,955	784,282
F6. Total Recognized Investment Gain	(5,057,075)	(1,788,371)	1,046,550	2,226,736	853,237	784,282
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	$100,207,082*	$105,580,269				
H. Difference Between Market & Actuarial Values	$(798,976)	$4,910,806	$3,864,256	$1,637,520	$784,282	$0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.
*This is the actuarial value as reported by the previous actuary. It differs from the method in the table above by $1. The difference is obviously not material.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for SPRS is 4.50%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for members are as follows and include inflation at 3.50% per annum:

	Annual Rates of		
Service	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	11.0%	3.5%	14.5%
1-2	4.0	3.5	7.5
2-3	3.5	3.5	7.0
3-4	3.0	3.5	6.5
4-5	2.5	3.5	6.0
5-6	2.0	3.5	5.5
6-7	1.5	3.5	5.0
7-8	1.5	3.5	5.0
8-9	1.0	3.5	4.5
9-10	1.0	3.5	4.5
10 & over	0.5	3.5	4.0

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

		Death**			Service Retirement***	
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate
20	2.50%	0.10%	0.08%	0.07%	20	20.0%
25	2.28	0.12	0.08	0.09	25	20.0
30	1.83	0.13	0.09	0.12	30	45.0
35	1.31	0.14	0.10	0.17	35	70.0
40	0.81	0.16	0.12	0.27		
45	0.41	0.21	0.15	0.44		
50		0.31	0.19	0.75		
55		0.49	0.28	1.23		
60		0.85	0.49	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 10.0%, 7.0%, 5.0%, 4.0% and 3.5%, respectively.
** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.
*** The annual rate of service retirement is 100% at age 55.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Trend
2006-08	12.0%
2009-11	11.0
2012-14	10.0
2015-17	9.0
2018-20	8.0
2021-23	7.0
2024-26	6.0
2027 and beyond	5.5

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 – 69	3.0%
70 – 74	2.5%
75 – 79	2.0%
80 – 84	1.0%
85 – 89	0.5%
90 and over	0.0%

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation and spouse coverage are as follows:

Participation	100%
Spouse Coverage	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

July – December 2006				
	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$550.62	$ 845.36	$ 942.72
Enhanced	$432.08	$662.71	$1,014.67	$1,130.82
Premier	$447.20	$688.87	$1,048.68	$1,168.62

MEDICARE ELIGIBLE

Available Plan	Cost
Kentucky Retirement System Health Plan - Medical Only	$143.00
Kentucky Retirement System Health Plan – PLUS	$237.00
Kentucky Retirement System Health Plan – PREMIUM	$310.00
Anthem Senior Advantage (HMO Local Network)	$168.00
Anthem Blue Medicare Access (PPO Regional Network)	$208.00

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

UNUSED SICK LEAVE: It is assumed that a member will be granted one and one-half year of service credit for unused sick leave at termination of employment.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation time years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Early Retirement:	
Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 5.5% per year for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.
Disability:	
Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used.

	A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System.
Members whose participation began on or after July 1, 2003	The Retirement System pays $15 per month per year of service for retirees, and $10 per month per year of service for surviving spouses employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of service.

Member Contributions: 8% of salary.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2001	2002	2003*	2004*	2005*	2006
			Number			
Beginning of Year	N/A	N/A	897	941	992	1,036
Added	N/A	N/A	53	62	50	43
Removed	N/A	N/A	9	11	6	10
End of Year	N/A	N/A	941	992	1,036	1,067
			Annual Allowances			
Beginning of Year	N/A	N/A	N/A	$28,115,500	$30,805,600	$32,983,900
Added	N/A	N/A	$2,040,300	2,580,100	1,813,000	1,943,760
Removed	N/A	N/A	135,000	189,900	159,600	276,409
End of Year	N/A	N/A	$28,115,500	$30,805,600	$32,983,900	$34,651,251
% Increase in Allowances	N/A	N/A	N/A	9.57%	7.07%	5.06%
Average Annual Allowance	N/A	N/A	$29,878	$31,054	$31,838	$32,475

*Reported by prior actuarial firm.

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	88	$239,703.32	4	$9,871.59	92	$249,574.91
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	117	308,937.68	1	3,126.65	118	312,064.33
66-2/3% to Beneficiary	76	245,656.29	1	2,653.98	77	248,310.27
50% to Beneficiary	74	232,933.80	0	0.00	74	232,933.80
Pop-up Option	307	967,062.14	0	0.00	307	967,062.14
10 Years Certain	3	12,529.16	0	0.00	3	12,529.16
10 Years Certain & Life	28	81,996.68	0	0.00	28	81,996.68
Social Security Option						
Age 62 Basic	36	82,850.34	0	0.00	36	82,850.34
Age 62 Survivorship	158	333,970.74	1	4,609.10	159	338,579.84
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	10	26,136.20	1	3,388.21	11	29,524.41
20 Years Certain & Life	28	73,389.50	1	2,452.08	29	75,841.58
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	4	11,074.90	0	0.00	4	11,074.90
PLSO 24 Month Survivor	1	6,408.83	0	0.00	1	6,408.83
PLSO 36 Month Survivor	6	12,489.33	0	0.00	6	12,489.33
Total	936	$2,635,138.91	9	$26,101.61	945	$2,661,240.52

Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$0.00	4	$2,656.98	4	$2,656.98
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2	3,658.03	55	128,995.64	57	132,653.67
66-2/3% to Beneficiary	0	0.00	2	3,431.44	2	3,431.44
50% to Beneficiary	1	1,132.13	13	19,268.71	14	20,400.84
Pop-up Option	0	0.00	11	27,120.18	11	27,120.18
10 Years Certain	1	515.67	1	2,563.48	2	3,079.15
10 Years Certain & Life	0	0.00	0	0.00	0	0.00
Social Security Option						
Age 62 Basic	0	0.00	1	1,916.40	1	1,916.40
Age 62 Survivorship	0	0.00	17	25,112.08	17	25,112.08
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	7	2,241.08	2	507.15	9	2,748.23
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	0	0.00	0	0.00	0	0.00
20 Years Certain & Life	0	0.00	4	7,224.05	4	7,224.05
5 Years Certain	0	0.00	1	20.28	1	20.28
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	11	$7,546.91	111	$218,816.39	122	$226,363.30

Retired and Beneficiary Information June 30, 2006
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Totals No.	Totals Annual Benefits
Under 45	18	$447,522	3	$38,309	17	$156,271	38	$642,102
45-49	54	$1,746,684	7	$118,781	2	$13,511	63	$1,878,976
50-54	166	$5,934,647	7	$92,424	17	$278,191	190	$6,305,262
55-59	284	$10,159,956	9	$173,606	19	$416,781	312	$10,750,343
60-64	151	$5,284,978	5	$87,657	13	$324,491	169	$5,697,126
65-69	108	$3,270,157	3	$65,232	10	$335,733	121	$3,671,122
70-74	58	$1,986,398	3	$35,504	18	$453,983	79	$2,475,885
75-79	45	$1,574,740			17	$510,780	62	$2,085,520
80-84	19	$860,878			8	$226,378	27	$1,087,256
85-89	5	$57,416					5	$57,416
90 & Over					1	$243	1	$243
Totals	908	$31,323,376	37	$611,513	122	$2,716,362	1,067	$34,651,251

Total Active Members as of June 30, 2006
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								
	0-4	5-9	10-14	15-19	20-24	25-26	27-29	30+	Totals
Under 20	5								5
Avg. Pay	$24,463								$24,463
20-24	34								34
Avg. Pay	$28,593								$28,593
25-29	138	36							174
Avg. Pay	$31,844	$40,875							$33,712
30-34	73	106	41						220
Avg. Pay	$34,299	$42,156	$49,542						$40,926
35-39	45	51	115	46	3				260
Avg. Pay	$33,813	$41,960	$50,922	$55,553	$58,564				$47,110
40-44	15	14	28	88	29	1			175
Avg. Pay	$36,233	$39,472	$49,738	$57,535	$62,679	$54,384			$53,851
45-49	4	3	3	27	52	9	8		106
Avg. Pay	$35,187	$40,028	$48,124	$58,127	$64,410	$68,021	$70,056		$61,288
50-54	1	1		2	19	5	8	4	40
Avg. Pay	$30,324	$46,632		$61,572	$62,172	$70,313	$71,690	$71,580	$64,819
55-59						3	1	4	8
Avg. Pay						$72,508	$61,428	$85,809	$77,774
60-64			1					3	4
Avg. Pay			$56,628					$80,256	$74,349
65-69				1					1
Avg. Pay				$56,016					$56,016
70 & over		1							1
Avg. Pay		$42,324							$42,324
Totals	315	212	188	164	103	18	17	11	1,028
Avg. Pay	$32,473	$41,706	$50,430	$57,117	$63,340	$68,648	$70,317	$79,120	$46,443

SCHEDULE F

AMORTIZATION BASES

Retirement Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/1990	30	$8,982,071	$1,035,366	14	$11,306,313
06/30/1991	30	9,963,656	1,099,243	15	12,629,636
06/30/1992	30	(24,502,117)	(2,587,078)	16	(31,138,625)
06/30/1993	30	(3,706,436)	(374,511)	17	(4,704,412)
06/30/1994	30	10,380,135	1,003,656	18	13,113,774
06/30/1995	30	22,729,292	2,102,865	19	28,495,170
06/30/1996	30	(17,793,855)	(1,575,109)	20	(22,076,986)
06/30/1997	30	(31,021,470)	(2,625,004)	21	(37,966,264)
06/30/1998	30	12,716,788	1,028,604	22	15,318,837
06/30/1999	30	(31,317,924)	(2,421,273)	23	(37,058,602)
06/30/2000	30	(77,707,399)	(5,742,083)	24	(90,160,612)
06/30/2001	30	26,106,163	1,843,670	25	29,650,641
06/30/2002	30	44,465,495	3,001,052	26	49,361,477
06/30/2003	30	61,350,968	3,956,936	27	66,473,730
06/30/2004	30	50,162,333	3,091,573	28	52,979,295
06/30/2005	30	50,784,900	2,990,736	29	52,220,497
06/30/2006	30	64,022,232	3,602,412	30	64,022,232
Total			$9,431,054		$172,466,101

* Level percent of salary

Insurance Bases

Date Established	Initial Years	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
06/30/2006	30	$477,000,598	$18,391,693	30	$477,000,598
Total		$477,000,598	$18,391,693		$477,000,598

* Level percent of salary

Report on the Annual Valuations of the Kentucky Employees Retirement System County Employees Retirement System State Police Retirement System

Prepared as of June 30, 2007

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

October 31, 2007

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fifty-first annual actuarial valuation of the Kentucky Employees Retirement System, the forty-eighth annual actuarial valuation of the County Employees Retirement System, and the forty-ninth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2007 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2008 and ending June 30, 2009.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) are established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30 year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension Fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2007 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	56.9%
KERS Hazardous Pension Fund	83.6%
CERS Non-Hazardous Pension Fund	82.1%
CERS Hazardous Pension Fund	74.2%
SPRS Pension Fund	63.7%

The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Medical inflation rates in excess of the assumed rates as well as recent employer contribution rate reductions under KERS and SPRS have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level. As of June 30, 2007 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	11.9%
KERS Hazardous Insurance Fund	49.8%
CERS Non-Hazardous Insurance Fund	28.8%
CERS Hazardous Insurance Fund	31.2%
SPRS Insurance Fund	26.6%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on January 19, 2006 based on the experience investigation report dated January 12, 2006, meet the parameters set for disclosure under GASB Statements No. 25 and 43. The health care cost trend assumptions were updated for the June 30, 2007 valuation adopted by the Board November 15, 2007. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in January 2011 and any adjustments will be reflected in the June 30, 2011 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Edward A. Macdonald ASA, FCA, MAAA
President

Summary of June 30, 2007 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2008-2009)					
Pension Fund Contribution	16.54%	10.84%	7.76%	15.04%	32.39%
Insurance Fund Contribution	20.38	23.94	12.75	27.62	59.54
Recommended Employer Contribution	36.92%	34.78%	20.51%	42.66%	91.93%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$9,485,939,277	$558,992,329	$6,659,446,126	$2,208,736,179	$547,955,286
Actuarial Value of Assets	5,396,782,459	467,287,809	$5,467,824,480	$1,639,288,924	348,806,508
Unfunded Actuarial Liability on Actuarial Value of Assets	4,089,156,818	91,704,520	$1,191,621,646	$569,447,255	199,148,778
Funding Level as a % of Actuarial Value of Assets	56.89%	83.59%	82.11%	74.22%	63.66%
Market Value of Assets	$5,773,156,838	$510,775,499	$5,812,935,251	$1,754,934,764	$376,381,488
Unfunded Actuarial Liability on Market Value of Assets	3,712,782,439	48,216,830	$846,510,875	$453,801,415	171,573,798
Funding Level on Market Value of Assets	60.86%	91.37%	87.29%	79.45%	68.69%
Insurance Fund					
Actuarially Accrued Liability	$5,201,355,055	$504,842,981	$3,333,966,070	$1,646,460,011	$432,763,229
Actuarial Value of Assets	621,171,658	251,536,756	$960,285,900	$512,926,549	115,215,912
Unfunded Actuarial Liability as a % of Actuarial Value of Assets	4,580,183,397	253,306,225	$2,373,680,170	$1,133,533,462	317,547,317
Funding Level as a % of Actuarial Value of Assets	11.94%	49.82%	28.80%	31.15%	26.62%
Market Value of Assets	$663,558,360	$280,885,910	$1,084,042,781	$570,155,702	$132,573,898
Unfunded Actuarial Liability as a % of Market Value of Assets	4,537,796,695	223,957,071	$2,249,923,289	$1,076,304,309	300,189,331
Funding Level on Market Value of Assets	12.76%	55.64%	32.52%	34.63%	30.63%
Member Data					
Number of Active Members	47,913	4,349	84,920	10,063	957
Total Annual Payroll (Active Members)	$1,780,223,493	$144,838,020	$2,076,848,328	$458,998,956	$49,247,580
Average Annual Pay (Active Members)	$37,155	$33,304	$24,457	$45,613	$51,460
Number of Retired Members & Beneficiaries	33,849	2,202	35,564	5,159	1,105
Average Annual Retirement Allowance	$18,477	$12,502	$9,805	$22,046	$33,673
Number of Vested Inactive Members	5,298	278	8,093	436	47

Additional Valuation Notes

In addition to the valuation results presented in the three reports that follow, certain calculations were made to round out the presentation and put the results in greater perspective. That information follows.

- Recent Contribution Shortfall – Although it has happened periodically in the past, there has been an ongoing contribution shortfall for KERS and SPRS since the 2002-2003 fiscal year. That shortfall has placed additional pressure on contribution rates, and that impact is compounding. The table below shows the recommended and budgeted contribution rates as a percent of payroll for KERS and SPRS over the last five fiscal years. The rates shown are the combined rates for retirement and insurance.

Fiscal Year	Recommended Rate	Budgeted Rate
	KERS Non-Hazardous	
2002-2003	5.89%	3.76%
2003-2004	7.53	5.89
2004-2005	10.29	5.89
2005-2006	13.62	5.89
2006-2007	17.13	7.75
	KERS Hazardous	
2002-2003	18.84%	17.60%
2003-2004	18.84	18.84
2004-2005	19.47	18.84
2005-2006	21.59	18.84
2006-2007	23.32	22.00
	SPRS	
2002-2003	21.58%	17.37%
2003-2004	21.58	21.58
2004-2005	28.08	21.58
2005-2006	34.83	21.58
2006-2007	42.30	25.50

Had the recommended contributions been made over this period of time, the contribution rates recommended as a result of the June 30, 2007 valuations would have been reduced by 1.38% of payroll for KERS Non-Hazardous, 0.41% for KERS Hazardous and 2.62% for SPRS.

- Market Value of Assets and COLA Liability Impact on Funding Ratio - The funding ratio for all the Plans is based on the actuarial liabilities and asset values computed for the purpose of meeting funding requirements on the basis required by state law. This basis does not take all actuarial liabilities and investment performance to date into account. If the Retirement and Insurance results were combined, if the market value instead of actuarial value of assets were used, and if a 3% annual cost-of-living adjustment for retirement benefits were assumed to be in effect for all future years, then the funding ratio for the combined Retirement and Insurance plans would be lower, as shown in the table below.

System	Reported Funding Ratio	Adjusted Funding Ratio
KERS Non-Hazardous	40.97%	36.38%
KERS Hazardous	67.57	63.52
CERS Non-Hazardous	64.32	57.40
CERS Hazardous	55.83	50.14
SPRS	47.31	43.54

- Impact of Blended Interest Rates on Insurance Valuations - The June 30, 2007 Insurance Plan valuations recognize the parameters required by GASB Statements No. 43 and 45. One of the parameters is that a blended interest rate must be used when the benefits are not being fully funded. This rate reflects the level of advanced funding that is occurring. Because of the contribution rate shortfall noted above, blended rates were required for KERS Non-Hazardous and SPRS. The rate used for the June 30, 2007 valuation is 4.50% for both KERS Non-Hazardous and SPRS. If KERS Non-Hazardous and SPRS were being fully funded, an interest rate of 7.75% would be used, reducing liabilities and therefore contribution rates. The impact on rates is shown in the table below.

Insurance Plan	"Blended" Contribution Rate	"Full Funding" Contribution Rate
KERS Non-Hazardous	20.38%	12.06%
SPRS	59.54	27.75

- Unrecognized Investment Gains and Losses - The actuarial value of assets is determined by smoothing market gains and losses over a five year period. This results in a difference between market value and actuarial value of assets on each valuation date representing the gains and losses that have yet to be recognized in the valuation. The total unrecognized investment gain as of June 30, 2007 for each of the plans is shown in the table below.

Plan	Unrecognized investment gains/(losses)	Actuarial value as a % of market value
	KERS Non-Hazardous	
Retirement	$376,374,379	93.5%
Insurance	42,386,702	93.6
	KERS Hazardous	
Retirement	$43,487,690	91.5%
Insurance	29,349,154	89.6
	CERS Non-Hazardous	
Retirement	$345,110,771	94.1%
Insurance	123,756,881	88.6
	CERS Hazardous	
Retirement	$115,645,840	93.4%
Insurance	57,229,153	90.0
	SPRS	
Retirement	$27,574,980	92.7%
Insurance	17,357,986	86.9

Report on the Annual Valuation of the Kentucky Employees Retirement System

Prepared as of June 30, 2007

November 19, 2007

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2008.

The date of the valuation was June 30, 2007.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

Edward A. Macdonald, ASA, FCA, MAAA
President

TJC/EAM:kc

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REPORT ON THE ANNUAL VALUATION OF THE KENTUCKY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2007

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2007, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/2007	6/30/2006	6/30/2007	6/30/2006	6/30/2007	6/30/2006
Contributions for next fiscal year:						
Retirement	16.54%	15.55%	10.84%	10.20%		
Insurance	20.38	32.82	23.94	36.91	N/A	N/A
Total	36.92%	48.37%	34.78%	47.11%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$9,485,939,277	$8,994,826,247	$558,992,329	$508,655,903	$10,044,931,606	$9,503,482,150
Actuarial value of assets	5,396,782,459	5,394,086,323	467,287,809	427,984,192	5,864,070,268	5,822,070,515
Unfunded liability on actuarial value of assets	4,089,156,818	3,600,739,924	91,704,520	80,671,711	4,180,861,338	3,681,411,635
Funded ratio on actuarial value of assets	56.89%	59.97%	83.59%	84.14%	58.38%	61.26%
Market value of assets	$5,773,156,838	$5,440,132,708	$510,775,499	$437,029,583	$6,283,932,337	$5,877,162,291
Unfunded liability on market value of assets	3,712,782,439	3,554,693,539	48,216,830	71,626,320	3,760,999,269	3,626,319,859
Funded ratio on market value of assets	60.86%	60.48%	91.37%	85.92%	62.56%	61.84%
Insurance						
Actuarial accured liability	$5,201,355,055	$7,815,480,774	$504,842,981	$621,237,856	$5,706,198,036	$8,436,718,630
Actuarial value of assets	621,171,658	611,350,765	251,536,756	212,833,318	872,708,414	824,184,083
Unfunded liability on actuarial value of assets	4,580,183,397	7,204,130,009	253,306,225	408,404,538	4,833,489,622	7,612,534,547
Funded ratio on actuarial value of assets	11.94%	7.82%	49.82%	34.26%	15.29%	9.77%
Market value of assets	$663,558,360	$632,642,846	$280,885,910	$223,523,081	$944,444,270	$856,165,927
Unfunded liability on market value of assets	4,537,796,695	7,182,837,928	223,957,071	397,714,775	4,761,753,766	7,580,552,703
Funded ratio on market value of assets	12.76%	8.09%	55.64%	35.98%	16.55%	10.15%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	33,849	32,140	2,202	1,980	36,051	34,120
Number of vested former members	5,298	4,998	278	265	5,576	5,263
Number of former members due a refund	25,606	24,145	2,460	2,236	28,066	26,381
Number of active members	47,913	46,707	4,349	4,320	52,262	51,027
Total salary	$1,780,223,493	$1,702,230,777	$144,838,020	$138,747,320	$1,925,061,513	$1,840,978,097
Average salary	37,155	36,445	33,304	32,117	36,835	36,079

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. Since the previous valuation, the assumptions and methods were changed as follows:
   - Medical trend rates were changed to a range starting at 12.0% per year in 2008 and declining to an ultimate rate of 5.0% in 2015 and later
   - All accrued liability amortization bases were consolidated and reset to a new 30-year closed amortization period beginning with the June 30, 2007 valuation. In future years, the total unfunded accrued liability will be amortized over the remaining period.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2006 and June 30, 2007 is 4.50% for KERS Non-Hazardous and 7.75% for KERS Hazardous. The lower rate for KERS Non-Hazardous is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2007 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	47,913	$1,780,223,493	$37,155	43.3	9.3
Hazardous	4,349	144,838,020	33,304	41.7	7.0
Total in KERS	52,262	$1,925,061,513	$36,835	43.2	9.1

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2002	48,555	$1,597,344,963	$32,898	3.1%
6/30/2003	49,158	1,658,604,696	33,740	2.6
6/30/2004	47,599	1,645,412,496	34,568	2.5
6/30/2005	47,118	1,655,907,288	35,144	1.7
6/30/2006	46,707	1,702,230,777	36,445	3.7
6/30/2007	47,913	1,780,223,493	37,155	1.9

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2002	4,211	$125,371,604	$29,772	1.8%
6/30/2003	4,189	129,088,956	30,816	3.5
6/30/2004	4,014	126,664,812	31,556	2.4
6/30/2005	4,274	131,687,088	30,811	(2.4)
6/30/2006	4,320	138,747,320	32,117	4.2
6/30/2007	4,349	144,838,020	33,304	3.7

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	28,145	$566,279,509	$20,120	66.1
Disability	1,866	20,252,391	10,853	62.5
Beneficiary	3,838	38,903,516	10,136	69.4
Total in KERS	33,849	$625,435,416	$18,477	66.3

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	1,852	$24,977,927	$13,487	61.3
Disability	121	890,089	7,356	56.8
Beneficiary	229	1,660,773	7,252	57.6
Total in KERS	2,202	$27,528,789	$12,502	60.7

This valuation also includes 33,642 inactive members (30,904 Non-Hazardous and 2,738 Hazardous; of which 5,298 Non-Hazardous are vested and 278 Hazardous are vested.)

SECTION III – ASSETS

1. As of June 30, 2007 the total market value of assets amounted to $7,228,376,607 as shown in the following table.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2007

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	$5,773,156,838	$663,558,360	$6,436,715,198
Hazardous	510,775,499	280,885,910	791,661,409
Total	$6,283,932,337	$944,444,270	$7,228,376,607

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $6,736,778,682 . Schedule B shows the development of the actuarial value of assets as of June 30, 2007. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	June 30, 2007	June 30, 2006
Retirement		
Non-Hazardous	$ 5,396,782,459	$ 5,394,086,323
Hazardous	467,287,809	427,984,192
Total	$ 5,864,070,268	$ 5,822,070,515
Insurance		
Non-Hazardous	$ 621,171,658	$ 611,350,765
Hazardous	251,536,756	212,833,318
Total	$ 872,708,414	$ 824,184,083
KERS Total		
Non-Hazardous	$ 6,017,954,117	$ 6,005,437,088
Hazardous	718,824,565	640,817,510
Total	$ 6,736,778,682	$ 6,646,254,598

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2007. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $11,461,835,101, of which $6,601,446,674 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $142,281,269 is for the prospective benefits payable on account of present inactive members, and $4,718,107,158 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $5,864,070,268 as of June 30, 2007. The difference of $5,597,764,833 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $849,292,004 is the present value of future contributions expected to be made by members, and the balance of $4,748,472,829 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.22% of payroll for non-hazardous members and 6.86% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $567,611,491. When this amount is subtracted from $4,748,472,829, which is the present value of the total future contributions to be made by the employers, there remains $4,180,861,338 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 12.92% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 3.56% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $4,089,156,818 for non-hazardous members and $91,704,520 for hazardous members over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.

5. The contribution rate for administrative expenses is determined to be 0.40% of payroll for non-hazardous members and 0.42% of payroll for hazardous members.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $7,500,046,349, of which $2,479,917,722 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $290,469,391 is for the prospective benefits payable on account of present inactive members, and $4,729,659,236 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $872,708,414 as of June 30, 2007. The difference of $6,627,337,935 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $0 is the present value of future contributions expected to be made by members, and the balance of $6,627,337,935 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 10.37% of payroll for non-hazardous members and 14.04% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,793,848,313. When this amount is subtracted from $6,627,337,935, which is the present value of the total future contributions to be made by the employers, there remains $4,833,489,622 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 9.83% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 9.84% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $4,580,183,397 for non-hazardous members and $253,306,225 for hazardous members over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.18% of payroll for non-hazardous members and 0.06% of payroll for hazardous members.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2007 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/06	$ 3,600.7	$ 80.7	$ 3,681.4
(2)	Normal cost from last valuation	63.3	10.1	73.4
(3)	Expected employer contributions	264.6	14.2	278.9
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	263.4	5.9	277.3
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 3,662.8	$ 82.5	$ 3,753.3
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 3,662.8	$ 82.5	$ 3,753.3
(9)	Actual UAAL as of 6/30/07	$ 4,089.2	$ 91.7	$ 4,180.9
(10)	Gain/(loss): (8) - (9)	$ (426.4)	$ (9.2)	$ (427.6)
(11)	Accrued liabilities as of 6/30/06	$ 8,994.8	$ 508.7	$ 9,503.5
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(4.7%)	(1.8%)	(4.5%)

*Unfunded actuarial accrued liability.

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/06	$ 7,204.1	$ 408.4	$ 7,612.5
(2)	Normal cost from last valuation	279.3	27.2	306.5
(3)	Expected employer contributions	554.4	50.2	604.6
(4)	Interest accrual: Non-Haz: [(1) + (2) - (3)] x .045 Haz: [(1) + (2) - (3)] x .0775	311.8	29.9	341.7
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 7,240.8	$ 415.3	$ 7,656.1
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	(2,388.1)	(216.4)	(2,604.5)
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 4,852.7	$ 198.9	$ 5,051.6
(9)	Actual UAAL as of 6/30/07	$ 4,580.2	$ 253.3	$ 4,833.5
(10)	Gain/(loss): (8) - (9)	$ 272.5	$ (54.4)	$ 218.1
(11)	Accrued liabilities as of 6/30/06	$ 7,815.5	$ 621.2	$ 8,436.7
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	3.5%	(8.8%)	2.6%

*Unfunded actuarial accrued liability.

NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/07	Insurance $ Gain (or Loss) For Year Ending 6/30/07
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (72.6)	$ (63.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	3.8	3.3
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(3.9)	(3.4)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	7.5	6.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(8.0)	339.4
New Members. Additional unfunded accrued liability will produce a loss.	(10.1)	(8.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	54.5	9.9
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(0.4)	(0.3)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(397.2)	(11.0)
Gain (or Loss) During Year From Financial Experience	$ (426.4)	$ 272.5
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	2,388.1
Composite Gain (or Loss) During Year	$ (426.4)	$ 2,660.6

HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/07	Insurance $ Gain (or Loss) For Year Ending 6/30/07
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (8.8)	$ (10.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	1.1	1.3
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.2)	(0.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	2.0	2.4
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(1.4)	25.4
New Members. Additional unfunded accrued liability will produce a loss.	(1.8)	(2.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	10.6	8.0
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.6	0.7
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(11.3)	(79.1)
Gain (or Loss) During Year From Financial Experience	$ (9.2)	$ (54.4)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	216.4
Composite Gain (or Loss) During Year	$ (9.2)	$ 162.0

TOTAL KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/07	Insurance $ Gain (or Loss) For Year Ending 6/30/07
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (81.4)	$ (73.8)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	4.9	4.6
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(4.1)	(3.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	9.5	8.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(9.4)	364.8
New Members. Additional unfunded accrued liability will produce a loss.	(11.9)	(11.0)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	65.1	17.9
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.2	0.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(408.5)	(90.1)
Gain (or Loss) During Year From Financial Experience	$ (435.6)	$ 218.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	2,604.5
Composite Gain (or Loss) During Year	$ (435.6)	$ 2,822.6

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2008/2009 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	126,395,868	7.10%
	(2) Disability benefits		15,843,989	0.89
	(3) Survivor benefits		4,094,514	0.23
	(4) Total	$	146,334,371	8.22%
B.	Member Contributions	$	89,011,175	5.00%
C.	Employer Normal Cost: [A(4) - B]	$	57,323,196	3.22%
D.	Administrative Expenses	$	7,082,562	0.40%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/06 Valuation:	$	210,638,386	11.83%
	(2) Change due to:			
	a. Active decrements	$	3,668,683	0.21%
	b. Pay increases		450,145	0.03
	c. Retiree mortality		22,507	0.00
	d. Investment return		(3,066,614)	(0.17)
	e. COLA		11,928,846	0.67
	f. Assumption Change		0	0.00
	g. Other		6,447,299	0.35
	h. Total Change	$	19,450,866	1.09%
	(3) UAAL Contribution Based on 6/30/07 Valuation: [E(1) +E(2)h]	$	230,089,252	12.92%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	294,495,010	16.54%

*Based on 30 year amortization of the UAAL from June 30, 2007

Required Contribution Rates
Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	17,901,979	12.36%
	(2) Disability benefits		2,607,084	1.80
	(3) Survivor benefits		1,013,866	0.70
	(4) Total	$	21,522,930	14.85%
B.	Member Contributions	$	11,587,042	8.00%
C.	Employer Normal Cost: [A(4) - B]	$	9,935,888	6.86%
D.	Administrative Expenses	$	612,323	0.42%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/06 Valuation:	$	4,240,071	2.93%
	(2) Change due to:			
	a. Active decrements	$	343,235	0.24%
	b. Pay increases		78,775	0.05
	c. Retiree mortality		(33,761)	(0.02)
	d. Investment return		(557,055)	(0.38)
	e. COLA		832,768	0.57
	f. Assumption Change		0	0.00
	g. Other		256,010	0.17
	h. Total Change	$	919,972	0.63%
	(3) UAAL Contribution Based on 6/30/07 Valuation: [E(1) +E(2)h]	$	5,160,043	3.56%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	15,708,254	10.84%

* Based on 30 year amortization of the UAAL from June 30, 2007

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	184,600,233	10.37%
B.	Member Contributions*	$	0	0.00%
C.	Employer Normal Cost: [A - B]	$	184,600,233	10.37%
D.	Administrative Expenses	$	3,199,131	0.18%
E.	Unfunded Actuarial Accrued Liability**:	$	174,908,014	9.83%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	362,707,378	20.38%

*The liabilities are net of retiree contributions towards their healthcare
** Based on 30 year amortization of the UAAL from June 30, 2007

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	20,333,837	14.04%
B.	Member Contributions*	$	0	0.00%
C.	Employer Normal Cost: [A - B]	$	20,333,837	14.04%
D.	Administrative Expenses	$	83,560	0.06%
E.	Unfunded Actuarial Accrued Liability**:	$	14,253,070	9.84%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	34,670,467	23.94%

*The liabilities are net of retiree contributions towards their healthcare
** Based on 30 year amortization of the UAAL from June 30, 2007

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2007

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	33,849	2,202	36,051
Terminated employees entitled to benefits but not yet receiving benefits	30,904	2,738	33,642
Active Members	47,913	4,349	52,262
Total	112,666	9,289	121,955

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2002	$ 6,654,084,196	$ 6,026,094,764	$ (627,989,432)	110.4%	$ 1,597,344,963	(39.3%)
6/30/2003	6,351,318,832	6,520,463,188	169,144,356	97.4	1,658,604,696	10.2
6/30/2004	6,000,513,743	7,049,613,171	1,049,099,428	85.1	1,645,412,496	63.8
6/30/2005	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
6/30/2006	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
6/30/2007	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
Hazardous Members						
6/30/2002	$ 376,384,302	$ 322,069,164	$ (54,315,138)	116.9%	$ 125,371,604	(43.3%)
6/30/2003	385,925,722	356,879,133	(29,046,589)	108.1	129,088,956	(22.5)
6/30/2004	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
6/30/2005	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
6/30/2006	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
6/30/2007	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
Total KERS Members						
6/30/2002	$ 7,030,468,498	$ 6,348,163,928	$ (682,304,570)	110.7%	$ 1,722,716,567	(39.6%)
6/30/2003	6,737,244,554	6,877,342,321	140,097,767	98.0	1,787,693,652	7.8
6/30/2004	6,397,726,506	7,453,191,207	1,055,464,701	85.8	1,772,077,308	59.6
6/30/2005	5,983,974,408	8,018,069,096	2,034,094,688	74.6	1,787,594,376	113.8
6/30/2006	5,822,070,515	9,503,482,150	3,681,411,635	61.3	1,840,978,097	200.0
6/30/2007	5,864,070,268	10,044,931,606	4,180,861,338	58.4	1,925,061,513	217.2

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2002	$ 521,250,455	$ 1,907,683,881	$ 1,386,433,426	27.3%	$ 1,597,344,963	86.8%
6/30/2003	553,885,082	2,093,210,321	1,539,325,239	26.5	1,658,604,696	92.8
6/30/2004	600,586,961	2,335,905,365	1,735,318,404	25.7	1,645,412,496	105.5
6/30/2005	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
6/30/2006	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
6/30/2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
Hazardous Members						
6/30/2002	$ 135,874,582	$ 236,819,050	$ 100,944,468	57.4%	$ 125,371,604	80.5%
6/30/2003	151,459,500	283,178,335	131,718,835	53.5	129,088,956	102.0
6/30/2004	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
6/30/2005	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
6/30/2006	212,833,318	621,237,856	408,404,538	34.3	138,747,320	294.4
6/30/2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
Total KERS Members						
6/30/2002	$ 657,125,037	$ 2,144,502,931	$ 1,487,377,894	30.6%	$ 1,722,716,567	86.3%
6/30/2003	705,344,582	2,376,388,656	1,671,044,074	29.7	1,787,693,652	93.5
6/30/2004	769,745,840	2,659,408,928	1,889,663,088	28.9	1,772,077,308	106.6
6/30/2005	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
6/30/2006	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,978,097	413.5
6/30/2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2007. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2007	6/30/2007
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	30 years	30 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases*	4.0% - 13.5%	4.0% - 14.5%
Cost-of-living adjustment	None	None
*Includes inflation at	3.50%	3.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2007	6/30/2007
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	30 years	30 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Medical Trend Assumption	12.0% - 5.0%	12.0% - 5.0%
Year Ultimate Trend	2015	2015
Actuarial assumptions:		
Investment rate of return*	4.50%	7.75%
*Includes inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2007 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2006. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 5,396,782,459	$ 5,394,086,323
Prospective contributions		
Member contributions	$ 749,698,617	$ 711,518,422
Employer normal contributions	482,231,015	465,884,489
Unfunded accrued liability contributions	4,089,156,818	3,600,739,924
Total prospective contributions	$ 5,321,086,450	$ 4,778,142,835
Total assets	$ 10,717,868,909	$ 10,172,229,158
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 6,310,580,255	$ 5,763,076,811
Present value of benefits payable on account of active members	4,280,633,316	4,290,238,304
Present value of benefits payable on account of inactive members	126,655,338	118,914,043
Total liabilities	$ 10,717,868,909	$ 10,172,229,158

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 467,287,809	$ 427,984,192
Prospective contributions		
Member contributions	$ 99,593,387	$ 94,495,624
Employer normal contributions	85,380,476	80,370,934
Unfunded accrued liability contributions	91,704,520	80,671,711
Total prospective contributions	$ 276,678,383	$ 255,538,269
Total assets	$ 743,966,192	$ 683,522,461
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 290,866,419	$ 248,804,272
Present value of benefits payable on account of active members	437,473,842	421,075,855
Present value of benefits payable on account of inactive members	15,625,931	13,642,334
Total liabilities	$ 743,966,192	$ 683,522,461

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 5,864,070,268	$ 5,822,070,515
Prospective contributions		
Member contributions	$ 849,292,004	$ 806,014,046
Employer normal contributions	567,611,491	546,255,423
Unfunded accrued liability contributions	4,180,861,338	3,681,411,635
Total prospective contributions	$ 5,597,764,833	$ 5,033,681,104
Total assets	$ 11,461,835,101	$ 10,855,751,619
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 6,601,446,674	$ 6,011,881,083
Present value of benefits payable on account of active members	4,718,107,158	4,711,314,159
Present value of benefits payable on account of inactive members	142,281,269	132,556,377
Total liabilities	$ 11,461,835,101	$ 10,855,751,619

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 621,171,658	$ 611,350,765
Prospective contributions		
Normal contributions	$ 1,649,460,524	$ 2,538,834,443
Unfunded accrued liability contributions	4,580,183,397	7,204,130,009
Total prospective contributions	$ 6,229,643,921	$ 9,742,964,452
Total assets	$ 6,850,815,579	$ 10,354,315,217
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,292,824,569	$ 3,067,574,794
Present value of benefits payable on account of active members	4,281,618,012	6,811,189,842
Present value of benefits payable on account of inactive members	276,372,998	475,550,581
Total liabilities	$ 6,850,815,579	$ 10,354,315,217

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 251,536,756	$ 212,833,318
Prospective contributions		
Normal contributions	$ 144,387,789	$ 195,890,838
Unfunded accrued liability contributions	253,306,225	408,404,538
Total prospective contributions	$ 397,694,014	$ 604,295,376
Total assets	$ 649,230,770	$ 817,128,694
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 187,093,153	$ 226,036,462
Present value of benefits payable on account of active members	448,041,224	583,069,979
Present value of benefits payable on account of inactive members	14,096,393	8,022,253
Total liabilities	$ 649,230,770	$ 817,128,694

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 872,708,414	$ 824,184,083
Prospective contributions		
Normal contributions	$ 1,793,848,313	$ 2,734,725,281
Unfunded accrued liability contributions	4,833,489,622	7,612,534,547
Total prospective contributions	$ 6,627,337,935	$ 10,347,259,828
Total assets	$ 7,500,046,349	$ 11,171,443,911
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,479,917,722	$ 3,293,611,256
Present value of benefits payable on account of active members	4,729,659,236	7,394,259,821
Present value of benefits payable on account of inactive members	290,469,391	483,572,834
Total liabilities	$ 7,500,046,349	$ 11,171,443,911

The following tables provide the solvency test for non-hazardous and hazardous KERS members.

Solvency Test
Retirement Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2002*	$ 910,956,664	$ 3,242,343,193	$ 1,872,794,907	$ 6,654,084,196	100.0%	100.0%	133.5%
6/30/2003*	859,895,312	3,844,696,149	1,815,871,727	6,351,318,832	100.0	100.0	90.7
6/30/2004*	915,105,103	4,452,864,748	1,681,643,320	6,000,513,743	100.0	100.0	37.6
6/30/2005*	866,044,474	5,056,247,608	1,656,782,757	5,578,685,746	100.0	93.2	0.0
6/30/2006	866,050,799	5,881,990,853	2,246,784,595	5,394,086,323	100.0	77.0	0.0
6/30/2007	878,842,180	6,437,235,593	2,169,861,504	5,396,782,459	100.0	70.2	0.0

*Reported by prior actuarial firm.

Solvency Test
Retirement Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2002*	$ 77,700,666	$ 110,048,474	$ 134,320,024	$ 376,384,302	100.0%	100.0%	140.4%
6/30/2003*	71,414,721	135,622,333	149,842,079	385,925,722	100.0	100.0	119.4
6/30/2004*	78,817,575	175,102,848	149,657,613	397,212,763	100.0	100.0	95.7
6/30/2005*	75,098,321	213,310,550	150,585,386	405,288,662	100.0	100.0	77.6
6/30/2006	87,092,538	262,446,606	159,116,759	427,984,192	100.0	100.0	49.3
6/30/2007	88,670,847	306,492,350	163,829,132	467,287,809	100.0	100.0	44.0

*Reported by prior actuarial firm.

Solvency Test
Insurance Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2002*	$ 0	$ 900,313,022	$ 1,007,370,859	$ 521,250,455	100.0%	57.9%	0.0%
6/30/2003*	0	1,089,606,122	1,003,604,199	553,885,082	100.0	50.8	0.0
6/30/2004*	0	1,282,214,660	1,053,690,705	600,586,961	100.0	46.8	0.0
6/30/2005*	0	1,550,619,458	1,129,939,730	607,068,351	100.0	39.2	0.0
6/30/2006	0	3,543,125,375	4,272,355,400	611,350,765	100.0	17.3	0.0
6/30/2007	0	2,569,197,567	2,632,157,488	621,171,658	100.0	24.2	0.0

*Reported by prior actuarial firm.

Solvency Test
Insurance Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2002*	$ 0	$ 90,978,506	$ 145,840,544	$ 135,874,582	100.0%	100.0%	30.8%
6/30/2003*	0	113,979,451	169,198,884	151,459,500	100.0	100.0	22.2
6/30/2004*	0	142,872,557	180,631,006	169,158,879	100.0	100.0	14.6
6/30/2005*	0	187,883,650	198,961,045	187,947,644	100.0	100.0	0.0
6/30/2006	0	234,058,715	387,179,141	212,833,318	100.0	90.9	0.0
6/30/2007	0	201,189,546	303,653,435	251,536,756	100.0	100.0	16.6

*Reported by prior actuarial firm.

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2006	2007	2008	2009	2010	2011
A.	Actuarial Value Beginning of Year	$ 5,578,685,745	$ 5,394,086,323				
B.	Market Value End of Year	5,440,132,708	5,773,156,838				
C.	Market Value Beginning of Year	5,362,630,697	5,440,132,708				
D.	Cash Flow						
	D1. Contributions	168,287,852	204,502,532				
	D2. Benefit Payments	(587,578,810)	(649,690,416)				
	D3. Administrative Expenses	(7,567,641)	(7,082,562)				
	D4. Investment Expenses	(4,466,247)	(4,842,834)				
	D5. Net	(431,324,846)	(457,113,280)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	508,826,857	790,137,410				
	E2. Assumed Rate	8.25%	7.75%				
	E3. Amount for Immediate Recognition	429,275,362	408,927,639				
	E4. Amount for Phased-In Recognition	79,551,495	381,209,771				
F.	Pasked-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	15,910,299	76,241,954				
	F2. First Prior Year	(2,608,084)	15,910,299	76,241,954			
	F3. Second Prior Year	28,891,832	(2,608,084)	15,910,299	76,241,954		
	F4. Third Prior Year	(67,554,224)	28,891,832	(2,608,084)	15,910,299	76,241,954	
	F5. Fourth Prior Year	(157,189,761)	(67,554,224)	28,891,832	(2,608,084)	15,910,299	76,241,954
	F6. Total Recognized Investment Gain	(182,549,938)	50,881,777	118,436,001	89,544,169	92,152,253	76,241,954
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 5,394,086,323	$ 5,396,782,459				
H.	Difference Between Market & Actuarial Values	$ 46,046,385	$ 376,374,379	$ 257,938,378	$ 168,394,209	$ 76,241,954	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2006	2007	2008	2009	2010	2011
A.	Actuarial Value Beginning of Year	$ 405,288,662	$ 427,984,192				
B.	Market Value End of Year	437,029,583	510,775,499				
C.	Market Value Beginning of Year	398,308,897	437,029,583				
D.	Cash Flow						
	D1. Contributions	22,858,959	26,482,004				
	D2. Benefit Payments	(25,172,682)	(30,176,113)				
	D3. Administrative Expenses	(645,377)	(612,323)				
	D4. Investment Expenses	(352,105)	(455,686)				
	D5. Net	(3,311,205)	(4,762,118)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	42,031,891	78,508,034				
	E2. Assumed Rate	8.25%	7.75%				
	E3. Amount for Immediate Recognition	33,090,526	34,158,604				
	E4. Amount for Phased-In Recognition	8,941,365	44,349,430				
F.	Pasked-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	1,788,273	8,869,886				
	F2. First Prior Year	151,597	1,788,273	8,869,886			
	F3. Second Prior Year	2,340,134	151,597	1,788,273	8,869,886		
	F4. Third Prior Year	(3,242,759)	2,340,134	151,597	1,788,273	8,869,886	
	F5. Fourth Prior Year	(8,121,036)	(3,242,759)	2,340,134	151,597	1,788,273	8,869,886
	F6. Total Recognized Investment Gain	(7,083,791)	9,907,131	13,149,890	10,809,756	10,658,159	8,869,886
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 427,984,192	$ 467,287,809				
H.	Difference Between Market & Actuarial Values	$ 9,045,391	$ 43,487,690	$ 30,337,800	$ 19,528,044	$ 8,869,886	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2006	2007	2008	2009	2010	2011
A.	Actuarial Value Beginning of Year	$ 607,068,351	$ 611,350,765				
B.	Market Value End of Year	632,642,846	663,558,360				
C.	Market Value Beginning of Year	610,901,623	632,642,846				
D.	Cash Flow						
	D1. Contributions	53,404,601	86,954,395				
	D2. Benefit Payments	(95,822,805)	(111,659,052)				
	D3. Administrative Expenses	(1,679,307)	(3,199,131)				
	D4. Investment Expenses	(442,465)	(366,841)				
	D5. Net	(44,539,976)	(28,270,629)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	66,281,199	59,186,143				
	E2. Assumed Rate	8.25%	4.50%				
	E3. Amount for Immediate Recognition	49,022,827	28,207,934				
	E4. Amount for Phased-In Recognition	17,258,372	30,978,209				
F.	Pasked-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	3,451,674	6,195,642				
	F2. First Prior Year	(51,332)	3,451,674	6,195,642			
	F3. Second Prior Year	7,351,776	(51,332)	3,451,674	6,195,642		
	F4. Third Prior Year	(7,064,172)	7,351,776	(51,332)	3,451,674	6,195,642	
	F5. Fourth Prior Year	(3,888,383)	(7,064,172)	7,351,776	(51,332)	3,451,674	6,195,642
	F6. Total Recognized Investment Gain	(200,437)	9,883,588	16,947,760	9,595,984	9,647,316	6,195,642
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 611,350,765	$ 621,171,658				
H.	Difference Between Market & Actuarial Values	$ 21,292,081	$ 42,386,702	$ 25,438,942	$ 15,842,958	$ 6,195,642	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2006	2007	2008	2009	2010	2011
A.	Actuarial Value Beginning of Year	$ 187,947,644	$ 212,833,318				
B.	Market Value End of Year	223,523,081	280,885,910				
C.	Market Value Beginning of Year	188,871,226	223,523,081				
D.	Cash Flow						
	D1. Contributions	17,100,064	19,843,444				
	D2. Benefit Payments	(6,513,266)	(6,873,207)				
	D3. Administrative Expenses	(63,250)	(83,560)				
	D4. Investment Expenses	(211,889)	(201,690)				
	D5. Net	10,311,659	12,684,987				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	24,340,195	44,677,842				
	E2. Assumed Rate	8.25%	7.75%				
	E3. Amount for Immediate Recognition	16,227,862	18,024,088				
	E4. Amount for Phased-In Recognition	8,112,334	26,653,754				
F.	Pasked-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	1,622,467	5,330,751				
	F2. First Prior Year	346,732	1,622,467	5,330,751			
	F3. Second Prior Year	2,465,285	346,732	1,622,467	5,330,751		
	F4. Third Prior Year	(1,770,872)	2,465,285	346,732	1,622,467	5,330,751	
	F5. Fourth Prior Year	(4,317,459)	(1,770,872)	2,465,285	346,732	1,622,467	5,330,751
	F6. Total Recognized Investment Gain	(1,653,847)	7,994,363	9,765,235	7,299,950	6,953,218	5,330,751
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 212,833,318	$ 251,536,756				
H.	Difference Between Market & Actuarial Values	$ 10,689,763	$ 29,349,154	$ 19,583,919	$ 12,283,969	$ 5,330,751	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

*This is the actuarial value as reported by the previous actuary. It differs from the method in the table above by $5,402. The difference is not material.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006, with the exception of the health care cost trend rate which was adopted by the Board on November 15, 2007.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for KERS non-hazardous is 4.50% and for KERS hazardous is 7.75%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 3.50% per annum:

Service	Annual Rates of Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	10.0%	11.0%	3.5%	13.5%	14.5%
1-2	3.5	4.0	3.5	7.0	7.5
2-3	2.0	3.5	3.5	5.5	7.0
3-4	1.5	3.0	3.5	5.0	6.5
4-5	1.5	2.5	3.5	5.0	6.0
5-6	1.0	2.0	3.5	4.5	5.5
6-7	1.0	1.5	3.5	4.5	5.0
7-8	1.0	1.5	3.5	4.5	5.0
8-9	0.5	1.0	3.5	4.0	4.5
9-10	0.5	1.0	3.5	4.0	4.5
10 & over	0.5	0.5	3.5	4.0	4.0

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement**
		Male	Female		
20	6.00%	0.05%	0.03%	0.05%	
25	5.40	0.07	0.03	0.07	
30	4.80	0.08	0.04	0.09	
35	3.60	0.09	0.05	0.13	
40	2.66	0.11	0.07	0.20	
45	1.98	0.16	0.10	0.33	
50	1.92	0.26	0.14	0.56	
55	1.08	0.44	0.23	0.92	8.0%
60	0.75	0.80	0.44	1.46	10.0
65		1.45	0.86		25.0
70		2.37	1.37		25.0
75					100.0

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.

** If service is at least 27 years, the rate is 25%. All rates are doubled during the window period expiring January 1, 2009, for those eligible for enhanced benefits.

Hazardous Members

Age	Withdrawal and Vesting*	Death**			Service Retirement***	
		Male	Female	Disability	Service	Rate
20	6.00%	0.05%	0.03%	0.07%	20	20.0%
25	5.40	0.07	0.03	0.09	25	20.0
30	4.80	0.08	0.04	0.12	30	35.0
35	3.60	0.09	0.05	0.17	35	60.0
40	2.66	0.11	0.07	0.27		
45	1.98	0.16	0.10	0.44		
50	1.92	0.26	0.14	0.75		
55	1.08	0.44	0.23	1.23		
60	0.75	0.80	0.44	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.

** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.

*** The annual rate of service retirement is 100% at age 65.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Trend
2008	12.0%
2009	11.0
2010	10.0
2011	9.0
2012	8.0
2013	7.0
2014	6.0
2015 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	90%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2007				
	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$ 583.28	$ 895.50	$ 998.64
Enhanced	$ 457.70	$ 702.02	$ 1,074.84	$ 1,197.92
Premier	$ 473.72	$ 729.74	$ 1,110.88	$ 1,237.96
Select	$ 443.30	$ 664.94	$ 934.94	$ 1,066.60

2008				
	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$ 617.12	$ 947.44	$ 1,056.56
Enhanced	$ 484.24	$ 742.74	$ 1,137.18	$ 1,267.40
Premier	$ 501.20	$ 772.06	$ 1,175.32	$ 1,309.76
Select	$ 469.00	$ 703.50	$ 989.18	$ 1,128.48

MEDICARE ELIGIBLE

Effective January 1, 2008 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 144.00	$ 143.00
Kentucky Retirement System Health Plan - PLUS	$ 211.00	$ 260.00
Kentucky Retirement System Health Plan - PREMIUM	$ 354.00	$ 329.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2007 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

UNUSED SICK LEAVE: It is assumed that a member will be granted one-half year of service credit for unused sick leave at termination of employment.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Non-Hazardous Normal Retirement:	
Age Requirement	65
Service Requirement	None
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For these members who retire between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%. Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period are less than forty-eight, one or more additional fiscal years shall be used. For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.
Hazardous Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.49% times final average compensation times years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Early Retirement:

Requirement	Age 55 with 60 months of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Hazardous Early Retirement:

Requirement	Age 50 with 15 years of service or any age with 20 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months of service or age 65 with 48 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System. For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.
Members whose participation began on or after July 1, 2003	The Retirement System pays $11.21 per month per year of service toward medical premiums for non-hazardous retirees, $16.82 per month per year of service for hazardous retirees, and $11.21 per month per year of service for surviving spouses of hazardous employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of hazardous service. These amounts are shown as of the valuation date and are indexed annually based on the CPI.

Member Contributions:

Non-hazardous Members	5% of salary.
Hazardous Members	8% of salary.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2002*	2003*	2004*	2005*	2006	2007
			Number			
Beginning of Year	N/A	26,703	27,233	28,892	30,770	32,140
Added	N/A	2,148	2,473	2,481	2,481	2,440
Removed	N/A	1,618	814	603	1,111	731
End of Year	N/A	27,233	28,892	30,770	32,140	33,849
			Annual Allowances			
Beginning of Year	N/A	N/A	$ 393,048,800	$ 449,410,400	$ 509,347,800	$ 566,167,003
Added	N/A	48,272,600	57,329,301	56,489,600	65,942,585	65,965,990
Removed	N/A	13,060,300	6,092,500	5,298,200	9,123,382	6,697,577
End of Year	N/A	$ 393,048,800	$ 449,410,400	$ 509,347,800	$ 566,167,003	$ 625,435,416
% Increase in Allowances	N/A	N/A	14.34%	13.34%	11.31%	10.47%
Average Annual Allowance	N/A	$ 14,433	$ 15,555	$ 16,553	$ 17,611	$ 18,477

*Reported by prior actuarial firm.

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2002*	2003*	2004*	2005*	2006	2007
			Number			
Beginning of Year	N/A	1,208	1,357	1,549	1,752	1,980
Added	N/A	170	227	234	256	241
Removed	N/A	21	35	31	28	19
End of Year	N/A	1,357	1,549	1,752	1,980	2,202
			Annual Allowances			
Beginning of Year	N/A	N/A	$ 12,974,700	$ 16,099,000	$ 19,640,700	$ 23,381,537
Added	N/A	2,333,400	3,070,600	3,415,500	3,929,666	4,509,381
Removed	N/A	130,400	155,000	191,000	188,829	362,129
End of Year	N/A	$ 12,974,700	$ 16,099,000	$ 19,640,700	$ 23,381,537	$ 27,528,789
% Increase in Allowances	N/A	N/A	24.08%	22.00%	19.25%	17.74%
Average Annual Allowance	N/A	$ 9,561	$ 10,393	$ 11,210	$ 11,809	$ 12,502

*Reported by prior actuarial firm.

Non-Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2,890	$ 4,783,976.90	8,013	$ 10,568,354.30	10,903	$ 15,352,331.20
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,727	2,746,515.87	669	690,022.02	2,396	3,436,537.89
66-2/3% to Beneficiary	796	1,961,189.15	322	622,168.43	1,118	2,583,357.58
50% to Beneficiary	1,028	2,345,135.72	1,000	1,900,416.65	2,028	4,245,552.37
Pop-up Option	2,928	6,619,405.01	2,183	4,026,553.94	5,111	10,645,958.95
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	954	1,365,179.78	1,759	2,310,820.09	2,713	3,675,999.87
Social Security Option						
Age 62 Basic	415	870,255.29	969	1,558,683.32	1,384	2,428,938.61
Age 62 Survivorship	889	1,740,822.89	554	913,575.01	1,443	2,654,397.90
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	1	1,740.53	0	0.00	1	1,740.53
15 Years Certain & Life	381	563,773.06	431	612,692.23	812	1,176,465.29
20 Years Certain & Life	358	725,538.40	388	615,184.20	746	1,340,722.60
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	62	79,695.74	202	260,141.03	264	339,836.77
PLSO 24 Month Basic	27	32,650.29	114	111,399.24	141	144,049.53
PLSO 36 Month Basic	123	94,108.29	279	176,240.72	402	270,349.01
PLSO 12 Month Survivor	78	131,527.17	57	87,566.60	135	219,093.77
PLSO 24 Month Survivor	64	70,227.11	55	65,510.39	119	135,737.50
PLSO 36 Month Survivor	187	156,541.41	108	70,051.00	295	226,592.41
Total	12,908	$ 24,288,282.61	17,103	$ 24,589,379.17	30,011	$ 48,877,661.78

Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	285	$ 293,325.12	209	$ 176,389.63	494	$ 469,714.75
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	158	164,446.15	14	11,736.59	172	176,182.74
66-2/3% to Beneficiary	60	69,494.80	10	11,929.78	70	81,424.58
50% to Beneficiary	104	145,065.21	18	25,010.38	122	170,075.59
Pop-up Option	409	515,949.13	74	78,515.19	483	594,464.32
10 Years Certain	17	24,531.53	5	5,294.35	22	29,825.88
10 Years Certain & Life	86	76,705.59	37	26,129.57	123	102,835.16
Social Security Option						
Age 62 Basic	46	47,977.43	24	19,773.52	70	67,750.95
Age 62 Survivorship	106	140,997.28	15	11,539.87	121	152,537.15
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	38	43,667.38	10	9,458.01	48	53,125.39
20 Years Certain & Life	37	38,142.86	15	22,635.58	52	60,778.44
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	12	12,564.05	10	10,108.77	22	22,672.82
PLSO 24 Month Basic	13	13,931.13	6	3,626.21	19	17,557.34
PLSO 36 Month Basic	34	31,366.10	22	20,240.15	56	51,606.25
PLSO 12 Month Survivor	15	18,027.93	4	3,482.59	19	21,510.52
PLSO 24 Month Survivor	16	20,428.33	8	9,969.03	24	30,397.36
PLSO 36 Month Survivor	43	37,433.72	13	15,774.62	56	53,208.34
Total	1,479	$ 1,694,053.74	494	$ 461,613.84	1,973	$ 2,155,667.58

Non-Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	4	$ 1,293.46	21	$ 18,848.23	25	$ 20,141.69
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	213	151,088.08	1,602	1,290,351.76	1,815	1,441,439.84
66-2/3% to Beneficiary	23	18,904.96	280	201,573.78	303	220,478.74
50% to Beneficiary	78	42,144.11	469	228,744.21	547	270,888.32
Pop-up Option	66	88,898.18	293	324,764.24	359	413,662.42
10 Years Certain	46	48,650.31	60	62,145.99	106	110,796.30
10 Years Certain & Life	43	45,138.18	62	64,302.71	105	109,440.89
Social Security Option						
Age 62 Basic	0	0.00	2	1,142.59	2	1,142.59
Age 62 Survivorship	30	31,663.65	192	270,417.38	222	302,081.03
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	10	3,742.86	10	3,742.86
Dependent Child	2	545.74	2	769.93	4	1,315.67
Refund	0	0.00	5	4,831.97	5	4,831.97
15 Years Certain & Life	28	31,764.86	63	63,157.84	91	94,922.70
20 Years Certain & Life	36	35,954.10	76	85,982.04	112	121,936.14
5 Years Certain	44	47,600.98	50	47,539.84	94	95,140.82
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	1	547.17	0	0.00	1	547.17
PLSO 36 Month Basic	1	577.75	10	6,531.73	11	7,109.48
PLSO 12 Month Survivor	2	2,857.65	4	5,270.96	6	8,128.61
PLSO 24 Month Survivor	1	2,174.15	4	1,741.27	5	3,915.42
PLSO 36 Month Survivor	4	1,236.09	11	9,061.92	15	10,298.01
Total	622	$ 551,039.42	3,216	$ 2,690,921.25	3,838	$ 3,241,960.67

Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	2	$ 285.41	2	$ 285.41
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	7	2,894.39	82	55,216.04	89	58,110.43
66-2/3% to Beneficiary	0	0.00	7	2,674.68	7	2,674.68
50% to Beneficiary	1	416.94	16	5,604.39	17	6,021.33
Pop-up Option	4	1,794.18	27	14,070.38	31	15,864.56
10 Years Certain	2	2,375.54	12	9,335.37	14	11,710.91
10 Years Certain & Life	3	2,338.91	9	5,718.47	12	8,057.38
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	1	20.09	12	9,857.93	13	9,878.02
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	8	2,457.69	7	2,057.65	15	4,515.34
Refund	0	0.00	3	1,939.67	3	1,939.67
15 Years Certain & Life	3	1,136.89	1	754.11	4	1,891.00
20 Years Certain & Life	0	0.00	4	1,066.52	4	1,066.52
5 Years Certain	6	6,696.57	8	6,417.21	14	13,113.78
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	331.54	0	0.00	1	331.54
PLSO 12 Month Survivor	0	0.00	2	2,214.06	2	2,214.06
PLSO 24 Month Survivor	0	0.00	1	723.48	1	723.48
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	36	$ 20,462.74	193	$ 117,935.37	229	$ 138,398.11

Non-Hazardous Members
Retired and Beneficiary Information June 30, 2007
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	117	$ 2,382,671	64	$ 630,023	71	$ 536,414	252	$ 3,549,108
45-49	967	$ 26,692,254	118	$ 1,324,368	64	$ 690,007	1,149	$ 28,706,629
50-54	2,813	$ 83,804,037	220	$ 2,517,441	135	$ 1,709,496	3,168	$ 88,030,974
55-59	4,817	$ 134,818,070	315	$ 3,824,171	220	$ 3,230,210	5,352	$ 141,872,451
60-64	5,023	$ 117,055,386	356	$ 4,050,610	295	$ 4,425,066	5,674	$ 125,531,062
65-69	4,416	$ 78,724,732	341	$ 3,785,637	356	$ 4,685,643	5,113	$ 87,196,012
70-74	3,429	$ 49,772,736	256	$ 2,497,603	438	$ 5,403,786	4,123	$ 57,674,125
75-79	2,782	$ 35,958,370	104	$ 971,210	470	$ 5,772,672	3,356	$ 42,702,252
80-84	2,106	$ 23,306,398	51	$ 382,748	562	$ 5,393,577	2,719	$ 29,082,723
85-89	1,134	$ 10,171,319	31	$ 212,824	574	$ 3,880,088	1,739	$ 14,264,231
90 & Over	541	$ 3,593,536	10	$ 55,756	653	$ 3,176,557	1,204	$ 6,825,849
Totals	28,145	$ 566,279,509	1,866	$ 20,252,391	3,838	$ 38,903,516	33,849	$ 625,435,416

Hazardous Members
Retired and Beneficiary Information June 30, 2007
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	35	$ 552,504	11	$ 87,136	24	$ 119,389	70	$ 759,029
45-49	108	$ 2,022,650	11	$ 98,682	9	$ 59,152	128	$ 2,180,484
50-54	239	$ 4,345,293	20	$ 197,644	18	$ 125,028	277	$ 4,667,965
55-59	418	$ 6,794,945	39	$ 322,128	20	$ 196,385	477	$ 7,313,458
60-64	442	$ 5,862,413	18	$ 122,300	32	$ 205,982	492	$ 6,190,695
65-69	298	$ 3,091,600	7	$ 24,476	37	$ 328,180	342	$ 3,444,256
70-74	187	$ 1,394,823	13	$ 31,778	31	$ 169,417	231	$ 1,596,018
75-79	89	$ 505,507	2	$ 5,945	31	$ 181,682	122	$ 693,134
80-84	28	$ 303,838			15	$ 144,546	43	$ 448,384
85-89	7	$ 100,518			8	$ 80,998	15	$ 181,516
90 & Over	1	$ 3,836			4	$ 50,014	5	$ 53,850
Totals	1,852	$ 24,977,927	121	$ 890,089	229	$ 1,660,773	2,202	$ 27,528,789

Total Non-Hazardous Active Members as of June 30, 2007
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	226								226
Avg Pay	$25,127								$25,127
20-24	1,715	86							1,801
Avg Pay	$24,312	$30,996							$24,631
25-29	3,698	887	29						4,614
Avg Pay	$28,024	$30,650	$34,376						$28,569
30-34	2,765	2,230	470	12					5,477
Avg Pay	$30,789	$35,117	$36,846	$50,686					$33,114
35-39	2,754	1,917	1,333	512	46				6,562
Avg Pay	$30,506	$36,802	$40,918	$42,504	$51,267				$35,542
40-44	1,875	1,614	1,123	1,029	742	156	4		6,543
Avg Pay	$31,255	$36,890	$41,827	$43,588	$48,560	$52,567	$30,255		$38,869
44-49	1,794	1,562	1,006	899	849	352	460	84	7,006
Avg Pay	$31,787	$36,122	$39,851	$43,694	$48,506	$52,922	$54,927	$53,112	$40,302
50-54	1,556	1,439	1,014	826	707	317	387	427	6,673
Avg Pay	$33,025	$36,219	$39,834	$42,671	$47,068	$50,813	$51,133	$58,032	$40,926
55-59	1,139	1,124	793	691	597	240	263	413	5,260
Avg Pay	$34,845	$37,014	$40,593	$41,813	$45,658	$50,663	$52,131	$56,614	$41,613
60-64	492	643	422	434	287	115	100	177	2,670
Avg Pay	$34,444	$36,279	$40,087	$41,451	$45,927	$50,958	$53,461	$64,437	$41,563
65-69	120	184	130	150	62	21	28	66	761
Avg Pay	$37,928	$37,992	$38,048	$40,409	$42,935	$51,714	$50,080	$61,332	$41,718
70 & over	38	61	54	69	39	11	17	31	320
Avg Pay	$38,059	$28,509	$34,663	$37,999	$40,927	$45,674	$33,688	$65,942	$38,733
Totals	18,172	11,747	6,374	4,622	3,329	1,212	1,259	1,198	47,913
Avg Pay	$30,255	$35,793	$40,200	$42,690	$47,325	$51,604	$52,587	$58,531	$37,155

Total Hazardous Active Members as of June 30, 2007
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	14								14
Avg Pay	$22,666								$22,666
20-24	206	4							210
Avg Pay	$25,352	$32,034							$25,480
25-29	442	57							499
Avg Pay	$26,109	$29,108							$26,452
30-34	374	185	30						589
Avg Pay	$27,789	$33,124	$34,889						$29,826
35-39	329	179	121	35	2				666
Avg Pay	$27,350	$33,651	$37,966	$40,006	$55,902				$31,723
40-44	227	137	98	136	14	2			614
Avg Pay	$28,420	$33,751	$40,463	$40,984	$44,679	$44,220			$34,737
44-49	164	130	81	128	30	2	3	1	539
Avg Pay	$30,124	$33,965	$38,799	$43,821	$48,460	$53,016	$38,728	$54,324	$36,805
50-54	157	133	74	121	21	8	8	4	526
Avg Pay	$30,953	$36,537	$37,914	$42,222	$48,235	$49,365	$52,305	$68,772	$37,519
55-59	126	113	70	114	13	2	1	3	442
Avg Pay	$28,175	$38,488	$37,409	$42,980	$46,273	$46,650	$40,656	$50,904	$36,891
60-64	45	53	35	61	8	1	2		205
Avg Pay	$34,568	$38,933	$39,887	$46,417	$48,231	$63,000	$33,804		$40,795
65-69	8	15	6	7				1	37
Avg Pay	$28,995	$37,674	$37,520	$51,017				$70,992	$39,197
70 & over	1	3	2	2					8
Avg Pay	$21,900	$32,320	$27,054	$41,028					$31,878
Totals	2,093	1,009	517	604	88	15	14	9	4,349
Avg Pay	$27,751	$34,601	$38,391	$42,818	$47,630	$49,713	$45,921	$61,457	$33,304

Report on the Annual Valuation of the County Employees Retirement System

Prepared as of June 30, 2007

November 19, 2007

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2008.

The date of the valuation was June 30, 2007.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

Edward A. Macdonald, ASA, FCA, MAAA
President

TJC/EAM:kc

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REPORT ON THE ANNUAL VALUATION OF THE COUNTY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2007

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2007, presents the results of the annual actuarial valuation the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/2007	6/30/2006	6/30/2007	6/30/2006	6/30/2007	6/30/2006
Contributions for next fiscal year:						
Retirement	7.76%	6.98%	15.04%	15.01%		
Insurance	12.75	20.51	27.62	39.52	N/A	N/A
Total	20.51%	27.49%	42.66%	54.53%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$6,659,446,126	$6,179,569,267	$2,208,736,179	$2,020,142,770	$8,868,182,305	$8,199,712,037
Actuarial value of assets	$5,467,824,480	$5,162,894,136	$1,639,288,924	$1,515,075,017	$7,107,113,404	$6,677,969,153
Unfunded liability on actuarial value of assets	$1,191,621,646	$1,016,675,131	$569,447,255	$505,067,753	$1,761,068,901	$1,521,742,884
Funded ratio on actuarial value of assets	82.11%	83.55%	74.22%	75.00%	80.14%	81.44%
Market value of assets	$5,812,935,251	$5,191,376,948	$1,754,934,764	$1,528,845,357	$7,567,870,015	$6,720,222,305
Unfunded liability on market value of assets	$846,510,875	$988,192,319	$453,801,415	$491,297,413	$1,300,312,290	$1,479,489,732
Funded ratio on market value of assets	87.29%	84.01%	79.45%	75.68%	85.34%	81.96%
Insurance						
Actuarial accured liability	$3,333,966,070	$4,607,223,639	$1,646,460,011	$1,928,481,371	$4,980,426,081	$6,535,705,010
Actuarial value of assets	$960,285,900	$777,726,590	$512,926,549	$422,785,042	$1,473,212,449	$1,200,511,632
Unfunded liability on actuarial value of assets	$2,373,680,170	$3,829,497,049	$1,133,533,462	$1,505,696,329	$3,507,213,632	$5,335,193,378
Funded ratio on actuarial value of assets	28.80%	16.88%	31.15%	21.92%	29.58%	18.37%
Market value of assets	$1,084,042,781	$813,250,744	$570,155,702	$441,278,796	$1,654,198,483	$1,254,529,540
Unfunded liability on market value of assets	$2,249,923,289	$3,793,972,895	$1,076,304,309	$1,487,202,575	$3,326,227,598	$5,281,175,470
Funded ratio on market value of assets	32.52%	17.65%	34.63%	22.88%	33.21%	19.20%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	35,564	33,102	5,159	4,712	40,723	37,814
Number of vested former members	8,093	7,379	436	393	8,529	7,772
Number of former members due a refund	45,808	42,667	1,761	1,562	47,569	44,229
Number of active members	84,920	83,694	10,063	9,635	94,983	93,329
Total salary	$2,076,848,328	$1,982,437,473	$458,998,956	$426,927,550	$2,535,847,284	$2,409,365,023
Average salary	$24,457	$23,687	$45,613	$44,310	$26,698	$25,816

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. Since the previous valuation, the assumptions and methods were changed as follows:

   - Medical trend rates were changed to a range starting at 12.0% per year in 2008 and declining to an ultimate rate of 5.0% in 2015 and later
   - All accrued liability amortization bases were consolidated and reset to a new 30-year closed amortization period beginning with the June 30, 2007 valuation. In future years, the total unfunded accrued liability will be amortized over the remaining period.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2007 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	84,920	$2,076,848,328	$24,457	45.9	8.1
Hazardous	10,063	458,998,956	45,613	38.6	8.1
Total in CERS	94,983	$2,535,847,284	$26,698	45.1	8.1

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2002	79,850	$1,688,460,789	$21,145	4.3%
6/30/2003	82,288	1,796,451,180	21,831	3.2
6/30/2004	80,922	1,826,870,880	22,576	3.4
6/30/2005	81,240	1,885,275,000	23,206	2.8
6/30/2006	83,694	1,982,437,473	23,687	2.1
6/30/2007	84,920	2,076,848,328	24,457	3.3

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2002	8,949	$346,319,146	$38,699	2.9%
6/30/2003	9,286	374,700,732	40,351	4.3
6/30/2004	9,349	392,562,624	41,990	4.1
6/30/2005	9,464	411,121,728	43,441	3.5
6/30/2006	9,635	426,927,550	44,310	2.0
6/30/2007	10,063	458,998,956	45,613	2.9

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	29,259	$298,805,715	$10,212	68.0
Disability	2,935	26,954,487	9,184	62.4
Beneficiary	3,370	22,951,818	6,811	66.1
Total in CERS	35,564	$348,712,020	$9,805	67.4

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	4,183	$101,476,153	$24,259	58.6
Disability	359	5,221,913	14,546	51.9
Beneficiary	617	7,037,784	11,406	47.5
Total in CERS	5,159	$113,735,850	$22,046	56.8

This valuation also includes 56,098 inactive members (53,901 Non-Hazardous and 2,197 Hazardous; of which 8,093 Non-Hazardous are vested and 436 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2007 the total market value of assets amounted to $9,222,068,498 as shown in the following table.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2007

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	$5,812,935,251	$1,084,042,781	$6,896,978,032
Hazardous	1,754,934,764	570,155,702	2,325,090,466
Total	$7,567,870,015	$1,654,198,483	$9,222,068,498

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $8,580,325,853. Schedule B shows the development of the actuarial value of assets as of June 30, 2007. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2007	JUNE 30, 2006
Retirement		
Non-Hazardous	$ 5,467,824,480	$ 5,162,894,136
Hazardous	1,639,288,924	1,515,075,017
Total	$ 7,107,113,404	$ 6,677,969,153
Insurance		
Non-Hazardous	$ 960,285,900	$ 777,726,590
Hazardous	512,926,549	422,785,042
Total	$ 1,473,212,449	$ 1,200,511,632
KERS Total		
Non-Hazardous	$ 6,428,110,380	$ 5,940,620,726
Hazardous	2,152,215,473	1,937,860,059
Total	$ 8,580,325,853	$ 7,878,480,785

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2007. Separate balance sheets are shown for each employee group as well as in total for all groups.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $11,110,325,257, of which $4,682,884,754 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $181,849,084 is for the prospective benefits payable on account of inactive members and $6,245,591,419 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $7,107,113,404 as of June 30, 2007. The difference of $4,003,211,853 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $1,218,271,703 is the present value of future contributions expected to be made by members, and the balance of $2,784,940,150 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.94% of payroll for non-hazardous members and 7.83% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $1,023,871,249. When this amount is subtracted from $2,784,940,150, which is the present value of the total future contributions to be made by the employers, there remains $1,761,068,901 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 3.23% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 6.98% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $1,191,621,646 for non-hazardous members and $569,447,255 for hazardous members over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.

5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.59% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.23% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $6,371,671,123, of which $1,815,390,183 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $216,491,201 is for the prospective benefits payable on account of inactive members and $4,339,789,739 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $1,473,212,449 as of June 30, 2007. The difference of $4,898,458,674 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $0 is the present value of future contributions expected to be made by members, and the balance of $4,898,458,674 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 6.17% of payroll for non-hazardous members and 13.65% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,391,245,042. When this amount is subtracted from $4,898,458,674, which is the present value of the total future contributions to be made by the employers, there remains $3,507,213,632 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 6.43% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 13.90% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $2,373,680,170 for non-hazardous members and $1,133,533,462 for hazardous members over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.15% of payroll for non-hazardous employees and 0.07% of payroll for hazardous employees.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2007 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/06	$ 1,016.7	$ 505.1	$ 1,521.8
(2)	Normal cost from last valuation	93.0	34.7	127.7
(3)	Expected employer contributions	138.4	64.2	202.5
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	75.3	36.9	115.0
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 1,046.6	$ 512.5	$ 1,562.0
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 1,046.6	$ 512.5	$ 1,562.0
(9)	Actual UAAL as of 6/30/07	$ 1,191.6	$ 569.4	$ 1,761.0
(10)	Gain/(loss): (8) - (9)	$ (145.0)	$ (56.9)	$ (199.0)
(11)	Accrued liabilities as of 6/30/06	$ 6,179.6	$ 2,020.1	$ 8,199.7
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(2.3)%	(2.8)%	(2.4)%

*Unfunded actuarial accrued liability.

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/06	$ 3,829.5	$ 1,505.7	$ 5,335.2
(2)	Normal cost from last valuation	180.7	80.3	261.0
(3)	Expected employer contributions	396.2	165.0	561.2
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	280.1	110.1	390.2
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 3,894.1	$ 1,531.1	$ 5,425.2
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	(1,354.3)	(662.2)	(2,016.5)
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 2,539.8	$ 868.9	$ 3,408.7
(9)	Actual UAAL as of 6/30/07	$ 2,373.7	$ 1,133.5	$ 3,507.2
(10)	Gain/(loss): (8) - (9)	$ 166.1	$ (264.6)	$ (98.5)
(11)	Accrued liabilities as of 6/30/06	$ 4,607.2	$ 1,928.5	$ 6,535.7
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	3.6 %	(13.7)%	(1.5)%

*Unfunded actuarial accrued liability.

NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/07	Insurance $ Gain (or Loss) For Year Ending 6/30/07
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (65.0)	$ (48.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	1.9	1.4
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(5.8)	(4.3)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	16.8	12.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(1.3)	203.6
New Members. Additional unfunded accrued liability will produce a loss.	(12.1)	(9.0)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	53.4	33.3
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	5.8	4.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(138.7)	(27.2)
Gain (or Loss) During Year From Financial Experience	$ (145.0)	$ 166.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	1,354.3
Composite Gain (or Loss) During Year	$ (145.0)	$ 1,520.4

HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/07	Insurance $ Gain (or Loss) For Year Ending 6/30/07
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (17.2)	$ (16.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	1.4	1.3
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.5)	(1.4)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	5.4	5.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(7.1)	81.2
New Members. Additional unfunded accrued liability will produce a loss.	(4.3)	(4.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	21.4	15.4
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	1.9	1.8
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(56.9)	(347.6)
Gain (or Loss) During Year From Financial Experience	$ (56.9)	$ (264.6)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	662.2
Composite Gain (or Loss) During Year	$ (56.9)	$ 397.6

TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/07	Insurance $ Gain (or Loss) For Year Ending 6/30/07
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (82.2)	$ (64.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	3.3	2.7
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(7.3)	(5.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	22.2	17.7
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(8.4)	284.8
New Members. Additional unfunded accrued liability will produce a loss.	(16.4)	(13.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	74.8	48.7
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	7.7	6.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(195.6)	(374.8)
Gain (or Loss) During Year From Financial Experience	$ (201.9)	$ (98.5)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	2,016.5
Composite Gain (or Loss) During Year	$ (201.9)	$ 1,918.0

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2008/2009 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	157,840,473	7.60%
	(2) Disability benefits		22,014,592	1.06
	(3) Survivor benefits		5,815,175	0.28
	(4) Total	$	185,670,240	8.94%
B.	Member Contributions	$	103,842,416	5.00%
C.	Employer Normal Cost: [A(4) - B]	$	81,827,824	3.94%
D.	Administrative Expenses	$	12,218,992	0.59%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/06 Valuation:	$	47,494,100	2.29%
	(2) Change due to:			
	a. Active decrements	$	2,931,570	0.14%
	b. Pay increases		73,149	0.00
	c. Retiree mortality		(326,355)	(0.02)
	d. Investment return		(3,004,719)	(0.14)
	e. COLA		6,662,148	0.32
	f. Assumption Change		0	0.00
	g. Other		13,220,442	0.64
	h. Total Change	$	19,556,235	0.94%
	(3) UAAL Contribution Based on 6/30/07 Valuation: [E(1) +E(2)h]	$	67,050,335	3.23%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	161,097,151	7.76%

* Based on 30 year amortization of the UAAL from June 30, 2007

Required Contribution Rates
Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	63,525,456	13.84%
	(2) Disability benefits		6,517,785	1.42
	(3) Survivor benefits		2,616,294	0.57
	(4) Total	$	72,659,535	15.83%
B.	Member Contributions	$	36,719,916	8.00%
C.	Employer Normal Cost: [A(4) - B]	$	35,939,619	7.83%
D.	Administrative Expenses	$	1,075,008	0.23%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/06 Valuation:	$	31,625,283	6.89%
	(2) Change due to:			
	a. Active decrements	$	669,591	0.15%
	b. Pay increases		399,504	0.09
	c. Retiree mortality		(106,909)	(0.02)
	d. Investment return		(1,204,138)	(0.26)
	e. COLA		3,196,030	0.70
	f. Assumption Change		0	0.00
	g. Other		(2,537,623)	(0.57)
	h. Total Change	$	416,455	0.09%
	(3) UAAL Contribution Based on 6/30/07 Valuation: [E(1) +E(2)h]	$	32,041,738	6.98%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	69,056,365	15.04%

* Based on 30 year amortization of the UAAL from June 30, 2007

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	128,130,634	6.17%
B.	Member Contributions*	$	0	0.00%
C.	Employer Normal Cost: [A - B]	$	128,130,634	6.17%
D.	Administrative Expenses	$	3,040,328	0.15%
E.	Unfunded Actuarial Accrued Liability**:	$	133,562,570	6.43%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	264,733,532	12.75%

*The liabilities are net of retiree contributions toward their healthcare
** Based on 30 year amortization of the UAAL from June 30, 2007

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	62,655,896	13.65%
B.	Member Contributions*	$	0	0.00%
C.	Employer Normal Cost: [A - B]	$	62,655,896	13.65%
D.	Administrative Expenses	$	319,632	0.07%
E.	Unfunded Actuarial Accrued Liability**:	$	63,781,820	13.90%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	126,757,348	27.62%

*The liabilities are net of retiree contributions toward their healthcare
** Based on 30 year amortization of the UAAL from June 30, 2007

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2007

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	35,564	5,159	40,723
Terminated employees entitled to benefits but not yet receiving benefits	53,901	2,197	56,098
Active Members	84,920	10,063	94,983
Total	174,385	17,419	191,804

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2002	$ 5,397,787,158	$ 4,165,355,149	$ (1,232,432,009)	129.6%	$ 1,688,460,789	(73.0)%
6/30/2003	5,286,580,047	4,417,597,802	(868,982,245)	119.7	1,796,451,180	(48.4)
6/30/2004	5,187,851,530	4,936,459,488	(251,392,042)	105.1	1,826,870,880	(13.8)
6/30/2005	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
6/30/2006	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
6/30/2007	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
Hazardous Members						
6/30/2002	$ 1,485,511,793	$ 1,327,291,273	$ (158,220,520)	111.9%	$ 346,319,146	(45.7)%
6/30/2003	1,467,004,856	1,499,628,782	32,623,926	97.8	374,700,732	8.7
6/30/2004	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
6/30/2005	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
6/30/2006	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
6/30/2007	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
Total CERS Members						
6/30/2002	$ 6,883,298,951	$ 5,492,646,422	$ (1,390,652,529)	125.3%	$ 2,034,779,935	(68.3)%
6/30/2003	6,753,584,903	5,917,226,584	(836,358,319)	114.1	2,171,151,912	(38.5)
6/30/2004	6,645,463,572	6,577,289,608	(68,173,964)	101.0	2,219,433,504	(3.1)
6/30/2005	6,511,561,710	7,180,774,025	669,212,315	90.7	2,296,396,728	29.2
6/30/2006	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
6/30/2007	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2002	$ 450,497,307	$ 1,977,577,038	$ 1,527,079,731	22.8%	$ 1,688,460,789	90.4%
6/30/2003	520,060,105	2,176,963,259	1,656,903,154	23.9	1,796,451,180	92.2
6/30/2004	585,399,072	2,438,734,696	1,853,335,624	24.0	1,826,870,880	101.5
6/30/2005	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
6/30/2006	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
6/30/2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
Hazardous Members						
6/30/2002	$ 234,683,878	$ 781,184,974	$ 546,501,096	30.0%	$ 346,319,146	157.8%
6/30/2003	269,190,080	935,650,662	666,460,582	28.8	374,700,732	177.9
6/30/2004	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
6/30/2005	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
6/30/2006	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
6/30/2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
Total CERS Members						
6/30/2002	$ 685,181,185	$ 2,758,762,012	$ 2,073,580,827	24.8%	$ 2,034,779,935	101.9%
6/30/2003	789,250,185	3,112,613,921	2,323,363,736	25.4	2,171,151,912	107.0
6/30/2004	895,977,234	3,464,419,173	2,568,441,939	25.9	2,219,433,504	115.7
6/30/2005	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
6/30/2006	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
6/30/2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2007. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2007	6/30/2007
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	30 years	30 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases*	4.0% - 13.5%	4.0% - 14.5%
Cost-of-living adjustment	None	None
*Includes inflation at	3.50%	3.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2007	6/30/2007
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	30 years	30 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption	12.0% - 5.0%	12.0% - 5.0%
Year Ultimate Trend	2015	2015
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2007 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2006. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 5,467,824,480	$ 5,162,894,136
Prospective contributions		
Member contributions	$ 879,530,367	$ 849,924,564
Employer normal contributions	692,218,125	686,781,563
Unfunded accrued liability contributions	1,191,621,646	1,016,675,131
Total prospective contributions	$ 2,763,370,138	$ 2,553,381,258
Total assets	$ 8,231,194,618	$ 7,716,275,394
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 3,427,501,606	$ 3,060,649,619
Present value of benefits payable on account of active members	4,641,682,555	4,506,180,371
Present value of benefits payable on account of inactive members	162,010,457	149,445,404
Total liabilities	$ 8,231,194,618	$ 7,716,275,394

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 1,639,288,924	$ 1,515,075,017
Prospective contributions		
Member contributions	$ 338,741,336	$ 316,488,370
Employer normal contributions	331,653,124	311,030,508
Unfunded accrued liability contributions	569,447,255	505,067,753
Total prospective contributions	$ 1,239,841,715	$ 1,132,586,631
Total assets	$ 2,879,130,639	$ 2,647,661,648
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,255,383,148	$ 1,111,463,723
Present value of benefits payable on account of active members	1,603,908,864	1,519,497,030
Present value of benefits payable on account of inactive members	19,838,627	16,700,895
Total liabilities	$ 2,879,130,639	$ 2,647,661,648

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 7,107,113,404	$ 6,677,969,153
Prospective contributions		
Member contributions	$ 1,218,271,703	$ 1,166,412,934
Employer normal contributions	1,023,871,249	997,812,071
Unfunded accrued liability contributions	1,761,068,901	1,521,742,884
Total prospective contributions	$ 4,003,211,853	$ 3,685,967,889
Total assets	$ 11,110,325,257	$ 10,363,937,042
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 4,682,884,754	$ 4,172,113,342
Present value of benefits payable on account of active members	6,245,591,419	6,025,677,401
Present value of benefits payable on account of inactive members	181,849,084	166,146,299
Total liabilities	$ 11,110,325,257	$ 10,363,937,042

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 960,285,900	$ 777,726,590
Prospective contributions		
Normal contributions	$ 904,995,678	$ 1,300,307,643
Unfunded accrued liability contributions	2,373,680,170	3,829,497,049
Total prospective contributions	$ 3,278,675,848	$ 5,129,804,692
Total assets	$ 4,238,961,748	$ 5,907,531,282
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,177,386,474	$ 1,435,145,235
Present value of benefits payable on account of active members	2,866,833,342	4,212,931,139
Present value of benefits payable on account of inactive members	194,741,932	259,454,908
Total liabilities	$ 4,238,961,748	$ 5,907,531,282

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 512,926,549	$ 422,785,042
Prospective contributions		
Normal contributions	$ 486,249,364	$ 661,211,021
Unfunded accrued liability contributions	1,133,533,462	1,505,696,329
Total prospective contributions	$ 1,619,782,826	$ 2,166,907,350
Total assets	$ 2,132,709,375	$ 2,589,692,392
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 638,003,709	$ 775,654,558
Present value of benefits payable on account of active members	1,472,956,397	1,802,021,119
Present value of benefits payable on account of inactive members	21,749,269	12,016,715
Total liabilities	$ 2,132,709,375	$ 2,589,692,392

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS

	June 30, 2007	June 30, 2006
ASSETS		
Current actuarial value of assets	$ 1,473,212,449	$ 1,200,511,632
Prospective contributions		
Normal contributions	$ 1,391,245,042	$ 1,961,518,664
Unfunded accrued liability contributions	3,507,213,632	5,335,193,378
Total prospective contributions	$ 4,898,458,674	$ 7,296,712,042
Total assets	$ 6,371,671,123	$ 8,497,223,674
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,815,390,183	$ 2,210,799,793
Present value of benefits payable on account of active members	4,339,789,739	6,014,952,258
Present value of benefits payable on account of inactive members	216,491,201	271,471,623
Total liabilities	$ 6,371,671,123	$ 8,497,223,674

The following tables provide the solvency test for non-hazardous and hazardous CERS members.

Solvency Test
Retirement Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2002*	$ 768,656,315	$ 1,861,419,517	$ 1,535,279,317	$ 5,397,787,158	100.0%	100.0%	180.3%
6/30/2003*	759,938,261	2,068,481,586	1,589,177,955	5,286,580,047	100.0	100.0	154.7
6/30/2004*	814,908,627	2,478,195,080	1,643,355,781	5,187,851,530	100.0	100.0	115.3
6/30/2005*	837,513,907	2,814,210,355	1,733,432,428	5,059,208,687	100.0	100.0	81.2
6/30/2006	883,946,564	3,210,095,023	2,085,527,680	5,162,894,136	100.0	100.0	51.3
6/30/2007	920,126,096	3,589,512,063	2,149,807,967	5,467,824,480	100.0	100.0	44.6

*Reported by prior actuarial firm.

Solvency Test
Retirement Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2002*	$ 238,363,024	$ 664,188,862	$ 424,739,387	$ 1,485,511,793	100.0%	100.0%	137.3%
6/30/2003*	227,629,402	769,804,746	502,194,634	1,467,004,856	100.0	100.0	93.5
6/30/2004*	256,366,204	851,354,443	533,109,473	1,457,612,042	100.0	100.0	65.6
6/30/2005*	264,913,465	960,052,305	570,651,565	1,452,353,023	100.0	100.0	39.8
6/30/2006	300,200,800	1,128,164,618	591,777,352	1,515,075,017	100.0	100.0	14.7
6/30/2007	317,007,367	1,275,221,775	616,507,037	1,639,288,924	100.0	100.0	7.6

*Reported by prior actuarial firm.

. **Solvency Test**
Insurance Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2002*	$ 0	$ 656,812,900	$ 1,320,764,138	$ 450,497,307	100.0%	68.6%	0.0%
6/30/2003*	0	799,777,264	1,377,185,995	520,060,105	100.0	65.0	0.0
6/30/2004*	0	955,930,091	1,482,804,605	585,399,072	100.0	61.2	0.0
6/30/2005*	0	1,144,219,107	1,644,535,547	663,941,949	100.0	58.0	0.0
6/30/2006	0	1,694,600,143	2,912,623,496	777,726,590	100.0	45.9	0.0
6/30/2007	0	1,372,128,406	1,961,837,664	960,285,900	100.0	70.0	0.0

*Reported by prior actuarial firm.

. **Solvency Test**
Insurance Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2002*	$ 0	$ 343,821,677	$ 437,363,297	$ 234,683,878	100.0%	68.3%	0.0%
6/30/2003*	0	401,276,347	534,374,315	269,190,080	100.0	67.1	0.0
6/30/2004*	0	450,288,687	575,395,790	310,578,162	100.0	69.0	0.0
6/30/2005*	0	586,104,126	697,194,966	359,180,461	100.0	61.3	0.0
6/30/2006	0	787,671,273	1,140,810,098	422,785,042	100.0	53.7	0.0
6/30/2007	0	659,752,978	986,707,033	512,926,549	100.0	77.7	0.0

*Reported by prior actuarial firm.

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2006	2007	2008	2009	2010	2011
A.	Actuarial Value Beginning of Year	$ 5,059,208,687	$ 5,162,894,136				
B.	Market Value End of Year	5,191,376,948	5,812,935,251				
C.	Market Value Beginning of Year	4,893,599,997	5,191,376,948				
D.	Cash Flow						
	D1. Contributions	203,205,884	246,240,158				
	D2. Benefit Payments	(336,724,204)	(377,044,524)				
	D3. Administrative Expenses	(12,797,224)	(12,218,992)				
	D4. Investment Expenses	(4,251,662)	(4,731,050)				
	D5. Net	(150,567,206)	(147,754,408)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	448,344,157	769,312,711				
	E2. Assumed Rate	8.25%	7.75%				
	E3. Amount for Immediate Recognition	401,938,146	401,520,608				
	E4. Amount for Phased-In Recognition	46,406,011	367,792,103				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	9,281,202	73,558,421				
	F2. First Prior Year	(936,362)	9,281,202	73,558,421			
	F3. Second Prior Year	24,906,205	(936,362)	9,281,202	73,558,421		
	F4. Third Prior Year	(55,645,322)	24,906,205	(936,362)	9,281,202	73,558,421	
	F5. Fourth Prior Year	(125,291,214)	(55,645,322)	24,906,205	(936,362)	9,281,202	73,558,421
	F6. Total Recognized Investment Gain	(147,685,491)	51,164,144	106,809,466	81,903,261	82,839,623	73,558,421
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 5,162,894,136	$ 5,467,824,480				
H.	Difference Between Market & Actuarial Values	$ 28,482,812	$ 345,110,771	$ 238,301,305	$ 156,398,044	$ 73,558,421	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2006	2007	2008	2009	2010	2011
A.	Actuarial Value Beginning of Year	$ 1,452,353,023	$ 1,515,075,017				
B.	Market Value End of Year	1,528,845,357	1,754,934,764				
C.	Market Value Beginning of Year	1,411,245,719	1,528,845,357				
D.	Cash Flow						
	D1. Contributions	89,031,633	105,203,362				
	D2. Benefit Payments	(103,233,867)	(118,166,617)				
	D3. Administrative Expenses	(1,112,916)	(1,075,008)				
	D4. Investment Expenses	(1,256,675)	(1,654,423)				
	D5. Net	(16,571,825)	(15,692,686)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	134,171,463	241,782,093				
	E2. Assumed Rate	8.25%	7.75%				
	E3. Amount for Immediate Recognition	117,052,697	119,595,955				
	E4. Amount for Phased-In Recognition	17,118,766	122,186,138				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	3,423,753	24,437,228				
	F2. First Prior Year	286,557	3,423,753	24,437,228			
	F3. Second Prior Year	7,052,555	286,557	3,423,753	24,437,228		
	F4. Third Prior Year	(14,889,455)	7,052,555	286,557	3,423,753	24,437,228	
	F5. Fourth Prior Year	(33,632,288)	(14,889,455)	7,052,555	286,557	3,423,753	24,437,228
	F6. Total Recognized Investment Gain	(37,758,878)	20,310,638	35,200,093	28,147,538	27,860,981	24,437,228
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,515,075,017	$ 1,639,288,924				
H.	Difference Between Market & Actuarial Values	$ 13,770,340	$ 115,645,840	$ 80,445,747	$ 52,298,209	$ 24,437,228	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2006	2007	2008	2009	2010	2011
A.	Actuarial Value Beginning of Year	$ 663,941,949	$ 777,726,590				
B.	Market Value End of Year	813,250,744	1,084,042,781				
C.	Market Value Beginning of Year	668,485,367	813,250,744				
D.	Cash Flow						
	D1. Contributions	135,232,560	171,229,072				
	D2. Benefit Payments	(72,918,573)	(85,198,699)				
	D3. Administrative Expenses	(1,539,512)	(3,040,328)				
	D4. Investment Expenses	(741,200)	(720,918)				
	D5. Net	60,033,275	82,269,127				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	84,732,102	188,522,910				
	E2. Assumed Rate	8.25%	7.75%				
	E3. Amount for Immediate Recognition	58,398,190	66,963,715				
	E4. Amount for Phased-In Recognition	26,333,912	121,559,195				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	5,266,783	24,311,839				
	F2. First Prior Year	1,195,664	5,266,783	24,311,839			
	F3. Second Prior Year	8,317,853	1,195,664	5,266,783	24,311,839		
	F4. Third Prior Year	(5,765,671)	8,317,853	1,195,664	5,266,783	24,311,839	
	F5. Fourth Prior Year	(13,661,453)	(5,765,671)	8,317,853	1,195,664	5,266,783	24,311,839
	F6. Total Recognized Investment Gain	(4,646,824)	33,326,468	39,092,139	30,774,286	29,578,622	24,311,839
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 777,726,590	$ 960,285,900				
H.	Difference Between Market & Actuarial Values	$ 35,524,154	$ 123,756,881	$ 84,664,742	$ 53,890,456	$ 24,311,839	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2006	2007	2008	2009	2010	2011
A.	Actuarial Value Beginning of Year	$ 359,180,461	$ 422,785,042				
B.	Market Value End of Year	441,278,796	570,155,702				
C.	Market Value Beginning of Year	360,938,669	441,278,796				
D.	Cash Flow						
	D1. Contributions	64,952,086	70,920,610				
	D2. Benefit Payments	(29,717,549)	(31,607,270)				
	D3. Administrative Expenses	(212,443)	(319,632)				
	D4. Investment Expenses	(391,835)	(379,910)				
	D5. Net	34,630,259	38,613,798				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	45,709,868	90,263,108				
	E2. Assumed Rate	8.25%	7.75%				
	E3. Amount for Immediate Recognition	31,613,937	36,090,023				
	E4. Amount for Phased-In Recognition	14,095,931	54,173,085				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	2,819,186	10,834,617				
	F2. First Prior Year	616,704	2,819,186	10,834,617			
	F3. Second Prior Year	4,199,719	616,704	2,819,186	10,834,617		
	F4. Third Prior Year	(3,032,540)	4,199,719	616,704	2,819,186	10,834,617	
	F5. Fourth Prior Year	(7,242,684)	(3,032,540)	4,199,719	616,704	2,819,186	10,834,617
	F6. Total Recognized Investment Gain	(2,639,615)	15,437,686	18,470,226	14,270,507	13,653,803	10,834,617
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 422,785,042	$ 512,926,549				
H.	Difference Between Market & Actuarial Values	$ 18,493,754	$ 57,229,153	$ 38,758,927	$ 24,488,420	$ 10,834,617	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006, with the exception of the health care cost trend rate which was adopted by the Board on November 15, 2007.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 3.50% per annum:

Service	Annual Rates of				
	Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	10.0%	11.0%	3.5%	13.5%	14.5%
1-2	3.5%	4.0%	3.5%	7.0%	7.5%
2-3	2.0%	3.5%	3.5%	5.5%	7.0%
3-4	1.5%	3.0%	3.5%	5.0%	6.5%
4-5	1.5%	2.5%	3.5%	5.0%	6.0%
5-6	1.0%	2.0%	3.5%	4.5%	5.5%
6-7	1.0%	1.5%	3.5%	4.5%	5.0%
7-8	1.0%	1.5%	3.5%	4.5%	5.0%
8-9	0.5%	1.0%	3.5%	4.0%	4.5%
9-10	0.5%	1.0%	3.5%	4.0%	4.5%
10 & Over	0.5%	0.5%	3.5%	4.0%	4.0%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

		Death			
Age	Withdrawal and Vesting*	Male	Female	Disability	Service Retirement**
20	6.00%	0.05%	0.03%	0.05%	
25	5.40	0.07	0.03	0.07	
30	4.80	0.08	0.04	0.09	
35	3.60	0.09	0.05	0.13	
40	2.66	0.11	0.07	0.20	
45	1.98	0.16	0.10	0.33	
50	1.92	0.26	0.14	0.56	
55	1.08	0.44	0.23	0.92	8.0%
60	0.75	0.80	0.44	1.46	10.0
65		1.45	0.86		25.0
70		2.37	1.37		25.0
75					100.0

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.
** If service is at least 27 years, the rate is 25%.

Hazardous Members

		Death**			Service Retirement***	
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate
20	4.56%	0.05%	0.03%	0.07%	20	30.0%
25	3.04	0.07	0.03	0.09	25	25.0
30	3.01	0.08	0.04	0.12	30	40.0
35	1.95	0.09	0.05	0.17	35	30.0
40	1.50	0.11	0.07	0.27		
45	0.75	0.16	0.10	0.44		
50	0.50	0.26	0.14	0.75		
55		0.44	0.23	1.23		
60		0.80	0.44	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 10.0%, 7.0%, 5.0%, 4.0% and 3.5%, respectively.
** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.
*** The annual rate of service retirement is 100% at age 62.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Trend
2008	12.0%
2009	11.0
2010	10.0
2011	9.0
2012	8.0
2013	7.0
2014	6.0
2015 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	85%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2007				
	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$ 583.28	$ 895.50	$ 998.64
Enhanced	$ 457.70	$ 702.02	$ 1,074.84	$ 1,197.92
Premier	$ 473.72	$ 729.74	$ 1,110.88	$ 1,237.96
Select	$ 443.30	$ 664.94	$ 934.94	$ 1,066.60

2008				
	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$ 617.12	$ 947.44	$ 1,056.56
Enhanced	$ 484.24	$ 742.74	$ 1,137.18	$ 1,267.40
Premier	$ 501.20	$ 772.06	$ 1,175.32	$ 1,309.76
Select	$ 469.00	$ 703.50	$ 989.18	$ 1,128.48

MEDICARE ELIGIBLE

Effective January 1, 2008 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 144.00	$ 143.00
Kentucky Retirement System Health Plan - PLUS	$ 211.00	$ 260.00
Kentucky Retirement System Health Plan - PREMIUM	$ 354.00	$ 329.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Non-Hazardous Normal Retirement:	
Age Requirement	65
Service Requirement	None
Members whose participation began before 8/1/2004	If a member has at least 48 months of service, the monthly benefit is 2.20% times final average compensation times years of service. Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period are less than forty-eight, one or more additional fiscal years shall be used. For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Members whose participation began on or after 8/1/2004	Monthly benefit as calculated above but with a benefit factor of 2.0% instead of 2.2%.
Hazardous Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation time years of service.

Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Early Retirement:

Requirement — Age 55 with 60 months of service or any age with 25 years of service.

Amount — Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Hazardous Early Retirement:

Requirement — Age 50 with 15 years of service or any age with 20 years of service.

Amount — Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement — None

Service Requirement — 60 months

Members whose participation began before 8/1/2004 — Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The

	maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months of service or age 65 with 48 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System. For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.
Members whose participation began on or after July 1, 2003	The Retirement System pays $11.21 per month per year of service toward medical premiums for non-hazardous retirees, $16.82 per month per year of service for hazardous retirees, and $11.21 per month per year of service for surviving spouses of hazardous employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of hazardous service. These amounts are shown as of the valuation date and are indexed annually based on the CPI.

Member Contributions:

Non-hazardous Members	5% of salary.
Hazardous Members	8% of salary.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2002	2003*	2004*	2005*	2006	2007
			Number			
Beginning of Year	N/A	26,147	27,092	29,129	31,347	33,102
Added	N/A	2,411	2,805	2,808	2,782	3,244
Removed	N/A	1,466	768	590	1,027	782
End of Year	N/A	27,092	29,129	31,347	33,102	35,564
			Annual Allowances			
Beginning of Year	N/A	N/A	$ 219,848,200	$ 247,534,300	$ 279,590,300	$ 308,269,651
Added	N/A	$ 24,855,000	28,181,800	30,397,300	34,559,599	44,888,509
Removed	N/A	8,111,100	3,587,800	3,161,200	5,880,248	4,446,140
End of Year	N/A	$ 219,848,200	$ 247,534,300	$ 279,590,300	$ 308,269,651	$ 348,712,020
% Increase in Allowances	N/A	N/A	12.59%	12.95%	10.26%	13.12%
Average Annual Allowance	N/A	$ 8,115	$ 8,498	$ 8,919	$ 9,313	$ 9,805

*Reported by prior actuarial firm.

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2002	2003*	2004*	2005*	2006	2007
			Number			
Beginning of Year	N/A	3,483	3,737	4,005	4,361	4,712
Added	N/A	293	343	403	427	500
Removed	N/A	39	75	47	76	53
End of Year	N/A	3,737	4,005	4,361	4,712	5,159
			Annual Allowances			
Beginning of Year	N/A	N/A	$ 72,322,200	$ 79,559,200	$ 89,224,700	$ 100,290,052
Added	N/A	$ 6,258,300	6,712,500	8,536,100	11,876,922	14,207,939
Removed	N/A	355,100	605,100	502,700	811,570	762,141
End of Year	N/A	$ 72,322,200	$ 79,559,200	$ 89,224,700	$ 100,290,052	$ 113,735,850
% Increase in Allowances	N/A	N/A	10.01%	12.15%	12.40%	13.41%
Average Annual Allowance	N/A	$ 19,353	$ 19,865	$ 20,460	$ 21,284	$ 22,046

*Reported by prior actuarial firm.

Non-Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,106	$ 2,759,169.52	10,541	$ 6,495,258.89	13,647	$ 9,254,428.41
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,868	1,813,320.80	795	433,150.53	2,663	2,246,471.33
66-2/3% to Beneficiary	571	917,795.51	281	274,071.37	852	1,191,866.88
50% to Beneficiary	821	1,131,432.91	799	792,064.45	1,620	1,923,497.36
Pop-up Option	2,560	3,636,814.99	1,861	1,761,676.31	4,421	5,398,491.30
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,152	931,233.02	2,396	1,513,313.58	3,548	2,444,546.60
Social Security Option						
Age 62 Basic	219	378,927.13	420	373,899.97	639	752,827.10
Age 62 Survivorship	533	897,532.94	242	232,328.74	775	1,129,861.68
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	506	432,539.34	495	336,557.74	1,001	769,097.08
20 Years Certain & Life	328	388,196.26	416	318,625.36	744	706,821.62
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	98	95,761.60	288	207,024.35	386	302,785.95
PLSO 24 Month Basic	44	27,929.53	182	119,920.11	226	147,849.64
PLSO 36 Month Basic	240	109,546.15	554	213,672.42	794	323,218.57
PLSO 12 Month Survivor	117	125,283.56	72	63,044.61	189	188,328.17
PLSO 24 Month Survivor	77	67,553.05	52	28,256.62	129	95,809.67
PLSO 36 Month Survivor	345	187,421.13	215	83,357.42	560	270,778.55
Total	12,585	$ 13,900,457.44	19,609	$ 13,246,222.47	32,194	$ 27,146,679.91

Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	552	$ 1,053,569.73	162	$ 228,945.49	714	$ 1,282,515.22
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	468	849,335.18	21	17,838.52	489	867,173.70
66-2/3% to Beneficiary	196	464,743.84	3	7,457.44	199	472,201.28
50% to Beneficiary	318	675,520.77	16	25,368.90	334	700,889.67
Pop-up Option	1,648	3,731,550.71	56	96,683.23	1,704	3,828,233.94
10 Years Certain	26	39,043.88	3	3,549.46	29	42,593.34
10 Years Certain & Life	150	282,494.43	32	52,159.56	182	334,653.99
Social Security Option						
Age 62 Basic	91	139,689.31	7	8,989.48	98	148,678.79
Age 62 Survivorship	285	432,113.66	10	10,293.46	295	442,407.12
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	52	83,758.84	7	6,346.83	59	90,105.67
20 Years Certain & Life	95	162,692.97	8	8,489.20	103	171,182.17
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	24	37,575.50	5	6,155.50	29	43,731.00
PLSO 24 Month Basic	21	40,673.08	6	6,813.35	27	47,486.43
PLSO 36 Month Basic	45	62,605.61	11	12,081.75	56	74,687.36
PLSO 12 Month Survivor	48	106,011.51	1	2,792.73	49	108,804.24
PLSO 24 Month Survivor	48	70,245.56	3	2,579.54	51	72,825.10
PLSO 36 Month Survivor	118	158,954.46	6	4,380.83	124	163,335.29
Total	4,185	$ 8,390,579.04	357	$ 500,925.27	4,542	$ 8,891,504.31

Non-Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2	$ 926.06	23	$ 15,220.48	25	$ 16,146.54
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	254	107,709.83	1,327	666,703.48	1,581	774,413.31
66-2/3% to Beneficiary	22	7,975.06	162	86,459.49	184	94,434.55
50% to Beneficiary	59	20,507.04	270	107,654.23	329	128,161.27
Pop-up Option	83	49,864.84	290	209,349.29	373	259,214.13
10 Years Certain	56	35,858.31	99	68,975.83	155	104,834.14
10 Years Certain & Life	58	30,040.21	97	70,132.53	155	100,172.74
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	14	9,257.96	80	93,092.18	94	102,350.14
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	631.08	3	631.08
Dependent Child	4	1,402.08	5	1,341.25	9	2,743.33
Refund	0	0.00	4	2,508.60	4	2,508.60
15 Years Certain & Life	26	20,329.49	67	46,596.65	93	66,926.14
20 Years Certain & Life	35	17,981.43	73	70,370.23	108	88,351.66
5 Years Certain	92	56,461.29	106	83,424.42	198	139,885.71
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	11	3,432.71	11	3,432.71
PLSO 12 Month Survivor	3	1,288.69	11	13,510.48	14	14,799.17
PLSO 24 Month Survivor	0	0.00	6	4,016.40	6	4,016.40
PLSO 36 Month Survivor	11	4,148.78	17	5,538.28	28	9,687.06
Total	719	$ 363,751.07	2,651	$ 1,548,957.61	3,370	$ 1,912,708.68

Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	19	$ 17,075.59	19	$ 17,075.59
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	5	3,291.04	118	140,588.19	123	143,879.23
66-2/3% to Beneficiary	0	0.00	29	36,372.14	29	36,372.14
50% to Beneficiary	1	509.07	35	26,591.87	36	27,100.94
Pop-up Option	0	0.00	86	126,247.80	86	126,247.80
10 Years Certain	5	12,984.56	19	18,799.44	24	31,784.00
10 Years Certain & Life	1	1,928.62	3	2,129.88	4	4,058.50
Social Security Option						
Age 62 Basic	0	0.00	2	399.50	2	399.50
Age 62 Survivorship	1	2,605.45	60	82,576.09	61	85,181.54
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	2,501.51	3	2,501.51
Dependent Child	99	33,566.98	77	26,653.89	176	60,220.87
Refund	1	248.29	7	4,951.41	8	5,199.70
15 Years Certain & Life	0	0.00	5	5,440.23	5	5,440.23
20 Years Certain & Life	1	1,654.07	23	26,486.38	24	28,140.45
5 Years Certain	4	1,873.50	4	4,042.67	8	5,916.17
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	855.35	4	1,731.27	5	2,586.62
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	2	1,302.54	2	1,302.54
PLSO 36 Month Survivor	0	0.00	2	3,074.54	2	3,074.54
Total	119	$ 59,516.93	498	$ 526,964.94	617	$ 586,481.87

Non-Hazardous Members

Retired and Beneficiary Information June 30, 2007
Tabulated by Attained Ages

Attained Age	Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	60	$ 1,120,761	62	$ 608,628	105	$ 470,069	227	$ 2,199,458
45-49	664	$ 14,916,379	155	$ 1,657,540	67	$ 545,027	886	$ 17,118,946
50-54	1,577	$ 34,605,768	289	$ 3,037,619	140	$ 1,174,629	2,006	$ 38,818,016
55-59	3,508	$ 55,035,432	559	$ 5,679,012	215	$ 2,261,957	4,282	$ 62,976,401
60-64	4,898	$ 56,425,715	645	$ 6,208,981	326	$ 3,061,941	5,869	$ 65,696,637
65-69	6,097	$ 54,787,054	652	$ 5,756,321	395	$ 3,433,452	7,144	$ 63,976,827
70-74	5,054	$ 38,787,656	378	$ 2,840,727	431	$ 3,330,373	5,863	$ 44,958,756
75-79	3,565	$ 23,546,148	129	$ 832,767	499	$ 3,475,105	4,193	$ 27,854,020
80-84	2,294	$ 13,203,643	36	$ 210,313	463	$ 2,281,991	2,793	$ 15,695,947
85-89	1,130	$ 4,767,460	24	$ 99,262	380	$ 1,674,581	1,534	$ 6,541,303
90 & Over	412	$ 1,609,699	6	$ 23,317	349	$ 1,242,693	767	$ 2,875,709
Totals	29,259	$ 298,805,715	2,935	$ 26,954,487	3,370	$ 22,951,818	35,564	$ 348,712,020

Hazardous Members

Retired and Beneficiary Information June 30, 2007
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	157	$ 4,187,134	68	$ 1,063,600	199	$ 906,167	424	$ 6,156,901
45-49	402	$ 10,878,722	73	$ 1,102,469	22	$ 187,940	497	$ 12,169,131
50-54	765	$ 21,314,113	84	$ 1,209,944	38	$ 408,277	887	$ 22,932,334
55-59	1,059	$ 28,400,913	75	$ 1,062,721	68	$ 1,017,231	1,202	$ 30,480,865
60-64	815	$ 17,970,665	37	$ 521,471	74	$ 1,333,995	926	$ 19,826,131
65-69	547	$ 10,638,052	9	$ 106,113	84	$ 1,491,735	640	$ 12,235,900
70-74	276	$ 5,176,450	10	$ 121,899	50	$ 753,881	336	$ 6,052,230
75-79	116	$ 2,209,227	2	$ 15,740	50	$ 628,467	168	$ 2,853,434
80-84	40	$ 692,805	1	$ 17,956	22	$ 219,366	63	$ 930,127
85-89	5	$ 7,358			6	$ 55,124	11	$ 62,482
90 & Over	1	$ 714			4	$ 35,601	5	$ 36,315
Totals	4,183	$ 101,476,153	359	$ 5,221,913	617	$ 7,037,784	5,159	$ 113,735,850

Total Non-Hazardous Active Members as of June 30, 2007
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	750								750
Avg Pay	$15,113								$15,113
20-24	3,009	250							3,259
Avg Pay	$18,859	$23,288							$19,199
25-29	3,436	1,061	89						4,586
Avg Pay	$21,073	$26,665	$28,171						$22,505
30-34	3,741	1,988	475	19					6,223
Avg Pay	$20,454	$28,254	$33,057	$33,909					$23,949
35-39	6,112	2,867	1,237	312	26				10,554
Avg Pay	$18,294	$25,983	$33,225	$37,316	$50,568				$22,775
40-44	4,379	3,970	1,831	899	456	69			11,604
Avg Pay	$19,640	$23,533	$29,036	$36,715	$43,002	$43,990			$24,840
44-49	4,437	4,096	2,822	1,400	738	232	180	33	13,552
Avg Pay	$19,965	$23,444	$26,146	$32,129	$41,670	$45,343	$48,725	$57,247	$25,649
50-54	3,633	3,345	2,971	1,847	938	264	189	135	12,936
Avg Pay	$21,923	$23,789	$25,262	$29,439	$37,290	$39,277	$48,092	$53,478	$26,426
55-59	2,974	2,304	2,114	1,923	944	267	167	132	10,440
Avg Pay	$20,983	$24,802	$25,766	$27,491	$33,550	$35,757	$41,996	$55,391	$26,278
60-64	1,628	1,580	1,150	1,049	504	201	118	89	6,319
Avg Pay	$18,787	$22,642	$24,189	$27,104	$28,908	$33,343	$36,718	$49,271	$24,149
65-69	655	614	445	369	144	35	42	34	2,338
Avg Pay	$16,228	$20,055	$21,367	$23,950	$26,310	$26,187	$35,662	$50,965	$21,054
70 & over	317	332	220	174	87	19	25	28	1,202
Avg Pay	$15,586	$18,314	$18,612	$21,589	$24,731	$28,940	$24,713	$46,967	$19,556
Totals	35,071	22,407	13,354	7,992	3,837	1,087	721	451	84,920
Avg Pay	$19,678	$24,328	$26,749	$29,847	$36,183	$38,307	$43,442	$52,890	$24,457

Total Hazardous Active Members as of June 30, 2007
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	41								41
Avg Pay	$30,210								$30,210
20-24	456	16							472
Avg Pay	$31,924	$39,890							$32,194
25-29	1,063	229	6						1,298
Avg Pay	$36,379	$45,662	$43,526						$38,050
30-34	711	892	162						1,765
Avg Pay	$37,330	$46,775	$52,440						$43,490
35-39	597	756	656	166	11	1			2,187
Avg Pay	$35,059	$46,075	$53,650	$57,644	$60,371	$35,268			$46,285
40-44	271	385	404	533	149	14			1,756
Avg Pay	$36,201	$45,365	$51,710	$58,787	$63,008	$63,549			$51,126
44-49	150	215	194	289	214	27	28	4	1,121
Avg Pay	$34,871	$42,339	$49,627	$57,911	$61,347	$57,634	$57,063	$71,547	$51,085
50-54	111	140	124	140	110	31	50	28	734
Avg Pay	$38,039	$43,446	$49,028	$54,616	$54,195	$60,356	$55,231	$65,917	$49,687
55-59	92	95	40	59	51	23	42	29	431
Avg Pay	$39,689	$42,982	$47,118	$54,144	$50,219	$50,755	$56,711	$54,690	$47,588
60-64	37	47	28	17	25	6	13	19	192
Avg Pay	$35,269	$40,625	$45,450	$51,758	$42,234	$48,788	$44,068	$57,023	$43,603
65-69	14	14	8		3	3	1	1	44
Avg Pay	$37,994	$41,716	$41,573		$44,976	$50,104	$105,516	$49,128	$42,918
70 & over	7	5	3	2	2	1	2		22
Avg Pay	$23,823	$43,572	$33,204	$64,440	$53,604	$65,880	$60,048		$41,195
Totals	3,550	2,794	1,625	1,206	565	106	136	81	10,063
Avg Pay	$35,735	$45,489	$51,777	$57,618	$58,409	$56,872	$55,439	$59,882	$45,613

Report on the Annual Valuation of the State Police Retirement System

Prepared as of June 30, 2007

November 19, 2007

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2008.

The date of the valuation was June 30, 2007.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 5.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

Edward A. Macdonald, ASA, FCA, MAAA
President

TJC/EAM:kc

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REPORT ON THE ANNUAL VALUATION OF THE STATE POLICE RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2007

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2007, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	6/30/2007	6/30/2006
Contributions for next fiscal year:		
Retirement	32.39%	28.95%
Insurance	59.54	91.05
Total	91.93%	120.00%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$547,955,286	$516,482,298
Actuarial value of assets	348,806,508	344,016,197
Unfunded liability on actuarial value of assets	199,148,778	172,466,101
Funded ratio on actuarial value of assets	63.66%	66.61%
Market value of assets	$376,381,488	$352,841,486
Unfunded liability on market value of assets	171,573,798	163,640,812
Funded ratio on market value of assets	68.69%	68.32%
Insurance		
Actuarial accured liability	$432,763,229	$582,580,867
Actuarial value of assets	115,215,912	105,580,269
Unfunded liability on actuarial value of assets	317,547,317	477,000,598
Funded ratio on actuarial value of assets	26.62%	18.12%
Market value of assets	$132,573,898	$110,491,075
Unfunded liability on market value of assets	300,189,331	472,089,792
Funded ratio on market value of assets	30.63%	18.97%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,105	1,067
Number of vested former members	47	48
Number of former members due a refund	239	218
Number of active members	957	1,028
Total salary	$49,247,580	$47,743,865
Average salary	$51,460	$46,443

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. Since the previous valuation, the assumptions and methods were changed as follows:

   - Medical trend rates were changed to a range starting at 12.0% per year in 2008 and declining to an ultimate rate of 5.0% in 2015 and later
   - All accrued liability amortization bases were consolidated and reset to a new 30-year closed amortization period beginning with the June 30, 2007 valuation. In future years, the total unfunded accrued liability will be amortized over the remaining period.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2006 and June 30, 2007 is 4.50%. The lower rate for insurance benefits is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of those benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2007 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

		Group Averages		
Number	Payroll	Salary	Age	Service
957	$49,247,580	$51,460	37.3	11.1

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2002	1,002	$43,961,844	$43,874	0.8%
6/30/2003	1,019	43,760,832	42,945	(2.1)
6/30/2004	999	43,835,208	43,879	2.2
6/30/2005	987	43,720,092	44,296	1.0
6/30/2006	1,028	47,743,865	46,443	4.8
6/30/2007	957	49,247,580	51,460	10.8

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

			Group Averages	
Type of Benefit Payment	Number	Annual Benefits	Benefit	Age
Retiree	939	$33,555,843	$35,736	60.1
Disability	37	$641,068	17,326	56.3
Beneficiary	129	3,011,466	23,345	60.7
Total in SPRS	1,105	$37,208,377	$33,673	60.0

This valuation also includes 286 inactive members of which 47 are vested.

SECTION III - ASSETS

1. As of June 30, 2007 the total market value of assets amounted to $508,955,386 as shown in the following table.

Retirement	Insurance	SPRS Total
$376,381,488	$132,573,898	$508,955,386

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $464,022,420. Schedule B shows the development of the actuarial value of assets as of June 30, 2007. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2007	JUNE 30, 2006
Retirement	$ 348,806,508	$ 344,016,197
Insurance	115,215,912	105,580,269
Total	$ 464,022,420	$ 449,596,466

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2007. Separate balance sheets are shown for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $621,417,513, of which $395,686,232 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $2,177,288 is for the prospective benefits payable on account of inactive members, $223,553,993 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $348,806,508 as of June 30, 2007. The difference of $272,611,005 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $33,817,886 is the present value of future contributions expected to be made by members, and the balance of $238,793,119 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 9.38% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $39,644,341. When this amount is subtracted from $238,793,119, which is the present value of the total future contributions to be made by the State, there remains $199,148,778 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 22.75% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $199,148,778 over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.26% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $592,708,459, of which $165,115,867 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $7,175,275 is for the prospective benefits payable to current inactive members, and $420,417,317 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $115,215,912 as of June 30, 2007. The difference of $477,492,547 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $0 is the present value of future contributions expected to be made by members, and the balance of $477,492,547 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 34.71% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $159,945,230. When this amount is subtracted from $477,492,547, which is the present value of the total future contributions to be made by the employers, there remains $317,547,317 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 24.62% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $317,547,317 over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.21% of payroll.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2007 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

			Amount
(1)	UAAL* as of 6/30/06	$	172.5
(2)	Normal cost from last valuation		4.3
(3)	Expected employer contributions		13.8
(4)	Interest accrual: [(1) + (2) - (3)] x .0775		12.6
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	175.6
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	175.6
(9)	Actual UAAL as of 6/30/07	$	199.1
(10)	Gain/(loss): (8) - (9)	$	(23.5)
(11)	Accrued liabilities as of 6/30/06	$	516.5
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(4.5)%

*Unfunded actuarial accrued liability.

Experience Gain/(Loss)
Insurance Benefits

			Amount
(1)	UAAL* as of 6/30/06	$	477.0
(2)	Normal cost from last valuation		25.0
(3)	Actual employer contributions		43.2
(4)	Interest accrual: [(1) + (2) - (3)] x .045		20.6
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	479.4
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		(218.3)
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	261.1
(9)	Actual UAAL as of 6/30/07	$	317.5
(10)	Gain/(loss): (8) - (9)	$	(56.4)
(11)	Accrued liabilities as of 6/30/06	$	582.6
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(9.7)%

*Unfunded actuarial accrued liability.

SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/07	Insurance $ Gain (or Loss) For Year Ending 6/30/07
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (3.6)	$ (4.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.2	0.2
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.0	0.0
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(4.8)	24.0
New Members. Additional unfunded accrued liability will produce a loss.	(0.1)	(0.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	5.2	4.4
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(0.1)	(0.1)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(20.3)	(80.7)
Gain (or Loss) During Year From Financial Experience	$ (23.5)	$ (56.4)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	218.3
Composite Gain (or Loss) During Year	$ (23.5)	$ 161.9

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2008/2009 fiscal year.

Required Contribution Rates
Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	7,781,118	15.80%
	(2) Disability benefits		561,422	1.14
	(3) Survivor benefits		216,689	0.44
	(4) Total	$	8,559,229	17.38%
B.	Member Contributions	$	3,939,806	8.00%
C.	Employer Normal Cost: [A(4) - B]	$	4,619,423	9.38%
D.	Administrative Expenses	$	126,687	0.26%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/06 Valuation:	$	9,728,089	19.75%
	(2) Change due to:			
	a. Active decrements	$	191,312	0.39%
	b. Pay increases		270,087	0.55
	c. Retiree mortality		5,627	0.01
	d. Investment return		(292,594)	(0.59)
	e. COLA		894,663	1.82
	f. Assumption Change		0	0.00
	g. Other		408,547	0.82
	h. Total Change	$	1,477,642	3.00%
	(3) UAAL Contribution Based on 6/30/07 Valuation: [E(1) +E(2)h]	$	11,205,731	22.75%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	15,951,841	32.39%

* Based on 30 year amortization of the UAAL from June 30, 2007

Required Contribution Rates
Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost	$	17,093,299	34.71%
B.	Member Contributions*	$	0	0.00%
C.	Employer Normal Cost: [A - B]	$	17,093,299	34.71%
D.	Administrative Expenses	$	104,872	0.21%
E.	Unfunded Actuarial Accrued Liability**	$	12,126,495	24.62%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	29,324,666	59.54%

*The liabilities are net of retiree contributions toward their healthcare.
** Based on 30 year amortization of the UAAL from June 30, 2007

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2007

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,105
Terminated employees entitled to benefits but not yet receiving benefits	286
Active Members	957
Total	2,348

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2002	$ 438,955,613	$ 380,790,346	$ (58,165,267)	115.3%	$ 43,961,844	(132.3)%
6/30/2003	413,063,576	414,881,459	1,817,883	99.6	43,760,832	4.2
6/30/2004	385,077,195	437,482,425	52,405,230	88.0	43,835,208	119.6
6/30/2005	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
6/30/2006	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
6/30/2007	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2002	$ 86,867,391	$ 165,445,412	$ 78,578,021	52.5%	$ 43,961,844	178.7%
6/30/2003	90,747,967	184,501,205	93,753,238	49.2	43,760,832	214.2
6/30/2004	96,622,908	197,604,301	100,981,393	48.9	43,835,208	230.4
6/30/2005	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
6/30/2006	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
6/30/2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2007. Additional information as of the latest actuarial valuation follows.

Retirement Benefits	
Valuation date	6/30/2007
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	30 years
Asset valuation method	5 Year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases*	4.0% - 14.5%
Cost-of-living adjustment	None
*Includes inflation at	3.50%

Insurance Benefits	
Valuation date	6/30/2007
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	30 years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption	12.0 - 5.0%
Year of Ulitimate Trend	2015
Actuarial assumptions:	
Investment rate of return*	4.50%
*Includes inflation at	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2007 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2006. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM

RETIREMENT BENEFITS

	JUNE 30, 2007	JUNE 30, 2006
ASSETS		
Current actuarial value of assets	$ 348,806,508	$ 344,016,197
Prospective contributions		
Member contributions	$ 33,817,886	$ 33,653,343
Employer normal contributions	39,644,341	37,531,263
Unfunded accrued liability contributions	199,148,778	172,466,101
Total prospective contributions	$ 272,611,005	$ 243,650,707
Total assets	$ 621,417,513	$ 587,666,904
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 395,686,232	$ 371,485,440
Present value of benefits payable on account of active members	223,553,993	214,078,759
Present value of benefits payable on account of inactive members	2,177,288	2,102,705
Total liabilities	$ 621,417,513	$ 587,666,904

VALUATION BALANCE SHEET
INSURANCE BENEFITS

	JUNE 30, 2007	JUNE 30, 2006
ASSETS		
Current actuarial value of assets	$ 115,215,912	$ 105,580,269
Prospective contributions		
Normal contributions	$ 159,945,230	$ 241,009,134
Unfunded accrued liability contributions	317,547,317	477,000,598
Total prospective contributions	$ 477,492,547	$ 718,009,732
Total assets	$ 592,708,459	$ 823,590,001
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 165,115,867	$ 235,676,003
Present value of benefits payable on account of active members	420,417,317	582,676,133
Present value of benefits payable on account of inactive members	7,175,275	5,237,865
Total liabilities	$ 592,708,459	$ 823,590,001

The following tables provide the solvency test for SPRS members.

Solvency Test
Retirement Benefits

Valuation Date	Aggregate Accrued Liabilites For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2002*	$ 36,886,477	$ 252,498,613	$ 91,405,256	$ 438,955,613	100.0%	100.0%	163.6%
6/30/2003*	35,832,095	290,012,792	89,036,572	413,063,576	100.0	100.0	98.0
6/30/2004*	37,658,106	318,664,694	81,159,625	385,077,195	100.0	100.0	35.4
6/30/2005*	35,670,717	341,398,363	81,524,496	353,511,622	100.0	93.1	0.0
6/30/2006	37,866,774	373,588,145	105,027,379	344,016,197	100.0	81.9	0.0
6/30/2007	39,505,285	397,863,520	110,586,481	348,806,508	100.0	77.7	0.0

*Reported by prior actuarial firm.

Solvency Test
Insurance Benefits

Valuation Date	Aggregate Accrued Liabilites For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2002*	$ 0	$ 94,205,237	$ 71,240,175	$ 86,867,391	100.0%	92.2%	0.0%
6/30/2003*	0	106,317,750	78,183,455	90,747,967	100.0	85.4	0.0
6/30/2004*	0	119,104,851	78,499,450	96,622,908	100.0	81.1	0.0
6/30/2005*	0	141,585,694	92,573,816	100,207,082	100.0	70.8	0.0
6/30/2006	0	240,913,868	341,666,999	105,580,269	100.0	43.8	0.0
6/30/2007	0	172,291,142	260,472,087	115,215,912	100.0	66.9	0.0

*Reported by prior actuarial firm.

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits

	Valuation date June 30:	2006	2007	2008	2009	2010	2011
A.	Actuarial Value Beginning of Year	$ 353,511,622	$ 344,016,197				
B.	Market Value End of Year	352,841,486	376,381,488				
C.	Market Value Beginning of Year	339,405,873	352,841,486				
D.	Cash Flow						
	D1. Contributions	9,058,705	11,293,952				
	D2. Benefit Payments	(34,836,365)	(37,233,587)				
	D3. Administrative Expenses	(133,540)	(126,687)				
	D4. Investment Expenses	(284,289)	(306,896)				
	D5. Net	(26,195,490)	(26,373,218)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	39,631,102	49,913,220				
	E2. Assumed Rate	8.25%	7.75%				
	E3. Amount for Immediate Recognition	27,216,436	26,642,041				
	E4. Amount for Phased-In Recognition	12,414,667	23,271,179				
F.	Pasked-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	2,482,933	4,654,236				
	F2. First Prior Year	(128,096)	2,482,933	4,654,236			
	F3. Second Prior Year	1,765,427	(128,096)	2,482,933	4,654,236		
	F4. Third Prior Year	(4,253,012)	1,765,427	(128,096)	2,482,933	4,654,236	
	F5. Fourth Prior Year	(10,383,623)	(4,253,012)	1,765,427	(128,096)	2,482,933	4,654,236
	F6. Total Recognized Investment Gain	(10,516,371)	4,521,488	8,774,500	7,009,073	7,137,169	4,654,236
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 344,016,197	$ 348,806,508				
H.	Difference Between Market & Actuarial Values	$ 8,825,289	$ 27,574,980	$ 18,800,480	$ 11,791,407	$ 4,654,235	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits

	Valuation date June 30:	2006	2007	2008	2009	2010	2011
A.	Actuarial Value Beginning of Year	$ 100,207,082	$ 105,580,269				
B.	Market Value End of Year	110,491,075	132,573,898				
C.	Market Value Beginning of Year	99,408,106	110,491,075				
D.	Cash Flow						
	D1. Contributions	6,885,334	6,858,127				
	D2. Benefit Payments	(7,816,174)	(6,515,053)				
	D3. Administrative Expenses	(67,587)	(104,872)				
	D4. Investment Expenses	(100,954)	(93,044)				
	D5. Net	(1,099,381)	145,158				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	12,182,350	21,937,665				
	E2. Assumed Rate	8.25%	4.50%				
	E3. Amount for Immediate Recognition	8,260,938	5,070,502				
	E4. Amount for Phased-In Recognition	3,921,412	16,867,163				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	784,282	3,373,433				
	F2. First Prior Year	68,955	784,282	3,373,433			
	F3. Second Prior Year	1,373,499	68,955	784,282	3,373,433		
	F4. Third Prior Year	(1,180,186)	1,373,499	68,955	784,282	3,373,433	
	F5. Fourth Prior Year	(2,834,921)	(1,180,186)	1,373,499	68,955	784,282	3,373,433
	F6. Total Recognized Investment Gain	(1,788,371)	4,419,983	5,600,169	4,226,670	4,157,715	3,373,433
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 105,580,269	$ 115,215,912				
H.	Difference Between Market & Actuarial Values	$ 4,910,806	$ 17,357,986	$ 11,757,817	$ 7,531,147	$ 3,373,433	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.
*This is the actuarial value as reported by the previous actuary. It differs from the method in the table above by $1. The difference is obviously not material.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006, with the exception of the health care cost trend rate which was adopted by the Board on November 15, 2007.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for SPRS is 4.50%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for members are as follows and include inflation at 3.50% per annum:

	Annual Rates of		
Service	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	11.0%	3.5%	14.5%
1-2	4.0	3.5	7.5
2-3	3.5	3.5	7.0
3-4	3.0	3.5	6.5
4-5	2.5	3.5	6.0
5-6	2.0	3.5	5.5
6-7	1.5	3.5	5.0
7-8	1.5	3.5	5.0
8-9	1.0	3.5	4.5
9-10	1.0	3.5	4.5
10 & over	0.5	3.5	4.0

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

		Death**			Service Retirement***	
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate
20	2.50%	0.05%	0.03%	0.07%	20	20.0%
25	2.28	0.07	0.03	0.09	25	20.0
30	1.83	0.08	0.04	0.12	30	45.0
35	1.31	0.09	0.05	0.17	35	70.0
40	0.81	0.11	0.07	0.27		
45	0.41	0.16	0.10	0.44		
50		0.26	0.14	0.75		
55		0.44	0.23	1.23		
60		0.80	0.44	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 10.0%, 7.0%, 5.0%, 4.0% and 3.5%, respectively.
** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.
*** The annual rate of service retirement is 100% at age 55.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Trend
2008	12.0%
2009	11.0
2010	10.0
2011	9.0
2012	8.0
2013	7.0
2014	6.0
2015 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and over	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation and spouse coverage are as follows:

Participation	100%
Spouse Coverage	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2007				
	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$ 583.28	$ 895.50	$ 998.64
Enhanced	$ 457.70	$ 702.02	$ 1,074.84	$ 1,197.92
Premier	$ 473.72	$ 729.74	$ 1,110.88	$ 1,237.96
Select	$ 443.30	$ 664.94	$ 934.94	$ 1,066.60

2008				
	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$ 617.12	$ 947.44	$ 1,056.56
Enhanced	$ 484.24	$ 742.74	$ 1,137.18	$ 1,267.40
Premier	$ 501.20	$ 772.06	$ 1,175.32	$ 1,309.76
Select	$ 469.00	$ 703.50	$ 989.18	$ 1,128.48

MEDICARE ELIGIBLE

Effective January 1, 2008 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 144.00	$ 143.00
Kentucky Retirement System Health Plan - PLUS	$ 211.00	$ 260.00
Kentucky Retirement System Health Plan - PREMIUM	$ 354.00	$ 329.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

UNUSED SICK LEAVE: It is assumed that a member will be granted one and one-half year of service credit for unused sick leave at termination of employment.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation time years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Early Retirement:	
Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.
Disability:	
Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used.

	A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System. For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.
Members whose participation began on or after July 1, 2003	The Retirement System pays $16.82 per month per year of service for retirees, and $11.21 per month per year of service for surviving spouses employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of service. These amounts are shown as of the valuation date and are indexed annually based on the CPI.

Member Contributions: 8% of salary.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2002	2003*	2004*	2005*	2006	2007
			Number			
Beginning of Year	N/A	897	941	992	1,036	1,067
Added	N/A	53	62	50	43	49
Removed	N/A	9	11	6	10	11
End of Year	N/A	941	992	1,036	1,067	1,105
			Annual Allowances			
Beginning of Year	N/A	N/A	$ 28,115,500	$ 30,805,600	$ 32,983,900	$ 34,651,251
Added	N/A	2,040,300	2,580,100	1,813,000	1,943,760	2,836,956
Removed	N/A	135,000	189,900	189,900	276,409	279,830
End of Year	N/A	$ 28,115,500	$ 30,805,600	$ 32,983,900	$ 34,651,251	$ 37,208,377
% Increase in Allowances	N/A	N/A	9.57%	7.07%	5.06%	7.38%
Average Annual Allowance	N/A	$ 29,878	$ 31,054	$ 31,838	$ 32,475	$ 33,673

*Reported by prior actuarial firm.

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	88	$ 254,446.62	5	$ 13,465.41	93	$ 267,912.03
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	115	314,976.96	1	3,232.96	116	318,209.92
66-2/3% to Beneficiary	79	268,874.58	1	2,744.22	80	271,618.80
50% to Beneficiary	74	236,542.13	0	0.00	74	236,542.13
Pop-up Option	335	1,090,798.25	1	3,954.69	336	1,094,752.94
10 Years Certain	3	12,955.14	0	0.00	3	12,955.14
10 Years Certain & Life	30	88,187.88	0	0.00	30	88,187.88
Social Security Option						
Age 62 Basic	35	83,610.48	0	0.00	35	83,610.48
Age 62 Survivorship	155	329,217.26	1	4,765.81	156	333,983.07
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	10	27,024.82	1	3,532.38	11	30,557.20
20 Years Certain & Life	28	75,884.75	1	2,535.45	29	78,420.20
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	1	415.72	1	415.72
PLSO 12 Month Survivor	4	11,451.45	0	0.00	4	11,451.45
PLSO 24 Month Survivor	1	6,626.73	0	0.00	1	6,626.73
PLSO 36 Month Survivor	7	14,498.99	0	0.00	7	14,498.99
Total	964	$ 2,815,096.04	12	$ 34,646.64	976	$ 2,849,742.68

Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	4	$ 2,747.32	4	$ 2,747.32
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2	3,782.40	58	144,515.72	60	148,298.12
66-2/3% to Beneficiary	1	721.18	2	3,548.11	3	4,269.29
50% to Beneficiary	1	1,170.62	13	19,923.85	14	21,094.47
Pop-up Option	0	0.00	12	28,059.05	12	28,059.05
10 Years Certain	1	533.20	1	2,650.64	2	3,183.84
10 Years Certain & Life	0	0.00	0	0.00	0	0.00
Social Security Option						
Age 62 Basic	0	0.00	1	1,981.56	1	1,981.56
Age 62 Survivorship	0	0.00	19	30,706.72	19	30,706.72
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	6	1,853.30	3	1,000.07	9	2,853.37
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	0	0.00	0	0.00	0	0.00
20 Years Certain & Life	0	0.00	5	7,761.79	5	7,761.79
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	11	$ 8,060.70	118	$ 242,894.83	129	$ 250,955.53

Retired and Beneficiary Information June 30, 2007
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	21	$ 543,462	4	$ 61,357	11	$ 60,475	36	$ 665,294
45-49	59	1,987,159	6	109,839	5	43,983	70	2,140,981
50-54	151	5,523,915	7	95,567	8	61,870	166	5,681,352
55-59	266	9,954,898	7	137,482	18	423,221	291	10,515,601
60-64	197	7,266,386	7	132,664	16	351,722	220	7,750,772
65-69	113	3,524,086	1	21,519	10	311,220	124	3,856,825
70-74	59	1,969,099	4	76,316	11	402,582	74	2,447,997
75-79	44	1,649,605	1	6,324	22	530,816	67	2,186,745
80-84	23	1,057,883	0	0	23	763,185	46	1,821,068
85-89	6	79,350	0	0	5	62,392	11	141,742
90 & Over	0	0	0	0	0	0	0	0
Totals	939	$ 33,555,843	37	$ 641,068	129	$ 3,011,466	1,105	$ 37,208,377

Total Active Members as of June 30, 2007
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	1								1
Avg Pay	$37,656								$37,656
20-24	15								15
Avg Pay	$37,397								$37,397
25-29	97	28							125
Avg Pay	$39,470	$43,820							$40,444
30-34	68	122	19						209
Avg Pay	$39,159	$45,369	$53,485						$44,086
35-39	40	80	127	32	2				281
Avg Pay	$39,545	$45,750	$54,826	$61,200	$61,314				$50,839
40-44	11	14	35	63	32	1			156
Avg Pay	$39,862	$45,914	$55,535	$61,874	$66,418	$68,952			$58,445
44-49	7	2	11	37	48	8	7		120
Avg Pay	$37,505	$42,000	$50,479	$61,477	$67,353	$69,573	$72,081		$62,254
50-54		1	1		18	2	12	3	37
Avg Pay		$54,300	$50,232		$65,494	$66,240	$73,273	$81,028	$68,602
55-59					1		4	2	7
Avg Pay					$60,060		$76,710	$90,060	$78,146
60-64								3	3
Avg Pay								$83,540	$83,540
65-69			1						1
Avg Pay			$61,044						$61,044
70 & over		1		1					2
Avg Pay		$48,612		$60,204					$54,408
Totals	239	248	194	133	101	11	23	8	957
Avg Pay	$39,217	$45,370	$54,584	$61,589	$66,533	$68,911	$73,508	$84,228	$51,460

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October 31, 2008

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fifty-second annual actuarial valuation of the Kentucky Employees Retirement System, the forty-ninth annual actuarial valuation of the County Employees Retirement System, and the fiftieth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2008 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2009 and ending June 30, 2010.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) are established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

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Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30 year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension Fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.

.Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

The impact of HB1 passed into law in 2008 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2008 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	52.5%
KERS Hazardous Pension Fund	81.3%
CERS Non-Hazardous Pension Fund	78.5%
CERS Hazardous Pension Fund	72.9%
SPRS Pension Fund	59.8%

The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Recent employer contribution rate reductions under KERS and SPRS have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level. As of June 30, 2008 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	11.1%
KERS Hazardous Insurance Fund	53.2%
CERS Non-Hazardous Insurance Fund	32.6%
CERS Hazardous Insurance Fund	34.7%
SPRS Insurance Fund	27.9%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on January 19, 2006 based on the experience investigation report dated January 12, 2006, meet the parameters set for disclosure under GASB Statements No. 25 and 43. The health care cost trend assumptions were updated for the June 30, 2007 valuation adopted by the Board November 15, 2007. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in January 2011 and any adjustments will be reflected in the June 30, 2011 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,

Thomas J. Cavanaugh

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Summary of June 30, 2008 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2009-2010)					
Pension Fund Contribution	18.96%	11.98%	8.62%	16.11%	35.23%
Insurance Fund Contribution	20.49	23.56	12.29	27.25	56.89
Recommended Employer Contribution	39.45%	35.54%	20.91%	43.36%	92.12%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$10,129,689,985	$618,010,827	$7,304,217,691	$2,403,122,095	$587,129,257
Actuarial Value of Assets	5,318,792,893	502,132,214	5,731,502,438	1,750,867,373	350,891,451
Unfunded Actuarial Liability on Actuarial Value of Assets	4,810,897,092	115,878,613	1,572,715,253	652,254,722	236,237,806
Funding Level as a % of Actuarial Value of Assets	52.5%	81.3%	78.5%	72.9%	59.8%
Market Value of Assets	$5,056,867,294	$484,440,015	$5,431,735,605	$1,644,983,243	$337,358,918
Unfunded Actuarial Liability on Market Value of Assets	5,072,822,691	133,570,812	1,872,482,086	758,138,852	249,770,339
Funding Level on Market Value of Assets	49.9%	78.4%	74.4%	68.5%	57.5%
Insurance Fund					
Actuarially Accrued Liability	$5,431,499,285	$541,657,214	$3,583,193,466	$1,769,782,957	$445,107,468
Actuarial Value of Assets	603,197,761	288,161,759	1,168,883,170	613,526,319	123,961,197
Unfunded Actuarial Liability as a % of Actuarial Value of Assets	4,828,301,524	253,495,455	2,414,310,296	1,156,256,638	321,146,271
Funding Level as a % of Actuarial Value of Assets	11.1%	53.2%	32.6%	34.7%	27.9%
Market Value of Assets	$574,480,809	$269,299,859	$1,105,944,178	$576,414,457	$121,781,967
Unfunded Actuarial Liability as a % of Market Value of Assets	4,857,018,476	272,357,355	2,477,249,288	1,193,368,500	323,325,501
Funding Level on Market Value of Assets	10.6%	49.7%	30.9%	32.6%	27.4%
Member Data					
Number of Active Members	48,085	4,393	85,221	10,173	993
Total Annual Payroll (Active Members)	$1,837,873,488	$148,710,060	$2,166,612,648	$474,241,332	$53,269,080
Average Annual Pay (Active Members)	$38,221	$33,852	$25,423	$46,618	$53,645
Number of Retired Members & Beneficiaries	35,307	2,404	37,579	5,422	1,135
Average Annual Retirement Allowance	$20,124	$13,972	$10,478	$23,511	$36,382
Number of Vested Inactive Members	5,605	287	8,693	487	55

Additional Valuation Notes

In addition to the valuation results presented in the three reports that follow, certain calculations were made to round out the presentation and put the results in greater perspective. That information follows.

- Recent Contribution Shortfall – Although it has happened periodically in the past, there has been an ongoing contribution shortfall for KERS and SPRS since the 2002-2003 fiscal year. That shortfall has placed additional pressure on contribution rates, and that impact is compounding. The table below shows the recommended and budgeted contribution rates as a percent of payroll for KERS and SPRS over the last six fiscal years. The rates shown are the combined rates for retirement and insurance.

Fiscal Year	Recommended Rate	Budgeted Rate
	KERS Non-Hazardous	
2002-2003	5.89%	3.76%
2003-2004	7.53	5.89
2004-2005	10.29	5.89
2005-2006	13.62	5.89
2006-2007	17.13	7.75
2007-2008	34.23	8.50
	KERS Hazardous	
2002-2003	18.84%	17.60%
2003-2004	18.84	18.84
2004-2005	19.47	18.84
2005-2006	21.59	18.84
2006-2007	23.32	22.00
2007-2008	47.11	24.25
	SPRS	
2002-2003	21.58%	17.37%
2003-2004	21.58	21.58
2004-2005	28.08	21.58
2005-2006	34.83	21.58
2006-2007	42.30	25.50
2007-2008	72.00	28.00

Had the recommended contributions been made over this period of time, the contribution rates recommended as a result of the June 30, 2008 valuations would have been reduced by 2.51% of payroll for KERS Non-Hazardous, 1.63% for KERS Hazardous and 4.05% for SPRS.

- Market Value of Assets and COLA Liability Impact on Funding Ratio - The funding ratio for all the Plans is based on the actuarial liabilities and asset values computed for the purpose of meeting funding requirements on the basis required by state law. This basis does not take all actuarial liabilities and investment performance to date into account. If the Retirement and Insurance results were combined, if the market value instead of actuarial value of assets were used, and if a 1.5% annual cost-of-living adjustment for retirement benefits were assumed to be in effect for all future years, then the funding ratio for the combined Retirement and Insurance plans would be lower, as shown in the table below.

System	Reported Funding Ratio	Adjusted Funding Ratio
KERS Non-Hazardous	38.1%	33.2%
KERS Hazardous	68.1	60.3
CERS Non-Hazardous	63.4	55.1
CERS Hazardous	56.7	48.9
SPRS	46.0	41.0

- Impact of Blended Interest Rates on Insurance Valuations - The June 30, 2007 Insurance Plan valuations recognize the parameters required by GASB Statements No. 43 and 45. One of the parameters is that a blended interest rate must be used when the benefits are not being fully funded. This rate reflects the level of advanced funding that is occurring. Because of the contribution rate shortfall noted above, blended rates were required for KERS Non-Hazardous and SPRS. The rate used for the June 30, 2008 valuation is 4.50% for both KERS Non-Hazardous and SPRS. If KERS Non-Hazardous and SPRS were being fully funded, an interest rate of 7.75% would be used, reducing liabilities and therefore contribution rates. The impact on rates is shown in the table below.

Insurance Plan	"Blended" Contribution Rate	"Full Funding" Contribution Rate
KERS Non-Hazardous	20.49%	12.33%
SPRS	56.89	26.64

- Unrecognized Investment Gains and Losses - The actuarial value of assets is determined by smoothing market gains and losses over a five year period. This results in a difference between market value and actuarial value of assets on each valuation date representing the gains and losses that have yet to be recognized in the valuation. The total unrecognized investment gain as of June 30, 2008 for each of the plans is shown in the table below.

Plan	Unrecognized investment gains/(losses)	Actuarial value as a % of market value
	KERS Non-Hazardous	
Retirement	$(261,925,599)	105.2%
Insurance	(28,716,952)	105.0
	KERS Hazardous	
Retirement	$(17,692,199)	103.7%
Insurance	(18,861,900)	107.0
	CERS Non-Hazardous	
Retirement	$(299,766,833)	105.5%
Insurance	(62,938,992)	105.7
	CERS Hazardous	
Retirement	$(105,884,130)	106.4%
Insurance	(37,111,862)	106.4
	SPRS	
Retirement	$(13,532,533)	104.0%
Insurance	(2,179,230)	101.8

Report on the Annual Valuation of the Kentucky Employees Retirement System

Prepared as of June 30, 2008

November 21, 2008

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2009. The date of the valuation was June 30, 2008.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

TJC:kc

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REPORT ON THE ANNUAL VALUATION OF THE KENTUCKY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2008

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2008, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/2008	6/30/2007	6/30/2008	6/30/2007	6/30/2008	6/30/2007
Contributions for next fiscal year:						
Retirement	18.96%	16.54%	11.98%	10.84%		
Insurance	20.49	20.38	23.56	23.94	N/A	N/A
Total	39.45%	36.92%	35.54%	34.78%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$10,129,689,985	$9,485,939,277	$618,010,827	$558,992,329	$10,747,700,812	$10,044,931,606
Actuarial value of assets	5,318,792,893	5,396,782,459	502,132,214	467,287,809	5,820,925,107	5,864,070,268
Unfunded liability on actuarial value of assets	4,810,897,092	4,089,156,818	115,878,613	91,704,520	4,926,775,705	4,180,861,338
Funded ratio on actuarial value of assets	52.51%	56.89%	81.25%	83.59%	54.16%	58.38%
Market value of assets	$5,056,867,294	$5,773,156,838	$484,440,015	$510,775,499	$5,541,307,309	$6,283,932,337
Unfunded liability on market value of assets	5,072,822,691	3,712,782,439	133,570,812	48,216,830	5,206,393,504	3,760,999,269
Funded ratio on market value of assets	49.92%	60.86%	78.39%	91.37%	51.56%	62.56%
Insurance						
Actuarial accured liability	$5,431,499,285	$5,201,355,055	$541,657,214	$504,842,981	$5,973,156,499	$5,706,198,036
Actuarial value of assets	603,197,761	621,171,658	288,161,759	251,536,756	891,359,520	872,708,414
Unfunded liability on actuarial value of assets	4,828,301,524	4,580,183,397	253,495,455	253,306,225	5,081,796,979	4,833,489,622
Funded ratio on actuarial value of assets	11.11%	11.94%	53.20%	49.82%	14.92%	15.29%
Market value of assets	$574,480,809	$663,558,360	$269,299,859	$280,885,910	$843,780,668	$944,444,270
Unfunded liability on market value of assets	4,857,018,476	4,537,796,695	272,357,355	223,957,071	5,129,375,831	4,761,753,766
Funded ratio on market value of assets	10.58%	12.76%	49.72%	55.64%	14.13%	16.55%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	35,307	33,849	2,404	2,202	37,711	36,051
Number of vested former members	5,605	5,298	287	278	5,892	5,576
Number of former members due a refund	27,597	25,606	2,640	2,460	30,237	28,066
Number of active members	48,085	47,913	4,393	4,349	52,478	52,262
Total salary	$1,837,873,488	$1,780,223,493	$148,710,060	$144,838,020	$1,986,583,548	$1,925,061,513
Average salary	38,221	37,155	33,852	33,304	37,856	36,835

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, coverage options for pre-65 members have changed. There are three coverage options from which retirees and beneficiaries may choose for Plan Year 2009. Two of the options are new and a third has a new name. The new rates for 2009 can be found in Schedule C. The options for 2009 are summarized below.

    - Commonwealth Optimum PPO is a new plan which combines the Commonwealth Enhanced and Commonwealth Premier plans of Plan Year 2008 into one plan.
    - Commonwealth Capitol Choice is a new plan offering for Plan Year 2009.
    - Commonwealth Standard PPO is the new name for the Commonwealth Essential plan of Plan Year 2008. The benefits on this plan remain unchanged for Plan Year 2009.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2007 and June 30, 2008 is 4.50% for KERS Non-Hazardous and 7.75% for KERS Hazardous. The lower rate for KERS Non-Hazardous is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2008 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	48,085	$1,837,873,488	$38,221	43.2	9.1
Hazardous	4,393	148,710,060	33,852	41.4	6.9
Total in KERS	52,478	$1,986,583,548	$37,856	43.1	8.9

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2003	49,158	$1,658,604,696	$33,740	2.6%
6/30/2004	47,599	1,645,412,496	34,568	2.5
6/30/2005	47,118	1,655,907,288	35,144	1.7
6/30/2006	46,707	1,702,230,777	36,445	3.7
6/30/2007	47,913	1,780,223,493	37,155	1.9
6/30/2008	48,085	1,837,873,488	38,221	2.9

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2003	4,189	$129,088,956	$30,816	3.5%
6/30/2004	4,014	126,664,812	31,556	2.4
6/30/2005	4,274	131,687,088	30,811	(2.4)
6/30/2006	4,320	138,747,320	32,117	4.2
6/30/2007	4,349	144,838,020	33,304	3.7
6/30/2008	4,393	148,710,060	33,852	1.6

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	29,645	$647,783,384	$21,851	66.1
Disability	1,880	21,337,353	11,350	63.1
Beneficiary	3,782	41,384,533	10,942	70.1
Total in KERS	35,307	$710,505,270	$20,124	66.4

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	2,055	$30,873,038	$15,023	61.5
Disability	122	935,920	7,671	57.2
Beneficiary	227	1,780,035	7,842	59.6
Total in KERS	2,404	$33,588,993	$13,972	61.1

This valuation also includes 36,129 inactive members (33,202 Non-Hazardous and 2,927 Hazardous; of which 5,605 Non-Hazardous are vested and 287 Hazardous are vested.)

SECTION III – ASSETS

1. As of June 30, 2008 the total market value of assets amounted to $6,385,087,977 as shown in the following table.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2008

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	$5,056,867,294	$574,480,809	$5,631,348,103
Hazardous	484,440,015	269,299,859	753,739,874
Total	$5,541,307,309	$843,780,668	$6,385,087,977

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $6,712,284,627 . Schedule B shows the development of the actuarial value of assets as of June 30, 2008. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	June 30, 2008	June 30, 2007
Retirement		
Non-Hazardous	$ 5,318,792,893	$ 5,396,782,459
Hazardous	502,132,214	467,287,809
Total	$ 5,820,925,107	$ 5,864,070,268
Insurance		
Non-Hazardous	$ 603,197,761	$ 621,171,658
Hazardous	288,161,759	251,536,756
Total	$ 891,359,520	$ 872,708,414
KERS Total		
Non-Hazardous	$ 5,921,990,654	$ 6,017,954,117
Hazardous	790,293,973	718,824,565
Total	$ 6,712,284,627	$ 6,736,778,682

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2008. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $12,268,599,377, of which $7,337,998,938 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $180,269,639 is for the prospective benefits payable on account of present inactive members, and $4,750,330,800 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $5,820,925,107 as of June 30, 2008. The difference of $6,447,674,270 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $879,861,003 is the present value of future contributions expected to be made by members, and the balance of $5,567,813,267 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.55% of payroll for non-hazardous members and 7.07% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $641,037,562. When this amount is subtracted from $5,567,813,267, which is the present value of the total future contributions to be made by the employers, there remains $4,926,775,705 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 14.99% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 4.46% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $4,810,897,092 for non-hazardous members and $115,878,613 for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.

5. The contribution rate for administrative expenses is determined to be 0.42% of payroll for non-hazardous members and 0.45% of payroll for hazardous members.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $7,741,550,212, of which $2,668,463,744 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $348,560,950 is for the prospective benefits payable on account of present inactive members, and $4,724,525,518 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $891,359,520 as of June 30, 2008. The difference of $6,850,190,692 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $0 is the present value of future contributions expected to be made by members, and the balance of $6,850,190,692 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 9.97% of payroll for non-hazardous members and 13.74% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,768,393,713. When this amount is subtracted from $6,850,190,692, which is the present value of the total future contributions to be made by the employers, there remains $5,081,796,979 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 10.33% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 9.76% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $4,828,301,524 for non-hazardous members and $253,495,455 for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.19% of payroll for non-hazardous members and 0.06% of payroll for hazardous members.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2008 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/07	$ 4,089.2	$ 91.7	$ 4,180.9
(2)	Normal cost from last valuation	64.4	10.5	74.9
(3)	Expected employer contributions	294.5	15.7	310.2
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	299.1	6.7	305.8
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 4,158.2	$ 93.2	$ 4,251.4
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 4,158.2	$ 93.2	$ 4,251.4
(9)	Actual UAAL as of 6/30/08	$ 4,810.9	$ 115.9	$ 4,926.8
(10)	Gain/(loss): (8) - (9)	$ (652.7)	$ (22.7)	$ (675.4)
(11)	Accrued liabilities as of 6/30/07	$ 9,485.9	$ 559.0	$ 10,044.9
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(6.9%)	(4.1%)	(6.7%)

*Unfunded actuarial accrued liability.

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/07	$ 4,580.2	$ 253.3	$ 4,833.5
(2)	Normal cost from last valuation	184.6	20.3	204.9
(3)	Expected employer contributions	359.5	34.6	394.1
(4)	Interest accrual: Non-Haz: [(1) + (2) - (3)] x .045 Haz: [(1) + (2) - (3)] x .0775	198.2	18.5	216.7
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 4,603.5	$ 257.5	$ 4,861.0
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 4,603.5	$ 257.5	$ 4,861.0
(9)	Actual UAAL as of 6/30/08	$ 4,828.3	$ 253.5	$ 5,081.8
(10)	Gain/(loss): (8) - (9)	$ (224.8)	$ 4.0	$ (220.8)
(11)	Accrued liabilities as of 6/30/07	$ 5,201.4	$ 504.8	$ 5,706.2
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(4.3%)	0.8%	(3.9%)

*Unfunded actuarial accrued liability.

NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/08	Insurance $ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (265.6)	$ (89.0)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.9	6.0
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	1.9	(3.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	71.1	34.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(21.3)	202.2
New Members. Additional unfunded accrued liability will produce a loss.	(14.1)	(28.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(11.5)	3.4
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	99.5	114.7
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(513.6)	(464.5)
Gain (or Loss) During Year From Financial Experience	$ (652.7)	$ (224.8)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	0.0
Composite Gain (or Loss) During Year	$ (652.7)	$ (224.8)

HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/08	Insurance $ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (21.0)	$ (13.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.6	1.3
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.5	0.4
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	11.5	12.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(0.1)	21.2
New Members. Additional unfunded accrued liability will produce a loss.	(2.5)	(4.4)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	1.1	0.2
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	2.0	8.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(14.8)	(22.6)
Gain (or Loss) During Year From Financial Experience	$ (22.7)	$ 4.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	0.0
Composite Gain (or Loss) During Year	$ (22.7)	$ 4.0

TOTAL KERS MEMBERS

ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/08	Insurance $ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (286.6)	$ (102.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	1.5	7.3
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	2.4	(2.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	82.6	47.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(21.4)	223.4
New Members. Additional unfunded accrued liability will produce a loss.	(16.6)	(33.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(10.4)	3.6
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	101.5	123.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(528.4)	(487.1)
Gain (or Loss) During Year From Financial Experience	$ (675.4)	$ (220.8)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	0.0
Composite Gain (or Loss) During Year	$ (675.4)	$ (220.8)

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2009/2010 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	136,370,213	7.42%
(2) Disability benefits		16,357,074	0.89
(3) Survivor benefits		4,410,896	0.24
(4) Total	$	157,138,183	8.55%
B. Member Contributions	$	91,893,674	5.00%
C. Employer Normal Cost: [A(4) - B]	$	65,244,509	3.55%
D. Administrative Expenses	$	7,723,852	0.42%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/07 Valuation:	$	230,089,252	12.92%
(2) Change due to:			
a. Active decrements	$	10,978,948	0.60%
b. Pay increases		1,221,410	0.07
c. Retiree mortality		(5,697,771)	(0.31)
d. Investment return		660,338	0.04
e. COLA		14,024,484	0.76
f. Assumption Change		0	0.00
g. Other		24,249,657	1.31
h. Total Change	$	45,437,065	2.07%
(3) UAAL Contribution Based on 6/30/08 Valuation: [E(1) +E(2)h]	$	275,526,317	14.99%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	348,494,678	18.96%

*Based on 30 year amortization of the UAAL from June 30, 2007 and 29 years from June 30, 2008

Required Contribution Rates
Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	18,930,791	12.73%
	(2) Disability benefits		2,483,458	1.67
	(3) Survivor benefits		996,357	0.67
	(4) Total	$	22,410,606	15.07%
B.	Member Contributions	$	11,896,805	8.00%
C.	Employer Normal Cost: [A(4) - B]	$	10,513,801	7.07%
D.	Administrative Expenses	$	664,311	0.45%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/07 Valuation:	$	5,160,043	3.56%
	(2) Change due to:			
	a. Active decrements	$	481,388	0.32%
	b. Pay increases		3,660	0.00
	c. Retiree mortality		(113,858)	(0.08)
	d. Investment return		(65,426)	(0.04)
	e. COLA		706,932	0.48
	f. Assumption Change		0	0.00
	g. Other		463,780	0.30
	h. Total Change	$	1,476,476	0.90%
	(3) UAAL Contribution Based on 6/30/08 Valuation: [E(1) +E(2)h]	$	6,636,518	4.46%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	17,814,630	11.98%

* Based on 30 year amortization of the UAAL from June 30, 2007 and 29 years from June 30, 2008

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	183,199,470	9.97%
B.	Member Contributions*	$	0	0.00%
C.	Employer Normal Cost: [A - B]	$	183,199,470	9.97%
D.	Administrative Expenses	$	3,487,268	0.19%
E.	Unfunded Actuarial Accrued Liability**:	$	189,869,449	10.33%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	376,556,187	20.49%

*The liabilities are net of retiree contributions towards their healthcare
** Based on 29 year amortization of the UAAL from June 30, 2008

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	20,431,843	13.74%
B.	Member Contributions*	$	0	0.00%
C.	Employer Normal Cost: [A - B]	$	20,431,843	13.74%
D.	Administrative Expenses	$	95,421	0.06%
E.	Unfunded Actuarial Accrued Liability**:	$	14,518,014	9.76%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	35,045,278	23.56%

*The liabilities are net of retiree contributions towards their healthcare
** Based on 29 year amortization of the UAAL from June 30, 2008

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2008

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	35,307	2,404	37,711
Terminated employees entitled to benefits but not yet receiving benefits	33,202	2,927	36,129
Active Members	48,085	4,393	52,478
Total	116,594	9,724	126,318

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2003	$ 6,351,318,832	$ 6,520,463,188	$ 169,144,356	97.4%	$ 1,658,604,696	10.2%
6/30/2004	6,000,513,743	7,049,613,171	1,049,099,428	85.1	1,645,412,496	63.8
6/30/2005	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
6/30/2006	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
6/30/2007	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
6/30/2008	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
Hazardous Members						
6/30/2003	$ 385,925,722	$ 356,879,133	$ (29,046,589)	108.1%	$ 129,088,956	(22.5%)
6/30/2004	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
6/30/2005	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
6/30/2006	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
6/30/2007	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
6/30/2008	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
Total KERS Members						
6/30/2003	$ 6,737,244,554	$ 6,877,342,321	$ 140,097,767	98.0%	$ 1,787,693,652	7.8%
6/30/2004	6,397,726,506	7,453,191,207	1,055,464,701	85.8	1,772,077,308	59.6
6/30/2005	5,983,974,408	8,018,069,096	2,034,094,688	74.6	1,787,594,376	113.8
6/30/2006	5,822,070,515	9,503,482,150	3,681,411,635	61.3	1,840,978,097	200.0
6/30/2007	5,864,070,268	10,044,931,606	4,180,861,338	58.4	1,925,061,513	217.2
6/30/2008	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0

INSURANCE BENEFITS

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2003	$ 553,885,082	$ 2,093,210,321	$ 1,539,325,239	26.5%	$ 1,658,604,696	92.8%
6/30/2004	600,586,961	2,335,905,365	1,735,318,404	25.7	1,645,412,496	105.5
6/30/2005	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
6/30/2006	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
6/30/2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
6/30/2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
Hazardous Members						
6/30/2003	$ 151,459,500	$ 283,178,335	$ 131,718,835	53.5%	$ 129,088,956	102.0%
6/30/2004	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
6/30/2005	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
6/30/2006	212,833,318	621,237,856	408,404,538	34.3	138,747,320	294.4
6/30/2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
6/30/2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
Total KERS Members						
6/30/2003	$ 705,344,582	$ 2,376,388,656	$ 1,671,044,074	29.7%	$ 1,787,693,652	93.5%
6/30/2004	769,745,840	2,659,408,928	1,889,663,088	28.9	1,772,077,308	106.6
6/30/2005	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
6/30/2006	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,978,097	413.5
6/30/2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
6/30/2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2008. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2008	6/30/2008
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases*	4.0% - 13.5%	4.0% - 14.5%
Cost-of-living adjustment	None	None
*Includes inflation at	3.50%	3.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2008	6/30/2008
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Medical Trend Assumption	11.0% - 5.0%	11.0% - 5.0%
Year Ultimate Trend	2015	2015
Actuarial assumptions:		
Investment rate of return*	4.50%	7.75%
*Includes inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2008 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2007. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 5,318,792,893	$ 5,396,782,459
Prospective contributions		
Member contributions	$ 781,785,019	$ 749,698,617
Employer normal contributions	554,332,337	482,231,015
Unfunded accrued liability contributions	4,810,897,092	4,089,156,818
Total prospective contributions	$ 6,147,014,448	$ 5,321,086,450
Total assets	$ 11,465,807,341	$ 10,717,868,909
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 6,997,568,860	$ 6,310,580,255
Present value of benefits payable on account of active members	4,303,310,641	4,280,633,316
Present value of benefits payable on account of inactive members	164,927,840	126,655,338
Total liabilities	$ 11,465,807,341	$ 10,717,868,909

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 502,132,214	$ 467,287,809
Prospective contributions		
Member contributions	$ 98,075,984	$ 99,593,387
Employer normal contributions	86,705,225	85,380,476
Unfunded accrued liability contributions	115,878,613	91,704,520
Total prospective contributions	$ 300,659,822	$ 276,678,383
Total assets	$ 802,792,036	$ 743,966,192
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 340,430,078	$ 290,866,419
Present value of benefits payable on account of active members	447,020,159	437,473,842
Present value of benefits payable on account of inactive members	15,341,799	15,625,931
Total liabilities	$ 802,792,036	$ 743,966,192

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 5,820,925,107	$ 5,864,070,268
Prospective contributions		
Member contributions	$ 879,861,003	$ 849,292,004
Employer normal contributions	641,037,562	567,611,491
Unfunded accrued liability contributions	4,926,775,705	4,180,861,338
Total prospective contributions	$ 6,447,674,270	$ 5,597,764,833
Total assets	$ 12,268,599,377	$ 11,461,835,101
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 7,337,998,938	$ 6,601,446,674
Present value of benefits payable on account of active members	4,750,330,800	4,718,107,158
Present value of benefits payable on account of inactive members	180,269,639	142,281,269
Total liabilities	$ 12,268,599,377	$ 11,461,835,101

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 603,197,761	$ 621,171,658
Prospective contributions		
Normal contributions	$ 1,628,379,162	$ 1,649,460,524
Unfunded accrued liability contributions	4,828,301,524	4,580,183,397
Total prospective contributions	$ 6,456,680,686	$ 6,229,643,921
Total assets	$ 7,059,878,447	$ 6,850,815,579
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,456,368,401	$ 2,292,824,569
Present value of benefits payable on account of active members	4,271,688,693	4,281,618,012
Present value of benefits payable on account of inactive members	331,821,353	276,372,998
Total liabilities	$ 7,059,878,447	$ 6,850,815,579

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 288,161,759	$ 251,536,756
Prospective contributions		
Normal contributions	$ 140,014,551	$ 144,387,789
Unfunded accrued liability contributions	253,495,455	253,306,225
Total prospective contributions	$ 393,510,006	$ 397,694,014
Total assets	$ 681,671,765	$ 649,230,770
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 212,095,343	$ 187,093,153
Present value of benefits payable on account of active members	452,836,825	448,041,224
Present value of benefits payable on account of inactive members	16,739,597	14,096,393
Total liabilities	$ 681,671,765	$ 649,230,770

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 891,359,520	$ 872,708,414
Prospective contributions		
Normal contributions	$ 1,768,393,713	$ 1,793,848,313
Unfunded accrued liability contributions	5,081,796,979	4,833,489,622
Total prospective contributions	$ 6,850,190,692	$ 6,627,337,935
Total assets	$ 7,741,550,212	$ 7,500,046,349
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,668,463,744	$ 2,479,917,722
Present value of benefits payable on account of active members	4,724,525,518	4,729,659,236
Present value of benefits payable on account of inactive members	348,560,950	290,469,391
Total liabilities	$ 7,741,550,212	$ 7,500,046,349

The following tables provide the solvency test for non-hazardous and hazardous KERS members.

Solvency Test
Retirement Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2003*	$ 859,895,312	$ 3,844,696,149	$ 1,815,871,727	$ 6,351,318,832	100.0%	100.0%	90.7%
6/30/2004*	915,105,103	4,452,864,748	1,681,643,320	6,000,513,743	100.0	100.0	37.6
6/30/2005*	866,044,474	5,056,247,608	1,656,782,757	5,578,685,746	100.0	93.2	0.0
6/30/2006	866,050,799	5,881,990,853	2,246,784,595	5,394,086,323	100.0	77.0	0.0
6/30/2007	878,842,180	6,437,235,593	2,169,861,504	5,396,782,459	100.0	70.2	0.0
6/30/2008	875,178,069	7,162,496,700	2,092,015,217	5,318,792,893	100.0	62.0	0.0

*Reported by prior actuarial firm.

Solvency Test
Retirement Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2003*	$ 71,414,721	$ 135,622,333	$ 149,842,079	$ 385,925,722	100.0%	100.0%	119.4%
6/30/2004*	78,817,575	175,102,848	149,657,613	397,212,763	100.0	100.0	95.7
6/30/2005*	75,098,321	213,310,550	150,585,386	405,288,662	100.0	100.0	77.6
6/30/2006	87,092,538	262,446,606	159,116,759	427,984,192	100.0	100.0	49.3
6/30/2007	88,670,847	306,492,350	163,829,132	467,287,809	100.0	100.0	44.0
6/30/2008	89,590,638	355,771,877	172,648,312	502,132,214	100.0	100.0	32.9

*Reported by prior actuarial firm.

Solvency Test
Insurance Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2003*	$ 0	$ 1,089,606,122	$ 1,003,604,199	$ 553,885,082	100.0%	50.8%	0.0%
6/30/2004*	0	1,282,214,660	1,053,690,705	600,586,961	100.0	46.8	0.0
6/30/2005*	0	1,550,619,458	1,129,939,730	607,068,351	100.0	39.2	0.0
6/30/2006	0	3,543,125,375	4,272,355,400	611,350,765	100.0	17.3	0.0
6/30/2007	0	2,569,197,567	2,632,157,488	621,171,658	100.0	24.2	0.0
6/30/2008	0	2,788,189,754	2,643,309,531	603,197,761	100.0	21.6	0.0

*Reported by prior actuarial firm.

Solvency Test
Insurance Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2003*	$ 0	$ 113,979,451	$ 169,198,884	$ 151,459,500	100.0%	100.0%	22.2%
6/30/2004*	0	142,872,557	180,631,006	169,158,879	100.0	100.0	14.6
6/30/2005*	0	187,883,650	198,961,045	187,947,644	100.0	100.0	0.0
6/30/2006	0	234,058,715	387,179,141	212,833,318	100.0	90.9	0.0
6/30/2007	0	201,189,546	303,653,435	251,536,756	100.0	100.0	16.6
6/30/2008	0	228,834,940	312,822,274	288,161,759	100.0	100.0	19.0

*Reported by prior actuarial firm.

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2007	2008	2009	2010	2011	2012
A.	Actuarial Value Beginning of Year	$ 5,394,086,323	$ 5,396,782,459				
B.	Market Value End of Year	5,773,156,838	5,056,867,294				
C.	Market Value Beginning of Year	5,440,132,708	5,773,156,838				
D.	Cash Flow						
	D1. Contributions	204,502,532	221,142,527				
	D2. Benefit Payments	(649,690,416)	(708,127,920)				
	D3. Administrative Expenses	(7,082,562)	(7,723,852)				
	D4. Investment Expenses	(4,842,834)	(5,200,312)				
	D5. Net	(457,113,280)	(499,909,557)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	790,137,410	(216,379,987)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	408,927,639	433,449,984				
	E4. Amount for Phased-In Recognition	381,209,771	(649,829,971)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	76,241,954	(129,965,994)	0	0	0	0
	F2. First Prior Year	15,910,299	76,241,954	(129,965,994)	0	0	0
	F3. Second Prior Year	(2,608,084)	15,910,299	76,241,954	(129,965,994)	0	0
	F4. Third Prior Year	28,891,832	(2,608,084)	15,910,299	76,241,954	(129,965,994)	0
	F5. Fourth Prior Year	(67,554,224)	28,891,832	(2,608,084)	15,910,299	76,241,954	(129,965,994)
	F6. Total Recognized Investment Gain	50,881,777	(11,529,993)	(40,421,825)	(37,813,741)	(53,724,040)	(129,965,994)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 5,396,782,459	$ 5,318,792,893				
H.	Difference Between Market & Actuarial Values	$ 376,374,379	$ (261,925,599)	$ (221,503,774)	$ (183,690,033)	$ (129,965,994)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2007	2008	2009	2010	2011	2012
A.	Actuarial Value Beginning of Year	$ 427,984,192	$ 467,287,809				
B.	Market Value End of Year	510,775,499	484,440,015				
C.	Market Value Beginning of Year	437,029,583	510,775,499				
D.	Cash Flow						
	D1. Contributions	26,482,004	28,348,194				
	D2. Benefit Payments	(30,176,113)	(33,347,504)				
	D3. Administrative Expenses	(612,323)	(664,311)				
	D4. Investment Expenses	(455,686)	(460,314)				
	D5. Net	(4,762,118)	(6,123,935)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	78,508,034	(20,211,549)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	34,158,604	39,825,950				
	E4. Amount for Phased-In Recognition	44,349,430	(60,037,499)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	8,869,886	(12,007,500)	0	0	0	0
	F2. First Prior Year	1,788,273	8,869,886	(12,007,500)	0	0	0
	F3. Second Prior Year	151,597	1,788,273	8,869,886	(12,007,500)	0	0
	F4. Third Prior Year	2,340,134	151,597	1,788,273	8,869,886	(12,007,500)	0
	F5. Fourth Prior Year	(3,242,759)	2,340,134	151,597	1,788,273	8,869,886	(12,007,500)
	F6. Total Recognized Investment Gain	9,907,131	1,142,390	(1,197,744)	(1,349,341)	(3,137,614)	(12,007,500)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 467,287,809	$ 502,132,214				
H.	Difference Between Market & Actuarial Values	$ 43,487,690	$ (17,692,199)	$ (16,494,455)	$ (15,145,114)	$ (12,007,500)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2007	2008	2009	2010	2011	2012
A.	Actuarial Value Beginning of Year	$ 611,350,765	$ 621,171,658				
B.	Market Value End of Year	663,558,360	574,480,809				
C.	Market Value Beginning of Year	632,642,846	663,558,360				
D.	Cash Flow						
	D1. Contributions	86,954,395	76,318,407				
	D2. Benefit Payments	(111,659,052)	(122,946,356)				
	D3. Administrative Expenses	(3,199,131)	(3,487,268)				
	D4. Investment Expenses	(366,841)	(391,063)				
	D5. Net	(28,270,629)	(50,506,280)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	59,186,143	(38,571,271)				
	E2. Assumed Rate	4.50%	4.50%				
	E3. Amount for Immediate Recognition	28,207,934	29,123,597				
	E4. Amount for Phased-In Recognition	30,978,209	(67,694,868)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	6,195,642	(13,538,974)	0	0	0	0
	F2. First Prior Year	3,451,674	6,195,642	(13,538,974)	0	0	0
	F3. Second Prior Year	(51,332)	3,451,674	6,195,642	(13,538,974)	0	0
	F4. Third Prior Year	7,351,776	(51,332)	3,451,674	6,195,642	(13,538,974)	0
	F5. Fourth Prior Year	(7,064,172)	7,351,776	(51,332)	3,451,674	6,195,642	(13,538,972)
	F6. Total Recognized Investment Gain	9,883,588	3,408,786	(3,942,990)	(3,891,658)	(7,343,332)	(13,538,972)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 621,171,658	$ 603,197,761				
H.	Difference Between Market & Actuarial Values	$ 42,386,702	$ (28,716,952)	$ (24,773,962)	$ (20,882,304)	$ (13,538,972)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2007	2008	2009	2010	2011	2012
A.	Actuarial Value Beginning of Year	$ 212,833,318	$ 251,536,756				
B.	Market Value End of Year	280,885,910	269,299,859				
C.	Market Value Beginning of Year	223,523,081	280,885,910				
D.	Cash Flow						
	D1. Contributions	19,843,444	22,318,658				
	D2. Benefit Payments	(6,873,207)	(8,069,143)				
	D3. Administrative Expenses	(83,560)	(95,421)				
	D4. Investment Expenses	(201,690)	(186,674)				
	D5. Net	12,684,987	13,967,420				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	44,677,842	(25,553,471)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	18,024,088	22,503,803				
	E4. Amount for Phased-In Recognition	26,653,754	(48,057,274)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	5,330,751	(9,611,455)	0	0	0	0
	F2. First Prior Year	1,622,467	5,330,751	(9,611,455)	0	0	0
	F3. Second Prior Year	346,732	1,622,467	5,330,751	(9,611,455)	0	0
	F4. Third Prior Year	2,465,285	346,732	1,622,467	5,330,751	(9,611,455)	0
	F5. Fourth Prior Year	(1,770,872)	2,465,285	346,732	1,622,467	5,330,751	(9,611,455)
	F6. Total Recognized Investment Gain	7,994,363	153,780	(2,311,505)	(2,658,237)	(4,280,704)	(9,611,455)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 251,536,756	$ 288,161,759				
H.	Difference Between Market & Actuarial Values	$ 29,349,154	$ (18,861,900)	$ (16,550,395)	$ (13,892,158)	$ (9,611,455)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006, with the exception of the health care cost trend rate which was adopted by the Board on November 15, 2007.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for KERS non-hazardous is 4.50% and for KERS hazardous is 7.75%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 3.50% per annum:

Service	Annual Rates of Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	10.0%	11.0%	3.5%	13.5%	14.5%
1-2	3.5	4.0	3.5	7.0	7.5
2-3	2.0	3.5	3.5	5.5	7.0
3-4	1.5	3.0	3.5	5.0	6.5
4-5	1.5	2.5	3.5	5.0	6.0
5-6	1.0	2.0	3.5	4.5	5.5
6-7	1.0	1.5	3.5	4.5	5.0
7-8	1.0	1.5	3.5	4.5	5.0
8-9	0.5	1.0	3.5	4.0	4.5
9-10	0.5	1.0	3.5	4.0	4.5
10 & over	0.5	0.5	3.5	4.0	4.0

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement**
		Male	Female		
20	6.00%	0.05%	0.03%	0.05%	
25	5.40	0.07	0.03	0.07	
30	4.80	0.08	0.04	0.09	
35	3.60	0.09	0.05	0.13	
40	2.66	0.11	0.07	0.20	
45	1.98	0.16	0.10	0.33	
50	1.92	0.26	0.14	0.56	
55	1.08	0.44	0.23	0.92	8.0%
60	0.75	0.80	0.44	1.46	10.0
65		1.45	0.86		25.0
70		2.37	1.37		25.0
75					100.0

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.

** If service is at least 27 years, the rate is 25%. All rates are doubled during the window period expiring January 1, 2009, for those eligible for enhanced benefits.

Hazardous Members

Age	Withdrawal and Vesting*	Death**			Service Retirement***	
		Male	Female	Disability	Service	Rate
20	6.00%	0.05%	0.03%	0.07%	20	20.0%
25	5.40	0.07	0.03	0.09	25	20.0
30	4.80	0.08	0.04	0.12	30	35.0
35	3.60	0.09	0.05	0.17	35	60.0
40	2.66	0.11	0.07	0.27		
45	1.98	0.16	0.10	0.44		
50	1.92	0.26	0.14	0.75		
55	1.08	0.44	0.23	1.23		
60	0.75	0.80	0.44	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.

** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.

*** The annual rate of service retirement is 100% at age 65.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Fiscal Year Ended	Trend
2009	11.0%
2010	10.0
2011	9.0
2012	8.0
2013	7.0
2014	6.0
2015 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	90%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2008	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$ 617.12	$ 947.44	$ 1,056.56
Enhanced	$ 484.24	$ 742.74	$ 1,137.18	$ 1,267.40
Premier	$ 501.20	$ 772.06	$ 1,175.32	$ 1,309.76
Select	$ 469.00	$ 703.50	$ 989.18	$ 1,128.48

2009	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 446.24	$ 690.00	$ 1,044.48	$ 1,162.16
Optimum PPO	$ 566.20	$ 821.46	$ 1,265.10	$ 1,407.32
Capitol Choice	$ 545.08	$ 826.38	$ 1,249.74	$ 1,383.52

MEDICARE ELIGIBLE

Effective January 1, 2009 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 162.48	$ 162.00
Kentucky Retirement System Health Plan - PLUS	$ 203.05	$ 267.00
Kentucky Retirement System Health Plan - PREMIUM	$ 363.18	$ 338.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2008 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

UNUSED SICK LEAVE: It is assumed that a member will be granted one-half year of service credit for unused sick leave at termination of employment.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Non-Hazardous Normal Retirement:	
Age Requirement	65
Service Requirement	None
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For these members who retire between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%. Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period are less than forty-eight, one or more additional fiscal years shall be used. For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.
Hazardous Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.49% times final average compensation times years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Early Retirement:

Requirement	Age 55 with 60 months of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Hazardous Early Retirement:

Requirement	Age 50 with 15 years of service or any age with 20 years of service.
Amount	Normal retirement benefit reduced by 5.5% for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months of service or age 65 with 48 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System. For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.
Members whose participation began on or after July 1, 2003	The Retirement System pays $11.96 per month per year of service toward medical premiums for non-hazardous retirees, $17.94 per month per year of service for hazardous retirees, and $17.94 per month per year of service for surviving spouses of hazardous employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of hazardous service. These amounts are shown as of the valuation date and are indexed annually based on the CPI.

Member Contributions:

Non-hazardous Members	5% of salary.
Hazardous Members	8% of salary.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2003*	2004*	2005*	2006	2007	2008
			Number			
Beginning of Year	26,703	27,233	28,892	30,770	32,140	33,849
Added	2,148	2,473	2,481	2,481	2,440	2,573
Removed	1,618	814	603	1,111	731	1,115
End of Year	27,233	28,892	30,770	32,140	33,849	35,307
			Annual Allowances			
Beginning of Year	N/A	$ 393,048,800	$ 449,410,400	$ 509,347,800	$ 566,167,003	$ 625,435,416
Added	48,272,600	57,329,301	56,489,600	65,942,585	65,965,990	102,305,405
Removed	13,060,300	6,092,500	5,298,200	9,123,382	6,697,577	17,235,551
End of Year	$ 393,048,800	$ 449,410,400	$ 509,347,800	$ 566,167,003	$ 625,435,416	$ 710,505,270
% Increase in Allowances	N/A	14.34%	13.34%	11.31%	10.47%	13.60%
Average Annual Allowance	$ 14,433	$ 15,555	$ 16,553	$ 17,611	$ 18,477	$ 20,124

*Reported by prior actuarial firm.

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2003*	2004*	2005*	2006	2007	2008
			Number			
Beginning of Year	1,208	1,357	1,549	1,752	1,980	2,202
Added	170	227	234	256	241	261
Removed	21	35	31	28	19	59
End of Year	1,357	1,549	1,752	1,980	2,202	2,404
			Annual Allowances			
Beginning of Year	N/A	$ 12,974,700	$ 16,099,000	$ 19,640,700	$ 23,381,537	$ 27,528,789
Added	2,333,400	3,070,600	3,415,500	3,929,666	4,509,381	6,565,454
Removed	130,400	155,000	191,000	188,829	362,129	505,250
End of Year	$ 12,974,700	$ 16,099,000	$ 19,640,700	$ 23,381,537	$ 27,528,789	$ 33,588,993
% Increase in Allowances	N/A	24.08%	22.00%	19.25%	17.74%	22.01%
Average Annual Allowance	$ 9,561	$ 10,393	$ 11,210	$ 11,809	$ 12,502	$ 13,972

*Reported by prior actuarial firm.

Non-Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,007	$ 5,302,838.72	8,358	$ 11,647,759.62	11,365	$ 16,950,598.34
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,756	2,984,285.86	693	773,895.77	2,449	3,758,181.63
66-2/3% to Beneficiary	793	2,071,695.41	351	715,664.13	1,144	2,787,359.54
50% to Beneficiary	1,061	2,535,252.94	1,079	2,137,737.42	2,140	4,672,990.36
Pop-up Option	3,158	7,437,943.85	2,435	4,708,142.77	5,593	12,146,086.62
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	943	1,451,094.77	1,785	2,477,136.47	2,728	3,928,231.24
Social Security Option						
Age 62 Basic	421	1,298,736.21	979	2,129,846.11	1,400	3,428,582.32
Age 62 Survivorship	890	2,353,480.65	565	1,342,452.88	1,455	3,695,933.53
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	1	1,796.23	0	0.00	1	1,796.23
15 Years Certain & Life	379	584,590.85	451	671,021.37	830	1,255,612.22
20 Years Certain & Life	367	767,713.06	407	666,587.87	774	1,434,300.93
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	71	94,948.52	251	333,388.31	322	428,336.83
PLSO 24 Month Basic	30	32,798.08	133	138,837.31	163	171,635.39
PLSO 36 Month Basic	141	105,779.34	347	221,734.35	488	327,513.69
PLSO 12 Month Survivor	95	169,486.62	74	115,383.60	169	284,870.22
PLSO 24 Month Survivor	84	108,257.90	71	94,328.82	155	202,586.72
PLSO 36 Month Survivor	220	194,627.06	129	90,818.53	349	285,445.59
Total	13,417	$ 27,495,326.07	18,108	$ 28,264,735.33	31,525	$ 55,760,061.40

Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	309	$ 334,316.10	232	$ 213,783.46	541	$ 548,099.56
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	173	189,884.43	13	11,886.52	186	201,770.95
66-2/3% to Beneficiary	64	77,792.45	11	13,061.73	75	90,854.18
50% to Beneficiary	112	160,322.34	24	34,525.58	136	194,847.92
Pop-up Option	474	631,816.04	88	103,560.69	562	735,376.73
10 Years Certain	19	27,564.84	5	5,463.77	24	33,028.61
10 Years Certain & Life	87	80,904.53	38	28,837.43	125	109,741.96
Social Security Option						
Age 62 Basic	48	85,953.16	27	43,421.49	75	129,374.65
Age 62 Survivorship	110	239,983.23	15	20,873.12	125	260,856.35
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	40	47,897.78	10	9,760.66	50	57,658.44
20 Years Certain & Life	42	44,928.39	15	23,359.93	57	68,288.32
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	14	14,384.73	12	10,568.83	26	24,953.56
PLSO 24 Month Basic	15	15,945.74	9	6,452.14	24	22,397.88
PLSO 36 Month Basic	39	36,263.24	25	21,556.91	64	57,820.15
PLSO 12 Month Survivor	18	20,716.70	5	3,855.92	23	24,572.62
PLSO 24 Month Survivor	17	22,170.24	8	10,288.04	25	32,458.28
PLSO 36 Month Survivor	45	41,628.86	14	17,017.42	59	58,646.28
Total	1,626	$ 2,072,472.80	551	$ 578,273.64	2,177	$ 2,650,746.44

Non-Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	4	$ 516.57	22	$ 20,317.36	26	$ 20,833.93
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	217	155,062.60	1,556	1,328,720.82	1,773	1,483,783.42
66-2/3% to Beneficiary	23	19,509.96	290	225,092.50	313	244,602.46
50% to Beneficiary	82	44,966.08	460	235,222.34	542	280,188.42
Pop-up Option	70	100,517.47	322	383,110.98	392	483,628.45
10 Years Certain	32	39,745.07	47	51,831.32	79	91,576.39
10 Years Certain & Life	40	43,314.07	61	67,073.76	101	110,387.83
Social Security Option						
Age 62 Basic	0	0.00	2	1,986.92	2	1,986.92
Age 62 Survivorship	36	56,639.78	202	343,731.32	238	400,371.10
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	9	3,629.09	9	3,629.09
Dependent Child	2	563.20	1	565.92	3	1,129.12
Refund	0	0.00	5	4,986.59	5	4,986.59
15 Years Certain & Life	28	30,877.66	60	66,183.44	88	97,061.10
20 Years Certain & Life	36	35,662.18	73	85,780.14	109	121,442.32
5 Years Certain	28	32,377.65	26	32,867.93	54	65,245.58
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	1	564.68	0	0.00	1	564.68
PLSO 36 Month Basic	1	596.24	11	6,924.85	12	7,521.09
PLSO 12 Month Survivor	2	2,949.09	4	3,989.62	6	6,938.71
PLSO 24 Month Survivor	2	3,375.52	4	1,796.99	6	5,172.51
PLSO 36 Month Survivor	6	3,303.45	17	14,357.96	23	17,661.41
Total	610	$ 570,541.27	3,172	$ 2,878,169.85	3,782	$ 3,448,711.12

Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	2	$ 294.55	2	$ 294.55
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	7	2,987.01	89	61,279.59	96	64,266.60
66-2/3% to Beneficiary	0	0.00	8	3,846.72	8	3,846.72
50% to Beneficiary	1	430.28	15	5,144.69	16	5,574.97
Pop-up Option	4	1,851.60	28	15,660.29	32	17,511.89
10 Years Certain	1	1,686.74	11	8,709.74	12	10,396.48
10 Years Certain & Life	1	1,073.57	8	5,602.24	9	6,675.81
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	1	20.73	15	18,204.43	16	18,225.16
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	6	2,072.24	4	1,102.72	10	3,174.96
Refund	0	0.00	3	2,001.74	3	2,001.74
15 Years Certain & Life	4	1,414.38	2	878.83	6	2,293.21
20 Years Certain & Life	0	0.00	5	1,373.15	5	1,373.15
5 Years Certain	3	5,371.77	2	1,559.49	5	6,931.26
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	342.15	0	0.00	1	342.15
PLSO 12 Month Survivor	0	0.00	2	2,284.91	2	2,284.91
PLSO 24 Month Survivor	0	0.00	1	746.63	1	746.63
PLSO 36 Month Survivor	3	2,396.08	0	0.00	3	2,396.08
Total	32	$ 19,646.55	195	$ 128,689.72	227	$ 148,336.27

Non-Hazardous Members
Retired and Beneficiary Information June 30, 2008
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	107	$ 2,344,227	50	$ 538,974	28	$ 211,764	185	$ 3,094,965
45-49	1,004	$ 28,990,592	117	$ 1,381,746	55	$ 622,097	1,176	$ 30,994,435
50-54	2,904	$ 89,897,151	201	$ 2,319,145	121	$ 1,780,923	3,226	$ 93,997,219
55-59	4,972	$ 156,095,923	307	$ 3,980,707	205	$ 3,151,111	5,484	$ 163,227,742
60-64	5,525	$ 143,921,364	376	$ 4,474,360	295	$ 4,662,015	6,196	$ 153,057,740
65-69	4,814	$ 90,309,050	338	$ 3,904,229	358	$ 5,268,846	5,510	$ 99,482,126
70-74	3,629	$ 57,058,635	275	$ 2,821,848	455	$ 6,081,699	4,359	$ 65,962,182
75-79	2,816	$ 38,025,123	120	$ 1,182,441	462	$ 6,080,640	3,398	$ 45,288,203
80-84	2,172	$ 25,858,001	58	$ 467,912	530	$ 5,649,444	2,760	$ 31,975,357
85-89	1,178	$ 11,570,885	26	$ 202,568	581	$ 4,271,274	1,785	$ 16,044,727
90 & Over	524	$ 3,712,433	12	$ 63,422	692	$ 3,604,719	1,228	$ 7,380,574
Totals	29,645	$ 647,783,384	1,880	$ 21,337,353	3,782	$ 41,384,533	35,307	$ 710,505,270

Hazardous Members
Retired and Beneficiary Information June 30, 2008
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	33	$ 545,326	10	$ 79,104	12	$ 46,559	55	$ 670,989
45-49	118	$ 2,290,165	16	$ 162,978	6	$ 34,119	140	$ 2,487,263
50-54	259	$ 5,247,723	20	$ 191,042	19	$ 179,353	298	$ 5,618,117
55-59	426	$ 8,162,475	31	$ 293,444	25	$ 244,611	482	$ 8,700,531
60-64	520	$ 7,998,098	21	$ 136,816	37	$ 284,469	578	$ 8,419,383
65-69	341	$ 3,693,457	7	$ 26,386	30	$ 247,192	378	$ 3,967,034
70-74	217	$ 1,881,252	13	$ 35,811	32	$ 228,687	262	$ 2,145,750
75-79	103	$ 626,929	4	$ 10,339	33	$ 192,711	140	$ 829,978
80-84	31	$ 338,995			19	$ 160,956	50	$ 499,951
85-89	6	$ 84,659			8	$ 60,106	14	$ 144,766
90 & Over	1	$ 3,958			6	$ 101,271	7	$ 105,229
Totals	2,055	$ 30,873,038	122	$ 935,920	227	$ 1,780,035	2,404	$ 33,588,993

Total Non-Hazardous Active Members as of June 30, 2008
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	476								476
Avg Pay	$23,062								$23,062
20-24	1,980	64							2,044
Avg Pay	$25,944	$32,016							$26,134
25-29	3,803	890	28						4,721
Avg Pay	$29,333	$32,382	$34,982						$29,941
30-34	2,797	2,186	492	9					5,484
Avg Pay	$31,834	$36,913	$37,478	$38,476					$34,376
35-39	2,293	1,957	1,381	495	43				6,169
Avg Pay	$33,150	$38,379	$42,059	$43,448	$57,803				$37,801
40-44	1,896	1,556	1,185	1,000	688	117	4		6,446
Avg Pay	$32,554	$37,882	$43,640	$44,598	$50,501	$53,665	$43,281		$40,052
44-49	1,821	1,561	1,057	882	890	275	367	76	6,929
Avg Pay	$32,496	$37,653	$42,285	$45,418	$49,497	$55,080	$57,171	$54,757	$41,427
50-54	1,581	1,397	1,042	824	746	248	367	327	6,532
Avg Pay	$33,447	$37,654	$40,513	$44,410	$48,409	$53,281	$51,810	$57,310	$41,545
55-59	1,156	1,196	805	665	634	194	261	348	5,259
Avg Pay	$35,341	$38,016	$41,733	$42,805	$47,440	$52,101	$51,785	$56,710	$42,179
60-64	555	637	543	466	318	115	105	187	2,926
Avg Pay	$36,077	$37,292	$42,509	$41,629	$48,197	$55,149	$51,690	$61,876	$42,695
65-69	113	190	135	127	77	21	29	54	746
Avg Pay	$41,465	$39,161	$41,926	$43,021	$46,966	$46,407	$56,982	$65,529	$44,278
70 & over	52	69	58	74	34	11	20	35	353
Avg Pay	$33,613	$30,634	$34,850	$40,013	$44,677	$50,100	$45,325	$63,480	$39,780
Totals	18,523	11,703	6,726	4,542	3,430	981	1,153	1,027	48,085
Avg Pay	$31,315	$37,236	$41,702	$43,900	$48,960	$53,634	$53,488	$58,392	$38,221

Total Hazardous Active Members as of June 30, 2008
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	22								22
Avg Pay	$16,441								$16,441
20-24	230	1							231
Avg Pay	$26,250	$37,644							$26,299
25-29	492	59	1						552
Avg Pay	$27,223	$30,544	$32,244						$27,587
30-34	362	197	28						587
Avg Pay	$28,705	$33,525	$35,890						$30,665
35-39	309	172	150	23					654
Avg Pay	$29,012	$34,451	$37,805	$42,389					$32,930
40-44	219	129	94	134	18				594
Avg Pay	$29,256	$34,918	$41,283	$43,558	$47,785				$36,177
44-49	181	128	87	121	18	7	1		543
Avg Pay	$30,995	$35,909	$38,808	$45,175	$45,929	$53,805	$41,844		$37,374
50-54	161	124	74	114	18	4	6	8	509
Avg Pay	$28,719	$33,685	$43,085	$43,752	$46,837	$28,701	$44,864	$53,130	$36,599
55-59	120	125	71	88	13	2	3	3	425
Avg Pay	$30,302	$38,209	$40,111	$43,181	$45,172	$55,812	$43,736	$51,552	$37,753
60-64	53	52	42	66	12		2	1	228
Avg Pay	$32,356	$36,665	$37,844	$49,022	$49,104		$35,028	$66,804	$40,230
65-69	7	16	9	8					40
Avg Pay	$28,279	$41,552	$41,635	$52,290					$41,395
70 & over	4	2		2					8
Avg Pay	$24,543	$30,786		$31,800					$27,918
Totals	2,160	1,005	556	556	79	13	12	12	4,393
Avg Pay	$28,443	$34,882	$39,506	$44,574	$46,916	$46,389	$42,691	$53,875	$33,852

Report on the Annual Valuation of the County Employees Retirement System

Prepared as of June 30, 2008

November 21, 2008

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2009. The date of the valuation was June 30, 2008.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

TJC:kc

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REPORT ON THE ANNUAL VALUATION OF THE COUNTY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2008

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2008, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/2008	6/30/2007	6/30/2008	6/30/2007	6/30/2008	6/30/2007
Contributions for next fiscal year:						
Retirement	8.62%	7.76%	16.11%	15.04%		
Insurance	12.29	12.75	27.25	27.62	N/A	N/A
Total	20.91%	20.51%	43.36%	42.66%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$7,304,217,691	$6,659,446,126	$2,403,122,095	$2,208,736,179	$9,707,339,786	$8,868,182,305
Actuarial value of assets	$5,731,502,438	$5,467,824,480	$1,750,867,373	$1,639,288,924	$7,482,369,811	$7,107,113,404
Unfunded liability on actuarial value of assets	$1,572,715,253	$1,191,621,646	$652,254,722	$569,447,255	$2,224,969,975	$1,761,068,901
Funded ratio on actuarial value of assets	78.47%	82.11%	72.86%	74.22%	77.08%	80.14%
Market value of assets	$5,431,735,605	$5,812,935,251	$1,644,983,243	$1,754,934,764	$7,076,718,848	$7,567,870,015
Unfunded liability on market value of assets	$1,872,482,086	$846,510,875	$758,138,852	$453,801,415	$2,630,620,938	$1,300,312,290
Funded ratio on market value of assets	74.36%	87.29%	68.45%	79.45%	72.90%	85.34%
Insurance						
Actuarial accured liability	$3,583,193,466	$3,333,966,070	$1,769,782,957	$1,646,460,011	$5,352,976,423	$4,980,426,081
Actuarial value of assets	$1,168,883,170	$960,285,900	$613,526,319	$512,926,549	$1,782,409,489	$1,473,212,449
Unfunded liability on actuarial value of assets	$2,414,310,296	$2,373,680,170	$1,156,256,638	$1,133,533,462	$3,570,566,934	$3,507,213,632
Funded ratio on actuarial value of assets	32.62%	28.80%	34.67%	31.15%	33.30%	29.58%
Market value of assets	$1,105,944,178	$1,084,042,781	$576,414,457	$570,155,702	$1,682,358,635	$1,654,198,483
Unfunded liability on market value of assets	$2,477,249,288	$2,249,923,289	$1,193,368,500	$1,076,304,309	$3,670,617,788	$3,326,227,598
Funded ratio on market value of assets	30.86%	32.52%	32.57%	34.63%	31.43%	33.21%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	37,579	35,564	5,422	5,159	43,001	40,723
Number of vested former members	8,693	8,093	487	436	9,180	8,529
Number of former members due a refund	49,062	45,808	1,889	1,761	50,951	47,569
Number of active members	85,221	84,920	10,173	10,063	95,394	94,983
Total salary	$2,166,612,648	$2,076,848,328	$474,241,332	$458,998,956	$2,640,853,980	$2,535,847,284
Average salary	$25,423	$24,457	$46,618	$45,613	$27,684	$26,698

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, coverage options for pre-65 members have changed. There are three coverage options from which retirees and beneficiaries may choose for Plan Year 2009. Two of the options are new and a third has a new name. The new rates for 2009 can be found in Schedule C. The options for 2009 are summarized below.

    - Commonwealth Optimum PPO is a new plan which combines the Commonwealth Enhanced and Commonwealth Premier plans of Plan Year 2008 into one plan.
    - Commonwealth Capitol Choice is a new plan offering for Plan Year 2009.
    - Commonwealth Standard PPO is the new name for the Commonwealth Essential plan of Plan Year 2008. The benefits on this plan remain unchanged for Plan Year 2009.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2008 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages		
			Salary	Age	Service
Non-Hazardous	85,221	$2,166,612,648	$25,423	45.9	8.3
Hazardous	10,173	474,241,332	46,618	38.7	8.3
Total in CERS	95,394	$2,640,853,980	$27,684	45.1	8.3

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2003	82,288	$1,796,451,180	$21,831	3.2%
6/30/2004	80,922	1,826,870,880	22,576	3.4
6/30/2005	81,240	1,885,275,000	23,206	2.8
6/30/2006	83,694	1,982,437,473	23,687	2.1
6/30/2007	84,920	2,076,848,328	24,457	3.3
6/30/2008	85,221	2,166,612,648	25,423	3.9

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2003	9,286	$374,700,732	$40,351	4.3%
6/30/2004	9,349	392,562,624	41,990	4.1
6/30/2005	9,464	411,121,728	43,441	3.5
6/30/2006	9,635	426,927,550	44,310	2.0
6/30/2007	10,063	458,998,956	45,613	2.9
6/30/2008	10,173	474,241,332	46,618	2.2

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	31,154	$339,994,566	$10,913	68.1
Disability	3,002	28,695,122	9,559	62.8
Beneficiary	3,423	25,067,822	7,323	67.2
Total in CERS	37,579	$393,757,510	$10,478	67.6

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	4,486	$114,080,001	$25,430	58.9
Disability	380	5,858,308	15,417	52.6
Beneficiary	556	7,538,801	13,559	53.1
Total in CERS	5,422	$127,477,109	$23,511	57.9

This valuation also includes 60,131 inactive members (57,755 Non-Hazardous and 2,376 Hazardous; of which 8,693 Non-Hazardous are vested and 487 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2008 the total market value of assets amounted to $8,759,077,483 as shown in the following table.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2008

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	$5,431,735,605	$1,105,944,178	$6,537,679,783
Hazardous	1,644,983,243	576,414,457	2,221,397,700
Total	$7,076,718,848	$1,682,358,635	$8,759,077,483

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $9,264,779,300. Schedule B shows the development of the actuarial value of assets as of June 30, 2008. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2008	JUNE 30, 2007
Retirement		
Non-Hazardous	$ 5,731,502,438	$ 5,467,824,480
Hazardous	1,750,867,373	1,639,288,924
Total	$ 7,482,369,811	$ 7,107,113,404
Insurance		
Non-Hazardous	$ 1,168,883,170	$ 960,285,900
Hazardous	613,526,319	512,926,549
Total	$ 1,782,409,489	$ 1,473,212,449
KERS Total		
Non-Hazardous	$ 6,900,385,608	$ 6,428,110,380
Hazardous	2,364,393,692	2,152,215,473
Total	$ 9,264,779,300	$ 8,580,325,853

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2008. Separate balance sheets are shown for each employee group as well as in total for all groups.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $11,975,865,376, of which $5,186,569,476 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $279,180,352 is for the prospective benefits payable on account of inactive members and $6,510,115,548 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $7,482,369,811 as of June 30, 2008. The difference of $4,493,495,565 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $1,238,584,550 is the present value of future contributions expected to be made by members, and the balance of $3,254,911,015 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.85% of payroll for non-hazardous members and 7.99% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $1,029,941,040. When this amount is subtracted from $3,254,911,015, which is the present value of the total future contributions to be made by the employers, there remains $2,224,969,975 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 4.16% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 7.88% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $1,572,715,253 for non-hazardous members and $652,254,722 for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.

5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.61% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.24% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $6,673,332,079, of which $1,985,100,837 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $258,784,621 is for the prospective benefits payable on account of inactive members and $4,429,446,621 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $1,782,409,489 as of June 30, 2008. The difference of $4,890,922,590 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $0 is the present value of future contributions expected to be made by members, and the balance of $4,890,922,590 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 5.75% of payroll for non-hazardous members and 13.21% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,320,355,656. When this amount is subtracted from $4,890,922,590, which is the present value of the total future contributions to be made by the employers, there remains $3,570,566,934 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 6.38% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 13.96% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $2,414,310,296 for non-hazardous members and $1,156,256,638 for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.16% of payroll for non-hazardous employees and 0.08% of payroll for hazardous employees.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2008 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/07	$ 1,191.6	$ 569.4	$ 1,761.0
(2)	Normal cost from last valuation	94.0	37.0	131.0
(3)	Expected employer contributions	161.1	69.0	230.1
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	87.2	41.6	128.8
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 1,211.7	$ 579.0	$ 1,790.8
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 1,211.7	$ 579.0	$ 1,790.8
(9)	Actual UAAL as of 6/30/08	$ 1,572.7	$ 652.3	$ 2,225.0
(10)	Gain/(loss): (8) - (9)	$ (361.0)	$ (73.3)	$ (434.2)
(11)	Accrued liabilities as of 6/30/07	$ 6,659.4	$ 2,208.7	$ 8,868.1
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(5.4)%	(3.3)%	(4.9)%

*Unfunded actuarial accrued liability.

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/07	$ 2,373.7	$ 1,133.5	$ 3,507.2
(2)	Normal cost from last valuation	128.1	62.7	190.8
(3)	Expected employer contributions	261.7	126.5	388.2
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	173.6	82.9	256.5
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 2,413.7	$ 1,152.6	$ 3,566.3
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 2,413.7	$ 1,152.6	$ 3,566.3
(9)	Actual UAAL as of 6/30/08	$ 2,414.3	$ 1,156.3	$ 3,570.6
(10)	Gain/(loss): (8) - (9)	$ (0.6)	$ (3.7)	$ (4.3)
(11)	Accrued liabilities as of 6/30/07	$ 3,334.0	$ 1,646.5	$ 4,980.5
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(0.0)%	(0.2)%	(0.1)%

*Unfunded actuarial accrued liability.

NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/08	Insurance $ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (169.9)	$ (82.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(4.6)	8.6
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.2)	(4.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	58.3	30.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(29.9)	127.6
New Members. Additional unfunded accrued liability will produce a loss.	(13.1)	(21.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(27.7)	2.2
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	76.5	96.9
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(250.4)	(157.8)
Gain (or Loss) During Year From Financial Experience	$ (361.0)	$ (0.6)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	0.0
Composite Gain (or Loss) During Year	$ (361.0)	$ (0.6)

HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/08	Insurance $ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (58.2)	$ (89.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.7)	0.9
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	1.1	0.5
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	21.9	23.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	5.8	75.7
New Members. Additional unfunded accrued liability will produce a loss.	(5.4)	(20.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(11.4)	(0.5)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	27.3	91.6
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(53.7)	(85.6)
Gain (or Loss) During Year From Financial Experience	$ (73.3)	$ (3.7)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	0.0
Composite Gain (or Loss) During Year	$ (73.3)	$ (3.7)

TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/08	Insurance $ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (228.1)	$ (172.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(5.3)	9.5
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.9	(3.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	80.2	54.7
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(24.1)	203.3
New Members. Additional unfunded accrued liability will produce a loss.	(18.5)	(42.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(39.1)	1.7
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	103.8	188.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(304.1)	(243.4)
Gain (or Loss) During Year From Financial Experience	$ (434.3)	$ (4.3)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	0.0
Composite Gain (or Loss) During Year	$ (434.3)	$ (4.3)

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2009/2010 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	163,579,255	7.55%
(2) Disability benefits		22,316,110	1.03
(3) Survivor benefits		5,849,854	0.27
(4) Total	$	191,745,219	8.85%
B. Member Contributions	$	108,330,632	5.00%
C. Employer Normal Cost: [A(4) - B]	$	83,414,587	3.85%
D. Administrative Expenses	$	13,238,353	0.61%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/07 Valuation:	$	67,050,335	3.23%
(2) Change due to:			
a. Active decrements	$	6,665,726	0.31%
b. Pay increases		1,712,713	0.08
c. Retiree mortality		(4,560,357)	(0.21)
d. Investment return		1,586,848	0.07
e. COLA		7,394,437	0.34
f. Assumption Change		0	0.00
g. Other		10,221,742	0.47
h. Total Change	$	23,021,108	0.93%
(3) UAAL Contribution Based on 6/30/08 Valuation: [E(1) +E(2)h]	$	90,071,443	4.16%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	186,724,383	8.62%

* Based on 30 year amortization of the UAAL from June 30, 2007 and 29 years from June 30, 2008

Required Contribution Rates
Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	66,820,604	14.09%
	(2) Disability benefits		6,402,258	1.35
	(3) Survivor benefits		2,608,327	0.55
	(4) Total	$	75,831,189	15.99%
B.	Member Contributions	$	37,939,307	8.00%
C.	Employer Normal Cost: [A(4) - B]	$	37,891,882	7.99%
D.	Administrative Expenses	$	1,143,313	0.24%
			1	
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/07 Valuation:	$	32,041,738	6.98%
	(2) Change due to:			
	a. Active decrements	$	2,057,352	0.43%
	b. Pay increases		(331,571)	(0.07)
	c. Retiree mortality		(1,565,952)	(0.33)
	d. Investment return		651,883	0.14
	e. COLA		2,455,592	0.52
	f. Assumption Change		0	0.00
	g. Other		2,046,432	0.41
	h. Total Change	$	5,313,736	1.12%
	(3) UAAL Contribution Based on 6/30/08 Valuation: [E(1) +E(2)h]	$	37,355,474	7.88%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	76,390,669	16.11%

* Based on 30 year amortization of the UAAL from June 30, 2007 and 29 years from June 30, 2008

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	124,635,859	5.75%
B.	Member Contributions*	$	0	0.00%
C.	Employer Normal Cost: [A - B]	$	124,635,859	5.75%
D.	Administrative Expenses	$	3,424,785	0.16%
E.	Unfunded Actuarial Accrued Liability**:	$	138,270,682	6.38%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	266,331,326	12.29%

*The liabilities are net of retiree contributions toward their healthcare
** Based on 29 year amortization of the UAAL from June 30, 2008

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	62,642,769	13.21%
B.	Member Contributions*	$	0	0.00%
C.	Employer Normal Cost: [A - B]	$	62,642,769	13.21%
D.	Administrative Expenses	$	364,362	0.08%
E.	Unfunded Actuarial Accrued Liability**:	$	66,220,318	13.96%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	129,227,449	27.25%

*The liabilities are net of retiree contributions toward their healthcare
** Based on 29 year amortization of the UAAL from June 30, 2008

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2008

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	37,579	5,422	43,001
Terminated employees entitled to benefits but not yet receiving benefits	57,755	2,376	60,131
Active Members	85,221	10,173	95,394
Total	180,555	17,971	198,526

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2003	$ 5,286,580,047	$ 4,417,597,802	$ (868,982,245)	119.7%	$ 1,796,451,180	(48.4)%
6/30/2004	5,187,851,530	4,936,459,488	(251,392,042)	105.1	1,826,870,880	(13.8)
6/30/2005	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
6/30/2006	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
6/30/2007	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
6/30/2008	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
Hazardous Members						
6/30/2003	$ 1,467,004,856	$ 1,499,628,782	$ 32,623,926	97.8%	$ 374,700,732	8.7%
6/30/2004	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
6/30/2005	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
6/30/2006	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
6/30/2007	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
6/30/2008	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
Total CERS Members						
6/30/2003	$ 6,753,584,903	$ 5,917,226,584	$ (836,358,319)	114.1%	$ 2,171,151,912	(38.5)%
6/30/2004	6,645,463,572	6,577,289,608	(68,173,964)	101.0	2,219,433,504	(3.1)
6/30/2005	6,511,561,710	7,180,774,025	669,212,315	90.7	2,296,396,728	29.2
6/30/2006	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
6/30/2007	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4
6/30/2008	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2003	$ 520,060,105	$ 2,176,963,259	$ 1,656,903,154	23.9%	$ 1,796,451,180	92.2%
6/30/2004	585,399,072	2,438,734,696	1,853,335,624	24.0	1,826,870,880	101.5
6/30/2005	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
6/30/2006	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
6/30/2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
6/30/2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
Hazardous Members						
6/30/2003	$ 269,190,080	$ 935,650,662	$ 666,460,582	28.8%	$ 374,700,732	177.9%
6/30/2004	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
6/30/2005	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
6/30/2006	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
6/30/2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
6/30/2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
Total CERS Members						
6/30/2003	$ 789,250,185	$ 3,112,613,921	$ 2,323,363,736	25.4%	$ 2,171,151,912	107.0%
6/30/2004	895,977,234	3,464,419,173	2,568,441,939	25.9	2,219,433,504	115.7
6/30/2005	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
6/30/2006	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
6/30/2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
6/30/2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2008. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2008	6/30/2008
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases*	4.0% - 13.5%	4.0% - 14.5%
Cost-of-living adjustment	None	None
*Includes inflation at	3.50%	3.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2008	6/30/2008
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption	11.0% - 5.0%	11.0% - 5.0%
Year Ultimate Trend	2015	2015
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2008 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2007. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 5,731,502,438	$ 5,467,824,480
Prospective contributions		
Member contributions	$ 905,496,624	$ 879,530,367
Employer normal contributions	697,404,856	692,218,125
Unfunded accrued liability contributions	1,572,715,253	1,191,621,646
Total prospective contributions	$ 3,175,616,733	$ 2,763,370,138
Total assets	$ 8,907,119,171	$ 8,231,194,618
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 3,801,445,603	$ 3,427,501,606
Present value of benefits payable on account of active members	4,848,351,752	4,641,682,555
Present value of benefits payable on account of inactive members	257,321,816	162,010,457
Total liabilities	$ 8,907,119,171	$ 8,231,194,618

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 1,750,867,373	$ 1,639,288,924
Prospective contributions		
Member contributions	$ 333,087,926	$ 338,741,336
Employer normal contributions	332,536,184	331,653,124
Unfunded accrued liability contributions	652,254,722	569,447,255
Total prospective contributions	$ 1,317,878,832	$ 1,239,841,715
Total assets	$ 3,068,746,205	$ 2,879,130,639
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,385,123,873	$ 1,255,383,148
Present value of benefits payable on account of active members	1,661,763,796	1,603,908,864
Present value of benefits payable on account of inactive members	21,858,536	19,838,627
Total liabilities	$ 3,068,746,205	$ 2,879,130,639

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 7,482,369,811	$ 7,107,113,404
Prospective contributions		
Member contributions	$ 1,238,584,550	$ 1,218,271,703
Employer normal contributions	1,029,941,040	1,023,871,249
Unfunded accrued liability contributions	2,224,969,975	1,761,068,901
Total prospective contributions	$ 4,493,495,565	$ 4,003,211,853
Total assets	$ 11,975,865,376	$ 11,110,325,257
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 5,186,569,476	$ 4,682,884,754
Present value of benefits payable on account of active members	6,510,115,548	6,245,591,419
Present value of benefits payable on account of inactive members	279,180,352	181,849,084
Total liabilities	$ 11,975,865,376	$ 11,110,325,257

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 1,168,883,170	$ 960,285,900
Prospective contributions		
Normal contributions	$ 864,456,661	$ 904,995,678
Unfunded accrued liability contributions	2,414,310,296	2,373,680,170
Total prospective contributions	$ 3,278,766,957	$ 3,278,675,848
Total assets	$ 4,447,650,127	$ 4,238,961,748
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,291,138,217	$ 1,177,386,474
Present value of benefits payable on account of active members	2,926,199,853	2,866,833,342
Present value of benefits payable on account of inactive members	230,312,057	194,741,932
Total liabilities	$ 4,447,650,127	$ 4,238,961,748

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 613,526,319	$ 512,926,549
Prospective contributions		
Normal contributions	$ 455,898,995	$ 486,249,364
Unfunded accrued liability contributions	1,156,256,638	1,133,533,462
Total prospective contributions	$ 1,612,155,633	$ 1,619,782,826
Total assets	$ 2,225,681,952	$ 2,132,709,375
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 693,962,620	$ 638,003,709
Present value of benefits payable on account of active members	1,503,246,768	1,472,956,397
Present value of benefits payable on account of inactive members	28,472,564	21,749,269
Total liabilities	$ 2,225,681,952	$ 2,132,709,375

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	$ 1,782,409,489	$ 1,473,212,449
Prospective contributions		
Normal contributions	$ 1,320,355,656	$ 1,391,245,042
Unfunded accrued liability contributions	3,570,566,934	3,507,213,632
Total prospective contributions	$ 4,890,922,590	$ 4,898,458,674
Total assets	$ 6,673,332,079	$ 6,371,671,123
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,985,100,837	$ 1,815,390,183
Present value of benefits payable on account of active members	4,429,446,621	4,339,789,739
Present value of benefits payable on account of inactive members	258,784,621	216,491,201
Total liabilities	$ 6,673,332,079	$ 6,371,671,123

The following tables provide the solvency test for non-hazardous and hazardous CERS members.

Solvency Test
Retirement Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2003*	$ 759,938,261	$ 2,068,481,586	$ 1,589,177,955	$ 5,286,580,047	100.0%	100.0%	154.7%
6/30/2004*	814,908,627	2,478,195,080	1,643,355,781	5,187,851,530	100.0	100.0	115.3
6/30/2005*	837,513,907	2,814,210,355	1,733,432,428	5,059,208,687	100.0	100.0	81.2
6/30/2006	883,946,564	3,210,095,023	2,085,527,680	5,162,894,136	100.0	100.0	51.3
6/30/2007	920,126,096	3,589,512,063	2,149,807,967	5,467,824,480	100.0	100.0	44.6
6/30/2008	963,213,677	4,058,767,419	2,282,236,595	5,731,502,438	100.0	100.0	31.1

*Reported by prior actuarial firm.

Solvency Test
Retirement Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2003*	$ 227,629,402	$ 769,804,746	$ 502,194,634	$ 1,467,004,856	100.0%	100.0%	93.5%
6/30/2004*	256,366,204	851,354,443	533,109,473	1,457,612,042	100.0	100.0	65.6
6/30/2005*	264,913,465	960,052,305	570,651,565	1,452,353,023	100.0	100.0	39.8
6/30/2006	300,200,800	1,128,164,618	591,777,352	1,515,075,017	100.0	100.0	14.7
6/30/2007	317,007,367	1,275,221,775	616,507,037	1,639,288,924	100.0	100.0	7.6
6/30/2008	338,324,362	1,406,982,409	657,815,324	1,750,867,373	100.0	100.0	0.8

*Reported by prior actuarial firm.

. **Solvency Test**
Insurance Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2003*	$ 0	$ 799,777,264	$ 1,377,185,995	$ 520,060,105	100.0%	65.0%	0.0%
6/30/2004*	0	955,930,091	1,482,804,605	585,399,072	100.0	61.2	0.0
6/30/2005*	0	1,144,219,107	1,644,535,547	663,941,949	100.0	58.0	0.0
6/30/2006	0	1,694,600,143	2,912,623,496	777,726,590	100.0	45.9	0.0
6/30/2007	0	1,372,128,406	1,961,837,664	960,285,900	100.0	70.0	0.0
6/30/2008	0	1,521,450,274	2,061,743,192	1,168,883,170	100.0	76.8	0.0

*Reported by prior actuarial firm.

. **Solvency Test**
Insurance Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2003*	$ 0	$ 401,276,347	$ 534,374,315	$ 269,190,080	100.0%	67.1%	0.0%
6/30/2004*	0	450,288,687	575,395,790	310,578,162	100.0	69.0	0.0
6/30/2005*	0	586,104,126	697,194,966	359,180,461	100.0	61.3	0.0
6/30/2006	0	787,671,273	1,140,810,098	422,785,042	100.0	53.7	0.0
6/30/2007	0	659,752,978	986,707,033	512,926,549	100.0	77.7	0.0
6/30/2008	0	722,435,184	1,047,347,773	613,526,319	100.0	84.9	0.0

*Reported by prior actuarial firm.

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2007	2008	2009	2010	2011	2012
A.	Actuarial Value Beginning of Year	$ 5,162,894,136	$ 5,467,824,480				
B.	Market Value End of Year	5,812,935,251	5,431,735,605				
C.	Market Value Beginning of Year	5,191,376,948	5,812,935,251				
D.	Cash Flow						
	D1. Contributions	246,240,158	275,938,785				
	D2. Benefit Payments	(377,044,524)	(415,881,616)				
	D3. Administrative Expenses	(12,218,992)	(13,238,353)				
	D4. Investment Expenses	(4,731,050)	(5,136,459)				
	D5. Net	(147,754,408)	(158,317,643)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	769,312,711	(222,882,003)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	401,520,608	449,703,170				
	E4. Amount for Phased-In Recognition	367,792,103	(672,585,173)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	73,558,421	(134,517,035)	0	0	0	0
	F2. First Prior Year	9,281,202	73,558,421	(134,517,035)	0	0	0
	F3. Second Prior Year	(936,362)	9,281,202	73,558,421	(134,517,035)	0	0
	F4. Third Prior Year	24,906,205	(936,362)	9,281,202	73,558,421	(134,517,035)	0
	F5. Fourth Prior Year	(55,645,322)	24,906,205	(936,362)	9,281,202	73,558,421	(134,517,035)
	F6. Total Recognized Investment Gain	51,164,144	(27,707,569)	(52,613,774)	(51,677,412)	(60,958,614)	(134,517,035)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 5,467,824,480	$ 5,731,502,438				
H.	Difference Between Market & Actuarial Values	$ 345,110,771	$ (299,766,833)	$ (247,153,059)	$ (195,475,647)	$ (134,517,035)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2007	2008	2009	2010	2011	2012
A.	Actuarial Value Beginning of Year	$ 1,515,075,017	$ 1,639,288,924				
B.	Market Value End of Year	1,754,934,764	1,644,983,243				
C.	Market Value Beginning of Year	1,528,845,357	1,754,934,764				
D.	Cash Flow						
	D1. Contributions	105,203,362	116,415,000				
	D2. Benefit Payments	(118,166,617)	(127,831,609)				
	D3. Administrative Expenses	(1,075,008)	(1,143,313)				
	D4. Investment Expenses	(1,654,423)	(1,603,610)				
	D5. Net	(15,692,686)	(14,163,532)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	241,782,093	(95,787,989)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	119,595,955	137,124,357				
	E4. Amount for Phased-In Recognition	122,186,138	(232,912,346)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	24,437,228	(46,582,469)	0	0	0	0
	F2. First Prior Year	3,423,753	24,437,228	(46,582,469)	0	0	0
	F3. Second Prior Year	286,557	3,423,753	24,437,228	(46,582,469)	0	0
	F4. Third Prior Year	7,052,555	286,557	3,423,753	24,437,228	(46,582,469)	0
	F5. Fourth Prior Year	(14,889,455)	7,052,555	286,557	3,423,753	24,437,228	(46,582,469)
	F6. Total Recognized Investment Gain	20,310,638	(11,382,376)	(18,434,931)	(18,721,488)	(22,145,241)	(46,582,469)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,639,288,924	$ 1,750,867,373				
H.	Difference Between Market & Actuarial Values	$ 115,645,840	$ (105,884,130)	$ (87,449,199)	$ (68,727,711)	$ (46,582,469)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2007	2008	2009	2010	2011	2012
A.	Actuarial Value Beginning of Year	$ 777,726,590	$ 960,285,900				
B.	Market Value End of Year	1,084,042,781	1,105,944,178				
C.	Market Value Beginning of Year	813,250,744	1,084,042,781				
D.	Cash Flow						
	D1. Contributions	171,229,072	217,217,750				
	D2. Benefit Payments	(85,198,699)	(95,966,011)				
	D3. Administrative Expenses	(3,040,328)	(3,424,785)				
	D4. Investment Expenses	(720,918)	(744,254)				
	D5. Net	82,269,127	117,082,700				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	188,522,910	(95,181,303)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	66,963,715	89,323,364				
	E4. Amount for Phased-In Recognition	121,559,195	(184,504,667)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	24,311,839	(36,900,933)	0	0	0	0
	F2. First Prior Year	5,266,783	24,311,839	(36,900,933)	0	0	0
	F3. Second Prior Year	1,195,664	5,266,783	24,311,839	(36,900,933)	0	0
	F4. Third Prior Year	8,317,853	1,195,664	5,266,783	24,311,839	(36,900,933)	0
	F5. Fourth Prior Year	(5,765,671)	8,317,853	1,195,661	5,266,781	24,311,839	(36,900,935)
	F6. Total Recognized Investment Gain	33,326,468	2,191,206	(6,126,650)	(7,322,313)	(12,589,094)	(36,900,935)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 960,285,900	$ 1,168,883,170				
H.	Difference Between Market & Actuarial Values	$ 123,756,881	$ (62,938,992)	$ (56,812,342)	$ (49,490,029)	$ (36,900,935)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2007	2008	2009	2010	2011	2012
A.	Actuarial Value Beginning of Year	$ 422,785,042	$ 512,926,549				
B.	Market Value End of Year	570,155,702	576,414,457				
C.	Market Value Beginning of Year	441,278,796	570,155,702				
D.	Cash Flow						
	D1. Contributions	70,920,610	90,754,757				
	D2. Benefit Payments	(31,607,270)	(35,603,224)				
	D3. Administrative Expenses	(319,632)	(364,362)				
	D4. Investment Expenses	(379,910)	(388,529)				
	D5. Net	38,613,798	54,398,642				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	90,263,108	(48,139,887)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	36,090,023	46,698,599				
	E4. Amount for Phased-In Recognition	54,173,085	(94,838,486)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	10,834,617	(18,967,697)	0	0	0	0
	F2. First Prior Year	2,819,186	10,834,617	(18,967,697)	0	0	0
	F3. Second Prior Year	616,704	2,819,186	10,834,617	(18,967,697)	0	0
	F4. Third Prior Year	4,199,719	616,704	2,819,186	10,834,617	(18,967,697)	0
	F5. Fourth Prior Year	(3,032,540)	4,199,719	616,704	2,819,186	10,834,617	(18,967,698)
	F6. Total Recognized Investment Gain	15,437,686	(497,471)	(4,697,190)	(5,313,894)	(8,133,080)	(18,967,698)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 512,926,549	$ 613,526,319				
H.	Difference Between Market & Actuarial Values	$ 57,229,153	$ (37,111,862)	$ (32,414,672)	$ (27,100,778)	$ (18,967,698)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006, with the exception of the health care cost trend rate which was adopted by the Board on November 15, 2007.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 3.50% per annum:

Service	Annual Rates of				
	Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	10.0%	11.0%	3.5%	13.5%	14.5%
1-2	3.5%	4.0%	3.5%	7.0%	7.5%
2-3	2.0%	3.5%	3.5%	5.5%	7.0%
3-4	1.5%	3.0%	3.5%	5.0%	6.5%
4-5	1.5%	2.5%	3.5%	5.0%	6.0%
5-6	1.0%	2.0%	3.5%	4.5%	5.5%
6-7	1.0%	1.5%	3.5%	4.5%	5.0%
7-8	1.0%	1.5%	3.5%	4.5%	5.0%
8-9	0.5%	1.0%	3.5%	4.0%	4.5%
9-10	0.5%	1.0%	3.5%	4.0%	4.5%
10 & Over	0.5%	0.5%	3.5%	4.0%	4.0%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

		Death			
Age	Withdrawal and Vesting*	Male	Female	Disability	Service Retirement**
20	6.00%	0.05%	0.03%	0.05%	
25	5.40	0.07	0.03	0.07	
30	4.80	0.08	0.04	0.09	
35	3.60	0.09	0.05	0.13	
40	2.66	0.11	0.07	0.20	
45	1.98	0.16	0.10	0.33	
50	1.92	0.26	0.14	0.56	
55	1.08	0.44	0.23	0.92	8.0%
60	0.75	0.80	0.44	1.46	10.0
65		1.45	0.86		25.0
70		2.37	1.37		25.0
75					100.0

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.
** If service is at least 27 years, the rate is 25%.

Hazardous Members

		Death**			Service Retirement***	
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate
20	4.56%	0.05%	0.03%	0.07%	20	30.0%
25	3.04	0.07	0.03	0.09	25	25.0
30	3.01	0.08	0.04	0.12	30	40.0
35	1.95	0.09	0.05	0.17	35	30.0
40	1.50	0.11	0.07	0.27		
45	0.75	0.16	0.10	0.44		
50	0.50	0.26	0.14	0.75		
55		0.44	0.23	1.23		
60		0.80	0.44	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 10.0%, 7.0%, 5.0%, 4.0% and 3.5%, respectively.
** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.
*** The annual rate of service retirement is 100% at age 62.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Fiscal Year Ended	Trend
2009	11.0%
2010	10.0
2011	9.0
2012	8.0
2013	7.0
2014	6.0
2015 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	85%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2008	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$ 617.12	$ 947.44	$ 1,056.56
Enhanced	$ 484.24	$ 742.74	$ 1,137.18	$ 1,267.40
Premier	$ 501.20	$ 772.06	$ 1,175.32	$ 1,309.76
Select	$ 469.00	$ 703.50	$ 989.18	$ 1,128.48

2009	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 446.24	$ 690.00	$ 1,044.48	$ 1,162.16
Optimum PPO	$ 566.20	$ 821.46	$ 1,265.10	$ 1,407.32
Capitol Choice	$ 545.08	$ 826.38	$ 1,249.74	$ 1,383.52

MEDICARE ELIGIBLE

Effective January 1, 2009 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 162.48	$ 162.00
Kentucky Retirement System Health Plan - PLUS	$ 203.05	$ 267.00
Kentucky Retirement System Health Plan - PREMIUM	$ 363.18	$ 338.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Non-Hazardous Normal Retirement:	
Age Requirement	65
Service Requirement	None
Members whose participation began before 8/1/2004	If a member has at least 48 months of service, the monthly benefit is 2.20% times final average compensation times years of service. Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period are less than forty-eight, one or more additional fiscal years shall be used. For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Members whose participation began on or after 8/1/2004	Monthly benefit as calculated above but with a benefit factor of 2.0% instead of 2.2%.
Hazardous Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation time years of service.

Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Early Retirement:

Requirement — Age 55 with 60 months of service or any age with 25 years of service.

Amount — Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Hazardous Early Retirement:

Requirement — Age 50 with 15 years of service or any age with 20 years of service.

Amount — Normal retirement benefit reduced by 5.5% per each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement — None

Service Requirement — 60 months

Members whose participation began before 8/1/2004 — Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used. A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months of service or age 65 with 48 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System. For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.
Members whose participation began on or after July 1, 2003	The Retirement System pays $11.96 per month per year of service toward medical premiums for non-hazardous retirees, $17.94 per month per year of service for hazardous retirees, and $17.94 per month per year of service for surviving spouses of hazardous employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of hazardous service. These amounts are shown as of the valuation date and are indexed annually based on the CPI.

Member Contributions:

Non-hazardous Members	5% of salary.
Hazardous Members	8% of salary.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2003	2004*	2005*	2006*	2007	2008
			Number			
Beginning of Year	26,147	27,092	29,129	31,347	33,102	35,564
Added	2,411	2,805	2,808	2,782	3,244	3,366
Removed	1,466	768	590	1,027	782	1,351
End of Year	27,092	29,129	31,347	33,102	35,564	37,579
			Annual Allowances			
Beginning of Year	N/A	$ 219,848,200	$ 247,534,300	$ 279,590,300	$ 308,269,651	$ 348,712,020
Added	$ 24,855,000	$ 28,181,800	30,397,300	34,559,599	44,888,509	56,376,123
Removed	8,111,100	3,587,800	3,161,200	5,880,248	4,446,140	11,330,633
End of Year	$ 219,848,200	$ 247,534,300	$ 279,590,300	$ 308,269,651	$ 348,712,020	$ 393,757,510
% Increase in Allowances	N/A	12.59%	12.95%	10.26%	13.12%	12.92%
Average Annual Allowance	$ 8,115	$ 8,498	$ 8,919	$ 9,313	$ 9,805	$ 10,478

*Reported by prior actuarial firm.

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2003	2004*	2005*	2006*	2007	2008
			Number			
Beginning of Year	3,483	3,737	4,005	4,361	4,712	5,159
Added	293	343	403	427	500	469
Removed	39	75	47	76	53	206
End of Year	3,737	4,005	4,361	4,712	5,159	5,422
			Annual Allowances			
Beginning of Year	N/A	$ 72,322,200	$ 79,559,200	$ 89,224,700	$ 100,290,052	$ 113,735,850
Added	6,258,300	$ 6,712,500	8,536,100	11,876,922	14,207,939	16,794,618
Removed	355,100	605,100	502,700	811,570	762,141	3,053,359
End of Year	$ 72,322,200	$ 79,559,200	$ 89,224,700	$ 100,290,052	$ 113,735,850	$ 127,477,109
% Increase in Allowances	N/A	10.01%	12.15%	12.40%	13.41%	12.08%
Average Annual Allowance	$ 19,353	$ 19,865	$ 20,460	$ 21,284	$ 22,046	$ 23,511

*Reported by prior actuarial firm.

Non-Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,244	$ 2,990,716.92	11,121	$ 7,159,913.56	14,365	$ 10,150,630.48
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,928	1,968,387.30	826	482,032.81	2,754	2,450,420.11
66-2/3% to Beneficiary	581	977,842.90	303	312,987.61	884	1,290,830.51
50% to Beneficiary	833	1,193,550.31	872	896,088.33	1,705	2,089,638.64
Pop-up Option	2,772	4,104,641.58	2,082	2,084,232.21	4,854	6,188,873.79
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,137	970,433.85	2,421	1,597,292.75	3,558	2,567,726.60
Social Security Option						
Age 62 Basic	224	552,048.75	437	547,419.34	661	1,099,468.09
Age 62 Survivorship	547	1,280,444.87	260	361,671.73	807	1,642,116.60
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	505	453,388.78	512	363,424.77	1,017	816,813.55
20 Years Certain & Life	348	422,735.65	442	344,065.92	790	766,801.57
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	117	114,940.46	349	253,404.06	466	368,344.52
PLSO 24 Month Basic	65	41,426.38	225	157,241.47	290	198,667.85
PLSO 36 Month Basic	281	130,633.11	658	259,678.61	939	390,311.72
PLSO 12 Month Survivor	138	151,339.72	86	75,157.64	224	226,497.36
PLSO 24 Month Survivor	96	91,373.58	63	37,581.58	159	128,955.16
PLSO 36 Month Survivor	425	245,238.16	258	102,805.96	683	348,044.12
Total	13,241	$ 15,689,142.32	20,915	$ 15,034,998.35	34,156	$ 30,724,140.67

Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	595	$ 1,138,678.98	178	$ 269,363.31	773	$ 1,408,042.29
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	481	903,325.02	22	20,040.93	503	923,365.95
66-2/3% to Beneficiary	200	489,806.98	4	10,789.23	204	500,596.21
50% to Beneficiary	336	742,635.43	17	28,463.50	353	771,098.93
Pop-up Option	1,793	4,208,990.31	62	110,502.32	1,855	4,319,492.63
10 Years Certain	28	39,647.40	3	3,700.96	31	43,348.36
10 Years Certain & Life	157	306,592.40	37	65,360.09	194	371,952.49
Social Security Option						
Age 62 Basic	92	193,780.69	7	12,380.04	99	206,160.73
Age 62 Survivorship	282	541,291.43	10	11,661.35	292	552,952.78
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	55	90,220.52	7	6,549.94	62	96,770.46
20 Years Certain & Life	103	185,092.86	11	10,917.62	114	196,010.48
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	25	42,238.28	8	11,424.82	33	53,663.10
PLSO 24 Month Basic	23	46,411.23	6	7,070.05	29	53,481.28
PLSO 36 Month Basic	52	77,476.69	13	13,320.02	65	90,796.71
PLSO 12 Month Survivor	53	119,134.44	2	3,364.20	55	122,498.64
PLSO 24 Month Survivor	63	94,682.27	4	3,900.59	67	98,582.86
PLSO 36 Month Survivor	130	181,375.21	7	4,669.90	137	186,045.11
Total	4,468	$ 9,401,380.14	398	$ 593,478.87	4,866	$ 9,994,859.01

Non-Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	5	$ 1,434.44	21	$ 15,474.71	26	$ 16,909.15
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	263	114,293.69	1,344	703,989.21	1,607	818,282.90
66-2/3% to Beneficiary	23	9,256.71	173	94,346.93	196	103,603.64
50% to Beneficiary	69	23,102.37	280	116,781.65	349	139,884.02
Pop-up Option	87	53,489.97	324	241,512.13	411	295,002.10
10 Years Certain	58	40,953.08	86	63,791.29	144	104,744.37
10 Years Certain & Life	56	34,833.45	84	65,478.62	140	100,312.07
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	15	10,877.76	91	149,355.08	106	160,232.84
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	651.28	3	651.28
Dependent Child	2	639.36	2	395.73	4	1,035.09
Refund	0	0.00	4	2,588.88	4	2,588.88
15 Years Certain & Life	29	25,092.56	79	60,180.27	108	85,272.83
20 Years Certain & Life	38	21,561.72	73	69,653.33	111	91,215.05
5 Years Certain	59	51,190.73	69	71,606.66	128	122,797.39
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	2	668.09	13	4,060.23	15	4,728.32
PLSO 12 Month Survivor	5	1,805.66	15	16,530.03	20	18,335.69
PLSO 24 Month Survivor	0	0.00	6	4,144.92	6	4,144.92
PLSO 36 Month Survivor	18	8,031.46	27	11,213.13	45	19,244.59
Total	729	$ 397,231.05	2,694	$ 1,691,754.08	3,423	$ 2,088,985.13

Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	20	$ 18,161.41	20	$ 18,161.41
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	6	3,513.60	124	155,221.06	130	158,734.66
66-2/3% to Beneficiary	0	0.00	28	37,138.45	28	37,138.45
50% to Beneficiary	1	525.36	36	29,731.31	37	30,256.67
Pop-up Option	0	0.00	90	139,097.58	90	139,097.58
10 Years Certain	4	12,931.95	9	11,365.74	13	24,297.69
10 Years Certain & Life	1	1,990.34	3	2,198.04	4	4,188.38
Social Security Option						
Age 62 Basic	0	0.00	2	536.08	2	536.08
Age 62 Survivorship	1	2,688.82	65	114,781.82	66	117,470.64
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	2,581.57	3	2,581.57
Dependent Child	52	18,650.68	52	18,518.46	104	37,169.14
Refund	0	0.00	8	5,702.85	8	5,702.85
15 Years Certain & Life	0	0.00	5	5,614.32	5	5,614.32
20 Years Certain & Life	1	1,707.00	23	24,696.31	24	26,403.31
5 Years Certain	3	1,598.36	7	9,491.27	10	11,089.63
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	882.72	5	2,062.26	6	2,944.98
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	2	1,344.22	2	1,344.22
PLSO 36 Month Survivor	0	0.00	4	5,501.82	4	5,501.82
Total	70	$ 44,488.83	486	$ 583,744.57	556	$ 628,233.40

Non-Hazardous Members

Retired and Beneficiary Information June 30, 2008
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	67	$ 1,410,123	58	$ 520,235	32	$ 196,718	157	$ 2,127,075
45-49	587	$ 13,243,768	130	$ 1,408,578	54	$ 426,580	771	$ 15,078,926
50-54	1,715	$ 39,357,311	276	$ 3,215,080	133	$ 1,307,050	2,124	$ 43,879,441
55-59	3,621	$ 64,881,862	548	$ 5,687,722	226	$ 2,679,715	4,395	$ 73,249,300
60-64	5,317	$ 67,898,563	702	$ 7,155,490	344	$ 3,399,343	6,363	$ 78,453,396
65-69	6,518	$ 60,619,255	635	$ 5,934,562	428	$ 4,088,301	7,581	$ 70,642,118
70-74	5,462	$ 43,189,097	422	$ 3,299,985	466	$ 3,835,709	6,350	$ 50,324,791
75-79	3,790	$ 27,096,677	164	$ 1,153,981	482	$ 3,496,947	4,436	$ 31,747,605
80-84	2,440	$ 15,069,785	42	$ 238,493	461	$ 2,343,813	2,943	$ 17,652,092
85-89	1,181	$ 5,357,043	19	$ 57,681	401	$ 1,853,241	1,601	$ 7,267,966
90 & Over	456	$ 1,871,083	6	$ 23,314	396	$ 1,440,404	858	$ 3,334,800
Totals	31,154	$ 339,994,566	3,002	$ 28,695,122	3,423	$ 25,067,822	37,579	$ 393,757,510

Hazardous Members

Retired and Beneficiary Information June 30, 2008
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	145	$ 4,002,800	69	$ 1,131,734	123	$ 640,864	337	$ 5,775,398
45-49	483	$ 13,717,436	76	$ 1,290,987	18	$ 187,433	577	$ 15,195,856
50-54	733	$ 20,951,893	80	$ 1,243,517	37	$ 415,369	850	$ 22,610,779
55-59	1,098	$ 32,122,950	82	$ 1,165,502	65	$ 1,084,548	1,245	$ 34,373,000
60-64	926	$ 21,849,135	45	$ 672,095	74	$ 1,323,104	1,045	$ 23,844,335
65-69	606	$ 11,939,580	15	$ 193,899	83	$ 1,750,352	704	$ 13,883,831
70-74	305	$ 5,955,076	8	$ 102,139	60	$ 983,081	373	$ 7,040,297
75-79	134	$ 2,649,270	2	$ 23,660	60	$ 814,850	196	$ 3,487,781
80-84	46	$ 789,544	3	$ 34,775	27	$ 254,159	76	$ 1,078,478
85-89	9	$ 101,579			7	$ 69,932	16	$ 171,511
90 & Over	1	$ 737			2	$ 15,107	3	$ 15,843
Totals	4,486	$ 114,080,001	380	$ 5,858,308	556	$ 7,538,801	5,422	$ 127,477,109

Total Non-Hazardous Active Members as of June 30, 2008
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	1,672								1,672
Avg Pay	$12,523								$12,523
20-24	3,611	210							3,821
Avg Pay	$19,522	$23,067							$19,716
25-29	3,490	1,111	53						4,654
Avg Pay	$21,885	$27,238	$31,681						$23,274
30-34	3,571	1,891	570	5					6,037
Avg Pay	$21,275	$29,614	$32,647	$40,291					$24,976
35-39	4,470	2,743	1,327	333	22				8,895
Avg Pay	$20,126	$27,449	$34,830	$37,288	$46,725				$25,286
40-44	4,187	3,725	1,876	836	426	70	4		11,124
Avg Pay	$20,298	$24,606	$30,494	$37,963	$45,285	$49,414	$34,764		$25,933
44-49	3,863	4,065	2,846	1,452	772	233	206	35	13,472
Avg Pay	$20,783	$24,497	$26,946	$33,422	$42,761	$44,194	$47,902	$52,931	$26,730
50-54	3,302	3,343	3,029	2,028	972	297	301	177	13,449
Avg Pay	$22,001	$25,247	$26,562	$29,879	$37,078	$42,798	$42,310	$53,246	$27,438
55-59	2,552	2,394	2,179	1,924	1,116	280	315	178	10,938
Avg Pay	$21,191	$26,309	$26,909	$28,532	$34,537	$35,478	$39,267	$50,102	$27,460
60-64	1,607	1,768	1,242	1,125	676	195	189	137	6,939
Avg Pay	$19,326	$23,979	$25,673	$28,026	$30,388	$34,282	$36,202	$53,677	$25,694
65-69	641	714	541	391	210	54	83	66	2,700
Avg Pay	$15,760	$21,363	$21,482	$25,144	$25,141	$28,984	$28,172	$44,407	$21,823
70 & over	338	418	288	218	151	34	29	44	1,520
Avg Pay	$15,978	$19,069	$19,142	$22,588	$23,812	$22,733	$28,787	$48,490	$20,490
Totals	33,304	22,382	13,951	8,312	4,345	1,163	1,127	637	85,221
Avg Pay	$20,187	$25,496	$27,849	$30,637	$36,210	$39,058	$40,041	$51,199	$25,423

Total Hazardous Active Members as of June 30, 2008
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	85								85
Avg Pay	$27,060								$27,060
20-24	507	13							520
Avg Pay	$32,116	$43,385							$32,397
25-29	1,085	236	2						1,323
Avg Pay	$37,458	$45,185	$59,088						$38,869
30-34	679	820	192	3					1,694
Avg Pay	$38,343	$47,568	$53,685	$61,544					$44,589
35-39	485	753	691	169	14				2,112
Avg Pay	$37,934	$46,861	$54,093	$59,527	$63,451				$48,301
40-44	274	431	368	545	144	16			1,778
Avg Pay	$36,384	$46,092	$52,435	$59,085	$65,847	$64,619			$51,658
44-49	153	233	196	300	225	53	15	4	1,179
Avg Pay	$36,183	$43,951	$50,359	$58,106	$61,881	$59,331	$58,832	$74,172	$52,015
50-54	91	139	94	176	136	29	49	24	738
Avg Pay	$40,158	$44,722	$48,776	$55,360	$55,259	$59,951	$56,775	$63,551	$51,165
55-59	78	108	43	65	69	21	40	38	462
Avg Pay	$35,772	$46,688	$53,572	$52,616	$53,099	$52,263	$54,196	$59,877	$49,266
60-64	34	64	23	20	30	5	17	16	209
Avg Pay	$33,741	$46,126	$42,593	$51,953	$43,753	$47,290	$42,865	$50,305	$44,022
65-69	8	22	8	3	2	3	2	1	49
Avg Pay	$31,611	$39,960	$46,130	$41,108	$38,202	$52,456	$81,978	$47,820	$42,243
70 & over	6	8	1	3	2	2	2		24
Avg Pay	$27,634	$52,374	$33,372	$59,792	$56,640	$59,568	$66,180		$48,430
Totals	3,485	2,827	1,618	1,284	622	129	125	83	10,173
Avg Pay	$36,492	$46,387	$52,683	$57,931	$59,445	$58,353	$54,858	$59,638	$46,618

Report on the Annual Valuation of the State Police Retirement System

Prepared as of June 30, 2008

November 21, 2008

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2009. The date of the valuation was June 30, 2008.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 5.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

TJC:kc

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REPORT ON THE ANNUAL VALUATION OF THE STATE POLICE RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2008

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2008, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	6/30/2008	6/30/2007
Contributions for next fiscal year:		
Retirement	35.23%	32.39%
Insurance	56.89	59.54
Total	92.12%	91.93%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$587,129,257	$547,955,286
Actuarial value of assets	350,891,451	348,806,508
Unfunded liability on actuarial value of assets	236,237,806	199,148,778
Funded ratio on actuarial value of assets	59.76%	63.66%
Market value of assets	$337,358,918	$376,381,488
Unfunded liability on market value of assets	249,770,339	171,573,798
Funded ratio on market value of assets	57.46%	68.69%
Insurance		
Actuarial accured liability	$445,107,468	$432,763,229
Actuarial value of assets	123,961,197	115,215,912
Unfunded liability on actuarial value of assets	321,146,271	317,547,317
Funded ratio on actuarial value of assets	27.85%	26.62%
Market value of assets	$121,781,967	$132,573,898
Unfunded liability on market value of assets	323,325,501	300,189,331
Funded ratio on market value of assets	27.36%	30.63%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,135	1,105
Number of vested former members	55	47
Number of former members due a refund	246	239
Number of active members	993	957
Total salary	$53,269,080	$49,247,580
Average salary	$53,645	$51,460

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, coverage options for pre-65 members have changed. There are three coverage options from which retirees and beneficiaries may choose for Plan Year 2009. Two of the options are new and a third has a new name. The new rates for 2009 can be found in Schedule C. The options for 2009 are summarized below.

    - Commonwealth Optimum PPO is a new plan which combines the Commonwealth Enhanced and Commonwealth Premier plans of Plan Year 2008 into one plan.
    - Commonwealth Capitol Choice is a new plan offering for Plan Year 2009.
    - Commonwealth Standard PPO is the new name for the Commonwealth Essential plan of Plan Year 2008. The benefits on this plan remain unchanged for Plan Year 2009.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2007 and June 30, 2008 is 4.50%. The lower rate for insurance benefits is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of those benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2008 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

		Group Averages		
Number	Payroll	Salary	Age	Service
993	$53,269,080	$53,645	36.9	10.8

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2003	1,019	$43,760,832	$42,945	(2.1)%
6/30/2004	999	43,835,208	43,879	2.2
6/30/2005	987	43,720,092	44,296	1.0
6/30/2006	1,028	47,743,865	46,443	4.8
6/30/2007	957	49,247,580	51,460	10.8
6/30/2008	993	53,269,080	53,645	4.2

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

			Group Averages	
Type of Benefit Payment	Number	Annual Benefits	Benefit	Age
Retiree	969	$37,354,115	$38,549	60.5
Disability	36	$612,536	17,015	56.7
Beneficiary	130	3,326,365	25,587	63.0
Total in SPRS	1,135	$41,293,016	$36,382	60.7

This valuation also includes 301 inactive members of which 55 are vested.

SECTION III - ASSETS

1. As of June 30, 2008 the total market value of assets amounted to $459,140,885 as shown in the following table.

Retirement	Insurance	SPRS Total
$337,358,918	$121,781,967	$459,140,885

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $474,852,648. Schedule B shows the development of the actuarial value of assets as of June 30, 2008. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2008	JUNE 30, 2007
Retirement	$ 350,891,451	$ 348,806,508
Insurance	123,961,197	115,215,912
Total	$ 474,852,648	$ 464,022,420

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2008. Separate balance sheets are shown for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $665,344,483, of which $423,834,095 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $2,477,273 is for the prospective benefits payable on account of inactive members, $239,033,115 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $350,891,451 as of June 30, 2008. The difference of $314,453,032 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $35,604,574 is the present value of future contributions expected to be made by members, and the balance of $278,848,458 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 9.57% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $42,610,652. When this amount is subtracted from $278,848,458, which is the present value of the total future contributions to be made by the State, there remains $236,237,806 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 25.40% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $236,237,806 over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.26% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $607,603,231, of which $169,176,606 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $9,478,639 is for the prospective benefits payable to current inactive members, and $428,947,986 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $123,961,197 as of June 30, 2008. The difference of $483,642,034 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $0 is the present value of future contributions expected to be made by members, and the balance of $483,642,034 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 32.98% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $162,495,763. When this amount is subtracted from $483,642,034, which is the present value of the total future contributions to be made by the employers, there remains $321,146,271 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 23.71% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $321,146,271 over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.20% of payroll.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2008 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

			Amount
(1)	UAAL* as of 6/30/07	$	199.1
(2)	Normal cost from last valuation		4.7
(3)	Expected employer contributions		16.0
(4)	Interest accrual: [(1) + (2) - (3)] x .0775		14.2
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	202.0
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	202.0
(9)	Actual UAAL as of 6/30/08	$	236.2
(10)	Gain/(loss): (8) - (9)	$	(34.2)
(11)	Accrued liabilities as of 6/30/07	$	548.0
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(6.2)%

*Unfunded actuarial accrued liability.

Experience Gain/(Loss)
Insurance Benefits

			Amount
(1)	UAAL* as of 6/30/07	$	317.5
(2)	Normal cost from last valuation		17.1
(3)	Expected employer contributions		29.2
(4)	Interest accrual: [(1) + (2) - (3)] x .045		13.7
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	319.1
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	319.1
(9)	Actual UAAL as of 6/30/08	$	321.1
(10)	Gain/(loss): (8) - (9)	$	(2.0)
(11)	Accrued liabilities as of 6/30/07	$	432.8
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(0.5)%

*Unfunded actuarial accrued liability.

SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/08	Insurance $ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (3.3)	$ 3.2
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.3	0.4
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.7	2.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(5.4)	19.8
New Members. Additional unfunded accrued liability will produce a loss.	(0.4)	(0.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	0.7	2.1
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(0.7)	2.8
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(26.1)	(31.9)
Gain (or Loss) During Year From Financial Experience	$ (34.2)	$ (2.0)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	0.0	0.0
Composite Gain (or Loss) During Year	$ (34.2)	$ (2.0)

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2009/2010 fiscal year.

Required Contribution Rates
Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	8,560,341	16.07%
	(2) Disability benefits		580,633	1.09
	(3) Survivor benefits		218,403	0.41
	(4) Total	$	9,359,377	17.57%
B.	Member Contributions	$	4,261,526	8.00%
C.	Employer Normal Cost: [A(4) - B]	$	5,097,851	9.57%
D.	Administrative Expenses	$	137,444	0.26%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/07 Valuation:	$	11,205,731	22.75%
	(2) Change due to:			
	a. Active decrements	$	135,092	0.25%
	b. Pay increases		309,401	0.58
	c. Retiree mortality		39,652	0.07
	d. Investment return		(39,589)	(0.07)
	e. COLA		927,198	1.74
	f. Assumption Change		0	0.00
	g. Other		952,159	1.78
	h. Total Change	$	2,323,915	2.65%
	(3) UAAL Contribution Based on 6/30/08 Valuation: [E(1) +E(2)h]	$	13,529,646	25.40%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	18,764,941	35.23%

* Based on 30 year amortization of the UAAL from June 30, 2007 and 29 years from June 30, 2008

Required Contribution Rates
Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost	$	17,567,794	32.98%
B.	Member Contributions*	$	0	0.00%
C.	Employer Normal Cost: [A - B]	$	17,567,794	32.98%
D.	Administrative Expenses	$	105,513	0.20%
E.	Unfunded Actuarial Accrued Liability**	$	12,628,844	23.71%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	30,302,151	56.89%

*The liabilities are net of retiree contributions toward their healthcare.
** Based on 29 year amortization of the UAAL from June 30, 2008

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2008

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,135
Terminated employees entitled to benefits but not yet receiving benefits	301
Active Members	993
Total	2,429

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2003	$ 413,063,576	$ 414,881,459	$ 1,817,883	99.6%	$ 43,760,832	4.2%
6/30/2004	385,077,195	437,482,425	52,405,230	88.0	43,835,208	119.6
6/30/2005	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
6/30/2006	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
6/30/2007	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
6/30/2008	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2003	$ 90,747,967	$ 184,501,205	$ 93,753,238	49.2%	$ 43,760,832	214.2%
6/30/2004	96,622,908	197,604,301	100,981,393	48.9	43,835,208	230.4
6/30/2005	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
6/30/2006	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
6/30/2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
6/30/2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2008. Additional information as of the latest actuarial valuation follows.

Retirement Benefits	
Valuation date	6/30/2008
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	29 years
Asset valuation method	5 Year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases*	4.0% - 14.5%
Cost-of-living adjustment	None
*Includes inflation at	3.50%

Insurance Benefits	
Valuation date	6/30/2008
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	29 years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption	11.0 - 5.0%
Year of Ulitimate Trend	2015
Actuarial assumptions:	
Investment rate of return*	4.50%
*Includes inflation at	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2008 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2007. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM

RETIREMENT BENEFITS

	JUNE 30, 2008	JUNE 30, 2007
ASSETS		
Current actuarial value of assets	$ 350,891,451	$ 348,806,508
Prospective contributions		
Member contributions	$ 35,604,574	$ 33,817,886
Employer normal contributions	42,610,652	39,644,341
Unfunded accrued liability contributions	236,237,806	199,148,778
Total prospective contributions	$ 314,453,032	$ 272,611,005
Total assets	$ 665,344,483	$ 621,417,513
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 423,834,095	$ 395,686,232
Present value of benefits payable on account of active members	239,033,115	223,553,993
Present value of benefits payable on account of inactive members	2,477,273	2,177,288
Total liabilities	$ 665,344,483	$ 621,417,513

VALUATION BALANCE SHEET
INSURANCE BENEFITS

	JUNE 30, 2008	JUNE 30, 2007
ASSETS		
Current actuarial value of assets	$ 123,961,197	$ 115,215,912
Prospective contributions		
Normal contributions	$ 162,495,763	$ 159,945,230
Unfunded accrued liability contributions	321,146,271	317,547,317
Total prospective contributions	$ 483,642,034	$ 477,492,547
Total assets	$ 607,603,231	$ 592,708,459
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 169,176,606	$ 165,115,867
Present value of benefits payable on account of active members	428,947,986	420,417,317
Present value of benefits payable on account of inactive members	9,478,639	7,175,275
Total liabilities	$ 607,603,231	$ 592,708,459

The following tables provide the solvency test for SPRS members.

Solvency Test
Retirement Benefits

Valuation Date	Aggregate Accrued Liabilites For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2003*	$ 35,832,095	$ 290,012,792	$ 89,036,572	$ 413,063,576	100.0%	100.0%	98.0%
6/30/2004*	37,658,106	318,664,694	81,159,625	385,077,195	100.0	100.0	35.4
6/30/2005*	35,670,717	341,398,363	81,524,496	353,511,622	100.0	93.1	0.0
6/30/2006	37,866,774	373,588,145	105,027,379	344,016,197	100.0	81.9	0.0
6/30/2007	39,505,285	397,863,520	110,586,481	348,806,508	100.0	77.7	0.0
6/30/2008	41,391,416	426,311,368	119,426,473	350,891,451	100.0	72.6	0.0

*Reported by prior actuarial firm.

Solvency Test
Insurance Benefits

Valuation Date	Aggregate Accrued Liabilites For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2003*	$ 0	$ 106,317,750	$ 78,183,455	$ 90,747,967	100.0%	85.4%	0.0%
6/30/2004*	0	119,104,851	78,499,450	96,622,908	100.0	81.1	0.0
6/30/2005*	0	141,585,694	92,573,816	100,207,082	100.0	70.8	0.0
6/30/2006	0	240,913,868	341,666,999	105,580,269	100.0	43.8	0.0
6/30/2007	0	172,291,142	260,472,087	115,215,912	100.0	66.9	0.0
6/30/2008	0	178,655,245	266,452,223	123,961,197	100.0	69.4	0.0

*Reported by prior actuarial firm.

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits

	Valuation date June 30:	2007	2008	2009	2010	2011	2012
A.	Actuarial Value Beginning of Year	$ 344,016,197	$ 348,806,508				
B.	Market Value End of Year	376,381,488	337,358,918				
C.	Market Value Beginning of Year	352,841,486	376,381,488				
D.	Cash Flow						
	D1. Contributions	11,293,952	12,850,624				
	D2. Benefit Payments	(37,233,587)	(39,452,886)				
	D3. Administrative Expenses	(126,687)	(137,444)				
	D4. Investment Expenses	(306,896)	(349,948)				
	D5. Net	(26,373,218)	(27,089,654)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	49,913,220	(11,932,916)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	26,642,041	28,483,350				
	E4. Amount for Phased-In Recognition	23,271,179	(40,416,266)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	4,654,236	(8,083,253)	0	0	0	0
	F2. First Prior Year	2,482,933	4,654,236	(8,083,253)	0	0	0
	F3. Second Prior Year	(128,096)	2,482,933	4,654,236	(8,083,253)	0	0
	F4. Third Prior Year	1,765,427	(128,096)	2,482,933	4,654,236	(8,083,253)	0
	F5. Fourth Prior Year	(4,253,012)	1,765,427	(128,096)	2,482,933	4,654,236	(8,083,253)
	F6. Total Recognized Investment Gain	4,521,488	691,247	(1,074,180)	(946,084)	(3,429,017)	(8,083,253)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 348,806,508	$ 350,891,451				
H.	Difference Between Market & Actuarial Values	$ 27,574,980	$ (13,532,533)	$ (12,458,353)	$ (11,512,269)	$ (8,083,253)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits

	Valuation date June 30:	2007	2008	2009	2010	2011	2012
A.	Actuarial Value Beginning of Year	$ 105,580,269	$ 115,215,912				
B.	Market Value End of Year	132,573,898	121,781,967				
C.	Market Value Beginning of Year	110,491,075	132,573,898				
D.	Cash Flow						
	D1. Contributions	6,858,127	7,521,645				
	D2. Benefit Payments	(6,515,053)	(6,767,181)				
	D3. Administrative Expenses	(104,872)	(105,513)				
	D4. Investment Expenses	(93,044)	(84,947)				
	D5. Net	145,158	564,004				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	21,937,665	(11,355,935)				
	E2. Assumed Rate	4.50%	4.50%				
	E3. Amount for Immediate Recognition	5,070,502	6,065,374				
	E4. Amount for Phased-In Recognition	16,867,163	(17,421,309)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	3,373,433	(3,484,262)	0	0	0	0
	F2. First Prior Year	784,282	3,373,433	(3,484,262)	0	0	0
	F3. Second Prior Year	68,955	784,282	3,373,433	(3,484,262)	0	0
	F4. Third Prior Year	1,373,499	68,955	784,282	3,373,433	(3,484,262)	0
	F5. Fourth Prior Year	(1,180,186)	1,373,499	68,955	784,282	3,373,433	(3,484,262)
	F6. Total Recognized Investment Gain	4,419,983	2,115,907	742,408	673,453	(110,829)	(3,484,262)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 115,215,912	$ 123,961,197				
H.	Difference Between Market & Actuarial Values	$ 17,357,986	$ (2,179,230)	$ (2,921,638)	$ (3,595,091)	$ (3,484,262)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006, with the exception of the health care cost trend rate which was adopted by the Board on November 15, 2007.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for SPRS is 4.50%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for members are as follows and include inflation at 3.50% per annum:

	Annual Rates of		
Service	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	11.0%	3.5%	14.5%
1-2	4.0	3.5	7.5
2-3	3.5	3.5	7.0
3-4	3.0	3.5	6.5
4-5	2.5	3.5	6.0
5-6	2.0	3.5	5.5
6-7	1.5	3.5	5.0
7-8	1.5	3.5	5.0
8-9	1.0	3.5	4.5
9-10	1.0	3.5	4.5
10 & over	0.5	3.5	4.0

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

		Death**			Service Retirement***	
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate
20	2.50%	0.05%	0.03%	0.07%	20	20.0%
25	2.28	0.07	0.03	0.09	25	20.0
30	1.83	0.08	0.04	0.12	30	45.0
35	1.31	0.09	0.05	0.17	35	70.0
40	0.81	0.11	0.07	0.27		
45	0.41	0.16	0.10	0.44		
50		0.26	0.14	0.75		
55		0.44	0.23	1.23		
60		0.80	0.44	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 10.0%, 7.0%, 5.0%, 4.0% and 3.5%, respectively.
** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.
*** The annual rate of service retirement is 100% at age 55.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Fiscal Year Ended	Trend
2009	11.0%
2010	10.0
2011	9.0
2012	8.0
2013	7.0
2014	6.0
2015 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and over	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation and spouse coverage are as follows:

Participation	100%
Spouse Coverage	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2008				
	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Essential	N/A	$ 617.12	$ 947.44	$ 1,056.56
Enhanced	$ 484.24	$ 742.74	$ 1,137.18	$ 1,267.40
Premier	$ 501.20	$ 772.06	$ 1,175.32	$ 1,309.76
Select	$ 469.00	$ 703.50	$ 989.18	$ 1,128.48

2009				
	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 446.24	$ 690.00	$ 1,044.48	$ 1,162.16
Optimum PPO	$ 566.20	$ 821.46	$ 1,265.10	$ 1,407.32
Capitol Choice	$ 545.08	$ 826.38	$ 1,249.74	$ 1,383.52

MEDICARE ELIGIBLE

Effective January 1, 2009 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 162.48	$ 162.00
Kentucky Retirement System Health Plan - PLUS	$ 203.05	$ 267.00
Kentucky Retirement System Health Plan - PREMIUM	$ 363.18	$ 338.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

UNUSED SICK LEAVE: It is assumed that a member will be granted one and one-half year of service credit for unused sick leave at termination of employment.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Normal Retirement:	
Age Requirement	55
Service Requirement	None
Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation time years of service. Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.
Early Retirement:	
Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.
Disability:	
Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used.

	A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Any age with 60 months service or age 65 with 48 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

Lump-sum Benefit	$5,000
Husband and Wife	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

Members whose participation began before July 1, 2003	The Retirement System pays a portion of medical premiums for retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System. For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.
Members whose participation began on or after July 1, 2003	The Retirement System pays $17.94 per month per year of service for retirees, and $11.96 per month per year of service for surviving spouses employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of service. These amounts are shown as of the valuation date and are indexed annually based on the CPI.

Member Contributions: 8% of salary.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2003*	2004*	2005*	2006	2007	2008
			Number			
Beginning of Year	897	941	992	1,036	1,067	1,105
Added	53	62	50	43	49	42
Removed	9	11	6	10	11	12
End of Year	941	992	1,036	1,067	1,105	1,135
			Annual Allowances			
Beginning of Year	N/A	$ 28,115,500	$ 30,805,600	$ 32,983,900	$ 34,651,251	$ 37,208,377
Added	2,040,300	2,580,100	1,813,000	1,943,760	2,836,956	4,330,608
Removed	135,000	189,900	159,600	276,409	279,830	245,968
End of Year	$ 28,115,500	$ 30,805,600	$ 32,983,900	$ 34,651,251	$ 37,208,377	$ 41,293,017
% Increase in Allowances	N/A	9.57%	7.07%	5.06%	7.38%	10.98%
Average Annual Allowance	$ 29,878	$ 31,054	$ 31,838	$ 32,475	$ 33,673	$ 36,382

*Reported by prior actuarial firm.

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	91	$ 270,613.82	5	$ 13,896.30	96	$ 284,510.12
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	115	327,339.52	1	3,336.41	116	330,675.93
66-2/3% to Beneficiary	79	277,478.57	1	2,832.04	80	280,310.61
50% to Beneficiary	75	254,517.07	0	0.00	75	254,517.07
Pop-up Option	361	1,215,311.71	1	4,081.24	362	1,219,392.95
10 Years Certain	3	13,369.70	0	0.00	3	13,369.70
10 Years Certain & Life	29	87,538.72	0	0.00	29	87,538.72
Social Security Option						
Age 62 Basic	33	110,679.36	0	0.00	33	110,679.36
Age 62 Survivorship	153	423,789.44	1	4,918.32	154	428,707.76
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	10	27,889.60	1	3,645.42	11	31,535.02
20 Years Certain & Life	29	85,817.37	1	2,616.58	30	88,433.95
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	1	429.02	1	429.02
PLSO 12 Month Survivor	4	11,817.90	0	0.00	4	11,817.90
PLSO 24 Month Survivor	3	6,994.65	0	0.00	3	6,994.65
PLSO 36 Month Survivor	8	14,974.83	0	0.00	8	14,974.83
Total	993	$ 3,128,132.26	12	$ 35,755.33	1,005	$ 3,163,887.59

Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	4	$ 2,835.23	4	$ 2,835.23
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2	3,903.44	57	148,367.62	59	152,271.06
66-2/3% to Beneficiary	1	744.26	2	3,661.65	3	4,405.91
50% to Beneficiary	1	1,208.08	15	21,948.61	16	23,156.69
Pop-up Option	0	0.00	12	28,956.94	12	28,956.94
10 Years Certain	1	550.26	1	2,735.46	2	3,285.72
10 Years Certain & Life	0	0.00	0	0.00	0	0.00
Social Security Option						
Age 62 Basic	0	0.00	1	3,069.46	1	3,069.46
Age 62 Survivorship	0	0.00	22	46,375.23	22	46,375.23
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	3	895.29	2	541.17	5	1,436.46
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	0	0.00	0	0.00	0	0.00
20 Years Certain & Life	0	0.00	5	8,010.17	5	8,010.17
5 Years Certain	1	3,394.25	0	0.00	1	3,394.25
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	9	$ 10,695.58	121	$ 266,501.54	130	$ 277,197.12

Retired and Beneficiary Information June 30, 2008
Tabulated by Attained Ages

Attained Age	Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	21	$ 628,995	4	$ 41,077	7	$ 44,311	32	$ 714,384
45-49	74	2,597,458	5	94,356	5	82,822	84	2,774,636
50-54	113	4,069,635	6	101,573	7	73,205	126	4,244,413
55-59	280	12,168,195	7	101,513	17	368,511	304	12,638,219
60-64	220	8,868,849	7	165,458	20	460,257	247	9,494,563
65-69	116	3,697,450	1	1,065	9	289,950	126	3,988,465
70-74	65	2,228,283	4	95,590	10	415,971	79	2,739,844
75-79	45	1,697,038	2	11,904	22	615,972	69	2,324,914
80-84	27	1,234,724	0	0	24	727,070	51	1,961,794
85-89	7	145,343	0	0	9	248,297	16	393,640
90 & Over	1	18,145	0	0	0	0	1	18,145
Totals	969	$ 37,354,115	36	$ 612,536	130	$ 3,326,365	1,135	$ 41,293,017

Total Active Members as of June 30, 2008
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	21								21
Avg Pay	$17,664								$17,664
20-24	22								22
Avg Pay	$35,549								$35,549
25-29	102	28							130
Avg Pay	$41,818	$48,675							$43,295
30-34	62	125	21						208
Avg Pay	$41,178	$48,778	$57,227						$47,366
35-39	33	74	134	23	4				268
Avg Pay	$41,062	$48,856	$57,953	$62,693	$64,185				$53,861
40-44	7	21	42	77	30	3			180
Avg Pay	$44,043	$48,552	$60,121	$65,856	$70,054	$71,776			$62,449
44-49	8	6	11	34	38	10	4		111
Avg Pay	$38,592	$42,830	$55,191	$64,863	$71,945	$67,838	$74,346		$63,854
50-54			2	3	12	12	7	6	42
Avg Pay			$57,900	$65,444	$68,016	$72,039	$75,423	$80,140	$71,467
55-59						1	3	2	6
Avg Pay						$64,668	$81,768	$85,896	$80,294
60-64								3	3
Avg Pay								$91,548	$91,548
65-69			1						1
Avg Pay			$65,436						$65,436
70 & over		1							1
Avg Pay		$48,816							$48,816
Totals	255	255	211	137	84	26	14	11	993
Avg Pay	$38,994	$48,631	$58,204	$65,069	$70,339	$70,110	$76,475	$84,298	$53,645

Report on the Annual Valuations of the Kentucky Employees Retirement System County Employees Retirement System State Police Retirement System

Prepared as of June 30, 2009

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 9, 2009

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fifty-third annual actuarial valuation of the Kentucky Employees Retirement System, the fiftieth annual actuarial valuation of the County Employees Retirement System, and the fifty-first annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2009 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2010 and ending June 30, 2011.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) are established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30 year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension Fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

The impact of HB1 passed into law in 2008 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 (and for KERS Hazardous and CERS Non-Hazardous the 2009) assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2009 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	45.0%
KERS Hazardous Pension Fund	74.5%
CERS Non-Hazardous Pension Fund	71.4%
CERS Hazardous Pension Fund	67.9%
SPRS Pension Fund	54.8%

The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Recent employer contribution rate reductions under KERS and SPRS have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level. As of June 30, 2009 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	11.9%
KERS Hazardous Insurance Fund	61.4%
CERS Non-Hazardous Insurance Fund	39.6%
CERS Hazardous Insurance Fund	40.9%
SPRS Insurance Fund	33.9%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on August 20, 2009 based on the experience investigation report dated August 17, 2009, meet the parameters set for disclosure under GASB Statements No. 25 and 43. The health care cost trend assumptions were updated for the June 30, 2007 valuation adopted by the Board November 15, 2007. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in January 2014 and any adjustments will be reflected in the June 30, 2014 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Summary of June 30, 2009 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2010-2011)					
Pension Fund Contribution	21.77%	14.11%	10.03%	16.79%	35.74%
Insurance Fund Contribution	16.81	20.26	9.78	23.27	49.89
Recommended Employer Contribution	38.58%	34.37%	19.81%	40.06%	85.63%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$10,658,549,532	$674,411,781	$7,912,913,512	$2,578,444,600	$602,328,868
Actuarial Value of Assets	4,794,611,365	502,503,287	5,650,789,991	1,751,487,540	329,966,989
Unfunded Actuarial Liability on Actuarial Value of Assets	5,863,938,167	171,908,494	2,262,123,521	826,957,060	272,361,879
Funding Level as a % of Actuarial Value of Assets	45.0%	74.5%	71.4%	67.9%	54.8%
Market Value of Assets	$3,584,196,429	$388,913,374	$4,330,593,934	$1,320,522,868	$256,571,073
Unfunded Actuarial Liability on Market Value of Assets	7,074,353,103	285,498,407	3,582,319,578	1,257,921,732	345,757,795
Funding Level on Market Value of Assets	33.6%	57.7%	54.7%	51.2%	42.6%
Insurance Fund					
Actuarially Accrued Liability	$4,507,325,571	$491,132,170	$3,070,386,018	$1,593,548,263	$364,031,141
Actuarial Value of Assets	534,172,580	301,634,592	1,216,631,769	651,130,782	123,526,647
Unfunded Actuarial Liability as a % of Actuarial Value of Assets	3,973,152,991	189,497,578	1,853,754,249	942,417,481	240,504,494
Funding Level as a % of Actuarial Value of Assets	11.9%	61.4%	39.6%	40.9%	33.9%
Market Value of Assets	$365,771,088	$219,537,255	$894,905,841	$483,269,862	$93,686,940
Unfunded Actuarial Liability as a % of Market Value of Assets	4,141,554,483	271,594,915	2,175,480,177	1,110,278,401	270,344,201
Funding Level on Market Value of Assets	8.1%	44.7%	29.2%	30.3%	25.7%
Member Data					
Number of Active Members	46,060	4,334	83,724	9,757	946
Total Annual Payroll (Active Members)	$1,754,412,912	$146,043,576	$2,183,611,848	$469,315,464	$51,660,396
Average Annual Pay (Active Members)	$38,090	$33,697	$26,081	$48,100	$54,609
Number of Retired Members & Beneficiaries	37,883	2,648	39,756	5,808	1,184
Average Annual Retirement Allowance	$21,449	$14,613	$11,069	$24,085	$37,394
Number of Vested Inactive Members	5,745	303	9,182	549	58

Additional Valuation Notes

In addition to the valuation results presented in the three reports that follow, certain calculations were made to round out the presentation and put the results in greater perspective. That information follows.

- Recent Contribution Shortfall – Although it has happened periodically in the past, there has been an ongoing contribution shortfall for KERS and SPRS since the 2002-2003 fiscal year. That shortfall has placed additional pressure on contribution rates, and that impact is compounding. The table below shows the recommended and budgeted contribution rates as a percent of payroll for KERS and SPRS over the last six fiscal years. The rates shown are the combined rates for retirement and insurance.

Fiscal Year	Recommended Rate	Budgeted Rate
	KERS Non-Hazardous	
2002-2003	5.89%	3.76%
2003-2004	7.53	5.89
2004-2005	10.29	5.89
2005-2006	13.62	5.89
2006-2007	17.13	7.75
2007-2008	34.23	8.50
2008-2009	36.92	10.01
	KERS Hazardous	
2002-2003	18.84%	17.60%
2003-2004	18.84	18.84
2004-2005	19.47	18.84
2005-2006	21.59	18.84
2006-2007	23.32	22.00
2007-2008	47.11	24.25
2008-2009	34.78	24.35
	SPRS	
2002-2003	21.58%	17.37%
2003-2004	21.58	21.58
2004-2005	28.08	21.58
2005-2006	34.83	21.58
2006-2007	42.30	25.50
2007-2008	72.00	28.00
2008-2009	91.93	30.07

Had the recommended contributions been made over this period of time, the contribution rates recommended as a result of the June 30, 2009 valuations would have been reduced by 2.99% of payroll for KERS Non-Hazardous, 1.67% for KERS Hazardous and 5.14% for SPRS.

- Market Value of Assets and COLA Liability Impact on Funding Ratio - The funding ratio for all the Plans is based on the actuarial liabilities and asset values computed for the purpose of meeting funding requirements on the basis required by state law. This basis does not take all actuarial liabilities and investment performance to date into account. If the Retirement and Insurance results were combined, if the market value instead of actuarial value of assets were used, and if a 1.5% annual cost-of-living adjustment for retirement benefits were assumed to be in effect for all future years, then the funding ratio for the combined Retirement and Insurance plans would be lower, as shown in the table below.

System	Reported Funding Ratio	Adjusted Funding Ratio
KERS Non-Hazardous	35.1%	23.8%
KERS Hazardous	69.0	48.3
CERS Non-Hazardous	62.5	43.8
CERS Hazardous	57.6	39.6
SPRS	46.9	33.2

- Impact of Blended Interest Rates on Insurance Valuations - The June 30, 2009 Insurance Plan valuations recognize the parameters required by GASB Statements No. 43 and 45. One of the parameters is that a blended interest rate must be used when the benefits are not being fully funded. This rate reflects the level of advanced funding that is occurring. Because of the contribution rate shortfall noted above, blended rates were required for KERS Non-Hazardous and SPRS. The rate used for the June 30, 2009 valuation is 4.50% for both KERS Non-Hazardous and SPRS. If KERS Non-Hazardous and SPRS were being fully funded, an interest rate of 7.75% would be used, reducing liabilities and therefore contribution rates. The impact on rates is shown in the table below.

Insurance Plan	"Blended" Contribution Rate	"Full Funding" Contribution Rate
KERS Non-Hazardous	16.81%	10.98%
SPRS	49.89	24.10

Report on the Annual Valuation of the Kentucky Employees Retirement System

Prepared as of June 30, 2009

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 10, 2009

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2010. The date of the valuation was June 30, 2009.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

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REPORT ON THE ANNUAL VALUATION OF THE KENTUCKY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2009

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2009, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/2009	6/30/2008	6/30/2009	6/30/2008	6/30/2009	6/30/2008
Contributions for next fiscal year:						
Retirement	21.77%	18.96%	14.11%	11.98%		
Insurance	16.81	20.49	20.26	23.56	N/A	N/A
Total	38.58%	39.45%	34.37%	35.54%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$10,658,549,532	$10,129,689,985	$674,411,781	$618,010,827	$11,332,961,313	$10,747,700,812
Actuarial value of assets	4,794,611,365	5,318,792,893	502,503,287	502,132,214	5,297,114,652	5,820,925,107
Unfunded liability on actuarial value of assets	5,863,938,167	4,810,897,092	171,908,494	115,878,613	6,035,846,661	4,926,775,705
Funded ratio on actuarial value of assets	44.98%	52.51%	74.51%	81.25%	46.74%	54.16%
Market value of assets	$3,584,196,429	$5,056,867,294	$388,913,374	$484,440,015	$3,973,109,803	$5,541,307,309
Unfunded liability on market value of assets	7,074,353,103	5,072,822,691	285,498,407	133,570,812	7,359,851,510	5,206,393,504
Funded ratio on market value of assets	33.63%	49.92%	57.67%	78.39%	35.06%	51.56%
Insurance						
Actuarial accured liability	$4,507,325,571	$5,431,499,285	$491,132,170	$541,657,214	$4,998,457,741	$5,973,156,499
Actuarial value of assets	534,172,580	603,197,761	301,634,592	288,161,759	835,807,172	891,359,520
Unfunded liability on actuarial value of assets	3,973,152,991	4,828,301,524	189,497,578	253,495,455	4,162,650,569	5,081,796,979
Funded ratio on actuarial value of assets	11.85%	11.11%	61.42%	53.20%	16.72%	14.92%
Market value of assets	$365,771,088	$574,480,809	$219,537,255	$269,299,859	$585,308,343	$843,780,668
Unfunded liability on market value of assets	4,141,554,483	4,857,018,476	271,594,915	272,357,355	4,413,149,398	5,129,375,831
Funded ratio on market value of assets	8.12%	10.58%	44.70%	49.72%	11.71%	14.13%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	37,883	35,307	2,648	2,404	40,531	37,711
Number of vested former members	5,745	5,605	303	287	6,048	5,892
Number of former members due a refund	28,770	27,597	2,753	2,640	31,523	30,237
Number of active members	46,060	48,085	4,334	4,393	50,394	52,478
Total salary	$1,754,412,912	$1,837,873,488	$146,043,576	$148,710,060	$1,900,456,488	$1,986,583,548
Average salary	$38,090	$38,221	$33,697	$33,852	$37,712	$37,856

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were changes in benefit provisions since the last valuation. On June 27, 2008 House Bill 1, the Pension Reform legislation, was signed by Governor Beshear. This law is a comprehensive pension reform that will significantly impact retirement benefits for employees who begin participating with the Kentucky Retirement Systems on or after September 1, 2008. The summary of main benefit and contribution provisions can be found in Schedule D. Most provisions of HB 1 apply to employees hired on or after September 1, 2008, including the following:

    - A tiered structure for benefit factors
    - Additional nonrefundable 1% employee contribution to a health insurance account
    - New retirement eligibility requirements
    - Different rules on computing final compensation for retirement
    - Different medical insurance eligibility
    - Different post-retirement medical insurance benefit cost-of-living increase

5. An additional benefit change beyond HB 1 was the implementation of an Employer Group Waiver Plan contracting directly with CMS to provide a Medicare Part D prescription drug plan. This change resulted in a significant decrease in the insurance liabilities in this valuation.

6. There were changes in actuarial assumptions since the last valuation. In August 2009, the Board approved the Kentucky Retirement Systems Experience Study for the Three-Year Period Ending June 30, 2008. The actuarial assumptions and methods employed can be found in Schedule C.

7. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

8. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2008 and June 30, 2009 is 4.50% for KERS Non-Hazardous and 7.75% for KERS Hazardous. The lower rate for KERS Non-Hazardous is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2009 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	46,060	$1,754,412,912	$38,090	43.0	8.7
Hazardous	4,334	146,043,576	33,697	41.4	7.0
Total in KERS	50,394	$1,900,456,488	$37,712	42.9	8.5

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2004	47,599	$1,645,412,496	$34,568	2.5%
6/30/2005	47,118	1,655,907,288	35,144	1.7
6/30/2006	46,707	1,702,230,777	36,445	3.7
6/30/2007	47,913	1,780,223,493	37,155	1.9
6/30/2008	48,085	1,837,873,488	38,221	2.9
6/30/2009	46,060	1,754,412,912	38,090	(0.3)

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2004	4,014	$126,664,812	$31,556	2.4%
6/30/2005	4,274	131,687,088	30,811	(2.4)
6/30/2006	4,320	138,747,320	32,117	4.2
6/30/2007	4,349	144,838,020	33,304	3.7
6/30/2008	4,393	148,710,060	33,852	1.6
6/30/2009	4,334	146,043,576	33,697	(0.5)

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	32,089	$745,864,962	$23,244	65.8
Disability	1,867	21,947,848	11,756	63.4
Beneficiary	3,927	44,746,260	11,395	70.5
Total in KERS	37,883	$812,559,070	$21,449	66.2

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	2,270	$35,696,472	$15,725	61.6
Disability	123	988,864	8,040	57.5
Beneficiary	255	2,010,165	7,883	60.9
Total in KERS	2,648	$38,695,501	$14,613	61.3

This valuation also includes 37,571 inactive members (34,515 Non-Hazardous and 3,056 Hazardous; of which 5,745 Non-Hazardous are vested and 303 Hazardous are vested.)

SECTION III – ASSETS

1. As of June 30, 2009 the total market value of assets amounted to $4,558,418,146 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2009

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	$3,584,196,429	$365,771,088	$3,949,967,517
Hazardous	388,913,374	219,537,255	608,450,629
Total	$3,973,109,803	$585,308,343	$4,558,418,146

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $6,132,921,824 . Schedule B shows the development of the actuarial value of assets as of June 30, 2009. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	June 30, 2009	June 30, 2008
Retirement		
Non-Hazardous	$ 4,794,611,365	$ 5,318,792,893
Hazardous	502,503,287	502,132,214
Total	$ 5,297,114,652	$ 5,820,925,107
Insurance		
Non-Hazardous	$ 534,172,580	$ 603,197,761
Hazardous	301,634,592	288,161,759
Total	$ 835,807,172	$ 891,359,520
KERS Total		
Non-Hazardous	$ 5,328,783,945	$ 5,921,990,654
Hazardous	804,137,879	790,293,973
Total	$ 6,132,921,824	$ 6,712,284,627

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2009. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $12,959,619,959, of which $8,430,911,176 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $188,216,871 is for the prospective benefits payable on account of present inactive members, and $4,340,491,912 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $5,297,114,652 as of June 30, 2009. The difference of $7,662,505,307 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $933,812,016 is the present value of future contributions expected to be made by members, and the balance of $6,728,693,291 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.80% of payroll for non-hazardous members and 7.45% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $692,846,630. When this amount is subtracted from $6,728,693,291, which is the present value of the total future contributions to be made by the employers, there remains $6,035,846,661 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 17.51% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 6.17% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $5,863,938,167 for non-hazardous members and $171,908,494 for hazardous members over 28 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.46% of payroll for non-hazardous members and 0.49% of payroll for hazardous members.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $6,943,817,340, of which $2,813,692,193 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $290,298,260 is for the prospective benefits payable on account of present inactive members, and $3,839,826,887 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $835,807,172 as of June 30, 2009. The difference of $6,108,010,168 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $13,629,537 is the present value of future contributions expected to be made by members, and the balance of $6,094,380,631 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 8.49% of payroll for non-hazardous members and 13.36% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,931,730,062. When this amount is subtracted from $6,094,380,631, which is the present value of the total future contributions to be made by the employers, there remains $4,162,650,569 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 8.09% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 6.80% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $3,973,152,991 for non-hazardous members and $189,497,578 for hazardous members over 28 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.23% of payroll for non-hazardous members and 0.10% of payroll for hazardous members.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2009 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/08	$ 4,810.9	$ 115.9	$ 4,926.8
(2)	Normal cost from last valuation	65.2	10.5	75.7
(3)	Employer contributions	112.4	15.8	128.2
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	373.5	9.2	382.7
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 5,137.2	$ 119.8	$ 5,257.0
(6)	Change due to plan amendments	(45.3)	(5.9)	(51.2)
(7)	Change due to new actuarial assumption or methods	(11.6)	10.2	(1.4)
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 5,080.3	$ 124.1	$ 5,204.4
(9)	Actual UAAL as of 6/30/09	$ 5,863.9	$ 171.9	$ 6,035.8
(10)	Gain/(loss): (8) - (9)	$ (783.6)	$ (47.8)	$ (831.4)
(11)	Accrued liabilities as of 6/30/08	$ 10,129.7	$ 618.0	$ 10,747.7
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(7.7%)	(7.7%)	(7.7%)

**Unfunded actuarial accrued liability.*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/08	$ 4,828.3	$ 253.5	$ 5,081.8
(2)	Normal cost from last valuation	183.2	20.4	203.6
(3)	Expected employer contributions	373.1	34.9	408.0
(4)	Interest accrual: Non-Haz: [(1) + (2) - (3)] x .045 Haz: [(1) + (2) - (3)] x .0775	208.7	18.5	227.2
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 4,847.1	$ 257.5	$ 5,104.6
(6)	Change due to plan amendments, including adoption of the Employer Group Waiver Plan	(658.3)	(50.3)	(708.6)
(7)	Change due to new actuarial assumption or methods	(620.1)	(35.8)	(655.9)
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 3,568.7	$ 171.4	$ 3,740.1
(9)	Actual UAAL as of 6/30/09	$ 3,973.2	$ 189.5	$ 4,162.7
(10)	Gain/(loss): (8) - (9)	$ (404.5)	$ (18.1)	$ (422.6)
(11)	Accrued liabilities as of 6/30/08	$ 5,431.5	$ 541.7	$ 5,973.2
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(7.4%)	(3.3%)	(7.1%)

**Unfunded actuarial accrued liability.*

NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/09	Insurance $ Gain (or Loss) For Year Ending 6/30/09
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (312.8)	$ (167.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.2	5.4
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.3)	(5.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	169.9	38.7
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	17.0	260.3
New Members. Additional unfunded accrued liability will produce a loss.	(9.0)	(15.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(307.9)	(39.8)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	5.2	44.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(344.9)	(524.3)
Gain (or Loss) During Year From Financial Experience	$ (783.6)	$ (404.5)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	56.9	1,278.4
Composite Gain (or Loss) During Year	$ (726.7)	$ 873.9

HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/09	Insurance $ Gain (or Loss) For Year Ending 6/30/09
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (20.4)	$ (10.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.9	1.0
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.2	0.2
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	14.9	9.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	4.2	25.4
New Members. Additional unfunded accrued liability will produce a loss.	(1.3)	(1.0)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(26.8)	(18.7)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	1.4	6.7
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(20.9)	(30.2)
Gain (or Loss) During Year From Financial Experience	$ (47.8)	$ (18.1)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	(4.3)	86.1
Composite Gain (or Loss) During Year	$ (52.1)	$ 68.0

TOTAL KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/09	Insurance $ Gain (or Loss) For Year Ending 6/30/09
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (333.2)	$ (178.2)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	1.1	6.4
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.1)	(5.5)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	184.8	47.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	21.2	285.7
New Members. Additional unfunded accrued liability will produce a loss.	(10.3)	(16.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(334.7)	(58.5)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	6.6	51.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(365.8)	(554.5)
Gain (or Loss) During Year From Financial Experience	$ (831.4)	$ (422.6)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	52.6	1,364.5
Composite Gain (or Loss) During Year	$ (778.8)	$ 941.9

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2010/2011 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	140,944,684	8.03%
	(2) Disability benefits		11,057,838	0.63
	(3) Survivor benefits		2,388,655	0.14
	(4) Total	$	154,391,177	8.80%
B.	Member Contributions	$	87,720,646	5.00%
C.	Employer Normal Cost: [A(4) - B]	$	66,670,531	3.80%
D.	Administrative Expenses	$	8,070,299	0.46%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/08 Valuation:	$	275,526,317	14.99%
	(2) Change due to:			
	a. Active decrements	$	9,113,501	0.52%
	b. Pay increases		(890,586)	(0.05)
	c. Retiree mortality		(272,694)	(0.02)
	d. Investment return		16,131,481	0.92
	e. COLA		10,763,092	0.61
	f. Assumption Change		2,982,383	0.17
	g. Other		(6,179,089)	(0.36)
	h. Total Change	$	31,648,089	2.52%
	(3) UAAL Contribution Based on 6/30/09 Valuation: [E(1) +E(2)h]	$	307,174,406	17.51%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	381,915,236	21.77%

**Based on 29 year amortization of the UAAL from June 30, 2008 and 28 years from June 30, 2009*

Required Contribution Rates
Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	20,367,383	13.86%
	(2) Disability benefits		1,806,436	1.15
	(3) Survivor benefits		393,931	0.25
	(4) Total	$	22,567,750	15.45%
B.	Member Contributions	$	11,683,486	8.00%
C.	Employer Normal Cost: [A(4) - B]	$	10,884,264	7.45%
D.	Administrative Expenses	$	715,614	0.49%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/08 Valuation:	$	6,762,023	4.46%
	(2) Change due to:			
	a. Active decrements	$	225,849	0.15%
	b. Pay increases		(221,305)	(0.15)
	c. Retiree mortality		(72,968)	(0.05)
	d. Investment return		1,406,121	0.96
	e. COLA		482,659	0.33
	f. Assumption Change		(535,731)	(0.37)
	g. Other		958,543	0.65
	h. Total Change	$	2,243,169	1.71%
	(3) UAAL Contribution Based on 6/30/09 Valuation: [E(1) +E(2)h]	$	9,005,192	6.17%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	20,605,070	14.11%

** Based on 29 year amortization of the UAAL from June 30, 2008 and 30 years from June 30, 2009*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	149,770,311	8.54%
B.	Member Contributions*	$	877,206	0.05%
C.	Employer Normal Cost: [A - B]	$	148,893,105	8.49%
D.	Administrative Expenses	$	4,106,387	0.23%
E.	Unfunded Actuarial Accrued Liability**:	$	141,898,321	8.09%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	294,897,813	16.81%

**The liabilities are net of retiree contributions towards their healthcare*
*** Based on 28 year amortization of the UAAL from June 30, 2009*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	19,587,845	13.41%
B.	Member Contributions*	$	73,022	0.05%
C.	Employer Normal Cost: [A - B]	$	19,514,823	13.36%
D.	Administrative Expenses	$	143,862	0.10%
E.	Unfunded Actuarial Accrued Liability**:	$	9,926,572	6.80%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	29,585,257	20.26%

**The liabilities are net of retiree contributions towards their healthcare*
*** Based on 28 year amortization of the UAAL from June 30, 2009*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2009

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	37,883	2,648	40,531
Terminated employees entitled to benefits but not yet receiving benefits	34,515	3,056	37,571
Active Members	46,060	4,334	50,394
Total	118,458	10,038	128,496

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
			Non-Hazardous Members			
6/30/2004	$ 6,000,513,743	$ 7,049,613,171	$ 1,049,099,428	85.1%	$ 1,645,412,496	63.8%
6/30/2005	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
6/30/2006	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
6/30/2007	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
6/30/2008	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
6/30/2009	4,794,611,365	10,658,549,532	5,863,938,167	45.0	1,754,412,912	334.2
			Hazardous Members			
6/30/2004	$ 397,212,763	$ 403,578,036	$ 6,365,273	98.4%	$ 126,664,812	5.0%
6/30/2005	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
6/30/2006	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
6/30/2007	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
6/30/2008	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
6/30/2009	502,503,287	674,411,781	171,908,494	74.5	146,043,576	117.7
			Total KERS Members			
6/30/2004	$ 6,397,726,506	$ 7,453,191,207	$ 1,055,464,701	85.8%	$ 1,772,077,308	59.6%
6/30/2005	5,983,974,408	8,018,069,096	2,034,094,688	74.6	1,787,594,376	113.8
6/30/2006	5,822,070,515	9,503,482,150	3,681,411,635	61.3	1,840,978,097	200.0
6/30/2007	5,864,070,268	10,044,931,606	4,180,861,338	58.4	1,925,061,513	217.2
6/30/2008	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0
6/30/2009	5,297,114,652	11,332,961,313	6,035,846,661	46.7	1,900,456,488	317.6

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
			Non-Hazardous Members			
6/30/2004	$ 600,586,961	$ 2,335,905,365	$ 1,735,318,404	25.7%	$ 1,645,412,496	105.5%
6/30/2005	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
6/30/2006	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
6/30/2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
6/30/2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
6/30/2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
			Hazardous Members			
6/30/2004	$ 169,158,879	$ 323,503,563	$ 154,344,684	52.3%	$ 126,664,812	121.9%
6/30/2005	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
6/30/2006	212,833,318	621,237,856	408,404,538	34.3	138,747,320	294.4
6/30/2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
6/30/2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
6/30/2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
			Total KERS Members			
6/30/2004	$ 769,745,840	$ 2,659,408,928	$ 1,889,663,088	28.9%	$ 1,772,077,308	106.6%
6/30/2005	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
6/30/2006	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,978,097	413.5
6/30/2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
6/30/2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
6/30/2009	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2009. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2009	6/30/2009
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	28 years	28 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	5.0% - 17.0%	5.0% - 21.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2009	6/30/2009
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	28 years	28 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Medical Trend Assumption	10.5% - 5.0%	10.5% - 5.0%
Year Ultimate Trend	2017	2017
Actuarial assumptions:		
Investment rate of return*	4.50%	7.75%
*Includes price inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2009 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2008. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 4,794,611,365	$ 5,318,792,893
Prospective contributions		
Member contributions	$ 836,173,026	$ 781,785,019
Employer normal contributions	604,255,306	554,332,337
Unfunded accrued liability contributions	5,863,938,167	4,810,897,092
Total prospective contributions	$ 7,304,366,499	$ 6,147,014,448
Total assets	$ 12,098,977,864	$ 11,465,807,341
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,034,479,089	$ 6,997,568,860
Present value of benefits payable on account of active members	3,893,822,173	4,303,310,641
Present value of benefits payable on account of inactive members	170,676,602	164,927,840
Total liabilities	$ 12,098,977,864	$ 11,465,807,341

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 502,503,287	$ 502,132,214
Prospective contributions		
Member contributions	$ 97,638,990	$ 98,075,984
Employer normal contributions	88,591,324	86,705,225
Unfunded accrued liability contributions	171,908,494	115,878,613
Total prospective contributions	$ 358,138,808	$ 300,659,822
Total assets	$ 860,642,095	$ 802,792,036
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 396,432,087	$ 340,430,078
Present value of benefits payable on account of active members	446,669,739	447,020,159
Present value of benefits payable on account of inactive members	17,540,269	15,341,799
Total liabilities	$ 860,642,095	$ 802,792,036

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 5,297,114,652	$ 5,820,925,107
Prospective contributions		
Member contributions	$ 933,812,016	$ 879,861,003
Employer normal contributions	692,846,630	641,037,562
Unfunded accrued liability contributions	6,035,846,661	4,926,775,705
Total prospective contributions	$ 7,662,505,307	$ 6,447,674,270
Total assets	$ 12,959,619,959	$ 12,268,599,377
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,430,911,176	$ 7,337,998,938
Present value of benefits payable on account of active members	4,340,491,912	4,750,330,800
Present value of benefits payable on account of inactive members	188,216,871	180,269,639
Total liabilities	$ 12,959,619,959	$ 12,268,599,377

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 534,172,580	$ 603,197,761
Prospective contributions		
Member contributions	$ 12,903,248	$ 0
Employer normal contributions	1,774,858,516	1,628,379,162
Unfunded accrued liability contributions	3,973,152,991	4,828,301,524
Total prospective contributions	$ 5,760,914,755	$ 6,456,680,686
Total assets	$ 6,295,087,335	$ 7,059,878,447
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,586,293,577	$ 2,456,368,401
Present value of benefits payable on account of active members	3,433,220,247	4,271,688,693
Present value of benefits payable on account of inactive members	275,573,511	331,821,353
Total liabilities	$ 6,295,087,335	$ 7,059,878,447

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 301,634,592	$ 288,161,759
Prospective contributions		
Member contributions	$ 726,289	$ 0
Employer normal contributions	156,871,546	140,014,551
Unfunded accrued liability contributions	189,497,578	253,495,455
Total prospective contributions	$ 347,095,413	$ 393,510,006
Total assets	$ 648,730,005	$ 681,671,765
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 227,398,616	$ 212,095,343
Present value of benefits payable on account of active members	406,606,640	452,836,825
Present value of benefits payable on account of inactive members	14,724,749	16,739,597
Total liabilities	$ 648,730,005	$ 681,671,765

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 835,807,172	$ 891,359,520
Prospective contributions		
Member contributions	$ 13,629,537	$ 0
Employer normal contributions	1,931,730,062	1,768,393,713
Unfunded accrued liability contributions	4,162,650,569	5,081,796,979
Total prospective contributions	$ 6,108,010,168	$ 6,850,190,692
Total assets	$ 6,943,817,340	$ 7,741,550,212
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,813,692,193	$ 2,668,463,744
Present value of benefits payable on account of active members	3,839,826,887	4,724,525,518
Present value of benefits payable on account of inactive members	290,298,260	348,560,950
Total liabilities	$ 6,943,817,340	$ 7,741,550,212

The following tables provide the solvency test for non-hazardous and hazardous KERS members.

Solvency Test
Retirement Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2004*	$ 915,105,103	$ 4,452,864,748	$ 1,681,643,320	$ 6,000,513,743	100.0%	100.0%	37.6%
6/30/2005*	866,044,474	5,056,247,608	1,656,782,757	5,578,685,746	100.0	93.2	0.0
6/30/2006	866,050,799	5,881,990,853	2,246,784,595	5,394,086,323	100.0	77.0	0.0
6/30/2007	878,842,180	6,437,235,593	2,169,861,504	5,396,782,459	100.0	70.2	0.0
6/30/2008	875,178,069	7,162,496,700	2,092,015,217	5,318,792,893	100.0	62.0	0.0
6/30/2009	793,574,765	8,205,155,691	1,659,819,076	4,794,611,365	100.0	48.8	0.0

**Reported by prior actuarial firm.*

Solvency Test
Retirement Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2004*	$ 78,817,575	$ 175,102,848	$ 149,657,613	$ 397,212,763	100.0%	100.0%	95.7%
6/30/2005*	75,098,321	213,310,550	150,585,386	405,288,662	100.0	100.0	77.6
6/30/2006	87,092,538	262,446,606	159,116,759	427,984,192	100.0	100.0	49.3
6/30/2007	88,670,847	306,492,350	163,829,132	467,287,809	100.0	100.0	44.0
6/30/2008	89,590,638	355,771,877	172,648,312	502,132,214	100.0	100.0	32.9
6/30/2009	87,779,938	413,972,356	172,659,487	502,503,287	100.0	100.0	0.4

**Reported by prior actuarial firm.*

Solvency Test
Insurance Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2004*	$ 0	$ 1,282,214,660	$ 1,053,690,705	$ 600,586,961	100.0%	46.8%	0.0%
6/30/2005*	0	1,550,619,458	1,129,939,730	607,068,351	100.0	39.2	0.0
6/30/2006	0	3,543,125,375	4,272,355,400	611,350,765	100.0	17.3	0.0
6/30/2007	0	2,569,197,567	2,632,157,488	621,171,658	100.0	24.2	0.0
6/30/2008	0	2,788,189,754	2,643,309,531	603,197,761	100.0	21.6	0.0
6/30/2009	0	2,861,867,088	1,645,458,483	534,172,580	100.0	18.7	0.0

**Reported by prior actuarial firm.*

Solvency Test
Insurance Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2004*	$ 0	$ 142,872,557	$ 180,631,006	$ 169,158,879	100.0%	100.0%	14.6%
6/30/2005*	0	187,883,650	198,961,045	187,947,644	100.0	100.0	0.0
6/30/2006	0	234,058,715	387,179,141	212,833,318	100.0	90.9	0.0
6/30/2007	0	201,189,546	303,653,435	251,536,756	100.0	100.0	16.6
6/30/2008	0	228,834,940	312,822,274	288,161,759	100.0	100.0	19.0
6/30/2009	0	242,123,365	249,008,805	301,634,592	100.0	100.0	23.9

**Reported by prior actuarial firm.*

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2008	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	$ 5,396,782,459	$ 5,318,792,893				
B.	Market Value End of Year	5,056,867,294	3,584,196,429				
C.	Market Value Beginning of Year	5,773,156,838	5,056,867,294				
D.	Cash Flow						
	D1. Contributions	221,142,527	220,744,764				
	D2. Benefit Payments	(708,127,920)	(817,640,554)				
	D3. Administrative Expenses	(7,723,852)	(8,099,760)				
	D4. Investment Expenses	(5,200,312)	(5,331,690)				
	D5. Net	(499,909,557)	(610,327,240)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(216,379,987)	(862,343,625)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	433,449,984	373,795,328				
	E4. Amount for Phased-In Recognition	(649,829,971)	(1,236,138,953)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(129,965,994)	(247,227,791)	0	0	0	0
	F2. First Prior Year	76,241,954	(129,965,994)	(247,227,791)	0	0	0
	F3. Second Prior Year	15,910,299	76,241,954	(129,965,994)	(247,227,791)	0	0
	F4. Third Prior Year	(2,608,084)	15,910,299	76,241,954	(129,965,994)	(247,227,791)	0
	F5. Fourth Prior Year	28,891,832	(2,608,084)	15,910,299	76,241,954	(129,965,994)	(247,227,791)
	F6. Total Recognized Investment Gain	(11,529,993)	(287,649,616)	(285,041,532)	(300,951,831)	(377,193,785)	(247,227,791)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 5,318,792,893	$ 4,794,611,365				
H.	Difference Between Market & Actuarial Values	$ (261,925,599)	$ (1,210,414,936)	$ (925,373,404)	$ (624,421,573)	$ (247,227,791)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2008	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	$ 467,287,809	$ 502,132,214				
B.	Market Value End of Year	484,440,015	388,913,374				
C.	Market Value Beginning of Year	510,775,499	484,440,015				
D.	Cash Flow						
	D1. Contributions	28,348,194	28,285,357				
	D2. Benefit Payments	(33,347,504)	(38,833,245)				
	D3. Administrative Expenses	(664,311)	(717,016)				
	D4. Investment Expenses	(460,314)	(467,886)				
	D5. Net	(6,123,935)	(11,732,790)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(20,211,549)	(83,793,851)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	39,825,950	37,575,472				
	E4. Amount for Phased-In Recognition	(60,037,499)	(121,369,323)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(12,007,500)	(24,273,865)	0	0	0	0
	F2. First Prior Year	8,869,886	(12,007,500)	(24,273,865)	0	0	0
	F3. Second Prior Year	1,788,273	8,869,886	(12,007,500)	(24,273,865)	0	0
	F4. Third Prior Year	151,597	1,788,273	8,869,886	(12,007,500)	(24,273,865)	0
	F5. Fourth Prior Year	2,340,134	151,597	1,788,273	8,869,886	(12,007,500)	(24,273,865)
	F6. Total Recognized Investment Gain	1,142,390	(25,471,609)	(25,623,206)	(27,411,479)	(36,281,365)	(24,273,865)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 502,132,214	$ 502,503,287				
H.	Difference Between Market & Actuarial Values	$ (17,692,199)	$ (113,589,913)	$ (87,966,707)	$ (60,555,228)	$ (24,273,865)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2008	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	$ 621,171,658	$ 603,197,761				
B.	Market Value End of Year	574,480,809	365,771,088				
C.	Market Value Beginning of Year	663,558,360	574,480,809				
D.	Cash Flow						
	D1. Contributions	76,318,407	95,326,154				
	D2. Benefit Payments	(122,946,356)	(145,035,850)				
	D3. Administrative Expenses	(3,487,268)	(4,106,387)				
	D4. Investment Expenses	(391,063)	(370,766)				
	D5. Net	(50,506,280)	(54,186,849)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(38,571,271)	(154,522,872)				
	E2. Assumed Rate	4.50%	4.50%				
	E3. Amount for Immediate Recognition	29,123,597	25,011,541				
	E4. Amount for Phased-In Recognition	(67,694,868)	(179,534,413)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(13,538,974)	(35,906,883)	0	0	0	0
	F2. First Prior Year	6,195,642	(13,538,974)	(35,906,883)	0	0	0
	F3. Second Prior Year	3,451,674	6,195,642	(13,538,974)	(35,906,883)	0	0
	F4. Third Prior Year	(51,332)	3,451,674	6,195,642	(13,538,974)	(35,906,883)	0
	F5. Fourth Prior Year	7,351,776	(51,332)	3,451,674	6,195,642	(13,538,974)	(35,906,883)
	F6. Total Recognized Investment Gain	3,408,786	(39,849,873)	(39,798,541)	(43,250,215)	(49,445,857)	(35,906,883)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 603,197,761	$ 534,172,580				
H.	Difference Between Market & Actuarial Values	$ (28,716,952)	$ (168,401,492)	$ (128,602,951)	$ (85,352,736)	$ (35,906,883)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2008	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	$ 251,536,756	$ 288,161,759				
B.	Market Value End of Year	269,299,859	219,537,255				
C.	Market Value Beginning of Year	280,885,910	269,299,859				
D.	Cash Flow						
	D1. Contributions	22,318,658	21,326,365				
	D2. Benefit Payments	(8,069,143)	(10,303,721)				
	D3. Administrative Expenses	(95,421)	(143,862)				
	D4. Investment Expenses	(186,674)	(120,294)				
	D5. Net	13,967,420	10,758,488				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(25,553,471)	(60,521,092)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	22,503,803	21,412,586				
	E4. Amount for Phased-In Recognition	(48,057,274)	(81,933,678)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(9,611,455)	(16,386,736)	0	0	0	0
	F2. First Prior Year	5,330,751	(9,611,455)	(16,386,736)	0	0	0
	F3. Second Prior Year	1,622,467	5,330,751	(9,611,455)	(16,386,736)	0	0
	F4. Third Prior Year	346,732	1,622,467	5,330,751	(9,611,455)	(16,386,736)	0
	F5. Fourth Prior Year	2,465,285	346,732	1,622,467	5,330,751	(9,611,455)	(16,386,736)
	F6. Total Recognized Investment Gain	153,780	(18,698,241)	(19,044,973)	(20,667,440)	(25,998,191)	(16,386,736)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 288,161,759	$ 301,634,592				
H.	Difference Between Market & Actuarial Values	$ (18,861,900)	$ (82,097,337)	$ (63,052,364)	$ (42,384,924)	$ (16,386,736)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for KERS non-hazardous is 4.50% and for KERS hazardous is 7.75%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.50% per annum:

Service	Annual Rates of Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	12.50%	16.50%	4.50%	17.00%	21.00%
1-2	4.50%	4.50%	4.50%	9.00%	9.00%
2-3	2.00%	2.50%	4.50%	6.50%	7.00%
3-4	1.50%	2.00%	4.50%	6.00%	6.50%
4-5	1.50%	1.50%	4.50%	6.00%	6.00%
5-6	1.50%	1.00%	4.50%	6.00%	5.50%
6-7	1.00%	0.50%	4.50%	5.50%	5.00%
7-8	1.00%	0.50%	4.50%	5.50%	5.00%
8-9	1.00%	0.50%	4.50%	5.50%	5.00%
9-10	0.50%	0.50%	4.50%	5.00%	5.00%
10 & over	0.50%	0.50%	4.50%	5.00%	5.00%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement+	Service Retirement++
		Male	Female			
20	6.00%	0.03%	0.01%	0.04%		
25	5.08	0.03	0.01	0.05		
30	4.26	0.04	0.02	0.06		
35	3.21	0.04	0.02	0.09		
40	3.00	0.05	0.04	0.13		
45	3.00	0.08	0.05	0.22		
50	3.00	0.13	0.07	0.37		
55	3.00	0.22	0.11	0.61	8.0%	
60	3.00	0.40	0.22	0.97	10.0	10.0%
65		0.73	0.43		22.5	25.0
70		1.19	0.69		22.5	25.0
75					100.0	100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 19.0%, 13.0%, 10.0%, 9.0% and 6.5%, respectively.*

\+ *For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.*

++ *For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 25%.*

Hazardous Members

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement		
		Male	Female		Service	Rate+	Rate++
20	4.00%	0.03%	0.01%	0.05%	20	22.0%	
25	4.00	0.03	0.01	0.07	25	35.0	22.0%
30	3.50	0.04	0.02	0.09	30	38.0	35.0
35	3.00	0.04	0.02	0.13	35	60.0	38.0
40	3.00	0.05	0.04	0.20	40		60.0
45	3.00	0.08	0.05	0.33			
50	3.00	0.13	0.07	0.56			
55	3.00	0.22	0.11	0.92			
60	3.00	0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 26.0%, 11.5%, 8.25%, 7.5% and 7.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.*

++ *For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Fiscal Year Ended	Trend
2010	10.5%
2011	9.5
2012	8.5
2013	7.5
2014	6.5
2015	6.0
2016	5.5
2017 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	90%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2009	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 446.24	$ 690.00	$ 1,044.48	$ 1,162.16
Optimum PPO	$ 566.20	$ 821.46	$ 1,265.10	$ 1,407.32
Capitol Choice	$ 545.08	$ 826.38	$ 1,249.74	$ 1,383.52

2010	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 486.40	$ 749.84	$ 1,127.80	$ 1,253.56
Optimum PPO	$ 616.28	$ 889.54	$ 1,363.40	$ 1,515.36
Capitol Choice	$ 594.14	$ 896.06	$ 1,347.50	$ 1,490.60

MEDICARE ELIGIBLE

Effective January 1, 2010 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 162.22	$ 162.00
Kentucky Retirement System Health Plan - PLUS	$ 217.41	$ 267.00
Kentucky Retirement System Health Plan - PREMIUM	$ 384.47	$ 338.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006, and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For those members who retired between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

Non-Hazardous Normal Retirement (continued):

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement:

Age Requirement

55

Service Requirement

At least one month of hazardous duty service credit

Amount

If a member has at least 60 months of service, the monthly benefit is 2.49% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement

60

Service Requirement

At least 60 months of hazardous duty service credit

Hazardous Normal Retirement (continued):

Amount

The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 55 with 60 months of service or any age with 25 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement

Age 60 with 10 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 50 with 15 years of service or any age with 20 years service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

Hazardous Disability (continued):

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Vesting (continued):

	Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $11.96 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $17.94 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $11.96 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2004*	2005*	2006	2007	2008	2009
			Number			
Beginning of Year	27,233	28,892	30,770	32,140	33,849	35,307
Added	2,473	2,481	2,481	2,440	2,573	3,465
Removed	814	603	1,111	731	1,115	889
End of Year	28,892	30,770	32,140	33,849	35,307	37,883
			Annual Allowances			
Beginning of Year	$ 393,048,800	$ 449,410,400	$ 509,347,800	$ 566,167,003	$ 625,435,416	$ 710,505,270
Added	57,329,301	56,489,600	65,942,585	65,965,990	102,305,405	110,700,043
Removed	6,092,500	5,298,200	9,123,382	6,697,577	17,235,551	8,646,243
End of Year	$ 449,410,400	$ 509,347,800	$ 566,167,003	$ 625,435,416	$ 710,505,270	$ 812,559,070
% Increase in Allowances	14.34%	13.34%	11.31%	10.47%	13.60%	14.36%
Average Annual Allowance	$ 15,555	$ 16,553	$ 17,616	$ 18,472	$ 20,124	$ 21,449

**Reported by prior actuarial firm.*

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2004*	2005*	2006	2007	2008	2009
			Number			
Beginning of Year	1,357	1,549	1,752	1,980	2,202	2,404
Added	227	234	256	241	261	339
Removed	35	31	28	19	59	95
End of Year	1,549	1,752	1,980	2,202	2,404	2,648
			Annual Allowances			
Beginning of Year	$ 12,974,700	$ 16,099,000	$ 19,640,748	$ 23,381,489	$ 27,528,837	$ 33,588,993
Added	3,070,600	3,415,500	3,929,666	4,509,381	6,565,454	5,443,628
Removed	155,000	191,000	188,829	362,129	505,250	337,120
End of Year	$ 16,099,000	$ 19,640,748	$ 23,381,489	$ 27,528,837	$ 33,588,993	$ 38,695,501
% Increase in Allowances	24.08%	22.00%	19.05%	17.94%	22.01%	15.20%
Average Annual Allowance	$ 10,393	$ 11,210	$ 11,809	$ 12,502	$ 13,972	$ 14,613

**Reported by prior actuarial firm.*

Non-Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,179	$ 5,915,124.63	8,926	$ 13,347,248.51	12,105	$ 19,262,373.14
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,830	3,376,662.85	721	873,981.72	2,551	4,250,644.57
66-2/3% to Beneficiary	831	2,291,751.12	380	812,968.60	1,211	3,104,719.72
50% to Beneficiary	1,099	2,737,267.93	1,189	2,439,434.37	2,288	5,176,702.30
Pop-up Option	3,497	8,640,994.63	2,793	5,645,735.62	6,290	14,286,730.25
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	945	1,558,273.96	1,878	2,770,970.87	2,823	4,329,244.83
Social Security Option						
Age 62 Basic	435	1,491,202.92	988	2,407,675.11	1,423	3,898,878.03
Age 62 Survivorship	896	2,710,476.94	571	1,553,376.99	1,467	4,263,853.93
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	387	623,481.75	480	755,550.33	867	1,379,032.08
20 Years Certain & Life	394	862,678.49	438	752,564.61	832	1,615,243.10
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	90	138,416.96	313	450,751.75	403	589,168.71
PLSO 24 Month Basic	40	46,638.91	176	205,819.92	216	252,458.83
PLSO 36 Month Basic	188	155,232.00	441	324,994.12	629	480,226.12
PLSO 12 Month Survivor	122	240,880.56	105	173,499.56	227	414,380.12
PLSO 24 Month Survivor	100	140,515.22	85	116,467.55	185	256,982.77
PLSO 36 Month Survivor	269	282,196.78	170	141,565.56	439	423,762.34
Total	14,302	$ 31,211,795.65	19,654	$ 32,772,605.19	33,956	$ 63,984,400.84

Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	339	$ 380,573.92	257	$ 252,878.40	596	$ 633,452.32
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	186	217,019.58	14	13,063.89	200	230,083.47
66-2/3% to Beneficiary	69	84,075.97	15	18,767.70	84	102,843.67
50% to Beneficiary	119	176,934.64	30	42,914.41	149	219,849.05
Pop-up Option	518	724,801.98	97	125,092.18	615	849,894.16
10 Years Certain	19	29,672.88	3	3,699.35	22	33,372.23
10 Years Certain & Life	95	94,705.21	40	33,975.07	135	128,680.28
Social Security Option						
Age 62 Basic	52	103,367.30	27	42,266.23	79	145,633.53
Age 62 Survivorship	120	282,691.63	15	22,760.19	135	305,451.82
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	40	47,467.81	12	10,864.12	52	58,331.93
20 Years Certain & Life	45	50,557.55	17	25,561.34	62	76,118.89
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	15	14,618.42	15	13,766.28	30	28,384.70
PLSO 24 Month Basic	16	16,990.32	12	10,773.80	28	27,764.12
PLSO 36 Month Basic	48	42,257.48	27	22,403.71	75	64,661.19
PLSO 12 Month Survivor	24	30,818.18	6	5,204.46	30	36,022.64
PLSO 24 Month Survivor	22	30,583.26	10	12,599.29	32	43,182.55
PLSO 36 Month Survivor	54	54,546.73	15	18,838.13	69	73,384.86
Total	1,781	$ 2,381,682.86	612	$ 675,428.55	2,393	$ 3,057,111.41

Non-Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	4	$ 531.04	24	$ 23,733.62	28	$ 24,264.66
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	233	172,116.11	1,546	1,380,049.22	1,779	1,552,165.33
66-2/3% to Beneficiary	26	23,495.28	283	229,782.15	309	253,277.43
50% to Beneficiary	89	49,788.16	462	250,935.21	551	300,723.37
Pop-up Option	75	110,686.31	352	431,060.34	427	541,746.65
10 Years Certain	53	59,837.80	71	71,790.59	124	131,628.39
10 Years Certain & Life	33	35,760.71	42	52,735.22	75	88,495.93
Social Security Option						
Age 62 Basic	0	0.00	1	1,660.76	1	1,660.76
Age 62 Survivorship	45	81,901.89	213	361,387.02	258	443,288.91
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	9	3,730.70	9	3,730.70
Dependent Child	2	578.96	3	1,068.48	5	1,647.44
Refund	1	842.82	5	5,126.22	6	5,969.04
15 Years Certain & Life	27	32,540.65	58	67,692.51	85	100,233.16
20 Years Certain & Life	36	37,287.57	78	95,312.26	114	132,599.83
5 Years Certain	50	54,251.40	39	36,306.13	89	90,557.53
PLSO 12 Month Basic	0	0.00	1	1,126.48	1	1,126.48
PLSO 24 Month Basic	1	580.49	0	0.00	1	580.49
PLSO 36 Month Basic	1	612.93	11	7,118.75	12	7,731.68
PLSO 12 Month Survivor	3	3,189.79	6	4,219.76	9	7,409.55
PLSO 24 Month Survivor	2	3,470.03	9	5,397.88	11	8,867.91
PLSO 36 Month Survivor	7	3,712.66	26	27,437.12	33	31,149.78
Total	688	$ 671,184.60	3,239	$ 3,057,670.42	3,927	$ 3,728,855.02

Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	3	$ 352.13	3	$ 352.13
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	7	3,070.65	93	64,911.77	100	67,982.42
66-2/3% to Beneficiary	0	0.00	10	4,464.68	10	4,464.68
50% to Beneficiary	1	442.32	17	6,778.29	18	7,220.61
Pop-up Option	5	2,458.62	33	20,704.69	38	23,163.31
10 Years Certain	1	1,733.97	12	11,241.53	13	12,975.50
10 Years Certain & Life	2	2,206.47	5	3,277.76	7	5,484.23
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	1	24.13	16	18,562.20	17	18,586.33
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	11	3,677.60	6	1,919.54	17	5,597.14
Refund	0	0.00	3	2,057.80	3	2,057.80
15 Years Certain & Life	3	1,252.58	2	939.46	5	2,192.04
20 Years Certain & Life	0	0.00	5	1,411.60	5	1,411.60
5 Years Certain	5	5,260.20	6	3,957.01	11	9,217.21
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	351.73	0	0.00	1	351.73
PLSO 12 Month Survivor	0	0.00	2	2,348.89	2	2,348.89
PLSO 24 Month Survivor	0	0.00	1	767.53	1	767.53
PLSO 36 Month Survivor	4	3,340.59	0	0.00	4	3,340.59
Total	41	$ 23,818.86	214	$ 143,694.88	255	$ 167,513.74

Non-Hazardous Members
Retired and Beneficiary Information June 30, 2009
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	158	$ 4,073,602	47	$ 519,013	83	$ 734,095	288	$ 5,326,710
45-49	1,118	$ 34,648,320	117	$ 1,424,704	71	$ 840,299	1,306	$ 36,913,323
50-54	3,166	$ 107,013,760	179	$ 2,285,111	118	$ 1,642,452	3,463	$ 110,941,323
55-59	5,352	$ 172,784,378	296	$ 3,768,511	210	$ 3,375,275	5,858	$ 179,928,164
60-64	6,278	$ 171,235,849	390	$ 4,851,106	316	$ 5,270,483	6,984	$ 181,357,438
65-69	5,318	$ 105,720,507	331	$ 3,856,443	353	$ 5,252,267	6,002	$ 114,829,216
70-74	3,831	$ 64,186,268	273	$ 3,040,340	462	$ 6,396,038	4,566	$ 73,622,645
75-79	2,888	$ 40,802,939	139	$ 1,412,097	485	$ 6,330,786	3,512	$ 48,545,822
80-84	2,171	$ 28,007,583	54	$ 475,811	507	$ 5,984,581	2,732	$ 34,467,974
85-89	1,263	$ 13,153,663	27	$ 230,811	584	$ 4,846,281	1,874	$ 18,230,755
90 & Over	546	$ 4,238,095	14	$ 83,901	738	$ 4,073,704	1,298	$ 8,395,701
Totals	32,089	$ 745,864,962	1,867	$ 21,947,848	3,927	$ 44,746,260	37,883	$ 812,559,070

Hazardous Members
Retired and Beneficiary Information June 30, 2009
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	36	$ 728,887	8	$ 56,069	26	$ 136,343	70	$ 921,299
45-49	140	$ 2,916,896	19	$ 181,722	4	$ 18,873	163	$ 3,117,491
50-54	269	$ 5,830,879	16	$ 178,636	22	$ 230,381	307	$ 6,239,896
55-59	461	$ 9,253,817	34	$ 321,681	25	$ 245,471	520	$ 9,820,969
60-64	588	$ 9,070,578	22	$ 166,893	32	$ 296,524	642	$ 9,533,995
65-69	387	$ 4,510,627	8	$ 38,691	38	$ 304,215	433	$ 4,853,533
70-74	225	$ 2,091,273	9	$ 30,630	35	$ 267,241	269	$ 2,389,144
75-79	114	$ 830,319	7	$ 14,542	35	$ 177,208	156	$ 1,022,070
80-84	42	$ 313,899			22	$ 130,631	64	$ 444,530
85-89	7	$ 133,346			10	$ 99,171	17	$ 232,517
90 & Over	1	$ 15,950			6	$ 104,107	7	$ 120,057
Totals	2,270	$ 35,696,472	123	$ 988,864	255	$ 2,010,165	2,648	$ 38,695,502

Total Non-Hazardous Active Members as of June 30, 2009
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	22								22
Avg Pay	$19,821								$19,821
20-24	1,857	88							1,945
Avg Pay	$26,126	$34,620							$26,510
25-29	3,697	800	25						4,522
Avg Pay	$29,347	$33,280	$35,494						$30,076
30-34	2,922	2,067	544	11					5,544
Avg Pay	$32,098	$37,525	$38,633	$49,276					$34,797
35-39	2,824	1,919	1,435	482	42				6,702
Avg Pay	$31,180	$39,133	$41,970	$43,905	$52,553				$36,817
40-44	1,955	1,497	1,227	973	658	97			6,407
Avg Pay	$33,128	$39,640	$44,098	$46,192	$50,392	$57,121			$40,871
44-49	1,902	1,490	1,087	818	967	217	143	22	6,646
Avg Pay	$32,623	$38,103	$43,935	$45,557	$50,915	$53,738	$57,591	$63,447	$41,284
50-54	1,594	1,344	1,093	815	770	146	92	58	5,912
Avg Pay	$33,394	$37,982	$41,413	$45,176	$49,792	$52,022	$58,397	$63,285	$40,822
55-59	1,177	1,135	849	678	600	114	75	72	4,700
Avg Pay	$35,299	$38,027	$42,023	$44,164	$48,014	$51,163	$64,774	$64,271	$41,373
60-64	592	662	569	421	344	78	30	30	2,726
Avg Pay	$37,862	$38,396	$44,348	$44,774	$46,975	$50,731	$53,205	$67,111	$42,422
65-69	124	176	148	129	54	9	5	10	655
Avg Pay	$36,965	$38,921	$43,709	$43,704	$50,973	$74,431	$51,497	$60,924	$42,488
70 & over	60	62	57	58	30		3	9	279
Avg Pay	$39,319	$32,726	$35,373	$38,843	$51,804		$94,888	$84,152	$40,335
Totals	18,726	11,240	7,034	4,385	3,465	661	348	201	46,060
Avg Pay	$31,520	$37,985	$42,459	$45,021	$49,701	$53,338	$59,208	$65,044	$38,090

Total Hazardous Active Members as of June 30, 2009
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	187	4							191
Avg Pay	$25,863	$43,305							$26,228
25-29	513	65	2						580
Avg Pay	$27,602	$31,524	$31,014						$28,053
30-34	355	164	26						545
Avg Pay	$28,972	$33,667	$34,159						$30,632
35-39	365	168	157	14					704
Avg Pay	$28,524	$35,046	$38,489	$41,881					$32,568
40-44	243	129	116	125	22				635
Avg Pay	$29,455	$34,347	$40,074	$44,989	$51,205				$36,200
44-49	205	107	88	102	17		1		520
Avg Pay	$30,252	$33,892	$39,718	$44,247	$49,407		$51,444		$36,015
50-54	160	121	79	91	22	5	1	2	481
Avg Pay	$31,163	$34,073	$39,783	$45,316	$48,667	$58,622	$62,532	$89,898	$37,384
55-59	123	111	73	81	11	1	1	1	402
Avg Pay	$28,723	$35,059	$38,286	$42,436	$47,501	$54,084	$52,224	$63,936	$35,695
60-64	59	56	44	67	12				238
Avg Pay	$32,978	$35,830	$45,027	$46,017	$54,195				$40,617
65-69	6	9	9	7					31
Avg Pay	$30,820	$37,489	$40,269	$45,046					$38,712
70 & over	4	1	1	1					7
Avg Pay	$27,588	$40,092	$36,648	$40,104					$32,457
Totals	2,220	935	595	488	84	6	3	3	4,334
Avg Pay	$28,744	$34,318	$39,420	$44,514	$50,119	$57,866	$55,400	$81,244	$33,697

Report on the Annual Valuation of the County Employees Retirement System

Prepared as of June 30, 2009

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 9, 2009

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2010. The date of the valuation was June 30, 2009.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

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REPORT ON THE ANNUAL VALUATION OF THE COUNTY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2009

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2009, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/2009	6/30/2008	6/30/2009	6/30/2008	6/30/2009	6/30/2008
Contributions for next fiscal year:						
Retirement	10.03%	8.62%	16.79%	16.11%		
Insurance	9.78	12.29	23.27	27.25	N/A	N/A
Total	19.81%	20.91%	40.06%	43.36%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$7,912,913,512	$7,304,217,691	$2,578,444,600	$2,403,122,095	$10,491,358,112	$9,707,339,786
Actuarial value of assets	$5,650,789,991	$5,731,502,438	$1,751,487,540	$1,750,867,373	$7,402,277,531	$7,482,369,811
Unfunded liability on actuarial value of assets	$2,262,123,521	$1,572,715,253	$826,957,060	$652,254,722	$3,089,080,581	$2,224,969,975
Funded ratio on actuarial value of assets	71.41%	78.47%	67.93%	72.86%	70.56%	77.08%
Market value of assets	$4,330,593,934	$5,431,735,605	$1,320,522,868	$1,644,983,243	$5,651,116,802	$7,076,718,848
Unfunded liability on market value of assets	$3,582,319,578	$1,872,482,086	$1,257,921,732	$758,138,852	$4,840,241,310	$2,630,620,938
Funded ratio on market value of assets	54.73%	74.36%	51.21%	68.45%	53.86%	72.90%
Insurance						
Actuarial accured liability	$3,070,386,018	$3,583,193,466	$1,593,548,263	$1,769,782,957	$4,663,934,281	$5,352,976,423
Actuarial value of assets	$1,216,631,769	$1,168,883,170	$651,130,782	$613,526,319	$1,867,762,551	$1,782,409,489
Unfunded liability on actuarial value of assets	$1,853,754,249	$2,414,310,296	$942,417,481	$1,156,256,638	$2,796,171,730	$3,570,566,934
Funded ratio on actuarial value of assets	39.62%	32.62%	40.86%	34.67%	40.05%	33.30%
Market value of assets	$894,905,841	$1,105,944,178	$483,269,862	$576,414,457	$1,378,175,703	$1,682,358,635
Unfunded liability on market value of assets	$2,175,480,177	$2,477,249,288	$1,110,278,401	$1,193,368,500	$3,285,758,578	$3,670,617,788
Funded ratio on market value of assets	29.15%	30.86%	30.33%	32.57%	29.55%	31.43%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	39,756	37,579	5,808	5,422	45,564	43,001
Number of vested former members	9,182	8,693	549	487	9,731	9,180
Number of former members due a refund	51,093	49,062	1,973	1,889	53,066	50,951
Number of active members	83,724	85,221	9,757	10,173	93,481	95,394
Total salary	$2,183,611,848	$2,166,612,648	$469,315,464	$474,241,332	$2,652,927,312	$2,640,853,980
Average salary	$26,081	$25,423	$48,100	$46,618	$28,379	$27,684

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were changes in benefit provisions since the last valuation. On June 27, 2008 House Bill 1, the Pension Reform legislation, was signed by Governor Beshear. This law is a comprehensive pension reform that will significantly impact retirement benefits for employees who begin participating with the Kentucky Retirement Systems on or after September 1, 2008. The summary of main benefit and contribution provisions can be found in Schedule D. Most provisions of HB 1 apply to employees hired on or after September 1, 2008, including the following:

    - A tiered structure for benefit factors
    - Additional nonrefundable 1% employee contribution to a health insurance account
    - New retirement eligibility requirements
    - Different rules on computing final compensation for retirement
    - Different definition of hazardous duty positions
    - Different medical insurance eligibility
    - Different post-retirement medical insurance benefit cost-of-living increase

5. An additional benefit change beyond HB 1 was the implementation of an Employer Group Waiver Plan contracting directly with CMS to provide a Medicare Part D prescription drug plan. This change resulted in a significant decrease in the insurance liabilities in this valuation.

6. There were changes in actuarial assumptions since the last valuation. In August 2009, the Board approved the Kentucky Retirement Systems Experience Study for the Three-Year Period Ending June 30, 2008. The actuarial assumptions and methods employed can be found in Schedule C.

7. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2009 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	83,724	$2,183,611,848	$26,081	46.2	8.6
Hazardous	9,757	469,315,464	48,100	38.4	8.8
Total in CERS	93,481	$2,652,927,312	$28,379	45.4	8.6

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2004	80,922	$1,826,870,880	$22,576	3.4%
6/30/2005	81,240	1,885,275,000	23,206	2.8
6/30/2006	83,694	1,982,437,473	23,687	2.1
6/30/2007	84,920	2,076,848,328	24,457	3.3
6/30/2008	85,221	2,166,612,648	25,423	3.9
6/30/2009	83,724	2,183,611,848	26,081	2.6

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2004	9,349	$392,562,624	$41,990	4.1%
6/30/2005	9,464	411,121,728	43,441	3.5
6/30/2006	9,635	426,927,550	44,310	2.0
6/30/2007	10,063	458,998,956	45,613	2.9
6/30/2008	10,173	474,241,332	46,618	2.2
6/30/2009	9,757	469,315,464	48,100	3.2

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	33,081	$382,077,963	$11,550	68.2
Disability	3,048	30,159,608	9,895	63.2
Beneficiary	3,627	27,823,847	7,671	68.1
Total in CERS	39,756	$440,061,418	$11,069	67.8

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	4,750	$125,247,199	$26,368	59.4
Disability	403	6,380,290	15,832	52.8
Beneficiary	655	8,259,262	12,610	50.0
Total in CERS	5,808	$139,886,751	$24,085	57.8

This valuation also includes 62,797 inactive members (60,275 Non-Hazardous and 2,522 Hazardous; of which 9,182 Non-Hazardous are vested and 549 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2009 the total market value of assets amounted to $7,029,292,505 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2009

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	$4,330,593,934	$894,905,841	$5,225,499,775
Hazardous	1,320,522,868	483,269,862	1,803,792,730
Total	$5,651,116,802	$1,378,175,703	$7,029,292,505

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $9,270,040,082. Schedule B shows the development of the actuarial value of assets as of June 30, 2009. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2009	JUNE 30, 2008
Retirement		
Non-Hazardous	$ 5,650,789,991	$ 5,731,502,438
Hazardous	1,751,487,540	1,750,867,373
Total	$ 7,402,277,531	$ 7,482,369,811
Insurance		
Non-Hazardous	$ 1,216,631,769	$ 1,168,883,170
Hazardous	651,130,782	613,526,319
Total	$ 1,867,762,551	$ 1,782,409,489
KERS Total		
Non-Hazardous	$ 6,867,421,760	$ 6,900,385,608
Hazardous	2,402,618,322	2,364,393,692
Total	$ 9,270,040,082	$ 9,264,779,300

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2009. Separate balance sheets are shown for each employee group as well as in total for all groups.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $12,734,984,501, of which $5,779,815,149 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $302,930,540 is for the prospective benefits payable on account of inactive members and $6,652,238,812 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $7,402,277,531 as of June 30, 2009. The difference of $5,332,706,970 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $1,252,655,929 is the present value of future contributions expected to be made by members, and the balance of $4,080,051,041 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.97% of payroll for non-hazardous members and 7.30% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $990,970,460. When this amount is subtracted from $4,080,051,041, which is the present value of the total future contributions to be made by the employers, there remains $3,089,080,581 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 5.43% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 9.23% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $2,262,123,521 for non-hazardous members and $826,957,060 for hazardous members over 28 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.

5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.63% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.26% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $6,098,247,744, of which $1,967,663,986 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $237,018,603 is for the prospective benefits payable on account of inactive members and $3,893,565,155 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $1,867,762,551 as of June 30, 2009. The difference of $4,230,485,193 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $9,026,579 is the present value of future contributions expected to be made by members, and the balance of $4,221,458,614 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 5.14% of payroll for non-hazardous members and 12.66% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,425,286,884. When this amount is subtracted from $4,221,458,614, which is the present value of the total future contributions to be made by the employers, there remains $2,796,171,730 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 4.45% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 10.52% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $1,853,754,249 for non-hazardous members and $942,417,481 for hazardous members over 28 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.19% of payroll for non-hazardous employees and 0.09% of payroll for hazardous employees.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2009 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/08	$ 1,572.7	$ 652.3	$ 2,225.0
(2)	Normal cost from last valuation	83.4	37.9	121.3
(3)	Employer contributions	179.3	78.2	257.5
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	121.4	50.5	171.9
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 1,598.2	$ 662.5	$ 2,260.7
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	43.5	(3.7)	39.8
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 1,641.7	$ 658.8	$ 2,300.5
(9)	Actual UAAL as of 6/30/09	$ 2,262.1	$ 827.0	$ 3,089.1
(10)	Gain/(loss): (8) - (9)	$ (620.4)	$ (168.2)	$ (788.6)
(11)	Accrued liabilities as of 6/30/08	$ 7,304.2	$ 2,403.1	$ 9,707.3
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(8.5)%	(7.0)%	(8.1)%

**Unfunded actuarial accrued liability.*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/08	$ 2,414.3	$ 1,156.3	$ 3,570.6
(2)	Normal cost from last valuation	124.6	62.6	187.2
(3)	Expected employer contributions	262.9	128.8	391.7
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	176.4	84.5	260.9
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 2,452.4	$ 1,174.6	$ 3,627.0
(6)	Change due to plan amendments, including adoption of the Employer Group Waiver Plan	(478.1)	(116.6)	(594.7)
(7)	Change due to new actuarial assumption or methods	(301.3)	(167.6)	(468.9)
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 1,673.0	$ 890.4	$ 2,563.4
(9)	Actual UAAL as of 6/30/09	$ 1,853.8	$ 942.4	$ 2,796.2
(10)	Gain/(loss): (8) - (9)	$ (180.8)	$ (52.0)	$ (232.8)
(11)	Accrued liabilities as of 6/30/08	$ 3,583.2	$ 1,769.8	$ 5,353.0
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(5.0)%	(2.9)%	(4.3)%

**Unfunded actuarial accrued liability.*

NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/09	Insurance $ Gain (or Loss) For Year Ending 6/30/09
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (117.8)	$ (55.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3.0)	9.4
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(2.7)	(6.3)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	85.4	24.6
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	11.1	166.0
New Members. Additional unfunded accrued liability will produce a loss.	(12.3)	(12.4)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(344.1)	(72.4)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	3.6	31.8
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(240.6)	(266.0)
Gain (or Loss) During Year From Financial Experience	$ (620.4)	$ (180.8)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	(43.5)	779.4
Composite Gain (or Loss) During Year	$ (663.9)	$ 598.6

HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/09	Insurance $ Gain (or Loss) For Year Ending 6/30/09
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (23.3)	$ (1.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.8)	0.8
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.4	0.3
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	42.5	29.6
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(3.7)	77.0
New Members. Additional unfunded accrued liability will produce a loss.	(5.0)	(7.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(112.5)	(38.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(3.5)	13.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(62.3)	(125.5)
Gain (or Loss) During Year From Financial Experience	$ (168.2)	$ (52.0)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	3.7	284.2
Composite Gain (or Loss) During Year	$ (164.5)	$ 232.2

TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/09	Insurance $ Gain (or Loss) For Year Ending 6/30/09
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (141.1)	$ (57.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3.8)	10.2
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(2.3)	(6.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	127.9	54.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	7.4	243.0
New Members. Additional unfunded accrued liability will produce a loss.	(17.3)	(19.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(456.6)	(111.0)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.1	45.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(302.9)	(391.5)
Gain (or Loss) During Year From Financial Experience	$ (788.6)	$ (232.8)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	(39.8)	1,063.6
Composite Gain (or Loss) During Year	$ (828.4)	$ 830.8

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2010/2011 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	178,072,016	7.96%
	(2) Disability benefits		14,603,058	0.66
	(3) Survivor benefits		3,235,134	0.14
	(4) Total	$	195,910,208	8.97%
B.	Member Contributions	$	109,180,592	5.00%
C.	Employer Normal Cost: [A(4) - B]	$	86,729,616	3.97%
D.	Administrative Expenses	$	13,756,755	0.63%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/08 Valuation:	$	90,071,443	4.16%
	(2) Change due to:			
	a. Active decrements	$	1,994,276	0.09%
	b. Pay increases		(580,508)	(0.03)
	c. Retiree mortality		(195,827)	(0.01)
	d. Investment return		18,025,547	0.83
	e. COLA		5,285,203	0.24
	f. Assumption Change		2,280,671	0.10
	g. Other		1,617,451	0.07
	h. Total Change	$	28,426,814	1.27%
	(3) UAAL Contribution Based on 6/30/09 Valuation: [E(1) +E(2)h]	$	118,498,257	5.43%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	218,984,628	10.03%

** Based on 29 year amortization of the UAAL from June 30, 2008 and 28 years from June 30, 2009*

Required Contribution Rates
Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	66,301,268	14.06%
	(2) Disability benefits		4,562,740	0.95
	(3) Survivor benefits		937,593	0.20
	(4) Total	$	71,801,601	15.30%
B.	Member Contributions	$	37,545,237	8.00%
C.	Employer Normal Cost: [A(4) - B]	$	34,256,364	7.30%
D.	Administrative Expenses	$	1,220,220	0.26%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/08 Valuation:	$	37,355,474	7.88%
	(2) Change due to:			
	a. Active decrements	$	(985,183)	-0.21%
	b. Pay increases		191,381	0.04
	c. Retiree mortality		181,414	0.04
	d. Investment return		5,894,197	1.26
	e. COLA		2,414,100	0.51
	f. Assumption Change		(195,369)	(0.04)
	g. Other		(1,536,996)	(0.35)
	h. Total Change	$	5,963,544	1.27%
	(3) UAAL Contribution Based on 6/30/09 Valuation: [E(1) +E(2)h]	$	43,319,018	9.23%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	78,795,602	16.79%

** Based on 29 year amortization of the UAAL from June 30, 2008 and 28 years from June 30, 2009*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	113,145,520	5.18%
B.	Member Contributions*	$	873,445	0.04%
C.	Employer Normal Cost: [A - B]	$	112,272,075	5.14%
D.	Administrative Expenses	$	4,050,960	0.19%
E.	Unfunded Actuarial Accrued Liability**:	$	97,106,389	4.45%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	213,429,424	9.78%

**The liabilities are net of retiree contributions toward their healthcare*
*** Based on 28 year amortization of the UAAL from June 30, 2009*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	59,554,930	12.69%
B.	Member Contributions*	$	140,795	0.03%
C.	Employer Normal Cost: [A - B]	$	59,414,135	12.66%
D.	Administrative Expenses	$	445,277	0.09%
E.	Unfunded Actuarial Accrued Liability**:	$	49,367,255	10.52%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	109,226,667	23.27%

**The liabilities are net of retiree contributions toward their healthcare*
*** Based on 28 year amortization of the UAAL from June 30, 2009*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2009

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	39,756	5,808	45,564
Terminated employees entitled to benefits but not yet receiving benefits	60,275	2,522	62,797
Active Members	83,724	9,757	93,481
Total	183,755	18,087	201,842

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
			Non-Hazardous Members			
6/30/2004	$ 5,187,851,530	$ 4,936,459,488	$ (251,392,042)	105.1%	$1,826,870,880	(13.8)%
6/30/2005	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
6/30/2006	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
6/30/2007	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
6/30/2008	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
6/30/2009	5,650,789,991	7,912,913,512	2,262,123,521	71.4	2,183,611,848	103.6
			Hazardous Members			
6/30/2004	$ 1,457,612,042	$ 1,640,830,120	$ 183,218,078	88.8%	$ 392,562,624	46.7%
6/30/2005	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
6/30/2006	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
6/30/2007	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
6/30/2008	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
6/30/2009	1,751,487,540	2,578,444,600	826,957,060	67.9	469,315,464	176.2
			Total CERS Members			
6/30/2004	$ 6,645,463,572	$ 6,577,289,608	$ (68,173,964)	101.0%	$2,219,433,504	(3.1)%
6/30/2005	6,511,561,710	7,180,774,025	669,212,315	90.7	2,296,396,728	29.1
6/30/2006	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
6/30/2007	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4
6/30/2008	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3
6/30/2009	7,402,277,531	10,491,358,112	3,089,080,581	70.6	2,652,927,312	116.4

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
			Non-Hazardous Members			
6/30/2004	$ 585,399,072	$ 2,438,734,696	$ 1,853,335,624	24.0%	$ 1,826,870,880	101.5%
6/30/2005	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
6/30/2006	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
6/30/2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
6/30/2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
6/30/2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
			Hazardous Members			
6/30/2004	$ 310,578,162	$ 1,025,684,477	$ 715,106,315	30.3%	$ 392,562,624	182.2%
6/30/2005	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
6/30/2006	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
6/30/2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
6/30/2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
6/30/2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
			Total CERS Members			
6/30/2004	$ 895,977,234	$ 3,464,419,173	$ 2,568,441,939	25.9%	$ 2,219,433,504	115.7%
6/30/2005	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
6/30/2006	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
6/30/2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
6/30/2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
6/30/2009	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2009. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2009	6/30/2009
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	28 years	28 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	4.75% - 13.0%	4.5% - 20.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2009	6/30/2009
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	28 years	28 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption	10.5% - 5.0%	10.5% - 5.0%
Year Ultimate Trend	2017	2017
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes price inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2009 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2008. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 5,650,789,991	$ 5,731,502,438
Prospective contributions		
Member contributions	$ 922,791,578	$ 905,496,624
Employer normal contributions	693,386,420	697,404,856
Unfunded accrued liability contributions	2,262,123,521	1,572,715,253
Total prospective contributions	$ 3,878,301,519	$ 3,175,616,733
Total assets	$ 9,529,091,510	$ 8,907,119,171
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 4,265,165,380	$ 3,801,445,603
Present value of benefits payable on account of active members	4,986,608,408	4,848,351,752
Present value of benefits payable on account of inactive members	277,317,722	257,321,816
Total liabilities	$ 9,529,091,510	$ 8,907,119,171

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 1,751,487,540	$ 1,750,867,373
Prospective contributions		
Member contributions	$ 329,864,351	$ 333,087,926
Employer normal contributions	297,584,040	332,536,184
Unfunded accrued liability contributions	826,957,060	652,254,722
Total prospective contributions	$ 1,454,405,451	$ 1,317,878,832
Total assets	$ 3,205,892,991	$ 3,068,746,205
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,514,649,769	$ 1,385,123,873
Present value of benefits payable on account of active members	1,665,630,404	1,661,763,796
Present value of benefits payable on account of inactive members	25,612,818	21,858,536
Total liabilities	$ 3,205,892,991	$ 3,068,746,205

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 7,402,277,531	$ 7,482,369,811
Prospective contributions		
Member contributions	$ 1,252,655,929	$ 1,238,584,550
Employer normal contributions	990,970,460	1,029,941,040
Unfunded accrued liability contributions	3,089,080,581	2,224,969,975
Total prospective contributions	$ 5,332,706,970	$ 4,493,495,565
Total assets	$ 12,734,984,501	$ 11,975,865,376
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 5,779,815,149	$ 5,186,569,476
Present value of benefits payable on account of active members	6,652,238,812	6,510,115,548
Present value of benefits payable on account of inactive members	302,930,540	279,180,352
Total liabilities	$ 12,734,984,501	$ 11,975,865,376

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 1,216,631,769	$ 1,168,883,170
Prospective contributions		
Member contributions	$ 7,431,458	$ 0
Employer normal contributions	934,328,870	864,456,661
Unfunded accrued liability contributions	1,853,754,249	2,414,310,296
Total prospective contributions	$ 2,795,514,577	$ 3,278,766,957
Total assets	$ 4,012,146,346	$ 4,447,650,127
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,269,509,766	$ 1,291,138,217
Present value of benefits payable on account of active members	2,533,363,593	2,926,199,853
Present value of benefits payable on account of inactive members	209,272,987	230,312,057
Total liabilities	$ 4,012,146,346	$ 4,447,650,127

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 651,130,782	$ 613,526,319
Prospective contributions		
Member contributions	$ 1,595,121	$ 0
Employer normal contributions	490,958,014	455,898,995
Unfunded accrued liability contributions	942,417,481	1,156,256,638
Total prospective contributions	$ 1,434,970,616	$ 1,612,155,633
Total assets	$ 2,086,101,398	$ 2,225,681,952
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 698,154,220	$ 693,962,620
Present value of benefits payable on account of active members	1,360,201,562	1,503,246,768
Present value of benefits payable on account of inactive members	27,745,616	28,472,564
Total liabilities	$ 2,086,101,398	$ 2,225,681,952

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS

	June 30, 2009	June 30, 2008
ASSETS		
Current actuarial value of assets	$ 1,867,762,551	$ 1,782,409,489
Prospective contributions		
Member contributions	$ 9,026,579	$ 0
Employer normal contributions	1,425,286,884	1,320,355,656
Unfunded accrued liability contributions	2,796,171,730	3,570,566,934
Total prospective contributions	$ 4,230,485,193	$ 4,890,922,590
Total assets	$ 6,098,247,744	$ 6,673,332,079
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,967,663,986	$ 1,985,100,837
Present value of benefits payable on account of active members	3,893,565,155	4,429,446,621
Present value of benefits payable on account of inactive members	237,018,603	258,784,621
Total liabilities	$ 6,098,247,744	$ 6,673,332,079

The following tables provide the solvency test for non-hazardous and hazardous CERS members.

Solvency Test
Retirement Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2004*	$ 814,908,627	$ 2,478,195,080	$ 1,643,355,781	$ 5,187,851,530	100.0%	100.0%	115.3%
6/30/2005*	837,513,907	2,814,210,355	1,733,432,428	5,059,208,687	100.0	100.0	81.2
6/30/2006	883,946,564	3,210,095,023	2,085,527,680	5,162,894,136	100.0	100.0	51.3
6/30/2007	920,126,096	3,589,512,063	2,149,807,967	5,467,824,480	100.0	100.0	44.6
6/30/2008	963,213,677	4,058,767,419	2,282,236,595	5,731,502,438	100.0	100.0	31.1
6/30/2009	991,628,551	4,542,483,102	2,378,801,859	5,650,789,991	100.0	100.0	4.9

**Reported by prior actuarial firm.*

Solvency Test
Retirement Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2004*	$ 256,366,204	$ 851,354,443	$ 533,109,473	$ 1,457,612,042	100.0%	100.0%	65.6%
6/30/2005*	264,913,465	960,052,305	570,651,565	1,452,353,023	100.0	100.0	39.8
6/30/2006	300,200,800	1,128,164,618	591,777,352	1,515,075,017	100.0	100.0	14.7
6/30/2007	317,007,367	1,275,221,775	616,507,037	1,639,288,924	100.0	100.0	7.6
6/30/2008	338,324,362	1,406,982,409	657,815,324	1,750,867,373	100.0	100.0	0.8
6/30/2009	350,308,879	1,540,262,587	687,873,134	1,751,487,540	100.0	91.0	0.0

**Reported by prior actuarial firm.*

Solvency Test
Insurance Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2004*	$ 0	$ 955,930,091	$ 1,482,804,605	$ 585,399,072	100.0%	61.2%	0.0%
6/30/2005*	0	1,144,219,107	1,644,535,547	663,941,949	100.0	58.0	0.0
6/30/2006	0	1,694,600,143	2,912,623,496	777,726,590	100.0	45.9	0.0
6/30/2007	0	1,372,128,406	1,961,837,664	960,285,900	100.0	70.0	0.0
6/30/2008	0	1,521,450,274	2,061,743,192	1,168,883,170	100.0	76.8	0.0
6/30/2009	0	1,478,782,753	1,591,603,265	1,216,631,769	100.0	82.3	0.0

**Reported by prior actuarial firm.*

Solvency Test
Insurance Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2004*	$ 0	$ 450,288,687	$ 575,395,790	$ 310,578,162	100.0%	69.0%	0.0%
6/30/2005*	0	586,104,126	697,194,966	359,180,461	100.0	61.3	0.0
6/30/2006	0	787,671,273	1,140,810,098	422,785,042	100.0	53.7	0.0
6/30/2007	0	659,752,978	986,707,033	512,926,549	100.0	77.7	0.0
6/30/2008	0	722,435,184	1,047,347,773	613,526,319	100.0	84.9	0.0
6/30/2009	0	725,899,836	867,648,427	651,130,782	100.0	89.7	0.0

**Reported by prior actuarial firm.*

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2008	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	$ 5,467,824,480	$ 5,731,502,438				
B.	Market Value End of Year	5,431,735,605	4,330,593,934				
C.	Market Value Beginning of Year	5,812,935,251	5,431,735,605				
D.	Cash Flow						
	D1. Contributions	275,938,785	301,802,344				
	D2. Benefit Payments	(415,881,616)	(462,022,378)				
	D3. Administrative Expenses	(13,238,353)	(13,832,849)				
	D4. Investment Expenses	(5,136,459)	(5,616,856)				
	D5. Net	(158,317,643)	(179,669,739)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(222,882,003)	(921,471,932)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	449,703,170	419,831,816				
	E4. Amount for Phased-In Recognition	(672,585,173)	(1,341,303,748)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(134,517,035)	(268,260,750)	0	0	0	0
	F2. First Prior Year	73,558,421	(134,517,035)	(268,260,750)	0	0	0
	F3. Second Prior Year	9,281,202	73,558,421	(134,517,035)	(268,260,750)	0	0
	F4. Third Prior Year	(936,362)	9,281,202	73,558,421	(134,517,035)	(268,260,749)	0
	F5. Fourth Prior Year	24,906,205	(936,362)	9,281,202	73,558,421	(134,517,035)	(268,260,749)
	F6. Total Recognized Investment Gain	(27,707,569)	(320,874,524)	(319,938,162)	(329,219,364)	(402,777,784)	(268,260,749)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 5,731,502,438	$ 5,650,789,991				
H.	Difference Between Market & Actuarial Values	$ (299,766,833)	$ (1,320,196,057)	$ (1,000,257,895)	$ (671,038,531)	$ (268,260,749)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2008	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	$ 1,639,288,924	$ 1,750,867,373				
B.	Market Value End of Year	1,644,983,243	1,320,522,868				
C.	Market Value Beginning of Year	1,754,934,764	1,644,983,243				
D.	Cash Flow						
	D1. Contributions	116,415,000	120,733,655				
	D2. Benefit Payments	(127,831,609)	(141,246,089)				
	D3. Administrative Expenses	(1,143,313)	(1,198,503)				
	D4. Investment Expenses	(1,603,610)	(1,540,413)				
	D5. Net	(14,163,532)	(23,251,350)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(95,787,989)	(301,209,025)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	137,124,357	128,185,316				
	E4. Amount for Phased-In Recognition	(232,912,346)	(429,394,341)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(46,582,469)	(85,878,868)	0	0	0	0
	F2. First Prior Year	24,437,228	(46,582,469)	(85,878,868)	0	0	0
	F3. Second Prior Year	3,423,753	24,437,228	(46,582,469)	(85,878,868)	0	0
	F4. Third Prior Year	286,557	3,423,753	24,437,228	(46,582,469)	(85,878,868)	0
	F5. Fourth Prior Year	7,052,555	286,557	3,423,753	24,437,228	(46,582,469)	(85,878,868)
	F6. Total Recognized Investment Gain	(11,382,376)	(104,313,799)	(104,600,356)	(108,024,109)	(132,461,337)	(85,878,868)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,750,867,373	$ 1,751,487,540				
H.	Difference Between Market & Actuarial Values	$ (105,884,130)	$ (430,964,672)	$ (326,364,316)	$ (218,340,207)	$ (85,878,868)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2008	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	$ 960,285,900	$ 1,168,883,170				
B.	Market Value End of Year	1,105,944,178	894,905,841				
C.	Market Value Beginning of Year	1,084,042,781	1,105,944,178				
D.	Cash Flow						
	D1. Contributions	217,217,750	146,156,476				
	D2. Benefit Payments	(95,966,011)	(108,995,559)				
	D3. Administrative Expenses	(3,424,785)	(4,050,960)				
	D4. Investment Expenses	(744,254)	(554,766)				
	D5. Net	117,082,700	32,555,191				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(95,181,303)	(243,593,528)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	89,323,364	87,548,451				
	E4. Amount for Phased-In Recognition	(184,504,667)	(331,141,979)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(36,900,933)	(66,228,396)	0	0	0	0
	F2. First Prior Year	24,311,839	(36,900,933)	(66,228,396)	0	0	0
	F3. Second Prior Year	5,266,783	24,311,839	(36,900,933)	(66,228,395)	0	0
	F4. Third Prior Year	1,195,664	5,266,783	24,311,839	(36,900,933)	(66,228,395)	0
	F5. Fourth Prior Year	8,317,853	1,195,664	5,266,780	24,311,837	(36,900,933)	(66,228,395)
	F6. Total Recognized Investment Gain	2,191,206	(72,355,043)	(73,550,710)	(78,817,491)	(103,129,328)	(66,228,395)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,168,883,170	$ 1,216,631,769				
H.	Difference Between Market & Actuarial Values	$ (62,938,992)	$ (321,725,928)	$ (248,175,218)	$ (169,357,727)	$ (66,228,395)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2008	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	$ 512,926,549	$ 613,526,319				
B.	Market Value End of Year	576,414,457	483,269,862				
C.	Market Value Beginning of Year	570,155,702	576,414,457				
D.	Cash Flow						
	D1. Contributions	90,754,757	71,778,158				
	D2. Benefit Payments	(35,603,224)	(41,016,544)				
	D3. Administrative Expenses	(364,362)	(445,277)				
	D4. Investment Expenses	(388,529)	(278,278)				
	D5. Net	54,398,642	30,038,059				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(48,139,887)	(123,182,654)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	46,698,599	46,125,156				
	E4. Amount for Phased-In Recognition	(94,838,486)	(169,307,810)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(18,967,697)	(33,861,562)	0	0	0	0
	F2. First Prior Year	10,834,617	(18,967,697)	(33,861,562)	0	0	0
	F3. Second Prior Year	2,819,186	10,834,617	(18,967,697)	(33,861,562)	0	0
	F4. Third Prior Year	616,704	2,819,186	10,834,617	(18,967,697)	(33,861,562)	0
	F5. Fourth Prior Year	4,199,719	616,704	2,819,186	10,834,617	(18,967,697)	(33,861,562)
	F6. Total Recognized Investment Gain	(497,471)	(38,558,752)	(39,175,456)	(41,994,642)	(52,829,259)	(33,861,562)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 613,526,319	$ 651,130,782				
H.	Difference Between Market & Actuarial Values	$ (37,111,862)	$ (167,860,920)	$ (128,685,464)	$ (86,690,822)	$ (33,861,562)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.50% per annum:

Service	Annual Rates of Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	8.50%	15.50%	4.50%	13.00%	20.00%
1-2	5.00%	6.00%	4.50%	9.50%	10.50%
2-3	1.50%	2.00%	4.50%	6.00%	6.50%
3-4	1.50%	1.25%	4.50%	6.00%	5.75%
4-5	1.00%	1.00%	4.50%	5.50%	5.50%
5-6	1.00%	0.50%	4.50%	5.50%	5.00%
6-7	0.75%	0.00%	4.50%	5.25%	4.50%
7-8	0.75%	0.00%	4.50%	5.25%	4.50%
8-9	0.50%	0.00%	4.50%	5.00%	4.50%
9-10	0.50%	0.00%	4.50%	5.00%	4.50%
10 & Over	0.25%	0.00%	4.50%	4.75%	4.50%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement**
		Male	Female		
20	5.75%	0.03%	0.01%	0.04%	
25	5.75	0.03	0.01	0.05	
30	5.30	0.04	0.02	0.06	
35	4.40	0.04	0.02	0.09	
40	3.70	0.05	0.04	0.13	
45	3.02	0.08	0.05	0.22	
50	2.70	0.13	0.07	0.37	
55	2.20	0.22	0.11	0.61	8.0%
60	0.75	0.40	0.22	0.97	10.0
65		0.73	0.43		22.0
70		1.19	0.69		22.0
75					100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 25.0%, 14.0%, 10.0%, 8.0% and 6.5%, respectively.*

** *If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.*

Hazardous Members

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement		
		Male	Female		Service	Rate+	Rate++
20	3.00%	0.03%	0.01%	0.05%	20	20.0%	
25	2.70	0.03	0.01	0.07	25	33.0	20.0%
30	2.50	0.04	0.02	0.09	30	33.0	33.0
35	2.50	0.04	0.02	0.13	35	40.0	33.0
40	2.50	0.05	0.04	0.20	40		40.0
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 14.0%, 7.5%, 6.0%, 4.5% and 4.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *Applies to members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.*

++ *Applies to members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Fiscal Year Ended	Trend
2010	10.5%
2011	9.5
2012	8.5
2013	7.5
2014	6.5
2015	6.0
2016	5.5
2017 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	85%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2009	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 446.24	$ 690.00	$ 1,044.48	$ 1,162.16
Optimum PPO	$ 566.20	$ 821.46	$ 1,265.10	$ 1,407.32
Capitol Choice	$ 545.08	$ 826.38	$ 1,249.74	$ 1,383.52

2010	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 486.40	$ 749.84	$ 1,127.80	$ 1,253.56
Optimum PPO	$ 616.28	$ 889.54	$ 1,363.40	$ 1,515.36
Capitol Choice	$ 594.14	$ 896.06	$ 1,347.50	$ 1,490.60

MEDICARE ELIGIBLE

Effective January 1, 2010 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 162.22	$ 162.00
Kentucky Retirement System Health Plan - PLUS	$ 217.41	$ 267.00
Kentucky Retirement System Health Plan - PREMIUM	$ 384.47	$ 338.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 2.20% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement

55

Service Requirement

At least one month of hazardous duty service credit

Amount

If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement

60

Service Requirement

At least 60 months of hazardous duty service credit

Hazardous Normal Retirement (continued):

Amount

The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 55 with 60 months of service or any age with 25 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement

Age 60 with 10 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 50 with 15 years of service or any age with 20 years service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

Hazardous Disability (continued):

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Vesting (continued):

	Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.21 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.21 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.14 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2004*	2005*	2006	2007	2008	2009
			Number			
Beginning of Year	27,092	29,129	31,347	33,102	35,564	37,579
Added	2,805	2,808	2,782	3,244	3,366	3,060
Removed	768	590	1,027	782	1,351	883
End of Year	29,129	31,347	33,102	35,564	37,579	39,756
			Annual Allowances			
Beginning of Year	N/A	$ 247,534,300	$ 279,590,300	$ 308,269,651	$ 348,712,020	$ 393,757,510
Added	$ 28,181,800	$ 30,397,300	34,559,599	44,888,509	56,376,123	51,679,136
Removed	3,587,800	3,161,200	5,880,248	4,446,140	11,330,633	5,375,228
End of Year	$ 247,534,300	$ 279,590,300	$ 308,269,651	$ 348,712,020	$ 393,757,510	$ 440,061,418
% Increase in Allowances	12.59%	12.95%	10.26%	13.12%	12.92%	11.76%
Average Annual Allowance	$ 8,498	$ 8,919	$ 9,313	$ 9,805	$ 10,478	$ 11,069

**Reported by prior actuarial firm.*

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2004*	2005*	2006	2007	2008	2009
			Number			
Beginning of Year	3,737	4,005	4,361	4,712	5,159	5,422
Added	343	403	427	500	469	650
Removed	75	47	76	53	206	264
End of Year	4,005	4,361	4,712	5,159	5,422	5,808
			Annual Allowances			
Beginning of Year	$ 72,322,200	$ 79,559,200	$ 89,224,700	$ 100,290,052	$ 113,735,850	$ 127,477,109
Added	6,712,500	$ 8,536,100	11,876,922	14,207,939	16,794,618	13,030,426
Removed	605,100	502,700	811,570	762,141	3,053,359	620,784
End of Year	$ 79,559,200	$ 89,224,700	$ 100,290,052	$ 113,735,850	$ 127,477,109	$ 139,886,751
% Increase in Allowances	10.01%	12.15%	12.40%	13.41%	12.08%	9.73%
Average Annual Allowance	$ 19,865	$ 20,460	$ 21,284	$ 22,046	$ 23,511	$ 24,085

**Reported by prior actuarial firm.*

Non-Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,382	$ 3,291,833.01	11,638	$ 7,891,883.14	15,020	$ 11,183,716.15
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,993	2,159,482.27	870	521,418.80	2,863	2,680,901.07
66-2/3% to Beneficiary	600	1,039,018.11	333	370,678.55	933	1,409,696.66
50% to Beneficiary	874	1,298,944.56	938	1,011,411.23	1,812	2,310,355.79
Pop-up Option	2,950	4,523,374.18	2,254	2,361,834.17	5,204	6,885,208.35
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,159	1,038,971.16	2,488	1,717,460.79	3,647	2,756,431.95
Social Security Option						
Age 62 Basic	230	666,359.35	452	653,745.13	682	1,320,104.48
Age 62 Survivorship	549	1,562,726.22	271	448,503.91	820	2,011,230.13
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	511	479,086.09	533	392,979.63	1,044	872,065.72
20 Years Certain & Life	364	469,056.71	470	372,575.08	834	841,631.79
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	133	135,211.50	424	331,283.65	557	466,495.15
PLSO 24 Month Basic	77	49,166.57	272	199,610.01	349	248,776.58
PLSO 36 Month Basic	321	153,217.67	782	341,065.07	1,103	494,282.74
PLSO 12 Month Survivor	170	197,375.69	103	95,546.73	273	292,922.42
PLSO 24 Month Survivor	116	111,824.74	75	50,747.84	191	162,572.58
PLSO 36 Month Survivor	486	280,132.83	311	136,606.55	797	416,739.38
Total	13,915	$ 17,455,780.66	22,214	$ 16,897,350.28	36,129	$ 34,353,130.94

Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	635	$ 1,228,750.33	189	$ 296,454.81	824	$ 1,525,205.14
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	496	965,888.95	22	20,248.96	518	986,137.91
66-2/3% to Beneficiary	209	517,376.79	5	13,841.04	214	531,217.83
50% to Beneficiary	347	787,323.76	18	31,460.11	365	818,783.87
Pop-up Option	1,893	4,589,419.10	71	133,757.12	1,964	4,723,176.22
10 Years Certain	24	37,188.56	3	3,804.59	27	40,993.15
10 Years Certain & Life	166	329,822.38	37	67,450.22	203	397,272.60
Social Security Option						
Age 62 Basic	91	217,395.70	7	14,174.48	98	231,570.18
Age 62 Survivorship	284	627,067.08	10	19,493.92	294	646,561.00
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	59	98,020.92	7	6,733.34	66	104,754.26
20 Years Certain & Life	111	206,753.44	11	11,223.45	122	217,976.89
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	28	50,697.69	10	12,801.99	38	63,499.68
PLSO 24 Month Basic	25	53,647.32	7	7,824.25	32	61,471.57
PLSO 36 Month Basic	59	90,145.47	22	24,092.55	81	114,238.02
PLSO 12 Month Survivor	63	145,813.18	4	7,911.30	67	153,724.48
PLSO 24 Month Survivor	72	114,733.88	4	4,031.33	76	118,765.21
PLSO 36 Month Survivor	156	226,654.63	8	6,954.81	164	233,609.44
Total	4,718	$ 10,286,699.18	435	$ 682,258.27	5,153	$ 10,968,957.45

Non-Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	5	$ 1,474.60	19	$ 15,276.98	24	$ 16,751.58
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	268	125,045.30	1,367	760,232.77	1,635	885,278.07
66-2/3% to Beneficiary	28	11,307.13	177	103,033.34	205	114,340.47
50% to Beneficiary	73	24,421.63	280	122,321.82	353	146,743.45
Pop-up Option	94	58,222.70	371	294,570.82	465	352,793.52
10 Years Certain	73	46,549.47	109	90,752.10	182	137,301.57
10 Years Certain & Life	53	31,967.65	70	53,957.29	123	85,924.94
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	17	17,309.84	94	160,766.40	111	178,076.24
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	2	256.90	2	256.90
Dependent Child	2	979.89	5	1,394.49	7	2,374.38
Refund	0	0.00	5	3,396.24	5	3,396.24
15 Years Certain & Life	29	20,844.79	73	58,998.04	102	79,842.83
20 Years Certain & Life	37	23,539.78	71	68,998.94	108	92,538.72
5 Years Certain	98	63,552.09	101	92,709.64	199	156,261.73
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	2	686.80	14	4,397.87	16	5,084.67
PLSO 12 Month Survivor	5	1,545.06	18	23,997.15	23	25,542.21
PLSO 24 Month Survivor	1	1,501.03	7	5,665.32	8	7,166.35
PLSO 36 Month Survivor	21	10,423.00	38	18,557.02	59	28,980.02
Total	806	$ 439,370.76	2,821	$ 1,879,283.13	3,627	$ 2,318,653.89

Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	19	$ 18,226.72	19	$ 18,226.72
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	7	3,485.04	131	163,610.15	138	167,095.19
66-2/3% to Beneficiary	0	0.00	30	40,671.51	30	40,671.51
50% to Beneficiary	1	540.07	37	31,457.17	38	31,997.24
Pop-up Option	1	2,472.55	100	161,260.93	101	163,733.48
10 Years Certain	5	9,117.58	14	14,804.96	19	23,922.54
10 Years Certain & Life	2	2,116.00	1	669.28	3	2,785.28
Social Security Option						
Age 62 Basic	0	0.00	2	551.10	2	551.10
Age 62 Survivorship	1	2,764.11	68	115,881.84	69	118,645.95
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	2,653.86	3	2,653.86
Dependent Child	101	37,043.42	74	27,151.88	175	64,195.30
Refund	1	263.41	9	6,182.19	10	6,445.60
15 Years Certain & Life	0	0.00	5	5,771.51	5	5,771.51
20 Years Certain & Life	1	1,754.80	19	17,192.03	20	18,946.83
5 Years Certain	2	1,291.34	7	9,757.03	9	11,048.37
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	907.44	6	2,333.15	7	3,240.59
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	2	1,381.86	2	1,381.86
PLSO 36 Month Survivor	0	0.00	5	6,958.93	5	6,958.93
Total	123	$ 61,755.76	532	$ 626,516.10	655	$ 688,271.86

Non-Hazardous Members

Retired and Beneficiary Information June 30, 2009
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	55	$ 1,232,270	58	$ 543,766	105	$ 674,819	218	$ 2,450,854
45-49	577	$ 13,962,803	127	$ 1,461,165	68	$ 501,039	772	$ 15,925,008
50-54	1,803	$ 45,736,316	268	$ 3,190,196	143	$ 1,419,654	2,214	$ 50,346,165
55-59	3,808	$ 72,227,868	510	$ 5,566,883	227	$ 2,781,850	4,545	$ 80,576,601
60-64	5,794	$ 77,165,245	718	$ 7,465,801	360	$ 3,958,528	6,872	$ 88,589,574
65-69	6,854	$ 66,953,128	663	$ 6,488,265	444	$ 4,232,638	7,961	$ 77,674,030
70-74	5,837	$ 49,513,338	435	$ 3,550,395	469	$ 4,030,629	6,741	$ 57,094,362
75-79	4,024	$ 30,144,009	205	$ 1,571,389	499	$ 3,831,498	4,728	$ 35,546,896
80-84	2,522	$ 16,331,124	44	$ 253,204	471	$ 2,657,288	3,037	$ 19,241,616
85-89	1,288	$ 6,557,004	12	$ 38,213	423	$ 2,078,676	1,723	$ 8,673,893
90 & Over	518	$ 2,254,859	8	$ 30,330	418	$ 1,657,229	944	$ 3,942,418
Totals	33,080	$ 382,077,963	3,048	$ 30,159,608	3,627	$ 27,823,847	39,755	$ 440,061,418

Hazardous Members

Retired and Beneficiary Information June 30, 2009
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	124	$ 3,515,470	71	$ 1,139,965	199	$ 1,003,441	394	$ 5,658,876
45-49	521	$ 15,871,453	75	$ 1,322,854	22	$ 231,503	618	$ 17,425,810
50-54	710	$ 20,839,309	85	$ 1,373,618	31	$ 384,373	826	$ 22,597,300
55-59	1,130	$ 34,802,304	87	$ 1,268,889	72	$ 1,226,466	1,289	$ 37,297,659
60-64	1,022	$ 25,352,508	48	$ 808,994	73	$ 1,228,935	1,143	$ 27,390,438
65-69	683	$ 13,605,696	24	$ 306,804	77	$ 1,557,625	784	$ 15,470,125
70-74	332	$ 6,778,124	4	$ 62,796	73	$ 1,289,185	409	$ 8,130,105
75-79	151	$ 3,057,451	6	$ 60,623	64	$ 808,061	221	$ 3,926,135
80-84	63	$ 1,271,084	3	$ 35,748	32	$ 404,505	98	$ 1,711,336
85-89	12	$ 153,042			9	$ 101,287	21	$ 254,329
90 & Over	1	$ 757			3	$ 23,882	4	$ 24,639
Totals	4,749	$ 125,247,199	403	$ 6,380,290	655	$ 8,259,262	5,807	$ 139,886,751

Total Non-Hazardous Active Members as of June 30, 2009
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	37								37
Avg Pay	$12,336								$12,336
20-24	3,604	280							3,884
Avg Pay	$19,856	$23,245							$20,101
25-29	3,402	1,187	59						4,648
Avg Pay	$22,863	$27,667	$24,869						$24,115
30-34	3,511	1,815	648	25					5,999
Avg Pay	$22,252	$30,019	$34,086	$36,742					$25,941
35-39	5,491	2,604	1,374	363	17				9,849
Avg Pay	$19,671	$27,984	$35,742	$39,062	$52,570				$24,882
40-44	4,172	3,257	2,003	828	368	81			10,709
Avg Pay	$20,872	$25,376	$30,905	$39,295	$45,985	$53,557			$26,653
44-49	3,772	3,848	3,017	1,481	820	197	123	22	13,280
Avg Pay	$21,438	$24,880	$27,394	$34,525	$42,542	$47,967	$51,486	$52,843	$27,275
50-54	3,199	3,223	3,054	2,205	1,030	229	171	94	13,205
Avg Pay	$22,157	$25,652	$26,838	$30,407	$38,467	$44,274	$47,241	$58,283	$27,708
55-59	2,522	2,347	2,351	2,078	1,198	252	156	112	11,016
Avg Pay	$21,976	$26,315	$27,724	$28,728	$34,323	$38,344	$43,108	$59,583	$27,800
60-64	1,599	1,709	1,417	1,233	771	162	132	63	7,086
Avg Pay	$19,800	$24,970	$26,296	$29,068	$30,731	$35,500	$36,775	$54,111	$26,128
65-69	691	697	556	378	196	36	41	42	2,637
Avg Pay	$16,424	$22,026	$22,392	$25,874	$29,417	$28,966	$36,977	$42,277	$22,386
70 & over	326	372	288	208	109	19	21	31	1,374
Avg Pay	$15,681	$19,294	$20,766	$23,593	$27,640	$20,870	$24,882	$40,883	$20,652
Totals	32,326	21,339	14,767	8,799	4,509	976	644	364	83,724
Avg Pay	$20,983	$25,996	$28,445	$31,371	$36,796	$41,782	$43,523	$54,304	$26,081

Total Hazardous Active Members as of June 30, 2009
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	2								2
Avg Pay	$19,050								$19,050
20-24	474	15							489
Avg Pay	$33,522	$38,667							$33,680
25-29	1,038	228							1,266
Avg Pay	$39,401	$45,601							$40,517
30-34	699	769	218						1,686
Avg Pay	$39,935	$48,841	$53,974						$45,812
35-39	565	716	759	157	10				2,207
Avg Pay	$35,385	$47,733	$55,872	$60,570	$69,049				$48,381
40-44	276	387	431	504	150	8			1,756
Avg Pay	$37,668	$47,505	$53,001	$61,562	$68,241	$73,626			$53,233
44-49	162	220	240	327	182	30	9	1	1,171
Avg Pay	$38,496	$45,288	$51,882	$59,128	$68,271	$71,865	$74,096	$69,084	$54,059
50-54	91	120	111	164	97	17	22	10	632
Avg Pay	$39,966	$45,246	$50,516	$56,345	$65,870	$80,116	$71,079	$73,534	$53,741
55-59	72	97	66	65	25	1	7	14	347
Avg Pay	$36,138	$45,132	$55,107	$54,294	$64,215	$59,904	$84,370	$81,103	$50,540
60-64	33	46	33	16	6			4	138
Avg Pay	$39,997	$47,191	$44,715	$53,219	$59,970			$82,305	$47,151
65-69	9	17	10	3	1				40
Avg Pay	$32,807	$41,388	$48,119	$47,236	$44,196				$41,649
70 & over	6	9	6			1	1		23
Avg Pay	$30,070	$41,932	$52,502			$97,692	$71,100		$45,287
Totals	3,427	2,624	1,874	1,236	471	57	39	29	9,757
Avg Pay	$37,759	$47,302	$53,887	$59,575	$67,411	$74,816	$74,162	$78,244	$48,100

Report on the Annual Valuation of the State Police Retirement System

Prepared as of June 30, 2009

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 9, 2009

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2010. The date of the valuation was June 30, 2009.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 5.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

TJC:kc
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REPORT ON THE ANNUAL VALUATION OF THE STATE POLICE RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2009

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2009, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	6/30/2009	6/30/2008
Contributions for next fiscal year:		
Retirement	35.74%	35.23%
Insurance	49.89	56.89
Total	85.63%	92.12%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$602,328,868	$587,129,257
Actuarial value of assets	329,966,989	350,891,451
Unfunded liability on actuarial value of assets	272,361,879	236,237,806
Funded ratio on actuarial value of assets	54.78%	59.76%
Market value of assets	$256,571,073	$337,358,918
Unfunded liability on market value of assets	345,757,795	249,770,339
Funded ratio on market value of assets	42.60%	57.46%
Insurance		
Actuarial accured liability	$364,031,141	$445,107,468
Actuarial value of assets	123,526,647	123,961,197
Unfunded liability on actuarial value of assets	240,504,494	321,146,271
Funded ratio on actuarial value of assets	33.93%	27.85%
Market value of assets	$93,686,940	$121,781,967
Unfunded liability on market value of assets	270,344,201	323,325,501
Funded ratio on market value of assets	25.74%	27.36%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,184	1,135
Number of vested former members	58	55
Number of former members due a refund	274	246
Number of active members	946	993
Total salary	$51,660,396	$53,269,080
Average salary	$54,609	$53,645

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were changes in benefit provisions since the last valuation. On June 27, 2008 House Bill 1, the Pension Reform legislation, was signed by Governor Beshear. This law is a comprehensive pension reform that will significantly impact retirement benefits for employees who begin participating with the Kentucky Retirement Systems on or after September 1, 2008. The summary of main benefit and contribution provisions can be found in Schedule D. Most provisions of HB 1 apply to employees hired on or after September 1, 2008, including the following:

    - A tiered structure for benefit factors
    - Additional nonrefundable 1% employee contribution to a health insurance account
    - New retirement eligibility requirements
    - Different rules on computing final compensation for retirement
    - Different medical insurance eligibility
    - Different post-retirement medical insurance benefit cost-of-living increase

5. An additional benefit change beyond HB 1 was the implementation of an Employer Group Waiver Plan contracting directly with CMS to provide a Medicare Part D prescription drug plan. This change resulted in a significant decrease in the insurance liabilities in this valuation.

6. There were changes in actuarial assumptions since the last valuation. In August 2009, the Board approved the Kentucky Retirement Systems Experience Study for the Three-Year Period Ending June 30, 2008. The actuarial assumptions and methods employed can be found in Schedule C.

7. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

8. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2008 and June 30, 2009 is 4.50%. The lower rate for insurance benefits is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of those benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2009 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

		Group Averages		
Number	Payroll	Salary	Age	Service
946	$51,660,396	$54,609	37.3	11.0

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2004	999	$43,835,208	$43,879	2.2%
6/30/2005	987	43,720,092	44,296	1.0
6/30/2006	1,028	47,743,865	46,443	4.8
6/30/2007	957	49,247,580	51,460	10.8
6/30/2008	993	53,269,080	53,645	4.2
6/30/2009	946	51,660,396	54,609	1.8

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

			Group Averages	
Type of Benefit Payment	Number	Annual Benefits	Benefit	Age
Retiree	1,010	$40,313,825	$39,915	60.6
Disability	38	$666,664	17,544	57.0
Beneficiary	136	3,293,448	24,217	62.5
Total in SPRS	1,184	$44,273,937	$37,394	60.7

This valuation also includes 332 inactive members of which 58 are vested.

SECTION III - ASSETS

1. As of June 30, 2009 the total market value of assets amounted to $350,258,013 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

Retirement	Insurance	SPRS Total
$256,571,073	$93,686,940	$350,258,013

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $453,493,636. Schedule B shows the development of the actuarial value of assets as of June 30, 2009. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2009	JUNE 30, 2008
Retirement	$ 329,966,989	$ 350,891,451
Insurance	123,526,647	123,961,197
Total	$ 453,493,636	$ 474,852,648

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2009. Separate balance sheets are shown for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $675,533,360, of which $456,671,083 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $2,914,271 is for the prospective benefits payable on account of inactive members, $215,948,006 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $329,966,989 as of June 30, 2009. The difference of $345,566,371 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $36,405,148 is the present value of future contributions expected to be made by members, and the balance of $309,161,223 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 7.88% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $36,799,344. When this amount is subtracted from $309,161,223, which is the present value of the total future contributions to be made by the State, there remains $272,361,879 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 27.62% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $272,361,879 over 28 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.24% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $533,298,028, of which $158,534,652 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $8,556,801 is for the prospective benefits payable on account of inactive members, and $366,206,575 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $123,526,647 as of June 30, 2009. The difference of $409,771,381 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $269,371 is the present value of future contributions expected to be made by members, and the balance of $409,502,010 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 33.02% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $168,997,516. When this amount is subtracted from $409,502,010, which is the present value of the total future contributions to be made by the employers, there remains $240,504,494 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 16.63% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $240,504,494 over 28 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.24% of payroll.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2009 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

			Amount
(1)	UAAL* as of 6/30/08	$	236.2
(2)	Normal cost from last valuation		5.1
(3)	Employer contributions		8.2
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875		18.4
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	251.5
(6)	Change due to plan amendments		(10.3)
(7)	Change due to new actuarial assumption or methods		(3.3)
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	237.9
(9)	Actual UAAL as of 6/30/09	$	272.4
(10)	Gain/(loss): (8) - (9)	$	(34.5)
(11)	Accrued liabilities as of 6/30/08	$	587.1
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(5.9)%

**Unfunded actuarial accrued liability.*

Experience Gain/(Loss)
Insurance Benefits

			Amount
(1)	UAAL* as of 6/30/08	$	321.1
(2)	Normal cost from last valuation		17.6
(3)	Expected employer contributions		30.2
(4)	Interest accrual: [(1) + (2) - (3)] x .045		13.9
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	322.4
(6)	Change due to plan amendments, including adoption of the Employer Group Waiver Plan		(34.8)
(7)	Change due to new actuarial assumption or methods		(53.3)
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	234.3
(9)	Actual UAAL as of 6/30/09	$	240.5
(10)	Gain/(loss): (8) - (9)	$	(6.2)
(11)	Accrued liabilities as of 6/30/08	$	445.1
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(1.4)%

**Unfunded actuarial accrued liability.*

SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/09	Insurance $ Gain (or Loss) For Year Ending 6/30/09
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (4.8)	$ 8.1
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.2)	0.5
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	1.6	5.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	2.1	20.9
New Members. Additional unfunded accrued liability will produce a loss.	(0.1)	(0.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(17.4)	(6.0)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.0	6.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(15.7)	(40.3)
Gain (or Loss) During Year From Financial Experience	$ (34.5)	$ (6.2)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	13.6	88.1
Composite Gain (or Loss) During Year	$ (20.9)	$ 81.9

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2010/2011 fiscal year.

Required Contribution Rates
Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	7,688,550	14.88%
	(2) Disability benefits		435,235	0.84
	(3) Survivor benefits		81,128	0.16
	(4) Total	$	8,204,913	15.88%
B.	Member Contributions	$	4,132,832	8.00%
C.	Employer Normal Cost: [A(4) - B]	$	4,072,081	7.88%
D.	Administrative Expenses	$	123,985	0.24%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/08 Valuation:	$	13,529,646	25.40%
	(2) Change due to:			
	a. Active decrements	$	179,840	0.35%
	b. Pay increases		(108,286)	(0.21)
	c. Retiree mortality		92	0.00
	d. Investment return		909,241	1.76
	e. COLA		599,507	1.16
	f. Assumption Change		(171,916)	(0.33)
	g. Other		(670,818)	(1.31)
	h. Total Change	$	737,660	2.22%
	(3) UAAL Contribution Based on 6/30/09 Valuation: [E(1) +E(2)h]	$	14,267,306	27.62%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	18,463,372	35.74%

** Based on 29 year amortization of the UAAL from June 30, 2008 and 28 years from June 30, 2009*

Required Contribution Rates
Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost	$	17,069,935	33.04%
B.	Member Contributions*	$	10,332	0.02%
C.	Employer Normal Cost: [A - B]	$	17,059,603	33.02%
D.	Administrative Expenses	$	123,525	0.24%
E.	Unfunded Actuarial Accrued Liability**	$	8,589,446	16.63%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	25,772,574	49.89%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 28 year amortization of the UAAL from June 30, 2009*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2009

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,184
Terminated employees entitled to benefits but not yet receiving benefits	332
Active Members	946
Total	2,462

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2004	$ 385,077,195	$ 437,482,425	$ 52,405,230	88.0%	$ 43,835,208	119.6%
6/30/2005	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
6/30/2006	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
6/30/2007	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
6/30/2008	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5
6/30/2009	329,966,989	602,328,868	272,361,879	54.8	51,660,396	527.2

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2004	$ 96,622,908	$ 197,604,301	$ 100,981,393	48.9%	$ 43,835,208	230.4%
6/30/2005	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
6/30/2006	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
6/30/2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
6/30/2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
6/30/2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2009. Additional information as of the latest actuarial valuation follows.

Retirement Benefits	
Valuation date	6/30/2009
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	28 years
Asset valuation method	5 Year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases**	4.5% - 17.0%
Cost-of-living adjustment	None
*Includes price inflation at	3.50%
**Includes wage inflation at	4.50%

Insurance Benefits	
Valuation date	6/30/2009
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	28 years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption	10.5 - 5.0%
Year of Ulitimate Trend	2017
Actuarial assumptions:	
Investment rate of return*	4.50%
*Includes price inflation at	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2009 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2008. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM

RETIREMENT BENEFITS

	JUNE 30, 2009	JUNE 30, 2008
ASSETS		
Current actuarial value of assets	$ 329,966,989	$ 350,891,451
Prospective contributions		
Member contributions	$ 36,405,148	$ 35,604,574
Employer normal contributions	36,799,344	42,610,652
Unfunded accrued liability contributions	272,361,879	236,237,806
Total prospective contributions	$ 345,566,371	$ 314,453,032
Total assets	$ 675,533,360	$ 665,344,483
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 456,671,083	$ 423,834,095
Present value of benefits payable on account of active members	215,948,006	239,033,115
Present value of benefits payable on account of inactive members	2,914,271	2,477,273
Total liabilities	$ 675,533,360	$ 665,344,483

VALUATION BALANCE SHEET
INSURANCE BENEFITS

	JUNE 30, 2009	JUNE 30, 2008
ASSETS		
Current actuarial value of assets	$ 123,526,647	$ 123,961,197
Prospective contributions		
Member contributions	$ 269,371	$ 0
Employer normal contributions	168,997,516	162,495,763
Unfunded accrued liability contributions	240,504,494	321,146,271
Total prospective contributions	$ 409,771,381	$ 483,642,034
Total assets	$ 533,298,028	$ 607,603,231
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 158,534,652	$ 169,176,606
Present value of benefits payable on account of active members	366,206,575	428,947,986
Present value of benefits payable on account of inactive members	8,556,801	9,478,639
Total liabilities	$ 533,298,028	$ 607,603,231

The following tables provide the solvency test for SPRS members.

Solvency Test
Retirement Benefits

Valuation Date	Aggregate Accrued Liabilites For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2004*	$ 37,658,106	$ 318,664,694	$ 81,159,625	$ 385,077,195	100.0%	100.0%	35.4%
6/30/2005*	35,670,717	341,398,363	81,524,496	353,511,622	100.0	93.1	0.0
6/30/2006	37,866,774	373,588,145	105,027,379	344,016,197	100.0	81.9	0.0
6/30/2007	39,505,285	397,863,520	110,583,481	348,806,508	100.0	77.7	0.0
6/30/2008	41,391,416	426,311,368	119,426,473	350,891,451	100.0	72.6	0.0
6/30/2009	41,664,469	459,585,353	101,079,046	329,966,989	100.0	62.7	0.0

**Reported by prior actuarial firm.*

Solvency Test
Insurance Benefits

Valuation Date	Aggregate Accrued Liabilites For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2004*	$ 0	$ 119,104,851	$ 78,499,450	$ 96,622,908	100.0%	81.1%	0.0%
6/30/2005*	0	141,585,694	92,573,816	100,207,082	100.0	70.8	0.0
6/30/2006	0	240,913,868	341,666,999	105,580,269	100.0	43.8	0.0
6/30/2007	0	172,291,142	260,472,087	115,215,912	100.0	66.9	0.0
6/30/2008	0	178,655,245	266,452,223	123,961,197	100.0	69.4	0.0
6/30/2009	0	167,091,453	196,939,688	123,526,647	100.0	73.9	0.0

**Reported by prior actuarial firm.*

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits

	Valuation date June 30:	2008	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	$ 348,806,508	$ 350,891,451				
B.	Market Value End of Year	337,358,918	256,571,073				
C.	Market Value Beginning of Year	376,381,488	337,358,918				
D.	Cash Flow						
	D1. Contributions	12,850,624	13,124,235				
	D2. Benefit Payments	(39,452,886)	(42,615,976)				
	D3. Administrative Expenses	(137,444)	(121,936)				
	D4. Investment Expenses	(349,948)	(344,480)				
	D5. Net	(27,089,654)	(29,958,157)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(11,932,916)	(50,829,688)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	28,483,350	25,342,266				
	E4. Amount for Phased-In Recognition	(40,416,266)	(76,171,954)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(8,083,253)	(15,234,391)	0	0	0	0
	F2. First Prior Year	4,654,236	(8,083,253)	(15,234,391)	0	0	0
	F3. Second Prior Year	2,482,933	4,654,236	(8,083,253)	(15,234,391)	0	0
	F4. Third Prior Year	(128,096)	2,482,933	4,654,236	(8,083,253)	(15,234,391)	0
	F5. Fourth Prior Year	1,765,427	(128,096)	2,482,933	4,654,236	(8,083,253)	(15,234,391)
	F6. Total Recognized Investment Gain	691,247	(16,308,571)	(16,180,475)	(18,663,408)	(23,317,644)	(15,234,391)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 350,891,451	$ 329,966,989				
H.	Difference Between Market & Actuarial Values	$ (13,532,533)	$ (73,395,916)	$ (57,215,441)	$ (38,552,033)	$ (15,234,391)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits

	Valuation date June 30:	2008	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	$ 115,215,912	$ 123,961,197				
B.	Market Value End of Year	121,781,967	93,686,940				
C.	Market Value Beginning of Year	132,573,898	121,781,967				
D.	Cash Flow						
	D1. Contributions	7,521,645	7,670,129				
	D2. Benefit Payments	(6,767,181)	(7,475,826)				
	D3. Administrative Expenses	(105,513)	(123,525)				
	D4. Investment Expenses	(84,947)	(59,315)				
	D5. Net	564,004	11,463				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(11,355,935)	(28,106,490)				
	E2. Assumed Rate	4.50%	4.50%				
	E3. Amount for Immediate Recognition	6,065,374	5,541,096				
	E4. Amount for Phased-In Recognition	(17,421,309)	(33,647,586)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(3,484,262)	(6,729,517)	0	0	0	0
	F2. First Prior Year	3,373,433	(3,484,262)	(6,729,517)	0	0	0
	F3. Second Prior Year	784,282	3,373,433	(3,484,262)	(6,729,517)	0	0
	F4. Third Prior Year	68,955	784,282	3,373,433	(3,484,262)	(6,729,517)	0
	F5. Fourth Prior Year	1,373,499	68,955	784,282	3,373,433	(3,484,262)	(6,729,517)
	F6. Total Recognized Investment Gain	2,115,907	(5,987,109)	(6,056,064)	(6,840,346)	(10,213,779)	(6,729,517)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 123,961,197	$ 123,526,647				
H.	Difference Between Market & Actuarial Values	$ (2,179,230)	$ (29,839,707)	$ (23,783,643)	$ (16,943,297)	$ (6,729,517)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for SPRS is 4.50%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for members are as follows and include inflation at 4.50% per annum:

	Annual Rates of		
Service	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	12.50%	4.50%	17.00%
1-2	7.50%	4.50%	12.00%
2-3	5.50%	4.50%	10.00%
3-4	4.50%	4.50%	9.00%
4-5	3.50%	4.50%	8.00%
5-6	2.50%	4.50%	7.00%
6-7	1.50%	4.50%	6.00%
7-8	2.00%	4.50%	6.50%
8-9	1.00%	4.50%	5.50%
9-10	0.50%	4.50%	5.00%
10 & over	0.00%	4.50%	4.50%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

		Death**			Service Retirement		
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate+	Rate++
20	2.50%	0.03%	0.01%	0.05%	20	9.00%	
25	2.50	0.03	0.01	0.07	25	22.00	9.00%
30	2.50	0.04	0.02	0.09	30	33.33	22.00
35	2.50	0.04	0.02	0.13	35	33.33	25.00
40	2.50	0.05	0.04	0.20	40		33.33
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 20.0%, 7.5%, 3.0%, 3.0% and 3.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *For members whose participation began before September 1, 2008. The annual rate of service retirement is 100% at age 55.*

++ *For members whose participation began on or after September 1, 2008. The annual rate of service retirement is 100% at age 60.*

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Fiscal Year Ended	Trend
2010	10.5%
2011	9.5
2012	8.5
2013	7.5
2014	6.5
2015	6.0
2016	5.5
2017 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and over	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation and spouse coverage are as follows:

Participation	100%
Spouse Coverage	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2009	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 446.24	$ 690.00	$ 1,044.48	$ 1,162.16
Optimum PPO	$ 566.20	$ 821.46	$ 1,265.10	$ 1,407.32
Capitol Choice	$ 545.08	$ 826.38	$ 1,249.74	$ 1,383.52

2010	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 486.40	$ 749.84	$ 1,127.80	$ 1,253.56
Optimum PPO	$ 616.28	$ 889.54	$ 1,363.40	$ 1,515.36
Capitol Choice	$ 594.14	$ 896.06	$ 1,347.50	$ 1,490.60

MEDICARE ELIGIBLE

Effective January 1, 2010 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 162.22	$ 162.00
Kentucky Retirement System Health Plan - PLUS	$ 217.41	$ 267.00
Kentucky Retirement System Health Plan - PREMIUM	$ 384.47	$ 338.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement 55

Service Requirement At least one month of hazardous duty service credit

Amount If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement 60

Service Requirement At least 60 months of hazardous duty service credit

Amount The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday. The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance. A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Disability (continued):

Members whose participation began on or after 8/1/2004	Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Members whose participation began on or after 9/1/2008

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	60

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.21 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.14 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2004*	2005*	2006	2007	2008	2009
			Number			
Beginning of Year	941	992	1,036	1,067	1,105	1,135
Added	62	50	43	49	42	75
Removed	11	6	10	11	12	26
End of Year	992	1,036	1,067	1,105	1,135	1,184
			Annual Allowances			
Beginning of Year	$ 28,115,500	$ 30,805,600	$ 32,983,900	$ 34,651,251	$ 37,208,377	$ 41,293,017
Added	2,580,100	1,813,000	1,943,760	2,836,956	4,330,608	3,380,331
Removed	189,900	159,600	276,409	279,830	245,968	399,410
End of Year	$ 30,805,600	$ 32,983,900	$ 34,651,251	$ 37,208,377	$ 41,293,017	$ 44,273,937
% Increase in Allowances	9.57%	7.07%	5.06%	7.38%	10.98%	7.22%
Average Annual Allowance	$ 31,054	$ 31,838	$ 32,475	$ 33,673	$ 36,382	$ 37,394

**Reported by prior actuarial firm.*

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	90	$ 282,198.73	5	$ 14,285.39	95	$ 296,484.12
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	115	347,900.42	0	0.00	115	347,900.42
66-2/3% to Beneficiary	78	283,396.29	1	2,911.34	79	286,307.63
50% to Beneficiary	77	271,439.67	0	0.00	77	271,439.67
Pop-up Option	395	1,363,324.83	3	9,463.15	398	1,372,787.98
10 Years Certain	2	8,665.60	0	0.00	2	8,665.60
10 Years Certain & Life	32	95,952.59	0	0.00	32	95,952.59
Social Security Option						
Age 62 Basic	31	107,432.96	0	0.00	31	107,432.96
Age 62 Survivorship	153	441,420.04	1	10,112.06	154	451,532.10
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	11	31,817.80	1	3,747.49	12	35,565.29
20 Years Certain & Life	30	89,034.37	1	2,689.84	31	91,724.21
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	446.06	2	446.06
PLSO 12 Month Survivor	6	19,895.39	0	0.00	6	19,895.39
PLSO 24 Month Survivor	5	12,744.01	0	0.00	5	12,744.01
PLSO 36 Month Survivor	9	16,162.76	0	0.00	9	16,162.76
Total	1,034	$ 3,371,385.46	14	$ 43,655.33	1,048	$ 3,415,040.79

Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	6	$ 4,372.28	6	$ 4,372.28
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2	4,012.74	56	142,791.02	58	146,803.76
66-2/3% to Beneficiary	1	765.10	4	7,459.79	5	8,224.89
50% to Beneficiary	1	1,241.91	16	23,340.39	17	24,582.30
Pop-up Option	0	0.00	10	23,447.45	10	23,447.45
10 Years Certain	1	565.67	1	2,812.05	2	3,377.72
10 Years Certain & Life	0	0.00	0	0.00	0	0.00
Social Security Option						
Age 62 Basic	0	0.00	1	3,155.40	1	3,155.40
Age 62 Survivorship	0	0.00	23	46,049.17	23	46,049.17
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	5	1,656.34	3	1,060.98	8	2,717.32
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	0	0.00	0	0.00	0	0.00
20 Years Certain & Life	0	0.00	5	8,234.44	5	8,234.44
5 Years Certain	1	3,489.29	0	0.00	1	3,489.29
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	11	$ 11,731.05	125	$ 262,722.97	136	$ 274,454.02

Retired and Beneficiary Information June 30, 2009
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	24	$ 689,900	4	$ 59,421	10	$ 60,440	38	$ 809,761
45-49	86	3,180,491	5	70,240	3	61,078	94	3,311,809
50-54	112	4,674,423	6	127,430	9	84,847	127	4,886,700
55-59	251	10,994,620	7	96,110	19	410,792	277	11,501,522
60-64	262	10,811,608	9	201,864	18	361,876	289	11,375,348
65-69	118	3,981,699	1	1,095	11	345,456	130	4,328,250
70-74	75	2,640,404	4	98,267	9	333,386	88	3,072,056
75-79	50	1,978,165	2	12,237	23	713,075	75	2,703,477
80-84	23	985,944	0	0	17	465,974	40	1,451,917
85-89	8	376,573	0	0	15	437,917	23	814,490
90 & Over	0	0	0	0	2	18,608	2	18,608
Totals	1,009	$ 40,313,825	38	$ 666,664	136	$ 3,293,448	1,183	$ 44,273,938

Total Active Members as of June 30, 2009
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	24								24
Avg Pay	$38,362								$38,362
25-29	99	25							124
Avg Pay	$39,959	$49,094							$41,800
30-34	57	123	15						195
Avg Pay	$44,054	$49,547	$54,746						$48,342
35-39	27	71	135	23	4				260
Avg Pay	$41,332	$49,271	$58,015	$61,104	$64,914				$54,274
40-44	11	23	35	72	40	3			184
Avg Pay	$43,612	$49,148	$58,033	$65,740	$69,498	$78,352			$61,900
44-49	5	7	16	27	45	7	6		113
Avg Pay	$44,215	$47,818	$56,222	$63,803	$71,986	$73,603	$78,118		$65,499
50-54	3	1	2	1	11	9	3	4	34
Avg Pay	$40,096	$47,592	$58,686	$57,516	$68,755	$72,113	$77,796	$70,296	$66,549
55-59							3	3	6
Avg Pay							$83,080	$86,484	$84,782
60-64							1	3	4
Avg Pay							$72,624	$89,156	$85,023
65-69			1						1
Avg Pay			$66,564						$66,564
70 & over		1							1
Avg Pay		$49,704							$49,704
Totals	226	251	204	123	100	19	13	10	946
Avg Pay	$41,260	$49,332	$57,686	$64,381	$70,352	$73,647	$78,766	$80,810	$54,609

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November 10, 2010

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fifty-fourth annual actuarial valuation of the Kentucky Employees Retirement System, the fifty-first annual actuarial valuation of the County Employees Retirement System, and the fifty-second annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2010 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2011 and ending June 30, 2012.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30 year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

The impact of HB1 passed into law in 2008 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 (and for KERS Hazardous and CERS Non-Hazardous the 2009) assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2010 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	38.3%
KERS Hazardous Pension Fund	73.1%
CERS Non-Hazardous Pension Fund	65.6%
CERS Hazardous Pension Fund	65.5%
SPRS Pension Fund	49.7%

The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Recent employer contribution rate reductions under KERS and SPRS have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level. As of June 30, 2010 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	10.6%
KERS Hazardous Insurance Fund	63.7%
CERS Non-Hazardous Insurance Fund	40.9%
CERS Hazardous Insurance Fund	41.4%
SPRS Insurance Fund	27.9%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on August 20, 2009 based on the experience investigation report dated August 17, 2009, meet the parameters set for disclosure under GASB Statements No. 25 and 43. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in January 2014 and any adjustments will be reflected in the June 30, 2014 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Summary of June 30, 2010 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2011-2012)					
Pension Fund Contribution	24.30%	14.11%	11.70%	17.91%	39.80%
Insurance Fund Contribution	16.41	19.73	9.59	23.74	54.83
Recommended Employer Contribution	40.71%	33.84%	21.29%	41.65%	94.63%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$11,004,795,089	$688,149,451	$8,459,022,280	$2,672,151,907	$612,444,806
Actuarial Value of Assets	4,210,215,585	502,729,009	5,546,857,291	1,749,464,388	304,577,292
Unfunded Actuarial Liability on Actuarial Value of Assets	6,794,579,504	185,420,442	2,912,164,989	922,687,519	307,867,514
Funding Level as a % of Actuarial Value of Assets	38.3%	73.1%	65.6%	65.5%	49.7%
Market Value of Assets	$3,503,007,035	$443,511,663	$4,819,933,717	$1,506,787,429	$264,944,089
Unfunded Actuarial Liability on Market Value of Assets	7,501,788,054	244,637,788	3,639,088,563	1,165,364,478	347,500,717
Funding Level on Market Value of Assets	31.8%	64.5%	57.0%	56.4%	43.3%
Insurance Fund					
Actuarially Accrued Liability	$4,466,136,041	$493,297,529	$3,158,340,174	$1,674,703,216	$434,960,495
Actuarial Value of Assets	471,341,628	314,427,296	1,293,038,593	692,769,770	121,175,083
Unfunded Actuarial Liability as a % of Actuarial Value of Assets	3,994,794,413	178,870,233	1,865,301,581	981,933,446	313,785,412
Funding Level as a % of Actuarial Value of Assets	10.6%	63.7%	40.9%	41.4%	27.9%
Market Value of Assets	$371,002,484	$271,395,843	$1,096,581,872	$586,826,965	$104,526,550
Unfunded Actuarial Liability as a % of Market Value of Assets	4,095,133,557	221,901,686	2,061,758,302	1,087,876,251	330,433,945
Funding Level on Market Value of Assets	8.3%	55.0%	34.7%	35.0%	24.0%
Member Data					
Number of Active Members	47,090	4,291	84,681	9,562	961
Total Annual Payroll (Active Members)	$1,815,146,388	$143,557,944	$2,236,855,380	$466,548,660	$51,506,712
Average Annual Pay (Active Members)	$38,546	$33,456	$26,415	$48,792	$53,597
Number of Retired Members & Beneficiaries	37,945	2,835	41,038	6,068	1,223
Average Annual Retirement Allowance	$21,133	$14,503	$11,029	$24,212	$37,217
Number of Vested Inactive Members	5,875	319	9,430	545	55

Additional Valuation Notes

In addition to the valuation results presented in the three reports that follow, certain calculations were made to round out the presentation and put the results in greater perspective. That information follows.

- Recent Contribution Shortfall – Although it has happened periodically in the past, there has been an ongoing contribution shortfall for KERS and SPRS since the 2002-2003 fiscal year. That shortfall has placed additional pressure on contribution rates, and that impact is compounding. The table below shows the recommended and budgeted contribution rates as a percent of payroll for KERS and SPRS over the last eight fiscal years. The rates shown are the combined rates for retirement and insurance.

Fiscal Year	Recommended Rate	Budgeted Rate
	KERS Non-Hazardous	
2002-2003	5.89%	3.76%
2003-2004	7.53	5.89
2004-2005	10.29	5.89
2005-2006	13.62	5.89
2006-2007	17.13	7.75
2007-2008	34.23	8.50
2008-2009	28.60	10.01
2009-2010	31.29	11.61
	KERS Hazardous	
2002-2003	18.84%	17.60%
2003-2004	18.84	18.84
2004-2005	19.47	18.84
2005-2006	21.59	18.84
2006-2007	23.32	22.00
2007-2008	47.11	24.25
2008-2009	34.78	24.35
2009-2010	35.54	24.69
	SPRS	
2002-2003	21.58%	17.37%
2003-2004	21.58	21.58
2004-2005	28.08	21.58
2005-2006	34.83	21.58
2006-2007	42.30	25.50
2007-2008	72.00	28.00
2008-2009	60.14	30.07
2009-2010	61.87	33.08

Had the recommended contributions been made over this period of time, the contribution rates recommended as a result of the June 30, 2010 valuations would have been reduced by 4.72% of payroll for KERS Non-Hazardous, 2.65% for KERS Hazardous and 7.48% for SPRS.

- Market Value of Assets and COLA Liability Impact on Funding Ratio - The funding ratio for all the Plans is based on the actuarial liabilities and asset values computed for the purpose of meeting funding requirements on the basis required by state law. This basis does not take all actuarial liabilities and investment performance to date into account. If the Retirement and Insurance results were combined, if the market value instead of actuarial value of assets were used, and if a 1.5% annual cost-of-living adjustment for retirement benefits were assumed to be in effect for all future years, then the funding ratio for the combined Retirement and Insurance plans would be lower, as shown in the table below.

System	Reported Funding Ratio	Adjusted Funding Ratio
KERS Non-Hazardous	30.3%	22.9%
KERS Hazardous	69.2	55.9
CERS Non-Hazardous	58.9	46.6
CERS Hazardous	56.2	44.0
SPRS	40.6	32.5

- Impact of Blended Interest Rates on Insurance Valuations - The June 30, 2010 Insurance Plan valuations recognize the parameters required by GASB Statements No. 43 and 45. One of the parameters is that a blended interest rate must be used when the benefits are not being fully funded. This rate reflects the level of advanced funding that is occurring. Because of the contribution rate shortfall noted above, blended rates were required for KERS Non-Hazardous and SPRS. The rate used for the June 30, 2010 valuation is 4.50% for both KERS Non-Hazardous and SPRS. If KERS Non-Hazardous and SPRS were being fully funded, an interest rate of 7.75% would be used, reducing liabilities and therefore contribution rates. The impact on rates is shown in the table below.

Insurance Plan	"Blended" Contribution Rate	"Full Funding" Contribution Rate
KERS Non-Hazardous	16.41%	10.83%
SPRS	54.83	29.52

Report on the Annual Valuation of the Kentucky Employees Retirement System

Prepared as of June 30, 2010

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 10, 2010

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2011. The date of the valuation was June 30, 2010.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

TJC:kc

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REPORT ON THE ANNUAL VALUATION OF THE KENTUCKY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2010

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2010, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/2010	6/30/2009	6/30/2010	6/30/2009	6/30/2010	6/30/2009
Contributions for next fiscal year:						
Retirement	24.30%	21.77%	14.11%	14.11%		
Insurance	16.41	16.81	19.73	20.26	N/A	N/A
Total	40.71%	38.58%	33.84%	34.37%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$11,004,795,089	$10,658,549,532	$688,149,451	$674,411,781	$11,692,944,540	$11,332,961,313
Actuarial value of assets	4,210,215,585	4,794,611,365	502,729,009	502,503,287	4,712,944,594	5,297,114,652
Unfunded liability on actuarial value of assets	6,794,579,504	5,863,938,167	185,420,442	171,908,494	6,979,999,946	6,035,846,661
Funded ratio on actuarial value of assets	38.26%	44.98%	73.06%	74.51%	40.31%	46.74%
Market value of assets	$3,503,007,035	$3,584,196,429	$443,511,663	$388,913,374	$3,946,518,698	$3,973,109,803
Unfunded liability on market value of assets	7,501,788,054	7,074,353,103	244,637,788	285,498,407	7,746,425,842	7,359,851,510
Funded ratio on market value of assets	31.83%	33.63%	64.45%	57.67%	33.75%	35.06%
Insurance						
Actuarial accured liability	$4,466,136,041	$4,507,325,571	$493,297,529	$491,132,170	$4,959,433,570	$4,998,457,741
Actuarial value of assets	471,341,628	534,172,580	314,427,296	301,634,592	785,768,924	835,807,172
Unfunded liability on actuarial value of assets	3,994,794,413	3,973,152,991	178,870,233	189,497,578	4,173,664,646	4,162,650,569
Funded ratio on actuarial value of assets	10.55%	11.85%	63.74%	61.42%	15.84%	16.72%
Market value of assets	$371,002,484	$365,771,088	$271,395,843	$219,537,255	$642,398,327	$585,308,343
Unfunded liability on market value of assets	4,095,133,557	4,141,554,483	221,901,686	271,594,915	4,317,035,243	4,413,149,398
Funded ratio on market value of assets	8.31%	8.12%	55.02%	44.70%	12.95%	11.71%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	37,945	37,883	2,835	2,648	40,780	40,531
Number of vested former members	5,875	5,745	319	303	6,194	6,048
Number of former members due a refund	31,806	28,770	2,836	2,753	34,642	31,523
Number of active members	47,090	46,060	4,291	4,334	51,381	50,394
Total salary	$1,815,146,388	$1,754,412,912	$143,557,944	$146,043,576	$1,958,704,332	$1,900,456,488
Average salary	$38,546	$38,090	$33,456	$33,697	$38,121	$37,712

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, plan designs for two of the Health Insurance plans that cover Medicare eligible retirees will change for Plan Year 2011. The changes are summarized below.

    - The KRS Health Plan Essential will replace the KRS Health Plan Plus.
    - The medical coverage under the KRS Health Plan Essential includes an increase to the annual deductible and the prescription drug coverage has been altered to reflect the same coverage as described in the Standard Medicare Part D benefit parameters.
    - The annual deductible, out-of-pocket maximum and prescription drug co-payments have increased under the KRS Health Plan Premium.
    - Plan design changes have also been implemented for Plan Year 2011 for the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2009 and June 30, 2010 is 4.50% for KERS Non-Hazardous and 7.75% for KERS Hazardous. The lower rate for KERS Non-Hazardous is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2010 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	47,090	$1,815,146,388	$38,546	43.4	9.0
Hazardous	4,291	143,557,944	33,456	41.4	7.0
Total in KERS	51,381	$1,958,704,332	$38,121	43.2	8.9

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2005	47,118	$1,655,907,288	$35,144	1.7%
6/30/2006	46,707	1,702,230,777	36,445	3.7
6/30/2007	47,913	1,780,223,493	37,155	1.9
6/30/2008	48,085	1,837,873,488	38,221	2.9
6/30/2009	46,060	1,754,412,912	38,090	(0.3)
6/30/2010	47,090	1,815,146,388	38,546	1.2

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2005	4,274	$131,687,088	$30,811	(2.4%)
6/30/2006	4,320	138,747,320	32,117	4.2
6/30/2007	4,349	144,838,020	33,304	3.7
6/30/2008	4,393	148,710,060	33,852	1.6
6/30/2009	4,334	146,043,576	33,697	(0.5)
6/30/2010	4,291	143,557,944	33,456	(0.7)

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	32,196	$732,950,896	$22,765	66.3
Disability	1,808	21,888,837	12,107	63.8
Beneficiary	3,941	47,042,178	11,937	69.8
Total in KERS	37,945	$801,881,911	$21,133	66.5

* Does not include annual benefits for those members included in the Hazardous System who are also receiving a portion of their benefit from the Non Hazardous System

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	2,448	$37,904,152	$15,484	61.9
Disability	126	990,064	7,858	58.0
Beneficiary	261	2,220,584	8,508	59.5
Total in KERS	2,835	$41,114,800	$14,503	61.5

This valuation also includes 40,836 inactive members (37,681 Non-Hazardous and 3,155 Hazardous; of which 5,875 Non-Hazardous are vested and 319 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2010 the total market value of assets amounted to $4,588,917,025 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2010

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	$3,503,007,035	$371,002,484	$3,874,009,519
Hazardous	443,511,663	271,395,843	714,907,506
Total	$3,946,518,698	$642,398,327	$4,588,917,025

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $5,498,713,518 . Schedule B shows the development of the actuarial value of assets as of June 30, 2010. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	June 30, 2010	June 30, 2009
Retirement		
Non-Hazardous	$ 4,210,215,585	$ 4,794,611,365
Hazardous	502,729,009	502,503,287
Total	$ 4,712,944,594	$ 5,297,114,652
Insurance		
Non-Hazardous	$ 471,341,628	$ 534,172,580
Hazardous	314,427,296	301,634,592
Total	$ 785,768,924	$ 835,807,172
KERS Total		
Non-Hazardous	$ 4,681,557,213	$ 5,328,783,945
Hazardous	817,156,305	804,137,879
Total	$ 5,498,713,518	$ 6,132,921,824

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2010. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $13,319,173,213, of which $8,552,261,977 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $219,153,066 is for the prospective benefits payable on account of present inactive members, and $4,547,758,170 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $4,712,944,594 as of June 30, 2010. The difference of $8,606,228,619 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $939,963,643 is the present value of future contributions expected to be made by members, and the balance of $7,666,264,976 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.77% of payroll for non-hazardous members and 6.68% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $686,265,030. When this amount is subtracted from $7,666,264,976, which is the present value of the total future contributions to be made by the employers, there remains $6,979,999,946 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 20.07% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 6.92% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $6,794,579,504 for non-hazardous members and $185,420,442 for hazardous members over 27 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.46% of payroll for non-hazardous members and 0.51% of payroll for hazardous members.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $6,803,183,212, of which $2,708,543,170 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $304,501,593 is for the prospective benefits payable on account of present inactive members, and $3,790,138,449 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $785,768,924 as of June 30, 2010. The difference of $6,017,414,288 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $28,503,267 is the present value of future contributions expected to be made by members, and the balance of $5,988,911,021 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 8.02% of payroll for non-hazardous members and 12.91% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,815,246,375. When this amount is subtracted from $5,988,911,021, which is the present value of the total future contributions to be made by the employers, there remains $4,173,664,646 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 8.15% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 6.68% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $3,994,794,413 for non-hazardous members and $178,870,233 for hazardous members over 27 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.24% of payroll for non-hazardous members and 0.14% of payroll for hazardous members.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2010 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/09	$ 5,863.9	$ 171.9	$ 6,035.8
(2)	Normal cost from last valuation	74.7	11.6	86.3
(3)	Employer contributions	144.1	17.7	161.8
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	454.7	13.5	468.2
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 6,249.2	$ 179.3	$ 6,428.5
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 6,249.2	$ 179.3	$ 6,428.5
(9)	Actual UAAL as of 6/30/10	$ 6,794.6	$ 185.4	$ 6,980.0
(10)	Gain/(loss): (8) - (9)	$ (545.4)	$ (6.1)	$ (551.5)
(11)	Accrued liabilities as of 6/30/09	$ 10,658.5	$ 674.4	$ 11,332.9
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(5.1%)	(0.9%)	(4.9%)

**Unfunded actuarial accrued liability.*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/09	$ 3,973.2	$ 189.5	$ 4,162.7
(2)	Normal cost from last valuation	148.9	19.5	168.4
(3)	Expected employer contributions	290.8	29.4	320.2
(4)	Interest accrual: Non-Haz: [(1) + (2) - (3)] x .045 Haz: [(1) + (2) - (3)] x .0775	172.4	13.9	186.3
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 4,003.7	$ 193.5	$ 4,197.2
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Data correction**	(53.0)	0.4	(52.6)
(9)	Expected UAAL after changes: (5) + (6) + (7) + (8)	$ 3,950.7	$ 193.9	$ 4,144.6
(10)	Actual UAAL as of 6/30/10	$ 3,994.8	$ 178.9	$ 4,173.7
(11)	Gain/(loss): (9) - (10)	$ (44.1)	$ 15.0	$ (29.1)
(12)	Accrued liabilities as of 6/30/09	$ 4,507.3	$ 491.1	$ 4,998.4
(13)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(1.0%)	3.1%	(0.6%)

* *Unfunded actuarial accrued liability.*

***$53 million gain due to 506 KERS Non-Hazardous retirees with split service coded as covered for health insurance under other systems this year who were coded with coverage in KERS Non-Hazardous in prior years. Most of these 506 retirees are now coded with coverage in CERS Non-Hazardous. It was determined during conversion to the new data system that most of these retirees are covered for health insurance under other systems because the majority of their service was not KERS Non-Hazardous.*

$0.4 million loss due to 43 KERS Hazardous retirees with split service coded as covered for health insurance under KERS Hazardous this year who were coded without coverage in KERS Hazardous in prior years. Most of these 43 retirees were coded as covered for health insurance under CERS Non-Hazardous in prior years and are now coded without coverage in that system. It was determined during conversion to the new data system that these retirees are covered for health insurance under KERS Hazardous because the majority of their service was KERS Hazardous and not with the other systems.

NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/10	Insurance $ Gain (or Loss) For Year Ending 6/30/10
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (39.4)	$ (4.3)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(4.1)	2.9
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.9)	(1.8)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	6.9	10.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	68.5	306.0
New Members. Additional unfunded accrued liability will produce a loss.	(8.4)	(8.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(324.2)	(32.7)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	14.2	58.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(258.0)	(375.1)
Gain (or Loss) During Year From Financial Experience	$ (545.4)	$ (44.1)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	53.0
Composite Gain (or Loss) During Year	$ (545.4)	$ 8.9

HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/10	Insurance $ Gain (or Loss) For Year Ending 6/30/10
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (31.7)	$ (2.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.4	0.8
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	15.9	9.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	7.3	36.0
New Members. Additional unfunded accrued liability will produce a loss.	(1.4)	(0.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(27.2)	(14.0)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	5.1	9.9
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	25.4	(23.2)
Gain (or Loss) During Year From Financial Experience	$ (6.1)	$ 15.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	(0.4)
Composite Gain (or Loss) During Year	$ (6.1)	$ 14.6

TOTAL KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/10	Insurance $ Gain (or Loss) For Year Ending 6/30/10
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (71.1)	$ (7.2)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3.7)	3.7
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.8)	(1.9)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	22.8	20.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	75.8	342.0
New Members. Additional unfunded accrued liability will produce a loss.	(9.8)	(9.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(351.4)	(46.7)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	19.3	68.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(232.6)	(398.3)
Gain (or Loss) During Year From Financial Experience	$ (551.5)	$ (29.1)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	52.6
Composite Gain (or Loss) During Year	$ (551.5)	$ 23.5

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2011/2012 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for		Amount	% of Payroll
A.	Normal Cost:		
	(1) Service retirement benefits	$ 145,716,762	8.03%
	(2) Disability benefits	11,150,373	0.61
	(3) Survivor benefits	2,363,904	0.13
	(4) Total	$ 159,231,039	8.77%
B.	Member Contributions	$ 90,757,319	5.00%
C.	Employer Normal Cost: [A(4) - B]	$ 68,473,720	3.77%
D.	Administrative Expenses	$ 8,349,673	0.46%
E.	Unfunded Actuarial Accrued Liability Contributions*:		
	(1) UAAL Contribution Based on 6/30/09 Valuation:	$ 317,832,133	17.51%
	(2) Change due to:		
	a. Active decrements	$ 2,007,711	0.11%
	b. Pay increases	(3,669,823)	(0.20)
	c. Retiree mortality	(763,338)	(0.04)
	d. Investment return	17,382,439	0.96
	e. COLA	5,461,593	0.30
	f. Assumption Change	0	0.00
	g. Other	26,020,363	1.42
	h. Total Change	$ 46,438,944	2.56%
	(3) UAAL Contribution Based on 6/30/10 Valuation: [E(1) +E(2)h]	$ 364,271,077	20.07%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$ 441,094,470	24.30%

**Based on 28 year amortization of the UAAL from June 30, 2009 and 27 years from June 30, 2010*

Required Contribution Rates
Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	19,432,605	13.51%
	(2) Disability benefits		1,267,546	0.86
	(3) Survivor benefits		376,330	0.25
	(4) Total	$	21,076,481	14.68%
B.	Member Contributions	$	11,484,636	8.00%
C.	Employer Normal Cost: [A(4) - B]	$	9,591,845	6.68%
D.	Administrative Expenses	$	732,146	0.51%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/09 Valuation:	$	8,857,525	6.17%
	(2) Change due to:			
	a. Active decrements	$	820,394	0.57%
	b. Pay increases		(389,374)	(0.27)
	c. Retiree mortality		(272,557)	(0.19)
	d. Investment return		1,459,939	1.02
	e. COLA		267,726	0.19
	f. Assumption Change		0	0.00
	g. Other		(802,891)	(0.57)
	h. Total Change	$	1,083,238	0.75%
	(3) UAAL Contribution Based on 6/30/10 Valuation: [E(1) +E(2)h]	$	9,940,763	6.92%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	20,264,754	14.11%

** Based on 28 year amortization of the UAAL from June 30, 2009 and 27 years from June 30, 2010*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	147,431,092	8.12%
B.	Member Contributions*	$	1,815,146	0.10%
C.	Employer Normal Cost: [A - B]	$	145,615,946	8.02%
D.	Administrative Expenses	$	4,332,929	0.24%
E.	Unfunded Actuarial Accrued Liability**:	$	147,955,349	8.15%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	297,904,224	16.41%

**The liabilities are net of retiree contributions towards their healthcare*
*** Based on 27 year amortization of the UAAL from June 30, 2010*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	18,694,203	13.02%
B.	Member Contributions*	$	157,914	0.11%
C.	Employer Normal Cost: [A - B]	$	18,536,289	12.91%
D.	Administrative Expenses	$	200,324	0.14%
E.	Unfunded Actuarial Accrued Liability**:	$	9,589,593	6.68%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	28,326,206	19.73%

**The liabilities are net of retiree contributions towards their healthcare*
*** Based on 27 year amortization of the UAAL from June 30, 2010*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2010

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	37,945	2,835	40,780
Terminated employees entitled to benefits but not yet receiving benefits	37,681	3,155	40,836
Active Members	47,090	4,291	51,381
Total	122,716	10,281	132,997

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2005	$ 5,578,685,746	$ 7,579,074,839	$ 2,000,389,093	73.6%	$ 1,655,907,288	120.8%
6/30/2006	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
6/30/2007	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
6/30/2008	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
6/30/2009	4,794,611,365	10,658,549,532	5,863,938,167	45.0	1,754,412,912	334.2
6/30/2010	4,210,215,585	11,004,795,089	6,794,579,504	38.3	1,815,146,388	374.3
Hazardous Members						
6/30/2005	$ 405,288,662	$ 438,994,257	$ 33,705,595	92.3%	$ 131,687,088	25.6%
6/30/2006	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
6/30/2007	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
6/30/2008	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
6/30/2009	502,503,287	674,411,781	171,908,494	74.5	146,043,576	117.7
6/30/2010	502,729,009	688,149,451	185,420,442	73.1	143,557,944	129.2
Total KERS Members						
6/30/2005	$ 5,983,974,408	$ 8,018,069,096	$ 2,034,094,688	74.6%	$ 1,787,594,376	113.8%
6/30/2006	5,822,070,515	9,503,482,150	3,681,411,635	61.3	1,840,978,097	200.0
6/30/2007	5,864,070,268	10,044,931,606	4,180,861,338	58.4	1,925,061,513	217.2
6/30/2008	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0
6/30/2009	5,297,114,652	11,332,961,313	6,035,846,661	46.7	1,900,456,488	317.6
6/30/2010	4,712,944,594	11,692,944,540	6,979,999,946	40.3	1,958,704,332	356.4

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2005	$ 607,068,351	$ 2,680,559,188	$ 2,073,490,837	22.7%	$ 1,655,907,288	125.2%
6/30/2006	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
6/30/2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
6/30/2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
6/30/2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
6/30/2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
Hazardous Members						
6/30/2005	$ 187,947,644	$ 386,844,695	$ 198,897,051	48.6%	$ 131,687,088	151.0%
6/30/2006	212,833,318	621,237,856	408,404,538	34.3	138,747,320	294.4
6/30/2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
6/30/2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
6/30/2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
6/30/2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
Total KERS Members						
6/30/2005	$ 795,015,995	$ 3,067,403,883	$ 2,272,387,888	25.9%	$ 1,787,594,376	127.1%
6/30/2006	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,978,097	413.5
6/30/2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
6/30/2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
6/30/2009	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0
6/30/2010	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2010. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2010	6/30/2010
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	27 years	27 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	5.0% - 17.0%	5.0% - 21.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2010	6/30/2010
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	27 years	27 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	10.5% - 5.0%	10.5% - 5.0%
Medical Trend Assumption (Post-Medicare)	9.0% - 5.0%	9.0% - 5.0%
Year Ultimate Trend	2018	2018
Actuarial assumptions:		
Investment rate of return*	4.50%	7.75%
*Includes price inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2010 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2009. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 4,210,215,585	$ 4,794,611,365
Prospective contributions		
Member contributions	$ 842,839,073	$ 836,173,026
Employer normal contributions	605,961,561	604,255,306
Unfunded accrued liability contributions	6,794,579,504	5,863,938,167
Total prospective contributions	$ 8,243,380,138	$ 7,304,366,499
Total assets	$ 12,453,595,723	$ 12,098,977,864
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,129,008,670	$ 8,034,479,089
Present value of benefits payable on account of active members	4,123,837,921	3,893,822,173
Present value of benefits payable on account of inactive members	200,749,132	170,676,602
Total liabilities	$ 12,453,595,723	$ 12,098,977,864

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 502,729,009	$ 502,503,287
Prospective contributions		
Member contributions	$ 97,124,570	$ 97,638,990
Employer normal contributions	80,303,469	88,591,324
Unfunded accrued liability contributions	185,420,442	171,908,494
Total prospective contributions	$ 362,848,481	$ 358,138,808
Total assets	$ 865,577,490	$ 860,642,095
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 423,253,307	$ 396,432,087
Present value of benefits payable on account of active members	423,920,249	446,669,739
Present value of benefits payable on account of inactive members	18,403,934	17,540,269
Total liabilities	$ 865,577,490	$ 860,642,095

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 4,712,944,594	$ 5,297,114,652
Prospective contributions		
Member contributions	$ 939,963,643	$ 933,812,016
Employer normal contributions	686,265,030	692,846,630
Unfunded accrued liability contributions	6,979,999,946	6,035,846,661
Total prospective contributions	$ 8,606,228,619	$ 7,662,505,307
Total assets	$ 13,319,173,213	$ 12,959,619,959
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,552,261,977	$ 8,430,911,176
Present value of benefits payable on account of active members	4,547,758,170	4,340,491,912
Present value of benefits payable on account of inactive members	219,153,066	188,216,871
Total liabilities	$ 13,319,173,213	$ 12,959,619,959

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 471,341,628	$ 534,172,580
Prospective contributions		
Member contributions	$ 26,873,691	$ 12,903,248
Employer normal contributions	1,668,710,243	1,774,858,516
Unfunded accrued liability contributions	3,994,794,413	3,973,152,991
Total prospective contributions	$ 5,690,378,347	$ 5,760,914,755
Total assets	$ 6,161,719,975	$ 6,295,087,335
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,456,024,556	$ 2,586,293,577
Present value of benefits payable on account of active members	3,417,185,921	3,433,220,247
Present value of benefits payable on account of inactive members	288,509,498	275,573,511
Total liabilities	$ 6,161,719,975	$ 6,295,087,335

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 314,427,296	$ 301,634,592
Prospective contributions		
Member contributions	$ 1,629,576	$ 726,289
Employer normal contributions	146,536,132	156,871,546
Unfunded accrued liability contributions	178,870,233	189,497,578
Total prospective contributions	$ 327,035,941	$ 347,095,413
Total assets	$ 641,463,237	$ 648,730,005
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 252,518,614	$ 227,398,616
Present value of benefits payable on account of active members	372,952,528	406,606,640
Present value of benefits payable on account of inactive members	15,992,095	14,724,749
Total liabilities	$ 641,463,237	$ 648,730,005

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 785,768,924	$ 835,807,172
Prospective contributions		
Member contributions	$ 28,503,267	$ 13,629,537
Employer normal contributions	1,815,246,375	1,931,730,062
Unfunded accrued liability contributions	4,173,664,646	4,162,650,569
Total prospective contributions	$ 6,017,414,288	$ 6,108,010,168
Total assets	$ 6,803,183,212	$ 6,943,817,340
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,708,543,170	$ 2,813,692,193
Present value of benefits payable on account of active members	3,790,138,449	3,839,826,887
Present value of benefits payable on account of inactive members	304,501,593	290,298,260
Total liabilities	$ 6,803,183,212	$ 6,943,817,340

The following tables provide the solvency test for non-hazardous and hazardous KERS members.

Solvency Test
Retirement Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2005*	$ 866,044,474	$ 5,056,247,608	$ 1,656,782,757	$ 5,578,685,746	100.0%	93.2%	0.0%
6/30/2006	866,050,799	5,881,990,853	2,246,784,595	5,394,086,323	100.0	77.0	0.0
6/30/2007	878,842,180	6,437,235,593	2,169,861,504	5,396,782,459	100.0	70.2	0.0
6/30/2008	875,178,068	7,162,496,700	2,092,015,217	5,318,792,893	100.0	62.0	0.0
6/30/2009	793,574,765	8,205,155,691	1,659,819,076	4,794,611,365	100.0	48.8	0.0
6/30/2010	869,484,042	8,329,757,802	1,805,553,245	4,210,215,585	100.0	40.1	0.0

**Reported by prior actuarial firm.*

Solvency Test
Retirement Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2005*	$ 75,098,321	$ 213,310,550	$ 150,585,386	$ 405,288,662	100.0%	100.0%	77.6%
6/30/2006	87,092,538	262,446,606	159,116,759	427,984,192	100.0	100.0	49.3
6/30/2007	88,670,847	306,492,350	163,829,132	467,287,809	100.0	100.0	44.0
6/30/2008	89,590,638	355,771,877	172,648,312	502,132,214	100.0	100.0	32.9
6/30/2009	87,779,938	413,972,356	172,659,487	502,503,287	100.0	100.0	0.4
6/30/2010	88,511,283	441,657,241	157,980,927	502,729,009	100.0	93.8	0.0

**Reported by prior actuarial firm.*

Solvency Test
Insurance Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2005*	$ 0	$ 1,550,619,458	$ 1,129,939,730	$ 607,068,351	100.0%	39.2%	0.0%
6/30/2006	0	3,543,125,375	4,272,355,400	611,350,765	100.0	17.3	0.0
6/30/2007	0	2,569,197,567	2,632,157,488	621,171,658	100.0	24.2	0.0
6/30/2008	0	2,788,189,754	2,643,309,531	603,197,761	100.0	21.6	0.0
6/30/2009	0	2,861,867,088	1,645,458,483	534,172,580	100.0	18.7	0.0
6/30/2010	0	2,744,534,054	1,721,601,987	471,341,628	100.0	17.2	0.0

**Reported by prior actuarial firm.*

Solvency Test
Insurance Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2005*	$ 0	$ 187,883,650	$ 198,961,045	$ 187,947,644	100.0%	100.0%	0.0%
6/30/2006	0	234,058,715	387,179,141	212,833,318	100.0	90.9	0.0
6/30/2007	0	201,189,546	303,653,435	251,536,756	100.0	100.0	16.6
6/30/2008	0	228,834,940	312,822,274	288,161,759	100.0	100.0	19.0
6/30/2009	0	242,123,365	249,008,805	301,634,592	100.0	100.0	23.9
6/30/2010	0	268,510,709	224,786,820	314,427,296	100.0	100.0	20.4

**Reported by prior actuarial firm.*

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2009	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	$ 5,318,792,893	$ 4,794,611,365				
B.	Market Value End of Year	3,584,196,429	3,503,007,035				
C.	Market Value Beginning of Year	5,056,867,294	3,584,196,429				
D.	Cash Flow						
	D1. Contributions	220,744,764	234,830,687				
	D2. Benefit Payments	(817,640,554)	(834,513,585)				
	D3. Administrative Expenses	(8,099,760)	(8,423,658)				
	D4. Investment Expenses	(5,331,690)	(12,902,243)				
	D5. Net	(610,327,240)	(621,008,799)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(862,343,625)	539,819,405				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	373,795,328	267,113,337				
	E4. Amount for Phased-In Recognition	(1,236,138,953)	272,706,068				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(247,227,791)	54,541,214	0	0	0	0
	F2. First Prior Year	(129,965,994)	(247,227,791)	54,541,214	0	0	0
	F3. Second Prior Year	76,241,954	(129,965,994)	(247,227,791)	54,541,214	0	0
	F4. Third Prior Year	15,910,299	76,241,954	(129,965,994)	(247,227,791)	54,541,214	0
	F5. Fourth Prior Year	(2,608,084)	15,910,299	76,241,954	(129,965,994)	(247,227,791)	54,541,214
	F6. Total Recognized Investment Gain	(287,649,616)	(230,500,318)	(246,410,617)	(322,652,571)	(192,686,577)	54,541,214
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 4,794,611,365	$ 4,210,215,585				
H.	Difference Between Market & Actuarial Values	$ (1,210,414,936)	$ (707,208,550)	$ (460,797,933)	$ (138,145,362)	$ 54,541,214	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2009	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	$ 502,132,214	$ 502,503,287				
B.	Market Value End of Year	388,913,374	443,511,663				
C.	Market Value Beginning of Year	484,440,015	388,913,374				
D.	Cash Flow						
	D1. Contributions	28,285,357	28,768,529				
	D2. Benefit Payments	(38,833,245)	(39,082,467)				
	D3. Administrative Expenses	(717,016)	(737,035)				
	D4. Investment Expenses	(467,886)	(1,479,708)				
	D5. Net	(11,732,790)	(12,530,681)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(83,793,851)	67,128,970				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	37,575,472	31,192,269				
	E4. Amount for Phased-In Recognition	(121,369,323)	35,936,701				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(24,273,865)	7,187,340	0	0	0	0
	F2. First Prior Year	(12,007,500)	(24,273,865)	7,187,340	0	0	0
	F3. Second Prior Year	8,869,886	(12,007,500)	(24,273,865)	7,187,340	0	0
	F4. Third Prior Year	1,788,273	8,869,886	(12,007,500)	(24,273,865)	7,187,340	0
	F5. Fourth Prior Year	151,597	1,788,273	8,869,886	(12,007,500)	(24,273,865)	7,187,340
	F6. Total Recognized Investment Gain	(25,471,609)	(18,435,866)	(20,224,139)	(29,094,025)	(17,086,525)	7,187,340
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 502,503,287	$ 502,729,009				
H.	Difference Between Market & Actuarial Values	$ (113,589,913)	$ (59,217,346)	$ (38,993,207)	$ (9,899,182)	$ 7,187,340	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2009	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	$ 603,197,761	$ 534,172,580				
B.	Market Value End of Year	365,771,088	371,002,484				
C.	Market Value Beginning of Year	574,480,809	365,771,088				
D.	Cash Flow						
	D1. Contributions	95,326,154	116,616,692				
	D2. Benefit Payments	(145,035,850)	(157,817,320)				
	D3. Administrative Expenses	(4,106,387)	(4,332,929)				
	D4. Investment Expenses	(370,766)	(1,138,191)				
	D5. Net	(54,186,849)	(46,671,748)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(154,522,872)	51,903,144				
	E2. Assumed Rate	4.50%	4.50%				
	E3. Amount for Immediate Recognition	25,011,541	16,573,385				
	E4. Amount for Phased-In Recognition	(179,534,413)	35,329,759				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(35,906,883)	7,065,952	0	0	0	0
	F2. First Prior Year	(13,538,974)	(35,906,883)	7,065,952	0	0	0
	F3. Second Prior Year	6,195,642	(13,538,974)	(35,906,883)	7,065,952	0	0
	F4. Third Prior Year	3,451,674	6,195,642	(13,538,974)	(35,906,883)	7,065,952	0
	F5. Fourth Prior Year	(51,332)	3,451,674	6,195,642	(13,538,974)	(35,906,883)	7,065,952
	F6. Total Recognized Investment Gain	(39,849,873)	(32,732,589)	(36,184,263)	(42,379,905)	(28,840,931)	7,065,952
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 534,172,580	$ 471,341,628				
H.	Difference Between Market & Actuarial Values	$ (168,401,492)	$ (100,339,144)	$ (64,154,881)	$ (21,774,976)	$ 7,065,952	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2009	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	$ 288,161,759	$ 301,634,592				
B.	Market Value End of Year	219,537,255	271,395,843				
C.	Market Value Beginning of Year	269,299,859	219,537,255				
D.	Cash Flow						
	D1. Contributions	21,326,365	23,107,913				
	D2. Benefit Payments	(10,303,721)	(13,455,544)				
	D3. Administrative Expenses	(143,862)	(200,324)				
	D4. Investment Expenses	(120,294)	(551,875)				
	D5. Net	10,758,488	8,900,170				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(60,521,092)	42,958,418				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	21,412,586	17,932,279				
	E4. Amount for Phased-In Recognition	(81,933,678)	25,026,139				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(16,386,736)	5,005,228	0	0	0	0
	F2. First Prior Year	(9,611,455)	(16,386,736)	5,005,228	0	0	0
	F3. Second Prior Year	5,330,751	(9,611,455)	(16,386,736)	5,005,228	0	0
	F4. Third Prior Year	1,622,467	5,330,751	(9,611,455)	(16,386,736)	5,005,228	0
	F5. Fourth Prior Year	346,732	1,622,467	5,330,751	(9,611,455)	(16,386,736)	5,005,228
	F6. Total Recognized Investment Gain	(18,698,241)	(14,039,745)	(15,662,212)	(20,992,963)	(11,381,508)	5,005,228
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 301,634,592	$ 314,427,296				
H.	Difference Between Market & Actuarial Values	$ (82,097,337)	$ (43,031,453)	$ (27,369,241)	$ (6,376,278)	$ 5,005,228	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for KERS non-hazardous is 4.50% and for KERS hazardous is 7.75%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.50% per annum:

Service	Annual Rates of Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	12.50%	16.50%	4.50%	17.00%	21.00%
1-2	4.50%	4.50%	4.50%	9.00%	9.00%
2-3	2.00%	2.50%	4.50%	6.50%	7.00%
3-4	1.50%	2.00%	4.50%	6.00%	6.50%
4-5	1.50%	1.50%	4.50%	6.00%	6.00%
5-6	1.50%	1.00%	4.50%	6.00%	5.50%
6-7	1.00%	0.50%	4.50%	5.50%	5.00%
7-8	1.00%	0.50%	4.50%	5.50%	5.00%
8-9	1.00%	0.50%	4.50%	5.50%	5.00%
9-10	0.50%	0.50%	4.50%	5.00%	5.00%
10 & over	0.50%	0.50%	4.50%	5.00%	5.00%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement+	Service Retirement++
		Male	Female			
20	6.00%	0.03%	0.01%	0.04%		
25	5.08	0.03	0.01	0.05		
30	4.26	0.04	0.02	0.06		
35	3.21	0.04	0.02	0.09		
40	3.00	0.05	0.04	0.13		
45	3.00	0.08	0.05	0.22		
50	3.00	0.13	0.07	0.37		
55	3.00	0.22	0.11	0.61	8.0%	
60	3.00	0.40	0.22	0.97	10.0	10.0%
65		0.73	0.43		22.5	25.0
70		1.19	0.69		22.5	25.0
75					100.0	100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 19.0%, 13.0%, 10.0%, 9.0% and 6.5%, respectively.*
\+ *For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.*
++ *For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 25%.*

Hazardous Members

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement		
		Male	Female		Service	Rate+	Rate++
20	4.00%	0.03%	0.01%	0.05%	20	22.0%	
25	4.00	0.03	0.01	0.07	25	35.0	22.0%
30	3.50	0.04	0.02	0.09	30	38.0	35.0
35	3.00	0.04	0.02	0.13	35	60.0	38.0
40	3.00	0.05	0.04	0.20	40		60.0
45	3.00	0.08	0.05	0.33			
50	3.00	0.13	0.07	0.56			
55	3.00	0.22	0.11	0.92			
60	3.00	0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 26.0%, 11.5%, 8.25%, 7.5% and 7.0%, respectively.*
** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*
\+ *For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.*
++ *For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2011	10.5%	9.0%
2012	9.5%	8.5%
2013	8.5%	7.5%
2014	7.5%	7.0%
2015	6.5%	6.5%
2016	6.0%	6.0%
2017	5.5%	5.5%
2018 and beyond	5.0%	5.0%

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	90%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2010	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 486.40	$ 749.84	$ 1,127.80	$ 1,253.56
Optimum PPO	$ 616.28	$ 889.54	$ 1,363.40	$ 1,515.36
Capitol Choice	$ 594.14	$ 896.06	$ 1,347.50	$ 1,490.60

2011	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 486.40	$ 749.84	$ 1,127.80	$ 1,253.56
Optimum PPO	$ 650.30	$ 905.42	$ 1,405.66	$ 1,565.88
Capitol Choice	$ 625.68	$ 909.02	$ 1,387.36	$ 1,537.92

MEDICARE ELIGIBLE

Effective January 1, 2011 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 163.61	$ 163.00
Kentucky Retirement System Health Plan - Essential	$ 182.03	$ 163.00
Kentucky Retirement System Health Plan - Premium	$ 375.11	$ 355.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted. In addition, the claims costs for the Essential and Premium plans are adjusted to reflect the front end CMS reimbursement of $54.71 per member per month due to the EGWP.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006, and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For those members who retired between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

Non-Hazardous Normal Retirement (continued):

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement:

Age Requirement

55

Service Requirement

At least one month of hazardous duty service credit

Amount

If a member has at least 60 months of service, the monthly benefit is 2.49% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement

60

Service Requirement

At least 60 months of hazardous duty service credit

Hazardous Normal Retirement (continued):

Amount

The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 55 with 60 months of service or any age with 25 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement

Age 60 with 10 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 50 with 15 years of service or any age with 20 years service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

Hazardous Disability (continued):

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Vesting (continued):

	Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.32 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.48 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.32 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2005*	2006	2007	2008	2009	2010
			Number			
Beginning of Year	28,892	30,770	32,140	33,849	35,307	37,883
Added	2,481	2,481	2,440	2,573	3,465	1,162
Removed	603	1,111	731	1,115	889	1,100
End of Year	30,770	32,140	33,849	35,307	37,883	37,945
			Annual Allowances			
Beginning of Year	$ 449,410,400	$ 509,347,800	$ 566,167,003	$ 625,435,416	$ 710,505,270	$ 812,559,070
Added	56,489,600	65,942,585	65,965,990	102,305,405	110,700,043	865,483
Removed	5,298,200	9,123,382	6,697,577	17,235,551	8,646,243	11,542,643
End of Year	$ 509,347,800	$ 566,167,003	$ 625,435,416	$ 710,505,270	$ 812,559,070	$ 801,881,911
% Increase in Allowances	13.34%	11.31%	10.47%	13.60%	14.36%	-1.31%
Average Annual Allowance	$ 16,553	$ 17,616	$ 18,472	$ 20,124	$ 21,449	$ 21,133

**Reported by prior actuarial firm.*

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2005*	2006	2007	2008	2009	2010
			Number			
Beginning of Year	1,549	1,752	1,980	2,202	2,404	2,648
Added	234	256	241	261	339	282
Removed	31	28	19	59	95	95
End of Year	1,752	1,980	2,202	2,404	2,648	2,835
			Annual Allowances			
Beginning of Year	$ 16,099,000	$ 19,640,748	$ 23,381,489	$ 27,528,837	$ 33,588,993	$ 38,695,501
Added	3,415,500	3,929,666	4,509,381	6,565,454	5,443,628	3,315,361
Removed	191,000	188,829	362,129	505,250	337,120	896,062
End of Year	$ 19,640,748	$ 23,381,489	$ 27,528,837	$ 33,588,993	$ 38,695,501	$ 41,114,800
% Increase in Allowances	22.00%	19.05%	17.94%	22.01%	15.20%	6.25%
Average Annual Allowance	$ 11,210	$ 11,809	$ 12,502	$ 13,972	$ 14,613	$ 14,503

**Reported by prior actuarial firm.*

Non-Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,168	$ 5,917,150.29	9,028	$ 13,544,571.45	12,196	$ 19,461,721.74
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,795	3,405,112.32	727	893,634.28	2,522	4,298,746.60
66-2/3% to Beneficiary	811	2,302,489.76	383	820,547.77	1,194	3,123,037.53
50% to Beneficiary	1,092	2,741,096.99	1,200	2,482,970.32	2,292	5,224,067.31
Pop-up Option	3,521	8,741,726.49	2,846	5,776,055.69	6,367	14,517,782.18
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	906	1,552,445.95	1,879	2,804,868.19	2,785	4,357,314.14
Social Security Option						
Age 62 Basic	432	1,173,950.15	976	1,951,829.07	1,408	3,125,779.22
Age 62 Survivorship	878	2,161,563.44	574	1,217,638.47	1,452	3,379,201.91
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	380	611,369.20	485	760,186.04	865	1,371,555.24
20 Years Certain & Life	392	846,675.06	452	761,015.79	844	1,607,690.85
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	89	143,630.57	311	454,332.74	400	597,963.31
PLSO 24 Month Basic	42	49,274.59	173	205,458.35	215	254,732.94
PLSO 36 Month Basic	187	156,540.89	438	328,092.43	625	484,633.32
PLSO 12 Month Survivor	122	244,423.98	106	176,201.45	228	420,625.43
PLSO 24 Month Survivor	98	141,778.24	85	118,282.42	183	260,060.66
PLSO 36 Month Survivor	262	280,067.86	166	138,330.90	428	418,398.76
Total	14,175	$ 30,469,295.78	19,829	$ 32,434,015.36	34,004	$ 62,903,311.14

Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	362	$ 398,089.65	282	$ 267,490.79	644	$ 665,580.44
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	192	219,674.59	17	17,025.05	209	236,699.64
66-2/3% to Beneficiary	74	91,447.33	17	20,123.25	91	111,570.58
50% to Beneficiary	125	179,448.70	35	55,224.84	160	234,673.54
Pop-up Option	585	813,792.44	112	140,593.22	697	954,385.66
10 Years Certain	20	32,768.00	3	4,051.15	23	36,819.15
10 Years Certain & Life	98	95,650.41	44	34,370.20	142	130,020.61
Social Security Option						
Age 62 Basic	53	103,115.85	29	49,609.07	82	152,724.92
Age 62 Survivorship	132	302,006.54	15	24,083.72	147	326,090.26
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	42	49,937.02	13	10,741.48	55	60,678.50
20 Years Certain & Life	46	50,352.34	17	24,824.59	63	75,176.93
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	14	12,170.18	15	12,549.24	29	24,719.42
PLSO 24 Month Basic	16	15,547.06	12	10,188.70	28	25,735.76
PLSO 36 Month Basic	48	39,469.45	27	21,450.04	75	60,919.49
PLSO 12 Month Survivor	24	29,818.40	6	4,999.73	30	34,818.13
PLSO 24 Month Survivor	22	29,132.13	10	11,683.84	32	40,815.97
PLSO 36 Month Survivor	52	51,609.09	15	18,146.55	67	69,755.64
Total	1,905	$ 2,514,029.18	669	$ 727,155.46	2,574	$ 3,241,184.64

Non-Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	5	$ 1,222.43	14	$ 15,360.19	19	$ 16,582.62
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	244	186,893.67	1,511	1,422,603.23	1,755	1,609,496.90
66-2/3% to Beneficiary	31	32,349.90	286	235,842.27	317	268,192.17
50% to Beneficiary	90	51,588.84	458	266,935.98	548	318,524.82
Pop-up Option	84	117,541.84	377	498,661.17	461	616,203.01
10 Years Certain	58	56,789.28	71	75,610.77	129	132,400.05
10 Years Certain & Life	32	38,162.74	40	47,238.74	72	85,401.48
Social Security Option						
Age 62 Basic	1	264.16	5	3,024.45	6	3,288.61
Age 62 Survivorship	43	68,288.92	223	372,195.43	266	440,484.35
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	8	3,450.84	8	3,450.84
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	3	1,949.28	7	6,032.20	10	7,981.48
15 Years Certain & Life	24	27,637.01	58	90,258.01	82	117,895.02
20 Years Certain & Life	31	35,042.76	73	109,980.39	104	145,023.15
5 Years Certain	52	56,099.25	43	39,012.01	95	95,111.26
PLSO 12 Month Basic	0	0.00	1	1,739.03	1	1,739.03
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	2,283.89	2	2,283.89
PLSO 12 Month Survivor	3	3,237.64	6	4,283.07	9	7,520.71
PLSO 24 Month Survivor	3	4,144.20	11	6,155.61	14	10,299.81
PLSO 36 Month Survivor	11	7,512.75	32	30,789.56	43	38,302.31
Total	715	$ 688,724.67	3,226	$ 3,231,456.84	3,941	$ 3,920,181.51

Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	1	$ 5.61	4	$ 880.29	5	$ 885.90
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	9	3,354.71	100	72,914.49	109	76,269.20
66-2/3% to Beneficiary	0	0.00	11	4,539.36	11	4,539.36
50% to Beneficiary	1	445.39	18	6,957.11	19	7,402.50
Pop-up Option	7	2,771.30	36	21,625.48	43	24,396.78
10 Years Certain	2	3,344.99	13	14,829.38	15	18,174.37
10 Years Certain & Life	2	1,120.18	3	1,735.94	5	2,856.12
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	1	380.84	16	25,489.89	17	25,870.73
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	1	254.85	3	2,088.67	4	2,343.52
15 Years Certain & Life	3	1,191.88	2	818.57	5	2,010.45
20 Years Certain & Life	0	0.00	5	1,322.32	5	1,322.32
5 Years Certain	3	3,114.82	8	8,376.40	11	11,491.22
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	1	122.05	1	122.05
PLSO 12 Month Survivor	0	0.00	1	1,025.01	1	1,025.01
PLSO 24 Month Survivor	0	0.00	1	766.76	1	766.76
PLSO 36 Month Survivor	3	1,040.89	6	4,531.54	9	5,572.43
Total	33	$ 17,025.46	228	$ 168,023.26	261	$ 185,048.72

Non-Hazardous Members
Retired and Beneficiary Information June 30, 2010
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	111	$ 2,749,493	42	$ 447,020	88	$ 728,089	241	$ 3,924,603
45-49	822	$ 23,221,083	104	$ 1,417,193	63	$ 889,036	989	$ 25,527,311
50-54	2,811	$ 91,533,598	166	$ 2,041,540	115	$ 1,429,017	3,092	$ 95,004,154
55-59	5,161	$ 160,476,406	293	$ 3,849,146	216	$ 3,619,406	5,670	$ 167,944,958
60-64	6,690	$ 177,375,069	364	$ 4,786,326	306	$ 4,806,122	7,360	$ 186,967,517
65-69	5,513	$ 114,061,642	321	$ 3,798,729	381	$ 6,237,001	6,215	$ 124,097,372
70-74	4,104	$ 71,514,150	268	$ 3,031,060	447	$ 6,296,100	4,819	$ 80,841,310
75-79	2,970	$ 43,626,054	150	$ 1,603,060	488	$ 6,625,551	3,608	$ 51,854,665
80-84	2,166	$ 29,347,918	65	$ 627,579	513	$ 6,686,554	2,744	$ 36,662,051
85-89	1,273	$ 14,216,952	26	$ 239,297	564	$ 5,130,188	1,863	$ 19,586,437
90 & Over	575	$ 4,828,531	9	$ 47,887	760	$ 4,595,115	1,344	$ 9,471,533
Totals	32,196	$ 732,950,896	1,808	$ 21,888,837	3,941	$ 47,042,178	37,945	$ 801,881,912

Hazardous Members
Retired and Beneficiary Information June 30, 2010
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	41	$ 871,980	8	$ 59,380	25	$ 180,649	74	$ 1,112,009
45-49	151	$ 2,996,567	19	$ 167,770	5	$ 81,407	175	$ 3,245,745
50-54	277	$ 5,919,947	16	$ 183,329	20	$ 194,840	313	$ 6,298,117
55-59	468	$ 9,024,848	29	$ 233,498	24	$ 226,436	521	$ 9,484,783
60-64	648	$ 9,873,830	26	$ 235,762	34	$ 324,254	708	$ 10,433,846
65-69	426	$ 5,174,306	13	$ 58,437	39	$ 292,850	478	$ 5,525,593
70-74	238	$ 2,482,185	8	$ 34,196	34	$ 334,309	280	$ 2,850,689
75-79	125	$ 907,799	7	$ 17,692	38	$ 231,261	170	$ 1,156,752
80-84	62	$ 400,385			21	$ 138,972	83	$ 539,356
85-89	10	$ 209,041			15	$ 109,938	25	$ 318,979
90 & Over	2	$ 43,263			6	$ 105,668	8	$ 148,931
Totals	2,448	$ 37,904,152	126	$ 990,064	261	$ 2,220,584	2,835	$ 41,114,800

Total Non-Hazardous Active Members as of June 30, 2010
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	16								16
Avg Pay	$21,076								$21,076
20-24	1,533	105							1,638
Avg Pay	$25,871	$32,851							$26,319
25-29	3,622	801	35						4,458
Avg Pay	$29,058	$33,521	$34,304						$29,901
30-34	2,837	2,114	659	16					5,626
Avg Pay	$31,729	$37,551	$38,975	$49,490					$34,816
35-39	3,065	1,853	1,570	451	43				6,982
Avg Pay	$30,976	$39,313	$41,605	$44,603	$48,932				$36,570
40-44	1,961	1,485	1,287	1,087	588	103			6,511
Avg Pay	$33,234	$40,362	$43,658	$47,049	$49,957	$56,538			$41,105
44-49	1,780	1,476	1,166	862	955	332	182	30	6,783
Avg Pay	$31,993	$38,652	$43,968	$46,670	$50,372	$54,058	$59,363	$58,147	$41,883
50-54	1,572	1,308	1,129	818	807	259	111	83	6,087
Avg Pay	$34,010	$38,242	$42,112	$45,282	$49,456	$52,947	$58,129	$64,874	$41,651
55-59	1,136	1,148	941	722	643	207	84	95	4,976
Avg Pay	$35,841	$38,294	$41,274	$44,520	$48,125	$51,701	$62,680	$67,840	$42,005
60-64	580	725	626	459	396	112	60	44	3,002
Avg Pay	$38,779	$39,411	$42,859	$45,666	$46,938	$48,962	$52,398	$63,766	$42,930
65-69	110	180	169	128	78	17	9	12	703
Avg Pay	$37,126	$39,610	$43,471	$48,194	$46,594	$56,617	$77,283	$66,576	$43,841
70 & over	59	62	68	58	44	3	3	11	308
Avg Pay	$47,401	$34,258	$35,718	$42,059	$49,319	$47,092	$52,004	$87,958	$42,934
Totals	18,271	11,257	7,650	4,601	3,554	1,033	449	275	47,090
Avg Pay	$31,518	$38,316	$42,176	$45,867	$49,193	$53,024	$59,058	$65,985	$38,546

Total Hazardous Active Members as of June 30, 2010
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	188	6							194
Avg Pay	$25,032	$27,638							$25,112
25-29	470	61	3						534
Avg Pay	$27,388	$31,020	$32,864						$27,834
30-34	321	221	41	1					584
Avg Pay	$28,722	$32,774	$33,156	$29,928					$30,569
35-39	359	187	140	32					718
Avg Pay	$28,219	$34,574	$38,669	$40,623					$32,465
40-44	206	162	112	113	21				614
Avg Pay	$29,365	$34,797	$39,132	$44,695	$49,216				$36,080
44-49	178	122	91	79	49	1			520
Avg Pay	$28,431	$33,983	$39,213	$43,673	$44,770	$46,896			$35,511
50-54	134	136	86	66	46	3	3		474
Avg Pay	$28,275	$35,298	$39,122	$47,117	$49,284	$56,080	$65,532		$37,332
55-59	110	110	70	60	28	1		2	381
Avg Pay	$29,551	$34,248	$41,199	$40,301	$45,029	$55,956		$60,888	$36,111
60-64	43	73	47	38	25	1			227
Avg Pay	$30,992	$35,378	$41,553	$44,689	$53,249	$55,812			$39,442
65-69	5	17	11	6	1				40
Avg Pay	$31,366	$31,676	$44,366	$45,424	$53,100				$37,725
70 & over	3	1	1						5
Avg Pay	$24,512	$20,940	$31,740						$25,243
Totals	2,017	1,096	602	395	170	6	3	2	4,291
Avg Pay	$28,082	$33,996	$39,110	$43,871	$47,879	$54,484	$65,532	$60,888	$33,456

Report on the Annual Valuation of the County Employees Retirement System

Prepared as of June 30, 2010

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 10, 2010

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2011. The date of the valuation was June 30, 2010.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

TJC:kc
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REPORT ON THE ANNUAL VALUATION OF THE COUNTY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2010

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2010, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/2010	6/30/2009	6/30/2010	6/30/2009	6/30/2010	6/30/2009
Contributions for next fiscal year:						
Retirement	11.70%	10.03%	17.91%	16.79%		
Insurance	9.59	9.78	23.74	23.27	N/A	N/A
Total	21.29%	19.81%	41.65%	40.06%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$8,459,022,280	$7,912,913,512	$2,672,151,907	$2,578,444,600	$11,131,174,187	$10,491,358,112
Actuarial value of assets	$5,546,857,291	$5,650,789,991	$1,749,464,388	$1,751,487,540	$7,296,321,679	$7,402,277,531
Unfunded liability on actuarial value of assets	$2,912,164,989	$2,262,123,521	$922,687,519	$826,957,060	$3,834,852,508	$3,089,080,581
Funded ratio on actuarial value of assets	65.57%	71.41%	65.47%	67.93%	65.55%	70.56%
Market value of assets	$4,819,933,717	$4,330,593,934	$1,506,787,429	$1,320,522,868	$6,326,721,146	$5,651,116,802
Unfunded liability on market value of assets	$3,639,088,563	$3,582,319,578	$1,165,364,478	$1,257,921,732	$4,804,453,041	$4,840,241,310
Funded ratio on market value of assets	56.98%	54.73%	56.39%	51.21%	56.84%	53.86%
Insurance						
Actuarial accured liability	$3,158,340,174	$3,070,386,018	$1,674,703,216	$1,593,548,263	$4,833,043,390	$4,663,934,281
Actuarial value of assets	$1,293,038,593	$1,216,631,769	$692,769,770	$651,130,782	$1,985,808,363	$1,867,762,551
Unfunded liability on actuarial value of assets	$1,865,301,581	$1,853,754,249	$981,933,446	$942,417,481	$2,847,235,027	$2,796,171,730
Funded ratio on actuarial value of assets	40.94%	39.62%	41.37%	40.86%	41.09%	40.05%
Market value of assets	$1,096,581,872	$894,905,841	$586,826,965	$483,269,862	$1,683,408,837	$1,378,175,703
Unfunded liability on market value of assets	$2,061,758,302	$2,175,480,177	$1,087,876,251	$1,110,278,401	$3,149,634,553	$3,285,758,578
Funded ratio on market value of assets	34.72%	29.15%	35.04%	30.33%	34.83%	29.55%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	41,038	39,756	6,068	5,808	47,106	45,564
Number of vested former members	9,430	9,182	545	549	9,975	9,731
Number of former members due a refund	54,574	51,093	2,086	1,973	56,660	53,066
Number of active members	84,681	83,724	9,562	9,757	94,243	93,481
Total salary	$2,236,855,380	$2,183,611,848	$466,548,660	$469,315,464	$2,703,404,040	$2,652,927,312
Average salary	$26,415	$26,081	$48,792	$48,100	$28,685	$28,379

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, plan designs for two of the Health Insurance plans that cover Medicare eligible retirees will change for Plan Year 2011. The changes are summarized below.

    - The KRS Health Plan Essential will replace the KRS Health Plan Plus.
    - The medical coverage under the KRS Health Plan Essential includes an increase to the annual deductible and the prescription drug coverage has been altered to reflect the same coverage as described in the Standard Medicare Part D benefit parameters.
    - The annual deductible, out-of-pocket maximum and prescription drug co-payments have increase under the KRS Health Plan Premium.
    - Plan design changes have also been implemented for Plan Year 2011 for the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2010 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages		
			Salary	Age	Service
Non-Hazardous	84,681	$2,236,855,380	$26,415	46.6	8.8
Hazardous	9,562	466,548,660	48,792	38.8	9.2
Total in CERS	94,243	$2,703,404,040	$28,685	45.8	8.9

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2005	81,240	$1,885,275,000	$23,206	2.8%
6/30/2006	83,694	1,982,437,473	23,687	2.1
6/30/2007	84,920	2,076,848,328	24,457	3.3
6/30/2008	85,221	2,166,612,648	25,423	3.9
6/30/2009	83,724	2,183,611,848	26,081	2.6
6/30/2010	84,681	2,236,855,380	26,415	1.3

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2005	9,464	$411,121,728	$43,441	3.5%
6/30/2006	9,635	426,927,550	44,310	2.0
6/30/2007	10,063	458,998,956	45,613	2.9
6/30/2008	10,173	474,241,332	46,618	2.2
6/30/2009	9,757	469,315,464	48,100	3.2
6/30/2010	9,562	466,548,660	48,792	1.4

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	34,263	$391,107,167	$11,415	68.5
Disability	3,048	32,070,380	10,522	63.7
Beneficiary	3,727	29,436,003	7,898	66.8
Total in CERS	41,038	$452,613,550	$11,029	68.0

* Does not include annual benefits for those members included in the Hazardous System who are also receiving a portion of their benefit from the Non Hazardous System

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	5,013	$131,984,715	$26,328	59.8
Disability	413	6,470,660	15,667	53.6
Beneficiary	642	8,461,437	13,180	51.5
Total in CERS	6,068	$146,916,812	$24,212	58.5

This valuation also includes 66,635 inactive members (64,004 Non-Hazardous and 2,631 Hazardous; of which 9,430 Non-Hazardous are vested and 545 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2010 the total market value of assets amounted to $8,010,129,983 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2010

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	$4,819,933,717	$1,096,581,872	$5,916,515,589
Hazardous	1,506,787,429	586,826,965	2,093,614,394
Total	$6,326,721,146	$1,683,408,837	$8,010,129,983

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $9,282,130,042. Schedule B shows the development of the actuarial value of assets as of June 30, 2010. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2010	JUNE 30, 2009
Retirement		
Non-Hazardous	$ 5,546,857,291	$ 5,650,789,991
Hazardous	1,749,464,388	1,751,487,540
Total	$ 7,296,321,679	$ 7,402,277,531
Insurance		
Non-Hazardous	$ 1,293,038,593	$ 1,216,631,769
Hazardous	692,769,770	651,130,782
Total	$ 1,985,808,363	$ 1,867,762,551
CERS Total		
Non-Hazardous	$ 6,839,895,884	$ 6,867,421,760
Hazardous	2,442,234,158	2,402,618,322
Total	$ 9,282,130,042	$ 9,270,040,082

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2010. Separate balance sheets are shown for each employee group as well as in total for all groups.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $13,403,937,730, of which $6,163,032,221 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $350,311,311 is for the prospective benefits payable on account of inactive members and $6,890,594,198 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $7,296,321,679 as of June 30, 2010. The difference of $6,107,616,051 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $1,265,557,423 is the present value of future contributions expected to be made by members, and the balance of $4,842,058,628 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 4.08% of payroll for non-hazardous members and 7.05% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $1,007,206,120. When this amount is subtracted from $4,842,058,628, which is the present value of the total future contributions to be made by the employers, there remains $3,834,852,508 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 6.98% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 10.60% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $2,912,164,989 for non-hazardous members and $922,687,519 for hazardous members over 27 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.

5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.64% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.26% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $6,208,816,168, of which $2,090,160,823 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $250,672,805 is for the prospective benefits payable on account of inactive members and $3,867,982,540 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $1,985,808,363 as of June 30, 2010. The difference of $4,223,007,805 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $22,402,531 is the present value of future contributions expected to be made by members, and the balance of $4,200,605,274 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 4.92% of payroll for non-hazardous members and 12.34% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,353,370,247. When this amount is subtracted from $4,200,605,274, which is the present value of the total future contributions to be made by the employers, there remains $2,847,235,027 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 4.47% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 11.28% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $1,865,301,581 for non-hazardous members and $981,933,446 for hazardous members over 27 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.20% of payroll for non-hazardous employees and 0.12% of payroll for hazardous employees.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2010 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/09	$ 2,262.1	$ 827.0	$ 3,089.1
(2)	Normal cost from last valuation	100.4	35.5	135.9
(3)	Employer contributions	207.1	82.9	290.0
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	175.1	63.6	238.7
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 2,330.5	$ 843.2	$ 3,173.7
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 2,330.5	$ 843.2	$ 3,173.7
(9)	Actual UAAL as of 6/30/10	$ 2,912.2	$ 922.7	$ 3,834.9
(10)	Gain/(loss): (8) - (9)	$ (581.7)	$ (79.5)	$ (661.2)
(11)	Accrued liabilities as of 6/30/09	$ 7,912.9	$ 2,578.4	$ 10,491.3
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(7.4)%	(3.1)%	(6.3)%

**Unfunded actuarial accrued liability.*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/09	$ 1,853.8	$ 942.4	$ 2,796.2
(2)	Normal cost from last valuation	112.3	59.4	171.7
(3)	Expected employer contributions	209.4	108.8	318.2
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	136.1	69.2	205.3
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 1,892.8	$ 962.2	$ 2,855.0
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Data correction**	(28.2)	20.1	(8.1)
(9)	Expected UAAL after changes: (5) + (6) + (7) + (8)	$ 1,864.6	$ 982.3	$ 2,846.9
(10)	Actual UAAL as of 6/30/10	$ 1,865.3	$ 981.9	$ 2,847.2
(11)	Gain/(loss): (9) - (10)	$ (0.7)	$ 0.4	$ (0.3)
(12)	Accrued liabilities as of 6/30/09	$ 3,070.4	$ 1,593.5	$ 4,663.9
(13)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(0.0)%	0.0 %	(0.0)%

** Unfunded actuarial accrued liability.*

***$28.2 million gain due to 301 CERS Non-Hazardous retirees with split service coded as covered for health insurance under other systems this year who were coded with coverage in CERS Non-Hazardous in prior years. Most of these 301 retirees are now coded with coverage in KERS Non-Hazardous. It was determined during conversion to the new data system that most of these retirees are covered for health insurance under other systems because the majority of their service was not CERS Non-Hazardous.*

$20.1 million loss due to 155 CERS Hazardous retirees with split service coded as covered for health insurance under CERS Hazardous this year who were coded without coverage in CERS Hazardous in prior years. Most of these 155 retirees were coded as covered for health insurance under KERS Non-Hazardous in prior years and are now coded without coverage in that system. It was determined during conversion to the new data system that these retirees are covered for health insurance under CERS Hazardous because the majority of their service was CERS Hazardous and not with the other systems.

NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/10	Insurance $ Gain (or Loss) For Year Ending 6/30/10
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (91.3)	$ (13.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(14.3)	6.1
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.5)	(2.5)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	21.0	10.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	77.6	209.8
New Members. Additional unfunded accrued liability will produce a loss.	(11.2)	(7.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(353.8)	(60.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	13.1	10.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(221.3)	(153.6)
Gain (or Loss) During Year From Financial Experience	$ (581.7)	$ (0.7)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	28.2
Composite Gain (or Loss) During Year	$ (581.7)	$ 27.5

HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/10	Insurance $ Gain (or Loss) For Year Ending 6/30/10
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (46.2)	$ (8.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.3	0.5
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	3.9
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	19.4	17.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	29.8	123.9
New Members. Additional unfunded accrued liability will produce a loss.	(4.8)	(6.6)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(117.1)	(33.5)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	4.5	18.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	34.5	(114.5)
Gain (or Loss) During Year From Financial Experience	$ (79.5)	$ 0.4
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	(20.1)
Composite Gain (or Loss) During Year	$ (79.5)	$ (19.7)

TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/10	Insurance $ Gain (or Loss) For Year Ending 6/30/10
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (137.5)	$ (21.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(14.0)	6.6
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.4)	1.4
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	40.4	27.6
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	107.4	333.7
New Members. Additional unfunded accrued liability will produce a loss.	(16.0)	(14.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(470.9)	(94.1)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	17.6	28.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(186.8)	(268.1)
Gain (or Loss) During Year From Financial Experience	$ (661.2)	$ (0.3)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	8.1
Composite Gain (or Loss) During Year	$ (661.2)	$ 7.8

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2011/2012 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for		Amount	% of Payroll
A.	Normal Cost:		
	(1) Service retirement benefits	$ 184,996,610	8.06%
	(2) Disability benefits	14,918,037	0.66
	(3) Survivor benefits	3,249,243	0.13
	(4) Total	$ 203,163,890	9.08%
B.	Member Contributions	$ 111,842,769	5.00%
C.	Employer Normal Cost: [A(4) - B]	$ 91,321,121	4.08%
D.	Administrative Expenses	$ 14,315,874	0.64%
E.	Unfunded Actuarial Accrued Liability Contributions*:		
	(1) UAAL Contribution Based on 6/30/09 Valuation:	$ 121,461,247	5.43%
	(2) Change due to:		
	a. Active decrements	$ 4,617,931	0.21%
	b. Pay increases	(4,159,640)	(0.19)
	c. Retiree mortality	(700,322)	(0.03)
	d. Investment return	18,969,895	0.85
	e. COLA	2,962,763	0.13
	f. Assumption Change	0	0.00
	g. Other	12,975,150	0.58
	h. Total Change	$ 34,665,777	1.55%
	(3) UAAL Contribution Based on 6/30/10 Valuation: [E(1) +E(2)h]	$ 156,127,024	6.98%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$** 261,764,019	11.70%

** Based on 28 year amortization of the UAAL from June 30, 2009 and 27 years from June 30, 2010*

Required Contribution Rates
Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	65,844,999	13.99%
(2) Disability benefits		3,447,118	0.74
(3) Survivor benefits		940,573	0.20
(4) Total	$	70,232,690	15.05%
B. Member Contributions	$	37,323,893	8.00%
C. Employer Normal Cost: [A(4) - B]	$	32,908,797	7.05%
D. Administrative Expenses	$	1,213,027	0.26%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/09 Valuation:	$	43,062,441	9.23%
(2) Change due to:			
a. Active decrements	$	1,410,662	0.30%
b. Pay increases		(1,599,989)	(0.34)
c. Retiree mortality		(241,608)	(0.05)
d. Investment return		6,277,180	1.35
e. COLA		1,104,488	0.24
f. Assumption Change		0	0.00
g. Other		(546,039)	(0.14)
h. Total Change	$	6,404,693	1.37%
(3) UAAL Contribution Based on 6/30/10 Valuation: [E(1) +E(2)h]	$	49,467,134	10.60%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	83,588,958	17.91%

** Based on 28 year amortization of the UAAL from June 30, 2009 and 27 years from June 30, 2010*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	111,962,540	5.01%
B.	Member Contributions*	$	2,013,170	0.09%
C.	Employer Normal Cost: [A - B]	$	109,949,370	4.92%
D.	Administrative Expenses	$	4,469,067	0.20%
E.	Unfunded Actuarial Accrued Liability**:	$	100,002,571	4.47%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	214,421,008	9.59%

**The liabilities are net of retiree contributions toward their healthcare*
*** Based on 27 year amortization of the UAAL from June 30, 2010*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	57,798,060	12.39%
B.	Member Contributions*	$	233,274	0.05%
C.	Employer Normal Cost: [A - B]	$	57,564,786	12.34%
D.	Administrative Expenses	$	554,363	0.12%
E.	Unfunded Actuarial Accrued Liability**:	$	52,643,428	11.28%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	110,762,577	23.74%

**The liabilities are net of retiree contributions toward their healthcare*
*** Based on 27 year amortization of the UAAL from June 30, 2010*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2010

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	41,038	6,068	47,106
Terminated employees entitled to benefits but not yet receiving benefits	64,004	2,631	66,635
Active Members	84,681	9,562	94,243
Total	189,723	18,261	207,984

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2005	$ 5,059,208,687	$ 5,385,156,690	$ 325,948,003	94.0%	$ 1,885,275,000	17.3%
6/30/2006	5,162,894,136	6,179,569,267	1,016,675,131	83.6	1,982,437,473	51.3
6/30/2007	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
6/30/2008	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
6/30/2009	5,650,789,991	7,912,913,512	2,262,123,521	71.4	2,183,611,848	103.6
6/30/2010	5,546,857,291	8,459,022,280	2,912,164,989	65.6	2,236,855,380	130.2
Hazardous Members						
6/30/2005	$ 1,452,353,023	$ 1,795,617,335	$ 343,264,312	80.9%	$ 411,121,728	83.5%
6/30/2006	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
6/30/2007	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
6/30/2008	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
6/30/2009	1,751,487,540	2,578,444,600	826,957,060	67.9	469,315,464	176.2
6/30/2010	1,749,464,388	2,672,151,907	922,687,519	65.5	466,548,660	197.8
Total CERS Members						
6/30/2005	$ 6,511,561,710	$ 7,180,774,025	$ 669,212,315	90.7%	$ 2,296,396,728	29.1%
6/30/2006	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
6/30/2007	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4
6/30/2008	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3
6/30/2009	7,402,277,531	10,491,358,112	3,089,080,581	70.6	2,652,927,312	116.4
6/30/2010	7,296,321,679	11,131,174,187	3,834,852,508	65.5	2,703,404,040	141.9

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2005	$ 663,941,949	$ 2,788,754,654	$ 2,124,812,705	23.8%	$ 1,885,275,000	112.7%
6/30/2006	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
6/30/2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
6/30/2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
6/30/2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
6/30/2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
Hazardous Members						
6/30/2005	$ 359,180,461	$ 1,283,299,092	$ 924,118,631	28.0%	$ 411,121,728	224.8%
6/30/2006	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
6/30/2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
6/30/2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
6/30/2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
6/30/2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
Total CERS Members						
6/30/2005	$ 1,023,122,410	$ 4,072,053,746	$ 3,048,931,336	25.1%	$ 2,296,396,728	132.8%
6/30/2006	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
6/30/2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
6/30/2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
6/30/2009	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4
6/30/2010	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2010. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2010	6/30/2010
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	27 years	27 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	4.75% - 13.0%	4.5% - 20.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2010	6/30/2010
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	27 years	27 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption (Pre-Medicare) Medical Trend Assumption (Post-Medicare)	10.5% - 5.0% 9.0% - 5.0%	10.5% - 5.0% 9.0% - 5.0%
Year Ultimate Trend	2018	2018
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes price inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2010 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2009. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 5,546,857,291	$ 5,650,789,991
Prospective contributions		
Member contributions	$ 938,666,730	$ 922,791,578
Employer normal contributions	723,714,570	693,386,420
Unfunded accrued liability contributions	2,912,164,989	2,262,123,521
Total prospective contributions	$ 4,574,546,289	$ 3,878,301,519
Total assets	$ 10,121,403,580	$ 9,529,091,510
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 4,568,443,463	$ 4,265,165,380
Present value of benefits payable on account of active members	5,230,744,503	4,986,608,408
Present value of benefits payable on account of inactive members	322,215,614	277,317,722
Total liabilities	$ 10,121,403,580	$ 9,529,091,510

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 1,749,464,388	$ 1,751,487,540
Prospective contributions		
Member contributions	$ 326,890,693	$ 329,864,351
Employer normal contributions	283,491,550	297,584,040
Unfunded accrued liability contributions	922,687,519	826,957,060
Total prospective contributions	$ 1,533,069,762	$ 1,454,405,451
Total assets	$ 3,282,534,150	$ 3,205,892,991
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,594,588,758	$ 1,514,649,769
Present value of benefits payable on account of active members	1,659,849,695	1,665,630,404
Present value of benefits payable on account of inactive members	28,095,697	25,612,818
Total liabilities	$ 3,282,534,150	$ 3,205,892,991

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 7,296,321,679	$ 7,402,277,531
Prospective contributions		
Member contributions	$ 1,265,557,423	$ 1,252,655,929
Employer normal contributions	1,007,206,120	990,970,460
Unfunded accrued liability contributions	3,834,852,508	3,089,080,581
Total prospective contributions	$ 6,107,616,051	$ 5,332,706,970
Total assets	$ 13,403,937,730	$ 12,734,984,501
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 6,163,032,221	$ 5,779,815,149
Present value of benefits payable on account of active members	6,890,594,198	6,652,238,812
Present value of benefits payable on account of inactive members	350,311,311	302,930,540
Total liabilities	$ 13,403,937,730	$ 12,734,984,501

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 1,293,038,593	$ 1,216,631,769
Prospective contributions		
Member contributions	$ 19,092,218	$ 7,431,458
Employer normal contributions	891,691,710	934,328,870
Unfunded accrued liability contributions	1,865,301,581	1,853,754,249
Total prospective contributions	$ 2,776,085,509	$ 2,795,514,577
Total assets	$ 4,069,124,102	$ 4,012,146,346
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,304,212,597	$ 1,269,509,766
Present value of benefits payable on account of active members	2,542,590,730	2,533,363,593
Present value of benefits payable on account of inactive members	222,320,775	209,272,987
Total liabilities	$ 4,069,124,102	$ 4,012,146,346

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 692,769,770	$ 651,130,782
Prospective contributions		
Member contributions	$ 3,310,313	$ 1,595,121
Employer normal contributions	461,678,537	490,958,014
Unfunded accrued liability contributions	981,933,446	942,417,481
Total prospective contributions	$ 1,446,922,296	$ 1,434,970,616
Total assets	$ 2,139,692,066	$ 2,086,101,398
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 785,948,226	$ 698,154,220
Present value of benefits payable on account of active members	1,325,391,810	1,360,201,562
Present value of benefits payable on account of inactive members	28,352,030	27,745,616
Total liabilities	$ 2,139,692,066	$ 2,086,101,398

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS

	June 30, 2010	June 30, 2009
ASSETS		
Current actuarial value of assets	$ 1,985,808,363	$ 1,867,762,551
Prospective contributions		
Member contributions	$ 22,402,531	$ 9,026,579
Employer normal contributions	1,353,370,247	1,425,286,884
Unfunded accrued liability contributions	2,847,235,027	2,796,171,730
Total prospective contributions	$ 4,223,007,805	$ 4,230,485,193
Total assets	$ 6,208,816,168	$ 6,098,247,744
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,090,160,823	$ 1,967,663,986
Present value of benefits payable on account of active members	3,867,982,540	3,893,565,155
Present value of benefits payable on account of inactive members	250,672,805	237,018,603
Total liabilities	$ 6,208,816,168	$ 6,098,247,744

The following tables provide the solvency test for non-hazardous and hazardous CERS members.

Solvency Test
Retirement Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2005*	$ 837,513,907	$ 2,814,210,355	$ 1,733,432,428	$ 5,059,208,687	100.0%	100.0%	81.2%
6/30/2006	883,946,564	3,210,095,023	2,085,527,680	5,162,894,136	100.0	100.0	51.3
6/30/2007	920,126,096	3,589,512,063	2,149,807,967	5,467,824,480	100.0	100.0	44.6
6/30/2008	963,213,677	4,058,767,419	2,282,236,595	5,731,502,438	100.0	100.0	31.1
6/30/2009	991,628,551	4,542,483,102	2,378,801,859	5,650,789,991	100.0	100.0	4.9
6/30/2010	1,063,746,826	4,890,659,077	2,504,616,377	5,546,857,291	100.0	91.7	0.0

**Reported by prior actuarial firm.*

Solvency Test
Retirement Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2005*	$ 264,913,465	$ 960,052,305	$ 570,651,565	$ 1,452,353,023	100.0%	100.0%	39.8%
6/30/2006	300,200,800	1,128,164,618	591,777,352	1,515,075,017	100.0	100.0	14.7
6/30/2007	317,007,367	1,275,221,775	616,507,037	1,639,288,924	100.0	100.0	7.6
6/30/2008	338,324,362	1,406,982,409	657,815,324	1,750,867,373	100.0	100.0	0.8
6/30/2009	350,308,879	1,540,262,587	687,873,134	1,751,487,540	100.0	91.0	0.0
6/30/2010	369,612,720	1,622,684,455	679,854,732	1,749,464,388	100.0	85.0	0.0

**Reported by prior actuarial firm.*

Solvency Test
Insurance Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2005*	$ 0	$ 1,144,219,107	$ 1,644,535,547	$ 663,941,949	100.0%	58.0%	0.0%
6/30/2006	0	1,694,600,143	2,912,623,496	777,726,590	100.0	45.9	0.0
6/30/2007	0	1,372,128,406	1,961,837,664	960,285,900	100.0	70.0	0.0
6/30/2008	0	1,521,450,274	2,061,743,192	1,168,883,170	100.0	76.8	0.0
6/30/2009	0	1,478,782,753	1,591,603,265	1,216,631,769	100.0	82.3	0.0
6/30/2010	0	1,526,533,372	1,631,806,802	1,293,038,593	100.0	84.7	0.0

**Reported by prior actuarial firm.*

Solvency Test
Insurance Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2005*	$ 0	$ 586,104,126	$ 697,194,966	$ 359,180,461	100.0%	61.3%	0.0%
6/30/2006	0	787,671,273	1,140,810,098	422,785,042	100.0	53.7	0.0
6/30/2007	0	659,752,978	986,707,033	512,926,549	100.0	77.7	0.0
6/30/2008	0	722,435,184	1,047,347,773	613,526,319	100.0	84.9	0.0
6/30/2009	0	725,899,836	867,648,427	651,130,782	100.0	89.7	0.0
6/30/2010	0	814,300,256	860,402,960	692,769,770	100.0	85.1	0.0

**Reported by prior actuarial firm.*

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2009	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	$ 5,731,502,438	$ 5,650,789,991				
B.	Market Value End of Year	4,330,593,934	4,819,933,717				
C.	Market Value Beginning of Year	5,431,735,605	4,330,593,934				
D.	Cash Flow						
	D1. Contributions	301,802,344	313,633,777				
	D2. Benefit Payments	(462,022,378)	(480,248,345)				
	D3. Administrative Expenses	(13,832,849)	(14,323,240)				
	D4. Investment Expenses	(5,616,856)	(16,016,532)				
	D5. Net	(179,669,739)	(196,954,340)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(921,471,932)	686,294,123				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	419,831,816	344,626,222				
	E4. Amount for Phased-In Recognition	(1,341,303,748)	341,667,901				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(268,260,750)	68,333,580	0	0	0	0
	F2. First Prior Year	(134,517,035)	(268,260,750)	68,333,580	0	0	0
	F3. Second Prior Year	73,558,421	(134,517,035)	(268,260,750)	68,333,580	0	0
	F4. Third Prior Year	9,281,202	73,558,421	(134,517,035)	(268,260,750)	68,333,580	0
	F5. Fourth Prior Year	(936,362)	9,281,202	73,558,421	(134,517,035)	(268,260,750)	68,333,580
	F6. Total Recognized Investment Gain	(320,874,524)	(251,604,582)	(260,885,784)	(334,444,205)	(199,927,170)	68,333,580
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 5,650,789,991	$ 5,546,857,291				
H.	Difference Between Market & Actuarial Values	$ (1,320,196,057)	$ (726,923,574)	$ (466,037,790)	$ (131,593,585)	$ 68,333,580	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2009	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	$ 1,750,867,373	$ 1,751,487,540				
B.	Market Value End of Year	1,320,522,868	1,506,787,429				
C.	Market Value Beginning of Year	1,644,983,243	1,320,522,868				
D.	Cash Flow						
	D1. Contributions	120,733,655	120,086,876				
	D2. Benefit Payments	(141,246,089)	(138,766,191)				
	D3. Administrative Expenses	(1,198,503)	(1,234,194)				
	D4. Investment Expenses	(1,540,413)	(4,216,663)				
	D5. Net	(23,251,350)	(24,130,172)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(301,209,025)	210,394,733				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	128,185,316	105,785,537				
	E4. Amount for Phased-In Recognition	(429,394,341)	104,609,196				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(85,878,868)	20,921,839	0	0	0	0
	F2. First Prior Year	(46,582,469)	(85,878,868)	20,921,839	0	0	0
	F3. Second Prior Year	24,437,228	(46,582,469)	(85,878,868)	20,921,839	0	0
	F4. Third Prior Year	3,423,753	24,437,228	(46,582,469)	(85,878,868)	20,921,839	0
	F5. Fourth Prior Year	286,557	3,423,753	24,437,228	(46,582,469)	(85,878,868)	20,921,839
	F6. Total Recognized Investment Gain	(104,313,799)	(83,678,517)	(87,102,270)	(111,539,498)	(64,957,029)	20,921,839
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,751,487,540	$ 1,749,464,388				
H.	Difference Between Market & Actuarial Values	$ (430,964,672)	$ (242,676,959)	$ (155,574,689)	$ (44,035,191)	$ 20,921,839	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2009	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	$ 1,168,883,170	$ 1,216,631,769				
B.	Market Value End of Year	894,905,841	1,096,581,872				
C.	Market Value Beginning of Year	1,105,944,178	894,905,841				
D.	Cash Flow						
	D1. Contributions	146,156,476	192,750,255				
	D2. Benefit Payments	(108,995,559)	(123,132,978)				
	D3. Administrative Expenses	(4,050,960)	(4,469,067)				
	D4. Investment Expenses	(554,766)	(2,390,751)				
	D5. Net	32,555,191	62,757,459				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(243,593,528)	138,918,572				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	87,548,451	74,270,447				
	E4. Amount for Phased-In Recognition	(331,141,979)	64,648,125				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(66,228,396)	12,929,625	0	0	0	0
	F2. First Prior Year	(36,900,933)	(66,228,396)	12,929,625	0	0	0
	F3. Second Prior Year	24,311,839	(36,900,933)	(66,228,396)	12,929,625	0	0
	F4. Third Prior Year	5,266,783	24,311,839	(36,900,933)	(66,228,396)	12,929,625	0
	F5. Fourth Prior Year	1,195,664	5,266,783	24,311,836	(36,900,933)	(66,228,396)	12,929,625
	F6. Total Recognized Investment Gain	(72,355,043)	(60,621,082)	(65,887,868)	(90,199,704)	(53,298,771)	12,929,625
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,216,631,769	$ 1,293,038,593				
H.	Difference Between Market & Actuarial Values	$ (321,725,928)	$ (196,456,721)	$ (130,568,853)	$ (40,369,149)	$ 12,929,625	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2009	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	$ 613,526,319	$ 651,130,782				
B.	Market Value End of Year	483,269,862	586,826,965				
C.	Market Value Beginning of Year	576,414,457	483,269,862				
D.	Cash Flow						
	D1. Contributions	71,778,158	85,144,950				
	D2. Benefit Payments	(41,016,544)	(48,320,681)				
	D3. Administrative Expenses	(445,277)	(554,363)				
	D4. Investment Expenses	(278,278)	(1,089,127)				
	D5. Net	30,038,059	35,180,779				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(123,182,654)	68,376,324				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	46,125,156	39,948,000				
	E4. Amount for Phased-In Recognition	(169,307,810)	28,428,324				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(33,861,562)	5,685,665	0	0	0	0
	F2. First Prior Year	(18,967,697)	(33,861,562)	5,685,665	0	0	0
	F3. Second Prior Year	10,834,617	(18,967,697)	(33,861,562)	5,685,665	0	0
	F4. Third Prior Year	2,819,186	10,834,617	(18,967,697)	(33,861,562)	5,685,665	0
	F5. Fourth Prior Year	616,704	2,819,186	10,834,617	(18,967,697)	(33,861,562)	5,685,665
	F6. Total Recognized Investment Gain	(38,558,752)	(33,489,791)	(36,308,977)	(47,143,594)	(28,175,897)	5,685,665
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 651,130,782	$ 692,769,770				
H.	Difference Between Market & Actuarial Values	$ (167,860,920)	$ (105,942,805)	$ (69,633,828)	$ (22,490,234)	$ 5,685,665	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.50% per annum:

Service	Annual Rates of Merit & Seniority Increase Next Year				
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	8.50%	15.50%	4.50%	13.00%	20.00%
1-2	5.00%	6.00%	4.50%	9.50%	10.50%
2-3	1.50%	2.00%	4.50%	6.00%	6.50%
3-4	1.50%	1.25%	4.50%	6.00%	5.75%
4-5	1.00%	1.00%	4.50%	5.50%	5.50%
5-6	1.00%	0.50%	4.50%	5.50%	5.00%
6-7	0.75%	0.00%	4.50%	5.25%	4.50%
7-8	0.75%	0.00%	4.50%	5.25%	4.50%
8-9	0.50%	0.00%	4.50%	5.00%	4.50%
9-10	0.50%	0.00%	4.50%	5.00%	4.50%
10 & Over	0.25%	0.00%	4.50%	4.75%	4.50%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement**
		Male	Female		
20	5.75%	0.03%	0.01%	0.04%	
25	5.75	0.03	0.01	0.05	
30	5.30	0.04	0.02	0.06	
35	4.40	0.04	0.02	0.09	
40	3.70	0.05	0.04	0.13	
45	3.02	0.08	0.05	0.22	
50	2.70	0.13	0.07	0.37	
55	2.20	0.22	0.11	0.61	8.0%
60	0.75	0.40	0.22	0.97	10.0
65		0.73	0.43		22.0
70		1.19	0.69		22.0
75					100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 25.0%, 14.0%, 10.0%, 8.0% and 6.5%, respectively.*

** *If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.*

Hazardous Members

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement		
		Male	Female		Service	Rate+	Rate++
20	3.00%	0.03%	0.01%	0.05%	20	20.0%	
25	2.70	0.03	0.01	0.07	25	33.0	20.0%
30	2.50	0.04	0.02	0.09	30	33.0	33.0
35	2.50	0.04	0.02	0.13	35	40.0	33.0
40	2.50	0.05	0.04	0.20	40		40.0
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 14.0%, 7.5%, 6.0%, 4.5% and 4.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *Applies to members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.*

++ *Applies to members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2011	10.5%	9.0%
2012	9.5%	8.5%
2013	8.5%	7.5%
2014	7.5%	7.0%
2015	6.5%	6.5%
2016	6.0%	6.0%
2017	5.5%	5.5%
2018 and beyond	5.0%	5.0%

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	85%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2010	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 486.40	$ 749.84	$ 1,127.80	$ 1,253.56
Optimum PPO	$ 616.28	$ 889.54	$ 1,363.40	$ 1,515.36
Capitol Choice	$ 594.14	$ 896.06	$ 1,347.50	$ 1,490.60

2011	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 486.40	$ 749.84	$ 1,127.80	$ 1,253.56
Optimum PPO	$ 650.30	$ 905.42	$ 1,405.66	$ 1,565.88
Capitol Choice	$ 625.68	$ 909.02	$ 1,387.36	$ 1,537.92

MEDICARE ELIGIBLE

Effective January 1, 2011 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 163.61	$ 163.00
Kentucky Retirement System Health Plan - Essential	$ 182.03	$ 163.00
Kentucky Retirement System Health Plan - Premium	$ 375.11	$ 355.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted. In addition, the claims costs for the Essential and Premium plans are adjusted to reflect the front end CMS reimbursement of $54.71 per member per month due to the EGWP.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 2.20% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement

55

Service Requirement

At least one month of hazardous duty service credit

Amount

If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement

60

Service Requirement

At least 60 months of hazardous duty service credit

Hazardous Normal Retirement (continued):

Amount

The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 55 with 60 months of service or any age with 25 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement

Age 60 with 10 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 50 with 15 years of service or any age with 20 years service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

Hazardous Disability (continued):

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Vesting (continued):

	Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.32 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.48 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.32 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2005*	2006	2007	2008	2009	2010
			Number			
Beginning of Year	29,129	31,347	33,102	35,564	37,579	39,756
Added	2,808	2,782	3,244	3,366	3,060	2,565
Removed	590	1,027	782	1,351	883	1,283
End of Year	31,347	33,102	35,564	37,579	39,756	41,038
			Annual Allowances			
Beginning of Year	$ 247,534,300	$ 279,590,300	$ 308,269,651	$ 348,712,020	$ 393,757,510	$ 440,061,418
Added	$ 30,397,300	$ 34,559,599	44,888,509	56,376,123	51,679,136	21,063,111
Removed	3,161,200	5,880,248	4,446,140	11,330,633	5,375,228	8,510,979
End of Year	$ 279,590,300	$ 308,269,651	$ 348,712,020	$ 393,757,510	$ 440,061,418	$ 452,613,550
% Increase in Allowances	12.59%	10.26%	13.12%	12.92%	11.76%	2.85%
Average Annual Allowance	$ 8,919	$ 9,313	$ 9,805	$ 10,478	$ 11,069	$ 11,029

**Reported by prior actuarial firm.*

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2005*	2006	2007	2008	2009	2010
			Number			
Beginning of Year	4,005	4,361	4,712	5,159	5,422	5,808
Added	403	427	500	469	650	423
Removed	47	76	53	206	264	163
End of Year	4,361	4,712	5,159	5,422	5,808	6,068
			Annual Allowances			
Beginning of Year	$ 79,559,200	$ 89,224,700	$ 100,290,052	$ 113,735,850	$ 127,477,109	$ 139,886,751
Added	8,536,100	$ 11,876,922	14,207,939	16,794,618	13,030,426	8,566,698
Removed	502,700	811,570	762,141	3,053,359	620,784	1,536,637
End of Year	$ 89,224,700	$ 100,290,052	$ 113,735,850	$ 127,477,109	$ 139,886,751	$ 146,916,812
% Increase in Allowances	12.15%	12.40%	13.41%	12.08%	9.73%	5.03%
Average Annual Allowance	$ 20,460	$ 21,284	$ 22,046	$ 23,511	$ 24,085	$ 24,212

**Reported by prior actuarial firm.*

Non-Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,514	$ 3,475,562.16	12,204	$ 8,415,365.84	15,718	$ 11,890,928.00
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2,005	2,205,011.85	903	558,874.77	2,908	2,763,886.62
66-2/3% to Beneficiary	600	1,055,260.04	342	389,074.87	942	1,444,334.91
50% to Beneficiary	894	1,343,066.08	986	1,109,178.53	1,880	2,452,244.61
Pop-up Option	3,076	4,788,868.70	2,379	2,510,483.27	5,455	7,299,351.97
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,156	1,052,793.99	2,547	1,791,787.95	3,703	2,844,581.94
Social Security Option						
Age 62 Basic	232	528,383.96	456	520,314.02	688	1,048,697.98
Age 62 Survivorship	548	1,224,266.03	287	392,137.11	835	1,616,403.14
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	532	500,442.22	560	423,173.35	1,092	923,615.57
20 Years Certain & Life	373	491,288.28	494	394,808.17	867	886,096.45
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	130	136,634.32	418	334,914.05	548	471,548.37
PLSO 24 Month Basic	73	48,828.54	271	201,328.08	344	250,156.62
PLSO 36 Month Basic	319	152,667.98	776	347,769.65	1,095	500,437.63
PLSO 12 Month Survivor	171	202,323.33	102	97,113.62	273	299,436.95
PLSO 24 Month Survivor	112	111,188.75	73	48,988.35	185	160,177.10
PLSO 36 Month Survivor	472	278,174.89	306	134,722.81	778	412,897.70
Total	14,207	$ 17,594,761.12	23,104	$ 17,670,034.44	37,311	$ 35,264,795.56

Hazardous
Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	673	$ 1,311,950.33	211	$ 320,430.06	884	$ 1,632,380.39
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	525	1,024,723.09	23	22,756.66	548	1,047,479.75
66-2/3% to Beneficiary	211	528,152.11	5	14,022.10	216	542,174.21
50% to Beneficiary	358	821,389.98	20	32,247.32	378	853,637.30
Pop-up Option	2,037	4,989,122.72	81	155,476.99	2,118	5,144,599.71
10 Years Certain	30	36,168.13	3	3,744.78	33	39,912.91
10 Years Certain & Life	171	341,152.21	38	69,417.10	209	410,569.31
Social Security Option						
Age 62 Basic	93	197,725.98	9	19,431.50	102	217,157.48
Age 62 Survivorship	286	577,498.73	10	18,263.20	296	595,761.93
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	62	101,324.94	8	6,924.68	70	108,249.62
20 Years Certain & Life	113	211,436.07	12	12,262.04	125	223,698.11
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	28	50,451.44	10	11,993.02	38	62,444.46
PLSO 24 Month Basic	25	54,051.61	7	6,715.38	32	60,766.99
PLSO 36 Month Basic	56	85,077.84	22	23,622.62	78	108,700.46
PLSO 12 Month Survivor	60	139,778.58	4	7,843.16	64	147,621.74
PLSO 24 Month Survivor	71	111,428.17	4	3,992.07	75	115,420.24
PLSO 36 Month Survivor	152	217,615.81	8	9,757.53	160	227,373.34
Total	4,951	$ 10,799,047.74	475	$ 738,900.21	5,426	$ 11,537,947.95

Non-Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	7	$ 2,209.45	8	$ 4,782.94	15	$ 6,992.39
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	284	136,858.22	1,394	801,666.20	1,678	938,524.42
66-2/3% to Beneficiary	0	0.00	2	1,509.93	2	1,509.93
50% to Beneficiary	77	26,638.88	285	132,449.26	362	159,088.14
Pop-up Option	107	69,692.10	405	338,338.01	512	408,030.11
10 Years Certain	75	47,775.51	129	104,697.20	204	152,472.71
10 Years Certain & Life	33	14,350.72	188	118,112.68	221	132,463.40
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	17	18,441.11	101	158,539.17	118	176,980.28
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	2	260.76	2	260.76
Dependent Child	48	34,112.28	64	63,522.11	112	97,634.39
Refund	1	515.42	7	3,933.48	8	4,448.90
15 Years Certain & Life	27	21,322.30	66	50,304.84	93	71,627.14
20 Years Certain & Life	38	27,756.09	61	59,823.95	99	87,580.04
5 Years Certain	89	57,887.61	88	75,686.45	177	133,574.06
PLSO 12 Month Basic	0	0.00	1	383.89	1	383.89
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	144.70	1	185.55	2	330.25
PLSO 12 Month Survivor	6	1,769.20	20	25,788.71	26	27,557.91
PLSO 24 Month Survivor	2	2,921.76	12	9,795.51	14	12,717.27
PLSO 36 Month Survivor	25	13,160.49	56	27,663.78	81	40,824.27
Total	837	$ 475,555.84	2,890	$ 1,977,444.42	3,727	$ 2,453,000.26

Hazardous
Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	15	$ 9,690.72	17	$ 14,145.62	32	$ 23,836.34
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	21	7,701.23	155	185,094.00	176	192,795.23
66-2/3% to Beneficiary	3	904.05	33	45,572.40	36	46,476.45
50% to Beneficiary	4	1,648.50	44	39,566.24	48	41,214.74
Pop-up Option	28	11,436.39	129	180,401.85	157	191,838.24
10 Years Certain	6	11,020.25	12	11,077.10	18	22,097.35
10 Years Certain & Life	6	4,041.80	1	88.35	7	4,130.15
Social Security Option						
Age 62 Basic	0	0.00	2	494.79	2	494.79
Age 62 Survivorship	70	115,335.22	1	2,805.57	71	118,140.79
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	3,190.64	3	3,190.64
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	3	783.55	13	6,959.75	16	7,743.30
15 Years Certain & Life	4	1,299.70	4	3,954.22	8	5,253.92
20 Years Certain & Life	4	1,475.59	13	7,774.36	17	9,249.95
5 Years Certain	3	2,720.85	7	9,667.10	10	12,387.95
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	2	549.95	2	394.39	4	944.34
PLSO 12 Month Survivor	1	403.27	3	2,018.70	4	2,421.97
PLSO 24 Month Survivor	1	356.35	4	2,139.50	5	2,495.85
PLSO 36 Month Survivor	8	3,319.62	20	17,088.18	28	20,407.80
Total	179	$ 172,687.04	463	$ 532,432.76	642	$ 705,119.80

Non-Hazardous Members

Retired and Beneficiary Information June 30, 2010
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	45	$ 981,700	57	$ 806,299	101	$ 814,511	203	$ 2,602,509
45-49	450	$ 10,484,945	118	$ 1,454,796	64	$ 509,758	632	$ 12,449,499
50-54	1,651	$ 40,804,141	278	$ 3,831,457	133	$ 1,404,647	2,062	$ 46,040,245
55-59	3,700	$ 68,612,166	462	$ 5,430,523	233	$ 2,528,368	4,395	$ 76,571,057
60-64	6,278	$ 83,431,693	701	$ 7,711,113	378	$ 4,378,832	7,357	$ 95,521,638
65-69	7,115	$ 71,288,569	642	$ 6,253,293	457	$ 4,314,463	8,214	$ 81,856,326
70-74	6,159	$ 54,406,169	490	$ 4,383,577	483	$ 4,432,544	7,132	$ 63,222,291
75-79	4,300	$ 33,139,169	226	$ 1,748,201	497	$ 3,881,034	5,023	$ 38,768,404
80-84	2,648	$ 17,841,741	51	$ 360,802	495	$ 3,243,862	3,194	$ 21,446,405
85-89	1,358	$ 7,565,093	17	$ 56,597	430	$ 2,079,920	1,805	$ 9,701,611
90 & Over	559	$ 2,551,780	6	$ 33,721	456	$ 1,848,063	1,021	$ 4,433,565
Totals	34,263	$ 391,107,167	3,048	$ 32,070,380	3,727	$ 29,436,003	41,038	$ 452,613,550

Hazardous Members

Retired and Beneficiary Information June 30, 2010
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	121	$ 3,672,058	64	$ 1,055,237	168	$ 886,408	353	$ 5,613,702
45-49	528	$ 16,220,465	64	$ 1,097,099	20	$ 180,753	612	$ 17,498,317
50-54	727	$ 21,494,282	84	$ 1,374,008	36	$ 514,950	847	$ 23,383,240
55-59	1,152	$ 34,354,908	106	$ 1,515,600	59	$ 1,025,394	1,317	$ 36,895,902
60-64	1,132	$ 28,287,462	52	$ 868,556	83	$ 1,336,573	1,267	$ 30,492,592
65-69	692	$ 14,648,594	27	$ 353,476	78	$ 1,550,955	797	$ 16,553,025
70-74	390	$ 7,669,969	6	$ 105,693	82	$ 1,469,158	478	$ 9,244,821
75-79	179	$ 3,816,245	7	$ 64,817	57	$ 808,268	243	$ 4,689,331
80-84	78	$ 1,553,038	2	$ 16,838	39	$ 498,216	119	$ 2,068,092
85-89	13	$ 266,988	1	$ 19,335	17	$ 166,811	31	$ 453,135
90 & Over	1	$ 707			3	$ 23,950	4	$ 24,657
Totals	5,013	$ 131,984,715	413	$ 6,470,660	642	$ 8,461,437	6,068	$ 146,916,813

Total Non-Hazardous Active Members as of June 30, 2010
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	46								46
Avg Pay	$13,138								$13,138
20-24	2,777	309							3,086
Avg Pay	$19,799	$25,638							$20,384
25-29	3,406	1,259	80						4,745
Avg Pay	$22,969	$27,033	$27,693						$24,127
30-34	3,501	1,762	728	22					6,013
Avg Pay	$22,414	$30,114	$33,530	$35,811					$26,065
35-39	6,236	2,366	1,460	384	16				10,462
Avg Pay	$19,544	$27,929	$35,519	$38,530	$53,836				$24,419
40-44	4,089	3,051	2,235	890	343	58			10,666
Avg Pay	$21,519	$25,454	$30,862	$38,667	$45,627	$55,357			$26,993
44-49	3,590	3,508	3,259	1,451	846	229	141	31	13,055
Avg Pay	$21,777	$25,201	$27,327	$34,088	$42,830	$50,953	$49,528	$50,769	$27,695
50-54	3,083	2,995	3,288	2,302	1,123	256	184	114	13,345
Avg Pay	$22,156	$26,372	$26,721	$30,351	$37,964	$45,811	$48,005	$59,484	$28,100
55-59	2,476	2,378	2,489	2,228	1,315	255	219	135	11,495
Avg Pay	$22,628	$26,768	$27,679	$28,929	$33,738	$41,168	$40,951	$56,306	$28,226
60-64	1,557	1,708	1,571	1,362	889	194	150	88	7,519
Avg Pay	$20,279	$25,107	$27,282	$28,946	$32,367	$35,467	$36,160	$57,078	$26,977
65-69	649	761	596	404	224	51	48	51	2,784
Avg Pay	$16,268	$21,188	$23,106	$26,516	$29,573	$35,787	$34,918	$37,803	$22,708
70 & over	299	394	333	208	146	24	27	34	1,465
Avg Pay	$16,783	$19,699	$21,537	$21,572	$30,615	$23,946	$29,307	$41,089	$21,618
Totals	31,709	20,491	16,039	9,251	4,902	1,067	769	453	84,681
Avg Pay	$21,187	$26,186	$28,498	$31,176	$36,641	$43,472	$42,492	$53,651	$26,415

Total Hazardous Active Members as of June 30, 2010
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	328	19							347
Avg Pay	$35,057	$37,794							$35,207
25-29	981	257	7						1,245
Avg Pay	$39,683	$45,859	$53,301						$41,034
30-34	627	774	227						1,628
Avg Pay	$39,935	$47,699	$53,958						$45,581
35-39	505	669	781	178	5				2,138
Avg Pay	$36,961	$47,520	$55,247	$60,258	$69,943				$48,961
40-44	246	389	488	515	160	12			1,810
Avg Pay	$39,991	$46,924	$52,849	$60,274	$67,097	$69,325			$53,309
44-49	141	231	258	315	222	40	10	1	1,218
Avg Pay	$38,379	$45,668	$51,761	$58,598	$67,703	$71,292	$71,566	$61,536	$54,542
50-54	73	117	127	139	115	24	15	8	618
Avg Pay	$41,567	$45,690	$48,046	$55,046	$65,076	$73,391	$85,011	$53,195	$53,526
55-59	56	99	66	73	36	3	5	17	355
Avg Pay	$38,017	$41,592	$59,933	$56,087	$62,348	$80,004	$83,258	$83,484	$52,441
60-64	32	47	36	14	10	1		4	144
Avg Pay	$40,691	$49,673	$47,754	$54,609	$64,538	$61,404		$72,900	$49,436
65-69	2	17	11	6					36
Avg Pay	$28,374	$38,612	$47,463	$54,458					$43,389
70 & over	5	10	6			1	1		23
Avg Pay	$31,644	$40,007	$54,456			$102,420	$72,096		$46,067
Totals	2,996	2,629	2,007	1,240	548	81	31	30	9,562
Avg Pay	$38,739	$46,737	$53,582	$58,921	$66,586	$72,207	$79,975	$73,264	$48,792

Report on the Annual Valuation of the State Police Retirement System

Prepared as of June 30, 2010

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 10, 2010

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2011. The date of the valuation was June 30, 2010.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 5.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

TJC:kc

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REPORT ON THE ANNUAL VALUATION OF THE STATE POLICE RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2010

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2010, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	6/30/2010	6/30/2009
Contributions for next fiscal year:		
Retirement	39.80%	35.74%
Insurance	54.83	49.89
Total	94.63%	85.63%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$612,444,806	$602,328,868
Actuarial value of assets	304,577,292	329,966,989
Unfunded liability on actuarial value of assets	307,867,514	272,361,879
Funded ratio on actuarial value of assets	49.73%	54.78%
Market value of assets	$264,944,089	$256,571,073
Unfunded liability on market value of assets	347,500,717	345,757,795
Funded ratio on market value of assets	43.26%	42.60%
Insurance		
Actuarial accured liability	$434,960,495	$364,031,141
Actuarial value of assets	121,175,083	123,526,647
Unfunded liability on actuarial value of assets	313,785,412	240,504,494
Funded ratio on actuarial value of assets	27.86%	33.93%
Market value of assets	$104,526,550	$93,686,940
Unfunded liability on market value of assets	330,433,945	270,344,201
Funded ratio on market value of assets	24.03%	25.74%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,223	1,184
Number of vested former members	55	58
Number of former members due a refund	290	274
Number of active members	961	946
Total salary	$51,506,712	$51,660,396
Average salary	$53,597	$54,609

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, plan designs for two of the Health Insurance plans that cover Medicare eligible retirees will change for Plan Year 2011. The changes are summarized below.

    - The KRS Health Plan Essential will replace the KRS Health Plan Plus.
    - The medical coverage under the KRS Health Plan Essential includes an increase to the annual deductible and the prescription drug coverage has been altered to reflect the same coverage as described in the Standard Medicare Part D benefit parameters.
    - The annual deductible, out-of-pocket maximum and prescription drug co-payments have increased under the KRS Health Plan Premium.
    - Plan design changes have also been implemented for Plan Year 2011 for the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2009 and June 30, 2010 is 4.50%. The lower rate for insurance benefits is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2010 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

		Group Averages		
Number	Payroll	Salary	Age	Service
961	$51,506,712	$53,597	37.2	10.6

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2005	987	$43,720,092	$44,296	1.0%
6/30/2006	1,028	47,743,865	46,443	4.8
6/30/2007	957	49,247,580	51,460	10.8
6/30/2008	993	53,269,080	53,645	4.2
6/30/2009	946	51,660,396	54,609	1.8
6/30/2010	961	51,506,712	53,597	(1.9)

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

			Group Averages	
Type of Benefit Payment	Number	Annual Benefits	Benefit	Age
Retiree	1,051	$41,468,221	$39,456	60.8
Disability	39	$686,216	17,595	57.0
Beneficiary	133	3,361,360	25,273	64.4
Total in SPRS	1,223	$45,515,797	$37,217	61.1

This valuation also includes 345 inactive members of which 55 are vested.

SECTION III - ASSETS

1. As of June 30, 2010 the total market value of assets amounted to $369,470,639 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

Retirement	Insurance	SPRS Total
$264,944,089	$104,526,550	$369,470,639

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $425,752,375. Schedule B shows the development of the actuarial value of assets as of June 30, 2010. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2010	JUNE 30, 2009
Retirement	$ 304,577,292	$ 329,966,989
Insurance	121,175,083	123,526,647
Total	$ 425,752,375	$ 453,493,636

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2010. Separate balance sheets are shown for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $684,309,534, of which $473,234,521 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $2,658,139 is for the prospective benefits payable on account of inactive members, $208,416,874 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $304,577,292 as of June 30, 2010. The difference of $379,732,242 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $36,719,577 is the present value of future contributions expected to be made by members, and the balance of $343,012,665 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 7.50% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $35,145,151. When this amount is subtracted from $343,012,665, which is the present value of the total future contributions to be made by the State, there remains $307,867,514 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 32.05% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $307,867,514 over 27 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.25% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $597,169,621, of which $245,812,639 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $7,768,188 is for the prospective benefits payable on account of inactive members, and $343,588,794 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $121,175,083 as of June 30, 2010. The difference of $475,994,538 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $599,327 is the present value of future contributions expected to be made by members, and the balance of $475,395,211 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 31.99% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $161,609,799. When this amount is subtracted from $475,395,211, which is the present value of the total future contributions to be made by the employers, there remains $313,785,412 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 22.56% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $313,785,412 over 27 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.28% of payroll.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2010 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

			Amount
(1)	UAAL* as of 6/30/09	$	272.4
(2)	Normal cost from last valuation		4.2
(3)	Employer contributions		9.5
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875		21.1
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	288.2
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	288.2
(9)	Actual UAAL as of 6/30/10	$	307.9
(10)	Gain/(loss): (8) - (9)	$	(19.7)
(11)	Accrued liabilities as of 6/30/09	$	602.3
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(3.3)%

**Unfunded actuarial accrued liability.*

Experience Gain/(Loss)
Insurance Benefits

			Amount
(1)	UAAL* as of 6/30/09	$	240.5
(2)	Normal cost from last valuation		17.1
(3)	Expected employer contributions		25.7
(4)	Interest accrual: [(1) + (2) - (3)] x .045		10.4
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	242.3
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Data correction**		61.0
(9)	Expected UAAL after changes: (5) + (6) + (7) + (8)	$	303.3
(10)	Actual UAAL as of 6/30/10	$	313.8
(11)	Gain/(loss): (9) - (10)	$	(10.5)
(12)	Accrued liabilities as of 6/30/09	$	364.0
(13)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(2.9)%

* *Unfunded actuarial accrued liability.*

** *$61 million loss due to 208 SPRS retirees with split service coded as covered for health insurance under SPRS this year who were coded without coverage in SPRS in prior years. Most of these 208 retirees were coded as covered for health insurance under CERS and KERS Nonhazardous in prior years and are now coded without coverage in these systems. It was determined during conversion to the new data system that these retirees are covered for health insurance under SPRS because the majority of their service was with SPRS and not with the other systems.*

SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/10	Insurance $ Gain (or Loss) For Year Ending 6/30/10
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (7.5)	$ (1.3)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.1)	(0.3)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.7	2.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	3.0	32.8
New Members. Additional unfunded accrued liability will produce a loss.	0.0	(0.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(17.5)	(4.3)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(0.3)	4.7
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	2.0	(44.1)
Gain (or Loss) During Year From Financial Experience	$ (19.7)	$ (10.5)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	(61.0)
Composite Gain (or Loss) During Year	$ (19.7)	$ (71.5)

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2011/2012 fiscal year.

Required Contribution Rates
Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	7,573,484	14.70%
(2) Disability benefits		328,405	0.64
(3) Survivor benefits		82,408	0.16
(4) Total	$	7,984,297	15.50%
B. Member Contributions	$	4,120,537	8.00%
C. Employer Normal Cost: [A(4) - B]	$	3,863,760	7.50%
D. Administrative Expenses	$	128,767	0.25%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/09 Valuation:	$	14,226,154	27.62%
(2) Change due to:			
a. Active decrements	$	373,490	0.73%
b. Pay increases		(159,903)	(0.31)
c. Retiree mortality		14,091	0.03
d. Investment return		936,721	1.82
e. COLA		337,908	0.66
f. Assumption Change		0	0.00
g. Other		776,937	1.50
h. Total Change	$	2,279,243	4.43%
(3) UAAL Contribution Based on 6/30/10 Valuation: [E(1) +E(2)h]	$	16,505,397	32.05%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	20,497,924	39.80%

** Based on 28 year amortization of the UAAL from June 30, 2009 and 27 years from June 30, 2010*

Required Contribution Rates
Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost	$	16,504,141	32.04%
B.	Member Contributions*	$	25,753	0.05%
C.	Employer Normal Cost: [A - B]	$	16,478,388	31.99%
D.	Administrative Expenses	$	146,716	0.28%
E.	Unfunded Actuarial Accrued Liability**	$	11,621,682	22.56%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	28,246,786	54.83%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 27 year amortization of the UAAL from June 30, 2010*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2010

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,223
Terminated employees entitled to benefits but not yet receiving benefits	345
Active Members	961
Total	2,529

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2005	$ 353,511,622	$ 458,593,576	$ 105,081,954	77.1%	$ 43,720,092	240.4%
6/30/2006	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
6/30/2007	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
6/30/2008	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5
6/30/2009	329,966,989	602,328,868	272,361,879	54.8	51,660,396	527.2
6/30/2010	304,577,292	612,444,806	307,867,514	49.7	51,506,712	597.7

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2005	$ 100,207,082	$ 234,159,510	$ 133,952,428	42.8%	$ 43,720,092	306.4%
6/30/2006	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
6/30/2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
6/30/2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
6/30/2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
6/30/2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2010. Additional information as of the latest actuarial valuation follows.

Retirement Benefits	
Valuation date	6/30/2010
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	27 years
Asset valuation method	5 Year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases**	4.5% - 17.0%
Cost-of-living adjustment	None
*Includes price inflation at	3.50%
**Includes wage inflation at	4.50%

Insurance Benefits	
Valuation date	6/30/2010
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	27 years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	10.5% - 5.0%
Medical Trend Assumption (Post-Medicare)	9.0% - 5.0%
Year of Ulitimate Trend	2018
Actuarial assumptions:	
Investment rate of return*	4.50%
*Includes price inflation at	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2010 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2009. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM

RETIREMENT BENEFITS

	JUNE 30, 2010	JUNE 30, 2009
ASSETS		
Current actuarial value of assets	$ 304,577,292	$ 329,966,989
Prospective contributions		
Member contributions	$ 36,719,577	$ 36,405,148
Employer normal contributions	35,145,151	36,799,344
Unfunded accrued liability contributions	307,867,514	272,361,879
Total prospective contributions	$ 379,732,242	$ 345,566,371
Total assets	$ 684,309,534	$ 675,533,360
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 473,234,521	$ 456,671,083
Present value of benefits payable on account of active members	208,416,874	215,948,006
Present value of benefits payable on account of inactive members	2,658,139	2,914,271
Total liabilities	$ 684,309,534	$ 675,533,360

VALUATION BALANCE SHEET
INSURANCE BENEFITS

	JUNE 30, 2010	JUNE 30, 2009
ASSETS		
Current actuarial value of assets	$ 121,175,083	$ 123,526,647
Prospective contributions		
Member contributions	$ 599,327	$ 269,371
Employer normal contributions	161,609,799	168,997,516
Unfunded accrued liability contributions	313,785,412	240,504,494
Total prospective contributions	$ 475,994,538	$ 409,771,381
Total assets	$ 597,169,621	$ 533,298,028
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 245,812,639	$ 158,534,652
Present value of benefits payable on account of active members	343,588,794	366,206,575
Present value of benefits payable on account of inactive members	7,768,188	8,556,801
Total liabilities	$ 597,169,621	$ 533,298,028

The following tables provide the solvency test for SPRS members.

Solvency Test
Retirement Benefits

Valuation Date	Aggregate Accrued Liabilites For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2005*	$ 35,670,717	$ 341,398,363	$ 81,524,496	$ 353,511,622	100.0%	93.1%	0.0%
6/30/2006	37,866,774	373,588,145	105,027,379	344,016,197	100.0	81.9	0.0
6/30/2007	39,505,285	397,863,520	110,583,481	348,806,508	100.0	77.7	0.0
6/30/2008	41,391,416	426,311,368	119,426,473	350,891,451	100.0	72.6	0.0
6/30/2009	41,664,469	459,585,353	101,079,046	329,966,989	100.0	62.7	0.0
6/30/2010	42,011,523	475,892,659	94,540,624	304,577,292	100.0	55.2	0.0

**Reported by prior actuarial firm.*

Solvency Test
Insurance Benefits

Valuation Date	Aggregate Accrued Liabilites For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2005*	$ 0	$ 141,585,694	$ 92,573,816	$ 100,207,082	100.0%	70.8%	0.0%
6/30/2006	0	240,913,868	341,666,999	105,580,269	100.0	43.8	0.0
6/30/2007	0	172,291,142	260,472,087	115,215,912	100.0	66.9	0.0
6/30/2008	0	178,655,245	266,452,223	123,961,197	100.0	69.4	0.0
6/30/2009	0	167,091,453	196,939,688	123,526,647	100.0	73.9	0.0
6/30/2010	0	253,580,827	181,379,668	121,175,083	100.0	47.8	0.0

**Reported by prior actuarial firm.*

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits

	Valuation date June 30:	2009	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	$ 350,891,451	$ 329,966,989				
B.	Market Value End of Year	256,571,073	264,944,089				
C.	Market Value Beginning of Year	337,358,918	256,571,073				
D.	Cash Flow						
	D1. Contributions	13,124,235	13,616,226				
	D2. Benefit Payments	(42,615,976)	(45,726,064)				
	D3. Administrative Expenses	(121,936)	(129,911)				
	D4. Investment Expenses	(344,480)	(810,560)				
	D5. Net	(29,958,157)	(33,050,309)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(50,829,688)	41,423,325				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	25,342,266	19,445,528				
	E4. Amount for Phased-In Recognition	(76,171,954)	21,977,797				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(15,234,391)	4,395,559	0	0	0	0
	F2. First Prior Year	(8,083,253)	(15,234,391)	4,395,559	0	0	0
	F3. Second Prior Year	4,654,236	(8,083,253)	(15,234,391)	4,395,559	0	0
	F4. Third Prior Year	2,482,933	4,654,236	(8,083,253)	(15,234,391)	4,395,559	0
	F5. Fourth Prior Year	(128,096)	2,482,933	4,654,236	(8,083,253)	(15,234,391)	4,395,559
	F6. Total Recognized Investment Gain	(16,308,571)	(11,784,916)	(14,267,849)	(18,922,085)	(10,838,832)	4,395,559
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 329,966,989	$ 304,577,292				
H.	Difference Between Market & Actuarial Values	$ (73,395,916)	$ (39,633,203)	$ (25,365,354)	$ (6,443,269)	$ 4,395,559	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits

	Valuation date June 30:	2009	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	$ 123,961,197	$ 123,526,647				
B.	Market Value End of Year	93,686,940	104,526,550				
C.	Market Value Beginning of Year	121,781,967	93,686,940				
D.	Cash Flow						
	D1. Contributions	7,670,129	8,670,692				
	D2. Benefit Payments	(7,475,826)	(10,768,660)				
	D3. Administrative Expenses	(123,525)	(146,716)				
	D4. Investment Expenses	(59,315)	(195,077)				
	D5. Net	11,463	(2,439,761)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(28,106,490)	13,279,371				
	E2. Assumed Rate	4.50%	4.50%				
	E3. Amount for Immediate Recognition	5,541,096	4,360,484				
	E4. Amount for Phased-In Recognition	(33,647,586)	8,918,887				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(6,729,517)	1,783,777	0	0	0	0
	F2. First Prior Year	(3,484,262)	(6,729,517)	1,783,777	0	0	0
	F3. Second Prior Year	3,373,433	(3,484,262)	(6,729,517)	1,783,777	0	0
	F4. Third Prior Year	784,282	3,373,433	(3,484,262)	(6,729,517)	1,783,777	0
	F5. Fourth Prior Year	68,955	784,282	3,373,433	(3,484,262)	(6,729,517)	1,783,777
	F6. Total Recognized Investment Gain	(5,987,109)	(4,272,287)	(5,056,569)	(8,430,002)	(4,945,740)	1,783,777
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 123,526,647	$ 121,175,083				
H.	Difference Between Market & Actuarial Values	$ (29,839,707)	$ (16,648,533)	$ (11,591,964)	$ (3,161,962)	$ 1,783,777	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for SPRS is 4.50%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for members are as follows and include inflation at 4.50% per annum:

	Annual Rates of		
Service	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	12.50%	4.50%	17.00%
1-2	7.50%	4.50%	12.00%
2-3	5.50%	4.50%	10.00%
3-4	4.50%	4.50%	9.00%
4-5	3.50%	4.50%	8.00%
5-6	2.50%	4.50%	7.00%
6-7	1.50%	4.50%	6.00%
7-8	2.00%	4.50%	6.50%
8-9	1.00%	4.50%	5.50%
9-10	0.50%	4.50%	5.00%
10 & over	0.00%	4.50%	4.50%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

		Death**			Service Retirement		
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate+	Rate++
20	2.50%	0.03%	0.01%	0.05%	20	9.00%	
25	2.50	0.03	0.01	0.07	25	22.00	9.00%
30	2.50	0.04	0.02	0.09	30	25.00	22.00
35	2.50	0.04	0.02	0.13	35	33.33	25.00
40	2.50	0.05	0.04	0.20	40		33.33
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 20.0%, 7.5%, 3.0%, 3.0% and 3.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.*

++ *For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2011	10.5%	9.0%
2012	9.5%	8.5%
2013	8.5%	7.5%
2014	7.5%	7.0%
2015	6.5%	6.5%
2016	6.0%	6.0%
2017	5.5%	5.5%
2018 and beyond	5.0%	5.0%

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and over	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation and spouse coverage are as follows:

Participation	100%
Spouse Coverage	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE

2010	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 486.40	$ 749.84	$ 1,127.80	$ 1,253.56
Optimum PPO	$ 616.28	$ 889.54	$ 1,363.40	$ 1,515.36
Capitol Choice	$ 594.14	$ 896.06	$ 1,347.50	$ 1,490.60

2011	Single	Parent Plus	Couple	Family
TOTAL PREMIUMS				
Standard PPO	$ 486.40	$ 749.84	$ 1,127.80	$ 1,253.56
Optimum PPO	$ 650.30	$ 905.42	$ 1,405.66	$ 1,565.88
Capitol Choice	$ 625.68	$ 909.02	$ 1,387.36	$ 1,537.92

MEDICARE ELIGIBLE

Effective January 1, 2011 Available Plan	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	$ 163.61	$ 163.00
Kentucky Retirement System Health Plan - Essential	$ 182.03	$ 163.00
Kentucky Retirement System Health Plan - Premium	$ 375.11	$ 355.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted. In addition, the claims costs for the Essential and Premium plans are adjusted to reflect the front end CMS reimbursement of $54.71 per member per month due to the EGWP.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement 55

Service Requirement At least one month of hazardous duty service credit

Amount If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement 60

Service Requirement At least 60 months of hazardous duty service credit

Amount The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday. The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance. A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Disability (continued):

Members whose participation began on or after 8/1/2004	Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Members whose participation began on or after 9/1/2008

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	60

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.48 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.32 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2005*	2006	2007	2008	2009	2010
			Number			
Beginning of Year	992	1,036	1,067	1,105	1,135	1,184
Added	50	43	49	42	75	54
Removed	6	10	11	12	26	15
End of Year	1,036	1,067	1,105	1,135	1,184	1,223
			Annual Allowances			
Beginning of Year	$ 30,805,600	$ 32,983,900	$ 34,651,251	$ 37,208,377	$ 41,293,017	$ 44,273,937
Added	1,813,000	1,943,760	2,836,956	4,330,608	3,380,331	1,543,665
Removed	159,600	276,409	279,830	245,968	399,410	301,805
End of Year	$ 32,983,900	$ 34,651,251	$ 37,208,377	$ 41,293,017	$ 44,273,937	$ 45,515,797
% Increase in Allowances	7.07%	5.06%	7.38%	10.98%	7.22%	2.80%
Average Annual Allowance	$ 31,838	$ 32,475	$ 33,673	$ 36,382	$ 37,394	$ 37,217

**Reported by prior actuarial firm.*

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	96	$ 298,488.92	8	$ 21,252.00	104	$ 319,740.92
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	114	351,629.31	1	4,480.13	115	356,109.44
66-2/3% to Beneficiary	80	299,865.08	1	2,955.01	81	302,820.09
50% to Beneficiary	79	282,250.97	0	0.00	79	282,250.97
Pop-up Option	421	1,471,374.40	4	13,523.83	425	1,484,898.23
10 Years Certain	2	4,387.34	0	0.00	2	4,387.34
10 Years Certain & Life	34	106,778.24	0	0.00	34	106,778.24
Social Security Option						
Age 62 Basic	31	84,104.26	0	0.00	31	84,104.26
Age 62 Survivorship	148	363,029.99	1	7,697.81	149	370,727.80
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	12	35,435.09	1	3,803.70	13	39,238.79
20 Years Certain & Life	34	109,129.30	1	2,730.19	35	111,859.49
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	452.72	2	452.72
PLSO 12 Month Survivor	6	20,171.54	0	0.00	6	20,171.54
PLSO 24 Month Survivor	5	12,913.69	0	0.00	5	12,913.69
PLSO 36 Month Survivor	9	16,416.24	0	0.00	9	16,416.24
Total	1,071	$ 3,455,974.37	19	$ 56,895.39	1,090	$ 3,512,869.76

Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	1	$ 418.94	1	$ 418.94
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	4	4,668.31	56	143,066.43	60	147,734.74
66-2/3% to Beneficiary	1	776.58	5	9,212.32	6	9,988.90
50% to Beneficiary	1	1,260.54	15	21,955.74	16	23,216.28
Pop-up Option	1	464.16	15	30,254.18	16	30,718.34
10 Years Certain	1	574.16	0	0.00	1	574.16
10 Years Certain & Life	0	0.00	0	0.00	0	0.00
Social Security Option						
Age 62 Basic	0	0.00	1	2,402.05	1	2,402.05
Age 62 Survivorship	0	0.00	26	52,664.70	26	52,664.70
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	0	0.00	0	0.00	0	0.00
20 Years Certain & Life	0	0.00	4	6,660.77	4	6,660.77
5 Years Certain	2	5,734.43	0	0.00	2	5,734.43
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	10	$ 13,478.18	123	$ 266,635.13	133	$ 280,113.31

Retired and Beneficiary Information June 30, 2010
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	32	$ 1,003,494	4	$ 58,730	6	$ 65,369	42	$ 1,127,592
45-49	95	3,482,823	5	70,757	4	68,089	104	3,621,669
50-54	115	4,729,910	7	141,734	8	79,841	130	4,951,485
55-59	236	10,143,300	7	88,719	11	234,957	254	10,466,976
60-64	273	10,994,163	8	176,162	17	389,816	298	11,560,141
65-69	125	4,483,226	3	44,762	21	538,831	149	5,066,819
70-74	81	2,821,079	3	72,631	5	211,021	89	3,104,731
75-79	51	1,996,477	2	32,721	20	675,264	73	2,704,462
80-84	30	1,242,141	0	0	21	533,784	51	1,775,925
85-89	11	556,625	0	0	16	524,771	27	1,081,396
90 & Over	2	14,985	0	0	4	39,617	6	54,602
Totals	1,051	$ 41,468,221	39	$ 686,216	133	$ 3,361,360	1,223	$ 45,515,797

Total Active Members as of June 30, 2010
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	33	2							35
Avg Pay	$33,561	$47,976							$34,385
25-29	72	42							114
Avg Pay	$38,002	$48,293							$41,793
30-34	50	127	27						204
Avg Pay	$39,326	$49,553	$53,308						$47,544
35-39	37	65	97	45	2				246
Avg Pay	$34,018	$50,197	$55,661	$62,714	$65,526				$52,332
40-44	10	28	55	81	35	2			211
Avg Pay	$44,816	$49,781	$55,761	$66,277	$69,627	$67,332			$60,895
44-49	2	12	10	31	38	8	5	2	108
Avg Pay	$44,484	$48,221	$58,216	$62,354	$72,664	$78,810	$74,160	$77,628	$65,746
50-54	3		2	3	9	6	5	4	32
Avg Pay	$43,548		$49,608	$59,916	$69,300	$74,746	$75,540	$78,021	$67,862
55-59			1			1	2	1	5
Avg Pay			$64,932			$69,912	$80,220	$78,444	$74,746
60-64								4	4
Avg Pay								$88,560	$88,560
65-69				1					1
Avg Pay				$66,936					$66,936
70 & over		1							1
Avg Pay		$50,328							$50,328
Totals	207	277	192	161	84	17	12	11	961
Avg Pay	$37,374	$49,470	$55,477	$64,411	$70,868	$75,502	$75,745	$81,820	$53,597

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October 31, 2011

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fifty-fifth annual actuarial valuation of the Kentucky Employees Retirement System, the fifty-second annual actuarial valuation of the County Employees Retirement System, and the fifty-third annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2011 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2012 and ending June 30, 2013.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

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Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30-year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the combined UAL bases will be amortized over a 30-year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

The impact of HB1 passed into law in 2008 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 (and for KERS Hazardous and CERS Non-Hazardous the 2009) assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2011 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	33.3%
KERS Hazardous Pension Fund	70.8%
CERS Non-Hazardous Pension Fund	63.1%
CERS Hazardous Pension Fund	62.2%
SPRS Pension Fund	45.0%

The funding level for the insurance funds is below that of the pension funds, and the Board's funding objective is to increase this funded level consistently over time. Recent employer contribution rate reductions under KERS and SPRS have significantly limited this improvement. As of June 30, 2011 the funding level for the insurance funds are as follows:

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System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	10.6%
KERS Hazardous Insurance Fund	65.1%
CERS Non-Hazardous Insurance Fund	46.6%
CERS Hazardous Insurance Fund	46.8%
SPRS Insurance Fund	28.2%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on August 20, 2009 based on the experience investigation report dated August 17, 2009, meet the parameters set for disclosure under GASB Statements No. 25 and 43. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in January, 2014 and any adjustments will be reflected in the June 30, 2014 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose. It is up to the state legislature to follow through with the required funding.

Sincerely,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

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Summary of June 30, 2011 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2012-2013)					
Pension Fund Contribution	28.03%	16.16%	12.62%	20.10%	47.48%
Insurance Fund Contribution	16.52	19.73	8.59	21.84	55.93
Recommended Employer Contribution	44.55%	35.89%	21.21%	41.94%	103.41%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$11,182,142,032	$721,293,444	$8,918,085,025	$2,859,041,052	$634,379,401
Actuarial Value of Assets	3,726,986,087	510,748,505	$5,629,611,183	$1,779,545,393	$285,580,631
Unfunded Actuarial Liability on Actuarial Value of Assets	7,455,155,945	210,544,939	$3,288,473,842	$1,079,495,659	$348,798,770
Funding Level as a % of Actuarial Value of Assets	33.3%	70.8%	63.1%	62.2%	45.0%
Market Value of Assets	$3,538,878,093	$510,628,492	$5,577,252,295	$1,760,602,934	$279,934,443
Unfunded Actuarial Liability on Market Value of Assets	7,643,263,939	210,664,952	$3,340,832,730	$1,098,438,118	$354,444,958
Funding Level on Market Value of Assets	31.7%	70.8%	62.5%	61.6%	44.1%
Insurance Fund					
Actuarially Accrued Liability	$4,280,089,633	$507,058,767	$3,073,973,205	$1,647,702,755	$438,427,763
Actuarial Value of Assets	451,620,442	329,961,615	1,433,450,793	770,790,274	123,687,289
Unfunded Actuarial Liability as a % of Actuarial Value of Assets	3,828,469,191	177,097,152	1,640,522,412	876,912,481	314,740,474
Funding Level as a % of Actuarial Value of Assets	10.6%	65.1%	46.6%	46.8%	28.2%
Market Value of Assets	$433,305,243	$321,071,515	$1,451,984,026	$774,509,101	$127,367,947
Unfunded Actuarial Liability as a % of Market Value of Assets	3,846,784,390	185,987,252	1,621,989,179	873,193,654	311,059,816
Funding Level on Market Value of Assets	10.1%	63.3%	47.2%	47.0%	29.1%
Member Data					
Number of Active Members	46,617	4,291	85,285	9,407	965
Total Annual Payroll (Active Members)	$1,731,632,748	$133,053,792	$2,276,595,948	$466,963,860	$48,692,616
Average Annual Pay (Active Members)	$37,146	$31,008	$26,694	$49,640	$50,459
Number of Retired Members & Beneficiaries	38,597	3,064	43,211	6,468	1,263
Average Annual Retirement Allowance	$21,276	$14,886	$11,191	$24,777	$37,583
Number of Vested Inactive Members	6,265	334	9,902	580	52

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Additional Valuation Notes

In addition to the valuation results presented in the three reports that follow, certain calculations were made to round out the presentation and put the results in greater perspective. That information follows.

- Recent Contribution Shortfall – Although it has happened periodically in the past, there has been an ongoing contribution shortfall for KERS and SPRS since the 2002-2003 fiscal year. That shortfall has placed additional pressure on contribution rates, and that impact is compounding. The table below shows the recommended and budgeted contribution rates as a percent of payroll for KERS and SPRS over the last eight fiscal years. The rates shown are the combined rates for retirement and insurance.

Fiscal Year	Recommended Rate	Budgeted Rate
	KERS Non-Hazardous	
2003-2004	7.53	5.89
2004-2005	10.29	5.89
2005-2006	13.62	5.89
2006-2007	17.13	7.75
2007-2008	34.23	8.50
2008-2009	28.60	10.01
2009-2010	31.29	11.61
2010-2011	32.75	16.98
	KERS Hazardous	
2003-2004	18.84	18.84
2004-2005	19.47	18.84
2005-2006	21.59	18.84
2006-2007	23.32	22.00
2007-2008	47.11	24.25
2008-2009	34.78	24.35
2009-2010	35.54	24.69
2010-2011	34.37	26.12
	SPRS	
2003-2004	21.58	21.58
2004-2005	28.08	21.58
2005-2006	34.83	21.58
2006-2007	42.30	25.50
2007-2008	72.00	28.00
2008-2009	60.14	30.07
2009-2010	61.87	33.08
2010-2011	59.84	45.54

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Had the recommended contributions been made over this period of time, the contribution rates recommended as a result of the June 30, 2011 valuations would have been reduced by 6.52% of payroll for KERS Non-Hazardous, 3.71% for KERS Hazardous and 10.08% for SPRS.

- Market Value of Assets and COLA Liability Impact on Funding Ratio - The funding ratio for all the Plans is based on the actuarial liabilities and asset values computed for the purpose of meeting funding requirements on the basis required by state law. This basis does not take all actuarial liabilities and investment performance to date into account. If the Retirement and Insurance results were combined, if the market value instead of actuarial value of assets were used, and if a 1.5% annual cost-of-living adjustment for retirement benefits were assumed to be in effect for all future years, then the funding ratio for the combined Retirement and Insurance plans would be lower, as shown in the table below.

System	Reported Funding Ratio	Adjusted Funding Ratio
KERS Non-Hazardous	27.0%	23.4%
KERS Hazardous	68.4	62.4
CERS Non-Hazardous	58.9	53.5
CERS Hazardous	56.6	51.3
SPRS	38.1	34.9

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- Impact of Blended Interest Rates on Insurance Valuations - The June 30, 2011 Insurance Plan valuations recognize the parameters required by GASB Statements No. 43 and 45. One of the parameters is that a blended interest rate must be used when the benefits are not being fully funded. This rate reflects the level of advanced funding that is occurring. Because of the contribution rate shortfall noted above, blended rates were required for KERS Non-Hazardous and SPRS. The rate used for the June 30, 2011 valuation is 4.50% for both KERS Non-Hazardous and SPRS. If KERS Non-Hazardous and SPRS were being fully funded, an interest rate of 7.75% would be used, reducing liabilities and therefore contribution rates. The impact on rates is shown in the table below.

Insurance Plan	"Blended" Contribution Rate	"Full Funding" Contribution Rate
KERS Non-Hazardous	16.52%	11.00%
SPRS	55.93	30.43

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Report on the Annual Valuation of the Kentucky Employees Retirement System

Prepared as of June 30, 2011

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October 31, 2011

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2012. The date of the valuation was June 30, 2011.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

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REPORT ON THE ANNUAL VALUATION OF THE KENTUCKY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2011

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2011, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/2011	6/30/2010	6/30/2011	6/30/2010	6/30/2011	6/30/2010
Contributions for next fiscal year:						
Retirement	28.03%	24.30%	16.16%	14.11%		
Insurance	16.52	16.41	19.73	19.73	N/A	N/A
Total	44.55%	40.71%	35.89%	33.84%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$11,182,142,032	$11,004,795,089	$721,293,444	$688,149,451	$11,903,435,476	$11,692,944,540
Actuarial value of assets	3,726,986,087	4,210,215,585	510,748,505	502,729,009	4,237,734,592	4,712,944,594
Unfunded liability on actuarial value of assets	7,455,155,945	6,794,579,504	210,544,939	185,420,442	7,665,700,884	6,979,999,946
Funded ratio on actuarial value of assets	33.33%	38.26%	70.81%	73.06%	35.60%	40.31%
Market value of assets	$3,538,878,093	$3,503,007,035	$510,628,492	$443,511,663	$4,049,506,585	$3,946,518,698
Unfunded liability on market value of assets	7,643,263,939	7,501,788,054	210,664,952	244,637,788	7,853,928,891	7,746,425,842
Funded ratio on market value of assets	31.65%	31.83%	70.79%	64.45%	34.02%	33.75%
Insurance						
Actuarial accured liability	$4,280,089,633	$4,466,136,041	$507,058,767	$493,297,529	$4,787,148,400	$4,959,433,570
Actuarial value of assets	451,620,442	471,341,628	329,961,615	314,427,296	781,582,057	785,768,924
Unfunded liability on actuarial value of assets	3,828,469,191	3,994,794,413	177,097,152	178,870,233	4,005,566,343	4,173,664,646
Funded ratio on actuarial value of assets	10.55%	10.55%	65.07%	63.74%	16.33%	15.84%
Market value of assets	$433,305,243	$371,002,484	$321,071,515	$271,395,843	$754,376,758	$642,398,327
Unfunded liability on market value of assets	3,846,784,390	4,095,133,557	185,987,252	221,901,686	4,032,771,642	4,317,035,243
Funded ratio on market value of assets	10.12%	8.31%	63.32%	55.02%	15.76%	12.95%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	38,597	37,945	3,064	2,835	41,661	40,780
Number of vested former members	6,265	5,875	334	319	6,599	6,194
Number of former members due a refund	32,332	31,806	2,930	2,836	35,262	34,642
Number of active members	46,617	47,090	4,291	4,291	50,908	51,381
Total salary	$1,731,632,748	$1,815,146,388	$133,053,792	$143,557,944	$1,864,686,540	$1,958,704,332
Average salary	$37,146	$38,546	$31,008	$33,456	$36,629	$38,121

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2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, plan designs have changed for the Health Insurance plans that cover Medicare eligible retirees and non-Medicare eligible retirees. The changes are summarized below.

   - The annual deductible and out-of-pocket maximum have been increased for Plan Year 2012 under the KRS Health Plan Medical Only, from the standard Part B deductible to $500.
   - The prescription drug coverage under the KRS Health Plan Essential for Plan Years 2011 and 2012 have been altered to reflect the same coverage as described in the Standard Medicare Part D benefit parameters.
   - The annual deductible, out-of-pocket maximum and prescription drug co-payments have increased under the KRS Health Plan Premium for Plan Year 2011.
   - Plan design changes have also been implemented for Plan Year 2012 for the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2010 and June 30, 2011 is 4.50% for KERS Non-Hazardous and 7.75% for KERS Hazardous. The lower rate for KERS Non-Hazardous is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

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SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2011 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	46,617	$1,731,632,748	$37,146	43.8	9.4
Hazardous	4,291	133,053,792	31,008	41.3	6.9
Total in KERS	50,908	$1,864,686,540	$36,629	43.5	9.2

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2006	46,707	$1,702,230,777	$36,445	3.7%
6/30/2007	47,913	1,780,223,493	37,155	1.9
6/30/2008	48,085	1,837,873,488	38,221	2.9
6/30/2009	46,060	1,754,412,912	38,090	(0.3)
6/30/2010	47,090	1,815,146,388	38,546	1.2
6/30/2011	46,617	1,731,632,748	37,146	(3.6)

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2006	4,320	$138,747,320	$32,117	4.2%
6/30/2007	4,349	144,838,020	33,304	3.7
6/30/2008	4,393	148,710,060	33,852	1.6
6/30/2009	4,334	146,043,576	33,697	(0.5)
6/30/2010	4,291	143,557,944	33,456	(0.7)
6/30/2011	4,291	133,053,792	31,008	(7.3)

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The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits*	Group Averages Benefit	Age
Retiree	32,693	$745,908,634	$22,816	66.8
Disability	1,813	23,127,998	12,757	64.1
Beneficiary	4,091	52,160,646	12,750	69.8
Total in KERS	38,597	$821,197,278	$21,276	66.9

* Does not include annual benefits for those members included in the Hazardous System who are also receiving a portion of their benefit from the Non Hazardous System

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Age
Retiree	2,652	$42,068,231	$15,863	62.2
Disability	124	988,637	7,973	58.7
Beneficiary	288	2,552,361	8,862	60.5
Total in KERS	3,064	$45,609,229	$14,886	61.9

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This valuation also includes 41,861 inactive members (38,597 Non-Hazardous and 3,264 Hazardous; of which 6,265 Non-Hazardous are vested and 334 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2011 the total market value of assets amounted to $4,803,883,343 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2011

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	$3,538,878,093	$433,305,243	$3,972,183,336
Hazardous	510,628,492	321,071,515	831,700,007
Total	$4,049,506,585	$754,376,758	$4,803,883,343

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $5,019,316,649. Schedule B shows the development of the actuarial value of assets as of June 30, 2011. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	June 30, 2011	June 30, 2010
Retirement		
Non-Hazardous	$ 3,726,986,087	$ 4,210,215,585
Hazardous	510,748,505	502,729,009
Total	$ 4,237,734,592	$ 4,712,944,594
Insurance		
Non-Hazardous	$ 451,620,442	$ 471,341,628
Hazardous	329,961,615	314,427,296
Total	$ 781,582,057	$ 785,768,924
KERS Total		
Non-Hazardous	$ 4,178,606,529	$ 4,681,557,213
Hazardous	840,710,120	817,156,305
Total	$ 5,019,316,649	$ 5,498,713,518

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SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2011. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $13,437,295,219, of which $8,739,190,590 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $233,918,844 is for the prospective benefits payable on account of present inactive members, and $4,464,185,785 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $4,237,734,592 as of June 30, 2011. The difference of $9,199,560,627 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $888,189,011 is the present value of future contributions expected to be made by members, and the balance of $8,311,371,616 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.84% of payroll for non-hazardous members and 6.88% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $645,670,732. When this amount is subtracted from $8,311,371,616, which is the present value of the total future contributions to be made by the employers, there remains $7,665,700,884 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 23.65% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 8.69% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $7,455,155,945 for non-hazardous members and $210,544,939 for hazardous members over 26 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.54% of payroll for non-hazardous members and 0.59% of payroll for hazardous members.

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Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $6,444,139,426, of which $2,564,143,223 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $289,399,616 is for the prospective benefits payable on account of present inactive members, and $3,590,596,587 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $781,582,057 as of June 30, 2011. The difference of $5,662,557,369 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $39,847,795 is the present value of future contributions expected to be made by members, and the balance of $5,622,709,574 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 7.75% of payroll for non-hazardous members and 12.25% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,617,143,231. When this amount is subtracted from $5,622,709,574, which is the present value of the total future contributions to be made by the employers, there remains $4,005,566,343 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 8.50% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 7.31% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $3,828,469,191 for non-hazardous members and $177,097,152 for hazardous members over 26 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.27% of payroll for non-hazardous members and 0.17% of payroll for hazardous members.

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SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2011 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/10	$ 6,794.6	$ 185.4	$ 6,980.0
(2)	Normal cost from last valuation	76.8	10.3	87.1
(3)	Employer contributions	193.8	19.1	212.9
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	525.0	14.4	539.4
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 7,202.6	$ 191.0	$ 7,393.6
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 7,202.6	$ 191.0	$ 7,393.6
(9)	Actual UAAL as of 6/30/11	$ 7,455.2	$ 210.5	$ 7,665.7
(10)	Gain/(loss): (8) - (9)	$ (252.6)	$ (19.5)	$ (272.1)
(11)	Accrued liabilities as of 6/30/10	$ 11,004.8	$ 688.1	$ 11,692.9
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(2.3%)	(2.8%)	(2.3%)

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**Unfunded actuarial accrued liability.*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/10	$ 3,994.8	$ 178.9	$ 4,173.7
(2)	Normal cost from last valuation	145.6	18.5	164.1
(3)	Expected employer contributions	293.6	28.1	321.7
(4)	Interest accrual: Non-Haz: [(1) + (2) - (3)] x .045 Haz: [(1) + (2) - (3)] x .0775	173.1	13.1	186.2
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 4,019.9	$ 182.4	$ 4,202.3
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 4,019.9	$ 182.4	$ 4,202.3
(9)	Actual UAAL as of 6/30/11	$ 3,828.5	$ 177.1	$ 4,005.6
(10)	Gain/(loss): (8) - (9)	$ 191.4	$ 5.3	$ 196.7
(11)	Accrued liabilities as of 6/30/10	$ 4,466.1	$ 493.3	$ 4,959.4
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	4.3%	1.1%	4.0%

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* *Unfunded actuarial accrued liability.*

NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/11	Insurance $ Gain (or Loss) For Year Ending 6/30/11
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (108.3)	$ (47.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(14.2)	2.0
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.9)	(2.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	42.3	26.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	194.1	332.4
New Members. Additional unfunded accrued liability will produce a loss.	(6.2)	(6.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(242.7)	(24.7)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	22.4	41.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(139.1)	(129.7)
Gain (or Loss) During Year From Financial Experience	$ (252.6)	$ 191.4
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (252.6)	$ 191.4

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HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/11	Insurance $ Gain (or Loss) For Year Ending 6/30/11
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (36.4)	$ (21.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.3)	0.7
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.3)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	18.5	7.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	18.6	39.7
New Members. Additional unfunded accrued liability will produce a loss.	(1.2)	(0.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(15.9)	(11.0)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	2.6	10.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(5.5)	(19.1)
Gain (or Loss) During Year From Financial Experience	$ (19.5)	$ 5.3
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (19.5)	$ 5.3

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TOTAL KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/11	Insurance $ Gain (or Loss) For Year Ending 6/30/11
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (144.7)	$ (69.3)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(14.5)	2.7
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.8)	(2.3)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	60.8	33.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	212.7	372.1
New Members. Additional unfunded accrued liability will produce a loss.	(7.4)	(7.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(258.6)	(35.7)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	25.0	51.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(144.6)	(148.8)
Gain (or Loss) During Year From Financial Experience	$ (272.1)	$ 196.7
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (272.1)	$ 196.7

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SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2012/2013 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	139,877,393	8.08%
(2) Disability benefits		10,901,972	0.63
(3) Survivor benefits		2,258,063	0.13
(4) Total	$	153,037,428	8.84%
B. Member Contributions	$	86,581,637	5.00%
C. Employer Normal Cost: [A(4) - B]	$	66,455,791	3.84%
D. Administrative Expenses	$	9,350,817	0.54%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/10 Valuation:	$	347,538,693	20.07%
(2) Change due to:			
a. Active decrements	$	4,008,488	0.23%
b. Pay increases		(10,661,350)	(0.62)
c. Retiree mortality		(1,235,344)	(0.07)
d. Investment return		12,803,687	0.74
e. COLA		6,215,714	0.36
f. Assumption Change		0	0.00
g. Other		50,919,439	2.93
h. Total Change	$	62,050,633	3.58%
(3) UAAL Contribution Based on 6/30/11 Valuation: [E(1) +E(2)h]	$	409,589,326	23.65%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	485,395,934	28.03%

**Based on 27 year amortization of the UAAL from June 30, 2010 and 26 years from June 30, 2011*

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Required Contribution Rates
Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	18,234,022	13.50%
(2) Disability benefits		1,212,846	0.88
(3) Survivor benefits		354,574	0.25
(4) Total	$	19,801,442	14.88%
B. Member Contributions	$	10,644,303	8.00%
C. Employer Normal Cost: [A(4) - B]	$	9,157,139	6.88%
D. Administrative Expenses	$	785,017	0.59%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/10 Valuation:	$	9,207,322	6.92%
(2) Change due to:			
a. Active decrements	$	993,072	0.75%
b. Pay increases		(1,021,656)	(0.77)
c. Retiree mortality		(140,326)	(0.11)
d. Investment return		829,336	0.62
e. COLA		344,218	0.26
f. Assumption Change		0	0.00
g. Other		1,355,460	1.01
h. Total Change	$	2,360,103	1.77%
(3) UAAL Contribution Based on 6/30/11 Valuation: [E(1) +E(2)h]	$	11,567,425	8.69%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	21,509,581	16.16%

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** Based on 27 year amortization of the UAAL from June 30, 2010 and 26 years from June 30, 2011*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	136,651,990	7.89%
B.	Member Contributions*	$	2,424,286	0.14%
C.	Employer Normal Cost: [A - B]	$	134,227,704	7.75%
D.	Administrative Expenses	$	4,666,615	0.27%
E.	Unfunded Actuarial Accrued Liability**:	$	147,248,815	8.50%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	286,143,134	16.52%

**The liabilities are net of retiree contributions towards their healthcare*
*** Based on 26 year amortization of the UAAL from June 30, 2011*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	16,526,329	12.42%
B.	Member Contributions*	$	226,191	0.17%
C.	Employer Normal Cost: [A - B]	$	16,300,138	12.25%
D.	Administrative Expenses	$	222,983	0.17%
E.	Unfunded Actuarial Accrued Liability**:	$	9,729,790	7.31%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	26,252,911	19.73%

**The liabilities are net of retiree contributions towards their healthcare*
*** Based on 26 year amortization of the UAAL from June 30, 2011*

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SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2011

GROUP	NUMBER Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	38,597	3,064	41,661
Terminated employees entitled to benefits but not yet receiving benefits	38,597	3,264	41,861
Active Members	46,617	4,291	50,908
Total	123,811	10,619	134,430

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

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RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2006	$ 5,394,086,323	$ 8,994,826,247	$ 3,600,739,924	60.0%	$ 1,702,230,777	211.5%
6/30/2007	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
6/30/2008	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
6/30/2009	4,794,611,365	10,658,549,532	5,863,938,167	45.0	1,754,412,912	334.2
6/30/2010	4,210,215,585	11,004,795,089	6,794,579,504	38.3	1,815,146,388	374.3
6/30/2011	3,726,986,087	11,182,142,032	7,455,155,945	33.3	1,731,632,748	430.5
Hazardous Members						
6/30/2006	$ 427,984,192	$ 508,655,903	$ 80,671,711	84.1%	$ 138,747,320	58.1%
6/30/2007	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
6/30/2008	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
6/30/2009	502,503,287	674,411,781	171,908,494	74.5	146,043,576	117.7
6/30/2010	502,729,009	688,149,451	185,420,442	73.1	143,557,944	129.2
6/30/2011	510,748,505	721,293,444	210,544,939	70.8	133,053,792	158.2
Total KERS Members						
6/30/2006	$ 5,822,070,515	$ 9,503,482,150	$ 3,681,411,635	61.3%	$ 1,840,978,097	200.0%
6/30/2007	5,864,070,268	10,044,931,606	4,180,861,338	58.4	1,925,061,513	217.2
6/30/2008	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0
6/30/2009	5,297,114,652	11,332,961,313	6,035,846,661	46.7	1,900,456,488	317.6
6/30/2010	4,712,944,594	11,692,944,540	6,979,999,946	40.3	1,958,704,332	356.4
6/30/2011	4,237,734,592	11,903,435,476	7,665,700,884	35.6	1,864,686,540	411.1

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INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2006	$ 611,350,765	$ 7,815,480,774	$ 7,204,130,009	7.8%	$ 1,702,230,777	423.2%
6/30/2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
6/30/2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
6/30/2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
6/30/2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
6/30/2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
Hazardous Members						
6/30/2006	$ 212,833,318	$ 621,237,856	$ 408,404,538	34.3%	$ 138,747,320	294.4%
6/30/2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
6/30/2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
6/30/2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
6/30/2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
6/30/2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
Total KERS Members						
6/30/2006	$ 824,184,083	$ 8,436,718,630	$ 7,612,534,547	9.8%	$ 1,840,978,097	413.5%
6/30/2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
6/30/2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
6/30/2009	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0
6/30/2010	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1
6/30/2011	781,582,057	4,787,148,400	4,005,566,343	16.3	1,864,686,540	214.8

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RETIREMENT BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2006	129,125,800	60,680,607	47.0%
June 30, 2007	176,774,106	88,248,677	49.9
June 30, 2008	264,742,985	104,655,217	39.5
June 30, 2009	294,495,010	112,383,083	38.2
June 30, 2010	348,494,678	144,050,560	41.3
June 30, 2011	381,915,236	193,754,471	50.7
	Hazardous Members		
June 30, 2006	10,787,472	10,803,206	100.1%
June 30, 2007	12,219,689	13,237,321	108.3
June 30, 2008	14,147,341	15,257,079	107.8
June 30, 2009	15,708,254	15,843,289	100.9
June 30, 2010	17,814,630	17,658,058	99.1
June 30, 2011	20,605,070	19,140,508	92.9
	Total KERS Members		
June 30, 2006	139,913,272	71,483,813	51.1%
June 30, 2007	188,993,795	101,485,998	53.7
June 30, 2008	278,890,326	119,912,296	43.0
June 30, 2009	310,203,264	128,226,372	41.3
June 30, 2010	366,309,308	161,708,618	44.1
June 30, 2011	402,520,306	212,894,979	52.9

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INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
		Non-Hazardous Members			
June 30, 2006	$ 202,498,302	$ 0	$ 47,634,639	$ 47,634,639	23.5%
June 30, 2007	219,768,964	10,744,049	64,014,332	74,758,381	34.0
June 30, 2008	558,745,820	6,633,538	56,744,942	63,378,480	11.3
June 30, 2009	362,707,378	8,167,982	74,542,932	82,710,914	22.8
June 30, 2010	376,556,187	8,550,914	93,976,917	102,527,831	27.2
June 30, 2011	294,897,813	0	129,335,552	129,335,552	43.9
		Hazardous Members			
June 30, 2006	$ 28,517,563	$ 0	$ 17,011,745	$ 17,011,745	59.7%
June 30, 2007	31,304,778	104,669	19,534,819	19,639,488	62.7
June 30, 2008	51,214,929	73,891	21,997,341	22,071,232	43.1
June 30, 2009	34,670,467	186,081	20,807,204	20,993,285	60.6
June 30, 2010	35,045,278	319,059	21,921,535	22,240,594	63.5
June 30, 2011	29,585,257	0	19,952,580	19,952,580	67.4
		Total KERS Members			
June 30, 2006	$ 231,015,865	$ 0	$ 64,646,384	$ 64,646,384	28.0%
June 30, 2007	251,073,742	10,848,718	83,549,151	94,397,869	37.6
June 30, 2008	609,960,749	6,707,429	78,742,283	85,449,712	14.0
June 30, 2009	397,377,845	8,354,063	95,350,136	103,704,199	26.1
June 30, 2010	411,601,465	8,869,973	115,898,452	124,768,425	30.3
June 30, 2011	324,483,070	0	149,288,132	149,288,132	46.0

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The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2011. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2011	6/30/2011
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	26 years	26 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	5.0% - 17.0%	5.0% - 21.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2011	6/30/2011
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	26 years	26 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	10.5% - 5.0%	10.5% - 5.0%
Medical Trend Assumption (Post-Medicare)	8.5% - 5.0%	8.5% - 5.0%
Year Ultimate Trend	2019	2019
Actuarial assumptions:		
Investment rate of return*	4.50%	7.75%
*Includes price inflation at	3.50%	3.50%

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SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2011 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2010. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS

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	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 3,726,986,087	$ 4,210,215,585
Prospective contributions		
Member contributions	$ 797,874,166	$ 842,839,073
Employer normal contributions	570,896,611	605,961,561
Unfunded accrued liability contributions	7,455,155,945	6,794,579,504
Total prospective contributions	$ 8,823,926,722	$ 8,243,380,138
Total assets	$ 12,550,912,809	$ 12,453,595,723
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,268,747,284	$ 8,129,008,670
Present value of benefits payable on account of active members	4,068,198,453	4,123,837,921
Present value of benefits payable on account of inactive members	213,967,072	200,749,132
Total liabilities	$ 12,550,912,809	$ 12,453,595,723

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 510,748,505	$ 502,729,009
Prospective contributions		
Member contributions	$ 90,314,845	$ 97,124,570
Employer normal contributions	74,774,121	80,303,469
Unfunded accrued liability contributions	210,544,939	185,420,442
Total prospective contributions	$ 375,633,905	$ 362,848,481
Total assets	$ 886,382,410	$ 865,577,490
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 470,443,306	$ 423,253,307
Present value of benefits payable on account of active members	395,987,332	423,920,249
Present value of benefits payable on account of inactive members	19,951,772	18,403,934
Total liabilities	$ 886,382,410	$ 865,577,490

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VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS

	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 4,237,734,592	$ 4,712,944,594
Prospective contributions		
Member contributions	$ 888,189,011	$ 939,963,643
Employer normal contributions	645,670,732	686,265,030
Unfunded accrued liability contributions	7,665,700,884	6,979,999,946
Total prospective contributions	$ 9,199,560,627	$ 8,606,228,619
Total assets	$ 13,437,295,219	$ 13,319,173,213
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,739,190,590	$ 8,552,261,977
Present value of benefits payable on account of active members	4,464,185,785	4,547,758,170
Present value of benefits payable on account of inactive members	233,918,844	219,153,066
Total liabilities	$ 13,437,295,219	$ 13,319,173,213

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VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 451,620,442	$ 471,341,628
Prospective contributions		
Member contributions	$ 37,443,473	$ 26,873,691
Employer normal contributions	1,489,811,511	1,668,710,243
Unfunded accrued liability contributions	3,828,469,191	3,994,794,413
Total prospective contributions	$ 5,355,724,175	$ 5,690,378,347
Total assets	$ 5,807,344,617	$ 6,161,719,975
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,296,980,336	$ 2,456,024,556
Present value of benefits payable on account of active members	3,239,341,639	3,417,185,921
Present value of benefits payable on account of inactive members	271,022,642	288,509,498
Total liabilities	$ 5,807,344,617	$ 6,161,719,975

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VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 329,961,615	$ 314,427,296
Prospective contributions		
Member contributions	$ 2,404,322	$ 1,629,576
Employer normal contributions	127,331,720	146,536,132
Unfunded accrued liability contributions	177,097,152	178,870,233
Total prospective contributions	$ 306,833,194	$ 327,035,941
Total assets	$ 636,794,809	$ 641,463,237
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 267,162,887	$ 252,518,614
Present value of benefits payable on account of active members	351,254,948	372,952,528
Present value of benefits payable on account of inactive members	18,376,974	15,992,095
Total liabilities	$ 636,794,809	$ 641,463,237

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VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS

	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 781,582,057	$ 785,768,924
Prospective contributions		
Member contributions	$ 39,847,795	$ 28,503,267
Employer normal contributions	1,617,143,231	1,815,246,375
Unfunded accrued liability contributions	4,005,566,343	4,173,664,646
Total prospective contributions	$ 5,662,557,369	$ 6,017,414,288
Total assets	$ 6,444,139,426	$ 6,803,183,212
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,564,143,223	$ 2,708,543,170
Present value of benefits payable on account of active members	3,590,596,587	3,790,138,449
Present value of benefits payable on account of inactive members	289,399,616	304,501,593
Total liabilities	$ 6,444,139,426	$ 6,803,183,212

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The following tables provide the solvency test for non-hazardous and hazardous KERS members.

Solvency Test
Retirement Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2006	$ 866,050,799	$ 5,881,990,853	$ 2,246,784,595	$ 5,394,086,323	100.0%	77.0%	0.0%
6/30/2007	878,842,180	6,437,235,593	2,169,861,504	5,396,782,459	100.0	70.2	0.0
6/30/2008	875,178,068	7,162,496,700	2,092,015,217	5,318,792,893	100.0	62.0	0.0
6/30/2009	793,574,765	8,205,155,691	1,659,819,076	4,794,611,365	100.0	48.8	0.0
6/30/2010	869,484,042	8,329,757,802	1,805,553,245	4,210,215,585	100.0	40.1	0.0
6/30/2011	916,568,932	8,482,714,356	1,782,858,744	3,726,986,087	100.0	33.1	0.0

Solvency Test
Retirement Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2006	$ 87,092,538	$ 262,446,606	$ 159,116,759	$ 427,984,192	100.0%	100.0%	49.3%
6/30/2007	88,670,847	306,492,350	163,829,132	467,287,809	100.0	100.0	44.0
6/30/2008	89,590,638	355,771,877	172,648,312	502,132,214	100.0	100.0	32.9
6/30/2009	87,779,938	413,972,356	172,659,487	502,503,287	100.0	100.0	0.4
6/30/2010	88,511,283	441,657,241	157,980,927	502,729,009	100.0	93.8	0.0
6/30/2011	86,614,205	490,395,078	144,284,161	510,748,505	100.0	86.5	0.0

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Solvency Test
Insurance Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2006	$ 0	$ 3,543,125,375	$ 4,272,355,400	$ 611,350,765	100.0%	17.3%	0.0%
6/30/2007	0	2,569,197,567	2,632,157,488	621,171,658	100.0	24.2	0.0
6/30/2008	0	2,788,189,754	2,643,309,531	603,197,761	100.0	21.6	0.0
6/30/2009	0	2,861,867,088	1,645,458,483	534,172,580	100.0	18.7	0.0
6/30/2010	0	2,744,534,054	1,721,601,987	471,341,628	100.0	17.2	0.0
6/30/2011	0	2,568,002,978	1,712,086,655	451,620,442	100.0	17.6	0.0

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Solvency Test
Insurance Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2006	$ 0	$ 234,058,715	$ 387,179,141	$ 212,833,318	100.0%	90.9%	0.0%
6/30/2007	0	201,189,546	303,653,435	251,536,756	100.0	100.0	16.6
6/30/2008	0	228,834,940	312,822,274	288,161,759	100.0	100.0	19.0
6/30/2009	0	242,123,365	249,008,805	301,634,592	100.0	100.0	23.9
6/30/2010	0	268,510,709	224,786,820	314,427,296	100.0	100.0	20.4
6/30/2011	0	285,539,861	221,518,906	329,961,615	100.0	100.0	20.1

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2010	2011	2012	2013	2014	2015
A.	Actuarial Value Beginning of Year	$ 4,794,611,365	$ 4,210,215,585				
B.	Market Value End of Year	3,503,007,035	3,538,878,093				
C.	Market Value Beginning of Year	3,584,196,429	3,503,007,035				
D.	Cash Flow						
	D1. Contributions	234,830,687	303,633,346				
	D2. Benefit Payments	(834,513,585)	(849,302,748)				
	D3. Administrative Expenses	(8,423,658)	(9,299,947)				
	D4. Investment Expenses	(12,902,243)	(17,600,109)				
	D5. Net	(621,008,799)	(572,569,458)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	539,819,405	608,440,516				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	267,113,337	267,578,092				
	E4. Amount for Phased-In Recognition	272,706,068	340,862,424				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	54,541,214	68,172,485	0	0	0	0
	F2. First Prior Year	(247,227,791)	54,541,214	68,172,485	0	0	0
	F3. Second Prior Year	(129,965,994)	(247,227,791)	54,541,214	68,172,485	0	0
	F4. Third Prior Year	76,241,954	(129,965,994)	(247,227,791)	54,541,214	68,172,485	0
	F5. Fourth Prior Year	15,910,299	76,241,954	(129,965,994)	(247,227,791)	54,541,214	68,172,485
	F6. Total Recognized Investment Gain	(230,500,318)	(178,238,132)	(254,480,086)	(124,514,092)	122,713,699	68,172,485
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 4,210,215,585	$ 3,726,986,087				
H.	Difference Between Market & Actuarial Values	$ (707,208,550)	$ (188,107,994)	$ 66,372,092	$ 190,886,184	$ 68,172,485	$ 0

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The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2010	2011	2012	2013	2014	2015
A.	Actuarial Value Beginning of Year	$ 502,503,287	$ 502,729,009				
B.	Market Value End of Year	443,511,663	510,628,492				
C.	Market Value Beginning of Year	388,913,374	443,511,663				
D.	Cash Flow						
	D1. Contributions	28,768,529	32,099,490				
	D2. Benefit Payments	(39,082,467)	(46,571,518)				
	D3. Administrative Expenses	(737,035)	(783,633)				
	D4. Investment Expenses	(1,479,708)	(2,052,991)				
	D5. Net	(12,530,681)	(17,308,652)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	67,128,970	84,425,481				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	31,192,269	35,833,988				
	E4. Amount for Phased-In Recognition	35,936,701	48,591,493				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	7,187,340	9,718,299	0	0	0	0
	F2. First Prior Year	(24,273,865)	7,187,340	9,718,299	0	0	0
	F3. Second Prior Year	(12,007,500)	(24,273,865)	7,187,340	9,718,299	0	0
	F4. Third Prior Year	8,869,886	(12,007,500)	(24,273,865)	7,187,340	9,718,299	0
	F5. Fourth Prior Year	1,788,273	8,869,886	(12,007,500)	(24,273,865)	7,187,340	9,718,299
	F6. Total Recognized Investment Gain	(18,435,866)	(10,505,840)	(19,375,726)	(7,368,226)	16,905,639	9,718,299
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 502,729,009	$ 510,748,505				
H.	Difference Between Market & Actuarial Values	$ (59,217,346)	$ (120,013)	$ 19,255,713	$ 26,623,939	$ 9,718,299	$ 0

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The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2010	2011	2012	2013	2014	2015
A.	Actuarial Value Beginning of Year	$ 534,172,580	$ 471,341,628				
B.	Market Value End of Year	371,002,484	433,305,243				
C.	Market Value Beginning of Year	365,771,088	371,002,484				
D.	Cash Flow						
	D1. Contributions	116,616,692	155,036,517				
	D2. Benefit Payments	(157,817,320)	(161,804,578)				
	D3. Administrative Expenses	(4,332,929)	(4,666,615)				
	D4. Investment Expenses	(1,138,191)	(1,382,872)				
	D5. Net	(46,671,748)	(12,817,548)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	51,903,144	75,120,307				
	E2. Assumed Rate	4.50%	4.50%				
	E3. Amount for Immediate Recognition	16,573,385	17,820,704				
	E4. Amount for Phased-In Recognition	35,329,759	57,299,603				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	7,065,952	11,459,921	0	0	0	0
	F2. First Prior Year	(35,906,883)	7,065,952	11,459,921	0	0	0
	F3. Second Prior Year	(13,538,974)	(35,906,883)	7,065,952	11,459,921	0	0
	F4. Third Prior Year	6,195,642	(13,538,974)	(35,906,883)	7,065,952	11,459,921	0
	F5. Fourth Prior Year	3,451,674	6,195,642	(13,538,974)	(35,906,883)	7,065,952	11,459,921
	F6. Total Recognized Investment Gain	(32,732,589)	(24,724,342)	(30,919,984)	(17,381,010)	18,525,873	11,459,921
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 471,341,628	$ 451,620,442				
H.	Difference Between Market & Actuarial Values	$ (100,339,144)	$ (18,315,199)	$ 12,604,785	$ 29,985,795	$ 11,459,921	$ 0

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The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2010	2011	2012	2013	2014	2015
A.	Actuarial Value Beginning of Year	$ 301,634,592	$ 314,427,296				
B.	Market Value End of Year	271,395,843	321,071,515				
C.	Market Value Beginning of Year	219,537,255	271,395,843				
D.	Cash Flow						
	D1. Contributions	23,107,913	20,887,821				
	D2. Benefit Payments	(13,455,544)	(15,328,070)				
	D3. Administrative Expenses	(200,324)	(222,983)				
	D4. Investment Expenses	(551,875)	(840,645)				
	D5. Net	8,900,170	4,496,123				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	42,958,418	45,179,549				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	17,932,279	22,080,623				
	E4. Amount for Phased-In Recognition	25,026,139	23,098,926				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	5,005,228	4,619,785	0	0	0	0
	F2. First Prior Year	(16,386,736)	5,005,228	4,619,785	0	0	0
	F3. Second Prior Year	(9,611,455)	(16,386,736)	5,005,228	4,619,785	0	0
	F4. Third Prior Year	5,330,751	(9,611,455)	(16,386,736)	5,005,228	4,619,785	0
	F5. Fourth Prior Year	1,622,467	5,330,751	(9,611,455)	(16,386,736)	5,005,228	4,619,785
	F6. Total Recognized Investment Gain	(14,039,745)	(11,042,427)	(16,373,178)	(6,761,723)	9,625,013	4,619,785
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 314,427,296	$ 329,961,615				
H.	Difference Between Market & Actuarial Values	$ (43,031,453)	$ (8,890,100)	$ 7,483,078	$ 14,244,801	$ 4,619,785	$ 0

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The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for KERS non-hazardous insurance benefits is 4.50%, and the current rate for KERS hazardous insurance benefits is 7.75%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.50% per annum:

Service	Annual Rates of Merit & Seniority		Increase Next Year		
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	12.50%	16.50%	4.50%	17.00%	21.00%
1-2	4.50%	4.50%	4.50%	9.00%	9.00%
2-3	2.00%	2.50%	4.50%	6.50%	7.00%
3-4	1.50%	2.00%	4.50%	6.00%	6.50%
4-5	1.50%	1.50%	4.50%	6.00%	6.00%
5-6	1.50%	1.00%	4.50%	6.00%	5.50%
6-7	1.00%	0.50%	4.50%	5.50%	5.00%
7-8	1.00%	0.50%	4.50%	5.50%	5.00%
8-9	1.00%	0.50%	4.50%	5.50%	5.00%
9-10	0.50%	0.50%	4.50%	5.00%	5.00%
10 & over	0.50%	0.50%	4.50%	5.00%	5.00%

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SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death Male	Death Female	Disability	Service Retirement+	Service Retirement++
20	6.00%	0.03%	0.01%	0.04%		
25	5.08	0.03	0.01	0.05		
30	4.26	0.04	0.02	0.06		
35	3.21	0.04	0.02	0.09		
40	3.00	0.05	0.04	0.13		
45	3.00	0.08	0.05	0.22		
50	3.00	0.13	0.07	0.37		
55	3.00	0.22	0.11	0.61	8.0%	
60	3.00	0.40	0.22	0.97	10.0	10.0%
65		0.73	0.43		22.5	25.0
70		1.19	0.69		22.5	25.0
75					100.0	100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 19.0%, 13.0%, 10.0%, 9.0% and 6.5%, respectively.*
\+ *For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.*
++ *For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 25%.*

Hazardous Members

Age	Withdrawal and Vesting*	Death** Male	Death** Female	Disability	Service Retirement Service	Service Retirement Rate+	Service Retirement Rate++
20	4.00%	0.03%	0.01%	0.05%	20	22.0%	
25	4.00	0.03	0.01	0.07	25	35.0	22.0%
30	3.50	0.04	0.02	0.09	30	38.0	35.0
35	3.00	0.04	0.02	0.13	35	60.0	38.0
40	3.00	0.05	0.04	0.20	40		60.0
45	3.00	0.08	0.05	0.33			
50	3.00	0.13	0.07	0.56			
55	3.00	0.22	0.11	0.92			
60	3.00	0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 26.0%, 11.5%, 8.25%, 7.5% and 7.0%, respectively.*
** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*
\+ *For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.*
++ *For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

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DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006, and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2012	10.5%	8.5%
2013	9.5%	7.5%
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

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HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	90%	100%

HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2011				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$486.40	$749.84	$1,127.80	$1,253.56
Optimum PPO	$650.30	$905.42	$1,405.66	$1,565.88
Capitol Choice	$625.68	$909.02	$1,387.36	$1,537.92

Effective January 1, 2012				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$496.14	$764.68	$1,144.72	$1,272.83
Optimum PPO	$663.30	$922.88	$1,432.36	$1,595.06
Capitol Choice	$638.16	$927.08	$1,414.46	$1,568.06

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MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2012 Available Plan	Self-Supporting Rates (Used for Claims Costs)	Funding Rates (Used for Retiree Contributions)
Kentucky Retirement System Health Plan - Medical Only	$147.30	$147.00
Kentucky Retirement System Health Plan - Essential	$182.41	$171.00
Kentucky Retirement System Health Plan - Premium	$391.35	$372.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted. In addition, the claims costs for the Essential and Premium plans are adjusted to reflect the front end CMS reimbursement of $53.42 per member per month due to the EGWP.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For those members who retired between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

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Non-Hazardous Normal Retirement (continued):

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement:

Age Requirement

55

Service Requirement

At least one month of hazardous duty service credit

Amount

If a member has at least 60 months of service, the monthly benefit is 2.49% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement

60

Service Requirement

At least 60 months of hazardous duty service credit

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Hazardous Normal Retirement (continued):

Amount

The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 55 with 60 months of service or any age with 25 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement

Age 60 with 10 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 50 with 15 years of service or any age with 20 years service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

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Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

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Hazardous Disability (continued):

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

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Vesting (continued):

	Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

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Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

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Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.50 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

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Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.76 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.50 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

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SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2006	2007	2008	2009	2010	2011
			Number			
Beginning of Year	30,770	32,140	33,849	35,307	37,883	37,945
Added	2,481	2,440	2,573	3,465	1,162	1,592
Removed	1,111	731	1,115	889	1,100	940
End of Year	32,140	33,849	35,307	37,883	37,945	38,597
			Annual Allowances			
Beginning of Year	$ 509,347,800	$ 566,167,003	$ 625,435,416	$ 710,505,270	$ 812,559,070	$ 801,881,911
Added	65,942,585	65,965,990	102,305,405	110,700,043	865,483	31,930,847
Removed	9,123,382	6,697,577	17,235,551	8,646,243	11,542,643	12,615,480
End of Year	$ 566,167,003	$ 625,435,416	$ 710,505,270	$ 812,559,070	$ 801,881,911	$ 821,197,278
% Increase in Allowances	11.31%	10.47%	13.60%	14.36%	-1.31%	2.41%
Average Annual Allowance	$ 17,616	$ 18,472	$ 20,124	$ 21,449	$ 21,133	$ 21,276

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Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2006	2007	2008	2009	2010	2011
			Number			
Beginning of Year	1,752	1,980	2,202	2,404	2,648	2,835
Added	256	241	261	339	282	288
Removed	28	19	59	95	95	59
End of Year	1,980	2,202	2,404	2,648	2,835	3,064
			Annual Allowances			
Beginning of Year	$ 19,640,748	$ 23,381,489	$ 27,528,837	$ 33,588,993	$ 38,695,501	$ 41,114,800
Added	3,929,666	4,509,381	6,565,454	5,443,628	3,315,361	5,012,933
Removed	188,829	362,129	505,250	337,120	896,062	518,504
End of Year	$ 23,381,489	$ 27,528,837	$ 33,588,993	$ 38,695,501	$ 41,114,800	$ 45,609,229
% Increase in Allowances	19.05%	17.94%	22.01%	15.20%	6.25%	10.93%
Average Annual Allowance	$ 11,809	$ 12,502	$ 13,972	$ 14,613	$ 14,503	$ 14,886

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Non-Hazardous Retired Lives Summary June 30, 2011

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,258	$ 6,086,752.13	9,261	$ 13,967,882.92	12,519	$ 20,054,635.05
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,800	3,456,247.28	747	920,462.11	2,547	4,376,709.39
66-2/3% to Beneficiary	793	2,314,348.79	398	846,874.31	1,191	3,161,223.10
50% to Beneficiary	1,076	2,725,247.78	1,224	2,541,182.67	2,300	5,266,430.45
Pop-up Option	3,594	8,881,004.22	2,938	5,943,634.56	6,532	14,824,638.78
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	876	1,536,304.24	1,897	2,871,970.91	2,773	4,408,275.15
Social Security Option						
Age 62 Basic	424	1,149,634.17	985	1,972,259.53	1,409	3,121,893.70
Age 62 Survivorship	872	2,178,287.53	581	1,235,877.49	1,453	3,414,165.02
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	377	612,184.51	494	779,872.43	871	1,392,056.94
20 Years Certain & Life	397	852,447.43	467	777,642.53	864	1,630,089.96
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	88	141,562.30	310	460,580.29	398	602,142.59
PLSO 24 Month Basic	41	49,854.98	172	207,026.64	213	256,881.62
PLSO 36 Month Basic	180	154,715.28	430	329,865.64	610	484,580.92
PLSO 12 Month Survivor	119	238,383.60	106	179,041.94	225	417,425.54
PLSO 24 Month Survivor	96	140,254.88	82	117,321.66	178	257,576.54
PLSO 36 Month Survivor	257	277,990.09	166	139,671.18	423	417,661.27
Total	14,248	$ 30,795,219.21	20,258	$ 33,291,166.81	34,506	$ 64,086,386.02

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Hazardous Retired Lives Summary June 30, 2011

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	403	$ 450,772.84	311	$ 312,135.50	714	$ 762,908.34
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	207	241,165.70	19	20,672.43	226	261,838.13
66-2/3% to Beneficiary	76	97,566.70	19	21,363.23	95	118,929.93
50% to Beneficiary	130	190,732.82	40	65,201.75	170	255,934.57
Pop-up Option	649	932,675.91	121	149,262.73	770	1,081,938.64
10 Years Certain	22	32,921.19	5	5,238.89	27	38,160.08
10 Years Certain & Life	102	103,202.74	50	42,260.07	152	145,462.81
Social Security Option						
Age 62 Basic	55	109,097.47	32	55,576.58	87	164,674.05
Age 62 Survivorship	135	325,365.08	16	24,217.87	151	349,582.95
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	48	55,636.56	13	10,901.55	61	66,538.11
20 Years Certain & Life	48	56,828.53	19	29,732.63	67	86,561.16
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	14	13,209.47	15	12,737.48	29	25,946.95
PLSO 24 Month Basic	16	15,780.26	12	10,341.53	28	26,121.79
PLSO 36 Month Basic	48	39,390.07	26	21,584.00	74	60,974.07
PLSO 12 Month Survivor	23	29,467.39	6	5,074.73	29	34,542.12
PLSO 24 Month Survivor	22	29,569.11	9	10,866.16	31	40,435.27
PLSO 36 Month Survivor	50	49,104.59	15	18,418.77	65	67,523.36
Total	2,048	$ 2,772,486.43	728	$ 815,585.90	2,776	$ 3,588,072.33

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Non-Hazardous Beneficiary Lives Summary June 30, 2011

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	9	$ 5,012.19	17	$ 19,057.68	26	$ 24,069.87
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	252	270,966.04	1,538	1,486,188.33	1,790	1,757,154.37
66-2/3% to Beneficiary	35	39,266.45	302	275,776.93	337	315,043.38
50% to Beneficiary	100	65,286.39	461	282,957.52	561	348,243.91
Pop-up Option	95	133,541.81	416	564,670.11	511	698,211.92
10 Years Certain	66	82,208.60	77	78,156.31	143	160,364.91
10 Years Certain & Life	27	32,590.21	33	52,234.34	60	84,824.55
Social Security Option						
Age 62 Basic	1	268.12	8	15,164.86	9	15,432.98
Age 62 Survivorship	48	78,782.00	227	390,649.74	275	469,431.74
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	7	3,171.08	7	3,171.08
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	5	3,269.00	8	9,010.22	13	12,279.22
15 Years Certain & Life	23	34,093.26	57	89,592.04	80	123,685.30
20 Years Certain & Life	30	36,537.00	73	114,970.52	103	151,507.52
5 Years Certain	49	55,210.41	44	44,333.53	93	99,543.94
PLSO 12 Month Basic	0	0.00	1	1,765.12	1	1,765.12
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	3,307.78	2	3,307.78
PLSO 12 Month Survivor	3	3,286.21	7	7,795.82	10	11,082.03
PLSO 24 Month Survivor	6	7,054.26	13	10,021.96	19	17,076.22
PLSO 36 Month Survivor	13	11,773.65	38	38,751.04	51	50,524.69
Total	762	$ 859,145.60	3,329	$ 3,487,574.93	4,091	$ 4,346,720.53

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Hazardous Beneficiary Lives Summary June 30, 2011

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2	$ 1,036.37	4	$ 1,796.00	6	$ 2,832.37
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	8	3,108.56	109	80,559.43	117	83,667.99
66-2/3% to Beneficiary	0	0.00	13	6,071.61	13	6,071.61
50% to Beneficiary	1	452.06	19	7,141.52	20	7,593.58
Pop-up Option	10	6,181.25	44	25,709.85	54	31,891.10
10 Years Certain	3	4,536.47	14	16,954.20	17	21,490.67
10 Years Certain & Life	1	1,136.98	3	1,761.98	4	2,898.96
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	1	386.56	20	32,546.79	21	32,933.35
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	1	258.67	3	2,120.01	4	2,378.68
15 Years Certain & Life	2	850.63	2	830.85	4	1,681.48
20 Years Certain & Life	0	0.00	6	2,294.48	6	2,294.48
5 Years Certain	5	1,902.02	4	5,035.65	9	6,937.67
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	368.70	2	368.70
PLSO 12 Month Survivor	0	0.00	1	1,040.38	1	1,040.38
PLSO 24 Month Survivor	0	0.00	1	778.27	1	778.27
PLSO 36 Month Survivor	2	695.84	7	7,141.66	9	7,837.50
Total	36	$ 20,545.41	252	$ 192,151.38	288	$ 212,696.79

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Non-Hazardous Members
Retired and Beneficiary Information June 30, 2011
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	79	$ 1,833,529	37	$ 372,583	96	$ 819,423	212	$ 3,025,536
45-49	627	$ 16,736,135	92	$ 1,376,449	64	$ 1,140,499	783	$ 19,253,083
50-54	2,494	$ 79,961,618	172	$ 2,218,017	118	$ 1,621,941	2,784	$ 83,801,576
55-59	4,958	$ 151,504,659	292	$ 4,557,342	237	$ 3,958,183	5,487	$ 160,020,184
60-64	6,951	$ 188,054,798	362	$ 4,821,282	315	$ 6,192,537	7,628	$ 199,068,617
65-69	6,084	$ 130,398,054	314	$ 3,655,876	387	$ 6,731,229	6,785	$ 140,785,159
70-74	4,309	$ 78,256,320	281	$ 3,352,433	449	$ 6,345,917	5,039	$ 87,954,670
75-79	3,022	$ 46,161,266	155	$ 1,728,870	517	$ 7,480,125	3,694	$ 55,370,261
80-84	2,212	$ 31,544,425	68	$ 717,037	505	$ 7,006,359	2,785	$ 39,267,822
85-89	1,319	$ 15,607,914	30	$ 267,287	567	$ 5,565,143	1,916	$ 21,440,343
90 & Over	638	$ 5,849,916	10	$ 60,823	836	$ 5,299,290	1,484	$ 11,210,029
Totals	32,693	$ 745,908,634	1,813	$ 23,127,998	4,091	$ 52,160,646	38,597	$ 821,197,278

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Hazardous Members
Retired and Beneficiary Information June 30, 2011
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	39	$ 895,001	7	$ 60,247	24	$ 157,784	70	$ 1,113,032
45-49	169	$ 3,559,672	15	$ 125,318	6	$ 87,833	190	$ 3,772,823
50-54	277	$ 5,881,940	15	$ 151,359	19	$ 210,549	311	$ 6,243,847
55-59	482	$ 9,079,870	26	$ 254,952	31	$ 298,228	539	$ 9,633,049
60-64	713	$ 11,819,920	32	$ 265,435	39	$ 363,399	784	$ 12,448,754
65-69	498	$ 6,296,545	12	$ 73,342	42	$ 378,333	552	$ 6,748,220
70-74	253	$ 2,778,790	7	$ 20,893	35	$ 349,519	295	$ 3,149,202
75-79	148	$ 1,119,373	8	$ 30,599	41	$ 296,789	197	$ 1,446,761
80-84	60	$ 400,614	2	$ 6,492	28	$ 196,726	90	$ 603,832
85-89	11	$ 192,595			14	$ 77,610	25	$ 270,205
90 & Over	2	$ 43,912			9	$ 135,591	11	$ 179,503
Totals	2,652	$ 42,068,231	124	$ 988,637	288	$ 2,552,361	3,064	$ 45,609,229

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Total Non-Hazardous Active Members as of June 30, 2011
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	16								16
Avg Pay	$14,393								$14,393
20-24	1,199	95							1,294
Avg Pay	$24,147	$31,998							$24,723
25-29	3,353	804	28						4,185
Avg Pay	$27,718	$31,700	$32,317						$28,514
30-34	2,683	2,084	726	19					5,512
Avg Pay	$30,319	$35,398	$36,066	$39,947					$33,029
35-39	3,309	1,731	1,668	403	32				7,143
Avg Pay	$29,101	$37,468	$40,153	$42,784	$47,339				$34,563
40-44	1,844	1,401	1,520	1,060	595	75			6,495
Avg Pay	$32,170	$38,744	$40,646	$45,244	$45,919	$53,458			$39,211
44-49	1,568	1,366	1,229	841	958	340	237	40	6,579
Avg Pay	$31,746	$37,523	$42,125	$45,425	$48,098	$50,973	$55,219	$54,734	$40,993
50-54	1,412	1,270	1,244	760	836	333	160	92	6,107
Avg Pay	$32,582	$37,304	$39,675	$43,993	$46,801	$50,350	$52,830	$61,416	$40,309
55-59	1,056	1,037	1,079	690	643	224	138	111	4,978
Avg Pay	$34,269	$36,159	$39,615	$42,071	$46,625	$50,840	$54,370	$65,271	$40,493
60-64	572	718	692	482	402	175	67	65	3,173
Avg Pay	$36,297	$38,104	$40,162	$44,981	$44,974	$45,101	$51,080	$57,977	$41,209
65-69	125	209	209	120	104	28	20	12	827
Avg Pay	$41,936	$36,720	$42,569	$45,732	$46,386	$49,729	$66,082	$78,290	$43,264
70 & over	53	53	76	59	45	7	2	13	308
Avg Pay	$38,630	$34,381	$33,773	$40,937	$47,934	$52,539	$33,138	$80,757	$40,560
Totals	17,190	10,768	8,471	4,434	3,615	1,182	624	333	46,617
Avg Pay	$30,198	$36,629	$40,016	$44,251	$46,772	$50,040	$54,252	$62,590	$37,146

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Total Hazardous Active Members as of June 30, 2011
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	155	5							160
Avg Pay	$23,388	$25,668							$23,459
25-29	429	77							506
Avg Pay	$26,018	$28,920							$26,460
30-34	333	223	41						597
Avg Pay	$26,749	$30,495	$32,239						$28,526
35-39	433	193	148	27					801
Avg Pay	$23,625	$32,474	$36,635	$37,757					$28,637
40-44	203	174	131	100	21				629
Avg Pay	$27,584	$32,663	$36,739	$40,306	$45,783				$33,526
44-49	170	138	103	71	40	1			523
Avg Pay	$26,268	$32,025	$37,581	$40,084	$44,233	$43,476			$33,297
50-54	123	117	97	54	51	1		1	444
Avg Pay	$27,657	$32,847	$37,215	$41,549	$48,484	$66,816		$63,936	$35,364
55-59	106	96	76	46	25	1	1		351
Avg Pay	$27,148	$30,283	$37,408	$41,153	$41,813	$43,668	$56,808		$33,238
60-64	48	80	54	26	17	2		1	228
Avg Pay	$32,072	$32,119	$39,671	$39,157	$46,172	$58,746		$71,064	$36,153
65-69	7	18	8	6	2				41
Avg Pay	$30,706	$31,399	$39,405	$53,966	$41,184				$36,623
70 & over	4	1	4	1	1				11
Avg Pay	$23,505	$4,944	$37,419	$29,868	$49,992				$29,864
Totals	2,011	1,122	662	331	157	5	1	2	4,291
Avg Pay	$25,916	$31,565	$36,990	$40,497	$45,644	$54,290	$56,808	$67,500	$31,008

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Report on the Annual Valuation of the County Employees Retirement System

Prepared as of June 30, 2011

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October 31, 2011

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2012. The date of the valuation was June 30, 2011.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

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REPORT ON THE ANNUAL VALUATION OF THE COUNTY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2011

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2011, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/2011	6/30/2010	6/30/2011	6/30/2010	6/30/2011	6/30/2010
Contributions for next fiscal year:						
Retirement	12.62%	11.70%	20.10%	17.91%		
Insurance	8.59	9.59	21.84	23.74	N/A	N/A
Total	21.21%	21.29%	41.94%	41.65%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$8,918,085,025	$8,459,022,280	$2,859,041,052	$2,672,151,907	$11,777,126,077	$11,131,174,187
Actuarial value of assets	$5,629,611,183	$5,546,857,291	$1,779,545,393	$1,749,464,388	$7,409,156,576	$7,296,321,679
Unfunded liability on actuarial value of assets	$3,288,473,842	$2,912,164,989	$1,079,495,659	$922,687,519	$4,367,969,501	$3,834,852,508
Funded ratio on actuarial value of assets	63.13%	65.57%	62.24%	65.47%	62.91%	65.55%
Market value of assets	$5,577,252,295	$4,819,933,717	$1,760,602,934	$1,506,787,429	$7,337,855,229	$6,326,721,146
Unfunded liability on market value of assets	$3,340,832,730	$3,639,088,563	$1,098,438,118	$1,165,364,478	$4,439,270,848	$4,804,453,041
Funded ratio on market value of assets	62.54%	56.98%	61.58%	56.39%	62.31%	56.84%
Insurance						
Actuarial accured liability	$3,073,973,205	$3,158,340,174	$1,647,702,755	$1,674,703,216	$4,721,675,960	$4,833,043,390
Actuarial value of assets	$1,433,450,793	$1,293,038,593	$770,790,274	$692,769,770	$2,204,241,067	$1,985,808,363
Unfunded liability on actuarial value of assets	$1,640,522,412	$1,865,301,581	$876,912,481	$981,933,446	$2,517,434,893	$2,847,235,027
Funded ratio on actuarial value of assets	46.63%	40.94%	46.78%	41.37%	46.68%	41.09%
Market value of assets	$1,451,984,026	$1,096,581,872	$774,509,101	$586,826,965	$2,226,493,127	$1,683,408,837
Unfunded liability on market value of assets	$1,621,989,179	$2,061,758,302	$873,193,654	$1,087,876,251	$2,495,182,833	$3,149,634,553
Funded ratio on market value of assets	47.23%	34.72%	47.01%	35.04%	47.15%	34.83%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	43,211	41,038	6,468	6,068	49,679	47,106
Number of vested former members	9,902	9,430	580	545	10,482	9,975
Number of former members due a refund	56,012	54,574	2,194	2,086	58,206	56,660
Number of active members	85,285	84,681	9,407	9,562	94,692	94,243
Total salary	$2,276,595,948	$2,236,855,380	$466,963,860	$466,548,660	$2,743,559,808	$2,703,404,040
Average salary	$26,694	$26,415	$49,640	$48,792	$28,974	$28,685

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2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, plan designs have changed for the Health Insurance plans that cover Medicare eligible retirees and non-Medicare eligible retirees. The changes are summarized below.

    - The annual deductible and out-of-pocket maximum have been increased for Plan Year 2012 under the KRS Health Plan Medical Only, from the standard Part B deductible to $500.
    - The prescription drug coverage under the KRS Health Plan Essential for Plan Years 2011 and 2012 have been altered to reflect the same coverage as described in the Standard Medicare Part D benefit parameters.
    - The annual deductible, out-of-pocket maximum and prescription drug co-payments have increased under the KRS Health Plan Premium for Plan Year 2011.
    - Plan design changes have also been implemented for Plan Year 2012 for the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

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SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2011 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	85,285	$2,276,595,948	$26,694	46.8	9.0
Hazardous	9,407	466,963,860	49,640	39.1	9.5
Total in CERS	94,692	$2,743,559,808	$28,974	46.0	9.0

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2006	83,694	$1,982,437,473	$23,687	2.1%
6/30/2007	84,920	2,076,848,328	24,457	3.3
6/30/2008	85,221	2,166,612,648	25,423	3.9
6/30/2009	83,724	2,183,611,848	26,081	2.6
6/30/2010	84,681	2,236,855,380	26,415	1.3
6/30/2011	85,285	2,276,595,948	26,694	1.1

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2006	9,635	$426,927,550	$44,310	2.0%
6/30/2007	10,063	458,998,956	45,613	2.9
6/30/2008	10,173	474,241,332	46,618	2.2
6/30/2009	9,757	469,315,464	48,100	3.2
6/30/2010	9,562	466,548,660	48,792	1.4
6/30/2011	9,407	466,963,860	49,640	1.7

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The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	36,109	$415,638,650	$11,511	68.8
Disability	3,167	34,959,669	11,039	64.0
Beneficiary	3,935	32,995,749	8,385	67.2
Total in CERS	43,211	$483,594,068	$11,191	68.3

* Does not include annual benefits for those members included in the Hazardous System who are also receiving a portion of their benefit from the Non Hazardous System

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	5,346	$143,857,251	$26,909	60.1
Disability	429	6,767,929	15,776	54.1
Beneficiary	693	9,634,215	13,902	53.5
Total in CERS	6,468	$160,259,395	$24,777	59.0

This valuation also includes 68,688 inactive members (65,914 Non-Hazardous and 2,774 Hazardous; of which 9,902 Non-Hazardous are vested and 580 Hazardous are vested).

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SECTION III – ASSETS

1. As of June 30, 2011 the total market value of assets amounted to $9,564,348,356 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2011

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	$5,577,252,295	$1,451,984,026	$7,029,236,321
Hazardous	1,760,602,934	774,509,101	2,535,112,035
Total	$7,337,855,229	$2,226,493,127	$9,564,348,356

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $9,613,397,643. Schedule B shows the development of the actuarial value of assets as of June 30, 2011. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2011	JUNE 30, 2010
Retirement		
Non-Hazardous	$ 5,629,611,183	$ 5,546,857,291
Hazardous	1,779,545,393	1,749,464,388
Total	$ 7,409,156,576	$ 7,296,321,679
Insurance		
Non-Hazardous	$ 1,433,450,793	$ 1,293,038,593
Hazardous	770,790,274	692,769,770
Total	$ 2,204,241,067	$ 1,985,808,363
CERS Total		
Non-Hazardous	$ 7,063,061,976	$ 6,839,895,884
Hazardous	2,550,335,667	2,442,234,158
Total	$ 9,613,397,643	$ 9,282,130,042

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SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2011. Separate balance sheets are shown for each employee group as well as in total for all groups.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $14,041,344,597, of which $6,602,002,250 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $376,293,219 is for the prospective benefits payable on account of inactive members and $7,063,049,128 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $7,409,156,576 as of June 30, 2011. The difference of $6,632,188,021 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $1,275,868,432 is the present value of future contributions expected to be made by members, and the balance of $5,356,319,589 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 4.00% of payroll for non-hazardous members and 7.12% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $988,350,088. When this amount is subtracted from $5,356,319,589, which is the present value of the total future contributions to be made by the employers, there remains $4,367,969,501 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 7.94% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 12.70% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $3,288,473,842 for non-hazardous members and $1,079,495,659 for hazardous members over 26 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.

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5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.68% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.28% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $5,970,242,133, of which $1,980,403,714 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $252,035,828 is for the prospective benefits payable on account of inactive members and $3,737,802,591 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $2,204,241,067 as of June 30, 2011. The difference of $3,766,001,066 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $37,297,885 is the present value of future contributions expected to be made by members, and the balance of $3,728,703,181 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 4.42% of payroll for non-hazardous members and 11.40% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,211,268,288. When this amount is subtracted from $3,728,703,181, which is the present value of the total future contributions to be made by the employers, there remains $2,517,434,893 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 3.96% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 10.32% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $1,640,522,412 for non-hazardous members and $876,912,481 for hazardous members over 26 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.21% of payroll for non-hazardous employees and 0.12% of payroll for hazardous employees.

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SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2011 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/10	$ 2,912.2	$ 922.7	$ 3,834.9
(2)	Normal cost from last valuation	105.6	34.1	139.7
(3)	Employer contributions	248.5	85.1	333.6
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	224.3	70.9	295.2
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 2,993.6	$ 942.6	$ 3,936.2
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 2,993.6	$ 942.6	$ 3,936.2
(9)	Actual UAAL as of 6/30/11	$ 3,288.5	$ 1,079.5	$ 4,368.0
(10)	Gain/(loss): (8) - (9)	$ (294.9)	$ (136.9)	$ (431.8)
(11)	Accrued liabilities as of 6/30/10	$ 8,459.0	$ 2,672.2	$ 11,131.2
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(3.5)%	(5.1)%	(3.9)%

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**Unfunded actuarial accrued liability.*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/10	$ 1,865.3	$ 981.9	$ 2,847.2
(2)	Normal cost from last valuation	110.0	57.6	167.6
(3)	Expected employer contributions	210.0	110.2	320.2
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	136.8	72.0	208.8
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 1,902.1	$ 1,001.3	$ 2,903.4
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(9)	Expected UAAL after changes: (5) + (6) + (7)	$ 1,902.1	$ 1,001.3	$ 2,903.4
(10)	Actual UAAL as of 6/30/11	$ 1,640.5	$ 876.9	$ 2,517.4
(11)	Gain/(loss): (8) - (9)	$ 261.6	$ 124.4	$ 386.0
(12)	Accrued liabilities as of 6/30/10	$ 3,158.3	$ 1,674.7	$ 4,833.0
(13)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	8.3 %	7.4 %	8.0 %

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* *Unfunded actuarial accrued liability.*

NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/11	Insurance $ Gain (or Loss) For Year Ending 6/30/11
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (144.9)	$ (12.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(23.1)	4.4
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.4)	(2.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	52.5	18.0
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	74.6	243.0
New Members. Additional unfunded accrued liability will produce a loss.	(12.5)	(8.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(230.0)	(28.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	19.9	33.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(30.0)	14.3
Gain (or Loss) During Year From Financial Experience	$ (294.9)	$ 261.6
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (294.9)	$ 261.6

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HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/11	Insurance $ Gain (or Loss) For Year Ending 6/30/11
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (72.2)	$ (41.2)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(2.3)	(0.1)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	30.4	18.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	17.6	130.5
New Members. Additional unfunded accrued liability will produce a loss.	(3.9)	(4.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(73.1)	(18.0)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	1.9	27.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(35.4)	12.7
Gain (or Loss) During Year From Financial Experience	$ (136.9)	$ 124.4
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (136.9)	$ 124.4

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TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/11	Insurance $ Gain (or Loss) For Year Ending 6/30/11
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (217.1)	$ (53.3)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(25.4)	4.3
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.3)	(3.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	82.9	36.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	92.2	373.5
New Members. Additional unfunded accrued liability will produce a loss.	(16.4)	(12.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(303.1)	(46.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	21.8	60.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(65.4)	27.0
Gain (or Loss) During Year From Financial Experience	$ (431.8)	$ 386.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (431.8)	$ 386.0

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SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2012/2013 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for		Amount	% of Payroll
A.	Normal Cost:		
	(1) Service retirement benefits	$ 186,431,877	7.94%
	(2) Disability benefits	15,202,054	0.65
	(3) Survivor benefits	3,260,611	0.13
	(4) Total	$ 204,894,542	9.00%
B.	Member Contributions	$ 113,829,797	5.00%
C.	Employer Normal Cost: [A(4) - B]	$ 91,064,745	4.00%
D.	Administrative Expenses	$ 15,480,852	0.68%
E.	Unfunded Actuarial Accrued Liability Contributions*:		
	(1) UAAL Contribution Based on 6/30/10 Valuation:	$ 158,906,397	6.98%
	(2) Change due to:		
	a. Active decrements	$ 5,701,354	0.25%
	b. Pay increases	(4,099,113)	(0.18)
	c. Retiree mortality	(1,053,178)	(0.05)
	d. Investment return	11,746,405	0.52
	e. COLA	3,382,550	0.15
	f. Assumption Change	0	0.00
	g. Other	6,085,687	0.27
	h. Total Change	$ 21,763,705	0.96%
	(3) UAAL Contribution Based on 6/30/11 Valuation: [E(1) +E(2)h]	$ 180,670,102	7.94%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$** 287,215,699	12.62%

** Based on 27 year amortization of the UAAL from June 30, 2010 and 26 years from June 30, 2011*

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Required Contribution Rates
Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	66,149,845	13.95%
(2) Disability benefits		3,516,023	0.75
(3) Survivor benefits		955,981	0.21
(4) Total	$	70,621,849	15.12%
B. Member Contributions	$	37,357,109	8.00%
C. Employer Normal Cost: [A(4) - B]	$	33,264,740	7.12%
D. Administrative Expenses	$	1,307,499	0.28%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/10 Valuation:	$	49,498,169	10.60%
(2) Change due to:			
a. Active decrements	$	2,418,619	0.52%
b. Pay increases		(967,982)	(0.21)
c. Retiree mortality		(103,198)	(0.02)
d. Investment return		3,943,357	0.84
e. COLA		1,311,041	0.28
f. Assumption Change		0	0.00
g. Other		3,207,928	0.67
h. Total Change	$	9,809,765	2.10%
(3) UAAL Contribution Based on 6/30/11 Valuation: [E(1) +E(2)h]	$	59,307,934	12.70%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	93,880,173	20.10%

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** Based on 27 year amortization of the UAAL from June 30, 2010 and 26 years from June 30, 2011*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	103,854,606	4.56%
B.	Member Contributions*	$	3,187,234	0.14%
C.	Employer Normal Cost: [A - B]	$	100,667,372	4.42%
D.	Administrative Expenses	$	4,762,524	0.21%
E.	Unfunded Actuarial Accrued Liability**:	$	90,130,974	3.96%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	195,560,870	8.59%

**The liabilities are net of retiree contributions toward their healthcare*
*** Based on 26 year amortization of the UAAL from June 30, 2011*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	53,672,815	11.49%
B.	Member Contributions*	$	420,267	0.09%
C.	Employer Normal Cost: [A - B]	$	53,252,548	11.40%
D.	Administrative Expenses	$	580,193	0.12%
E.	Unfunded Actuarial Accrued Liability**:	$	48,177,931	10.32%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	102,010,672	21.84%

**The liabilities are net of retiree contributions toward their healthcare*
*** Based on 26 year amortization of the UAAL from June 30, 2011*

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SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2011

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	43,211	6,468	49,679
Terminated employees entitled to benefits but not yet receiving benefits	65,914	2,774	68,688
Active Members	85,285	9,407	94,692
Total	194,410	18,649	213,059

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Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2006	$ 5,162,894,136	$ 6,179,569,267	$ 1,016,675,131	83.6%	$ 1,982,437,473	51.3%
6/30/2007	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
6/30/2008	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
6/30/2009	5,650,789,991	7,912,913,512	2,262,123,521	71.4	2,183,611,848	103.6
6/30/2010	5,546,857,291	8,459,022,280	2,912,164,989	65.6	2,236,855,380	130.2
6/30/2011	5,629,611,183	8,918,085,025	3,288,473,842	63.1	2,276,595,948	144.4
Hazardous Members						
6/30/2006	$ 1,515,075,017	$ 2,020,142,770	$ 505,067,753	75.0%	$ 426,927,550	118.3%
6/30/2007	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
6/30/2008	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
6/30/2009	1,751,487,540	2,578,444,600	826,957,060	67.9	469,315,464	176.2
6/30/2010	1,749,464,388	2,672,151,907	922,687,519	65.5	466,548,660	197.8
6/30/2011	1,779,545,393	2,859,041,052	1,079,495,659	62.2	466,963,860	231.2
Total CERS Members						
6/30/2006	$ 6,677,969,153	$ 8,199,712,037	$ 1,521,742,884	81.4%	$ 2,409,365,023	63.2%
6/30/2007	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4
6/30/2008	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3
6/30/2009	7,402,277,531	10,491,358,112	3,089,080,581	70.6	2,652,927,312	116.4
6/30/2010	7,296,321,679	11,131,174,187	3,834,852,508	65.5	2,703,404,040	141.9
6/30/2011	7,409,156,576	11,777,126,077	4,367,969,501	62.9	2,743,559,808	159.2

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INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2006	$ 777,726,590	$ 4,607,223,639	$ 3,829,497,049	16.9%	$ 1,982,437,473	193.2%
6/30/2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
6/30/2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
6/30/2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
6/30/2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
6/30/2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
Hazardous Members						
6/30/2006	$ 422,785,042	$ 1,928,481,371	$ 1,505,696,329	21.9%	$ 426,927,550	352.7%
6/30/2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
6/30/2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
6/30/2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
6/30/2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
6/30/2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
Total CERS Members						
6/30/2006	$ 1,200,511,632	$ 6,535,705,010	$ 5,335,193,378	18.4%	$ 2,409,365,023	221.4%
6/30/2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
6/30/2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
6/30/2009	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4
6/30/2010	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3
6/30/2011	2,204,241,067	4,721,675,960	2,517,434,893	46.7	2,743,559,808	91.8

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RETIREMENT BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2006	$ 83,123,669	$ 90,834,052	109.3%
June 30, 2007	112,508,305	124,260,850	110.4
June 30, 2008	138,311,398	150,925,334	109.1
June 30, 2009	161,097,151	179,284,551	111.3
June 30, 2010	186,724,383	207,075,842	110.9
June 30, 2011	218,984,628	248,518,574	113.5
	Hazardous Members		
June 30, 2006	$ 44,059,404	$ 49,976,485	113.4%
June 30, 2007	53,889,838	61,553,118	114.2
June 30, 2008	64,082,063	72,154,734	112.6
June 30, 2009	69,056,365	78,151,677	113.2
June 30, 2010	76,390,669	82,887,128	108.5
June 30, 2011	78,795,602	85,078,181	108.0
	Total CERS Members		
June 30, 2006	$ 127,183,073	$ 140,810,537	110.7%
June 30, 2007	166,398,143	185,813,968	111.7
June 30, 2008	202,393,461	223,080,068	110.2
June 30, 2009	230,153,516	257,436,228	111.9
June 30, 2010	263,115,052	289,962,970	110.2
June 30, 2011	297,780,230	333,596,755	112.0

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INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
		Non-Hazardous Members			
June 30, 2006	$ 272,942,757	$ 0	$ 128,867,817	$ 128,867,817	47.2%
June 30, 2007	285,600,490	9,623,431	147,608,801	157,232,232	55.1
June 30, 2008	406,541,729	6,003,181	196,110,111	202,113,292	49.7
June 30, 2009	264,733,532	7,623,628	123,852,611	131,476,239	49.7
June 30, 2010	266,331,326	9,156,991	166,607,097	175,764,088	66.0
June 30, 2011	213,429,424	0	186,885,576	186,885,576	87.6
		Hazardous Members			
June 30, 2006	$ 98,297,535	$ 0	$ 64,853,778	$ 64,853,778	66.0%
June 30, 2007	115,938,899	656,523	70,072,785	70,729,308	61.0
June 30, 2008	168,723,639	419,774	90,113,200	90,532,974	53.7
June 30, 2009	126,757,348	627,938	70,785,241	71,413,179	56.3
June 30, 2010	129,227,449	1,493,440	83,042,875	84,536,315	65.4
June 30, 2011	109,226,667	0	98,592,286	98,592,286	90.3
		Total CERS Members			
June 30, 2006	$ 371,240,292	$ 0	$ 193,721,595	$ 193,721,595	52.2%
June 30, 2007	401,539,389	10,279,954	217,681,586	227,961,540	56.8
June 30, 2008	575,265,368	6,422,955	286,223,311	292,646,266	50.9
June 30, 2009	391,490,880	8,251,566	194,637,852	202,889,418	51.8
June 30, 2010	395,558,775	10,650,431	249,649,972	260,300,403	65.8
June 30, 2011	322,656,091	0	285,477,862	285,477,862	88.5

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The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2011. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2011	6/30/2011
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	26 years	26 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	4.75% - 13.0%	4.5% - 20.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2011	6/30/2011
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	26 years	26 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption (Pre-Medicare)	10.5% - 5.0%	10.5% - 5.0%
Medical Trend Assumption (Post-Medicare)	8.5% - 5.0%	8.5% - 5.0%
Year Ultimate Trend	2019	2019
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes price inflation at	3.50%	3.50%

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SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2011 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2010. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS

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	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 5,629,611,183	$ 5,546,857,291
Prospective contributions		
Member contributions	$ 952,686,879	$ 938,666,730
Employer normal contributions	709,345,099	723,714,570
Unfunded accrued liability contributions	3,288,473,842	2,912,164,989
Total prospective contributions	$ 4,950,505,820	$ 4,574,546,289
Total assets	$ 10,580,117,003	$ 10,121,403,580
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 4,864,821,271	$ 4,568,443,463
Present value of benefits payable on account of active members	5,370,333,079	5,230,744,503
Present value of benefits payable on account of inactive members	344,962,653	322,215,614
Total liabilities	$ 10,580,117,003	$ 10,121,403,580

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 1,779,545,393	$ 1,749,464,388
Prospective contributions		
Member contributions	$ 323,181,553	$ 326,890,693
Employer normal contributions	279,004,989	283,491,550
Unfunded accrued liability contributions	1,079,495,659	922,687,519
Total prospective contributions	$ 1,681,682,201	$ 1,533,069,762
Total assets	$ 3,461,227,594	$ 3,282,534,150
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,737,180,979	$ 1,594,588,758
Present value of benefits payable on account of active members	1,692,716,049	1,659,849,695
Present value of benefits payable on account of inactive members	31,330,566	28,095,697
Total liabilities	$ 3,461,227,594	$ 3,282,534,150

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VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS

	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 7,409,156,576	$ 7,296,321,679
Prospective contributions		
Member contributions	$ 1,275,868,432	$ 1,265,557,423
Employer normal contributions	988,350,088	1,007,206,120
Unfunded accrued liability contributions	4,367,969,501	3,834,852,508
Total prospective contributions	$ 6,632,188,021	$ 6,107,616,051
Total assets	$ 14,041,344,597	$ 13,403,937,730
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 6,602,002,250	$ 6,163,032,221
Present value of benefits payable on account of active members	7,063,049,128	6,890,594,198
Present value of benefits payable on account of inactive members	376,293,219	350,311,311
Total liabilities	$ 14,041,344,597	$ 13,403,937,730

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VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 1,433,450,793	$ 1,293,038,593
Prospective contributions		
Member contributions	$ 31,828,274	$ 19,092,218
Employer normal contributions	801,135,367	891,691,710
Unfunded accrued liability contributions	1,640,522,412	1,865,301,581
Total prospective contributions	$ 2,473,486,053	$ 2,776,085,509
Total assets	$ 3,906,936,846	$ 4,069,124,102
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,245,819,075	$ 1,304,212,597
Present value of benefits payable on account of active members	2,446,128,591	2,542,590,730
Present value of benefits payable on account of inactive members	214,989,180	222,320,775
Total liabilities	$ 3,906,936,846	$ 4,069,124,102

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VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 770,790,274	$ 692,769,770
Prospective contributions		
Member contributions	$ 5,469,611	$ 3,310,313
Employer normal contributions	410,132,921	461,678,537
Unfunded accrued liability contributions	876,912,481	981,933,446
Total prospective contributions	$ 1,292,515,013	$ 1,446,922,296
Total assets	$ 2,063,305,287	$ 2,139,692,066
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 734,584,639	$ 785,948,226
Present value of benefits payable on account of active members	1,291,674,000	1,325,391,810
Present value of benefits payable on account of inactive members	37,046,648	28,352,030
Total liabilities	$ 2,063,305,287	$ 2,139,692,066

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VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS

	June 30, 2011	June 30, 2010
ASSETS		
Current actuarial value of assets	$ 2,204,241,067	$ 1,985,808,363
Prospective contributions		
Member contributions	$ 37,297,885	$ 22,402,531
Employer normal contributions	1,211,268,288	1,353,370,247
Unfunded accrued liability contributions	2,517,434,893	2,847,235,027
Total prospective contributions	$ 3,766,001,066	$ 4,223,007,805
Total assets	$ 5,970,242,133	$ 6,208,816,168
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,980,403,714	$ 2,090,160,823
Present value of benefits payable on account of active members	3,737,802,591	3,867,982,540
Present value of benefits payable on account of inactive members	252,035,828	250,672,805
Total liabilities	$ 5,970,242,133	$ 6,208,816,168

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The following tables provide the solvency test for non-hazardous and hazardous CERS members.

Solvency Test
Retirement Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2006	$ 883,946,564	$ 3,210,095,023	$ 2,085,527,680	$ 5,162,894,136	100.0%	100.0%	51.3%
6/30/2007	920,126,096	3,589,512,063	2,149,807,967	5,467,824,480	100.0	100.0	44.6
6/30/2008	963,213,677	4,058,767,419	2,282,236,595	5,731,502,438	100.0	100.0	31.1
6/30/2009	991,628,551	4,542,483,102	2,378,801,859	5,650,789,991	100.0	100.0	4.9
6/30/2010	1,063,746,826	4,890,659,077	2,504,616,377	5,546,857,291	100.0	91.7	0.0
6/30/2011	1,110,967,160	5,209,783,924	2,597,333,941	5,629,611,183	100.0	86.7	0.0

Solvency Test
Retirement Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2006	$ 300,200,800	$ 1,128,164,618	$ 591,777,352	$ 1,515,075,017	100.0%	100.0%	14.7%
6/30/2007	317,007,367	1,275,221,775	616,507,037	1,639,288,924	100.0	100.0	7.6
6/30/2008	338,324,362	1,406,982,409	657,815,324	1,750,867,373	100.0	100.0	0.8
6/30/2009	350,308,879	1,540,262,587	687,873,134	1,751,487,540	100.0	91.0	0.0
6/30/2010	369,612,720	1,622,684,455	679,854,732	1,749,464,388	100.0	85.0	0.0
6/30/2011	382,072,055	1,768,511,545	708,457,452	1,779,545,393	100.0	79.0	0.0

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Solvency Test
Insurance Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2006	$ 0	$ 1,694,600,143	$ 2,912,623,496	$ 777,726,590	100.0%	45.9%	0.0%
6/30/2007	0	1,372,128,406	1,961,837,664	960,285,900	100.0	70.0	0.0
6/30/2008	0	1,521,450,274	2,061,743,192	1,168,883,170	100.0	76.8	0.0
6/30/2009	0	1,478,782,753	1,591,603,265	1,216,631,769	100.0	82.3	0.0
6/30/2010	0	1,526,533,372	1,631,806,802	1,293,038,593	100.0	84.7	0.0
6/30/2011	0	1,460,808,255	1,613,164,950	1,433,450,793	100.0	98.1	0.0

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Solvency Test
Insurance Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2006	$ 0	$ 787,671,273	$ 1,140,810,098	$ 422,785,042	100.0%	53.7%	0.0%
6/30/2007	0	659,752,978	986,707,033	512,926,549	100.0	77.7	0.0
6/30/2008	0	722,435,184	1,047,347,773	613,526,319	100.0	84.9	0.0
6/30/2009	0	725,899,836	867,648,427	651,130,782	100.0	89.7	0.0
6/30/2010	0	814,300,256	860,402,960	692,769,770	100.0	85.1	0.0
6/30/2011	0	771,631,287	876,071,468	770,790,274	100.0	99.9	0.0

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2010	2011	2012	2013	2014	2015
A.	Actuarial Value Beginning of Year	$ 5,650,789,991	$ 5,546,857,291				
B.	Market Value End of Year	4,819,933,717	5,577,252,295				
C.	Market Value Beginning of Year	4,330,593,934	4,819,933,717				
D.	Cash Flow						
	D1. Contributions	313,633,777	393,379,256				
	D2. Benefit Payments	(480,248,345)	(506,162,686)				
	D3. Administrative Expenses	(14,323,240)	(15,567,869)				
	D4. Investment Expenses	(16,016,532)	(11,427,951)				
	D5. Net	(196,954,340)	(139,779,250)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	686,294,123	897,097,828				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	344,626,222	379,999,201				
	E4. Amount for Phased-In Recognition	341,667,901	517,098,627				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	68,333,580	103,419,725	0	0	0	0
	F2. First Prior Year	(268,260,750)	68,333,580	103,419,725	0	0	0
	F3. Second Prior Year	(134,517,035)	(268,260,750)	68,333,580	103,419,725	0	0
	F4. Third Prior Year	73,558,421	(134,517,035)	(268,260,750)	68,333,580	103,419,725	0
	F5. Fourth Prior Year	9,281,202	73,558,421	(134,517,035)	(268,260,750)	68,333,580	103,419,725
	F6. Total Recognized Investment Gain	(251,604,582)	(157,466,059)	(231,024,480)	(96,507,445)	171,753,305	103,419,725
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 5,546,857,291	$ 5,629,611,183				
H.	Difference Between Market & Actuarial Values	$ (726,923,574)	$ (52,358,888)	$ 178,665,592	$ 275,173,037	$ 103,419,725	$ 0

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The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2010	2011	2012	2013	2014	2015
A.	Actuarial Value Beginning of Year	$ 1,751,487,540	$ 1,749,464,388				
B.	Market Value End of Year	1,506,787,429	1,760,602,934				
C.	Market Value Beginning of Year	1,320,522,868	1,506,787,429				
D.	Cash Flow						
	D1. Contributions	120,086,876	138,996,575				
	D2. Benefit Payments	(138,766,191)	(170,193,302)				
	D3. Administrative Expenses	(1,234,194)	(1,295,026)				
	D4. Investment Expenses	(4,216,663)	(14,514,425)				
	D5. Net	(24,130,172)	(47,006,178)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	210,394,733	300,821,683				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	105,785,537	130,031,395				
	E4. Amount for Phased-In Recognition	104,609,196	170,790,288				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	20,921,839	34,158,058	0	0	0	0
	F2. First Prior Year	(85,878,868)	20,921,839	34,158,058	0	0	0
	F3. Second Prior Year	(46,582,469)	(85,878,868)	20,921,839	34,158,058	0	0
	F4. Third Prior Year	24,437,228	(46,582,469)	(85,878,868)	20,921,839	34,158,058	0
	F5. Fourth Prior Year	3,423,753	24,437,228	(46,582,469)	(85,878,868)	20,921,839	34,158,058
	F6. Total Recognized Investment Gain	(83,678,517)	(52,944,212)	(77,381,440)	(30,798,971)	55,079,897	34,158,058
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,749,464,388	$ 1,779,545,393				
H.	Difference Between Market & Actuarial Values	$ (242,676,959)	$ (18,942,459)	$ 58,438,981	$ 89,237,952	$ 34,158,058	$ 0

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The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2010	2011	2012	2013	2014	2015
A.	Actuarial Value Beginning of Year	$ 1,216,631,769	$ 1,293,038,593				
B.	Market Value End of Year	1,096,581,872	1,451,984,026				
C.	Market Value Beginning of Year	894,905,841	1,096,581,872				
D.	Cash Flow						
	D1. Contributions	192,750,255	217,610,265				
	D2. Benefit Payments	(123,132,978)	(131,943,339)				
	D3. Administrative Expenses	(4,469,067)	(4,762,524)				
	D4. Investment Expenses	(2,390,751)	(2,339,212)				
	D5. Net	62,757,459	78,565,190				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	138,918,572	276,836,964				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	74,270,447	90,459,353				
	E4. Amount for Phased-In Recognition	64,648,125	186,377,611				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	12,929,625	37,275,522	0	0	0	0
	F2. First Prior Year	(66,228,396)	12,929,625	37,275,522	0	0	0
	F3. Second Prior Year	(36,900,933)	(66,228,396)	12,929,625	37,275,522	0	0
	F4. Third Prior Year	24,311,839	(36,900,933)	(66,228,396)	12,929,625	37,275,522	0
	F5. Fourth Prior Year	5,266,783	24,311,839	(36,900,936)	(66,228,396)	12,929,625	37,275,522
	F6. Total Recognized Investment Gain	(60,621,082)	(28,612,343)	(52,924,185)	(16,023,249)	50,205,147	37,275,522
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,293,038,593	$ 1,433,450,793				
H.	Difference Between Market & Actuarial Values	$ (196,456,721)	$ 18,533,233	$ 71,457,418	$ 87,480,667	$ 37,275,522	$ 0

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The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2010	2011	2012	2013	2014	2015
A.	Actuarial Value Beginning of Year	$ 651,130,782	$ 692,769,770				
B.	Market Value End of Year	586,826,965	774,509,101				
C.	Market Value Beginning of Year	483,269,862	586,826,965				
D.	Cash Flow						
	D1. Contributions	85,144,950	101,037,884				
	D2. Benefit Payments	(48,320,681)	(51,829,795)				
	D3. Administrative Expenses	(554,363)	(580,193)				
	D4. Investment Expenses	(1,089,127)	(2,324,660)				
	D5. Net	35,180,779	46,303,236				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	68,376,324	141,378,900				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	39,948,000	49,688,081				
	E4. Amount for Phased-In Recognition	28,428,324	91,690,819				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	5,685,665	18,338,164	0	0	0	0
	F2. First Prior Year	(33,861,562)	5,685,665	18,338,164	0	0	0
	F3. Second Prior Year	(18,967,697)	(33,861,562)	5,685,665	18,338,164	0	0
	F4. Third Prior Year	10,834,617	(18,967,697)	(33,861,562)	5,685,665	18,338,164	0
	F5. Fourth Prior Year	2,819,186	10,834,617	(18,967,697)	(33,861,562)	5,685,665	18,338,164
	F6. Total Recognized Investment Gain	(33,489,791)	(17,970,813)	(28,805,430)	(9,837,733)	24,023,829	18,338,164
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 692,769,770	$ 770,790,274				
H.	Difference Between Market & Actuarial Values	$ (105,942,805)	$ 3,718,827	$ 32,524,257	$ 42,361,990	$ 18,338,164	$ 0

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The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.50% per annum:

Service	Annual Rates of Merit & Seniority Increase Next Year				
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	8.50%	15.50%	4.50%	13.00%	20.00%
1-2	5.00%	6.00%	4.50%	9.50%	10.50%
2-3	1.50%	2.00%	4.50%	6.00%	6.50%
3-4	1.50%	1.25%	4.50%	6.00%	5.75%
4-5	1.00%	1.00%	4.50%	5.50%	5.50%
5-6	1.00%	0.50%	4.50%	5.50%	5.00%
6-7	0.75%	0.00%	4.50%	5.25%	4.50%
7-8	0.75%	0.00%	4.50%	5.25%	4.50%
8-9	0.50%	0.00%	4.50%	5.00%	4.50%
9-10	0.50%	0.00%	4.50%	5.00%	4.50%
10 & Over	0.25%	0.00%	4.50%	4.75%	4.50%

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SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement**
		Male	Female		
20	5.75%	0.03%	0.01%	0.04%	
25	5.75	0.03	0.01	0.05	
30	5.30	0.04	0.02	0.06	
35	4.40	0.04	0.02	0.09	
40	3.70	0.05	0.04	0.13	
45	3.02	0.08	0.05	0.22	
50	2.70	0.13	0.07	0.37	
55	2.20	0.22	0.11	0.61	8.0%
60	0.75	0.40	0.22	0.97	10.0
65		0.73	0.43		22.0
70		1.19	0.69		22.0
75					100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 25.0%, 14.0%, 10.0%, 8.0% and 6.5%, respectively.*

** *If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.*

Hazardous Members

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement		
		Male	Female		Service	Rate+	Rate++
20	3.00%	0.03%	0.01%	0.05%	20	20.0%	
25	2.70	0.03	0.01	0.07	25	33.0	20.0%
30	2.50	0.04	0.02	0.09	30	33.0	33.0
35	2.50	0.04	0.02	0.13	35	40.0	33.0
40	2.50	0.05	0.04	0.20	40		40.0
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 14.0%, 7.5%, 6.0%, 4.5% and 4.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *Applies to members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.*

++ *Applies to members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

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DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2012	10.5%	8.5%
2013	9.5%	7.5%
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

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HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	85%	100%

HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2011				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$486.40	$749.84	$1,127.80	$1,253.56
Optimum PPO	$650.30	$905.42	$1,405.66	$1,565.88
Capitol Choice	$625.68	$909.02	$1,387.36	$1,537.92

Effective January 1, 2012				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$496.14	$764.68	$1,144.72	$1,272.83
Optimum PPO	$663.30	$922.88	$1,432.36	$1,595.06
Capitol Choice	$638.16	$927.08	$1,414.46	$1,568.06

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MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2012 Available Plan	Self-Supporting Rates (Used for Claims Costs)	Funding Rates (Used for Retiree Contributions)
Kentucky Retirement System Health Plan - Medical Only	$147.30	$147.00
Kentucky Retirement System Health Plan - Essential	$182.41	$171.00
Kentucky Retirement System Health Plan - Premium	$391.35	$372.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted. In addition, the claims costs for the Essential and Premium plans are adjusted to reflect the front end CMS reimbursement of $53.42 per member per month due to the EGWP.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.20% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

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Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement

55

Service Requirement

At least one month of hazardous duty service credit

Amount

If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement

60

Service Requirement

At least 60 months of hazardous duty service credit

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Hazardous Normal Retirement (continued):

Amount

The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 55 with 60 months of service or any age with 25 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement

Age 60 with 10 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 50 with 15 years of service or any age with 20 years service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

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Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

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Hazardous Disability (continued):

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

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Vesting (continued):

	Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

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Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

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Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.50 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

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Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.76 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.50 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

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SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2006	2007	2008	2009	2010	2011
			Number			
Beginning of Year	31,347	33,102	35,564	37,579	39,756	41,038
Added	2,782	3,244	3,366	3,060	2,565	3,250
Removed	1,027	782	1,351	883	1,283	1,077
End of Year	33,102	35,564	37,579	39,756	41,038	43,211
			Annual Allowances			
Beginning of Year	$ 279,590,300	$ 308,269,651	$ 348,712,020	$ 393,757,510	$ 440,061,418	$ 452,613,550
Added	$ 34,559,599	$ 44,888,509	56,376,123	51,679,136	21,063,111	38,861,094
Removed	5,880,248	4,446,140	11,330,633	5,375,228	8,510,979	7,880,576
End of Year	$ 308,269,651	$ 348,712,020	$ 393,757,510	$ 440,061,418	$ 452,613,550	$ 483,594,068
% Increase in Allowances	10.26%	13.12%	12.92%	11.76%	2.85%	6.84%
Average Annual Allowance	$ 9,313	$ 9,805	$ 10,478	$ 11,069	$ 11,029	$ 11,191

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Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2006	2007	2008	2009	2010	2011
			Number			
Beginning of Year	4,361	4,712	5,159	5,422	5,808	6,068
Added	427	500	469	650	423	502
Removed	76	53	206	264	163	102
End of Year	4,712	5,159	5,422	5,808	6,068	6,468
			Annual Allowances			
Beginning of Year	$ 89,224,700	$ 100,290,052	$ 113,735,850	$ 127,477,109	$ 139,886,751	$ 146,916,812
Added	11,876,922	$ 14,207,939	16,794,618	13,030,426	8,566,698	14,640,991
Removed	811,570	762,141	3,053,359	620,784	1,536,637	1,298,408
End of Year	$ 100,290,052	$ 113,735,850	$ 127,477,109	$ 139,886,751	$ 146,916,812	$ 160,259,395
% Increase in Allowances	12.40%	13.41%	12.08%	9.73%	5.03%	9.08%
Average Annual Allowance	$ 21,284	$ 22,046	$ 23,511	$ 24,085	$ 24,212	$ 24,777

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Non-Hazardous Retired Lives Summary June 30, 2011

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,772	$ 3,749,103.79	12,985	$ 9,078,289.04	16,757	$ 12,827,392.83
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2,130	2,373,400.08	967	603,632.71	3,097	2,977,032.79
66-2/3% to Beneficiary	621	1,096,475.57	377	422,096.79	998	1,518,572.36
50% to Beneficiary	939	1,443,734.33	1,043	1,183,803.19	1,982	2,627,537.52
Pop-up Option	3,235	5,017,684.73	2,574	2,726,186.55	5,809	7,743,871.28
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,196	1,137,416.83	2,629	1,880,649.98	3,825	3,018,066.81
Social Security Option						
Age 62 Basic	236	530,825.89	480	585,583.80	716	1,116,409.69
Age 62 Survivorship	560	1,286,360.02	297	413,398.75	857	1,699,758.77
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	546	514,271.61	602	456,915.87	1,148	971,187.48
20 Years Certain & Life	387	526,363.52	534	420,228.64	921	946,592.16
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	127	136,885.58	413	337,475.11	540	474,360.69
PLSO 24 Month Basic	73	49,929.21	267	203,828.85	340	253,758.06
PLSO 36 Month Basic	305	145,762.83	767	349,404.49	1,072	495,167.32
PLSO 12 Month Survivor	168	203,646.43	100	98,271.34	268	301,917.77
PLSO 24 Month Survivor	110	110,954.74	72	48,380.55	182	159,335.29
PLSO 36 Month Survivor	463	283,295.06	301	135,604.01	764	418,899.07
Total	14,868	$ 18,606,110.22	24,408	$ 18,943,749.67	39,276	$ 37,549,859.89

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Hazardous Retired Lives Summary June 30, 2011

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	730	$ 1,421,889.15	230	$ 361,582.96	960	$ 1,783,472.11
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	557	1,091,363.56	25	24,815.69	582	1,116,179.25
66-2/3% to Beneficiary	225	570,222.41	5	14,309.95	230	584,532.36
50% to Beneficiary	371	854,852.16	24	44,725.34	395	899,577.50
Pop-up Option	2,204	5,519,566.07	84	159,809.29	2,288	5,679,375.36
10 Years Certain	33	42,649.37	3	3,832.51	36	46,481.88
10 Years Certain & Life	174	353,926.90	40	72,258.68	214	426,185.58
Social Security Option						
Age 62 Basic	96	216,705.00	10	21,845.33	106	238,550.33
Age 62 Survivorship	295	631,409.28	12	28,763.89	307	660,173.17
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	66	113,330.12	10	10,818.67	76	124,148.79
20 Years Certain & Life	116	220,731.64	17	26,828.79	133	247,560.43
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	27	50,094.93	10	12,172.92	37	62,267.85
PLSO 24 Month Basic	24	54,208.12	7	6,816.12	31	61,024.24
PLSO 36 Month Basic	59	90,756.71	22	23,998.27	81	114,754.98
PLSO 12 Month Survivor	62	147,708.77	4	7,960.81	66	155,669.58
PLSO 24 Month Survivor	71	117,558.73	3	2,774.81	74	120,333.54
PLSO 36 Month Survivor	151	221,651.52	8	10,159.84	159	231,811.36
Total	5,261	$ 11,718,624.44	514	$ 833,473.87	5,775	$ 12,552,098.31

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Non-Hazardous Beneficiary Lives Summary June 30, 2011

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	9	$ 2,455.30	17	$ 8,965.22	26	$ 11,420.52
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	302	149,227.28	1,432	882,075.18	1,734	1,031,302.46
66-2/3% to Beneficiary	0	0.00	3	3,417.04	3	3,417.04
50% to Beneficiary	88	31,344.34	304	150,921.12	392	182,265.46
Pop-up Option	116	79,770.56	443	401,426.20	559	481,196.76
10 Years Certain	81	60,137.35	139	106,334.21	220	166,471.56
10 Years Certain & Life	36	16,560.91	201	136,392.53	237	152,953.44
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	17	18,913.20	109	177,429.13	126	196,342.33
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	2	264.67	2	264.67
Dependent Child	50	38,584.18	51	48,396.70	101	86,980.88
Refund	2	1,293.51	6	3,801.72	8	5,095.23
15 Years Certain & Life	27	21,403.63	72	66,171.49	99	87,575.12
20 Years Certain & Life	42	35,264.63	68	70,780.73	110	106,045.36
5 Years Certain	96	78,653.56	76	65,175.14	172	143,828.70
PLSO 12 Month Basic	0	0.00	1	389.65	1	389.65
PLSO 24 Month Basic	1	150.13	0	0.00	1	150.13
PLSO 36 Month Basic	1	146.87	2	344.76	3	491.63
PLSO 12 Month Survivor	6	2,258.53	24	29,253.03	30	31,511.56
PLSO 24 Month Survivor	3	4,308.23	14	11,916.90	17	16,225.13
PLSO 36 Month Survivor	28	15,498.23	66	30,219.88	94	45,718.11
Total	905	$ 555,970.44	3,030	$ 2,193,675.30	3,935	$ 2,749,645.74

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Hazardous Beneficiary Lives Summary June 30, 2011

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	17	$ 10,494.11	19	$ 16,794.99	36	$ 27,289.10
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	20	7,486.32	168	213,926.11	188	221,412.43
66-2/3% to Beneficiary	3	917.60	34	47,733.73	37	48,651.33
50% to Beneficiary	5	3,332.43	49	44,308.18	54	47,640.61
Pop-up Option	27	14,458.37	149	217,570.58	176	232,028.95
10 Years Certain	7	11,948.79	18	17,482.85	25	29,431.64
10 Years Certain & Life	5	1,976.01	1	89.68	6	2,065.69
Social Security Option						
Age 62 Basic	0	0.00	2	502.22	2	502.22
Age 62 Survivorship	75	127,237.38	1	2,847.65	76	130,085.03
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	3,238.49	3	3,238.49
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	3	795.30	13	7,064.15	16	7,859.45
15 Years Certain & Life	4	1,319.20	3	1,386.15	7	2,705.35
20 Years Certain & Life	4	1,497.73	12	7,635.01	16	9,132.74
5 Years Certain	2	1,897.78	4	5,894.05	6	7,791.83
PLSO 12 Month Basic	0	0.00	1	2,160.02	1	2,160.02
PLSO 24 Month Basic	0	0.00	1	1,444.82	1	1,444.82
PLSO 36 Month Basic	2	553.43	4	1,830.60	6	2,384.03
PLSO 12 Month Survivor	1	409.32	2	1,886.05	3	2,295.37
PLSO 24 Month Survivor	2	1,638.84	5	2,521.97	7	4,160.81
PLSO 36 Month Survivor	5	2,039.08	22	18,532.25	27	20,571.33
Total	182	$ 188,001.69	511	$ 614,849.55	693	$ 802,851.24

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Non-Hazardous Members

Retired and Beneficiary Information June 30, 2011
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	41	$ 907,722	60	$ 1,096,414	104	$ 699,514	205	$ 2,703,650
45-49	385	$ 9,224,562	114	$ 1,447,521	65	$ 546,691	564	$ 11,218,774
50-54	1,536	$ 37,834,696	291	$ 4,324,058	131	$ 1,546,605	1,958	$ 43,705,358
55-59	3,674	$ 68,349,170	473	$ 5,952,597	257	$ 2,640,321	4,404	$ 76,942,088
60-64	6,733	$ 92,156,991	723	$ 8,227,373	408	$ 5,372,653	7,864	$ 105,757,017
65-69	7,686	$ 79,240,778	629	$ 6,265,342	485	$ 4,736,065	8,800	$ 90,242,185
70-74	6,635	$ 60,370,498	524	$ 4,993,850	501	$ 4,842,413	7,660	$ 70,206,762
75-79	4,572	$ 36,391,739	261	$ 2,091,951	518	$ 4,286,659	5,351	$ 42,770,349
80-84	2,815	$ 20,118,879	67	$ 458,028	522	$ 3,883,125	3,404	$ 24,460,032
85-89	1,423	$ 8,292,253	15	$ 61,605	449	$ 2,373,645	1,887	$ 10,727,503
90 & Over	609	$ 2,751,362	10	$ 40,930	495	$ 2,068,057	1,114	$ 4,860,349
Totals	36,109	$ 415,638,650	3,167	$ 34,959,669	3,935	$ 32,995,749	43,211	$ 483,594,068

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Hazardous Members

Retired and Beneficiary Information June 30, 2011
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	126	$ 3,784,751	69	$ 1,095,981	162	$ 911,895	357	$ 5,792,627
45-49	563	$ 17,781,111	66	$ 1,227,627	20	$ 246,517	649	$ 19,255,255
50-54	751	$ 22,698,151	80	$ 1,284,199	35	$ 450,257	866	$ 24,432,607
55-59	1,120	$ 33,660,977	96	$ 1,406,577	62	$ 1,123,776	1,278	$ 36,191,330
60-64	1,239	$ 32,787,227	67	$ 1,020,664	96	$ 1,652,794	1,402	$ 35,460,685
65-69	793	$ 17,558,916	34	$ 506,230	91	$ 1,717,875	918	$ 19,783,021
70-74	449	$ 9,156,907	7	$ 124,145	95	$ 1,809,043	551	$ 11,090,095
75-79	203	$ 4,285,644	7	$ 65,790	63	$ 866,280	273	$ 5,217,714
80-84	81	$ 1,811,532	2	$ 17,091	50	$ 675,046	133	$ 2,503,669
85-89	19	$ 330,630	1	$ 19,625	15	$ 147,097	35	$ 497,352
90 & Over	2	$ 1,405			4	$ 33,634	6	$ 35,039
Totals	5,346	$ 143,857,251	429	$ 6,767,929	693	$ 9,634,215	6,468	$ 160,259,395

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Total Non-Hazardous Active Members as of June 30, 2011
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	29								29
Avg Pay	$11,697								$11,697
20-24	2,252	224							2,476
Avg Pay	$19,820	$24,405							$20,235
25-29	3,302	1,428	84						4,814
Avg Pay	$22,851	$27,384	$29,987						$24,320
30-34	3,375	1,714	800	31					5,920
Avg Pay	$22,914	$30,153	$34,416	$35,880					$26,632
35-39	7,305	2,256	1,447	391	9				11,408
Avg Pay	$19,806	$27,867	$35,372	$39,913	$39,669				$24,079
40-44	3,994	3,032	2,326	961	324	35			10,672
Avg Pay	$21,859	$25,739	$31,675	$38,738	$46,390	$53,745			$27,470
44-49	3,360	3,197	3,240	1,521	848	201	159	32	12,558
Avg Pay	$21,820	$25,428	$27,809	$33,866	$43,643	$49,855	$55,170	$50,625	$28,161
50-54	2,993	2,906	3,418	2,366	1,191	268	180	132	13,454
Avg Pay	$22,165	$25,568	$27,334	$29,952	$37,842	$47,245	$48,996	$57,896	$28,180
55-59	2,433	2,367	2,562	2,329	1,394	306	220	151	11,762
Avg Pay	$23,031	$26,463	$28,236	$28,681	$34,125	$42,915	$44,955	$54,139	$28,616
60-64	1,587	1,665	1,635	1,403	1,007	235	147	118	7,797
Avg Pay	$20,376	$25,349	$28,090	$29,309	$32,648	$37,700	$35,095	$52,944	$27,541
65-69	628	777	654	430	257	49	48	57	2,900
Avg Pay	$16,906	$21,038	$24,408	$26,338	$29,052	$38,487	$43,181	$42,767	$23,488
70 & over	290	399	369	209	145	30	20	33	1,495
Avg Pay	$14,972	$19,057	$21,739	$21,819	$27,481	$31,765	$24,323	$42,823	$20,980
Totals	31,548	19,965	16,535	9,641	5,175	1,124	774	523	85,285
Avg Pay	$21,324	$26,123	$29,071	$31,130	$36,592	$43,945	$45,478	$52,649	$26,694

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Total Hazardous Active Members as of June 30, 2011
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	1								1
Avg Pay	$23,916								$23,916
20-24	275	18							293
Avg Pay	$34,733	$38,701							$34,977
25-29	886	285	4						1,175
Avg Pay	$40,555	$44,933	$49,440						$41,647
30-34	587	786	217	2					1,592
Avg Pay	$41,156	$48,433	$54,104	$45,114					$46,519
35-39	497	550	782	179	2				2,010
Avg Pay	$37,663	$47,088	$56,002	$59,480	$55,962				$49,338
40-44	244	395	599	547	131	11			1,927
Avg Pay	$40,250	$46,418	$53,710	$62,036	$68,356	$74,935			$53,991
44-49	130	203	297	310	238	28	12		1,218
Avg Pay	$40,515	$46,247	$51,860	$59,953	$67,856	$70,008	$82,041		$55,614
50-54	90	93	147	144	119	33	20	6	652
Avg Pay	$41,241	$45,401	$49,684	$55,310	$66,912	$70,595	$79,252	$80,918	$54,547
55-59	48	90	84	69	37	5	3	16	352
Avg Pay	$34,464	$44,089	$54,003	$57,867	$62,672	$66,607	$76,068	$77,894	$51,925
60-64	23	37	40	18	11	2		3	134
Avg Pay	$38,751	$42,748	$52,697	$46,079	$65,695	$53,136		$83,900	$48,439
65-69	5	10	9	5					29
Avg Pay	$47,189	$34,277	$44,657	$54,874					$43,276
70 & over	5	9	8				2		24
Avg Pay	$31,711	$44,512	$53,259				$88,458		$48,423
Totals	2,791	2,476	2,187	1,274	538	79	37	25	9,407
Avg Pay	$39,457	$46,732	$53,993	$59,904	$67,324	$70,297	$80,396	$79,340	$49,640

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Report on the Annual Valuation of the State Police Retirement System

Prepared as of June 30, 2011

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October 31, 2011

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2012. The date of the valuation was June 30, 2011.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 5.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

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REPORT ON THE ANNUAL VALUATION OF THE STATE POLICE RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2011

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2011, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

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SUMMARY OF PRINCIPAL RESULTS

	6/30/2011	6/30/2010
Contributions for next fiscal year:		
Retirement	47.48%	39.80%
Insurance	55.93	54.83
Total	103.41%	94.63%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$634,379,401	$612,444,806
Actuarial value of assets	285,580,631	304,577,292
Unfunded liability on actuarial value of assets	348,798,770	307,867,514
Funded ratio on actuarial value of assets	45.02%	49.73%
Market value of assets	$279,934,443	$264,944,089
Unfunded liability on market value of assets	354,444,958	347,500,717
Funded ratio on market value of assets	44.13%	43.26%
Insurance		
Actuarial accured liability	$438,427,763	$434,960,495
Actuarial value of assets	123,687,289	121,175,083
Unfunded liability on actuarial value of assets	314,740,474	313,785,412
Funded ratio on actuarial value of assets	28.21%	27.86%
Market value of assets	$127,367,947	$104,526,550
Unfunded liability on market value of assets	311,059,816	330,433,945
Funded ratio on market value of assets	29.05%	24.03%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,263	1,223
Number of vested former members	52	55
Number of former members due a refund	305	290
Number of active members	965	961
Total salary	$48,692,616	$51,506,712
Average salary	$50,459	$53,597

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, plan designs have changed for the Health Insurance plans that cover Medicare eligible retirees and non-Medicare eligible retirees. The changes are summarized below.

    - The annual deductible and out-of-pocket maximum have been increased for Plan Year 2012 under the KRS Health Plan Medical Only, from the standard Part B deductible to $500.
    - The prescription drug coverage under the KRS Health Plan Essential for Plan Years 2011 and 2012 have been altered to reflect the same coverage as described in the Standard Medicare Part D benefit parameters.
    - The annual deductible, out-of-pocket maximum and prescription drug co-payments have increased under the KRS Health Plan Premium for Plan Year 2011.
    - Plan design changes have also been implemented for Plan Year 2012 for the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2010 and June 30, 2011 is 4.50%. The lower rate for insurance benefits is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

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SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2011 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

		Group Averages		
Number	Payroll	Salary	Age	Service
965	$48,692,616	$50,459	37.7	10.6

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2006	1,028	$47,743,865	$46,443	4.8%
6/30/2007	957	49,247,580	51,460	10.8
6/30/2008	993	53,269,080	53,645	4.2
6/30/2009	946	51,660,396	54,609	1.8
6/30/2010	961	51,506,712	53,597	(1.9)
6/30/2011	965	48,692,616	50,459	(5.9)

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

			Group Averages	
Type of Benefit Payment	Number	Annual Benefits	Benefit	Age
Retiree	1,071	$42,717,950	$39,886	61.2
Disability	44	$789,274	17,938	56.0
Beneficiary	148	3,960,180	26,758	64.7
Total in SPRS	1,263	$47,467,404	$37,583	61.4

This valuation also includes 357 inactive members of which 52 are vested.

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SECTION III - ASSETS

1. As of June 30, 2011 the total market value of assets amounted to $407,302,390 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

Retirement	Insurance	SPRS Total
$279,934,443	$127,367,947	$407,302,390

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $409,267,920. Schedule B shows the development of the actuarial value of assets as of June 30, 2011. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2011	JUNE 30, 2010
Retirement	$ 285,580,631	$ 304,577,292
Insurance	123,687,289	121,175,083
Total	$ 409,267,920	$ 425,752,375

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SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2011. Separate balance sheets are shown for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $701,964,991, of which $496,684,389 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $2,509,840 is for the prospective benefits payable on account of inactive members, $202,770,762 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $285,580,631 as of June 30, 2011. The difference of $416,384,360 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $34,201,120 is the present value of future contributions expected to be made by members, and the balance of $382,183,240 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 7.84% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $33,384,470. When this amount is subtracted from $382,183,240, which is the present value of the total future contributions to be made by the State, there remains $348,798,770 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 39.36% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $348,798,770 over 26 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.28% of payroll.

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Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $581,902,928, of which $244,274,249 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $8,165,477 is for the prospective benefits payable on account of inactive members, and $329,463,202 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $123,687,289 as of June 30, 2011. The difference of $458,215,639 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $771,703 is the present value of future contributions expected to be made by members, and the balance of $457,443,936 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 30.70% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $142,703,462. When this amount is subtracted from $457,443,936, which is the present value of the total future contributions to be made by the employers, there remains $314,740,474 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 24.86% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $314,740,474 over 26 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.37% of payroll.

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SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2011 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

			Amount
(1)	UAAL* as of 6/30/10	$	307.9
(2)	Normal cost from last valuation		4.0
(3)	Employer contributions		12.7
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875		23.7
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	322.9
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	322.9
(9)	Actual UAAL as of 6/30/11	$	348.8
(10)	Gain/(loss): (8) - (9)	$	(25.9)
(11)	Accrued liabilities as of 6/30/10	$	612.4
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(4.2)%

**Unfunded actuarial accrued liability.*

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Experience Gain/(Loss)
Insurance Benefits

			Amount
(1)	UAAL* as of 6/30/10	$	313.8
(2)	Normal cost from last valuation		16.5
(3)	Expected employer contributions		28.1
(4)	Interest accrual: [(1) + (2) - (3)] x .045		13.6
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	315.8
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	315.8
(9)	Actual UAAL as of 6/30/11	$	314.7
(10)	Gain/(loss): (8) - (9)	$	1.1
(11)	Accrued liabilities as of 6/30/10	$	435.0
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		0.3%

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* *Unfunded actuarial accrued liability.*

SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/11	Insurance $ Gain (or Loss) For Year Ending 6/30/11
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (14.1)	$ (12.8)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(1.0)	0.1
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	4.1	3.0
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	7.3	33.5
New Members. Additional unfunded accrued liability will produce a loss.	0.0	(1.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(13.2)	(1.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(2.0)	9.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(7.0)	(29.6)
Gain (or Loss) During Year From Financial Experience	$ (25.9)	$ 1.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (25.9)	$ 1.1

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SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2012/2013 fiscal year.

Required Contribution Rates
Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	7,302,312	15.00%
(2) Disability benefits		328,449	0.67
(3) Survivor benefits		82,452	0.17
(4) Total	$	7,713,213	15.84%
B. Member Contributions	$	3,895,409	8.00%
C. Employer Normal Cost: [A(4) - B]	$	3,817,804	7.84%
D. Administrative Expenses	$	136,339	0.28%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/10 Valuation:	$	15,605,983	32.05%
(2) Change due to:			
a. Active decrements	$	608,212	1.25%
b. Pay increases		(403,701)	(0.83)
c. Retiree mortality		(21,743)	(0.04)
d. Investment return		689,469	1.42
e. COLA		380,233	0.78
f. Assumption Change		0	0.00
g. Other		2,304,695	4.72
h. Total Change	$	3,557,165	7.31%
(3) UAAL Contribution Based on 6/30/11 Valuation: [E(1) +E(2)h]	$	19,163,148	39.36%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	23,117,291	47.48%

** Based on 27 year amortization of the UAAL from June 30, 2010 and 26 years from June 30, 2011*

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Required Contribution Rates
Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost	$	14,983,962	30.77%
B.	Member Contributions*	$	34,085	0.07%
C.	Employer Normal Cost: [A - B]	$	14,949,877	30.70%
D.	Administrative Expenses	$	178,949	0.37%
E.	Unfunded Actuarial Accrued Liability**	$	12,105,403	24.86%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	27,234,229	55.93%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 26 year amortization of the UAAL from June 30, 2011*

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SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2011

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,263
Terminated employees entitled to benefits but not yet receiving benefits	357
Active Members	965
Total	2,585

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

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RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2006	$ 344,016,197	$ 516,482,298	$ 172,466,101	66.6%	$ 47,743,865	361.2%
6/30/2007	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
6/30/2008	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5
6/30/2009	329,966,989	602,328,868	272,361,879	54.8	51,660,396	527.2
6/30/2010	304,577,292	612,444,806	307,867,514	49.7	51,506,712	597.7
6/30/2011	285,580,631	634,379,401	348,798,770	45.0	48,692,616	716.3

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2006	$ 105,580,269	$ 582,580,867	$ 477,000,598	18.1%	$ 47,743,865	999.1%
6/30/2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
6/30/2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
6/30/2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
6/30/2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2
6/30/2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4

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RETIREMENT BENEFITS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
June 30, 2006	$ 6,352,777	$ 4,244,445	66.8%
June 30, 2007	9,023,665	6,142,326	68.1
June 30, 2008	13,823,490	7,443,277	53.8
June 30, 2009	15,951,841	8,186,259	51.3
June 30, 2010	18,764,941	9,489,399	50.6
June 30, 2011	18,463,372	12,657,225	68.6

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INSURANCE BENEFITS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
June 30, 2006	$ 12,554,648	$ 0	$ 6,880,517	$ 6,880,517	54.8%
June 30, 2007	15,233,320	361,942	6,488,600	6,850,542	45.0
June 30, 2008	43,469,735	183,564	7,329,229	7,512,793	17.3
June 30, 2009	29,324,666	229,240	7,413,552	7,642,792	26.1
June 30, 2010	30,302,151	273,684	8,369,428	8,643,112	28.5
June 30, 2011	25,772,574	0	11,050,964	11,050,964	42.9

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2011. Additional information as of the latest actuarial valuation follows.

Retirement Benefits	
Valuation date	6/30/2011
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	26 years
Asset valuation method	5 Year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases**	4.5% - 17.0%
Cost-of-living adjustment	None
*Includes price inflation at	3.50%
**Includes wage inflation at	4.50%

Insurance Benefits	
Valuation date	6/30/2011
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	26 years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	10.5% - 5.0%
Medical Trend Assumption (Post-Medicare)	8.5% - 5.0%
Year of Ulitimate Trend	2019
Actuarial assumptions:	
Investment rate of return*	4.50%
*Includes price inflation at	3.50%

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SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2011 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2010. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM

RETIREMENT BENEFITS

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	JUNE 30, 2011	JUNE 30, 2010
ASSETS		
Current actuarial value of assets	$ 285,580,631	$ 304,577,292
Prospective contributions		
Member contributions	$ 34,201,120	$ 36,719,577
Employer normal contributions	33,384,470	35,145,151
Unfunded accrued liability contributions	348,798,770	307,867,514
Total prospective contributions	$ 416,384,360	$ 379,732,242
Total assets	$ 701,964,991	$ 684,309,534
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 496,684,389	$ 473,234,521
Present value of benefits payable on account of active members	202,770,762	208,416,874
Present value of benefits payable on account of inactive members	2,509,840	2,658,139
Total liabilities	$ 701,964,991	$ 684,309,534

VALUATION BALANCE SHEET
INSURANCE BENEFITS

	JUNE 30, 2011	JUNE 30, 2010
ASSETS		
Current actuarial value of assets	$ 123,687,289	$ 121,175,083
Prospective contributions		
Member contributions	$ 771,703	$ 599,327
Employer normal contributions	142,703,462	161,609,799
Unfunded accrued liability contributions	314,740,474	313,785,412
Total prospective contributions	$ 458,215,639	$ 475,994,538
Total assets	$ 581,902,928	$ 597,169,621
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 244,274,249	$ 245,812,639
Present value of benefits payable on account of active members	329,463,202	343,588,794
Present value of benefits payable on account of inactive members	8,165,477	7,768,188
Total liabilities	$ 581,902,928	$ 597,169,621

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The following tables provide the solvency test for SPRS members.

Solvency Test
Retirement Benefits

Valuation Date	Aggregate Accrued Liabilites For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2006	$ 37,866,774	$ 373,588,145	$ 105,027,379	$ 344,016,197	100.0%	81.9%	0.0%
6/30/2007	39,505,285	397,863,520	110,583,481	348,806,508	100.0	77.7	0.0
6/30/2008	41,391,416	426,311,368	119,426,473	350,891,451	100.0	72.6	0.0
6/30/2009	41,664,469	459,585,353	101,079,046	329,966,989	100.0	62.7	0.0
6/30/2010	42,011,523	475,892,659	94,540,624	304,577,292	100.0	55.2	0.0
6/30/2011	43,574,097	499,194,229	91,611,075	285,580,631	100.0	48.5	0.0

Solvency Test
Insurance Benefits

Valuation Date	Aggregate Accrued Liabilites For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2006	$ 0	$ 240,913,868	$ 341,666,999	$ 105,580,269	100.0%	43.8%	0.0%
6/30/2007	0	172,291,142	260,472,087	115,215,912	100.0	66.9	0.0
6/30/2008	0	178,655,245	266,452,223	123,961,197	100.0	69.4	0.0
6/30/2009	0	167,091,453	196,939,688	123,526,647	100.0	73.9	0.0
6/30/2010	0	253,580,827	181,379,668	121,175,083	100.0	47.8	0.0
6/30/2011	0	252,439,726	185,988,037	123,687,289	100.0	49.0	0.0

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SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits

	Valuation date June 30:	2010	2011	2012	2013	2014	2015
A.	Actuarial Value Beginning of Year	$ 329,966,989	$ 304,577,292				
B.	Market Value End of Year	264,944,089	279,934,443				
C.	Market Value Beginning of Year	256,571,073	264,944,089				
D.	Cash Flow						
	D1. Contributions	13,616,226	17,882,105				
	D2. Benefit Payments	(45,726,064)	(46,813,041)				
	D3. Administrative Expenses	(129,911)	(134,547)				
	D4. Investment Expenses	(810,560)	(3,910,742)				
	D5. Net	(33,050,309)	(32,976,225)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	41,423,325	47,966,579				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	19,445,528	23,317,621				
	E4. Amount for Phased-In Recognition	21,977,797	24,648,958				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	4,395,559	4,929,792	0	0	0	0
	F2. First Prior Year	(15,234,391)	4,395,559	4,929,792	0	0	0
	F3. Second Prior Year	(8,083,253)	(15,234,391)	4,395,559	4,929,792	0	0
	F4. Third Prior Year	4,654,236	(8,083,253)	(15,234,391)	4,395,559	4,929,792	0
	F5. Fourth Prior Year	2,482,933	4,654,236	(8,083,253)	(15,234,391)	4,395,559	4,929,792
	F6. Total Recognized Investment Gain	(11,784,916)	(9,338,057)	(13,992,293)	(5,909,040)	9,325,351	4,929,792
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 304,577,292	$ 285,580,631				
H.	Difference Between Market & Actuarial Values	$ (39,633,203)	$ (5,646,188)	$ 8,346,105	$ 14,255,145	$ 4,929,792	$ 0

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The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits

	Valuation date June 30:	2010	2011	2012	2013	2014	2015
A.	Actuarial Value Beginning of Year	$ 123,526,647	$ 121,175,083				
B.	Market Value End of Year	104,526,550	127,367,947				
C.	Market Value Beginning of Year	93,686,940	104,526,550				
D.	Cash Flow						
	D1. Contributions	8,670,692	11,418,135				
	D2. Benefit Payments	(10,768,660)	(12,171,288)				
	D3. Administrative Expenses	(146,716)	(178,949)				
	D4. Investment Expenses	(195,077)	(846,892)				
	D5. Net	(2,439,761)	(1,778,994)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	13,279,371	24,620,391				
	E2. Assumed Rate	4.50%	4.50%				
	E3. Amount for Immediate Recognition	4,360,484	5,529,614				
	E4. Amount for Phased-In Recognition	8,918,887	19,090,777				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	1,783,777	3,818,155	0	0	0	0
	F2. First Prior Year	(6,729,517)	1,783,777	3,818,155	0	0	0
	F3. Second Prior Year	(3,484,262)	(6,729,517)	1,783,777	3,818,155	0	0
	F4. Third Prior Year	3,373,433	(3,484,262)	(6,729,517)	1,783,777	3,818,155	0
	F5. Fourth Prior Year	784,282	3,373,433	(3,484,262)	(6,729,517)	1,783,777	3,818,155
	F6. Total Recognized Investment Gain	(4,272,287)	(1,238,414)	(4,611,847)	(1,127,585)	5,601,932	3,818,155
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 121,175,083	$ 123,687,289				
H.	Difference Between Market & Actuarial Values	$ (16,648,533)	$ 3,680,658	$ 8,292,505	$ 9,420,090	$ 3,818,155	$ 0

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The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for SPRS insurance benefits is 4.50%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for members are as follows and include inflation at 4.50% per annum:

	Annual Rates of		
Service	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	12.50%	4.50%	17.00%
1-2	7.50%	4.50%	12.00%
2-3	5.50%	4.50%	10.00%
3-4	4.50%	4.50%	9.00%
4-5	3.50%	4.50%	8.00%
5-6	2.50%	4.50%	7.00%
6-7	1.50%	4.50%	6.00%
7-8	2.00%	4.50%	6.50%
8-9	1.00%	4.50%	5.50%
9-10	0.50%	4.50%	5.00%
10 & over	0.00%	4.50%	4.50%

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SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

		Death**			Service Retirement		
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate+	Rate++
20	2.50%	0.03%	0.01%	0.05%	20	9.00%	
25	2.50	0.03	0.01	0.07	25	22.00	9.00%
30	2.50	0.04	0.02	0.09	30	25.00	22.00
35	2.50	0.04	0.02	0.13	35	33.33	25.00
40	2.50	0.05	0.04	0.20	40		33.33
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 20.0%, 7.5%, 3.0%, 3.0% and 3.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.*

++ *For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is little margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

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HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2012	10.5%	8.5%
2013	9.5%	7.5%
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and over	0.0

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of member participation and spouse coverage are as follows:

Participation	100%
Spouse Coverage	100%

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HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2011				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$486.40	$749.84	$1,127.80	$1,253.56
Optimum PPO	$650.30	$905.42	$1,405.66	$1,565.88
Capitol Choice	$625.68	$909.02	$1,387.36	$1,537.92

Effective January 1, 2012				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$496.14	$764.68	$1,144.72	$1,272.83
Optimum PPO	$663.30	$922.88	$1,432.36	$1,595.06
Capitol Choice	$638.16	$927.08	$1,414.46	$1,568.06

MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2012 Available Plan	Self-Supporting Rates (Used for Claims Costs)	Funding Rates (Used for Retiree Contributions)
Kentucky Retirement System Health Plan - Medical Only	$147.30	$147.00
Kentucky Retirement System Health Plan - Essential	$182.41	$171.00
Kentucky Retirement System Health Plan - Premium	$391.35	$372.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted. In addition, the claims costs for the Essential and Premium plans are adjusted to reflect the front end CMS reimbursement of $53.42 per member per month due to the EGWP.

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SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement 55

Service Requirement At least one month of hazardous duty service credit

Amount If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement 60

Service Requirement At least 60 months of hazardous duty service credit

Amount The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

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Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday. The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance. A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

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Disability (continued):

Members whose participation began on or after 8/1/2004	Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Members whose participation began on or after 9/1/2008

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	60

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

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Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

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Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly benefit.*

For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.76 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.50 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

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SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2006	2007	2008	2009	2010	2011
			Number			
Beginning of Year	1,036	1,067	1,105	1,135	1,184	1,223
Added	43	49	42	75	54	52
Removed	10	11	12	26	15	12
End of Year	1,067	1,105	1,135	1,184	1,223	1,263
			Annual Allowances			
Beginning of Year	$ 32,983,900	$ 34,651,251	$ 37,208,377	$ 41,293,017	$ 44,273,937	$ 45,515,797
Added	1,943,760	2,836,956	4,330,608	3,380,331	1,543,665	2,341,589
Removed	276,409	279,830	245,968	399,410	301,805	389,982
End of Year	$ 34,651,251	$ 37,208,377	$ 41,293,017	$ 44,273,937	$ 45,515,797	$ 47,467,404
% Increase in Allowances	5.06%	7.38%	10.98%	7.22%	2.80%	4.29%
Average Annual Allowance	$ 32,475	$ 33,673	$ 36,382	$ 37,394	$ 37,217	$ 37,583

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Retired Lives Summary June 30, 2011

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	102	$ 329,243.36	10	$ 23,957.62	112	$ 353,200.98
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	120	381,589.52	1	4,742.52	121	386,332.04
66-2/3% to Beneficiary	79	300,330.57	1	2,999.34	80	303,329.91
50% to Beneficiary	80	288,973.44	1	2,547.84	81	291,521.28
Pop-up Option	434	1,528,369.98	4	13,887.04	438	1,542,257.02
10 Years Certain	1	0.00	0	0.00	1	0.00
10 Years Certain & Life	33	103,237.39	1	1,733.20	34	104,970.59
Social Security Option						
Age 62 Basic	31	76,885.45	0	0.00	31	76,885.45
Age 62 Survivorship	144	356,402.64	1	7,813.28	145	364,215.92
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	14	41,486.59	1	3,860.76	15	45,347.35
20 Years Certain & Life	33	102,913.65	2	3,924.26	35	106,837.91
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	459.51	2	459.51
PLSO 12 Month Survivor	6	20,474.11	0	0.00	6	20,474.11
PLSO 24 Month Survivor	5	13,107.40	0	0.00	5	13,107.40
PLSO 36 Month Survivor	9	16,662.52	0	0.00	9	16,662.52
Total	1,091	$ 3,559,676.62	24	$ 65,925.37	1,115	$ 3,625,601.99

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Beneficiary Lives Summary June 30, 2011

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	1	$ 425.22	1	$ 425.22
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	4	4,738.33	57	147,368.03	61	152,106.36
66-2/3% to Beneficiary	1	788.23	6	12,455.62	7	13,243.85
50% to Beneficiary	1	1,279.45	16	24,982.71	17	26,262.16
Pop-up Option	1	471.12	24	63,947.48	25	64,418.60
10 Years Certain	1	582.77	0	0.00	1	582.77
10 Years Certain & Life	0	0.00	0	0.00	0	0.00
Social Security Option						
Age 62 Basic	0	0.00	2	3,060.44	2	3,060.44
Age 62 Survivorship	0	0.00	28	57,334.49	28	57,334.49
Paritial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	0	0.00	0	0.00	0	0.00
20 Years Certain & Life	0	0.00	4	6,760.68	4	6,760.68
5 Years Certain	2	5,820.44	0	0.00	2	5,820.44
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	10	$ 13,680.34	138	$ 316,334.67	148	$ 330,015.01

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Retired and Beneficiary Information June 30, 2011
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	24	$ 781,260	8	$ 135,611	5	$ 45,852	37	$ 962,723
45-49	94	3,394,240	4	62,992	4	46,471	102	3,503,702
50-54	135	5,613,985	7	132,628	8	142,511	150	5,889,124
55-59	195	8,517,891	8	107,948	11	165,385	214	8,791,223
60-64	288	11,631,014	7	155,415	23	586,387	318	12,372,816
65-69	140	5,477,195	5	87,749	25	723,402	170	6,288,345
70-74	102	3,465,926	3	73,720	8	321,606	113	3,861,252
75-79	49	1,884,032	2	33,211	15	589,351	66	2,506,595
80-84	31	1,337,499	0	0	25	654,780	56	1,992,279
85-89	11	575,575	0	0	17	606,205	28	1,181,780
90 & Over	2	39,333	0	0	7	78,229	9	117,563
Totals	1,071	$ 42,717,950	44	$ 789,274	148	$ 3,960,180	1,263	$ 47,467,404

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Total Active Members as of June 30, 2011
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20 Avg Pay									
20-24 Avg Pay	21 $34,315	1 $37,308							22 $34,451
25-29 Avg Pay	68 $40,603	31 $46,990							99 $42,603
30-34 Avg Pay	36 $41,685	108 $47,784	35 $50,029						179 $46,996
35-39 Avg Pay	89 $22,365	63 $47,768	94 $53,053	38 $60,381	2 $57,264				286 $43,342
40-44 Avg Pay	6 $37,930	37 $47,138	47 $51,221	101 $62,134	38 $68,748	3 $70,644			232 $58,099
44-49 Avg Pay		14 $44,896	9 $52,407	24 $58,912	43 $69,736	8 $75,264	4 $76,350	1 $88,812	103 $63,195
50-54 Avg Pay	4 $42,732	1 $46,176	2 $46,008	3 $57,784	9 $69,463	4 $76,356	5 $69,242	3 $72,556	31 $63,772
55-59 Avg Pay				1 $63,456	1 $69,288	1 $80,256	3 $73,416	3 $81,216	9 $75,211
60-64 Avg Pay								2 $76,392	2 $76,392
65-69 Avg Pay				1 $65,892					1 $65,892
70 & over Avg Pay			1 $48,264						1 $48,264
Totals Avg Pay	224 $32,908	255 $47,384	188 $51,900	168 $61,230	93 $69,033	16 $74,983	12 $72,655	9 $78,101	965 $50,459

DRAFT

Cavanaugh Macdonald
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The experience and dedication you deserve

Report on the Annual Valuation of the Kentucky Employees Retirement System

Prepared as of June 30, 2012

www.CavMacConsulting.com

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 20, 2012

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2013. The date of the valuation was June 30, 2012.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

TJC/TBG/AB:kc

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REPORT ON THE ANNUAL VALUATION OF THE KENTUCKY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2012

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2012, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/2012	6/30/2011	6/30/2012	6/30/2011	6/30/2012	6/30/2011
Contributions for next fiscal year:						
Retirement	32.57%	28.03%	17.00%	16.16%		
Insurance	12.71	16.52	11.84	19.73	N/A	N/A
Total	45.28%	44.55%	28.84%	35.89%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$11,361,048,136	$11,182,142,032	$752,699,457	$721,293,444	$12,113,747,593	$11,903,435,476
Actuarial value of assets	3,101,316,738	3,726,986,087	497,226,296	510,748,505	3,598,543,034	4,237,734,592
Unfunded liability on actuarial value of assets	8,259,731,398	7,455,155,945	255,473,161	210,544,939	8,515,204,559	7,665,700,884
Funded ratio on actuarial value of assets	27.30%	33.33%	66.06%	70.81%	29.71%	35.60%
Market value of assets	$2,980,401,603	$3,538,878,093	$478,103,794	$510,628,492	$3,458,505,397	$4,049,506,585
Unfunded liability on market value of assets	8,380,646,533	7,643,263,939	274,595,663	210,664,952	8,655,242,196	7,853,928,891
Funded ratio on market value of assets	26.23%	31.65%	63.52%	70.79%	28.55%	34.02%
Insurance						
Actuarial accrued liability	$3,125,330,157	$4,280,089,633	$384,592,406	$507,058,767	$3,509,922,563	$4,787,148,400
Actuarial value of assets	446,080,511	451,620,442	345,573,948	329,961,615	791,654,459	781,582,057
Unfunded liability on actuarial value of assets	2,679,249,646	3,828,469,191	39,018,458	177,097,152	2,718,268,104	4,005,566,343
Funded ratio on actuarial value of assets	14.27%	10.55%	89.85%	65.07%	22.55%	16.33%
Market value of assets	$430,805,726	$433,305,243	$333,298,119	$321,071,515	$764,103,845	$754,376,758
Unfunded liability on market value of assets	2,694,524,431	3,846,784,390	51,294,287	185,987,252	2,745,818,718	4,032,771,642
Funded ratio on market value of assets	13.78%	10.12%	86.66%	63.32%	21.77%	15.76%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	39,226	38,597	3,253	3,064	42,479	41,661
Number of vested former members	8,976	6,265	347	334	9,323	6,599
Number of former members due a refund	35,130	32,332	2,821	2,930	37,951	35,262
Number of active members	42,196	46,617	4,086	4,291	46,282	50,908
Total salary	$1,644,896,681	$1,731,632,748	$131,976,754	$133,053,792	$1,776,873,435	$1,864,686,540
Average salary	$38,982	$37,146	$32,300	$31,008	$38,392	$36,629

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation for KERS Hazardous members. There were changes in benefit provisions since the last valuation for KERS Non-Hazardous members. The plan administrator - Kentucky Retirement Systems Board of Trustees - has changed the Health Insurance plans that cover Medicare eligible retirees and the plan designs have changed for the Health Insurance plans that cover non-Medicare eligible retirees. The changes are summarized below.

    - The health insurance dependent subsidy for non-hazardous retirees not eligible for Medicare has been eliminated effective January 1, 2013.
    - The self-insured Medicare plans have been replaced by Medicare Advantage plans administered by Humana for Plan Year 2013.
    - Plan design changes have also been implemented for Plan Year 2013 for the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2011 and June 30, 2012 is 4.50% for KERS Non-Hazardous and 7.75% for KERS Hazardous. The lower rate for KERS Non-Hazardous is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2012 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	42,196	$1,644,896,681	$38,982	44.3	9.8
Hazardous	4,086	131,976,754	32,300	41.1	7.3
Total in KERS	46,282	$1,776,873,435	$38,392	44.0	9.6

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2007	47,913	$1,780,223,493	$37,155	1.9%
6/30/2008	48,085	1,837,873,488	38,221	2.9
6/30/2009	46,060	1,754,412,912	38,090	(0.3)
6/30/2010	47,090	1,815,146,388	38,546	1.2
6/30/2011	46,617	1,731,632,748	37,146	(3.6)
6/30/2012	42,196	1,644,896,681	38,982	4.9

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2007	4,349	$144,838,020	$33,304	3.7%
6/30/2008	4,393	148,710,060	33,852	1.6
6/30/2009	4,334	146,043,576	33,697	(0.5)
6/30/2010	4,291	143,557,944	33,456	(0.7)
6/30/2011	4,291	133,053,792	31,008	(7.3)
6/30/2012	4,086	131,976,754	32,300	4.2

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	33,254	$763,984,686	$22,974	67.1
Disability	1,800	25,253,036	14,029	64.3
Beneficiary	4,172	55,643,223	13,337	70.4
Total in KERS	39,226	$844,880,945	$21,539	67.3

* Does not include annual benefits for those members included in the Hazardous System who are also receiving a portion of their benefit from the Non Hazardous System

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	2,807	$45,242,426	$16,118	62.5
Disability	130	1,059,602	8,151	58.8
Beneficiary	316	2,929,177	9,270	61.3
Total in KERS	3,253	$49,231,205	$15,134	62.2

This valuation also includes 47,274 inactive members (44,106 Non-Hazardous and 3,168 Hazardous; of which 8,976 Non-Hazardous are vested and 347 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2012 the total market value of assets amounted to $4,222,609,242 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2012

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	$2,980,401,603	$430,805,726	$3,411,207,329
Hazardous	478,103,794	333,298,119	811,401,913
Total	$3,458,505,397	$764,103,845	$4,222,609,242

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $4,390,197,493. Schedule B shows the development of the actuarial value of assets as of June 30, 2012. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	June 30, 2012	June 30, 2011
Retirement		
Non-Hazardous	$ 3,101,316,738	$ 3,726,986,087
Hazardous	497,226,296	510,748,505
Total	$ 3,598,543,034	$ 4,237,734,592
Insurance		
Non-Hazardous	$ 446,080,511	$ 451,620,442
Hazardous	345,573,948	329,961,615
Total	$ 791,654,459	$ 781,582,057
KERS Total		
Non-Hazardous	$ 3,547,397,249	$ 4,178,606,529
Hazardous	842,800,244	840,710,120
Total	$ 4,390,197,493	$ 5,019,316,649

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2012. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $13,536,982,296, of which $8,981,435,267 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $248,789,874 is for the prospective benefits payable on account of present inactive members, and $4,306,757,155 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $3,598,543,034 as of June 30, 2012. The difference of $9,938,439,262 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $841,110,018 is the present value of future contributions expected to be made by members, and the balance of $9,097,329,244 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.72% of payroll for non-hazardous members and 5.42% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $582,124,685. When this amount is subtracted from $9,097,329,244, which is the present value of the total future contributions to be made by the employers, there remains $8,515,204,559 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 28.31% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 10.91% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $8,259,731,398 for non-hazardous members and $255,473,161 for hazardous members over 25 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.54% of payroll for non-hazardous members and 0.67% of payroll for hazardous members.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $4,710,184,207, of which $1,798,049,543 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $322,598,015 is for the prospective benefits payable on account of present inactive members, and $2,589,536,649 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $791,654,459 as of June 30, 2012. The difference of $3,918,529,748 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $47,416,322 is the present value of future contributions expected to be made by members, and the balance of $3,871,113,426 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 5.88% of payroll for non-hazardous members and 9.93% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $1,152,845,322. When this amount is subtracted from $3,871,113,426, which is the present value of the total future contributions to be made by the employers, there remains $2,718,268,104 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 6.52% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 1.67% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $2,679,249,646 for non-hazardous members and $39,018,458 for hazardous members over 25 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.31% of payroll for non-hazardous members and 0.24% of payroll for hazardous members.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2012 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/11	$ 7,455.2	$ 210.5	$ 7,665.7
(2)	Normal cost from last valuation	75.8	9.9	85.7
(3)	Employer contributions	214.8	20.8	235.6
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	575.3	16.3	591.6
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 7,891.5	$ 215.9	$ 8,107.4
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 7,891.5	$ 215.9	$ 8,107.4
(9)	Actual UAAL as of 6/30/12	$ 8,259.7	$ 255.5	$ 8,515.2
(10)	Gain/(loss): (8) - (9)	$ (368.2)	$ (39.6)	$ (407.8)
(11)	Accrued liabilities as of 6/30/11	$ 11,182.1	$ 721.3	$ 11,903.4
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(3.3%)	(5.5%)	(3.4%)

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/11	$ 3,828.5	$ 177.1	$ 4,005.6
(2)	Normal cost from last valuation	134.2	16.3	150.5
(3)	Expected employer contributions	281.4	26.0	307.4
(4)	Interest accrual: Non-Haz: [(1) + (2) - (3)] x .045 Haz: [(1) + (2) - (3)] x .0775	165.7	13.0	178.7
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 3,847.0	$ 180.4	$ 4,027.4
(6)	Change due to plan change to MA-PD	(1,251.0)	(105.8)	(1,356.8)
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 2,596.0	$ 74.6	$ 2,670.6
(9)	Actual UAAL as of 6/30/12	$ 2,679.2	$ 39.0	$ 2,718.2
(10)	Gain/(loss): (8) - (9)	$ (83.2)	$ 35.6	$ (47.6)
(11)	Accrued liabilities as of 6/30/11	$ 4,280.1	$ 507.1	$ 4,787.2
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(1.9%)	7.0%	(1.0%)

* *Unfunded actuarial accrued liability*

NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/12	Insurance $ Gain (or Loss) For Year Ending 6/30/12
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (61.3)	$ 20.2
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(26.1)	1.4
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.6)	(2.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	141.0	(27.4)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(7.1)	111.8
New Members. Additional unfunded accrued liability will produce a loss.	(7.8)	(3.4)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(325.1)	(37.9)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	15.0	33.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(96.2)	(179.4)
Gain (or Loss) During Year From Financial Experience	$ (368.2)	$ (83.2)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	1,251.0
Composite Gain (or Loss) During Year	$ (368.2)	$ 1,167.8

HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/12	Insurance $ Gain (or Loss) For Year Ending 6/30/12
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (12.0)	$ 2.4
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.8)	0.4
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	20.1	10.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(3.8)	19.3
New Members. Additional unfunded accrued liability will produce a loss.	(2.7)	(2.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(29.9)	(21.3)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	3.9	7.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(14.5)	19.2
Gain (or Loss) During Year From Financial Experience	$ (39.6)	$ 35.6
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	105.8
Composite Gain (or Loss) During Year	$ (39.6)	$ 141.4

TOTAL KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/12	Insurance $ Gain (or Loss) For Year Ending 6/30/12
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (73.3)	$ 22.6
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(26.9)	1.8
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.5)	(2.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	161.2	(16.5)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(10.9)	131.1
New Members. Additional unfunded accrued liability will produce a loss.	(10.4)	(5.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(355.0)	(59.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	18.9	40.6
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(110.7)	(160.2)
Gain (or Loss) During Year From Financial Experience	$ (407.8)	$ (47.6)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	1,356.8
Composite Gain (or Loss) During Year	$ (407.8)	$ 1,309.2

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2013/2014 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for		Amount	% of Payroll
A.	Normal Cost:		
	(1) Service retirement benefits	$ 131,143,668	7.97%
	(2) Disability benefits	10,285,846	0.63
	(3) Survivor benefits	2,071,853	0.13
	(4) Total	$ 143,501,367	8.72%
B.	Member Contributions	$ 82,244,834	5.00%
C.	Employer Normal Cost: [A(4) - B]	$ 61,256,533	3.72%
D.	Administrative Expenses	$ 8,882,442	0.54%
E.	Unfunded Actuarial Accrued Liability Contributions*:		
	(1) UAAL Contribution Based on 6/30/11 Valuation:	$ 389,018,065	23.65%
	(2) Change due to:		
	a. Active decrements	$ (2,988,661)	(0.18)%
	b. Pay increases	399,403	0.02
	c. Retiree mortality	(846,666)	(0.05)
	d. Investment return	18,331,291	1.11
	e. COLA	6,597,310	0.40
	f. Assumption Change	0	0.00
	g. Other	55,180,039	3.34
	h. Total Change	$ 76,672,716	4.66%
	(3) UAAL Contribution Based on 6/30/12 Valuation: [E(1) +E(2)h]	$ 465,690,781	28.31%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$ 535,829,756	32.57%

**Based on 26 year amortization of the UAAL from June 30, 2011 and 25 years from June 30, 2012*

Required Contribution Rates
Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	16,277,766	12.48%
(2) Disability benefits		1,121,967	0.83
(3) Survivor benefits		317,359	0.23
(4) Total	$	17,717,092	13.42%
B. Member Contributions	$	10,558,140	8.00%
C. Employer Normal Cost: [A(4) - B]	$	7,158,952	5.42%
D. Administrative Expenses	$	884,244	0.67%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/11 Valuation:	$	11,468,780	8.69%
(2) Change due to:			
a. Active decrements	$	(419,932)	(0.32)%
b. Pay increases		216,379	0.16
c. Retiree mortality		(217,196)	(0.16)
d. Investment return		1,685,899	1.28
e. COLA		406,133	0.31
f. Assumption Change		0	0.00
g. Other		1,263,734	0.95
h. Total Change	$	2,935,017	2.22%
(3) UAAL Contribution Based on 6/30/12 Valuation: [E(1) +E(2)h]	$	14,403,797	10.91%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	22,446,993	17.00%

**Based on 26 year amortization of the UAAL from June 30, 2011 and 25 years from June 30, 2012*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	99,601,271	6.06%
B.	Member Contributions*	$	2,960,814	0.18%
C.	Employer Normal Cost: [A - B]	$	96,640,457	5.88%
D.	Administrative Expenses	$	5,070,370	0.31%
E.	Unfunded Actuarial Accrued Liability**:	$	107,169,986	6.52%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	208,880,813	12.71%

**The liabilities are net of retiree contributions towards their healthcare.*
*** Based on 25 year amortization of the UAAL from June 30, 2012*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	13,421,141	10.17%
B.	Member Contributions*	$	316,744	0.24%
C.	Employer Normal Cost: [A - B]	$	13,104,397	9.93%
D.	Administrative Expenses	$	322,727	0.24%
E.	Unfunded Actuarial Accrued Liability**:	$	2,199,894	1.67%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	15,627,018	11.84%

**The liabilities are net of retiree contributions towards their healthcare.*
*** Based on 25 year amortization of the UAAL from June 30, 2012*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2012

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	39,226	3,253	42,479
Terminated employees entitled to benefits but not yet receiving benefits	44,106	3,168	47,274
Active Members	42,196	4,086	46,282
Total	125,528	10,507	136,035

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2007	$ 5,396,782,459	$ 9,485,939,277	$ 4,089,156,818	56.9%	$ 1,780,223,493	229.7%
6/30/2008	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
6/30/2009	4,794,611,365	10,658,549,532	5,863,938,167	45.0	1,754,412,912	334.2
6/30/2010	4,210,215,585	11,004,795,089	6,794,579,504	38.3	1,815,146,388	374.3
6/30/2011	3,726,986,087	11,182,142,032	7,455,155,945	33.3	1,731,632,748	430.5
6/30/2012	3,101,316,738	11,361,048,136	8,259,731,398	27.3	1,644,896,681	502.1
Hazardous Members						
6/30/2007	$ 467,287,809	$ 558,992,329	$ 91,704,520	83.6%	$ 144,838,020	63.3%
6/30/2008	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
6/30/2009	502,503,287	674,411,781	171,908,494	74.5	146,043,576	117.7
6/30/2010	502,729,009	688,149,451	185,420,442	73.1	143,557,944	129.2
6/30/2011	510,748,505	721,293,444	210,544,939	70.8	133,053,792	158.2
6/30/2012	497,226,296	752,699,457	255,473,161	66.1	131,976,754	193.6
Total KERS Members						
6/30/2007	$ 5,864,070,268	$ 10,044,931,606	$ 4,180,861,338	58.4%	$ 1,925,061,513	217.2%
6/30/2008	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0
6/30/2009	5,297,114,652	11,332,961,313	6,035,846,661	46.7	1,900,456,488	317.6
6/30/2010	4,712,944,594	11,692,944,540	6,979,999,946	40.3	1,958,704,332	356.4
6/30/2011	4,237,734,592	11,903,435,476	7,665,700,884	35.6	1,864,686,540	411.1
6/30/2012	3,598,543,034	12,113,747,593	8,515,204,559	29.7	1,776,873,435	479.2

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2007	$ 621,171,658	$ 5,201,355,055	$ 4,580,183,397	11.9%	$ 1,780,223,493	257.3%
6/30/2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
6/30/2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
6/30/2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
6/30/2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
6/30/2012	446,080,511	3,125,330,157	2,679,249,646	14.3	1,644,896,681	162.9
Hazardous Members						
6/30/2007	$ 251,536,756	$ 504,842,981	$ 253,306,225	49.8%	$ 144,838,020	174.9%
6/30/2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
6/30/2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
6/30/2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
6/30/2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
6/30/2012	345,573,948	384,592,406	39,018,458	89.9	131,976,754	29.6
Total KERS Members						
6/30/2007	$ 872,708,414	$ 5,706,198,036	$ 4,833,489,622	15.3%	$ 1,925,061,513	251.1%
6/30/2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
6/30/2009	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0
6/30/2010	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1
6/30/2011	781,582,057	4,787,148,400	4,005,566,343	16.3	1,864,686,540	214.8
6/30/2012	791,654,459	3,509,922,563	2,718,268,104	22.6	1,776,873,435	153.0

RETIREMENT BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2007	$176,774,106	$88,248,677	49.9%
June 30, 2008	264,742,985	104,655,217	39.5
June 30, 2009	294,495,010	112,383,083	38.2
June 30, 2010	348,494,678	144,050,560	41.3
June 30, 2011	381,915,236	193,754,471	50.7
June 30, 2012	441,094,470	214,786,132	48.7
	Hazardous Members		
June 30, 2007	$12,219,689	$13,237,321	108.3%
June 30, 2008	14,147,341	15,257,079	107.8
June 30, 2009	15,708,254	15,843,289	100.9
June 30, 2010	17,814,630	17,658,058	99.1
June 30, 2011	20,605,070	19,140,508	92.9
June 30, 2012	20,264,754	20,808,540	102.7
	Total KERS Members		
June 30, 2007	$188,993,795	$101,485,998	53.7%
June 30, 2008	278,890,326	119,912,296	43.0
June 30, 2009	310,203,264	128,226,372	41.3
June 30, 2010	366,309,308	161,708,618	44.1
June 30, 2011	402,520,306	212,894,979	52.9
June 30, 2012	461,359,224	235,594,672	51.1

INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
		Non-Hazardous Members			
June 30, 2007	$219,768,964	$10,744,049	$ 64,014,332	$ 74,758,381	34.0%
June 30, 2008	558,745,820	6,633,538	56,744,942	63,378,480	11.3
June 30, 2009	362,707,378	8,167,982	74,542,932	82,710,914	22.8
June 30, 2010	376,556,187	8,550,914	93,976,917	102,527,831	27.2
June 30, 2011	294,897,813	0	129,335,552	129,335,552	43.9
June 30, 2012	297,904,224	0	156,057,216	156,057,216	52.4
		Hazardous Members			
June 30, 2007	$31,304,778	104,669	$19,534,819	$19,639,488	62.7%
June 30, 2008	51,214,929	73,891	21,997,341	22,071,232	43.1
June 30, 2009	34,670,467	186,081	20,807,204	20,993,285	60.6
June 30, 2010	35,045,278	319,059	21,921,535	22,240,594	63.5
June 30, 2011	29,585,257	0	19,952,580	19,952,580	67.4
June 30, 2012	28,326,206	0	24,538,087	24,538,087	86.6
		Total KERS Members			
June 30, 2007	$251,073,742	$10,848,718	$ 83,549,151	$ 94,397,869	37.6%
June 30, 2008	609,960,749	6,707,429	78,742,283	85,449,712	14.0
June 30, 2009	397,377,845	8,354,063	95,350,136	103,704,199	26.1
June 30, 2010	411,601,465	8,869,973	115,898,452	124,768,425	30.3
June 30, 2011	324,483,070	0	149,288,132	149,288,132	46.0
June 30, 2012	326,230,430	0	180,595,303	180,595,303	55.4

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2012. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2012	6/30/2012
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	25 years	25 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	5.0% - 17.0%	5.0% - 21.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2012	6/30/2012
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	25 years	25 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	9.5% - 5.0%	9.5% - 5.0%
Medical Trend Assumption (Post-Medicare)	7.5% - 5.0%	7.5% - 5.0%
Year Ultimate Trend	2019	2019
Actuarial assumptions:		
Investment rate of return*	4.50%	7.75%
*Includes price inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2012 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2011. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 3,101,316,738	$ 3,726,986,087
Prospective contributions		
Member contributions	$ 751,281,602	$ 797,874,166
Employer normal contributions	519,955,001	570,896,611
Unfunded accrued liability contributions	8,259,731,398	7,455,155,945
Total prospective contributions	$ 9,530,968,001	$ 8,823,926,722
Total assets	$ 12,632,284,739	$ 12,550,912,809
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,473,263,446	$ 8,268,747,284
Present value of benefits payable on account of active members	3,923,748,401	4,068,198,453
Present value of benefits payable on account of inactive members	235,272,892	213,967,072
Total liabilities	$ 12,632,284,739	$ 12,550,912,809

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 497,226,296	$ 510,748,505
Prospective contributions		
Member contributions	$ 89,828,416	$ 90,314,845
Employer normal contributions	62,169,684	74,774,121
Unfunded accrued liability contributions	255,473,161	210,544,939
Total prospective contributions	$ 407,471,261	$ 375,633,905
Total assets	$ 904,697,557	$ 886,382,410
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 508,171,821	$ 470,443,306
Present value of benefits payable on account of active members	383,008,754	395,987,332
Present value of benefits payable on account of inactive members	13,516,982	19,951,772
Total liabilities	$ 904,697,557	$ 886,382,410

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 3,598,543,034	$ 4,237,734,592
Prospective contributions		
Member contributions	$ 841,110,018	$ 888,189,011
Employer normal contributions	582,124,685	645,670,732
Unfunded accrued liability contributions	8,515,204,559	7,665,700,884
Total prospective contributions	$ 9,938,439,262	$ 9,199,560,627
Total assets	$ 13,536,982,296	$ 13,437,295,219
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,981,435,267	$ 8,739,190,590
Present value of benefits payable on account of active members	4,306,757,155	4,464,185,785
Present value of benefits payable on account of inactive members	248,789,874	233,918,844
Total liabilities	$ 13,536,982,296	$ 13,437,295,219

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 446,080,511	$ 451,620,442
Prospective contributions		
Member contributions	$ 44,118,830	$ 37,443,473
Employer normal contributions	1,052,410,976	1,489,811,511
Unfunded accrued liability contributions	2,679,249,646	3,828,469,191
Total prospective contributions	$ 3,775,779,452	$ 5,355,724,175
Total assets	$ 4,221,859,963	$ 5,807,344,617
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,617,674,784	$ 2,296,980,336
Present value of benefits payable on account of active members	2,297,791,340	3,239,341,639
Present value of benefits payable on account of inactive members	306,393,839	271,022,642
Total liabilities	$ 4,221,859,963	$ 5,807,344,617

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 345,573,948	$ 329,961,615
Prospective contributions		
Member contributions	$ 3,297,492	$ 2,404,322
Employer normal contributions	100,434,346	127,331,720
Unfunded accrued liability contributions	39,018,458	177,097,152
Total prospective contributions	$ 142,750,296	$ 306,833,194
Total assets	$ 488,324,244	$ 636,794,809
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 180,374,759	$ 267,162,887
Present value of benefits payable on account of active members	291,745,309	351,254,948
Present value of benefits payable on account of inactive members	16,204,176	18,376,974
Total liabilities	$ 488,324,244	$ 636,794,809

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 791,654,459	$ 781,582,057
Prospective contributions		
Member contributions	$ 47,416,322	$ 39,847,795
Employer normal contributions	1,152,845,322	1,617,143,231
Unfunded accrued liability contributions	2,718,268,104	4,005,566,343
Total prospective contributions	$ 3,918,529,748	$ 5,662,557,369
Total assets	$ 4,710,184,207	$ 6,444,139,426
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,798,049,543	$ 2,564,143,223
Present value of benefits payable on account of active members	2,589,536,649	3,590,596,587
Present value of benefits payable on account of inactive members	322,598,015	289,399,616
Total liabilities	$ 4,710,184,207	$ 6,444,139,426

The following tables provide the solvency test for non-hazardous and hazardous KERS members.

Solvency Test
Retirement Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2007	$ 878,842,180	$ 6,437,235,593	$ 2,169,861,504	$ 5,396,782,459	100.0%	70.2%	0.0%
6/30/2008	875,178,068	7,162,496,700	2,092,015,217	5,318,792,893	100.0	62.0	0.0
6/30/2009	793,574,765	8,205,155,691	1,659,819,076	4,794,611,365	100.0	48.8	0.0
6/30/2010	869,484,042	8,329,757,802	1,805,553,245	4,210,215,585	100.0	40.1	0.0
6/30/2011	916,568,932	8,482,714,356	1,782,858,744	3,726,986,087	100.0	33.1	0.0
6/30/2012	885,137,183	8,708,536,338	1,767,374,615	3,101,316,738	100.0	25.4	0.0

Solvency Test
Retirement Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2007	$ 88,670,847	$ 306,492,350	$ 163,829,132	$ 467,287,809	100.0%	100.0%	44.0%
6/30/2008	89,590,638	355,771,877	172,648,312	502,132,214	100.0	100.0	32.9
6/30/2009	87,779,938	413,972,356	172,659,487	502,503,287	100.0	100.0	0.4
6/30/2010	88,511,283	441,657,241	157,980,927	502,729,009	100.0	93.8	0.0
6/30/2011	86,614,205	490,395,078	144,284,161	510,748,505	100.0	86.5	0.0
6/30/2012	82,100,877	521,688,803	148,909,777	497,226,296	100.0	79.6	0.0

Solvency Test
Insurance Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2007	$ 0	$ 2,569,197,567	$ 2,632,157,488	$ 621,171,658	100.0%	24.2%	0.0%
6/30/2008	0	2,788,189,754	2,643,309,531	603,197,761	100.0	21.6	0.0
6/30/2009	0	2,861,867,088	1,645,458,483	534,172,580	100.0	18.7	0.0
6/30/2010	0	2,744,534,054	1,721,601,987	471,341,628	100.0	17.2	0.0
6/30/2011	0	2,568,002,978	1,712,086,655	451,620,442	100.0	17.6	0.0
6/30/2012	0	1,924,068,623	1,201,261,534	446,080,511	100.0	23.2	0.0

Solvency Test
Insurance Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2007	$ 0	$ 201,189,546	$ 303,653,435	$ 251,536,756	100.0%	100.0%	16.6%
6/30/2008	0	228,834,940	312,822,274	288,161,759	100.0	100.0	19.0
6/30/2009	0	242,123,365	249,008,805	301,634,592	100.0	100.0	23.9
6/30/2010	0	268,510,709	224,786,820	314,427,296	100.0	100.0	20.4
6/30/2011	0	285,539,861	221,518,906	329,961,615	100.0	100.0	20.1
6/30/2012	0	196,578,935	188,013,471	345,573,948	100.0	100.0	79.2

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2011	2012	2013	2014	2015	2016
A.	Actuarial Value Beginning of Year	$ 4,210,215,585	$ 3,726,986,087				
B.	Market Value End of Year	3,538,878,093	2,980,401,603				
C.	Market Value Beginning of Year	3,503,007,035	3,538,878,093				
D.	Cash Flow						
	D1. Contributions	303,633,346	311,192,306				
	D2. Benefit Payments	(849,302,748)	(878,583,454)				
	D3. Administrative Expenses	(9,299,947)	(8,907,777)				
	D4. Investment Expenses	(17,600,109)	(11,549,725)				
	D5. Net	(572,569,458)	(587,848,650)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	608,440,516	29,372,160				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	267,578,092	263,481,194				
	E4. Amount for Phased-In Recognition	340,862,424	(234,109,034)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	68,172,485	(46,821,807)	0	0	0	0
	F2. First Prior Year	54,541,214	68,172,485	(46,821,807)	0	0	0
	F3. Second Prior Year	(247,227,791)	54,541,214	68,172,485	(46,821,807)	0	0
	F4. Third Prior Year	(129,965,994)	(247,227,791)	54,541,214	68,172,485	(46,821,807)	0
	F5. Fourth Prior Year	76,241,954	(129,965,994)	(247,227,791)	54,541,214	68,172,485	(46,821,807)
	F6. Total Recognized Investment Gain	(178,238,132)	(301,301,893)	(171,335,899)	75,891,892	21,350,678	(46,821,807)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 3,726,986,087	$ 3,101,316,738				
H.	Difference Between Market & Actuarial Values	$ (188,107,994)	$ (120,915,135)	$ 50,420,764	$ (25,471,128)	$ (46,821,807)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2011	2012	2013	2014	2015	2016
A.	Actuarial Value Beginning of Year	$ 502,729,009	$ 510,748,505				
B.	Market Value End of Year	510,628,492	478,103,794				
C.	Market Value Beginning of Year	443,511,663	510,628,492				
D.	Cash Flow						
	D1. Contributions	32,099,490	32,590,014				
	D2. Benefit Payments	(46,571,518)	(54,927,682)				
	D3. Administrative Expenses	(783,633)	(887,975)				
	D4. Investment Expenses	(2,052,991)	(1,460,743)				
	D5. Net	(17,308,652)	(24,686,386)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	84,425,481	(7,838,312)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	35,833,988	40,134,457				
	E4. Amount for Phased-In Recognition	48,591,493	(47,972,769)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	9,718,299	(9,594,554)	0	0	0	0
	F2. First Prior Year	7,187,340	9,718,299	(9,594,554)	0	0	0
	F3. Second Prior Year	(24,273,865)	7,187,340	9,718,299	(9,594,554)	0	0
	F4. Third Prior Year	(12,007,500)	(24,273,865)	7,187,340	9,718,299	(9,594,554)	0
	F5. Fourth Prior Year	8,869,886	(12,007,500)	(24,273,865)	7,187,340	9,718,299	(9,594,554)
	F6. Total Recognized Investment Gain	(10,505,840)	(28,970,280)	(16,962,780)	7,311,085	123,745	(9,594,554)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 510,748,505	$ 497,226,296				
H.	Difference Between Market & Actuarial Values	$ (120,013)	$ (19,122,502)	$ (2,159,722)	$ (9,470,807)	$ (9,594,554)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2011	2012	2013	2014	2015	2016
A.	Actuarial Value Beginning of Year	$ 471,341,628	$ 451,620,442				
B.	Market Value End of Year	433,305,243	430,805,726				
C.	Market Value Beginning of Year	371,002,484	433,305,243				
D.	Cash Flow						
	D1. Contributions	155,036,517	181,479,543				
	D2. Benefit Payments	(161,804,578)	(163,840,752)				
	D3. Administrative Expenses	(4,666,615)	(5,070,370)				
	D4. Investment Expenses	(1,382,872)	(1,195,793)				
	D5. Net	(12,817,548)	11,372,628				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	75,120,307	(13,872,145)				
	E2. Assumed Rate	4.50%	4.50%				
	E3. Amount for Immediate Recognition	17,820,704	20,977,318				
	E4. Amount for Phased-In Recognition	57,299,603	(34,849,463)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	11,459,921	(6,969,893)	0	0	0	0
	F2. First Prior Year	7,065,952	11,459,921	(6,969,893)	0	0	0
	F3. Second Prior Year	(35,906,883)	7,065,952	11,459,921	(6,969,893)	0	0
	F4. Third Prior Year	(13,538,974)	(35,906,883)	7,065,952	11,459,921	(6,969,893)	0
	F5. Fourth Prior Year	6,195,642	(13,538,974)	(35,906,883)	7,065,952	11,459,921	(6,969,893)
	F6. Total Recognized Investment Gain	(24,724,342)	(37,889,877)	(24,350,903)	11,555,980	4,490,028	(6,969,893)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 451,620,442	$ 446,080,511				
H.	Difference Between Market & Actuarial Values	$ (18,315,199)	$ (15,274,785)	$ 9,076,118	$ (2,479,862)	$ (6,969,893)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2011	2012	2013	2014	2015	2016
A.	Actuarial Value Beginning of Year	$ 314,427,296	$ 329,961,615				
B.	Market Value End of Year	321,071,515	333,298,119				
C.	Market Value Beginning of Year	271,395,843	321,071,515				
D.	Cash Flow						
	D1. Contributions	20,887,821	25,856,162				
	D2. Benefit Payments	(15,328,070)	(13,940,467)				
	D3. Administrative Expenses	(222,983)	(322,727)				
	D4. Investment Expenses	(840,645)	(857,285)				
	D5. Net	4,496,123	10,735,683				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	45,179,549	1,490,921				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	22,080,623	26,189,555				
	E4. Amount for Phased-In Recognition	23,098,926	(24,698,634)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	4,619,785	(4,939,727)	0	0	0	0
	F2. First Prior Year	5,005,228	4,619,785	(4,939,727)	0	0	0
	F3. Second Prior Year	(16,386,736)	5,005,228	4,619,785	(4,939,727)	0	0
	F4. Third Prior Year	(9,611,455)	(16,386,736)	5,005,228	4,619,785	(4,939,727)	0
	F5. Fourth Prior Year	5,330,751	(9,611,455)	(16,386,736)	5,005,228	4,619,785	(4,939,727)
	F6. Total Recognized Investment Gain	(11,042,427)	(21,312,905)	(11,701,450)	4,685,286	(319,942)	(4,939,727)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 329,961,615	$ 345,573,948				
H.	Difference Between Market & Actuarial Values	$ (8,890,100)	$ (12,275,829)	$ (574,379)	$ (5,259,665)	$ (4,939,727)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for KERS non-hazardous insurance benefits is 4.50%, and the current rate for KERS hazardous insurance benefits is 7.75%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.50% per annum:

Service	Annual Rates of Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	12.50%	16.50%	4.50%	17.00%	21.00%
1-2	4.50%	4.50%	4.50%	9.00%	9.00%
2-3	2.00%	2.50%	4.50%	6.50%	7.00%
3-4	1.50%	2.00%	4.50%	6.00%	6.50%
4-5	1.50%	1.50%	4.50%	6.00%	6.00%
5-6	1.50%	1.00%	4.50%	6.00%	5.50%
6-7	1.00%	0.50%	4.50%	5.50%	5.00%
7-8	1.00%	0.50%	4.50%	5.50%	5.00%
8-9	1.00%	0.50%	4.50%	5.50%	5.00%
9-10	0.50%	0.50%	4.50%	5.00%	5.00%
10 & over	0.50%	0.50%	4.50%	5.00%	5.00%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement+	Service Retirement++
		Male	Female			
20	6.00%	0.03%	0.01%	0.04%		
25	5.08	0.03	0.01	0.05		
30	4.26	0.04	0.02	0.06		
35	3.21	0.04	0.02	0.09		
40	3.00	0.05	0.04	0.13		
45	3.00	0.08	0.05	0.22		
50	3.00	0.13	0.07	0.37		
55	3.00	0.22	0.11	0.61	8.0%	
60	3.00	0.40	0.22	0.97	10.0	10.0%
65		0.73	0.43		22.5	25.0
70		1.19	0.69		22.5	25.0
75					100.0	100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 19.0%, 13.0%, 10.0%, 9.0% and 6.5%, respectively.*
\+ *For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.*
++ *For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 25%.*

Hazardous Members

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement		
		Male	Female		Service	Rate+	Rate++
20	4.00%	0.03%	0.01%	0.05%	20	22.0%	
25	4.00	0.03	0.01	0.07	25	35.0	22.0%
30	3.50	0.04	0.02	0.09	30	38.0	35.0
35	3.00	0.04	0.02	0.13	35	60.0	38.0
40	3.00	0.05	0.04	0.20	40		60.0
45	3.00	0.08	0.05	0.33			
50	3.00	0.13	0.07	0.56			
55	3.00	0.22	0.11	0.92			
60	3.00	0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 26.0%, 11.5%, 8.25%, 7.5% and 7.0%, respectively.*
** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*
\+ *For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.*
++ *For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006, and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2013	9.5%	7.5%
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	90%	100%

HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2012				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$496.14	$764.68	$1,144.72	$1,272.83
Optimum PPO	$663.30	$922.88	$1,432.36	$1,595.06
Capitol Choice	$638.16	$927.08	$1,414.46	$1,568.06

Effective January 1, 2013				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$506.06	$791.54	$1,177.80	$1,314.12
Optimum PPO	$675.34	$961.84	$1,476.00	$1,642.78
Capitol Choice	$650.22	$961.42	$1,457.90	$1,613.74

MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2013	
Available Plan	**Premium**
Kentucky Retirement System Health Plan - Medical Only	$157.00
Kentucky Retirement System Health Plan - Essential	$84.08
Kentucky Retirement System Health Plan - Premium	$198.31

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For those members who retired between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

Non-Hazardous Normal Retirement (continued):

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement

55

Service Requirement

At least one month of hazardous duty service credit

Amount

If a member has at least 60 months of service, the monthly benefit is 2.49% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement

60

Service Requirement

At least 60 months of hazardous duty service credit

Hazardous Normal Retirement (continued):

Amount

The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 55 with 60 months of service or any age with 25 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement

Age 60 with 10 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 50 with 15 years of service or any age with 20 years service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

Hazardous Disability (continued):

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Vesting (continued):

	Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.69 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $19.04 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.69 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2007	2008	2009	2010	2011	2012
			Number			
Beginning of Year	32,140	33,849	35,307	37,883	37,945	38,597
Added	2,440	2,573	3,465	1,162	1,592	1,707
Removed	731	1,115	889	1,100	940	1,078
End of Year	33,849	35,307	37,883	37,945	38,597	39,226
			Annual Allowances			
Beginning of Year	$ 566,167,003	$ 625,435,416	$ 710,505,270	$ 812,559,070	$ 801,881,911	$ 821,197,278
Added	65,965,990	102,305,405	110,700,043	865,483	31,930,847	37,458,130
Removed	6,697,577	17,235,551	8,646,243	11,542,643	12,615,480	13,774,463
End of Year	$ 625,435,416	$ 710,505,270	$ 812,559,070	$ 801,881,911	$ 821,197,278	$ 844,880,945
% Increase in Allowances	10.47%	13.60%	14.36%	-1.31%	2.41%	2.88%
Average Annual Allowance	$ 18,472	$ 20,124	$ 21,449	$ 21,133	$ 21,276	$ 21,539

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2007	2008	2009	2010	2011	2012
			Number			
Beginning of Year	1,980	2,202	2,404	2,648	2,835	3,064
Added	241	261	339	282	288	243
Removed	19	59	95	95	59	54
End of Year	2,202	2,404	2,648	2,835	3,064	3,253
			Annual Allowances			
Beginning of Year	$ 23,381,489	$ 27,528,837	$ 33,588,993	$ 38,695,501	$ 41,114,800	$ 45,609,229
Added	4,509,381	6,565,454	5,443,628	3,315,361	5,012,933	4,213,360
Removed	362,129	505,250	337,120	896,062	518,504	591,384
End of Year	$ 27,528,837	$ 33,588,993	$ 38,695,501	$ 41,114,800	$ 45,609,229	$ 49,231,205
% Increase in Allowances	17.94%	22.01%	15.20%	6.25%	10.93%	7.94%
Average Annual Allowance	$ 12,502	$ 13,972	$ 14,613	$ 14,503	$ 14,886	$ 15,134

Non-Hazardous Retired Lives Summary June 30, 2012

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	9,485	$ 14,379,888.53	3,346	$ 6,338,745.63	12,831	$ 20,718,634.16
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	762	958,618.81	1,832	3,547,532.79	2,594	4,506,151.60
66-2/3% to Beneficiary	404	866,969.02	789	2,361,556.01	1,193	3,228,525.03
50% to Beneficiary	1,255	2,609,117.98	1,061	2,747,912.75	2,316	5,357,030.73
Pop-up Option	3,042	6,196,977.17	3,656	9,156,305.38	6,698	15,353,282.55
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,937	2,965,797.25	866	1,549,757.68	2,803	4,515,554.93
Social Security Option						
Age 62 Basic	982	1,947,430.65	426	1,174,719.99	1,408	3,122,150.64
Age 62 Survivorship	578	1,231,426.25	865	2,172,686.34	1,443	3,404,112.59
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	504	802,503.50	377	619,021.25	881	1,421,524.75
20 Years Certain & Life	488	859,139.52	391	848,179.24	879	1,707,318.76
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	307	465,316.13	85	141,888.64	392	607,204.77
PLSO 24 Month Basic	170	208,041.91	37	45,150.21	207	253,192.12
PLSO 36 Month Basic	425	329,190.28	171	149,925.46	596	479,115.74
PLSO 12 Month Survivor	105	180,026.79	116	239,663.67	221	419,690.46
PLSO 24 Month Survivor	81	115,718.08	93	140,830.13	174	256,548.21
PLSO 36 Month Survivor	164	140,168.01	254	279,605.13	418	419,773.14
Total	20,689	$ 34,256,329.88	14,365	$ 31,513,480.30	35,054	$ 65,769,810.18

Hazardous Retired Lives Summary June 30, 2012

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	442	$ 508,261.34	333	$ 345,620.23	775	$ 853,881.57
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	208	248,554.56	23	24,557.60	231	273,112.16
66-2/3% to Beneficiary	83	108,015.99	21	23,487.28	104	131,503.27
50% to Beneficiary	135	199,603.90	44	67,386.28	179	266,990.18
Pop-up Option	696	1,014,989.82	137	172,490.83	833	1,187,480.65
10 Years Certain	22	23,819.38	9	9,518.47	31	33,337.85
10 Years Certain & Life	107	113,011.20	52	44,859.04	159	157,870.24
Social Security Option						
Age 62 Basic	56	116,792.27	31	57,863.13	87	174,655.40
Age 62 Survivorship	138	333,775.93	16	25,378.01	154	359,153.94
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	49	59,643.76	13	11,065.07	62	70,708.83
20 Years Certain & Life	49	62,826.41	20	30,411.72	69	93,238.13
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	13	12,920.85	15	12,928.54	28	25,849.39
PLSO 24 Month Basic	16	16,016.98	12	10,496.63	28	26,513.61
PLSO 36 Month Basic	48	39,981.67	26	21,907.80	74	61,889.47
PLSO 12 Month Survivor	21	27,586.95	6	5,150.84	27	32,737.79
PLSO 24 Month Survivor	22	30,012.66	9	11,029.16	31	41,041.82
PLSO 36 Month Survivor	50	49,843.05	15	18,695.05	65	68,538.10
Total	2,155	$ 2,965,656.72	782	$ 892,845.68	2,937	$ 3,858,502.40

Non-Hazardous Beneficiary Lives Summary June 30, 2012

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	9	$ 5,087.38	21	$ 20,690.25	30	$ 25,777.63
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	253	281,739.24	1,518	1,515,478.77	1,771	1,797,218.01
66-2/3% to Beneficiary	36	37,860.67	307	298,521.69	343	336,382.36
50% to Beneficiary	104	71,458.23	460	297,181.98	564	368,640.21
Pop-up Option	112	164,722.03	457	672,398.12	569	837,120.15
10 Years Certain	67	81,092.38	77	66,962.05	144	148,054.43
10 Years Certain & Life	19	18,096.78	38	54,654.23	57	72,751.01
Social Security Option						
Age 62 Basic	1	272.14	8	15,392.34	9	15,664.48
Age 62 Survivorship	54	92,511.02	248	442,812.18	302	535,323.20
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	6	2,543.99	6	2,543.99
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	3	2,712.62	7	8,134.18	10	10,846.80
15 Years Certain & Life	21	28,460.59	53	101,220.21	74	129,680.80
20 Years Certain & Life	32	40,531.31	79	128,158.13	111	168,689.44
5 Years Certain	48	50,408.13	44	39,918.21	92	90,326.34
PLSO 12 Month Basic	0	0.00	1	1,791.60	1	1,791.60
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	3,357.39	2	3,357.39
PLSO 12 Month Survivor	4	5,036.27	9	12,350.53	13	17,386.80
PLSO 24 Month Survivor	9	13,815.81	13	10,145.06	22	23,960.87
PLSO 36 Month Survivor	14	13,103.90	38	38,315.85	52	51,419.75
Total	786	$ 906,908.50	3,386	$ 3,730,026.76	4,172	$ 4,636,935.26

Hazardous Beneficiary Lives Summary June 30, 2012

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2	$ 1,051.91	5	$ 2,918.99	7	$ 3,970.90
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	9	2,980.85	115	85,544.72	124	88,525.57
66-2/3% to Beneficiary	0	0.00	15	9,740.30	15	9,740.30
50% to Beneficiary	2	1,450.30	20	7,528.22	22	8,978.52
Pop-up Option	11	7,846.28	49	31,240.78	60	39,087.06
10 Years Certain	4	4,921.56	14	17,101.64	18	22,023.20
10 Years Certain & Life	4	2,121.00	1	938.53	5	3,059.53
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	1	392.36	21	38,525.62	22	38,917.98
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	1	262.55	3	2,151.81	4	2,414.36
15 Years Certain & Life	3	1,456.86	4	2,696.02	7	4,152.88
20 Years Certain & Life	0	0.00	7	3,399.45	7	3,399.45
5 Years Certain	5	1,930.55	4	4,309.34	9	6,239.89
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	1	125.74	1	125.74
PLSO 12 Month Survivor	0	0.00	3	3,378.45	3	3,378.45
PLSO 24 Month Survivor	1	995.41	1	789.94	2	1,785.35
PLSO 36 Month Survivor	3	1,072.35	7	7,226.54	10	8,298.89
Total	46	$ 26,481.98	270	$ 217,616.09	316	$ 244,098.07

Non-Hazardous Members
Retired and Beneficiary Information June 30, 2012
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	82	$ 1,929,500	39	$ 403,551	278	$ 3,420,018	399	$ 5,753,069
45-49	655	$ 17,634,697	95	$ 2,164,573	122	$ 1,619,009	872	$ 21,418,279
50-54	2,448	$ 77,659,014	175	$ 2,575,913	219	$ 3,167,494	2,842	$ 83,402,421
55-59	5,041	$ 152,494,901	302	$ 5,635,961	347	$ 5,383,685	5,690	$ 163,514,546
60-64	7,141	$ 189,615,680	357	$ 4,680,990	421	$ 7,649,417	7,919	$ 201,946,087
65-69	6,504	$ 141,862,286	324	$ 3,946,050	459	$ 7,060,227	7,287	$ 152,868,563
70-74	4,475	$ 83,327,904	256	$ 3,176,990	493	$ 7,393,006	5,224	$ 93,897,900
75-79	2,981	$ 47,469,596	154	$ 1,689,228	559	$ 7,432,107	3,694	$ 56,590,930
80-84	2,151	$ 31,296,443	62	$ 698,070	550	$ 6,645,316	2,763	$ 38,639,829
85-89	1,217	$ 15,122,024	31	$ 258,574	426	$ 3,885,655	1,674	$ 19,266,254
90 & Over	559	$ 5,572,642	5	$ 23,135	298	$ 1,987,290	862	$ 7,583,067
Totals	33,254	$ 763,984,686	1,800	$ 25,253,036	4,172	$ 55,643,223	39,226	$ 844,880,945

Hazardous Members
Retired and Beneficiary Information June 30, 2012
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	48	$ 1,008,111	11	$ 114,623	47	$ 325,203	106	$ 1,447,937
45-49	195	$ 4,001,701	14	$ 123,517	13	$ 107,303	222	$ 4,232,521
50-54	288	$ 6,162,537	19	$ 176,559	24	$ 247,219	331	$ 6,586,315
55-59	514	$ 9,955,857	23	$ 204,038	38	$ 482,626	575	$ 10,642,521
60-64	733	$ 12,178,022	33	$ 292,367	45	$ 481,727	811	$ 12,952,116
65-69	543	$ 7,352,410	13	$ 92,003	42	$ 417,487	598	$ 7,861,900
70-74	269	$ 2,824,442	7	$ 18,846	52	$ 469,041	328	$ 3,312,329
75-79	142	$ 1,101,486	8	$ 31,058	29	$ 223,071	179	$ 1,355,615
80-84	61	$ 418,904	2	$ 6,589	18	$ 77,350	81	$ 502,844
85-89	12	$ 194,387			4	$ 25,077	16	$ 219,464
90 & Over	2	$ 44,571			4	$ 73,072	6	$ 117,643
Totals	2,807	$ 45,242,426	130	$ 1,059,602	316	$ 2,929,177	3,253	$ 49,231,205

Total Non-Hazardous Active Members as of June 30, 2012
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	10								10
Avg Pay	$11,224								$11,224
20-24	908	19							927
Avg Pay	$22,008	$24,717							$22,063
25-29	3,029	590	18						3,637
Avg Pay	$28,302	$31,437	$33,939						$28,838
30-34	2,445	2,089	656	16					5,206
Avg Pay	$30,975	$36,779	$37,521	$45,100					$34,172
35-39	1,719	1,665	1,717	395	27	2			5,525
Avg Pay	$31,898	$39,056	$42,060	$43,332	$51,882	$56,217			$38,137
40-44	1,608	1,429	1,482	1,108	485	61	32	5	6,210
Avg Pay	$32,051	$39,112	$42,864	$47,152	$47,887	$56,295	$59,179	$69,940	$40,596
44-49	1,388	1,259	1,214	911	878	284	202	45	6,181
Avg Pay	$32,338	$38,820	$43,452	$48,131	$49,371	$54,179	$58,129	$61,416	$42,646
50-54	1,166	1,191	1,199	758	704	285	207	93	5,603
Avg Pay	$32,849	$38,372	$41,775	$44,654	$49,199	$52,376	$56,583	$62,398	$41,945
55-59	942	1,016	1,053	683	573	231	154	112	4,764
Avg Pay	$34,289	$37,994	$41,507	$43,913	$47,839	$52,496	$54,254	$64,639	$41,926
60-64	507	677	676	459	355	140	97	73	2,984
Avg Pay	$36,046	$39,961	$40,959	$45,922	$48,189	$50,672	$54,967	$66,774	$43,064
65-69	104	210	232	133	96	33	19	20	847
Avg Pay	$43,269	$38,275	$42,005	$54,834	$50,008	$51,333	$58,346	$77,748	$45,731
70 & over	45	53	76	62	41	8	7	10	302
Avg Pay	$39,828	$40,049	$38,864	$44,069	$49,927	$43,639	$62,893	$71,470	$43,549
Totals	13,871	10,198	8,323	4,525	3,159	1,044	718	358	42,196
Avg Pay	$30,854	$37,964	$41,800	$46,160	$48,742	$52,801	$56,524	$65,085	$38,982

Total Hazardous Active Members as of June 30, 2012
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	195								195
Avg Pay	$21,746								$21,746
25-29	445	82	1						528
Avg Pay	$25,290	$30,714	$37,323						$26,155
30-34	319	252	44	1					616
Avg Pay	$26,747	$32,146	$33,408	$40,437					$29,454
35-39	201	190	164	34					589
Avg Pay	$28,116	$34,018	$36,762	$42,036					$33,231
40-44	197	174	144	105	17	2	1		640
Avg Pay	$26,298	$34,283	$38,022	$41,958	$44,913	$61,510	$62,487		$34,337
44-49	147	130	104	78	48	3	5		515
Avg Pay	$26,593	$32,157	$36,618	$41,722	$50,302	$63,334	$81,763		$35,273
50-54	108	93	88	61	36	3	2		391
Avg Pay	$28,150	$32,883	$37,514	$40,523	$51,263	$47,979	$65,276		$35,784
55-59	101	101	72	44	22	3	3	2	348
Avg Pay	$29,587	$31,424	$37,697	$42,210	$48,354	$60,344	$53,699	$59,710	$35,227
60-64	40	69	53	29	10	4	1	1	207
Avg Pay	$29,694	$34,125	$37,219	$41,442	$39,449	$57,835	$52,753	$75,910	$36,093
65-69	2	17	9	13	4		1		46
Avg Pay	$26,969	$33,744	$45,422	$43,608	$78,670		$75,300		$43,332
70 & over	4	1	4	1				1	11
Avg Pay	$23,410	$29,168	$30,451	$55,804				$53,414	$32,166
Totals	1,759	1,109	683	366	137	15	13	4	4,086
Avg Pay	$26,226	$32,839	$37,098	$41,758	$49,609	$57,955	$68,539	$62,186	$32,300

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Report on the Annual Valuation of the County Employees Retirement System

Prepared as of June 30, 2012

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Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 20, 2012

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2013. The date of the valuation was June 30, 2012.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

TJC/TBG/AB:kc

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REPORT ON THE ANNUAL VALUATION OF THE COUNTY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2012

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2012, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/2012	6/30/2011	6/30/2012	6/30/2011	6/30/2012	6/30/2011
Contributions for next fiscal year:						
Retirement	13.74%	12.62%	21.77%	20.10%		
Insurance	5.84	8.59	16.02	21.84	N/A	N/A
Total	19.58%	21.21%	37.79%	41.94%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$9,139,567,695	$8,918,085,025	$3,009,992,047	$2,859,041,052	$12,149,559,743	$11,777,126,077
Actuarial value of assets	$5,547,235,599	$5,629,611,183	$1,747,379,297	$1,779,545,393	$7,294,614,896	$7,409,156,576
Unfunded liability on actuarial value of assets	$3,592,332,096	$3,288,473,842	$1,262,612,750	$1,079,495,659	$4,854,944,847	$4,367,969,501
Funded ratio on actuarial value of assets	60.69%	63.13%	58.05%	62.24%	60.04%	62.91%
Market value of assets	$5,372,769,813	$5,577,252,295	$1,677,940,479	$1,760,602,934	$7,050,710,292	$7,337,855,229
Unfunded liability on market value of assets	$3,766,797,882	$3,340,832,730	$1,332,051,568	$1,098,438,118	$5,098,849,451	$4,439,270,848
Funded ratio on market value of assets	58.79%	62.54%	55.75%	61.58%	58.03%	62.31%
Insurance						
Actuarial accrued liability	$2,370,771,288	$3,073,973,205	$1,364,843,057	$1,647,702,755	$3,735,614,345	$4,721,675,960
Actuarial value of assets	$1,512,853,851	$1,433,450,793	$829,040,842	$770,790,274	$2,341,894,693	$2,204,241,067
Unfunded liability on actuarial value of assets	$857,917,437	$1,640,522,412	$535,802,215	$876,912,481	$1,393,719,652	$2,517,434,893
Funded ratio on actuarial value of assets	63.81%	46.63%	60.74%	46.78%	62.69%	46.68%
Market value of assets	$1,439,226,170	$1,451,984,026	$788,070,813	$774,509,101	$2,227,296,983	$2,226,493,127
Unfunded liability on market value of assets	$931,545,118	$1,621,989,179	$576,772,244	$873,193,654	$1,508,317,362	$2,495,182,833
Funded ratio on market value of assets	60.71%	47.23%	57.74%	47.01%	59.62%	47.15%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	45,304	43,211	6,878	6,468	52,182	49,679
Number of vested former members	12,071	9,902	617	580	12,688	10,482
Number of former members due a refund	57,645	56,012	1,794	2,194	59,439	58,206
Number of active members	83,052	85,285	9,130	9,407	92,182	94,692
Total salary	$2,236,546,345	$2,276,595,948	$464,228,923	$466,963,860	$2,700,775,268	$2,743,559,808
Average salary	$26,929	$26,694	$50,847	$49,640	$29,298	$28,974

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation for CERS Hazardous members. There were changes in benefit provisions since the last valuation for CERS Non-Hazardous members. The plan administrator - Kentucky Retirement Systems Board of Trustees - has changed the Health Insurance plans that cover Medicare eligible retirees and the plan designs have changed for the Health Insurance plans that cover non-Medicare eligible retirees. The changes are summarized below.

    - The health insurance dependent subsidy for non-hazardous retirees not eligible for Medicare has been eliminated effective January 1, 2013.
    - The self-insured Medicare plans have been replaced by Medicare Advantage plans administered by Humana for Plan Year 2013.
    - Plan design changes have also been implemented for Plan Year 2013 for the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2012 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	83,052	$2,236,546,345	$26,929	47.5	9.1
Hazardous	9,130	464,228,923	50,847	39.3	10.3
Total in CERS	92,182	$2,700,775,268	$29,298	46.7	9.2

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2007	84,920	$2,076,848,328	$24,457	3.3%
6/30/2008	85,221	2,166,612,648	25,423	3.9
6/30/2009	83,724	2,183,611,848	26,081	2.6
6/30/2010	84,681	2,236,855,380	26,415	1.3
6/30/2011	85,285	2,276,595,948	26,694	1.1
6/30/2012	83,052	2,236,546,345	26,929	0.9

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2007	10,063	$458,998,956	$45,613	2.9%
6/30/2008	10,173	474,241,332	46,618	2.2
6/30/2009	9,757	469,315,464	48,100	3.2
6/30/2010	9,562	466,548,660	48,792	1.4
6/30/2011	9,407	466,963,860	49,640	1.7
6/30/2012	9,130	464,228,923	50,847	2.4

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	37,935	$441,153,955	$11,629	69.0
Disability	3,284	38,593,354	11,752	64.1
Beneficiary	4,085	35,261,053	8,632	67.8
Total in CERS	45,304	$515,008,362	$11,368	68.5

* Does not include annual benefits for those members included in the Hazardous System who are also receiving a portion of their benefit from the Non Hazardous System

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	5,673	$154,744,663	$27,277	60.4
Disability	452	7,337,685	16,234	54.2
Beneficiary	753	11,139,135	14,793	54.3
Total in CERS	6,878	$173,221,483	$25,185	59.3

This valuation also includes 72,127 inactive members (69,716 Non-Hazardous and 2,411 Hazardous; of which 12,071 Non-Hazardous are vested and 617 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2012 the total market value of assets amounted to $9,278,007,275 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2012

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	$5,372,769,813	$1,439,226,170	$6,811,995,983
Hazardous	1,677,940,479	788,070,813	2,466,011,292
Total	$7,050,710,292	$2,227,296,983	$9,278,007,275

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $9,636,509,589. Schedule B shows the development of the actuarial value of assets as of June 30, 2012. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2012	JUNE 30, 2011
Retirement		
Non-Hazardous	$ 5,547,235,599	$ 5,629,611,183
Hazardous	1,747,379,297	1,779,545,393
Total	$ 7,294,614,896	$ 7,409,156,576
Insurance		
Non-Hazardous	$ 1,512,853,851	$ 1,433,450,793
Hazardous	829,040,842	770,790,274
Total	$ 2,341,894,693	$ 2,204,241,067
CERS Total		
Non-Hazardous	$ 7,060,089,450	$ 7,063,061,976
Hazardous	2,576,420,139	2,550,335,667
Total	$ 9,636,509,589	$ 9,613,397,643

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2012. Separate balance sheets are shown for each employee group as well as in total for all groups.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $14,309,389,202, of which $7,045,432,041 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $261,385,258 is for the prospective benefits payable on account of inactive members and $7,002,571,903 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $7,294,614,896 as of June 30, 2012. The difference of $7,014,774,306 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $1,246,060,551 is the present value of future contributions expected to be made by members, and the balance of $5,768,713,755 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.92% of payroll for non-hazardous members and 6.15% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $913,768,908. When this amount is subtracted from $5,768,713,755, which is the present value of the total future contributions to be made by the employers, there remains $4,854,944,847 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 9.06% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the participating employers on account of retirement benefits be set at 15.33% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $3,592,332,096 for non-hazardous members and $1,262,612,750 for hazardous members over 25 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.

5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.76% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.29% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $4,714,424,549, of which $1,487,250,402 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $234,756,437 is for the prospective benefits payable on account of inactive members and $2,992,417,710 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $2,341,894,693 as of June 30, 2012. The difference of $2,372,529,856 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $49,768,250 is the present value of future contributions expected to be made by members, and the balance of $2,322,761,606 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 3.44% of payroll for non-hazardous members and 9.37% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $929,041,954. When this amount is subtracted from $2,322,761,606, which is the present value of the total future contributions to be made by the employers, there remains $1,393,719,652 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 2.16% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the participating employers on account of insurance benefits be set at 6.51% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $857,917,437 for non-hazardous members and $535,802,215 for hazardous members over 25 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.24% of payroll for non-hazardous employees and 0.14% of payroll for hazardous employees.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2012 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/11	$ 3,288.5	$ 1,079.5	$ 4,368.0
(2)	Normal cost from last valuation	106.5	34.6	141.1
(3)	Employer contributions	275.7	89.3	365.0
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	252.4	82.9	335.3
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 3,371.7	$ 1,107.7	$ 4,479.4
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 3,371.7	$ 1,107.7	$ 4,479.4
(9)	Actual UAAL as of 6/30/12	$ 3,592.3	$ 1,262.6	$ 4,854.9
(10)	Gain/(loss): (8) - (9)	$ (220.6)	$ (154.9)	$ (375.5)
(11)	Accrued liabilities as of 6/30/11	$ 8,918.1	$ 2,859.0	$ 11,777.1
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(2.5)%	(5.4)%	(3.2)%

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/11	$ 1,640.5	$ 876.9	$ 2,517.4
(2)	Normal cost from last valuation	100.6	53.2	153.8
(3)	Expected employer contributions	190.7	101.4	292.1
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	120.2	64.2	184.4
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 1,670.6	$ 892.9	$ 2,563.5
(6)	Change due to plan change to MA-PD	(833.9)	(265.8)	(1,099.7)
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 836.7	$ 627.1	$ 1,463.8
(9)	Actual UAAL as of 6/30/12	$ 857.9	$ 535.8	$ 1,393.7
(10)	Gain/(loss): (8) - (9)	$ (21.2)	$ 91.3	$ 70.1
(11)	Accrued liabilities as of 6/30/11	$ 3,074.0	$ 1,647.7	$ 4,721.7
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(0.7)%	5.5 %	1.5 %

* *Unfunded actuarial accrued liability*

NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/12	Insurance $ Gain (or Loss) For Year Ending 6/30/12
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (41.7)	$ 2.2
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(36.1)	1.1
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.3)	(2.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	71.4	7.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	70.8	90.0
New Members. Additional unfunded accrued liability will produce a loss.	(14.9)	(4.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(341.0)	(89.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	22.9	28.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	49.4	(53.8)
Gain (or Loss) During Year From Financial Experience	$ (220.6)	$ (21.2)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	833.9
Composite Gain (or Loss) During Year	$ (220.6)	$ 812.7

HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/12	Insurance $ Gain (or Loss) For Year Ending 6/30/12
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (19.3)	$ (2.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(5.2)	(1.4)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.2	(0.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	40.8	28.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	7.0	71.0
New Members. Additional unfunded accrued liability will produce a loss.	(12.7)	(8.6)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(112.2)	(47.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.1	12.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(53.6)	40.5
Gain (or Loss) During Year From Financial Experience	$ (154.9)	$ 91.3
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	265.8
Composite Gain (or Loss) During Year	$ (154.9)	$ 357.1

TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/12	Insurance $ Gain (or Loss) For Year Ending 6/30/12
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (61.0)	$ (0.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(41.2)	(0.3)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.2)	(3.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	112.1	35.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	77.8	161.0
New Members. Additional unfunded accrued liability will produce a loss.	(27.6)	(12.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(453.2)	(136.4)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	23.0	40.6
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(4.2)	(13.3)
Gain (or Loss) During Year From Financial Experience	$ (375.5)	$ 70.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	1,099.7
Composite Gain (or Loss) During Year	$ (375.5)	$ 1,169.8

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2013/2014 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	181,356,863	7.82%
(2) Disability benefits		15,035,995	0.65
(3) Survivor benefits		3,123,774	0.13
(4) Total	$	199,516,632	8.92%
B. Member Contributions	$	111,827,317	5.00%
C. Employer Normal Cost: [A(4) - B]	$	87,689,315	3.92%
D. Administrative Expenses	$	16,997,752	0.76%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/11 Valuation:	$	177,581,780	7.94%
(2) Change due to:			
a. Active decrements	$	439,339	0.02%
b. Pay increases		(3,994,064)	(0.18)
c. Retiree mortality		(1,288,806)	(0.06)
d. Investment return		19,225,043	0.86
e. COLA		4,012,961	0.18
f. Assumption Change		0	0.00
g. Other		6,562,528	0.29
h. Total Change	$	24,957,002	1.12%
(3) UAAL Contribution Based on 6/30/12 Valuation: [E(1) +E(2)h]	$	202,538,782	9.06%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	307,225,849	13.74%

** Based on 26 year amortization of the UAAL from June 30, 2011 and 25 years from June 30, 2012*

Required Contribution Rates
Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	61,321,082	13.21%
(2) Disability benefits		3,467,412	0.75
(3) Survivor benefits		916,723	0.20
(4) Total	$	65,705,217	14.15%
B. Member Contributions	$	37,138,314	8.00%
C. Employer Normal Cost: [A(4) - B]	$	28,566,903	6.15%
D. Administrative Expenses	$	1,346,264	0.29%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/11 Valuation:	$	58,957,073	12.70%
(2) Change due to:			
a. Active decrements	$	(929,289)	(0.20)%
b. Pay increases		(394,672)	(0.09)
c. Retiree mortality		(8,409)	0.00
d. Investment return		6,328,690	1.36
e. COLA		1,575,627	0.34
f. Assumption Change		0	0.00
g. Other		5,658,177	1.20
h. Total Change	$	12,230,123	2.63%
(3) UAAL Contribution Based on 6/30/12 Valuation: [E(1) +E(2)h]	$	71,187,196	15.33%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	101,100,363	21.77%

** Based on 26 year amortization of the UAAL from June 30, 2011 and 25 years from June 30, 2012*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	81,209,158	3.63%
B.	Member Contributions*	$	4,249,438	0.19%
C.	Employer Normal Cost: [A - B]	$	76,959,720	3.44%
D.	Administrative Expenses	$	5,321,955	0.24%
E.	Unfunded Actuarial Accrued Liability**:	$	48,370,125	2.16%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	130,651,800	5.84%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 25 year amortization of the UAAL from June 30, 2012*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	44,086,003	9.50%
B.	Member Contributions*	$	603,498	0.13%
C.	Employer Normal Cost: [A - B]	$	43,482,505	9.37%
D.	Administrative Expenses	$	668,942	0.14%
E.	Unfunded Actuarial Accrued Liability**:	$	30,208,991	6.51%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	74,360,438	16.02%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 25 year amortization of the UAAL from June 30, 2012*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2012

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	45,304	6,878	52,182
Terminated employees entitled to benefits but not yet receiving benefits	69,716	2,411	72,127
Active Members	83,052	9,130	92,182
Total	198,072	18,419	216,491

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2007	$ 5,467,824,480	$ 6,659,446,126	$ 1,191,621,646	82.1%	$ 2,076,848,328	57.4%
6/30/2008	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
6/30/2009	5,650,789,991	7,912,913,512	2,262,123,521	71.4	2,183,611,848	103.6
6/30/2010	5,546,857,291	8,459,022,280	2,912,164,989	65.6	2,236,855,380	130.2
6/30/2011	5,629,611,183	8,918,085,025	3,288,473,842	63.1	2,276,595,948	144.4
6/30/2012	5,547,235,599	9,139,567,695	3,592,332,096	60.7	2,236,546,345	160.6
Hazardous Members						
6/30/2007	$ 1,639,288,924	$ 2,208,736,179	$ 569,447,255	74.2%	$ 458,998,956	124.1%
6/30/2008	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
6/30/2009	1,751,487,540	2,578,444,600	826,957,060	67.9	469,315,464	176.2
6/30/2010	1,749,464,388	2,672,151,907	922,687,519	65.5	466,548,660	197.8
6/30/2011	1,779,545,393	2,859,041,052	1,079,495,659	62.2	466,963,860	231.2
6/30/2012	1,747,379,297	3,009,992,047	1,262,612,750	58.1	464,228,923	272.0
Total CERS Members						
6/30/2007	$ 7,107,113,404	$ 8,868,182,305	$ 1,761,068,901	80.1%	$ 2,535,847,284	69.4%
6/30/2008	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3
6/30/2009	7,402,277,531	10,491,358,112	3,089,080,581	70.6	2,652,927,312	116.4
6/30/2010	7,296,321,679	11,131,174,187	3,834,852,508	65.5	2,703,404,040	141.9
6/30/2011	7,409,156,576	11,777,126,077	4,367,969,501	62.9	2,743,559,808	159.2
6/30/2012	7,294,614,896	12,149,559,743	4,854,944,847	60.0	2,700,775,268	179.8

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2007	$ 960,285,900	$ 3,333,966,070	$ 2,373,680,170	28.8%	$ 2,076,848,328	114.3%
6/30/2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
6/30/2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
6/30/2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
6/30/2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
6/30/2012	1,512,853,851	2,370,771,288	857,917,437	63.8	2,236,546,345	38.4
Hazardous Members						
6/30/2007	$ 512,926,549	$ 1,646,460,011	$ 1,133,533,462	31.2%	$ 458,998,956	247.0%
6/30/2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
6/30/2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
6/30/2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
6/30/2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
6/30/2012	829,040,842	1,364,843,057	535,802,215	60.7	464,228,923	115.4
Total CERS Members						
6/30/2007	$ 1,473,212,449	$ 4,980,426,081	$ 3,507,213,632	29.6%	$ 2,535,847,284	138.3%
6/30/2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
6/30/2009	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4
6/30/2010	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3
6/30/2011	2,204,241,067	4,721,675,960	2,517,434,893	46.7	2,743,559,808	91.8
6/30/2012	2,341,894,693	3,735,614,345	1,393,719,652	62.7	2,700,775,268	51.6

RETIREMENT BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2007	$112,508,305	$124,260,850	110.4%
June 30, 2008	138,311,398	150,925,334	109.1
June 30, 2009	161,097,151	179,284,551	111.3
June 30, 2010	186,724,383	207,075,842	110.9
June 30, 2011	218,984,628	248,518,574	113.5
June 30, 2012	261,764,019	275,736,191	105.3
	Hazardous Members		
June 30, 2007	$53,889,838	$61,553,118	114.2%
June 30, 2008	64,082,063	72,154,734	112.6
June 30, 2009	69,056,365	78,151,677	113.2
June 30, 2010	76,390,669	82,887,128	108.5
June 30, 2011	78,795,602	85,078,181	108.0
June 30, 2012	83,588,958	89,329,217	106.9
	Total CERS Members		
June 30, 2007	$166,398,143	$185,813,968	111.7%
June 30, 2008	202,393,461	223,080,068	110.2
June 30, 2009	230,153,516	257,436,228	111.9
June 30, 2010	263,115,052	289,962,970	110.2
June 30, 2011	297,780,230	333,596,755	112.0
June 30, 2012	345,352,977	365,065,408	105.7

INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
		Non-Hazardous Members			
June 30, 2007	$285,600,490	$9,623,431	$147,608,801	$157,232,232	55.1%
June 30, 2008	406,541,729	6,003,181	196,110,111	202,113,292	49.7
June 30, 2009	264,733,532	7,623,628	123,852,611	131,476,239	49.7
June 30, 2010	266,331,326	9,156,991	166,607,097	175,764,088	66.0
June 30, 2011	213,429,424	0	186,885,576	186,885,576	87.6
June 30, 2012	214,421,008	0	171,924,836	171,924,836	80.2
		Hazardous Members			
June 30, 2007	$115,938,899	$ 656,523	$70,072,785	$70,729,308	61.0%
June 30, 2008	168,723,639	419,774	90,113,200	90,532,974	53.7
June 30, 2009	126,757,348	627,938	70,785,241	71,413,179	56.3
June 30, 2010	129,227,449	1,493,440	83,042,875	84,536,315	65.4
June 30, 2011	109,226,667	0	98,592,286	98,592,286	90.3
June 30, 2012	110,762,577	0	92,563,664	92,563,664	83.6
		Total CERS Members			
June 30, 2007	$401,539,389	$10,279,954	$217,681,586	$227,961,540	56.8%
June 30, 2008	575,265,368	6,422,955	286,223,311	292,646,266	50.9
June 30, 2009	391,490,880	8,251,566	194,637,852	202,889,418	51.8
June 30, 2010	395,558,775	10,650,431	249,649,972	260,300,403	65.8
June 30, 2011	322,656,091	0	285,477,862	285,477,862	88.5
June 30, 2012	325,183,585	0	264,488,500	264,488,500	81.3

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2012. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2012	6/30/2012
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	25 years	25 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	4.75% - 13.0%	4.5% - 20.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2012	6/30/2012
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	25 years	25 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption (Pre-Medicare)	9.5% - 5.0%	9.5% - 5.0%
Medical Trend Assumption (Post-Medicare)	7.5% - 5.0%	7.5% - 5.0%
Year Ultimate Trend	2019	2019
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes price inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2012 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2011. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 5,547,235,599	$ 5,629,611,183
Prospective contributions		
Member contributions	$ 924,952,981	$ 952,686,879
Employer normal contributions	666,452,549	709,345,099
Unfunded accrued liability contributions	3,592,332,096	3,288,473,842
Total prospective contributions	$ 5,183,737,626	$ 4,950,505,820
Total assets	$ 10,730,973,225	$ 10,580,117,003
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 5,174,881,611	$ 4,864,821,271
Present value of benefits payable on account of active members	5,314,040,230	5,370,333,079
Present value of benefits payable on account of inactive members	242,051,384	344,962,653
Total liabilities	$ 10,730,973,225	$ 10,580,117,003

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 1,747,379,297	$ 1,779,545,393
Prospective contributions		
Member contributions	$ 321,107,570	$ 323,181,553
Employer normal contributions	247,316,359	279,004,989
Unfunded accrued liability contributions	1,262,612,750	1,079,495,659
Total prospective contributions	$ 1,831,036,679	$ 1,681,682,201
Total assets	$ 3,578,415,976	$ 3,461,227,594
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,870,550,430	$ 1,737,180,979
Present value of benefits payable on account of active members	1,688,531,673	1,692,716,049
Present value of benefits payable on account of inactive members	19,333,873	31,330,566
Total liabilities	$ 3,578,415,976	$ 3,461,227,594

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 7,294,614,896	$ 7,409,156,576
Prospective contributions		
Member contributions	$ 1,246,060,551	$ 1,275,868,432
Employer normal contributions	913,768,908	988,350,088
Unfunded accrued liability contributions	4,854,944,847	4,367,969,501
Total prospective contributions	$ 7,014,774,306	$ 6,632,188,021
Total assets	$ 14,309,389,202	$ 14,041,344,597
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 7,045,432,041	$ 6,602,002,250
Present value of benefits payable on account of active members	7,002,571,903	7,063,049,128
Present value of benefits payable on account of inactive members	261,385,258	376,293,219
Total liabilities	$ 14,309,389,202	$ 14,041,344,597

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 1,512,853,851	$ 1,433,450,793
Prospective contributions		
Member contributions	$ 42,031,107	$ 31,828,274
Employer normal contributions	603,105,896	801,135,367
Unfunded accrued liability contributions	857,917,437	1,640,522,412
Total prospective contributions	$ 1,503,054,440	$ 2,473,486,053
Total assets	$ 3,015,908,291	$ 3,906,936,846
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 944,340,604	$ 1,245,819,075
Present value of benefits payable on account of active members	1,869,000,541	2,446,128,591
Present value of benefits payable on account of inactive members	202,567,146	214,989,180
Total liabilities	$ 3,015,908,291	$ 3,906,936,846

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 829,040,842	$ 770,790,274
Prospective contributions		
Member contributions	$ 7,737,143	$ 5,469,611
Employer normal contributions	325,936,058	410,132,921
Unfunded accrued liability contributions	535,802,215	876,912,481
Total prospective contributions	$ 869,475,416	$ 1,292,515,013
Total assets	$ 1,698,516,258	$ 2,063,305,287
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 542,909,798	$ 734,584,639
Present value of benefits payable on account of active members	1,123,417,169	1,291,674,000
Present value of benefits payable on account of inactive members	32,189,291	37,046,648
Total liabilities	$ 1,698,516,258	$ 2,063,305,287

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS

	June 30, 2012	June 30, 2011
ASSETS		
Current actuarial value of assets	$ 2,341,894,693	$ 2,204,241,067
Prospective contributions		
Member contributions	$ 49,768,250	$ 37,297,885
Employer normal contributions	929,041,954	1,211,268,288
Unfunded accrued liability contributions	1,393,719,652	2,517,434,893
Total prospective contributions	$ 2,372,529,856	$ 3,766,001,066
Total assets	$ 4,714,424,549	$ 5,970,242,133
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,487,250,402	$ 1,980,403,714
Present value of benefits payable on account of active members	2,992,417,710	3,737,802,591
Present value of benefits payable on account of inactive members	234,756,437	252,035,828
Total liabilities	$ 4,714,424,549	$ 5,970,242,133

The following tables provide the solvency test for non-hazardous and hazardous CERS members.

Solvency Test
Retirement Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2007	$ 920,126,096	$ 3,589,512,063	$ 2,149,807,967	$ 5,467,824,480	100.0%	100.0%	44.6%
6/30/2008	963,213,677	4,058,767,419	2,282,236,595	5,731,502,438	100.0	100.0	31.1
6/30/2009	991,628,551	4,542,483,102	2,378,801,859	5,650,789,991	100.0	100.0	4.9
6/30/2010	1,063,746,826	4,890,659,077	2,504,616,377	5,546,857,291	100.0	91.7	0.0
6/30/2011	1,110,967,160	5,209,783,924	2,597,333,941	5,629,611,183	100.0	86.7	0.0
6/30/2012	1,117,549,337	5,416,932,995	2,605,085,363	5,547,235,599	100.0	81.8	0.0

Solvency Test
Retirement Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2007	$ 317,007,367	$ 1,275,221,775	$ 616,507,037	$ 1,639,288,924	100.0%	100.0%	7.6%
6/30/2008	338,324,362	1,406,982,409	657,815,324	1,750,867,373	100.0	100.0	0.8
6/30/2009	350,308,879	1,540,262,587	687,873,134	1,751,487,540	100.0	91.0	0.0
6/30/2010	369,612,720	1,622,684,455	679,854,732	1,749,464,388	100.0	85.0	0.0
6/30/2011	382,072,055	1,768,511,545	708,457,452	1,779,545,393	100.0	79.0	0.0
6/30/2012	381,672,428	1,889,884,303	738,435,316	1,747,379,297	100.0	72.3	0.0

Solvency Test
Insurance Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2007	$ 0	$ 1,372,128,406	$ 1,961,837,664	$ 960,285,900	100.0%	70.0%	0.0%
6/30/2008	0	1,521,450,274	2,061,743,192	1,168,883,170	100.0	76.8	0.0
6/30/2009	0	1,478,782,753	1,591,603,265	1,216,631,769	100.0	82.3	0.0
6/30/2010	0	1,526,533,372	1,631,806,802	1,293,038,593	100.0	84.7	0.0
6/30/2011	0	1,460,808,255	1,613,164,950	1,433,450,793	100.0	98.1	0.0
6/30/2012	0	1,146,907,750	1,223,863,538	1,512,853,851	100.0	100.0	29.9

Solvency Test
Insurance Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2007	$ 0	$ 659,752,978	$ 986,707,033	$ 512,926,549	100.0%	77.7%	0.0%
6/30/2008	0	722,435,184	1,047,347,773	613,526,319	100.0	84.9	0.0
6/30/2009	0	725,899,836	867,648,427	651,130,782	100.0	89.7	0.0
6/30/2010	0	814,300,256	860,402,960	692,769,770	100.0	85.1	0.0
6/30/2011	0	771,631,287	876,071,468	770,790,274	100.0	99.9	0.0
6/30/2012	0	575,099,089	789,743,968	829,040,842	100.0	100.0	32.2

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2011	2012	2013	2014	2015	2016
A.	Actuarial Value Beginning of Year	$ 5,546,857,291	$ 5,629,611,183				
B.	Market Value End of Year	5,577,252,295	5,372,769,813				
C.	Market Value Beginning of Year	4,819,933,717	5,577,252,295				
D.	Cash Flow						
	D1. Contributions	393,379,256	394,922,258				
	D2. Benefit Payments	(506,162,686)	(565,978,993)				
	D3. Administrative Expenses	(15,567,869)	(16,962,819)				
	D4. Investment Expenses	(11,427,951)	(14,985,808)				
	D5. Net	(139,779,250)	(203,005,362)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	897,097,828	(1,477,120)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	379,999,201	439,937,103				
	E4. Amount for Phased-In Recognition	517,098,627	(441,414,223)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	103,419,725	(88,282,845)	0	0	0	0
	F2. First Prior Year	68,333,580	103,419,725	(88,282,845)	0	0	0
	F3. Second Prior Year	(268,260,750)	68,333,580	103,419,725	(88,282,845)	0	0
	F4. Third Prior Year	(134,517,035)	(268,260,750)	68,333,580	103,419,725	(88,282,845)	0
	F5. Fourth Prior Year	73,558,421	(134,517,035)	(268,260,750)	68,333,580	103,419,725	(88,282,845)
	F6. Total Recognized Investment Gain	(157,466,059)	(319,307,325)	(184,790,290)	83,470,460	15,136,880	(88,282,845)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 5,629,611,183	$ 5,547,235,599				
H.	Difference Between Market & Actuarial Values	$ (52,358,888)	$ (174,465,786)	$ 10,324,504	$ (73,145,956)	$ (88,282,845)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2011	2012	2013	2014	2015	2016
A.	Actuarial Value Beginning of Year	$ 1,749,464,388	$ 1,779,545,393				
B.	Market Value End of Year	1,760,602,934	1,677,940,479				
C.	Market Value Beginning of Year	1,506,787,429	1,760,602,934				
D.	Cash Flow						
	D1. Contributions	138,996,575	131,314,624				
	D2. Benefit Payments	(170,193,302)	(187,027,979)				
	D3. Administrative Expenses	(1,295,026)	(1,337,844)				
	D4. Investment Expenses	(14,514,425)	(4,604,154)				
	D5. Net	(47,006,178)	(61,655,353)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	300,821,683	(21,007,102)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	130,031,395	138,840,147				
	E4. Amount for Phased-In Recognition	170,790,288	(159,847,249)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	34,158,058	(31,969,450)	0	0	0	0
	F2. First Prior Year	20,921,839	34,158,058	(31,969,450)	0	0	0
	F3. Second Prior Year	(85,878,868)	20,921,839	34,158,058	(31,969,450)	0	0
	F4. Third Prior Year	(46,582,469)	(85,878,868)	20,921,839	34,158,058	(31,969,450)	0
	F5. Fourth Prior Year	24,437,228	(46,582,469)	(85,878,868)	20,921,839	34,158,058	(31,969,450)
	F6. Total Recognized Investment Gain	(52,944,212)	(109,350,890)	(62,768,421)	23,110,447	2,188,608	(31,969,450)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,779,545,393	$ 1,747,379,297				
H.	Difference Between Market & Actuarial Values	$ (18,942,459)	$ (69,438,818)	$ (6,670,397)	$ (29,780,844)	$ (31,969,450)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2011	2012	2013	2014	2015	2016
A.	Actuarial Value Beginning of Year	$ 1,293,038,593	$ 1,433,450,793				
B.	Market Value End of Year	1,451,984,026	1,439,226,170				
C.	Market Value Beginning of Year	1,096,581,872	1,451,984,026				
D.	Cash Flow						
	D1. Contributions	217,610,265	200,993,492				
	D2. Benefit Payments	(131,943,339)	(141,693,436)				
	D3. Administrative Expenses	(4,762,524)	(5,321,955)				
	D4. Investment Expenses	(2,339,212)	(2,870,026)				
	D5. Net	78,565,190	51,108,075				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	276,836,964	(63,865,931)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	90,459,353	117,490,439				
	E4. Amount for Phased-In Recognition	186,377,611	(181,356,370)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	37,275,522	(36,271,274)	0	0	0	0
	F2. First Prior Year	12,929,625	37,275,522	(36,271,274)	0	0	0
	F3. Second Prior Year	(66,228,396)	12,929,625	37,275,522	(36,271,274)	0	0
	F4. Third Prior Year	(36,900,933)	(66,228,396)	12,929,625	37,275,522	(36,271,274)	0
	F5. Fourth Prior Year	24,311,839	(36,900,933)	(66,228,399)	12,929,625	37,275,522	(36,271,274)
	F6. Total Recognized Investment Gain	(28,612,343)	(89,195,456)	(52,294,526)	13,933,873	1,004,248	(36,271,274)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,433,450,793	$ 1,512,853,851				
H.	Difference Between Market & Actuarial Values	$ 18,533,233	$ (73,627,681)	$ (21,333,155)	$ (35,267,028)	$ (36,271,274)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2011	2012	2013	2014	2015	2016
A.	Actuarial Value Beginning of Year	$ 692,769,770	$ 770,790,274				
B.	Market Value End of Year	774,509,101	788,070,813				
C.	Market Value Beginning of Year	586,826,965	774,509,101				
D.	Cash Flow						
	D1. Contributions	101,037,884	94,535,608				
	D2. Benefit Payments	(51,829,795)	(50,155,364)				
	D3. Administrative Expenses	(580,193)	(668,942)				
	D4. Investment Expenses	(2,324,660)	(1,516,866)				
	D5. Net	46,303,236	42,194,436				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	141,378,900	(28,632,724)				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	49,688,081	63,235,134				
	E4. Amount for Phased-In Recognition	91,690,819	(91,867,858)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	18,338,164	(18,373,572)	0	0	0	0
	F2. First Prior Year	5,685,665	18,338,164	(18,373,572)	0	0	0
	F3. Second Prior Year	(33,861,562)	5,685,665	18,338,164	(18,373,572)	0	0
	F4. Third Prior Year	(18,967,697)	(33,861,562)	5,685,665	18,338,164	(18,373,572)	0
	F5. Fourth Prior Year	10,834,617	(18,967,697)	(33,861,562)	5,685,665	18,338,164	(18,373,572)
	F6. Total Recognized Investment Gain	(17,970,813)	(47,179,002)	(28,211,305)	5,650,257	(35,408)	(18,373,572)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 770,790,274	$ 829,040,842				
H.	Difference Between Market & Actuarial Values	$ 3,718,827	$ (40,970,029)	$ (12,758,724)	$ (18,408,981)	$ (18,373,572)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.50% per annum:

Service	Annual Rates of Merit & Seniority Increase Next Year				
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	8.50%	15.50%	4.50%	13.00%	20.00%
1-2	5.00%	6.00%	4.50%	9.50%	10.50%
2-3	1.50%	2.00%	4.50%	6.00%	6.50%
3-4	1.50%	1.25%	4.50%	6.00%	5.75%
4-5	1.00%	1.00%	4.50%	5.50%	5.50%
5-6	1.00%	0.50%	4.50%	5.50%	5.00%
6-7	0.75%	0.00%	4.50%	5.25%	4.50%
7-8	0.75%	0.00%	4.50%	5.25%	4.50%
8-9	0.50%	0.00%	4.50%	5.00%	4.50%
9-10	0.50%	0.00%	4.50%	5.00%	4.50%
10 & Over	0.25%	0.00%	4.50%	4.75%	4.50%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement**
		Male	Female		
20	5.75%	0.03%	0.01%	0.04%	
25	5.75	0.03	0.01	0.05	
30	5.30	0.04	0.02	0.06	
35	4.40	0.04	0.02	0.09	
40	3.70	0.05	0.04	0.13	
45	3.02	0.08	0.05	0.22	
50	2.70	0.13	0.07	0.37	
55	2.20	0.22	0.11	0.61	8.0%
60	0.75	0.40	0.22	0.97	10.0
65		0.73	0.43		22.0
70		1.19	0.69		22.0
75					100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 25.0%, 14.0%, 10.0%, 8.0% and 6.5%, respectively.*

** *If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.*

Hazardous Members

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement		
		Male	Female		Service	Rate+	Rate++
20	3.00%	0.03%	0.01%	0.05%	20	20.0%	
25	2.70	0.03	0.01	0.07	25	33.0	20.0%
30	2.50	0.04	0.02	0.09	30	33.0	33.0
35	2.50	0.04	0.02	0.13	35	40.0	33.0
40	2.50	0.05	0.04	0.20	40		40.0
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 14.0%, 7.5%, 6.0%, 4.5% and 4.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *Applies to members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.*

++ *Applies to members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2013	9.5%	7.5%
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	85%	100%

HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2012				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$496.14	$764.68	$1,144.72	$1,272.83
Optimum PPO	$663.30	$922.88	$1,432.36	$1,595.06
Capitol Choice	$638.16	$927.08	$1,414.46	$1,568.06

Effective January 1, 2013				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$506.06	$791.54	$1,177.80	$1,314.12
Optimum PPO	$675.34	$961.84	$1,476.00	$1,642.78
Capitol Choice	$650.22	$961.42	$1,457.90	$1,613.74

MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2013	
Available Plan	Premium
Kentucky Retirement System Health Plan - Medical Only	$157.00
Kentucky Retirement System Health Plan - Essential	$84.08
Kentucky Retirement System Health Plan - Premium	$198.31

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.20% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement

55

Service Requirement

At least one month of hazardous duty service credit

Amount

If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement

60

Service Requirement

At least 60 months of hazardous duty service credit

Hazardous Normal Retirement (continued):

Amount

The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 55 with 60 months of service or any age with 25 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement

Age 60 with 10 years of service.

Amount

Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 50 with 15 years of service or any age with 20 years service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

Hazardous Disability (continued):

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Vesting (continued):

	Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.69 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $19.04 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.69 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2007	2008	2009	2010	2011	2012
			Number			
Beginning of Year	33,102	35,564	37,579	39,756	41,038	43,211
Added	3,244	3,366	3,060	2,565	3,250	3,300
Removed	782	1,351	883	1,283	1,077	1,207
End of Year	35,564	37,579	39,756	41,038	43,211	45,304
			Annual Allowances			
Beginning of Year	$ 308,269,651	$ 348,712,020	$ 393,757,510	$ 440,061,418	$ 452,613,550	$ 483,594,068
Added	$ 44,888,509	$ 56,376,123	51,679,136	21,063,111	38,861,094	41,160,717
Removed	4,446,140	11,330,633	5,375,228	8,510,979	7,880,576	9,746,424
End of Year	$ 348,712,020	$ 393,757,510	$ 440,061,418	$ 452,613,550	$ 483,594,068	$ 515,008,362
% Increase in Allowances	13.12%	12.92%	11.76%	2.85%	6.84%	6.50%
Average Annual Allowance	$ 9,805	$ 10,478	$ 11,069	$ 11,029	$ 11,191	$ 11,368

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2007	2008	2009	2010	2011	2012
			Number			
Beginning of Year	4,712	5,159	5,422	5,808	6,068	6,468
Added	500	469	650	423	502	483
Removed	53	206	264	163	102	73
End of Year	5,159	5,422	5,808	6,068	6,468	6,878
			Annual Allowances			
Beginning of Year	$ 100,290,052	$ 113,735,850	$ 127,477,109	$ 139,886,751	$ 146,916,812	$ 160,259,395
Added	14,207,939	$ 16,794,618	13,030,426	8,566,698	14,640,991	14,149,084
Removed	762,141	3,053,359	620,784	1,536,637	1,298,408	1,186,996
End of Year	$ 113,735,850	$ 127,477,109	$ 139,886,751	$ 146,916,812	$ 160,259,395	$ 173,221,483
% Increase in Allowances	13.41%	12.08%	9.73%	5.03%	9.08%	8.09%
Average Annual Allowance	$ 22,046	$ 23,511	$ 24,085	$ 24,212	$ 24,777	$ 25,185

Non-Hazardous Retired Lives Summary June 30, 2012

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	4,006	$ 4,038,200.01	13,880	$ 9,878,492.50	17,886	$ 13,916,692.51
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2,238	2,520,794.47	1,068	669,550.91	3,306	3,190,345.38
66-2/3% to Beneficiary	641	1,169,259.25	409	458,636.63	1,050	1,627,895.88
50% to Beneficiary	945	1,475,896.65	1,133	1,309,647.71	2,078	2,785,544.36
Pop-up Option	3,394	5,346,685.59	2,742	2,913,436.45	6,136	8,260,122.04
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,211	1,191,199.84	2,722	2,011,403.83	3,933	3,202,603.67
Social Security Option						
Age 62 Basic	235	546,549.56	491	605,238.76	726	1,151,788.32
Age 62 Survivorship	565	1,305,066.00	303	424,510.19	868	1,729,576.19
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	551	532,710.37	629	480,636.31	1,180	1,013,346.68
20 Years Certain & Life	399	547,426.97	564	456,394.73	963	1,003,821.70
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	118	132,355.09	403	338,160.01	521	470,515.10
PLSO 24 Month Basic	70	47,356.84	263	205,001.26	333	252,358.10
PLSO 36 Month Basic	297	143,032.43	753	351,964.75	1,050	494,997.18
PLSO 12 Month Survivor	166	205,608.84	99	98,501.60	265	304,110.44
PLSO 24 Month Survivor	106	110,243.01	72	49,106.25	178	159,349.26
PLSO 36 Month Survivor	452	282,147.25	294	133,728.32	746	415,875.57
Total	15,394	$ 19,594,532.17	25,825	$ 20,384,410.21	41,219	$ 39,978,942.38

Hazardous Retired Lives Summary June 30, 2012

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	781	$ 1,537,594.12	245	$ 386,363.70	1,026	$ 1,923,957.82
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	599	1,190,410.78	26	29,578.49	625	1,219,989.27
66-2/3% to Beneficiary	234	603,416.71	5	14,524.60	239	617,941.31
50% to Beneficiary	387	901,205.05	25	45,689.90	412	946,894.95
Pop-up Option	2,377	6,027,205.23	95	188,026.94	2,472	6,215,232.17
10 Years Certain	40	58,156.01	3	3,890.00	43	62,046.01
10 Years Certain & Life	184	375,757.52	45	83,017.00	229	458,774.52
Social Security Option						
Age 62 Basic	97	221,485.79	11	24,135.78	108	245,621.57
Age 62 Survivorship	296	644,442.83	12	29,084.71	308	673,527.54
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	70	122,223.25	10	10,982.37	80	133,205.62
20 Years Certain & Life	123	238,143.57	19	29,821.03	142	267,964.60
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	27	50,875.63	10	12,355.51	37	63,231.14
PLSO 24 Month Basic	23	49,456.43	6	6,336.10	29	55,792.53
PLSO 36 Month Basic	57	88,795.33	22	24,358.25	79	113,153.58
PLSO 12 Month Survivor	62	150,216.84	4	8,080.23	66	158,297.07
PLSO 24 Month Survivor	69	116,125.68	3	2,816.43	72	118,942.11
PLSO 36 Month Survivor	151	225,538.65	7	6,751.85	158	232,290.50
Total	5,577	$ 12,601,049.42	548	$ 905,812.89	6,125	$ 13,506,862.31

Non-Hazardous Beneficiary Lives Summary June 30, 2012

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	10	$ 2,876.11	18	$ 9,430.54	28	$ 12,306.65
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	330	166,394.00	1,433	924,808.75	1,763	1,091,202.75
66-2/3% to Beneficiary	0	0.00	3	3,468.30	3	3,468.30
50% to Beneficiary	96	35,994.46	319	172,463.39	415	208,457.85
Pop-up Option	125	89,213.79	475	440,689.18	600	529,902.97
10 Years Certain	85	69,188.72	146	115,635.22	231	184,823.94
10 Years Certain & Life	38	17,396.04	197	141,242.49	235	158,638.53
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	21	21,438.56	118	195,066.23	139	216,504.79
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	1	206.92	1	206.92
Dependent Child	50	39,136.24	47	40,950.89	97	80,087.13
Refund	2	1,312.92	6	3,414.32	8	4,727.24
15 Years Certain & Life	29	26,116.63	71	68,532.05	100	94,648.68
20 Years Certain & Life	41	31,038.87	63	61,802.36	104	92,841.23
5 Years Certain	107	84,669.54	86	65,831.64	193	150,501.18
PLSO 12 Month Basic	0	0.00	1	395.49	1	395.49
PLSO 24 Month Basic	1	152.38	0	0.00	1	152.38
PLSO 36 Month Basic	1	149.07	3	581.68	4	730.75
PLSO 12 Month Survivor	6	2,292.40	27	33,608.55	33	35,900.95
PLSO 24 Month Survivor	4	5,010.62	17	14,342.54	21	19,353.16
PLSO 36 Month Survivor	31	16,878.60	77	36,691.62	108	53,570.22
Total	977	$ 609,258.95	3,108	$ 2,329,162.16	4,085	$ 2,938,421.11

Hazardous Beneficiary Lives Summary June 30, 2012

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	21	$ 30,975.73	23	$ 26,712.56	44	$ 57,688.29
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	18	7,115.52	178	228,126.60	196	235,242.12
66-2/3% to Beneficiary	3	931.36	41	57,720.02	44	58,651.38
50% to Beneficiary	6	3,689.17	52	46,525.47	58	50,214.64
Pop-up Option	31	18,872.90	169	255,952.80	200	274,825.70
10 Years Certain	10	13,594.01	16	17,090.35	26	30,684.36
10 Years Certain & Life	5	2,005.64	1	91.02	6	2,096.66
Social Security Option						
Age 62 Basic	0	0.00	2	509.75	2	509.75
Age 62 Survivorship	82	142,906.97	1	2,890.36	83	145,797.33
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	3,287.07	3	3,287.07
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	3	807.23	13	7,170.11	16	7,977.34
15 Years Certain & Life	4	1,338.98	3	1,406.94	7	2,745.92
20 Years Certain & Life	4	1,520.19	14	15,135.14	18	16,655.33
5 Years Certain	1	1,457.54	2	3,455.62	3	4,913.16
PLSO 12 Month Basic	0	0.00	1	2,192.42	1	2,192.42
PLSO 24 Month Basic	0	0.00	1	1,466.49	1	1,466.49
PLSO 36 Month Basic	2	561.73	4	1,858.06	6	2,419.79
PLSO 12 Month Survivor	1	415.46	4	2,840.54	5	3,256.00
PLSO 24 Month Survivor	2	1,661.84	8	6,388.67	10	8,050.51
PLSO 36 Month Survivor	4	1,553.48	20	18,033.48	24	19,586.96
Total	197	$ 229,407.75	556	$ 698,853.47	753	$ 928,261.22

Non-Hazardous Members

Retired and Beneficiary Information June 30, 2012
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	53	$ 1,195,242	64	$ 914,747	325	$ 2,518,454	442	$ 4,628,444
45-49	413	$ 9,854,681	126	$ 2,283,382	131	$ 1,063,351	670	$ 13,201,414
50-54	1,550	$ 38,582,397	309	$ 4,665,835	245	$ 2,486,600	2,104	$ 45,734,832
55-59	3,965	$ 71,589,308	555	$ 7,848,605	375	$ 3,947,967	4,895	$ 83,385,880
60-64	7,243	$ 99,041,812	732	$ 8,729,951	504	$ 5,378,109	8,479	$ 113,149,871
65-69	8,367	$ 87,134,247	645	$ 6,557,008	517	$ 5,047,700	9,529	$ 98,738,956
70-74	6,920	$ 64,717,498	493	$ 4,789,428	569	$ 5,048,993	7,982	$ 74,555,920
75-79	4,695	$ 37,993,637	265	$ 2,215,771	517	$ 4,202,032	5,477	$ 44,411,441
80-84	2,785	$ 20,287,588	70	$ 480,327	456	$ 3,091,189	3,311	$ 23,859,105
85-89	1,398	$ 8,286,541	15	$ 69,843	290	$ 1,752,465	1,703	$ 10,108,849
90 & Over	546	$ 2,471,002	10	$ 38,457	156	$ 724,192	712	$ 3,233,651
Totals	37,935	$ 441,153,955	3,284	$ 38,593,354	4,085	$ 35,261,053	45,304	$ 515,008,362

Hazardous Members

Retired and Beneficiary Information June 30, 2012
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	113	$ 3,471,983	73	$ 1,187,754	185	$ 1,457,435	371	$ 6,117,172
45-49	611	$ 19,845,178	64	$ 1,217,164	32	$ 476,834	707	$ 21,539,175
50-54	788	$ 24,396,517	87	$ 1,464,468	58	$ 1,019,247	933	$ 26,880,232
55-59	1,114	$ 32,764,353	103	$ 1,534,972	85	$ 1,274,711	1,302	$ 35,574,036
60-64	1,276	$ 35,378,383	73	$ 1,138,243	82	$ 1,729,678	1,431	$ 38,246,304
65-69	899	$ 20,421,541	33	$ 547,349	114	$ 1,983,466	1,046	$ 22,952,356
70-74	522	$ 11,023,469	8	$ 95,078	83	$ 1,541,212	613	$ 12,659,759
75-79	238	$ 5,011,122	10	$ 132,738	60	$ 916,853	308	$ 6,060,713
80-84	85	$ 1,931,236	0	$ -	43	$ 620,632	128	$ 2,551,867
85-89	25	$ 499,454	1	$ 19,920	10	$ 98,889	36	$ 618,262
90 & Over	2	$ 1,426			1	$ 20,179	3	$ 21,605
Totals	5,673	$ 154,744,663	452	$ 7,337,685	753	$ 11,139,135	6,878	$ 173,221,482

Total Non-Hazardous Active Members as of June 30, 2012
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	102	2		1					105
Avg Pay	$10,466	$53,933		$11,385					$11,303
20-24	2,003	26							2,029
Avg Pay	$17,507	$26,743							$17,625
25-29	3,637	799	20						4,456
Avg Pay	$22,110	$29,140	$35,450						$23,431
30-34	3,781	1,775	661	20					6,237
Avg Pay	$22,119	$30,849	$35,299	$39,116					$26,055
35-39	3,948	2,241	1,519	398	16	1			8,123
Avg Pay	$21,122	$28,356	$36,142	$40,810	$45,711	$24,000			$26,940
40-44	4,187	3,060	2,210	1,073	283	30	16	1	10,860
Avg Pay	$21,377	$26,215	$32,145	$39,758	$45,532	$59,822	$58,769	$44,585	$27,540
44-49	3,610	3,078	3,180	1,535	818	190	116	26	12,553
Avg Pay	$21,218	$26,194	$28,361	$33,805	$43,425	$49,804	$53,849	$56,706	$28,042
50-54	3,087	3,041	3,306	2,349	1,244	268	187	127	13,609
Avg Pay	$21,295	$25,842	$28,026	$30,075	$37,451	$44,811	$51,379	$60,629	$28,182
55-59	2,785	2,444	2,638	2,371	1,416	331	200	165	12,350
Avg Pay	$21,399	$27,318	$28,427	$29,164	$34,203	$41,228	$49,054	$53,886	$28,444
60-64	1,778	1,787	1,568	1,404	1,020	208	134	117	8,016
Avg Pay	$19,468	$25,390	$29,131	$29,883	$32,343	$39,635	$37,983	$49,176	$27,407
65-69	752	822	679	423	255	79	42	64	3,116
Avg Pay	$16,361	$22,127	$25,688	$26,898	$32,169	$33,487	$36,939	$47,121	$23,982
70 & over	360	461	360	199	133	28	21	36	1,598
Avg Pay	$14,053	$19,769	$22,499	$22,661	$26,525	$36,683	$27,533	$44,776	$20,981
Totals	30,030	19,536	16,141	9,773	5,185	1,135	716	536	83,052
Avg Pay	$20,879	$26,682	$29,678	$31,640	$36,428	$43,043	$47,241	$53,155	$26,929

Total Hazardous Active Members as of June 30, 2012
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	1								1
Avg Pay	$36,516								$36,516
20-24	239	2							241
Avg Pay	$34,919	$35,627							$34,925
25-29	883	296	1						1,180
Avg Pay	$40,719	$46,236	$63,850						$42,122
30-34	498	788	258	5					1,549
Avg Pay	$41,150	$48,543	$53,990	$53,179					$47,088
35-39	288	549	772	201	3				1,813
Avg Pay	$40,075	$47,640	$56,450	$58,713	$67,190				$51,450
40-44	175	333	625	629	149	20	2		1,933
Avg Pay	$40,029	$47,234	$53,791	$61,299	$66,445	$68,661	$81,181		$55,016
44-49	102	180	266	311	275	36	35		1,205
Avg Pay	$41,968	$47,910	$53,309	$58,633	$64,596	$69,774	$79,757		$56,753
50-54	56	107	132	146	133	36	27	12	649
Avg Pay	$38,866	$46,376	$49,559	$55,022	$64,799	$73,089	$76,387	$83,110	$55,505
55-59	36	81	78	75	54	11	15	20	370
Avg Pay	$38,032	$45,734	$50,229	$55,816	$61,646	$67,620	$64,342	$77,617	$53,426
60-64	9	48	38	22	20	3	1	4	145
Avg Pay	$41,890	$40,811	$46,401	$55,121	$62,203	$57,534	$63,892	$101,005	$49,630
65-69	2	8	9	5			1		25
Avg Pay	$33,231	$38,400	$58,439	$50,974			$77,999		$49,299
70 & over		8	6	1	1		2	1	19
Avg Pay		$25,872	$58,600	$44,405	$9,788		$86,552	$113,340	$47,327
Totals	2,289	2,400	2,185	1,395	635	106	83	37	9,130
Avg Pay	$40,038	$47,357	$54,221	$59,205	$64,672	$70,120	$75,860	$82,892	$50,847

Report on the Annual Valuation of the State Police Retirement System

Prepared as of June 30, 2012

November 20, 2012

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2013. The date of the valuation was June 30, 2012.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 5.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

TJC/TBG/AB:kc

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REPORT ON THE ANNUAL VALUATION OF THE STATE POLICE RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2012

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2012, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	6/30/2012	6/30/2011
Contributions for next fiscal year:		
Retirement	53.35%	47.48%
Insurance	43.17	55.93
Total	96.52%	103.41%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$647,688,665	$634,379,401
Actuarial value of assets	259,791,575	285,580,631
Unfunded liability on actuarial value of assets	387,897,090	348,798,770
Funded ratio on actuarial value of assets	40.11%	45.02%
Market value of assets	$252,896,868	$279,934,443
Unfunded liability on market value of assets	394,791,797	354,444,958
Funded ratio on market value of assets	39.05%	44.13%
Insurance		
Actuarial accrued liability	$333,903,782	$438,427,763
Actuarial value of assets	124,372,072	123,687,289
Unfunded liability on actuarial value of assets	209,531,710	314,740,474
Funded ratio on actuarial value of assets	37.25%	28.21%
Market value of assets	$125,567,846	$127,367,947
Unfunded liability on market value of assets	208,335,936	311,059,816
Funded ratio on market value of assets	37.61%	29.05%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,299	1,263
Number of vested former members	58	52
Number of former members due a refund	322	305
Number of active members	907	965
Total salary	$48,372,506	$48,692,616
Average salary	$53,332	$50,459

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, the plan administrator - Kentucky Retirement Systems Board of Trustees - has changed the Health Insurance plans that cover Medicare eligible retirees and the plan designs have changed for the Health Insurance plans that cover non-Medicare eligible retirees. The changes are summarized below.

    - The self-insured Medicare plans have been replaced by Medicare Advantage plans administered by Humana for Plan Year 2013.
    - Plan design changes have also been implemented for Plan Year 2013 for the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky.

5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2011 and June 30, 2012 is 4.50%. The lower rate for insurance benefits is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2012 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

		Group Averages		
Number	Payroll	Salary	Age	Service
907	$48,372,506	$53,332	37.3	10.4

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2007	957	$49,247,580	$51,460	10.8%
6/30/2008	993	53,269,080	53,645	4.2
6/30/2009	946	51,660,396	54,609	1.8
6/30/2010	961	51,506,712	53,597	(1.9)
6/30/2011	965	48,692,616	50,459	(5.9)
6/30/2012	907	48,372,506	53,332	5.7

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

			Group Averages	
Type of Benefit Payment	Number	Annual Benefits	Benefit	Age
Retiree	1,100	$44,869,614	$40,791	61.6
Disability	46	$838,716	18,233	56.3
Beneficiary	153	4,178,763	27,312	64.6
Total in SPRS	1,299	$49,887,093	$38,404	61.8

This valuation also includes 380 inactive members of which 58 are vested.

SECTION III - ASSETS

1. As of June 30, 2012 the total market value of assets amounted to $378,464,714 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

Retirement	Insurance	SPRS Total
$252,896,868	$125,567,846	$378,464,714

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $384,163,647. Schedule B shows the development of the actuarial value of assets as of June 30, 2012. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2012	JUNE 30, 2011
Retirement	$ 259,791,575	$ 285,580,631
Insurance	124,372,072	123,687,289
Total	$ 384,163,647	$ 409,267,920

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2012. Separate balance sheets are shown for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $717,995,652, of which $520,280,073 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $2,736,573 is for the prospective benefits payable on account of inactive members, $194,979,006 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $259,791,575 as of June 30, 2012. The difference of $458,204,077 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $35,600,938 is the present value of future contributions expected to be made by members, and the balance of $422,603,139 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 7.98% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $34,706,049. When this amount is subtracted from $422,603,139, which is the present value of the total future contributions to be made by the State, there remains $387,897,090 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 45.21% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $387,897,090 over 25 years on the assumption that the aggregate payroll for members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.16% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $451,199,400, of which $186,024,449 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $4,234,280 is for the prospective benefits payable on account of inactive members, and $260,940,671 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $124,372,072 as of June 30, 2012. The difference of $326,827,328 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $1,075,267 is the present value of future contributions expected to be made by members, and the balance of $325,752,061 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 25.42% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $116,220,351. When this amount is subtracted from $325,752,061, which is the present value of the total future contributions to be made by the employers, there remains $209,531,710 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 17.33% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $209,531,710 over 25 years on the assumption that the aggregate payroll for members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.42% of payroll.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2012 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

			Amount
(1)	UAAL* as of 6/30/11	$	348.8
(2)	Normal cost from last valuation		4.0
(3)	Employer contributions		15.4
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875		26.7
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	364.1
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	364.1
(9)	Actual UAAL as of 6/30/12	$	387.9
(10)	Gain/(loss): (8) - (9)	$	(23.8)
(11)	Accrued liabilities as of 6/30/11	$	634.4
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(3.8)%

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

			Amount
(1)	UAAL* as of 6/30/11	$	314.7
(2)	Normal cost from last valuation		14.9
(3)	Expected employer contributions		27.0
(4)	Interest accrual: [(1) + (2) - (3)] x .045		13.6
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	316.2
(6)	Change due to plan change to MA-PD		(102.7)
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	213.5
(9)	Actual UAAL as of 6/30/12	$	209.5
(10)	Gain/(loss): (8) - (9)	$	4.0
(11)	Accrued liabilities as of 6/30/11	$	438.4
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		0.9%

* *Unfunded actuarial accrued liability*

SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/12	Insurance $ Gain (or Loss) For Year Ending 6/30/12
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ 2.9	$ 8.0
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.3)	(0.6)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	1.9	4.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(1.8)	14.2
New Members. Additional unfunded accrued liability will produce a loss.	0.0	0.0
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(19.1)	(6.4)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.5	2.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(7.9)	(17.8)
Gain (or Loss) During Year From Financial Experience	$ (23.8)	$ 4.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	102.7
Composite Gain (or Loss) During Year	$ (23.8)	$ 106.7

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2013/2014 fiscal year.

Required Contribution Rates
Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	7,315,734	15.12%
(2) Disability benefits		332,405	0.69
(3) Survivor benefits		82,784	0.17
(4) Total	$	7,730,923	15.98%
B. Member Contributions	$	3,869,800	8.00%
C. Employer Normal Cost: [A(4) - B]	$	3,861,123	7.98%
D. Administrative Expenses	$	77,396	0.16%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/11 Valuation:	$	19,039,418	39.36%
(2) Change due to:			
a. Active decrements	$	(252,937)	(0.52)%
b. Pay increases		100,637	0.21
c. Retiree mortality		(27,990)	(0.06)
d. Investment return		1,077,664	2.23
e. COLA		486,674	1.01
f. Assumption Change		0	0.00
g. Other		1,446,507	2.98
h. Total Change	$	2,830,555	5.85%
(3) UAAL Contribution Based on 6/30/12 Valuation: [E(1) +E(2)h]	$	21,869,973	45.21%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	25,808,492	53.35%

** Based on 26 year amortization of the UAAL from June 30, 2011 and 25 years from June 30, 2012*

Required Contribution Rates
Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost	$	12,345,247	25.52%
B.	Member Contributions*	$	48,373	0.10%
C.	Employer Normal Cost: [A - B]	$	12,296,874	25.42%
D.	Administrative Expenses	$	200,880	0.42%
E.	Unfunded Actuarial Accrued Liability**	$	8,381,268	17.33%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	20,879,022	43.17%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 25 year amortization of the UAAL from June 30, 2012*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2012

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,299
Terminated employees entitled to benefits but not yet receiving benefits	380
Active Members	907
Total	2,586

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2007	$ 348,806,508	$ 547,955,286	$ 199,148,778	63.7%	$ 49,247,580	404.4%
6/30/2008	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5
6/30/2009	329,966,989	602,328,868	272,361,879	54.8	51,660,396	527.2
6/30/2010	304,577,292	612,444,806	307,867,514	49.7	51,506,712	597.7
6/30/2011	285,580,631	634,379,401	348,798,770	45.0	48,692,616	716.3
6/30/2012	259,791,575	647,688,665	387,897,090	40.1	48,372,506	801.9

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2007	$ 115,215,912	$ 432,763,229	$ 317,547,317	26.6%	$ 49,247,580	644.8%
6/30/2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
6/30/2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
6/30/2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2
6/30/2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4
6/30/2012	124,372,072	333,903,782	209,531,710	37.2	48,372,506	433.2

RETIREMENT BENEFITS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
June 30, 2007	$ 9,023,665	$ 6,142,326	68.1%
June 30, 2008	13,823,490	7,443,277	53.8
June 30, 2009	15,951,841	8,186,259	51.3
June 30, 2010	18,764,941	9,489,399	50.6
June 30, 2011	18,463,372	12,657,225	68.6
June 30, 2012	20,497,924	15,361,781	74.9

INSURANCE BENEFITS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
June 30, 2007	$15,233,320	$361,942	$ 6,488,600	$ 6,850,542	45.0%
June 30, 2008	43,469,735	183,564	7,329,229	7,512,793	17.3
June 30, 2009	29,324,666	229,240	7,413,552	7,642,792	26.1
June 30, 2010	30,302,151	273,684	8,369,428	8,643,112	28.5
June 30, 2011	25,772,574	0	11,050,964	11,050,964	42.9
June 30, 2012	28,246,786	0	11,960,468	11,960,468	42.3

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2012. Additional information as of the latest actuarial valuation follows.

Retirement Benefits	
Valuation date	6/30/2012
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	25 years
Asset valuation method	5 Year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases**	4.5% - 17.0%
Cost-of-living adjustment	None
*Includes price inflation at	3.50%
**Includes wage inflation at	4.50%

Insurance Benefits	
Valuation date	6/30/2012
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	25 years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	9.5% - 5.0%
Medical Trend Assumption (Post-Medicare)	7.5% - 5.0%
Year of Ulitimate Trend	2019
Actuarial assumptions:	
Investment rate of return*	4.50%
*Includes price inflation at	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2012 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2011. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM

RETIREMENT BENEFITS

	JUNE 30, 2012	JUNE 30, 2011
ASSETS		
Current actuarial value of assets	$ 259,791,575	$ 285,580,631
Prospective contributions		
Member contributions	$ 35,600,938	$ 34,201,120
Employer normal contributions	34,706,049	33,384,470
Unfunded accrued liability contributions	387,897,090	348,798,770
Total prospective contributions	$ 458,204,077	$ 416,384,360
Total assets	$ 717,995,652	$ 701,964,991
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 520,280,073	$ 496,684,389
Present value of benefits payable on account of active members	194,979,006	202,770,762
Present value of benefits payable on account of inactive members	2,736,573	2,509,840
Total liabilities	$ 717,995,652	$ 701,964,991

VALUATION BALANCE SHEET
INSURANCE BENEFITS

	JUNE 30, 2012	JUNE 30, 2011
ASSETS		
Current actuarial value of assets	$ 124,372,072	$ 123,687,289
Prospective contributions		
Member contributions	$ 1,075,267	$ 771,703
Employer normal contributions	116,220,351	142,703,462
Unfunded accrued liability contributions	209,531,710	314,740,474
Total prospective contributions	$ 326,827,328	$ 458,215,639
Total assets	$ 451,199,400	$ 581,902,928
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 186,024,449	$ 244,274,249
Present value of benefits payable on account of active members	260,940,671	329,463,202
Present value of benefits payable on account of inactive members	4,234,280	8,165,477
Total liabilities	$ 451,199,400	$ 581,902,928

The following tables provide the solvency test for SPRS members.

Solvency Test
Retirement Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2007	$ 39,505,285	$ 397,863,520	$ 110,583,481	$ 348,806,508	100.0%	77.7%	0.0%
6/30/2008	41,391,416	426,311,368	119,426,473	350,891,451	100.0	72.6	0.0
6/30/2009	41,664,469	459,585,353	101,079,046	329,966,989	100.0	62.7	0.0
6/30/2010	42,011,523	475,892,659	94,540,624	304,577,292	100.0	55.2	0.0
6/30/2011	43,574,097	499,194,229	91,611,075	285,580,631	100.0	48.5	0.0
6/30/2012	41,139,306	523,016,647	83,532,712	259,791,575	100.0	41.8	0.0

Solvency Test
Insurance Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2007	$ 0	$ 172,291,142	$ 260,472,087	$ 115,215,912	100.0%	66.9%	0.0%
6/30/2008	0	178,655,245	266,452,223	123,961,197	100.0	69.4	0.0
6/30/2009	0	167,091,453	196,939,688	123,526,647	100.0	73.9	0.0
6/30/2010	0	253,580,827	181,379,668	121,175,083	100.0	47.8	0.0
6/30/2011	0	252,439,726	185,988,037	123,687,289	100.0	49.0	0.0
6/30/2012	0	190,258,729	143,645,053	124,372,072	100.0	65.4	0.0

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits

	Valuation date June 30:	2011	2012	2013	2014	2015	2016
A.	Actuarial Value Beginning of Year	$ 304,577,292	$ 285,580,631				
B.	Market Value End of Year	279,934,443	252,896,868				
C.	Market Value Beginning of Year	264,944,089	279,934,443				
D.	Cash Flow						
	D1. Contributions	17,882,105	20,516,672				
	D2. Benefit Payments	(46,813,041)	(49,014,930)				
	D3. Administrative Expenses	(134,547)	(75,970)				
	D4. Investment Expenses	(3,910,742)	(870,407)				
	D5. Net	(32,976,225)	(29,444,635)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	47,966,579	2,407,060				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	23,317,621	21,458,075				
	E4. Amount for Phased-In Recognition	24,648,958	(19,051,015)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	4,929,792	(3,810,203)	0	0	0	0
	F2. First Prior Year	4,395,559	4,929,792	(3,810,203)	0	0	0
	F3. Second Prior Year	(15,234,391)	4,395,559	4,929,792	(3,810,203)	0	0
	F4. Third Prior Year	(8,083,253)	(15,234,391)	4,395,559	4,929,792	(3,810,203)	0
	F5. Fourth Prior Year	4,654,236	(8,083,253)	(15,234,391)	4,395,559	4,929,792	(3,810,203)
	F6. Total Recognized Investment Gain	(9,338,057)	(17,802,496)	(9,719,243)	5,515,148	1,119,589	(3,810,203)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 285,580,631	$ 259,791,575				
H.	Difference Between Market & Actuarial Values	$ (5,646,188)	$ (6,894,707)	$ 2,824,536	$ (2,690,612)	$ (3,810,203)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits

	Valuation date June 30:	2011	2012	2013	2014	2015	2016
A.	Actuarial Value Beginning of Year	$ 121,175,083	$ 123,687,289				
B.	Market Value End of Year	127,367,947	125,567,846				
C.	Market Value Beginning of Year	104,526,550	127,367,947				
D.	Cash Flow						
	D1. Contributions	11,418,135	12,301,298				
	D2. Benefit Payments	(12,171,288)	(10,790,633)				
	D3. Administrative Expenses	(178,949)	(200,880)				
	D4. Investment Expenses	(846,892)	(313,626)				
	D5. Net	(1,778,994)	996,159				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	24,620,391	(2,796,260)				
	E2. Assumed Rate	4.50%	4.50%				
	E3. Amount for Immediate Recognition	5,529,614	6,074,654				
	E4. Amount for Phased-In Recognition	19,090,777	(8,870,914)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	3,818,155	(1,774,183)	0	0	0	0
	F2. First Prior Year	1,783,777	3,818,155	(1,774,183)	0	0	0
	F3. Second Prior Year	(6,729,517)	1,783,777	3,818,155	(1,774,183)	0	0
	F4. Third Prior Year	(3,484,262)	(6,729,517)	1,783,777	3,818,155	(1,774,183)	0
	F5. Fourth Prior Year	3,373,433	(3,484,262)	(6,729,517)	1,783,777	3,818,155	(1,774,183)
	F6. Total Recognized Investment Gain	(1,238,414)	(6,386,030)	(2,901,768)	3,827,749	2,043,972	(1,774,183)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 123,687,289	$ 124,372,072				
H.	Difference Between Market & Actuarial Values	$ 3,680,658	$ 1,195,774	$ 4,097,542	$ 269,793	$ (1,774,183)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for SPRS insurance benefits is 4.50%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for members are as follows and include inflation at 4.50% per annum:

	Annual Rates of		
Service	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	12.50%	4.50%	17.00%
1-2	7.50%	4.50%	12.00%
2-3	5.50%	4.50%	10.00%
3-4	4.50%	4.50%	9.00%
4-5	3.50%	4.50%	8.00%
5-6	2.50%	4.50%	7.00%
6-7	1.50%	4.50%	6.00%
7-8	2.00%	4.50%	6.50%
8-9	1.00%	4.50%	5.50%
9-10	0.50%	4.50%	5.00%
10 & over	0.00%	4.50%	4.50%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

		Death**			Service Retirement		
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate+	Rate++
20	2.50%	0.03%	0.01%	0.05%	20	9.00%	
25	2.50	0.03	0.01	0.07	25	22.00	9.00%
30	2.50	0.04	0.02	0.09	30	25.00	22.00
35	2.50	0.04	0.02	0.13	35	33.33	25.00
40	2.50	0.05	0.04	0.20	40		33.33
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 20.0%, 7.5%, 3.0%, 3.0% and 3.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.*

++ *For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is little margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2013	9.5%	7.5%
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and over	0.0

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of member participation and spouse coverage are as follows:

Participation	100%
Spouse Coverage	100%

HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2012				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$496.14	$764.68	$1,144.72	$1,272.83
Optimum PPO	$663.30	$922.88	$1,432.36	$1,595.06
Capitol Choice	$638.16	$927.08	$1,414.46	$1,568.06

Effective January 1, 2013				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$506.06	$791.54	$1,177.80	$1,314.12
Optimum PPO	$675.34	$961.84	$1,476.00	$1,642.78
Capitol Choice	$650.22	$961.42	$1,457.90	$1,613.74

MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2013	
Available Plan	**Premium**
Kentucky Retirement System Health Plan - Medical Only	$157.00
Kentucky Retirement System Health Plan - Essential	$84.08
Kentucky Retirement System Health Plan - Premium	$198.31

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement 55

Service Requirement At least one month of hazardous duty service credit

Amount If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement 60

Service Requirement At least 60 months of hazardous duty service credit

Amount The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday. The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance. A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Disability (continued):

Members whose participation began on or after 8/1/2004	Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Members whose participation began on or after 9/1/2008

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	60

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age with 60 months service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts will be set at 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $19.04 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.69 per month for each year of earned. These amounts are shown as of the valuation date and are indexed annually based on the CPI prior to July 1, 2008 and by 1.5% thereafter.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2007	2008	2009	2010	2011	2012
			Number			
Beginning of Year	1,067	1,105	1,135	1,184	1,223	1,263
Added	49	42	75	54	52	52
Removed	11	12	26	15	12	16
End of Year	1,105	1,135	1,184	1,223	1,263	1,299
			Annual Allowances			
Beginning of Year	$ 34,651,251	$ 37,208,377	$ 41,293,017	$ 44,273,937	$ 45,515,797	$ 47,467,404
Added	2,836,956	4,330,608	3,380,331	1,543,665	2,341,589	3,026,513
Removed	279,830	245,968	399,410	301,805	389,982	606,825
End of Year	$ 37,208,377	$ 41,293,017	$ 44,273,937	$ 45,515,797	$ 47,467,404	$ 49,887,093
% Increase in Allowances	7.38%	10.98%	7.22%	2.80%	4.29%	5.10%
Average Annual Allowance	$ 33,673	$ 36,382	$ 37,394	$ 37,217	$ 37,583	$ 38,404

Retired Lives Summary June 30, 2012

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	107	$ 350,923.86	10	$ 24,305.39	117	$ 375,229.25
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	126	403,819.80	1	4,813.66	127	408,633.46
66-2/3% to Beneficiary	79	304,843.74	1	3,044.33	80	307,888.07
50% to Beneficiary	81	297,688.51	1	2,604.67	82	300,293.18
Pop-up Option	457	1,637,058.14	5	14,943.95	462	1,652,002.09
10 Years Certain	1	0.00	0	0.00	1	0.00
10 Years Certain & Life	33	105,094.14	1	1,737.53	34	106,831.67
Social Security Option						
Age 62 Basic	32	95,213.93	0	0.00	32	95,213.93
Age 62 Survivorship	137	342,235.09	1	7,930.47	138	350,165.56
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	14	42,077.03	1	3,918.67	15	45,995.70
20 Years Certain & Life	34	111,331.65	2	3,978.81	36	115,310.46
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	466.41	2	466.41
PLSO 12 Month Survivor	6	20,781.22	0	0.00	6	20,781.22
PLSO 24 Month Survivor	5	13,304.01	0	0.00	5	13,304.01
PLSO 36 Month Survivor	9	16,912.49	0	0.00	9	16,912.49
Total	1,121	$ 3,741,283.61	25	$ 67,743.89	1,146	$ 3,809,027.50

Beneficiary Lives Summary June 30, 2012

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	2	$ 1,844.42	2	$ 1,844.42
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	6	5,751.51	57	149,574.73	63	155,326.24
66-2/3% to Beneficiary	1	800.05	6	15,775.18	7	16,575.23
50% to Beneficiary	1	1,298.64	16	24,504.05	17	25,802.69
Pop-up Option	1	478.19	24	68,494.36	25	68,972.55
10 Years Certain	1	591.51	0	0.00	1	591.51
10 Years Certain & Life	0	0.00	0	0.00	0	0.00
Social Security Option						
Age 62 Basic	0	0.00	2	2,281.46	2	2,281.46
Age 62 Survivorship	0	0.00	30	61,029.31	30	61,029.31
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	0	0.00	0	0.00	0	0.00
20 Years Certain & Life	1	6,685.69	4	6,862.09	5	13,547.78
5 Years Certain	1	2,259.08	0	0.00	1	2,259.08
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	12	$ 17,864.67	141	$ 330,365.60	153	$ 348,230.27

Retired and Beneficiary Information June 30, 2012
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	23	$ 840,561	9	$ 151,517	12	$ 138,890	44	$ 1,130,968
45-49	93	3,562,962	5	86,424	7	108,927	105	3,758,313
50-54	146	6,178,916	7	134,618	7	133,367	160	6,446,901
55-59	180	7,765,364	8	110,810	16	364,388	204	8,240,563
60-64	266	11,244,762	5	111,124	25	888,753	296	12,244,639
65-69	185	7,405,097	7	135,687	27	683,572	219	8,224,356
70-74	106	3,760,619	1	23,873	15	520,519	122	4,305,011
75-79	52	1,912,789	4	84,663	22	664,923	78	2,662,375
80-84	33	1,449,558	0	0	16	544,839	49	1,994,397
85-89	14	709,061	0	0	4	77,317	18	786,378
90 & Over	2	39,924	0	0	2	53,268	4	93,192
Totals	1,100	$ 44,869,614	46	$ 838,716	153	$ 4,178,763	1,299	$ 49,887,092

Total Active Members as of June 30, 2012
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	20								20
Avg Pay	$41,723								$41,723
25-29	115	11							126
Avg Pay	$42,167	$50,024							$42,853
30-34	58	88	24						170
Avg Pay	$41,791	$51,006	$52,731						$48,106
35-39	34	59	111	19	1				224
Avg Pay	$41,356	$51,233	$55,038	$60,386	$65,621				$52,460
40-44	7	37	73	97	29	2			245
Avg Pay	$44,308	$50,782	$55,655	$63,945	$65,334	$72,800			$59,163
44-49	5	9	12	24	19	4	3		76
Avg Pay	$35,881	$52,036	$53,694	$64,469	$69,621	$84,827	$81,555		$62,449
50-54	3	6	2	8	7	3	6	1	36
Avg Pay	$44,885	$49,045	$48,855	$56,096	$71,147	$78,589	$73,240	$82,000	$61,962
55-59				1	1		3	3	8
Avg Pay				$66,781	$69,892		$74,619	$74,403	$72,968
60-64								1	1
Avg Pay								$85,352	$85,352
65-69									
Avg Pay									
70 & over				1					1
Avg Pay				$68,860					$68,860
Totals	242	210	222	150	57	9	12	5	907
Avg Pay	$41,892	$50,967	$54,863	$63,211	$67,562	$80,075	$75,664	$78,112	$53,332

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November 8, 2013

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fifty-seventh annual actuarial valuation of the Kentucky Employees Retirement System KERS), the fifty-fourth annual actuarial valuation of the County Employees Retirement System (CERS), and the fifty-fifth annual actuarial valuation of the State Police Retirement System (SPRS) have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rates for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2013 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2014 and ending June 30, 2015. This same rate will be used for the fiscal year beginning July 1, 2015 and ending June 30, 2016 for KERS and SPRS.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by SB2, the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30-year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the UAL will be amortized over a 30-year period beginning June 30, 2013. The amortization period will decrease by one each year going forward.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

The impact of HB1 passed into law in 2008 and SB2 passed into law in 2013 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008 and January 1, 2014. SB2 introduced a Cash Balance Plan for members hired on or after January 1, 2014. The cash balance plan limits the employers' exposure to increased contribution rates due to less than anticipated investment experience.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 (and for KERS Hazardous and CERS Non-Hazardous the 2009) assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have severely limited the plans ability to correct the declining funding levels. SB 2 requires the state to contribute the full actuarially determined employer contribution rates compared to the HB 1 phase-in rates which would not have required the full actuarially determined employer contribution rate for many years. As of June 30, 2013 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	23.2%
KERS Hazardous Pension Fund	64.5%
CERS Non-Hazardous Pension Fund	60.1%
CERS Hazardous Pension Fund	57.7%
SPRS Pension Fund	37.1%

The Board's funding objective for the insurance funds is to increase the funded level consistently over time. As of June 30, 2013 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	23.4%
KERS Hazardous Insurance Fund	96.2%
CERS Non-Hazardous Insurance Fund	66.6%
CERS Hazardous Insurance Fund	62.1%
SPRS Insurance Fund	61.3%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. At least once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on August 20, 2009 based on the experience investigation report dated August 17, 2009, meet the parameters set for disclosure under GASB Statements No. 25 and 43. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in early 2014 and any adjustments will be reflected in the June 30, 2014 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose. However, it is up to the state legislature to follow through with the required funding. As noted above, SB2 calls for KERS and SPRS contributions at the actuarially determined rates beginning with fiscal year 2014-2015, which is a positive development for the long term sustainability of those systems. CERS has always received the actuarially determined contributions, and its sustainability is not in question.

Sincerely,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Summary of June 30, 2013 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2014-2015)					
Pension Fund Contribution	30.84%	16.37%	12.75%	20.73%	53.90%
Insurance Fund Contribution	7.93	9.97	5.35	14.97	21.86
Recommended Employer Contribution	38.77%	26.34%	18.10%	35.70%	75.76%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$11,386,602,159	$783,980,594	$9,378,876,114	$3,124,205,593	$651,580,654
Actuarial Value of Assets	2,636,122,852	505,656,808	5,637,094,483	1,801,691,410	241,800,328
Unfunded Actuarial Liability on Actuarial Value of Assets	8,750,479,307	278,323,786	3,741,781,631	1,322,514,183	409,780,326
Funding Level as a % of Actuarial Value of Assets	23.2%	64.5%	60.1%	57.7%	37.1%
Market Value of Assets	$2,747,428,086	$513,162,166	$5,780,830,355	$1,830,657,969	$248,559,040
Unfunded Actuarial Liability on Market Value of Assets	8,639,174,073	270,818,428	3,598,045,759	1,293,547,624	403,021,614
Funding Level on Market Value of Assets	24.1%	65.5%	61.6%	58.6%	38.2%
Insurance Fund					
Actuarially Accrued Liability	$ 2,128,754,134	$ 385,517,675	$ 2,443,894,100	$ 1,437,332,817	$ 222,326,743
Actuarial Value of Assets	497,584,327	370,774,403	1,628,244,197	892,774,391	136,321,060
Unfunded Actuarial Liability on Actuarial Value of Assets	1,631,169,807	14,743,272	815,649,903	544,558,426	86,005,683
Funding Level as a % of Actuarial Value of Assets	23.4%	96.2%	66.6%	62.1%	61.3%
Market Value of Assets	$ 509,364,080	$ 374,309,576	$ 1,633,696,661	$ 894,232,297	$ 142,830,916
Unfunded Actuarial Liability on Market Value of Assets	1,619,390,054	11,208,099	810,197,439	543,100,520	79,495,827
Funding Level on Market Value of Assets	23.9%	97.1%	66.9%	62.2%	64.2%
Member Data					
Number of Active Members	42,226	4,127	81,815	9,123	902
Total Annual Payroll (Active Members)	$1,644,408,698	$132,015,368	$2,236,277,489	$461,672,567	$45,256,202
Average Annual Pay (Active Members)	$38,943	$31,988	$27,333	$50,605	$50,173
Number of Retired Members & Beneficiaries	40,194	3,430	47,676	7,293	1,346
Average Annual Retirement Allowance	$21,698	$14,905	$11,704	$25,042	$37,820
Number of Vested Inactive Members	8,189	368	11,899	614	60

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Report on the Annual Valuation of the Kentucky Employees Retirement System

Prepared as of June 30, 2013

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November 8, 2013

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal years beginning July 1, 2014 and July 1, 2015. The date of the valuation was June 30, 2013.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

Since the previous valuation, certain provisions of Senate Bill 2 which impact current members of KRS have been reflected in the valuation where appropriate. Those that have an effect on the current members are as follows:

- The COLA provisions in current law are amended to require either greater than 100% funding or full pre-funding of any future COLA along with legislative action to provide a COLA. Previous legislation had suspended COLAs for Fiscal Years 2012-2013 and 2013-2014.
- The phase-in of employer contributions under KERS has been eliminated, requiring the full actuarial required contribution beginning in FY 2014-2015. Therefore, the discount rate used to value insurance liabilities in the KERS Non-Hazardous Plan has been increased from 4.50% to 7.75%.
- For FY 2014-2015 (the June 30, 2013 actuarial valuation), the amortization period for the unfunded accrued liability (UAL) of each system is reset to a closed 30 year period.

The cash balance plan enacted by Senate Bill 2 for members whose participation date is on or after January 1, 2014 has not been reflected in this valuation. The cash balance plan will be reflected in the next valuation once membership in the cash balance plan is established.

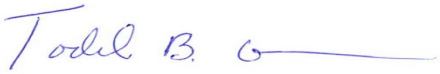
To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer



Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

TJC/TBG/AB:kc

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REPORT ON THE ANNUAL VALUATION OF THE KENTUCKY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2013

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2013, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table. Since the previous valuation, the amortization period has been reset to a closed 30 year period and the discount rate used to value insurance liabilities in the non-hazardous plan has been increased from 4.50% to 7.75%.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/2013	6/30/2012	6/30/2013	6/30/2012	6/30/2013	6/30/2012
Contributions for next fiscal year:						
Retirement	30.84%	32.57%	16.37%	17.00%		
Insurance	7.93	12.71	9.97	11.84	N/A	N/A
Total	38.77%	45.28%	26.34%	28.84%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$11,386,602,159	$11,361,048,136	$783,980,594	$752,699,457	$12,170,582,752	$12,113,747,593
Actuarial value of assets	2,636,122,852	3,101,316,738	505,656,808	497,226,296	3,141,779,660	3,598,543,034
Unfunded liability on actuarial value of assets	8,750,479,307	8,259,731,398	278,323,786	255,473,161	9,028,803,092	8,515,204,559
Funded ratio on actuarial value of assets	23.15%	27.30%	64.50%	66.06%	25.81%	29.71%
Market value of assets	$2,747,428,086	$2,980,401,603	$513,162,166	$478,103,794	$3,260,590,252	$3,458,505,397
Unfunded liability on market value of assets	8,639,174,073	8,380,646,533	270,818,428	274,595,663	8,909,992,500	8,655,242,196
Funded ratio on market value of assets	24.13%	26.23%	65.46%	63.52%	26.79%	28.55%
Insurance						
Actuarial accrued liability	$2,128,754,134	$3,125,330,157	$385,517,675	$384,592,406	$2,514,271,809	$3,509,922,563
Actuarial value of assets	497,584,327	446,080,511	370,774,403	345,573,948	868,358,730	791,654,459
Unfunded liability on actuarial value of assets	1,631,169,807	2,679,249,646	14,743,272	39,018,458	1,645,913,079	2,718,268,104
Funded ratio on actuarial value of assets	23.37%	14.27%	96.18%	89.85%	34.54%	22.55%
Market value of assets	$509,364,080	$430,805,726	$374,309,576	$333,298,119	$883,673,656	$764,103,845
Unfunded liability on market value of assets	1,619,390,054	2,694,524,431	11,208,099	51,294,287	1,630,598,153	2,745,818,718
Funded ratio on market value of assets	23.93%	13.78%	97.09%	86.66%	35.15%	21.77%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	40,194	39,226	3,430	3,253	43,624	42,479
Number of vested former members	8,189	8,976	368	347	8,557	9,323
Number of former members due a refund	35,857	35,130	3,117	2,821	38,974	37,951
Number of active members	42,226	42,196	4,127	4,086	46,353	46,282
Total salary	$1,644,408,698	$1,644,896,681	$132,015,368	$131,976,754	$1,776,424,066	$1,776,873,435
Average salary	$38,943	$38,982	$31,988	$32,300	$38,324	$38,392

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky, has replaced the Plan Year 2013 health insurance plan options with new health insurance plan options for Plan Year 2014. The changes are summarized below.

    - The 2013 health insurance plan options, consisting of Commonwealth Capitol Choice, Commonwealth Optimum PPO and Commonwealth Standard PPO, have been replaced by two new Consumer-Driven Health Plans (CDHP) - LivingWell CDHP and Standard CDHP, and two new Preferred Provider Organization (PPO) plans - LivingWell PPO and Standard PPO.

5. The following changes have been reflected in this valuation in accordance with Senate Bill 2:

    - The amortization period was reset to a closed 30 year period.
    - Since full payment of the Annual Required Contribution is assumed, the insurance liabilities and insurance contribution rates for KERS Non-Hazardous reflect a 7.75% fully-funded interest rate.

6. The cash balance plan enacted by Senate Bill 2 for members whose participation date is on or after January 1, 2014 has not been reflected in this valuation. The cash balance plan will be reflected in the next valuation once membership in the cash balance plan is established.

7. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

8. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for KERS Non-Hazardous was 4.50% for June 30, 2012 and 7.75% for June 30, 2013. KERS Hazardous used an investment rate of return of 7.75% for both June 30, 2012 and June 30, 2013. The lower rate for KERS Non-Hazardous for June 30, 2012 was required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2013 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	42,226	$1,644,408,698	$38,943	44.5	10.1
Hazardous	4,127	132,015,368	31,988	40.6	7.2
Total in KERS	46,353	$1,776,424,066	$38,324	44.1	9.8

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2008	48,085	$1,837,873,488	$38,221	2.9%
6/30/2009	46,060	1,754,412,912	38,090	(0.3)
6/30/2010	47,090	1,815,146,388	38,546	1.2
6/30/2011	46,617	1,731,632,748	37,146	(3.6)
6/30/2012	42,196	1,644,896,681	38,982	4.9
6/30/2013	42,226	1,644,408,698	38,943	(0.1)

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2008	4,393	$148,710,060	$33,852	1.6%
6/30/2009	4,334	146,043,576	33,697	(0.5)
6/30/2010	4,291	143,557,944	33,456	(0.7)
6/30/2011	4,291	133,053,792	31,008	(7.3)
6/30/2012	4,086	131,976,754	32,300	4.2
6/30/2013	4,127	132,015,368	31,988	(1.0)

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	34,058	$788,668,748	$23,157	67.4
Disability	1,868	25,601,341	13,705	64.3
Beneficiary	4,268	57,869,693	13,559	70.5
Total in KERS	40,194	$872,139,782	$21,698	67.6

* Does not include annual benefits for those members included in the Hazardous System who are also receiving a portion of their benefit from the Non Hazardous System

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	2,953	$46,803,026	$15,849	62.9
Disability	143	1,304,502	9,122	58.3
Beneficiary	334	3,014,928	9,027	63.0
Total in KERS	3,430	$51,122,456	$14,905	62.7

This valuation also includes 47,531 inactive members (44,046 Non-Hazardous and 3,485 Hazardous; of which 8,189 Non-Hazardous are vested and 368 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2013 the total market value of assets amounted to $4,144,263,908 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2013

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	$2,747,428,086	$509,364,080	$3,256,792,166
Hazardous	513,162,166	374,309,576	887,471,742
Total	$3,260,590,252	$883,673,656	$4,144,263,908

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $4,010,138,390. Schedule B shows the development of the actuarial value of assets as of June 30, 2013. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	June 30, 2013	June 30, 2012
Retirement		
Non-Hazardous	$ 2,636,122,852	$ 3,101,316,738
Hazardous	505,656,808	497,226,296
Total	$ 3,141,779,660	$ 3,598,543,034
Insurance		
Non-Hazardous	$ 497,584,327	$ 446,080,511
Hazardous	370,774,403	345,573,948
Total	$ 868,358,730	$ 791,654,459
KERS Total		
Non-Hazardous	$ 3,133,707,179	$ 3,547,397,249
Hazardous	876,431,211	842,800,244
Total	$ 4,010,138,390	$ 4,390,197,493

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2013. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $13,552,865,615, of which $8,986,162,124 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $268,758,031 is for the prospective benefits payable on account of present inactive members, and $4,297,945,460 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $3,141,779,660 as of June 30, 2013. The difference of $10,411,085,955 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $839,435,357 is the present value of future contributions expected to be made by members, and the balance of $9,571,650,598 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.48% of payroll for non-hazardous members and 5.24% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $542,847,506. When this amount is subtracted from $9,571,650,598, which is the present value of the total future contributions to be made by the employers, there remains $9,028,803,092 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 26.71% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 10.58% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $8,750,479,307 for non-hazardous members and $278,323,786 for hazardous members over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.65% of payroll for non-hazardous members and 0.55% of payroll for hazardous members.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $3,012,963,571, of which $1,373,084,060 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $167,720,315 is for the prospective benefits payable on account of present inactive members, and $1,472,159,196 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $868,358,730 as of June 30, 2013. The difference of $2,144,604,841 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $41,946,391 is the present value of future contributions expected to be made by members, and the balance of $2,102,658,450 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 2.69% of payroll for non-hazardous members and 9.27% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $456,745,371. When this amount is subtracted from $2,102,658,450, which is the present value of the total future contributions to be made by the employers, there remains $1,645,913,079 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 4.98% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 0.56% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $1,631,169,807 for non-hazardous members and $14,743,272 for hazardous members over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.26% of payroll for non-hazardous members and 0.14% of payroll for hazardous members.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2013 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/12	$ 8,259.7	$ 255.5	$ 8,515.2
(2)	Normal cost from last valuation	152.4	18.6	171.0
(3)	Contributions	377.6	38.8	416.4
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	637.3	19.7	657.0
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 8,671.8	$ 255.0	$ 8,926.8
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 8,671.8	$ 255.0	$ 8,926.8
(9)	Actual UAAL as of 6/30/13	$ 8,750.5	$ 278.3	$ 9,028.8
(10)	Gain/(loss): (8) - (9)	$ (78.7)	$ (23.3)	$ (102.0)
(11)	Accrued liabilities as of 6/30/12	$ 11,361.0	$ 752.7	$ 12,113.7
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(0.7%)	(3.1%)	(0.8%)

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/12	$ 2,679.2	$ 39.0	$ 2,718.2
(2)	Normal cost from last valuation	96.7	13.1	109.8
(3)	Expected employer contributions	203.9	15.3	219.2
(4)	Interest accrual: Non-Haz: [(1) + (2) - (3)] x .045 Haz: [(1) + (2) - (3)] x .0775	115.7	2.9	118.6
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 2,687.7	$ 39.7	$ 2,727.4
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods**	(1,014.4)	0.0	(1,014.4)
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 1,673.3	$ 39.7	$ 1,713.0
(9)	Actual UAAL as of 6/30/13	$ 1,631.2	$ 14.7	$ 1,645.9
(10)	Gain/(loss): (8) - (9)	$ 42.1	$ 25.0	$ 67.1
(11)	Accrued liabilities as of 6/30/12	$ 3,125.3	$ 384.6	$ 3,509.9
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	1.3%	6.5%	1.9%

* *Unfunded actuarial accrued liability*

** *Gain due to change in Non-Hazardous discount rate from 4.50% to 7.75%*

NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/13	Insurance $ Gain (or Loss) For Year Ending 6/30/13
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (112.6)	$ (29.3)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(26.8)	(2.8)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.6)	(1.4)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	72.2	24.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	81.9	41.2
New Members. Additional unfunded accrued liability will produce a loss.	(13.2)	(3.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(165.5)	(24.9)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	16.8	54.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	69.1	(15.4)
Gain (or Loss) During Year From Financial Experience	$ (78.7)	$ 42.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	1,014.4
Composite Gain (or Loss) During Year	$ (78.7)	$ 1,056.5

HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/13	Insurance $ Gain (or Loss) For Year Ending 6/30/13
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (16.7)	$ 2.0
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3.0)	(0.2)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	16.6	9.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	6.3	10.8
New Members. Additional unfunded accrued liability will produce a loss.	(3.4)	(3.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(16.0)	(11.6)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	2.2	6.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(9.4)	11.8
Gain (or Loss) During Year From Financial Experience	$ (23.3)	$ 25.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (23.3)	$ 25.0

TOTAL KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/13	Insurance $ Gain (or Loss) For Year Ending 6/30/13
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (129.3)	$ (27.3)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(29.8)	(3.0)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.5)	(1.4)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	88.9	33.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	88.2	52.0
New Members. Additional unfunded accrued liability will produce a loss.	(16.6)	(6.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(181.5)	(36.5)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	19.0	60.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	59.7	(3.6)
Gain (or Loss) During Year From Financial Experience	$ (102.0)	$ 67.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	1,014.4
Composite Gain (or Loss) During Year	$ (102.0)	$ 1,081.5

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2014/2015 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for		Amount	% of Payroll
A.	Normal Cost:		
	(1) Service retirement benefits	$ 127,085,518	7.73%
	(2) Disability benefits	10,341,322	0.63
	(3) Survivor benefits	2,058,452	0.13
	(4) Total	$ 139,485,292	8.48%
B.	Member Contributions	$ 82,220,435	5.00%
C.	Employer Normal Cost: [A(4) - B]	$ 57,264,857	3.48%
D.	Administrative Expenses	$ 10,718,851	0.65%
E.	Unfunded Actuarial Accrued Liability Contributions*:		
	(1) UAAL Contribution Based on 6/30/12 Valuation:	$ 465,690,781	28.31%
	(2) Change due to:		
	a. Active decrements	$ 3,404,619	0.21%
	b. Pay increases	(4,109,244)	(0.25)
	c. Retiree mortality	(845,264)	(0.05)
	d. Investment return	8,305,206	0.51
	e. COLA	0	0.00
	f. Assumption Change	0	0.00
	g. Other	(33,287,125)	(2.03)
	h. Total Change	$ (26,531,808)	(1.60)%
	(3) UAAL Contribution Based on 6/30/13 Valuation: [E(1) +E(2)h]	$ 439,158,973	26.71%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$ 507,142,681	30.84%

**Based on 25 year amortization of the UAAL from June 30, 2012 reset to 30 years as of June 30, 2013*

Required Contribution Rates
Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	16,089,464	12.25%
(2) Disability benefits		1,078,265	0.80
(3) Survivor benefits		308,793	0.22
(4) Total	$	17,476,522	13.24%
B. Member Contributions	$	10,561,229	8.00%
C. Employer Normal Cost: [A(4) - B]	$	6,915,293	5.24%
D. Administrative Expenses	$	726,085	0.55%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/12 Valuation:	$	14,403,797	10.91%
(2) Change due to:			
a. Active decrements	$	147,264	0.11%
b. Pay increases		(315,881)	(0.24)
c. Retiree mortality		(107,988)	(0.08)
d. Investment return		804,420	0.61
e. COLA		0	0.00
f. Assumption Change		0	0.00
g. Other		(963,419)	(0.74)
h. Total Change	$	(435,604)	(0.33)%
(3) UAAL Contribution Based on 6/30/13 Valuation: [E(1) +E(2)h]	$	13,968,193	10.58%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	21,609,571	16.37%

**Based on 25 year amortization of the UAAL from June 30, 2012 reset to 30 years as of June 30, 2013*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	47,595,433	2.89%
B.	Member Contributions*	$	3,288,817	0.20%
C.	Employer Normal Cost: [A - B]	$	44,306,616	2.69%
D.	Administrative Expenses	$	4,285,139	0.26%
E.	Unfunded Actuarial Accrued Liability**:	$	81,863,271	4.98%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	130,455,026	7.93%

**The liabilities are net of retiree contributions towards their healthcare.*
*** Based on 30 year amortization of the UAAL from June 30, 2013*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	12,642,398	9.58%
B.	Member Contributions*	$	409,248	0.31%
C.	Employer Normal Cost: [A - B]	$	12,233,150	9.27%
D.	Administrative Expenses	$	178,870	0.14%
E.	Unfunded Actuarial Accrued Liability**:	$	739,918	0.56%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	13,151,938	9.97%

**The liabilities are net of retiree contributions towards their healthcare.*
*** Based on 30 year amortization of the UAAL from June 30, 2013*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2013

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	40,194	3,430	43,624
Terminated employees entitled to benefits but not yet receiving benefits	44,046	3,485	47,531
Active Members	42,226	4,127	46,353
Total	126,466	11,042	137,508

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2008	$ 5,318,792,893	$ 10,129,689,985	$ 4,810,897,092	52.5%	$ 1,837,873,488	261.8%
6/30/2009	4,794,611,365	10,658,549,532	5,863,938,167	45.0	1,754,412,912	334.2
6/30/2010	4,210,215,585	11,004,795,089	6,794,579,504	38.3	1,815,146,388	374.3
6/30/2011	3,726,986,087	11,182,142,032	7,455,155,945	33.3	1,731,632,748	430.5
6/30/2012	3,101,316,738	11,361,048,136	8,259,731,398	27.3	1,644,896,681	502.1
6/30/2013	2,636,122,852	11,386,602,159	8,750,479,307	23.2	1,644,408,698	532.1
Hazardous Members						
6/30/2008	$ 502,132,214	$ 618,010,827	$ 115,878,613	81.2%	$ 148,710,060	77.9%
6/30/2009	502,503,287	674,411,781	171,908,494	74.5	146,043,576	117.7
6/30/2010	502,729,009	688,149,451	185,420,442	73.1	143,557,944	129.2
6/30/2011	510,748,505	721,293,444	210,544,939	70.8	133,053,792	158.2
6/30/2012	497,226,296	752,699,457	255,473,161	66.1	131,976,754	193.6
6/30/2013	505,656,808	783,980,594	278,323,786	64.5	132,015,368	210.8
Total KERS Members						
6/30/2008	$ 5,820,925,107	$ 10,747,700,812	$ 4,926,775,705	54.2%	$ 1,986,583,548	248.0%
6/30/2009	5,297,114,652	11,332,961,313	6,035,846,661	46.7	1,900,456,488	317.6
6/30/2010	4,712,944,594	11,692,944,540	6,979,999,946	40.3	1,958,704,332	356.4
6/30/2011	4,237,734,592	11,903,435,476	7,665,700,884	35.6	1,864,686,540	411.1
6/30/2012	3,598,543,034	12,113,747,593	8,515,204,559	29.7	1,776,873,435	479.2
6/30/2013	3,141,779,660	12,170,582,752	9,028,803,092	25.8	1,776,424,066	508.3

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2008	$ 603,197,761	$ 5,431,499,285	$ 4,828,301,524	11.1%	$ 1,837,873,488	262.7%
6/30/2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
6/30/2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
6/30/2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
6/30/2012	446,080,511	3,125,330,157	2,679,249,646	14.3	1,644,896,681	162.9
6/30/2013*	497,584,327	2,128,754,134	1,631,169,807	23.4	1,644,408,698	99.2
Hazardous Members						
6/30/2008	$ 288,161,759	$ 541,657,214	$ 253,495,455	53.2%	$ 148,710,060	170.5%
6/30/2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
6/30/2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
6/30/2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
6/30/2012	345,573,948	384,592,406	39,018,458	89.9	131,976,754	29.6
6/30/2013	370,774,403	385,517,675	14,743,272	96.2	132,015,368	11.2
Total KERS Members						
6/30/2008	$ 891,359,520	$ 5,973,156,499	$ 5,081,796,979	14.9%	$ 1,986,583,548	255.8%
6/30/2009	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0
6/30/2010	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1
6/30/2011	781,582,057	4,787,148,400	4,005,566,343	16.3	1,864,686,540	214.8
6/30/2012	791,654,459	3,509,922,563	2,718,268,104	22.6	1,776,873,435	153.0
6/30/2013	868,358,730	2,514,271,809	1,645,913,079	34.5	1,776,424,066	92.7

** Discount rate changed from 4.50% to 7.75%*

RETIREMENT BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2008	$264,742,985	$104,655,217	39.5%
June 30, 2009	294,495,010	112,383,083	38.2
June 30, 2010	348,494,678	144,050,560	41.3
June 30, 2011	381,915,236	193,754,471	50.7
June 30, 2012	441,094,470	214,786,132	48.7
June 30, 2013	485,395,934	280,874,152	57.9
	Hazardous Members		
June 30, 2008	$14,147,341	$15,257,079	107.8%
June 30, 2009	15,708,254	15,843,289	100.9
June 30, 2010	17,814,630	17,658,058	99.1
June 30, 2011	20,605,070	19,140,508	92.9
June 30, 2012	20,264,754	20,808,540	102.7
June 30, 2013	21,501,581	27,333,681	127.1
	Total KERS Members		
June 30, 2008	$278,890,326	$119,912,296	43.0%
June 30, 2009	310,203,264	128,226,372	41.3
June 30, 2010	366,309,308	161,708,618	44.1
June 30, 2011	402,520,306	212,894,979	52.9
June 30, 2012	461,359,224	235,594,672	51.1
June 30, 2013	506,905,515	308,207,833	60.8

INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
		Non-Hazardous Members			
June 30, 2008	$558,745,820	$6,633,538	$56,744,942	$ 63,378,480	11.3%
June 30, 2009	362,707,378	8,167,982	74,542,932	82,710,914	22.8
June 30, 2010	376,556,187	8,550,914	93,976,917	102,527,831	27.2
June 30, 2011	294,897,813	0	129,335,552	129,335,552	43.9
June 30, 2012	297,904,224	0	156,057,216	156,057,216	52.4
June 30, 2013	286,143,134	0	165,330,557	165,330,557	57.8
		Hazardous Members			
June 30, 2008	$51,214,929	$73,891	$21,997,341	$22,071,232	43.1%
June 30, 2009	34,670,467	186,081	20,807,204	20,993,285	60.6
June 30, 2010	35,045,278	319,059	21,921,535	22,240,594	63.5
June 30, 2011	29,585,257	0	19,952,580	19,952,580	67.4
June 30, 2012	28,326,206	0	24,538,087	24,538,087	86.6
June 30, 2013	26,252,911	0	25,682,403	25,682,403	97.8
		Total KERS Members			
June 30, 2008	$609,960,749	$6,707,429	$ 78,742,283	$ 85,449,712	14.0%
June 30, 2009	397,377,845	8,354,063	95,350,136	103,704,199	26.1
June 30, 2010	411,601,465	8,869,973	115,898,452	124,768,425	30.3
June 30, 2011	324,483,070	0	149,288,132	149,288,132	46.0
June 30, 2012	326,230,430	0	180,595,303	180,595,303	55.4
June 30, 2013	312,396,045	0	191,012,960	191,012,960	61.1

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2013. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2013	6/30/2013
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	30 years	30 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	5.0% - 17.0%	5.0% - 21.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2013	6/30/2013
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	30 years	30 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	8.5% - 5.0%	8.5% - 5.0%
Medical Trend Assumption (Post-Medicare)	7.0% - 5.0%	7.0% - 5.0%
Year Ultimate Trend	2019	2019
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes price inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2013 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2012. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 2,636,122,852	$ 3,101,316,738
Prospective contributions		
Member contributions	$ 748,898,753	$ 751,281,602
Employer normal contributions	483,225,184	519,955,001
Unfunded accrued liability contributions	8,750,479,307	8,259,731,398
Total prospective contributions	$ 9,982,603,244	$ 9,530,968,001
Total assets	$ 12,618,726,096	$ 12,632,284,739
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,457,981,441	$ 8,473,263,446
Present value of benefits payable on account of active members	3,909,402,474	3,923,748,401
Present value of benefits payable on account of inactive members	251,342,181	235,272,892
Total liabilities	$ 12,618,726,096	$ 12,632,284,739

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 505,656,808	$ 497,226,296
Prospective contributions		
Member contributions	$ 90,536,604	$ 89,828,416
Employer normal contributions	59,622,322	62,169,684
Unfunded accrued liability contributions	278,323,786	255,473,161
Total prospective contributions	$ 428,482,712	$ 407,471,261
Total assets	$ 934,139,520	$ 904,697,557
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 528,180,683	$ 508,171,821
Present value of benefits payable on account of active members	388,542,986	383,008,754
Present value of benefits payable on account of inactive members	17,415,851	13,516,982
Total liabilities	$ 934,139,520	$ 904,697,557

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 3,141,779,660	$ 3,598,543,034
Prospective contributions		
Member contributions	$ 839,435,357	$ 841,110,018
Employer normal contributions	542,847,506	582,124,685
Unfunded accrued liability contributions	9,028,803,092	8,515,204,559
Total prospective contributions	$ 10,411,085,955	$ 9,938,439,262
Total assets	$ 13,552,865,615	$ 13,536,982,296
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,986,162,124	$ 8,981,435,267
Present value of benefits payable on account of active members	4,297,945,460	4,306,757,155
Present value of benefits payable on account of inactive members	268,758,031	248,789,874
Total liabilities	$ 13,552,865,615	$ 13,536,982,296

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 497,584,327	$ 446,080,511
Prospective contributions		
Member contributions	$ 37,703,377	$ 44,118,830
Employer normal contributions	365,769,800	1,052,410,976
Unfunded accrued liability contributions	1,631,169,807	2,679,249,646
Total prospective contributions	$ 2,034,642,984	$ 3,775,779,452
Total assets	$ 2,532,227,311	$ 4,221,859,963
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,187,225,490	$ 1,617,674,784
Present value of benefits payable on account of active members	1,193,454,451	2,297,791,340
Present value of benefits payable on account of inactive members	151,547,370	306,393,839
Total liabilities	$ 2,532,227,311	$ 4,221,859,963

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 370,774,403	$ 345,573,948
Prospective contributions		
Member contributions	$ 4,243,014	$ 3,297,492
Employer normal contributions	90,975,571	100,434,346
Unfunded accrued liability contributions	14,743,272	39,018,458
Total prospective contributions	$ 109,961,857	$ 142,750,296
Total assets	$ 480,736,260	$ 488,324,244
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 185,858,570	$ 180,374,759
Present value of benefits payable on account of active members	278,704,745	291,745,309
Present value of benefits payable on account of inactive members	16,172,945	16,204,176
Total liabilities	$ 480,736,260	$ 488,324,244

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 868,358,730	$ 791,654,459
Prospective contributions		
Member contributions	$ 41,946,391	$ 47,416,322
Employer normal contributions	456,745,371	1,152,845,322
Unfunded accrued liability contributions	1,645,913,079	2,718,268,104
Total prospective contributions	$ 2,144,604,841	$ 3,918,529,748
Total assets	$ 3,012,963,571	$ 4,710,184,207
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,373,084,060	$ 1,798,049,543
Present value of benefits payable on account of active members	1,472,159,196	2,589,536,649
Present value of benefits payable on account of inactive members	167,720,315	322,598,015
Total liabilities	$ 3,012,963,571	$ 4,710,184,207

The following tables provide the solvency test for non-hazardous and hazardous KERS members.

Solvency Test
Retirement Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2008	$ 875,178,068	$ 7,162,496,700	$ 2,092,015,217	$ 5,318,792,893	100.0%	62.0%	0.0%
6/30/2009	793,574,765	8,205,155,691	1,659,819,076	4,794,611,365	100.0	48.8	0.0
6/30/2010	869,484,042	8,329,757,802	1,805,553,245	4,210,215,585	100.0	40.1	0.0
6/30/2011	916,568,932	8,482,714,356	1,782,858,744	3,726,986,087	100.0	33.1	0.0
6/30/2012	885,137,183	8,708,536,338	1,767,374,615	3,101,316,738	100.0	25.4	0.0
6/30/2013	922,928,027	8,709,323,622	1,754,350,510	2,636,122,852	100.0	19.7	0.0

Solvency Test
Retirement Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2008	$ 89,590,638	$ 355,771,877	$ 172,648,312	$ 502,132,214	100.0%	100.0%	32.9%
6/30/2009	87,779,938	413,972,356	172,659,487	502,503,287	100.0	100.0	0.4
6/30/2010	88,511,283	441,657,241	157,980,927	502,729,009	100.0	93.8	0.0
6/30/2011	86,614,205	490,395,078	144,284,161	510,748,505	100.0	86.5	0.0
6/30/2012	82,100,877	521,688,803	148,909,777	497,226,296	100.0	79.6	0.0
6/30/2013	82,145,602	545,596,534	156,238,458	505,656,808	100.0	77.6	0.0

Solvency Test
Insurance Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2008	$ 0	$ 2,788,189,754	$ 2,643,309,531	$ 603,197,761	100.0%	21.6%	0.0%
6/30/2009	0	2,861,867,088	1,645,458,483	534,172,580	100.0	18.7	0.0
6/30/2010	0	2,744,534,054	1,721,601,987	471,341,628	100.0	17.2	0.0
6/30/2011	0	2,568,002,978	1,712,086,655	451,620,442	100.0	17.6	0.0
6/30/2012	0	1,924,068,623	1,201,261,534	446,080,511	100.0	23.2	0.0
6/30/2013	0	1,338,772,860	789,981,274	497,584,327	100.0	37.2	0.0

Solvency Test
Insurance Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2008	$ 0	$ 228,834,940	$ 312,822,274	$ 288,161,759	100.0%	100.0%	19.0%
6/30/2009	0	242,123,365	249,008,805	301,634,592	100.0	100.0	23.9
6/30/2010	0	268,510,709	224,786,820	314,427,296	100.0	100.0	20.4
6/30/2011	0	285,539,861	221,518,906	329,961,615	100.0	100.0	20.1
6/30/2012	0	196,578,935	188,013,471	345,573,948	100.0	100.0	79.2
6/30/2013	0	202,031,515	183,486,160	370,774,403	100.0	100.0	92.0

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2012	2013	2014	2015	2016	2017
A.	Actuarial Value Beginning of Year	$ 3,726,986,087	$ 3,101,316,738				
B.	Market Value End of Year	2,980,401,603	2,747,428,086				
C.	Market Value Beginning of Year	3,538,878,093	2,980,401,603				
D.	Cash Flow						
	D1. Contributions	311,192,306	377,617,564				
	D2. Benefit Payments	(878,583,454)	(886,812,291)				
	D3. Administrative Expenses	(8,907,777)	(10,718,851)				
	D4. Investment Expenses	(11,549,725)	(12,324,984)				
	D5. Net	(587,848,650)	(532,238,562)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	29,372,160	299,265,045				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	263,481,194	223,159,457				
	E4. Amount for Phased-In Recognition	(234,109,034)	76,105,588				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(46,821,807)	15,221,118	0	0	0	0
	F2. First Prior Year	68,172,485	(46,821,807)	15,221,118	0	0	0
	F3. Second Prior Year	54,541,214	68,172,485	(46,821,807)	15,221,118	0	0
	F4. Third Prior Year	(247,227,791)	54,541,214	68,172,485	(46,821,807)	15,221,118	0
	F5. Fourth Prior Year	(129,965,994)	(247,227,791)	54,541,214	68,172,485	(46,821,807)	15,221,118
	F6. Total Recognized Investment Gain	(301,301,893)	(156,114,781)	91,113,010	36,571,796	(31,600,689)	15,221,118
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 3,101,316,738	$ 2,636,122,852				
H.	Difference Between Market & Actuarial Values	$ (120,915,135)	$ 111,305,234	$ 20,192,224	$ (16,379,572)	$ 15,221,118	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2012	2013	2014	2015	2016	2017
A.	Actuarial Value Beginning of Year	$ 510,748,505	$ 497,226,296				
B.	Market Value End of Year	478,103,794	513,162,166				
C.	Market Value Beginning of Year	510,628,492	478,103,794				
D.	Cash Flow						
	D1. Contributions	32,590,014	38,798,624				
	D2. Benefit Payments	(54,927,682)	(51,616,993)				
	D3. Administrative Expenses	(887,975)	(732,555)				
	D4. Investment Expenses	(1,460,743)	(1,815,898)				
	D5. Net	(24,686,386)	(15,366,822)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(7,838,312)	50,425,194				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	40,134,457	38,343,844				
	E4. Amount for Phased-In Recognition	(47,972,769)	12,081,350				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(9,594,554)	2,416,270	0	0	0	0
	F2. First Prior Year	9,718,299	(9,594,554)	2,416,270	0	0	0
	F3. Second Prior Year	7,187,340	9,718,299	(9,594,554)	2,416,270	0	0
	F4. Third Prior Year	(24,273,865)	7,187,340	9,718,299	(9,594,554)	2,416,270	0
	F5. Fourth Prior Year	(12,007,500)	(24,273,865)	7,187,340	9,718,299	(9,594,554)	2,416,270
	F6. Total Recognized Investment Gain	(28,970,280)	(14,546,510)	9,727,355	2,540,015	(7,178,284)	2,416,270
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 497,226,296	$ 505,656,808				
H.	Difference Between Market & Actuarial Values	$ (19,122,502)	$ 7,505,358	$ (2,221,997)	$ (4,762,012)	$ 2,416,270	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2012	2013	2014	2015	2016	2017
A.	Actuarial Value Beginning of Year	$ 451,620,442	$ 446,080,511				
B.	Market Value End of Year	430,805,726	509,364,080				
C.	Market Value Beginning of Year	433,305,243	430,805,726				
D.	Cash Flow						
	D1. Contributions	181,479,543	184,673,842				
	D2. Benefit Payments	(163,840,752)	(140,156,341)				
	D3. Administrative Expenses	(5,070,370)	(4,285,139)				
	D4. Investment Expenses	(1,195,793)	(1,570,529)				
	D5. Net	11,372,628	38,661,833				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(13,872,145)	39,896,521				
	E2. Assumed Rate	4.50%	7.75%				
	E3. Amount for Immediate Recognition	20,977,318	36,516,977				
	E4. Amount for Phased-In Recognition	(34,849,463)	3,379,544				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(6,969,893)	675,909	0	0	0	0
	F2. First Prior Year	11,459,921	(6,969,893)	675,909	0	0	0
	F3. Second Prior Year	7,065,952	11,459,921	(6,969,893)	675,909	0	0
	F4. Third Prior Year	(35,906,883)	7,065,952	11,459,921	(6,969,893)	675,909	0
	F5. Fourth Prior Year	(13,538,974)	(35,906,883)	7,065,952	11,459,921	(6,969,893)	675,909
	F6. Total Recognized Investment Gain	(37,889,877)	(23,674,994)	12,231,889	5,165,937	(6,293,984)	675,909
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 446,080,511	$ 497,584,327				
H.	Difference Between Market & Actuarial Values	$ (15,274,785)	$ 11,779,753	$ (452,136)	$ (5,618,073)	$ 675,909	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2012	2013	2014	2015	2016	2017
A.	Actuarial Value Beginning of Year	$ 329,961,615	$ 345,573,948				
B.	Market Value End of Year	333,298,119	374,309,576				
C.	Market Value Beginning of Year	321,071,515	333,298,119				
D.	Cash Flow						
	D1. Contributions	25,856,162	26,684,555				
	D2. Benefit Payments	(13,940,467)	(16,836,455)				
	D3. Administrative Expenses	(322,727)	(178,870)				
	D4. Investment Expenses	(857,285)	(1,018,077)				
	D5. Net	10,735,683	8,651,153				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	1,490,921	32,360,304				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	26,189,555	27,223,364				
	E4. Amount for Phased-In Recognition	(24,698,634)	5,136,940				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(4,939,727)	1,027,388	0	0	0	0
	F2. First Prior Year	4,619,785	(4,939,727)	1,027,388	0	0	0
	F3. Second Prior Year	5,005,228	4,619,785	(4,939,727)	1,027,388	0	0
	F4. Third Prior Year	(16,386,736)	5,005,228	4,619,785	(4,939,727)	1,027,388	0
	F5. Fourth Prior Year	(9,611,455)	(16,386,736)	5,005,228	4,619,785	(4,939,727)	1,027,388
	F6. Total Recognized Investment Gain	(21,312,905)	(10,674,062)	5,712,674	707,446	(3,912,339)	1,027,388
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 345,573,948	$ 370,774,403				
H.	Difference Between Market & Actuarial Values	$ (12,275,829)	$ 3,535,173	$ (2,177,501)	$ (2,884,947)	$ 1,027,388	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.50% per annum:

Service	Annual Rates of Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	12.50%	16.50%	4.50%	17.00%	21.00%
1-2	4.50%	4.50%	4.50%	9.00%	9.00%
2-3	2.00%	2.50%	4.50%	6.50%	7.00%
3-4	1.50%	2.00%	4.50%	6.00%	6.50%
4-5	1.50%	1.50%	4.50%	6.00%	6.00%
5-6	1.50%	1.00%	4.50%	6.00%	5.50%
6-7	1.00%	0.50%	4.50%	5.50%	5.00%
7-8	1.00%	0.50%	4.50%	5.50%	5.00%
8-9	1.00%	0.50%	4.50%	5.50%	5.00%
9-10	0.50%	0.50%	4.50%	5.00%	5.00%
10 & over	0.50%	0.50%	4.50%	5.00%	5.00%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement+	Service Retirement++
		Male	Female			
20	6.00%	0.03%	0.01%	0.04%		
25	5.08	0.03	0.01	0.05		
30	4.26	0.04	0.02	0.06		
35	3.21	0.04	0.02	0.09		
40	3.00	0.05	0.04	0.13		
45	3.00	0.08	0.05	0.22		
50	3.00	0.13	0.07	0.37		
55	3.00	0.22	0.11	0.61	8.0%	
60	3.00	0.40	0.22	0.97	10.0	10.0%
65		0.73	0.43		22.5	25.0
70		1.19	0.69		22.5	25.0
75					100.0	100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 19.0%, 13.0%, 10.0%, 9.0% and 6.5%, respectively.*
\+ *For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.*
++ *For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 25%.*

Hazardous Members

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement		
		Male	Female		Service	Rate+	Rate++
20	4.00%	0.03%	0.01%	0.05%	20	22.0%	
25	4.00	0.03	0.01	0.07	25	35.0	22.0%
30	3.50	0.04	0.02	0.09	30	38.0	35.0
35	3.00	0.04	0.02	0.13	35	60.0	38.0
40	3.00	0.05	0.04	0.20	40		60.0
45	3.00	0.08	0.05	0.33			
50	3.00	0.13	0.07	0.56			
55	3.00	0.22	0.11	0.92			
60	3.00	0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 26.0%, 11.5%, 8.25%, 7.5% and 7.0%, respectively.*
** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*
\+ *For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.*
++ *For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006, and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	90%	100%

HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2013				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$506.06	$791.54	$1,177.80	$1,314.12
Optimum PPO	$675.34	$961.84	$1,476.00	$1,642.78
Capitol Choice	$650.22	$961.42	$1,457.90	$1,613.74

Effective January 1, 2014				
	Single	Parent Plus	Couple	Family
Total Premiums				
LivingWell CDHP	$733.88	$1,045.20	$1,603.94	$1,785.16
LivingWell PPO	$699.28	$995.94	$1,528.34	$1,701.04
Standard PPO	$656.28	$934.70	$1,434.36	$1,596.42
Standard CDHP	$641.50	$913.66	$1,402.06	$1,560.48

MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2014	
Available Plan	**Premium**
Kentucky Retirement System Health Plan - Medical Only	$166.00
Kentucky Retirement System Health Plan - Essential	$67.62
Kentucky Retirement System Health Plan - Premium	$212.39

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For those members who retired between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

Non-Hazardous Normal Retirement (continued):

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement

55

Service Requirement

At least one month of hazardous duty service credit

Amount

If a member has at least 60 months of service, the monthly benefit is 2.49% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement

60

Service Requirement

At least 60 months of hazardous duty service credit

Hazardous Normal Retirement (continued):

Amount

The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 55 with 60 months of service or any age with 25 years of service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement

Age 60 with 10 years of service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 50 with 15 years of service or any age with 20 years service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

Hazardous Disability (continued):

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Vesting (continued):

	Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.42 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.64 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.42 per month for each year of earned. These amounts are shown as of the valuation date and are increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2008	2009	2010	2011	2012	2013
			Number			
Beginning of Year	33,849	35,307	37,883	37,945	38,597	39,226
Added	2,573	3,465	1,162	1,592	1,707	1,982
Removed	1,115	889	1,100	940	1,078	1,014
End of Year	35,307	37,883	37,945	38,597	39,226	40,194
			Annual Allowances			
Beginning of Year	$ 625,435,416	$ 710,505,270	$ 812,559,070	$ 801,881,911	$ 821,197,278	$ 844,880,945
Added	102,305,405	110,700,043	865,483	31,930,847	37,458,130	41,468,079
Removed	17,235,551	8,646,243	11,542,643	12,615,480	13,774,463	14,209,242
End of Year	$ 710,505,270	$ 812,559,070	$ 801,881,911	$ 821,197,278	$ 844,880,945	$ 872,139,782
% Increase in Allowances	13.60%	14.36%	(1.31)%	2.41%	2.88%	3.23%
Average Annual Allowance	$ 20,124	$ 21,449	$ 21,133	$ 21,276	$ 21,539	$ 21,698

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2008	2009	2010	2011	2012	2013
			Number			
Beginning of Year	2,202	2,404	2,648	2,835	3,064	3,253
Added	261	339	282	288	243	229
Removed	59	95	95	59	54	52
End of Year	2,404	2,648	2,835	3,064	3,253	3,430
			Annual Allowances			
Beginning of Year	$ 27,528,837	$ 33,588,993	$ 38,695,501	$ 41,114,800	$ 45,609,229	$ 49,231,205
Added	6,565,454	5,443,628	3,315,361	5,012,933	4,213,360	2,390,928
Removed	505,250	337,120	896,062	518,504	591,384	499,677
End of Year	$ 33,588,993	$ 38,695,501	$ 41,114,800	$ 45,609,229	$ 49,231,205	$ 51,122,456
% Increase in Allowances	22.01%	15.20%	6.25%	10.93%	7.94%	3.84%
Average Annual Allowance	$ 13,972	$ 14,613	$ 14,503	$ 14,886	$ 15,134	$ 14,905

Non-Hazardous Retired Lives Summary June 30, 2013

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	9,876	$ 15,044,801.25	3,459	$ 6,655,954.96	13,335	$ 21,700,756.21
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	811	1,034,146.00	1,894	3,730,921.55	2,705	4,765,067.55
66-2/3% to Beneficiary	426	917,928.65	771	2,333,426.32	1,197	3,251,354.97
50% to Beneficiary	1,295	2,707,905.86	1,074	2,853,023.89	2,369	5,560,929.75
Pop-up Option	3,156	6,411,365.93	3,694	9,619,806.89	6,850	16,031,172.82
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,994	3,096,268.02	878	1,636,081.16	2,872	4,732,349.18
Social Security Option						
Age 62 Basic	980	1,824,037.09	410	1,091,421.66	1,390	2,915,458.75
Age 62 Survivorship	577	1,143,325.78	845	2,023,427.11	1,422	3,166,752.89
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	518	832,401.10	389	651,223.91	907	1,483,625.01
20 Years Certain & Life	511	888,371.28	393	890,710.23	904	1,779,081.51
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	304	467,781.69	85	144,193.84	389	611,975.53
PLSO 24 Month Basic	168	210,644.49	37	51,154.16	205	261,798.65
PLSO 36 Month Basic	417	328,462.93	165	156,147.81	582	484,610.74
PLSO 12 Month Survivor	105	181,936.33	112	239,410.53	217	421,346.86
PLSO 24 Month Survivor	81	121,638.65	90	143,992.98	171	265,631.63
PLSO 36 Month Survivor	164	143,190.89	247	280,737.81	411	423,928.70
Total	21,383	$ 35,354,205.94	14,543	$ 32,501,634.81	35,926	$ 67,855,840.75

Hazardous Retired Lives Summary June 30, 2013

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	478	$ 536,909.93	371	$ 380,142.49	849	$ 917,052.42
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	233	283,845.41	25	26,982.74	258	310,828.15
66-2/3% to Beneficiary	86	120,935.17	21	23,478.05	107	144,413.22
50% to Beneficiary	140	209,028.92	47	73,784.91	187	282,813.83
Pop-up Option	721	1,050,377.24	144	181,052.39	865	1,231,429.63
10 Years Certain	28	33,718.32	8	8,814.03	36	42,532.35
10 Years Certain & Life	108	115,040.62	60	52,051.06	168	167,091.68
Social Security Option						
Age 62 Basic	55	103,131.37	30	51,123.34	85	154,254.71
Age 62 Survivorship	141	308,184.29	17	26,912.93	158	335,097.22
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	50	63,697.48	14	11,301.18	64	74,998.66
20 Years Certain & Life	48	63,131.66	20	30,411.72	68	93,543.38
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	12	11,835.61	15	12,928.54	27	24,764.15
PLSO 24 Month Basic	16	16,016.98	12	10,496.63	28	26,513.61
PLSO 36 Month Basic	48	40,029.37	25	21,280.54	73	61,309.91
PLSO 12 Month Survivor	21	27,586.95	6	5,150.84	27	32,737.79
PLSO 24 Month Survivor	22	30,012.66	9	11,029.16	31	41,041.82
PLSO 36 Month Survivor	50	49,843.05	15	18,695.05	65	68,538.10
Total	2,257	$ 3,063,325.03	839	$ 945,635.60	3,096	$ 4,008,960.63

Non-Hazardous Beneficiary Lives Summary June 30, 2013

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	12	$ 6,887.62	24	$ 31,145.65	36	$ 38,033.27
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	272	222,809.18	1,479	1,542,660.23	1,751	1,765,469.41
66-2/3% to Beneficiary	38	41,020.35	312	334,325.23	350	375,345.58
50% to Beneficiary	114	84,414.09	447	302,105.08	561	386,519.17
Pop-up Option	126	201,513.95	506	804,343.33	632	1,005,857.28
10 Years Certain	76	65,507.20	85	71,853.11	161	137,360.31
10 Years Certain & Life	22	28,103.15	37	45,347.77	59	73,450.92
Social Security Option						
Age 62 Basic	1	272.14	8	8,647.21	9	8,919.35
Age 62 Survivorship	53	88,497.16	258	465,592.92	311	554,090.08
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	5	2,040.62	5	2,040.62
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	3	2,712.62	7	8,134.18	10	10,846.80
15 Years Certain & Life	19	22,313.06	55	88,347.35	74	110,660.41
20 Years Certain & Life	29	34,871.46	78	128,982.86	107	163,854.32
5 Years Certain	53	38,972.54	50	41,541.55	103	80,514.09
PLSO 12 Month Basic	0	0.00	1	1,791.60	1	1,791.60
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	3,426.69	2	3,426.69
PLSO 12 Month Survivor	3	4,870.93	12	18,532.00	15	23,402.93
PLSO 24 Month Survivor	9	11,795.18	17	14,052.91	26	25,848.09
PLSO 36 Month Survivor	14	13,103.90	41	41,939.60	55	55,043.50
Total	844	$ 867,664.53	3,424	$ 3,954,809.89	4,268	$ 4,822,474.42

Hazardous Beneficiary Lives Summary June 30, 2013

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2	$ 1,051.91	5	$ 2,918.99	7	$ 3,970.90
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	11	7,071.99	123	85,099.37	134	92,171.36
66-2/3% to Beneficiary	0	0.00	15	6,106.18	15	6,106.18
50% to Beneficiary	2	1,450.30	21	8,575.97	23	10,026.27
Pop-up Option	11	8,499.24	57	40,283.07	68	48,782.31
10 Years Certain	4	4,921.56	14	13,662.57	18	18,584.13
10 Years Certain & Life	4	2,570.43	1	938.53	5	3,508.96
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	1	392.36	23	39,765.02	24	40,157.38
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	1	262.55	3	2,151.81	4	2,414.36
15 Years Certain & Life	3	1,344.59	6	4,138.42	9	5,483.01
20 Years Certain & Life	0	0.00	6	3,140.16	6	3,140.16
5 Years Certain	4	7.52	2	4,127.28	6	4,134.80
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	1	125.74	1	125.74
PLSO 12 Month Survivor	0	0.00	3	3,344.12	3	3,344.12
PLSO 24 Month Survivor	1	995.41	0	0.00	1	995.41
PLSO 36 Month Survivor	3	1,072.35	7	7,226.54	10	8,298.89
Total	47	$ 29,640.21	287	$ 221,603.77	334	$ 251,243.98

Non-Hazardous Members
Retired and Beneficiary Information June 30, 2013
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	53	$ 1,291,170	34	$ 427,737	104	$ 724,141	191	$ 2,443,047
45-49	502	$ 13,231,061	92	$ 1,448,690	54	$ 612,249	648	$ 15,292,001
50-54	1,972	$ 61,607,176	169	$ 2,614,956	113	$ 1,669,116	2,254	$ 65,891,248
55-59	4,519	$ 137,978,932	300	$ 4,923,205	219	$ 3,390,911	5,038	$ 146,293,048
60-64	7,046	$ 190,071,769	360	$ 4,923,224	352	$ 6,470,455	7,758	$ 201,465,449
65-69	7,384	$ 169,381,477	350	$ 4,578,265	435	$ 8,104,169	8,169	$ 182,063,911
70-74	5,053	$ 99,982,293	264	$ 3,426,420	474	$ 7,732,339	5,791	$ 111,141,052
75-79	3,309	$ 56,992,835	189	$ 2,109,402	546	$ 8,354,474	4,044	$ 67,456,712
80-84	2,213	$ 33,300,914	70	$ 788,128	511	$ 7,626,043	2,794	$ 41,715,085
85-89	1,366	$ 17,992,183	33	$ 288,090	572	$ 6,883,383	1,971	$ 25,163,656
90 & Over	641	$ 6,838,936	7	$ 73,224	888	$ 6,302,413	1,536	$ 13,214,573
Totals	34,058	$ 788,668,748	1,868	$ 25,601,341	4,268	$ 57,869,693	40,194	$ 872,139,782

Hazardous Members
Retired and Beneficiary Information June 30, 2013
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	24	$ 506,146	14	$ 163,494	24	$ 85,277	62	$ 754,917
45-49	197	$ 3,971,517	17	$ 261,674	7	$ 130,338	221	$ 4,363,530
50-54	282	$ 5,832,350	19	$ 202,258	17	$ 179,665	318	$ 6,214,273
55-59	480	$ 9,486,704	27	$ 228,346	28	$ 292,942	535	$ 10,007,991
60-64	696	$ 11,178,034	29	$ 255,234	41	$ 448,768	766	$ 11,882,036
65-69	673	$ 9,663,180	19	$ 128,328	53	$ 520,671	745	$ 10,312,180
70-74	332	$ 3,705,927	6	$ 21,506	48	$ 443,694	386	$ 4,171,126
75-79	179	$ 1,656,886	11	$ 40,432	46	$ 442,111	236	$ 2,139,429
80-84	67	$ 457,276	1	$ 3,230	42	$ 217,921	110	$ 678,427
85-89	19	$ 261,924			17	$ 130,994	36	$ 392,918
90 & Over	4	$ 83,081			11	$ 122,548	15	$ 205,629
Totals	2,953	$ 46,803,026	143	$ 1,304,502	334	$ 3,014,928	3,430	$ 51,122,455

Total Non-Hazardous Active Members as of June 30, 2013
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	9								9
Avg Pay	$16,489								$16,489
20-24	922	3							925
Avg Pay	$22,323	$23,164							$22,326
25-29	2,900	562	10						3,472
Avg Pay	$28,282	$30,341	$34,506						$28,633
30-34	2,370	2,137	608	22					5,137
Avg Pay	$31,189	$36,269	$37,263	$43,841					$34,075
35-39	1,639	1,709	1,708	419	20	2			5,497
Avg Pay	$32,404	$38,392	$41,683	$41,888	$40,181	$60,344			$37,910
40-44	1,515	1,428	1,557	1,164	464	53	27	6	6,214
Avg Pay	$31,881	$38,871	$42,777	$45,996	$47,663	$57,474	$59,085	$69,819	$40,413
44-49	1,278	1,244	1,209	985	885	256	194	39	6,090
Avg Pay	$31,867	$38,032	$42,347	$48,180	$48,753	$52,053	$58,133	$60,815	$42,170
50-54	1,076	1,225	1,220	855	736	266	277	121	5,776
Avg Pay	$32,776	$38,610	$41,295	$44,946	$49,061	$53,537	$54,783	$64,187	$42,359
55-59	857	1,095	1,008	773	585	199	186	105	4,808
Avg Pay	$35,325	$38,249	$40,181	$43,762	$47,697	$51,505	$55,623	$65,125	$41,976
60-64	462	697	739	478	351	118	117	75	3,037
Avg Pay	$34,923	$39,341	$40,475	$44,979	$46,161	$49,658	$56,482	$68,506	$42,402
65-69	108	228	233	176	110	32	26	22	935
Avg Pay	$41,283	$43,537	$41,295	$52,208	$49,477	$57,666	$53,401	$66,038	$46,336
70 & over	31	64	92	65	43	11	9	11	326
Avg Pay	$30,861	$39,116	$38,205	$48,397	$44,956	$70,209	$64,578	$75,127	$43,662
Totals	13,167	10,392	8,384	4,937	3,194	937	836	379	42,226
Avg Pay	$30,826	$37,730	$41,260	$45,696	$48,108	$52,785	$56,187	$65,469	$38,943

Total Hazardous Active Members as of June 30, 2013
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	1								1
Avg Pay	$10,700								$10,700
20-24	239								239
Avg Pay	$21,858								$21,858
25-29	506	78							584
Avg Pay	$25,984	$31,763							$26,756
30-34	293	266	39	1					599
Avg Pay	$26,646	$32,552	$33,774	$40,293					$29,756
35-39	205	180	168	35					588
Avg Pay	$26,166	$34,517	$36,971	$40,766					$32,679
40-44	204	171	131	144	15		2		667
Avg Pay	$26,717	$33,571	$37,480	$41,886	$48,309		$76,510		$34,498
44-49	130	122	94	70	36	7	2	1	462
Avg Pay	$26,597	$31,537	$37,937	$40,722	$49,065	$55,755	$70,156	$44,324	$34,769
50-54	112	96	87	66	30	5	4		400
Avg Pay	$27,337	$32,679	$36,725	$40,220	$53,458	$50,386	$55,614		$35,317
55-59	90	96	75	41	25		3	3	333
Avg Pay	$26,702	$32,345	$35,451	$44,336	$47,184		$44,373	$61,342	$34,479
60-64	40	56	54	36	8	2	2		198
Avg Pay	$31,480	$33,224	$37,527	$40,855	$41,770	$54,716	$53,296		$36,198
65-69	2	18	9	9	6				44
Avg Pay	$19,746	$40,320	$31,399	$37,994	$73,955				$41,671
70 & over	3	3	5	1					12
Avg Pay	$25,738	$30,253	$46,888	$31,903					$36,193
Totals	1,825	1,086	662	403	120	14	13	4	4,127
Avg Pay	$25,919	$33,017	$36,861	$41,355	$50,435	$53,689	$58,115	$57,088	$31,988

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Report on the Annual Valuation of the County Employees Retirement System

Prepared as of June 30, 2013

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November 8, 2013

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Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2014. The date of the valuation was June 30, 2013.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

Since the previous valuation, certain provisions of Senate Bill 2 which impact current members of KRS have been reflected in the valuation where appropriate. Those that have an effect on the current members are as follows:

- The COLA provisions in current law are amended to require either greater than 100% funding or full pre-funding of any future COLA along with legislative action to provide a COLA. Previous legislation had suspended COLAs for Fiscal Years 2012-2013 and 2013-2014.
- For FY 2014-2015 (the June 30, 2013 actuarial valuation), the amortization period for the unfunded accrued liability (UAL) of each system is reset to a closed 30 year period.

The cash balance plan enacted by Senate Bill 2 for members whose participation date is on or after January 1, 2014 has not been reflected in this valuation. The cash balance plan will be reflected in the next valuation once membership in the cash balance plan is established.

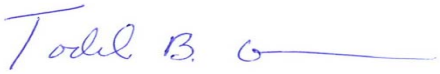
To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer



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REPORT ON THE ANNUAL VALUATION OF THE COUNTY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2013

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2013, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table. Since the previous valuation, the amortization period has been reset to a closed 30 year period.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/2013	6/30/2012	6/30/2013	6/30/2012	6/30/2013	6/30/2012
Contributions for next fiscal year:						
Retirement	12.75%	13.74%	20.73%	21.77%		
Insurance	5.35	5.84	14.97	16.02	N/A	N/A
Total	18.10%	19.58%	35.70%	37.79%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$9,378,876,114	$9,139,567,695	$3,124,205,593	$3,009,992,047	$12,503,081,707	$12,149,559,743
Actuarial value of assets	$5,637,094,483	$5,547,235,599	$1,801,691,410	$1,747,379,297	$7,438,785,893	$7,294,614,896
Unfunded liability on actuarial value of assets	$3,741,781,631	$3,592,332,096	$1,322,514,183	$1,262,612,750	$5,064,295,814	$4,854,944,847
Funded ratio on actuarial value of assets	60.10%	60.69%	57.67%	58.05%	59.50%	60.04%
Market value of assets	$5,780,830,355	$5,372,769,813	$1,830,657,969	$1,677,940,479	$7,611,488,324	$7,050,710,292
Unfunded liability on market value of assets	$3,598,045,759	$3,766,797,882	$1,293,547,624	$1,332,051,568	$4,891,593,383	$5,098,849,451
Funded ratio on market value of assets	61.64%	58.79%	58.60%	55.75%	60.88%	58.03%
Insurance						
Actuarial accrued liability	$2,443,894,100	$2,370,771,288	$1,437,332,817	$1,364,843,057	$3,881,226,917	$3,735,614,345
Actuarial value of assets	$1,628,244,197	$1,512,853,851	$892,774,391	$829,040,842	$2,521,018,588	$2,341,894,693
Unfunded liability on actuarial value of assets	$815,649,903	$857,917,437	$544,558,426	$535,802,215	$1,360,208,329	$1,393,719,652
Funded ratio on actuarial value of assets	66.62%	63.81%	62.11%	60.74%	64.95%	62.69%
Market value of assets	$1,633,696,661	$1,439,226,170	$894,232,297	$788,070,813	$2,527,928,958	$2,227,296,983
Unfunded liability on market value of assets	$810,197,439	$931,545,118	$543,100,520	$576,772,244	$1,353,297,959	$1,508,317,362
Funded ratio on market value of assets	66.85%	60.71%	62.21%	57.74%	65.13%	59.62%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	47,676	45,304	7,293	6,878	54,969	52,182
Number of vested former members	11,899	12,071	614	617	12,513	12,688
Number of former members due a refund	61,179	57,645	1,802	1,794	62,981	59,439
Number of active members	81,815	83,052	9,123	9,130	90,938	92,182
Total salary	$2,236,277,489	$2,236,546,345	$461,672,567	$464,228,923	$2,697,950,056	$2,700,775,268
Average salary	$27,333	$26,929	$50,605	$50,847	$29,668	$29,298

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky, has replaced the Plan Year 2013 health insurance plan options with new health insurance plan options for Plan Year 2014. The changes are summarized below.

    - The 2013 health insurance plan options, consisting of Commonwealth Capitol Choice, Commonwealth Optimum PPO and Commonwealth Standard PPO, have been replaced by two new Consumer-Driven Health Plans (CDHP) - LivingWell CDHP and Standard CDHP, and two new Preferred Provider Organization (PPO) plans - LivingWell PPO and Standard PPO.

5. The following change has been reflected in this valuation in accordance with Senate Bill 2:

    - The amortization period was reset to a closed 30 year period.

6. The cash balance plan enacted by Senate Bill 2 for members whose participation date is on or after January 1, 2014 has not been reflected in this valuation. The cash balance plan will be reflected in the next valuation once membership in the cash balance plan is established.

7. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2013 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	81,815	$2,236,277,489	$27,333	47.8	9.3
Hazardous	9,123	461,672,567	50,605	39.1	10.3
Total in CERS	90,938	$2,697,950,056	$29,668	46.9	9.4

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2008	85,221	$2,166,612,648	$25,423	4.0%
6/30/2009	83,724	2,183,611,848	26,081	2.6
6/30/2010	84,681	2,236,855,380	26,415	1.3
6/30/2011	85,285	2,276,595,948	26,694	1.1
6/30/2012	83,052	2,236,546,345	26,929	0.9
6/30/2013	81,815	2,236,277,489	27,333	1.5

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2008	10,173	$474,241,332	$46,618	2.2%
6/30/2009	9,757	469,315,464	48,100	3.2
6/30/2010	9,562	466,548,660	48,792	1.4
6/30/2011	9,407	466,963,860	49,640	1.7
6/30/2012	9,130	464,228,923	50,847	2.4
6/30/2013	9,123	461,672,567	50,605	(0.5)

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	39,894	$478,970,459	$12,006	69.2
Disability	3,510	40,481,009	11,533	64.0
Beneficiary	4,272	38,527,724	9,019	68.1
Total in CERS	47,676	$557,979,192	$11,704	68.7

* Does not include annual benefits for those members included in the Hazardous System who are also receiving a portion of their benefit from the Non Hazardous System

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	6,010	$163,346,342	$27,179	60.6
Disability	479	7,880,014	16,451	54.5
Beneficiary	804	11,408,539	14,190	55.1
Total in CERS	7,293	$182,634,895	$25,042	59.6

This valuation also includes 75,494 inactive members (73,078 Non-Hazardous and 2,416 Hazardous; of which 11,899 Non-Hazardous are vested and 614 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2013 the total market value of assets amounted to $10,139,417,282 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2013

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	$5,780,830,355	$1,633,696,661	$7,414,527,016
Hazardous	1,830,657,969	894,232,297	2,724,890,266
Total	$7,611,488,324	$2,527,928,958	$10,139,417,282

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $9,959,804,481. Schedule B shows the development of the actuarial value of assets as of June 30, 2013. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2013	JUNE 30, 2012
Retirement		
Non-Hazardous	$ 5,637,094,483	$ 5,547,235,599
Hazardous	1,801,691,410	1,747,379,297
Total	$ 7,438,785,893	$ 7,294,614,896
Insurance		
Non-Hazardous	$ 1,628,244,197	$ 1,512,853,851
Hazardous	892,774,391	829,040,842
Total	$ 2,521,018,588	$ 2,341,894,693
CERS Total		
Non-Hazardous	$ 7,265,338,680	$ 7,060,089,450
Hazardous	2,694,465,801	2,576,420,139
Total	$ 9,959,804,481	$ 9,636,509,589

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2013. Separate balance sheets are shown for each employee group as well as in total for all groups.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $14,584,671,224, of which $7,324,910,676 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $301,490,123 is for the prospective benefits payable on account of inactive members and $6,958,270,425 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $7,438,785,893 as of June 30, 2013. The difference of $7,145,885,331 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $1,242,870,286 is the present value of future contributions expected to be made by members, and the balance of $5,903,015,045 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.56% of payroll for non-hazardous members and 6.09% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $838,719,231. When this amount is subtracted from $5,903,015,045, which is the present value of the total future contributions to be made by the employers, there remains $5,064,295,814 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 8.40% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the participating employers on account of retirement benefits be set at 14.38% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $3,741,781,631 for non-hazardous members and $1,322,514,183 for hazardous members over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.

5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.79% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.26% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $4,803,737,219, of which $1,631,432,734 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $235,121,884 is for the prospective benefits payable on account of inactive members and $2,937,182,601 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $2,521,018,588 as of June 30, 2013. The difference of $2,282,718,631 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $61,871,424 is the present value of future contributions expected to be made by members, and the balance of $2,220,847,207 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 3.32% of payroll for non-hazardous members and 8.90% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $860,638,878. When this amount is subtracted from $2,220,847,207, which is the present value of the total future contributions to be made by the employers, there remains $1,360,208,329 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 1.83% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the participating employers on account of insurance benefits be set at 5.92% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $815,649,903 for non-hazardous members and $544,558,426 for hazardous members over 30 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.20% of payroll for non-hazardous employees and 0.15% of payroll for hazardous employees.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2013 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/12	$ 3,592.3	$ 1,262.6	$ 4,854.9
(2)	Normal cost from last valuation	216.5	67.0	283.5
(3)	Contributions	415.7	163.0	578.7
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	279.1	96.7	375.8
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 3,672.2	$ 1,263.3	$ 4,935.5
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 3,672.2	$ 1,263.3	$ 4,935.5
(9)	Actual UAAL as of 6/30/13	$ 3,741.8	$ 1,322.5	$ 5,064.3
(10)	Gain/(loss): (8) - (9)	$ (69.6)	$ (59.2)	$ (128.8)
(11)	Accrued liabilities as of 6/30/12	$ 9,139.6	$ 3,010.0	$ 12,149.6
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(0.8)%	(2.0)%	(1.1)%

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/12	$ 857.9	$ 535.8	$ 1,393.7
(2)	Normal cost from last valuation	76.9	43.5	120.4
(3)	Expected employer contributions	125.3	73.7	199.0
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	62.7	39.2	101.9
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 872.2	$ 544.8	$ 1,417.0
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 872.2	$ 544.8	$ 1,417.0
(9)	Actual UAAL as of 6/30/13	$ 815.6	$ 544.6	$ 1,360.2
(10)	Gain/(loss): (8) - (9)	$ 56.6	$ 0.2	$ 56.8
(11)	Accrued liabilities as of 6/30/12	$ 2,370.8	$ 1,364.8	$ 3,735.6
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	2.4 %	0.0 %	1.5 %

* *Unfunded actuarial accrued liability*

NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/13	Insurance $ Gain (or Loss) For Year Ending 6/30/13
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (227.3)	$ (13.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	77.5	(4.1)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.2)	(1.9)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	56.7	16.7
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	77.1	35.7
New Members. Additional unfunded accrued liability will produce a loss.	(12.3)	(3.0)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(165.0)	(51.3)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	0.4	39.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	124.5	38.1
Gain (or Loss) During Year From Financial Experience	$ (69.6)	$ 56.6
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (69.6)	$ 56.6

HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/13	Insurance $ Gain (or Loss) For Year Ending 6/30/13
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (46.3)	$ (8.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(6.7)	(0.2)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.2	(0.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	38.9	24.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	25.5	44.8
New Members. Additional unfunded accrued liability will produce a loss.	(7.4)	(3.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(59.2)	(27.8)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	(1.9)	10.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(2.2)	(38.8)
Gain (or Loss) During Year From Financial Experience	$ (59.2)	$ 0.2
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (59.2)	$ 0.2

TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/13	Insurance $ Gain (or Loss) For Year Ending 6/30/13
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (273.6)	$ (21.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	70.8	(4.3)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.0)	(2.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	95.5	41.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	102.6	80.5
New Members. Additional unfunded accrued liability will produce a loss.	(19.7)	(6.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(224.2)	(79.1)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	(1.5)	49.7
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	122.3	(0.7)
Gain (or Loss) During Year From Financial Experience	$ (128.8)	$ 56.8
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (128.8)	$ 56.8

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2014/2015 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	173,254,597	7.47%
(2) Disability benefits		14,979,183	0.64
(3) Survivor benefits		3,080,912	0.12
(4) Total	$	191,314,692	8.56%
B. Member Contributions	$	111,813,874	5.00%
C. Employer Normal Cost: [A(4) - B]	$	79,500,818	3.56%
D. Administrative Expenses	$	17,666,592	0.79%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/12 Valuation:	$	202,606,741	9.06%
(2) Change due to:			
a. Active decrements	$	4,731,283	0.21%
b. Pay increases		(3,867,095)	(0.17)
c. Retiree mortality		(19,399)	0.00
d. Investment return		8,278,749	0.37
e. COLA		0	0.00
f. Assumption Change		0	0.00
g. Other		(23,942,054)	(1.07)
h. Total Change	$	(14,818,516)	(0.66)%
(3) UAAL Contribution Based on 6/30/13 Valuation: [E(1) +E(2)h]	$	187,788,225	8.40%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	284,955,635	12.75%

** Based on 25 year amortization of the UAAL from June 30, 2012 reset to 30 years as of June 30, 2013*

Required Contribution Rates
Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	60,807,210	13.09%
(2) Disability benefits		3,342,423	0.73
(3) Survivor benefits		911,629	0.20
(4) Total	$	65,061,262	14.09%
B. Member Contributions	$	36,933,805	8.00%
C. Employer Normal Cost: [A(4) - B]	$	28,127,457	6.09%
D. Administrative Expenses	$	1,200,349	0.26%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/12 Valuation:	$	70,774,405	15.33%
(2) Change due to:			
a. Active decrements	$	703,197	0.15%
b. Pay increases		(1,282,058)	(0.28)
c. Retiree mortality		95,074	0.02
d. Investment return		2,973,103	0.64
e. COLA		0	0.00
f. Assumption Change		0	0.00
g. Other		(6,890,904)	(1.51)
h. Total Change	$	(4,401,587)	(0.95)%
(3) UAAL Contribution Based on 6/30/13 Valuation: [E(1) +E(2)h]	$	66,372,818	14.38%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	95,700,624	20.73%

** Based on 25 year amortization of the UAAL from June 30, 2012 reset to 30 years as of June 30, 2013*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	79,288,243	3.55%
B.	Member Contributions*	$	5,143,438	0.23%
C.	Employer Normal Cost: [A - B]	$	74,144,805	3.32%
D.	Administrative Expenses	$	4,430,886	0.20%
E.	Unfunded Actuarial Accrued Liability**:	$	40,934,898	1.83%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	119,510,589	5.35%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 30 year amortization of the UAAL from June 30, 2013*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	41,879,460	9.07%
B.	Member Contributions*	$	784,843	0.17%
C.	Employer Normal Cost: [A - B]	$	41,094,617	8.90%
D.	Administrative Expenses	$	678,523	0.15%
E.	Unfunded Actuarial Accrued Liability**:	$	27,329,671	5.92%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	69,102,811	14.97%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 30 year amortization of the UAAL from June 30, 2013*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2013

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	47,676	7,293	54,969
Terminated employees entitled to benefits but not yet receiving benefits	73,078	2,416	75,494
Active Members	81,815	9,123	90,938
Total	202,569	18,832	221,401

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2008	$ 5,731,502,438	$ 7,304,217,691	$ 1,572,715,253	78.5%	$ 2,166,612,648	72.6%
6/30/2009	5,650,789,991	7,912,913,512	2,262,123,521	71.4	2,183,611,848	103.6
6/30/2010	5,546,857,291	8,459,022,280	2,912,164,989	65.6	2,236,855,380	130.2
6/30/2011	5,629,611,183	8,918,085,025	3,288,473,842	63.1	2,276,595,948	144.4
6/30/2012	5,547,235,599	9,139,567,695	3,592,332,096	60.7	2,236,546,345	160.6
6/30/2013	5,637,094,483	9,378,876,114	3,741,781,631	60.1	2,236,277,489	167.3
Hazardous Members						
6/30/2008	$ 1,750,867,373	$ 2,403,122,095	$ 652,254,722	72.9%	$ 474,241,332	137.5%
6/30/2009	1,751,487,540	2,578,444,600	826,957,060	67.9	469,315,464	176.2
6/30/2010	1,749,464,388	2,672,151,907	922,687,519	65.5	466,548,660	197.8
6/30/2011	1,779,545,393	2,859,041,052	1,079,495,659	62.2	466,963,860	231.2
6/30/2012	1,747,379,297	3,009,992,047	1,262,612,750	58.1	464,228,923	272.0
6/30/2013	1,801,691,410	3,124,205,593	1,322,514,183	57.7	461,672,567	286.5
Total CERS Members						
6/30/2008	$ 7,482,369,811	$ 9,707,339,786	$ 2,224,969,975	77.1%	$ 2,640,853,980	84.3%
6/30/2009	7,402,277,531	10,491,358,112	3,089,080,581	70.6	2,652,927,312	116.4
6/30/2010	7,296,321,679	11,131,174,187	3,834,852,508	65.5	2,703,404,040	141.9
6/30/2011	7,409,156,576	11,777,126,077	4,367,969,501	62.9	2,743,559,808	159.2
6/30/2012	7,294,614,896	12,149,559,743	4,854,944,847	60.0	2,700,775,268	179.8
6/30/2013	7,438,785,893	12,503,081,707	5,064,295,814	59.5	2,697,950,056	187.7

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2008	$ 1,168,883,170	$ 3,583,193,466	$ 2,414,310,296	32.6%	$ 2,166,612,648	111.4%
6/30/2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
6/30/2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
6/30/2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
6/30/2012	1,512,853,851	2,370,771,288	857,917,437	63.8	2,236,546,345	38.4
6/30/2013	1,628,244,197	2,443,894,100	815,649,903	66.6	2,236,277,489	36.5
Hazardous Members						
6/30/2008	$ 613,526,319	$ 1,769,782,957	$ 1,156,256,638	34.7%	$ 474,241,332	243.8%
6/30/2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
6/30/2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
6/30/2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
6/30/2012	829,040,842	1,364,843,057	535,802,215	60.7	464,228,923	115.4
6/30/2013	892,774,391	1,437,332,817	544,558,426	62.1	461,672,567	118.0
Total CERS Members						
6/30/2008	$ 1,782,409,489	$ 5,352,976,423	$ 3,570,566,934	33.3%	$ 2,640,853,980	135.2%
6/30/2009	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4
6/30/2010	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3
6/30/2011	2,204,241,067	4,721,675,960	2,517,434,893	46.7	2,743,559,808	91.8
6/30/2012	2,341,894,693	3,735,614,345	1,393,719,652	62.7	2,700,775,268	51.6
6/30/2013	2,521,018,588	3,881,226,917	1,360,208,329	65.0	2,697,950,056	50.4

RETIREMENT BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2008	$138,311,398	$150,925,334	109.1%
June 30, 2009	161,097,151	179,284,551	111.3
June 30, 2010	186,724,383	207,075,842	110.9
June 30, 2011	218,984,628	248,518,574	113.5
June 30, 2012	261,764,019	275,736,191	105.3
June 30, 2013	294,914,244	294,914,244	100.0
	Hazardous Members		
June 30, 2008	$ 64,082,063	$ 72,154,734	112.6%
June 30, 2009	69,056,365	78,151,677	113.2
June 30, 2010	76,390,669	82,887,128	108.5
June 30, 2011	78,795,602	85,078,181	108.0
June 30, 2012	83,588,958	89,329,217	106.9
June 30, 2013	120,139,906	120,139,906	100.0
	Total CERS Members		
June 30, 2008	$202,393,461	$223,080,068	110.2%
June 30, 2009	230,153,516	257,436,228	111.9
June 30, 2010	263,115,052	289,962,970	110.2
June 30, 2011	297,780,230	333,596,755	112.0
June 30, 2012	345,352,977	365,065,408	105.7
June 30, 2013	415,054,150	415,054,150	100.0

INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
		Non-Hazardous Members			
June 30, 2008	$406,541,729	$6,003,181	$196,110,111	$202,113,292	49.7%
June 30, 2009	264,733,532	7,623,628	123,852,611	131,476,239	49.7
June 30, 2010	266,331,326	9,156,991	166,607,097	175,764,088	66.0
June 30, 2011	213,429,424	0	186,885,576	186,885,576	87.6
June 30, 2012	214,421,008	0	171,924,836	171,924,836	80.2
June 30, 2013	195,560,870	0	159,992,643	159,992,643	81.8
		Hazardous Members			
June 30, 2008	$168,723,639	$ 419,774	$90,113,200	$90,532,974	53.7%
June 30, 2009	126,757,348	627,938	70,785,241	71,413,179	56.3
June 30, 2010	129,227,449	1,493,440	83,042,875	84,536,315	65.4
June 30, 2011	109,226,667	0	98,592,286	98,592,286	90.3
June 30, 2012	110,762,577	0	92,563,664	92,563,664	83.6
June 30, 2013	102,010,672	0	85,319,393	85,319,393	83.6
		Total CERS Members			
June 30, 2008	$575,265,368	$ 6,422,955	$286,223,311	$292,646,266	50.9%
June 30, 2009	391,490,880	8,251,566	194,637,852	202,889,418	51.8
June 30, 2010	395,558,775	10,650,431	249,649,972	260,300,403	65.8
June 30, 2011	322,656,091	0	285,477,862	285,477,862	88.5
June 30, 2012	325,183,585	0	264,488,500	264,488,500	81.3
June 30, 2013	297,571,542	0	245,312,036	245,312,036	82.4

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2013. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2013	6/30/2013
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	30 years	30 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	4.75% - 13.0%	4.5% - 20.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2013	6/30/2013
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	30 years	30 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption (Pre-Medicare) Medical Trend Assumption (Post-Medicare)	8.5% - 5.0% 7.0% - 5.0%	8.5% - 5.0% 7.0% - 5.0%
Year Ultimate Trend	2019	2019
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes price inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2013 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2012. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 5,637,094,483	$ 5,547,235,599
Prospective contributions		
Member contributions	$ 922,323,160	$ 924,952,981
Employer normal contributions	597,812,223	666,452,549
Unfunded accrued liability contributions	3,741,781,631	3,592,332,096
Total prospective contributions	$ 5,261,917,014	$ 5,183,737,626
Total assets	$ 10,899,011,497	$ 10,730,973,225
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 5,365,093,613	$ 5,174,881,611
Present value of benefits payable on account of active members	5,260,640,661	5,314,040,230
Present value of benefits payable on account of inactive members	273,277,223	242,051,384
Total liabilities	$ 10,899,011,497	$ 10,730,973,225

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 1,801,691,410	$ 1,747,379,297
Prospective contributions		
Member contributions	$ 320,547,126	$ 321,107,570
Employer normal contributions	240,907,008	247,316,359
Unfunded accrued liability contributions	1,322,514,183	1,262,612,750
Total prospective contributions	$ 1,883,968,317	$ 1,831,036,679
Total assets	$ 3,685,659,727	$ 3,578,415,976
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,959,817,063	$ 1,870,550,430
Present value of benefits payable on account of active members	1,697,629,764	1,688,531,673
Present value of benefits payable on account of inactive members	28,212,900	19,333,873
Total liabilities	$ 3,685,659,727	$ 3,578,415,976

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 7,438,785,893	$ 7,294,614,896
Prospective contributions		
Member contributions	$ 1,242,870,286	$ 1,246,060,551
Employer normal contributions	838,719,231	913,768,908
Unfunded accrued liability contributions	5,064,295,814	4,854,944,847
Total prospective contributions	$ 7,145,885,331	$ 7,014,774,306
Total assets	$ 14,584,671,224	$ 14,309,389,202
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 7,324,910,676	$ 7,045,432,041
Present value of benefits payable on account of active members	6,958,270,425	7,002,571,903
Present value of benefits payable on account of inactive members	301,490,123	261,385,258
Total liabilities	$ 14,584,671,224	$ 14,309,389,202

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 1,628,244,197	$ 1,512,853,851
Prospective contributions		
Member contributions	$ 51,449,998	$ 42,031,107
Employer normal contributions	564,153,820	603,105,896
Unfunded accrued liability contributions	815,649,903	857,917,437
Total prospective contributions	$ 1,431,253,721	$ 1,503,054,440
Total assets	$ 3,059,497,918	$ 3,015,908,291
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,000,185,562	$ 944,340,604
Present value of benefits payable on account of active members	1,853,898,631	1,869,000,541
Present value of benefits payable on account of inactive members	205,413,725	202,567,146
Total liabilities	$ 3,059,497,918	$ 3,015,908,291

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 892,774,391	$ 829,040,842
Prospective contributions		
Member contributions	$ 10,421,426	$ 7,737,143
Employer normal contributions	296,485,058	325,936,058
Unfunded accrued liability contributions	544,558,426	535,802,215
Total prospective contributions	$ 851,464,910	$ 869,475,416
Total assets	$ 1,744,239,301	$ 1,698,516,258
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 631,247,172	$ 542,909,798
Present value of benefits payable on account of active members	1,083,283,970	1,123,417,169
Present value of benefits payable on account of inactive members	29,708,159	32,189,291
Total liabilities	$ 1,744,239,301	$ 1,698,516,258

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS

	June 30, 2013	June 30, 2012
ASSETS		
Current actuarial value of assets	$ 2,521,018,588	$ 2,341,894,693
Prospective contributions		
Member contributions	$ 61,871,424	$ 49,768,250
Employer normal contributions	860,638,878	929,041,954
Unfunded accrued liability contributions	1,360,208,329	1,393,719,652
Total prospective contributions	$ 2,282,718,631	$ 2,372,529,856
Total assets	$ 4,803,737,219	$ 4,714,424,549
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,631,432,734	$ 1,487,250,402
Present value of benefits payable on account of active members	2,937,182,601	2,992,417,710
Present value of benefits payable on account of inactive members	235,121,884	234,756,437
Total liabilities	$ 4,803,737,219	$ 4,714,424,549

The following tables provide the solvency test for non-hazardous and hazardous CERS members.

Solvency Test
Retirement Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2008	$ 963,213,677	$ 4,058,767,419	$ 2,282,236,595	$ 5,731,502,438	100.0%	100.0%	31.1%
6/30/2009	991,628,551	4,542,483,102	2,378,801,859	5,650,789,991	100.0	100.0	4.9
6/30/2010	1,063,746,826	4,890,659,077	2,504,616,377	5,546,857,291	100.0	91.7	0.0
6/30/2011	1,110,967,160	5,209,783,924	2,597,333,941	5,629,611,183	100.0	86.7	0.0
6/30/2012	1,117,549,337	5,416,932,995	2,605,085,363	5,547,235,599	100.0	81.8	0.0
6/30/2013	1,149,610,832	5,638,370,836	2,590,894,446	5,637,094,483	100.0	79.6	0.0

Solvency Test
Retirement Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2008	$ 338,324,362	$ 1,406,982,409	$ 657,815,324	$ 1,750,867,373	100.0%	100.0%	0.8%
6/30/2009	350,308,879	1,540,262,587	687,873,134	1,751,487,540	100.0	91.0	0.0
6/30/2010	369,612,720	1,622,684,455	679,854,732	1,749,464,388	100.0	85.0	0.0
6/30/2011	382,072,055	1,768,511,545	708,457,452	1,779,545,393	100.0	79.0	0.0
6/30/2012	381,672,428	1,889,884,303	738,435,316	1,747,379,297	100.0	72.3	0.0
6/30/2013	390,471,059	1,988,029,963	745,704,571	1,801,691,410	100.0	71.0	0.0

Solvency Test
Insurance Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2008	$ 0	$ 1,521,450,274	$ 2,061,743,192	$ 1,168,883,170	100.0%	76.8%	0.0%
6/30/2009	0	1,478,782,753	1,591,603,265	1,216,631,769	100.0	82.3	0.0
6/30/2010	0	1,526,533,372	1,631,806,802	1,293,038,593	100.0	84.7	0.0
6/30/2011	0	1,460,808,255	1,613,164,950	1,433,450,793	100.0	98.1	0.0
6/30/2012	0	1,146,907,750	1,223,863,538	1,512,853,851	100.0	100.0	29.9
6/30/2013	0	1,205,599,287	1,238,294,813	1,628,244,197	100.0	100.0	34.1

Solvency Test
Insurance Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2008	$ 0	$ 722,435,184	$ 1,047,347,773	$ 613,526,319	100.0%	84.9%	0.0%
6/30/2009	0	725,899,836	867,648,427	651,130,782	100.0	89.7	0.0
6/30/2010	0	814,300,256	860,402,960	692,769,770	100.0	85.1	0.0
6/30/2011	0	771,631,287	876,071,468	770,790,274	100.0	99.9	0.0
6/30/2012	0	575,099,089	789,743,968	829,040,842	100.0	100.0	32.2
6/30/2013	0	660,955,331	776,377,486	892,774,391	100.0	100.0	29.9

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2012	2013	2014	2015	2016	2017
A.	Actuarial Value Beginning of Year	$ 5,629,611,183	$ 5,547,235,599				
B.	Market Value End of Year	5,372,769,813	5,780,830,355				
C.	Market Value Beginning of Year	5,577,252,295	5,372,769,813				
D.	Cash Flow						
	D1. Contributions	394,922,258	415,691,061				
	D2. Benefit Payments	(565,978,993)	(566,509,548)				
	D3. Administrative Expenses	(16,962,819)	(17,743,081)				
	D4. Investment Expenses	(14,985,808)	(19,876,309)				
	D5. Net	(203,005,362)	(188,437,877)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(1,477,120)	596,498,419				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	439,937,103	429,734,209				
	E4. Amount for Phased-In Recognition	(441,414,223)	166,764,210				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(88,282,845)	33,352,842	0	0	0	0
	F2. First Prior Year	103,419,725	(88,282,845)	33,352,842	0	0	0
	F3. Second Prior Year	68,333,580	103,419,725	(88,282,845)	33,352,842	0	0
	F4. Third Prior Year	(268,260,750)	68,333,580	103,419,725	(88,282,845)	33,352,842	0
	F5. Fourth Prior Year	(134,517,035)	(268,260,750)	68,333,580	103,419,725	(88,282,845)	33,352,842
	F6. Total Recognized Investment Gain	(319,307,325)	(151,437,448)	116,823,302	48,489,722	(54,930,003)	33,352,842
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 5,547,235,599	$ 5,637,094,483				
H.	Difference Between Market & Actuarial Values	$ (174,465,786)	$ 143,735,872	$ 26,912,570	$ (21,577,152)	$ 33,352,842	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2012	2013	2014	2015	2016	2017
A.	Actuarial Value Beginning of Year	$ 1,779,545,393	$ 1,747,379,297				
B.	Market Value End of Year	1,677,940,479	1,830,657,969				
C.	Market Value Beginning of Year	1,760,602,934	1,677,940,479				
D.	Cash Flow						
	D1. Contributions	131,314,624	163,001,791				
	D2. Benefit Payments	(187,027,979)	(182,853,403)				
	D3. Administrative Expenses	(1,337,844)	(1,201,666)				
	D4. Investment Expenses	(4,604,154)	(6,111,057)				
	D5. Net	(61,655,353)	(27,164,335)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(21,007,102)	179,881,825				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	138,840,147	135,335,630				
	E4. Amount for Phased-In Recognition	(159,847,249)	44,546,195				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(31,969,450)	8,909,239	0	0	0	0
	F2. First Prior Year	34,158,058	(31,969,450)	8,909,239	0	0	0
	F3. Second Prior Year	20,921,839	34,158,058	(31,969,450)	8,909,239	0	0
	F4. Third Prior Year	(85,878,868)	20,921,839	34,158,058	(31,969,450)	8,909,239	0
	F5. Fourth Prior Year	(46,582,469)	(85,878,868)	20,921,839	34,158,058	(31,969,450)	8,909,239
	F6. Total Recognized Investment Gain	(109,350,890)	(53,859,182)	32,019,686	11,097,847	(23,060,211)	8,909,239
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,747,379,297	$ 1,801,691,410				
H.	Difference Between Market & Actuarial Values	$ (69,438,818)	$ 28,966,559	$ (3,053,127)	$ (14,150,974)	$ 8,909,239	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2012	2013	2014	2015	2016	2017
A.	Actuarial Value Beginning of Year	$ 1,433,450,793	$ 1,512,853,851				
B.	Market Value End of Year	1,439,226,170	1,633,696,661				
C.	Market Value Beginning of Year	1,451,984,026	1,439,226,170				
D.	Cash Flow						
	D1. Contributions	200,993,492	184,523,526				
	D2. Benefit Payments	(141,693,436)	(132,488,852)				
	D3. Administrative Expenses	(5,321,955)	(4,430,886)				
	D4. Investment Expenses	(2,870,026)	(4,279,715)				
	D5. Net	51,108,075	43,324,073				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(63,865,931)	151,146,418				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	117,490,439	117,664,390				
	E4. Amount for Phased-In Recognition	(181,356,370)	33,482,028				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(36,271,274)	6,696,406	0	0	0	0
	F2. First Prior Year	37,275,522	(36,271,274)	6,696,406	0	0	0
	F3. Second Prior Year	12,929,625	37,275,522	(36,271,274)	6,696,406	0	0
	F4. Third Prior Year	(66,228,396)	12,929,625	37,275,522	(36,271,274)	6,696,406	0
	F5. Fourth Prior Year	(36,900,933)	(66,228,396)	12,929,622	37,275,522	(36,271,274)	6,696,406
	F6. Total Recognized Investment Gain	(89,195,456)	(45,598,117)	20,630,276	7,700,654	(29,574,868)	6,696,406
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,512,853,851	$ 1,628,244,197				
H.	Difference Between Market & Actuarial Values	$ (73,627,681)	$ 5,452,464	$ (15,177,812)	$ (22,878,466)	$ 6,696,406	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2012	2013	2014	2015	2016	2017
A.	Actuarial Value Beginning of Year	$ 770,790,274	$ 829,040,842				
B.	Market Value End of Year	788,070,813	894,232,297				
C.	Market Value Beginning of Year	774,509,101	788,070,813				
D.	Cash Flow						
	D1. Contributions	94,535,608	86,915,544				
	D2. Benefit Payments	(50,155,364)	(59,940,791)				
	D3. Administrative Expenses	(668,942)	(678,523)				
	D4. Investment Expenses	(1,516,866)	(2,306,365)				
	D5. Net	42,194,436	23,989,865				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(28,632,724)	82,171,619				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	63,235,134	64,400,832				
	E4. Amount for Phased-In Recognition	(91,867,858)	17,770,787				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(18,373,572)	3,554,157	0	0	0	0
	F2. First Prior Year	18,338,164	(18,373,572)	3,554,157	0	0	0
	F3. Second Prior Year	5,685,665	18,338,164	(18,373,572)	3,554,157	0	0
	F4. Third Prior Year	(33,861,562)	5,685,665	18,338,164	(18,373,572)	3,554,157	0
	F5. Fourth Prior Year	(18,967,697)	(33,861,562)	5,685,665	18,338,164	(18,373,572)	3,554,157
	F6. Total Recognized Investment Gain	(47,179,002)	(24,657,148)	9,204,414	3,518,749	(14,819,415)	3,554,157
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 829,040,842	$ 892,774,391				
H.	Difference Between Market & Actuarial Values	$ (40,970,029)	$ 1,457,906	$ (7,746,508)	$ (11,265,257)	$ 3,554,157	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.50% per annum:

Service	Annual Rates of Merit & Seniority Increase Next Year				
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	8.50%	15.50%	4.50%	13.00%	20.00%
1-2	5.00%	6.00%	4.50%	9.50%	10.50%
2-3	1.50%	2.00%	4.50%	6.00%	6.50%
3-4	1.50%	1.25%	4.50%	6.00%	5.75%
4-5	1.00%	1.00%	4.50%	5.50%	5.50%
5-6	1.00%	0.50%	4.50%	5.50%	5.00%
6-7	0.75%	0.00%	4.50%	5.25%	4.50%
7-8	0.75%	0.00%	4.50%	5.25%	4.50%
8-9	0.50%	0.00%	4.50%	5.00%	4.50%
9-10	0.50%	0.00%	4.50%	5.00%	4.50%
10 & Over	0.25%	0.00%	4.50%	4.75%	4.50%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement**
		Male	Female		
20	5.75%	0.03%	0.01%	0.04%	
25	5.75	0.03	0.01	0.05	
30	5.30	0.04	0.02	0.06	
35	4.40	0.04	0.02	0.09	
40	3.70	0.05	0.04	0.13	
45	3.02	0.08	0.05	0.22	
50	2.70	0.13	0.07	0.37	
55	2.20	0.22	0.11	0.61	8.0%
60	0.75	0.40	0.22	0.97	10.0
65		0.73	0.43		22.0
70		1.19	0.69		22.0
75					100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 25.0%, 14.0%, 10.0%, 8.0% and 6.5%, respectively.*

** *If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.*

Hazardous Members

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement		
		Male	Female		Service	Rate+	Rate++
20	3.00%	0.03%	0.01%	0.05%	20	20.0%	
25	2.70	0.03	0.01	0.07	25	33.0	20.0%
30	2.50	0.04	0.02	0.09	30	33.0	33.0
35	2.50	0.04	0.02	0.13	35	40.0	33.0
40	2.50	0.05	0.04	0.20	40		40.0
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 14.0%, 7.5%, 6.0%, 4.5% and 4.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *Applies to members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.*

++ *Applies to members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	85%	100%

HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2013				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$506.06	$791.54	$1,177.80	$1,314.12
Optimum PPO	$675.34	$961.84	$1,476.00	$1,642.78
Capitol Choice	$650.22	$961.42	$1,457.90	$1,613.74

Effective January 1, 2014				
	Single	Parent Plus	Couple	Family
Total Premiums				
LivingWell CDHP	$733.88	$1,045.20	$1,603.94	$1,785.16
LivingWell PPO	$699.28	$995.94	$1,528.34	$1,701.04
Standard PPO	$656.28	$934.70	$1,434.36	$1,596.42
Standard CDHP	$641.50	$913.66	$1,402.06	$1,560.48

MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2014	
Available Plan	Premium
Kentucky Retirement System Health Plan - Medical Only	$166.00
Kentucky Retirement System Health Plan - Essential	$67.62
Kentucky Retirement System Health Plan - Premium	$212.39

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.20% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement

55

Service Requirement

At least one month of hazardous duty service credit

Amount

If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement

60

Service Requirement

At least 60 months of hazardous duty service credit

Hazardous Normal Retirement (continued):

Amount

The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 55 with 60 months of service or any age with 25 years of service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement

Age 60 with 10 years of service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement

Age 50 with 15 years of service or any age with 20 years service.

Amount

Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used. A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.
Members whose participation began on or after 8/1/2004	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

Hazardous Disability (continued):

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Vesting (continued):

	Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.42 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is increased annually 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.64 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.42 per month for each year of earned. These amounts are shown as of the valuation date and are increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2008	2009	2010	2011	2012	2013
			Number			
Beginning of Year	35,564	37,579	39,756	41,038	43,211	45,304
Added	3,366	3,060	2,565	3,250	3,300	3,570
Removed	1,351	883	1,283	1,077	1,207	1,198
End of Year	37,579	39,756	41,038	43,211	45,304	47,676
			Annual Allowances			
Beginning of Year	$ 348,712,020	$ 393,757,510	$ 440,061,418	$ 452,613,550	$ 483,594,068	$ 515,008,361
Added	56,376,123	51,679,136	21,063,111	38,861,094	41,160,717	56,721,012
Removed	11,330,633	5,375,228	8,510,979	7,880,576	9,746,424	13,750,181
End of Year	$ 393,757,510	$ 440,061,418	$ 452,613,550	$ 483,594,068	$ 515,008,361	$ 557,979,192
% Increase in Allowances	12.92%	11.76%	2.85%	6.84%	6.50%	8.34%
Average Annual Allowance	$ 10,478	$ 11,069	$ 11,029	$ 11,191	$ 11,368	$ 11,704

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2008	2009	2010	2011	2012	2013
			Number			
Beginning of Year	5,159	5,422	5,808	6,068	6,468	6,878
Added	469	650	423	502	483	519
Removed	206	264	163	102	73	104
End of Year	5,422	5,808	6,068	6,468	6,878	7,293
			Annual Allowances			
Beginning of Year	$ 113,735,850	$ 127,477,109	$ 139,886,751	$ 146,916,812	$ 160,259,395	$ 173,221,483
Added	16,794,618	13,030,426	8,566,698	14,640,991	14,149,084	10,923,660
Removed	3,053,359	620,784	1,536,637	1,298,408	1,186,996	1,510,248
End of Year	$ 127,477,109	$ 139,886,751	$ 146,916,812	$ 160,259,395	$ 173,221,483	$ 182,634,895
% Increase in Allowances	12.08%	9.73%	5.03%	9.08%	8.09%	5.43%
Average Annual Allowance	$ 23,511	$ 24,085	$ 24,212	$ 24,777	$ 25,185	$ 25,042

Non-Hazardous Retired Lives Summary June 30, 2013

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	4,296	$ 4,527,699.76	14,870	$ 10,652,387.37	19,166	$ 15,180,087.13
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2,357	2,833,106.00	1,167	741,476.25	3,524	3,574,582.25
66-2/3% to Beneficiary	666	1,235,664.42	434	483,283.06	1,100	1,718,947.48
50% to Beneficiary	969	1,616,819.51	1,229	1,423,966.58	2,198	3,040,786.09
Pop-up Option	3,559	6,107,999.70	2,888	3,164,678.11	6,447	9,272,677.81
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,240	1,255,472.28	2,836	2,119,630.89	4,076	3,375,103.17
Social Security Option						
Age 62 Basic	234	521,806.92	494	569,993.98	728	1,091,800.90
Age 62 Survivorship	568	1,281,636.19	315	400,965.75	883	1,682,601.94
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	571	573,234.27	661	515,266.18	1,232	1,088,500.45
20 Years Certain & Life	408	583,786.48	608	516,097.30	1,016	1,099,883.78
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	116	141,392.94	395	337,472.10	511	478,865.04
PLSO 24 Month Basic	64	46,431.66	260	209,192.33	324	255,623.99
PLSO 36 Month Basic	290	150,977.35	741	338,618.73	1,031	489,596.08
PLSO 12 Month Survivor	163	211,747.22	99	99,404.69	262	311,151.91
PLSO 24 Month Survivor	103	131,337.11	72	49,343.51	175	180,680.62
PLSO 36 Month Survivor	440	312,316.62	291	134,417.12	731	446,733.74
Total	16,044	$ 21,531,428.43	27,360	$ 21,756,193.95	43,404	$ 43,287,622.38

Hazardous Retired Lives Summary June 30, 2013

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	853	$ 1,683,142.63	265	$ 427,653.26	1,118	$ 2,110,795.89
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	642	1,262,476.79	30	34,247.82	672	1,296,724.61
66-2/3% to Beneficiary	258	665,514.49	6	15,669.72	264	681,184.21
50% to Beneficiary	397	930,245.68	27	51,641.40	424	981,887.08
Pop-up Option	2,520	6,340,172.48	103	199,870.70	2,623	6,540,043.18
10 Years Certain	49	78,134.06	3	3,890.00	52	82,024.06
10 Years Certain & Life	192	392,207.67	48	83,224.80	240	475,432.47
Social Security Option						
Age 62 Basic	102	248,828.91	12	22,700.77	114	271,529.68
Age 62 Survivorship	293	634,848.45	15	37,384.97	308	672,233.42
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	76	134,959.63	11	13,042.96	87	148,002.59
20 Years Certain & Life	130	248,103.85	24	37,438.08	154	285,541.93
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	26	45,792.55	10	12,355.51	36	58,148.06
PLSO 24 Month Basic	23	47,989.93	6	6,336.10	29	54,326.03
PLSO 36 Month Basic	57	87,627.09	22	24,358.25	79	111,985.34
PLSO 12 Month Survivor	59	147,864.89	4	8,080.23	63	155,945.12
PLSO 24 Month Survivor	68	110,391.43	3	2,816.43	71	113,207.86
PLSO 36 Month Survivor	148	223,099.65	7	6,751.85	155	229,851.50
Total	5,893	$ 13,281,400.18	596	$ 987,462.85	6,489	$ 14,268,863.03

Non-Hazardous Beneficiary Lives Summary June 30, 2013

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	11	$ 4,284.53	21	$ 11,611.54	32	$ 15,896.07
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	350	191,069.43	1,458	979,026.81	1,808	1,170,096.24
66-2/3% to Beneficiary	0	0.00	3	2,366.05	3	2,366.05
50% to Beneficiary	102	37,581.17	327	183,065.92	429	220,647.09
Pop-up Option	142	100,062.01	507	519,853.66	649	619,915.67
10 Years Certain	104	84,310.19	146	116,155.08	250	200,465.27
10 Years Certain & Life	42	19,606.02	208	164,622.74	250	184,228.76
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	23	19,297.06	129	192,638.42	152	211,935.48
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	1	206.92	1	206.92
Dependent Child	48	35,575.78	59	56,151.93	107	91,727.71
Refund	2	1,607.64	6	4,912.78	8	6,520.42
15 Years Certain & Life	35	30,067.43	63	51,943.36	98	82,010.79
20 Years Certain & Life	40	28,628.05	70	118,612.68	110	147,240.73
5 Years Certain	103	80,106.72	87	60,720.38	190	140,827.10
PLSO 12 Month Basic	0	0.00	1	395.49	1	395.49
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	149.07	1	623.63	2	772.70
PLSO 12 Month Survivor	7	2,541.17	30	32,054.19	37	34,595.36
PLSO 24 Month Survivor	4	4,044.98	20	19,551.28	24	23,596.26
PLSO 36 Month Survivor	32	16,347.09	89	40,852.50	121	57,199.59
Total	1,046	$ 655,278.34	3,226	$ 2,555,365.36	4,272	$ 3,210,643.70

Hazardous Beneficiary Lives Summary June 30, 2013

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	18	$ 7,364.26	28	$ 23,449.97	46	$ 30,814.23
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	20	10,176.75	187	245,991.95	207	256,168.70
66-2/3% to Beneficiary	3	687.67	42	57,339.45	45	58,027.12
50% to Beneficiary	6	3,686.66	55	50,579.64	61	54,266.30
Pop-up Option	37	20,792.43	181	276,635.95	218	297,428.38
10 Years Certain	11	12,914.77	18	15,367.32	29	28,282.09
10 Years Certain & Life	5	2,005.64	4	983.68	9	2,989.32
Social Security Option						
Age 62 Basic	0	0.00	1	310.13	1	310.13
Age 62 Survivorship	87	148,887.08	1	2,890.36	88	151,777.44
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	3,287.07	3	3,287.07
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	4	824.79	14	7,214.03	18	8,038.82
15 Years Certain & Life	4	1,338.98	3	1,406.94	7	2,745.92
20 Years Certain & Life	4	1,520.19	13	9,721.80	17	11,241.99
5 Years Certain	3	4,673.50	3	5,161.49	6	9,834.99
PLSO 12 Month Basic	0	0.00	1	2,192.42	1	2,192.42
PLSO 24 Month Basic	0	0.00	1	1,466.49	1	1,466.49
PLSO 36 Month Basic	2	561.73	4	1,858.06	6	2,419.79
PLSO 12 Month Survivor	1	415.46	4	2,794.70	5	3,210.16
PLSO 24 Month Survivor	1	1,294.71	9	6,630.00	10	7,924.71
PLSO 36 Month Survivor	4	1,553.48	22	16,731.98	26	18,285.46
Total	210	$ 218,698.10	594	$ 732,013.43	804	$ 950,711.53

Non-Hazardous Members

Retired and Beneficiary Information June 30, 2013
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	29	$ 881,009	61	$ 1,096,070	135	$ 1,000,403	225	$ 2,977,481
45-49	303	$ 9,042,093	127	$ 2,022,259	51	$ 435,001	481	$ 11,499,353
50-54	1,302	$ 34,303,688	307	$ 4,101,587	123	$ 1,494,035	1,732	$ 39,899,310
55-59	3,724	$ 74,472,577	588	$ 7,452,646	256	$ 2,992,002	4,568	$ 84,917,224
60-64	7,027	$ 102,333,132	757	$ 9,315,306	438	$ 5,172,421	8,222	$ 116,820,859
65-69	9,110	$ 102,554,188	706	$ 7,748,226	540	$ 5,729,949	10,356	$ 116,032,364
70-74	7,612	$ 72,715,582	515	$ 5,113,514	583	$ 6,463,807	8,710	$ 84,292,903
75-79	5,319	$ 44,374,959	313	$ 2,679,045	594	$ 5,748,712	6,226	$ 52,802,716
80-84	3,143	$ 24,243,397	107	$ 804,607	519	$ 4,007,978	3,769	$ 29,055,982
85-89	1,655	$ 10,859,320	20	$ 120,088	482	$ 3,017,813	2,157	$ 13,997,221
90 & Over	670	$ 3,190,516	9	$ 27,661	551	$ 2,465,604	1,230	$ 5,683,781
Totals	39,894	$ 478,970,459	3,510	$ 40,481,009	4,272	$ 38,527,724	47,676	$ 557,979,193

Hazardous Members

Retired and Beneficiary Information June 30, 2013
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	116	$ 3,754,795	78	$ 1,182,275	184	$ 993,459	378	$ 5,930,529
45-49	619	$ 19,861,182	69	$ 1,400,966	25	$ 272,023	713	$ 21,534,171
50-54	866	$ 27,267,794	97	$ 1,763,014	39	$ 597,993	1,002	$ 29,628,801
55-59	1,102	$ 31,355,382	92	$ 1,418,926	62	$ 809,605	1,256	$ 33,583,913
60-64	1,321	$ 37,312,430	80	$ 1,126,010	95	$ 1,794,874	1,496	$ 40,233,314
65-69	1,026	$ 23,564,641	41	$ 703,532	110	$ 1,973,845	1,177	$ 26,242,018
70-74	572	$ 11,907,924	11	$ 132,633	110	$ 2,415,962	693	$ 14,456,520
75-79	257	$ 5,468,701	8	$ 107,605	81	$ 1,285,898	346	$ 6,862,204
80-84	96	$ 2,152,359	2	$ 25,133	65	$ 963,155	163	$ 3,140,647
85-89	29	$ 599,077	1	$ 19,920	25	$ 226,680	55	$ 845,677
90 & Over	6	$ 102,057			8	$ 75,045	14	$ 177,102
Totals	6,010	$ 163,346,342	479	$ 7,880,014	804	$ 11,408,539	7,293	$ 182,634,895

Total Non-Hazardous Active Members as of June 30, 2013
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	94	2	1						97
Avg Pay	$10,995	$29,985	$75,952						$12,057
20-24	1,989	29							2,018
Avg Pay	$17,288	$26,966							$17,427
25-29	3,528	811	17						4,356
Avg Pay	$22,256	$29,812	$30,725						$23,696
30-34	3,564	1,850	640	14					6,068
Avg Pay	$22,049	$31,536	$35,448	$40,093					$26,396
35-39	3,691	2,175	1,454	439	11			1	7,771
Avg Pay	$21,705	$28,691	$36,363	$39,120	$50,178			$20,749	$27,427
40-44	3,912	2,977	2,173	1,149	310	19	17	1	10,558
Avg Pay	$21,588	$26,745	$33,032	$40,791	$44,159	$66,023	$64,420	$45,486	$28,301
44-49	3,369	3,005	2,981	1,599	725	184	103	29	11,995
Avg Pay	$21,352	$26,074	$28,877	$34,802	$43,263	$48,564	$56,081	$57,681	$28,326
50-54	3,014	2,913	3,326	2,399	1,274	270	202	125	13,523
Avg Pay	$22,020	$26,138	$28,207	$30,112	$37,910	$46,098	$49,814	$56,519	$28,576
55-59	2,624	2,455	2,603	2,443	1,506	337	207	179	12,354
Avg Pay	$21,851	$26,648	$29,264	$29,556	$34,267	$37,305	$46,371	$57,878	$28,758
60-64	1,742	1,799	1,615	1,480	1,023	281	129	126	8,195
Avg Pay	$20,025	$25,666	$29,709	$30,445	$32,249	$36,471	$45,020	$51,342	$28,018
65-69	750	808	754	454	267	75	66	61	3,235
Avg Pay	$16,214	$22,395	$25,295	$28,610	$32,334	$31,708	$38,230	$46,618	$24,326
70 & over	367	443	388	213	131	30	32	42	1,646
Avg Pay	$14,143	$19,033	$23,285	$21,864	$28,887	$29,005	$37,233	$39,987	$21,166
Totals	28,644	19,267	15,952	10,190	5,247	1,196	756	564	81,816
Avg Pay	$21,120	$26,885	$30,096	$32,129	$36,386	$40,723	$47,692	$53,468	$27,333

Total Hazardous Active Members as of June 30, 2013
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	2								2
Avg Pay	$27,948								$27,948
20-24	276	1							277
Avg Pay	$33,381	$31,167							$33,373
25-29	929	299	1						1,229
Avg Pay	$39,577	$46,382	$35,111						$41,229
30-34	515	804	238	1					1,558
Avg Pay	$40,938	$49,350	$53,487	$59,568					$47,208
35-39	286	512	702	255	7				1,762
Avg Pay	$39,904	$48,407	$55,264	$60,240	$62,891				$51,529
40-44	163	317	625	672	132	24	3		1,936
Avg Pay	$40,494	$47,380	$53,615	$60,852	$65,828	$68,123	$71,426		$55,042
44-49	93	178	289	310	254	44	27	3	1,198
Avg Pay	$38,793	$45,669	$53,814	$57,706	$66,838	$70,778	$74,188	$99,620	$56,403
50-54	45	105	120	171	131	35	32	14	653
Avg Pay	$37,770	$44,685	$50,032	$56,303	$64,465	$72,523	$73,022	$89,320	$56,039
55-59	26	60	66	68	49	7	13	14	303
Avg Pay	$39,269	$46,547	$48,018	$54,100	$63,084	$76,692	$70,804	$73,038	$53,573
60-64	11	37	45	25	17	3	5	7	150
Avg Pay	$36,878	$40,873	$47,152	$61,032	$55,381	$61,250	$66,668	$97,022	$51,355
65-69	2	10	11	8	2			1	34
Avg Pay	$26,877	$34,368	$57,595	$50,023	$84,178			$78,273	$49,347
70 & over		7	9	1	1		2	1	21
Avg Pay		$32,404	$50,223	$42,087	$9,425		$86,340	$116,248	$48,537
Totals	2,348	2,330	2,106	1,511	593	113	82	40	9,123
Avg Pay	$39,148	$47,673	$53,657	$59,217	$65,365	$70,868	$72,933	$86,139	$50,605

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Report on the Annual Valuation of the State Police Retirement System

Prepared as of June 30, 2013

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The experience and dedication you deserve

November 8, 2013

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal years beginning July 1, 2014 and July 1, 2015. The date of the valuation was June 30, 2013.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 5.

Since the previous valuation, certain provisions of Senate Bill 2 which impact current members of KRS have been reflected in the valuation where appropriate. Those that have an effect on the current members are as follows:

- The COLA provisions in current law are amended to require either greater than 100% funding or full pre-funding of any future COLA along with legislative action to provide a COLA. Previous legislation had suspended COLAs for Fiscal Years 2012-2013 and 2013-2014.
- The phase-in of employer contributions under SPRS has been eliminated, requiring the full actuarial required contribution beginning in FY 2014-2015. Therefore, the discount rate used to value insurance liabilities has been increased from 4.50% to 7.75%.
- For FY 2014-2015 (the June 30, 2013 actuarial valuation), the amortization period for the unfunded accrued liability (UAL) of each system is reset to a closed 30 year period.

The cash balance plan enacted by Senate Bill 2 for members whose participation date is on or after January 1, 2014 has not been reflected in this valuation. The cash balance plan will be reflected in the next valuation once membership in the cash balance plan is established.

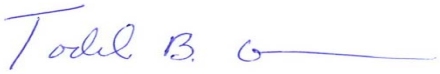
To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer



Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

TJC/TBG/AB:kc

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REPORT ON THE ANNUAL VALUATION OF THE STATE POLICE RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2013

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2013, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table. Since the previous valuation, the amortization period has been reset to a closed 30 year period and the discount rate used to value insurance liabilities has been increased from 4.50% to 7.75%.

SUMMARY OF PRINCIPAL RESULTS

	6/30/2013	6/30/2012
Contributions for next fiscal year:		
Retirement	53.90%	53.35%
Insurance	21.86	43.17
Total	75.76%	96.52%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$651,580,654	$647,688,665
Actuarial value of assets	241,800,328	259,791,575
Unfunded liability on actuarial value of assets	409,780,326	387,897,090
Funded ratio on actuarial value of assets	37.11%	40.11%
Market value of assets	$248,559,040	$252,896,868
Unfunded liability on market value of assets	403,021,614	394,791,797
Funded ratio on market value of assets	38.15%	39.05%
Insurance		
Actuarial accrued liability	$222,326,743	$333,903,782
Actuarial value of assets	136,321,060	124,372,072
Unfunded liability on actuarial value of assets	86,005,683	209,531,710
Funded ratio on actuarial value of assets	61.32%	37.25%
Market value of assets	$142,830,916	$125,567,846
Unfunded liability on market value of assets	79,495,827	208,335,936
Funded ratio on market value of assets	64.24%	37.61%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,346	1,299
Number of vested former members	60	58
Number of former members due a refund	330	322
Number of active members	902	907
Total salary	$45,256,202	$48,372,506
Average salary	$50,173	$53,332

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky, has replaced the Plan Year 2013 health insurance plan options with new health insurance plan options for Plan Year 2014. The changes are summarized below.

    - The 2013 health insurance plan options, consisting of Commonwealth Capitol Choice, Commonwealth Optimum PPO and Commonwealth Standard PPO, have been replaced by two new Consumer-Driven Health Plans (CDHP) - LivingWell CDHP and Standard CDHP, and two new Preferred Provider Organization (PPO) plans - LivingWell PPO and Standard PPO.

5. The following changes have been reflected in this valuation in accordance with Senate Bill 2:

    - The amortization period was reset to a closed 30 year period.
    - Since full payment of the Annual Required Contribution is assumed, the insurance liabilities and insurance contribution rates reflect a 7.75% fully-funded interest rate.

6. The cash balance plan enacted by Senate Bill 2 for members whose participation date is on or after January 1, 2014 has not been reflected in this valuation. The cash balance plan will be reflected in the next valuation once membership in the cash balance plan is established.

7. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

8. The investment rate of return for developing insurance liabilities and contribution rates shown in this report was 4.50% for June 30, 2012 and 7.75% for June 30, 2013. The lower rate for insurance benefits for June 30, 2012 was required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2013 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

		Group Averages		
Number	Payroll	Salary	Age	Service
902	$45,256,202	$50,173	37.0	10.0

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2008	993	$53,269,080	$53,645	4.2%
6/30/2009	946	51,660,396	54,609	1.8
6/30/2010	961	51,506,712	53,597	(1.9)
6/30/2011	965	48,692,616	50,459	(5.9)
6/30/2012	907	48,372,506	53,332	5.7
6/30/2013	902	45,256,202	50,173	(5.9)

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

			Group Averages	
Type of Benefit Payment	Number	Annual Benefits	Benefit	Age
Retiree	1,136	$45,770,596	$40,291	61.8
Disability	50	$905,431	18,109	56.3
Beneficiary	160	4,229,762	26,436	63.9
Total in SPRS	1,346	$50,905,789	$37,820	61.8

This valuation also includes 390 inactive members of which 60 are vested.

SECTION III - ASSETS

1. As of June 30, 2013 the total market value of assets amounted to $391,389,956 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

Retirement	Insurance	SPRS Total
$248,559,040	$142,830,916	$391,389,956

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $378,121,388. Schedule B shows the development of the actuarial value of assets as of June 30, 2013. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2013	JUNE 30, 2012
Retirement	$ 241,800,328	$ 259,791,575
Insurance	136,321,060	124,372,072
Total	$ 378,121,388	$ 384,163,647

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2013. Separate balance sheets are shown for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $717,302,609, of which $532,387,170 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $3,333,025 is for the prospective benefits payable on account of inactive members, $181,582,414 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $241,800,328 as of June 30, 2013. The difference of $475,502,281 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $33,277,558 is the present value of future contributions expected to be made by members, and the balance of $442,224,723 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 8.05% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $32,444,397. When this amount is subtracted from $442,224,723, which is the present value of the total future contributions to be made by the State, there remains $409,780,326 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 45.44% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $409,780,326 over 30 years on the assumption that the aggregate payroll for members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.41% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $265,432,340, of which $136,470,662 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $3,037,928 is for the prospective benefits payable on account of inactive members, and $125,923,750 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $136,321,060 as of June 30, 2013. The difference of $129,111,280 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $845,028 is the present value of future contributions expected to be made by members, and the balance of $128,266,252 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 11.91% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $42,260,569. When this amount is subtracted from $128,266,252, which is the present value of the total future contributions to be made by the employers, there remains $86,005,683 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 9.54% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $86,005,683 over 30 years on the assumption that the aggregate payroll for members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.41% of payroll.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2013 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

			Amount
(1)	UAAL* as of 6/30/12	$	387.9
(2)	Normal cost from last valuation		7.8
(3)	Contributions		23.0
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875		29.8
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	402.5
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	402.5
(9)	Actual UAAL as of 6/30/13	$	409.8
(10)	Gain/(loss): (8) - (9)	$	(7.3)
(11)	Accrued liabilities as of 6/30/12	$	647.7
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(1.1)%

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

			Amount
(1)	UAAL* as of 6/30/12	$	209.5
(2)	Normal cost from last valuation		12.3
(3)	Expected employer contributions		20.7
(4)	Interest accrual: [(1) + (2) - (3)] x .045		9.0
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	210.1
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods**		(117.0)
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	93.1
(9)	Actual UAAL as of 6/30/13	$	86.0
(10)	Gain/(loss): (8) - (9)	$	7.1
(11)	Accrued liabilities as of 6/30/12	$	333.9
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		2.1%

* *Unfunded actuarial accrued liability*

** *Gain due to change in discount rate from 4.50% to 7.75%*

SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/13	Insurance $ Gain (or Loss) For Year Ending 6/30/13
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (8.2)	$ (5.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.2)	(0.7)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	4.4	7.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	4.4	8.9
New Members. Additional unfunded accrued liability will produce a loss.	(0.1)	(0.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(9.3)	(2.2)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	(1.0)	2.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	2.7	(2.8)
Gain (or Loss) During Year From Financial Experience	$ (7.3)	$ 7.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	117.0
Composite Gain (or Loss) During Year	$ (7.3)	$ 124.1

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2014/2015 fiscal year.

Required Contribution Rates
Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	6,867,705	15.18%
(2) Disability benefits		317,002	0.70
(3) Survivor benefits		79,829	0.18
(4) Total	$	7,264,536	16.05%
B. Member Contributions	$	3,620,496	8.00%
C. Employer Normal Cost: [A(4) - B]	$	3,644,040	8.05%
D. Administrative Expenses	$	185,550	0.41%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/12 Valuation:	$	21,869,973	45.21%
(2) Change due to:			
a. Active decrements	$	202,714	0.45%
b. Pay increases		(219,750)	(0.49)
c. Retiree mortality		48,920	0.11
d. Investment return		519,541	1.15
e. COLA		0	0.00
f. Assumption Change		0	0.00
g. Other		(1,855,815)	(4.11)
h. Total Change	$	(1,304,390)	0.23%
(3) UAAL Contribution Based on 6/30/13 Valuation: [E(1) +E(2)h]	$	20,565,583	45.44%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	24,395,173	53.90%

** Based on 25 year amortization of the UAAL from June 30, 2012 reset to 30 years as of June 30, 2013*

Required Contribution Rates
Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost	$	5,443,759	12.03%
B.	Member Contributions*	$	54,307	0.12%
C.	Employer Normal Cost: [A - B]	$	5,389,452	11.91%
D.	Administrative Expenses	$	183,991	0.41%
E.	Unfunded Actuarial Accrued Liability**	$	4,316,354	9.54%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	9,889,797	21.86%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 30 year amortization of the UAAL from June 30, 2013*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2013

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,346
Terminated employees entitled to benefits but not yet receiving benefits	390
Active Members	902
Total	2,638

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2008	$ 350,891,451	$ 587,129,257	$ 236,237,806	59.8%	$ 53,269,080	443.5%
6/30/2009	329,966,989	602,328,868	272,361,879	54.8	51,660,396	527.2
6/30/2010	304,577,292	612,444,806	307,867,514	49.7	51,506,712	597.7
6/30/2011	285,580,631	634,379,401	348,798,770	45.0	48,692,616	716.3
6/30/2012	259,791,575	647,688,665	387,897,090	40.1	48,372,506	801.9
6/30/2013	241,800,328	651,580,654	409,780,326	37.1	45,256,202	905.5

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2008	$ 123,961,197	$ 445,107,468	$ 321,146,271	27.8%	$ 53,269,080	602.9%
6/30/2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
6/30/2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2
6/30/2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4
6/30/2012	124,372,072	333,903,782	209,531,710	37.2	48,372,506	433.2
6/30/2013*	136,321,060	222,326,743	86,005,683	61.3	45,256,202	190.0

** Discount rate changed from 4.50% to 7.75%*

RETIREMENT BENEFITS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
June 30, 2008	$13,823,490	$ 7,443,277	53.8%
June 30, 2009	15,951,841	8,186,259	51.3
June 30, 2010	18,764,941	9,489,399	50.6
June 30, 2011	18,463,372	12,657,225	68.6
June 30, 2012	20,497,924	15,361,781	74.9
June 30, 2013	23,117,291	18,501,090	80.0

INSURANCE BENEFITS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
June 30, 2008	$43,469,735	$183,564	$ 7,329,229	$ 7,512,793	17.3%
June 30, 2009	29,324,666	229,240	7,413,552	7,642,792	26.1
June 30, 2010	30,302,151	273,684	8,369,428	8,643,112	28.5
June 30, 2011	25,772,574	0	11,050,964	11,050,964	42.9
June 30, 2012	28,246,786	0	11,960,468	11,960,468	42.3
June 30, 2013	27,234,229	0	16,828,681	16,828,681	61.8

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2013. Additional information as of the latest actuarial valuation follows.

Retirement Benefits	
Valuation date	6/30/2013
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	30 years
Asset valuation method	5 Year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases**	4.5% - 17.0%
Cost-of-living adjustment	None
*Includes price inflation at	3.50%
**Includes wage inflation at	4.50%

Insurance Benefits	
Valuation date	6/30/2013
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	30 years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	8.5% - 5.0%
Medical Trend Assumption (Post-Medicare)	7.0% - 5.0%
Year of Ulitimate Trend	2019
Actuarial assumptions:	
Investment rate of return*	7.75%
*Includes price inflation at	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2013 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2012. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM

RETIREMENT BENEFITS

	JUNE 30, 2013	JUNE 30, 2012
ASSETS		
Current actuarial value of assets	$ 241,800,328	$ 259,791,575
Prospective contributions		
Member contributions	$ 33,277,558	$ 35,600,938
Employer normal contributions	32,444,397	34,706,049
Unfunded accrued liability contributions	409,780,326	387,897,090
Total prospective contributions	$ 475,502,281	$ 458,204,077
Total assets	$ 717,302,609	$ 717,995,652
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 532,387,170	$ 520,280,073
Present value of benefits payable on account of active members	181,582,414	194,979,006
Present value of benefits payable on account of inactive members	3,333,025	2,736,573
Total liabilities	$ 717,302,609	$ 717,995,652

VALUATION BALANCE SHEET
INSURANCE BENEFITS

	JUNE 30, 2013	JUNE 30, 2012
ASSETS		
Current actuarial value of assets	$ 136,321,060	$ 124,372,072
Prospective contributions		
Member contributions	$ 845,028	$ 1,075,267
Employer normal contributions	42,260,569	116,220,351
Unfunded accrued liability contributions	86,005,683	209,531,710
Total prospective contributions	$ 129,111,280	$ 326,827,328
Total assets	$ 265,432,340	$ 451,199,400
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 136,470,662	$ 186,024,449
Present value of benefits payable on account of active members	125,923,750	260,940,671
Present value of benefits payable on account of inactive members	3,037,928	4,234,280
Total liabilities	$ 265,432,340	$ 451,199,400

The following tables provide the solvency test for SPRS members.

Solvency Test
Retirement Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2008	$ 41,391,416	$ 426,311,368	$ 119,426,473	$ 350,891,451	100.0%	72.6%	0.0%
6/30/2009	41,664,469	459,585,353	101,079,046	329,966,989	100.0	62.7	0.0
6/30/2010	42,011,523	475,892,659	94,540,624	304,577,292	100.0	55.2	0.0
6/30/2011	43,574,097	499,194,229	91,611,075	285,580,631	100.0	48.5	0.0
6/30/2012	41,139,306	523,016,647	83,532,712	259,791,575	100.0	41.8	0.0
6/30/2013	39,788,421	535,720,195	76,072,038	241,800,328	100.0	37.7	0.0

Solvency Test
Insurance Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2008	$ 0	$ 178,655,245	$ 266,452,223	$ 123,961,197	100.0%	69.4%	0.0%
6/30/2009	0	167,091,453	196,939,688	123,526,647	100.0	73.9	0.0
6/30/2010	0	253,580,827	181,379,668	121,175,083	100.0	47.8	0.0
6/30/2011	0	252,439,726	185,988,037	123,687,289	100.0	49.0	0.0
6/30/2012	0	190,258,729	143,645,053	124,372,072	100.0	65.4	0.0
6/30/2013	0	139,508,590	82,818,153	136,321,060	100.0	97.7	0.0

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits

	Valuation date June 30:	2012	2013	2014	2015	2016	2017
A.	Actuarial Value Beginning of Year	$ 285,580,631	$ 259,791,575				
B.	Market Value End of Year	252,896,868	248,559,040				
C.	Market Value Beginning of Year	279,934,443	252,896,868				
D.	Cash Flow						
	D1. Contributions	20,516,672	22,994,693				
	D2. Benefit Payments	(49,014,930)	(50,589,396)				
	D3. Administrative Expenses	(75,970)	(183,930)				
	D4. Investment Expenses	(870,407)	(998,995)				
	D5. Net	(29,444,635)	(28,777,628)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	2,407,060	24,439,800				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	21,458,075	19,522,080				
	E4. Amount for Phased-In Recognition	(19,051,015)	4,917,720				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(3,810,203)	983,544	0	0	0	0
	F2. First Prior Year	4,929,792	(3,810,203)	983,544	0	0	0
	F3. Second Prior Year	4,395,559	4,929,792	(3,810,203)	983,544	0	0
	F4. Third Prior Year	(15,234,391)	4,395,559	4,929,792	(3,810,203)	983,544	0
	F5. Fourth Prior Year	(8,083,253)	(15,234,391)	4,395,559	4,929,792	(3,810,203)	983,544
	F6. Total Recognized Investment Gain	(17,802,496)	(8,735,699)	6,498,692	2,103,133	(2,826,659)	983,544
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 259,791,575	$ 241,800,328				
H.	Difference Between Market & Actuarial Values	$ (6,894,707)	$ 6,758,712	$ 260,020	$ (1,843,113)	$ 983,544	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits

	Valuation date June 30:	2012	2013	2014	2015	2016	2017
A.	Actuarial Value Beginning of Year	$ 123,687,289	$ 124,372,072				
B.	Market Value End of Year	125,567,846	142,830,916				
C.	Market Value Beginning of Year	127,367,947	125,567,846				
D.	Cash Flow						
	D1. Contributions	12,301,298	17,076,979				
	D2. Benefit Payments	(10,790,633)	(12,545,291)				
	D3. Administrative Expenses	(200,880)	(183,991)				
	D4. Investment Expenses	(313,626)	(423,944)				
	D5. Net	996,159	3,923,753				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	(2,796,260)	13,339,317				
	E2. Assumed Rate	4.50%	7.75%				
	E3. Amount for Immediate Recognition	6,074,654	10,323,925				
	E4. Amount for Phased-In Recognition	(8,870,914)	3,015,392				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(1,774,183)	603,078	0	0	0	0
	F2. First Prior Year	3,818,155	(1,774,183)	603,078	0	0	0
	F3. Second Prior Year	1,783,777	3,818,155	(1,774,183)	603,078	0	0
	F4. Third Prior Year	(6,729,517)	1,783,777	3,818,155	(1,774,183)	603,078	0
	F5. Fourth Prior Year	(3,484,262)	(6,729,517)	1,783,777	3,818,155	(1,774,183)	603,078
	F6. Total Recognized Investment Gain	(6,386,030)	(2,298,690)	4,430,827	2,647,050	(1,171,105)	603,078
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 124,372,072	$ 136,321,060				
H.	Difference Between Market & Actuarial Values	$ 1,195,774	$ 6,509,856	$ 2,079,029	$ (568,021)	$ 603,078	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for members are as follows and include inflation at 4.50% per annum:

	Annual Rates of		
Service	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	12.50%	4.50%	17.00%
1-2	7.50%	4.50%	12.00%
2-3	5.50%	4.50%	10.00%
3-4	4.50%	4.50%	9.00%
4-5	3.50%	4.50%	8.00%
5-6	2.50%	4.50%	7.00%
6-7	1.50%	4.50%	6.00%
7-8	2.00%	4.50%	6.50%
8-9	1.00%	4.50%	5.50%
9-10	0.50%	4.50%	5.00%
10 & over	0.00%	4.50%	4.50%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

		Death**			Service Retirement		
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate+	Rate++
20	2.50%	0.03%	0.01%	0.05%	20	9.00%	
25	2.50	0.03	0.01	0.07	25	22.00	9.00%
30	2.50	0.04	0.02	0.09	30	25.00	22.00
35	2.50	0.04	0.02	0.13	35	33.33	25.00
40	2.50	0.05	0.04	0.20	40		33.33
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 20.0%, 7.5%, 3.0%, 3.0% and 3.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.*

++ *For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is little margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and over	0.0

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of member participation and spouse coverage are as follows:

Participation	100%
Spouse Coverage	100%

HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2013				
	Single	Parent Plus	Couple	Family
Total Premiums				
Standard PPO	$506.06	$791.54	$1,177.80	$1,314.12
Optimum PPO	$675.34	$961.84	$1,476.00	$1,642.78
Capitol Choice	$650.22	$961.42	$1,457.90	$1,613.74

Effective January 1, 2014				
	Single	Parent Plus	Couple	Family
Total Premiums				
LivingWell CDHP	$733.88	$1,045.20	$1,603.94	$1,785.16
LivingWell PPO	$699.28	$995.94	$1,528.34	$1,701.04
Standard PPO	$656.28	$934.70	$1,434.36	$1,596.42
Standard CDHP	$641.50	$913.66	$1,402.06	$1,560.48

MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2014	
Available Plan	**Premium**
Kentucky Retirement System Health Plan - Medical Only	$166.00
Kentucky Retirement System Health Plan - Essential	$67.62
Kentucky Retirement System Health Plan - Premium	$212.39

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement 55

Service Requirement At least one month of hazardous duty service credit

Amount If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008

Age Requirement 60

Service Requirement At least 60 months of hazardous duty service credit

Amount The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Members whose participation began on or after 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday. The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance. A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Disability (continued):

Members whose participation began on or after 8/1/2004	Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Vesting:

Members whose participation began before 9/1/2008	
Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55
Members whose participation began on or after 9/1/2008	
Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	60

Pre-Retirement Death Benefit (not in line of duty):

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently set at 2.5% and per statute, shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.64 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.42 per month for each year of earned. These amounts are shown as of the valuation date and will be increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2008	2009	2010	2011	2012	2013
			Number			
Beginning of Year	1,105	1,135	1,184	1,223	1,263	1,299
Added	42	75	54	52	52	63
Removed	12	26	15	12	16	16
End of Year	1,135	1,184	1,223	1,263	1,299	1,346
			Annual Allowances			
Beginning of Year	$ 37,208,377	$ 41,293,017	$ 44,273,937	$ 45,515,797	$ 47,467,404	$ 49,887,093
Added	4,330,608	3,380,331	1,543,665	2,341,589	3,026,513	1,471,331
Removed	245,968	399,410	301,805	389,982	606,825	452,635
End of Year	$ 41,293,017	$ 44,273,937	$ 45,515,797	$ 47,467,404	$ 49,887,093	$ 50,905,789
% Increase in Allowances	10.98%	7.22%	2.80%	4.29%	5.10%	2.04%
Average Annual Allowance	$ 36,382	$ 37,394	$ 37,217	$ 37,583	$ 38,404	$ 37,820

Retired Lives Summary June 30, 2013

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	117	$ 365,815.37	10	$ 24,108.26	127	$ 389,923.63
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	127	408,124.19	1	4,813.66	128	412,937.85
66-2/3% to Beneficiary	81	311,856.59	1	3,044.33	82	314,900.92
50% to Beneficiary	82	301,933.60	1	2,604.67	83	304,538.27
Pop-up Option	484	1,728,257.69	5	14,943.95	489	1,743,201.64
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	33	105,094.14	2	5,001.52	35	110,095.66
Social Security Option						
Age 62 Basic	31	87,540.19	0	0.00	31	87,540.19
Age 62 Survivorship	134	303,673.33	1	7,930.47	135	311,603.80
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	16	42,823.86	1	3,918.67	17	46,742.53
20 Years Certain & Life	35	112,741.52	2	3,978.81	37	116,720.33
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	466.41	2	466.41
PLSO 12 Month Survivor	6	20,781.22	0	0.00	6	20,781.22
PLSO 24 Month Survivor	5	13,304.01	0	0.00	5	13,304.01
PLSO 36 Month Survivor	9	16,912.49	0	0.00	9	16,912.49
Total	1,160	$ 3,818,858.20	26	$ 70,810.75	1,186	$ 3,889,668.95

Beneficiary Lives Summary June 30, 2013

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	3	$ 2,208.08	3	$ 2,208.08
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	6	5,751.51	55	148,287.63	61	154,039.14
66-2/3% to Beneficiary	2	1,198.62	8	13,385.10	10	14,583.72
50% to Beneficiary	0	0.00	14	21,592.42	14	21,592.42
Pop-up Option	1	478.19	29	76,703.26	30	77,181.45
10 Years Certain	1	591.51	0	0.00	1	591.51
10 Years Certain & Life	0	0.00	0	0.00	0	0.00
Social Security Option						
Age 62 Basic	0	0.00	2	2,281.46	2	2,281.46
Age 62 Survivorship	0	0.00	33	64,195.52	33	64,195.52
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	0	0.00	0	0.00	0	0.00
20 Years Certain & Life	1	6,685.69	4	6,862.09	5	13,547.78
5 Years Certain	1	2,259.08	0	0.00	1	2,259.08
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	12	$ 16,964.60	148	$ 335,515.56	160	$ 352,480.16

Retired and Beneficiary Information June 30, 2013
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	24	$ 900,092	11	$ 187,201	12	$ 81,201	47	$ 1,168,494
45-49	111	4,198,663	5	93,085	2	29,103	118	4,320,851
50-54	149	6,162,303	6	114,196	9	139,325	164	6,415,824
55-59	148	6,204,847	8	117,019	9	111,058	165	6,432,924
60-64	277	11,774,269	7	106,390	20	524,844	304	12,405,503
65-69	211	8,411,178	7	177,860	32	885,647	250	9,474,685
70-74	105	3,676,001	1	1,145	15	431,976	121	4,109,122
75-79	56	2,051,546	4	102,756	14	530,061	74	2,684,362
80-84	37	1,563,196	1	5,780	21	679,321	59	2,248,297
85-89	15	725,427	0	0	18	602,508	33	1,327,935
90 & Over	3	103,075	0	0	8	214,717	11	317,792
Totals	1,136	$ 45,770,596	50	$ 905,431	160	$ 4,229,762	1,346	$ 50,905,789

Total Active Members as of June 30, 2013
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	24								24
Avg Pay	$15,970								$15,970
25-29	122	15							137
Avg Pay	$35,305	$47,227							$36,610
30-34	69	86	26						181
Avg Pay	$39,037	$49,779	$51,832						$45,979
35-39	29	54	115	19					217
Avg Pay	$38,488	$50,680	$54,127	$58,807					$51,589
40-44	8	24	64	97	24	4			221
Avg Pay	$44,267	$50,511	$54,131	$63,153	$58,124	$59,550			$57,872
44-49	3	9	19	24	17	3	2		77
Avg Pay	$33,276	$50,433	$54,033	$64,927	$67,230	$67,146	$79,364		$60,282
50-54	1	5	6	8	8	1	4	2	35
Avg Pay	$45,366	$49,365	$46,269	$60,164	$69,885	$85,250	$77,504	$69,918	$61,294
55-59				1			3	4	8
Avg Pay				$66,911			$79,498	$75,881	$76,116
60-64								1	1
Avg Pay								$85,352	$85,352
65-69									
Avg Pay									
70 & over				1					1
Avg Pay				$69,378					$69,378
Totals	256	193	230	150	49	8	9	7	902
Avg Pay	$35,154	$49,943	$53,656	$62,793	$63,204	$65,611	$78,582	$75,530	$50,173

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Report on the Annual Valuation of the County Employees Retirement System

Prepared as of June 30, 2014

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Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 12, 2014

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2015. The date of the valuation was June 30, 2014.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

Since the previous valuation, the cash balance plan (a provision of Senate Bill 2) for members whose participation date is on or after January 1, 2014 has been reflected in this valuation.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

TJC/TBG/AB:kc

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REPORT ON THE ANNUAL VALUATION OF THE COUNTY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2014

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2014, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/2014	6/30/2013	6/30/2014	6/30/2013	6/30/2014	6/30/2013
Contributions for next fiscal year:						
Retirement	12.42%	12.75%	20.26%	20.73%		
Insurance	4.88	5.35	13.42	14.97	N/A	N/A
Total	17.30%	18.10%	33.68%	35.70%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$9,772,522,616	$9,378,876,114	$3,288,825,753	$3,124,205,593	$13,061,348,369	$12,503,081,707
Actuarial value of assets	$6,117,133,692	$5,637,094,483	$1,967,640,027	$1,801,691,410	$8,084,773,719	$7,438,785,893
Unfunded liability on actuarial value of assets	$3,655,388,924	$3,741,781,631	$1,321,185,726	$1,322,514,183	$4,976,574,650	$5,064,295,814
Funded ratio on actuarial value of assets	62.60%	60.10%	59.83%	57.67%	61.90%	59.50%
Market value of assets	$6,507,300,157	$5,780,830,355	$2,082,998,414	$1,830,657,969	$8,590,298,571	$7,611,488,324
Unfunded liability on market value of assets	$3,265,222,459	$3,598,045,759	$1,205,827,339	$1,293,547,624	$4,471,049,798	$4,891,593,383
Funded ratio on market value of assets	66.59%	61.64%	63.34%	58.60%	65.77%	60.88%
Insurance						
Actuarial accrued liability	$2,616,914,600	$2,443,894,100	$1,493,864,379	$1,437,332,817	$4,110,778,979	$3,881,226,917
Actuarial value of assets	$1,831,199,465	$1,628,244,197	$997,733,237	$892,774,391	$2,828,932,702	$2,521,018,588
Unfunded liability on actuarial value of assets	$785,715,135	$815,649,903	$496,131,142	$544,558,426	$1,281,846,277	$1,360,208,329
Funded ratio on actuarial value of assets	69.98%	66.62%	66.79%	62.11%	68.82%	64.95%
Market value of assets	$1,899,557,376	$1,633,696,661	$1,034,307,636	$894,232,297	$2,933,865,012	$2,527,928,958
Unfunded liability on market value of assets	$717,357,224	$810,197,439	$459,556,743	$543,100,520	$1,176,913,967	$1,353,297,959
Funded ratio on market value of assets	72.59%	66.85%	69.24%	62.21%	71.37%	65.13%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	49,935	47,676	7,646	7,293	57,581	54,969
Number of vested former members	10,329	11,899	588	614	10,917	12,513
Number of former members due a refund	66,661	61,179	1,940	1,802	68,601	62,981
Number of active members	81,115	81,815	9,194	9,123	90,309	90,938
Total salary	$2,272,270,287	$2,236,277,489	$479,164,016	$461,672,567	$2,751,434,303	$2,697,950,056
Average salary	$28,013	$27,333	$52,117	$50,605	$30,467	$29,668

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky, has made the following changes for plan year 2015:

    - The new medical plan administrator is Anthem Blue Cross Blue Shield.
    - The new prescription drug plan administrator is CVS/caremark and changes were made to the prescription drug formulary.
    - Out-of-pocket maximums are now tracked separately for medical and prescription drug coverage. Prescription drug coverage is now capped.
    - The LivingWell PPO plan has lowered co-pays for mental health and allergy injections.

5. The following change has been reflected in this valuation in accordance with Senate Bill 2:

    - The cash balance plan for members whose participation date is on or after January 1, 2014 has been reflected in this valuation.

6. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2014 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	81,115	$2,272,270,287	$28,013	48.1	9.6
Hazardous	9,194	479,164,016	52,117	39.2	10.6
Total in CERS	90,309	$2,751,434,303	$30,467	47.2	9.7

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2009	83,724	$2,183,611,848	$26,081	2.6%
6/30/2010	84,681	2,236,855,380	26,415	1.3
6/30/2011	85,285	2,276,595,948	26,694	1.1
6/30/2012	83,052	2,236,546,345	26,929	0.9
6/30/2013	81,815	2,236,277,489	27,333	1.5
6/30/2014	81,115	2,272,270,287	28,013	2.5

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2009	9,757	$469,315,464	$48,100	3.2%
6/30/2010	9,562	466,548,660	48,792	1.4
6/30/2011	9,407	466,963,860	49,640	1.7
6/30/2012	9,130	464,228,923	50,847	2.4
6/30/2013	9,123	461,672,567	50,605	(0.5)
6/30/2014	9,194	479,164,016	52,117	3.0

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number*	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	41,784	$483,416,413	$11,569	69.5
Disability	3,656	39,689,408	10,856	64.1
Beneficiary	4,495	38,474,722	8,559	68.8
Total in CERS	49,935	$561,580,543	$11,246	69.0

** Does not include number and annual benefits for those members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 2,660 members in the hazardous system also receiving an annual benefit from the non-hazardous System. Total annual benefits for these members is $21,377,283.*

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	6,294	$170,787,472	$27,135	61.0
Disability	489	7,913,389	16,183	54.9
Beneficiary	863	12,306,971	14,261	56.9
Total in CERS	7,646	$191,007,832	$24,981	60.1

This valuation also includes 79,518 inactive members (76,990 Non-Hazardous and 2,528 Hazardous; of which 10,329 Non-Hazardous are vested and 588 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2014 the total market value of assets amounted to $11,524,163,583 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2014

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	$6,507,300,157	$1,899,557,376	$8,406,857,533
Hazardous	2,082,998,414	1,034,307,636	3,117,306,050
Total	$8,590,298,571	$2,933,865,012	$11,524,163,583

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $10,913,706,421. Schedule B shows the development of the actuarial value of assets as of June 30, 2014. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2014	JUNE 30, 2013
Retirement		
Non-Hazardous	$ 6,117,133,692	$ 5,637,094,483
Hazardous	1,967,640,027	1,801,691,410
Total	$ 8,084,773,719	$ 7,438,785,893
Insurance		
Non-Hazardous	$ 1,831,199,465	$ 1,628,244,197
Hazardous	997,733,237	892,774,391
Total	$ 2,828,932,702	$ 2,521,018,588
CERS Total		
Non-Hazardous	$ 7,948,333,157	$ 7,265,338,680
Hazardous	2,965,373,264	2,694,465,801
Total	$ 10,913,706,421	$ 9,959,804,481

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2014. Separate balance sheets are shown for each employee group as well as in total for all groups.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $15,144,687,996, of which $7,619,970,785 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $330,825,418 is for the prospective benefits payable on account of inactive members and $7,193,891,793 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $8,084,773,719 as of June 30, 2014. The difference of $7,059,914,277 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $1,253,999,387 is the present value of future contributions expected to be made by members, and the balance of $5,805,914,890 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.42% of payroll for non-hazardous members and 5.85% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $829,340,240. When this amount is subtracted from $5,805,914,890, which is the present value of the total future contributions to be made by the employers, there remains $4,976,574,650 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 8.19% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the participating employers on account of retirement benefits be set at 14.05% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $3,655,388,924 for non-hazardous members and $1,321,185,726 for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.

5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.81% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.36% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $4,963,609,447, of which $1,770,844,562 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $247,649,919 is for the prospective benefits payable on account of inactive members and $2,945,114,966 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $2,828,932,702 as of June 30, 2014. The difference of $2,134,676,745 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $74,671,582 is the present value of future contributions expected to be made by members, and the balance of $2,060,005,163 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 3.09% of payroll for non-hazardous members and 8.05% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $778,158,886. When this amount is subtracted from $2,060,005,163, which is the present value of the total future contributions to be made by the employers, there remains $1,281,846,277 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 1.77% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the participating employers on account of insurance benefits be set at 5.31% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $785,715,135 for non-hazardous members and $496,131,142 for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.02% of payroll for non-hazardous employees and 0.06% of payroll for hazardous employees.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2014 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/13	$ 3,741.8	$ 1,322.5	$ 5,064.3
(2)	Normal cost from last valuation	209.1	66.3	275.4
(3)	Contributions	446.7	157.9	604.6
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	288.9	101.5	390.4
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 3,793.1	$ 1,332.4	$ 5,125.5
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 3,793.1	$ 1,332.4	$ 5,125.5
(9)	Actual UAAL as of 6/30/14	$ 3,655.4	$ 1,321.2	$ 4,976.6
(10)	Gain/(loss): (8) - (9)	$ 137.7	$ 11.2	$ 148.9
(11)	Accrued liabilities as of 6/30/13	$ 9,378.9	$ 3,124.2	$ 12,503.1
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	1.5 %	0.4 %	1.2 %

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/13	$ 815.6	$ 544.6	$ 1,360.2
(2)	Normal cost from last valuation	74.2	41.1	115.3
(3)	Expected employer contributions	115.1	68.4	183.5
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	60.0	40.1	100.1
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 834.7	$ 557.4	$ 1,392.1
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 834.7	$ 557.4	$ 1,392.1
(9)	Actual UAAL as of 6/30/14	$ 785.7	$ 496.1	$ 1,281.8
(10)	Gain/(loss): (8) - (9)	$ 49.0	$ 61.3	$ 110.3
(11)	Accrued liabilities as of 6/30/13	$ 2,443.9	$ 1,437.3	$ 3,881.2
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	2.0 %	4.3 %	2.8 %

* *Unfunded actuarial accrued liability*

NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/14	Insurance $ Gain (or Loss) For Year Ending 6/30/14
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (153.8)	$ (28.2)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(22.3)	(1.3)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.1)	(2.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	44.7	9.7
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	63.0	(27.5)
New Members. Additional unfunded accrued liability will produce a loss.	(15.1)	(4.4)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	218.8	41.9
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	1.4	60.8
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	2.0	0.0
Gain (or Loss) During Year From Financial Experience	$ 137.7	$ 49.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ 137.7	$ 49.0

HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/14	Insurance $ Gain (or Loss) For Year Ending 6/30/14
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (72.1)	$ (11.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3.7)	1.3
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	22.0	2.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	7.5	45.0
New Members. Additional unfunded accrued liability will produce a loss.	(8.4)	(3.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	63.9	20.4
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	2.8	30.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(0.8)	(22.7)
Gain (or Loss) During Year From Financial Experience	$ 11.2	$ 61.3
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ 11.2	$ 61.3

TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/14	Insurance $ Gain (or Loss) For Year Ending 6/30/14
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (225.8)	$ (40.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(26.0)	0.0
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.9)	(2.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	66.7	12.0
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	70.5	17.5
New Members. Additional unfunded accrued liability will produce a loss.	(23.6)	(7.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	282.6	62.3
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	4.2	91.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	1.2	(22.7)
Gain (or Loss) During Year From Financial Experience	$ 148.9	$ 110.3
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ 148.9	$ 110.3

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2015/2016 fiscal year.

Required Contribution Rates
Non-Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	174,339,556	7.67%
(2) Disability benefits		15,049,846	0.63
(3) Survivor benefits		3,093,095	0.12
(4) Total	$	192,482,497	8.42%
B. Member Contributions	$	113,613,514	5.00%
C. Employer Normal Cost: [A(4) - B]	$	78,868,983	3.42%
D. Administrative Expenses	$	18,405,389	0.81%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/13 Valuation:	$	190,870,704	8.40%
(2) Change due to:			
a. Active decrements	$	8,021,412	0.35%
b. Pay increases		(3,229,087)	(0.14)
c. Retiree mortality		(636,522)	(0.03)
d. Investment return		(11,211,173)	(0.49)
e. COLA		0	0.00
f. Assumption Change		0	0.00
g. Other		3,504,749	0.10
h. Total Change	$	(3,550,620)	(0.21)%
(3) UAAL Contribution Based on 6/30/14 Valuation: [E(1) +E(2)h]	$	187,320,084	8.19%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	284,594,456	12.42%

**Based on 29 year amortization of the UAAL from June 30, 2014*

Required Contribution Rates
Hazardous Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	62,421,835	12.94%
(2) Disability benefits		3,410,873	0.71
(3) Survivor benefits		927,798	0.20
(4) Total	$	66,760,506	13.85%
B. Member Contributions	$	38,333,121	8.00%
C. Employer Normal Cost: [A(4) - B]	$	28,427,385	5.85%
D. Administrative Expenses	$	1,724,990	0.36%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/13 Valuation:	$	68,903,786	14.38%
(2) Change due to:			
a. Active decrements	$	2,545,805	0.45%
b. Pay increases		(383,074)	(0.08)
c. Retiree mortality		(142,719)	(0.03)
d. Investment return		(3,272,883)	(0.68)
e. COLA		0	0.00
f. Assumption Change		0	0.00
g. Other		53,130	0.01
h. Total Change	$	(1,199,740)	(0.33)%
(3) UAAL Contribution Based on 6/30/14 Valuation: [E(1) +E(2)h]	$	67,704,046	14.05%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	97,856,421	20.26%

**Based on 29 year amortization of the UAAL from June 30, 2014*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	76,350,560	3.36%
B.	Member Contributions*	$	6,135,130	0.27%
C.	Employer Normal Cost: [A - B]	$	70,215,430	3.09%
D.	Administrative Expenses	$	507,954	0.02%
E.	Unfunded Actuarial Accrued Liability**:	$	40,263,903	1.77%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	110,987,287	4.88%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 29 year amortization of the UAAL from June 30, 2014*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	39,560,311	8.26%
B.	Member Contributions*	$	1,006,244	0.21%
C.	Employer Normal Cost: [A - B]	$	38,554,067	8.05%
D.	Administrative Expenses	$	274,768	0.06%
E.	Unfunded Actuarial Accrued Liability**:	$	25,424,197	5.31%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	**$**	64,253,032	13.42%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 29 year amortization of the UAAL from June 30, 2014*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2014

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	49,935	7,646	57,581
Terminated employees entitled to benefits but not yet receiving benefits	76,990	2,528	79,518
Active Members	81,115	9,194	90,309
Total	208,040	19,368	227,408

* *Does not include number and annual benefits for those members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 2,660 members in in the hazardous system also receiving an annual benefit from the non-hazardous system.*

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
		Non-Hazardous Members				
6/30/2009	$ 5,650,789,991	$ 7,912,913,512	$ 2,262,123,521	71.4%	$ 2,183,611,848	103.6%
6/30/2010	5,546,857,291	8,459,022,280	2,912,164,989	65.6	2,236,855,380	130.2
6/30/2011	5,629,611,183	8,918,085,025	3,288,473,842	63.1	2,276,595,948	144.4
6/30/2012	5,547,235,599	9,139,567,695	3,592,332,096	60.7	2,236,546,345	160.6
6/30/2013	5,637,094,483	9,378,876,114	3,741,781,631	60.1	2,236,277,489	167.3
6/30/2014	6,117,133,692	9,772,522,616	3,655,388,924	62.6	2,272,270,287	160.9
		Hazardous Members				
6/30/2009	$ 1,751,487,540	$ 2,578,444,600	$ 826,957,060	67.9%	$ 469,315,464	176.2%
6/30/2010	1,749,464,388	2,672,151,907	922,687,519	65.5	466,548,660	197.8
6/30/2011	1,779,545,393	2,859,041,052	1,079,495,659	62.2	466,963,860	231.2
6/30/2012	1,747,379,297	3,009,992,047	1,262,612,750	58.1	464,228,923	272.0
6/30/2013	1,801,691,410	3,124,205,593	1,322,514,183	57.7	461,672,567	286.5
6/30/2014	1,967,640,027	3,288,825,753	1,321,185,726	59.8	479,164,016	275.7
		Total CERS Members				
6/30/2009	$ 7,402,277,531	$ 10,491,358,112	$ 3,089,080,581	70.6%	$ 2,652,927,312	116.4%
6/30/2010	7,296,321,679	11,131,174,187	3,834,852,508	65.5	2,703,404,040	141.9
6/30/2011	7,409,156,576	11,777,126,077	4,367,969,501	62.9	2,743,559,808	159.2
6/30/2012	7,294,614,896	12,149,559,743	4,854,944,847	60.0	2,700,775,268	179.8
6/30/2013	7,438,785,893	12,503,081,707	5,064,295,814	59.5	2,697,950,056	187.7
6/30/2014	8,084,773,719	13,061,348,369	4,976,574,650	61.9	2,751,434,303	180.9

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2009	$ 1,216,631,769	$ 3,070,386,018	$ 1,853,754,249	39.6%	$ 2,183,611,848	84.9%
6/30/2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
6/30/2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
6/30/2012	1,512,853,851	2,370,771,288	857,917,437	63.8	2,236,546,345	38.4
6/30/2013	1,628,244,197	2,443,894,100	815,649,903	66.6	2,236,277,489	36.5
6/30/2014	1,831,199,465	2,616,914,600	785,715,135	70.0	2,272,270,287	34.6
Hazardous Members						
6/30/2009	$ 651,130,782	$ 1,593,548,263	$ 942,417,481	40.9%	$ 469,315,464	200.8%
6/30/2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
6/30/2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
6/30/2012	829,040,842	1,364,843,057	535,802,215	60.7	464,228,923	115.4
6/30/2013	892,774,391	1,437,332,817	544,558,426	62.1	461,672,567	118.0
6/30/2014	997,733,237	1,493,864,379	496,131,142	66.8	479,164,016	103.5
Total CERS Members						
6/30/2009	$ 1,867,762,551	$ 4,663,934,281	$ 2,796,171,730	40.0%	$ 2,652,927,312	105.4%
6/30/2010	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3
6/30/2011	2,204,241,067	4,721,675,960	2,517,434,893	46.7	2,743,559,808	91.8
6/30/2012	2,341,894,693	3,735,614,345	1,393,719,652	62.7	2,700,775,268	51.6
6/30/2013	2,521,018,588	3,881,226,917	1,360,208,329	65.0	2,697,950,056	50.4
6/30/2014	2,828,932,702	4,110,778,979	1,281,846,277	68.8	2,751,434,303	46.6

RETIREMENT BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2009	161,097,151	179,284,551	111.3%
June 30, 2010	186,724,383	207,075,842	110.9
June 30, 2011	218,984,628	248,518,574	113.5
June 30, 2012	261,764,019	275,736,191	105.3
June 30, 2013	294,914,244	294,914,244	100.0
June 30, 2014	324,231,245	324,231,245	100.0
	Hazardous Members		
June 30, 2009	69,056,365	78,151,677	113.2%
June 30, 2010	76,390,669	82,887,128	108.5
June 30, 2011	78,795,602	85,078,181	108.0
June 30, 2012	83,588,958	89,329,217	106.9
June 30, 2013	120,139,906	120,139,906	100.0
June 30, 2014	115,239,556	115,239,556	100.0
	Total CERS Members		
June 30, 2009	230,153,516	257,436,228	111.9%
June 30, 2010	263,115,052	289,962,970	110.2
June 30, 2011	297,780,230	333,596,755	112.0
June 30, 2012	345,352,977	365,065,408	105.7
June 30, 2013	415,054,150	415,054,150	100.0
June 30, 2014	438,326,212	438,470,801	100.0

INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
		Non-Hazardous Members			
June 30, 2009	$264,733,532	$7,623,628	$123,852,611	$131,476,239	49.7%
June 30, 2010	266,331,326	9,156,991	166,607,097	175,764,088	66.0
June 30, 2011	213,429,424	0	186,885,576	186,885,576	87.6
June 30, 2012	214,421,008	0	171,924,836	171,924,836	80.2
June 30, 2013	195,560,870	0	159,992,643	159,992,643	81.8
June 30, 2014	130,651,800	0	123,278,028	123,278,028	94.4
		Hazardous Members			
June 30, 2009	$126,757,348	$627,938	$70,785,241	$71,413,179	56.3%
June 30, 2010	129,227,449	1,493,440	83,042,875	84,536,315	65.4
June 30, 2011	109,226,667	0	98,592,286	98,592,286	90.3
June 30, 2012	110,762,577	0	92,563,664	92,563,664	83.6
June 30, 2013	102,010,672	0	85,319,393	85,319,393	83.6
June 30, 2014	74,360,438	0	74,791,619	74,791,619	100.6
		Total CERS Members			
June 30, 2009	$391,490,880	$8,251,566	$194,637,852	$202,889,418	51.8%
June 30, 2010	395,558,775	10,650,431	249,649,972	260,300,403	65.8
June 30, 2011	322,656,091	0	285,477,862	285,477,862	88.5
June 30, 2012	325,183,585	0	264,488,500	264,488,500	81.3
June 30, 2013	297,571,542	0	245,312,036	245,312,036	82.4
June 30, 2014	205,012,238	0	198,069,647	198,069,647	96.6

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2014. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2014	6/30/2014
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	4.75% - 13.0%	4.5% - 20.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2014	6/30/2014
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption (Pre-Medicare) Medical Trend Assumption (Post-Medicare)	7.75% - 5.00% 6.00% - 5.00%	7.75% - 5.00% 6.00% - 5.00%
Year Ultimate Trend	2020	2020
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes price inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2014 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2013. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 6,117,133,692	$ 5,637,094,483
Prospective contributions		
Member contributions	$ 925,203,934	$ 922,323,160
Employer normal contributions	585,670,648	597,812,223
Unfunded accrued liability contributions	3,655,388,924	3,741,781,631
Total prospective contributions	$ 5,166,263,506	$ 5,261,917,014
Total assets	$ 11,283,397,198	$ 10,899,011,497
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 5,578,289,754	$ 5,365,093,613
Present value of benefits payable on account of active members	5,410,117,704	5,260,640,661
Present value of benefits payable on account of inactive members	294,989,740	273,277,223
Total liabilities	$ 11,283,397,198	$ 10,899,011,497

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 1,967,640,027	$ 1,801,691,410
Prospective contributions		
Member contributions	$ 328,795,453	$ 320,547,126
Employer normal contributions	243,669,592	240,907,008
Unfunded accrued liability contributions	1,321,185,726	1,322,514,183
Total prospective contributions	$ 1,893,650,771	$ 1,883,968,317
Total assets	$ 3,861,290,798	$ 3,685,659,727
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,041,681,031	$ 1,959,817,063
Present value of benefits payable on account of active members	1,783,774,089	1,697,629,764
Present value of benefits payable on account of inactive members	35,835,678	28,212,900
Total liabilities	$ 3,861,290,798	$ 3,685,659,727

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 8,084,773,719	$ 7,438,785,893
Prospective contributions		
Member contributions	$ 1,253,999,387	$ 1,242,870,286
Employer normal contributions	829,340,240	838,719,231
Unfunded accrued liability contributions	4,976,574,650	5,064,295,814
Total prospective contributions	$ 7,059,914,277	$ 7,145,885,331
Total assets	$ 15,144,687,996	$ 14,584,671,224
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 7,619,970,785	$ 7,324,910,676
Present value of benefits payable on account of active members	7,193,891,793	6,958,270,425
Present value of benefits payable on account of inactive members	330,825,418	301,490,123
Total liabilities	$ 15,144,687,996	$ 14,584,671,224

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 1,831,199,465	$ 1,628,244,197
Prospective contributions		
Member contributions	$ 61,485,213	$ 51,449,998
Employer normal contributions	512,955,032	564,153,820
Unfunded accrued liability contributions	785,715,135	815,649,903
Total prospective contributions	$ 1,360,155,380	$ 1,431,253,721
Total assets	$ 3,191,354,845	$ 3,059,497,918
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,107,884,548	$ 1,000,185,562
Present value of benefits payable on account of active members	1,873,171,963	1,853,898,631
Present value of benefits payable on account of inactive members	210,298,334	205,413,725
Total liabilities	$ 3,191,354,845	$ 3,059,497,918

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 997,733,237	$ 892,774,391
Prospective contributions		
Member contributions	$ 13,186,369	$ 10,421,426
Employer normal contributions	265,203,854	296,485,058
Unfunded accrued liability contributions	496,131,142	544,558,426
Total prospective contributions	$ 774,521,365	$ 851,464,910
Total assets	$ 1,772,254,602	$ 1,744,239,301
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 662,960,014	$ 631,247,172
Present value of benefits payable on account of active members	1,071,943,003	1,083,283,970
Present value of benefits payable on account of inactive members	37,351,585	29,708,159
Total liabilities	$ 1,772,254,602	$ 1,744,239,301

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 2,828,932,702	$ 2,521,018,588
Prospective contributions		
Member contributions	$ 74,671,582	$ 61,871,424
Employer normal contributions	778,158,886	860,638,878
Unfunded accrued liability contributions	1,281,846,277	1,360,208,329
Total prospective contributions	$ 2,134,676,745	$ 2,282,718,631
Total assets	$ 4,963,609,447	$ 4,803,737,219
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,770,844,562	$ 1,631,432,734
Present value of benefits payable on account of active members	2,945,114,966	2,937,182,601
Present value of benefits payable on account of inactive members	247,649,919	235,121,884
Total liabilities	$ 4,963,609,447	$ 4,803,737,219

The following tables provide the solvency test for non-hazardous and hazardous CERS members.

Solvency Test
Retirement Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2009	$ 991,628,551	$ 4,542,483,102	$ 2,378,801,859	$ 5,650,789,991	100.0%	100.0%	4.9%
6/30/2010	1,063,746,826	4,890,659,077	2,504,616,377	5,546,857,291	100.0	91.7	0.0
6/30/2011	1,110,967,160	5,209,783,924	2,597,333,941	5,629,611,183	100.0	86.7	0.0
6/30/2012	1,117,549,337	5,416,932,995	2,605,085,363	5,547,235,599	100.0	81.8	0.0
6/30/2013	1,149,610,832	5,638,370,836	2,590,894,446	5,637,094,483	100.0	79.6	0.0
6/30/2014	1,204,383,085	5,873,279,494	2,694,860,037	6,117,133,692	100.0	83.6	0.0

Solvency Test
Retirement Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2009	$ 350,308,879	$ 1,540,262,587	$ 687,873,134	$ 1,751,487,540	100.0%	91.0%	0.0%
6/30/2010	369,612,720	1,622,684,455	679,854,732	1,749,464,388	100.0	85.0	0.0
6/30/2011	382,072,055	1,768,511,545	708,457,452	1,779,545,393	100.0	79.0	0.0
6/30/2012	381,672,428	1,889,884,303	738,435,316	1,747,379,297	100.0	72.3	0.0
6/30/2013	390,471,059	1,988,029,963	745,704,571	1,801,691,410	100.0	71.0	0.0
6/30/2014	415,069,629	2,077,516,709	796,239,415	1,967,640,027	100.0	74.7	0.0

Solvency Test
Insurance Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2009	$ 0	$ 1,478,782,753	$ 1,591,603,265	$ 1,216,631,769	100.0%	82.3%	0.0%
6/30/2010	0	1,526,533,372	1,631,806,802	1,293,038,593	100.0	84.7	0.0
6/30/2011	0	1,460,808,255	1,613,164,950	1,433,450,793	100.0	98.1	0.0
6/30/2012	0	1,146,907,750	1,223,863,538	1,512,853,851	100.0	100.0	29.9
6/30/2013	0	1,205,599,287	1,238,294,813	1,628,244,197	100.0	100.0	34.1
6/30/2014	0	1,318,182,882	1,298,731,718	1,831,199,465	100.0	100.0	39.5

Solvency Test
Insurance Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2009	$ 0	$ 725,899,836	$ 867,648,427	$ 651,130,782	100.0%	89.7%	0.0%
6/30/2010	0	814,300,256	860,402,960	692,769,770	100.0	85.1	0.0
6/30/2011	0	771,631,287	876,071,468	770,790,274	100.0	99.9	0.0
6/30/2012	0	575,099,089	789,743,968	829,040,842	100.0	100.0	32.2
6/30/2013	0	660,955,331	776,377,486	892,774,391	100.0	100.0	29.9
6/30/2014	0	700,311,599	793,552,780	997,733,237	100.0	100.0	37.5

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2013	2014	2015	2016	2017	2018
A.	Actuarial Value Beginning of Year	$ 5,547,235,599	$ 5,637,094,483				
B.	Market Value End of Year	5,780,830,355	6,507,300,157				
C.	Market Value Beginning of Year	5,372,769,813	5,780,830,355				
D.	Cash Flow						
	D1. Contributions	415,691,061	446,690,113				
	D2. Benefit Payments	(566,509,548)	(597,136,388)				
	D3. Administrative Expenses	(17,743,081)	(18,614,538)				
	D4. Investment Expenses	(19,876,309)	(25,695,263)				
	D5. Net	(188,437,877)	(194,756,076)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	596,498,419	921,225,878				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	429,734,209	467,158,509				
	E4. Amount for Phased-In Recognition	166,764,210	454,067,369				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	33,352,842	90,813,474	0	0	0	0
	F2. First Prior Year	(88,282,845)	33,352,842	90,813,474	0	0	0
	F3. Second Prior Year	103,419,725	(88,282,845)	33,352,842	90,813,474	0	0
	F4. Third Prior Year	68,333,580	103,419,725	(88,282,845)	33,352,842	90,813,474	0
	F5. Fourth Prior Year	(268,260,750)	68,333,580	103,419,725	(88,282,845)	33,352,842	90,813,474
	F6. Total Recognized Investment Gain	(151,437,448)	207,636,776	139,303,196	35,883,471	124,166,316	90,813,474
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 5,637,094,483	$ 6,117,133,692				
H.	Difference Between Market & Actuarial Values	$ 143,735,872	$ 390,166,465	$ 250,863,269	$ 214,979,798	$ 90,813,474	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2013	2014	2015	2016	2017	2018
A.	Actuarial Value Beginning of Year	$ 1,747,379,297	$ 1,801,691,410				
B.	Market Value End of Year	1,830,657,969	2,082,998,414				
C.	Market Value Beginning of Year	1,677,940,479	1,830,657,969				
D.	Cash Flow						
	D1. Contributions	163,001,791	157,870,670				
	D2. Benefit Payments	(182,853,403)	(192,298,833)				
	D3. Administrative Expenses	(1,201,666)	(1,720,998)				
	D4. Investment Expenses	(6,111,057)	(8,220,545)				
	D5. Net	(27,164,335)	(44,369,706)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	179,881,825	296,710,151				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	135,335,630	148,695,758				
	E4. Amount for Phased-In Recognition	44,546,195	148,014,393				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	8,909,239	29,602,879	0	0	0	0
	F2. First Prior Year	(31,969,450)	8,909,239	29,602,879	0	0	0
	F3. Second Prior Year	34,158,058	(31,969,450)	8,909,239	29,602,879	0	0
	F4. Third Prior Year	20,921,839	34,158,058	(31,969,450)	8,909,239	29,602,879	0
	F5. Fourth Prior Year	(85,878,868)	20,921,839	34,158,058	(31,969,450)	8,909,239	29,602,879
	F6. Total Recognized Investment Gain	(53,859,182)	61,622,565	40,700,726	6,542,668	38,512,118	29,602,879
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,801,691,410	$ 1,967,640,027				
H.	Difference Between Market & Actuarial Values	$ 28,966,559	$ 115,358,387	$ 74,657,661	$ 68,114,993	$ 29,602,879	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2013	2014	2015	2016	2017	2018
A.	Actuarial Value Beginning of Year	$ 1,512,853,851	$ 1,628,244,197				
B.	Market Value End of Year	1,633,696,661	1,899,557,376				
C.	Market Value Beginning of Year	1,439,226,170	1,633,696,661				
D.	Cash Flow						
	D1. Contributions	184,523,526	130,842,429				
	D2. Benefit Payments	(132,488,852)	(96,804,206)				
	D3. Administrative Expenses	(4,430,886)	(507,954)				
	D4. Investment Expenses	(4,279,715)	(7,387,530)				
	D5. Net	43,324,073	26,142,739				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	151,146,418	239,717,976				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	117,664,390	135,298,319				
	E4. Amount for Phased-In Recognition	33,482,028	104,419,657				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	6,696,406	20,883,931	0	0	0	0
	F2. First Prior Year	(36,271,274)	6,696,406	20,883,931	0	0	0
	F3. Second Prior Year	37,275,522	(36,271,274)	6,696,406	20,883,931	0	0
	F4. Third Prior Year	12,929,625	37,275,522	(36,271,274)	6,696,406	20,883,931	0
	F5. Fourth Prior Year	(66,228,396)	12,929,625	37,275,519	(36,271,274)	6,696,406	20,883,931
	F6. Total Recognized Investment Gain	(45,598,117)	41,514,210	28,584,582	(8,690,937)	27,580,337	20,883,931
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,628,244,197	$ 1,831,199,465				
H.	Difference Between Market & Actuarial Values	$ 5,452,464	$ 68,357,911	$ 39,773,329	$ 48,464,266	$ 20,883,931	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2013	2014	2015	2016	2017	2018
A.	Actuarial Value Beginning of Year	$ 829,040,842	$ 892,774,391				
B.	Market Value End of Year	894,232,297	1,034,307,636				
C.	Market Value Beginning of Year	788,070,813	894,232,297				
D.	Cash Flow						
	D1. Contributions	86,915,544	75,914,753				
	D2. Benefit Payments	(59,940,791)	(60,842,197)				
	D3. Administrative Expenses	(678,523)	(274,768)				
	D4. Investment Expenses	(2,306,365)	(4,075,256)				
	D5. Net	23,989,865	10,722,532				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	82,171,619	129,352,807				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	64,400,832	73,951,673				
	E4. Amount for Phased-In Recognition	17,770,787	55,401,134				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	3,554,157	11,080,227	0	0	0	0
	F2. First Prior Year	(18,373,572)	3,554,157	11,080,227	0	0	0
	F3. Second Prior Year	18,338,164	(18,373,572)	3,554,157	11,080,227	0	0
	F4. Third Prior Year	5,685,665	18,338,164	(18,373,572)	3,554,157	11,080,227	0
	F5. Fourth Prior Year	(33,861,562)	5,685,665	18,338,164	(18,373,572)	3,554,157	11,080,227
	F6. Total Recognized Investment Gain	(24,657,148)	20,284,641	14,598,976	(3,739,188)	14,634,384	11,080,227
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 892,774,391	$ 997,733,237				
H.	Difference Between Market & Actuarial Values	$ 1,457,906	$ 36,574,399	$ 21,975,423	$ 25,714,611	$ 11,080,227	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.00% per annum:

Service	Annual Rates of Merit & Seniority Increase Next Year				
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	8.50%	15.50%	4.50%	13.00%	20.00%
1-2	5.00%	6.00%	4.50%	9.50%	10.50%
2-3	1.50%	2.00%	4.50%	6.00%	6.50%
3-4	1.50%	1.25%	4.50%	6.00%	5.75%
4-5	1.00%	1.00%	4.50%	5.50%	5.50%
5-6	1.00%	0.50%	4.50%	5.50%	5.00%
6-7	0.75%	0.00%	4.50%	5.25%	4.50%
7-8	0.75%	0.00%	4.50%	5.25%	4.50%
8-9	0.50%	0.00%	4.50%	5.00%	4.50%
9-10	0.50%	0.00%	4.50%	5.00%	4.50%
10 & Over	0.25%	0.00%	4.50%	4.75%	4.50%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement**
		Male	Female		
20	5.75%	0.03%	0.01%	0.04%	
25	5.75	0.03	0.01	0.05	
30	5.30	0.04	0.02	0.06	
35	4.40	0.04	0.02	0.09	
40	3.70	0.05	0.04	0.13	
45	3.02	0.08	0.05	0.22	
50	2.70	0.13	0.07	0.37	
55	2.20	0.22	0.11	0.61	8.0%
60	0.75	0.40	0.22	0.97	10.0
65		0.73	0.43		22.0
70		1.19	0.69		22.0
75					100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 25.0%, 14.0%, 10.0%, 8.0% and 6.5%, respectively.*

** *If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.*

Hazardous Members

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement		
		Male	Female		Service	Rate+	Rate++
20	3.00%	0.03%	0.01%	0.05%	20	20.0%	
25	2.70	0.03	0.01	0.07	25	33.0	20.0%
30	2.50	0.04	0.02	0.09	30	33.0	33.0
35	2.50	0.04	0.02	0.13	35	40.0	33.0
40	2.50	0.05	0.04	0.20	40		40.0
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 14.0%, 7.5%, 6.0%, 4.5% and 4.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *Applies to members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.*

++ *Applies to members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2015	7.75%	6.00%
2016	6.75%	5.75%
2017	6.25%	5.50%
2018	5.75%	5.25%
2019	5.25%	5.00%
2020 and beyond	5.00%	5.00%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	85%	100%

HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2014				
	Single	Parent Plus	Couple	Family
Total Premiums				
LivingWell CDHP	$733.88	$1,045.20	$1,603.94	$1,785.16
LivingWell PPO	$699.28	$995.94	$1,528.34	$1,701.04
Standard PPO	$656.28	$934.70	$1,434.36	$1,596.42
Standard CDHP	$641.50	$913.66	$1,402.06	$1,560.48

Effective January 1, 2015				
	Single	Parent Plus	Couple	Family
Total Premiums				
LivingWell CDHP	$689.28	$950.62	$1,282.84	$1,432.06
LivingWell PPO	$708.56	$1,007.46	$1,543.58	$1,716.92
Standard PPO	$665.40	$946.88	$1,451.56	$1,615.30
Standard CDHP	$650.92	$913.28	$1,406.14	$1,566.20

MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2015	
Available Plan	Premium
Kentucky Retirement System Health Plan - Medical Only	$162.00
Kentucky Retirement System Health Plan - Essential	$77.76
Kentucky Retirement System Health Plan - Premium	$244.25

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.20% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Members whose participation began on or after 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 5.00% and 4.00% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year.

Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement — 55

Service Requirement — At least one month of hazardous duty service credit

Amount — If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — 60

Service Requirement — At least 60 months of hazardous duty service credit

Amount — The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement (continued):

Members whose participation began on or after 1/1/2014

Age Requirement	60
Service Requirement	At least 60 months of hazardous duty service credit or 25 or more years of service, with no age requirement
Amount	Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 55 with 60 months of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Non-Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 60 with 10 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

Non-Hazardous Disability (continued):

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Hazardous Disability:

Age Requirement

None

Service Requirement

60 months (waived if in line of duty disability)

Members whose participation began before 8/1/2004

Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Hazardous Disability (continued):

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age — 65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Vesting (continued):

Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Members whose participation began on or after 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Upon termination the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or the member can elect to leave the hypothetical account balance in the System. If the member does not withdraw the account balance, it will continue to earn 4% interest. Upon reaching normal retirement age the member can apply for retirement and receive the account balance as a lump sum payment or annuitize the account balance into a single life annuity.

Pre-Retirement Death Benefit (not in line of duty):

Members whose participation began before 1/1/2014

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Members whose participation began on or after 1/1/2014

Requirement	60 months service
Amount	The maximum of the benefit equal to the benefit the member would have received had the member retired on the day before the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Member Contributions (continued):

Members whose participation began on or after 1/1/2014	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.
Members whose participation began on or after 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.61 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is increased annually 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.91 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.61 per month for each year of earned. These amounts are shown as of the valuation date and are increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2009	2010	2011	2012	2013	2014
			Number			
Beginning of Year	37,579	39,756	41,038	43,211	45,304	47,676
Added	3,060	2,565	3,250	3,300	3,570	3,480
Removed	883	1,283	1,077	1,207	1,198	1,221
End of Year	39,756	41,038	43,211	45,304	47,676	49,935
			Annual Allowances*			
Beginning of Year	$ 393,757,510	$ 440,061,418	$ 452,613,550	$ 483,594,068	$ 515,008,361	$ 557,979,192
Added	51,679,136	21,063,111	38,861,094	41,160,717	56,721,012	33,974,542
Removed	5,375,228	8,510,979	7,880,576	9,746,424	13,750,181	8,995,909
End of Year	$ 440,061,418	$ 452,613,550	$ 483,594,068	$ 515,008,361	$ 557,979,192	$ 582,957,825
% Increase in Allowances	11.76%	2.85%	6.84%	6.50%	8.34%	4.48%
Average Annual Allowance	$ 11,069	$ 11,029	$ 11,191	$ 11,368	$ 11,704	$ 11,674

** The annual allowances shown for 2013 and 2014 include allowances for hazardous members who are receiving a portion of benefit from the non-hazardous system.*

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2009	2010	2011	2012	2013	2014
			Number			
Beginning of Year	5,422	5,808	6,068	6,468	6,878	7,293
Added	650	423	502	483	519	469
Removed	264	163	102	73	104	116
End of Year	5,808	6,068	6,468	6,878	7,293	7,646
			Annual Allowances			
Beginning of Year	$ 127,477,109	$ 139,886,751	$ 146,916,812	$ 160,259,395	$ 173,221,483	$ 182,634,895
Added	13,030,426	8,566,698	14,640,991	14,149,084	10,923,660	9,940,048
Removed	620,784	1,536,637	1,298,408	1,186,996	1,510,248	1,567,111
End of Year	$ 139,886,751	$ 146,916,812	$ 160,259,395	$ 173,221,483	$ 182,634,895	$ 191,007,832
% Increase in Allowances	9.73%	5.03%	9.08%	8.09%	5.43%	4.58%
Average Annual Allowance	$ 24,085	$ 24,212	$ 24,777	$ 25,185	$ 25,042	$ 24,981

Non-Hazardous Retired Lives Summary June 30, 2014

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	4,567	$ 4,607,161.27	15,824	$ 11,287,896.88	20,391	$ 15,895,058.15
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2,477	2,772,719.65	1,257	789,959.20	3,734	3,562,678.85
66-2/3% to Beneficiary	699	1,264,757.11	466	518,453.26	1,165	1,783,210.37
50% to Beneficiary	991	1,570,872.39	1,315	1,510,760.39	2,306	3,081,632.78
Pop-up Option	3,673	5,709,532.36	3,044	3,245,841.12	6,717	8,955,373.48
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,260	1,248,141.81	2,953	2,181,242.24	4,213	3,429,384.05
Social Security Option						
Age 62 Basic	240	521,904.40	499	587,302.42	739	1,109,206.82
Age 62 Survivorship	573	1,220,696.71	323	396,853.99	896	1,617,550.70
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	583	571,409.36	697	529,025.58	1,280	1,100,434.94
20 Years Certain & Life	417	560,286.77	633	498,098.22	1,050	1,058,384.99
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	112	128,824.17	384	323,085.47	496	451,909.64
PLSO 24 Month Basic	63	43,789.14	257	201,360.81	320	245,149.95
PLSO 36 Month Basic	280	137,097.03	727	330,572.98	1,007	467,670.01
PLSO 12 Month Survivor	154	190,181.76	99	98,531.91	253	288,713.67
PLSO 24 Month Survivor	99	101,533.97	67	45,724.56	166	147,258.53
PLSO 36 Month Survivor	423	269,560.91	284	128,973.89	707	398,534.80
Total	16,611	$ 20,918,468.81	28,829	$ 22,673,682.92	45,440	$ 43,592,151.73

Hazardous Retired Lives Summary June 30, 2014

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	910	$ 1,793,714.25	283	$ 443,325.76	1,193	$ 2,237,040.01
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	676	1,331,339.17	33	38,852.42	709	1,370,191.59
66-2/3% to Beneficiary	271	688,261.55	7	16,768.69	278	705,030.24
50% to Beneficiary	418	980,337.98	28	53,283.55	446	1,033,621.53
Pop-up Option	2,641	6,647,157.86	112	217,460.00	2,753	6,864,617.86
10 Years Certain	58	97,467.58	4	5,048.37	62	102,515.95
10 Years Certain & Life	193	399,334.43	51	86,751.71	244	486,086.14
Social Security Option						
Age 62 Basic	104	237,822.65	12	21,240.69	116	259,063.34
Age 62 Survivorship	285	606,964.24	15	37,451.88	300	644,416.12
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	83	155,899.20	14	18,704.35	97	174,603.55
20 Years Certain & Life	136	262,846.88	24	37,464.74	160	300,311.62
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	26	45,792.55	10	12,355.51	36	58,148.06
PLSO 24 Month Basic	22	45,740.67	6	6,336.10	28	52,076.77
PLSO 36 Month Basic	56	86,887.54	22	24,358.25	78	111,245.79
PLSO 12 Month Survivor	59	147,864.89	4	8,080.23	63	155,945.12
PLSO 24 Month Survivor	68	110,391.43	2	2,220.11	70	112,611.54
PLSO 36 Month Survivor	144	217,964.33	6	6,248.86	150	224,213.19
Total	6,150	$ 13,855,787.20	633	$ 1,035,951.22	6,783	$ 14,891,738.42

Non-Hazardous Beneficiary Lives Summary June 30, 2014

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	14	$ 4,563.80	23	$ 11,542.41	37	$ 16,106.21
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	422	249,237.29	1,435	953,296.79	1,857	1,202,534.08
66-2/3% to Beneficiary	1	905.18	2	1,913.46	3	2,818.64
50% to Beneficiary	117	43,139.97	343	192,804.04	460	235,944.01
Pop-up Option	175	125,698.89	542	517,345.67	717	643,044.56
10 Years Certain	118	81,477.17	145	113,317.68	263	194,794.85
10 Years Certain & Life	63	38,670.84	205	157,037.25	268	195,708.09
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	27	18,130.48	131	183,690.79	158	201,821.27
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	1	206.92	1	206.92
Dependent Child	50	35,735.33	64	54,629.55	114	90,364.88
Refund	1	531.00	8	4,679.23	9	5,210.23
15 Years Certain & Life	40	29,994.68	53	43,496.12	93	73,490.80
20 Years Certain & Life	41	27,581.78	69	65,660.55	110	93,242.33
5 Years Certain	102	67,208.00	94	59,008.59	196	126,216.59
PLSO 12 Month Basic	0	0.00	1	395.49	1	395.49
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	149.07	1	152.38	2	301.45
PLSO 12 Month Survivor	7	4,283.80	35	36,214.84	42	40,498.64
PLSO 24 Month Survivor	8	7,981.89	20	15,847.95	28	23,829.84
PLSO 36 Month Survivor	37	15,337.55	99	44,360.41	136	59,697.96
Total	1,224	$ 750,626.72	3,271	$ 2,455,600.12	4,495	$ 3,206,226.84

Hazardous Beneficiary Lives Summary June 30, 2014

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	17	$ 9,241.97	28	$ 23,513.53	45	$ 32,755.50
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	30	20,953.04	186	242,078.53	216	263,031.57
66-2/3% to Beneficiary	5	2,853.43	43	59,849.17	48	62,702.60
50% to Beneficiary	7	3,118.85	61	54,580.74	68	57,699.59
Pop-up Option	49	34,171.69	189	293,368.46	238	327,540.15
10 Years Certain	11	13,414.79	17	14,379.36	28	27,794.15
10 Years Certain & Life	5	2,697.04	4	983.68	9	3,680.72
Social Security Option						
Age 62 Basic	0	0.00	1	310.13	1	310.13
Age 62 Survivorship	96	160,183.05	5	7,344.23	101	167,527.28
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	3,287.07	3	3,287.07
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	4	1,594.48	16	7,843.83	20	9,438.31
15 Years Certain & Life	7	4,623.63	2	1,273.74	9	5,897.37
20 Years Certain & Life	6	3,335.32	11	9,671.26	17	13,006.58
5 Years Certain	2	3,215.96	3	5,161.49	5	8,377.45
PLSO 12 Month Basic	0	0.00	1	2,192.42	1	2,192.42
PLSO 24 Month Basic	0	0.00	1	1,466.49	1	1,466.49
PLSO 36 Month Basic	2	561.73	3	1,618.98	5	2,180.71
PLSO 12 Month Survivor	1	786.37	4	2,794.70	5	3,581.07
PLSO 24 Month Survivor	2	2,696.58	9	6,630.00	11	9,326.58
PLSO 36 Month Survivor	9	5,130.19	23	18,654.98	32	23,785.17
Total	253	$ 268,578.12	610	$ 757,002.79	863	$ 1,025,580.91

Non-Hazardous Members

Retired and Beneficiary Information June 30, 2014
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	19	$ 387,872	59	$ 614,632	140	$ 841,036	218	$ 1,843,540
45-49	270	$ 6,845,034	126	$ 1,523,209	54	$ 412,232	450	$ 8,780,475
50-54	1,210	$ 29,414,185	313	$ 4,089,039	121	$ 1,359,890	1,644	$ 34,863,114
55-59	3,686	$ 69,405,223	615	$ 7,163,189	247	$ 2,859,249	4,548	$ 79,427,661
60-64	7,235	$ 102,299,214	778	$ 9,047,287	475	$ 5,114,775	8,488	$ 116,461,276
65-69	9,888	$ 108,974,912	754	$ 8,035,348	583	$ 6,266,685	11,225	$ 123,276,945
70-74	7,979	$ 76,151,899	535	$ 5,319,061	634	$ 5,884,796	9,148	$ 87,355,756
75-79	5,661	$ 48,677,450	313	$ 2,703,794	576	$ 5,408,139	6,550	$ 56,789,383
80-84	3,343	$ 25,796,861	138	$ 1,082,844	579	$ 4,543,114	4,060	$ 31,422,819
85-89	1,757	$ 11,619,833	16	$ 78,018	486	$ 2,935,158	2,259	$ 14,633,009
90 & Over	736	$ 3,843,930	9	$ 32,987	600	$ 2,849,648	1,345	$ 6,726,565
Totals	41,784	$ 483,416,413	3,656	$ 39,689,408	4,495	$ 38,474,722	49,935	$ 561,580,543

Hazardous Members

Retired and Beneficiary Information June 30, 2014
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	105	$ 3,335,555	77	$ 1,209,092	186	$ 1,033,932	368	$ 5,578,579
45-49	597	$ 18,719,598	66	$ 1,148,762	26	$ 261,809	689	$ 20,130,169
50-54	934	$ 29,757,571	98	$ 1,756,856	47	$ 670,070	1,079	$ 32,184,497
55-59	1,105	$ 30,960,507	90	$ 1,411,452	67	$ 893,278	1,262	$ 33,265,237
60-64	1,354	$ 39,023,086	86	$ 1,306,354	99	$ 1,826,198	1,539	$ 42,155,638
65-69	1,133	$ 26,562,909	46	$ 729,524	114	$ 1,977,203	1,293	$ 29,269,636
70-74	638	$ 13,058,033	16	$ 216,812	121	$ 2,466,035	775	$ 15,740,880
75-79	277	$ 5,948,930	4	$ 66,573	95	$ 1,714,970	376	$ 7,730,473
80-84	105	$ 2,345,402	5	$ 48,044	73	$ 987,855	183	$ 3,381,301
85-89	41	$ 983,360	1	$ 19,920	25	$ 349,590	67	$ 1,352,870
90 & Over	5	$ 92,521			10	$ 126,031	15	$ 218,552
Totals	6,294	$ 170,787,472	489	$ 7,913,389	863	$ 12,306,971	7,646	$ 191,007,832

Total Non-Hazardous Active Members as of June 30, 2014
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	109								109
Avg Pay	$11,688								$11,688
20-24	1,985	23							2,008
Avg Pay	$18,316	$24,557							$18,388
25-29	3,571	777	14						4,362
Avg Pay	$23,009	$30,566	$37,254						$24,401
30-34	3,522	1,718	612	18					5,870
Avg Pay	$22,530	$32,184	$36,147	$35,567					$26,815
35-39	3,575	2,085	1,392	474	21			1	7,548
Avg Pay	$21,963	$29,919	$36,881	$40,968	$42,969			$20,383	$28,163
40-44	3,734	2,672	2,042	1,184	331	27	10	1	10,001
Avg Pay	$22,190	$27,668	$33,317	$41,745	$45,997	$57,302	$70,918	$45,895	$29,175
44-49	3,275	2,839	2,578	1,685	745	158	100	40	11,420
Avg Pay	$22,189	$26,490	$29,479	$35,241	$44,030	$49,073	$54,107	$66,802	$29,062
50-54	3,005	2,764	3,166	2,516	1,318	325	204	129	13,427
Avg Pay	$22,694	$27,175	$28,796	$30,663	$38,479	$44,714	$49,564	$57,115	$29,370
55-59	2,460	2,301	2,588	2,450	1,718	364	250	207	12,338
Avg Pay	$22,444	$26,523	$29,338	$30,115	$34,192	$40,230	$45,384	$56,673	$29,374
60-64	1,791	1,794	1,624	1,631	1,203	307	198	150	8,698
Avg Pay	$20,534	$26,581	$29,507	$30,905	$32,067	$34,729	$42,120	$53,843	$28,563
65-69	784	803	732	579	353	101	104	63	3,519
Avg Pay	$17,371	$22,406	$27,087	$28,387	$30,885	$34,204	$37,062	$47,203	$25,308
70 & over	355	485	409	280	143	50	41	52	1,815
Avg Pay	$14,901	$19,712	$21,842	$24,585	$27,191	$29,753	$36,520	$42,017	$21,887
Totals	28,166	18,261	15,157	10,817	5,832	1,332	907	643	81,115
Avg Pay	$21,738	$27,518	$30,467	$32,682	$36,309	$40,601	$45,500	$54,545	$28,013

Total Hazardous Active Members as of June 30, 2014
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	267	2							269
Avg Pay	$33,859	$46,798							$33,955
25-29	957	276	2						1,235
Avg Pay	$40,710	$47,055	$42,340						$42,131
30-34	529	817	215	3					1,564
Avg Pay	$42,720	$50,439	$53,327	$57,971					$48,240
35-39	253	522	668	265	7				1,715
Avg Pay	$41,532	$50,267	$55,574	$60,828	$73,778				$52,773
40-44	160	324	576	733	135	16	5		1,949
Avg Pay	$41,527	$48,956	$54,513	$62,632	$69,606	$80,915	$77,364		$56,898
44-49	79	163	282	352	237	65	28	6	1,212
Avg Pay	$38,241	$46,530	$54,331	$58,982	$69,319	$72,778	$77,740	$95,581	$58,249
50-54	42	108	128	204	148	42	38	13	723
Avg Pay	$37,376	$47,777	$50,749	$57,873	$66,016	$69,059	$77,270	$84,502	$57,728
55-59	27	53	60	63	58	18	13	22	314
Avg Pay	$37,277	$48,938	$51,358	$55,258	$58,496	$76,581	$66,896	$79,754	$55,918
60-64	7	38	54	22	17	7	5	11	161
Avg Pay	$36,894	$42,917	$45,886	$60,163	$70,478	$54,158	$66,501	$83,978	$52,944
65-69	1	8	12	5	5			1	32
Avg Pay	$30,180	$36,296	$51,293	$67,312	$61,859			$78,773	$51,897
70 & over	1	4	5	5	2		1	2	20
Avg Pay	$33,686	$30,060	$46,541	$68,163	$26,316		$62,900	$115,395	$53,688
Totals	2,323	2,315	2,002	1,652	609	148	90	55	9,194
Avg Pay	$40,323	$49,145	$54,095	$60,686	$67,430	$72,184	$75,165	$84,726	$52,117

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Report on the Annual Valuation of the Kentucky Employees Retirement System

Prepared as of June 30, 2014

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November 12, 2014

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The date of the valuation was June 30, 2014.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

Since the previous valuation, the cash balance plan (a provision of Senate Bill 2) for members whose participation date is on or after January 1, 2014 has been reflected in this valuation.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

TJC/TBG/AB:kc

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REPORT ON THE ANNUAL VALUATION OF THE KENTUCKY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2014

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2014, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/2014	6/30/2013	6/30/2014	6/30/2013	6/30/2014	6/30/2013
Contributions for next fiscal year:						
Retirement	33.57%	30.84%	17.09%	16.37%		
Insurance	7.74	7.93	7.12	9.97	N/A	N/A
Total	41.31%	38.77%	24.21%	26.34%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$11,550,110,224	$11,386,602,159	$816,850,063	$783,980,594	$12,366,960,287	$12,170,582,752
Actuarial value of assets	2,423,956,716	2,636,122,852	527,897,261	505,656,808	2,951,853,977	3,141,779,660
Unfunded liability on actuarial value of assets	9,126,153,508	8,750,479,307	288,952,802	278,323,786	9,415,106,310	9,028,803,092
Funded ratio on actuarial value of assets	20.99%	23.15%	64.63%	64.50%	23.87%	25.81%
Market value of assets	$2,560,419,519	$2,747,428,086	$559,504,340	$513,162,166	$3,119,923,859	$3,260,590,252
Unfunded liability on market value of assets	8,989,690,705	8,639,174,073	257,345,723	270,818,428	9,247,036,428	8,909,992,500
Funded ratio on market value of assets	22.17%	24.13%	68.50%	65.46%	25.23%	26.79%
Insurance						
Actuarial accrued liability	$2,226,759,925	$2,128,754,134	$396,986,820	$385,517,675	$2,623,746,745	$2,514,271,809
Actuarial value of assets	621,236,646	497,584,327	419,395,867	370,774,403	1,040,632,513	868,358,730
Unfunded liability on actuarial value of assets	1,605,523,279	1,631,169,807	(22,409,047)	14,743,272	1,583,114,232	1,645,913,079
Funded ratio on actuarial value of assets	27.90%	23.37%	105.64%	96.18%	39.66%	34.54%
Market value of assets	$664,775,708	$509,364,080	$435,503,976	$374,309,576	$1,100,279,684	$883,673,656
Unfunded liability on market value of assets	1,561,984,217	1,619,390,054	(38,517,156)	11,208,099	1,523,467,061	1,630,598,153
Funded ratio on market value of assets	29.85%	23.93%	109.70%	97.09%	41.94%	35.15%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	41,223	40,194	3,620	3,430	44,843	43,624
Number of vested former members	7,891	8,189	365	368	8,256	8,557
Number of former members due a refund	38,748	35,857	3,643	3,117	42,391	38,974
Number of active members	40,365	42,226	4,024	4,127	44,389	46,353
Total salary	$1,577,496,447	$1,644,408,698	$129,076,038	$132,015,368	$1,706,572,485	$1,776,424,066
Average salary	$39,081	$38,943	$32,077	$31,988	$38,446	$38,324

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky, has made the following changes for plan year 2015:

    - The new medical plan administrator is Anthem Blue Cross Blue Shield.
    - The new prescription drug plan administrator is CVS/caremark and changes were made to the prescription drug formulary.
    - Out-of-pocket maximums are now tracked separately for medical and prescription drug coverage. Prescription drug coverage is now capped.
    - The LivingWell PPO plan has lowered co-pays for mental health and allergy injections.

5. The following change has been reflected in this valuation in accordance with Senate Bill 2:

    - The cash balance plan for members whose participation date is on or after January 1, 2014 has been reflected in this valuation.

6. Since the previous valuation, Seven Counties Mental Health Services no longer participates in the KERS Non-Hazardous System as an active contributing employer. As of July 1, 2013 there were 926 active members. Of the 926 members, those that were vested or who were eligible to retire will continue as members of the System.

7. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2014 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	40,365	$1,577,496,447	$39,081	44.8	10.5
Hazardous	4,024	129,076,038	32,077	40.6	7.4
Total in KERS	44,389	$1,706,572,485	$38,446	44.4	10.2

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2009	46,060	$1,754,412,912	$38,090	(0.3%)
6/30/2010	47,090	1,815,146,388	38,546	1.2
6/30/2011	46,617	1,731,632,748	37,146	(3.6)
6/30/2012	42,196	1,644,896,681	38,982	4.9
6/30/2013	42,226	1,644,408,698	38,943	(0.1)
6/30/2014	40,365	1,577,496,447	39,081	0.4

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2009	4,334	$146,043,576	$33,697	(0.5%)
6/30/2010	4,291	143,557,944	33,456	(0.7)
6/30/2011	4,291	133,053,792	31,008	(7.3)
6/30/2012	4,086	131,976,754	32,300	4.2
6/30/2013	4,127	132,015,368	31,988	(1.0)
6/30/2014	4,024	129,076,038	32,077	0.3

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	34,965	$783,372,355	$22,404	67.7
Disability	1,904	24,300,056	12,763	64.6
Beneficiary	4,354	58,374,245	13,407	71.1
Total in KERS	41,223	$866,046,656	$21,009	67.9

** Does not include number and annual benefits for those members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 2,196 members in the hazardous system also receiving an annual benefit from the non-hazardous System. Total annual benefits for these members is $19,537,677.*

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	3,114	$49,675,429	$15,952	63.1
Disability	145	1,269,006	8,752	58.1
Beneficiary	361	3,327,283	9,217	65.1
Total in KERS	3,620	$54,271,718	$14,992	63.1

This valuation also includes 50,647 inactive members (46,639 Non-Hazardous and 4,008 Hazardous; of which 7,891 Non-Hazardous are vested and 365 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2014 the total market value of assets amounted to $4,220,203,543 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2014

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	$2,560,419,519	$664,775,708	$3,225,195,227
Hazardous	559,504,340	435,503,976	995,008,316
Total	$3,119,923,859	$1,100,279,684	$4,220,203,543

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $3,992,486,490. Schedule B shows the development of the actuarial value of assets as of June 30, 2014. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	June 30, 2014	June 30, 2013
Retirement		
Non-Hazardous	$ 2,423,956,716	$ 2,636,122,852
Hazardous	527,897,261	505,656,808
Total	$ 2,951,853,977	$ 3,141,779,660
Insurance		
Non-Hazardous	$ 621,236,646	$ 497,584,327
Hazardous	419,395,867	370,774,403
Total	$ 1,040,632,513	$ 868,358,730
KERS Total		
Non-Hazardous	$ 3,045,193,362	$ 3,133,707,179
Hazardous	947,293,128	876,431,211
Total	$ 3,992,486,490	$ 4,010,138,390

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2014. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $13,670,960,454, of which $9,123,837,536 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $328,086,360 is for the prospective benefits payable on account of present inactive members, and $4,219,036,558 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $2,951,853,977 as of June 30, 2014. The difference of $10,719,106,477 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $796,664,983 is the present value of future contributions expected to be made by members, and the balance of $9,922,441,494 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.40% of payroll for non-hazardous members and 5.00% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $507,335,184. When this amount is subtracted from $9,922,441,494, which is the present value of the total future contributions to be made by the employers, there remains $9,415,106,310 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 29.47% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 11.40% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $9,126,153,508 for non-hazardous members and $288,952,802 for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.70% of payroll for non-hazardous members and 0.69% of payroll for hazardous members.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $3,054,947,815, of which $1,430,134,011 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $201,947,963 is for the prospective benefits payable on account of present inactive members, and $1,422,865,841 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $1,040,632,513 as of June 30, 2014. The difference of $2,014,315,302 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $48,363,395 is the present value of future contributions expected to be made by members, and the balance of $1,965,951,907 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 2.47% of payroll for non-hazardous members and 7.95% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $382,837,675. When this amount is subtracted from $1,965,951,907, which is the present value of the total future contributions to be made by the employers, there remains $1,583,114,232 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 5.22% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at (0.89%) of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $1,605,523,279 for non-hazardous members and $(22,409,047) for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.05% of payroll for non-hazardous members and 0.06% of payroll for hazardous members.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2014 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/13	$ 8,750.5	$ 278.3	$ 9,028.8
(2)	Normal cost from last valuation	150.2	18.2	168.4
(3)	Contributions	389.8	23.7	413.5
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	674.7	22.1	696.8
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 9,185.6	$ 294.9	$ 9,480.5
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 9,185.6	$ 294.9	$ 9,480.5
(9)	Actual UAAL as of 6/30/14	$ 9,126.2	$ 289.0	$ 9,415.2
(10)	Gain/(loss): (8) - (9)	$ 59.4	$ 5.9	$ 65.3
(11)	Accrued liabilities as of 6/30/13	$ 11,386.6	$ 784.0	$ 12,170.6
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	0.5%	0.8%	0.5%

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/13	$ 1,631.2	$ 14.7	$ 1,645.9
(2)	Normal cost from last valuation	44.2	12.2	56.4
(3)	Expected employer contributions	126.1	12.9	139.0
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	120.1	1.1	121.2
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 1,669.4	$ 15.1	$ 1,684.5
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 1,669.4	$ 15.1	$ 1,684.5
(9)	Actual UAAL as of 6/30/14	$ 1,605.5	$ (22.4)	$ 1,583.1
(10)	Gain/(loss): (8) - (9)	$ 63.9	$ 37.5	$ 101.4
(11)	Accrued liabilities as of 6/30/13	$ 2,128.8	$ 385.5	$ 2,514.3
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	3.0%	9.7%	4.0%

* *Unfunded actuarial accrued liability*

NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/14	Insurance $ Gain (or Loss) For Year Ending 6/30/14
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (228.9)	$ (33.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(8.1)	0.0
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.5)	(1.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	92.0	5.0
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	68.9	(13.5)
New Members. Additional unfunded accrued liability will produce a loss.	(11.4)	(2.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	128.8	24.1
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	19.8	59.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(1.1)	26.0
Gain (or Loss) During Year From Financial Experience	$ 59.4	$ 63.9
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ 59.4	$ 63.9

HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/14	Insurance $ Gain (or Loss) For Year Ending 6/30/14
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (34.7)	$ (3.8)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.8)	0.7
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	20.0	3.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	7.0	7.1
New Members. Additional unfunded accrued liability will produce a loss.	(7.2)	(4.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	18.8	10.6
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	4.0	21.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(1.2)	3.2
Gain (or Loss) During Year From Financial Experience	$ 5.9	$ 37.5
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ 5.9	$ 37.5

TOTAL KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/14	Insurance $ Gain (or Loss) For Year Ending 6/30/14
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (263.6)	$ (37.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(8.9)	0.7
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.4)	(1.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	112.0	8.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	75.9	(6.4)
New Members. Additional unfunded accrued liability will produce a loss.	(18.6)	(6.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	147.6	34.7
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	23.8	80.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(2.4)	29.2
Gain (or Loss) During Year From Financial Experience	$ 65.3	$ 101.4
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ 65.3	$ 101.4

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation. These rates are for informational purposes only.

Required Contribution Rates
Non-Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	121,445,387	7.65%
	(2) Disability benefits		9,952,302	0.63
	(3) Survivor benefits		1,963,415	0.12
	(4) Total	$	133,361,104	8.40%
B.	Member Contributions	$	78,874,822	5.00%
C.	Employer Normal Cost: [A(4) - B]	$	54,486,282	3.40%
D.	Administrative Expenses	$	11,144,929	0.70%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/13 Valuation:	$	439,158,973	26.71%
	(2) Change due to:			
	a. Active decrements	$	11,711,442	0.74%
	b. Pay increases		(4,712,685)	(0.30)
	c. Retiree mortality		(6,600,694)	(0.42)
	d. Investment return		584,640	0.04
	e. COLA		0	0.00
	f. Assumption Change		0	0.00
	g. Other		27,527,257	2.70
	h. Total Change	$	28,509,960	2.76%
	(3) UAAL Contribution Based on 6/30/14 Valuation: [E(1) +E(2)h]	$	467,668,933	29.47%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	533,300,144	33.57%

**Based on 29 year amortization of the UAAL from June 30, 2014*

Required Contribution Rates
Hazardous Retirement

	Contribution for		Amount	% of Payroll
A.	Normal Cost:			
	(1) Service retirement benefits	$	15,562,214	12.01%
	(2) Disability benefits		1,028,338	0.77
	(3) Survivor benefits		289,292	0.22
	(4) Total	$	16,879,844	13.00%
B.	Member Contributions	$	10,326,083	8.00%
C.	Employer Normal Cost: [A(4) - B]	$	6,553,761	5.00%
D.	Administrative Expenses	$	890,625	0.69%
E.	Unfunded Actuarial Accrued Liability Contributions*:			
	(1) UAAL Contribution Based on 6/30/13 Valuation:	$	13,968,193	10.58%
	(2) Change due to:			
	a. Active decrements	$	1,662,184	1.29%
	b. Pay increases		(1,024,817)	(0.79)
	c. Retiree mortality		(961,677)	(0.75)
	d. Investment return		369,037	0.29
	e. COLA		0	0.00
	f. Assumption Change		0	0.00
	g. Other		794,441	0.78
	h. Total Change	$	839,168	0.82%
	(3) UAAL Contribution Based on 6/30/14 Valuation: [E(1) +E(2)h]	$	14,807,361	11.40%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	$	22,251,747	17.09%

**Based on 29 year amortization of the UAAL from June 30, 2014*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	42,674,391	2.71%
B.	Member Contributions*	$	3,785,991	0.24%
C.	Employer Normal Cost: [A - B]	$	38,888,400	2.47%
D.	Administrative Expenses	$	735,604	0.05%
E.	Unfunded Actuarial Accrued Liability**:	$	82,274,899	5.22%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	121,898,903	7.74%

**The liabilities are net of retiree contributions towards their healthcare.*
*** Based on 29 year amortization of the UAAL from June 30, 2014*

Required Contribution Rates
Hazardous Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost:	$	10,721,419	8.31%
B.	Member Contributions*	$	464,674	0.36%
C.	Employer Normal Cost: [A - B]	$	10,256,745	7.95%
D.	Administrative Expenses	$	77,471	0.06%
E.	Unfunded Actuarial Accrued Liability**:	$	(1,148,350)	(0.89%)
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	9,185,866	7.12%

**The liabilities are net of retiree contributions towards their healthcare.*
*** Based on 29 year amortization of the UAAL from June 30, 2014*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2014

GROUP	NUMBER Non-Hazardous*	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	41,223	3,620	44,843
Terminated employees entitled to benefits but not yet receiving benefits	46,639	4,008	50,647
Active Members	40,365	4,024	44,389
Total	128,227	11,652	139,879

* *Does not include members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 2,196 members in in the hazardous system also receiving an annual benefit from the non-hazardous System*

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2009	$ 4,794,611,365	$ 10,658,549,532	$ 5,863,938,167	45.0%	$ 1,754,412,912	334.2%
6/30/2010	4,210,215,585	11,004,795,089	6,794,579,504	38.3	1,815,146,388	374.3
6/30/2011	3,726,986,087	11,182,142,032	7,455,155,945	33.3	1,731,632,748	430.5
6/30/2012	3,101,316,738	11,361,048,136	8,259,731,398	27.3	1,644,896,681	502.1
6/30/2013	2,636,122,852	11,386,602,159	8,750,479,307	23.2	1,644,408,698	532.1
6/30/2014	2,423,956,716	11,550,110,224	9,126,153,508	21.0	1,577,496,447	578.5
Hazardous Members						
6/30/2009	$ 502,503,287	$ 674,411,781	$ 171,908,494	74.5%	$ 146,043,576	117.7%
6/30/2010	502,729,009	688,149,451	185,420,442	73.1	143,557,944	129.2
6/30/2011	510,748,505	721,293,444	210,544,939	70.8	133,053,792	158.2
6/30/2012	497,226,296	752,699,457	255,473,161	66.1	131,976,754	193.6
6/30/2013	505,656,808	783,980,594	278,323,786	64.5	132,015,368	210.8
6/30/2014	527,897,261	816,850,063	288,952,802	64.6	129,076,038	223.9
Total KERS Members						
6/30/2009	$ 5,297,114,652	$ 11,332,961,313	$ 6,035,846,661	46.7%	$ 1,900,456,488	317.6%
6/30/2010	4,712,944,594	11,692,944,540	6,979,999,946	40.3	1,958,704,332	356.4
6/30/2011	4,237,734,592	11,903,435,476	7,665,700,884	35.6	1,864,686,540	411.1
6/30/2012	3,598,543,034	12,113,747,593	8,515,204,559	29.7	1,776,873,435	479.2
6/30/2013	3,141,779,660	12,170,582,752	9,028,803,092	25.8	1,776,424,066	508.3
6/30/2014	2,951,853,977	12,366,960,287	9,415,106,310	23.9	1,706,572,485	551.7

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2009	$ 534,172,580	$ 4,507,325,571	$ 3,973,152,991	11.9%	$ 1,754,412,912	226.5%
6/30/2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
6/30/2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
6/30/2012	446,080,511	3,125,330,157	2,679,249,646	14.3	1,644,896,681	162.9
6/30/2013*	497,584,327	2,128,754,134	1,631,169,807	23.4	1,644,408,698	99.2
6/30/2014	621,236,646	2,226,759,925	1,605,523,279	27.9	1,577,496,447	101.8
Hazardous Members						
6/30/2009	$ 301,634,592	$ 491,132,170	$ 189,497,578	61.4%	$ 146,043,576	129.8%
6/30/2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
6/30/2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
6/30/2012	345,573,948	384,592,406	39,018,458	89.9	131,976,754	29.6
6/30/2013	370,774,403	385,517,675	14,743,272	96.2	132,015,368	11.2
6/30/2014	419,395,867	396,986,820	(22,409,047)	105.6	129,076,038	(17.4)
Total KERS Members						
6/30/2009	$ 835,807,172	$ 4,998,457,741	$ 4,162,650,569	16.7%	$ 1,900,456,488	219.0%
6/30/2010	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1
6/30/2011	781,582,057	4,787,148,400	4,005,566,343	16.3	1,864,686,540	214.8
6/30/2012	791,654,459	3,509,922,563	2,718,268,104	22.6	1,776,873,435	153.0
6/30/2013	868,358,730	2,514,271,809	1,645,913,079	34.5	1,776,424,066	92.7
6/30/2014	1,040,632,513	2,623,746,745	1,583,114,232	39.7	1,706,572,485	92.8

** Discount rate changed from 4.50% to 7.75%*

RETIREMENT BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2009	294,495,010	112,383,083	38.2%
June 30, 2010	348,494,678	144,050,560	41.3
June 30, 2011	381,915,236	193,754,471	50.7
June 30, 2012	441,094,470	214,786,132	48.7
June 30, 2013	485,395,934	280,874,152	57.9
June 30, 2014	520,764,995	296,836,047	57.0
	Hazardous Members		
June 30, 2009	15,708,254	15,843,289	100.9%
June 30, 2010	17,814,630	17,658,058	99.1
June 30, 2011	20,605,070	19,140,508	92.9
June 30, 2012	20,264,754	20,808,540	102.7
June 30, 2013	21,501,581	27,333,681	127.1
June 30, 2014	13,570,322	11,670,477	86%
	Total KERS Members		
June 30, 2009	310,203,264	128,226,372	41.3%
June 30, 2010	366,309,308	161,708,618	44.1
June 30, 2011	402,520,306	212,894,979	52.9
June 30, 2012	461,359,224	235,594,672	51.1
June 30, 2013	506,905,515	308,207,833	60.8
June 30, 2014	534,335,317	308,506,524	57.7

INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
		Non-Hazardous Members			
June 30, 2009	$362,707,378	$8,167,982	$74,542,932	$82,710,914	22.8%
June 30, 2010	376,556,187	8,550,914	93,976,917	102,527,831	27.2
June 30, 2011	294,897,813	0	129,335,552	129,335,552	43.9
June 30, 2012	297,904,224	0	156,057,216	156,057,216	52.4
June 30, 2013	286,143,134	0	165,330,557	165,330,557	57.8
June 30, 2014	208,880,813	0	166,609,592	166,609,592	79.8
		Hazardous Members			
June 30, 2009	$34,670,467	$186,081	$20,807,204	$20,993,285	60.6%
June 30, 2010	35,045,278	319,059	21,921,535	22,240,594	63.5
June 30, 2011	29,585,257	0	19,952,580	19,952,580	67.4
June 30, 2012	28,326,206	0	24,538,087	24,538,087	86.6
June 30, 2013	26,252,911	0	25,682,403	25,682,403	97.8
June 30, 2014	15,627,018	0	23,873,967	23,873,967	152.8
		Total KERS Members			
June 30, 2009	$397,377,845	$8,354,063	$95,350,136	$103,704,199	26.1%
June 30, 2010	411,601,465	8,869,973	115,898,452	124,768,425	30.3
June 30, 2011	324,483,070	0	149,288,132	149,288,132	46.0
June 30, 2012	326,230,430	0	180,595,303	180,595,303	55.4
June 30, 2013	312,396,045	0	191,012,960	191,012,960	61.1
June 30, 2014	224,507,831	0	190,483,559	190,483,559	84.8

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2014. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2014	6/30/2014
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases**	5.0% - 17.0%	5.0% - 21.0%
Cost-of-living adjustment	None	None
*Includes price inflation at	3.50%	3.50%
**Includes wage inflation at	4.50%	4.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2014	6/30/2014
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	7.75% - 5.00%	7.75% - 5.00%
Medical Trend Assumption (Post-Medicare)	6.00% - 5.00%	6.00% - 5.00%
Year Ultimate Trend	2020	2020
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes price inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2014 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2013. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 2,423,956,716	$ 2,636,122,852
Prospective contributions		
Member contributions	$ 709,583,930	$ 748,898,753
Employer normal contributions	448,523,568	483,225,184
Unfunded accrued liability contributions	9,126,153,508	8,750,479,307
Total prospective contributions	$ 10,284,261,006	$ 9,982,603,244
Total assets	$ 12,708,217,722	$ 12,618,726,096
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,564,988,130	$ 8,457,981,441
Present value of benefits payable on account of active members	3,837,525,126	3,909,402,474
Present value of benefits payable on account of inactive members	305,704,466	251,342,181
Total liabilities	$ 12,708,217,722	$ 12,618,726,096

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 527,897,261	$ 505,656,808
Prospective contributions		
Member contributions	$ 87,081,053	$ 90,536,604
Employer normal contributions	58,811,616	59,622,322
Unfunded accrued liability contributions	288,952,802	278,323,786
Total prospective contributions	$ 434,845,471	$ 428,482,712
Total assets	$ 962,742,732	$ 934,139,520
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 558,849,406	$ 528,180,683
Present value of benefits payable on account of active members	381,511,432	388,542,986
Present value of benefits payable on account of inactive members	22,381,894	17,415,851
Total liabilities	$ 962,742,732	$ 934,139,520

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 2,951,853,977	$ 3,141,779,660
Prospective contributions		
Member contributions	$ 796,664,983	$ 839,435,357
Employer normal contributions	507,335,184	542,847,506
Unfunded accrued liability contributions	9,415,106,310	9,028,803,092
Total prospective contributions	$ 10,719,106,477	$ 10,411,085,955
Total assets	$ 13,670,960,454	$ 13,552,865,615
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 9,123,837,536	$ 8,986,162,124
Present value of benefits payable on account of active members	4,219,036,558	4,297,945,460
Present value of benefits payable on account of inactive members	328,086,360	268,758,031
Total liabilities	$ 13,670,960,454	$ 13,552,865,615

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 621,236,646	$ 497,584,327
Prospective contributions		
Member contributions	$ 43,587,814	$ 37,703,377
Employer normal contributions	309,167,195	365,769,800
Unfunded accrued liability contributions	1,605,523,279	1,631,169,807
Total prospective contributions	$ 1,958,278,288	$ 2,034,642,984
Total assets	$ 2,579,514,934	$ 2,532,227,311
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,243,505,028	$ 1,187,225,490
Present value of benefits payable on account of active members	1,153,910,365	1,193,454,451
Present value of benefits payable on account of inactive members	182,099,541	151,547,370
Total liabilities	$ 2,579,514,934	$ 2,532,227,311

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 419,395,867	$ 370,774,403
Prospective contributions		
Member contributions	$ 4,775,581	$ 4,243,014
Employer normal contributions	73,670,480	90,975,571
Unfunded accrued liability contributions	(22,409,047)	14,743,272
Total prospective contributions	$ 56,037,014	$ 109,961,857
Total assets	$ 475,432,881	$ 480,736,260
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 186,628,983	$ 185,858,570
Present value of benefits payable on account of active members	268,955,476	278,704,745
Present value of benefits payable on account of inactive members	19,848,422	16,172,945
Total liabilities	$ 475,432,881	$ 480,736,260

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS

	June 30, 2014	June 30, 2013
ASSETS		
Current actuarial value of assets	$ 1,040,632,513	$ 868,358,730
Prospective contributions		
Member contributions	$ 48,363,395	$ 41,946,391
Employer normal contributions	382,837,675	456,745,371
Unfunded accrued liability contributions	1,583,114,232	1,645,913,079
Total prospective contributions	$ 2,014,315,302	$ 2,144,604,841
Total assets	$ 3,054,947,815	$ 3,012,963,571
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,430,134,011	$ 1,373,084,060
Present value of benefits payable on account of active members	1,422,865,841	1,472,159,196
Present value of benefits payable on account of inactive members	201,947,963	167,720,315
Total liabilities	$ 3,054,947,815	$ 3,012,963,571

The following tables provide the solvency test for non-hazardous and hazardous KERS members.

Solvency Test
Retirement Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2009	$ 793,574,765	$ 8,205,155,691	$ 1,659,819,076	$ 4,794,611,365	100.0%	48.8%	0.0%
6/30/2010	869,484,042	8,329,757,802	1,805,553,245	4,210,215,585	100.0	40.1	0.0
6/30/2011	916,568,932	8,482,714,356	1,782,858,744	3,726,986,087	100.0	33.1	0.0
6/30/2012	885,137,183	8,708,536,338	1,767,374,615	3,101,316,738	100.0	25.4	0.0
6/30/2013	922,928,027	8,709,323,622	1,754,350,510	2,636,122,852	100.0	19.7	0.0
6/30/2014	928,557,540	8,870,692,596	1,750,860,088	2,423,956,716	100.0	16.9	0.0

Solvency Test
Retirement Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2009	$ 87,779,938	$ 413,972,356	$ 172,659,487	$ 502,503,287	100.0%	100.0%	0.4%
6/30/2010	88,511,283	441,657,241	157,980,927	502,729,009	100.0	93.8	0.0
6/30/2011	86,614,205	490,395,078	144,284,161	510,748,505	100.0	86.5	0.0
6/30/2012	82,100,877	521,688,803	148,909,777	497,226,296	100.0	79.6	0.0
6/30/2013	82,145,602	545,596,534	156,238,458	505,656,808	100.0	77.6	0.0
6/30/2014	83,663,535	581,231,300	151,955,228	527,897,261	100.0	76.4	0.0

Solvency Test
Insurance Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2009	$ 0	$ 2,861,867,088	$ 1,645,458,483	$ 534,172,580	100.0%	18.7%	0.0%
6/30/2010	0	2,744,534,054	1,721,601,987	471,341,628	100.0	17.2	0.0
6/30/2011	0	2,568,002,978	1,712,086,655	451,620,442	100.0	17.6	0.0
6/30/2012	0	1,924,068,623	1,201,261,534	446,080,511	100.0	23.2	0.0
6/30/2013	0	1,338,772,860	789,981,274	497,584,327	100.0	37.2	0.0
6/30/2014	0	1,425,604,569	801,155,356	621,236,646	100.0	43.6	0.0

Solvency Test
Insurance Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2009	$ 0	$ 242,123,365	$ 249,008,805	$ 301,634,592	100.0%	100.0%	23.9%
6/30/2010	0	268,510,709	224,786,820	314,427,296	100.0	100.0	20.4
6/30/2011	0	285,539,861	221,518,906	329,961,615	100.0	100.0	20.1
6/30/2012	0	196,578,935	188,013,471	345,573,948	100.0	100.0	79.2
6/30/2013	0	202,031,515	183,486,160	370,774,403	100.0	100.0	92.0
6/30/2014	0	206,477,405	190,509,415	419,395,867	100.0	100.0	100.0

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2013	2014	2015	2016	2017	2018
A.	Actuarial Value Beginning of Year	$ 3,101,316,738	$ 2,636,122,852				
B.	Market Value End of Year	2,747,428,086	2,560,419,519				
C.	Market Value Beginning of Year	2,980,401,603	2,747,428,086				
D.	Cash Flow						
	D1. Contributions	377,617,564	389,777,286				
	D2. Benefit Payments	(886,812,291)	(903,563,734)				
	D3. Administrative Expenses	(10,718,851)	(11,144,929)				
	D4. Investment Expenses	(12,324,984)	(9,152,919)				
	D5. Net	(532,238,562)	(534,084,296)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	299,265,045	347,075,729				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	223,159,457	201,737,505				
	E4. Amount for Phased-In Recognition	76,105,588	145,338,224				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	15,221,118	29,067,645	0	0	0	0
	F2. First Prior Year	(46,821,807)	15,221,118	29,067,645	0	0	0
	F3. Second Prior Year	68,172,485	(46,821,807)	15,221,118	29,067,645	0	0
	F4. Third Prior Year	54,541,214	68,172,485	(46,821,807)	15,221,118	29,067,645	0
	F5. Fourth Prior Year	(247,227,791)	54,541,214	68,172,485	(46,821,807)	15,221,118	29,067,645
	F6. Total Recognized Investment Gain	(156,114,781)	120,180,655	65,639,441	(2,533,044)	44,288,763	29,067,645
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 2,636,122,852	$ 2,423,956,716				
H.	Difference Between Market & Actuarial Values	$ 111,305,234	$ 136,462,803	$ 70,823,362	$ 73,356,406	$ 29,067,645	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2013	2014	2015	2016	2017	2018
A.	Actuarial Value Beginning of Year	$ 497,226,296	$ 505,656,808				
B.	Market Value End of Year	513,162,166	559,504,340				
C.	Market Value Beginning of Year	478,103,794	513,162,166				
D.	Cash Flow						
	D1. Contributions	38,798,624	23,665,778				
	D2. Benefit Payments	(51,616,993)	(57,150,606)				
	D3. Administrative Expenses	(732,555)	(897,111)				
	D4. Investment Expenses	(1,815,898)	(2,261,049)				
	D5. Net	(15,366,822)	(36,642,988)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	50,425,194	82,985,162				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	38,343,844	40,698,817				
	E4. Amount for Phased-In Recognition	12,081,350	42,286,345				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	2,416,270	8,457,269	0	0	0	0
	F2. First Prior Year	(9,594,554)	2,416,270	8,457,269	0	0	0
	F3. Second Prior Year	9,718,299	(9,594,554)	2,416,270	8,457,269	0	0
	F4. Third Prior Year	7,187,340	9,718,299	(9,594,554)	2,416,270	8,457,269	0
	F5. Fourth Prior Year	(24,273,865)	7,187,340	9,718,299	(9,594,554)	2,416,270	8,457,269
	F6. Total Recognized Investment Gain	(14,546,510)	18,184,624	10,997,284	1,278,985	10,873,539	8,457,269
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 505,656,808	$ 527,897,261				
H.	Difference Between Market & Actuarial Values	$ 7,505,358	$ 31,607,079	$ 20,609,795	$ 19,330,810	$ 8,457,269	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2013	2014	2015	2016	2017	2018
A.	Actuarial Value Beginning of Year	$ 446,080,511	$ 497,584,327				
B.	Market Value End of Year	509,364,080	664,775,708				
C.	Market Value Beginning of Year	430,805,726	509,364,080				
D.	Cash Flow						
	D1. Contributions	184,673,842	172,080,578				
	D2. Benefit Payments	(140,156,341)	(112,671,651)				
	D3. Administrative Expenses	(4,285,139)	(735,604)				
	D4. Investment Expenses	(1,570,529)	(1,929,107)				
	D5. Net	38,661,833	56,744,216				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	39,896,521	98,667,412				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	36,516,977	43,678,414				
	E4. Amount for Phased-In Recognition	3,379,544	54,988,998				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	675,909	10,997,800	0	0	0	0
	F2. First Prior Year	(6,969,893)	675,909	10,997,800	0	0	0
	F3. Second Prior Year	11,459,921	(6,969,893)	675,909	10,997,800	0	0
	F4. Third Prior Year	7,065,952	11,459,921	(6,969,893)	675,909	10,997,800	0
	F5. Fourth Prior Year	(35,906,883)	7,065,952	11,459,921	(6,969,893)	675,909	10,997,800
	F6. Total Recognized Investment Gain	(23,674,994)	23,229,689	16,163,737	4,703,816	11,673,709	10,997,800
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 497,584,327	$ 621,236,646				
H.	Difference Between Market & Actuarial Values	$ 11,779,753	$ 43,539,062	$ 27,375,325	$ 22,671,509	$ 10,997,800	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2013	2014	2015	2016	2017	2018
A.	Actuarial Value Beginning of Year	$ 345,573,948	$ 370,774,403				
B.	Market Value End of Year	374,309,576	435,503,976				
C.	Market Value Beginning of Year	333,298,119	374,309,576				
D.	Cash Flow						
	D1. Contributions	26,684,555	24,462,622				
	D2. Benefit Payments	(16,836,455)	(15,404,747)				
	D3. Administrative Expenses	(178,870)	(77,471)				
	D4. Investment Expenses	(1,018,077)	(1,621,522)				
	D5. Net	8,651,153	7,358,882				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	32,360,304	53,835,518				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	27,223,364	30,978,505				
	E4. Amount for Phased-In Recognition	5,136,940	22,857,013				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	1,027,388	4,571,403	0	0	0	0
	F2. First Prior Year	(4,939,727)	1,027,388	4,571,403	0	0	0
	F3. Second Prior Year	4,619,785	(4,939,727)	1,027,388	4,571,403	0	0
	F4. Third Prior Year	5,005,228	4,619,785	(4,939,727)	1,027,388	4,571,403	0
	F5. Fourth Prior Year	(16,386,736)	5,005,228	4,619,785	(4,939,727)	1,027,388	4,571,403
	F6. Total Recognized Investment Gain	(10,674,062)	10,284,077	5,278,849	659,064	5,598,791	4,571,403
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 370,774,403	$ 419,395,867				
H.	Difference Between Market & Actuarial Values	$ 3,535,173	$ 16,108,109	$ 10,829,260	$ 10,170,196	$ 4,571,403	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.50% per annum:

Service	Annual Rates of Merit & Seniority			Increase Next Year	
	Non-Hazardous	Hazardous	Base (Economy)	Non-Hazardous	Hazardous
0-1	12.50%	16.50%	4.50%	17.00%	21.00%
1-2	4.50%	4.50%	4.50%	9.00%	9.00%
2-3	2.00%	2.50%	4.50%	6.50%	7.00%
3-4	1.50%	2.00%	4.50%	6.00%	6.50%
4-5	1.50%	1.50%	4.50%	6.00%	6.00%
5-6	1.50%	1.00%	4.50%	6.00%	5.50%
6-7	1.00%	0.50%	4.50%	5.50%	5.00%
7-8	1.00%	0.50%	4.50%	5.50%	5.00%
8-9	1.00%	0.50%	4.50%	5.50%	5.00%
9-10	0.50%	0.50%	4.50%	5.00%	5.00%
10 & over	0.50%	0.50%	4.50%	5.00%	5.00%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement+	Service Retirement++
		Male	Female			
20	6.00%	0.03%	0.01%	0.04%		
25	5.08	0.03	0.01	0.05		
30	4.26	0.04	0.02	0.06		
35	3.21	0.04	0.02	0.09		
40	3.00	0.05	0.04	0.13		
45	3.00	0.08	0.05	0.22		
50	3.00	0.13	0.07	0.37		
55	3.00	0.22	0.11	0.61	8.0%	
60	3.00	0.40	0.22	0.97	10.0	10.0%
65		0.73	0.43		22.5	25.0
70		1.19	0.69		22.5	25.0
75					100.0	100.0

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 19.0%, 13.0%, 10.0%, 9.0% and 6.5%, respectively.*
\+ *For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.*
++ *For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 25%.*

Hazardous Members

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement		
		Male	Female		Service	Rate+	Rate++
20	4.00%	0.03%	0.01%	0.05%	20	22.0%	
25	4.00	0.03	0.01	0.07	25	35.0	22.0%
30	3.50	0.04	0.02	0.09	30	38.0	35.0
35	3.00	0.04	0.02	0.13	35	60.0	38.0
40	3.00	0.05	0.04	0.20	40		60.0
45	3.00	0.08	0.05	0.33			
50	3.00	0.13	0.07	0.56			
55	3.00	0.22	0.11	0.92			
60	3.00	0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 26.0%, 11.5%, 8.25%, 7.5% and 7.0%, respectively.*
** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*
\+ *For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.*
++ *For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006, and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2015	7.75%	6.00%
2016	6.75%	5.75%
2017	6.25%	5.50%
2018	5.75%	5.25%
2019	5.25%	5.00%
2020 and beyond	5.00%	5.00%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	90%	100%

HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2014				
	Single	Parent Plus	Couple	Family
Total Premiums				
LivingWell CDHP	$733.88	$1,045.20	$1,603.94	$1,785.16
LivingWell PPO	$699.28	$995.94	$1,528.34	$1,701.04
Standard PPO	$656.28	$934.70	$1,434.36	$1,596.42
Standard CDHP	$641.50	$913.66	$1,402.06	$1,560.48

Effective January 1, 2015				
	Single	Parent Plus	Couple	Family
Total Premiums				
LivingWell CDHP	$689.28	$950.62	$1,282.84	$1,432.06
LivingWell PPO	$708.56	$1,007.46	$1,543.58	$1,716.92
Standard PPO	$665.40	$946.88	$1,451.56	$1,615.30
Standard CDHP	$650.92	$913.28	$1,406.14	$1,566.20

MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2015	
Available Plan	**Premium**
Kentucky Retirement System Health Plan - Medical Only	$162.00
Kentucky Retirement System Health Plan - Essential	$77.76
Kentucky Retirement System Health Plan - Premium	$244.25

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For those members who retired between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Members whose participation began on or after 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 5.00% and 4.00% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year.

Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement — 55

Service Requirement — At least one month of hazardous duty service credit

Amount — If a member has at least 60 months of service, the monthly benefit is 2.49% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — 60

Service Requirement — At least 60 months of hazardous duty service credit

Amount — The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement (continued):

Members whose participation began on or after 1/1/2014

Age Requirement	60
Service Requirement	At least 60 months of hazardous duty service credit or 25 or more years of service, with no age requirement
Amount	Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 55 with 60 months of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Non-Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 60 with 10 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

Non-Hazardous Disability (continued):

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Hazardous Disability:

Age Requirement

None

Service Requirement

60 months (waived if in line of duty disability)

Members whose participation began before 8/1/2004

Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Hazardous Disability (continued):

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age — 65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Vesting (continued):

Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Members whose participation began on or after 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Upon termination the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or the member can elect to leave the hypothetical account balance in the System. If the member does not withdraw the account balance, it will continue to earn 4% interest. Upon reaching normal retirement age the member can apply for retirement and receive the account balance as a lump sum payment or annuitize the account balance into a single life annuity.

Pre-Retirement Death Benefit (not in line of duty):

Members whose participation began before 1/1/2014

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Members whose participation began on or after 1/1/2014

Requirement	60 months service
Amount	The maximum of the benefit equal to the benefit the member would have received had the member retired on the day before the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Member Contributions (continued):

Members whose participation began on or after 1/1/2014	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently set at 2.5% and per statute, shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008 and up to 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.
Members whose participation began on or after 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.61 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.91 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.61 per month for each year of earned. These amounts are shown as of the valuation date and are increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2009	2010	2011	2012	2013	2014
			Number			
Beginning of Year	35,307	37,883	37,945	38,597	39,226	40,194
Added	3,465	1,162	1,592	1,707	1,982	2,067
Removed	889	1,100	940	1,078	1,014	1,038
End of Year	37,883	37,945	38,597	39,226	40,194	41,223
			Annual Allowances*			
Beginning of Year	$ 710,505,270	$ 812,559,070	$ 801,881,911	$ 821,197,278	$ 844,880,945	$ 872,139,782
Added	110,700,043	865,483	31,930,847	37,458,130	41,468,079	31,433,028
Removed	8,646,243	11,542,643	12,615,480	13,774,463	14,209,242	15,142,500
End of Year	$ 812,559,070	$ 801,881,911	$ 821,197,278	$ 844,880,945	$ 872,139,782	$ 888,430,310
% Increase in Allowances	14.36%	(1.31)%	2.41%	2.88%	3.23%	1.87%
Average Annual Allowance	$ 21,449	$ 21,133	$ 21,276	$ 21,539	$ 21,698	$ 21,552

** The annual allowances shown for 2013 and 2014 include allowances for hazardous members who are receiving a portion of benefit from the non-hazardous system.*

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2009	2010	2011	2012	2013	2014
			Number			
Beginning of Year	2,404	2,648	2,835	3,064	3,253	3,430
Added	339	282	288	243	229	256
Removed	95	95	59	54	52	66
End of Year	2,648	2,835	3,064	3,253	3,430	3,620
			Annual Allowances			
Beginning of Year	$ 33,588,993	$ 38,695,501	$ 41,114,800	$ 45,609,229	$ 49,231,205	$ 51,122,456
Added	5,443,628	3,315,361	5,012,933	4,213,360	2,390,928	3,761,697
Removed	337,120	896,062	518,504	591,384	499,677	612,435
End of Year	$ 38,695,501	$ 41,114,800	$ 45,609,229	$ 49,231,205	$ 51,122,456	$ 54,271,718
% Increase in Allowances	15.20%	6.25%	10.93%	7.94%	3.84%	6.16%
Average Annual Allowance	$ 14,613	$ 14,503	$ 14,886	$ 15,134	$ 14,905	$ 14,992

Non-Hazardous Retired Lives Summary June 30, 2014

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,552	$ 6,562,811.30	10,296	$ 15,266,400.20	13,848	$ 21,829,211.50
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,956	3,691,617.33	847	1,053,021.59	2,803	4,744,638.92
66-2/3% to Beneficiary	774	2,270,682.34	447	932,418.62	1,221	3,203,100.96
50% to Beneficiary	1,100	2,825,768.00	1,338	2,734,870.43	2,438	5,560,638.43
Pop-up Option	3,751	9,316,621.29	3,263	6,493,081.08	7,014	15,809,702.37
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	907	1,590,748.70	2,043	3,111,640.78	2,950	4,702,389.48
Social Security Option						
Age 62 Basic	418	1,044,817.57	978	1,785,259.83	1,396	2,830,077.40
Age 62 Survivorship	831	1,948,137.65	577	1,095,214.53	1,408	3,043,352.18
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	394	644,031.91	532	833,232.06	926	1,477,263.97
20 Years Certain & Life	395	875,590.10	529	870,935.57	924	1,746,525.67
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	84	135,249.05	303	458,748.61	387	593,997.66
PLSO 24 Month Basic	36	42,772.42	166	208,631.83	202	251,404.25
PLSO 36 Month Basic	160	142,510.31	416	319,576.45	576	462,086.76
PLSO 12 Month Survivor	106	226,387.25	103	177,608.86	209	403,996.11
PLSO 24 Month Survivor	89	137,115.06	78	114,819.45	167	251,934.51
PLSO 36 Month Survivor	240	259,395.44	160	136,318.67	400	395,714.11
Total	14,793	$ 31,714,255.72	22,076	$ 35,591,778.56	36,869	$ 67,306,034.28

Hazardous Retired Lives Summary June 30, 2014

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	390	$ 412,035.18	522	$ 579,779.68	912	$ 991,814.86
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	32	35,980.19	251	305,308.03	283	341,288.22
66-2/3% to Beneficiary	24	27,779.79	94	118,865.88	118	146,645.67
50% to Beneficiary	50	77,799.68	146	218,747.73	196	296,547.41
Pop-up Option	149	190,909.17	759	1,126,765.37	908	1,317,674.54
10 Years Certain	6	6,611.16	38	48,373.30	44	54,984.46
10 Years Certain & Life	65	54,721.40	110	124,920.84	175	179,642.24
Social Security Option						
Age 62 Basic	31	51,080.74	58	118,563.39	89	169,644.13
Age 62 Survivorship	17	23,940.73	142	302,305.86	159	326,246.59
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	15	13,307.43	44	56,325.69	59	69,633.12
20 Years Certain & Life	20	30,411.72	52	70,748.57	72	101,160.29
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	15	12,928.54	12	11,835.61	27	24,764.15
PLSO 24 Month Basic	11	9,071.88	16	16,016.98	27	25,088.86
PLSO 36 Month Basic	25	21,280.54	46	39,101.25	71	60,381.79
PLSO 12 Month Survivor	6	5,150.84	21	27,586.95	27	32,737.79
PLSO 24 Month Survivor	9	11,029.16	19	27,990.82	28	39,019.98
PLSO 36 Month Survivor	15	18,695.05	49	49,400.40	64	68,095.45
Total	880	$ 1,002,733.20	2,379	$ 3,242,636.35	3,259	$ 4,245,369.55

Non-Hazardous Beneficiary Lives Summary June 30, 2014

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	15	$ 9,869.31	23	$ 24,773.89	38	$ 34,643.20
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	332	283,148.14	1,452	1,467,422.69	1,784	1,750,570.83
66-2/3% to Beneficiary	48	54,410.95	311	328,675.41	359	383,086.36
50% to Beneficiary	124	93,939.07	438	300,683.21	562	394,622.28
Pop-up Option	161	265,978.79	525	808,521.28	686	1,074,500.07
10 Years Certain	76	59,416.83	86	66,281.37	162	125,698.20
10 Years Certain & Life	28	28,002.95	33	36,541.69	61	64,544.64
Social Security Option						
Age 62 Basic	3	5,628.35	7	3,680.93	10	9,309.28
Age 62 Survivorship	57	102,325.10	261	446,877.33	318	549,202.43
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	5	2,090.62	5	2,090.62
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	2	1,701.43	9	8,742.08	11	10,443.51
15 Years Certain & Life	19	22,242.37	45	72,540.92	64	94,783.29
20 Years Certain & Life	25	31,560.94	74	125,053.69	99	156,614.63
5 Years Certain	53	44,525.49	44	42,134.21	97	86,659.70
PLSO 12 Month Basic	0	0.00	1	1,791.60	1	1,791.60
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	3,357.39	2	3,357.39
PLSO 12 Month Survivor	7	11,995.07	14	19,608.72	21	31,603.79
PLSO 24 Month Survivor	9	11,795.18	17	14,052.91	26	25,848.09
PLSO 36 Month Survivor	19	19,333.25	45	45,817.28	64	65,150.53
Total	978	$ 1,045,873.22	3,392	$ 3,818,647.22	4,370	$ 4,864,520.44

Hazardous Beneficiary Lives Summary June 30, 2014

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2	$ 1,168.25	4	$ 2,566.69	6	$ 3,734.94
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	14	9,435.66	120	83,547.38	134	92,983.04
66-2/3% to Beneficiary	1	962.29	15	6,106.18	16	7,068.47
50% to Beneficiary	4	2,283.11	24	9,745.06	28	12,028.17
Pop-up Option	18	18,773.58	64	47,581.09	82	66,354.67
10 Years Certain	5	4,622.67	12	10,770.97	17	15,393.64
10 Years Certain & Life	4	2,570.43	3	3,738.48	7	6,308.91
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	1	1,166.60	26	44,001.12	27	45,167.72
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	1	262.55	3	2,151.81	4	2,414.36
15 Years Certain & Life	3	1,422.71	7	3,186.54	10	4,609.25
20 Years Certain & Life	1	619.70	5	2,284.98	6	2,904.68
5 Years Certain	4	2,854.84	2	634.60	6	3,489.44
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	1	125.74	1	125.74
PLSO 12 Month Survivor	0	0.00	3	3,344.12	3	3,344.12
PLSO 24 Month Survivor	1	995.41	3	2,052.16	4	3,047.57
PLSO 36 Month Survivor	3	1,072.35	7	7,226.54	10	8,298.89
Total	62	$ 48,210.15	299	$ 229,063.46	361	$ 277,273.61

Non-Hazardous Members
Retired and Beneficiary Information June 30, 2014
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	47	$ 1,143,341	40	$ 466,079	94	$ 605,781	181	$ 2,215,201
45-49	468	$ 12,506,433	92	$ 1,398,814	46	$ 510,099	606	$ 14,415,346
50-54	1,794	$ 53,698,466	158	$ 2,143,459	124	$ 1,705,277	2,076	$ 57,547,202
55-59	4,278	$ 124,984,030	282	$ 3,998,095	209	$ 2,972,773	4,769	$ 131,954,898
60-64	7,054	$ 182,774,761	373	$ 4,776,818	358	$ 6,178,696	7,785	$ 193,730,275
65-69	8,067	$ 181,378,509	371	$ 4,675,140	496	$ 9,035,023	8,934	$ 195,088,672
70-74	5,467	$ 106,983,861	265	$ 3,341,544	457	$ 7,486,528	6,189	$ 117,811,933
75-79	3,430	$ 59,582,622	191	$ 2,186,137	554	$ 8,126,417	4,175	$ 69,895,176
80-84	2,274	$ 34,110,675	90	$ 933,363	527	$ 7,733,513	2,891	$ 42,777,551
85-89	1,397	$ 18,503,737	32	$ 283,074	547	$ 7,131,074	1,976	$ 25,917,885
90 & Over	689	$ 7,705,920	10	$ 97,533	942	$ 6,889,064	1,641	$ 14,692,517
Totals	34,965	$ 783,372,355	1,904	$ 24,300,056	4,354	$ 58,374,245	41,223	$ 866,046,656

Hazardous Members
Retired and Beneficiary Information June 30, 2014
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	28	$ 534,063	14	$ 179,988	18	$ 70,642	60	$ 784,693
45-49	190	$ 4,136,438	17	$ 159,101	5	$ 71,421	212	$ 4,366,960
50-54	290	$ 5,737,266	23	$ 237,335	12	$ 120,132	325	$ 6,094,733
55-59	495	$ 9,838,790	24	$ 225,048	32	$ 369,718	551	$ 10,433,556
60-64	700	$ 11,496,460	31	$ 268,011	52	$ 636,850	783	$ 12,401,321
65-69	766	$ 10,963,264	19	$ 128,092	49	$ 508,875	834	$ 11,600,231
70-74	358	$ 4,239,239	7	$ 33,113	58	$ 512,428	423	$ 4,784,780
75-79	185	$ 1,773,476	6	$ 28,701	51	$ 483,463	242	$ 2,285,640
80-84	74	$ 597,705	4	$ 9,617	46	$ 258,420	124	$ 865,742
85-89	23	$ 242,224			26	$ 160,892	49	$ 403,116
90 & Over	5	$ 116,504			12	$ 134,442	17	$ 250,946
Totals	3,114	$ 49,675,429	145	$ 1,269,006	361	$ 3,327,283	3,620	$ 54,271,718

Total Non-Hazardous Active Members as of June 30, 2014
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	17								17
Avg Pay	$17,634								$17,634
20-24	899	6							905
Avg Pay	$23,585	$25,848							$23,600
25-29	2,698	489	5						3,192
Avg Pay	$28,394	$31,380	$31,271						$28,856
30-34	2,210	1,944	506	20					4,680
Avg Pay	$31,001	$36,187	$37,888	$40,524					$33,940
35-39	1,540	1,631	1,529	463	15				5,178
Avg Pay	$31,987	$38,100	$41,914	$42,686	$46,682				$37,843
40-44	1,352	1,346	1,438	1,136	444	38	25	8	5,787
Avg Pay	$32,008	$38,757	$43,120	$44,965	$47,322	$52,412	$57,690	$66,604	$40,350
44-49	1,184	1,206	1,117	997	836	277	189	61	5,867
Avg Pay	$31,144	$37,991	$43,435	$47,377	$49,215	$50,389	$56,922	$61,849	$42,283
50-54	1,042	1,188	1,098	851	693	293	320	155	5,640
Avg Pay	$31,883	$37,854	$41,035	$45,893	$47,276	$51,951	$55,775	$62,332	$42,163
55-59	786	1,050	963	801	603	197	224	132	4,756
Avg Pay	$32,376	$38,716	$40,640	$43,624	$47,605	$51,152	$55,562	$60,915	$41,936
60-64	430	690	696	512	363	117	133	99	3,040
Avg Pay	$35,344	$40,499	$40,323	$43,463	$47,818	$50,065	$55,745	$64,908	$42,933
65-69	93	238	236	198	106	34	41	24	970
Avg Pay	$39,570	$44,082	$42,050	$48,736	$52,671	$54,149	$56,645	$64,747	$46,439
70 & over	27	60	87	66	49	13	17	14	333
Avg Pay	$38,792	$35,859	$35,464	$47,953	$49,447	$58,956	$57,905	$66,363	$43,700
Totals	12,278	9,848	7,675	5,044	3,109	969	949	493	40,365
Avg Pay	$30,512	$37,793	$41,590	$45,193	$48,146	$51,303	$56,075	$62,711	$39,081

Total Hazardous Active Members as of June 30, 2014
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	265								265
Avg Pay	$22,560								$22,560
25-29	502	56							558
Avg Pay	$25,771	$31,490							$26,345
30-34	302	253	45	1					601
Avg Pay	$27,221	$32,625	$34,531	$40,422					$30,065
35-39	189	175	139	29					532
Avg Pay	$26,995	$33,942	$37,476	$39,587					$32,705
40-44	162	157	134	137	13	1			604
Avg Pay	$27,446	$34,230	$38,162	$42,448	$43,160	$48,424			$35,363
44-49	119	133	93	83	38	10	1	2	479
Avg Pay	$26,148	$32,253	$35,932	$41,796	$50,502	$51,377	$101,685	$62,693	$35,223
50-54	121	97	79	61	21	15	3	1	398
Avg Pay	$26,684	$32,902	$36,536	$39,911	$51,739	$55,787	$59,084	$103,084	$35,037
55-59	94	83	75	51	18	3	2	4	330
Avg Pay	$27,734	$31,536	$35,765	$40,346	$51,701	$46,724	$37,002	$55,543	$34,338
60-64	38	53	52	35	9	1	1	1	190
Avg Pay	$28,804	$32,095	$37,426	$42,052	$43,663	$47,107	$65,987	$54,529	$35,654
65-69	6	17	17	9	5	1	1		56
Avg Pay	$27,276	$42,163	$33,510	$43,783	$51,438	$63,125	$51,908		$39,578
70 & over	2	2	4	3					11
Avg Pay	$24,758	$28,293	$53,482	$37,002					$39,185
Totals	1,800	1,026	638	409	104	31	8	8	4,024
Avg Pay	$26,078	$33,045	$36,860	$41,423	$49,495	$53,206	$58,855	$63,146	$32,077

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Report on the Annual Valuation of the State Police Retirement System

Prepared as of June 30, 2014

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November 12, 2014

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The date of the valuation was June 30, 2014.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 5.

Since the previous valuation, the cash balance plan (a provision of Senate Bill 2) for members whose participation date is on or after January 1, 2014 has been reflected in this valuation.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
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REPORT ON THE ANNUAL VALUATION OF THE STATE POLICE RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2014

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2014, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	6/30/2014	6/30/2013
Contributions for next fiscal year:		
Retirement	58.44%	53.90%
Insurance	19.17	21.86
Total	77.61%	75.76%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$681,118,402	$651,580,654
Actuarial value of assets	242,741,735	241,800,328
Unfunded liability on actuarial value of assets	438,376,667	409,780,326
Funded ratio on actuarial value of assets	35.64%	37.11%
Market value of assets	$260,763,486	$248,559,040
Unfunded liability on market value of assets	420,354,916	403,021,614
Funded ratio on market value of assets	38.28%	38.15%
Insurance		
Actuarial accrued liability	$234,271,127	$222,326,743
Actuarial value of assets	155,594,760	136,321,060
Unfunded liability on actuarial value of assets	78,676,367	86,005,683
Funded ratio on actuarial value of assets	66.42%	61.32%
Market value of assets	$165,167,805	$142,830,916
Unfunded liability on market value of assets	69,103,322	79,495,827
Funded ratio on market value of assets	70.50%	64.24%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,413	1,346
Number of vested former members	59	60
Number of former members due a refund	349	330
Number of active members	855	902
Total salary	$44,615,885	$45,256,202
Average salary	$52,182	$50,173

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.

3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.

4. There were no changes in benefit provisions since the last valuation. However, the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky, has made the following changes for plan year 2015:

    - The new medical plan administrator is Anthem Blue Cross Blue Shield.
    - The new prescription drug plan administrator is CVS/caremark and changes were made to the prescription drug formulary.
    - Out-of-pocket maximums are now tracked separately for medical and prescription drug coverage. Prescription drug coverage is now capped.
    - The LivingWell PPO plan has lowered co-pays for mental health and allergy injections.

5. The following change has been reflected in this valuation in accordance with Senate Bill 2:

    - The cash balance plan for members whose participation date is on or after January 1, 2014 has been reflected in this valuation.

6. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2014 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

		Group Averages		
Number	Payroll	Salary	Age	Service
855	$44,615,885	$52,182	37.8	10.9

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2009	946	$51,660,396	$54,609	1.8%
6/30/2010	961	51,506,712	53,597	(1.9)
6/30/2011	965	48,692,616	50,459	(5.9)
6/30/2012	907	48,372,506	53,332	5.7
6/30/2013	902	45,256,202	50,173	(5.9)
6/30/2014	855	44,615,885	52,182	4.0

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

			Group Averages	
Type of Benefit Payment	Number	Annual Benefits	Benefit	Age
Retiree	1,189	$47,952,621	$40,330	61.8
Disability	52	$937,598	18,031	56.8
Beneficiary	172	4,542,227	26,408	65.3
Total in SPRS	1,413	$53,432,446	$37,815	62.0

This valuation also includes 408 inactive members of which 59 are vested.

SECTION III - ASSETS

1. As of June 30, 2014 the total market value of assets amounted to $425,931,291 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

Retirement	Insurance	SPRS Total
$260,763,486	$165,167,805	$425,931,291

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $398,336,495. Schedule B shows the development of the actuarial value of assets as of June 30, 2014. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2014	JUNE 30, 2013
Retirement	$ 242,741,735	$ 241,800,328
Insurance	155,594,760	136,321,060
Total	$ 398,336,495	$ 378,121,388

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2014. Separate balance sheets are shown for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $744,550,068, of which $559,105,744 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $3,905,282 is for the prospective benefits payable on account of inactive members, $181,539,042 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $242,741,735 as of June 30, 2014. The difference of $501,808,333 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $32,424,439 is the present value of future contributions expected to be made by members, and the balance of $469,383,894 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 7.91% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $31,007,228. When this amount is subtracted from $469,383,894, which is the present value of the total future contributions to be made by the State, there remains $438,376,666 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 50.05% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $438,376,667 over 29 years on the assumption that the aggregate payroll for members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.48% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $268,188,808, of which $139,228,358 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $4,173,768 is for the prospective benefits payable on account of inactive members, and $124,786,682 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $155,594,760 as of June 30, 2014. The difference of $112,594,048 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $1,054,241 is the present value of future contributions expected to be made by members, and the balance of $111,539,807 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 10.00% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $32,863,440. When this amount is subtracted from $111,539,807, which is the present value of the total future contributions to be made by the employers, there remains $78,676,367 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 9.04% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $78,676,367 over 29 years on the assumption that the aggregate payroll for members will increase by 4.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.13% of payroll.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2014 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

			Amount
(1)	UAAL* as of 6/30/13	$	409.8
(2)	Normal cost from last valuation		7.4
(3)	Contributions		25.3
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875		31.4
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	423.3
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	423.3
(9)	Actual UAAL as of 6/30/14	$	438.4
(10)	Gain/(loss): (8) - (9)	$	(15.1)
(11)	Accrued liabilities as of 6/30/13	$	651.6
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(2.3)%

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

			Amount
(1)	UAAL* as of 6/30/13	$	86.0
(2)	Normal cost from last valuation		5.4
(3)	Expected employer contributions		9.7
(4)	Interest accrual: [(1) + (2) - (3)] x .0775		6.3
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	88.0
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$	88.0
(9)	Actual UAAL as of 6/30/14	$	78.7
(10)	Gain/(loss): (8) - (9)	$	9.3
(11)	Accrued liabilities as of 6/30/13	$	222.3
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		4.2%

* *Unfunded actuarial accrued liability*

SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/14	Insurance $ Gain (or Loss) For Year Ending 6/30/14
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (26.3)	$ (10.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.2)	0.2
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(0.7)	(0.7)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	4.4	5.3
New Members. Additional unfunded accrued liability will produce a loss.	(0.1)	0.0
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	11.5	6.8
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	(1.0)	13.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(2.7)	(4.9)
Gain (or Loss) During Year From Financial Experience	$ (15.1)	$ 9.3
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (15.1)	$ 9.3

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation. This rate is for informational purposes only.

Required Contribution Rates
Retirement

Contribution for		Amount	% of Payroll
A. Normal Cost:			
(1) Service retirement benefits	$	6,746,989	15.03%
(2) Disability benefits		315,258	0.70
(3) Survivor benefits		79,688	0.18
(4) Total	$	7,141,935	15.91%
B. Member Contributions	$	3,569,271	8.00%
C. Employer Normal Cost: [A(4) - B]	$	3,572,664	7.91%
D. Administrative Expenses	$	214,156	0.48%
E. Unfunded Actuarial Accrued Liability Contributions*:			
(1) UAAL Contribution Based on 6/30/13 Valuation:	$	20,565,583	45.44%
(2) Change due to:			
a. Active decrements	$	206,988	0.46%
b. Pay increases		(224,383)	(0.50)
c. Retiree mortality		49,951	0.11
d. Investment return		530,495	1.19
e. COLA		0	0.00
f. Assumption Change		0	0.00
g. Other		1,335,940	3.35
h. Total Change	$	1,898,991	4.61%
(3) UAAL Contribution Based on 6/30/14 Valuation: [E(1) +E(2)h]	$	22,464,574	50.05%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	**$**	26,251,394	58.44%

** Based on 29 year amortization of the UAAL from June 30, 2014*

Required Contribution Rates
Insurance

	Contribution for		Amount	% of Payroll
A.	Normal Cost	$	4,530,360	10.15%
B.	Member Contributions*	$	66,924	0.15%
C.	Employer Normal Cost: [A - B]	$	4,463,436	10.00%
D.	Administrative Expenses	$	57,433	0.13%
E.	Unfunded Actuarial Accrued Liability**	$	4,031,764	9.04%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	$	8,552,633	19.17%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 29 year amortization of the UAAL from June 30, 2014*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2014

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,413
Terminated employees entitled to benefits but not yet receiving benefits	408
Active Members	855
Total	2,676

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2009	$ 329,966,989	$ 602,328,868	$ 272,361,879	54.8%	$ 51,660,396	527.2%
6/30/2010	304,577,292	612,444,806	307,867,514	49.7	51,506,712	597.7
6/30/2011	285,580,631	634,379,401	348,798,770	45.0	48,692,616	716.3
6/30/2012	259,791,575	647,688,665	387,897,090	40.1	48,372,506	801.9
6/30/2013	241,800,328	651,580,654	409,780,326	37.1	45,256,202	905.5
6/30/2014	242,741,735	681,118,402	438,376,667	35.6	44,615,885	982.6

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2009	$ 123,526,647	$ 364,031,141	$ 240,504,494	33.9%	$ 51,660,396	465.5%
6/30/2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2
6/30/2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4
6/30/2012	124,372,072	333,903,782	209,531,710	37.2	48,372,506	433.2
6/30/2013*	136,321,060	222,326,743	86,005,683	61.3	45,256,202	190.0
6/30/2014	155,594,760	234,271,127	78,676,367	66.4	44,615,885	176.3

** Discount rate changed from 4.50% to 7.75%*

RETIREMENT BENEFITS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contributions	Percentage Contributed
June 30, 2009	$15,951,841	$ 8,186,259	51.3%
June 30, 2010	18,764,941	9,489,399	50.6
June 30, 2011	18,463,372	12,657,225	68.6
June 30, 2012	20,497,924	15,361,781	74.9
June 30, 2013	23,117,291	18,501,090	80.0
June 30, 2014	25,808,492	20,279,448	78.6

INSURANCE BENEFITS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
June 30, 2009	$29,324,666	$229,240	$7,413,552	$7,642,792	26.1%
June 30, 2010	30,302,151	273,684	8,369,428	8,643,112	28.5
June 30, 2011	25,772,574	0	11,050,964	11,050,964	42.9
June 30, 2012	28,246,786	0	11,960,468	11,960,468	42.3
June 30, 2013	27,234,229	0	16,828,681	16,828,681	61.8
June 30, 2014	20,879,022	0	14,493,242	14,493,242	69.4

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2014. Additional information as of the latest actuarial valuation follows.

Retirement Benefits	
Valuation date	6/30/2014
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	29 years
Asset valuation method	5 Year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases**	4.5% - 17.0%
Cost-of-living adjustment	None
*Includes price inflation at	3.50%
**Includes wage inflation at	4.50%

Insurance Benefits	
Valuation date	6/30/2014
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	29 years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	7.75% - 5.00%
Medical Trend Assumption (Post-Medicare)	6.00% - 5.00%
Year of Ulitimate Trend	2020
Actuarial assumptions:	
Investment rate of return*	7.75%
*Includes price inflation at	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2014 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2013. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM

RETIREMENT BENEFITS

	JUNE 30, 2014	JUNE 30, 2013
ASSETS		
Current actuarial value of assets	$ 242,741,735	$ 241,800,328
Prospective contributions		
Member contributions	$ 32,424,439	$ 33,277,558
Employer normal contributions	31,007,228	32,444,397
Unfunded accrued liability contributions	438,376,667	409,780,326
Total prospective contributions	$ 501,808,334	$ 475,502,281
Total assets	$ 744,550,069	$ 717,302,609
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 559,105,744	$ 532,387,170
Present value of benefits payable on account of active members	181,539,042	181,582,414
Present value of benefits payable on account of inactive members	3,905,282	3,333,025
Total liabilities	$ 744,550,068	$ 717,302,609

VALUATION BALANCE SHEET
INSURANCE BENEFITS

	JUNE 30, 2014	JUNE 30, 2013
ASSETS		
Current actuarial value of assets	$ 155,594,760	$ 136,321,060
Prospective contributions		
Member contributions	$ 1,054,241	$ 845,028
Employer normal contributions	32,863,440	42,260,569
Unfunded accrued liability contributions	78,676,367	86,005,683
Total prospective contributions	$ 112,594,048	$ 129,111,280
Total assets	$ 268,188,808	$ 265,432,340
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 139,228,358	$ 136,470,662
Present value of benefits payable on account of active members	124,786,682	125,923,750
Present value of benefits payable on account of inactive members	4,173,768	3,037,928
Total liabilities	$ 268,188,808	$ 265,432,340

The following tables provide the solvency test for SPRS members.

Solvency Test
Retirement Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2009	$ 41,664,469	$ 459,585,353	$ 101,079,046	$ 329,966,989	100.0%	62.7%	0.0%
6/30/2010	42,011,523	475,892,659	94,540,624	304,577,292	100.0	55.2	0.0
6/30/2011	43,574,097	499,194,229	91,611,075	285,580,631	100.0	48.5	0.0
6/30/2012	41,139,306	523,016,647	83,532,712	259,791,575	100.0	41.8	0.0
6/30/2013	39,788,421	535,720,195	76,072,038	241,800,328	100.0	37.7	0.0
6/30/2014	41,831,465	563,011,026	76,275,911	242,741,735	100.0	35.7	0.0

Solvency Test
Insurance Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2009	$ 0	$ 167,091,453	$ 196,939,688	$ 123,526,647	100.0%	73.9%	0.0%
6/30/2010	0	253,580,827	181,379,668	121,175,083	100.0	47.8	0.0
6/30/2011	0	252,439,726	185,988,037	123,687,289	100.0	49.0	0.0
6/30/2012	0	190,258,729	143,645,053	124,372,072	100.0	65.4	0.0
6/30/2013	0	139,508,590	82,818,153	136,321,060	100.0	97.7	0.0
6/30/2014	0	143,402,126	90,869,001	155,594,760	100.0	100.0	13.4

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits

	Valuation date June 30:	2013	2014	2015	2016	2017	2018
A.	Actuarial Value Beginning of Year	$ 259,791,575	$ 241,800,328				
B.	Market Value End of Year	248,559,040	260,763,486				
C.	Market Value Beginning of Year	252,896,868	248,559,040				
D.	Cash Flow						
	D1. Contributions	22,994,693	25,284,602				
	D2. Benefit Payments	(50,589,396)	(53,239,125)				
	D3. Administrative Expenses	(183,930)	(214,953)				
	D4. Investment Expenses	(998,995)	(1,020,182)				
	D5. Net	(28,777,628)	(29,189,658)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	24,439,800	41,394,104				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	19,522,080	19,191,940				
	E4. Amount for Phased-In Recognition	4,917,720	22,202,164				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	983,544	4,440,433	0	0	0	0
	F2. First Prior Year	(3,810,203)	983,544	4,440,433	0	0	0
	F3. Second Prior Year	4,929,792	(3,810,203)	983,544	4,440,433	0	0
	F4. Third Prior Year	4,395,559	4,929,792	(3,810,203)	983,544	4,440,433	0
	F5. Fourth Prior Year	(15,234,391)	4,395,559	4,929,792	(3,810,203)	983,544	4,440,433
	F6. Total Recognized Investment Gain	(8,735,699)	10,939,125	6,543,566	1,613,774	5,423,977	4,440,433
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 241,800,328	$ 242,741,735				
H.	Difference Between Market & Actuarial Values	$ 6,758,712	$ 18,021,751	$ 11,478,185	$ 9,864,411	$ 4,440,433	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits

	Valuation date June 30:	2013	2014	2015	2016	2017	2018
A.	Actuarial Value Beginning of Year	$ 124,372,072	$ 136,321,060				
B.	Market Value End of Year	142,830,916	165,167,805				
C.	Market Value Beginning of Year	125,567,846	142,830,916				
D.	Cash Flow						
	D1. Contributions	17,076,979	14,574,060				
	D2. Benefit Payments	(12,545,291)	(12,687,531)				
	D3. Administrative Expenses	(183,991)	(57,433)				
	D4. Investment Expenses	(423,944)	(647,239)				
	D5. Net	3,923,753	1,181,857				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	13,339,317	21,155,032				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	10,323,925	11,787,512				
	E4. Amount for Phased-In Recognition	3,015,392	9,367,520				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	603,078	1,873,504	0	0	0	0
	F2. First Prior Year	(1,774,183)	603,078	1,873,504	0	0	0
	F3. Second Prior Year	3,818,155	(1,774,183)	603,078	1,873,504	0	0
	F4. Third Prior Year	1,783,777	3,818,155	(1,774,183)	603,078	1,873,504	0
	F5. Fourth Prior Year	(6,729,517)	1,783,777	3,818,155	(1,774,183)	603,078	1,873,504
	F6. Total Recognized Investment Gain	(2,298,690)	6,304,331	4,520,554	702,399	2,476,582	1,873,504
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 136,321,060	$ 155,594,760				
H.	Difference Between Market & Actuarial Values	$ 6,509,856	$ 9,573,045	$ 5,052,491	$ 4,350,092	$ 1,873,504	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of June 30, 2008, submitted August 14, 2009, and adopted by the Board on August 20, 2009.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for members are as follows and include inflation at 4.50% per annum:

	Annual Rates of		
Service	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	12.50%	4.50%	17.00%
1-2	7.50%	4.50%	12.00%
2-3	5.50%	4.50%	10.00%
3-4	4.50%	4.50%	9.00%
4-5	3.50%	4.50%	8.00%
5-6	2.50%	4.50%	7.00%
6-7	1.50%	4.50%	6.00%
7-8	2.00%	4.50%	6.50%
8-9	1.00%	4.50%	5.50%
9-10	0.50%	4.50%	5.00%
10 & over	0.00%	4.50%	4.50%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

		Death**			Service Retirement		
Age	Withdrawal and Vesting*	Male	Female	Disability	Service	Rate+	Rate++
20	2.50%	0.03%	0.01%	0.05%	20	9.00%	
25	2.50	0.03	0.01	0.07	25	22.00	9.00%
30	2.50	0.04	0.02	0.09	30	25.00	22.00
35	2.50	0.04	0.02	0.13	35	33.33	25.00
40	2.50	0.05	0.04	0.20	40		33.33
45	2.50	0.08	0.05	0.33			
50	2.50	0.13	0.07	0.56			
55		0.22	0.11	0.92			
60		0.40	0.22	1.46			

* *Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 20.0%, 7.5%, 3.0%, 3.0% and 3.0%, respectively.*

** *75% are presumed to be non-duty related, and 25% are assumed to be duty related.*

\+ *For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.*

++ *For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement. There is little margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2015	7.75%	6.00%
2016	6.75%	5.75%
2017	6.25%	5.50%
2018	5.75%	5.25%
2019	5.25%	5.00%
2020 and beyond	5.00%	5.00%

HEALTH CARE AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and over	0.0

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of member participation and spouse coverage are as follows:

Participation	100%
Spouse Coverage	100%

HEALTH CARE MONTHLY RATES: Following are charts detailing expected monthly rates for pre-Medicare eligible and post-Medicare eligible retirees for the year following the valuation date.

MEDICAL INSURANCE RATES
PRE-MEDICARE ELIGIBLE

Effective January 1, 2014				
	Single	Parent Plus	Couple	Family
Total Premiums				
LivingWell CDHP	$733.88	$1,045.20	$1,603.94	$1,785.16
LivingWell PPO	$699.28	$995.94	$1,528.34	$1,701.04
Standard PPO	$656.28	$934.70	$1,434.36	$1,596.42
Standard CDHP	$641.50	$913.66	$1,402.06	$1,560.48

Effective January 1, 2015				
	Single	Parent Plus	Couple	Family
Total Premiums				
LivingWell CDHP	$689.28	$950.62	$1,282.84	$1,432.06
LivingWell PPO	$708.56	$1,007.46	$1,543.58	$1,716.92
Standard PPO	$665.40	$946.88	$1,451.56	$1,615.30
Standard CDHP	$650.92	$913.28	$1,406.14	$1,566.20

MEDICAL INSURANCE RATES
MEDICARE ELIGIBLE

Effective January 1, 2015	
Available Plan	**Premium**
Kentucky Retirement System Health Plan - Medical Only	$162.00
Kentucky Retirement System Health Plan - Essential	$77.76
Kentucky Retirement System Health Plan - Premium	$244.25

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement 55

Service Requirement At least one month of hazardous duty service credit

Amount If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement 60

Service Requirement At least 60 months of hazardous duty service credit

Amount The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Normal Retirement (continued):

Members whose participation began on or after 1/1/2014

Age Requirement	60
Service Requirement	At least 60 months of hazardous duty service credit or 25 or more years of service, with no age requirement
Amount	Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday. The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance. A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.
Members whose participation began on or after 8/1/2004 but before 1/1/2014	Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay.
Members whose participation began on or after 1/1/2014	The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Members whose participation began on or after 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Upon termination the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or the member can elect to leave the hypothetical account balance in the System. If the member does not withdraw the account balance, it will continue to earn 4% interest. Upon reaching normal retirement age the member can apply for retirement and receive the account balance as a lump sum payment or annuitize the account balance into a single life annuity.

Pre-Retirement Death Benefit (not in line of duty):

Members whose participation began before 1/1/2014

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Members whose participation began on or after 1/1/2014

Requirement	60 months service
Amount	The maximum of the benefit equal to the benefit the member would have received had the member retired on the day before the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently set at 2.5% and per statute, shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008 and up to 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.
Members whose participation began on or after 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $18.91 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.61 per month for each year of earned. These amounts are shown as of the valuation date and will be increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $15 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $10 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2009	2010	2011	2012	2013	2014
			Number			
Beginning of Year	1,135	1,184	1,223	1,263	1,299	1,346
Added	75	54	52	52	63	95
Removed	26	15	12	16	16	28
End of Year	1,184	1,223	1,263	1,299	1,346	1,413
			Annual Allowances			
Beginning of Year	$ 41,293,017	$ 44,273,937	$ 45,515,797	$ 47,467,404	$ 49,887,093	$ 50,905,789
Added	3,380,331	1,543,665	2,341,589	3,026,513	1,471,331	3,360,043
Removed	399,410	301,805	389,982	606,825	452,635	833,386
End of Year	$ 44,273,937	$ 45,515,797	$ 47,467,404	$ 49,887,093	$ 50,905,789	$ 53,432,446
% Increase in Allowances	7.22%	2.80%	4.29%	5.10%	2.04%	4.96%
Average Annual Allowance	$ 37,394	$ 37,217	$ 37,583	$ 38,404	$ 37,820	$ 37,815

Retired Lives Summary June 30, 2014

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	129	$ 400,493.98	11	$ 30,351.29	140	$ 430,845.27
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	129	415,733.20	1	4,813.66	130	420,546.86
66-2/3% to Beneficiary	82	313,461.27	2	7,515.61	84	320,976.88
50% to Beneficiary	87	319,046.51	1	2,604.67	88	321,651.18
Pop-up Option	519	1,863,097.03	5	14,961.79	524	1,878,058.82
10 Years Certain	1	4,863.68	0	0.00	1	4,863.68
10 Years Certain & Life	35	109,456.34	2	5,033.86	37	114,490.20
Social Security Option						
Age 62 Basic	31	84,923.54	0	0.00	31	84,923.54
Age 62 Survivorship	128	279,200.44	1	7,930.47	129	287,130.91
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	18	48,359.23	1	3,918.67	19	52,277.90
20 Years Certain & Life	35	110,326.50	2	3,978.81	37	114,305.31
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	466.41	2	466.41
PLSO 12 Month Survivor	6	20,781.22	0	0.00	6	20,781.22
PLSO 24 Month Survivor	4	5,952.60	0	0.00	4	5,952.60
PLSO 36 Month Survivor	9	16,914.11	0	0.00	9	16,914.11
Total	1,213	$ 3,992,609.65	28	$ 81,575.24	1,241	$ 4,074,184.89

Beneficiary Lives Summary June 30, 2014

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2	$ 2,133.54	3	$ 2,208.08	5	$ 4,341.62
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	7	6,090.54	55	148,287.63	62	154,378.17
66-2/3% to Beneficiary	2	1,206.05	9	16,826.45	11	18,032.50
50% to Beneficiary	1	1,083.53	13	18,707.03	14	19,790.56
Pop-up Option	2	865.09	30	83,676.27	32	84,541.36
10 Years Certain	1	591.51	0	0.00	1	591.51
10 Years Certain & Life	1	389.49	0	0.00	1	389.49
Social Security Option						
Age 62 Basic	0	0.00	2	2,281.46	2	2,281.46
Age 62 Survivorship	1	918.93	37	71,702.79	38	72,621.72
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	0	0.00	0	0.00	0	0.00
20 Years Certain & Life	2	7,707.15	3	6,381.72	5	14,088.87
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	1	7,461.68	1	7,461.68
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	19	$ 20,985.83	153	$ 357,533.11	172	$ 378,518.94

Retired and Beneficiary Information June 30, 2014
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	29	$ 1,084,515	11	$ 185,613	13	$ 67,486	53	$ 1,337,614
45-49	123	4,903,733	5	106,017	3	41,361	131	5,051,111
50-54	168	6,997,776	6	83,619	5	63,684	179	7,145,079
55-59	137	5,876,871	8	141,083	12	182,617	157	6,200,571
60-64	251	10,548,374	7	100,500	23	571,550	281	11,220,424
65-69	254	9,957,930	9	211,085	29	841,154	292	11,010,169
70-74	108	3,850,864	1	1,145	21	585,744	130	4,437,753
75-79	63	2,270,223	4	102,756	14	499,576	81	2,872,555
80-84	38	1,660,746	1	5,780	25	838,938	64	2,505,464
85-89	13	549,409	0	0	15	491,122	28	1,040,531
90 & Over	5	252,180	0	0	12	358,995	17	611,175
Totals	1,189	$ 47,952,621	52	$ 937,598	172	$ 4,542,227	1,413	$ 53,432,446

Total Active Members as of June 30, 2014
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	7								7
Avg Pay	$38,563								$38,563
25-29	108	14							122
Avg Pay	$43,665	$47,105							$44,059
30-34	58	77	23						158
Avg Pay	$43,540	$48,133	$52,372						$47,064
35-39	26	48	112	18					204
Avg Pay	$44,352	$48,871	$53,229	$55,871					$51,305
40-44	10	21	64	95	34	4			228
Avg Pay	$46,139	$48,338	$52,030	$61,129	$60,727	$70,033			$56,835
44-49	4	12	20	24	23	7	2		92
Avg Pay	$46,336	$48,090	$51,651	$60,202	$67,168	$59,269	$88,216		$58,440
50-54		5	6	10	6	1	2	1	31
Avg Pay		$49,288	$48,863	$59,880	$61,198	$78,898	$82,096	$85,556	$59,169
55-59		2	1	1		1	1	5	11
Avg Pay		$49,261	$48,303	$66,781		$59,397	$75,919	$77,343	$66,876
60-64								1	1
Avg Pay								$78,136	$78,136
65-69								1	1
Avg Pay								$85,352	$85,352
70 & over									
Avg Pay									
Totals	213	179	226	148	63	13	5	8	855
Avg Pay	$43,713	$48,317	$52,525	$60,293	$63,123	$64,101	$83,309	$79,470	$52,182

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November 10, 2015

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fifty-ninth annual actuarial valuation of the Kentucky Employees Retirement System (KERS), the fifty-sixth annual actuarial valuation of the County Employees Retirement System (CERS), and the fifty-seventh annual actuarial valuation of the State Police Retirement System (SPRS) have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rates. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. The June 30, 2015 actuarial valuation will be used by the Board of Trustees to certify the CERS employer contribution rates for the fiscal year beginning July 1, 2016 and ending June 30, 2017. The June 30, 2015 actuarial valuation will be used by the Board of Trustees to certify the KERS and SPRS employer contribution rates for the fiscal years beginning July 1, 2016 and ending June 30, 2018.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by SB2, the amortization period was reestablished as a closed 30-year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the UAL will be amortized over a 30-year period beginning June 30, 2013. The amortization period will decrease by one each year going forward.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain relatively stable as a percentage of payroll over future years.

KERS, CERS and SPRS have three benefit tiers. Members hired prior to or on August 31, 2008 are in Tier 1. HB1 passed into law in 2008 which introduced Tier 2 for members hired after August 31, 2008 and prior to January 1, 2014. Tier 2 reduced the contribution rates in relationship to Tier 1. SB2 was passed into law in 2013 which introduced Tier 3 for those hired on or after January 1, 2014. Tier 3 is a Cash Balance Plan for pension benefits. The cash balance plan limits the employers' exposure to increased contribution rates due to less than anticipated investment experience.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, relative to both the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, assumption changes and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, prior employer contribution rate reductions enacted by the State Legislature severely limited the plans ability to correct the declining funding levels. SB2 requires the state to contribute the full actuarially determined employer contribution rates compared to the HB1 phase-in rates which would not have required the full actuarially determined employer contribution rate for many years. As of June 30, 2015 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	19.0%
KERS Hazardous Pension Fund	62.2%
CERS Non-Hazardous Pension Fund	60.3%
CERS Hazardous Pension Fund	58.0%
SPRS Pension Fund	33.8%

The Board's funding objective for the insurance funds is to increase the funded level consistently over time. As of June 30, 2015 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	28.8%
KERS Hazardous Insurance Fund	120.4%
CERS Non-Hazardous Insurance Fund	68.7%
CERS Hazardous Insurance Fund	72.3%
SPRS Insurance Fund	65.8%

Data

In completing the valuation of these systems, we have relied on data and financial information provided by the Kentucky Retirement Systems. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. At least once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on December 4, 2014 and based on the experience investigation report dated April 30, 2014, meet the parameters set for disclosure under GASB Statement 43. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is scheduled to be completed in early 2019 and any adjustments are expected to be reflected in the June 30, 2019 actuarial valuation.

Closing

The long-term financial health of the three retirement Systems, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. The System has recently been strengthened due to two reasons. They are: recent legislative action that provides 100% funding of the actuarially determined contribution and the elimination of unfunded ad hoc cost-of-living adjustments for retirees. The cost for providing cost-of-living adjustments for retires must be prefunded in advance.

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

The funding of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System has been determined based on the requirements of the Kentucky Revised Statutes and the current funding policies of the Board on the basis that all the actuarial assumptions are met. The funding rates established by the Board are appropriate for this purpose. However, it is up to the state legislature to follow through with the required funding. As noted above, SB2 calls for KERS and SPRS contributions at the actuarially determined rates beginning with fiscal year 2014-2015. It should also be noted that the Retirement Fund of the KERS Non-Hazardous Retirement System and the SPRS Pension Fund are both in critical condition.

Sincerely,

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Summary of June 30, 2015 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2016-2017)					
Pension Fund Contribution	38.93%	21.08%	13.95%	21.71%	66.47%
Insurance Fund Contribution	8.35	2.74	4.93	9.79	18.87
Recommended Employer Contribution	47.28%	23.82%	18.88%	31.50%	85.34%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$12,359,672,849	$895,433,387	$10,740,325,421	$3,613,307,547	$734,156,446
Actuarial Value of Assets	2,350,989,940	556,687,757	6,474,848,513	2,096,782,956	248,387,946
Unfunded Actuarial Liability on Actuarial Value of Assets	10,008,682,909	338,745,630	4,265,476,908	1,516,524,591	485,768,500
Funding Level as a % of Actuarial Value of Assets	19.02%	62.17%	60.29%	58.03%	33.83%
Market Value of Assets	2,307,858,072	550,120,310	6,416,853,506	2,073,397,045	246,968,144
Unfunded Actuarial Liability on Market Value of Assets	10,051,814,777	345,313,077	4,323,471,915	1,539,910,502	487,188,302
Funding Level on Market Value of Assets	18.67%	61.44%	59.75%	57.38%	33.64%
Insurance Fund					
Actuarially Accrued Liability	$2,413,705,252	$374,904,234	$2,907,827,440	$1,504,015,233	$254,838,710
Actuarial Value of Assets	695,018,262	451,514,191	1,997,456,463	1,087,707,118	167,774,940
Unfunded Actuarial Liability on Actuarial Value of Assets	1,718,686,990	(76,609,957)	910,370,977	416,308,115	87,063,770
Funding Level as a % of Actuarial Value of Assets	28.79%	120.43%	68.69%	72.32%	65.84%
Market Value of Assets	687,684,080	441,626,285	1,948,454,097	1,061,560,788	165,018,209
Unfunded Actuarial Liability on Market Value of Assets	1,726,021,172	(66,722,051)	959,373,343	442,454,445	89,820,501
Funding Level on Market Value of Assets	28.49%	117.80%	67.01%	70.58%	64.75%
Member Data					
Number of Active Members	39,056	3,886	80,852	9,172	937
Total Annual Payroll (Active Members)	$1,544,234,409	$128,680,130	$2,296,715,957	$483,640,601	$45,764,515
Average Annual Pay (Active Members)	$39,539	$33,114	$28,406	$52,730	$48,842
Number of Retired Members & Beneficiaries	42,269	3,758	52,651	8,034	1,460
Average Annual Retirement Allowance	$20,904	$15,016	$11,306	$25,162	$37,624
Number of Vested Inactive Members	9,806	460	13,649	708	63

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November 10, 2015

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal years beginning July 1, 2016 and July 1, 2017. The date of the valuation was June 30, 2015.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

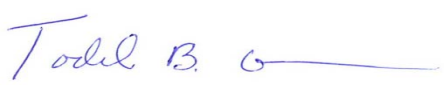
Since the previous valuation, the revised assumptions from the economic and demographic experience investigation covering the five-year period from July 1, 2008 to June 30, 2013 have been reflected in this valuation.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,



Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

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Principal and Consulting Actuary

TBG/AB:kc

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REPORT ON THE ANNUAL VALUATION OF THE KENTUCKY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2015

SECTION I – SUMMARY OF PRINCIPAL RESULTS

This report, prepared as of June 30, 2015, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/2015	6/30/2014	6/30/2015	6/30/2014	6/30/2015	6/30/2014
Contributions for next fiscal year:						
Retirement	38.93%	33.57%	21.08%	17.09%		
Insurance	8.35	7.74	2.74	7.12	N/A	N/A
Total	47.28%	41.31%	23.82%	24.21%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$12,359,672,849	$11,550,110,224	$895,433,387	$816,850,063	$13,255,106,236	$12,366,960,287
Actuarial value of assets	2,350,989,940	2,423,956,716	556,687,757	527,897,261	2,907,677,697	2,951,853,977
Unfunded liability on actuarial value of assets	10,008,682,909	9,126,153,508	338,745,630	288,952,802	10,347,428,539	9,415,106,310
Funded ratio on actuarial value of assets	19.02%	20.99%	62.17%	64.63%	21.94%	23.87%
Market value of assets	$2,307,858,072	$2,560,419,519	$550,120,310	$559,504,340	$2,857,978,382	$3,119,923,859
Unfunded liability on market value of assets	10,051,814,777	8,989,690,705	345,313,077	257,345,723	10,397,127,854	9,247,036,428
Funded ratio on market value of assets	18.67%	22.17%	61.44%	68.50%	21.56%	25.23%
Insurance						
Actuarial accrued liability	$2,413,705,252	$2,226,759,925	$374,904,234	$396,986,820	$2,788,609,486	$2,623,746,745
Actuarial value of assets	695,018,262	621,236,646	451,514,191	419,395,867	1,146,532,453	1,040,632,513
Unfunded liability on actuarial value of assets	1,718,686,990	1,605,523,279	(76,609,957)	(22,409,047)	1,642,077,033	1,583,114,232
Funded ratio on actuarial value of assets	28.79%	27.90%	120.43%	105.64%	41.11%	39.66%
Market value of assets	$687,684,080	$664,775,708	$441,626,285	$435,503,976	$1,129,310,365	$1,100,279,684
Unfunded liability on market value of assets	1,726,021,172	1,561,984,217	(66,722,051)	(38,517,156)	1,659,299,121	1,523,467,061
Funded ratio on market value of assets	28.49%	29.85%	117.80%	109.70%	40.50%	41.94%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	42,269	41,223	3,758	3,620	46,027	44,843
Number of vested former members	9,806	7,891	460	365	10,266	8,256
Number of former members due a refund	38,454	38,748	4,094	3,643	42,548	42,391
Number of active members	39,056	40,365	3,886	4,024	42,942	44,389
Total salary	$1,544,234,409	$1,577,496,447	$128,680,130	$129,076,038	$1,672,914,539	$1,706,572,485
Average salary	$39,539	$39,081	$33,114	$32,077	$38,958	$38,446

The Kentucky Employees Retirement System is a defined benefit pension fund that provides pensions and health care coverage for employees of state government, non-teaching staff at regional state supported universities, local health departments, regional mental health/mental retardation agencies, and other quasi-state agencies. The Kentucky Employees Retirement System includes both non-hazardous and hazardous duty benefits. This report presents the results of the June 30, 2015 actuarial funding valuation for both the Retirement Plan and the Insurance Fund. The primary purpose of performing the actuarial funding valuations are to:

- Calculate the actuarially determined contribution rates for the fiscal years beginning July 1, 2016 and July 1, 2017 for both the Retirement Plan and the Insurance Fund.
- Determine the experience of the System since the last valuation date.
- Disclose asset and liability measures as of the valuation date.
- Analyze and report on trends in contributions, assets, and liabilities over the past several years.

Since the previous valuation there were no changes to the plan provisions, however the actuarial methods and assumptions were updated to reflect an experience study performed over the five-year period ending June 30, 2013 dated April 30, 2014. This experience study was adopted by the Board on December 4, 2014. The experience study reviewed the actuarial assumptions and methods used in the actuarial valuation process of both the Retirement Plan and Insurance Fund. For the Retirement Plan the assumptions fall into three categories. The first are economic assumptions which include price inflation, wage inflation and investment return. The second category includes demographic assumptions which includes assumed rates of mortality, service retirement, disability retirement, withdrawal and salary increases for merits and promotions. For the Insurance Fund the assumptions fall into three categories. The first two, economic assumptions and demographic assumptions are the same as those used for the Retirement Plan. The third category includes other post-employment benefit assumptions.

As a result of the experience the following assumptions were updated:

Summary of Assumptions Changes	
Economic Assumptions	
Salary	Composed of Inflation component, Real Rate of Salary Increase component and Merit/Promotion Scale
Inflation	Reduction to annual assumed rate of inflation assumption from 3.50% to 3.25%.
Wage Inflation	Reduction to annual assumed rate from real salary increase assumption from 1.00% to 0.75%
Investment Rate of Return	Composed of Inflation component (3.25% from above) and Real Rate of Return component. Reduction from 7.75% to 7.50% net investment return assumption.
Payroll Growth	Reduce from 4.50% to 4.00%.

Summary of Assumptions Changes	
Demographic Assumptions	
Withdrawal	Increase rates of withdrawal
Retirement	Adjusted rates of retirement
Disability	Decreased rates of disability
Base Mortality	Healthy Retirees – RP-2000 Mortality Tables Set back one year for females. Disabled Retirees – RP-2000 Combined Disabled Mortality Tables for disabled annuitants set back four years for males. Actives – 50% of the RP-2000 Combined Mortality for males, 30% of the RP-2000 Combined Mortality for Females.
Mortality Projection	Healthy Retiree and Beneficiary – Mortality rates are projected to 2013 using improvement Scale BB Disable Retirees – Mortality rates are projected to 2013 using improvement Scale BB Active Members – Mortality rates are projected to 2013 using improvement Scale BB
Other Post-Employment Benefit Assumptions	Updated participation assumptions

The actuarial valuation results provide "snapshot" view the System's financial condition on June 30, 2015. Actuarial gains and losses result when actuarial experience of the plan (such as asset return, pay increases, turnover, deaths, etc.) is different from the expected by the actuarial assumptions.

Non-Hazardous

The Retirement Plan's Unfunded Actuarial Accrued Liability (UAAL) was expected to be $9,320.0 million taking into account contributions from both the employer and members of $632.8 million. The actual UAAL was $10,014.6 million. The increase of $694.6 million was due to the change in actuarial assumptions and methods offset by an actuarial gain due to actual experience different than what was anticipated by the assumptions. The Insurance Fund's UAAL was expected to be $1,641.2 million taking into account expected employer and member contributions of $125.1 million. The actual UAAL was $1,718.7 million. The increase in the UAAL of $77.5 million was due to the change in actuarial assumptions and methods offset by an actuarial gain due to actuarial experience different than what was anticipated by the assumptions.

The remaining amortization period of the UAAL of both the Pension and Insurance Funds is 28-years as of June 30, 2015. Detailed analysis of the gains and losses are presented in Section V of the report.

As of June 30, 2015 the Pension and Insurance Funds had net assets of $2,307,858,072 and $687,684,080 respectively. The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarially determined contribution. The asset valuation

method which recognizes the annual unexpected portion of market value investment returns over a five-year period, attempts to dampen the effect of market volatility. The resulting amount is called the "actuarial value of assets" and is utilized to determine the actuarial valuation results. In this year's actuarial valuation, the actuarial value of assets as of June 30, 2015 was $2,350,989,940 and $695,018,262 respectively for the Pension and Insurance Funds.

On a market basis, the estimated rate of return was 1.84% and 1.29% respectively for the Pension and Insurance Funds, assuming all cash flows occur in the middle of the year. Due to better than assumed prior returns on the market value of assets the net rate of return measured on the actuarial value of assets was 9.85% and 9.48% respectively for both the Pension and Insurance Funds. Please see Section III and Schedule B of this report for more detailed information on the market and actuarial value of assets.

Hazardous

The Retirement Plan's Unfunded Actuarial Accrued Liability (UAAL) was expected to be $286.3 million taking into account contributions from both the employer and members of $42.2 million. The actual UAAL was $338.7 million. The increase of $52.4 million was due to the change in actuarial assumptions and methods and an actuarial loss due to actual experience different than what was anticipated by the assumptions. The Insurance Funds UAAL was expected to be ($23.0) million taking into account expected employer and member contributions of $9.6 million. The actual UAAL was ($76.6) million. The decrease in the UAAL of $53.6 million was due to the change in actuarial assumptions and methods and an actuarial gain due to actuarial experience different than what was anticipated by the assumptions.

The remaining amortization period of the UAAL of both the Pension and Insurance Funds is 28-years as of June 30, 2015. Detailed analysis of the gains and losses are presented in Section V of the report.

As of June 30, 2015 the Pension and Insurance Funds had net assets of $550,120,310 and $441,626,285 respectively. The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarially determined contribution. The asset valuation method which recognizes the annual unexpected portion of market value investment returns over a five-year period, attempts to dampen the effect of market volatility. The resulting amount is called the "actuarial value of assets" and is utilized to determine the actuarial valuation results. In this year's actuarial valuation, the actuarial value of assets as of June 30, 2015 was $556,687,757 and $451,514,191 respectively for the Pension and Insurance Funds.

On a market basis, the estimated rate of return was 1.58% and 1.79% respectively for the Pension and Insurance Funds, assuming all cash flows occur in the middle of the year. Due to better than assumed prior returns on the market value of assets the net rate of return measured on the actuarial value of assets was 9.03% and 8.07% respectively for both the Pension and Insurance Funds. Please see Section III and Schedule B of this report for more detailed information on the market and actuarial value of assets.

Schedule F provides sensitivity analysis for three different sets of economic assumptions; the discount rate assumption, the inflation assumption, and the payroll growth assumption. Two assumption change scenarios are presented for each economic assumption. The results of the economic assumption change scenarios are presented along with the valuation results for comparison.

The long-term financial health of this retirement System, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. The System has recently been strengthened due to two reasons. They are: recent legislative action that provides 100% funding of the actuarially determined contribution and the elimination of unfunded ad hoc cost-of-living adjustments for retirees. The cost for providing cost-of-living adjustments for retires must be prefunded in advance.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2015 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	39,056	$1,544,234,409	$39,539	45.0	10.6
Hazardous	3,886	128,680,130	33,114	40.7	7.5
Total in KERS	42,942	$1,672,914,539	$38,958	44.6	10.3

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2010	47,090	$1,815,146,388	$38,546	1.2%
6/30/2011	46,617	1,731,632,748	37,146	(3.6)
6/30/2012	42,196	1,644,896,681	38,982	4.9
6/30/2013	42,226	1,644,408,698	38,943	(0.1)
6/30/2014	40,365	1,577,496,447	39,081	0.4
6/30/2015	39,056	1,544,234,409	39,539	1.2

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2010	4,291	$143,557,944	$33,456	(0.7%)
6/30/2011	4,291	133,053,792	31,008	(7.3)
6/30/2012	4,086	131,976,754	32,300	4.2
6/30/2013	4,127	132,015,368	31,988	(1.0)
6/30/2014	4,024	129,076,038	32,077	0.3
6/30/2015	3,886	128,680,130	33,114	3.2

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	35,867	$796,779,222	$22,215	68.0
Disability	1,910	24,556,716	12,857	64.7
Beneficiary	4,492	62,245,624	13,857	69.8
Total in KERS	42,269	$883,581,562	$20,904	68.1

** Does not include number and annual benefits for those members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 2,214 members in the hazardous system also receiving an annual benefit from the non-hazardous System. Total annual benefits for these members is $19,738,904.*

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	3,226	$51,432,997	$15,943	63.5
Disability	152	1,326,242	8,725	58.4
Beneficiary	380	3,671,860	9,663	64.5
Total in KERS	3,758	$56,431,099	$15,016	63.4

This valuation also includes 52,814 inactive members (48,260 Non-Hazardous and 4,554 Hazardous; of which 9,806 Non-Hazardous are vested and 460 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2015 the total market value of assets amounted to $3,987,288,747 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2015

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	$2,307,858,072	$687,684,080	$2,995,542,152
Hazardous	550,120,310	441,626,285	991,746,595
Total	$2,857,978,382	$1,129,310,365	$3,987,288,747

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $4,054,210,150. Schedule B shows the development of the actuarial value of assets as of June 30, 2015. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	June 30, 2015	June 30, 2014
Retirement		
Non-Hazardous	$ 2,350,989,940	$ 2,423,956,716
Hazardous	556,687,757	527,897,261
Total	$ 2,907,677,697	$ 2,951,853,977
Insurance		
Non-Hazardous	$ 695,018,262	$ 621,236,646
Hazardous	451,514,191	419,395,867
Total	$ 1,146,532,453	$ 1,040,632,513
KERS Total		
Non-Hazardous	$ 3,046,008,202	$ 3,045,193,362
Hazardous	1,008,201,948	947,293,128
Total	$ 4,054,210,150	$ 3,992,486,490

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2015. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance. Since the previous valuation, the revised assumptions from the economic and demographic experience investigation covering the five-year period from July 1, 2008 to June 30, 2013 have been reflected in this valuation.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $14,452,312,749, of which $9,694,146,920 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $376,510,149 is for the prospective benefits payable on account of present inactive members, and $4,381,655,680 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $2,907,677,697 as of June 30, 2015. The difference of $11,544,635,052 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $763,785,056 is the present value of future contributions expected to be made by members, and the balance of $10,780,849,996 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 2.96% of payroll for non-hazardous members and 6.30% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $433,421,457. When this amount is subtracted from $10,780,849,996, which is the present value of the total future contributions to be made by the employers, there remains $10,347,428,539 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 35.33% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 14.15% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $10,008,682,909 for non-hazardous members and $338,745,630 for hazardous members over 28 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.00% each year.
5. The contribution rate for administrative expenses is determined to be 0.64% of payroll for non-hazardous members and 0.63% of payroll for hazardous members.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $3,157,765,303, of which $1,513,706,511 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $135,758,341 is for the prospective benefits payable on account of present inactive members, and $1,508,300,451 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $1,146,532,453 as of June 30, 2015. The difference of $2,011,232,850 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $38,938,755 is the present value of future contributions expected to be made by members, and the balance of $1,972,294,095 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 2.29% of payroll for non-hazardous members and 5.87% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $330,217,062. When this amount is subtracted from $1,972,294,095, which is the present value of the total future contributions to be made by the employers, there remains $1,642,077,033 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 6.00% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at (3.21%) of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $1,718,686,990 for non-hazardous members and $(76,609,957) for hazardous members over 28 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.00% each year.
5. The contribution rate for administrative expenses is determined to be 0.06% of payroll for non-hazardous members and 0.08% of payroll for hazardous members.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2015 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/14	$ 9,126.2	$ 289.0	$ 9,415.2
(2)	Normal cost from last valuation	133.5	17.4	150.9
(3)	Contributions	632.8	42.2	675.0
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	693.1	22.1	715.2
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 9,320.0	$ 286.3	$ 9,606.3
(6)	Change due to Actuarial Audit	(11.8)	1.0	(10.8)
(7)	Change due to new actuarial assumption or methods	(682.8)	(53.1)	(735.9)
(8)	Expected UAAL after changes: (5) - (6) - (7)	$ 10,014.6	$ 338.4	$ 10,353.0
(9)	Actual UAAL as of 6/30/15	$ 10,008.7	$ 338.7	$ 10,347.4
(10)	Gain/(loss): (8) - (9)	$ 5.9	$ (0.3)	$ 5.6
(11)	Accrued liabilities as of 6/30/14	$ 11,550.1	$ 816.9	$ 12,367.0
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	0.1%	(0.0%)	0.0%

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/14	$ 1,605.5	$ (22.4)	$ 1,583.1
(2)	Normal cost from last valuation	42.8	10.7	53.5
(3)	Expected contributions	125.1	9.6	134.7
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	118.0	(1.7)	116.3
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 1,641.2	$ (23.0)	$ 1,618.2
(6)	Change due to Actuarial Audit	(4.0)	(0.4)	(4.4)
(7)	Change due to new actuarial assumption or methods	(175.9)	30.3	(145.6)
(8)	Expected UAAL after changes: (5) - (6) - (7)	$ 1,821.1	$ (52.9)	$ 1,768.2
(9)	Actual UAAL as of 6/30/15	$ 1,718.7	$ (76.6)	$ 1,642.1
(10)	Gain/(loss): (8) - (9)	$ 102.4	$ 23.7	$ 126.1
(11)	Accrued liabilities as of 6/30/14	$ 2,226.8	$ 397.0	$ 2,623.8
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	4.6%	6.0%	4.8%

* *Unfunded actuarial accrued liability*

NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/15	Insurance $ Gain (or Loss) For Year Ending 6/30/15
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (115.6)	$ (35.8)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(9.3)	0.9
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.4)	(1.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	62.8	(5.7)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	51.2	112.3
New Members. Additional unfunded accrued liability will produce a loss.	(7.6)	(3.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	56.5	10.9
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	(8.5)	19.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(23.3)	6.0
Gain (or Loss) During Year From Financial Experience	$ 5.9	$ 102.4
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	(694.6)	(179.9)
Composite Gain (or Loss) During Year	$ (688.7)	$ (77.5)

HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/15	Insurance $ Gain (or Loss) For Year Ending 6/30/15
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (16.9)	$ (8.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.7)	0.4
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	15.8	2.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	2.0	19.8
New Members. Additional unfunded accrued liability will produce a loss.	(3.1)	(2.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	7.4	1.3
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	1.9	5.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(6.8)	5.2
Gain (or Loss) During Year From Financial Experience	$ (0.3)	$ 23.7
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	(52.1)	29.9
Composite Gain (or Loss) During Year	$ (52.4)	$ 53.6

TOTAL KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/15	Insurance $ Gain (or Loss) For Year Ending 6/30/15
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (132.5)	$ (44.2)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(10.0)	1.3
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.3)	(1.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	78.6	(2.9)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	53.2	132.1
New Members. Additional unfunded accrued liability will produce a loss.	(10.7)	(6.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	63.9	12.2
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	(6.6)	24.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(30.1)	11.2
Gain (or Loss) During Year From Financial Experience	$ 5.6	$ 126.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	(746.7)	(150.0)
Composite Gain (or Loss) During Year	$ (741.1)	$ (23.9)

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation. These rates are for informational purposes only.

Required Contribution Rates
Non-Hazardous Retirement

Contribution Rate for		% of Payroll
A.	Normal Cost:	
	(1) Service retirement benefits	7.63%
	(2) Disability benefits	0.25
	(3) Survivor benefits	0.08
	(4) Total	7.96%
B.	Member Contributions	5.00%
C.	Employer Normal Cost: [A(4) - B]	2.96%
D.	Administrative Expenses	0.64%
E.	Unfunded Actuarial Accrued Liability Contributions*:	
	(1) UAAL Contribution Based on 6/30/14 Valuation:	29.47%
	(2) Change due to:	
	a. Active decrements	0.22%
	b. Pay increases	(0.18)%
	c. Retiree mortality	0.03%
	d. Investment return	(0.20)%
	e. Assumption Changes	2.41%
	f. Payroll Growth Method	1.38%
	g. Other	2.20%
	h. Total Change	5.86%
	(3) UAAL Contribution Based on 6/30/15 Valuation: [E(1) +E(2)h]	35.33%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	38.93%

**Based on 28 year amortization of the UAAL from June 30, 2015*

Required Contribution Rates
Hazardous Retirement

Contribution Rate for		% of Payroll
A.	Normal Cost:	
	(1) Service retirement benefits	13.79%
	(2) Disability benefits	0.34
	(3) Survivor benefits	0.17
	(4) Total	14.30%
B.	Member Contributions	8.00%
C.	Employer Normal Cost: [A(4) - B]	6.30%
D.	Administrative Expenses	0.63%
E.	Unfunded Actuarial Accrued Liability Contributions*:	
	(1) UAAL Contribution Based on 6/30/14 Valuation:	11.40%
	(2) Change due to:	
	a. Active decrements	0.08%
	b. Pay increases	(0.08)%
	c. Retiree mortality	(0.08)%
	d. Investment return	(0.31)%
	e. Assumption Changes	2.22%
	f. Payroll Growth Method	0.52%
	g. Other	0.40%
	h. Total Change	2.75%
	(3) UAAL Contribution Based on 6/30/15 Valuation: [E(1) +E(2)h]	14.15%
F.	Total Recommended Employer Contribution Rate: [C+D+E(3)]	21.08%

**Based on 28 year amortization of the UAAL from June 30, 2015*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for	% of Payroll
A.	Normal Cost:	2.59%
B.	Member Contributions*	0.30%
C.	Employer Normal Cost: [A - B]	2.29%
D.	Administrative Expenses	0.06%
E.	Unfunded Actuarial Accrued Liability**:	6.00%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	8.35%

**The liabilities are net of retiree contributions towards their healthcare.*
*** Based on 28 year amortization of the UAAL from June 30, 2015*

Required Contribution Rates
Hazardous Insurance

	Contribution for	% of Payroll
A.	Normal Cost:	6.31%
B.	Member Contributions*	0.44%
C.	Employer Normal Cost: [A - B]	5.87%
D.	Administrative Expenses	0.08%
E.	Unfunded Actuarial Accrued Liability**:	(3.21%)
F.	Total Recommended Employer Contribution Rate: [C+D+E]	2.74%

**The liabilities are net of retiree contributions towards their healthcare.*
*** Based on 28 year amortization of the UAAL from June 30, 2015*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements (GASB) 43, 45, 67 and 68 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. The information required under GASB 67 and 68 will be issued in separate reports. We are providing the retirement benefit information for information purposes only. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2015

GROUP	NUMBER		
	Non-Hazardous*	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	42,269	3,758	46,027
Terminated employees entitled to benefits but not yet receiving benefits	48,260	4,554	52,814
Active Members	39,056	3,886	42,942
Total	129,585	12,198	141,783

** Does not include members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 2,214 members in in the hazardous system also receiving an annual benefit from the non-hazardous System*

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2010	$ 4,210,215,585	$ 11,004,795,089	$ 6,794,579,504	38.3%	$ 1,815,146,388	374.3%
6/30/2011	3,726,986,087	11,182,142,032	7,455,155,945	33.3	1,731,632,748	430.5
6/30/2012	3,101,316,738	11,361,048,136	8,259,731,398	27.3	1,644,896,681	502.1
6/30/2013	2,636,122,852	11,386,602,159	8,750,479,307	23.2	1,644,408,698	532.1
6/30/2014	2,423,956,716	11,550,110,224	9,126,153,508	21.0	1,577,496,447	578.5
6/30/2015*	2,350,989,940	12,359,672,849	10,008,682,909	19.0	1,544,234,409	648.1
Hazardous Members						
6/30/2010	$ 502,729,009	$ 688,149,451	$ 185,420,442	73.1%	$ 143,557,944	129.2%
6/30/2011	510,748,505	721,293,444	210,544,939	70.8	133,053,792	158.2
6/30/2012	497,226,296	752,699,457	255,473,161	66.1	131,976,754	193.6
6/30/2013	505,656,808	783,980,594	278,323,786	64.5	132,015,368	210.8
6/30/2014	527,897,261	816,850,063	288,952,802	64.6	129,076,038	223.9
6/30/2015*	556,687,757	895,433,387	338,745,630	62.2	128,680,130	263.2
Total KERS Members						
6/30/2010	$ 4,712,944,594	$ 11,692,944,540	$ 6,979,999,946	40.3%	$ 1,958,704,332	356.4%
6/30/2011	4,237,734,592	11,903,435,476	7,665,700,884	35.6	1,864,686,540	411.1
6/30/2012	3,598,543,034	12,113,747,593	8,515,204,559	29.7	1,776,873,435	479.2
6/30/2013	3,141,779,660	12,170,582,752	9,028,803,092	25.8	1,776,424,066	508.3
6/30/2014	2,951,853,977	12,366,960,287	9,415,106,310	23.9	1,706,572,485	551.7
6/30/2015	2,907,677,697	13,255,106,236	10,347,428,539	21.9	1,672,914,539	618.5

** Discount rate changed from 7.75% to 7.50%*

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2010	$ 471,341,628	$ 4,466,136,041	$ 3,994,794,413	10.6%	$ 1,815,146,388	220.1%
6/30/2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
6/30/2012	446,080,511	3,125,330,157	2,679,249,646	14.3	1,644,896,681	162.9
6/30/2013*	497,584,327	2,128,754,134	1,631,169,807	23.4	1,644,408,698	99.2
6/30/2014	621,236,646	2,226,759,925	1,605,523,279	27.9	1,577,496,447	101.8
6/30/2015**	695,018,262	2,413,705,252	1,718,686,990	28.8	1,544,234,409	111.3
Hazardous Members						
6/30/2010	$ 314,427,296	$ 493,297,529	$ 178,870,233	63.7%	$ 143,557,944	124.6%
6/30/2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
6/30/2012	345,573,948	384,592,406	39,018,458	89.9	131,976,754	29.6
6/30/2013	370,774,403	385,517,675	14,743,272	96.2	132,015,368	11.2
6/30/2014	419,395,867	396,986,820	(22,409,047)	105.6	129,076,038	(17.4)
6/30/2015**	451,514,191	374,904,234	(76,609,957)	120.4	128,680,130	(59.5)
Total KERS Members						
6/30/2010	$ 785,768,924	$ 4,959,433,570	$ 4,173,664,646	15.8%	$ 1,958,704,332	213.1%
6/30/2011	781,582,057	4,787,148,400	4,005,566,343	16.3	1,864,686,540	214.8
6/30/2012	791,654,459	3,509,922,563	2,718,268,104	22.6	1,776,873,435	153.0
6/30/2013	868,358,730	2,514,271,809	1,645,913,079	34.5	1,776,424,066	92.7
6/30/2014	1,040,632,513	2,623,746,745	1,583,114,232	39.7	1,706,572,485	92.8
6/30/2015	1,146,532,453	2,788,609,486	1,642,077,033	41.1	1,672,914,539	98.2

** Discount rate changed from 4.50% to 7.75%*
*** Discount rate changed from 7.75% to 7.50%*

INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
		Non-Hazardous Members			
June 30, 2010	$376,556,187	$8,550,914	$93,976,917	$102,527,831	27.2%
June 30, 2011	294,897,813	0	129,335,552	129,335,552	43.9
June 30, 2012	297,904,224	0	156,057,216	156,057,216	52.4
June 30, 2013	286,143,134	0	165,330,557	165,330,557	57.8
June 30, 2014	208,880,813	0	166,609,592	166,609,592	79.8
June 30, 2015	130,455,026	0	135,940,337	135,940,337	104.2
		Hazardous Members			
June 30, 2010	$35,045,278	$319,059	$21,921,535	$22,240,594	63.5%
June 30, 2011	29,585,257	0	19,952,580	19,952,580	67.4
June 30, 2012	28,326,206	0	24,538,087	24,538,087	86.6
June 30, 2013	26,252,911	0	25,682,403	25,682,403	97.8
June 30, 2014	15,627,018	0	23,873,967	23,873,967	152.8
June 30, 2015	13,151,938	0	14,882,343	14,882,343	113.2
		Total KERS Members			
June 30, 2010	$411,601,465	$8,869,973	$115,898,452	$124,768,425	30.3%
June 30, 2011	324,483,070	0	149,288,132	149,288,132	46.0
June 30, 2012	326,230,430	0	180,595,303	180,595,303	55.4
June 30, 2013	312,396,045	0	191,012,960	191,012,960	61.1
June 30, 2014	224,507,831	0	190,483,559	190,483,559	84.8
June 30, 2015	143,606,964	0	150,822,680	150,822,680	105.0

Only Insurance Benefits Schedule of Employer Contributions is required under GASB 67, which replaced GASB 27.

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2015. Additional information as of the latest actuarial valuation follows.

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2015	6/30/2015
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	28 years	28 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	7.50% - 5.00%	7.50% - 5.00%
Medical Trend Assumption (Post-Medicare)	5.50% - 5.00%	5.50% - 5.00%
Year Ultimate Trend	2020	2020
Dollar Contribution Trend	1.50%	1.50%
Actuarial assumptions:		
Investment rate of return*	7.50%	7.50%
*Includes price inflation at	3.25%	3.25%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2015 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2014. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 2,350,989,940	$ 2,423,956,716
Prospective contributions		
Member contributions	$ 672,048,227	$ 709,583,930
Employer normal contributions	366,345,728	448,523,568
Unfunded accrued liability contributions	10,008,682,909	9,126,153,508
Total prospective contributions	$ 11,047,076,864	$ 10,284,261,006
Total assets	$ 13,398,066,804	$ 12,708,217,722
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 9,088,328,416	$ 8,564,988,130
Present value of benefits payable on account of active members	3,960,599,033	3,837,525,126
Present value of benefits payable on account of inactive members	349,139,355	305,704,466
Total liabilities	$ 13,398,066,804	$ 12,708,217,722

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 556,687,757	$ 527,897,261
Prospective contributions		
Member contributions	$ 91,736,829	$ 87,081,053
Employer normal contributions	67,075,729	58,811,616
Unfunded accrued liability contributions	338,745,630	288,952,802
Total prospective contributions	$ 497,558,188	$ 434,845,471
Total assets	$ 1,054,245,945	$ 962,742,732
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 605,818,504	$ 558,849,406
Present value of benefits payable on account of active members	421,056,647	381,511,432
Present value of benefits payable on account of inactive members	27,370,794	22,381,894
Total liabilities	$ 1,054,245,945	$ 962,742,732

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 2,907,677,697	$ 2,951,853,977
Prospective contributions		
Member contributions	$ 763,785,056	$ 796,664,983
Employer normal contributions	433,421,457	507,335,184
Unfunded accrued liability contributions	10,347,428,539	9,415,106,310
Total prospective contributions	$ 11,544,635,052	$ 10,719,106,477
Total assets	$ 14,452,312,749	$ 13,670,960,454
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 9,694,146,920	$ 9,123,837,536
Present value of benefits payable on account of active members	4,381,655,680	4,219,036,558
Present value of benefits payable on account of inactive members	376,510,149	328,086,360
Total liabilities	$ 14,452,312,749	$ 13,670,960,454

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 695,018,262	$ 621,236,646
Prospective contributions		
Member contributions	$ 34,833,822	$ 43,587,814
Employer normal contributions	277,045,451	309,167,195
Unfunded accrued liability contributions	1,718,686,990	1,605,523,279
Total prospective contributions	$ 2,030,566,263	$ 1,958,278,288
Total assets	$ 2,725,584,525	$ 2,579,514,934
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,302,716,841	$ 1,243,505,028
Present value of benefits payable on account of active members	1,297,234,668	1,153,910,365
Present value of benefits payable on account of inactive members	125,633,016	182,099,541
Total liabilities	$ 2,725,584,525	$ 2,579,514,934

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 451,514,191	$ 419,395,867
Prospective contributions		
Member contributions	$ 4,104,933	$ 4,775,581
Employer normal contributions	53,171,611	73,670,480
Unfunded accrued liability contributions	(76,609,957)	(22,409,047)
Total prospective contributions	$ (19,333,413)	$ 56,037,014
Total assets	$ 432,180,778	$ 475,432,881
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 210,989,670	$ 186,628,983
Present value of benefits payable on account of active members	211,065,783	268,955,476
Present value of benefits payable on account of inactive members	10,125,325	19,848,422
Total liabilities	$ 432,180,778	$ 475,432,881

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 1,146,532,453	$ 1,040,632,513
Prospective contributions		
Member contributions	$ 38,938,755	$ 48,363,395
Employer normal contributions	330,217,062	382,837,675
Unfunded accrued liability contributions	1,642,077,033	1,583,114,232
Total prospective contributions	$ 2,011,232,850	$ 2,014,315,302
Total assets	$ 3,157,765,303	$ 3,054,947,815
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,513,706,511	$ 1,430,134,011
Present value of benefits payable on account of active members	1,508,300,451	1,422,865,841
Present value of benefits payable on account of inactive members	135,758,341	201,947,963
Total liabilities	$ 3,157,765,303	$ 3,054,947,815

The following tables provide the solvency test for non-hazardous and hazardous KERS members.

Solvency Test
Retirement Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2010	$ 869,484,042	$ 8,329,757,802	$ 1,805,553,245	$ 4,210,215,585	100.0%	40.1%	0.0%
6/30/2011	916,568,932	8,482,714,356	1,782,858,744	3,726,986,087	100.0	33.1	0.0
6/30/2012	885,137,183	8,708,536,338	1,767,374,615	3,101,316,738	100.0	25.4	0.0
6/30/2013	922,928,027	8,709,323,622	1,754,350,510	2,636,122,852	100.0	19.7	0.0
6/30/2014	928,557,540	8,870,692,596	1,750,860,088	2,423,956,716	100.0	16.9	0.0
6/30/2015	925,933,970	9,437,467,771	1,996,271,108	2,350,989,940	100.0	15.1	0.0

Solvency Test
Retirement Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2010	$ 88,511,283	$ 441,657,241	$ 157,980,927	$ 502,729,009	100.0%	93.8%	0.0%
6/30/2011	86,614,205	490,395,078	144,284,161	510,748,505	100.0	86.5	0.0
6/30/2012	82,100,877	521,688,803	148,909,777	497,226,296	100.0	79.6	0.0
6/30/2013	82,145,602	545,596,534	156,238,458	505,656,808	100.0	77.6	0.0
6/30/2014	83,663,535	581,231,300	151,955,228	527,897,261	100.0	76.4	0.0
6/30/2015	83,606,204	633,189,298	178,637,885	556,687,757	100.0	74.7	0.0

Solvency Test
Insurance Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2010	$ 0	$ 2,744,534,054	$ 1,721,601,987	$ 471,341,628	100.0%	17.2%	0.0%
6/30/2011	0	2,568,002,978	1,712,086,655	451,620,442	100.0	17.6	0.0
6/30/2012	0	1,924,068,623	1,201,261,534	446,080,511	100.0	23.2	0.0
6/30/2013	0	1,338,772,860	789,981,274	497,584,327	100.0	37.2	0.0
6/30/2014	0	1,425,604,569	801,155,356	621,236,646	100.0	43.6	0.0
6/30/2015	0	1,428,349,857	985,355,395	695,018,262	100.0	48.7	0.0

Solvency Test
Insurance Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2010	$ 0	$ 268,510,709	$ 224,786,820	$ 314,427,296	100.0%	100.0%	20.4%
6/30/2011	0	285,539,861	221,518,906	329,961,615	100.0	100.0	20.1
6/30/2012	0	196,578,935	188,013,471	345,573,948	100.0	100.0	79.2
6/30/2013	0	202,031,515	183,486,160	370,774,403	100.0	100.0	92.0
6/30/2014	0	206,477,405	190,509,415	419,395,867	100.0	100.0	100.0
6/30/2015	0	221,114,995	153,789,239	451,514,191	100.0	100.0	100.0

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2014	2015	2016	2017	2018	2019
A.	Actuarial Value Beginning of Year	$ 2,636,122,852	$ 2,423,956,716				
B.	Market Value End of Year	2,560,419,519	2,307,858,072				
C.	Market Value Beginning of Year	2,747,428,086	2,560,419,519				
D.	Cash Flow						
	D1. Contributions	389,777,286	632,777,097				
	D2. Benefit Payments	(903,563,734)	(919,342,856)				
	D3. Administrative Expenses	(11,144,929)	(10,473,878)				
	D4. Investment Expenses	(9,152,919)	(16,315,268)				
	D5. Net	(534,084,296)	(313,354,905)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	347,075,729	60,793,458				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	201,737,505	203,237,495				
	E4. Amount for Phased-In Recognition	145,338,224	(142,444,037)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	29,067,645	(28,488,807)	0	0	0	0
	F2. First Prior Year	15,221,118	29,067,645	(28,488,807)	0	0	0
	F3. Second Prior Year	(46,821,807)	15,221,118	29,067,645	(28,488,807)	0	0
	F4. Third Prior Year	68,172,485	(46,821,807)	15,221,118	29,067,645	(28,488,807)	0
	F5. Fourth Prior Year	54,541,214	68,172,485	(46,821,807)	15,221,118	29,067,645	(28,488,807)
	F6. Total Recognized Investment Gain	120,180,655	37,150,634	(31,021,851)	15,799,956	578,838	(28,488,807)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 2,423,956,716	$ 2,350,989,940				
H.	Difference Between Market & Actuarial Values	$ 136,462,803	$ (43,131,868)	$ (12,110,017)	$ (27,909,973)	$ (28,488,807)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2014	2015	2016	2017	2018	2019
A.	Actuarial Value Beginning of Year	$ 505,656,808	$ 527,897,261				
B.	Market Value End of Year	559,504,340	550,120,310				
C.	Market Value Beginning of Year	513,162,166	559,504,340				
D.	Cash Flow						
	D1. Contributions	23,665,778	42,153,137				
	D2. Benefit Payments	(57,150,606)	(59,382,637)				
	D3. Administrative Expenses	(897,111)	(844,208)				
	D4. Investment Expenses	(2,261,049)	(4,013,205)				
	D5. Net	(36,642,988)	(22,086,913)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	82,985,162	12,702,883				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	40,698,817	46,674,435				
	E4. Amount for Phased-In Recognition	42,286,345	(33,971,552)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	8,457,269	(6,794,310)	0	0	0	0
	F2. First Prior Year	2,416,270	8,457,269	(6,794,310)	0	0	0
	F3. Second Prior Year	(9,594,554)	2,416,270	8,457,269	(6,794,310)	0	0
	F4. Third Prior Year	9,718,299	(9,594,554)	2,416,270	8,457,269	(6,794,310)	0
	F5. Fourth Prior Year	7,187,340	9,718,299	(9,594,554)	2,416,270	8,457,269	(6,794,310)
	F6. Total Recognized Investment Gain	18,184,624	4,202,974	(5,515,325)	4,079,229	1,662,959	(6,794,310)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 527,897,261	$ 556,687,757				
H.	Difference Between Market & Actuarial Values	$ 31,607,079	$ (6,567,447)	$ (1,052,122)	$ (5,131,351)	$ (6,794,310)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2014	2015	2016	2017	2018	2019
A.	Actuarial Value Beginning of Year	$ 497,584,327	$ 621,236,646				
B.	Market Value End of Year	664,775,708	687,684,080				
C.	Market Value Beginning of Year	509,364,080	664,775,708				
D.	Cash Flow						
	D1. Contributions	172,080,578	140,393,102				
	D2. Benefit Payments	(112,671,651)	(125,273,008)				
	D3. Administrative Expenses	(735,604)	(896,134)				
	D4. Investment Expenses	(1,929,107)	(3,654,438)				
	D5. Net	56,744,216	10,569,522				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	98,667,412	12,338,850				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	43,678,414	55,725,734				
	E4. Amount for Phased-In Recognition	54,988,998	(43,386,884)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	10,997,800	(8,677,377)	0	0	0	0
	F2. First Prior Year	675,909	10,997,800	(8,677,377)	0	0	0
	F3. Second Prior Year	(6,969,893)	675,909	10,997,800	(8,677,377)	0	0
	F4. Third Prior Year	11,459,921	(6,969,893)	675,909	10,997,800	(8,677,377)	0
	F5. Fourth Prior Year	7,065,952	11,459,921	(6,969,893)	675,909	10,997,800	(8,677,377)
	F6. Total Recognized Investment Gain	23,229,689	7,486,360	(3,973,561)	2,996,332	2,320,423	(8,677,377)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 621,236,646	$ 695,018,262				
H.	Difference Between Market & Actuarial Values	$ 43,539,062	$ (7,334,182)	$ (3,360,621)	$ (6,356,953)	$ (8,677,377)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2014	2015	2016	2017	2018	2019
A.	Actuarial Value Beginning of Year	$ 370,774,403	$ 419,395,867				
B.	Market Value End of Year	435,503,976	441,626,285				
C.	Market Value Beginning of Year	374,309,576	435,503,976				
D.	Cash Flow						
	D1. Contributions	24,462,622	15,433,627				
	D2. Benefit Payments	(15,404,747)	(17,000,969)				
	D3. Administrative Expenses	(77,471)	(100,809)				
	D4. Investment Expenses	(1,621,522)	(2,765,329)				
	D5. Net	7,358,882	(4,433,480)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	53,835,518	10,555,789				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	30,978,505	36,452,246				
	E4. Amount for Phased-In Recognition	22,857,013	(25,896,457)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	4,571,403	(5,179,291)	0	0	0	0
	F2. First Prior Year	1,027,388	4,571,403	(5,179,291)	0	0	0
	F3. Second Prior Year	(4,939,727)	1,027,388	4,571,403	(5,179,291)	0	0
	F4. Third Prior Year	4,619,785	(4,939,727)	1,027,388	4,571,403	(5,179,291)	0
	F5. Fourth Prior Year	5,005,228	4,619,785	(4,939,727)	1,027,388	4,571,403	(5,179,291)
	F6. Total Recognized Investment Gain	10,284,077	99,558	(4,520,227)	419,500	(607,888)	(5,179,291)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 419,395,867	$ 451,514,191				
H.	Difference Between Market & Actuarial Values	$ 16,108,109	$ (9,887,906)	$ (5,367,679)	$ (5,787,179)	$ (5,179,291)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually for retirement and insurance benefits.

PRICE INFLATION: 3.25% per annum, compounded annually.

PAYROLL GROWTH: 4.00% per annum, compounded annually.

SALARY INCREASES: The assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.00% per annum:

Service Years	Annual Rates of Salary Increases				
	Merit & Seniority		Base (Economy)	Increase Next Year	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0-1	12.02%	15.87%	4.00%	16.50%	20.50%
1-2	4.33%	4.33%	4.00%	8.50%	8.50%
2-3	1.92%	2.40%	4.00%	6.00%	6.50%
3-4	1.44%	1.92%	4.00%	5.50%	6.00%
4-5	1.44%	1.44%	4.00%	5.50%	5.50%
5-6	1.44%	0.96%	4.00%	5.50%	5.00%
6-7	0.96%	0.48%	4.00%	5.00%	4.50%
7-8	0.96%	0.48%	4.00%	5.00%	4.50%
8-9	0.96%	0.48%	4.00%	5.00%	4.50%
9-10	0.48%	0.48%	4.00%	4.50%	4.50%
10 & Over	0.48%	0.48%	4.00%	4.50%	4.50%

DISABILITY: Representative assumed annual rates of disability for both non-hazardous and hazardous members are as follows:

Nearest Age	Annual Rates of Disability			
	Non-Hazardous		Hazardous	
	Male	Female	Male	Female
20	0.02%	0.02%	0.03%	0.03%
30	0.03%	0.03%	0.05%	0.05%
40	0.07%	0.07%	0.10%	0.10%
50	0.19%	0.19%	0.28%	0.28%
60	0.49%	0.49%	0.73%	0.73%

RETIREMENT: The assumed annual rates of retirement for both non-hazardous and hazardous members are as follows:

Annual Rates of Retirement					
Non-Hazardous			Hazardous		
Age	Those Eligible for Service Retirement*	Those Eligible for Service Retirement**	Service	Those Eligible for Service Retirement+	Those Eligible for Service Retirement++
55	8.0%		20	40.0%	
56	8.0%		21	40.0%	
57	8.0%		22	40.0%	
58	8.0%		23	40.0%	
59	8.0%		24	40.0%	
60	10.0%	10.0%	25	47.0%	40.0%
61	20.0%	20.0%	26	47.0%	40.0%
62	20.0%	20.0%	27	47.0%	40.0%
63	20.0%	20.0%	28	47.0%	40.0%
64	20.0%	20.0%	29	47.0%	40.0%
65	20.0%	25.0%	30	47.0%	47.0%
66	20.0%	25.0%	31	47.0%	47.0%
67	20.0%	25.0%	32	50.0%	47.0%
68	20.0%	25.0%	33	50.0%	47.0%
69	20.0%	25.0%	34	50.0%	47.0%
70	20.0%	25.0%	35	60.0%	47.0%
71	20.0%	25.0%	36	60.0%	47.0%
72	20.0%	25.0%	37	60.0%	50.0%
73	20.0%	25.0%	38	60.0%	50.0%
74	20.0%	25.0%	39	60.0%	50.0%
75	100.0%	100.0%	40	60.0%	60.0%

* *For members participating before September 1, 2008. If service is at least 27 years, the rate is 35%.*
** *For members participating on or after September 1, 2008. If age plus service is at least 87, the rate is 35%.*
\+ *For members participating before September 1, 2008. The annual rate of service retirement is 100% at age 65.*
++ *For members participating on or after September 1, 2008. The annual rate of service retirement is 100% at age 60.*

WITHDRAWAL: The assumed annual rates of withdrawal for both non-hazardous and hazardous members are as follows:

Service Years	Annual Rates of Withdrawal	
	Non-Hazardous	Hazardous
0-1	22.50%	25.00%
1-2	15.50%	10.50%
2-3	12.50%	7.50%
3-4	10.50%	6.50%
4-5	9.00%	5.50%
5-6	6.50%	4.50%
6-7	5.50%	3.00%
7-8	5.00%	3.00%
8-9	4.50%	3.00%
9-10	4.50%	2.50%
10-11	4.00%	2.50%
11-13	4.00%	2.00%
13-15	3.50%	2.00%
15 & Over	3.00%	2.00%

DEATH BEFORE RETIREMENT: The rates of mortality for the period before retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females) for all healthy retired members and beneficiaries. The RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. These assumptions are used to measure the probabilities of each benefit payment being made after retirement. These assumptions contain margin for mortality improvements.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

FORM OF PAYMENT: Participants are assumed to elect a life-only form of payment.

ASSET VALUATION METHOD: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

ACTUARIAL COST METHOD: Costs were determined using the Entry Age Normal, Level Percentage of Pay Actuarial Cost Method. Under this method, a calculation is made for retirement benefits to determine the uniform and constant percentage rate of contribution which, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would be required to meet the cost of benefits payable. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

MULTIPLE STATUS/MULTIPLE SYSTEM MEMBERS: Some members may be represented under more than one retirement system and/or may have more than one status (e.g., active in one system, deferred vested in another and retired from a different system). For pension purposes, members that are active in one System but have service in another are assumed to retire from the System in which they are currently active. Any deferred pension benefits from another System are assumed to begin once the member terminates from their current active position. The insurance liabilities for multiple status/multiple system members are calculated assuming only one benefit is payable across all Systems and that benefit is payable from the combination of status and System which produces the highest economic value to the member.

AFFORDABLE CARE ACT (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2018 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the insurance liability will be required.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE SPOUSE AGE DIFFERENCE: Wives are assumed to be three years younger than husbands.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Annual Rate of Increase		
	Under Age 65	Age 65 & Older	Dollar Contribution*
2015	7.50%	5.50%	1.50%
2016	6.75%	5.25%	1.50%
2017	6.25%	5.00%	1.50%
2018	5.75%	5.00%	1.50%
2019	5.25%	5.00%	1.50%
2020 & Beyond	5.00%	5.00%	1.50%

** Applies to members participating on or after July 1, 2003*

HEALTH CARE AGE RELATED MORBIDITY: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 – 69	3.00%
70 – 74	2.50%
75 – 79	2.00%
80 – 84	1.00%
85 – 89	0.50%
90 & Beyond	0.00%

For the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP.

HEALTH CARE DEFERRED VESTED BENEFIT RECIPIENT INITIAL AGE OF BENEFIT RECEIPT FOR MEMBERS: Health care benefits are assumed to begin at the following ages for deferred vested benefit recipients:

Deferred Vested Initial Age of Benefit Receipt		
Applies Only to Members with Non-Hazardous Service		
Members Participating Before July 1, 2003	Members Participating Between July 1, 2003 to September 1, 2008	Members Participating On or After September 1, 2008
55	55	60

Deferred Vested Initial Age of Benefit Receipt		
Applies Only to Members with Hazardous Service		
Members Participating Before July 1, 2003	Members Participating Between July 1, 2003 to September 1, 2008	Members Participating On or After September 1, 2008
50	50	50

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: Representative values of the assumed annual rates of member participation and spouse coverage are as follows:

Plan Elections of Covered Members Age 65 and Older as of January 1, 2016		
Kentucky Retirement System Health Plan	**Non-Hazardous**	**Hazardous**
Medical Only	5.71%	2.92%
Essential	2.72%	1.44%
Premium	91.58%	95.64%

Retirement Participation Rates			
Service at Retirement	**Members Participating Before July 1, 2003**	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
Under 10	50.00%	100.00%	100.00%
10 – 14	75.00%	100.00%	100.00%
15 – 19	90.00%	100.00%	100.00%
20+	100.00%	100.00%	100.00%

Disability/Death Participation Rates	
Members Participating Before July 1, 2003	
Duty-Disability	**Duty Death-In-Service**
100.00%	100.00%

Deferred Vested Member Participation Rates		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
50.00%	100.00%	100.00%

Members Electing Spouse Coverage		
Applies Only to Members with Hazardous Service		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
50.00%	50.00%	50.00%

HEALTH CARE MONTHLY PLAN COSTS: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions for the year following the valuation date. The amounts include medical and drug costs. Members under 65 are assumed to elect the LivingWell PPO. For retirees ages 65 and older, the full costs shown are before averaging. The average costs are then normalized to age 65 and age adjusted in calculating liabilities. The dollar amount contribution level is the cost to the system per year of service for members participating on or after July 1, 2003.

Under Age 65 (KEHP) Full Costs as of January 1, 2016				
Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 702.10	$ 721.14	$ 677.74	$ 663.68
Parent Plus	967.18	1,023.04	963.36	930.34
Couple	1,302.74	1,564.20	1,474.84	1,429.26
Family	1,453.94	1,738.40	1,640.84	1,591.52
Family C-R	810.00	865.64	814.72	792.90

Age 65 and Older Full Costs as of January 1, 2016	
Kentucky Retirement System Health Plan - Medical Only	$158.25
Kentucky Retirement System Health Plan - Essential	77.76
Kentucky Retirement System Health Plan - Premium	244.25

Age 65 and Older Average Cost as of the Valuation Date Based on Actual Retiree Elections	
Non-Hazardous	Hazardous
$218.33	$227.19

Dollar Amount Contribution Level Per Year of Service as of July 1, 2015	
Applies to members participating on or after July 1, 2003	
Non-Hazardous	Hazardous
$12.80	$19.19

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For those members who retired between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 5.00% and 4.00% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year.

Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement — 55

Service Requirement — At least one month of hazardous duty service credit

Amount — If a member has at least 60 months of service, the monthly benefit is 2.49% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — 60

Service Requirement — At least 60 months of hazardous duty service credit

Amount — The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Hazardous Normal Retirement (continued):

Members whose participation began on or after 1/1/2014

Age Requirement	60
Service Requirement	At least 60 months of hazardous duty service credit or 25 or more years of service, with no age requirement
Amount	Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 55 with 60 months of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Non-Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 60 with 10 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 50 with 15 years of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years of service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

Non-Hazardous Disability (continued):

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Hazardous Disability:

Age Requirement

None

Service Requirement

60 months (waived if in line of duty disability)

Members whose participation began before 8/1/2004

Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Hazardous Disability (continued):

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age — 65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Vesting (continued):

Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Members whose participation began on or after 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Upon termination the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or the member can elect to leave the hypothetical account balance in the System. If the member does not withdraw the account balance, it will continue to earn 4% interest. Upon reaching normal retirement age the member can apply for retirement and receive the account balance as a lump sum payment or annuitize the account balance into a single life annuity.

Pre-Retirement Death Benefit (not in line of duty):

Members whose participation began before 1/1/2014

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Members whose participation began on or after 1/1/2014

Requirement	60 months service
Amount	The maximum of the benefit equal to the benefit the member would have received had the member retired on the day before the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Member Contributions (continued):

Members whose participation began on or after 1/1/2014	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently set at 2.5% and per statute, shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008 and up to 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.
Members whose participation began on or after 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.80 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $12.80 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $19.19 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.80 per month for each year of earned. These amounts are shown as of the valuation date and are increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $19.19 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.80 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2010	2011	2012	2013	2014	2015
			Number			
Beginning of Year	37,883	37,945	38,597	39,226	40,194	41,223
Added	1,162	1,592	1,707	1,982	2,067	3,169
Removed	1,100	940	1,078	1,014	1,038	1,094
End of Year	37,945	38,597	39,226	40,194	41,223	42,269
			Annual Allowances*			
Beginning of Year	$ 812,559,070	$ 801,881,911	$ 821,197,278	$ 844,880,945	$ 872,139,782	$ 888,430,310
Added	865,483	31,930,847	37,458,130	41,468,079	31,433,028	32,433,375
Removed	11,542,643	12,615,480	13,774,463	14,209,242	15,142,500	14,902,459
End of Year	$ 801,881,911	$ 821,197,278	$ 844,880,945	$ 872,139,782	$ 888,430,310	$ 905,961,226
% Increase in Allowances	(1.31)%	2.41%	2.88%	3.23%	1.87%	1.97%
Average Annual Allowance	$ 21,133	$ 21,276	$ 21,539	$ 21,698	$ 21,552	$ 21,433

** The annual allowances shown for 2013 and later include allowances for hazardous members who are receiving a portion of benefit from the non-hazardous system.*

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2010	2011	2012	2013	2014	2015
			Number			
Beginning of Year	2,648	2,835	3,064	3,253	3,430	3,620
Added	282	288	243	229	256	393
Removed	95	59	54	52	66	65
End of Year	2,835	3,064	3,253	3,430	3,620	3,758
			Annual Allowances			
Beginning of Year	$ 38,695,501	$ 41,114,800	$ 45,609,229	$ 49,231,205	$ 51,122,456	$ 54,271,718
Added	3,315,361	5,012,933	4,213,360	2,390,928	3,761,697	3,144,016
Removed	896,062	518,504	591,384	499,677	612,435	984,635
End of Year	$ 41,114,800	$ 45,609,229	$ 49,231,205	$ 51,122,456	$ 54,271,718	$ 56,431,099
% Increase in Allowances	6.25%	10.93%	7.94%	3.84%	6.16%	3.98%
Average Annual Allowance	$ 14,503	$ 14,886	$ 15,134	$ 14,905	$ 14,992	$ 15,016

Non-Hazardous Retired Lives Summary June 30, 2015

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,694	$ 6,751,823.38	10,736	$ 15,872,249.83	14,430	$ 22,624,073.21
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2,009	3,774,214.24	883	1,106,032.08	2,892	4,880,246.32
66-2/3% to Beneficiary	782	2,260,446.51	474	980,407.69	1,256	3,240,854.20
50% to Beneficiary	1,122	2,860,975.83	1,348	2,749,061.18	2,470	5,610,037.01
Pop-up Option	3,797	9,399,074.45	3,372	6,669,421.53	7,169	16,068,495.98
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	922	1,619,661.11	2,076	3,157,126.16	2,998	4,776,787.27
Social Security Option						
Age 62 Basic	402	997,824.99	960	1,743,639.00	1,362	2,741,463.99
Age 62 Survivorship	808	1,839,490.00	585	1,089,989.73	1,393	2,929,479.73
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	402	648,323.84	549	836,829.65	951	1,485,153.49
20 Years Certain & Life	398	877,030.51	558	896,756.57	956	1,773,787.08
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	82	134,530.89	298	451,479.99	380	586,010.88
PLSO 24 Month Basic	36	42,772.42	160	202,669.85	196	245,442.27
PLSO 36 Month Basic	150	133,464.60	408	308,031.64	558	441,496.24
PLSO 12 Month Survivor	107	227,600.43	102	174,083.95	209	401,684.38
PLSO 24 Month Survivor	85	133,057.14	78	114,819.45	163	247,876.59
PLSO 36 Month Survivor	237	256,602.72	157	135,169.64	394	391,772.36
Total	15,033	$ 31,956,893.06	22,744	$ 36,487,767.94	37,777	$ 68,444,661.00

Hazardous Retired Lives Summary June 30, 2015

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	546	$ 623,173.09	417	$ 441,902.23	963	$ 1,065,075.32
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	270	321,675.94	32	35,992.59	302	357,668.53
66-2/3% to Beneficiary	95	124,113.01	25	28,470.28	120	152,583.29
50% to Beneficiary	151	226,570.36	53	82,243.85	204	308,814.21
Pop-up Option	790	1,178,355.10	149	190,433.91	939	1,368,789.01
10 Years Certain	38	50,671.18	8	9,483.17	46	60,154.35
10 Years Certain & Life	108	122,407.40	67	59,303.30	175	181,710.70
Social Security Option						
Age 62 Basic	58	102,424.11	32	54,945.63	90	157,369.74
Age 62 Survivorship	144	293,499.19	18	26,316.41	162	319,815.60
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	46	56,665.05	16	15,177.42	62	71,842.47
20 Years Certain & Life	55	75,938.29	25	35,627.47	80	111,565.76
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	11	10,996.56	13	10,878.00	24	21,874.56
PLSO 24 Month Basic	15	15,174.89	9	7,947.86	24	23,122.75
PLSO 36 Month Basic	46	39,101.25	24	20,365.85	70	59,467.10
PLSO 12 Month Survivor	21	27,586.95	6	5,150.84	27	32,737.79
PLSO 24 Month Survivor	19	27,990.82	9	11,029.16	28	39,019.98
PLSO 36 Month Survivor	47	46,297.04	15	18,695.05	62	64,992.09
Total	2,460	$ 3,342,640.23	918	$ 1,053,963.02	3,378	$ 4,396,603.25

Non-Hazardous Beneficiary Lives Summary June 30, 2015

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	11	$ 6,472.34	26	$ 28,627.42	37	$ 35,099.76
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	286	240,679.96	1,507	1,592,664.10	1,793	1,833,344.06
66-2/3% to Beneficiary	46	51,612.90	325	361,214.09	371	412,826.99
50% to Beneficiary	136	103,829.36	445	321,638.85	581	425,468.21
Pop-up Option	148	232,355.30	583	951,704.41	731	1,184,059.71
10 Years Certain	89	70,741.25	88	64,315.24	177	135,056.49
10 Years Certain & Life	27	27,939.89	31	34,592.49	58	62,532.38
Social Security Option						
Age 62 Basic	1	272.14	9	11,008.65	10	11,280.79
Age 62 Survivorship	60	90,697.76	280	517,510.81	340	608,208.57
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	4	1,500.58	4	1,500.58
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	3	2,135.64	7	8,134.18	10	10,269.82
15 Years Certain & Life	14	18,496.87	46	64,497.76	60	82,994.63
20 Years Certain & Life	23	31,188.28	71	126,372.04	94	157,560.32
5 Years Certain	51	52,570.42	52	41,085.99	103	93,656.41
PLSO 12 Month Basic	0	0.00	1	1,791.60	1	1,791.60
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	3,357.39	2	3,357.39
PLSO 12 Month Survivor	5	8,931.63	16	25,203.66	21	34,135.29
PLSO 24 Month Survivor	11	12,668.80	19	13,422.70	30	26,091.50
PLSO 36 Month Survivor	18	13,121.41	51	54,779.42	69	67,900.83
Total	929	$ 963,713.95	3,563	$ 4,223,421.38	4,492	$ 5,187,135.33

Hazardous Beneficiary Lives Summary June 30, 2015

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2	$ 1,051.91	3	$ 1,857.03	5	$ 2,908.94
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	10	4,162.37	131	95,844.42	141	100,006.79
66-2/3% to Beneficiary	0	0.00	18	8,090.57	18	8,090.57
50% to Beneficiary	2	1,450.30	28	12,494.57	30	13,944.87
Pop-up Option	11	10,157.51	81	72,693.99	92	82,851.50
10 Years Certain	3	3,404.88	17	13,950.13	20	17,355.01
10 Years Certain & Life	4	3,098.69	2	1,122.75	6	4,221.44
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	0	0.00	27	47,797.10	27	47,797.10
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	1	262.55	3	2,151.81	4	2,414.36
15 Years Certain & Life	3	1,422.71	6	3,186.33	9	4,609.04
20 Years Certain & Life	0	0.00	5	2,328.34	5	2,328.34
5 Years Certain	1	634.60	3	1,302.48	4	1,937.08
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	1	125.74	1	125.74
PLSO 12 Month Survivor	0	0.00	3	3,344.12	3	3,344.12
PLSO 24 Month Survivor	1	995.41	3	2,021.84	4	3,017.25
PLSO 36 Month Survivor	2	706.28	9	10,329.90	11	11,036.18
Total	40	$ 27,347.21	340	$ 278,641.12	380	$ 305,988.33

Non-Hazardous Members
Retired and Beneficiary Information June 30, 2015
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	38	$ 768,838	29	$ 359,797	95	$ 617,027	162	$ 1,745,662
45-49	451	$ 11,860,925	92	$ 1,441,952	39	$ 470,958	582	$ 13,773,835
50-54	1,619	$ 46,248,053	166	$ 2,357,480	124	$ 1,765,543	1,909	$ 50,371,076
55-59	4,109	$ 117,452,704	267	$ 3,605,427	218	$ 3,046,380	4,594	$ 124,104,511
60-64	7,067	$ 181,076,208	394	$ 5,306,557	364	$ 6,501,062	7,825	$ 192,883,827
65-69	8,754	$ 195,996,103	385	$ 4,857,730	507	$ 9,133,847	9,646	$ 209,987,680
70-74	5,689	$ 114,236,855	254	$ 3,100,310	538	$ 9,301,283	6,481	$ 126,638,448
75-79	3,726	$ 66,357,625	191	$ 2,188,882	542	$ 8,078,072	4,459	$ 76,624,579
80-84	2,311	$ 35,338,257	85	$ 906,308	541	$ 8,016,658	2,937	$ 44,261,223
85-89	1,397	$ 19,659,343	37	$ 360,404	543	$ 7,624,089	1,977	$ 27,643,836
90 & Over	706	$ 7,784,311	10	$ 71,869	981	$ 7,690,706	1,697	$ 15,546,886
Totals	35,867	$ 796,779,222	1,910	$ 24,556,716	4,492	$ 62,245,625	42,269	$ 883,581,563

Hazardous Members
Retired and Beneficiary Information June 30, 2015
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	27	$ 517,235	13	$ 161,596	16	$ 75,930	56	$ 754,761
45-49	182	$ 3,961,540	18	$ 203,632	7	$ 91,988	207	$ 4,257,160
50-54	304	$ 5,991,557	26	$ 250,024	10	$ 123,588	340	$ 6,365,169
55-59	505	$ 10,051,273	25	$ 233,500	31	$ 341,481	561	$ 10,626,254
60-64	679	$ 11,194,560	30	$ 227,917	49	$ 647,439	758	$ 12,069,916
65-69	818	$ 11,835,271	21	$ 165,169	57	$ 634,108	896	$ 12,634,548
70-74	397	$ 4,833,025	9	$ 46,086	64	$ 542,592	470	$ 5,421,703
75-79	191	$ 2,023,682	6	$ 28,701	55	$ 586,747	252	$ 2,639,130
80-84	80	$ 593,034	4	$ 9,617	48	$ 278,483	132	$ 881,134
85-89	37	$ 278,646			27	$ 181,166	64	$ 459,812
90 & Over	6	$ 153,175			16	$ 168,338	22	$ 321,513
Totals	3,226	$ 51,432,998	152	$ 1,326,242	380	$ 3,671,860	3,758	$ 56,431,100

Total Non-Hazardous Active Members as of June 30, 2015
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	20								20
Avg Pay	$17,737								$17,737
20-24	886	1							887
Avg Pay	$23,391	$33,425							$23,403
25-29	2,664	439	5						3,108
Avg Pay	$28,960	$32,731	$29,684						$29,494
30-34	2,141	1,708	445	21					4,315
Avg Pay	$31,287	$36,816	$37,865	$36,062					$34,177
35-39	1,535	1,522	1,479	539	24				5,099
Avg Pay	$31,952	$38,305	$42,376	$43,306	$47,931				$38,148
40-44	1,304	1,213	1,298	1,212	418	43	18	4	5,510
Avg Pay	$32,339	$39,112	$43,735	$45,002	$47,814	$48,845	$59,836	$87,422	$40,733
44-49	1,141	1,105	1,079	1,020	928	236	140	59	5,708
Avg Pay	$31,597	$38,396	$44,761	$46,435	$49,845	$49,274	$56,690	$61,249	$42,673
50-54	1,005	1,033	1,030	865	740	283	291	195	5,442
Avg Pay	$32,949	$36,903	$42,453	$45,858	$49,486	$51,184	$55,774	$60,909	$42,970
55-59	702	977	934	807	603	224	195	161	4,603
Avg Pay	$32,449	$38,477	$40,153	$44,954	$47,580	$48,259	$56,113	$62,583	$42,292
60-64	427	628	666	567	370	136	120	112	3,026
Avg Pay	$35,924	$40,253	$41,579	$43,715	$48,348	$50,916	$53,633	$62,896	$43,420
65-69	102	235	257	194	116	28	38	36	1,006
Avg Pay	$40,162	$44,643	$41,651	$46,324	$55,042	$48,604	$56,458	$65,539	$46,252
70 & over	32	59	78	69	49	18	13	14	332
Avg Pay	$36,039	$39,453	$38,113	$49,389	$53,186	$44,090	$60,320	$69,652	$45,243
Totals	11,959	8,920	7,271	5,294	3,248	968	815	581	39,056
Avg Pay	$30,853	$38,034	$42,269	$45,170	$49,133	$49,693	$55,892	$62,471	$39,539

Total Hazardous Active Members as of June 30, 2015
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	237								237
Avg Pay	$23,433								$23,433
25-29	498	63							561
Avg Pay	$27,179	$32,539							$27,781
30-34	320	211	44						575
Avg Pay	$28,166	$33,457	$36,244						$30,726
35-39	150	154	155	39	1				499
Avg Pay	$28,884	$34,290	$36,682	$39,649	$36,516				$33,831
40-44	160	126	137	133	26				582
Avg Pay	$28,351	$36,108	$38,552	$41,991	$47,190				$36,390
44-49	133	114	108	85	45	6	1	1	493
Avg Pay	$27,905	$33,652	$36,597	$41,865	$47,547	$63,485	$55,249	$44,796	$35,861
50-54	113	86	76	64	27	11	6	1	384
Avg Pay	$28,471	$35,423	$36,238	$40,473	$46,346	$53,618	$56,491	$64,218	$36,074
55-59	72	67	79	57	13	4		4	296
Avg Pay	$28,869	$33,784	$36,060	$40,850	$47,907	$60,395		$61,752	$35,914
60-64	46	50	46	31	14	4	1	2	194
Avg Pay	$28,263	$35,068	$38,441	$37,662	$43,967	$46,616	$48,383	$60,357	$35,879
65-69	3	16	15	11	2	2	1		50
Avg Pay	$38,807	$41,438	$37,813	$46,940	$74,676	$49,752	$52,436		$43,285
70 & over	2	2	6	4		1			15
Avg Pay	$24,952	$21,001	$33,219	$47,329		$45,591			$35,075
Totals	1,734	889	666	424	128	28	9	8	3,886
Avg Pay	$27,361	$34,358	$37,015	$41,230	$47,204	$55,138	$55,002	$59,592	$33,114

SCHEDULE F

SENSITIVITY ANALYSIS

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate and the rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 7.50%, together with a decrease in the discount rate to 6.50% and an increase in the discount rate to 8.50%. Under this scenario, the underlying inflation rate assumption is held constant at 3.25% and the payroll growth assumption is held constant at 4.00%.
- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.25%, together with decreases in the inflation rate to 3.00% and 2.75%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption and the healthcare trend assumption for members hired before 7/1/2003.
- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 4.00%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

NON-HAZARDOUS
ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Retirement			
Actuarial Accrued Liabiltiy	$ 13,627,857,276	$ 12,359,672,849	$ 11,286,839,300
Actuarial Value of Assets	2,350,989,940	2,350,989,940	2,350,989,940
Unfunded Liability	$ 11,276,867,336	$ 10,008,682,909	$ 8,935,849,360
Funded Ratio	17.25%	19.02%	20.83%
Contribution Rate	40.88%	38.93%	37.46%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 2,722,781,798	$ 2,413,705,252	$ 2,157,244,101
Actuarial Value of Assets	695,018,262	695,018,262	695,018,262
Unfunded Liability	$ 2,027,763,536	$ 1,718,686,990	$ 1,462,225,839
Funded Ratio	25.53%	28.79%	32.22%
Contribution Rate	9.44%	8.35%	7.44%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
KERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 16,350,639,074	$ 14,773,378,101	$ 13,444,083,401
Actuarial Value of Assets	3,046,008,202	3,046,008,202	3,046,008,202
Unfunded Liability	$ 13,304,630,872	$ 11,727,369,899	$ 10,398,075,199
Funded Ratio	18.63%	20.62%	22.66%
Contribution Rate	50.32%	47.28%	44.90%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%

NON-HAZARDOUS
INFLATION ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Inflation Rate 25 basis points	Decrease Inflation Rate 50 basis points
Retirement			
Actuarial Accrued Liabiltiy	$ 12,359,672,849	$ 12,630,546,443	$ 12,915,582,119
Actuarial Value of Assets	2,350,989,940	2,350,989,940	2,350,989,940
Unfunded Liability	$ 10,008,682,909	$ 10,279,556,503	$ 10,564,592,179
Funded Ratio	19.02%	18.61%	18.20%
Contribution Rate	38.93%	40.23%	41.59%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
Insurance			
Actuarial Accrued Liabiltiy	$ 2,413,705,252	$ 2,420,702,362	$ 2,428,129,859
Actuarial Value of Assets	695,018,262	695,018,262	695,018,262
Unfunded Liability	$ 1,718,686,990	$ 1,725,684,100	$ 1,733,111,597
Funded Ratio	28.79%	28.71%	28.62%
Contribution Rate	8.35%	8.42%	8.50%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
KERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 14,773,378,101	$ 15,051,248,805	$ 15,343,711,978
Actuarial Value of Assets	3,046,008,202	3,046,008,202	3,046,008,202
Unfunded Liability	$ 11,727,369,899	$ 12,005,240,603	$ 12,297,703,776
Funded Ratio	20.62%	20.24%	19.85%
Contribution Rate	47.28%	48.65%	50.09%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%

NON-HAZARDOUS
PAYROLL GROWTH ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Payroll Growth 2%	No Payroll Growth
Retirement			
Actuarial Accrued Liabiltiy	$ 12,359,672,849	$ 12,359,672,849	$ 12,359,672,849
Actuarial Value of Assets	2,350,989,940	2,350,989,940	2,350,989,940
Unfunded Liability	$ 10,008,682,909	$ 10,008,682,909	$ 10,008,682,909
Funded Ratio	19.02%	19.02%	19.02%
Contribution Rate	38.93%	48.00%	58.40%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 2,413,705,252	$ 2,413,705,252	$ 2,413,705,252
Actuarial Value of Assets	695,018,262	695,018,262	695,018,262
Unfunded Liability	$ 1,718,686,990	$ 1,718,686,990	$ 1,718,686,990
Funded Ratio	28.79%	28.79%	28.79%
Contribution Rate	8.35%	9.74%	11.30%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
KERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 14,773,378,101	$ 14,773,378,101	$ 14,773,378,101
Actuarial Value of Assets	3,046,008,202	3,046,008,202	3,046,008,202
Unfunded Liability	$ 11,727,369,899	$ 11,727,369,899	$ 11,727,369,899
Funded Ratio	20.62%	20.62%	20.62%
Contribution Rate	47.28%	57.74%	69.70%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%

HAZARDOUS
ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Retirement			
Actuarial Accrued Liabiltiy	$ 993,666,440	$ 895,433,387	$ 813,020,323
Actuarial Value of Assets	556,687,757	556,687,757	556,687,757
Unfunded Liability	$ 436,978,683	$ 338,745,630	$ 256,332,566
Funded Ratio	56.02%	62.17%	68.47%
Contribution Rate	26.30%	21.08%	16.42%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 424,497,259	$ 374,904,234	$ 334,316,325
Actuarial Value of Assets	451,514,191	451,514,191	451,514,191
Unfunded Liability	$ (27,016,932)	$ (76,609,957)	$ (117,197,866)
Funded Ratio	106.36%	120.43%	135.06%
Contribution Rate	6.59%	2.74%	-0.76%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
KERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 1,418,163,699	$ 1,270,337,621	$ 1,147,336,648
Actuarial Value of Assets	1,008,201,948	1,008,201,948	1,008,201,948
Unfunded Liability	$ 409,961,751	$ 262,135,673	$ 139,134,700
Funded Ratio	71.09%	79.36%	87.87%
Contribution Rate	32.89%	23.82%	15.66%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%

HAZARDOUS
INFLATION ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Inflation Rate 25 basis points	Decrease Inflation Rate 50 basis points
Retirement			
Actuarial Accrued Liabiltiy	$ 895,433,387	$ 919,056,850	$ 945,790,790
Actuarial Value of Assets	556,687,757	556,687,757	556,687,757
Unfunded Liability	$ 338,745,630	$ 362,369,093	$ 389,103,033
Funded Ratio	62.17%	60.57%	58.86%
Contribution Rate	21.08%	22.36%	23.97%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
Insurance			
Actuarial Accrued Liabiltiy	$ 374,904,234	$ 376,207,536	$ 377,592,353
Actuarial Value of Assets	451,514,191	451,514,191	451,514,191
Unfunded Liability	$ (76,609,957)	$ (75,306,655)	$ (73,921,838)
Funded Ratio	120.43%	120.02%	119.58%
Contribution Rate	2.74%	2.92%	3.12%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
KERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 1,270,337,621	$ 1,295,264,386	$ 1,323,383,143
Actuarial Value of Assets	1,008,201,948	1,008,201,948	1,008,201,948
Unfunded Liability	$ 262,135,673	$ 287,062,438	$ 315,181,195
Funded Ratio	79.36%	77.84%	76.18%
Contribution Rate	23.82%	25.28%	27.09%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%

HAZARDOUS
PAYROLL GROWTH ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Payroll Growth 2%	No Payroll Growth
Retirement			
Actuarial Accrued Liabiltiy	$ 895,433,387	$ 895,433,387	$ 895,433,387
Actuarial Value of Assets	556,687,757	556,687,757	556,687,757
Unfunded Liability	$ 338,745,630	$ 338,745,630	$ 338,745,630
Funded Ratio	62.17%	62.17%	62.17%
Contribution Rate	21.08%	24.72%	28.89%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 374,904,234	$ 374,904,234	$ 374,904,234
Actuarial Value of Assets	451,514,191	451,514,191	451,514,191
Unfunded Liability	$ (76,609,957)	$ (76,609,957)	$ (76,609,957)
Funded Ratio	120.43%	120.43%	120.43%
Contribution Rate	2.74%	2.00%	1.16%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
KERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 1,270,337,621	$ 1,270,337,621	$ 1,270,337,621
Actuarial Value of Assets	1,008,201,948	1,008,201,948	1,008,201,948
Unfunded Liability	$ 262,135,673	$ 262,135,673	$ 262,135,673
Funded Ratio	79.36%	79.36%	79.36%
Contribution Rate	23.82%	26.72%	30.05%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%

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November 10, 2015

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2016. The date of the valuation was June 30, 2015.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

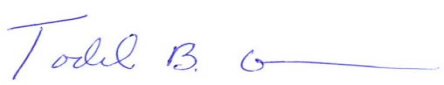
Since the previous valuation, the revised assumptions from the economic and demographic experience investigation covering the five-year period from July 1, 2008 to June 30, 2013 have been reflected in this valuation.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,



Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

TBG/AB:kc

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REPORT ON THE ANNUAL VALUATION OF THE COUNTY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2015

SECTION I – SUMMARY OF PRINCIPAL RESULTS

This report, prepared as of June 30, 2015, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/2015	6/30/2014	6/30/2015	6/30/2014	6/30/2015	6/30/2014
Contributions for next fiscal year:						
Retirement	13.95%	12.42%	21.71%	20.26%		
Insurance	4.93	4.88	9.79	13.42	N/A	N/A
Total	18.88%	17.30%	31.50%	33.68%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$10,740,325,421	$9,772,522,616	$3,613,307,547	$3,288,825,753	$14,353,632,968	$13,061,348,369
Actuarial value of assets	$6,474,848,513	$6,117,133,692	$2,096,782,956	$1,967,640,027	$8,571,631,469	$8,084,773,719
Unfunded liability on actuarial value of assets	$4,265,476,908	$3,655,388,924	$1,516,524,591	$1,321,185,726	$5,782,001,499	$4,976,574,650
Funded ratio on actuarial value of assets	60.29%	62.60%	58.03%	59.83%	59.72%	61.90%
Market value of assets	$6,416,853,506	$6,507,300,157	$2,073,397,045	$2,082,998,414	$8,490,250,551	$8,590,298,571
Unfunded liability on market value of assets	$4,323,471,915	$3,265,222,459	$1,539,910,502	$1,205,827,339	$5,863,382,417	$4,471,049,798
Funded ratio on market value of assets	59.75%	66.59%	57.38%	63.34%	59.15%	65.77%
Insurance						
Actuarial accrued liability	$2,907,827,440	$2,616,914,600	$1,504,015,233	$1,493,864,379	$4,411,842,673	$4,110,778,979
Actuarial value of assets	$1,997,456,463	$1,831,199,465	$1,087,707,118	$997,733,237	$3,085,163,581	$2,828,932,702
Unfunded liability on actuarial value of assets	$910,370,977	$785,715,135	$416,308,115	$496,131,142	$1,326,679,092	$1,281,846,277
Funded ratio on actuarial value of assets	68.69%	69.98%	72.32%	66.79%	69.93%	68.82%
Market value of assets	$1,948,454,097	$1,899,557,376	$1,061,560,788	$1,034,307,636	$3,010,014,885	$2,933,865,012
Unfunded liability on market value of assets	$959,373,343	$717,357,224	$442,454,445	$459,556,743	$1,401,827,788	$1,176,913,967
Funded ratio on market value of assets	67.01%	72.59%	70.58%	69.24%	68.23%	71.37%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	52,651	49,935	8,034	7,646	60,685	57,581
Number of vested former members	13,649	10,329	708	588	14,357	10,917
Number of former members due a refund	66,530	66,661	1,948	1,940	68,478	68,601
Number of active members	80,852	81,115	9,172	9,194	90,024	90,309
Total salary	$2,296,715,957	$2,272,270,287	$483,640,601	$479,164,016	$2,780,356,558	$2,751,434,303
Average salary	$28,406	$28,013	$52,730	$52,117	$30,885	$30,467

The County Employees Retirement System is a defined benefit pension fund that provides pensions and health care coverage for employees of city and county governments, police officers and firefighters, non-teaching staff of local boards of education, circuit clerks, local library employees, and other local governmental agency employees. The County Employees Retirement System includes both non-hazardous and hazardous duty benefits. This report presents the results of the June 30, 2015 actuarial funding valuation for both the Retirement Plan and the Insurance Fund. The primary purpose of performing the actuarial funding valuations are to:

- Calculate the actuarially determined contribution rates for the fiscal year beginning July 1, 2016 for both the Retirement Plan and the Insurance Fund.
- Determine the experience of the System since the last valuation date.
- Disclose asset and liability measures as of the valuation date.
- Analyze and report on trends in contributions, assets, and liabilities over the past several years.

Since the previous valuation there were no changes to the plan provisions, however the actuarial methods and assumptions were updated to reflect an experience study performed over the five-year period ending June 30, 2013 dated April 30, 2014. This experience study was adopted by the Board on December 4, 2014. The experience study reviewed the actuarial assumptions and methods used in the actuarial valuation process of both the Retirement Plan and Insurance Fund. For the Retirement Plan the assumptions fall into three categories. The first are economic assumptions which include price inflation, wage inflation and investment return. The second category includes demographic assumptions which includes assumed rates of mortality, service retirement, disability retirement, withdrawal and salary increases for merits and promotions. For the Insurance Fund the assumptions fall into three categories. The first two, economic assumptions and demographic assumptions are the same as those used for the Retirement Plan. The third category includes other post-employment benefit assumptions.

As a result of the experience the following assumptions were updated:

Summary of Assumptions Changes	
Economic Assumptions	
Salary	Composed of Inflation component, Real Rate of Salary Increase component and Merit/Promotion Scale
Inflation	Reduction to annual assumed rate of inflation assumption from 3.50% to 3.25%.
Wage Inflation	Reduction to annual assumed rate from real salary increase assumption from 1.00% to 0.75%
Investment Rate of Return	Composed of Inflation component (3.25% from above) and Real Rate of Return component. Reduction from 7.75% to 7.50% net investment return assumption.
Payroll Growth	Reduce from 4.50% to 4.00%.

Summary of Assumptions Changes	
Demographic Assumptions	
Withdrawal	Increase rates of withdrawal
Retirement	Adjusted rates of retirement
Disability	Decreased rates of disability
Base Mortality	Healthy Retirees – RP-2000 Mortality Tables Set back one year for females. Disabled Retirees – RP-2000 Combined Disabled Mortality Tables for disabled annuitants set back four years for males. Actives – 50% of the RP-2000 Combined Mortality for males, 30% of the RP-2000 Combined Mortality for Females.
Mortality Projection	Healthy Retiree and Beneficiary – Mortality rates are projected to 2013 using improvement Scale BB Disable Retirees – Mortality rates are projected to 2013 using improvement Scale BB Active Members – Mortality rates are projected to 2013 using improvement Scale BB
Other Post-Employment Benefit Assumptions	Updated participation assumptions

The actuarial valuation results provide "snapshot" view the System's financial condition on June 30, 2015. Actuarial gains and losses result when actuarial experience of the plan (such as asset return, pay increases, turnover, deaths, etc.) is different from the expected by the actuarial assumptions.

Non-Hazardous

The Retirement Plan's Unfunded Actuarial Accrued Liability (UAAL) was expected to be $3,682.6 million taking into account contributions from both the employer and members of $446.2 million. The actual UAAL was $4,265.5 million. The increase of $582.9 million was due to the change in actuarial assumptions and methods offset by an actuarial gain due to actual experience different than what was anticipated by the assumptions. The Insurance Fund's UAAL was expected to be $803.2 million taking into account expected employer and member contributions of $116.6 million. The actual UAAL was $910.4 million. The increase in the UAAL of $107.2 million was due to the change in actuarial assumptions and methods offset by an actuarial gain due to actuarial experience different than what was anticipated by the assumptions.

The remaining amortization period of the UAAL of both the Pension and Insurance Funds is 28-years as of June 30, 2015. Detailed analysis of the gains and losses are presented in Section V of the report.

As of June 30, 2015 the Pension and Insurance Funds had net assets of $6,416,853,506 and $1,948,454,097 respectively. The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarially determined contribution. The asset valuation method which recognizes the annual

unexpected portion of market value investment returns over a five-year period, attempts to dampen the effect of market volatility. The resulting amount is called the “actuarial value of assets” and is utilized to determine the actuarial valuation results. In this year’s actuarial valuation, the actuarial value of assets as of June 30, 2015 was $6,474,848,513 and $1,997,456,463 respectively for the Pension and Insurance Funds.

On a market basis, the estimated rate of return was 1.72% and 1.93% respectively for the Pension and Insurance Funds, assuming all cash flows occur in the middle of the year. Due to better than assumed prior returns on the market value of assets the net rate of return measured on the actuarial value of assets was 9.28% and 8.39% respectively for both the Pension and Insurance Funds. Please see Section III and Schedule B of this report for more detailed information on the market and actuarial value of assets.

Hazardous

The Retirement Plan’s Unfunded Actuarial Accrued Liability (UAAL) was expected to be $1,331.6 million taking into account contributions from both the employer and members of $157.9 million. The actual UAAL was $1,516.5 million. The increase of $184.9 million was due to the change in actuarial assumptions and methods and an actuarial loss due to actual experience different than what was anticipated by the assumptions. The Insurance Fund’s UAAL was expected to be $507.2 million taking into account expected employer and member contributions of $65.0 million. The actual UAAL was $416.3 million. The decrease in the UAAL of $90.9 million was due to the change in actuarial assumptions and methods and an actuarial gain due to actuarial experience different than what was anticipated by the assumptions.

The remaining amortization period of the UAAL of both the Pension and Insurance Funds is 28-years as of June 30, 2015. Detailed analysis of the gains and losses are presented in Section V of the report.

As of June 30, 2015 the Pension and Insurance Funds had net assets of $2,073,397,045 and $1,061,560,788 respectively. The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarially determined contribution. The asset valuation method which recognizes the annual unexpected portion of market value investment returns over a five-year period, attempts to dampen the effect of market volatility. The resulting amount is called the “actuarial value of assets” and is utilized to determine the actuarial valuation results. In this year’s actuarial valuation, the actuarial value of assets as of June 30, 2015 was $2,096,782,956 and $1,087,707,118 respectively for the Pension and Insurance Funds.

On a market basis, the estimated rate of return was 1.80% and 1.95% respectively for the Pension and Insurance Funds, assuming all cash flows occur in the middle of the year. Due to better than assumed prior returns on the market value of assets the net rate of return measured on the actuarial value of assets was 9.04% and 8.29% respectively for both the Pension and Insurance Funds. Please see Section III and Schedule B of this report for more detailed information on the market and actuarial value of assets.

Schedule F provides sensitivity analysis for three different sets of economic assumptions; the discount rate assumption, the inflation assumption, and the payroll growth assumption. Two assumption change scenarios are presented for each economic assumption. The results of the economic assumption change scenarios are presented along with the valuation results for comparison.

The long-term financial health of this retirement System, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. The System has recently been strengthened by eliminating unfunded ad hoc cost-of-living adjustments for retirees. The cost for providing these benefit increase must be prefunded in advance.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2015 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	80,852	$2,296,715,957	$28,406	48.0	9.5
Hazardous	9,172	483,640,601	52,730	39.1	10.6
Total in CERS	90,024	$2,780,356,558	$30,885	47.1	9.6

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2010	84,681	$2,236,855,380	$26,415	1.3%
6/30/2011	85,285	2,276,595,948	26,694	1.1
6/30/2012	83,052	2,236,546,345	26,929	0.9
6/30/2013	81,815	2,236,277,489	27,333	1.5
6/30/2014	81,115	2,272,270,287	28,013	2.5
6/30/2015	80,852	2,296,715,957	28,406	1.4

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2010	9,562	$466,548,660	$48,792	1.4%
6/30/2011	9,407	466,963,860	49,640	1.7
6/30/2012	9,130	464,228,923	50,847	2.4
6/30/2013	9,123	461,672,567	50,605	(0.5)
6/30/2014	9,194	479,164,016	52,117	3.0
6/30/2015	9,172	483,640,601	52,730	1.2

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number*	Annual Benefits*	Group Averages	
			Benefit	Age
Retiree	44,185	$513,032,750	$11,611	69.7
Disability	3,740	40,943,159	10,947	64.4
Beneficiary	4,726	41,299,467	8,739	67.1
Total in CERS	52,651	$595,275,376	$11,306	69.1

** Does not include number and annual benefits for those members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 2,819 members in the hazardous system also receiving an annual benefit from the non-hazardous System. Total annual benefits for these members is $19,419,161.*

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	6,632	$180,783,035	$27,259	61.2
Disability	494	8,049,322	16,294	55.6
Beneficiary	908	13,320,981	14,671	56.5
Total in CERS	8,034	$202,153,338	$25,162	60.4

This valuation also includes 82,835 inactive members (80,179 Non-Hazardous and 2,656 Hazardous; of which 13,649 Non-Hazardous are vested and 708 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2015 the total market value of assets amounted to $11,500,265,436 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2015

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	$6,416,853,506	$1,948,454,097	$8,365,307,603
Hazardous	2,073,397,045	1,061,560,788	3,134,957,833
Total	$8,490,250,551	$3,010,014,885	$11,500,265,436

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $11,656,795,050. Schedule B shows the development of the actuarial value of assets as of June 30, 2015. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2015	JUNE 30, 2014
Retirement		
Non-Hazardous	$ 6,474,848,513	$ 6,117,133,692
Hazardous	2,096,782,956	1,967,640,027
Total	$ 8,571,631,469	$ 8,084,773,719
Insurance		
Non-Hazardous	$ 1,997,456,463	$ 1,831,199,465
Hazardous	1,087,707,118	997,733,237
Total	$ 3,085,163,581	$ 2,828,932,702
CERS Total		
Non-Hazardous	$ 8,472,304,976	$ 7,948,333,157
Hazardous	3,184,490,074	2,965,373,264
Total	$ 11,656,795,050	$ 10,913,706,421

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2015. Separate balance sheets are shown for each employee group as well as in total for all groups. Since the previous valuation, the revised assumptions from the economic and demographic experience investigation covering the five-year period from July 1, 2008 to June 30, 2013 have been reflected in this valuation.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $16,266,003,952, of which $8,396,260,203 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $391,305,698 is for the prospective benefits payable on account of inactive members and $7,478,438,051 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $8,571,631,469 as of June 30, 2015. The difference of $7,694,372,483 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $1,253,220,746 is the present value of future contributions expected to be made by members, and the balance of $6,441,151,737 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.05% of payroll for non-hazardous members and 4.26% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $659,150,238. When this amount is subtracted from $6,441,151,737, which is the present value of the total future contributions to be made by the employers, there remains $5,782,001,499 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 10.15% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the participating employers on account of retirement benefits be set at 17.19% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $4,265,476,908 for non-hazardous members and $1,516,524,591 for hazardous members over 28 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.00% each year.

5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.75% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.26% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $5,115,755,686, of which $1,986,476,405 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $176,833,997 is for the prospective benefits payable on account of inactive members and $2,952,445,284 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $3,085,163,581 as of June 30, 2015. The difference of $2,030,592,105 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $84,680,334 is the present value of future contributions expected to be made by members, and the balance of $1,945,911,771 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 2.76% of payroll for non-hazardous members and 5.08% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $619,232,679. When this amount is subtracted from $1,945,911,771, which is the present value of the total future contributions to be made by the employers, there remains $1,326,679,092 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 2.14% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the participating employers on account of insurance benefits be set at 4.64% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $910,370,977 for non-hazardous members and $416,308,115 for hazardous members over 28 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.00% each year.
5. The contribution rate for administrative expenses is determined to be 0.03% of payroll for non-hazardous employees and 0.07% of payroll for hazardous employees.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2015 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/14	$ 3,655.4	$ 1,321.2	$ 4,976.6
(2)	Normal cost from last valuation	192.5	66.8	259.3
(3)	Contributions	446.2	157.9	604.1
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875	280.9	101.5	382.4
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 3,682.6	$ 1,331.6	$ 5,014.2
(6)	Change due to audit recommendations	(8.0)	1.3	(6.7)
(7)	Change due to new actuarial assumption or methods	(598.3)	(168.1)	(766.4)
(8)	Expected UAAL after changes: (5) - (6) - (7)	$ 4,288.9	$ 1,498.4	$ 5,787.3
(9)	Actual UAAL as of 6/30/15	$ 4,265.5	$ 1,516.5	$ 5,782.0
(10)	Gain/(loss): (8) - (9)	$ 23.4	$ (18.1)	$ 5.3
(11)	Accrued liabilities as of 6/30/14	$ 9,772.5	$ 3,288.8	$ 13,061.3
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	0.2 %	(0.6)%	0.0 %

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/14	$ 785.7	$ 496.1	$ 1,281.8
(2)	Normal cost from last valuation	76.3	39.6	115.9
(3)	Expected contributions	116.6	65.0	181.6
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	57.8	36.5	94.3
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 803.2	$ 507.2	$ 1,310.4
(6)	Change due to audit recommendations	(6.8)	(0.9)	(7.7)
(7)	Change due to new actuarial assumption or methods	(180.5)	23.5	(157.0)
(8)	Expected UAAL after changes: (5) - (6) - (7)	$ 990.5	$ 484.6	$ 1,475.1
(9)	Actual UAAL as of 6/30/15	$ 910.4	$ 416.3	$ 1,326.7
(10)	Gain/(loss): (8) - (9)	$ 80.1	$ 68.3	$ 148.4
(11)	Accrued liabilities as of 6/30/14	$ 2,616.9	$ 1,493.9	$ 4,110.8
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	3.1 %	4.6 %	3.6 %

* *Unfunded actuarial accrued liability*

NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/15	Insurance $ Gain (or Loss) For Year Ending 6/30/15
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (86.6)	$ (20.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(17.1)	2.6
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.1)	(2.5)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	43.5	(15.3)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	46.5	133.8
New Members. Additional unfunded accrued liability will produce a loss.	(16.9)	(5.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	103.0	11.7
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	(6.2)	26.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(41.8)	(50.0)
Gain (or Loss) During Year From Financial Experience	$ 23.4	$ 80.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	(606.3)	(187.3)
Composite Gain (or Loss) During Year	$ (582.9)	$ (107.2)

HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/15	Insurance $ Gain (or Loss) For Year Ending 6/30/15
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (70.9)	$ (8.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(2.7)	0.6
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	32.1	3.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	12.8	72.3
New Members. Additional unfunded accrued liability will produce a loss.	(23.8)	(4.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	28.1	5.4
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	28.9	11.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(22.7)	(10.2)
Gain (or Loss) During Year From Financial Experience	$ (18.1)	$ 68.3
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	(166.8)	22.6
Composite Gain (or Loss) During Year	$ (184.9)	$ 90.9

TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/15	Insurance $ Gain (or Loss) For Year Ending 6/30/15
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (157.5)	$ (29.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(19.9)	3.2
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.9)	(3.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	75.6	(12.1)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	59.3	206.1
New Members. Additional unfunded accrued liability will produce a loss.	(40.7)	(10.6)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	131.1	17.1
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	22.7	37.6
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(64.5)	(60.2)
Gain (or Loss) During Year From Financial Experience	$ 5.2	$ 148.4
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	(773.1)	(164.7)
Composite Gain (or Loss) During Year	$ (767.9)	$ (16.3)

SECTION VI – ACTUARIALLY DETERMINED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2016/2017 fiscal year.

Actuarially Determined Contribution Rates
Non-Hazardous Retirement

Contribution Rate for	% of Payroll
A. Normal Cost:	
(1) Service retirement benefits	7.68%
(2) Disability benefits	0.28
(3) Survivor benefits	0.09
(4) Total	8.05%
B. Member Contributions	5.00%
C. Employer Normal Cost: [A(4) - B]	3.05%
D. Administrative Expenses	0.75%
E. Unfunded Actuarial Accrued Liability Contributions:	
(1) UAAL Contribution Based on 6/30/14 Valuation:	8.19%
(2) Change due to:	
a. Active decrements	0.30%
b. Pay increases	(0.11)%
c. Retiree mortality	0.01%
d. Investment return	(0.25)%
e. Assumption Changes	1.42%
f. Payroll Growth Assumption	0.33%
g. Other	0.26%
h. Total Change	1.96%
(3) UAAL Contribution Based on 6/30/15 Valuation: [E(1) +E(2)h]	10.15%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	13.95%

**Based on 28 year amortization of the UAAL from June 30, 2015*

Actuarially Determined Contribution Rates
Hazardous Retirement

Contribution Rate for	% of Payroll
A. Normal Cost:	
(1) Service retirement benefits	11.71%
(2) Disability benefits	0.44
(3) Survivor benefits	0.11
(4) Total	12.26%
B. Member Contributions	8.00%
C. Employer Normal Cost: [A(4) - B]	4.26%
D. Administrative Expenses	0.26%
E. Unfunded Actuarial Accrued Liability Contributions*:	
(1) UAAL Contribution Based on 6/30/14 Valuation:	14.05%
(2) Change due to:	
a. Active decrements	0.47%
b. Pay increases	(0.15)%
c. Retiree mortality	(0.33)%
d. Investment return	(0.32)%
e. Assumption Changes	2.23%
f. Payroll Growth Assumption	0.77%
g. Other	0.47%
h. Total Change	3.14%
(3) UAAL Contribution Based on 6/30/15 Valuation: [E(1) +E(2)h]	17.19%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	21.71%

**Based on 28 year amortization of the UAAL from June 30, 2015*

Actuarially Determined Contribution Rates
Non-Hazardous Insurance

	Contribution for	% of Payroll
A.	Normal Cost:	3.10%
B.	Member Contributions*	0.34%
C.	Employer Normal Cost: [A - B]	2.76%
D.	Administrative Expenses	0.03%
E.	Unfunded Actuarial Accrued Liability**:	2.14%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	4.93%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 28 year amortization of the UAAL from June 30, 2015*

Actuarially Determined Contribution Rates
Hazardous Insurance

	Contribution for	% of Payroll
A.	Normal Cost:	5.36%
B.	Member Contributions*	0.28%
C.	Employer Normal Cost: [A - B]	5.08%
D.	Administrative Expenses	0.07%
E.	Unfunded Actuarial Accrued Liability**:	4.64%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	9.79%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 28 year amortization of the UAAL from June 30, 2015*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements (GASB) 43, 45, 67 and 68 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. The information required under GASB 67 and 68 will be issued in separate reports. We are providing the retirement benefit information for information purposes only. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2015

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	52,651	8,034	60,685
Terminated employees entitled to benefits but not yet receiving benefits	80,179	2,656	82,835
Active Members	80,852	9,172	90,024
Total	213,682	19,862	233,544

* *Does not include number and annual benefits for those members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 2,819 members in in the hazardous system also receiving an annual benefit from the non-hazardous system.*

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
			Non-Hazardous Members			
6/30/2010	$ 5,546,857,291	$ 8,459,022,280	$ 2,912,164,989	65.6%	$ 2,236,855,380	130.2%
6/30/2011	5,629,611,183	8,918,085,025	3,288,473,842	63.1	2,276,595,948	144.4
6/30/2012	5,547,235,599	9,139,567,695	3,592,332,096	60.7	2,236,546,345	160.6
6/30/2013	5,637,094,483	9,378,876,114	3,741,781,631	60.1	2,236,277,489	167.3
6/30/2014	6,117,133,692	9,772,522,616	3,655,388,924	62.6	2,272,270,287	160.9
6/30/2015*	6,474,848,513	10,740,325,421	4,265,476,908	60.3	2,296,715,957	185.7
			Hazardous Members			
6/30/2010	$ 1,749,464,388	$ 2,672,151,907	$ 922,687,519	65.5%	$ 466,548,660	197.8%
6/30/2011	1,779,545,393	2,859,041,052	1,079,495,659	62.2	466,963,860	231.2
6/30/2012	1,747,379,297	3,009,992,047	1,262,612,750	58.1	464,228,923	272.0
6/30/2013	1,801,691,410	3,124,205,593	1,322,514,183	57.7	461,672,567	286.5
6/30/2014	1,967,640,027	3,288,825,753	1,321,185,726	59.8	479,164,016	275.7
6/30/2015*	2,096,782,956	3,613,307,547	1,516,524,591	58.0	483,640,601	313.6
			Total CERS Members			
6/30/2010	$ 7,296,321,679	$ 11,131,174,187	$ 3,834,852,508	65.5%	$ 2,703,404,040	141.9%
6/30/2011	7,409,156,576	11,777,126,077	4,367,969,501	62.9	2,743,559,808	159.2
6/30/2012	7,294,614,896	12,149,559,743	4,854,944,847	60.0	2,700,775,268	179.8
6/30/2013	7,438,785,893	12,503,081,707	5,064,295,814	59.5	2,697,950,056	187.7
6/30/2014	8,084,773,719	13,061,348,369	4,976,574,650	61.9	2,751,434,303	180.9
6/30/2015	8,571,631,469	14,353,632,968	5,782,001,499	59.7	2,780,356,558	208.0

** Discount rate changed from 7.75% to 7.50%*

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2010	$ 1,293,038,593	$ 3,158,340,174	$ 1,865,301,581	40.9%	$ 2,236,855,380	83.4%
6/30/2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
6/30/2012	1,512,853,851	2,370,771,288	857,917,437	63.8	2,236,546,345	38.4
6/30/2013	1,628,244,197	2,443,894,100	815,649,903	66.6	2,236,277,489	36.5
6/30/2014	1,831,199,465	2,616,914,600	785,715,135	70.0	2,272,270,287	34.6
6/30/2015*	1,997,456,463	2,907,827,440	910,370,977	68.7	2,296,715,957	39.6
Hazardous Members						
6/30/2010	$ 692,769,770	$ 1,674,703,216	$ 981,933,446	41.4%	$ 466,548,660	210.5%
6/30/2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
6/30/2012	829,040,842	1,364,843,057	535,802,215	60.7	464,228,923	115.4
6/30/2013	892,774,391	1,437,332,817	544,558,426	62.1	461,672,567	118.0
6/30/2014	997,733,237	1,493,864,379	496,131,142	66.8	479,164,016	103.5
6/30/2015*	1,087,707,118	1,504,015,233	416,308,115	72.3	483,640,601	86.1
Total CERS Members						
6/30/2010	$ 1,985,808,363	$ 4,833,043,390	$ 2,847,235,027	41.1%	$ 2,703,404,040	105.3%
6/30/2011	2,204,241,067	4,721,675,960	2,517,434,893	46.7	2,743,559,808	91.8
6/30/2012	2,341,894,693	3,735,614,345	1,393,719,652	62.7	2,700,775,268	51.6
6/30/2013	2,521,018,588	3,881,226,917	1,360,208,329	65.0	2,697,950,056	50.4
6/30/2014	2,828,932,702	4,110,778,979	1,281,846,277	68.8	2,751,434,303	46.6
6/30/2015	3,085,163,581	4,411,842,673	1,326,679,092	69.9	2,780,356,558	47.7

** Discount rate changed from 7.75% to 7.50%*

INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
		Non-Hazardous Members			
June 30, 2010	$266,331,326	$9,156,991	$166,607,097	$175,764,088	66.0%
June 30, 2011	213,429,424	0	186,885,576	186,885,576	87.6
June 30, 2012	214,421,008	0	171,924,836	171,924,836	80.2
June 30, 2013	195,560,870	0	159,992,643	159,992,643	81.8
June 30, 2014	130,651,800	0	123,278,028	123,278,028	94.4
June 30, 2015	119,510,589	0	119,443,608	119,443,608	99.9
		Hazardous Members			
June 30, 2010	$129,227,449	$1,493,440	$83,042,875	$84,536,315	65.4%
June 30, 2011	109,226,667	0	98,592,286	98,592,286	90.3
June 30, 2012	110,762,577	0	92,563,664	92,563,664	83.6
June 30, 2013	102,010,672	0	85,319,393	85,319,393	83.6
June 30, 2014	74,360,438	0	74,791,619	74,791,619	100.6
June 30, 2015	69,102,811	0	71,778,130	71,778,130	103.9
		Total CERS Members			
June 30, 2010	$395,558,775	$10,650,431	$249,649,972	$260,300,403	65.8%
June 30, 2011	322,656,091	0	285,477,862	285,477,862	88.5
June 30, 2012	325,183,585	0	264,488,500	264,488,500	81.3
June 30, 2013	297,571,542	0	245,312,036	245,312,036	82.4
June 30, 2014	205,012,238	0	198,069,647	198,069,647	96.6
June 30, 2015	188,613,400	0	191,221,738	191,221,738	101.4

Only Insurance Benefits Schedule of Employer Contributions is required under GASB 67, which replaced GASB 27.

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2015. Additional information as of the latest actuarial valuation follows.

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2015	6/30/2015
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	28 years	28 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption (Pre-Medicare) Medical Trend Assumption (Post-Medicare)	7.50% - 5.00% 5.50% - 5.00%	7.50% - 5.00% 5.50% - 5.00%
Year Ultimate Trend	2020	2020
Dollar Contribution Trend	1.50%	1.50%
Actuarial assumptions:		
Investment rate of return*	7.50%	7.50%
*Includes price inflation at	3.25%	3.25%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2015 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2014. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 6,474,848,513	$ 6,117,133,692
Prospective contributions		
Member contributions	$ 976,915,537	$ 925,203,934
Employer normal contributions	542,240,368	585,670,648
Unfunded accrued liability contributions	4,265,476,908	3,655,388,924
Total prospective contributions	$ 5,784,632,813	$ 5,166,263,506
Total assets	$ 12,259,481,326	$ 11,283,397,198
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 6,142,108,967	$ 5,578,289,754
Present value of benefits payable on account of active members	5,769,618,592	5,410,117,704
Present value of benefits payable on account of inactive members	347,753,767	294,989,740
Total liabilities	$ 12,259,481,326	$ 11,283,397,198

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 2,096,782,956	$ 1,967,640,027
Prospective contributions		
Member contributions	$ 276,305,209	$ 328,795,453
Employer normal contributions	116,909,870	243,669,592
Unfunded accrued liability contributions	1,516,524,591	1,321,185,726
Total prospective contributions	$ 1,909,739,670	$ 1,893,650,771
Total assets	$ 4,006,522,626	$ 3,861,290,798
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,254,151,236	$ 2,041,681,031
Present value of benefits payable on account of active members	1,708,819,459	1,783,774,089
Present value of benefits payable on account of inactive members	43,551,931	35,835,678
Total liabilities	$ 4,006,522,626	$ 3,861,290,798

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 8,571,631,469	$ 8,084,773,719
Prospective contributions		
Member contributions	$ 1,253,220,746	$ 1,253,999,387
Employer normal contributions	659,150,238	829,340,240
Unfunded accrued liability contributions	5,782,001,499	4,976,574,650
Total prospective contributions	$ 7,694,372,483	$ 7,059,914,277
Total assets	$ 16,266,003,952	$ 15,144,687,996
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,396,260,203	$ 7,619,970,785
Present value of benefits payable on account of active members	7,478,438,051	7,193,891,793
Present value of benefits payable on account of inactive members	391,305,698	330,825,418
Total liabilities	$ 16,266,003,952	$ 15,144,687,996

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 1,997,456,463	$ 1,831,199,465
Prospective contributions		
Member contributions	$ 72,682,694	$ 61,485,213
Employer normal contributions	477,798,719	512,955,032
Unfunded accrued liability contributions	910,370,977	785,715,135
Total prospective contributions	$ 1,460,852,390	$ 1,360,155,380
Total assets	$ 3,458,308,853	$ 3,191,354,845
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,215,933,830	$ 1,107,884,548
Present value of benefits payable on account of active members	2,085,712,217	1,873,171,963
Present value of benefits payable on account of inactive members	156,662,806	210,298,334
Total liabilities	$ 3,458,308,853	$ 3,191,354,845

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 1,087,707,118	$ 997,733,237
Prospective contributions		
Member contributions	$ 11,997,640	$ 13,186,369
Employer normal contributions	141,433,960	265,203,854
Unfunded accrued liability contributions	416,308,115	496,131,142
Total prospective contributions	$ 569,739,715	$ 774,521,365
Total assets	$ 1,657,446,833	$ 1,772,254,602
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 770,542,575	$ 662,960,014
Present value of benefits payable on account of active members	866,733,067	1,071,943,003
Present value of benefits payable on account of inactive members	20,171,191	37,351,585
Total liabilities	$ 1,657,446,833	$ 1,772,254,602

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS

	June 30, 2015	June 30, 2014
ASSETS		
Current actuarial value of assets	$ 3,085,163,581	$ 2,828,932,702
Prospective contributions		
Member contributions	$ 84,680,334	$ 74,671,582
Employer normal contributions	619,232,679	778,158,886
Unfunded accrued liability contributions	1,326,679,092	1,281,846,277
Total prospective contributions	$ 2,030,592,105	$ 2,134,676,745
Total assets	$ 5,115,755,686	$ 4,963,609,447
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,986,476,405	$ 1,770,844,562
Present value of benefits payable on account of active members	2,952,445,284	2,945,114,966
Present value of benefits payable on account of inactive members	176,833,997	247,649,919
Total liabilities	$ 5,115,755,686	$ 4,963,609,447

The following tables provide the solvency test for non-hazardous and hazardous CERS members.

Solvency Test
Retirement Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2010	$ 1,063,746,826	$ 4,890,659,077	$ 2,504,616,377	$ 5,546,857,291	100.0%	91.7%	0.0%
6/30/2011	1,110,967,160	5,209,783,924	2,597,333,941	5,629,611,183	100.0	86.7	0.0
6/30/2012	1,117,549,337	5,416,932,995	2,605,085,363	5,547,235,599	100.0	81.8	0.0
6/30/2013	1,149,610,832	5,638,370,836	2,590,894,446	5,637,094,483	100.0	79.6	0.0
6/30/2014	1,204,383,085	5,873,279,494	2,694,860,037	6,117,133,692	100.0	83.6	0.0
6/30/2015	1,216,584,592	6,489,862,734	3,033,878,095	6,474,848,513	100.0	81.0	0.0

Solvency Test
Retirement Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2010	$ 369,612,720	$ 1,622,684,455	$ 679,854,732	$ 1,749,464,388	100.0%	85.0%	0.0%
6/30/2011	382,072,055	1,768,511,545	708,457,452	1,779,545,393	100.0	79.0	0.0
6/30/2012	381,672,428	1,889,884,303	738,435,316	1,747,379,297	100.0	72.3	0.0
6/30/2013	390,471,059	1,988,029,963	745,704,571	1,801,691,410	100.0	71.0	0.0
6/30/2014	415,069,629	2,077,516,709	796,239,415	1,967,640,027	100.0	74.7	0.0
6/30/2015	422,358,688	2,297,703,167	893,245,692	2,096,782,956	100.0	72.9	0.0

Solvency Test
Insurance Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2010	$ 0	$ 1,526,533,372	$ 1,631,806,802	$ 1,293,038,593	100.0%	84.7%	0.0%
6/30/2011	0	1,460,808,255	1,613,164,950	1,433,450,793	100.0	98.1	0.0
6/30/2012	0	1,146,907,750	1,223,863,538	1,512,853,851	100.0	100.0	29.9
6/30/2013	0	1,205,599,287	1,238,294,813	1,628,244,197	100.0	100.0	34.1
6/30/2014	0	1,318,182,882	1,298,731,718	1,831,199,465	100.0	100.0	39.5
6/30/2015	0	1,372,596,636	1,535,230,804	1,997,456,463	100.0	100.0	40.7

Solvency Test
Insurance Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2010	$ 0	$ 814,300,256	$ 860,402,960	$ 692,769,770	100.0%	85.1%	0.0%
6/30/2011	0	771,631,287	876,071,468	770,790,274	100.0	99.9	0.0
6/30/2012	0	575,099,089	789,743,968	829,040,842	100.0	100.0	32.2
6/30/2013	0	660,955,331	776,377,486	892,774,391	100.0	100.0	29.9
6/30/2014	0	700,311,599	793,552,780	997,733,237	100.0	100.0	37.5
6/30/2015	0	790,713,766	713,301,467	1,087,707,118	100.0	100.0	41.6

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2014	2015	2016	2017	2018	2019
A.	Actuarial Value Beginning of Year	$ 5,637,094,483	$ 6,117,133,692				
B.	Market Value End of Year	6,507,300,157	6,416,853,506				
C.	Market Value Beginning of Year	5,780,830,355	6,507,300,157				
D.	Cash Flow						
	D1. Contributions	446,690,113	446,166,560				
	D2. Benefit Payments	(597,136,388)	(628,858,436)				
	D3. Administrative Expenses	(18,614,538)	(18,212,642)				
	D4. Investment Expenses	(25,695,263)	(44,163,869)				
	D5. Net	(194,756,076)	(245,068,387)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	921,225,878	154,621,736				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	467,158,509	540,694,581				
	E4. Amount for Phased-In Recognition	454,067,369	(386,072,845)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	90,813,474	(77,214,569)	0	0	0	0
	F2. First Prior Year	33,352,842	90,813,474	(77,214,569)	0	0	0
	F3. Second Prior Year	(88,282,845)	33,352,842	90,813,474	(77,214,569)	0	0
	F4. Third Prior Year	103,419,725	(88,282,845)	33,352,842	90,813,474	(77,214,569)	0
	F5. Fourth Prior Year	68,333,580	103,419,725	(88,282,845)	33,352,842	90,813,474	(77,214,569)
	F6. Total Recognized Investment Gain	207,636,776	62,088,627	(41,331,098)	46,951,747	13,598,905	(77,214,569)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 6,117,133,692	$ 6,474,848,513				
H.	Difference Between Market & Actuarial Values	$ 390,166,465	$ (57,995,007)	$ (16,663,909)	$ (63,615,656)	$ (77,214,569)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2014	2015	2016	2017	2018	2019
A.	Actuarial Value Beginning of Year	$ 1,801,691,410	$ 1,967,640,027				
B.	Market Value End of Year	2,082,998,414	2,073,397,045				
C.	Market Value Beginning of Year	1,830,657,969	2,082,998,414				
D.	Cash Flow						
	D1. Contributions	157,870,670	157,861,279				
	D2. Benefit Payments	(192,298,833)	(203,244,240)				
	D3. Administrative Expenses	(1,720,998)	(1,287,827)				
	D4. Investment Expenses	(8,220,545)	(14,240,230)				
	D5. Net	(44,369,706)	(60,911,018)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	296,710,151	51,309,649				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	148,695,758	173,864,114				
	E4. Amount for Phased-In Recognition	148,014,393	(122,554,465)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	29,602,879	(24,510,893)	0	0	0	0
	F2. First Prior Year	8,909,239	29,602,879	(24,510,893)	0	0	0
	F3. Second Prior Year	(31,969,450)	8,909,239	29,602,879	(24,510,893)	0	0
	F4. Third Prior Year	34,158,058	(31,969,450)	8,909,239	29,602,879	(24,510,893)	0
	F5. Fourth Prior Year	20,921,839	34,158,058	(31,969,450)	8,909,239	29,602,879	(24,510,893)
	F6. Total Recognized Investment Gain	61,622,565	16,189,833	(17,968,225)	14,001,225	5,091,986	(24,510,893)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,967,640,027	$ 2,096,782,956				
H.	Difference Between Market & Actuarial Values	$ 115,358,387	$ (23,385,911)	$ (5,417,686)	$ (19,418,911)	$ (24,510,893)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2014	2015	2016	2017	2018	2019
A.	Actuarial Value Beginning of Year	$ 1,628,244,197	$ 1,831,199,465				
B.	Market Value End of Year	1,899,557,376	1,948,454,097				
C.	Market Value Beginning of Year	1,633,696,661	1,899,557,376				
D.	Cash Flow						
	D1. Contributions	130,842,429	126,700,611				
	D2. Benefit Payments	(96,804,206)	(113,734,556)				
	D3. Administrative Expenses	(507,954)	(787,341)				
	D4. Investment Expenses	(7,387,530)	(13,082,126)				
	D5. Net	26,142,739	(903,412)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	239,717,976	49,800,133				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	135,298,319	160,769,748				
	E4. Amount for Phased-In Recognition	104,419,657	(110,969,615)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	20,883,931	(22,193,923)	0	0	0	0
	F2. First Prior Year	6,696,406	20,883,931	(22,193,923)	0	0	0
	F3. Second Prior Year	(36,271,274)	6,696,406	20,883,931	(22,193,923)	0	0
	F4. Third Prior Year	37,275,522	(36,271,274)	6,696,406	20,883,931	(22,193,923)	0
	F5. Fourth Prior Year	12,929,625	37,275,522	(36,271,277)	6,696,406	20,883,931	(22,193,923)
	F6. Total Recognized Investment Gain	41,514,210	6,390,662	(30,884,863)	5,386,414	(1,309,992)	(22,193,923)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,831,199,465	$ 1,997,456,463				
H.	Difference Between Market & Actuarial Values	$ 68,357,911	$ (49,002,366)	$ (18,117,503)	$ (23,503,917)	$ (22,193,923)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2014	2015	2016	2017	2018	2019
A.	Actuarial Value Beginning of Year	$ 892,774,391	$ 997,733,237				
B.	Market Value End of Year	1,034,307,636	1,061,560,788				
C.	Market Value Beginning of Year	894,232,297	1,034,307,636				
D.	Cash Flow						
	D1. Contributions	75,914,753	72,870,851				
	D2. Benefit Payments	(60,842,197)	(65,555,654)				
	D3. Administrative Expenses	(274,768)	(339,023)				
	D4. Investment Expenses	(4,075,256)	(7,175,588)				
	D5. Net	10,722,532	(199,414)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	129,352,807	27,452,566				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	73,951,673	87,604,757				
	E4. Amount for Phased-In Recognition	55,401,134	(60,152,191)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	11,080,227	(12,030,438)	0	0	0	0
	F2. First Prior Year	3,554,157	11,080,227	(12,030,438)	0	0	0
	F3. Second Prior Year	(18,373,572)	3,554,157	11,080,227	(12,030,438)	0	0
	F4. Third Prior Year	18,338,164	(18,373,572)	3,554,157	11,080,227	(12,030,438)	0
	F5. Fourth Prior Year	5,685,665	18,338,164	(18,373,572)	3,554,157	11,080,227	(12,030,438)
	F6. Total Recognized Investment Gain	20,284,641	2,568,538	(15,769,626)	2,603,946	(950,211)	(12,030,438)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 997,733,237	$ 1,087,707,118				
H.	Difference Between Market & Actuarial Values	$ 36,574,399	$ (26,146,330)	$ (10,376,704)	$ (12,980,650)	$ (12,030,438)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually for retirement and insurance benefits.

PRICE INFLATION: 3.25% per annum, compounded annually.

PAYROLL GROWTH: 4.00% per annum, compounded annually.

SALARY INCREASES: The assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.00% per annum:

Service Years	Annual Rates of Salary Increases				
	Merit & Seniority		Base (Economy)	Increase Next Year	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0-1	8.17%	14.90%	4.00%	12.50%	19.50%
1-2	4.81%	5.77%	4.00%	9.00%	10.00%
2-3	1.44%	1.92%	4.00%	5.50%	6.00%
3-4	1.44%	1.20%	4.00%	5.50%	5.25%
4-5	0.96%	0.96%	4.00%	5.00%	5.00%
5-6	0.96%	0.48%	4.00%	5.00%	4.50%
6-7	0.72%	0.00%	4.00%	4.75%	4.00%
7-8	0.72%	0.00%	4.00%	4.75%	4.00%
8-9	0.48%	0.00%	4.00%	4.50%	4.00%
9-10	0.48%	0.00%	4.00%	4.50%	4.00%
10 & Over	0.24%	0.00%	4.00%	4.25%	4.00%

DISABILITY: Representative assumed annual rates of disability for both non-hazardous and hazardous members are as follows:

Nearest Age	Annual Rates of Disability			
	Non-Hazardous		Hazardous	
	Male	Female	Male	Female
20	0.02%	0.02%	0.05%	0.05%
30	0.03%	0.03%	0.09%	0.09%
40	0.07%	0.07%	0.20%	0.20%
50	0.19%	0.19%	0.56%	0.56%
60	0.49%	0.49%	1.46%	1.46%

RETIREMENT: The assumed annual rates of retirement for both non-hazardous and hazardous members are as follows:

Annual Rates of Retirement					
Non-Hazardous			Hazardous		
Age	Those Eligible for Service Retirement*	Those Eligible for Service Retirement**	Service	Those Eligible for Service Retirement+	Those Eligible for Service Retirement++
55	5.0%		20	22.5%	
56	6.0%		21	22.5%	
57	7.0%		22	22.5%	
58	7.0%		23	22.5%	
59	8.0%		24	30.0%	
60	9.0%	9.0%	25	33.0%	22.5%
61	15.0%	15.0%	26	33.0%	22.5%
62	18.0%	18.0%	27	36.0%	22.5%
63	18.0%	18.0%	28	39.0%	22.5%
64	18.0%	18.0%	29	55.0%	30.0%
65	18.0%	18.0%	30	33.0%	33.0%
66	18.0%	18.0%	31	33.0%	33.0%
67	18.0%	18.0%	32	50.0%	36.0%
68	18.0%	18.0%	33	40.0%	39.0%
69	18.0%	18.0%	34	40.0%	55.0%
70	18.0%	18.0%	35	40.0%	33.0%
71	18.0%	18.0%	36	40.0%	33.0%
72	18.0%	18.0%	37	40.0%	50.0%
73	18.0%	18.0%	38	40.0%	40.0%
74	18.0%	18.0%	39	40.0%	40.0%
75	100.0%	100.0%	40	40.0%	40.0%

* *For members participating before September 1, 2008. If service is at least 27 years, the rate is 30%.*

** *For members participating on or after September 1, 2008. If age plus service is at least 87, the rate is 30%.*

\+ *For members participating before September 1, 2008. The annual rate of service retirement is 100% at age 62.*

++ *For members participating on or after September 1, 2008. The annual rate of service retirement is 100% at age 60.*

WITHDRAWAL: The assumed annual rates of withdrawal for both non-hazardous and hazardous members are as follows:

Service Years	Annual Rates of Withdrawal	
	Non-Hazardous	Hazardous
0-1	28.00%	20.50%
1-2	16.00%	13.00%
2-3	12.00%	10.50%
3-4	10.00%	9.00%
4-5	8.00%	8.00%
5-6	6.00%	7.00%
6-7	5.00%	7.00%
7-8	5.00%	6.00%
8-13	4.00%	6.00%
14 & Over	3.00%	6.00%

DEATH BEFORE RETIREMENT: The rates of mortality for the period before retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females) for all healthy retired members and beneficiaries. The RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. These assumptions are used to measure the probabilities of each benefit payment being made after retirement. These assumptions contain margin for mortality improvements.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

FORM OF PAYMENT: Participants are assumed to elect a life-only form of payment.

ASSET VALUATION METHOD: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

ACTUARIAL COST METHOD: Costs were determined using the Entry Age Normal, Level Percentage of Pay Actuarial Cost Method. Under this method, a calculation is made for retirement benefits to determine the uniform and constant percentage rate of contribution which, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would be required to meet the cost of benefits payable. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

MULTIPLE STATUS/MULTIPLE SYSTEM MEMBERS: Some members may be represented under more than one retirement system and/or may have more than one status (e.g., active in one system, deferred vested in another and retired from a different system). For pension purposes, members that are active in one System but have service in another are assumed to retire from the System in which they are currently active. Any deferred pension benefits from another System are assumed to begin once the member terminates from their current active position. The insurance liabilities for multiple status/multiple system members are calculated assuming only one benefit is payable across all Systems and that benefit is payable from the combination of status and System which produces the highest economic value to the member.

AFFORDABLE CARE ACT (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2018 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the insurance liability will be required.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE SPOUSE AGE DIFFERENCE: Wives are assumed to be three years younger than husbands.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Annual Rate of Increase		
	Under Age 65	Age 65 & Older	Dollar Contribution*
2015	7.50%	5.50%	1.50%
2016	6.75%	5.25%	1.50%
2017	6.25%	5.00%	1.50%
2018	5.75%	5.00%	1.50%
2019	5.25%	5.00%	1.50%
2020 & Beyond	5.00%	5.00%	1.50%

** Applies to members participating on or after July 1, 2003*

HEALTH CARE AGE RELATED MORBIDITY: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 – 69	3.00%
70 – 74	2.50%
75 – 79	2.00%
80 – 84	1.00%
85 – 89	0.50%
90 & Beyond	0.00%

For the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP.

HEALTH CARE DEFERRED VESTED BENEFIT RECIPIENT INITIAL AGE OF BENEFIT RECEIPT FOR MEMBERS: Health care benefits are assumed to begin at the following ages for deferred vested benefit recipients:

Deferred Vested Initial Age of Benefit Receipt		
Applies Only to Members with Non-Hazardous Service		
Members Participating Before July 1, 2003	Members Participating Between July 1, 2003 to September 1, 2008	Members Participating On or After September 1, 2008
55	55	60

Deferred Vested Initial Age of Benefit Receipt		
Applies Only to Members with Hazardous Service		
Members Participating Before July 1, 2003	Members Participating Between July 1, 2003 to September 1, 2008	Members Participating On or After September 1, 2008
50	50	50

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: Representative values of the assumed annual rates of member participation and spouse coverage are as follows:

Plan Elections of Covered Members Age 65 and Older as of January 1, 2016		
Kentucky Retirement System Health Plan	**Non-Hazardous**	**Hazardous**
Medical Only	5.71%	2.92%
Essential	2.72%	1.44%
Premium	91.58%	95.64%

Retirement Participation Rates			
Service at Retirement	**Members Participating Before July 1, 2003**	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
Under 10	50.00%	100.00%	100.00%
10 – 14	75.00%	100.00%	100.00%
15 – 19	90.00%	100.00%	100.00%
20+	100.00%	100.00%	100.00%

Disability/Death Participation Rates	
Members Participating Before July 1, 2003	
Duty-Disability	**Duty Death-In-Service**
100.00%	100.00%

Deferred Vested Member Participation Rates		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
50.00%	100.00%	100.00%

Members Electing Spouse Coverage		
Applies Only to Members with Hazardous Service		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
75.00%	75.00%	75.00%

HEALTH CARE MONTHLY PLAN COSTS: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions for the year following the valuation date. The amounts include medical and drug costs. Members under 65 are assumed to elect the LivingWell PPO. For retirees ages 65 and older, the full costs shown are before averaging. The average costs are then normalized to age 65 and age adjusted in calculating liabilities. The dollar amount contribution level is the cost to the system per year of service for members participating on or after July 1, 2003.

Under Age 65 (KEHP) Full Costs as of January 1, 2016				
Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 702.10	$ 721.14	$ 677.74	$ 663.68
Parent Plus	967.18	1,023.04	963.36	930.34
Couple	1,302.74	1,564.20	1,474.84	1,429.26
Family	1,453.94	1,738.40	1,640.84	1,591.52
Family C-R	810.00	865.64	814.72	792.90

Age 65 and Older Full Costs as of January 1, 2016	
Kentucky Retirement System Health Plan - Medical Only	$158.25
Kentucky Retirement System Health Plan - Essential	77.76
Kentucky Retirement System Health Plan - Premium	244.25

Age 65 and Older Average Cost as of the Valuation Date Based on Actual Retiree Elections	
Non-Hazardous	Hazardous
$218.33	$227.19

Dollar Amount Contribution Level Per Year of Service as of July 1, 2015	
Applies to members participating on or after July 1, 2003	
Non-Hazardous	Hazardous
$12.80	$19.19

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.20% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 5.00% and 4.00% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year.

Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement — 55

Service Requirement — At least one month of hazardous duty service credit

Amount — If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — 60

Service Requirement — At least 60 months of hazardous duty service credit

Amount — The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Hazardous Normal Retirement (continued):

Members whose participation began on or after 1/1/2014

Age Requirement	60
Service Requirement	At least 60 months of hazardous duty service credit or 25 or more years of service, with no age requirement
Amount	Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 55 with 60 months of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Non-Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 60 with 10 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 50 with 15 years of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years of service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

Non-Hazardous Disability (continued):

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Hazardous Disability:

Age Requirement

None

Service Requirement

60 months (waived if in line of duty disability)

Members whose participation began before 8/1/2004

Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Hazardous Disability (continued):

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age — 65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Vesting (continued):

Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Members whose participation began on or after 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Upon termination the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or the member can elect to leave the hypothetical account balance in the System. If the member does not withdraw the account balance, it will continue to earn 4% interest. Upon reaching normal retirement age the member can apply for retirement and receive the account balance as a lump sum payment or annuitize the account balance into a single life annuity.

Pre-Retirement Death Benefit (not in line of duty):

Members whose participation began before 1/1/2014

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Members whose participation began on or after 1/1/2014

Requirement	60 months service
Amount	The maximum of the benefit equal to the benefit the member would have received had the member retired on the day before the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Member Contributions (continued):

Members whose participation began on or after 1/1/2014	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.
Members whose participation began on or after 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.80 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is increased annually 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $19.19 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.80 per month for each year of earned. These amounts are shown as of the valuation date and are increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $19.19 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.80 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2010	2011	2012	2013	2014	2015
			Number			
Beginning of Year	39,756	41,038	43,211	45,304	47,676	49,935
Added	2,565	3,250	3,300	3,570	3,480	6,279
Removed	1,283	1,077	1,207	1,198	1,221	1,304
End of Year	41,038	43,211	45,304	47,676	49,935	52,651
			Annual Allowances*			
Beginning of Year	$ 440,061,418	$ 452,613,550	$ 483,594,068	$ 515,008,361	$ 557,979,192	$ 582,957,825
Added	21,063,111	38,861,094	41,160,717	56,721,012	33,974,542	44,962,364
Removed	8,510,979	7,880,576	9,746,424	13,750,181	8,995,909	10,369,262
End of Year	$ 452,613,550	$ 483,594,068	$ 515,008,361	$ 557,979,192	$ 582,957,825	$ 617,550,928
% Increase in Allowances	2.85%	6.84%	6.50%	8.34%	4.48%	5.93%
Average Annual Allowance	$ 11,029	$ 11,191	$ 11,368	$ 11,704	$ 11,674	$ 11,729

** The annual allowances shown for 2013 and later include allowances for hazardous members who are receiving a portion of benefit from the non-hazardous system.*

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2010	2011	2012	2013	2014	2015
			Number			
Beginning of Year	5,808	6,068	6,468	6,878	7,293	7,646
Added	423	502	483	519	469	879
Removed	163	102	73	104	116	138
End of Year	6,068	6,468	6,878	7,293	7,646	8,034
			Annual Allowances			
Beginning of Year	$ 139,886,751	$ 146,916,812	$ 160,259,395	$ 173,221,483	$ 182,634,895	$ 191,007,832
Added	8,566,698	14,640,991	14,149,084	10,923,660	9,940,048	13,429,781
Removed	1,536,637	1,298,408	1,186,996	1,510,248	1,567,111	2,284,275
End of Year	$ 146,916,812	$ 160,259,395	$ 173,221,483	$ 182,634,895	$ 191,007,832	$ 202,153,338
% Increase in Allowances	5.03%	9.08%	8.09%	5.43%	4.58%	5.84%
Average Annual Allowance	$ 24,212	$ 24,777	$ 25,185	$ 25,042	$ 24,981	$ 25,162

Non-Hazardous Retired Lives Summary June 30, 2015

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	4,878	$ 5,017,677.25	16,960	$ 12,244,575.46	21,838	$ 17,262,252.71
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2,662	2,975,703.19	1,360	843,226.97	4,022	3,818,930.16
66-2/3% to Beneficiary	735	1,321,760.53	500	535,795.19	1,235	1,857,555.72
50% to Beneficiary	1,051	1,684,603.14	1,410	1,646,873.22	2,461	3,331,476.36
Pop-up Option	3,775	5,893,547.05	3,214	3,427,798.78	6,989	9,321,345.83
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,309	1,306,768.09	3,084	2,310,575.07	4,393	3,617,343.16
Social Security Option						
Age 62 Basic	250	511,960.73	506	601,445.81	756	1,113,406.54
Age 62 Survivorship	583	1,251,418.13	325	381,853.27	908	1,633,271.40
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	602	598,384.25	737	551,861.16	1,339	1,150,245.41
20 Years Certain & Life	444	595,860.19	659	510,231.52	1,103	1,106,091.71
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	104	122,674.64	374	319,095.43	478	441,770.07
PLSO 24 Month Basic	61	43,319.47	253	199,718.44	314	243,037.91
PLSO 36 Month Basic	269	131,663.87	721	326,923.00	990	458,586.87
PLSO 12 Month Survivor	151	186,043.95	97	97,509.94	248	283,553.89
PLSO 24 Month Survivor	93	94,895.66	64	41,785.78	157	136,681.44
PLSO 36 Month Survivor	413	261,071.15	281	128,038.75	694	389,109.90
Total	17,380	$ 21,997,351.29	30,545	$ 24,167,307.79	47,925	$ 46,164,659.08

Hazardous Retired Lives Summary June 30, 2015

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	977	$ 1,967,095.18	301	$ 471,413.04	1,278	$ 2,438,508.22
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	728	1,459,399.53	34	41,793.20	762	1,501,192.73
66-2/3% to Beneficiary	286	714,431.10	7	16,775.46	293	731,206.56
50% to Beneficiary	441	1,045,498.06	31	64,219.16	472	1,109,717.22
Pop-up Option	2,768	6,968,633.62	124	239,586.87	2,892	7,208,220.49
10 Years Certain	65	109,736.33	7	7,094.67	72	116,831.00
10 Years Certain & Life	196	408,835.59	54	95,889.59	250	504,725.18
Social Security Option						
Age 62 Basic	105	231,332.42	11	18,327.51	116	249,659.93
Age 62 Survivorship	288	618,169.03	16	41,380.35	304	659,549.38
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	88	164,301.13	13	18,674.23	101	182,975.36
20 Years Certain & Life	144	285,953.06	26	39,202.15	170	325,155.21
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	26	45,792.55	9	12,126.97	35	57,919.52
PLSO 24 Month Basic	20	42,744.50	6	6,336.10	26	49,080.60
PLSO 36 Month Basic	55	86,721.56	21	24,078.06	76	110,799.62
PLSO 12 Month Survivor	59	147,864.89	4	8,080.23	63	155,945.12
PLSO 24 Month Survivor	68	110,699.90	2	2,220.11	70	112,920.01
PLSO 36 Month Survivor	140	215,374.81	6	6,248.86	146	221,623.67
Total	6,454	$ 14,622,583.26	672	$ 1,113,446.56	7,126	$ 15,736,029.82

Non-Hazardous Beneficiary Lives Summary June 30, 2015

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	11	$ 2,663.45	29	$ 15,975.00	40	$ 18,638.45
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	382	211,488.20	1,559	1,051,933.45	1,941	1,263,421.65
66-2/3% to Beneficiary	51	26,050.43	235	185,877.35	286	211,927.78
50% to Beneficiary	111	41,437.87	365	206,355.62	476	247,793.49
Pop-up Option	169	123,662.74	597	580,405.98	766	704,068.72
10 Years Certain	121	79,322.33	155	121,907.60	276	201,229.93
10 Years Certain & Life	57	41,035.70	66	52,465.33	123	93,501.03
Social Security Option						
Age 62 Basic	0	0.00	4	4,836.06	4	4,836.06
Age 62 Survivorship	24	15,046.70	142	213,312.24	166	228,358.94
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	1	206.92	1	206.92
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	2	1,795.91	5	3,220.69	7	5,016.60
15 Years Certain & Life	36	30,177.72	61	49,587.22	97	79,764.94
20 Years Certain & Life	48	32,035.04	68	67,986.15	116	100,021.19
5 Years Certain	98	69,977.28	103	66,201.82	201	136,179.10
PLSO 12 Month Basic	0	0.00	1	395.49	1	395.49
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	149.07	1	152.38	2	301.45
PLSO 12 Month Survivor	7	2,001.60	39	40,058.93	46	42,060.53
PLSO 24 Month Survivor	12	13,559.37	22	20,285.34	34	33,844.71
PLSO 36 Month Survivor	36	18,368.94	107	51,686.30	143	70,055.24
Total	1,166	$ 708,772.35	3,560	$ 2,732,849.87	4,726	$ 3,441,622.22

Hazardous Beneficiary Lives Summary June 30, 2015

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	12	$ 5,344.03	35	$ 29,165.73	47	$ 34,509.76
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	17	9,056.18	213	269,539.76	230	278,595.94
66-2/3% to Beneficiary	3	687.67	52	75,076.90	55	75,764.57
50% to Beneficiary	7	4,462.32	61	59,273.71	68	63,736.03
Pop-up Option	30	20,236.46	232	368,500.49	262	388,736.95
10 Years Certain	14	8,785.30	19	16,403.44	33	25,188.74
10 Years Certain & Life	4	1,629.00	3	1,665.29	7	3,294.29
Social Security Option						
Age 62 Basic	0	0.00	1	310.13	1	310.13
Age 62 Survivorship	0	0.00	100	160,392.84	100	160,392.84
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	3,287.07	3	3,287.07
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	5	1,437.03	15	8,001.28	20	9,438.31
15 Years Certain & Life	3	1,094.65	2	295.12	5	1,389.77
20 Years Certain & Life	3	1,090.53	12	11,197.02	15	12,287.55
5 Years Certain	2	3,185.15	3	5,130.68	5	8,315.83
PLSO 12 Month Basic	0	0.00	1	2,192.42	1	2,192.42
PLSO 24 Month Basic	0	0.00	1	1,466.49	1	1,466.49
PLSO 36 Month Basic	2	561.73	3	1,618.98	5	2,180.71
PLSO 12 Month Survivor	0	0.00	5	3,581.07	5	3,581.07
PLSO 24 Month Survivor	1	1,294.71	10	8,031.87	11	9,326.58
PLSO 36 Month Survivor	5	2,056.47	29	24,030.26	34	26,086.73
Total	108	$ 60,921.23	800	$ 1,049,160.55	908	$ 1,110,081.78

Non-Hazardous Members

Retired and Beneficiary Information June 30, 2015
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	16	$ 296,919	55	$ 571,004	150	$ 906,582	221	$ 1,774,505
45-49	251	$ 6,336,551	129	$ 1,537,253	52	$ 502,425	432	$ 8,376,229
50-54	1,116	$ 27,612,754	312	$ 3,939,865	129	$ 1,499,045	1,557	$ 33,051,664
55-59	3,762	$ 69,886,689	618	$ 7,329,984	260	$ 2,995,656	4,640	$ 80,212,329
60-64	7,471	$ 105,848,619	799	$ 9,305,546	479	$ 5,178,530	8,749	$ 120,332,695
65-69	10,849	$ 123,187,666	773	$ 8,520,802	626	$ 6,855,797	12,248	$ 138,564,265
70-74	8,426	$ 81,417,028	533	$ 5,146,348	676	$ 6,214,640	9,635	$ 92,778,016
75-79	6,043	$ 53,402,968	343	$ 3,212,277	628	$ 5,917,623	7,014	$ 62,532,868
80-84	3,608	$ 28,168,738	146	$ 1,186,043	571	$ 4,678,022	4,325	$ 34,032,803
85-89	1,802	$ 12,244,028	24	$ 155,229	501	$ 3,442,092	2,327	$ 15,841,349
90 & Over	841	$ 4,630,790	8	$ 38,807	654	$ 3,109,057	1,503	$ 7,778,654
Totals	44,185	$ 513,032,750	3,740	$ 40,943,158	4,726	$ 41,299,469	52,651	$ 595,275,377

Hazardous Members

Retired and Beneficiary Information June 30, 2015
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	104	$ 3,220,583	67	$ 1,051,656	173	$ 952,589	344	$ 5,224,828
45-49	625	$ 19,799,736	66	$ 1,186,656	31	$ 391,851	722	$ 21,378,243
50-54	992	$ 32,241,968	90	$ 1,619,041	54	$ 762,410	1,136	$ 34,623,419
55-59	1,103	$ 31,480,905	89	$ 1,485,426	78	$ 1,103,943	1,270	$ 34,070,274
60-64	1,396	$ 39,435,731	101	$ 1,503,578	103	$ 1,847,319	1,600	$ 42,786,628
65-69	1,242	$ 29,681,588	52	$ 837,394	125	$ 2,136,183	1,419	$ 32,655,165
70-74	657	$ 14,016,816	18	$ 223,743	117	$ 2,426,762	792	$ 16,667,321
75-79	334	$ 6,811,601	4	$ 73,253	106	$ 1,915,397	444	$ 8,800,251
80-84	122	$ 2,811,283	6	$ 48,656	75	$ 1,166,923	203	$ 4,026,862
85-89	50	$ 1,080,833	0	$ -	32	$ 458,914	82	$ 1,539,747
90 & Over	7	$ 201,990	1	$ 19,920	14	$ 158,693	22	$ 380,603
Totals	6,632	$ 180,783,034	494	$ 8,049,323	908	$ 13,320,984	8,034	$ 202,153,341

Total Non-Hazardous Active Members as of June 30, 2015
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	98								98
Avg Pay	$11,967								$11,967
20-24	2,088	14							2,102
Avg Pay	$18,730	$22,153							$18,753
25-29	3,834	692	15						4,541
Avg Pay	$22,930	$32,180	$27,766						$24,356
30-34	3,742	1,604	558	23					5,927
Avg Pay	$22,798	$32,997	$36,868	$42,832					$26,961
35-39	3,925	1,881	1,339	528	17			1	7,691
Avg Pay	$22,108	$31,219	$37,137	$41,252	$48,148			$18,871	$28,324
40-44	3,822	2,390	1,802	1,223	352	11	12	1	9,613
Avg Pay	$22,108	$28,323	$33,909	$42,125	$47,285	$46,672	$69,083	$89,526	$29,428
44-49	3,429	2,646	2,411	1,816	790	160	80	27	11,359
Avg Pay	$22,896	$27,608	$30,536	$36,077	$45,359	$47,870	$55,952	$61,686	$29,962
50-54	3,055	2,541	2,820	2,679	1,245	352	209	145	13,046
Avg Pay	$23,214	$28,235	$29,042	$31,388	$37,912	$47,537	$49,162	$55,701	$29,966
55-59	2,544	2,156	2,354	2,609	1,750	382	261	178	12,234
Avg Pay	$22,637	$27,135	$29,929	$30,294	$34,687	$41,587	$46,518	$58,828	$29,817
60-64	1,859	1,675	1,654	1,632	1,299	304	214	156	8,793
Avg Pay	$21,041	$27,448	$30,172	$31,396	$32,809	$38,304	$39,861	$55,156	$29,300
65-69	897	797	716	570	364	106	111	82	3,643
Avg Pay	$17,397	$22,645	$27,360	$28,696	$31,011	$34,002	$38,026	$46,585	$25,400
70 & over	395	446	410	275	135	39	45	60	1,805
Avg Pay	$14,824	$19,220	$22,115	$24,530	$26,517	$33,412	$33,136	$36,160	$21,487
Totals	29,688	16,842	14,079	11,355	5,952	1,354	932	650	80,852
Avg Pay	$21,974	$28,371	$30,993	$33,225	$36,742	$42,351	$45,025	$53,717	$28,406

Total Hazardous Active Members as of June 30, 2015
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	269	1		1					271
Avg Pay	$34,105	$39,726		$73,857					$34,272
25-29	1,019	239	1						1,259
Avg Pay	$41,001	$48,275	$46,715						$42,386
30-34	587	779	234	7					1,607
Avg Pay	$43,325	$51,350	$54,979	$58,583					$48,979
35-39	262	464	686	262	6				1,680
Avg Pay	$42,018	$50,255	$56,089	$61,881	$59,138				$53,198
40-44	132	283	518	752	158	3	10		1,856
Avg Pay	$41,092	$49,799	$55,308	$63,631	$68,667	$57,583	$84,366		$58,127
44-49	105	157	279	415	235	50	28	7	1,276
Avg Pay	$37,950	$48,680	$54,060	$59,763	$70,386	$76,060	$71,698	$88,369	$58,372
50-54	44	95	138	195	140	53	34	17	716
Avg Pay	$38,466	$47,896	$51,732	$59,044	$66,743	$75,414	$73,509	$80,570	$58,806
55-59	25	45	54	73	47	26	14	24	308
Avg Pay	$37,915	$48,112	$53,444	$54,542	$60,884	$67,480	$73,718	$84,122	$57,297
60-64	10	28	46	28	21	6	3	12	154
Avg Pay	$39,878	$40,651	$48,349	$58,806	$66,683	$65,162	$81,379	$83,284	$54,821
65-69	3	6	8	6	3	1	2		29
Avg Pay	$25,129	$39,372	$50,482	$57,892	$59,391	$58,432	$51,264		$48,344
70 & over	1	3	3	4	1			4	16
Avg Pay	$42,795	$32,915	$36,522	$76,733	$9,473			$94,407	$59,071
Totals	2,457	2,100	1,967	1,743	611	139	91	64	9,172
Avg Pay	$40,684	$49,915	$54,847	$61,472	$67,985	$73,213	$73,948	$84,129	$52,730

SCHEDULE F

SENSITIVITY ANALYSIS

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate and the rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 7.50%, together with a decrease in the discount rate to 6.50% and an increase in the discount rate to 8.50%. Under this scenario, the underlying inflation rate assumption is held constant at 3.25% and the payroll growth assumption is held constant at 4.00%.
- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.25%, together with decreases in the inflation rate to 3.00% and 2.75%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption and the healthcare trend assumption for members hired before 7/1/2003.
- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 4.00%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

NON-HAZARDOUS
ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Retirement			
Actuarial Accrued Liabiltiy	$ 11,929,678,254	$ 10,740,325,421	$ 9,721,750,033
Actuarial Value of Assets	6,474,848,513	6,474,848,513	6,474,848,513
Unfunded Liability	$ 5,454,829,741	$ 4,265,476,908	$ 3,246,901,520
Funded Ratio	54.28%	60.29%	66.60%
Contribution Rate	17.27%	13.95%	10.96%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 3,287,498,478	$ 2,907,827,440	$ 2,591,881,484
Actuarial Value of Assets	1,997,456,463	1,997,456,463	1,997,456,463
Unfunded Liability	$ 1,290,042,015	$ 910,370,977	$ 594,425,021
Funded Ratio	60.76%	68.69%	77.07%
Contribution Rate	6.32%	4.93%	3.71%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
CERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 15,217,176,732	$ 13,648,152,861	$ 12,313,631,517
Actuarial Value of Assets	8,472,304,976	8,472,304,976	8,472,304,976
Unfunded Liability	$ 6,744,871,756	$ 5,175,847,885	$ 3,841,326,541
Funded Ratio	55.68%	62.08%	68.80%
Contribution Rate	23.59%	18.88%	14.67%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%

NON-HAZARDOUS
INFLATION ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Inflation Rate 25 basis points	Decrease Inflation Rate 50 basis points
Retirement			
Actuarial Accrued Liabiltiy	$ 10,740,325,421	$ 10,984,865,610	$ 11,239,814,857
Actuarial Value of Assets	6,474,848,513	6,474,848,513	6,474,848,513
Unfunded Liability	$ 4,265,476,908	$ 4,510,017,097	$ 4,764,966,344
Funded Ratio	60.29%	58.94%	57.61%
Contribution Rate	13.95%	14.81%	15.70%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
Insurance			
Actuarial Accrued Liabiltiy	$ 2,907,827,440	$ 2,920,220,659	$ 2,933,386,922
Actuarial Value of Assets	1,997,456,463	1,997,456,463	1,997,456,463
Unfunded Liability	$ 910,370,977	$ 922,764,196	$ 935,930,459
Funded Ratio	68.69%	68.40%	68.09%
Contribution Rate	4.93%	5.01%	5.10%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
CERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 13,648,152,861	$ 13,905,086,269	$ 14,173,201,779
Actuarial Value of Assets	8,472,304,976	8,472,304,976	8,472,304,976
Unfunded Liability	$ 5,175,847,885	$ 5,432,781,293	$ 5,700,896,803
Funded Ratio	62.08%	60.93%	59.78%
Contribution Rate	18.88%	19.82%	20.80%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%

NON-HAZARDOUS
PAYROLL GROWTH SENSITIVITY ANALYSIS

	Valuation Results	Decrease Payroll Growth 2%	No Payroll Growth
Retirement			
Actuarial Accrued Liabiltiy	$ 10,740,325,421	$ 10,740,325,421	$ 10,740,325,421
Actuarial Value of Assets	6,474,848,513	6,474,848,513	6,474,848,513
Unfunded Liability	$ 4,265,476,908	$ 4,265,476,908	$ 4,265,476,908
Funded Ratio	60.29%	60.29%	60.29%
Contribution Rate	13.95%	16.56%	19.55%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 2,907,827,440	$ 2,907,827,440	$ 2,907,827,440
Actuarial Value of Assets	1,997,456,463	1,997,456,463	1,997,456,463
Unfunded Liability	$ 910,370,977	$ 910,370,977	$ 910,370,977
Funded Ratio	68.69%	68.69%	68.69%
Contribution Rate	4.93%	5.42%	5.98%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
CERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 13,648,152,861	$ 13,648,152,861	$ 13,648,152,861
Actuarial Value of Assets	8,472,304,976	8,472,304,976	8,472,304,976
Unfunded Liability	$ 22,120,457,837	$ 22,120,457,837	$ 22,120,457,837
Funded Ratio	62.08%	62.08%	62.08%
Contribution Rate	18.88%	21.98%	25.53%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%

HAZARDOUS
ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Retirement			
Actuarial Accrued Liabiltiy	$ 4,043,189,647	$ 3,613,307,547	$ 3,257,142,471
Actuarial Value of Assets	2,096,782,956	2,096,782,956	2,096,782,956
Unfunded Liability	$ 1,946,406,691	$ 1,516,524,591	$ 1,160,359,515
Funded Ratio	51.86%	58.03%	64.37%
Contribution Rate	27.30%	21.71%	17.08%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 1,710,792,726	$ 1,504,015,233	$ 1,335,341,579
Actuarial Value of Assets	1,087,707,118	1,087,707,118	1,087,707,118
Unfunded Liability	$ 623,085,608	$ 416,308,115	$ 247,634,461
Funded Ratio	63.58%	72.32%	81.46%
Contribution Rate	12.93%	9.79%	7.05%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
CERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 5,753,982,373	$ 5,117,322,780	$ 4,592,484,050
Actuarial Value of Assets	3,184,490,074	3,184,490,074	3,184,490,074
Unfunded Liability	$ 2,569,492,299	$ 1,932,832,706	$ 1,407,993,976
Funded Ratio	55.34%	62.23%	69.34%
Contribution Rate	40.23%	31.50%	24.13%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%

HAZARDOUS
INFLATION ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Inflation Rate 25 basis points	Decrease Inflation Rate 50 basis points
Retirement			
Actuarial Accrued Liabiltiy	$ 3,613,307,547	$ 3,703,081,612	$ 3,797,000,893
Actuarial Value of Assets	2,096,782,956	2,096,782,956	2,096,782,956
Unfunded Liability	$ 1,516,524,591	$ 1,606,298,656	$ 1,700,217,937
Funded Ratio	58.03%	56.62%	55.22%
Contribution Rate	21.71%	23.15%	24.69%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
Insurance			
Actuarial Accrued Liabiltiy	$ 1,504,015,233	$ 1,507,652,574	$ 1,511,507,628
Actuarial Value of Assets	1,087,707,118	1,087,707,118	1,087,707,118
Unfunded Liability	$ 416,308,115	$ 419,945,456	$ 423,800,510
Funded Ratio	72.32%	72.15%	71.96%
Contribution Rate	9.79%	9.89%	10.02%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
CERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 5,117,322,780	$ 5,210,734,186	$ 5,308,508,521
Actuarial Value of Assets	3,184,490,074	3,184,490,074	3,184,490,074
Unfunded Liability	$ 1,932,832,706	$ 2,026,244,112	$ 2,124,018,447
Funded Ratio	62.23%	61.11%	59.99%
Contribution Rate	31.50%	33.04%	34.71%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%

HAZARDOUS
PAYROLL GROWTH ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Payroll Growth 2%	No Payroll Growth
Retirement			
Actuarial Accrued Liabiltiy	$ 3,613,307,547	$ 3,613,307,547	$ 3,613,307,547
Actuarial Value of Assets	2,096,782,956	2,096,782,956	2,096,782,956
Unfunded Liability	$ 1,516,524,591	$ 1,516,524,591	$ 1,516,524,591
Funded Ratio	58.03%	58.03%	58.03%
Contribution Rate	21.71%	26.12%	31.18%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 1,504,015,233	$ 1,504,015,233	$ 1,504,015,233
Actuarial Value of Assets	1,087,707,118	1,087,707,118	1,087,707,118
Unfunded Liability	$ 416,308,115	$ 416,308,115	$ 416,308,115
Funded Ratio	72.32%	72.32%	72.32%
Contribution Rate	9.79%	10.87%	12.07%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
CERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 5,117,322,780	$ 5,117,322,780	$ 5,117,322,780
Actuarial Value of Assets	3,184,490,074	3,184,490,074	3,184,490,074
Unfunded Liability	$ 1,932,832,706	$ 1,932,832,706	$ 1,932,832,706
Funded Ratio	62.23%	62.23%	62.23%
Contribution Rate	31.50%	36.99%	43.25%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%

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November 12, 2015

Mr. William A. Thielen
Executive Director
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: CERS Contribution Rates

Dear Mr. Thielen:

As you will recall, in 2008 the Legislature mandated an extension of the phase-in of insurance contribution rates that had been approved by the Board from five to ten years to mitigate the impact of the application of Governmental Accounting Standards Board Statements 43 and 45 for CERS employer contribution rates for health insurance.

The table below provides the recommended contribution rates over the next two years to continue the ten year phase-in begun in July 2007. These may be compared to the rates shown in the June 30, 2015 report of 4.93% of payroll for non-hazardous members and 9.79% for hazardous members.

Ten Year Phase-In
Remaining Period

Fiscal Year Ending June 30	Non-Hazardous Members	Hazardous Members
2017	4.73%	9.35%
2018 and later	4.94%	9.81%

As was noted last year, it is important to remember that the pension contribution rates are not part of the phase-in alternatives.

We look forward to discussing these results with the Board at the December 3rd meeting.

Sincerely,

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

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Report on the Annual Valuation of the State Police Retirement System

Prepared as of June 30, 2015

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November 10, 2015

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal years beginning July 1, 2016 and July 1, 2017. The date of the valuation was June 30, 2015.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Since the previous valuation, the revised assumptions from the economic and demographic experience investigation covering the five-year period from July 1, 2008 to June 30, 2013 have been reflected in this valuation.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

TBG/AB:kc

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REPORT ON THE ANNUAL VALUATION OF THE STATE POLICE RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2015

SECTION I – SUMMARY OF PRINCIPAL RESULTS

This report, prepared as of June 30, 2015, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	6/30/2015	6/30/2014
Contributions for next fiscal year:		
Retirement	66.47%	58.44%
Insurance	18.87	19.17
Total	85.34%	77.61%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$734,156,446	$681,118,402
Actuarial value of assets	248,387,946	242,741,735
Unfunded liability on actuarial value of assets	485,768,500	438,376,667
Funded ratio on actuarial value of assets	33.83%	35.64%
Market value of assets	$246,968,144	$260,763,486
Unfunded liability on market value of assets	487,188,302	420,354,916
Funded ratio on market value of assets	33.64%	38.28%
Insurance		
Actuarial accrued liability	$254,838,710	$234,271,127
Actuarial value of assets	167,774,940	155,594,760
Unfunded liability on actuarial value of assets	87,063,770	78,676,367
Funded ratio on actuarial value of assets	65.84%	66.42%
Market value of assets	$165,018,209	$165,167,805
Unfunded liability on market value of assets	89,820,501	69,103,322
Funded ratio on market value of assets	64.75%	70.50%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,460	1,413
Number of vested former members	63	59
Number of former members due a refund	362	349
Number of active members	937	855
Total salary	$45,764,515	$44,615,885
Average salary	$48,842	$52,182

The State Police Retirement System is a defined benefit pension fund that provides pensions and health care coverage for uniformed state police officers. This report presents the results of the June 30, 2015 actuarial funding valuation for both the Retirement Plan and the Insurance Fund. The primary purpose of performing the actuarial funding valuations are to:

- Calculate the actuarially determined contribution rates for the fiscal years beginning July 1, 2016 and July 1, 2017 for both the Retirement Plan and the Insurance Fund.
- Determine the experience of the System since the last valuation date.
- Disclose asset and liability measures as of the valuation date.
- Analyze and report on trends in contributions, assets, and liabilities over the past several years.

Since the previous valuation there were no changes to the plan provisions, however the actuarial methods and assumptions were updated to reflect an experience study performed over the five-year period ending June 30, 2013 dated April 30, 2014. This experience study was adopted by the Board on December 4, 2014. The experience study reviewed the actuarial assumptions and methods used in the actuarial valuation process of both the Retirement Plan and Insurance Fund. For the Retirement Plan the assumptions fall into three categories. The first are economic assumptions which include price inflation, wage inflation and investment return. The second category includes demographic assumptions which includes assumed rates of mortality, service retirement, disability retirement, withdrawal and salary increases for merits and promotions. For the Insurance Fund the assumptions fall into three categories. The first two, economic assumptions and demographic assumptions are the same as those used for the Retirement Plan. The third category includes other post-employment benefit assumptions.

As a result of the experience the following assumptions were updated:

Summary of Assumptions Changes	
Economic Assumptions	
Salary	Composed of Inflation component, Real Rate of Salary Increase component and Merit/Promotion Scale
Inflation	Reduction to annual assumed rate of inflation assumption from 3.50% to 3.25%.
Wage Inflation	Reduction to annual assumed rate from real salary increase assumption from 1.00% to 0.75%
Investment Rate of Return	Composed of Inflation component (3.25% from above) and Real Rate of Return component. Reduction from 7.75% to 7.50% net investment return assumption.
Payroll Growth	Reduce from 4.50% to 4.00%.

Summary of Assumptions Changes	
Demographic Assumptions	
Withdrawal	Increase rates of withdrawal
Retirement	Adjusted rates of retirement
Base Mortality	Healthy Retirees – RP-2000 Mortality Tables Set back one year for females. Disabled Retirees – RP-2000 Combined Disabled Mortality Tables for disabled annuitants set back four years for males. Actives – 50% of the RP-2000 Combined Mortality for males, 30% of the RP-2000 Combined Mortality for females.
Mortality Projection	Healthy Retiree and Beneficiary – Mortality rates are projected to 2013 using improvement Scale BB Disable Retirees – Mortality rates are projected to 2013 using improvement Scale BB Active Members – Mortality rates are projected to 2013 using improvement Scale BB

The actuarial valuation results provide "snapshot" view the System's financial condition on June 30, 2015. Actuarial gains and losses result when actuarial experience of the plan (such as asset return, pay increases, turnover, deaths, etc.) is different from the expected by the actuarial assumptions. The Retirement Plan's Unfunded Actuarial Accrued Liability (UAAL) was expected to be $440.8 million taking into account contributions from both the employer and members of $37.8 million. The actual UAAL was $485.8 million. The increase of $45 million was due to the change in actuarial assumptions and methods and an actuarial loss due to actual experience different than what was anticipated by the assumptions. The Insurance Funds UAAL was expected to be $80.5 million taking into account expected employer and member contributions of $8.5 million. The actual UAAL was $87.1 million. The increase in the UAAL of $6.6 million was due to the change in actuarial assumptions and methods offset by an actuarial gain due to actuarial experience different than what was anticipated by the assumptions.

The remaining amortization period of the UAAL of both the Pension and Insurance Funds is 28-years as of June 30, 2015. Detailed analysis of the gains and losses are presented in Section V of the report.

As of June 30, 2015 the Pension and Insurance Funds had net assets of $246,968,144 and $165,018,209 respectively. The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarially determined contribution. The asset valuation method which recognizes the annual unexpected portion of market value investment returns over a five-year period, attempts to dampen the effect of market volatility. The resulting amount is called the "actuarial value of assets" and is utilized to determine the actuarial valuation results. In this year's actuarial valuation, the actuarial value of assets as of June 30, 2015 was $248,387,946 and $167,774,940 respectively for the Pension and Insurance Funds.

On a market basis, the estimated rate of return was 1.36% and 1.78% respectively for the Pension and Insurance Funds, assuming all cash flows occur in the middle of the year. Due to better than assumed prior returns on the market value of assets the net rate of return measured on the actuarial value of assets was 9.76% and 9.90% respectively for both the Pension and Insurance Funds. Please see Section III and Schedule B of this report for more detailed information on the market and actuarial value of assets.

Schedule F provides sensitivity analysis for three different sets of economic assumptions; the discount rate assumption, the inflation assumption, and the payroll growth assumption. Two assumption change scenarios are presented for each economic assumption. The results of the economic assumption change scenarios are presented along with the valuation results for comparison.

The long-term financial health of this retirement System, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. The System has recently been strengthened due to two reasons. They are: recent legislative action that provides 100% funding of the actuarially determined contribution and the elimination of unfunded ad hoc cost-of-living adjustments for retirees. The cost for providing cost-of-living adjustments for retires must be prefunded in advance.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2015 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

		Group Averages		
Number	Payroll	Salary	Age	Service
937	$45,764,515	$48,842	36.8	9.8

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2010	961	$51,506,712	$53,597	(1.9)%
6/30/2011	965	48,692,616	50,459	(5.9)
6/30/2012	907	48,372,506	53,332	5.7
6/30/2013	902	45,256,202	50,173	(5.9)
6/30/2014	855	44,615,885	52,182	4.0
6/30/2015	937	45,764,515	48,842	(6.4)

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

			Group Averages	
Type of Benefit Payment	Number	Annual Benefits	Benefit	Age
Retiree	1,222	$49,027,447	$40,121	61.9
Disability	52	$934,883	17,979	57.6
Beneficiary	186	4,968,091	26,710	64.8
Total in SPRS	1,460	$54,930,421	$37,624	62.1

This valuation also includes 425 inactive members of which 63 are vested.

SECTION III - ASSETS

1. As of June 30, 2015 the total market value of assets amounted to $411,986,353 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

Retirement	Insurance	SPRS Total
$246,968,144	$165,018,209	$411,986,353

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $416,162,886. Schedule B shows the development of the actuarial value of assets as of June 30, 2015. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2015	JUNE 30, 2014
Retirement	$ 248,387,946	$ 242,741,735
Insurance	167,774,940	155,594,760
Total	$ 416,162,886	$ 398,336,495

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2015. Separate balance sheets are shown for Retirement and Insurance. Since the previous valuation, the revised assumptions from the economic and demographic experience investigation covering the five-year period from July 1, 2008 to June 30, 2013 have been reflected in this valuation.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $798,031,279, of which $601,295,055 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $4,559,850 is for the prospective benefits payable on account of inactive members, $192,176,374 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $248,387,946 as of June 30, 2015. The difference of $549,643,333 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $32,949,643 is the present value of future contributions expected to be made by members, and the balance of $516,693,690 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 8.35% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $30,925,190. When this amount is subtracted from $516,693,690, which is the present value of the total future contributions to be made by the State, there remains $485,768,500 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 57.70% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $485,768,500 over 28 years on the assumption that the aggregate payroll for members will increase by 4.00% each year.
5. The contribution rate for administrative expenses is determined to be 0.42% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $280,995,978, of which $165,675,982 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $4,771,225 is for the prospective benefits payable on account of inactive members, and $110,548,771 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $167,774,940 as of June 30, 2015. The difference of $113,221,038 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $1,558,766 is the present value of future contributions expected to be made by members, and the balance of $111,662,272 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 8.48% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $24,598,502. When this amount is subtracted from $111,662,272, which is the present value of the total future contributions to be made by the employers, there remains $87,063,770 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 10.25% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $87,063,770 over 28 years on the assumption that the aggregate payroll for members will increase by 4.00% each year.
5. The contribution rate for administrative expenses is determined to be 0.14% of payroll.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2015 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

			Amount
(1)	UAAL* as of 6/30/14	$	438.4
(2)	Normal cost from last valuation		7.1
(3)	Contributions		37.8
(4)	Interest accrual: [(1) + (2)] x .0775 - (3) x .03875		33.1
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	440.8
(6)	Change due to Actuarial Audit		0.0
(7)	Change due to new actuarial assumption or methods		(40.2)
(8)	Expected UAAL after changes: (5) - (6) - (7)	$	481.0
(9)	Actual UAAL as of 6/30/15	$	485.8
(10)	Gain/(loss): (8) - (9)	$	(4.8)
(11)	Accrued liabilities as of 6/30/14	$	681.1
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(0.7)%

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

			Amount
(1)	UAAL* as of 6/30/14	$	78.7
(2)	Normal cost from last valuation		4.5
(3)	Expected contributions		8.5
(4)	Interest accrual: [(1) + (2) - (3)] x .0775		5.8
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	80.5
(6)	Change due to Actuarial Audit		(0.1)
(7)	Change due to new actuarial assumption or methods		(8.5)
(8)	Expected UAAL after changes: (5) - (6) - (7)	$	89.1
(9)	Actual UAAL as of 6/30/15	$	87.1
(10)	Gain/(loss): (8) - (9)	$	2.0
(11)	Accrued liabilities as of 6/30/14	$	234.3
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		0.9%

* *Unfunded Actuarial Accrued Liability*

SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/15	Insurance $ Gain (or Loss) For Year Ending 6/30/15
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (6.5)	$ (13.0)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.0	0.1
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(0.7)	(0.2)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	2.2	12.1
New Members. Additional unfunded accrued liability will produce a loss.	(0.4)	(0.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	5.2	3.3
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	(1.7)	1.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(2.9)	(1.6)
Gain (or Loss) During Year From Financial Experience	$ (4.8)	$ 2.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	(40.2)	(8.6)
Composite Gain (or Loss) During Year	$ (45.0)	$ (6.6)

SECTION VI – ACTUARIALLY DETERMINED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation. This rate is for informational purposes only.

Actuarially Determined Contribution Rates

Retirement

Contribution Rate for	% of Payroll
A. Normal Cost:	
(1) Service retirement benefits	15.07%
(2) Disability benefits	0.52
(3) Survivor benefits	0.13
(4) Total	16.35%
B. Member Contributions	8.00%
C. Employer Normal Cost: [A(4) - B]	8.35%
D. Administrative Expenses	0.42%
E. Unfunded Actuarial Accrued Liability Contributions:	
(1) UAAL Contribution Rate as of 6/30/14 Valuation:	50.05%
(2) Change due to:	
a. Active decrements	0.86%
b. Pay increases	(0.26)%
c. Retiree mortality	0.20%
d. Investment return	(0.61)%
e. Assumption Changes	4.77%
f. Payroll Growth Assumption	2.23%
g. Other	0.46%
h. Total Change	7.65%
(3) UAAL Contribution Rate as of 6/30/15 Valuation: [E(1) +E(2)h]	57.70%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	66.47%

** Based on 28 year amortization of the UAAL from June 30, 2015*

Actuarially Determined Contribution Rates

Insurance

Contribution Rate for		% of Payroll
A.	Normal Cost	8.72%
B.	Member Contributions*	0.24%
C.	Employer Normal Cost: [A - B]	8.48%
D.	Administrative Expenses	0.14%
E.	Unfunded Actuarial Accrued Liability**	10.25%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	18.87%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 28 year amortization of the UAAL from June 30, 2015*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements (GASB) 43, 45, 67 and 68 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. The information required under GASB 67 and 68 will be issued in separate reports. We are providing the retirement benefit information for informational purposes only. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2015

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,460
Terminated employees entitled to benefits but not yet receiving benefits	425
Active Members	937
Total	2,822

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2010	$ 304,577,292	$ 612,444,806	$ 307,867,514	49.7%	$ 51,506,712	597.7%
6/30/2011	285,580,631	634,379,401	348,798,770	45.0	48,692,616	716.3
6/30/2012	259,791,575	647,688,665	387,897,090	40.1	48,372,506	801.9
6/30/2013	241,800,328	651,580,654	409,780,326	37.1	45,256,202	905.5
6/30/2014	242,741,735	681,118,402	438,376,667	35.6	44,615,885	982.6
6/30/2015*	248,387,946	734,156,446	485,768,500	33.8	45,764,515	1,061.5

** Discount rate changed from 7.75% to 7.50%*

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2010	$ 121,175,083	$ 434,960,495	$ 313,785,412	27.9%	$ 51,506,712	609.2%
6/30/2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4
6/30/2012	124,372,072	333,903,782	209,531,710	37.2	48,372,506	433.2
6/30/2013*	136,321,060	222,326,743	86,005,683	61.3	45,256,202	190.0
6/30/2014	155,594,760	234,271,127	78,676,367	66.4	44,615,885	176.3
6/30/2015**	167,774,940	254,838,710	87,063,770	65.8	45,764,515	190.2

** Discount rate changed from 4.50% to 7.75%*
*** Discount rate changed from 7.75% to 7.50%*

INSURANCE BENEFITS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Retiree Drug Subsidy (RDS) Contribution	Employer Contributions	Total Contributions	Percentage Contributed
June 30, 2010	$30,302,151	$273,684	$ 8,369,428	$ 8,643,112	28.5%
June 30, 2011	25,772,574	0	11,050,964	11,050,964	42.9
June 30, 2012	28,246,786	0	11,960,468	11,960,468	42.3
June 30, 2013	27,234,229	0	16,828,681	16,828,681	61.8
June 30, 2014	20,879,022	0	14,493,242	14,493,242	69.4
June 30, 2015	9,889,797	0	10,381,881	10,381,881	105.0

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2015. Additional information as of the latest actuarial valuation follows.

Insurance Benefits	
Valuation date	6/30/2015
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	28 years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	7.50% - 5.00%
Medical Trend Assumption (Post-Medicare)	5.50% - 5.00%
Year of Ulitimate Trend	2020
Dollar Contribution Trend	1.50%
Actuarial assumptions:	
Investment rate of return*	7.50%
*Includes price inflation at	3.25%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2015 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2014. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM

RETIREMENT BENEFITS

	JUNE 30, 2015	JUNE 30, 2014
ASSETS		
Current actuarial value of assets	$ 248,387,946	$ 242,741,735
Prospective contributions		
Member contributions	$ 32,949,643	$ 32,424,439
Employer normal contributions	30,925,190	31,007,228
Unfunded accrued liability contributions	485,768,500	438,376,667
Total prospective contributions	$ 549,643,333	$ 501,808,334
Total assets	$ 798,031,279	$ 744,550,069
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 601,295,055	$ 559,105,744
Present value of benefits payable on account of active members	192,176,374	181,539,042
Present value of benefits payable on account of inactive members	4,559,850	3,905,282
Total liabilities	$ 798,031,279	$ 744,550,068

VALUATION BALANCE SHEET
INSURANCE BENEFITS

	JUNE 30, 2015	JUNE 30, 2014
ASSETS		
Current actuarial value of assets	$ 167,774,940	$ 155,594,760
Prospective contributions		
Member contributions	$ 1,558,766	$ 1,054,241
Employer normal contributions	24,598,502	32,863,440
Unfunded accrued liability contributions	87,063,770	78,676,367
Total prospective contributions	$ 113,221,038	$ 112,594,048
Total assets	$ 280,995,978	$ 268,188,808
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 165,675,982	$ 139,228,358
Present value of benefits payable on account of active members	110,548,771	124,786,682
Present value of benefits payable on account of inactive members	4,771,225	4,173,768
Total liabilities	$ 280,995,978	$ 268,188,808

The following tables provide the solvency test for SPRS members.

Solvency Test
Retirement Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2010	$ 42,011,523	$ 475,892,659	$ 94,540,624	$ 304,577,292	100.0%	55.2%	0.0%
6/30/2011	43,574,097	499,194,229	91,611,075	285,580,631	100.0	48.5	0.0
6/30/2012	41,139,306	523,016,647	83,532,712	259,791,575	100.0	41.8	0.0
6/30/2013	39,788,421	535,720,195	76,072,038	241,800,328	100.0	37.7	0.0
6/30/2014	41,831,465	563,011,026	76,275,911	242,741,735	100.0	35.7	0.0
6/30/2015	41,567,127	605,854,905	86,734,414	248,387,946	100.0	34.1	0.0

Solvency Test
Insurance Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2010	$ 0	$ 253,580,827	$ 181,379,668	$ 121,175,083	100.0%	47.8%	0.0%
6/30/2011	0	252,439,726	185,988,037	123,687,289	100.0	49.0	0.0
6/30/2012	0	190,258,729	143,645,053	124,372,072	100.0	65.4	0.0
6/30/2013	0	139,508,590	82,818,153	136,321,060	100.0	97.7	0.0
6/30/2014	0	143,402,126	90,869,001	155,594,760	100.0	100.0	13.4
6/30/2015	0	170,447,207	84,391,503	167,774,940	100.0	98.4	0.0

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits

	Valuation date June 30:	2014	2015	2016	2017	2018	2019
A.	Actuarial Value Beginning of Year	$ 241,800,328	$ 242,741,735				
B.	Market Value End of Year	260,763,486	246,968,144				
C.	Market Value Beginning of Year	248,559,040	260,763,486				
D.	Cash Flow						
	D1. Contributions	25,284,602	37,836,413				
	D2. Benefit Payments	(53,239,125)	(54,850,254)				
	D3. Administrative Expenses	(214,953)	(201,108)				
	D4. Investment Expenses	(1,020,182)	(1,681,302)				
	D5. Net	(29,189,658)	(18,896,251)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	41,394,104	5,100,909				
	E2. Assumed Rate	7.75%	7.75%				
	E3. Amount for Immediate Recognition	19,191,940	21,223,393				
	E4. Amount for Phased-In Recognition	22,202,164	(16,122,484)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	4,440,433	(3,224,497)	0	0	0	0
	F2. First Prior Year	983,544	4,440,433	(3,224,497)	0	0	0
	F3. Second Prior Year	(3,810,203)	983,544	4,440,433	(3,224,497)	0	0
	F4. Third Prior Year	4,929,792	(3,810,203)	983,544	4,440,433	(3,224,497)	0
	F5. Fourth Prior Year	4,395,559	4,929,792	(3,810,203)	983,544	4,440,433	(3,224,497)
	F6. Total Recognized Investment Gain	10,939,125	3,319,069	(1,610,723)	2,199,480	1,215,936	(3,224,497)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 242,741,735	$ 248,387,946				
H.	Difference Between Market & Actuarial Values	$ 18,021,751	$ (1,419,802)	$ 190,921	$ (2,008,559)	$ (3,224,497)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits

	Valuation date June 30:	2014	2015	2016	2017	2018	2019
A.	Actuarial Value Beginning of Year	$ 136,321,060	$ 155,594,760				
B.	Market Value End of Year	165,167,805	165,018,209				
C.	Market Value Beginning of Year	142,830,916	165,167,805				
D.	Cash Flow						
	D1. Contributions	14,574,060	10,476,944				
	D2. Benefit Payments	(12,687,531)	(13,482,044)				
	D3. Administrative Expenses	(57,433)	(64,526)				
	D4. Investment Expenses	(647,239)	(1,185,520)				
	D5. Net	1,181,857	(4,255,146)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	21,155,032	4,105,550				
	E2. Assumed Rate	7.75%	0.00%				
	E3. Amount for Immediate Recognition	11,787,512	13,867,077				
	E4. Amount for Phased-In Recognition	9,367,520	(9,761,527)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	1,873,504	(1,952,305)	0	0	0	0
	F2. First Prior Year	603,078	1,873,504	(1,952,305)	0	0	0
	F3. Second Prior Year	(1,774,183)	603,078	1,873,504	(1,952,305)	0	0
	F4. Third Prior Year	3,818,155	(1,774,183)	603,078	1,873,504	(1,952,305)	0
	F5. Fourth Prior Year	1,783,777	3,818,155	(1,774,183)	603,078	1,873,504	(1,952,305)
	F6. Total Recognized Investment Gain	6,304,331	2,568,249	(1,249,906)	524,277	(78,801)	(1,952,305)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 155,594,760	$ 167,774,940				
H.	Difference Between Market & Actuarial Values	$ 9,573,045	$ (2,756,731)	$ (1,506,825)	$ (2,031,102)	$ (1,952,305)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually for retirement and insurance benefits.

PRICE INFLATION: 3.25% per annum, compounded annually.

PAYROLL GROWTH: 4.00% per annum, compounded annually.

SALARY INCREASES: The assumed annual rates of future salary increases are as follows and include inflation at 4.00% per annum:

Service Years	Annual Rates of Salary Increases		
	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	12.02%	4.00%	16.50%
1-2	7.21%	4.00%	11.50%
2-3	5.29%	4.00%	9.50%
3-4	4.33%	4.00%	8.50%
4-5	3.37%	4.00%	7.50%
5-6	2.40%	4.00%	6.50%
6-7	1.92%	4.00%	6.00%
7-8	1.92%	4.00%	6.00%
8-9	0.96%	4.00%	5.00%
9-10	0.48%	4.00%	4.50%
10 & Over	0.00%	4.00%	4.00%

DISABILITY: Representative assumed annual rates of disability are as follows:

Nearest Age	Annual Rates of Disability	
	Male	Female
20	0.05%	0.05%
30	0.09%	0.09%
40	0.20%	0.20%
50	0.56%	0.56%
60	1.46%	1.46%

RETIREMENT: The assumed annual rates of retirement are as follows:

Annual Rates of Retirement		
Service	Those Eligible for Service Retirement+	Those Eligible for Service Retirement++
20	22.00%	
21	22.00%	
22	22.00%	
23	28.00%	
24	28.00%	
25	28.00%	22.00%
26	28.00%	22.00%
27	28.00%	22.00%
28	44.00%	28.00%
29	44.00%	28.00%
30	44.00%	28.00%
31	58.00%	28.00%
32	58.00%	28.00%
33	58.00%	44.00%
34	58.00%	44.00%
35	58.00%	44.00%
36	58.00%	58.00%
37	58.00%	58.00%
38	58.00%	58.00%
39	58.00%	58.00%
40	58.00%	58.00%

+ For members participating before September 1, 2008. The annual rate of service retirement is 100% at age 55.
++ For members participating on or after September 1, 2008. The annual rate of service retirement is 100% at age 60.

WITHDRAWAL: The assumed annual rates of withdrawal are as follows:

Service Years	Annual Rates of Withdrawal
0-1	20.00%
1-2	7.00%
2-9	3.00%
9 & Over	2.50%

DEATH BEFORE RETIREMENT: The rates of mortality for the period before retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females) for all healthy retired members and beneficiaries. The RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. These assumptions are used to measure the probabilities of each benefit payment being made after retirement. These assumptions contain margin for mortality improvements.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

FORM OF PAYMENT: Participants are assumed to elect a life-only form of payment.

ASSET VALUATION METHOD: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

ACTUARIAL COST METHOD: Costs were determined using the Entry Age Normal, Level Percentage of Pay Actuarial Cost Method. Under this method, a calculation is made for retirement benefits to determine the uniform and constant percentage rate of contribution which, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would be required to meet the cost of benefits payable. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

MULTIPLE STATUS/MULTIPLE SYSTEM MEMBERS: Some members may be represented under more than one retirement system and/or may have more than one status (e.g., active in one system, deferred vested in another and retired from a different system). For pension purposes, members that are active in one System but have service in another are assumed to retire from the System in which they are currently active. Any deferred pension benefits from another System are assumed to begin once the member terminates from their current active position. The insurance liabilities for multiple status/multiple system members are calculated assuming only one benefit is payable across all Systems and that benefit is payable from the combination of status and System which produces the highest economic value to the member.

AFFORDABLE CARE ACT (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2018 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the insurance liability will be required.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE SPOUSE AGE DIFFERENCE: Wives are assumed to be three years younger than husbands.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Annual Rate of Increase		
	Under Age 65	Age 65 & Older	Dollar Contribution*
2015	7.50%	5.50%	1.50%
2016	6.75%	5.25%	1.50%
2017	6.25%	5.00%	1.50%
2018	5.75%	5.00%	1.50%
2019	5.25%	5.00%	1.50%
2020 & Beyond	5.00%	5.00%	1.50%

* *Applies to members participating on or after July 1, 2003*

HEALTH CARE AGE RELATED MORBIDITY: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 – 69	3.00%
70 – 74	2.50%
75 – 79	2.00%
80 – 84	1.00%
85 – 89	0.50%
90 & Beyond	0.00%

For the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP.

HEALTH CARE DEFERRED VESTED BENEFIT RECIPIENT INITIAL AGE OF BENEFIT RECEIPT FOR MEMBERS: Health care benefits are assumed to begin at the following ages for deferred vested benefit recipients:

Deferred Vested Initial Age of Benefit Receipt		
Members Participating Before July 1, 2003	Members Participating Between July 1, 2003 to September 1, 2008	Members Participating On or After September 1, 2008
50	50	50

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: Representative values of the assumed annual rates of member participation and spouse coverage are as follows:

Plan Elections of Covered Members Age 65 and Older as of January 1, 2016	
Kentucky Retirement System Health Plan	**Hazardous**
Medical Only	2.92%
Essential	1.44%
Premium	95.64%

Retirement Participation Rates			
Service at Retirement	**Members Participating Before July 1, 2003**	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
Under 10	100.00%	100.00%	100.00%
10 – 14	100.00%	100.00%	100.00%
15 – 19	100.00%	100.00%	100.00%
20+	100.00%	100.00%	100.00%

Disability/Death Participation Rates	
Members Participating Before July 1, 2003	
Duty-Disability	**Duty Death-In-Service**
100.00%	100.00%

Deferred Vested Member Participation Rates		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
100.00%	100.00%	100.00%

Members Electing Spouse Coverage		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
75.00%	75.00%	75.00%

HEALTH CARE MONTHLY PLAN COSTS: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions for the year following the valuation date. The amounts include medical and drug costs. Members under 65 are assumed to elect the LivingWell PPO. For retirees ages 65 and older, the full costs shown are before averaging. The average costs are then normalized to age 65 and age adjusted in calculating liabilities. The dollar amount contribution level is the cost to the system per year of service for members participating on or after July 1, 2003.

Under Age 65 (KEHP) Full Costs as of January 1, 2016				
Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 702.10	$ 721.14	$ 677.74	$ 663.68
Parent Plus	967.18	1,023.04	963.36	930.34
Couple	1,302.74	1,564.20	1,474.84	1,429.26
Family	1,453.94	1,738.40	1,640.84	1,591.52
Family C-R	810.00	865.64	814.72	792.90

Age 65 and Older Full Costs as of January 1, 2016	
Kentucky Retirement System Health Plan - Medical Only	$158.25
Kentucky Retirement System Health Plan - Essential	77.76
Kentucky Retirement System Health Plan - Premium	244.25

Age 65 and Older Average Cost as of the Valuation Date Based on Actual Retiree Elections
Hazardous
$227.19

Dollar Amount Contribution Level Per Year of Service as of July 1, 2015
Applies to members participating on or after July 1, 2003
Hazardous
$19.19

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement 55

Service Requirement At least one month of hazardous duty service credit

Amount If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement 60

Service Requirement At least 60 months of hazardous duty service credit

Amount The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Normal Retirement (continued):

Members whose participation began on or after 1/1/2014

Age Requirement	60
Service Requirement	At least 60 months of hazardous duty service credit or 25 or more years of service, with no age requirement
Amount	Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 50 with 15 years of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years of service, whichever is smaller.

Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday. The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance. A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.
Members whose participation began on or after 8/1/2004 but before 1/1/2014	Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay.
Members whose participation began on or after 1/1/2014	The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Members whose participation began on or after 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Upon termination the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or the member can elect to leave the hypothetical account balance in the System. If the member does not withdraw the account balance, it will continue to earn 4% interest. Upon reaching normal retirement age the member can apply for retirement and receive the account balance as a lump sum payment or annuitize the account balance into a single life annuity.

Pre-Retirement Death Benefit (not in line of duty):

Members whose participation began before 1/1/2014

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Members whose participation began on or after 1/1/2014

Requirement	60 months service
Amount	The maximum of the benefit equal to the benefit the member would have received had the member retired on the day before the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently set at 2.5% and per statute, shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008 and up to 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.
Members whose participation began on or after 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $19.19 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.80 per month for each year of earned. These amounts are shown as of the valuation date and will be increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $19.19 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.80 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2010	2011	2012	2013	2014	2015
			Number			
Beginning of Year	1,184	1,223	1,263	1,299	1,346	1,413
Added	54	52	52	63	95	62
Removed	15	12	16	16	28	15
End of Year	1,223	1,263	1,299	1,346	1,413	1,460
			Annual Allowances			
Beginning of Year	$ 44,273,937	$ 45,515,797	$ 47,467,404	$ 49,887,093	$ 50,905,789	$ 53,432,446
Added	1,543,665	2,341,589	3,026,513	1,471,331	3,360,043	1,946,803
Removed	301,805	389,982	606,825	452,635	833,386	448,827
End of Year	$ 45,515,797	$ 47,467,404	$ 49,887,093	$ 50,905,789	$ 53,432,446	$ 54,930,421
% Increase in Allowances	2.80%	4.29%	5.10%	2.04%	4.96%	2.80%
Average Annual Allowance	$ 37,217	$ 37,583	$ 38,404	$ 37,820	$ 37,815	$ 37,624

Retired Lives Summary June 30, 2015

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	134	$ 402,957.64	14	$ 43,388.33	148	$ 446,345.97
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	133	429,211.15	1	4,813.66	134	434,024.81
66-2/3% to Beneficiary	82	313,940.19	2	7,541.82	84	321,482.01
50% to Beneficiary	85	309,723.84	1	2,604.67	86	312,328.51
Pop-up Option	543	1,948,838.63	4	10,805.22	547	1,959,643.85
10 Years Certain	3	9,656.29	0	0.00	3	9,656.29
10 Years Certain & Life	37	115,460.88	2	5,033.86	39	120,494.74
Social Security Option						
Age 62 Basic	30	82,882.80	0	0.00	30	82,882.80
Age 62 Survivorship	124	256,317.49	1	7,930.47	125	264,247.96
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	18	48,399.66	1	3,918.67	19	52,318.33
20 Years Certain & Life	36	112,009.10	2	3,978.81	38	115,987.91
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	466.41	2	466.41
PLSO 12 Month Survivor	6	20,781.22	0	0.00	6	20,781.22
PLSO 24 Month Survivor	4	5,952.60	0	0.00	4	5,952.60
PLSO 36 Month Survivor	9	16,914.11	0	0.00	9	16,914.11
Total	1,244	$ 4,073,045.60	30	$ 90,481.92	1,274	$ 4,163,527.52

Beneficiary Lives Summary June 30, 2015

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	$ 0.00	5	$ 4,584.52	5	$ 4,584.52
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	6	5,883.26	60	160,931.82	66	166,815.08
66-2/3% to Beneficiary	2	1,206.05	10	18,639.77	12	19,845.82
50% to Beneficiary	0	0.00	15	21,773.84	15	21,773.84
Pop-up Option	2	1,154.22	33	88,328.02	35	89,482.24
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	0	0.00	1	389.49	1	389.49
Social Security Option						
Age 62 Basic	0	0.00	2	2,281.46	2	2,281.46
Age 62 Survivorship	0	0.00	42	83,903.41	42	83,903.41
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	1	893.10	1	893.10
15 Years Certain & Life	0	0.00	0	0.00	0	0.00
20 Years Certain & Life	1	6,685.69	5	10,001.56	6	16,687.25
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	1	7,351.41	1	7,351.41
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	11	$ 14,929.22	175	$ 399,078.40	186	$ 414,007.62

Retired and Beneficiary Information June 30, 2015
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	35	$ 1,340,592	9	$ 165,095	16	$ 100,053	60	$ 1,605,740
45-49	138	5,428,008	6	127,998	2	33,062	146	5,589,068
50-54	166	6,844,378	7	90,601	4	47,830	177	6,982,809
55-59	138	5,783,238	6	122,091	16	264,134	160	6,169,463
60-64	233	9,688,311	8	92,961	15	412,444	256	10,193,716
65-69	267	10,692,229	8	181,486	29	805,643	304	11,679,358
70-74	116	4,258,029	3	46,115	30	830,307	149	5,134,451
75-79	67	2,399,808	3	74,826	12	425,362	82	2,899,996
80-84	41	1,661,546	2	33,710	23	816,263	66	2,511,519
85-89	16	693,429	0	0	23	721,813	39	1,415,242
90 & Over	5	237,880	0	0	16	511,179	21	749,059
Totals	1,222	$ 49,027,448	52	$ 934,883	186	$ 4,968,090	1,460	$ 54,930,421

Total Active Members as of June 30, 2015
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	52								52
Avg Pay	$23,785								$23,785
25-29	129	22							151
Avg Pay	$34,949	$46,312							$36,605
30-34	65	60	38						163
Avg Pay	$41,095	$47,883	$51,183						$45,946
35-39	34	37	115	28	1				215
Avg Pay	$41,363	$48,770	$53,103	$54,816	$16,195				$50,552
40-44	13	18	62	70	32	1			196
Avg Pay	$37,723	$49,029	$53,025	$59,002	$69,237	$75,491			$56,539
44-49	4	11	23	39	26	7	2		112
Avg Pay	$44,050	$49,587	$52,983	$57,631	$66,983	$64,101	$88,500		$58,528
50-54		4	10	5	12	3	1	1	36
Avg Pay		$49,741	$51,639	$60,847	$62,976	$75,967	$91,416	$76,089	$60,297
55-59		2		1				6	9
Avg Pay		$46,862		$48,983				$76,823	$67,072
60-64				1				1	2
Avg Pay				$67,383				$78,353	$72,868
65-69								1	1
Avg Pay								$85,601	$85,601
70 & over									
Avg Pay									
Totals	297	154	248	144	71	11	3	9	937
Avg Pay	$35,318	$48,162	$52,719	$57,870	$66,607	$68,372	$89,472	$77,887	$48,842

SCHEDULE F

SENSITIVITY ANALYSIS

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate and the rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 7.50%, together with a decrease in the discount rate to 6.50% and an increase in the discount rate to 8.50%. Under this scenario, the underlying inflation rate assumption is held constant at 3.25% and the payroll growth assumption is held constant at 4.00%.
- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.25%, together with decreases in the inflation rate to 3.00% and 2.75%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption and the healthcare trend assumption for members hired before 7/1/2003.
- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 4.00%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Retirement			
Actuarial Accrued Liabiltiy	$ 811,020,318	$ 734,156,446	$ 669,475,953
Actuarial Value of Assets	248,387,946	248,387,946	248,387,946
Unfunded Liability	$ 562,632,372	$ 485,768,500	$ 421,088,007
Funded Ratio	30.63%	33.83%	37.10%
Contribution Rate	71.87%	66.47%	61.85%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 288,119,708	$ 254,838,710	$ 227,600,636
Actuarial Value of Assets	167,774,940	167,774,940	167,774,940
Unfunded Liability	$ 120,344,768	$ 87,063,770	$ 59,825,696
Funded Ratio	58.23%	65.84%	73.71%
Contribution Rate	23.75%	18.87%	14.60%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
SPRS Total			
Actuarial Accrued Liabiltiy	$ 1,099,140,026	$ 988,995,156	$ 897,076,589
Actuarial Value of Assets	416,162,886	416,162,886	416,162,886
Unfunded Liability	$ 682,977,140	$ 572,832,270	$ 480,913,703
Funded Ratio	37.86%	42.08%	46.39%
Contribution Rate	95.62%	85.34%	76.45%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%

INFLATION ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Inflation Rate 25 basis points	Decrease Inflation Rate 50 basis points
Retirement			
Actuarial Accrued Liabiltiy	$ 734,156,446	$ 751,321,300	$ 771,262,633
Actuarial Value of Assets	248,387,946	248,387,946	248,387,946
Unfunded Liability	$ 485,768,500	$ 502,933,354	$ 522,874,687
Funded Ratio	33.83%	33.06%	32.21%
Contribution Rate	66.47%	69.16%	72.23%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
Insurance			
Actuarial Accrued Liabiltiy	$ 254,838,710	$ 255,247,724	$ 255,677,698
Actuarial Value of Assets	167,774,940	167,774,940	167,774,940
Unfunded Liability	$ 87,063,770	$ 87,472,784	$ 87,902,758
Funded Ratio	65.84%	65.73%	65.62%
Contribution Rate	18.87%	19.01%	19.16%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
SPRS Total			
Actuarial Accrued Liabiltiy	$ 988,995,156	$ 1,006,569,024	$ 1,026,940,331
Actuarial Value of Assets	416,162,886	416,162,886	416,162,886
Unfunded Liability	$ 572,832,270	$ 590,406,138	$ 610,777,445
Funded Ratio	42.08%	41.34%	40.52%
Contribution Rate	85.34%	88.17%	91.39%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%

PAYROLL GROWTH ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Payroll Growth 2%	No Payroll Growth
Retirement			
Actuarial Accrued Liabiltiy	$ 734,156,446	$ 734,156,446	$ 734,156,446
Actuarial Value of Assets	248,387,946	248,387,946	248,387,946
Unfunded Liability	$ 485,768,500	$ 485,768,500	$ 485,768,500
Funded Ratio	33.83%	33.83%	33.83%
Contribution Rate	66.47%	81.29%	98.28%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 254,838,710	$ 254,838,710	$ 254,838,710
Actuarial Value of Assets	167,774,940	167,774,940	167,774,940
Unfunded Liability	$ 87,063,770	$ 87,063,770	$ 87,063,770
Funded Ratio	65.84%	65.84%	65.84%
Contribution Rate	18.87%	21.26%	23.91%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
SPRS Total			
Actuarial Accrued Liabiltiy	$ 988,995,156	$ 988,995,156	$ 988,995,156
Actuarial Value of Assets	416,162,886	416,162,886	416,162,886
Unfunded Liability	$ 572,832,270	$ 572,832,270	$ 572,832,270
Funded Ratio	42.08%	42.08%	42.08%
Contribution Rate	85.34%	102.55%	122.19%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%

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November 16, 2016

Board of Directors
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The sixtieth annual actuarial valuation of the Kentucky Employees Retirement System (KERS), the fifty-seventh annual actuarial valuation of the County Employees Retirement System (CERS), and the fifty-eighth annual actuarial valuation of the State Police Retirement System (SPRS) have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Directors must approve the employer contribution rates. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. The June 30, 2016 actuarial valuation will be used by the Board of Directors to certify the CERS employer contribution rates for the fiscal year beginning July 1, 2017 and ending June 30, 2018. The June 30, 2016 actuarial valuations for the KERS and SPRS will be used by the Board of Directors for informational purposes only. The KERS and SPRS employer contribution rates for the fiscal years beginning July 1, 2016 and ending June 30, 2018 were certified in the June 30, 2015 actuarial valuations.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by SB2, the amortization period was reestablished as a closed 30-year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL. As with the pension fund, going forward, the UAL will be amortized over a 30-year period beginning June 30, 2013. The amortization period will decrease by one each year going forward.

Administrative expenses of the plans are also included as part of the total contribution. This portion of the funding is expected to remain relatively stable as a percentage of payroll over future years.

KERS, CERS and SPRS have three benefit tiers. Members hired prior to or on August 31, 2008 are in Tier 1. HB1 passed into law in 2008 which introduced Tier 2 for members hired after August 31, 2008 and prior to January 1, 2014. Tier 2 reduced the contribution rates in relationship to Tier 1. SB2 was passed into law in 2013 which introduced Tier 3 for those hired on or after January 1, 2014. Tier 3 is a Cash Balance Plan for pension benefits. The cash balance plan limits the employers' exposure to increased contribution rates due to less than anticipated investment experience.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, relative to both the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, assumption changes and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, prior employer contribution rate reductions enacted by the State Legislature severely limited the plans ability to correct the declining funding levels. SB2 requires the state to contribute the full actuarially determined employer contribution rates compared to the HB1 phase-in rates which would not have required the full actuarially determined employer contribution rate for many years. As of June 30, 2016 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	16.0%
KERS Hazardous Pension Fund	59.7%
CERS Non-Hazardous Pension Fund	59.0%
CERS Hazardous Pension Fund	57.7%
SPRS Pension Fund	30.3%

The Board's funding objective for the insurance funds is to increase the funded level consistently over time. As of June 30, 2016 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	30.3%
KERS Hazardous Insurance Fund	125.3%
CERS Non-Hazardous Insurance Fund	69.6%
CERS Hazardous Insurance Fund	72.9%
SPRS Insurance Fund	67.2%

Data

In completing the valuation of these systems, we have relied on data and financial information provided by the Kentucky Retirement Systems. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Directors, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. At least once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation were adopted by the Board on December 4, 2014 and based on the experience investigation report dated April 30, 2014. Since the previous valuation, the assumed rate of return for the KERS Non-Hazardous Retirement System and the State Police Retirement System has been reduced from 7.50% to 6.75%. These assumptions have been adopted by the Board of Directors of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is scheduled to be completed in early 2019 and any adjustments are expected to be reflected in the June 30, 2019 actuarial valuation.

Closing

The long-term financial health of the three retirement Systems, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. The System has recently been strengthened due to two reasons. They are: recent legislative action that provides 100% funding of the actuarially determined contribution and the elimination of unfunded ad hoc cost-of-living adjustments for retirees. The cost for providing cost-of-living adjustments for retires must be prefunded in advance.

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

The funding of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System has been determined based on the requirements of the Kentucky Revised Statutes and the current funding policies of the Board on the basis that all the actuarial assumptions are met. The funding rates established by the Board are appropriate for this purpose. However, it is up to the state legislature to follow through with the required funding. As noted above, SB2 calls for KERS and SPRS contributions at the actuarially determined rates beginning with fiscal year 2014-2015. It should also be noted that the Retirement Fund of the KERS Non-Hazardous Retirement System and the SPRS Pension Fund are both in critical condition.

Sincerely,

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Summary of June 30, 2016 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2016-2017)					
Pension Fund Contribution	41.98%	20.48%	14.48%	22.20%	71.57%
Insurance Fund Contribution	8.41	1.34	4.70	9.35	18.10
Recommended Employer Contribution	50.39%	21.82%	19.18%	31.55%	89.67%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$13,224,698,427	$936,706,126	$11,076,456,794	$3,704,456,223	$775,160,294
Actuarial Value of Assets	2,112,286,498	559,487,184	6,535,372,347	2,139,119,173	234,567,536
Unfunded Actuarial Liability on Actuarial Value of Assets	11,112,411,929	377,218,942	4,541,084,447	1,565,337,050	540,592,758
Funding Level as a % of Actuarial Value of Assets	15.97%	59.73%	59.00%	57.74%	30.26%
Market Value of Assets	1,953,422,354	524,678,968	6,106,186,908	2,003,669,273	217,594,068
Unfunded Actuarial Liability on Market Value of Assets	11,271,276,073	412,027,158	4,970,269,886	1,700,786,950	557,566,226
Funding Level on Market Value of Assets	14.77%	56.01%	55.13%	54.09%	28.07%
Insurance Fund					
Actuarially Accrued Liability	$2,456,677,964	$377,745,230	$2,988,121,117	$1,558,818,204	$257,197,259
Actuarial Value of Assets	743,270,060	473,160,173	2,079,811,055	1,135,784,220	172,703,691
Unfunded Actuarial Liability on Actuarial Value of Assets	1,713,407,904	(95,414,943)	908,310,062	423,033,984	84,493,568
Funding Level as a % of Actuarial Value of Assets	30.26%	125.26%	69.60%	72.86%	67.15%
Market Value of Assets	695,188,649	440,596,305	1,943,756,727	1,062,602,089	161,366,312
Unfunded Actuarial Liability on Market Value of Assets	1,761,489,315	(62,851,075)	1,044,364,390	496,216,115	95,830,947
Funding Level on Market Value of Assets	28.30%	116.64%	65.05%	68.17%	62.74%
Member Data					
Number of Active Members	37,779	3,959	80,664	9,084	908
Total Annual Payroll (Active Members)	$1,529,248,873	$147,563,457	$2,352,761,794	$492,850,521	$45,551,469
Average Annual Pay (Active Members)	$40,479	$37,273	$29,167	$54,255	$50,167
Number of Retired Members & Beneficiaries	44,004	3,966	56,339	8,563	1,515
Average Annual Retirement Allowance	$20,633	$14,877	$11,264	$25,143	$37,393
Number of Vested Inactive Members	10,399	481	14,357	775	65

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Report on the Annual Valuation of the Kentucky Employees Retirement System

Prepared as of June 30, 2016

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November 16, 2016

Board of Directors
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal years beginning July 1, 2016 and July 1, 2017. The date of the valuation was June 30, 2016.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

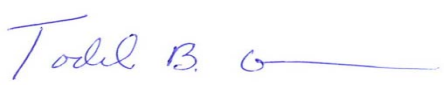
Since the previous valuation, the assumed rate of return for the Non-Hazardous Retirement Plan was changed to 6.75%

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,



Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

TBG/AB:kc

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REPORT ON THE ANNUAL VALUATION OF THE KENTUCKY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2016

SECTION I – SUMMARY OF PRINCIPAL RESULTS

This report, prepared as of June 30, 2016, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015
Contributions for next fiscal year:						
Retirement	41.98%	38.93%	20.48%	21.08%		
Insurance	8.41	8.35	1.34	2.74	N/A	N/A
Total	50.39%	47.28%	21.82%	23.82%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$13,224,698,427	$12,359,672,849	$936,706,126	$895,433,387	$14,161,404,553	$13,255,106,236
Actuarial value of assets	2,112,286,498	2,350,989,940	559,487,184	556,687,757	2,671,773,682	2,907,677,697
Unfunded liability on actuarial value of assets	11,112,411,929	10,008,682,909	377,218,942	338,745,630	11,489,630,871	10,347,428,539
Funded ratio on actuarial value of assets	15.97%	19.02%	59.73%	62.17%	18.87%	21.94%
Market value of assets	$1,953,422,354	$2,307,858,072	$524,678,968	$550,120,310	$2,478,101,322	$2,857,978,382
Unfunded liability on market value of assets	11,271,276,073	10,051,814,777	412,027,158	345,313,077	11,683,303,231	10,397,127,854
Funded ratio on market value of assets	14.77%	18.67%	56.01%	61.44%	17.50%	21.56%
Insurance						
Actuarial accrued liability	$2,456,677,964	$2,413,705,252	$377,745,230	$374,904,234	$2,834,423,194	$2,788,609,486
Actuarial value of assets	743,270,060	695,018,262	473,160,173	451,514,191	1,216,430,233	1,146,532,453
Unfunded liability on actuarial value of assets	1,713,407,904	1,718,686,990	(95,414,943)	(76,609,957)	1,617,992,961	1,642,077,033
Funded ratio on actuarial value of assets	30.26%	28.79%	125.26%	120.43%	42.92%	41.11%
Market value of assets	$695,188,649	$687,684,080	$440,596,305	$441,626,285	$1,135,784,954	$1,129,310,365
Unfunded liability on market value of assets	1,761,489,315	1,726,021,172	(62,851,075)	(66,722,051)	1,698,638,240	1,659,299,121
Funded ratio on market value of assets	28.30%	28.49%	116.64%	117.80%	40.07%	40.50%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	44,004	42,269	3,966	3,758	47,970	46,027
Number of vested former members	10,399	9,806	481	460	10,880	10,266
Number of former members due a refund	38,641	38,454	4,444	4,094	43,085	42,548
Number of active members	37,779	39,056	3,959	3,886	41,738	42,942
Total salary	$1,529,248,873	$1,544,234,409	$147,563,457	$128,680,130	$1,676,812,330	$1,672,914,539
Average salary	$40,479	$39,539	$37,273	$33,114	$40,175	$38,958

The Kentucky Employees Retirement System is a defined benefit pension fund that provides pensions and health care coverage for employees of state government, non-teaching staff at regional state supported universities, local health departments, regional mental health/mental retardation agencies, and other quasi-state agencies. The Kentucky Employees Retirement System includes both non-hazardous and hazardous duty benefits. This report presents the results of the June 30, 2016 actuarial funding valuation for both the Retirement Plan and the Insurance Fund. The primary purpose of performing the actuarial funding valuations are to:

- Calculate the actuarially determined contribution rates for the fiscal years beginning July 1, 2016 and July 1, 2017 for both the Retirement Plan and the Insurance Fund.
- Determine the experience of the System since the last valuation date.
- Disclose asset and liability measures as of the valuation date.
- Analyze and report on trends in contributions, assets, and liabilities over the past several years.

Since the previous valuation there were no changes to the plan provisions. The discount rate for the Non-Hazardous Pension Plan was changed to 6.75%. The discount rate remains 7.50% for the Non-Hazardous Insurance Plan. The actuarial valuation results provide "snapshot" view the System's financial condition on June 30, 2016. Actuarial gains and losses result when actuarial experience of the plan (such as asset return, pay increases, turnover, deaths, etc.) is different from the expected by the actuarial assumptions.

Non-Hazardous

The Retirement Plan's Unfunded Actuarial Accrued Liability (UAAL) was expected to be $10,261.1 million taking into account contributions from both the employer and members of $614.8 million. The actual UAAL was $11,112.4 million. The increase of $851.3 million was due to the change in discount rate offset by an actuarial gain due to actual experience different than what was anticipated by the assumptions. The Insurance Fund's UAAL was expected to be $1,748.1 million taking into account expected employer and member contributions of $132.6 million. The actual UAAL was $1,713.4 million. The decrease in the UAAL of $34.7 million was due to an actuarial gain due to actuarial experience different than what was anticipated by the assumptions.

The remaining amortization period of the UAAL of both the Pension and Insurance Funds is 27-years as of June 30, 2016. Detailed analysis of the gains and losses are presented in Section V of the report.

As of June 30, 2016 the Pension and Insurance Funds had net assets of $1,953,422,354 and $695,188,649 respectively. The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarially determined contribution. The asset valuation method which recognizes the annual unexpected portion of market value investment returns over a five-

year period, attempts to dampen the effect of market volatility. The resulting amount is called tl "actuarial value of assets" and is utilized to determine the actuarial valuation results. In this year's actuarial valuation, the actuarial value of assets as of June 30, 2016 was $2,112,286,498 and $743,270,060 respectively for the Pension and Insurance Funds.

On a market basis, the estimated rate of return was (1.1)% and (0.6)% respectively for the Pension and Insurance Funds, assuming all cash flows occur in the middle of the year. Due to better than assumed prior returns on the market value of assets the net rate of return measured on the actuarial value of assets was 4.3% and 5.3% respectively for both the Pension and Insurance Funds. Please see Section III and Schedule B of this report for more detailed information on the market and actuarial value of assets.

Hazardous

The Retirement Plan's Unfunded Actuarial Accrued Liability (UAAL) was expected to be $344.6 million taking into account contributions from both the employer and members of $38.8 million. The actual UAAL was $377.2 million. The increase of $32.6 million was due to an actuarial loss due to actual experience different than what was anticipated by the assumptions. The Insurance Funds UAAL was expected to be ($77.9) million taking into account expected employer and member contributions of $4.0 million. The actual UAAL was ($95.4) million. The decrease in the UAAL of $17.5 million was due to an actuarial gain due to actuarial experience different than what was anticipated by the assumptions.

The remaining amortization period of the UAAL of both the Pension and Insurance Funds is 27-years as of June 30, 2016. Detailed analysis of the gains and losses are presented in Section V of the report.

As of June 30, 2016 the Pension and Insurance Funds had net assets of $524,678,968 and $440,596,306 respectively. The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarially determined contribution. The asset valuation method which recognizes the annual unexpected portion of market value investment returns over a five-year period, attempts to dampen the effect of market volatility. The resulting amount is called the "actuarial value of assets" and is utilized to determine the actuarial valuation results. In this year's actuarial valuation, the actuarial value of assets as of June 30, 2016 was $559,487,184 and $473,160,173 respectively for the Pension and Insurance Funds.

On a market basis, the estimated rate of return was (0.3)% and (0.2)% respectively for the Pension and Insurance Funds, assuming all cash flows occur in the middle of the year. Due to better than assumed prior returns on the market value of assets the net rate of return measured on the actuarial value of assets was 5.0% and 4.8% respectively for both the Pension and Insurance Funds. Please see Section III and Schedule B of this report for more detailed information on the market and actuarial value of assets.

Schedule F provides sensitivity analysis for three different sets of economic assumptions; the discou rate assumption, the inflation assumption, and the payroll growth assumption. Two assumption change scenarios are presented for each economic assumption. The results of the economic assumption change scenarios are presented along with the valuation results for comparison.

The long-term financial health of this retirement System, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. The System has recently been strengthened due to two reasons. They are, recent legislative action that provides 100% funding of the actuarially determined contribution and the elimination of unfunded ad hoc cost-of-living adjustments for retirees. The cost for providing cost-of-living adjustments for retires must be prefunded in advance.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2016 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	37,779	$1,529,248,873	$40,479	45.1	10.7
Hazardous	3,959	147,563,457	37,273	40.4	7.5
Total in KERS	41,738	$1,676,812,330	$40,175	44.6	10.4

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2011	46,617	$1,731,632,748	$37,146	(3.6%)
6/30/2012	42,196	1,644,896,681	38,982	4.9
6/30/2013	42,226	1,644,408,698	38,943	(0.1)
6/30/2014	40,365	1,577,496,447	39,081	0.4
6/30/2015	39,056	1,544,234,409	39,539	1.2
6/30/2016	37,779	1,529,248,873	40,479	2.4

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2011	4,291	$133,053,792	$31,008	(7.3%)
6/30/2012	4,086	131,976,754	32,300	4.2
6/30/2013	4,127	132,015,368	31,988	(1.0)
6/30/2014	4,024	129,076,038	32,077	0.3
6/30/2015	3,886	128,680,130	33,114	3.2
6/30/2016	3,959	147,563,457	37,273	12.6

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	37,327	$816,466,272	$21,873	68.5
Disability	1,970	25,546,625	12,968	65.0
Beneficiary	4,707	65,921,441	14,005	70.3
Total in KERS	44,004	$907,934,338	$20,633	68.6

** Does not include number and annual benefits for those members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 2,274 members in the hazardous system also receiving an annual benefit from the non-hazardous System. Total annual benefits for these members is $20,165,642.*

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	3,404	$53,576,505	$15,739	64.1
Disability	149	1,323,120	8,880	59.1
Beneficiary	413	4,101,324	9,931	64.8
Total in KERS	3,966	$59,000,949	$14,877	63.9

This valuation also includes 53,965 inactive members (49,040 Non-Hazardous and 4,925 Hazardous; of which 10,399 Non-Hazardous are vested and 481 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2016 the total market value of assets amounted to $3,613,886,276 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2016

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	$1,953,422,354	$695,188,649	$2,648,611,003
Hazardous	524,678,968	440,596,305	965,275,273
Total	$2,478,101,322	$1,135,784,954	$3,613,886,276

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $3,888,203,915. Schedule B shows the development of the actuarial value of assets as of June 30, 2016. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	June 30, 2016	June 30, 2015
Retirement		
Non-Hazardous	$ 2,112,286,498	$ 2,350,989,940
Hazardous	559,487,184	556,687,757
Total	$ 2,671,773,682	$ 2,907,677,697
Insurance		
Non-Hazardous	$ 743,270,060	$ 695,018,262
Hazardous	473,160,173	451,514,191
Total	$ 1,216,430,233	$ 1,146,532,453
KERS Total		
Non-Hazardous	$ 2,855,556,558	$ 3,046,008,202
Hazardous	1,032,647,357	1,008,201,948
Total	$ 3,888,203,915	$ 4,054,210,150

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2016. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance. Since the previous valuation, the discount rate for the Non-Hazardous Plan has been changed to 6.75%.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $15,592,171,639, of which $10,219,120,158 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $439,530,185 is for the prospective benefits payable on account of present inactive members, and $4,933,521,296 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $2,671,773,682 as of June 30, 2016. The difference of $12,920,397,957 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $803,448,745 is the present value of future contributions expected to be made by members, and the balance of $12,116,949,212 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 4.25% of payroll for non-hazardous members and 5.85% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $627,318,341. When this amount is subtracted from $12,116,949,212, which is the present value of the total future contributions to be made by the employers, there remains $11,489,630,871 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 37.05% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 14.04% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $11,112,411,929 for non-hazardous members and $377,218,942 for hazardous members over 27 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.00% each year.
5. The contribution rate for administrative expenses is determined to be 0.68% of payroll for non-hazardous members and 0.59% of payroll for hazardous members.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $3,181,272,329, of which $1,569,979,955 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $142,016,967 is for the prospective benefits payable on account of present inactive members, and $1,469,275,407 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $1,216,430,233 as of June 30, 2016. The difference of $1,964,842,096 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $55,569,373 is the present value of future contributions expected to be made by members, and the balance of $1,909,272,723 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 2.19% of payroll for non-hazardous members and 4.83% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $291,279,762. When this amount is subtracted from $1,909,272,723, which is the present value of the total future contributions to be made by the employers, there remains $1,617,992,961 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 6.17% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at (3.56%) of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $1,713,407,904 for non-hazardous members and $(95,414,943) for hazardous members over 27 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.00% each year.
5. The contribution rate for administrative expenses is determined to be 0.05% of payroll for non-hazardous members and 0.07% of payroll for hazardous members.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2016 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/15	$ 10,008.7	$ 338.7	$ 10,347.4
(2)	Normal cost from last valuation	129.9	19.3	149.2
(3)	Contributions	614.8	38.8	653.6
(4)	Interest accrual: [(1) + (2)] x .075 - (3) x .0375	737.3	25.4	762.7
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 10,261.1	$ 344.6	$ 10,605.7
(6)	Change due to new actuarial assumption or methods	(903.0)	0.0	(903.0)
(7)	Expected UAAL after changes: (5) - (6)	$ 11,164.1	$ 344.6	$ 11,508.7
(8)	Actual UAAL as of 6/30/16	$ 11,112.4	$ 377.2	$ 11,489.6
(9)	Gain/(loss): (7) - (8)	$ 51.7	$ (32.6)	$ 19.1
(10)	Accrued liabilities as of 6/30/15	$ 12,359.7	$ 895.4	$ 13,255.1
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	0.4%	(3.6%)	0.1%

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/15	$ 1,718.7	$ (76.6)	$ 1,642.1
(2)	Normal cost from last valuation	40.0	8.1	48.1
(3)	Expected contributions	132.6	4.0	136.6
(4)	Interest accrual: [(1) + (2) - (3)] x .075	122.0	(5.4)	116.6
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 1,748.1	$ (77.9)	$ 1,670.2
(6)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(7)	Expected UAAL after changes: (5) - (6)	$ 1,748.1	$ (77.9)	$ 1,670.2
(8)	Actual UAAL as of 6/30/16	$ 1,713.4	$ (95.4)	$ 1,618.0
(9)	Gain/(loss): (7) - (8)	$ 34.7	$ 17.5	$ 52.2
(10)	Accrued liabilities as of 6/30/15	$ 2,413.7	$ 374.9	$ 2,788.6
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	1.4%	4.7%	1.9%

* *Unfunded actuarial accrued liability*

NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/16	Insurance $ Gain (or Loss) For Year Ending 6/30/16
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (34.0)	$ 5.4
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(4.0)	(0.3)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.1)	(1.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	91.9	12.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	34.2	75.6
New Members. Additional unfunded accrued liability will produce a loss.	(10.2)	(26.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(70.9)	(15.7)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	43.3	27.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	1.5	(43.3)
Gain (or Loss) During Year From Financial Experience	$ 51.7	$ 34.7
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	(903.0)	0.0
Composite Gain (or Loss) During Year	$ (851.3)	$ 34.7

HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/16	Insurance $ Gain (or Loss) For Year Ending 6/30/16
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (15.6)	$ (0.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.0	0.1
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.4)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	14.3	3.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(20.3)	14.0
New Members. Additional unfunded accrued liability will produce a loss.	(6.1)	(3.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(14.4)	(12.1)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	7.4	6.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	2.1	10.4
Gain (or Loss) During Year From Financial Experience	$ (32.6)	$ 17.5
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (32.6)	$ 17.5

TOTAL KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/16	Insurance $ Gain (or Loss) For Year Ending 6/30/16
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (49.6)	$ 4.9
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(4.0)	(0.2)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.1)	(1.4)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	106.2	16.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	13.9	89.6
New Members. Additional unfunded accrued liability will produce a loss.	(16.3)	(30.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(85.3)	(27.8)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	50.7	33.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	3.6	(32.9)
Gain (or Loss) During Year From Financial Experience	$ 19.1	$ 52.2
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	(903.0)	0.0
Composite Gain (or Loss) During Year	$ (883.9)	$ 52.2

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation. These rates are for informational purposes only.

Required Contribution Rates
Non-Hazardous Retirement

	Contribution Rate for	% of Payroll
A.	Normal Cost:	
	(1) Service retirement benefits	8.89%
	(2) Disability benefits	0.27%
	(3) Survivor benefits	0.09%
	(4) Total	9.25%
B.	Member Contributions	5.00%
C.	Employer Normal Cost: [A(4) - B]	4.25%
D.	Administrative Expenses	0.68%
E.	Unfunded Actuarial Accrued Liability Contributions*:	37.05%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	41.98%

**Based on 27 year amortization of the UAAL from June 30, 2016*

Required Contribution Rates
Hazardous Retirement

	Contribution Rate for	% of Payroll
A.	Normal Cost:	
	(1) Service retirement benefits	13.36%
	(2) Disability benefits	0.33%
	(3) Survivor benefits	0.16%
	(4) Total	13.85%
B.	Member Contributions	8.00%
C.	Employer Normal Cost: [A(4) - B]	5.85%
D.	Administrative Expenses	0.59%
E.	Unfunded Actuarial Accrued Liability Contributions*:	14.04%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	20.48%

**Based on 27 year amortization of the UAAL from June 30, 2016*

Required Contribution Rates
Non-Hazardous Insurance

	Contribution for	% of Payroll
A.	Normal Cost:	2.51%
B.	Member Contributions*	0.32%
C.	Employer Normal Cost: [A - B]	2.19%
D.	Administrative Expenses	0.05%
E.	Unfunded Actuarial Accrued Liability**:	6.17%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	8.41%

**The liabilities are net of retiree contributions towards their healthcare.*
*** Based on 27 year amortization of the UAAL from June 30, 2016*

Required Contribution Rates
Hazardous Insurance

	Contribution for	% of Payroll
A.	Normal Cost:	5.29%
B.	Member Contributions*	0.46%
C.	Employer Normal Cost: [A - B]	4.83%
D.	Administrative Expenses	0.07%
E.	Unfunded Actuarial Accrued Liability**:	(3.56%)
F.	Total Recommended Employer Contribution Rate: [C+D+E]	1.34%

**The liabilities are net of retiree contributions towards their healthcare.*
*** Based on 27 year amortization of the UAAL from June 30, 2016*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements (GASB) 43, 45, 67 and 68 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. The information required under GASB 67 and 68 will be issued in separate reports. We are providing the retirement benefit information for information purposes only. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2016

GROUP	NUMBER		
	Non-Hazardous*	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	44,004	3,966	47,970
Terminated employees entitled to benefits but not yet receiving benefits	49,040	4,925	53,965
Active Members	37,779	3,959	41,738
Total	130,823	12,850	143,673

** Does not include members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 2,274 members in in the hazardous system also receiving an annual benefit from the non-hazardous System*

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables. Please note that for the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the health care trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP. Under Actuarial Standard of Practice No. 6 (ASOP No. 6), aging subsidies (or implicit rate subsidies) should be recognized, as the differences in health care utilization and cost due to age have been demonstrated and well quantified. The impact of aging on a valuation's results can be as significant as the use of mortality, trend, and discounting. It has been the long-standing position that the responsibility for compliance with GASB Statement No. 43, when it relates to KEHP implicit subsidies, rests with KEHP, not KRS, as KRS has no operational authority over KEHP. As such, KEHP implicit subsidies are excluded from the OPEB valuation process of the Retiree Medical Plan. As GASB 74 and 75 prohibit such a deviation from ASOP No. 6, additional consideration to the current treatment of KEHP implicit rate subsidies may be needed in the future. The estimated impact of KEHP implicit subsidies to the actuarial accrued liability is an increase of $327,100,333 for KERS non-hazardous and $45,961,457 for KERS hazardous.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2011	$ 3,726,986,087	$ 11,182,142,032	$ 7,455,155,945	33.3%	$ 1,731,632,748	430.5%
6/30/2012	3,101,316,738	11,361,048,136	8,259,731,398	27.3	1,644,896,681	502.1
6/30/2013	2,636,122,852	11,386,602,159	8,750,479,307	23.2	1,644,408,698	532.1
6/30/2014	2,423,956,716	11,550,110,224	9,126,153,508	21.0	1,577,496,447	578.5
6/30/2015*	2,350,989,940	12,359,672,849	10,008,682,909	19.0	1,544,234,409	648.1
6/30/2016**	2,112,286,498	13,224,698,427	11,112,411,929	16.0	1,529,248,873	726.7
Hazardous Members						
6/30/2011	$ 510,748,505	$ 721,293,444	$ 210,544,939	70.8%	$ 133,053,792	158.2%
6/30/2012	497,226,296	752,699,457	255,473,161	66.1	131,976,754	193.6
6/30/2013	505,656,808	783,980,594	278,323,786	64.5	132,015,368	210.8
6/30/2014	527,897,261	816,850,063	288,952,802	64.6	129,076,038	223.9
6/30/2015*	556,687,757	895,433,387	338,745,630	62.2	128,680,130	263.2
6/30/2016	559,487,184	936,706,126	377,218,942	59.7	147,563,457	255.6
Total KERS Members						
6/30/2011	$ 4,237,734,592	$ 11,903,435,476	$ 7,665,700,884	35.6%	$ 1,864,686,540	411.1%
6/30/2012	3,598,543,034	12,113,747,593	8,515,204,559	29.7	1,776,873,435	479.2
6/30/2013	3,141,779,660	12,170,582,752	9,028,803,092	25.8	1,776,424,066	508.3
6/30/2014	2,951,853,977	12,366,960,287	9,415,106,310	23.9	1,706,572,485	551.7
6/30/2015	2,907,677,697	13,255,106,236	10,347,428,539	21.9	1,672,914,539	618.5
6/30/2016	2,671,773,682	14,161,404,553	11,489,630,871	18.9	1,676,812,330	685.2

** Discount rate changed from 7.75% to 7.50%*
** * Discount rate changed from 7.50% to 6.75%*

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2011	$ 451,620,442	$ 4,280,089,633	$ 3,828,469,191	10.6%	$ 1,731,632,748	221.1%
6/30/2012	446,080,511	3,125,330,157	2,679,249,646	14.3	1,644,896,681	162.9
6/30/2013*	497,584,327	2,128,754,134	1,631,169,807	23.4	1,644,408,698	99.2
6/30/2014	621,236,646	2,226,759,925	1,605,523,279	27.9	1,577,496,447	101.8
6/30/2015**	695,018,262	2,413,705,252	1,718,686,990	28.8	1,544,234,409	111.3
6/30/2016	743,270,060	2,456,677,964	1,713,407,904	30.3	1,529,248,873	112.0
Hazardous Members						
6/30/2011	$ 329,961,615	$ 507,058,767	$ 177,097,152	65.1%	$ 133,053,792	133.1%
6/30/2012	345,573,948	384,592,406	39,018,458	89.9	131,976,754	29.6
6/30/2013	370,774,403	385,517,675	14,743,272	96.2	132,015,368	11.2
6/30/2014	419,395,867	396,986,820	(22,409,047)	105.6	129,076,038	(17.4)
6/30/2015**	451,514,191	374,904,234	(76,609,957)	120.4	128,680,130	(59.5)
6/30/2016	473,160,173	377,745,230	(95,414,943)	125.3	147,563,457	(64.7)
Total KERS Members						
6/30/2011	$ 781,582,057	$ 4,787,148,400	$ 4,005,566,343	16.3%	$ 1,864,686,540	214.8%
6/30/2012	791,654,459	3,509,922,563	2,718,268,104	22.6	1,776,873,435	153.0
6/30/2013	868,358,730	2,514,271,809	1,645,913,079	34.5	1,776,424,066	92.7
6/30/2014	1,040,632,513	2,623,746,745	1,583,114,232	39.7	1,706,572,485	92.8
6/30/2015	1,146,532,453	2,788,609,486	1,642,077,033	41.1	1,672,914,539	98.2
6/30/2016	1,216,430,233	2,834,423,194	1,617,992,961	42.9	1,676,812,330	96.5

** Discount rate changed from 4.50% to 7.75%*
*** Discount rate changed from 7.75% to 7.50%*

INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Employer Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2011	$ 294,897,813	$ 129,335,552	43.9%
June 30, 2012	297,904,224	156,057,216	52.4%
June 30, 2013	286,143,134	165,330,557	57.8%
June 30, 2014	208,880,813	166,609,592	79.8%
June 30, 2015	130,455,026	135,940,337	104.2%
June 30, 2016	121,898,903	135,815,817	111.4%
	Hazardous Members		
June 30, 2011	$ 29,585,257	$ 19,952,580	67.4%
June 30, 2012	28,326,206	24,538,087	86.6%
June 30, 2013	26,252,911	25,682,403	97.8%
June 30, 2014	15,627,018	23,873,967	152.8%
June 30, 2015	13,151,938	14,882,343	113.2%
June 30, 2016	9,185,866	16,765,530	182.5%
	Total KERS Members		
June 30, 2011	$ 324,483,070	$ 149,288,132	46.0%
June 30, 2012	326,230,430	180,595,303	55.4%
June 30, 2013	312,396,045	191,012,960	61.1%
June 30, 2014	224,507,831	190,483,559	84.8%
June 30, 2015	143,606,964	150,822,680	105.0%
June 30, 2016	131,084,769	152,581,347	116.4%

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2016. Additional information as of the latest actuarial valuation follows.

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2016	6/30/2016
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	27 years	27 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	7.50% - 5.00%	7.50% - 5.00%
Medical Trend Assumption (Post-Medicare)	5.50% - 5.00%	5.50% - 5.00%
Year Ultimate Trend	2021	2021
Dollar Contribution Trend	1.50%	1.50%
Actuarial assumptions:		
Investment rate of return*	7.50%	7.50%
*Includes price inflation at	3.25%	3.25%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2016 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2015. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 2,112,286,498	$ 2,350,989,940
Prospective contributions		
Member contributions	$ 695,862,103	$ 672,048,227
Employer normal contributions	556,170,049	366,345,728
Unfunded accrued liability contributions	11,112,411,929	10,008,682,909
Total prospective contributions	$ 12,364,444,081	$ 11,047,076,864
Total assets	$ 14,476,730,579	$ 13,398,066,804
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 9,600,527,994	$ 9,088,328,416
Present value of benefits payable on account of active members	4,466,562,333	3,960,599,033
Present value of benefits payable on account of inactive members	409,640,252	349,139,355
Total liabilities	$ 14,476,730,579	$ 13,398,066,804

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 559,487,184	$ 556,687,757
Prospective contributions		
Member contributions	$ 107,586,642	$ 91,736,829
Employer normal contributions	71,148,292	67,075,729
Unfunded accrued liability contributions	377,218,942	338,745,630
Total prospective contributions	$ 555,953,876	$ 497,558,188
Total assets	$ 1,115,441,060	$ 1,054,245,945
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 618,592,164	$ 605,818,504
Present value of benefits payable on account of active members	466,958,963	421,056,647
Present value of benefits payable on account of inactive members	29,889,933	27,370,794
Total liabilities	$ 1,115,441,060	$ 1,054,245,945

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 2,671,773,682	$ 2,907,677,697
Prospective contributions		
Member contributions	$ 803,448,745	$ 763,785,056
Employer normal contributions	627,318,341	433,421,457
Unfunded accrued liability contributions	11,489,630,871	10,347,428,539
Total prospective contributions	$ 12,920,397,957	$ 11,544,635,052
Total assets	$ 15,592,171,639	$ 14,452,312,749
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 10,219,120,158	$ 9,694,146,920
Present value of benefits payable on account of active members	4,933,521,296	4,381,655,680
Present value of benefits payable on account of inactive members	439,530,185	376,510,149
Total liabilities	$ 15,592,171,639	$ 14,452,312,749

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 743,270,060	$ 695,018,262
Prospective contributions		
Member contributions	$ 48,293,415	$ 34,833,822
Employer normal contributions	243,914,729	277,045,451
Unfunded accrued liability contributions	1,713,407,904	1,718,686,990
Total prospective contributions	$ 2,005,616,048	$ 2,030,566,263
Total assets	$ 2,748,886,108	$ 2,725,584,525
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,352,227,044	$ 1,302,716,841
Present value of benefits payable on account of active members	1,265,250,497	1,297,234,668
Present value of benefits payable on account of inactive members	131,408,567	125,633,016
Total liabilities	$ 2,748,886,108	$ 2,725,584,525

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 473,160,173	$ 451,514,191
Prospective contributions		
Member contributions	$ 7,275,958	$ 4,104,933
Employer normal contributions	47,365,033	53,171,611
Unfunded accrued liability contributions	(95,414,943)	(76,609,957)
Total prospective contributions	$ (40,773,952)	$ (19,333,413)
Total assets	$ 432,386,221	$ 432,180,778
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 217,752,911	$ 210,989,670
Present value of benefits payable on account of active members	204,024,910	211,065,783
Present value of benefits payable on account of inactive members	10,608,400	10,125,325
Total liabilities	$ 432,386,221	$ 432,180,778

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 1,216,430,233	$ 1,146,532,453
Prospective contributions		
Member contributions	$ 55,569,373	$ 38,938,755
Employer normal contributions	291,279,762	330,217,062
Unfunded accrued liability contributions	1,617,992,961	1,642,077,033
Total prospective contributions	$ 1,964,842,096	$ 2,011,232,850
Total assets	$ 3,181,272,329	$ 3,157,765,303
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,569,979,955	$ 1,513,706,511
Present value of benefits payable on account of active members	1,469,275,407	1,508,300,451
Present value of benefits payable on account of inactive members	142,016,967	135,758,341
Total liabilities	$ 3,181,272,329	$ 3,157,765,303

The following tables provide the solvency test for non-hazardous and hazardous KERS members.

Solvency Test
Retirement Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2011	$ 916,568,932	$ 8,482,714,356	$ 1,782,858,744	$ 3,726,986,087	100.0%	33.1%	0.0%
6/30/2012	885,137,183	8,708,536,338	1,767,374,615	3,101,316,738	100.0	25.4	0.0
6/30/2013	922,928,027	8,709,323,622	1,754,350,510	2,636,122,852	100.0	19.7	0.0
6/30/2014	928,557,540	8,870,692,596	1,750,860,088	2,423,956,716	100.0	16.9	0.0
6/30/2015	925,933,970	9,437,467,771	1,996,271,108	2,350,989,940	100.0	15.1	0.0
6/30/2016	920,120,230	10,010,168,246	2,294,409,951	2,112,286,498	100.0	11.9	0.0

Solvency Test
Retirement Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2011	$ 86,614,205	$ 490,395,078	$ 144,284,161	$ 510,748,505	100.0%	86.5%	0.0%
6/30/2012	82,100,877	521,688,803	148,909,777	497,226,296	100.0	79.6	0.0
6/30/2013	82,145,602	545,596,534	156,238,458	505,656,808	100.0	77.6	0.0
6/30/2014	83,663,535	581,231,300	151,955,228	527,897,261	100.0	76.4	0.0
6/30/2015	83,606,204	633,189,298	178,637,885	556,687,757	100.0	74.7	0.0
6/30/2016	86,705,297	648,482,097	201,518,732	559,487,184	100.0	72.9	0.0

Solvency Test
Insurance Benefits
Non-Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2011	$ 0	$ 2,568,002,978	$ 1,712,086,655	$ 451,620,442	100.0%	17.6%	0.0%
6/30/2012	0	1,924,068,623	1,201,261,534	446,080,511	100.0	23.2	0.0
6/30/2013	0	1,338,772,860	789,981,274	497,584,327	100.0	37.2	0.0
6/30/2014	0	1,425,604,569	801,155,356	621,236,646	100.0	43.6	0.0
6/30/2015	0	1,428,349,857	985,355,395	695,018,262	100.0	48.7	0.0
6/30/2016	0	1,483,635,611	973,042,353	743,270,060	100.0	50.1	0.0

Solvency Test
Insurance Benefits
Hazardous KERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2011	$ 0	$ 285,539,861	$ 221,518,906	$ 329,961,615	100.0%	100.0%	20.1%
6/30/2012	0	196,578,935	188,013,471	345,573,948	100.0	100.0	79.2
6/30/2013	0	202,031,515	183,486,160	370,774,403	100.0	100.0	92.0
6/30/2014	0	206,477,405	190,509,415	419,395,867	100.0	100.0	100.0
6/30/2015	0	221,114,995	153,789,239	451,514,191	100.0	100.0	100.0
6/30/2016	0	228,361,311	149,383,919	473,160,173	100.0	100.0	100.0

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2015	2016	2017	2018	2019	2020
A.	Actuarial Value Beginning of Year	$ 2,423,956,716	$ 2,350,989,940				
B.	Market Value End of Year	2,307,858,072	1,953,422,354				
C.	Market Value Beginning of Year	2,560,419,519	2,307,858,072				
D.	Cash Flow						
	D1. Contributions	632,777,097	614,761,373				
	D2. Benefit Payments	(919,342,856)	(935,418,515)				
	D3. Administrative Expenses	(10,473,878)	(10,988,559)				
	D4. Investment Expenses	(16,315,268)	(16,269,756)				
	D5. Net	(313,354,905)	(347,915,457)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	60,793,458	(6,520,261)				
	E2. Assumed Rate	7.75%	7.50%				
	E3. Amount for Immediate Recognition	203,237,495	176,922,398				
	E4. Amount for Phased-In Recognition	(142,444,037)	(183,442,659)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(28,488,807)	(36,688,532)	0	0	0	0
	F2. First Prior Year	29,067,645	(28,488,807)	(36,688,532)	0	0	0
	F3. Second Prior Year	15,221,118	29,067,645	(28,488,807)	(36,688,532)	0	0
	F4. Third Prior Year	(46,821,807)	15,221,118	29,067,645	(28,488,807)	(36,688,532)	0
	F5. Fourth Prior Year	68,172,485	(46,821,807)	15,221,118	29,067,645	(28,488,807)	(36,688,532)
	F6. Total Recognized Investment Gain	37,150,634	(67,710,383)	(20,888,576)	(36,109,694)	(65,177,339)	(36,688,532)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 2,350,989,940	$ 2,112,286,498				
H.	Difference Between Market & Actuarial Values	$ (43,131,868)	$ (158,864,144)	$ (137,975,568)	$ (101,865,874)	$ (36,688,532)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2015	2016	2017	2018	2019	2020
A.	Actuarial Value Beginning of Year	$ 527,897,261	$ 556,687,757				
B.	Market Value End of Year	550,120,310	524,678,968				
C.	Market Value Beginning of Year	559,504,340	550,120,310				
D.	Cash Flow						
	D1. Contributions	42,153,137	38,814,280				
	D2. Benefit Payments	(59,382,637)	(61,517,531)				
	D3. Administrative Expenses	(844,208)	(916,265)				
	D4. Investment Expenses	(4,013,205)	(4,413,171)				
	D5. Net	(22,086,913)	(28,032,687)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	12,702,883	2,591,345				
	E2. Assumed Rate	7.75%	7.50%				
	E3. Amount for Immediate Recognition	46,674,435	44,786,462				
	E4. Amount for Phased-In Recognition	(33,971,552)	(42,195,117)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(6,794,310)	(8,439,023)	0	0	0	0
	F2. First Prior Year	8,457,269	(6,794,310)	(8,439,023)	0	0	0
	F3. Second Prior Year	2,416,270	8,457,269	(6,794,310)	(8,439,023)	0	0
	F4. Third Prior Year	(9,594,554)	2,416,270	8,457,269	(6,794,310)	(8,439,023)	0
	F5. Fourth Prior Year	9,718,299	(9,594,554)	2,416,270	8,457,269	(6,794,310)	(8,439,023)
	F6. Total Recognized Investment Gain	4,202,974	(13,954,348)	(4,359,794)	(6,776,064)	(15,233,333)	(8,439,023)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 556,687,757	$ 559,487,184				
H.	Difference Between Market & Actuarial Values	$ (6,567,447)	$ (34,808,216)	$ (30,448,422)	$ (23,672,358)	$ (8,439,023)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2015	2016	2017	2018	2019	2020
A.	Actuarial Value Beginning of Year	$ 621,236,646	$ 695,018,262				
B.	Market Value End of Year	687,684,080	695,188,649				
C.	Market Value Beginning of Year	664,775,708	687,684,080				
D.	Cash Flow						
	D1. Contributions	140,393,102	140,872,512				
	D2. Benefit Payments	(125,273,008)	(128,644,977)				
	D3. Administrative Expenses	(896,134)	(825,847)				
	D4. Investment Expenses	(3,654,438)	(3,527,784)				
	D5. Net	10,569,522	7,873,904				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	12,338,850	(369,335)				
	E2. Assumed Rate	7.75%	7.50%				
	E3. Amount for Immediate Recognition	55,725,734	55,531,653				
	E4. Amount for Phased-In Recognition	(43,386,884)	(55,900,988)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(8,677,377)	(11,180,198)	0	0	0	0
	F2. First Prior Year	10,997,800	(8,677,377)	(11,180,198)	0	0	0
	F3. Second Prior Year	675,909	10,997,800	(8,677,377)	(11,180,198)	0	0
	F4. Third Prior Year	(6,969,893)	675,909	10,997,800	(8,677,377)	(11,180,198)	0
	F5. Fourth Prior Year	11,459,921	(6,969,893)	675,909	10,997,800	(8,677,377)	(11,180,198)
	F6. Total Recognized Investment Gain	7,486,360	(15,153,759)	(8,183,866)	(8,859,775)	(19,857,575)	(11,180,198)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 695,018,262	$ 743,270,060				
H.	Difference Between Market & Actuarial Values	$ (7,334,182)	$ (48,081,411)	$ (39,897,545)	$ (31,037,770)	$ (11,180,198)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2015	2016	2017	2018	2019	2020
A.	Actuarial Value Beginning of Year	$ 419,395,867	$ 451,514,191				
B.	Market Value End of Year	441,626,285	440,596,305				
C.	Market Value Beginning of Year	435,503,976	441,626,285				
D.	Cash Flow						
	D1. Contributions	15,433,627	17,436,744				
	D2. Benefit Payments	(17,000,969)	(17,489,919)				
	D3. Administrative Expenses	(100,809)	(97,876)				
	D4. Investment Expenses	(2,765,329)	(3,290,159)				
	D5. Net	(4,433,480)	(3,441,210)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	10,555,789	2,411,230				
	E2. Assumed Rate	7.75%	7.50%				
	E3. Amount for Immediate Recognition	36,452,246	36,406,466				
	E4. Amount for Phased-In Recognition	(25,896,457)	(33,995,236)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(5,179,291)	(6,799,047)	0	0	0	0
	F2. First Prior Year	4,571,403	(5,179,291)	(6,799,047)	0	0	0
	F3. Second Prior Year	1,027,388	4,571,403	(5,179,291)	(6,799,047)	0	0
	F4. Third Prior Year	(4,939,727)	1,027,388	4,571,403	(5,179,291)	(6,799,047)	0
	F5. Fourth Prior Year	4,619,785	(4,939,727)	1,027,388	4,571,403	(5,179,291)	(6,799,047)
	F6. Total Recognized Investment Gain	99,558	(11,319,274)	(6,379,547)	(7,406,935)	(11,978,338)	(6,799,047)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 451,514,191	$ 473,160,173				
H.	Difference Between Market & Actuarial Values	$ (9,887,906)	$ (32,563,868)	$ (26,184,321)	$ (18,777,386)	$ (6,799,047)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014.

INVESTMENT RATE OF RETURN: 6.75% per annum for Non-Hazardous Pension Plan; 7.50% per annum for Hazardous Plans and the Non-Hazardous Insurance Plan, compounded annually for retirement and insurance benefits.

PRICE INFLATION: 3.25% per annum, compounded annually.

PAYROLL GROWTH: 4.00% per annum, compounded annually.

SALARY INCREASES: The assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.00% per annum:

Service Years	Annual Rates of Salary Increases				
	Merit & Seniority		Base (Economy)	Increase Next Year	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0-1	12.02%	15.87%	4.00%	16.50%	20.50%
1-2	4.33%	4.33%	4.00%	8.50%	8.50%
2-3	1.92%	2.40%	4.00%	6.00%	6.50%
3-4	1.44%	1.92%	4.00%	5.50%	6.00%
4-5	1.44%	1.44%	4.00%	5.50%	5.50%
5-6	1.44%	0.96%	4.00%	5.50%	5.00%
6-7	0.96%	0.48%	4.00%	5.00%	4.50%
7-8	0.96%	0.48%	4.00%	5.00%	4.50%
8-9	0.96%	0.48%	4.00%	5.00%	4.50%
9-10	0.48%	0.48%	4.00%	4.50%	4.50%
10 & Over	0.48%	0.48%	4.00%	4.50%	4.50%

DISABILITY: Representative assumed annual rates of disability for both non-hazardous and hazardous members are as follows:

Nearest Age	Annual Rates of Disability			
	Non-Hazardous		Hazardous	
	Male	Female	Male	Female
20	0.02%	0.02%	0.03%	0.03%
30	0.03%	0.03%	0.05%	0.05%
40	0.07%	0.07%	0.10%	0.10%
50	0.19%	0.19%	0.28%	0.28%
60	0.49%	0.49%	0.73%	0.73%

RETIREMENT: The assumed annual rates of retirement for both non-hazardous and hazardous members are as follows:

Annual Rates of Retirement					
Non-Hazardous			Hazardous		
Age	Those Eligible for Service Retirement*	Those Eligible for Service Retirement**	Service	Those Eligible for Service Retirement+	Those Eligible for Service Retirement++
55	8.0%		20	40.0%	
56	8.0%		21	40.0%	
57	8.0%		22	40.0%	
58	8.0%		23	40.0%	
59	8.0%		24	40.0%	
60	10.0%	10.0%	25	47.0%	40.0%
61	20.0%	20.0%	26	47.0%	40.0%
62	20.0%	20.0%	27	47.0%	40.0%
63	20.0%	20.0%	28	47.0%	40.0%
64	20.0%	20.0%	29	47.0%	40.0%
65	20.0%	25.0%	30	47.0%	47.0%
66	20.0%	25.0%	31	47.0%	47.0%
67	20.0%	25.0%	32	50.0%	47.0%
68	20.0%	25.0%	33	50.0%	47.0%
69	20.0%	25.0%	34	50.0%	47.0%
70	20.0%	25.0%	35	60.0%	47.0%
71	20.0%	25.0%	36	60.0%	47.0%
72	20.0%	25.0%	37	60.0%	50.0%
73	20.0%	25.0%	38	60.0%	50.0%
74	20.0%	25.0%	39	60.0%	50.0%
75	100.0%	100.0%	40	60.0%	60.0%

* *For members participating before September 1, 2008. If service is at least 27 years, the rate is 35%.*
** *For members participating on or after September 1, 2008. If age plus service is at least 87, the rate is 35%.*
\+ *For members participating before September 1, 2008. The annual rate of service retirement is 100% at age 65.*
++ *For members participating on or after September 1, 2008. The annual rate of service retirement is 100% at age 60.*

WITHDRAWAL: The assumed annual rates of withdrawal for both non-hazardous and hazardous members are as follows:

Service Years	Annual Rates of Withdrawal	
	Non-Hazardous	Hazardous
0-1	22.50%	25.00%
1-2	15.50%	10.50%
2-3	12.50%	7.50%
3-4	10.50%	6.50%
4-5	9.00%	5.50%
5-6	6.50%	4.50%
6-7	5.50%	3.00%
7-8	5.00%	3.00%
8-9	4.50%	3.00%
9-10	4.50%	2.50%
10-11	4.00%	2.50%
11-13	4.00%	2.00%
13-15	3.50%	2.00%
15 & Over	3.00%	2.00%

DEATH BEFORE RETIREMENT: The rates of mortality for the period before retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females) for all healthy retired members and beneficiaries. The RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. These assumptions are used to measure the probabilities of each benefit payment being made after retirement. These assumptions contain margin for mortality improvements.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

FORM OF PAYMENT: Participants are assumed to elect a life-only form of payment.

ASSET VALUATION METHOD: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

ACTUARIAL COST METHOD: Costs were determined using the Entry Age Normal, Level Percentage of Pay Actuarial Cost Method. Under this method, a calculation is made for retirement benefits to determine the uniform and constant percentage rate of contribution which, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would be required to meet the cost of benefits payable. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

MULTIPLE STATUS/MULTIPLE SYSTEM MEMBERS: Some members may be represented under more than one retirement system and/or may have more than one status (e.g., active in one system, deferred vested in another and retired from a different system). For pension purposes, members that are active in one System but have service in another are assumed to retire from the System in which they are currently active. Any deferred pension benefits from another System are assumed to begin once the member terminates from their current active position. The insurance liabilities for multiple status/multiple system members are calculated assuming only one benefit is payable across all Systems and that benefit is payable from the combination of status and System which produces the highest economic value to the member.

AFFORDABLE CARE ACT (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2018 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the insurance liability will be required.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE SPOUSE AGE DIFFERENCE: Wives are assumed to be three years younger than husbands.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Annual Rate of Increase		
	Under Age 65	Age 65 & Older	Dollar Contribution*
2016	7.50%	5.50%	1.50%
2017	6.75%	5.25%	1.50%
2018	6.25%	5.00%	1.50%
2019	5.75%	5.00%	1.50%
2020	5.25%	5.00%	1.50%
2021 & Beyond	5.00%	5.00%	1.50%

** Applies to members participating on or after July 1, 2003*

HEALTH CARE AGE RELATED MORBIDITY: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 – 69	3.00%
70 – 74	2.50%
75 – 79	2.00%
80 – 84	1.00%
85 – 89	0.50%
90 & Beyond	0.00%

Please note that for the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the health care trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP. Under Actuarial Standard of Practice No. 6 (ASOP No. 6), aging subsidies (or implicit rate subsidies) should be recognized, as the differences in health care utilization and cost due to age have been demonstrated and well quantified. The impact of aging on a valuation's results can be as significant as the use of mortality, trend, and discounting. It has been the long-standing position that the responsibility for compliance with GASB Statement No. 43, when it relates to KEHP implicit subsidies, rests with KEHP, not KRS, as KRS has no operational authority over KEHP. As such, KEHP implicit subsidies are excluded from the OPEB valuation process of the Retiree Medical Plan. As GASB 74 and 75 prohibit such a deviation from ASOP No. 6, additional consideration to the current treatment of KEHP implicit rate subsidies may be needed in the future. The estimated impact of KEHP implicit subsidies to the actuarial accrued liability is an increase of $327,100,333 for KERS non-hazardous and $45,961,457 for KERS hazardous.

HEALTH CARE DEFERRED VESTED BENEFIT RECIPIENT INITIAL AGE OF BENEFIT RECEIPT FOR MEMBERS: Health care benefits are assumed to begin at the following ages for deferred vested benefit recipients:

Deferred Vested Initial Age of Benefit Receipt		
Applies Only to Members with Non-Hazardous Service		
Members Participating Before July 1, 2003	Members Participating Between July 1, 2003 to September 1, 2008	Members Participating On or After September 1, 2008
55	55	60

Deferred Vested Initial Age of Benefit Receipt		
Applies Only to Members with Hazardous Service		
Members Participating Before July 1, 2003	Members Participating Between July 1, 2003 to September 1, 2008	Members Participating On or After September 1, 2008
50	50	50

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: Representative values of the assumed annual rates of member participation and spouse coverage are as follows:

Plan Elections of Covered Members Age 65 and Older as of January 1, 2017		
Kentucky Retirement System Health Plan	**Non-Hazardous**	**Hazardous**
Medical Only	7.62%	4.08%
Essential	8.01%	4.64%
Premium	84.37%	91.28%

Retirement Participation Rates			
Service at Retirement	**Members Participating Before July 1, 2003**	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
Under 10	50.00%	100.00%	100.00%
10 – 14	75.00%	100.00%	100.00%
15 – 19	90.00%	100.00%	100.00%
20+	100.00%	100.00%	100.00%

Disability/Death Participation Rates	
Members Participating Before July 1, 2003	
Duty-Disability	**Duty Death-In-Service**
100.00%	100.00%

Deferred Vested Member Participation Rates		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
50.00%	100.00%	100.00%

Members Electing Spouse Coverage		
Applies Only to Members with Hazardous Service		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
50.00%	50.00%	50.00%

HEALTH CARE MONTHLY PLAN COSTS: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions for the year following the valuation date. The amounts include medical and drug costs. Members under 65 are assumed to elect the LivingWell PPO. For retirees ages 65 and older, the full costs shown are before averaging. The average costs are then normalized to age 65 and age adjusted in calculating liabilities. The dollar amount contribution level is the cost to the system per year of service for members participating on or after July 1, 2003.

Under Age 65 (KEHP) Full Costs as of January 1, 2016				
Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 702.10	$ 721.14	$ 678.22	$ 663.80
Parent Plus	967.18	1,023.04	964.58	930.94
Couple	1,302.74	1,564.20	1,477.72	1,431.76
Family	1,453.94	1,738.40	1,640.22	1,594.52
Family C-R	810.00	865.64	815.50	793.18

Age 65 and Older Full Costs as of January 1, 2016	
Kentucky Retirement System Health Plan - Medical Only	$162.47
Kentucky Retirement System Health Plan - Essential	77.76
Kentucky Retirement System Health Plan - Premium	252.51

Age 65 and Older Average Cost as of the Valuation Date Based on Actual Retiree Elections	
Non-Hazardous	Hazardous
$225.54	$234.37

Dollar Amount Contribution Level Per Year of Service as of July 1, 2015	
Applies to members participating on or after July 1, 2003	
Non-Hazardous	Hazardous
$12.99	$19.48

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For those members who retired between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 5.00% and 4.00% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year.

Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement — 55

Service Requirement — At least one month of hazardous duty service credit

Amount — If a member has at least 60 months of service, the monthly benefit is 2.49% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — 60

Service Requirement — At least 60 months of hazardous duty service credit

Amount — The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Hazardous Normal Retirement (continued):

Members whose participation began on or after 1/1/2014

Age Requirement	60
Service Requirement	At least 60 months of hazardous duty service credit or 25 or more years of service, with no age requirement
Amount	Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 55 with 60 months of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Non-Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 60 with 10 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 50 with 15 years of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years of service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

Non-Hazardous Disability (continued):

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Hazardous Disability:

Age Requirement

None

Service Requirement

60 months (waived if in line of duty disability)

Members whose participation began before 8/1/2004

Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Hazardous Disability (continued):

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age — 65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Vesting (continued):

Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Members whose participation began on or after 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Upon termination the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or the member can elect to leave the hypothetical account balance in the System. If the member does not withdraw the account balance, it will continue to earn 4% interest. Upon reaching normal retirement age the member can apply for retirement and receive the account balance as a lump sum payment or annuitize the account balance into a single life annuity.

Pre-Retirement Death Benefit (not in line of duty):

Members whose participation began before 1/1/2014

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Members whose participation began on or after 1/1/2014

Requirement	60 months service
Amount	The maximum of the benefit equal to the benefit the member would have received had the member retired on the day before the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Member Contributions (continued):

Members whose participation began on or after 1/1/2014	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently set at 2.5% and per statute, shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008 and up to 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.
Members whose participation began on or after 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.99 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $12.99 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $19.48 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.99 per month for each year of earned. These amounts are shown as of the valuation date and are increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $19.48 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.99 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2011	2012	2013	2014	2015	2016
			Number			
Beginning of Year	37,945	38,597	39,226	40,194	41,223	42,269
Added	1,592	1,707	1,982	2,067	2,140	2,441
Removed	940	1,078	1,014	1,038	1,094	706
End of Year	38,597	39,226	40,194	41,223	42,269	44,004
			Annual Allowances*			
Beginning of Year	$ 801,881,911	$ 821,197,278	$ 844,880,945	$ 872,139,782	$ 866,046,656	$ 883,577,572
Added	31,930,847	37,458,130	41,468,079	31,433,028	32,433,375	61,293,789
Removed	12,615,480	13,774,463	14,209,242	15,142,500	14,902,459	9,941,594
End of Year	$ 821,197,278	$ 844,880,945	$ 872,139,782	$ 866,046,656	$ 883,577,572	$ 934,929,767
% Increase in Allowances	(1.31)%	2.88%	3.23%	(0.70)%	2.02%	5.81%
Average Annual Allowance	$ 21,276	$ 21,539	$ 21,698	$ 21,009	$ 20,904	$ 21,246

** The annual allowances shown for 2013 and later include allowances for hazardous members who are receiving a portion of benefit from the non-hazardous system.*

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2011	2012	2013	2014	2015	2016
			Number			
Beginning of Year	2,835	3,064	3,253	3,430	3,620	3,758
Added	288	243	229	256	203	237
Removed	59	54	52	66	65	29
End of Year	3,064	3,253	3,430	3,620	3,758	3,966
			Annual Allowances			
Beginning of Year	$ 41,114,800	$ 45,609,229	$ 49,231,205	$ 51,122,456	$ 54,271,718	$ 56,431,099
Added	5,012,933	4,213,360	2,390,928	3,761,697	3,144,016	3,028,060
Removed	518,504	591,384	499,677	612,435	984,635	458,210
End of Year	$ 45,609,229	$ 49,231,205	$ 51,122,456	$ 54,271,718	$ 56,431,099	$ 59,000,949
% Increase in Allowances	6.25%	7.94%	3.84%	6.16%	3.98%	4.55%
Average Annual Allowance	$ 14,886	$ 15,134	$ 14,905	$ 14,992	$ 15,016	$ 14,877

Non-Hazardous Retired Lives Summary June 30, 2016

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,876	$ 6,980,204.66	11,283	$ 16,585,997.69	15,159	$ 23,566,202.35
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2,149	3,985,991.96	976	1,212,989.19	3,125	5,198,981.15
66-2/3% to Beneficiary	803	2,286,315.75	497	1,010,205.80	1,300	3,296,521.55
50% to Beneficiary	1,137	2,874,494.33	1,413	2,835,242.12	2,550	5,709,736.45
Pop-up Option	3,898	9,578,675.60	3,491	6,874,561.14	7,389	16,453,236.74
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	953	1,667,803.05	2,159	3,263,781.61	3,112	4,931,584.66
Social Security Option						
Age 62 Basic	405	922,773.25	969	1,665,253.66	1,374	2,588,026.91
Age 62 Survivorship	813	1,751,830.13	598	1,015,260.04	1,411	2,767,090.17
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	420	666,325.29	583	878,004.85	1,003	1,544,330.14
20 Years Certain & Life	408	892,023.43	589	925,683.80	997	1,817,707.23
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	82	134,530.89	297	450,015.34	379	584,546.23
PLSO 24 Month Basic	33	40,037.69	158	201,267.29	191	241,304.98
PLSO 36 Month Basic	146	131,141.45	404	306,704.06	550	437,845.51
PLSO 12 Month Survivor	105	220,991.67	102	174,083.95	207	395,075.62
PLSO 24 Month Survivor	82	130,327.77	78	114,819.45	160	245,147.22
PLSO 36 Month Survivor	233	255,564.11	157	134,840.38	390	390,404.49
Total	15,543	$ 32,519,031.03	23,754	$ 37,648,710.37	39,297	$ 70,167,741.40

Hazardous Retired Lives Summary June 30, 2016

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	581	$ 658,370.14	453	$ 481,849.78	1,034	$ 1,140,219.92
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	288	342,604.11	35	39,937.92	323	382,542.03
66-2/3% to Beneficiary	99	129,375.91	26	28,907.23	125	158,283.14
50% to Beneficiary	159	240,036.62	60	91,309.85	219	331,346.47
Pop-up Option	822	1,229,351.73	157	202,182.21	979	1,431,533.94
10 Years Certain	43	59,933.57	10	11,482.60	53	71,416.17
10 Years Certain & Life	111	130,668.04	71	62,982.49	182	193,650.53
Social Security Option						
Age 62 Basic	59	97,750.31	32	46,949.70	91	144,700.01
Age 62 Survivorship	142	262,072.48	18	23,884.69	160	285,957.17
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	48	59,878.04	21	21,780.05	69	81,658.09
20 Years Certain & Life	55	74,771.62	28	37,675.36	83	112,446.98
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	11	10,996.56	13	10,878.00	24	21,874.56
PLSO 24 Month Basic	15	15,174.89	9	7,947.86	24	23,122.75
PLSO 36 Month Basic	46	39,101.25	24	20,365.85	70	59,467.10
PLSO 12 Month Survivor	21	27,586.95	6	5,150.84	27	32,737.79
PLSO 24 Month Survivor	19	27,990.82	9	11,029.16	28	39,019.98
PLSO 36 Month Survivor	47	46,297.04	15	18,695.05	62	64,992.09
Total	2,566	$ 3,451,960.08	987	$ 1,123,008.64	3,553	$ 4,574,968.72

Non-Hazardous Beneficiary Lives Summary June 30, 2016

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	13	$ 6,944.38	29	$ 33,054.05	42	$ 39,998.43
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	298	247,041.89	1,549	1,656,073.32	1,847	1,903,115.21
66-2/3% to Beneficiary	57	62,579.20	328	370,883.36	385	433,462.56
50% to Beneficiary	141	108,898.88	466	343,059.72	607	451,958.60
Pop-up Option	163	259,319.64	650	1,059,376.91	813	1,318,696.55
10 Years Certain	90	70,140.71	93	73,430.11	183	143,570.82
10 Years Certain & Life	26	27,255.93	36	36,960.52	62	64,216.45
Social Security Option						
Age 62 Basic	0	0.00	9	10,097.86	9	10,097.86
Age 62 Survivorship	61	89,210.53	304	556,919.61	365	646,130.14
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0	4	1,501	4	1,500.58
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	3	2,136	7	8,134	10	10,269.82
15 Years Certain & Life	14	22,737.66	45	52,457.91	59	75,195.57
20 Years Certain & Life	22	34,016.06	63	116,635.71	85	150,651.77
5 Years Certain	41	47,810	52	42,310	93	90,120.46
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	3,357.39	2	3,357.39
PLSO 12 Month Survivor	5	8,931.63	20	34,246.26	25	43,177.89
PLSO 24 Month Survivor	11	12,668.80	26	23,108.86	37	35,777.66
PLSO 36 Month Survivor	19	13,461.13	60	58,694.55	79	72,155.68
Total	964	$ 1,013,152.35	3,743	$ 4,480,301.09	4,707	$ 5,493,453.44

Hazardous Beneficiary Lives Summary June 30, 2016

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2	$ 1,051.91	5	$ 3,811.80	7	$ 4,863.71
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	11	4,167.29	138	103,469.47	149	107,636.76
66-2/3% to Beneficiary	0	0.00	19	8,922.41	19	8,922.41
50% to Beneficiary	2	1,450.30	30	12,427.90	32	13,878.20
Pop-up Option	14	13,388.26	87	79,236.54	101	92,624.80
10 Years Certain	3	3,404.88	17	14,246.89	20	17,651.77
10 Years Certain & Life	5	3,601.13	3	2,535.23	8	6,136.36
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	0	0.00	32	54,529.14	32	54,529.14
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	1	262.55	3	2,151.81	4	2,414.36
15 Years Certain & Life	2	818.50	6	4,251.38	8	5,069.88
20 Years Certain & Life	0	0.00	7	5,460.34	7	5,460.34
5 Years Certain	1	634.60	5	3,630.36	6	4,264.96
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	1	125.74	1	125.74
PLSO 12 Month Survivor	0	0.00	4	4,145.13	4	4,145.13
PLSO 24 Month Survivor	1	995.41	3	2,021.84	4	3,017.25
PLSO 36 Month Survivor	2	706.28	9	10,329.90	11	11,036.18
Total	44	$ 30,481.11	369	$ 311,295.88	413	$ 341,776.99

Non-Hazardous Members
Retired and Beneficiary Information June 30, 2016
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	23	$ 406,343	27	$ 334,095	90	$ 620,140	140	$ 1,360,578
45-49	422	$ 10,265,371	93	$ 1,330,582	41	$ 509,397	556	$ 12,105,350
50-54	1,515	$ 41,662,835	166	$ 2,496,519	111	$ 1,504,991	1,792	$ 45,664,345
55-59	3,939	$ 108,743,650	278	$ 3,826,193	212	$ 2,927,441	4,429	$ 115,497,284
60-64	6,885	$ 173,541,468	399	$ 5,538,887	369	$ 5,989,984	7,653	$ 185,070,339
65-69	9,286	$ 206,945,611	391	$ 4,949,122	540	$ 9,746,771	10,217	$ 221,641,504
70-74	6,409	$ 131,285,882	255	$ 2,989,782	581	$ 10,337,108	7,245	$ 144,612,772
75-79	4,006	$ 72,935,328	213	$ 2,572,823	548	$ 8,404,568	4,767	$ 83,912,719
80-84	2,461	$ 38,744,229	100	$ 1,080,329	606	$ 9,244,675	3,167	$ 49,069,233
85-89	1,531	$ 22,209,412	35	$ 356,010	553	$ 7,936,188	2,119	$ 30,501,610
90 & Over	850	$ 9,726,143	13	$ 72,283	1,056	$ 8,700,178	1,919	$ 18,498,604
Totals	37,327	$ 816,466,272	1,970	$ 25,546,625	4,707	$ 65,921,441	44,004	$ 907,934,338

Hazardous Members
Retired and Beneficiary Information June 30, 2016
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	26	$ 516,908	13	$ 164,359	18	$ 107,172	57	$ 788,439
45-49	173	$ 3,469,160	9	$ 102,321	9	$ 120,958	191	$ 3,692,439
50-54	312	$ 6,111,813	27	$ 255,154	12	$ 155,039	351	$ 6,522,006
55-59	502	$ 9,657,380	24	$ 225,793	30	$ 370,852	556	$ 10,254,025
60-64	663	$ 10,945,216	26	$ 247,088	50	$ 641,844	739	$ 11,834,148
65-69	886	$ 13,169,032	31	$ 231,898	65	$ 759,793	982	$ 14,160,723
70-74	478	$ 6,137,557	9	$ 55,486	68	$ 583,512	555	$ 6,776,555
75-79	213	$ 2,293,996	5	$ 15,703	57	$ 603,844	275	$ 2,913,543
80-84	105	$ 816,828	5	$ 25,318	53	$ 355,144	163	$ 1,197,290
85-89	38	$ 302,600	0	$ -	32	$ 226,084	70	$ 528,684
90 & Over	8	$ 156,015	0	$ -	19	$ 177,082	27	$ 333,097
Totals	3,404	$ 53,576,505	149	$ 1,323,120	413	$ 4,101,324	3,966	$ 59,000,949

Total Non-Hazardous Active Members as of June 30, 2016
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	19	1							20
Avg Pay	$21,330	$36,379							$22,082
20-24	877	5							882
Avg Pay	$25,050	$23,692							$25,042
25-29	2,664	369							3,033
Avg Pay	$30,350	$33,375							$30,718
30-34	2,068	1,517	390	16					3,991
Avg Pay	$32,672	$37,814	$39,401	$41,104					$35,318
35-39	1,570	1,422	1,382	562	24	1			4,961
Avg Pay	$33,926	$39,788	$43,006	$42,996	$51,609	$26,479			$39,247
40-44	1,287	1,095	1,141	1,249	392	32	8	4	5,208
Avg Pay	$32,849	$39,123	$44,444	$46,802	$50,221	$58,584	$61,727	$92,997	$41,611
44-49	1,202	991	980	1,147	891	266	130	39	5,646
Avg Pay	$32,524	$38,767	$45,093	$45,486	$51,954	$51,180	$56,458	$65,901	$43,162
50-54	968	925	909	905	736	282	275	204	5,204
Avg Pay	$33,828	$38,080	$43,113	$46,038	$50,973	$54,161	$55,748	$60,763	$44,070
55-59	665	822	900	879	565	215	190	186	4,422
Avg Pay	$34,566	$38,455	$41,360	$44,633	$48,075	$51,371	$54,398	$60,629	$43,164
60-64	404	589	632	640	370	148	115	122	3,020
Avg Pay	$39,517	$39,990	$41,077	$44,523	$47,539	$52,227	$52,933	$64,415	$44,119
65-69	122	225	251	213	103	38	36	42	1,030
Avg Pay	$39,884	$40,459	$43,765	$46,360	$54,448	$52,415	$59,179	$68,487	$46,054
70 & over	34	65	90	85	34	17	20	17	362
Avg Pay	$36,900	$37,903	$39,723	$47,430	$61,745	$56,443	$56,884	$63,462	$45,857
Totals	11,880	8,026	6,675	5,696	3,115	999	774	614	37,779
Avg Pay	$32,260	$38,578	$42,942	$45,426	$50,463	$52,567	$55,368	$62,588	$40,479

Total Hazardous Active Members as of June 30, 2016
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	263								263
Avg Pay	$26,636								$26,636
25-29	553	51							604
Avg Pay	$31,712	$37,132							$32,169
30-34	335	204	50						589
Avg Pay	$31,607	$38,290	$42,339						$34,833
35-39	165	135	168	37					505
Avg Pay	$34,111	$37,920	$41,309	$42,622					$38,147
40-44	144	127	122	140	22				555
Avg Pay	$30,590	$40,194	$44,987	$46,337	$51,184				$40,741
44-49	140	91	127	102	45	6	3		514
Avg Pay	$33,213	$37,083	$43,562	$46,641	$50,744	$63,665	$53,860		$41,131
50-54	126	85	76	73	23	9	9	1	402
Avg Pay	$32,465	$37,606	$41,798	$45,271	$49,710	$62,228	$51,034	$68,468	$39,800
55-59	75	52	61	64	11	2	3	2	270
Avg Pay	$33,140	$37,952	$40,074	$46,391	$51,476	$74,484	$57,289	$82,027	$40,458
60-64	42	52	46	39	10	3	1	1	194
Avg Pay	$34,824	$40,271	$41,673	$42,363	$47,522	$48,332	$37,790	$33,529	$40,296
65-69	5	15	19	8	3		1	2	53
Avg Pay	$32,611	$43,235	$40,186	$53,383	$66,068		$81,646	$58,395	$45,261
70 & over	1	2	2	4		1			10
Avg Pay	$29,614	$36,223	$48,917	$54,093		$38,788			$45,506
Totals	1,849	814	671	467	114	21	17	6	3,959
Avg Pay	$31,392	$38,438	$42,440	$45,805	$50,812	$60,705	$53,658	$63,807	$37,273

SCHEDULE F

SENSITIVITY ANALYSIS

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate and the rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 6.75% (Retirement Non-Hazardous) and 7.50% (Retirement Hazardous and Insurance), together with a decrease in the discount rate to 5.75% (Retirement Non-Hazardous) and 6.50% (Retirement Hazardous and Insurance) and an increase in the discount rate to 7.75% (Retirement Non-Hazardous) and 8.50% (Retirement Hazardous and Insurance). Under this scenario, the underlying inflation rate assumption is held constant at 3.25% and the payroll growth assumption is held constant at 4.00%.
- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.25%, together with decreases in the inflation rate to 3.00% and 2.75%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption and the healthcare trend assumption for members hired before 7/1/2003.
- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 4.00%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

NON-HAZARDOUS
ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Retirement			
Actuarial Accrued Liabiltiy	$ 14,628,224,712	$ 13,224,698,427	$ 12,043,307,004
Actuarial Value of Assets	2,112,286,498	2,112,286,498	2,112,286,498
Unfunded Liability	$ 12,515,938,214	$ 11,112,411,929	$ 9,931,020,506
Funded Ratio	14.44%	15.97%	17.54%
Contribution Rate	44.28%	41.98%	40.30%
Discount Rate	5.75%	6.75%	7.75%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 2,769,408,418	$ 2,456,677,964	$ 2,197,042,341
Actuarial Value of Assets	743,270,060	743,270,060	743,270,060
Unfunded Liability	$ 2,026,138,358	$ 1,713,407,904	$ 1,453,772,281
Funded Ratio	26.84%	30.26%	33.83%
Contribution Rate	9.53%	8.41%	7.49%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
KERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 17,397,633,130	$ 15,681,376,391	$ 14,240,349,345
Actuarial Value of Assets	2,855,556,558	2,855,556,558	2,855,556,558
Unfunded Liability	$ 14,542,076,572	$ 12,825,819,833	$ 11,384,792,787
Funded Ratio	16.41%	18.21%	20.05%
Contribution Rate	53.81%	50.39%	47.79%
Discount Rate	5.75%/6.50%	6.75%/7.50%	7.75%/8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%

NON-HAZARDOUS
INFLATION ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Inflation Rate 25 basis points	Decrease Inflation Rate 50 basis points
Retirement			
Actuarial Accrued Liabiltiy	$ 13,224,698,427	$ 13,527,890,341	$ 13,844,489,242
Actuarial Value of Assets	2,112,286,498	2,112,286,498	2,112,286,498
Unfunded Liability	$ 11,112,411,929	$ 11,415,603,843	$ 11,732,202,744
Funded Ratio	15.97%	15.61%	15.26%
Contribution Rate	41.98%	43.39%	44.87%
Discount Rate	6.75%	6.50%	6.25%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
Insurance			
Actuarial Accrued Liabiltiy	$ 2,456,677,964	$ 2,464,703,609	$ 2,473,226,127
Actuarial Value of Assets	743,270,060	743,270,060	743,270,060
Unfunded Liability	$ 1,713,407,904	$ 1,721,433,549	$ 1,729,956,067
Funded Ratio	30.26%	30.16%	30.05%
Contribution Rate	8.41%	8.49%	8.57%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
KERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 15,681,376,391	$ 15,992,593,950	$ 16,317,715,369
Actuarial Value of Assets	2,855,556,558	2,855,556,558	2,855,556,558
Unfunded Liability	$ 12,825,819,833	$ 13,137,037,392	$ 13,462,158,811
Funded Ratio	18.21%	17.86%	17.50%
Contribution Rate	50.39%	51.88%	53.44%
Discount Rate	6.75%/7.50%	6.50%/7.25%	6.25%/7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%

NON-HAZARDOUS
PAYROLL GROWTH ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Payroll Growth 2%	No Payroll Growth
Retirement			
Actuarial Accrued Liabiltiy	$ 13,224,698,427	$ 13,224,698,427	$ 13,224,698,427
Actuarial Value of Assets	2,112,286,498	2,112,286,498	2,112,286,498
Unfunded Liability	$ 11,112,411,929	$ 11,112,411,929	$ 11,112,411,929
Funded Ratio	15.97%	15.97%	15.97%
Contribution Rate	41.98%	51.58%	62.66%
Discount Rate	6.75%	6.75%	6.75%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 2,456,677,964	$ 2,456,677,964	$ 2,456,677,964
Actuarial Value of Assets	743,270,060	743,270,060	743,270,060
Unfunded Liability	$ 1,713,407,904	$ 1,713,407,904	$ 1,713,407,904
Funded Ratio	30.26%	30.26%	30.26%
Contribution Rate	8.41%	9.80%	11.35%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
KERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 15,681,376,391	$ 15,681,376,391	$ 15,681,376,391
Actuarial Value of Assets	2,855,556,558	2,855,556,558	2,855,556,558
Unfunded Liability	$ 12,825,819,833	$ 12,825,819,833	$ 12,825,819,833
Funded Ratio	18.21%	18.21%	18.21%
Contribution Rate	50.39%	61.38%	74.01%
Discount Rate	6.75%/7.50%	6.75%/7.50%	6.75%/7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%

HAZARDOUS
ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Retirement			
Actuarial Accrued Liabiltiy	$ 1,038,663,083	$ 936,706,126	$ 810,384,352
Actuarial Value of Assets	559,487,184	559,487,184	559,487,184
Unfunded Liability	$ 479,175,899	$ 377,218,942	$ 250,897,168
Funded Ratio	53.87%	59.73%	69.04%
Contribution Rate	25.37%	20.48%	14.45%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 427,844,893	$ 377,745,230	$ 336,798,057
Actuarial Value of Assets	473,160,173	473,160,173	473,160,173
Unfunded Liability	$ (45,315,280)	$ (95,414,943)	$ (136,362,116)
Funded Ratio	110.59%	125.26%	140.49%
Contribution Rate	4.78%	1.34%	-1.79%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
KERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 1,466,507,976	$ 1,314,451,356	$ 1,147,182,409
Actuarial Value of Assets	1,032,647,357	1,032,647,357	1,032,647,357
Unfunded Liability	$ 433,860,619	$ 281,803,999	$ 114,535,052
Funded Ratio	70.42%	78.56%	90.02%
Contribution Rate	30.15%	21.82%	12.66%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%

HAZARDOUS
INFLATION ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Inflation Rate 25 basis points	Decrease Inflation Rate 50 basis points
Retirement			
Actuarial Accrued Liabiltiy	$ 936,706,126	$ 958,334,436	$ 980,930,591
Actuarial Value of Assets	559,487,184	559,487,184	559,487,184
Unfunded Liability	$ 377,218,942	$ 398,847,252	$ 421,443,407
Funded Ratio	59.73%	58.38%	57.04%
Contribution Rate	20.48%	21.74%	23.07%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
Insurance			
Actuarial Accrued Liabiltiy	$ 377,745,230	$ 379,209,930	$ 380,767,362
Actuarial Value of Assets	473,160,173	473,160,173	473,160,173
Unfunded Liability	$ (95,414,943)	$ (93,950,243)	$ (92,392,811)
Funded Ratio	125.26%	124.78%	124.26%
Contribution Rate	1.34%	1.51%	1.69%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
KERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 1,314,451,356	$ 1,337,544,366	$ 1,361,697,953
Actuarial Value of Assets	1,032,647,357	1,032,647,357	1,032,647,357
Unfunded Liability	$ 281,803,999	$ 304,897,009	$ 329,050,596
Funded Ratio	78.56%	77.20%	75.84%
Contribution Rate	21.82%	23.25%	24.76%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%

HAZARDOUS
PAYROLL GROWTH ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Payroll Growth 2%	No Payroll Growth
Retirement			
Actuarial Accrued Liabiltiy	$ 936,706,126	$ 936,706,126	$ 936,706,126
Actuarial Value of Assets	559,487,184	559,487,184	559,487,184
Unfunded Liability	$ 377,218,942	$ 377,218,942	$ 377,218,942
Funded Ratio	59.73%	59.73%	59.73%
Contribution Rate	20.48%	23.98%	27.99%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 377,745,230	$ 377,745,230	$ 377,745,230
Actuarial Value of Assets	473,160,173	473,160,173	473,160,173
Unfunded Liability	$ (95,414,943)	$ (95,414,943)	$ (95,414,943)
Funded Ratio	125.26%	125.26%	125.26%
Contribution Rate	1.34%	0.53%	-0.36%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
KERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 1,314,451,356	$ 1,314,451,356	$ 1,314,451,356
Actuarial Value of Assets	1,032,647,357	1,032,647,357	1,032,647,357
Unfunded Liability	$ 281,803,999	$ 281,803,999	$ 281,803,999
Funded Ratio	78.56%	78.56%	78.56%
Contribution Rate	21.82%	24.51%	27.63%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%

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Report on the Annual Valuation of the County Employees Retirement System

Prepared as of June 30, 2016

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The experience and dedication you deserve

November 16, 2016

Board of Directors
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2017. The date of the valuation was June 30, 2016.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.
The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

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REPORT ON THE ANNUAL VALUATION OF THE COUNTY EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2016

SECTION I – SUMMARY OF PRINCIPAL RESULTS

This report, prepared as of June 30, 2016, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015
Contributions for next fiscal year:						
Retirement	14.48%	13.95%	22.20%	21.71%		
Insurance	4.70	4.93	9.35	9.79	N/A	N/A
Total	19.18%	18.88%	31.55%	31.50%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	$11,076,456,794	$10,740,325,421	$3,704,456,223	$3,613,307,547	$14,780,913,017	$14,353,632,968
Actuarial value of assets	$6,535,372,347	$6,474,848,513	$2,139,119,173	$2,096,782,956	$8,674,491,520	$8,571,631,469
Unfunded liability on actuarial value of assets	$4,541,084,447	$4,265,476,908	$1,565,337,050	$1,516,524,591	$6,106,421,497	$5,782,001,499
Funded ratio on actuarial value of assets	59.00%	60.29%	57.74%	58.03%	58.69%	59.72%
Market value of assets	$6,106,186,908	$6,416,853,506	$2,003,669,273	$2,073,397,045	$8,109,856,181	$8,490,250,551
Unfunded liability on market value of assets	$4,970,269,886	$4,323,471,915	$1,700,786,950	$1,539,910,502	$6,671,056,836	$5,863,382,417
Funded ratio on market value of assets	55.13%	59.75%	54.09%	57.38%	54.87%	59.15%
Insurance						
Actuarial accrued liability	$2,988,121,117	$2,907,827,440	$1,558,818,204	$1,504,015,233	$4,546,939,321	$4,411,842,673
Actuarial value of assets	$2,079,811,055	$1,997,456,463	$1,135,784,220	$1,087,707,118	$3,215,595,275	$3,085,163,581
Unfunded liability on actuarial value of assets	$908,310,062	$910,370,977	$423,033,984	$416,308,115	$1,331,344,046	$1,326,679,092
Funded ratio on actuarial value of assets	69.60%	68.69%	72.86%	72.32%	70.72%	69.93%
Market value of assets	$1,943,756,727	$1,948,454,097	$1,062,602,089	$1,061,560,788	$3,006,358,816	$3,010,014,885
Unfunded liability on market value of assets	$1,044,364,390	$959,373,343	$496,216,115	$442,454,445	$1,540,580,505	$1,401,827,788
Funded ratio on market value of assets	65.05%	67.01%	68.17%	70.58%	66.12%	68.23%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	56,339	52,651	8,563	8,034	64,902	60,685
Number of vested former members	14,357	13,649	775	708	15,132	14,357
Number of former members due a refund	67,935	66,530	2,055	1,948	69,990	68,478
Number of active members	80,664	80,852	9,084	9,172	89,748	90,024
Total salary	$2,352,761,794	$2,296,715,957	$492,850,521	$483,640,601	$2,845,612,315	$2,780,356,558
Average salary	$29,167	$28,406	$54,255	$52,730	$31,707	$30,885

The County Employees Retirement System is a defined benefit pension fund that provides pensions and health care coverage for employees of city and county governments, police officers and firefighters, non-teaching staff of local boards of education, circuit clerks, local library employees, and other local governmental agency employees. The County Employees Retirement System includes both non-hazardous and hazardous duty benefits. This report presents the results of the June 30, 2016 actuarial funding valuation for both the Retirement Plan and the Insurance Fund. The primary purpose of performing the actuarial funding valuations are to:

- Calculate the actuarially determined contribution rates for the fiscal year beginning July 1, 2017 for both the Retirement Plan and the Insurance Fund.
- Determine the experience of the System since the last valuation date.
- Disclose asset and liability measures as of the valuation date.
- Analyze and report on trends in contributions, assets, and liabilities over the past several years.

Since the previous valuation there were no changes to the plan provisions or actuarial methods and assumptions The actuarial valuation results provide "snapshot" view the System's financial condition on June 30, 2016. Actuarial gains and losses result when actuarial experience of the plan (such as asset return, pay increases, turnover, deaths, etc.) is different from the expected by the actuarial assumptions.

Non-Hazardous

The Retirement Plan's Unfunded Actuarial Accrued Liability (UAAL) was expected to be $4,360.7 million taking into account contributions from both the employer and members of $418.1 million. The actual UAAL was $4,541.1 million. The increase of $180.4 million was due to an actuarial loss due to actual experience different than what was anticipated by the assumptions. The Insurance Fund's UAAL was expected to be $925.9 million taking into account expected employer and member contributions of $120.3 million. The actual UAAL was $908.3 million. The decrease in the UAAL of $17.6 million was due to an actuarial gain due to actuarial experience different than what was anticipated by the assumptions.

The remaining amortization period of the UAAL of both the Pension and Insurance Funds is 27-years as of June 30, 2016. Detailed analysis of the gains and losses are presented in Section V of the report.

As of June 30, 2016 the Pension and Insurance Funds had net assets of $6,106,186,908 and $1,943,756,727 respectively. The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarially determined contribution. The asset valuation method which recognizes the annual unexpected portion of market value investment returns over a five-year period, attempts to dampen the effect of market volatility. The resulting amount is called the "actuarial value of assets" and is utilized to determine the actuarial valuation results. In this year's actuarial valuation, the actuarial value of assets as of June 30, 2016 was $6,535,372,347 and $2,079,811,055 respectively for the Pension and Insurance Funds.

On a market basis, the estimated rate of return was (0.7)% and (0.1)% respectively for the Pension and Insurance Funds, assuming all cash flows occur in the middle of the year. Due to better than assumed prior returns on the market value of assets the net rate of return measured on the actuarial value of assets was 5.3% and 4.3% respectively for both the Pension and Insurance Funds. Please see Section III and Schedule B of this report for more detailed information on the market and actuarial value of assets.

Hazardous

The Retirement Plan's Unfunded Actuarial Accrued Liability (UAAL) was expected to be $1,533.3 million taking into account contributions from both the employer and members of $157.3 million. The actual UAAL was $1,565.3 million. The increase of $32.0 million was due to an actuarial loss due to actual experience different than what was anticipated by the assumptions. The Insurance Fund's UAAL was expected to be $423.4 million taking into account expected employer and member contributions of $48.3 million. The actual UAAL was $423.0 million. The decrease in the UAAL of $0.4 million was due to an actuarial gain due to actuarial experience different than what was anticipated by the assumptions.

The remaining amortization period of the UAAL of both the Pension and Insurance Funds is 27-years as of June 30, 2016. Detailed analysis of the gains and losses are presented in Section V of the report.

As of June 30, 2016 the Pension and Insurance Funds had net assets of $2,003,669,273 and $1,062,602,089 respectively. The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarially determined contribution. The asset valuation method which recognizes the annual unexpected portion of market value investment returns over a five-year period, attempts to dampen the effect of market volatility. The resulting amount is called the "actuarial value of assets" and is utilized to determine the actuarial valuation results. In this year's actuarial valuation, the actuarial value of assets as of June 30, 2016 was $2,139,119,173 and $1,135,784,220 respectively for the Pension and Insurance Funds.

On a market basis, the estimated rate of return was (0.5)% and 0.1% respectively for the Pension and Insurance Funds, assuming all cash flows occur in the middle of the year. Due to better than assumed prior returns on the market value of assets the net rate of return measured on the actuarial value of assets was 4.3% and 4.4% respectively for both the Pension and Insurance Funds. Please see Section III and Schedule B of this report for more detailed information on the market and actuarial value of assets.

Schedule F provides sensitivity analysis for three different sets of economic assumptions; the discount rate assumption, the inflation assumption, and the payroll growth assumption. Two assumption change scenarios are presented for each economic assumption. The results of the economic assumption change scenarios are presented along with the valuation results for comparison.

The long-term financial health of this retirement System, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. The System has recently been strengthened by eliminating unfunded ad hoc cost-of-living adjustments for retirees. The cost for providing these benefit increase must be prefunded in advance.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2016 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages Salary	Age	Service
Non-Hazardous	80,664	$2,352,761,794	$29,167	47.9	9.4
Hazardous	9,084	492,850,521	54,255	39.1	10.6
Total in CERS	89,748	$2,845,612,315	$31,707	47.0	9.5

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2011	85,285	$2,276,595,948	$26,694	1.1%
6/30/2012	83,052	2,236,546,345	26,929	0.9
6/30/2013	81,815	2,236,277,489	27,333	1.5
6/30/2014	81,115	2,272,270,287	28,013	2.5
6/30/2015	80,852	2,296,715,957	28,406	1.4
6/30/2016	80,664	2,352,761,794	29,167	2.7

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2011	9,407	$466,963,860	$49,640	1.7%
6/30/2012	9,130	464,228,923	50,847	2.4
6/30/2013	9,123	461,672,567	50,605	(0.5)
6/30/2014	9,194	479,164,016	52,117	3.0
6/30/2015	9,172	483,640,601	52,730	1.2
6/30/2016	9,084	492,850,521	54,255	2.9

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number*	Annual Benefits*	Group Averages Benefit	Group Averages Age
Retiree	47,311	$546,051,198	$11,542	70.0
Disability	3,951	43,921,768	11,117	64.7
Beneficiary	5,077	44,616,974	8,788	67.6
Total in CERS	56,339	$634,589,940	$11,264	69.4

** Does not include number and annual benefits for those members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 3,004 members in the hazardous system also receiving an annual benefit from the non-hazardous System. Total annual benefits for these members is $20,206,376.*

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Group Averages Age
Retiree	7,045	$192,218,028	$27,284	61.6
Disability	519	8,535,810	16,447	55.9
Beneficiary	999	14,548,263	14,563	56.6
Total in CERS	8,563	$215,302,101	$25,143	60.6

This valuation also includes 85,122 inactive members (82,292 Non-Hazardous and 2,830 Hazardous; of which 14,357 Non-Hazardous are vested and 775 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2016 the total market value of assets amounted to $11,116,214,997 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2016

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	$6,106,186,908	$1,943,756,727	$8,049,943,635
Hazardous	2,003,669,273	1,062,602,089	3,066,271,362
Total	$8,109,856,181	$3,006,358,816	$11,116,214,997

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $11,890,086,795. Schedule B shows the development of the actuarial value of assets as of June 30, 2016. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2016	JUNE 30, 2015
Retirement		
Non-Hazardous	$ 6,535,372,347	$ 6,474,848,513
Hazardous	2,139,119,173	2,096,782,956
Total	$ 8,674,491,520	$ 8,571,631,469
Insurance		
Non-Hazardous	$ 2,079,811,055	$ 1,997,456,463
Hazardous	1,135,784,220	1,087,707,118
Total	$ 3,215,595,275	$ 3,085,163,581
CERS Total		
Non-Hazardous	$ 8,615,183,402	$ 8,472,304,976
Hazardous	3,274,903,393	3,184,490,074
Total	$ 11,890,086,795	$ 11,656,795,050

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2016. Separate balance sheets are shown for each employee group as well as in total for all groups.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $16,689,498,454, of which $8,748,599,240 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $425,642,074 is for the prospective benefits payable on account of inactive members and $7,515,257,140 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $8,674,491,520 as of June 30, 2016. The difference of $8,015,006,934 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $1,283,806,888 is the present value of future contributions expected to be made by members, and the balance of $6,731,200,046 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 2.92% of payroll for non-hazardous members and 4.13% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $624,778,549. When this amount is subtracted from $6,731,200,046, which is the present value of the total future contributions to be made by the employers, there remains $6,106,421,497 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 10.78% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the participating employers on account of retirement benefits be set at 17.80% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $4,541,084,447 for non-hazardous members and $1,565,337,050 for hazardous members over 27 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.00% each year.
5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.78% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.27% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $5,206,254,745, of which $2,181,578,059 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $182,718,859 is for the prospective benefits payable on account of inactive members and $2,841,957,827 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $3,215,595,275 as of June 30, 2016. The difference of $1,990,659,470 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $92,598,841 is the present value of future contributions expected to be made by members, and the balance of $1,898,060,629 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 2.54% of payroll for non-hazardous members and 4.55% of payroll for hazardous members are required to fund the continuing benefit accruals for the average active member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $566,716,583. When this amount is subtracted from $1,898,060,629, which is the present value of the total future contributions to be made by the employers, there remains $1,331,344,046 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 2.13% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the participating employers on account of insurance benefits be set at 4.73% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of $908,310,062 for non-hazardous members and $423,033,984 for hazardous members over 27 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 4.00% each year.
5. The contribution rate for administrative expenses is determined to be 0.03% of payroll for non-hazardous employees and 0.07% of payroll for hazardous employees.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2016 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/15	$ 4,265.5	$ 1,516.5	$ 5,782.0
(2)	Normal cost from last valuation	194.5	61.6	256.1
(3)	Contributions	418.1	157.3	575.4
(4)	Interest accrual: [(1) + (2)] x .075 - (3) x .0375	318.8	112.5	431.3
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 4,360.7	$ 1,533.3	$ 5,894.0
(6)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(7)	Expected UAAL after changes: (5) - (6)	$ 4,360.7	$ 1,533.3	$ 5,894.0
(8)	Actual UAAL as of 6/30/16	$ 4,541.1	$ 1,565.3	$ 6,106.4
(9)	Gain/(loss): (7) - (8)	$ (180.4)	$ (32.0)	$ (212.4)
(10)	Accrued liabilities as of 6/30/15	$ 10,740.3	$ 3,613.3	$ 14,353.6
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(1.7)%	(0.9)%	(1.5)%

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/15	$ 910.4	$ 416.3	$ 1,326.7
(2)	Normal cost from last valuation	71.2	25.9	97.1
(3)	Expected contributions	120.3	48.3	168.6
(4)	Interest accrual: [(1) + (2) - (3)] x .075	64.6	29.5	94.1
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 925.9	$ 423.4	$ 1,349.3
(6)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(7)	Expected UAAL after changes: (5) - (6)	$ 925.9	$ 423.4	$ 1,349.3
(8)	Actual UAAL as of 6/30/16	$ 908.3	$ 423.0	$ 1,331.3
(9)	Gain/(loss): (7) - (8)	$ 17.6	$ 0.4	$ 18.0
(10)	Accrued liabilities as of 6/30/15	$ 2,907.8	$ 1,504.0	$ 4,411.8
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	0.6 %	0.0 %	0.4 %

* *Unfunded actuarial accrued liability*

NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/16	Insurance $ Gain (or Loss) For Year Ending 6/30/16
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (81.2)	$ 7.1
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(30.3)	(1.5)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.3)	(2.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	75.9	26.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	23.5	83.8
New Members. Additional unfunded accrued liability will produce a loss.	(18.6)	(20.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(148.8)	(64.0)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	1.2	33.6
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(0.8)	(45.8)
Gain (or Loss) During Year From Financial Experience	$ (180.4)	$ 17.6
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (180.4)	$ 17.6

HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/16	Insurance $ Gain (or Loss) For Year Ending 6/30/16
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (233.5)	$ (5.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(9.2)	0.9
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.9)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	19.2	(0.1)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(3.8)	63.1
New Members. Additional unfunded accrued liability will produce a loss.	(7.9)	(3.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(52.2)	(33.4)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	255.6	18.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(0.3)	(37.9)
Gain (or Loss) During Year From Financial Experience	$ (32.0)	$ 0.4
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (32.0)	$ 0.4

TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/16	Insurance $ Gain (or Loss) For Year Ending 6/30/16
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (314.7)	$ 1.4
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(39.5)	(0.6)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.3)	(2.9)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	95.1	26.4
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	19.7	146.9
New Members. Additional unfunded accrued liability will produce a loss.	(26.5)	(23.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(201.0)	(97.4)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	256.8	51.8
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(1.1)	(83.7)
Gain (or Loss) During Year From Financial Experience	$ (212.5)	$ 18.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	0.0	0.0
Composite Gain (or Loss) During Year	$ (212.5)	$ 18.0

SECTION VI – ACTUARIALLY DETERMINED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2017/2018 fiscal year.

Actuarially Determined Contribution Rates
Non-Hazardous Retirement

Contribution Rate for		% of Payroll
A.	Normal Cost:	
	(1) Service retirement benefits	7.56%
	(2) Disability benefits	0.27%
	(3) Survivor benefits	0.09%
	(4) Total	7.92%
B.	Member Contributions	5.00%
C.	Employer Normal Cost: [A(4) - B]	2.92%
D.	Administrative Expenses	0.78%
E.	Unfunded Actuarial Accrued Liability Contributions*:	10.78%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	14.48%

**Based on 27 year amortization of the UAAL from June 30, 2016*

Actuarially Determined Contribution Rates
Hazardous Retirement

Contribution Rate for		% of Payroll
A.	Normal Cost:	
	(1) Service retirement benefits	11.58%
	(2) Disability benefits	0.43%
	(3) Survivor benefits	0.12%
	(4) Total	12.13%
B.	Member Contributions	8.00%
C.	Employer Normal Cost: [A(4) - B]	4.13%
D.	Administrative Expenses	0.27%
E.	Unfunded Actuarial Accrued Liability Contributions*:	17.80%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	22.20%

**Based on 27 year amortization of the UAAL from June 30, 2016*

Actuarially Determined Contribution Rates
Non-Hazardous Insurance

	Contribution for	% of Payroll
A.	Normal Cost:	2.90%
B.	Member Contributions*	0.36%
C.	Employer Normal Cost: [A - B]	2.54%
D.	Administrative Expenses	0.03%
E.	Unfunded Actuarial Accrued Liability**:	2.13%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	4.70%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 27 year amortization of the UAAL from June 30, 2016*

Actuarially Determined Contribution Rates
Hazardous Insurance

	Contribution for	% of Payroll
A.	Normal Cost:	4.85%
B.	Member Contributions*	0.30%
C.	Employer Normal Cost: [A - B]	4.55%
D.	Administrative Expenses	0.07%
E.	Unfunded Actuarial Accrued Liability**:	4.73%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	9.35%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 27 year amortization of the UAAL from June 30, 2016*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements (GASB) 43, 45, 67 and 68 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. The information required under GASB 67 and 68 will be issued in separate reports. We are providing the retirement benefit information for information purposes only. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2016

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	56,339	8,563	64,902
Terminated employees entitled to benefits but not yet receiving benefits	82,292	2,830	85,122
Active Members	80,664	9,084	89,748
Total	219,295	20,477	239,772

* *Does not include number and annual benefits for those members included in the hazardous system who are also receiving benefits from the non-hazardous system. There were 3,004 members in in the hazardous system also receiving an annual benefit from the non-hazardous system.*

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables. Please note that for the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the health care trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP. Under Actuarial Standard of Practice No. 6 (ASOP No. 6), aging subsidies (or implicit rate subsidies) should be recognized, as the differences in health care utilization and cost due to age have been demonstrated and well quantified. The impact of aging on a valuation's results can be as significant as the use of mortality, trend, and discounting. It has been the long-standing position that the responsibility for compliance with GASB Statement No. 43, when it relates to KEHP implicit subsidies, rests with KEHP, not KRS, as KRS has no operational authority over KEHP. As such, KEHP implicit subsidies are excluded from the OPEB valuation process of the Retiree Medical Plan. As GASB 74 and 75 prohibit such a deviation from ASOP No. 6, additional consideration to the current treatment of KEHP implicit rate subsidies may be needed in the future. The estimated impact of KEHP implicit subsidies to the actuarial accrued liability is an increase of $380,865,151 for CERS non-hazardous and $193,213,657 for CERS hazardous.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
		Non-Hazardous Members				
6/30/2011	$ 5,629,611,183	$ 8,918,085,025	$ 3,288,473,842	63.1%	$ 2,276,595,948	144.4%
6/30/2012	5,547,235,599	9,139,567,695	3,592,332,096	60.7	2,236,546,345	160.6
6/30/2013	5,637,094,483	9,378,876,114	3,741,781,631	60.1	2,236,277,489	167.3
6/30/2014	6,117,133,692	9,772,522,616	3,655,388,924	62.6	2,272,270,287	160.9
6/30/2015*	6,474,848,513	10,740,325,421	4,265,476,908	60.3	2,296,715,957	185.7
6/30/2016	6,535,372,347	11,076,456,794	4,541,084,447	59.0	2,352,761,794	193.0
		Hazardous Members				
6/30/2011	$ 1,779,545,393	$ 2,859,041,052	$ 1,079,495,659	62.2%	$ 466,963,860	231.2%
6/30/2012	1,747,379,297	3,009,992,047	1,262,612,750	58.1	464,228,923	272.0
6/30/2013	1,801,691,410	3,124,205,593	1,322,514,183	57.7	461,672,567	286.5
6/30/2014	1,967,640,027	3,288,825,753	1,321,185,726	59.8	479,164,016	275.7
6/30/2015*	2,096,782,956	3,613,307,547	1,516,524,591	58.0	483,640,601	313.6
6/30/2016	2,139,119,173	3,704,456,223	1,565,337,050	57.7	492,850,521	317.6
		Total CERS Members				
6/30/2011	$ 7,409,156,576	$ 11,777,126,077	$ 4,367,969,501	62.9%	$ 2,743,559,808	159.2%
6/30/2012	7,294,614,896	12,149,559,743	4,854,944,847	60.0	2,700,775,268	179.8
6/30/2013	7,438,785,893	12,503,081,707	5,064,295,814	59.5	2,697,950,056	187.7
6/30/2014	8,084,773,719	13,061,348,369	4,976,574,650	61.9	2,751,434,303	180.9
6/30/2015*	8,571,631,469	14,353,632,968	5,782,001,499	59.7	2,780,356,558	208.0
6/30/2016	8,674,491,520	14,780,913,017	6,106,421,497	58.7	2,845,612,315	214.6

** Discount rate changed from 7.75% to 7.50%*

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
Non-Hazardous Members						
6/30/2011	$ 1,433,450,793	$ 3,073,973,205	$ 1,640,522,412	46.6%	$ 2,276,595,948	72.1%
6/30/2012	1,512,853,851	2,370,771,288	857,917,437	63.8	2,236,546,345	38.4
6/30/2013	1,628,244,197	2,443,894,100	815,649,903	66.6	2,236,277,489	36.5
6/30/2014	1,831,199,465	2,616,914,600	785,715,135	70.0	2,272,270,287	34.6
6/30/2015*	1,997,456,463	2,907,827,440	910,370,977	68.7	2,296,715,957	39.6
6/30/2016	2,079,811,055	2,988,121,117	908,310,062	69.6	2,352,761,794	38.6
Hazardous Members						
6/30/2011	$ 770,790,274	$ 1,647,702,755	$ 876,912,481	46.8%	$ 466,963,860	187.8%
6/30/2012	829,040,842	1,364,843,057	535,802,215	60.7	464,228,923	115.4
6/30/2013	892,774,391	1,437,332,817	544,558,426	62.1	461,672,567	118.0
6/30/2014	997,733,237	1,493,864,379	496,131,142	66.8	479,164,016	103.5
6/30/2015*	1,087,707,118	1,504,015,233	416,308,115	72.3	483,640,601	86.1
6/30/2016	1,135,784,220	1,558,818,204	423,033,984	72.9	492,850,521	85.8
Total CERS Members						
6/30/2011	$ 2,204,241,067	$ 4,721,675,960	$ 2,517,434,893	46.7%	$ 2,743,559,808	91.8%
6/30/2012	2,341,894,693	3,735,614,345	1,393,719,652	62.7	2,700,775,268	51.6
6/30/2013	2,521,018,588	3,881,226,917	1,360,208,329	65.0	2,697,950,056	50.4
6/30/2014	2,828,932,702	4,110,778,979	1,281,846,277	68.8	2,751,434,303	46.6
6/30/2015*	3,085,163,581	4,411,842,673	1,326,679,092	69.9	2,780,356,558	47.7
6/30/2016	3,215,595,275	4,546,939,321	1,331,344,046	70.7	2,845,612,315	46.8

** Discount rate changed from 7.75% to 7.50%*

INSURANCE BENEFITS

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Employer Contributions	Percentage Contributed
	Non-Hazardous Members		
June 30, 2011	$ 213,429,424	$ 186,885,576	87.6%
June 30, 2012	214,421,008	171,924,836	80.2%
June 30, 2013	195,560,870	159,992,643	81.8%
June 30, 2014	130,651,800	123,278,028	94.4%
June 30, 2015	119,510,589	119,443,608	99.9%
June 30, 2016	110,987,287	111,836,358	100.8%
	Hazardous Members		
June 30, 2011	$ 109,226,667	$ 98,592,286	90.3%
June 30, 2012	110,762,577	92,563,664	83.6%
June 30, 2013	102,010,672	85,319,393	83.6%
June 30, 2014	74,360,438	74,791,619	100.6%
June 30, 2015	69,102,811	71,778,130	103.9%
June 30, 2016	64,253,032	67,619,149	105.2%
	Total CERS Members		
June 30, 2011	$ 322,656,091	$ 285,477,862	88.5%
June 30, 2012	325,183,585	264,488,500	81.3%
June 30, 2013	297,571,542	245,312,036	82.4%
June 30, 2014	205,012,238	198,069,647	96.6%
June 30, 2015	188,613,400	191,221,738	101.4%
June 30, 2016	175,240,319	179,455,507	102.4%

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2016. Additional information as of the latest actuarial valuation follows.

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2016	6/30/2016
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	27 years	27 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption (Pre-Medicare) Medical Trend Assumption (Post-Medicare)	7.50% - 5.00% 5.50% - 5.00%	7.50% - 5.00% 5.50% - 5.00%
Year Ultimate Trend	2021	2021
Dollar Contribution Trend	1.50%	1.50%
Actuarial assumptions:		
Investment rate of return*	7.50%	7.50%
*Includes price inflation at	3.25%	3.25%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2016 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2015. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM

RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 6,535,372,347	$ 6,474,848,513
Prospective contributions		
Member contributions	$ 1,002,004,882	$ 976,915,537
Employer normal contributions	525,861,024	542,240,368
Unfunded accrued liability contributions	4,541,084,447	4,265,476,908
Total prospective contributions	$ 6,068,950,353	$ 5,784,632,813
Total assets	$ 12,604,322,700	$ 12,259,481,326
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 6,410,536,524	$ 6,142,108,967
Present value of benefits payable on account of active members	5,818,792,981	5,769,618,592
Present value of benefits payable on account of inactive members	374,993,195	347,753,767
Total liabilities	$ 12,604,322,700	$ 12,259,481,326

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 2,139,119,173	$ 2,096,782,956
Prospective contributions		
Member contributions	$ 281,802,006	$ 276,305,209
Employer normal contributions	98,917,525	116,909,870
Unfunded accrued liability contributions	1,565,337,050	1,516,524,591
Total prospective contributions	$ 1,946,056,581	$ 1,909,739,670
Total assets	$ 4,085,175,754	$ 4,006,522,626
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,338,062,716	$ 2,254,151,236
Present value of benefits payable on account of active members	1,696,464,159	1,708,819,459
Present value of benefits payable on account of inactive members	50,648,879	43,551,931
Total liabilities	$ 4,085,175,754	$ 4,006,522,626

VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 8,674,491,520	$ 8,571,631,469
Prospective contributions		
Member contributions	$ 1,283,806,888	$ 1,253,220,746
Employer normal contributions	624,778,549	659,150,238
Unfunded accrued liability contributions	6,106,421,497	5,782,001,499
Total prospective contributions	$ 8,015,006,934	$ 7,694,372,483
Total assets	$ 16,689,498,454	$ 16,266,003,952
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 8,748,599,240	$ 8,396,260,203
Present value of benefits payable on account of active members	7,515,257,140	7,478,438,051
Present value of benefits payable on account of inactive members	425,642,074	391,305,698
Total liabilities	$ 16,689,498,454	$ 16,266,003,952

VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 2,079,811,055	$ 1,997,456,463
Prospective contributions		
Member contributions	$ 79,502,725	$ 72,682,694
Employer normal contributions	441,835,902	477,798,719
Unfunded accrued liability contributions	908,310,062	910,370,977
Total prospective contributions	$ 1,429,648,689	$ 1,460,852,390
Total assets	$ 3,509,459,744	$ 3,458,308,853
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 1,326,304,614	$ 1,215,933,830
Present value of benefits payable on account of active members	2,024,522,896	2,085,712,217
Present value of benefits payable on account of inactive members	158,632,234	156,662,806
Total liabilities	$ 3,509,459,744	$ 3,458,308,853

VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 1,135,784,220	$ 1,087,707,118
Prospective contributions		
Member contributions	$ 13,096,116	$ 11,997,640
Employer normal contributions	124,880,681	141,433,960
Unfunded accrued liability contributions	423,033,984	416,308,115
Total prospective contributions	$ 561,010,781	$ 569,739,715
Total assets	$ 1,696,795,001	$ 1,657,446,833
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 855,273,445	$ 770,542,575
Present value of benefits payable on account of active members	817,434,931	866,733,067
Present value of benefits payable on account of inactive members	24,086,625	20,171,191
Total liabilities	$ 1,696,795,001	$ 1,657,446,833

VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS

	June 30, 2016	June 30, 2015
ASSETS		
Current actuarial value of assets	$ 3,215,595,275	$ 3,085,163,581
Prospective contributions		
Member contributions	$ 92,598,841	$ 84,680,334
Employer normal contributions	566,716,583	619,232,679
Unfunded accrued liability contributions	1,331,344,046	1,326,679,092
Total prospective contributions	$ 1,990,659,470	$ 2,030,592,105
Total assets	$ 5,206,254,745	$ 5,115,755,686
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 2,181,578,059	$ 1,986,476,405
Present value of benefits payable on account of active members	2,841,957,827	2,952,445,284
Present value of benefits payable on account of inactive members	182,718,859	176,833,997
Total liabilities	$ 5,206,254,745	$ 5,115,755,686

The following tables provide the solvency test for non-hazardous and hazardous CERS members.

Solvency Test
Retirement Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2011	$ 1,110,967,160	$ 5,209,783,924	$ 2,597,333,941	$ 5,629,611,183	100.0%	86.7%	0.0%
6/30/2012	1,117,549,337	5,416,932,995	2,605,085,363	5,547,235,599	100.0	81.8	0.0
6/30/2013	1,149,610,832	5,638,370,836	2,590,894,446	5,637,094,483	100.0	79.6	0.0
6/30/2014	1,204,383,085	5,873,279,494	2,694,860,037	6,117,133,692	100.0	83.6	0.0
6/30/2015	1,216,584,592	6,489,862,734	3,033,878,095	6,474,848,513	100.0	81.0	0.0
6/30/2016	1,231,027,269	6,785,529,719	3,059,899,806	6,535,372,347	100.0	78.2	0.0

Solvency Test
Retirement Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2011	$ 382,072,055	$ 1,768,511,545	$ 708,457,452	$ 1,779,545,393	100.0%	79.0%	0.0%
6/30/2012	381,672,428	1,889,884,303	738,435,316	1,747,379,297	100.0	72.3	0.0
6/30/2013	390,471,059	1,988,029,963	745,704,571	1,801,691,410	100.0	71.0	0.0
6/30/2014	415,069,629	2,077,516,709	796,239,415	1,967,640,027	100.0	74.7	0.0
6/30/2015	422,358,688	2,297,703,167	893,245,692	2,096,782,956	100.0	72.9	0.0
6/30/2016	428,713,398	2,388,711,595	887,031,230	2,139,119,173	100.0	71.6	0.0

Solvency Test
Insurance Benefits
Non-Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2011	$ 0	$ 1,460,808,255	$ 1,613,164,950	$ 1,433,450,793	100.0%	98.1%	0.0%
6/30/2012	0	1,146,907,750	1,223,863,538	1,512,853,851	100.0	100.0	29.9
6/30/2013	0	1,205,599,287	1,238,294,813	1,628,244,197	100.0	100.0	34.1
6/30/2014	0	1,318,182,882	1,298,731,718	1,831,199,465	100.0	100.0	39.5
6/30/2015	0	1,372,596,636	1,535,230,804	1,997,456,463	100.0	100.0	40.7
6/30/2016	0	1,484,936,848	1,503,184,269	2,079,811,055	100.0	100.0	39.6

Solvency Test
Insurance Benefits
Hazardous CERS Members

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2011	$ 0	$ 771,631,287	$ 876,071,468	$ 770,790,274	100.0%	99.9%	0.0%
6/30/2012	0	575,099,089	789,743,968	829,040,842	100.0	100.0	32.2
6/30/2013	0	660,955,331	776,377,486	892,774,391	100.0	100.0	29.9
6/30/2014	0	700,311,599	793,552,780	997,733,237	100.0	100.0	37.5
6/30/2015	0	790,713,766	713,301,467	1,087,707,118	100.0	100.0	41.6
6/30/2016	0	879,360,070	679,458,134	1,135,784,220	100.0	100.0	37.7

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members

	Valuation date June 30:	2015	2016	2017	2018	2019	2020
A.	Actuarial Value Beginning of Year	$ 6,117,133,692	$ 6,474,848,513				
B.	Market Value End of Year	6,416,853,506	6,106,186,908				
C.	Market Value Beginning of Year	6,507,300,157	6,416,853,506				
D.	Cash Flow						
	D1. Contributions	446,166,560	418,092,469				
	D2. Benefit Payments	(628,858,436)	(665,000,144)				
	D3. Administrative Expenses	(18,212,642)	(19,385,046)				
	D4. Investment Expenses	(44,163,869)	(49,107,252)				
	D5. Net	(245,068,387)	(315,399,973)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	154,621,736	4,733,375				
	E2. Assumed Rate	7.75%	7.50%				
	E3. Amount for Immediate Recognition	540,694,581	520,385,288				
	E4. Amount for Phased-In Recognition	(386,072,845)	(515,651,913)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(77,214,569)	(103,130,383)	0	0	0	0
	F2. First Prior Year	90,813,474	(77,214,569)	(103,130,383)	0	0	0
	F3. Second Prior Year	33,352,842	90,813,474	(77,214,569)	(103,130,383)	0	0
	F4. Third Prior Year	(88,282,845)	33,352,842	90,813,474	(77,214,569)	(103,130,383)	0
	F5. Fourth Prior Year	103,419,725	(88,282,845)	33,352,842	90,813,474	(77,214,569)	(103,130,383)
	F6. Total Recognized Investment Gain	62,088,627	(144,461,481)	(56,178,636)	(89,531,478)	(180,344,952)	(103,130,383)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 6,474,848,513	$ 6,535,372,347				
H.	Difference Between Market & Actuarial Values	$ (57,995,007)	$ (429,185,439)	$ (373,006,803)	$ (283,475,325)	$ (103,130,383)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members

	Valuation date June 30:	2015	2016	2017	2018	2019	2020
A.	Actuarial Value Beginning of Year	$ 1,967,640,027	$ 2,096,782,956				
B.	Market Value End of Year	2,073,397,045	2,003,669,273				
C.	Market Value Beginning of Year	2,082,998,414	2,073,397,045				
D.	Cash Flow						
	D1. Contributions	157,861,279	157,267,090				
	D2. Benefit Payments	(203,244,240)	(216,327,237)				
	D3. Administrative Expenses	(1,287,827)	(1,366,150)				
	D4. Investment Expenses	(14,240,230)	(16,500,706)				
	D5. Net	(60,911,018)	(76,927,003)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	51,309,649	7,199,231				
	E2. Assumed Rate	7.75%	7.50%				
	E3. Amount for Immediate Recognition	173,864,114	169,739,498				
	E4. Amount for Phased-In Recognition	(122,554,465)	(162,540,267)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(24,510,893)	(32,508,053)	0	0	0	0
	F2. First Prior Year	29,602,879	(24,510,893)	(32,508,053)	0	0	0
	F3. Second Prior Year	8,909,239	29,602,879	(24,510,893)	(32,508,053)	0	0
	F4. Third Prior Year	(31,969,450)	8,909,239	29,602,879	(24,510,893)	(32,508,053)	0
	F5. Fourth Prior Year	34,158,058	(31,969,450)	8,909,239	29,602,879	(24,510,893)	(32,508,053)
	F6. Total Recognized Investment Gain	16,189,833	(50,476,278)	(18,506,828)	(27,416,067)	(57,018,946)	(32,508,053)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 2,096,782,956	$ 2,139,119,173				
H.	Difference Between Market & Actuarial Values	$ (23,385,911)	$ (135,449,900)	$ (116,943,072)	$ (89,527,005)	$ (32,508,053)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members

	Valuation date June 30:	2015	2016	2017	2018	2019	2020
A.	Actuarial Value Beginning of Year	$ 1,831,199,465	$ 1,997,456,463				
B.	Market Value End of Year	1,948,454,097	1,943,756,727				
C.	Market Value Beginning of Year	1,899,557,376	1,948,454,097				
D.	Cash Flow						
	D1. Contributions	126,700,611	120,152,124				
	D2. Benefit Payments	(113,734,556)	(122,713,277)				
	D3. Administrative Expenses	(787,341)	(725,979)				
	D4. Investment Expenses	(13,082,126)	(16,592,147)				
	D5. Net	(903,412)	(19,879,279)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	49,800,133	15,181,909				
	E2. Assumed Rate	7.75%	7.50%				
	E3. Amount for Immediate Recognition	160,769,748	162,602,937				
	E4. Amount for Phased-In Recognition	(110,969,615)	(147,421,028)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(22,193,923)	(29,484,206)	0	0	0	0
	F2. First Prior Year	20,883,931	(22,193,923)	(29,484,206)	0	0	0
	F3. Second Prior Year	6,696,406	20,883,931	(22,193,923)	(29,484,206)	0	0
	F4. Third Prior Year	(36,271,274)	6,696,406	20,883,931	(22,193,923)	(29,484,206)	0
	F5. Fourth Prior Year	37,275,522	(36,271,274)	6,696,403	20,883,931	(22,193,923)	(29,484,206)
	F6. Total Recognized Investment Gain	6,390,662	(60,369,066)	(24,097,795)	(30,794,198)	(51,678,129)	(29,484,206)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,997,456,463	$ 2,079,811,055				
H.	Difference Between Market & Actuarial Values	$ (49,002,366)	$ (136,054,328)	$ (111,956,533)	$ (81,162,335)	$ (29,484,206)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members

	Valuation date June 30:	2015	2016	2017	2018	2019	2020
A.	Actuarial Value Beginning of Year	$ 997,733,237	$ 1,087,707,118				
B.	Market Value End of Year	1,061,560,788	1,062,602,089				
C.	Market Value Beginning of Year	1,034,307,636	1,061,560,788				
D.	Cash Flow						
	D1. Contributions	72,870,851	68,931,562				
	D2. Benefit Payments	(65,555,654)	(68,655,395)				
	D3. Administrative Expenses	(339,023)	(342,648)				
	D4. Investment Expenses	(7,175,588)	(9,287,179)				
	D5. Net	(199,414)	(9,353,660)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	27,452,566	10,394,961				
	E2. Assumed Rate	7.75%	7.50%				
	E3. Amount for Immediate Recognition	87,604,757	88,901,745				
	E4. Amount for Phased-In Recognition	(60,152,191)	(78,506,784)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(12,030,438)	(15,701,357)	0	0	0	0
	F2. First Prior Year	11,080,227	(12,030,438)	(15,701,357)	0	0	0
	F3. Second Prior Year	3,554,157	11,080,227	(12,030,438)	(15,701,357)	0	0
	F4. Third Prior Year	(18,373,572)	3,554,157	11,080,227	(12,030,438)	(15,701,357)	0
	F5. Fourth Prior Year	18,338,164	(18,373,572)	3,554,157	11,080,227	(12,030,438)	(15,701,357)
	F6. Total Recognized Investment Gain	2,568,538	(31,470,983)	(13,097,411)	(16,651,568)	(27,731,795)	(15,701,357)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 1,087,707,118	$ 1,135,784,220				
H.	Difference Between Market & Actuarial Values	$ (26,146,330)	$ (73,182,131)	$ (60,084,720)	$ (43,433,152)	$ (15,701,357)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually for retirement and insurance benefits.

PRICE INFLATION: 3.25% per annum, compounded annually.

PAYROLL GROWTH: 4.00% per annum, compounded annually.

SALARY INCREASES: The assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.00% per annum:

Service Years	Annual Rates of Salary Increases				
	Merit & Seniority		Base (Economy)	Increase Next Year	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0-1	8.17%	14.90%	4.00%	12.50%	19.50%
1-2	4.81%	5.77%	4.00%	9.00%	10.00%
2-3	1.44%	1.92%	4.00%	5.50%	6.00%
3-4	1.44%	1.20%	4.00%	5.50%	5.25%
4-5	0.96%	0.96%	4.00%	5.00%	5.00%
5-6	0.96%	0.48%	4.00%	5.00%	4.50%
6-7	0.72%	0.00%	4.00%	4.75%	4.00%
7-8	0.72%	0.00%	4.00%	4.75%	4.00%
8-9	0.48%	0.00%	4.00%	4.50%	4.00%
9-10	0.48%	0.00%	4.00%	4.50%	4.00%
10 & Over	0.24%	0.00%	4.00%	4.25%	4.00%

DISABILITY: Representative assumed annual rates of disability for both non-hazardous and hazardous members are as follows:

Nearest Age	Annual Rates of Disability			
	Non-Hazardous		Hazardous	
	Male	Female	Male	Female
20	0.02%	0.02%	0.05%	0.05%
30	0.03%	0.03%	0.09%	0.09%
40	0.07%	0.07%	0.20%	0.20%
50	0.19%	0.19%	0.56%	0.56%
60	0.49%	0.49%	1.46%	1.46%

RETIREMENT: The assumed annual rates of retirement for both non-hazardous and hazardous members are as follows:

Annual Rates of Retirement					
Non-Hazardous			Hazardous		
Age	Those Eligible for Service Retirement*	Those Eligible for Service Retirement**	Service	Those Eligible for Service Retirement+	Those Eligible for Service Retirement++
55	5.0%		20	22.5%	
56	6.0%		21	22.5%	
57	7.0%		22	22.5%	
58	7.0%		23	22.5%	
59	8.0%		24	30.0%	
60	9.0%	9.0%	25	33.0%	22.5%
61	15.0%	15.0%	26	33.0%	22.5%
62	18.0%	18.0%	27	36.0%	22.5%
63	18.0%	18.0%	28	39.0%	22.5%
64	18.0%	18.0%	29	55.0%	30.0%
65	18.0%	18.0%	30	33.0%	33.0%
66	18.0%	18.0%	31	33.0%	33.0%
67	18.0%	18.0%	32	50.0%	36.0%
68	18.0%	18.0%	33	40.0%	39.0%
69	18.0%	18.0%	34	40.0%	55.0%
70	18.0%	18.0%	35	40.0%	33.0%
71	18.0%	18.0%	36	40.0%	33.0%
72	18.0%	18.0%	37	40.0%	50.0%
73	18.0%	18.0%	38	40.0%	40.0%
74	18.0%	18.0%	39	40.0%	40.0%
75	100.0%	100.0%	40	40.0%	40.0%

* *For members participating before September 1, 2008. If service is at least 27 years, the rate is 30%.*

** *For members participating on or after September 1, 2008. If age plus service is at least 87, the rate is 30%.*

\+ *For members participating before September 1, 2008. The annual rate of service retirement is 100% at age 62.*

++ *For members participating on or after September 1, 2008. The annual rate of service retirement is 100% at age 60.*

WITHDRAWAL: The assumed annual rates of withdrawal for both non-hazardous and hazardous members are as follows:

Service Years	Annual Rates of Withdrawal	
	Non-Hazardous	Hazardous
0-1	28.00%	20.50%
1-2	16.00%	13.00%
2-3	12.00%	10.50%
3-4	10.00%	9.00%
4-5	8.00%	8.00%
5-6	6.00%	7.00%
6-7	5.00%	7.00%
7-8	5.00%	6.00%
8-13	4.00%	6.00%
14 & Over	3.00%	6.00%

DEATH BEFORE RETIREMENT: The rates of mortality for the period before retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females) for all healthy retired members and beneficiaries. The RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. These assumptions are used to measure the probabilities of each benefit payment being made after retirement. These assumptions contain margin for mortality improvements.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

FORM OF PAYMENT: Participants are assumed to elect a life-only form of payment.

ASSET VALUATION METHOD: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

ACTUARIAL COST METHOD: Costs were determined using the Entry Age Normal, Level Percentage of Pay Actuarial Cost Method. Under this method, a calculation is made for retirement benefits to determine the uniform and constant percentage rate of contribution which, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would be required to meet the cost of benefits payable. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

MULTIPLE STATUS/MULTIPLE SYSTEM MEMBERS: Some members may be represented under more than one retirement system and/or may have more than one status (e.g., active in one system, deferred vested in another and retired from a different system). For pension purposes, members that are active in one System but have service in another are assumed to retire from the System in which they are currently active. Any deferred pension benefits from another System are assumed to begin once the member terminates from their current active position. The insurance liabilities for multiple status/multiple system members are calculated assuming only one benefit is payable across all Systems and that benefit is payable from the combination of status and System which produces the highest economic value to the member.

AFFORDABLE CARE ACT (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2018 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the insurance liability will be required.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE SPOUSE AGE DIFFERENCE: Wives are assumed to be three years younger than husbands.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Annual Rate of Increase		
	Under Age 65	Age 65 & Older	Dollar Contribution*
2016	7.50%	5.50%	1.50%
2017	6.75%	5.25%	1.50%
2018	6.25%	5.00%	1.50%
2019	5.75%	5.00%	1.50%
2020	5.25%	5.00%	1.50%
2021 & Beyond	5.00%	5.00%	1.50%

** Applies to members participating on or after July 1, 2003*

HEALTH CARE AGE RELATED MORBIDITY: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 – 69	3.00%
70 – 74	2.50%
75 – 79	2.00%
80 – 84	1.00%
85 – 89	0.50%
90 & Beyond	0.00%

Please note that for the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the health care trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP. Under Actuarial Standard of Practice No. 6 (ASOP No. 6), aging subsidies (or implicit rate subsidies) should be recognized, as the differences in health care utilization and cost due to age have been demonstrated and well quantified. The impact of aging on a valuation's results can be as significant as the use of mortality, trend, and discounting. It has been the long-standing position that the responsibility for compliance with GASB Statement No. 43, when it relates to KEHP implicit subsidies, rests with KEHP, not KRS, as KRS has no operational authority over KEHP. As such, KEHP implicit subsidies are excluded from the OPEB valuation process of the Retiree Medical Plan. As GASB 74 and 75 prohibit such a deviation from ASOP No. 6, additional consideration to the current treatment of KEHP implicit rate subsidies may be needed in the future. The estimated impact of KEHP implicit subsidies to the actuarial accrued liability is an increase of $380,865,151 for CERS non-hazardous and $193,213,657 for CERS hazardous.

HEALTH CARE DEFERRED VESTED BENEFIT RECIPIENT INITIAL AGE OF BENEFIT RECEIPT FOR MEMBERS: Health care benefits are assumed to begin at the following ages for deferred vested benefit recipients:

Deferred Vested Initial Age of Benefit Receipt		
Applies Only to Members with Non-Hazardous Service		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
55	55	60

Deferred Vested Initial Age of Benefit Receipt		
Applies Only to Members with Hazardous Service		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
50	50	50

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: Representative values of the assumed annual rates of member participation and spouse coverage are as follows:

Plan Elections of Covered Members Age 65 and Older as of January 1, 2017		
Kentucky Retirement System Health Plan	**Non-Hazardous**	**Hazardous**
Medical Only	7.62%	4.08%
Essential	8.01%	4.64%
Premium	84.37%	91.28%

Retirement Participation Rates			
Service at Retirement	**Members Participating Before July 1, 2003**	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
Under 10	50.00%	100.00%	100.00%
10 – 14	75.00%	100.00%	100.00%
15 – 19	90.00%	100.00%	100.00%
20+	100.00%	100.00%	100.00%

Disability/Death Participation Rates	
Members Participating Before July 1, 2003	
Duty-Disability	**Duty Death-In-Service**
100.00%	100.00%

Deferred Vested Member Participation Rates		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
50.00%	100.00%	100.00%

Members Electing Spouse Coverage		
Applies Only to Members with Hazardous Service		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
75.00%	75.00%	75.00%

HEALTH CARE MONTHLY PLAN COSTS: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions for the year following the valuation date. The amounts include medical and drug costs. Members under 65 are assumed to elect the LivingWell PPO. For retirees ages 65 and older, the full costs shown are before averaging. The average costs are then normalized to age 65 and age adjusted in calculating liabilities. The dollar amount contribution level is the cost to the system per year of service for members participating on or after July 1, 2003.

Under Age 65 (KEHP) Full Costs as of January 1, 2017				
Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 702.10	$ 721.14	$ 678.22	$ 663.80
Parent Plus	967.18	1,023.04	964.58	930.94
Couple	1,302.74	1,564.20	1,477.72	1,431.76
Family	1,453.94	1,738.40	1,640.22	1,594.52
Family C-R	810.00	865.64	815.50	793.18

Age 65 and Older Full Costs as of January 1, 2016	
Kentucky Retirement System Health Plan - Medical Only	$162.47
Kentucky Retirement System Health Plan - Essential	77.76
Kentucky Retirement System Health Plan - Premium	252.51

Age 65 and Older Average Cost as of the Valuation Date Based on Actual Retiree Elections	
Non-Hazardous	Hazardous
$225.54	$234.37

Dollar Amount Contribution Level Per Year of Service as of July 1, 2015	
Applies to members participating on or after July 1, 2003	
Non-Hazardous	Hazardous
$12.99	$19.48

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.20% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement 65

Service Requirement At least one month of non-hazardous duty service credit

Amount If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 5.00% and 4.00% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year.

Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement — 55

Service Requirement — At least one month of hazardous duty service credit

Amount — If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — 60

Service Requirement — At least 60 months of hazardous duty service credit

Amount — The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Hazardous Normal Retirement (continued):

Members whose participation began on or after 1/1/2014

Age Requirement	60
Service Requirement	At least 60 months of hazardous duty service credit or 25 or more years of service, with no age requirement
Amount	Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 55 with 60 months of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Non-Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 60 with 10 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 50 with 15 years of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years of service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months
Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

Non-Hazardous Disability (continued):

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Hazardous Disability:

Age Requirement

None

Service Requirement

60 months (waived if in line of duty disability)

Members whose participation began before 8/1/2004

Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Hazardous Disability (continued):

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age — 65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — None

Service Requirement — 60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits.

Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount — Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Vesting (continued):

Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.

Members whose participation began on or after 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Upon termination the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or the member can elect to leave the hypothetical account balance in the System. If the member does not withdraw the account balance, it will continue to earn 4% interest. Upon reaching normal retirement age the member can apply for retirement and receive the account balance as a lump sum payment or annuitize the account balance into a single life annuity.

Pre-Retirement Death Benefit (not in line of duty):

Members whose participation began before 1/1/2014

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Members whose participation began on or after 1/1/2014

Requirement	60 months service
Amount	The maximum of the benefit equal to the benefit the member would have received had the member retired on the day before the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Member Contributions (continued):

Members whose participation began on or after 1/1/2014	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.
Members whose participation began on or after 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a retired member who is totally disabled from any employment as a result of a duty-related injury regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies as a result of a duty related injury, regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $12.99 per month for each year of earned service for retirees. This amount is shown as of the valuation date and is increased annually 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $10 per month for each year of earned service for retirees. This amount will be increased annually by 1.5%.

Hazardous Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $19.48 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.99 per month for each year of earned. These amounts are shown as of the valuation date and are increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $19.48 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.99 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2011	2012	2013	2014	2015	2016
			Number			
Beginning of Year	41,038	43,211	45,304	47,676	49,935	52,651
Added	3,250	3,300	3,570	3,480	4,020	4,409
Removed	1,077	1,207	1,198	1,221	1,304	721
End of Year	43,211	45,304	47,676	49,935	52,651	56,339
			Annual Allowances*			
Beginning of Year	$ 452,613,550	$ 483,594,068	$ 515,008,361	$ 557,979,192	$ 582,957,825	$ 617,550,927
Added	38,861,094	41,160,717	56,721,012	33,974,542	44,962,364	49,487,208
Removed	7,880,576	9,746,424	13,750,181	8,995,909	10,369,262	5,821,565
End of Year	$ 483,594,068	$ 515,008,361	$ 557,979,192	$ 582,957,825	$ 617,550,927	$ 661,216,570
% Increase in Allowances	6.84%	6.50%	8.34%	4.48%	5.93%	7.07%
Average Annual Allowance	$ 11,191	$ 11,368	$ 11,704	$ 11,674	$ 11,729	$ 11,736

** The annual allowances shown for 2013 and later include allowances for hazardous members who are receiving a portion of benefit from the non-hazardous system.*

Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2011	2012	2013	2014	2015	2016
			Number			
Beginning of Year	6,068	6,468	6,878	7,293	7,646	8,034
Added	502	483	519	469	526	604
Removed	102	73	104	116	138	75
End of Year	6,468	6,878	7,293	7,646	8,034	8,563
			Annual Allowances			
Beginning of Year	$ 146,916,812	$ 160,259,395	$ 173,221,483	$ 182,634,895	$ 191,007,832	$ 202,153,338
Added	14,640,991	14,149,084	10,923,660	9,940,048	13,429,781	14,642,463
Removed	1,298,408	1,186,996	1,510,248	1,567,111	2,284,275	1,493,700
End of Year	$ 160,259,395	$ 173,221,483	$ 182,634,895	$ 191,007,832	$ 202,153,338	$ 215,302,101
% Increase in Allowances	9.08%	8.09%	5.43%	4.58%	5.84%	6.50%
Average Annual Allowance	$ 24,777	$ 25,185	$ 25,042	$ 24,981	$ 25,162	$ 25,143

Non-Hazardous Retired Lives Summary June 30, 2016

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	5,246	$ 5,422,808.24	18,279	$ 13,293,765.38	23,525	$ 18,716,573.62
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2,896	3,235,044.69	1,529	958,150.63	4,425	4,193,195.32
66-2/3% to Beneficiary	787	1,436,964.62	557	592,517.99	1,344	2,029,482.61
50% to Beneficiary	1,110	1,775,175.82	1,524	1,781,062.61	2,634	3,556,238.43
Pop-up Option	3,989	6,240,512.44	3,442	3,660,737.18	7,431	9,901,249.62
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,387	1,388,846.95	3,323	2,503,312.64	4,710	3,892,159.59
Social Security Option						
Age 62 Basic	259	469,812.65	519	546,765.68	778	1,016,578.33
Age 62 Survivorship	601	1,135,477.82	338	347,558.40	939	1,483,036.22
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	630	644,735.07	813	610,666.45	1,443	1,255,401.52
20 Years Certain & Life	469	634,464.67	711	549,892.36	1,180	1,184,357.03
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	102	120,299.17	371	317,429.45	473	437,728.62
PLSO 24 Month Basic	61	43,319.47	251	198,459.42	312	241,778.89
PLSO 36 Month Basic	265	129,304.89	718	324,738.60	983	454,043.49
PLSO 12 Month Survivor	149	184,690.19	96	97,275.98	245	281,966.17
PLSO 24 Month Survivor	91	93,053.24	63	41,314.32	154	134,367.56
PLSO 36 Month Survivor	406	259,217.32	280	127,039.50	686	386,256.82
Total	18,448	$ 23,213,727.25	32,814	$ 25,950,686.59	51,262	$ 49,164,413.84

Hazardous Retired Lives Summary June 30, 2016

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	1,046	$ 2,116,711.69	315	$ 492,776.38	1,361	$ 2,609,488.07
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	804	1,651,813.96	35	42,570.08	839	1,694,384.04
66-2/3% to Beneficiary	306	768,703.31	9	18,908.25	315	787,611.56
50% to Beneficiary	456	1,094,753.82	36	75,668.51	492	1,170,422.33
Pop-up Option	2,939	7,456,500.41	134	264,587.48	3,073	7,721,087.89
10 Years Certain	75	123,266.43	7	6,528.43	82	129,794.86
10 Years Certain & Life	209	432,295.17	58	104,453.38	267	536,748.55
Social Security Option						
Age 62 Basic	108	207,404.49	13	24,031.47	121	231,435.96
Age 62 Survivorship	293	547,263.55	17	37,261.67	310	584,525.22
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	93	177,046.18	15	21,521.35	108	198,567.53
20 Years Certain & Life	154	314,906.21	30	46,442.17	184	361,348.38
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	26	45,792.55	9	12,126.97	35	57,919.52
PLSO 24 Month Basic	20	42,770.68	6	6,336.10	26	49,106.78
PLSO 36 Month Basic	54	85,677.20	20	23,431.10	74	109,108.30
PLSO 12 Month Survivor	59	147,922.19	4	8,080.23	63	156,002.42
PLSO 24 Month Survivor	68	110,449.90	2	2,220.11	70	112,670.01
PLSO 36 Month Survivor	138	213,016.26	6	6,248.86	144	219,265.12
Total	6,848	$ 15,536,294.00	716	$ 1,193,192.54	7,564	$ 16,729,486.54

Non-Hazardous Beneficiary Lives Summary June 30, 2016

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	14	$ 3,932	36	19,771	50	$ 23,702.91
Straight Life (Old Plan)	0	0	0	0	0	0.00
Joint & Survivor						
100% to Beneficiary	406	221,564	1,629	1,101,507	2,035	1,323,071.67
66-2/3% to Beneficiary	53	27,091	249	198,349	302	225,440.53
50% to Beneficiary	130	49,688	401	227,479	531	277,166.44
Pop-up Option	187	144,264	672	663,532	859	807,796.23
10 Years Certain	135	86,698	160	134,447	295	221,144.81
10 Years Certain & Life	62	45,452	73	56,599	135	102,050.90
Social Security Option						
Age 62 Basic	0	0	5	5,664	5	5,663.59
Age 62 Survivorship	27	16,243	150	220,489	177	236,732.22
Partial Deferred (Old Plan)	0	0	0	0	0	0.00
Widows Age 60	0	0	1	207	1	206.92
Dependent Child	0	0	0	0	0	0.00
Refund	3	1,796	5	3,221	8	5,016.60
15 Years Certain & Life	40	34,134	71	55,570	111	89,704.37
20 Years Certain & Life	47	31,343	61	65,873	108	97,216.11
5 Years Certain	98	69,789	104	68,726	202	138,514.59
PLSO 12 Month Basic	0	0	0	0	0	0.00
PLSO 24 Month Basic	0	0	0	0	0	0.00
PLSO 36 Month Basic	1	149	1	152	2	301.45
PLSO 12 Month Survivor	9	3,293	43	43,325	52	46,617.47
PLSO 24 Month Survivor	12	13,559	29	26,758	41	40,317.38
PLSO 36 Month Survivor	39	19,868	124	57,549	163	77,416.95
Total	1,263	$ 768,863.23	3,814	$ 2,949,217.91	5,077	$ 3,718,081.14

Hazardous Beneficiary Lives Summary June 30, 2016

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	11	$ 4,957	38	31,591	49	$ 36,548.47
Straight Life (Old Plan)	0	0	0	0	0	0.00
Joint & Survivor						
100% to Beneficiary	18	9,584	229	290,143	247	299,727.18
66-2/3% to Beneficiary	3	688	54	77,703	57	78,390.58
50% to Beneficiary	8	4,907	71	69,709	79	74,616.15
Pop-up Option	39	23,886	257	413,033	296	436,918.92
10 Years Certain	18	15,001	20	14,325	38	29,325.54
10 Years Certain & Life	5	3,522	5	3,062	10	6,584.07
Social Security Option						
Age 62 Basic	0	0	1	310	1	310.13
Age 62 Survivorship	0	0	107	167,558	107	167,557.84
Partial Deferred (Old Plan)	0	0	0	0	0	0.00
Widows Age 60	0	0	3	3,287	3	3,287.07
Dependent Child	0	0	0	0	0	0.00
Refund	8	2,482	17	9,973	25	12,455.67
15 Years Certain & Life	4	1,488	4	886	8	2,373.52
20 Years Certain & Life	4	1,520	11	9,497	15	11,017.23
5 Years Certain	3	4,969	2	3,185	5	8,153.98
PLSO 12 Month Basic	0	0	0	0	0	0.00
PLSO 24 Month Basic	0	0	1	1,466	1	1,466.49
PLSO 36 Month Basic	2	562	3	1,619	5	2,180.71
PLSO 12 Month Survivor	0	0	6	4,611	6	4,610.53
PLSO 24 Month Survivor	1	1,295	10	7,091	11	8,385.88
PLSO 36 Month Survivor	5	2,056	31	26,389	36	28,445.28
Total	129	$ 76,917.48	870	$ 1,135,437.76	999	$ 1,212,355.24

Non-Hazardous Members

Retired and Beneficiary Information June 30, 2016
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	12	$ 174,366	52	$ 530,738	164	$ 1,034,944	228	$ 1,740,048
45-49	243	$ 5,498,804	137	$ 1,632,678	50	$ 420,748	430	$ 7,552,230
50-54	1,090	$ 26,337,640	294	$ 3,748,460	128	$ 1,493,514	1,512	$ 31,579,614
55-59	3,801	$ 69,234,774	646	$ 8,011,055	267	$ 3,013,661	4,714	$ 80,259,490
60-64	7,633	$ 107,008,651	848	$ 10,005,674	481	$ 5,118,971	8,962	$ 122,133,296
65-69	11,717	$ 135,546,196	830	$ 9,206,949	685	$ 7,648,622	13,232	$ 152,401,767
70-74	9,169	$ 90,754,780	544	$ 5,378,722	723	$ 6,901,849	10,436	$ 103,035,351
75-79	6,617	$ 59,660,429	392	$ 3,770,797	688	$ 6,242,891	7,697	$ 69,674,117
80-84	3,955	$ 31,425,914	163	$ 1,339,584	631	$ 5,251,930	4,749	$ 38,017,428
85-89	2,053	$ 14,645,435	37	$ 250,147	538	$ 3,970,158	2,628	$ 18,865,740
90 & Over	1,021	$ 5,764,209	8	$ 46,964	722	$ 3,519,686	1,751	$ 9,330,859
Totals	47,311	$ 546,051,198	3,951	$ 43,921,768	5,077	$ 44,616,974	56,339	$ 634,589,940

Hazardous Members

Retired and Beneficiary Information June 30, 2016
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	105	$ 2,930,742	67	$ 1,120,002	196	$ 1,173,460	368	$ 5,224,204
45-49	646	$ 20,619,370	77	$ 1,421,440	34	$ 319,892	757	$ 22,360,702
50-54	1,060	$ 34,263,894	95	$ 1,731,042	52	$ 735,248	1,207	$ 36,730,184
55-59	1,147	$ 33,491,434	86	$ 1,412,301	75	$ 990,046	1,308	$ 35,893,781
60-64	1,381	$ 37,926,346	93	$ 1,337,831	110	$ 1,989,031	1,584	$ 41,253,208
65-69	1,333	$ 33,502,275	64	$ 997,141	134	$ 2,192,720	1,531	$ 36,692,136
70-74	760	$ 16,572,074	26	$ 374,225	136	$ 2,718,700	922	$ 19,664,999
75-79	400	$ 8,267,166	4	$ 73,252	118	$ 2,304,448	522	$ 10,644,866
80-84	148	$ 3,183,883	6	$ 48,656	83	$ 1,270,822	237	$ 4,503,361
85-89	56	$ 1,285,015	0	$ -	45	$ 680,603	101	$ 1,965,618
90 & Over	9	$ 175,829	1	$ 19,920	16	$ 173,293	26	$ 369,042
Totals	7,045	$ 192,218,028	519	$ 8,535,810	999	$ 14,548,263	8,563	$ 215,302,101

Total Non-Hazardous Active Members as of June 30, 2016
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	113		1						114
Avg Pay	$11,814		$9,453						$11,793
20-24	2,255	18	1	1					2,275
Avg Pay	$18,816	$29,326	$11,938	$12,324					$18,893
25-29	4,106	603	31			1			4,741
Avg Pay	$23,325	$33,004	$34,433			$74,817			$24,640
30-34	3,876	1,519	562	25					5,982
Avg Pay	$23,792	$34,189	$37,664	$38,971					$27,799
35-39	4,174	1,796	1,257	563	20	1		1	7,812
Avg Pay	$22,967	$32,193	$38,119	$43,224	$47,009	$40,125		$20,694	$29,049
40-44	3,823	2,204	1,679	1,196	356	11	4	1	9,274
Avg Pay	$22,568	$30,240	$34,973	$42,633	$48,653	$53,599	$82,523	$80,166	$30,295
44-49	3,627	2,523	2,293	1,879	845	169	58	22	11,416
Avg Pay	$23,115	$29,075	$31,863	$37,545	$45,381	$54,100	$56,844	$68,422	$30,930
50-54	3,048	2,313	2,468	2,641	1,298	318	217	136	12,439
Avg Pay	$23,168	$29,212	$30,409	$32,192	$38,408	$51,106	$50,782	$59,631	$30,829
55-59	2,621	2,011	2,262	2,656	1,793	408	250	177	12,178
Avg Pay	$23,181	$28,207	$30,187	$31,417	$35,210	$41,434	$45,186	$55,577	$30,414
60-64	1,864	1,655	1,594	1,711	1,287	365	199	182	8,857
Avg Pay	$21,805	$28,690	$30,977	$32,881	$33,400	$40,646	$38,368	$56,520	$30,429
65-69	948	793	679	613	346	122	108	91	3,700
Avg Pay	$17,243	$23,641	$29,051	$31,812	$34,010	$36,516	$33,738	$51,018	$26,711
70 & over	425	428	449	284	142	37	45	66	1,876
Avg Pay	$15,670	$19,859	$23,069	$26,237	$26,322	$33,200	$30,056	$43,220	$22,462
Totals	30,880	15,863	13,276	11,569	6,087	1,432	881	676	80,664
Avg Pay	$22,434	$29,579	$31,994	$34,448	$37,471	$44,360	$43,785	$55,229	$29,167

Total Hazardous Active Members as of June 30, 2016
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	3								3
Avg Pay	$30,477								$30,477
20-24	307								307
Avg Pay	$33,913								$33,913
25-29	1,034	232	3						1,269
Avg Pay	$42,249	$49,558	$48,247						$43,600
30-34	629	709	253	2					1,593
Avg Pay	$44,756	$53,127	$55,414	$57,923					$50,191
35-39	277	435	685	254	11				1,662
Avg Pay	$43,690	$53,153	$57,581	$63,910	$65,500				$55,126
40-44	125	243	440	696	169	7	4		1,684
Avg Pay	$40,843	$52,553	$56,395	$65,284	$72,172	$79,505	$87,051		$60,112
44-49	99	166	290	486	245	40	30	6	1,362
Avg Pay	$40,086	$50,942	$54,918	$61,704	$74,499	$80,093	$77,045	$89,658	$60,679
50-54	43	82	135	200	127	48	33	24	692
Avg Pay	$39,184	$50,643	$55,392	$60,428	$66,905	$76,428	$83,104	$82,367	$61,107
55-59	24	51	60	88	47	15	19	15	319
Avg Pay	$40,582	$49,462	$52,217	$58,543	$63,323	$65,889	$76,127	$93,239	$58,278
60-64	9	26	38	36	20	4	3	11	147
Avg Pay	$36,291	$40,253	$54,011	$56,082	$68,172	$75,492	$79,534	$81,139	$56,062
65-69	3	5	7	8	2	1	2		28
Avg Pay	$33,404	$52,810	$46,009	$57,721	$42,915	$60,158	$56,262		$50,236
70 & over	1	4	3	5		1		4	18
Avg Pay	$50,908	$32,200	$36,853	$72,691		$9,975		$95,878	$58,178
Totals	2,554	1,953	1,914	1,775	621	116	91	60	9,084
Avg Pay	$41,759	$52,037	$56,136	$63,018	$71,002	$75,769	$79,116	$86,490	$54,255

SCHEDULE F

SENSITIVITY ANALYSIS

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate and the rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 7.50%, together with a decrease in the discount rate to 6.50% and an increase in the discount rate to 8.50%. Under this scenario, the underlying inflation rate assumption is held constant at 3.25% and the payroll growth assumption is held constant at 4.00%.
- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.25%, together with decreases in the inflation rate to 3.00% and 2.75%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption and the healthcare trend assumption for members hired before 7/1/2003.
- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 4.00%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

NON-HAZARDOUS
ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Retirement			
Actuarial Accrued Liabiltiy	$ 12,492,249,015	$ 11,076,456,794	$ 10,051,855,482
Actuarial Value of Assets	6,535,372,347	6,535,372,347	6,535,372,347
Unfunded Liability	$ 5,956,876,668	$ 4,541,084,447	$ 3,516,483,135
Funded Ratio	52.32%	59.00%	65.02%
Contribution Rate	18.18%	14.48%	11.56%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 3,374,299,272	$ 2,988,121,117	$ 2,666,546,277
Actuarial Value of Assets	2,079,811,055	2,079,811,055	2,079,811,055
Unfunded Liability	$ 1,294,488,217	$ 908,310,062	$ 586,735,222
Funded Ratio	61.64%	69.60%	78.00%
Contribution Rate	6.08%	4.70%	3.50%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
CERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 15,866,548,287	$ 14,064,577,911	$ 12,718,401,759
Actuarial Value of Assets	8,615,183,402	8,615,183,402	8,615,183,402
Unfunded Liability	$ 7,251,364,885	$ 5,449,394,509	$ 4,103,218,357
Funded Ratio	54.30%	61.25%	67.74%
Contribution Rate	24.26%	19.18%	15.06%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%

NON-HAZARDOUS
INFLATION ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Inflation Rate 25 basis points	Decrease Inflation Rate 50 basis points
Retirement			
Actuarial Accrued Liabiltiy	$ 11,076,456,794	$ 11,324,806,709	$ 11,583,642,726
Actuarial Value of Assets	6,535,372,347	6,535,372,347	6,535,372,347
Unfunded Liability	$ 4,541,084,447	$ 4,789,434,362	$ 5,048,270,379
Funded Ratio	59.00%	57.71%	56.42%
Contribution Rate	14.48%	15.35%	16.24%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
Insurance			
Actuarial Accrued Liabiltiy	$ 2,988,121,117	$ 3,002,167,664	$ 3,017,089,817
Actuarial Value of Assets	2,079,811,055	2,079,811,055	2,079,811,055
Unfunded Liability	$ 908,310,062	$ 922,356,609	$ 937,278,762
Funded Ratio	69.60%	69.28%	68.93%
Contribution Rate	4.70%	4.79%	4.89%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
CERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 14,064,577,911	$ 14,326,974,373	$ 14,600,732,543
Actuarial Value of Assets	8,615,183,402	8,615,183,402	8,615,183,402
Unfunded Liability	$ 5,449,394,509	$ 5,711,790,971	$ 5,985,549,141
Funded Ratio	61.25%	60.13%	59.01%
Contribution Rate	19.18%	20.14%	21.13%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%

NON-HAZARDOUS
PAYROLL GROWTH SENSITIVITY ANALYSIS

	Valuation Results	Decrease Payroll Growth 2%	No Payroll Growth
Retirement			
Actuarial Accrued Liabiltiy	$ 11,076,456,794	$ 11,076,456,794	$ 11,076,456,794
Actuarial Value of Assets	6,535,372,347	6,535,372,347	6,535,372,347
Unfunded Liability	$ 4,541,084,447	$ 4,541,084,447	$ 4,541,084,447
Funded Ratio	59.00%	59.00%	59.00%
Contribution Rate	14.48%	17.18%	20.28%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 2,988,121,117	$ 2,988,121,117	$ 2,988,121,117
Actuarial Value of Assets	2,079,811,055	2,079,811,055	2,079,811,055
Unfunded Liability	$ 908,310,062	$ 908,310,062	$ 908,310,062
Funded Ratio	69.60%	69.60%	69.60%
Contribution Rate	4.70%	5.18%	5.71%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
CERS Non-Hazardous Total			
Actuarial Accrued Liabiltiy	$ 14,064,577,911	$ 14,064,577,911	$ 14,064,577,911
Actuarial Value of Assets	8,615,183,402	8,615,183,402	8,615,183,402
Unfunded Liability	$ 22,679,761,313	$ 22,679,761,313	$ 22,679,761,313
Funded Ratio	61.25%	61.25%	61.25%
Contribution Rate	19.18%	22.36%	25.99%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%

HAZARDOUS
ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Retirement			
Actuarial Accrued Liabiltiy	$ 4,135,351,830	$ 3,704,456,223	$ 3,344,701,905
Actuarial Value of Assets	2,139,119,173	2,139,119,173	2,139,119,173
Unfunded Liability	$ 1,996,232,657	$ 1,565,337,050	$ 1,205,582,732
Funded Ratio	51.73%	57.74%	63.96%
Contribution Rate	27.52%	22.20%	17.45%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 1,770,770,019	$ 1,558,818,204	$ 1,385,919,568
Actuarial Value of Assets	1,135,784,220	1,135,784,220	1,135,784,220
Unfunded Liability	$ 634,985,799	$ 423,033,984	$ 250,135,348
Funded Ratio	64.14%	72.86%	81.95%
Contribution Rate	12.42%	9.35%	6.65%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
CERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 5,906,121,849	$ 5,263,274,427	$ 4,730,621,473
Actuarial Value of Assets	3,274,903,393	3,274,903,393	3,274,903,393
Unfunded Liability	$ 2,631,218,456	$ 1,988,371,034	$ 1,455,718,080
Funded Ratio	55.45%	62.22%	69.23%
Contribution Rate	39.94%	31.55%	24.10%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%

HAZARDOUS
INFLATION ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Inflation Rate 25 basis points	Decrease Inflation Rate 50 basis points
Retirement			
Actuarial Accrued Liabiltiy	$ 3,704,456,223	$ 3,794,896,768	$ 3,889,498,523
Actuarial Value of Assets	2,139,119,173	2,139,119,173	2,139,119,173
Unfunded Liability	$ 1,565,337,050	$ 1,655,777,595	$ 1,750,379,350
Funded Ratio	57.74%	56.37%	55.00%
Contribution Rate	22.20%	23.66%	25.19%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
Insurance			
Actuarial Accrued Liabiltiy	$ 1,558,818,204	$ 1,563,005,462	$ 1,567,446,686
Actuarial Value of Assets	1,135,784,220	1,135,784,220	1,135,784,220
Unfunded Liability	$ 423,033,984	$ 427,221,242	$ 431,662,466
Funded Ratio	72.86%	72.67%	72.46%
Contribution Rate	9.35%	9.46%	9.58%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
CERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 5,263,274,427	$ 5,357,902,230	$ 5,456,945,209
Actuarial Value of Assets	3,274,903,393	3,274,903,393	3,274,903,393
Unfunded Liability	$ 1,988,371,034	$ 2,082,998,837	$ 2,182,041,816
Funded Ratio	62.22%	61.12%	60.01%
Contribution Rate	31.55%	33.12%	34.77%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%

HAZARDOUS
PAYROLL GROWTH ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Payroll Growth 2%	No Payroll Growth
Retirement			
Actuarial Accrued Liabiltiy	$ 3,704,456,223	$ 3,704,456,223	$ 3,704,456,223
Actuarial Value of Assets	2,139,119,173	2,139,119,173	2,139,119,173
Unfunded Liability	$ 1,565,337,050	$ 1,565,337,050	$ 1,565,337,050
Funded Ratio	57.74%	57.74%	57.74%
Contribution Rate	22.20%	26.63%	31.71%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 1,558,818,204	$ 1,558,818,204	$ 1,558,818,204
Actuarial Value of Assets	1,135,784,220	1,135,784,220	1,135,784,220
Unfunded Liability	$ 423,033,984	$ 423,033,984	$ 423,033,984
Funded Ratio	72.86%	72.86%	72.86%
Contribution Rate	9.35%	10.42%	11.60%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
CERS Hazardous Total			
Actuarial Accrued Liabiltiy	$ 5,263,274,427	$ 5,263,274,427	$ 5,263,274,427
Actuarial Value of Assets	3,274,903,393	3,274,903,393	3,274,903,393
Unfunded Liability	$ 1,988,371,034	$ 1,988,371,034	$ 1,988,371,034
Funded Ratio	62.22%	62.22%	62.22%
Contribution Rate	31.55%	37.05%	43.31%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%

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Report on the Annual Valuation of the State Police Retirement System

Prepared as of June 30, 2016

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The experience and dedication you deserve

November 16, 2016

Board of Directors
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The purpose of the valuation was to measure the System's funding progress. The date of the valuation was June 30, 2016.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Todd B. Green ASA, FCA, MAAA
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REPORT ON THE ANNUAL VALUATION OF THE STATE POLICE RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2016

SECTION I – SUMMARY OF PRINCIPAL RESULTS

This report, prepared as of June 30, 2016, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	6/30/2016	6/30/2015
Contributions for next fiscal year:		
Retirement	71.57%	66.47%
Insurance	18.10	18.87
Total	89.67%	85.34%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	$775,160,294	$734,156,446
Actuarial value of assets	234,567,536	248,387,946
Unfunded liability on actuarial value of assets	540,592,758	485,768,500
Funded ratio on actuarial value of assets	30.26%	33.83%
Market value of assets	$217,594,068	$246,968,144
Unfunded liability on market value of assets	557,566,226	487,188,302
Funded ratio on market value of assets	28.07%	33.64%
Insurance		
Actuarial accrued liability	$257,197,259	$254,838,710
Actuarial value of assets	172,703,691	167,774,940
Unfunded liability on actuarial value of assets	84,493,568	87,063,770
Funded ratio on actuarial value of assets	67.15%	65.84%
Market value of assets	$161,366,312	$165,018,209
Unfunded liability on market value of assets	95,830,947	89,820,501
Funded ratio on market value of assets	62.74%	64.75%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,515	1,460
Number of vested former members	65	63
Number of former members due a refund	390	362
Number of active members	908	937
Total salary	$45,551,469	$45,764,515
Average salary	$50,167	$48,842

The State Police Retirement System is a defined benefit pension fund that provides pensions and health care coverage for uniformed state police officers. This report presents the results of the June 30, 2016 actuarial funding valuation for both the Retirement Plan and the Insurance Fund. The primary purpose of performing the actuarial funding valuations are to:

- Determine the experience of the System since the last valuation date.
- Disclose asset and liability measures as of the valuation date.
- Analyze and report on trends in contributions, assets, and liabilities over the past several years.

Since the previous valuation there were no changes to the plan provisions, however the discount rate has been changed to 6.75% for the Pension Plan. The discount rate for the Insurance Fund remains at 7.50%.

The actuarial valuation results provide "snapshot" view the System's financial condition on June 30, 2016. Actuarial gains and losses result when actuarial experience of the plan (such as asset return, pay increases, turnover, deaths, etc.) is different from the expected by the actuarial assumptions. The Retirement Plan's Unfunded Actuarial Accrued Liability (UAAL) was expected to be $498.5 million taking into account contributions from both the employer and members of $31.0 million. The actual UAAL was $540.6 million. The increase of $42.1 million was due to the change in the discount rate offset by an actuarial gain due to actual experience different than what was anticipated by the assumptions. The Insurance Funds UAAL was expected to be $88.5 million taking into account expected employer and member contributions of $8.7 million. The actual UAAL was $84.5 million. The decrease in the UAAL of $4.0 million was due to the change in actuarial assumptions offset by an actuarial loss due to actuarial experience different than what was anticipated by the assumptions.

The remaining amortization period of the UAAL of both the Pension and Insurance Funds is 27-years as of June 30, 2016. Detailed analysis of the gains and losses are presented in Section V of the report.

As of June 30, 2016 the Pension and Insurance Funds had net assets of $217,594,068 and $161,366,312 respectively. The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarially determined contribution. The asset valuation method which recognizes the annual unexpected portion of market value investment returns over a five-year period, attempts to dampen the effect of market volatility. The resulting amount is called the "actuarial value of assets" and is utilized to determine the actuarial valuation results. In this year's actuarial valuation, the actuarial value of assets as of June 30, 2016 was $234,567,536 and $172,703,691 respectively for the Pension and Insurance Funds.

On a market basis, the estimated rate of return was (1.7)% and 0.0% respectively for the Pension and Insurance Funds, assuming all cash flows occur in the middle of the year. Due to better than assumed prior returns on the market value of assets the net rate of return measured on the actuarial value of assets was 5.0% and 5.1% respectively for both the Pension and Insurance Funds. Please see Section III and Schedule B of this report for more detailed information on the market and actuarial value of assets.

Schedule F provides sensitivity analysis for three different sets of economic assumptions; the discount rate assumption, the inflation assumption, and the payroll growth assumption. Two assumption change scenarios are presented for each economic assumption. The results of the economic assumption change scenarios are presented along with the valuation results for comparison.

The long-term financial health of this retirement System, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. The System has recently been strengthened due to two reasons. They are, recent legislative action that provides 100% funding of the actuarially determined contribution and the elimination of unfunded ad hoc cost-of-living adjustments for retirees. The cost for providing cost-of-living adjustments for retires must be prefunded in advance.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2016 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

		Group Averages		
Number	Payroll	Salary	Age	Service
908	$45,551,469	$50,167	37.0	10.0

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2011	965	$48,692,616	$50,459	(5.9)%
6/30/2012	907	48,372,506	53,332	5.7
6/30/2013	902	45,256,202	50,173	(5.9)
6/30/2014	855	44,615,885	52,182	4.0
6/30/2015	937	45,764,515	48,842	(6.4)
6/30/2016	908	45,551,469	50,167	2.7

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

			Group Averages	
Type of Benefit Payment	Number	Annual Benefits	Benefit	Age
Retiree	1,263	$50,522,573	$40,002	62.3
Disability	53	$968,489	18,273	58.2
Beneficiary	199	5,158,856	25,924	64.1
Total in SPRS	1,515	$56,649,918	$37,393	62.4

This valuation also includes 455 inactive members of which 65 are vested.

SECTION III - ASSETS

1. As of June 30, 2016 the total market value of assets amounted to $378,960,380 as shown in the following table. The Insurance assets include both the amount in the health care trust and the amount in the 401(h) account in the pension trust established to meet the requirements of HB1.

Retirement	Insurance	SPRS Total
$217,594,068	$161,366,312	$378,960,380

2. The five-year smoothed market related actuarial value of assets used for the current valuation was $407,271,227. Schedule B shows the development of the actuarial value of assets as of June 30, 2016. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2016	JUNE 30, 2015
Retirement	$ 234,567,536	$ 248,387,946
Insurance	172,703,691	167,774,940
Total	$ 407,271,227	$ 416,162,886

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2016. Separate balance sheets are shown for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of $851,805,347, of which $630,842,308 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $5,656,599 is for the prospective benefits payable on account of inactive members, $215,306,440 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of $234,567,536 as of June 30, 2016. The difference of $617,237,811 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, $34,857,655 is the present value of future contributions expected to be made by members, and the balance of $582,380,156 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 10.79% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of $41,787,398. When this amount is subtracted from $582,380,156, which is the present value of the total future contributions to be made by the State, there remains $540,592,758 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 60.41% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $540,592,758 over 27 years on the assumption that the aggregate payroll for members will increase by 4.00% each year.
5. The contribution rate for administrative expenses is determined to be 0.37% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of $280,211,827, of which $171,154,508 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, $5,939,567 is for the prospective benefits payable on account of inactive members, and $103,117,752 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of $172,703,691 as of June 30, 2016. The difference of $107,508,136 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, $1,699,282 is the present value of future contributions expected to be made by members, and the balance of $105,808,854 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 7.74% of payroll are required to fund the continuing benefit accruals for the average active member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of $21,315,286. When this amount is subtracted from $105,808,854, which is the present value of the total future contributions to be made by the employers, there remains $84,493,568 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 10.22% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of $84,493,568 over 27 years on the assumption that the aggregate payroll for members will increase by 4.00% each year.
5. The contribution rate for administrative expenses is determined to be 0.14% of payroll.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2016 is shown below ($ millions).

Experience Gain/(Loss)
Retirement Benefits

			Amount
(1)	UAAL* as of 6/30/15	$	485.8
(2)	Normal cost from last valuation		7.8
(3)	Contributions		31.0
(4)	Interest accrual: [(1) + (2)] x .075 - (3) x .0375		35.9
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	498.5
(6)	Change due to new actuarial assumption or methods		(53.4)
(7)	Expected UAAL after changes: (5) - (6)	$	551.9
(8)	Actual UAAL as of 6/30/16	$	540.6
(9)	Gain/(loss): (7) - (8)	$	11.3
(10)	Accrued liabilities as of 6/30/15	$	734.2
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		1.5%

**Unfunded actuarial accrued liability*

Experience Gain/(Loss)
Insurance Benefits

			Amount
(1)	UAAL* as of 6/30/15	$	87.1
(2)	Normal cost from last valuation		4.0
(3)	Expected contributions		8.7
(4)	Interest accrual: [(1) + (2) - (3)] x .075		6.1
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$	88.5
(6)	Change due to new actuarial assumption or methods		0.0
(7)	Expected UAAL after changes: (5) - (6)	$	88.5
(8)	Actual UAAL as of 6/30/16	$	84.5
(9)	Gain/(loss): (7) - (8)	$	4.0
(10)	Accrued liabilities as of 6/30/15	$	254.8
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		1.6%

* *Unfunded Actuarial Accrued Liability*

SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/16	Insurance $ Gain (or Loss) For Year Ending 6/30/16
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (11.2)	$ (1.0)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.0	0.0
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(1.3)	(0.8)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain.If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	2.0	10.3
New Members. Additional unfunded accrued liability will produce a loss.	0.0	(0.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(6.2)	(3.9)
Death or Waiver After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain. If retired members receiving health benefits later waive coverage, there is a gain.	26.8	1.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	1.2	(1.7)
Gain (or Loss) During Year From Financial Experience	$ 11.3	$ 4.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections	(53.4)	0.0
Composite Gain (or Loss) During Year	$ (42.1)	$ 4.0

SECTION VI – ACTUARIALLY DETERMINED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation. This rate is for informational purposes only.

Actuarially Determined Contribution Rates

Retirement

Contribution Rate for		% of Payroll
A.	Normal Cost:	
	(1) Service retirement benefits	18.05%
	(2) Disability benefits	0.59
	(3) Survivor benefits	0.15
	(4) Total	18.79%
B.	Member Contributions	8.00%
C.	Employer Normal Cost: [A(4) - B]	10.79%
D.	Administrative Expenses	0.37%
E.	Unfunded Actuarial Accrued Liability Contributions:	60.41%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	71.57%

** Based on 27 year amortization of the UAAL from June 30, 2016*

Actuarially Determined Contribution Rates

Insurance

	Contribution Rate for	% of Payroll
A.	Normal Cost	8.01%
B.	Member Contributions*	0.27%
C.	Employer Normal Cost: [A - B]	7.74%
D.	Administrative Expenses	0.14%
E.	Unfunded Actuarial Accrued Liability**	10.22%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	18.10%

**The liabilities are net of retiree contributions toward their healthcare.*
*** Based on 27 year amortization of the UAAL from June 30, 2016*

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements (GASB) 43, 45, 67 and 68 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. The information required under GASB 67 and 68 will be issued in separate reports. We are providing the retirement benefit information for informational purposes only. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2016

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,515
Terminated employees entitled to benefits but not yet receiving benefits	455
Active Members	908
Total	2,878

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables. Please note that for the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the health care trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP. Under Actuarial Standard of Practice No. 6 (ASOP No. 6), aging subsidies (or implicit rate subsidies) should be recognized, as the differences in health care utilization and cost due to age have been demonstrated and well quantified. The impact of aging on a valuation's results can be as significant as the use of mortality, trend, and discounting. It has been the long-standing position that the responsibility for compliance with GASB Statement No. 43, when it relates to KEHP implicit subsidies, rests with KEHP, not KRS, as KRS has no operational authority over KEHP. As such, KEHP implicit subsidies are excluded from the OPEB valuation process of the Retiree Medical Plan. As GASB 74 and 75 prohibit such a deviation from ASOP No. 6, additional consideration to the current treatment of KEHP implicit rate subsidies may be needed in the future. The estimated impact of KEHP implicit subsidies to the actuarial accrued liability is an increase of $28,253,706 for SPRS.

RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2011	$ 285,580,631	$ 634,379,401	$ 348,798,770	45.0%	$ 48,692,616	716.3%
6/30/2012	259,791,575	647,688,665	387,897,090	40.1	48,372,506	801.9
6/30/2013	241,800,328	651,580,654	409,780,326	37.1	45,256,202	905.5
6/30/2014	242,741,735	681,118,402	438,376,667	35.6	44,615,885	982.6
6/30/2015*	248,387,946	734,156,446	485,768,500	33.8	45,764,515	1,061.5
6/30/2016**	234,567,536	775,160,294	540,592,758	30.3	45,551,469	1,186.8

** Discount rate changed from 7.75% to 7.50%*
** Discount rate changed from 7.50% to 6.75%*

INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c)
6/30/2011	$ 123,687,289	$ 438,427,763	$ 314,740,474	28.2%	$ 48,692,616	646.4%
6/30/2012	124,372,072	333,903,782	209,531,710	37.2	48,372,506	433.2
6/30/2013*	136,321,060	222,326,743	86,005,683	61.3	45,256,202	190.0
6/30/2014	155,594,760	234,271,127	78,676,367	66.4	44,615,885	176.3
6/30/2015**	167,774,940	254,838,710	87,063,770	65.8	45,764,515	190.2
6/30/2016	172,703,691	257,197,259	84,493,568	67.1	45,551,469	185.5

** Discount rate changed from 4.50% to 7.75%*
*** Discount rate changed from 7.75% to 7.50%*

INSURANCE BENEFITS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Employer Contributions	Percentage Contributed
June 30, 2011	$ 25,772,574	$ 11,050,964	42.9 %
June 30, 2012	28,246,786	11,960,468	42.3
June 30, 2013	27,234,229	16,828,681	61.8
June 30, 2014	20,879,022	14,493,242	69.4
June 30, 2015	9,889,797	10,381,881	105.0
June 30, 2016	8,552,633	10,237,021	119.7

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2016. Additional information as of the latest actuarial valuation follows.

Insurance Benefits	
Valuation date	6/30/2016
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	27 years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	7.50% - 5.00%
Medical Trend Assumption (Post-Medicare)	5.50% - 5.00%
Year of Ulitimate Trend	2021
Dollar Contribution Trend	1.50%
Actuarial assumptions:	
Investment rate of return*	7.50%
*Includes price inflation at	3.25%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2016 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2015. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM

RETIREMENT BENEFITS

	JUNE 30, 2016	JUNE 30, 2015
ASSETS		
Current actuarial value of assets	$ 234,567,536	$ 248,387,946
Prospective contributions		
Member contributions	$ 34,857,655	$ 32,949,643
Employer normal contributions	41,787,398	30,925,190
Unfunded accrued liability contributions	540,592,758	485,768,500
Total prospective contributions	$ 617,237,811	$ 549,643,333
Total assets	$ 851,805,347	$ 798,031,279
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 630,842,308	$ 601,295,055
Present value of benefits payable on account of active members	215,306,440	192,176,374
Present value of benefits payable on account of inactive members	5,656,599	4,559,850
Total liabilities	$ 851,805,347	$ 798,031,279

VALUATION BALANCE SHEET
INSURANCE BENEFITS

	JUNE 30, 2016	JUNE 30, 2015
ASSETS		
Current actuarial value of assets	$ 172,703,691	$ 167,774,940
Prospective contributions		
Member contributions	$ 1,699,282	$ 1,558,766
Employer normal contributions	21,315,286	24,598,502
Unfunded accrued liability contributions	84,493,568	87,063,770
Total prospective contributions	$ 107,508,136	$ 113,221,038
Total assets	$ 280,211,827	$ 280,995,978
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	$ 171,154,508	$ 165,675,982
Present value of benefits payable on account of active members	103,117,752	110,548,771
Present value of benefits payable on account of inactive members	5,939,567	4,771,225
Total liabilities	$ 280,211,827	$ 280,995,978

The following tables provide the solvency test for SPRS members.

Solvency Test
Retirement Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2011	$ 43,574,097	$ 499,194,229	$ 91,611,075	$ 285,580,631	100.0%	48.5%	0.0%
6/30/2012	41,139,306	523,016,647	83,532,712	259,791,575	100.0	41.8	0.0
6/30/2013	39,788,421	535,720,195	76,072,038	241,800,328	100.0	37.7	0.0
6/30/2014	41,831,465	563,011,026	76,275,911	242,741,735	100.0	35.7	0.0
6/30/2015	41,567,127	605,854,905	86,734,414	248,387,946	100.0	34.1	0.0
6/30/2016	41,870,846	636,498,907	96,790,541	234,567,536	100.0	30.3	0.0

Solvency Test
Insurance Benefits

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset (1)	(2)	(3)
6/30/2011	$ 0	$ 252,439,726	$ 185,988,037	$ 123,687,289	100.0%	49.0%	0.0%
6/30/2012	0	190,258,729	143,645,053	124,372,072	100.0	65.4	0.0
6/30/2013	0	139,508,590	82,818,153	136,321,060	100.0	97.7	0.0
6/30/2014	0	143,402,126	90,869,001	155,594,760	100.0	100.0	13.4
6/30/2015	0	170,447,207	84,391,503	167,774,940	100.0	98.4	0.0
6/30/2016	0	177,094,075	80,103,184	172,703,691	100.0	97.5	0.0

SCHEDULE B

Development of Actuarial Value of Assets
Retirement Benefits

	Valuation date June 30:	2015	2016	2017	2018	2019	2020
A.	Actuarial Value Beginning of Year	$ 242,741,735	$ 248,387,946				
B.	Market Value End of Year	246,968,144	217,594,068				
C.	Market Value Beginning of Year	260,763,486	246,968,144				
D.	Cash Flow						
	D1. Contributions	37,836,413	30,971,333				
	D2. Benefit Payments	(54,850,254)	(56,278,918)				
	D3. Administrative Expenses	(201,108)	(177,910)				
	D4. Investment Expenses	(1,681,302)	(1,707,451)				
	D5. Net	(18,896,251)	(27,192,946)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	5,100,909	(2,181,130)				
	E2. Assumed Rate	7.75%	7.50%				
	E3. Amount for Immediate Recognition	21,223,393	19,274,356				
	E4. Amount for Phased-In Recognition	(16,122,484)	(21,455,486)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(3,224,497)	(4,291,097)	0	0	0	0
	F2. First Prior Year	4,440,433	(3,224,497)	(4,291,097)	0	0	0
	F3. Second Prior Year	983,544	4,440,433	(3,224,497)	(4,291,097)	0	0
	F4. Third Prior Year	(3,810,203)	983,544	4,440,433	(3,224,497)	(4,291,097)	0
	F5. Fourth Prior Year	4,929,792	(3,810,203)	983,544	4,440,433	(3,224,497)	(4,291,097)
	F6. Total Recognized Investment Gain	3,319,069	(5,901,820)	(2,091,617)	(3,075,161)	(7,515,594)	(4,291,097)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 248,387,946	$ 234,567,536				
H.	Difference Between Market & Actuarial Values	$ (1,419,802)	$ (16,973,468)	$ (14,881,851)	$ (11,806,690)	$ (4,291,097)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

Development of Actuarial Value of Assets
Insurance Benefits

	Valuation date June 30:	2015	2016	2017	2018	2019	2020
A.	Actuarial Value Beginning of Year	$ 155,594,760	$ 167,774,940				
B.	Market Value End of Year	165,018,209	161,366,312				
C.	Market Value Beginning of Year	165,167,805	165,018,209				
D.	Cash Flow						
	D1. Contributions	10,476,944	10,321,221				
	D2. Benefit Payments	(13,482,044)	(13,862,503)				
	D3. Administrative Expenses	(64,526)	(63,605)				
	D4. Investment Expenses	(1,185,520)	(1,391,722)				
	D5. Net	(4,255,146)	(4,996,609)				
E.	Investment Income						
	E1. Market Total: B.-C.-D5.	4,105,550	1,344,712				
	E2. Assumed Rate	7.75%	7.50%				
	E3. Amount for Immediate Recognition	13,867,077	13,632,904				
	E4. Amount for Phased-In Recognition	(9,761,527)	(12,288,192)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(1,952,305)	(2,457,638)	0	0	0	0
	F2. First Prior Year	1,873,504	(1,952,305)	(2,457,638)	0	0	0
	F3. Second Prior Year	603,078	1,873,504	(1,952,305)	(2,457,638)	0	0
	F4. Third Prior Year	(1,774,183)	603,078	1,873,504	(1,952,305)	(2,457,638)	0
	F5. Fourth Prior Year	3,818,155	(1,774,183)	603,078	1,873,504	(1,952,305)	(2,457,638)
	F6. Total Recognized Investment Gain	2,568,249	(3,707,544)	(1,933,361)	(2,536,439)	(4,409,943)	(2,457,638)
G.	Actuarial Value End of Year:						
	A.+D5.+E3.+F6.	$ 167,774,940	$ 172,703,691				
H.	Difference Between Market & Actuarial Values	$ (2,756,731)	$ (11,337,379)	$ (9,404,018)	$ (6,867,579)	$ (2,457,638)	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014.

INVESTMENT RATE OF RETURN: 6.75% per annum, compounded annually for retirement benefits. 7.50% per annum, compounded annually for insurance benefits.

PRICE INFLATION: 3.25% per annum, compounded annually.

PAYROLL GROWTH: 4.00% per annum, compounded annually.

SALARY INCREASES: The assumed annual rates of future salary increases are as follows and include inflation at 4.00% per annum:

Service Years	Annual Rates of Salary Increases		
	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	12.02%	4.00%	16.50%
1-2	7.21%	4.00%	11.50%
2-3	5.29%	4.00%	9.50%
3-4	4.33%	4.00%	8.50%
4-5	3.37%	4.00%	7.50%
5-6	2.40%	4.00%	6.50%
6-7	1.92%	4.00%	6.00%
7-8	1.92%	4.00%	6.00%
8-9	0.96%	4.00%	5.00%
9-10	0.48%	4.00%	4.50%
10 & Over	0.00%	4.00%	4.00%

DISABILITY: Representative assumed annual rates of disability are as follows:

Nearest Age	Annual Rates of Disability	
	Male	Female
20	0.05%	0.05%
30	0.09%	0.09%
40	0.20%	0.20%
50	0.56%	0.56%
60	1.46%	1.46%

RETIREMENT: The assumed annual rates of retirement are as follows:

Annual Rates of Retirement		
Service	Those Eligible for Service Retirement+	Those Eligible for Service Retirement++
20	22.00%	
21	22.00%	
22	22.00%	
23	28.00%	
24	28.00%	
25	28.00%	22.00%
26	28.00%	22.00%
27	28.00%	22.00%
28	44.00%	28.00%
29	44.00%	28.00%
30	44.00%	28.00%
31	58.00%	28.00%
32	58.00%	28.00%
33	58.00%	44.00%
34	58.00%	44.00%
35	58.00%	44.00%
36	58.00%	58.00%
37	58.00%	58.00%
38	58.00%	58.00%
39	58.00%	58.00%
40	58.00%	58.00%

+ For members participating before September 1, 2008. The annual rate of service retirement is 100% at age 55.
++ For members participating on or after September 1, 2008. The annual rate of service retirement is 100% at age 60.

WITHDRAWAL: The assumed annual rates of withdrawal are as follows:

Service Years	Annual Rates of Withdrawal
0-1	20.00%
1-2	7.00%
2-9	3.00%
9 & Over	2.50%

DEATH BEFORE RETIREMENT: The rates of mortality for the period before retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females) for all healthy retired members and beneficiaries. The RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. These assumptions are used to measure the probabilities of each benefit payment being made after retirement. These assumptions contain margin for mortality improvements.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

FORM OF PAYMENT: Participants are assumed to elect a life-only form of payment.

ASSET VALUATION METHOD: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

ACTUARIAL COST METHOD: Costs were determined using the Entry Age Normal, Level Percentage of Pay Actuarial Cost Method. Under this method, a calculation is made for retirement benefits to determine the uniform and constant percentage rate of contribution which, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would be required to meet the cost of benefits payable. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

MULTIPLE STATUS/MULTIPLE SYSTEM MEMBERS: Some members may be represented under more than one retirement system and/or may have more than one status (e.g., active in one system, deferred vested in another and retired from a different system). For pension purposes, members that are active in one System but have service in another are assumed to retire from the System in which they are currently active. Any deferred pension benefits from another System are assumed to begin once the member terminates from their current active position. The insurance liabilities for multiple status/multiple system members are calculated assuming only one benefit is payable across all Systems and that benefit is payable from the combination of status and System which produces the highest economic value to the member.

AFFORDABLE CARE ACT (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2018 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the insurance liability will be required.

HEALTH CARE BENEFITS VALUED: Medical and drug benefits for retirees under age 65 and Medicare eligible.

HEALTH CARE SPOUSE AGE DIFFERENCE: Wives are assumed to be three years younger than husbands.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Annual Rate of Increase		
	Under Age 65	Age 65 & Older	Dollar Contribution*
2016	7.50%	5.50%	1.50%
2017	6.75%	5.25%	1.50%
2018	6.25%	5.00%	1.50%
2019	5.75%	5.00%	1.50%
2020	5.25%	5.00%	1.50%
2021 & Beyond	5.00%	5.00%	1.50%

** Applies to members participating on or after July 1, 2003*

HEALTH CARE AGE RELATED MORBIDITY: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 – 69	3.00%
70 – 74	2.50%
75 – 79	2.00%
80 – 84	1.00%
85 – 89	0.50%
90 & Beyond	0.00%

Please note that for the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the health care trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP. Under Actuarial Standard of Practice No. 6 (ASOP No. 6), aging subsidies (or implicit rate subsidies) should be recognized, as the differences in health care utilization and cost due to age have been demonstrated and well quantified. The impact of aging on a valuation's results can be as significant as the use of mortality, trend, and discounting. It has been the long-standing position that the responsibility for compliance with GASB Statement No. 43, when it relates to KEHP implicit subsidies, rests with KEHP, not KRS, as KRS has no operational authority over KEHP. As such, KEHP implicit subsidies are excluded from the OPEB valuation process of the Retiree Medical Plan. As GASB 74 and 75 prohibit such a deviation from ASOP No. 6, additional consideration to the current treatment of KEHP implicit rate subsidies may be needed in the future. The estimated impact of KEHP implicit subsidies to the actuarial accrued liability is an increase of $28,253,706 for SPRS.

HEALTH CARE DEFERRED VESTED BENEFIT RECIPIENT INITIAL AGE OF BENEFIT RECEIPT FOR MEMBERS: Health care benefits are assumed to begin at the following ages for deferred vested benefit recipients:

Deferred Vested Initial Age of Benefit Receipt		
Members Participating Before July 1, 2003	Members Participating Between July 1, 2003 to September 1, 2008	Members Participating On or After September 1, 2008
50	50	50

HEALTH CARE ANTICIPATED PLAN PARTICIPATION: Representative values of the assumed annual rates of member participation and spouse coverage are as follows:

Plan Elections of Covered Members Age 65 and Older as of January 1, 2017	
Kentucky Retirement System Health Plan	**Hazardous**
Medical Only	4.08%
Essential	4.64%
Premium	91.28%

Retirement Participation Rates			
Service at Retirement	**Members Participating Before July 1, 2003**	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
Under 10	100.00%	100.00%	100.00%
10 – 14	100.00%	100.00%	100.00%
15 – 19	100.00%	100.00%	100.00%
20+	100.00%	100.00%	100.00%

Disability/Death Participation Rates	
Members Participating Before July 1, 2003	
Duty-Disability	**Duty Death-In-Service**
100.00%	100.00%

Deferred Vested Member Participation Rates		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
100.00%	100.00%	100.00%

Members Electing Spouse Coverage		
Members Participating Before July 1, 2003	**Members Participating Between July 1, 2003 to September 1, 2008**	**Members Participating On or After September 1, 2008**
75.00%	75.00%	75.00%

HEALTH CARE MONTHLY PLAN COSTS: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions for the year following the valuation date. The amounts include medical and drug costs. Members under 65 are assumed to elect the LivingWell PPO. For retirees ages 65 and older, the full costs shown are before averaging. The average costs are then normalized to age 65 and age adjusted in calculating liabilities. The dollar amount contribution level is the cost to the system per year of service for members participating on or after July 1, 2003.

Under Age 65 (KEHP) Full Costs as of January 1, 2017				
Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 702.10	$ 721.14	$ 678.22	$ 663.80
Parent Plus	967.18	1,023.04	964.58	930.94
Couple	1,302.74	1,564.20	1,477.72	1,431.76
Family	1,453.94	1,738.40	1,640.22	1,594.52
Family C-R	810.00	865.64	815.50	793.18

Age 65 and Older Full Costs as of January 1, 207	
Kentucky Retirement System Health Plan - Medical Only	$162.47
Kentucky Retirement System Health Plan - Essential	77.76
Kentucky Retirement System Health Plan - Premium	252.51

Age 65 and Older Average Cost as of the Valuation Date Based on Actual Retiree Elections
Hazardous
$234.37

Dollar Amount Contribution Level Per Year of Service as of July 1, 2015
Applies to members participating on or after July 1, 2003
Hazardous
$19.48

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement 55

Service Requirement At least one month of hazardous duty service credit

Amount If a member has at least 60 months of service, the monthly benefit is 2.50% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement 60

Service Requirement At least 60 months of hazardous duty service credit

Amount The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Normal Retirement (continued):

Members whose participation began on or after 1/1/2014

Age Requirement	60
Service Requirement	At least 60 months of hazardous duty service credit or 25 or more years of service, with no age requirement
Amount	Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 50 with 15 years of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years of service, whichever is smaller.

Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)
Members whose participation began before 8/1/2004	Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday. The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance. A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.
Members whose participation began on or after 8/1/2004 but before 1/1/2014	Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay.
Members whose participation began on or after 1/1/2014	The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	55

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Members whose participation began on or after 1/1/2014

Age Requirement	None
Service Requirement	60 months.
Amount	Upon termination the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or the member can elect to leave the hypothetical account balance in the System. If the member does not withdraw the account balance, it will continue to earn 4% interest. Upon reaching normal retirement age the member can apply for retirement and receive the account balance as a lump sum payment or annuitize the account balance into a single life annuity.

Pre-Retirement Death Benefit (not in line of duty):

Members whose participation began before 1/1/2014

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Members whose participation began on or after 1/1/2014

Requirement	60 months service
Amount	The maximum of the benefit equal to the benefit the member would have received had the member retired on the day before the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently set at 2.5% and per statute, shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008 and up to 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.
Members whose participation began on or after 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Insurance Plan for Retirees:

Members whose participation began before 7/1/2003

Requirement

In receipt of a monthly retirement allowance.

Amount

The Retirement System pays a portion of lifetime medical premiums for retirees, their spouse and their dependents based on the retired member's years of service credit. The percentage of the monthly contribution rate paid is show in the following table.

Service Credit	Percentage Paid*
0 – 3 years	0%
4 – 9 years	25%
10 – 14 years	50%
15 – 19 years	75%
20 or more years	100%

**100% of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents if the member is disabled in the line of duty as a result of a duty-related injury, regardless of actual service. 100% of the monthly contribution is paid toward health insurance for the spouse and dependent children of a member who dies in the line of duty regardless of the deceased member's service. The insurance benefit will be provided as long as the spouse and dependent children are eligible for a monthly retirement benefit.*

Members whose participation began on or after 7/1/2003, but before 9/1/2008

Requirement

Monthly retirement allowance with at least 120 months of service at retirement.

Amount

The Retirement System pays $19.48 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.99 per month for each year of earned. These amounts are shown as of the valuation date and will be increased annually by 1.5%.

Members whose participation began on or after 9/1/2008

Requirement

Monthly retirement allowance with at least 180 months of service at retirement.

Amount

The Retirement System pays $19.48 per month for each year of earned service for retirees. Upon the retiree's death, the surviving spouse will receive $12.99 per month for each year of earned. These amounts will be increased annually by 1.5%.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years

Year Ending June 30	2011	2012	2013	2014	2015	2016
			Number			
Beginning of Year	1,223	1,263	1,299	1,346	1,413	1,460
Added	52	52	63	95	62	65
Removed	12	16	16	28	15	10
End of Year	1,263	1,299	1,346	1,413	1,460	1,515
			Annual Allowances			
Beginning of Year	$ 45,515,797	$ 47,467,404	$ 49,887,093	$ 50,905,789	$ 53,432,446	$ 54,930,421
Added	2,341,589	3,026,513	1,471,331	3,360,043	1,946,803	2,004,028
Removed	389,982	606,825	452,635	833,386	448,827	284,531
End of Year	$ 47,467,404	$ 49,887,093	$ 50,905,789	$ 53,432,446	$ 54,930,421	$ 56,649,918
% Increase in Allowances	4.29%	5.10%	2.04%	4.96%	2.80%	3.13%
Average Annual Allowance	$ 37,583	$ 38,404	$ 37,820	$ 37,815	$ 37,624	$ 37,393

Retired Lives Summary June 30, 2016

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	141	$ 427,452.71	14	$ 43,388.33	155	$ 470,841.04
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	139	452,417.42	1	4,813.66	140	457,231.08
66-2/3% to Beneficiary	87	331,153.53	2	7,541.82	89	338,695.35
50% to Beneficiary	84	306,283.87	1	2,604.67	85	308,888.54
Pop-up Option	569	2,026,012.48	4	10,805.22	573	2,036,817.70
10 Years Certain	4	9,873.45	0	0.00	4	9,873.45
10 Years Certain & Life	35	114,307.08	2	5,033.86	37	119,340.94
Social Security Option						
Age 62 Basic	30	78,635.67	0	0.00	30	78,635.67
Age 62 Survivorship	124	248,966.51	1	7,930.47	125	256,896.98
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	17	47,678.40	1	3,918.67	18	51,597.07
20 Years Certain & Life	36	111,707.69	3	6,281.98	39	117,989.67
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	2	466.41	2	466.41
PLSO 12 Month Survivor	6	20,781.22	0	0.00	6	20,781.22
PLSO 24 Month Survivor	4	5,952.60	0	0.00	4	5,952.60
PLSO 36 Month Survivor	9	16,914.11	0	0.00	9	16,914.11
Total	1,285	$ 4,198,136.74	31	$ 92,785.09	1,316	$ 4,290,921.83

Beneficiary Lives Summary June 30, 2016

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	2	$ 820.48	7	5,405.00	9	$ 6,225.48
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	6	5,883.26	59	157,344.64	65	163,227.90
66-2/3% to Beneficiary	2	1,206.05	11	22,098.48	13	23,304.53
50% to Beneficiary	0	0.00	18	28,031.94	18	28,031.94
Pop-up Option	1	478.19	37	97,651.92	38	98,130.11
10 Years Certain	1	2,038.06	1	2,038.06	2	4,076.12
10 Years Certain & Life	0	0.00	1	389.49	1	389.49
Social Security Option						
Age 62 Basic	0	0.00	2	2,281.46	2	2,281.46
Age 62 Survivorship	0	0.00	42	82,974.81	42	82,974.81
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	1	893.10	1	893.10
15 Years Certain & Life	0	0.00	1	721.26	1	721.26
20 Years Certain & Life	1	6,685.69	5	5,611.34	6	12,297.03
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	1	7,351.41	1	7,351.41
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	13	$ 17,111.73	186	$ 412,792.91	199	$ 429,904.64

Retired and Beneficiary Information June 30, 2016
Tabulated by Attained Ages

Attained Age	Retirement No.	Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 45	28	$ 1,019,570	8	$ 167,214	20	$ 117,782	56	$ 1,304,566
45-49	141	5,501,842	8	155,007	3	60,587	152	5,717,436
50-54	168	6,669,144	5	69,113	6	97,572	179	6,835,829
55-59	160	6,777,217	6	110,691	14	258,231	180	7,146,139
60-64	198	8,391,605	9	111,117	15	294,974	222	8,797,696
65-69	284	11,251,961	7	157,746	30	682,640	321	12,092,347
70-74	132	5,170,158	5	89,065	33	1,020,962	170	6,280,185
75-79	85	2,938,003	3	74,826	16	569,831	104	3,582,660
80-84	40	1,562,941	2	33,710	16	640,188	58	2,236,839
85-89	21	966,929	0	0	27	807,161	48	1,774,090
90 & Over	6	273,203	0	0	19	608,928	25	882,131
Totals	1,263	$ 50,522,573	53	$ 968,489	199	$ 5,158,856	1,515	$ 56,649,918

Total Active Members as of June 30, 2016
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20									
Avg Pay									
20-24	49								49
Avg Pay	$26,192								$26,192
25-29	102	32							134
Avg Pay	$38,018	$49,576							$40,778
30-34	69	82	27						178
Avg Pay	$41,536	$47,981	$52,629						$46,188
35-39	25	37	97	32	3				194
Avg Pay	$43,960	$48,959	$53,308	$55,592	$54,502				$51,669
40-44	16	16	55	71	29	3			190
Avg Pay	$42,054	$51,264	$53,348	$58,366	$66,629	$72,725			$56,430
44-49	4	5	31	34	40	6	1		121
Avg Pay	$46,962	$52,348	$51,965	$60,522	$66,948	$74,053	$76,146		$60,468
50-54	1	3	11	5	8	2	1	1	32
Avg Pay	$27,984	$48,793	$52,645	$56,774	$66,531	$63,081	$82,902	$99,538	$58,693
55-59		2	1	2				1	6
Avg Pay		$48,645	$54,367	$49,316				$77,251	$54,590
60-64					1			2	3
Avg Pay					$74,419			$76,895	$76,070
65-69								1	1
Avg Pay								$86,457	$86,457
70 & over									
Avg Pay									
Totals	266	177	222	144	81	11	2	5	908
Avg Pay	$37,650	$48,915	$53,019	$58,077	$66,424	$71,696	$79,524	$83,407	$50,167

SCHEDULE F

SENSITIVITY ANALYSIS

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate and the rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 6.75% (Pension) and 7.50% (Insurance), together with a decrease in the discount rate to 5.75% (Pension) and 6.50% (Insurance) and an increase in the discount rate to 7.75% (Pension) and 8.50% (Insurance). Under this scenario, the underlying inflation rate assumption is held constant at 3.25% and the payroll growth assumption is held constant at 4.00%.
- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.25%, together with decreases in the inflation rate to 3.00% and 2.75%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption and the healthcare trend assumption for members hired before 7/1/2003.
- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 4.00%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Retirement			
Actuarial Accrued Liabiltiy	$ 858,463,312	$ 775,160,294	$ 705,336,816
Actuarial Value of Assets	234,567,536	234,567,536	234,567,536
Unfunded Liability	$ 623,895,776	$ 540,592,758	$ 470,769,280
Funded Ratio	27.32%	30.26%	33.26%
Contribution Rate	77.47%	71.57%	66.69%
Discount Rate	5.75%	6.75%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 290,891,533	$ 257,197,259	$ 229,660,924
Actuarial Value of Assets	172,703,691	172,703,691	172,703,691
Unfunded Liability	$ 118,187,842	$ 84,493,568	$ 56,957,233
Funded Ratio	59.37%	67.15%	75.20%
Contribution Rate	22.98%	18.10%	13.79%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%
SPRS Total			
Actuarial Accrued Liabiltiy	$ 1,149,354,845	$ 1,032,357,553	$ 934,997,740
Actuarial Value of Assets	407,271,227	407,271,227	407,271,227
Unfunded Liability	$ 742,083,618	$ 625,086,326	$ 527,726,513
Funded Ratio	35.43%	39.45%	43.56%
Contribution Rate	100.45%	89.67%	80.48%
Discount Rate	5.75%/6.50%	6.75%/7.50%	7.75%/8.50%
Payroll Growth	4.00%	4.00%	4.00%
Inflation Rate	3.25%	3.25%	3.25%

INFLATION ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Inflation Rate 25 basis points	Decrease Inflation Rate 50 basis points
Retirement			
Actuarial Accrued Liabiltiy	$ 775,160,294	$ 793,752,308	$ 813,188,375
Actuarial Value of Assets	234,567,536	234,567,536	234,567,536
Unfunded Liability	$ 540,592,758	$ 559,184,772	$ 578,620,839
Funded Ratio	30.26%	29.55%	28.85%
Contribution Rate	71.57%	74.42%	77.40%
Discount Rate	6.75%	6.50%	6.25%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
Insurance			
Actuarial Accrued Liabiltiy	$ 257,197,259	$ 257,644,168	$ 258,114,821
Actuarial Value of Assets	172,703,691	172,703,691	172,703,691
Unfunded Liability	$ 84,493,568	$ 84,940,477	$ 85,411,130
Funded Ratio	67.15%	67.03%	66.91%
Contribution Rate	18.10%	18.24%	18.40%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%
SPRS Total			
Actuarial Accrued Liabiltiy	$ 1,032,357,553	$ 1,051,396,476	$ 1,071,303,196
Actuarial Value of Assets	407,271,227	407,271,227	407,271,227
Unfunded Liability	$ 625,086,326	$ 644,125,249	$ 664,031,969
Funded Ratio	39.45%	38.74%	38.02%
Contribution Rate	89.67%	92.66%	95.80%
Discount Rate	6.75%/7.50%	6.50%/7.25%	6.25%/7.00%
Payroll Growth	4.00%	3.75%	3.50%
Inflation Rate	3.25%	3.00%	2.75%

PAYROLL GROWTH ASSUMPTION SENSITIVITY ANALYSIS

	Valuation Results	Decrease Payroll Growth 2%	No Payroll Growth
Retirement			
Actuarial Accrued Liabiltiy	$ 775,160,294	$ 775,160,294	$ 775,160,294
Actuarial Value of Assets	234,567,536	234,567,536	234,567,536
Unfunded Liability	$ 540,592,758	$ 540,592,758	$ 540,592,758
Funded Ratio	30.26%	30.26%	30.26%
Contribution Rate	71.57%	87.22%	105.30%
Discount Rate	6.75%	6.75%	6.75%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
Insurance			
Actuarial Accrued Liabiltiy	$ 257,197,259	$ 257,197,259	$ 257,197,259
Actuarial Value of Assets	172,703,691	172,703,691	172,703,691
Unfunded Liability	$ 84,493,568	$ 84,493,568	$ 84,493,568
Funded Ratio	67.15%	67.15%	67.15%
Contribution Rate	18.10%	20.40%	22.96%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%
SPRS Total			
Actuarial Accrued Liabiltiy	$ 1,032,357,553	$ 1,032,357,553	$ 1,032,357,553
Actuarial Value of Assets	407,271,227	407,271,227	407,271,227
Unfunded Liability	$ 625,086,326	$ 625,086,326	$ 625,086,326
Funded Ratio	39.45%	39.45%	39.45%
Contribution Rate	89.67%	107.62%	128.26%
Discount Rate	6.75%/7.50%	6.75%/7.50%	6.75%/7.50%
Payroll Growth	4.00%	2.00%	0.00%
Inflation Rate	3.25%	3.25%	3.25%

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GASB STATEMENT NO. 67 REPORT

FOR THE

KENTUCKY EMPLOYEES RETIREMENT SYSYTEM

PREPARED AS OF JUNE 30, 2016

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CONSULTING, LLC
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August 30, 2016

Board of Trustees
Kentucky Retirement System
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Ladies and Gentlemen:

Presented in this report is information to assist the Kentucky Employees Retirement System in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. The information is presented for the period ending June 30, 2016.

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2015. The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems staff, concerning active, inactive and retired members along with pertinent financial information.

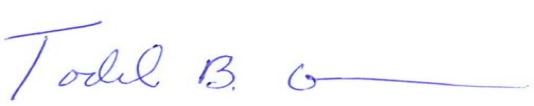
To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 67.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Respectfully submitted,



Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Beverly V. Bailey, ASA, EA, FCA, MAAA
Senior Actuary

TBG:bvb

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REPORT OF THE ANNUAL GASB STATEMENT NO. 67
REQUIRED INFORMATION FOR THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 2016

SECTION I – INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "*Financial Reporting For Pension Plans*", in June 2012. GASB 67's effective date is for plan years beginning after June 15, 2013. This report, prepared as of June 30, 2014 (the Measurement Date), presents information to assist the Kentucky Employees Retirement System in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of the County Employees Retirement System as of June 30, 2015. The results of that valuation were detailed in a report dated November 10, 2015.

GASB 67 basically divorces accounting and funding, creating disclosure and reporting requirements that may or may not be consistent with the basis used for funding the System.

A major change in GASB 67 is the requirement to determine the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. The Net Pension Liability (NPL) is then set equal to the TPL minus the System's Fiduciary Net Position (FNP) (basically the market values of assets). The benefit provisions recognized in the calculation of the TPL are summarized in Schedule B.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR). To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provision applicable to the membership and beneficiaries of the System on the Measurement Date. If the FNP is projected to not be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. The rate used, if necessary, for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index published monthly by the Board of Governors of the Federal Reserve System.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information (RSI).

SECTION II – FINANCIAL STATEMENT NOTES

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30(a) (1)-(3): The information required is to be supplied by the System.

Paragraph 30(a) (4): The data required regarding the membership of the Kentucky Employees Retirement System were furnished by the Kentucky Retirement Systems office. The following table summarizes the membership of the system as of June 30, 2015, the Valuation Date.

Membership

	Non-Hazardous	Hazardous
Inactive Members Or Their Beneficiaries Currently Receiving Benefits	40,099	2,739
Inactive Members Entitled To But Not Yet Receiving Benefits	43,929	4,067
Active Members	38,121	3,987
Total	122,149	10,793

Paragraphs 30(a)(5)-(6) and Paragraphs 30(b)-(f): The information required is to be supplied by the System.

Paragraphs 31(a) (1)-(4): The information is provided in the following table. As stated above, the NPL is equal to the TPL minus the FNP. That result as of June 30, 2016 is presented in the table below.

Fiscal Year End June 30, 2016

	Non-Hazardous	Hazardous
Total Pension Liability	$13,379,781,165	$919,517,466
Fiduciary Net Position	1,980,292,118	527,879,431
Net Pension Liability	$11,399,489,047	$391,638,035
Ratio of Fiduciary Net Position to Total Pension Liability	14.80%	57.41%

Paragraph 31(b) (1)(a)-(f): This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The total pension liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.25 percent
Salary increases	4.0 percent, average, including inflation
Investment rate of return	Non-Hazardous – 6.75 percent, net of pension plan investment expense, including inflation Hazardous – 7.50 percent, net of pension plan investment expense, including inflation

The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

The actuarial assumptions used in the June 30, 2015 valuation were based on the results of an actuarial experience study for the period July 1, 2008 – June 30, 2013. The long term assumed rate of return for the non-hazardous system is based on an analysis adopted by the Board on December 3, 2015.

Paragraph 31.b.(1)

(a) Discount rate: The discount rate used to measure the total pension liability was 6.75% for non-hazardous system, and 7.50% for the hazardous system

(b) Projected cash flows: The projection of cash flows used to determine the discount rate assumed that the employer would contribute the actuarially determined contribution rate of projected compensation. The remaining amortization period of the unfunded actuarial accrued liability is 28 years. Once the unfunded actuarial accrued liability is fully amortized, the employer will only contribute the normal cost rate and the administrative expense rate on the closed payroll for existing members.

(c) Long term rate of return: The long-term expected return on plan assets is reviewed as part of the regular experience studies prepared every five years for the System. The most recent analysis, is dated December 3, 2015. Several factors are considered in evaluating the long-term rate of return assumption including long term historical data, estimates

inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed by the investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The assumption is intended to be a long term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

(d) Municipal bond rate: the discount rate determination does not use a municipal bond rate.

(e) Periods of projected benefit payments: projected future benefit payments for all current plan members were projected through 2117.

(f) Assumed Asset Allocation: The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Non-Hazardous

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Combined Equity	50%	5.30%
Intermediate Duration Fixed Income	11	1.00
Custom KRS Fixed Income	11	3.33
Core Real Estate	5	4.25
Diversified Hedge Funds	10	4.00
Private Equity	2	8.00
Diversified Inflation Strategies	8	3.15
Cash Equivalent	3	-0.25
Total	100%	

Hazardous

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Combined Equity	44%	5.40%
Combined Fixed Income	19	1.50
Real Return (Diversified Inflation Strategies)	10	3.50
Real Estate	5	4.50
Absolute Return (Diversified Hedge Funds)	10	4.25
Private Equity	10	8.50
Cash Equivalent	2	-0.25
Total	100%	

Paragraph 31(b) (1) (g): This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.75 percent) or 1-percentage-point higher (7.75 percent) than the current rate for non-hazardous and 1-percentage-point lower (6.50 percent) or 1-percentage-point higher (8.50 percent) than the current rate for hazardous:

Non-Hazardous

	1% Decrease (5.75%)	Current Discount Rate (6.75%)	1% Increase (7.75%)
System's net pension liability	$12,842,328,478	$11,399,489,047	$10,186,892,118

Hazardous

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
System's net pension liability	$492,060,681	$391,638,035	$307,344,933

Paragraph 31(c): June 30, 2015 is the actuarial valuation date upon which the TPL is based. An expected TPL is determined as of June 30, 2016 using standard roll forward techniques. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the expected investment rate of return for the year. The procedure was used to determine the TPL as of June 30, 2016, as shown in the tables on the following page:

Non-Hazardous

	TPL Roll Forward	(1) TPL Reported for Fiscal Year Ended 2015	(2) TPL Reported for Fiscal Year Ended 2016
(a)	Interest Rate	7.50%	6.75%
(b)	Valuation Date for Measurement	June 30, 2015	June 30, 2015
(c)	TPL as of June 30, 2015	$12,359,672,850	$13,286,504,101
(d)	Entry Age Normal Cost for the period July 1, 2015 – June 30, 2016	$129,888,955	$153,093,139
(e)	Actual Benefit Payments and Refunds for the period July 1, 2015 – June 30, 2016	$935,418,514	$935,418,514
(f)	TPL as of July 1, 2016 =[(c+d) x (1 + (a))] – [e x (1 + (a)/2)]	$12,455,782,232	$13,379,781,165
(g)	Assumption Change: =(2f) – (1f)		$923,998,933

Hazardous

	TPL Roll Forward	TPL Reported for Fiscal Year Ended 2016
(a)	Interest Rate	7.50%
(b)	Valuation Date for Measurement	June 30, 2015
(c)	TPL as of June 30, 2015	$895,433,386
(d)	Entry Age Normal Cost for the period July 1, 2015 – June 30, 2016	$19,303,269
(e)	Actual Benefit Payments and Refunds for the period July 1, 2015 – June 30, 2016	$61,517,531
(f)	TPL as of July 1, 2016 =[(c+d) x (1 + (a))] – [e x (1 + (a)/2)]	$919,517,466

SECTION III – REQUIRED SUPPLEMENTARY INFORMATION

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 32(a)-(c): The required tables are provided in Schedule A.
Paragraph 32(d): The money-weighted rates of return required are to be supplied by the System.

Paragraph 34: In addition the following should be noted regarding the RSI:

Changes of benefit terms: none.

Changes of assumption: The following changes were adopted by the Board and reflected in the valuation performed as of June 30, listed below:

2016

- The assumed investment rate of return was decreased from 7.50% to 6.75% for the non-hazardous system.

2015

- The assumed investment rate of return was decreased from 7.75% to 7.50%.
- The assumed rate of inflation was reduced from 3.50% to 3.25%.
- The assumed rate of wage inflation was reduced from 1.00% to 0.75%.
- Payroll growth assumption was reduced from 4.50% to 4.00%.
- The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).
- For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.
- The assumed rates of Retirement, Withdrawal and Disability were updated to more accurately reflect experience.

Method and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates are determined on an annual basis. The amortization period of the unfunded liability has been reset as of July 1, 2013 to a closed 30-year period. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll, closed
Remaining amortization period	28 years
Asset valuation method	5-year smoothed market
Inflation	3.25 percent
Salary increase	4.00 percent, average, including inflation
Investment rate of return	6.75 percent for non-hazardous system and 7.50 percent for hazardous system, net of pension plan investment expense, including inflation

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)

Non-Hazardous

	2016	2015	2014
Total pension liability			
Service Cost	139,630,627	143,847,136	133,361,104
Interest	891,897,269	859,509,007	853,653,041
Benefit changes	0	0	0
Difference between expected and actual experience	0	30,957,685	0
Changes of assumptions	923,998,933	694,591,653	0
Benefit payments	(923,288,211)	(905,790,711)	(889,936,676)
Refunds of contributions	(12,130,303)	(13,552,144)	(13,627,058)
Net change in total pension liability	1,020,108,316	809,562,626	83,450,411
Total pension liability - beginning	$12,359,672,850	$11,550,110,224	$11,466,659,813
Total pension liability - ending (a)	$13,379,781,165	$12,359,672,850	$11,550,110,224
Plan net position			
Contributions - employer	513,083,951	521,690,774	296,836,047
Contributions - member	106,494,615	104,605,517	97,487,002
Net investment income	(20,662,546)	44,570,243	337,922,810
Benefit payments	(923,288,211)	(905,790,711)	(889,936,676)
Administrative expense	(10,988,559)	(10,473,878)	(11,144,929)
Refunds of contributions	(12,130,303)	(13,552,144)	(13,627,058)
Other	0	8,442,347	0
Net change in plan net position	(347,491,053)	(250,507,852)	(182,462,804)
Plan net position - beginning	$2,327,783,192	$2,578,291,044	$2,760,753,848
Prior Year Adjustment	(21)	0	0
Plan net position - ending (b)	$1,980,292,118	$2,327,783,192	$2,578,291,044
Net pension liability - ending (a) - (b)	$11,399,489,047	$10,031,889,658	$8,971,819,180

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)

Hazardous

	2016	2015	2014
Total pension liability			
Service Cost	$20,751,014	$18,729,024	$16,879,844
Interest	64,850,597	61,004,803	59,593,762
Benefit changes	0	0	0
Difference between expected and actual experience	0	6,066,657	0
Changes of assumptions	0	52,165,476	0
Benefit payments	(59,306,326)	(56,773,173)	(54,320,196)
Refunds of contributions	(2,211,205)	(2,609,464)	(2,830,410)
Net change in total pension liability	24,084,080	78,583,323	19,323,000
Total pension liability - beginning	$ 895,433,386	$ 816,850,063	$ 797,527,063
Total pension liability - ending (a)	$ 919,517,466	$ 895,433,386	$ 816,850,063
Plan net position			
Contributions - employer	23,759,468	28,535,889	11,670,477
Contributions - member	15,738,660	13,206,678	12,546,269
Net investment income	(1,652,805)	8,701,319	80,724,114
Benefit payments	(59,306,326)	(56,773,173)	(54,320,196)
Administrative expense	(916,264)	(844,208)	(897,111)
Refunds of contributions	(2,211,205)	(2,609,464)	(2,830,410)
Other	0	767,141	0
Net change in plan net position	(24,588,472)	(9,015,818)	46,893,143
Plan net position - beginning	$ 552,467,909	$ 561,483,727	$ 514,590,584
Prior Year Adjustment	(6)	0	0
Plan net position - ending (b)	$ 527,879,431	$ 552,467,909	$ 561,483,727
Net pension liability - ending (a) - (b)	$ 391,638,035	$ 342,965,477	$ 255,366,336

SCHEDULE OF THE NET PENSION LIABILITY
GASB 67 Paragraph 32(b)

Non-Hazardous

	2016	2015	2014
Total pension liability	$13,379,781,165	$12,359,672,850	$11,550,110,224
Plan net position	1,980,292,118	2,327,783,192	2,578,291,044
Net pension liability	$11,399,489,047	$10,031,889,658	$8,971,819,180
Ratio of plan net position to total pension liability	14.80%	18.83%	22.32%
Covered-employee payroll	$1,631,024,978	$1,544,234,409	$1,577,496,447
Net pension liability as a percentage of covered-employee payroll	698.92%	649.64%	568.74%

Hazardous

	2016	2015	2014
Total pension liability	$919,517,466	$895,433,386	$816,850,063
Plan net position	527,879,431	552,467,909	561,483,727
Net pension liability	$391,638,035	$342,965,477	$255,366,336
Ratio of plan net position to total pension liability	57.41%	61.70%	68.74%
Covered-employee payroll	$158,827,651	$128,680,130	$129,076,000
Net pension liability as a percentage of covered-employee payroll	246.58%	266.53%	197.84%

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 67 Paragraph 32(c)
($ Thousands)

Non-Hazardous

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Actuarially determined employer contribution	$512,670	$520,948	$520,765	$485,396	$441,094	$381,915	$348,495	$294,495	$264,743	$176,774
Actual employer contributions	513,084	521,691	296,836	280,874	214,786	193,754	144,051	112,383	104,655	88,249
Annual contribution deficiency (excess)	($414)	($743)	$223,929	$204,522	$226,308	$188,161	$204,444	$182,112	$160,088	$88,525
Covered-employee payroll	$1,631,025	$1,544,234	$1,577,496	$1,644,409	$1,644,897	$1,731,633	$1,815,146	$1,754,413	$1,837,873	$1,780,223
Actual contributions as a percentage of covered-employee payroll	31.46%	33.78%	18.82%	17.08%	13.06%	11.19%	7.94%	6.41%	5.69%	4.96%

Hazardous

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Actuarially determined employer contribution	$23,690	$28,374	$13,570	$21,502	$20,265	$20,605	$17,815	$15,708	$14,147	$12,220
Actual employer contributions	23,759	28,536	11,670	27,334	20,809	19,141	17,658	15,843	15,257	13,237
Annual contribution deficiency (excess)	($69)	($162)	$1,900	($5,832)	($544)	$1,465	$157	($135)	($1,110)	($1,018)
Covered-employee payroll	$158,828	$128,680	$129,076	$131,015	$131,977	$133,054	$143,558	$146,044	$148,710	$144,838
Actual contributions as a percentage of covered-employee payroll	14.96%	22.18%	9.04%	20.86%	15.77%	14.39%	12.30%	10.85%	10.26%	9.14%

SCHEDULE B

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Members whose participation began before 8/1/2004

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For those members who retired between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008

Age Requirement	65
Service Requirement	At least one month of non-hazardous duty service credit
Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Normal Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.
Amount	The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ – 20 years	1.30%
20+ – 26 years	1.50%
26+ – 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete

fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Members whose participation began on or after 1/1/2014

Requirement

Age 65 with 60 months of non-hazardous duty service credit, or age 57 if age plus service equals at least 87.

Amount

Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 5.00% and 4.00% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year.

Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Hazardous Normal Retirement:

Members whose participation began before 9/1/2008

Age Requirement — 55

Service Requirement — At least one month of hazardous duty service credit

Amount — If a member has at least 60 months of service, the monthly benefit is 2.49% multiplied by final average compensation, multiplied by years of service.

Final compensation is calculated by taking the average of the highest three (3) fiscal years of salary. If the number of months of service credit during the three (3) year period is less than twenty-four (24), one (1) or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Age Requirement — 60

Service Requirement — At least 60 months of hazardous duty service credit

Amount — The monthly benefit is the following benefit factor based on service credit at retirement, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.30%
10+ – 20 years	1.50%
20+ – 25 years	2.25%
25+ years	2.50%

Final compensation is calculated by taking the average of the highest three (3) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Hazardous Normal Retirement (continued):

Members whose participation began on or after 1/1/2014

Age Requirement	60
Service Requirement	At least 60 months of hazardous duty service credit or 25 or more years of service, with no age requirement
Amount	Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Non-Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 55 with 60 months of service or any age with 25 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Non-Hazardous Early Retirement (continued):

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 60 with 10 years of service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than age 57, whichever is smaller.

Hazardous Early Retirement:

Members whose participation began before 9/1/2008

Requirement	Age 50 with 15 years of service or any age with 20 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Members whose participation began on or after 9/1/2008 but before 1/1/2014

Requirement	Age 50 with 15 years of service or any age with 25 years service.
Amount	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 60 or has less than 25 years service, whichever is smaller.

Non-Hazardous Disability:

Age Requirement	None
Service Requirement	60 months

Members whose participation began before 8/1/2004	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

Non-Hazardous Disability (continued):

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Hazardous Disability:

Age Requirement	None
Service Requirement	60 months (waived if in line of duty disability)

Members whose participation began before 8/1/2004

Normal retirement benefit except if the member's total service credit is less than 20 years, service credit will be added for the period from the last day of paid employment to the member's 55th birthday.

The maximum service credit added will not exceed the total service the member had on this last day of paid employment and the maximum service credit for calculating his retirement allowance, including total service and service added will not exceed 20 years. May not apply if eligible for an unreduced retirement allowance.

A member in a hazardous position who is disabled in the line of duty is entitled to the normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty), except that the monthly retirement allowance payable shall not be less than 25% of the member's monthly final monthly rate of pay. Each dependent child shall receive 10% of the disabled member's monthly final rate of pay; however the total maximum dependent children's benefit shall not exceed 40% of the member's monthly final rate of pay.

Hazardous Disability (continued):

Members whose participation began on or after 8/1/2004 but before 1/1/2014

Normal retirement benefit based on years of service and final compensation determined as of the date of disability (no penalty) or, if larger, 25% of the member's monthly final rate of pay. May apply for disability even after normal retirement age.

Members whose participation began on or after 1/1/2014

The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Vesting:

Members whose participation began before 9/1/2008

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Members whose participation began on or after 9/1/2008 but before 1/1/2014	
Age Requirement	None
Service Requirement	60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits. Recontribution of refunds and omitted service purchases are the exception to this rule for service requirement.
Amount	Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.
Normal Retirement Age	65 for non-hazardous members and 60 for hazardous members.
Members whose participation began on or after 1/1/2014	
Age Requirement	None
Service Requirement	60 months.
Amount	Upon termination the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or the member can elect to leave the hypothetical account balance in the System. If the member does not withdraw the account balance, it will continue to earn 4% interest. Upon reaching normal retirement age the member can apply for retirement and receive the account balance as a lump sum payment or annuitize the account balance into a single life annuity.

Pre-Retirement Death Benefit (not in line of duty):

Members whose participation began before 1/1/2014

Requirement	Eligible for Normal or Early Retirement, or any age in active employment with 60 months service, or any age and not in active employment with at least 144 months of service.
Amount	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than normal retirement age at the date of death.

Members whose participation began on or after 1/1/2014

Requirement	60 months service
Amount	The maximum of the benefit equal to the benefit the member would have received had the member retired on the day before the date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement	None
Amount	The spouse may choose (1) a $10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefit options offered under death not in line of duty.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

Requirement	None
Amount	The non-spouse may choose (1) a $10,000 lump sum payment or (2) benefit options offered under death not in line of duty.

Dependent Child's Death Benefit (in line of duty):

Requirement	None
Amount	10% of member's final monthly rate of pay. Dependent child payments cannot exceed 40% of the member's monthly final rate of pay.

Post-Retirement Death Benefit:

Requirement	Retired member in receipt of monthly benefit based on at least 48 months or more of combined service with KERS, CERS or SPRS.
Amount	$5,000

Non-Hazardous Member Contributions:

Members whose participation began before 9/1/2008	5% of all creditable compensation. Interest paid on the members' accounts is currently 2.5% shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Non-Hazardous Member Contributions (continued):

Members whose participation began on or after 1/1/2014	6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Hazardous Member Contributions:

Members whose participation began before 9/1/2008	8% of all creditable compensation. Interest paid on the members' accounts is currently set at 2.5% and per statute, shall not be less than 2.0%. Member entitled to a full refund of contributions with interest.
Members whose participation began on or after 9/1/2008 and up to 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Member entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.
Members whose participation began on or after 1/1/2014	9% of all creditable compensation, with 8% being credited to the member's account and 1% deposited to the KRS 401(h) Account. Member entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014.

INVESTMENT RATE OF RETURN: 7.50% per annum (Hazardous Plan) and 6.75% per annum (Non-Hazardous Plan), compounded annually for retirement and insurance benefits.

PRICE INFLATION: 3.25% per annum, compounded annually.

PAYROLL GROWTH: 4.00% per annum, compounded annually.

SALARY INCREASES: The assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 4.00% per annum:

Service Years	Annual Rates of Salary Increases				
	Merit & Seniority		Base (Economy)	Increase Next Year	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0-1	12.02%	15.87%	4.00%	16.50%	20.50%
1-2	4.33%	4.33%	4.00%	8.50%	8.50%
2-3	1.92%	2.40%	4.00%	6.00%	6.50%
3-4	1.44%	1.92%	4.00%	5.50%	6.00%
4-5	1.44%	1.44%	4.00%	5.50%	5.50%
5-6	1.44%	0.96%	4.00%	5.50%	5.00%
6-7	0.96%	0.48%	4.00%	5.00%	4.50%
7-8	0.96%	0.48%	4.00%	5.00%	4.50%
8-9	0.96%	0.48%	4.00%	5.00%	4.50%
9-10	0.48%	0.48%	4.00%	4.50%	4.50%
10 & Over	0.48%	0.48%	4.00%	4.50%	4.50%

DISABILITY: Representative assumed annual rates of disability for both non-hazardous and hazardous members are as follows:

Nearest Age	Annual Rates of Disability			
	Non-Hazardous		Hazardous	
	Male	Female	Male	Female
20	0.02%	0.02%	0.03%	0.03%
30	0.03%	0.03%	0.05%	0.05%
40	0.07%	0.07%	0.10%	0.10%
50	0.19%	0.19%	0.28%	0.28%
60	0.49%	0.49%	0.73%	0.73%

RETIREMENT: The assumed annual rates of retirement for both non-hazardous and hazardous members are as follows:

Annual Rates of Retirement					
Non-Hazardous			Hazardous		
Age	Those Eligible for Service Retirement*	Those Eligible for Service Retirement**	Service	Those Eligible for Service Retirement+	Those Eligible for Service Retirement++
55	8.0%		20	40.0%	
56	8.0%		21	40.0%	
57	8.0%		22	40.0%	
58	8.0%		23	40.0%	
59	8.0%		24	40.0%	
60	10.0%	10.0%	25	47.0%	40.0%
61	20.0%	20.0%	26	47.0%	40.0%
62	20.0%	20.0%	27	47.0%	40.0%
63	20.0%	20.0%	28	47.0%	40.0%
64	20.0%	20.0%	29	47.0%	40.0%
65	20.0%	25.0%	30	47.0%	47.0%
66	20.0%	25.0%	31	47.0%	47.0%
67	20.0%	25.0%	32	50.0%	47.0%
68	20.0%	25.0%	33	50.0%	47.0%
69	20.0%	25.0%	34	50.0%	47.0%
70	20.0%	25.0%	35	60.0%	47.0%
71	20.0%	25.0%	36	60.0%	47.0%
72	20.0%	25.0%	37	60.0%	50.0%
73	20.0%	25.0%	38	60.0%	50.0%
74	20.0%	25.0%	39	60.0%	50.0%
75	100.0%	100.0%	40	60.0%	60.0%

** For members participating before September 1, 2008. If service is at least 27 years, the rate is 35%.*

*** For members participating on or after September 1, 2008. If age plus service is at least 87, the rate is 35%.*

+ For members participating before September 1, 2008. The annual rate of service retirement is 100% at age 65.

++ For members participating on or after September 1, 2008. The annual rate of service retirement is 100% at age 60.

WITHDRAWAL: The assumed annual rates of withdrawal for both non-hazardous and hazardous members are as follows:

Service Years	Annual Rates of Withdrawal	
	Non-Hazardous	Hazardous
0-1	22.50%	25.00%
1-2	15.50%	10.50%
2-3	12.50%	7.50%
3-4	10.50%	6.50%
4-5	9.00%	5.50%
5-6	6.50%	4.50%
6-7	5.50%	3.00%
7-8	5.00%	3.00%
8-9	4.50%	3.00%
9-10	4.50%	2.50%
10-11	4.00%	2.50%
11-13	4.00%	2.00%
13-15	3.50%	2.00%
15 & Over	3.00%	2.00%

DEATH BEFORE RETIREMENT: The rates of mortality for the period before retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females) for all healthy retired members and beneficiaries. The RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. These assumptions are used to measure the probabilities of each benefit payment being made after retirement. These assumptions contain margin for mortality improvements.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

FORM OF PAYMENT: Participants are assumed to elect a life-only form of payment.

ASSET VALUATION METHOD: For funding purposes, five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate

assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. For GASB 67 purposes, market value of assets.

ACTUARIAL COST METHOD: Costs were determined using the Entry Age Normal, Level Percentage of Pay Actuarial Cost Method. Under this method, a calculation is made for retirement benefits to determine the uniform and constant percentage rate of contribution which, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would be required to meet the cost of benefits payable. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

MULTIPLE STATUS/MULTIPLE SYSTEM MEMBERS: Some members may be represented under more than one retirement system and/or may have more than one status (e.g., active in one system, deferred vested in another and retired from a different system). For pension purposes, members that are active in one System but have service in another are assumed to retire from the System in which they are currently active. Any deferred pension benefits from another System are assumed to begin once the member terminates from their current active position. The insurance liabilities for multiple status/multiple system members are calculated assuming only one benefit is payable across all Systems and that benefit is payable from the combination of status and System which produces the highest economic value to the member.

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December 4, 2017

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Certification of the June 30, 2017 Actuarial Valuation Results

Dear Trustees of the Board:

Enclosed are the June 30, 2017 actuarial valuation reports for the Kentucky Employees Retirement System (KERS), the County Employees Retirement System (CERS), and the State Police Retirement System (SPRS). These reports provide the current actuarial and financial condition of the Kentucky Retirement Systems (KRS), as well as communicate the actuarially determined employer contribution rates.

Under Kentucky Statute, the Board of Trustees must approve the employer contribution rates. For KERS and CERS, these certified contribution rates will be effective for the two-year period beginning July 1, 2018 and ending June 30, 2020. The certified contribution rates for CERS will be effective for the fiscal year beginning July 1, 2018 and ending June 30, 2019.

These contribution rates are calculated based on the membership data and plan assets as of June 30, 2017. These calculations are also based on the benefit provisions in effect as of June 30, 2017. If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board may adjust the calculated rates to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

FINANCING OBJECTIVES AND FUNDING POLICY

KRS administers a pension and health insurance fund to provide for monthly retirement income and retiree health insurance benefits. The total employer contribution rate is comprised of a contribution to each respective fund.

The contribution rate for each fund consists of a normal cost that is net of employee contributions and an amortization payment on the unfunded actuarial accrued liability (UAAL). In accordance with Section 61.565 of Kentucky Statute, the amortization payment is based on a closed thirty-year amortization period beginning July 1, 2013. As a result, the amortization period used in the 2017 actuarial valuation is 26 years. The amortization period used in subsequent actuarial valuations will decrease by one each future year.

Due to changes in certain economic assumptions adopted by the Board for use in the June 30, 2017 actuarial valuation, the contribution rates for the retirement and health insurance funds have sustainably increased from those in currently in effect. However, the contribution rates determined under these new assumptions are more likely to remain stable, as a percentage of payroll in future years (absent benefit improvements and experience losses).

PROGRESS TOWARDS REALIZATION OF FUNDING OBJECTIVES

One way to measure the progress towards achieving the intended funding objective is to measure the relationship between the actuarial value of assets and the actuarial accrued liabilities for each fund. This relationship is referred to as the funded ratio and should increase over time (absence of benefit improvements) with the goal of attaining 100%.

The funded ratio as June 30, 2016 for the retirement and health insurance funds of each System are as follows:

System	Funded Ratio (AVA / AAL)	
	Retirement Fund	Health Insurance Fund
KERS Non-Hazardous	13.6%	30.7%
KERS Hazardous	54.1%	117.6%
CERS Non-Hazardous	52.8%	66.4%
CERS Hazardous	48.1%	66.9%
SPRS	27.0%	65.2%

The funding levels for the retirement funds have decreased since the prior year primarily due to the decrease in the assumed rate of return assumption (discussed in more detail later) for use in the June 30, 2017 actuarial valuation. The future improvement of the financial health of these systems will be very dependent on the employers paying the actuarially determined contribution rates in all future years.

In particular, during the last fiscal year KERS non-hazardous pension fund distributed $960 million in benefit payments and received $858 million in employer and employee contributions (excluding contributions to the 401(h)). As of June 30, 2017, the market value of assets for this system was $2,057 million (excluding assets in the 401(h)). To stabilize the financial condition of this system and reduce the likelihood that plan assets will become exhausted, it is imperative that contributions to the system exceed the benefit payments. The employer contribution rate to the retirement fund that is documented in the KERS is projected increase the total employer and member contributions to $1,164 million for each of the next two fiscal years (i.e. FY 2018-19 and FY 2019-20). If these employer contributions are not made to this system, then the financial condition of this retirement system is expected to continue to deteriorate and there will be a significant risk of plan assets being exhausted.

Assumptions and Methods

Kentucky Statutes requires that an actuarial investigation be performed at least every five years to review the economic and demographic assumptions. An experience study was conducted as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018. However, the Board has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study.

Since the last actuarial valuation the Board adopted changes to certain economic assumptions for KERS, CERS and SPRS. Specifically, the Board decreased the price inflation assumption to 2.30% for all funds. The assumed rate of return was decreased to 5.25% for the KERS non-hazardous retirement fund and the SPRS retirement fund. The assumed rate of return was decreased to 6.25% for the KERS hazardous retirement fund, CERS (non-hazardous and hazardous) retirement funds, and all the insurance funds for KERS, CERS, and SPRS. Furthermore, the Board decreased the payroll growth assumption to 2.00% for all the CERS funds (retirement and health insurance) and adopted a 0.00% payroll growth assumption for calculating the amortization payment for all the KERS and SPRS funds (retirement and health insurance).

It is our opinion that the current assumptions are internally consistent and reasonably reflect the anticipated future experience of the System.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

Benefit Provisions

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2017. There were no legislative changes enacted since the previous valuation that had a measurable effect on the current valuation.

Data

Member data for retired, active and inactive members was supplied as of June 30, 2017, by the KRS staff. The staff also supplied asset information as of June 30, 2017. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by KRS.

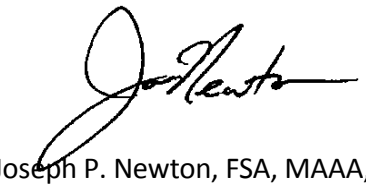
CERTIFICATION

We certify that the information presented herein is accurate and fairly portrays the actuarial position of KERS as of June 30, 2017.All of our work conforms with generally accepted actuarial principles and practices, and is in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

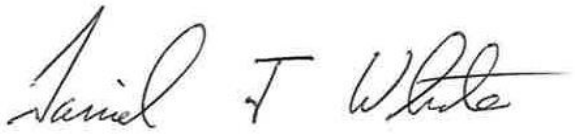
The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,

Gabriel, Roeder, Smith & Co.



Joseph P. Newton, FSA, MAAA, EA
Senior Consultant



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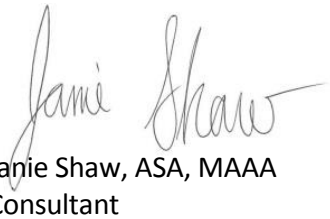
Senior Consultant



Janie Shaw, ASA, MAAA
Consultant

Summary of June 30, 2017 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Contributions for next fiscal year:					
Pension Fund Contribution	71.03%	34.39%	21.84%	35.69%	119.05%
Insurance Fund Contribution	12.40%	2.46%	6.21%	12.17%	27.23%
Total Recommended Employer Contribution	83.43%	36.85%	28.05%	47.86%	146.28%
Assets:					
Retirement					
• Actuarial value (AVAR)	$2,123,623,157	$607,158,871	$6,764,873,113	$2,238,320,330	$261,320,225
• Market value (MVAR)	$2,056,869,899	$601,528,922	$6,687,237,095	$2,217,996,136	$255,736,583
• Ratio of actuarial to market value of assets	103.2%	100.9%	101.2%	100.9%	102.2%
Insurance					
• Actuarial value (AVAI)	$823,917,560	$493,458,367	$2,227,401,268	$1,196,779,877	$180,463,820
• Market value (MVAI)	$817,369,841	$488,838,463	$2,212,535,662	$1,189,001,387	$178,838,260
• Ratio of actuarial to market value of assets	100.8%	100.9%	100.7%	100.7%	100.9%
Funded Status:					
Retirement					
• Actuarial accrued liability	$15,591,641,083	$1,121,419,836	$12,803,509,449	$4,649,046,764	$967,144,667
• Unfunded accrued liability on AVAR	$13,468,017,926	$514,260,965	$6,038,636,336	$2,410,726,434	$705,824,442
• Funded ratio on AVAR	13.6%	54.1%	52.8%	48.1%	27.0%
• Unfunded accrued liability on MVAR	$13,534,771,184	$519,890,914	$6,116,272,354	$2,431,050,628	$711,408,084
• Funded ratio on MVAR	13.2%	53.6%	52.2%	47.7%	26.4%
Insurance					
• Actuarial accrued liability	$2,683,496,055	$419,439,652	$3,355,151,286	$1,788,432,768	$276,641,361
• Unfunded accrued liability on AVAI	$1,859,578,495	($74,018,715)	$1,127,750,018	$591,652,891	$96,177,541
• Funded ratio on AVAI	30.7%	117.6%	66.4%	66.9%	65.2%
• Unfunded accrued liability on MVAI	$1,866,126,214	($69,398,811)	$1,142,615,624	$599,431,381	$97,803,101
• Funded ratio on MVAI	30.5%	116.5%	65.9%	66.5%	64.6%
Membership:					
• Number of					
- Active Members	37,234	4,047	82,198	9,495	903
- Retirees and Beneficiaries	44,916	4,093	59,013	8,998	1,536
- Inactive Members	49,658	5,298	85,031	3,198	480
- Total	131,808	13,438	226,242	21,691	2,919
• Projected payroll of active members	$1,531,534,820	$162,418,070	$2,452,407,113	$541,632,946	$48,598,296
• Average salary of active members	$41,133	$40,133	$29,835	$57,044	$53,819

Kentucky Employees Retirement System (KERS)

Actuarial Valuation Report
as of June 30, 2017

GRS Retirement Consulting

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December 4, 2017

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Actuarial Valuation as of June 30, 2017

Dear Trustees of the Board:

This report describes the current actuarial condition of the Kentucky Employees Retirement System (KERS), determines the required employer contribution rates, and analyzes changes in the System's financial condition. In addition, the report provides various summaries of the data. Separate reports are issued with regard to valuation results determined in accordance with Governmental Accounting Standards Board (GASB) Statements 67, 68, 74 and 75. Results of this report should not be used for any other purpose without consultation with the undersigned. Valuations are prepared annually as of June 30, the first day of the plan year for KRS. This report was prepared at the request of the Board of Trustees of the Kentucky Retirement System (Board) and is intended for use by the KRS staff and those designated or approved by the Board.

FINANCING OBJECTIVES AND FUNDING POLICY

The employer contribution rate is determined in accordance with Section 61.565 of Kentucky Statute. As specified by the Statute, the employer contribution rate is determined based on a closed thirty-year amortization period beginning July 1, 2013. As a result, the amortization period used in the 2017 actuarial valuation is 26 years. The contribution rate determined by this actuarial valuation becomes effective twelve months after the valuation date and is effective for two fiscal years. In other words, the contribution rate determined by this June 30, 2017 actuarial valuation will be used by the Board to certify the Commonwealth's contribution rates for the biennium period beginning July 1, 2018 and ending June 30, 2020.

If new legislation is enacted between the valuation date and the date the contribution rate becomes effective, the Board may adjust the calculated rate before certifying them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

ASSUMPTIONS AND METHODS

Kentucky Statutes also requires that an actuarial investigation be performed at least every five years to review the economic and demographic assumptions. An experience study was conducted

as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018. However, the Board has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study. Subsequent to the last actuarial valuation the Board decreased the price inflation assumption to 2.30% and changed the amortization of the unfunded actuarial accrued liability for the KERS Non-Hazardous and Hazardous Systems (Retirement and Health Insurance) to be based on a 0.00% payroll growth assumption (i.e. on a level dollar basis), but employers will continue to contribute to the System as a percentage of covered payroll. Additionally, the assumed rate of return was decreased to 6.25% for the KERS Hazardous Retirement and both KERS Health Insurance Funds, and the assumed rate of return was decreased to 5.25% for the KERS Non-Hazardous Retirement Fund. It is our opinion that the current assumptions are internally consistent and reasonably reflect the anticipated future experience of the System.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

BENEFIT PROVISIONS

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2017. There were no legislative changes enacted since the previous valuation that had a measurable effect on the current valuation.

DATA

Member data for retired, active and inactive members was supplied as of June 30, 2017, by the KRS staff. The staff also supplied asset information as of June 30, 2017. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by KRS.

CERTIFICATION

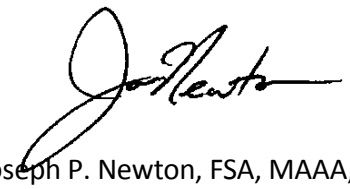
We certify that the information presented herein is accurate and fairly portrays the actuarial position of KERS as of June 30, 2017.

All of our work conforms with generally accepted actuarial principles and practices, and is in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,

Gabriel, Roeder, Smith & Co.



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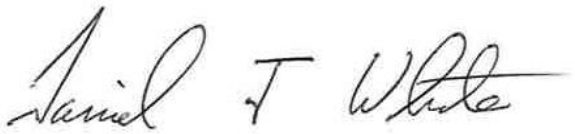
Senior Consultant



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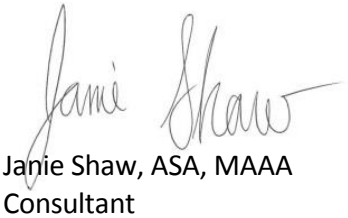

Janie Shaw, ASA, MAAA
Consultant

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Appendix C	Glossary	

SECTION 1

EXECUTIVE SUMMARY

Summary of Principal Results

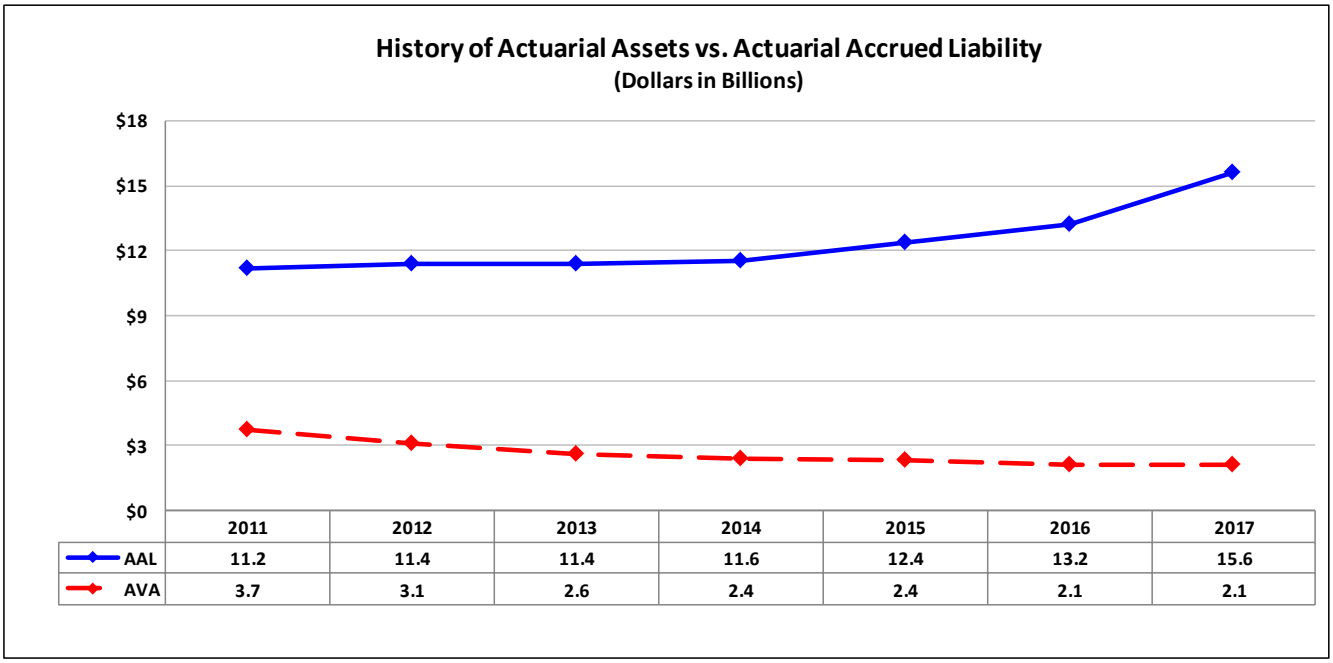
(Dollar amounts expressed in thousands)

	Non-Hazardous		Hazardous		Total	
	June 30, 2017	June 30, 2016	June 30, 2017	June 30, 2016	June 30, 2017	June 30, 2016
Contributions for next fiscal year:						
Retirement	71.03%	41.98%	34.39%	20.48%		
Insurance	12.40%	8.41%	2.46%	1.34%		
Total	83.43%	50.39%	36.85%	21.82%	N/A	N/A
Assets:						
Retirement						
• Actuarial value (AVAR)	$2,123,623	$2,112,286	$607,159	$559,487	$2,730,782	$2,671,774
• Market value (MVAR)	$2,056,870	$1,953,422	$601,529	$524,679	$2,658,399	$2,478,101
• Ratio of actuarial to market value of assets	103.2%	108.1%	100.9%	106.6%	102.7%	107.8%
Insurance						
• Actuarial value (AVAI)	$823,918	$743,270	$493,458	$473,160	$1,317,376	$1,216,430
• Market value (MVAI)	$817,370	$695,189	$488,838	$440,596	$1,306,208	$1,135,785
• Ratio of actuarial to market value of assets	100.8%	106.9%	100.9%	107.4%	100.9%	107.1%
Funded Status:						
Retirement						
• Actuarial accrued liability	$15,591,641	$13,224,698	$1,121,420	$936,706	$16,713,061	$14,161,405
• Unfunded accrued liability on AVAR	$13,468,018	$11,112,412	$514,261	$377,219	$13,982,279	$11,489,631
• Funded ratio on AVAR	13.6%	16.0%	54.1%	59.7%	16.3%	18.9%
• Unfunded accrued liability on MVAR	$13,534,771	$11,271,276	$519,891	$412,027	$14,054,662	$11,683,304
• Funded ratio on MVAR	13.2%	14.8%	53.6%	56.0%	15.9%	17.5%
Insurance						
• Actuarial accrued liability	$2,683,496	$2,456,678	$419,439	$377,745	$3,102,935	$2,834,423
• Unfunded accrued liability on AVAI	$1,859,578	$1,713,408	($74,019)	($95,415)	$1,785,559	$1,617,993
• Funded ratio on AVAI	30.7%	30.3%	117.6%	125.3%	42.5%	42.9%
• Unfunded accrued liability on MVAI	$1,866,126	$1,761,489	($69,399)	($62,851)	$1,796,727	$1,698,638
• Funded ratio on MVAI	30.5%	28.3%	116.5%	116.6%	42.1%	40.1%
Membership:						
• Number of						
- Active Members	37,234	37,779	4,047	3,959	41,281	41,738
- Retirees and Beneficiaries	44,916	44,004	4,093	3,966	49,009	47,970
- Inactive Members	49,658	49,040	5,298	4,925	54,956	53,965
- Total	131,808	130,823	13,438	12,850	145,246	143,673
• Projected payroll of active members	$1,531,535	$1,529,249	$162,418	$147,563	$1,693,953	$1,676,812
• Average salary of active members	$41,133	$40,479	$40,133	$37,273	$41,035	$40,175

Executive Summary (Continued)

Non-Hazardous Retirement Fund

The unfunded actuarial accrued liability for the non-hazardous retirement fund increased by $2.356 billion since the prior year's valuation to $13.468 billion. The largest source of this increase is the $2.158 billion due to a decrease in the assumed rate of investment return. Below is a chart with the historical actuarial value of assets and actuarial accrued liability for the non-hazardous fund. The divergence in the assets and liability over the last seven years has generally been due to a combination of: (i) actual contribution rates being insufficient to completely finance the interest on the unfunded actuarial accrued liability, (ii) the actual investment experience being less than the return assumption, and (iii) a decrease in the assumed rate of return in 2015, 2016 and again in 2017.



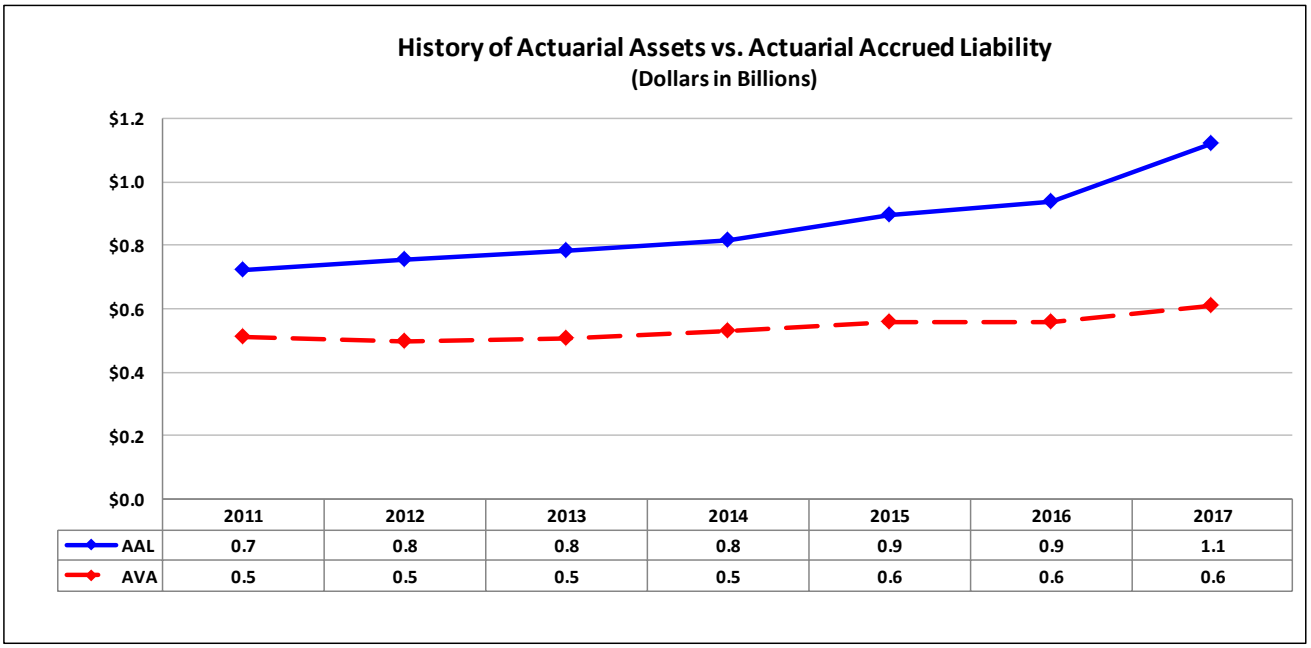
	2011	2012	2013	2014	2015	2016	2017
AAL	11.2	11.4	11.4	11.6	12.4	13.2	15.6
AVA	3.7	3.1	2.6	2.4	2.4	2.1	2.1

For FY2016-17, the KERS non-hazardous pension system distributed $960 million in benefit payments and received $858 million in employer and employee contributions (excluding contributions to the 401(h)). As of June 30, 2017, the market value of assets for this system was $2,057 million (excluding assets in the 401(h)). To stabilize the financial condition of this system and reduce the likelihood that plan assets will become exhausted, it is imperative that contributions to the system exceed the benefit payments. The 71.03% of pay employer contribution rate to the pension plan that is documented in this report is projected to increase the total employer and member contributions to $1,164 million for each of the next two fiscal years (i.e. FY 2018-19 and FY 2019-20). If these employer contributions are not made to this system, then the financial condition of this retirement system is expected to continue to deteriorate and there will be a significant risk of plan assets being exhausted.

Executive Summary (Continued)

Hazardous Retirement Fund

The unfunded actuarial accrued liability for the hazardous retirement fund increased by $137 million since the prior year's valuation to $514 million. The largest source of this increase is the $130 million due to a decrease in the assumed rate of investment return. Below is a chart with the historical actuarial value of assets and actuarial accrued liability for the hazardous retirement fund. The divergence in the assets and liability over the last seven years has generally been due to a combination of: (i) actual contribution rates being insufficient to finance, or pay down the unfunded actuarial accrued liability, (ii) the actual investment experience being less than the fund's expected investment return assumption, and (iii) a decrease in the assumed rate of return in 2015 and again in 2017.



	2011	2012	2013	2014	2015	2016	2017
AAL	0.7	0.8	0.8	0.8	0.9	0.9	1.1
AVA	0.5	0.5	0.5	0.5	0.6	0.6	0.6

SECTION 2

DISCUSSION

Discussion

The Kentucky Employees Retirement System (KERS) is a defined benefit pension fund that provides pensions and health care coverage for employees of state government, non-teaching staff at regional state supported universities, local health departments, regional mental health/mental retardation agencies, and other quasi-state agencies. KERS includes both non-hazardous and hazardous duty benefits. This report presents the result of the June 30, 2017 actuarial funding valuation for both the Retirement and Insurance Funds.

The primary purposes of the valuation report are to depict the current financial condition of the System, determine the annual required contribution, and analyze changes in the System's financial condition. In addition, the report provides various summaries of the data.

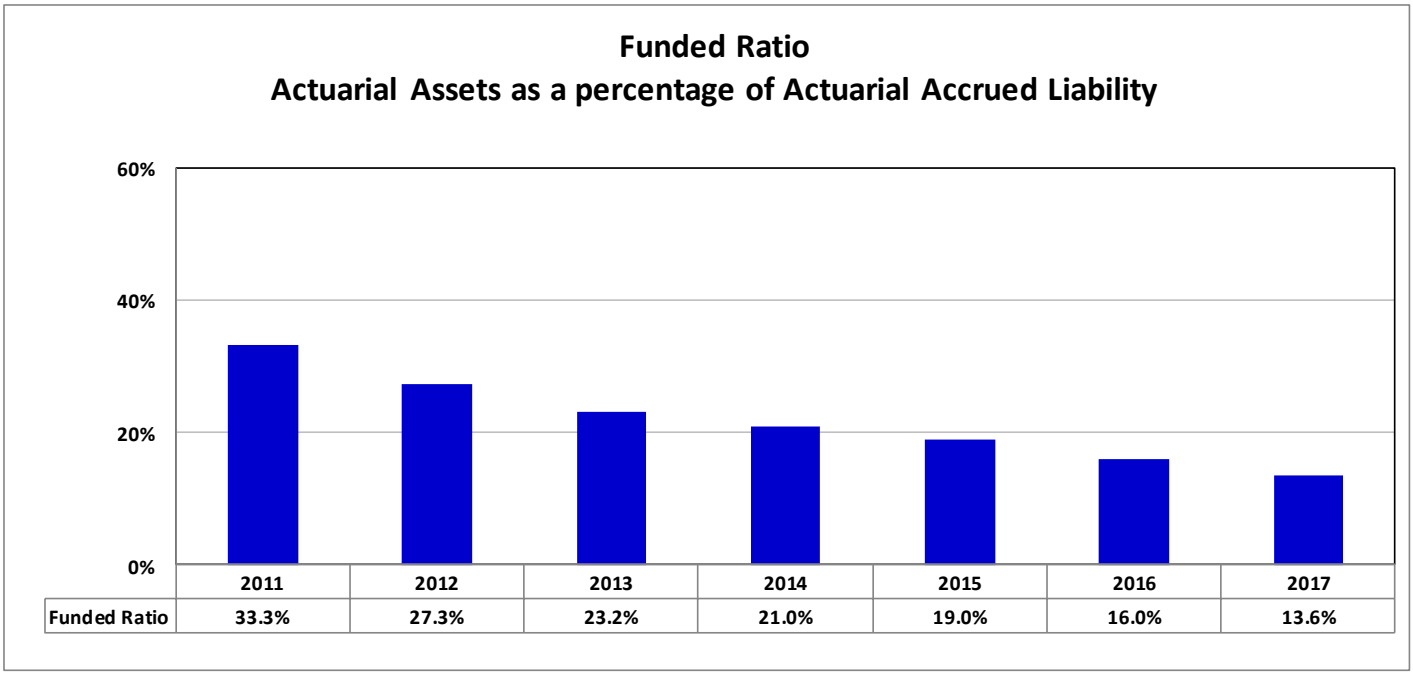
The actuarially determined contribution rates consist of two components: a normal cost rate and an amortization cost to finance the unfunded actuarial accrued liability. The normal cost rate is the theoretical amount which would be required to pay the members' benefits, based on the current plan provisions, if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. This is the amount is should cost to provide the benefits for an average new member. Since members contribute to the fund, only the excess of the normal rate over the member contribution rate is included in the employer contribution rate. The amortization cost is the amount, expressed as a percentage of payroll, necessary to amortize the unfunded actuarial accrued liability. The payroll growth rate and discount rate assumptions are selected by the Board. The funding period is specified in Section 61.565 of Kentucky Statute.

All of the actuarial and financial tables referenced by the other sections of this Report appear in Section 3. Section 4 provides member data and statistical information. Appendices A and B provide summaries of the principle actuarial assumptions and methods and plan provisions. Finally, Appendix C provides a glossary of technical terms that are used throughout this report.

Funding Progress

The following charts provide a seven-year history of the funds' funded ratio (i.e. the Actuarial Value of Assets divided by the Actuarial Accrued Liability). The decline in the funded ratio over the last seven years for the retirement funds has generally been due to a combination of: (i) actual contribution rates being insufficient to completely finance, or pay down, the unfunded actuarial accrued liability, (ii) the actual investment experience being less than assumed, and (iii) a decrease in the assumed rate of return in 2015, 2016 and again in 2017.

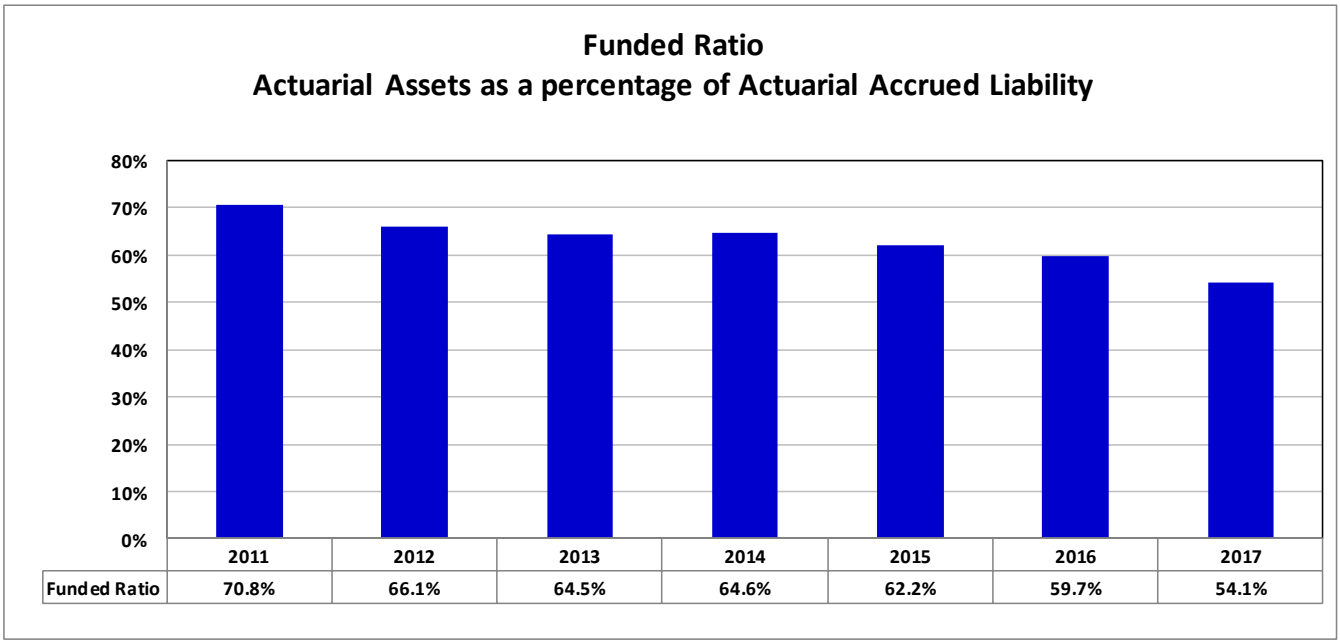
Non-Hazardous Retirement Fund



	2011	2012	2013	2014	2015	2016	2017
Funded Ratio	33.3%	27.3%	23.2%	21.0%	19.0%	16.0%	13.6%

Funding Progress (Continued)

Hazardous Retirement Fund



	2011	2012	2013	2014	2015	2016	2017
Funded Ratio	70.8%	66.1%	64.5%	64.6%	62.2%	59.7%	54.1%

Assuming the actuarial determined contributions are actually paid in future years, then absent future unfavorable investment or demographic experience we expect the funded ratio to begin improving. Also, the dollar amount of the unfunded actuarial accrued liability, or the difference between the actuarial accrued liability and the actuarial value of assets, is expected to decrease after those higher contribution rates become effective. Table 9, Schedule of Funding Progress, in the following section of the report provides additional detail regarding the funding progress of the Retirement System.

Asset Gains/ (Losses)

The actuarial value of assets ("AVA") is based on a smoothed market value of assets, using a systematic approach to phase-in the difference between the actual and expected investment return on the market value of assets (adjusted for receipts and disbursements during the year). This is appropriate because it dampens the short-term volatility inherent in investment markets. The returns are computed net of investment expenses. The actuarial value of assets for the non-hazardous retirement fund slightly increased from $2.112 billion to $2.124 billion since the prior valuation. Table 7 in the following section of the report provides the development of the actuarial value of assets.

The rate of return on the market value of assets on a dollar-weighted basis for fiscal year 2017 was 11.4% for the non-hazardous retirement fund which is greater than the 6.75% expected annual return during that fiscal year. The return on an actuarial (smoothed) asset value was 6.1%. This difference in the estimated return on market value and actuarial value illustrates the smoothing effect of the asset valuation method.

The market value of assets is $0.067 billion less than the actuarial value of assets, which signifies that the retirement system is in a position of deferred losses. Therefore, unless the System experiences investment returns in excess of the assumed rate of return in an amount that is at least equal to the outstanding deferred losses, the future recognition of these deferred losses is expected to increase the unfunded actuarial accrued liability.

Table 6 in the following section of this report provides asset information that was included in the annual financial statements of the System. Also, Tables 6 and 7 show the estimated yield on a market value basis and on the actuarial asset valuation method.

Actuarial Gains/ (Losses)

The annual actuarial valuation is a snapshot analysis of the benefit liabilities, assets and funded position of the System as of the first day of the plan year. In any one fiscal year, the experience can be better or worse from that which is assumed or expected. The actuarial assumptions do not necessarily attempt to model what the experience will be for any one given fiscal year, but instead try to model the overall experience over many years. Therefore, as long as the actual experience of the retirement system is reasonably close to the current assumptions, the long-term funding requirements of the System will remain relatively consistent.

Below are tables that separately show a reconciliation of the actuarial gains / (loss) since the prior actuarial valuation for the retirement and health insurance funds, which include the effect of asset and liability gains and losses, changes in assumptions, changes in plan provisions, etc.

Retirement Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

	Non-Hazardous	Hazardous
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ 11,112,412	$ 377,219
2. Normal cost and administrative expenses	157,499	22,423
3. Less: contributions for the year	(857,664)	(70,498)
4. Interest accrual	726,457	26,489
5. Expected UAAL (Sum of Items 1 - 4)	$ 11,138,704	$ 355,633
6. Actual UAAL as of June 30,2017	$ 13,468,018	$ 514,261
7. Total gain (loss) for the year (Item 5 - Item 6)	$ (2,329,314)	$ (158,628)
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ (13,806)	$ (765)
9. Liability experience gain (loss) for the year	(157,852)	(27,643)
10. Assumption change	(2,157,656)	(130,220)
11. Total	$ (2,329,314)	$ (158,628)

The accrued liability for the non-hazardous retirement fund was about 1% higher than expected, resulting in a $158 million liability loss. The accrued liability for the hazardous retirement fund was about 3% higher than expected, resulting in a $28 million liability loss, primarily due to higher than expected salary increases during the past year.

Actuarial Gains/ (Losses) (Continued)

Insurance Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

	Non-Hazardous	Hazardous
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ 1,713,408	$ (95,415)
2. Normal cost and administrative expenses	39,632	8,539
3. Less: contributions for the year	(157,511)	(6,431)
4. Interest accrual	124,085	(7,077)
5. Expected UAAL (Sum of Items 1 - 4)	$ 1,719,614	$ (100,384)
6. Actual UAAL as of June 30,2017	$ 1,859,578	$ (74,019)
7. Total gain (loss) for the year (Item 5 - Item 6)	$ (139,964)	$ (26,365)
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ (3,451)	$ (3,431)
9. Liability experience gain (loss) for the year	139,085	26,833
10. Assumption change	(275,598)	(49,767)
11. Total	$ (139,964)	$ (26,365)

The 2018 premiums were known at the time of the valuation and were incorporated into the liability measurement. Premiums were lower than expected and resulted in a $132 million liability experience gain for the non-hazardous insurance fund and a $24 million liability experience gain for the hazardous insurance fund.

Actuarial Assumptions and Methods

In determining costs and liabilities, actuaries use assumptions about the future, such as rates of salary increase, probabilities of retirement, termination, death and disability, and an annual investment return assumption. An experience study was conducted as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018. However, the Board has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study. Since the last actuarial valuation, the Board made the following changes in assumptions:

- Decrease the assumed rate of return to 5.25% for the non-hazardous retirement fund.
- Decrease the assumed rate of return to 6.25% for the hazardous retirement fund and both health insurance funds.
- Decrease the price inflation assumption to 2.30% for the retirement and health insurance funds.
- Amortize the unfunded accrued liability for the retirement and health insurance funds based on a 0.00% payroll growth assumption (i.e. on a level dollar basis), but employers will continue contributing the contribution rate determined as a percentage of the expected covered payroll.
- Decrease in the individual salary increase assumption and health care trend assumption that corresponds with the 0.95% decrease in the price inflation assumption.

Appendix A includes a summary of the actuarial assumptions and methods used in this valuation. It is our opinion that the assumptions are internally consistent, reasonable, and reflect anticipated future experience of the System. The next experience study will be conducted no later than as of June 30, 2018.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. This report does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

Benefit Provisions

Appendix B of this report includes a summary of the benefit provisions for KERS. There were no legislative changes enacted since the previous valuation that had a measurable effect on the current valuation.

This valuation reflects all benefits promised to KERS members, either by the statutes or by the Board. There are no ancillary benefits that might be deemed a KERS liability if continued beyond the availability of funding by the current funding source.

SECTION 3

ACTUARIAL TABLES

Actuarial Tables

TABLE NUMBER	PAGE	CONTENT OF TABLE
1	17	DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
2	18	ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS
3	19	DEVELOPMENT OF REQUIRED CONTRIBUTION RATE
4	20	ACTUARIAL BALANCE SHEET – NON-HAZARDOUS MEMBERS
5	21	ACTUARIAL BALANCE SHEET – HAZARDOUS MEMBERS
6	22	RECONCILIATION OF SYSTEM NET ASSETS
7	23	DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS – NON-HAZARDOUS MEMBERS
8	24	DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS – HAZARDOUS MEMBERS
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19	36	SCHEDULE OF FUNDING PROGRESS
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RETIREMENT BENEFITS

ACTUARIAL TABLES

Development of Unfunded Actuarial Accrued Liability
Retirement Benefits

(Dollar amounts expressed in thousands)

		June 30, 2017	
		Non-Hazardous (1)	Hazardous (2)
1.	Projected payroll of active members	$ 1,531,535	$ 162,418
2.	Present value of future pay	$ 12,869,356	$ 1,364,081
3.	Normal cost rate		
	a. Total normal cost rate	12.45%	17.10%
	b. Less: member contribution rate	-5.00%	-8.00%
	c. Employer normal cost rate	7.45%	9.10%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 5,514,500	$ 592,881
	b. Less: present value of future normal costs	(1,531,205)	(217,811)
	c. Actuarial accrued liability	$ 3,983,295	$ 375,070
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 11,120,669	$ 712,284
	b. Inactive members	487,677	34,066
	c. Active members (Item 4c)	3,983,295	375,070
	d. Total	$ 15,591,641	$ 1,121,420
6.	Actuarial value of assets	$ 2,123,623	$ 607,159
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 13,468,018	$ 514,261
8.	Funded Ratio	13.6%	54.1%

Actuarial Present Value of Future Benefits
Retirement Benefits
(Dollar amounts expressed in thousands)

		June 30, 2017	
		Non-Hazardous (1)	Hazardous (2)
1.	Active members		
	a. Service retirement	$ 5,027,645	$ 538,918
	b. Deferred termination benefits and refunds	355,339	41,227
	c. Survivor benefits	28,322	3,260
	d. Disability benefits	103,194	9,476
	e. Total	$ 5,514,500	$ 592,881
2.	Retired members		
	a. Service retirement	$ 10,203,322	$ 656,827
	b. Disability retirement	292,992	16,391
	c. Beneficiaries	624,355	39,066
	d. Total	$ 11,120,669	$ 712,284
3.	Inactive members		
	a. Vested terminations	$ 422,927	$ 26,360
	b. Nonvested terminations	64,750	7,706
	c. Total	$ 487,677	$ 34,066
4.	Total actuarial present value of future benefits	$ 17,122,846	$ 1,339,231

Development of Required Contribution Rate
Retirement Benefits

		June 30, 2017	
		Non-Hazardous (1)	Hazardous (2)
1.	Total normal cost rate		
	a. Service retirement	9.82%	13.98%
	b. Deferred termination benefits and refunds	2.18%	2.57%
	c. Survivor benefits	0.07%	0.15%
	d. Disability benefits	0.38%	0.40%
	e. Total	12.45%	17.10%
2.	Less: member contribution rate	-5.00%	-8.00%
3.	Total employer normal cost rate	7.45%	9.10%
4.	Administrative expenses	0.72%	0.57%
5.	Net employer normal cost rate	8.17%	9.67%
6.	UAAL amortization contribution	62.86%	24.72%
7.	Total recommended employer contribution	71.03%	34.39%

Actuarial Balance Sheet

Non-Hazardous Members Retirement

(Dollar amounts expressed in thousands)

		June 30, 2017 (1)	June 30, 2016 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 2,123,623	$ 2,112,286
	b. Present value of future member contributions	$ 643,468	$ 695,862
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 887,737	$ 556,170
	ii. Unfunded accrued liability contributions	13,468,018	11,112,412
	iii. Total future employer contributions	$ 14,355,755	$ 11,668,582
	d. Total assets	$ 17,122,846	$ 14,476,730
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 1,531,205	$ 1,252,032
	ii. Accrued liability	3,983,295	3,214,530
	iii. Total present value of future benefits	$ 5,514,500	$ 4,466,562
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 11,120,669	$ 9,600,528
	c. Present value of benefits payable on account of current inactive members	$ 487,677	$ 409,640
	d. Total liabilities	$ 17,122,846	$ 14,476,730

Actuarial Balance Sheet

Hazardous Members Retirement

(Dollar amounts expressed in thousands)

		June 30, 2017 (1)	June 30, 2016 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 607,159	$ 559,487
	b. Present value of future member contributions	$ 109,126	$ 107,587
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 108,685	$ 71,148
	ii. Unfunded accrued liability contributions	514,261	377,219
	iii. Total future employer contributions	$ 622,946	$ 448,367
	d. Total assets	$ 1,339,231	$ 1,115,441
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 217,811	$ 178,735
	ii. Accrued liability	375,070	288,224
	iii. Total present value of future benefits	$ 592,881	$ 466,959
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 712,284	$ 618,592
	c. Present value of benefits payable on account of current inactive members	$ 34,066	$ 29,890
	d. Total liabilities	$ 1,339,231	$ 1,115,441

Reconciliation of Retirement Net Assets

(Dollar amounts expressed in thousands)

		Year Ending June 30, 2017 (1) Non-Hazardous	Year Ending June 30, 2017 (2) Hazardous
1.	Value of assets at beginning of year	$ 1,953,422	$ 524,679
2.	Revenue for the year		
	a. Contributions		
	i. Member contributions	$ 100,543	$ 17,524
	ii. Employer contributions	644,804	37,630
	iii. Other contributions (less 401h)	112,317	15,344
	iii. Total	$ 857,664	$ 70,498
	b. Income		
	i. Interest, dividends, and other income	$ 66,528	$ 16,321
	ii. Investment expenses	(15,600)	(4,267)
	iii. Net	$ 50,928	$ 12,054
	c. Net realized and unrealized gains (losses)	166,122	58,554
	d. Total revenue	$ 1,074,714	$ 141,106
3.	Expenditures for the year		
	a. Disbursements		
	i. Refunds	$ 11,819	$ 2,106
	ii. Regular annuity benefits	948,490	61,231
	iii. Other benefit payments	0	0
	iv. Transfers to other systems	0	0
	v. Total	$ 960,309	$ 63,338
	b. Administrative expenses and depreciation	10,957	919
	c. Total expenditures	$ 971,266	$ 64,257
4.	Increase in net assets (Item 2. - Item 3.)	$ 103,447	$ 76,850
5.	Value of assets at end of year (Item 1. + Item 4.)	$ 2,056,870	$ 601,529
6.	Net external cash flow		
	a. Dollar amount	$ (113,602)	$ 6,242
	b. Percentage of market value	-5.7%	1.1%
7.	Estimated annual return on net assets	11.4%	13.4%

Development of Actuarial Value of Assets

Non-Hazardous Members Retirement

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2017
1.	Actuarial value of assets at beginning of year	$ 2,112,286
2.	Market value of assets at beginning of year	$ 1,953,422
3.	Net new investments	
	a. Contributions	$ 857,664
	b. Benefit payments	(960,309)
	c. Administrative expenses	(10,957)
	d. Subtotal	$ (113,602)
4.	Market value of assets at end of year	$ 2,056,870
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 217,050
6.	Assumed investment return rate for fiscal year	6.75%
7.	Expected return for immediate recognition	$ 128,022
8.	Excess return for phased recognition	$ 89,028
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2017	$ 89,028	$ 17,806
b.	2016	(183,443)	(36,689)
c.	2015	(142,444)	(28,489)
d.	2014	145,338	29,068
e.	2013	76,106	15,221
f.	Total		$ (3,083)

10.	Actuarial value of assets as of June 30, 2017 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 2,123,623
11.	Ratio of actuarial value to market value	103.2%
12.	Estimated annual return on actuarial value of assets	6.1%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Hazardous Members Retirement

(Dollar amounts expressed in thousands)*

	Year Ending		June 30, 2017
1.	Actuarial value of assets at beginning of year	$	559,487
2.	Market value of assets at beginning of year	$	524,679
3.	Net new investments		
	a. Contributions	$	70,498
	b. Benefit payments		(63,338)
	c. Administrative expenses		(919)
	d. Subtotal	$	6,242
4.	Market value of assets at end of year	$	601,529
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$	70,608
6.	Assumed investment return rate for fiscal year		7.50%
7.	Expected return for immediate recognition	$	39,585
8.	Excess return for phased recognition	$	31,023
9.	Phased-in recognition, 20% of excess return on assets for prior years:		

	Fiscal Year Ending June 30,		Excess Return		Recognized Amount
a.	2017	$	31,023	$	6,205
b.	2016		(42,195)		(8,439)
c.	2015		(33,972)		(6,794)
d.	2014		42,286		8,457
e.	2013		12,081		2,416
f.	Total			$	1,845

10.	Actuarial value of assets as of June 30, 2017 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$	607,159
11.	Ratio of actuarial value to market value		100.9%
12.	Estimated annual return on actuarial value of assets		7.4%

* Amounts may not add due to rounding

Schedule of Funding Progress
Retirement Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Non-Hazardous Members						
2011	$ 3,726,986	$ 11,182,142	$ 7,455,156	33.3%	$ 1,731,633	430.5%
2012	3,101,317	11,361,048	8,259,731	27.3%	1,644,897	502.1%
2013	2,636,123	11,386,602	8,750,479	23.2%	1,644,409	532.1%
2014	2,423,957	11,550,110	9,126,154	21.0%	1,577,496	578.5%
2015	2,350,990	12,359,673	10,008,683	19.0%	1,544,234	648.1%
2016	2,112,286	13,224,698	11,112,412	16.0%	1,529,249	726.7%
2017	2,123,623	15,591,641	13,468,018	13.6%	1,531,535	879.4%
Hazardous Members						
2011	$ 510,749	$ 721,293	$ 210,545	70.8%	$ 133,054	158.2%
2012	497,226	752,699	255,473	66.1%	131,977	193.6%
2013	505,657	783,981	278,324	64.5%	132,015	210.8%
2014	527,897	816,850	288,953	64.6%	129,076	223.9%
2015	556,688	895,433	338,746	62.2%	128,680	263.2%
2016	559,487	936,706	377,219	59.7%	147,563	255.6%
2017	607,159	1,121,420	514,261	54.1%	162,418	316.6%
Total KERS Members						
2011	$ 4,237,735	$ 11,903,435	$ 7,665,700	35.6%	$ 1,864,687	411.1%
2012	3,598,543	12,113,747	8,515,204	29.7%	1,776,874	479.2%
2013	3,141,780	12,170,583	9,028,803	25.8%	1,776,424	508.3%
2014	2,951,854	12,366,960	9,415,106	23.9%	1,706,572	551.7%
2015	2,907,678	13,255,106	10,347,428	21.9%	1,672,914	618.5%
2016	2,671,773	14,161,404	11,489,631	18.9%	1,676,812	685.2%
2017	2,730,782	16,713,061	13,982,279	16.3%	1,693,953	825.4%

Summary of Principal Assumptions and Methods

Below is a summary of the principal economic assumptions, cost method, and the method for financing the unfunded actuarial accrued liability:

	Non-Hazardous	Hazardous
Valuation date:	June 30, 2017	June 30, 2017
Actuarial cost method:	Entry Age Normal	Entry Age Normal
Amortization method:	Level percentage of payroll (0% payroll growth assumed)	Level percentage of payroll (0% payroll growth assumed)
Amortization period for contribution rate:	26-year closed period	26-year closed period
Asset valuation method:	5-Year Smoothed Market	5-Year Smoothed Market
Actuarial assumptions:		
Investment rate of return	5.25%	6.25%
Projected salary increases	3.55% to 15.55% (varies by service)	3.55% to 19.55% (varies by service)
Inflation	2.30%	2.30%
Post-retirement benefit adjustments	0.00%	0.00%
Retiree Mortality	RP-2000 Combined Mortality Table for Males and Females, projected using scale BB to 2013 (set back one year for females).	RP-2000 Combined Mortality Table for Males and Females, projected using scale BB to 2013 (set back one year for females).

Solvency Test
Retirement Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Accrued Liability: Active Member Contributions	Actuarial Accrued Liability: Retired Members & Beneficiaries	Actuarial Accrued Liability: Active Members (Employer Financed)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets: Active	Portion of Aggregate Accrued Liabilities Covered by Assets: Retired	Portion of Aggregate Accrued Liabilities Covered by Assets: ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Non-Hazardous Members							
2008	$ 875,178	$ 7,162,497	$ 2,092,015	$ 5,318,793	100.0%	62.0%	0.0%
2009	793,575	8,205,156	1,659,819	4,794,611	100.0%	48.8%	0.0%
2010	869,484	8,329,758	1,805,553	4,210,216	100.0%	40.1%	0.0%
2011	916,569	8,482,714	1,782,859	3,726,986	100.0%	33.1%	0.0%
2012	885,137	8,708,536	1,767,375	3,101,317	100.0%	25.4%	0.0%
2013	922,928	8,709,324	1,754,351	2,636,123	100.0%	19.7%	0.0%
2014	928,558	8,870,693	1,750,860	2,423,957	100.0%	16.9%	0.0%
2015	925,934	9,437,468	1,996,271	2,350,990	100.0%	15.1%	0.0%
2016	920,120	10,010,168	2,294,410	2,112,286	100.0%	11.9%	0.0%
2017	934,559	11,608,346	3,048,736	2,123,623	100.0%	10.2%	0.0%
Hazardous Members							
2008	$ 89,591	$ 355,772	$ 172,648	$ 502,132	100.0%	100.0%	32.9%
2009	87,780	413,972	172,659	502,503	100.0%	100.0%	0.4%
2010	88,511	441,657	157,981	502,729	100.0%	93.8%	0.0%
2011	86,614	490,395	144,284	510,749	100.0%	86.5%	0.0%
2012	82,101	521,689	148,910	497,226	100.0%	79.6%	0.0%
2013	82,146	545,597	156,238	505,657	100.0%	77.6%	0.0%
2014	83,664	581,231	151,955	527,897	100.0%	76.4%	0.0%
2015	83,606	633,189	178,638	556,688	100.0%	74.7%	0.0%
2016	86,705	648,482	201,519	559,487	100.0%	72.9%	0.0%
2017	93,350	746,350	281,720	607,159	100.0%	68.8%	0.0%

INSURANCE BENEFITS

ACTUARIAL TABLES

Development of Unfunded Actuarial Accrued Liability
Insurance Benefits

(Dollar amounts expressed in thousands)

		June 30, 2017	
		Non-Hazardous (1)	Hazardous (2)
1.	Projected payroll of active members	$ 1,531,535	$ 162,418
2.	Present value of future pay	$ 11,971,740	$ 1,360,355
3.	Normal cost rate		
	a. Total normal cost rate	3.06%	6.40%
	b. Less: member contribution rate	-0.35%	-0.52%
	c. Employer normal cost rate	2.71%	5.88%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 1,444,863	$ 246,482
	b. Less: present value of future normal costs	(336,661)	(70,859)
	c. Actuarial accrued liability	$ 1,108,202	$ 175,623
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 1,452,876	$ 233,808
	b. Inactive members	122,418	10,008
	c. Active members (Item 4c)	1,108,202	175,623
	d. Total	$ 2,683,496	$ 419,439
6.	Actuarial value of assets	$ 823,918	$ 493,458
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 1,859,578	$ (74,019)
8.	Funded Ratio	30.7%	117.6%

Development of Required Contribution Rate
Insurance Benefits

		June 30, 2017	
		Non-Hazardous (1)	Hazardous (2)
1.	Total normal cost rate	3.06%	6.40%
2.	Less: member contribution rate	-0.35%	-0.52%
3.	Total employer normal cost rate	2.71%	5.88%
4.	Administrative expenses	0.06%	0.06%
5.	Net employer normal cost rate	2.77%	5.94%
6.	UAAL amortization contribution	9.63%	-3.48%
7.	Total recommended employer contribution	12.40%	2.46%

Actuarial Balance Sheet

Non-Hazardous Members Insurance

(Dollar amounts expressed in thousands)

		June 30, 2017 (1)	June 30, 2016 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 823,918	$ 743,270
	b. Present value of future member contributions	$ 53,847	$ 48,293
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 282,814	$ 243,915
	ii. Unfunded accrued liability contributions	1,859,578	1,713,408
	iii. Total future employer contributions	$ 2,142,392	$ 1,957,323
	d. Total assets	$ 3,020,157	$ 2,748,886
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 336,661	$ 292,208
	ii. Accrued liability	1,108,202	973,042
	iii. Total present value of future benefits	$ 1,444,863	$ 1,265,250
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 1,452,876	$ 1,352,227
	c. Present value of benefits payable on account of current inactive members	$ 122,418	$ 131,409
	d. Total liabilities	$ 3,020,157	$ 2,748,886

Actuarial Balance Sheet

Hazardous Members Insurance

(Dollar amounts expressed in thousands)

		June 30, 2017 (1)	June 30, 2016 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 493,458	$ 473,160
	b. Present value of future member contributions	$ 9,088	$ 7,276
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 61,771	$ 47,365
	ii. Unfunded accrued liability contributions	(74,019)	(95,415)
	iii. Total future employer contributions	$ (12,248)	$ (48,050)
	d. Total assets	$ 490,298	$ 432,386
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 70,859	$ 54,641
	ii. Accrued liability	175,623	149,384
	iii. Total present value of future benefits	$ 246,482	$ 204,025
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 233,808	$ 217,753
	c. Present value of benefits payable on account of current inactive members	$ 10,008	$ 10,608
	d. Total liabilities	$ 490,298	$ 432,386

Reconciliation of Insurance Net Assets

(Dollar amounts expressed in thousands)

		Year Ending June 30, 2017 (1) Non-Hazardous	Year Ending June 30, 2017 (2) Hazardous
1.	Value of assets at beginning of year	$ 695,189	$ 440,596
2.	Revenue for the year		
	a. Contributions		
	i. Member contributions	$ 5,156	$ 811
	ii. Employer contributions	133,024	4,688
	iii. Other contributions	19,332	932
	iii. Total	$ 157,511	$ 6,431
	b. Income		
	i. Interest, dividends, and other income	$ 19,834	$ 13,191
	ii. Investment expenses	(4,227)	(3,402)
	iii. Net	$ 15,608	$ 9,789
	c. Net realized and unrealized gains (losses)	79,244	49,786
	d. Total revenue	$ 252,363	$ 66,006
3.	Expenditures for the year		
	a. Disbursements		
	i. Refunds	$ 0	$ 0
	ii. Healthcare premium subsidies	127,648	17,562
	iii. Other benefit payments	1,673	97
	iv. Transfers to other systems	0	0
	v. Total	$ 129,321	$ 17,659
	b. Administrative expenses and depreciation	861	105
	c. Total expenditures	$ 130,182	$ 17,764
4.	Increase in net assets (Item 2. - Item 3.)	$ 122,181	$ 48,242
5.	Value of assets at end of year (Item 1. + Item 4.)	$ 817,370	$ 488,838
6.	Net external cash flow		
	a. Dollar amount	$ 27,330	$ (11,333)
	b. Percentage of market value	3.6%	-2.4%
7.	Estimated annual return on net assets	13.4%	13.7%

Development of Actuarial Value of Assets

Non-Hazardous Members Insurance

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2017
1.	Actuarial value of assets at beginning of year	$ 743,270
2.	Market value of assets at beginning of year	$ 695,189
3.	Net new investments	
	a. Contributions	$ 157,511
	b. Benefit payments	(129,321)
	c. Administrative expenses	(861)
	d. Subtotal	$ 27,330
4.	Market value of assets at end of year	$ 817,370
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 94,851
6.	Assumed investment return rate for fiscal year	7.50%
7.	Expected return for immediate recognition	$ 53,164
8.	Excess return for phased recognition	$ 41,687
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2017	$ 41,687	$ 8,337
b.	2016	(55,901)	(11,180)
c.	2015	(43,387)	(8,677)
d.	2014	54,989	10,998
e.	2013	3,380	676
f.	Total		$ 154

10.	Actuarial value of assets as of June 30, 2017 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 823,918
11.	Ratio of actuarial value to market value	100.8%
12.	Estimated annual return on actuarial value of assets	7.0%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Hazardous Members Insurance

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2017
1.	Actuarial value of assets at beginning of year	$ 473,160
2.	Market value of assets at beginning of year	$ 440,596
3.	Net new investments	
	a. Contributions	$ 6,431
	b. Benefit payments	(17,659)
	c. Administrative expenses	(105)
	d. Subtotal	$ (11,333)
4.	Market value of assets at end of year	$ 488,838
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 59,575
6.	Assumed investment return rate for fiscal year	7.50%
7.	Expected return for immediate recognition	$ 32,619
8.	Excess return for phased recognition	$ 26,956
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2017	$ 26,956	$ 5,391
b.	2016	(33,995)	(6,799)
c.	2015	(25,896)	(5,179)
d.	2014	22,857	4,571
e.	2013	5,137	1,027
f.	Total		$ (988)

10.	Actuarial value of assets as of June 30, 2017 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 493,458
11.	Ratio of actuarial value to market value	100.9%
12.	Estimated annual return on actuarial value of assets	6.8%

* Amounts may not add due to rounding

Schedule of Funding Progress
Insurance Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Non-Hazardous Members			
2011	$ 451,620	$ 4,280,090	$ 3,828,469	10.6%	$ 1,731,633	221.1%
2012	446,081	3,125,330	2,679,250	14.3%	1,644,897	162.9%
2013	497,584	2,128,754	1,631,170	23.4%	1,644,409	99.2%
2014	621,237	2,226,760	1,605,523	27.9%	1,577,496	101.8%
2015	695,018	2,413,705	1,718,687	28.8%	1,544,234	111.3%
2016	743,270	2,456,678	1,713,408	30.3%	1,529,249	112.0%
2017	823,918	2,683,496	1,859,578	30.7%	1,531,535	121.4%
			Hazardous Members			
2011	$ 329,962	$ 507,059	$ 177,097	65.1%	$ 133,054	133.1%
2012	345,574	384,592	39,018	89.9%	131,977	29.6%
2013	370,774	385,518	14,743	96.2%	132,015	11.2%
2014	419,396	396,987	(22,409)	105.6%	129,076	-17.4%
2015	451,514	374,904	(76,610)	120.4%	128,680	-59.5%
2016	473,160	377,745	(95,415)	125.3%	147,563	-64.7%
2017	493,458	419,439	(74,019)	117.6%	162,418	-45.6%
			Total KERS Members			
2011	$ 781,582	$ 4,787,149	$ 4,005,567	16.3%	$ 1,864,687	214.8%
2012	791,655	3,509,922	2,718,267	22.6%	1,776,874	153.0%
2013	868,358	2,514,272	1,645,914	34.5%	1,776,424	92.7%
2014	1,040,633	2,623,747	1,583,114	39.7%	1,706,572	92.8%
2015	1,146,532	2,788,609	1,642,077	41.1%	1,672,914	98.2%
2016	1,216,430	2,834,423	1,617,993	42.9%	1,676,812	96.5%
2017	1,317,376	3,102,935	1,785,559	42.5%	1,693,953	105.4%

Solvency Test
Insurance Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Accrued Liability: Active Member Contributions	Actuarial Accrued Liability: Retired Members & Beneficiaries	Actuarial Accrued Liability: Active Members (Employer Financed)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets: Active	Portion of Aggregate Accrued Liabilities Covered by Assets: Retired	Portion of Aggregate Accrued Liabilities Covered by Assets: ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Non-Hazardous Members							
2008	$ -	$ 2,788,190	$ 2,643,310	$ 603,198	100.0%	21.6%	0.0%
2009	-	2,861,867	1,645,458	534,173	100.0%	18.7%	0.0%
2010	-	2,744,534	1,721,602	471,342	100.0%	17.2%	0.0%
2011	-	2,568,003	1,712,087	451,620	100.0%	17.6%	0.0%
2012	-	1,924,069	1,201,262	446,081	100.0%	23.2%	0.0%
2013	-	1,338,773	789,981	497,584	100.0%	37.2%	0.0%
2014	-	1,425,605	801,155	621,237	100.0%	43.6%	0.0%
2015	-	1,428,350	985,355	695,018	100.0%	48.7%	0.0%
2016	-	1,483,636	973,042	743,270	100.0%	50.1%	0.0%
2017	-	1,575,294	1,108,202	823,918	100.0%	52.3%	0.0%
Hazardous Members							
2008	$ -	$ 228,835	$ 312,822	$ 288,162	100.0%	100.0%	19.0%
2009	-	242,123	249,009	301,635	100.0%	100.0%	23.9%
2010	-	268,511	224,787	314,427	100.0%	100.0%	20.4%
2011	-	285,540	221,519	329,962	100.0%	100.0%	20.1%
2012	-	196,579	188,013	345,574	100.0%	100.0%	79.2%
2013	-	202,032	183,486	370,774	100.0%	100.0%	92.0%
2014	-	206,477	190,509	419,396	100.0%	100.0%	100.0%
2015	-	221,115	153,789	451,514	100.0%	100.0%	100.0%
2016	-	228,361	149,384	473,160	100.0%	100.0%	100.0%
2017	-	243,816	175,623	493,458	100.0%	100.0%	100.0%

SECTION 4

MEMBERSHIP INFORMATION

Membership Tables

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Summary of Membership Data

(Total dollar amounts expressed in thousands)

		Non-Hazardous June 30, 2017 (1)	Hazardous June 30, 2017 (2)	Total June 30, 2017 (3)
1.	Active members			
a.	Males	14,183	2,808	16,991
b.	Females	23,051	1,239	24,290
c.	Total members	37,234	4,047	41,281
d.	Total annualized prior year salaries	$ 1,531,535	$ 162,418	$ 1,693,953
e.	Average salary	$ 41,133	$ 40,133	$ 41,035
f.	Average age	45.4	40.3	44.9
g.	Average service	10.9	7.6	10.6
h.	Member contributions with interest	$ 934,559	$ 93,350	$ 1,027,910
i.	Average contributions with interest	$ 25,100	$ 23,066	$ 24,900
2.	Vested inactive members			
a.	Number	10,794	505	11,299
b.	Total annual deferred benefits	$ 69,704	$ 3,363	$ 73,067
c.	Average annual deferred benefit	$ 6,458	$ 6,659	$ 6,467
d.	Average age at the valuation date	48.8	45.1	N/A
3.	Nonvested inactive members			
a.	Number	38,864	4,793	43,657
b.	Total member contributions with interest	$ 64,750	$ 7,706	$ 72,457
c.	Average contributions with interest	$ 1,666	$ 1,608	$ 1,660
4.	Service retirees			
a.	Number	38,170	3,505	41,675
b.	Total annual benefits	$ 828,249	$ 53,647	$ 881,896
c.	Average annual benefit	$ 21,699	$ 15,306	$ 21,161
d.	Average age at the valuation date	68.8	64.5	68.5
5.	Disabled retirees			
a.	Number	1,978	159	2,137
b.	Total annual benefits	$ 25,776	$ 1,407	$ 27,183
c.	Average annual benefit	$ 13,031	$ 8,849	$ 12,720
d.	Average age at the valuation date	65.2	59.5	64.8
6.	Beneficiaries			
a.	Number	4,768	429	5,197
b.	Total annual benefits	$ 67,277	$ 4,108	$ 71,385
c.	Average annual benefit	$ 14,110	$ 9,576	$ 13,736
d.	Average age at the valuation date	71.0	66.2	70.6

Summary of Historical Active Membership

	Active Members		Covered Payroll[1]		Average Annual Pay	
June 30,	Number	Percent Increase /(Decrease)	Amount in Thousands	Percent Increase /(Decrease)	Amount	Percent Increase /(Decrease)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Non-Hazardous Members			
2011	46,617		$ 1,731,633		$ 37,146	-3.6%
2012	42,196	-9.5%	1,644,897	-5.0%	38,982	4.9%
2013	42,226	0.1%	1,644,409	0.0%	38,943	-0.1%
2014	40,365	-4.4%	1,577,496	-4.1%	39,081	0.4%
2015	39,056	-3.2%	1,544,234	-2.1%	39,539	1.2%
2016	37,779	-3.3%	1,529,249	-1.0%	40,479	2.4%
2017	37,234	-1.4%	1,531,535	0.1%	41,133	1.6%
			Hazardous Members			
2011	4,291		$ 133,054		$ 31,008	-7.3%
2012	4,086	-4.8%	131,977	-0.8%	32,300	4.2%
2013	4,127	1.0%	132,015	0.0%	31,988	-1.0%
2014	4,024	-2.5%	129,076	-2.2%	32,077	0.3%
2015	3,886	-3.4%	128,680	-0.3%	33,114	3.2%
2016	3,959	1.9%	147,563	14.7%	37,273	12.6%
2017	4,047	2.2%	162,418	10.1%	40,133	7.7%

[1] Covered payroll is the annualized, projected compensation for the following year and does not include payroll attributable to working retirees.

Distribution of Active Members by Age and by Years of Service

Non-Hazardous Members

Attained Age	Years of Credited Service												
	0 Count & Avg. Comp.	1 Count & Avg. Comp.	2 Count & Avg. Comp.	3 Count & Avg. Comp.	4 Count & Avg. Comp.	5-9 Count & Avg. Comp.	10-14 Count & Avg. Comp.	15-19 Count & Avg. Comp.	20-24 Count & Avg. Comp.	25-29 Count & Avg. Comp.	30-34 Count & Avg. Comp.	35 & Over Count & Avg. Comp.	Total Count & Avg. Comp.
Under 20	20	0	1	0	0	0	0	0	0	0	0	0	21
	$18,022	$0	$34,204	$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,793
20-24	426	224	124	57	7	3	0	0	0	0	0	0	841
	$22,750	$30,422	$30,159	$29,946	$28,139	$31,984	$0	$0	$0	$0	$0	$0	$26,452
25-29	623	657	545	387	283	367	8	0	0	0	0	0	2,870
	$25,204	$31,813	$32,994	$32,931	$34,154	$34,250	$30,421	$0	$0	$0	$0	$0	$31,292
30-34	411	418	429	339	363	1,394	341	15	0	0	0	0	3,710
	$26,132	$35,183	$35,597	$33,933	$36,162	$38,767	$38,951	$39,395	$0	$0	$0	$0	$35,920
35-39	356	336	326	266	267	1,301	1,384	531	35	0	0	0	4,802
	$27,671	$38,151	$34,602	$35,351	$37,439	$39,959	$43,413	$43,161	$50,506	$0	$0	$0	$39,589
40-44	305	304	242	225	192	946	1,175	1,351	405	38	2	0	5,185
	$28,010	$36,398	$34,686	$34,238	$39,015	$39,901	$44,443	$47,258	$49,502	$59,097	$83,546	$0	$42,328
45-49	292	274	243	192	195	916	1,019	1,148	962	336	40	0	5,617
	$28,223	$35,464	$34,656	$34,085	$35,782	$39,998	$44,566	$46,471	$51,721	$53,093	$68,288	$0	$43,729
50-54	187	210	181	211	163	831	929	913	788	516	166	17	5,112
	$28,042	$36,046	$35,598	$35,282	$35,054	$39,806	$42,759	$45,493	$51,399	$54,307	$60,489	$61,460	$44,281
55-59	178	142	118	128	122	728	905	899	619	375	155	31	4,400
	$27,572	$37,687	$35,102	$34,770	$36,529	$38,596	$42,166	$44,802	$47,909	$52,687	$60,243	$65,765	$43,326
60-64	82	84	75	70	93	577	695	690	425	241	95	44	3,171
	$31,260	$54,536	$41,599	$37,602	$39,283	$41,087	$42,090	$45,725	$47,363	$54,107	$60,828	$70,778	$45,135
65 & Over	43	38	37	35	34	268	354	343	164	109	46	34	1,505
	$37,827	$63,557	$36,987	$45,942	$35,558	$39,158	$44,452	$46,968	$50,997	$56,433	$65,165	$71,243	$46,845
Total	2,923	2,687	2,321	1,910	1,719	7,331	6,810	5,890	3,398	1,615	504	126	37,234
	$26,504	$35,705	$34,553	$34,419	$36,350	$39,347	$43,189	$45,870	$50,095	$53,905	$61,615	$68,413	$41,133

Distribution of Active Members by Age and by Years of Service

Hazardous Members

Attained Age	Years of Credited Service												
	0 Count & Avg. Comp.	1 Count & Avg. Comp.	2 Count & Avg. Comp.	3 Count & Avg. Comp.	4 Count & Avg. Comp.	5-9 Count & Avg. Comp.	10-14 Count & Avg. Comp.	15-19 Count & Avg. Comp.	20-24 Count & Avg. Comp.	25-29 Count & Avg. Comp.	30-34 Count & Avg. Comp.	35 & Over Count & Avg. Comp.	Total Count & Avg. Comp.
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
20-24	148	78	45	2	0	0	0	0	0	0	0	0	273
	$25,971	$38,449	$37,348	$31,005	$0	$0	$0	$0	$0	$0	$0	$0	$31,448
25-29	158	137	109	100	75	52	0	0	0	0	0	0	631
	$27,771	$35,894	$38,425	$38,060	$39,770	$40,278	$0	$0	$0	$0	$0	$0	$35,462
30-34	73	74	69	55	49	201	48	1	0	0	0	0	570
	$28,533	$37,772	$38,989	$38,650	$40,049	$39,919	$45,216	$42,641	$0	$0	$0	$0	$38,409
35-39	48	37	36	24	34	144	186	31	0	0	0	0	540
	$26,832	$39,720	$37,001	$37,922	$37,059	$41,392	$43,673	$43,649	$0	$0	$0	$0	$40,179
40-44	35	40	32	24	29	98	137	140	18	1	0	0	554
	$25,005	$34,889	$38,317	$40,167	$36,700	$43,398	$44,417	$48,122	$55,037	$79,550	$0	$0	$42,727
45-49	36	39	22	19	25	92	127	117	54	12	0	0	543
	$29,765	$36,942	$39,476	$37,459	$38,227	$40,887	$47,659	$48,081	$53,683	$56,652	$0	$0	$44,322
50-54	25	30	31	22	14	84	87	79	29	16	3	0	420
	$25,653	$35,465	$38,463	$36,740	$41,143	$40,670	$43,816	$46,851	$51,542	$64,509	$60,026	$0	$42,663
55-59	13	16	7	17	15	45	49	52	19	5	2	0	240
	$27,350	$40,343	$42,181	$36,343	$32,722	$41,046	$44,804	$47,864	$52,845	$70,328	$82,597	$0	$43,572
60-64	7	4	9	9	14	49	61	45	8	4	1	0	211
	$29,352	$40,919	$34,410	$36,271	$38,805	$40,090	$42,050	$45,678	$50,553	$61,256	$34,006	$0	$41,787
65 & Over	1	2	1	2	3	11	25	13	2	3	2	0	65
	$23,352	$84,786	$26,409	$43,111	$34,256	$35,069	$42,816	$47,927	$72,713	$61,307	$59,686	$0	$45,173
Total	544	457	361	274	258	776	720	478	130	41	8	0	4,047
	$27,160	$37,331	$38,254	$38,023	$38,519	$40,859	$44,548	$47,337	$53,371	$62,734	$62,331	$0	$40,133

Distribution of Annuitant Monthly Benefit by Status and Age
Non-Hazardous Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

Current Age	Retirement		Disability		Survivors & Beneficiaries		Total	
	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	481	$ 11,751	128	$ 1,753	454	$ 5,167	1,063	$ 18,671
50 - 54	1,644	44,975	171	2,547	183	2,216	1,998	49,738
55 - 59	4,011	105,459	281	3,804	323	4,412	4,615	113,675
60 - 64	7,055	172,764	418	5,802	493	7,442	7,966	186,008
65 - 69	9,426	206,490	388	4,926	592	10,133	10,406	221,549
70 - 74	6,810	141,009	253	3,043	646	10,347	7,709	154,399
75 - 79	4,089	75,976	190	2,364	613	9,860	4,892	88,200
80 - 84	2,455	39,493	100	1,063	569	8,209	3,124	48,765
85 - 89	1,440	21,180	38	405	489	5,670	1,967	27,255
90 And Over	759	9,153	11	69	406	3,821	1,176	13,043
Total	**38,170**	**$ 828,249**	**1,978**	**$ 25,776**	**4,768**	**$ 67,277**	**44,916**	**$ 921,302**

Distribution of Annuitant Monthly Benefit by Status and Age
Hazardous Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

Current Age	Retirement		Disability		Survivors & Beneficiaries		Total	
	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	198	$ 3,741	28	$ 354	47	$ 358	273	$ 4,453
50 - 54	347	6,752	25	241	19	226	391	7,219
55 - 59	514	9,387	27	233	44	496	585	10,116
60 - 64	679	11,151	28	235	63	708	770	12,094
65 - 69	880	12,460	31	243	64	711	975	13,414
70 - 74	518	6,864	9	67	69	590	596	7,521
75 - 79	228	2,205	6	14	62	546	296	2,765
80 - 84	97	696	5	21	37	308	139	1,025
85 - 89	36	218	0	-	18	95	54	313
90 And Over	8	174	0	-	6	70	14	244
Total	**3,505**	**$ 53,647**	**159**	**$ 1,407**	**429**	**$ 4,108**	**4,093**	**$ 59,162**

Non-Hazardous Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	4,000	$ 7,199,431	11,597	$ 17,003,936	15,597	$ 24,203,367
Joint & Survivor:						
100% to Beneficiary	2,249	4,141,025	1,028	1,293,678	3,277	5,434,703
66 2/3% to Beneficiary	808	2,294,297	515	1,028,783	1,323	3,323,080
50% to Beneficiary	1,133	2,876,489	1,452	2,898,594	2,585	5,775,084
Pop-up Option	3,958	9,681,044	3,606	7,034,454	7,564	16,715,498
Social Security Option:						
Age 62 Basic	403	860,926	963	1,577,120	1,366	2,438,046
Age 62 Survivorship	795	1,592,322	610	979,920	1,405	2,572,242
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	1	6,328	0	0	1	6,328
10 Years Certain & Life	962	1,690,766	2,183	3,285,276	3,145	4,976,042
15 Years Certain & Life	427	683,208	594	901,118	1,021	1,584,326
20 Years Certain & Life	420	921,839	613	966,051	1,033	1,887,890
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	81	133,879	289	441,461	370	575,340
24 Month Basic	33	40,038	155	199,100	188	239,138
36 Month Basic	141	125,618	396	301,140	537	426,758
12 Month Survivor	102	212,746	102	174,084	204	386,830
24 Month Survivor	79	126,121	76	111,082	155	237,203
36 Month Survivor	222	252,145	155	134,743	377	386,888
Total:	15,814	$ 32,838,222	24,334	$ 38,330,539	40,148	$ 71,168,761

Hazardous Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	604	$ 681,533	472	$ 504,082	1,076	$ 1,185,615
Joint & Survivor:						
100% to Beneficiary	305	357,738	36	40,460	341	398,198
66 2/3% to Beneficiary	106	139,673	28	32,358	134	172,032
50% to Beneficiary	159	240,641	63	96,308	222	336,949
Pop-up Option	846	1,267,739	169	218,329	1,015	1,486,069
Social Security Option:						
Age 62 Basic	58	67,088	33	29,788	91	96,877
Age 62 Survivorship	136	179,507	18	15,181	154	194,688
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	47	63,141	12	15,204	59	78,345
10 Years Certain & Life	111	133,256	73	64,413	184	197,669
15 Years Certain & Life	46	57,774	23	23,952	69	81,726
20 Years Certain & Life	58	79,865	32	41,978	90	121,843
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	10	10,601	13	10,878	23	21,479
24 Month Basic	15	15,175	9	7,948	24	23,123
36 Month Basic	44	37,923	23	20,016	67	57,939
12 Month Survivor	20	26,786	6	5,151	26	31,937
24 Month Survivor	19	27,991	9	11,029	28	39,020
36 Month Survivor	46	45,660	15	18,695	61	64,355
Total:	2,630	$ 3,432,092	1,034	$ 1,155,770	3,664	$ 4,587,862

Non-Hazardous Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	15	$ 8,685	31	$ 33,721	46	$ 42,406
Joint & Survivor:						
100% to Beneficiary	411	373,818	1,426	1,526,485	1,837	1,900,303
66 2/3% to Beneficiary	81	101,018	307	358,426	388	459,444
50% to Beneficiary	175	131,945	425	330,193	600	462,137
Pop-up Option	231	395,789	647	1,049,103	878	1,444,892
Social Security Option:						
Age 62 Basic	0	0	10	9,527	10	9,527
Age 62 Survivorship	83	119,325	289	491,116	372	610,441
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	3	1,475	3	1,475
5 Years Certain	43	58,509	41	34,945	84	93,455
10 Years Certain	96	69,175	95	73,455	191	142,630
10 Years Certain & Life	28	24,922	40	37,513	68	62,435
15 Years Certain & Life	12	17,463	44	46,676	56	64,139
20 Years Certain & Life	21	35,928	62	112,428	83	148,356
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	0	0	1	1,792	1	1,792
24 Month Basic	0	0	0	0	0	0
36 Month Basic	0	0	2	3,357	2	3,357
12 Month Survivor	7	14,743	20	34,246	27	48,990
24 Month Survivor	12	13,730	25	23,881	37	37,611
36 Month Survivor	25	17,183	60	55,825	85	73,008
Total:	1,240	$ 1,382,234	3,528	$ 4,224,163	4,768	$ 5,606,397

Hazardous Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	2	$ 1,052	6	$ 4,264	8	$ 5,316
Joint & Survivor:						
100% to Beneficiary	25	17,918	129	92,927	154	110,845
66 2/3% to Beneficiary	1	368	18	8,555	19	8,922
50% to Beneficiary	7	5,153	28	9,884	35	15,037
Pop-up Option	19	18,849	87	84,606	106	103,455
Social Security Option:	0	0	0	0		
Age 62 Basic	0	0	0	0	0	0
Age 62 Survivorship	8	9,889	29	29,500	37	39,389
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	1	635	6	5,089	7	5,723
10 Years Certain	5	5,823	14	12,003	19	17,826
10 Years Certain & Life	6	3,889	3	2,535	9	6,425
15 Years Certain & Life	3	2,044	4	2,627	7	4,670
20 Years Certain & Life	0	0	7	5,460	7	5,460
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):	0	0	0	0		
12 Month Basic	0	0	0	0	0	0
24 Month Basic	0	0	0	0	0	0
36 Month Basic	0	0	1	126	1	126
12 Month Survivor	0	0	4	4,145	4	4,145
24 Month Survivor	1	995	3	2,022	4	3,017
36 Month Survivor	3	1,640	9	10,330	12	11,970
Total:	81	$ 68,254	348	$ 274,072	429	$ 342,327

Schedule of Retirants Added to And Removed from Rolls

(Dollar amounts except average allowance expressed in thousands)

Year Ended	Added to Rolls	Removed from Rolls	Rolls End of the Year		% Increase in Annual Benefit	Average Annual Benefit
	Number	Number	Number	Annual Benefits		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Non-Hazardous			
2011	1,592	940	38,597	$ 821,197		$ 21,276
2012	1,707	1,078	39,226	844,881	2.9%	21,539
2013	1,982	1,014	40,194	872,140	3.2%	21,698
2014	2,067	1,038	41,223	866,047	-0.7%	21,009
2015	2,140	1,094	42,269	883,578	2.0%	20,904
2016	2,441	706	44,004	934,930	5.8%	21,246
2017	2,181	1,269	44,916	921,302	-1.5%	20,512
			Hazardous			
2011	288	59	3,064	$ 45,609		$ 14,885
2012	243	54	3,253	49,231	7.9%	15,134
2013	229	52	3,430	51,122	3.8%	14,904
2014	256	66	3,620	54,272	6.2%	14,992
2015	203	65	3,758	56,431	4.0%	15,016
2016	237	29	3,966	59,001	4.6%	14,877
2017	206	79	4,093	59,162	0.3%	14,454

APPENDIX A

ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Methods and Assumptions

The following presents a summary of the actuarial assumptions and methods used in the valuation of the Kentucky Employees Retirement System.

In general, the assumptions and methods used in the valuation are based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014. The investment return, price inflation, and payroll growth assumption were adopted by the Board in May and July 2017 for use with the June 30, 2017 valuation in order to reflect future economic expectations.

Investment return rate:

Assumed annual rate of 5.25% net of investment expenses for the non-hazardous retirement fund
Assumed annual rate of 6.25% net of investment expenses for the hazardous retirement fund, non-hazardous insurance fund, and hazardous insurance fund

Price Inflation:

Assumed annual rate of 2.30%

Rates of Annual Salary Increase:

Assumed rates of annual salary increases are shown below.

Service Years	Annual Rates of Salary Increases				
	Merit & Seniority		Price Inflation & Productivity	Total Increase	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0	12.50%	16.50%	3.05%	15.55%	19.55%
1	4.50%	4.50%	3.05%	7.55%	7.55%
2	2.00%	2.50%	3.05%	5.05%	5.55%
3	1.50%	2.00%	3.05%	4.55%	5.05%
4	1.50%	1.50%	3.05%	4.55%	4.55%
5	1.50%	1.00%	3.05%	4.55%	4.05%
6	1.00%	0.50%	3.05%	4.05%	3.55%
7	1.00%	0.50%	3.05%	4.05%	3.55%
8	1.00%	0.50%	3.05%	4.05%	3.55%
9	0.50%	0.50%	3.05%	3.55%	3.55%
10 & Over	0.50%	0.50%	3.05%	3.55%	3.55%

Retirement rates:

Assumed annual rates of retirement are shown below. Rates are only applicable for members who are eligible for a service retirement.

Age	Non-Hazardous		Service	Hazardous	
	Members participating before 9/1/2008[1]	Members participating on or after 9/1/2008[2]		Members participating before 9/1/2008[3]	Members participating on or after 9/1/2008[4]
55	8.0%		20	40.0%	
56	8.0%		21	40.0%	
57	8.0%		22	40.0%	
58	8.0%		23	40.0%	
59	8.0%		24	40.0%	
60	10.0%	10.0%	25	47.0%	40.0%
61	20.0%	20.0%	26	47.0%	40.0%
62	20.0%	20.0%	27	47.0%	40.0%
63	20.0%	20.0%	28	47.0%	40.0%
64	20.0%	20.0%	29	47.0%	40.0%
65	20.0%	25.0%	30	47.0%	47.0%
66	20.0%	25.0%	31	47.0%	47.0%
67	20.0%	25.0%	32	50.0%	47.0%
68	20.0%	25.0%	33	50.0%	47.0%
69	20.0%	25.0%	34	50.0%	47.0%
70	20.0%	25.0%	35	60.0%	47.0%
71	20.0%	25.0%	36	60.0%	47.0%
72	20.0%	25.0%	37	60.0%	50.0%
73	20.0%	25.0%	38	60.0%	50.0%
74	20.0%	25.0%	39	60.0%	50.0%
75	100.0%	100.0%	40	60.0%	60.0%

[1] If service is at least 27 years, the rate is 35%.
[2] If age plus service is at least 87, the rate is 35%.
[3] The annual rate of service retirement is 100% at age 65.
[4] The annual rate of service retirement is 100% at age 60.

Disability rates:

An abbreviated table with assumed rates of disability is show below.

Age	Non-Hazardous		Hazardous	
	Male	Female	Male	Female
20	0.02%	0.02%	0.03%	0.03%
30	0.03%	0.03%	0.05%	0.05%
40	0.07%	0.07%	0.10%	0.10%
50	0.19%	0.19%	0.28%	0.28%
60	0.49%	0.49%	0.73%	0.73%

Withdrawal rates (for causes other than death, disability or retirement):

Assumed annual rates of withdrawal are shown below.

Service Years	Annual Rates of Withdrawal	
	Non-Hazardous	Hazardous
0	22.50%	25.00%
1	15.50%	10.50%
2	12.50%	7.50%
3	10.50%	6.50%
4	9.00%	5.50%
5	6.50%	4.50%
6	5.50%	3.00%
7	5.00%	3.00%
8	4.50%	3.00%
9	4.50%	2.50%
10	4.00%	2.50%
11-12	4.00%	2.00%
13-14	3.50%	2.00%
15 & Over	3.00%	2.00%

Mortality Assumption:

Pre-retirement mortality: RP-2000 Combined Mortality Table projected with Scale BB to 2013. Male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%.

Post-retirement mortality (non-disabled): RP-2000 Combined Mortality Table projected with Scale BB to 2013. Female mortality rates are set back one year.

Post-retirement mortality (disabled): RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013. Male mortality rates are set back four years.

At the time of the last experience study, performed as of June 30, 2013, this mortality assumption provided 37% and 19% margin for future improvement for males and females, respectively.

Marital status:

100% of employees are assumed to be married, with the female spouse 3 years younger than the male spouse.

Line of Duty Disability

0% of disabilities are assumed to occur in the line of duty

Line of Duty Death

25% of deaths are assumed to occur in the line of duty

Dependent Children:

For members in the Hazardous Plan who receive a duty-related death benefit, the member is assumed to be survived by two dependent children, each age 6 with payments for 15 years.

Form of Payment:

Members are assumed to elect a life-only annuity at retirement.

Actuarial Cost Method:

Entry Age Normal, Level Percentage of Pay. The Entry Age Normal actuarial cost method allocates the System's actuarial present value of future benefits to various periods based upon service. The portion of the present value of future benefits allocated to years of service prior to the valuation date is the actuarial accrued liability, and the portion allocated to years following the valuation date is the present value of future normal costs. The normal cost is determined for each active member as the level percent of pay necessary to fully fund the expected benefits to be earned over the career of each individual active member. The normal cost is partially funded with active member contributions with the remainder funded by employer contributions.

Health Care Age Related Morbidity/Claims Utilization:

To model the impact of aging on the underlying health care costs for Medicare retirees, the valuation relied on the Society of Actuaries' 2013 Study "Health Care Costs – From Birth to Death". Table 4 (Development of Plan Specific Medicare Age Curve) was used to model the impact of aging for ages 65 and over.

Health Care Cost Trend Rates[1]:

January 1	Non-Medicare Plans	Medicare Plans	Dollar Contribution[2]
2019	7.25%	5.10%	1.50%
2020	7.00%	5.00%	1.50%
2021	6.75%	4.90%	1.50%
2022	6.50%	4.80%	1.50%
2023	6.25%	4.70%	1.50%
2024	6.00%	4.60%	1.50%
2025	5.75%	4.50%	1.50%
2026	5.50%	4.40%	1.50%
2027	5.25%	4.30%	1.50%
2028	5.00%	4.20%	1.50%
2029	4.75%	4.10%	1.50%
2030	4.50%	4.05%	1.50%
2031	4.25%	4.05%	1.50%
2032 & Beyond	4.05%	4.05%	1.50%

[1]All increases are assumed to occur on January 1. The 2018 premiums were known at the time of the valuation and were incorporated into the liability measurement using a trend of 1.232% for Non-Medicare plans and a trend of 0.00% for Medicare plans at January 1, 2018.

[2]Applies to members participating on or after July 1, 2003

Health care trend assumptions are based on the model issued by the Society of Actuaries "Getzen model of Long-Run Medical Cost Trends for the SOA; Thomas E. Getzen, iHEA and Temple University 2014 © Society of Actuaries.

The underlying assumptions used to develop the health care trend rates include:

- A short run period-this is a period for which anticipated health care trend rates are manually set based on local information as well as plan-specific and carrier information.
- Long term real GDP growth- 1.75%
- Long term rate of inflation- 2.30%
- Long term nominal GDP growth – 4.05%
- Year that excess rate converges to 0- 15 years from the valuation

Health care trend rates are thus the manually set rates for the short run period and rates which decline to an ultimate trend rate which equals the assumed nominal long term GDP growth rate.

Health Care Participation Assumptions:

- Members are assumed to elect health coverage at retirement at the following participation rates.

Service at Retirement	Members participating before 7/1/2003*	Members participating between 7/1/2003 and 9/1/2008	Members participating after 9/1/2008
Under 10	50%	100%	100%
10-14	75%	100%	100%
15-19	90%	100%	100%
Over 20	100%	100%	100%

* 100% of members with a duty disability or a duty death (in service) benefit are assumed to elect coverage at retirement.

- Future retirees are assumed to have a similar distribution by plan type as the current retirees.

Medicare Plan	June 30, 2017 Participation*
Medical Only	7%
Essential	8%
Premium	84%

* May not add due to rounding

Non-Medicare Plan	June 30, 2017 Participation
Standard PPO	14%
Standard CDHP	2%
LivingWell CDHP	22%
LivingWell PPO	62%

- 50% of deferred vested members participating before July 1, 2003 are assumed to elect health coverage at retirement. 100% of deferred vested members participating after July 1, 2003 are assumed to elect health coverage at retirement. Deferred vested members with non-hazardous service are assumed to begin health coverage at age 55 for members participating before September 1, 2008, and at age 60 for members participating on or after September 1, 2008. Deferred vested members with hazardous service are assumed to begin health coverage at age 50.

- 50% of future retirees, with hazardous service, are assumed to elect spouse health care coverage. No dependent coverage is assumed for members who only have non-hazardous service. 100% of spouses with health care coverage are assumed to continue coverage after the member's death.

Excise ("Cadillac") Tax:

For taxable years beginning after December 31, 2019, a 40% excise tax will be required to be paid (by the employer and/or insurer) on the aggregate cost of the health plan in excess of certain legislated thresholds. For 2018, the thresholds are $850 per month for individual coverage and $2,292 per month for family coverage.

Both Actuarial Standard of Practice No. 6 and GASB Statement Nos. 74 and 75 reference this tax, and, in accordance with these standards an estimate of the impact of the Cadillac tax has been included in this valuation.

Assumptions and methods used to determine the impact of the Cadillac Tax include:

- 2018 thresholds of $850/$2,292 were indexed annually by 2.30%.
- Premium data submitted was not adjusted for permissible exclusions to the Cadillac Tax.
- There were no special adjustments to the dollar limit other than those permissible for non-Medicare retirees over 55.

In this valuation, the impact of the Cadillac Tax has been calculated by increasing the employer paid premiums for Non-Medicare retirees, who became participants before July 1, 2003, by 3.6%. Non-Medicare retirees who became participants after July 1, 2003 receive dollar subsidies per year of service, which are not expected to exceed the overall Non-Medicare premiums. As a result, the costs attributable to the Cadillac Tax for members who became participants after July 1, 2003 will be paid by the retirees.

Changes in Assumptions since the prior valuation:

1. The assumed investment return was changed from 6.75% to 5.25% for the non-hazardous retirement fund and from 7.50% to 6.25% for the hazardous retirement fund and both insurance funds.
2. The price inflation assumption was changed from 3.25% to 2.30%, which also resulted in a 0.95% decrease in the salary increase assumption at all years of service and a 0.95% decrease in the health care cost trend rates.
3. The amortization method for unfunded accrued liabilities was changed to a level dollar basis (which is then converted to a percentage of expected covered payroll) from a level percentage of pay basis.

Development of Baseline Claims Cost

For non-Medicare retirees, the initial per capita costs were based on the plan premiums effective January 1, 2017, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. The spouse/dependent premium of $862.64 for non-Medicare retirees is based on a blending of Family and Couple premiums for the current retirees that have over 4 years of hazardous service. The fully-insured premiums KRS pays the Kentucky Employees' Health Plan (KEHP) are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit rate subsidy for the non-Medicare eligible retirees. Actuarial Standard of Practice No. 6 (ASOP No. 6) requires aging subsidies (or implicit rate subsidies) to be recognized. However, the KRS health insurance trusts are only used to reimburse KEHP for the employer's portion of the blended premiums. Said another way, the trusts are not used to fund the difference between the underlying retiree claims and the blended KEHP premiums. As a result, the retiree health care liabilities developed in this report for the non-Medicare retirees are based solely on the premiums charged by KEHP, without any age-adjustment. GASB Statements No. 74 and No. 75 prohibit such a deviation from ASOP No. 6. The liabilities developed in this report are solely for the purpose of funding the benefits paid by the health insurance funds and are not appropriate for financial statement disclosures required by GASB. GRS provides separate GASB reports to KRS which include the liabilities associated with the implicit rate subsidy.

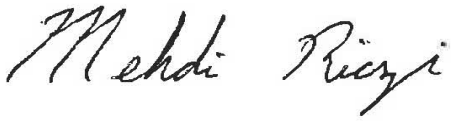
For those not eligible for Medicare		
Age	Member	Spouse/Dependents
<65	$711.22	$862.64

For Medicare retirees, the initial per capita costs were estimated based on the plan premiums effective January 1, 2017, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. Age graded and sex distinct premiums are utilized for retirees over the age of 65. These costs are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

For those eligible for Medicare		
Age	Male	Female
65	$208.66	$196.81
75	244.13	238.22
85	258.16	261.20

Appendix B of the report provides a full schedule of premiums.

Mehdi Riazi is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.



Mehdi Riazi, FSA, EA, MAAA

APPENDIX B

BENEFIT PROVISIONS

Summary of Benefit Provisions for Kentucky Employees Retirement System (KERS)

KERS Non-Hazardous Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 65 with at least 1 month of service credit; or Any age with at least 27 years of service
Benefit Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% times final average compensation times years of service. For members who did not have 13 months of service credit for 1/1/1998-1/1/1999, the monthly benefit is 1.97% times final average compensation times years of service. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 5 years of compensation.
Early Retirement Eligibility	Any age (prior to age 65) with at least 25 years of service; or Age 55 with at least 5 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement eligibility precedes the member's normal retirement date.

KERS Non-Hazardous Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 65 with at least 5 years of service; or Rule of 87 (Age 57 or older if age plus service equals 87)
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.10%
10-20	1.30%
20-26	1.50%
26-30	1.75%
Greater than 30*	2.00%

* The 2.00% benefit multiplier only applies to service credit in excess of 30 years. If a member has greater than 30 years of service at retirement, service prior to 30 years will be multiplied by the 1.75% benefit multiplier.

Final compensation is based on the member's last 5 years of compensation.

Early Retirement Eligibility	Age 60 with at least 10 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 65 with at least 5 years of service; or Rule of 87 (Age 57 or older if age plus service equals 87)
Benefit Amount	Each year that the member is active, a 4.00% employer pay credit and the employee's 5.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

KERS Non-Hazardous Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 65th birthday, with total service not exceeding 25 years. Total service credit added shall not be greater than the member's actual service at disability. For members with at least 25 years of service on the last day of paid employment but less than 27 years of service, total service shall be 27 years. For members with 27 or more years of service credit, actual service will be used.

KERS Non-Hazardous Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 20% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 20% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Line of Duty Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly rate of pay. Additionally, each eligible dependent child will receive 10% of the member's monthly final rate of pay up to a maximum of 40%.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 55 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 25% of the deceased member's final monthly rate of pay. A spouse may also elect the non-line of duty death benefit.
Child Benefit	Each eligible dependent child will receive 10% of the member's final monthly rate of pay up to a maximum of 40%.

KERS Non-Hazardous Employees (continued)

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	5% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the KRS board, not less than 2.0%.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	5% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	5% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes since the Prior Valuation

None.

KERS Hazardous Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 55 with at least 1 month of service credit; or Any age with at least 20 years of service
Benefit Amount	If a member has at least 60 months of service, the monthly benefit is 2.49% times final average compensation times years of service. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 3 years of compensation.
Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

KERS Hazardous Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.30%
10-20	1.50%
20-25	2.25%
Greater than 25	2.50%

Final average compensation is based on the member's highest 3 years of compensation.

Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	Each year that the member is active, a 7.50% employer pay credit and the employee's 8.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

KERS Hazardous Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that if the member has less than 20 years of service at disability, service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 55th birthday, with total service not exceeding 20 years. Total service credit added shall not be greater than the member's actual service at disability.

KERS Hazardous Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Line of Duty Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly rate of pay. Additionally, each eligible dependent child will receive 10% of the member's monthly final rate of pay up to a maximum of 40%.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 55 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 25% of the deceased member's final monthly rate of pay. A spouse may also elect the non-line of duty death benefit.
Non-Spouse Benefit	If the beneficiary is only one person who is a dependent receiving at least 50% of his or her support from the member, the beneficiary may elect a lump sum payment of$10,000.
Child Benefit	Each eligible dependent child will receive 10% of the member's final monthly rate of pay up to a maximum of 40%.

KERS Hazardous Employees (continued)

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	8% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the KRS board, not less than 2.0%.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes since the Prior Valuation

None.

Summary of Main Retiree Insurance Benefit Provisions

Insurance Tier 1: Participation began before 7/1/2003

Benefit Eligibility Recipient of a retirement allowance

Benefit Amount

Non-Hazardous Service	Percentage of Member Premium Paid by Retirement System	Hazardous Service	Percentage of Member & Dependent Premium Paid by Retirement System
Less than 4 years	0%	Less than 4 years	0%
4 – 9 years	25%	4 – 9 years	25%
10 – 14 years	50%	10 – 14 years	50%
15 – 19 years	75%	15 – 19 years	75%
20 or more years	100%	20 or more years	100%

The percentage paid by the retirement system is applied to the 'contribution' plan selected by the KRS Board.

Duty Disability Retirement If disability was a result of injuries sustained while in the line of duty, the member receives 100% of the maximum contribution for the member and dependents. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.

Duty Death in Service If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive 100% of the maximum contribution. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.

Non-Duty Death in Service If the surviving spouses is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Surviving Spouse of a Retiree A surviving spouse of a retiree, who is in receipt of a pension allowance, will receive a premium subsidy based on the member's years of hazardous service.

Hazardous employees who retired prior to August 1, 1998 System's contribution for spouse and dependents is based on total service.

Insurance Tier 2: Participation began on or after 7/1/2003, but before 9/1/2008

Benefit Eligibility	Recipient of a retirement allowance with at least 120 months of service at retirement
Non-Hazardous Subsidy	Monthly contribution of $10 for each year of earned service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $13.18/year of service. Upon the retiree's death, the surviving spouse may continue coverage (if in receipt of a retirement allowance) but will be 100% responsible for the premiums.
Hazardous Subsidy	Monthly contribution of $15 for each year of earned hazardous service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $19.77/year of service. Upon the retiree's death, the surviving spouse of a hazardous duty member will receive a monthly contribution of $10 ($13.18 as of July 1, 2017) for each year of hazardous service.
Duty Disability Retirement	If disability was a result of injuries sustained while in the line of duty, the member receives a benefit equal to at least 20 times the Non-Hazardous monthly contribution. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.
Duty Death in Service	If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive a benefit equal to at least 20 times the Non-Hazardous monthly contribution. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.
Non-Duty Death in Service	If the surviving spouse is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Insurance Tier 3: Participation began on or after 9/1/2008

Tier 3 insurance benefits are identical to Tier 2, except Tier 3 members are required to have at least 180 months of service in order to be eligible.

Monthly Health Plan Premiums – Effective January 1, 2018

Non-Medicare Plan Options					
Plan Option	Single	Parent Plus	Couple	Family	Family X-Ref
LivingWell PPO*	$729.34	$1,037.08	$1,589.10	$1,767.60	$876.68
LivingWell CDHP	709.46	978.50	1,325.64	1,479.76	818.96
Standard PPO	685.38	975.90	1,497.18	1,666.26	824.54
Standard CDHP	682.80	940.64	1,450.02	1,615.30	800.94

Medicare Plan Options	
Kentucky Retirement Systems - Medical Only Plan	$165.01
Kentucky Retirement Systems – Medicare Advantage/Essential Plan	75.56
Kentucky Retirement Systems – Medicare Advantage/Premium Plan*	252.21

*For 2018, the contribution plans selected by the KRS Board were the LivingWell PPO plan option for non-Medicare retirees and the Medicare Advantage Premium plan option for Medicare retirees.

Dollar Contribution Amount for Insurance Tier 2 and Tier 3

Monthly contribution amounts per year of service as of July 1, 2017.

Non-Hazardous Service	Hazardous Service
$13.18	$19.77

APPENDIX C

GLOSSARY

Glossary

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or ***Funding Method:*** A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ADC.

Actuarial Gain or ***Actuarial Loss:*** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)

b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, non-retired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations that provide the financial information of the plan, such as the funded ratio, unfunded actuarial accrued liability and the ADC.

Actuarial Value of Assets or ***Valuation Assets:*** The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Actuarially Determined Contribution (ADC): The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADC consists of the Employer Normal Cost and the Amortization Payment.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment: The portion of the pension plan contribution or ADC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Closed Amortization Period: A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.

Funding Period or ***Amortization Period:*** The term "Funding Period" is used two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ADC. This funding period is specified in State statute. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on a statutory employer contribution rate, and assuming no future actuarial gains or losses.

GASB: Governmental Accounting Standards Board.

GASB 67 and ***GASB 68***: Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting and reporting rules for public retirement systems and the employers that sponsor, participate in, or contribute to them. Statement No. 67 sets the accounting rules for the financial reporting of the retirement systems, while Statement No. 68 sets the rules for the employers that sponsor, participate in, or contribute to public retirement systems.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded

Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but may not decrease by exactly one year in the subsequent year's actuarial valuation. For instance, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year.

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

Valuation Date or Actuarial Valuation Date: The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

County Employees Retirement System (CERS)

Actuarial Valuation Report
as of June 30, 2017

GRS Retirement Consulting

P: 469.524.0000 | F: 469.524.0003 | www.grsconsulting.com

December 4, 2017

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Actuarial Valuation as of June 30, 2017

Dear Trustees of the Board:

This report describes the current actuarial condition of the County Employees Retirement System (CERS), determines the required employer contribution rates, and analyzes changes in the System's financial condition. In addition, the report provides various summaries of the data. Separate reports are issued with regard to valuation results determined in accordance with Governmental Accounting Standards Board (GASB) Statements 67, 68, 74 and 75. Results of this report should not be used for any other purpose without consultation with the undersigned. Valuations are prepared annually as of June 30, the first day of the plan year for KRS. This report was prepared at the request of the Board of Trustees of the Kentucky Retirement System (Board) and is intended for use by the KRS staff and those designated or approved by the Board.

FINANCING OBJECTIVES AND FUNDING POLICY

The employer contribution rate is determined in accordance with Section 61.565 of Kentucky Statute. As specified by the Statute, the employer contribution rate is determined based on a closed thirty-year amortization period beginning July 1, 2013. As a result, the amortization period used in the 2017 actuarial valuation is 26 years. The contribution rate determined by this actuarial valuation becomes effective twelve months after the valuation date. In other words, the contribution rate determined by this June 30, 2017 actuarial valuation will be used by the Board to certify the participating employer's contribution rates for the fiscal year July 1, 2018 and ending June 30, 2019.

If new legislation is enacted between the valuation date and the date the contribution rate becomes effective, the Board may adjust the calculated rate before certifying them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

ASSUMPTIONS AND METHODS

Kentucky Statutes also requires that an actuarial investigation be performed at least every five years to review the economic and demographic assumptions. An experience study was conducted

as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018. However, the Board has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study. Subsequent to the last actuarial valuation the Board decreased the price inflation assumption to 2.30% and the payroll growth assumption to 2.00% for the CERS Non-Hazardous and Hazardous Systems (Retirement and Health Insurance). Additionally, the assumed rate of return was decreased to 6.25% for the CERS Non-Hazardous and Hazardous Systems (Retirement and Health Insurance). It is our opinion that the current assumptions are internally consistent and reasonably reflect the anticipated future experience of the System.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

BENEFIT PROVISIONS

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2017. There were no legislative changes enacted since the previous valuation that had a measurable effect on the current valuation.

DATA

Member data for retired, active and inactive members was supplied as of June 30, 2017, by the KRS staff. The staff also supplied asset information as of June 30, 2017. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by KRS.

CERTIFICATION

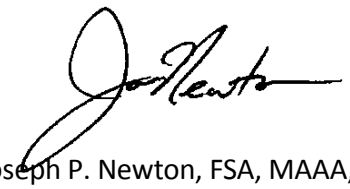
We certify that the information presented herein is accurate and fairly portrays the actuarial position of CERS as of June 30, 2017.

All of our work conforms with generally accepted actuarial principles and practices, and is in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,

Gabriel, Roeder, Smith & Co.



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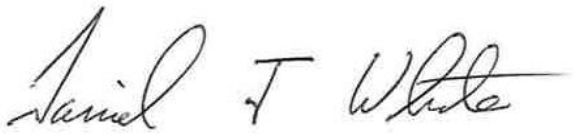
Senior Consultant



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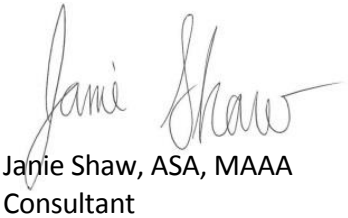

Janie Shaw, ASA, MAAA
Consultant

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SECTION 1

EXECUTIVE SUMMARY

Summary of Principal Results

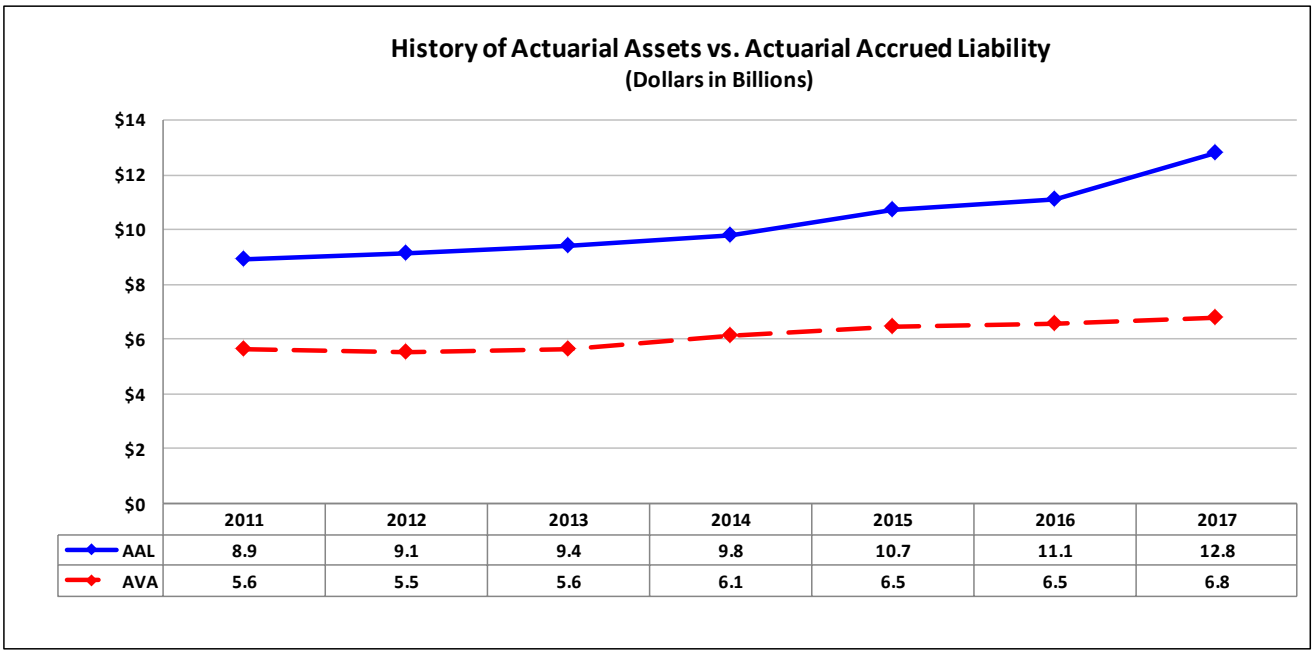
(Dollar amounts expressed in thousands)

	Non-Hazardous		Hazardous		Total	
	June 30, 2017	June 30, 2016	June 30, 2017	June 30, 2016	June 30, 2017	June 30, 2016
Contributions for next fiscal year:						
Retirement	21.84%	14.48%	35.69%	22.20%		
Insurance	6.21%	4.70%	12.17%	9.35%		
Total	28.05%	19.18%	47.86%	31.55%	N/A	N/A
Assets:						
Retirement						
• Actuarial value (AVAR)	$6,764,873	$6,535,372	$2,238,320	$2,139,119	$9,003,193	$8,674,492
• Market value (MVAR)	$6,687,237	$6,106,187	$2,217,996	$2,003,669	$8,905,233	$8,109,856
• Ratio of actuarial to market value of assets	101.2%	107.0%	100.9%	106.8%	101.1%	107.0%
Insurance						
• Actuarial value (AVAI)	$2,227,401	$2,079,811	$1,196,780	$1,135,784	$3,424,181	$3,215,595
• Market value (MVAI)	$2,212,536	$1,943,757	$1,189,001	$1,062,602	$3,401,537	$3,006,359
• Ratio of actuarial to market value of assets	100.7%	107.0%	100.7%	106.9%	100.7%	107.0%
Funded Status:						
Retirement						
• Actuarial accrued liability	$12,803,510	$11,076,457	$4,649,047	$3,704,456	$17,452,557	$14,780,913
• Unfunded accrued liability on AVAR	$6,038,637	$4,541,084	$2,410,727	$1,565,337	$8,449,364	$6,106,421
• Funded ratio on AVAR	52.8%	59.0%	48.1%	57.7%	51.6%	58.7%
• Unfunded accrued liability on MVAR	$6,116,273	$4,970,270	$2,431,051	$1,700,787	$8,547,324	$6,671,057
• Funded ratio on MVAR	52.2%	55.1%	47.7%	54.1%	51.0%	54.9%
Insurance						
• Actuarial accrued liability	$3,355,151	$2,988,121	$1,788,433	$1,558,818	$5,143,584	$4,546,939
• Unfunded accrued liability on AVAI	$1,127,750	$908,310	$591,653	$423,034	$1,719,403	$1,331,344
• Funded ratio on AVAI	66.4%	69.6%	66.9%	72.9%	66.6%	70.7%
• Unfunded accrued liability on MVAI	$1,142,615	$1,044,364	$599,432	$496,216	$1,742,047	$1,540,580
• Funded ratio on MVAI	65.9%	65.0%	66.5%	68.2%	66.1%	66.1%
Membership:						
• Number of						
- Active Members	82,198	80,664	9,495	9,084	91,693	89,748
- Retirees and Beneficiaries	59,013	56,339	8,998	8,563	68,011	64,902
- Inactive Members	85,031	82,292	3,198	2,830	88,229	85,122
- Total	226,242	219,295	21,691	20,477	247,933	239,772
• Projected payroll of active members	$2,452,407	$2,352,762	$541,633	$492,851	$2,994,040	$2,845,612
• Average salary of active members	$29,835	$29,167	$57,044	$54,255	$32,653	$31,707

Executive Summary (Continued)

Non-Hazardous Retirement Fund

The unfunded actuarial accrued liability for the non-hazardous retirement fund increased by $1.498 billion since the prior year's valuation to $6.039 billion. The largest source of this increase is the result of the decrease in the assumed rate of investment return which resulted in a $1.406 billion increase in the unfunded liability. Below is a chart with the historical actuarial value of assets and actuarial accrued liability for the non-hazardous fund. The divergence in the assets and liability over the last seven years has generally been due to a combination of the actual investment experience being less than the fund's expected investment return assumption, and a decrease in the assumed rate of return in 2015 and again in 2017.

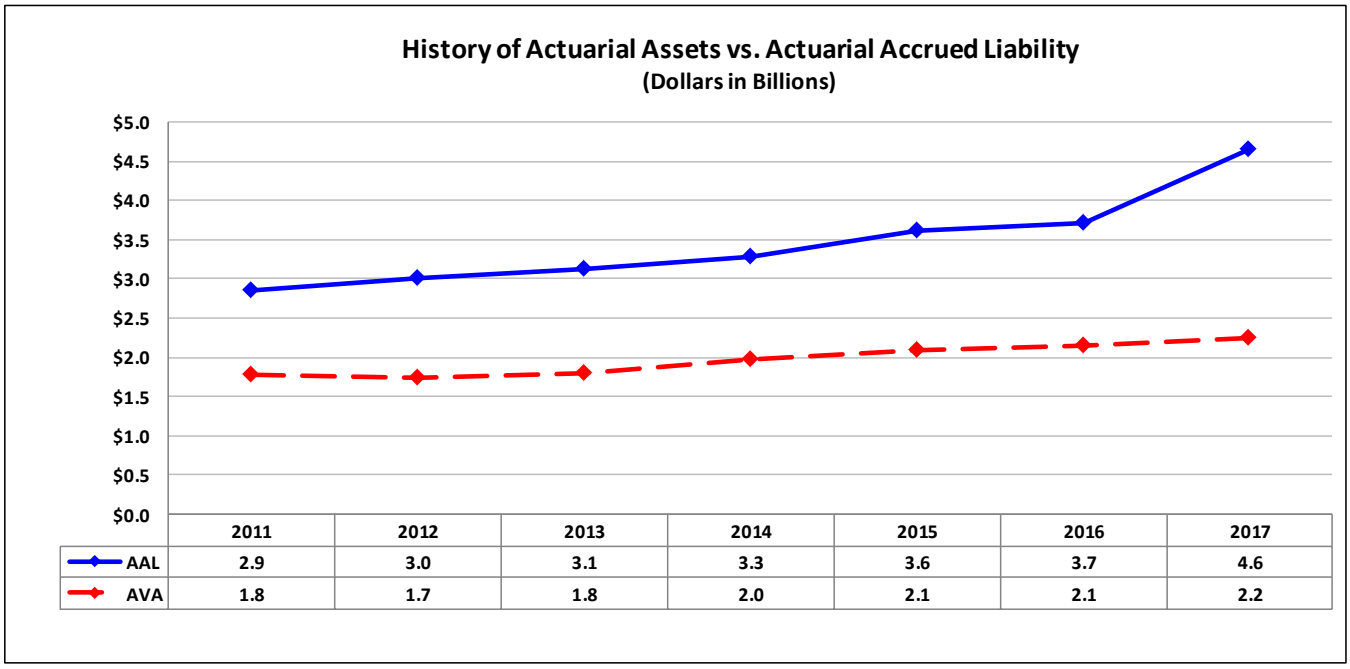


	2011	2012	2013	2014	2015	2016	2017
AAL	8.9	9.1	9.4	9.8	10.7	11.1	12.8
AVA	5.6	5.5	5.6	6.1	6.5	6.5	6.8

Executive Summary (Continued)

Hazardous Retirement Fund

The unfunded actuarial accrued liability for the hazardous retirement fund increased by $0.845 billion since the prior year's valuation to $2.411 billion. The largest source of this increase is the result of the decrease in the assumed rate of investment return which resulted in a $0.540 billion increase in the unfunded liability. Below is a chart with the historical actuarial value of assets and actuarial accrued liability for the hazardous retirement fund. The divergence in the assets and liability over the last seven years has generally been due to a combination of the actual contribution rates being less than the fund's expected investment return assumption, and a decrease in the assumed rate of return in 2015 and again in 2017.



	2011	2012	2013	2014	2015	2016	2017
AAL	2.9	3.0	3.1	3.3	3.6	3.7	4.6
AVA	1.8	1.7	1.8	2.0	2.1	2.1	2.2

SECTION 2

DISCUSSION

Discussion

The County Employees Retirement System (CERS) is a defined benefit pension fund that provides pensions and health care coverage for employees of state government, non-teaching staff at regional state supported universities, local health departments, regional mental health/mental retardation agencies, and other quasi-state agencies. CERS includes both non-hazardous and hazardous duty benefits. This report presents the result of the June 30, 2017 actuarial funding valuation for both the Retirement and Insurance Funds.

The primary purposes of the valuation report are to depict the current financial condition of the System, determine the annual required contribution, and analyze changes in the System's financial condition. In addition, the report provides various summaries of the data.

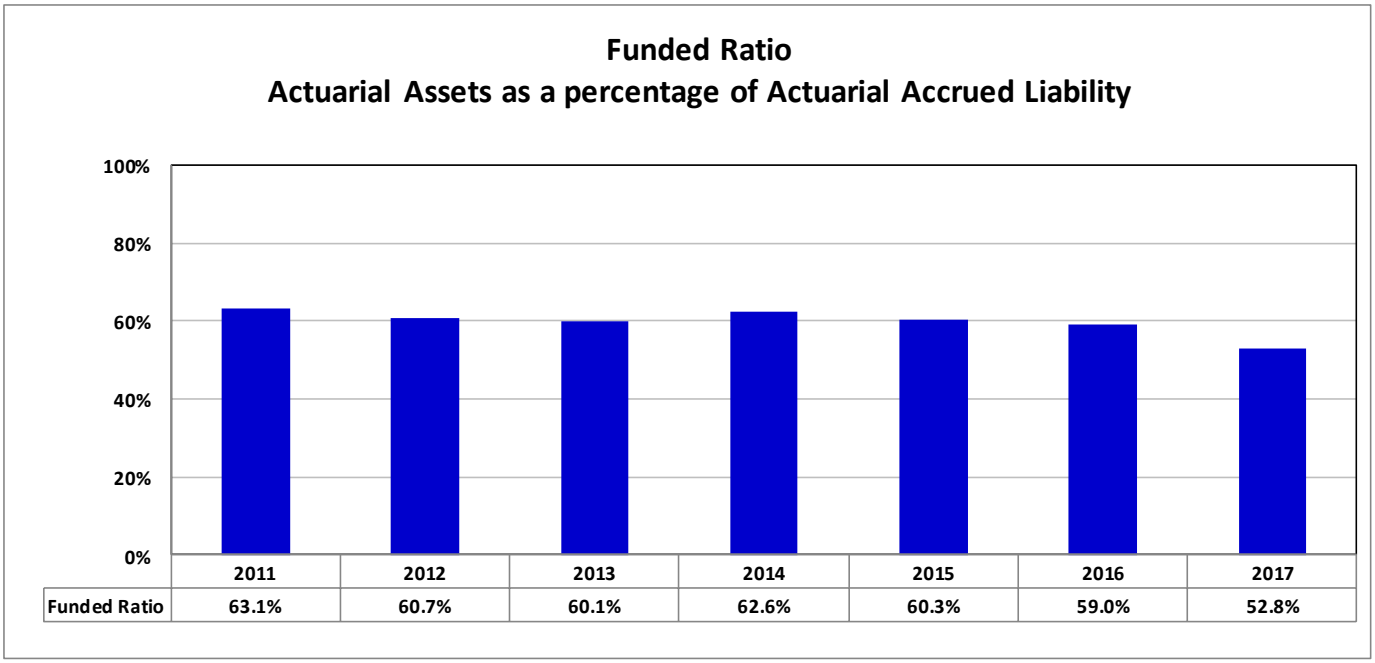
The actuarially determined contribution rates consist of two components: a normal cost rate and an amortization cost to finance the unfunded actuarial accrued liability. The normal cost rate is the theoretical amount which would be required to pay the members' benefits, based on the current plan provisions, if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. This is the amount is should cost to provide the benefits for an average new member. Since members contribute to the fund, only the excess of the normal rate over the member contribution rate is included in the employer contribution rate. The amortization cost is the amount, expressed as a percentage of payroll, necessary to amortize the unfunded actuarial accrued liability. The payroll growth rate and discount rate assumptions are selected by the Board. The funding period is specified in Section 61.565 of Kentucky Statute.

All of the actuarial and financial tables referenced by the other sections of this Report appear in Section 3. Section 4 provides member data and statistical information. Appendices A and B provide summaries of the principle actuarial assumptions and methods and plan provisions. Finally, Appendix C provides a glossary of technical terms that are used throughout this report.

Funding Progress

The following charts provide a seven-year history of the funds' funded ratio (i.e. the Actuarial Value of Assets divided by the Actuarial Accrued Liability). The decline in the funded ratio over the last seven years for the retirement funds has generally been due to actual investment experience being less than the investment return assumption, and a decrease in the assumed rate of return in 2015 and again in 2017.

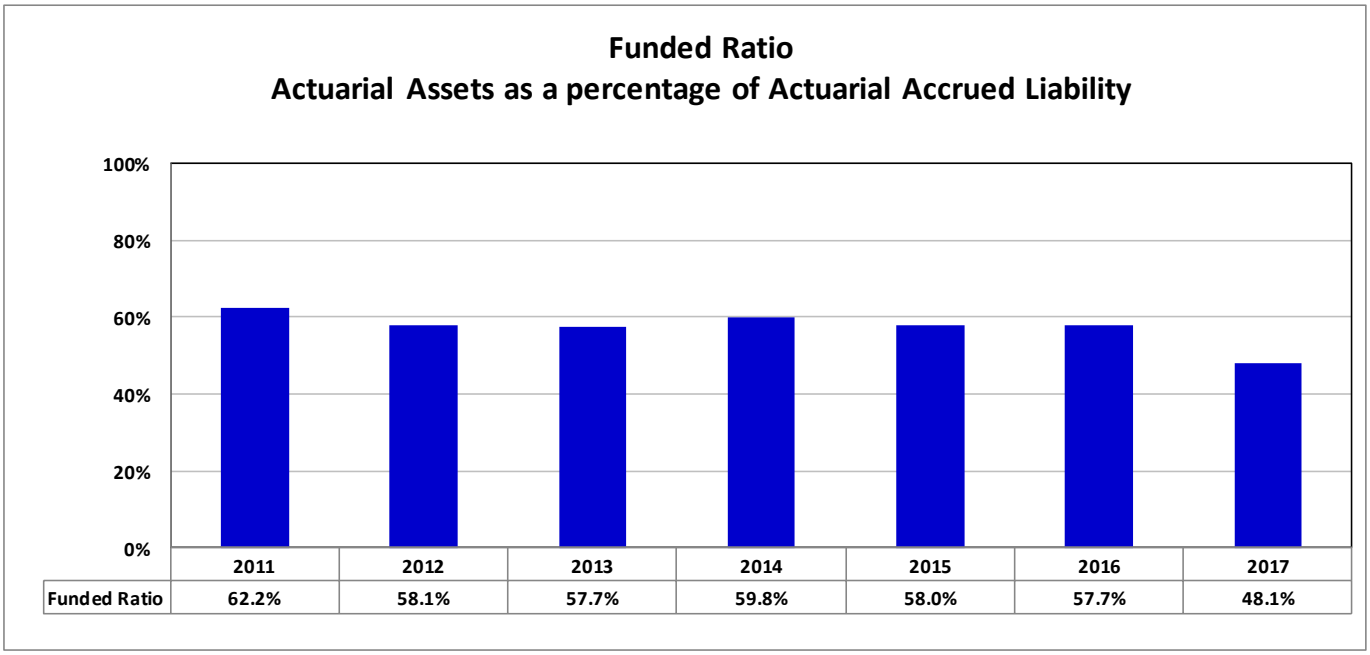
Non-Hazardous Retirement Fund



	2011	2012	2013	2014	2015	2016	2017
Funded Ratio	63.1%	60.7%	60.1%	62.6%	60.3%	59.0%	52.8%

Funding Progress (Continued)

Hazardous Retirement Fund



	2011	2012	2013	2014	2015	2016	2017
Funded Ratio	62.2%	58.1%	57.7%	59.8%	58.0%	57.7%	48.1%

Assuming the actuarial determined contributions are actually paid in future years, then absent future unfavorable investment or demographic experience we expect the funded ratio to begin improving. Also, the dollar amount of the unfunded actuarial accrued liability, or the difference between the actuarial accrued liability and the actuarial value of assets, is expected to decrease after those higher contribution rates become effective. Table 9, Schedule of Funding Progress, in the following section of the report provides additional detail regarding the funding progress of the Retirement System.

Asset Gains/ (Losses)

The actuarial value of assets ("AVA") is based on a smoothed market value of assets, using a systematic approach to phase-in the difference between the actual and expected investment return on the market value of assets (adjusted for receipts and disbursements during the year). This is appropriate because it dampens the short-term volatility inherent in investment markets. The returns are computed net of investment expenses. The actuarial value of assets for the Non-Hazardous Retirement Fund increased from $6.535 billion to $6.765 billion since the prior valuation. Table 7 in the following section of the report provides the development of the actuarial value of assets.

The rate of return on the market value of assets on a dollar-weighted basis for fiscal year 2017 was a 13.7% for the non-hazardous retirement fund which is greater than the 7.50% expected annual return during that fiscal year. The return on an actuarial (smoothed) asset value was 7.3%. This difference in the estimated return on market value and actuarial value illustrates the smoothing effect of the asset valuation method.

The market value of assets is $0.078 billion less than the actuarial value of assets, which signifies that the retirement system is in a position of deferred losses. Therefore, unless the System experiences investment returns in excess of the assumed rate of return in an amount that is at least equal to the outstanding deferred losses, the future recognition of these deferred losses is expected to increase the unfunded actuarial accrued liability.

Table 6 in the following section of this report provides asset information that was included in the annual financial statements of the System. Also, Tables 6 and 7 shows the estimated yield on a market value basis and on the actuarial asset valuation method.

Actuarial Gains/ (Losses)

The annual actuarial valuation is a snapshot analysis of the benefit liabilities, assets and funded position of the System as of the first day of the plan year. In any one fiscal year, the experience can be better or worse from that which is assumed or expected. The actuarial assumptions do not necessarily attempt to model what the experience will be for any one given fiscal year, but instead try to model the overall experience over many years. Therefore, as long as the actual experience of the retirement system is reasonably close to the current assumptions, the long-term funding requirements of the System will remain relatively consistent.

Below are tables that separately show a reconciliation of the actuarial gains / (loss) since the prior actuarial valuation for the retirement and health insurance funds, which include the effect of asset and liability gains and losses, changes in assumptions, changes in plan provisions, etc.

Retirement Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

	Non-Hazardous	Hazardous
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ 4,541,084	$ 1,565,337
2. Normal cost and administrative expenses	215,394	60,296
3. Less: contributions for the year	(484,268)	(176,048)
4. Interest accrual	330,499	113,060
5. Expected UAAL (Sum of Items 1 - 4)	$ 4,602,709	$ 1,562,645
6. Actual UAAL as of June 30,2017	$ 6,038,637	$ 2,410,727
7. Total gain (loss) for the year (Item 5 - Item 6)	$ (1,435,928)	$ (848,082)
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ (14,524)	$ (4,511)
9. Liability experience gain (loss) for the year	(15,568)	(303,768)
10. Assumption change	(1,405,836)	(539,803)
11. Total	$ (1,435,928)	$ (848,082)

The accrued liability for the non-hazardous retirement fund was less than 1% higher than expected, resulting in a $16 million liability loss. This $16 million increase is comprised of a $230 million decrease due to differences in liability calculations between GRS and the fund's prior actuary and a $246 million increase due the fund's experience during the last year. The accrued liability for the hazardous retirement fund was about 8% higher than expected, resulting in a $304 million liability loss. This $304 million increase is comprised of a $113 million increase due to differences in liability calculations between GRS and the fund's prior actuary and a $191 million increase due the fund's experience during the last year. The experience loss for both funds is primarily due to higher than expected salary increases during the past year.

Actuarial Gains/ (Losses) (Continued)

Insurance Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

	Non-Hazardous	Hazardous
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ 908,310	$ 423,034
2. Normal cost and administrative expenses	71,947	24,437
3. Less: contributions for the year	(129,870)	(53,245)
4. Interest accrual	65,951	30,647
5. Expected UAAL (Sum of Items 1 - 4)	$ 916,338	$ 424,873
6. Actual UAAL as of June 30,2017	$ 1,127,750	$ 591,653
7. Total gain (loss) for the year (Item 5 - Item 6)	$ (211,412)	$ (166,780)
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ (10,030)	$ (5,509)
9. Liability experience gain (loss) for the year	157,234	59,536
10. Assumption change	(358,616)	(220,807)
11. Total	$ (211,412)	$ (166,780)

The 2018 premiums were known at the time of the valuation and were incorporated into the liability measurement. Premiums were lower than expected and resulted in a $155 million liability experience gain for the non-hazardous insurance fund and a $118 million liability experience gain for the hazardous insurance fund.

Actuarial Assumptions and Methods

In determining costs and liabilities, actuaries use assumptions about the future, such as rates of salary increase, probabilities of retirement, termination, death and disability, and an annual investment return assumption. An experience study was conducted as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018. However, the Board has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study. Since the last actuarial valuation, the Board made the following changes in assumptions:

- Decrease the assumed rate of return to 6.25% for the retirement and health insurance funds.
- Decrease the price inflation assumption to 2.30% for the retirement and health insurance funds.
- Decrease the payroll growth assumption (used for amortizing the unfunded accrued liability) to 2.00% for retirement and health insurance funds.
- Decrease in the individual salary increase assumption and health care trend assumption that corresponds with the 0.95% decrease in the price inflation assumption.

Appendix A includes a summary of the actuarial assumptions and methods used in this valuation. It is our opinion that the assumptions are internally consistent, reasonable, and reflect anticipated future experience of the System. The next experience study will be conducted no later than as of June 30, 2018.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. This report does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

Benefit Provisions

Appendix B of this report includes a summary of the benefit provisions for CERS. There were no legislative changes enacted since the previous valuation that had a measurable effect on the current valuation.

This valuation reflects all benefits promised to CERS members, either by the statutes or by the Board. There are no ancillary benefits that might be deemed a CERS liability if continued beyond the availability of funding by the current funding source.

SECTION 3

ACTUARIAL TABLES

Actuarial Tables

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RETIREMENT BENEFITS

ACTUARIAL TABLES

Development of Unfunded Actuarial Accrued Liability
Retirement Benefits

(Dollar amounts expressed in thousands)

		June 30, 2017	
		Non-Hazardous (1)	Hazardous (2)
1.	Projected payroll of active members	$ 2,452,407	$ 541,633
2.	Present value of future pay	$ 19,236,003	$ 3,404,412
3.	Normal cost rate		
	a. Total normal cost rate	10.05%	14.52%
	b. Less: member contribution rate	-5.00%	-8.00%
	c. Employer normal cost rate	5.05%	6.52%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 6,904,473	$ 2,204,933
	b. Less: present value of future normal costs	(1,832,645)	(466,487)
	c. Actuarial accrued liability	$ 5,071,828	$ 1,738,446
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 7,313,076	$ 2,851,704
	b. Inactive members	418,606	58,897
	c. Active members (Item 4c)	5,071,828	1,738,446
	d. Total	$ 12,803,510	$ 4,649,047
6.	Actuarial value of assets	$ 6,764,873	$ 2,238,320
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 6,038,637	$ 2,410,727
8.	Funded Ratio	52.8%	48.1%

Actuarial Present Value of Future Benefits
Retirement Benefits
(Dollar amounts expressed in thousands)

		June 30, 2017	
		Non-Hazardous (1)	Hazardous (2)
1.	Active members		
	a. Service retirement	$ 6,359,838	$ 1,881,864
	b. Deferred termination benefits and refunds	355,125	261,612
	c. Survivor benefits	47,123	10,337
	d. Disability benefits	142,387	51,120
	e. Total	$ 6,904,473	$ 2,204,933
2.	Retired members		
	a. Service retirement	$ 6,424,305	$ 2,588,548
	b. Disability retirement	479,815	108,370
	c. Beneficiaries	408,956	154,786
	d. Total	$ 7,313,076	$ 2,851,704
3.	Inactive members		
	a. Vested terminations	$ 339,599	$ 51,652
	b. Nonvested terminations	79,007	7,245
	c. Total	$ 418,606	$ 58,897
4.	Total actuarial present value of future benefits	$ 14,636,155	$ 5,115,534

Development of Required Contribution Rate
Retirement Benefits

		June 30, 2017	
		Non-Hazardous (1)	Hazardous (2)
1.	Total normal cost rate		
	a. Service retirement	7.91%	8.94%
	b. Deferred termination benefits and refunds	1.72%	4.91%
	c. Survivor benefits	0.08%	0.11%
	d. Disability benefits	0.34%	0.56%
	e. Total	10.05%	14.52%
2.	Less: member contribution rate	-5.00%	-8.00%
3.	Total employer normal cost rate	5.05%	6.52%
4.	Administrative expenses	0.80%	0.26%
5.	Net employer normal cost rate	5.85%	6.78%
6.	UAAL amortization contribution	15.99%	28.91%
7.	Total recommended employer contribution	21.84%	35.69%

Actuarial Balance Sheet

Non-Hazardous Members Retirement

(Dollar amounts expressed in thousands)

		June 30, 2017 (1)	June 30, 2016 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 6,764,873	$ 6,535,372
	b. Present value of future member contributions	$ 961,800	$ 1,002,005
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 870,845	$ 525,861
	ii. Unfunded accrued liability contributions	6,038,637	4,541,085
	iii. Total future employer contributions	$ 6,909,482	$ 5,066,946
	d. Total assets	$ 14,636,155	$ 12,604,323
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 1,832,645	$ 1,527,866
	ii. Accrued liability	5,071,828	4,290,927
	iii. Total present value of future benefits	$ 6,904,473	$ 5,818,793
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 7,313,076	$ 6,410,537
	c. Present value of benefits payable on account of current inactive members	$ 418,606	$ 374,993
	d. Total liabilities	$ 14,636,155	$ 12,604,323

Actuarial Balance Sheet

Hazardous Members Retirement

(Dollar amounts expressed in thousands)

		June 30, 2017 (1)	June 30, 2016 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 2,238,320	$ 2,139,119
	b. Present value of future member contributions	$ 272,353	$ 281,802
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 194,134	$ 98,917
	ii. Unfunded accrued liability contributions	2,410,727	1,565,338
	iii. Total future employer contributions	$ 2,604,861	$ 1,664,255
	d. Total assets	$ 5,115,534	$ 4,085,176
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 466,487	$ 380,719
	ii. Accrued liability	1,738,446	1,315,745
	iii. Total present value of future benefits	$ 2,204,933	$ 1,696,464
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 2,851,704	$ 2,338,063
	c. Present value of benefits payable on account of current inactive members	$ 58,897	$ 50,649
	d. Total liabilities	$ 5,115,534	$ 4,085,176

Reconciliation of Retirement Net Assets

(Dollar amounts expressed in thousands)

		Year Ending June 30, 2017 (1) Non-Hazardous	Year Ending June 30, 2017 (2) Hazardous
1.	Value of assets at beginning of year	$ 6,106,187	$ 2,003,669
2.	Revenue for the year		
	a. Contributions		
	i. Member contributions	$ 150,715	$ 60,101
	ii. Employer contributions	331,492	114,316
	iii. Other contributions (less 401h)	2,061	1,632
	iii. Total	$ 484,268	$ 176,048
	b. Income		
	i. Interest, dividends, and other income	$ 185,883	$ 60,591
	ii. Investment expenses	(48,166)	(15,765)
	iii. Net	$ 137,717	$ 44,825
	c. Net realized and unrealized gains (losses)	680,564	224,173
	d. Total revenue	$ 1,302,550	$ 445,047
3.	Expenditures for the year		
	a. Disbursements		
	i. Refunds	$ 14,430	$ 2,315
	ii. Regular annuity benefits	687,461	226,984
	iii. Other benefit payments	0	0
	iv. Transfers to other systems	0	0
	v. Total	$ 701,891	$ 229,299
	b. Administrative expenses and depreciation	19,609	1,421
	c. Total expenditures	$ 721,500	$ 230,720
4.	Increase in net assets (Item 2. - Item 3.)	$ 581,050	$ 214,327
5.	Value of assets at end of year (Item 1. + Item 4.)	$ 6,687,237	$ 2,217,996
6.	Net external cash flow		
	a. Dollar amount	$ (237,231)	$ (54,672)
	b. Percentage of market value	-3.7%	-2.6%
7.	Estimated annual return on net assets	13.7%	13.6%

Development of Actuarial Value of Assets

Non-Hazardous Members Retirement

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2017
1.	Actuarial value of assets at beginning of year	$ 6,535,372
2.	Market value of assets at beginning of year	$ 6,106,187
3.	Net new investments	
	a. Contributions	$ 484,268
	b. Benefit payments	(701,891)
	c. Administrative expenses	(19,609)
	d. Subtotal	$ (237,231)
4.	Market value of assets at end of year	$ 6,687,237
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 818,281
6.	Assumed investment return rate for fiscal year	7.50%
7.	Expected return for immediate recognition	$ 449,068
8.	Excess return for phased recognition	$ 369,213
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2017	$ 369,213	$ 73,843
b.	2016	(515,652)	(103,130)
c.	2015	(386,073)	(77,215)
d.	2014	454,067	90,813
e.	2013	166,764	33,353
f.	Total		$ 17,664

10.	Actuarial value of assets as of June 30, 2017 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 6,764,873
11.	Ratio of actuarial value to market value	101.2%
12.	Estimated annual return on actuarial value of assets	7.3%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Hazardous Members Retirement

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2017
1.	Actuarial value of assets at beginning of year	$ 2,139,119
2.	Market value of assets at beginning of year	$ 2,003,669
3.	Net new investments	
	a. Contributions	$ 176,048
	b. Benefit payments	(229,299)
	c. Administrative expenses	(1,421)
	d. Subtotal	$ (54,672)
4.	Market value of assets at end of year	$ 2,217,996
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 268,999
6.	Assumed investment return rate for fiscal year	7.50%
7.	Expected return for immediate recognition	$ 148,225
8.	Excess return for phased recognition	$ 120,774
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2017	$ 120,774	$ 24,155
b.	2016	(162,540)	(32,508)
c.	2015	(122,554)	(24,511)
d.	2014	148,014	29,603
e.	2013	44,546	8,909
f.	Total		$ 5,648

10.	Actuarial value of assets as of June 30, 2017 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 2,238,320
11.	Ratio of actuarial value to market value	100.9%
12.	Estimated annual return on actuarial value of assets	7.3%

* Amounts may not add due to rounding

Schedule of Funding Progress
Retirement Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Non-Hazardous Members			
2011	$ 5,629,611	$ 8,918,085	$ 3,288,474	63.1%	$ 2,276,596	144.4%
2012	5,547,236	9,139,568	3,592,332	60.7%	2,236,546	160.6%
2013	5,637,094	9,378,876	3,741,782	60.1%	2,236,277	167.3%
2014	6,117,134	9,772,523	3,655,389	62.6%	2,272,270	160.9%
2015	6,474,849	10,740,325	4,265,477	60.3%	2,296,716	185.7%
2016	6,535,372	11,076,457	4,541,084	59.0%	2,352,762	193.0%
2017	6,764,873	12,803,510	6,038,637	52.8%	2,452,407	246.2%
			Hazardous Members			
2011	$ 1,779,545	$ 2,859,041	$ 1,079,496	62.2%	$ 466,964	231.2%
2012	1,747,379	3,009,992	1,262,613	58.1%	464,229	272.0%
2013	1,801,691	3,124,206	1,322,514	57.7%	461,673	286.5%
2014	1,967,640	3,288,826	1,321,186	59.8%	479,164	275.7%
2015	2,096,783	3,613,308	1,516,525	58.0%	483,641	313.6%
2016	2,139,119	3,704,456	1,565,337	57.7%	492,851	317.6%
2017	2,238,320	4,649,047	2,410,727	48.1%	541,633	445.1%
			Total CERS Members			
2011	$ 7,409,156	$ 11,777,126	$ 4,367,970	62.9%	$ 2,743,560	159.2%
2012	7,294,615	12,149,560	4,854,945	60.0%	2,700,775	179.8%
2013	7,438,785	12,503,082	5,064,297	59.5%	2,697,950	187.7%
2014	8,084,774	13,061,349	4,976,575	61.9%	2,751,434	180.9%
2015	8,571,632	14,353,633	5,782,001	59.7%	2,780,357	208.0%
2016	8,674,491	14,780,913	6,106,422	58.7%	2,845,613	214.6%
2017	9,003,193	17,452,557	8,449,364	51.6%	2,994,040	282.2%

Summary of Principal Assumptions and Methods

Below is a summary of the principal economic assumptions, cost method, and the method for financing the unfunded actuarial accrued liability:

	Non-Hazardous	Hazardous
Valuation date:	June 30, 2017	June 30, 2017
Actuarial cost method:	Entry Age Normal	Entry Age Normal
Amortization method:	Level percentage of payroll (2% payroll growth assumed)	Level percentage of payroll (2% payroll growth assumed)
Amortization period for contribution rate:	26-year closed period	26-year closed period
Asset valuation method:	5-Year Smoothed Market	5-Year Smoothed Market
Actuarial assumptions:		
Investment rate of return	6.25%	6.25%
Projected salary increases	3.30% to 11.55% (varies by service)	3.05% to 18.55% (varies by service)
Inflation	2.30%	2.30%
Post-retirement benefit adjustments	0.00%	0.00%
Retiree Mortality	RP-2000 Combined Mortality Table for Males and Females, projected using scale BB to 2013 (set back one year for females).	RP-2000 Combined Mortality Table for Males and Females, projected using scale BB to 2013 (set back one year for females).

Solvency Test
Retirement Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Accrued Liability: Active Member Contributions	Actuarial Accrued Liability: Retired Members & Beneficiaries	Actuarial Accrued Liability: Active Members (Employer Financed)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets: Active	Portion of Aggregate Accrued Liabilities Covered by Assets: Retired	Portion of Aggregate Accrued Liabilities Covered by Assets: ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Non-Hazardous Members							
2008	$ 963,214	$ 4,058,767	$ 2,282,237	$ 5,731,502	100.0%	100.0%	31.1%
2009	991,629	4,542,483	2,378,802	5,650,790	100.0%	100.0%	4.9%
2010	1,063,747	4,890,659	2,504,616	5,546,857	100.0%	91.7%	0.0%
2011	1,110,967	5,209,784	2,597,334	5,629,611	100.0%	86.7%	0.0%
2012	1,117,549	5,416,933	2,605,085	5,547,236	100.0%	81.8%	0.0%
2013	1,149,611	5,638,371	2,590,894	5,637,094	100.0%	79.6%	0.0%
2014	1,204,383	5,873,279	2,694,860	6,117,134	100.0%	83.6%	0.0%
2015	1,216,585	6,489,863	3,033,878	6,474,849	100.0%	81.0%	0.0%
2016	1,231,027	6,785,530	3,059,900	6,535,372	100.0%	78.2%	0.0%
2017	1,277,432	7,731,682	3,794,396	6,764,873	100.0%	71.0%	0.0%
Hazardous Members							
2008	$ 338,324	$ 1,406,982	$ 657,815	$ 1,750,867	100.0%	100.0%	0.8%
2009	350,309	1,540,263	687,873	1,751,488	100.0%	91.0%	0.0%
2010	369,613	1,622,684	679,855	1,749,464	100.0%	85.0%	0.0%
2011	382,072	1,768,512	708,457	1,779,545	100.0%	79.0%	0.0%
2012	381,672	1,889,884	738,435	1,747,379	100.0%	72.3%	0.0%
2013	390,471	1,988,030	745,705	1,801,691	100.0%	71.0%	0.0%
2014	415,070	2,077,517	796,239	1,967,640	100.0%	74.7%	0.0%
2015	422,359	2,297,703	893,246	2,096,783	100.0%	72.9%	0.0%
2016	428,713	2,388,712	887,031	2,139,119	100.0%	71.6%	0.0%
2017	458,808	2,910,601	1,279,638	2,238,320	100.0%	61.1%	0.0%

INSURANCE BENEFITS

ACTUARIAL TABLES

Development of Unfunded Actuarial Accrued Liability
Insurance Benefits

(Dollar amounts expressed in thousands)

		June 30, 2017	
		Non-Hazardous (1)	Hazardous (2)
1.	Projected payroll of active members	$ 2,452,407	$ 541,633
2.	Present value of future pay	$ 19,055,637	$ 3,402,207
3.	Normal cost rate		
	a. Total normal cost rate	3.57%	5.38%
	b. Less: member contribution rate	-0.41%	-0.35%
	c. Employer normal cost rate	3.16%	5.03%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 2,390,844	$ 944,509
	b. Less: present value of future normal costs	(639,131)	(150,840)
	c. Actuarial accrued liability	$ 1,751,713	$ 793,669
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 1,445,497	$ 973,103
	b. Inactive members	157,941	21,661
	c. Active members (Item 4c)	1,751,713	793,669
	d. Total	$ 3,355,151	$ 1,788,433
6.	Actuarial value of assets	$ 2,227,401	$ 1,196,780
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 1,127,750	$ 591,653
8.	Funded Ratio	66.4%	66.9%

Development of Required Contribution Rate
Insurance Benefits

		June 30, 2017	
		Non-Hazardous (1)	Hazardous (2)
1.	Total normal cost rate	3.57%	5.38%
2.	Less: member contribution rate	-0.41%	-0.35%
3.	Total employer normal cost rate	3.16%	5.03%
4.	Administrative expenses	0.03%	0.07%
5.	Net employer normal cost rate	3.19%	5.10%
6.	UAAL amortization contribution	3.02%	7.07%
7.	Total recommended employer contribution	6.21%	12.17%

Actuarial Balance Sheet

Non-Hazardous Members Insurance

(Dollar amounts expressed in thousands)

		June 30, 2017 (1)	June 30, 2016 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 2,227,401	$ 2,079,811
	b. Present value of future member contributions	$ 94,725	$ 79,503
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 544,406	$ 441,836
	ii. Unfunded accrued liability contributions	1,127,750	908,310
	iii. Total future employer contributions	$ 1,672,156	$ 1,350,146
	d. Total assets	$ 3,994,282	$ 3,509,460
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 639,131	$ 521,339
	ii. Accrued liability	1,751,713	1,503,184
	iii. Total present value of future benefits	$ 2,390,844	$ 2,024,523
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 1,445,497	$ 1,326,305
	c. Present value of benefits payable on account of current inactive members	$ 157,941	$ 158,632
	d. Total liabilities	$ 3,994,282	$ 3,509,460

Actuarial Balance Sheet

Hazardous Members Insurance

(Dollar amounts expressed in thousands)

		June 30, 2017 (1)	June 30, 2016 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 1,196,780	$ 1,135,784
	b. Present value of future member contributions	$ 16,300	$ 13,096
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 134,540	$ 124,881
	ii. Unfunded accrued liability contributions	591,653	423,034
	iii. Total future employer contributions	$ 726,193	$ 547,915
	d. Total assets	$ 1,939,273	$ 1,696,795
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 150,840	$ 137,977
	ii. Accrued liability	793,669	679,458
	iii. Total present value of future benefits	$ 944,509	$ 817,435
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 973,103	$ 855,273
	c. Present value of benefits payable on account of current inactive members	$ 21,661	$ 24,087
	d. Total liabilities	$ 1,939,273	$ 1,696,795

Reconciliation of Insurance Net Assets

(Dollar amounts expressed in thousands)

		Year Ending June 30, 2017 (1) Non-Hazardous	Year Ending June 30, 2017 (2) Hazardous
1.	Value of assets at beginning of year	$ 1,943,757	$ 1,062,602
2.	Revenue for the year		
	a. Contributions		
	i. Member contributions	$ 9,158	$ 1,708
	ii. Employer contributions	117,310	50,743
	iii. Other contributions	3,402	794
	iii. Total	$ 129,870	$ 53,245
	b. Income		
	i. Interest, dividends, and other income	$ 58,208	$ 32,002
	ii. Investment expenses	(16,245)	(8,992)
	iii. Net	$ 41,963	$ 23,010
	c. Net realized and unrealized gains (losses)	225,241	121,393
	d. Total revenue	$ 397,074	$ 197,648
3.	Expenditures for the year		
	a. Disbursements		
	i. Refunds	$ 0	$ 0
	ii. Healthcare premium subsidies	124,573	70,407
	iii. Other benefit payments	2,934	461
	iv. Transfers to other systems	0	0
	v. Total	$ 127,506	$ 70,868
	b. Administrative expenses and depreciation	789	381
	c. Total expenditures	$ 128,295	$ 71,249
4.	Increase in net assets (Item 2. - Item 3.)	$ 268,779	$ 126,399
5.	Value of assets at end of year (Item 1. + Item 4.)	$ 2,212,536	$ 1,189,001
6.	Net external cash flow		
	a. Dollar amount	$ 1,574	$ (18,004)
	b. Percentage of market value	0.1%	-1.6%
7.	Estimated annual return on net assets	13.7%	13.7%

Development of Actuarial Value of Assets

Non-Hazardous Members Insurance

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2017
1.	Actuarial value of assets at beginning of year	$ 2,079,811
2.	Market value of assets at beginning of year	$ 1,943,757
3.	Net new investments	
	a. Contributions	$ 129,870
	b. Benefit payments	(127,506)
	c. Administrative expenses	(789)
	d. Subtotal	$ 1,574
4.	Market value of assets at end of year	$ 2,212,536
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 267,205
6.	Assumed investment return rate for fiscal year	7.50%
7.	Expected return for immediate recognition	$ 145,841
8.	Excess return for phased recognition	$ 121,364
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2017	$ 121,364	$ 24,273
b.	2016	(147,421)	(29,484)
c.	2015	(110,970)	(22,194)
d.	2014	104,420	20,884
e.	2013	33,482	6,696
f.	Total		$ 175

10.	Actuarial value of assets as of June 30, 2017 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 2,227,401
11.	Ratio of actuarial value to market value	100.7%
12.	Estimated annual return on actuarial value of assets	7.0%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Hazardous Members Insurance

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2017
1.	Actuarial value of assets at beginning of year	$ 1,135,784
2.	Market value of assets at beginning of year	$ 1,062,602
3.	Net new investments	
	a. Contributions	$ 53,245
	b. Benefit payments	(70,868)
	c. Administrative expenses	(381)
	d. Subtotal	$ (18,004)
4.	Market value of assets at end of year	$ 1,189,001
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 144,403
6.	Assumed investment return rate for fiscal year	7.50%
7.	Expected return for immediate recognition	$ 79,020
8.	Excess return for phased recognition	$ 65,383
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2017	$ 65,383	$ 13,077
b.	2016	(78,507)	(15,701)
c.	2015	(60,152)	(12,030)
d.	2014	55,401	11,080
e.	2013	17,771	3,554
f.	Total		$ (21)

10.	Actuarial value of assets as of June 30, 2017 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 1,196,780
11.	Ratio of actuarial value to market value	100.7%
12.	Estimated annual return on actuarial value of assets	7.0%

* Amounts may not add due to rounding

Schedule of Funding Progress
Insurance Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Non-Hazardous Members			
2011	$ 1,433,451	$ 3,073,973	$ 1,640,522	46.6%	$ 2,276,596	72.1%
2012	1,512,854	2,370,771	857,917	63.8%	2,236,546	38.4%
2013	1,628,244	2,443,894	815,650	66.6%	2,236,277	36.5%
2014	1,831,199	2,616,915	785,715	70.0%	2,272,270	34.6%
2015	1,997,456	2,907,827	910,371	68.7%	2,296,716	39.6%
2016	2,079,811	2,988,121	908,310	69.6%	2,352,762	38.6%
2017	2,227,401	3,355,151	1,127,750	66.4%	2,452,407	46.0%
			Hazardous Members			
2011	$ 770,790	$ 1,647,703	$ 876,912	46.8%	$ 466,964	187.8%
2012	829,041	1,364,843	535,802	60.7%	464,229	115.4%
2013	892,774	1,437,333	544,558	62.1%	461,673	118.0%
2014	997,733	1,493,864	496,131	66.8%	479,164	103.5%
2015	1,087,707	1,504,015	416,308	72.3%	483,641	86.1%
2016	1,135,784	1,558,818	423,034	72.9%	492,851	85.8%
2017	1,196,780	1,788,433	591,653	66.9%	541,633	109.2%
			Total CERS Members			
2011	$ 2,204,241	$ 4,721,676	$ 2,517,435	46.7%	$ 2,743,560	91.8%
2012	2,341,895	3,735,614	1,393,719	62.7%	2,700,775	51.6%
2013	2,521,018	3,881,227	1,360,209	65.0%	2,697,950	50.4%
2014	2,828,932	4,110,779	1,281,847	68.8%	2,751,434	46.6%
2015	3,085,163	4,411,842	1,326,679	69.9%	2,780,357	47.7%
2016	3,215,595	4,546,939	1,331,344	70.7%	2,845,613	46.8%
2017	3,424,181	5,143,584	1,719,403	66.6%	2,994,040	57.4%

Solvency Test
Insurance Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Accrued Liability: Active Member Contributions	Actuarial Accrued Liability: Retired Members & Beneficiaries	Actuarial Accrued Liability: Active Members (Employer Financed)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets: Active	Portion of Aggregate Accrued Liabilities Covered by Assets: Retired	Portion of Aggregate Accrued Liabilities Covered by Assets: ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Non-Hazardous Members							
2008	$ -	$ 1,521,450	$ 2,061,743	$ 1,168,883	100.0%	76.8%	0.0%
2009	-	1,478,783	1,591,603	1,216,632	100.0%	82.3%	0.0%
2010	-	1,526,533	1,631,807	1,293,039	100.0%	84.7%	0.0%
2011	-	1,460,808	1,613,165	1,433,451	100.0%	98.1%	0.0%
2012	-	1,146,908	1,223,864	1,512,854	100.0%	100.0%	29.9%
2013	-	1,205,599	1,238,295	1,628,244	100.0%	100.0%	34.1%
2014	-	1,318,183	1,298,732	1,831,199	100.0%	100.0%	39.5%
2015	-	1,372,597	1,535,231	1,997,456	100.0%	100.0%	40.7%
2016	-	1,484,937	1,503,184	2,079,811	100.0%	100.0%	39.6%
2017	-	1,603,438	1,751,713	2,227,401	100.0%	100.0%	35.6%
Hazardous Members							
2008	$ -	$ 722,435	$ 1,047,348	$ 613,526	100.0%	84.9%	0.0%
2009	-	725,900	867,648	651,131	100.0%	89.7%	0.0%
2010	-	814,300	860,403	692,770	100.0%	85.1%	0.0%
2011	-	771,631	876,071	770,790	100.0%	99.9%	0.0%
2012	-	575,099	789,744	829,041	100.0%	100.0%	32.2%
2013	-	660,955	776,377	892,774	100.0%	100.0%	29.9%
2014	-	700,312	793,553	997,733	100.0%	100.0%	37.5%
2015	-	790,714	713,301	1,087,707	100.0%	100.0%	41.6%
2016	-	879,360	679,458	1,135,784	100.0%	100.0%	37.7%
2017	-	994,764	793,669	1,196,780	100.0%	100.0%	25.5%

SECTION 4

MEMBERSHIP INFORMATION

Membership Tables

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Summary of Membership Data

(Total dollar amounts expressed in thousands)

		Non-Hazardous June 30, 2017 (1)	Hazardous June 30, 2017 (2)	Total June 30, 2017 (3)
1.	Active members			
a.	Males	29,300	8,355	37,655
b.	Females	52,898	1,140	54,038
c.	Total members	82,198	9,495	91,693
d.	Total annualized prior year salaries	$ 2,452,407	$ 541,633	$ 2,994,040
e.	Average salary	$ 29,835	$ 57,044	$ 32,653
f.	Average age	47.9	39.2	47.0
g.	Average service	9.4	10.5	9.5
h.	Member contributions with interest	$ 1,277,432	$ 458,808	$ 1,736,240
i.	Average contributions with interest	$ 15,541	$ 48,321	$ 18,935
2.	Vested inactive members			
a.	Number	14,563	795	15,358
b.	Total annual deferred benefits	$ 61,920	$ 7,090	$ 69,010
c.	Average annual deferred benefit	$ 4,252	$ 8,918	$ 4,493
d.	Average age at the valuation date	51.0	43.5	N/A
3.	Nonvested inactive members			
a.	Number	70,468	2,403	72,871
b.	Total member contributions with interest	$ 79,007	$ 7,245	$ 86,252
c.	Average contributions with interest	$ 1,121	$ 3,015	$ 1,184
4.	Service retirees			
a.	Number	49,575	7,402	56,977
b.	Total annual benefits	$ 574,210	$ 202,267	$ 776,476
c.	Average annual benefit	$ 11,583	$ 27,326	$ 13,628
d.	Average age at the valuation date	70.2	61.8	69.1
5.	Disabled retirees			
a.	Number	4,089	551	4,640
b.	Total annual benefits	$ 45,906	$ 9,102	$ 55,008
c.	Average annual benefit	$ 11,227	$ 16,519	$ 11,855
d.	Average age at the valuation date	64.9	56.1	63.8
6.	Beneficiaries			
a.	Number	5,349	1,045	6,394
b.	Total annual benefits	$ 47,352	$ 15,312	$ 62,664
c.	Average annual benefit	$ 8,852	$ 14,653	$ 9,800
d.	Average age at the valuation date	68.7	57.6	66.9

Summary of Historical Active Membership

	Active Members		Covered Payroll		Average Annual Pay	
June 30,	Number	Percent Increase /(Decrease)	Amount in Thousands	Percent Increase /(Decrease)	Amount	Percent Increase /(Decrease)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Non-Hazardous Members						
2011	85,285		$ 2,276,596		$ 26,694	1.1%
2012	83,052	-2.6%	2,236,546	-1.8%	26,929	0.9%
2013	81,815	-1.5%	2,236,277	0.0%	27,333	1.5%
2014	81,115	-0.9%	2,272,270	1.6%	28,013	2.5%
2015	80,852	-0.3%	2,296,716	1.1%	28,406	1.4%
2016	80,664	-0.2%	2,352,762	2.4%	29,167	2.7%
2017	82,198	1.9%	2,452,407	4.2%	29,835	2.3%
Hazardous Members						
2011	9,407		$ 466,964		$ 49,640	1.7%
2012	9,130	-2.9%	464,229	-0.6%	50,847	2.4%
2013	9,123	-0.1%	461,673	-0.6%	50,605	-0.5%
2014	9,194	0.8%	479,164	3.8%	52,117	3.0%
2015	9,172	-0.2%	483,641	0.9%	52,730	1.2%
2016	9,084	-1.0%	492,851	1.9%	54,255	2.9%
2017	9,495	4.5%	541,633	9.9%	57,044	5.1%

Distribution of Active Members by Age and by Years of Service

Non-Hazardous Members

Attained Age	Years of Credited Service												
	0 Count & Avg. Comp.	1 Count & Avg. Comp.	2 Count & Avg. Comp.	3 Count & Avg. Comp.	4 Count & Avg. Comp.	5-9 Count & Avg. Comp.	10-14 Count & Avg. Comp.	15-19 Count & Avg. Comp.	20-24 Count & Avg. Comp.	25-29 Count & Avg. Comp.	30-34 Count & Avg. Comp.	35 & Over Count & Avg. Comp.	Total Count & Avg. Comp.
Under 20	116	7	1	1	0	0	0	0	0	0	0	0	125
	$14,326	$20,495	$25,247	$15,310	$0	$0	$0	$0	$0	$0	$0	$0	$14,767
20-24	1,351	612	266	123	47	18	3	0	0	0	0	0	2,420
	$17,383	$22,843	$23,709	$26,240	$29,907	$25,874	$16,613	$0	$0	$0	$0	$0	$20,215
25-29	1,582	1,109	790	501	352	582	16	0	1	1	0	0	4,934
	$19,345	$23,682	$27,440	$29,359	$30,263	$33,560	$38,969	$0	$1,200	$81,174	$0	$0	$25,161
30-34	1,283	1,014	818	576	430	1,498	531	15	1	0	0	0	6,166
	$19,226	$23,836	$26,668	$29,352	$30,813	$34,525	$38,953	$41,565	$51,262	$0	$0	$0	$28,201
35-39	1,278	1,020	835	611	516	1,809	1,301	552	20	1	0	0	7,943
	$19,047	$23,701	$24,171	$26,175	$26,741	$33,253	$39,101	$43,592	$51,552	$41,188	$0	$0	$29,542
40-44	1,059	888	857	602	546	2,128	1,651	1,251	402	17	0	0	9,401
	$18,791	$23,316	$24,911	$25,920	$26,785	$30,914	$35,728	$43,282	$49,477	$55,976	$0	$0	$31,054
45-49	1,007	826	760	624	544	2,421	2,273	1,805	934	215	17	0	11,426
	$20,234	$23,468	$25,262	$26,974	$26,008	$29,657	$32,898	$38,637	$46,954	$55,357	$67,469	$0	$31,784
50-54	853	695	630	490	477	2,208	2,395	2,586	1,315	508	116	9	12,282
	$19,382	$23,427	$25,908	$27,947	$27,997	$29,404	$31,373	$32,917	$39,261	$50,616	$59,930	$73,413	$31,454
55-59	661	583	596	432	447	1,926	2,353	2,625	1,812	652	138	48	12,273
	$20,195	$23,952	$25,332	$25,256	$26,217	$29,067	$31,559	$32,162	$35,606	$42,975	$54,148	$62,781	$31,185
60-64	491	361	422	340	353	1,707	1,698	1,777	1,299	586	133	54	9,221
	$16,295	$22,479	$23,690	$25,346	$24,708	$27,935	$32,639	$33,653	$34,327	$40,617	$50,505	$61,433	$30,885
65 & Over	385	295	330	218	248	1,263	1,340	908	528	337	91	64	6,007
	$14,237	$16,715	$20,233	$18,403	$19,458	$23,624	$29,223	$31,674	$32,543	$35,438	$41,754	$53,298	$26,639
Total	10,066	7,410	6,305	4,518	3,960	15,560	13,561	11,519	6,312	2,317	495	175	82,198
	$18,716	$23,227	$25,162	$26,676	$26,894	$30,070	$33,181	$35,305	$38,458	$44,218	$52,703	$59,444	$29,835

Distribution of Active Members by Age and by Years of Service

Hazardous Members

Attained Age	Years of Credited Service												
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.
Under 20	3	0	0	0	1	0	0	0	0	0	0	0	4
	$32,735	$0	$0	$0	$44,742	$0	$0	$0	$0	$0	$0	$0	$35,737
20-24	218	116	39	12	6	1	0	0	0	0	0	0	392
	$31,003	$39,289	$45,030	$44,626	$40,612	$35,991	$0	$0	$0	$0	$0	$0	$35,427
25-29	225	240	215	214	170	218	2	0	0	0	0	0	1,284
	$33,707	$43,742	$48,733	$47,619	$48,478	$53,071	$47,869	$0	$0	$0	$0	$0	$45,683
30-34	127	115	143	123	166	729	263	1	0	0	0	0	1,667
	$34,262	$44,426	$49,280	$51,712	$50,189	$56,473	$59,511	$78,551	$0	$0	$0	$0	$52,848
35-39	60	46	57	51	75	429	707	225	18	1	0	0	1,669
	$34,233	$45,393	$47,850	$48,995	$53,001	$56,157	$61,242	$65,500	$79,916	$51,518	$0	$0	$58,095
40-44	31	29	23	24	22	228	453	639	198	12	0	0	1,659
	$32,514	$42,658	$48,240	$48,336	$45,818	$54,912	$60,684	$68,155	$75,959	$90,285	$0	$0	$63,416
45-49	26	25	22	15	24	141	280	521	321	55	7	0	1,437
	$29,061	$43,628	$41,978	$48,781	$48,469	$54,823	$57,217	$64,009	$77,251	$85,461	$90,942	$0	$63,952
50-54	17	11	8	13	14	97	163	204	116	103	15	0	761
	$31,956	$40,026	$44,821	$40,538	$48,595	$56,610	$60,409	$64,701	$70,819	$79,994	$89,348	$0	$64,233
55-59	2	12	7	2	6	51	101	92	54	25	13	1	366
	$45,805	$41,635	$42,363	$55,669	$37,587	$55,263	$58,958	$60,316	$62,812	$77,335	$99,484	$116,630	$60,880
60-64	3	3	1	1	1	31	63	34	20	14	6	6	183
	$50,435	$59,964	$59,368	$31,649	$35,411	$52,091	$57,870	$63,589	$69,574	$80,378	$69,058	$98,627	$62,312
65 & Over	1	1	1	1	0	7	31	23	1	3	3	1	73
	$27,189	$39,776	$22,217	$42,993	$0	$45,213	$54,424	$65,878	$44,373	$41,976	$90,783	$121,853	$57,747
Total	713	598	516	456	485	1,932	2,063	1,739	728	213	44	8	9,495
	$32,852	$43,043	$48,019	$48,663	$49,379	$55,567	$59,957	$65,636	$74,614	$81,030	$89,928	$103,781	$57,044

Distribution of Annuitant Monthly Benefit by Status and Age
Non-Hazardous Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

	Retirement		Disability		Survivors & Beneficiaries		Total	
Current Age	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	276	$ 6,258	213	$ 2,578	605	$ 4,743	1,094	$ 13,579
50 - 54	1,208	28,709	313	4,114	240	2,148	1,761	34,971
55 - 59	4,139	72,231	702	8,721	408	4,126	5,249	85,078
60 - 64	8,320	114,696	904	10,600	596	6,021	9,820	131,317
65 - 69	12,190	141,556	821	9,118	764	7,691	13,775	158,365
70 - 74	9,753	96,987	550	5,542	740	7,020	11,043	109,549
75 - 79	6,764	61,869	368	3,508	741	6,511	7,873	71,888
80 - 84	4,007	32,317	166	1,394	568	4,645	4,741	38,356
85 - 89	1,990	14,382	46	291	408	2,856	2,444	17,529
90 And Over	928	5,204	6	39	279	1,591	1,213	6,834
Total	**49,575**	**$ 574,210**	**4,089**	**$ 45,906**	**5,349**	**$ 47,352**	**59,013**	**$ 667,468**

Distribution of Annuitant Monthly Benefit by Status and Age
Hazardous Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

Current Age	Retirement		Disability		Survivors & Beneficiaries		Total	
	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	830	$ 26,495	164	$ 2,943	256	$ 1,918	1,250	$ 31,356
50 - 54	1,167	37,679	99	1,725	68	1,169	1,334	40,573
55 - 59	1,193	34,754	89	1,506	103	1,587	1,385	37,847
60 - 64	1,398	37,634	96	1,391	132	2,087	1,626	41,112
65 - 69	1,387	34,980	66	982	143	2,674	1,596	38,636
70 - 74	806	17,744	27	415	147	2,557	980	20,716
75 - 79	397	8,215	2	25	95	1,751	494	9,991
80 - 84	158	3,217	7	95	60	899	225	4,211
85 - 89	56	1,341	0	-	35	551	91	1,892
90 And Over	10	207	1	20	6	119	17	346
Total	**7,402**	**$ 202,267**	**551**	**$ 9,102**	**1,045**	**$ 15,312**	**8,998**	**$ 226,680**

Non-Hazardous Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	5,433	$ 5,654,324	19,324	$ 14,240,228	24,757	$ 19,894,552
Joint & Survivor:						
100% to Beneficiary	3,081	3,496,419	1,680	1,056,228	4,761	4,552,647
66 2/3% to Beneficiary	817	1,516,140	612	653,305	1,429	2,169,445
50% to Beneficiary	1,144	1,857,408	1,603	1,863,468	2,747	3,720,877
Pop-up Option	4,111	6,488,014	3,697	3,906,152	7,808	10,394,165
Social Security Option:						
Age 62 Basic	257	448,542	535	553,209	792	1,001,752
Age 62 Survivorship	598	1,057,324	355	350,888	953	1,408,212
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	1	3,007	1	236	2	3,243
10 Years Certain & Life	1,424	1,460,646	3,480	2,649,787	4,904	4,110,433
15 Years Certain & Life	649	662,254	859	650,927	1,508	1,313,181
20 Years Certain & Life	482	651,052	745	565,567	1,227	1,216,619
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	96	114,040	365	312,783	461	426,822
24 Month Basic	59	40,600	243	194,946	302	235,546
36 Month Basic	253	124,069	708	322,323	961	446,392
12 Month Survivor	144	176,456	92	93,158	236	269,615
24 Month Survivor	89	91,577	60	40,491	149	132,067
36 Month Survivor	390	254,202	277	126,566	667	380,768
Total:	19,028	$ 24,096,075	34,636	$ 27,580,261	53,664	$ 51,676,336

Hazardous Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	1,095	$ 2,239,751	328	$ 503,186	1,423	$ 2,742,937
Joint & Survivor:						
100% to Beneficiary	898	1,900,096	39	49,096	937	1,949,192
66 2/3% to Beneficiary	325	816,348	13	27,475	338	843,823
50% to Beneficiary	467	1,129,014	43	96,969	510	1,225,984
Pop-up Option	3,090	7,872,075	147	289,025	3,237	8,161,100
Social Security Option:						
Age 62 Basic	108	173,877	13	13,278	121	187,155
Age 62 Survivorship	292	467,388	19	32,804	311	500,192
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	85	145,525	5	5,333	90	150,858
10 Years Certain & Life	225	469,925	66	119,374	291	589,299
15 Years Certain & Life	91	175,897	17	28,006	108	203,903
20 Years Certain & Life	156	324,566	29	45,859	185	370,425
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	23	37,037	9	12,127	32	49,164
24 Month Basic	20	42,799	6	6,336	26	49,135
36 Month Basic	53	85,377	20	23,431	73	108,808
12 Month Survivor	57	146,314	4	8,080	61	154,394
24 Month Survivor	68	110,450	2	2,220	70	112,670
36 Month Survivor	134	208,725	6	6,249	140	214,973
Total:	7,187	$ 16,345,163	766	$ 1,268,848	7,953	$ 17,614,011

Non-Hazardous Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	16	$ 4,408	42	$ 25,711	58	$ 30,119
Joint & Survivor:						
100% to Beneficiary	534	320,572	1,578	1,073,177	2,112	1,393,748
66 2/3% to Beneficiary	86	54,726	242	189,302	328	244,028
50% to Beneficiary	154	60,896	412	235,493	566	296,389
Pop-up Option	260	232,093	675	682,333	935	914,425
Social Security Option:						
Age 62 Basic	0	0	5	4,806	5	4,806
Age 62 Survivorship	44	49,846	147	176,382	191	226,228
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	94	64,720	109	72,951	203	137,671
10 Years Certain	142	86,298	172	141,416	314	227,714
10 Years Certain & Life	58	39,911	79	59,000	137	98,910
15 Years Certain & Life	41	38,912	68	55,007	109	93,919
20 Years Certain & Life	55	37,304	62	62,091	117	99,395
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	0	0	1	395	1	395
24 Month Basic	0	0	0	0	0	0
36 Month Basic	1	149	1	152	2	301
12 Month Survivor	11	7,150	46	46,720	57	53,869
24 Month Survivor	15	14,462	30	28,682	45	43,144
36 Month Survivor	48	24,467	121	56,451	169	80,918
Total:	1,559	$ 1,035,914	3,790	$ 2,910,068	5,349	$ 3,945,982

Hazardous Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	11	$ 5,268	40	$ 30,031	51	$ 35,299
Joint & Survivor:						
100% to Beneficiary	43	37,391	229	285,889	272	323,280
66 2/3% to Beneficiary	10	9,658	51	70,709	61	80,367
50% to Beneficiary	17	13,273	68	66,619	85	79,892
Pop-up Option	62	75,205	259	415,988	321	491,193
Social Security Option:	0	0	0	0		
Age 62 Basic	0	0	1	310	1	310
Age 62 Survivorship	7	12,994	101	136,037	108	149,031
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	3	2,669	3	2,669
5 Years Certain	2	2,495	0	0	2	2,495
10 Years Certain	29	24,957	9	7,349	38	32,306
10 Years Certain & Life	5	3,627	7	5,858	12	9,485
15 Years Certain & Life	3	998	5	1,440	8	2,438
20 Years Certain & Life	5	2,742	11	9,683	16	12,424
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):	0	0	0	0		
12 Month Basic	0	0	1	2,192	1	2,192
24 Month Basic	0	0	1	1,467	1	1,467
36 Month Basic	2	562	3	1,619	5	2,181
12 Month Survivor	1	579	6	4,611	7	5,189
24 Month Survivor	2	1,468	10	7,091	12	8,560
36 Month Survivor	10	8,827	31	26,389	41	35,215
Total:	209	$ 200,043	836	$ 1,075,951	1,045	$ 1,275,994

Schedule of Retirants Added to And Removed from Rolls

(Dollar amounts except average allowance expressed in thousands)

Year Ended	Added to Rolls	Removed from Rolls	Rolls End of the Year		% Increase in Annual Benefit	Average Annual Benefit
	Number	Number	Number	Annual Benefits		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Non-Hazardous			
2011	3,250	1,077	43,211	$ 483,594		$ 11,191
2012	3,300	1,207	45,304	515,008	6.5%	11,368
2013	3,570	1,198	47,676	557,979	8.3%	11,704
2014	3,480	1,221	49,935	582,958	4.5%	11,674
2015	4,020	1,304	52,651	617,551	5.9%	11,729
2016	4,409	721	56,339	661,217	7.1%	11,736
2017	4,141	1,467	59,013	667,468	0.9%	11,311
			Hazardous			
2011	502	102	6,468	$ 160,259		$ 24,777
2012	483	73	6,878	173,221	8.1%	25,185
2013	519	104	7,293	182,635	5.4%	25,043
2014	469	116	7,646	191,008	4.6%	24,981
2015	526	138	8,034	202,153	5.8%	25,162
2016	604	75	8,563	215,302	6.5%	25,143
2017	576	141	8,998	226,681	5.3%	25,192

APPENDIX A

ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Methods and Assumptions

The following presents a summary of the actuarial assumptions and methods used in the valuation of the County Employees Retirement System.

In general, the assumptions and methods used in the valuation are based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014. The investment return, price inflation, and payroll growth assumption were adopted by the Board in May and July 2017 for use with the June 30, 2017 valuation in order to reflect future economic expectations.

Investment return rate:

Assumed annual rate of 6.25% net of investment expenses for the retirement funds and the insurance funds

Price Inflation:

Assumed annual rate of 2.30%

Payroll Growth Assumption (used for amortization of unfunded accrued liabilities):

Assumed annual rate of 2.00%

Rates of Annual Salary Increase:

Assumed rates of annual salary increases are shown below.

Service Years	Annual Rates of Salary Increases				
	Merit & Seniority		Price Inflation & Productivity	Total Increase	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0	8.50%	15.50%	3.05%	11.55%	18.55%
1	5.00%	6.00%	3.05%	8.05%	9.05%
2	1.50%	2.00%	3.05%	4.55%	5.05%
3	1.50%	1.25%	3.05%	4.55%	4.30%
4	1.00%	1.00%	3.05%	4.05%	4.05%
5	1.00%	0.50%	3.05%	4.05%	3.55%
6	0.75%	0.00%	3.05%	3.80%	3.05%
7	0.75%	0.00%	3.05%	3.80%	3.05%
8	0.50%	0.00%	3.05%	3.55%	3.05%
9	0.50%	0.00%	3.05%	3.55%	3.05%
10 & Over	0.25%	0.00%	3.05%	3.30%	3.05%

Retirement rates:

Assumed annual rates of retirement are shown below. Rates are only applicable for members who are eligible for a service retirement.

	Non-Hazardous			Hazardous	
Age	Members participating before 9/1/2008[1]	Members participating on or after 9/1/2008[2]	Service	Members participating before 9/1/2008[3]	Members participating on or after 9/1/2008[4]
55	5.0%		20	22.5%	
56	6.0%		21	22.5%	
57	7.0%		22	22.5%	
58	7.0%		23	22.5%	
59	8.0%		24	30.0%	
60	9.0%	9.0%	25	33.0%	22.5%
61	15.0%	15.0%	26	33.0%	22.5%
62	18.0%	18.0%	27	36.0%	22.5%
63	18.0%	18.0%	28	39.0%	22.5%
64	18.0%	18.0%	29	55.0%	30.0%
65	18.0%	18.0%	30	33.0%	33.0%
66	18.0%	18.0%	31	33.0%	33.0%
67	18.0%	18.0%	32	50.0%	36.0%
68	18.0%	18.0%	33	40.0%	39.0%
69	18.0%	18.0%	34	40.0%	55.0%
70	18.0%	18.0%	35	40.0%	33.0%
71	18.0%	18.0%	36	40.0%	33.0%
72	18.0%	18.0%	37	40.0%	50.0%
73	18.0%	18.0%	38	40.0%	40.0%
74	18.0%	18.0%	39	40.0%	40.0%
75	100.0%	100.0%	40	40.0%	40.0%

[1] If service is at least 27 years, the rate is 30%.
[2] If age plus service is at least 87, the rate is 30%.
[3] The annual rate of service retirement is 100% at age 62.
[4] The annual rate of service retirement is 100% at age 60.

Disability rates:

An abbreviated table with assumed rates of disability is show below.

Age	Non-Hazardous		Hazardous	
	Male	Female	Male	Female
20	0.02%	0.02%	0.05%	0.05%
30	0.03%	0.03%	0.09%	0.09%
40	0.07%	0.07%	0.20%	0.20%
50	0.19%	0.19%	0.56%	0.56%
60	0.49%	0.49%	1.46%	1.46%

Withdrawal rates (for causes other than death, disability or retirement):

Assumed annual rates of withdrawal are shown below.

Service Years	Annual Rates of Withdrawal	
	Non-Hazardous	Hazardous
0	28.00%	20.50%
1	16.00%	13.00%
2	12.00%	10.50%
3	10.00%	9.00%
4	8.00%	8.00%
5	6.00%	7.00%
6	5.00%	7.00%
7	5.00%	6.00%
8-13	4.00%	6.00%
14 & Over	3.00%	6.00%

Mortality Assumption:

Pre-retirement mortality: RP-2000 Combined Mortality Table projected with Scale BB to 2013. Male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%.

Post-retirement mortality (non-disabled): RP-2000 Combined Mortality Table projected with Scale BB to 2013. Female mortality rates are set back one year.

Post-retirement mortality (disabled): RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013. Male mortality rates are set back four years.

At the time of the last experience study, performed as of June 30, 2013, this mortality assumption provided 37% and 19% margin for future improvement for males and females, respectively. *Marital status*:

100% of employees are assumed to be married, with the female spouse 3 years younger than the male spouse.

Line of Duty Disability

0% of disabilities are assumed to occur in the line of duty

Line of Duty Death

25% of deaths are assumed to occur in the line of duty

Dependent Children:

For members in the Hazardous Plan who receive a duty-related death benefit, the member is assumed to be survived by two dependent children, each age 6 with payments for 15 years.

Form of Payment:

Members are assumed to elect a life-only annuity at retirement.

Actuarial Cost Method:

Entry Age Normal, Level Percentage of Pay. The Entry Age Normal actuarial cost method allocates the System's actuarial present value of future benefits to various periods based upon service. The portion of the present value of future benefits allocated to years of service prior to the valuation date is the actuarial accrued liability, and the portion allocated to years following the valuation date is the present value of future normal costs. The normal cost is determined for each active member as the level percent of pay necessary to fully fund the expected benefits to be earned over the career of each individual active member. The normal cost is partially funded with active member contributions with the remainder funded by employer contributions.

Health Care Age Related Morbidity/Claims Utilization:

To model the impact of aging on the underlying health care costs for Medicare retirees, the valuation relied on the Society of Actuaries' 2013 Study "Health Care Costs – From Birth to Death". Table 4 (Development of Plan Specific Medicare Age Curve) was used to model the impact of aging for ages 65 and over.

Health Care Cost Trend Rates[1]*:*

January 1	Non-Medicare Plans	Medicare Plans	Dollar Contribution[2]
2019	7.25%	5.10%	1.50%
2020	7.00%	5.00%	1.50%
2021	6.75%	4.90%	1.50%
2022	6.50%	4.80%	1.50%
2023	6.25%	4.70%	1.50%
2024	6.00%	4.60%	1.50%
2025	5.75%	4.50%	1.50%
2026	5.50%	4.40%	1.50%
2027	5.25%	4.30%	1.50%
2028	5.00%	4.20%	1.50%
2029	4.75%	4.10%	1.50%
2030	4.50%	4.05%	1.50%
2031	4.25%	4.05%	1.50%
2032 & Beyond	4.05%	4.05%	1.50%

[1]All increases are assumed to occur on January 1. The 2018 premiums were known at the time of the valuation and were incorporated into the liability measurement using a trend of 1.232% for Non-Medicare plans and a trend of 0.00% for Medicare plans at January 1, 2018.

[2]Applies to members participating on or after July 1, 2003

Health care trend assumptions are based on the model issued by the Society of Actuaries "Getzen model of Long-Run Medical Cost Trends for the SOA; Thomas E. Getzen, iHEA and Temple University 2014 © Society of Actuaries.

The underlying assumptions used to develop the health care trend rates include:

- A short run period-this is a period for which anticipated health care trend rates are manually set based on local information as well as plan-specific and carrier information.
- Long term real GDP growth- 1.75%
- Long term rate of inflation- 2.30%
- Long term nominal GDP growth – 4.05%
- Year that excess rate converges to 0- 15 years from the valuation

Health care trend rates are thus the manually set rates for the short run period and rates which decline to an ultimate trend rate which equals the assumed nominal long term GDP growth rate.

Health Care Participation Assumptions:

- Members are assumed to elect health coverage at retirement at the following participation rates.

Service at Retirement	Members participating before 7/1/2003*	Members participating between 7/1/2003 and 9/1/2008	Members participating after 9/1/2008
Under 10	50%	100%	100%
10-14	75%	100%	100%
15-19	90%	100%	100%
Over 20	100%	100%	100%

* 100% of members with a duty disability or a duty death (in service) benefit are assumed to elect coverage at retirement.

- Future retirees are assumed to have a similar distribution by plan type as the current retirees.

Medicare Plan	June 30, 2017 Participation*
Medical Only	7%
Essential	8%
Premium	84%

* May not add due to rounding

Non-Medicare Plan	June 30, 2017 Participation
Standard PPO	14%
Standard CDHP	2%
LivingWell CDHP	22%
LivingWell PPO	62%

- 50% of deferred vested members participating before July 1, 2003 are assumed to elect health coverage at retirement. 100% of deferred vested members participating after July 1, 2003 are assumed to elect health coverage at retirement. Deferred vested members with non-hazardous service are assumed to begin health coverage at age 55 for members participating before September 1, 2008, and at age 60 for members participating on or after September 1, 2008. Deferred vested members with hazardous service are assumed to begin health coverage at age 50.

- 50% of future retirees, with hazardous service, are assumed to elect spouse health care coverage. No dependent coverage is assumed for members who only have non-hazardous service. 100% of spouses with health care coverage are assumed to continue coverage after the member's death.

Excise ("Cadillac") Tax:

For taxable years beginning after December 31, 2019, a 40% excise tax will be required to be paid (by the employer and/or insurer) on the aggregate cost of the health plan in excess of certain legislated thresholds. For 2018, the thresholds are $850 per month for individual coverage and $2,292 per month for family coverage.

Both Actuarial Standard of Practice No. 6 and GASB Statement Nos. 74 and 75 reference this tax, and, in accordance with these standards an estimate of the impact of the Cadillac tax has been included in this valuation.

Assumptions and methods used to determine the impact of the Cadillac Tax include:

- 2018 thresholds of $850/$2,292 were indexed annually by 2.30%.
- Premium data submitted was not adjusted for permissible exclusions to the Cadillac Tax.
- There were no special adjustments to the dollar limit other than those permissible for non-Medicare retirees over 55.

In this valuation, the impact of the Cadillac Tax has been calculated by increasing the employer paid premiums for Non-Medicare retirees, who became participants before July 1, 2003, by 3.6%. Non-Medicare retirees who became participants after July 1, 2003 receive dollar subsidies per year of service, which are not expected to exceed the overall Non-Medicare premiums. As a result, the costs attributable to the Cadillac Tax for members who became participants after July 1, 2003 will be paid by the retirees.

Changes in Assumptions since the prior valuation:

1. The assumed investment return was changed from 7.50% to 6.25%.
2. The price inflation assumption was changed from 3.25% to 2.30%, which also resulted in a 0.95% decrease in the salary increase assumption at all years of service and a 0.95% decrease in the health care cost trend rates.
3. The payroll growth assumption (used for the amortization of unfunded actuarial accrued liabilities) was changed from 4.00% to 2.00%.

Development of Baseline Claims Cost

For non-Medicare retirees, the initial per capita costs were based on the plan premiums effective January 1, 2017, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. The spouse/dependent premium of $862.64 for non-Medicare retirees is based on a blending of Family and Couple premiums for the current retirees that have over 4 years of hazardous service. The fully-insured premiums KRS pays the Kentucky Employees' Health Plan (KEHP) are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit rate subsidy for the non-Medicare eligible retirees. Actuarial Standard of Practice No. 6 (ASOP No. 6) requires aging subsidies (or implicit rate subsidies) to be recognized. However, the KRS health insurance trusts are only used to reimburse KEHP for the employer's portion of the blended premiums. Said another way, the trusts are not used to fund the difference between the underlying retiree claims and the blended KEHP premiums. As a result, the retiree health care liabilities developed in this report for the non-Medicare retirees are based solely on the premiums charged by KEHP, without any age-adjustment. GASB Statements No. 74 and No. 75 prohibit such a deviation from ASOP No. 6. The liabilities developed in this report are solely for the purpose of funding the benefits paid by the health insurance funds and are not appropriate for financial statement disclosures required by GASB. GRS provides separate GASB reports to KRS which include the liabilities associated with the implicit rate subsidy.

For those not eligible for Medicare		
Age	Member	Spouse/Dependents
<65	$711.22	$862.64

For Medicare retirees, the initial per capita costs were estimated based on the plan premiums effective January 1, 2017, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. Age graded and sex distinct premiums are utilized for retirees over the age of 65. These costs are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

For those eligible for Medicare		
Age	Male	Female
65	$208.66	$196.81
75	244.13	238.22
85	258.16	261.20

Appendix B of the report provides a full schedule of premiums.

Mehdi Riazi is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Mehdi Riazi, FSA, EA, MAAA

APPENDIX B

BENEFIT PROVISIONS

Summary of Benefit Provisions for County Employees Retirement System (CERS)

CERS Non-Hazardous Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 65 with at least 1 month of service credit; or Any age with at least 27 years of service
Benefit Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% times final average compensation times years of service. For members who began participating prior to 8/1/2004, the monthly benefit is 2.20% times final average compensation times years of service. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 5 years of compensation.
Early Retirement Eligibility	Any age (prior to age 65) with at least 25 years of service; or Age 55 with at least 5 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement eligibility precedes the member's normal retirement date.

CERS Non-Hazardous Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 65 with at least 5 years of service; or Rule of 87 (Age 57 or older if age plus service equals 87)
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.10%
10-20	1.30%
20-26	1.50%
26-30	1.75%
Greater than 30*	2.00%

* The 2.00% benefit multiplier only applies to service credit in excess of 30 years. If a member has greater than 30 years of service at retirement, service prior to 30 years will be multiplied by the 1.75% benefit multiplier.

Final compensation is based on the member's last 5 years of compensation.

Early Retirement Eligibility	Age 60 with at least 10 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 65 with at least 5 years of service; or Rule of 87 (Age 57 or older if age plus service equals 87)
Benefit Amount	Each year that the member is active, a 4.00% employer pay credit and the employee's 5.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

CERS Non-Hazardous Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 65th birthday, with total service not exceeding 25 years. Total service credit added shall not be greater than the member's actual service at disability. For members with at least 25 years of service on the last day of paid employment but less than 27 years of service, total service shall be 27 years. For members with 27 or more years of service credit, actual service will be used.

CERS Non-Hazardous Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 20% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 20% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Line of Duty Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly rate of pay. Additionally, each eligible dependent child will receive 10% of the member's monthly final rate of pay up to a maximum of 40%.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 55 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 25% of the deceased member's final monthly rate of pay. A spouse may also elect the non-line of duty death benefit.
Child Benefit	Each eligible dependent child will receive 10% of the member's final monthly rate of pay up to a maximum of 40%.

CERS Non-Hazardous Employees (continued)

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	5% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the KRS board, not less than 2.0%.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	5% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	5% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes since the Prior Valuation

None.

CERS Hazardous Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 55 with at least 1 month of service credit; or Any age with at least 20 years of service
Benefit Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation times years of service. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 3 years of compensation.
Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

CERS Hazardous Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.30%
10-20	1.50%
20-25	2.25%
Greater than 25	2.50%

Final average compensation is based on the member's highest 3 years of compensation.

Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	Each year that the member is active, a 7.50% employer pay credit and the employee's 8.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

CERS Hazardous Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that if the member has less than 20 years of service at disability, service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 55th birthday, with total service not exceeding 20 years. Total service credit added shall not be greater than the member's actual service at disability.

CERS Hazardous Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Line of Duty Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly rate of pay. Additionally, each eligible dependent child will receive 10% of the member's monthly final rate of pay up to a maximum of 40%.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 55 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 25% of the deceased member's final monthly rate of pay. A spouse may also elect the non-line of duty death benefit.
Non-Spouse Benefit	If the beneficiary is only one person who is a dependent receiving at least 50% of his or her support from the member, the beneficiary may elect a lump sum payment of$10,000.
Child Benefit	Each eligible dependent child will receive 10% of the member's final monthly rate of pay up to a maximum of 40%.

CERS Hazardous Employees (continued)

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	8% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the KRS board, not less than 2.0%.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes since the Prior Valuation

None.

Summary of Main Retiree Insurance Benefit Provisions

Insurance Tier 1: Participation began before 7/1/2003

Benefit Eligibility Recipient of a retirement allowance

Benefit Amount

Non-Hazardous Service	Percentage of Member Premium Paid by Retirement System	Hazardous Service	Percentage of Member & Dependent Premium Paid by Retirement System
Less than 4 years	0%	Less than 4 years	0%
4 – 9 years	25%	4 – 9 years	25%
10 – 14 years	50%	10 – 14 years	50%
15 – 19 years	75%	15 – 19 years	75%
20 or more years	100%	20 or more years	100%

The percentage paid by the retirement system is applied to the 'contribution' plan selected by the KRS Board.

Duty Disability Retirement If disability was a result of injuries sustained while in the line of duty, the member receives 100% of the maximum contribution for the member and dependents. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.

Duty Death in Service If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive 100% of the maximum contribution. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.

Non-Duty Death in Service If the surviving spouses is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Surviving Spouse of a Retiree A surviving spouse of a retiree, who is in receipt of a pension allowance, will receive a premium subsidy based on the member's years of hazardous service.

Hazardous employees who retired prior to August 1, 1998 System's contribution for spouse and dependents is based on total service.

Insurance Tier 2: Participation began on or after 7/1/2003, but before 9/1/2008

Benefit Eligibility	Recipient of a retirement allowance with at least 120 months of service at retirement
Non-Hazardous Subsidy	Monthly contribution of $10 for each year of earned service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $13.18/year of service. Upon the retiree's death, the surviving spouse may continue coverage (if in receipt of a retirement allowance) but will be 100% responsible for the premiums.
Hazardous Subsidy	Monthly contribution of $15 for each year of earned hazardous service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $19.77/year of service. Upon the retiree's death, the surviving spouse of a hazardous duty member will receive a monthly contribution of $10 ($13.18 as of July 1, 2017) for each year of hazardous service.
Duty Disability Retirement	If disability was a result of injuries sustained while in the line of duty, the member receives a benefit equal to at least 20 times the Non-Hazardous monthly contribution. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.
Duty Death in Service	If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive a benefit equal to at least 20 times the Non-Hazardous monthly contribution. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.
Non-Duty Death in Service	If the surviving spouse is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Insurance Tier 3: Participation began on or after 9/1/2008

Tier 3 insurance benefits are identical to Tier 2, except Tier 3 members are required to have at least 180 months of service in order to be eligible.

Monthly Health Plan Premiums – Effective January 1, 2018

Non-Medicare Plan Options					
Plan Option	Single	Parent Plus	Couple	Family	Family X-Ref
LivingWell PPO*	$729.34	$1,037.08	$1,589.10	$1,767.60	$876.68
LivingWell CDHP	709.46	978.50	1,325.64	1,479.76	818.96
Standard PPO	685.38	975.90	1,497.18	1,666.26	824.54
Standard CDHP	682.80	940.64	1,450.02	1,615.30	800.94

Medicare Plan Options	
Kentucky Retirement Systems - Medical Only Plan	$165.01
Kentucky Retirement Systems – Medicare Advantage/Essential Plan	75.56
Kentucky Retirement Systems – Medicare Advantage/Premium Plan*	252.21

*For 2018, the contribution plans selected by the KRS Board were the LivingWell PPO plan option for non-Medicare retirees and the Medicare Advantage Premium plan option for Medicare retirees.

Dollar Contribution Amount for Insurance Tier 2 and Tier 3

Monthly contribution amounts per year of service as of July 1, 2017.

Non-Hazardous Service	Hazardous Service
$13.18	$19.77

APPENDIX C

GLOSSARY

Glossary

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or ***Funding Method:*** A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ADC.

Actuarial Gain or ***Actuarial Loss:*** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)

b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, non-retired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations that provide the financial information of the plan, such as the funded ratio, unfunded actuarial accrued liability and the ADC.

Actuarial Value of Assets or ***Valuation Assets:*** The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Actuarially Determined Contribution (ADC): The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADC consists of the Employer Normal Cost and the Amortization Payment.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment: The portion of the pension plan contribution or ADC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Closed Amortization Period: A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.

Funding Period or ***Amortization Period:*** The term "Funding Period" is used two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ADC. This funding period specified in State statute. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on a statutory employer contribution rate, and assuming no future actuarial gains or losses.

GASB: Governmental Accounting Standards Board.

GASB 67 and ***GASB 68***: Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting and reporting rules for public retirement systems and the employers that sponsor, participate in, or contribute to them. Statement No. 67 sets the accounting rules for the financial reporting of the retirement systems, while Statement No. 68 sets the rules for the employers that sponsor, participate in, or contribute to public retirement systems.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded

Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but may not decrease by exactly one year in the subsequent year's actuarial valuation. For instance, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year.

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

Valuation Date or Actuarial Valuation Date: The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

State Police Retirement System (SPRS)

Actuarial Valuation Report
as of June 30, 2017

GRS Retirement Consulting

P: 469.524.0000 | F: 469.524.0003 | www.grsconsulting.com

December 4, 2017

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Actuarial Valuation as of June 30, 2017

Dear Trustees of the Board:

This report describes the current actuarial condition of the State Police Retirement System (SPRS), determines the required employer contribution rates, and analyzes changes in the System's financial condition. In addition, the report provides various summaries of the data. Separate reports are issued with regard to valuation results determined in accordance with Governmental Accounting Standards Board (GASB) Statements 67, 68, 74 and 75. Results of this report should not be used for any other purpose without consultation with the undersigned. Valuations are prepared annually as of June 30, the first day of the plan year for KRS. This report was prepared at the request of the Board of Trustees of the Kentucky Retirement System (Board) and is intended for use by the KRS staff and those designated or approved by the Board.

FINANCING OBJECTIVES AND FUNDING POLICY

The employer contribution rate is determined in accordance with Section 61.565 of Kentucky Statute. As specified by the Statute, the employer contribution rate is determined based on a closed thirty-year amortization period beginning July 1, 2013. As a result, the amortization period used in the 2017 actuarial valuation is 26 years. The contribution rate determined by this actuarial valuation becomes effective twelve months after the valuation date and is effective for two fiscal years. In other words, the contribution rate determined by this June 30, 2017 actuarial valuation will be used by the Board to certify the Commonwealth's contribution rates for the fiscal year July 1, 2018 and ending June 30, 2020.

If new legislation is enacted between the valuation date and the date the contribution rate becomes effective, the Board may adjust the calculated rate before certifying them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

ASSUMPTIONS AND METHODS

Kentucky Statutes also requires that an actuarial investigation be performed at least every five years to review the economic and demographic assumptions. An experience study was conducted

as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018. However, the Board has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study. Subsequent to the last actuarial valuation the Board decreased the price inflation assumption to 2.30%, and decreased the assumed rate of return to 5.25% for the Retirement Fund and to 6.25% for the Health Insurance Fund. Finally, the amortization of the unfunded actuarial accrued liability will be based on a 0.00% payroll growth assumption (i.e. amortized on a level dollar basis) for the Retirement and Health Insurance funds, but employers will continue to contribute to the System as a percentage of expected covered payroll. It is our opinion that the current assumptions are internally consistent and reasonably reflect the anticipated future experience of the System.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

BENEFIT PROVISIONS

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2017. There were no legislative changes enacted since the previous valuation that had a measurable effect on the current valuation.

DATA

Member data for retired, active and inactive members was supplied as of June 30, 2017, by the KRS staff. The staff also supplied asset information as of June 30, 2017. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by KRS.

CERTIFICATION

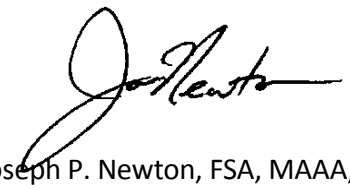
We certify that the information presented herein is accurate and fairly portrays the actuarial position of SPRS as of June 30, 2017.

All of our work conforms with generally accepted actuarial principles and practices, and is in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

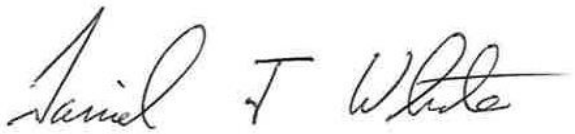
The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,

Gabriel, Roeder, Smith & Co.



Joseph P. Newton, FSA, MAAA, EA
Senior Consultant



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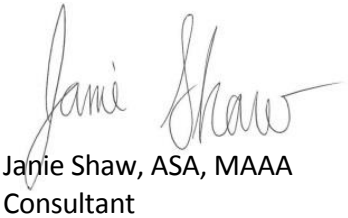
Senior Consultant



Janie Shaw, ASA, MAAA
Consultant

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Appendix B Benefit Provisions

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SECTION 1

EXECUTIVE SUMMARY

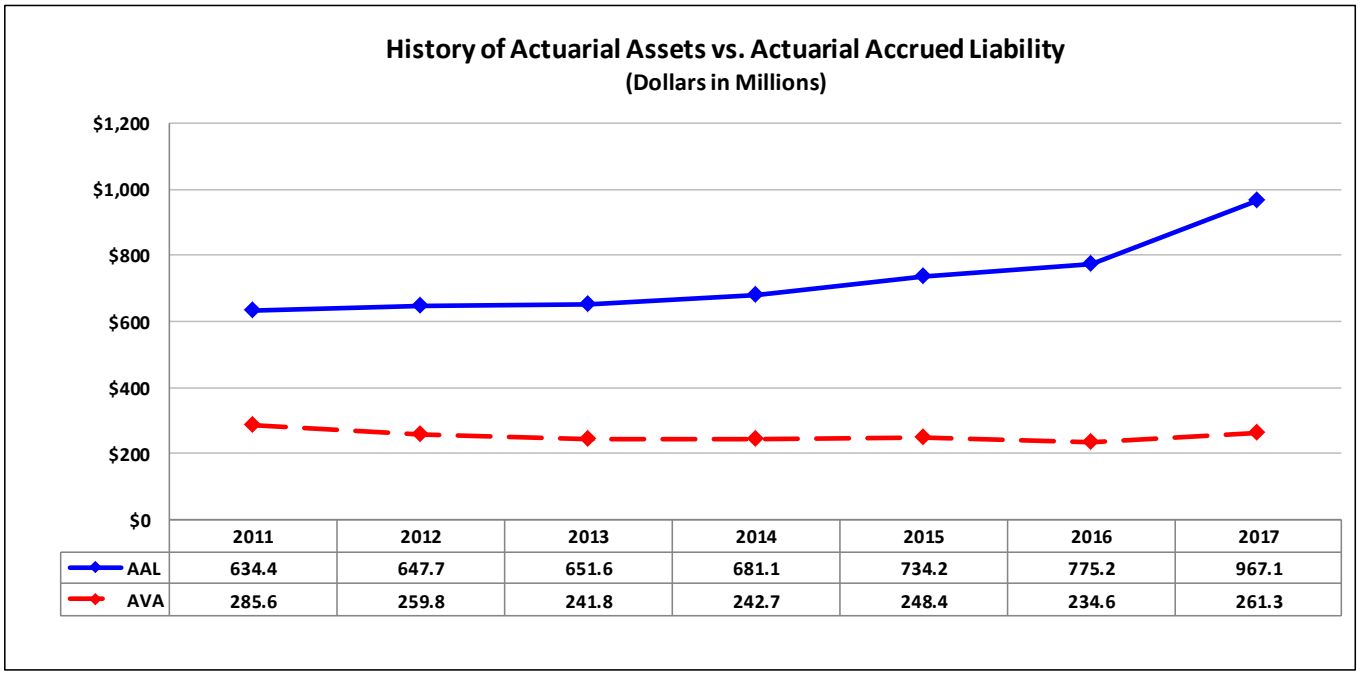
Summary of Principal Results

(Dollar amounts expressed in thousands)

	SPRS	
	June 30, 2017	June 30, 2016
Contributions for next fiscal year:		
Retirement	119.05%	71.57%
Insurance	27.23%	18.10%
Total	146.28%	89.67%
Assets:		
Retirement		
• Actuarial value (AVAR)	$261,320	$234,568
• Market value (MVAR)	$255,737	$217,594
• Ratio of actuarial to market value of assets	102.2%	107.8%
Insurance		
• Actuarial value (AVAI)	$180,464	$172,704
• Market value (MVAI)	$178,838	$161,366
• Ratio of actuarial to market value of assets	100.9%	107.0%
Funded Status:		
Retirement		
• Actuarial accrued liability	$967,145	$775,160
• Unfunded accrued liability on AVAR	$705,825	$540,593
• Funded ratio on AVAR	27.0%	30.3%
• Unfunded accrued liability on MVAR	$711,408	$557,566
• Funded ratio on MVAR	26.4%	28.1%
Insurance		
• Actuarial accrued liability	$276,641	$257,197
• Unfunded accrued liability on AVAI	$96,177	$84,494
• Funded ratio on AVAI	65.2%	67.1%
• Unfunded accrued liability on MVAI	$97,803	$95,831
• Funded ratio on MVAI	64.6%	62.7%
Membership:		
• Number of		
- Active Members	903	908
- Retirees and Beneficiaries	1,536	1,515
- Inactive Members	480	455
- Total	2,919	2,878
• Projected payroll of active members	$48,598	$45,551
• Average salary of active members	$53,818	$50,166

Executive Summary (Continued)

The unfunded actuarial accrued liability increased by $165.2 million since the prior year's valuation to $705.8 million. The largest source of this increase is the result of the decrease in the assumed rate of investment return which resulted in a $136.6 million increase in the unfunded liability. Below is a chart with the historical actuarial value of assets and actuarial accrued liability. The divergence in the assets and liability over the last seven years has generally been due to a combination of the actual investment experience being less than the fund's expected investment return assumption, a decrease in the assumed rate of return in 2015, 2016 and again in 2017, and contributions that were insufficient to amortize the unfunded actuarial accrued liability.



	2011	2012	2013	2014	2015	2016	2017
AAL	634.4	647.7	651.6	681.1	734.2	775.2	967.1
AVA	285.6	259.8	241.8	242.7	248.4	234.6	261.3

SECTION 2

DISCUSSION

Discussion

The State Police Retirement System (SPRS) is a defined benefit pension fund that provides pensions and health care coverage for uniformed state police officers. SPRS includes both non-hazardous and hazardous duty benefits. This report presents the result of the June 30, 2017 actuarial funding valuation for both the Retirement Plan and Insurance Funds.

The primary purposes of the valuation report are to depict the current financial condition of the System, determine the annual required contribution, and analyze changes in the System's financial condition. In addition, the report provides various summaries of the data.

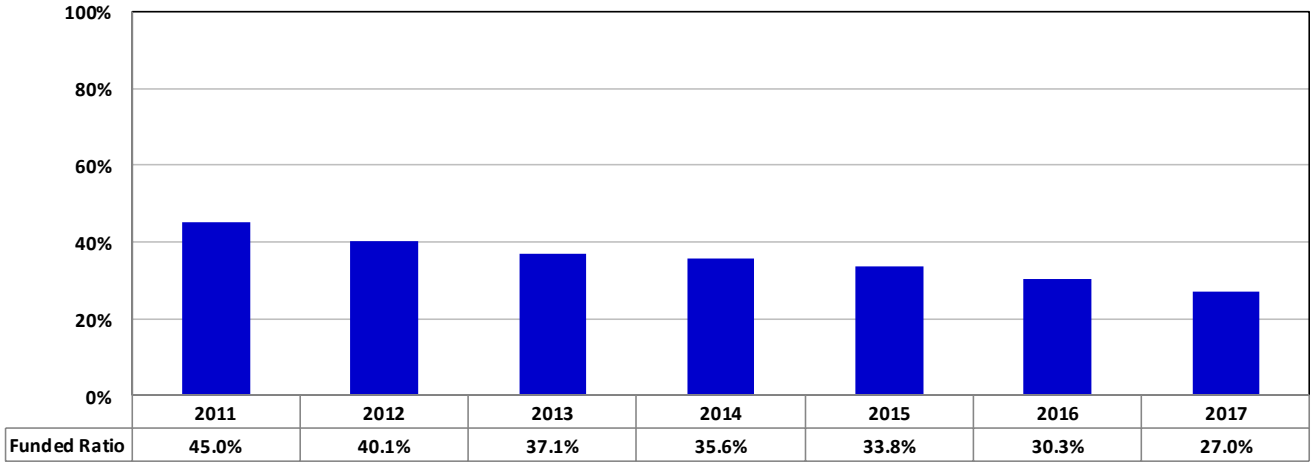
The actuarially determined contribution rates consist of two components: a normal cost rate and an amortization cost to finance the unfunded actuarial accrued liability. The normal cost rate is the theoretical amount which would be required to pay the members' benefits, based on the current plan provisions, if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. This is the amount is should cost to provide the benefits for an average new member. Since members contribute to the fund, only the excess of the normal rate over the member contribution rate is included in the employer contribution rate. The amortization cost is the amount, expressed as a percentage of payroll, necessary to amortize the unfunded actuarial accrued liability. The payroll growth rate and discount rate assumptions are selected by the Board. The funding period is specified in Section 61.565 of Kentucky Statute.

All of the actuarial and financial tables referenced by the other sections of this Report appear in Section 3. Section 4 provides member data and statistical information. Appendices A and B provide summaries of the principle actuarial assumptions and methods and plan provisions. Finally, Appendix C provides a glossary of technical terms that are used throughout this report.

Funding Progress

The following charts provide a seven-year history of the funds' funded ratio (i.e. the Actuarial Value of Assets divided by the Actuarial Accrued Liability). The decline in the funded ratio over the last seven years for the retirement funds has generally been due to actual contributions being insufficient to finance the unfunded actuarial accrued liability, actual investment experience being less than the investment return assumption, a decrease in the assumed rate of return in 2015, 2016 and again in 2017.

Funded Ratio
Actuarial Assets as a percentage of Actuarial Accrued Liability



	2011	2012	2013	2014	2015	2016	2017
Funded Ratio	45.0%	40.1%	37.1%	35.6%	33.8%	30.3%	27.0%

Assuming the actuarial determined contributions are actually paid in future years, then absent future unfavorable experience we expect the funded ratio to begin improving. Also, the dollar amount of the unfunded actuarial accrued liability, or the difference between the actuarial accrued liability and the actuarial value of assets, is expected to decrease after the higher contribution rates determined by the actuarial valuation become effective. Table 9, Schedule of Funding Progress, in the following section of the report provides additional detail regarding the funding progress of the Retirement System.

Asset Gains/ (Losses)

The actuarial value of assets ("AVA") is based on a smoothed market value of assets, using a systematic approach to phase-in the difference between the actual and expected investment return on the market value of assets (adjusted for receipts and disbursements during the year). This is appropriate because it dampens the short-term volatility inherent in investment markets. The returns are computed net of investment expenses. The actuarial value of assets for the retirement fund increased from $234.6 million to $261.3 million since the prior valuation. Table 7 in the following section of the report provides the development of the actuarial value of assets.

The rate of return on the market value of assets on a dollar-weighted basis for fiscal year 2017 was a 12.0% which is greater than the 6.75% expected annual return during that fiscal year. The return on an actuarial (smoothed) asset value was 6.4%. This difference in the estimated return on market value and actuarial value illustrates the smoothing effect of the asset valuation method.

The market value of assets is $5.6 million less than the actuarial value of assets, which signifies that the retirement fund is in a position of deferred losses. Therefore, unless the fund experiences investment returns in excess of the assumed rate of return in an amount that is at least equal to the outstanding deferred losses, the future recognition of these deferred losses is expected to increase the unfunded actuarial accrued liability.

Table 6 in the following section of this report provides asset information that was included in the annual financial statements of the System. Also, Tables 6 and 7 shows the estimated yield on a market value basis and on the actuarial asset valuation method.

Actuarial Gains/ (Losses)

The annual actuarial valuation is a snapshot analysis of the benefit liabilities, assets and funded position of the System as of the first day of the plan year. In any one fiscal year, the experience can be better or worse from that which is assumed or expected. The actuarial assumptions do not necessarily attempt to model what the experience will be for any one given fiscal year, but instead try to model the overall experience over many years. Therefore, as long as the actual experience of the retirement system is reasonably close to the current assumptions, the long-term funding requirements of the System will remain relatively consistent.

Below are tables that separately show a reconciliation of the actuarial gains / (loss) since the prior actuarial valuation for the retirement and health insurance funds, which include the effect of asset and liability gains and losses, changes in assumptions, changes in plan provisions, etc.

Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

		Retirement		Insurance
A.	Calculation of total actuarial gain or loss			
1.	Unfunded actuarial accrued liability (UAAL), previous year	$ 540,593	$	84,494
2.	Normal cost and administrative expenses	8,653		4,886
3.	Less: contributions for the year	(68,587)		(9,353)
4.	Interest accrual	34,467		6,169
5.	Expected UAAL (Sum of Items 1 - 4)	$ 515,126	$	86,196
6.	Actual UAAL as of June 30,2017	$ 705,825	$	96,177
7.	Total gain (loss) for the year (Item 5 - Item 6)	$ (190,699)	$	(9,981)
B.	Source of gains and losses			
8.	Asset gain (loss) for the year	$ (914)	$	(839)
9.	Liability experience gain (loss) for the year	(53,157)		24,070
10.	Assumption change	(136,628)		(33,212)
11.	Total	$ (190,699)	$	(9,981)

The accrued liability for the retirement fund was about 7% higher than expected, resulting in a $53 million liability loss. This $53 million increase is comprised of a $29 million increase due to differences in liability calculations between GRS and the fund's prior actuary and a $24 million increase due to the fund's experience during the last year. The experience loss is primarily due to higher than expected salary increases during the past year. The 2018 insurance premiums were known at the time of the valuation and were incorporated into the liability measurement. Premiums were lower than expected and resulted in a $19 million liability experience gain for the insurance fund.

Actuarial Assumptions and Methods

In determining costs and liabilities, actuaries use assumptions about the future, such as rates of salary increase, probabilities of retirement, termination, death and disability, and an annual investment return assumption. An experience study was conducted as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018. However, the Board has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study. Since the last actuarial valuation, the Board made the following changes in assumptions:

- Decrease the assumed rate of return to 5.25% for the retirement fund and to 6.25% for the health insurance fund.
- Decrease the price inflation assumption to 2.30% for the retirement and health insurance funds.
- Amortize the unfunded actuarial accrued liability for the retirement and health insurance funds on a level dollar basis, converted to a percentage of the expected covered payroll.
- Decrease in the individual salary increase assumption and health care trend assumption that corresponds with the 0.95% decrease in the price inflation assumption.

Appendix A includes a summary of the actuarial assumptions and methods used in this valuation. It is our opinion that the assumptions are internally consistent, reasonable, and reflect anticipated future experience of the System. The next experience study will be conducted no later than as of June 30, 2018.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. This report does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

Benefit Provisions

Appendix B of this report includes a summary of the benefit provisions for SPRS. There were no legislative changes enacted since the previous valuation that had a measurable effect on the current valuation.

This valuation reflects all benefits promised to SPRS members, either by the statutes or by the Board. There are no ancillary benefits that might be deemed a SPRS liability if continued beyond the availability of funding by the current funding source.

SECTION 3

ACTUARIAL TABLES

Actuarial Tables

TABLE NUMBER	PAGE	CONTENT OF TABLE
1	13	DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
2	14	ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS
3	15	DEVELOPMENT OF REQUIRED CONTRIBUTION RATE
4	16	ACTUARIAL BALANCE SHEET – RETIREMENT
5	17	ACTUARIAL BALANCE SHEET – INSURANCE
6	18	RECONCILIATION OF SYSTEM NET ASSETS
7	19	DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS – RETIREMENT
8	20	DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS – INSURANCE
9	21	SCHEDULE OF FUNDING PROGRESS
10	22	SUMMARY OF PRINCIPAL ASSUMPTIONS AND METHODS
11	23	SOLVENCY TEST

Development of Unfunded Actuarial Accrued Liability

(Dollar amounts expressed in thousands)

		June 30, 2017	
		Retirement (1)	Insurance (2)
1.	Projected payroll of active members	$ 48,598	$ 48,164
2.	Present value of future pay	$ 424,190	$ 390,888
3.	Normal cost rate		
	a. Total normal cost rate	23.84%	11.48%
	b. Less: member contribution rate	-8.00%	-0.30%
	c. Employer normal cost rate	15.84%	11.18%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 286,843	$ 122,992
	b. Less: present value of future normal costs	(93,680)	(32,741)
	c. Actuarial accrued liability	$ 193,163	$ 90,251
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 766,899	$ 183,156
	b. Inactive members	7,083	3,234
	c. Active members (Item 4c)	193,163	90,251
	d. Total	$ 967,145	$ 276,641
6.	Actuarial value of assets	$ 261,320	$ 180,464
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 705,825	$ 96,177
8.	Funded Ratio	27.0%	65.2%

Actuarial Present Value of Future Benefits

(Dollar amounts expressed in thousands)

		June 30, 2017	
		Retirement (1)	Insurance (2)
1.	Active members		
	a. Service retirement	$ 264,685	
	b. Deferred termination benefits and refunds	14,923	
	c. Survivor benefits	1,266	
	d. Disability benefits	5,969	
	e. Total	$ 286,843	$ 122,992
2.	Retired members		
	a. Service retirement	$ 701,038	
	b. Disability retirement	12,152	
	c. Beneficiaries	53,709	
	d. Total	$ 766,899	$ 183,156
3.	Inactive members		
	a. Vested terminations	$ 6,563	$ 3,234
	b. Nonvested terminations	520	N/A
	c. Total	$ 7,083	$ 3,234
4.	Total actuarial present value of future benefits	$ 1,060,825	$ 309,382

Development of Required Contribution Rate

		June 30, 2017	
		Retirement (1)	Insurance (2)
1.	Total normal cost rate		
	a. Service retirement	20.08%	
	b. Deferred termination benefits and refunds	2.82%	
	c. Survivor benefits	0.16%	
	d. Disability benefits	0.78%	
	e. Total	23.84%	11.48%
2.	Less: member contribution rate	-8.00%	-0.30%
3.	Total employer normal cost rate	15.84%	11.18%
4.	Administrative expenses	0.37%	0.14%
5.	Net employer normal cost rate	16.21%	11.32%
6.	UAAL amortization contribution	102.84%	15.91%
7.	Total recommended employer contribution	119.05%	27.23%

Actuarial Balance Sheet

Retirement Benefits

(Dollar amounts expressed in thousands)

		June 30, 2017 (1)	June 30, 2016 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 261,320	$ 234,568
	b. Present value of future member contributions	$ 33,935	$ 34,858
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 59,745	$ 41,787
	ii. Unfunded accrued liability contributions	705,825	540,592
	iii. Total future employer contributions	$ 765,570	$ 582,379
	d. Total assets	$ 1,060,825	$ 851,805
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 93,680	$ 76,645
	ii. Accrued liability	193,163	138,661
	iii. Total present value of future benefits	$ 286,843	$ 215,306
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 766,899	$ 630,842
	c. Present value of benefits payable on account of current inactive members	$ 7,083	$ 5,657
	d. Total liabilities	$ 1,060,825	$ 851,805

Actuarial Balance Sheet

Insurance Benefits

(Dollar amounts expressed in thousands)

		June 30, 2017 (1)	June 30, 2016 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 180,464	$ 172,704
	b. Present value of future member contributions	$ 1,905	$ 1,699
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 30,836	$ 21,316
	ii. Unfunded accrued liability contributions	96,177	84,494
	iii. Total future employer contributions	$ 127,013	$ 105,810
	d. Total assets	$ 309,382	$ 280,213
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 32,741	$ 23,015
	ii. Accrued liability	90,251	80,103
	iii. Total present value of future benefits	$ 122,992	$ 103,118
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 183,156	$ 171,155
	c. Present value of benefits payable on account of current inactive members	$ 3,234	$ 5,940
	d. Total liabilities	$ 309,382	$ 280,213

Reconciliation of System Net Assets

(Dollar amounts expressed in thousands)

		June 30, 2017 (1) Retirement	June 30, 2017 (2) Insurance
1.	Value of assets at beginning of year	$ 217,594	$ 161,366
2.	Revenue for the year		
	a. Contributions		
	i. Member contributions	$ 5,348	$ 131
	ii. Employer contributions	38,029	9,222
	iii. Other contributions (less 401h)	25,210	0
	iii. Total	$ 68,587	$ 9,353
	b. Income		
	i. Interest, dividends, and other income	$ 7,263	$ 4,896
	ii. Investment expenses	(1,722)	(1,362)
	iii. Net	$ 5,540	$ 3,533
	c. Net realized and unrealized gains (losses)	21,156	18,135
	d. Total revenue	$ 95,284	$ 31,021
3.	Expenditures for the year		
	a. Disbursements		
	i. Refunds	$ 26	$ 0
	ii. Regular annuity benefits	56,934	13,405
	iii. Other benefit payments	0	78
	iv. Transfers to other systems	0	0
	v. Total	$ 56,960	$ 13,483
	b. Administrative expenses and depreciation	181	66
	c. Total expenditures	$ 57,141	$ 13,549
4.	Increase in net assets (Item 2. - Item 3.)	$ 38,143	$ 17,472
5.	Value of assets at end of year (Item 1. + Item 4.)	$ 255,737	$ 178,838
6.	Net external cash flow		
	a. Dollar amount	$ 11,446	$ (4,196)
	b. Percentage of market value	4.8%	-2.5%
7.	Estimated annual return on net assets	12.0%	13.6%

Development of Actuarial Value of Assets

Retirement Benefits

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2017
1.	Actuarial value of assets at beginning of year	$ 234,568
2.	Market value of assets at beginning of year	$ 217,594
3.	Net new investments	
	a. Contributions	$ 68,587
	b. Benefit payments	(56,960)
	c. Administrative expenses	(181)
	d. Subtotal	$ 11,446
4.	Market value of assets at end of year	$ 255,737
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 26,697
6.	Assumed investment return rate for fiscal year	6.75%
7.	Expected return for immediate recognition	$ 15,074
8.	Excess return for phased recognition	$ 11,623
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2017	$ 11,623	$ 2,325
b.	2016	(21,455)	(4,291)
c.	2015	(16,122)	(3,224)
d.	2014	22,202	4,440
e.	2013	4,918	984
f.	Total		$ 233

10.	Actuarial value of assets as of June 30, 2017 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 261,320
11.	Ratio of actuarial value to market value	102.2%
12.	Estimated annual return on actuarial value of assets	6.4%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Insurance Benefits

(Dollar amounts expressed in thousands)*

	Year Ending		June 30, 2017
1.	Actuarial value of assets at beginning of year	$	172,704
2.	Market value of assets at beginning of year	$	161,366
3.	Net new investments		
	a. Contributions	$	9,353
	b. Benefit payments		(13,483)
	c. Administrative expenses		(66)
	d. Subtotal	$	(4,196)
4.	Market value of assets at end of year	$	178,838
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$	21,668
6.	Assumed investment return rate for fiscal year		7.50%
7.	Expected return for immediate recognition	$	11,945
8.	Excess return for phased recognition	$	9,723

9. Phased-in recognition, 20% of excess return on assets for prior years:

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2017	$ 9,723	$ 1,945
b.	2016	(12,288)	(2,458)
c.	2015	(9,762)	(1,952)
d.	2014	9,368	1,874
e.	2013	3,015	603
f.	Total		$ 11

10.	Actuarial value of assets as of June 30, 2017 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$	180,464
11.	Ratio of actuarial value to market value		100.9%
12.	Estimated annual return on actuarial value of assets		7.0%

* Amounts may not add due to rounding

Schedule of Funding Progress

(Dollar amounts expressed in thousands)

June 30,	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Retirement			
2011	$ 285,581	$ 634,379	$ 348,799	45.0%	$ 48,693	716.3%
2012	259,792	647,689	387,897	40.1%	48,373	801.9%
2013	241,800	651,581	409,780	37.1%	45,256	905.5%
2014	242,742	681,118	438,377	35.6%	44,616	982.6%
2015	248,388	734,156	485,769	33.8%	45,765	1061.4%
2016	234,568	775,160	540,593	30.3%	45,551	1186.8%
2017	261,320	967,145	705,825	27.0%	48,598	1452.4%
			Insurance			
2011	$ 123,687	$ 438,428	$ 314,741	28.2%	$ 48,693	646.4%
2012	124,372	333,904	209,532	37.2%	48,373	433.2%
2013	136,321	222,327	86,006	61.3%	45,256	190.0%
2014	155,595	234,271	78,676	66.4%	44,616	176.3%
2015	167,775	254,839	87,064	65.8%	45,765	190.2%
2016	172,704	257,197	84,493	67.1%	45,551	185.5%
2017	180,464	276,641	96,177	65.2%	48,598	197.9%

Summary of Principal Assumptions and Methods

Below is a summary of the principal economic assumptions, cost method, and the method for financing the unfunded actuarial accrued liability:

Valuation date:	June 30, 2017
Actuarial cost method:	Entry Age Normal
Amortization method:	Level percentage of payroll (0% payroll growth assumed)
Amortization period for contribution rate:	26-year closed period
Asset valuation method:	5-Year Smoothed Market
Actuarial assumptions:	
Investment rate of return	5.25%
Projected salary increases	3.05% to 15.55% (varies by service)
Inflation	2.30%
Post-retirement benefit adjustments	0.00%
Retiree Mortality	RP-2000 Combined Mortality Table for Males and Females, projected using scale BB to 2013 (set back one year for females).

Solvency Test

(Dollar amounts expressed in thousands)

June 30,	Actuarial Accrued Liability: Active Member Contributions	Actuarial Accrued Liability: Retired Members & Beneficiaries	Actuarial Accrued Liability: Active Members (Employer Financed)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets: Active	Portion of Aggregate Accrued Liabilities Covered by Assets: Retired	Portion of Aggregate Accrued Liabilities Covered by Assets: ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Retirement							
2008	$ 41,391	$ 426,311	$ 119,426	$ 350,891	100.0%	72.6%	0.0%
2009	41,664	459,585	101,079	329,967	100.0%	62.7%	0.0%
2010	42,012	475,893	94,541	304,577	100.0%	55.2%	0.0%
2011	43,574	499,194	91,611	285,581	100.0%	48.5%	0.0%
2012	41,139	523,017	83,533	259,792	100.0%	41.8%	0.0%
2013	39,788	535,720	76,072	241,800	100.0%	37.7%	0.0%
2014	41,831	563,011	76,276	242,742	100.0%	35.7%	0.0%
2015	41,567	605,855	86,734	248,388	100.0%	34.1%	0.0%
2016	41,871	636,499	96,791	234,568	100.0%	30.3%	0.0%
2017	44,798	773,982	148,365	261,320	100.0%	28.0%	0.0%
Insurance							
2008	$ -	$ 178,655	$ 266,452	$ 123,961	100.0%	69.4%	0.0%
2009	-	167,091	196,940	123,527	100.0%	73.9%	0.0%
2010	-	253,581	181,380	121,175	100.0%	47.8%	0.0%
2011	-	252,440	185,988	123,687	100.0%	49.0%	0.0%
2012	-	190,259	143,645	124,372	100.0%	65.4%	0.0%
2013	-	139,509	82,818	136,321	100.0%	97.7%	0.0%
2014	-	143,402	90,869	155,595	100.0%	100.0%	13.4%
2015	-	170,447	84,392	167,775	100.0%	98.4%	0.0%
2016	-	177,094	80,103	172,704	100.0%	97.5%	0.0%
2017	-	186,390	90,251	180,464	100.0%	96.8%	0.0%

SECTION 4

MEMBERSHIP INFORMATION

Membership Tables

TABLE NUMBER	PAGE	CONTENT OF TABLE
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18	32	SCHEDULE OF ANNUITANTS ADDED TO AND REMOVED FROM ROLLS

Summary of Membership Data

(Total dollar amounts expressed in thousands)

		June 30, 2017 (1)
1.	Active members	
a.	Males	873
b.	Females	30
c.	Total members	903
d.	Total annualized prior year salaries	$ 48,598
e.	Average salary	$ 53,819
f.	Average age	37.5
g.	Average service	10.6
h.	Member contributions with interest	$ 44,798
i.	Average contributions with interest	$ 49,610
2.	Vested inactive members	
a.	Number	86
b.	Total annual deferred benefits	$ 762
c.	Average annual deferred benefit	$ 8,860
d.	Average age at the valuation date	42.5
3.	Nonvested inactive members	
a.	Number	394
b.	Total member contributions with interest	$ 520
c.	Average contributions with interest	$ 1,320
4.	Service retirees	
a.	Number	1,279
b.	Total annual benefits	$ 50,871
c.	Average annual benefit	$ 39,774
d.	Average age at the valuation date	62.7
5.	Disabled retirees	
a.	Number	53
b.	Total annual benefits	$ 968
c.	Average annual benefit	$ 18,264
d.	Average age at the valuation date	59.2
6.	Beneficiaries	
a.	Number	204
b.	Total annual benefits	$ 5,414
c.	Average annual benefit	$ 26,539
d.	Average age at the valuation date	65.6

Summary of Historical Active Membership

	Active Members		Covered Payroll		Average Annual Pay	
June 30,	Number	Percent Increase /(Decrease)	Amount in Thousands	Percent Increase /(Decrease)	Amount	Percent Increase /(Decrease)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2011	965		$ 48,693		$ 50,459	-5.9%
2012	907	-6.0%	48,373	-0.7%	53,333	5.7%
2013	902	-0.6%	45,256	-6.4%	50,173	-5.9%
2014	855	-5.2%	44,616	-1.4%	52,182	4.0%
2015	937	9.6%	45,765	2.6%	48,842	-6.4%
2016	908	-3.1%	45,551	-0.5%	50,166	2.7%
2017	903	-0.6%	48,598	6.7%	53,818	7.3%

Distribution of Active Members by Age and by Years of Service

SPRS Members

Attained Age	Years of Credited Service												
	0 Count & Avg. Comp.	1 Count & Avg. Comp.	2 Count & Avg. Comp.	3 Count & Avg. Comp.	4 Count & Avg. Comp.	5-9 Count & Avg. Comp.	10-14 Count & Avg. Comp.	15-19 Count & Avg. Comp.	20-24 Count & Avg. Comp.	25-29 Count & Avg. Comp.	30-34 Count & Avg. Comp.	35 & Over Count & Avg. Comp.	Total Count & Avg. Comp.
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
20-24	0	12	6	0	0	0	0	0	0	0	0	0	18
	$0	$40,371	$43,380	$0	$0	$0	$0	$0	$0	$0	$0	$0	$41,374
25-29	25	18	55	0	25	17	0	0	0	0	0	0	140
	$22,825	$40,529	$44,672	$0	$48,998	$51,062	$0	$0	$0	$0	$0	$0	$41,787
30-34	20	6	29	1	22	100	10	0	0	0	0	0	188
	$16,057	$40,948	$45,202	$39,698	$47,655	$51,068	$56,122	$0	$0	$0	$0	$0	$45,925
35-39	9	0	6	0	3	49	80	26	0	0	0	0	173
	$22,827	$0	$45,436	$0	$49,809	$49,915	$56,411	$60,343	$0	$0	$0	$0	$52,920
40-44	2	0	5	0	5	30	51	81	27	2	0	0	203
	$22,149	$0	$45,211	$0	$48,158	$51,595	$56,493	$64,186	$72,557	$69,627	$0	$0	$60,283
45-49	2	0	1	0	0	4	25	51	42	9	0	0	134
	$22,149	$0	$64,883	$0	$0	$50,882	$54,766	$63,631	$75,548	$81,048	$0	$0	$65,892
50-54	0	0	0	0	0	4	8	6	9	6	0	0	33
	$0	$0	$0	$0	$0	$51,067	$58,215	$66,255	$75,995	$77,682	$0	$0	$67,199
55-59	0	0	0	0	0	1	5	3	0	0	1	0	10
	$0	$0	$0	$0	$0	$50,718	$55,218	$57,405	$0	$0	$93,660	$0	$59,268
60-64	0	0	0	0	0	0	0	0	1	0	1	1	3
	$0	$0	$0	$0	$0	$0	$0	$0	$76,333	$0	$93,357	$80,489	$83,393
65 & Over	0	0	0	0	0	0	0	0	0	0	0	1	1
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$87,068	$87,068
Total	58	36	102	1	55	205	179	167	79	17	2	2	903
	$20,445	$40,546	$45,016	$39,698	$48,428	$50,864	$56,236	$63,371	$74,586	$78,517	$93,509	$83,779	$53,819

Distribution of Annuitant Monthly Benefit by Status and Age
Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

Current Age	Retirement		Disability		Survivors & Beneficiaries		Total	
	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	180	$ 6,808	15	$ 300	31	$ 442	226	$ 7,550
50 - 54	169	6,693	6	92	7	112	182	6,897
55 - 59	159	6,625	6	111	12	278	177	7,014
60 - 64	190	8,004	9	111	22	511	221	8,626
65 - 69	280	11,130	6	135	30	798	316	12,063
70 - 74	151	5,969	6	111	38	1,122	195	7,202
75 - 79	84	2,909	2	45	19	691	105	3,645
80 - 84	41	1,577	3	64	24	784	68	2,425
85 - 89	21	918	0	-	17	580	38	1,498
90 And Over	4	238	0	-	4	95	8	333
Total	**1,279**	**$ 50,871**	**53**	**$ 968**	**204**	**$ 5,414**	**1,536**	**$ 57,253**

Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	145	$ 435,328	15	$ 46,122	160	$ 481,450
Joint & Survivor:						
100% to Beneficiary	140	456,888	1	4,814	141	461,702
66 2/3% to Beneficiary	87	332,233	2	7,542	89	339,775
50% to Beneficiary	82	294,980	1	2,605	83	297,585
Pop-up Option	582	2,063,324	4	10,805	586	2,074,130
Social Security Option:						
Age 62 Basic	30	75,359	0	0	30	75,359
Age 62 Survivorship	121	232,365	1	5,287	122	237,652
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	5	16,014	0	0	5	16,014
10 Years Certain & Life	34	112,610	3	6,759	37	119,369
15 Years Certain & Life	17	47,678	1	3,919	18	51,597
20 Years Certain & Life	38	117,233	2	3,979	40	121,211
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	0	0	0	0	0	0
24 Month Basic	0	0	0	0	0	0
36 Month Basic	0	0	2	466	2	466
12 Month Survivor	6	20,781	0	0	6	20,781
24 Month Survivor	4	5,953	0	0	4	5,953
36 Month Survivor	9	16,914	0	0	9	16,914
Total:	1,300	$ 4,227,662	32	$ 92,297	1,332	$ 4,319,959

Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	2	$ 820	7	$ 5,405	9	$ 6,225
Joint & Survivor:						
100% to Beneficiary	7	8,333	58	153,735	65	162,068
66 2/3% to Beneficiary	3	2,775	11	22,098	14	24,874
50% to Beneficiary	3	6,341	16	22,951	19	29,292
Pop-up Option	7	19,746	36	96,976	43	116,722
Social Security Option:						
Age 62 Basic	0	0	2	2,281	2	2,281
Age 62 Survivorship	1	3,897	41	80,941	42	84,838
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	1	2,038	1	2,038	2	4,076
10 Years Certain & Life	0	0	1	389	1	389
15 Years Certain & Life	0	0	1	721	1	721
20 Years Certain & Life	1	6,686	4	5,611	5	12,297
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	0	0	0	0	0	0
24 Month Basic	0	0	0	0	0	0
36 Month Basic	0	0	0	0	0	0
12 Month Survivor	0	0	0	0	0	0
24 Month Survivor	0	0	1	7,351	1	7,351
36 Month Survivor	0	0	0	0	0	0
Total:	25	$ 50,636	179	$ 400,499	204	$ 451,135

Schedule of Retirants Added to And Removed from Rolls

(Dollar amounts except average allowance expressed in thousands)

Year Ended	Added to Rolls	Removed from Rolls	Rolls End of the Year		% Increase in Annual Benefit	Average Annual Benefit
	Number	Number	Number	Annual Benefits		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2011	52	12	1,263	$ 47,467		$ 37,583
2012	52	16	1,299	49,887	5.1%	38,404
2013	63	16	1,346	50,906	2.0%	37,820
2014	95	28	1,413	53,432	5.0%	37,815
2015	62	15	1,460	54,930	2.8%	37,623
2016	65	10	1,515	56,650	3.1%	37,393
2017	30	9	1,536	57,253	1.1%	37,274

APPENDIX A

ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Methods and Assumptions

The following presents a summary of the actuarial assumptions and methods used in the valuation of the State Police Retirement System.

In general, the assumptions and methods used in the valuation are based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014. The investment return, price inflation, and payroll growth assumption were adopted by the Board in May and July 2017 for use with the June 30, 2017 valuation in order to reflect future economic expectations.

Investment return rate:

Assumed annual rate of 5.25% net of investment expenses for the retirement fund

Assumed annual rate of 6.25% net of investment expenses for the insurance fund

Price Inflation:

Assumed annual rate of 2.30%

Rates of Annual Salary Increase:

Assumed rates of annual salary increases are shown below.

Service Years	Annual Rates of Salary Increases		
	Merit & Seniority	Price Inflation & Productivity	Total Increase
0	12.50%	3.05%	15.55%
1	7.50%	3.05%	10.55%
2	5.50%	3.05%	8.55%
3	4.50%	3.05%	7.55%
4	3.50%	3.05%	6.55%
5	2.50%	3.05%	5.55%
6	2.00%	3.05%	5.05%
7	2.00%	3.05%	5.05%
8	1.00%	3.05%	4.05%
9	0.50%	3.05%	3.55%
10 & Over	0.00%	3.05%	3.05%

Retirement rates:

Assumed annual rates of retirement are shown below. Rates are only applicable for members who are eligible for a service retirement.

Service	Members participating before 9/1/2008[1]	Members participating on or after 9/1/2008[2]
20	22.0%	
21	22.0%	
22	22.0%	
23	28.0%	
24	28.0%	
25	28.0%	22.0%
26	28.0%	22.0%
27	28.0%	22.0%
28	44.0%	28.0%
29	44.0%	28.0%
30	44.0%	28.0%
31	58.0%	28.0%
32	58.0%	28.0%
33	58.0%	44.0%
34	58.0%	44.0%
35	58.0%	44.0%
36	58.0%	58.0%
37	58.0%	58.0%
38	58.0%	58.0%
39	58.0%	58.0%
40	58.0%	58.0%

[1] The annual rate of service retirement is 100% at age 55.

[2] The annual rate of service retirement is 100% at age 60.

Disability rates:

An abbreviated table with assumed rates of disability is show below.

Age	Annual Rates of Disability	
	Male	Female
20	0.05%	0.05%
30	0.09%	0.09%
40	0.20%	0.20%
50	0.56%	0.56%
60	1.46%	1.46%

Withdrawal rates (for causes other than death, disability or retirement):

Assumed annual rates of withdrawal are shown below.

Service	Annual Rates of Withdrawal
0	20.00%
1	7.00%
2-8	3.00%
9 & Over	2.50%

Mortality Assumption:

Pre-retirement mortality: RP-2000 Combined Mortality Table projected with Scale BB to 2013. Male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%.

Post-retirement mortality (non-disabled): RP-2000 Combined Mortality Table projected with Scale BB to 2013. Female mortality rates are set back one year.

Post-retirement mortality (disabled): RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013. Male mortality rates are set back four years.

At the time of the last experience study performed as of June 30, 2013, this mortality assumption provided 37% and 19% margin for future improvement for males and females, respectively.

Marital status:

100% of employees are assumed to be married, with the female spouse 3 years younger than the male spouse.

Line of Duty Disability

0% of disabilities are assumed to occur in the line of duty

Line of Duty Death

25% of deaths are assumed to occur in the line of duty

Dependent Children:

For members in the Hazardous Plan who receive a duty-related death benefit, the member is assumed to be survived by two dependent children, each age 6 with payments for 15 years.

Form of Payment:

Members are assumed to elect a life-only annuity at retirement.

Actuarial Cost Method:

Entry Age Normal, Level Percentage of Pay. The Entry Age Normal actuarial cost method allocates the System's actuarial present value of future benefits to various periods based upon service. The portion of the present value of future benefits allocated to years of service prior to the valuation date is the actuarial accrued liability, and the portion allocated to years following the valuation date is the present value of future normal costs. The normal cost is determined for each active member as the level percent of pay necessary to fully fund the expected benefits to be earned over the career of each individual active member. The normal cost is partially funded with active member contributions with the remainder funded by employer contributions.

Health Care Age Related Morbidity/Claims Utilization:

To model the impact of aging on the underlying health care costs for Medicare retirees, the valuation relied on the Society of Actuaries' 2013 Study "Health Care Costs – From Birth to Death". Table 4 (Development of Plan Specific Medicare Age Curve) was used to model the impact of aging for ages 65 and over.

Health Care Cost Trend Rates[1]:

Year	Non-Medicare Plans	Medicare Plans	Dollar Contribution[2]
2019	7.25%	5.10%	1.50%
2020	7.00%	5.00%	1.50%
2021	6.75%	4.90%	1.50%
2022	6.50%	4.80%	1.50%
2023	6.25%	4.70%	1.50%
2024	6.00%	4.60%	1.50%
2025	5.75%	4.50%	1.50%
2026	5.50%	4.40%	1.50%
2027	5.25%	4.30%	1.50%
2028	5.00%	4.20%	1.50%
2029	4.75%	4.10%	1.50%
2030	4.50%	4.05%	1.50%
2031	4.25%	4.05%	1.50%
2032 & Beyond	4.05%	4.05%	1.50%

[1]All increases are assumed to occur on January 1. The 2018 premiums were known at the time of the valuation and were incorporated into the liability measurement using a trend of 1.232% for Non-Medicare plans and a trend of 0.00% for Medicare plans at January 1, 2018.

[2]Applies to members participating on or after July 1, 2003

Health care trend assumptions are based on the model issued by the Society of Actuaries "Getzen model of Long-Run Medical Cost Trends for the SOA; Thomas E. Getzen, iHEA and Temple University 2014 © Society of Actuaries.

The underlying assumptions used to develop the health care trend rates include:

- A short run period-this is a period for which anticipated health care trend rates are manually set based on local information as well as plan-specific and carrier information.
- Long term real GDP growth- 1.75%
- Long term rate of inflation- 2.30%
- Long term nominal GDP growth – 4.05%
- Year that excess rate converges to 0- 15 years from the valuation

Health care trend rates are thus the manually set rates for the short run period and rates which decline to an ultimate trend rate which equals the assumed nominal long term GDP growth rate.

Health Care Participation Assumptions:

- Members are assumed to elect health coverage at retirement at the following participation rates.

Service at Retirement	Members participating before 7/1/2003*	Members participating between 7/1/2003 and 9/1/2008	Members participating after 9/1/2008
Under 10	50%	100%	100%
10-14	75%	100%	100%
15-19	90%	100%	100%
Over 20	100%	100%	100%

* 100% of members with a duty disability or a duty death (in service) benefit are assumed to elect coverage at retirement.

- Future retirees are assumed to have a similar distribution by plan type as the current retirees.

Medicare Plan	June 30, 2017Participation*
Medical Only	7%
Essential	8%
Premium	84%

* May not add due to rounding

Non-Medicare Plan	June 30, 2017 Participation
Standard PPO	14%
Standard CDHP	2%
LivingWell CDHP	22%
LivingWell PPO	62%

- 50% of deferred vested members participating before July 1, 2003 are assumed to elect health coverage at retirement. 100% of deferred vested members participating after July 1, 2003 are assumed to elect health coverage at retirement. Deferred vested members with non-hazardous service are assumed to begin health coverage at age 55 for members participating before September 1, 2008, and at age 60 for members participating on or after September 1, 2008. Deferred vested members with hazardous service are assumed to begin health coverage at age 50.

- 50% of future retirees, with hazardous service, are assumed to elect spouse health care coverage. No dependent coverage is assumed for members who only have non-hazardous service. 100% of spouses with health care coverage are assumed to continue coverage after the member's death.

Excise ("Cadillac") Tax:

For taxable years beginning after December 31, 2019, a 40% excise tax will be required to be paid (by the employer and/or insurer) on the aggregate cost of the health plan in excess of certain legislated thresholds. For 2018, the thresholds are $850 per month for individual coverage and $2,292 per month for family coverage.

Both Actuarial Standard of Practice No. 6 and GASB Statement Nos. 74 and 75 reference this tax, and, in accordance with these standards an estimate of the impact of the Cadillac tax has been included in this valuation.

Assumptions and methods used to determine the impact of the Cadillac Tax include:

- 2018 thresholds of $850/$2,292 were indexed annually by 2.30%.
- Premium data submitted was not adjusted for permissible exclusions to the Cadillac Tax.
- There were no special adjustments to the dollar limit other than those permissible for non-Medicare retirees over 55.

In this valuation, the impact of the Cadillac Tax has been calculated by increasing the employer paid premiums for Non-Medicare retirees, who became participants before July 1, 2003, by 3.6%. Non-Medicare retirees who became participants after July 1, 2003 receive dollar subsidies per year of service, which are not expected to exceed the overall Non-Medicare premiums. As a result, the costs attributable to the Cadillac Tax for members who became participants after July 1, 2003 will be paid by the retirees.

Changes in Assumptions since the prior valuation:

1. The assumed investment return was changed from 6.75% to 5.25% for the retirement fund and from 7.50% to 6.25% for the insurance fund.
2. The price inflation assumption was changed from 3.25% to 2.30%, which also resulted in a 0.95% decrease in the salary increase assumption at all years of service and a 0.95% decrease in the health care cost trend rates.
3. The amortization method for unfunded accrued liabilities was changed to a level dollar basis (which is then converted to a percentage of expected covered payroll) from a level percentage of pay basis.

Development of Baseline Claims Cost

For non-Medicare retirees, the initial per capita costs were based on the plan premiums effective January 1, 2017, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. The spouse/dependent premium of $862.64 for non-Medicare retirees is based on a blending of Family and Couple premiums for the current retirees that have over 4 years of hazardous service. The fully-insured premiums KRS pays the Kentucky Employees' Health Plan (KEHP) are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit rate subsidy for the non-Medicare eligible retirees. Actuarial Standard of Practice No. 6 (ASOP No. 6) requires aging subsidies (or implicit rate subsidies) to be recognized. However, the KRS health insurance trusts are only used to reimburse KEHP for the employer's portion of the blended premiums. Said another way, the trusts are not used to fund the difference between the underlying retiree claims and the blended KEHP premiums. As a result, the retiree health care liabilities developed in this report for the non-Medicare retirees are based solely on the premiums charged by KEHP, without any age-adjustment. GASB Statements No. 74 and No. 75 prohibit such a deviation from ASOP No. 6. The liabilities developed in this report are solely for the purpose of funding the benefits paid by the health insurance funds and are not appropriate for financial statement disclosures required by GASB. GRS provides separate GASB reports to KRS which include the liabilities associated with the implicit rate subsidy.

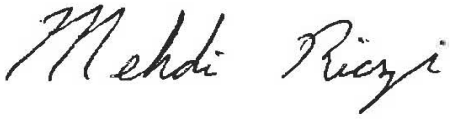
For those not eligible for Medicare		
Age	Member	Spouse/Dependents
<65	$711.22	$862.64

For Medicare retirees, the initial per capita costs were estimated based on the plan premiums effective January 1, 2017, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. Age graded and sex distinct premiums are utilized for retirees over the age of 65. These costs are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

For those eligible for Medicare		
Age	Male	Female
65	$208.66	$196.81
75	244.13	238.22
85	258.16	261.20

Appendix B of the report provides a full schedule of premiums.

Mehdi Riazi is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.



Mehdi Riazi, FSA, EA, MAAA

APPENDIX B

BENEFIT PROVISIONS

Summary of Benefit Provisions for State Police Retirement System (SPRS)

SPRS Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 55 with at least 1 month of service credit; or Any age with at least 20 years of service
Benefit Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation times years of service. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 3 years of compensation.
Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement eligibility precedes the member's normal retirement date.

SPRS Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.10%
10-20	1.30%
20-25	1.50%
Greater than 25*	2.00%

Final compensation is based on the member's highest 3 years of compensation.

Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	Each year that the member is active, a 7.50% employer pay credit and the employee's 5.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

SPRS Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that if the member has less than 20 years of service at disability, service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 55th birthday, with total service not exceeding 20 years. Total service credit added shall not be greater than the member's actual service at disability.

SPRS Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Line of Duty Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly rate of pay. Additionally, each eligible dependent child will receive 10% of the member's monthly final rate of pay up to a maximum of 40%.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 55 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 25% of the deceased member's final monthly rate of pay. A spouse may also elect the non-line of duty death benefit.
Non-Spouse Benefit	If the beneficiary is only one person who is a dependent receiving at least 50% of his or her support from the member, the beneficiary may elect a lump sum payment of$10,000.
Child Benefit	Each eligible dependent child will receive 10% of the member's final monthly rate of pay up to a maximum of 40%.

SPRS Employees (continued)

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	8% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the KRS board, not less than 2.0%.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes since the Prior Valuation

None.

Summary of Main Retiree Insurance Benefit Provisions

Insurance Tier 1: Participation began before 7/1/2003

Benefit Eligibility Recipient of a retirement allowance

Benefit Amount

Non-Hazardous Service	Percentage of Member Premium Paid by Retirement System	Hazardous Service	Percentage of Member & Dependent Premium Paid by Retirement System
Less than 4 years	0%	Less than 4 years	0%
4 – 9 years	25%	4 – 9 years	25%
10 – 14 years	50%	10 – 14 years	50%
15 – 19 years	75%	15 – 19 years	75%
20 or more years	100%	20 or more years	100%

The percentage paid by the retirement system is applied to the 'contribution' plan selected by the KRS Board.

Duty Disability Retirement If disability was a result of injuries sustained while in the line of duty, the member receives 100% of the maximum contribution for the member and dependents.

Duty Death in Service If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive 100% of the maximum contribution.

Non-Duty Death in Service If the surviving spouses is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Surviving Spouse of a Retiree A surviving spouse of a retiree, who is in receipt of a pension allowance, will receive a premium subsidy based on the member's years of hazardous service.

Hazardous employees who retired prior to August 1, 1998 System's contribution for spouse and dependents is based on total service.

Insurance Tier 2: Participation began on or after 7/1/2003, but before 9/1/2008

Benefit Eligibility	Recipient of a retirement allowance with at least 120 months of service at retirement
Non-Hazardous Subsidy	Monthly contribution of $10 for each year of earned non-hazardous service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $13.18/year of service. Upon the retiree's death, the surviving spouse may continue coverage (if in receipt of a retirement allowance) but will be 100% responsible for the premiums.
Hazardous Subsidy	Monthly contribution of $15 for each year of earned hazardous service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $19.77/year of service. Upon the retiree's death, the surviving spouse of a hazardous duty member will receive a monthly contribution of $10 ($13.18 as of July 1, 2017) for each year of hazardous service.
Duty Disability Retirement	If disability was a result of injuries sustained while in the line of duty, the member receives a benefit equal to at least 20 times the Non-Hazardous monthly contribution.
Duty Death in Service	If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive a benefit equal to at least 20 times the Non-Hazardous monthly contribution.
Non-Duty Death in Service	If the surviving spouse is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Insurance Tier 3: Participation began on or after 9/1/2008

Tier 3 insurance benefits are identical to Tier 2, except Tier 3 members are required to have at least 180 months of service in order to be eligible.

Monthly Health Plan Premiums – Effective January 1, 2018

Non-Medicare Plan Options					
Plan Option	Single	Parent Plus	Couple	Family	Family X-Ref
LivingWell PPO*	$729.34	$1,037.08	$1,589.10	$1,767.60	$876.68
LivingWell CDHP	709.46	978.50	1,325.64	1,479.76	818.96
Standard PPO	685.38	975.90	1,497.18	1,666.26	824.54
Standard CDHP	682.80	940.64	1,450.02	1,615.30	800.94

Medicare Plan Options	
Kentucky Retirement Systems - Medical Only Plan	$165.01
Kentucky Retirement Systems – Medicare Advantage/Essential Plan	75.56
Kentucky Retirement Systems – Medicare Advantage/Premium Plan*	252.21

*For 2018, the contribution plans selected by the KRS Board were the LivingWell PPO plan option for non-Medicare retirees and the Medicare Advantage Premium plan option for Medicare retirees.

Dollar Contribution Amount for Insurance Tier 2 and Tier 3

Monthly contribution amounts per year of service as of July 1, 2017.

Non-Hazardous Service	Hazardous Service
$13.18	$19.77

Note: Non-Hazardous benefits are applicable to SPRS members with prior service in a Non-Hazardous System.

APPENDIX C

GLOSSARY

Glossary

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or ***Funding Method:*** A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ADC.

Actuarial Gain or ***Actuarial Loss:*** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)

b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, non-retired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations that provide the financial information of the plan, such as the funded ratio, unfunded actuarial accrued liability and the ADC.

Actuarial Value of Assets or ***Valuation Assets:*** The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Actuarially Determined Contribution (ADC): The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADC consists of the Employer Normal Cost and the Amortization Payment.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment: The portion of the pension plan contribution or ADC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Closed Amortization Period: A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.

Funding Period or ***Amortization Period:*** The term "Funding Period" is used two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ADC. This funding period is specified in State statute. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on a statutory employer contribution rate, and assuming no future actuarial gains or losses.

GASB: Governmental Accounting Standards Board.

GASB 67 and ***GASB 68***: Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting and reporting rules for public retirement systems and the employers that sponsor, participate in, or contribute to them. Statement No. 67 sets the accounting rules for the financial reporting of the retirement systems, while Statement No. 68 sets the rules for the employers that sponsor, participate in, or contribute to public retirement systems.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded

Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but may not decrease by exactly one year in the subsequent year's actuarial valuation. For instance, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year.

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

Valuation Date or Actuarial Valuation Date: The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

GRS Retirement Consulting

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December 4, 2017

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Re: Sensitivity Analysis Based on Results of the June 30, 2017 Actuarial Valuation

Dear Members of the Board:

Per Kentucky State Statute 61.670, we are providing this supplemental information regarding the sensitivity of the valuation results to changes in some of the economic assumptions. Specifically, the attached tables show the impact for the KERS retirement system due to changes in the investment return assumption, the inflation rate assumption, or the payroll growth rate assumption.

Background

Investment Assumption

The investment return assumption is used to discount future expected benefit payments to the valuation date in order to determine the liabilities of the plans. The lower the investment return assumption, the less the benefit payments are discounted and the higher the valuation liability. The current investment return assumption is 5.25% for the KERS non-hazardous retirement fund and 6.25% for the KERS hazardous retirement fund and both KERS insurance funds. The sensitivity analysis shows the financial impact of a 1.00% increase and a 1.00% decrease in the investment return assumption. For purposes of this sensitivity analysis, the inflation assumption and payroll growth assumption remain unchanged from the valuation assumption.

Inflation Assumption

The inflation assumption underlies most of the other economic assumptions, including the investment return, salary increases, and payroll growth rate. This is a macroeconomic assumption and as such the same assumption is used in the valuation of each of the retirement systems. The current assumption is 2.30% for all funds. The sensitivity analysis shows the financial impact of a 0.25% increase and a 0.25% decrease in the inflation assumption. Note, the change in the in the inflation assumption results in a corresponding change in the investment return assumption, the payroll growth rate assumption, and the healthcare trend assumption that is used in the valuation of the health insurance funds.

Payroll Growth Assumption

Participating employers of KERS make contributions to the system as a percentage of the covered payroll. Therefore, as payroll changes over time these amortization payments will also change. If actual covered payroll increases at a rate that is less than assumed, then the retirement system receives less money than expected to finance the unfunded liability, which means the contribution rates in future years will be required to increase in order to finance the unfunded liability over the same time period. The current payroll growth assumption is 0.00% for all the KERS retirement and insurance funds. The analysis shows the impact of a 1.00% increase and a 1.00% decrease in the payroll growth assumption. Please note that the payroll growth assumption does not impact the valuation liabilities, unfunded liability, and funded status of the system. Rather, this assumption only impacts the amortization rate for financing the existing unfunded actuarial accrued liability and the recommended employer contribution. For purposes of this analysis, the investment return assumption and the inflation assumption are held at their current valuation assumptions.

Certification

The information provided in this report compliments the information provided in the June 30, 2017 actuarial valuation report. Please refer to the June 30, 2017 actuarial valuation report for additional discussion of the actuarial valuation, including the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

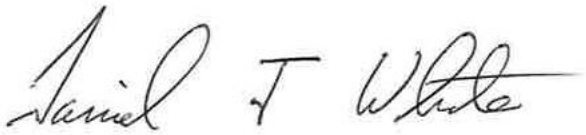
Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making. The purpose of this information is to provide stakeholders the financial sensitivity of the unfunded liability and contribution rates to changes in the inflation, assumed rate of return, and discount rate.

The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All of the undersigned are experienced in performing valuations for large public retirement systems.

This communication shall not be construed to provide tax advice, legal advice or investment advice.

Sincerely,

Joseph P. Newton, FSA, EA, MAAA
Pension Market Leader and Actuary



Daniel J. White, FSA, EA, MAAA
Senior Consultant

Janie Shaw, ASA, MAAA
Consultant

Sensitivity Analysis - Discount Rate
Non-Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	0.00%	0.00%	0.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	4.25%	5.25%	6.25%
Discount Rate - Insurance	5.25%	6.25%	7.25%
Retirement			
Actuarial Accrued Liability	$ 17,501,838	$ 15,591,641	$ 14,002,077
Actuarial Value of Assets	2,123,623	2,123,623	2,123,623
Unfunded Actuarial Accrued Liability	15,378,215	13,468,018	11,878,454
Funded Ratio	12.1%	13.6%	15.2%
Total Recommended Contribution Rate	76.70%	71.03%	66.43%
Insurance			
Actuarial Accrued Liability	$ 3,027,049	$ 2,683,496	$ 2,398,595
Actuarial Value of Assets	823,918	823,918	823,918
Unfunded Actuarial Accrued Liability	2,203,131	1,859,578	1,574,677
Funded Ratio	27.2%	30.7%	34.4%
Total Recommended Contribution Rate	14.10%	12.40%	10.94%
Combined Non-Hazardous			
Actuarial Accrued Liability	$ 20,528,887	$ 18,275,137	$ 16,400,672
Actuarial Value of Assets	2,947,541	2,947,541	2,947,541
Unfunded Actuarial Accrued Liability	17,581,346	15,327,596	13,453,131
Funded Ratio	14.4%	16.1%	18.0%
Total Recommended Contribution Rate	90.80%	83.43%	77.37%

Sensitivity Analysis - Inflation Rate
Non-Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Inflation Rate	Valuation Results	Increase Inflation Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	-0.25%	0.00%	0.25%
Inflation Rate	2.05%	2.30%	2.55%
Discount Rate - Retirement	5.00%	5.25%	5.50%
Discount Rate - Insurance	6.00%	6.25%	6.50%
Retirement			
Actuarial Accrued Liability	$ 16,002,991	$ 15,591,641	$ 15,198,200
Actuarial Value of Assets	2,123,623	2,123,623	2,123,623
Unfunded Actuarial Accrued Liability	13,879,368	13,468,018	13,074,577
Funded Ratio	13.3%	13.6%	14.0%
Total Recommended Contribution Rate	73.51%	71.03%	68.66%
Insurance			
Actuarial Accrued Liability	$ 2,699,129	$ 2,683,496	$ 2,668,652
Actuarial Value of Assets	823,918	823,918	823,918
Unfunded Actuarial Accrued Liability	1,875,211	1,859,578	1,844,734
Funded Ratio	30.5%	30.7%	30.9%
Total Recommended Contribution Rate	12.57%	12.40%	12.24%
Combined Non-Hazardous			
Actuarial Accrued Liability	$ 18,702,120	$ 18,275,137	$ 17,866,852
Actuarial Value of Assets	2,947,541	2,947,541	2,947,541
Unfunded Actuarial Accrued Liability	15,754,579	15,327,596	14,919,311
Funded Ratio	15.8%	16.1%	16.5%
Total Recommended Contribution Rate	86.08%	83.43%	80.90%

Sensitivity Analysis - Payroll Growth
Non-Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Payroll Growth	Valuation Results	Increase Payroll Growth
(1)	(2)	(3)	(4)
Payroll Growth Rate	-1.00%	0.00%	1.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	5.25%	5.25%	5.25%
Discount Rate - Insurance	6.25%	6.25%	6.25%
Retirement			
Actuarial Accrued Liability	$ 15,591,641	$ 15,591,641	$ 15,591,641
Actuarial Value of Assets	2,123,623	2,123,623	2,123,623
Unfunded Actuarial Accrued Liability	13,468,018	13,468,018	13,468,018
Funded Ratio	13.6%	13.6%	13.6%
Total Recommended Contribution Rate	77.81%	71.03%	64.70%
Insurance			
Actuarial Accrued Liability	$ 2,683,496	$ 2,683,496	$ 2,683,496
Actuarial Value of Assets	823,918	823,918	823,918
Unfunded Actuarial Accrued Liability	1,859,578	1,859,578	1,859,578
Funded Ratio	30.7%	30.7%	30.7%
Total Recommended Contribution Rate	13.39%	12.40%	11.47%
Combined Non-Hazardous			
Actuarial Accrued Liability	$ 18,275,137	$ 18,275,137	$ 18,275,137
Actuarial Value of Assets	2,947,541	2,947,541	2,947,541
Unfunded Actuarial Accrued Liability	15,327,596	15,327,596	15,327,596
Funded Ratio	16.1%	16.1%	16.1%
Total Recommended Contribution Rate	91.20%	83.43%	76.17%

Sensitivity Analysis - Discount Rate
Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	0.00%	0.00%	0.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	5.25%	6.25%	7.25%
Discount Rate - Insurance	5.25%	6.25%	7.25%
Retirement			
Actuarial Accrued Liability	$ 1,259,563	$ 1,121,420	$ 1,006,780
Actuarial Value of Assets	607,159	607,159	607,159
Unfunded Actuarial Accrued Liability	652,404	514,261	399,621
Funded Ratio	48.2%	54.1%	60.3%
Total Recommended Contribution Rate	42.70%	34.39%	27.07%
Insurance			
Actuarial Accrued Liability	$ 474,187	$ 419,439	$ 374,457
Actuarial Value of Assets	493,458	493,458	493,458
Unfunded Actuarial Accrued Liability	(19,271)	(74,019)	(119,001)
Funded Ratio	104.1%	117.6%	131.8%
Total Recommended Contribution Rate	7.19%	2.46%	-1.86%
Combined Hazardous			
Actuarial Accrued Liability	$ 1,733,750	$ 1,540,859	$ 1,381,237
Actuarial Value of Assets	1,100,617	1,100,617	1,100,617
Unfunded Actuarial Accrued Liability	633,133	440,242	280,620
Funded Ratio	63.5%	71.4%	79.7%
Total Recommended Contribution Rate	49.89%	36.85%	25.21%

Sensitivity Analysis - Inflation Rate
Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Inflation Rate	Valuation Results	Increase Inflation Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	-0.25%	0.00%	0.25%
Inflation Rate	2.05%	2.30%	2.55%
Discount Rate - Retirement	6.00%	6.25%	6.50%
Discount Rate - Insurance	6.00%	6.25%	6.50%
Retirement			
Actuarial Accrued Liability	$ 1,150,681	$ 1,121,420	$ 1,093,448
Actuarial Value of Assets	607,159	607,159	607,159
Unfunded Actuarial Accrued Liability	543,522	514,261	486,289
Funded Ratio	52.8%	54.1%	55.5%
Total Recommended Contribution Rate	36.49%	34.39%	32.38%
Insurance			
Actuarial Accrued Liability	$ 422,418	$ 419,439	$ 416,625
Actuarial Value of Assets	493,458	493,458	493,458
Unfunded Actuarial Accrued Liability	(71,040)	(74,019)	(76,833)
Funded Ratio	116.8%	117.6%	118.4%
Total Recommended Contribution Rate	2.84%	2.46%	2.12%
Combined Hazardous			
Actuarial Accrued Liability	$ 1,573,099	$ 1,540,859	$ 1,510,073
Actuarial Value of Assets	1,100,617	1,100,617	1,100,617
Unfunded Actuarial Accrued Liability	472,482	440,242	409,456
Funded Ratio	70.0%	71.4%	72.9%
Total Recommended Contribution Rate	39.33%	36.85%	34.50%

Sensitivity Analysis - Payroll Growth
Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Payroll Growth	Valuation Results	Increase Payroll Growth
(1)	(2)	(3)	(4)
Payroll Growth Rate	-1.00%	0.00%	1.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	6.25%	6.25%	6.25%
Discount Rate - Insurance	6.25%	6.25%	6.25%
Retirement			
Actuarial Accrued Liability	$ 1,121,420	$ 1,121,420	$ 1,121,420
Actuarial Value of Assets	607,159	607,159	607,159
Unfunded Actuarial Accrued Liability	514,261	514,261	514,261
Funded Ratio	54.1%	54.1%	54.1%
Total Recommended Contribution Rate	36.94%	34.39%	32.00%
Insurance			
Actuarial Accrued Liability	$ 419,439	$ 419,439	$ 419,439
Actuarial Value of Assets	493,458	493,458	493,458
Unfunded Actuarial Accrued Liability	(74,019)	(74,019)	(74,019)
Funded Ratio	117.6%	117.6%	117.6%
Total Recommended Contribution Rate	2.11%	2.46%	2.80%
Combined Hazardous			
Actuarial Accrued Liability	$ 1,540,859	$ 1,540,859	$ 1,540,859
Actuarial Value of Assets	1,100,617	1,100,617	1,100,617
Unfunded Actuarial Accrued Liability	440,242	440,242	440,242
Funded Ratio	71.4%	71.4%	71.4%
Total Recommended Contribution Rate	39.05%	36.85%	34.80%

GRS Retirement Consulting

P: 469.524.0000 | F: 469.524.0003 | www.grsconsulting.com

December 4, 2017

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Re: Sensitivity Analysis Based on Results of the June 30, 2017 Actuarial Valuation

Dear Members of the Board:

Per Kentucky State Statute 61.670, we are providing this supplemental information regarding the sensitivity of the valuation results to changes in some of the economic assumptions. Specifically, the attached tables show the impact for the CERS retirement system due to changes in the investment return assumption, the inflation rate assumption, or the payroll growth rate assumption.

Background

Investment Assumption

The investment return assumption is used to discount future expected benefit payments to the valuation date in order to determine the liabilities of the plans. The lower the investment return assumption, the less the benefit payments are discounted and the higher the valuation liability. The current investment return assumption is 6.25% for the CERS non-hazardous and hazardous retirement and insurance funds. The sensitivity analysis shows the financial impact of a 1.00% increase and a 1.00% decrease in the investment return assumption. For purposes of this sensitivity analysis, the inflation assumption and payroll growth assumption remain unchanged from the valuation assumption.

Inflation Assumption

The inflation assumption underlies most of the other economic assumptions, including the investment return, salary increases, and payroll growth rate. This is a macroeconomic assumption and as such the same assumption is used in the valuation of each of the retirement systems. The current assumption is 2.30% for all funds. The sensitivity analysis shows the financial impact of a 0.25% increase and a 0.25% decrease in the inflation assumption. Note, the change in the in the inflation assumption results in a corresponding change in the investment return assumption, the payroll growth rate assumption, and the healthcare trend assumption that is used in the valuation of the health insurance funds.

Payroll Growth Assumption

Participating employers of CERS make contributions to the system as a percentage of the covered payroll. Therefore, as payroll changes over time these amortization payments will also change. If actual covered payroll increases at a rate that is less than assumed, then the retirement system receives less money than expected to finance the unfunded liability, which means the contribution rates in future years will be required to increase in order to finance the unfunded liability over the same time period. The current payroll growth assumption is 2.00% for all the CERS retirement and insurance funds. The analysis shows the impact of a 1.00% increase and a 1.00% decrease in the payroll growth assumption. Please note that the payroll growth assumption does not impact the valuation liabilities, unfunded liability, and funded status of the system. Rather, this assumption only impacts the amortization rate for financing the existing unfunded actuarial accrued liability and the recommended employer contribution. For purposes of this analysis, the investment return assumption and the inflation assumption are held at their current valuation assumptions.

Certification

The information provided in this report compliments the information provided in the June 30, 2017 actuarial valuation report. Please refer to the June 30, 2017 actuarial valuation report for additional discussion of the actuarial valuation, including the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

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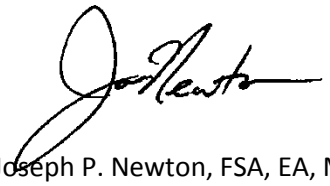
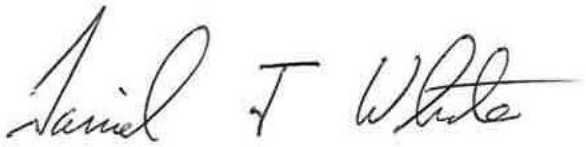
Sincerely,



Joseph P. Newton, FSA, EA, MAAA
Pension Market Leader and Actuary



Daniel J. White, FSA, EA, MAAA
Senior Consultant

Janie Shaw, ASA, MAAA
Consultant

Sensitivity Analysis - Discount Rate
Non-Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	2.00%	2.00%	2.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	5.25%	6.25%	7.25%
Discount Rate - Insurance	5.25%	6.25%	7.25%
Retirement			
Actuarial Accrued Liability	$ 14,361,475	$ 12,803,510	$ 11,499,054
Actuarial Value of Assets	6,764,873	6,764,873	6,764,873
Unfunded Actuarial Accrued Liability	7,596,602	6,038,637	4,734,181
Funded Ratio	47.1%	52.8%	58.8%
Total Recommended Contribution Rate	26.58%	21.84%	17.67%
Insurance			
Actuarial Accrued Liability	$ 3,798,688	$ 3,355,151	$ 2,987,083
Actuarial Value of Assets	2,227,401	2,227,401	2,227,401
Unfunded Actuarial Accrued Liability	1,571,287	1,127,750	759,682
Funded Ratio	58.6%	66.4%	74.6%
Total Recommended Contribution Rate	8.03%	6.21%	4.62%
Combined Non-Hazardous			
Actuarial Accrued Liability	$ 18,160,163	$ 16,158,661	$ 14,486,137
Actuarial Value of Assets	8,992,274	8,992,274	8,992,274
Unfunded Actuarial Accrued Liability	9,167,889	7,166,387	5,493,863
Funded Ratio	49.5%	55.6%	62.1%
Total Recommended Contribution Rate	34.61%	28.05%	22.29%

Sensitivity Analysis - Inflation Rate
Non-Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Inflation Rate	Valuation Results	Increase Inflation Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	1.75%	2.00%	2.25%
Inflation Rate	2.05%	2.30%	2.55%
Discount Rate - Retirement	6.00%	6.25%	6.50%
Discount Rate - Insurance	6.00%	6.25%	6.50%
Retirement			
Actuarial Accrued Liability	$ 13,121,425	$ 12,803,510	$ 12,498,722
Actuarial Value of Assets	6,764,873	6,764,873	6,764,873
Unfunded Actuarial Accrued Liability	6,356,552	6,038,637	5,733,849
Funded Ratio	51.6%	52.8%	54.1%
Total Recommended Contribution Rate	23.04%	21.84%	20.69%
Insurance			
Actuarial Accrued Liability	$ 3,382,139	$ 3,355,151	$ 3,329,648
Actuarial Value of Assets	2,227,401	2,227,401	2,227,401
Unfunded Actuarial Accrued Liability	1,154,738	1,127,750	1,102,247
Funded Ratio	65.9%	66.4%	66.9%
Total Recommended Contribution Rate	6.40%	6.21%	6.04%
Combined Non-Hazardous			
Actuarial Accrued Liability	$ 16,503,564	$ 16,158,661	$ 15,828,370
Actuarial Value of Assets	8,992,274	8,992,274	8,992,274
Unfunded Actuarial Accrued Liability	7,511,290	7,166,387	6,836,096
Funded Ratio	54.5%	55.6%	56.8%
Total Recommended Contribution Rate	29.44%	28.05%	26.73%

Sensitivity Analysis - Payroll Growth
Non-Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Payroll Growth	Valuation Results	Increase Payroll Growth
(1)	(2)	(3)	(4)
Payroll Growth Rate	1.00%	2.00%	3.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	6.25%	6.25%	6.25%
Discount Rate - Insurance	6.25%	6.25%	6.25%
Retirement			
Actuarial Accrued Liability	$ 12,803,510	$ 12,803,510	$ 12,803,510
Actuarial Value of Assets	6,764,873	6,764,873	6,764,873
Unfunded Actuarial Accrued Liability	6,038,637	6,038,637	6,038,637
Funded Ratio	52.8%	52.8%	52.8%
Total Recommended Contribution Rate	23.61%	21.84%	20.19%
Insurance			
Actuarial Accrued Liability	$ 3,355,151	$ 3,355,151	$ 3,355,151
Actuarial Value of Assets	2,227,401	2,227,401	2,227,401
Unfunded Actuarial Accrued Liability	1,127,750	1,127,750	1,127,750
Funded Ratio	66.4%	66.4%	66.4%
Total Recommended Contribution Rate	6.55%	6.21%	5.90%
Combined Non-Hazardous			
Actuarial Accrued Liability	$ 16,158,661	$ 16,158,661	$ 16,158,661
Actuarial Value of Assets	8,992,274	8,992,274	8,992,274
Unfunded Actuarial Accrued Liability	7,166,387	7,166,387	7,166,387
Funded Ratio	55.6%	55.6%	55.6%
Total Recommended Contribution Rate	30.16%	28.05%	26.09%

Sensitivity Analysis - Discount Rate
Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	2.00%	2.00%	2.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	5.25%	6.25%	7.25%
Discount Rate - Insurance	5.25%	6.25%	7.25%
Retirement			
Actuarial Accrued Liability	$ 5,253,887	$ 4,649,047	$ 4,149,262
Actuarial Value of Assets	2,238,320	2,238,320	2,238,320
Unfunded Actuarial Accrued Liability	3,015,567	2,410,727	1,910,942
Funded Ratio	42.6%	48.1%	53.9%
Total Recommended Contribution Rate	43.30%	35.69%	29.11%
Insurance			
Actuarial Accrued Liability	$ 2,026,503	$ 1,788,433	$ 1,593,138
Actuarial Value of Assets	1,196,780	1,196,780	1,196,780
Unfunded Actuarial Accrued Liability	829,723	591,653	396,358
Funded Ratio	59.1%	66.9%	75.1%
Total Recommended Contribution Rate	15.77%	12.17%	8.98%
Combined Hazardous			
Actuarial Accrued Liability	$ 7,280,390	$ 6,437,480	$ 5,742,400
Actuarial Value of Assets	3,435,100	3,435,100	3,435,100
Unfunded Actuarial Accrued Liability	3,845,290	3,002,380	2,307,300
Funded Ratio	47.2%	53.4%	59.8%
Total Recommended Contribution Rate	59.07%	47.86%	38.09%

Sensitivity Analysis - Inflation Rate
Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Inflation Rate	Valuation Results	Increase Inflation Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	1.75%	2.00%	2.25%
Inflation Rate	2.05%	2.30%	2.55%
Discount Rate - Retirement	6.00%	6.25%	6.50%
Discount Rate - Insurance	6.00%	6.25%	6.50%
Retirement			
Actuarial Accrued Liability	$ 4,775,734	$ 4,649,047	$ 4,528,024
Actuarial Value of Assets	2,238,320	2,238,320	2,238,320
Unfunded Actuarial Accrued Liability	2,537,414	2,410,727	2,289,704
Funded Ratio	46.9%	48.1%	49.4%
Total Recommended Contribution Rate	37.77%	35.69%	33.70%
Insurance			
Actuarial Accrued Liability	$ 1,798,060	$ 1,788,433	$ 1,779,274
Actuarial Value of Assets	1,196,780	1,196,780	1,196,780
Unfunded Actuarial Accrued Liability	601,280	591,653	582,494
Funded Ratio	66.6%	66.9%	67.3%
Total Recommended Contribution Rate	12.41%	12.17%	11.94%
Combined Hazardous			
Actuarial Accrued Liability	$ 6,573,794	$ 6,437,480	$ 6,307,298
Actuarial Value of Assets	3,435,100	3,435,100	3,435,100
Unfunded Actuarial Accrued Liability	3,138,694	3,002,380	2,872,198
Funded Ratio	52.3%	53.4%	54.5%
Total Recommended Contribution Rate	50.18%	47.86%	45.64%

Sensitivity Analysis - Payroll Growth
Hazardous Members
(Dollar amounts expressed in thousands)

	Decrease Payroll Growth	Valuation Results	Increase Payroll Growth
(1)	(2)	(3)	(4)
Payroll Growth Rate	1.00%	2.00%	3.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	6.25%	6.25%	6.25%
Discount Rate - Insurance	6.25%	6.25%	6.25%
Retirement			
Actuarial Accrued Liability	$ 4,649,047	$ 4,649,047	$ 4,649,047
Actuarial Value of Assets	2,238,320	2,238,320	2,238,320
Unfunded Actuarial Accrued Liability	2,410,727	2,410,727	2,410,727
Funded Ratio	48.1%	48.1%	48.1%
Total Recommended Contribution Rate	38.90%	35.69%	32.70%
Insurance			
Actuarial Accrued Liability	$ 1,788,433	$ 1,788,433	$ 1,788,433
Actuarial Value of Assets	1,196,780	1,196,780	1,196,780
Unfunded Actuarial Accrued Liability	591,653	591,653	591,653
Funded Ratio	66.9%	66.9%	66.9%
Total Recommended Contribution Rate	12.95%	12.17%	11.44%
Combined Hazardous			
Actuarial Accrued Liability	$ 6,437,480	$ 6,437,480	$ 6,437,480
Actuarial Value of Assets	3,435,100	3,435,100	3,435,100
Unfunded Actuarial Accrued Liability	3,002,380	3,002,380	3,002,380
Funded Ratio	53.4%	53.4%	53.4%
Total Recommended Contribution Rate	51.85%	47.86%	44.14%

GRS Retirement Consulting

P: 469.524.0000 | F: 469.524.0003 | www.grsconsulting.com

December 4, 2017

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Re: Sensitivity Analysis Based on Results of the June 30, 2017 Actuarial Valuation

Dear Members of the Board:

Per Kentucky State Statute 61.670, we are providing this supplemental information regarding the sensitivity of the valuation results to changes in some of the economic assumptions. Specifically, the attached tables show the impact for the SPRS retirement system due to changes in the investment return assumption, the inflation rate assumption, or the payroll growth rate assumption.

Background

Investment Assumption

The investment return assumption is used to discount future expected benefit payments to the valuation date in order to determine the liabilities of the plans. The lower the investment return assumption, the less the benefit payments are discounted and the higher the valuation liability. The current investment return assumption is 5.25% for the SPRS retirement fund and 6.25% for the SPRS insurance fund. The sensitivity analysis shows the financial impact of a 1.00% increase and a 1.00% decrease in the investment return assumption. For purposes of this sensitivity analysis, the inflation assumption and payroll growth assumption remain unchanged from the valuation assumption.

Inflation Assumption

The inflation assumption underlies most of the other economic assumptions, including the investment return, salary increases, and payroll growth rate. This is a macroeconomic assumption and as such the same assumption is used in the valuation of each of the retirement systems. The current assumption is 2.30% for all funds. The sensitivity analysis shows the financial impact of a 0.25% increase and a 0.25% decrease in the inflation assumption. Note, the change in the in the inflation assumption results in a corresponding change in the investment return assumption, the payroll growth rate assumption, and the healthcare trend assumption that is used in the valuation of the health insurance funds.

Payroll Growth Assumption

Participating employers of SPRS make contributions to the system as a percentage of the covered payroll. Therefore, as payroll changes over time these amortization payments will also change. If actual covered payroll increases at a rate that is less than assumed, then the retirement system receives less money than expected to finance the unfunded liability, which means the contribution rates in future years will be required to increase in order to finance the unfunded liability over the same time period. The current payroll growth assumption is 0.00% for the SPRS retirement and insurance funds. The analysis shows the impact of a 1.00% increase and a 1.00% decrease in the payroll growth assumption. Please note that the payroll growth assumption does not impact the valuation liabilities, unfunded liability, and funded status of the system. Rather, this assumption only impacts the amortization rate for financing the existing unfunded actuarial accrued liability and the recommended employer contribution. For purposes of this analysis, the investment return assumption and the inflation assumption are held at their current valuation assumptions.

Certification

The information provided in this report compliments the information provided in the June 30, 2017 actuarial valuation report. Please refer to the June 30, 2017 actuarial valuation report for additional discussion of the actuarial valuation, including the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

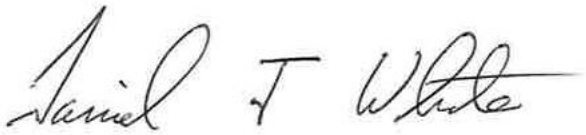
Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making. The purpose of this information is to provide stakeholders the financial sensitivity of the unfunded liability and contribution rates to changes in the inflation, assumed rate of return, and discount rate.

The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All of the undersigned are experienced in performing valuations for large public retirement systems.

This communication shall not be construed to provide tax advice, legal advice or investment advice.

Sincerely,

Joseph P. Newton, FSA, EA, MAAA
Pension Market Leader and Actuary



Daniel J. White, FSA, EA, MAAA
Senior Consultant

Janie Shaw, ASA, MAAA
Consultant

Sensitivity Analysis - Discount Rate

(Dollar amounts expressed in thousands)

(1)	Decrease Discount Rate (2)	Valuation Results (3)	Increase Discount Rate (4)
Payroll Growth Rate	0.00%	0.00%	0.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	4.25%	5.25%	6.25%
Discount Rate - Insurance	5.25%	6.25%	7.25%
Retirement			
Actuarial Accrued Liability	$ 1,089,826	$ 967,145	$ 866,311
Actuarial Value of Assets	261,320	261,320	261,320
Unfunded Actuarial Accrued Liability	828,506	705,825	604,991
Funded Ratio	24.0%	27.0%	30.2%
Total Recommended Contribution Rate	132.59%	119.05%	107.52%
Insurance			
Actuarial Accrued Liability	$ 311,618	$ 276,641	$ 247,763
Actuarial Value of Assets	180,464	180,464	180,464
Unfunded Actuarial Accrued Liability	131,154	96,177	67,299
Funded Ratio	57.9%	65.2%	72.8%
Total Recommended Contribution Rate	34.45%	27.23%	20.79%
Combined			
Actuarial Accrued Liability	$ 1,401,444	$ 1,243,786	$ 1,114,074
Actuarial Value of Assets	441,784	441,784	441,784
Unfunded Actuarial Accrued Liability	959,660	802,002	672,290
Funded Ratio	31.5%	35.5%	39.7%
Total Recommended Contribution Rate	167.04%	146.28%	128.31%

Sensitivity Analysis - Inflation Rate

(Dollar amounts expressed in thousands)

	Decrease Inflation Rate	Valuation Results	Increase Inflation Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	-0.25%	0.00%	0.25%
Inflation Rate	2.05%	2.30%	2.55%
Discount Rate - Retirement	5.00%	5.25%	5.50%
Discount Rate - Insurance	6.00%	6.25%	6.50%
Retirement			
Actuarial Accrued Liability	$ 994,172	$ 967,145	$ 941,392
Actuarial Value of Assets	261,320	261,320	261,320
Unfunded Actuarial Accrued Liability	732,852	705,825	680,072
Funded Ratio	26.3%	27.0%	27.8%
Total Recommended Contribution Rate	124.15%	119.05%	114.20%
Insurance			
Actuarial Accrued Liability	$ 277,760	$ 276,641	$ 275,568
Actuarial Value of Assets	180,464	180,464	180,464
Unfunded Actuarial Accrued Liability	97,296	96,177	95,104
Funded Ratio	65.0%	65.2%	65.5%
Total Recommended Contribution Rate	27.61%	27.23%	26.88%
Combined			
Actuarial Accrued Liability	$ 1,271,932	$ 1,243,786	$ 1,216,960
Actuarial Value of Assets	441,784	441,784	441,784
Unfunded Actuarial Accrued Liability	830,148	802,002	775,176
Funded Ratio	34.7%	35.5%	36.3%
Total Recommended Contribution Rate	151.76%	146.28%	141.08%

Sensitivity Analysis - Payroll Growth

(Dollar amounts expressed in thousands)

(1)	Decrease Payroll Growth (2)	Valuation Results (3)	Increase Payroll Growth (4)
Payroll Growth Rate	-1.00%	0.00%	1.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	5.25%	5.25%	5.25%
Discount Rate - Insurance	6.25%	6.25%	6.25%
Retirement			
Actuarial Accrued Liability	$ 967,145	$ 967,145	$ 967,145
Actuarial Value of Assets	261,320	261,320	261,320
Unfunded Actuarial Accrued Liability	705,825	705,825	705,825
Funded Ratio	27.0%	27.0%	27.0%
Total Recommended Contribution Rate	130.15%	119.05%	108.69%
Insurance			
Actuarial Accrued Liability	$ 276,641	$ 276,641	$ 276,641
Actuarial Value of Assets	180,464	180,464	180,464
Unfunded Actuarial Accrued Liability	96,177	96,177	96,177
Funded Ratio	65.2%	65.2%	65.2%
Total Recommended Contribution Rate	28.87%	27.23%	25.69%
Combined			
Actuarial Accrued Liability	$ 1,243,786	$ 1,243,786	$ 1,243,786
Actuarial Value of Assets	441,784	441,784	441,784
Unfunded Actuarial Accrued Liability	802,002	802,002	802,002
Funded Ratio	35.5%	35.5%	35.5%
Total Recommended Contribution Rate	159.02%	146.28%	134.38%

Projected Cost of the Retirement and Insurance
Current Plan - Non-hazardous

Kentucky Retirement Systems
KERS Non-Hazardous Retirement Fund
Current Plan
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2017	$ 15,592	$ 2,124	$ 13,468	14%	$ 629	$ 77	$ 1,532	41.06%	41.98%
2018	15,629	2,038	13,591	13%	1,101	78	1,551	71.03%	71.03%
2019	15,645	2,296	13,349	15%	1,118	79	1,574	71.03%	69.79%
2020	15,643	2,601	13,042	17%	1,097	80	1,601	68.54%	68.54%
2021	15,624	2,924	12,700	19%	1,116	81	1,628	68.54%	67.18%
2022	15,587	3,253	12,334	21%	1,086	83	1,656	65.54%	65.54%
2023	15,535	3,556	11,979	23%	1,105	84	1,686	65.54%	64.13%
2024	15,466	3,886	11,580	25%	1,075	86	1,718	62.57%	62.57%
2025	15,383	4,193	11,190	27%	1,095	88	1,751	62.57%	61.15%
2026	15,285	4,530	10,755	30%	1,064	89	1,785	59.60%	59.60%
2027	15,172	4,845	10,327	32%	1,084	91	1,819	59.60%	58.21%
2028	15,052	5,199	9,853	35%	1,052	93	1,854	56.71%	56.71%
2029	14,918	5,533	9,385	37%	1,072	95	1,891	56.71%	55.37%
2030	14,769	5,901	8,868	40%	1,040	96	1,929	53.90%	53.90%
2031	14,609	6,254	8,355	43%	1,062	99	1,970	53.90%	52.59%
2032	14,440	6,649	7,791	46%	1,028	101	2,012	51.10%	51.10%
2033	14,262	7,033	7,229	49%	1,051	103	2,056	51.10%	49.82%
2034	14,077	7,463	6,614	53%	1,015	105	2,101	48.33%	48.33%
2035	13,884	7,884	6,000	57%	1,038	107	2,147	48.33%	47.09%
2036	13,689	8,358	5,331	61%	1,003	110	2,198	45.62%	45.62%

Notes and assumptions:

The projection is based on the results of the June 30, 2017 actuarial valuation.

The employer actuarially determined contribution rate for a particular year is determined by the prior year's actuarial valuation.

The employer contribution amount shown does not include the $87 million additional contribution budgeted to be paid in fiscal year beginning 2017.

Kentucky Retirement Systems
CERS Non-Hazardous Retirement Fund
Current Plan
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2017	$ 12,804	$ 6,765	$ 6,039	53%	$ 355	$ 123	$ 2,452	14.48%	14.48%
2018	13,121	6,902	6,219	53%	546	125	2,500	21.84%	21.84%
2019	13,421	7,122	6,299	53%	548	127	2,547	21.50%	21.50%
2020	13,704	7,412	6,292	54%	558	130	2,594	21.53%	21.53%
2021	13,970	7,805	6,165	56%	563	132	2,642	21.33%	21.33%
2022	14,218	8,119	6,099	57%	561	135	2,690	20.86%	20.86%
2023	14,445	8,419	6,026	58%	565	137	2,740	20.64%	20.64%
2024	14,652	8,711	5,941	59%	570	140	2,790	20.43%	20.43%
2025	14,836	8,996	5,840	61%	575	142	2,842	20.22%	20.22%
2026	14,998	9,273	5,725	62%	580	145	2,894	20.03%	20.03%
2027	15,136	9,541	5,595	63%	585	147	2,948	19.84%	19.84%
2028	15,259	9,813	5,446	64%	591	150	3,003	19.67%	19.67%
2029	15,359	10,079	5,280	66%	597	153	3,062	19.50%	19.50%
2030	15,438	10,344	5,094	67%	604	156	3,124	19.34%	19.34%
2031	15,496	10,611	4,885	68%	611	159	3,187	19.18%	19.18%
2032	15,536	10,882	4,654	70%	619	163	3,254	19.03%	19.03%
2033	15,558	11,161	4,397	72%	627	166	3,323	18.88%	18.88%
2034	15,565	11,450	4,115	74%	636	170	3,394	18.74%	18.74%
2035	15,556	11,753	3,803	76%	645	173	3,467	18.61%	18.61%
2036	15,535	12,073	3,462	78%	655	177	3,545	18.49%	18.49%

Notes and assumptions:

The projection is based on the results of the June 30, 2017 actuarial valuation.

The employer actuarially determined contribution rate for a particular year is determined by the prior year's actuarial valuation.

Kentucky Retirement Systems
KERS Non-Hazardous Insurance Fund
Current Plan
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2017	$ 2,683	$ 824	$ 1,859	31%	$ 128	$ 5	$ 1,524	8.41%	8.41%
2018	2,760	874	1,886	32%	191	6	1,541	12.40%	12.40%
2019	2,837	975	1,862	34%	194	7	1,564	12.40%	12.09%
2020	2,907	1,087	1,820	37%	188	8	1,590	11.81%	11.81%
2021	2,972	1,202	1,770	40%	191	9	1,617	11.81%	11.50%
2022	3,032	1,311	1,721	43%	182	10	1,645	11.09%	11.09%
2023	3,085	1,411	1,674	46%	186	10	1,675	11.09%	10.77%
2024	3,133	1,512	1,621	48%	178	11	1,706	10.44%	10.44%
2025	3,174	1,604	1,570	51%	181	12	1,738	10.44%	10.12%
2026	3,208	1,698	1,510	53%	173	13	1,772	9.76%	9.76%
2027	3,235	1,781	1,454	55%	176	14	1,806	9.76%	9.47%
2028	3,254	1,864	1,390	57%	168	15	1,841	9.13%	9.13%
2029	3,264	1,937	1,327	59%	171	15	1,877	9.13%	8.82%
2030	3,265	2,010	1,255	62%	162	16	1,915	8.48%	8.48%
2031	3,259	2,072	1,187	64%	166	17	1,956	8.48%	8.23%
2032	3,248	2,139	1,109	66%	158	18	1,998	7.92%	7.92%
2033	3,233	2,200	1,033	68%	162	19	2,041	7.92%	7.68%
2034	3,215	2,268	947	71%	155	20	2,085	7.42%	7.42%
2035	3,195	2,332	863	73%	158	20	2,132	7.42%	7.20%
2036	3,175	2,406	769	76%	151	21	2,183	6.94%	6.94%

Notes and assumptions:

The projection is based on the results of the June 30, 2017 actuarial valuation.

The employer actuarially determined contribution rate for a particular year is determined by the prior year's actuarial valuation.

Kentucky Retirement Systems
CERS Non-Hazardous Insurance Fund
Current Plan
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2017	$ 3,355	$ 2,227	$ 1,128	66%	$ 114	$ 10	$ 2,429	4.70%	4.70%
2018	3,514	2,343	1,171	67%	154	11	2,477	6.21%	6.21%
2019	3,667	2,475	1,192	67%	153	13	2,524	6.06%	6.06%
2020	3,813	2,623	1,190	69%	154	14	2,572	5.98%	5.98%
2021	3,951	2,798	1,153	71%	153	15	2,619	5.84%	5.84%
2022	4,081	2,941	1,140	72%	150	17	2,668	5.62%	5.62%
2023	4,202	3,077	1,125	73%	149	18	2,718	5.48%	5.48%
2024	4,315	3,206	1,109	74%	148	19	2,768	5.35%	5.35%
2025	4,419	3,330	1,089	75%	147	20	2,820	5.21%	5.21%
2026	4,514	3,447	1,067	76%	146	22	2,873	5.08%	5.08%
2027	4,600	3,558	1,042	77%	145	23	2,926	4.96%	4.96%
2028	4,676	3,663	1,013	78%	144	24	2,982	4.83%	4.83%
2029	4,745	3,763	982	79%	144	26	3,040	4.72%	4.72%
2030	4,807	3,860	947	80%	143	27	3,102	4.60%	4.60%
2031	4,862	3,954	908	81%	143	28	3,166	4.51%	4.51%
2032	4,912	4,047	865	82%	143	29	3,232	4.42%	4.42%
2033	4,958	4,140	818	84%	144	31	3,301	4.35%	4.35%
2034	5,002	4,236	766	85%	144	32	3,372	4.28%	4.28%
2035	5,045	4,336	709	86%	146	33	3,445	4.23%	4.23%
2036	5,089	4,443	646	87%	147	34	3,522	4.18%	4.18%

Notes and assumptions:

The projection is based on the results of the June 30, 2017 actuarial valuation.

The employer actuarially determined contribution rate for a particular year is determined by the prior year's actuarial valuation.

Projected Cost of the Retirement and Insurance
Current Plan - Hazardous

Kentucky Retirement Systems
KERS Hazardous Retirement Fund
Current Plan
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2017	$ 1,121	$ 607	$ 514	54%	$ 35	$ 13	$ 162	21.44%	20.48%
2018	1,155	637	518	55%	57	13	166	34.39%	34.39%
2019	1,186	669	517	56%	58	14	170	34.39%	33.30%
2020	1,217	709	508	58%	57	14	174	32.60%	32.60%
2021	1,247	757	490	61%	58	14	179	32.60%	31.64%
2022	1,276	801	475	63%	55	15	183	30.23%	30.23%
2023	1,305	841	464	64%	57	15	188	30.23%	29.28%
2024	1,333	884	449	66%	55	15	193	28.30%	28.30%
2025	1,360	925	435	68%	56	16	197	28.30%	27.39%
2026	1,386	967	419	70%	53	16	202	26.47%	26.47%
2027	1,410	1,007	403	71%	55	16	206	26.47%	25.63%
2028	1,434	1,048	386	73%	52	17	211	24.72%	24.72%
2029	1,456	1,087	369	75%	53	17	216	24.72%	23.96%
2030	1,478	1,128	350	76%	51	18	222	23.16%	23.16%
2031	1,500	1,169	331	78%	53	18	229	23.16%	22.48%
2032	1,524	1,214	310	80%	51	19	236	21.75%	21.75%
2033	1,549	1,260	289	81%	53	19	242	21.75%	21.14%
2034	1,576	1,310	266	83%	51	20	249	20.47%	20.47%
2035	1,605	1,362	243	85%	52	20	256	20.47%	19.91%
2036	1,634	1,417	217	87%	51	21	263	19.29%	19.29%

Notes and assumptions:

The projection is based on the results of the June 30, 2017 actuarial valuation.

The employer actuarially determined contribution rate for a particular year is determined by the prior year's actuarial valuation.

The employer contribution amount shown does not include the $10 million additional contribution budgeted to be paid in fiscal year beginning 2017.

Kentucky Retirement Systems
CERS Hazardous Retirement Fund
Current Plan
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2017	$ 4,649	$ 2,238	$ 2,411	48%	$ 120	$ 43	$ 542	22.20%	22.20%
2018	4,771	2,293	2,478	48%	192	43	537	35.69%	35.69%
2019	4,880	2,376	2,504	49%	193	43	538	35.95%	35.95%
2020	4,978	2,478	2,500	50%	197	43	542	36.42%	36.42%
2021	5,066	2,610	2,456	52%	199	44	546	36.48%	36.48%
2022	5,145	2,712	2,433	53%	199	44	551	36.06%	36.06%
2023	5,214	2,809	2,405	54%	201	45	558	35.95%	35.95%
2024	5,274	2,902	2,372	55%	202	45	565	35.81%	35.81%
2025	5,325	2,992	2,333	56%	204	46	573	35.66%	35.66%
2026	5,367	3,079	2,288	57%	207	47	582	35.49%	35.49%
2027	5,400	3,164	2,236	59%	209	47	592	35.32%	35.32%
2028	5,426	3,248	2,178	60%	212	48	602	35.14%	35.14%
2029	5,444	3,333	2,111	61%	215	49	614	34.96%	34.96%
2030	5,457	3,420	2,037	63%	218	50	628	34.75%	34.75%
2031	5,466	3,512	1,954	64%	222	51	642	34.54%	34.54%
2032	5,472	3,611	1,861	66%	225	53	657	34.33%	34.33%
2033	5,478	3,719	1,759	68%	229	54	672	34.12%	34.12%
2034	5,483	3,837	1,646	70%	233	55	688	33.92%	33.92%
2035	5,489	3,967	1,522	72%	238	56	705	33.73%	33.73%
2036	5,495	4,110	1,385	75%	242	58	721	33.56%	33.56%

Notes and assumptions:

The projection is based on the results of the June 30, 2017 actuarial valuation.

The employer actuarially determined contribution rate for a particular year is determined by the prior year's actuarial valuation.

Kentucky Retirement Systems
SPRS Retirement Fund
Current Plan
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2017	$ 967	$ 261	$ 706	27%	$ 35	$ 4	$ 49	72.47%	71.57%
2018	970	264	706	27%	58	4	49	119.05%	119.05%
2019	972	275	697	28%	59	4	50	119.05%	117.69%
2020	972	290	682	30%	58	4	50	116.24%	116.24%
2021	972	308	664	32%	59	4	51	116.24%	114.50%
2022	970	325	645	34%	58	4	52	111.48%	111.48%
2023	967	341	626	35%	59	4	53	111.48%	109.03%
2024	964	358	606	37%	57	4	54	106.31%	106.31%
2025	959	373	586	39%	58	4	55	106.31%	103.75%
2026	953	390	563	41%	56	4	56	101.12%	101.12%
2027	946	405	541	43%	58	5	57	101.12%	98.44%
2028	938	423	515	45%	56	5	59	95.24%	95.24%
2029	930	440	490	47%	57	5	60	95.24%	92.43%
2030	922	459	463	50%	55	5	62	89.36%	89.36%
2031	914	477	437	52%	57	5	64	89.36%	86.61%
2032	905	499	406	55%	55	5	65	83.53%	83.53%
2033	897	519	378	58%	56	5	67	83.53%	81.10%
2034	888	544	344	61%	54	6	69	78.24%	78.24%
2035	880	567	313	64%	55	6	71	78.24%	75.87%
2036	872	595	277	68%	53	6	73	73.29%	73.29%

Notes and assumptions:

The projection is based on the results of the June 30, 2017 actuarial valuation.

The employer actuarially determined contribution rate for a particular year is determined by the prior year's actuarial valuation.

The employer contribution amount shown does not include the $10 million additional contribution budgeted to be paid in fiscal year beginning 2017.

Kentucky Retirement Systems
KERS Hazardous Insurance Fund
Current Plan
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarial Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2017	$ 419	$ 493	$ (74)	118%	$ 4	$ 1	$ 162	2.26%	1.34%
2018	436	507	(71)	116%	4	1	165	2.46%	2.46%
2019	453	516	(63)	114%	4	1	169	2.46%	2.15%
2020	468	529	(61)	113%	4	1	174	2.11%	2.11%
2021	482	548	(66)	114%	4	1	178	2.11%	1.84%
2022	494	559	(65)	113%	2	1	183	1.21%	1.21%
2023	504	568	(64)	113%	2	1	187	1.21%	0.91%
2024	513	575	(62)	112%	1	1	192	0.65%	0.65%
2025	520	581	(61)	112%	1	2	197	0.65%	0.50%
2026	525	585	(60)	111%	1	2	201	0.35%	0.35%
2027	530	587	(57)	111%	1	2	206	0.35%	0.25%
2028	534	589	(55)	110%	0	2	210	0.14%	0.14%
2029	537	590	(53)	110%	0	2	216	0.14%	0.09%
2030	540	590	(50)	109%	0	2	222	0.07%	0.07%
2031	543	590	(47)	109%	0	2	228	0.07%	0.10%
2032	546	590	(44)	108%	0	2	235	0.15%	0.15%
2033	550	590	(40)	107%	0	2	242	0.15%	0.20%
2034	554	591	(37)	107%	1	2	249	0.25%	0.25%
2035	559	592	(33)	106%	1	3	255	0.25%	0.31%
2036	565	594	(29)	105%	1	3	262	0.39%	0.39%

Notes and assumptions:

The projection is based on the results of the June 30, 2017 actuarial valuation.

The employer actuarially determined contribution rate for a particular year is determined by the prior year's actuarial valuation.

Kentucky Retirement Systems
CERS Hazardous Insurance Fund
Current Plan
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2017	$ 1,788	$ 1,197	$ 591	67%	$ 51	$ 2	$ 541	9.35%	9.35%
2018	1,853	1,243	610	67%	65	2	536	12.17%	12.17%
2019	1,912	1,290	622	67%	64	3	538	11.97%	11.97%
2020	1,962	1,343	619	68%	64	3	541	11.83%	11.83%
2021	2,005	1,405	600	70%	63	3	546	11.52%	11.52%
2022	2,038	1,446	592	71%	61	4	551	11.00%	11.00%
2023	2,061	1,478	583	72%	59	4	558	10.66%	10.66%
2024	2,075	1,501	574	72%	59	4	565	10.37%	10.37%
2025	2,081	1,517	564	73%	58	5	573	10.12%	10.12%
2026	2,078	1,526	552	73%	58	5	582	9.89%	9.89%
2027	2,068	1,528	540	74%	57	5	591	9.71%	9.71%
2028	2,052	1,527	525	74%	58	5	602	9.57%	9.57%
2029	2,031	1,522	509	75%	58	6	614	9.43%	9.43%
2030	2,008	1,517	491	76%	59	6	627	9.33%	9.33%
2031	1,982	1,511	471	76%	59	6	641	9.24%	9.24%
2032	1,954	1,506	448	77%	60	6	656	9.16%	9.16%
2033	1,927	1,503	424	78%	61	7	672	9.09%	9.09%
2034	1,899	1,502	397	79%	62	7	688	9.03%	9.03%
2035	1,873	1,506	367	80%	63	7	704	8.98%	8.98%
2036	1,849	1,515	334	82%	64	7	721	8.93%	8.93%

Notes and assumptions:

The projection is based on the results of the June 30, 2017 actuarial valuation.

The employer actuarially determined contribution rate for a particular year is determined by the prior year's actuarial valuation.

Kentucky Retirement Systems
SPRS Insurance Fund
Current Plan
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2017	$ 277	$ 180	$ 97	65%	$ 9	$ 0	$ 48	18.77%	18.10%
2018	286	186	100	65%	13	0	48	27.23%	27.23%
2019	295	195	100	66%	13	0	49	27.23%	26.34%
2020	302	205	97	68%	13	0	49	25.64%	25.64%
2021	309	216	93	70%	13	0	50	25.64%	24.57%
2022	314	224	90	71%	12	0	51	22.92%	22.92%
2023	319	231	88	72%	12	0	52	22.92%	21.70%
2024	321	237	84	74%	11	0	53	20.35%	20.35%
2025	322	241	81	75%	11	0	54	20.35%	19.25%
2026	322	244	78	76%	10	0	55	18.17%	18.17%
2027	320	246	74	77%	10	0	56	18.17%	17.28%
2028	318	247	71	78%	9	0	57	16.37%	16.37%
2029	314	247	67	79%	10	1	59	16.37%	15.65%
2030	310	246	64	79%	9	1	61	14.90%	14.90%
2031	305	245	60	80%	9	1	62	14.90%	14.30%
2032	300	244	56	81%	9	1	64	13.64%	13.64%
2033	294	242	52	82%	9	1	66	13.64%	13.13%
2034	288	241	47	84%	9	1	68	12.58%	12.58%
2035	283	239	44	84%	9	1	69	12.58%	12.18%
2036	277	238	39	86%	8	1	71	11.77%	11.77%

Notes and assumptions:

The projection is based on the results of the June 30, 2017 actuarial valuation.

The employer actuarially determined contribution rate for a particular year is determined by the prior year's actuarial valuation.

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October 31, 2018

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Certification of the June 30, 2018 Actuarial Valuation Results

Dear Trustees of the Board:

Enclosed are the June 30, 2018 actuarial valuation reports for the Kentucky Employees Retirement System (KERS), the County Employees Retirement System (CERS), and the State Police Retirement System (SPRS). These reports provide the current actuarial and financial condition of the Kentucky Retirement Systems (KRS) and analyze fluctuations in the employer contribution rates since the prior actuarial valuation.

Under Kentucky Statute, the Board must approve the employer contribution rates for the CERS Systems for the fiscal year beginning July 1, 2018 and ending June 30, 2019. The June 30, 2018 actuarial valuations for the KERS and SPRS were used by the Board for informational purposes only as the employer contribution rates for these systems were certified in the June 30, 2017 actuarial for the fiscal years ending June 30, 2019 and June 30, 2020.

These contribution rates are calculated based on the membership data and plan assets as of June 30, 2018. These calculations are also based on the benefit provisions in effect as of June 30, 2018. If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board may adjust the calculated rates for CERS to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

FINANCING OBJECTIVES AND FUNDING POLICY

KRS administers a pension and health insurance fund to provide for monthly retirement income and retiree health insurance benefits. The total employer contribution rate is comprised of a contribution to each respective fund.

The contribution rate for each fund consists of a normal cost that is net of employee contributions and an amortization payment on the unfunded actuarial accrued liability (UAAL). In accordance with Section 61.565 of Kentucky Statute, the amortization payment is based on a closed thirty-year amortization period beginning July 1, 2013. As a result, the amortization period used in the 2018 actuarial valuation is 25 years. The amortization period used in subsequent actuarial valuations will decrease by one each future year.

PROGRESS TOWARDS REALIZATION OF FUNDING OBJECTIVES

One way to measure the progress towards achieving the intended funding objective is to measure the relationship between the actuarial value of assets and the actuarial accrued liabilities for each fund. This relationship is referred to as the funded ratio and should increase over time (absent of benefit improvements) with the goal of attaining 100%.

Table 1 shown below provides a comparison of the change in funded ratio from June 30, 2017 to June 30, 2018 for the retirement funds of each System. As the table shows, there is little change in the funded ratio for each system compared to the prior year. The improvement in the financial health of these retirement systems is very dependent on the Retirement System and Commonwealth maintaining a sound funding policy and the participating employers paying the actuarially determined contribution rates on the payroll of their employees.

In particular, during the last fiscal year KERS non-hazardous pension fund distributed $981 million in benefit payments and received $794 million in employer and employee contributions (excluding contributions to the 401(h)). As of June 30, 2018, the market value of assets for this system was $2,004 million (excluding assets in the 401(h)). To stabilize the financial condition of this system and reduce the likelihood that plan assets will become exhausted, it is imperative that contributions to the system exceed the benefit payments. If employer contribution rates determined by the June 30, 2017 actuarial valuation are not made to this system, then the financial condition of this retirement system is expected to continue to deteriorate and there will be a significant risk of plan assets being exhausted.

Table 1. Change in the Funded Ratio (AVA / AAL) from 2017 to 2018 for the Retirement Funds

System	Funded Ratio – Retirement Funds	
	June 20, 2017	June 30, 2018
KERS Non-Hazardous	13.6%	12.9%
KERS Hazardous	54.1%	55.5%
CERS Non-Hazardous	52.8%	52.7%
CERS Hazardous	48.1%	48.4%
SPRS	27.0%	27.1%

Table 2 on the following page provides a similar comparison of the change in funded ratio for the insurance funds. As the table shows, there is a significant increase in the funded ratio for each system compared to the prior year. The increase in the funded ratio is the result of very favorable premium experience from calendar year 2018 to 2019. Specifically, the non-Medicare premiums were expected to increase by 7.25% from calendar year 2018 to calendar year 2019 (i.e. the medical trend assumption for non-Medicare premiums used in the actuarial valuation) and the actual average premiums remained relatively unchanged. Also, the Medicare premiums were expected to increase by 5.10% from calendar year 2018 to calendar year 2019 (i.e. the medical trend

assumption used in the actuarial valuation for Medicare premium) and the actual average premiums decreased by 12%.

Table 2. Change in the Funded Ratio (AVA / AAL) from 2017 to 2018 for the Insurance Funds

System	Funded Ratio – Insurance Funds June 30, 2017	June 30, 2018
KERS Non-Hazardous	30.7%	36.4%
KERS Hazardous	117.6%	130.0%
CERS Non-Hazardous	66.4%	76.7%
CERS Hazardous	66.9%	74.6%
SPRS	65.2%	71.6%

Please note that while the insurance funds experienced favorable premium experience from calendar year 2018 to calendar year 2019, there may be years where the premium experience is less favorable than expected resulting in actuarial losses and possible decreases in the funded ratio in future years.

Summary of Change in Contribution Rates Since the Prior Valuation

The following tables provide a comparison of the actuarially determined contribution rates determined by the June 30, 2017 actuarial valuation, the certified contribution rates that are in effect for the fiscal year ending June 30, 2019, and the actuarially determined contribution rates determined by the June 30, 2018 actuarial valuation.

Table 3. Comparison of the Contribution Rates (Retirement and Insurance)

System	2017 Valuation Calculated Rates	Effective for FY 2019	2018 Valuation Calculated Rates
KERS Non-Hazardous	83.43%	83.43%[1]	85.19%
KERS Hazardous	36.85%	36.85%	34.42%
CERS Non-Hazardous	28.05%	21.48%[2]	27.28%
CERS Hazardous	47.86%	35.34%[2]	46.50%
SPRS	146.28%	146.28%	140.04%

[1] House Bill 265 passed during the 2018 legislative session which reduced the FY 2019 employer contribution rate to 49.47% for Regional Mental Health/Mental Retardation Boards, Local and District Health Departments, State Universities, Community Colleges and any other agency eligible to voluntarily cease participating in the KERS non-hazardous system.

[2] House Bill 362 passed during the 2018 legislative session which limited the CERS employer contribution rate increases to 12% per year over the prior fiscal year for the period of July 1, 2018 to June 30, 2028.

The actuarially determined contribution rate for the KERS Non-Hazardous System increase by 1.76% from the prior year primarily due to the 4.0% decrease in covered payroll. However, the expected contribution dollars on the calculated contribution rates remain relatively unchanged from the prior year (i.e. $1,277 million based on the 2017 valuation and $1,254 million based on the 2018 valuation). The actuarially determined contribution rates for the other four systems (i.e. KERS Hazardous, CERS Non-Hazardous and Hazardous, and SPRS) slightly decreased due to the favorable experience with the insurance funds.

Also note that while the actuarially determined contribution rates decreased for both CERS Systems, the actual certified contribution rate will increase from fiscal year 2019 to fiscal year 2020 as the contribution rate increases due to the assumption changes from the June 30, 2017 valuation are being phased-in in accordance with HB 362.

ASSUMPTIONS AND METHODS

There were no changes in the actuarial assumptions or methods since the last actuarial valuation. It is our opinion that the current assumptions are internally consistent and reasonably reflect the anticipated future experience of the System.

Kentucky Statutes require that an actuarial investigation be performed at least every five years to review the economic and demographic assumptions. An experience study was conducted as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018 and the results of that analysis will be first used to prepare the actuarial valuation as of June 30, 2019.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

BENEFIT PROVISIONS

The benefit provisions reflected in these valuations are those which were in effect on June 30, 2018. During the 2018 legislative session House Bill 185 was enacted which increased the benefit provisions for active members who die in the line of duty. House Bill 265 reduced the FY 2019 employer contribution rate to 49.47% for Regional Mental Health/Mental Retardation Boards, Local and District Health Departments, State Universities, Community Colleges and any other agency eligible to voluntarily cease participating in the KERS. Also, House Bill 362 limits the increase in the CERS employer contribution rate to 12% per year over the prior fiscal year for the period of July 1, 2018 to June 30, 2028.

This actuarial valuation was determined without regard to the enactment of SB 151 in 2018, which is currently being reviewed by the State Supreme Court.

DATA

Member data for retired, active and inactive members was supplied as of June 30, 2018, by the KRS staff. The staff also supplied asset information as of June 30, 2018. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by KRS.

CERTIFICATION

We certify that the information presented herein is accurate and fairly portrays the actuarial position of KERS as of June 30, 2018. All of our work conforms with generally accepted actuarial principles and practices, and is in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,

Gabriel, Roeder, Smith & Co.

Joseph P. Newton, FSA, MAAA, EA
Senior Consultant

Daniel J. White, FSA, MAAA, EA
Senior Consultant

Janie Shaw, ASA, MAAA
Consultant

Summary of June 30, 2018 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Actuarially Determined Contribution:					
Pension Fund Contribution	74.54%	34.42%	22.52%	36.98%	120.54%
Insurance Fund Contribution	10.65%	0.00%	4.76%	9.52%	19.50%
Total Calculated Employer Contribution	85.19%	34.42%	27.28%	46.50%	140.04%
Certified Contribution Rate for Fiscal Year Ending 2020[1]	83.43%	36.85%	24.06%	39.58%	146.28%
Assets:					
Retirement					
• Actuarial value (AVAR)	$2,019,277,832	$639,261,848	$6,950,225,236	$2,321,720,761	$268,258,835
• Market value (MVAR)	$2,004,445,981	$645,484,989	$7,018,963,357	$2,348,336,623	$267,572,480
• Ratio of actuarial to market value of assets	100.7%	99.0%	99.0%	98.9%	100.3%
Insurance					
• Actuarial value (AVAI)	$887,121,270	$511,441,262	$2,371,430,361	$1,256,306,056	$187,535,217
• Market value (MVAI)	$891,204,988	$519,072,283	$2,414,126,203	$1,280,981,973	$190,846,553
• Ratio of actuarial to market value of assets	99.5%	98.5%	98.2%	98.1%	98.3%
Funded Status:					
Retirement					
• Actuarial accrued liability	$15,675,231,694	$1,151,922,950	$13,191,504,861	$4,792,547,709	$989,528,282
• Unfunded accrued liability on AVAR	$13,655,953,862	$512,661,102	$6,241,279,625	$2,470,826,948	$721,269,447
• Funded ratio on AVAR	12.9%	55.5%	52.7%	48.4%	27.1%
• Unfunded accrued liability on MVAR	$13,670,785,713	$506,437,961	$6,172,541,504	$2,444,211,086	$721,955,802
• Funded ratio on MVAR	12.8%	56.0%	53.2%	49.0%	27.0%
Insurance					
• Actuarial accrued liability	$2,435,505,788	$393,480,563	$3,092,623,449	$1,684,028,461	$262,088,421
• Unfunded accrued liability on AVAI	$1,548,384,518	($117,960,699)	$721,193,088	$427,722,405	$74,553,204
• Funded ratio on AVAI	36.4%	130.0%	76.7%	74.6%	71.6%
• Unfunded accrued liability on MVAI	$1,544,300,800	($125,591,720)	$678,497,246	$403,046,488	$71,241,868
• Funded ratio on MVAI	36.6%	131.9%	78.1%	76.1%	72.8%
Membership:					
• Number of					
- Active Members	35,139	3,929	81,818	9,263	886
- Retirees and Beneficiaries	46,526	4,370	61,938	9,587	1,600
- Inactive Members	50,435	5,727	87,160	3,067	499
- Total	132,100	14,026	230,916	21,917	2,985
• Projected payroll of active members	$1,471,477,482	$158,212,710	$2,466,801,417	$533,617,790	$48,808,080
• Average salary of active members	$41,876	$40,268	$30,150	$57,607	$55,088

[1] Based on contribution rates budgeted in House Bill 200 for the KERS and SPRS systems and on a 12% increase in the certified contribution rates from fiscal year ending 2019 in accordance with House Bill 362 for the CERS system

Kentucky Employees Retirement System (KERS)

Actuarial Valuation Report
as of June 30, 2018

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October 31, 2018

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Actuarial Valuation as of June 30, 2018

Dear Trustees of the Board:

This report describes the current actuarial condition of the Kentucky Employees Retirement System (KERS), provides the actuarially determined employer contribution rates for fiscal year ending June 30, 2020, and analyzes changes in the System's financial condition. In addition, the report provides various summaries of the data. The results of this actuarial valuation, including the calculated employer contribution rates will be used by the Board and stakeholders for informational purposes only as the employer contribution rate for the fiscal years ending June 30, 2019 and June 30, 2020 were certified in the June 30, 2017 actuarial valuation and adopted by the Board.

Separate reports are issued with regard to valuation results determined in accordance with Governmental Accounting Standards Board (GASB) Statements 67, 68, 74 and 75. Results of this report should not be used for any other purpose without consultation with the undersigned. Valuations are prepared annually as of June 30, the first day of the plan year for KRS. This report was prepared at the request of the Board of Trustees of the Kentucky Retirement System (Board) and is intended for use by the KRS staff and those designated or approved by the Board.

FINANCING OBJECTIVES AND FUNDING POLICY

The employer contribution rate is determined in accordance with Section 61.565 of Kentucky Statute. As specified by the Statute, the employer contribution rate is determined based on a closed thirty-year amortization period beginning July 1, 2013. As a result, the amortization period used in the 2018 actuarial valuation is 25 years. As noted above, the contribution rate determined by this actuarial valuation is for informational purposes and may be useful in tracking the change in the calculated contribution rate since the prior valuation performed as of June 30, 2017.

ASSUMPTIONS AND METHODS

There were no changes in actuarial assumptions since the prior actuarial valuation. It is our opinion that the current assumptions are internally consistent and reasonably reflect the anticipated future experience of the System.

Kentucky Statutes also require that an actuarial investigation be performed at least every five years to review the economic and demographic assumptions. An experience study was conducted as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018 and the Board adopted assumptions as a result of that analysis will be first used to prepare the June 30, 2019 actuarial valuation. The Board also has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

BENEFIT PROVISIONS

The benefit provisions reflected in these valuations are those which were in effect on June 30, 2018. During the 2018 legislative session House Bill 185 was enacted which increased the benefit provisions for active members who die in the line of duty. House Bill 265 maintained the FY 2019 employer contribution rate at 49.47% for Regional Mental Health/Mental Retardation Boards, Local and District Health Departments, State Universities, Community Colleges and any other agency eligible to voluntarily cease participating in the KERS non-hazardous retirement and insurance funds.

This actuarial valuation was determined without regard to the enactment of SB 151 in 2018, which is currently being reviewed by the State Supreme Court.

DATA

Member data for retired, active and inactive members was supplied as of June 30, 2018, by the KRS staff. The staff also supplied asset information as of June 30, 2018. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by KRS.

CERTIFICATION

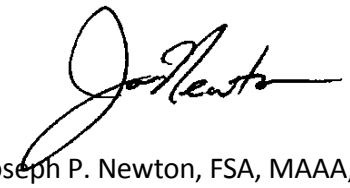
We certify that the information presented herein is accurate and fairly portrays the actuarial position of KERS as of June 30, 2018.

All of our work conforms with generally accepted actuarial principles and practices, and is in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,

Gabriel, Roeder, Smith & Co.



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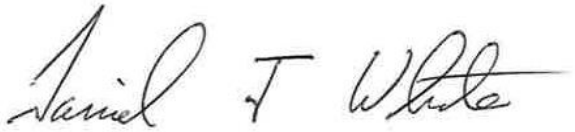

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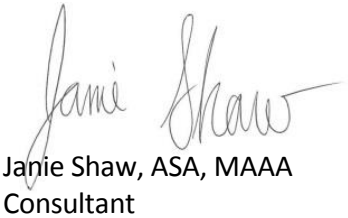

Janie Shaw, ASA, MAAA
Consultant

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SECTION 1

EXECUTIVE SUMMARY

Summary of Principal Results

(Dollar amounts expressed in thousands)

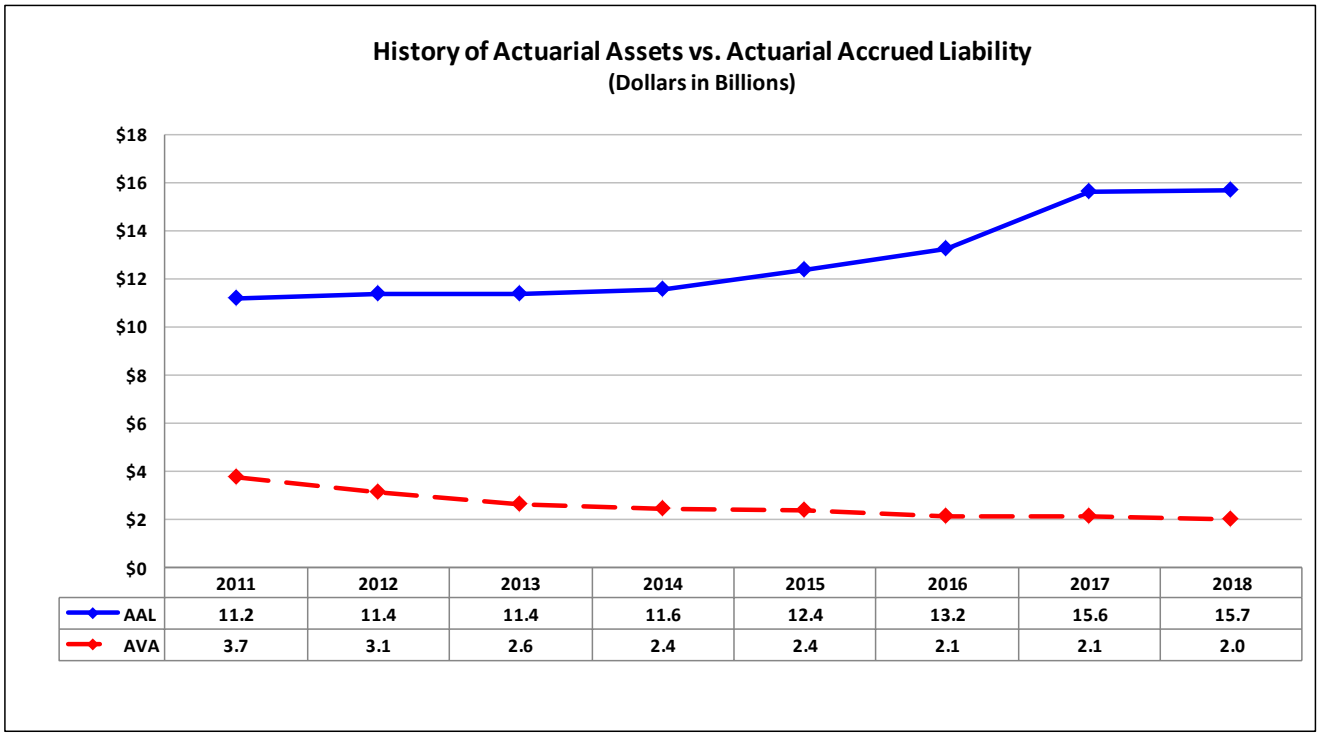
	Non-Hazardous		Hazardous		Total	
	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Actuarially Determined Contribution:						
Retirement	74.54%	71.03%	34.42%	34.39%		
Insurance	10.65%	12.40%	0.00%	2.46%		
Total	85.19%	83.43%	34.42%	36.85%	N/A	N/A
Actual Contribution Rate for Next Fiscal Year[1]	83.43%	83.43%	36.85%	36.85%		
Assets:						
Retirement						
• Actuarial value (AVAR)	$2,019,278	$2,123,623	$639,262	$607,159	$2,658,540	$2,730,782
• Market value (MVAR)	$2,004,446	$2,056,870	$645,485	$601,529	$2,649,931	$2,658,399
• Ratio of actuarial to market value of assets	100.7%	103.2%	99.0%	100.9%	100.3%	102.7%
Insurance						
• Actuarial value (AVAI)	$887,121	$823,918	$511,441	$493,458	$1,398,562	$1,317,376
• Market value (MVAI)	$891,205	$817,370	$519,072	$488,838	$1,410,277	$1,306,208
• Ratio of actuarial to market value of assets	99.5%	100.8%	98.5%	100.9%	99.2%	100.9%
Funded Status:						
Retirement						
• Actuarial accrued liability	$15,675,232	$15,591,641	$1,151,923	$1,121,420	$16,827,155	$16,713,061
• Unfunded accrued liability on AVAR	$13,655,954	$13,468,018	$512,661	$514,261	$14,168,615	$13,982,279
• Funded ratio on AVAR	12.9%	13.6%	55.5%	54.1%	15.8%	16.3%
• Unfunded accrued liability on MVAR	$13,670,786	$13,534,771	$506,438	$519,891	$14,177,224	$14,054,662
• Funded ratio on MVAR	12.8%	13.2%	56.0%	53.6%	15.7%	15.9%
Insurance						
• Actuarial accrued liability	$2,435,505	$2,683,496	$393,481	$419,439	$2,828,986	$3,102,935
• Unfunded accrued liability on AVAI	$1,548,384	$1,859,578	($117,960)	($74,019)	$1,430,424	$1,785,559
• Funded ratio on AVAI	36.4%	30.7%	130.0%	117.6%	49.4%	42.5%
• Unfunded accrued liability on MVAI	$1,544,300	$1,866,126	($125,591)	($69,399)	$1,418,709	$1,796,727
• Funded ratio on MVAI	36.6%	30.5%	131.9%	116.5%	49.9%	42.1%
Membership:						
• Number of						
- Active Members	35,139	37,234	3,929	4,047	39,068	41,281
- Retirees and Beneficiaries	46,526	44,916	4,370	4,093	50,896	49,009
- Inactive Members	50,435	49,658	5,727	5,298	56,162	54,956
- Total	132,100	131,808	14,026	13,438	146,126	145,246
• Projected payroll of active members	$1,471,477	$1,531,535	$158,213	$162,418	$1,629,690	$1,693,953
• Average salary of active members	$41,876	$41,133	$40,268	$40,133	$41,714	$41,035

[1] Based on contribution rates budgeted in House Bill 200 during the 2018 legislative session

Executive Summary (Continued)

Non-Hazardous Retirement Fund

The unfunded actuarial accrued liability for the non-hazardous retirement fund increased by $0.188 billion since the prior year's valuation to $13.656 billion. The largest source of this increase includes the FY 2018 contribution effort being $0.099 billion less than the interest on the prior year's unfunded actuarial accrued liability (i.e. negative amortization of $0.099 billion), followed by a $0.066 increase due to a liability experience. Below is a chart with the historical actuarial value of assets and actuarial accrued liability for the non-hazardous fund. The divergence in the assets and liability over the last eight years has generally been due to a combination of: (i) actual contribution rates being insufficient to completely finance the interest on the unfunded actuarial accrued liability, (ii) the actual investment experience being less than the return assumption, and (iii) a decrease in the assumed rate of return in 2015, 2016 and again in 2017.



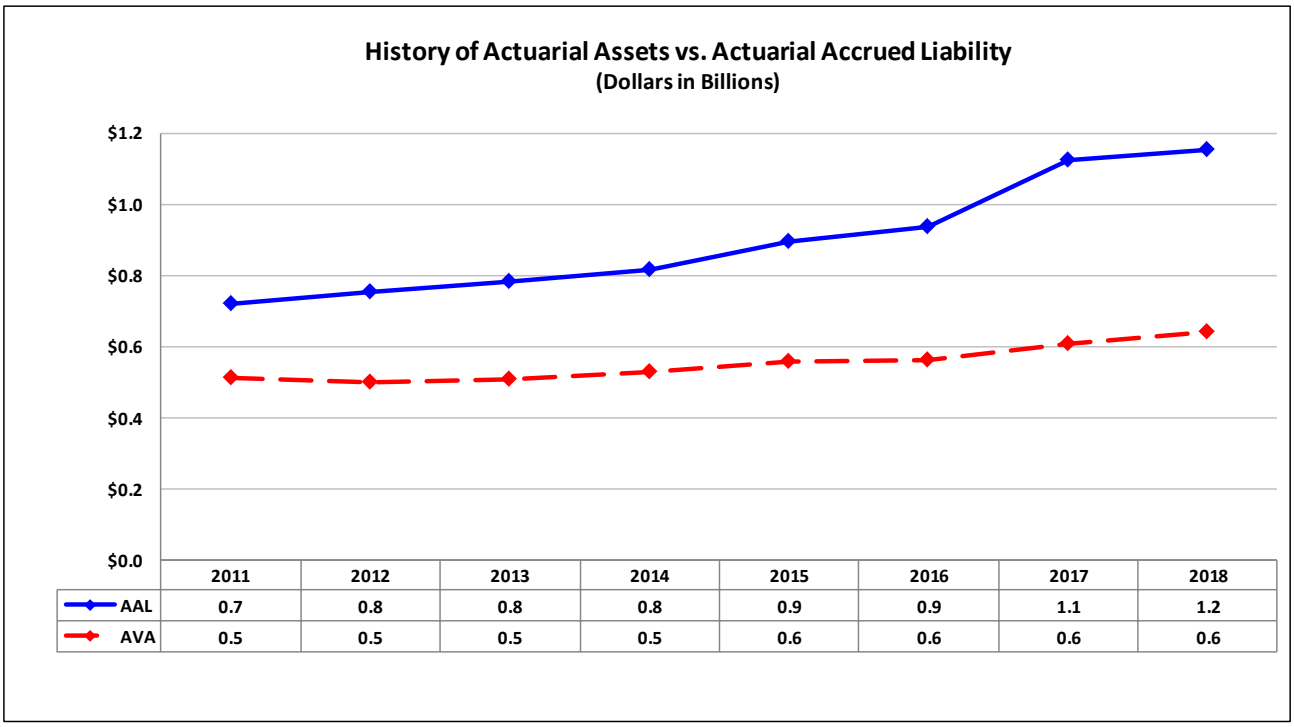
	2011	2012	2013	2014	2015	2016	2017	2018
AAL	11.2	11.4	11.4	11.6	12.4	13.2	15.6	15.7
AVA	3.7	3.1	2.6	2.4	2.4	2.1	2.1	2.0

For FY 2018, the KERS non-hazardous pension system distributed $981 million in benefit payments and received $794 million in employer and employee contributions (excluding contributions to the 401(h)). As of June 30, 2018, the market value of assets for this system was $2,004 million (excluding assets in the 401(h)). To stabilize the financial condition of this system and reduce the likelihood that plan assets will become exhausted, it is imperative that contributions to the system exceed the benefit payments. To stabilize the financial condition of this system and reduce the likelihood that plan assets will become exhausted, it is imperative that contributions to the system exceed the benefit payments. If employer contribution amounts determined by the June 30, 2017 actuarial valuation are not made to this system, then the financial condition of this retirement system is expected to continue to deteriorate and there will be a significant risk of plan assets being exhausted.

Executive Summary (Continued)

Hazardous Retirement Fund

The unfunded actuarial accrued liability for the hazardous retirement fund decreased by $1.6 million since the prior year's valuation to $512.7 million. The largest source of this decrease includes a $1.9 million gain due to realized investment experience. Below is a chart with the historical actuarial value of assets and actuarial accrued liability for the hazardous retirement fund. The divergence in the assets and liability over the last eight years has generally been due to a combination of: (i) actual contribution rates being insufficient to finance, or pay down the unfunded actuarial accrued liability, (ii) the actual investment experience being less than the fund's expected investment return assumption, and (iii) a decrease in the assumed rate of return in 2015 and again in 2017.



	2011	2012	2013	2014	2015	2016	2017	2018
AAL	0.7	0.8	0.8	0.8	0.9	0.9	1.1	1.2
AVA	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6

Executive Summary (Continued)

Summary of Change in Financial Condition of the Insurance Funds

Both the Non-Hazardous and Hazardous Insurance funds experience extremely favorable premium experience from calendar year 2018 to 2019. Specifically, the non-Medicare premiums were expected to increase by 7.25% from calendar year 2018 to calendar year 2019 (i.e. the medical trend assumption for non-Medicare premiums used in the actuarial valuation) and the actual average premiums remained relatively unchanged. Also, the Medicare premiums were expected to increase by 5.10% from calendar year 2018 to calendar year 2019 (i.e. the medical trend assumption used in the actuarial valuation for Medicare premium) and the actual average premiums decreased by 12%.

Non-Hazardous Insurance Fund

Since the prior year's valuation, the unfunded actuarial accrued liability for the nonhazardous insurance fund decreased by $0.312 billion to $1.548 billion with $0.311 billion of that decrease attributable to the favorable premium experience. The corresponding funded ratio increased from 30.7% at June 30, 2017 to 36.4% at June 30, 2018.

Hazardous Insurance Fund

Since the prior year's valuation, the actuarial value of assets in excess of the actuarial accrued liability for the hazardous insurance fund increased by $0.044 billion to $0.118 billion with $0.041 billion of that increase attributable to the favorable premium experience. The corresponding funded ratio increased from 117.6% at June 30, 2017 to 130.0% at June 30, 2018.

SECTION 2

DISCUSSION

Discussion

The Kentucky Employees Retirement System (KERS) is a defined benefit pension fund that provides pensions and health care coverage for employees of state government, non-teaching staff at regional state supported universities, local health departments, regional mental health/mental retardation agencies, and other quasi-state agencies. KERS includes both non-hazardous and hazardous duty benefits. This report presents the result of the June 30, 2018 actuarial funding valuation for both the Retirement and Insurance Funds.

The primary purposes of the valuation report are to depict the current financial condition of the System and analyze changes in the System's financial condition. In addition, the report provides various summaries of the data. The results of this actuarial valuation, including the calculated employer contribution rates will be used by the Board and stakeholders for informational purposes only as the employer contribution rate for the fiscal years ending June 30, 2019 and June 30, 2020 were certified in the June 30, 2017 actuarial valuation and adopted by the Board.

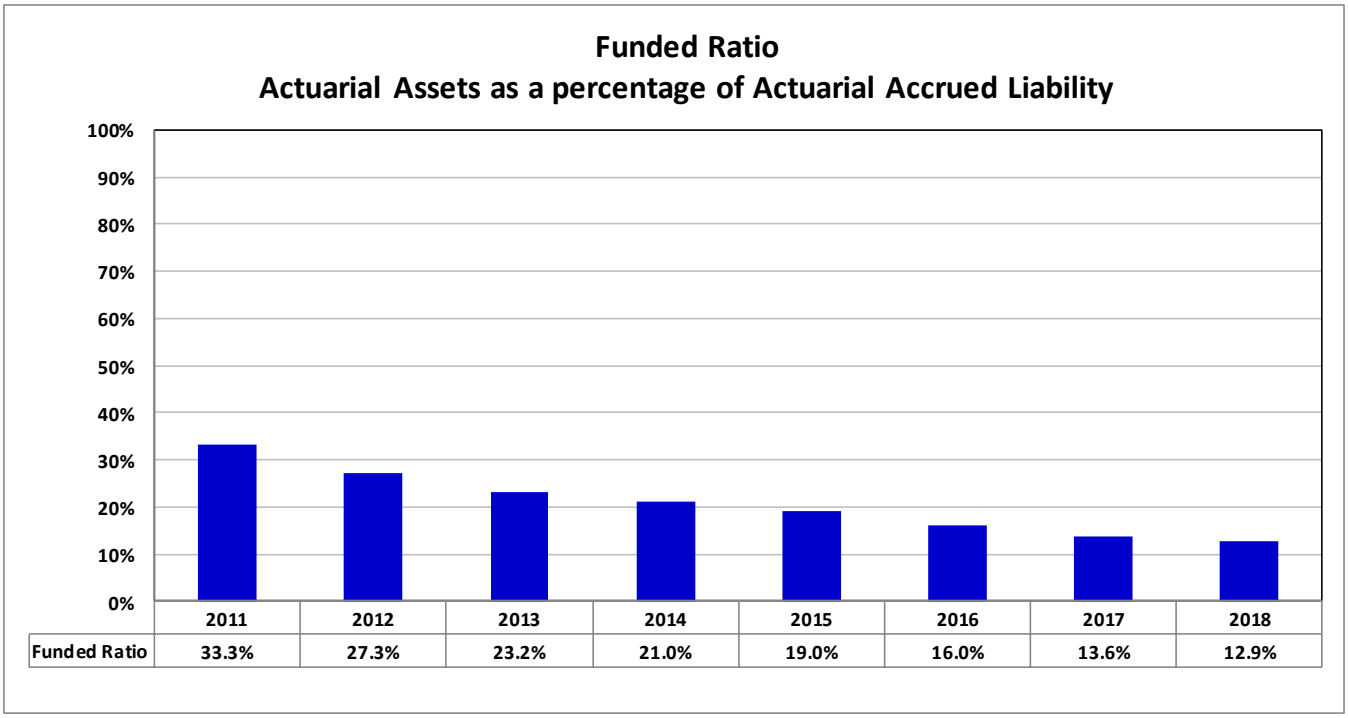
The actuarially determined contribution rates consist of two components: a normal cost rate and an amortization cost to finance the unfunded actuarial accrued liability. The normal cost rate is the theoretical amount which would be required to pay the members' benefits, based on the current plan provisions, if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. This is the amount it should cost to provide the benefits for an average new member. Since members contribute to the fund, only the excess of the normal rate over the member contribution rate is included in the employer contribution rate. The amortization cost is the amount, expressed as a percentage of payroll, necessary to amortize the unfunded actuarial accrued liability. The payroll growth rate and discount rate assumptions are selected by the Board. The funding period is specified in Section 61.565 of Kentucky Statute.

All of the actuarial and financial tables referenced by the other sections of this Report appear in Section 3. Section 4 provides member data and statistical information. Appendices A and B provide summaries of the principle actuarial assumptions and methods and plan provisions. Finally, Appendix C provides a glossary of technical terms that are used throughout this report.

Funding Progress

The following charts provide an eight-year history of the funds' funded ratio (i.e. the Actuarial Value of Assets divided by the Actuarial Accrued Liability). The decline in the funded ratio over the last eight years for the retirement funds has generally been due to a combination of: (i) actual contribution rates being insufficient to completely finance, or pay down, the unfunded actuarial accrued liability, (ii) the actual investment experience being less than assumed, and (iii) a decrease in the assumed rate of return in 2015, 2016 and again in 2017.

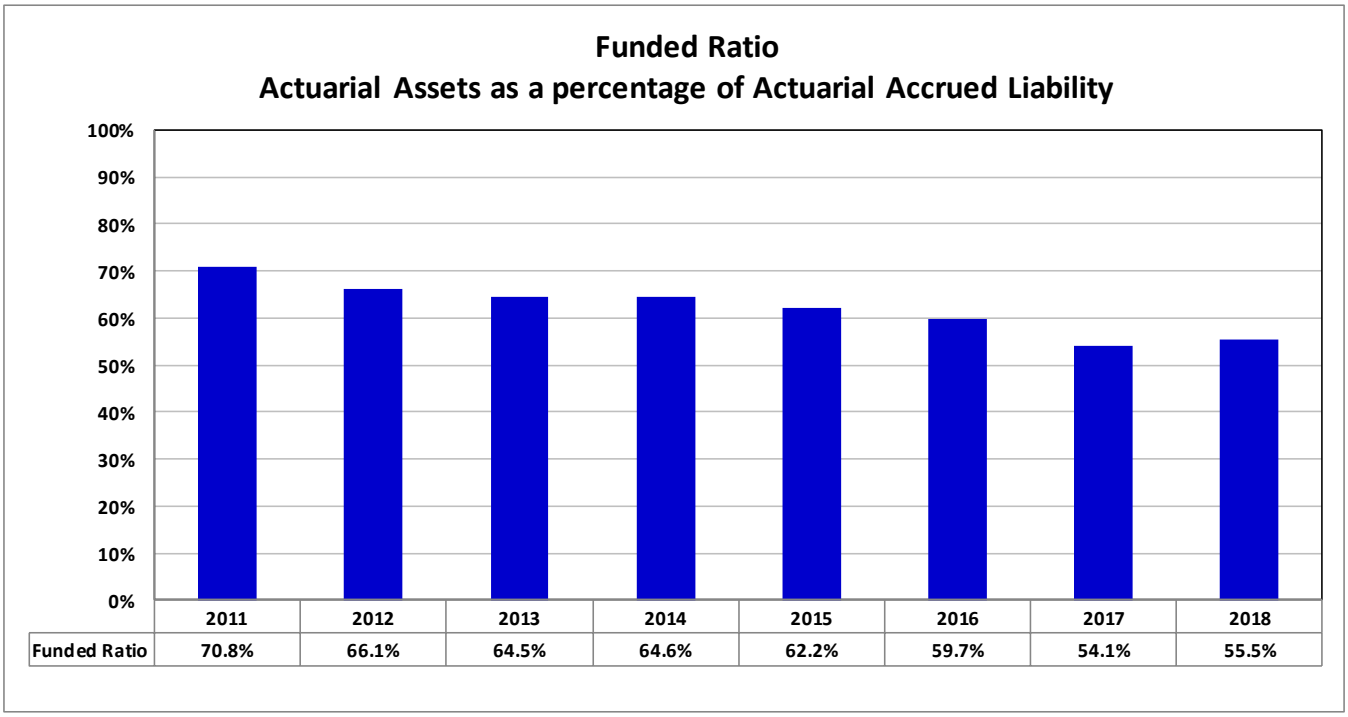
Non-Hazardous Retirement Fund



	2011	2012	2013	2014	2015	2016	2017	2018
Funded Ratio	33.3%	27.3%	23.2%	21.0%	19.0%	16.0%	13.6%	12.9%

Funding Progress (Continued)

Hazardous Retirement Fund



Assuming the actuarial determined contributions are actually paid in future years and absent future unfavorable investment or demographic experience, we expect the funded ratio to begin improving. Table 9, Schedule of Funding Progress, in the following section of the report provides additional detail regarding the funding progress of the Retirement System.

Asset Gains/ (Losses)

The actuarial value of assets ("AVA") is based on a smoothed market value of assets, using a systematic approach to phase-in the difference between the actual and expected investment return on the market value of assets (adjusted for receipts and disbursements during the year). This is appropriate because it dampens the short-term volatility inherent in investment markets. The returns are computed net of investment expenses. The actuarial value of assets for the non-hazardous retirement fund slightly decreased from $2.124 billion to $2.019 billion since the prior valuation. Table 7 in the following section of the report provides the development of the actuarial value of assets.

The rate of return on the market value of assets on a dollar-weighted basis for fiscal year 2018 was 7.4% for the non-hazardous retirement fund which is greater than the 5.25% expected annual return. The return on an actuarial (smoothed) asset value was 4.6%, which resulted in a $0.013 billion loss for the fiscal year. This difference in the estimated return on market value and actuarial value illustrates the smoothing effect of the asset valuation method.

The market value of assets for the non-hazardous retirement fund is $0.015 billion less than the actuarial value of assets, which signifies that the retirement system is in a position of deferred losses. Therefore, unless the System experiences investment returns in excess of the assumed rate of return in an amount that is at least equal to the outstanding deferred losses, the future recognition of these deferred losses is expected to increase the unfunded actuarial accrued liability.

The actuarial value of assets for the hazardous retirement fund increased from $607 million to $639 million since the prior valuation. The rate of return on the market value of assets on a dollar-weighted basis for fiscal year 2018 was 8.6% which is greater than the 6.25% expected annual return. The return on the actuarial (smoothed) asset value was 6.6%, which resulted in a $2 million gain for the fiscal year. The market value of assets for the hazardous fund is $6 million greater than the actuarial value of assets, which signifies that this system has some net deferred investment gains to be realized in future years.

Table 6 in the following section of this report provides asset information that was included in the annual financial statements of the System. Also, Tables 6 and 7 show the estimated yield on a market value basis and on the actuarial asset valuation method.

Actuarial Gains/ (Losses)

The annual actuarial valuation is a snapshot analysis of the benefit liabilities, assets and funded position of the System as of the first day of the plan year. In any one fiscal year, the experience can be better or worse from that which is assumed or expected. The actuarial assumptions do not necessarily attempt to model what the experience will be for any one given fiscal year, but instead try to model the overall experience over many years. Therefore, as long as the actual experience of the retirement system is reasonably close to the current assumptions, the long-term funding requirements of the System will remain relatively consistent.

Below are tables that separately show a reconciliation of the actuarial gains / (loss) since the prior actuarial valuation for the retirement and health insurance funds, which include the effect of asset and liability gains and losses, changes in assumptions, changes in plan provisions, etc.

Retirement Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

	Non-Hazardous	Hazardous
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ 13,468,018	$ 514,261
2. Normal cost and administrative expenses	201,703	28,699
3. Less: contributions for the year	(794,416)	(61,585)
4. Interest accrual	691,512	31,114
5. Expected UAAL (Sum of Items 1 - 4)	$ 13,566,817	$ 512,489
6. Actual UAAL as of June 30,2018	$ 13,655,954	$ 512,661
7. Total gain (loss) for the year (Item 5 - Item 6)	$ (89,137)	$ (172)
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ (13,404)	$ 1,897
9. Liability experience gain (loss) for the year	(66,109)	(1,364)
10. Plan Change	(9,624)	(705)
11. Assumption change	0	0
12. Total	$ (89,137)	$ (172)

The UAAL for the non-hazardous retirement fund was expected to increase since the prior year as the FY 2018 contribution effort was less than the interest on the prior year's unfunded actuarial accrued liability (i.e. negative amortization). Once the higher contribution rates are effective on July 1, 2018, the UAAL for the non-hazardous fund is expecting to begin decreasing in future years (absent other gains or losses).

Actuarial Gains/ (Losses) (Continued)

Insurance Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

	Non-Hazardous	Hazardous
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ 1,859,578	$ (74,019)
2. Normal cost and administrative expenses	47,560	10,467
3. Less: contributions for the year	(142,237)	(6,215)
4. Interest accrual	113,265	(4,493)
5. Expected UAAL (Sum of Items 1 - 4)	$ 1,878,166	$ (74,260)
6. Actual UAAL as of June 30,2018	$ 1,548,384	$ (117,960)
7. Total gain (loss) for the year (Item 5 - Item 6)	$ 329,782	$ 43,700
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ 1,596	$ 254
9. Liability experience gain (loss) for the year	329,415	43,612
10. Plan Change	(1,229)	(166)
11. Assumption change	0	0
12. Total	$ 329,782	$ 43,700

The favorable premium experience from calendar year 2018 to calendar year 2019 resulted in a $311 million liability gain for the non-hazardous insurance fund and a $41 million liability gain for the hazardous insurance fund.

Actuarial Assumptions and Methods

In determining costs and liabilities, actuaries use assumptions about the future, such as rates of salary increase, probabilities of retirement, termination, death and disability, and an annual investment return assumption. There were no changes to the actuarial assumptions and methods since the last actuarial valuation. It is our opinion that the assumptions are internally consistent, reasonable, and reflect anticipated future experience of the System. Appendix A includes a summary of the actuarial assumptions and methods used in this valuation.

An experience study was conducted as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018, the results of which will be first used in preparing the June 30, 2019 actuarial valuation. However, the Board has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. This report does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

Benefit Provisions

Appendix B of this report includes a summary of the benefit provisions for KERS.

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members paid from the retirement fund have been increased from 25% of the member's final rate of pay to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children. The insurance fund shall also now pay 100% of the insurance premium for spouses and children of all active members who die in the line of duty.

House Bill 265 maintained the FY 2019 employer contribution rate at 49.47% for Regional Mental Health/Mental Retardation Boards, Local and District Health Departments, State Universities, Community Colleges and any other agency eligible to voluntarily cease participating in the KERS. This legislation impacts the contribution rates for approximately 114 employers participating in the KERS non-hazardous retirement and insurance funds. The covered payroll for these employers exempt from the higher contribution rate is approximately 25% of the total covered payroll for the KERS non-hazardous system.

This actuarial valuation was determined without regard to enactment of SB 151 in 2018, which is currently being reviewed by the State Supreme Court.

This valuation reflects all benefits promised to KERS members, either by the statutes or by the Board. There are no ancillary benefits that might be deemed a KERS liability if continued beyond the availability of funding by the current funding source.

SECTION 3

ACTUARIAL TABLES

Actuarial Tables

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RETIREMENT BENEFITS

ACTUARIAL TABLES

Development of Unfunded Actuarial Accrued Liability
Retirement Benefits

(Dollar amounts expressed in thousands)

		June 30, 2018	
		Non-Hazardous (1)	Hazardous (2)
1.	Projected payroll of active members	$ 1,471,477	$ 158,213
2.	Present value of future pay	$ 12,557,065	$ 1,367,492
3.	Normal cost rate		
	a. Total normal cost rate	12.25%	16.62%
	b. Less: member contribution rate	-5.00%	-8.00%
	c. Employer normal cost rate	7.25%	8.62%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 5,202,677	$ 552,514
	b. Less: present value of future normal costs	(1,456,464)	(210,902)
	c. Actuarial accrued liability	$ 3,746,213	$ 341,612
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 11,419,229	$ 771,706
	b. Inactive members	509,790	38,605
	c. Active members (Item 4c)	3,746,213	341,612
	d. Total	$ 15,675,232	$ 1,151,923
6.	Actuarial value of assets	$ 2,019,278	$ 639,262
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 13,655,954	$ 512,661
8.	Funded Ratio	12.9%	55.5%

Actuarial Present Value of Future Benefits
Retirement Benefits
(Dollar amounts expressed in thousands)

		June 30, 2018	
		Non-Hazardous (1)	Hazardous (2)
1.	Active members		
	a. Service retirement	$ 4,700,863	$ 498,190
	b. Deferred termination benefits and refunds	345,804	40,012
	c. Survivor benefits	64,161	5,220
	d. Disability benefits	91,849	9,092
	e. Total	$ 5,202,677	$ 552,514
2.	Retired members		
	a. Service retirement	$ 10,472,173	$ 711,832
	b. Disability retirement	290,266	16,817
	c. Beneficiaries	656,790	43,057
	d. Total	$ 11,419,229	$ 771,706
3.	Inactive members		
	a. Vested terminations	$ 450,060	$ 31,174
	b. Nonvested terminations	59,730	7,431
	c. Total	$ 509,790	$ 38,605
4.	Total actuarial present value of future benefits	$ 17,131,696	$ 1,362,825

Development of Actuarially Determined Contribution Rate
Retirement Benefits

		June 30, 2018	
		Non-Hazardous (1)	Hazardous (2)
1.	Total normal cost rate		
	a. Service retirement	9.45%	13.46%
	b. Deferred termination benefits and refunds	2.17%	2.49%
	c. Survivor benefits	0.28%	0.28%
	d. Disability benefits	0.35%	0.39%
	e. Total	12.25%	16.62%
2.	Less: member contribution rate	-5.00%	-8.00%
3.	Total employer normal cost rate	7.25%	8.62%
4.	Administrative expenses	0.73%	0.62%
5.	Net employer normal cost rate	7.98%	9.24%
6.	UAAL amortization contribution	66.56%	25.18%
7.	Total calculated employer contribution	74.54%	34.42%

Actuarial Balance Sheet

Non-Hazardous Members Retirement

(Dollar amounts expressed in thousands)

		June 30, 2018 (1)	June 30, 2017 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 2,019,278	$ 2,123,623
	b. Present value of future member contributions	$ 627,853	$ 643,468
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 828,611	$ 887,737
	ii. Unfunded accrued liability contributions	13,655,954	13,468,018
	iii. Total future employer contributions	$ 14,484,565	$ 14,355,755
	d. Total assets	$ 17,131,696	$ 17,122,846
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 1,456,464	$ 1,531,205
	ii. Accrued liability	3,746,213	3,983,295
	iii. Total present value of future benefits	$ 5,202,677	$ 5,514,500
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 11,419,229	$ 11,120,669
	c. Present value of benefits payable on account of current inactive members	$ 509,790	$ 487,677
	d. Total liabilities	$ 17,131,696	$ 17,122,846

Actuarial Balance Sheet

Hazardous Members Retirement

(Dollar amounts expressed in thousands)

		June 30, 2018 (1)	June 30, 2017 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 639,262	$ 607,159
	b. Present value of future member contributions	$ 109,399	$ 109,126
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 101,503	$ 108,685
	ii. Unfunded accrued liability contributions	512,661	514,261
	iii. Total future employer contributions	$ 614,164	$ 622,946
	d. Total assets	$ 1,362,825	$ 1,339,231
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 210,902	$ 217,811
	ii. Accrued liability	341,612	375,070
	iii. Total present value of future benefits	$ 552,514	$ 592,881
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 771,706	$ 712,284
	c. Present value of benefits payable on account of current inactive members	$ 38,605	$ 34,066
	d. Total liabilities	$ 1,362,825	$ 1,339,231

Reconciliation of Retirement Net Assets

(Dollar amounts expressed in thousands)*

	Year Ending June 30, 2018 (1) Non-Hazardous	Year Ending June 30, 2018 (2) Hazardous
1. Value of assets at beginning of year	$ 2,056,870	$ 601,529
2. Revenue for the year		
a. Contributions		
i. Member contributions	$ 104,972	$ 17,891
ii. Employer contributions	619,988	32,790
iii. Other contributions (less 401h)	69,456	10,904
iii. Total	$ 794,416	$ 61,585
b. Income		
i. Interest, dividends, and other income	$ 47,741	$ 14,013
ii. Investment expenses	(13,157)	(4,833)
iii. Net	$ 34,584	$ 9,180
c. Net realized and unrealized gains (losses)	110,246	42,283
d. Total revenue	$ 939,245	$ 113,048
3. Expenditures for the year		
a. Disbursements		
i. Refunds	$ 13,603	$ 2,501
ii. Regular annuity benefits	967,375	65,616
iii. Other benefit payments	0	0
iv. Transfers to other systems	0	0
v. Total	$ 980,977	$ 68,117
b. Administrative expenses and depreciation	10,692	975
c. Total expenditures	$ 991,669	$ 69,092
4. Increase in net assets (Item 2. - Item 3.)	$ (52,424)	$ 43,956
5. Value of assets at end of year (Item 1. + Item 4.)	$ 2,004,446	$ 645,485
6. Net external cash flow		
a. Dollar amount	$ (197,253)	$ (7,507)
b. Percentage of market value	-9.7%	-1.2%
7. Estimated annual return on net assets	7.4%	8.6%

* Amounts may not add due to rounding

* Excludes 401h assets

Development of Actuarial Value of Assets

Non-Hazardous Members Retirement

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2018
1.	Actuarial value of assets at beginning of year	$ 2,123,623
2.	Market value of assets at beginning of year	$ 2,056,870
3.	Net new investments	
	a. Contributions	$ 794,416
	b. Benefit payments	(980,977)
	c. Administrative expenses	(10,692)
	d. Subtotal	$ (197,253)
4.	Market value of assets at end of year	$ 2,004,446
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 144,829
6.	Assumed investment return rate for fiscal year	5.25%
7.	Expected return for immediate recognition	$ 102,808
8.	Excess return for phased recognition	$ 42,022
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2018	$ 42,022	$ 8,404
b.	2017	89,028	17,806
c.	2016	(183,443)	(36,689)
d.	2015	(142,444)	(28,489)
e.	2014	145,338	29,068
f.	Total		$ (9,900)

10.	Actuarial value of assets as of June 30, 2018 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 2,019,278
11.	Ratio of actuarial value to market value	100.7%
12.	Estimated annual return on actuarial value of assets	4.6%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Hazardous Members Retirement

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2018
1.	Actuarial value of assets at beginning of year	$ 607,159
2.	Market value of assets at beginning of year	$ 601,529
3.	Net new investments	
	a. Contributions	$ 61,585
	b. Benefit payments	(68,117)
	c. Administrative expenses	(975)
	d. Subtotal	$ (7,507)
4.	Market value of assets at end of year	$ 645,485
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 51,463
6.	Assumed investment return rate for fiscal year	6.25%
7.	Expected return for immediate recognition	$ 37,361
8.	Excess return for phased recognition	$ 14,102
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2018	$ 14,102	$ 2,820
b.	2017	31,023	6,205
c.	2016	(42,195)	(8,439)
d.	2015	(33,972)	(6,794)
e.	2014	42,286	8,457
f.	Total		$ 2,249

10.	Actuarial value of assets as of June 30, 2018 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 639,262
11.	Ratio of actuarial value to market value	99.0%
12.	Estimated annual return on actuarial value of assets	6.6%

* Amounts may not add due to rounding

Schedule of Funding Progress
Retirement Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Non-Hazardous Members			
2011	$ 3,726,986	$ 11,182,142	$ 7,455,156	33.3%	$ 1,731,633	430.5%
2012	3,101,317	11,361,048	8,259,731	27.3%	1,644,897	502.1%
2013	2,636,123	11,386,602	8,750,479	23.2%	1,644,409	532.1%
2014	2,423,957	11,550,110	9,126,154	21.0%	1,577,496	578.5%
2015	2,350,990	12,359,673	10,008,683	19.0%	1,544,234	648.1%
2016	2,112,286	13,224,698	11,112,412	16.0%	1,529,249	726.7%
2017	2,123,623	15,591,641	13,468,018	13.6%	1,531,535	879.4%
2018	2,019,278	15,675,232	13,655,954	12.9%	1,471,477	928.0%
			Hazardous Members			
2011	$ 510,749	$ 721,293	$ 210,545	70.8%	$ 133,054	158.2%
2012	497,226	752,699	255,473	66.1%	131,977	193.6%
2013	505,657	783,981	278,324	64.5%	132,015	210.8%
2014	527,897	816,850	288,953	64.6%	129,076	223.9%
2015	556,688	895,433	338,746	62.2%	128,680	263.2%
2016	559,487	936,706	377,219	59.7%	147,563	255.6%
2017	607,159	1,121,420	514,261	54.1%	162,418	316.6%
2018	639,262	1,151,923	512,661	55.5%	158,213	324.0%
			Total KERS Members			
2011	$ 4,237,735	$ 11,903,435	$ 7,665,700	35.6%	$ 1,864,687	411.1%
2012	3,598,543	12,113,747	8,515,204	29.7%	1,776,874	479.2%
2013	3,141,780	12,170,583	9,028,803	25.8%	1,776,424	508.3%
2014	2,951,854	12,366,960	9,415,106	23.9%	1,706,572	551.7%
2015	2,907,678	13,255,106	10,347,428	21.9%	1,672,914	618.5%
2016	2,671,773	14,161,404	11,489,631	18.9%	1,676,812	685.2%
2017	2,730,782	16,713,061	13,982,279	16.3%	1,693,953	825.4%
2018	2,658,540	16,827,155	14,168,615	15.8%	1,629,690	869.4%

Summary of Principal Assumptions and Methods

Below is a summary of the principal economic assumptions, cost method, and the method for financing the unfunded actuarial accrued liability:

	Non-Hazardous	Hazardous
Valuation date:	June 30, 2018	June 30, 2018
Actuarial cost method:	Entry Age Normal	Entry Age Normal
Amortization method:	Level percentage of payroll (0% payroll growth assumed)	Level percentage of payroll (0% payroll growth assumed)
Amortization period for contribution rate:	25-year closed period	25-year closed period
Asset valuation method:	5-Year Smoothed Market	5-Year Smoothed Market
Actuarial assumptions:		
Investment rate of return	5.25%	6.25%
Projected salary increases	3.55% to 15.55% (varies by service)	3.55% to 19.55% (varies by service)
Inflation	2.30%	2.30%
Post-retirement benefit adjustments	0.00%	0.00%
Retiree Mortality	RP-2000 Combined Mortality Table for Males and Females, projected using scale BB to 2013 (set back one year for females).	RP-2000 Combined Mortality Table for Males and Females, projected using scale BB to 2013 (set back one year for females).

Solvency Test
Retirement Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Accrued Liability: Active Member Contributions	Actuarial Accrued Liability: Retired Members & Beneficiaries	Actuarial Accrued Liability: Active Members (Employer Financed)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets: Active	Portion of Aggregate Accrued Liabilities Covered by Assets: Retired	Portion of Aggregate Accrued Liabilities Covered by Assets: ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Non-Hazardous Members							
2009	$ 793,575	$ 8,205,156	$ 1,659,819	$ 4,794,611	100.0%	48.8%	0.0%
2010	869,484	8,329,758	1,805,553	4,210,216	100.0%	40.1%	0.0%
2011	916,569	8,482,714	1,782,859	3,726,986	100.0%	33.1%	0.0%
2012	885,137	8,708,536	1,767,375	3,101,317	100.0%	25.4%	0.0%
2013	922,928	8,709,324	1,754,351	2,636,123	100.0%	19.7%	0.0%
2014	928,558	8,870,693	1,750,860	2,423,957	100.0%	16.9%	0.0%
2015	925,934	9,437,468	1,996,271	2,350,990	100.0%	15.1%	0.0%
2016	920,120	10,010,168	2,294,410	2,112,286	100.0%	11.9%	0.0%
2017	934,559	11,608,346	3,048,736	2,123,623	100.0%	10.2%	0.0%
2018	892,033	11,929,019	2,854,180	2,019,278	100.0%	9.4%	0.0%
Hazardous Members							
2009	$ 87,780	$ 413,972	$ 172,659	$ 502,503	100.0%	100.0%	0.4%
2010	88,511	441,657	157,981	502,729	100.0%	93.8%	0.0%
2011	86,614	490,395	144,284	510,749	100.0%	86.5%	0.0%
2012	82,101	521,689	148,910	497,226	100.0%	79.6%	0.0%
2013	82,146	545,597	156,238	505,657	100.0%	77.6%	0.0%
2014	83,664	581,231	151,955	527,897	100.0%	76.4%	0.0%
2015	83,606	633,189	178,638	556,688	100.0%	74.7%	0.0%
2016	86,705	648,482	201,519	559,487	100.0%	72.9%	0.0%
2017	93,350	746,350	281,720	607,159	100.0%	68.8%	0.0%
2018	89,106	810,311	252,506	639,262	100.0%	67.9%	0.0%

INSURANCE BENEFITS

ACTUARIAL TABLES

Development of Unfunded Actuarial Accrued Liability
Insurance Benefits

(Dollar amounts expressed in thousands)

		June 30, 2018	
		Non-Hazardous (1)	Hazardous (2)
1.	Projected payroll of active members	$ 1,471,477	$ 158,213
2.	Present value of future pay	$ 11,638,890	$ 1,357,261
3.	Normal cost rate		
	a. Total normal cost rate	2.83%	5.73%
	b. Less: member contribution rate	-0.40%	-0.58%
	c. Employer normal cost rate	2.43%	5.15%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 1,261,721	$ 209,922
	b. Less: present value of future normal costs	(302,169)	(65,216)
	c. Actuarial accrued liability	$ 959,552	$ 144,706
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 1,357,311	$ 238,885
	b. Inactive members	118,642	9,890
	c. Active members (Item 4c)	959,552	144,706
	d. Total	$ 2,435,505	$ 393,481
6.	Actuarial value of assets	$ 887,121	$ 511,441
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 1,548,384	$ (117,960)
8.	Funded Ratio	36.4%	130.0%

Development of Actuarially Determined Contribution Rate
Insurance Benefits

		June 30, 2018	
		Non-Hazardous (1)	Hazardous (2)
1.	Total normal cost rate	2.83%	5.73%
2.	Less: member contribution rate	-0.40%	-0.58%
3.	Total employer normal cost rate	2.43%	5.15%
4.	Administrative expenses	0.05%	0.07%
5.	Net employer normal cost rate	2.48%	5.22%
6.	UAAL amortization contribution	8.17%	-6.09%
7.	Total calculated employer contribution Max (0%, item 5. + item6.)	10.65%	0.00%

Actuarial Balance Sheet

Non-Hazardous Members Insurance

(Dollar amounts expressed in thousands)

	June 30, 2018 (1)	June 30, 2017 (2)
1. Assets - Present and Expected Future Resources		
a. Current assets (actuarial value)	$ 887,121	$ 823,918
b. Present value of future member contributions	$ 58,117	$ 53,847
c. Present value of future employer contributions		
i. Normal cost contributions	$ 244,052	$ 282,814
ii. Unfunded accrued liability contributions	1,548,384	1,859,578
iii. Total future employer contributions	$ 1,792,436	$ 2,142,392
d. Total assets	$ 2,737,674	$ 3,020,157
2. Liabilities - Present Value of Expected Future Benefit Payments		
a. Active members		
i. Present value of future normal costs	$ 302,169	$ 336,661
ii. Accrued liability	959,552	1,108,202
iii. Total present value of future benefits	$ 1,261,721	$ 1,444,863
b. Present value of benefits payable on account of current retired members and beneficiaries	$ 1,357,311	$ 1,452,876
c. Present value of benefits payable on account of current inactive members	$ 118,642	$ 122,418
d. Total liabilities	$ 2,737,674	$ 3,020,157

Actuarial Balance Sheet

Hazardous Members Insurance

(Dollar amounts expressed in thousands)

		June 30, 2018 (1)	June 30, 2017 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 511,441	$ 493,458
	b. Present value of future member contributions	$ 9,821	$ 9,088
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 55,395	$ 61,771
	ii. Unfunded accrued liability contributions	(117,960)	(74,019)
	iii. Total future employer contributions	$ (62,565)	$ (12,248)
	d. Total assets	$ 458,697	$ 490,298
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 65,216	$ 70,859
	ii. Accrued liability	144,706	175,623
	iii. Total present value of future benefits	$ 209,922	$ 246,482
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 238,885	$ 233,808
	c. Present value of benefits payable on account of current inactive members	$ 9,890	$ 10,008
	d. Total liabilities	$ 458,697	$ 490,298

Reconciliation of Insurance Net Assets

(Dollar amounts expressed in thousands)*

	Year Ending June 30, 2018 (1) Non-Hazardous	Year Ending June 30, 2018 (2) Hazardous
1. Value of assets at beginning of year	$ 817,370	$ 488,838
2. Revenue for the year		
a. Contributions		
i. Member contributions	$ 5,786	$ 909
ii. Employer contributions	132,365	4,301
iii. Other contributions (less 401h)	4,086	1,005
iii. Total	$ 142,237	$ 6,215
b. Income		
i. Interest, dividends, and other income	$ 16,929	$ 10,562
ii. Investment expenses	(5,501)	(4,479)
iii. Net	$ 11,428	$ 6,082
c. Net realized and unrealized gains (losses)	52,600	36,866
d. Total revenue	$ 206,266	$ 49,164
3. Expenditures for the year		
a. Disbursements		
i. Refunds	$ 0	$ 0
ii. Healthcare premium subsidies	130,069	18,697
iii. Other benefit payments	1,601	129
iv. Transfers to other systems	0	0
v. Total	$ 131,670	$ 18,826
b. Administrative expenses and depreciation	760	104
c. Total expenditures	$ 132,430	$ 18,930
4. Increase in net assets (Item 2. - Item 3.)	$ 73,835	$ 30,234
5. Value of assets at end of year (Item 1. + Item 4.)	$ 891,205	$ 519,072
6. Net external cash flow		
a. Dollar amount	$ 9,807	$ (12,715)
b. Percentage of market value	1.1%	-2.5%
7. Estimated annual return on net assets	7.8%	8.9%

* Amounts may not add due to rounding

* Includes 401h assets

Development of Actuarial Value of Assets

Non-Hazardous Members Insurance

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2018
1.	Actuarial value of assets at beginning of year	$ 823,918
2.	Market value of assets at beginning of year	$ 817,370
3.	Net new investments	
	a. Contributions	$ 142,237
	b. Benefit payments	(131,670)
	c. Administrative expenses	(760)
	d. Subtotal	$ 9,807
4.	Market value of assets at end of year	$ 891,205
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 64,028
6.	Assumed investment return rate for fiscal year	6.25%
7.	Expected return for immediate recognition	$ 51,392
8.	Excess return for phased recognition	$ 12,636
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2018	$ 12,636	$ 2,527
b.	2017	41,687	8,337
c.	2016	(55,901)	(11,180)
d.	2015	(43,387)	(8,677)
e.	2014	54,989	10,998
f.	Total		$ 2,005

10.	Actuarial value of assets as of June 30, 2018 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 887,121
11.	Ratio of actuarial value to market value	99.5%
12.	Estimated annual return on actuarial value of assets	6.4%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Hazardous Members Insurance

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2018
1.	Actuarial value of assets at beginning of year	$ 493,458
2.	Market value of assets at beginning of year	$ 488,838
3.	Net new investments	
	a. Contributions	$ 6,215
	b. Benefit payments	(18,826)
	c. Administrative expenses	(104)
	d. Subtotal	$ (12,715)
4.	Market value of assets at end of year	$ 519,072
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 42,949
6.	Assumed investment return rate for fiscal year	6.25%
7.	Expected return for immediate recognition	$ 30,155
8.	Excess return for phased recognition	$ 12,794
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2018	$ 12,794	$ 2,559
b.	2017	26,956	5,391
c.	2016	(33,995)	(6,799)
d.	2015	(25,896)	(5,179)
e.	2014	22,857	4,571
f.	Total		$ 543

10.	Actuarial value of assets as of June 30, 2018 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 511,441
11.	Ratio of actuarial value to market value	98.5%
12.	Estimated annual return on actuarial value of assets	6.3%

* Amounts may not add due to rounding

Schedule of Funding Progress
Insurance Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Non-Hazardous Members						
2011	$ 451,620	$ 4,280,090	$ 3,828,469	10.6%	$ 1,731,633	221.1%
2012	446,081	3,125,330	2,679,250	14.3%	1,644,897	162.9%
2013	497,584	2,128,754	1,631,170	23.4%	1,644,409	99.2%
2014	621,237	2,226,760	1,605,523	27.9%	1,577,496	101.8%
2015	695,018	2,413,705	1,718,687	28.8%	1,544,234	111.3%
2016	743,270	2,456,678	1,713,408	30.3%	1,529,249	112.0%
2017	823,918	2,683,496	1,859,578	30.7%	1,531,535	121.4%
2018	887,121	2,435,505	1,548,384	36.4%	1,471,477	105.2%
Hazardous Members						
2011	$ 329,962	$ 507,059	$ 177,097	65.1%	$ 133,054	133.1%
2012	345,574	384,592	39,018	89.9%	131,977	29.6%
2013	370,774	385,518	14,743	96.2%	132,015	11.2%
2014	419,396	396,987	(22,409)	105.6%	129,076	-17.4%
2015	451,514	374,904	(76,610)	120.4%	128,680	-59.5%
2016	473,160	377,745	(95,415)	125.3%	147,563	-64.7%
2017	493,458	419,439	(74,019)	117.6%	162,418	-45.6%
2018	511,441	393,481	(117,960)	130.0%	158,213	-74.6%
Total KERS Members						
2011	$ 781,582	$ 4,787,149	$ 4,005,567	16.3%	$ 1,864,687	214.8%
2012	791,655	3,509,922	2,718,267	22.6%	1,776,874	153.0%
2013	868,358	2,514,272	1,645,914	34.5%	1,776,424	92.7%
2014	1,040,633	2,623,747	1,583,114	39.7%	1,706,572	92.8%
2015	1,146,532	2,788,609	1,642,077	41.1%	1,672,914	98.2%
2016	1,216,430	2,834,423	1,617,993	42.9%	1,676,812	96.5%
2017	1,317,376	3,102,935	1,785,559	42.5%	1,693,953	105.4%
2018	1,398,562	2,828,986	1,430,424	49.4%	1,629,690	87.8%

Solvency Test
Insurance Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Accrued Liability: Active Member Contributions	Actuarial Accrued Liability: Retired Members & Beneficiaries	Actuarial Accrued Liability: Active Members (Employer Financed)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets: Active	Portion of Aggregate Accrued Liabilities Covered by Assets: Retired	Portion of Aggregate Accrued Liabilities Covered by Assets: ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Non-Hazardous Members							
2009	$ -	$ 2,861,867	$ 1,645,458	$ 534,173	100.0%	18.7%	0.0%
2010	-	2,744,534	1,721,602	471,342	100.0%	17.2%	0.0%
2011	-	2,568,003	1,712,087	451,620	100.0%	17.6%	0.0%
2012	-	1,924,069	1,201,262	446,081	100.0%	23.2%	0.0%
2013	-	1,338,773	789,981	497,584	100.0%	37.2%	0.0%
2014	-	1,425,605	801,155	621,237	100.0%	43.6%	0.0%
2015	-	1,428,350	985,355	695,018	100.0%	48.7%	0.0%
2016	-	1,483,636	973,042	743,270	100.0%	50.1%	0.0%
2017	-	1,575,294	1,108,202	823,918	100.0%	52.3%	0.0%
2018	-	1,475,953	959,552	887,121	100.0%	60.1%	0.0%
Hazardous Members							
2009	$ -	$ 242,123	$ 249,009	$ 301,635	100.0%	100.0%	23.9%
2010	-	268,511	224,787	314,427	100.0%	100.0%	20.4%
2011	-	285,540	221,519	329,962	100.0%	100.0%	20.1%
2012	-	196,579	188,013	345,574	100.0%	100.0%	79.2%
2013	-	202,032	183,486	370,774	100.0%	100.0%	92.0%
2014	-	206,477	190,509	419,396	100.0%	100.0%	100.0%
2015	-	221,115	153,789	451,514	100.0%	100.0%	100.0%
2016	-	228,361	149,384	473,160	100.0%	100.0%	100.0%
2017	-	243,816	175,623	493,458	100.0%	100.0%	100.0%
2018	-	248,775	144,706	511,441	100.0%	100.0%	100.0%

SECTION 4

MEMBERSHIP INFORMATION

Membership Tables

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Summary of Membership Data

(Total dollar amounts expressed in thousands)

		Non-Hazardous June 30, 2018 (1)	Hazardous June 30, 2018 (2)	Total June 30, 2018 (3)	Total June 30, 2017 (4)
1.	Active members				
a.	Males	13,374	2,706	16,080	16,991
b.	Females	21,765	1,223	22,988	24,290
c.	Total members	35,139	3,929	39,068	41,281
d.	Total annualized prior year salaries	$ 1,471,477	$ 158,213	$ 1,629,690	$ 1,693,953
e.	Average salary	$ 41,876	$ 40,268	$ 41,714	$ 41,035
f.	Average age	45.2	39.8	44.7	44.9
g.	Average service	10.8	7.3	10.4	10.6
h.	Member contributions with interest	$ 892,033	$ 89,106	$ 981,139	$ 1,027,910
i.	Average contributions with interest	$ 25,386	$ 22,679	$ 25,114	$ 24,900
2.	Vested inactive members				
a.	Number	13,230	886	14,116	11,299
b.	Total annual deferred benefits	$ 73,955	$ 4,084	$ 78,039	$ 73,067
c.	Average annual deferred benefit	$ 5,590	$ 4,610	$ 5,528	$ 6,467
d.	Average age at the valuation date	48.8	44.0	48.5	48.6
3.	Nonvested inactive members				
a.	Number	37,205	4,841	42,046	43,657
b.	Total member contributions with interest	$ 59,730	$ 7,431	$ 67,161	$ 72,457
c.	Average contributions with interest	$ 1,605	$ 1,535	$ 1,597	$ 1,660
4.	Service retirees				
a.	Number	39,702	3,760	43,462	41,675
b.	Total annual benefits	$ 857,037	$ 58,157	$ 915,193	$ 881,896
c.	Average annual benefit	$ 21,587	$ 15,467	$ 21,057	$ 21,161
d.	Average age at the valuation date	69.0	64.5	68.6	68.5
5.	Disabled retirees				
a.	Number	1,969	160	2,129	2,137
b.	Total annual benefits	$ 25,766	$ 1,463	$ 27,229	$ 27,183
c.	Average annual benefit	$ 13,086	$ 9,146	$ 12,790	$ 12,720
d.	Average age at the valuation date	65.5	60.2	65.1	64.8
6.	Beneficiaries				
a.	Number	4,855	450	5,305	5,197
b.	Total annual benefits	$ 70,148	$ 4,430	$ 74,578	$ 71,385
c.	Average annual benefit	$ 14,449	$ 9,844	$ 14,058	$ 13,736
d.	Average age at the valuation date	70.5	66.0	70.2	70.6

Summary of Historical Active Membership

	Active Members		Covered Payroll[1]		Average Annual Pay	
June 30,	Number	Percent Increase /(Decrease)	Amount in Thousands	Percent Increase /(Decrease)	Amount	Percent Increase /(Decrease)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Non-Hazardous Members						
2011	46,617		1,731,633		$ 37,146	
2012	42,196	-9.5%	1,644,897	-5.0%	38,982	4.9%
2013	42,226	0.1%	1,644,409	0.0%	38,943	-0.1%
2014	40,365	-4.4%	1,577,496	-4.1%	39,081	0.4%
2015	39,056	-3.2%	1,544,234	-2.1%	39,539	1.2%
2016	37,779	-3.3%	1,529,249	-1.0%	40,479	2.4%
2017	37,234	-1.4%	1,531,535	0.1%	41,133	1.6%
2018	35,139	-5.6%	1,471,477	-3.9%	41,876	1.8%
Hazardous Members						
2011	4,291		$ 133,054		$ 31,008	
2012	4,086	-4.8%	131,977	-0.8%	32,300	4.2%
2013	4,127	1.0%	132,015	0.0%	31,988	-1.0%
2014	4,024	-2.5%	129,076	-2.2%	32,077	0.3%
2015	3,886	-3.4%	128,680	-0.3%	33,114	3.2%
2016	3,959	1.9%	147,563	14.7%	37,273	12.6%
2017	4,047	2.2%	162,418	10.1%	40,133	7.7%
2018	3,929	-2.9%	158,213	-2.6%	40,268	0.3%

Distribution of Active Members by Age and by Years of Service

Non-Hazardous Members

Attained Age	Years of Credited Service												
	0 Count & Avg. Comp.	1 Count & Avg. Comp.	2 Count & Avg. Comp.	3 Count & Avg. Comp.	4 Count & Avg. Comp.	5-9 Count & Avg. Comp.	10-14 Count & Avg. Comp.	15-19 Count & Avg. Comp.	20-24 Count & Avg. Comp.	25-29 Count & Avg. Comp.	30-34 Count & Avg. Comp.	35 & Over Count & Avg. Comp.	Total Count & Avg. Comp.
Under 20	14	2	0	0	0	0	0	0	0	0	0	0	16
	$22,301	$24,102	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$22,526
20-24	437	243	84	48	17	2	1	0	0	0	0	0	832
	$23,505	$30,683	$33,249	$32,676	$34,649	$34,709	$36,667	$0	$0	$0	$0	$0	$27,385
25-29	612	606	510	413	279	347	1	0	0	0	0	0	2,768
	$26,304	$32,155	$34,692	$34,985	$35,379	$35,953	$33,855	$0	$0	$0	$0	$0	$32,553
30-34	386	392	402	394	323	1,312	312	7	0	0	0	0	3,528
	$27,664	$33,818	$37,118	$37,597	$35,776	$39,665	$40,117	$45,686	$0	$0	$0	$0	$36,877
35-39	316	347	302	305	245	1,200	1,354	472	32	0	0	0	4,573
	$28,032	$35,721	$40,884	$37,025	$38,474	$40,407	$43,711	$44,465	$50,070	$0	$0	$0	$40,363
40-44	271	265	274	221	217	864	1,129	1,310	427	18	2	0	4,998
	$27,943	$35,234	$40,702	$37,298	$36,520	$42,223	$45,125	$47,886	$49,329	$56,396	$71,845	$0	$43,339
45-49	239	277	225	210	164	855	944	1,161	943	303	27	2	5,350
	$27,724	$34,386	$38,218	$36,694	$36,005	$40,316	$45,231	$47,986	$51,897	$54,340	$65,033	$95,033	$44,596
50-54	178	189	204	162	203	701	864	863	787	435	115	8	4,709
	$28,508	$36,896	$38,530	$37,014	$36,605	$40,577	$43,294	$45,779	$51,587	$56,031	$61,386	$62,035	$44,855
55-59	131	150	130	117	119	661	826	855	637	321	126	22	4,095
	$29,429	$35,971	$39,296	$37,564	$38,001	$39,189	$42,922	$44,738	$48,846	$54,722	$62,378	$68,557	$44,184
60-64	86	99	89	70	71	475	628	632	433	197	71	38	2,889
	$29,217	$36,759	$53,219	$40,946	$36,321	$42,722	$42,264	$45,496	$47,996	$54,312	$60,358	$73,616	$45,167
65 & Over	45	39	37	43	34	246	304	319	154	85	42	33	1,381
	$34,944	$44,391	$69,895	$40,441	$49,018	$38,870	$46,090	$45,982	$54,432	$52,951	$67,485	$74,156	$47,576
Total	2,715	2,609	2,257	1,983	1,672	6,663	6,363	5,619	3,413	1,359	383	103	35,139
	$27,047	$34,206	$38,900	$36,847	$36,764	$40,256	$43,820	$46,437	$50,537	$54,908	$62,502	$72,225	$41,876

Distribution of Active Members by Age and by Years of Service

Hazardous Members

Attained Age	Years of Credited Service												
	0 Count & Avg. Comp.	1 Count & Avg. Comp.	2 Count & Avg. Comp.	3 Count & Avg. Comp.	4 Count & Avg. Comp.	5-9 Count & Avg. Comp.	10-14 Count & Avg. Comp.	15-19 Count & Avg. Comp.	20-24 Count & Avg. Comp.	25-29 Count & Avg. Comp.	30-34 Count & Avg. Comp.	35 & Over Count & Avg. Comp.	Total Count & Avg. Comp.
Under 20	1	0	0	0	0	0	0	0	0	0	0	0	1
	$15,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,000
20-24	144	73	27	4	0	0	0	0	0	0	0	0	248
	$23,029	$39,018	$42,451	$36,095	$0	$0	$0	$0	$0	$0	$0	$0	$30,060
25-29	171	136	105	103	73	70	0	0	0	0	0	0	658
	$26,954	$38,250	$39,560	$40,761	$40,872	$42,776	$0	$0	$0	$0	$0	$0	$36,689
30-34	102	67	63	66	57	181	49	0	0	0	0	0	585
	$26,447	$36,257	$40,527	$40,249	$40,211	$40,932	$44,935	$0	$0	$0	$0	$0	$38,015
35-39	55	40	41	28	24	144	187	36	1	0	0	0	556
	$25,686	$36,978	$42,024	$38,792	$40,065	$42,127	$43,375	$46,140	$42,450	$0	$0	$0	$40,546
40-44	45	18	33	28	21	97	131	131	16	0	0	0	520
	$26,160	$37,285	$37,737	$38,225	$41,973	$41,453	$46,046	$48,854	$53,564	$0	$0	$0	$42,991
45-49	35	34	33	26	16	90	121	107	42	8	0	0	512
	$26,257	$36,846	$37,987	$39,821	$35,673	$41,764	$48,025	$49,540	$53,554	$53,760	$0	$0	$44,104
50-54	21	29	23	24	20	75	85	65	20	13	1	0	376
	$28,037	$38,885	$38,299	$42,265	$37,794	$43,078	$44,259	$45,946	$50,783	$62,048	$54,115	$0	$43,147
55-59	19	11	18	9	13	50	55	51	13	6	1	0	246
	$30,533	$38,743	$39,170	$44,932	$34,547	$40,331	$46,495	$47,910	$54,150	$72,784	$112,168	$0	$44,044
60-64	4	5	3	10	12	43	43	39	7	3	0	0	169
	$25,997	$42,677	$43,512	$39,580	$41,194	$39,712	$41,949	$46,637	$46,435	$75,608	$0	$0	$42,723
65 & Over	2	0	3	2	3	13	20	9	2	1	3	0	58
	$16,276	$0	$67,671	$35,239	$45,911	$35,270	$42,385	$47,090	$69,085	$96,877	$65,095	$0	$44,899
Total	599	413	349	300	239	763	691	438	101	31	5	0	3,929
	$25,797	$37,893	$40,099	$40,253	$39,860	$41,497	$45,046	$48,023	$52,788	$64,423	$72,314	$0	$40,268

Distribution of Annuitant Monthly Benefit by Status and Age
Non-Hazardous Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

	Retirement		Disability		Survivors & Beneficiaries		Total	
Current Age	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	525	$ 12,861	110	$ 1,547	498	$ 5,730	1,133	$ 20,138
50 - 54	1,753	47,528	187	2,819	181	2,183	2,121	52,530
55 - 59	3,913	101,415	268	3,566	314	4,245	4,495	109,226
60 - 64	6,946	165,460	405	5,475	511	7,569	7,862	178,504
65 - 69	9,685	212,463	384	4,994	629	10,798	10,698	228,255
70 - 74	7,534	156,803	261	3,236	659	11,130	8,454	171,169
75 - 79	4,501	85,661	188	2,339	652	10,290	5,341	98,290
80 - 84	2,593	43,131	112	1,272	576	8,723	3,281	53,126
85 - 89	1,466	22,115	42	444	471	6,073	1,979	28,632
90 And Over	786	9,600	12	75	364	3,408	1,162	13,083
Total	**39,702**	**$ 857,037**	**1,969**	**$ 25,766**	**4,855**	**$ 70,148**	**46,526**	**$ 952,951**

Distribution of Annuitant Monthly Benefit by Status and Age
Hazardous Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

	Retirement		Disability		Survivors & Beneficiaries		Total	
Current Age	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	252	$ 4,813	27	$ 368	55	$ 536	334	$ 5,717
50 - 54	384	7,313	25	220	19	191	428	7,724
55 - 59	516	9,503	26	266	51	586	593	10,355
60 - 64	701	11,827	28	237	52	541	781	12,605
65 - 69	864	12,273	30	248	76	920	970	13,441
70 - 74	615	8,227	12	82	73	632	700	8,941
75 - 79	262	2,784	6	17	62	573	330	3,374
80 - 84	120	1,054	5	22	37	293	162	1,369
85 - 89	38	248	1	3	19	92	58	343
90 And Over	8	116	0	-	6	67	14	183
Total	**3,760**	**$ 58,157**	**160**	**$ 1,463**	**450**	**$ 4,430**	**4,370**	**$ 64,050**

Non-Hazardous Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	4,229	$ 7,630,679	12,128	$ 17,755,442	16,357	$ 25,386,120
Joint & Survivor:						
100% to Beneficiary	2,373	4,357,201	1,115	1,395,025	3,488	5,752,226
66 2/3% to Beneficiary	822	2,305,032	568	1,097,309	1,390	3,402,341
50% to Beneficiary	1,142	2,877,506	1,521	3,026,442	2,663	5,903,948
Pop-up Option	4,053	9,847,283	3,778	7,325,753	7,831	17,173,036
Social Security Option:						
Age 62 Basic	404	848,056	964	1,564,679	1,368	2,412,736
Age 62 Survivorship	800	1,607,679	610	974,202	1,410	2,581,881
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	0	0	0	0	0	0
10 Years Certain & Life	984	1,727,000	2,256	3,416,680	3,240	5,143,680
15 Years Certain & Life	437	707,245	620	924,751	1,057	1,631,996
20 Years Certain & Life	439	956,756	634	1,005,404	1,073	1,962,160
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	81	133,879	287	440,254	368	574,133
24 Month Basic	32	38,929	151	197,445	183	236,374
36 Month Basic	134	121,009	392	298,631	526	419,640
12 Month Survivor	101	210,677	101	172,917	202	383,595
24 Month Survivor	78	124,189	73	107,349	151	231,537
36 Month Survivor	213	243,916	151	127,573	364	371,488
Total:	16,322	$ 33,737,035	25,349	$ 39,829,857	41,671	$ 73,566,892

Hazardous Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	647	$ 735,853	509	$ 553,691	1,156	$ 1,289,544
Joint & Survivor:						
100% to Beneficiary	345	409,449	44	49,058	389	458,507
66 2/3% to Beneficiary	113	140,881	30	34,303	143	175,184
50% to Beneficiary	173	270,893	71	107,998	244	378,891
Pop-up Option	905	1,384,064	191	254,396	1,096	1,638,461
Social Security Option:						
Age 62 Basic	58	69,929	32	29,856	90	99,786
Age 62 Survivorship	139	176,034	18	14,464	157	190,498
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	47	67,579	13	17,031	60	84,610
10 Years Certain & Life	116	139,766	78	69,006	194	208,771
15 Years Certain & Life	49	61,660	25	25,079	74	86,739
20 Years Certain & Life	62	84,327	32	42,001	94	126,328
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	10	10,601	13	10,878	23	21,479
24 Month Basic	14	14,040	9	7,948	23	21,987
36 Month Basic	43	37,150	23	20,016	66	57,166
12 Month Survivor	20	26,786	6	5,151	26	31,937
24 Month Survivor	18	25,731	9	11,029	27	36,760
36 Month Survivor	43	42,999	15	18,695	58	61,695
Total:	2,802	$ 3,697,742	1,118	$ 1,270,600	3,920	$ 4,968,342

Non-Hazardous Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	16	$ 8,783	33	$ 35,052	49	$ 43,835
Joint & Survivor:						
100% to Beneficiary	372	317,653	1,444	1,600,258	1,816	1,917,911
66 2/3% to Beneficiary	82	87,250	308	380,611	390	467,861
50% to Beneficiary	175	136,519	429	346,393	604	482,912
Pop-up Option	225	333,328	709	1,239,721	934	1,573,049
Social Security Option:						
Age 62 Basic	1	1,293	10	9,527	11	10,820
Age 62 Survivorship	71	97,069	313	541,231	384	638,299
Partial Deferred (Old Plan)	0	0	0	0		
Widows Age 60	0	0	3	1,475	3	1,475
5 Years Certain	28	43,626	64	54,336	92	97,962
10 Years Certain	81	64,364	103	70,223	184	134,587
10 Years Certain & Life	34	31,325	43	41,756	77	73,081
15 Years Certain & Life	18	23,921	41	39,145	59	63,066
20 Years Certain & Life	24	42,985	62	115,242	86	158,227
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	0	0	1	1,792	1	1,792
24 Month Basic	0	0	0	0	0	0
36 Month Basic	0	0	2	3,357	2	3,357
12 Month Survivor	6	10,098	26	43,945	32	54,044
24 Month Survivor	12	15,777	28	27,132	40	42,909
36 Month Survivor	20	16,520	71	63,986	91	80,506
Total:	1,165	$ 1,230,513	3,690	$ 4,615,180	4,855	$ 5,845,692

Hazardous Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	2	$ 1,052	7	$ 4,483	9	$ 5,535
Joint & Survivor:						
100% to Beneficiary	12	4,283	148	107,980	160	112,263
66 2/3% to Beneficiary	0	0	21	11,377	21	11,377
50% to Beneficiary	3	1,862	33	12,194	36	14,057
Pop-up Option	13	13,893	102	107,548	115	121,441
Social Security Option:						
Age 62 Basic	0	0	0	0	0	0
Age 62 Survivorship	1	483	36	40,982	37	41,465
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	1	635	6	5,089	7	5,723
10 Years Certain	3	3,405	16	16,102	19	19,507
10 Years Certain & Life	5	3,601	4	2,824	9	6,425
15 Years Certain & Life	2	819	4	2,627	6	3,445
20 Years Certain & Life	0	0	7	5,926	7	5,926
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	0	0	0	0	0	0
24 Month Basic	0	0	0	0	0	0
36 Month Basic	0	0	1	126	1	126
12 Month Survivor	0	0	4	4,145	4	4,145
24 Month Survivor	1	995	3	2,022	4	3,017
36 Month Survivor	2	706	13	13,996	15	14,702
Total:	45	$ 31,733	405	$ 337,420	450	$ 369,153

Schedule of Retirants Added to And Removed from Rolls

(Dollar amounts except average allowance expressed in thousands)

Year Ended	Added to Rolls	Removed from Rolls	Rolls End of the Year		% Increase in Annual Benefit	Average Annual Benefit
	Number	Number	Number	Annual Benefits		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Non-Hazardous			
2011	1,592	940	38,597	$ 821,197		$ 21,276
2012	1,707	1,078	39,226	844,881	2.9%	21,539
2013	1,982	1,014	40,194	872,140	3.2%	21,698
2014	2,067	1,038	41,223	866,047	-0.7%	21,009
2015	2,140	1,094	42,269	883,578	2.0%	20,904
2016	2,441	706	44,004	934,930	5.8%	21,246
2017	2,181	1,269	44,916	921,302	-1.5%	20,512
2018	2,853	1,243	46,526	952,951	3.4%	20,482
			Hazardous			
2011	288	59	3,064	$ 45,609		$ 14,885
2012	243	54	3,253	49,231	7.9%	15,134
2013	229	52	3,430	51,122	3.8%	14,904
2014	256	66	3,620	54,272	6.2%	14,992
2015	203	65	3,758	56,431	4.0%	15,016
2016	237	29	3,966	59,001	4.6%	14,877
2017	206	79	4,093	59,162	0.3%	14,454
2018	321	44	4,370	64,050	8.3%	14,657

APPENDIX A

ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Methods and Assumptions

The following presents a summary of the actuarial assumptions and methods used in the valuation of the Kentucky Employees Retirement System.

In general, the assumptions and methods used in the valuation are based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014. The investment return, price inflation, and payroll growth assumption were adopted by the Board in May and July 2017 for use with the June 30, 2017 valuation in order to reflect future economic expectations.

Investment return rate:

Assumed annual rate of 5.25% net of investment expenses for the non-hazardous retirement fund
Assumed annual rate of 6.25% net of investment expenses for the hazardous retirement fund, non-hazardous insurance fund, and hazardous insurance fund

Price Inflation:

Assumed annual rate of 2.30%

Rates of Annual Salary Increase:

Assumed rates of annual salary increases are shown below.

Service Years	Annual Rates of Salary Increases				
	Merit & Seniority		Price Inflation & Productivity	Total Increase	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0	12.50%	16.50%	3.05%	15.55%	19.55%
1	4.50%	4.50%	3.05%	7.55%	7.55%
2	2.00%	2.50%	3.05%	5.05%	5.55%
3	1.50%	2.00%	3.05%	4.55%	5.05%
4	1.50%	1.50%	3.05%	4.55%	4.55%
5	1.50%	1.00%	3.05%	4.55%	4.05%
6	1.00%	0.50%	3.05%	4.05%	3.55%
7	1.00%	0.50%	3.05%	4.05%	3.55%
8	1.00%	0.50%	3.05%	4.05%	3.55%
9	0.50%	0.50%	3.05%	3.55%	3.55%
10 & Over	0.50%	0.50%	3.05%	3.55%	3.55%

Retirement rates:

Assumed annual rates of retirement are shown below. Rates are only applicable for members who are eligible for a service retirement.

Age	Non-Hazardous		Service	Hazardous	
	Members participating before 9/1/2008[1]	Members participating on or after 9/1/2008[2]		Members participating before 9/1/2008[3]	Members participating on or after 9/1/2008[4]
55	8.0%		20	40.0%	
56	8.0%		21	40.0%	
57	8.0%		22	40.0%	
58	8.0%		23	40.0%	
59	8.0%		24	40.0%	
60	10.0%	10.0%	25	47.0%	40.0%
61	20.0%	20.0%	26	47.0%	40.0%
62	20.0%	20.0%	27	47.0%	40.0%
63	20.0%	20.0%	28	47.0%	40.0%
64	20.0%	20.0%	29	47.0%	40.0%
65	20.0%	25.0%	30	47.0%	47.0%
66	20.0%	25.0%	31	47.0%	47.0%
67	20.0%	25.0%	32	50.0%	47.0%
68	20.0%	25.0%	33	50.0%	47.0%
69	20.0%	25.0%	34	50.0%	47.0%
70	20.0%	25.0%	35	60.0%	47.0%
71	20.0%	25.0%	36	60.0%	47.0%
72	20.0%	25.0%	37	60.0%	50.0%
73	20.0%	25.0%	38	60.0%	50.0%
74	20.0%	25.0%	39	60.0%	50.0%
75	100.0%	100.0%	40	60.0%	60.0%

[1] If service is at least 27 years, the rate is 35%.
[2] If age plus service is at least 87, the rate is 35%.
[3] The annual rate of service retirement is 100% at age 65.
[4] The annual rate of service retirement is 100% at age 60.

Disability rates:

An abbreviated table with assumed rates of disability is show below.

Age	Non-Hazardous		Hazardous	
	Male	Female	Male	Female
20	0.02%	0.02%	0.03%	0.03%
30	0.03%	0.03%	0.05%	0.05%
40	0.07%	0.07%	0.10%	0.10%
50	0.19%	0.19%	0.28%	0.28%
60	0.49%	0.49%	0.73%	0.73%

Withdrawal rates (for causes other than death, disability or retirement):

Assumed annual rates of withdrawal are shown below.

Service Years	Annual Rates of Withdrawal	
	Non-Hazardous	Hazardous
0	22.50%	25.00%
1	15.50%	10.50%
2	12.50%	7.50%
3	10.50%	6.50%
4	9.00%	5.50%
5	6.50%	4.50%
6	5.50%	3.00%
7	5.00%	3.00%
8	4.50%	3.00%
9	4.50%	2.50%
10	4.00%	2.50%
11-12	4.00%	2.00%
13-14	3.50%	2.00%
15 & Over	3.00%	2.00%

Mortality Assumption:

Pre-retirement mortality: RP-2000 Combined Mortality Table projected with Scale BB to 2013. Male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%.

Post-retirement mortality (non-disabled): RP-2000 Combined Mortality Table projected with Scale BB to 2013. Female mortality rates are set back one year.

Post-retirement mortality (disabled): RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013. Male mortality rates are set back four years.

At the time of the last experience study, performed as of June 30, 2013, this mortality assumption provided 37% and 19% margin for future improvement for males and females, respectively.

Marital status:

100% of employees are assumed to be married, with the female spouse 3 years younger than the male spouse.

Line of Duty Disability

0% of disabilities are assumed to occur in the line of duty

Line of Duty Death

25% of deaths are assumed to occur in the line of duty

Dependent Children:

For members in the Hazardous Plan who receive a duty-related death benefit, the member is assumed to be survived by two dependent children, each age 6 with payments for 15 years.

Form of Payment:

Members are assumed to elect a life-only annuity at retirement.

Actuarial Cost Method:

Entry Age Normal, Level Percentage of Pay. The Entry Age Normal actuarial cost method allocates the System's actuarial present value of future benefits to various periods based upon service. The portion of the present value of future benefits allocated to years of service prior to the valuation date is the actuarial accrued liability, and the portion allocated to years following the valuation date is the present value of future normal costs. The normal cost is determined for each active member as the level percent of pay necessary to fully fund the expected benefits to be earned over the career of each individual active member. The normal cost is partially funded with active member contributions with the remainder funded by employer contributions.

Health Care Age Related Morbidity/Claims Utilization:

To model the impact of aging on the underlying health care costs for Medicare retirees, the valuation relied on the Society of Actuaries' 2013 Study "Health Care Costs – From Birth to Death". Table 4 (Development of Plan Specific Medicare Age Curve) was used to model the impact of aging for ages 65 and over.

Health Care Cost Trend Rates[1]:

January 1	Non-Medicare Plans	Medicare Plans	Dollar Contribution[2]
2020	7.00%	5.00%	1.50%
2021	6.75%	4.90%	1.50%
2022	6.50%	4.80%	1.50%
2023	6.25%	4.70%	1.50%
2024	6.00%	4.60%	1.50%
2025	5.75%	4.50%	1.50%
2026	5.50%	4.40%	1.50%
2027	5.25%	4.30%	1.50%
2028	5.00%	4.20%	1.50%
2029	4.75%	4.10%	1.50%
2030	4.50%	4.05%	1.50%
2031	4.25%	4.05%	1.50%
2032 & Beyond	4.05%	4.05%	1.50%

[1]All increases are assumed to occur on January 1. The 2019 premiums were known at the time of the valuation and were incorporated into the liability measurement.

[2]Applies to members participating on or after July 1, 2003

Health care trend assumptions are based on the model issued by the Society of Actuaries "Getzen model of Long-Run Medical Cost Trends for the SOA; Thomas E. Getzen, iHEA and Temple University 2014 © Society of Actuaries.

The underlying assumptions used to develop the health care trend rates include:

- A short run period-this is a period for which anticipated health care trend rates are manually set based on local information as well as plan-specific and carrier information.
- Long term real GDP growth- 1.75%
- Long term rate of inflation- 2.30%
- Long term nominal GDP growth – 4.05%
- Year that excess rate converges to 0- 15 years from the valuation

Health care trend rates are thus the manually set rates for the short run period and rates which decline to an ultimate trend rate which equals the assumed nominal long term GDP growth rate.

Health Care Participation Assumptions:

- Members are assumed to elect health coverage at retirement at the following participation rates.

Service at Retirement	Members participating before 7/1/2003*	Members participating between 7/1/2003 and 9/1/2008	Members participating after 9/1/2008
Under 10	50%	100%	100%
10-14	75%	100%	100%
15-19	90%	100%	100%
Over 20	100%	100%	100%

* 100% of members with a duty disability or a duty death (in service) benefit are assumed to elect coverage at retirement.

- Future retirees are assumed to have a similar distribution by plan type as the current retirees.

Medicare Plan	Participation Percentage
Medical Only	7%
Essential	8%
Premium	86%

Non-Medicare Plan	Participation Percentage
LivingWell Limited	2%
LivingWell Basic	13%
LivingWell CDHP	27%
LivingWell PPO	58%

- 50% of deferred vested members participating before July 1, 2003 are assumed to elect health coverage at retirement. 100% of deferred vested members participating after July 1, 2003 are assumed to elect health coverage at retirement. Deferred vested members with non-hazardous service are assumed to begin health coverage at age 55 for members participating before September 1, 2008, and at age 60 for members participating on or after September 1, 2008. Deferred vested members with hazardous service are assumed to begin health coverage at age 50.

- 50% of future retirees, with hazardous service, are assumed to elect spouse health care coverage. No dependent coverage is assumed for members who only have non-hazardous service. 100% of spouses with health care coverage are assumed to continue coverage after the member's death.

Excise ("Cadillac") Tax:

For taxable years beginning after December 31, 2021, a 40% excise tax will be required to be paid (by the employer and/or insurer) on the aggregate cost of the health plan in excess of certain legislated thresholds. For 2018, the thresholds are $850 per month for individual coverage and $2,292 per month for family coverage.

Both Actuarial Standard of Practice No. 6 and GASB Statement Nos. 74 and 75 reference this tax, and, in accordance with these standards an estimate of the impact of the Cadillac tax has been included in this valuation.

Assumptions and methods used to determine the impact of the Cadillac Tax include:

- 2018 thresholds of $850/$2,292 were indexed annually by 2.30%.
- Premium data submitted was not adjusted for permissible exclusions to the Cadillac Tax.
- There were no special adjustments to the dollar limit other than those permissible for non-Medicare retirees over 55.

In this valuation, the impact of the Cadillac Tax has been calculated by increasing the employer paid premiums for Non-Medicare retirees, who became participants before July 1, 2003, by 3.6%. Non-Medicare retirees who became participants after July 1, 2003 receive dollar subsidies per year of service, which are not expected to exceed the overall Non-Medicare premiums. As a result, the costs attributable to the Cadillac Tax for members who became participants after July 1, 2003 will be paid by the retirees.

Changes in Assumptions since the prior valuation:

None.

Development of Baseline Claims Cost

For non-Medicare retirees, the initial per capita costs were based on the plan premiums effective January 1, 2019, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. The spouse/dependent premium of $865.74 for non-Medicare retirees is based on a blending of Family and Couple premiums for the current retirees that have over 4 years of hazardous service. The fully-insured premiums KRS pays the Kentucky Employees' Health Plan (KEHP) are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit rate subsidy for the non-Medicare eligible retirees. Actuarial Standard of Practice No. 6 (ASOP No. 6) requires aging subsidies (or implicit rate subsidies) to be recognized. However, the KRS health insurance trusts are only used to reimburse KEHP for the employer's portion of the blended premiums. Said another way, the trusts are not used to fund the difference between the underlying retiree claims and the blended KEHP premiums. As a result, the retiree health care liabilities developed in this report for the non-Medicare retirees are based solely on the premiums charged by KEHP, without any age-adjustment. GASB Statements No. 74 and No. 75 prohibit such a deviation from ASOP No. 6. The liabilities developed in this report are solely for the purpose of funding the benefits paid by the health insurance funds and are not appropriate for financial statement disclosures required by GASB. GRS provides separate GASB reports to KRS which include the liabilities associated with the implicit rate subsidy.

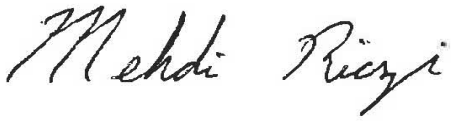
For those not eligible for Medicare		
Age	Member	Spouse/Dependents
<65	$717.39	$865.74

For Medicare retirees, the initial per capita costs were estimated based on the plan premiums effective January 1, 2019, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. Age graded and sex distinct premiums are utilized for retirees over the age of 65. These costs are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

For those eligible for Medicare		
Age	Male	Female
65	$183.50	$173.08
75	214.69	209.49
85	227.02	229.07

Appendix B of the report provides a full schedule of premiums.

Mehdi Riazi is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.



Mehdi Riazi, FSA, EA, MAAA

APPENDIX B

BENEFIT PROVISIONS

Summary of Benefit Provisions for Kentucky Employees Retirement System (KERS)

KERS Non-Hazardous Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 65 with at least 1 month of service credit; or Any age with at least 27 years of service
Benefit Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% times final average compensation times years of service. For members who did not have 13 months of service credit for 1/1/1998-1/1/1999, the monthly benefit is 1.97% times final average compensation times years of service. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 5 years of compensation.
Early Retirement Eligibility	Any age (prior to age 65) with at least 25 years of service; or Age 55 with at least 5 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement eligibility precedes the member's normal retirement date.

KERS Non-Hazardous Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 65 with at least 5 years of service; or Rule of 87 (Age 57 or older if age plus service equals 87)
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.10%
10-20	1.30%
20-26	1.50%
26-30	1.75%
Greater than 30*	2.00%

* The 2.00% benefit multiplier only applies to service credit in excess of 30 years. If a member has greater than 30 years of service at retirement, service prior to 30 years will be multiplied by the 1.75% benefit multiplier.

Final compensation is based on the member's last 5 years of compensation.

Early Retirement Eligibility	Age 60 with at least 10 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 65 with at least 5 years of service; or Rule of 87 (Age 57 or older if age plus service equals 87)
Benefit Amount	Each year that the member is active, a 4.00% employer pay credit and the employee's 5.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

KERS Non-Hazardous Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 65th birthday, with total service not exceeding 25 years. Total service credit added shall not be greater than the member's actual service at disability. For members with at least 25 years of service on the last day of paid employment but less than 27 years of service, total service shall be 27 years. For members with 27 or more years of service credit, actual service will be used.

KERS Non-Hazardous Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 20% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 20% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Line of Duty Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly rate of pay. Additionally, each eligible dependent child will receive 10% of the member's monthly final rate of pay up to a maximum of 40%.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 55 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 75% of the deceased member's final monthly average pay. Each dependent child will receive 10% of average pay (not to exceed a total child benefit of 25% while the spouse is alive). A spouse may also elect the non-line of duty death benefit.
Child Benefit	In the event there is no surviving spouse, the benefit is 50% of final monthly average pay for one child, 65% of final average pay for two children, or 75% of final average pay for three or more eligible children.

KERS Non-Hazardous Employees (continued)

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	5% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the KRS board, not less than 2.0%.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	5% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	5% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes since the Prior Valuation

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members paid from the retirement fund have been increased from 25% of the member's final rate of pay to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children.

KERS Hazardous Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 55 with at least 1 month of service credit; or Any age with at least 20 years of service
Benefit Amount	If a member has at least 60 months of service, the monthly benefit is 2.49% times final average compensation times years of service. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 3 years of compensation.
Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

KERS Hazardous Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.30%
10-20	1.50%
20-25	2.25%
Greater than 25	2.50%

Final average compensation is based on the member's highest 3 years of compensation.

Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	Each year that the member is active, a 7.50% employer pay credit and the employee's 8.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

KERS Hazardous Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that if the member has less than 20 years of service at disability, service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 55th birthday, with total service not exceeding 20 years. Total service credit added shall not be greater than the member's actual service at disability.

KERS Hazardous Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Line of Duty Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly rate of pay. Additionally, each eligible dependent child will receive 10% of the member's monthly final rate of pay up to a maximum of 40%.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 55 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 75% of the deceased member's final average pay. Each dependent child will receive 10% of average pay (not to exceed a total child benefit of 25% while the spouse is alive). A spouse may also elect the non-line of duty death benefit.
Non-Spouse Benefit	If the beneficiary is only one person who is a dependent receiving at least 50% of his or her support from the member, the beneficiary may elect a lump-sum payment of $10,000.
Child Benefit	In the event there is no surviving spouse, the benefit is 50% of final monthly average pay for one child, 65% of final average pay for two children, or 75% of final average pay for three or more eligible children.

KERS Hazardous Employees (continued)

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	8% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the KRS board, not less than 2.0%.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes since the Prior Valuation

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members paid from the retirement fund have been increased from 25% of the member's final rate of pay to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children.

Summary of Main Retiree Insurance Benefit Provisions

Insurance Tier 1: Participation began before 7/1/2003

Benefit Eligibility Recipient of a retirement allowance

Benefit Amount

Non-Hazardous Service	Percentage of Member Premium Paid by Retirement System	Hazardous Service	Percentage of Member & Dependent Premium Paid by Retirement System
Less than 4 years	0%	Less than 4 years	0%
4 – 9 years	25%	4 – 9 years	25%
10 – 14 years	50%	10 – 14 years	50%
15 – 19 years	75%	15 – 19 years	75%
20 or more years	100%	20 or more years	100%

The percentage paid by the retirement system is applied to the 'contribution' plan selected by the KRS Board.

Duty Disability Retirement If disability was a result of injuries sustained while in the line of duty, the member receives 100% of the maximum contribution for the member and dependents. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.

Duty Death in Service If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive a fully subsidized health insurance benefit. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.

Non-Duty Death in Service If the surviving spouses is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Surviving Spouse of a Retiree A surviving spouse of a retiree, who is in receipt of a pension allowance, will receive a premium subsidy based on the member's years of hazardous service.

Hazardous employees who retired prior to August 1, 1998 System's contribution for spouse and dependents is based on total service.

Insurance Tier 2: Participation began on or after 7/1/2003, but before 9/1/2008

Benefit Eligibility	Recipient of a retirement allowance with at least 120 months of service at retirement
Non-Hazardous Subsidy	Monthly contribution of $10 for each year of earned service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $13.18/year of service. Upon the retiree's death, the surviving spouse may continue coverage (if in receipt of a retirement allowance) but will be 100% responsible for the premiums.
Hazardous Subsidy	Monthly contribution of $15 for each year of earned hazardous service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $19.77/year of service. Upon the retiree's death, the surviving spouse of a hazardous duty member will receive a monthly contribution of $10 ($13.18 as of July 1, 2017) for each year of hazardous service.
Duty Disability Retirement	If disability was a result of injuries sustained while in the line of duty, the member receives a benefit equal to at least 20 times the Non-Hazardous monthly contribution. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.
Duty Death in Service	If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive a fully subsidized health insurance benefit. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.
Non-Duty Death in Service	If the surviving spouse is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Insurance Tier 3: Participation began on or after 9/1/2008

Tier 3 insurance benefits are identical to Tier 2, except Tier 3 members are required to have at least 180 months of service in order to be eligible.

Monthly Health Plan Premiums – Effective January 1, 2019

Non-Medicare Plan Options					
Plan Option	Single	Parent Plus	Couple	Family	Family X-Ref
LivingWell PPO*	$729.34	$1,037.08	$1,589.10	$1,767.60	$876.68
LivingWell CDHP	709.46	978.50	1,333.64	1,479.76	818.96
LivingWell Basic	682.80	940.64	1,450.02	1,615.30	800.94
Living Well Limited	607.54	865.08	1,327.16	1,477.04	730.90

Medicare Plan Options	
Kentucky Retirement Systems - Medical Only Plan	$175.22
Kentucky Retirement Systems – Medicare Advantage/Essential Plan	53.73
Kentucky Retirement Systems – Medicare Advantage/Premium Plan*	220.11

*For 2019, the contribution plans selected by the KRS Board were the LivingWell PPO plan option for non-Medicare retirees and the Medicare Advantage Premium plan option for Medicare retirees.

Dollar Contribution Amount for Insurance Tier 2 and Tier 3

Monthly contribution amounts per year of service as of July 1, 2018.

Non-Hazardous Service	Hazardous Service
$13.38	$20.07

Changes since the Prior Valuation

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. The insurance fund shall now pay 100% of the insurance premium for spouses and children of all active members who die in the line of duty.

APPENDIX C

GLOSSARY

Glossary

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or ***Funding Method:*** A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ADC.

Actuarial Gain or ***Actuarial Loss:*** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)

b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, non-retired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations that provide the financial information of the plan, such as the funded ratio, unfunded actuarial accrued liability and the ADC.

Actuarial Value of Assets or ***Valuation Assets:*** The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Actuarially Determined Contribution (ADC): The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADC consists of the Employer Normal Cost and the Amortization Payment.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment: The portion of the pension plan contribution or ADC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Closed Amortization Period: A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.

Funding Period or ***Amortization Period:*** The term "Funding Period" is used two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ADC. This funding period is specified in State statute. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on a statutory employer contribution rate, and assuming no future actuarial gains or losses.

GASB: Governmental Accounting Standards Board.

GASB 67 and ***GASB 68***: Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting and reporting rules for public retirement systems and the employers that sponsor, participate in, or contribute to them. Statement No. 67 sets the accounting rules for the financial reporting of the retirement systems, while Statement No. 68 sets the rules for the employers that sponsor, participate in, or contribute to public retirement systems.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded

Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but may not decrease by exactly one year in the subsequent year's actuarial valuation. For instance, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year.

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

Valuation Date or Actuarial Valuation Date: The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

County Employees Retirement System (CERS)

Actuarial Valuation Report
as of June 30, 2018

GRS Retirement Consulting

P: 469.524.0000 | F: 469.524.0003 | www.grsconsulting.com

October 31, 2018

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Actuarial Valuation as of June 30, 2018

Dear Trustees of the Board:

This report describes the current actuarial condition of the County Employees Retirement System (CERS), provides the actuarially determined employer contribution rates for fiscal year ending June 30, 2020, and analyzes changes in the System's financial condition. In addition, the report provides various summaries of the data.

Separate reports are issued with regard to valuation results determined in accordance with Governmental Accounting Standards Board (GASB) Statements 67, 68, 74 and 75. Results of this report should not be used for any other purpose without consultation with the undersigned. Valuations are prepared annually as of June 30, the first day of the plan year for KRS. This report was prepared at the request of the Board of Trustees of the Kentucky Retirement System (Board) and is intended for use by the KRS staff and those designated or approved by the Board.

FINANCING OBJECTIVES AND FUNDING POLICY

The employer contribution rate is determined in accordance with Section 61.565 of Kentucky Statute. As specified by the Statute, the employer contribution rate is determined based on a closed thirty-year amortization period beginning July 1, 2013. As a result, the amortization period used in the 2018 actuarial valuation is 25 years. The contribution rate determined by this actuarial valuation becomes effective twelve months after the valuation date. In other words, the contribution rate determined by this June 30, 2018 actuarial valuation will be used by the Board to certify the participating employer's contribution rates for the fiscal year July 1, 2019 and ending June 30, 2020.

If new legislation is enacted between the valuation date and the date the contribution rate becomes effective, the Board may adjust the calculated rate before certifying them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

ASSUMPTIONS AND METHODS

There were no changes in actuarial assumptions since the prior actuarial valuation. It is our opinion that the current assumptions are internally consistent and reasonably reflect the anticipated future experience of the System.

Kentucky Statutes also require that an actuarial investigation be performed at least every five years to review the economic and demographic assumptions. An experience study was conducted as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018 and the Board adopted assumptions as a result of that analysis will be first used to prepare the June 30, 2019 actuarial valuation. The Board also has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

BENEFIT PROVISIONS

The benefit provisions reflected in these valuations are those which were in effect on June 30, 2018. During the 2018 legislative session House Bill 185 was enacted which provided increased retirement and health insurance benefits for active members who die in the line of duty. House Bill 362 limits the increase in the CERS employer contribution rate over the prior fiscal year to 12% per year for the period of July 1, 2018 to June 30, 2028.

This actuarial valuation was determined without regard to the enactment of SB 151 in 2018, which is currently being reviewed by the State Supreme Court.

DATA

Member data for retired, active and inactive members was supplied as of June 30, 2018, by the KRS staff. The staff also supplied asset information as of June 30, 2018. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by KRS.

CERTIFICATION

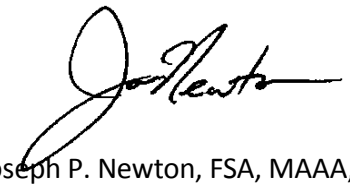
We certify that the information presented herein is accurate and fairly portrays the actuarial position of CERS as of June 30, 2018.

All of our work conforms with generally accepted actuarial principles and practices, and is in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

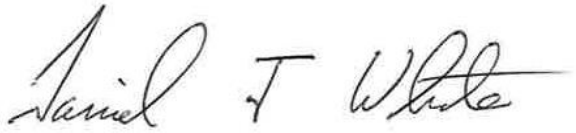
The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,

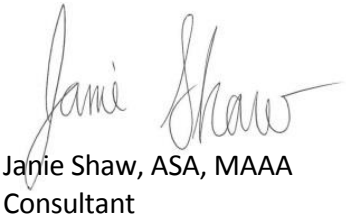
Gabriel, Roeder, Smith & Co.



Joseph P. Newton, FSA, MAAA, EA
Senior Consultant



Daniel J. White, FSA, MAAA, EA
Senior Consultant



Janie Shaw, ASA, MAAA
Consultant

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SECTION 1

EXECUTIVE SUMMARY

Summary of Principal Results

(Dollar amounts expressed in thousands)

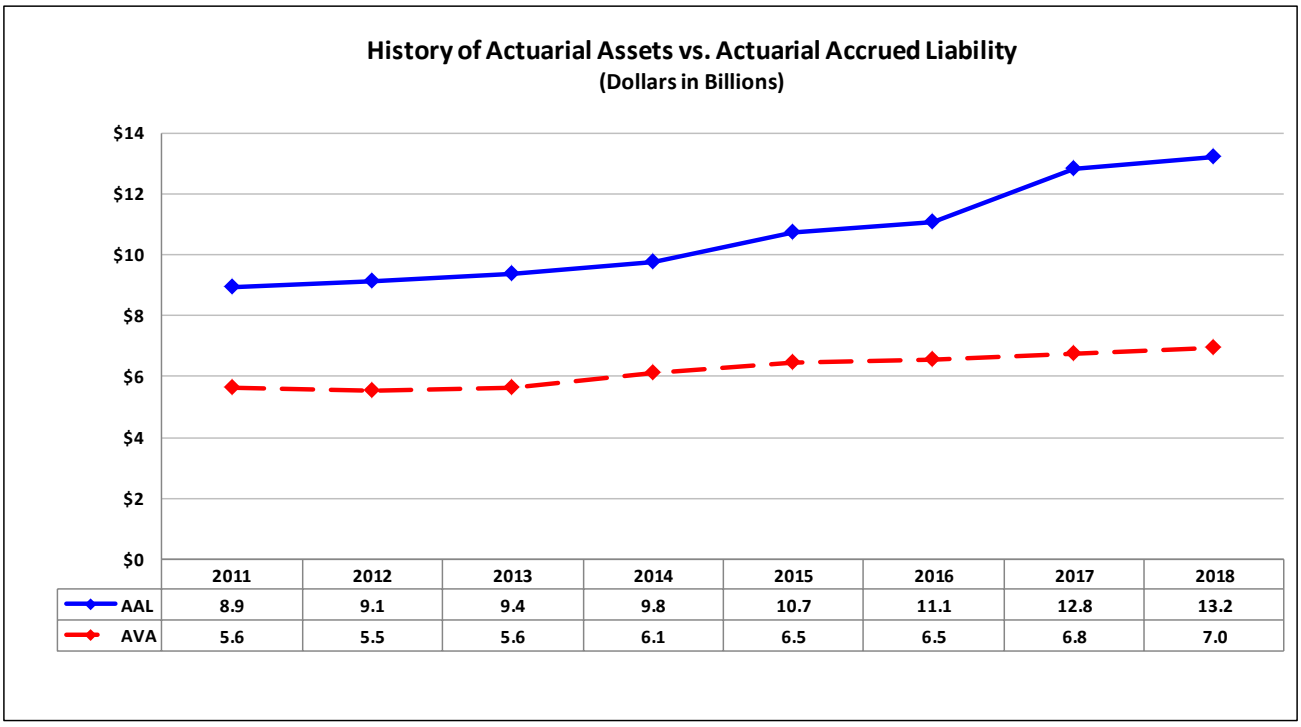
	Non-Hazardous		Hazardous		Total	
	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Actuarially Determined Contribution:						
Retirement	22.52%	21.84%	36.98%	35.69%		
Insurance	4.76%	6.21%	9.52%	12.17%		
Total	27.28%	28.05%	46.50%	47.86%	N/A	N/A
Actual Contribution Rate for Next Fiscal Year[1]	24.06%	21.48%	39.58%	35.34%		
Assets:						
Retirement						
• Actuarial value (AVAR)	$6,950,225	$6,764,873	$2,321,721	$2,238,320	$9,271,946	$9,003,193
• Market value (MVAR)	$7,018,963	$6,687,237	$2,348,337	$2,217,996	$9,367,300	$8,905,233
• Ratio of actuarial to market value of assets	99.0%	101.2%	98.9%	100.9%	99.0%	101.1%
Insurance						
• Actuarial value (AVAI)	$2,371,430	$2,227,401	$1,256,306	$1,196,780	$3,627,736	$3,424,181
• Market value (MVAI)	$2,414,126	$2,212,536	$1,280,982	$1,189,001	$3,695,108	$3,401,537
• Ratio of actuarial to market value of assets	98.2%	100.7%	98.1%	100.7%	98.2%	100.7%
Funded Status:						
Retirement						
• Actuarial accrued liability	$13,191,505	$12,803,510	$4,792,548	$4,649,047	$17,984,053	$17,452,557
• Unfunded accrued liability on AVAR	$6,241,280	$6,038,637	$2,470,827	$2,410,727	$8,712,107	$8,449,364
• Funded ratio on AVAR	52.7%	52.8%	48.4%	48.1%	51.6%	51.6%
• Unfunded accrued liability on MVAR	$6,172,542	$6,116,273	$2,444,211	$2,431,051	$8,616,753	$8,547,324
• Funded ratio on MVAR	53.2%	52.2%	49.0%	47.7%	52.1%	51.0%
Insurance						
• Actuarial accrued liability	$3,092,624	$3,355,151	$1,684,028	$1,788,433	$4,776,652	$5,143,584
• Unfunded accrued liability on AVAI	$721,194	$1,127,750	$427,722	$591,653	$1,148,916	$1,719,403
• Funded ratio on AVAI	76.7%	66.4%	74.6%	66.9%	75.9%	66.6%
• Unfunded accrued liability on MVAI	$678,498	$1,142,615	$403,046	$599,432	$1,081,544	$1,742,047
• Funded ratio on MVAI	78.1%	65.9%	76.1%	66.5%	77.4%	66.1%
Membership:						
• Number of						
- Active Members	81,818	82,198	9,263	9,495	91,081	91,693
- Retirees and Beneficiaries	61,938	59,013	9,587	8,998	71,525	68,011
- Inactive Members	87,160	85,031	3,067	3,198	90,227	88,229
- Total	230,916	226,242	21,917	21,691	252,833	247,933
• Projected payroll of active members	$2,466,801	$2,452,407	$533,618	$541,633	$3,000,419	$2,994,040
• Average salary of active members	$30,150	$29,835	$57,607	$57,044	$32,942	$32,653

[1] Based on a 12% increase in the certified contribution rates from fiscal year ending 2018 in accordance with House Bill 362

Executive Summary (Continued)

Non-Hazardous Retirement Fund

The unfunded actuarial accrued liability for the non-hazardous retirement fund increased by $0.202 billion since the prior year's valuation to $6.241 billion. The largest source of this increase includes the FY 2018 contribution effort to finance the unfunded liability being $0.117 billion less than the interest on the prior year's unfunded actuarial accrued liability (i.e. negative amortization of $0.117 billion) and a $0.082 billion increase due to liability experience. Below is a chart with the historical actuarial value of assets and actuarial accrued liability for the non-hazardous fund. The divergence in the assets and liability over the last eight years has generally been due to a combination of the actual investment experience being less than the fund's expected investment return assumption, and a decrease in the assumed rate of return in 2015 and again in 2017.



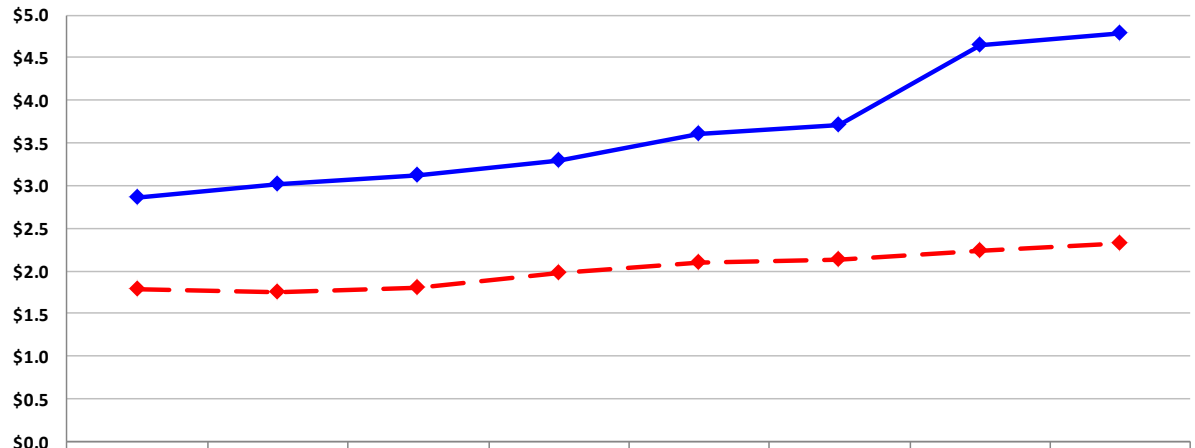
	2011	2012	2013	2014	2015	2016	2017	2018
AAL	8.9	9.1	9.4	9.8	10.7	11.1	12.8	13.2
AVA	5.6	5.5	5.6	6.1	6.5	6.5	6.8	7.0

Executive Summary (Continued)

Hazardous Retirement Fund

The unfunded actuarial accrued liability for the hazardous retirement fund increased by $0.060 billion since the prior year's valuation to $2.471 billion. The largest source of this increase includes the FY 2018 contribution effort to finance the unfunded liability being $0.039 billion less than the interest on the prior year's unfunded actuarial accrued liability (i.e. negative amortization of $0.039 billion) and $0.026 billion increase due to liability experience. Below is a chart with the historical actuarial value of assets and actuarial accrued liability for the hazardous retirement fund. The divergence in the assets and liability over the last eight years has generally been due to a combination of the actual contribution rates being less than the fund's expected investment return assumption, and a decrease in the assumed rate of return in 2015 and again in 2017.

History of Actuarial Assets vs. Actuarial Accrued Liability
(Dollars in Billions)



	2011	2012	2013	2014	2015	2016	2017	2018
AAL	2.9	3.0	3.1	3.3	3.6	3.7	4.6	4.8
AVA	1.8	1.7	1.8	2.0	2.1	2.1	2.2	2.3

Executive Summary (Continued)

Summary of Change in Financial Condition of the Insurance Funds

Both the Non-Hazardous and Hazardous Insurance funds experience extremely favorable premium experience from calendar year 2018 to 2019. Specifically, the non-Medicare premiums were expected to increase by 7.25% from calendar year 2018 to calendar year 2019 (i.e. the medical trend assumption for non-Medicare premiums used in the actuarial valuation) and the actual average premiums remained relatively unchanged. Also, the Medicare premiums were expected to increase by 5.10% from calendar year 2018 to calendar year 2019 (i.e. the medical trend assumption used in the actuarial valuation for Medicare premium) and the actual average premiums decreased by 12%.

Non-Hazardous Insurance Fund

Since the prior year's valuation the unfunded actuarial accrued liability for the nonhazardous insurance fund decreased by $0.407 billion to $0.721 billion with $0.389 billion of that decrease attributable to the favorable premium experience. The corresponding funded ratio increased from 66.4% at June 30, 2017 to 76.7% at June 30, 2018.

Hazardous Insurance Fund

Since the prior year's valuation the unfunded actuarial accrued liability for the hazardous insurance fund decreased by $0.164 billion to $0.428 billion with $0.172 billion of that decrease attributable to the favorable premium experience. The corresponding funded ratio increased from 66.9% at June 30, 2017 to 74.6% at June 30, 2018.

SECTION 2

DISCUSSION

Discussion

The County Employees Retirement System (CERS) is a defined benefit pension fund that provides pensions and health care coverage for employees of state government, non-teaching staff at regional state supported universities, local health departments, regional mental health/mental retardation agencies, and other quasi-state agencies. CERS includes both non-hazardous and hazardous duty benefits. This report presents the result of the June 30, 2018 actuarial funding valuation for both the Retirement and Insurance Funds.

The primary purposes of the valuation report are to depict the current financial condition of the System, determine the annual required contribution, and analyze changes in the System's financial condition. In addition, the report provides various summaries of the data.

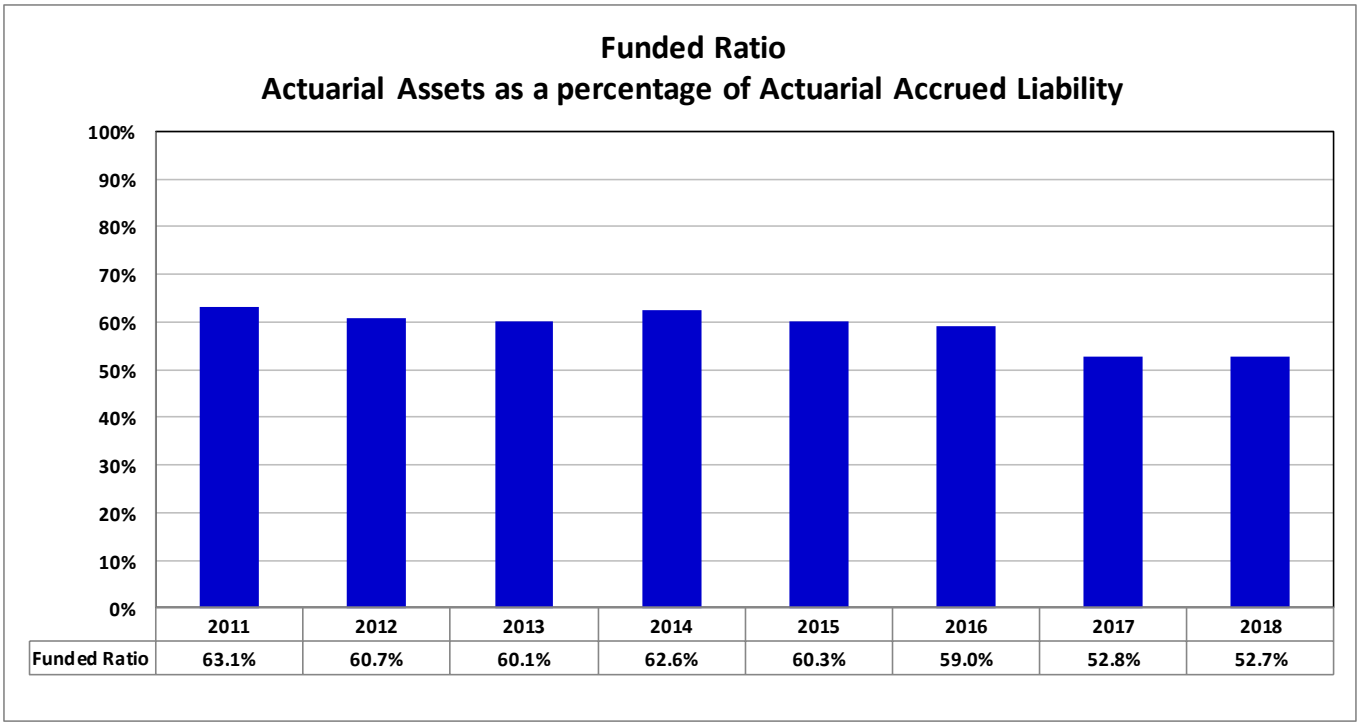
The actuarially determined contribution rates consist of two components: a normal cost rate and an amortization cost to finance the unfunded actuarial accrued liability. The normal cost rate is the theoretical amount which would be required to pay the members' benefits, based on the current plan provisions, if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. This is the amount it should cost to provide the benefits for an average new member. Since members contribute to the fund, only the excess of the normal rate over the member contribution rate is included in the employer contribution rate. The amortization cost is the amount, expressed as a percentage of payroll, necessary to amortize the unfunded actuarial accrued liability. The payroll growth rate and discount rate assumptions are selected by the Board. The funding period is specified in Section 61.565 of Kentucky Statute.

All of the actuarial and financial tables referenced by the other sections of this Report appear in Section 3. Section 4 provides member data and statistical information. Appendices A and B provide summaries of the principle actuarial assumptions and methods and plan provisions. Finally, Appendix C provides a glossary of technical terms that are used throughout this report.

Funding Progress

The following charts provide an eight-year history of the funded ratio (i.e. the Actuarial Value of Assets divided by the Actuarial Accrued Liability) for the retirement funds. The decline in the funded ratio over the last eight years for the retirement funds has generally been due to actual investment experience being less than the investment return assumption, and a decrease in the assumed rate of return in 2015 and again in 2017.

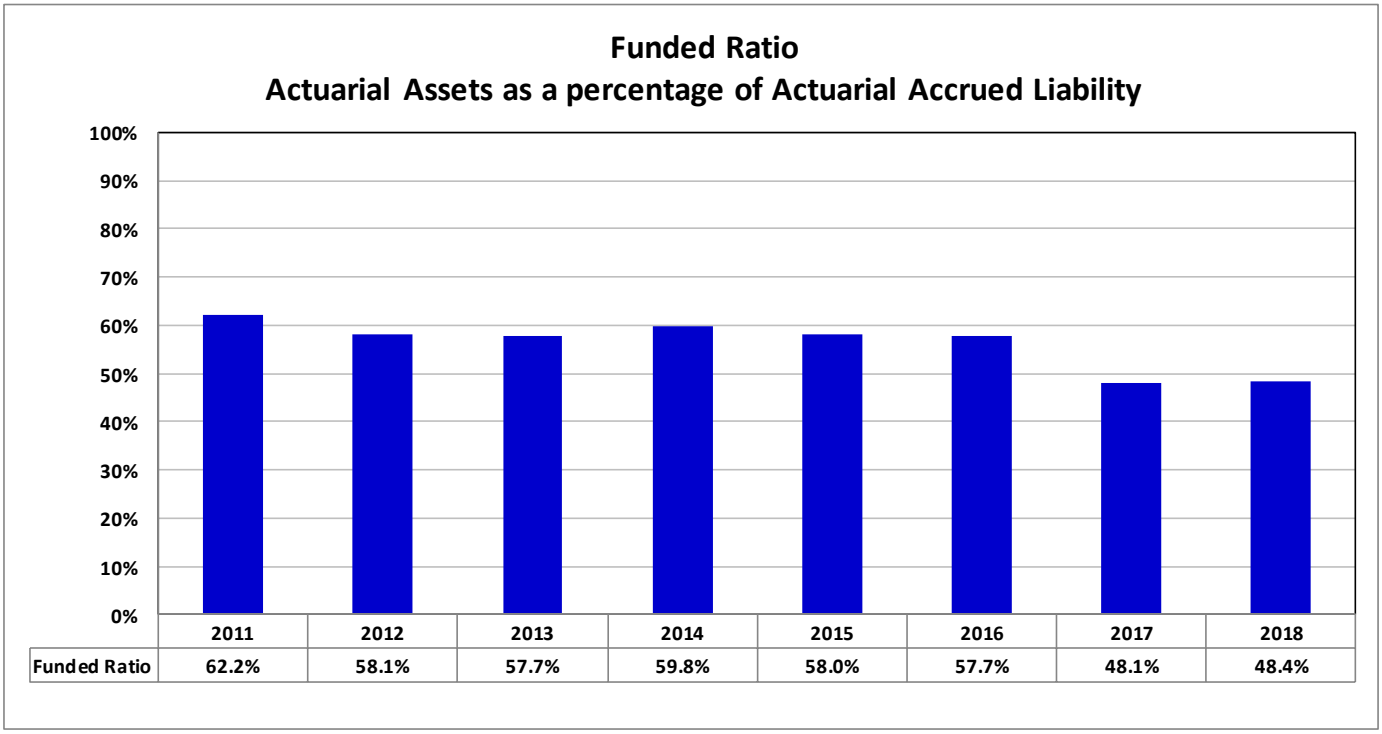
Non-Hazardous Retirement Fund



	2011	2012	2013	2014	2015	2016	2017	2018
Funded Ratio	63.1%	60.7%	60.1%	62.6%	60.3%	59.0%	52.8%	52.7%

Funding Progress (Continued)

Hazardous Retirement Fund



	2011	2012	2013	2014	2015	2016	2017	2018
Funded Ratio	62.2%	58.1%	57.7%	59.8%	58.0%	57.7%	48.1%	48.4%

Assuming the actuarial determined contributions are actually paid in future years and absent future unfavorable investment or demographic experience, we expect the funded ratio to slowly improve for both the nonhazardous and hazardous systems. Table 9, Schedule of Funding Progress, in the following section of the report provides additional detail regarding the funding progress of the Retirement System.

Asset Gains/ (Losses)

The actuarial value of assets ("AVA") is based on a smoothed market value of assets, using a systematic approach to phase-in the difference between the actual and expected investment return on the market value of assets (adjusted for receipts and disbursements during the year). This is appropriate because it dampens the short-term volatility inherent in investment markets. The returns are computed net of investment expenses. The actuarial value of assets for the non-hazardous retirement fund increased from $6.765 billion to $6.950 billion since the prior valuation. Table 7 in the following section of the report provides the development of the actuarial value of assets.

The rate of return on the market value of assets on a dollar-weighted basis for fiscal year 2018 was 8.7% for the non-hazardous retirement fund which is greater than the 6.25% expected rate of return. The return on an actuarial (smoothed) asset value was 6.4%, which resulted in a $0.012 billion gain for the fiscal year. This difference in the estimated return on market value and actuarial value illustrates the smoothing effect of the asset valuation method.

The market value of assets is $0.069 billion more than the actuarial value of assets, which signifies that this system has some net deferred investment gains to be realized in future years.

Likewise, the actuarial value of assets for the hazardous retirement fund increased from $2.238 billion to $2.322 billion since the prior valuation. The rate of return on the market value of assets on a dollar-weighted basis for fiscal year 2018 was 8.7% which is greater than the 6.25% expected return. The return on the actuarial (smoothed) asset value was 6.5%, which resulted in a $6 million gain for the fiscal year. The market value of assets is $0.027 billion greater than the actuarial value of assets, which signifies that this system has some net deferred investment gains to be realized in future years.

Table 6 in the following section of this report provides asset information that was included in the annual financial statements of the System. Also, Tables 6 and 7 shows the estimated yield on a market value basis and on the actuarial asset valuation method.

Actuarial Gains/ (Losses)

The annual actuarial valuation is a snapshot analysis of the benefit liabilities, assets and funded position of the System as of the first day of the plan year. In any one fiscal year, the experience can be better or worse from that which is assumed or expected. The actuarial assumptions do not necessarily attempt to model what the experience will be for any one given fiscal year, but instead try to model the overall experience over many years. Therefore, as long as the actual experience of the retirement system is reasonably close to the current assumptions, the long-term funding requirements of the System will remain relatively consistent.

Below are tables that separately show a reconciliation of the actuarial gains / (loss) since the prior actuarial valuation for the retirement and health insurance funds, which include the effect of asset and liability gains and losses, changes in assumptions, changes in plan provisions, etc.

Retirement Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

	Non-Hazardous	Hazardous
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ 6,038,636	$ 2,410,727
2. Normal cost and administrative expenses	266,086	80,053
3. Less: contributions for the year	(518,748)	(188,860)
4. Interest accrual	369,519	147,270
5. Expected UAAL (Sum of Items 1 - 4)	$ 6,155,493	$ 2,449,190
6. Actual UAAL as of June 30,2018	$ 6,241,280	$ 2,470,827
7. Total gain (loss) for the year (Item 5 - Item 6)	$ (85,787)	$ (21,637)
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ 12,130	$ 6,388
9. Liability experience gain (loss) for the year	(82,209)	(25,853)
10. Plan Change	(15,708)	(2,172)
11. Assumption change	0	0
12. Total	$ (85,787)	$ (21,637)

The UAAL for both retirement funds was expected to increase since the prior year as the FY 2018 contribution effort was less than the interest on the prior year's unfunded actuarial accrued liability (i.e. negative amortization). The UAAL is expected to remain relatively unchanged for the next few years until it begins to decrease after the phase-in to the higher contribution rates become effective.

Actuarial Gains/ (Losses) (Continued)

Insurance Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

	Non-Hazardous	Hazardous
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ 1,127,750	$ 591,653
2. Normal cost and administrative expenses	87,442	29,502
3. Less: contributions for the year	(135,519)	(58,215)
4. Interest accrual	68,982	36,081
5. Expected UAAL (Sum of Items 1 - 4)	$ 1,148,655	$ 599,021
6. Actual UAAL as of June 30,2018	$ 721,194	$ 427,722
7. Total gain (loss) for the year (Item 5 - Item 6)	$ 427,461	$ 171,299
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ 5,309	$ 3,159
9. Liability experience gain (loss) for the year	424,524	168,622
10. Plan Change	(2,372)	(482)
11. Assumption change	0	0
12. Total	$ 427,461	$ 171,299

The favorable premium experience from calendar year 2018 to calendar year 2019 resulted in a $389 million liability gain for the non-hazardous insurance fund and a $172 million liability gain for the hazardous insurance fund.

Actuarial Assumptions and Methods

In determining costs and liabilities, actuaries use assumptions about the future, such as rates of salary increase, probabilities of retirement, termination, death and disability, and an annual investment return assumption. There were no changes to the actuarial assumptions and methods since the last actuarial valuation. It is our opinion that the assumptions are internally consistent, reasonable, and reflect anticipated future experience of the System. Appendix A includes a summary of the actuarial assumptions and methods used in this valuation.

An experience study was conducted as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018, the results of which will be first used in preparing the June 30, 2019 actuarial valuation. However, the Board has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. This report does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

Benefit Provisions

Appendix B of this report includes a summary of the benefit provisions for CERS.

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members paid from the retirement fund have been increased from 25% of the member's final rate of pay to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children. The insurance fund shall also now pay 100% of the insurance premium for spouses and children of all active members who die in the line of duty.

Also, House Bill 362 was enacted during the 2018 legislative session that limits the increase in the CERS employer contribution rate over the prior fiscal year to 12% per year for the period of July 1, 2018 to June 30, 2028.

Please note that this actuarial valuation was determined without regard to enactment of SB 151 in 2018, which is currently being reviewed by the State Supreme Court.

This valuation reflects all benefits promised to CERS members, either by the statutes or by the Board. There are no ancillary benefits that might be deemed a CERS liability if continued beyond the availability of funding by the current funding source.

SECTION 3

ACTUARIAL TABLES

Actuarial Tables

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2	19	ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS
3	20	DEVELOPMENT OF REQUIRED CONTRIBUTION RATE
4	21	ACTUARIAL BALANCE SHEET – NON-HAZARDOUS MEMBERS
5	22	ACTUARIAL BALANCE SHEET – HAZARDOUS MEMBERS
6	23	RECONCILIATION OF SYSTEM NET ASSETS
7	24	DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS – NON-HAZARDOUS MEMBERS
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9	26	SCHEDULE OF FUNDING PROGRESS
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RETIREMENT BENEFITS

ACTUARIAL TABLES

Development of Unfunded Actuarial Accrued Liability
Retirement Benefits

(Dollar amounts expressed in thousands)

		June 30, 2018	
		Non-Hazardous (1)	Hazardous (2)
1.	Projected payroll of active members	$ 2,466,801	$ 533,618
2.	Present value of future pay	$ 19,527,842	$ 3,460,652
3.	Normal cost rate		
	a. Total normal cost rate	10.01%	14.07%
	b. Less: member contribution rate	-5.00%	-8.00%
	c. Employer normal cost rate	5.01%	6.07%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 6,821,795	$ 2,098,696
	b. Less: present value of future normal costs	(1,827,009)	(457,206)
	c. Actuarial accrued liability	$ 4,994,786	$ 1,641,490
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 7,754,521	$ 3,094,100
	b. Inactive members	442,198	56,958
	c. Active members (Item 4c)	4,994,786	1,641,490
	d. Total	$ 13,191,505	$ 4,792,548
6.	Actuarial value of assets	$ 6,950,225	$ 2,321,721
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 6,241,280	$ 2,470,827
8.	Funded Ratio	52.7%	48.4%

Actuarial Present Value of Future Benefits
Retirement Benefits
(Dollar amounts expressed in thousands)

		June 30, 2018	
		Non-Hazardous (1)	Hazardous (2)
1.	Active members		
	a. Service retirement	$ 6,194,197	$ 1,782,058
	b. Deferred termination benefits and refunds	374,526	253,193
	c. Survivor benefits	114,364	14,203
	d. Disability benefits	138,708	49,242
	e. Total	$ 6,821,795	$ 2,098,696
2.	Retired members		
	a. Service retirement	$ 6,818,513	$ 2,814,815
	b. Disability retirement	492,386	110,115
	c. Beneficiaries	443,622	169,170
	d. Total	$ 7,754,521	$ 3,094,100
3.	Inactive members		
	a. Vested terminations	$ 366,025	$ 51,047
	b. Nonvested terminations	76,173	5,911
	c. Total	$ 442,198	$ 56,958
4.	Total actuarial present value of future benefits	$ 15,018,514	$ 5,249,754

Development of Actuarially Determined Contribution Rate
Retirement Benefits

		June 30, 2018	
		Non-Hazardous (1)	Hazardous (2)
1.	Total normal cost rate		
	a. Service retirement	7.59%	8.57%
	b. Deferred termination benefits and refunds	1.76%	4.76%
	c. Survivor benefits	0.32%	0.20%
	d. Disability benefits	0.34%	0.54%
	e. Total	10.01%	14.07%
2.	Less: member contribution rate	-5.00%	-8.00%
3.	Total employer normal cost rate	5.01%	6.07%
4.	Administrative expenses	0.79%	0.28%
5.	Net employer normal cost rate	5.80%	6.35%
6.	UAAL amortization contribution	16.72%	30.63%
7.	Total calculated employer contribution	22.52%	36.98%

Actuarial Balance Sheet

Non-Hazardous Members Retirement

(Dollar amounts expressed in thousands)

		June 30, 2018 (1)	June 30, 2017 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 6,950,225	$ 6,764,873
	b. Present value of future member contributions	$ 976,392	$ 961,800
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 850,617	$ 870,845
	ii. Unfunded accrued liability contributions	6,241,280	6,038,637
	iii. Total future employer contributions	$ 7,091,897	$ 6,909,482
	d. Total assets	$ 15,018,514	$ 14,636,155
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 1,827,009	$ 1,832,645
	ii. Accrued liability	4,994,786	5,071,828
	iii. Total present value of future benefits	$ 6,821,795	$ 6,904,473
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 7,754,521	$ 7,313,076
	c. Present value of benefits payable on account of current inactive members	$ 442,198	$ 418,606
	d. Total liabilities	$ 15,018,514	$ 14,636,155

Actuarial Balance Sheet

Hazardous Members Retirement

(Dollar amounts expressed in thousands)

		June 30, 2018 (1)	June 30, 2017 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 2,321,721	$ 2,238,320
	b. Present value of future member contributions	$ 276,852	$ 272,353
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 180,354	$ 194,134
	ii. Unfunded accrued liability contributions	2,470,827	2,410,727
	iii. Total future employer contributions	$ 2,651,181	$ 2,604,861
	d. Total assets	$ 5,249,754	$ 5,115,534
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 457,206	$ 466,487
	ii. Accrued liability	1,641,490	1,738,446
	iii. Total present value of future benefits	$ 2,098,696	$ 2,204,933
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 3,094,100	$ 2,851,704
	c. Present value of benefits payable on account of current inactive members	$ 56,958	$ 58,897
	d. Total liabilities	$ 5,249,754	$ 5,115,534

Reconciliation of Retirement Net Assets

(Dollar amounts expressed in thousands)*

	Year Ending June 30, 2018 (1) Non-Hazardous	Year Ending June 30, 2018 (2) Hazardous
1. Value of assets at beginning of year	$ 6,687,237	$ 2,217,996
2. Revenue for the year		
a. Contributions		
i. Member contributions	$ 160,370	$ 61,089
ii. Employer contributions	355,473	124,953
iii. Other contributions (less 401h)	2,905	2,818
iii. Total	$ 518,748	$ 188,860
b. Income		
i. Interest, dividends, and other income	$ 155,876	$ 51,582
ii. Investment expenses	(54,718)	(18,196)
iii. Net	$ 101,158	$ 33,386
c. Net realized and unrealized gains (losses)	472,587	157,932
d. Total revenue	$ 1,092,494	$ 380,178
3. Expenditures for the year		
a. Disbursements		
i. Refunds	$ 14,608	$ 4,214
ii. Regular annuity benefits	726,569	244,118
iii. Other benefit payments	0	0
iv. Transfers to other systems	0	0
v. Total	$ 741,176	$ 248,333
b. Administrative expenses and depreciation	19,592	1,504
c. Total expenditures	$ 760,768	$ 249,837
4. Increase in net assets (Item 2. - Item 3.)	$ 331,726	$ 130,340
5. Value of assets at end of year (Item 1. + Item 4.)	$ 7,018,963	$ 2,348,337
6. Net external cash flow		
a. Dollar amount	$ (242,020)	$ (60,977)
b. Percentage of market value	-3.5%	-2.7%
7. Estimated annual return on net assets	8.7%	8.7%

* Amounts may not add due to rounding

* Excludes 401h assets

Development of Actuarial Value of Assets

Non-Hazardous Members Retirement

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2018
1.	Actuarial value of assets at beginning of year	$ 6,764,873
2.	Market value of assets at beginning of year	$ 6,687,237
3.	Net new investments	
	a. Contributions	$ 518,748
	b. Benefit payments	(741,176)
	c. Administrative expenses	(19,592)
	d. Subtotal	$ (242,020)
4.	Market value of assets at end of year	$ 7,018,963
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 573,746
6.	Assumed investment return rate for fiscal year	6.25%
7.	Expected return for immediate recognition	$ 410,389
8.	Excess return for phased recognition	$ 163,357
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2018	$ 163,357	$ 32,671
b.	2017	369,213	73,843
c.	2016	(515,652)	(103,130)
d.	2015	(386,073)	(77,215)
e.	2014	454,067	90,813
f.	Total		$ 16,983

10.	Actuarial value of assets as of June 30, 2018 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 6,950,225
11.	Ratio of actuarial value to market value	99.0%
12.	Estimated annual return on actuarial value of assets	6.4%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Hazardous Members Retirement

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2018
1.	Actuarial value of assets at beginning of year	$ 2,238,320
2.	Market value of assets at beginning of year	$ 2,217,996
3.	Net new investments	
	a. Contributions	$ 188,860
	b. Benefit payments	(248,333)
	c. Administrative expenses	(1,504)
	d. Subtotal	$ (60,977)
4.	Market value of assets at end of year	$ 2,348,337
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 191,318
6.	Assumed investment return rate for fiscal year	6.25%
7.	Expected return for immediate recognition	$ 136,719
8.	Excess return for phased recognition	$ 54,598
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2018	$ 54,598	$ 10,920
b.	2017	120,774	24,155
c.	2016	(162,540)	(32,508)
d.	2015	(122,554)	(24,511)
e.	2014	148,014	29,603
f.	Total		$ 7,658

10.	Actuarial value of assets as of June 30, 2018 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 2,321,721
11.	Ratio of actuarial value to market value	98.9%
12.	Estimated annual return on actuarial value of assets	6.5%

* Amounts may not add due to rounding

Schedule of Funding Progress
Retirement Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Non-Hazardous Members						
2011	$ 5,629,611	$ 8,918,085	$ 3,288,474	63.1%	$ 2,276,596	144.4%
2012	5,547,236	9,139,568	3,592,332	60.7%	2,236,546	160.6%
2013	5,637,094	9,378,876	3,741,782	60.1%	2,236,277	167.3%
2014	6,117,134	9,772,523	3,655,389	62.6%	2,272,270	160.9%
2015	6,474,849	10,740,325	4,265,477	60.3%	2,296,716	185.7%
2016	6,535,372	11,076,457	4,541,084	59.0%	2,352,762	193.0%
2017	6,764,873	12,803,510	6,038,637	52.8%	2,452,407	246.2%
2018	6,950,225	13,191,505	6,241,280	52.7%	2,466,801	253.0%
Hazardous Members						
2011	$ 1,779,545	$ 2,859,041	$ 1,079,496	62.2%	$ 466,964	231.2%
2012	1,747,379	3,009,992	1,262,613	58.1%	464,229	272.0%
2013	1,801,691	3,124,206	1,322,514	57.7%	461,673	286.5%
2014	1,967,640	3,288,826	1,321,186	59.8%	479,164	275.7%
2015	2,096,783	3,613,308	1,516,525	58.0%	483,641	313.6%
2016	2,139,119	3,704,456	1,565,337	57.7%	492,851	317.6%
2017	2,238,320	4,649,047	2,410,727	48.1%	541,633	445.1%
2018	2,321,721	4,792,548	2,470,827	48.4%	533,618	463.0%
Total CERS Members						
2011	$ 7,409,156	$ 11,777,126	$ 4,367,970	62.9%	$ 2,743,560	159.2%
2012	7,294,615	12,149,560	4,854,945	60.0%	2,700,775	179.8%
2013	7,438,785	12,503,082	5,064,297	59.5%	2,697,950	187.7%
2014	8,084,774	13,061,349	4,976,575	61.9%	2,751,434	180.9%
2015	8,571,632	14,353,633	5,782,001	59.7%	2,780,357	208.0%
2016	8,674,491	14,780,913	6,106,422	58.7%	2,845,613	214.6%
2017	9,003,193	17,452,557	8,449,364	51.6%	2,994,040	282.2%
2018	9,271,946	17,984,053	8,712,107	51.6%	3,000,419	290.4%

Summary of Principal Assumptions and Methods

Below is a summary of the principal economic assumptions, cost method, and the method for financing the unfunded actuarial accrued liability:

	Non-Hazardous	Hazardous
Valuation date:	June 30, 2018	June 30, 2018
Actuarial cost method:	Entry Age Normal	Entry Age Normal
Amortization method:	Level percentage of payroll (2% payroll growth assumed)	Level percentage of payroll (2% payroll growth assumed)
Amortization period for contribution rate:	25-year closed period	25-year closed period
Asset valuation method:	5-Year Smoothed Market	5-Year Smoothed Market
Actuarial assumptions:		
Investment rate of return	6.25%	6.25%
Projected salary increases	3.30% to 11.55% (varies by service)	3.05% to 18.55% (varies by service)
Inflation	2.30%	2.30%
Post-retirement benefit adjustments	0.00%	0.00%
Retiree Mortality	RP-2000 Combined Mortality Table for Males and Females, projected using scale BB to 2013 (set back one year for females).	RP-2000 Combined Mortality Table for Males and Females, projected using scale BB to 2013 (set back one year for females).

Solvency Test
Retirement Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Accrued Liability: Active Member Contributions	Actuarial Accrued Liability: Retired Members & Beneficiaries	Actuarial Accrued Liability: Active Members (Employer Financed)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets: Active	Portion of Aggregate Accrued Liabilities Covered by Assets: Retired	Portion of Aggregate Accrued Liabilities Covered by Assets: ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Non-Hazardous Members							
2009	$ 991,629	$ 4,542,483	$ 2,378,802	$ 5,650,790	100.0%	100.0%	4.9%
2010	1,063,747	4,890,659	2,504,616	5,546,857	100.0%	91.7%	0.0%
2011	1,110,967	5,209,784	2,597,334	5,629,611	100.0%	86.7%	0.0%
2012	1,117,549	5,416,933	2,605,085	5,547,236	100.0%	81.8%	0.0%
2013	1,149,611	5,638,371	2,590,894	5,637,094	100.0%	79.6%	0.0%
2014	1,204,383	5,873,279	2,694,860	6,117,134	100.0%	83.6%	0.0%
2015	1,216,585	6,489,863	3,033,878	6,474,849	100.0%	81.0%	0.0%
2016	1,231,027	6,785,530	3,059,900	6,535,372	100.0%	78.2%	0.0%
2017	1,277,432	7,731,682	3,794,396	6,764,873	100.0%	71.0%	0.0%
2018	1,269,287	8,196,719	3,725,499	6,950,225	100.0%	69.3%	0.0%
Hazardous Members							
2009	$ 350,309	$ 1,540,263	$ 687,873	$ 1,751,488	100.0%	91.0%	0.0%
2010	369,613	1,622,684	679,855	1,749,464	100.0%	85.0%	0.0%
2011	382,072	1,768,512	708,457	1,779,545	100.0%	79.0%	0.0%
2012	381,672	1,889,884	738,435	1,747,379	100.0%	72.3%	0.0%
2013	390,471	1,988,030	745,705	1,801,691	100.0%	71.0%	0.0%
2014	415,070	2,077,517	796,239	1,967,640	100.0%	74.7%	0.0%
2015	422,359	2,297,703	893,246	2,096,783	100.0%	72.9%	0.0%
2016	428,713	2,388,712	887,031	2,139,119	100.0%	71.6%	0.0%
2017	458,808	2,910,601	1,279,638	2,238,320	100.0%	61.1%	0.0%
2018	442,637	3,151,058	1,198,853	2,321,721	100.0%	59.6%	0.0%

INSURANCE BENEFITS

ACTUARIAL TABLES

Development of Unfunded Actuarial Accrued Liability
Insurance Benefits

(Dollar amounts expressed in thousands)

		June 30, 2018	
		Non-Hazardous (1)	Hazardous (2)
1.	Projected payroll of active members	$ 2,466,801	$ 533,618
2.	Present value of future pay	$ 19,346,340	$ 3,452,875
3.	Normal cost rate		
	a. Total normal cost rate	3.32%	4.74%
	b. Less: member contribution rate	-0.46%	-0.41%
	c. Employer normal cost rate	2.86%	4.33%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 2,172,566	$ 816,206
	b. Less: present value of future normal costs	(605,265)	(133,895)
	c. Actuarial accrued liability	$ 1,567,301	$ 682,311
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 1,374,325	$ 983,359
	b. Inactive members	150,998	18,358
	c. Active members (Item 4c)	1,567,301	682,311
	d. Total	$ 3,092,624	$ 1,684,028
6.	Actuarial value of assets	$ 2,371,430	$ 1,256,306
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 721,194	$ 427,722
8.	Funded Ratio	76.7%	74.6%

Development of Actuarially Determined Contribution Rate
Insurance Benefits

		June 30, 2018	
		Non-Hazardous (1)	Hazardous (2)
1.	Total normal cost rate	3.32%	4.74%
2.	Less: member contribution rate	-0.46%	-0.41%
3.	Total employer normal cost rate	2.86%	4.33%
4.	Administrative expenses	0.03%	0.07%
5.	Net employer normal cost rate	2.89%	4.40%
6.	UAAL amortization contribution	1.87%	5.12%
7.	Total calculated employer contribution Max (0%, item 5. + item6.)	4.76%	9.52%

Actuarial Balance Sheet

Non-Hazardous Members Insurance

(Dollar amounts expressed in thousands)

		June 30, 2018 (1)	June 30, 2017 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 2,371,430	$ 2,227,401
	b. Present value of future member contributions	$ 106,356	$ 94,725
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 498,909	$ 544,406
	ii. Unfunded accrued liability contributions	721,194	1,127,750
	iii. Total future employer contributions	$ 1,220,103	$ 1,672,156
	d. Total assets	$ 3,697,889	$ 3,994,282
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 605,265	$ 639,131
	ii. Accrued liability	1,567,301	1,751,713
	iii. Total present value of future benefits	$ 2,172,566	$ 2,390,844
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 1,374,325	$ 1,445,497
	c. Present value of benefits payable on account of current inactive members	$ 150,998	$ 157,941
	d. Total liabilities	$ 3,697,889	$ 3,994,282

Actuarial Balance Sheet

Hazardous Members Insurance

(Dollar amounts expressed in thousands)

		June 30, 2018 (1)	June 30, 2017 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 1,256,306	$ 1,196,780
	b. Present value of future member contributions	$ 19,064	$ 16,300
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 114,831	$ 134,540
	ii. Unfunded accrued liability contributions	427,722	591,653
	iii. Total future employer contributions	$ 542,553	$ 726,193
	d. Total assets	$ 1,817,923	$ 1,939,273
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 133,895	$ 150,840
	ii. Accrued liability	682,311	793,669
	iii. Total present value of future benefits	$ 816,206	$ 944,509
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 983,359	$ 973,103
	c. Present value of benefits payable on account of current inactive members	$ 18,358	$ 21,661
	d. Total liabilities	$ 1,817,923	$ 1,939,273

Reconciliation of Insurance Net Assets

(Dollar amounts expressed in thousands)*

	Year Ending June 30, 2018 (1) Non-Hazardous	Year Ending June 30, 2018 (2) Hazardous
1. Value of assets at beginning of year	$ 2,212,536	$ 1,189,001
2. Revenue for the year		
a. Contributions		
i. Member contributions	$ 10,826	$ 2,173
ii. Employer contributions	120,797	55,027
iii. Other contributions (less 401h)	3,896	1,015
iii. Total	$ 135,519	$ 58,215
b. Income		
i. Interest, dividends, and other income	$ 48,736	$ 26,405
ii. Investment expenses	(21,923)	(12,173)
iii. Net	$ 26,813	$ 14,233
c. Net realized and unrealized gains (losses)	175,256	95,620
d. Total revenue	$ 337,588	$ 168,069
3. Expenditures for the year		
a. Disbursements		
i. Refunds	$ 0	$ 0
ii. Healthcare premium subsidies	131,630	74,844
iii. Other benefit payments	3,606	868
iv. Transfers to other systems	0	0
v. Total	$ 135,236	$ 75,712
b. Administrative expenses and depreciation	761	376
c. Total expenditures	$ 135,997	$ 76,088
4. Increase in net assets (Item 2. - Item 3.)	$ 201,591	$ 91,981
5. Value of assets at end of year (Item 1. + Item 4.)	$ 2,414,126	$ 1,280,982
6. Net external cash flow		
a. Dollar amount	$ (478)	$ (17,873)
b. Percentage of market value	0.0%	-1.4%
7. Estimated annual return on net assets	9.1%	9.3%

* Amounts may not add due to rounding
* Includes 401h assets

Development of Actuarial Value of Assets

Non-Hazardous Members Insurance

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2018
1.	Actuarial value of assets at beginning of year	$ 2,227,401
2.	Market value of assets at beginning of year	$ 2,212,536
3.	Net new investments	
	a. Contributions	$ 135,519
	b. Benefit payments	(135,236)
	c. Administrative expenses	(761)
	d. Subtotal	$ (478)
4.	Market value of assets at end of year	$ 2,414,126
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 202,069
6.	Assumed investment return rate for fiscal year	6.25%
7.	Expected return for immediate recognition	$ 138,269
8.	Excess return for phased recognition	$ 63,800
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2018	$ 63,800	$ 12,760
b.	2017	121,364	24,273
c.	2016	(147,421)	(29,484)
d.	2015	(110,970)	(22,194)
e.	2014	104,420	20,884
f.	Total		$ 6,239

10.	Actuarial value of assets as of June 30, 2018 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 2,371,430
11.	Ratio of actuarial value to market value	98.2%
12.	Estimated annual return on actuarial value of assets	6.5%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Hazardous Members Insurance

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2018
1.	Actuarial value of assets at beginning of year	$ 1,196,780
2.	Market value of assets at beginning of year	$ 1,189,001
3.	Net new investments	
	a. Contributions	$ 58,215
	b. Benefit payments	(75,712)
	c. Administrative expenses	(376)
	d. Subtotal	$ (17,873)
4.	Market value of assets at end of year	$ 1,280,982
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 109,853
6.	Assumed investment return rate for fiscal year	6.25%
7.	Expected return for immediate recognition	$ 73,754
8.	Excess return for phased recognition	$ 36,099
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2018	$ 36,099	$ 7,220
b.	2017	65,383	13,077
c.	2016	(78,507)	(15,701)
d.	2015	(60,152)	(12,030)
e.	2014	55,401	11,080
f.	Total		$ 3,645

10.	Actuarial value of assets as of June 30, 2018 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 1,256,306
11.	Ratio of actuarial value to market value	98.1%
12.	Estimated annual return on actuarial value of assets	6.5%

* Amounts may not add due to rounding

Schedule of Funding Progress
Insurance Benefits
(Dollar amounts expressed in thousands)

June 30, (1)	Actuarial Value of Assets (AVA) (2)	Actuarial Accrued Liability (AAL) (3)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2) (4)	Funded Ratio (2)/(3) (5)	Annual Covered Payroll (6)	UAAL as % of Payroll (4)/(6) (7)
			Non-Hazardous Members			
2011	$ 1,433,451	$ 3,073,973	$ 1,640,522	46.6%	$ 2,276,596	72.1%
2012	1,512,854	2,370,771	857,917	63.8%	2,236,546	38.4%
2013	1,628,244	2,443,894	815,650	66.6%	2,236,277	36.5%
2014	1,831,199	2,616,915	785,715	70.0%	2,272,270	34.6%
2015	1,997,456	2,907,827	910,371	68.7%	2,296,716	39.6%
2016	2,079,811	2,988,121	908,310	69.6%	2,352,762	38.6%
2017	2,227,401	3,355,151	1,127,750	66.4%	2,452,407	46.0%
2018	2,371,430	3,092,624	721,194	76.7%	2,466,801	29.2%
			Hazardous Members			
2011	$ 770,790	$ 1,647,703	$ 876,912	46.8%	$ 466,964	187.8%
2012	829,041	1,364,843	535,802	60.7%	464,229	115.4%
2013	892,774	1,437,333	544,558	62.1%	461,673	118.0%
2014	997,733	1,493,864	496,131	66.8%	479,164	103.5%
2015	1,087,707	1,504,015	416,308	72.3%	483,641	86.1%
2016	1,135,784	1,558,818	423,034	72.9%	492,851	85.8%
2017	1,196,780	1,788,433	591,653	66.9%	541,633	109.2%
2018	1,256,306	1,684,028	427,722	74.6%	533,618	80.2%
			Total CERS Members			
2011	$ 2,204,241	$ 4,721,676	$ 2,517,435	46.7%	$ 2,743,560	91.8%
2012	2,341,895	3,735,614	1,393,719	62.7%	2,700,775	51.6%
2013	2,521,018	3,881,227	1,360,209	65.0%	2,697,950	50.4%
2014	2,828,932	4,110,779	1,281,847	68.8%	2,751,434	46.6%
2015	3,085,163	4,411,842	1,326,679	69.9%	2,780,357	47.7%
2016	3,215,595	4,546,939	1,331,344	70.7%	2,845,613	46.8%
2017	3,424,181	5,143,584	1,719,403	66.6%	2,994,040	57.4%
2018	3,627,736	4,776,652	1,148,916	75.9%	3,000,419	38.3%

Solvency Test
Insurance Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Accrued Liability: Active Member Contributions	Actuarial Accrued Liability: Retired Members & Beneficiaries	Actuarial Accrued Liability: Active Members (Employer Financed)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets: Active	Portion of Aggregate Accrued Liabilities Covered by Assets: Retired	Portion of Aggregate Accrued Liabilities Covered by Assets: ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Non-Hazardous Members							
2009	$ -	$ 1,478,783	$ 1,591,603	$ 1,216,632	100.0%	82.3%	0.0%
2010	-	1,526,533	1,631,807	1,293,039	100.0%	84.7%	0.0%
2011	-	1,460,808	1,613,165	1,433,451	100.0%	98.1%	0.0%
2012	-	1,146,908	1,223,864	1,512,854	100.0%	100.0%	29.9%
2013	-	1,205,599	1,238,295	1,628,244	100.0%	100.0%	34.1%
2014	-	1,318,183	1,298,732	1,831,199	100.0%	100.0%	39.5%
2015	-	1,372,597	1,535,231	1,997,456	100.0%	100.0%	40.7%
2016	-	1,484,937	1,503,184	2,079,811	100.0%	100.0%	39.6%
2017	-	1,603,438	1,751,713	2,227,401	100.0%	100.0%	35.6%
2018	-	1,525,323	1,567,301	2,371,430	100.0%	100.0%	54.0%
Hazardous Members							
2009	$ -	$ 725,900	$ 867,648	$ 651,131	100.0%	89.7%	0.0%
2010	-	814,300	860,403	692,770	100.0%	85.1%	0.0%
2011	-	771,631	876,071	770,790	100.0%	99.9%	0.0%
2012	-	575,099	789,744	829,041	100.0%	100.0%	32.2%
2013	-	660,955	776,377	892,774	100.0%	100.0%	29.9%
2014	-	700,312	793,553	997,733	100.0%	100.0%	37.5%
2015	-	790,714	713,301	1,087,707	100.0%	100.0%	41.6%
2016	-	879,360	679,458	1,135,784	100.0%	100.0%	37.7%
2017	-	994,764	793,669	1,196,780	100.0%	100.0%	25.5%
2018	-	1,001,717	682,311	1,256,306	100.0%	100.0%	37.3%

SECTION 4

MEMBERSHIP INFORMATION

Membership Tables

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Summary of Membership Data

(Total dollar amounts expressed in thousands)

		Non-Hazardous June 30, 2018 (1)	Hazardous June 30, 2018 (2)	Total June 30, 2018 (3)	Total June 30, 2017 (4)
1.	Active members				
a.	Males	29,252	8,137	37,389	37,655
b.	Females	52,566	1,126	53,692	54,038
c.	Total members	81,818	9,263	91,081	91,693
d.	Total annualized prior year salaries	$ 2,466,801	$ 533,618	$ 3,000,419	$ 2,994,040
e.	Average salary	$ 30,150	$ 57,607	$ 32,942	$ 32,653
f.	Average age	47.7	38.5	46.8	47.0
g.	Average service	9.2	10.2	9.3	9.5
h.	Member contributions with interest	$ 1,269,287	$ 442,637	$ 1,711,924	$ 1,736,240
i.	Average contributions with interest	$ 15,514	$ 47,786	$ 18,796	$ 18,935
2.	Vested inactive members				
a.	Number	17,621	954	18,575	15,358
b.	Total annual deferred benefits	$ 66,670	$ 7,194	$ 73,864	$ 69,010
c.	Average annual deferred benefit	$ 3,784	$ 7,540	$ 3,977	$ 4,493
d.	Average age at the valuation date	50.6	43.4	50.3	50.6
3.	Nonvested inactive members				
a.	Number	69,539	2,113	71,652	72,871
b.	Total member contributions with interest	$ 76,173	$ 5,911	$ 82,084	$ 86,252
c.	Average contributions with interest	$ 1,095	$ 2,797	$ 1,146	$ 1,184
4.	Service retirees				
a.	Number	52,123	7,916	60,039	56,977
b.	Total annual benefits	$ 611,865	$ 219,838	$ 831,703	$ 776,476
c.	Average annual benefit	$ 11,739	$ 27,771	$ 13,853	$ 13,628
d.	Average age at the valuation date	70.3	61.8	69.2	69.1
5.	Disabled retirees				
a.	Number	4,165	564	4,729	4,640
b.	Total annual benefits	$ 47,368	$ 9,328	$ 56,695	$ 55,008
c.	Average annual benefit	$ 11,373	$ 16,539	$ 11,989	$ 11,855
d.	Average age at the valuation date	65.2	56.6	64.1	63.8
6.	Beneficiaries				
a.	Number	5,650	1,107	6,757	6,394
b.	Total annual benefits	$ 51,141	$ 16,509	$ 67,650	$ 62,664
c.	Average annual benefit	$ 9,052	$ 14,913	$ 10,012	$ 9,800
d.	Average age at the valuation date	68.1	57.7	66.4	66.9

Summary of Historical Active Membership

	Active Members		Covered Payroll[1]		Average Annual Pay	
June 30,	Number	Percent Increase /(Decrease)	Amount in Thousands	Percent Increase /(Decrease)	Amount	Percent Increase /(Decrease)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Non-Hazardous Members						
2011	85,285		2,276,596		$ 26,694	
2012	83,052	-2.6%	2,236,546	-1.8%	26,929	0.9%
2013	81,815	-1.5%	2,236,277	0.0%	27,333	1.5%
2014	81,115	-0.9%	2,272,270	1.6%	28,013	2.5%
2015	80,852	-0.3%	2,296,716	1.1%	28,406	1.4%
2016	80,664	-0.2%	2,352,762	2.4%	29,167	2.7%
2017	82,198	1.9%	2,452,407	4.2%	29,835	2.3%
2018	81,818	-0.5%	2,466,801	0.6%	30,150	1.1%
Hazardous Members						
2011	9,407		$ 466,964		$ 49,640	
2012	9,130	-2.9%	464,229	-0.6%	50,847	2.4%
2013	9,123	-0.1%	461,673	-0.6%	50,605	-0.5%
2014	9,194	0.8%	479,164	3.8%	52,117	3.0%
2015	9,172	-0.2%	483,641	0.9%	52,730	1.2%
2016	9,084	-1.0%	492,851	1.9%	54,255	2.9%
2017	9,495	4.5%	541,633	9.9%	57,044	5.1%
2018	9,263	-2.4%	533,618	-1.5%	57,607	1.0%

Distribution of Active Members by Age and by Years of Service

Non-Hazardous Members

Attained Age	Years of Credited Service												
	0 Count & Avg. Comp.	1 Count & Avg. Comp.	2 Count & Avg. Comp.	3 Count & Avg. Comp.	4 Count & Avg. Comp.	5-9 Count & Avg. Comp.	10-14 Count & Avg. Comp.	15-19 Count & Avg. Comp.	20-24 Count & Avg. Comp.	25-29 Count & Avg. Comp.	30-34 Count & Avg. Comp.	35 & Over Count & Avg. Comp.	Total Count & Avg. Comp.
Under 20	125	9	0	0	1	0	1	0	0	0	0	0	136
	$13,084	$15,227	$0	$0	$15,544	$0	$13,319	$0	$0	$0	$0	$0	$13,245
20-24	1,422	652	276	124	46	21	2	0	0	0	0	0	2,543
	$17,513	$23,339	$26,154	$25,222	$30,370	$29,907	$14,475	$0	$0	$0	$0	$0	$20,653
25-29	1,554	1,156	813	586	374	580	13	0	1	1	0	0	5,078
	$19,952	$24,791	$26,249	$29,167	$31,193	$34,050	$41,333	$0	$1,508	$79,781	$0	$0	$25,626
30-34	1,411	1,021	801	650	470	1,434	532	13	1	0	0	0	6,333
	$19,571	$24,118	$26,024	$29,085	$32,022	$35,706	$39,938	$39,466	$57,456	$0	$0	$0	$28,432
35-39	1,308	1,063	826	743	528	1,757	1,310	530	20	1	0	0	8,086
	$19,590	$24,341	$25,348	$25,478	$27,983	$32,872	$40,828	$43,959	$59,147	$89,817	$0	$0	$29,922
40-44	1,139	973	798	720	562	2,026	1,585	1,203	417	13	0	0	9,436
	$20,756	$23,342	$24,929	$26,327	$27,139	$31,370	$36,888	$44,154	$48,782	$59,770	$0	$0	$31,445
45-49	936	882	731	688	577	2,316	2,198	1,720	1,006	214	9	0	11,277
	$20,415	$24,525	$25,765	$27,342	$28,905	$29,682	$34,032	$40,110	$49,254	$55,423	$90,203	$0	$32,794
50-54	830	718	594	570	475	2,048	2,250	2,396	1,379	411	82	11	11,764
	$20,040	$23,321	$25,834	$26,860	$27,267	$29,559	$31,969	$34,222	$40,821	$49,621	$61,156	$76,222	$31,791
55-59	698	610	518	558	440	1,895	2,225	2,608	1,800	642	120	41	12,155
	$18,616	$25,026	$24,928	$27,025	$27,386	$30,060	$31,483	$32,373	$36,283	$44,360	$55,998	$62,973	$31,496
60-64	512	441	368	399	326	1,587	1,615	1,724	1,289	595	109	54	9,019
	$17,828	$21,130	$24,516	$25,827	$26,135	$28,076	$31,599	$33,870	$34,872	$40,514	$47,746	$62,859	$30,816
65 & Over	411	345	266	323	241	1,249	1,169	965	530	326	98	68	5,991
	$13,194	$18,037	$19,335	$22,333	$20,380	$24,064	$27,610	$31,433	$34,276	$36,031	$39,891	$53,730	$26,549
Total	10,346	7,870	5,991	5,361	4,040	14,913	12,900	11,159	6,443	2,203	418	174	81,818
	$19,110	$23,686	$25,287	$26,810	$28,036	$30,426	$33,633	$35,941	$39,710	$44,273	$51,818	$60,163	$30,150

Distribution of Active Members by Age and by Years of Service

Hazardous Members

Attained Age	Years of Credited Service												
	0 Count & Avg. Comp.	1 Count & Avg. Comp.	2 Count & Avg. Comp.	3 Count & Avg. Comp.	4 Count & Avg. Comp.	5-9 Count & Avg. Comp.	10-14 Count & Avg. Comp.	15-19 Count & Avg. Comp.	20-24 Count & Avg. Comp.	25-29 Count & Avg. Comp.	30-34 Count & Avg. Comp.	35 & Over Count & Avg. Comp.	Total Count & Avg. Comp.
Under 20	3	1	0	0	0	0	0	0	0	0	0	0	4
	$27,500	$24,839	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$26,835
20-24	208	128	66	14	8	6	0	0	0	0	0	0	430
	$32,837	$43,725	$43,019	$50,558	$42,294	$40,110	$0	$0	$0	$0	$0	$0	$38,495
25-29	216	274	244	199	191	236	1	0	0	0	0	0	1,361
	$34,908	$44,642	$47,898	$50,820	$50,737	$52,714	$48,992	$0	$0	$0	$0	$0	$46,842
30-34	113	154	120	149	133	765	252	1	0	0	0	0	1,687
	$34,909	$44,540	$48,276	$52,159	$52,702	$57,267	$61,643	$46,208	$0	$0	$0	$0	$53,804
35-39	50	62	55	62	68	425	711	220	13	0	0	0	1,666
	$36,373	$45,227	$47,569	$51,950	$50,786	$57,788	$62,280	$65,830	$80,391	$0	$0	$0	$58,993
40-44	23	27	27	26	29	223	448	581	197	16	0	0	1,597
	$29,630	$45,790	$51,249	$49,746	$53,251	$55,585	$62,007	$67,981	$78,511	$84,626	$0	$0	$64,265
45-49	21	24	23	20	19	126	267	492	320	51	5	0	1,368
	$35,587	$39,617	$48,544	$44,839	$48,577	$56,201	$59,941	$65,806	$77,431	$86,080	$96,227	$0	$65,604
50-54	10	14	9	7	12	70	141	215	105	65	11	0	659
	$28,753	$42,939	$37,105	$57,315	$45,121	$56,091	$57,113	$64,279	$72,814	$87,685	$83,445	$0	$64,078
55-59	9	1	7	6	5	33	70	83	55	27	12	1	309
	$39,932	$69,292	$47,400	$48,773	$52,971	$50,822	$53,798	$63,068	$63,261	$77,362	$94,694	$123,210	$60,917
60-64	4	3	0	3	1	15	31	28	16	10	5	2	118
	$31,110	$59,168	$0	$54,765	$34,127	$44,701	$53,033	$59,578	$62,051	$69,201	$92,672	$118,612	$58,208
65 & Over	1	1	3	1	1	8	16	20	5	2	2	4	64
	$29,880	$28,673	$66,092	$21,011	$44,502	$38,312	$48,834	$70,117	$73,697	$58,985	$72,703	$103,827	$60,308
Total	658	689	554	487	467	1,907	1,937	1,640	711	171	35	7	9,263
	$34,113	$44,384	$47,473	$51,094	$51,058	$56,165	$60,863	$66,175	$75,634	$83,873	$89,832	$110,820	$57,607

Distribution of Annuitant Monthly Benefit by Status and Age
Non-Hazardous Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

	Retirement		Disability		Survivors & Beneficiaries		Total	
Current Age	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	306	$ 6,911	206	$ 2,574	694	$ 5,482	1,206	$ 14,967
50 - 54	1,241	29,780	293	3,758	270	2,509	1,804	36,047
55 - 59	4,147	72,485	694	8,847	441	4,444	5,282	85,776
60 - 64	8,594	121,258	937	11,205	626	6,396	10,157	138,859
65 - 69	12,599	148,601	827	9,338	795	8,171	14,221	166,110
70 - 74	10,505	108,480	577	5,932	773	7,714	11,855	122,126
75 - 79	7,332	67,318	386	3,743	791	7,338	8,509	78,399
80 - 84	4,308	35,457	182	1,540	587	4,666	5,077	41,663
85 - 89	2,101	15,581	54	384	430	3,110	2,585	19,075
90 And Over	990	5,994	9	47	243	1,310	1,242	7,351
Total	**52,123**	**$ 611,865**	**4,165**	**$ 47,368**	**5,650**	**$ 51,141**	**61,938**	**$ 710,374**

Distribution of Annuitant Monthly Benefit by Status and Age
Hazardous Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

Current Age	Retirement		Disability		Survivors & Beneficiaries		Total	
	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	954	$ 31,680	157	$ 2,757	279	$ 2,323	1,390	$ 36,760
50 - 54	1,253	41,021	97	1,720	77	1,120	1,427	43,861
55 - 59	1,265	37,939	105	1,788	93	1,665	1,463	41,392
60 - 64	1,410	37,533	96	1,396	152	2,469	1,658	41,398
65 - 69	1,420	36,526	65	977	150	2,890	1,635	40,393
70 - 74	896	19,959	29	491	143	2,477	1,068	22,927
75 - 79	478	10,123	7	83	99	1,875	584	12,081
80 - 84	180	3,665	7	96	73	1,014	260	4,775
85 - 89	50	1,195	0	-	33	516	83	1,711
90 And Over	10	196	1	20	8	160	19	376
Total	**7,916**	**$ 219,838**	**564**	**$ 9,328**	**1,107**	**$ 16,509**	**9,587**	**$ 245,675**

Non-Hazardous Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	5,709	$ 6,016,003	20,431	$ 15,327,748	26,140	$ 21,343,751
Joint & Survivor:						
100% to Beneficiary	3,264	3,795,295	1,888	1,239,053	5,152	5,034,348
66 2/3% to Beneficiary	863	1,590,528	668	717,280	1,531	2,307,808
50% to Beneficiary	1,183	1,936,508	1,735	2,007,149	2,918	3,943,658
Pop-up Option	4,237	6,797,888	3,945	4,213,658	8,182	11,011,547
Social Security Option:						
Age 62 Basic	249	429,948	543	570,090	792	1,000,038
Age 62 Survivorship	599	1,066,262	367	375,074	966	1,441,336
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	0	0	1	236	1	236
10 Years Certain & Life	1,461	1,549,983	3,582	2,781,656	5,043	4,331,639
15 Years Certain & Life	661	685,408	925	717,857	1,586	1,403,265
20 Years Certain & Life	496	686,107	789	595,322	1,285	1,281,429
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	91	108,237	360	308,541	451	416,779
24 Month Basic	56	38,167	238	192,634	294	230,801
36 Month Basic	241	119,288	691	316,436	932	435,724
12 Month Survivor	137	170,256	88	88,115	225	258,371
24 Month Survivor	85	87,067	59	37,965	144	125,032
36 Month Survivor	372	244,946	274	125,381	646	370,327
Total:	19,704	$ 25,321,895	36,584	$ 29,614,195	56,288	$ 54,936,090

Hazardous Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	1,163	$ 2,421,416	343	$ 543,755	1,506	$ 2,965,171
Joint & Survivor:						
100% to Beneficiary	999	2,165,629	43	56,826	1,042	2,222,455
66 2/3% to Beneficiary	336	856,258	21	52,813	357	909,072
50% to Beneficiary	485	1,185,427	51	113,274	536	1,298,700
Pop-up Option	3,334	8,575,121	158	318,383	3,492	8,893,504
Social Security Option:						
Age 62 Basic	109	169,548	13	12,930	122	182,477
Age 62 Survivorship	296	487,661	19	32,950	315	520,610
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	94	175,991	4	4,175	98	180,166
10 Years Certain & Life	241	507,015	68	121,260	309	628,275
15 Years Certain & Life	97	188,809	18	30,961	115	219,770
20 Years Certain & Life	168	352,277	29	45,859	197	398,136
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	22	35,421	9	12,127	31	47,548
24 Month Basic	20	42,817	6	6,336	26	49,154
36 Month Basic	49	82,198	19	22,651	68	104,849
12 Month Survivor	57	146,341	4	8,080	61	154,422
24 Month Survivor	66	108,868	2	2,248	68	111,117
36 Month Survivor	131	205,458	6	6,249	137	211,707
Total:	7,667	$ 17,706,255	813	$ 1,390,877	8,480	$ 19,097,132

Non-Hazardous Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	19	$ 5,002	42	$ 25,426	61	$ 30,428
Joint & Survivor:						
100% to Beneficiary	514	287,009	1,689	1,207,016	2,203	1,494,025
66 2/3% to Beneficiary	79	45,565	253	202,470	332	248,034
50% to Beneficiary	179	77,477	398	232,681	577	310,158
Pop-up Option	252	207,439	789	827,040	1,041	1,034,479
Social Security Option:						
Age 62 Basic	1	1,291	5	4,806	6	6,097
Age 62 Survivorship	30	18,654	161	201,012	191	219,666
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	97	81,180	122	79,702	219	160,883
10 Years Certain	134	87,260	194	152,461	328	239,721
10 Years Certain & Life	63	44,477	88	71,590	151	116,067
15 Years Certain & Life	43	37,300	74	58,371	117	95,670
20 Years Certain & Life	57	37,896	75	72,665	132	110,561
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	0	0	1	396	1	396
24 Month Basic	0	0	0	0	0	0
36 Month Basic	1	149	1	152	2	302
12 Month Survivor	12	9,860	46	48,539	58	58,399
24 Month Survivor	14	17,937	34	30,138	48	48,075
36 Month Survivor	43	21,140	140	67,669	183	88,809
Total:	1,538	$ 979,633	4,112	$ 3,282,134	5,650	$ 4,261,766

Hazardous Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	11	$ 5,268	47	$ 38,598	58	$ 43,866
Joint & Survivor:						
100% to Beneficiary	36	28,175	258	320,020	294	348,195
66 2/3% to Beneficiary	4	4,477	55	75,909	59	80,387
50% to Beneficiary	14	10,925	83	77,328	97	88,254
Pop-up Option	49	39,605	290	495,927	339	535,532
Social Security Option:						
Age 62 Basic	0	0	0	0	0	0
Age 62 Survivorship	3	3,234	106	145,847	109	149,081
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	3	2,669	3	2,669
5 Years Certain	1	1,784	2	1,333	3	3,116
10 Years Certain	28	23,769	12	10,875	40	34,644
10 Years Certain & Life	5	3,607	7	4,285	12	7,893
15 Years Certain & Life	3	686	4	6,218	7	6,905
20 Years Certain & Life	3	1,403	14	12,772	17	14,174
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	0	0	2	2,641	2	2,641
24 Month Basic	0	0	1	1,467	1	1,467
36 Month Basic	2	562	2	1,296	4	1,858
12 Month Survivor	0	0	8	11,725	8	11,725
24 Month Survivor	1	1,295	12	7,949	13	9,244
36 Month Survivor	5	3,219	36	30,898	41	34,117
Total:	165	$ 128,008	942	$ 1,247,758	1,107	$ 1,375,767

Schedule of Retirants Added to And Removed from Rolls

(Dollar amounts except average allowance expressed in thousands)

Year Ended	Added to Rolls	Removed from Rolls	Rolls End of the Year		% Increase in Annual Benefit	Average Annual Benefit
	Number	Number	Number	Annual Benefits		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Non-Hazardous			
2011	3,250	1,077	43,211	$ 483,594		$ 11,191
2012	3,300	1,207	45,304	515,008	6.5%	11,368
2013	3,570	1,198	47,676	557,979	8.3%	11,704
2014	3,480	1,221	49,935	582,958	4.5%	11,674
2015	4,020	1,304	52,651	617,551	5.9%	11,729
2016	4,409	721	56,339	661,217	7.1%	11,736
2017	4,141	1,467	59,013	667,468	0.9%	11,311
2018	4,650	1,725	61,938	710,374	6.4%	11,469
			Hazardous			
2011	502	102	6,468	$ 160,259		$ 24,777
2012	483	73	6,878	173,221	8.1%	25,185
2013	519	104	7,293	182,635	5.4%	25,043
2014	469	116	7,646	191,008	4.6%	24,981
2015	526	138	8,034	202,153	5.8%	25,162
2016	604	75	8,563	215,302	6.5%	25,143
2017	576	141	8,998	226,681	5.3%	25,192
2018	779	190	9,587	245,675	8.4%	25,626

APPENDIX A

ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Methods and Assumptions

The following presents a summary of the actuarial assumptions and methods used in the valuation of the County Employees Retirement System.

In general, the assumptions and methods used in the valuation are based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014. The investment return, price inflation, and payroll growth assumption were adopted by the Board in May and July 2017 for use with the June 30, 2017 valuation in order to reflect future economic expectations.

Investment return rate:

Assumed annual rate of 6.25% net of investment expenses for the retirement funds and the insurance funds

Price Inflation:

Assumed annual rate of 2.30%

Payroll Growth Assumption (used for amortization of unfunded accrued liabilities):

Assumed annual rate of 2.00%

Rates of Annual Salary Increase:

Assumed rates of annual salary increases are shown below.

Service Years	Annual Rates of Salary Increases				
	Merit & Seniority		Price Inflation & Productivity	Total Increase	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0	8.50%	15.50%	3.05%	11.55%	18.55%
1	5.00%	6.00%	3.05%	8.05%	9.05%
2	1.50%	2.00%	3.05%	4.55%	5.05%
3	1.50%	1.25%	3.05%	4.55%	4.30%
4	1.00%	1.00%	3.05%	4.05%	4.05%
5	1.00%	0.50%	3.05%	4.05%	3.55%
6	0.75%	0.00%	3.05%	3.80%	3.05%
7	0.75%	0.00%	3.05%	3.80%	3.05%
8	0.50%	0.00%	3.05%	3.55%	3.05%
9	0.50%	0.00%	3.05%	3.55%	3.05%
10 & Over	0.25%	0.00%	3.05%	3.30%	3.05%

Retirement rates:

Assumed annual rates of retirement are shown below. Rates are only applicable for members who are eligible for a service retirement.

	Non-Hazardous			Hazardous	
Age	Members participating before 9/1/2008[1]	Members participating on or after 9/1/2008[2]	Service	Members participating before 9/1/2008[3]	Members participating on or after 9/1/2008[4]
55	5.0%		20	22.5%	
56	6.0%		21	22.5%	
57	7.0%		22	22.5%	
58	7.0%		23	22.5%	
59	8.0%		24	30.0%	
60	9.0%	9.0%	25	33.0%	22.5%
61	15.0%	15.0%	26	33.0%	22.5%
62	18.0%	18.0%	27	36.0%	22.5%
63	18.0%	18.0%	28	39.0%	22.5%
64	18.0%	18.0%	29	55.0%	30.0%
65	18.0%	18.0%	30	33.0%	33.0%
66	18.0%	18.0%	31	33.0%	33.0%
67	18.0%	18.0%	32	50.0%	36.0%
68	18.0%	18.0%	33	40.0%	39.0%
69	18.0%	18.0%	34	40.0%	55.0%
70	18.0%	18.0%	35	40.0%	33.0%
71	18.0%	18.0%	36	40.0%	33.0%
72	18.0%	18.0%	37	40.0%	50.0%
73	18.0%	18.0%	38	40.0%	40.0%
74	18.0%	18.0%	39	40.0%	40.0%
75	100.0%	100.0%	40	40.0%	40.0%

[1] If service is at least 27 years, the rate is 30%.
[2] If age plus service is at least 87, the rate is 30%.
[3] The annual rate of service retirement is 100% at age 62.
[4] The annual rate of service retirement is 100% at age 60.

Disability rates:

An abbreviated table with assumed rates of disability is show below.

Age	Non-Hazardous		Hazardous	
	Male	Female	Male	Female
20	0.02%	0.02%	0.05%	0.05%
30	0.03%	0.03%	0.09%	0.09%
40	0.07%	0.07%	0.20%	0.20%
50	0.19%	0.19%	0.56%	0.56%
60	0.49%	0.49%	1.46%	1.46%

Withdrawal rates (for causes other than death, disability or retirement):

Assumed annual rates of withdrawal are shown below.

Service Years	Annual Rates of Withdrawal	
	Non-Hazardous	Hazardous
0	28.00%	20.50%
1	16.00%	13.00%
2	12.00%	10.50%
3	10.00%	9.00%
4	8.00%	8.00%
5	6.00%	7.00%
6	5.00%	7.00%
7	5.00%	6.00%
8-13	4.00%	6.00%
14 & Over	3.00%	6.00%

Mortality Assumption:

Pre-retirement mortality: RP-2000 Combined Mortality Table projected with Scale BB to 2013. Male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%.

Post-retirement mortality (non-disabled): RP-2000 Combined Mortality Table projected with Scale BB to 2013. Female mortality rates are set back one year.

Post-retirement mortality (disabled): RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013. Male mortality rates are set back four years.

At the time of the last experience study, performed as of June 30, 2013, this mortality assumption provided 37% and 19% margin for future improvement for males and females, respectively. *Marital status*:

100% of employees are assumed to be married, with the female spouse 3 years younger than the male spouse.

Line of Duty Disability

0% of disabilities are assumed to occur in the line of duty

Line of Duty Death

25% of deaths are assumed to occur in the line of duty

Dependent Children:

For members in the Hazardous Plan who receive a duty-related death benefit, the member is assumed to be survived by two dependent children, each age 6 with payments for 15 years.

Form of Payment:

Members are assumed to elect a life-only annuity at retirement.

Actuarial Cost Method:

Entry Age Normal, Level Percentage of Pay. The Entry Age Normal actuarial cost method allocates the System's actuarial present value of future benefits to various periods based upon service. The portion of the present value of future benefits allocated to years of service prior to the valuation date is the actuarial accrued liability, and the portion allocated to years following the valuation date is the present value of future normal costs. The normal cost is determined for each active member as the level percent of pay necessary to fully fund the expected benefits to be earned over the career of each individual active member. The normal cost is partially funded with active member contributions with the remainder funded by employer contributions.

Health Care Age Related Morbidity/Claims Utilization:

To model the impact of aging on the underlying health care costs for Medicare retirees, the valuation relied on the Society of Actuaries' 2013 Study "Health Care Costs – From Birth to Death". Table 4 (Development of Plan Specific Medicare Age Curve) was used to model the impact of aging for ages 65 and over.

Health Care Cost Trend Rates[1]:

January 1	Non-Medicare Plans	Medicare Plans	Dollar Contribution[2]
2020	7.00%	5.00%	1.50%
2021	6.75%	4.90%	1.50%
2022	6.50%	4.80%	1.50%
2023	6.25%	4.70%	1.50%
2024	6.00%	4.60%	1.50%
2025	5.75%	4.50%	1.50%
2026	5.50%	4.40%	1.50%
2027	5.25%	4.30%	1.50%
2028	5.00%	4.20%	1.50%
2029	4.75%	4.10%	1.50%
2030	4.50%	4.05%	1.50%
2031	4.25%	4.05%	1.50%
2032 & Beyond	4.05%	4.05%	1.50%

[1]All increases are assumed to occur on January 1. The 2019 premiums were known at the time of the valuation and were incorporated into the liability measurement.

[2]Applies to members participating on or after July 1, 2003

Health care trend assumptions are based on the model issued by the Society of Actuaries "Getzen model of Long-Run Medical Cost Trends for the SOA; Thomas E. Getzen, iHEA and Temple University 2014 © Society of Actuaries.

The underlying assumptions used to develop the health care trend rates include:

- A short run period-this is a period for which anticipated health care trend rates are manually set based on local information as well as plan-specific and carrier information.
- Long term real GDP growth- 1.75%
- Long term rate of inflation- 2.30%
- Long term nominal GDP growth – 4.05%
- Year that excess rate converges to 0- 15 years from the valuation

Health care trend rates are thus the manually set rates for the short run period and rates which decline to an ultimate trend rate which equals the assumed nominal long term GDP growth rate.

Health Care Participation Assumptions:

- Members are assumed to elect health coverage at retirement at the following participation rates.

Service at Retirement	Members participating before 7/1/2003*	Members participating between 7/1/2003 and 9/1/2008	Members participating after 9/1/2008
Under 10	50%	100%	100%
10-14	75%	100%	100%
15-19	90%	100%	100%
Over 20	100%	100%	100%

* 100% of members with a duty disability or a duty death (in service) benefit are assumed to elect coverage at retirement.

- Future retirees are assumed to have a similar distribution by plan type as the current retirees.

Medicare Plan	Participation Percentage
Medical Only	7%
Essential	8%
Premium	86%

Non-Medicare Plan	Participation Percentage
LivingWell Limited	2%
LivingWell Basic	13%
LivingWell CDHP	27%
LivingWell PPO	58%

- 50% of deferred vested members participating before July 1, 2003 are assumed to elect health coverage at retirement. 100% of deferred vested members participating after July 1, 2003 are assumed to elect health coverage at retirement. Deferred vested members with non-hazardous service are assumed to begin health coverage at age 55 for members participating before September 1, 2008, and at age 60 for members participating on or after September 1, 2008. Deferred vested members with hazardous service are assumed to begin health coverage at age 50.

- 75% of future retirees, with hazardous service, are assumed to elect spouse health care coverage. No dependent coverage is assumed for members who only have non-hazardous service. 100% of spouses with health care coverage are assumed to continue coverage after the member's death.

Excise ("Cadillac") Tax:

For taxable years beginning after December 31, 2021, a 40% excise tax will be required to be paid (by the employer and/or insurer) on the aggregate cost of the health plan in excess of certain legislated thresholds. For 2018, the thresholds are $850 per month for individual coverage and $2,292 per month for family coverage.

Both Actuarial Standard of Practice No. 6 and GASB Statement Nos. 74 and 75 reference this tax, and, in accordance with these standards an estimate of the impact of the Cadillac tax has been included in this valuation.

Assumptions and methods used to determine the impact of the Cadillac Tax include:

- 2018 thresholds of $850/$2,292 were indexed annually by 2.30%.
- Premium data submitted was not adjusted for permissible exclusions to the Cadillac Tax.
- There were no special adjustments to the dollar limit other than those permissible for non-Medicare retirees over 55.

In this valuation, the impact of the Cadillac Tax has been calculated by increasing the employer paid premiums for Non-Medicare retirees, who became participants before July 1, 2003, by 3.6%. Non-Medicare retirees who became participants after July 1, 2003 receive dollar subsidies per year of service, which are not expected to exceed the overall Non-Medicare premiums. As a result, the costs attributable to the Cadillac Tax for members who became participants after July 1, 2003 will be paid by the retirees.

Changes in Assumptions since the prior valuation:

None.

Development of Baseline Claims Cost

For non-Medicare retirees, the initial per capita costs were based on the plan premiums effective January 1, 2019, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. The spouse/dependent premium of $865.74 for non-Medicare retirees is based on a blending of Family and Couple premiums for the current retirees that have over 4 years of hazardous service. The fully-insured premiums KRS pays the Kentucky Employees' Health Plan (KEHP) are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit rate subsidy for the non-Medicare eligible retirees. Actuarial Standard of Practice No. 6 (ASOP No. 6) requires aging subsidies (or implicit rate subsidies) to be recognized. However, the KRS health insurance trusts are only used to reimburse KEHP for the employer's portion of the blended premiums. Said another way, the trusts are not used to fund the difference between the underlying retiree claims and the blended KEHP premiums. As a result, the retiree health care liabilities developed in this report for the non-Medicare retirees are based solely on the premiums charged by KEHP, without any age-adjustment. GASB Statements No. 74 and No. 75 prohibit such a deviation from ASOP No. 6. The liabilities developed in this report are solely for the purpose of funding the benefits paid by the health insurance funds and are not appropriate for financial statement disclosures required by GASB. GRS provides separate GASB reports to KRS which include the liabilities associated with the implicit rate subsidy.

For those not eligible for Medicare		
Age	Member	Spouse/Dependents
<65	$717.39	$865.74

For Medicare retirees, the initial per capita costs were estimated based on the plan premiums effective January 1, 2019, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. Age graded and sex distinct premiums are utilized for retirees over the age of 65. These costs are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

For those eligible for Medicare		
Age	Male	Female
65	$183.50	$173.08
75	214.69	209.49
85	227.02	229.07

Appendix B of the report provides a full schedule of premiums.

Mehdi Riazi is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Mehdi Riazi, FSA, EA, MAAA

APPENDIX B

BENEFIT PROVISIONS

Summary of Benefit Provisions for County Employees Retirement System (CERS)

CERS Non-Hazardous Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 65 with at least 1 month of service credit; or Any age with at least 27 years of service
Benefit Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% times final average compensation times years of service. For members who began participating prior to 8/1/2004, the monthly benefit is 2.20% times final average compensation times years of service. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 5 years of compensation.
Early Retirement Eligibility	Any age (prior to age 65) with at least 25 years of service; or Age 55 with at least 5 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement eligibility precedes the member's normal retirement date.

CERS Non-Hazardous Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 65 with at least 5 years of service; or Rule of 87 (Age 57 or older if age plus service equals 87)
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.10%
10-20	1.30%
20-26	1.50%
26-30	1.75%
Greater than 30*	2.00%

* The 2.00% benefit multiplier only applies to service credit in excess of 30 years. If a member has greater than 30 years of service at retirement, service prior to 30 years will be multiplied by the 1.75% benefit multiplier.

Final compensation is based on the member's last 5 years of compensation.

Early Retirement Eligibility	Age 60 with at least 10 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 65 with at least 5 years of service; or Rule of 87 (Age 57 or older if age plus service equals 87)
Benefit Amount	Each year that the member is active, a 4.00% employer pay credit and the employee's 5.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

CERS Non-Hazardous Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 65th birthday, with total service not exceeding 25 years. Total service credit added shall not be greater than the member's actual service at disability. For members with at least 25 years of service on the last day of paid employment but less than 27 years of service, total service shall be 27 years. For members with 27 or more years of service credit, actual service will be used.

CERS Non-Hazardous Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 20% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 20% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Line of Duty Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly rate of pay. Additionally, each eligible dependent child will receive 10% of the member's monthly final rate of pay up to a maximum of 40%.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 55 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 75% of the deceased member's final monthly average pay. Each dependent child will receive 10% of average pay (not to exceed a total child benefit of 25% while the spouse is alive). A spouse may also elect the non-line of duty death benefit.
Child Benefit	In the event there is no surviving spouse, the benefit is 50% of final monthly average pay for one child, 65% of final average pay for two children, or 75% of final average pay for three or more eligible children.

CERS Non-Hazardous Employees (continued)

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	5% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the KRS board, not less than 2.0%.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	5% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	5% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes since the Prior Valuation

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members paid from the retirement fund have been increased from 25% of the member's final rate of pay to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children.

CERS Hazardous Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 55 with at least 1 month of service credit; or Any age with at least 20 years of service
Benefit Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation times years of service. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 3 years of compensation.
Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

CERS Hazardous Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.30%
10-20	1.50%
20-25	2.25%
Greater than 25	2.50%

Final average compensation is based on the member's highest 3 years of compensation.

Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	Each year that the member is active, a 7.50% employer pay credit and the employee's 8.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

CERS Hazardous Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that if the member has less than 20 years of service at disability, service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 55th birthday, with total service not exceeding 20 years. Total service credit added shall not be greater than the member's actual service at disability.

CERS Hazardous Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Line of Duty Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly rate of pay. Additionally, each eligible dependent child will receive 10% of the member's monthly final rate of pay up to a maximum of 40%.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 55 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 75% of the deceased member's final average pay. Each dependent child will receive 10% of average pay (not to exceed a total child benefit of 25% while the spouse is alive). A spouse may also elect the non-line of duty death benefit.
Non-Spouse Benefit	If the beneficiary is only one person who is a dependent receiving at least 50% of his or her support from the member, the beneficiary may elect a lump sum payment of$10,000.
Child Benefit	In the event there is no surviving spouse, the benefit is 50% of final monthly average pay for one child, 65% of final average pay for two children, or 75% of final average pay for three or more eligible children.

CERS Hazardous Employees (continued)

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	8% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the KRS board, not less than 2.0%.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes since the Prior Valuation

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members paid from the retirement fund have been increased from 25% of the member's final rate of pay to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children.

Summary of Main Retiree Insurance Benefit Provisions

Insurance Tier 1: Participation began before 7/1/2003

Benefit Eligibility Recipient of a retirement allowance

Benefit Amount

Non-Hazardous Service	Percentage of Member Premium Paid by Retirement System	Hazardous Service	Percentage of Member & Dependent Premium Paid by Retirement System
Less than 4 years	0%	Less than 4 years	0%
4 – 9 years	25%	4 – 9 years	25%
10 – 14 years	50%	10 – 14 years	50%
15 – 19 years	75%	15 – 19 years	75%
20 or more years	100%	20 or more years	100%

The percentage paid by the retirement system is applied to the 'contribution' plan selected by the KRS Board.

Duty Disability Retirement If disability was a result of injuries sustained while in the line of duty, the member receives 100% of the maximum contribution for the member and dependents. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.

Duty Death in Service If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive a fully subsidized health insurance benefit. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.

Non-Duty Death in Service If the surviving spouses is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Surviving Spouse of a Retiree A surviving spouse of a retiree, who is in receipt of a pension allowance, will receive a premium subsidy based on the member's years of hazardous service.

Hazardous employees who retired prior to August 1, 1998 System's contribution for spouse and dependents is based on total service.

Insurance Tier 2: Participation began on or after 7/1/2003, but before 9/1/2008

Benefit Eligibility	Recipient of a retirement allowance with at least 120 months of service at retirement
Non-Hazardous Subsidy	Monthly contribution of $10 for each year of earned service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $13.18/year of service. Upon the retiree's death, the surviving spouse may continue coverage (if in receipt of a retirement allowance) but will be 100% responsible for the premiums.
Hazardous Subsidy	Monthly contribution of $15 for each year of earned hazardous service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $19.77/year of service. Upon the retiree's death, the surviving spouse of a hazardous duty member will receive a monthly contribution of $10 ($13.18 as of July 1, 2017) for each year of hazardous service.
Duty Disability Retirement	If disability was a result of injuries sustained while in the line of duty, the member receives a benefit equal to at least 20 times the Non-Hazardous monthly contribution. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.
Duty Death in Service	If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive a fully subsidized health insurance benefit. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.
Non-Duty Death in Service	If the surviving spouse is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Insurance Tier 3: Participation began on or after 9/1/2008

Tier 3 insurance benefits are identical to Tier 2, except Tier 3 members are required to have at least 180 months of service in order to be eligible.

Monthly Health Plan Premiums – Effective January 1, 2019

Non-Medicare Plan Options					
Plan Option	Single	Parent Plus	Couple	Family	Family X-Ref
LivingWell PPO*	$729.34	$1,037.08	$1,589.10	$1,767.60	$876.68
LivingWell CDHP	709.46	978.50	1,333.64	1,479.76	818.96
LivingWell Basic	682.80	940.64	1,450.02	1,615.30	800.94
Living Well Limited	607.54	865.08	1,327.16	1,477.04	730.90

Medicare Plan Options	
Kentucky Retirement Systems - Medical Only Plan	$175.22
Kentucky Retirement Systems – Medicare Advantage/Essential Plan	53.73
Kentucky Retirement Systems – Medicare Advantage/Premium Plan*	220.11

*For 2019, the contribution plans selected by the KRS Board were the LivingWell PPO plan option for non-Medicare retirees and the Medicare Advantage Premium plan option for Medicare retirees.

Dollar Contribution Amount for Insurance Tier 2 and Tier 3

Monthly contribution amounts per year of service as of July 1, 2018.

Non-Hazardous Service	Hazardous Service
$13.38	$20.07

Changes since the Prior Valuation

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. The insurance fund shall now pay 100% of the insurance premium for spouses and children of all active members who die in the line of duty.

APPENDIX C

GLOSSARY

Glossary

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or ***Funding Method:*** A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ADC.

Actuarial Gain or ***Actuarial Loss:*** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)

b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, non-retired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations that provide the financial information of the plan, such as the funded ratio, unfunded actuarial accrued liability and the ADC.

Actuarial Value of Assets or ***Valuation Assets:*** The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Actuarially Determined Contribution (ADC): The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADC consists of the Employer Normal Cost and the Amortization Payment.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment: The portion of the pension plan contribution or ADC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Closed Amortization Period: A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.

Funding Period or ***Amortization Period:*** The term "Funding Period" is used two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ADC. This funding period specified in State statute. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on a statutory employer contribution rate, and assuming no future actuarial gains or losses.

GASB: Governmental Accounting Standards Board.

GASB 67 and ***GASB 68***: Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting and reporting rules for public retirement systems and the employers that sponsor, participate in, or contribute to them. Statement No. 67 sets the accounting rules for the financial reporting of the retirement systems, while Statement No. 68 sets the rules for the employers that sponsor, participate in, or contribute to public retirement systems.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded

Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but may not decrease by exactly one year in the subsequent year's actuarial valuation. For instance, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year.

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

Valuation Date or Actuarial Valuation Date: The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

State Police Retirement System (SPRS)

Actuarial Valuation Report
as of June 30, 2018

GRS Retirement Consulting

P: 469.524.0000 | F: 469.524.0003 | www.grsconsulting.com

October 31, 2018

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Actuarial Valuation as of June 30, 2018

Dear Trustees of the Board:

This report describes the current actuarial condition of the State Police Retirement System (SPRS), provides the actuarially determined employer contribution rates for fiscal year ending June 30, 2020, and analyzes changes in the System's financial condition. In addition, the report provides various summaries of the data. The results of this actuarial valuation, including the calculated employer contribution rates will be used by the Board and stakeholders for informational purposes only as the employer contribution rate for the fiscal years ending June 30, 2019 and June 30, 2020 were certified in the June 30, 2017 actuarial valuation and adopted by the Board.

Separate reports are issued with regard to valuation results determined in accordance with Governmental Accounting Standards Board (GASB) Statements 67, 68, 74 and 75. Results of this report should not be used for any other purpose without consultation with the undersigned. Valuations are prepared annually as of June 30, the first day of the plan year for KRS. This report was prepared at the request of the Board of Trustees of the Kentucky Retirement System (Board) and is intended for use by the KRS staff and those designated or approved by the Board.

FINANCING OBJECTIVES AND FUNDING POLICY

The employer contribution rate is determined in accordance with Section 61.565 of Kentucky Statute. As specified by the Statute, the employer contribution rate is determined based on a closed thirty-year amortization period beginning July 1, 2013. As a result, the amortization period used in the 2018 actuarial valuation is 25 years. As noted above, the contribution rate determined by this actuarial valuation is for informational purposes and may be useful in tracking the change in in the calculated contribution rate since the prior valuation performed as of June 30, 2017.

ASSUMPTIONS AND METHODS

There were no changes in actuarial assumptions since the prior actuarial valuation. It is our opinion that the current assumptions are internally consistent and reasonably reflect the anticipated future experience of the System.

Kentucky Statutes also require that an actuarial investigation be performed at least every five years to review the economic and demographic assumptions. An experience study was conducted as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018 and the Board adopted assumptions as a result of that analysis will be first used to prepare the June 30, 2019 actuarial valuation. The Board also has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

BENEFIT PROVISIONS

The benefit provisions reflected in these valuations are those which were in effect on June 30, 2018. During the 2018 legislative session House Bill 185 was enacted which provides increased the retirement and health insurance benefits for active members who die in the line of duty.

This actuarial valuation was determined without regard to the enactment of SB 151 in 2018, which is currently being reviewed by the State Supreme Court.

DATA

Member data for retired, active and inactive members was supplied as of June 30, 2018, by the KRS staff. The staff also supplied asset information as of June 30, 2018. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by KRS.

CERTIFICATION

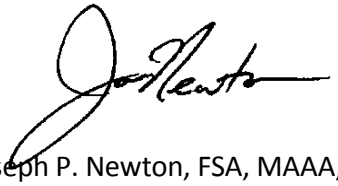
We certify that the information presented herein is accurate and fairly portrays the actuarial position of SPRS as of June 30, 2018.

All of our work conforms with generally accepted actuarial principles and practices, and is in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,

Gabriel, Roeder, Smith & Co.



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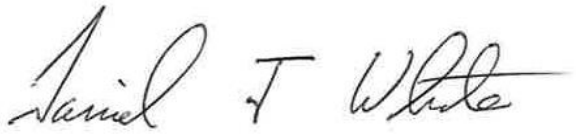
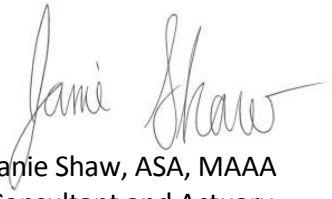
Pension Market Leader and Actuary



Daniel J. White, FSA, MAAA, EA
Senior Consultant and Actuary



Janie Shaw, ASA, MAAA
Consultant and Actuary

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Appendix B Benefit Provisions

Appendix C Glossary

SECTION 1

EXECUTIVE SUMMARY

Summary of Principal Results

(Dollar amounts expressed in thousands)

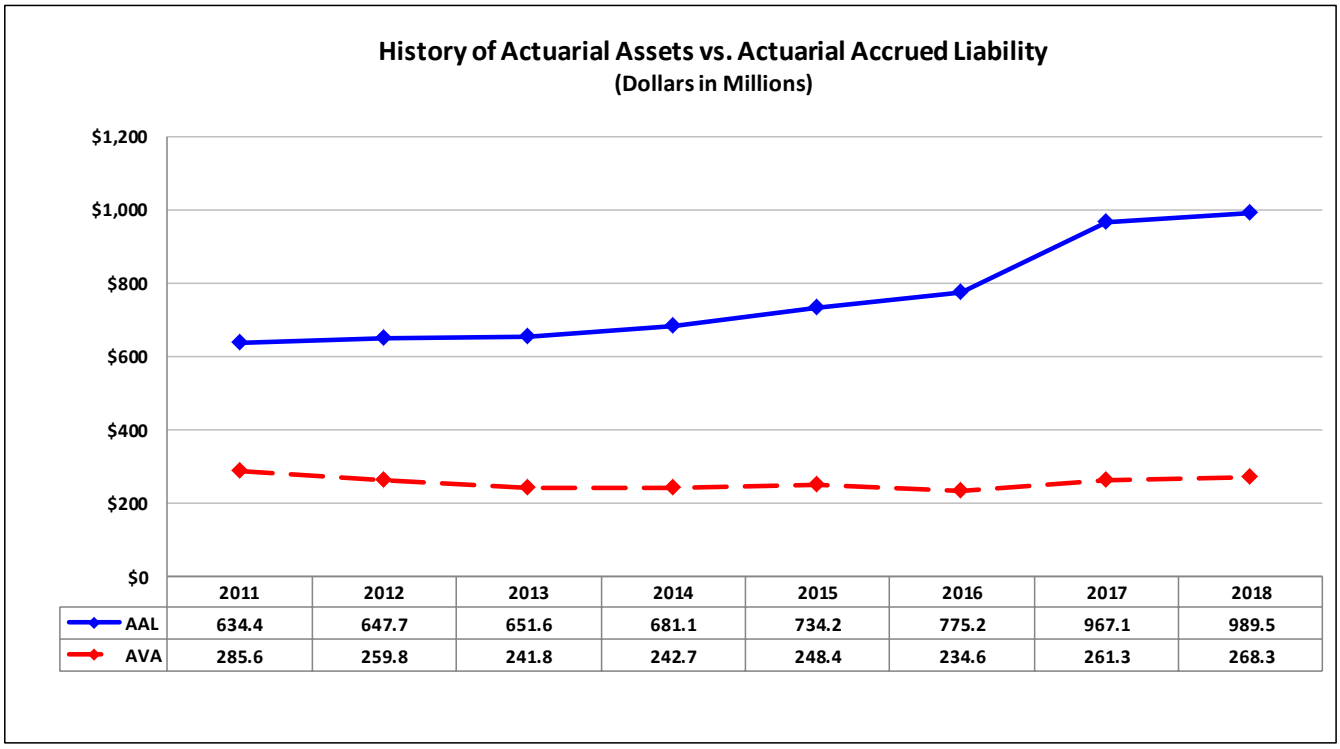
	SPRS	
	June 30, 2018	June 30, 2017
Actuarially Determined Contribution:		
Retirement	120.54%	119.05%
Insurance	19.50%	27.23%
Total	140.04%	146.28%
Actual Contribution Rate for Next Fiscal Year[1]	146.28%	146.28%
Assets:		
Retirement		
• Actuarial value (AVAR)	$268,259	$261,320
• Market value (MVAR)	$267,572	$255,737
• Ratio of actuarial to market value of assets	100.3%	102.2%
Insurance		
• Actuarial value (AVAI)	$187,535	$180,464
• Market value (MVAI)	$190,847	$178,838
• Ratio of actuarial to market value of assets	98.3%	100.9%
Funded Status:		
Retirement		
• Actuarial accrued liability	$989,528	$967,145
• Unfunded accrued liability on AVAR	$721,269	$705,825
• Funded ratio on AVAR	27.1%	27.0%
• Unfunded accrued liability on MVAR	$721,956	$711,408
• Funded ratio on MVAR	27.0%	26.4%
Insurance		
• Actuarial accrued liability	$262,088	$276,641
• Unfunded accrued liability on AVAI	$74,553	$96,177
• Funded ratio on AVAI	71.6%	65.2%
• Unfunded accrued liability on MVAI	$71,241	$97,803
• Funded ratio on MVAI	72.8%	64.6%
Membership:		
• Number of		
- Active Members	886	903
- Retirees and Beneficiaries	1,600	1,536
- Inactive Members	499	480
- Total	2,985	2,919
• Projected payroll of active members	$48,808	$48,598
• Average salary of active members	$55,088	$53,818

[1] Based on contribution rates budgeted in House Bill 200 during the 2018 legislative session

Executive Summary (Continued)

Retirement Fund

The unfunded actuarial accrued liability of the retirement system increased by $15 million since the prior year's valuation to $721 million. The largest source of this increase due to a $20 million loss due to liability experience. Below is a chart with the historical actuarial value of assets and actuarial accrued liability. The divergence in the assets and liability over the last eight years has generally been due to a combination of the actual investment experience being less than the fund's expected investment return assumption, a decrease in the assumed rate of return in 2015, 2016 and again in 2017, and contributions that were insufficient to amortize the unfunded actuarial accrued liability.



	2011	2012	2013	2014	2015	2016	2017	2018
AAL	634.4	647.7	651.6	681.1	734.2	775.2	967.1	989.5
AVA	285.6	259.8	241.8	242.7	248.4	234.6	261.3	268.3

Executive Summary (Continued)

Insurance Fund

The Insurance fund experience extremely favorable premium experience from calendar year 2018 to 2019. Specifically, the non-Medicare premiums were expected to increase by 7.25% from calendar year 2018 to calendar year 2019 (i.e. the medical trend assumption for non-Medicare premiums used in the actuarial valuation) and the actual average premiums remained relatively unchanged. Also, the Medicare premiums were expected to increase by 5.10% from calendar year 2018 to calendar year 2019 (i.e. the medical trend assumption used in the actuarial valuation for Medicare premium) and the actual average premiums decreased by 12%.

Since the prior year's valuation, the unfunded actuarial accrued liability for the insurance fund decreased by $22 million to $75 million with $27 million of that decrease attributable to the favorable premium experience. The corresponding funded ratio increased from 65.2% at June 30, 2017 to 71.6% at June 30, 2018.

SECTION 2

DISCUSSION

Discussion

The State Police Retirement System (SPRS) is a defined benefit pension fund that provides pensions and health care coverage for uniformed state police officers. SPRS includes both non-hazardous and hazardous duty benefits. This report presents the result of the June 30, 2018 actuarial funding valuation for both the Retirement Plan and Insurance Funds.

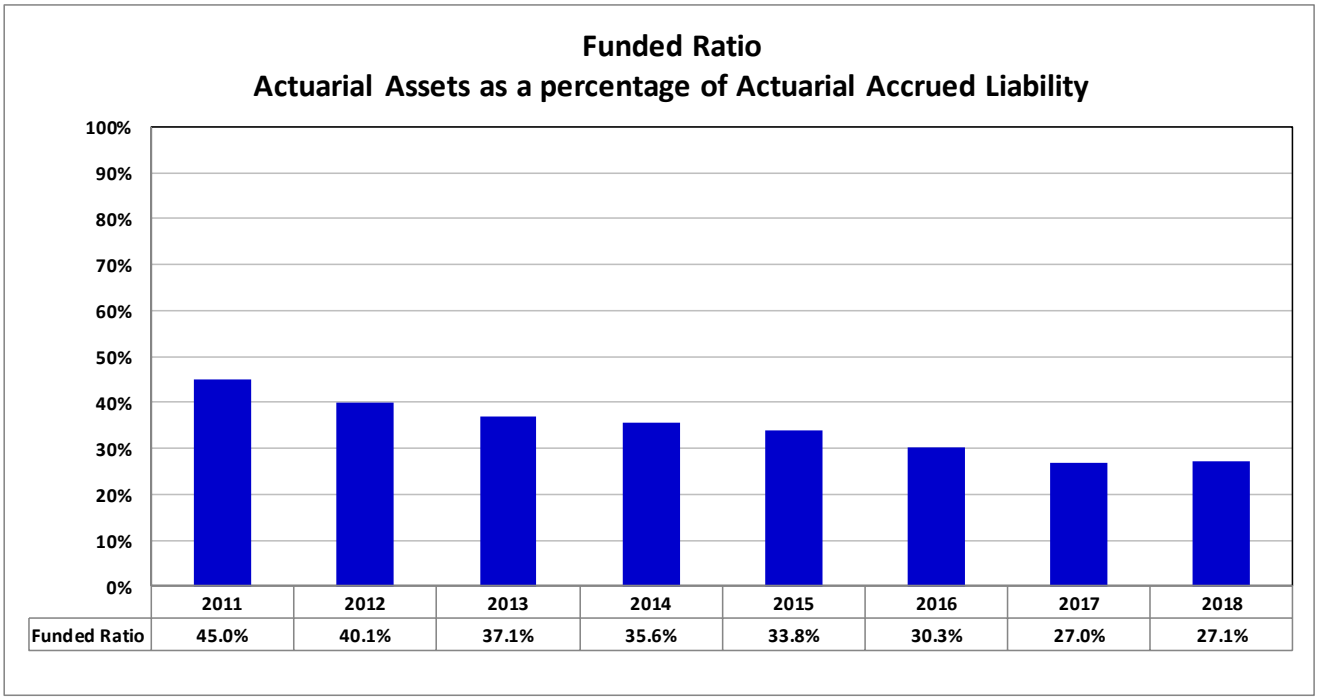
The primary purposes of the valuation report are to depict the current financial condition of the System and analyze changes in the System's financial condition. In addition, the report provides various summaries of the data. The results of this actuarial valuation, including the calculated employer contribution rates will be used by the Board and stakeholders for informational purposes only as the employer contribution rate for the fiscal years ending June 30, 2019 and June 30, 2020 were certified in the June 30, 2017 actuarial valuation and adopted by the Board.

The actuarially determined contribution rates consist of two components: a normal cost rate and an amortization cost to finance the unfunded actuarial accrued liability. The normal cost rate is the theoretical amount which would be required to pay the members' benefits, based on the current plan provisions, if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. This is the amount it should cost to provide the benefits for an average new member. Since members contribute to the fund, only the excess of the normal rate over the member contribution rate is included in the employer contribution rate. The amortization cost is the amount, expressed as a percentage of payroll, necessary to amortize the unfunded actuarial accrued liability. The payroll growth rate and discount rate assumptions are selected by the Board. The funding period is specified in Section 61.565 of Kentucky Statute.

All of the actuarial and financial tables referenced by the other sections of this Report appear in Section 3. Section 4 provides member data and statistical information. Appendices A and B provide summaries of the principle actuarial assumptions and methods and plan provisions. Finally, Appendix C provides a glossary of technical terms that are used throughout this report.

Funding Progress

The following charts provide an eight-year history of the retirement system's funded ratio (i.e. the Actuarial Value of Assets divided by the Actuarial Accrued Liability). The decline in the funded ratio over the last eight years has generally been due to actual contributions being insufficient to finance the unfunded actuarial accrued liability, actual investment experience being less than the investment return assumption, a decrease in the assumed rate of return in 2015, 2016 and again in 2017.



Assuming the actuarial determined contributions are actually paid in future years and absent future unfavorable experience we expect the funded ratio to begin improving. Also, the dollar amount of the unfunded actuarial accrued liability, or the difference between the actuarial accrued liability and the actuarial value of assets, is expected to decrease after the higher contribution rates determined by the June 30, 2017 actuarial valuation become effective July 1, 2018. Table 9, Schedule of Funding Progress, in the following section of the report provides additional detail regarding the funding progress of the Retirement System.

Asset Gains/ (Losses)

The actuarial value of assets ("AVA") is based on a smoothed market value of assets, using a systematic approach to phase-in the difference between the actual and expected investment return on the market value of assets (adjusted for receipts and disbursements during the year). This is appropriate because it dampens the short-term volatility inherent in investment markets. The returns are computed net of investment expenses. The actuarial value of assets for the retirement fund increased from $261.3 million to $268.3 million since the prior valuation. Table 7 in the following section of the report provides the development of the actuarial value of assets.

The rate of return on the market value of assets on a dollar-weighted basis for fiscal year 2018 was a 7.3% which is greater than the 5.25% expected annual return. The return on an actuarial (smoothed) asset value was 5.2%, which resulted in a $7 thousand loss for the fiscal year. This difference in the estimated return on market value and actuarial value illustrates the smoothing effect of the asset valuation method.

The market value of assets is $0.7 million less than the actuarial value of assets, which signifies that the retirement fund is in a position of deferred losses. Therefore, unless the fund experiences investment returns in excess of the assumed rate of return in an amount that is at least equal to the outstanding deferred losses, the future recognition of these deferred losses is expected to increase the unfunded actuarial accrued liability.

Table 6 in the following section of this report provides asset information that was included in the annual financial statements of the System. Also, Tables 6 and 7 shows the estimated yield on a market value basis and on the actuarial asset valuation method.

Actuarial Gains/ (Losses)

The annual actuarial valuation is a snapshot analysis of the benefit liabilities, assets and funded position of the System as of the first day of the plan year. In any one fiscal year, the experience can be better or worse from that which is assumed or expected. The actuarial assumptions do not necessarily attempt to model what the experience will be for any one given fiscal year, but instead try to model the overall experience over many years. Therefore, as long as the actual experience of the retirement system is reasonably close to the current assumptions, the long-term funding requirements of the System will remain relatively consistent.

Below are tables that separately show a reconciliation of the actuarial gains / (loss) since the prior actuarial valuation for the retirement and health insurance funds, which include the effect of asset and liability gains and losses, changes in assumptions, changes in plan provisions, etc.

Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

	Retirement	Insurance
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ 705,825	$ 96,177
2. Normal cost and administrative expenses	11,766	5,597
3. Less: contributions for the year	(52,421)	(9,560)
4. Interest accrual	35,989	5,887
5. Expected UAAL (Sum of Items 1 - 4)	$ 701,159	$ 98,101
6. Actual UAAL as of June 30,2018	$ 721,269	$ 74,553
7. Total gain (loss) for the year (Item 5 - Item 6)	$ (20,110)	$ 23,548
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ (7)	$ 393
9. Liability experience gain (loss) for the year	(19,919)	23,190
10. Plan Change	(184)	(35)
11. Assumption change	0	0
12. Total	$ (20,110)	$ 23,548

The favorable premium experience from calendar year 2018 to calendar year 2019 resulted in a $27 million liability gain for the insurance fund.

Actuarial Assumptions and Methods

In determining costs and liabilities, actuaries use assumptions about the future, such as rates of salary increase, probabilities of retirement, termination, death and disability, and an annual investment return assumption. There were no changes to the actuarial assumptions and methods since the last actuarial valuation. It is our opinion that the assumptions are internally consistent, reasonable, and reflect anticipated future experience of the System. Appendix A includes a summary of the actuarial assumptions and methods used in this valuation.

An experience study was conducted as of June 30, 2013 and the next experience study will be conducted as of June 30, 2018, the results of which will be first used in preparing the June 30, 2019 actuarial valuation. However, the Board has the authority to review the assumptions on a more frequent basis and adopt new assumptions prior to the next scheduled experience study.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. This report does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

Benefit Provisions

Appendix B of this report includes a summary of the benefit provisions for SPRS.

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members paid from the retirement fund have been increased from 25% of the member's final rate of pay to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children. The insurance fund shall also now pay 100% of the insurance premium for spouses and children of all active members who die in the line of duty.

This actuarial valuation was determined without regard to enactment of SB 151 in 2018, which is currently being reviewed by the State Supreme Court.

This valuation reflects all benefits promised to SPRS members, either by the statutes or by the Board. There are no ancillary benefits that might be deemed a SPRS liability if continued beyond the availability of funding by the current funding source.

SECTION 3

ACTUARIAL TABLES

Actuarial Tables

TABLE NUMBER	PAGE	CONTENT OF TABLE
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2	15	ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS
3	16	DEVELOPMENT OF REQUIRED CONTRIBUTION RATE
4	17	ACTUARIAL BALANCE SHEET – RETIREMENT
5	18	ACTUARIAL BALANCE SHEET – INSURANCE
6	19	RECONCILIATION OF SYSTEM NET ASSETS
7	20	DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS – RETIREMENT
8	21	DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS – INSURANCE
9	22	SCHEDULE OF FUNDING PROGRESS
10	23	SUMMARY OF PRINCIPAL ASSUMPTIONS AND METHODS
11	24	SOLVENCY TEST

Development of Unfunded Actuarial Accrued Liability

(Dollar amounts expressed in thousands)

		June 30, 2018	
		Retirement (1)	Insurance (2)
1.	Projected payroll of active members	$ 48,808	$ 48,808
2.	Present value of future pay	$ 436,669	$ 398,014
3.	Normal cost rate		
	a. Total normal cost rate	23.41%	8.29%
	b. Less: member contribution rate	-8.00%	-0.35%
	c. Employer normal cost rate	15.41%	7.94%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 282,511	$ 103,561
	b. Less: present value of future normal costs	(93,771)	(24,624)
	c. Actuarial accrued liability	$ 188,740	$ 78,937
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 793,303	$ 179,760
	b. Inactive members	7,485	3,391
	c. Active members (Item 4c)	188,740	78,937
	d. Total	$ 989,528	$ 262,088
6.	Actuarial value of assets	$ 268,259	$ 187,535
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 721,269	$ 74,553
8.	Funded Ratio	27.1%	71.6%

Actuarial Present Value of Future Benefits

(Dollar amounts expressed in thousands)

		June 30, 2018	
		Retirement (1)	Insurance (2)
1.	Active members		
	a. Service retirement	$ 259,601	
	b. Deferred termination benefits and refunds	14,945	
	c. Survivor benefits	1,931	
	d. Disability benefits	6,034	
	e. Total	$ 282,511	$ 103,561
2.	Retired members		
	a. Service retirement	$ 723,302	
	b. Disability retirement	11,337	
	c. Beneficiaries	58,664	
	d. Total	$ 793,303	$ 179,760
3.	Inactive members		
	a. Vested terminations	$ 7,158	$ 3,391
	b. Nonvested terminations	327	N/A
	c. Total	$ 7,485	$ 3,391
4.	Total actuarial present value of future benefits	$ 1,083,299	$ 286,712

Development of Actuarially Determined Contribution Rate

		June 30, 2018	
		Retirement (1)	Insurance (2)
1.	Total normal cost rate		
	a. Service retirement	19.57%	
	b. Deferred termination benefits and refunds	2.79%	
	c. Survivor benefits	0.27%	
	d. Disability benefits	0.78%	
	e. Total	23.41%	8.29%
2.	Less: member contribution rate	-8.00%	-0.35%
3.	Total employer normal cost rate	15.41%	7.94%
4.	Administrative expenses	0.40%	0.13%
5.	Net employer normal cost rate	15.81%	8.07%
6.	UAAL amortization contribution	104.73%	11.43%
7.	Total calculated employer contribution	120.54%	19.50%

Actuarial Balance Sheet

Retirement Benefits

(Dollar amounts expressed in thousands)

		June 30, 2018 (1)	June 30, 2017 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 268,259	$ 261,320
	b. Present value of future member contributions	$ 34,933	$ 33,935
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 58,838	$ 59,745
	ii. Unfunded accrued liability contributions	721,269	705,825
	iii. Total future employer contributions	$ 780,107	$ 765,570
	d. Total assets	$ 1,083,299	$ 1,060,825
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 93,771	$ 93,680
	ii. Accrued liability	188,740	193,163
	iii. Total present value of future benefits	$ 282,511	$ 286,843
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 793,303	$ 766,899
	c. Present value of benefits payable on account of current inactive members	$ 7,485	$ 7,083
	d. Total liabilities	$ 1,083,299	$ 1,060,825

Actuarial Balance Sheet

Insurance Benefits

(Dollar amounts expressed in thousands)

		June 30, 2018 (1)	June 30, 2017 (2)
1.	Assets - Present and Expected Future Resources		
	a. Current assets (actuarial value)	$ 187,535	$ 180,464
	b. Present value of future member contributions	$ 2,186	$ 1,905
	c. Present value of future employer contributions		
	i. Normal cost contributions	$ 22,438	$ 30,836
	ii. Unfunded accrued liability contributions	74,553	96,177
	iii. Total future employer contributions	$ 96,991	$ 127,013
	d. Total assets	$ 286,712	$ 309,382
2.	Liabilities - Present Value of Expected Future Benefit Payments		
	a. Active members		
	i. Present value of future normal costs	$ 24,624	$ 32,741
	ii. Accrued liability	78,937	90,251
	iii. Total present value of future benefits	$ 103,561	$ 122,992
	b. Present value of benefits payable on account of current retired members and beneficiaries	$ 179,760	$ 183,156
	c. Present value of benefits payable on account of current inactive members	$ 3,391	$ 3,234
	d. Total liabilities	$ 286,712	$ 309,382

Reconciliation of Retirement Net Assets

(Dollar amounts expressed in thousands)*

	Year Ending June 30, 2018 (1) Retirement	Year Ending June 30, 2018 (2) Insurance
1. Value of assets at beginning of year	$ 255,737	$ 178,838
2. Revenue for the year		
a. Contributions		
i. Member contributions	$ 5,522	$ 155
ii. Employer contributions	36,486	9,397
iii. Other contributions (less 401h)	10,413	8
iii. Total	$ 52,421	$ 9,560
b. Income		
i. Interest, dividends, and other income	$ 5,683	$ 3,972
ii. Investment expenses	(1,692)	(1,841)
iii. Net	$ 3,991	$ 2,131
c. Net realized and unrealized gains (losses)	14,446	14,338
d. Total revenue	$ 70,857	$ 26,030
3. Expenditures for the year		
a. Disbursements		
i. Refunds	$ 22	$ 0
ii. Regular annuity benefits / Healthcare premiums	58,805	13,880
iii. Other benefit payments	0	79
iv. Transfers to other systems	0	0
v. Total	$ 58,827	$ 13,959
b. Administrative expenses and depreciation	194	62
c. Total expenditures	$ 59,021	$ 14,021
4. Increase in net assets (Item 2. - Item 3.)	$ 11,836	$ 12,008
5. Value of assets at end of year (Item 1. + Item 4.)	$ 267,572	$ 190,847
6. Net external cash flow		
a. Dollar amount	$ (6,600)	$ (4,461)
b. Percentage of market value	-2.5%	-2.4%
7. Estimated annual return on net assets	7.3%	9.3%

* Amounts may not add due to rounding

* Retirement assets exclude 401h assets and insurance assets include 401h assets

Development of Actuarial Value of Assets

Retirement Benefits

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2018
1.	Actuarial value of assets at beginning of year	$ 261,320
2.	Market value of assets at beginning of year	$ 255,737
3.	Net new investments	
	a. Contributions	$ 52,421
	b. Benefit payments	(58,827)
	c. Administrative expenses	(194)
	d. Subtotal	$ (6,600)
4.	Market value of assets at end of year	$ 267,572
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 18,436
6.	Assumed investment return rate for fiscal year	5.25%
7.	Expected return for immediate recognition	$ 13,253
8.	Excess return for phased recognition	$ 5,183
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2018	$ 5,183	$ 1,037
b.	2017	11,623	2,325
c.	2016	(21,455)	(4,291)
d.	2015	(16,122)	(3,224)
e.	2014	22,202	4,440
f.	Total		$ 286

10.	Actuarial value of assets as of June 30, 2018 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 268,259
11.	Ratio of actuarial value to market value	100.3%
12.	Estimated annual return on actuarial value of assets	5.2%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Insurance Benefits

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2018
1.	Actuarial value of assets at beginning of year	$ 180,464
2.	Market value of assets at beginning of year	$ 178,838
3.	Net new investments	
	a. Contributions	$ 9,560
	b. Benefit payments	(13,959)
	c. Administrative expenses	(62)
	d. Subtotal	$ (4,461)
4.	Market value of assets at end of year	$ 190,847
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 16,469
6.	Assumed investment return rate for fiscal year	6.25%
7.	Expected return for immediate recognition	$ 11,038
8.	Excess return for phased recognition	$ 5,431
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2018	$ 5,431	$ 1,086
b.	2017	9,723	1,945
c.	2016	(12,288)	(2,458)
d.	2015	(9,762)	(1,952)
e.	2014	9,368	1,874
f.	Total		$ 494

10.	Actuarial value of assets as of June 30, 2018 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 187,535
11.	Ratio of actuarial value to market value	98.3%
12.	Estimated annual return on actuarial value of assets	6.5%

* Amounts may not add due to rounding

Schedule of Funding Progress

(Dollar amounts expressed in thousands)

June 30, (1)	Actuarial Value of Assets (AVA) (2)	Actuarial Accrued Liability (AAL) (3)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2) (4)	Funded Ratio (2)/(3) (5)	Annual Covered Payroll (6)	UAAL as % of Payroll (4)/(6) (7)
			Retirement			
2011	$ 285,581	$ 634,379	$ 348,799	45.0%	$ 48,693	716.3%
2012	259,792	647,689	387,897	40.1%	48,373	801.9%
2013	241,800	651,581	409,780	37.1%	45,256	905.5%
2014	242,742	681,118	438,377	35.6%	44,616	982.6%
2015	248,388	734,156	485,769	33.8%	45,765	1061.4%
2016	234,568	775,160	540,593	30.3%	45,551	1186.8%
2017	261,320	967,145	705,825	27.0%	48,598	1452.4%
2018	268,259	989,528	721,269	27.1%	48,808	1477.8%
			Insurance			
2011	$ 123,687	$ 438,428	$ 314,740	28.2%	$ 48,693	646.4%
2012	124,372	333,904	209,532	37.2%	48,373	433.2%
2013	136,321	222,327	86,006	61.3%	45,256	190.0%
2014	155,595	234,271	78,676	66.4%	44,616	176.3%
2015	167,775	254,839	87,064	65.8%	45,765	190.2%
2016	172,704	257,197	84,494	67.1%	45,551	185.5%
2017	180,464	276,641	96,177	65.2%	48,598	197.9%
2018	187,535	262,088	74,553	71.6%	48,808	152.7%

Summary of Principal Assumptions and Methods

Below is a summary of the principal economic assumptions, cost method, and the method for financing the unfunded actuarial accrued liability:

Valuation date:	June 30, 2018
Actuarial cost method:	Entry Age Normal
Amortization method:	Level percentage of payroll (0% payroll growth assumed)
Amortization period for contribution rate:	25-year closed period
Asset valuation method:	5-Year Smoothed Market
Actuarial assumptions:	
Investment rate of return	5.25%
Projected salary increases	3.05% to 15.55% (varies by service)
Inflation	2.30%
Post-retirement benefit adjustments	0.00%
Retiree Mortality	RP-2000 Combined Mortality Table for Males and Females, projected using scale BB to 2013 (set back one year for females).

Solvency Test

(Dollar amounts expressed in thousands)

June 30,	Actuarial Accrued Liability: Active Member Contributions	Actuarial Accrued Liability: Retired Members & Beneficiaries	Actuarial Accrued Liability: Active Members (Employer Financed)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets: Active	Portion of Aggregate Accrued Liabilities Covered by Assets: Retired	Portion of Aggregate Accrued Liabilities Covered by Assets: ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Retirement							
2009	$ 41,664	$ 459,585	$ 101,079	$ 329,967	100.0%	62.7%	0.0%
2010	42,012	475,893	94,541	304,577	100.0%	55.2%	0.0%
2011	43,574	499,194	91,611	285,581	100.0%	48.5%	0.0%
2012	41,139	523,017	83,533	259,792	100.0%	41.8%	0.0%
2013	39,788	535,720	76,072	241,800	100.0%	37.7%	0.0%
2014	41,831	563,011	76,276	242,742	100.0%	35.7%	0.0%
2015	41,567	605,855	86,734	248,388	100.0%	34.1%	0.0%
2016	41,871	636,499	96,791	234,568	100.0%	30.3%	0.0%
2017	44,798	773,982	148,365	261,320	100.0%	28.0%	0.0%
2018	43,835	800,788	144,905	268,259	100.0%	28.0%	0.0%
Insurance							
2009	$ -	$ 167,091	$ 196,940	$ 123,527	100.0%	73.9%	0.0%
2010	-	253,581	181,380	121,175	100.0%	47.8%	0.0%
2011	-	252,440	185,988	123,687	100.0%	49.0%	0.0%
2012	-	190,259	143,645	124,372	100.0%	65.4%	0.0%
2013	-	139,509	82,818	136,321	100.0%	97.7%	0.0%
2014	-	143,402	90,869	155,595	100.0%	100.0%	13.4%
2015	-	170,447	84,392	167,775	100.0%	98.4%	0.0%
2016	-	177,094	80,103	172,704	100.0%	97.5%	0.0%
2017	-	186,390	90,251	180,464	100.0%	96.8%	0.0%
2018	-	183,151	78,937	187,535	100.0%	100.0%	5.6%

SECTION 4

MEMBERSHIP INFORMATION

Membership Tables

TABLE NUMBER	PAGE	CONTENT OF TABLE
12	27	SUMMARY OF MEMBERSHIP DATA
13	28	SUMMARY OF HISTORICAL ACTIVE MEMBERSHIP
14	29	DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVIC
15	30	SCHEDULE OF ANNUITANTS BY AGE
16	31	SCHEDULE OF ANNUITANTS BY BENEFIT TYPE – RETIREES
17	32	SCHEDULE OF ANNUITANTS BY BENEFIT TYPE – BENEFICIARIES
18	33	SCHEDULE OF ANNUITANTS ADDED TO AND REMOVED FROM ROLLS

Summary of Membership Data

(Total dollar amounts expressed in thousands)

		June 30, 2018	June 30, 2017
		(1)	(4)
1.	Active members		
	a. Males	857	873
	b. Females	29	30
	c. Total members	886	903
	d. Total annualized prior year salaries	$ 48,808	$ 48,598
	e. Average salary	$ 55,088	$ 53,819
	f. Average age	37.3	37.5
	g. Average service	10.5	10.6
	h. Member contributions with interest	$ 43,835	$ 44,798
	i. Average contributions with interest	$ 49,476	$ 49,610
2.	Vested inactive members		
	a. Number	176	86
	b. Total annual deferred benefits	$ 815	$ 762
	c. Average annual deferred benefit	$ 4,632	$ 8,860
	d. Average age at the valuation date	41.0	42.5
3.	Nonvested inactive members		
	a. Number	323	394
	b. Total member contributions with interest	$ 327	$ 520
	c. Average contributions with interest	$ 1,012	$ 1,320
4.	Service retirees		
	a. Number	1,331	1,279
	b. Total annual benefits	$ 52,821	$ 50,871
	c. Average annual benefit	$ 39,686	$ 39,774
	d. Average age at the valuation date	62.8	62.7
5.	Disabled retirees		
	a. Number	52	53
	b. Total annual benefits	$ 909	$ 968
	c. Average annual benefit	$ 17,473	$ 18,264
	d. Average age at the valuation date	59.3	59.2
6.	Beneficiaries		
	a. Number	217	204
	b. Total annual benefits	$ 5,896	$ 5,414
	c. Average annual benefit	$ 27,168	$ 26,539
	d. Average age at the valuation date	65.9	65.6

Summary of Historical Active Membership

	Active Members		Covered Payroll[1]		Average Annual Pay	
June 30,	Number	Percent Increase /(Decrease)	Amount in Thousands	Percent Increase /(Decrease)	Amount	Percent Increase /(Decrease)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2011	965		48,693		$ 50,459	
2012	907	-6.0%	48,373	-0.7%	53,332	5.7%
2013	902	-0.6%	45,256	-6.4%	50,173	-5.9%
2014	855	-5.2%	44,616	-1.4%	52,182	4.0%
2015	937	9.6%	45,765	2.6%	48,842	-6.4%
2016	908	-3.1%	45,551	-0.5%	50,167	2.7%
2017	903	-0.6%	48,598	6.7%	53,818	7.3%
2018	886	-1.9%	48,808	0.4%	55,088	2.4%

Distribution of Active Members by Age and by Years of Service

SPRS Members

Attained Age	Years of Credited Service												
	0 Count & Avg. Comp.	1 Count & Avg. Comp.	2 Count & Avg. Comp.	3 Count & Avg. Comp.	4 Count & Avg. Comp.	5-9 Count & Avg. Comp.	10-14 Count & Avg. Comp.	15-19 Count & Avg. Comp.	20-24 Count & Avg. Comp.	25-29 Count & Avg. Comp.	30-34 Count & Avg. Comp.	35 & Over Count & Avg. Comp.	Total Count & Avg. Comp.
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
20-24	24	0	7	2	0	0	0	0	0	0	0	0	33
	$26,135	$0	$45,956	$44,734	$0	$0	$0	$0	$0	$0	$0	$0	$31,467
25-29	25	15	19	51	0	22	0	0	0	0	0	0	132
	$33,400	$42,072	$45,125	$45,838	$0	$50,807	$0	$0	$0	$0	$0	$0	$43,780
30-34	9	16	9	30	3	100	14	0	0	0	0	0	181
	$36,488	$42,754	$42,602	$46,500	$43,508	$51,404	$52,670	$0	$0	$0	$0	$0	$48,614
35-39	3	7	1	8	0	56	78	25	1	0	0	0	179
	$39,111	$43,372	$44,771	$49,097	$0	$51,611	$57,427	$61,890	$72,510	$0	$0	$0	$55,015
40-44	1	3	0	6	1	24	44	89	21	1	0	0	190
	$32,329	$44,641	$0	$45,184	$46,310	$52,538	$57,395	$65,128	$74,627	$73,812	$0	$0	$61,618
45-49	0	2	0	3	0	7	18	37	43	7	0	0	117
	$0	$42,277	$0	$52,589	$0	$50,844	$55,449	$64,645	$77,191	$83,394	$0	$0	$67,446
50-54	0	0	0	0	0	1	9	10	13	6	0	0	39
	$0	$0	$0	$0	$0	$50,095	$57,021	$65,904	$75,960	$83,303	$0	$0	$69,478
55-59	0	0	0	0	0	0	4	4	2	1	0	0	11
	$0	$0	$0	$0	$0	$0	$51,375	$58,642	$74,011	$95,206	$0	$0	$62,118
60-64	0	0	0	0	0	0	0	0	1	0	1	2	4
	$0	$0	$0	$0	$0	$0	$0	$0	$79,745	$0	$95,902	$88,371	$88,097
65 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	62	43	36	100	4	210	167	165	81	15	1	2	886
	$31,295	$42,726	$44,646	$46,438	$44,209	$51,501	$56,640	$64,419	$76,224	$83,506	$95,902	$88,371	$55,088

Distribution of Annuitant Monthly Benefit by Status and Age
Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

	Retirement		Disability		Survivors & Beneficiaries		Total	
Current Age	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	202	$ 7,596	16	$ 313	34	$ 486	252	$ 8,395
50 - 54	170	6,529	4	52	7	133	181	6,714
55 - 59	168	6,950	7	126	14	300	189	7,376
60 - 64	167	6,966	8	113	21	523	196	7,602
65 - 69	276	11,372	6	91	31	880	313	12,343
70 - 74	179	7,165	6	135	43	1,320	228	8,620
75 - 79	95	3,239	2	25	21	706	118	3,970
80 - 84	44	1,647	2	49	20	678	66	2,374
85 - 89	24	1,047	1	6	20	714	45	1,767
90 And Over	6	311	0	-	6	155	12	466
Total	**1,331**	**$ 52,821**	**52**	**$ 909**	**217**	**$ 5,896**	**1,600**	**$ 59,626**

Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	149	$ 438,125	17	$ 50,826	166	$ 488,952
Joint & Survivor:						
100% to Beneficiary	146	465,865	1	4,814	147	470,678
66 2/3% to Beneficiary	89	339,906	2	7,542	91	347,448
50% to Beneficiary	82	298,968	1	2,605	83	301,573
Pop-up Option	614	2,169,493	5	10,874	619	2,180,368
Social Security Option:						
Age 62 Basic	31	78,625	0	0	31	78,625
Age 62 Survivorship	120	230,066	1	4,416	121	234,482
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	6	28,112	0	0	6	28,112
10 Years Certain & Life	37	124,726	3	6,759	40	131,485
15 Years Certain & Life	16	45,041	1	3,919	17	48,960
20 Years Certain & Life	39	118,730	2	3,979	41	122,709
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	0	0	0	0	0	0
24 Month Basic	0	0	0	0	0	0
36 Month Basic	0	0	2	466	2	466
12 Month Survivor	6	20,781	0	0	6	20,781
24 Month Survivor	4	5,953	0	0	4	5,953
36 Month Survivor	9	16,914	0	0	9	16,914
Total:	1,348	$ 4,381,307	35	$ 96,200	1,383	$ 4,477,507

Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	2	$ 821	8	$ 7,052	10	$ 7,872
Joint & Survivor:						
100% to Beneficiary	8	11,031	61	167,263	69	178,294
66 2/3% to Beneficiary	2	1,206	13	27,456	15	28,662
50% to Beneficiary	1	3,110	19	27,538	20	30,649
Pop-up Option	2	1,154	44	125,259	46	126,413
Social Security Option:						
Age 62 Basic	0	0	2	2,281	2	2,281
Age 62 Survivorship	1	2,199	43	88,984	44	91,183
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	2	4,076	0	0	2	4,076
10 Years Certain & Life	0	0	1	390	1	390
15 Years Certain & Life	0	0	1	721	1	721
20 Years Certain & Life	1	6,686	5	6,716	6	13,402
Refund	0	0	0	0	0	0
Partial Lump Sum Option (PLSO):						
12 Month Basic	0	0	0	0	0	0
24 Month Basic	0	0	0	0	0	0
36 Month Basic	0	0	0	0	0	0
12 Month Survivor	0	0	0	0	0	0
24 Month Survivor	0	0	1	7,351	1	7,351
36 Month Survivor	0	0	0	0	0	0
Total:	19	$ 30,282	198	$ 461,011	217	$ 491,293

Schedule of Retirants Added to And Removed from Rolls

(Dollar amounts except average allowance expressed in thousands)

Year Ended	Added to Rolls	Removed from Rolls	Rolls End of the Year		% Increase in Annual Benefit	Average Annual Benefit
	Number	Number	Number	Annual Benefits		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2011	52	12	1,263	$ 47,467		$ 37,583
2012	52	16	1,299	49,887	5.1%	38,404
2013	63	16	1,346	50,906	2.0%	37,820
2014	95	28	1,413	53,432	5.0%	37,815
2015	62	15	1,460	54,930	2.8%	37,623
2016	65	10	1,515	56,650	3.1%	37,393
2017	30	9	1,536	57,253	1.1%	37,274
2018	81	17	1,600	59,626	4.1%	37,266

APPENDIX A

ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Methods and Assumptions

The following presents a summary of the actuarial assumptions and methods used in the valuation of the State Police Retirement System.

In general, the assumptions and methods used in the valuation are based on the actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014. The investment return, price inflation, and payroll growth assumption were adopted by the Board in May and July 2017 for use with the June 30, 2017 valuation in order to reflect future economic expectations.

Investment return rate:

Assumed annual rate of 5.25% net of investment expenses for the retirement fund

Assumed annual rate of 6.25% net of investment expenses for the insurance fund

Price Inflation:

Assumed annual rate of 2.30%

Rates of Annual Salary Increase:

Assumed rates of annual salary increases are shown below.

Service Years	Annual Rates of Salary Increases		
	Merit & Seniority	Price Inflation & Productivity	Total Increase
0	12.50%	3.05%	15.55%
1	7.50%	3.05%	10.55%
2	5.50%	3.05%	8.55%
3	4.50%	3.05%	7.55%
4	3.50%	3.05%	6.55%
5	2.50%	3.05%	5.55%
6	2.00%	3.05%	5.05%
7	2.00%	3.05%	5.05%
8	1.00%	3.05%	4.05%
9	0.50%	3.05%	3.55%
10 & Over	0.00%	3.05%	3.05%

Retirement rates:

Assumed annual rates of retirement are shown below. Rates are only applicable for members who are eligible for a service retirement.

Service	Members participating before 9/1/2008[1]	Members participating on or after 9/1/2008[2]
20	22.0%	
21	22.0%	
22	22.0%	
23	28.0%	
24	28.0%	
25	28.0%	22.0%
26	28.0%	22.0%
27	28.0%	22.0%
28	44.0%	28.0%
29	44.0%	28.0%
30	44.0%	28.0%
31	58.0%	28.0%
32	58.0%	28.0%
33	58.0%	44.0%
34	58.0%	44.0%
35	58.0%	44.0%
36	58.0%	58.0%
37	58.0%	58.0%
38	58.0%	58.0%
39	58.0%	58.0%
40	58.0%	58.0%

[1] The annual rate of service retirement is 100% at age 55.

[2] The annual rate of service retirement is 100% at age 60.

Disability rates:

An abbreviated table with assumed rates of disability is show below.

Age	Annual Rates of Disability	
	Male	Female
20	0.05%	0.05%
30	0.09%	0.09%
40	0.20%	0.20%
50	0.56%	0.56%
60	1.46%	1.46%

Withdrawal rates (for causes other than death, disability or retirement):

Assumed annual rates of withdrawal are shown below.

Service	Annual Rates of Withdrawal
0	20.00%
1	7.00%
2-8	3.00%
9 & Over	2.50%

Mortality Assumption:

Pre-retirement mortality: RP-2000 Combined Mortality Table projected with Scale BB to 2013. Male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%.

Post-retirement mortality (non-disabled): RP-2000 Combined Mortality Table projected with Scale BB to 2013. Female mortality rates are set back one year.

Post-retirement mortality (disabled): RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013. Male mortality rates are set back four years.

At the time of the last experience study performed as of June 30, 2013, this mortality assumption provided 37% and 19% margin for future improvement for males and females, respectively.

Marital status:

100% of employees are assumed to be married, with the female spouse 3 years younger than the male spouse.

Line of Duty Disability

0% of disabilities are assumed to occur in the line of duty

Line of Duty Death

25% of deaths are assumed to occur in the line of duty

Dependent Children:

For members in the Hazardous Plan who receive a duty-related death benefit, the member is assumed to be survived by two dependent children, each age 6 with payments for 15 years.

Form of Payment:

Members are assumed to elect a life-only annuity at retirement.

Actuarial Cost Method:

Entry Age Normal, Level Percentage of Pay. The Entry Age Normal actuarial cost method allocates the System's actuarial present value of future benefits to various periods based upon service. The portion of the present value of future benefits allocated to years of service prior to the valuation date is the actuarial accrued liability, and the portion allocated to years following the valuation date is the present value of future normal costs. The normal cost is determined for each active member as the level percent of pay necessary to fully fund the expected benefits to be earned over the career of each individual active member. The normal cost is partially funded with active member contributions with the remainder funded by employer contributions.

Health Care Age Related Morbidity/Claims Utilization:

To model the impact of aging on the underlying health care costs for Medicare retirees, the valuation relied on the Society of Actuaries' 2013 Study "Health Care Costs – From Birth to Death". Table 4 (Development of Plan Specific Medicare Age Curve) was used to model the impact of aging for ages 65 and over.

Health Care Cost Trend Rates[1]:

Year	Non-Medicare Plans	Medicare Plans	Dollar Contribution[2]
2020	7.00%	5.00%	1.50%
2021	6.75%	4.90%	1.50%
2022	6.50%	4.80%	1.50%
2023	6.25%	4.70%	1.50%
2024	6.00%	4.60%	1.50%
2025	5.75%	4.50%	1.50%
2026	5.50%	4.40%	1.50%
2027	5.25%	4.30%	1.50%
2028	5.00%	4.20%	1.50%
2029	4.75%	4.10%	1.50%
2030	4.50%	4.05%	1.50%
2031	4.25%	4.05%	1.50%
2032 & Beyond	4.05%	4.05%	1.50%

[1]All increases are assumed to occur on January 1. The 2019 premiums were known at the time of the valuation and were incorporated into the liability measurement.

[2]Applies to members participating on or after July 1, 2003

Health care trend assumptions are based on the model issued by the Society of Actuaries "Getzen model of Long-Run Medical Cost Trends for the SOA; Thomas E. Getzen, iHEA and Temple University 2014 © Society of Actuaries.

The underlying assumptions used to develop the health care trend rates include:

- A short run period-this is a period for which anticipated health care trend rates are manually set based on local information as well as plan-specific and carrier information.
- Long term real GDP growth- 1.75%
- Long term rate of inflation- 2.30%
- Long term nominal GDP growth – 4.05%
- Year that excess rate converges to 0- 15 years from the valuation

Health care trend rates are thus the manually set rates for the short run period and rates which decline to an ultimate trend rate which equals the assumed nominal long term GDP growth rate.

Health Care Participation Assumptions:

- Members are assumed to elect health coverage at retirement at the following participation rates.

Service at Retirement	Members participating before 7/1/2003*	Members participating between 7/1/2003 and 9/1/2008	Members participating after 9/1/2008
Under 10	100%	100%	100%
10-14	100%	100%	100%
15-19	100%	100%	100%
Over 20	100%	100%	100%

* 100% of members with a duty disability or a duty death (in service) benefit are assumed to elect coverage at retirement.

- Future retirees are assumed to have a similar distribution by plan type as the current retirees.

Medicare Plan	Participation
Medical Only	7%
Essential	8%
Premium	86%

Non-Medicare Plan	Participation
LivingWell Limited	2%
LivingWell Basic	13%
LivingWell CDHP	27%
LivingWell PPO	58%

- 100% of deferred vested members participating are assumed to elect health coverage at retirement. Deferred vested members are assumed to begin health coverage at age 50.

- 75% of future retirees, with hazardous service, are assumed to elect spouse health care coverage. No dependent coverage is assumed for members who only have non-hazardous service. 100% of spouses with health care coverage are assumed to continue coverage after the member's death.

Excise ("Cadillac") Tax:

For taxable years beginning after December 31, 2021, a 40% excise tax will be required to be paid (by the employer and/or insurer) on the aggregate cost of the health plan in excess of certain legislated thresholds. For 2018, the thresholds are $850 per month for individual coverage and $2,292 per month for family coverage.

Both Actuarial Standard of Practice No. 6 and GASB Statement Nos. 74 and 75 reference this tax, and, in accordance with these standards an estimate of the impact of the Cadillac tax has been included in this valuation.

Assumptions and methods used to determine the impact of the Cadillac Tax include:

- 2018 thresholds of $850/$2,292 were indexed annually by 2.30%.
- Premium data submitted was not adjusted for permissible exclusions to the Cadillac Tax.
- There were no special adjustments to the dollar limit other than those permissible for non-Medicare retirees over 55.

In this valuation, the impact of the Cadillac Tax has been calculated by increasing the employer paid premiums for Non-Medicare retirees, who became participants before July 1, 2003, by 3.6%. Non-Medicare retirees who became participants after July 1, 2003 receive dollar subsidies per year of service, which are not expected to exceed the overall Non-Medicare premiums. As a result, the costs attributable to the Cadillac Tax for members who became participants after July 1, 2003 will be paid by the retirees.

Changes in Assumptions since the prior valuation:

None.

Development of Baseline Claims Cost

For non-Medicare retirees, the initial per capita costs were based on the plan premiums effective January 1, 2019, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. The spouse/dependent premium of $865.74 for non-Medicare retirees is based on a blending of Family and Couple premiums for the current retirees that have over 4 years of hazardous service. The fully-insured premiums KRS pays the Kentucky Employees' Health Plan (KEHP) are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit rate subsidy for the non-Medicare eligible retirees. Actuarial Standard of Practice No. 6 (ASOP No. 6) requires aging subsidies (or implicit rate subsidies) to be recognized. However, the KRS health insurance trusts are only used to reimburse KEHP for the employer's portion of the blended premiums. Said another way, the trusts are not used to fund the difference between the underlying retiree claims and the blended KEHP premiums. As a result, the retiree health care liabilities developed in this report for the non-Medicare retirees are based solely on the premiums charged by KEHP, without any age-adjustment. GASB Statements No. 74 and No. 75 prohibit such a deviation from ASOP No. 6. The liabilities developed in this report are solely for the purpose of funding the benefits paid by the health insurance funds and are not appropriate for financial statement disclosures required by GASB. GRS provides separate GASB reports to KRS which include the liabilities associated with the implicit rate subsidy.

For those not eligible for Medicare		
Age	Member	Spouse/Dependents
<65	$717.39	$865.74

For Medicare retirees, the initial per capita costs were estimated based on the plan premiums effective January 1, 2019, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. Age graded and sex distinct premiums are utilized for retirees over the age of 65. These costs are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

For those eligible for Medicare		
Age	Male	Female
65	$183.50	$173.08
75	214.69	209.49
85	227.02	229.07

Appendix B of the report provides a full schedule of premiums.

Mehdi Riazi is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Mehdi Riazi, FSA, EA, MAAA

APPENDIX B

BENEFIT PROVISIONS

Summary of Benefit Provisions for State Police Retirement System (SPRS)

SPRS Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 55 with at least 1 month of service credit; or Any age with at least 20 years of service
Benefit Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation times years of service. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 3 years of compensation.
Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement eligibility precedes the member's normal retirement date.

SPRS Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.10%
10-20	1.30%
20-25	1.50%
Greater than 25*	2.00%

Final compensation is based on the member's highest 3 years of compensation.

Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	Each year that the member is active, a 7.50% employer pay credit and the employee's 5.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

SPRS Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that if the member has less than 20 years of service at disability, service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 55th birthday, with total service not exceeding 20 years. Total service credit added shall not be greater than the member's actual service at disability.

SPRS Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Line of Duty Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly rate of pay. Additionally, each eligible dependent child will receive 10% of the member's monthly final rate of pay up to a maximum of 40%.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 55 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 75% of the deceased member's final monthly average pay. Each dependent child will receive 10% of average pay (not to exceed a total child benefit of 25% while the spouse is alive). A spouse may also elect the non-line of duty death benefit.
Non-Spouse Benefit	If the beneficiary is only one person who is a dependent receiving at least 50% of his or her support from the member, the beneficiary may elect a lump sum payment of $10,000.
Child Benefit	In the event there is no surviving spouse, the benefit is 50% of final monthly average pay for one child, 65% of final average pay for two children, or 75% of final average pay for three or more eligible children.

SPRS Employees (continued)

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	8% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the KRS board, not less than 2.0%.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	8% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes since the Prior Valuation

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members paid from the retirement fund have been increased from 25% of the member's final rate of pay to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children.

Summary of Main Retiree Insurance Benefit Provisions

Insurance Tier 1: Participation began before 7/1/2003

Benefit Eligibility Recipient of a retirement allowance

Benefit Amount

Non-Hazardous Service	Percentage of Member Premium Paid by Retirement System	Hazardous Service	Percentage of Member & Dependent Premium Paid by Retirement System
Less than 4 years	0%	Less than 4 years	0%
4 – 9 years	25%	4 – 9 years	25%
10 – 14 years	50%	10 – 14 years	50%
15 – 19 years	75%	15 – 19 years	75%
20 or more years	100%	20 or more years	100%

The percentage paid by the retirement system is applied to the 'contribution' plan selected by the KRS Board.

Duty Disability Retirement If disability was a result of injuries sustained while in the line of duty, the member receives 100% of the maximum contribution for the member and dependents.

Duty Death in Service If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive a fully subsidized health insurance benefit.

Non-Duty Death in Service If the surviving spouses is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Surviving Spouse of a Retiree A surviving spouse of a retiree, who is in receipt of a pension allowance, will receive a premium subsidy based on the member's years of hazardous service.

Hazardous employees who retired prior to August 1, 1998 System's contribution for spouse and dependents is based on total service.

Insurance Tier 2: Participation began on or after 7/1/2003, but before 9/1/2008

Benefit Eligibility	Recipient of a retirement allowance with at least 120 months of service at retirement
Non-Hazardous Subsidy	Monthly contribution of $10 for each year of earned non-hazardous service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $13.18/year of service. Upon the retiree's death, the surviving spouse may continue coverage (if in receipt of a retirement allowance) but will be 100% responsible for the premiums.
Hazardous Subsidy	Monthly contribution of $15 for each year of earned hazardous service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2017, the Non-Hazardous monthly contribution was $19.77/year of service. Upon the retiree's death, the surviving spouse of a hazardous duty member will receive a monthly contribution of $10 ($13.18 as of July 1, 2017) for each year of hazardous service.
Duty Disability Retirement	If disability was a result of injuries sustained while in the line of duty, the member receives a benefit equal to at least 20 times the Non-Hazardous monthly contribution.
Duty Death in Service	If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive a fully subsidized health insurance benefit.
Non-Duty Death in Service	If the surviving spouse is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Insurance Tier 3: Participation began on or after 9/1/2008

Tier 3 insurance benefits are identical to Tier 2, except Tier 3 members are required to have at least 180 months of service in order to be eligible.

Monthly Health Plan Premiums – Effective January 1, 2019

Non-Medicare Plan Options					
Plan Option	Single	Parent Plus	Couple	Family	Family X-Ref
LivingWell PPO*	$729.34	$1,037.08	$1,589.10	$1,767.60	$876.68
LivingWell CDHP	709.46	978.50	1,333.64	1,479.76	818.96
LivingWell Basic	682.80	940.64	1,450.02	1,615.30	800.94
Living Well Limited	607.54	865.08	1,327.16	1,477.04	730.90

Medicare Plan Options	
Kentucky Retirement Systems - Medical Only Plan	$175.22
Kentucky Retirement Systems – Medicare Advantage/Essential Plan	53.73
Kentucky Retirement Systems – Medicare Advantage/Premium Plan*	220.11

*For 2019, the contribution plans selected by the KRS Board were the LivingWell PPO plan option for non-Medicare retirees and the Medicare Advantage Premium plan option for Medicare retirees.

Dollar Contribution Amount for Insurance Tier 2 and Tier 3

Monthly contribution amounts per year of service as of July 1, 2018.

Non-Hazardous Service	Hazardous Service
$13.38	$20.07

Note: Non-Hazardous benefits are applicable to SPRS members with prior service in a Non-Hazardous System.

Changes since the Prior Valuation

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. The insurance fund shall now pay 100% of the insurance premium for spouses and children of all active members who die in the line of duty.

APPENDIX C

GLOSSARY

Glossary

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or ***Funding Method:*** A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ADC.

Actuarial Gain or ***Actuarial Loss:*** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)

b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, non-retired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations that provide the financial information of the plan, such as the funded ratio, unfunded actuarial accrued liability and the ADC.

Actuarial Value of Assets or ***Valuation Assets:*** The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Actuarially Determined Contribution (ADC): The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADC consists of the Employer Normal Cost and the Amortization Payment.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment: The portion of the pension plan contribution or ADC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Closed Amortization Period: A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.

Funding Period or ***Amortization Period:*** The term "Funding Period" is used two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ADC. This funding period is specified in State statute. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on a statutory employer contribution rate, and assuming no future actuarial gains or losses.

GASB: Governmental Accounting Standards Board.

GASB 67 and ***GASB 68***: Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting and reporting rules for public retirement systems and the employers that sponsor, participate in, or contribute to them. Statement No. 67 sets the accounting rules for the financial reporting of the retirement systems, while Statement No. 68 sets the rules for the employers that sponsor, participate in, or contribute to public retirement systems.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded

Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but may not decrease by exactly one year in the subsequent year's actuarial valuation. For instance, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year.

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

Valuation Date or Actuarial Valuation Date: The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

Comprehensive Annual Financial Report For the Year Ended June 30, 2001

KENTUCKY RETIREMENT SYSTEMS

Kentucky Employees Retirement Systems
County Employees Retirement System
State Police Retirement System

A Component Unit of the
Commonwealth of Kentucky

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KENTUCKY RETIREMENT SYSTEMS

A Component Unit of the Commonwealth of Kentucky

Comprehensive Annual Financial Report For the Fiscal Year Ended June 30, 2001

Prepared by the executive staff of
Kentucky Retirement Systems
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The cost of printing this CAFR
is part of the administrative expense of the system.

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KENTUCKY RETIREMENT SYSTEMS

Introductory Section

Comprehensive Annual Financial Report
June 30, 2001

KENTUCKY RETIREMENT SYSTEMS
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

William P. Hanes, Esq.
General Manager
Phone 502-564-4646
FAX# 502-564-5656
www.kyret.com

November 15, 2001

The Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601-6124

I am pleased to present the comprehensive annual financial report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), State Police Retirement System (SPRS) and Insurance Fund for the fiscal year ended June 30, 2001.

The CAFR is divided into six sections:

- An Introductory Section, containing the administrative organization and letter of transmittal.
- A Financial Section, containing the report of the independent Auditor, the financial statements of the three systems and insurance fund and certain required supplementary information.
- An Investment Section, containing a report on investment activity, investment policies, investment results and various investment schedules.
- An Actuarial Section, containing the Actuary's Certification Letter and the results of the annual actuarial valuation.
- A Statistical Section, containing information about plan participants and recipients.
- A Compliance Section, containing a report on compliance and internal control.

The management of the systems is responsible for the accuracy of the data as well as the completeness and fairness of the presentation. We present this information to help you and the members of the retirement systems understand the systems' financial and actuarial status. This CAFR was prepared to conform with the principles of governmental accounting and reporting set forth by the Governmental Accounting Standard Board. Transactions of the system are reported on the accrual basis of accounting. Sufficient internal accounting controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules.

History

KERS was created in 1956 by the Kentucky General Assembly in order to supplement the benefits provided by Social Security. When the first actuarial valuation was done June 30, 1957, there were 16,000 employees participating in KERS and assets of $2.8 million. CERS and SPRS were established in 1958. The first actuarial valuation of SPRS was conducted June 30, 1959. No actuarial valuation of CERS was conducted until June 30, 1960 because the statutes prohibited retirements from the system prior to July 1, 1960. On June 30, 1960, there were 68 counties and 2,617 employees participating in CERS, and SPRS included 415 uniformed state troopers.

As of June 30, 2001, there were more than 240,000 active and retired members in the three systems and approximately $11.7 billion in assets. A breakdown of membership by system is provided in the statistical section.

The staff of Kentucky Retirement Systems provides detailed benefit estimates to members upon request. Counselors are available at the Frankfort office for individual counseling. In addition, staff conducts individual counseling sessions at sites throughout the state and holds preretirement seminars to help members prepare for retirement.

Major Initiatives

Kentucky Retirement Systems completed an asset modeling study, and the new asset allocation can be found in the Investment Section of the CAFR.

In conjuction with the asset modeling study, the actuary performed a five-year experience study which resulted in several assumption changes, including a new method of valuing assets. A description of the assumptions can be found in the Actuarial Section of the CAFR.

The systems began a comprehensive fiduciary compliance review utilizing the expertise of Ice Miller, Indianapolis, Indiana. The investment review was completed.

Kentucky voters amended the state constitution to allow for annual sessions. Thus, the first annual session was held in 2001. During the 2001 General Assembly, legislation was passed creating a final compensation based on the three highest years of earnings for nonhazardous employees of KERS and CERS who retire between August 1, 2001, and January 1, 2009, and who have 27 years of service and whose age and service are at least equal to 75. The General Assembly also changed the cost of most service purchases to 100% of actuarial cost effective July 1, 2001. This change resulted in a tremendous influx of requests to purchase service before the service increased in cost, increasing the already significant work backlog of the systems.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its CAFR for the fiscal year ended June 30, 2000. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe our current comprehensive annual financial report continues to meet the Certificate of Achievement Program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Additions To Plan Net Assets

The collection of employer and employee contributions, as well as income from investments, provide the reserves needed to finance retirement and insurance benefits.

(dollar amounts expressed in thousand)	*2001*	*2000*	*Increase (Decrease) Amount*	*Increase (Decrease) Percentage*
Member Contributions	$250,239	$ 246,563	$3,676	1.5%
Employer Contributions	$288,178	$ 305,231	($17,053)	(5.6%)
Net Investment Income	($739,315)	$ 651,187	($1,390,501)	(213.5%)
Total	($200,898)	$1,202,981	($1,403,879)	(116.7%)

The increase in member contributions is a result of an increase in the covered payroll from the previous year, as well as a steady number of service purchases. The decrease in employer contributions can be attributed to decreases in the actuarially required rates. The decrease in Net Investment Income is a result of the considerably less favorable financial markets than for fiscal year 2000.

Deductions To Plan Net Assets

The Kentucky Retirement Systems administers the retirement programs established by the Kentucky General Assembly. The costs associated with those programs include the monthly retirement allowances of retired members under normal, early or disability retirement; payments to beneficiaries; monthly insurance benefits; member refunds and the administrative expenses of the system.

(dollar amounts expressed in thousand)	*2001*	*2000*	*Increase (Decrease) Amount*	*Increase (Decrease) Percentage*
Retirement Allowances	$549,120	$476,610	$72,510	15.2%
Refunds	$ 18,614	$ 21,369	($2,755)	(12.9%)
Administrative Expense	$ 11,593	$ 10,103	$ 1,490	14.7%
Medical Insurance Expenses	$ 82,615	$ 66,818	$15,797	23.6%
Total	$661,942	$574,900	$87,042	15.1%

Retirement allowances increased due to a 2.2% cost of living adjustment added to recipients' monthly benefits in July and the increase in the number of retired members. Administrative expenses increased due to equipment purchases, overtime and additional personnel.

Investments

The Board of Trustees of the Kentucky Retirement Systems has a statutory obligation to invest the systems' funds in accordance with the "prudent person rule." The prudent person rule states that fiduciaries shall discharge their investment duties with the same degree of diligence, care and skill which a prudent person would ordinarily exercise under similar circumstances in a like position.

The Board has managed the funds in recognition of the basic long term nature of the systems. The Board has interpreted this to mean that the assets of the three systems should be actively managed — that is, investment decisions regarding the particular securities to be purchased or sold shall be the result of the conscious exercise of discretion. The Board has further recognized that proper diversification of assets must be maintained. The asset allocation can be found in the Investment Section of this CAFR. The Board's policies have provided significant returns over the long term while holding down investment related expenses. Due to short-term market conditions for the fiscal year ending June 30, 2001, the systems' pension funds had a total return of -5.4% and the insurance fund had a total return of -3.8%.

Funding

The Kentucky Retirement Systems' funding objective is to meet long-term benefit promises through contributions that remain fairly level as a percent of member payroll. Funding of the pension benefits for all systems as of June 30, 2001 is greater than 100% using the ratio of assets at actuarial value to the total actuarial accrued liability.

The medical insurance benefit, created in 1978, is not at the same level of funding. Total insurance liabilities exceed assets in the Insurance Fund by $3.4 billion, although insurance fund assets increased to $1.2 billion. The medical insurance liability continues to be the primary funding concern of the Kentucky Retirement Systems.

A detailed discussion of the funding status of the systems can be found in the Financial Section of this report.

Professional Services

A listing of the Board's contracted consultants can be found in the organizational chart on page 15. A listing of the external investment managers can be found on page 85 in the Investment Section.

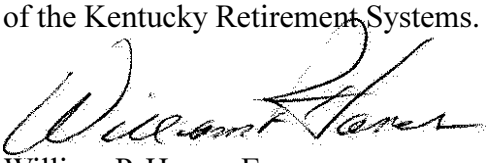
Other Information

Kentucky statutes require an annual audit by an independent certified public accountant or the Auditor of Public Accounts. The Charles T. Mitchell Co. performed the audit for the fiscal year ended June 30, 2001. The results of that audit are contained in the Financial Section. It is the opinion of the auditing firm that the general purpose financial statements present fairly the plan net assets.

The compilation of this report reflects the combined efforts of Lauren Stewart, Bob Leggett and Mark Roberts under the leadership of the Board of Trustees. It is intended to provide complete and reliable information to be used in making management decisions, determining compliance with statutory provisions and determining responsible stewardship of the funds.

The report is being mailed to all employers participating in the Kentucky Retirement Systems. They form the link between the systems and its membership. Their cooperation contributes significantly to the success of the Kentucky Retirement Systems. We hope the employers and their employees find this report informative. This and past CAFRs can be found at www.kyret.com.

On behalf of the Board of Trustees, I would like to take this opportunity to express my gratitude to the staff, the advisors and the many people who have worked so diligently to assure the successful operation of the Kentucky Retirement Systems.



William P. Hanes, Esq.
General Manager

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Kentucky Retirement Systems

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended
June 30, 2000

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

Anne Spray Kinney
President

Jeffrey L. Esser
Executive Director

Board of Trustees

John Balbach
Louisville, appointed
by Governor, term expires
March 31, 2004

John Freeman
Louisville, elected
by CERS, term expires
March 31, 2005

Ed Davis
Louisville, elected
by CERS, term expires
March 31, 2005

Susan Horne
Lexington, elected
by KERS, term expires
March 31, 2002

Bobby Henson, Frankfort,
elected by KERS, term
expires
March 31, 2002

Randy Overstreet
Chair
Elizabethtown, elected by
SPRS, term expires
March 31, 2003

Walter Pagan
Vice-Chair
Wilder, appointed
by Governor,
term expires
March 31, 2004

Carol Palmore
Frankfort, Secretary of
Personnel Cabinet,
ex officio

Larry Conner
Lexington, appointed
by Governor,
term expires
March 31, 2003

KENTUCKY RETIREMENT SYSTEMS
ORGANIZATIONAL CHART

CONSULTANTS

Actuarial Services
William M. Mercer Inc.
Suite 1500
462 S. Fourth St.
Louisville, KY 40202

Auditing Services
Charles T. Mitchell Co.
201 W. Main St.
Frankfort, KY 40601

Legal Consultant
Robert D. Klausner, P.A.
10059 N.W. 1st Court
Plantation, FL 33324

Legal Services
Stoll Keenon & Park
300 West Vine Street, Suite 2100
Lexington, KY 40507

Asset Management
William M. Mercer Investment
Consulting, Inc.
10 S. Wacker Drive
Chicago, IL 60606

Fiduciary Review Consultant
Ice Miller
One American Square
Box 82001
Indianapolis, IN 46282

Information on Investment Managers may be found on page 85 in the Investment Section

Board of Trustees

Investment Committee

General Manager
William P. Hanes

Administrative Issues Only

Operations Deputy Commissioner
Lauren Stewart

Benefit Services Deputy Commissioner
Gerri Miller

Investments Deputy Commissioner
Robert S. Leggett

Accounting Director
Glenn Valley

Information Technology Director
Connie Goins

Employment Services Director
Becky Stephens

Membership Support Director
Lorrie Gritton

Support Services Director
Terri Price

Disabilities Director
Pamela Kyler

Retired Services Director
Connie Coleman

Fixed Assets Director
Kenton Bottoms

Equity Assets Director
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KENTUCKY RETIREMENT SYSTEMS

Financial Section

Comprehensive Annual Financial Report
June 30, 2001

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INDEPENDENT AUDITOR'S REPORT

Board of Trustees
Kentucky Retirement System
Frankfort, Kentucky

We have audited the accompanying statements of plan net assets of the Kentucky Retirement System as of June 30, 2001 and 2000 and the related statements of changes in plan net assets for the years then ended. These component unit financial statements are the responsibility of Kentucky Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the plan net assets of the Kentucky Retirement System, a component unit of the Commonwealth of Kentucky, at June 30, 2001 and 2000 and the changes in its plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated November 26, 2001 on our consideration of the Kentucky Retirement System's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

The financial section supporting schedules listed in the table of contents are presented for the purpose of additional analysis and are not a required part of the basic financial statements. These schedules are the responsibility of the System's management. Such schedules as of and for the year ended June 30, 2001 have been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

We did not audit the data included in the introductory and statistical sections of the report and therefore express no opinion on them.

Charles T. Mitchell Co.

November 26, 2001

MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of Kentucky Retirement System's financial performance provides an overview of the retirement systems' and insurance fund's financial activities for the fiscal year ended June 30, 2001. Please read it in conjunction with the Retirement Systems' financial statements and Insurance Fund's financial statements, which begin on page 18.

FINANCIAL HIGHLIGHTS—RETIREMENT SYSTEMS

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of all pension funds administered by Kentucky Retirement Systems decreased by $920.8 million during the 2000-2001 fiscal year.
- Salaries totaling $3.5 billion requiring both employee and employer pension contributions were reported during the year. The covered payroll increased $225 million over the prior reporting period. Although, the covered payroll increased, the corresponding employer contributions decreased by $17.1 million for a total employer contribution amount of $288.1 million. This decrease is attributable to four of the five pension funds experiencing a decrease in the required employer contribution rate. Contributions paid by employees were $250.2 and $246.6 million respectively for the years ended June 30, 2001 and June 30, 2000. This increase is a reflection of the increase in covered payroll.
- Net appreciation in fair value of investments revealed net depreciation of $1.1 billion compared to net appreciation of $210 million for the prior fiscal year. The pension funds realized gains on sales of investments of $992.7 million compared to $2.068 billion for the year ended June 30, 2000. This decline in the net appreciation in the fair value of investments compared to the prior year is due to less favorable market conditions.
- Investment income net of investment expense from all sources including securities lending was $408 million representing an increase of approximately $25 million compared to last fiscal year.
- Pension benefits paid to retirees and beneficiaries increased $72 million bringing total benefit payments to $549 million. Refund of contributions paid to former members upon termination of employment decreased from $21 million to $19 million.
- Administrative expense and other deductions totaling $10.2 million decreased $179.8 million. This decrease is attributable to the change in the way that employer contributions are posted to the insurance fund. In the prior fiscal year, contributions were deducted from the pension account and added to the insurance fund. Beginning with the fiscal year ended June 30, 2001, employer contributions were deposited into a clearing account fund and the appropriate employer contributions were transferred to the respective pension and insurance funds.

FINANCIAL HIGHLIGHTS—INSURANCE FUND

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of the insurance fund administered by Kentucky Retirement Systems increased by $59.3 million during the 2000-2001 fiscal year.

- Employer contributions of $182.6 million were received. This is an increase of $2.3 million over the prior fiscal year.
- Net appreciation in fair value of investments results were net depreciation of $72 million compared to net appreciation of $31 million for the prior fiscal year. The insurance fund realized gains on sales of investments of $42.7 million compared to $71 million in the prior fiscal year. This decline in the net appreciation in the fair value of investments compared to the prior year is due to less favorable market conditions.
- Investment income net of investment expense from all sources including securities lending was $31.1 million representing an increase of approximately $4.6 million compared to last fiscal year.
- Premiums paid by the fund for hospital and medical insurance coverage increased $15.4 million to total $81.9 million for the year.
- Administrative fees paid to the State Personnel Cabinet for administration of the insurance program for retirees not eligible for Medicare totaled $714 thousand compared to $331 thousand for the prior year. This increase is due to the increase in the administrative rate charged per retiree.

USING THIS FINANCIAL REPORT

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combined Statement of Plan Net Assets and Combined Statements of Changes in Plan Net Assets (on pages 24-27) provide information about the activities of the pension funds and insurance fund as a whole. Kentucky Retirement Systems is the fiduciary of funds held in trust for five distinct groups of members. The Combining Statements of Plan Net Assets and Combining Statements of Changes in Plan Net Assets (on pages 28-35) provide more detailed information about each plan assets, liabilities, plan net assets, and changes in plan net assets.

The Schedule of Funding Progress (on pages 50-60) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (on pages 61-66) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY RETIREMENT SYSTEMS AS A WHOLE

Kentucky Retirement Systems' combined plan net assets decreased during the year ended June 30, 2001 by $861.5 million from $13,703.2 million to $12,841.7 million. Plan net assets for the prior fiscal year increased by $628.4 million. The decrease for the plan year ended June 30, 2001 is attributable to less favorable market conditions than the prior fiscal year. The analysis below focuses on plan net assets (Table 1) and changes in plan net assets (Table 2) of Kentucky Retirement Systems' pension funds and insurance fund.

Table 1
Plan Net Assets
(In Millions)

	Pension Funds		Insurance Fund		Total	
	2001	**2000**	**2001**	**2000**	**2001**	**2000**
Cash & Investments	$ 13,420.10	$12,884.20	$1,156.70	$ 998.90	$14,576.80	$13,883.10
Receivables	125.00	138.80	21.20	22.60	146.20	161.40
Total Assets	13,545.10	13,023.00	1,177.90	1,021.50	14,723.00	14,044.50
Total Liabilities	(1,781.90)	(339.00)	(99.40)	(2.30)	(1,881.30)	(341.30)
Plan Net Assets	$ 11,763.20	$12,684.00	$1,078.50	$1,019.20	$12,841.70	$13,703.20

Table 2
Changes in Plan Net Assets
(In Millions)

	Pension Funds		Insurance Fund		Total	
	2001	**2000**	**2001**	**2000**	**2001**	**2000**
Additions:						
Members' Contributions	$ 250.20	$ 246.60	$ -	$ -	$ 250.20	$ 246.60
*Employer Contributions	105.50	305.20	182.60	180.30	288.10	485.50
Investment Income(net)	(698.50)	593.70	(40.70)	57.80	(739.20)	651.50
Total additions	(342.80)	1,145.50	141.90	238.10	(200.90)	1,383.60
Program deductions						
Benefit payments	549.10	476.60	-	-	549.10	476.60
Refunds	18.60	21.40	-	-	18.60	21.40
Administrative Expense	10.90	9.80	0.70	0.30	11.60	10.10
Healthcare premiums	-	-	81.90	66.50	81.90	66.50
Tot. program deductions	578.60	507.80	82.60	66.80	661.20	574.60
*Other deductions(net)	(0.60)	180.30	-	-	(0.60)	180.30
Total deductions	578.00	688.10	82.60	66.80	660.60	754.90
Increase (decrease) in plan net assets	$ (920.80)	$ 457.40	$ 59.30	$ 171.30	$ (861.50)	$ 628.70

*Beginning with the fiscal year ended June 30, 2001, employer contributions were deposited into a clearing account fund and the appropriate employer contributions were transferred to the respective pension and insurance funds.

Plan net assets of the pension funds decreased by 7.3% ($11,763.2 million compared to $12,684.0 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. This plan net asset decrease is attributable primarily to the decline in the net appreciation in the fair value of investments due to less favorable market conditions in general.

Plan net assets of the insurance fund increased by 5.8% ($1,078.5 million compared to $1,019.2 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. Even though there was an increase in plan net assets for the year, the increase was not of the magnitude of the increase for the prior year. This reduction in the amount of increase in plan assets arose primarily because of two factors. First, there was a decline in the net appreciation in the fair value of investments due to less favorable market conditions as explained above for the pension funds. The second factor was a 23.1% increase in health insurance premiums paid for the year ($81.9 million compared to $66.5 million).

PENSION FUND ACTIVITIES

Member contributions increased ($3.6 million). Retirement contributions are calculated by applying a percentage factor to salary and are paid in monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit. During the year there was an increase in monthly contributions over the previous year due to the increase in salaries reported to Kentucky Retirement Systems. The number of elective service purchases remained relatively close to the prior year.

Employer contributions decreased ($17.1 million). Even though salaries reported to Kentucky Retirement Systems increased ($225 million), because four of the five pension funds experienced a decrease in the required employer contribution rate, employer contributions decreased to $288.1 million compared to $305.2 million. A portion ($182.6 million) of the employer contributions was added to the insurance fund. Only $105.5 million remained in the pension funds.

Net investment income decreased by 217.6% (loss of $698.5 million compared to income of $593.7 million). The primary cause of the reduction in net investment income between fiscal years is less appreciation in the fair value of investments for the year ended June 30, 2001 than for the year ended June 30, 2000. This can be illustrated as follows:

	In Millions
Appreciation in fair value of investments-June 30, 2001	$420.7
Appreciation in fair value of investments-June 30, 2000	$2,520.7
Net appreciation in fair value of investments	($2,100.0)
Investment income (net of investment expense)	$408.6
Net gain on sale of investments	$992.7
Investment income (net)-June 30, 2001	($698.5)

Program deductions increased by $70.8 million caused principally by an increase of $72 million in benefit payments. Retirees received an increase of 2.2% in benefits as of July 1, 2000. Also there was an increase of approximately 3300 members and beneficiaries on the retired payroll as of June 30, 2001. Refunds decreased by $2.8 million.

Other deductions (net) decreased approximately $180.9 million explained primarily by employer contributions no longer being deducted from the pension funds and added to the insurance fund. Employer contributions are now added directly to the insurance fund.

INSURANCE FUND ACTIVITIES

Employer contributions paid into the insurance fund increased by $2.3 million over the prior year. An increase in the amount of covered payroll ($225 million) reported to Kentucky Retirement Systems is responsible for the increased employer contributions paid into the insurance fund.

Net investment income decreased by 170.4 % (loss of $40.7 million compared to income of $57.8 million). The primary cause of the reduction in net investment income between fiscal years is less appreciation in the fair value of investments for the year ended June 30, 2001 than for the year ended June 30, 2000. This can be illustrated as follows:

	In Millions
Appreciation in fair value of investments-June 30, 2001	$65.1
Appreciation in fair value of investments-June 30, 2000	$179.6
Net appreciation in fair value of investments	($114.5)
Investment income (net of investment expense)	$31.1
Net gain on sale of investments	$42.7
Investment Income (net)-June 30, 2001	($40.7)

Program deductions increased by $15.8 million explained almost totally by an increase in payment of healthcare premiums of $15.4 million. The health insurance program administrative fee increased from $.3 million to $.7 million.

HISTORICAL TRENDS

Accounting standards require that the statement of plan net assets state asset value at **fair value** and include only benefits and refund due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the pension funds and insurance fund is provided in the Schedule of Funding Progress (on pages 50-60). The asset value stated in the Schedule of Funding Progress is the **actuarial value** of assets determined by calculating the difference between the expected valuation assets and the actual market value of assets adjusted for any unrecognized gains or losses and amortized over a five year period. The actuarial accrued liability is calculated using the entry age normal fund method.

The funding position of the pension funds continues to provide more than adequate assets to meet pension obligations. The insurance fund continues to have a large unfunded liability for all participating employee groups. However, the funded ratio for all employee groups participating in the pension funds and the insurance fund show a positive trend over the six-year period displayed.

Annual required contributions of the employers and contributions made by the employers in relation to the required contributions are provided in the Schedule of Employer Contributions (on pages 61-66). This schedule indicates that employers are generally meeting their responsibilities to provide resources to the plans.

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	2001		
	Pensions	Post-Employment Healthcare	Total
ASSETS			
Cash and Short Term Investments			
Cash	$ 33,263	$ 19,154	$ 52,417
Short Term Investments	1,833,669	188,046	2,021,715
Total Cash and Short Term Investments	1,866,932	207,200	2,074,133
Receivables			
Investments - accounts receivable	820	82	902
Due from retirement fund			
Interest receivable - year end	58,287	2,658	60,945
Accounts receivable - year end	61,414	18,431	79,845
Accounts receivable - alternate plan	4,162	-	4,162
A/R - alternate plan - year end	304	-	304
Total receivables	124,988	21,171	146,159
Investments at fair value			
Corporate and government bonds	2,939,846	104,512	3,044,358
Corporate stocks	5,742,621	739,105	6,481,726
Mortgages	525,665	6,595	532,260
Real estate	577,315	-	577,315
Total investments at fair value	9,785,447	850,212	10,635,659
Securities lending collateral invested	1,767,731	99,339	1,867,071
Total assets	13,545,098	1,177,923	14,723,021
LIABILITIES			
Investments - accounts payable		108	108
Accounts payable	14,166		14,166
Due to insurance fund			
Securities lending collateral	1,767,731	99,339	1,867,071
Total Liabilities	1,781,898	99,448	1,881,346
Plan net assets held in trust for pension Benefits	$11,763,200	$ 1,078,475	$12,841,676

(A schedule of funding progress for each plan is presented on pages 50 through 60.)

The accompanying notes are an integral part of these financial statements.

KENTUCKY RETIREMENT SYSTEMS
COMBINED STATEMENTS OF PLAN NET ASSETS
As of June 30, 2001 and 2000
Expressed In Thousands

	2000	
	Post-Employment	
Pensions	Healthcare	Total
$	$	$
867,131	85,503	952,633
867,131	85,503	952,633
282	10	292
	900	900
46,277	3,706	49,982
87,222	17,980	105,202
4,644	-	4,644
327	-	327
138,752	22,596	161,347
2,661,171	224,782	2,885,953
7,935,081	669,515	8,604,596
527,838	17,117	544,955
590,310	-	590,310
11,714,401	911,414	12,625,814
302,677	1,979	304,656
13,022,960	1,021,491	14,044,451
	191	191
35,385	130	35,515
900		900
302,677	1,979	304,656
338,962	2,300	341,262
$12,683,998	$ 1,019,191	$13,702,289

	Pensions	2001 Post-Employment Healthcare	Total
ADDITIONS			
Members contributions	$ 250,239	$ -	$ 250,239
Employers contributions	105,522	182,656	288,178
Total contributions	355,761	182,656	538,417
Investment Income:			
From investing activities			
Net appreciation in fair value of investments	(1,107,218)	(71,873)	(1,179,090)
Interest	291,982	23,791	315,773
Dividends	109,057	6,458	115,516
Real estate operating income (Net)	3,964	-	3,964
Total investing activities income	(702,214)	(41,624)	(743,838)
Investment expense	4,508	95	4,603
Net income from investing activities	(706,722)	(41,719)	(748,441)
From securities lending activities			
Securities lending income	106,874	11,095	117,578
Securities lending expense:			
Custodial Fee	19		19
Security borrower rebate	96,171	9,892	106,063
Security lending agent fee	2,520	240	2,760
Net income from securities lending activities	8,165	962	9,126
Total net investment income	(698,558)	(40,757)	(739,315)
TOTAL ADDITIONS	(342,796)	141,899	(200,897)
DEDUCTIONS			
Benefit payments	549,120		549,120
Refunds	18,614		18,614
Administrative expenses	10,879	714	11,593
Healthcare premiums paid		81,901	81,901
Other deductions (Net)	(612)	-	(612)
TOTAL DEDUCTIONS	578,001	82,615	660,616
Net increase	(920,797)	59,284	(861,513)
Plan net assets held in trust for pension benefits and post-employment benefits			
Beginning of year	12,683,998	1,019,191	13,703,189
Prior period adjustment (Note K)	-	-	-
End of year	$11,763,201	$ 1,078,475	$12,841,676

The accompanying notes are an integral part of these financial statements.

KENTUCKY RETIREMENT SYSTEMS
COMBINED STATEMENTS OF CHANGES IN PLAN NET ASSETS
For The Years Ended June 30, 2001 and 2000

Expressed In Thousands

	2000	
	Post-Employment	
Pensions	Healthcare	Total
$ 246,563	$ -	$ 246,563
305,231	180,350	485,581
551,794	180,350	732,144
210,243	31,230	241,473
244,948	17,624	262,572
99,348	8,819	108,167
40,600	-	40,600
595,139	57,673	652,812
5,082	83	5,164
590,057	57,590	647,648
105,560	5,522	111,082
324		324
99,421	5,223	104,643
2,455	119	2,575
3,360	179	3,539
593,417	57,770	651,187
1,145,211	238,120	1,383,331
476,610		476,610
21,369		21,369
9,772	331	10,103
	66,487	66,487
180,345	-	180,345
688,095	66,818	754,914
457,116	171,302	628,417
12,226,898	847,874	13,074,772
(15)	15	-
$12,683,998	$ 1,019,191	$13,703,189

ASSETS	KERS HAZARDOUS	KERS NON-HAZARDOUS
Cash and short-term investments		
Cash	$ 5,339	$ 11,356
Short-term investments	52,255	797,007
Total cash and short-term investments	57,593	808,363
Receivables		
Investments - accounts receivable	28	314
Interest receivable - year end	1,476	27,459
Accounts receivable - year end	1,675	26,343
Accounts receivable - alternate plan		
A/R - alternate plan - year end	-	-
Total receivables	3,178	54,116
Investments at fair value		
Corporate and government bonds	72,139	1,399,392
Corporate stocks	140,120	2,714,016
Mortgages	12,089	256,644
Real estate	20,700	256,984
Total investments at fair value	245,048	4,627,036
Securities lending collateral invested	45,784	824,647
Total assets	351,604	6,314,162
LIABILITIES		
Accounts payable	276	4,952
Securities lending collateral	45,784	824,647
Total liabilities	46,060	829,599
PLAN NET ASSETS HELD IN TRUST FOR PENSION BENEFITS	$ 305,544	$ 5,484,564

The accompanying notes are an integral part of these financial statements.

KENTUCKY RETIREMENT SYSTEMS
COMBINING STATEMENTS OF PLAN NET ASSETS
PENSION FUNDS
June 30, 2001 and 2000

Expressed In Thousands

CERS HAZARDOUS	CERS NON-HAZARDOUS	STATE POLICE	2001 TOTAL	2000 TOTAL
$ 4,070	$ 11,404	$ 1,095	$ 33,263	$ -
199,808	739,534	45,064	1,833,669	867,131
203,878	750,939	46,159	1,866,932	867,131
99	368	11	820	282
5,889	21,637	1,826	58,287	46,277
7,173	24,987	1,236	61,414	87,222
2,306	1,856		4,162	4,644
177	127	-	304	327
15,644	48,976	3,073	124,988	138,752
293,187	1,081,551	93,577	2,939,846	2,661,171
585,237	2,116,660	186,588	5,742,621	7,935,081
50,538	189,332	17,061	525,665	527,838
64,547	216,190	18,893	577,315	590,310
993,509	3,603,733	316,120	9,785,447	11,714,401
181,723	660,601	54,976	1,767,731	302,677
1,394,754	5,064,249	420,329	13,545,098	13,022,960
1,877	6,302	761	14,166	35,385
181,723	660,601	54,976	1,767,731	302,677
183,599	666,903	55,737	1,781,898	338,962
$1,211,155	$ 4,397,347	$ 364,592	$11,763,200	$12,683,998

	KERS HAZARDOUS	KERS NON-HAZARDOUS
ADDITIONS		
Members contributions	$ 10,577	$ 106,648
Employers contributions	10,627	23,482
Total contributions	21,203	130,130
INVESTMENT INCOME		
From Investing Activities		
Net appreciation in fair value of investments	(19,341)	(549,461)
Interest	8,237	134,627
Dividends	2,722	51,229
Real estate operating income (Net)	41	2,209
Total investing activity income	(8,341)	(361,396)
Investment expense	109	2,141
Net income from investing activities	(8,449)	(363,537)
From securities lending activities		
Securities lending income	5,115	37,814
Securities lending expense:		
Custodial fee	1	7
Security borrower rebates	4,603	34,027
Security lending agent fees	121	892
Net income from securities lending activities	391	2,889
Total net investment income	(8,059)	(360,648)
TOTAL ADDITIONS	13,145	(230,518)
DEDUCTIONS		
Benefit payments	7,996	291,704
Refunds	1,253	6,968
Administrative expenses	302	3,826
Other deductions (Net)	(29)	(125)
Total deductions	9,522	302,374
Net increase	3,623	(532,892)
PLAN NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
Beginning of Year	301,920	6,017,456
Prior Period Adjustment (Note J)	-	-
End of year	$ 305,544	$ 5,484,564

The accompanying notes are an integral part of these financial statements

KENTUCKY RETIREMENT SYSTEMS
COMBINING STATEMENTS OF CHANGES IN PLAN NET ASSETS
PENSION FUNDS
June 30, 2001 and 2000

Expressed In Thousands

CERS HAZARDOUS	CERS NON-HAZARDOUS	STATE POLICE	2001 TOTAL	2000 TOTAL
$ 27,279	$ 101,597	$ 4,138	$ 250,239	$ 246,563
20,983	48,914	1,516	105,522	305,231
48,263	150,511	5,654	355,761	551,794
(101,236)	(395,343)	(41,837)	(1,107,218)	210,243
30,260	110,690	8,168	291,982	244,948
11,170	40,273	3,663	109,057	490,248
335	1,197	181	3,964	40,600
(59,470)	(243,182)	(29,826)	(702,214)	595,139
462	1,646	150	4,508	5,082
(59,933)	(244,828)	(29,975)	(706,722)	590,057
13,683	48,707	1,556	106,874	105,560
2	9		19	324
12,312	43,829	1,400	96,171	99,421
323	1,148	37	2,520	2,455
1,045	3,721	119	8,165	3,360
(58,887)	(241,107)	(29,856)	(698,558)	593,417
(10,625)	(90,596)	(24,202)	(342,796)	1,145,211
56,520	170,256	22,644	549,120	476,610
1,319	8,994	80	18,614	21,369
512	6,174	64	10,879	9,772
(194)	(213)	(52)	(612)	180,345
58,157	185,212	22,737	578,001	688,095
(68,782)	(275,808)	(46,939)	(920,797)	457,116
1,279,936	4,673,154	411,531	12,683,998	12,226,897
-	-	-	-	(15)
$1,211,155	$ 4,397,347	$364,592	$11,763,200	$12,683,998

	KERS HAZARDOUS	KERS NON-HAZARDOUS
ASSETS		
Cash and short-term investments		
Cash	$ 1,356	$ 6,955
Short-term investments	21,935	64,427
Total cash and short-term investments	23,291	71,383
Receivables		
Investments - accounts receivable	10	27
Due from Retirement Fund	-	-
Interest receivable - year end	255	989
Accounts receivable - year end	1,128	6,082
Accounts receivable – alternate plan	-	-
A/R – alternate plan – year end	-	-
Total receivables	1,393	7,098
Investments, at fair value		
Corporate and government bonds	10,260	38,850
Corporate stocks	72,392	276,317
Mortgages	265	2,642
Total investments, at fair value	82,917	317,809
Security lending collateral invested	9,974	36,567
Total assets	117,575	432,857
LIABILITIES		
Accounts payable	9	36
Deferred premium	-	-
Securities lending collateral	9,974	36,567
Total liabilities	9,982	36,603
PLAN NET ASSETS HELD IN TRUST FOR PENSION BENEFITS	$ 107,592	$ 396,254

The accompanying notes are an integral part of these financial statements.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
COMBINING STATEMENTS OF PLAN NET ASSETS
POSTEMPLOYMENT HEALTHCARE
June 30, 2001 and 2000

Expressed In Thousands

CERS HAZARDOUS	CERS NON-HAZARDOUS	STATE POLICE	2001 TOTAL	2000 TOTAL
$ 3,300	$ 6,709	$ 834	$ 19,154	$ -
31,695	58,219	11,770	188,046	85.503
34,995	64,928	12,604	207,200	85,503
14	26	5	82	10
				900
427	810	178	2,658	3,706
3,292	7,240	689	18,431	17,980
-	-	-	-	-
-	-	-	-	-
3,733	8,076	872	21,171	22,596
16,696	31,686	7,019	104,512	224,782
117,104	224,402	48,890	739,105	669,515
1,124	2,017	547	6,595	17,117
134,924	258,105	56,457	850,212	911,414
15,964	30,348	6,487	99,339	1,979
189,615	361,457	76,419	1,177,923	1,021,492
15	42	7	108	191
				130
15,964	30,348	6,487	99,339	1,979
15,979	30,390	6,493	99,448	2,300
$ 173,636	$ 331,067	$ 69,926	$ 1,078,475	$ 1,019,191

	KERS HAZARDOUS	KERS NON-HAZARDOUS
ADDITIONS		
Employers contributions	$ 13,226	$ 66,875
Total contributions	13,226	66,875
INVESTMENT INCOME		
From Investing Activities		
Net appreciation in fair value of investments	(6,011)	(27,776)
Interest	2,364	8,790
Dividends	632	2,423
Total income from investing activities	(3,015)	(16,563)
Investment activities expense	9	36
Net investment activities income	(3,023)	(16,599)
From securities lending activities		
Securities lending income	1,587	3,535
Securities lending expense:		
Security borrower rebates	1,415	3,153
Security lending agent fees	34	77
Net income from securities lending activities	138	306
Total net investment income	(2,886)	(16,293)
Total additions	10,341	50,582
DEDUCTIONS		
Healthcare premiums subsidies	1,984	37,301
Administrative fees	25	308
Total deductions	2,009	37,609
Net increase	8,332	12,973
PLAN NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
Beginning of year	99,260	383,281
Prior Period Adjustment	-	-
End of year	$ 107,592	$ 396,254

The accompanying notes are an integral part of these financial statements.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
COMBINING STATEMENTS OF CHANGES IN PLAN NET ASSETS
POSTEMPLOYMENT HEALTHCARE
June 30, 2001 and 2000

Expressed In Thousands

CERS HAZARDOUS	CERS NON-HAZARDOUS	STATE POLICE	2001 TOTAL	2000 TOTAL
$ 32,149	$ 62,292	$ 8,113	$ 182,656	$ 180,350
32,149	62,292	8,113	182,656	180,350
(11,688)	(20,291)	(6,107)	(71,873)	31,230
3,948	7,100	1,589	23,791	17,624
1,000	1,963	440	6,548	8,819
(6,740)	(11,228)	(4,077)	(41,624)	57,673
15	29	7	95	83
(6,756)	(11,257)	(4,084)	(41,719)	57,590
2,231	3,106	636	11,095	5,522
1,989	2,769	567	9,892	5,223
48	67	14	240	119
193	269	55	962	179
(6,562)	(10,988)	(4,029)	(40,757)	57,770
25,587	51,305	4,085	141,899	238,120
11,531	27,539	3,547	81,901	66,487
109	244	28	714	331
11,640	27,783	3,575	82,615	66,818
13,948	23,521	510	59,284	171,302
159,688	307,545	69,416	1,019,191	847,874
-	-	-	-	15
$ 173,636	$ 331,067	$ 69,926	$ 1,078,475	$ 1,019,191

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by Kentucky Retirement Systems: (1) Kentucky Employees Retirement System (KERS); (2) County Employees Retirement System (CERS); and (3) State Police Retirement System (SPRS). KRS maintains separate accounting records for five insurance funds which also includes hazardous duty members of the Kentucky Employees and County Employees Retirement Systems. The assets of the various insurance funds are commingled for investment purposes. Legal counsel has advised there is no statutory authority to use the assets of one insurance fund to pay the liabilities of another insurance fund. The following notes apply to the various funds administered by Kentucky Retirement Systems.

NOTE A. Summary of Significant Accounting Policies

Basis of Accounting - KRS's financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan.

Method Used to Value Investments - Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate is based on appraisals. Investments that do not have an established market are reported at estimated fair value.

Component Unit - Kentucky Retirement Systems is a component unit of the Commonwealth of Kentucky. As such, the Commonwealth of Kentucky is the primary government in whose financial reporting entity The System is included.

The Kentucky Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.515. The County Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 78.520. The State Police Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.701. The Retirement Systems' and Insurance Fund's administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Systems' Board of Trustees without further legislative review. The methods used to determine the employer rates for all Retirement Systems are specified in KRS 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

Expense Allocation - Administrative and investment expenses of the Kentucky Retirement Systems are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

NOTE B. Plan Descriptions and Contribution Information

Membership of each Retirement plan consisted of the following at June 30, 2001 and 2000, the date of the latest actuarial valuation:

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	2000			2001		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and beneficiaries receiving benefits	23,760	924	24,684	25,118	1,053	26,171
Terminated plan members - vested	3,073	113	3,186	3,312	123	3,435
Terminated plan members - non-vested	11,886	646	12,532	13,429	799	14,228
Active plan members	46,897	4,007	50,904	47,780	4,228	52,008
Total	85,616	5,690	91,306	89,639	6,203	95,842
Number of participating employers			391			408

COUNTY EMPLOYEES RETIREMENT SYSTEM

	2000			2001		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and beneficiaries receiving benefits	22,708	2,984	25,692	24,415	3,221	27,636
Terminated plan members - vested	3,500	112	3,612	4,080	148	4,228
Terminated plan members - non-vested	20,512	339	20,851	24,276	462	24,738
Active plan members	77,419	7,951	85,370	78,773	8,586	87,359
Total	124,139	11,386	135,525	131,544	12,417	143,961
Number of participating employers			1,218			1,297

STATE POLICE RETIREMENT SYSTEM

	2000	2001
Number of Members	Hazardous Position Employees	Hazardous Position Employees
Retirees and beneficiaries receiving benefits	797	842
Terminated plan members - vested	9	12
Terminated plan members - non-vested	69	78
Active plan members	1,023	1,016
Total	1,898	1,948
Number of participating employers	1	1

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

Hospital and medical contracts in force consisted of the following at June 30, 2001 and 2000, the date of the latest actuarial valuation:

	2000					2001				
	Single	Couple/ Family	Parent +	Medicare Regular	Medicare High	Single	Couple/ Family	Parent +	Medicare Regular	Medicare High
KERS Non-Hazardous	4,619	955	295	1,802	10,869	5,199	1,070	346	1,818	11,107
KERS Hazardous	268	175	37	43	375	302	185	51	52	420
CERS Non-Hazardous	3,813	745	186	2,035	8,341	4,215	791	204	2,212	8,974
CERS Hazardous	775	1,243	173	23	609	869	1,267	202	32	694
SPRS	178	347	38	8	264	194	350	47	8	278
Totals	9,653	3,465	729	3,911	20,458	10,779	3,663	850	4,122	21,473

NOTE B. Plan Descriptions and Contribution Information (Continued)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgement the welfare of the Commonwealth so demands.

Contributions - For the years ended June 30, 2001 and 2000, plan members were required to contribute 5% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2001 and 2000, the State contributed 5.89% and 8.03% respectively of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2001 and 2000 was 5.89% and 8.03% respectively of creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that cover substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgement the welfare of the Commonwealth so demands.

Contributions - For the years ended June 30, 2001 and 2000, plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2001 and 2000, the State contributed 18.84% and 18.66% respectively of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2001 and 2000 was 18.84% and 18.66% respectively, of creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

NOTE B. Plan Descriptions and Contribution Information (Continued)

COUNTY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2001 and 2000, plan members were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2001 and 2000, participating employers contributed 6.34% and 7.28%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2001 and 2000 was 6.34% and 7.28%, respectively, of creditable compensation. Administrative costs of Kentucky Retirement System are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2001 and 2000, plan members were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2001 and 2000, participating employers contributed 16.28% and 17.55%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2001 and 2000 was 16.28% and 17.55%, respectively, of creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

NOTE B. Plan Descriptions and Contribution Information (Continued)

STATE POLICE RETIREMENT SYSTEM

Plan Description - SPRS is a single-employer defined benefit pension plan that covers all full-time State Troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2001 and 2000, plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2001 and 2000, the State contributed 21.58% and 23.41% respectively of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2001 and 2000 was 21.58% and 23.41%, respectively, of creditable compensation. Administrative costs of Kentucky Retirement System are financed through employer contributions and investment earnings.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

Plan Description - The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System (Systems). The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the year insurance premiums withheld from benefit payments to members of the Systems approximated $17,193,475 and $369,916 for KERS and KERS hazardous, respectively, $16,732,837 and $1,328,687 for CERS and CERS hazardous, respectively, and $292,648 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2001 the Fund had 54,649 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Fund is based on years of service with the Systems. Years of service and respective percentages of the maximum contribution are as follows:

Years of Service	Percent Paid by Insurance Fund
20 or More	100%
15 - 19	75%
10 - 14	50%
4 - 9	25%
Less Than 4	0%

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed.

In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years. The increases commenced with the 1997 valuation and adjustments will be made every other valuation year to coincide with the valuation used by the General Assembly to establish employer contribution rates for the biennium.

NOTE C. Cash and Short-Term Investments and Securities Lending Collateral

The provisions of Governmental Accounting Standards Board Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions and investments made with that cash be reported as assets on the financial statements. In conjunction with the adoption of Governmental Accounting Standard No. 28, the System has reclassified certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	2001	2000
Cash, uninsured, unregistered & uncollateralized	$ -	$ -
Miscellaneous cash	16,694,421	47
Short-Term Investment Pool	870,430,971	139,651,805
Short-Term Investments	849,261,657	-
Repurchase agreements purchased with cash collateral	-	13,680,024
Other repurchase agreements	-	400,995,739
Total	$1,736,387,049	$554,327,568

COUNTY EMPLOYEES RETIREMENT SYSTEM

	2001	2000
Cash, uninsured, unregistered & uncollateralized	$ -	$ -
Miscellaneous Cash	15,474,032	-
Short-Term Investment Pool	842,324,041	128,053,183
Short-Term Investments	939,342,782	-
Repurchase agreements purchased with cash collateral	-	12,550,439
Other repurchase agreements	-	442,896,850
Total	$1,797,140,855	$583,500,472

STATE POLICE RETIREMENT SYSTEM

	2001	2000
Cash, uninsured, unregistered & uncollateralized	$ -	$ -
Miscellaneous Cash	1,094,951	-
Short-Term Investment Pool	54,976,448	7,796,698
Short-Term Investments	45,064,222	-
Repurchase agreements purchased with cash collateral	-	944,577
Other repurchase agreements	-	23,238,262
Total	$101,135,621	$ 31,979,537

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

	2001	2000
Cash, uninsured, unregistered & uncollateralized	$ -	$ -
Miscellaneous Cash	19,154,421	-
Short-Term Investments	188,046,064	-
Repurchase agreements purchased with cash collateral	-	1,979,372
Other repurchase agreements	-	85,502,549
Total	$ 207,200,485	$ 87,481,921

NOTE D. Investments

The Board of Trustees of the Retirement Systems and Insurance Fund give priority to the investment of funds in obligations considered to improve the industrial development and enhance the economic welfare of the Commonwealth. The Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments - Investments may be made in common stock, securities convertible into common stock and in preferred stock of publicly traded corporations.

Fixed Income Investments - Publicly traded bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with the current market and economic conditions. Investment may be made in any debt instrument issued or guaranteed in whole or in part by the U.S. Government or any agency or instrumentality of the U.S. Government.

Mortgages - Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments guaranteed by an agency of the U.S. Government or the Commonwealth of Kentucky.

Alternative Investments/Equity Real Estate – Subject to the specific approval of the investment committee of the board of trustees, investments may be made for the purpose of creating a diversified portfolio of income-producing properties of publicly or privately traded real estate securities with moderate to low levels of risk. In the construction of the equity real estate portfolio, the board of trustees requires diversification as to the location, age, type, purpose, and cost of holdings. In certain situations where the return appears to justify the investment, the board may invest in other real estate or alternative investments including, without limitation, venture capital, private equity and private placements which the investment committee believes has excellent potential to generate income and which may have a higher degree of risk. However, such investments shall not represent more than 2% of the entire portfolio and shall be undertaken only after approval of the board.

Mutual Fund Investments - Investments may be made in mutual funds which hold common stocks or fixed income securities.

Cash Equivalent Securities - The following short-term investment vehicles are considered acceptable:

> Publicly traded investment grade corporate bonds, government and agency bonds, mortgages, and collective STIF's, money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having a BBB or better rating by at least one recognized bond rating service. All instruments shall have a maturity at the time of purchase that does not exceed two years; notwithstanding the maturity of individual instruments, collective STIF's and money market funds shall have an average maturity not to exceed 91 days. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur.

Derivatives – Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited.

The Retirement Systems and Insurance Fund invest in collateral mortgage obligations (CMOs) and other asset-backed securities to increase return and adjust duration of the portfolio. The Systems and the Fund invest in exchange-traded funds to convert cash held in index funds to short-term equity investments. This practice is intended to make the performance of the index funds more closely track the performance of the index that the funds are intended to replicate.

Note D: Investments (continued)

Derivatives (continued)

Collateral mortgage obligations, asset-backed securities, and exchange-traded funds pose no greater risk than other similar investment grade holdings in the Systems' and the Fund's portfolios. The fair value of CMOs at June 30, 2001 and 2000 was approximately $135 million and $29 million respectively; the fair value of asset-backed securities at June 30, 2001 and 2000 was approximately $263 million and $428 million respectively; and the fair value of exchange-traded funds at June 30, 2001 and 2000 was approximately $33 million and $182 million respectively.

The Retirement Systems' and Insurance Fund's investments are categorized below to give an indication of the level of risk assumed by them at June 30, 2001 and 2000. Category 1 includes investments that are either insured or registered or for which the investments are held by The System or its agent in the System's name. Category 3 includes securities purchased by and held by the System's custodial agent. The agent loans securities owned by the Systems and Fund with the simultaneous receipt of cash collateral. The custodial agent purchases securities with the cash collateral in accordance with the Systems' and Fund's *Statement of Investment Policy*. All securities purchased with cash collateral are segregated by the custodial agent and held in the name of Kentucky Retirement Systems. At June 30, 2001, the systems had a second agent who also loans securities owned by the systems with the simultaneous receipt of cash collateral. The second custodial agent invests cash collateral in a short-term investment pool that holds only U.S. dollar cash and U.S. securities. Oversight of investments in on-SEC regulated external investment pools is conducted by internal and external bank auditors and investment staff.

Note D: Investments (continued)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

2001

Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 251,035,661	$ -	$ 10,107,139	$ 261,142,799
Loaned for securities collateral	124,804,102			124,804,102
Corporate bonds	591,171,106		11,341,877	602,512,983
Loaned for securities collateral	9,310,764			9,310,764
Corporate stocks	2,479,798,756			2,479,798,756
Loaned for securities collateral	222			222
Short-term investments	849,261,657	-	-	849,261,657
Subtotal	$4,305,382,268	$ -	$ 21,449,016	$4,326,831,283
Investments - Not Categorized				
Short Term Investment Pool				$ 870,430,971
Investments held by broker-dealers under securities loans				
U.S. Government Securities				414,965,006
Corporate bonds				58,795,295
Corporate stocks				374,337,005
Mortgages				268,732,891
Real Estate Investment				277,684,389
Total Investments				$6,591,776,840

2000

Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 634,485,980	$ -	$ -	$ 634,485,980
Loaned for securities collateral				
Corporate bonds	686,321,643			686,321,643
Loaned for securities collateral				
Corporate stocks	3,843,236,881			3,843,236,881
Loaned for securities collateral	345,323			345,323
Repurchase agreements	400,995,739	-	13,680,024	414,675,763
Subtotal	$5,565,385,566	$ 0	$ 13,680,024	$5,579,065,590
Investments - Not Categorized				
Investments held by broker-dealers under securities loans				139,651,805
U.S. Government Securities				
Corporate bonds				
Corporate stocks				149,717,539
Mortgages				270,145,672
Real Estate Investment				286,933,699
Total Investments				$6,425,514,305

Note D: Investments (continued)

COUNTY EMPLOYEES RETIREMENT SYSTEM

2001

Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 216,449,214	$ -	$ 9,442,356	$ 225,891,570
Loaned for securities collateral	120,774,075			120,774,075
Corporate bonds	550,004,359		10,477,937	560,600,168
Loaned for securities collateral	9,010,112			9,010,112
Corporate stocks	2,339,647,418			2,339,647,418
Loaned for securities collateral	214			214
Short-term investments	939,342,782	-	-	939,342,782
Subtotal	$4,175,228,174	$ -	$ 20,038,165	$4,195,266,339
Investments - Not Categorized				
Short-Term Investment Pool				842,324,041
Investments held by broker-dealers under securities loans				
U.S. Government Securities				401,565,445
Corporate bonds				58,896,746
Corporate stocks				362,249,356
Mortgages				239,870,634
Real Estate Investment				280,736,876
Total Investments				$6,378,909,438

2000

Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 613,809,633	$ -	$ -	$ 13,809,633
Loaned for securities collateral				
Corporate bonds	649,161,998			649,161,998
Loaned for securities collateral				
Corporate stocks	3,528,716,054			3,528,716,054
Loaned for securities collateral	316,642			316,642
Repurchase agreements	442,896,850	-	12,550,439	445,447,289
Subtotal	$5,234,901,177	$ 0	$ 12,550,439	$5,247,451,616
Investments - Not Categorized				
Investments held by broker-dealers under securities loans				128,053,183
U.S. Government Securities				
Corporate bonds				
Corporate stocks				137,289,538
Mortgages				239,916,469
Real Estate Investment				283,815,607
Total Investments				$6,036,526,413

Note D: Investments (continued)

STATE POLICE RETIREMENT SYSTEM

2001

Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 16,196,830	$ -	$ 642,732	$ 16,839,562
Loaned for securities collateral	7,882,631			7,882,631
Corporate bonds	37,622,945		721,233	38,344,178
Loaned for securities collateral	588,068			588,068
Corporate stocks	162,945,265			162,945,265
Loaned for securities collateral	14			14
Short-term investments	45,064,222	-	-	45,064,222
Subtotal	$ 270,299,976	$ -	$ 1,363,966	$ 271,663,942
Investments - Not Categorized				
Short-Term Investment Pool				54,976,448
Investments held by broker-dealers under securities loans				
U.S. Government Securities				26,209,203
Corporate bonds				3,713,513
Corporate stocks				23,643,137
Mortgages				17,061,141
Real Estate Investment				18,893,323
Total Investments				$ 416,160,708

2000

Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 32,384,494	$ -	$ -	$32,384,494
Loaned for securities collateral				
Corporate bonds	41,817,385			41,817,385
Loaned for securities collateral				
Corporate stocks	266,899,568			266,899,568
Loaned for securities collateral	19,280			19,280
Repurchase agreements	23,238,262	-	944,577	24,182,839
Subtotal	$ 364,358,989	$ 0	$ 944,577	$ 365,303,566
Investments - Not Categorized				
Investments held by broker-dealers under securities loans				7,796,698
U.S. Government Securities				
Corporate bonds				
Corporate stocks				8,540,127
Mortgages				17,124,139
Real Estate Investment				19,560,901
Total Investments				$ 418,325,431

Note D: Investments (continued)

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

	2001			
Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 64,843,456	$ -	$ -	$ 64,843,456
Loaned for securities collateral				
Corporate bonds	1,843,891			1,843,891
Loaned for securities collateral				
Corporate stocks	681,320,455			681,320,435
Loaned for securities collateral				
Short-term investments	188,046,064	-	-	188,046,064
Subtotal	$ 936,053,866	$ -	$ -	$ 936,053,866
Investments - Not Categorized				
Investments held by broker-dealers under securities loans				99,339,376
U.S. Government Securities				37,824,200
Corporate bonds				
Corporate stocks				57,784,278
Mortgages				6,595,407
Total Investments				$1,137,597,128

	2000			
Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 116,859,452	$ -	$ -	$ 116,859,452
Loaned for securities collateral				
Corporate bonds	107,649,776			107,649,776
Loaned for securities collateral				
Corporate stocks	667,540,279			667,540,279
Loaned for securities collateral				
Repurchase agreements	85,502,549	-	1,979,372	87,481,921
Subtotal	$ 977,552,056	$ 0	$ 1,979,372	$ 979,531,428
Investments - Not Categorized				
Investments held by broker-dealers under securities loans				
U.S. Government Securities				
Corporate bonds				
Corporate stocks				1,974,710
Mortgages				17,116,661
Total Investments				$ 998,622,799

NOTE E. SECURITIES LENDING TRANSACTIONS

Kentucky Revised Statues Sections 61.650 and 386.020(2) permit the Retirement Systems and Insurance Fund to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Systems' and the Fund's custodial banks either cash collateral or other securities with a market value of 102 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. At year-end, the Systems and Fund have no credit risk exposure to borrowers because the amounts the Systems and Fund owe to borrowers exceed the amounts the borrowers owe the Systems and Fund. The contracts with the custodial banks require them to indemnify the Systems or the Fund if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction, although the average term of the loans was 6 days, 10 days, and 24 days for the three investment portfolios subject to security lending agreements. One custodial bank invests cash collateral in securities that are permitted for investment by state statute and board policy, which at year-end has a weighted-average maturity of 3 days for the Retirement Systems and the Insurance Fund. The other custodial bank invests cash collateral in the agent's short term investment pool as permitted by state statute and Board policy, which at year-end has a weighted-average maturity of 24 days for the Retirement Systems only. Neither the Systems nor the Fund can pledge or sell collateral securities received unless the borrower defaults.

NOTE F. RISKS OF LOSS

The Systems are exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $100,000 for a single claim and $250,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims against the Board of Trustees of Kentucky Retirement Systems or any of its staff as result of actual or alleged breach of fiduciary duty are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $25,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers Compensation Board.

NOTE G. CONTINGENCIES

In the normal course of business, the Retirement Systems and Insurance Fund are involved in various litigation concerning the right of participants or their beneficiaries to receive benefits. The System does not anticipate any material losses as a result of the contingent liabilities.

NOTE H. INCOME TAX STATUS

The Internal Revenue Service has ruled that the Plan qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax under income tax law.

NOTE J. CHANGE IN ACCOUNTING ESTIMATE

As of July 1, 2000, the Systems entered into a Master Custody Agreement with Northern Trust Corporation. The Master Custody Agreement changed the way the Systems hold assets in the investment portfolio. Asset ownership had been an indication of individual security ownership. Under the Master Custody Agreement, asset ownership is reflected as a percentage of the portfolio. The change in accounting estimate has no effect on the Kentucky Retirement Systems' investment portfolio as a whole. The initial effect of the change on the individual funds is as follows:

PENSION FUNDS

	Book Value 6/30/2000	Book Value Portfolio Percentage 6/30/2000	Market Value Portfolio Percentage 6/30/2000	Restated Book Value 7/1/2000
KERS	$ 4,740,654,296	47.0544%	47.4828%	$ 4,783,815,498
CERS	3,732,292,416	37.0457%	36.8195%	3,709,509,383
KSP	315,799,384	3.1345%	3.2564%	328,080,622
CERH	1,030,710,828	10.2305%	10.0565%	1,013,178,221
KERH	255,386,326	2.5249%	2.3847%	240,259,526
TOTAL	$10,074,843,250	100.0000%	100.0000%	$10,074,843,250

INSURANCE FUNDS

	Book Value 6/30/2000	Book Value Portfolio Percentage 6/30/2000	Market Value Portfolio Percentage 6/30/2000	Restated Book Value 7/1/2000
KERS	$303,231,563	37.5506%	37.6022%	$303,648,695
CERS	244,469,319	30.2738%	30.1173%	243,205,485
KSP	53,986,398	6.6854%	6.8726%	55,498,194
CERH	126,884,648	15.7127%	15.6783%	126,607,005
KERH	78,956,426	9.7775%	9.7296%	78,568,975
TOTAL	$807,528,354	100.0000%	100.0000%	$807,528,354

NOTE K. PRIOR PERIOD ADJUSTMENT

In the prior year, certain amounts which should have been posted to the Insurance Fund were posted to the Retirement Systems. The error was discovered and corrected in the current year resulting in a $15,000 increase in the Insurance Fund and a corresponding clearance in the Retirement Systems.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded (Overfunded) AAL (UAAL) (b-a)
June 30, 1996	$3,237,983,129	$3,295,362,361	$ 7,379,232
June 30, 1997	$3,683,995,005	$3,463,047,650	($ 220,947,355)
June 30, 1998	$4,356,072,625	$3,800,014,746	($ 556,057,879)
June 30, 1999	$5,264,340,397	$4,327,622,821	($ 936,717,576)
June 30, 2000	$6,806,675,460	$4,876,825,772	($1,929,849,688)
June 30, 2001	$6,844,742,687	$5,444,035,294	($1,400,707,393)
Hazardous			
June 30, 1996	$137,312,448	$120,042,122	($17,270,326)
June 30, 1997	$166,717,238	$140,918,460	($25,798,778)
June 30, 1998	$212,214,618	$171,735,076	($40,479,542)
June 30, 1999	$259,839,319	$204,282,788	($55,556,531)
June 30, 2000	$336,213,464	$243,365,557	($92,847,907)
June 30, 2001	$361,677,475	$285,193,761	($76,483,714)

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2001

Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
0.983	$1,232,974,460	0.047
1.064	$1,234,798,738	(0.179)
1.146	$1,321,004,266	(0.421)
1.216	$1,330,766,100	(0.704)
1.396	$1,409,504,668	(1.369)
1.257	$1,505,299,220	(0.931)
1.144	$ 85,933,543	(0.201)
1.183	$ 87,757,075	(0.294)
1.236	$ 93,130,996	(0.435)
1.272	$103,464,123	(0.537)
1.382	$115,639,439	(0.803)
1.268	$122,857,992	(0.623)

COUNTY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded (Overfunded) AAL (UAAL) (b-a)
June 30, 1996	$2,237,808,033	$2,083,374,317	($ 154,433,716)
June 30, 1997	$2,750,196,558	$2,390,620,093	($ 359,576,465)
June 30, 1998	$3,346,205,003	$2,663,946,276	($ 682,258,727)
June 30, 1999	$4,072,227,435	$2,991,420,884	($1,080,806,551)
June 30, 2000	$5,284,033,534	$3,368,601,134	($1,915,432,400)
June 30, 2001	$5,423,834,549	$3,706,282,212	($1,717,552,337)
Hazardous			
June 30, 1996	$ 642,220,505	$ 694,942,156	$ 52,721,651
June 30, 1997	$ 763,829,310	$ 754,308,810	($ 9,520,500)
June 30, 1998	$ 927,057,492	$ 865,966,626	($ 61,090,866)
June 30, 1999	$1,124,651,486	$ 963,711,775	($160,939,711)
June 30, 2000	$1,445,542,794	$1,084,553,697	($360,989,097)
June 30, 2001	$1,486,666,016	$1,193,860,442	($292,806,574)

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2001

Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll (b-a)/c)
1.074	$1,137,192,560	(0.136)
1.150	$1,297,116,204	(0.277)
1.256	$1,437,594,574	(0.475)
1.361	$1,346,601,939	(0.803)
1.569	$1,452,058,248	(1.319)
1.463	$1,544,973,296	(1.112)
0.924	$ 211,638,457	0.249
1.013	$225,094,837	(0.042)
1.071	$236,180,023	(0.257)
1.167	$256,201,726	(0.628)
1.333	$288,575,870	(1.251)
1.245	$316,700,304	(0.925)

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2001

STATE POLICE RETIREMENT SYSTEM

Year Ended	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
June 30, 1996	$237,515,346	$244,540,812	$ 7,025,466	0.971	$34,698,957	0.202
June 30, 1997	$279,643,275	$255,784,758	($ 23,858,517)	1.093	$41,586,211	(0.574)
June 30, 1998	$306,318,918	$294,427,019	($ 11,891,899)	1.040	$38,727,361	(0.307)
June 30, 1999	$357,623,196	$314,021,673	($ 43,601,523)	1.139	$40,433,405	(1.078)
June 30, 2000	$459,168,574	$336,579,763	($122,588,811)	1.364	$43,619,383	(2.810)
June 30, 2001	$456,160,709	$356,211,860	($ 99,948,849)	1.281	$44,646,678	(2.237)

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KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

KERS Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Targeted Rate (b)	Unfunded AAL (UAAL) (b-a)
June 30, 1996**	$138,382,213	$1,127,128,023	$ 988,745,810
June 30, 1997	$168,479,973	$1,153,952,891	$ 985,472,918
June 30, 1998	$210,105,184	$1,242,183,993	$1,032,078,809
June 30, 1999	$283,704,887	$1,273,364,800	$ 989,659,913
June 30, 2000	$399,560,252	$1,457,475,358	$1,057,915,106
June 30, 2001	$449,630,605	$1,769,583,098	$1,319,952,493
KERS Hazardous			
June 30, 1996**	$ 34,263,992	$ 95,266,115	$61,002,123
June 30, 1997	$ 42,684,374	$120,511,351	$77,826,977
June 30, 1998	$ 54,606,786	$137,394,162	$82,787,376
June 30, 1999	$ 74,579,649	$149,158,586	$74,578,937
June 30, 2000	$102,212,237	$175,167,613	$72,955,376
June 30, 2001	$119,372,742	$214,450,822	$95,078,080

** Asset valuation method was changed from book value to a five-year average of market to book values. - June 30, 1996 valuation.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2001

Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
0.123	$1,232,974,460	0.802
0.146	$1,234,798,738	0.798
0.169	$1,321,004,266	0.781
0.223	$1,330,766,100	0.743
0.274	$1,409,504,668	0.751
0.254	$1,505,299,220	0.877
0.360	$ 85,933,543	0.710
0.354	$ 87,757,075	0.887
0.397	$ 93,130,996	0.889
0.500	$103,464,123	0.721
0.584	$115,639,439	0.631
0.557	$122,857,992	0.774

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

CERS Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Targeted Rate (b)	Unfunded AAL (UAAL) (b-a)
June 30, 1996**	$110,203,861	$1,011,215,398	$ 901,011,537
June 30, 1997	$134,688,096	$1,091,055,849	$ 956,367,753
June 30, 1998	$168,531,296	$1,213,339,747	$1,044,808,451
June 30, 1999	$231,937,169	$1,282,874,286	$1,050,937,117
June 30, 2000	$319,642,694	$1,466,716,928	$1,147,074,234
June 30, 2001	$371,758,628	$1,793,710,768	$1,421,952,140
CERS Hazardous			
June 30, 1996**	$ 57,332,380	$ 375,444,348	$318,111,968
June 30, 1997	$ 69,832,681	$450,304,608	$380,471,927
June 30, 1998	$ 87,055,079	$493,286,363	$406,231,284
June 30, 1999	$114,590,223	$518,280,115	$403,689,892
June 30, 2000	$168,657,912	$599,936,029	$431,278,117
June 30, 2001	$197,875,249	$721,605,292	$523,730,043

** Asset valuation method was changed from book value to a five-year average of market to book values. - June 30, 1996 valuation.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2001

Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
0.109	$1,137,192,560	0.792
0.123	$1,297,116,204	0.737
0.139	$1,437,594,574	0.727
0.180	$1,346,601,939	0.780
0.218	$1,452,058,248	0.780
0.207	$1,544,973,296	0.920
0.153	$ 211,638,457	1.503
0.155	$225,094,837	1.690
0.176	$236,180,023	1.720
0.221	$256,201,726	1.576
0.281	$288,575,870	1.500
0.274	$316,700,304	1.654

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2001

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

SPRS	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Targeted Rate (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
June 30, 1996**	$27,809,267	$101,132,886	$73,323,619	0.275	$34,698,957	2.113
June 30, 1997	$33,876,483	$117,361,754	$83,485,271	0.289	$41,586,211	2.008
June 30, 1998	$41,410,500	$124,501,076	$83,090,576	0.333	$38,727,361	2.146
June 30, 1999	$53,929,859	$125,797,150	$71,867,291	0.429	$40,433,405	1.777
June 30, 2000	$71,711,712	$138,867,085	$67,155,373	0.516	$43,619,383	1.540
June 30, 2001	$79,863,577	$158,261,479	$78,397,902	0.505	$44,646,678	1.756

** Asset valuation method was changed from book value to a five-year average of market to book values. - June 30, 1996 valuation.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS
For The Year Ended June 30, 2001

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

EMPLOYER CONTRIBUTIONS

NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1996	$107,885,265	$ 99,296,569	0.920
June 30, 1997	$109,773,608	$102,967,907	0.935
June 30, 1998	$117,437,279	$112,082,480	0.954
June 30, 1999	$106,860,518	$107,514,778	1.006
June 30, 2000	$113,183,225	$115,055,476	1.017
June 30, 2001	$ 88,662,124	$ 90,356,951	1.019

HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1996	$15,511,004	$14,420,406	0.930
June 30, 1997	$15,682,189	$15,151,328	0.966
June 30, 1998	$16,642,509	$15,997,189	0.961
June 30, 1999	$19,306,405	$19,443,818	1.007
June 30, 2000	$21,578,319	$21,633,272	1.003
June 30, 2001	$23,146,446	$23,852,961	1.031

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS
For The Year Ended June 30, 2001

COUNTY EMPLOYEES RETIREMENT SYSTEM

EMPLOYER CONTRIBUTIONS

NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1996	$101,665,015	$ 95,660,478	0.941
June 30, 1997	$112,200,552	$105,773,743	0.942
June 30, 1998	$124,351,931	$107,490,256	0.864
June 30, 1999	$109,074,757	$110,591,016	1.014
June 30, 2000	$105,709,840	$106,587,217	1.008
June 30, 2001	$ 97,951,307	$111,206,820	1.135

HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1996	$38,539,363	$35,951,348	0.933
June 30, 1997	$42,070,225	$39,552,085	0.938
June 30, 1998	$44,142,046	$42,297,090	0.958
June 30, 1999	$46,526,233	$48,290,617	1.037
June 30, 2000	$50,645,065	$51,739,272	1.022
June 30, 2001	$51,558,809	$53,132,792	1.031

ENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS
For The Year Ended June 30, 2001

STATE POLICE RETIREMENT SYSTEM

EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1996	$ 7,998,110	$ 7,089,072	0.886
June 30, 1997	$11,053,615	$ 9,627,692	0.871
June 30, 1998	$10,293,733	$ 9,573,742	0.930
June 30, 1999	$ 9,465,460	$ 9,463,188	0.999
June 30, 2000	$10,211,298	$10,215,824	1.000
June 30, 2001	$ 9,634,753	$ 9,628,912	0.999

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS
For The Year Ended June 30, 2001

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

EMPLOYER CONTRIBUTIONS

KERS
NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1996	$ 38,838,695	$36,690,182	0.940
June 30, 1997	$38,896,160	$37,709,736	0.970
June 30, 1998	$54,029,074	$39,503,545	0.731
June 30, 1999	$56,690,636	$56,769,539	1.001
June 30, 2000	$76,818,004	$76,926,320	1.001
June 30, 2001	$66,874,871	$66,874,871	1.000

KERS
HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1996	$ 6,410,642	$ 5,931,007	0.930
June 30, 1997	$ 6,546,678	$ 6,278,931	0.960
June 30, 1998	$ 9,341,039	$ 6,632,037	0.710
June 30, 1999	$10,760,269	$10,773,916	1.001
June 30, 2000	$12,026,502	$12,047,095	1.002
June 30, 2001	$13,226,298	$13,226,298	1.000

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS
For The Year Ended June 30, 2001

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

EMPLOYER CONTRIBUTIONS

CERS
NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1996	$26,837,744	$25,234,550	0.940
June 30, 1997	$30,611,942	$27,504,331	0.898
June 30, 1998	$48,303,178	$29,271,074	0.606
June 30, 1999	$47,939,029	$47,901,837	0.999
June 30, 2000	$55,033,008	$55,213,973	1.003
June 30, 2001	$62,292,385	$62,292,385	1.000

CERS
HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1996	$13,396,714	$12,381,700	0.920
June 30, 1997	$14,248,503	$13,305,317	0.934
June 30, 1998	$20,783,842	$14,275,040	0.687
June 30, 1999	$23,647,419	$23,382,957	0.989
June 30, 2000	$27,991,859	$28,345,377	1.013
June 30, 2001	$32,149,432	$32,149,432	1.000

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS
For The Year Ended June 30, 2001

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

EMPLOYER CONTRIBUTIONS

SPRS
HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1996	$ 4,930,722	$4,603,921	0.930
June 30, 1997	$5,909,401	$5,125,678	0.867
June 30, 1998	$6,808,270	$5,120,037	0.752
June 30, 1999	$7,237,579	$7,251,787	1.002
June 30, 2000	$7,807,870	$7,817,613	1.001
June 30, 2001	$8,098,907	$8,113,391	1.002

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows.

PENSION FUNDS

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2000	June 30, 2000
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percent Closed	Level Percent Closed
Amortization Period - Each Benefit Improvement	30 years - Commencing with 1990 Valuation	30 years - Commencing with 1990 Valuation
Asset Valuation Method -	Five-year Average of Market to Book Value	Five-year Average of Market to Book Value
Postretirement Benefit Increase	1.6%	1.6%
Actuarial Assumptions:		
Investment Return	8.25%	8.25%
Projected Salary Increases	6.50%	6.50%
Inflation Rate	3.50%	3.50%

POST-EMPLOYMENT HEALTHCARE

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2000	June 30, 2000
Actuarial Cost Method	Targeted Rate	Targeted Rate
Asset Valuation Method - Started with 1996 Valuation	Five-year Average of Market to Book Value	Five-year Average of Market to Book Value
Actuarial Assumptions:		
Investment Return	8.25%	8.25%
Projected Salary Increases	6.50%	6.50%
Inflation Rate	3.50%	3.50%

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF ADMINISTRATIVE EXPENSES
For the Year Ended June 30, 2001

SUPPORTING SCHEDULE #1

Personal Services:		
Salaries and Per Diem	$6,371,154	
Fringe Benefits	1,424,598	
Tuition Assistance	35,003	
Total Personal Services		$ 7,830,755
Contractual Services:		
Actuarial	129,450	
Audit	29,000	
Legal	156,473	
Medical	102,264	
Contractual	329,414	
Miscellaneous	375	
Total Contractual Services		746,976
Communication:		
Printing	137,722	
Telephone	69,872	
Postage	507,481	
Travel	72,236	
Total Communication		787,311
Rentals:		
Office Space	441,333	
Equipment	34,660	
Total Rentals		475,993
Miscellaneous:		
Utilities	64,984	
Supplies	133,310	
Insurance	33,803	
Maintenance	436,756	
Other	118,664	
Total Miscellaneous		787,517
Capital Outlay:		
Equipment Purchases	129,959	
Lease Purchases	-	
Total Capital Outlay		129,959
TOTAL ADMINISTRATIVE EXPENSES		$10,758,511

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTAL INFORMATION
SCHEDULE OF INVESTMENT EXPENSES
For the Year Ended June 30, 2001

SUPPORTING SCHEDULE #2

Retirement Funds		
Security Lending Fees:		
Broker Rebates	$96,171,191	
Lending Agent Fees	2,519,719	
Custodial Fee	18,750	
Total Security Lending		$ 98,709,660
Contractual Services:		
Investment Management	4,437,749	
Security Custody	45,456	
Investment Consultant	25,000	
Total Contractual Services		4,508,205
Insurance Funds		
Security Lending Fees:		
Broker Rebates	9,892,293	
Lending Agent Fees	240,455	
Total Security Lending		10,132,748
Investment Management		94,997
TOTAL INVESTMENT EXPENSES		$113,445,610

Information on fees paid to investment professionals can be found in the investment section of the Comprehensive Annual Financial Report.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF PAYMENT TO CONSULTANTS
For the Year Ended June 30, 2001

SUPPORTING SCHEDULE #3

Actuarial Services	$129,450
Medical Review Services	102,264
Audit Services	29,000
Legal Counsel	156,473
TOTAL	$417,187

KENTUCKY RETIREMENT SYSTEMS

Investment Section

Comprehensive Annual Financial Report
June 30, 2001

INVESTMENT SECTION
PREFACE

The Board of Trustees is charged with the responsibility of investing the systems' assets to provide for the benefits of the members of the systems. To achieve that goal the Board follows a policy of preserving capital, while seeking means of enhancing revenues and protecting against undue losses in any particular investment area.

The Board recognizes its fiduciary duty not only to invest the funds in formal compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the systems. In order to maintain quality while maximizing the long range return, the Board diversifies the investment of the assets among classes of securities.

The assets are managed by the Investment Division staff and by external professional managers based on these investment policies.

Objectives

Long-Term: The total assets of the systems should achieve a return measured over two market cycles (estimated to be six to ten years) which exceeds the rate of inflation for the period, as measured by the Consumer Price Index for All Urban Consumers, by at least 4%.

Short-Term: The returns of the particular asset classes of the managed funds of the systems, measured on a year-to-year basis, should exceed the returns achieved by comparable unmanaged market indices.

In keeping with its responsibility as trustee and wherever consistent with its fiduciary responsibility, the Board encourages the investment of the systems' assets in securities of corporations which provide a positive contribution to the economy of the Commonwealth of Kentucky.

Investments Performance Review Procedures

At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. Each month the Investment Division performs tests to assure compliance with the restrictions imposed by the Investment Policy.

Investment Consulting

The Board employs William M. Mercer Investment Consulting to review the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from that firm follows this introduction and discusses current allocations, performance and significant changes over the fiscal year.

WILLIAM M. MERCER

Investment Consulting

September 19, 2001

The Board of Trustees of the
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Re: Annual Fund Review

Dear Trustees:

Mercer is charged with the duty to advise the Board in its asset management activities. This is our annual review of the asset management of the Kentucky Retirement Systems. Although we recognize that the Board of Trustees is charged with the responsibility of managing the Funds in a manner consistent with the basic long term nature of the participating systems, our comments focus on the annual period ended June 30, 2001. In managing the Funds, the Board must maintain formal compliance with the Prudent Person Rule. Therefore, it seeks to maintain proper and appropriate diversification for the Fund.

Market Highlights

Overall, despite a second quarter recovery, the equity markets slumped sharply over the trailing twelve months. Large Cap stocks, as measured by the S&P 500, have fallen 14.8% through June 30 despite the 5.9% return in the second quarter of 2001. Conversely, aided by the flight to quality and lower short-term interest rates, the Lehman Brothers Aggregate Index returned 11.2% over the trailing year.

Systems Highlights

The System's assets contracted over the trailing twelve months because of the poor investment environment for equities. According to the FundAnalytic statements from Northern Trust, The Retirement Fund's assets decreased from $12.6 billion to $11.7 billion due to a return of -5.4% and negative cash flow. The Insurance Fund increased from $1.0 billion to $1.1 billion mainly through contributions made during the year, as the plan returned -3.8% over the trailing year. The Total Fund return for both the Retirement and Insurance Fund's outperformed their Reference Indices over the trailing year. These results were achieved

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Investment Consulting, Inc.
10 South Wacker Street
Suite 1700
Chicago, IL 60606

Phone 312 902 7500
Fax 312 902 7626

A Marsh & McLennan Company

at a risk or volatility level similar to the Reference Indices. The Reference Indices are constructed according to the individual target asset allocations of the Funds.
The asset allocation targets were adjusted during the second quarter of 2001 after the ALM study was completed. A TIPS portfolio was added to the investment lineup in both the Retirement Fund and Insurance Fund as a means to protect assets from inflation. As of June 30th, the allocation to the ADR portfolios was underweight relative to targets in both plans. In the Retirement and Insurance Funds, cash and equivalents was above target allocations while in the Insurance Fund, the allocation to Domestic Equities was above targets.

The June 30th asset allocation of the Retirement and Insurance Funds are compared in the table below to their individual asset allocation targets:

	Retirement Fund		Insurance Fund	
Asset Classes	Actual Allocation 6/30/01	Target Asset Allocation	Actual Allocation 6/30/01	Target Asset Allocation
Domestic Equity	40.1	40	65.4	60
International Equity	9.8	15	9.4	20
Fixed Income	29.3	27	1.3	0
Alternatives *	5.3	5	0.0	5
TIPS	8.5	10	9.8	10
Cash	7.0	3	14.1	5

* Includes Real Estate and Private Equity.

We note that the Insurance Fund's allocations are beyond ranges in Domestic Equity, International Equity, and Cash. The large cash allocation is partly due to a contribution of $74.6 million in June.

Investment Manager Highlights

The Retirement Fund

One new portfolio was initiated during 2001:

· NAMCO began managing the TIPS mandate in June.

The System's domestic equity managers performed well on a relative basis over the trailing twelve months. The NAMCO portfolio returned –7.2% vs. the –14.8% return of the S&P 500. AllianceBernstein, the System's large cap growth manager, outperformed the S&P Growth return of –32.4%, returning –23.2%.

The fixed income managers' results were strong on an absolute and relative basis over the past year. NAMCO, the active manager, and Lincoln, the passive manager, each added value returning 11.2% and 11.4%, respectively.

· The mandate for Weaver Barksdale was changed from short duration to core fixed income.

The System's Real Estate managers posted mixed results over the past year. All of Real Estate managers underperformed their respective benchmarks except the Heitman portfolio. However, the strong absolute and relative performance of the Heitman portfolio resulted in the asset class outperforming the benchmark.

· In a review of the portfolio structure, Mercer recommended the use of active management in the implementation of the international equity allocation. This recommendation was approved and a manager search was initiated during the second quarter.

The Insurance Fund

· The TIPS mandate was funded in June and is managed by NAMCO.

NAMCO is the Fund's only external investment manager. The portfolio continued to post competitive results relative to its benchmarks and acted as a crutch over the trailing twelve months returning 11.5%. On an absolute basis the ADR portfolio was the largest drag on performance but performed well on a relative basis. The poor relative performance of the Small Cap portfolio over the past year hurt relative performance but still posted positive returns.

Summary

The Systems' assets have contracted over the past year, as equity markets contracted in the second half of 2000 and first half of 2001. The large allocation to domestic equities hurt performance on an absolute basis, while the System's active managers performed well against their peers. The Board continues to monitor the Systems' results and has initiated changes to improve investment returns.

Sincerely,

WILLIAM M. MERCER INVESTMENT CONSULTING, INC.

Louis Finney, Ph.D.
(312) 902-7802

Douglas J. Kryscio
(312) 902-7147

LF/DJK:otj

cc: B. Aldridge, Kentucky Retirement Systems
R. Leggett, Kentucky Retirement Systems
S. Gagel, Mercer-Louisville

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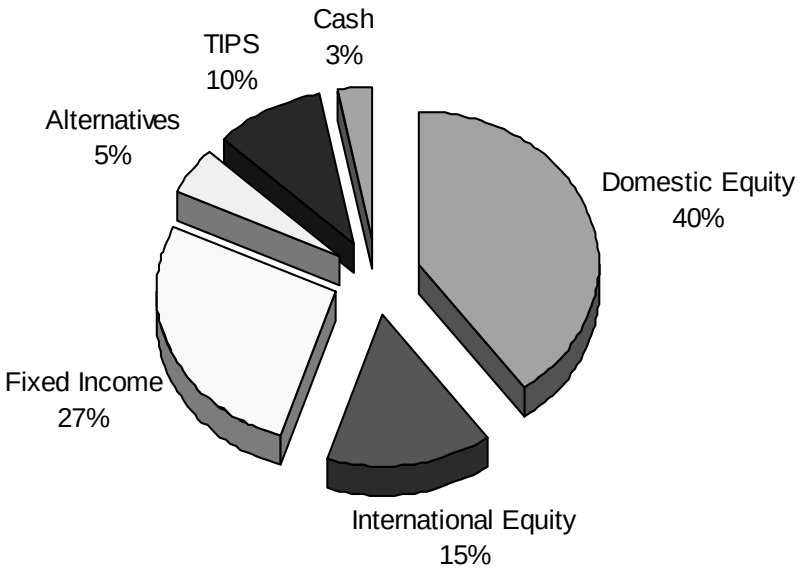
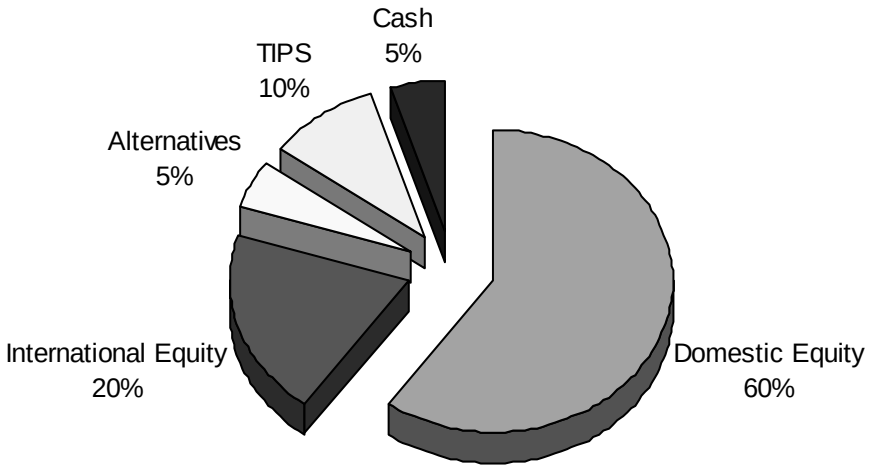
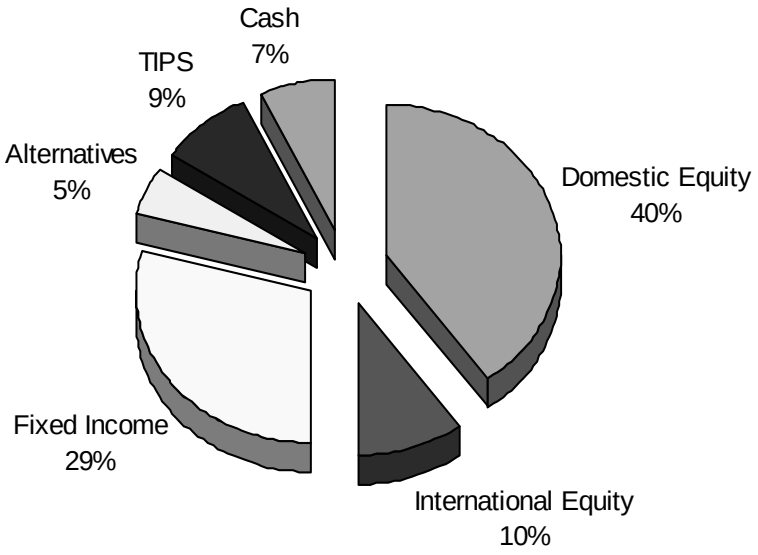
Pension Fund Target Allocation



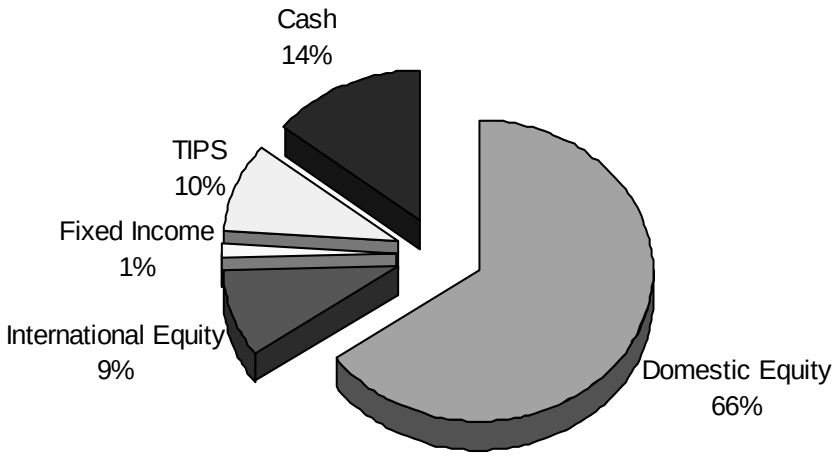
Insurance Fund Target Allocation



Pension Fund Actual Allocation 6/30/01



Insurance Fund Actual Allocation 6/30/01



KENTUCKY RETIREMENT SYSTEMS
PERFORMANCE EVALUATION

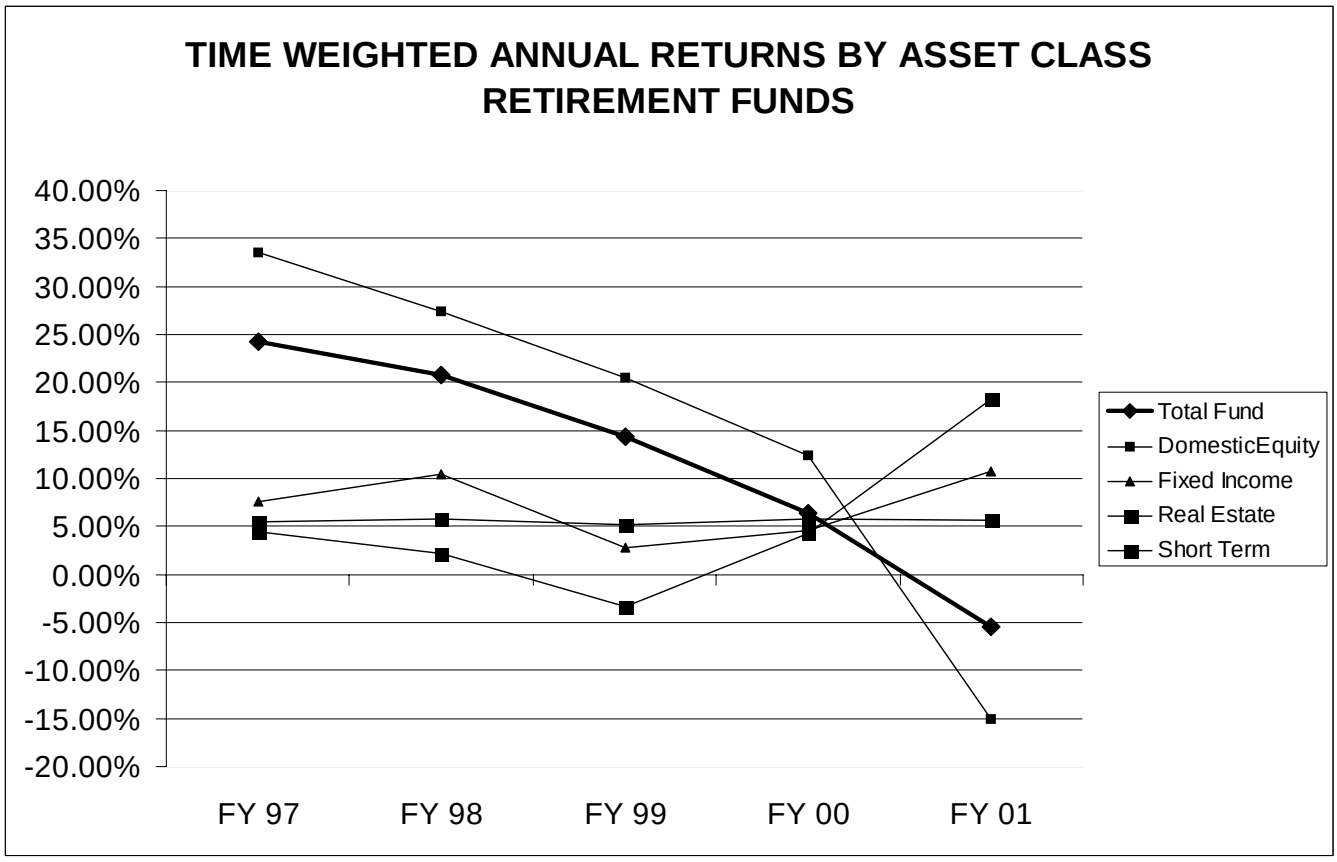
PENSION FUNDS

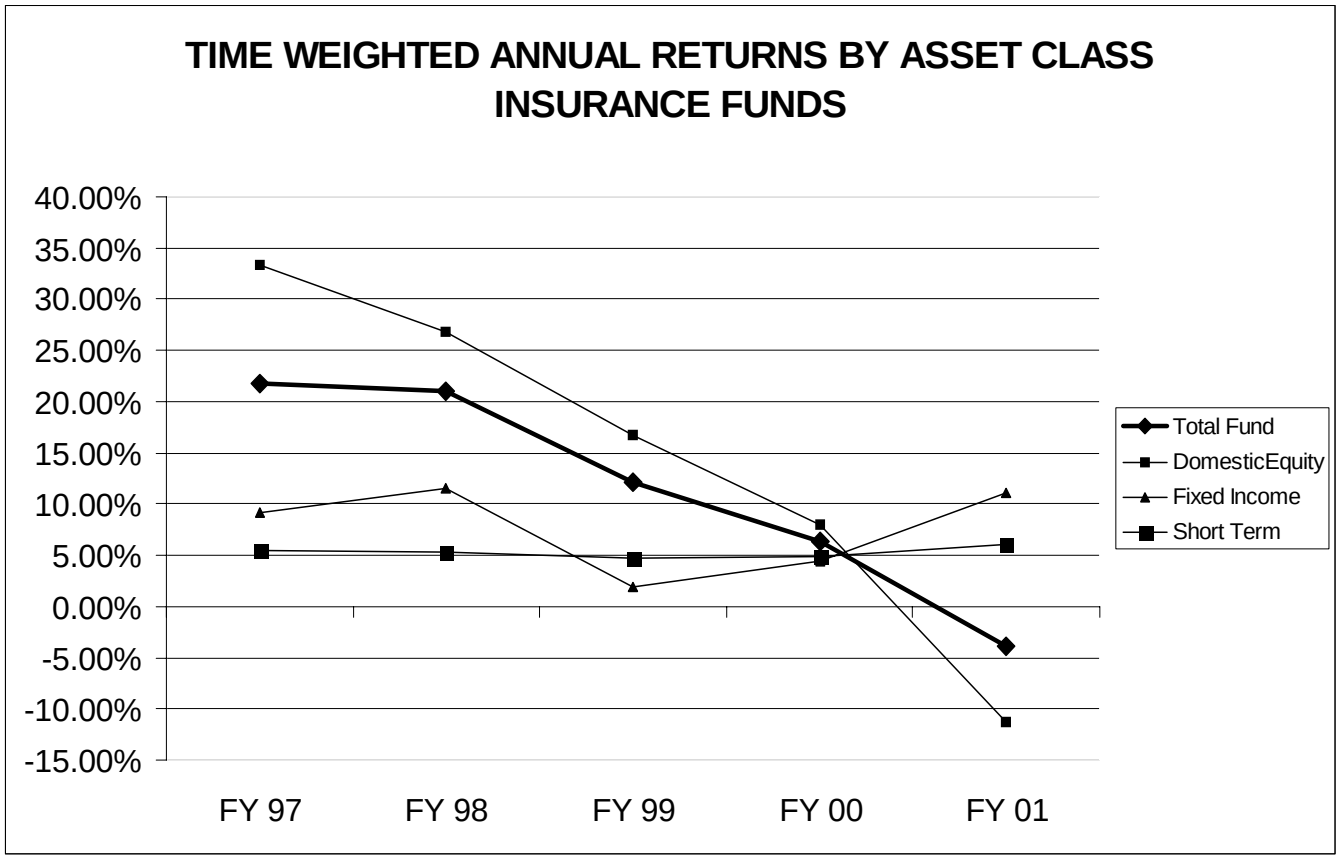
	Fiscal Year	3-Year	5-Year
Total KRS Retirement Fund	**(5.42%)**	**4.77%**	**11.51%**
CPI	3.31%	2.98%	2.56%
KRS Equities	**(15.09%)**	**4.75%**	**14.38%**
S&P 500	(14.83%)	3.89%	14.48%
KRS Fixed Income	**10.69%**	**5.98%**	**7.25%**
Lehman Bros. Govt./Credit Bond Index	11.14%	5.98%	7.38%
KRS Real Estate	**18.28%**	**6.06%**	**4.97%**
WARESI	24.60%	6.62%	11.50%
KRS Cash Reserves	**6.74%**	**5.92%**	**5.82%**
Salomon Bros. 3 Month T-Bill	5.64%	5.22%	5.23%

INSURANCE FUNDS

Total KRS Insurance Fund	**(3.81%)**	**4.70%**	**11.07%**
CPI	3.31%	2.98%	2.56%
KRS Insurance Fund Equities	**(11.22%)**	**3.69%**	**12.86%**
S&P 500	(14.83%)	3.89%	14.48%
KRS Insurance Fund Fixed Income	**11.02%**	**5.71%**	**7.56%**
Lehman Bros. Govt./Credit Bond Index	11.14%	5.98%	7.38%
KRS Insurance Fund Cash Reserves	**6.07%**	**5.19%**	**5.25%**
Salomon Bros. 3 Month T-Bill	5.64%	5.22%	5.23%

Performance figures were calculated using a time-weighted rate of return.


TIME WEIGHTED ANNUAL RETURNS BY ASSET CLASS
RETIREMENT FUNDS
40.00%
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
-5.00%
-10.00%
-15.00%
-20.00%
FY 97
FY 98
FY 99
FY 00
FY 01
Total Fund
DomesticEquity
Fixed Income
Real Estate
Short Term


TIME WEIGHTED ANNUAL RETURNS BY ASSET CLASS
INSURANCE FUNDS
40.00%
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
-5.00%
-10.00%
-15.00%
FY 97
FY 98
FY 99
FY 00
FY 01
Total Fund
DomesticEquity
Fixed Income
Short Term

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARIES
JUNE 30, 2001

CLASS	KERS NONHAZARDOUS 6/30/2000 BOOK VALUE	KERS NONHAZARDOUS 6/30/2000 MARKET VALUE	KERS NONHAZARDOUS 6/30/2001 BOOK VALUE	KERS NONHAZARDOUS 6/30/2001 MARKET VALUE	% OF MKT VALUE 6/30/2001
Bonds	$1,272,662,428	$1,250,243,765	$1,394,064,525	$1,399,391,916	25%
Mortgages	260,531,097	258,776,437	253,571,947	256,644,045	5%
Short-Term	369,291,371	369,291,371	808,232,979	808,362,901	15%
Real Estate	55,559,021	54,689,568	36,152,097	33,897,012	1%
Reit Real Estate	217,593,169	211,865,186	195,336,827	223,086,956	4%
Equities	2,565,017,210	3,827,370,073	2,540,157,224	2,714,016,310	50%
Total Portfolio	$4,740,654,296	$5,972,236,400	$5,227,515,599	$5,435,399,140	100%

CLASS	KERS HAZARDOUS 6/30/2000 BOOK VALUE	KERS HAZARDOUS 6/30/2000 MARKET VALUE	KERS HAZARDOUS 6/30/2001 BOOK VALUE	KERS HAZARDOUS 6/30/2001 MARKET VALUE	% OF MKT VALUE 6/30/2001
Bonds	$ 71,832,888	$ 70,563,859	$ 72,114,723	$ 72,139,033	24%
Mortgages	11,549,128	11,369,234	11,938,221	12,088,847	4%
Short-Term	31,704,368	31,704,368	57,586,144	57,593,177	19%
Real Estate	2,970,452	2,971,432	2,569,130	2,513,806	1%
Reit Real Estate	17,523,003	17,407,512	15,924,354	18,186,615	6%
Equities	119,806,487	165,929,671	136,235,944	140,119,672	46%
Total Portfolio	$255,386,326	$299,946,076	$296,368,516	$302,641,150	100%

For these porfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARIES
JUNE 30, 2001

CLASS	CERS NONHAZARDOUS 6/30/2000 BOOK VALUE	CERS NONHAZARDOUS 6/30/2000 MARKET VALUE	CERS NONHAZARDOUS 6/30/2001 BOOK VALUE	CERS NONHAZARDOUS 6/30/2001 MARKET VALUE	% OF MKT VALUE 6/30/2001
Bonds	$1,014,245,242	$ 995,323,535	$1,079,737,947	$1,081,551,116	25%
Mortgages	190,477,017	188,628,882	187,018,218	189,332,391	4%
Short-Term	347,820,741	347,820,741	750,835,711	750,938,933	17%
Real Estate	32,508,441	32,282,421	21,389,796	19,835,123	1%
Reit Real Estate	190,995,358	186,941,070	171,929,969	196,354,849	4%
Equities	1,956,245,617	2,880,048,794	1,993,605,427	2,116,659,800	49%
Total Portfolio	$3,732,292,416	$4,631,045,443	$4,204,517,068	$4,354,672,212	100%

CLASS	CERS HAZARDOUS 6/30/2000 BOOK VALUE	CERS HAZARDOUS 6/30/2000 MARKET VALUE	CERS HAZARDOUS 6/30/2001 BOOK VALUE	CERS HAZARDOUS 6/30/2001 MARKET VALUE	% OF MKT VALUE 6/30/2001
Bonds	$ 272,902,791	$ 267,648,097	$ 292,898,364	$ 293,187,001	24%
Mortgages	51,973,158	51,287,587	49,916,145	50,538,244	4%
Short-Term	95,076,109	95,076,109	203,849,653	203,877,881	17%
Real Estate	9,975,889	10,018,781	7,258,020	7,044,568	1%
Reit Real Estate	56,419,698	54,573,334	50,349,532	57,502,335	5%
Equities	544,363,183	786,273,439	554,929,954	585,237,188	49%
Total Portfolio	$1,030,710,828	$1,264,877,347	$1,159,201,668	$1,197,387,217	100%

For these porfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARIES
JUNE 30, 2001

CLASS	SPRS 6/30/2000 BOOK VALUE	SPRS 6/30/2000 MARKET VALUE	SPRS 6/30/2001 BOOK VALUE	SPRS 6/30/2001 MARKET VALUE	% OF MKT VALUE 6/30/2001
Bonds	$ 75,464,125	$ 74,201,878	$ 93,279,304	$ 93,577,155	26%
Mortgages	17,213,682	17,124,139	16,856,293	17,061,141	5%
Short-Term	23,238,262	23,238,262	46,150,440	46,159,174	13%
Real Estate	4,797,829	4,690,136	3,206,928	3,037,992	1%
Reit Real Estate	15,445,316	14,870,766	13,883,062	15,855,331	4%
Equities	179,640,170	275,458,975	170,647,349	186,588,417	51%
Total Portfolio	$315,799,384	409,584,156	$344,023,376	$362,279,210	100%

CLASS	INSURANCE FUND 6/30/2000 BOOK VALUE	INSURANCE FUND 6/30/2000 MARKET VALUE	INSURANCE FUND 6/30/2001 BOOK VALUE	INSURANCE FUND 6/30/2001 MARKET VALUE	% OF MKT VALUE 6/30/2001
Bonds	$230,492,185	$224,509,227	$105,507,370	$ 104,511,548	10%
Mortgages	17,839,206	17,116,662	6,629,726	6,595,407	1%
Short-Term	85,502,549	85,502,549	207,200,485	207,200,484	20%
Equities	473,694,414	669,514,989	672,988,603	739,104,733	69%
Total Portfolio	$807,528,354	$996,643,427	$992,326,184	$1,057,412,172	100%

For these porfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

List of Largest Assets Held

PENSION FUND

Largest Stock Holdings
(By Market Value)
June 30, 2001

Rank	Shares	Stock	Market Value
1	3,523,600	GENERAL ELECTRIC CO	$171,775,500.00
2	1,729,430	MICROSOFT CORP	$126,248,390.00
3	2,122,876	CITIGROUP INC	$112,172,767.84
4	1,272,257	EXXON MOBIL CORP	$111,131,648.95
5	1,216,925	AMERICAN INTERNATIONAL	$104,655,550.00
6	2,570,770	PFIZER INC	$102,959,338.50
7	2,522,038	INTEL CORP	$ 73,769,611.50
8	1,392,960	WAL MART	$ 67,976,448.00
9	3,178,400	HOME DEPOT INC	$ 64,090,040.00
10	1,225,560	MEDTRONIC INC	$ 56,388,015.60

Largest Bond Holdings
(By Market Value)
June 30, 2001

Rank	Par	Bond	Market Value
1	$179,435,000	U S TSY NOTE 4.625 DUE 05/15/06 Rating AAA	$176,953,414
2	$119,150,000	U S TSY BOND 5.375 DUE 02/15/31 Rating AAA	$112,987,562
3	$ 98,400,000	U S TSY NOTE 5.000 DUE 02/15/11 Rating AAA	$ 95,478,504
4	$ 75,000,000	U S TSY NOTE 3.500 DUE 01/15/11 Rating AAA	$ 76,495,537
5	$ 60,655,000	U S TSY BOND 7.500 DUE 11/15/16 Rating AAA	$ 70,715,845
6	$ 67,560,000	U S TSY NOTE 6.250 DUE 02/15/03 Rating AAA	$ 69,707,732
7	$ 74,065,000	U S TSY BOND 5.250 DUE 02/15/29 Rating AAA	$ 67,824,283
8	$ 55,100,000	FNMA 7.130 DUE 06/15/10 Rating AAA	$ 58,797,761
9	$ 58,000,000	U S TSY NOTE 4.250 DUE 05/31/03 Rating AAA	$ 57,984,340
10	$ 50,000,000	U S TSY BOND 6.875 DUE 08/15/25 Rating AAA	$ 56,137,500

A complete listing of securities held is available upon request.

List of Largest Assets Held

INSURANCE FUND

Largest Stock Holdings
(By Market Value)
June 30, 2001

Rank	Shares	Stock	Market Value
1	492,500	GENERAL ELECTRIC CO	$24,009,375
2	265,200	MICROSOFT CORP	$19,359,600
3	249,600	CITIGROUP INC	$13,188,864
4	313,600	PFIZER INC	$12,559,680
5	215,100	AOL TIME WARNER	$11,400,300
6	222,000	WAL MART STORES INC	$10,833,600
7	115,700	AMER INTL GROUP	$ 9,950,200
8	334,500	INTEL CORP	$ 9,784,125
9	156,600	ROYAL DUTCH PETRO	$ 9,125,082
10	89,034	EXXON CORP	$ 7,777,119

Largest Bond Holdings
(By Market Value)
June 30, 2001

Rank	Par	Bond	Market Value
1	$20,895,000	US TSY NOTE 8.750 DUE 11/30/01 Rating AAA	$20,712,169
1	$18,500,000	US TSY INFLATION INDEX 3.625 DUE 04/15/28 Rating AAA	$20,664,770
2	$18,450,000	US TSY INFLATION INDEX 4.25 DUE 01/15/10 Rating AAA	$20,515,063
3	$13,600,000	US TSY INFLATION INDEX 3.875 DUE 04/15/29 Rating AAA	$15,627,537
4	$13,700,000	US TSY INFLATION INDEX 3.625 DUE 01/15/08 Rating AAA	$15,339,481
5	$13,500,000	US TSY INFLATION INDEX 3.375 DUE 01/15/07 Rating AAA	$15,262,414
6	$13,700,000	US TSY INFLATION INDEX 3.875 DUE 01/15/099 Rating AAA	$15,258,393
7	$ 6,528,112	NATIONSLINK FDG CORP 6.001 DUE 11/20/07 Rating AAA	$ 6,539,602
8	$ 1,750,000	BSCH ISSUANCES LTD NT 7.625 DUE 09/14/10 Rating AAA	$ 1,801,660
9	$ 56,186	FNMA POOL #429165 6.000 DUE 05/01/13 Rating AAA	$ 55,805
10	$ 42,093	FED EXPRESS CORP 7.520 DUE 01/15/18 Rating AAA	$ 42,231

A complete listing of securities held is available upon request.

Schedule of Fees and Commissions
Year Ended June 30, 2001

External Investment Manager Fees –	
– Equities and Fixed Income	
Pension Funds	$4,437,749
Insurance Funds	94,997
Investment Consulting Fees	*185,000
Security Lending Agent Fees	2,760,175
Brokerage Commissions — Equities	3,339,237
Total	$10,817,158

Total fees and commissions represent .084% of the fair value of the combined Pension and Insurance Fund portfolios.

*This figure consists of $25,000 for Investment Consultant included in Supporting Schedule #2 on page 69 and $160,000 for an asset liability modeling study which is included under Contractual Services in Supporting Schedule #1 on page 68.

INVESTMENT MANAGERS

Alliance Bernstein
1345 Avenue of the Americas
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C. B. Richard Ellis
865 South Figueroa Street, Suite 3500
Los Angeles, CA 90017

Heitman Capital Management Corp.
180 North LaSalle Street, Suite 3600
Chicago, IL 60601

Lend Lease
10 East 50th Street
New York, NY 10022

Lincoln Capital Management Co.
200 South Wacker Drive, Suite 2100
Chicago, IL 60606

Invesco-National Asset Management Corp.
Aegon Center
400 West Market Street, Suite 2500
Louisville, KY 40202

Northern Trust Quantitative Advisors, Inc.
50 South LaSalle Street
Chicago, IL 60675

Weaver C. Barksdale & Associates, Inc.
Two Creekside Crossing, Suite 450
10 Cadillac Drive
Brentwood, TN 37027

KENTUCKY RETIREMENT SYSTEMS

Actuarial Section

Comprehensive Annual Financial Report
June 30, 2001

WILLIAM M. MERCER

November 7, 2001

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Members of the Board:

The forty-fifth annual actuarial valuation of the Kentucky Employees Retirement System, the forty-second annual actuarial valuation of the County Employees Retirement System, and the forty-third annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. The following comments are pertinent to the results of this valuation:

1. The funding objectives for the plan remain unchanged from the prior year's valuation. Relative to the retirement fund, a contribution rate has been established which consists of the normal cost and amortization payment on the unfunded actuarial accrued liability. The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any unfunded actuarial accrued liability is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Each year any actuarial gains or losses, along with any other changes in the accrued liability (such as retiree COLA's, other benefit improvements, changes in actuarial assumptions, etc.) are established as a new amortization base to be amortized over the following 30 years.

Overall, the total funding for the retirement fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements. In particular, the current valuation funding rate does not anticipate any future cost of living increases to benefit recipients. Should these cost of living increases occur in the future, the funding rate for the retirement fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the ultimate target funding is to reach the full amount of the entry age funding level including 30-year level percent of payroll amortization of the unfunded actuarial accrued liability. However, current insurance funding levels are less than this ultimate target rate, and will be systematically increased over the 20-year period beginning with 1997 until the target funding rate is reached. As such, the insurance funding rate is expected to increase over the next 20 years.

The administrative expenses are also included as part of the total funding amount. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

To the extent that actual experience deviates from expected, an amortization base will be established and amortized over 30 years as a level percentage of payroll.

2. The progress towards achieving the intended funding objectives, both relative to the retirement and insurance funds, can be measured by the relationship of valuation assets of each fund to the accrued liabilities. The funded level for the retirement fund exceeds 100% in the 2001 valuation for all three systems (KERS, CERS and SPRS). This funded level will fluctuate over time with experience deviations, but should remain at or near the 100% funding level in the absence of material retirement benefit improvements. Since 1992, all three systems have had a funded level relative to the retirement fund of at least 90% in all valuations, with this funded level moving above 100% in recent years.

William M. Mercer, Incorporated
462 South Fourth Avenue
Suite 1500
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Phone 502 561 4500

Relative to the insurance fund, the funded level is not anywhere near 100% at this time, and the funding objective is to increase this funded level consistently over future years. Since 1990, the funded level relative to the insurance fund has improved in each succeeding valuation for all three systems with the exception of 2001. This increasing trend in the funded level is the primary objective of the current funding policy.

3. Valuations of each system are prepared annually, with the most recent such valuation being as of June 30, 2001.

4. In completing the valuation of these systems, we have relied on employee data as provided by Kentucky Retirement Systems, as well as financial data provided by the plan's auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data, nor has there been any reconciliation of data used in the prior year's valuation with this current valuation data.

5. I have prepared none of the supporting schedules included with this filing. However, I have reviewed these schedules, and the information included on them is consistent with the information provided in our actuarial valuation report.

6. Any schedules of trend data over the past ten years or less have been based on valuation reports fully prepared by William M. Mercer, with the undersigned having served as actuary in the preparation of each of these valuations.

7. The actuarial assumptions and methods used for the funding calculations of the valuation meet the parameters set for disclosure under GASB Statement No. 25. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary.

8. The information presented in items 1 through 7 of this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

The three Retirement Systems are actuarially sound based on the continuation of current funding policies adopted by the Board. Adequate provision is being made for the funding of the Actuarial Accrued Liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes, as appropriate funding rates have been established by the Board for this purpose.

Respectfully Submitted,
WILLIAM M. MERCER, INCORPORATED

By _____
Stephen A. Gagel, F.S.A.

SUMMARY OF BENEFIT PROVISIONS

Normal Retirement Eligibility

The age a participant becomes eligible for an unreduced age or service annuity is:

General Classification		Hazardous Classification	
Age	Service	Age	Service
65	**1 Month** (benefit based on account balance)	55	**1 Month** (benefit based on account balance)
	48 Months (benefit based on service & salary)		**5 Years** (benefit based on service & salary)
Any	27 Years	Any	20 Years

Normal Retirement Annuity

The annuity payable at Normal Retirement Age is based on Final Compensation (FC) and Creditable Service (CS) as follows:

Formula	**Group**
1.97% x FC x CS	Kentucky Employees Retirement General Participants
2.00% x FC x CS	Kentucky Employees Retirement General Participants who were employed January 1998 through January 1999.
2.20% x FC x CS	Kentucky Employees Retirement General Participants who were employed January 1998 through January 1999 and who retire between February 1999 and January 2009 with 20 or more years of service.
2.20% x FC x CS	County Employees Retirement General Participants
2.49% x FC x CS	Kentucky Employees Retirement Hazardous Duty Participants
2.50% x FC x CS	County Employees and State Police Hazardous Duty Participants

FC for General Participants is the average of the highest five fiscal years (July 1 – June 30) of earnings. These years do not have to be consecutive, but there must be a minimum of 48 months of earnings. Exception: for General Participants who retire no later than January 1, 2009 with at least 27 years and whose age and years of service total at least 75, the three highest fiscal years of earnings will be used . FC for Hazardous Duty Participants is the average of the three highest fiscal years of earnings. For FC based on the three highest fiscal years, the years do not have to be consecutive, but there must be a minimum of 25 months of earnings.

Early Retirement

A general participant may elect early retirement if the participant is age 55 or older and has at least 60 months of service credit.

Under early retirement the benefit is calculated the same as under normal retirement, except that benefits are reduced depending on the participant's age or years of service.

The following chart shows reductions for age or service. The retirement office reduces benefits by the lesser of the number of years to reach age 65 or to attain 27 years service.

	Years to Attain Age 65 or 27 Years Service									
	1	2	3	4	5	6	7	8	9	10
% of	95%	90%	85%	80%	75%	71%	67%	63%	59%	55% Benefit

A general participant under age 55 may also choose early retirement if the member has at least 25 years of service. The benefits are calculated the same as for normal retirement and are reduced 5% for each year of service credit less than 27.

State Police or hazardous position members of the County Employees or Kentucky Employees Retirement Systems may retire before age 55 if the member is at least age 50 and has at least 15 years of service credit.

Under early retirement, the benefit is calculated the same as under normal retirement, except that the benefits are reduced depending on the member's age or years of service. The following chart shows reductions for age or service. The retirement office reduces benefits by the lesser of the number of years to reach age 55 or to attain 20 years service.

	Years to Attain Age 55 or 20 Years Service				
	1	2	3	4	5
% of Benefit	94.5%	89.0%	83.5%	78.0%	72.5%

Voluntary Termination Before Immediate Benefit Eligibility

Participant may either (1) receive a refund of accumulated contributions and interest credited thereon, or (2) if vested, leave contributions on deposit and apply for a retirement annuity on or after the minimum retirement age based upon accrued service at the time of termination. Vesting requirements are included in each benefit described herein.

Disability Benefits

A general employee who is not eligible for an unreduced benefit may retire on account of disability. If the condition for disability (1) did not exist before the employee was employed, or (2) the disability is expected to last at least 12 months or result in death, and (3) the objective medical evidence is sufficient to prove the disability prevents the employee from performing his job or a job of similar duties, the employee will be deemed disabled. The employee must have at least 60 months of service, 12 of which are current service and must apply within 24 months of the last day of paid employment in a regular full-time position. Preexisting conditions can be considered if the employee has credit for 16 years of employment with participating employers. Benefits are calculated the same as for normal retirement except that additional years of service may be added to the employees account, depending on the employee's age and years of service.

A hazardous duty employee who is not eligible for an unreduced benefit may retire on account of disability. If the condition for disability: (1) did not exist before the employee was employed; or (2) the disability is expected to last at least 12 months or result in death; and (3) the objective medical evidence is sufficient to prove the employee is totally incapable of working in a hazardous position, but may still be capable of performing other types of work, the employee will be deemed disabled. The employee must have at least 60 months of service, 12 of which are current service and must apply within 24 months of the last day of paid employment in a regular full-time position. Preexisting conditions can be considered if the employee has credit for 16 years of employment with participating employers. Benefits are calculated the same as for normal retirement except that additional years of service may be added to the employees account, depending on the employee's age and years of service.

For both hazardous and nonhazardous members, if the disability is TOTAL and PERMANENT and results from an act IN LINE OF DUTY or a DUTY RELATED INJURY, the employee is eligible for a monthly benefit of no less than 25% of the employee's monthly Final Rate of Pay. In addition, each dependent child of such employee is eligible for a monthly benefit equal to 10% of the employee's monthly Final Rate of Pay. Aggregate dependent monthly payments cannot exceed 40 % of the employee's monthly Final Rate of Pay.

Death Before Retirement

If a general employee is employed with a participating agency at the time of death and has at least 60 months service credit 12 of which are current service, the beneficiary is eligible for monthly benefits. If the member is not working for a participating agency, but at the time of death has an account with at least 144 months service credit 12 of which are current service, the beneficiary is eligible for monthly benefits. The beneficiary of a member is also eligible if the member is 65 years old at the time of death and has 48 months service credit 12 of which are current service. Special death benefits may be offered if the employee dies because of a duty related injury.

If the named beneficiary is an individual, the beneficiary will have the option of a lifetime monthly benefit. In addition, the beneficiary, as well as multiple beneficiaries, an estate, or trust will be offered: (1) a lump sum actuarial refund, (2) monthly benefit for five years, or (3) monthly benefit for ten years.

Death benefits for hazardous duty employees whose death is not in the line of duty is similar to that of general employees. However, hazardous employees of Kentucky Employees, County Employees, and State Police Retirement Systems are eligible for death in line of duty benefits beginning the first day of employment. If the employee dies in the line of duty and the beneficiary is the employee's spouse, the beneficiary may elect a lump sum payment of $10,000 and a monthly benefit equal to 25% of the employee's Final Rate of Pay which will continue to remarriage or death. If the beneficiary is a dependent receiving at least 50% of his or her support from the employee, the beneficiary may elect a lump sum payment of $10,000. The beneficiary may elect this option or may choose from the benefit options offered under death not in the line of duty. Each dependent child will receive a monthly benefit equal to 10% of the employee's Final Rate of Pay. Aggregate dependent payments cannot exceed 40 % of the employee's monthly Final Rate of Pay.

Post Retirement Adjustments

Annuities are increased July 1 each year by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent. The Kentucky General Assembly reserves the right to suspend or reduce benefit increases if in their judgment the welfare of the State so demands.

Death After Retirement

If the member is receiving a monthly payment based on at least 48 months service credit, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Hospital and Medical Insurance Benefit

The retirement system provides group rates for medical insurance and, where available, health maintenance organization (HMO) and other managed care coverage for retirees. In addition, the member may pay the cost to obtain coverage for a spouse and dependents at group rates. Participation in the insurance program is optional.

Depending on the member's years of retirement service, the retirement system may pay a portion of the member's monthly premium for medical coverage. If coverage is for the member only, the system pays the same portion of the monthly contribution for both general and hazardous duty members. For hazardous duty members with a spouse the system will pay a portion of the monthly contribution for two-person coverage. For hazardous duty members with a spouse and dependent, the system will pay a portion of the monthly contribution for family coverage based on the member's hazardous duty service. Members may obtain enhanced coverage by paying an additional amount.

Percent of Monthly Contribution Paid by Retirement System

Years of Service	Percent Paid
Less than 4 years	*0%*
4 to 9 years	25%
10 to 14 years	50%
15 to 19 years	75%
20 or more years	100%

If a hazardous duty member becomes disabled in the line of duty, the retirement system will pay 100% of the monthly contribution for the member, spouse, and dependents. If a hazardous duty member dies in the line of duty, the retirement system will pay 100% of the monthly contribution for the beneficiary and dependent children.

Interest Credits

Member accounts have been credited with interest on July 1 each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; and 4% thereafter.

Contribution Rates

Employer contribution rates are determined by the entry age normal cost funding method. Actuarial gains and losses reduce or increase the unfunded liability. For years beginning with the 1990 valuation, actuarial gains and losses have been amortized over a period of thirty years using the level percent of payroll method as required by state statute.

Statutory required participant contributions are 5% of creditable compensation for general employees, 8% of creditable compensation for hazardous employees.

A *SUMMARY PLAN DESCRIPTION* WHICH GIVES A MORE DETAILED DESCRIPTION OF PLAN PROVISIONS IS AVAILABLE UPON REQUEST.

THIS INFORMATION CAN ALSO BE FOUND IN KENTUCKY RETIREMENT SYSTEMS' HOME PAGE ON THE INTERNET AT http://www.kyret.com

Summary of Actuarial Assumptions and Methods

1. The investment return rate used in making the valuations was 8.25% per year, net of investment related expenses, compounded annually. Adopted 2001.

2. The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:

    a. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.

    b. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.

    c. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.

    d. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.

    e. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

3. The percentage of participants assumed to retire at sample ages is shown in Schedule 1. Adopted 2001.

4. The mortality table used for active and retired lives was the 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees. Mortality assumptions for disabled lives are based on Social Security Administration Disability Mortality Rates – Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security). Sample annual rates of mortality are shown in Schedule 2. Adopted 2001.

5. Select rates of termination before retirement are shown in Schedule 3. Adopted 2001.

6. Annual pay per member is assumed to increase 12% in the first year, 10% in the second year, 8% in the third year and 6.50% per year thereafter, compounded annually, which is based on experience rather than the effects of inflation. Adopted 2001.

7. Kentucky Revised Statutes require use of the entry age normal cost funding method to determine the actuarial accrued liability. Actuarial gains and losses reduce or increase the unfunded liability. For years beginning with the 1990 valuation, actuarial gains and losses have been amortized over a period of thirty years using the level percent of payroll method as required by state statute.

8. With respect to cost-of-living adjustments, effective August 1, 1996, and on July 1 of each year thereafter, state statutes require retirement benefits to be increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent. The State Legislature reserved the right to suspend or reduce cost-of-living adjustments if in their judgment the welfare of the Commonwealth so demands.

9. The most recent actuarial experience analysis was performed for the period from July 1, 1995 through June 30, 2000. All assumptions used in the most recent actuarial valuation were based on the study performed in 2001.

Assumptions used in determining the actuarial accrued liability for postemployment healthcare benefits are shown in Schedule 4. Adopted 2001.

Schedule 1

Percentage of Participants Assumed to Retire at Sample Ages

Age	55-57	58-59	60-61	62	63-64	65	66-67	68	69	70 & Over
Percent Retiring	4%	5%	6%	25%	10%	50%	20%	25%	40%	100%

At age 55-64 in lieu of age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits with 27 years service credit.

For hazardous duty participants of the Kentucky Employees Retirement System it is assumed that 50% will retire as soon as eligible for unreduced benefits with 20 years service credit and the balance will continue to age 60.

For hazardous duty participants of the County Employees Retirement System it is assumed that 60% will retire as soon as eligible for unreduced benefits with 20 years service credit and the balance will continue to age 55.

For participants of the State Police Retirement System it is assumed that 60% will retire as soon as eligible for unreduced benefits with 20 years service credit and the balance will continue to age 55.

Schedule 2

Sample Annual Rates of Mortality

	Active Mortality*		Disabled Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

*Plus 0.05% duty death rate prior to retirement for hazardous duty participants.

Schedule 3

Select Rates of Termination Prior to Retirement

KERS

		Termination		Disablement	
Sample Ages	Years of Service	General Employees	Hazardous Employees	General Employees	Hazardous Employees
	1	35.00%	30.00%	**	**
	2	10.00%	8.00%	**	**
	3	7.00%	4.00%	**	**
	4	5.00%	4.00%	**	**
	5	4.00%	4.00%	**	**
25	Over 5	2.40%	3.04%	0.033%	0.042%
30		2.40%	3.38%	0.039%	0.050%
40		2.00%	1.50%	0.105%	0.132%
50		1.60%	0.00%	0.423%	0.530%
55		1.20%	0.00%	0.794%	0.992%
60		0.20%	0.00%	1.395%	1.743%

**Same as age-based rates for over five years of service.

CERS

		Termination		Disablement	
Sample Ages	Years of Service	General Employees	Hazardous Employees	General Employees	Hazardous Employees
	1	35.00%	**	**	**
	2	10.00%	**	**	**
	3	7.00%	**	**	**
	4	5.00%	**	**	**
	5	4.00%	**	**	**
25	Over 5	2.40%	3.04%	0.033%	0.042%
30		2.40%	3.38%	0.039%	0.050%
40		2.00%	1.50%	0.105%	0.132%
50		1.60%	0.00%	0.423%	0.530%
55		1.20%	0.00%	0.794%	0.992%
60		0.20%	0.00%	1.395%	1.743%

**Same as age-based rates for over five years of service.

SPRS

		Termination	Disablement
Sample Ages	Years of Service	Employees	Employees
	1	**	**
	2	**	**
	3	**	**
	4	**	**
	5	**	**
25	Over 5	1.82%	0.042%
30		2.03%	0.050%
40		0.90%	0.132%
50		0.00%	0.530%
55		0.00%	0.992%
60		0.00%	1.743%

**Same as age-based rates for over five years of service.

Schedule 4

Assumed Medical Premium Growth

Years	2001 – 2002	2003 – 2005	2006 – 2010	2011 -- 2015	2016 -- 2020	Thereafter
Increase Per Year	12%	10%	9%	8%	7.5%	7%

SUMMARY OF MEMBER VALUATION DATA

Kentucky Employees Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1996	47,145	$1,184,165,952	$25,118	
6/30/1997	46,073	$1,208,230,632	$26,224	4.4%
6/30/1998	46,342	$1,272,316,548	$27,455	4.7%
6/30/1999	45,824	$1,330,937,460	$29,046	5.8%
6/30/2000	46,897	$1,432,316,220	$30,542	5.2%
6/30/2001	47,780	$1,525,188,532	$31,921	4.5%

Kentucky (Hazardous) Employees Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1996	3,452	$ 79,514,184	$23,034	
6/30/1997	3,532	$ 84,231,840	$23,848	3.5%
6/30/1998	3,582	$ 88,891,680	$24,816	4.1%
6/30/1999	3,889	$103,970,148	$26,734	7.7%
6/30/2000	4,007	$115,135,008	$28,733	7.5%
6/30/2001	4,228	$123,647,407	$29,245	1.8%

County Employees Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1996	66,273	$1,126,719,480	$17,001	
6/30/1997	69,219	$1,281,975,348	$18,521	8.9%
6/30/1998	71,426	$1,341,570,672	$18,783	1.4%
6/30/1999	74,151	$1,449,817,548	$19,552	4.1%
6/30/2000	77,419	$1,575,632,580	$20,352	4.1%
6/30/2001	78,773	$1,597,653,320	$20,282	-0.3%

County (Hazardous) Employees Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1996	6,281	$197,337,300	$31,418	
6/30/1997	6,513	$210,180,588	$32,271	2.7%
6/30/1998	6,800	$227,851,248	$33,508	3.8%
6/30/1999	7,488	$260,279,940	$34,760	3.7%
6/30/2000	7,951	$291,062,928	$36,607	5.3%
6/30/2001	8,586	$322,819,064	$37,598	2.7%

State Police Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1996	1,002	$32,570,292	$32,505	
6/30/1997	943	$34,948,092	$37,061	14.0%
6/30/1998	954	$35,865,072	$37,594	1.4%
6/30/1999	985	$40,548,636	$41,166	9.5%
6/30/2000	1,023	$43,596,396	$42,616	3.5%
6/30/2001	1,016	$44,209,944	$43,514	2.1%

All Participants

Schedule of Active Member Valuation Data

Valuation Date	Participating Employers	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1996	1,367	124,153	$2,620,307,208	$21,105	
6/30/1997	1,412	126,280	$2,819,566,500	$22,328	5.8%
6/30/1998	1,841	129,104	$2,966,495,220	$22,978	2.9%
6/30/1999	1,531	132,337	$3,185,553,732	$24,072	4.8%
6/30/2000	1,610	137,297	$3,457,743,132	$25,184	4.6%
6/30/2001	1,706	140,383	$3,613,518,267	$25,740	2.2%

SUMMARY OF ACCRUED AND UNFUNDED LIABILITIES

Kentucky Employees Retirement System
(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1996	$3,415,404	$ 40,109	1.2%	$3,375,296	
6/30/1997	$3,603,966	($ 246,746)	(6.9%)	$3,850,712	$ 475,416
6/30/1998	$3,971,749	($ 596,537)	(15%)	$4,568,287	$ 717,575
6/30/1999	$4,531,905	($ 992,274)	(21.9%)	$5,524,179	$ 955,892
6/30/2000	$5,120,191	($2,022,698)	(39.5%)	$7,142,889	$1,618,710
6/30/2001*	$5,729,229	($1,477,191)	(25.8%)	$7,206,420	$ 63,531

*Change in asset valuation method. See Summary of Actuarial Assumptions and Methods.

Kentucky Employees Insurance Fund

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1996	$1,222,394	$1,049,748	85.9%	$172,646	
6/30/1997	$1,274,464	$1,063,300	83.4%	$211,164	$ 38,518
6/30/1998	$1,379,578	$1,114,866	80.8%	$264,711	$ 53,547
6/30/1999	$1,422,523	$1,064,238	74.8%	$358,284	$ 93,572
6/30/2000	$1,632,643	$1,130,871	69.3%	$501,772	$143,488
6/30/2001*	$1,984,034	$1,415,031	71.3%	$569,003	$ 67,231

*Change in asset valuation method. See Summary of Actuarial Assumptions and Methods.

County Employees Retirement System

(Expressed in Thousands)

Valuation Date	*Actuarial* Liability	*Unfunded* Liability	*Percent* Unfunded	*Actuarial* Value of Assets	*Increase* In Assets
6/30/1996	$2,778,316	($ 101,712)	(3.7%)	$2,880,029	
6/30/1997	$3,144,929	($ 369,097)	(11.7%)	$3,514,026	$ 633,997
6/30/1998	$3,529,912	($ 743,349)	(21.1%)	$4,273,262	$ 759,236
6/30/1999	$3,955,132	($1,241,746)	(31.4%)	$5,196,878	$ 923,616
6/30/2000	$4,453,155	($2,276,421)	(51.1%)	$6,729,576	$1,532,698
6/30/2001*	$4,900,143	($2,010,358)	(41.0%)	$6,910,500	$ 180,924

*Change in asset valuation method. See Summary of Actuarial Assumptions and Methods.

County Employees Insurance Fund

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1996	$1,386,660	$1,219,124	87.9%	$167,536	
6/30/1997	$1,541,360	$1,336,840	86.7%	$204,521	$ 36,985
6/30/1998	$1,706,626	$1,451,039	85.0%	$255,586	$ 51,065
6/30/1999	$1,801,154	$1,454,627	80.8%	$346,527	$ 90,941
6/30/2000	$2,066,653	$1,578,352	76.4%	$488,301	$141,774
6/30/2001*	$2,515,316	$1,954,682	77.4%	$569,634	$ 81,333

*Change in asset valuation method. See Summary of Actuarial Assumptions and Methods.

State Police Retirement System

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1996	$244,541	$ 7,025	2.9%	$237,515	
6/30/1997	$255,785	($ 23,859)	(9.3)%	$279,643	$ 42,128
6/30/1998	$294,427	($ 11,891)	(4.0)%	$306,318	$ 26,675
6/30/1999	$314,021	($ 43,601)	(13.9)%	$357,623	$ 51,304
6/30/2000	$336,580	($122,589)	(36.4)%	$459,169	$101,546
6/30/2001*	$356,212	($ 99,949)	(28.1%)	$456,161	($ 3,008)

*Change in asset valuation method. See Summary of Actuarial Assumptions and Methods.

State Police Insurance Fund

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1996	$101,133	$73,324	72.5%	$27,809	
6/30/1997	$117,361	$83,485	71.1%	$33,876	$ 6,100
6/30/1998	$124,501	$83,090	66.7%	$41,410	$ 7,534
6/30/1999	$125,797	$71,867	57.1%	$53,929	$12,519
6/30/2000	$138,867	$67,155	48.4%	$71,712	$17,783
6/30/2001*	$158,261	$78,398	49.5%	$79,864	$ 8,152

*Change in asset valuation method. See Summary of Actuarial Assumptions and Methods.

SOLVENCY TEST

Kentucky Employees Retirement System

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1996	$654,343	$1,425,519	$1,335,543	$3,375,296	100%	100%	97.0%
6/30/1997	$691,058	$1,541,845	$1,371,063	$3,850,712	100%	100%	118.0%
6/30/1998	$752,816	$1,711,602	$1,507,332	$4,568,287	100%	100%	139.6%
6/30/1999	$862,558	$1,935,471	$1,733,877	$5,524,180	100%	100%	157.2%
6/30/2000	$900,839	$2,378,236	$1,841,116	$7,142,889	100%	100%	209.9%
6/30/2001	$895,839	$2,756,127	$2,077,262	$7,206,420	100%	100%	171.1%

County Employees Retirement System

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1996	$546,014	$1,042,290	$1,190,012	$2,880,029	100%	100%	108.6%
6/30/1997	$617,592	$1,170,196	$1,357,141	$3,514,026	100%	100%	127.2%
6/30/1998	$685,806	$1,355,013	$1,489,094	$4,273,262	100%	100%	150.0%
6/30/1999	$759,922	$1,600,392	$1,594,819	$5,196,879	100%	100%	177.9%
6/30/2000	$821,630	$1,904,182	$1,727,343	$6,729,576	100%	100%	231.8%
6/30/2001	$855,815	$2,185,378	$1,858,950	$6,910,501	100%	100%	208.1%

State Police Retirement System

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1996	$28,918	$152,503	$ 63,120	$237,515	100%	100%	88.9%
6/30/1997	$29,910	$153,693	$ 72,182	$279,643	100%	100%	133.1%
6/30/1998	$30,546	$183,652	$ 80,229	$306,319	100%	100%	114.8%
6/30/1999	$33,633	$187,163	$ 93,226	$357,623	100%	100%	146.8%
6/30/2000	$36,111	$199,749	$100,720	$459,169	100%	100%	221.7%
6/30/2001	$34,338	$224,433	$97,441	$456,161	100%	100%	202.6%

RETIRED LIVES SUMMARY

Kentucky Employees Retirement System

	Nonhazardous Retirees		Hazardous Retirees		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	8,389	$7,196,364	250	$151,979	8,639	$7,348,343
Joint and Survivor						
100 % to Beneficiary	2,198	$1,901,356	107	$71,333	2,305	$1,972,689
66-2/3% to Beneficiary	857	$1,261,211	42	$34,677	899	$1,295,888
50% to Beneficiary	1,404	$1,858,161	54	$49,919	1,458	$1,908,080
Pop-Up Option	2,433	$3,223,760	185	$147,958	2,618	$3,371,718
10 Years Certain	—	—	21	$15,395	21	$15,395
10 Years Certain and Life	2,573	$2,095,213	87	$48,989	2,660	$2,144,202
15 Years Certain and Life	647	$622,881	26	$18,655	673	$641,536
20 Years Certain and Life	483	$553,481	23	$17,776	506	$571,257
Social Security Option						
Basic Form	1,234	$1,719,216	42	$29,219	1,276	$1,748,435
Survivorship Option	1,221	$1,732,698	78	$72,417	1,299	$1,805,115
Dependent Child	1	$189	18	$3,969	19	$4,158
Total	**21,440**	**$22,164,530**	**933**	**$662,286**	**22,373**	**$22,826,816**

RETIRED LIVES SUMMARY

County Employees Retirement System

	Nonhazardous Retirees		Hazardous Retirees		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	9,807	$4,785,938	443	$653,736	10,250	$5,439,674
Joint and Survivor						
100 % to Beneficiary	2,261	$1,285,562	350	$492,695	2,611	$1,778,257
66-2/3% to Beneficiary	634	$667,160	164	$313,743	798	$980,903
50% to Beneficiary	1,132	$970,224	250	$432,795	1,382	$1,403,019
Pop-Up Option	2,259	$1,863,279	908	$1,580,208	3,167	$3,443,487
10 Years Certain	—	—	46	$83,432	46	$83,432
10 Years Certain and Life	3,209	$1,497,801	144	$210,672	3,353	$1,708,473
15 Years Certain and Life	755	$428,442	43	$55,199	798	$483,641
20 Years Certain and Life	501	$369,239	96	$135,254	597	$504,493
Social Security Option						
Basic Form	511	$508,708	100	$148,690	611	$657,398
Survivorship Option	634	$760,634	295	$410,583	929	$1,171,217
Dependent Child	2	$648	165	$46,418	167	$47,066
Five Years Only	1	$125	—	—	1	$125
Total	**21,706**	**$13,137,760**	**3,004**	**$4,563,425**	**24,710**	**$17,701,185**

RETIRED LIVES SUMMARY

State Police Retirement System

	Number	Monthly Benefits
Basic Form	74	$168,280
Joint and Survivor		
100 % to Beneficiary	108	$230,574
66-2/3% to Beneficiary	57	$151,925
50% to Beneficiary	58	$137,465
Pop-Up Option	187	$488,968
10 Years Certain	5	$14,816
10 Years Certain and Life	22	$54,358
15 Years Certain and Life	10	$21,371
20 Years Certain and Life	29	$57,583
Social Security Option		
Basic Form	35	$74,588
Survivorship Option	170	$349,630
Dependent Child	12	$3,154
Total	**767**	**$1,752,712**

BENEFICIARY SUMMARY

Kentucky Employees Retirement System

	Nonhazardous Retirees		Hazardous Retirees		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Joint and Survivor						
100 % to Beneficiary	1,911	$1,057,764	55	$31,533	1,966	$1,089,297
66-2/3% to Beneficiary	271	$142,093	4	$2,249	275	$144,342
50% to Beneficiary	544	$198,977	8	$2,299	552	$201,276
Pop-Up Option	185	$138,643	9	$3,138	194	$141,781
5 Years Certain	124	$125,042	10	$3,606	134	$128,648
10 Years Certain	142	$112,969	9	$4,034	151	$117,003
10 Years Certain and Life	143	$108,398	10	$3,037	153	$111,435
15 Years Certain and Life	122	$92,932	1	$162	123	$93,094
20 Years Certain and Life	76	$65,641	4	$909	80	$66,550
Social Security Option						
Survivorship Option	143	$154,835	8	$6,491	151	$161,326
Beneficiary Under 60	17	$6,872	—	—	17	$6,872
Dependent Child	–	–	2	$563	2	$563
Total	**3,678**	**$2,204,166**	**120**	**$58,021**	**3,798**	**$2,262,187**

BENEFICIARY SUMMARY

County Employees Retirement System

	Nonhazardous Retirees		Hazardous Retirees		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Joint and Survivor						
100 % to Beneficiary	1,313	$463,843	78	$74,590	1,391	$538,433
66-2/3% to Beneficiary	144	$48,429	15	$15,063	159	$63,492
50% to Beneficiary	273	$75,796	17	$9,530	290	$85,326
Pop-Up Option	201	$106,834	36	$46,007	237	$152,841
5 Years Certain	185	$97,477	7	$5,531	192	$103,008
10 Years Certain	150	$83,077	19	$32,244	169	$115,321
10 Years Certain and Life	197	$93,092	1	$37	198	$93,129
15 Years Certain and Life	121	$64,428	1	$75	122	$64,503
20 Years Certain and Life	71	$40,495	5	$8,199	76	$48,694
Social Security Option						
Survivorship Option	49	$45,143	34	$49,136	83	$94,279
Beneficiary Under 60	5	$1,009	3	$2,983	8	$3,992
Dependent Child	—	—	1	$290	1	$290
Total	**2,709**	**$1,119,623**	**217**	**$243,685**	**2,926**	**$1,363,308**

BENEFICIARY SUMMARY

State Police Retirement System

	Number	Monthly Benefits
Joint and Survivor		
100 % to Beneficiary	48	$92,896
66-2/3% to Beneficiary	1	$1,168
50% to Beneficiary	9	$11,490
Pop-Up Option	6	$15,094
5 Years Certain	–	–
10 Years Certain	–	–
10 Years Certain and Life	–	–
15 Years Certain and Life	1	$2,991
20 Years Certain and Life	2	$7,271
Social Security Option		
Basic Form	–	–
Survivorship Option	7	$15,508
Beneficiary Under 60	–	–
Dependent Child	1	$249
Total	**75**	**$146,667**

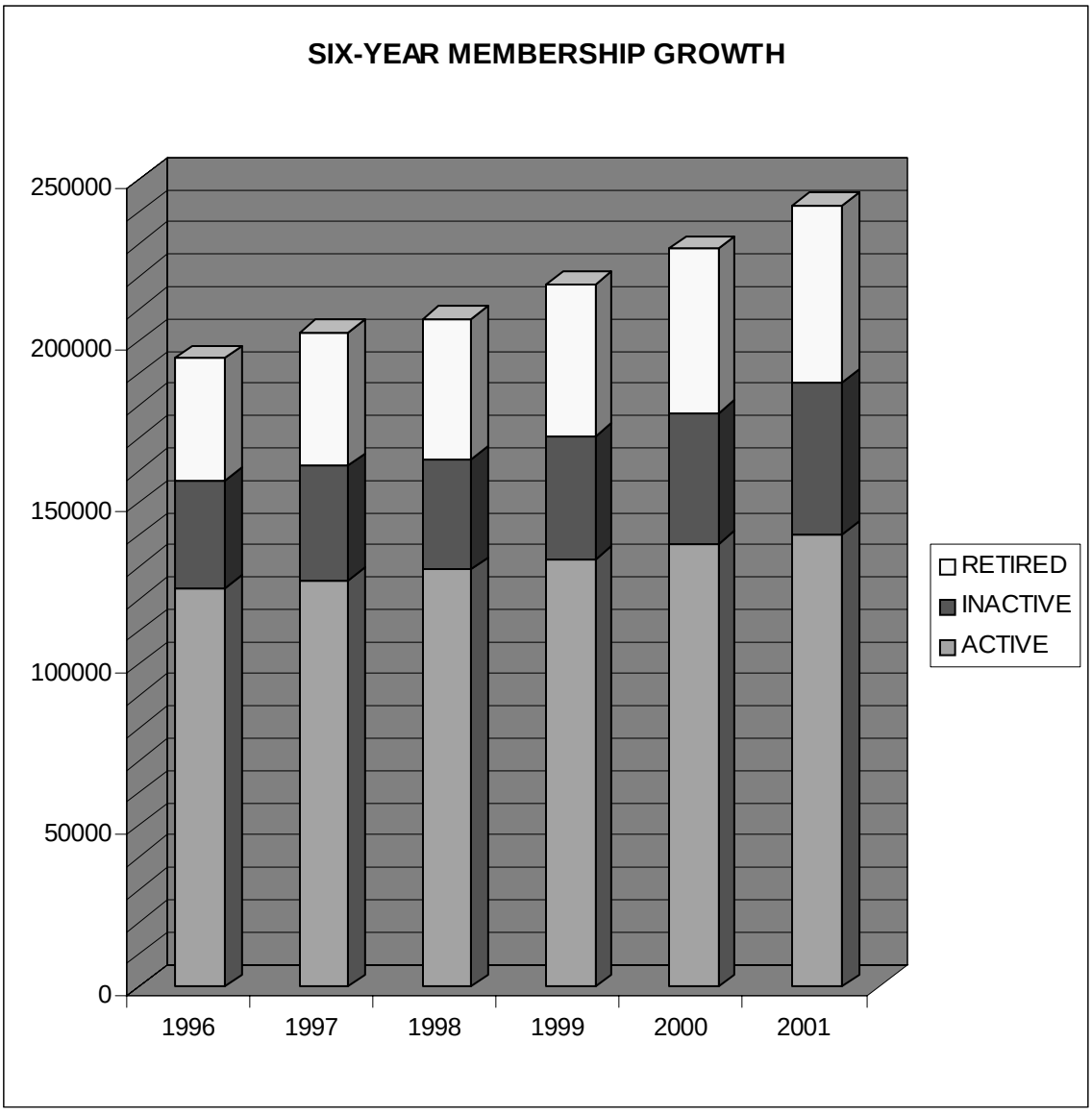
KENTUCKY RETIREMENT SYSTEMS

Statistical Section

Comprehensive Annual Financial Report
June 30, 2001

MEMBERSHIP
AS OF JUNE 30, 2001

SYSTEM	ACTIVE	INACTIVE	RETIRED	TOTAL
KERS	47,780	16,741	25,118	89,639
KERS Hazardous	4,228	922	1,053	6,203
TOTAL KERS	**52,008**	**17,663**	**26,171**	**95,842**
CERS	78,773	28,356	24,415	131,544
CERS Hazardous	8,586	610	3,221	12,417
TOTAL CERS	**87,359**	**28,966**	**27,636**	**143,961**
SPRS	**1,016**	**90**	**842**	**1,948**
GRAND TOTAL	**140,383**	**46,719**	**54,649**	**241,751**



Schedule of Participating Employers

Kentucky Employees Retirement System

Agency Classification	Number of Agencies
Agencies Reporting through State Payroll	215
Other Agencies (universities, mental health boards, health departments)	120
Special Districts and Boards	4
Child Support Offices (county attorneys)	66
Other State-Administered Retirement Systems	3
TOTAL	408

County Employees Retirement System

Agency Classification	Number of Agencies
Area Development Districts	15
Boards of Education	176
Cities	247
County Attorneys	58
County Clerks	10
County Government Agencies	249
Fire Departments	57
Hospitals	2
Jailers	7
Libraries	80
Planning Commissions	8
Police Departments	50
Police & Fire Departments (combined)	40
Sanitation Districts	4
Sheriff Departments	34
Special Districts and Boards	159
Utility Boards	97
Urban County Government Agencies	4
TOTAL	1,297

State Police Retirement System

Agency Classification	Number of Agencies
Kentucky State Police-Uniformed Officers	1

SCHEDULE OF REVENUE BY SOURCE
(expressed in thousands)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Year Ending	Member Contributions	Employer Contributions	Investment Income	Total
June 30, 1996	$ 68,933	$113,717	$1,198,411	$1,381,091
June 30, 1997	$ 69,075	$118,119	$ 862,023	$1,049,217
June 30, 1998	$ 74,115	$128,221	$ 997,451	$1,199,787
June 30, 1999	$149,722	$126,959	$ 889,768	$1,166,449
June 30, 2000	$117,209	$136,688	$ 333,006	$ 586,903
June 30, 2001	$117,225	$114,210	($ 387,886)	($ 156,451)

COUNTY EMPLOYEES RETIREMENT SYSTEM

Year Ending	Member Contributions	Employer Contributions	Investment Income	Total
June 30, 1996	$ 72,557	$131,612	$1,024,443	$1,228,612
June 30, 1997	$ 79,342	$145,326	$ 793,030	$ 938,356
June 30, 1998	$ 90,963	$149,824	$ 903,101	$1,143,888
June 30, 1999	$121,484	$158,882	$ 818,969	$1,099,335
June 30, 2000	$125,152	$158,326	$ 295,579	$ 579,057
June 30, 2001	$128,876	$164,338	($ 317,544)	($ 24,330)

STATE POLICE RETIREMENT SYSTEM

Year Ending	Member Contributions	Employer Contributions	Investment Income	Total
June 30, 1996	$2,457	$ 7,089	$94,182	$103,728
June 30, 1997	$2,958	$ 9,628	$64,815	$ 77,401
June 30, 1998	$2,711	$ 9,574	$75,292	$ 87,577
June 30, 1999	$3,658	$ 9,463	$76,389	$ 89,510
June 30, 2000	$4,202	$10,216	$22,601	$ 37,019
June 30, 2001	$4,138	$ 9,629	($33,885)	($ 20,118)

SCHEDULE OF EXPENSES BY TYPE
(expressed in thousands)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Year Ending	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	Total
June 30, 1996	$158,407	$2,284	$7,485	$18,092	$186,268
June 30, 1997	$173,352	$2,701	$8,262	$22,010	$206,325
June 30, 1998	$193,569	$2,628	$9,196	$24,521	$229,914
June 30, 1999	$209,339	$3,448	$9,168	$25,829	$247,784
June 30, 2000	$258,999	$3,792	$9,041	$32,085	$303,917
June 30, 2001	$299,700	$4,461	$8,221	$39,618	$352,000

COUNTY EMPLOYEES RETIREMENT SYSTEM

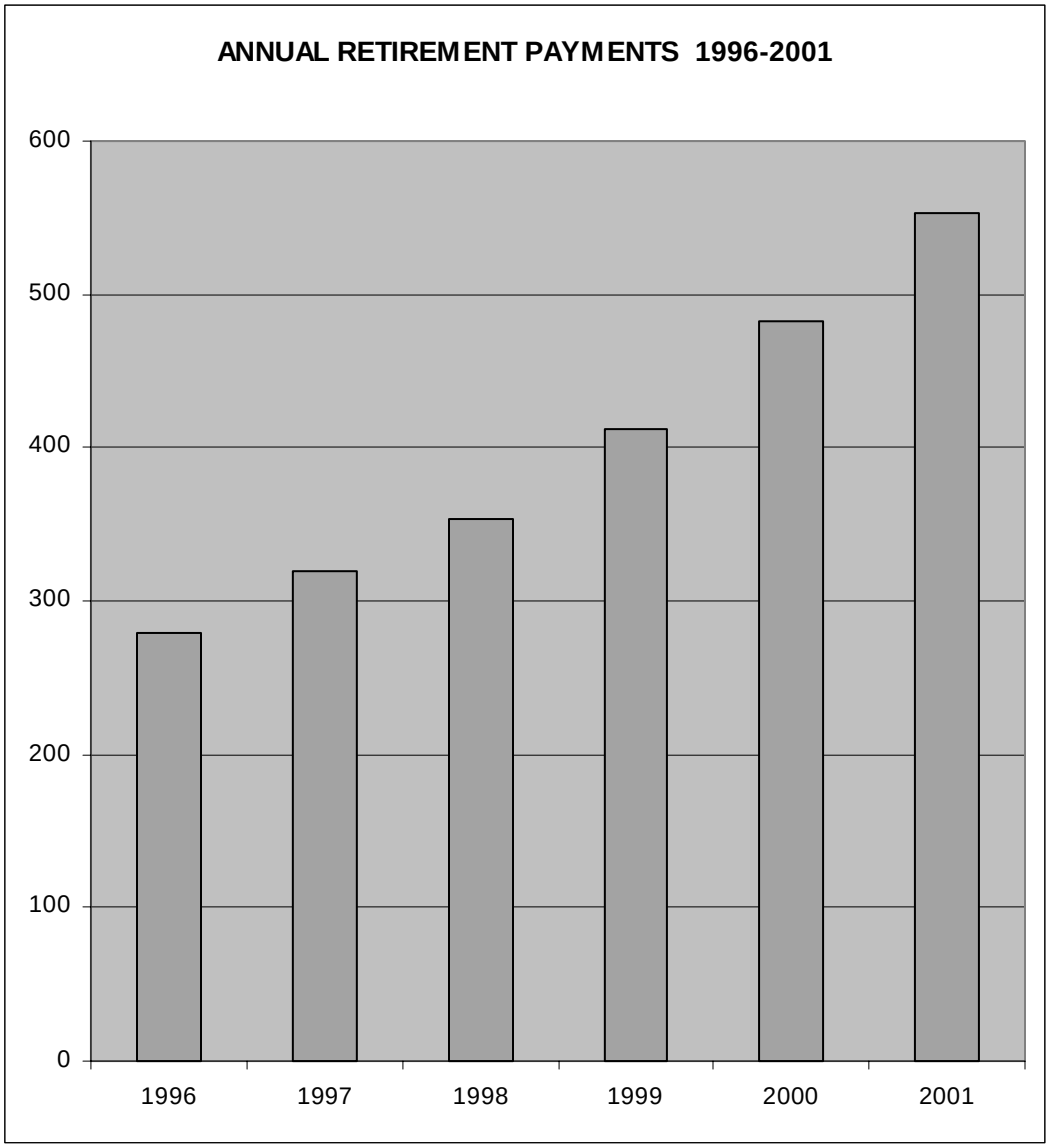
Year Ending	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	Total
June 30, 1996	$109,081	$3,217	$ 8,944	$15,638	$136,880
June 30, 1997	$124,187	$3,909	$ 9,167	$19,757	$157,020
June 30, 1998	$142,405	$4,030	$10,173	$23,138	$179,746
June 30, 1999	$165,107	$5,385	$10,924	$25,841	$207,257
June 30, 2000	$197,637	$6,228	$12,248	$31,705	$247,818
June 30, 2001	$226,776	$7,039	$10,313	$39,423	$283,551

STATE POLICE RETIREMENT SYSTEM

Year Ending	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	Total
June 30, 1996	$13,711	$44	$31	$1,791	$15,577
June 30, 1997	$14,682	$52	$57	$2,160	$16,951
June 30, 1998	$17,735	$47	$70	$2,611	$20,463
June 30, 1999	$19,136	$68	$44	$2,754	$22,002
June 30, 2000	$19,974	$82	$80	$3,028	$23,164
June 30, 2001	$22,644	$92	$80	$3,575	$26,391

ANALYSIS OF INITIAL RETIREMENT
1996-2001

	1996	1997	1998	1999	2000	2001
KERS Retirees	1,127	1,523	1,093	1,648	2,323	2,083
Average Monthly Benefit	$967	$1,117	$1,000	$1,296	$1,639	$1,616
CERS Retirees	1,344	1,962	1,626	2,349	2,485	2,265
Average Monthly Benefit	$690	$737	$709	$907	$1,012	$1,006
SPRS Retirees	39	47	46	23	42	53
Average Monthly Benefit	$2,116	$2,185	$2,299	$2,223	$2,664	$3,582



SCHEDULE OF BENEFIT EXPENSES BY TYPE

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	DEATH	TOTAL
FY 1995-96					
Average Benefit	$530	$758	$567	$566	$670
Retirees	4,312	10,717	1,560		16,589
Beneficiaries	815	826	595	733	2,969
Total Recipients	5,127	11,543	2,155	733	19,558
Monthly Benefits	$2,714,747	$8,752,259	$1,221,084	$414,832	$13,102,922
% of Total Monthly Benefits	**21%**	**67%**	**9%**	**3%**	**100%**
FY 1996-97					
Average Benefit	$562	$817	$596	$600	$721
Retirees	4,322	11,513	1,694		17,529
Beneficiaries	819	853	622	754	3,048
Total Recipients	5,141	12,366	2,316	754	20,577
Monthly Benefits	$2,890,662	$10,108,484	$1,380,195	$452,335	$14,831,676
% of Total Monthly Benefits	**19%**	**68%**	**9%**	**4%**	**100%**
FY 1997-98					
Average Benefit	$589	$859	$629	$647	$760
Retirees	4,248	11,920	1,772		17,940
Beneficiaries	827	890	636	782	3,135
Total Recipients	5,075	12,810	2,408	782	21,075
Monthly Benefits	$2,989,698	$11,006,325	$1,512,760	$505,747	$16,014,530
% of Total Monthly Benefits	**19%**	**69%**	**9%**	**3%**	**100%**
FY 1998-99					
Average Benefit	$630	$944	$662	$686	$830
Retirees	4,267	12,755	1,848		18,870
Beneficiaries	807	936	670	866	3,279
Total Recipients	5,074	13,691	2,518	866	22,149
Monthly Benefits	$3,194,856	$12,927,270	$1,665,838	$594,363	$18,382,327
% of Total Monthly Benefits	**17%**	**70%**	**9%**	**4%**	**100%**
FY 1999-2000					
Average Benefit	$663	$1,042	$675	$698	$907
Retirees	4,360	14,323	1,977		20,660
Beneficiaries	804	978	689	885	3,356
Total Recipients	5,164	15,301	2,666	885	24,016
Monthly Benefits	$3,425,223	$15,949,488	$1,799,238	$618,038	$21,791,987
% of Total Monthly Benefits	**16%**	**73%**	**8%**	**3%**	**100%**
FY 2000-2001					
Average Benefit	$706	$1,135	$702	$726	$987
Retirees	4,348	15,624	2,068		22,040
Beneficiaries	795	1,015	702	887	3,399
Total Recipients	5,143	16,639	2,770	887	25,439
Monthly Benefits	$3,631,318	$18,878,492	$1,944,415	$643,874	$25,098,099
% of Total Monthly Benefits	**14%**	**75%**	**8%**	**3%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Secriton for a further delineation of retirement options by system.

SCHEDULE OF BENEFIT EXPENSES BY TYPE

COUNTY EMPLOYEES RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	DEATH	TOTAL
FY 1995-96					
Average Benefit	$380	$581	$528	$425	$510
Retirees	4,684	9,384	1,660		15,728
Beneficiaries	549	457	380	562	1,948
Total Recipients	5,233	9,841	2,040	562	17,676
Monthly Benefits	$1,988,732	$5,714,564	$1,076,787	$238,803	$9,018,886
% of Total Monthly Benefits	**22%**	**63%**	**12%**	**3%**	**100%**
FY 1996-97					
Average Benefit	$405	$620	$560	$446	$547
Retirees	4,937	10,453	1,942		17,332
Beneficiaries	574	490	406	576	2,046
Total Recipients	5,511	10,943	2,348	576	19,378
Monthly Benefits	$2,229,937	$6,790,089	$1,314,240	$256,650	$10,590,916
% of Total Monthly Benefits	**21%**	**64%**	**12%**	**3%**	**100%**
FY 1997-98					
Average Benefit	$429	$650	$585	$473	$576
Retirees	5,095	11,238	2,165		18,498
Beneficiaries	594	544	416	614	2,168
Total Recipients	5,689	11,782	2,581	614	20,666
Monthly Benefits	$2,438,180	$7,660,693	$1,511,141	$290,517	$11,900,531
% of Total Monthly Benefits	**20%**	**64%**	**13%**	**3%**	**100%**
FY 1998-99					
Average Benefit	$466	$718	$604	$482	$630
Retirees	5,365	12,609	2,350		20,324
Beneficiaries	603	578	636	727	2,544
Total Recipients	5,968	13,187	2,986	727	22,868
Monthly Benefits	$2,783,194	$9,472,665	$1,802,978	$350,404	$14,409,241
% of Total Monthly Benefits	**19%**	**66%**	**13%**	**2%**	**100%**
FY 1999-00					
Average Benefit	$478	$766	$612	$483	$666
Retirees	5,628	14,179	2,633		22,440
Beneficiaries	620	609	639	771	2,639
Total Recipients	6,248	14,788	3,272	771	25,079
Monthly Benefits	$2,985,474	$11,328,818	$2,003,432	$372,601	$16,690,325
% of Total Monthly Benefits	**18%**	**68%**	**12%**	**2%**	**100%**
FY 2000-2001					
Average Benefit	$499	$816	$638	$503	$708
Retirees	5,840	15,516	2,846		24,202
Beneficiaries	632	649	673	773	2,727
Total Recipients	6,472	16,165	3,519	773	26,929
Monthly Benefits	$3,231,715	$13,192,315	$2,243,451	$388,758	$19,056,239
% of Total Monthly Benefits	**17%**	**69%**	**12%**	**2%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Secriton for a further delineation of retirement options by system.

SCHEDULE OF BENEFIT EXPENSES BY TYPE

STATE POLICE RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	DEATH	TOTAL
FY 1995-96					
Average Benefit	$1,749	$2,020	$1,241	$1,034	$1,901
Retirees	84	446	30		560
Beneficiaries	12	4	6	17	39
Total Recipients	96	450	36	17	599
Monthly Benefits	$167,947	$908,793	$44,664	$17,582	$1,138,986
% of Total Monthly Benefits	**15%**	**78%**	**4%**	**3%**	**100%**
FY 1996-97					
Average Benefit	$1,789	$2,079	$1,224	$1,065	$1,958
Retirees	86	484	31		601
Beneficiaries	12	4	8	16	40
Total Recipients	98	488	39	16	641
Monthly Benefits	$175,303	$1,014,787	$47,733	$17,050	$1,254,873
% of Total Monthly Benefits	**14%**	**81%**	**4%**	**1%**	**100%**
FY 1997-98					
Average Benefit	$2,472	$2,131	$1,319	$1,309	$2,120
Retirees	101	520	33		654
Beneficiaries	20	4	7	20	51
Total Recipients	121	524	40	20	705
Monthly Benefits	$299,059	$1,116,767	$52,744	$26,178	$1,494,748
% of Total Monthly Benefits	**20%**	**75%**	**4%**	**1%**	**100%**
FY 1998-99					
Average Benefit	$2,495	$2,175	$1,024	$1,237	$2,102
Retirees	98	550	38		686
Beneficiaries	23	5	23	25	76
Total Recipients	121	555	61	25	762
Monthly Benefits	$301,845	$1,206,862	$62,478	$30,922	$1,602,087
% of Total Monthly Benefits	**19%**	**75%**	**4%**	**2%**	**100%**
FY 1999-2000					
Average Benefit	$2,522	$2,185	$1,062	$1,318	$2,126
Retirees	98	585	40		723
Beneficiaries	25	5	21	23	74
Total Recipients	123	590	61	23	797
Monthly Benefits	$310,242	$1,289,260	$64,788	$30,323	$1,694,613
% of Total Monthly Benefits	**18%**	**76%**	**4%**	**2%**	**100%**
FY 2000-2001					
Average Benefit	$2,677	$2,305	$1,107	$1,354	$2,258
Retirees	99	632	36		767
Beneficiaries	27	6	18	23	74
Total Recipients	126	638	54	23	841
Monthly Benefits	$337,279	$1,470,596	$59,799	$31,132	$1,898,806
% of Total Monthly Benefits	**18%**	**77%**	**3%**	**2%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Secriton for a further delineation of retirement options by system.

COMPARISON OF AVERAGE MONTHLY BENEFITS BY LENGTH OF SERVICE

KERS

Service in Years	Under 2	2-5	6-10	11-15	16-20	21-25	26-30	31-35	Over 35
Number of Recipients	805	942	3,638	3,827	3,499	3,656	4,866	2,939	1,261
Average Monthly Pay	$91	$162	$255	$419	$625	$900	$1,536	$2,045	$2,679

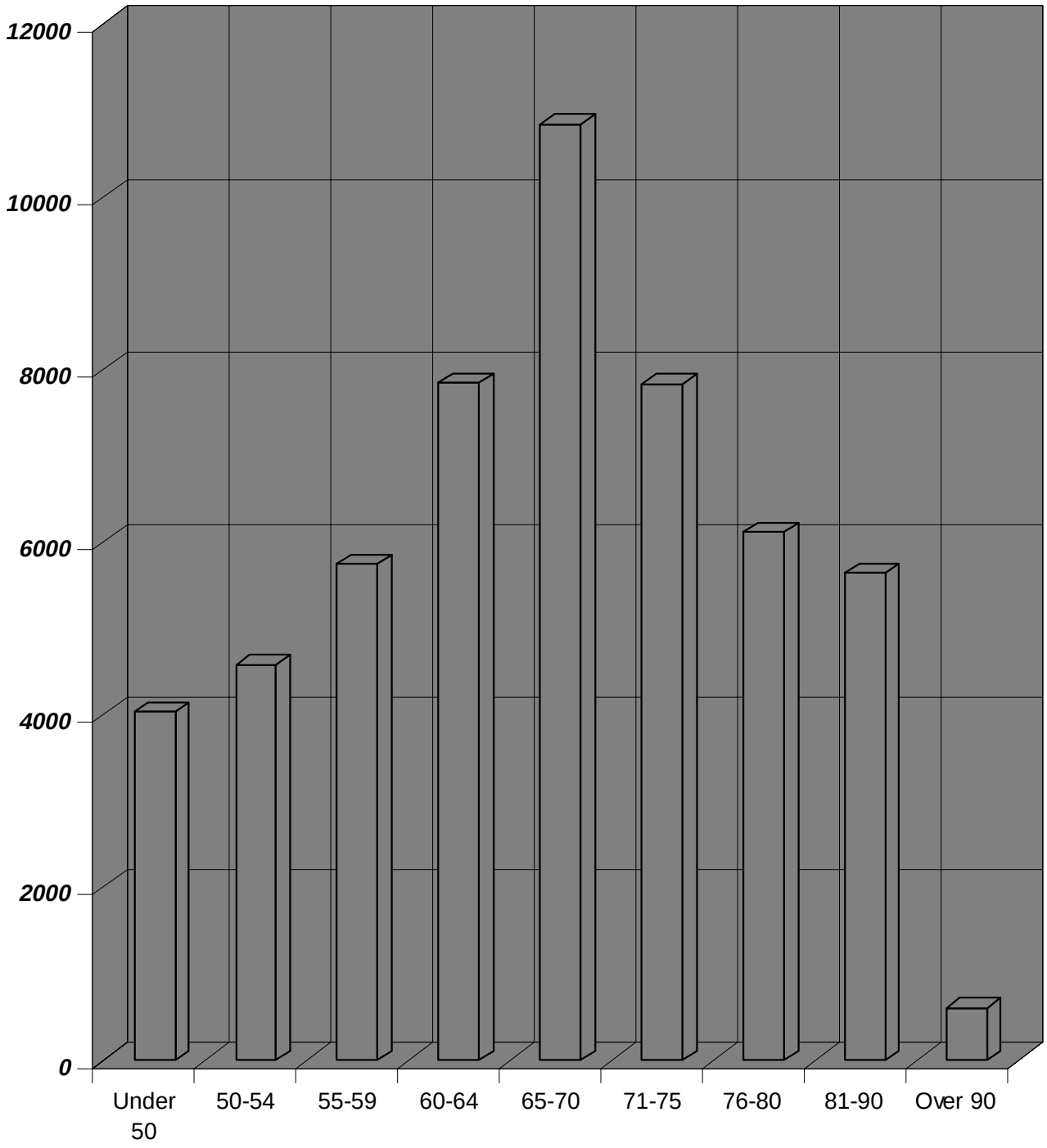
CERS

Service in Years	Under 2	2-5	6-10	11-15	16-20	21-25	26-30	31-35	Over 35
Number of Recipients	996	1,268	5,781	5,512	4,119	4,269	3,486	1,105	404
Average Monthly Pay	$156	$140	$213	$376	$598	$996	$1,587	$2,019	$2,352

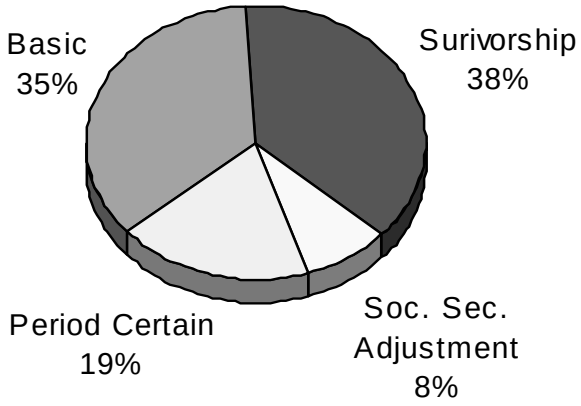
SPRS

Service in Years	Under 2	2-5	6-10	11-15	16-20	21-25	26-30	31-35	Over 35
Number of Recipients	37	22	26	26	59	228	271	127	46
Average Monthly Pay	$501	$290	$616	$909	$1,422	$1,929	$2,608	$3,342	$3,909

AGE OF RECIPIENTS

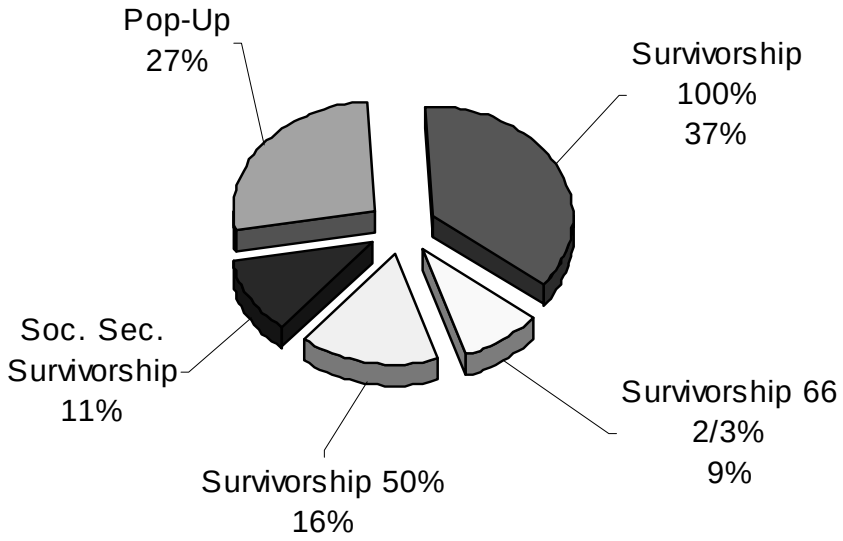


PAYMENT OPTIONS BY TYPE



The Basic option is a single life annuity. Survivorship options include 100%, 66 2/3%, 50% and Pop-Up, which is a 100% survivorship option that increases to the Basic amount if the beneficiary dies or divorces the member prior to the member's death. Social Security Adjustment options provide enhanced benefits prior to age 62 and a reduced benefit after age 62. There are two Social Security Adjustment options: one with 100% survivorship and one with no survivor benefit.

SURVIVORSHIP OPTIONS BY TYPE



TOTAL FISCAL YEAR RETIREMENT PAYMENTS BY COUNTY

Jefferson	$99,417,046	Harlan	$ 2,817,581	Pendleton	$ 1,402,971
Franklin	$66,356,996	Clark	$ 2,787,812	Carroll	$ 1,368,222
Fayette	$28,785,648	Bourbon	$ 2,614,110	Powell	$ 1,354,773
Warren	$13,813,791	Grayson	$ 2,549,797	Union	$ 1,351,205
Daviess	$12,079,463	Johnson	$ 2,449,847	Livingston	$ 1,315,203
Shelby	$11,501,706	Clay	$ 2,390,931	Wolfe	$ 1,307,248
Kenton	$10,495,482	Knott	$ 2,350,874	Washington	$ 1,266,225
Christian	$10,216,617	Perry	$ 2,253,447	Webster	$ 1,200,685
Pulaski	$10,039,458	Logan	$ 2,252,271	Todd	$ 1,150,588
McCracken	$ 8,737,993	Caldwell	$ 2,175,263	Metcalfe	$ 1,136,189
Madison	$ 8,470,877	Trigg	$ 2,122,397	Lee	$ 1,112,300
Hardin	$ 7,992,906	Harrison	$ 2,078,668	McCreary	$ 1,094,689
Anderson	$ 7,114,961	Breathitt	$ 2,068,243	Trimble	$ 1,066,399
Boone	$ 6,675,685	Greenup	$ 2,061,967	Lewis	$ 1,059,441
Campbell	$ 6,599,490	Lincoln	$ 2,032,595	Jackson	$ 1,058,764
Oldham	$ 6,480,389	Marion	$ 2,021,746	Simpson	$ 1,021,309
Bullitt	$ 5,511,088	Muhlenberg	$ 1,967,758	Green	$ 1,009,930
Boyd	$ 4,996,872	Letcher	$ 1,962,608	Ballard	$ 997,018
Pike	$ 4,980,402	Montgomery	$ 1,953,778	Menifee	$ 930,321
Laurel	$ 4,913,587	Taylor	$ 1,945,439	Butler	$ 929,337
Boyle	$ 4,868,508	Knox	$ 1,918,646	Leslie	$ 926,472
Hopkins	$ 4,861,702	Russell	$ 1,900,031	Magoffin	$ 918,821
Calloway	$ 4,734,437	Fleming	$ 1,893,924	Lawrence	$ 877,266
Henderson	$ 4,717,262	Adair	$ 1,854,153	McLean	$ 877,002
Woodford	$ 4,675,624	Morgan	$ 1,846,436	Owsley	$ 854,151
Scott	$ 4,373,410	Spencer	$ 1,793,552	Fulton	$ 811,686
Barren	$ 4,317,402	Lyon	$ 1,772,959	Nicholas	$ 761,748
Rowan	$ 3,930,568	Ohio	$ 1,697,086	Edmonson	$ 747,275
Graves	$ 3,810,116	Breckinridge	$ 1,602,162	Clinton	$ 744,177
Floyd	$ 3,790,066	Meade	$ 1,598,848	Bracken	$ 734,930
Henry	$ 3,647,776	Larue	$ 1,580,223	Hancock	$ 709,326
Jessamine	$ 3,622,937	Wayne	$ 1,553,578	Cumberland	$ 693,616
Whitley	$ 3,619,025	Allen	$ 1,524,847	Monroe	$ 683,114
Nelson	$ 3,577,840	Mason	$ 1,518,316	Carlisle	$ 655,542
Marshall	$ 3,542,748	Casey	$ 1,515,156	Crittenden	$ 623,338
Mercer	$ 3,517,793	Estill	$ 1,512,770	Elliott	$ 594,075
Owen	$ 3,460,761	Garrard	$ 1,510,411	Martin	$ 592,504
Bell	$ 3,041,252	Bath	$ 1,481,980	Gallatin	$ 481,284
Grant	$ 2,912,490	Hart	$ 1,481,050	Hickman	$ 405,255
Carter	$ 2,847,983	Rockcastle	$ 1,430,165	Robertson	$ 189,927

Payments to Recipients Living in Other States
$24,938,030

TOTAL PAYMENTS TO MEMBERS AND BENEFICIARIES FOR FY 2000-01
$552,845,938

KENTUCKY RETIREMENT SYSTEMS

Compliance Section

Comprehensive Annual Financial Report
June 30, 2001

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BERNADETTE SMITH, C.P.A.
KIM FIELD, C.P.A.

CHARLES T. MITCHELL, C.P.A.
CONSULTANT

REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL REPORTING BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the general purpose financial statements of Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2001, and have issued our report thereon dated October 31, 2001. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Compliance

As part of obtaining reasonable assurance about whether Kentucky Retirement Systems= general purpose financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under Government Auditing Standards.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Kentucky Retirement Systems= internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the general-purpose financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the general purpose financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving internal control over financial reporting and its operation that we consider to be material weaknesses.

This report is intended for the information of the audit committee, management, and federal awarding agencies and pass-through entities. However, this report is a matter of public record and its distribution is not limited.

Charles T. Mitchell Co.

October 31, 2001

Comprehensive Annual Financial Report

For the Year Ended
June 30, 2002

KENTUCKY RETIREMENT SYSTEMS

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

A Component Unit of the
Commonwealth of Kentucky

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KENTUCKY RETIREMENT SYSTEMS

A Component Unit of the
Commonwealth of Kentucky

Comprehensive Annual Financial Report
For the Fiscal Year Ended June 30, 2002

Prepared by the executive staff of
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601
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www.kyret.com

The cost of printing this CAFR
is part of the administrative expense of the system.

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KENTUCKY RETIREMENT SYSTEMS

Introductory Section

Comprehensive Annual Financial Report
June 30, 2002

KENTUCKY RETIREMENT SYSTEMS
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

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Executive Director
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November 21, 2002

The Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601-6124

I am pleased to present the comprehensive annual financial report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), State Police Retirement System (SPRS) and Insurance Fund for the fiscal year ended June 30, 2002.

The CAFR is divided into six sections:

- An Introductory Section, containing the administrative organization and letter of transmittal.
- A Financial Section, containing the report of the independent Auditor, the financial statements of the three systems and insurance fund and certain required supplementary information.
- An Investment Section, containing a report on investment activity, investment policies, investment results and various investment schedules.
- An Actuarial Section, containing the Actuary's Certification Letter and the results of the annual actuarial valuation.
- A Statistical Section, containing information about plan participants and recipients.
- A Compliance Section, containing a report on compliance and internal control.

The management of the systems is responsible for the accuracy of the data as well as the completeness and fairness of the presentation. We present this information to help you and the members of the retirement systems understand the systems' financial and actuarial status. This CAFR was prepared to conform with the principles of governmental accounting and reporting set forth by the Governmental Accounting Standard Board. Transactions of the system are reported on the accrual basis of accounting. Sufficient internal accounting controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis on page 12 for more information.

History

KERS was created in 1956 by the Kentucky General Assembly in order to supplement the benefits provided by Social Security. When the first actuarial valuation was done June 30, 1957, there were 16,000 employees participating in KERS and assets of $2.8 million. CERS and SPRS were established in 1958. The first actuarial valuation of SPRS was conducted June 30, 1959. No actuarial valuation of CERS was conducted until June 30, 1960 because the statutes prohibited retirements from the system prior to July 1, 1960. On June 30, 1960, there were 68 counties and 2,617 employees participating in CERS, and SPRS included 415 uniformed state troopers.

As of June 30, 2002, there were more than 250,000 active and retired members in the three systems and approximately $10.9 billion in assets. A breakdown of membership by system is provided in the statistical section.

The staff of Kentucky Retirement Systems provides detailed benefit estimates to members upon request. Counselors are available at the Frankfort office for individual counseling. In addition, staff conducts individual counseling sessions at sites throughout the state and holds preretirement seminars to help members prepare for retirement.

Major Initiatives

Kentucky Retirement Systems continued a comprehensive fiduciary compliance review utilizing the expertise of Ice Miller, Indianapolis, Indiana. The Administrative Processes review was completed.

During the 2002 General Assembly, legislation was passed allowing the Partial Lump Sum Option, with or without survivor rights, to become a new retirement allowance option for the systems. The General Assembly also made several changes to comply with the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), as well as allow KRS to create and operate its own personnel system. We believe the new personnel system will allow Kentucky Retirement Systems to provide even better service to our members.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its CAFR for the fiscal year ended June 30, 2001. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe our current comprehensive annual financial report continues to meet the Certificate of Achievement Program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Additions To Plan Net Assets

The collection of employer and employee contributions, as well as income from investments, provide the reserves needed to finance retirement and insurance benefits.

(dollar amounts expressed in thousands)	*2002*	*2001*	*Increase (Decrease) Amount*	*Increase (Decrease) Percentage*
Member Contributions	$286,822	$ 250,239	$36,583	14.6%
Employer Contributions	$293,520	$ 288,178	$5,342	1.9%
Net Investment Income	($550,490)	($739,315)	$188,825	25.5%
Total	$29,852	($200,898)	$230,750	114.9%

The increase in member contributions is a result of an increase in the covered payroll from the previous year. The corresponding employer contributions increased to a total employer contribution amount of $293.6 million. The increase in Net Investment Income is a result of the slightly more favorable financial markets than for fiscal year 2001.

Deductions To Plan Net Assets

The Kentucky Retirement Systems administers the retirement programs established by the Kentucky General Assembly. The costs associated with those programs include the monthly retirement allowances of retired members under normal, early or disability retirement; payments to beneficiaries; monthly insurance benefits; member refunds and the administrative expenses of the system.

(dollar amounts expressed in thousands)	*2002*	*2001*	*Increase (Decrease) Amount*	*Increase (Decrease) Percentage*
Retirement Allowances	$640,860	$549,120	$91,740	16.7%
Refunds	$ 17,918	$ 18,614	($696)	(3.7%)
Administrative Expense	$ 13,430	$ 11,593	$ 1,837	15.9%
Medical Insurance Expenses	$ 96,882	$ 82,615	$14,267	17.3%
Total	$769,090	$661,942	$107,148	16.2%

Retirement allowances increased due to a 2.85% cost of living adjustment added to recipients' monthly benefits in July and the increase in the number of retired members. Administrative expenses increased due to equipment purchases, overtime and additional personnel.

Investments

The Board of Trustees of the Kentucky Retirement Systems has a statutory obligation to invest the systems' funds in accordance with the "prudent person rule." The prudent person rule states that fiduciaries shall discharge their investment duties with the same degree of diligence, care and skill which a prudent person would ordinarily exercise under similar circumstances in a like position.

The Board has managed the funds in recognition of the basic long term nature of the systems. The Board has interpreted this to mean that the assets of the three systems should be actively managed — that is, investment decisions regarding the particular securities to be purchased or sold shall be the result of the conscious exercise of discretion. The Board has further recognized that proper diversification of assets must be maintained. The asset allocation can be found in the Investment Section of this CAFR. The Board's policies have provided significant returns over the long term while holding down investment related expenses. Due to short-term market conditions for the fiscal year ending June 30, 2002, the systems' pension funds had a total return of -4.3% and the insurance fund had a total return of -9.3%.

Funding

The Kentucky Retirement Systems' funding objective is to meet long-term benefit promises through contributions that remain fairly level as a percent of member payroll. Funding of the pension benefits for all systems as of June 30, 2002 is greater than 100% using the ratio of assets at actuarial value to the total actuarial accrued liability.

The medical insurance benefit, created in 1978, is not at the same level of funding. Total insurance liabilities exceed assets in the Insurance Fund by $3.6 billion, although insurance fund assets increased to $1.2 billion. The medical insurance liability continues to be the primary funding concern of the Kentucky Retirement Systems.

A detailed discussion of the funding status of the systems can be found in the Financial Section of this report.

Professional Services

A listing of the Board's contracted consultants can be found in the organizational chart on page 9. A listing of the external investment managers can be found on page 81 in the Investment Section.

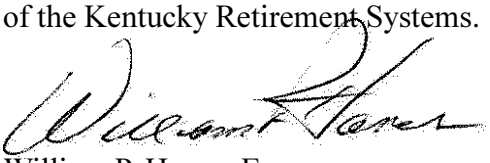
Other Information

Kentucky statutes require an annual audit by an independent certified public accountant or the Auditor of Public Accounts. The Charles T. Mitchell Co. performed the audit for the fiscal year ended June 30, 2002. The results of that audit are contained in the Financial Section. It is the opinion of the auditing firm that the general purpose financial statements present fairly the plan net assets.

The compilation of this report reflects the combined efforts of Lauren Stewart, Bob Leggett and Shawn Sparks under the leadership of the Board of Trustees. It is intended to provide complete and reliable information to be used in making management decisions, determining compliance with statutory provisions and determining responsible stewardship of the funds.

The report is being furnished to all employers participating in the Kentucky Retirement Systems. They form the link between the systems and its membership. Their cooperation contributes significantly to the success of the Kentucky Retirement Systems. We hope the employers and their employees find this report informative. This and past CAFRs can be found at www.kyret.com.

On behalf of the Board of Trustees, I would like to take this opportunity to express my gratitude to the staff, the advisors and the many people who have worked so diligently to assure the successful operation of the Kentucky Retirement Systems.



William P. Hanes, Esq.
Executive Director

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Kentucky Retirement Systems

For its Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2001

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

President

Executive Director

Board of Trustees

John Balbach
Louisville
appointed by Governor
term expires
March 31, 2004

John Freeman
Louisville
elected by CERS
term expires
March 31, 2005

Ed Davis
Louisville
elected by CERS
term expires
March 31, 2005

Susan Horne
Lexington
elected by KERS
term expires
March 31, 2006

Bobby Henson
Frankfort
elected by KERS
term expires
March 31, 2006

Randy Overstreet
Chair
Elizabethtown
elected by SPRS
term expires
March 31, 2003

Walter Pagan
Vice-Chair
Wilder
appointed by Governor
term expires
March 31, 2004

Carol Palmore
Frankfort
Secretary of
Personnel Cabinet
ex officio

Larry Conner
Lexington
appointed by Governor
term expires
March 31, 2003

KENTUCKY RETIREMENT SYSTEMS
ORGANIZATIONAL CHART

CONSULTANTS

Actuarial Services
William M. Mercer Inc.

Auditing Services
Charles T. Mitchell Co.

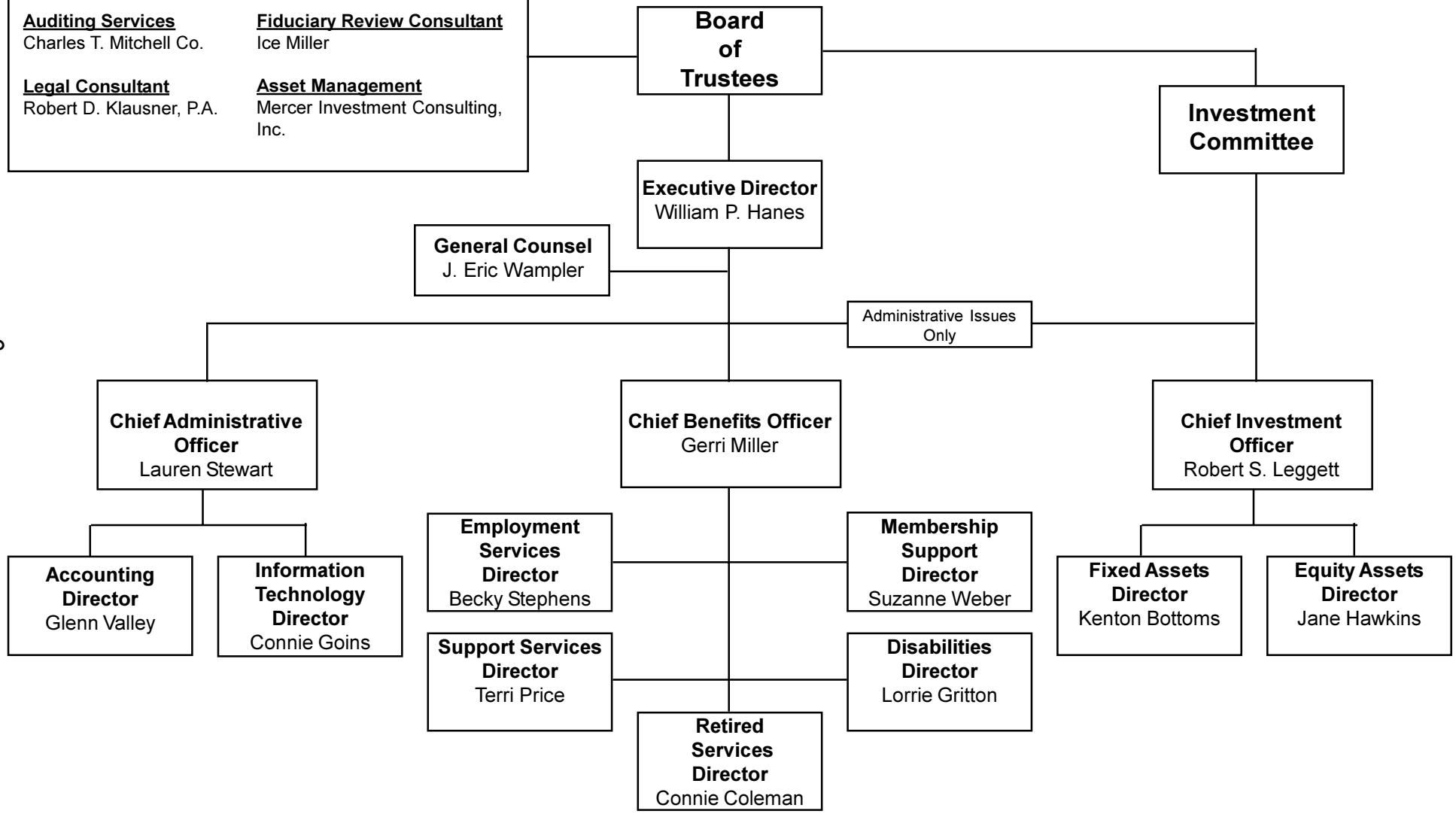
Legal Consultant
Robert D. Klausner, P.A.

Legal Services
Stoll Keenon & Park

Fiduciary Review Consultant
Ice Miller

Asset Management
Mercer Investment Consulting, Inc.

Information on Investment Managers may be found on page 81 in the Investment Section



KENTUCKY RETIREMENT SYSTEMS

Financial Section

Comprehensive Annual Financial Report
June 30, 2002

Charles T. Mitchell Company, LLP

Certified Public Accountants

DON C. GILES, C.P.A.
WILLIAM G. JOHNSON, JR., C.P.A.
LARRY T. WILLIAMS, C.P.A.
JAMES CLOUSE, C.P.A.
BERNADETTE SMITH, C.P.A.
KIM FIELD, C.P.A.
GREG MIKLAVCIC, C.P.A

CHARLES T. MITCHELL, C.P.A.
CONSULTANT

201 WEST MAIN, P.O. BOX 698
FRANKFORT, KENTUCKY 40602-0698
TELEPHONE (502) 227-7395
TELECOPIER (502) 227-8005

INDEPENDENT AUDITOR'S REPORT

Board of Trustees
Kentucky Retirement System
Frankfort, Kentucky

We have audited the accompanying general purpose statements of plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the years ended June 30, 2002 and 2001 and the related statements of changes in plan net assets for the years then ended. These component unit general-purpose financial statements are the responsibility of the Kentucky Retirement System's management. Our responsibility is to express an opinion on these general-purpose financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the general-purpose financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the general-purpose financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall general-purpose financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, at June 30, 2002 and 2001 and the changes in its plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated October 31, 2002 on our consideration of the Kentucky Retirement System's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

The financial section supporting schedules listed in the table of contents are presented for the purpose of additional analysis and are not a required part of the basic financial statements. These schedules are the responsibility of the System's management. Such schedules as of and for the year ended June 30, 2002 have been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

Charles T. Mitchell Co.

October 31, 2002

MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of Kentucky Retirement System's financial performance provides an overview of the pension fund's and insurance fund's financial activities for the fiscal year ended June 30, 2002. Please read it in conjunction with the Pension Fund's financial statements and Insurance Fund's financial statements, which begin on page 18.

FINANCIAL HIGHLIGHTS—PENSION FUND

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of all pension funds administered by Kentucky Retirement Systems decreased by $856.4 million during the 2001-2002 fiscal year.
- Salaries totaling $3.8 billion requiring both employee and employer pension contributions were reported during the year. The covered payroll increased $238 million over the prior reporting period. The corresponding employer contributions increased by $5.5 million for a total employer contribution amount of $293.6 million. Of the total employer contribution amount, $26.3 million was posted to the pension fund while $267.3 million was posted to the insurance fund. Contributions paid by employees were $286.8 and $250.2 million respectively for the years ended June 30, 2002 and June 30, 2001. This increase in employee contributions is a reflection of the increase in covered payroll.
- The fair value of investments depreciated by $872.6 million for the year ended June 30, 2002 compared to net depreciation of $1.1 billion for the prior fiscal year. Included in this net depreciation were realized losses on sales of investments of $664.3 million. In comparison, the pension funds realized gains of $992.7 million for the year ended June 30, 2001. The net realized loss experienced by the pension funds is due to less favorable market conditions.
- Investment income net of investment expense from all sources including securities lending was $374.5 million representing a decline in investment income of approximately $34 million compared to last fiscal year. This decline is due to less favorable market conditions.
- Pension benefits paid to retirees and beneficiaries increased $91.7 million bringing total benefit payments to $640.9 million. Refund of contributions paid to former members upon termination of employment decreased from $18.6 million to $17.9 million.
- Administrative expense and other deductions totaling $12.6 million increased $2.4 million.

FINANCIAL HIGHLIGHTS—INSURANCE FUND

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of the insurance fund administered by Kentucky Retirement Systems increased by $117.9 million during the 2001-2002 fiscal year.
- Employer contributions of $267.3 were received. This is an increase of $84.6 million over the prior fiscal year. This increase is due to the increase in covered payroll reported and also an increase in the insurance transfer rate.

- After applying a $61 million Anthem demutualization (See Note K to the Financial Statements), the fair value of investments depreciated $73 million compared to net depreciation of $72 million for the prior fiscal year. After netting the $61 million Anthem demutualization (See Note K to the Financial Statements) against current year losses, the insurance fund realized net gains on sales of investments of $12 million compared to $42.7 million realized gains in the prior fiscal year. This decline in net appreciation and decline in realized gains is due to less favorable market conditions.
- Investment income net of investment expense from all sources including securities lending was $20.6 million representing a decrease of approximately $10.5 million compared to last fiscal year.
- Premiums paid by the fund for hospital and medical insurance coverage increased $14.2 million to total $96.1 million for the year.
- Administrative fees paid to the State Personnel Cabinet for administration of the insurance program for retirees not eligible for Medicare totaled $778 thousand compared to $714 thousand for the prior year. This increase is due to an increase in retirees.

USING THIS FINANCIAL REPORT

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combined Statement of Plan Net Assets and Combined Statements of Changes in Plan Net Assets (on pages 18-21) provide information about the activities of the pension funds and insurance fund as a whole. Kentucky Retirement Systems is the fiduciary of funds held in trust for five distinct groups of members. The Combining Statements of Plan Net Assets and Combining Statements of Changes in Plan Net Assets (on pages 22-29) provide more detailed information about each plan assets, liabilities, plan net assets, and changes in plan net assets.

The Schedule of Funding Progress (on pages 46-56) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (on pages 57-62) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY RETIREMENT SYSTEMS AS A WHOLE

Kentucky Retirement Systems' combined plan net assets decreased during the year ended June 30, 2002 by $738.5 million from $12,841.7 million to $12,103.2 million. Plan net assets for the prior fiscal year decreased by $861.5 million. The decrease for the plan year ended June 30, 2002 is attributable to unfavorable market conditions. The analysis below focuses on plan net assets (Table 1) and changes in plan net assets (Table 2) of Kentucky Retirement Systems' pension funds and insurance fund.

Table 1
Plan Net Assets
(In Millions)

	Pension Funds		Insurance Fund		Total	
	2002	**2001**	**2002**	**2001**	**2002**	**2001**
Cash & Investments	$13,492.8	$13,420.1	$1,372.5	$1,156.7	$14,865.3	$14,576.8
Receivables	$132.0	$125.0	$29.6	$21.2	$161.6	$146.2
Total Assets	$13,624.8	$13,545.1	$1,402.1	$1,177.9	$15,026.9	$14,723.0
Total Liabilities	(2,718.0)	(1,781.9)	(205.7)	(99.4)	(2,923.7)	(1,881.3)
Plan Net Assets	$10,906.8	$11,763.2	$1,196.4	$1,078.5	$12,103.2	$12,841.7

Table 2
Changes in Plan Net Assets
(In Millions)

	Pension Funds		Insurance Fund		Total	
	2002	**2001**	**2002**	**2001**	**2002**	**2001**
Additions:						
Members' Contributions	$286.8	$250.2	$0.0	$0.0	$286.8	$250.2
Employer Contributions	26.3	105.5	267.3	182.6	293.6	288.1
Investment Income(net)	(498.0)	(698.5)	(52.5)	(40.7)	(550.5)	(739.2)
Total additions	(184.9)	(342.8)	214.8	141.9	29.9	(200.9)
Program deductions						
Benefit payments	640.9	549.1	0.0	0.0	640.9	549.1
Refunds	17.9	18.6	0.0	0.0	17.9	18.6
Administrative Expense	12.6	10.9	0.8	0.7	13.4	11.6
Healthcare premiums	0.0	0.0	96.1	81.9	96.1	81.9
Tot. program deductions	671.4	578.6	96.9	82.6	768.3	661.2
Other deductions(net)	(0.0)	(0.6)	0.0	0.0	(0.0)	(0.6)
Total deductions	671.4	578.0	96.9	82.6	768.3	660.6
Increase (decrease) in plan net assets	($856.3)	($920.8)	$117.9	$59.3	($738.4)	($861.5)

Plan net assets of the pension funds decreased by 7.3% ($10,906.8 million compared to $11,763.2 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. This plan net asset decrease is attributable primarily to the decline in the net appreciation in the fair value of investments due to less favorable market conditions in general.

Plan net assets of the insurance fund increased by 10.9% ($1,196.4 million compared to $1,078.5 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. This increase in net plan assets is primarily attributable to the increase in the amount of employer contributions transferred into the insurance fund due to the increase in the actuarial set insurance transfer rate.

PENSION FUND ACTIVITIES

Member contributions increased ($36.6 million). Retirement contributions are calculated by applying a percentage factor to salary and are paid in monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit. During the year there was an increase in monthly contributions over the previous year due to the increase in salaries reported to Kentucky Retirement Systems. The amount of elective service purchases also increased this fiscal year.

Employer contributions decreased ($79.2 million). Even though salaries reported to Kentucky Retirement Systems increased ($238 million), because the amount of employer contributions that were transferred to the insurance fund increased, employer contributions transferred to the pension funds decreased.

Net investment income increased by 28.7% (loss of $498.0 million compared to loss of $698.5 million). The pension funds continued to experience a net loss in income; however, the decline in net appreciation of fair value of investments was not as great as in the prior fiscal year. This can be illustrated as follows:

	In Millions
Appreciation in fair value of investments-June 30, 2002	212.5
Appreciation in fair value of investments-June 30, 2001	420.7
Net appreciation in fair value of investments	(208.2)
Investment income (net of investment expense)	374.5
Net loss on sale of investments	(664.3)
Investment income (net)-June 30, 2002	(498.0)

Program deductions increased by $93.4 million caused principally by an increase of $91.8 million in benefit payments. Retirees received an increase of 3.4% in benefits as of July 1, 2001. Also there was an increase of approximately 3400 members and beneficiaries on the retired payroll as of June 30, 2002. Refunds decreased by $.7 million.

INSURANCE FUND ACTIVITIES

Employer contributions paid into the insurance fund increased by $84.7 million over the prior year. An increase in the amount of covered payroll ($238 million) reported to Kentucky Retirement Systems as well as the increase in the insurance transfer rate are responsible for the increased employer contributions paid into the insurance fund.

Net investment income decreased by 28.7 % (loss of $52.4 million compared to loss of $40.7 million). This decline in net investment income is attributable to the continuing decline in the fair value of investments and the decline in investment income. This can be illustrated as follows:

	In Millions
Appreciation in fair value of investments-June 30, 2002	(19.8)
Appreciation in fair value of investments-June 30, 2001	65.1
Net appreciation in fair value of investments	(84.9)
Investment income (net of investment expense)	20.5
Net gain on sale of investments (net of Anthem demutualization - See Note K to the Financial Statements)	12.0
Investment Income (net)-June 30, 2002	(52.4)

Program deductions increased by $14.3 million explained almost totally by an increase in payment of healthcare premiums of $14.2 million.

HISTORICAL TRENDS

Accounting standards require that the statement of plan net assets state asset value at fair value and include only benefits and refund due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the pension funds and insurance fund is provided in the Schedule of Funding Progress (on pages 46-56). The asset value stated in the Schedule of Funding Progress is the actuarial value of assets determined by calculating the difference between the expected valuation assets and the actual market value of assets adjusted for any unrecognized gains or losses and amortized over a five year period. The actuarial accrued liability is calculated using the entry age normal fund method.

The funding position of the pension funds continues to provide more than adequate assets to meet pension obligations. The insurance fund continues to have a large unfunded liability of all participating employees groups.

Annual required contributions of the employers and contributions made by the employers in relation to the required contributions are provided in the Schedule of Employer Contributions (on pages 57-62). This schedule indicates that employers are generally meeting their responsibilities to provide resources to the plans.

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	2002		
	Pensions	Post-Employment Healthcare	Total
ASSETS			
Cash and Short Term Investments			
Cash	$ 28,494	$ 24,939	$ 53,433
Short Term Investments	548,058	142,008	690,066
Total Cash and Short Term Investments	576,552	166,948	743,500
Receivables			
Investments - accounts receivable	720	70	790
Due from retirement fund			
Interest receivable - year end	70,486	3,027	73,513
Accounts receivable - year end	57,008	26,494	83,502
Accounts receivable - alternate plan	3,551	-	3,551
A/R - alternate plan - year end	244	-	244
Total receivables	132,009	29,591	161,600
Investments at fair value			
Corporate and government bonds	3,680,675	119,766	3,800,442
Corporate stocks	5,861,831	881,263	6,743,094
Mortgages	642,520	-	642,520
Real estate	21,699	-	21,699
Total investments at fair value	10,206,725	1,001,029	11,207,754
Securities lending collateral invested	2,709,530	204,493	2,914,023
Total assets	13,624,816	1,402,061	15,026,877
LIABILITIES			
Investments - accounts payable		1,193	1,193
Accounts payable	8,445		8,445
Due to insurance fund			
Securities lending collateral	2,709,530	204,493	2,914,023
Total Liabilities	2,717,976	205,686	2,923,662
Plan net assets held in trust for pension Benefits	$10,906,841	$ 1,196,375	$12,103,215

(A schedule of funding progress for each plan is presented on pages 46 through 56.)

The accompanying notes are an integral part of these financial statements.

KENTUCKY RETIREMENT SYSTEMS
COMBINED STATEMENTS OF PLAN NET ASSETS
As of June 30, 2002 and 2001
Expressed In Thousands

	2001	
	Post-Employment	
Pensions	Healthcare	Total
$ 33,263	$ 19,154	$ 52,417
1,833,669	188,046	2,021,715
1,866,932	207,200	2,074,133
820	82	902
58,287	2,658	60,945
61,414	18,431	79,845
4,162	-	4,162
304	-	304
124,988	21,171	146,159
2,939,846	104,512	3,044,358
5,742,621	739,105	6,481,726
525,665	6,595	532,260
577,315	-	577,315
9,785,447	850,212	10,635,659
1,767,731	99,339	1,867,070
13,545,098	1,177,922	14,723,020
	108	108
14,166		14,166
1,767,731	99,339	1,867,070
1,781,897	99,447	1,881,345
$11,763,200	$ 1,078,475	$12,841,676

	Pensions	2002 Post-Employment Healthcare	Total
ADDITIONS			
Members contributions	$ 286,822	$ -	$ 286,822
Employers contributions	26,260	267,260	293,520
Total contributions	313,082	267,260	580,342
Investment Income:			
From investing activities			
Net appreciation in fair value of investments	(872,569)	(134,657)	(1,007,226)
Demutualization Proceeds (Note K)		61,603	61,603
Interest	240,540	13,147	253,687
Dividends	130,801	7,149	137,950
Real estate operating income (Net)	-	-	-
Total investing activities income	(501,228)	(52,758)	(553,986)
Investment expense	7,275	451	7,726
Net income from investing activities	(508,503)	(53,209)	(561,712)
From securities lending activities			
Securities lending income	60,496	4,242	64,737
Securities lending expense:			
Custodial Fee	20		20
Security borrower rebate	47,021	3,325	50,346
Security lending agent fee	2,964	186	3,150
Net income from securities lending activities	10,491	731	11,222
Total net investment income	(498,012)	(52,479)	(550,490)
TOTAL ADDITIONS	(184,931)	214,782	29,851
DEDUCTIONS			
Benefit payments	640,860		640,860
Refunds	17,918		17,918
Administrative expenses	12,651	778	13,430
Healthcare premiums paid		96,104	96,104
Other deductions (Net)	(1)	-	(1)
TOTAL DEDUCTIONS	671,428	96,882	768,311
Net increase	(856,360)	117,900	(738,460)
Plan net assets held in trust for pension benefits and post-employment benefits			
Beginning of year	11,763,200	1,078,475	12,841,676
Prior period adjustment (Note K)	-	-	-
End of year	$10,906,840	$ 1,196,375	$12,103,216

The accompanying notes are an integral part of these financial statements.

KENTUCKY RETIREMENT SYSTEMS
COMBINED STATEMENTS OF CHANGES IN PLAN NET ASSETS
For The Years Ended June 30, 2002 and 2001

Expressed In Thousands

	2001	
	Post-Employment	
Pensions	Healthcare	Total
$ 250,239	$ -	$ 250,239
105,522	182,656	288,178
355,761	182,656	538,417
(1,107,218)	(71,873)	(1,179,090)
291,982	23,701	315,683
109,057	6,548	115,605
3,964	-	3,964
(702,214)	(41,624)	(743,838)
4,508	95	4,603
(706,723)	(41,719)	(748,441)
106,484	11,095	117,578
19		19
96,171	9,892	106,063
2,520	240	2,760
7,774	962	8,754
(698,949)	(40,757)	(739,687)
(342,796)	141,899	(201,269)
549,120		549,120
18,614		18,614
10,879	714	11,593
	81,901	81,901
(612)	-	(612)
578,001	82,615	660,616
(920,797)	59,284	(861,885)
12,683,998	1,019,191	13,703,189
-	-	-
$11,763,201	$ 1,078,475	$12,841,676

ASSETS	KERS HAZARDOUS	KERS NON-HAZARDOUS
Cash and short-term investments		
Cash	$ 2,105	$ 10,476
Short-term investments	22,909	237,836
Total cash and short-term investments	25,014	248,312
Receivables		
Investments - accounts receivable	24	276
Interest receivable - year end	1,993	32,305
Accounts receivable - year end	2,871	24,702
Accounts receivable - alternate plan		
A/R - alternate plan - year end	-	-
Total receivables	4,889	57,283
Investments at fair value		
Corporate and government bonds	99,477	1,695,472
Corporate stocks	153,251	2,702,708
Mortgages	17,449	295,890
Real estate	2,047	9,057
Total investments at fair value	272,224	4,703,127
Securities lending collateral invested	74,700	1,244,141
Total assets	376,826	6,252,863
LIABILITIES		
Accounts payable	327	3,531
Securities lending collateral	74,700	1,244,141
Total liabilities	75,026	1,247,672
PLAN NET ASSETS HELD IN TRUST FOR PENSION BENEFITS	$ 301,800	$ 5,005,191

The accompanying notes are an integral part of these financial statements.

KENTUCKY RETIREMENT SYSTEMS
COMBINING STATEMENTS OF PLAN NET ASSETS
PENSION FUNDS
June 30, 2002 and 2001

Expressed In Thousands

CERS HAZARDOUS	CERS NON-HAZARDOUS	STATE POLICE	2002 TOTAL	2001 TOTAL
$ 2,954	$ 11,693	$ 1,266	$ 28,494	$ 33,263
60,351	209,119	17,843	548,058	1,833,669
63,305	220,812	19,109	576,552	1,866,932
87	323	10	720	820
7,403	26,609	2,175	70,486	58,287
8,959	19,403	1,073	57,008	61,414
1,960	1,592	-	3,551	4,162
130	114	-	244	304
18,538	48,041	3,259	132,009	124,988
381,820	1,389,803	114,103	3,680,675	2,939,846
611,186	2,222,749	171,937	5,861,831	5,742,621
67,019	242,677	19,485	642,520	525,665
3,381	6,200	1,015	21,699	577,315
1,063,406	3,861,428	306,540	10,206,725	9,785,447
283,120	1,025,732	81,838	2,709,530	1,767,731
1,428,369	5,156,013	410,745	13,624,816	13,545,098
900	3,525	163	8,445	14,166
283,120	1,025,732	81,838	2,709,530	1,767,731
284,020	1,029,257	82,001	2,717,976	1,781,897
$1,144,349	$ 4,126,756	$ 328,744	$10,906,841	$11,763,200

	KERS HAZARDOUS	KERS NON-HAZARDOUS
ADDITIONS		
Members contributions	$ 10,807	$ 111,992
Employers contributions	7,934	1,760
Total contributions	18,741	113,752
INVESTMENT INCOME		
From Investing Activities		
Net appreciation in fair value of investments	(21,332)	(408,185)
Interest	6,592	111,107
Dividends	3,584	60,418
Total investing activity income	(11,156)	(236,661)
Investment expense	193	3,305
Net income from investing activities	(11,348)	(239,966)
From securities lending activities		
Securities lending income	3,231	20,555
Securities lending expense:		
Custodial fee	1	7
Security borrower rebates	2,510	15,980
Security lending agent fees	158	1,007
Net income from securities lending activities	562	3,561
Total net investment income	(10,786)	(236,405)
TOTAL ADDITIONS	7,954	(122,653)
DEDUCTIONS		
Benefit payments	10,203	345,666
Refunds	1,141	6,657
Administrative expenses	354	4,399
Other deductions (Net)	(1)	(2)
Total deductions	11,698	356,720
Net increase	(3,744)	(479,373)
PLAN NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
Beginning of Year	305,544	5,484,564
Prior Period Adjustment (Note J)	-	-
End of year	$ 301,800	$ 5,005,191

The accompanying notes are an integral part of these financial statements

KENTUCKY RETIREMENT SYSTEMS
COMBINING STATEMENTS OF CHANGES IN PLAN NET ASSETS
PENSION FUNDS
June 30, 2002 and 2001

Expressed In Thousands

CERS HAZARDOUS	CERS NON-HAZARDOUS	STATE POLICE	2002 TOTAL	2001 TOTAL
$ 37,096	$ 122,428	$ 4,499	$ 286,822	$ 250,239
11,055	5,528	(18)	26,260	105,522
48,151	127,956	4,482	313,081	355,761
(89,092)	(327,253)	(26,707)	(872,569)	(1,107,218)
25,270	90,339	7,233	240,540	405,394
13,741	49,124	3,933	130,801	-
(50,080)	(187,790)	(15,541)	(501,228)	(701,823)
745	2,835	197	7,275	4,508
(50,825)	(190,625)	(15,738)	(508,503)	(706,332)
10,173	24,524	2,012	60,496	106,484
3	8	1	20	19
7,903	19,065	1,562	47,021	96,171
498	1,202	98	2,964	2,520
1,768	4,249	350	10,491	7,774
(49,057)	(186,375)	(15,388)	(498,012)	(698,558)
(906)	(58,419)	(10,906)	(184,931)	(342,796)
63,494	196,659	24,839	640,860	549,120
1,770	8,325	25	17,918	18,614
635	7,187	76	12,651	10,879
-	-	1	(1)	(612)
65,900	212,171	24,941	671,429	578,001
(66,806)	(270,590)	(35,848)	(856,360)	(920,797)
1,211,155	4,397,347	364,592	11,763,200	12,683,998
-	-	-	-	-
$1,144,349	$ 4,126,756	$328,744	$10,906,841	$11,763,200

	KERS HAZARDOUS	KERS NON-HAZARDOUS
ASSETS		
Cash and short-term investments		
Cash	$ 1,633	$ 8,591
Short-term investments	7,971	93,020
Total cash and short-term investments	9,604	101,611
Receivables		
Investments - accounts receivable	9	23
Due from Retirement Fund	-	-
Interest receivable - year end	288	1,129
Accounts receivable - year end	1,381	8,590
Accounts receivable – alternate plan	-	-
A/R – alternate plan – year end	-	-
Total receivables	1,678	9,741
Investments, at fair value		
Corporate and government bonds	11,569	43,160
Corporate stocks	86,978	311,828
Mortgages	-	-
Total investments, at fair value	98,547	354,988
Security lending collateral invested	18,937	79,933
Total assets	128,766	546,274
LIABILITIES		
Accounts payable	60	676
Securities lending collateral	18,937	79,933
Total liabilities	18,996	80,609
PLAN NET ASSETS HELD IN TRUST FOR PENSION BENEFITS	$ 109,769	$ 465,665

The accompanying notes are an integral part of these financial statements.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
COMBINING STATEMENTS OF PLAN NET ASSETS
POSTEMPLOYMENT HEALTHCARE
June 30, 2002 and 2001

Expressed In Thousands

CERS HAZARDOUS	CERS NON-HAZARDOUS	STATE POLICE	2002 TOTAL	2001 TOTAL
$ 4,358	$ 9,375	$ 982	$ 24,940	$ 19,154
12,381	23,930	4,706	142,008	188,046
16,739	33,305	5,689	166,948	207,200
12	22	4	70	82
481	948	182	3,027	2,658
4,457	11,261	805	26,494	18,431
-	-	-	-	-
-	-	-	-	-
4,949	12,231	991	29,591	21,171
19,134	38,489	7,413	119,766	104,512
146,842	281,588	54,026	881,263	739,105
-	-	-	-	6,595
165,977	320,078	61,439	1,001,029	850,212
31,992	61,877	11,754	204,493	99,339
219,657	427,491	79,873	1,402,061	1,177,922
131	282	45	1,193	108
31,992	61,877	11,754	204,493	99,339
32,123	62,159	11,799	205,686	99,447
$ 187,534	$ 365,333	$ 68,074	$ 1,196,375	$ 1,078,475

	KERS HAZARDOUS	KERS NON-HAZARDOUS
ADDITIONS		
Employer's contributions	$ 15,887	$ 93,912
Total contributions	15,887	93,912
INVESTMENT INCOME		
From Investing Activities		
Net appreciation in fair value of investments	(13,248)	(49,693)
Demutualization Proceeds (Note K)		61,603
Interest	1,281	4,929
Dividends	696	2,681
Total income from investing activities	(11,271)	19,520
Investment activities expense	45	163
Net investment activities income	(11,316)	19,357
From securities lending activities		
Securities lending income	508	1,308
Securities lending expense:		
Security borrower rebates	398	1,025
Security lending agent fees	22	57
Net income from securities lending activities	87	225
Total net investment income	(11,229)	19,582
Total additions	4,659	113,494
DEDUCTIONS		
Healthcare premiums subsidies	2,453	43,738
Administrative fees	29	345
Total deductions	2,482	44,083
Net increase	2,177	69,410
PLAN NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
Beginning of year	107,592	396,254
Prior Period Adjustment	-	-
End of year	$ 109,769	$ 465,665

The accompanying notes are an integral part of these financial statements.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
COMBINING STATEMENTS OF CHANGES IN PLAN NET ASSETS
POSTEMPLOYMENT HEALTHCARE
June 30, 2002 and 2001

Expressed In Thousands

CERS HAZARDOUS	CERS NON-HAZARDOUS	STATE POLICE	2002 TOTAL	2001 TOTAL
$ 45,730	$ 102,151	$ 9,580	$ 267,260	$ 182,656
45,730	102,151	9,580	267,260	182,656
(21,857)	(41,217)	(8,642)	(134,657)	(71,873)
			61,603	
2,097	4,033	807	13,147	23,701
1,140	2,193	439	7,149	6,548
(18,620)	(34,991)	(7,396)	(52,758)	(41,624)
72	142	29	451	95
(18,692)	(35,133)	(7,425)	(53,209)	(41,719)
816	1,360	250	4,242	11,095
640	1,066	196	3,326	9,892
36	59	11	186	240
141	234	43	731	962
(18,551)	(34,899)	(7,382)	(52,479)	(40,757)
27,179	67,252	2,198	214,782	141,899
13,166	32,726	4,020	96,104	81,901
115	260	29	778	714
13,281	32,986	4,049	96,882	82,615
13,898	34,265	(1,851)	117,900	59,284
173,636	331,067	69,926	1,078,475	1,019,191
-	-	-	-	-
$ 187,534	$ 365,333	$ 68,074	$ 1,196,375	$ 1,078,475

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by Kentucky Retirement Systems: (1) Kentucky Employees Retirement System (KERS); (2) County Employees Retirement System (CERS); and (3) State Police Retirement System (SPRS). KRS maintains separate accounting records for five insurance funds which also includes hazardous duty members of the Kentucky Employees and County Employees Retirement Systems. The assets of the various insurance funds are commingled for investment purposes. The following notes apply to the various funds administered by Kentucky Retirement Systems.

NOTE A. Summary of Significant Accounting Policies

Basis of Accounting - KRS's financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan.

Method Used to Value Investments - Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate is based on appraisals. Investments that do not have an established market are reported at estimated fair value.

Component Unit - Kentucky Retirement Systems is a component unit of the Commonwealth of Kentucky. As such, the Commonwealth of Kentucky is the primary government in whose financial reporting entity The System is included.

The Kentucky Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.515. The County Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 78.520. The State Police Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 16.510. The Kentucky Retirement Systems Insurance Fund consisting of the Kentucky Employees Insurance Fund, Kentucky Employees Hazardous Insurance Fund, County Employees Insurance Fund, County Employees Hazardous Insurance Fund and State Police Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.701. The Retirement Systems' and Insurance Fund's administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Systems' Board of Trustees without further legislative review. The methods used to determine the employer rates for all Retirement Systems are specified in KRS 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

Expense Allocation - Administrative and investment expenses of the Kentucky Retirement Systems are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

NOTE B. Plan Descriptions and Contribution Information

Membership of each Retirement plan consisted of the following at June 30, 2002 and 2001, the date of the latest actuarial valuation:

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	2001			2002		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and beneficiaries receiving benefits	25,118	1,053	26,171	26,703	1,208	27,911
Terminated plan members - vested	3,312	123	3,435	3,415	127	3,542
Terminated plan members - non-vested	13,429	799	14,228	14,299	946	15,245
Active plan members	47,780	4,228	52,008	48,555	4,211	52,766
Total	89,639	6,203	95,842	92,972	6,492	99,464
Number of participating employers			408			404

COUNTY EMPLOYEES RETIREMENT SYSTEM

	2001			2002		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and beneficiaries receiving benefits	24,415	3,221	27,636	26,147	3,483	29,630
Terminated plan members - vested	4,080	148	4,228	4,470	148	4,618
Terminated plan members - non-vested	24,276	462	24,738	26,508	552	27,060
Active plan members	78,773	8,586	87,359	79,850	8,949	88,799
Total	131,544	12,417	143,961	136,975	13,132	150,107
Number of participating employers			1,297			1,314

STATE POLICE RETIREMENT SYSTEM

Number of Members	2001 Hazardous Position Employees	2002 Hazardous Position Employees
Retirees and beneficiaries receiving benefits	842	897
Terminated plan members - vested	12	20
Terminated plan members - non-vested	78	83
Active plan members	1,016	1,002
Total	1,948	2,002
Number of participating employers	1	1

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

Hospital and medical contracts in force consisted of the following at June 30, 2002 and 2001, the date of the latest actuarial valuation:

	2001					2002				
	Single	Couple/ Family	Parent +	Medicare Regular	Medicare High	Single	Couple/ Family	Parent +	Medicare Regular	Medicare High
KERS Non-Hazardous	5,199	1,070	346	1,818	11,107	5,822	1,182	396	1,838	11,229
KERS Hazardous	302	185	51	52	420	359	205	57	66	451
CERS Non-Hazardous	4,215	791	204	2,212	8,974	4,530	800	224	2,446	9,517
CERS Hazardous	869	1,267	202	32	694	956	1,321	210	38	734
SPRS	194	350	47	8	278	199	364	50	11	303
Totals	10,779	3,663	850	4,122	21,473	11,866	3,872	937	4,399	22,234

NOTE B. Plan Descriptions and Contribution Information (Continued)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgement the welfare of the Commonwealth so demands.

Contributions - For the years ended June 30, 2002 and 2001, plan members were required to contribute 5% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2002 and 2001, the State contributed 5.89% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2002 and 2001 was 5.89% of creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that cover substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgement the welfare of the Commonwealth so demands.

Contributions - For the years ended June 30, 2002 and 2001, plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2002 and 2001, the State contributed 18.84% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2002 and 2001 was 18.84% of creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

NOTE B. Plan Descriptions and Contribution Information (Continued)

COUNTY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2002 and 2001, plan members were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2002 and 2001, participating employers contributed 6.34% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2002 and 2001 was 6.34% of creditable compensation. A dministrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2002 and 2001, plan members were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2002 and 2001, participating employers contributed 16.28% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2002 and 2001 was 16.28% of creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

NOTE B. Plan Descriptions and Contribution Information (Continued)

STATE POLICE RETIREMENT SYSTEM

Plan Description - SPRS is a single-employer defined benefit pension plan that covers all full-time State Troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2002 and 2001, plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2002 and 2001, the State contributed 21.58% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2002 and 2001 was 21.58% of creditable compensation. Administrative costs of Kentucky Retirement System are financed through employer contributions and investment earnings.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

Plan Description - The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System (Systems). The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the year insurance premiums withheld from benefit payments to members of the Systems approximated $16,462,261 and $355,816 for KERS and KERS hazardous, respectively, $15,190,421 and $1,299,220 for CERS and CERS hazardous, respectively, and $285,755 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2002 the Fund had 58,020 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Fund is based on years of service with the Systems. Years of service and respective percentages of the maximum contribution are as follows:

Years of Service	Percent Paid by Insurance Fund
20 or More	100%
15 - 19	75%
10 - 14	50%
4 - 9	25%
Less Than 4	0%

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed.

In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years. The increases commenced with the 1997 valuation and adjustments will be made every other valuation year to coincide with the valuation used by the General Assembly to establish employer contribution rates for the biennium.

NOTE C. Cash and Short-Term Investments and Securities Lending Collateral

The provisions of Governmental Accounting Standards Board Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions and investments made with that cash be reported as assets on the financial statements. In conjunction with the adoption of Governmental Accounting Standard No. 28, the System has reclassified certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	2002	2001
Miscellaneous cash	12,580,710	16,694,421
Short-Term Investment Pool	1,318,840,638	870,430,971
Short-Term Investments	260,745,038	849,261,657
Total	$1,592,166,386	$1,736,387,049

COUNTY EMPLOYEES RETIREMENT SYSTEM

	2002	2001
Miscellaneous Cash	14,647,210	15,474,032
Short-Term Investment Pool	1,308,851,954	842,324,041
Short-Term Investments	269,469,918	939,342,782
Total	$1,592,969,082	$1,797,140,855

STATE POLICE RETIREMENT SYSTEM

	2002	2001
Miscellaneous Cash	1,266,091	1,094,951
Short-Term Investment Pool	81,837,844	54,976,448
Short-Term Investments	17,843,020	45,064,222
Total	$100,946,955	$101,135,621

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

	2002	2001
Miscellaneous Cash	24,939,638	19,154,421
Short-Term Investment Pool	204,492,843	
Short-Term Investments	142,008,460	188,046,064
Total	$371,440,941	$ 207,200,485

NOTE D. Investments

The Board of Trustees of the Retirement Systems and Insurance Fund recognize their duty to invest funds in accordance with the Prudent Person Rule and manage those funds consistent with the long term nature of the Systems. The Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments - Investments may be made in common stock, securities convertible into common stock and in preferred stock of publicly traded corporations.

Fixed Income Investments - Publicly traded bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with the current market and economic conditions. Investment may also be made in any debt instrument issued or guaranteed in whole or in part by the U.S. Government or any agency or instrumentality of the U.S. Government.

Mortgages - Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments guaranteed by an agency of the U.S. Government or the Commonwealth of Kentucky.

Alternative Investments/Equity Real Estate – Subject to the specific approval of the investment committee of the board of trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The board may invest in real estate or alternative investments including, without limitation, venture capital, private equity and private placements which the investment committee believes has excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities - The following short-term investment vehicles are considered acceptable:

> Publicly traded investment grade corporate bonds, government and agency bonds, mortgages, and collective STIF's, money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having a BBB or better rating by at least one recognized bond rating service. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur.

Derivatives – Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited.

The Retirement Systems and Insurance Fund invest in collateral mortgage obligations (CMOs) and other asset-backed securities to increase return and adjust duration of the portfolio. The Systems and the Fund invest in exchange-traded funds to convert cash held in index funds to short-term equity investments. This practice is intended to make the performance of the index funds more closely track the performance of the index that the funds are intended to replicate.

Note D: Investments (continued)

Derivatives (continued)

Collateral mortgage obligations, asset-backed securities, and exchange-traded funds pose no greater risk than other similar investment grade holdings in the Systems' and the Fund's portfolios. The fair value of CMOs at June 30, 2002 and 2001 was approximately $137 million and $135 million respectively; the fair value of asset-backed securities at June 30, 2002 and 2001 was approximately $141 million and $263 million respectively; and the fair value of exchange-traded funds at June 30, 2002 and 2001 was approximately $191 million and $33 million respectively.

The Retirement Systems' and Insurance Fund's investments are categorized below to give an indication of the level of risk assumed by them at June 30, 2002 and 2001. Category 1 includes investments that are either insured or registered or for which the investments are held by The System or its agent in the System's name. Category 3 includes securities purchased by and held by the System's custodial agent. The agent loans securities owned by the Systems and Fund with the simultaneous receipt of cash collateral. The custodial agent purchases securities with the cash collateral in accordance with the Systems' and Fund's *Statement of Investment Policy*. All securities purchased with cash collateral are segregated by the custodial agent and held in the name of Kentucky Retirement Systems. At June 30, 2002, the systems had a second agent who also loans securities owned by the systems with the simultaneous receipt of cash collateral. The second custodial agent invests cash collateral in a short-term investment pool that holds only U.S. dollar cash and U.S. securities.

Note D: Investments (continued)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	2002			
Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 113,768,072	$ -	$ 6,257,731	$ 120,025,803
Loaned for securities collateral	250,546,768			250,546,768
Corporate bonds	545,042,869			545,042,869
Loaned for securities collateral	5,102,948			5,102,948
Corporate stocks	2,452,194,242		129	2,452,194,371
Loaned for securities collateral	444,848			444,848
Short-term investments	259,255,343	-	1,495,823	260,751,166
Subtotal	$3,626,355,090	$ -	$ 7,753,683	$3,634,108,773
Investments - Not Categorized				
Short Term Investment Pool				$ 1,318,840,638
Investments held by broker-dealers under securities loans				
U.S. Government Securities				806,544,819
Corporate bonds				67,680,028
Corporate stocks				403,320,388
Mortgages				313,339,066
Real Estate Investment				11,103,333
Total Investments				$6,554,937,045

	2001			
Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 251,035,661	$ -	$ 10,107,139	$261,142,799
Loaned for securities collateral	124,804,102			124,804,102
Corporate bonds	591,171,106		11,341,877	602,512,983
Loaned for securities collateral	9,310,764			9,310,764
Corporate stocks	2,479,798,756			2,479,798,756
Loaned for securities collateral	222			222
Repurchase agreements	849,261,657	-	-	849,261,657
Subtotal	$4,305,382,268	$ -	$21,449,016	$4,326,831,283
Investments - Not Categorized				
Investments held by broker-dealers under securities loans				$ 870,430,971
U.S. Government Securities				414,965,006
Corporate bonds				58,795,295
Corporate stocks				374,337,005
Mortgages				268,732,891
Real Estate Investment				277,684,389
Total Investments				$6,591,776,840

Note D: Investments (continued)

COUNTY EMPLOYEES RETIREMENT SYSTEM

2002

Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 106,558,509	$ -	$ 6,176,453	$ 112,734,961
Loaned for securities collateral	248,649,168			248,649,168
Corporate bonds	537,565,238			537,565,238
Loaned for securities collateral	5,064,299			5,064,299
Corporate stocks	2,433,226,793		124	2,433,226,917
Loaned for securities collateral	441,479			441,479
Short-term investments	267,991,504	-	1,478,414	269,469,918
Subtotal	$3,599,496,989	$ -	$ 7,654,990	$3,607,151,979
Investments - Not Categorized				
Short-Term Investment Pool				1,308,851,954
Investments held by broker-dealers under securities loans				
U.S. Government Securities				800,442,229
Corporate bonds				67,167,431
Corporate stocks				400,265,705
Mortgages				309,695,477
Real Estate Investment				9,580,920
Total Investments				$6,503,155,695

2001

Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 216,449,214	$ -	$ 9,442,356	$ 225,891,570
Loaned for securities collateral	120,774,075			120,774,075
Corporate bonds	550,004,359		10,477,937	560,600,168
Loaned for securities collateral	9,010,112			9,010,112
Corporate stocks	2,339,647,418			2,339,647,418
Loaned for securities collateral	214			214
Repurchase agreements	939,342,782	-	-	939,342,782
Subtotal	$4,175,228,174	$ -	$ 20,038,165	$4,195,266,339
Investments - Not Categorized				
Investments held by broker-dealers under securities loans				842,324,041
U.S. Government Securities				401,565,445
Corporate bonds				58,896,746
Corporate stocks				362,249,356
Mortgages				239,870,634
Real Estate Investment				280,736,876
Total Investments				$6,378,909,438

Note D: Investments (continued)

STATE POLICE RETIREMENT SYSTEM

2002

Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 8,834,474	$ -	$ 397,807	$ 9,232,273
Loaned for securities collateral	15,547,146			15,547,146
Corporate bonds	34,758,002			34,758,002
Loaned for securities collateral	316,653			316,653
Corporate stocks	146,882,275			146,882,283
Loaned for securities collateral	27,604			27,604
Short-term investments	17,750,580	-	92,440	17,843,020
Subtotal	$ 224,116,733	$ -	$ 490,247	$ 224,606,980
Investments - Not Categorized				
Short-Term Investment Pool				81,837,844
Investments held by broker-dealers under securities loans				
U.S. Government Securities				50,048,419
Corporate bonds				4,199,740
Corporate stocks				25,027,187
Mortgages				19,484,961
Real Estate Investment				1,014,934
Total Investments				$ 406,220,066

2001

Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 16,196,830	$ -	$ 642,732	$ 16,839,562
Loaned for securities collateral	7,882,631			7,882,631
Corporate bonds	37,622,945		721,233	38,344,178
Loaned for securities collateral	588,068			588,068
Corporate stocks	162,945,265			162,945,265
Loaned for securities collateral	14			14
Repurchase agreements	45,064,222	-	-	45,064,222
Subtotal	$ 270,299,976	$ -	$ 1,363,966	$ 271,663,942
Investments - Not Categorized				
Short Term Investment Pool				54,976,448
Investments held by broker-dealers under securities loans				
U.S. Government Securities				26,209,203
Corporate bonds				3,713,513
Corporate stocks				23,643,137
Mortgages				17,061,141
Real Estate Investment				18,893,323
Total Investments				$ 416,160,708

Note D: Investments (continued)

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

	2002			
Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 14,644,105	$ -	$ -	$ 14,644,105
Loaned for securities collateral	12,342,559			12,342,559
Corporate stocks	758,949,817			758,949,817
Loaned for securities collateral	2,647,879			2,647,879
Short-term investments	141,428,879	-	579,581	142,008,459
Subtotal	$ 930,013,238	$ -	$579,581	$ 930,592,818
Investments - Not Categorized				
Investments held by broker-dealers under securities loans				204,492,843
U.S. Government Securities				92,779,528
Corporate stocks				119,665,028
Mortgage				
Total Investments				$1,347,530,217

	2001			
Investments - Categorized	Category 1	Category 2	Category 3	Market Value
U.S. Government Securities	$ 64,843,456	$ -	$ -	$ 64,843,456
Corporate bonds	1,843,891			1,843,891
Corporate stocks	681,320,455			681,320,435
Repurchase agreements	188,046,064	-	-	188,046,064
Subtotal	$ 936,053,866	$ -	$ -	$ 936,053,866
Investments - Not Categorized				
Investments held by broker-dealers under securities loans				99,339,376
U.S. Government Securities				37,824,200
Corporate stocks				57,784,278
Mortgages				6,595,407
Total Investments				$1,137,597,128

NOTE E. SECURITIES LENDING TRANSACTIONS

Kentucky Revised Statues Sections 61.650 and 386.020(2) permit the Retirement Systems and Insurance Fund to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Systems' and the Fund's custodial banks either cash collateral or other securities with a market value of 102 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. At year-end, the Systems and Fund have no credit risk exposure to borrowers because the amounts the Systems and Fund owe to borrowers exceed the amounts the borrowers owe the Systems and Fund. The contracts with the custodial banks require them to indemnify the Systems or the Fund if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction, although the average term of the loans was 6 days, 10 days, and 24 days for the three investment portfolios subject to security lending agreements. One custodial bank invests cash collateral in securities that are permitted for investment by state statute and board policy, which at year-end has a weighted-average maturity of 3 days for the Retirement Systems and the Insurance Fund. The other custodial bank invests cash collateral in the agent's short term investment pool as permitted by state statute and Board policy, which at year-end has a weighted-average maturity of 24 days for the Retirement Systems only. Neither the Systems nor the Fund can pledge or sell collateral securities received unless the borrower defaults.

NOTE F. RISKS OF LOSS

The Systems are exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims against the Board of Trustees of Kentucky Retirement Systems or any of its staff as result of actual or alleged breach of fiduciary duty are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $25,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers Compensation Board.

NOTE G. CONTINGENCIES

In the normal course of business, the Retirement Systems and Insurance Fund are involved in various litigation concerning the right of participants or their beneficiaries to receive benefits. The System does not anticipate any material losses as a result of the contingent liabilities.

NOTE H. INCOME TAX STATUS

The Internal Revenue Service has ruled that the Plan qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax under income tax law.

NOTE J. CHANGE IN ACCOUNTING ESTIMATE

As of July 1, 2000, the Systems entered into a Master Custody Agreement with Northern Trust Corporation. The Master Custody Agreement changed the way the Systems hold assets in the investment portfolio. Asset ownership had been an indication of individual security ownership. Under the Master Custody Agreement, asset ownership is reflected as a percentage of the portfolio. The change in accounting estimate has no effect on the Kentucky Retirement Systems' investment portfolio as a whole. The initial effect of the change on the individual funds is as follows:

PENSION FUNDS

	Book Value 6/30/2000	Book Value Portfolio Percentage 6/30/2000	Market Value Portfolio Percentage 6/30/2000	Restated Book Value 7/1/2000
KERS	$ 4,740,654,296	47.0544%	47.4828%	$ 4,783,815,498
CERS	3,732,292,416	37.0457%	36.8195%	3,709,509,383
KSP	315,799,384	3.1345%	3.2564%	328,080,622
CERH	1,030,710,828	10.2305%	10.0565%	1,013,178,221
KERH	255,386,326	2.5249%	2.3847%	240,259,526
TOTAL	$10,074,843,250	100.0000%	100.0000%	$10,074,843,250

INSURANCE FUNDS

	Book Value 6/30/2000	Book Value Portfolio Percentage 6/30/2000	Market Value Portfolio Percentage 6/30/2000	Restated Book Value 7/1/2000
KERS	$303,231,563	37.5506%	37.6022%	$303,648,695
CERS	244,469,319	30.2738%	30.1173%	243,205,485
KSP	53,986,398	6.6854%	6.8726%	55,498,194
CERH	126,884,648	15.7127%	15.6783%	126,607,005
KERH	78,956,426	9.7775%	9.7296%	78,568,975
TOTAL	$807,528,354	100.0000%	100.0000%	$807,528,354

NOTE K. ANTHEM DEMUTUALIZATION

In 2001, Anthem Insurance Companies, Inc., an Indiana corporation, underwent a demutualization, as authorized by the Indiana statutes. The demutualization provided, among other things, that "eligible statutory members", as defined by Indiana statutory provision, would receive cash or stock in consideration for giving up their membership interest in Anthem. In some instances application of the statute led to the determination by Anthem that individual members of the retirement plans administered by Kentucky Retirement Systems were the "statutory members" and in other instances the Kentucky Retirement Systems was identified by Anthem as the eligible statutory member to receive cash or stock under the Anthem demutualization plan. According to Anthem, this determination was based upon which of Anthem's subsidiaries was the original provider. The determination was confirmed by the Indiana Department of Insurance.

The $61,603,207 distribution which Kentucky Retirement Systems received on January 4, 2002 under the Anthem demutualization has been deposited in the Kentucky Employees Retirement Systems Insurance Fund. The retirement systems included within the Kentucky Retirement Systems for purposes of the Anthem demutualization are the Kentucky Employees Retirement System, (hazardous and non-hazardous), the County Employees Retirement System (hazardous and non-hazardous), the State Police Retirement System, the Legislators' Retirement Plan, and the Judicial Retirement Plan. Anthem has not yet provided the Kentucky Retirement Systems with the information necessary to divide the distribution among these retirement funds. Accordingly, the distribution will remain in the Kentucky Employees Retirement Systems Insurance Fund until the interests of the various retirement funds are determined. Given the unusual and non-recurring nature of the transaction, it is reported in these financial statements as a separate component of income.

NOTE L. CONTINGENT LIABILITY - ANTHEM DEMUTUALIZATION

In relation to the above noted Anthem demutualization, Kentucky Retirement System is a defendant in a case entitled Jean C. Love, David E. Wiseman and Belvia Campbell v. Board of Trustees of the Kentucky Retirement Systems, which is in Franklin Circuit Court. At issue is how to distribute the proceeds resulting from Anthem's demutualization, which resulted in Kentucky Retirement System receiving approximately $61 million dollars in proceeds. The plaintiffs seek to recover the full amount of the proceeds or, alternatively, the pro rata amount of proceeds attributable to insurance premiums that the employees and/or their beneficiaries paid directly to Anthem. Kentucky Retirement System believes that the claims are without merit and intends to vigorously defend its position. The ultimate outcome of this litigation cannot presently be determined. However, in management's opinion, the likelihood of a material adverse outcome is unlikely. Accordingly, adjustments, if any, that might result from the resolution of this matter have not been reflected in the financial statements.

NOTE M. EXCHANGE GAIN OR LOSS

Foreign currency translations resulted in an aggregate exchange gain of $77,489,388 for the Pension Funds and $12,284,741 for the Insurance Funds.

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KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded (Overfunded) AAL (UAAL) (b-a)
June 30, 1997	$3,683,995,005	$3,463,047,650	($ 220,947,355)
June 30, 1998	$4,356,072,625	$3,800,014,746	($ 556,057,879)
June 30, 1999	$5,264,340,397	$4,327,622,821	($ 936,717,576)
June 30, 2000	$6,806,675,460	$4,876,825,772	($1,929,849,688)
June 30, 2001	$6,844,742,687	$5,444,035,294	($1,400,707,393)
June 30, 2002*	$6,654,084,196	$6,026,094,764	($627,989,432)
Hazardous			
June 30, 1997	$166,717,238	$140,918,460	($25,798,778)
June 30, 1998	$212,214,618	$171,735,076	($40,479,542)
June 30, 1999	$259,839,319	$204,282,788	($55,556,531)
June 30, 2000	$336,213,464	$243,365,557	($92,847,907)
June 30, 2001	$361,677,475	$285,193,761	($76,483,714)
June 30, 2002*	$376,384,302	$322,069,164	($54,315,138)

* Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2002

Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
1.064	$1,234,798,738	(0.179)
1.146	$1,321,004,266	(0.421)
1.216	$1,330,766,100	(0.704)
1.396	$1,409,504,668	(1.369)
1.257	$1,505,299,220	(0.931)
1.104	$1,595,809,458	(0.393)
1.183	$ 87,757,075	(0.294)
1.236	$ 93,130,996	(0.435)
1.272	$103,464,123	(0.537)
1.382	$115,639,439	(0.803)
1.268	$122,857,992	(0.623)
1.169	$125,275,925	(0.434)

COUNTY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded (Overfunded) AAL (UAAL) (b-a)
June 30, 1997	$2,750,196,558	$2,390,620,093	($ 359,576,465)
June 30, 1998	$3,346,205,003	$2,663,946,276	($ 682,258,727)
June 30, 1999	$4,072,227,435	$2,991,420,884	($1,080,806,551)
June 30, 2000	$5,284,033,534	$3,368,601,134	($1,915,432,400)
June 30, 2001	$5,423,834,549	$3,706,282,212	($1,717,552,337)
June 30, 2002*	$5,397,787,158	$4,165,355,149	($1,232,432,009)
Hazardous			
June 30, 1997	$ 763,829,310	$ 754,308,810	($ 9,520,500)
June 30, 1998	$ 927,057,492	$ 865,966,626	($ 61,090,866)
June 30, 1999	$1,124,651,486	$ 963,711,775	($160,939,711)
June 30, 2000	$1,445,542,794	$1,084,553,697	($360,989,097)
June 30, 2001	$1,486,666,016	$1,193,860,442	($292,806,574)
June 30, 2002*	$1,485,511,793	$1,327,291,273	($158,220,520)

* Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2002

Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll (b-a)/c)
1.150	$1,297,116,204	(0.277)
1.256	$1,437,594,574	(0.475)
1.361	$1,346,601,939	(0.803)
1.569	$1,452,058,248	(1.319)
1.463	$1,544,973,296	(1.112)
1.296	$1,663,183,629	(0.741)
1.013	$225,094,837	(0.042)
1.071	$236,180,023	(0.257)
1.167	$256,201,726	(0.628)
1.333	$288,575,870	(1.251)
1.245	$316,700,304	(0.925)
1.119	$345,849,277	(0.457)

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2002

STATE POLICE RETIREMENT SYSTEM

Year Ended	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
June 30, 1997	$279,643,275	$255,784,758	($ 23,858,517)	1.093	$41,586,211	(0.574)
June 30, 1998	$306,318,918	$294,427,019	($ 11,891,899)	1.040	$38,727,361	(0.307)
June 30, 1999	$357,623,196	$314,021,673	($ 43,601,523)	1.139	$40,433,405	(1.078)
June 30, 2000	$459,168,574	$336,579,763	($122,588,811)	1.364	$43,619,383	(2.810)
June 30, 2001	$456,160,709	$356,211,860	($ 99,948,849)	1.281	$44,646,678	(2.237)
June 30, 2002*	$438,955,465	$380,790,346	($ 58,165,119)	1.153	$44,314,696	(1.312)

* Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

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KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

KERS Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Targeted Rate (b)	Unfunded AAL (UAAL) (b-a)
June 30, 1997	$168,479,973	$1,153,952,891	$ 985,472,918
June 30, 1998	$210,105,184	$1,242,183,993	$1,032,078,809
June 30, 1999	$283,704,887	$1,273,364,800	$ 989,659,913
June 30, 2000	$399,560,252	$1,457,475,358	$1,057,915,106
June 30, 2001	$449,630,605	$1,769,583,098	$1,319,952,493
June 30, 2002*	$521,250,455	$1,907,683,881	$1,386,433,426
KERS Hazardous			
June 30, 1997	$ 42,684,374	$120,511,351	$77,826,977
June 30, 1998	$ 54,606,786	$137,394,162	$82,787,376
June 30, 1999	$ 74,579,649	$149,158,586	$74,578,937
June 30, 2000	$102,212,237	$175,167,613	$72,955,376
June 30, 2001	$119,372,742	$214,450,822	$95,078,080
June 30, 2002*	$135,874,582	$236,819,050	$100,944,468

* Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2002

Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
0.146	$1,234,798,738	0.798
0.169	$1,321,004,266	0.781
0.223	$1,330,766,100	0.743
0.274	$1,409,504,668	0.751
0.254	$1,505,299,220	0.877
0.273	$1,595,809,458	0.869
0.354	$ 87,757,075	0.887
0.397	$ 93,130,996	0.889
0.500	$103,464,123	0.721
0.584	$115,639,439	0.631
0.557	$122,857,992	0.774
0.574	$125,275,925	0.806

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

CERS Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Targeted Rate (b)	Unfunded AAL (UAAL) (b-a)
June 30, 1997	$134,688,096	$1,091,055,849	$ 956,367,753
June 30, 1998	$168,531,296	$1,213,339,747	$1,044,808,451
June 30, 1999	$231,937,169	$1,282,874,286	$1,050,937,117
June 30, 2000	$319,642,694	$1,466,716,928	$1,147,074,234
June 30, 2001	$371,758,628	$1,793,710,768	$1,421,952,140
June 30, 2002*	$450,497,307	$1,977,577,038	$1,527,079,731
CERS Hazardous			
June 30, 1997	$ 69,832,681	$450,304,608	$380,471,927
June 30, 1998	$ 87,055,079	$493,286,363	$406,231,284
June 30, 1999	$114,590,223	$518,280,115	$403,689,892
June 30, 2000	$168,657,912	$599,936,029	$431,278,117
June 30, 2001	$197,875,249	$721,605,292	$523,730,043
June 30, 2002*	$234,683,878	$781,184,974	$546,501,096

* Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2002

Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
0.123	$1,297,116,204	0.737
0.139	$1,437,594,574	0.727
0.180	$1,346,601,939	0.780
0.218	$1,452,058,248	0.780
0.207	$1,544,973,296	0.920
0.228	$1,663,183,629	0.918
0.155	$225,094,837	1.690
0.176	$236,180,023	1.720
0.221	$256,201,726	1.576
0.281	$288,575,870	1.500
0.274	$316,700,304	1.654
0.301	$345,849,279	1.580

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
For The Year Ended June 30, 2002

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

SPRS	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Targeted Rate (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
June 30, 1997	$33,876,483	$117,361,754	$83,485,271	0.289	$41,586,211	2.008
June 30, 1998	$41,410,500	$124,501,076	$83,090,576	0.333	$38,727,361	2.146
June 30, 1999	$53,929,859	$125,797,150	$71,867,291	0.429	$40,433,405	1.777
June 30, 2000	$71,711,712	$138,867,085	$67,155,373	0.516	$43,619,383	1.540
June 30, 2001*	$79,863,577	$158,261,479	$78,397,902	0.505	$44,646,678	1.756
June 30, 2002*	$86,867,391	$165,445,412	$78,578,021	0.525	$44,314,696	1.773

* Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

EMPLOYER CONTRIBUTIONS

NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1997	$109,773,608	$102,967,907	0.935
June 30, 1998	$117,437,279	$112,082,480	0.954
June 30, 1999	$106,860,518	$107,514,778	1.006
June 30, 2000	$113,183,225	$115,055,476	1.017
June 30, 2001	$ 88,662,124	$ 90,356,951	1.019
June 30, 2002	$ 93,993,177	$ 95,672,345	1.018

HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1997	$15,682,189	$15,151,328	0.966
June 30, 1998	$16,642,509	$15,997,189	0.961
June 30, 1999	$19,306,405	$19,443,818	1.007
June 30, 2000	$21,578,319	$21,633,272	1.003
June 30, 2001	$23,146,446	$23,852,961	1.031
June 30, 2002	$23,601,984	$23,821,216	1.009

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS
For The Year Ended June 30, 2002

COUNTY EMPLOYEES RETIREMENT SYSTEM

EMPLOYER CONTRIBUTIONS

NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1997	$112,200,552	$105,773,743	0.942
June 30, 1998	$124,351,931	$107,490,256	0.864
June 30, 1999	$109,074,757	$110,591,016	1.014
June 30, 2000	$105,709,840	$106,587,217	1.008
June 30, 2001	$ 97,951,307	$111,206,820	1.135
June 30, 2002	$105,445,842	$107,678,891	1.021

HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1997	$42,070,225	$39,552,085	0.938
June 30, 1998	$44,142,046	$42,297,090	0.958
June 30, 1999	$46,526,233	$48,290,617	1.037
June 30, 2000	$50,645,065	$51,739,272	1.022
June 30, 2001	$51,558,809	$53,132,792	1.031
June 30, 2002	$56,304,262	$56,785,282	1.009

STATE POLICE RETIREMENT SYSTEM

EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1997	$11,053,615	$ 9,627,692	0.871
June 30, 1998	$10,293,733	$ 9,573,742	0.930
June 30, 1999	$ 9,465,460	$ 9,463,188	0.999
June 30, 2000	$10,211,298	$10,215,824	1.000
June 30, 2001	$ 9,634,753	$ 9,628,912	0.999
June 30, 2002	$ 9,563,111	$ 9,562,256	0.999

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS
For The Year Ended June 30, 2002

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

EMPLOYER CONTRIBUTIONS

KERS
NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1997	$38,896,160	$37,709,736	0.970
June 30, 1998	$54,029,074	$39,503,545	0.731
June 30, 1999	$56,690,636	$56,769,539	1.001
June 30, 2000	$76,818,004	$76,926,320	1.001
June 30, 2001	$66,874,871	$66,874,871	1.000
June 30, 2002	$93,993,177	$93,912,017	0.999

KERS
HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1997	$ 6,546,678	$ 6,278,931	0.960
June 30, 1998	$ 9,341,039	$ 6,632,037	0.710
June 30, 1999	$10,760,269	$10,773,916	1.001
June 30, 2000	$12,026,502	$12,047,095	1.002
June 30, 2001	$13,226,298	$13,226,298	1.000
June 30, 2002	$15,859,932	$15,887,399	1.002

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

EMPLOYER CONTRIBUTIONS

CERS
NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1997	$30,611,942	$27,504,331	0.898
June 30, 1998	$48,303,178	$29,271,074	0.606
June 30, 1999	$47,939,029	$47,901,837	0.999
June 30, 2000	$55,033,008	$55,213,973	1.003
June 30, 2001	$62,292,385	$62,292,385	1.000
June 30, 2002	$102,119,475	$102,150,543	1.000

CERS
HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1997	$14,248,503	$13,305,317	0.934
June 30, 1998	$20,783,842	$14,275,040	0.687
June 30, 1999	$23,647,419	$23,382,957	0.989
June 30, 2000	$27,991,859	$28,345,377	1.013
June 30, 2001	$32,149,432	$32,149,432	1.000
June 30, 2002	$45,721,274	$45,730,333	1.000

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

EMPLOYER CONTRIBUTIONS

SPRS
HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1997	$5,909,401	$5,125,678	0.867
June 30, 1998	$6,808,270	$5,120,037	0.752
June 30, 1999	$7,237,579	$7,251,787	1.002
June 30, 2000	$7,807,870	$7,817,613	1.001
June 30, 2001	$8,098,907	$8,113,391	1.002
June 30, 2002	$9,563,111	$9,579,899	1.001

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows.

PENSION FUNDS

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2002	June 30, 2002
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percent Closed	Level Percent Closed
Amortization Period - Each Benefit Improvement	30 years - Commencing with 1990 Valuation	30 years - Commencing with 1990 Valuation
Asset Valuation Method -	Five-year Smoothing of Investment Gains and Losses	Five-year Smoothing of Investment Gains and Losses
Postretirement Benefit Increase	1.6%	1.6%
Actuarial Assumptions:		
Investment Return	8.25%	8.25%
Projected Salary Increases	6.50%	6.50%
Inflation Rate	3.50%	3.50%

POST-EMPLOYMENT HEALTHCARE

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2002	June 30, 2002
Actuarial Cost Method	Targeted Rate	Targeted Rate
Asset Valuation Method - Started with 1996 Valuation	Five-year Smoothing of Investment Gains and Losses	Five-year Smoothing of Investment Gains and Losses
Actuarial Assumptions:		
Investment Return	8.25%	8.25%
Projected Salary Increases	6.50%	6.50%
Inflation Rate	3.50%	3.50%

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF ADMINISTRATIVE EXPENSES
For the Year Ended June 30, 2002

SUPPORTING SCHEDULE #1

Personal Services:		
Salaries and Per Diem	$7,596,287	
Fringe Benefits	1,574,458	
Tuition Assistance	35,533	
Total Personal Services		$ 9,206,278
Contractual Services:		
Actuarial	36,150	
Audit	27,500	
Legal	245,907	
Medical	139,172	
Contractual	62,071	
Miscellaneous	286,106	
Total Contractual Services		796,906
Communication:		
Printing	143,111	
Telephone	120,965	
Postage	684,694	
Travel	135,182	
Total Communication		1,083,952
Rentals:		
Office Space	512,298	
Equipment	43,071	
Total Rentals		555,369
Miscellaneous:		
Utilities	66,159	
Supplies	177,384	
Insurance	36,032	
Maintenance	449,578	
Other	45,844	
Total Miscellaneous		774,997
Capital Outlay:		
Equipment Purchases	75,974	
Total Capital Outlay		75,974
Year End Accruals:		
Investment management	451,025	
Sick Leave Expense	105,930	
Year End Accounts payable	379,089	
Total Year End Accruals		936,044
TOTAL ADMINISTRATIVE EXPENSES		$13,429,520

SUPPORTING SCHEDULE #2

Retirement Funds		
Security Lending Fees:		
Broker Rebates	$47,020,886	
Lending Agent Fees	2,965,049	
Custodial Fee	18,750	
Total Security Lending		$ 50,004,685
Contractual Services:		
Investment Management	7,154,941	
Security Custody	440,680	
Investment Consultant	130,000	
Total Contractual Services		7,725,621
Insurance Funds		
Security Lending Fees:		
Broker Rebates	3,325,556	
Lending Agent Fees	185,598	
Total Security Lending		3,511,154
Investment Management		(451,025)
TOTAL INVESTMENT EXPENSES		$ 60,790,435

Information on fees paid to investment professionals can be found in the investment section of the Comprehensive Annual Financial Report.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF PAYMENT TO CONSULTANTS
For the Year Ended June 30, 2002

SUPPORTING SCHEDULE #3

Actuarial Services	$ 36,150
Medical Review Services	139,172
Audit Services	27,500
Legal Counsel	245,907
TOTAL	$448,729

KENTUCKY RETIREMENT SYSTEMS

Investment Section

Comprehensive Annual Financial Report
June 30, 2002

INVESTMENT SECTION
PREFACE

The Board of Trustees is charged with the responsibility of investing the systems' assets to provide for the benefits of the members of the systems. To achieve that goal the Board follows a policy of preserving capital, while seeking means of enhancing revenues and protecting against undue losses in any particular investment area.

The Board recognizes its fiduciary duty not only to invest the funds in formal compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the systems. In order to maintain quality while maximizing the long range return, the Board diversifies the investment of the assets among classes of securities.

The assets are managed by the Investment Division staff and by external professional managers based on these investment policies.

Objectives

Long-Term: The total assets of the systems should achieve a return measured over two market cycles (estimated to be six to ten years) which exceeds the rate of inflation for the period, as measured by the Consumer Price Index for All Urban Consumers, by at least 4%.

Short-Term: The returns of the particular asset classes of the managed funds of the systems, measured on a year-to-year basis, should exceed the returns achieved by comparable unmanaged market indices.

In keeping with its responsibility as trustee and wherever consistent with its fiduciary responsibility, the Board encourages the investment of the systems' assets in securities of corporations which provide a positive contribution to the economy of the Commonwealth of Kentucky.

Investments Performance Review Procedures

At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. Each month the Investment Division performs tests to assure compliance with the restrictions imposed by the Investment Policy.

Investment Consulting

The Board employs Mercer Investment Consulting, Inc. to review the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from that firm follows this introduction and discusses current allocations, performance and significant changes over the fiscal year.

MERCER
Investment Consulting

10 South Wacker Drive, Suite 1700
Chicago, IL 60606-7500
312 902 7500 Fax 312 902 7626
www.mercerIC.com

12 August 2002

The Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Re: Annual Fund Review

Dear Trustees:

Mercer Investment Consulting is charged with the duty to advise the Board in its asset management activities. This is our annual review of the asset management of the Kentucky Retirement Systems. Although we recognize that the Board of Trustees is charged with the responsibility of managing the Funds in a manner consistent with the basic long term nature of the participating systems, our comments focus on the annual period ending June 30, 2002. In managing the Funds, the Board must maintain formal compliance with the Prudent Person Rule. Therefore, it seeks to maintain proper and appropriate diversification for the Fund.

Market Highlights

The past twelve months have been turbulent for investors globally. Equity markets were in decline before September 11th and were exacerbated by the terrorist attacks and further by accounting scandals. Mid Cap and Small Value stocks were the only equities in positive territory for the trailing year. The S&P 500 Index returned –18.0% over this period. Fixed Income has been a brighter spot, with all segments of the asset class posting positive returns for the past year (with the exception of high yield) as the Lehman Brothers Aggregate Index returned 3.8%.

Systems Highlights

The System's assets contracted over the trailing twelve months because of the poor investment environment for equities. According to the FundAnalytic statements from Northern Trust, The Retirement Fund's assets decreased from $11.7 billion to $10.9 billion due to a return of –4.3% and negative cash flow. The Insurance Fund increased from $1.1 billion to $1.2 billion mainly through contributions made during the year, as the Fund returned –9.3% over the trailing year.

MMC Marsh & McLennan Companies

The Total Fund return for both the Retirement and Insurance Fund's outperformed their Reference Indices over the trailing year. These results were achieved at a risk or volatility level lower than those of the Reference Indices. The Reference Indices are constructed according to the individual target asset allocations of the Funds.

As of June 30th, Domestic and International Equities were below target allocations for both the Retirement and Insurance Funds, cash was above target for both plans and Fixed Income was above target for the Retirement Fund.

The June 30th asset allocation of the Retirement and Insurance Funds are compared in the table below to their individual asset allocation targets:

	Retirement Fund		Insurance Fund	
Asset Classes	Actual Allocation 6/30/02	Target Asset Allocation	Actual Allocation 6/30/02	Target Asset Allocation
Domestic Equity	36.3	40.0	53.6	60.0
International Equity	13.1	15.0	18.6	20.0
Fixed Income	30.9	27.0	0.0	0.0
Alternatives *	5.5	5.0	9.1	5.0
TIPS	9.8	10.0	10.3	10.0
Cash	4.4	3.0	8.4	5.0

* Includes Real Estate and Private Equity.

Despite deviations from target, all the major asset classes were within the ranges set forth by the policies.

Investment Manager Highlights

The Retirement Fund

Two new international portfolios were initiated over the trailing year:

- Fidelity and Bank of Ireland began managing International portfolios during the third quarter of 2001.

The System's Domestic Core Equity manager, NAMCO returned –16.0% over the trailing year, outperforming the S&P 500 Index return of –18.0% over the same period. AllianceBernstein fell victim to the struggle faced by domestic growth equities and returned –33.5% over the trailing year as compared to the S&P Growth Index return of –18.5%.

Bank of Ireland and Fidelity do not have a year's worth of performance, but the international segment of the Fund returned –3.3% as compared to the International Equity Blended Index return of –3.8% during the second quarter of 2002.

The Weaver Barksdale portfolios mediated strong performance from Lincoln (8.9%) and NAMCO (8.3%) over the trailing year. The Weaver Barksdale Core return of 7.3% and the TIPS return of 8.3% were behind their respective indices. As a group, Fixed Income managers trailed the Fixed Income Blended Index by 30 basis points for the trailing year and returned 8.2%.

The System's Real Estate managers posted mixed results over the past year. Negative returns from Richard Ellis were more than made up for by Heitman's strong performance over the past three months. This has caused the System's Real Estate composite to yield 9.3% over the trailing year as compared to the NCREIF Classic Property Index return of 5.9%.

The Insurance Fund

One new portfolio was initiated over the trailing year:

- Fidelity began managing an International Equity portfolio during the third quarter of 2001.

The NAMCO TIPS portfolio helped curb negative equity performance over the past year and returned 9.1% compared to the LB US Tips Index return of 8.8%. Fidelity has surpassed the MSCI EAFE Index since its inception and has returned 0.5% over the past quarter, 1.4% ahead of the Index. Internally managed portfolios posted strong relative returns over the past year, while the ADR component placed downward pressure on overall performance.

Summary

The Insurance and Retirement Funds have yielded superior performance as compared to their respective benchmarks over the trailing year despite the ordeals faced by markets globally. The Systems' assets have contracted over the past twelve months due mainly to investment depreciation, however, the Insurance assets have increased as contributions offset the negative investment experience.

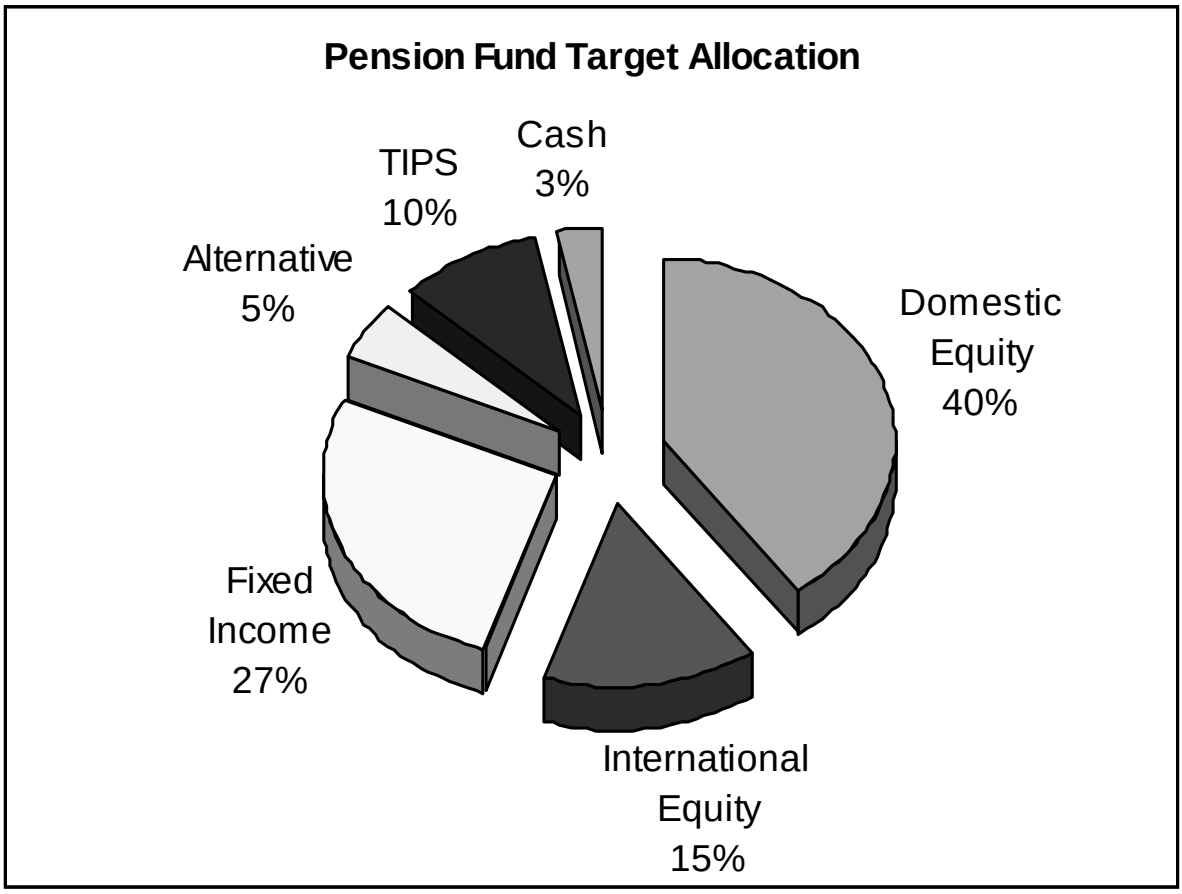
Sincerely,

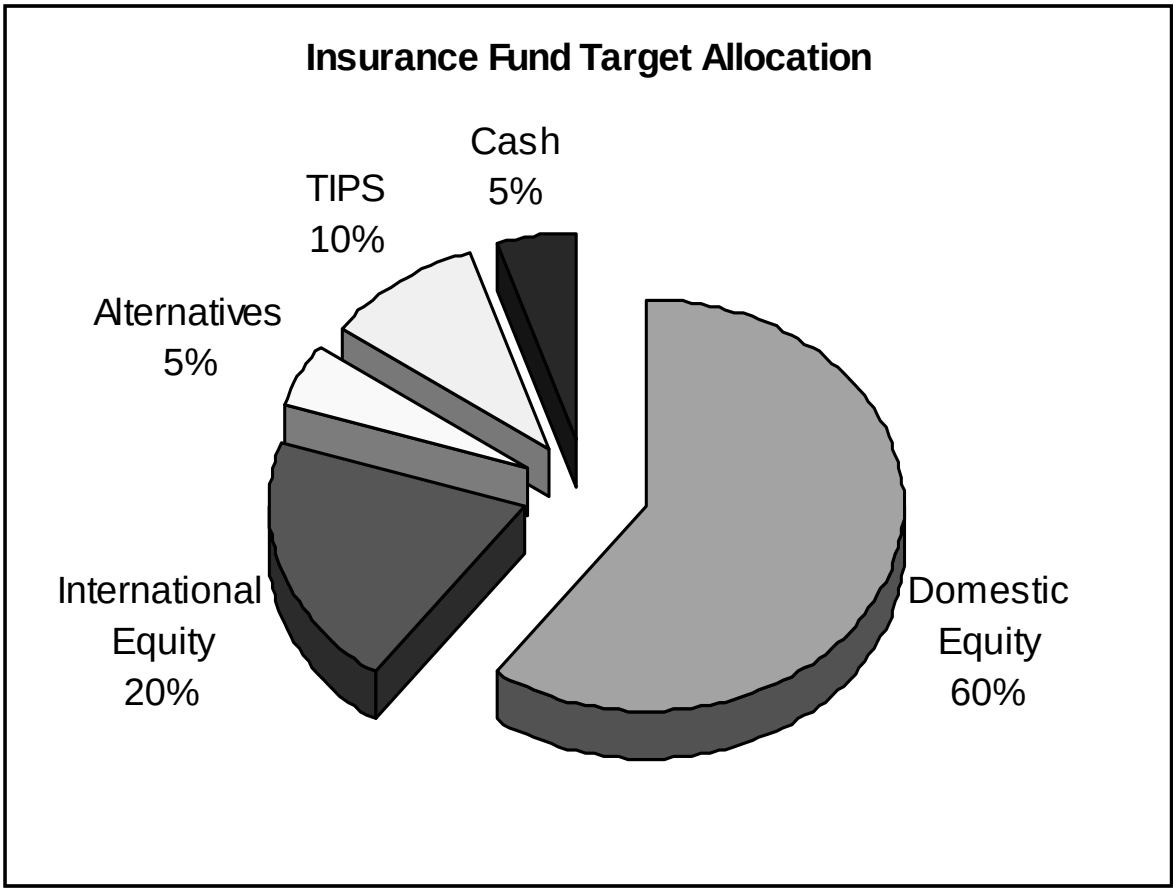
Louis Finney, Ph.D.
312- 902-7802

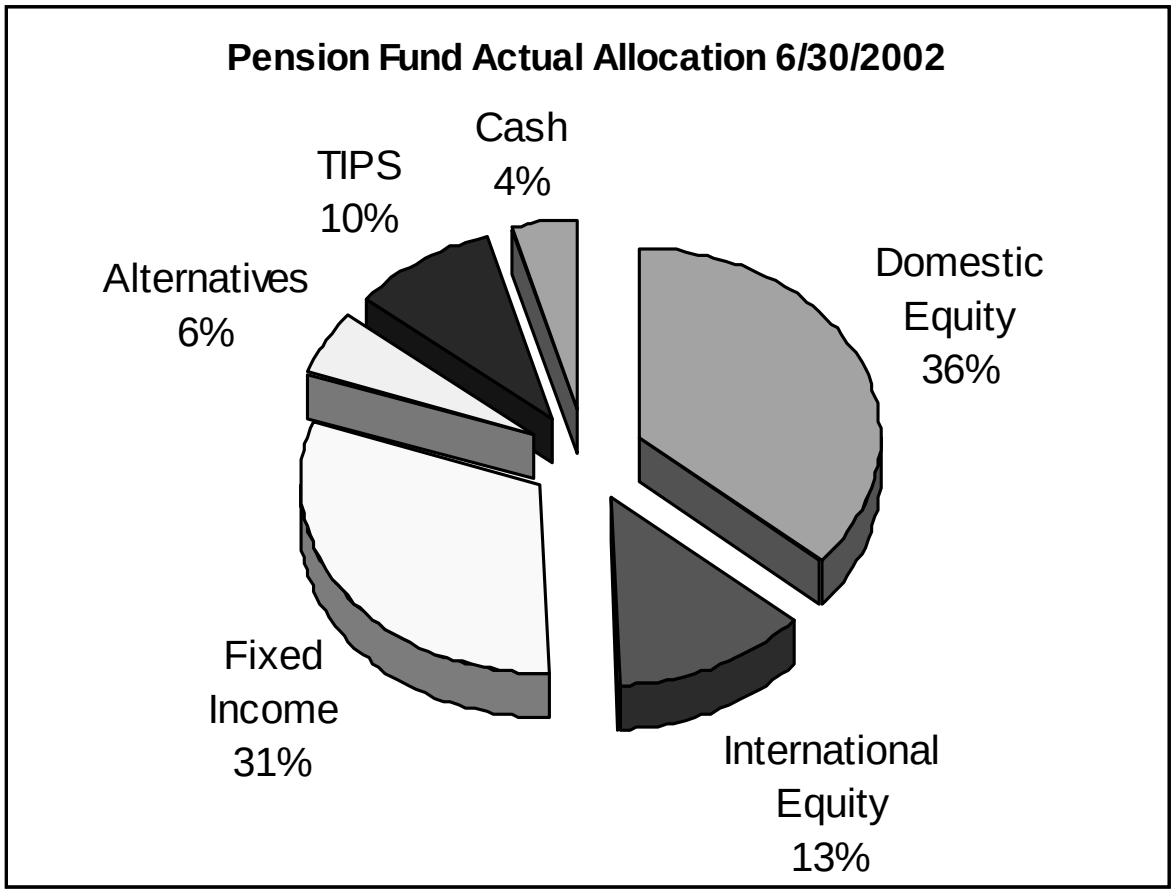
Douglas J. Kryscio
312- 902-7147

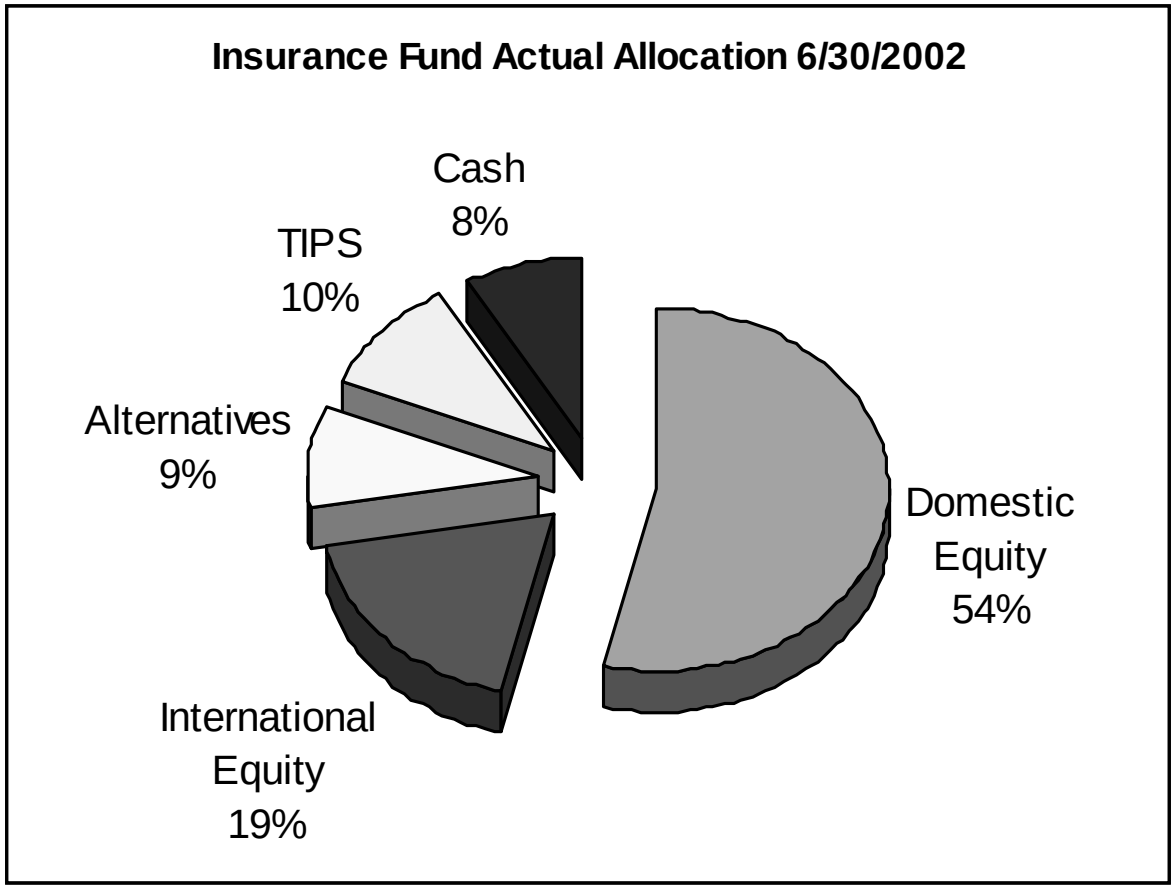
LF/DJK/dls

cc: B. Aldridge, Kentucky Retirement Systems
R. Leggett, Kentucky Retirement Systems
S. Gagel, Mercer-Louisville


Pension Fund Target Allocation
Cash
3%
TIPS
10%
Alternative
5%
Domestic
Equity
40%
Fixed
Income
27%
International
Equity
15%


Insurance Fund Target Allocation
Cash
5%
TIPS
10%
Alternatives
5%
International
Equity
20%
Domestic
Equity
60%


Pension Fund Actual Allocation 6/30/2002
Cash
4%
TIPS
10%
Alternatives
6%
Domestic
Equity
36%
Fixed
Income
31%
International
Equity
13%


Insurance Fund Actual Allocation 6/30/2002
Cash
8%
TIPS
10%
Alternatives
9%
Domestic
Equity
54%
International
Equity
19%

KENTUCKY RETIREMENT SYSTEMS
PERFORMANCE EVALUATION

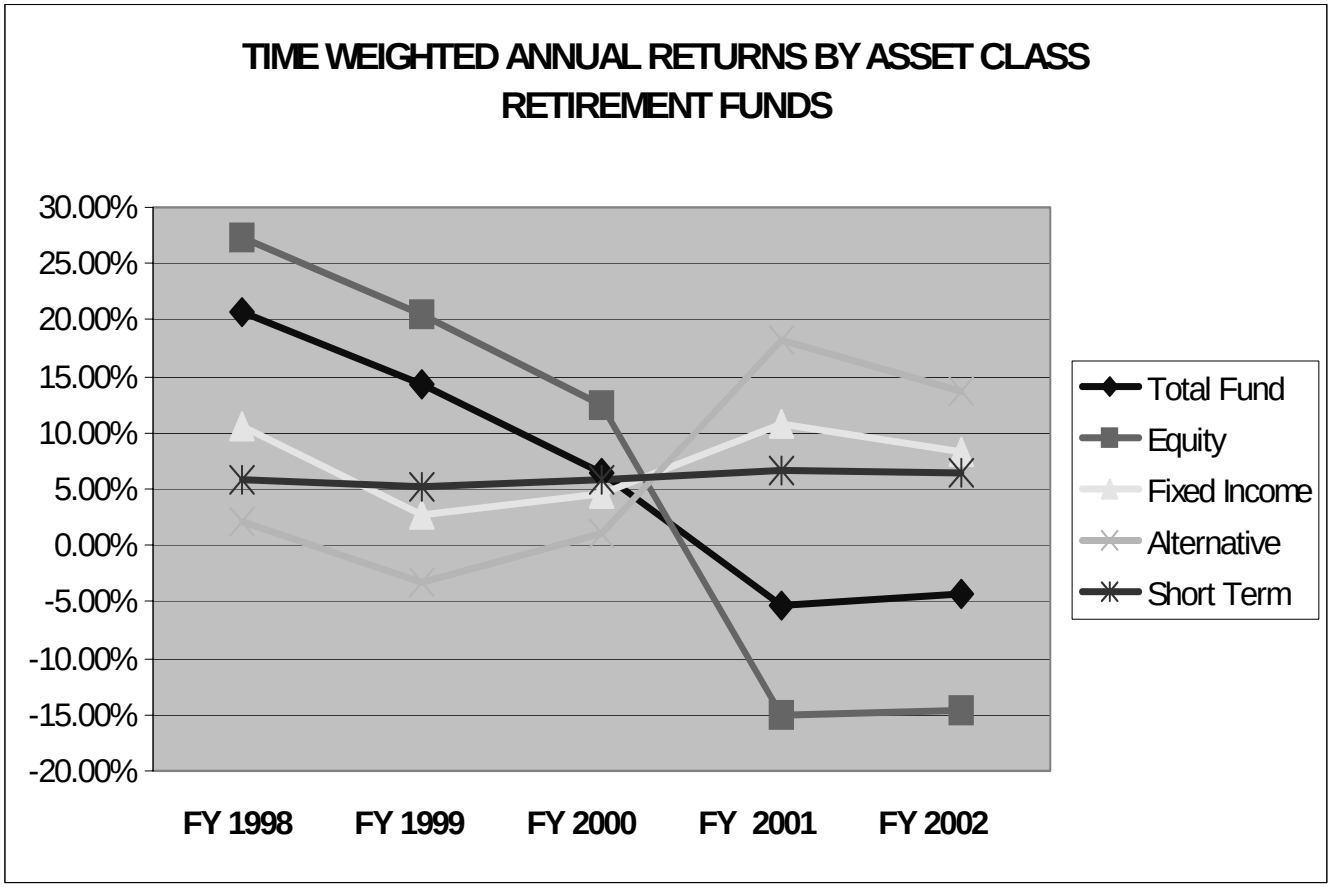
PENSION FUNDS

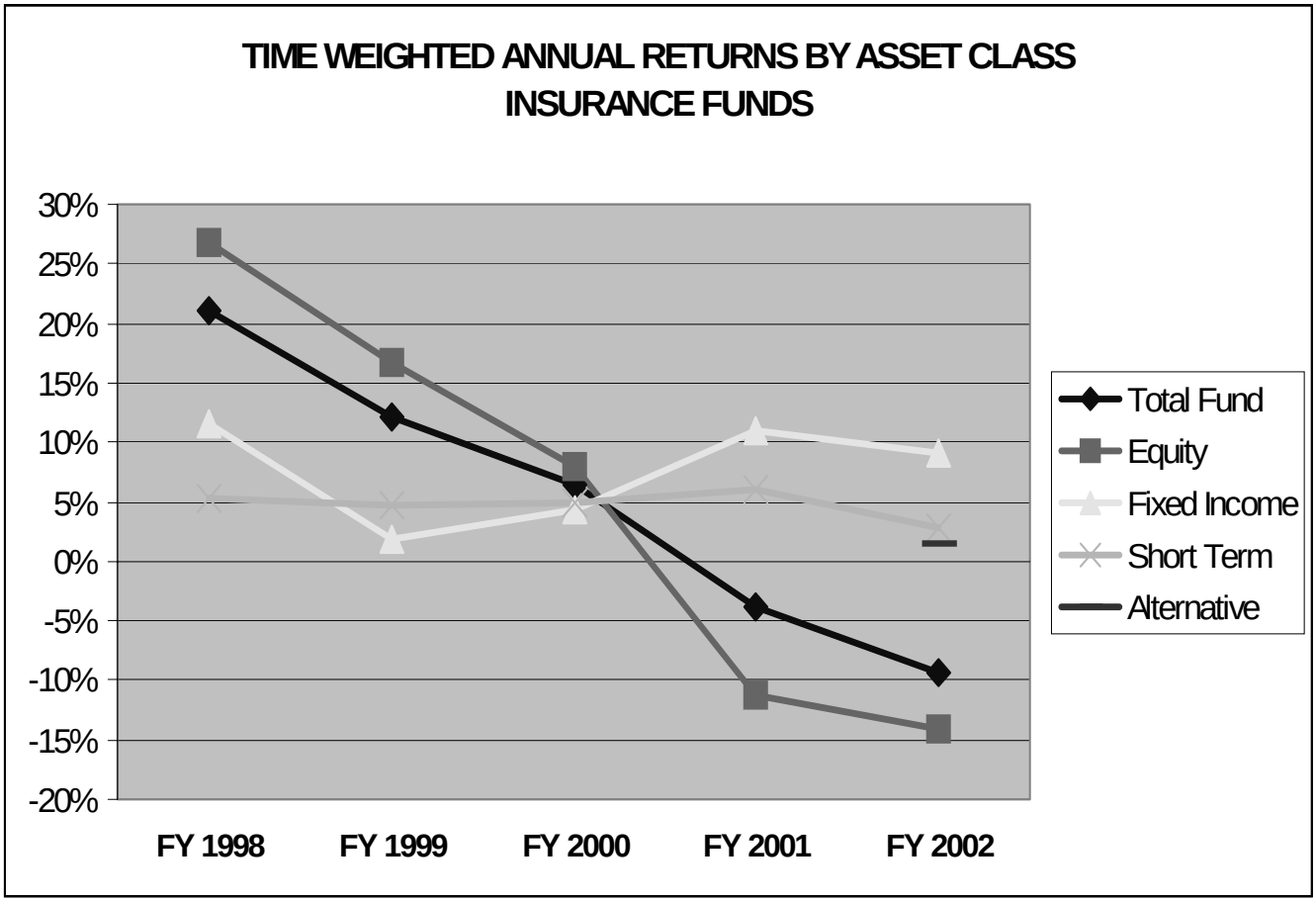
	Fiscal Year	3-Year	5-Year
Total KRS Retirement Fund	**(4.28%)**	**(1.24%)**	**5.86%**
KRS Blended Index	(5.54%)	(1.70%)	5.88%
CPI	1.48%	2.63%	2.34%
KRS Equities	**(14.70%)**	**(6.60%)**	**4.50%**
KRS Blended Index	(13.50%)	(7.80%)	3.70%
S&P 1500	(17.60%)	(8.80%)	3.00%
KRS Fixed Income	**8.22%**	**7.84%**	**7.38%**
KRS Blended Index	8.20%	7.90%	7.50%
Lehman Bros. Govt./Credit Bond Index	8.24%	7.85%	7.47%
KRS Alternate Investments	**13.70%**	**13.00%**	**14.10%**
KRS Blended Index	(12.10%)	10.10%	12.50%
KRS Cash Reserves	**6.35%**	**6.29%**	**5.99%**
Salomon Bros. 3 Month T-Bill	2.45%	4.46%	4.66%

INSURANCE FUNDS

Total KRS Insurance Fund	**(9.31%)**	**(2.45%)**	**4.72%**
KRS Blended Index	(12.37%)	(3.53%)	4.21%
CPI	1.48%	2.63%	2.34%
KRS Insurance Fund Equities	**(14.14%)**	**(6.28%)**	**3.91%**
KRS Blended Index	(15.60%)	(6.32%)	3.71%
S&P 1500	(17.60%)	(8.80%)	3.00%
KRS Insurance Fund Fixed Income	**9.12%**	**8.15%**	**7.54%**
KRS Blended Index	8.80%	8.16%	7.60%
Lehman Bros. Govt./Credit Bond Index	8.24%	7.85%	7.47%
KRS Alternate Investments	**1.53%**	N/A	N/A
KRS Blended Index	(12.13%)		
KRS Insurance Fund Cash Reserves	**2.81%**	**4.57%**	**4.73%**
Salomon Bros. 3 Month T-Bill	2.45%	4.46%	4.66%

The calculations made by the custody bank in the Performance Evaluation were prepared using a time-weighted rate of return based on the market rate of return in accordance with AIMR's performance presentation standards.


TIME WEIGHTED ANNUAL RETURNS BY ASSET CLASS
RETIREMENT FUNDS
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
-5.00%
-10.00%
-15.00%
-20.00%
FY 1998
FY 1999
FY 2000
FY 2001
FY 2002
Total Fund
Equity
Fixed Income
Alternative
Short Term


TIME WEIGHTED ANNUAL RETURNS BY ASSET CLASS
INSURANCE FUNDS
30%
25%
20%
15%
10%
5%
0%
-5%
-10%
-15%
-20%
FY 1998
FY 1999
FY 2000
FY 2001
FY 2002
Total Fund
Equity
Fixed Income
Short Term
Alternative

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARIES
JUNE 30, 2002

CLASS	KERS NONHAZARDOUS 6/30/2001 BOOK VALUE	KERS NONHAZARDOUS 6/30/2001 MARKET VALUE	KERS NONHAZARDOUS 6/30/2002 BOOK VALUE	KERS NONHAZARDOUS 6/30/2002 MARKET VALUE	% OF MKT VALUE 6/30/2002
Bonds	$1,394,064,525	$1,399,391,916	$1,655,696,978	$1,695,471,995	34%
Mortgages	253,571,947	256,644,045	288,952,763	295,890,402	6%
Short-Term	808,232,979	808,362,901	248,598,556	248,312,086	5%
Alternative	231,488,924	256,983,968	233,684,658	264,290,493	5%
Domestic Equities	2,017,405,665	2,170,476,396	1,727,868,664	1,836,522,403	37%
Int'l Equities	522,751,559	543,539,914	699,326,570	610,952,182	12%
Total Portfolio	$5,227,515,599	$5,435,399,140	$4,854,128,190	$4,951,439,561	100%

CLASS	KERS HAZARDOUS 6/30/2001 BOOK VALUE	KERS HAZARDOUS 6/30/2001 MARKET VALUE	KERS HAZARDOUS 6/30/2002 BOOK VALUE	KERS HAZARDOUS 6/30/2002 MARKET VALUE	% OF MKT VALUE 6/30/2002
Bonds	$ 71,114,723	$ 72,139,033	$ 97,076,458	$ 99,477,370	33%
Mortgages	11,938,221	12,088,847	17,039,177	17,448,664	6%
Short-Term	57,586,144	57,593,177	25,025,444	25,013,660	8%
Alternative	18,493,484	20,700,421	17,540,921	20,103,716	7%
Domestic Equities	103,635,407	106,829,146	88,802,009	95,650,025	32%
Int'l Equities	32,600,537	33,290,526	44,878,983	39,544,121	13%
Total Portfolio	$296,368,516	$302,641,150	$290,362,991	$297,237,557	100%

For these porfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARIES
JUNE 30, 2002

CLASS	CERS NONHAZARDOUS 6/30/2001 BOOK VALUE	CERS NONHAZARDOUS 6/30/2001 MARKET VALUE	CERS NONHAZARDOUS 6/30/2002 BOOK VALUE	CERS NONHAZARDOUS 6/30/2002 MARKET VALUE	% OF MKT VALUE 6/30/2002
Bonds	$1,079,737,947	$ 1,081,551,116	$1,357,524,235	$1,389,803,226	34%
Mortgages	187,018,218	189,332,391	236,988,210	242,676,529	6%
Short-Term	750,835,711	750,938,933	221,102,196	220,811,905	5%
Alternative	193,319,765	216,189,972	190,774,472	217,511,238	5%
Domestic Equities	1,573,153,720	1,681,192,579	1,366,334,749	1,454,440,727	36%
Int'l Equities	420,451,707	435,467,221	630,731,420	556,996,550	14%
Total Portfolio	$4,204,517,068	$4,354,672,212	$4,003,455,283	$4,082,240,175	100%

CLASS	CERS HAZARDOUS 6/30/2001 BOOK VALUE	CERS HAZARDOUS 6/30/2001 MARKET VALUE	CERS HAZARDOUS 6/30/2002 BOOK VALUE	CERS HAZARDOUS 6/30/2002 MARKET VALUE	% OF MKT VALUE 6/30/2002
Bonds	$ 292,898,364	$ 293,187,001	$ 372,939,799	$ 381,820,100	34%
Mortgages	49,916,145	50,538,244	65,447,544	67,018,948	6%
Short-Term	203,849,653	203,877,881	63,380,898	63,305,223	6%
Alternative	57,607,552	64,546,903	55,688,648	63,547,845	6%
Domestic Equities	439,009,787	465,498,466	377,645,550	401,695,881	36%
Int'l Equities	115,920,167	119,738,722	169,672,542	149,322,781	13%
Total Portfolio	$1,159,201,668	$1,197,387,217	$1,104,774,981	$1,126,710,777	100%

For these porfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARIES
JUNE 30, 2002

CLASS	SPRS 6/30/2001 BOOK VALUE	SPRS 6/30/2001 MARKET VALUE	SPRS 6/30/2002 BOOK VALUE	SPRS 6/30/2002 MARKET VALUE	% OF MKT VALUE 6/30/2002
Bonds	$ 93,279,304	$ 93,577,155	$ 111,429,852	$ 114,102,622	35%
Mortgages	16,856,293	17,061,141	19,028,354	19,484,961	6%
Short-Term	46,150,440	46,159,174	19,119,472	19,109,110	6%
Alternative	17,089,990	18,893,323	16,430,587	18,498,935	6%
Domestic Equities	136,245,011	150,360,496	110,503,695	118,712,335	36%
Int'l Equities	34,402,338	36,227,921	41,563,007	35,740,738	11%
Total Portfolio	$344,023,376	362,279,210	$318,074,967	$325,648,702	100%

CLASS	INSURANCE FUND 6/30/2001 BOOK VALUE	INSURANCE FUND 6/30/2001 MARKET VALUE	INSURANCE FUND 6/30/2002 BOOK VALUE	INSURANCE FUND 6/30/2002 MARKET VALUE	% OF MKT VALUE 6/30/2002
Bonds	$105,507,370	$104,511,548	$114,752,500	$ 119,766,192	10%
Mortgages	6,629,726	6,595,407	0	0	0%
Short-Term	207,200,485	207,200,484	166,641,837	166,948,096	14%
Alternative	0	0	45,048,991	44,419,406	4%
Domestic Equities	543,986,199	601,641,151	624,558,167	620,216,949	53%
Int'l Equities	129,002,404	137,463,582	236,828,692	216,626,367	19%
Total Portfolio	$992,326,184	$1,057,412,172	$1,187,830,188	$1,167,977,011	100%

For these porfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

List of Largest Assets Held

PENSION FUND

Largest Stock Holdings
(By Market Value)
June 30, 2002

Rank	Shares	Stock	Market Value
1	3,689,618	GENERAL ELECTRIC CO	$107,183,402.90
2	1,885,290	MICROSOFT CORP	$103,125,363.00
3	2,603,070	PFIZER INC	$ 91,107,450.00
4	1,491,860	WAL MART	$ 82,067,218.60
5	1,976,694	EXXON MOBIL CORP	$ 80,886,318.48
6	2,018,576	CITIGROUP INC	$ 78,219,820.00
7	1,061,047	AMERICAN INTERNATIONAL	$ 72,395,236.81
8	1,286,234	JOHNSON & JOHNSON	$ 67,218,588.84
9	3,859,120	CISCO SYSTEMS INC	$ 53,834,724.00
10	1,406,740	HOME DEPOT INC	$ 51,669,560.20

Largest Bond Holdings
(By Market Value)
June 30, 2002

Rank	Par	Bond	Market Value
1	$143,000,000	U S TSY BDS INFL INDEX 3.875 DUE 04/15/29	$176,244,858.79
2	$130,000,000	U S TSY BDS INFL INDEX 3.625 DUE 04/15/28	$156,035,152.00
3	$130,000,000	U S TSY NTS INFL INDEX 3.625 DUE 01/15/08	$151,424,988.00
4	$120,000,000	U S TSY NTS INFL INDEX 3.375 DUE 01/15/07	$141,508,123.20
5	$120,000,000	U S TSY BDS INFL INDEX 3.875 DUE 01/15/09	$139,623,394.80
6	$113,650,000	U S TSY BDS WI TSY SEC 3.875 DUE 01/15/09	$111,288,353.00
7	$ 90,000,000	U S TSY NTS INFL INDEX 4.54189 DUE 01/15/10	$104,328,052.20
8	$ 98,607,000	U S TSY NTS 4.625 DUE 05/15/06 Rating AAA	$101,556,335.37
9	$ 90,000,000	U S TSY NTS INFL INDEX 3.61574 DUE 01/15/11	$ 96,176,443.50
10	$ 71,800,000	U S TSY NTS 6.625 DUE 05/15/07 Rating AAA	$ 79,827,240.00

A complete list of portfolio holdings is available upon request.

List of Largest Assets Held

INSURANCE FUND

Largest Stock Holdings
(By Market Value)
June 30, 2002

Rank	Shares	Stock	Market Value
1	280,400	MICROSOFT CORP	$15,337,880.00
2	514,500	GENERAL ELECTRIC CO	$14,946,225.00
3	357,000	EXXON MOBIL CORP	$14,608,440.00
4	222,000	WAL MART STORES INC	$12,212,220.00
5	313,600	PFIZER INC	$10,976,000.00
6	266,400	CITIGROUP INC	$10,323,000.00
7	135,284	AMER INTL GROUP	$ 9,230,427.32
8	158,888	JOHNSON & JOHNSON	$ 8,303,486.88
9	134,100	ROYAL DUTCH PETRO	$ 7,411,707.00
10	123,600	COCA COLA CO	$ 6,921,600.00

Largest Bond Holdings
(By Market Value)
June 30, 2002

Rank	Par	Bond	Market Value
1	$18,400,000	US TSY INFLATION INDEX 3.625 DUE 04/15/28	$22,084,975.36
2	$16,650,000	US TSY INFLATION INDEX 4.55189 DUE 01/15/10	$19,300,689.65
3	$15,600,000	US TSY INFLATION INDEX 3.875 DUE 04/15/29	$19,226,711.86
4	$16,100,000	US TSY INFLATION INDEX 3.375 DUE 01/15/07	$18,985,673.19
5	$13,700,000	US TSY INFLATION INDEX 3.625 DUE 01/15/08	$15,957,864.12
6	$12,300,000	US TSY INFLATION INDEX 3.875 DUE 01/15/09	$14,311,397.96
7	$ 5,000,000	US TSY INFLATION INDEX 3.375 DUE 01/15/12	$ 5,189,816.35
8	$ 3,100,000	US TSY INFLATION INDEX 3.375 DUE 04/15/32	$ 3,319,848.28
9	$ 1,300,000	US TSY INFLATION INDEX 3.61574 DUE 01/15/11	$ 1,389,215.29

A complete list of portfolio holdings is available upon request.

Schedule of Fees and Commissions
Year Ended June 30, 2002

External Investment Manager Fees –	
– Equities and Fixed Income	
Pension Funds	$6,703,917
Insurance Funds	451,025
Investment Consulting Fees	221,764
Security Lending Agent Fees	3,149,484
Brokerage Commissions — Equities	4,420,632
Total	$14,946,822

Total fees and commissions represent .125% of the fair value of the combined Pension and Insurance Fund portfolios.

INVESTMENT MANAGERS

Alliance Capital Management

C. B. Richard Ellis

Heitman Capital Management Corp.

Weaver C. Barksdale & Associates, Inc.

Lend Lease

J.W. Childs Associates L.P.

Lincoln Capital Management Co.

Invesco-National Asset Management Corp.

Northern Trust Quantitative Advisors, Inc.

Bank of Ireland Asset Management

Fidelity Management Trust Company

KENTUCKY RETIREMENT SYSTEMS

Actuarial Section

Comprehensive Annual Financial Report
June 30, 2002

MERCER
Human Resource Consulting

462 South Fourth Street, Suite 1500
Louisville, KY 40202-3415
502 561 4500 Fax 502 561 4747
www.mercerHR.com

November 8, 2002

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Members of the Board:

The forty-sixth annual actuarial valuation of the Kentucky Employees Retirement System, the forty-third annual actuarial valuation of the County Employees Retirement System, and the forty-fourth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. The following comments are pertinent to the results of this valuation:

1. The funding objectives for the plan remain unchanged from the prior year's valuation. Relative to the retirement fund, a contribution rate has been established which consists of the normal cost and amortization payment on the unfunded actuarial accrued liability. The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any unfunded actuarial accrued liability is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Each year any actuarial gains or losses, along with any other changes in the accrued liability (such as retiree COLA's, other benefit improvements, changes in actuarial assumptions, etc.) are established as a new amortization base to be amortized over the following 30 years.

Overall, the total funding for the retirement fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. In particular, the current valuation funding rate does not anticipate any future cost of living increases to benefit recipients. Should these cost of living increases occur in the future, the funding rate for the retirement fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the ultimate target funding is to reach the full amount of the entry age funding level including 30-year level percent of payroll amortization of the unfunded actuarial accrued liability. However, current insurance funding levels are less than this ultimate target rate, and will be systematically increased over the 20-year period beginning with 1997 until the target funding rate is reached. As such, the insurance funding rate is expected to increase over the next 20 years.

The administrative expenses are also included as part of the total funding amount. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

To the extent that actual experience deviates from expected, an amortization base will be established and amortized over 30 years as a level percentage of payroll.

2. The progress towards achieving the intended funding objectives, both relative to the retirement and insurance funds, can be measured by the relationship of valuation assets of each fund to the accrued liabilities. The funded level for the retirement fund exceeds 100% in the 2002 valuation for all three systems (KERS, CERS and SPRS). This funded level will fluctuate over time with experience deviations, but should remain at or near the 100% funding level in the absence of material retirement benefit improvements. Since 1992, all three systems have had a funded level relative to the retirement fund of at least 90% in all valuations, with this funded level moving above 100% in recent years.

Relative to the insurance fund, the funded level is not anywhere near 100% at this time, and the funding objective is to increase this funded level consistently over future years. Since 1990, the funded level relative to the insurance fund has improved in each succeeding valuation for all three systems with the exception of 2001. This increasing trend in the funded level is the primary objective of the current funding policy.

3. Valuations of each system are prepared annually, with the most recent such valuation being as of June 30, 2002.

4. In completing the valuation of these systems, we have relied on employee data as provided by Kentucky Retirement Systems, as well as financial data provided by the plan's auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data, nor has there been any reconciliation of data used in the prior year's valuation with this current valuation data.

5. I have prepared none of the supporting schedules included with this filing. However, based on a brief review of these schedules, the information included on them appears consistent with the information provided in our actuarial valuation report.

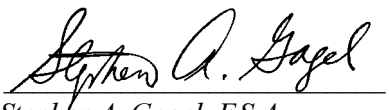
6. Any schedules of trend data over the past ten years or less have been based on valuation reports fully prepared by William M. Mercer, with the undersigned having served as actuary in the preparation of each of these valuations.

7. The actuarial assumptions and methods used for the funding calculations of the valuation meet the parameters set for disclosure under GASB Statement No. 25. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary.

8. The information presented in items 1 through 7 of this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

The three Retirement Systems are actuarially sound based on the continuation of current funding policies adopted by the Board. Adequate provision is being made for the funding of the Actuarial Accrued Liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes, as appropriate funding rates have been established by the Board for this purpose.

Respectfully Submitted,
MERCER HUMAN RESOURCE CONSULTING

By 

Stephen A. Gagel, F.S.A.

SUMMARY OF BENEFIT PROVISIONS

Normal Retirement Eligibility

The age a participant becomes eligible for an unreduced age or service annuity is:

NonHazardous Classification		Hazardous Classification	
Age	Service	Age	Service
65	**1 Month** (benefit based on account balance)	55	**1 Month** (benefit based on account balance)
	48 Months (benefit based on service & salary)		**5 Years** (benefit based on service & salary)
Any	27 Years	Any	20 Years

Normal Retirement Annuity

The annuity payable at Normal Retirement Age is based on Final Compensation (FC) and Creditable Service (CS) as follows:

Formula	Group
1.97% x FC x CS	Kentucky Employees Retirement NonHazardous Participants
2.00% x FC x CS	Kentucky Employees Retirement NonHazardous Participants who were employed January 1998 through January 1999.
2.20% x FC x CS	Kentucky Employees Retirement NonHazardous Participants who were employed January 1998 through January 1999 and who retire between February 1999 and January 2009 with 20 or more years of service.
2.20% x FC x CS	County Employees Retirement NonHazardous Participants
2.49% x FC x CS	Kentucky Employees Retirement Hazardous Duty Participants
2.50% x FC x CS	County Employees and State Police Hazardous Duty Participants

FC for NonHazardous Participants is the average of the highest five fiscal years (July 1 – June 30) of earnings. These years do not have to be consecutive, but there must be a minimum of 48 months of earnings. Exception: for NonHazardous Participants who retire no later than January 1, 2009 with at least 27 years and whose age and years of service total at least 75, the three highest fiscal years of earnings will be used, but there must be a minimum of 24 months. FC for Hazardous Duty Participants is the average of the three highest fiscal years of earnings. For FC based on the three highest fiscal years, the years do not have to be consecutive, but there must be a minimum of 24 months of earnings.

Early Retirement

A NonHazardous participant may elect early retirement if the participant is age 55 or older and has at least 60 months of service credit.

Under early retirement the benefit is calculated the same as under normal retirement, except that benefits are reduced depending on the participant's age or years of service.

The following chart shows reductions for age or service. The retirement office reduces benefits by the lesser of the number of years to reach age 65 or to attain 27 years service.

	Years to Attain Age 65 or 27 Years Service									
	1	2	3	4	5	6	7	8	9	10
% of	95%	90%	85%	80%	75%	71%	67%	63%	59%	55% Benefit

A NonHazardous participant under age 55 may also choose early retirement if the member has at least 25 years of service. The benefits are calculated the same as for normal retirement and are reduced 5% for each year of service credit less than 27.

State Police or hazardous participants of the County Employees or Kentucky Employees Retirement Systems may retire before age 55 if the member is at least age 50 and has at least 15 years of service credit.

Under early retirement, the benefit is calculated the same as under normal retirement, except that the benefits are reduced depending on the member's age or years of service. The following chart shows reductions for age or service. The retirement office reduces benefits by the lesser of the number of years to reach age 55 or to attain 20 years service.

	Years to Attain Age 55 or 20 Years Service				
	1	2	3	4	5
% of Benefit	94.5%	89.0%	83.5%	78.0%	72.5%

Voluntary Termination Before Immediate Benefit Eligibility

Participant may either (1) receive a refund of accumulated contributions and interest credited thereon, or (2) if vested, leave contributions on deposit and apply for a retirement annuity on or after the minimum retirement age based upon accrued service at the time of termination. Vesting requirements are included in each benefit described herein.

Disability Benefits

A NonHazardous employee who is not eligible for an unreduced benefit may retire based on disability. If the condition for disability (1) did not exist before the employee was employed, or (2) the disability is expected to last at least 12 months or result in death, and (3) the objective medical evidence is sufficient to prove the disability prevents the employee from performing his job or a job of similar duties, the employee will be deemed disabled. The employee must have at least 60 months of service, 12 of which are current service and must apply within 24 months of the last day of paid employment in a regular full-time position. Preexisting conditions can be considered if the employee has credit for 16 years of service with participating employers, or may be considered with less than 16 years credit if the disability is substantially aggravated by the job. Benefits are calculated the same as for normal retirement except that additional years of service may be added to the employees account, depending on the employee's age and years of service.

A hazardous duty employee who is not eligible for an unreduced benefit may retire based on disability. If the condition for disability: (1) did not exist before the employee was employed; or (2) the disability is expected to last at least 12 months or result in death; and (3) the objective medical evidence is sufficient to prove the employee is totally incapable of working in a hazardous position, but may still be capable of performing other types of work, the employee will be deemed disabled. The employee must have at least 60 months of service, 12 of which are current service and must apply within 24 months of the last day of paid employment in a regular full-time position. Preexisting conditions can be considered if the employee has credit for 16 years of service with participating employers, or may be considered with less than 16 years credit if the disability is substantially aggravated by the job. Benefits are calculated the same as for normal retirement except that additional years of service may be added to the employees account, depending on the employee's age and years of service.

For both hazardous and nonhazardous members, if the disability is TOTAL and PERMANENT or results from an act IN LINE OF DUTY or a DUTY RELATED INJURY, the employee is eligible for a monthly benefit of no less than 25% of the employee's monthly Final Rate of Pay. The requirement of 60 months service credit will be waived. In addition, each dependent child of such employee is eligible for a monthly benefit equal to 10% of the employee's monthly Final Rate of Pay. Aggregate dependent monthly payments cannot exceed 40 % of the employee's monthly Final Rate of Pay.

Death Before Retirement

If a general employee is employed with a participating agency at the time of death and has at least 60 months service credit 12 of which are current service, the beneficiary is eligible for monthly benefits. If the member is not working for a participating agency, but at the time of death has an account with at least 144 months service credit 12 of which are current service, the beneficiary is eligible for monthly benefits. The beneficiary of a member is also eligible if the member is 65 years old at the time of death and has 48 months service credit 12 of which are current

service. Special death benefits may be offered if the employee dies because of a duty related injury. If the named beneficiary is an individual, the beneficiary will have the option of a lifetime monthly benefit. In addition, the beneficiary, as well as multiple beneficiaries, an estate, or trust will be offered: (1) a lump sum actuarial refund, (2) monthly benefit for five years, or (3) monthly benefit for ten years.

Death benefits for hazardous duty employees whose death is not in the line of duty is similar to that of general employees. However, hazardous employees of Kentucky Employees, County Employees, and State Police Retirement Systems are eligible for death in line of duty benefits beginning the first day of employment. If the employee dies in the line of duty and the beneficiary is the employee's spouse, the beneficiary may elect a lump sum payment of $10,000 and a monthly benefit equal to 25% of the employee's Final Rate of Pay. If the beneficiary is a dependent receiving at least 50% of his or her support from the employee, the beneficiary may elect a lump sum payment of $10,000. The beneficiary may elect this option or may choose from the benefit options offered under death not in the line of duty. Each dependent child will receive a monthly benefit equal to 10% of the employee's Final Rate of Pay. Aggregate dependent payments cannot exceed 40% of the employee's monthly Final Rate of Pay.

Post Retirement Adjustments

Annuities are increased July 1 each year by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent. The Kentucky General Assembly reserves the right to suspend or reduce benefit increases if in their judgment the welfare of the State so demands.

Death After Retirement

If the member is receiving a monthly payment based on at least 48 months service credit, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Hospital and Medical Insurance Benefit

The retirement system provides group rates for medical insurance and, where available, health maintenance organization (HMO) and other managed care coverage for retirees. In addition, the member may pay the cost to obtain coverage for a spouse and dependents at group rates. Participation in the insurance program is optional.

Depending on the member's years of retirement service, the retirement system may pay a portion of the member's monthly premium for medical coverage. If coverage is for the member only, the system pays the same portion of the monthly contribution rate for both NonHazardous and hazardous duty members. For hazardous duty members with a spouse the system will pay a portion of the monthly contribution rate for two-person coverage. For hazardous duty members with a spouse and dependent, the system will pay a portion of the monthly contribution rate for family coverage based on the member's hazardous duty service. Members may obtain enhanced coverage by paying an additional amount.

Percent of Monthly Contribution Paid by Retirement System

Years of Service	Percent Paid
Less than 4 years	*0%*
4 to 9 years	25%
10 to 14 years	50%
15 to 19 years	75%
20 or more years	100%

If a hazardous duty member becomes disabled in the line of duty, the retirement system will pay 100% of the monthly contribution rate for the member, spouse, and dependents. If a hazardous duty member dies in the line of duty, the retirement system will pay 100% of the monthly contribution rate for the beneficiary and dependent children.

Interest Credits
Member accounts have been credited with interest on July 1 each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; and 4% thereafter.

Contribution Rates
Employer contribution rates are determined by the entry age normal cost funding method. Actuarial gains and losses reduce or increase the unfunded liability. For years beginning with the 1990 valuation, actuarial gains and losses have been amortized over a period of thirty years using the level percent of payroll method as required by state statute.

Statutory required participant contributions are 5% of creditable compensation for NonHazardous employees, 8% of creditable compensation for hazardous employees.

A *SUMMARY PLAN DESCRIPTION* WHICH GIVES A MORE DETAILED DESCRIPTION OF PLAN PROVISIONS IS AVAILABLE UPON REQUEST.

THIS INFORMATION CAN ALSO BE FOUND IN KENTUCKY RETIREMENT SYSTEMS' HOME PAGE ON THE INTERNET AT http://www.kyret.com

Summary of Actuarial Assumptions and Methods

1. The investment return rate used in making the valuations was 8.25% per year, net of investment related expenses, compounded annually. Adopted 2001.

2. The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:

    a. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.

    b. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.

    c. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.

    d. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.

    e. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

3. The percentage of participants assumed to retire at sample ages is shown in Schedule 1. Adopted 2001.

4. The mortality table used for active and retired lives was the 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees. Mortality assumptions for disabled lives are based on Social Security Administration Disability Mortality Rates – Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security). Sample annual rates of mortality are shown in Schedule 2. Adopted 2001.

5. Select rates of termination before retirement are shown in Schedule 3. Adopted 2001.

6. Annual pay per member is assumed to increase 12% in the first year, 10% in the second year, 8% in the third year and 6.50% per year thereafter, compounded annually, which is based on experience rather than the effects of inflation. Adopted 2001.

7. Kentucky Revised Statutes require use of the entry age normal cost funding method to determine the actuarial accrued liability. Actuarial gains and losses reduce or increase the unfunded liability. For years beginning with the 1990 valuation, actuarial gains and losses have been amortized over a period of thirty years using the level percent of payroll method as required by state statute.

8. With respect to cost-of-living adjustments, effective August 1, 1996, and on July 1 of each year thereafter, state statutes require retirement benefits to be increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent. The State Legislature reserved the right to suspend or reduce cost-of-living adjustments if in their judgment the welfare of the Commonwealth so demands.

9. The most recent actuarial experience analysis was performed for the period from July 1, 1995 through June 30, 2000. All assumptions used in the most recent actuarial valuation were based on the study performed in 2001.

Assumptions used in determining the actuarial accrued liability for postemployment healthcare benefits are shown in Schedule 4. Adopted 2001.

Schedule 1

Percentage of Participants Assumed to Retire at Sample Ages

Age	55-57	58-59	60-61	62	63-64	65	66-67	68	69	70 & Over
Percent Retiring	4%	5%	6%	25%	10%	50%	20%	25%	40%	100%

At age 55-64 in lieu of age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits with 27 years service credit.

For hazardous duty participants of the Kentucky Employees Retirement System it is assumed that 50% will retire as soon as eligible for unreduced benefits with 20 years service credit and the balance will continue to age 60.

For hazardous duty participants of the County Employees Retirement System it is assumed that 60% will retire as soon as eligible for unreduced benefits with 20 years service credit and the balance will continue to age 55.

For participants of the State Police Retirement System it is assumed that 60% will retire as soon as eligible for unreduced benefits with 20 years service credit and the balance will continue to age 55.

Schedule 2

Sample Annual Rates of Mortality

	Active Mortality*		Disabled Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

*Plus 0.05% duty death rate prior to retirement for hazardous duty participants.

Schedule 3

Select Rates of Termination Prior to Retirement

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

		Termination		Disablement	
Sample Ages	Years of Service	General Employees	Hazardous Employees	General Employees	Hazardous Employees
	1	35.00%	30.00%	**	**
	2	10.00%	8.00%	**	**
	3	7.00%	4.00%	**	**
	4	5.00%	4.00%	**	**
	5	4.00%	4.00%	**	**
25	Over 5	2.40%	3.04%	0.033%	0.042%
30		2.40%	3.38%	0.039%	0.050%
40		2.00%	1.50%	0.105%	0.132%
50		1.60%	0.00%	0.423%	0.530%
55		1.20%	0.00%	0.794%	0.992%
60		0.20%	0.00%	1.395%	1.743%

**Same as age-based rates for over five years of service.

COUNTY EMPLOYEES RETIREMENT SYSTEM

		Termination		Disablement	
Sample Ages	Years of Service	General Employees	Hazardous Employees	General Employees	Hazardous Employees
	1	35.00%	**	**	**
	2	10.00%	**	**	**
	3	7.00%	**	**	**
	4	5.00%	**	**	**
	5	4.00%	**	**	**
25	Over 5	2.40%	3.04%	0.033%	0.042%
30		2.40%	3.38%	0.039%	0.050%
40		2.00%	1.50%	0.105%	0.132%
50		1.60%	0.00%	0.423%	0.530%
55		1.20%	0.00%	0.794%	0.992%
60		0.20%	0.00%	1.395%	1.743%

**Same as age-based rates for over five years of service.

STATE POLICE RETIREMENT SYSTEM

		Termination	Disablement
Sample Ages	Years of Service	Employees	Employees
	1	**	**
	2	**	**
	3	**	**
	4	**	**
	5	**	**
25	Over 5	1.82%	0.042%
30		2.03%	0.050%
40		0.90%	0.132%
50		0.00%	0.530%
55		0.00%	0.992%
60		0.00%	1.743%

**Same as age-based rates for over five years of service.

Schedule 4

Assumed Medical Premium Growth

Years	2001 – 2002	2003 – 2005	2006 – 2010	2011 -- 2015	2016 -- 2020	Thereafter
Increase Per Year	12%	10%	9%	8%	7.5%	7%

SUMMARY OF MEMBER VALUATION DATA

Kentucky Employees Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1997	46,073	$1,208,230,632	$26,224	4.4%
6/30/1998	46,342	$1,272,316,548	$27,455	4.7%
6/30/1999	45,824	$1,330,937,460	$29,046	5.8%
6/30/2000	46,897	$1,432,316,220	$30,542	5.2%
6/30/2001	47,780	$1,525,188,532	$31,921	4.5%
6/30/2002	48,555	$1,597,447,963	$32,900	3.1%

Kentucky (Hazardous) Employees Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1997	3,532	$ 84,231,840	$23,848	3.5%
6/30/1998	3,582	$ 88,891,680	$24,816	4.1%
6/30/1999	3,889	$103,970,148	$26,734	7.7%
6/30/2000	4,007	$115,135,008	$28,733	7.5%
6/30/2001	4,228	$123,647,407	$29,245	1.8%
6/30/2002	4,211	$125,371,604	$29,772	1.8%

County Employees Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1997	69,219	$1,281,975,348	$18,521	8.9%
6/30/1998	71,426	$1,341,570,672	$18,783	1.4%
6/30/1999	74,151	$1,449,817,548	$19,552	4.1%
6/30/2000	77,419	$1,575,632,580	$20,352	4.1%
6/30/2001	78,773	$1,597,653,320	$20,282	-0.3%
6/30/2002	79,850	$1,688,460,789	$21,145	4.3%

County (Hazardous) Employees Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1997	6,513	$210,180,588	$32,271	2.7%
6/30/1998	6,800	$227,851,248	$33,508	3.8%
6/30/1999	7,488	$260,279,940	$34,760	3.7%
6/30/2000	7,951	$291,062,928	$36,607	5.3%
6/30/2001	8,586	$322,819,064	$37,598	2.7%
6/30/2002	8,949	$346,319,146	$38,699	2.9%

State Police Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1997	943	$34,948,092	$37,061	14.0%
6/30/1998	954	$35,865,072	$37,594	1.4%
6/30/1999	985	$40,548,636	$41,166	9.5%
6/30/2000	1,023	$43,596,396	$42,616	3.5%
6/30/2001	1,016	$44,209,944	$43,514	2.1%
6/30/2002	1,002	$43,961,844	$43,874	0.8%

All Participants

Schedule of Active Member Valuation Data

Valuation Date	Participating Employers	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1997	1,412	126,280	$2,819,566,500	$22,328	5.8%
6/30/1998	1,841	129,104	$2,966,495,220	$22,978	2.9%
6/30/1999	1,531	132,337	$3,185,553,732	$24,072	4.8%
6/30/2000	1,610	137,297	$3,457,743,132	$25,184	4.6%
6/30/2001	1,706	140,383	$3,613,518,267	$25,740	2.2%
6/30/2002	1,727	142,567	$3,801,561,346	$26,665	3.4%

SUMMARY OF ACCRUED AND UNFUNDED LIABILITIES

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1997	$3,603,966	($ 246,746)	(6.9%)	$3,850,712	$ 475,416
6/30/1998	$3,971,749	($ 596,537)	(15%)	$4,568,287	$ 717,575
6/30/1999	$4,531,905	($ 992,274)	(21.9%)	$5,524,179	$ 955,892
6/30/2000	$5,120,191	($2,022,698)	(39.5%)	$7,142,889	$1,618,710
6/30/2001*	$5,729,229	($1,477,191)	(25.8%)	$7,206,420	$ 63,531
6/30/2002	$6,348,164	($ 682,305)	(10.7%)	$7,030,468	($ 175,952)

*Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

KENTUCKY EMPLOYEES INSURANCE FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1997	$1,274,464	$1,063,300	83.4%	$211,164	$ 38,518
6/30/1998	$1,379,578	$1,114,866	80.8%	$264,711	$ 53,547
6/30/1999	$1,422,523	$1,064,238	74.8%	$358,284	$ 93,572
6/30/2000	$1,632,643	$1,130,871	69.3%	$501,772	$143,488
6/30/2001*	$1,984,034	$1,415,031	71.3%	$569,003	$ 67,231
6/30/2002	$2,144,503	$1,487,378	69.4%	$657,125	$ 88,122

*Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

COUNTY EMPLOYEES RETIREMENT FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1997	$3,144,929	($ 369,097)	(11.7%)	$3,514,026	$ 633,997
6/30/1998	$3,529,912	($ 743,349)	(21.1%)	$4,273,262	$ 759,236
6/30/1999	$3,955,132	($1,241,746)	(31.4%)	$5,196,878	$ 923,616
6/30/2000	$4,453,155	($2,276,421)	(51.1%)	$6,729,576	$1,532,698
6/30/2001*	$4,900,143	($2,010,358)	(41.0%)	$6,910,500	$ 180,924
6/30/2002	$5,492,646	($1,390,653)	(25.3%)	$6,883,299	($ 27,202)

*Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

COUNTY EMPLOYEES INSURANCE FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1997	$1,541,360	$1,336,840	86.7%	$204,521	$ 36,985
6/30/1998	$1,706,626	$1,451,039	85.0%	$255,586	$ 51,065
6/30/1999	$1,801,154	$1,454,627	80.8%	$346,527	$ 90,941
6/30/2000	$2,066,653	$1,578,352	76.4%	$488,301	$141,774
6/30/2001*	$2,515,316	$1,954,682	77.4%	$569,634	$ 81,333
6/30/2002	$2,758,762	$2,073,581	75.2%	$685,181	$115,547

*Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

STATE POLICE RETIREMENT SYSTEM

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1997	$255,785	($ 23,859)	(9.3)%	$279,643	$ 42,128
6/30/1998	$294,427	($ 11,891)	(4.0)%	$306,318	$ 26,675
6/30/1999	$314,021	($ 43,601)	(13.9)%	$357,623	$ 51,304
6/30/2000	$336,580	($122,589)	(36.4)%	$459,169	$101,546
6/30/2001*	$356,212	($ 99,949)	(28.1%)	$456,161	($ 3,008)
6/30/2002	$380,790	($ 58,165)	(15.3%)	$438,955	($ 17,205)

*Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

STATE POLICE INSURANCE FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1997	$117,361	$83,485	71.1%	$33,876	$ 6,100
6/30/1998	$124,501	$83,090	66.7%	$41,410	$ 7,534
6/30/1999	$125,797	$71,867	57.1%	$53,929	$12,519
6/30/2000	$138,867	$67,155	48.4%	$71,712	$17,783
6/30/2001*	$158,261	$78,398	49.5%	$79,864	$ 8,152
6/30/2002	$165,445	$78,578	47.5%	$86,867	$ 7,004

*Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).

SOLVENCY TEST

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1997	$691,058	$1,541,845	$1,371,063	$3,850,712	100%	100%	118.0%
6/30/1998	$752,816	$1,711,602	$1,507,332	$4,568,287	100%	100%	139.6%
6/30/1999	$862,558	$1,935,471	$1,733,877	$5,524,180	100%	100%	157.2%
6/30/2000	$900,839	$2,378,236	$1,841,116	$7,142,889	100%	100%	209.9%
6/30/2001	$895,839	$2,756,127	$2,077,262	$7,206,420	100%	100%	171.1%
6/30/2002	$988,657	$3,352,392	$2,007,115	$7,030,468	100%	100%	134.0%

COUNTY EMPLOYEES RETIREMENT SYSTEM

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1997	$617,592	$1,170,196	$1,357,141	$3,514,026	100%	100%	127.2%
6/30/1998	$685,806	$1,355,013	$1,489,094	$4,273,262	100%	100%	150.0%
6/30/1999	$759,922	$1,600,392	$1,594,819	$5,196,879	100%	100%	177.9%
6/30/2000	$821,630	$1,904,182	$1,727,343	$6,729,576	100%	100%	231.8%
6/30/2001	$855,815	$2,185,378	$1,858,950	$6,910,501	100%	100%	208.1%
6/30/2002	$1,007,019	$2,525,608	$1,960,019	$6,883,299	100%	100%	171.0%

STATE POLICE RETIREMENT SYSTEM

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1997	$29,910	$153,693	$ 72,182	$279,643	100%	100%	133.1%
6/30/1998	$30,546	$183,652	$ 80,229	$306,319	100%	100%	114.8%
6/30/1999	$33,633	$187,163	$ 93,226	$357,623	100%	100%	146.8%
6/30/2000	$36,111	$199,749	$100,720	$459,169	100%	100%	221.7%
6/30/2001	$34,338	$224,433	$97,441	$456,161	100%	100%	202.6%
6/30/2002	$36,886	$252,499	$91,405	$438,955	100%	100%	163.6%

RETIRED LIVES SUMMARY

Kentucky Employees Retirement System

	Nonhazardous Retirees		Hazardous Retirees		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	8,873	$8,592,150	282	$194,937	9,155	$8,787,087
Joint and Survivor						
100% to Beneficiary	2,267	$2,219,945	119	$95,806	2,386	$2,315,751
66-2/3% to Beneficiary	906	$1,515,316	46	$37,787	952	$1,553,103
50% to Beneficiary	1,529	$2,267,522	62	$57,738	1,591	$2,325,260
Pop-Up Option	2,895	$4,342,580	228	$201,136	3,123	$4,543,716
10 Years Certain	—	—	22	$16,567	22	$16,567
10 Years Certain and Life	2,646	$2,421,301	99	$59,877	2,745	$2,481,178
15 Years Certain and Life	692	$760,660	32	$24,636	724	$785,296
20 Years Certain and Life	563	$759,839	28	$24,233	591	$784,072
Social Security Option						
Basic Form	1,290	$1,907,971	48	$39,118	1,338	$1,947,089
Survivorship Option	1,284	$1,929,295	85	$83,529	1,369	$2,012,824
Dependent Child	3	$1,161	18	$4,091	21	$5,252
Total	**22,948**	**$26,717,740**	**1,069**	**$839,454**	**24,017**	**$27,557,195**

RETIRED LIVES SUMMARY

County Employees Retirement System

	Nonhazardous Retirees		Hazardous Retirees		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	10,492	$5,519,934	490	$751,388	10,982	$6,271,322
Joint and Survivor						
100% to Beneficiary	2,331	$1,450,670	379	$566,652	2,710	$2,017,322
66-2/3% to Beneficiary	665	$746,537	177	$354,356	842	$1,100,893
50% to Beneficiary	1,216	$1,114,638	264	$480,306	1,480	$1,594,944
Pop-Up Option	2,609	$2,371,210	1,030	$1,892,288	3,639	$4,263,498
10 Years Certain	—	—	43	$78,666	43	$78,666
10 Years Certain and Life	3,355	$1,700,681	153	$232,604	3,508	$1,933,285
15 Years Certain and Life	827	$506,114	46	$65,642	873	$571,756
20 Years Certain and Life	562	$426,221	100	$146,071	662	$572,292
Social Security Option						
Basic Form	557	$587,790	98	$148,448	655	$736,238
Survivorship Option	679	$855,489	297	$427,272	976	$1,282,761
Dependent Child	2	$670	169	$49,824	171	$50,494
Five Years Only	1	$129	—	—	1	$129
Total	**23,296**	**$15,280,083**	**3,246**	**$5,193,517**	**26,542**	**$20,473,600**

RETIRED LIVES SUMMARY

State Police Retirement System

	Number	Monthly Benefits
Basic Form	77	$180,634
Joint and Survivor		
100% to Beneficiary	112	$256,152
66-2/3% to Beneficiary	62	$176,360
50% to Beneficiary	64	$166,944
Pop-Up Option	217	$598,802
10 Years Certain	6	$20,963
10 Years Certain and Life	23	$60,251
15 Years Certain and Life	10	$22,098
20 Years Certain and Life	31	$65,502
Social Security Option		
Basic Form	35	$74,185
Survivorship Option	169	$353,772
Dependent Child	13	$3,633
Total	**819**	**$1,979,296**

BENEFICIARY SUMMARY

Kentucky Employees Retirement System

	Nonhazardous Retirees		Hazardous Retirees		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Joint and Survivor						
100% to Beneficiary	1,930	$1,153,688	66	$38,202	1,996	$1,191,890
66-2/3% to Beneficiary	283	$156,889	3	$1,630	286	$158,519
50% to Beneficiary	541	$204,709	10	$2,838	551	$207,547
Pop-Up Option	218	$177,400	12	$5,971	230	$183,371
5 Years Certain	109	$116,822	11	$6,437	120	$123,259
10 Years Certain	134	$114,412	11	$5,784	145	$120,196
10 Years Certain and Life	145	$119,251	10	$4,052	155	$123,303
15 Years Certain and Life	130	$110,680	2	$670	132	$111,350
20 Years Certain and Life	85	$79,148	4	$940	89	$80,088
Social Security Option						
Survivorship Option	164	$191,327	8	$6,712	172	$198,039
Beneficiary Under 60	16	$5,582	—	—	16	$5,582
Dependent Child	–	–	2	$582	2	$582
Total	**3,755**	**$2,429,908**	**139**	**$73,817**	**3,894**	**$2,503,726**

BENEFICIARY SUMMARY

County Employees Retirement System

	Nonhazardous Retirees		Hazardous Retirees		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Joint and Survivor						
100% to Beneficiary	1,385	$517,350	84	$84,199	1,469	$601,549
66-2/3% to Beneficiary	155	$57,355	17	$20,418	172	$77,773
50% to Beneficiary	281	$82,022	18	$10,572	299	$92,594
Pop-Up Option	230	$124,492	40	$54,272	270	$178,764
5 Years Certain	190	$117,103	7	$3,167	197	$120,270
10 Years Certain	154	$90,755	22	$31,194	176	$121,949
10 Years Certain and Life	203	$94,702	2	$1,672	205	$96,374
15 Years Certain and Life	116	$66,388	—	—	116	$66,388
20 Years Certain and Life	78	$50,809	8	$13,018	86	$63,827
Social Security Option						
Survivorship Option	54	$46,984	35	$50,842	89	$97,826
Beneficiary Under 60	5	$1,043	3	$3,084	8	$4,127
Dependent Child	—	—	1	$300	1	$300
Total	**2,851**	**$1,249,003**	**237**	**$272,739**	**3,088**	**$1,521,741**

BENEFICIARY SUMMARY

State Police Retirement System

	Number	Monthly Benefits
Joint and Survivor		
100% to Beneficiary	49	$100,784
66-2/3% to Beneficiary	1	$1,208
50% to Beneficiary	9	$11,881
Pop-Up Option	6	$15,609
5 Years Certain	–	–
10 Years Certain	–	–
10 Years Certain and Life	–	–
15 Years Certain and Life	–	–
20 Years Certain and Life	2	$7,518
Social Security Option		
Basic Form	–	–
Survivorship Option	10	$21,003
Beneficiary Under 60	–	–
Dependent Child	1	$257
Total	**78**	**$158,260**

KENTUCKY RETIREMENT SYSTEMS

Statistical Section

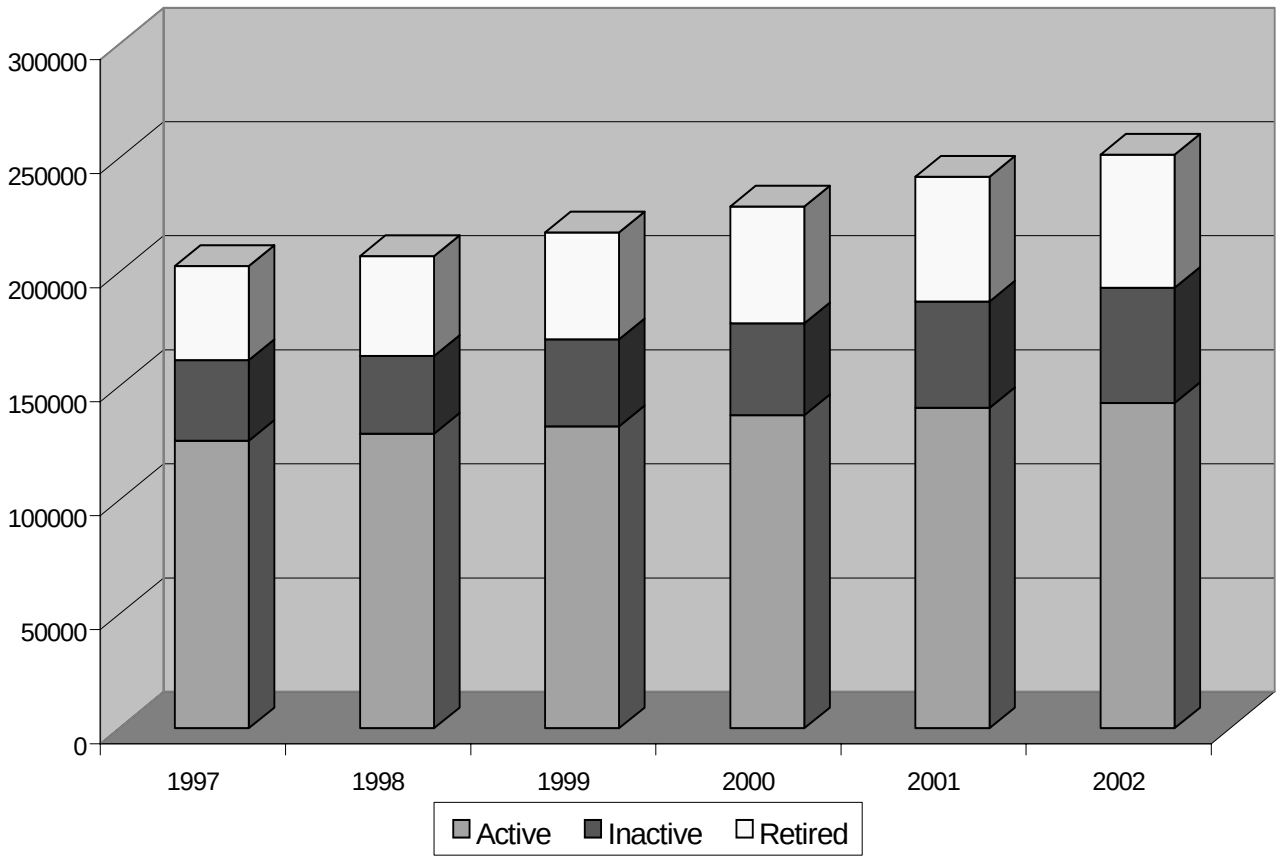
Comprehensive Annual Financial Report
June 30, 2002

MEMBERSHIP

AS OF JUNE 30, 2002

SYSTEM	ACTIVE	INACTIVE	RETIRED	TOTAL
KERS	48,555	17,714	26,703	92,972
KERS Hazardous	4,211	1,073	1,208	6,492
TOTAL KERS	**52,766**	**18,787**	**27,911**	**99,464**
CERS	79,850	30,978	26,147	136,975
CERS Hazardous	8,949	700	3,483	13,132
TOTAL CERS	**88,799**	**31,678**	**29,630**	**150,107**
SPRS	**1,002**	**103**	**897**	**2,002**
GRAND TOTAL	**142,567**	**50,568**	**58,438**	**251,573**

SIX-YEAR MEMBERSHIP GROWTH



Schedule of Participating Employers

Kentucky Employees Retirement System

Agency Classification	Number of Agencies
Agencies Reporting through State Payroll	211
Other Agencies (universities, mental health boards, health departments)	120
Special Districts and Boards	4
Child Support Offices (county attorneys)	66
Other State-Administered Retirement Systems	3
TOTAL	**404**

County Employees Retirement System

Agency Classification	Number of Agencies
Area Development Districts	14
Boards of Education	176
Cities	247
County Attorneys	58
County Clerks	10
County Government Agencies	249
Fire Departments	61
Hospitals	2
Jailers	8
Libraries	79
Planning Commissions	8
Police Departments	53
Police & Fire Departments (combined)	41
Sanitation Districts	4
Sheriff Departments	35
Special Districts and Boards	164
Utility Boards	101
Urban County Government Agencies	4
TOTAL	**1,314**

State Police Retirement System

Agency Classification	Number of Agencies
Kentucky State Police-Uniformed Officers	1

SCHEDULE OF REVENUE BY SOURCE

(expressed in thousands)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Year Ending	Member Contributions	Employer Contributions	Investment Income	Total
June 30, 1997	$ 69,075	$118,119	$ 862,023	$1,049,217
June 30, 1998	$ 74,115	$128,221	$ 997,451	$1,199,787
June 30, 1999	$149,722	$126,959	$ 889,768	$1,166,449
June 30, 2000	$117,209	$136,688	$ 333,006	$ 586,903
June 30, 2001	$117,225	$114,210	($ 387,886)	($ 156,451)
June 30, 2002	$122,799	$119,494	($ 238,838)	$ 3,455

COUNTY EMPLOYEES RETIREMENT SYSTEM

Year Ending	Member Contributions	Employer Contributions	Investment Income	Total
June 30, 1997	$ 79,342	$145,326	$ 793,030	$ 938,356
June 30, 1998	$ 90,963	$149,824	$ 903,101	$1,143,888
June 30, 1999	$121,484	$158,882	$ 818,969	$1,099,335
June 30, 2000	$125,152	$158,326	$ 295,579	$ 579,057
June 30, 2001	$128,876	$164,338	($ 317,544)	($ 24,330)
June 30, 2002	$159,524	$164,464	($ 288,882)	$ 35,106

STATE POLICE RETIREMENT SYSTEM

Year Ending	Member Contributions	Employer Contributions	Investment Income	Total
June 30, 1997	$2,958	$ 9,628	$64,815	$ 77,401
June 30, 1998	$2,711	$ 9,574	$75,292	$ 87,577
June 30, 1999	$3,658	$ 9,463	$76,389	$ 89,510
June 30, 2000	$4,202	$10,216	$22,601	$ 37,019
June 30, 2001	$4,138	$ 9,629	($33,885)	($ 20,118)
June 30, 2002	$4,499	$ 9,562	($22,770)	($ 8,709)

SCHEDULE OF EXPENSES BY TYPE

(expressed in thousands)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Year Ending	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	Total
June 30, 1997	$173,352	$2,701	$8,262	$22,010	$206,325
June 30, 1998	$193,569	$2,628	$9,196	$24,521	$229,914
June 30, 1999	$209,339	$3,448	$9,168	$25,829	$247,784
June 30, 2000	$258,999	$3,792	$9,041	$32,085	$303,917
June 30, 2001	$299,700	$4,461	$8,221	$39,618	$352,000
June 30, 2002	$355,869	$5,127	$7,798	$46,565	$415,359

COUNTY EMPLOYEES RETIREMENT SYSTEM

Year Ending	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	Total
June 30, 1997	$124,187	$3,909	$ 9,167	$19,757	$157,020
June 30, 1998	$142,405	$4,030	$10,173	$23,138	$179,746
June 30, 1999	$165,107	$5,385	$10,924	$25,841	$207,257
June 30, 2000	$197,637	$6,228	$12,248	$31,705	$247,818
June 30, 2001	$226,776	$7,039	$10,313	$39,423	$283,551
June 30, 2002	$260,153	$8,197	$10,095	$46,267	$324,712

STATE POLICE RETIREMENT SYSTEM

Year Ending	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	Total
June 30, 1997	$14,682	$52	$57	$2,160	$16,951
June 30, 1998	$17,735	$47	$70	$2,611	$20,463
June 30, 1999	$19,136	$68	$44	$2,754	$22,002
June 30, 2000	$19,974	$82	$80	$3,028	$23,164
June 30, 2001	$22,644	$92	$80	$3,575	$26,391
June 30, 2002	$24,839	$105	$25	$4,049	$29,018

ANALYSIS OF INITIAL RETIREMENT

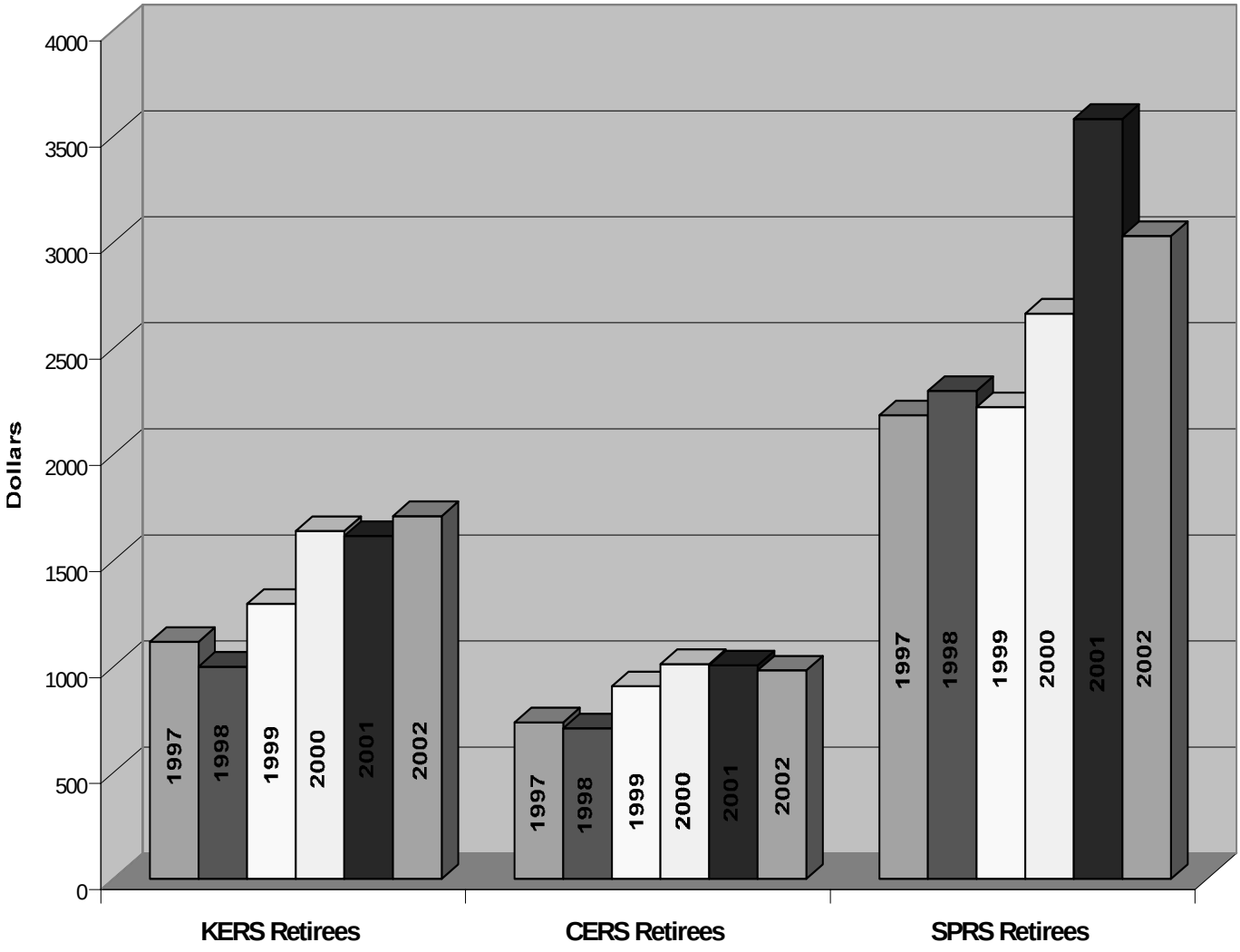
1997-2002

	1997	1998	1999	2000	2001	2002
KERS Retirees	1,523	1,093	1,648	2,323	2,083	2,457
Average Monthly Benefit	$1,117	$1,000	$1,296	$1,639	$1,616	$1,709
CERS Retirees	1,962	1,626	2,349	2,485	2,265	2,733
Average Monthly Benefit	$737	$709	$907	$1,012	$1,006	$982
SPRS Retirees	47	46	23	42	53	58
Average Monthly Benefit	$2,185	$2,299	$2,223	$2,664	$3,582	$3,030

INITIAL RETIREMENT

Average Monthly Benefit Payments 1997-2002

(By System)



SCHEDULE OF BENEFIT EXPENSES BY TYPE

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	DEATH	TOTAL
FY 1996-97					
Average Benefit	$562	$817	$596	$600	$721
Retirees	4,322	11,513	1,694		17,529
Beneficiaries	819	853	622	754	3,048
Total Recipients	5,141	12,366	2,316	754	20,577
Monthly Benefits	$2,890,662	$10,108,484	$1,380,195	$452,335	$14,831,676
% of Total Monthly Benefits	**19%**	**68%**	**9%**	**4%**	**100%**
FY 1997-98					
Average Benefit	$589	$859	$629	$647	$760
Retirees	4,248	11,920	1,772		17,940
Beneficiaries	827	890	636	782	3,135
Total Recipients	5,075	12,810	2,408	782	21,075
Monthly Benefits	$2,989,698	$11,006,325	$1,512,760	$505,747	$16,014,530
% of Total Monthly Benefits	**19%**	**69%**	**9%**	**3%**	**100%**
FY 1998-99					
Average Benefit	$630	$944	$662	$686	$830
Retirees	4,267	12,755	1,848		18,870
Beneficiaries	807	936	670	866	3,279
Total Recipients	5,074	13,691	2,518	866	22,149
Monthly Benefits	$3,194,856	$12,927,270	$1,665,838	$594,363	$18,382,327
% of Total Monthly Benefits	**17%**	**70%**	**9%**	**4%**	**100%**
FY 1999-2000					
Average Benefit	$663	$1,042	$675	$698	$907
Retirees	4,360	14,323	1,977		20,660
Beneficiaries	804	978	689	885	3,356
Total Recipients	5,164	15,301	2,666	885	24,016
Monthly Benefits	$3,425,223	$15,949,488	$1,799,238	$618,038	$21,791,987
% of Total Monthly Benefits	**16%**	**73%**	**8%**	**3%**	**100%**
FY 2000-2001					
Average Benefit	$706	$1,135	$702	$726	$987
Retirees	4,348	15,624	2,068		22,040
Beneficiaries	795	1,015	702	887	3,399
Total Recipients	5,143	16,639	2,770	887	25,439
Monthly Benefits	$3,631,318	$18,878,492	$1,944,415	$643,874	$25,098,099
% of Total Monthly Benefits	**14%**	**75%**	**8%**	**3%**	**100%**
FY 2001-2002					
Average Benefit	$763	$1,283	$737	$778	$1,111
Retirees	4,341	17,193	2,104		23,657
Beneficiaries	796	1,039	696	863	3,394
Total Recipients	5,137	18,232	2,800	863	27,051
Monthly Benefits	$3,921,539	$23,392,161	$2,063,497	$685,848	$30,063,045
% of Total Monthly Benefits	**13%**	**78%**	**7%**	**2%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Secriton for a further delineation of retirement options by system.

SCHEDULE OF BENEFIT EXPENSES BY TYPE

COUNTY EMPLOYEES RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	DEATH	TOTAL
FY 1996-97					
Average Benefit	$405	$620	$560	$446	$547
Retirees	4,937	10,453	1,942		17,332
Beneficiaries	574	490	406	576	2,046
Total Recipients	5,511	10,943	2,348	576	19,378
Monthly Benefits	$2,229,937	$6,790,089	$1,314,240	$256,650	$10,590,916
% of Total Monthly Benefits	**21%**	**64%**	**12%**	**3%**	**100%**
FY 1997-98					
Average Benefit	$429	$650	$585	$473	$576
Retirees	5,095	11,238	2,165		18,498
Beneficiaries	594	544	416	614	2,168
Total Recipients	5,689	11,782	2,581	614	20,666
Monthly Benefits	$2,438,180	$7,660,693	$1,511,141	$290,517	$11,900,531
% of Total Monthly Benefits	**20%**	**64%**	**13%**	**3%**	**100%**
FY 1998-99					
Average Benefit	$466	$718	$604	$482	$630
Retirees	5,365	12,609	2,350		20,324
Beneficiaries	603	578	636	727	2,544
Total Recipients	5,968	13,187	2,986	727	22,868
Monthly Benefits	$2,783,194	$9,472,665	$1,802,978	$350,404	$14,409,241
% of Total Monthly Benefits	**19%**	**66%**	**13%**	**2%**	**100%**
FY 1999-00					
Average Benefit	$478	$766	$612	$483	$666
Retirees	5,628	14,179	2,633		22,440
Beneficiaries	620	609	639	771	2,639
Total Recipients	6,248	14,788	3,272	771	25,079
Monthly Benefits	$2,985,474	$11,328,818	$2,003,432	$372,601	$16,690,325
% of Total Monthly Benefits	**18%**	**68%**	**12%**	**2%**	**100%**
FY 2000-2001					
Average Benefit	$499	$816	$638	$503	$708
Retirees	5,840	15,516	2,846		24,202
Beneficiaries	632	649	673	773	2,727
Total Recipients	6,472	16,165	3,519	773	26,929
Monthly Benefits	$3,231,715	$13,192,315	$2,243,451	$388,758	$19,056,239
% of Total Monthly Benefits	**17%**	**69%**	**12%**	**2%**	**100%**
FY 2001-2002					
Average Benefit	$532	$880	$667	$532	$762
Retirees	6,025	16,999	3,132		26,156
Beneficiaries	664	695	531	801	2,691
Total Recipients	6,689	17,694	3,663	801	28,847
Monthly Benefits	$3,555,481	$15,563,130	$2,441,911	$426,386	$21,986,908
% of Total Monthly Benefits	**16%**	**71%**	**11%**	**2%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Secriton for a further delineation of retirement options by system.

SCHEDULE OF BENEFIT EXPENSES BY TYPE

STATE POLICE RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	DEATH	TOTAL
FY 1996-97					
Average Benefit	$1,789	$2,079	$1,224	$1,065	$1,958
Retirees	86	484	31		601
Beneficiaries	12	4	8	16	40
Total Recipients	98	488	39	16	641
Monthly Benefits	$175,303	$1,014,787	$47,733	$17,050	$1,254,873
% of Total Monthly Benefits	**14%**	**81%**	**4%**	**1%**	**100%**
FY 1997-98					
Average Benefit	$2,472	$2,131	$1,319	$1,309	$2,120
Retirees	101	520	33		654
Beneficiaries	20	4	7	20	51
Total Recipients	121	524	40	20	705
Monthly Benefits	$299,059	$1,116,767	$52,744	$26,178	$1,494,748
% of Total Monthly Benefits	**20%**	**75%**	**4%**	**1%**	**100%**
FY 1998-99					
Average Benefit	$2,495	$2,175	$1,024	$1,237	$2,102
Retirees	98	550	38		686
Beneficiaries	23	5	23	25	76
Total Recipients	121	555	61	25	762
Monthly Benefits	$301,845	$1,206,862	$62,478	$30,922	$1,602,087
% of Total Monthly Benefits	**19%**	**75%**	**4%**	**2%**	**100%**
FY 1999-2000					
Average Benefit	$2,522	$2,185	$1,062	$1,318	$2,126
Retirees	98	585	40		723
Beneficiaries	25	5	21	23	74
Total Recipients	123	590	61	23	797
Monthly Benefits	$310,242	$1,289,260	$64,788	$30,323	$1,694,613
% of Total Monthly Benefits	**18%**	**76%**	**4%**	**2%**	**100%**
FY 2000-2001					
Average Benefit	$2,677	$2,305	$1,107	$1,354	$2,258
Retirees	99	632	36		767
Beneficiaries	27	6	18	23	74
Total Recipients	126	638	54	23	841
Monthly Benefits	$337,279	$1,470,596	$59,799	$31,132	$1,898,806
% of Total Monthly Benefits	**18%**	**77%**	**3%**	**2%**	**100%**
FY 2001-2002					
Average Benefit	$2,851	$2,424	$1,133	$1,450	$2,385
Retirees	105	682	26		813
Beneficiaries	26	7	28	22	83
Total Recipients	131	689	54	22	896
Monthly Benefits	$373,474	$1,670,425	$61,170	$31,894	$2,136,963
% of Total Monthly Benefits	**17.5%**	**78%**	**3%**	**1.5%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Secriton for a further delineation of retirement options by system.

COMPARISON OF AVERAGE MONTHLY BENEFITS
BY LENGTH OF SERVICE

KERS

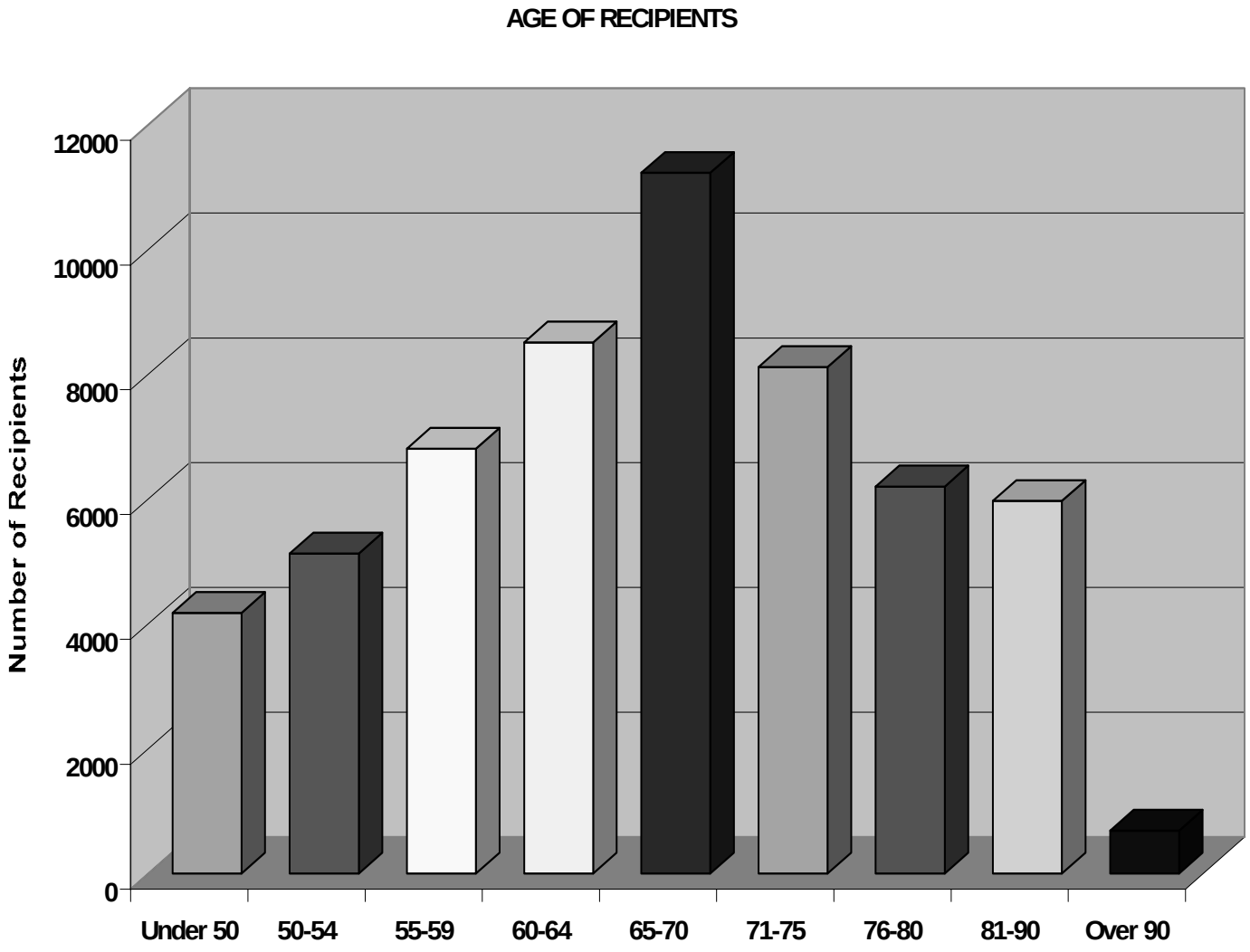
Service in Years	Under 2	2-5	6-10	11-15	16-20	21-25	26-30	31-35	Over 35
Number of Recipients	911	982	3,674	3,871	3,523	3,747	5,468	3,417	1,466
Average Monthly Pay	$91	$173	$270	$445	$666	$951	$1,647	$2,260	$3,045

CERS

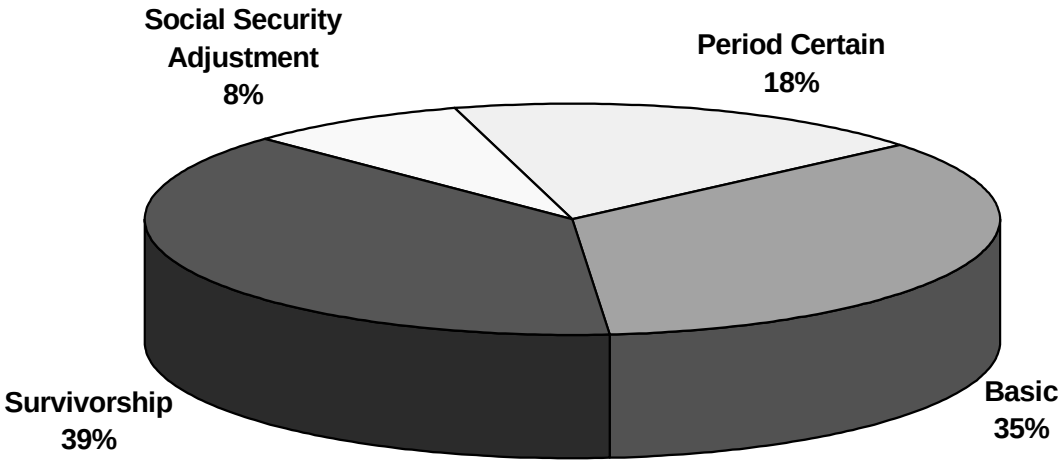
Service in Years	Under 2	2-5	6-10	11-15	16-20	21-25	26-30	31-35	Over 35
Number of Recipients	1099	1,370	5,950	5,759	4,329	4,607	4,053	1,256	441
Average Monthly Pay	$156	$149	$224	$395	$622	$1,033	$1,665	$2,162	$2,497

SPRS

Service in Years	Under 2	2-5	6-10	11-15	16-20	21-25	26-30	31-35	Over 35
Number of Recipients	41	25	24	26	63	236	293	139	50
Average Monthly Pay	$549	$326	$662	$941	$1,502	$2,008	$2,732	$3,540	$4,108

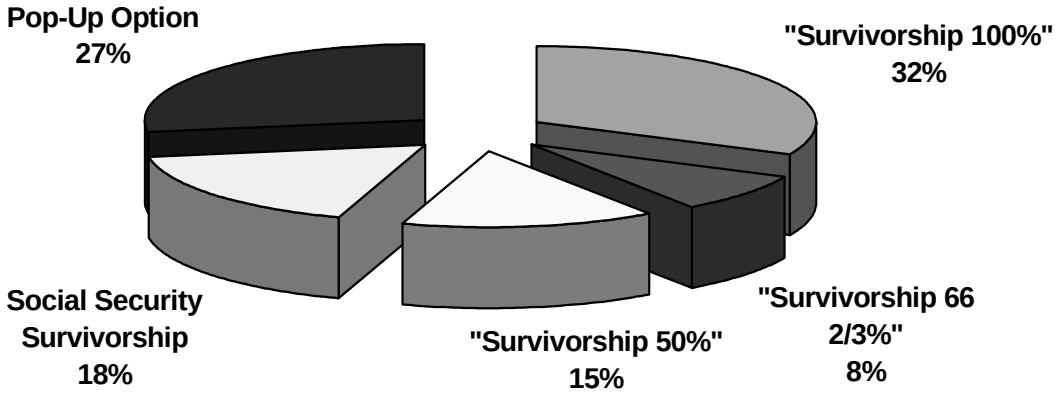

AGE OF RECIPIENTS
Number of Recipients
12000
10000
8000
6000
4000
2000
0
Under 50
50-54
55-59
60-64
65-70
71-75
76-80
81-90
Over 90

PAYMENT OPTIONS BY TYPE (All Systems)



The Basic option is a single life annuity. Survivorship options include 100%, 66 2/3%, 50% and Pop-Up, which is a 100% survivorship option that increases to the Basic amount if the beneficiary dies or divorces the member prior to the member's death. Social Security Adjustment options provide enhanced benefits prior to age 62 and a reduced benefit after age 62. There are two Social Security Adjustment options: one with 100% survivorship and one with no survivor benefit.

SURVIVORSHIP OPTIONS BY TYPE (All Systems)



TOTAL FISCAL YEAR RETIREMENT PAYMENTS
BY COUNTY

Jefferson	$113,840,989	Clark	$ 3,357,187	Powell	$ 1,605,166
Franklin	$80,861,639	Harlan	$ 3,329,640	Hart	$ 1,577,138
Fayette	$35,232,743	Bourbon	$ 3,154,954	Carroll	$ 1,542,870
Warren	$16,042,003	Grayson	$ 3,055,633	Washington	$ 1,501,377
Shelby	$14,038,246	Johnson	$ 3,034,770	Livingston	$ 1,443,115
Daviess	$13,802,108	Clay	$ 2,875,921	Union	$ 1,429,702
Kenton	$12,457,963	Knott	$ 2,791,790	Metcalfe	$ 1,380,836
Pulaski	$12,056,203	Perry	$ 2,596,929	Webster	$ 1,367,268
Christian	$11,450,991	Knox	$ 2,577,182	McCreary	$ 1,354,578
McCracken	$10,312,376	Trigg	$ 2,477,181	Wolfe	$ 1,351,363
Hardin	$ 9,811,774	Caldwell	$ 2,455,375	Todd	$ 1,338,813
Madison	$ 9,627,860	Breathitt	$ 2,447,119	Butler	$ 1,318,150
Anderson	$ 8,367,674	Greenup	$ 2,430,246	Lewis	$ 1,316,064
Boone	$ 8,235,088	Lincoln	$ 2,412,042	Lee	$ 1,260,396
Oldham	$ 7,662,976	Taylor	$ 2,400,739	Green	$ 1,182,155
Campbell	$ 7,422,622	Logan	$ 2,397,150	McLean	$ 1,174,564
Bullitt	$ 6,313,351	Montgomery	$ 2,335,792	Trimble	$ 1,148,666
Woodford	$ 5,984,030	Harrison	$ 2,324,248	Jackson	$ 1,145,565
Boyd	$ 5,837,717	Fleming	$ 2,322,810	Menifee	$ 1,129,264
Pike	$ 5,657,942	Adair	$ 2,309,272	Ballard	$ 1,099,479
Laurel	$ 5,593,493	Letcher	$ 2,228,615	Leslie	$ 1,094,825
Henderson	$ 5,465,308	Marion	$ 2,212,478	Magoffin	$ 1,030,510
Hopkins	$ 5,441,778	Morgan	$ 2,210,550	Simpson	$ 1,020,006
Calloway	$ 5,415,423	Spencer	$ 2,155,748	Lawrence	$ 991,384
Scott	$ 5,403,401	Muhlenberg	$ 2,154,165	Owsley	$ 921,858
Boyle	$ 5,387,305	Russell	$ 2,112,291	Clinton	$ 919,778
Barren	$ 5,144,305	Wayne	$ 2,079,571	Fulton	$ 889,777
Rowan	$ 4,665,730	Breckinridge	$ 1,956,778	Cumberland	$ 879,048
Henry	$ 4,546,785	Lyon	$ 1,955,200	Nicholas	$ 868,227
Nelson	$ 4,428,900	Ohio	$ 1,933,729	Bracken	$ 861,359
Jessamine	$ 4,402,591	Bath	$ 1,843,701	Monroe	$ 836,848
Graves	$ 4,336,788	Garrard	$ 1,830,970	Edmonson	$ 822,928
Floyd	$ 4,298,547	Meade	$ 1,748,627	Carlisle	$ 769,608
Whitley	$ 4,251,584	Casey	$ 1,746,832	Hancock	$ 740,096
Marshall	$ 4,092,722	Larue	$ 1,738,815	Martin	$ 715,996
Mercer	$ 3,928,431	Mason	$ 1,730,738	Crittenden	$ 665,620
Owen	$ 3,904,337	Estill	$ 1,729,268	Elliott	$ 652,588
Bell	$ 3,533,573	Rockcastle	$ 1,728,933	Gallatin	$ 514,427
Grant	$ 3,439,851	Pendleton	$ 1,666,656	Hickman	$ 416,778
Carter	$ 3,420,753	Allen	$ 1,633,223	Robertson	$ 261,536

Payments to Recipients Living in Other States
$30,307,669

TOTAL PAYMENTS TO MEMBERS AND BENEFICIARIES FOR FY 2001-02
$650,448,162

KENTUCKY RETIREMENT SYSTEMS

Compliance Section

Comprehensive Annual Financial Report
June 30, 2002

Charles T. Mitchell Company, LLP

Certified Public Accountants

DON C. GILES, C.P.A.
WILLIAM G. JOHNSON, JR., C.P.A.
LARRY T. WILLIAMS, C.P.A.
JAMES CLOUSE, C.P.A.
BERNADETTE SMITH, C.P.A.
KIM FIELD, C.P.A.
GREG MIKLAVCIC, C.P.A

CHARLES T. MITCHELL, C.P.A.
CONSULTANT

201 WEST MAIN, P.O. BOX 698
FRANKFORT, KENTUCKY 40602-0698
TELEPHONE (502) 227-7395
TELECOPIER (502) 227-8005

REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL REPORTING BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the general purpose financial statements of Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2002, and have issued our report thereon dated October 31, 2002. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Compliance

As part of obtaining reasonable assurance about whether Kentucky Retirement Systems' general purpose financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under Government Auditing Standards.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Kentucky Retirement Systems' internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the general-purpose financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the general purpose financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving internal control over financial reporting and its operation that we consider to be material weaknesses.

This report is intended for the information of the audit committee, management, and federal awarding agencies and pass-through entities. However, this report is a matter of public record and its distribution is not limited.

Charles T. Mitchell Co.

October 31, 2002

KENTUCKY RETIREMENT SYSTEMS

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

Comprehensive Annual Financial Report

For the Fiscal Year Ended **June 30, 2003**

A Component Unit of the
Commonwealth of Kentucky

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KENTUCKY RETIREMENT SYSTEMS

A Component Unit of the
Commonwealth of Kentucky

Comprehensive Annual Financial Report
For the Fiscal Year Ended **June 30, 2003**

KRS Office in Frankfort, Kentucky

Prepared by the executive staff of
Kentucky Retirement Systems
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1260 Louisville Road
Frankfort, KY 40601
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Fax: (502) 564-5656
www.kyret.com

The cost of printing this CAFR is part of the administrative expense of the system.

Kentucky Retirement Systems
Comprehensive Annual Financial Report

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KENTUCKY RETIREMENT SYSTEMS

Introductory Section

Comprehensive Annual Financial Report
June 30, 2003

KENTUCKY RETIREMENT SYSTEMS
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

William P. Hanes, Esq.
Executive Director
Phone 502-564-4646
FAX# 502-564-5656
www.kyret.com

November 20, 2003

The Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601-6124

Dear Board of Trustees and Members:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), State Police Retirement System (SPRS) and Insurance Fund for the fiscal year ended June 30, 2003. Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the management of the Systems.

The CAFR is divided into six sections:

- An Introductory Section, containing the administrative organization and letter of transmittal.
- A Financial Section, containing the report of the independent Auditor, the financial statements of the three systems and insurance fund and certain required supplementary information.
- An Investment Section, containing a report on investment activity, investment policies, investment results and various investment schedules.
- An Actuarial Section, containing the Actuary's Certification Letter and the results of the annual actuarial valuation.
- A Statistical Section, containing information about plan participants and recipients.
- A Compliance Section, containing a report on compliance and internal control.

We present this information to assist the Board and the members of the retirement systems in understanding the systems' financial and actuarial status. This CAFR was prepared to conform with the principles of governmental accounting and reporting set forth by the Governmental Accounting Standard Board. Transactions of the system are reported on the accrual basis of accounting. Additionally, sufficient internal accounting controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis on page 12 for more information.

History

KERS was created in 1956 by the Kentucky General Assembly in order to supplement the benefits provided by Social Security. When the first actuarial valuation was completed June 30, 1957, there were 16,000 employees participating in KERS and assets of $2.8 million. SPRS and CERS were established in 1958. The first actuarial valuation of SPRS was conducted June 30, 1959. No actuarial valuation of CERS was conducted until June 30, 1960 because the statutes prohibited retirements from the system prior to July 1, 1960. On June 30, 1960, there were 68 counties and 2,617 employees participating in CERS, and SPRS included 415 uniformed state troopers.

As of June 30, 2003, there were more than 267,000 active and retired members in the three systems and approximately $12.2 billion in assets. A breakdown of membership by system is provided in the statistical section.

The staff of Kentucky Retirement Systems provides detailed benefit estimates to members upon request. Counselors are available at the Frankfort office for individual counseling, both in office by appointment and by telephone during normal business hours. In addition, staff conducts individual counseling sessions at sites throughout the state and holds preretirement seminars to help members prepare for retirement.

Major Initiatives

As a result of legislation passed during the 2003 General Assembly, KRS began implementing its own personnel system in December 2002. A Human Resources Director was hired to lead the human resources and payroll functions. This position is currently focusing on recruitment, retention and compliance to applicable federal and state statutes. We have already begun to see positive experiences in several operational areas, and we believe the new personnel system will continue to allow Kentucky Retirement Systems to provide even better service to our members.

Additionally, KRS hired an Internal Auditor who is responsible for the planning, implementation and reporting of audits and the internal audit plan. The Internal Auditor is also responsible for the functional control of audit activities in relation to the objectives of the Division of Internal Audit.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its CAFR for the fiscal year ended June 30, 2002. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. This was the fourth consecutive year that KRS has achieved this award.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Additions to Plan Net Assets

The collection of employer and employee contributions, as well as income from investments, provide the reserves needed to finance retirement and insurance benefits.

(Dollar amounts expressed in thousands)	2003	2002	Increase (Decrease) Amount	Increase (Decrease) Percentage
Member Contributions	$314,855	$286,822	$28,033	9.7%
Employer Contributions	$277,012	$293,520	($16,508)	(5.6%)
Net Investment Income	$464,808	($550,490)	$1,015,298	184.4%
Total	$1,056,675	$29,852	$1,086,527	3639.7%

The increase in member contributions is a reflection of the increase in the covered payroll from the previous year. The corresponding employer contributions decreased by $16.5 million for a total employer contribution amount of $277 million. The increase in Net Investment Income is a result of the slightly more favorable financial markets than for fiscal year 2002.

Deductions To Plan Net Assets

The Kentucky Retirement Systems administers the retirement programs established by the Kentucky General Assembly. The costs associated with those programs include the monthly retirement allowances of retired members under normal, early or disability retirement; payments to beneficiaries; monthly insurance benefits; member refunds and the administrative expenses of the system.

(Dollar amounts expressed in thousands)	2003	2002	Increase (Decrease) Amount	Increase (Decrease) Percentage
Retirement Allowances	$748,980	$640,859	$108,121	16.8%
Refunds	$20,522	$ 17,918	$2,604	14.5%
Administrative Expense	$15,292	$ 13,381	$1,911	14.2%
Medical Insurance Expense	$113,296	$ 96,104	$17,192	17.8%
Total	$898,090	$768,262	$129,828	16.8%

Retirement allowances increased due to a 1.6% cost of living adjustment added to recipients' monthly benefits in July and the increase in the number of retired members. Administrative expenses increased due to equipment purchases, overtime and additional personnel.

Investments

The Board of Trustees of the Kentucky Retirement Systems has a statutory obligation to invest the systems' funds in accordance with the "prudent person rule." The prudent person rule states that fiduciaries shall discharge their investment duties with the same degree of diligence, care and skill that a prudent person would ordinarily exercise under similar circumstances in a comparable position.

The Board has managed the funds in recognition of the basic long-term nature of the systems. The Board has interpreted this to mean that the assets of the three systems should be actively managed — that is, investment decisions regarding the particular securities to be purchased or sold shall be the result of the conscious exercise of discretion. The Board has further recognized that proper diversification of assets must be maintained. The asset allocation can be found in the Investment Section of this CAFR.

The Board's policies have provided significant returns over the long term while minimizing investment related expenses. Due to short-term market conditions for the fiscal year ending June 30, 2003, the systems' pension funds had a total return of 4.3% and the insurance fund had a total return of 1.7%.

Funding

The Kentucky Retirement Systems' funding objective is to meet long-term benefit promises through contributions that remain fairly level as a percent of member payroll. Funding of the pension benefits for all systems as of June 30, 2003 exceeds 97% using the ratio of assets at actuarial value to the total actuarial accrued liability. This funded level will fluctuate over time with experience deviations. Since 1992, all three systems have had a funded level relative to the retirement fund of at least 90% in all valuations.

The medical insurance benefit, created in 1978, is not at the same level of funding. Total insurance liabilities exceed assets in the Insurance Fund by $4.08 billion. The medical insurance liability continues to be the primary funding concern of the Kentucky Retirement Systems.

A detailed discussion of the funding status of the systems can be found in the Financial Section of this report.

Professional Services

A listing of the Board's contracted consultants can be found in the organizational chart on page 9. A listing of the external investment managers can be found on page 77 in the Investment Section.

Other Information

Kentucky statutes require an annual audit by an independent certified public accountant or the Auditor of Public Accounts. Carpenter, Mountjoy & Bressler PSC performed the audit for the fiscal year ended June 30, 2003, and the results of that audit are contained in the Financial Section. The firm gave the Systems an unqualified opinion and also indicated that the financial statements present fairly, in all material respects, the plan net assets of Kentucky Retirement Systems.

The compilation of this report reflects the combined efforts of Don Mullis, Bob Leggett, Brad Gross and Shawn Sparks under the leadership of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with statutory provisions, and as a means of determining responsible stewardship of the Systems' funds.

The report is available to all employers participating in the Kentucky Retirement Systems. They form the link between the systems and its membership, and their cooperation contributes significantly to the success of the Kentucky Retirement Systems. We hope the employers and their employees find this report informative. This and past CAFRs can be found on the Systems' web site, **www.kyret.com**.

On behalf of the Board of Trustees, I would like to take this opportunity to express my gratitude to the staff, the advisors and the many people who have worked so diligently to assure the successful operation of the Kentucky Retirement Systems.

Respectfully submitted,

William P. Hanes, Esq.
Executive Director

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Kentucky Retirement Systems

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended
June 30, 2002

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

President

Executive Director

Kentucky Retirement Systems Board of Trustees

John Balbach
Louisville
Appointed by Governor
Term expires
March 31, 2004

John Freeman
Louisville
Elected by CERS
Term expires
March 31, 2005

Ed Davis
Louisville
Elected by CERS
Term expires
March 31, 2005

Susan Horne
Lexington
Elected by KERS
Term expires
March 31, 2006

Bobby Henson
Frankfort
Elected by KERS
Term expires
March 31, 2006

Randy Overstreet
Chair
Elected by SPRS
Term expires
March 31, 2007

Walter Pagan
Vice Chair
Wilder
Appointed by Governor
Term expires
March 31, 2004

Carol Palmore
Frankfort
Secretary of Personnel Cabinet
Ex Officio

Larry Conner
Lexington
Appointed by Governor
Term expires
March 31, 2007

Kentucky Retirement Systems **Organizational Chart**

CONSULTANTS

Actuarial Services
The Segal Company

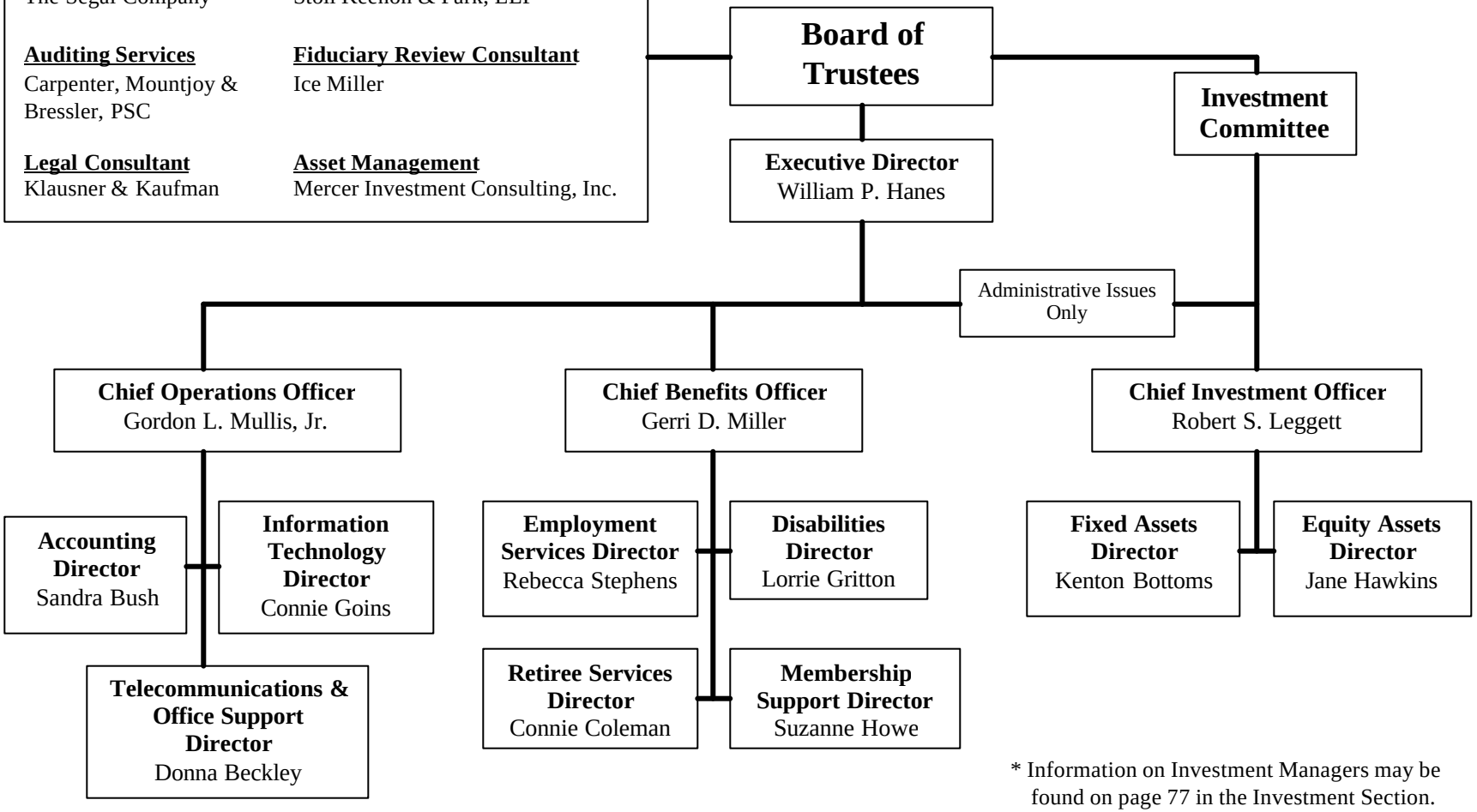
Legal Services
Stoll Keenon & Park, LLP

Auditing Services
Carpenter, Mountjoy & Bressler, PSC

Fiduciary Review Consultant
Ice Miller

Legal Consultant
Klausner & Kaufman

Asset Management
Mercer Investment Consulting, Inc.



* Information on Investment Managers may be found on page 77 in the Investment Section.

KENTUCKY RETIREMENT SYSTEMS

Financial Section

Comprehensive Annual Financial Report
June 30, 2003

Carpenter, Mountjoy & Bressler, PSC
Certified Public Accountants and Advisors

INDEPENDENT AUDITOR'S REPORT

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2003, as listed in the table of contents. These financial statements are the responsibility of the Kentucky Retirement Systems' management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of the Kentucky Retirement Systems as of and for the year ended June 30, 2002 were audited by other auditors whose report dated October 31, 2002, expressed an unqualified opinion on those statements.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2003 and the changes in plan net assets for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated September 18, 2003 on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

Management's Discussion and Analysis (pages 12 through 16) and the supplementary information included in the schedule of funding progress and schedule of employer contributions (pages 45 through 56) are not a required part of the basic financial statements, but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the financial statements taken as a whole. The additional supporting schedules (pages 58 through 61) are presented for the purpose of additional analysis and are not a required part of the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

September 18, 2003
Louisville, Kentucky

Carpenter, Mountjoy & Bressler, PSC
2300 Waterfront Plaza
325 West Main Street
Louisville, Kentucky 40202-4244
Offices in Louisville, Lexington, Covington and Frankfort
Phone 502-992-2700
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mail@cmbcpa.com
www.cmbcpa.com
Independent Member of Ernst & Young Alliance

KENTUCKY RETIREMENT SYSTEMS

MANAGEMENT'S DISCUSSION AND ANALYSIS

June 30, 2003 and 2002

This discussion and analysis of Kentucky Retirement Systems' financial performance provides an overview of the pension fund's and insurance fund's financial activities for the fiscal year ended June 30, 2003. Please read it in conjunction with the Pension Fund's financial statements and Insurance Fund's financial statements, which begin on page 17.

FINANCIAL HIGHLIGHTS--PENSION FUND

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of all pension funds administered by Kentucky Retirement Systems increased by $5.5 million during the 2002-2003 fiscal year.
- Covered payroll for 2002-2003 was $4 billion compared to covered payroll for the 2001-2002 plan year of $3.8 billion, an increase of $228 million. The corresponding employer contributions decreased by $16.5 million for a total employer contribution amount of $277 million. Of the total employer contribution amount, $43.7 million was posted to the pension fund while $233.3 million was posted to the insurance fund. Contributions paid by employees were $314.8 and $286.8 million respectively for the years ended June 30, 2003 and June 30, 2002. This increase in employee contributions is a reflection of the increase in covered payroll.
- The net appreciation in the fair value of investments was $110 million for the year ended June 30, 2003 compared to net depreciation of $868.6 million for the prior fiscal year. Included in this net appreciation were realized losses on sales of investments of $155.2 million. In comparison, the pension funds realized losses of $664.3 million for the year ended June 30, 2002. The net realized loss experienced by the pension funds is due to unfavorable market conditions.
- Investment income net of investment expense from all sources including securities lending was $321 million representing a decline in investment income of approximately $49.6 million compared to last fiscal year. This decline is due to unfavorable market conditions.
- Pension benefits paid to retirees and beneficiaries increased $108.1 million bringing total benefit payments to $749 million. Refund of contributions paid to former members upon termination of employment increased from $18 million to $20.5 million.
- Administrative expense increased $1.8 million totaling $14.4 million compared to $12.6 million in the prior year.

FINANCIAL HIGHLIGHTS--INSURANCE FUND

- The following highlights are explained in more detail later in this discussion.
- The combined plan net assets of the insurance fund administered by Kentucky Retirement Systems increased by $147.4 million during the 2002-2003 fiscal year.
- Employer contributions of $233.4 million were received. This is a decrease of $33.9 million over the prior fiscal year. This decrease is due to four of the five systems having a decrease in the insurance transfer percentage rate.
- The net appreciation in the fair value of investments was $6.3 million compared to depreciation of $73 million for the prior fiscal year. The insurance fund realized net loss on sale of investments of $24.8 million. This loss is due to unfavorable market conditions.
- Investment income net of investment expense from all sources including securities lending was $22 million representing an increase of approximately $1.8 million compared to last fiscal year.
- Premiums paid by the fund for hospital and medical insurance coverage increased $17.2 million to total $113.3 million for the year.

USING THIS FINANCIAL REPORT

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combined Statements of Plan Net Assets and Combined Statements of Changes in Plan Net Assets (pages 17 and 19) provide information about the activities of the pension funds and insurance fund as a whole. Kentucky Retirement Systems is the fiduciary of funds held in trust for five distinct groups of members. The Combining Statements of Plan Net Assets and Combining Statements of Changes in Plan Net Assets (pages 20 through 25) provide more detailed information about each plan assets, liabilities, plan net assets, and changes in plan net assets.

The Schedule of Funding Progress (pages 45 through 50) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (pages 51 through 56) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY RETIREMENT SYSTEMS AS A WHOLE

Kentucky Retirement Systems' combined plan net assets increased during the year ended June 30, 2003 by $152.9 million from $12,104.4 million to $12,257.3 million. Plan net assets for the prior fiscal year decreased by $737.3 million. The increase in plan net assets for the plan year ended June 30, 2003 is attributable to the change in market conditions. The analysis below focuses on plan net assets (Table 1) and changes in plan net assets (Table 2) of Kentucky Retirement Systems' pension funds and insurance fund.

Table 1
Plan Net Assets
(In Millions)

	Pension Funds			Insurance Fund			Total		
	2003	**2002**	**2001**	**2003**	**2002**	**2001**	**2003**	**2002**	**2001**
Cash & Investments	$14,240.2	$13,492.8	$13,420.1	$1,664.2	$1,372.5	$1,156.7	$15,904.4	$14,865.3	$14,576.8
Receivables	124.9	132.0	125.0	25.2	29.6	21.2	150.1	161.6	146.2
Equipment, net of depreciation	1.0	1.2	0.0	0.0	0.0	0.0	1.0	1.2	0.0
Total Assets	$14,366.1	$13,626.0	$13,545.1	$1,689.4	$1,402.1	$1,177.9	$16,055.5	$15,028.1	$14,723.0
Total Liabilities	$(3,452.5)	$(2,718.0)	$(1,781.9)	$ (345.7)	$ (205.7)	$ (99.4)	$(3,798.2)	$(2,923.7)	$(1,881.3)
Plan Net Assets	$10,913.6	$10,908.0	$11,763.2	$1,343.7	$1,196.4	$1,078.5	$12,257.3	$12,104.4	$12,841.7

Table 2
Changes in Plan Net Assets
(In Millions)

	Pension Funds			Insurance Fund			Total		
	2003	2002	2001	2003	2002	2001	2003	2002	2001
Additions:									
Member Cont.	$ 314.8	$ 286.8	$ 250.2	$ 0.0	$ 0.0	$ 0.0	$ 314.8	$ 286.8	$ 250.2
Employer Cont.	43.7	26.3	105.5	233.4	267.3	182.6	277.1	293.6	288.1
Invest. Inc. (net)	430.9	(498.0)	(698.5)	28.2	(52.5)	(40.7)	459.1	(550.5)	(739.2)
Total additions	$ 789.4	$(184.9)	$(342.8)	$261.6	$214.8	$141.9	$1,051.0	$ 29.9	$(200.9)
Deductions:									
Benefit payments	$ 749.0	$ 640.9	$ 548.5	$ 0.0	$ 0.0	$ 0.0	$ 749.0	$ 640.9	$ 548.5
Refunds	20.5	17.9	18.6	0.0	0.0	0.0	20.5	17.9	18.6
Administrative Expense	14.4	12.6	10.9	0.9	0.8	0.7	15.3	13.4	11.6
Healthcare Premiums	0.0	0.0	0.0	113.3	96.1	81.9	113.3	96.1	81.9
Total deductions	$ 783.9	$ 671.4	$ 578.0	$114.2	$ 96.9	$ 82.6	$ 898.1	$ 768.3	$ 660.6
Increase (decrease) in plan net assets	$ 5.5	$(856.3)	$(920.8)	$147.4	$117.9	$ 59.3	$ 152.9	$(738.4)	$(861.5)

Plan net assets of the pension funds increased by $5.5 million ($10,913.6 million compared to $10,908.0 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. This plan net asset increase is attributable primarily to the net appreciation in the fair value of investments due to the change in market conditions in general.

Plan net assets of the insurance fund increased by $147.4 million ($1,343.7 million compared to $1,196.4 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. This increase in net plan assets is primarily attributable to the net appreciation in the fair value of investments which is due to the change in market conditions in general.

PENSION FUND ACTIVITIES

Member contributions increased by $28 million. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit. During the year there was an increase in monthly contributions over the previous year due to the increase in salaries reported to Kentucky Retirement Systems. The amount of elective service purchases also increased this fiscal year.

Employer contributions decreased ($16.5 million). Even though salaries reported to Kentucky Retirement Systems increased ($228 million), employer contributions decreased due to the reduction in the employer rate applied to covered payroll.

Net investment income increased by $928.9 million (income of $431 million compared to loss of $498 million in the prior year). The pension funds experienced an increase in income primarily due to the appreciation in the fair value of investments. This can be illustrated as follows:

	In Millions
Appreciation in fair value of investments-June 30, 2003	$ 477.7
Appreciation in fair value of investments-June 30, 2002	212.5
Net appreciation in fair value of investments	265.2
Investment income (net of investment expense)	321.0
Net loss on sale of investments	(155.2)
Investment income (net)-June 30, 2003	$ 431.0

Program deductions increased by $112.6 million caused principally by an increase of $108.1 million in benefit payments**.** Retirees received an increase of 2.85% in benefits as of July 1, 2002. Also there was an increase of approximately 1900 members and beneficiaries on the retired payroll as of June 30, 2003. Refunds of member contributions increased by $2.6 million.

INSURANCE FUND ACTIVITIES

Employer contributions paid into the insurance fund decreased by $33.9 million over the prior year. While covered payroll actually increased by $228 million, four of the five systems experienced a decrease in rate applied to covered payroll.

Net investment income increased from a net loss of $52.4 million in the prior year to net income of $28.2 million this year. This increase in net income is due to the increase in net appreciation in the fair value of assets. This can be illustrated as follows:

	In Millions
Appreciation in fair value of investments-June 30, 2003	$ 11.2
Appreciation in fair value of investments-June 30, 2002	(19.8)
Net appreciation in fair value of investments	31.0
Investment income (net of investment expense)	22.0
Net loss on sale of investments	(24.8)
Investment Income (net)-June 30, 2003	$ 28.2

The increase in program deductions is due to the increase in payment of healthcare premiums of $17.2 million.

HISTORICAL TRENDS

Accounting standards require that the statement of plan net assets state asset value at **fair value** and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the pension funds and insurance fund is provided in the Schedule of Funding Progress (pages 45 through 50). The asset value stated in the Schedule of Funding Progress is the **actuarial value** of assets determined by calculating the difference between the expected valuation assets and the actual market value of assets adjusted for any unrecognized gains or losses and amortized over a five year period. The actuarial accrued liability is calculated using the entry age normal cost funding method.

The funding position of the pension funds continues to provide more than adequate assets to meet pension obligations. The insurance fund continues to have a large unfunded liability of all participating employees groups. However, the funded ratio for all employee groups participating in the pension funds and the insurance fund show a positive trend over the six-year period displayed.

Annual required contributions of the employers and contributions made by the employers in relation to the required contributions are provided in the Schedule of Employer Contributions (pages 51 through 56). This schedule indicates that employers are generally meeting their responsibilities to provide resources to the plans.

KENTUCKY RETIREMENT SYSTEMS
COMBINED STATEMENTS OF PLAN NET ASSETS
June 30, 2003 and 2002
(Dollars in Thousands)

	2003			2002		
ASSETS	Pension	Post-Employment Healthcare	Total	Pension (Restated)	Post-Employment Healthcare	Total (Restated)
Cash and Short-Term Investments						
Cash	$ 1,493	$ 216	$ 1,709	$ 28,494	$ 24,939	$ 53,433
Short-term investments	485,752	147,010	632,762	548,058	142,009	690,067
Total cash and short-term investments	487,245	147,226	634,471	576,552	166,948	743,500
Receivables						
Investments - accounts receivable	480	63	543	720	70	790
Interest receivable - year end	59,102	3,371	62,473	70,486	3,027	73,513
Accounts receivable - year end	62,139	21,790	83,929	57,008	26,494	83,502
Accounts receivable - alternate plan	2,970	-	2,970	3,551	-	3,551
Accounts receivable - alternate plan - year end	187	-	187	244	-	244
Total receivables	124,878	25,224	150,102	132,009	29,591	161,600
Investments, at fair value						
Corporate and government bonds	3,845,290	133,241	3,978,531	3,680,675	119,766	3,800,441
Corporate stocks	5,886,202	1,039,366	6,925,568	5,861,831	881,263	6,743,094
Mortgages	560,005	-	560,005	642,520	-	642,520
Real estate	17,256	-	17,256	21,699	-	21,699
Total investments	10,308,753	1,172,607	11,481,360	10,206,725	1,001,029	11,207,754
Securities lending collateral invested	3,444,164	344,416	3,788,580	2,709,530	204,493	2,914,023
Equipment (net of accumulated depreciation)	1,012	-	1,012	1,199	-	1,199
Total Assets	14,366,052	1,689,473	16,055,525	13,626,015	1,402,061	15,028,076
LIABILITIES						
Accounts payable	8,340	1,258	9,598	8,446	1,193	9,639
Securities lending collateral obligations	3,444,164	344,416	3,788,580	2,709,530	204,493	2,914,023
Total Liabilities	3,452,504	345,674	3,798,178	2,717,976	205,686	2,923,662
Plan Net Assets Held in Trust for Plan Benefits	$ 10,913,548	$ 1,343,799	$ 12,257,347	$ 10,908,039	$ 1,196,375	$ 12,104,414

(A schedule of funding progress for each plan is presented on pages 45-50)

See accompanying independent auditor's report and notes to financial statements.

KENTUCKY RETIREMENT SYSTEMS
COMBINED STATEMENTS OF CHANGES IN PLAN NET ASSETS
Years Ended June 30, 2003 and 2002
(Dollars in Thousands)

	2003			2002		
	Pension	Post-Employment Healthcare	Total	Pension (Restated)	Post-Employment Healthcare	Total (Restated)
ADDITIONS						
Members' contributions	$ 314,855	$ -	$ 314,855	$ 286,822	$ -	$ 286,822
Employers' contributions	43,661	233,351	277,012	26,260	267,260	293,520
Total contributions	358,516	233,351	591,867	313,082	267,260	580,342
Investment Income						
From investing activities						
Net appreciation (depreciation) in fair value of investments	109,972	6,272	116,244	(868,579)	(134,227)	(1,002,806)
Demutualization proceeds	-	-	-	-	61,603	61,603
Interest	228,942	7,141	236,083	240,540	13,147	253,687
Dividends	97,317	15,164	112,481	130,801	7,149	137,950
Total investing activities income (loss)	436,231	28,577	464,808	(497,238)	(52,328)	(549,566)
Investment expense	7,385	522	7,907	7,295	451	7,746
Commissions	3,101	378	3,479	3,990	430	4,420
Total investing activities expense	10,486	900	11,386	11,285	881	12,166
Net income (loss) from investing activities	425,745	27,677	453,422	(508,523)	(53,209)	(561,732)
From Securities Lending Activities						
Securities lending income	35,925	2,980	38,905	60,496	4,242	64,738
Securities lending expense:						
Security borrower rebate	29,191	2,286	31,477	47,021	3,325	50,346
Security lending agent fee	1,554	140	1,694	2,964	186	3,150
Net income from securities lending activities	5,180	554	5,734	10,511	731	11,242
Total net investment income (loss)	430,925	28,231	459,156	(498,012)	(52,478)	(550,490)
Total Additions	789,441	261,582	1,051,023	(184,930)	214,782	29,852

	2003			2002		
	Pension	Post-Employment Healthcare	Total	Pension (Restated)	Post-Employment Healthcare	Total (Restated)
DEDUCTIONS						
Benefit payments	$ 748,980	$ -	$ 748,980	$ 640,859	$ -	$ 640,859
Refunds	20,522	-	20,522	17,918	-	17,918
Administrative expenses	14,430	862	15,292	12,603	778	13,381
Healthcare premiums paid	-	113,296	113,296	-	96,104	96,104
Total deductions	783,932	114,158	898,090	671,380	96,882	768,262
Net increase (decrease) in plan assets	5,509	147,424	152,933	(856,310)	117,900	(738,410)
Plan Net Assets Held in Trust for Plan Benefits						
Beginning of Year (as previously reported for 2002)	10,908,039	1,196,375	12,104,414	11,763,201	1,078,475	12,841,676
Adjustment for Change in Accounting Method	-	-	-	1,148	-	1,148
Beginning of Year (as restated for 2002)	10,908,039	1,196,375	12,104,414	11,764,349	1,078,475	12,842,824
End of Year (as restated for 2002)	$ 10,913,548	$ 1,343,799	$ 12,257,347	$ 10,908,039	$ 1,196,375	$ 12,104,414

See accompanying independent auditor's report and notes to financial statements.

KENTUCKY RETIREMENT SYSTEMS
COMBINING STATEMENTS OF PLAN NET ASSETS--PENSION FUNDS
June 30, 2003 and 2002
(Dollars in Thousands)

ASSETS	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	2003 Total	2002 Total (Restated)
Cash and short-term investments							
Cash	$ 139	$ 386	$ 218	$ 615	$ 135	$ 1,493	$ 28,494
Short-term investments	18,057	152,861	68,395	238,154	8,285	485,752	548,058
Total cash and short-term investments	18,196	153,247	68,613	238,769	8,420	487,245	576,552
Receivables							
Investments - accounts receivable	16	165	64	225	10	480	720
Interest receivable - year end	1,642	27,079	6,180	22,424	1,777	59,102	70,486
Accounts receivable - year end	3,036	28,459	8,194	21,426	1,024	62,139	57,008
Accounts receivable - alternate plan	-	-	1,673	1,297	-	2,970	3,551
Accounts receivable-alternate plan-year end	-	-	122	65	-	187	244
Total receivables	4,694	55,703	16,233	45,437	2,811	124,878	132,009
Investments, at fair value							
Corporate and government bonds	104,852	1,772,037	398,907	1,452,706	116,788	3,845,290	3,680,675
Corporate stocks	175,804	2,686,554	624,404	2,226,016	173,424	5,886,202	5,861,831
Mortgages	15,234	257,881	58,421	211,499	16,970	560,005	642,520
Real estate	1,994	6,641	3,055	4,742	824	17,256	21,699
Total investments at fair value	297,884	4,723,113	1,084,787	3,894,963	308,006	10,308,753	10,206,725
Securities lending collateral invested	100,809	1,555,789	367,918	1,318,687	100,961	3,444,164	2,709,530
Equipment (net of accumulated depreciation)	28	348	52	578	6	1,012	1,199
Total Assets	421,611	6,488,200	1,537,603	5,498,434	420,204	14,366,052	13,626,015
LIABILITIES							
Accounts payable	289	3,092	909	3,922	128	8,340	8,446
Securities lending collateral	100,809	1,555,789	367,918	1,318,687	100,961	3,444,164	2,709,530
Total Liabilities	101,098	1,558,881	368,827	1,322,609	101,089	3,452,504	2,717,976
Plan Net Assets Held in Trust for Pension Benefits	$ 320,513	$ 4,929,319	$ 1,168,776	$ 4,175,825	$ 319,115	$ 10,913,548	$ 10,908,039

(A schedule of funding progress for each plan is presented on pages 45-50)

See accompanying independent auditor's report and notes to financial statements.

KENTUCKY RETIREMENT SYSTEMS
COMBINING STATEMENTS OF CHANGES IN PLAN NET ASSETS--PENSION FUNDS
Years Ended June 30, 2003 and 2002
(Dollars in Thousands)

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	2003 Total	2002 Total (Restated)
ADDITIONS							
Members' contributions	$ 11,553	$ 137,124	$ 36,203	$ 125,301	$ 4,674	$ 314,855	$ 286,822
Employers' contributions	7,322	7,597	16,906	11,856	(20)	43,661	26,260
Total contributions	18,875	144,721	53,109	137,157	4,654	358,516	313,082
INVESTMENT INCOME							
From investing activities							
Net appreciation (depreciation) in fair value of investments	5,566	50,102	12,185	38,004	4,115	109,972	(868,579)
Interest	6,494	104,393	24,204	86,970	6,881	228,942	240,540
Dividends	2,760	44,374	10,289	36,969	2,925	97,317	130,801
Total investing activities income (loss)	14,820	198,869	46,678	161,943	13,921	436,231	(497,238)
Investment expense	217	3,313	790	2,851	214	7,385	7,295
Commissions	91	1,401	331	1,187	91	3,101	3,990
Total investing activities expense	308	4,714	1,121	4,038	305	10,486	11,285
Net income from investing activities	14,512	194,155	45,557	157,905	13,616	425,745	(508,523)
From Securities Lending Activities							
Securities lending income	1,577	13,621	4,504	15,295	928	35,925	60,496
Securities lending expense:							
Security borrower rebates	1,279	11,080	3,655	12,428	749	29,191	47,021
Security lending agent fees	68	590	194	662	40	1,554	2,964
Net income from securities lending activities	230	1,951	655	2,205	139	5,180	10,511
Total net investment income	14,742	196,106	46,212	160,110	13,755	430,925	(498,012)
Total Additions	33,617	340,827	99,321	297,267	18,409	789,441	(184,930)

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	2003 Total	2002 Total (Restated)
DEDUCTIONS							
Benefit payments	$ 13,373	$ 404,896	$ 72,532	$ 230,317	$ 27,862	$ 748,980	$ 640,859
Refunds	1,160	7,258	1,794	10,213	97	20,522	17,918
Administrative expenses	404	4,959	737	8,244	86	14,430	12,603
Total deductions	14,937	417,113	75,063	248,774	28,045	783,932	671,380
Net increase (decrease) in plan assets	18,680	(76,286)	24,258	48,493	(9,636)	5,509	(856,310)
Plan net assets held in trust for Pension Benefits							
Beginning of Year (as previously reported for 2002)	301,833	5,005,605	1,144,518	4,127,332	328,751	10,908,039	11,763,201
Adjustment for Change in Accounting Method	-	-	-	-	-	-	1,148
Beginning of Year (as restated for 2002)	301,833	5,005,605	1,144,518	4,127,332	328,751	10,908,039	11,764,349
End of Year (as restated for 2002)	$ 320,513	$ 4,929,319	$ 1,168,776	$ 4,175,825	$ 319,115	$ 10,913,548	$ 10,908,039

See accompanying independent auditor's report and notes to financial statements.

KENTUCKY RETIREMENT SYSTEMS
COMBINING STATEMENTS OF PLAN NET ASSETS--POST-EMPLOYMENT HEALTHCARE
June 30, 2003 and 2002
(Dollars in Thousands)

ASSETS	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	2003 Total	2002 Total
Cash and short-term investments							
Cash	$ 25	$ 31	$ 82	$ 64	$ 14	$ 216	$ 24,940
Short-term investments	8,203	89,312	15,308	29,905	4,282	147,010	142,008
Total cash and short-term investments	8,228	89,343	15,390	29,969	4,296	147,226	166,948
Receivables							
Investments - accounts receivable	6	21	12	22	2	63	70
Interest receivable - year end	328	1,180	560	1,104	199	3,371	3,027
Accounts receivable - year end	1,334	5,457	3,653	10,695	651	21,790	26,494
Total receivables	1,668	6,658	4,225	11,821	852	25,224	29,591
Investments, at fair value							
Corporate and government bonds	12,871	48,016	21,287	42,820	8,247	133,241	119,766
Corporate stocks	102,823	343,727	182,396	351,228	59,192	1,039,366	881,263
Total investments	115,694	391,743	203,683	394,048	67,439	1,172,607	1,001,029
Security lending collateral invested	31,894	134,627	53,881	104,216	19,798	344,416	204,493
Total Assets	157,484	622,371	277,179	540,054	92,385	1,689,473	1,402,061
LIABILITIES							
Accounts payable	68	673	130	338	49	1,258	1,193
Securities lending collateral obligations	31,894	134,627	53,881	104,216	19,798	344,416	204,493
Total Liabilities	31,962	135,300	54,011	104,554	19,847	345,674	205,686
Plan Net Assets Held in Trust for Post-Employment Healthcare Benefits	$ 125,522	$ 487,071	$ 223,168	$ 435,500	$ 72,538	$ 1,343,799	$ 1,196,375

(A schedule of funding progress for each plan is presented on pages 45-50)

See accompanying independent auditor's report and notes to financial statements.

KENTUCKY RETIREMENT SYSTEMS
COMBINING STATEMENTS OF CHANGES IN PLAN NET ASSETS--POST-EMPLOYMENT HEALTHCARE
Years Ended June 30, 2003 and 2002
(Dollars in Thousands)

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	2003 Total	2002 Total
ADDITIONS							
Employers' contributions	$ 15,883	$ 65,335	$ 45,244	$ 99,235	$ 7,654	$ 233,351	$ 267,260
Total contributions	15,883	65,335	45,244	99,235	7,654	233,351	267,260
INVESTMENT INCOME							
From investing activities							
Net appreciation (depreciation) in fair value of investments	719	146	1,735	3,576	96	6,272	(134,227)
Demutualization proceeds	-	-	-	-	-	-	61,603
Interest	684	2,582	1,175	2,287	413	7,141	13,147
Dividends	1,453	5,482	2,496	4,857	876	15,164	7,149
Total income (loss) from investing activities	2,856	8,210	5,406	10,720	1,385	28,577	(52,328)
Investment activities expense	52	183	84	170	33	522	451
Commissions	35	138	63	121	21	378	430
Total investing activities expense	87	321	147	291	54	900	881
Net investing activities income (loss)	2,769	7,889	5,259	10,429	1,331	27,677	(53,209)
From Securities Lending Activities							
Securities lending income	364	872	546	1,036	162	2,980	4,242
Securities lending expense:							
Security borrower rebates	281	670	418	792	125	2,286	3,325
Security lending agent fees	17	41	26	48	8	140	186
Net income from securities lending activities	66	161	102	196	29	554	731
Total net investment income (loss)	2,835	8,050	5,361	10,625	1,360	28,231	(52,478)
Total Additions	18,718	73,385	50,605	109,860	9,014	261,582	214,782

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	2003 Total	2002 Total
DEDUCTIONS							
Healthcare premiums subsidies	$ 2,938	$ 51,586	$ 14,866	$ 39,387	$ 4,519	$ 113,296	$ 96,104
Administrative fees	27	393	105	306	31	862	778
Total deductions	2,965	51,979	14,971	39,693	4,550	114,158	96,882
Net increase in plan assets	15,753	21,406	35,634	70,167	4,464	147,424	117,900
Plan net assets held in trust for post-employment healthcare benefit							
Beginning of Year	109,769	465,665	187,534	365,333	68,074	1,196,375	1,078,475
End of Year	$ 125,522	$ 487,071	$ 223,168	$ 435,500	$ 72,538	$ 1,343,799	$ 1,196,375

See accompanying independent auditor's report and notes to financial statements.

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by Kentucky Retirement Systems: (1) Kentucky Employees Retirement System (KERS); (2) County Employees Retirement System (CERS); and (3) State Police Retirement System (SPRS). KRS maintains separate accounting records for five insurance funds which also includes hazardous duty members of the Kentucky Employees and County Employees Retirement Systems. The assets of the various insurance funds are commingled for investment purposes. The following notes apply to the various funds administered by Kentucky Retirement Systems.

NOTE A--SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - KRS's financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan.

Method Used to Value Investments - Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate is based on appraisals. Investments that do not have an established market are reported at estimated fair value.

Estimates - The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment - Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years.

Expense Allocation - Administrative and investment expenses of the Kentucky Retirement Systems are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

Reclassification - Certain amounts in 2002 have been reclassified to conform with the 2003 presentation. Such reclassifications had no effect on reported increase or decrease in plan net assets.

NOTE A--SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES--CONTINUED

Component Unit - Kentucky Retirement Systems is a component unit of the Commonwealth of Kentucky. As such, the Commonwealth of Kentucky is the primary government in whose financial reporting entity the System is included.

The Kentucky Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.515. The County Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 78.520. The State Police Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 16.510. The Kentucky Retirement Systems Insurance Fund consisting of the Kentucky Employees Insurance Fund, Kentucky Employee Hazardous Insurance Fund, County Employees Insurance Fund, County Employees Hazardous Insurance Fund and State Police Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.701. The Retirement Systems' and Insurance Fund's administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Systems' Board of Trustees without further legislative review. The methods used to determine the employer rates for all Retirement Systems are specified in KRS 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION

Membership of each Retirement plan consisted of the following at June 30, 2003 and 2002:

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	2003			2002		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and beneficiaries receiving benefits	27,182	1,365	28,547	26,703	1,208	27,911
Inactive Vested Retirements	3,892	169	4,061	3,415	127	3,542
Inactive Vested Memberships	17,320	1,233	18,553	14,299	946	15,245
Active plan members	49,586	4,203	53,789	48,555	4,211	52,766
Total	97,980	6,970	104,950	92,972	6,492	99,464
Number of participating employers			410			404

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

COUNTY EMPLOYEES RETIREMENT SYSTEM

	2003			2002		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and beneficiaries receiving benefits	27,057	3,787	30,844	26,147	3,483	29,630
Inactive Vested Retirements	5,147	193	5,340	4,470	148	4,618
Inactive Vested Memberships	30,573	873	31,446	26,508	552	27,060
Active plan members	83,142	9,587	92,729	79,850	8,949	88,799
Total	145,919	14,440	160,359	136,975	13,132	150,107
Number of participating employers			1,367			1,314

STATE POLICE RETIREMENT SYSTEM

Number of Members	2003 Hazardous Position Employees	2002 Hazardous Position Employees
Retirees and beneficiaries receiving benefits	966	897
Inactive Vested Retirements	43	20
Inactive Vested Memberships	186	83
Active plan members	1,022	1,002
Total	2,217	2,002
Number of participating employers	1	1

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

Hospital and medical contracts in force consisted of the following at June 30, 2003 and 2002:

	2003					2002				
	Single	Couple/ Family	Parent +	Medicare Regular	Medicare High	Single	Couple/ Family	Parent +	Medicare Regular	Medicare High
KERS Non-Hazardous	6,602	1,298	428	1,855	11,311	5,822	1,182	396	1,838	11,229
KERS Hazardous	417	234	53	62	494	359	205	57	66	451
CERS Non-Hazardous	5,054	855	244	2,630	9,958	4,530	800	224	2,446	9,517
CERS Hazardous	1,010	1,379	223	40	808	956	1,321	210	38	734
SPRS	218	384	44	13	312	199	364	50	11	303
Totals	13,301	4,150	992	4,600	22,883	11,866	3,872	937	4,399	22,234

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions - For the years ended June 30, 2003 and 2002, plan members were required to contribute 5% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the year ended June 30, 2003, the contribution rate for some employers participating in KERS was 3.76% of creditable compensation and 5.89% of creditable compensation for some KERS employers pursuant to legislation enacted by the 2003 General Assembly [HB269, FCCR1, Part III, General Provisions, Paragraph 18 (2003)]. For the year ended June 30, 2002, the rate was 5.89%. The actuarially determined rate set by the Board for the years ended June 30, 2003 and 2002 was 5.89% of creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions - For the years ended June 30, 2003 and 2002, plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the year ended June 30, 2003, the contribution rate for some employers participating in KERS was 17.60% and for some employers in KERS was 18.84% of creditable compensation pursuant to legislation enacted by the 2003 General Assembly [HB269, FCCR1, Part III, General Provisions, Paragraph 18 (2003)]. For the year ended June 30, 2002, the rate was 18.84%. The actuarially determined rate set by the Board for the years ended June 30, 2003 and 2002 was 18.84% of creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

COUNTY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

Contributions - For the years ended June 30, 2003 and 2002, plan members were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2003 and 2002, participating employers contributed 6.34% and 6.41%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2003 and 2002 was 6.34% and 6.41%, respectively. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2003 and 2002, plan members were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2003 and 2002, participating employers contributed 16.28% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2003 and 2002 was 16.28% of creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

STATE POLICE RETIREMENT SYSTEM

Plan Description - SPRS is a single-employer defined benefit pension plan that covers all full-time State Troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

Contributions - For the years ended June 30, 2003 and 2002 plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2003 and 2002, the State contributed 17.37% and 21.58%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2003 and 2002 was 21.58% of creditable compensation. Administrative costs of Kentucky Retirement System are financed through employer contributions and investment earnings.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

Plan Description - The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System (Systems). The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the year insurance premiums withheld from benefit payments to members of the Systems approximated $22,384,767 and $659,533 for KERS and KERS hazardous, respectively, $20,456,708 and $2,242,457 for CERS and CERS hazardous, respectively, and $581,251 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2003 the Fund had 60,357 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Fund is based on years of service with the Systems. Years of service and respective percentages of the maximum contribution are as follows:

Years of Service	Percent Paid by Insurance Fund
20 or More	100%
15 – 19	75%
10 - 14	50%
4 - 9	25%
Less Than 4	0%

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed.

In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years. The increases commenced with the 1997 valuation and adjustments will be made every other valuation year to coincide with the valuation used by the General Assembly to establish employer contribution rates for the biennium.

NOTE C--CASH AND SHORT-TERM INVESTMENTS AND SECURITIES LENDING COLLATERAL

The provisions of Governmental Accounting Standards Board Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions and investments made with that cash be reported as assets on the financial statements. In conjunction with the adoption of Governmental Accounting Standard No. 28, the System has reclassified certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	2003	2002
Miscellaneous cash	$ 525,299	$ 12,580,710
Short-Term Investment Pool	1,656,597,564	1,318,840,638
Repurchase agreements	170,917,610	260,745,038
Total	$1,828,040,473	$ 1,592,166,386

COUNTY EMPLOYEES RETIREMENT SYSTEM

	2003	2002
Miscellaneous Cash	$ 832,473	$ 14,647,210
Short-Term Investment Pool	1,686,604,839	1,308,851,954
Repurchase agreements	306,549,501	269,469,918
Total	$1,993,986,813	$ 1,592,969,082

STATE POLICE RETIREMENT SYSTEM

	2003	2002
Miscellaneous Cash	134,759	1,266,091
Short-Term Investment Pool	100,961,178	81,837,844
Repurchase agreements	8,285,357	17,843,020
Total	$ 109,381,294	$ 100,946,955

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

	2003	2002
Miscellaneous Cash	215,516	24,939,638
Short-Term Investment Pool	344,416,324	204,492,843
Repurchase agreements	147,009,999	142,008,460
Total	$ 491,641,839	$ 371,440,941

NOTE D--INVESTMENTS

The Board of Trustees of the Retirement Systems and Insurance Fund recognize their duty to invest funds in accordance with the Prudent Person Rule and manage those funds consistent with the long-term nature of the Systems. The Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments - Investments may be made in domestic and international common stock, securities convertible into common stock and in preferred stock of publicly traded corporations.

Fixed Income Investments - Publicly traded corporate bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with the current market and economic conditions. Investment may also be made in any debt instrument issued or guaranteed in whole or in part by the U.S. Government or any agency or instrumentality of the U.S. Government.

Mortgages - Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments guaranteed by an agency of the U.S. Government or the Commonwealth of Kentucky.

Alternative Investments/Equity Real Estate – Subject to the specific approval of the investment committee of the board of trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The board may invest in real estate or alternative investments including, without limitation, venture capital, private equity and private placements which the investment committee believes has excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities - The following short-term investment vehicles are considered acceptable:

Publicly traded investment grade corporate bonds, government and agency bonds, mortgages, and collective STIF's, money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having a BBB or better rating by at least one recognized bond rating service. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur.

Derivatives – Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited.

The Retirement Systems and Insurance Fund invest in collateral mortgage obligations (CMOs) and other asset-backed securities to increase return and adjust duration of the portfolio. The Systems and the Fund invest in exchange-traded funds to convert cash held in index funds to short-term equity investments. This practice is intended to make the performance of the index funds more closely track the performance of the index that the funds are intended to replicate.

NOTE D--INVESTMENTS--CONTINUED

Collateral mortgage obligations, asset-backed securities, and exchange-traded funds pose no greater risk than other similar investment grade holdings in the Systems' and the Fund's portfolios. The fair value of CMOs at June 30, 2003 and 2002 was approximately $80 million and $137 million respectively; the fair value of asset-backed securities at June 30, 2003 and 2002 was approximately $310 million and $141 million respectively; and the fair value of exchange-traded funds at June 30, 2003 and 2002 was approximately $188 million and $191 million, respectively.

The Retirement Systems' and Insurance Fund's investments are categorized on pages 36 through 39 to give an indication of the level of risk assumed by them at June 30, 2003 and 2002. Category 1 includes investments that are either insured or registered or for which the investments are held by the System or its agent in the System's name. Category 3 includes securities purchased by and held by the System's custodial agent. The agent loans securities owned by the Systems and Fund with the simultaneous receipt of cash collateral. The custodial agent purchases securities with the cash collateral in accordance with the Systems' and Fund's Statement of Investment Policy. All securities purchased with cash collateral are segregated by the custodial agent and held in the name of Kentucky Retirement Systems. At June 30, 2003, the systems had a second agent who also loans securities owned by the systems with the simultaneous receipt of cash collateral. The second custodial agent invests cash collateral in a short-term investment pool that holds only U.S. dollar cash and U.S. securities.

NOTE D--INVESTMENTS--CONTINUED

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	2003			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 669,755,421	$ -	$ 3,809,832	$ 673,565,253
Loaned for securities collateral	48,609,045	-	-	48,609,045
Corporate bonds	588,972,872	-	-	588,972,872
Corporate stocks	2,299,125,931	-	130	2,299,126,062
Loaned for securities collateral	1,719,201	-	-	1,719,201
Repurchase agreements	167,987,935	-	2,929,676	170,917,610
Subtotal	3,776,170,405	-	6,739,638	3,782,910,043
Investments - Not Categorized				
Short-term Investment Pool	-	-	-	1,656,597,564
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	504,017,197
Corporate bonds	-	-	-	61,722,729
Corporate stocks	-	-	-	561,512,794
Mortgages	-	-	-	273,115,545
Real Estate Investment	-	-	-	8,635,101
Total Investments	$3,776,170,405	$ -	$ 6,739,638	$6,848,510,973

	2002			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 113,768,072	$ -	$ 6,257,731	$ 120,025,803
Loaned for securities collateral	250,546,768	-	-	250,546,768
Corporate bonds	545,042,869	-	-	545,042,869
Loaned for securities collateral	5,102,948	-	-	5,102,948
Corporate stocks	2,452,194,242	-	129	2,452,194,371
Loaned for securities collateral	444,848	-	-	444,848
Repurchase agreements	259,255,343	-	1,495,823	260,751,166
Subtotal	3,626,355,090	-	7,753,683	3,634,108,773
Investments - Not Categorized				
Short-term Investment Pool	-	-	-	1,318,840,638
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	806,544,819
Corporate bonds	-	-	-	67,680,028
Corporate stocks	-	-	-	403,320,388
Mortgages	-	-	-	313,339,066
Real Estate Investment	-	-	-	11,103,333
Total Investments	$3,626,335,090	$ -	$ 7,753,683	$6,554,937,045

NOTE D--INVESTMENTS--CONTINUED

COUNTY EMPLOYEES RETIREMENT SYSTEM

	2003			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 209,130,474	$ -	$ 3,879,310	$ 213,009,784
Loaned for securities collateral	483,521,727	-	-	483,521,727
Corporate bonds	574,044,312	-	-	574,044,312
Loaned for securities collateral	5,047,609	-	-	5,047,609
Corporate stocks	2,265,011,128	-	133	2,265,011,261
Loaned for securities collateral	13,724,905	-	-	13,724,905
Repurchase agreements	303,566,399	-	2,983,102	306,549,501
Subtotal	3,854,046,554	-	6,862,545	3,860,909,099
Investments - Not Categorized				
Short-Term Investment Pool	-	-	-	1,686,604,839
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	513,146,864
Corporate bonds	-	-	-	62,840,762
Corporate stocks	-	-	-	571,683,924
Mortgages	-	-	-	269,920,205
Real Estate Investment	-	-	-	7,796,669
Total Investments	$3,854,046,554	$ -	$ 6,862,545	$6,972,902,362

	2002			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 106,558,508	$ -	$ 6,176,452	$ 112,734,960
Loaned for securities collateral	248,649,168	-	-	248,649,168
Corporate bonds	537,565,238	-	-	537,565,238
Loaned for securities collateral	5,064,299	-	-	5,064,299
Corporate stocks	2,433,226,793	-	124	2,433,226,917
Loaned for securities collateral	441,479	-	-	441,479
Repurchase agreements	267,991,504	-	1,478,414	269,469,918
Subtotal	3,599,496,989	-	7,654,990	3,607,151,979
Investments - Not Categorized				
Short-Term Investment Pool	-	-	-	1,308,851,954
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	800,442,229
Corporate bonds	-	-	-	67,167,431
Corporate stocks	-	-	-	400,265,705
Mortgages	-	-	-	309,695,477
Real Estate Investment	-	-	-	9,580,920
Total Investments	$3,599,496,989	$ -	$ 7,654,990	$6,503,155,695

NOTE D--INVESTMENTS--CONTINUED

STATE POLICE RETIREMENT SYSTEM

	2003			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 16,405,761	$ -	$ 232,170	$ 16,637,931
Loaned for securities collateral	28,943,901	-	-	28,943,901
Corporate bonds	36,425,347	-	-	36,425,347
Loaned for securities collateral	302,153	-	-	302,153
Corporate stocks	138,380,614	-	8	138,380,622
Loaned for securities collateral	821,581	-	-	821,581
Repurchase agreements	8,106,824	-	178,533	8,285,357
Subtotal	229,386,181	-	410,711	229,796,892
Investments - Not Categorized				
Short-Term Investment Pool	-	-	-	100,961,178
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	30,717,279
Corporate bonds	-	-	-	3,761,686
Corporate stocks	-	-	-	34,221,343
Mortgages	-	-	-	16,969,831
Real Estate Investment	-	-	-	823,918
Total Investments	$ 229,386,181	$ -	$ 410,711	$ 417,252,127

	2002			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 8,834,473	$ -	$ 397,807	$ 9,232,280
Loaned for securities collateral	15,547,146	-	-	15,547,146
Corporate bonds	34,758,002	-	-	34,758,002
Loaned for securities collateral	316,653	-	-	316,653
Corporate stocks	146,882,275	-	-	146,882,275
Loaned for securities collateral	27,604	-	-	27,604
Repurchase agreements	17,750,580	-	92,440	17,843,020
Subtotal	224,116,733	-	490,247	224,606,980
Investments - Not Categorized				
Short-Term Investment Pool	-	-	-	81,837,844
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	50,048,419
Corporate bonds	-	-	-	4,199,740
Corporate stocks	-	-	-	25,027,187
Mortgages	-	-	-	19,484,961
Real Estate Investment	-	-	-	1,014,934
Total Investments	$ 224,116,733	$ -	$ 490,247	$ 406,220,066

NOTE D--INVESTMENTS--CONTINUED

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

	2003			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ -	$ -	$ -	$ -
Loaned for securities collateral	104,484,853	-	-	104,484,853
Corporate stocks	827,298,990	-	-	827,298,990
Loaned for securities collateral	16,750,685	-	-	16,750,685
Repurchase agreements	145,186,891	-	1,823,108	147,009,999
Subtotal	1,093,721,419	-	1,823,108	1,095,544,527
Investments - Not Categorized				
Short-term investment pool	-	-	-	344,416,324
Investments held by broker-dealers under securities loans:	-	-	-	28,755,858
U.S. Government Securities	-	-	-	195,316,898
Corporate stocks	-	-	-	-
Mortgage				
Total Investments	$1,093,721,419	$ -	$ 1,823,108	$1,664,033,607

	2002			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 14,644,105	$ -	$ -	$ 14,644,105
Loaned for securities collateral	12,342,559	-	-	12,342,559
Corporate stocks	758,949,817	-	-	758,949,817
Loaned for securities collateral	2,647,879	-	-	2,647,879
Repurchase agreements	141,428,878	-	579,581	142,008,459
Subtotal	930,013,238	-	579,581	930,592,819
Investments - Not Categorized				
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	204,492,842
Corporate stocks	-	-	-	92,779,528
Mortgages	-	-	-	119,665,028
Total Investments	$ 930,013,238	$ -	$ 579,581	$1,347,530,217

NOTE E--SECURITIES LENDING TRANSACTIONS

Kentucky Revised Statues Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with a fair value of 102 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. At year-end, the Funds have no credit risk exposure to borrowers because the amounts the Funds owe to borrowers exceed the amounts the borrowers owe the Funds. The contracts with the custodial banks require them to indemnify the Funds if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction, although the average term of the loans was 6 days, 10 days, and 24 days for the three investment portfolios subject to security lending agreements. One custodial bank invests cash collateral in securities that are permitted for investment by state statute and board policy, which at year-end has a weighted-average maturity of 3 days for the Funds. The other custodial bank invests cash collateral in the agent's short-term investment pool as permitted by state statute and Board policy, which at year-end has a weighted-average maturity of 24 days for the Pension Fund only. Neither of the Funds can pledge or sell collateral securities received unless the borrower defaults.

NOTE F--RISKS OF LOSS

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims against the Board of Trustees of Kentucky Retirement Systems or any of its staff as result of actual or alleged breach of fiduciary duty are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $25,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

NOTE F--RISKS OF LOSS--CONTINUED

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

NOTE G--CONTINGENCIES

In the normal course of business, KRS is involved in various litigation concerning the right of participants or their beneficiaries to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

NOTE H--INCOME TAX STATUS

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax under income tax law.

NOTE I--PRIOR PERIOD ADJUSTMENT

The plan assets of KRS have been restated as of July 1, 2001 to reflect a change in accounting method in the recording of equipment acquisitions. Effective July 1, 2001, KRS changed to recording such equipment acquisitions as capital assets and providing for depreciation of such assets over their respective estimated useful lives utilizing the straight-line method of depreciation. KRS had previously recorded equipment acquisitions as an expense in the period acquired. The net affect of this change in accounting method was an increase of $1,148,000 to plan net assets as of July 1, 2001.

NOTE J--ANTHEM DEMUTUALIZATION

In 2002, Anthem Insurance Companies, Inc., an Indiana corporation, underwent a demutualization, as authorized by the Indiana statutes. The demutualization provided, among other things, that "eligible statutory members", as defined by Indiana statutory provision, would receive cash or stock in consideration for giving up their membership interest in Anthem. In some instances application of the statute led to the determination by Anthem that individual members of the retirement plans administered by Kentucky Retirement Systems were the "statutory members" and in other instances the Kentucky Retirement Systems was identified by Anthem as the eligible statutory member to receive cash or stock under the Anthem demutualization plan. According to Anthem, this determination was based upon which of Anthem's subsidiaries was the original provider. The determination was confirmed by the Indiana Department of Insurance.

NOTE J--ANTHEM DEMUTUALIZATION--CONTINUED

The $61,603,207 distribution which Kentucky Retirement Systems received on January 4, 2002 under the Anthem demutualization was deposited in the Kentucky Employees Retirement Systems Insurance Fund. The retirement systems included within the Kentucky Retirement Systems for purposes of the Anthem demutualization are the Kentucky Employees Retirement System, (hazardous and non-hazardous), the County Employees Retirement System (hazardous and non-hazardous), the State Police Retirement System, the Legislators' Retirement Plan, and the Judicial Retirement Plan. Anthem has not yet provided the Kentucky Retirement System with the information necessary to divide the distribution among these retirement funds. Accordingly, the distribution will remain in the Kentucky Employees Retirement Systems Insurance Fund until the interests of the various retirement funds are determined. Given the unusual and non-recurring nature of the transaction, it is reported in these financial statements as a separate component of income.

NOTE K--CONTINGENT LIABILITY--ANTHEM DEMUTUALIZATION

In relation to the above noted Anthem demutualization, Kentucky Retirement System is a defendant in a case entitled Jean C. Love, David E. Wiseman and Belvia Campbell v. Board of Trustees of the Kentucky Retirement Systems, which is in Franklin Circuit Court. At issue is how to distribute the proceeds resulting from Anthem's demutualization, which resulted in Kentucky Retirement System receiving approximately $61 million dollars in proceeds. The plaintiffs seek to recover the full amount of the proceeds or, alternatively, the pro rata amount of proceeds attributable to insurance premiums that the employees and/or their beneficiaries paid directly to Anthem. Kentucky Retirement System believes that the claims are without merit and intends to vigorously defend its position. The ultimate outcome of this litigation cannot presently be determined. However, in management's opinion, the likelihood of a material adverse outcome is unlikely. Accordingly, adjustments, if any, that might result from the resolution of this matter have not been reflected in the financial statements.

NOTE L--EXCHANGE GAIN OR LOSS

Foreign currency translations resulted in an aggregate exchange gain of $158,432,007 for the Pension Funds and $21,586,901 for the Insurance Funds.

NOTE M--DEFINED BENEFIT PENSION PLAN

All eligible employees of Kentucky Retirement Systems (KRS) participate in the Kentucky Employees Retirement System (non-hazardous), a cost sharing, multiple employer defined pension plan that covers substantially all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The Plan provides for retirement, disability, and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. KRS contributed 3.76% of covered payroll for the period July 1, 2002 - December 15, 2002 and 5.89% for the period December 16, 2002 - June 30, 2003. For the year ended June 30, 2002, KRS contributed 5.89% of covered payroll. Plan members were required to contribute 5% of creditable compensation for the plan years ended June 30, 2003 and 2002. Covered payroll was approximately $8,265,000 and $7,521,000 for 2003 and 2002, respectively. KRS contributed approximately $408,000 and $443,000 for 2003 and 2002, respectively.

NOTE N--EQUIPMENT

Equipment at June 30, 2003 and 2002 consists of the following:

Equipment, at cost	$ 3,343,869	$ 3,179,151
Less accumulated depreciation	(2,332,240)	(1,980,185)
	$ 1,011,629	$ 1,198,966

Depreciation expense for the years ended June 30, 2003 and 2002 amounted to $352,054 and $329,839, respectively.

NOTE O--COLLATERALIZATION OF DEPOSITS

At June 30, 2003, KRS had cash deposits at a financial institution, which totaled approximately $1,709,000. The balance is insured by the Federal Deposit Insurance Corporation up to $100,000. The remaining balance of approximately $1,609,000 was collateralized by securities recorded in KRS's name and held by the financial institution.

REQUIRED SUPPLEMENTARY INFORMATION

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded (Overfunded) AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
June 30, 1998	4,356,072,625	3,800,014,746	(556,057,879)	1.146	1,321,004,266	(0.421)
June 30, 1999	5,264,340,397	4,327,622,821	(936,717,576)	1.216	1,330,766,100	(0.704)
June 30, 2000	6,806,675,460	4,876,825,772	(1,929,849,688)	1.396	1,409,504,668	(1.369)
June 30, 2001*	6,844,742,687	5,444,035,294	(1,400,707,393)	1.257	1,505,299,220	(0.931)
June 30, 2002	6,654,084,196	6,026,094,764	(627,989,432)	1.104	1,595,809,458	(0.393)
June 30, 2003**	6,351,318,832	6,520,463,188	169,144,356	0.974	1,658,604,696	0.102
Hazardous						
June 30, 1998	212,214,618	171,735,076	(40,479,542)	1.236	93,130,996	(0.435)
June 30, 1999	259,839,319	204,282,788	(55,556,531)	1.272	103,464,123	(0.537)
June 30, 2000	336,213,464	243,365,557	(92,847,907)	1.382	115,639,439	(0.803)
June 30, 2001*	361,677,475	285,193,761	(76,483,714)	1.268	122,857,992	(0.623)
June 30, 2002	376,384,302	322,069,164	(54,315,138)	1.169	125,275,925	(0.434)
June 30, 2003**	385,925,722	356,879,133	(29,046,589)	1.081	129,088,956	(0.225)

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

**Covered payroll was actuarially computed as opposed to estimated in prior years.

COUNTY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded (Overfunded) AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
June 30, 1998	3,346,205,003	2,663,946,276	(682,258,727)	1.256	1,437,594,574	(0.475)
June 30, 1999	4,072,227,435	2,991,420,884	(1,080,806,551)	1.361	1,346,601,939	(0.803)
June 30, 2000	5,284,033,534	3,368,601,134	(1,915,432,400)	1.569	1,452,058,248	(1.319)
June 30, 2001*	5,423,834,549	3,706,282,212	(1,717,552,337)	1.463	1,544,973,296	(1.112)
June 30, 2002	5,397,787,158	4,165,355,149	(1,232,432,009)	1.296	1,663,183,629	(0.741)
June 30, 2003**	5,286,580,047	4,417,597,802	(868,982,245)	1.197	1,796,451,180	(0.484)
Hazardous						
June 30, 1998	927,057,492	865,966,626	(61,090,866)	1.071	236,180,023	(0.257)
June 30, 1999	1,124,651,486	963,711,775	(160,939,711)	1.167	256,201,726	(0.628)
June 30, 2000	1,445,542,794	1,084,553,697	(360,989,097)	1.333	288,575,870	(1.251)
June 30, 2001*	1,486,666,016	1,193,860,442	(292,805,574)	1.245	316,700,304	(0.925)
June 30, 2002	1,485,511,793	1,327,291,273	(158,220,520)	1.119	345,849,277	(0.457)
June 30, 2003**	1,467,004,856	1,499,628,782	32,623,926	0.978	374,700,732	0.087

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

**Covered payroll was actuarially computed as opposed to estimated in prior years.

STATE POLICE RETIREMENT SYSTEM

Year Ended	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Overfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
June 30, 1998	306,318,918	294,427,019	(11,891,899)	1.040	38,727,361	(0.307)
June 30, 1999	357,623,196	314,021,673	(43,601,523)	1.139	40,433,405	(1.078)
June 30, 2000	459,168,574	336,579,763	(122,588,811)	1.364	43,619,383	(2.810)
June 30, 2001*	456,160,709	356,211,860	(99,948,849)	1.281	44,646,678	(2.237)
June 30, 2002	438,955,465	380,790,346	(58,165,119)	1.153	44,314,696	(1.312)
June 30, 2003**	413,063,576	414,881,459	1,817,883	0.996	43,760,832	0.042

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

**Covered payroll was actuarially computed as opposed to estimated in prior years.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

KERS Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Overfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
June 30, 1998	210,105,184	1,242,183,993	1,032,078,809	0.169	1,321,004,266	0.781
June 30, 1999	283,704,887	1,273,364,800	989,659,913	0.223	1,330,766,100	0.743
June 30, 2000	399,560,252	1,457,475,358	1,057,915,106	0.274	1,409,504,668	0.751
June 30, 2001*	449,630,605	1,769,583,098	1,319,952,493	0.254	1,505,299,220	0.877
June 30, 2002	521,250,455	1,907,683,881	1,386,433,426	0.273	1,595,809,458	0.869
June 30, 2003**	553,885,082	2,093,210,321	1,539,325,239	0.265	1,658,604,696	0.928
KERS Hazardous						
June 30, 1998	54,606,786	137,394,162	82,787,376	0.397	93,130,996	0.889
June 30, 1999	74,579,649	149,158,586	74,578,937	0.500	103,464,123	0.721
June 30, 2000	102,212,237	175,167,613	72,955,376	0.584	115,639,439	0.631
June 30, 2001*	119,372,742	214,450,822	95,078,080	0.557	122,857,992	0.774
June 30, 2002	135,874,582	236,819,050	100,944,468	0.574	125,275,925	0.806
June 30, 2003**	151,459,500	283,178,335	131,718,835	0.535	129,088,956	1.020

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

**Covered payroll was actuarially computed as opposed to estimated in prior years.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

CERS Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Targeted Rate (b)	Overfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
June 30, 1998	168,531,296	1,213,339,747	1,044,808,451	0.139	1,437,594,574	0.727
June 30, 1999	231,937,169	1,282,874,286	1,050,937,117	0.180	1,346,601,939	0.780
June 30, 2000	319,642,694	1,466,716,928	1,147,074,234	0.218	1,452,058,248	0.790
June 30, 2001*	371,758,628	1,793,710,768	1,421,952,140	0.207	1,544,973,296	0.920
June 30, 2002	450,497,307	1,977,577,038	1,527,079,731	0.228	1,663,183,629	0.918
June 30, 2003**	520,060,105	2,176,963,259	1,656,903,154	0.239	1,796,451,180	0.922
CERS Hazardous						
June 30, 1998	87,055,079	493,286,363	406,231,284	0.176	236,180,023	1.720
June 30, 1999	114,590,223	518,280,115	403,689,892	0.221	256,201,726	1.576
June 30, 2000	168,657,912	599,936,029	431,278,117	0.281	288,575,870	1.495
June 30, 2001*	197,875,249	721,605,292	523,730,043	0.274	316,700,304	1.654
June 30, 2002	234,683,878	781,184,974	546,501,096	0.301	345,849,279	1.580
June 30, 2003**	269,190,080	935,650,662	666,460,582	0.288	374,700,732	1.779

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

**Covered payroll was actuarially computed as opposed to estimated in prior years.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

SPRS	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Targeted Targeted Rate (b)	Overfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
June 30, 1998	41,410,500	124,501,076	83,090,576	0.333	38,727,361	2.146
June 30, 1999	53,929,859	125,797,150	71,867,291	0.429	40,433,405	1.777
June 30, 2000	71,711,712	138,867,085	67,155,373	0.516	43,619,383	1.540
June 30, 2001*	79,863,577	158,261,479	78,397,902	0.505	44,646,678	1.756
June 30, 2002	86,867,391	165,445,412	78,578,021	0.525	44,314,696	1.773
June 30, 2003**	90,747,967	184,501,205	93,753,238	0.492	43,760,832	2.142

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

**Covered payroll was actuarially computed as opposed to estimated in prior years.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1998	117,437,279	112,082,480	0.954
June 30, 1999	106,860,518	107,514,778	1.006
June 30, 2000	113,183,225	115,055,476	1.017
June 30, 2001	88,662,124	90,356,951	1.019
June 30, 2002	93,993,177	95,672,345	1.018
June 30, 2003	96,957,960	72,932,669	0.752

HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1998	16,642,509	15,997,189	0.961
June 30, 1999	19,306,405	19,443,818	1.007
June 30, 2000	21,578,319	21,633,272	1.003
June 30, 2001	23,146,446	23,852,961	1.031
June 30, 2002	23,601,984	23,821,216	1.009
June 30, 2003	24,350,617	23,205,870	0.953

COUNTY EMPLOYEES RETIREMENT SYSTEM

NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1998	124,351,931	107,490,256	0.864
June 30, 1999	109,074,757	110,591,016	1.014
June 30, 2000	105,709,840	106,587,217	1.008
June 30, 2001	97,951,307	111,206,820	1.135
June 30, 2002	105,445,842	107,678,891	1.021
June 30, 2003	110,720,684	111,090,537	1.003

HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1998	44,142,046	42,297,090	0.958
June 30, 1999	46,526,233	48,290,617	1.037
June 30, 2000	50,645,065	51,739,272	1.022
June 30, 2001	51,558,809	53,132,792	1.031
June 30, 2002	56,304,262	56,785,282	1.009
June 30, 2003	63,422,978	62,149,506	0.980

STATE POLICE RETIREMENT SYSTEM

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1998	10,293,733	9,573,742	0.930
June 30, 1999	9,465,460	9,463,188	0.999
June 30, 2000	10,211,298	10,215,824	1.000
June 30, 2001	9,634,753	9,628,912	0.999
June 30, 2002	9,563,111	9,562,256	0.999
June 30, 2003	9,398,296	7,634,252	0.812

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

KERS
NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1998	54,029,074	39,503,545	0.731
June 30, 1999	56,690,636	56,769,539	1.001
June 30, 2000	76,818,004	76,926,320	1.001
June 30, 2001	66,874,871	66,874,871	1.000
June 30, 2002	93,993,177	93,912,017	0.999
June 30, 2003	92,052,561	65,335,219	0.710

KERS
HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1998	9,341,039	6,632,037	0.710
June 30, 1999	10,760,269	10,773,916	1.001
June 30, 2000	12,026,502	12,047,095	1.002
June 30, 2001	13,226,298	13,226,298	1.000
June 30, 2002	15,859,932	15,887,399	1.002
June 30, 2003	15,839,215	15,883,263	1.003

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

CERS
NON-HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1998	48,303,178	29,271,074	0.606
June 30, 1999	47,939,029	47,901,837	0.999
June 30, 2000	55,033,008	55,213,973	1.003
June 30, 2001	62,292,385	62,292,385	1.000
June 30, 2002	102,119,475	102,150,543	1.000
June 30, 2003	102,038,427	99,234,843	0.973

CERS
HAZARDOUS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1998	20,783,842	14,275,040	0.687
June 30, 1999	23,647,419	23,382,957	0.989
June 30, 2000	27,991,859	28,345,377	1.013
June 30, 2001	32,149,432	32,149,432	1.000
June 30, 2002	45,721,274	45,730,333	1.000
June 30, 2003	43,502,755	45,243,950	1.040

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

SPRS

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1998	5,909,401	5,125,678	0.867
June 30, 1999	6,808,270	5,120,037	0.752
June 30, 2000	7,237,579	7,251,787	1.002
June 30, 2001	7,807,870	7,817,613	1.001
June 30, 2002	8,098,907	8,113,391	1.002
June 30, 2003	9,443,588	7,654,313	0.811

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

PENSION FUNDS

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2003	June 30, 2003
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percent Closed	Level Percent Closed
Amortization Period - Each Benefit Improvement	30 years – Commencing with 1990 Valuation	30 years – Commencing with 1990 Valuation
Asset Valuation Method	Five-year Smoothing of Investment Gains and Losses	Five-year Smoothing of Investment Gains and Losses
Postretirement Benefit Increase	2.85%	2.85%
Actuarial Assumptions:		
Investment Return	8.25%	8.25%
Projected Salary Increases	6.50%	6.50%
Inflation Rate	3.50%	3.50%

POST-EMPLOYMENT HEALTHCARE

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2003	June 30, 2003
Actuarial Cost Method	Targeted Rate	Targeted Rate
Asset Valuation Method - Started with 1996 Valuation	Five-year Smoothing of Investment Gains and Losses	Five-year Smoothing of Investment Gains and Losses
Actuarial Assumptions:		
Investment Return	8.25%	8.25%
Projected Salary Increases	6.50%	6.50%
Inflation Rate	3.50%	3.50%

ADDITIONAL SUPPORTING SCHEDULES

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF ADMINISTRATIVE EXPENSES
Years Ended June 30, 2003 and 2002
(Dollars in thousands)

	2003	2002
Personal Services		
Salaries and per diem	$ 8,681	$ 7,702
Fringe benefits	1,679	1,574
Tuition assistance	45	36
Total personal services	10,405	9,312
Contractual Services		
Actuarial	66	36
Audit	59	28
Legal	575	246
Medical	211	139
Contractual	452	348
Total contractual services	1,363	797
Communication		
Printing	142	143
Telephone	134	121
Postage	337	685
Travel	168	135
Total communication	781	1,084
Rentals		
Office space	814	512
Equipment	52	43
Total rentals	866	555
Miscellaneous		
Utilities	101	66
Supplies	123	177
Insurance	48	36
Maintenance	225	199
Other	166	47
Total miscellaneous	663	525
Depreciation	352	330
Healthcare Administrative Fees	862	778
Total Administrative Expenses	$ 15,292	$ 13,381

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF INVESTMENT EXPENSES
Years Ended June 30, 2003 and 2002
(Dollars in thousands)

	2003	2002
RETIREMENT FUNDS		
Security Lending Fees		
Broker rebates	$ 29,191	$ 47,021
Lending agent fees	1,554	2,964
Total security lending	30,745	49,985
Common Stock Commissions	3,101	3,990
Contractual Services		
Investment management	6,609	6,704
Security custody	591	461
Investment consultant	185	130
Total contractual services	7,385	7,295
INSURANCE FUNDS		
Security Lending Fees		
Broker rebates	2,286	3,325
Lending agent fees	140	186
Total security lending	2,426	3,511
Common Stock Commissions	378	430
Investment Management	522	451
Total investment expenses	$ 44,557	$ 65,662

Information on fees paid to investment professionals can be found in the Investment Section of the Comprehensive Annual Financial Report.

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF PROFESSIONAL CONSULTANT FEES
Years Ended June 30, 2003 and 2002
(Dollars in thousands)

	2003	2002
Actuarial Services	$ 66	$ 36
Medical Review Services	211	139
Audit Services	59	28
Legal Counsel	575	246
Total	$ 911	$ 449

KENTUCKY RETIREMENT SYSTEMS

Investment Section

Comprehensive Annual Financial Report
June 30, 2003

INVESTMENT SECTION PREFACE

June 30, 2003 Comprehensive Annual Financial Report

The Board of Trustees is charged with the responsibility of investing the systems' assets to provide for the benefits of the members of the systems. To achieve that goal the Board follows a policy of preserving capital, while seeking means of enhancing revenues and protecting against undue losses in any particular investment area.

The Board recognizes its fiduciary duty not only to invest the funds in formal compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the systems. In order to maintain quality while maximizing the long-range return, the Board diversifies the investment of the assets among classes of securities.

The assets are managed by the Investment Division staff and by external professional managers based on these investment policies:

Objectives

Long-Term: The total assets of the systems should achieve a return measured over two market cycles (estimated to be six to ten years) which exceeds the rate of inflation for the period, as measured by the Consumer Price Index for All Urban Consumers, by at least 4%.

Short-Term: The returns of the particular asset classes of the managed funds of the systems, measured on a year-to-year basis, should exceed the returns achieved by comparable unmanaged market indices.

In keeping with its responsibility as trustee and wherever consistent with its fiduciary responsibility, the Board encourages the investment of the systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

Investments Performance Review Procedures

At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. Each month the Investment Division performs tests to assure compliance with the restrictions imposed by the Investment Policy.

Investment Consulting

The Board employs Mercer Investment Consulting, Inc. to review the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from that firm follows this introduction and discusses current allocations, performance and significant changes over the fiscal year.

MERCER
Investment Consulting

10 South Wacker Drive, Suite 1700
Chicago, IL 60606-7500
312 902 7500 Fax 312 902 7626
www.mercerIC.com

15 August 2003

The Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject:
Annual Fund Review

Dear Trustees:

Mercer is charged with the duty to advise the Board in its asset management activities. This is our annual review of the asset management of the Kentucky Retirement Systems (KRS). Although we recognize that the Board of Trustees is charged with the responsibility of managing the Funds in a manner consistent with the basic long term nature of the participating systems, our comments focus on the annual period ended June 30, 2003. In managing the Funds, the Board must maintain formal compliance with the Prudent Person Rule. Therefore, it seeks to maintain proper and appropriate diversification for the Fund.

Market Highlights

The twelve months ending June 30, 2003 was turbulent for investors globally. Equity markets continued to decline well into the latter half of 2002. Markets rallied in October and November, but the perceived economic recovery was not sustainable, and equities slumped again during the last month of 2002 and into 2003. In March 2003, equity markets slowly began adding value as the military campaign in Iraq transitioned into an occupation and rebuilding phase. For the trailing year, the S&P 500 Index returned 0.3%. Fixed Income, as measured by the Lehman Brothers Aggregate Index, returned 10.4% over the same period, benefiting from struggling equities and the declining interest rate environment.

Systems Highlights

According to the FundAnalytics statements from Northern Trust, the System's assets expanded back to their June 2002 level of $10.9 billion by June 30, 2003 due mainly to investment appreciation during the fourth quarter of 2002 and the second quarter of 2003. Over the trailing

year, the Fund returned 4.3%. Performance trailed the Reference Index return of 4.7%. The Insurance Fund was valued at $1.3 billion, a $0.1 billion increase since June 30, 2002. The Fund posted a 1.7% gain over the trailing twelve month period, outpacing its Reference Index return of -0.6%. Both Funds achieved positive absolute performance at a risk or volatility level lower than those of their respective Reference Indices. The Reference Indices are constructed according to the individual target asset allocations of the Funds.

Allocations to domestic and international equities were below Target in both the Retirement and Insurance Funds, while cash was above target for both plans as of June 30, 2003. Fixed Income for the Retirement Fund exceeded Target.

Asset allocation as of June 30th for the Retirement and Insurance Funds are compared in the table below to their individual asset allocation targets:

	Retirement Fund		Insurance Fund	
Asset Classes	Actual Allocation 06/30/03	Target Asset Allocation	Actual Allocation 06/30/03	Target Asset Allocation
Domestic Equity	38.2	40.0	55.3	60.0
International Equity	12.5	15.0	18.9	20.0
Fixed Income	28.6	27.0	0.0	0.0
Alternatives *	4.4	5.0	4.8	5.0
TIPS	10.9	10.0	10.2	10.0
Cash	5.4	3.0	10.8	5.0

* Includes Real Estate and Private Equity.

It is our understanding that the high allocation to cash within the Insurance Fund includes funds received as a result of a demutualization of Anthem Insurance Companies, Inc. The funds are currently held in trust on behalf of multiple retirement plans (including plans not associated with

KRS) as cash equivalents pending the outcome of litigation. These funds comprise approximately 4.7% of the 10.8% allocation to cash as of June 30, 2003.

Other than the cash portion of the Insurance Fund, all major asset classes are within their allowable ranges. As detailed in the current Investment Policy for the Plans, "The Staff at KRS shall reallocate the assets when actual asset class allocation is within 1.0% of the allowable range boundary, but may reallocate when the actual class allocation exceeds the target asset class by a margin of +/- 5.0%." In addition, four out of the five Plans are currently facing negative cash flows, due in part to market conditions and the receipt of less employer contributions than recommended by the actuary. Therefore, KRS has opportunistically retained a somewhat higher cash position in order to meet the monthly obligations of the Plans.

Investment Manager Highlights

The Retirement Fund

NAMCO and AllianceBernstein lagged their respective indices over the trailing year ending June 30. The Core Equity manager, NAMCO returned -6.7%, underperforming the S&P 500 Index return of 0.3% over the same period. AllianceBernstein returned 0.4% while the S&P Growth Index returned 2.3%.

As we discussed during the Board meeting in late July, Mercer continues to be concerned with the performance of the AllianceBernstein product on both a relative and risk adjusted basis. In addition, representatives from Mercer Investment Consulting and Kentucky Retirement Systems had an on-site due diligence meeting with AllianceBernstein in mid July to discuss their lackluster performance. It was agreed by the committee that we would review the product after the third and fourth quarter of 2003 to determine its ongoing feasibility in the Plan.

Bank of Ireland trailed and Fidelity outpaced the International Equity Blended Index loss of 6.4% over the past year. Bank of Ireland returned -9.5% and Fidelity returned -4.0%.

The Weaver Barksdale Core portfolio and NAMCO both returned 12.9%, trailing the Fixed Income Blended Index return of 13.2%. However, the Weaver Barksdale TIPS strategy (15.5%)

outpaced the LB TIPS Index by 10 basis points. Lincoln Capital returned 11.1%, outpacing the LB Aggregate return of 10.4%. The Fixed Income composite gained 13.0% over the trailing year, 20 basis points short of its Index.

The Insurance Fund

The NAMCO TIPS gained 15.4%, performing in line with the LB US Tips Index. Fidelity exceeded the MSCI EAFE Index return of -6.1%, returning -4.0% during the year.

Summary

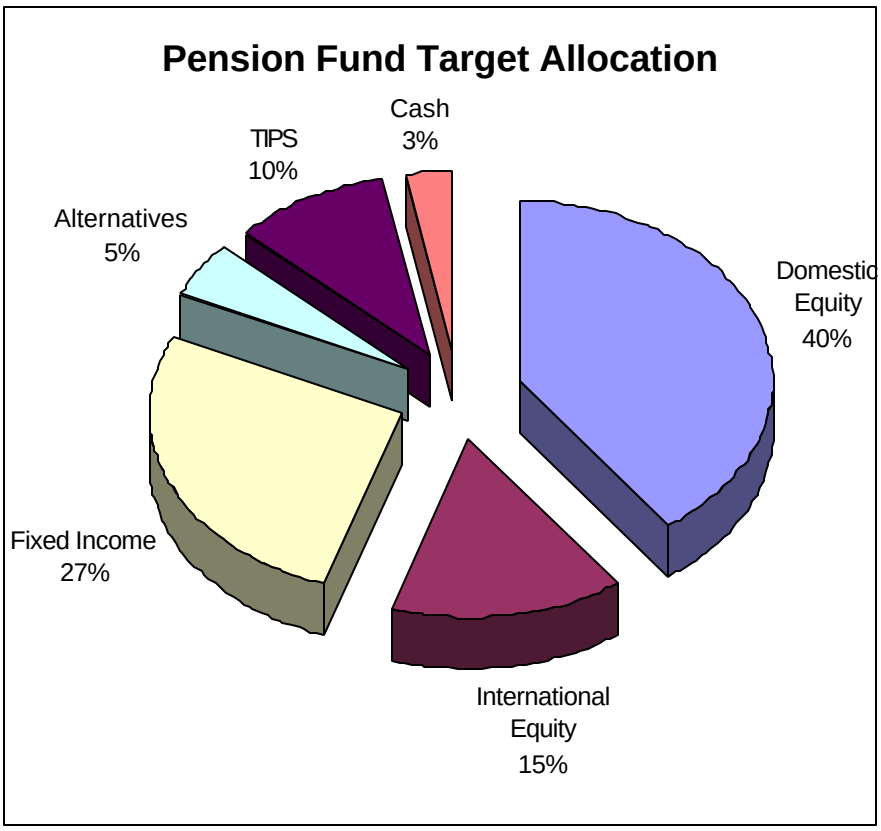
Many of the Fund's strategies struggled in comparison to their indices over the trailing year. However, with the exception of AllianceBernstein, Mercer believes this short term underperformance is a result of a difficult investment environment, and not indicative of active management's inability to add value over longer periods. Both Funds have experienced an expansion of their investment assets over past year due to absolute positive performance from the fixed income managers.

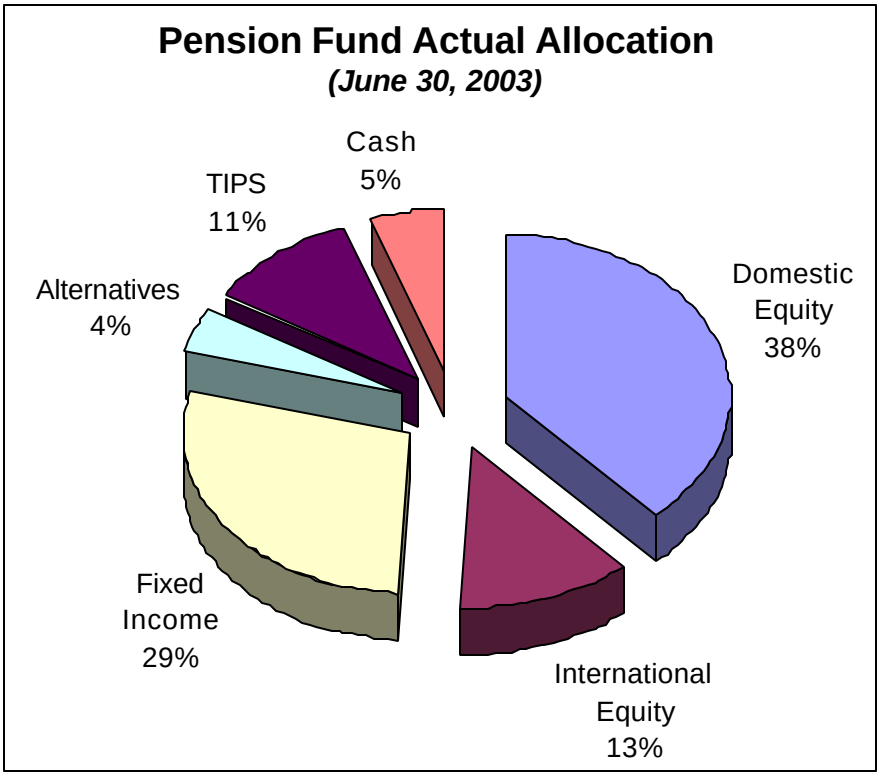
Sincerely,

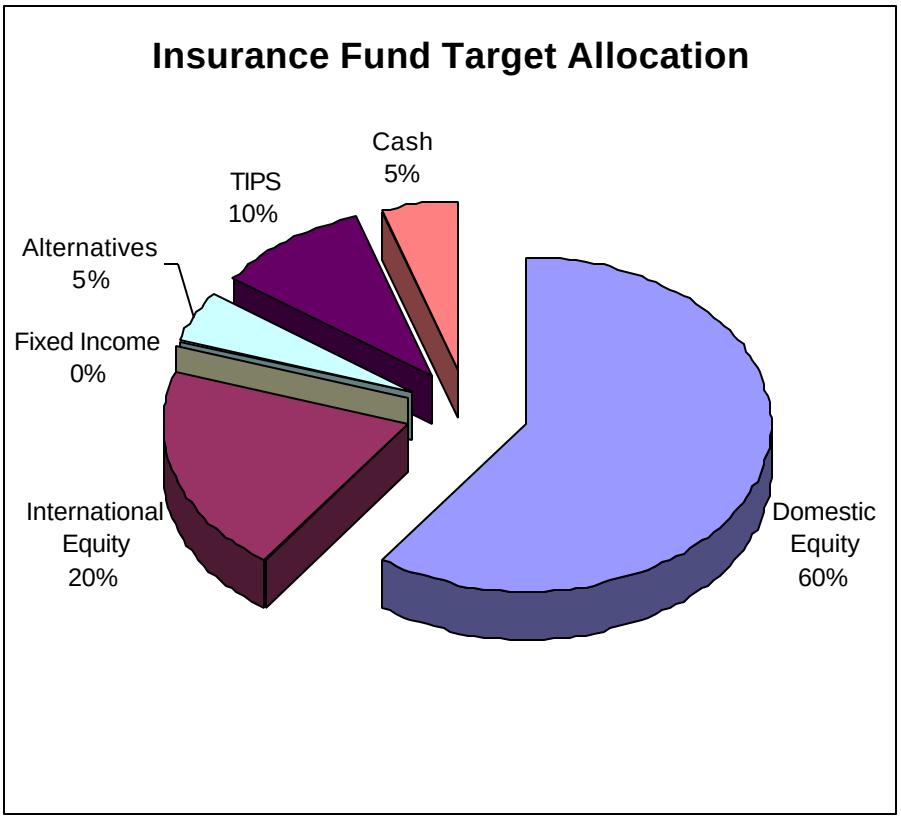
Douglas J. Kryscio
312.902.7147

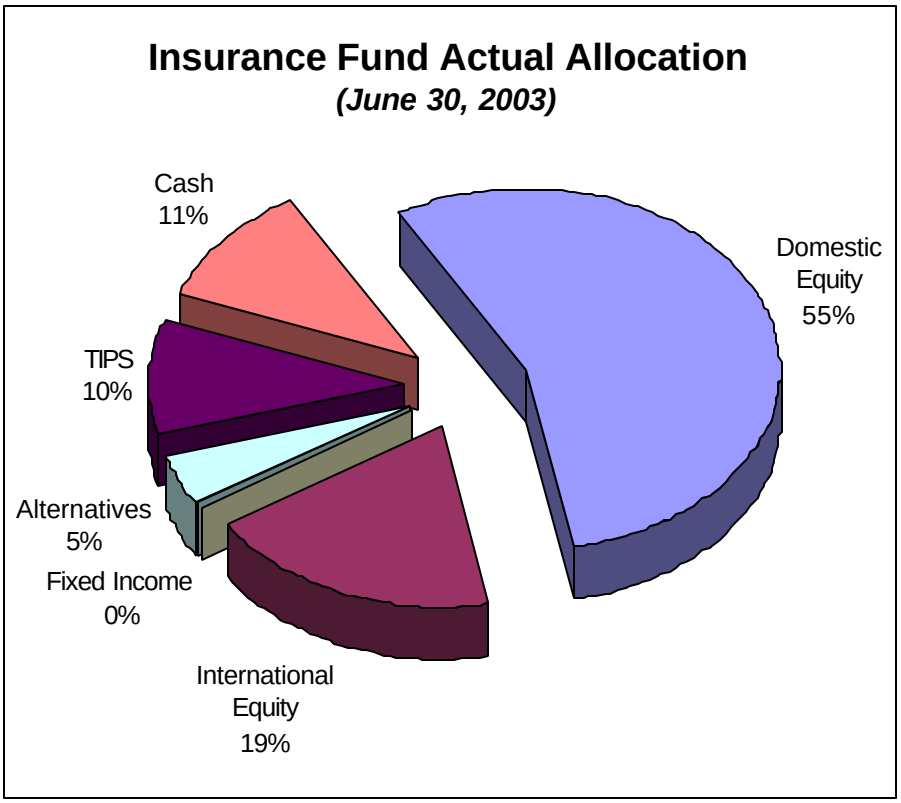
DJK/kmt

Copy:
B. Aldridge, Kentucky Retirement Systems
R. Leggett, Kentucky Retirement Systems


Pension Fund Target Allocation
Cash
3%
TIPS
10%
Alternatives
5%
Domestic
Equity
40%
Fixed Income
27%
International
Equity
15%


Pension Fund Actual Allocation
(June 30, 2003)
Cash
5%
TIPS
11%
Alternatives
4%
Domestic
Equity
38%
Fixed
Income
29%
International
Equity
13%


Insurance Fund Target Allocation
Cash
5%
TIPS
10%
Alternatives
5%
Fixed Income
0%
International
Equity
20%
Domestic
Equity
60%


Insurance Fund Actual Allocation
(June 30, 2003)
Cash
11%
Domestic
Equity
55%
TIPS
10%
Alternatives
5%
Fixed Income
0%
International
Equity
19%

KENTUCKY RETIREMENT SYSTEMS

PERFORMANCE EVALUATION

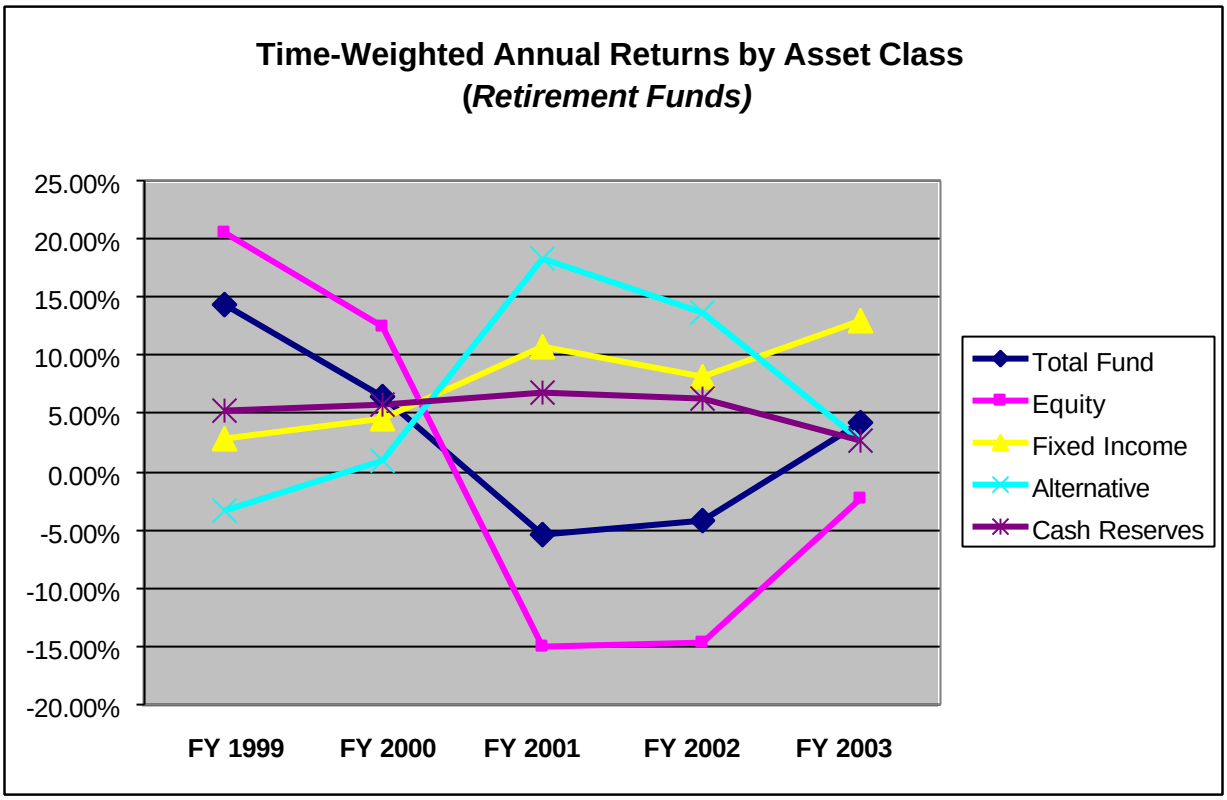
PENSION FUNDS

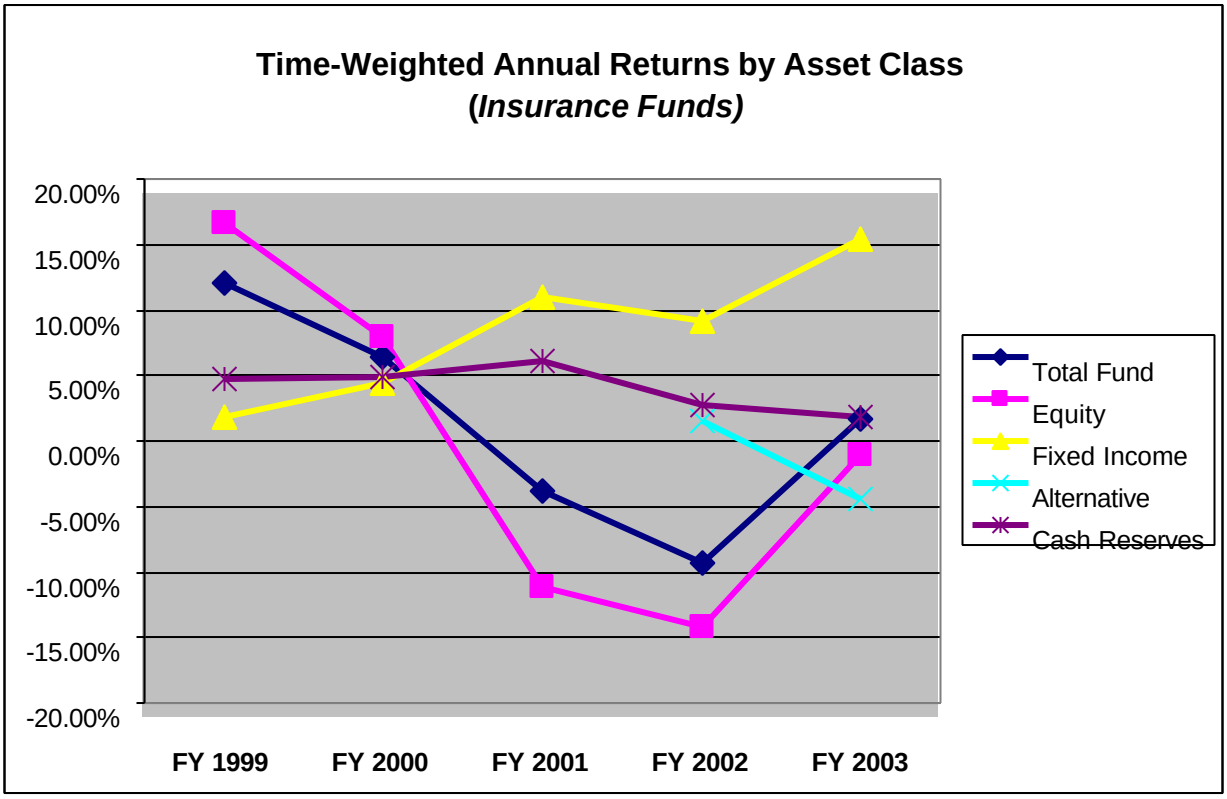
	Fiscal Year	3-Year	5-Year
Total KRS Retirement Fund	**4.28%**	**(1.90%)**	**2.80%**
KRS Blended Index	4.70%	(2.69%)	2.68%
CPI	2.11%	2.14%	2.43%
KRS Equities	**(2.25%)**	**(10.88%)**	**(0.85%)**
KRS Blended Index	(3.25%)	(11.32%)	(1.94%)
S&P 1500	(1.68%)	(11.29%)	(2.24%)
KRS Fixed Income	**13.03%**	**10.63%**	**7.80%**
KRS Blended Index	13.25%	10.79%	7.94%
Lehman Bros. Govt./Credit Bond Index	13.15%	10.82%	7.83%
KRS Alternate Investments	**2.71%**	**10.80%**	**11.96%**
KRS Blended Index	7.87%	N/A	N/A
KRS Cash Reserves	**2.71%**	**5.25%**	**5.36%**
Salomon Bros. 3 Month T-Bill	1.42%	3.15%	3.89%

INSURANCE FUNDS

	Fiscal Year	3-Year	5-Year
Total KRS Insurance Fund	**1.67%**	**(3.92%)**	**1.14%**
KRS Blended Index	(0.07%)	(6.05%)	0.11%
CPI	2.11%	2.14%	2.43%
KRS Insurance Fund Equities	**(1.06%)**	**(8.98%)**	**(1.08%)**
KRS Blended Index	(2.82%)	(10.04%)	(1.71%)
S&P 1500	(1.68%)	(11.29%)	(2.24%)
KRS Insurance Fund Fixed Income	**15.44%**	**11.83%**	**8.28%**
KRS Blended Index	15.40%	11.78%	8.53%
KRS Alternate Investments	**(4.41%)**	**N/A**	**N/A**
KRS Blended Index	7.87%	N/A	N/A
KRS Insurance Fund Cash Reserves	**1.89%**	**3.57%**	**4.05%**
Salomon Bros. 3 Month T-Bill	1.42%	3.15%	3.89%

The calculations made by the custody bank in the Performance Evaluation were prepared using a time-weighted rate of return based on the market rate of return in accordance with AIMR's performance presentation standards.


Time-Weighted Annual Returns by Asset Class
(Retirement Funds)
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
-5.00%
-10.00%
-15.00%
-20.00%
FY 1999
FY 2000
FY 2001
FY 2002
FY 2003
Total Fund
Equity
Fixed Income
Alternative
Cash Reserves


Time-Weighted Annual Returns by Asset Class
(Insurance Funds)
20.00%
15.00%
10.00%
5.00%
0.00%
-5.00%
-10.00%
-15.00%
-20.00%
FY 1999
FY 2000
FY 2001
FY 2002
FY 2003
Total Fund
Equity
Fixed Income
Alternative
Cash Reserves

KENTUCKY RETIREMENT SYSTEMS

PORTFOLIO SUMMARIES

JUNE 30, 2003

	KERS NON HAZARDOUS June 30, 2002		KERS NON HAZARDOUS June 30, 2003		% OF MKT VALUE June 30, 2003
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$1,655,696,978	$1,695,471,995	$1,629,793,345	$1,772,036,808	36%
Mortgages	288,952,763	295,890,402	255,486,658	257,880,947	5%
Short-term	248,598,556	248,312,086	152,592,087	153,247,067	3%
Alternative	233,684,658	264,290,493	189,254,761	208,630,080	4%
Domestic Equities	1,727,868,664	1,836,522,403	1,769,418,597	1,905,665,342	39%
International Equities	699,326,570	610,952,182	664,134,948	578,899,308	12%
Total Portfolio	4,854,128,189	4,951,439,561	4,660,680,396	4,876,359,552	100%

	KERS HAZARDOUS June 30, 2002		KERS HAZARDOUS June 30, 2003		% OF MKT VALUE June 30, 2003
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$97,076,457	$99,477,370	$96,359,797	$104,852,057	33%
Mortgages	17,039,177	17,448,664	15,092,421	15,234,599	5%
Short-term	25,025,444	25,013,660	18,127,073	18,195,842	6%
Alternative	17,540,921	20,103,716	15,038,791	16,881,363	5%
Domestic Equities	88,802,009	95,650,025	114,803,820	123,778,198	39%
International Equities	44,878,983	39,544,121	42,369,173	37,138,867	12%
Total Portfolio	290,362,991	297,237,556	301,791,075	316,080,926	100%

For these portfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

KENTUCKY RETIREMENT SYSTEMS

PORTFOLIO SUMMARIES

JUNE 30, 2003

	CERS NON HAZARDOUS June 30, 2002		CERS NON HAZARDOUS June 30, 2003		% OF MKT VALUE June 30, 2003
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$1,357,524,236	$1,389,803,226	$1,336,817,229	$1,452,706,088	35%
Mortgages	236,988,210	242,676,529	209,533,366	211,499,185	5%
Short-term	221,102,196	220,811,905	237,857,390	238,769,081	6%
Alternative	190,774,472	217,511,238	156,137,460	174,249,104	4%
Domestic Equities	1,366,334,749	1,454,440,727	1,425,109,433	1,540,452,440	37%
International Equities	630,731,420	556,996,550	587,804,057	516,056,612	13%
Total Portfolio	4,003,455,283	4,082,240,175	3,953,258,935	4,133,732,510	100%

	CERS HAZARDOUS June 30, 2002		CERS HAZARDOUS June 30, 2003		% OF MKT VALUE June 30, 2003
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$372,939,799	$381,820,100	$367,125,344	$398,906,715	35%
Mortgages	65,447,544	67,018,947	57,877,613	58,421,019	5%
Short-term	63,380,898	63,305,223	68,352,052	68,612,892	6%
Alternative	55,688,648	63,547,845	45,925,862	51,356,064	4%
Domestic Equities	377,645,550	401,695,881	401,723,792	435,940,054	38%
International Equities	169,672,542	149,322,781	160,151,494	140,162,485	12%
Total Portfolio	1,104,774,981	1,126,710,777	1,101,156,157	1,153,399,229	100%

For these portfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

KENTUCKY RETIREMENT SYSTEMS

PORTFOLIO SUMMARIES

JUNE 30, 2003

	STATE POLICE RETIREMENT SYSTEM June 30, 2002		STATE POLICE RETIREMENT SYSTEM June 30, 2003		% OF MKT VALUE June 30, 2003
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$111,429,852	$114,102,622	$107,345,666	$116,788,407	37%
Mortgages	19,028,354	19,484,961	16,812,317	16,969,831	5%
Short-term	19,119,472	19,109,111	8,382,400	8,420,116	3%
Alternative	16,430,587	18,498,935	13,614,664	14,895,530	5%
Domestic Equities	110,503,695	118,712,335	114,041,105	123,749,125	39%
International Equities	41,563,007	35,740,738	41,228,892	35,602,808	11%
Total Portfolio	318,074,967	325,648,702	301,425,044	316,425,817	100%

	INSURANCE FUND June 30, 2002		INSURANCE FUND June 30, 2003		% OF MKT VALUE June 30, 2003
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$114,752,500	$119,766,192	$116,320,111	$133,240,710	10%
Mortgages	0	0	0	0	0%
Short-term	166,641,837	166,948,096	146,217,293	147,225,515	11%
Alternative	45,048,991	44,419,406	65,505,381	63,811,861	5%
Domestic Equities	624,558,167	620,216,949	727,982,011	731,807,786	55%
International Equities	236,828,693	216,626,368	252,580,159	243,746,926	19%
Total Portfolio	1,187,830,188	1,167,977,011	1,308,604,955	1,319,832,798	100%

For these portfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

List of Largest Assets Held

Pension Fund

Largest Stock Holdings

(By Market Value)
June 30, 2003

Rank	Shares	Stock	Market Value
1	4,082,780	MICROSOFT CORP	104,553,038.18
2	2,925,650	PFIZER INC	99,910,947.50
3	3,445,840	GENERAL ELECTRIC CO	98,826,691.20
4	2,163,406	CITIGROUP INC	92,593,776.80
5	1,626,760	WAL MART	87,308,209.20
6	1,985,794	EXXON MOBIL CORP	71,309,862.54
7	1,362,234	JOHNSON & JOHNSON	70,427,497.80
8	1,121,747	AMERICAN INTERNATIONAL	61,897,999.46
9	3,435,820	CISCO SYS INC	57,343,835.80
10	2,757,418	INTEL CORP COM	57,310,175.71
		TOTAL	**801,482,034.19**

Largest Bond Holdings

(By Market Value)
June 30, 2003

Rank	Par	Bonds	Market Value
1	131,500,000.00	US TSY BDS INFL INDEX 3.875 DUE 4/15/29	187,192,782.69
2	109,000,000.00	US TSY BDS INFL INDEX 3.625 DUE 4/15/28	150,663,248.76
3	118,000,000.00	US TSY NTS INFL INDEX 3.625 DUE 1/15/08	150,536,827.94
4	108,000,000.00	US TSY NTS INFL INDEX 3.375 DUE 1/15/07	137,476,978.92
5	104,000,000.00	US TSY BDS INFL INDEX 3.875 DUE 1/15/09	133,356,775.76
6	96,200,000.00	US TSY NTS INFL INDEX 3.000 DUE 7/15/12	108,304,836.37
7	74,000,000.00	US TSY NTS INFL INDEX 4.54189 DUE 1/15/10	95,096,542.34
8	75,000,000.00	US TSY NTS INFL INDEX 3.500 DUE 1/15/11	89,926,968.00
9	68,390,000.00	U S TSY NTS 7.000 DUE 07/15/06 Rating AAA	79,049,947.93
10	63,750,000.00	US TSY NTS 5.875 DUE 11/15/04 Rating AAA	67,859,329.46
		TOTAL	**1,199,464,238.17**

A complete list of portfolio holdings is available upon request.

List of Largest Assets Held

Insurance Fund

Largest Stock Holdings

(By Market Value)
June 30, 2003

Rank	Shares	Stock	Market Value
1	621,500	GENERAL ELECTRIC CO	17,824,620.00
2	646,000	MICROSOFT CORP	16,544,060.00
3	477,000	PFIZER INC	16,289,550.00
4	420,300	EXXON CORP	15,092,973.00
5	265,300	WAL MART STORES INC	14,238,651.00
6	320,800	CITIGROUP INC	13,730,240.00
7	177,488	JOHNSON & JOHNSON	9,176,129.60
8	413,800	INTEL CORP COM	8,600,419.20
9	155,684	AMER INTL GROUP	8,590,643.12
10	101,100	COCA COLA CO	8,340,750.00
		TOTAL	**128,428,035.92**

Largest Bond Holdings

(By Market Value)
June 30, 2003

Rank	Par	Bonds	Market Value
1	15,600,000.00	U S TSY INFLATION INDEX 3.875 DUE 04/15/29	22,206,900.45
2	18,300,000.00	U S TSY INFLATION INDEX 3.000 DUE 07/15/12	20,602,687.17
3	12,400,000.00	U S TSY INFLATION INDEX 3.625 DUE 04/15/28	17,139,672.33
4	13,300,000.00	U S TSY INFLATION INDEX 3.625 DUE 01/15/08	16,967,286.53
5	12,300,000.00	U S TSY INFLATION INDEX 3.875 DUE 01/15/09	15,772,003.28
6	11,700,000.00	U S TSY INFLATION INDEX 3.375 DUE 01/15/07	14,893,339.38
7	7,450,000.00	U S TSY INFLATION INDEX 4.55189 DUE 01/15/10	9,573,908.65
8	5,300,000.00	U S TSY INFLATION INDEX 3.61574 DUE 01/15/11	6,354,839.07
9	5,000,000.00	U S TSY INFLATION INDEX 3.375 DUE 01/15/12	5,853,675.95
10	3,100,000.00	U S TSY INFLATION INDEX 3.375 DUE 04/15/32	3,876,397.41
		TOTAL	**133,240,710.22**

A complete list of portfolio holdings is available upon request.

Schedule of Fees and Commissions

Year Ended June 30, 2003

External Investment Manager Fees	
Equities and Fixed Income	
Pension Funds	$6,609,494
Insurance Funds	521,854
Investment Consulting Fees	184,490
Security Lending Agent Fees	33,171,032
Brokerage Commissions –– Equities	3,479,424
TOTAL	**43,966,294**

Total fees and commissions represent .103% of the fair value of the combined Pension and Insurance Fund portfolios (excluding securities lending broker rebates).

INVESTMENT MANAGERS

Alliance Capital Management	Lincoln Capital Management Company
C. B. Richard Ellis	Invesco-National Asset Management Corp.
Heitman Capital Management Corp.	Northern Trust Quantitative Advisors, Inc.
Weaver C. Barksdale & Associates, Inc.	Bank of Ireland Asset Management
Lend Lease	Fidelity Management Trust Company
J.W. Childs Associates L.P.	Vantage Point Venture Partners L.P.

KENTUCKY RETIREMENT SYSTEMS

Actuarial Section

Comprehensive Annual Financial Report
June 30, 2003

SEGAL

THE SEGAL COMPANY
2018 Powers Ferry Road, Suite 850 Atlanta, GA 30339
T 678.306.3100 F 678.306.3190 www.segalco.com

November 18, 2003

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Members of the Board:

The forty-seventh annual actuarial valuation of the Kentucky Employees Retirement System, the forty-fourth annual actuarial valuation of the County Employees Retirement System, and the forty-fifth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. The following comments are pertinent to the results of this valuation:

1. The funding objectives for the plan remain unchanged from the prior year's valuation. Relative to the retirement fund, a contribution rate has been established which consists of the normal cost and amortization payment on the unfunded actuarial accrued liability. The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any unfunded actuarial accrued liability is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Each year any actuarial gains or losses, along with any other changes in the accrued liability (such as retiree COLA's, other benefit improvements, changes in actuarial assumptions, etc.) are established as a new amortization base to be amortized over the following 30 years. Due to the recent downturn in the capital markets, there remain significant investment losses which will be recognized in accordance with the actuarial methods used to value the plan.

   Overall, the total funding for the retirement fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. In particular, the current valuation funding rate does not anticipate any future cost of living increases to benefit recipients. Should these cost of living increases occur in the future, the funding rate for the retirement fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains. In addition, rates are expected to increase as the prior mentioned investment losses are recognized.

   Relative to the insurance fund, the ultimate target funding is to reach the full amount of the entry age funding level including 30-year level percent of payroll amortization of the unfunded actuarial accrued liability. However, current insurance funding levels are less than this ultimate target rate, and will be systematically increased over the 20-year period beginning with 1997 until the target funding rate is reached. As such, the insurance funding rate is expected to increase each year for the remainder of the 20-year period.

   The administrative expenses are also included as part of the total funding amount. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

   To the extent that actual experience deviates from expected, an amortization base will be established and amortized over 30 years as a level percentage of payroll.

2. The progress towards achieving the intended funding objectives, both relative to the retirement

and insurance funds, can be measured by the relationship of valuation assets of each fund to the accrued liabilities. The funded level for the retirement fund exceeds 97% in the 2003 valuation for all three systems (KERS, CERS and SPRS). This funded level will fluctuate over time with experience deviations. Since 1992, all three systems have had a funded level relative to the retirement fund of at least 90% in all valuations.

The funded level for the insurance fund is not anywhere near 100% at this time, and the funding objective is to increase this funded level consistently over future years. Since 1990, the funded level relative to the insurance fund has improved steadily. This increasing trend in the funded level is the primary objective of the current funding policy.

3. Valuations of each system are prepared annually, with the most recent such valuation being as of June 30, 2003.

4. In completing the valuation of these systems, we have relied on employee data as provided by Kentucky Retirement Systems, as well as financial data provided by the plan's auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data, nor has there been any reconciliation of data used in the prior year's valuation with this current valuation data.

5. We have prepared none of the supporting schedules included with this filing. However, based on a brief review of these schedules, the information included on them appears consistent with the information provided in our actuarial valuation report.

6. Any schedules of trend data over the past ten years or less have been based on valuation reports fully prepared by the plan's actuary.

7. The actuarial assumptions and methods used for the funding calculations of the valuation meet the parameters set for disclosure under GASB Statement No. 25. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary.

8. The information presented in items 1 through 7 of this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

The three Retirement Systems are actuarially sound based on the continuation of current funding policies adopted by the Board. Adequate provision is being made for the funding of the Actuarial Accrued Liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes, as appropriate funding rates have been established by the Board for this purpose.

Sincerely,

THE SEGAL COMPANY

By _____
Leon F. (Rocky) Joyner, Jr., ASA, MAAA
Vice-President and Actuary

By _____
K. Eric Fredén, FSA, MAAA,
Associate Actuary

Kentucky Retirement Systems

Summary of Benefit Provisions

(As of June 30, 2003)

NORMAL RETIREMENT ELIGIBILITY

Members become eligible for an unreduced age or service annuity based upon the following requirements:

Non-Hazardous Members		*Hazardous Duty Members*	
Age	Creditable Service	Age	Creditable Service
65	1 Month (benefit based on account balance)	55	1 Month (benefit based on account balance)
65	4 Years (benefit based on service & salary)	55	5 Years (benefit based on service & salary)
Any	27 Years	Any	20 Years

NORMAL RETIREMENT ANNUITY

The annuity payable to a member under Normal Retirement provisions is based on *Final Compensation (FC)* and *Creditable Service (CS)* as follows:

Non-Hazardous Members	*Formula*
▪ Kentucky Employees Retirement System	1.97% x FC x CS
▪ Kentucky Employees Retirement System *Members who were employed January 1998 through January 1999.*	2.00% x FC x CS
▪ Kentucky Employees Retirement System *Members who were employed January 1998 through January 1999 and who retire between February 1999 and January 2009 with 20 or more years of service.*	2.20% x FC x CS
▪ County Employees Retirement System	2.20% x FC x CS

Hazardous Duty Members	*Formula*
▪ Kentucky Employees Retirement System	2.49% x FC x CS
▪ County Employees Retirement System	2.50% x FC x CS
▪ State Police Retirement System	2.50% x FC x CS

Final Compensation (FC) for non-hazardous members is the average of the highest five fiscal years (July to June) of earnings. The years do not have to be consecutive but must contain a minimum of 48 months.

Exception: For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose creditable service is at least 27 years, and whose age and years of creditable service total at least 75, final compensation is based on the average of the three highest fiscal years of earnings. The years do not have to be consecutive but must contain a minimum of 24 months.

Final Compensation (FC) for Hazardous Duty members is the average of the highest three fiscal years (July to June) of earnings. The years do not have to be consecutive but must contain a minimum of 24 months.

EARLY RETIREMENT

Members become eligible for a reduced age or service annuity based upon the requirements:

Non-Hazardous Members		*Hazardous Duty Members*	
Age	Creditable Service	Age	Creditable Service
55	5 Years (benefit based on service & salary)	50	15 Years (benefit based on service & salary)
Any	25 Years (benefit based on service & salary)		

Early Retirement benefits are calculated the same as Normal Retirement benefits, except that a reduction is applied depending on the member's age or years of creditable service at retirement.

For non-hazardous members, the amount of the reduction under early retirement provisions is based upon the lesser of the number of years required for the member to reach age 65 or 27 years of creditable service (see table below).

5% per year for the first five years

Years to Attain Age 65 or 27 Years of Creditable Service			
1 Year:	95%	6 Years:	71%
2 Years:	90%	7 Years:	67%
3 Years:	85%	8 Years:	63%
4 Years:	80%	9 Years:	59%
5 Years:	75%	10 Years:	55%

4% per year for the next five years.

For hazardous duty members, the amount of the reduction under early retirement provisions is based upon the lesser of the number of years required for the member to reach age 55 or 20 years of creditable service (see table below).

5.5% for each year.

Years to Attain Age 55 or 20 Years of Creditable Service			
1 Year:	94.5%	4 Years:	78.0%
2 Years:	89.0%	5 Years:	72.5%
3 Years:	83.5%		

VOLUNTARY TERMINATION BEFORE IMMEDIATE BENEFIT ELIGIBILITY

Upon voluntary termination a member may either (1) receive a refund of accumulated contributions and interest credited thereon, or (2) if vested, leave contributions on deposit and apply for a retirement annuity on or after the minimum retirement age based upon creditable service at the time of termination. Vesting requirements are included in each benefit described herein.

DISABILITY BENEFITS

A non-hazardous member may retire due to disability if:

- The member has at least five (5) years of creditable service, one (1) of which is credited as current service.
- The member is not eligible for an unreduced benefit from the retirement systems.
- The member applies within 24 months of the last day of paid employment in a regular full-time position.
- The medical review physicians employed by the retirement office determine the condition or disease prohibits the member from performing their job, or a job of similar duties.

A hazardous member may retire due to disability if:

- The member has at least five (5) years of creditable service, one (1) of which is credited as current service.
- The member is not eligible for an unreduced benefit from the retirement systems.

- The member applies within 24 months of the last day of paid employment in a regular full-time position.
- The medical review physicians employed by the retirement office determine the condition or disease is total and permanent or will render the individual totally incapable of working in a hazardous position, but may still be capable of performing other types of work.

A condition or disease which existed before a non-hazardous or hazardous member was actively contributing to the retirement system cannot be considered unless the condition was substantially aggravated by accident or injury during the course of employment or if the member has 16 years of service with a participating employer.

Disability benefits are calculated the same as for normal retirement benefits except that additional years of service may be added to the member's account, depending on the member's age and years of service.

Disability In the Line of Duty Benefits

A contributing ***member in a non-hazardous position*** who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of final monthly rate of pay. Monthly benefits shall be also be paid for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay.

A member in a ***hazardous position*** who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay. Monthly benefits shall be also be paid for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay.

DEATH BEFORE RETIREMENT

If a member dies before retirement, the beneficiary will be eligible for a monthly benefit based on the member's age, years of service and final compensation at the date of death if:

1. The member was eligible for normal or early retirement benefits at the date of death.
2. If the member had earned 5 years of creditable service, 1 of which is current service, and was contributing at the date of death.
3. If the member had earned 12 years of creditable service, 1 of which is current service, and was not contributing at the date of death.

If the beneficiary is a single individual, multiple individuals, an estate, or a trust the following will be offered: (1) a lump sum actuarial refund, (2) monthly benefit for five years, or (3) monthly benefit for ten years. If the named beneficiary is a single individual, the beneficiary will also have the option of a lifetime monthly benefit.

Death In the Line of Duty Benefits

If a ***member in a non-hazardous position*** dies in the line of duty and has a spouse as beneficiary, the spouse may choose: (1) a $10,000 lump sum payment and monthly payment of 25% of the member's final monthly rate of pay or (2) benefits based upon the members age, years of service and final compensation at the date of death. Monthly benefits shall also be paid for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay.

If a ***member in a hazardous position*** dies in the line of duty and has a spouse as beneficiary, the spouse may choose: (1) a $10,000 lump sum payment and a monthly payment of 25% of the member's final monthly rate of pay or (2) benefits based upon the member's age, years of service and final compensation at the date of death. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary other than his spouse, the non-spouse may choose: (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at the date of death. Monthly benefits shall be also be paid for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay.

POST RETIREMENT ADJUSTMENTS

Annuities are increased July 1 each year by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent (5%). The Kentucky General Assembly reserves the right to suspend or reduce benefit increases if in their judgment the welfare of the State so demands.

DEATH AFTER RETIREMENT

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

HOSPITAL AND MEDICAL INSURANCE BENEFIT

Kentucky Retirement Systems provides group rates on medical insurance and, where available, health maintenance organization (HMO) and other managed care coverage for retired members. Participation in the insurance/HMO program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage.

The cost of insurance for the retired member may be partially, or fully, paid by the Systems depending upon the member's years of service, the insurance carrier selected, and the level of coverage chosen. If coverage is for the member only, the system pays the same percentage of the single monthly contribution rate for both non-hazardous and hazardous duty members. The percentage of the single monthly contribution paid by KRS based upon a member's years of creditable service is provided in the table below.

Percent of the Monthly Insurance Contribution Paid Based Upon Service Credit at Retirement	
Years of Creditable Service	% Paid
At least 4 years but less than 10 years	25%
At least 10 years but less than 15 years	50%
At least 15 years but less than 20 years	75%
20 or more years	100%

If a hazardous duty member has a spouse and/or dependent children, KRS may also pay a portion of the monthly contribution towards a couple, parent plus, or family coverage plan. The portion paid toward couple, parent plus, or family coverage is based solely on the amount of creditable service the member has in an approved hazardous position (see table below).

Percent of the Monthly Insurance Contribution Paid By KRS For Spouse & Dependent Coverage	
Years of Creditable ***Hazardous Duty*** Service Credit	% Paid
At least 4 years but less than 10 years	25%
At least 10 years but less than 15 years	50%
At least 15 years but less than 20 years	75%
20 or more years	100%

Under the provisions of House Bill 430, passed during the 2003 General Assembly, *employees hired July 1, 2003 or after* will be required to earn at least ten (10) years of creditable service before they will be eligible for insurance benefits at retirement. Retired members or employees who have creditable service in a KERS, CERS, or SPRS account as of July 1, 2003, will not be effected by this legislation.

If a contributing member is disabled in the line of duty, the retirement system will pay 100% of the cost for the member. If a contributing member is killed in the line of duty, the retirement system will pay 100% of the cost for the beneficiary as long as they remain eligible for a monthly benefit payment.

INTEREST CREDITS

Member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; and 4% thereafter.

CONTRIBUTION RATES

Member Contributions

State statute requires participating non-hazardous members to contribute 5% of creditable compensation. Participating hazardous duty members are required to contribute 8% of creditable compensation.

Employer Contributions

Employer contribution rates are determined by the entry age normal cost funding method. Actuarial gains and losses reduce or increase the unfunded liability. For years beginning with the 1990 valuation, actuarial gains and losses have been amortized over a period of thirty years using the level percent of payroll method as required by state statute.

NOTE: A SUMMARY PLAN DESCRIPTION WHICH GIVES A MORE DETAILED DESCRIPTION OF PLAN PROVISIONS IS AVAILABLE UPON REQUEST OR CAN BE DOWNLOADED FROM THE KENTUCKY RETIREMENT SYSTEMS' WEB PAGE AT WWW.KYRET.COM.

Kentucky Retirement Systems

Summary of Actuarial Assumptions and Methods

(As of June 30, 2003)

1. The investment return rate used in making the valuations was 8.25% per year, net of investment related expenses, compounded annually. Adopted 2001.
2. The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:
   a. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.
   b. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.
   c. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.
   d. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.
   e. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.
3. The percentage of members assumed to retire at sample ages is shown in Schedule 1. Adopted 2001.
4. The mortality table used for active and retired lives was the 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees. Mortality assumptions for disabled lives are based on Social Security Administration Disability Mortality Rates – Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security). Sample annual rates of mortality are shown in Schedule 2. Adopted 2001.
5. Select rates of termination before retirement are shown in Schedule 3. Adopted 2001.
6. Annual pay per member is assumed to increase 12% in the first year, 10% in the second year, 8% in the third year and 6.50% per year thereafter, compounded annually, which is based on experience rather than the effects of inflation. Adopted 2001.
7. Kentucky Revised Statutes require use of the entry age normal cost funding method to determine the actuarial accrued liability. Actuarial gains and losses reduce or increase the unfunded liability. For years beginning with the 1990 valuation, actuarial gains and losses have been amortized over a period of thirty years using the level percent of payroll method as required by state statute.
8. With respect to cost-of-living adjustments, effective August 1, 1996, and on July 1 of each year thereafter, state statutes require retirement benefits to be increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent. The State Legislature reserved the right to suspend or reduce cost-of-living adjustments if in their judgment the welfare of the Commonwealth so demands.
9. The most recent actuarial experience analysis was performed for the period from July 1, 1995 through June 30, 2000. All assumptions used in the most recent actuarial valuation were based on the study performed in 2001.

Assumptions used in determining the actuarial accrued liability for postemployment healthcare benefits are shown in Schedule 4. Adopted 2001.

SCHEDULE 1: PERCENTAGE OF PARTICIPANTS ASSUMED TO RETIRE AT SAMPLE AGES

Age	55-57	58-59	60-61	62	63-64	65	66-67	68	69	70 & Over
Percent Retiring	4%	5%	6%	25%	10%	50%	20%	25%	40%	100%

At age 55-64 in lieu of age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits with 27 years of creditable service.

For hazardous duty participants of the Kentucky Employees Retirement System it is assumed that 50% will retire as soon as eligible for unreduced benefits with 20 years of creditable service and the balance will continue to age 60.

For hazardous duty participants of the County Employees Retirement System it is assumed that 60% will retire as soon as eligible for unreduced benefits with 20 years of creditable service and the balance will continue to age 55.

For participants of the State Police Retirement System it is assumed that 60% will retire as soon as eligible for unreduced benefits with 20 years of creditable service and the balance will continue to age 55.

SCHEDULE 2: SAMPLE ANNUAL RATES OF MORTALITY

	*Active Mortality**		*Disabled Mortality*	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

**Plus 0.05% duty death rate prior to retirement for hazardous duty participants.*

SCHEDULE 3: SELECT OF TERMINATION PRIOR TO RETIREMENT

Kentucky Employees Retirement System

		Termination		*Disablement*	
Sample Ages	Years of Service	Non-Hazardous Employees	Hazardous Employees	Non-Hazardous Employees	Hazardous Employees
	1	35.00%	30.00%	**	**
	2	10.00%	8.00%	**	**
	3	7.00%	4.00%	**	**
	4	5.00%	4.00%	**	**
	5	4.00%	4.00%	**	**
25	Over 5	2.40%	3.04%	0.033%	0.042%
30		2.40%	3.38%	0.039%	0.050%
40		2.00%	1.50%	0.105%	0.132%
50		1.60%	0.00%	0.423%	0.530%
55		1.20%	0.00%	0.794%	0.992%
60		0.20%	0.00%	1.395%	1.743%

***Same as age-based rates for over five years of service.*

County Employees Retirement System

Sample Ages	Years of Service	*Termination* Non-Hazardous Employees	*Termination* Hazardous Employees	*Disablement* Non-Hazardous Employees	*Disablement* Hazardous Employees
	1	35.00%	30.00%	**	**
	2	10.00%	8.00%	**	**
	3	7.00%	4.00%	**	**
	4	5.00%	4.00%	**	**
	5	4.00%	4.00%	**	**
25	Over 5	2.40%	3.04%	0.033%	0.042%
30		2.40%	3.38%	0.039%	0.050%
40		2.00%	1.50%	0.105%	0.132%
50		1.60%	0.00%	0.423%	0.530%
55		1.20%	0.00%	0.794%	0.992%
60		0.20%	0.00%	1.395%	1.743%

***Same as age-based rates for over five years of service.*

State Police Retirement System

Sample Ages	Years of Service	*Termination* Hazardous Employees	*Disablement* Hazardous Employees
	1	**	**
	2	**	**
	3	**	**
	4	**	**
	5	**	**
25	Over 5	1.82%	0.042%
30		2.03%	0.050%
40		0.90%	0.132%
50		0.00%	0.530%
55		0.00%	0.992%
60		0.00%	1.743%

***Same as age-based rates for over five years of service.*

SCHEDULE 4: ASSUMED MEDICAL PREMIUM GROWTH

Years	2003 – 2005	2006 – 2010	2011 -- 2015	2016 -- 2020	Thereafter
Increase Per Year	10%	9%	8%	7.5%	7%

Kentucky Retirement Systems

Summary of Member Valuation Data

(As of June 30, 2003)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM (NON-HAZARDOUS)

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1998	46,342	$1,272,316,548	$27,455	4.7%
6/30/1999	45,824	$1,330,937,460	$29,046	5.8%
6/30/2000	46,897	$1,432,316,220	$30,542	5.2%
6/30/2001	47,780	$1,525,188,532	$31,921	4.5%
6/30/2002	48,555	$1,597,447,963	$32,900	3.1%
6/30/2003	49,158	$1,658,604,696	$33,740	2.6%

KENTUCKY EMPLOYEES RETIREMENT SYSTEM (HAZARDOUS)

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1998	3,582	$ 88,891,680	$24,816	4.1%
6/30/1999	3,889	$103,970,148	$26,734	7.7%
6/30/2000	4,007	$115,135,008	$28,733	7.5%
6/30/2001	4,228	$123,647,407	$29,245	1.8%
6/30/2002	4,211	$125,371,604	$29,772	1.8%
6/30/2003	4,189	$129,088,956	$30,816	3.5%

COUNTY EMPLOYEES RETIREMENT SYSTEM (NON-HAZARDOUS)

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1998	71,426	$1,341,570,672	$18,783	1.4%
6/30/1999	74,151	$1,449,817,548	$19,552	4.1%
6/30/2000	77,419	$1,575,632,580	$20,352	4.1%
6/30/2001	78,773	$1,597,653,320	$20,282	(0.3%)
6/30/2002	79,850	$1,688,460,789	$21,145	4.3%
6/30/2003	82,288	$1,796,451,180	$21,831	3.2%

COUNTY EMPLOYEES RETIREMENT SYSTEM (HAZARDOUS)

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1998	6,800	$227,851,248	$33,508	3.8%
6/30/1999	7,488	$260,279,940	$34,760	3.7%
6/30/2000	7,951	$291,062,928	$36,607	5.3%
6/30/2001	8,586	$322,819,064	$37,598	2.7%
6/30/2002	8,949	$346,319,146	$38,699	2.9%
6/30/2003	9,286	$374,700,732	$40,351	4.3%

STATE POLICE RETIREMENT SYSTEM

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1998	954	$35,865,072	$37,594	1.4%
6/30/1999	985	$40,548,636	$41,166	9.5%
6/30/2000	1,023	$43,596,396	$42,616	3.5%
6/30/2001	1,016	$44,209,944	$43,514	2.1%
6/30/2002	1,002	$43,961,844	$43,874	0.8%
6/30/2003	1,019	$43,760,832	$42,945	(2.1%)

ALL SYSTEMS

Schedule of Active Member Valuation Data

Valuation Date	Participating Employers	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1998	1,841	129,104	$2,966,495,220	$22,978	2.9%
6/30/1999	1,531	132,337	$3,185,553,732	$24,072	4.8%
6/30/2000	1,610	137,297	$3,457,743,132	$25,184	4.6%
6/30/2001	1,706	140,383	$3,613,518,267	$25,740	2.2%
6/30/2002	1,727	142,567	$3,801,561,346	$26,665	3.6%
6/30/2003	1,778	145,940	$4,002,606,396	$27,426	2.9%

Kentucky Retirement Systems

Summary of Accrued & Unfunded Liabilities

(As of June 30, 2003)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM: PENSION FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1998	$3,971,749	($ 596,537)	(15.00%)	$4,568,287	$717,575
6/30/1999	$4,531,905	($ 992,274)	(21.90%)	$5,524,179	$955,892
6/30/2000	$5,120,191	($2,022,698)	(39.50%)	$7,142,889	$1,618,710
6/30/2001*	$5,729,229	($1,477,191)	(25.80%)	$7,206,420	$63,531
6/30/2002	$6,348,164	($ 682,305)	(10.70%)	$7,030,468	($175,952)
6/30/2003	$6,877,342	$ 140,098	2.04%	$6,737,245	($293,223)

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

KENTUCKY EMPLOYEES RETIREMENT SYSTEM: INSURANCE FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1998	$1,379,578	$1,114,866	80.80%	$264,711	$53,547
6/30/1999	$1,422,523	$1,064,238	74.80%	$358,284	$93,572
6/30/2000	$1,632,643	$1,130,871	69.30%	$501,772	$143,488
6/30/2001*	$1,984,034	$1,415,031	71.30%	$569,003	$67,231
6/30/2002	$2,144,503	$1,487,378	69.40%	$657,125	$88,122
6/30/2003	$2,376,389	$1,671,044	70.32%	$705,345	$48,220

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

COUNTY EMPLOYEES RETIREMENT SYSTEM: PENSION FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1998	$3,529,912	($743,349)	(21.10%)	$4,273,262	$759,236
6/30/1999	$3,955,132	($1,241,746)	(31.40%)	$5,196,878	$923,616
6/30/2000	$4,453,155	($2,276,421)	(51.10%)	$6,729,576	$1,532,698
6/30/2001*	$4,900,143	($2,010,358)	(41.00%)	$6,910,500	$180,924
6/30/2002	$5,492,646	($1,390,653)	(25.30%)	$6,883,299	($27,202)
6/30/2003	$5,917,227	($836,358)	(14.13%)	$6,753,585	($129,714)

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

COUNTY EMPLOYEES RETIREMENT SYSTEM: INSURANCE FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1998	$1,706,626	$1,451,039	85.00%	$255,586	$51,065
6/30/1999	$1,801,154	$1,454,627	80.80%	$346,527	$90,941
6/30/2000	$2,066,653	$1,578,352	76.40%	$488,301	$141,774
6/30/2001*	$2,515,316	$1,954,682	77.40%	$569,634	$81,333
6/30/2002	$2,758,762	$2,073,581	75.20%	$685,181	$115,547
6/30/2003	$3,112,614	$2,323,364	74.64%	$789,250	$104,069

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

STATE POLICE RETIREMENT SYSTEM: PENSION FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1998	$294,427	($11,891)	(4.00%)	$306,318	$26,675
6/30/1999	$314,021	($43,601)	(13.90%)	$357,623	$51,304
6/30/2000	$336,580	($122,589)	(36.40%)	$459,169	$101,546
6/30/2001*	$356,212	($99,949)	(28.10%)	$456,161	($3,008)
6/30/2002	$380,790	($58,165)	(15.30%)	$438,955	($17,205)
6/30/2003	$414,881	$1,818	0.44%	$413,064	($25,891)

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

STATE POLICE RETIREMENT SYSTEM: INSURANCE FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1998	$124,501	$83,090	66.70%	$41,410	$7,534
6/30/1999	$125,797	$71,867	57.10%	$53,929	$12,519
6/30/2000	$138,867	$67,155	48.40%	$71,712	$17,783
6/30/2001*	$158,261	$78,398	49.50%	$79,864	$8,152
6/30/2002	$165,445	$78,578	47.50%	$86,867	$7,004
6/30/2003	$184,501	$93,753	50.81%	$90,748	$3,881

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

Kentucky Retirement Systems

Solvency Test

(As of June 30, 2003)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1998	$752,816	$1,711,602	$1,507,332	$4,568,287	100%	100%	139.6%
6/30/1999	$862,558	$1,935,471	$1,733,877	$5,524,180	100%	100%	157.2%
6/30/2000	$900,839	$2,378,236	$1,841,116	$7,142,889	100%	100%	209.9%
6/30/2001	$895,839	$2,756,127	$2,077,262	$7,206,420	100%	100%	171.1%
6/30/2002	$988,657	$3,352,392	$2,007,115	$7,030,468	100%	100%	134.0%
6/30/2003	$931,310	$3,980,318	$1,965,714	$6,737,248	100%	100%	92.9%

COUNTY EMPLOYEES RETIREMENT SYSTEM

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1998	$685,806	$1,355,013	$1,489,094	$4,273,262	100%	100%	150.00%
6/30/1999	$759,922	$1,600,392	$1,594,819	$5,196,879	100%	100%	177.90%
6/30/2000	$821,630	$1,904,182	$1,727,343	$6,729,576	100%	100%	231.80%
6/30/2001	$855,815	$2,185,378	$1,858,950	$6,910,501	100%	100%	208.10%
6/30/2002	$1,007,019	$2,525,608	$1,960,019	$6,883,299	100%	100%	171.00%
6/30/2003	$987,568	$2,838,286	$2,091,373	$6,753,585	100%	100%	140.0%

STATE POLICE RETIREMENT SYSTEM

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1998	$30,546	$183,652	$80,229	$306,319	100%	100%	114.80%
6/30/1999	$33,633	$187,163	$93,226	$357,623	100%	100%	146.80%
6/30/2000	$36,111	$199,749	$100,720	$459,169	100%	100%	221.70%
6/30/2001	$34,338	$224,433	$97,441	$456,161	100%	100%	202.60%
6/30/2002	$36,886	$252,499	$91,405	$438,955	100%	100%	163.60%
6/30/2003	$35,832	$290,013	$89,037	$413,064	100%	100%	98.0%

Kentucky Retirement Systems

KERS Retired Lives Summary

(As of June 30, 2003)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM (KERS)

	Non-Hazardous Retirees		*Hazardous Retirees*		*Total*	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	9,074	$9,750,567	320	$210,316	9,394	$9,960,883
Joint & Survivor						
100% to Beneficiary	2,239	$2,437,608	127	$106,698	2,366	$2,544,306
66 2/3% to Beneficiary	917	$1,676,661	48	$41,813	965	$1,718,474
50% to Beneficiary	1,582	$2,628,738	72	$77,358	1,654	$2,706,096
Pop-Up Option	3,102	$5,211,263	261	$246,994	3,363	$5,458,257
10 Years Certain	---	---	22	$25,597	22	$25,597
10 Years Certain & Life	2,583	$2,570,364	102	$69,168	2,685	$2,639,532
15 Years Certain & Life	711	$857,896	38	$30,352	749	$888,248
20 Years Certain & Life	581	$850,021	35	$32,124	616	$882,145
Social Security Option						
Basic Form	1,286	$2,014,703	53	$43,350	1,339	$2,058,053
Survivorship Option	1,269	$2,053,795	89	$88,107	1,358	$2,141,902
Partial Lump Sum Option						
PLSO 12 Month Basic	39	$44,633	4	$4,072	43	$48,704
PLSO 24 Month Basic	19	$13,291	3	$3,027	22	$16,319
PLSO 36 Month Basic	50	$31,760	6	$3,611	56	$35,371
PLSO 12 Month Survivor	18	$22,562	2	$1,921	20	$24,483
PLSO 24 Month Survivor	22	$20,482	3	$3,448	25	$23,929
PLSO 36 Month Survivor	34	$19,319	5	$2,819	39	$22,138
5 Years Only	1	$1,590	0	$0	1	$1,590
Dependent Child	3	$1,194	15	$3,614	18	$4,808
TOTAL	**23,530**	**$30,206,449**	**1,205**	**$994,388**	**24,735**	**$31,200,838**

Kentucky Retirement Systems

CERS Retired Lives Summary

(As of June 30, 2003)

COUNTY EMPLOYEES RETIREMENT SYSTEM (CERS)

	Non-Hazardous Retirees		***Hazardous Retirees***		***Total***	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	10,887	$6,090,988	531	$844,042	11,418	$6,935,030
Joint & Survivor						
100% to Beneficiary	2,341	$1,579,166	404	$621,465	2,745	$2,200,631
66 2/3% to Beneficiary	686	$823,343	184	$385,563	870	$1,208,906
50% to Beneficiary	1,238	$1,231,648	276	$515,434	1,514	$1,747,082
Pop-Up Option	2,751	$2,753,783	1,120	$2,133,051	3,871	$4,886,835
10 Years Certain	0	$0	38	$68,699	38	$68,699
10 Years Certain & Life	3,368	$1,844,814	159	$248,774	3,527	$2,093,588
15 Years Certain & Life	847	$558,431	48	$69,574	895	$628,005
20 Years Certain & Life	571	$469,418	105	$157,819	676	$627,236
Social Security Option						
Basic Form	557	$614,956	98	$144,454	655	$759,409
Survivorship Option	640	$859,392	301	$425,591	941	$1,284,984
Partial Lump Sum Option	47	$27,245	8	$10,304	55	$37,549
PLSO 12 Month Basic	23	$10,213	6	$8,830	29	$19,043
PLSO 24 Month Basic	97	$38,820	4	$2,621	101	$41,441
PLSO 36 Month Basic	29	$33,012	5	$10,156	34	$43,167
PLSO 12 Month Survivor	19	$12,372	5	$5,068	24	$17,440
PLSO 24 Month Survivor	66	$25,659	14	$16,092	80	$41,751
PLSO 36 Month Survivor						
5 Years Only	0	$0	0	$0	0	$0
Dependent Child	4	$905	163	$49,886	167	$50,791
TOTAL	**24,167**	**$16,974,165**	**3,469**	**$5,717,422**	**27,473**	**$22,640,796**

Kentucky Retirement Systems

SPRS Retired Lives Summary

(As of June 30, 2003)

STATE POLICE RETIREMENT SYSTEM (SPRS)		
	Number	Monthly Benefits
Basic Form	83	$208,174
Joint & Survivor		
100% to Beneficiary	115	$274,322
66 2/3% to Beneficiary	66	$197,441
50% to Beneficiary	66	$181,888
Pop-Up Option	243	$697,252
10 Years Certain	6	$21,599
10 Years Certain & Life	23	$61,226
15 Years Certain & Life	9	$20,995
20 Years Certain & Life	31	$69,259
Social Security Option		
Basic Form	36	$79,284
Survivorship Option	167	$352,114
Partial Lump Sum Option		
PLSO 12 Month Basic	---	---
PLSO 24 Month Basic	---	---
PLSO 36 Month Basic	---	---
PLSO 12 Month Survivor	---	---
PLSO 24 Month Survivor	---	---
PLSO 36 Month Survivor	---	---
5 Years Only	1	$2,659
Dependent Child	11	$3,336
TOTAL	**857**	**$2,169,550**

Kentucky Retirement Systems

KERS Beneficiary Summary

(As of June 30, 2003)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM (KERS)

	Non-Hazardous Retirees		*Hazardous Retirees*		*Total*	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Joint & Survivor						
100% to Beneficiary	1,879	$1,192,277	71	$41,736	1,950	$1,234,013
66 2/3% to Beneficiary	287	$168,212	4	$2,179	291	$170,390
50% to Beneficiary	538	$214,076	13	$4,170	551	$218,246
Pop-Up Option	243	$214,057	15	$7,481	258	$221,538
5 Years Certain	95	$105,471	7	$7,313	102	$112,783
10 Years Certain	130	$118,169	12	$5,939	142	$124,108
10 Years Certain & Life	132	$114,381	14	$7,624	146	$122,005
15 Years Certain & Life	116	$108,371	2	$689	118	$109,061
20 Years Certain & Life	92	$89,987	4	$966	96	$90,954
Social Security Option						
Survivorship Option	177	$216,959	9	$8,442	186	$225,401
Beneficiary Under 60	15	$5,654	0	$0	15	$5,654
Dependent Child	0	$0	1	$299	1	$299
Partial Lump Sum Option						
PLSO 12 Month Basic	---	---	---	---	---	---
PLSO 24 Month Basic	---	---	---	---	---	---
PLSO 36 Month Basic	---	---	---	---	---	---
PLSO 12 Month Survivor	---	---	---	---	---	---
PLSO 24 Month Survivor	---	---	---	---	---	---
PLSO 36 Month Survivor	---	---	---	---	---	---
TOTAL	**3,704**	**$2,547,615**	**152**	**$86,839**	**3,856**	**$2,634,454**

Kentucky Retirement Systems

CERS Beneficiary Summary

(As of June 30, 2003)

COUNTY EMPLOYEES RETIREMENT SYSTEM (CERS)

	Non-Hazardous Retirees		*Hazardous Retirees*		*Total*	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Joint & Survivor						
100% to Beneficiary	1,391	$542,614	92	$93,479	1,483	$636,093
66 2/3% to Beneficiary	154	$64,198	19	$22,420	173	$86,617
50% to Beneficiary	290	$90,287	21	$12,080	311	$102,367
Pop-Up Option	238	$138,676	49	$69,131	287	$207,807
5 Years Certain	200	$126,048	11	$5,739	211	$131,787
10 Years Certain	161	$94,978	21	$29,775	182	$124,753
10 Years Certain & Life	206	$94,871	4	$4,785	210	$99,656
15 Years Certain & Life	125	$74,966	1	$605	126	$75,571
20 Years Certain & Life	89	$61,324	9	$14,058	98	$75,382
Social Security Option						
Survivorship Option	59	$56,803	37	$54,779	96	$111,582
Beneficiary Under 60	4	$655	3	$2,266	7	$2,921
Dependent Child	2	$316	1	$309	3	$625
Partial Lump Sum Option						
PLSO 12 Month Basic	---	---	---	---	---	---
PLSO 24 Month Basic	---	---	---	---	---	---
PLSO 36 Month Basic	---	---	---	---	---	---
PLSO 12 Month Survivor	1	$535	---	---	1	$535
PLSO 24 Month Survivor	---	---	---	---	---	---
PLSO 36 Month Survivor	---	---	---	---	---	---
TOTAL	**2,921**	**$1,346,521**	**268**	**$309,425**	**3,189**	**$1,655,946**

Kentucky Retirement Systems

SPRS Beneficiary Summary

(As of June 30, 2003)

STATE POLICE RETIREMENT SYSTEM (SPRS)

	Number	Monthly Benefits
Basic Form		
Joint & Survivor		
100% to Beneficiary	52	$109,453
66 2/3% to Beneficiary	1	$1,242
50% to Beneficiary	10	$13,629
Pop-Up Option	6	$16,054
10 Years Certain	0	$0
10 Years Certain & Life	0	$0
15 Years Certain & Life	0	$0
20 Years Certain & Life	2	$7,732
Social Security Option		
Basic Form		
Survivorship Option	12	$25,037
Partial Lump Sum Option		
PLSO 12 Month Basic	---	---
PLSO 24 Month Basic	---	---
PLSO 36 Month Basic	---	---
PLSO 12 Month Survivor	---	---
PLSO 24 Month Survivor	---	---
PLSO 36 Month Survivor	---	---
Dependent Child	1	$265
TOTAL	**84**	**$173,412**

KENTUCKY RETIREMENT SYSTEMS

Statistical Section

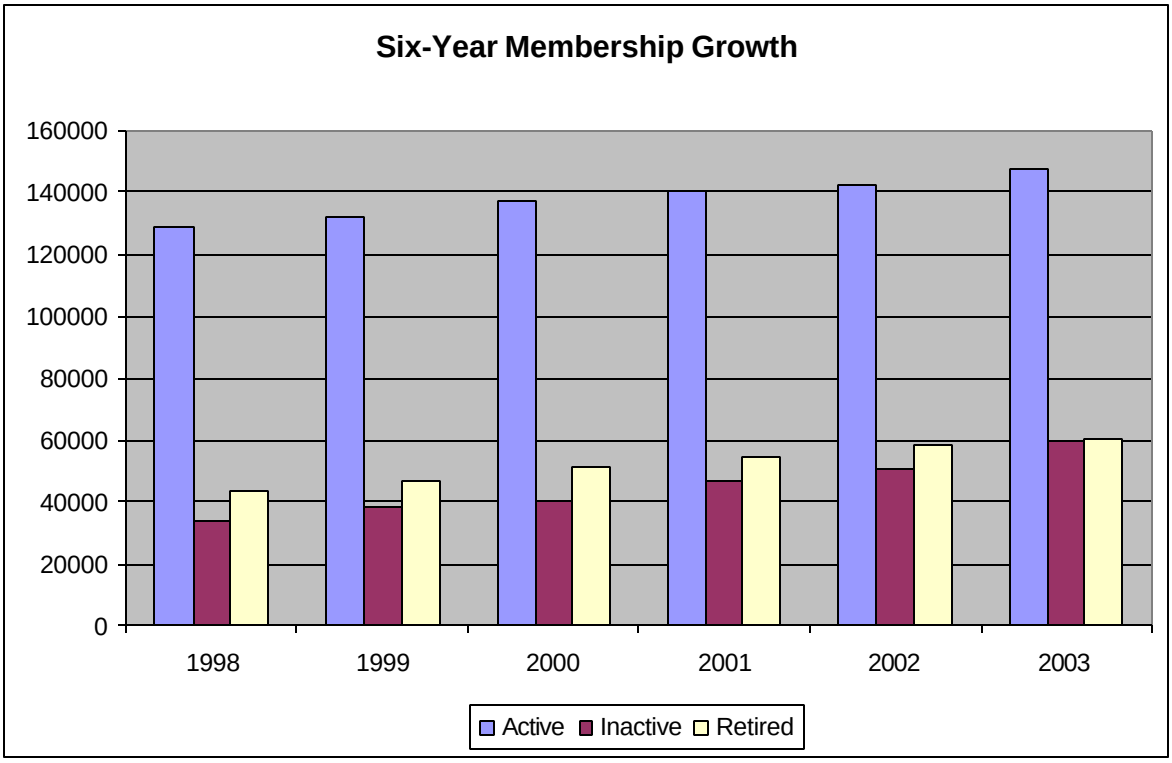
Comprehensive Annual Financial Report
June 30, 2003

Kentucky Retirement Systems

Membership by System

(As of June 30, 2003)

SYSTEM	ACTIVE	INACTIVE	RETIRED & BENEFICIARIES RECEIVING BENEFITS	TOTAL
KERS	49,586	21,212	27,182	97,980
KERS Hazardous	4,203	1,402	1,365	6,970
TOTAL KERS	**53,789**	**22,614**	**28,547**	**104,950**
CERS	83,142	35,720	27,057	145,919
CERS Hazardous	9,587	1,066	3,787	14,440
TOTAL CERS	**92,729**	**36,786**	**30,844**	**160,359**
SPRS	1,022	229	966	2,217
GRAND TOTAL	**147,540**	**59,629**	**60,357**	**267,526**



Kentucky Retirement Systems

Schedule of Participating Employers

KENTUCKY EMPLOYEES RETIREMENT SYSTEM	
Agency Classification	**Number of Agencies**
Agencies Reporting Through State Payroll	214
Other Agencies (universities, mental health boards, health departments)	123
Special Districts and Boards	4
Child Support Offices (county attorneys)	66
Other State-Administered Retirement Systems	3
TOTAL	**410**

COUNTY EMPLOYEES RETIREMENT SYSTEM	
Agency Classification	**Number of Agencies**
Area Development Districts	14
Boards of Education	176
Cities	255
County Attorneys	59
County Clerks	13
County Government Agencies	254
Fire Departments	63
Hospitals	3
Jailers	8
Libraries	83
Planning Commissions	9
Police Departments	63
Police & Fire Departments (combined)	41
Sanitation Districts	4
Sheriff Departments	43
Special Districts and Boards	173
Utility Boards	102
Urban County Government Agencies	4
TOTAL	**1,367**

STATE POLICE RETIREMENT SYSTEM	
Agency Classification	**Number of Agencies**
Kentucky State Police-Uniformed Officers	1

Kentucky Retirement Systems

SCHEDULE OF REVENUE BY SOURCE

(Expressed in thousands)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM				
Year Ending	**Member Contributions**	**Employer Contributions**	**Investment Income**	**Total**
June 30, 1998	$ 74,115	$128,221	$ 997,451	$1,199,787
June 30, 1999	$149,722	$126,959	$ 889,768	$1,166,449
June 30, 2000	$117,209	$136,688	$ 333,006	$ 586,903
June 30, 2001	$117,225	$114,210	($ 387,886)	($ 156,451)
June 30, 2002	$122,799	$119,494	($ 238,838)	$3,455
June 30, 2003	$148,677	$96,137	$219,325	$464,139

COUNTY EMPLOYEES RETIREMENT SYSTEM				
Year Ending	**Member Contributions**	**Employer Contributions**	**Investment Income**	**Total**
June 30, 1998	$ 90,963	$149,824	$ 903,101	$1,143,888
June 30, 1999	$121,484	$158,882	$ 818,969	$1,099,335
June 30, 2000	$125,152	$158,326	$ 295,579	$ 579,057
June 30, 2001	$128,876	$164,338	($ 317,544)	($ 24,330)
June 30, 2002	$159,524	$164,464	($ 288,882)	$ 35,106
June 30, 2003	$161,504	$173,241	$219,150	$553,895

STATE POLICE RETIREMENT SYSTEM				
Year Ending	**Member Contributions**	**Employer Contributions**	**Investment Income**	**Total**
June 30, 1998	$2,711	$ 9,574	$75,292	$ 87,577
June 30, 1999	$3,658	$ 9,463	$76,389	$ 89,510
June 30, 2000	$4,202	$10,216	$22,601	$ 37,019
June 30, 2001	$4,138	$ 9,629	($33,885)	($ 20,118)
June 30, 2002	$4,499	$ 9,562	($22,770)	($ 8,709)
June 30, 2003	$4,674	$7,634	$14,947	$27,255

Kentucky Retirement Systems

SCHEDULE OF EXPENSES BY TYPE

(Expressed in thousands)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM					
Year Ending	**Benefit Payments**	**Administrative Expenses**	**Refunds**	**Medical Insurance Expenses**	**Total**
June 30, 1998	$193,569	$2,628	$9,196	$24,521	$229,914
June 30, 1999	$209,339	$3,448	$9,168	$25,829	$247,784
June 30, 2000	$258,999	$3,792	$9,041	$32,085	$303,917
June 30, 2001	$299,700	$4,461	$8,221	$39,618	$352,000
June 30, 2002	$355,869	$5,127	$7,798	$46,565	$415,359
June 30, 2003	$418,269	$5,363	$8,418	$54,944	$486,994

COUNTY EMPLOYEES RETIREMENT SYSTEM					
Year Ending	**Benefit Payments**	**Administrative Expenses**	**Refunds**	**Medical Insurance Expenses**	**Total**
June 30, 1998	$142,405	$4,030	$10,173	$23,138	$179,746
June 30, 1999	$165,107	$5,385	$10,924	$25,841	$207,257
June 30, 2000	$197,637	$6,228	$12,248	$31,705	$247,818
June 30, 2001	$226,776	$7,039	$10,313	$39,423	$283,551
June 30, 2002	$260,153	$8,197	$10,095	$46,267	$324,712
June 30, 2003	$302,849	$8,981	$12,007	$54,664	$378,501

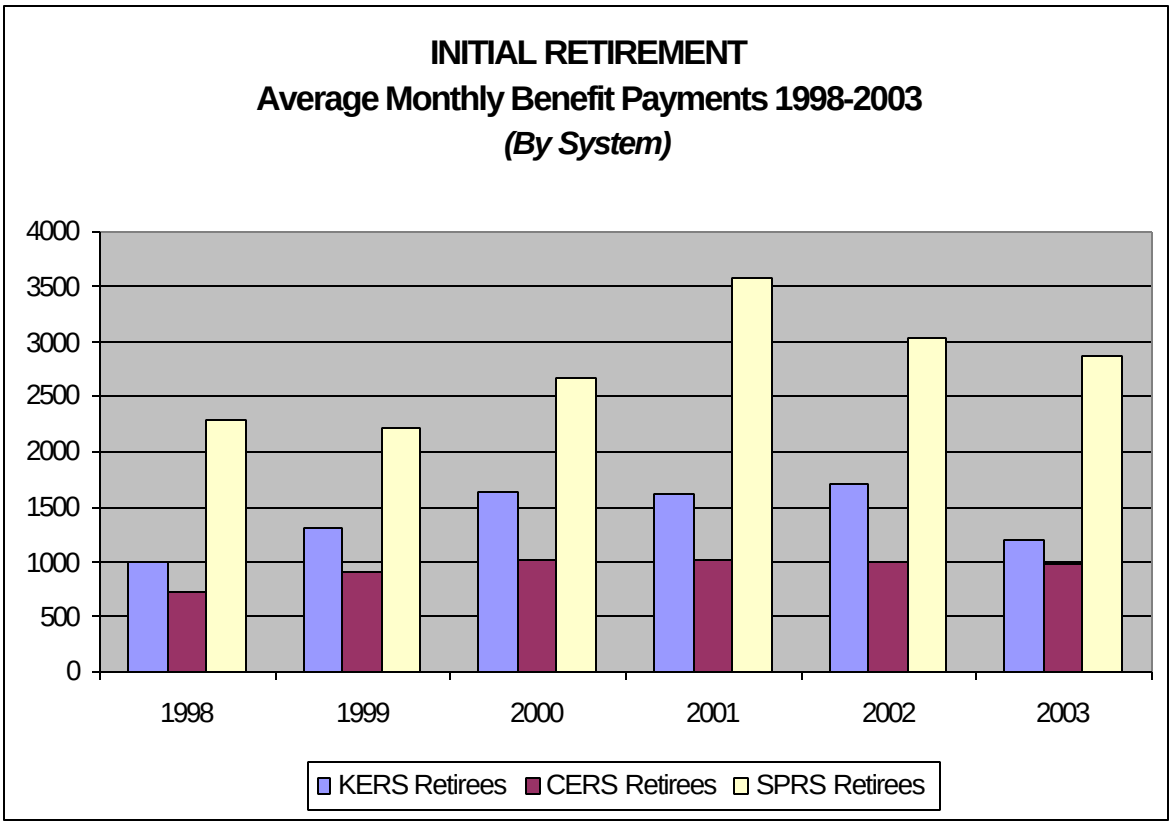
STATE POLICE RETIREMENT SYSTEM					
Year Ending	**Benefit Payments**	**Administrative Expenses**	**Refunds**	**Medical Insurance Expenses**	**Total**
June 30, 1998	$17,735	$47	$70	$2,611	$20,463
June 30, 1999	$19,136	$68	$44	$2,754	$22,002
June 30, 2000	$19,974	$82	$80	$3,028	$23,164
June 30, 2001	$22,644	$92	$80	$3,575	$26,391
June 30, 2002	$24,839	$105	$25	$4,049	$29,018
June 30, 2003	$27,862	$86	$97	$4,550	$32,595

Kentucky Retirement Systems

ANALYSIS OF INITIAL RETIREMENT

1998-2003

	1998	1999	2000	2001	2002	2003
KERS Retirees	1,093	1,648	2,323	2,083	2,457	2,565
Average Monthly Benefit	$1,000	$1,296	$1,639	$1,616	$1,709	$1,203
CERS Retirees	1,626	2,349	2,485	2,265	2,733	3,115
Average Monthly Benefit	$709	$907	$1,012	$1,006	$982	$967
SPRS Retirees	46	23	42	53	58	53
Average Monthly Benefit	$2,299	$2,223	$2,664	$3,582	$3,030	$2,867



Schedule of Benefit Expenses by Type

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	DEATH	TOTAL
FY 1997-98					
Average Benefit	$589	$859	$629	$647	$760
Retirees	4,248	11,920	1,772		17,940
Beneficiaries	827	890	636	782	3,135
Total Recipients	5,075	12,810	2,408	782	21,075
Monthly Benefits	$2,989,698	$11,006,325	$1,512,760	$505,747	$16,014,530
% of Total Monthly Benefits	**19%**	**69%**	**9%**	**3%**	**100%**
FY 1998-99					
Average Benefit	$630	$944	$662	$686	$830
Retirees	4,267	12,755	1,848		18,870
Beneficiaries	807	936	670	866	3,279
Total Recipients	5,074	13,691	2,518	866	22,149
Monthly Benefits	$3,194,856	$12,927,270	$1,665,838	$594,363	$18,382,327
% of Total Monthly Benefits	**17%**	**70%**	**9%**	**4%**	**100%**
FY 1999-00					
Average Benefit	$663	$1,042	$675	$698	$907
Retirees	4,360	14,323	1,977		20,660
Beneficiaries	804	978	689	885	3,356
Total Recipients	5,164	15,301	2,666	885	24,016
Monthly Benefits	$3,425,223	$15,949,488	$1,799,238	$618,038	$21,791,987
% of Total Monthly Benefits	**16%**	**73%**	**8%**	**3%**	**100%**
FY 2000-01					
Average Benefit	$706	$1,135	$702	$726	$987
Retirees	4,348	15,624	2,068		22,040
Beneficiaries	795	1,015	702	887	3,399
Total Recipients	5,143	16,639	2,770	887	25,439
Monthly Benefits	$3,631,318	$18,878,492	$1,944,415	$643,874	$25,098,099
% of Total Monthly Benefits	**14%**	**75%**	**8%**	**3%**	**100%**
FY 2001-02					
Average Benefit	$763	$1,283	$737	$778	$1,111
Retirees	4,341	17,193	2,104		23,657
Beneficiaries	796	1,039	696	863	3,394
Total Recipients	5,137	18,232	2,800	863	27,051
Monthly Benefits	$3,921,539	$23,392,161	$2,063,497	$685,848	$30,063,045
% of Total Monthly Benefits	**13%**	**78%**	**7%**	**2%**	**100%**
FY 2002-03					
Average Benefit	$1,054	$452	$931	$1,191	$1,297
Retirees	370	1,882	87		2,339
Beneficiaries	19	59	2	91	171
Total Recipients	389	1,941	89	91	2,510
Monthly Benefits	$1,750,796	$6,225,808	$424,089	$372,859	$8,773,553
% of Total Monthly Benefits	**20%**	**71%**	**5%**	**4%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Section for a further delineation of retirement options by system.

Schedule of Benefit Expenses by Type

COUNTY EMPLOYEES RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	DEATH	TOTAL
FY 1997-98					
Average Benefit	$429	$650	$585	$473	$576
Retirees	5,095	11,238	2,165		18,498
Beneficiaries	594	544	416	614	2,168
Total Recipients	5,689	11,782	2,581	614	20,666
Monthly Benefits	$2,438,180	$7,660,693	$1,511,141	$290,517	$11,900,531
% of Total Monthly Benefits	**20%**	**64%**	**13%**	**3%**	**100%**
FY 1998-99					
Average Benefit	$466	$718	$604	$482	$630
Retirees	5,365	12,609	2,350		20,324
Beneficiaries	603	578	636	727	2,544
Total Recipients	5,968	13,187	2,986	727	22,868
Monthly Benefits	$2,783,194	$9,472,665	$1,802,978	$350,404	$14,409,241
% of Total Monthly Benefits	**19%**	**66%**	**13%**	**2%**	**100%**
FY 1999-00					
Average Benefit	$478	$766	$612	$483	$666
Retirees	5,628	14,179	2,633		22,440
Beneficiaries	620	609	639	771	2,639
Total Recipients	6,248	14,788	3,272	771	25,079
Monthly Benefits	$2,985,474	$11,328,818	$2,003,432	$372,601	$16,690,325
% of Total Monthly Benefits	**18%**	**68%**	**12%**	**2%**	**100%**
FY 2000-01					
Average Benefit	$499	$816	$638	$503	$708
Retirees	5,840	15,516	2,846		24,202
Beneficiaries	632	649	673	773	2,727
Total Recipients	6,472	16,165	3,519	773	26,929
Monthly Benefits	$3,231,715	$13,192,315	$2,243,451	$388,758	$19,056,239
% of Total Monthly Benefits	**17%**	**69%**	**12%**	**2%**	**100%**
FY 2001-02					
Average Benefit	$532	$880	$667	$532	$762
Retirees	6,025	16,999	3,132		26,156
Beneficiaries	664	695	531	801	2,691
Total Recipients	6,689	17,694	3,663	801	28,847
Monthly Benefits	$3,555,481	$15,563,130	$2,441,911	$426,386	$21,986,908
% of Total Monthly Benefits	**16%**	**71%**	**11%**	**2%**	**100%**
FY 2002-03					
Average Benefit	$659	$1,156	$765	$466	1,514
Retirees	766	1,849	157	171	2,943
Beneficiaries	15	44	5	0	64
Total Recipients	781	1,893	162	171	3,007
Monthly Benefits	$2,433,274	$5,035,337	$607,839	$525,564	$8,602,015
% of Total Monthly Benefits	**28%**	**59%**	**7%**	**6%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Section for a further delineation of retirement options by system.

Schedule of Benefit Expenses by Type

STATE POLICE RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	DEATH	TOTAL
FY 1997-98					
Average Benefit	$2,472	$2,131	$1,319	$1,309	$2,120
Retirees	101	520	33		654
Beneficiaries	20	4	7	20	51
Total Recipients	121	524	40	20	705
Monthly Benefits	$299,059	$1,116,767	$52,744	$26,178	$1,494,748
% of Total Monthly Benefits	**20%**	**75%**	**4%**	**1%**	**100%**
FY 1998-99					
Average Benefit	$2,495	$2,175	$1,024	$1,237	$2,102
Retirees	98	550	38		686
Beneficiaries	23	5	23	25	76
Total Recipients	121	555	61	25	762
Monthly Benefits	$301,845	$1,206,862	$62,478	$30,922	$1,602,087
% of Total Monthly Benefits	**19%**	**75%**	**4%**	**2%**	**100%**
FY 1999-00					
Average Benefit	$2,522	$2,185	$1,062	$1,318	$2,126
Retirees	98	585	40		723
Beneficiaries	25	5	21	23	74
Total Recipients	123	590	61	23	797
Monthly Benefits	$310,242	$1,289,260	$64,788	$30,323	$1,694,613
% of Total Monthly Benefits	**18%**	**76%**	**4%**	**2%**	**100%**
FY 2000-01					
Average Benefit	$2,677	$2,305	$1,107	$1,354	$2,258
Retirees	99	632	36		767
Beneficiaries	27	6	18	23	74
Total Recipients	126	638	54	23	841
Monthly Benefits	$337,279	$1,470,596	$59,799	$31,132	$1,898,806
% of Total Monthly Benefits	**18%**	**77%**	**3%**	**2%**	**100%**
FY 2001-02					
Average Benefit	$2,851	$2,424	$1,133	$1,450	$2,385
Retirees	105	682	26		813
Beneficiaries	26	7	28	22	83
Total Recipients	131	689	54	22	896
Monthly Benefits	$373,474	$1,670,425	$61,170	$31,894	$2,136,963
% of Total Monthly Benefits	**17.5%**	**78%**	**3%**	**1.5%**	**100%**
FY 2002-03					
Average Benefit	$3,116	$3,509	$1,705	0	$3,358
Retirees	10	38	2		50
Beneficiaries	0	0	0	0	0
Total Recipients	10	38	2	0	50
Monthly Benefits	$31,160	$133,351	$3,411	0	$167,922
% of Total Monthly Benefits	**19%**	**79%**	**2%**	**0%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Section for a further delineation of retirement options by system.

Kentucky Retirement Systems

COMPARISON OF AVERAGE MONTHLY BENEFITS BY LENGTH OF SERVICE

KENTUCKY EMPLOYEES RETIREMENT SYSTEM									
Service in Years	**Under 2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**31-35**	**Over 35**
Number of Recipients	1,022	1,070	3,725	3,910	3,571	3,810	6,014	3,855	1,638
Average Monthly Pay	89	181	283	471	705	994	73	2,426	3,279

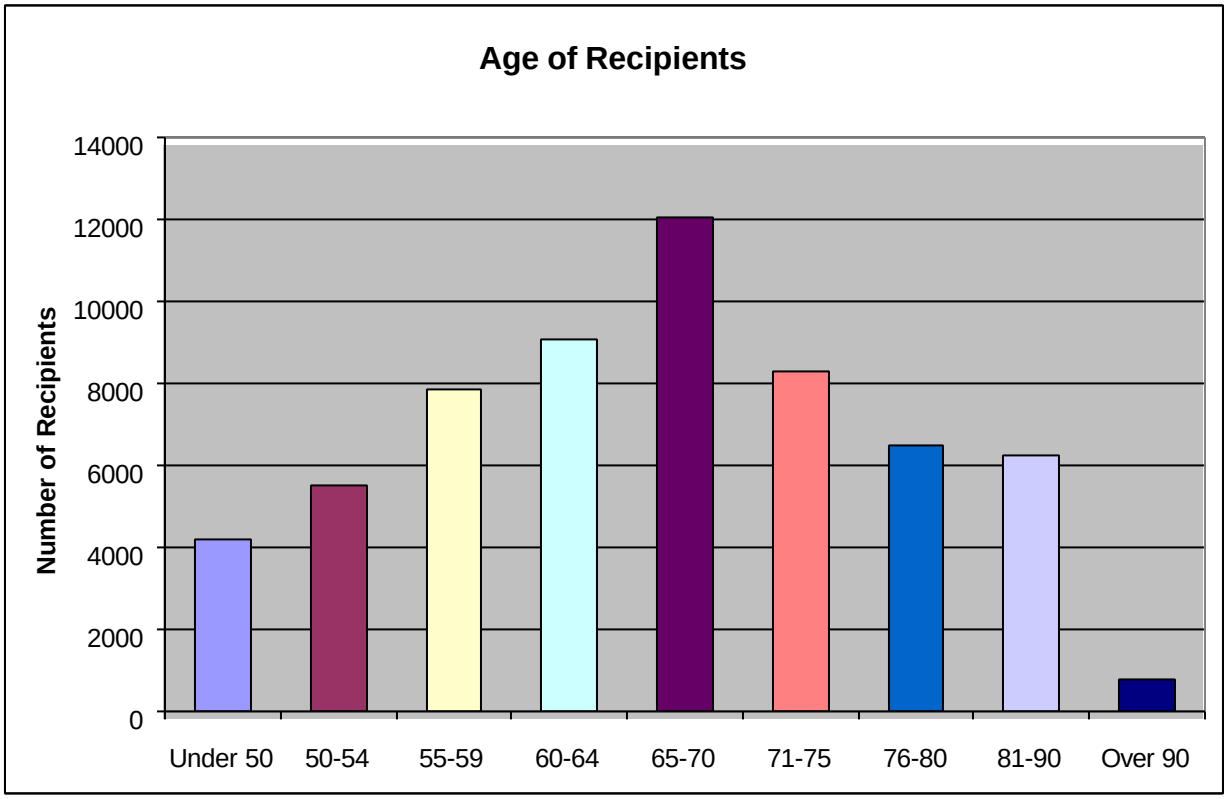
COUNTY EMPLOYEES RETIREMENT SYSTEM									
Service in Years	**Under 2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**31-35**	**Over 35**
Number of Recipients	1,217	1,484	6,170	6,011	4,563	4,934	4,599	1,404	479
Average Monthly Pay	152	156	233	417	645	1,059	1,725	2,284	2,674

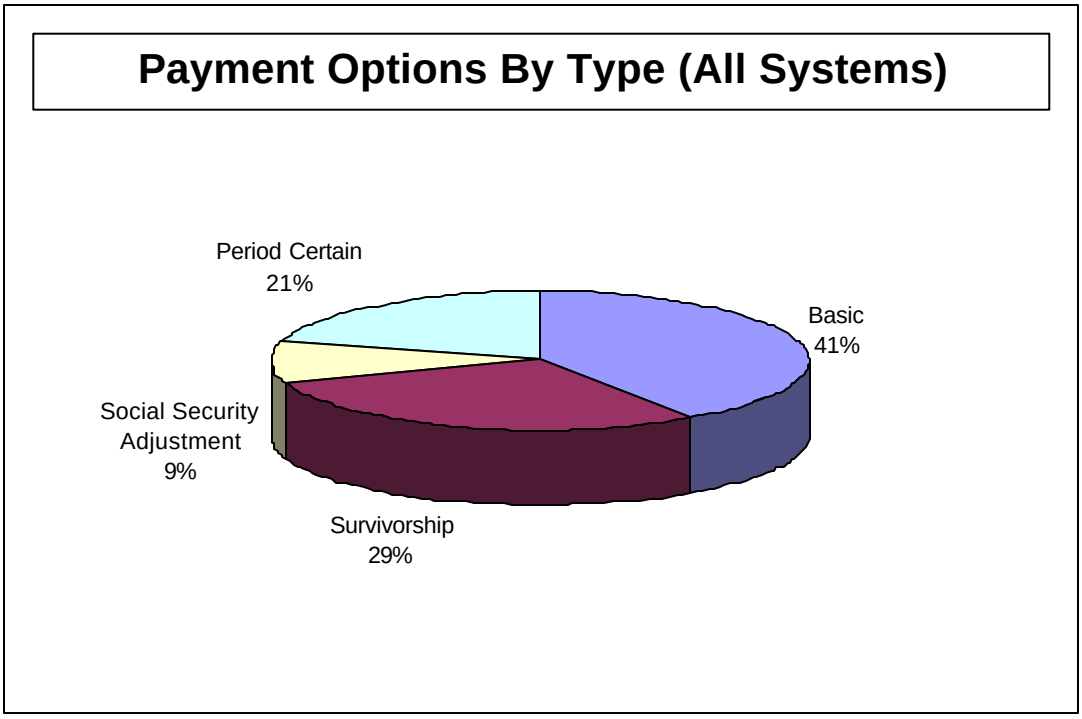
STATE POLICE RETIREMENT SYSTEM									
Service in Years	**Under 2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**31-35**	**Over 35**
Number of Recipients	39	28	26	26	65	242	303	160	52
Average Monthly Pay	583	345	672	967	1,551	2,045	2,812	3,741	4,298

Kentucky Retirement Systems

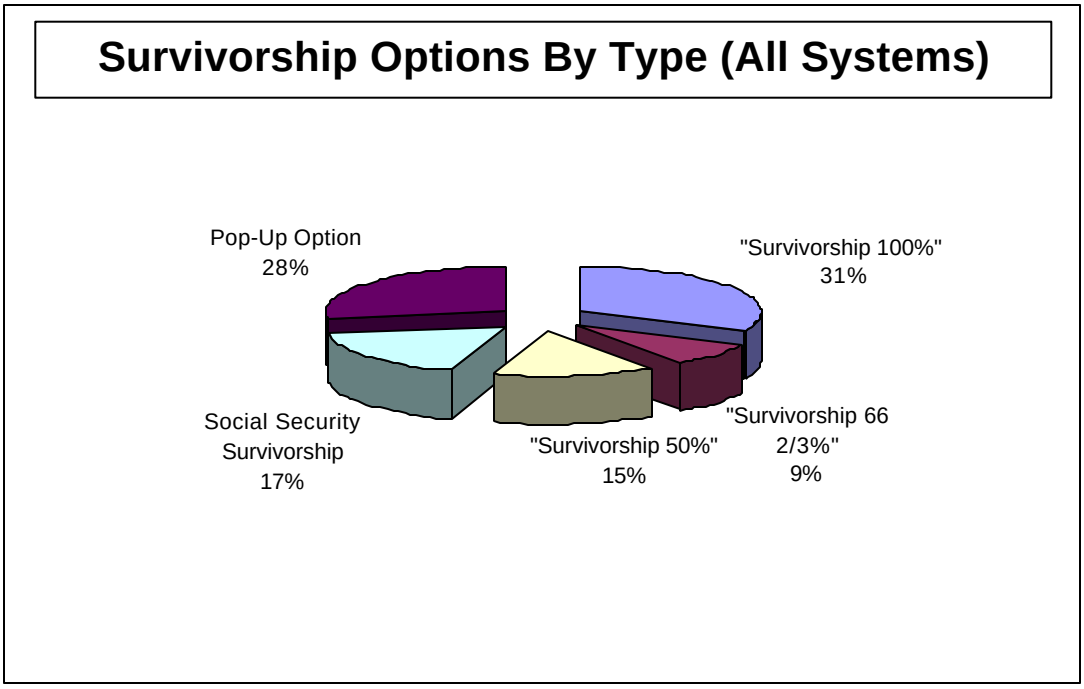
AGE OF RECIPIENTS

(All Systems Combined)





The Basic option is a single life annuity. Survivorship options include 100%, 66 2/3%, 50% and Pop-Up, which is a 100% survivorship option that increases to the Basic amount if the beneficiary dies or divorces the member prior to the member's death. Social Security Adjustment options provide enhanced benefits prior to age 62 and a reduced benefit after age 62. There are two Social Security Adjustment options: one with 100% survivorship and one with no survivor benefit.



Kentucky Retirement Systems

TOTAL FISCAL YEAR RETIREMENT PAYMENTS BY COUNTY

Jefferson	$128,495,663	**Carter**	$ 3,843,762	**Estill**	$ 1,872,485
Franklin	93,102,485	**Harlan**	3,671,009	**Wolfe**	1,839,805
Fayette	41,099,046	**Bourbon**	3,422,366	**Washington**	1,828,793
Warren	17,842,914	**Grayson**	3,372,367	**Powell**	1,786,209
Shelby	16,510,638	**Knott**	3,345,583	**Carroll**	1,746,757
Daviess	15,901,761	**Johnson**	3,313,985	**Livingston**	1,572,313
Kenton	14,525,550	**Clay**	3,246,735	**Union**	1,568,984
Pulaski	13,799,128	**Taylor**	2,986,032	**Webster**	1,563,615
Christian	12,439,317	**Logan**	2,985,191	**Butler**	1,485,476
McCracken	11,237,340	**Knox**	2,887,891	**Metcalfe**	1,483,166
Madison	11,234,096	**Caldwell**	2,881,108	**Lee**	1,480,249
Hardin	11,160,644	**Perry**	2,877,191	**Todd**	1,465,296
Anderson	10,095,424	**Breathitt**	2,873,224	**Lewis**	1,457,081
Boone	9,231,777	**Trigg**	2,836,504	**McCreary**	1,417,656
Campbell	8,790,331	**Morgan**	2,786,700	**McLean**	1,415,830
Oldham	8,598,690	**Adair**	2,758,999	**Trimble**	1,411,063
Bullitt	7,343,909	**Spencer**	2,682,659	**Jackson**	1,386,407
Woodford	7,027,404	**Greenup**	2,661,299	**Green**	1,323,664
Boyd	6,734,520	**Lincoln**	2,630,862	**Magoffin**	1,319,760
Laurel	6,434,011	**Montgomery**	2,619,290	**Leslie**	1,231,082
Scott	6,412,965	**Harrison**	2,592,930	**Lawrence**	1,206,243
Pike	6,368,071	**Fleming**	2,551,402	**Clinton**	1,146,975
Boyle	6,312,255	**Wayne**	2,549,730	**Ballard**	1,146,327
Hopkins	6,282,160	**Letcher**	2,527,575	**Menifee**	1,133,386
Henderson	6,006,129	**Russell**	2,523,178	**Nicholas**	1,076,449
Calloway	5,903,474	**Marion**	2,522,784	**Owsley**	1,065,595
Barren	5,599,840	**Breckinridge**	2,360,980	**Simpson**	1,021,103
Whitley	5,307,383	**Muhlenberg**	2,255,232	**Bracken**	990,194
Jessamine	5,203,307	**Meade**	2,211,201	**Cumberland**	983,520
Floyd	5,121,533	**Lyon**	2,158,485	**Fulton**	960,311
Rowan	5,098,717	**Larue**	2,150,680	**Edmonson**	953,391
Nelson	5,098,306	**Ohio**	2,087,645	**Monroe**	924,108
Henry	5,041,565	**Bath**	2,086,863	**Hancock**	888,624
Graves	4,942,349	**Casey**	2,059,960	**Carlisle**	859,180
Marshall	4,766,965	**Garrard**	2,059,546	**Martin**	832,610
Owen	4,573,246	**Mason**	2,005,086	**Crittenden**	817,556
Mercer	4,363,712	**Pendleton**	1,913,937	**Elliott**	772,934
Clark	4,089,438	**Rockcastle**	1,893,085	**Gallatin**	641,255
Bell	3,999,854	**Hart**	1,883,517	**Hickman**	517,954
Grant	3,987,055	**Allen**	1,875,772	**Robertson**	298,779

Payments to Recipients Living in Other States
$33,458,337

TOTAL PAYMENTS TO MEMBERS AND BENEFICIARIES FOR FY 2002-03
$709,927,499

KENTUCKY RETIREMENT SYSTEMS

Compliance Section

Comprehensive Annual Financial Report
June 30, 2003

Carpenter, Mountjoy & Bressler, PSC
Certified Public Accountants and Advisors

REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL REPORTING BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2003, and have issued our report thereon dated September 18, 2003. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Compliance

As part of obtaining reasonable assurance about whether Kentucky Retirement Systems' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under Government Auditing Standards.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Kentucky Retirement Systems' internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over financial reporting and its operation that we consider to be material weaknesses. However, we noted other matters involving the internal control over financial reporting that we have reported to the management of Kentucky Retirement Systems in a separate letter dated September 18, 2003.

This report is intended for the information of the audit committee, management, and federal awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

September 18, 2003
Louisville, Kentucky

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KENTUCKY RETIREMENT SYSTEMS

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

Comprehensive Annual Financial Report

For the Fiscal Year Ended **June 30, 2004**

A Component Unit of the
Commonwealth of Kentucky

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KENTUCKY RETIREMENT SYSTEMS

A Component Unit of the
Commonwealth of Kentucky

Comprehensive Annual Financial Report
For the Fiscal Year Ended **June 30, 2004**

KRS Office in Frankfort, Kentucky

Prepared by the executive staff of
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Fax: (502) 564-5656
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The cost of printing this CAFR is part of the administrative expense of the system.

Kentucky Retirement Systems
Comprehensive Annual Financial Report

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KENTUCKY RETIREMENT SYSTEMS

Introductory Section

Comprehensive Annual Financial Report
June 30, 2004

KENTUCKY RETIREMENT SYSTEMS
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

William P. Hanes, Esq.
Executive Director
Phone 502-564-4646
FAX# 502-564-5656
www.kyret.com

November 18, 2004

The Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601-6124

Dear Board of Trustees and Members:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year ended June 30, 2004. Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the management of the Systems.

The CAFR is divided into six sections:

- An Introductory Section, containing the administrative organization and letter of transmittal.
- A Financial Section, containing the report of the independent Auditor, the financial statements of the three systems and certain required supplementary information.
- An Investment Section, containing a report on investment activity, investment policies, investment results and various investment schedules.
- An Actuarial Section, containing the Actuary's Certification Letter and the results of the annual actuarial valuation.
- A Statistical Section, containing information about plan participants and recipients.
- A Compliance Section, containing a report on compliance and internal control.

We present this information to assist the Board and the members of the retirement systems in understanding the systems' financial and actuarial status. This CAFR was prepared to conform with the principles of governmental accounting and reporting set forth by the Governmental Accounting Standard Board. Transactions of the system are reported on the accrual basis of accounting. Additionally, sufficient internal accounting controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis on page 12 for more information.

History

KERS was created in 1956 by the Kentucky General Assembly in order to supplement the benefits provided by Social Security. When the first actuarial valuation was completed June 30, 1957, there were 16,000 employees participating in KERS and assets of $2.8 million. SPRS and CERS were established in 1958. The first actuarial valuation of SPRS was conducted June 30, 1959. No actuarial valuation of CERS was conducted until June 30, 1960 because the statutes prohibited retirements from the system prior to July 1, 1960. On June 30, 1960, there were 68 counties and 2,617 employees participating in CERS, and SPRS included 415 uniformed state troopers.

As of June 30, 2004, there were more than 284,000 active and retired members in the three systems and approximately $13.4 billion in assets. A breakdown of membership by system is provided in the Statistical Section.

The staff of Kentucky Retirement Systems provides detailed benefit estimates to members upon request. Counselors are available at the Frankfort office for individual counseling, both in office by appointment and by telephone during normal business hours. In addition, staff conducts individual counseling sessions at sites throughout the state and holds preretirement seminars to help members prepare for retirement.

Major Initiatives

During fiscal year 2004, The Board of Trustees issued a Request for Proposal for an Organizational and Operational Review. The purpose of the review was to focus on business processes and the technology needed to provide services to members in the future. The firm of L.R. Wechsler, Ltd. was selected and a report is expected in late fiscal year 2005. In addition, the Board also issued an RFP for a Pharmacy Consultant to assist it in understanding the utilization and management of the drug benefit it provides under its contract with retirees. Additional work is expected over the course of the next several years in the medical benefits area, including drug benefits.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its CAFR for the fiscal year ended June 30, 2003. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. This was the fifth consecutive year that KRS has achieved this award.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Additions to Plan Net Assets

The collection of employer and employee contributions, as well as income from investments, provide the reserves needed to finance retirement and insurance benefits.

(Dollar amounts expressed in thousands)	2004	2003	Increase (Decrease) Amount	Increase (Decrease) Percentage
Member Contributions	$306,652	$314,855	($8,203)	(2.7%)
Employer Contributions	$342,101	$277,012	$65,089	23.5%
Net Investment Income	$1,696,010	$459,156	$1,236,854	269.4%
Total	$2,344,763	$1,051,023	$1,293,740	123.1%

Member contributions decreased by $8.1 million over the fiscal year. Employer contributions increased by $60.6 million due to the increase in covered payroll and the increase in the contribution rates applied to the pension funds. The increase in Net Investment Income is primarily due to the more favorable financial market conditions of the past fiscal year.

Deductions To Plan Net Assets

The Kentucky Retirement Systems administers the retirement programs established by the Kentucky General Assembly. The costs associated with those programs include the monthly retirement allowances of retired members under normal, early or disability retirement; payments to beneficiaries; monthly insurance benefits; member refunds and the administrative expenses of the system.

(Dollar amounts expressed in thousands)	2004	2003	Increase (Decrease) Amount	Increase (Decrease) Percentage
Retirement Allowances	$849,172	$748,980	$100,192	13.4%
Refunds	$23,361	$20,522	$2,839	13.8%
Administrative Expense	$16,232	$15,292	$940	6.1%
Medical Insurance Expense	$131,872	$113,296	$18,576	16.4%
Total	$1,020,637	$898,090	$122,547	13.6%

Retirement allowances increased due to a 1.6% cost of living adjustment added to recipients' monthly benefits effective July 1, 2003, as well as an increase in the number of retired members over the past fiscal year.

Investments

The Board of Trustees of the Kentucky Retirement Systems has a statutory obligation to invest the systems' funds in accordance with the "prudent person rule." The prudent person rule states that fiduciaries shall discharge their investment duties with the same degree of diligence, care and skill that a prudent person would ordinarily exercise under similar circumstances in a comparable position.

The Board has managed the funds in recognition of the basic long-term nature of the systems. The Board has interpreted this to mean that the assets of the three systems should be actively managed — that is, investment decisions regarding the particular securities to be purchased or sold shall be the result of the conscious exercise of discretion. The Board has further recognized that proper diversification of assets must be maintained. The asset allocation can be found in the Investment Section of this CAFR.

The Board's policies have provided significant returns over the long term while minimizing investment related expenses. Due to favorable market conditions for the fiscal year ending June 30, 2004, the systems' pension funds increased $1.44 billion and the insurance fund increased $253.1 million.

Funding

The Kentucky Retirement Systems' funding objective is to meet long-term benefit promises through contributions that remain fairly level as a percent of member payroll. The progress towards achieving the intended funding objectives for both the pension and insurance funds can be measured by the relationship of valuation assets of each fund to the accrued liabilities. The funded level for the retirement funds are 85.8% for KERS, 101.0% for CERS and 88.0% for SPRS. These funded levels will fluctuate over time with experience deviations. Since 1992, all three systems have had a funded level relative to the retirement fund of at least 85% in all valuations.

The medical insurance benefit, created in 1978, is not at the same level of funding. Total insurance liabilities exceed assets in the Insurance Fund by $4.09 billion. The medical insurance liability continues to be the primary funding concern of the Kentucky Retirement Systems.

A detailed discussion of the funding status of the systems can be found in the Financial Section of this report.

Professional Services

A listing of the Board's contracted consultants can be found in the organizational chart on page 9. A listing of the external investment managers can be found on page 75 in the Investment Section.

Other Information

Kentucky statutes require an annual audit by an independent certified public accountant or the Auditor of Public Accounts. Carpenter, Mountjoy & Bressler PSC performed the audit for the fiscal year ended June 30, 2004, and the results of that audit are contained in the Financial Section. The firm gave the Systems an unqualified opinion and also indicated that the financial statements present fairly, in all material respects, the plan net assets of Kentucky Retirement Systems.

The compilation of this report reflects the combined efforts of Don Mullis, Bob Leggett, Brad Gross and Shawn Sparks under the leadership of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with statutory provisions, and as a means of determining responsible stewardship of the Systems' funds.

The report is available to all employers participating in the Kentucky Retirement Systems. They form the link between the systems and its membership, and their cooperation contributes significantly to the success of the Kentucky Retirement Systems. We hope the employers and their employees find this report informative. This and past CAFRs can be found on the Systems' web site, **www.kyret.com**.

On behalf of the Board of Trustees, I would like to take this opportunity to express my gratitude to the staff, the advisors and the many people who have worked so diligently to assure the successful operation of the Kentucky Retirement Systems.

Respectfully submitted,

William P. Hanes, Esq.
Executive Director

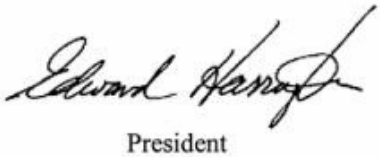
Certificate of Achievement for Excellence in Financial Reporting

Presented to

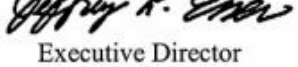
Kentucky Retirement Systems

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended
June 30, 2003

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



President

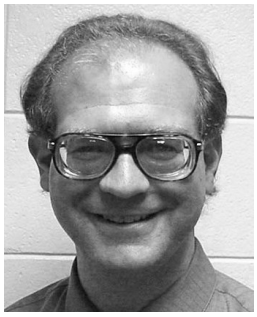


Executive Director

Kentucky Retirement Systems Board of Trustees

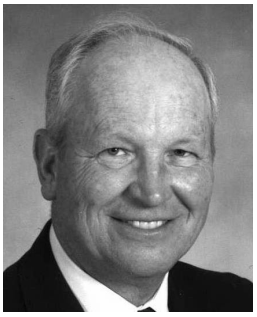
Larry C. Conner
Lexington
Appointed by Governor
Term Expires March 31, 2007

Edwin A. Davis
Louisville
Elected by CERS
Term Expires March 31, 2005



John W. Freeman
Louisville
Elected by CERS
Term Expires March 31, 2005

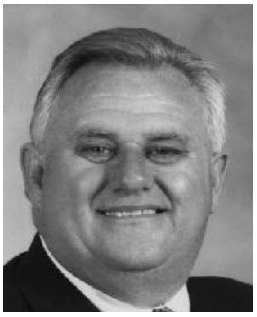
Lynn T. Harpring
Louisville
Appointed by Governor
Term Expires March 31, 2008



Bobby D. Henson
Frankfort
Elected by KERS
Term Expires March 31, 2006

Susan Smith Horne
Lexington
Elected by KERS
Term Expires March 31, 2006

Randy J. Overstreet, *Chair*
Elizabethtown
Elected by SPRS
Term Expires March 31, 2007



Walter J. Pagan, *Vice Chair*
Wilder
Appointed by Governor
Term Expires March 31, 2008

Robert Ramsey, Sr.
Georgetown
Commissioner, Department of Personnel
Term Expires: Ex-Officio

Kentucky Retirement Systems **Organizational Chart**

CONSULTANTS

Actuarial Services
The Segal Company

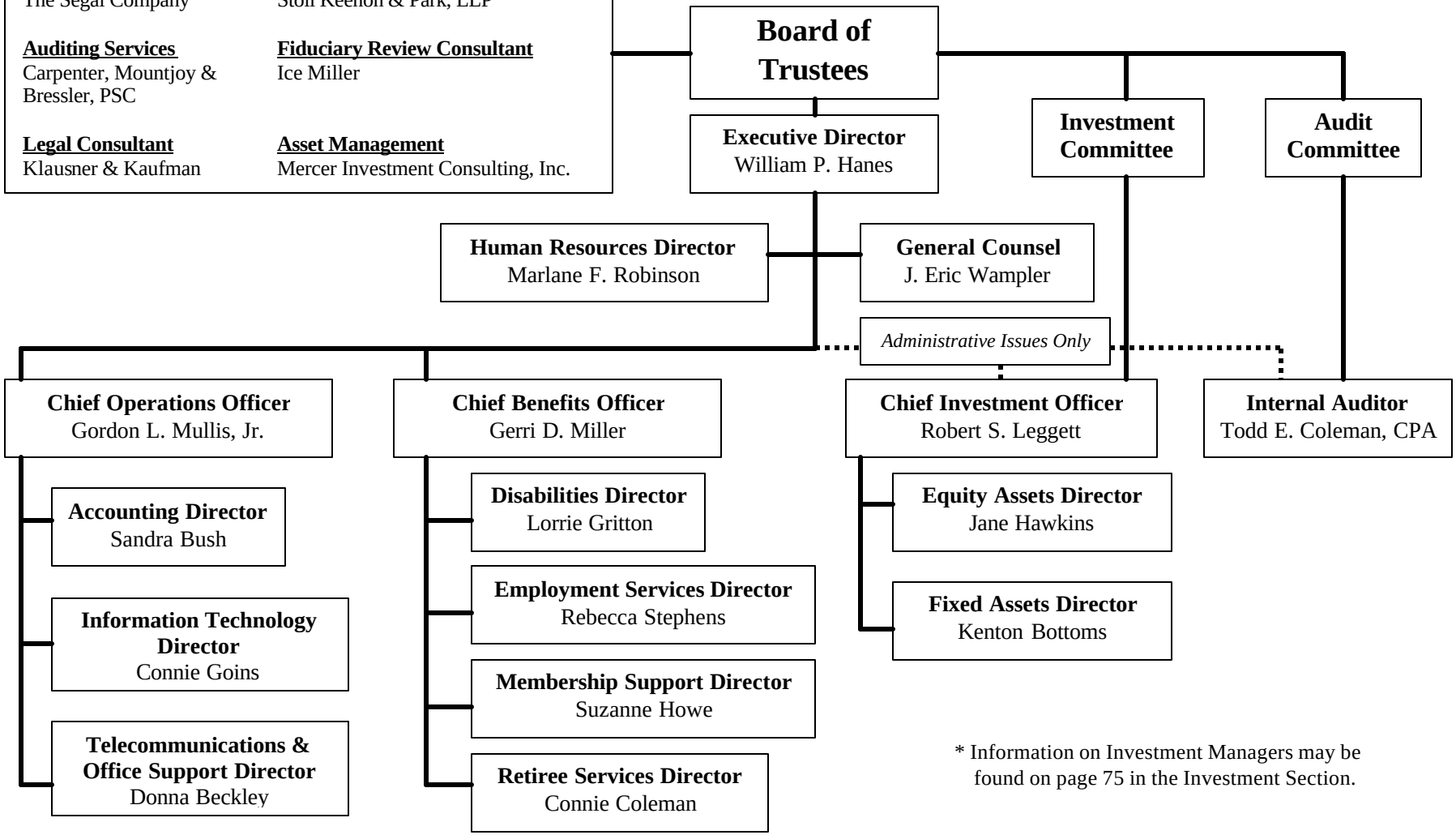
Auditing Services
Carpenter, Mountjoy & Bressler, PSC

Legal Consultant
Klausner & Kaufman

Legal Services
Stoll Keenon & Park, LLP

Fiduciary Review Consultant
Ice Miller

Asset Management
Mercer Investment Consulting, Inc.



* Information on Investment Managers may be found on page 75 in the Investment Section.

KENTUCKY RETIREMENT SYSTEMS

Financial Section

Comprehensive Annual Financial Report
June 30, 2004

Carpenter, Mountjoy & Bressler, PSC
Certified Public Accountants and Advisors

INDEPENDENT AUDITOR'S REPORT

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the years ended June 30, 2004 and 2003, as listed in the table of contents. These financial statements are the responsibility of the Kentucky Retirement Systems' management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2004 and 2003 and the changes in plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated September 16, 2004 on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

Management's Discussion and Analysis (pages 12 through 16) and the supplementary information included in the schedule of funding progress and schedule of employer contributions (pages 40 through 48) are not a required part of the basic financial statements, but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the financial statements taken as a whole. The additional supporting schedules (pages 51 through 53) are presented for the purpose of additional analysis and are not a required part of the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

September 16, 2004
Louisville, Kentucky

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Louisville, Kentucky 40202-4244
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www.cmbcpa.com
Independent Member of Ernst & Young Alliance

KENTUCKY RETIREMENT SYSTEMS

MANAGEMENT'S DISCUSSION AND ANALYSIS

June 30, 2004 and 2003

This discussion and analysis of Kentucky Retirement System's financial performance provides an overview of the pension fund's and insurance fund's financial activities for the fiscal year ended June 30, 2004. Please read it in conjunction with the Pension Fund's financial statements and Insurance Fund's financial statements, which begin on page 17.

FINANCIAL HIGHLIGHTS--PENSION FUND

The following highlights are explained in more detail later in this discussion:

- The combined plan net assets of all pension funds administered by Kentucky Retirement Systems increased by $966.1 million during the 2003-2004 fiscal year.
- Covered payroll for 2003-2004 was $4.048 billion compared to covered payroll for the 2002-2003 plan year of $3.955 billion, increasing approximately $93 million. The corresponding employer contributions increased by $65.1 million for a total employer contribution amount of $342.1 million. Of the total employer contribution amount, $104.3 million was posted to the pension fund while $237.8 million was posted to the insurance fund. Contributions paid by employees were $306.7 and $314.8 million respectively for the years ended June 30, 2004 and June 30, 2003. This decrease in employee contributions is a reflection of a decrease in voluntary service purchases.
- The net appreciation in the fair value of investments was $1.14 billion for the year ended June 30, 2004 compared to net appreciation of $110 million for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $227.6 million. In comparison, the pension funds realized losses of $155.2 million for the year ended June 30, 2003. The net realized gain experienced by the pension funds is due to a favorable change in market conditions.
- Investment income net of investment expense from all sources including securities lending was $298.2 million compared to $321 million net investment income in last fiscal year.
- Pension benefits paid to retirees and beneficiaries increased $100.2 million bringing total benefit payments to $849.2 million. Refund of contributions paid to former members upon termination of employment increased from $20.5 million to $23.4 million.
- Administrative expense increased $.8 million totaling $15.2 million compared to $14.4 million in the prior year.

FINANCIAL HIGHLIGHTS--INSURANCE FUND

The following highlights are explained in more detail later in this discussion:

- The combined plan net assets of the post-employment healthcare (insurance) fund administered by Kentucky Retirement Systems increased by $358 million during the 2003-2004 fiscal year.
- Employer contributions of $237.8 million were received. This is an increase of $4.5 million over the prior fiscal year. This increase is due to an increase in covered payroll reported during the 2003-2004 plan year.
- The net appreciation in the fair value of investments was $228.6 million compared to net appreciation of 6.3 million for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $22 million.
- Investment income net of investment expense from all sources including securities lending was $24.6 million compared to net investment income of $22 million in last fiscal year.
- Premiums paid by the fund for hospital and medical insurance coverage increased $18.6 million to total $131.9 million for the year.

USING THIS FINANCIAL REPORT

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combined Statement of Plan Net Assets for the Pension Fund on page 17 and for the Postemployment Healthcare fund on page 20 provides a snapshot of the financial position of each of the three systems at June 30, 2004. The Combined Statement of Changes in Plan Net Assets for the Pension Fund on page 18 and for the Postemployment Healthcare Fund on page 21 summarize the additions and deductions that occurred for each of the three systems during the period from July 1, 2003 through June 30, 2004.

The Schedule of Funding Progress on pages 40-45 includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions on pages 46-48 presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY RETIREMENT SYSTEMS AS A WHOLE

Kentucky Retirement Systems' combined plan net assets increased during the year ended June 30, 2004 by $1,324.1 million from $12,257.3 million to $13,581.4 million. Plan net assets for the prior fiscal year increased by $152.9 million. The increase in plan net assets for the plan year ended June 30, 2004 is attributable to the change in market conditions. The analysis below focuses on plan net assets (Table 1) and changes in plan net assets (Table 2) of Kentucky Retirement Systems' pension funds and insurance fund.

Table 1
Plan Net Assets
(In Millions)

	Pension Funds			Insurance Fund			Total		
	2004	**2003**	**2002**	**2004**	**2003**	**2002**	**2004**	**2003**	**2002**
Cash & Investments	$13,327.7	$14,240.2	$13,492.8	$2,000.8	$1,664.2	$1,372.5	$15,328.5	$15,904.4	$14,865.3
Receivables	123,3	124.9	132.0	21.4	25.2	29.6	144.7	150.1	161.6
Equipment, net of depreciation	0.9	1.0	1.2	0.0	0.0	0.0	0.9	1.0	1.2
Total Assets	$13,451.9	$14,366.1	$13,626.0	$2,022.2	$1,689.4	$1,402.1	$15,474.1	$16,055.5	$15,028.1
Total Liabilities	$(1,572.3)	$(3,452.5)	$(2,718.0)	$ (320.4)	$ (345.7)	$ (205.7)	$(1,892.7)	$(3,798.2)	$(2,923.7)
Plan Net Assets	$11,879.6	$10,913.6	$10,908.0	$1,701.8	$1,343.7	$1,196.4	$13,581.4	$12,257.3	$12,104.4

Table 2
Changes in Plan Net Assets
(In Millions)

	Pension Funds			Insurance Fund			Total		
	2004	**2003**	**2002**	**2004**	**2003**	**2002**	**2004**	**2003**	**2002**
Additions:									
Member Cont.	$ 306.7	$ 314.8	$ 286.8	$ 0.0	$ 0.0	$ 0.0	$ 306.7	$ 314.8	$ 286.8
Employer Cont.	104.3	43.7	26.3	237.8	233.4	267.3	342.1	277.1	293.6
Invest. Inc. (net)	1,442.9	430.9	(498.0)	253.1	28.2	(52.5)	1,696	459.1	(550.5)
Total additions	$1,853.9	$ 789.4	$(184.9)	$490.9	$261.6	$214.8	$2,344.8	$1,051.0	$ 29.9
Deductions:									
Benefit payments	$ 849.2	$ 749.0	$ 640.9	$ 0.0	$ 0.0	$ 0.0	$ 849.2	$ 749.0	$ 640.9
Refunds	23.4	20.5	17.9	0.0	0.0	0.0	23.4	20.5	17.9
Administrative Expense	15.2	14.4	12.6	1.0	0.9	0.8	16.2	15.3	13.4
Healthcare Premiums	0.0	0.0	0.0	131.9	113.3	96.1	131.9	113.3	96.1
Total deductions	$ 887.8	$ 783.9	$ 671.4	$132.9	$114.2	$ 96.9	$1,020.7	$ 898.1	$ 768.3
Increase (decrease) in plan net assets	$ 966.1	$ 5.5	$(856.3)	$358.0	$147.4	$117.9	$1,324.1	$ 152.9	$(738.4)

Plan net assets of the pension funds increased by $966.1 million ($11,879.6 million compared to $10,913.5 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. This plan net asset increase is attributable primarily to the net appreciation in the fair value of investments due to the change in market conditions in general.

Plan net assets of the insurance fund increased by $358 million ($1,701.8 million compared to $1,343.8 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. This increase in net plan assets is primarily attributable to the net appreciation in the fair value of investments, which is due to the change in market conditions in general.

PENSION FUND ACTIVITIES

Member contributions decreased by $8.1 million. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit. During the year there was an increase in monthly contributions over the previous year due to the increase in salaries reported to Kentucky Retirement Systems. The amount of elective service purchases decreased this fiscal year.

Employer contributions increased ($60.6 million) due to the increase in covered payroll and the increase in the contribution rates applied to the pension funds.

Net investment income increased by $1,012 million (income of $1,442.9 million compared to net investment income of $430.9 million in the prior year). The pension funds experienced an increase in income primarily due to the appreciation in the fair value of investments. This can be illustrated as follows:

	In Millions
Appreciation in fair value of investments-June 30, 2004	$ 1,394.8
Appreciation in fair value of investments-June 30, 2003	477.7
Net appreciation in fair value of investments	917.1
Investment income (net of investment expense)	298.2
Net gain on sale of investments	227.6
Investment income (net)-June 30, 2004	$ 1,442.9

Pension fund deductions increased by $103.8 million caused principally by an increase of $100.2 million in benefit payments. Retirees received an increase of 1.6% in benefits as of July 1, 2003. Refunds of member contributions increased by $2.8 million.

INSURANCE FUND ACTIVITIES

Employer contributions paid into the insurance fund increased by $4.5 million over the prior year. This increase is a result of the increase ($93 million) in covered payroll reported.

Net investment income increased by $224.9 million. This increase in net income is due primarily to the increase in net appreciation in the fair value of assets. This can be illustrated as follows:

	In Millions
Appreciation in fair value of investments-June 30, 2004	$ 217.7
Appreciation in fair value of investments-June 30, 2003	11.2
Net appreciation in fair value of investments	206.5
Investment income (net of investment expense)	24.6
Net gain on sale of investments	22.0
Investment Income (net)-June 30, 2004	$ 253.1

Pension fund deductions increased by $18.7 million primarily due to the increase of $18.6 million in health insurance premiums paid.

HISTORICAL TRENDS

Accounting standards require that the statement of plan net assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the pension funds and insurance fund is provided in the Schedule of Funding Progress on pages 40-45. The asset value stated in the Schedule of Funding Progress is the actuarial value of assets determined by calculating the difference between the expected valuation assets and the actual market value of assets adjusted for any unrecognized gains or losses and amortized over a five-year period. The actuarial accrued liability is calculated using the entry age normal cost funding method.

The funding position of the pension funds continues to provide more than adequate assets to meet pension obligations. The insurance fund continues to have a large unfunded liability of all participating employees groups.

Annual required contributions of the employers and contributions made by the employers in relation to the required contributions are provided in the Schedule of Employer Contributions on pages 46-48. The difference in the annual required contributions made by employers in the KERS and SPRS funds is attributable to the statuary employer contribution rate set by the Kentucky General Assembly being less than the rate computed by the actuary.

KENTUCKY RETIREMENT SYSTEMS
COMBINED STATEMENTS OF PLAN NET ASSETS--PENSION FUNDS
June 30, 2004 and 2003
(Dollars in Thousands)

	2004				2003
ASSETS	KERS	CERS	State Police	Total	Total
Cash and short-term investments					
Cash	$ 828	$ 1,041	$ 86	$ 1,955	$ 1,493
Short-term investments	109,455	152,957	3,607	266,019	485,752
Total cash and short-term investments	110,283	153,998	3,693	267,974	487,245
Receivables					
Contributions	26,806	35,675	966	63,447	65,296
Investment income	28,121	30,009	1,727	59,857	59,582
Total receivables	54,927	65,684	2,693	123,304	124,878
Investments, at fair value					
Corporate and government bonds	1,722,643	1,838,555	107,006	3,668,204	3,845,290
Corporate stocks	3,464,583	3,543,644	205,072	7,213,299	5,886,202
Mortgages	272,632	316,200	16,860	605,692	560,005
Real estate	4,493	4,912	493	9,898	17,256
Total investments at fair value	5,464,351	5,703,311	329,431	11,497,093	10,308,753
Securities lending collateral invested	740,416	778,008	44,251	1,562,675	3,444,164
Equipment (net of accumulated depreciation)	344	579	6	929	1,012
Total Assets	6,370,321	6,701,580	380,074	13,451,975	14,366,052
LIABILITIES					
Accounts payable	4,342	5,225	102	9,669	8,340
Securities lending collateral	740,416	778,008	44,251	1,562,675	3,444,164
Total Liabilities	744,758	783,233	44,353	1,572,344	3,452,504
Plan Net Assets Held in Trust for Pension Benefits	$ 5,625,563	$ 5,918,347	$ 335,721	$ 11,879,631	$ 10,913,548

(A schedule of funding progress for each plan is presented on pages 40-45)

See accompanying independent auditor's report and notes to financial statements

KENTUCKY RETIREMENT SYSTEMS
COMBINED STATEMENTS OF CHANGES IN PLAN NET ASSETS--PENSION FUNDS
Years Ended June 30, 2004 and 2003
(Dollars in Thousands)

	2004				2003
	KERS	CERS	State Police	Total	Total
ADDITIONS					
Members' contributions	$ 140,625	$ 161,152	$ 4,875	$ 306,652	$ 314,855
Employers' contributions	31,466	71,669	1,153	104,288	43,661
Total contributions	172,091	232,821	6,028	410,940	358,516
INVESTMENT INCOME					
From investing activities					
Net appreciation in fair value of investments	554,217	557,392	33,053	1,144,662	109,972
Interest/Dividends	144,522	152,961	8,806	306,289	326,259
Total investing activities income	698,739	710,353	41,859	1,450,951	436,231
Investment expense	3,856	4,105	223	8,184	7,385
Commissions	2,476	2,616	145	5,237	3,101
Total investing activities expense	6,332	6,721	368	13,421	10,486
Net income from investing activities	692,407	703,632	41,491	1,437,530	425,745
From Securities Lending Activities					
Securities lending income	11,734	12,337	701	24,772	35,925
Securities lending expense:					
Security borrower rebates	8,467	8,896	506	17,869	29,191
Security lending agent fees	739	776	44	1,559	1,554
Net income from securities lending activities	2,528	2,665	151	5,344	5,180
Total net investment income	694,935	706,297	41,642	1,442,874	430,925
Total Additions	867,026	939,118	47,670	1,853,814	789,441

	2004				2003
	KERS	CERS	State Police	Total	Total
DEDUCTIONS					
Benefit payments	$ 476,230	$ 342,065	$ 30,877	$ 849,172	$ 748,980
Refunds	9,411	13,854	96	23,361	20,522
Administrative expenses	5,654	9,453	91	15,198	14,430
Total deductions	491,295	365,372	31,064	887,731	783,932
Net increase in plan assets	375,731	573,746	16,606	966,083	5,509
Plan net assets held in trust for Pension Benefits					
Beginning of Year	5,249,832	5,344,601	319,115	10,913,548	10,908,039
End of Year	$ 5,625,563	$ 5,918,347	$ 335,721	$ 11,879,631	$ 10,913,548

See accompanying independent auditor's report and notes to financial statements

KENTUCKY RETIREMENT SYSTEMS

COMBINED STATEMENTS OF PLAN NET ASSETS--POST-EMPLOYMENT HEALTHCARE

June 30, 2004 and 2003

(Dollars in Thousands)

	2004				2003
ASSETS	KERS	CERS	State Police	Total	Total
Cash and short-term investments					
Cash	$ 38	$ 37	$ 5	$ 80	$ 216
Short-term investments	118,411	82,813	6,526	207,750	147,010
Total cash and short-term investments	118,449	82,850	6,531	207,830	147,226
Receivables					
Contributions	4,607	12,175	351	17,133	21,790
Investment income	1,870	2,166	242	4,278	3,434
Total receivables	6,477	14,341	593	21,411	25,224
Investments, at fair value					
Corporate and government bonds	73,244	82,178	9,445	164,867	133,241
Corporate stocks	552,048	683,348	73,926	1,309,322	1,039,366
Total investments	625,292	765,526	83,371	1,474,189	1,172,607
Security lending collateral invested	140,967	160,804	17,043	318,814	344,416
Total Assets	891,185	1,023,521	107,538	2,022,244	1,689,473
LIABILITIES					
Accounts payable	410	1,103	75	1,588	1,258
Securities lending collateral obligations	140,967	160,804	17,043	318,814	344,416
Total Liabilities	141,377	161,907	17,118	320,402	345,674
Plan Net Assets Held in Trust for Post-Employment Healthcare Benefits	$ 749,808	$ 861,614	$ 90,420	$ 1,701,842	$ 1,343,799

(A schedule of funding progress for each plan is presented on pages 40-45)

See accompanying independent auditor's report and notes to financial statements

KENTUCKY RETIREMENT SYSTEMS

COMBINED STATEMENTS OF CHANGES IN PLAN NET ASSETS--POST-EMPLOYMENT HEALTHCARE

Years Ended June 30, 2004 and 2003

(Dollars in Thousands)

	2004				2003
	KERS	CERS	State Police	Total	Total
ADDITIONS					
Employers' contributions	$ 92,976	$ 136,381	$ 8,456	$ 237,813	$ 233,351
Total contributions	92,976	136,381	8,456	237,813	233,351
INVESTMENT INCOME					
From investing activities:					
Net appreciation in fair value of investments	97,913	117,623	13,048	228,584	6,272
Interest/Dividends	10,645	13,147	1,451	25,243	22,305
Total income from investing activities	108,558	130,770	14,499	253,827	28,577
Investment activities expense	399	471	57	927	522
Commissions	252	298	36	586	378
Total investing activities expense	651	769	93	1,513	900
Net income from investing activities	107,907	130,001	14,406	252,314	27,677
From Securities Lending Activities					
Securities lending income	1,538	1,757	185	3,480	2,980
Securities lending expense:					
Security borrower rebates	1,089	1,242	132	2,463	2,286
Security lending agent fees	86	99	10	195	140
Net income from securities lending activities	363	416	43	822	554
Total net investment income	108,270	130,417	14,449	253,136	28,231
Total Additions	201,246	266,798	22,905	490,949	261,582

	2004				2003
	KERS	CERS	State Police	Total	Total
DEDUCTIONS					
Healthcare premiums subsidies	$ 63,526	$ 63,354	$ 4,992	$ 131,872	$ 113,296
Administrative fees	505	498	31	1,034	862
Total deductions	64,031	63,852	5,023	132,906	114,158
Net increase in plan assets	137,215	202,946	17,882	358,043	147,424
Plan net assets held in trust for post-employment healthcare benefit					
Beginning of Year	612,593	658,668	72,538	1,343,799	1,196,375
End of Year	$ 749,808	$ 861,614	$ 90,420	$ 1,701,842	$ 1,343,799

See accompanying independent auditor's report and notes to financial statements

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by Kentucky Retirement Systems: (1) Kentucky Employees Retirement System (KERS); (2) County Employees Retirement System (CERS); and (3) State Police Retirement System (SPRS). The assets of the various insurance funds are commingled for investment purposes. The following notes apply to the various funds administered by Kentucky Retirement Systems.

NOTE A--SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - KRS's financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan.

Method Used to Value Investments - Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate is based on appraisals. Investments that do not have an established market are reported at estimated fair value.

Estimates - The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment - Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years.

Expense Allocation - Administrative and investment expenses of the Kentucky Retirement Systems are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

Component Unit - Kentucky Retirement Systems is a component unit of the Commonwealth of Kentucky. As such, the Commonwealth of Kentucky is the primary government in whose financial reporting entity the System is included.

NOTE A--SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES--CONTINUED

The Kentucky Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.515. The County Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 78.520. The State Police Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 16.510. The Kentucky Retirement Systems Insurance Fund consisting of the Kentucky employees Insurance Fund, Kentucky Employee Hazardous Insurance Fund, County Employees Insurance Fund, County Employees Hazardous Insurance Fund and State Police Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.701. The Retirement Systems' and Insurance Fund's administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Systems' Board of Trustees without further legislative review. The methods used to determine the employer rates for all Retirement Systems are specified in KRS 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION

Membership of each Retirement plan consisted of the following at June 30, 2004 and 2003:

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	2004			2003		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and beneficiaries receiving benefits	28,892	1,549	30,441	27,182	1,365	28,547
Inactive Vested Retirements	4,833	260	5,093	3,892	169	4,061
Inactive Vested Memberships	20,951	1,772	22,723	17,320	1,233	18,553
Active plan members	47,599	4,014	51,613	49,586	4,203	53,789
Total	102,275	7,595	109,870	97,980	6,970	104,950
Number of participating employers			411			410

COUNTY EMPLOYEES RETIREMENT SYSTEM

	2004			2003		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and beneficiaries receiving benefits	29,129	4,005	33,134	27,057	3,787	30,844
Inactive Vested Retirements	6,927	361	7,288	5,147	193	5,340
Inactive Vested Memberships	37,509	1,287	38,796	30,573	873	31,446
Active plan members	80,922	9,349	90,271	83,142	9,587	92,729
Total	154,487	15,002	169,489	145,919	14,440	160,359
Number of participating employers			1,389			1,367

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

STATE POLICE RETIREMENT SYSTEM

Number of Members	2004 Hazardous Position Employees	2003 Hazardous Position Employees
Retirees and beneficiaries receiving benefits	992	966
Inactive Vested Retirements	46	43
Inactive Vested Memberships	201	186
Active plan members	999	1,022
Total	2,238	2,217
Number of participating employers	1	1

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

Hospital and medical contracts in force consisted of the following at June 30, 2004 and 2003:

	2004					2003				
	Single	Couple/ Family	Parent +	Medicare Regular	Medicare High	Single	Couple/ Family	Parent +	Medicare Regular	Medicare High
KERS Non-Hazardous	7,313	1,462	443	1,932	11,437	6,602	1,298	428	1,855	11,311
KERS Hazardous	502	276	65	65	531	417	234	53	62	494
CERS Non-Hazardous	5,598	946	246	2,756	10,424	5,054	855	244	2,630	9,958
CERS Hazardous	1,087	1,463	223	45	913	1,010	1,379	223	40	808
SPRS	226	400	45	13	326	218	384	44	13	312
Totals	14,726	4,547	1,022	4,811	26,631	13,301	4,150	992	4,600	22,883

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

Contributions - For the years ended June 30, 2004 and 2003, plan members were required to contribute 5% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the year ended June 30, 2004, participating employers contributed 5.89% of each employee's creditable compensation. For the year ended June 30, 2003, the contribution rate for some employers participating in KERS was 3.76% of creditable compensation and 5.89% of creditable compensation for some employers pursuant to legislation enacted by the 2003 General Assembly [HB269, FCCRI, Part III, General Provisions, Paragraph 18 (2003)]. The actuarially determined rate set by the Board for the years ended June 30, 2004 and 2003 was 7.53% and 5.89%, respectively, of each employee's creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions - For the years ended June 30, 2004 and 2003, plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the year ended June 30, 2004, participating employers contributed 18.84% of each employee's creditable compensation. For the year ended June 30, 2003, the contribution rate for some employers participating in KERS was 17.60% of creditable compensation and 18.84% of creditable compensation for some employers pursuant to legislation enacted by the 2003 General Assembly [HB269, FCCRI, Part III, General Provisions, Paragraph 18 (2003)]. The actuarially determined rate set by the Board for the years ended June 30, 2004 and 2003 was 18.84% of creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

COUNTY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2004 and 2003, plan members were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2004 and 2003, participating employers contributed 7.34% and 6.34%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2004 and 2003 was 7.34% and 6.34%, respectively. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2004 and 2003, plan members were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2004 and 2003, participating employers contributed 18.51% and 16.28%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2004 and 2003 was 18.51% and 16.28%, respectively, of each employee’s creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

STATE POLICE RETIREMENT SYSTEM

Plan Description - SPRS is a single-employer defined benefit pension plan that covers all full-time State Troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2004 and 2003 plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2004 and 2003, the State contributed 21.58% and 17.37%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2004 and 2003 was 21.58% of creditable compensation. Administrative costs of Kentucky Retirement System are financed through employer contributions and investment earnings.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

Plan Description - The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System (Systems). The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For fiscal 2004, insurance premiums withheld from benefit payments to members of the Systems were $25,004,536 and $793,183 for KERS and KERS hazardous, respectively, $22,201,996 and $2,517,308 for CERS and CERS hazardous, respectively, and $664,487 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2004 the Fund had 64,567 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Fund is based on years of service with the Systems. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows:

Years of Service	% Paid by Insurance Fund
20 or More	100%
15 – 19	75%
10 - 14	50%
4 - 9	25%
Less Than 4	0%

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

As a result of House Bill 290 (2004 General Assembly), medical insurance benefits are calculated differently for members who began participating on or after July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on or after July 1, 2003 earn ten dollars ($10) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on or after July 1, 2003 earn fifteen dollars ($15) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, such employee's spouse receives ten dollars ($10) per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree cost of living adjustment (COLA), which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed.

In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years.

NOTE C--CASH AND SHORT-TERM INVESTMENTS AND SECURITIES LENDING COLLATERAL

The provisions of Governmental Accounting Standards Board Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions and investments made with that cash be reported as assets on the financial statements. In conjunction with the adoption of Governmental Accounting Standard No. 28, the System has reclassified certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	2004	2003
Miscellaneous cash	$ 827,932	$ 525,299
Short-Term Investment Pool	740,416,197	1,656,597,564
Repurchase agreements	109,455,167	170,917,610
Total	$ 850,699,296	$ 1,828,040,473

NOTE C-CASH AND SHORT-TERM INVESTMENTS AND SECURITIES LENDING COLLATERAL--CONTINUED

COUNTY EMPLOYEES RETIREMENT SYSTEM

	2004	2003
Miscellaneous Cash	$ 1,041,182	$ 832,473
Short-Term Investment Pool	778,007,759	1,686,604,839
Repurchase agreements	152,957,527	306,549,501
Total	$ 932,006,468	$ 1,993,986,813

STATE POLICE RETIREMENT SYSTEM

	2004	2003
Miscellaneous Cash	$ 85,664	$ 134,759
Short-Term Investment Pool	44,251,527	100,961,178
Repurchase agreements	3,606,746	8,285,357
Total	$ 47,943,937	$ 109,381,294

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

	2004	2003
Miscellaneous Cash	$ 79,960	$ 215,516
Short-Term Investment Pool	318,814,039	344,416,324
Repurchase agreements	207,750,238	147,009,999
Total	$ 526,644,237	$ 491,641,839

NOTE D--INVESTMENTS

The Board of Trustees of the Retirement Systems and Insurance Fund recognize their duty to invest funds in accordance with the Prudent Person Rule and manage those funds consistent with the long-term nature of the Systems. The Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments - Investments may be made in domestic and international common stock, securities convertible into common stock and in preferred stock of publicly traded corporations.

Fixed Income Investments - Publicly traded corporate bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with the current market and economic conditions. Investment may also be made in any debt instrument issued or guaranteed in whole or in part by the U.S. Government or any agency or instrumentality of the U.S. Government.

Mortgages - Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments guaranteed by an agency of the U.S. Government or the Commonwealth of Kentucky.

NOTE D--INVESTMENTS--CONTINUED

Alternative Investments/Equity Real Estate - Subject to the specific approval of the investment committee of the Board of Trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The board may invest in real estate or alternative investments including, without limitation, venture capital, private equity and private placements which the investment committee believes has excellent potential to generate income and which may have a higher degree of risk.
Continued

Cash Equivalent Securities - The following short-term investment vehicles are considered acceptable:

Publicly traded investment grade corporate bonds, government and agency bonds, mortgages, and collective STIF's, money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having a BBB or better rating by at least one recognized bond rating service. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur.

Derivatives - Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited.

The Retirement Systems and Insurance Fund invest in collateral mortgage obligations (CMOs) and other asset-backed securities to increase return and adjust duration of the portfolio. The Systems and the Fund invest in exchange-traded funds to convert cash held in index funds to short-term equity investments. This practice is intended to make the performance of the index funds more closely track the performance of the index that the funds are intended to replicate.

Collateral mortgage obligations, asset-backed securities, and exchange-traded funds pose no greater risk than other similar investment grade holdings in the Systems' and the Fund's portfolios. The fair value of CMOs at June 30, 2004 and 2003 was approximately $67 million and $80 million respectively; the fair value of asset-backed securities at June 30, 2004 and 2003 was approximately $277 million and $310 million respectively; and the fair value of exchange-traded funds at June 30, 2004 and 2003 was approximately $299 million and $188 million, respectively.

The Retirement Systems' and Insurance Fund's investments are categorized on pages 20 through 23 to give an indication of the level of risk assumed by them at June 30, 2004 and 2003. Category 1 includes investments that are either insured or registered or for which the securities are held by the System or its agent in the Systems' name. Category 2 includes uninsured and unregistered investments for which the securities are held by the Systems' custodial agent in the Systems' name. Category 3 includes securities held by the Systems' custodial agent. The agent loans securities owned by the Systems and Fund with the simultaneous receipt of cash collateral. The custodial agent purchases securities with the cash collateral in accordance with the Systems' and Fund's Statement of Investment Policy. All securities purchased with cash collateral are segregated by the custodial agent and held in the name of Kentucky Retirement Systems. At June 30, 2004, the Systems had a second agent who also loans securities owned by the Systems with the simultaneous receipt of cash collateral. The second custodial agent invests cash collateral in a short-term investment pool that holds only U.S. dollar cash and U.S. securities.

NOTE D--INVESTMENTS--CONTINUED

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	2004			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 209,189,878	$ -	$ 2,999,767	$ 212,189,645
Loaned for securities collateral	378,306,710	-	-	378,306,710
Corporate bonds	526,500,959	-	-	526,500,959
Loaned for securities collateral	92,446	-	-	92,446
Corporate stocks	2,993,621,987	-	-	2,993,621,987
Loaned for securities collateral	59,523,647	-	-	59,523,647
Repurchase agreements	42,637,457	-	66,817,710	109,455,167
Subtotal	4,209,873,084	-	69,817,477	4,279,690,561
Investments - Not Categorized				
Short-term Investment Pool	-	-	-	740,416,197
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	549,619,775
Corporate bonds	-	-	-	55,933,080
Corporate stocks	-	-	-	411,437,414
Mortgages	-	-	-	272,632,186
Real Estate Investment	-	-	-	4,493,473
Total Investments	$4,209,873,084	$ -	$ 69,817,477	$6,314,222,686

	2003			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 669,755,421	$ -	$ 3,809,832	$ 673,565,253
Loaned for securities collateral	48,609,045	-	-	48,609,045
Corporate bonds	588,972,872	-	-	588,972,872
Corporate stocks	2,299,125,931	-	130	2,299,126,062
Loaned for securities collateral	1,719,201	-	-	1,719,201
Repurchase agreements	167,987,935	-	2,929,676	170,917,610
Subtotal	3,776,170,405	-	6,739,638	3,782,910,043
Investments - Not Categorized				
Short-term Investment Pool	-	-	-	1,656,597,564
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	504,017,197
Corporate bonds	-	-	-	61,722,729
Corporate stocks	-	-	-	561,512,794
Mortgages	-	-	-	273,115,545
Real Estate Investment	-	-	-	8,635,101
Total Investments	$3,776,170,405	$ -	$ 6,739,638	$6,848,510,973

NOTE D--INVESTMENTS--CONTINUED

COUNTY EMPLOYEES RETIREMENT SYSTEM

	2004			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 167,700,557	$ -	$ 3,304,358	$ 171,004,915
Loaned for securities collateral	483,521,727	-	-	483,521,727
Corporate bonds	460,074,146	-	-	460,074,146
Loaned for securities collateral	5,047,609	-	-	5,047,609
Corporate stocks	3,184,464,154	-	-	3,184,464,154
Loaned for securities collateral	13,724,905	-	-	13,724,905
Repurchase agreements	82,747,424	-	70,210,103	152,957,527
Subtotal	4,397,280,522	-	73,514,461	4,470,794,983
Investments - Not Categorized				
Short-Term Investment Pool	-	-	-	778,007,759
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	562,309,398
Corporate bonds	-	-	-	156,597,783
Corporate stocks	-	-	-	345,454,294
Mortgages	-	-	-	316,199,740
Real Estate Investment	-	-	-	4,911,995
Total Investments	$4,397,280,522	$ -	$ 73,514,461	$6,634,275,952

	2003			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 209,130,474	$ -	$ 3,879,310	$ 213,009,784
Loaned for securities collateral	483,521,727	-	-	483,521,727
Corporate bonds	574,044,312	-	-	574,044,312
Loaned for securities collateral	5,047,609	-	-	5,047,609
Corporate stocks	2,265,011,128	-	133	2,265,011,261
Loaned for securities collateral	13,724,905	-	-	13,724,905
Repurchase agreements	303,566,399	-	2,983,102	306,549,501
Subtotal	3,854,046,554	-	6,862,545	3,860,909,099
Investments - Not Categorized				
Short-Term Investment Pool	-	-	-	1,686,604,839
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	513,146,864
Corporate bonds	-	-	-	62,840,762
Corporate stocks	-	-	-	571,683,924
Mortgages	-	-	-	269,920,205
Real Estate Investment	-	-	-	7,796,669
Total Investments	$3,854,046,554	$ -	$ 6,862,545	$6,972,902,362

NOTE D--INVESTMENTS--CONTINUED

STATE POLICE RETIREMENT SYSTEM

	2004			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 11,052,618	$ -	$ 179,283	$ 11,231,901
Loaned for securities collateral	28,943,901	-	-	28,943,901
Corporate bonds	32,048,956	-	-	32,048,956
Loaned for securities collateral	302,153	-	-	302,153
Corporate stocks	170,029,412	-	-	170,029,412
Loaned for securities collateral	821,581	-	-	821,581
Repurchase agreements	-	-	3,606,746	3,606,746
Subtotal	243,198,531	-	3,786,029	246,984,650
Investments - Not Categorized				
Short-Term Investment Pool	-	-	-	44,251,527
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	30,717,279
Corporate bonds	-	-	-	3,761,686
Corporate stocks	-	-	-	34,221,343
Mortgages	-	-	-	16,860,141
Real Estate Investment	-	-	-	493,000
Total Investments	$ 243,198,531	$ -	$ 3,786,029	$ 377,289,626

	2003			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 16,405,761	$ -	$ 232,170	$ 16,637,931
Loaned for securities collateral	28,943,901	-	-	28,943,901
Corporate bonds	36,425,347	-	-	36,425,347
Loaned for securities collateral	302,153	-	-	302,153
Corporate stocks	138,380,614	-	8	138,380,622
Loaned for securities collateral	821,581	-	-	821,581
Repurchase agreements	8,106,824	-	178,533	8,285,357
Subtotal	229,386,181	-	410,711	229,796,892
Investments - Not Categorized				
Short-Term Investment Pool	-	-	-	100,961,178
Investments held by broker-dealers under securities loans:				
U.S. Government Securities	-	-	-	30,717,279
Corporate bonds	-	-	-	3,761,686
Corporate stocks	-	-	-	34,221,343
Mortgages	-	-	-	16,969,831
Real Estate Investment	-	-	-	823,918
Total Investments	$ 229,386,181	$ -	$ 410,711	$ 417,252,127

NOTE D--INVESTMENTS--CONTINUED

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

	2004			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ 2,003,959	$ -	$ -	$ 2,003,959
Loaned for securities collateral	69,032,483	-	-	69,032,483
Corporate stocks	1,024,278,961	-	-	1,024,278,961
Loaned for securities collateral	19,365,667	-	-	19,365,667
Repurchase agreements	171,042,829	-	36,707,409	207,750,238
Subtotal	1,285,723,899	-	36,707,409	1,322,431,308
Investments - Not Categorized				
Short-term investment pool	-	-	-	318,814,039
Investments held by broker-dealers under securities loans:	-	-	-	-
U.S. Government Securities	-	-	-	93,830,603
Corporate stocks	-	-	-	265,677,741
Total Investments	$1,285,723,899	$ -	$ 36,707,409	$2,000,753,691

	2003			
Investments - Categorized	Category 1	Category 2	Category 3	Fair Value
U.S. Government Securities	$ -	$ -	$ -	$ -
Loaned for securities collateral	104,484,853	-	-	104,484,853
Corporate stocks	827,298,990	-	-	827,298,990
Loaned for securities collateral	16,750,685	-	-	16,750,685
Repurchase agreements	145,186,891	-	1,823,108	147,009,999
Subtotal	1,093,721,419	-	1,823,108	1,095,544,527
Investments - Not Categorized				
Short-term investment pool	-	-	-	344,416,324
Investments held by broker-dealers under securities loans:	-	-	-	28,755,858
U.S. Government Securities	-	-	-	195,316,898
Corporate stocks	-	-	-	-
Total Investments	$1,093,721,419	$ -	$ 1,823,108	$1,664,033,607

NOTE E--SECURITIES LENDING TRANSACTIONS

Kentucky Revised Statues Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with a fair value of 102 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. At June 30, 2004, the Funds have no credit risk exposure to borrowers because the amounts the Funds owe to borrowers exceed the amounts the borrowers owe the Funds. The contracts with the custodial banks require them to indemnify the Funds if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction, although the average term of the loans was 6 days, 10 days, and 24 days for the three investment portfolios subject to security lending agreements. One custodial bank invests cash collateral in securities that are permitted for investment by state statute and board policy, which at year-end has a weighted-average maturity of 3 days for the Funds. The other custodial bank invests cash collateral in the agent's short-term investment pool as permitted by state statute and Board policy, which at year-end has a weighted-average maturity of 24 days for the Pension Fund only. Neither of the Funds can pledge or sell collateral securities received unless the borrower defaults.

NOTE F--RISKS OF LOSS

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims against the Board of Trustees of Kentucky Retirement Systems or any of its staff as result of actual or alleged breach of fiduciary duty are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $100,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

NOTE G--CONTINGENCIES

In the normal course of business, KRS is involved in various litigation concerning the right of participants or their beneficiaries to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

NOTE H--INCOME TAX STATUS

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax under income tax law.

NOTE I--ANTHEM DEMUTUALIZATION

In 2002, Anthem Insurance Companies, Inc., an Indiana corporation, underwent a demutualization, as authorized by the Indiana statutes. The demutualization provided, among other things, that "eligible statutory members," as defined by Indiana statutory provision, would receive cash or stock in consideration for giving up their membership interest in Anthem. In some instances application of the statute led to the determination by Anthem that individual members of the retirement plans administered by Kentucky Retirement Systems were the "statutory members" and in other instances the Kentucky Retirement Systems was identified by Anthem as the eligible statutory member to receive cash or stock under the Anthem demutualization plan. According to Anthem, this determination was based upon which of Anthem's subsidiaries was the original provider. The determination was confirmed by the Indiana Department of Insurance.

The $61,603,207 distribution which Kentucky Retirement Systems received on January 4, 2002 under the Anthem demutualization was deposited in the Kentucky Employees Retirement Systems Insurance Fund. The retirement systems included within the Kentucky Retirement Systems for purposes of the Anthem demutualization are the Kentucky Employees Retirement System, (hazardous and non-hazardous), the County Employees Retirement System (hazardous and non-hazardous), the State Police Retirement System, the Legislators' Retirement Plan, and the Judicial Retirement Plan. Anthem has not yet provided the Kentucky Retirement System with the information necessary to divide the distribution among these retirement funds. Accordingly, the distribution will remain in the Kentucky Employees Retirement Systems Insurance Fund until the interests of the various retirement funds are determined.

NOTE J--CONTINGENT LIABILITY--ANTHEM DEMUTUALIZATION

In relation to the above noted Anthem demutualization, Kentucky Retirement System is a defendant in a case entitled Jean C. Love, David E. Wiseman and Belvia Campbell v. Board of Trustees of the Kentucky Retirement Systems, which is in Franklin Circuit Court. At issue is how to distribute the proceeds resulting from Anthem's demutualization, which resulted in Kentucky Retirement System receiving approximately $61 million dollars in proceeds. The plaintiffs seek to recover the full amount of the proceeds or, alternatively, the pro rata amount of proceeds attributable to insurance premiums that the employees and/or their beneficiaries paid directly to Anthem. Kentucky Retirement System believes that the claims are without merit and intends to vigorously defend its position. The ultimate outcome of this litigation cannot presently be determined. However, in management's opinion, there is a reasonable possibility that an adverse outcome will occur, but an estimate of such amount cannot be determined. Accordingly, no amounts that might result from this outcome have been reflected in the financial statements.

NOTE K--DEFINED BENEFIT PENSION PLAN

All eligible employees of Kentucky Retirement Systems (KRS) participate in the Kentucky Employees Retirement System (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers substantially all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The Plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. KRS contributed 5.89% of covered payroll for the period July 1, 2003 – June 30, 2004. KRS contributed 3.76% of covered payroll for the period July 1, 2002 – December 15, 2002 and 5.89% for the period December 16, 2002 – June 30, 2003. Plan members were required to contribute 5% of creditable compensation for the plan years ended June 30, 2004 and 2003. Covered payroll was approximately $9,035,000 and $8,265,000 for 2004 and 2003, respectively. KRS contributed approximately $532,000 and $408,000 for 2004 and 2003, respectively.

NOTE L--EQUIPMENT

Equipment consists of the following:

	June 30 2004	2003
Equipment, at cost	$ 3,337,099	$ 3,343,869
Less accumulated depreciation	(2,407,794)	(2,332,240)
	$ 929,305	$ 1,011,629

Depreciation expense for the years ended June 30, 2004 and 2003 amounted to $303,562 and $352,054, respectively.

NOTE M--COLLATERALIZATION OF DEPOSITS

At June 30, 2004, KRS had cash deposits at a financial institution, which totaled approximately $2,035,000. The balance is insured by the Federal Deposit Insurance Corporation up to $100,000. The remaining balance of approximately $1,935,000 was collateralized by securities recorded in KRS's name and held by the financial institution.

REQUIRED SUPPLEMENTARY INFORMATION

KENTUCKY EMPLOYEES RETIREMENT SYSTEM (KERS)--PENSION FUNDS

Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 1999	$ 5,264,340,397	$ 4,327,622,821	$ (936,717,576)	121.6%	$ 1,330,766,100	(70.4)%
June 30, 2000	6,806,675,460	4,876,825,772	(1,929,849,688)	139.6	1,409,504,668	(136.9)
June 30, 2001	6,844,742,687	5,444,035,294	(1,400,707,393)	125.7	1,505,299,220	(93.1)
June 30, 2002*	6,654,084,196	6,026,094,764	(627,989,432)	110.4	1,595,809,458	(39.3)
June 30, 2003**	6,351,318,832	6,520,463,188	169,144,356	97.4	1,658,604,696	10.2
June 30, 2004**	6,000,513,743	7,049,613,171	1,049,099,428	85.1	1,645,412,496	63.8
Hazardous						
June 30, 1999	$ 259,839,319	$ 204,282,788	$ (55,556,531)	127.2%	$ 103,464,123	(53.7)%
June 30, 2000	336,213,464	243,365,557	(92,847,907)	138.2	115,639,439	(80.3)
June 30, 2001	361,677,475	285,193,761	(76,483,714)	126.8	122,857,992	(62.3)
June 30, 2002*	376,384,302	322,069,164	(54,315,138)	116.9	125,275,925	(43.4)
June 30, 2003**	385,925,722	356,879,133	(29,046,589)	108.1	129,088,956	(22.5)
June 30, 2004**	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
Total						
June 30, 1999	$ 5,524,179,716	$ 4,531,905,609	$ (992,274,107)	121.9%	$ 1,434,230,223	(69.2)%
June 30, 2000	7,142,888,924	5,120,191,329	2,022,697,595	139.5	1,525,144,107	132.6
June 30, 2001	7,206,420,162	5,729,229,055	1,477,191,107	125.8	1,628,157,212	90.7
June 30, 2002*	7,030,468,498	6,348,163,928	682,304,570	110.7	1,721,085,383	39.6
June 30, 2003**	6,737,244,554	6,877,342,321	198,190,945	98.0	1,787,693,652	11.1
June 30, 2004**	6,397,726,506	7,453,191,207	1,055,464,701	85.8	1,772,077,308	59.6

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
**Covered payroll was actuarially computed as opposed to estimated in prior years.

COUNTY EMPLOYEES RETIREMENT SYSTEM (CERS)--PENSION FUNDS

Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 1999	$ 4,072,227,435	$ 2,991,420,884	$ (1,080,806,551)	136.1%	$ 1,346,601,939	(80.3)%
June 30, 2000	5,284,033,534	3,368,601,134	(1,915,432,400)	156.9	1,452,058,248	(131.9)
June 30, 2001	5,423,834,549	3,706,282,212	(1,717,552,337)	146.3	1,544,973,296	(111.2)
June 30, 2002*	5,397,787,158	4,165,355,149	(1,232,432,009)	129.6	1,663,183,629	(74.1)
June 30, 2003**	5,286,580,047	4,417,597,802	(868,982,245)	119.7	1,796,451,180	(48.4)
June 30, 2004**	5,187,851,530	4,936,459,488	(251,392,042)	105.1	1,826,870,880	(13.8)
Hazardous						
June 30, 1999	$ 1,124,651,486	$ 963,711,775	$ (160,939,711)	116.7%	$ 256,201,726	(62.8)%
June 30, 2000	1,445,542,794	1,084,553,697	(360,989,097)	133.3	288,575,870	(125.1)
June 30, 2001	1,486,666,016	1,193,860,442	(292,805,574)	124.5	316,700,304	(92.5)
June 30, 2002*	1,485,511,793	1,327,291,273	(158,220,520)	111.9	345,849,277	(45.7)
June 30, 2003**	1,467,004,856	1,499,628,782	32,623,926	97.8	374,700,732	8.7
June 30, 2004**	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
Total						
June 30, 1999	$ 5,196,878,921	$ 3,955,132,659	$ (1,241,746,262)	131.4%	$ 1,602,803,665	(77.5)%
June 30, 2000	6,729,576,328	4,453,154,831	(2,276,421,497)	151.1	1,740,634,118	(130.8)
June 30, 2001	6,910,500,565	4,900,142,654	(2,010,357,911)	141.0	1,861,673,600	(108.0)
June 30, 2002*	6,883,298,951	5,492,646,422	(1,390,652,529)	125.3	2,009,032,906	(69.2)
June 30, 2003**	6,753,584,903	5,917,226,584	(836,358,319)	114.1	2,171,151,912	(38.5)
June 30, 2004**	6,645,463,572	6,577,289,608	(68,173,964)	101.0	2,219,433,504	(3.1)

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
**Covered payroll was actuarially computed as opposed to estimated in prior years.

STATE POLICE RETIREMENT SYSTEM (SPRS)--PENSION FUNDS

Year Ended	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 1998	$ 306,318,918	$ 294,427,019	$ (11,891,899)	104.0%	$ 38,727,361	(30.7)%
June 30, 1999	357,623,196	314,021,673	(43,601,523)	113.9	40,433,405	(107.8)
June 30, 2000	459,168,574	336,579,763	(122,588,811)	136.4	43,619,383	(281.0)
June 30, 2001	456,160,709	356,211,860	(99,948,849)	128.1	44,646,678	(223.7)
June 30, 2002*	438,955,465	380,790,346	(58,165,119)	115.3	44,314,696	(131.2)
June 30, 2003**	413,063,576	414,881,459	1,817,883	99.6	43,760,832	4.2
June 30, 2004**	385,077,195	437,482,425	52,405,230	88.0	43,835,208	119.6

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
**Covered payroll was actuarially computed as opposed to estimated in prior years.

KENTUCKY EMPLOYEES RETIREMENT SYSTEMS (KERS)--POST-EMPLOYMENT HEALTHCARE

Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 1999	$ 283,704,887	$ 1,273,364,800	$ 989,659,913	22.3%	$ 1,330,766,100	74.3%
June 30, 2000	399,560,252	1,457,475,358	1,057,915,106	27.4	1,409,504,668	75.1
June 30, 2001	449,630,605	1,769,583,098	1,319,952,493	25.4	1,505,299,220	87.7
June 30, 2002*	521,250,455	1,907,683,881	1,386,433,426	27.3	1,595,809,458	86.9
June 30, 2003**	553,885,082	2,093,210,321	1,539,325,239	26.5	1,658,604,696	92.8
June 30, 2004**	600,586,961	2,335,905,365	1,735,318,404	25.7	1,645,412,496	105.5
Hazardous						
June 30, 1999	$ 74,579,649	$ 149,158,586	$ 74,578,937	50.0%	$ 103,464,123	72.1%
June 30, 2000	102,212,237	175,167,613	72,955,376	58.4	115,639,439	63.1
June 30, 2001	119,372,742	214,450,822	95,078,080	55.7	122,857,992	77.4
June 30, 2002*	135,874,582	236,819,050	100,944,468	57.4	125,275,925	80.6
June 30, 2003**	151,459,500	283,178,335	131,718,835	53.5	129,088,956	102.0
June 30, 2004**	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
Total						
June 30, 1999	$ 358,284,536	$ 1,422,523,386	$ 1,064,238,850	25.2%	$ 1,434,230,223	74.2%
June 30, 2000	501,772,489	1,632,642,971	1,130,870,482	30.7	1,525,144,107	74.1
June 30, 2001	569,003,347	1,984,033,920	1,415,030,573	28.7	1,628,157,212	86.9
June 30, 2002*	657,125,037	2,144,502,931	1,487,377,894	30.6	1,721,085,383	86.4
June 30, 2003**	705,344,582	2,376,388,656	1,671,044,074	29.7	1,787,693,652	93.5
June 30, 2004**	769,745,840	2,659,408,928	1,889, 663,088	28.9	1,772,077,308	106.6

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

**Covered payroll was actuarially computed as opposed to estimated in prior years.

COUNTY EMPLOYEES RETIREMENT SYSTEMS (CERS)--POST-EMPLOYMENT HEALTHCARE

Non-Hazardous	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Targeted Rate (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 1999	$ 231,937,169	$ 1,282,874,286	$ 1,050,937,117	18.0%	$ 1,346,601,939	78.0%
June 30, 2000	319,642,694	1,466,716,928	1,147,074,234	21.8	1,452,058,248	79.0
June 30, 2001	371,758,628	1,793,710,768	1,421,952,140	20.7	1,544,973,296	92.0
June 30, 2002*	450,497,307	1,977,577,038	1,527,079,731	22.8	1,663,183,629	91.8
June 30, 2003**	520,060,105	2,176,963,259	1,656,903,154	23.9	1,796,451,180	92.2
June 30, 2004**	585,399,072	2,438,734,696	1,853,335,624	24.0	1,826,870,880	101.5
Hazardous						
June 30, 1999	$ 114,590,223	$ 518,280,115	$ 403,689,892	22.1%	$ 256,201,726	157.6%
June 30, 2000	168,657,912	599,936,029	431,278,117	28.1	288,575,870	149.5
June 30, 2001	197,875,249	721,605,292	523,730,043	27.4	316,700,304	165.4
June 30, 2002*	234,683,878	781,184,974	546,501,096	30.1	345,849,279	158.0
June 30, 2003**	269,190,080	935,650,662	666,460,582	28.8	374,700,732	177.9
June 30, 2004**	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
Total						
June 30, 1999	$ 346,527,392	$ 1,801,154,401	$ 1,454, 627,009	19.2%	$ 1,602,803,665	90.8%
June 30, 2000	488,300,606	2,066,652,957	1,578,352,351	23.6	1,740,634,118	90.7
June 30, 2001	569,633,877	2,515,316,060	1,945,682,183	22.6	1,861,673,600	104.5
June 30, 2002*	685,181,185	2,758,762,012	2,073,580,827	24.8	2,009,032,908	103.2
June 30, 2003**	789,250,185	3,112,613,921	2,323,363,736	25.4	2,171,151,912	107.0
June 30, 2004**	895,977,234	3,464,419,173	2,568,441,939	25.9	2,219,433,504	115.7

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.

**Covered payroll was actuarially computed as opposed to estimated in prior years.

STATE POLICE RETIREMENT SYSTEMS (SPRS)--POST-EMPLOYMENT HEALTHCARE

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Targeted Rate (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 1999	$ 53,929,859	$ 125,797,150	$ 71,867,291	42.9%	$ 40,433,405	177.7%
June 30, 2000	71,711,712	138,867,085	67,155,373	51.6	43,619,383	154.0
June 30, 2001	79,863,577	158,261,479	78,397,902	50.5	44,646,678	175.6
June 30, 2002*	86,867,391	165,445,412	78,578,021	52.5	44,314,696	177.3
June 30, 2003**	90,747,967	184,501,205	93,753,238	49.2	43,760,832	214.2
June 30, 2004**	96,622,908	197,604,301	100,981,393	48.9	43,835,208	230.4

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
**Covered payroll was actuarially computed as opposed to estimated in prior years.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS

KENTUCKY EMPLOYEES RETIREMENT SYSTEM (KERS)

NON-HAZARDOUS

	Pension			Insurance			Total		
Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1999	$ 50,169,882	$ 50,745,239	101.1%	$ 56,690,636	$ 56,769,539	100.1%	$ 106,860,518	$ 107,514,778	100.6%
June 30, 2000	36,365,221	38,129,156	104.9	76,818,004	76,926,320	100.1	113,183,225	115,055,476	100.7
June 30, 2001	21,787,253	23,482,080	107.8	66,874,871	66,874,871	100.0	88,662,124	90,356,951	101.9
June 30, 2002	-	1,760,328	-	93,993,177	93,912,017	99.9	93,993,177	95,672,345	101.8
June 30, 2003	4,905,399	7,597,450	134.9	92,052,561	65,335,219	71.0	96,957,960	72,932,669	75.2
June 30, 2004	47,739,067	21,696,543	45.4	77,951,553	78,016,737	100.1	125,690,620	99,713,280	79.3

HAZARDOUS

	Pension			Insurance			Total		
Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1999	$ 8,546,136	$ 8,669,902	101.4%	$ 10,760,269	$ 10,773,916	100.1%	$ 19,306,405	$ 19,443,818	100.7%
June 30, 2000	9,551,817	9,586,177	100.4	12,026,502	12,047,095	100.2	21,578,319	21,633,272	100.3
June 30, 2001	9,920,148	10,626,663	107.1	13,226,298	13,226,298	100.0	23,146,446	23,852,961	103.1
June 30, 2002	7,742,052	7,933,817	102.5	15,859,932	15,887,399	100.2	23,601,984	23,821,216	100.9
June 30, 2003	8,511,402	7,322,607	86.0	15,839,215	15,883,263	100.3	24,350,617	23,205,870	95.3
June 30, 2004	9,600,978	9,769,580	101.8	14,942,092	14,959,617	100.1	24,543,070	24,729,197	100.8

TOTAL

	Pension			Insurance			Total		
Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1999	$ 58,716,018	$ 59,415,141	101.2%	$ 67,450,905	$ 67,543,455	100.1%	$ 126,166,923	$ 126,958,596	100.6%
June 30, 2000	45,917,038	47,715,333	103.9	88,844,506	88,973,415	100.1	134,761,544	136,688,748	101.4
June 30, 2001	31,707,401	34,108,743	107.6	80,101,169	80,101,169	100.0	111,808,570	114,209,912	102.1
June 30, 2002	7,742,052	9,694,145	125.2	109,853,109	109,799,416	100.0	117,595,161	119,493,561	101.6
June 30, 2003	13,416,801	14,920,057	111.2	107,891,776	81,218,482	75.3	121,308,577	96,138,539	79.3
June 30, 2004	57,340,045	31,466,123	54.9	92,893,645	92,976,354	100.1	150,233,690	124,442,477	82.8

COUNTY EMPLOYEES RETIREMENT SYSTEM (CERS)

NON-HAZARDOUS

	Pension			Insurance			Total		
Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1999	$ 61,135,728	$ 62,689,179	102.5%	$ 47,939,029	$ 47,901,837	99.9%	$ 109,074,757	$ 110,591,016	101.4%
June 30, 2000	50,676,832	51,373,244	101.4	55,033,008	55,213,973	100.3	105,709,840	106,587,217	100.8
June 30, 2001	35,658,922	48,914,435	137.2	62,292,385	62,292,385	100.0	97,951,307	111,206,820	113.5
June 30, 2002	3,326,367	5,528,348	166.2	102,119,475	102,150,543	100.0	105,445,842	107,678,891	102.1
June 30, 2003	8,682,257	11,855,694	136.6	102,038,427	99,234,843	97.3	110,720,684	111,090,537	100.3
June 30, 2004	43,111,505	44,028,465	102.1	89,289,520	89,344,241	100.1	132,401,025	133,372,706	100.7

HAZARDOUS

	Pension			Insurance			Total		
Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1999	$ 22,878,814	$ 24,907,660	108.9%	$ 23,647,419	$ 23,382,957	98.9%	$ 46,526,233	$ 48,290,617	103.8%
June 30, 2000	22,653,206	23,393,895	103.3	27,991,859	28,345,377	101.3	50,645,065	51,739,272	102.2
June 30, 2001	19,409,377	20,983,360	108.1	32,149,432	32,149,432	100.0	51,558,809	53,132,792	103.1
June 30, 2002	10,582,988	11,054,949	104.5	45,721,274	45,730,333	100.0	56,304,262	56,785,282	100.9
June 30, 2003	19,920,223	16,905,556	84.9	43,502,755	45,243,950	104.0	63,422,978	62,149,506	98.0
June 30, 2004	27,050,382	27,640,775	102.2	47,018,046	47,036,777	100.0	74,068,428	74,677,552	100.8

TOTAL

	Pension			Insurance			Total		
Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1999	$ 84,014,542	$ 87,596,839	104.3%	$ 71,586,448	$ 71,284,794	99.6%	$ 155,600,990	$ 158,881,633	102.1%
June 30, 2000	73,330,038	74,767,139	102.0	83,024,867	83,559,350	100.6	156,354,905	158,326,489	101.3
June 30, 2001	55,068,299	69,897,795	126.9	94,441,817	94,441,817	100.0	149,510,116	164,339,612	109.9
June 30, 2002	13,909,355	16,583,297	119.2	147,840,749	147,880,876	100.0	161,750,104	164,464,173	101.7
June 30, 2003	28,602,480	28,761,250	100.6	145,541,182	144,478,793	99.3	174,143,662	173,240,043	99.5
June 30, 2004	70,161,887	71,669,240	102.1	136,307,566	136,381,018	100.1	206,469,453	208,050,258	100.8

STATE POLICE RETIREMENT SYSTEM (SPRS)

	Pension			Insurance			Total		
Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 1999	$ 2,657,190	$ 4,343,151	163.4%	$ 6,808,270	$ 5,120,037	75.2%	$ 9,465,460	$ 9,463,188	100.0%
June 30, 2000	2,973,719	2,964,037	99.7	7,237,579	7,251,787	100.2	10,211,298	10,215,824	100.0
June 30, 2001	1,826,883	1,811,299	99.1	7,807,870	7,817,613	100.1	9,634,753	9,628,912	99.9
June 30, 2002	1,464,204	1,448,865	99.0	8,098,907	8,113,391	100.2	9,563,111	9,562,256	100.0
June 30, 2003	-	(20,061)	-	9,443,588	7,654,313	81.1	9,443,588	7,634,252	80.8
June 30, 2004	1,175,711	1,152,752	98.0	8,434,834	8,455,498	100.2	9,610,545	9,608,250	100.0

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

PENSION FUNDS

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2004	June 30, 2004
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Amortization Period - Each Benefit Improvement	30 years – Commencing with 1990 Valuation	30 years – Commencing with 1990 Valuation
Asset Valuation Method	Five-year Smoothing of Investment Gains and Losses	Five-year Smoothing of Investment Gains and Losses
Post-retirement Benefit Increase	2.85%	2.85%
Actuarial Assumptions:		
Investment Return	8.25%	8.25%
Projected Salary Increases	6.50%	6.50%
Inflation Rate	3.50%	3.50%

POST-EMPLOYMENT HEALTHCARE

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2004	June 30, 2004
Actuarial Cost Method	Targeted Rate	Targeted Rate
Asset Valuation Method - Started with 1996 Valuation	Five-year Smoothing of Investment Gains and Losses	Five-year Smoothing of Investment Gains and Losses
Actuarial Assumptions:		
Investment Return	8.25%	8.25%
Projected Salary Increases	6.50%	6.50%
Inflation Rate	3.50%	3.50%

ADDITIONAL SUPPORTING SCHEDULES

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF ADMINISTRATIVE EXPENSES
Years ended June 30, 2004 and 2003
(Dollars in thousands)

	2004	2003
Personal Services		
Salaries and per diem	$ 9,268	$ 8,681
Fringe benefits	1,930	1,679
Tuition assistance	50	45
Total personal services	11,248	10,405
Contractual Services		
Actuarial	141	66
Audit	40	59
Legal	288	575
Medical	326	211
Contractual	100	452
Total contractual services	895	1,363
Communication		
Printing	139	142
Telephone	150	134
Postage	571	337
Travel	152	168
Total communication	1,012	781
Rentals		
Office space	982	814
Equipment	50	52
Total rentals	1,032	866
Miscellaneous		
Utilities	120	101
Supplies	113	123
Insurance	51	48
Maintenance	170	225
Other	253	166
Total miscellaneous	707	663
Depreciation	304	352
Healthcare Administrative Fees	1,034	862
Total Administrative Expenses	$ 16,232	$ 15,292

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF INVESTMENT EXPENSES
Years Ended June 30, 2004 and 2003
(Dollars in thousands)

	2004	2003
RETIREMENT FUNDS		
Security Lending Fees		
Broker rebates	$ 17,869	$ 29,191
Lending agent fees	1,559	1,554
Total security lending	19,428	30,745
Common Stock Commissions	5,237	3,101
Contractual Services		
Investment management	7,253	6,609
Security custody	727	591
Investment consultant	184	185
Investment related travel	20	-
Total contractual services	8,184	7,385
INSURANCE FUNDS		
Security Lending Fees		
Broker rebates	2,463	2,286
Lending agent fees	195	140
Total security lending	2,658	2,426
Common Stock Commissions	586	378
Investment Management	927	522
Total investment expenses	$ 37,020	$ 44,557

Information on fees paid to investment professionals can be found in the investment section.

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF PROFESSIONAL CONSULTANT FEES
Years ended June 30, 2004 and 2003
(Dollars in thousands)

	2004	2003
Actuarial Services	$ 141	$ 66
Medical Review Services	326	211
Audit Services	40	59
Legal Counsel	288	575
Total	$ 795	$ 911

KENTUCKY RETIREMENT SYSTEMS
COMBINING SCHEDULES OF PLAN NET ASSETS--PENSION FUNDS
June 30, 2004 and 2003
(Dollars in Thousands)

	2004						2003
ASSETS	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	Total	Total
Cash and short-term investments							
Cash	$ 67	$ 761	$ 228	$ 813	$ 86	$ 1,955	$ 1,493
Short-term investments	11,330	98,125	34,290	118,667	3,607	266,019	485,752
Total cash and short-term investments	11,397	98,886	34,518	119,480	3,693	267,974	487,245
Receivables							
Contributions	2,047	24,759	10,061	25,614	966	63,447	65,296
Investment income	1,747	26,374	6,481	23,528	1,727	59,857	59,582
Total receivables	3,794	51,133	16,542	49,142	2,693	123,304	124,878
Investments, at fair value							
Corporate and government bonds	105,309	1,617,334	394,924	1,443,631	107,006	3,668,204	3,845,290
Corporate stocks	227,386	3,237,197	788,758	2,754,886	205,072	7,213,299	5,886,202
Mortgages	17,062	255,570	69,113	247,087	16,860	605,692	560,005
Real estate	1,913	2,580	2,416	2,496	493	9,898	17,256
Total investments at fair value	351,670	5,112,681	1,255,211	4,448,100	329,431	11,497,093	10,308,753
Securities lending collateral invested	48,210	692,206	171,294	606,714	44,251	1,562,675	3,444,164
Equipment (net of accumulated depreciation)	25	319	48	531	6	929	1,012
Total Assets	415,096	5,955,225	1,477,613	5,223,967	380,074	13,451,975	14,366,052
LIABILITIES							
Accounts payable	318	4,024	1,307	3,918	102	9,669	8,340
Securities lending collateral	48,210	692,206	171,294	606,714	44,251	1,562,675	3,444,164
Total Liabilities	48,528	696,230	172,601	610,632	44,353	1,572,344	3,452,504
Plan Net Assets Held in Trust for Pension Benefits	$ 366,568	$ 5,258,995	$ 1,305,012	$ 4,613,335	$ 335,721	$ 11,879,631	$ 10,913,548

KENTUCKY RETIREMENT SYSTEMS
COMBINING SCHEDULES OF CHANGES IN PLAN NET ASSETS--PENSION FUNDS
Years Ended June 30, 2004 and 2003
(Dollars in Thousands)

	2004						2003
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	Total	Total
ADDITIONS							
Members' contributions	$ 11,548	$ 129,077	$ 38,668	$ 122,484	$ 4,875	$ 306,652	$ 314,855
Employers' contributions	9,769	21,697	27,641	44,028	1,153	104,288	43,661
Total contributions	21,317	150,774	66,309	166,512	6,028	410,940	358,516
INVESTMENT INCOME							
From investing activities							
Net appreciation in fair value of investments	34,350	519,867	122,104	435,288	33,053	1,144,662	109,972
Interest/Dividends	9,295	135,227	33,400	119,560	8,806	306,289	326,259
Total investing activities income	43,645	655,094	155,505	554,848	41,859	1,450,951	436,231
Investment expense	246	3,610	886	3,219	223	8,184	7,385
Commissions	160	2,316	578	2,038	145	5,237	3,101
Total investing activities expense	406	5,926	1,464	5,257	368	13,421	10,486
Net income from investing activities	43,239	649,168	154,041	549,591	41,491	1,437,530	425,745
From Securities Lending Activities							
Securities lending income	764	10,970	2,716	9,621	701	24,772	35,925
Securities lending expense:							
Security borrower rebates	552	7,915	1,958	6,938	506	17,869	29,191
Security lending agent fees	48	691	171	605	44	1,559	1,554
Net income from securities lending activities	164	2,364	587	2,078	151	5,344	5,180
Total net investment income	43,403	651,532	154,628	551,669	41,642	1,442,874	430,925
Total Additions	64,720	802,306	220,937	718,181	47,670	1,853,814	789,441

	2004						2003
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	Total	Total
DEDUCTIONS							
Benefit payments	$ 16,863	$ 459,367	$ 81,422	$ 260,643	$ 30,877	$ 849,172	$ 748,980
Refunds	1,410	8,001	2,520	11,334	96	23,361	20,522
Administrative expenses	392	5,262	759	8,694	91	15,198	14,430
Total deductions	18,665	472,630	84,701	280,671	31,064	887,731	783,932
Net increase in plan assets	46,055	329,676	136,236	437,510	16,606	966,083	5,509
Plan net assets held in trust for Pension Benefits							
Beginning of Year	320,513	4,929,319	1,168,776	4,175,825	319,115	10,913,548	10,908,039
End of Year	$ 366,568	$ 5,258,995	$ 1,305,012	$ 4,613,335	$ 335,721	$ 11,879,631	$ 10,913,548

KENTUCKY RETIREMENT SYSTEMS

COMBINING SCHEDULES OF PLAN NET ASSETS--POST-EMPLOYMENT HEALTHCARE

June 30, 2004 and 2003

(Dollars in Thousands)

	2004						2003
ASSETS	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	Total	Total
Cash and short-term investments							
Cash	$ 5	$ 33	$ 7	$ 30	$ 5	$ 80	$ 216
Short-term investments	15,050	103,361	30,510	52,303	6,526	207,750	147,010
Total cash and short-term investments	15,055	103,394	30,517	52,333	6,531	207,830	147,226
Receivables							
Contributions	617	3,990	3,811	8,364	351	17,133	21,790
Investment income	424	1,446	765	1,401	242	4,278	3,434
Total receivables	1,041	5,436	4,576	9,765	593	21,411	25,224
Investments, at fair value							
Corporate and government bonds	16,491	56,753	30,331	51,847	9,445	164,867	133,241
Corporate stocks	129,646	422,402	232,519	450,829	73,926	1,309,322	1,039,366
Total investments	146,137	479,155	262,850	502,676	83,371	1,474,189	1,172,607
Security lending collateral invested	30,556	110,411	55,608	105,196	17,043	318,814	344,416
Total Assets	192,789	698,396	353,551	669,970	107,538	2,022,244	1,689,473
LIABILITIES							
Accounts payable	106	304	206	897	67	1,588	1,258
Securities lending collateral obligations	30,556	110,411	55,608	105,196	17,043	318,814	344,416
Total Liabilities	30,662	110,715	55,814	106,093	17,110	320,402	345,674
Plan Net Assets Held in Trust for Post-Employment Healthcare Benefits	$ 162,127	$ 587,681	$ 297,737	$ 563,877	$ 90,420	$ 1,701,842	$ 1,343,799

KENTUCKY RETIREMENT SYSTEMS

COMBINING SCHEDULES OF CHANGES IN PLAN NET ASSETS--POST-EMPLOYMENT HEALTHCARE

Years Ended June 30, 2004 and 2003

(Dollars in Thousands)

	2004						2003
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	Total	Total
ADDITIONS							
Employers' contributions	$ 14,959	$ 78,017	$ 47,037	$ 89,344	$ 8,456	$ 237,813	$ 233,351
Total contributions	14,959	78,017	47,037	89,344	8,456	237,813	233,351
INVESTMENT INCOME							
From investing activities							
Net appreciation in fair value of investments	23,300	74,613	39,950	77,673	13,048	228,584	6,272
Interest/Dividends	1,980	8,665	4,499	8,648	1,451	25,243	22,305
Total income from investing activities	25,280	83,278	44,449	86,321	14,499	253,827	28,577
Investment expense	95	304	156	315	57	927	522
Commissions	59	193	100	198	36	586	378
Total investing activities expense	154	497	256	513	93	1,513	900
Net income from investing activities	25,126	82,781	44,193	85,808	14,406	252,314	27,677
From Securities Lending Activities							
Securities lending income	334	1,204	608	1,149	185	3,480	2,980
Securities lending expense:							
Security borrower rebates	236	853	429	813	132	2,463	2,286
Security lending agent fees	18	68	35	64	10	195	140
Net income from securities lending activities	80	283	144	272	43	822	554
Total net investment income	25,206	83,064	44,337	86,080	14,449	253,136	28,231
Total Additions	40,165	161,081	91,374	175,424	22,905	490,949	261,582

	2004						2003
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	State Police	Total	Total
DEDUCTIONS							
Healthcare premiums subsidies	$ 3,539	$ 59,987	$ 16,700	$ 46,654	$ 4,992	$ 131,872	$ 113,296
Administrative fees	21	484	105	393	31	1,034	862
Total deductions	3,560	60,471	16,805	47,047	5,023	132,906	114,158
Net increase in plan assets	36,605	100,610	74,569	128,377	17,882	358,043	147,424
Plan net assets held in trust for post-employment healthcare benefit							
Beginning of Year	125,522	487,071	223,168	435,500	72,538	1,343,799	1,196,375
End of Year	$ 162,127	$ 587,681	$ 297,737	$ 563,877	$ 90,420	$ 1,701,842	$ 1,343,799

KENTUCKY RETIREMENT SYSTEMS

Investment Section

Comprehensive Annual Financial Report
June 30, 2004

INVESTMENT SECTION PREFACE

June 30, 2004 Comprehensive Annual Financial Report

The Board of Trustees is charged with the responsibility of investing the systems' assets to provide for the benefits of the members of the systems. To achieve that goal the Board follows a policy of preserving capital, while seeking means of enhancing revenues and protecting against undue losses in any particular investment area.

The Board recognizes its fiduciary duty not only to invest the funds in formal compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the systems. In order to maintain quality while maximizing the long-range return, the Board diversifies the investment of the assets among classes of securities.

The assets are managed by the Investment Division staff and by external professional managers based on these investment policies:

Objectives

Long-Term: The total assets of the systems should achieve a return measured over two market cycles (estimated to be six to ten years) which exceeds the rate of inflation for the period, as measured by the Consumer Price Index for All Urban Consumers, by at least 4%.

Short-Term: The returns of the particular asset classes of the managed funds of the systems, measured on a year-to-year basis, should exceed the returns achieved by comparable unmanaged market indices.

In keeping with its responsibility as trustee and wherever consistent with its fiduciary responsibility, the Board encourages the investment of the systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

Investments Performance Review Procedures

At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. Each month the Investment Division performs tests to assure compliance with the restrictions imposed by the Investment Policy.

Investment Consulting

The Board employs Mercer Investment Consulting, Inc. to review the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from that firm follows this introduction and discusses current allocations, performance and significant changes over the fiscal year.

MERCER
Investment Consulting

10 South Wacker Drive, Suite 1700
Chicago, IL 60606-7500
312 902 7500 Fax 312 902 7626
www.mercerIC.com

August 30, 2004

The Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: **Annual Fund Review**

Dear Trustees:

Mercer is charged with the duty to advise the Board in its asset management activities. This is our annual review of the asset management of the Kentucky Retirement Systems. Although we recognize that the Board of Trustees is charged with the responsibility of managing the Funds in a manner consistent with the basic long term nature of the participating systems, our comments focus on the year ended June, 2004. In managing the Funds, the Board must maintain formal compliance with the Prudent Person Rule. Therefore, it seeks to maintain proper and appropriate diversification for the Fund.

Market Highlights

The year ending June 2004 was characterized by a global equity market recovery. Improved economic indicators and strong monetary and fiscal stimulus coupled with the wind down of the war in Iraq, led to favorable conditions for a rebound in the domestic equity market. International equity markets outpaced their domestic counterparts due primarily to a declining dollar in the second half of 2003. The S&P 500 Index gained 19.1 % over the trailing year while the international markets (as measure by the MSCI EAFE) returned 32.9%. The market rebound has had an adverse effect on fixed income as the Lehman Brothers Aggregate Index gaining 0.3% for the year ending June 30th.

Systems Highlights

According to the Fund Analytics statements from Northern Trust, The Retirement Fund's assets increased from $10.9 billion (on June 30, 2003) to $11.8 billion at the end of June 2004 due to a return of 13.6% during the one year period. Performance trailed the Reference Index return of

14.0%. The Insurance Fund was valued at $1.6 billion, a $0.4 billion increase since June 2003 due to investment appreciation and contributions during the period. The Fund posted a 19.4% gain over the one year period, outpacing its Reference Index return of 18.5%. The Reference Indices are constructed according to the individual target asset allocations of the Funds.

The Retirement Fund's allocation was overweight domestic equity and underweight fixed income as of June 30. The Insurance Fund was overweight cash and underweight domestic equity at the end of June, 2004.

Asset allocation as of June 30th for the Retirement and Insurance Funds are compared in the table below to their individual asset allocation targets:

	Retirement Fund		Insurance Fund	
Asset Classes	Actual Allocation 6/30/04	Target Asset Allocation	Actual Allocation 6/30/04	Target Asset Allocation
Domestic Equity	42.2	40.0	56.9	60.0
International Equity	14.4	15.0	19.8	20.0
Fixed Income	24.5	27.0	0.0	0.0
Alternatives *	5.4	5.0	5.4	5.0
TIPS	10.2	10.0	10.3	10.0
Cash **	3.3	3.0	7.6	5.0

* Includes Real Estate and Private Equity.

** Includes equitization positions.

All major asset classes are within their allowable ranges. As previously discussed, Mercer recommends rebalancing back to target with on-going cash flows.

Investment Manager Highlights

The Retirement Fund

NAMCO underperformed the S&P 500 Index over the one year period ending June 30, returning 18.2% vs. the Index return of 19.1 %. The strong relative performance over the second half of 2003 was not enough to reverse the relative losses during the first half of 2004.

The Weaver MVT portfolio returned 26.6% over the trailing one year, underperforming the Russell 2500 Growth Index return of 30.1 %. Both active international managers trailed the International Equity Blended Index return of 31.7% during the past year with Bank of Ireland returning 25.2% and Fidelity gaining 31.5%.

The Weaver Barksdale Core portfolio (-0.7%) and NAMCO (-0.9%) trailed the Fixed Income Blended Index return of 0.9%. The Weaver Barksdale TIPS strategy (3.8%) slightly lagged the LB TIPS Index by 4 basis points. Lincoln Capital returned 0.6%, outpacing the LB Aggregate return of 0.3%. The Fixed Income composite gained 1.0% over the trailing year, performing relatively in line with its Index.

The Insurance Fund

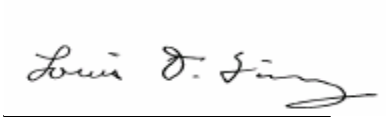
The NAMCO TIPS gained 3.7% during the trailing year, underperforming its index return of 3.9%. Fidelity failed to meet the MSCI EAFE Index return of 32.9%, gaining 31.4% over the trailing one year period.

MERCER
Investment Consulting

Summary

Over the trailing one year period all of the domestic equity and international equity managers lagged their comparative measures. In addition, Lincoln was the only fixed manager able to lead its benchmark over the same period. This was somewhat in line with expectations given the market environment experienced for the twelve months ending June 2004. Both plans experienced a growth in assets due to positive investment performance.

Sincerely,



Louis D. Finney, Ph.D.
312.902.7802

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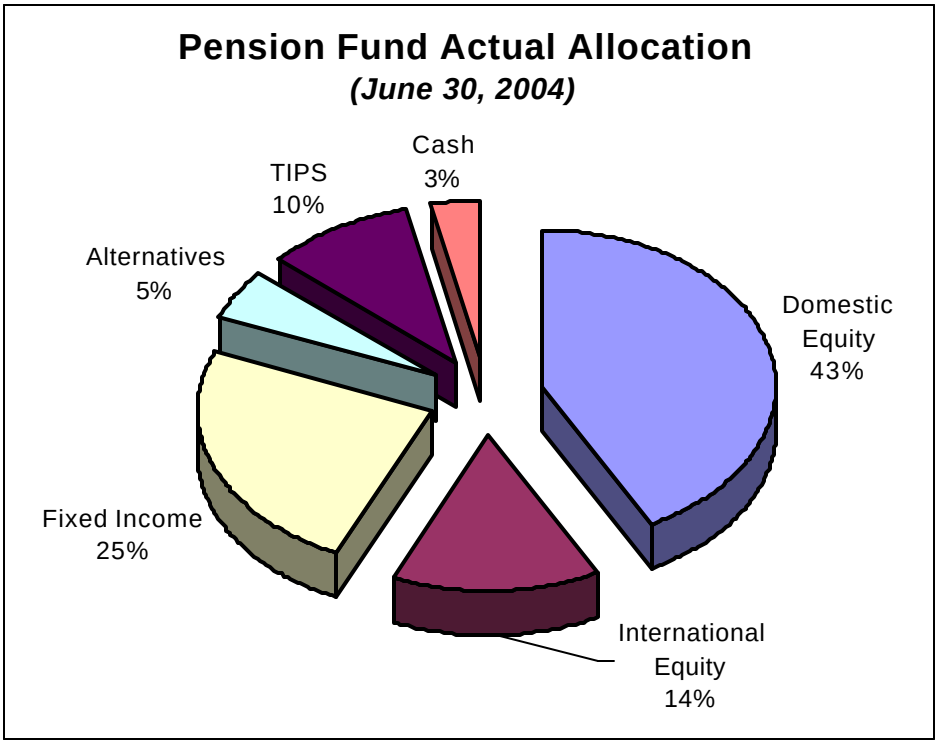
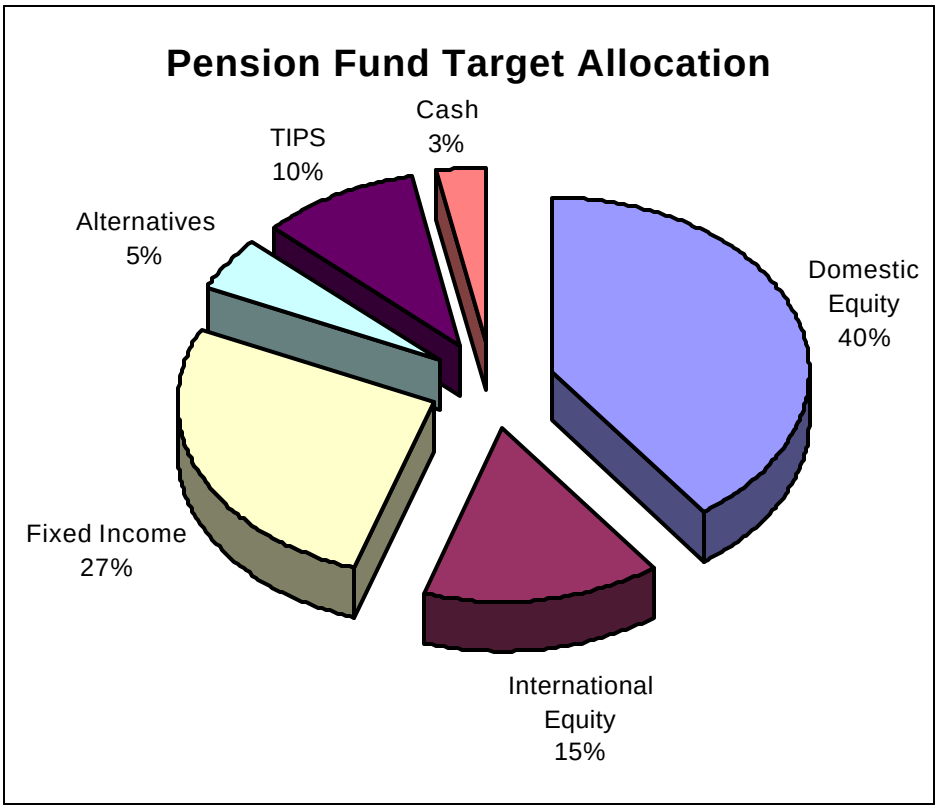
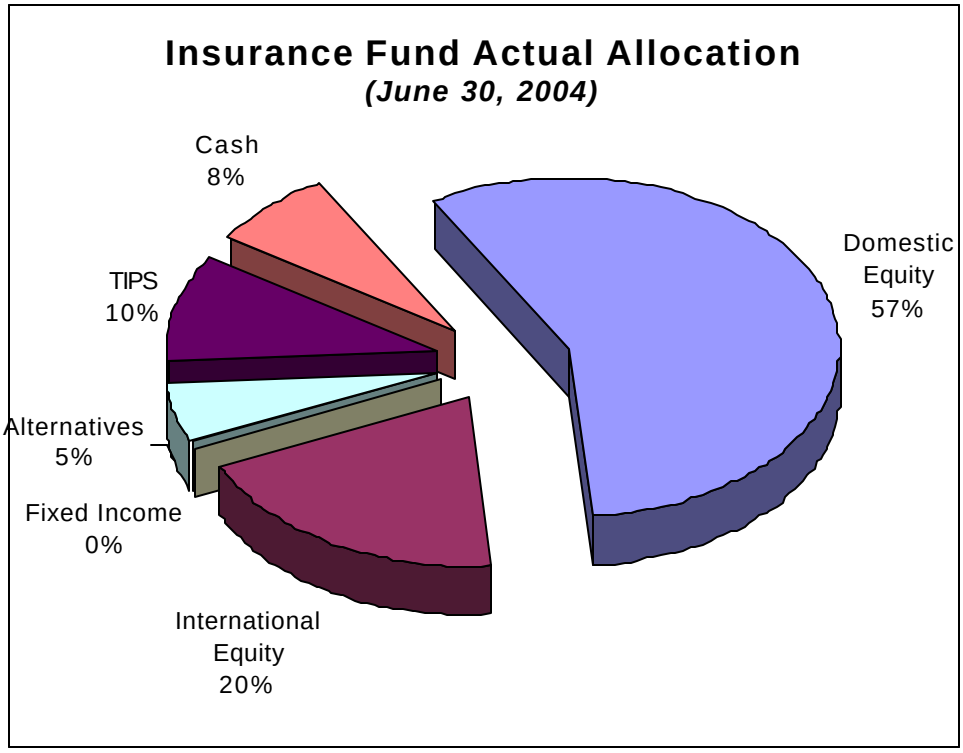
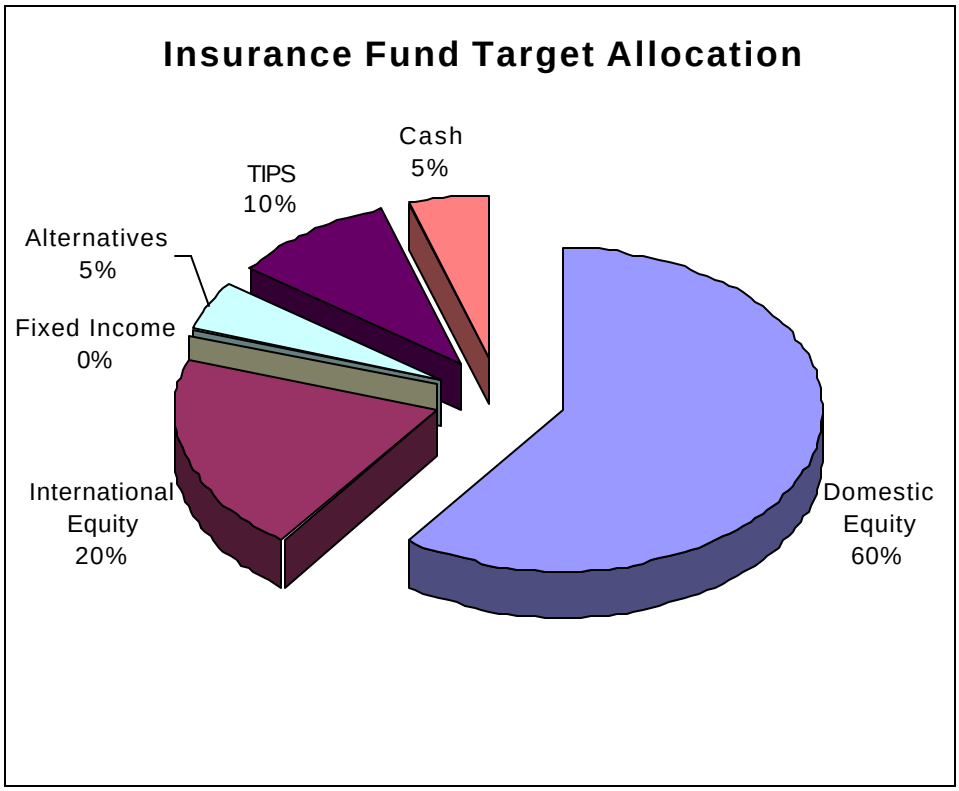
Copy:
B. Aldridge, Kentucky Retirement Systems
R. Leggett, Kentucky Retirement Systems


Pension Fund Actual Allocation
(June 30, 2004)
Cash
3%
TIPS
10%
Alternatives
5%
Domestic
Equity
43%
Fixed Income
25%
International
Equity
14%


Pension Fund Target Allocation
Cash
3%
TIPS
10%
Alternatives
5%
Domestic
Equity
40%
Fixed Income
27%
International
Equity
15%


Insurance Fund Actual Allocation
(June 30, 2004)
Cash
8%
Domestic
Equity
57%
TIPS
10%
Alternatives
5%
Fixed Income
0%
International
Equity
20%


Insurance Fund Target Allocation
Cash
5%
TIPS
10%
Alternatives
5%
Fixed Income
0%
International
Equity
20%
Domestic
Equity
60%

KENTUCKY RETIREMENT SYSTEMS

PERFORMANCE EVALUATION

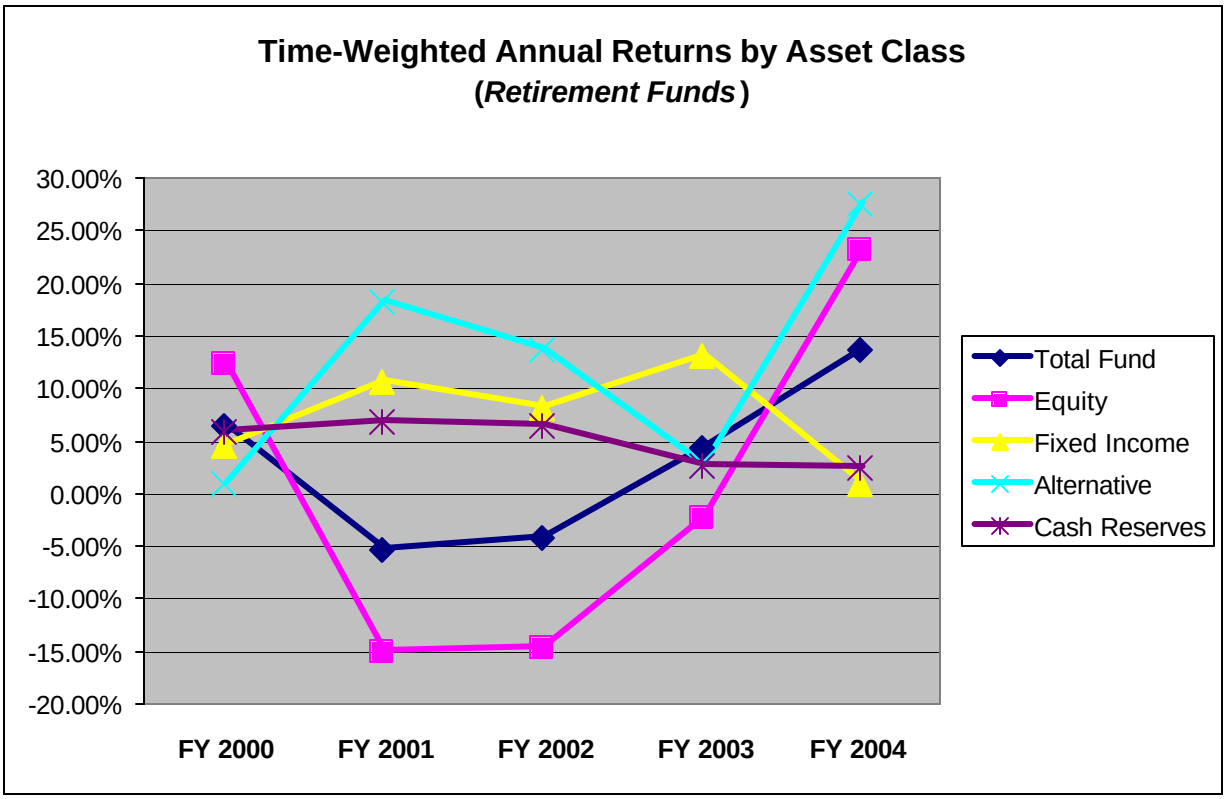
PENSION FUNDS

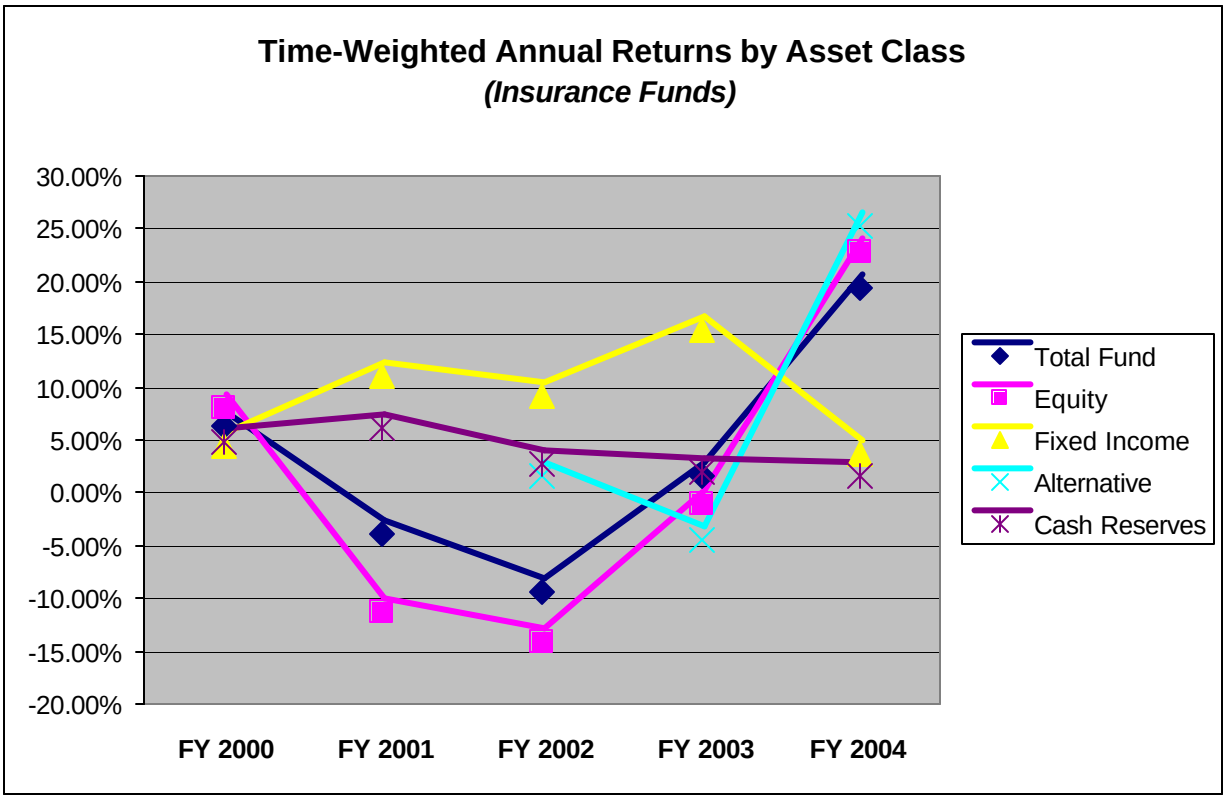
	Fiscal Year	3-Year	5-Year
Total KRS Retirement Fund	**13.59%**	**4.27%**	**2.67%**
KRS Blended Index	13.95%	4.06%	2.53%
CPI	3.21%	2.13%	2.67%
KRS Equities	**23.08%**	**0.84%**	**(0.44%)**
KRS Blended Index	24.04%	1.34%	(1.08%)
S&P 1500	18.42%	(1.39%)	(2.45%)
KRS Fixed Income	**0.95%**	**7.28%**	**7.40%**
KRS Blended Index	0.92%	7.42%	7.46%
Lehman Bros. Govt./Credit Bond Index	(0.72%)	6.73%	7.10%
KRS Alternate Investments	**27.44%**	**14.60%**	**13.82%**
KRS Blended Index	15.20%	2.97%	N/A
KRS Cash Reserves	**2.36%**	**3.79%**	**4.77%**
Salomon Bros. 3 Month T-Bill	0.96%	1.61%	3.14%

INSURANCE FUNDS

	Fiscal Year	3-Year	5-Year
Total KRS Insurance Fund	**19.41%**	**3.26%**	**2.42%**
KRS Blended Index	18.53%	1.25%	1.24%
CPI	0.88%	2.01%	1.18%
KRS Insurance Fund Equities	**22.81%**	**1.42%**	**0.01%**
KRS Blended Index	21.71%	0.02%	(0.52%)
S&P 1500	18.42%	(1.39%)	(2.45%)
KRS Insurance Fund Fixed Income	**3.69%**	**9.32%**	**N/A**
KRS Blended Index	3.86%	9.25%	9.58%
KRS Alternate Investments	**25.22%**	**6.71%**	**N/A**
KRS Blended Index	15.20%	2.97%	N/A
KRS Insurance Fund Cash Reserves	**1.64%**	**2.11%**	**3.44%**
Salomon Bros. 3 Month T-Bill	0.96%	1.61%	3.14%

The calculations made by the custody bank in the Performance Evaluation were prepared using a time-weighted rate of return based on the market rate of return in accordance with AIMR's performance presentation standards.


Time-Weighted Annual Returns by Asset Class
(Retirement Funds)
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
-5.00%
-10.00%
-15.00%
-20.00%
FY 2000
FY 2001
FY 2002
FY 2003
FY 2004
Total Fund
Equity
Fixed Income
Alternative
Cash Reserves


Time-Weighted Annual Returns by Asset Class
(Insurance Funds)
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
-5.00%
-10.00%
-15.00%
-20.00%
FY 2000
FY 2001
FY 2002
FY 2003
FY 2004
Total Fund
Equity
Fixed Income
Alternative
Cash Reserves

KENTUCKY RETIREMENT SYSTEMS

PORTFOLIO SUMMARIES

JUNE 30, 2004

	KERS NON HAZARDOUS June 30, 2003		KERS NON HAZARDOUS June 30, 2004		% OF MKT VALUE June 30, 2004
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$1,629,793,345	$1,772,036,808	1,549,839,905	1,617,334,320	31%
Mortgages	255,486,658	257,880,947	254,167,742	255,569,903	5%
Short-term	152,592,087	153,247,067	97,652,698	98,885,232	2%
Alternative	189,254,761	208,630,080	210,777,411	280,255,903	5%
Domestic Equities	1,769,418,597	1,905,665,342	1,795,218,655	2,222,981,861	43%
International Equities	664,134,948	578,899,308	676,478,619	736,539,713	14%
Total Portfolio	4,660,680,396	4,876,359,552	4,584,135,031	5,211,566,932	100%

	KERS HAZARDOUS June 30, 2003		KERS HAZARDOUS June 30, 2004		% OF MKT VALUE June 30, 2004
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$96,359,797	$104,852,057	101,222,308	105,308,294	29%
Mortgages	15,092,421	15,234,599	16,967,183	17,062,283	5%
Short-term	18,127,073	18,195,842	11,263,977	11,397,867	3%
Alternative	15,038,791	16,881,363	20,817,815	25,570,934	7%
Domestic Equities	114,803,820	123,778,198	125,568,278	155,806,045	43%
International Equities	42,369,173	37,138,867	43,854,254	47,922,065	13%
Total Portfolio	301,791,075	316,080,926	319,693,815	363,067,488	100%

For these portfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

KENTUCKY RETIREMENT SYSTEMS

PORTFOLIO SUMMARIES

JUNE 30, 2004

	CERS NON HAZARDOUS June 30, 2003		CERS NON HAZARDOUS June 30, 2004		% OF MKT VALUE June 30, 2004
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$1,336,817,229	$1,452,706,088	1,389,837,560	1,443,631,252	32%
Mortgages	209,533,366	211,499,185	245,725,160	247,087,021	5%
Short-term	237,857,390	238,769,081	117,932,893	119,480,587	3%
Alternative	156,137,460	174,249,104	178,096,484	236,382,515	5%
Domestic Equities	1,425,109,433	1,540,452,440	1,500,325,361	1,858,416,880	41%
International Equities	587,804,057	516,056,612	606,302,643	662,582,579	14%
Total Portfolio	3,953,258,935	4,133,732,510	4,038,220,101	4,567,580,833	100%

	CERS HAZARDOUS June 30, 2003		CERS HAZARDOUS June 30, 2004		% OF MKT VALUE June 30, 2004
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$367,125,344	$398,906,715	380,334,463	394,924,326	31%
Mortgages	57,877,613	58,421,019	68,732,367	69,112,719	5%
Short-term	68,352,052	68,612,892	34,075,598	34,518,122	3%
Alternative	45,925,862	51,356,064	52,334,574	68,947,645	5%
Domestic Equities	401,723,792	435,940,054	436,384,782	542,735,131	42%
International Equities	160,151,494	140,162,485	164,370,747	179,490,598	14%
Total Portfolio	1,101,156,157	1,153,399,229	1,136,232,531	1,289,728,540	100%

For these portfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

KENTUCKY RETIREMENT SYSTEMS

PORTFOLIO SUMMARIES

JUNE 30, 2004

	STATE POLICE RETIREMENT SYSTEM June 30, 2003		STATE POLICE RETIREMENT SYSTEM June 30, 2004		% OF MKT VALUE June 30, 2004
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$107,345,666	$116,788,407	102,415,352	107,005,876	32%
Mortgages	16,812,317	16,969,831	16,767,554	16,860,141	5%
Short-term	8,382,400	8,420,116	3,639,558	3,692,410	1%
Alternative	13,614,664	14,895,530	14,718,002	19,549,332	6%
Domestic Equities	114,041,105	123,749,125	115,480,302	143,866,046	43%
International Equities	41,228,892	35,602,808	39,002,089	42,149,957	13%
Total Portfolio	301,425,044	316,425,817	292,022,858	333,123,762	100%

	INSURANCE FUND June 30, 2003		INSURANCE FUND June 30, 2004		% OF MKT VALUE June 30, 2004
CLASS	**BOOK VALUE**	**MARKET VALUE**	**BOOK VALUE**	**MARKET VALUE**	
Bonds	$116,320,111	$133,240,710	149,691,010	164,867,042	10%
Mortgages	0	0	0	0	0%
Short-term	146,217,293	147,225,515	206,196,686	207,830,198	12%
Alternative	65,505,381	63,811,861	78,746,785	87,469,879	5%
Domestic Equities	727,982,011	731,807,786	760,758,317	907,929,067	54%
International Equities	252,580,159	243,746,926	268,888,546	313,923,423	19%
Total Portfolio	1,308,604,955	1,319,832,798	1,464,281,344	1,682,019,609	100%

For these portfolio summaries, market value is equivalent to fair value. A summary of acceptable types of investments by class is contained in Note D to the financial statements in the Financial Section.

List of Largest Assets Held

Pension Fund

Largest Stock Holdings

(By Market Value)
June 30, 2004

Rank	Shares	Stock	Market Value
1	3,457,750	MICROSOFT CORP	98,753,340.00
2	2,873,870	PFIZER INC	98,516,263.00
3	2,890,935	GENERAL ELECTRIC CO	93,666,294.00
4	1,453,604	JOHNSON & JOHNSON	80,965,742.80
5	1,664,756	CITIGROUP INC	77,411,154.00
6	3,082,620	CISCO SYS INC	73,058,094.00
7	2,336,688	INTEL CORP COM	64,492,036.80
8	1,219,800	EXXON MOBIL CORP	54,171,318.00
9	1,007,170	WAL MART	53,138,289.20
10	702,754	FNMA COM STK	50,148,525.44
		TOTAL	**744,321,057.24**

Largest Bond Holdings

(By Market Value)
June 30, 2004

Rank	Par	Bonds	Market Value
1	114,500,000.00	US TSY BDS INFL INDEX 3.875 DUE 4/15/29	165,267,010.00
2	106,000,000.00	US TSY BDS INFL INDEX 3.625 DUE 4/15/28	150,743,617.60
3	116,000,000.00	US TSY NTS INFL INDEX 3.625 DUE 1/15/08	147,513,720.00
4	99,000,000.00	US TSY BDS INFL INDEX 3.875 DUE 1/15/09	126,387,360.00
5	99,000,000.00	US TSY NTS INFL INDEX 3.375 DUE 1/15/07	125,846,820.00
6	103,850,000.00	US TSY NTS INFL INDEX 3.000 DUE 7/15/12	116,952,754.50
7	73,000,000.00	US TSY NTS INFL INDEX 4.250 DUE 1/15/10	93,169,170.00
8	73,000,000.00	US TSY NTS INFL INDEX 3.500 DUE 1/15/11	87,226,240.00
9	62,850,000.00	FHLMC DEB DTD 07/16/01 5.500 DUE 7/15/06	65,771,330.84
10	56,820,000.00	US TSY NTS 7.000 DUE 07/15/06 Rating AAA	61,563,163.14
		TOTAL	**1,140,441,186.08**

A complete list of portfolio holdings is available upon request.

List of Largest Assets Held

Insurance Fund

Largest Stock Holdings

(By Market Value)
June 30, 2004

Rank	Shares	Stock	Market Value
1	649,016	GENERAL ELECTRIC CO	21,028,118.40
2	694,600	MICROSOFT CORP	19,837,776.00
3	431,200	EXXON CORP	19,149,592.00
4	510,700	PFIZER INC	17,506,796.00
5	333,000	CITIGROUP INC	15,484,500.00
6	283,300	WAL MART STORES INC	14,946,908.00
7	168,784	AMER INTL GROUP	12,030,923.52
8	413,800	INTEL CORP COM	11,420,880.00
9	126,775	BK AMER CORP	10,727,700.50
10	192,088	JOHNSON & JOHNSON	10,699,301.60
		TOTAL	**152,832,496.02**

Largest Bond Holdings

(By Market Value)
June 30, 2004

Rank	Par	Bonds	Market Value
1	15,125,000.00	U S TSY INFLATION INDEX 3.875 DUE 04/15/29	21,831,122.50
2	17,400,000.00	U S TSY INFLATION INDEX 3.000 DUE 07/15/12	19,595,358.00
3	11,850,000.00	U S TSY INFLATION INDEX 3.625 DUE 04/15/28	16,851,998.76
4	16,350,000.00	U S TSY INFLATION INDEX 1.875 DUE 07/15/13	16,569,497.44
5	12,450,000.00	U S TSY INFLATION INDEX 3.625 DUE 01/15/08	15,832,291.50
6	11,950,000.00	U S TSY INFLATION INDEX 3.875 DUE 01/15/09	15,255,848.00
7	11,900,000.00	U S TSY INFLATION INDEX 3.375 DUE 01/15/07	15,127,042.00
8	14,050,000.00	U S TSY INFLATION INDEX 2.000 DUE 01/15/14	14,240,165.90
9	8,950,000.00	U S TSY INFLATION INDEX 4.250 DUE 01/15/10	11,422,795.50
10	6,900,000.00	U S TSY INFLATION INDEX 3.500 DUE 01/15/11	8,244,672.00
		TOTAL	**154,970,791.60**

A complete list of portfolio holdings is available upon request.

Schedule of Fees and Commissions

Year Ended June 30, 2004

External Investment Manager Fees	
Equities and Fixed Income	
Pension Funds	$7,969,426
Insurance Funds	927,488
Investment Consulting Fees	184,096
Security Lending Agent Fees*	22,086,376
Brokerage Commissions –– Equities	5,822,599
TOTAL	**$36,989,985**

*Total fees and commissions represent .111% of the fair value of the combined Pension and Insurance Fund portfolios (excluding securities lending broker rebates).

INVESTMENT MANAGERS

C. B. Richard Ellis	Invesco-National Asset Management Corp.
Heitman Capital Management Corp.	Northern Trust Quantitative Advisors, Inc.
Weaver C. Barksdale & Associates, Inc.	Bank of Ireland Asset Management
Lend Lease	Fidelity Management Trust Company
Matlin Patterson Global Opportunities Partners L.P.	Leonard Green & Partners L.P.
J.W. Childs Associates L.P.	Vantage Point Venture Partners L.P.
Lincoln Capital Management Company	

KENTUCKY RETIREMENT SYSTEMS

Actuarial Section

Comprehensive Annual Financial Report
June 30, 2004

SEGAL

THE SEGAL COMPANY
2018 Powers Ferry Road, Suite 850 Atlanta, GA 30339
T 678.306.3100 F 678.306.3190 www.segalco.com

November 11, 2004

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Dear Members of the Board:

The forty-eighth annual actuarial valuation of the Kentucky Employees Retirement System, the forty-fifth annual actuarial valuation of the County Employees Retirement System, and the forty-sixth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. The following comments are pertinent to the results of this valuation:

1. The funding objectives for the plan remain unchanged from the prior year's valuation. Relative to the retirement fund, a contribution rate has been established which consists of the normal cost and amortization payment on the unfunded actuarial accrued liability. The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any unfunded actuarial accrued liability is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Each year any actuarial gains or losses, along with any other changes in the accrued liability (such as retiree COLA's, other benefit improvements, changes in actuarial assumptions, etc.) are established as a new amortization base to be amortized over the following 30 years. Due to the recent downturn in the capital markets, there remains significant investment losses which will be recognized in accordance with the actuarial methods used to value the plan.

   Overall, the total funding for the retirement fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. In particular, the current valuation funding rate does not anticipate any future cost of living increases to benefit recipients. Should these cost of living increases occur in the future, the funding rate for the retirement fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains. In addition, rates are expected to increase as the prior mentioned investment losses are recognized.

   Relative to the insurance fund, the ultimate target funding is to reach the full amount of the entry age funding level including 30-year level percent of payroll amortization of the unfunded actuarial accrued liability. However, current insurance funding levels are less than this ultimate target rate, and will be systematically increased over the 20-year period beginning with 1997 until the target funding rate is reached. As such, the insurance funding rate is expected to increase each year for the remainder of the 20-year period.

The administrative expenses are also included as part of the total funding amount. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

To the extent that actual experience deviates from expected, an amortization base will be established and amortized over 30 years as a level percentage of payroll.

2. The progress towards achieving the intended funding objectives, both relative to the retirement and insurance funds, can be measured by the relationship of valuation assets of each fund to the accrued liabilities. The funded level for the retirement funds are 85.8% for KERS, 101.0% for CERS and 88.0% for SPRS. These funded levels will fluctuate over time with experience deviations. Since 1992, all three systems have had a funded level relative to the retirement fund of at least 85% in all valuations.

   The funded level for the insurance fund is not anywhere near 100% at this time, and the funding objective is to increase this funded level consistently over future years. Since 1990, the funded level relative to the insurance fund has improved steadily. This increasing trend in the funded level is the primary objective of the current funding policy.

3. Valuations of each system are prepared annually, with the most recent such valuation being as of June 30, 2004.

4. In completing the valuation of these systems, we have relied on employee data as provided by Kentucky Retirement Systems, as well as financial data provided by the plan's auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data, nor has there been any reconciliation of data used in the prior year's valuation with this current valuation data.

5. We have prepared none of the supporting schedules included with this filing. However, based on a brief review of these schedules, the information included on them appears consistent with the information provided in our actuarial valuation report.

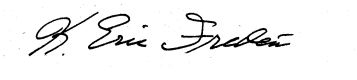
6. Any schedules of trend data over the past ten years or less have been based on valuation reports fully prepared by the plan's actuary.

7. The actuarial assumptions and methods used for the funding calculations of the valuation meet the parameters set for disclosure under GASB Statement No. 25. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary.

8. The information presented in items 1 through 7 of this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

The three Retirement Systems are actuarially sound based on the continuation of current funding policies adopted by the Board. Adequate provision is being made for the funding of the Actuarial Accrued Liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes, as appropriate funding rates have been established by the Board for this purpose.

Sincerely,



Leon F. (Rocky) Joyner, Jr., ASA, MAA
Vice President

K. Eric Fredén, FSA, MAAA
Associate Actuary

Kentucky Retirement Systems

Summary of Benefit Provisions

(As of June 30, 2004)

NORMAL RETIREMENT ELIGIBILITY

Members become eligible for an unreduced age or service annuity based upon the following requirements:

Non-Hazardous Members	
Age	Creditable Service
65	1 Month (benefit based on account balance)
65	4 Years (benefit based on service & salary)
Any	27 Years

Hazardous Duty Members	
Age	Creditable Service
55	1 Month (benefit based on account balance)
55	5 Years (benefit based on service & salary)
Any	20 Years

NORMAL RETIREMENT ANNUITY

The annuity payable to a member under Normal Retirement provisions is based on *Final Compensation (FC)* and *Creditable Service (CS)* as follows:

Non-Hazardous Members	*Formula*
▪ Kentucky Employees Retirement System	1.97% x FC x CS
▪ Kentucky Employees Retirement System *Members who were employed January 1998 through January 1999.*	2.00% x FC x CS
▪ Kentucky Employees Retirement System *Members who were employed January 1998 through January 1999 and who retire between February 1999 and January 2009 with 20 or more years of service.*	2.20% x FC x CS
▪ County Employees Retirement System	2.20% x FC x CS

Hazardous Duty Members	*Formula*
▪ Kentucky Employees Retirement System	2.49% x FC x CS
▪ County Employees Retirement System	2.50% x FC x CS
▪ State Police Retirement System	2.50% x FC x CS

Final Compensation (FC) for non-hazardous members is the average of the highest five fiscal years (July to June) of earnings. The years do not have to be consecutive but must contain a minimum of 48 months.

Exception: For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose creditable service is at least 27 years, and whose age and years of creditable service total at least 75, final compensation is based on the average of the three highest fiscal years of earnings. The years do not have to be consecutive but must contain a minimum of 24 months.

Final Compensation (FC) for Hazardous Duty members is the average of the highest three fiscal years (July to June) of earnings. The years do not have to be consecutive but must contain a minimum of 24 months.

EARLY RETIREMENT

Members become eligible for a reduced age or service annuity based upon the requirements:

Non-Hazardous Members		*Hazardous Duty Members*	
Age	Creditable Service	Age	Creditable Service
55	5 Years (benefit based on service & salary)	50	15 Years (benefit based on service & salary)
Any	25 Years (benefit based on service & salary)		

Early Retirement benefits are calculated the same as Normal Retirement benefits, except that a reduction is applied depending on the member's age or years of creditable service at retirement.

For non-hazardous members, the amount of the reduction under early retirement provisions is based upon the lesser of the number of years required for the member to reach age 65 or 27 years of creditable service (see table below).

5% per year for the first five years

Years to Attain Age 65 or 27 Years of Creditable Service			
1 Year:	95%	6 Years:	71%
2 Years:	90%	7 Years:	67%
3 Years:	85%	8 Years:	63%
4 Years:	80%	9 Years:	59%
5 Years:	75%	10 Years:	55%

4% per year for the next five years.

For hazardous duty members, the amount of the reduction under early retirement provisions is based upon the lesser of the number of years required for the member to reach age 55 or 20 years of creditable service (see table below).

5.5% for each year.

Years to Attain Age 55 or 20 Years of Creditable Service			
1 Year:	94.5%	4 Years:	78.0%
2 Years:	89.0%	5 Years:	72.5%
3 Years:	83.5%		

VOLUNTARY TERMINATION BEFORE IMMEDIATE BENEFIT ELIGIBILITY

Upon voluntary termination a member may either (1) receive a refund of accumulated contributions and interest credited thereon, or (2) if vested, leave contributions on deposit and apply for a retirement annuity on or after the minimum retirement age based upon creditable service at the time of termination. Vesting requirements are included in each benefit described herein.

DISABILITY BENEFITS

A non-hazardous member may retire due to disability if:

- The member has at least five (5) years of creditable service, one (1) of which is credited as current service.
- The member is not eligible for an unreduced benefit from the retirement systems.
- The member applies within 24 months of the last day of paid employment in a regular full-time position.
- The medical review physicians employed by the retirement office determine the condition or disease prohibits the member from performing their job, or a job of similar duties.

A hazardous member may retire due to disability if:

- The member has at least five (5) years of creditable service, one (1) of which is credited as current service.
- The member is not eligible for an unreduced benefit from the retirement systems.

- The member applies within 24 months of the last day of paid employment in a regular full-time position.
- The medical review physicians employed by the retirement office determine the condition or disease is total and permanent or will render the individual totally incapable of working in a hazardous position, but may still be capable of performing other types of work.

A condition or disease which existed before a non-hazardous or hazardous member was actively contributing to the retirement system cannot be considered unless the condition was substantially aggravated by accident or injury during the course of employment or if the member has 16 years of service with a participating employer.

Disability benefits are calculated the same as for normal retirement benefits except that additional years of service may be added to the member's account, depending on the member's age and years of service.

Disability In the Line of Duty Benefits

A contributing ***member in a non-hazardous position*** who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of final monthly rate of pay. Monthly benefits shall be also be paid for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay.

A member in a ***hazardous position*** who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay. Monthly benefits shall be also be paid for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay.

DEATH BEFORE RETIREMENT

If a member dies before retirement, the beneficiary will be eligible for a monthly benefit based on the member's age, years of service and final compensation at the date of death if:

1. The member was eligible for normal or early retirement benefits at the date of death.
2. If the member had earned 5 years of creditable service, 1 of which is current service, and was contributing at the date of death.
3. If the member had earned 12 years of creditable service, 1 of which is current service, and was not contributing at the date of death.

If the beneficiary is a single individual, multiple individuals, an estate, or a trust the following will be offered: (1) a lump sum actuarial refund, (2) monthly benefit for five years, or (3) monthly benefit for ten years. If the named beneficiary is a single individual, the beneficiary will also have the option of a lifetime monthly benefit.

Death In the Line of Duty Benefits

If a ***member in a non-hazardous position*** dies in the line of duty and has a spouse as beneficiary, the spouse may choose: (1) a $10,000 lump sum payment and monthly payment of 25% of the member's final monthly rate of pay or (2) benefits based upon the members age, years of service and final compensation at the date of death. Monthly benefits shall also be paid for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay.

If a ***member in a hazardous position*** dies in the line of duty and has a spouse as beneficiary, the spouse may choose: (1) a $10,000 lump sum payment and a monthly payment of 25% of the member's final monthly rate of pay or (2) benefits based upon the member's age, years of service and final compensation at the date of death. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary other than his spouse, the non-spouse may choose: (1) a $10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at the date of death. Monthly benefits shall be also be paid for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay.

POST RETIREMENT ADJUSTMENTS

Annuities are increased July 1 each year by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent (5%). The Kentucky General Assembly reserves the right to suspend or reduce benefit increases if in their judgment the welfare of the State so demands.

DEATH AFTER RETIREMENT

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

HOSPITAL AND MEDICAL INSURANCE BENEFIT

Kentucky Retirement Systems provides group rates on medical insurance and, where available, health maintenance organization (HMO) and other managed care coverage for retired members. Participation in the insurance/HMO program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage.

The cost of insurance for the retired member may be partially, or fully, paid by the Systems depending upon the member's years of service, the insurance carrier selected, and the level of coverage chosen. If coverage is for the member only, the system pays the same percentage of the single monthly contribution rate for both non-hazardous and hazardous duty members. The percentage of the single monthly contribution paid by KRS based upon a member's years of creditable service is provided in the table below.

Percent of the Monthly Insurance Contribution Paid Based Upon Service Credit at Retirement	
Years of Creditable Service	% Paid
At least 4 years but less than 10 years	25%
At least 10 years but less than 15 years	50%
At least 15 years but less than 20 years	75%
20 or more years	100%

If a hazardous duty member has a spouse and/or dependent children, KRS may also pay a portion of the monthly contribution towards a couple, parent plus, or family coverage plan. The portion paid toward couple, parent plus, or family coverage is based solely on the amount of creditable service the member has in an approved hazardous position (see table below).

Percent of the Monthly Insurance Contribution Paid By KRS For Spouse & Dependent Coverage	
Years of Creditable ***Hazardous Duty*** Service Credit	% Paid
At least 4 years but less than 10 years	25%
At least 10 years but less than 15 years	50%
At least 15 years but less than 20 years	75%
20 or more years	100%

Under the provisions of House Bill 430, passed during the 2003 General Assembly, *employees hired July 1, 2003 or after* will be required to earn at least ten (10) years of creditable service before they will be eligible for insurance benefits at retirement. Retired members or employees who have creditable service in a KERS, CERS, or SPRS account as of July 1, 2003, will not be affected by this legislation.

If a contributing member is disabled in the line of duty, the retirement system will pay 100% of the cost for the member. If a contributing member is killed in the line of duty, the retirement system will pay 100% of the cost for the beneficiary as long as they remain eligible for a monthly benefit payment.

INTEREST CREDITS

Member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

CONTRIBUTION RATES

Member Contributions

State statute requires participating non-hazardous members to contribute 5% of creditable compensation. Participating hazardous duty members are required to contribute 8% of creditable compensation.

Employer Contributions

Employer contribution rates are determined by the entry age normal cost funding method. Actuarial gains and losses reduce or increase the unfunded liability. For years beginning with the 1990 valuation, actuarial gains and losses have been amortized over a period of thirty years using the level percent of payroll method as required by state statute.

NOTE: A SUMMARY PLAN DESCRIPTION WHICH GIVES A MORE DETAILED DESCRIPTION OF PLAN PROVISIONS IS AVAILABLE UPON REQUEST OR CAN BE DOWNLOADED FROM THE KENTUCKY RETIREMENT SYSTEMS' WEB PAGE AT WWW.KYRET.COM.

Kentucky Retirement Systems

Summary of Actuarial Assumptions and Methods

(As of June 30, 2004)

1. The investment return rate used in making the valuations was 8.25% per year, net of investment related expenses, compounded annually. Adopted 2001.
2. The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:
    a. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.
    b. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.
    c. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.
    d. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.
    e. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.
3. The percentage of members assumed to retire at sample ages is shown in Schedule 1. Adopted 2001.
4. The mortality table used for active and retired lives was the 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees. Mortality assumptions for disabled lives are based on Social Security Administration Disability Mortality Rates – Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security). Sample annual rates of mortality are shown in Schedule 2. Adopted 2001.
5. Select rates of termination before retirement are shown in Schedule 3. Adopted 2001.
6. Annual pay per member is assumed to increase 12% in the first year, 10% in the second year, 8% in the third year and 6.50% per year thereafter, compounded annually, which is based on experience rather than the effects of inflation. Adopted 2001.
7. Kentucky Revised Statutes require use of the entry age normal cost funding method to determine the actuarial accrued liability. Actuarial gains and losses reduce or increase the unfunded liability. For years beginning with the 1990 valuation, actuarial gains and losses have been amortized over a period of thirty years using the level percent of payroll method as required by state statute.
8. With respect to cost-of-living adjustments, effective August 1, 1996, and on July 1 of each year thereafter, state statutes require retirement benefits to be increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent. The State Legislature reserved the right to suspend or reduce cost-of-living adjustments if in their judgment the welfare of the Commonwealth so demands.
9. The most recent actuarial experience analysis was performed for the period from July 1, 1995 through June 30, 2000. All assumptions used in the most recent actuarial valuation were based on the study performed in 2001.

Assumptions used in determining the actuarial accrued liability for postemployment healthcare benefits are shown in Schedule 4. Adopted 2001.

SCHEDULE 1: PERCENTAGE OF PARTICIPANTS ASSUMED TO RETIRE AT SAMPLE AGES

Age	55-57	58-59	60-61	62	63-64	65	66-67	68	69	70 & Over
Percent Retiring	4%	5%	6%	25%	10%	50%	20%	25%	40%	100%

At age 55-64 in lieu of age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits with 27 years of creditable service.

For hazardous duty participants of the Kentucky Employees Retirement System it is assumed that 50% will retire as soon as eligible for unreduced benefits with 20 years of creditable service and the balance will continue to age 60.

For hazardous duty participants of the County Employees Retirement System it is assumed that 60% will retire as soon as eligible for unreduced benefits with 20 years of creditable service and the balance will continue to age 55.

For participants of the State Police Retirement System it is assumed that 60% will retire as soon as eligible for unreduced benefits with 20 years of creditable service and the balance will continue to age 55.

SCHEDULE 2: SAMPLE ANNUAL RATES OF MORTALITY

	*Active Mortality**		*Disabled Mortality*	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

**Plus 0.05% duty death rate prior to retirement for hazardous duty participants.*

SCHEDULE 3: SELECT RATES OF TERMINATION PRIOR TO RETIREMENT

Kentucky Employees Retirement System

		Termination		*Disablement*	
Sample Ages	Years of Service	Non-Hazardous Employees	Hazardous Employees	Non-Hazardous Employees	Hazardous Employees
	1	35.00%	30.00%	**	**
	2	10.00%	8.00%	**	**
	3	7.00%	4.00%	**	**
	4	5.00%	4.00%	**	**
	5	4.00%	4.00%	**	**
25	Over 5	2.40%	3.04%	0.033%	0.042%
30		2.40%	3.38%	0.039%	0.050%
40		2.00%	1.50%	0.105%	0.132%
50		1.60%	0.00%	0.423%	0.530%
55		1.20%	0.00%	0.794%	0.992%
60		0.20%	0.00%	1.395%	1.743%

***Same as age-based rates for over five years of service.*

County Employees Retirement System

Sample Ages	Years of Service	*Termination* Non-Hazardous Employees	*Termination* Hazardous Employees	*Disablement* Non-Hazardous Employees	*Disablement* Hazardous Employees
	1	35.00%	30.00%	**	**
	2	10.00%	8.00%	**	**
	3	7.00%	4.00%	**	**
	4	5.00%	4.00%	**	**
	5	4.00%	4.00%	**	**
25	Over 5	2.40%	3.04%	0.033%	0.042%
30		2.40%	3.38%	0.039%	0.050%
40		2.00%	1.50%	0.105%	0.132%
50		1.60%	0.00%	0.423%	0.530%
55		1.20%	0.00%	0.794%	0.992%
60		0.20%	0.00%	1.395%	1.743%

***Same as age-based rates for over five years of service.*

State Police Retirement System

Sample Ages	Years of Service	*Termination* Hazardous Employees	*Disablement* Hazardous Employees
	1	**	**
	2	**	**
	3	**	**
	4	**	**
	5	**	**
25	Over 5	1.82%	0.042%
30		2.03%	0.050%
40		0.90%	0.132%
50		0.00%	0.530%
55		0.00%	0.992%
60		0.00%	1.743%

***Same as age-based rates for over five years of service.*

SCHEDULE 4: ASSUMED MEDICAL PREMIUM GROWTH

Years	2003 – 2005	2006 – 2010	2011 -- 2015	2016 -- 2020	Thereafter
Increase Per Year	10%	9%	8%	7.5%	7%

Kentucky Retirement Systems

Summary of Member Valuation Data

(As of June 30, 2004)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM (NON-HAZARDOUS)

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1999	45,824	$1,330,937,460	$29,046	5.8%
6/30/2000	46,897	$1,432,316,220	$30,542	5.2%
6/30/2001	47,780	$1,525,188,532	$31,921	4.5%
6/30/2002	48,555	$1,597,447,963	$32,900	3.1%
6/30/2003	49,158	$1,658,604,696	$33,740	2.6%
6/30/2004	47,599	$1,645,412,496	$34,568	2.5%

KENTUCKY EMPLOYEES RETIREMENT SYSTEM (HAZARDOUS)

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1999	3,889	$103,970,148	$26,734	7.7%
6/30/2000	4,007	$115,135,008	$28,733	7.5%
6/30/2001	4,228	$123,647,407	$29,245	1.8%
6/30/2002	4,211	$125,371,604	$29,772	1.8%
6/30/2003	4,189	$129,088,956	$30,816	3.5%
6/30/2004	4,014	$126,664,812	$31,556	2.4%

COUNTY EMPLOYEES RETIREMENT SYSTEM (NON-HAZARDOUS)

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1999	74,151	$1,449,817,548	$19,552	4.1%
6/30/2000	77,419	$1,575,632,580	$20,352	4.1%
6/30/2001	78,773	$1,597,653,320	$20,282	(0.3%)
6/30/2002	79,850	$1,688,460,789	$21,145	4.3%
6/30/2003	82,288	$1,796,451,180	$21,831	3.2%
6/30/2004	80,922	$1,826,870,880	$22,576	3.4%

COUNTY EMPLOYEES RETIREMENT SYSTEM (HAZARDOUS)

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1999	7,488	$260,279,940	$34,760	3.7%
6/30/2000	7,951	$291,062,928	$36,607	5.3%
6/30/2001	8,586	$322,819,064	$37,598	2.7%
6/30/2002	8,949	$346,319,146	$38,699	2.9%
6/30/2003	9,286	$374,700,732	$40,351	4.3%
6/30/2004	9,349	$392,562,624	$41,990	4.1%

STATE POLICE RETIREMENT SYSTEM

Schedule of Active Member Valuation Data

Valuation Date	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1999	985	$40,548,636	$41,166	9.5%
6/30/2000	1,023	$43,596,396	$42,616	3.5%
6/30/2001	1,016	$44,209,944	$43,514	2.1%
6/30/2002	1,002	$43,961,844	$43,874	0.8%
6/30/2003	1,019	$43,760,832	$42,945	(2.1%)
6/30/2004	999	$43,835,208	$43,879	2.2%

ALL SYSTEMS

Schedule of Active Member Valuation Data

Valuation Date	Participating Employers	Active Participants	Annual Payroll	Annual Average Pay	% Increase In Average Pay
6/30/1999	1,531	132,337	$3,185,553,732	$24,072	4.8%
6/30/2000	1,610	137,297	$3,457,743,132	$25,184	4.6%
6/30/2001	1,706	140,383	$3,613,518,267	$25,740	2.2%
6/30/2002	1,727	142,567	$3,801,561,346	$26,665	3.6%
6/30/2003	1,778	145,940	$4,002,606,396	$27,426	2.9%
6/30/2004	1,801	142,883	$4,035,346,020	$28,242	2.9%

Kentucky Retirement Systems

Summary of Accrued & Unfunded Liabilities

(As of June 30, 2004)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM: PENSION FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1999	$4,531,905	($ 992,274)	(21.90%)	$5,524,179	$955,892
6/30/2000	$5,120,191	($2,022,698)	(39.50%)	$7,142,889	$1,618,710
6/30/2001*	$5,729,229	($1,477,191)	(25.80%)	$7,206,420	$63,531
6/30/2002	$6,348,164	($ 682,305)	(10.70%)	$7,030,468	($175,952)
6/30/2003	$6,877,342	$ 140,098	2.04%	$6,737,245	($293,223)
6/30/2004	$7,453,191	$1,055,465	14.16%	$6,397,727	($339,518)

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

KENTUCKY EMPLOYEES RETIREMENT SYSTEM: INSURANCE FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1999	$1,422,523	$1,064,238	74.80%	$358,284	$93,572
6/30/2000	$1,632,643	$1,130,871	69.30%	$501,772	$143,488
6/30/2001*	$1,984,034	$1,415,031	71.30%	$569,003	$67,231
6/30/2002	$2,144,503	$1,487,378	69.40%	$657,125	$88,122
6/30/2003	$2,376,389	$1,671,044	70.32%	$705,345	$48,220
6/30/2004	$2,659,409	$1,889,663	71.06%	$769,746	$64,401

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

COUNTY EMPLOYEES RETIREMENT SYSTEM: PENSION FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1999	$3,955,132	($1,241,746)	(31.40%)	$5,196,878	$923,616
6/30/2000	$4,453,155	($2,276,421)	(51.10%)	$6,729,576	$1,532,698
6/30/2001*	$4,900,143	($2,010,358)	(41.00%)	$6,910,500	$180,924
6/30/2002	$5,492,646	($1,390,653)	(25.30%)	$6,883,299	($27,202)
6/30/2003	$5,917,227	($836,358)	(14.13%)	$6,753,585	($129,714)
6/30/2004	$6,577,290	($68,174)	(1.04%)	$6,645,464	($108,121)

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

COUNTY EMPLOYEES RETIREMENT SYSTEM: INSURANCE FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1999	$1,801,154	$1,454,627	80.80%	$346,527	$90,941
6/30/2000	$2,066,653	$1,578,352	76.40%	$488,301	$141,774
6/30/2001*	$2,515,316	$1,954,682	77.40%	$569,634	$81,333
6/30/2002	$2,758,762	$2,073,581	75.20%	$685,181	$115,547
6/30/2003	$3,112,614	$2,323,364	74.64%	$789,250	$104,069
6/30/2004	$3,464,419	$2,568,442	74.14%	$895,977	$106,727

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

STATE POLICE RETIREMENT SYSTEM: PENSION FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1999	$314,021	($43,601)	(13.90%)	$357,623	$51,304
6/30/2000	$336,580	($122,589)	(36.40%)	$459,169	$101,546
6/30/2001*	$356,212	($99,949)	(28.10%)	$456,161	($3,008)
6/30/2002	$380,790	($58,165)	(15.30%)	$438,955	($17,205)
6/30/2003	$414,881	$1,818	0.44%	$413,064	($25,891)
6/30/2004	$437,482	$52,405	11.98%	$385,077	($27,987)

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

STATE POLICE RETIREMENT SYSTEM: INSURANCE FUND

(Expressed in Thousands)

Valuation Date	Actuarial Liability	Unfunded Liability	Percent Unfunded	Actuarial Value of Assets	Increase In Assets
6/30/1999	$125,797	$71,867	57.10%	$53,929	$12,519
6/30/2000	$138,867	$67,155	48.40%	$71,712	$17,783
6/30/2001*	$158,261	$78,398	49.50%	$79,864	$8,152
6/30/2002	$165,445	$78,578	47.50%	$86,867	$7,004
6/30/2003	$184,501	$93,753	50.81%	$90,748	$3,881
6/30/2004	$197,604	$100,981	51.10%	$96,623	$5,875

**Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

Kentucky Retirement Systems

Solvency Test

(As of June 30, 2004)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1999	$862,558	$1,935,471	$1,733,877	$5,524,180	100%	100%	157.2%
6/30/2000	$900,839	$2,378,236	$1,841,116	$7,142,889	100%	100%	209.9%
6/30/2001	$895,839	$2,756,127	$2,077,262	$7,206,420	100%	100%	171.1%
6/30/2002	$988,657	$3,352,392	$2,007,115	$7,030,468	100%	100%	134.0%
6/30/2003	$931,310	$3,980,318	$1,965,714	$6,737,248	100%	100%	92.9%
6/30/2004	$993,923	$4,627,968	$1,831,301	$6,397,727	100%	100%	42.4%

COUNTY EMPLOYEES RETIREMENT SYSTEM

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1999	$759,922	$1,600,392	$1,594,819	$5,196,879	100%	100%	177.90%
6/30/2000	$821,630	$1,904,182	$1,727,343	$6,729,576	100%	100%	231.80%
6/30/2001	$855,815	$2,185,378	$1,858,950	$6,910,501	100%	100%	208.10%
6/30/2002	$1,007,019	$2,525,608	$1,960,019	$6,883,299	100%	100%	171.00%
6/30/2003	$987,568	$2,838,286	$2,091,373	$6,753,585	100%	100%	140.0%
6/30/2004	$1,071,275	$3,329,550	$2,176,465	$6,645,464	100%	100%	103.1%

STATE POLICE RETIREMENT SYSTEM

(Expressed in Thousands)

Valuation Date	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
6/30/1999	$33,633	$187,163	$93,226	$357,623	100%	100%	146.80%
6/30/2000	$36,111	$199,749	$100,720	$459,169	100%	100%	221.70%
6/30/2001	$34,338	$224,433	$97,441	$456,161	100%	100%	202.60%
6/30/2002	$36,886	$252,499	$91,405	$438,955	100%	100%	163.60%
6/30/2003	$35,832	$290,013	$89,037	$413,064	100%	100%	98.0%
6/30/2004	$37,658	$318,665	$81,160	$385,077	100%	100%	35.4%

Kentucky Retirement Systems

KERS Retired Lives Summary

(As of June 30, 2004)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM (KERS)

	Non-Hazardous Retirees		*Hazardous Retirees*		*Total*	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	9,502	$11,053,223	361	$262,644	9,863	$11,315,867
Joint & Survivor						
100% to Beneficiary	2,264	$2,680,027	137	$121,962	2,401	$2,801,989
66 2/3% to Beneficiary	974	$1,923,195	50	$44,796	1,024	$1,967,991
50% to Beneficiary	1,706	$3,075,938	87	$99,499	1,793	$3,175,437
Pop-Up Option	3,600	$6,493,531	314	$323,529	3,914	$6,817,060
10 Years Certain	---	---	23	$26,912	23	$26,912
10 Years Certain & Life	2,629	$2,854,766	111	$77,596	2,740	$2,932,362
15 Years Certain & Life	741	$937,335	40	$35,613	781	$972,948
20 Years Certain & Life	626	$992,860	37	$35,802	663	$1,028,662
Social Security Option						
Basic Form	1,321	$2,125,023	57	$46,613	1,378	$2,171,636
Survivorship Option	1,329	$2,224,462	98	$109,603	1,427	$2,334,065
Partial Lump Sum Option						
PLSO 12 Month Basic	84	$92,025	8	$7,111	92	$99,136
PLSO 24 Month Basic	47	$41,526	8	$8,016	55	$49,542
PLSO 36 Month Basic	111	$58,763	22	$17,780	133	$76,543
PLSO 12 Month Survivor	43	$59,999	6	$6,590	49	$66,589
PLSO 24 Month Survivor	46	$68,658	9	$10,821	55	$79,479
PLSO 36 Month Survivor	91	$20,764	14	$9,059	105	$29,823
5 Years Only	0	$0		$0	0	$0
Dependent Child	0	$0		$0	0	$0
TOTAL	**25,114**	**$34,702,095**	**1,382**	**$1,243,946**	**26,496**	**35,946,041**

Kentucky Retirement Systems

CERS Retired Lives Summary

(As of June 30, 2004)

COUNTY EMPLOYEES RETIREMENT SYSTEM (CERS)

	Non-Hazardous Retirees		***Hazardous Retirees***		***Total***	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	11,542	$6,735,969	560	$929,772	12,102	$7,665,741
Joint & Survivor						
100% to Beneficiary	2,405	$1,700,279	427	$674,827	2,832	$2,375,106
66 2/3% to Beneficiary	725	$913,506	183	$401,439	908	$1,314,945
50% to Beneficiary	1,325	$1,373,459	286	$543,020	1,611	$1,916,479
Pop-Up Option	3,190	$3,357,122	1,216	$2,405,041	4,406	$5,762,163
10 Years Certain	1	$101	34	$57,920	35	$58,021
10 Years Certain & Life	3,424	$1,989,162	162	$257,872	3,586	$2,247,034
15 Years Certain & Life	877	$596,623	50	$72,153	927	$668,776
20 Years Certain & Life	619	$542,094	96	$153,715	715	$695,809
Social Security Option						
Basic Form	584	$654,309	97	$144,922	681	$799,231
Survivorship Option	658	$889,952	294	$418,023	952	$1,307,975
Partial Lump Sum Option						
PLSO 12 Month Basic	128	$83,762	14	$15,737	142	$99,499
PLSO 24 Month Basic	62	$32,857	12	$20,411	74	$53,268
PLSO 36 Month Basic	239	$90,159	17	$13,504	256	$103,663
PLSO 12 Month Survivor	78	$68,659	16	$31,732	94	$100,391
PLSO 24 Month Survivor	44	$26,413	16	$21,500	60	$47,913
PLSO 36 Month Survivor	173	$66,715	34	$41,154	207	$107,869
5 Years Only	1	$284	0	$0	1	$284
Dependent Child	0	$0	0	$0	0	$0
TOTAL	**26,075**	**$19,121,425**	**3,514**	**$6,202,742**	**29,589**	**$25,324,167**

Kentucky Retirement Systems

SPRS Retired Lives Summary

(As of June 30, 2004)

STATE POLICE RETIREMENT SYSTEM (SPRS)		
	Number	Monthly Benefits
Basic Form	87	$231,758
Joint & Survivor		
100% to Beneficiary	114	$281,995
66 2/3% to Beneficiary	69	$214,125
50% to Beneficiary	69	$207,437
Pop-Up Option	266	$794,136
10 Years Certain	5	$19,505
10 Years Certain & Life	25	$68,402
15 Years Certain & Life	10	$24,861
20 Years Certain & Life	30	$76,113
Social Security Option		
Basic Form	35	$76,564
Survivorship Option	162	$344,339
Partial Lump Sum Option		
PLSO 12 Month Basic	---	---
PLSO 24 Month Basic	---	---
PLSO 36 Month Basic	---	---
PLSO 12 Month Survivor	2	$8,391
PLSO 24 Month Survivor	1	$6,096
PLSO 36 Month Survivor	3	$7,523
5 Years Only	0	$0
Dependent Child	0	$0
TOTAL	**878**	**$2,361,245**

Kentucky Retirement Systems

KERS Beneficiary Summary

(As of June 30, 2004)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM (KERS)

	Non-Hazardous Retirees		*Hazardous Retirees*		*Total*	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Joint & Survivor						
100% to Beneficiary	1,884	$1,263,997	76	$46,134	1,960	$1,310,131
66 2/3% to Beneficiary	287	$175,561	4	$1,490	291	$177,051
50% to Beneficiary	549	$230,534	13	$4,237	562	$234,771
Pop-Up Option	275	$266,703	16	$8,450	291	$275,153
5 Years Certain	91	$92,704	7	$8,638	98	$101,342
10 Years Certain	123	$119,471	8	$4,967	131	$124,438
10 Years Certain & Life	132	$1,123,345	11	$7,351	133	$1,130,696
15 Years Certain & Life	102	$94,977	2	$700	104	$95,677
20 Years Certain & Life	103	$101,298	4	$982	107	$102,280
Social Security Option						
Survivorship Option	184	$226,723	10	$10,023	194	$236,746
Beneficiary Under 60	15	$5,744	0	$0	15	$5,744
Dependent Child	4	$1,211	13	$3,367	17	$4,578
Partial Lump Sum Option						
PLSO 12 Month Basic	0	$0	---	---	---	---
PLSO 24 Month Basic	1	$504	---	---	1	$504
PLSO 36 Month Basic	1	$162	---	---	1	$162
PLSO 12 Month Survivor	0	$0	1	$1,036	1	$1,036
PLSO 24 Month Survivor	1	$338	---	---	1	$338
PLSO 36 Month Survivor	2	$1,581	---	---	2	$1,581
TOTAL	**3,754**	**$3,704,853**	**165**	**$97,375**	**3,909**	**$3,802,228**

Kentucky Retirement Systems

CERS Beneficiary Summary

(As of June 30, 2004)

COUNTY EMPLOYEES RETIREMENT SYSTEM (CERS)

	Non-Hazardous Retirees		*Hazardous Retirees*		*Total*	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Joint & Survivor						
100% to Beneficiary	1,438	$600,841	99	$100,804	1,537	$701,645
66 2/3% to Beneficiary	165	$73,055	24	$26,667	189	$99,722
50% to Beneficiary	299	$96,655	27	$17,027	326	$113,682
Pop-Up Option	268	$159,904	70	$89,274	338	$249,178
5 Years Certain	193	$132,635	8	$4,375	201	$137,010
10 Years Certain	167	$99,700	22	$29,504	189	$129,204
10 Years Certain & Life	202	$105,212	8	$6,184	210	$111,396
15 Years Certain & Life	112	$72,828	5	$5,008	117	$77,836
20 Years Certain & Life	96	$68,115	21	$24,417	117	$92,532
Social Security Option						
Survivorship Option	69	$72,785	47	$61,297	116	$134,082
Beneficiary Under 60	4	$665	3	$2,303	7	$2,968
Dependent Child	4	$954	133	$41,222	137	$42,176
Partial Lump Sum Option						
PLSO 12 Month Basic	---	---	---	---	---	---
PLSO 24 Month Basic	---	---	---	---	---	---
PLSO 36 Month Basic	3	$809	1	$863	4	$1,672
PLSO 12 Month Survivor	4	$6,164	---	---	4	$6,164
PLSO 24 Month Survivor	2	$634	1	$142	3	$776
PLSO 36 Month Survivor	3	$1,083	---	---	3	$1,083
TOTAL	**3,029**	**$1,492,039**	**469**	**$409,087**	**3,498**	**$1,901,126**

Kentucky Retirement Systems

SPRS Beneficiary Summary

(As of June 30, 2004)

STATE POLICE RETIREMENT SYSTEM (SPRS)		
	Number	Monthly Benefits
Basic Form	4	$2,529
Joint & Survivor		
100% to Beneficiary	56	$122,609
66 2/3% to Beneficiary	1	$1,262
50% to Beneficiary	12	$15,996
Pop-Up Option	8	$17,526
10 Years Certain	1	$2,440
10 Years Certain & Life	0	$0
15 Years Certain & Life	0	$0
20 Years Certain & Life	6	$11,467
Social Security Option		
Basic Form	1	$1,824
Survivorship Option	17	$25,037
Partial Lump Sum Option		
PLSO 12 Month Basic	---	---
PLSO 24 Month Basic	---	---
PLSO 36 Month Basic	---	---
PLSO 12 Month Survivor	---	---
PLSO 24 Month Survivor	---	---
PLSO 36 Month Survivor	---	---
Dependent Child	7	$1,927
TOTAL	**113**	**$202,617**

KENTUCKY RETIREMENT SYSTEMS

Statistical Section

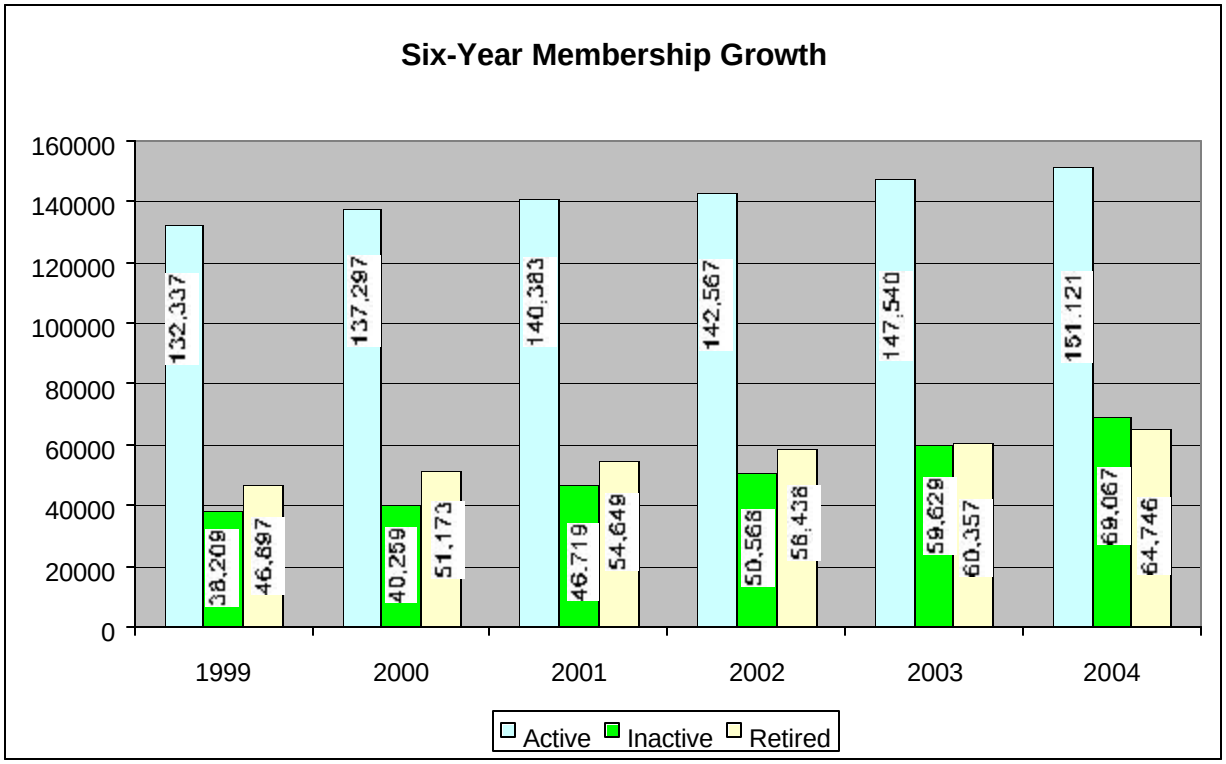
Comprehensive Annual Financial Report
June 30, 2004

Kentucky Retirement Systems

Membership by System

(As of June 30, 2004)

SYSTEM	ACTIVE	INACTIVE	RETIRED & BENEFICIARIES RECEIVING BENEFITS	TOTAL
KERS	51,207	24,366	28,910	104,483
KERS Hazardous	3,963	1,609	1,566	7,138
TOTAL KERS	**55,170**	**25,975**	**30,476**	**111,621**
CERS	85,317	41,497	29,150	155,964
CERS Hazardous	9,616	1,346	4,098	15,060
TOTAL CERS	**94,933**	**42,843**	**33,248**	**171,024**
SPRS	**1,018**	**249**	**1,022**	**2,289**
GRAND TOTAL	**151,121**	**69,067**	**64,746**	**284,934**



Kentucky Retirement Systems

Schedule of Participating Employers

KENTUCKY EMPLOYEES RETIREMENT SYSTEM	
Agency Classification	**Number of Agencies**
Agencies Reporting Through State Payroll	194
Other Agencies (universities, mental health boards, health departments)	141
Special Districts and Boards	4
Child Support Offices (county attorneys)	66
Other State-Administered Retirement Systems	3
TOTAL	**408**

COUNTY EMPLOYEES RETIREMENT SYSTEM	
Agency Classification	**Number of Agencies**
Area Development Districts	14
Boards of Education	176
Cities	259
County Attorneys	60
County Clerks	13
County Government Agencies	257
Fire Departments	63
Hospitals	3
Jailers	8
Libraries	83
Planning Commissions	9
Police Departments	65
Police & Fire Departments (combined)	42
Sanitation Districts	4
Sheriff Departments	45
Special Districts and Boards	175
Utility Boards	103
Urban County Government Agencies	4
TOTAL	**1,383**

STATE POLICE RETIREMENT SYSTEM	
Agency Classification	**Number of Agencies**
Kentucky State Police-Uniformed Officers	**1**

Kentucky Retirement Systems

SCHEDULE OF REVENUE BY SOURCE

(Expressed in thousands)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM				
Year Ending	**Member Contributions**	**Employer Contributions**	**Investment Income**	**Total**
June 30, 1999	$149,722	$126,959	$ 889,768	$1,166,449
June 30, 2000	$117,209	$136,688	$ 333,006	$ 586,903
June 30, 2001	$117,225	$114,210	($ 387,886)	($ 156,451)
June 30, 2002	$122,799	$119,494	($ 238,838)	$ 3,455
June 30, 2003	$148,677	$96,137	$219,325	$464,139
June 30, 2004	$140,625	$124,442	$692,407	$957,474

COUNTY EMPLOYEES RETIREMENT SYSTEM				
Year Ending	**Member Contributions**	**Employer Contributions**	**Investment Income**	**Total**
June 30, 1999	$121,484	$158,882	$ 818,969	$1,099,335
June 30, 2000	$125,152	$158,326	$ 295,579	$ 579,057
June 30, 2001	$128,876	$164,338	($ 317,544)	($ 24,330)
June 30, 2002	$159,524	$164,464	($ 288,882)	$ 35,106
June 30, 2003	$161,504	$173,241	$219,150	$553,895
June 30, 2004	$161,152	$208,050	$703,632	$1,072,834

STATE POLICE RETIREMENT SYSTEM				
Year Ending	**Member Contributions**	**Employer Contributions**	**Investment Income**	**Total**
June 30, 1999	$3,658	$ 9,463	$76,389	$ 89,510
June 30, 2000	$4,202	$10,216	$22,601	$ 37,019
June 30, 2001	$4,138	$ 9,629	($33,885)	($ 20,118)
June 30, 2002	$4,499	$ 9,562	($22,770)	($ 8,709)
June 30, 2003	$4,674	$ 7,634	$14,947	$27,255
June 30, 2004	$4,875	$ 9,608	$41,491	$55,974

Kentucky Retirement Systems

SCHEDULE OF EXPENSES BY TYPE

(Expressed in thousands)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM					
Year Ending	**Benefit Payments**	**Administrative Expenses**	**Refunds**	**Medical Insurance Expenses**	**Total**
June 30, 1999	$209,339	$3,448	$9,168	$25,829	$247,784
June 30, 2000	$258,999	$3,792	$9,041	$32,085	$303,917
June 30, 2001	$299,700	$4,461	$8,221	$39,618	$352,000
June 30, 2002	$355,869	$5,127	$7,798	$46,565	$415,359
June 30, 2003	$418,269	$5,363	$8,418	$54,944	$486,994
June 30, 2004	$476,230	$6,159	$9,411	$64,031	$555,831

COUNTY EMPLOYEES RETIREMENT SYSTEM					
Year Ending	**Benefit Payments**	**Administrative Expenses**	**Refunds**	**Medical Insurance Expenses**	**Total**
June 30, 1999	$165,107	$5,385	$10,924	$25,841	$207,257
June 30, 2000	$197,637	$6,228	$12,248	$31,705	$247,818
June 30, 2001	$226,776	$7,039	$10,313	$39,423	$283,551
June 30, 2002	$260,153	$8,197	$10,095	$46,267	$324,712
June 30, 2003	$302,849	$8,981	$12,007	$54,664	$378,501
June 30, 2004	$342,065	$9,951	$13,854	$63,852	$429,722

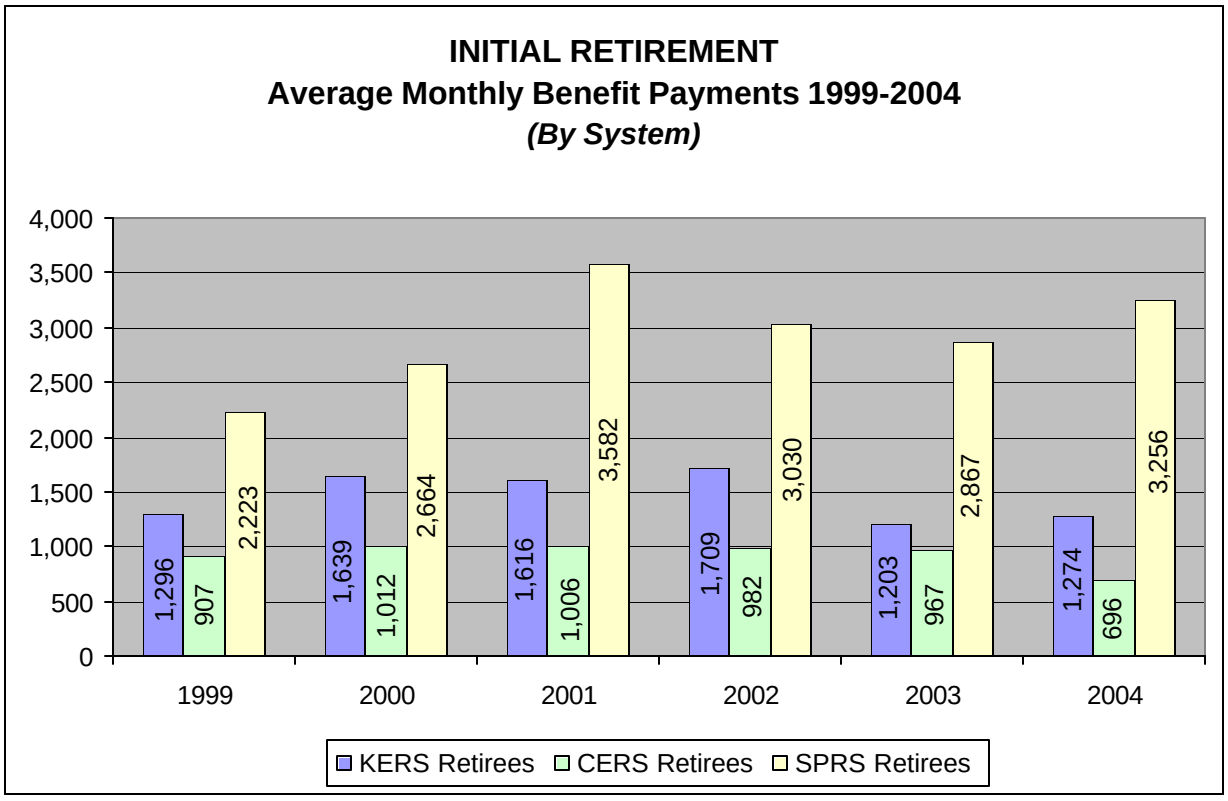
STATE POLICE RETIREMENT SYSTEM					
Year Ending	**Benefit Payments**	**Administrative Expenses**	**Refunds**	**Medical Insurance Expenses**	**Total**
June 30, 1999	$19,136	$68	$44	$2,754	$22,002
June 30, 2000	$19,974	$82	$80	$3,028	$23,164
June 30, 2001	$22,644	$92	$80	$3,575	$26,391
June 30, 2002	$24,839	$105	$25	$4,049	$29,018
June 30, 2003	$27,862	$86	$97	$4,550	$32,595
June 30, 2004	$30,877	$122	$96	$5,023	$36,118

Kentucky Retirement Systems

ANALYSIS OF INITIAL RETIREMENT

1999-2004

	1999	2000	2001	2002	2003	2004
KERS Retirees	1,648	2,323	2,083	2,457	2,565	2,653
Average Monthly Benefit	$1,296	$1,639	$1,616	$1,709	$1,203	$1,274
CERS Retirees	2,349	2,485	2,265	2,733	3,115	3,237
Average Monthly Benefit	$907	$1,012	$1,006	$982	$967	$696
SPRS Retirees	23	42	53	58	53	64
Average Monthly Benefit	$2,223	$2,664	$3,582	$3,030	$2,867	$3,256



Schedule of Benefit Expenses by Type

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	TOTAL
FY 1998-99				
Average Benefit	$630	$944	$662	$830
Retirees	4,267	12,755	1,848	18,870
Beneficiaries	807	936	670	2,413
Total Recipients	5,074	13,691	2,518	21,283
Monthly Benefits	$3,194,856	$12,927,270	$1,665,838	$17,787,964
% of Total Monthly Benefits	**18%**	**73%**	**9%**	**100%**
FY 1999-00				
Average Benefit	$663	$1,042	$675	$907
Retirees	4,360	14,323	1,977	20,660
Beneficiaries	804	978	689	2,471
Total Recipients	5,164	15,301	2,666	23,131
Monthly Benefits	$3,425,223	$15,949,488	$1,799,238	$21,173,949
% of Total Monthly Benefits	**16%**	**75%**	**9%**	**100%**
FY 2000-01				
Average Benefit	$706	$1,135	$702	$987
Retirees	4,348	15,624	2,068	22,040
Beneficiaries	795	1,015	702	2,512
Total Recipients	5,143	16,639	2,770	24,552
Monthly Benefits	$3,631,318	$18,878,492	$1,944,415	$24,454,225
% of Total Monthly Benefits	**15%**	**77%**	**8%**	**100%**
FY 2001-02				
Average Benefit	$763	$1,283	$737	$1,111
Retirees	4,341	17,193	2,104	23,638
Beneficiaries	796	1,039	696	2,531
Total Recipients	5,137	18,232	2,800	26,169
Monthly Benefits	$3,921,539	$23,392,161	$2,063,497	$29,377,197
% of Total Monthly Benefits	**13%**	**80%**	**7%**	**100%**
FY 2002-03				
Average Benefit	$1,054	$452	$931	$1,297
Retirees	370	1,882	87	2,339
Beneficiaries	19	59	2	80
Total Recipients	389	1,941	89	2,419
Monthly Benefits	$1,750,796	$6,225,808	$424,089	$8,400,693
% of Total Monthly Benefits	**21%**	**74%**	**5%**	**100%**
FY 2003-04				
Average Benefit	$1,131	$247	$848	$120
Retirees	482	2,116	93	2,691
Beneficiaries	51	80	1	132
Total Recipients	533	2,196	94	2,823
Monthly Benefits	$2,429,816	$5,406,360	$759,477	$8,595,653
% of Total Monthly Benefits	**28%**	**63%**	**9%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Section for a further delineation of retirement options by system.

Schedule of Benefit Expenses by Type

COUNTY EMPLOYEES RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	TOTAL
FY 1998-99				
Average Benefit	$466	$718	$604	$630
Retirees	5,365	12,609	2,350	20,324
Beneficiaries	603	578	636	1,817
Total Recipients	5,968	13,187	2,986	22,141
Monthly Benefits	$2,783,194	$9,472,665	$1,802,978	$14,058,837
% of Total Monthly Benefits	**20%**	**67%**	**13%**	**100%**
FY 1999-00				
Average Benefit	$478	$766	$612	$666
Retirees	5,628	14,179	2,633	22,440
Beneficiaries	620	609	639	1,868
Total Recipients	6,248	14,788	3,272	24,308
Monthly Benefits	$2,985,474	$11,328,818	$2,003,432	$16,317,724
% of Total Monthly Benefits	**18%**	**70%**	**12%**	**100%**
FY 2000-01				
Average Benefit	$499	$816	$638	$708
Retirees	5,840	15,516	2,846	24,202
Beneficiaries	632	649	673	1,954
Total Recipients	6,472	16,165	3,519	26,156
Monthly Benefits	$3,231,715	$13,192,315	$2,243,451	$18,667,481
% of Total Monthly Benefits	**17%**	**71%**	**12%**	**100%**
FY 2001-02				
Average Benefit	$532	$880	$667	$762
Retirees	6,025	16,999	3,132	26,156
Beneficiaries	664	695	531	1,890
Total Recipients	6,689	17,694	3,663	28,046
Monthly Benefits	$3,555,481	$15,563,130	$2,441,911	$21,560,522
% of Total Monthly Benefits	**17%**	**72%**	**11%**	**100%**
FY 2002-03				
Average Benefit	$659	$1,156	$765	$1,514
Retirees	766	1,849	157	2,772
Beneficiaries	15	44	5	64
Total Recipients	781	1,893	162	2,836
Monthly Benefits	$2,433,274	$5,035,337	$607,839	$8,076,450
% of Total Monthly Benefits	**30%**	**62%**	**8%**	**100%**
FY 2003-04				
Average Benefit	$570	$169	$838	$469
Retirees	875	2,190	186	3,251
Beneficiaries	82	107	3	192
Total Recipients	957	2,297	189	3,443
Monthly Benefits	$1,750,461	$6,732,785	$1,371,392	$9,854,638
% of Total Monthly Benefits	**18%**	**68%**	**14%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Section for a further delineation of retirement options by system.

Schedule of Benefit Expenses by Type

STATE POLICE RETIREMENT SYSTEM

	NORMAL	EARLY	DISABILITY	TOTAL
FY 1998-99				
Average Benefit	$2,495	$2,175	$1,024	$2,102
Retirees	98	550	38	686
Beneficiaries	23	5	23	51
Total Recipients	121	555	61	737
Monthly Benefits	$301,845	$1,206,862	$62,478	$1,571,185
% of Total Monthly Benefits	**19%**	**77%**	**4%**	**100%**
FY 1999-00				
Average Benefit	$2,522	$2,185	$1,062	$2,126
Retirees	98	585	40	723
Beneficiaries	25	5	21	51
Total Recipients	123	590	61	774
Monthly Benefits	$310,242	$1,289,260	$64,788	$1,664,290
% of Total Monthly Benefits	**19%**	**77%**	**4%**	**100%**
FY 2000-01				
Average Benefit	$2,677	$2,305	$1,107	$2,258
Retirees	99	632	36	767
Beneficiaries	27	6	18	51
Total Recipients	126	638	54	818
Monthly Benefits	$337,279	$1,470,596	$59,799	$1,867,674
% of Total Monthly Benefits	**18%**	**79%**	**3%**	**100%**
FY 2001-02				
Average Benefit	$2,851	$2,424	$1,133	$2,385
Retirees	105	682	26	813
Beneficiaries	26	7	28	61
Total Recipients	131	689	54	874
Monthly Benefits	$373,474	$1,670,425	$61,170	$2,105,069
% of Total Monthly Benefits	**18%**	**79%**	**3%**	**100%**
FY 2002-03				
Average Benefit	$3,116	$3,509	$1,705	$3,358
Retirees	10	38	2	50
Beneficiaries	0	0	0	0
Total Recipients	10	38	2	50
Monthly Benefits	$31,160	$133,351	$3,411	$167,922
% of Total Monthly Benefits	**19%**	**79%**	**2%**	**100%**
FY 2003-04				
Average Benefit	$3,796	$3,514	$639	$3,413
Retirees	5	51	1	57
Beneficiaries		4		4
Total Recipients	5	55	1	61
Monthly Benefits	$252,964	$520,575	$40,857	$814,396
% of Total Monthly Benefits	**31%**	**64%**	**5%**	**100%**

The information in the above tables includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from that shown in the Retired Lives Summary in the Actuarial Section. See the Retired Lives Summary and Beneficiary Summary in the Actuarial Section for a further delineation of retirement options by system.

Kentucky Retirement Systems

SCHEDULE OF RETIREES BY BENEFIT TYPE

(Cumulative Totals)

KENTUCKY EMPLOYEES RETIREMENT SYSTEM				
Year Ending	**Normal**	**Early**	**Disability**	**Total**
June 30, 1999	N/A	N/A	N/A	N/A
June 30, 2000	N/A	N/A	N/A	N/A
June 30, 2001	N/A	N/A	N/A	N/A
June 30, 2002	5,231	19,019	2,808	27,058
June 30, 2003	5,301	20,499	2,812	28,612
June 30, 2004	5,465	22,168	2,826	30,452

COUNTY EMPLOYEES RETIREMENT SYSTEM				
Year Ending	**Normal**	**Early**	**Disability**	**Total**
June 30, 1999	N/A	N/A	N/A	N/A
June 30, 2000	N/A	N/A	N/A	N/A
June 30, 2001	N/A	N/A	N/A	N/A
June 30, 2002	6,876	18,332	3,683	28,819
June 30, 2003	7,270	19,814	3,806	30,890
June 30, 2004	7,644	21,626	3,959	33,229

STATE POLICE RETIREMENT SYSTEM				
Year Ending	**Normal**	**Early**	**Disability**	**Total**
June 30, 1999	N/A	N/A	N/A	N/A
June 30, 2000	N/A	N/A	N/A	N/A
June 30, 2001	N/A	N/A	N/A	N/A
June 30, 2002	138	720	59	917
June 30, 2003	147	754	59	960
June 30, 2004	149	806	60	1,015

Kentucky Retirement Systems

COMPARISON OF AVERAGE MONTHLY BENEFITS BY LENGTH OF SERVICE

KENTUCKY EMPLOYEES RETIREMENT SYSTEM									
Service in Years	**Under 2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**31-35**	**Over 35**
Number of Recipients	1,165	1,174	3,809	3,935	3,655	3,906	6,623	4,353	1,848
Average Monthly Pay	$88	185	296	492	740	1,032	299	257	3,524

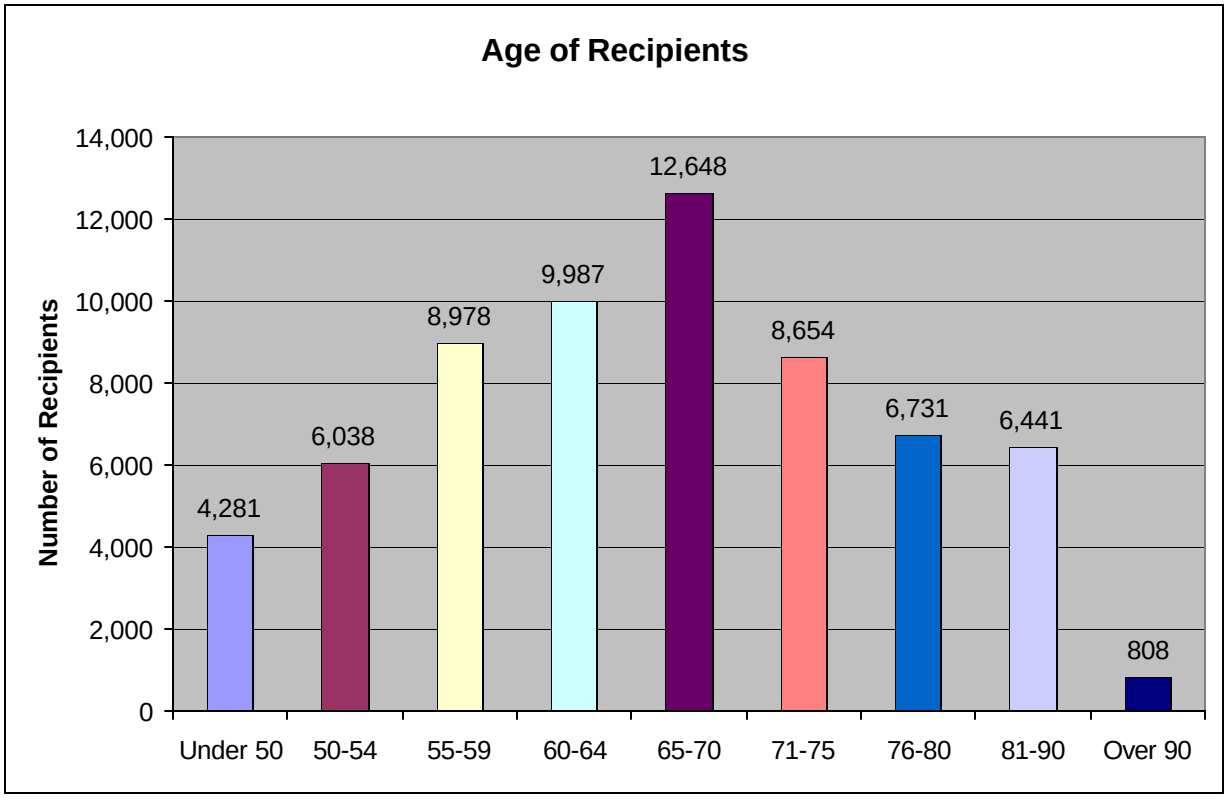
COUNTY EMPLOYEES RETIREMENT SYSTEM									
Service in Years	**Under 2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**31-35**	**Over 35**
Number of Recipients	1,382	1,618	6,415	6,271	4,869	5,337	5,207	1,592	510
Average Monthly Pay	$145	160	239	428	663	1,067	1,758	2,394	2,799

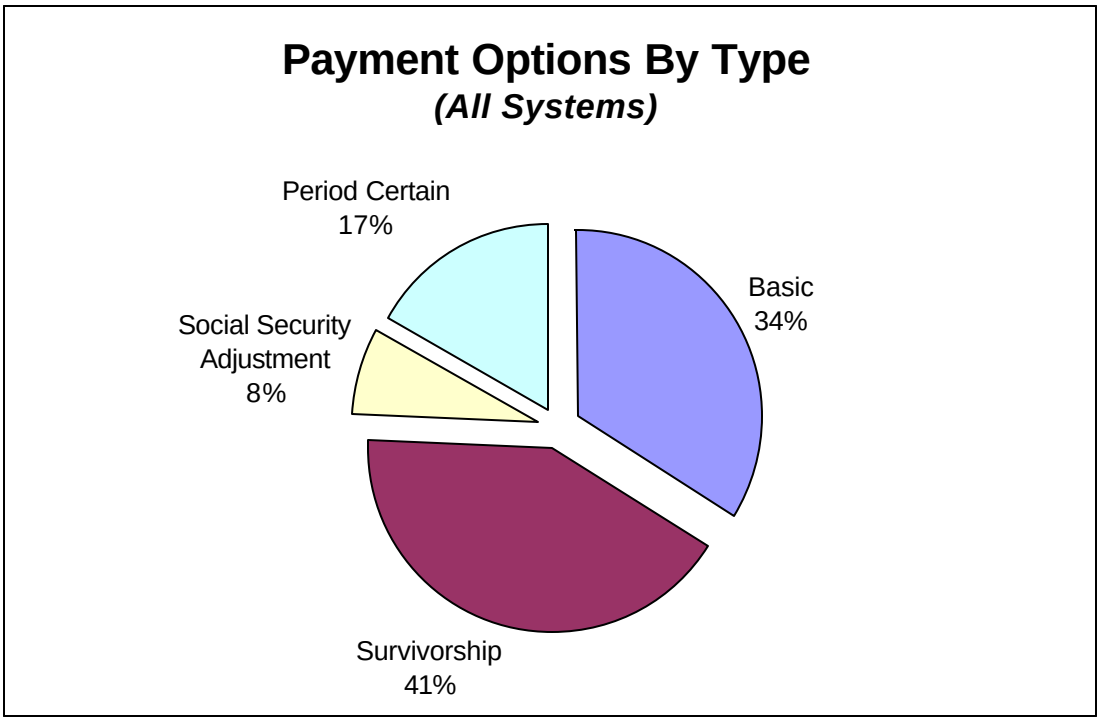
STATE POLICE RETIREMENT SYSTEM									
Service in Years	**Under 2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**31-35**	**Over 35**
Number of Recipients	41	28	28	29	69	247	320	179	56
Average Monthly Pay	$561	351	713	1,017	1,586	2,052	2,894	3,859	4,523

Kentucky Retirement Systems

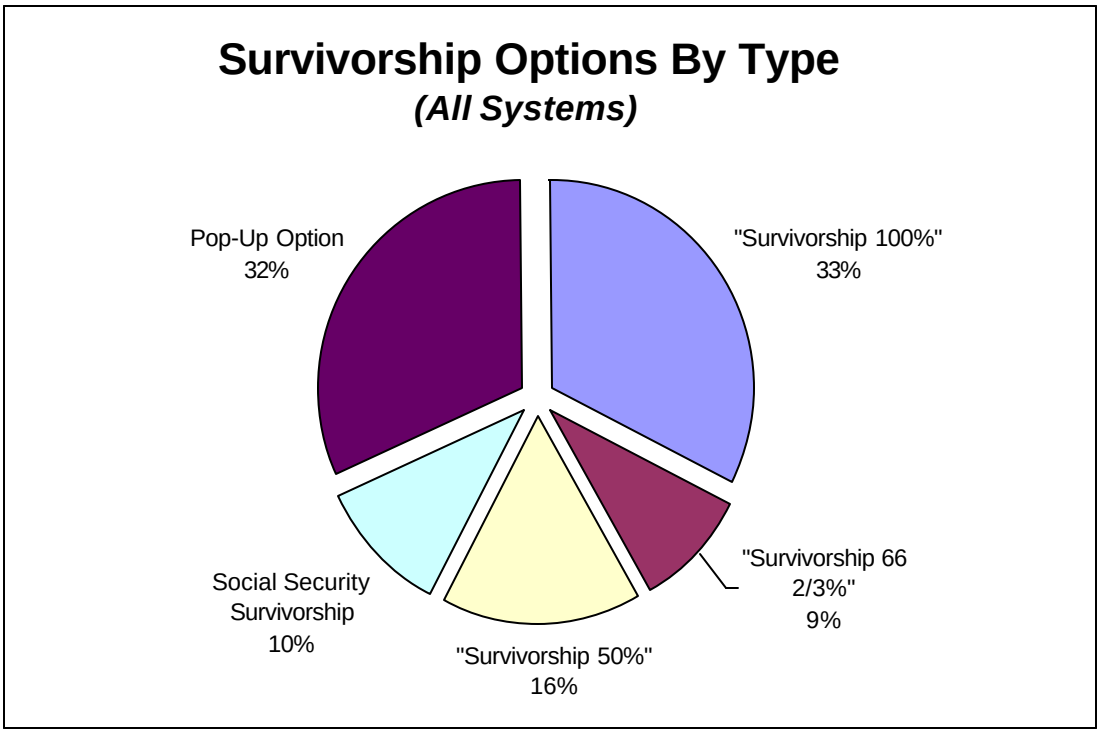
AGE OF RECIPIENTS

(All Systems Combined)





The Basic option is a single life annuity. Survivorship options include 100%, 66 2/3%, 50% and Pop-Up, which is a 100% survivorship option that increases to the Basic amount if the beneficiary dies or divorces the member prior to the member's death. Social Security Adjustment options provide enhanced benefits prior to age 62 and a reduced benefit after age 62. There are two Social Security Adjustment options: one with 100% survivorship and one with no survivor benefit.



Kentucky Retirement Systems

TOTAL FISCAL YEAR RETIREMENT PAYMENTS BY COUNTY

Jefferson	$145,841,705	**Grant**	$ 4,377,712	**Carroll**	$ 2,086,679
Franklin	107,979,459	**Harlan**	4,328,863	**Wolfe**	2,073,940
Fayette	47,166,889	**Knott**	3,839,454	**Pendleton**	2,064,257
Warren	19,114,260	**Bourbon**	3,835,602	**Allen**	2,050,097
Daviess	17,864,181	**Johnson**	3,819,763	**Powell**	1,936,068
Shelby	17,256,628	**Grayson**	3,633,086	**Butler**	1,769,955
Kenton	16,242,408	**Clay**	3,546,396	**Trimble**	1,720,644
Pulaski	15,350,575	**Logan**	3,509,495	**Livingston**	1,719,539
Christian	13,613,063	**Breathitt**	3,475,360	**Union**	1,693,088
Madison	13,489,001	**Knox**	3,417,915	**Jackson**	1,633,209
McCracken	12,492,731	**Montgomery**	3,387,855	**Webster**	1,628,940
Anderson	12,477,220	**Perry**	3,325,945	**Lee**	1,620,355
Hardin	12,320,399	**Trigg**	3,285,554	**Leslie**	1,573,288
Boone	10,161,650	**Caldwell**	3,179,746	**Magoffin**	1,571,665
Campbell	9,726,603	**Spencer**	3,157,663	**Lewis**	1,571,263
Oldham	9,537,122	**Taylor**	3,069,199	**Mclean**	1,548,216
Henry	8,539,120	**Wayne**	3,053,914	**Metcalfe**	1,545,191
Woodford	8,432,409	**Adair**	3,037,305	**Lawrence**	1,530,057
Bullitt	8,117,590	**Morgan**	3,007,811	**Todd**	1,519,518
Scott	7,784,918	**Russell**	2,984,284	**Green**	1,494,141
Laurel	7,444,611	**Lincoln**	2,952,841	**Mccreary**	1,425,040
Boyd	7,275,515	**Fleming**	2,908,101	**Cumberland**	1,278,569
Pike	6,996,032	**Greenup**	2,876,967	**Owsley**	1,260,829
Boyle	6,877,187	**Letcher**	2,828,156	**Clinton**	1,214,961
Hopkins	6,786,559	**Muhlenberg**	2,691,521	**Nicholas**	1,195,891
Henderson	6,669,827	**Marion**	2,676,824	**Menifee**	1,169,428
Calloway	6,581,452	**Breckinridge**	2,629,115	**Simpson**	1,164,151
Barren	6,419,478	**Harrison**	2,615,399	**Monroe**	1,137,770
Floyd	6,233,946	**Lyon**	2,399,858	**Ballard**	1,101,303
Jessamine	6,171,710	**Garrard**	2,377,449	**Bracken**	1,079,018
Whitley	6,076,492	**Ohio**	2,376,733	**Hancock**	1,041,292
Nelson	5,670,963	**Larue**	2,343,745	**Fulton**	1,006,563
Rowan	5,567,050	**Bath**	2,303,532	**Edmonson**	991,697
Graves	5,470,041	**Meade**	2,285,619	**Crittenden**	982,637
Owen	5,322,763	**Hart**	2,194,464	**Carlisle**	929,520
Marshall	5,157,322	**Casey**	2,165,069	**Martin**	885,693
Mercer	5,023,704	**Rockcastle**	2,154,589	**Elliott**	846,174
Clark	4,794,083	**Mason**	2,152,433	**Gallatin**	658,888
Bell	4,644,250	**Washington**	2,126,734	**Hickman**	487,170
Carter	4,403,388	**Estill**	2,096,269	**Robertson**	356,715

Payments to Recipients Living in Other States
$37,396,638

TOTAL PAYMENTS TO MEMBERS AND BENEFICIARIES FOR FY 2003-04
$843,482,699

KENTUCKY RETIREMENT SYSTEMS

Compliance Section

Comprehensive Annual Financial Report
June 30, 2004

Carpenter, Mountjoy & Bressler, PSC
Certified Public Accountants and Advisors

REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL REPORTING BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2004, and have issued our report thereon dated September 16, 2004. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Compliance

As part of obtaining reasonable assurance about whether Kentucky Retirement Systems' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under Government Auditing Standards.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Kentucky Retirement Systems' internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over financial reporting and its operation that we consider to be material weaknesses.

This report is intended for the information of the audit committee, management, and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

September 16, 2004
Louisville, Kentucky

Carpenter, Mountjoy & Bressler, PSC
2300 Waterfront Plaza
325 West Main Street
Louisville, Kentucky 40202-4244
Offices in Louisville, Lexington, Covington and Frankfort
Phone 502-992-2700
Fax 502-568-5626
mail@cmbcpa.com
www.cmbcpa.com
Independent Member of Ernst & Young Alliance

FOCUSED *On Your* FUTURE

Comprehensive Annual Financial Report

for fiscal year ended June 30, 2005

KENTUCKY RETIREMENT SYSTEMS

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

A COMPONENT UNIT OF THE COMMONWEALTH OF KENTUCKY

Kentucky Retirement Systems

A Component Unit of the Commonwealth of Kentucky.

Comprehensive Annual Financial Report

For the Fiscal Year Ended ***June 30, 2005***

Prepared by the executive staff of
Kentucky Retirement Systems
Peremiter Park West
1260 Louisville Road
Frankfort, KY 40601
Phone: (502) 696-8800
Fax: (502) 696-8822
www.kyret.com

The cost of printing this CAFR is part of the administrative expense of the systems.

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KENTUCKY RETIREMENT SYSTEMS
Peremiter Park
1260 Louisville Road
Frankfort, Kentucky 40601

Kentucky Employees Retirement Systems
County Employees Retirement Systems
State Police Retirement Systems

William P. Hanes Esq.
Executive Director
Phone: 502-696-8800
FAX: 502-696-8801
www.kyret.com

November 18, 2005

The Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601-6124

Dear Board of Trustees and Members:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year ended June 30, 2005. Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the management of the Systems.

The CAFR is divided into five sections:

- An Introductory Section, containing the administrative organization and letter of transmittal.
- A Financial Section, containing the report of the independent Auditor, the financial statements of the systems and certain required supplementary information.
- An Investment Section, containing a report on investment activity, investment policies, investment results and various investment schedules.
- An Actuarial Section, containing the Actuary's Certification Letter and the results of the annual actuarial valuation.
- A Statistical Section, containing information about plan participants and recipients.

We present this information to assist the Board and the members of the retirement systems in understanding the systems' financial and actuarial status. This CAFR was prepared to conform with the principles of governmental accounting and reporting set forth by the Governmental Accounting Standard Board. Transactions of the system are reported on the accrual basis of accounting. Additionally, sufficient internal accounting controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and

supporting schedules. Please refer to Management's Discussion and Analysis on page 27 for more information.

History

KERS was created in 1956 by the Kentucky State Legislature in order to supplement the benefits provided by Social Security. When the first actuarial valuation was completed June 30, 1957, there were 16,000 employees participating in KERS and assets of $2.8 million. SPRS and CERS were established in 1958. The first actuarial valuation of SPRS was conducted June 30, 1959. No actuarial valuation of CERS was conducted until June 30, 1960 because the statutes did not authorize retirements from the system prior to July 1, 1960. On June 30, 1960, there were 68 counties and 2,617 employees participating in CERS, and SPRS included 415 uniformed state troopers.

As of June 30, 2005, there were more than 290,000 active, inactive and retired members in the combined systems and approximately $14.3 billion in assets. A breakdown of membership by system is provided in the Statistical Section.

The staff of Kentucky Retirement Systems provides detailed benefit estimates to members upon request. Counselors are available at the Frankfort office for individual counseling, both in office by appointment and by telephone during normal business hours. In addition, staff conducts individual counseling sessions at sites throughout the state and holds preretirement seminars to help members prepare for retirement. Information including an online benefit calculator is available online at http://www.kyret.com.

Major Initiatives

In February 2005, The Board of Trustees received an Organizational and Operational Review completed by L.R. Wechsler, Ltd. The purpose of the review was to focus on business processes and the technology needed to provide services to members in the future. Several initiatives were immediately undertaken including the installation of a new phone system more capable of handling the million plus calls KRS receives each year.

KRS Administrative staff worked to move forward on other initiatives recommended by the Wechsler Review including the Line of Business Project, which has begun with the hiring of a project manager and will continue to move forward in the next fiscal year.

KRS embarked on a project of self-insuring the Medicare eligible retirees during this fiscal year. The Systems have teamed up with Wausau Benefits and Walgreen's to offer three levels of gap coverage to the membership. Additional work is expected over the course of the next several years in the medical benefits area, including drug benefits.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its CAFR for the fiscal year ended June 30, 2004. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. This was the sixth consecutive year that KRS has achieved this award.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Investments

The Board of Trustees of the Kentucky Retirement Systems has a statutory obligation to invest the Systems' funds in accordance with the "prudent person rule." The prudent person rule states that fiduciaries shall discharge their investment duties with the same degree of diligence, care and skill that a prudent person would ordinarily exercise under similar circumstances in a comparable position.

The Board has managed the funds in recognition of the basic long-term nature of the systems. The Board has interpreted this to mean that the assets of the systems should be actively managed — that is, investment decisions regarding the particular securities to be purchased or sold shall be the result of the conscious exercise of discretion. The Board has further recognized that proper diversification of assets must be maintained. The asset allocation can be found in the Investment Section of this CAFR.

The Board's policies have provided significant returns over the long term while minimizing investment related expenses. Despite continued reductions in employer contributions and increasing negative cash flow, the systems' pension and insurance funds increased $526 and $227 million, respectively.

Actuarial Funding

The Kentucky Retirement Systems' funding objective is to meet long-term benefit promises through contributions that remain fairly level as a percent of active member payroll. The progress towards achieving the intended funding objectives for both the pension and insurance funds can be measured by the funding level of the actuarial assets of each fund to the actuarial liabilities. The

funding level for the pension funds are 73.6% for KERS Non-Hazardous, 92.3% for KERS Hazardous, 93.9% for CERS Non-Hazardous, 80.9% for CERS Hazardous and 77.1% for SPRS. These funding levels will fluctuate over time with experience deviations. Since 2001, all systems have experienced reductions in the funding levels relative to the pension due to investment returns less than the assumed rate, higher than anticipated retirements and increasing payments for retiree cost of living adjustments.

The medical insurance benefit, created in 1978, is not at the same level of funding. Total actuarial liabilities for the Insurance Fund exceed assets by+ $5.5 billion. The Insurance Funds continue to be a primary concern of the Kentucky Retirement Systems.

Detailed information of the actuarial soundness of the systems can be found in the Actuarial Section of this report.

Professional Services

A listing of the Board's contracted consultants can be found in the organizational chart on page 10. A listing of the external investment managers can be found on page 97 in the Investment Section.

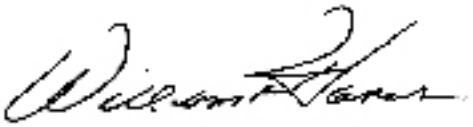
Other Information

Kentucky statutes require an annual audit by an independent certified public accountant or the Auditor of Public Accounts. Carpenter, Mountjoy & Bressler PSC performed the audit for the fiscal year ended June 30, 2005, and the results of that audit are contained in the Financial Section. The firm gave the Systems an unqualified opinion and also indicated that the financial statements present fairly, in all material respects, the plan net assets of Kentucky Retirement Systems.

The compilation of this report reflects the combined efforts of the KRS administrative staff under the leadership of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with statutory provisions, and as a means of determining responsible stewardship of the Systems' funds.

The report is available to all employers participating in the Kentucky Retirement Systems. They form the link between the systems and its membership, and their cooperation contributes significantly to the success of the Kentucky Retirement Systems. We hope the employers and their employees find this report informative. This and past CAFRs can be found on the Systems' web site, **www.kyret.com**.

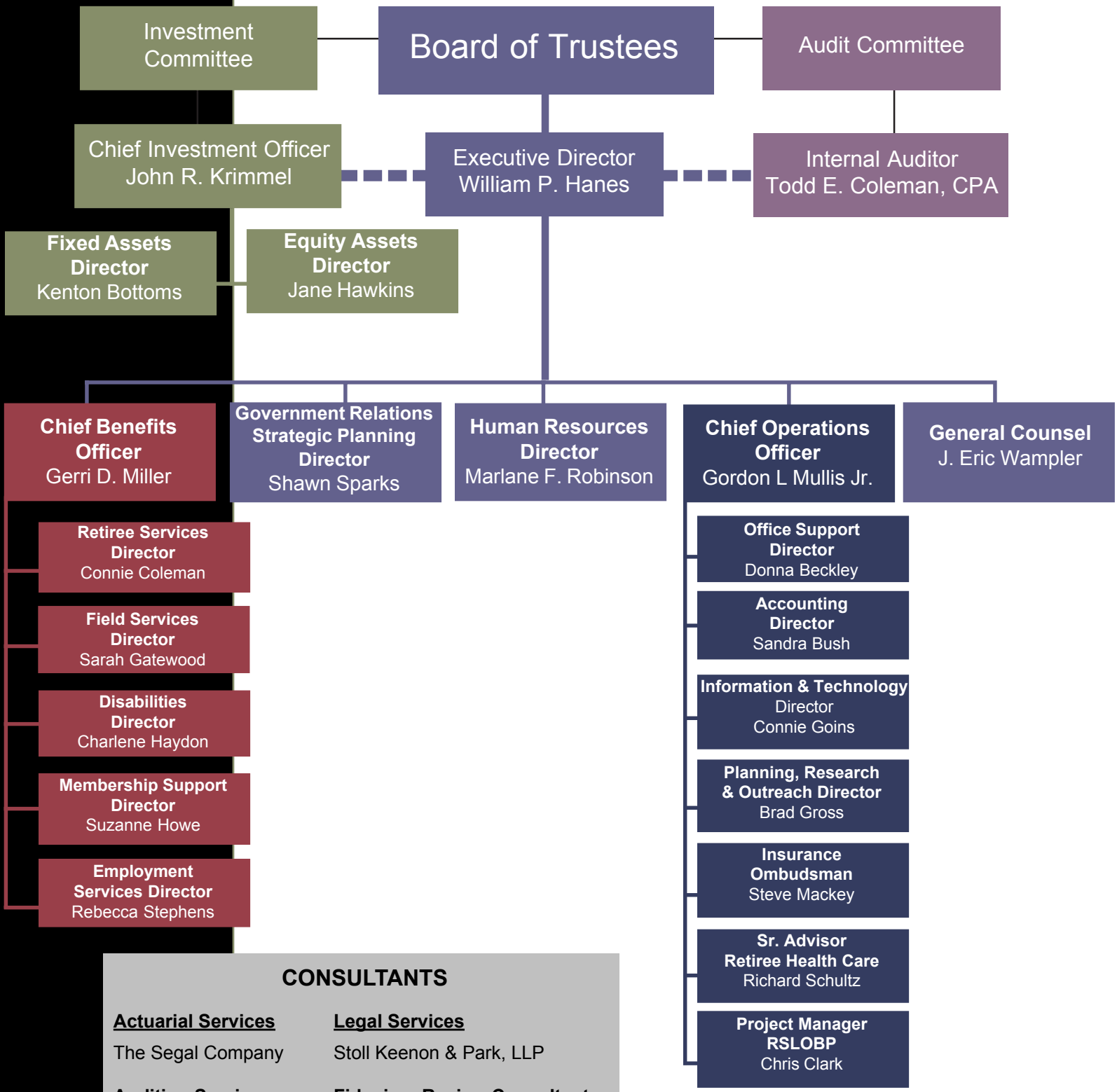
On behalf of the Board of Trustees, I would like to take this opportunity to express my gratitude to the staff, the advisors and the many people who have worked so diligently to assure the successful operation of the Kentucky Retirement Systems.



William P. Hanes, Esq.
Executive Director

Kentucky Retirement Systems

Organizational Chart



CONSULTANTS

Actuarial Services
The Segal Company

Auditing Services
Carpenter, Mo untjoy & Bressler, PSC

Legal Consultant
Klausner & Kaufman

Legal Services
Stoll Keenon & Park, LLP

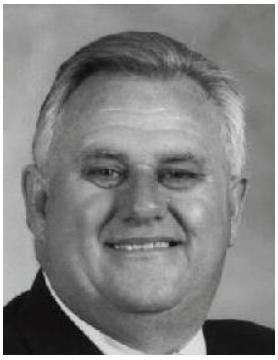
Fiduciary Review Consultant
Ice Miller

Asset Management
Mercer Investment Consulting, Inc.

2005 KRS Board of Trustees

A nine-member Board of Trustees administers the Systems: two trustees elected by KERS members; two trustees elected by CERS members; one trustee elected by SPRS members; three trustees appointed by the Governor; and the Secretary of the State Personnel Cabinet. One of the trustees appointed by the Governor must be knowledgeable about the impact of pensions on local governments. Elected trustees may serve no more than five terms consecutively.

Randy J. Overstreet, *Chair*
Elizabethtown
Elected by SPRS
Term Expires March 31, 2007



Walter J. Pagan, , *Vice Chair*
Wilder
Appointed by Governor
Term Expires March 31, 2008

Vince Lang
Frankfort
Elected by CERS
Term Expires March 31, 2009

Lynn T. Harpring
Louisville
Appointed by Governor
Term Expires March 31, 2008

Bobby D. Henson
Frankfort
Elected by KERS
Term Expires March 31, 2006

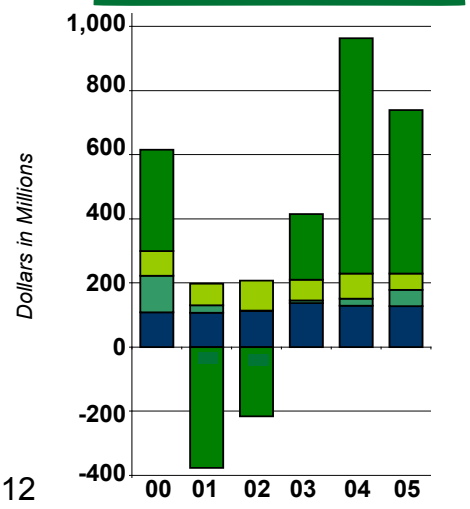
Susan Smith Horne
Lexington
Elected by KERS
Term Expires March 31, 2006

Larry C. Conner
Lexington
Appointed by Governor
Term Expires March 31, 2007

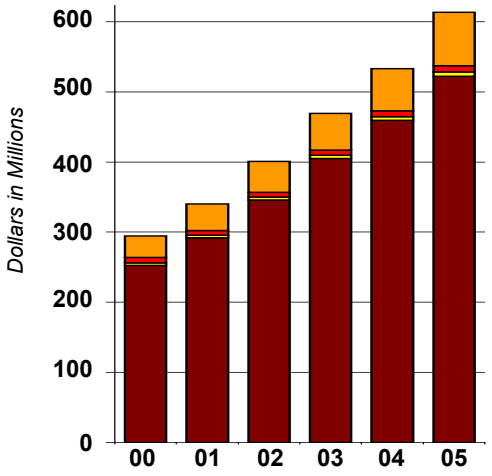
Erwin Roberts
Louisville
Secretary, Personnel Cabinet
Term Expires Ex-Officio

Patricia Ballenger
Lexington
Elected by CERS
Term Expires March 31, 2009

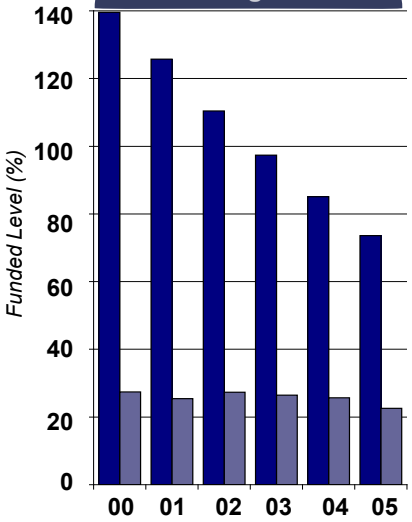
Net Plan Assets Additions



Net Plan Asset Deductions



Funding Level



Kentucky Employees Retirement System Non-Hazardous

The Kentucky Employees Retirement System (KERS) was established July 1, 1956 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that averages 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.

	2000	2001	2002	2003	2004	2005
Net Plan Assets Additions			*(Dollars in Millions)*			
Net Investment Income	315.1	376.9	216.8	204.2	734.6	510.5
Employer Cont. (Ins.)	76.3	66.9	93.9	65.3	78.0	51.4
Employer Cont. (Pen.)	115.1	23.5	1.8	7.6	21.7	50.3
Member Contribution	107.8	106.6	112.0	137.1	129.1	127.8
Net Plan Assets Deductions			*(Dollars in Millions)*			
Medical Insurance Exp.	30.5	37.6	44.1	52.0	60.5	76.0
Refunds	7.9	7.0	6.7	7.3	8.0	8.8
Administrative Exp.	3.3	3.8	4.4	5.0	5.3	5.9
Benefit Payments	252.8	291.7	345.7	404.9	459.4	522.4
Funding Level			*(% of Actuarial Assets to Actuarial Liabilities)*			
Pension	139.6	125.7	110.4	97.4	85.1	73.6
Insurance	27.4	25.4	27.3	26.5	25.7	22.6

System Highlights

Members

Active Members:	47,118
Inactive Members:	28,345
Retired Members and Beneficiaries:	30,770

Active Membership

Average Age:	42.9
Average Years of Service:	9.8
Average Annual Salary:	$35,144

Retired Membership

Average Age:	66.1
Average Annual Benefit:	$16,553
Number Added:	2,481
Number Removed:	603

Normal Retirement

The KERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member may be partially, or fully paid by KRS depending upon the member's years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	5% per year for 5 years before age 65 or 27 years of service. 4% for each year thereafter.
Any	25	5% each year for five years before 65 or 27 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$5,362,631,000
Insurance Fund:	$ 610,901,000
Total:	$5,973,532,000

Contributions

Employees:		5%
Employers:	Pension:	10.68%
	Insurance:	6.45%
	Total	17.13%

(Rate Effective July 1,2006)

KERS employer rates are subject to state budget approval.

System Highlights

Members

Active Members:	4,274
Inactive Members:	2,304
Retired Members and Beneficiaries:	1,752

Active Membership

Average Age:	41.9
Average Years of Service:	7.1
Average Annual Salary:	$30,811

Retired Membership

Average Age:	60.5
Average Annual Benefit:	$11,210
Number Added:	234
Number Removed:	31

Normal Retirement

The KERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member and eligible dependents may be partially, or fully paid by KRS depending upon the member's type and years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	5.5% per year for 5 years before age 55 or 20 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$ 398,308,000
Insurance Fund:	$ 188,871,000
Total:	$ 587,179,000

Contributions

Employees:		8 %
Employers:	Pension:	9.28 %
	Insurance:	14.04 %
	Total:	23.32 %

(Rate Effective July 1,2006)

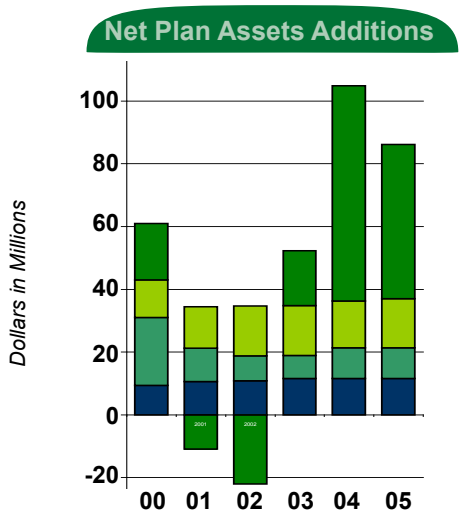
KERS employer rates are subject to state budget approval.

Kentucky Employees Retirement System Hazardous

The Kentucky Employees Retirement System (KERS) was established July 1, 1956 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that average 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.

	2000	2001	2002	2003	2004	2005
Net Plan Assets Additions	*(Dollars in Millions)*					
Net Investment Income	17.9	10.9	22.0	17.6	68.6	49.1
Employer Cont. (Ins.)	12.0	13.2	15.9	15.9	15.0	15.7
Employer Cont. (Pen.)	21.6	10.6	7.9	7.3	9.8	9.8
Member Contribution	9.4	10.6	10.8	11.6	11.5	11.6
Net Plan Assets Deductions	*(Dollars in Millions)*					
Medical Insurance Exp.	1.6	2.0	2.5	3.0	3.6	4.9
Refunds	1.1	1.3	1.1	1.2	1.4	1.8
Administrative Exp.	.3	.3	.4	.4	.4	.5
Benefit Payments	6.2	8.0	10.2	13.4	16.9	20.5
Funding Level	*(% of Actuarial Assets to Actuarial Liabilities)*					
Pension	138.1	126.8	116.9	108.1	98.4	92.3
Insurance	58.4	55.7	57.4	53.5	52.3	48.6

ENFORCEMENT
KENTUCKY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60
40
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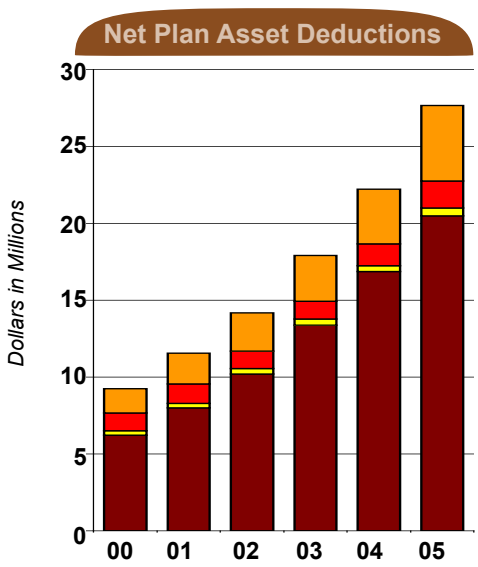
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Dollars in Millions
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10
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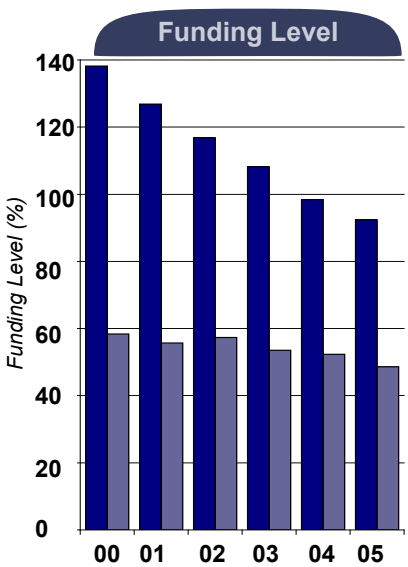
02
03
04
05


Funding Level
Funding Level (%)
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120
100
80
60
40
20
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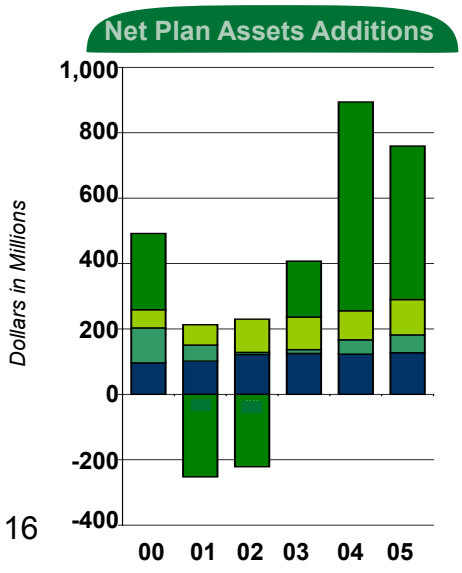
03
04
05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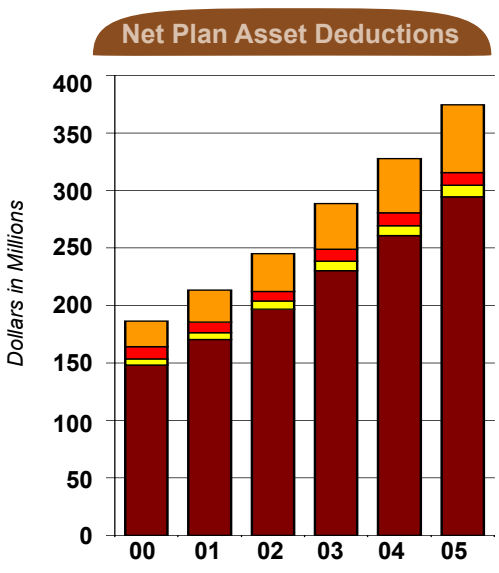
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Dollars in Millions
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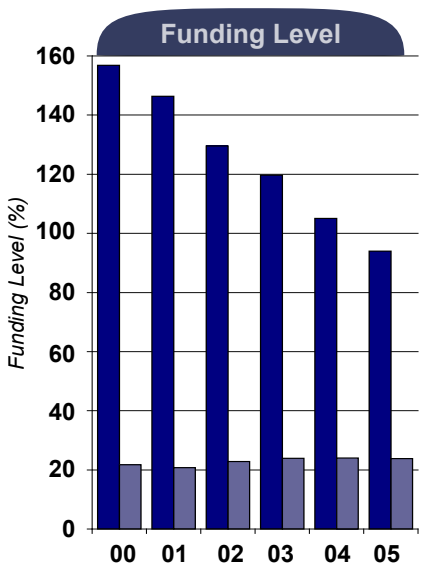
05


Funding Level
Funding Level (%)
160
140
120
100
80
60
40
20
0
00
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02
03
04
05

County Employees Retirement System Non-Hazardous

The County Employees Retirement System (CERS) was established July 1, 1958 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that average 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim. For school board employees participating in the CERS non-hazardous plan, a regular full-time position is defined as a position that requires the employee to average 80 hours of work per month over the actual days worked during the school year.

	2000	2001	2002	2003	2004	2005
Net Plan Assets Additions			(Dollars in Millions)			
Net Investment Income	233.1	252.1	151.5	170.7	637.7	469.4
Employer Cont. (Ins.)	55.2	62.3	102.2	99.2	89.3	107.6
Employer Cont. (Pen.)	106.6	48.9	5.5	11.9	44.0	54.6
Member Contribution	96.7	101.6	122.4	125.3	122.5	127.6
Net Plan Assets Deductions			(Dollars in Millions)			
Medical Insurance Exp.	22.1	27.8	33.0	39.7	47.0	58.7
Refunds	10.8	9.0	8.3	10.2	11.3	11.0
Administrative Exp.	5.5	6.2	7.2	8.2	8.7	10.0
Benefit Payments	148.0	170.3	196.7	230.3	260.6	294.6
Funding Level			(% of Actuarial Assets to Actuarial Liabilities)			
Pension	156.9	146.3	129.6	119.7	105.1	94.0
Insurance	21.8	20.7	22.8	23.9	24.00	23.8

System Highlights

Members

Active Members	81,240
Inactive Members	48,869
Retired Members and Beneficiaries	31,347

Active Membership

Average Age	45.0
Average Years of Service	8.1
Average Annual Salary	$23,206

Retired Membership

Average Age	67.4
Average Annual Benefit	$8,919
Number Added	2,808
Number Removed	590

Normal Retirement

The CERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member may be partially, or fully paid by KRS depending upon the member's years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	5% per year for 5 years before age 65 or 27 years of service. 4% for each year thereafter.
Any	25	5% each year for five years before 65 or 27 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$4,893,600,000
Insurance Fund:	$ 668,485,000
Total:	$5,562,085,000

Contributions

Employees:		5%
Employers:	Pension:	5.97%
	Insurance:	7.22%
	Total	13.19%

(Rate Effective July 1,2006)

System Highlights

Members

Active Members	9,464
Inactive Members	1,971
Retired Members and Beneficiaries	4,361

Active Membership

Average Age	38.0
Average Years of Service	8.2
Average Annual Salary	$43,441

Retired Membership

Average Age	57.6
Average Annual Benefit	$20,460
Number Added	403
Number Removed	47

Normal Retirement

The KERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member and eligible dependents may be partially, or fully paid by KRS depending upon the member's type and years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	5.5% per year for 5 years before age 55 or 20 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$1,411,246,000
Insurance Fund:	$ 360,940,000
Total:	$1,772,186,000

Contributions

Employees:		8 %
Employers:	Pension:	13.11 %
	Insurance:	15.10 %
	Total:	28.21 %

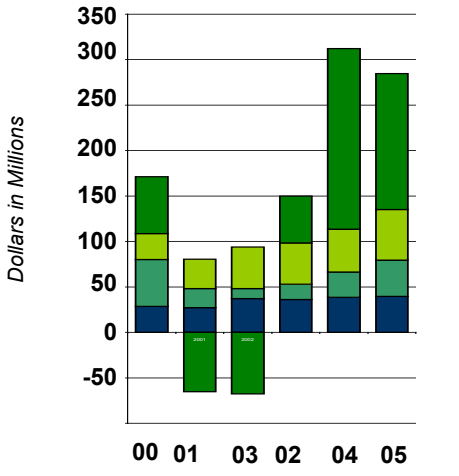
(Rate Effective July 1,2006)

County Employees Retirement System Hazardous

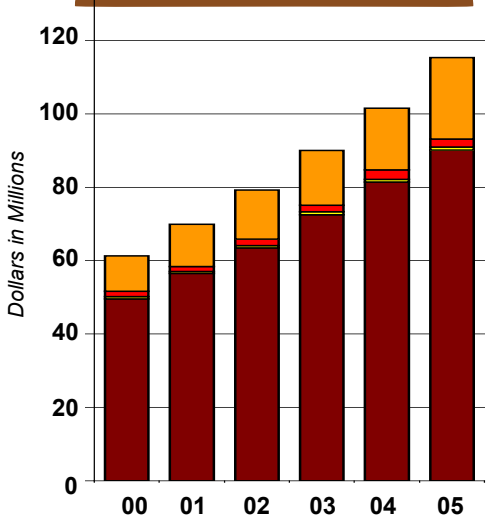
The County Employees Retirement System (CERS) was established July 1, 1958 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that average 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.

	2000	2001	2002	2003	2004	2005
Net Plan Assets Additions	*(Dollars in Millions)*					
Net Investment Income	62.5	65.4	67.6	51.6	199.0	148.7
Employer Cont. (Ins.)	28.3	32.1	45.7	45.2	47.0	55.6
Employer Cont. (Pen.)	51.7	21.0	11.1	16.9	27.6	39.9
Member Contribution	28.5	27.3	37.1	36.2	38.7	39.5
Net Plan Assets Deductions	*(Dollars in Millions)*					
Medical Insurance Exp.	9.6	11.5	13.3	15.0	16.8	22.2
Refunds	1.5	1.3	1.8	1.8	2.5	2.1
Administrative Exp.	.6	.5	.6	.7	.8	.9
Benefit Payments	49.6	56.5	63.5	72.5	81.4	90.1
Funding Level	*(% of Actuarial Assets to Actuarial Liabilities)*					
Pension	133.3	124.5	111.9	97.8	88.8	80.9
Insurance	28.1	27.4	30.0	28.8	30.3	28.0

Net Plan Assets Additions



Net Plan Asset Deductions



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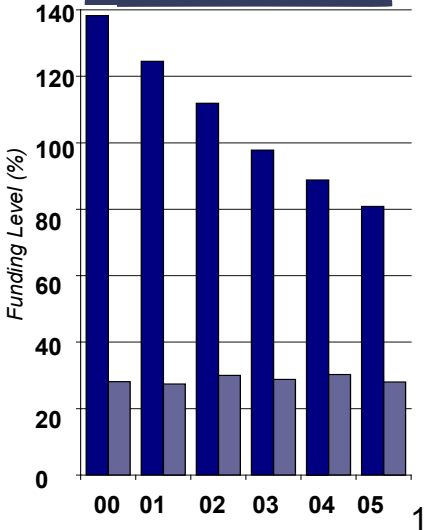
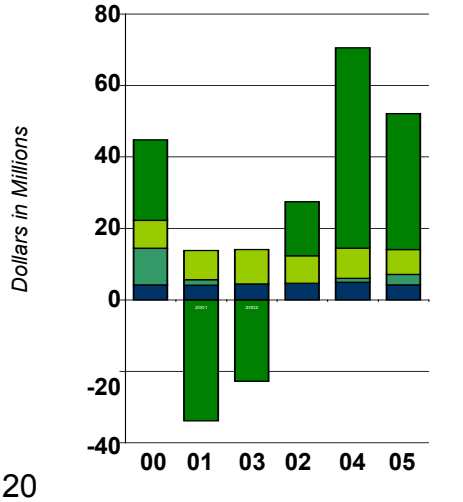
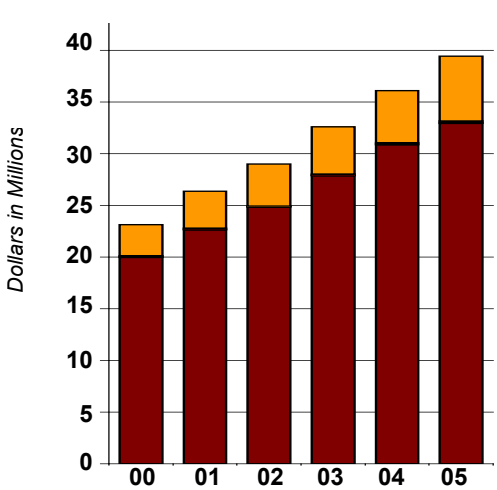


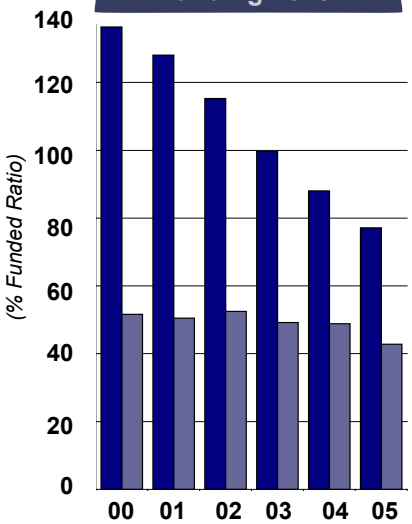
Net Plan Assets Additions



Net Plan Asset Deductions



Funding Level



State Police Retirement System

The State Police Retirement System (SPRS) was established July 1, 1960 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that average 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.

	2000	2001	2002	2003	2004	2005
Net Plan Assets Additions			(Dollars in Millions)			
Net Investment Income	22.6	33.9	22.8	15.1	56.1	38.0
Employer Cont. (Ins.)	7.8	8.1	9.6	7.7	8.5	7.0
Employer Cont. (Pen.)	10.2	1.5	0	0	1.2	2.9
Member Contribution	4.2	4.1	4.5	4.7	4.9	4.2
Net Plan Assets Deductions			(Dollars in Millions)			
Medical Insurance Exp.	3.0	3.6	4.0	4.5	5.0	6.3
Refunds	.1	.1	0	.1	.2	.1
Administrative Exp.	.1	.1	.1	.1	.1	.1
Benefit Payments	20.0	22.6	24.8	27.9	30.8	32.9
Funding Level			(% of Actuarial Assets to Actuarial Liabilities)			
Pension	136.4	128.1	115.3	99.6	88.0	77.1
Insurance	51.6	50.5	52.5	49.2	48.9	42.8

System Highlights

Members

Active Members	987
Inactive Members	252
Retired Members and Beneficiaries	1,036

Active Membership

Average Age	36.5
Average Years of Service	10.6
Average Annual Salary	$44,296

Retired Membership

Average Age	59.2
Average Annual Benefit	$31,838
Number Added	50
Number Removed	6

Normal Retirement

The SPRS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member and eligible dependents may be partially, or fully paid by KRS depending upon the member's type and years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
Any	15	5.5% each year for five years before 55 or 20 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the average consumer price index for all urban consumers for the most recent calendar year not to exceed 5%. The General Assembly may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

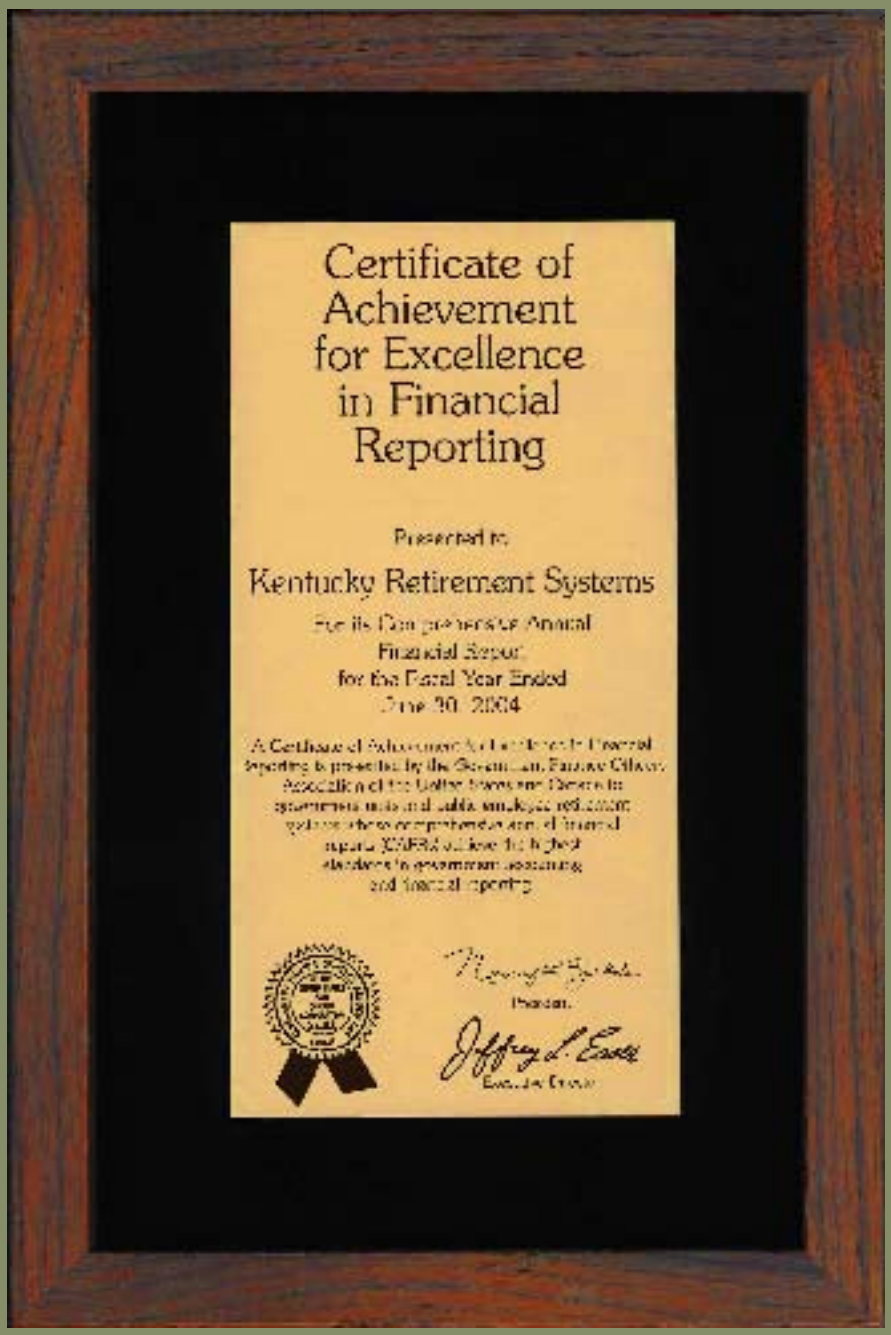
Pension Fund:	$ 339,406,000
Insurance Fund:	$ 99,408,000
Total:	$ 438,814,000

Contributions

Employees:		8%
Employers:	Pension:	20.64 %
	Insurance:	21.66 %
	Total:	42.30 %

(Rate Effective July 1,2006)

SPRS employer rates are subject to state budget approval.



Certificate of Achievement for Excellence in Financial Reporting

Presented to

Kentucky Retirement Systems

For its Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2004

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

President

Executive Director

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- *Administrative Expenses* 72
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Independent Auditor's Report

Carpenter, Mountjoy & Bressler, PSC
Certified Public Accountants and Advisors

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the years ended June 30, 2005 and 2004, as listed in the table of contents. These financial statements are the responsibility of the Kentucky Retirement Systems' management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provides a reasonable basis for our opinion.

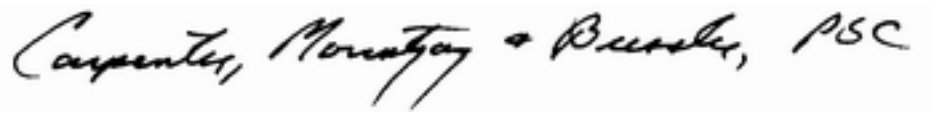
In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2005 and 2004 and the changes in plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated August 24, 2005 on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report

is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

Management's Discussion and Analysis (pages 26 through 31) and the supplementary information included in the schedule of funding progress and schedule of employer contributions (pages 60 through 69) are not a required part of the basic financial statements, but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the financial statements taken as a whole. The additional supporting schedules (pages 72 through 77) are presented for the purpose of additional analysis and are not a required part of the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.



August 24, 2005
Louisville, Kentucky

This discussion and analysis of Kentucky Retirement System's financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2005. Please read it in conjunction with the financial statements, which begin on page 32.

Financial Highlights-Pension Fund

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of all pension funds administered by Kentucky Retirement Systems increased by $525.6 million during the 2004-2005 fiscal year.
- Covered payroll for 2004-2005 was $4,160.4 million compared to covered payroll for the 2003-2004 plan year of $4,048 million, increasing approximately $112 million. The corresponding employer contributions increased by $48.1 million for a total employer contribution amount of $390.2 million. Of the total employer contribution amount, $157.5 million was posted to the pension fund while $232.7 million was posted to the insurance fund. Contributions paid by employees were $310.8 and $306.7 million respectively for the years ended June 30, 2005 and June 30, 2004. This increase in employee contributions is attributable to the increase of contributions reported on covered payroll.
- The net appreciation in the fair value of investments was $723.8 million for the year ended June 30, 2005 compared to net appreciation of $1,144.7 million for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $474.9 million. In comparison, the pension funds realized gains of $227.6 million for the year ended June 30, 2004. The increase in realized gain experienced by the pension funds is due to a favorable change in market conditions and invesment strategies.
- Investment income net of investment expense from all sources including securities lending was $335.3 million compared to $298.2 million net investment income in last fiscal year.
- Pension benefits paid to retirees and beneficiaries increased $111.3 million bringing total benefit payments to $960.5 million. Refund of contributions paid to former members upon termination of employment increased from $23.4 million to $23.9 million.
- Administrative expense increased $2.2 million totaling $17.4 million compared to $15.2 million in the prior year.

Financial Highlights-Insurance Fund

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of the insurance fund administered by Kentucky Retirement Systems increased by $226.8 million during the 2004-2005 fiscal year.

- Employer contributions of $232.7 million were received. This is a decrease of $5.1 million over the prior fiscal year. This decrease is due to the difference in the distribution of the employer rate between pension and insurance funds this year and last fiscal year.

- The net appreciation in the fair value of investments was $122.1 million compared to net appreciation of 228.6 million for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $35.9 million. In comparison, the insurance funds realized gains on investments of $22 million. This increase in realized gains is due to a favorable change in market conditions and investment strategies.

- Investment income net of investment expense from all sources including securities lending was $35.5 million compared to net investment income of $24.6 million in last fiscal year.

- Premiums paid by the fund for hospital and medical insurance coverage increased $35 million to total $166.9 million for the year.

Using This Financial Report

Because of the long-term nature of a defined benefit pension plan and insurance benefit plan, financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combined Statement of Plan Net Assets for the Pension Fund on page 32 and for the Insurance Fund on page 34 provides a snapshot of the financial position of the each of the three systems at June 30, 2005. The Combined Statement of Changes in Plan Net Assets for the Pension Fund on page 33 and for the Insurance Fund on page 35 summarize the additions and deductions that occurred for each of the three systems during the period from July 1, 2004 through June 30, 2005.

The Schedule of Funding Progress on pages 60-64 includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions on pages 65-69 presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

Kentucky Retirement Systems As A Whole

Kentucky Retirement Systems' combined plan net assets increased during the year ended June 30, 2005 by $ 752.4 million from $13,581.4 million to $14,333.8 million. Plan net assets for the prior fiscal year increased by $1,324.1 million. The increase in plan net assets for the plan year ended June 30, 2005 is primarily attributable to the gains on investment due to favorable market conditions. The analysis below focuses on plan net assets (Table 1) and changes in plan net assets (Table 2) of Kentucky Retirement Systems' pension funds and insurance funds.

Table 1 Plan Net Assets
(in millions)

	Pension Funds			Insurance Funds			Total		
	2005	**2004**	**2003**	**2005**	**2004**	**2003**	**2005**	**2004**	**2003**
Cash & Invest.	$14,926.9	$13,327.7	$14,240.2	$2,338.9	$2,000.8	$1,664.2	$17,265.8	$15,328.5	$15,904.4
Receivables	123.4	123.3	124.9	23.5	21.4	25.2	146.9	144.7	150.1
Equip. net of dep.	0.8	0.9	1.0	0.0	0.0	0.0	0.8	0.9	1.0
Total Assets	$15,051.1	$13,451.9	$14,366.1	$2,362.4	$2,022.2	1,689.4	$17,413.5	$15,474.1	$16,055.5
Total Liabilities	($2,645.9)	($1,572.3)	($3,452.2)	($433.8)	($320.4)	($345.7)	($3,079.7)	($1,892.7)	($3,798.2)
Plan Net Assets	$12,405.2	$11,879.6	$10,913.6	$1,928.6	$1,701.8	$1,343.7	$14,333.8	$13,581.4	$12,257.3

Table 2 Changes in Plan Net Assets
(in millions)

	Pension Funds			Insurance Funds			Total		
	2005	2004	2003	2005	2004	2003	2005	2004	2003
Additions:									
Member Contribution	$310.8	$306.7	$314.8	$0.0	$0.0	$0.0	$310.8	$306.7	$314.8
Employer Contribution	157.5	104.3	43.7	232.7	237.8	233.4	390.2	342.1	277.1
Insurance Appropriation	0.0	0.0	0.0	4.6	0.0	0.0	4.6	0.0	0.0
Investment Income (net)	1,059.1	1,442.9	430.9	157.6	253.1	28.2	1,216.7	1,696.0	459.1
Total Additions	***$1,527.4***	***$1,853.9***	***$789.4***	***$394.9***	***$490.9***	***$261.6***	***$1,922.3***	***$2,344.8***	***$1,051.0***
Deductions:									
Benefit Payments	$960.5	$849.2	$749.0	$0.0	$0.0	$0.0	$960.5	$849.2	$749.0
Refunds	23.9	23.4	20.5	0.0	0.0	0.0	23.9	23.4	20.5
Administrative Expenses	17.4	15.2	14.4	1.2	1.0	0.9	18.6	16.2	15.3
Healthcare Premiums	0.0	0.0	0.0	166.9	131.9	113.3	166.9	131.9	113.3
Total Deductions	***$1,001.8***	***$887.8***	***$783.9***	***$168.1***	***$132.9***	***$114.2***	***$1,169.9***	***$1,020.7***	***$898.1***
Increase (Decrease) in Plan Net Assets	$525.6	$966.1	$5.5	$226.8	$358.0	$147.4	$752.4	$1,324.1	$152.9

Plan net assets of the pension funds increased by $525.6 million ($12,405.2 million compared to $11,879.6 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. This plan net asset increase is attributable primarily to the net appreciation in the fair value of investments due to the change in market conditions in general.

Plan net assets of the insurance fund increased by $226.8 million ($1,928.6 million compared to $1,701.8 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. This increase in net plan assets is primarily attributable to the net appreciation in the fair value of investments which is due to the change in market conditions in general.

Pension Fund Activities

Member contributions increased by $4.1 million. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit. During the year there was an increase in monthly contributions over the previous year due to the increase in salaries reported to Kentucky Retirement Systems.

Employer contributions increased ($53.2 million) due to the increase in covered payroll and the increase in the contribution rates applied to the pension funds.

Net investment income decreased by $383.8 million (income of $1,059.1 million compared to net investment income of $1,442.9 million in the prior year). The pension funds experienced a decrease in income primarily due to the decrease in the net appreciation in the fair value of investments. This can be illustrated in Table 3 as follows:

Table 3 *Investment Income (Pension)*	In Millions 2005	2004	2003
Appreciation in fair value of investments current year end	$1,643.7	$1,394.8	$477.7
Appreciation in fair value of investments prior year end	1,394.8	477.7	212.5
Net appreciation in fair value of investments	248.9	917.1	265.2
Investment Income net of Investment Expense	335.3	298.2	321.0
Gain (loss) on sale of investments	474.9	227.6	(155.2)
Investment Income (net)	$1,059.1	$1,442.9	$431.0

Pension fund deductions increased by approximately $114 million caused principally by an increase of $111.3 million in benefit payments. Retirees received an increase of 2.3% in benefit payments as of July 1, 2004. Refunds of member contributions increased by $.5 million.

Insurance Fund Activities

Employer contributions paid into the insurance fund decreased by $5.1 million over the prior year. This decrease is a result of the change in the employer rate applied to the insurance fund.

Net investment income decreased by $95.5 million. This decrease in net income is due primarily to the decrease in the net appreciation in the fair value of assets. This can be illustrated in Table 4 as follows:

Table 4 *Investment Income (Insurance)*	In Millions 2005	2004	2003
Appreciation in fair value of investments current year end	$304.0	$217.7	$11.2
Appreciation in fair value of investments prior year end	217.7	11.2	(19.8)
Net appreciation in fair value of investments	86.3	206.5	31.0
Investment Income net of Investment Expense	35.5	24.6	22.0
Gain (loss) on sale of investments	35.9	22.0	(24.8)
Investment Income (net)	$157.7	$253.1	$28.2

Insurance fund deductions increased by $35.2 million primarily due to the increase of $35 million in health insurance premiums paid.

Historical Trends

Accounting standards require that the statement of plan net assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the pension funds and insurance funds is provided in the Schedule of Funding Progress on pages 60-64. The asset value stated in the Schedule of Funding Progress is the actuarial value of assets determined by calculating the difference between the expected value of assets and the actual market value of assets adjusted for any unrecognized gains or losses and amortized over a five year period. The actuarial liability is calculated using the entry age normal cost funding method.

The difference in value between the actuarial liability and the actuarial value of assets is known as the unfunded actuarial liability. This unfunded actuarial accrued liability is the measure of the cost of benefits that have been earned to date by KRS members, but not yet paid for.

The unfunded actuarial liability in the pension plans increased by $1,768.9 million for a total unfunded amount of $2,808.6 million for the year ended June 30, 2005 compared to an unfunded amount of $1,039.7 for the year end June 30, 2004.

The insurance funds continue to have a large unfunded actuarial accrued liability increasing to $5,455.3 million for the plan year ended June 30, 2005 from $4,559.1 million for the plan year ended June 30, 2004. This is an increase in the unfunded amount of $896.2 million.

Annual required contributions of the employers as actuarially determined and actual contributions made by the employers in relation to the required contributions are provided in the Schedule of Employer Contributions on pages 65-69. The difference in the annual required contributions and actual contributions made by employers in the KERS and SPRS funds is attributable to the statutory employer contribution rate set by the Kentucky General Assembly being less than the rate computed by the actuary.

Combined Statements of Plan Net Assets

June 30, 2005 and 2004

(Dollars in Thousands)	Pension Funds 2005 KERS	CERS	SPRS	TOTAL	2004 TOTAL
Assets					
Cash and Short-Term Investments					
Cash	$726	$666	$107	$1,499	$1,955
Short-Term Investments	118,148	240,738	(5,831)	353,055	266,019
Total Cash and Short-Term Investments	***118,874***	***241,404***	***(5,724)***	***354,554***	***267,974***
Receivables					
Contributions	28,608	36,979	1,012	66,599	63,447
Investment Income	26,267	28,908	1,585	56,760	59,857
Total Receivables	***54,875***	***65,887***	***2,597***	***123,359***	***123,304***
Investments, at Fair Value					
Corporate and Government Bonds	1,819,200	2,024,701	111,322	3,955,223	3,668,204
Corporate Stocks	3,488,198	3,627,596	214,139	7,329,933	7,213,299
Mortgages	280,166	345,083	16,700	641,949	605,692
Real Estate	4,385	4,820	488	9,693	9,898
Total Investments at Fair Value	***5,591,949***	***6,002,200***	***342,649***	***11,936,798***	***11,497,093***
Securities Lending Collateral Invested	1,225,389	1,337,960	72,169	2,635,518	1,562,675
Equipment (net of accumulated depreciation)	309	518	5	832	929
Total Assets	***$6,991,396***	***$7,647,969***	***$411,696***	***15,051,061***	***13,451,975***
Liabilities					
Accounts Payable	5,068	5,163	121	10,352	9,669
Securities Lending Collateral Obligations	1,225,389	1,337,960	72,169	2,635,518	1,562,675
Total Liabilities	***1,230,457***	***1,343,123***	***72,290***	***2,645,870***	***1,572,344***
Plan Net Assets Held in Trust for Pension Benefits	5,760,939	6,304,846	339,406	12,405,191	11,879,631

(A schedule of funding progress for each plan is presented on pages 60-64)
See accompanying independent auditor's report and notes to financial statements

Combined Statements of Changes in Plan Net Assets

June 30, 2005 and 2004

(Dollars in Thousands)	Pension Funds 2005 KERS	CERS	SPRS	Total	2004 Total
Additions					
Members' Contributions	139,426	167,152	4,228	310,806	306,652
Employers' Contributions	60,091	94,565	2,852	157,508	104,288
Total Contributions	***199,517***	***261,717***	***7,080***	***468,314***	***410,940***
Investment Income					
From Investing Activities					
Net Appreciation in Fair Value of Investments	340,385	363,002	20,444	723,831	1,144,662
Interest/Dividends	160,144	175,242	9,543	344,929	306,289
Total Investing Activities Income	500,529	538,244	29,987	1,068,760	1,450,951
Investment Expense	4,709	5,149	280	10,138	8,184
Commissions	2,828	2,885	105	5,818	5,237
Total Investing Activities Expense	***7,537***	***8,034***	***385***	***15,956***	***13,421***
Net Income from Investing Activities	***492,992***	***530,210***	***29,602***	***1,052,804***	***1,437,530***
From Securities Lending Activities					
Securities Lending Income	25,821	28,534	1,517	55,872	24,772
Securities Lending Expense:					
Security Borrower Rebates	22,241	24,285	1,310	47,836	17,869
Security Lending Agent Fees	811	886	48	1,745	1,559
Net Income From Securities Lending Activities	2,769	3,363	159	6,291	5,344
Total Net Investment Income	***495,761***	***533,573***	***29,761***	***1,059,095***	***1,442,874***
Total Additions	***695,278***	***795,290***	***36,841***	***1,527,409***	***1,853,814***
Deductions					
Benefit Payments	542,891	384,709	32,921	960,521	849,172
Refunds	10,584	13,181	131	23,896	23,361
Administrative Expenses	6,427	10,901	104	17,432	15,198
Total Deductions	***559,902***	***408,791***	***33,156***	***1,001,849***	***887,731***
Net Increase in Plan Assets	***135,376***	***386,499***	***3,685***	***525,560***	***966,083***
Plan Net Assets Held in Trust for Pension Benefits					
Beginning of Year	5,625,563	5,918,347	335,721	11,879,631	10,913,548
End of Year	$5,760,939	6,304,846	339,406	12,405,191	11,879,631

Combined Statements of Plan Net Assets

June 30, 2005 and 2004

(Dollars in Thousands)	Insurance Funds 2005 KERS	CERS	SPRS	TOTAL	2004 TOTAL
Assets					
Cash and Short-Term Investments					
Cash	$109	$78	$20	$207	$80
Short-Term Investments	101,120	100,563	8,389	210,072	207,750
Total Cash and Short-Term Investments	***101,229***	***100,641***	***8,409***	***210,279***	***207,830***
Receivables					
Contributions	3,603	14,736	278	18,617	17,133
Investment Income	2,078	2,568	263	4,909	4,278
Total Receivables	***5,681***	***17,304***	***541***	***23,526***	***21,411***
Investments, at Fair Value					
Corporate and Government Bonds	85,619	102,272	11,298	199,189	164,867
Corporate Stocks	608,282	810,311	79,248	1,497,841	1,309,322
Total Investments at Fair Value	***693,901***	***912,583***	***90,546***	***1,697,030***	***1,474,189***
Securities Lending Collateral Invested	179,860	229,300	22,392	431,552	318,814
Total Assets	***$980,671***	***$1,259,828***	***$121,888***	***2,362,387***	***2,022,244***
Liabilities					
Accounts Payable	1,039	1,103	88	2,230	1,588
Securities Lending Collateral Obligations	179,860	229,300	22,392	431,552	318,814
Total Liabilities	***180,899***	***230,403***	***22,480***	***433,782***	***320,402***
Plan Net Assets Held in Trust for Pension Benefits	799,772	1,029,425	99,408	1,928,605	1,701,842

(A schedule of funding progress for each plan is presented on pages 60-64)
See accompanying independent auditor's report and notes to financial statements

Combined Statements of Changes in Plan Net Assets

June 30, 2005 and 2004

(Dollars in Thousands)	Insurance Funds 2005 KERS	CERS	SPRS	Total	2004 Total
Additions					
Employers' Contributions	$65,305	$160,745	$6,631	$232,681	$237,813
Insurance Subsidy Appropriation	1,780	2,439	343	4,562	
Total Contributions	***67,085***	***163,184***	***6,974***	***237,243***	***237,813***
Investment Income					
From Investing Activities					
Net Appreciation in Fair Value of Investments	48,958	66,795	6,374	122,127	228,584
Interest/Dividends	15,224	19,235	1,940	36,400	25,243
Total Investing Activities Income	64,182	86,030	8,314	158,526	253,827
Investment Activities Expense	565	798	65	1,428	927
Commissions	230	302	31	563	586
Total Investing Activities Expense	***795***	***1,100***	***96***	***1,991***	***1,513***
Net Income from Investing Activities	***63,387***	***84,930***	***8,218***	***156,535***	***252,314***
From Securities Lending Activities					
Securities Lending Income	3,740	4,827	472	9,039	3,480
Securities Lending Expense:					
Security Borrower Rebates	3,196	4,075	398	7,669	2,463
Security Lending Agent Fees	109	140	13	262	195
Net Income From Securities Lending Activities	435	612	61	1,108	822
Total Net Investment Income	***63,822***	***85,542***	***8,279***	***157,643***	***253,136***
Total Additions	***130,907***	***248,726***	***15,253***	***394,886***	***490,949***
Deductions					
Healthcare Premiums Subsidies	80,424	80,247	6,221	166,892	131,872
Administrative Expenses	519	668	44	1,231	1,034
Total Deductions	***80,943***	***80,915***	***6,265***	***168,123***	***132,906***
Net Increase in Plan Assets	***49,964***	***167,811***	***8,988***	***226,763***	***358,043***
Plan Net Assets Held in Trust for Pension Benefits					
Beginning of Year	749,808	861,614	90,420	1,701,842	
End of Year	799,772	1,029,425	99,408	1,928,605	

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by Kentucky Retirement Systems: (1) Kentucky Employees Retirement System (KERS); (2) County Employees Retirement System (CERS); and (3) State Police Retirement System (SPRS). The assets of the various insurance funds are commingled for investment purposes. The following notes apply to the various funds administered by Kentucky Retirement Systems.

Note A - Summary Of Significant Accounting Policies

Basis of Accounting - KRS's financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan.

Method Used to Value Investments - Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate is based on appraisals. Investments that do not have an established market are reported at estimated fair value.

Estimates - The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment - Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years.

Expense Allocation - Administrative and investment expenses of the Kentucky Retirement Systems are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

Component Unit - Kentucky Retirement Systems is a component unit of the Commonwealth of Kentucky. As such, the Commonwealth of Kentucky is the primary government in whose financial reporting entity the System is included.

The Kentucky Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.515. The County Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 78.520. The State Police Retirement System was created by the Kentucky General Assembly pursuant to the provisions of KRS 16.510. The Kentucky Retirement Systems Insurance Fund consisting of the Kentucky Employees Insurance Fund, Kentucky Employee Hazardous Insurance Fund, County Employees Insurance Fund, County Employees Hazardous Insurance Fund and State Police Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.701. The Retirement Systems' and Insurance Fund's administrative budget is subject to approval by the Kentucky State Legislature. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Systems' Board of Trustees without further legislative review. The methods used to determine the employer rates for all Retirement Systems are specified in KRS 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky State Legislature.

Note B - Plan Descriptions And Contribution Information
Membership of each Retirement plan consisted of the following at June 30, 2005 and 2004:

Kentucky Employees Retirement System

	2005			2004		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and Beneficiaries Receiving Benefits	30,770	1,752	32,522	28,892	1,549	30,441
Inactive Vested Retirements	5,240	307	5,547	4,833	260	5,093
Inactive Vested Memberships	23,105	1,997	25,102	20,951	1772	22,723
Active Plan Members	47,118	4,274	51,392	47,599	4,014	51,613
Total	106,233	8,330	114,563	102,275	7,595	109,870
Number of Participating Employers			350			411

County Employees Retirement System

Number of Members	2005 Non-Hazardous Position Employees	2005 Hazardous Position Employees	2005 Total	2004 Non-Hazardous Position Employees	2004 Hazardous Position Employees	2004 Total
Retirees and Beneficiaries Receiving Benefits	31,347	4,361	35,708	29,129	4,005	33,134
Inactive Vested Retirements	7,771	482	8,253	6,927	361	7,288
Inactive Vested Memberships	41,098	1,489	42,587	37,509	1,287	38,796
Active Plan Members	81,240	9,464	90,704	80,922	9,349	90,271
Total	161,456	15,796	177,252	154,487	15,002	169,489
Number of Participating Employers			1,400			1,389

State Police Retirement System

Number of Members	2005 Hazardous Position Employees	2004 Hazardous Position Employees
Retirees and Beneficiaries Receiving Benefits	1,036	992
Inactive Vested Retirements	42	46
Inactive Vested Memberships	210	201
Active Plan Members	987	999
Total	2275	2,238
Number of Participating Employers	1	1

Kentucky Retirement Systems Insurance Fund

Hospital and medical contracts in force consisted of the following at June 30, 2005 and 2004:

Kentucky Retirement Systems Insurance Fund

	2005					2004				
	Single	Couple/ Family	Parent +	Medicare Regular	Medicare High	Single	Couple/ Family	Parent +	Medicare Regular	Medicare High
KERS										
Non-Hazardous	7,928	1,679	461	1,915	11,764	7,313	1,462	443	1,932	11,437
Hazardous	570	319	65	61	567	502	276	65	65	531
CERS										
Non-Hazardous	6,014	1,022	255	2,853	11,005	5,598	946	246	2,756	10,424
Hazardous	1,220	1,579	195	55	1,004	1,087	1,463	223	45	913
SPRS	257	388	34	10	348	226	400	45	13	326
Total	15,989	4,987	1,010	4,894	24,688	14,726	4,547	1,022	4,811	26,631

Kentucky Employees Retirement System
Non-Hazardous Employees
Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions - For the years ended June 30, 2005 and 2004, plan members were required to contribute 5% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2005 and 2004, participating employers contributed 5.89% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2005 and 2004 was 10.29% and 7.53%, respectively, of each employee's creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

Kentucky Employees Retirement System
Hazardous Employees
Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General

Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions - For the years ended June 30, 2005 and 2004, plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2005 and 2004, participating employers contributed 18.84% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2005 and 2004 was 19.47% and 18.84%, respectively, of each employee's creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

County Employees Retirement System Non-Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2005 and 2004, plan members were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding

the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2005 and 2004, participating employers contributed 8.48% and 7.34%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2005 and 2004 was 8.48% and 7.34%, respectively. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

County Employees Retirement System Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each county and any additional eligible local agencies electing to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2005 and 2004, plan members were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2005 and 2004, participating employers contributed 22.08% and 18.51%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2005 and 2004 was 22.08% and 18.51%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

State Police Retirement System
Pension Plan

Plan Description - SPRS is a single-employer defined benefit pension plan that covers all full-time State Troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2005 and 2004 plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2005 and 2004, the State contributed 21.58% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2005 and 2004 was 28.08% and 21.58%, respectively, of each employee's creditable compensation. Administrative costs of Kentucky Retirement System are financed through employer contributions and investment earnings.

Kentucky Retirement Systems Insurance Fund

Plan Description - The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System (Systems). The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For fiscal 2005, insurance premiums withheld from benefit payments to members of the Systems were $25,491,575 and $781,396 for KERS and KERS hazardous, respectively, $23,110,726 and $1,983,786 for CERS and CERS hazardous, respectively, and $494,223 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2005 the Fund had 69,266 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Fund is based on years of service with the Systems. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows:

Years of Service	% Paid by Insurance Fund
20 or More	100%
15 – 19	75%
10 - 14	50%
4 - 9	25%
Less Than 4	0%

As a result of House Bill 290 (2004 General Assembly), medical insurance benefits are calculated differently for members who began participating on or after July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on or after July 1, 2003 earn ten dollars ($10) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on or after July 1, 2003 earn fifteen dollars ($15) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, such employee's spouse receives ten dollars ($10) per

month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree cost of living adjustment (COLA), which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years.

Note C - Cash And Short-term Investments And Securities Lending Collateral

The provisions of Governmental Accounting Standards Board Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions and investments made with that cash be reported as assets on the financial statements. In conjunction with the adoption of Governmental Accounting Standard No. 28, the System has reclassified certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

Kentucky Employees Retirement System

	2005	2004
Miscellaneous Cash	$726,023	$827,932
Short Term Investment Pool	1,225,388,483	740,416,197
Repurchase Agreements	118,148,292	109,455,167
Total	$1,344,262,798	$850,699,296

County Employees Retirement System

	2005	2004
Miscellaneous Cash	$665,927	$1,041,182
Short Term Investment Pool	1,337,960,409	778,007,759
Repurchase Agreements	240,737,425	152,957,527
Total	$1,579,363,761	$932,006,468

State Police Retirement System

	2005	2004
Miscellaneous Cash	$106,821	$85,664
Short Term Investment Pool	72,168,911	44,251,527
Repurchase Agreements	(5,830,993)	3,606,746
Total	$66,444,739	$47,943,937

Kentucky Retirement Systems Insurance Fund

	2005	2004
Miscellaneous Cash	$207,089	$79,960
Short Term Investment Pool	431,551,814	318,814,039
Repurchase Agreements	210,072,016	207,750,238
Total	$253,430,919	$526,644,237

Note D - Investments

The Board of Trustees of the Retirement Systems and Insurance Fund recognize their duty to invest funds in accordance with the Prudent Person Rule and manage those funds consistent with the long-term nature of the Systems. The Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments

Investments may be made in domestic and international common stock, securities convertible into common stock and in preferred stock of publicly traded corporations.

Fixed Income Investments

Publicly traded corporate bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with the current market and economic conditions. Investment may also be made in any debt instrument issued or guaranteed in whole or in part by the U.S. Government or any agency or instrumentality of the U.S. Government.

Mortgages

Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments guaranteed by an agency of the U.S. Government or the Commonwealth of Kentucky.

Alternative Investments/Equity Real Estate

Subject to the specific approval of the investment committee of the Board of Trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, without limitation, venture capital, private equity and private placements which the investment committee believes has excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities

The following short-term investment vehicles are considered acceptable:

Publicly traded investment grade corporate bonds, government and agency bonds, mortgages, and collective STIF's, money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the

above instruments. Instruments may be selected from among those having a BBB or better rating by at least one recognized bond rating service. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur.

Derivatives

Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited.

The Retirement Systems and Insurance Fund invest in collateralized mortgage obligations (CMOs) and other asset-backed securities to increase return and adjust duration of the portfolio. The Systems and the Fund invest in exchange-traded funds to convert cash held in index funds to short-term equity investments. This practice is intended to make the performance of the index funds more closely track the performance of the index that the funds are intended to replicate.

Collateralized mortgage obligations, asset-backed securities, and exchange-traded funds pose no greater risk than other similar investment grade holdings in the Systems' and the Fund's portfolios. The fair value of CMOs at June 30, 2005 and 2004 was approximately $82 million and $67 million respectively; the fair value of asset-backed securities at June 30, 2005 and 2004 was approximately $252 million and $277 million respectively; and the fair value of exchange-traded funds at June 30, 2005 and 2004 was approximately $318 million and $299 million, respectively.

Custodial Credit Risk for Deposits

Custodial credit risk for deposits is the risk that in the event of a financial institution failure, the System's deposits may not be returned. All non-investment related bank balances are held locally by Farmers Bank & Capital Trust Company. All non-investment related bank balances are held in KRS' name and each individual account is insured up to $100,000. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulation (200 KAR 14:081) to be collateralized at 102% of the principal amount.

At June 30, 2005 and 2004, deposits for KRS pension funds were $1,498,771 and $1,954,779, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

At June 30, 2005 and 2004, deposits for KRS insurance funds were $207,089 and $79,960, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Investment Policies

The Kentucky Revised Statutes (KRS 61.650) grant the responsibility for the investment of plan assets to the Board of Trustees of the Kentucky Retirement Systems. The Board of Trustees has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the Prudent Person Rule and manage those funds consistent with the long-term nature of the Systems. The Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of the Kentucky Retirement Systems. The Statement of Investment Policy – Pension contains the specific guidelines for the investment of pension assets. The Statement of Investment Policy – Insurance contains the specific guidelines for the investment of insurance assets.

Investment Summary

The following tables present a summary of the investments by type as of June 30, 2005 and June 30, 2004.

Pension Funds
Years Ended June 30, 2005 and 2004

Investment Summary	2005	2004
U.S. Gov't & Agency Fixed Income Securities	$3,313,946,410	$2,954,464,596
U.S. Corporate Fixed Income Securities	1,268,342,165	1,306,976,137
Municipal Debt Securities	14,883,806	12,936,421
Short Term Investments	353,054,725	266,019,440
Equity Securities	7,219,482,637	7,127,553,444
Private Equity Limited Partnerships	110,450,122	85,264,271
Real Estate	9,694,317	9,898,468
Total	***$12,289,854,182***	***$11,763,112,777***

Insurance Funds
Years Ended June 30, 2005 and 2004

	2005	2004
U.S. Gov't & Agency Fixed Income Securities	$189,294,988	$164,867,042
Short Term Investments	219,965,717	207,750,247
Equity Securities	1,485,569,035	1,299,848,563
Private Equity Limited Partnerships	12,272,237	9,473,806
Total	***$1,907,101,977***	***$1,681,939,659***

Custodial Credit Risk for Investments

Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. At June 30, the following investments were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in the System's name.

Pension Funds	2005	2004
Foreign Currency Investments	$3,059,869	$152,709

Insurance Funds	2005	2004
Foreign Currency Investments	$ 124,692	$ 1

Credit Risk of Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external professional investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension fund debt securities portfolio is managed using the following guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the U.S. government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- The average credit quality of the total portfolio must be A or better.
- Debt obligations must have an investment grade rating at the time of purchase.
- Debt obligations that have been downgraded to below investment grade may be held in the portfolio up to a maximum of 1.5 percent of the total portfolio at market value.
- Debt obligations in the lowest investment grade rating category may not exceed 15 percent of the total portfolio at market value.

The following tables present the KRS pension fund debt ratings at June 30, 2005 and 2004.

Pension Funds
Debt Securities Investments at Fair Value
For Years Ended June 30, 2005 and 2004

Quality Rating	2005	2004
AAA	$1,481,814,394	$1,297,085,238
AA+	1,439,266	4,087,950
AA	41,927,341	45,731,606
AA-	84,766,981	104,426,635
A+	196,920,079	192,973,774
A	153,635,654	156,294,715
A-	94,502,023	93,046,599
BBB+	138,345,630	123,085,471
BBB	47,195,847	90,952,068
BBB-	81,970,376	43,458,260
BB+	20,332,710	64,791,545
BB	0	49,345,339
NR	26,838,395	13,169,106
	2,369,688,696	2,278,448,307
U.S. Government & Agencies	2,172,535,022	1,995,447,827
Pooled Investments	54,948,663	0
Total Debt Securities	$4,597,172,381	$4,273,896,134

At June 30, 2005 and 2004, the weighted average quality rating of the pension fund debt securities portfolio was AA+ and AA+, respectively. The Systems had no below investment grade rated debt securities in the pension portfolio at June 30, 2005 and 2004. The fair value of securities in the lowest investment grade rating category was $0 and $49,345,339 or 0.0% and 1.15% of the debt securities portfolio at June 30, 2005 and 2004, respectively.

The insurance fund debt securities portfolio, by guidelines, is to be invested in US government securities.

The following tables present the KRS insurance fund debt ratings at June 30, 2005 and 2004.

Insurance Funds
Credit Risk of Debt Securities
For Years Ended June 30, 2005 and 2004

	2005	2004
U.S. Government & Agencies	$189,294,988	$164,867,042
Pooled Investments	9,893,700	0.00
Total Credit Risk	$199,188,688	$164,867,042

Concentration of Credit Risk Debt Securities

Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

The total debt securities portfolio is managed using the following general guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the U.S. government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Debt obligations of any single U.S. corporation shall be limited to a maximum of 5 percent of the total portfolio at market value.

Except for US government debt securities, there were no individual investments held in either the KRS pension or insurance portfolios at June 30, 2005 or June 30, 2004, that exceeded the maximum issuer 5% limit.

Interest Rate Risk

Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. The effective duration measures the sensitivity of the market price to changes in the yield curve. Effective duration is the most accurate duration measure when a significant portion of the securities are callable (redeemable) prior to maturity. The pension fund portfolio contains a number of securities that are callable and therefore interest rate risk is most appropriately measured by effective duration. The Systems do not have a formal policy that constrains the duration of its fixed income portfolio.

The KRS pension fund debt securities portfolio benchmarks its debt securities portfolio to a blended benchmark consisting of the Lehman Brothers Government Credit Index, the Lehman Brothers Aggregate Index and the Lehman Brothers U.S. TIPS index. At June 30, 2005 and 2004, the effective duration of the blended benchmark was 5.34 and 4.83, respectively. At the same points in time, the effective duration of the KRS pension fund debt securities portfolio was 4.44 and 3.90, respectively.

KRS Pension Fund Interest Rate Risk

	2005	Weighted Average Effective Duration	2004	Weighted Average Effective Duration
Asset Backed Securities	$252,331,426	1.12	$276,625,217.19	0.92
Commercial Mortgage Backed Securities	109,238,989	3.33	25,980,951.05	2.03
Corporate Bonds	824,979,866	5.89	936,913,084.74	5.07
Government Agencies	479,638,805	3.30	458,514,019.37	2.46
Government Bonds	2,189,525,343	5.06	1,956,394,812.82	4.38
Government Mortgage Backed Securities	589,833,599	2.91	539,555,764.34	3.05
Municipal Bonds	14,883,806	12.64	12,936,420.75	12.64
Non-Government Backed Collateralized Mortgage Obligations	81,791,885	1.19	66,975,864.02	1.68
Pooled Investments	54,948,663		0	
Total	***$4,597,172,381***	***4.44***	***$4,273,896,134***	***3.90***

The KRS insurance fund long-term debt securities portfolio consists entirely of US government issued bonds which are not callable (redeemable) prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve but does not assume that securities will be called prior to maturity. Since the modified duration measure most accurately reflects the interest rate sensitivity of the insurance fund portfolio, this measure is used for comparative purposes. The KRS insurance fund debt securities portfolio benchmarks its debt securities portfolio to the Lehman Brothers U.S. TIPS Index. At June 30, 2005 and 2004, the modified duration of the benchmark was 8.45 and 8.75 years, respectively. At the same points in time, the modified duration of the KRS insurance fund debt securities portfolio, excluding the pooled fund, was 8.64 and 8.62 years, respectively.

Insurance Funds
Debt Securities Investments at Fair Value
For Years Ended June 30, 2005 and 2004

	2005		2004	
Investment	**Fair Value**	**Weighted Duration**	**Fair Value**	**Weighted Duration**
Index Linked Government Bonds	$189,294,988	8.62	$164,867,042	8.64
Pooled Debt Securities	$9,893,700	NA	$0	
	$199,188,688	***8.62***	***$164,867,042***	***8.64***

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. The Systems do not have a formal policy to limit foreign currency risk. The following tables present the Systems exposure at June 30, 2005 and 2004.

Pension Funds Investments at Fair Value June 30, 2005 and 2004

Foreign Equities	2005	2004
Australian Dollar	$52,122,988	$59,299,679
British Pound Sterling	300,642,320	313,285,570
Canadian Dollar	0.00	2,077,749
Danish Krone	6,807,087	18,391,775
Euro	492,597,015	466,888,412
Hong Kong Dollar	23,082,401	34,539,384
Japanese Yen	346,791,634	347,332,087
New Zealand Dollar	3,535,112	1,030,244
Norwegian Krone	8,805,025	14,357,141
Singapore Dollar	21,641,967	10,663,676
South Korean Won	3,366,341	20,569,874
Swedish Krona	49,787,194	42,220,254
Swiss Franc	109,308,105	146,715,237
International Equity Mutual Fund (various currencies)	484,952,191	-
Total Securities subject to Foreign Currency Risk	1,903,439,380	1,477,371,082
USD (securities held by Int'l Investment Managers)	78,764,548	26,620,320
Total Int'l Investment Securities	***$1,982,203,928***	***$1,503,991,402***

Insurance Funds Investments at Fair Value June 30, 2005 and 2004

Foreign Equities	2005	2004
Australian Dollar	$21,058,561	$13,664,773
British Pound Sterling	81,925,423	55,426,507
Danish Krone	3,540,224	5,219,450
Euro	125,362,499	86,212,060
Hong Kong Dollar	6,984,939	4,718,849
Japanese Yen	85,596,433	73,534,460
New Zealand Dollar	905,291	289,725
Norwegian Krone	4,558,628	4,037,545
Singapore Dollar	3,851,828	2,153,301
Swedish Krona	22,215,317	11,880,888
Swiss Franc	32,258,586	24,457,395
Total Securities subject to Foreign Currency Risk	388,257,729	281,594,953
USD (securities held by International Investment Managers)	3,610,171	5,499,427
Total International Investment Securities	$391,867,900	$287,094,380

Note E - Securities Lending Transactions

Kentucky Revised Statues Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with a fair value of 102 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. At June 30, 2005, the Funds have no credit risk exposure to borrowers because the amounts the Funds owe to borrowers exceed the amounts the borrowers owe the Funds. The contracts with the custodial banks require them to indemnify the Funds if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction, although the average term of the loans was 6 days, 10 days, and 24 days for the three investment portfolios subject to security lending agreements. One custodial bank invests cash collateral in securities that are permitted for investment by state statute and board policy, which at year-end has a weighted-average maturity of 3 days for the Funds. The other custodial bank invests cash collateral in the agent's short-term investment pool as permitted by state statute and Board policy, which at year-end has a weighted-average maturity of 24 days for the Pension Fund only. Neither of the Funds can pledge or sell collateral securities received unless the borrower defaults.

Note F - Risks Of Loss

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited

to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims against the Board of Trustees of Kentucky Retirement Systems or any of its staff as result of actual or alleged breach of fiduciary duty are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $100,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

Note G - Contingencies

In the normal course of business, KRS is involved in various litigation concerning the right of participants or their beneficiaries to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

Note H - Income Tax Status

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax under income tax law.

Note I - Anthem Demutualization

In 2002, Anthem Insurance Companies, Inc., an Indiana corporation, underwent a demutualization, as authorized by the Indiana statutes. The demutualization provided, among other things, that "eligible statutory members," as defined by Indiana statutory provision, would receive cash or stock in consideration for giving up their membership interest in Anthem. In some instances application of the statute led to the determination by Anthem that individual members of the retirement plans administered by Kentucky Retirement Systems were the "statutory members" and in other instances the Kentucky Retirement Systems was identified by Anthem as the eligible statutory member to receive cash or stock under the Anthem demutualization plan. According to Anthem, this determination was based upon which of Anthem's subsidiaries was the original provider. The determination was confirmed by the Indiana Department of Insurance.

The $61,603,207 distribution which Kentucky Retirement Systems received on January 4, 2002 under the Anthem demutualization was deposited in the Kentucky Employees Retirement Systems Insurance Fund. The retirement systems included within the Kentucky Retirement Systems for purposes of the Anthem demutualization are the Kentucky Employees Retirement System, (hazardous and non-hazardous), the County Employees Retirement System (hazardous and non-hazardous), the State Police Retirement System, the Legislators' Retirement Plan, and the Judicial Retirement Plan. Anthem has not yet provided the Kentucky Retirement System with the information necessary to divide the distribution among these retirement funds. Accordingly, the distribution will remain in the Kentucky Employees Retirement Systems Insurance Fund until the interests of the various retirement funds are determined.

Note J - Contingent Liability--Anthem Demutualization

In relation to the above noted Anthem demutualization, Kentucky Retirement System is a defendant in a case entitled Jean C. Love, David E. Wiseman and Belvia Campbell v. Board of Trustees of the Kentucky Retirement Systems, which is in Franklin Circuit Court. At issue is how to distribute the proceeds resulting from Anthem's demutualization, which resulted in Kentucky Retirement System receiving approximately $61 million dollars in proceeds. The plaintiffs seek to recover the full amount of the proceeds or, alternatively, the pro rata amount of proceeds attributable to insurance premiums that the employees and/or their beneficiaries paid directly to Anthem. Kentucky

Retirement System believes that the claims are without merit and intends to vigorously defend its position. The ultimate outcome of this litigation cannot presently be determined. However, in management's opinion, there is a reasonable possibility that an adverse outcome will occur, but an estimate of such amount cannot be determined. Accordingly, no amounts that might result from this outcome have been reflected in the financial statements.

Note K - Defined Benefit Pension Plan

All eligible employees of Kentucky Retirement Systems (KRS) participate in the Kentucky Employees Retirement System (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers substantially all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The Plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. KRS contributed 5.89% of covered payroll for the period July 1, 2004 – June 30, 2005 and July 1, 2003 – June 30, 2004, respectively. KRS contributed 3.76% of covered payroll for the period July 1, 2002 – December 15, 2002 and 5.89% for the period December 16, 2002 – June 30, 2003. Plan members were required to contribute 5% of creditable compensation for the plan years ended June 30, 2005 and the periods ending June 30, 2004 and June 30, 2003, respectively. Covered payroll was approximately $9,891,000, $9,035,000 and $8,265,000 for 2005, 2004 and 2003, respectively. KRS contributed approximately $572,400, $532,000 and $408,000 for 2005, 2004, and 2003, respectively.

Note L - Equipment

Equipment consists of the following:

	June 30, 2005	June 30 , 2004
Equipment at Cost	$3,408,106	$3,337,099
Less Accumulated Depreciation	(2,576,490)	(2,407,794)
Total	**$831,615**	**$929,305**

Depreciation expense for the years ended June 30, 2005 and 2004 amounted to $318,840 and $303,562, respectively.

Note M - Collateralization Of Deposits

At June 30, 2005, KRS had cash deposits at a financial institution, which totaled approximately $1,706,000. The balance is insured by the Federal Deposit Insurance Corporation up to $100,000. The remaining balance of approximately $1,606,000 was collateralized by securities recorded in KRS's name and held by the financial institution.

Required Supplementary Information

Schedule of Funding Progress

Kentucky Employees Retirement Systems (KERS) - Pension Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2000	$6,806,675,460	$4,876,825,772	$(1,929,849,688)	139.6	$1,409,504,668	(136.9)
June 30, 2001	6,844,742,687	5,444,035,294	(1,400,707,393)	125.7	1,505,299,220	(93.1)
June 30, 2002*	6,654,084,196	6,026,094,764	(627,989,432)	110.4	1,595,809,458	(39.3)
June 30, 2003**	6,351,318,832	6,520,463,188	169,144,356	97.4	1,658,604,696	10.2
June 30, 2004**	6,000,513,743	7,049,613,171	1,049,099,428	85.1	1,645,413,496	63.8
June 30, 2005**	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
Hazardous						
June 30, 2000	$336,213,464	$243,365,557	$(92,847,907)	138.2	$115,639,439	(80.3)
June 30, 2001	361,677,475	285,193,761	(76,483,714)	126.8	122,857,992	(62.3)
June 30, 2002*	376,384,302	322,069,164	(54,315,138)	116.9	125,275,925	(43.4)
June 30, 2003**	385,925,722	356,879,133	(29,046,589)	108.1	129,088,956	(22.5)
June 30, 2004**	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
June 30, 2005**	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
Total						
June 30, 2000	$7,142,888,924	$5,120,191,329	$2,022,697,595	135.5	$1,525,144,107	(132.6)
June 30, 2001	7,206,420,162	5,729,229,055	1,477,191,107	125.8	1,628,157,212	(90.7)
June 30, 2002*	7,030,468,498	6,348,163,928	682,304,570	110.7	1,721,085,383	(39.6)
June 30, 2003**	6,737,244,554	6,877,342,321	198,190,945	98.0	1,787,693,652	11.1
June 30, 2004**	6,397,726,506	7,453,191,207	1,055,464,701	85.8	1,772,077,308	59.6
June 30, 2005**	5,983,974,408	8,018,069,096	2,034,094,688	74.6	1,787,594,376	113.8

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*

***Covered payroll was actuarially computed as opposed to estimated in prior years.*

Kentucky Employees Retirement Systems (KERS) - Insurance Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2000	$399,560,252	$1,457,475,358	$1,057,915,106	27.4	$1,409,504,668	75.1
June 30, 2001	449,630,605	1,769,583,098	1,319,952,493	25.4	1,505,299,220	87.7
June 30, 2002*	521,250,455	1,907,683,881	1,386,433,426	27.3	1,595,809,458	86.9
June 30, 2003**	553,885,082	2,093,210,321	1,539,325,239	26.5	1,658,604,696	92.8
June 30, 2004**	600,586,961	2,335,905,365	1,735,318,404	25.7	1,645,412,496	105.5
June 30, 2005**	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
Hazardous						
June 30, 2000	$102,212,237	$175,167,613	$72,955,376	58.4	$115,639,439	63.1
June 30, 2001	119,372,742	214,450,822	95,078,080	55.7	122,857,992	77.4
June 30, 2002*	135,874,582	236,819,050	100,944,468	57.4	125,275,925	80.6
June 30, 2003**	151,459,500	283,178,335	131,718,835	53.5	129,088,956	102.0
June 30, 2004**	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
June 30, 2005**	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
Total						
June 30, 2000	$501,772,489	$1,632,642,971	$1,130,870,482	30.7	$1,525,144,107	74.1
June 30, 2001	569,003,347	1,984,033,920	1,415,030,573	28.7	1,628,157,212	86.9
June 30, 2002*	657,125,037	2,144,502,931	1,487,377,894	30.6	1,721,085,383	86.4
June 30, 2003**	705,344,582	2,376,388,656	1,671,044,074	29.7	1,787,693,652	93.5
June 30, 2004**	769,745,840	2,659,408,928	1,889,663,088	28.9	1,772,077,308	106.6
June 30, 2005**	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

Required Supplementary Information

Schedule of Funding Progress

County Employees Retirement Systems (CERS) - Pension Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2000	$5,284,033,534	$3,368,601,134	$(1,915,432,400)	156.9%	$1,452,058,248	(131.9)%
June 30, 2001	5,423,834,549	3,706,282,212	(1,717,552,337)	146.3	1,544,973,296	(111.2)
June 30, 2002*	5,397,787,158	4,165,355,149	(1,232,432,009)	129.6	1,663,183,629	(74.1)
June 30, 2003**	5,286,580,047	4,417,597,802	(868,982,245)	119.7	1,796,451,180	(48.4)
June 30, 2004**	5,187,851,530	4,936,459,488	(251,392,042)	105.1	1,826,870,880	(13.8)
June 30, 2005**	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
Hazardous						
June 30, 2000	$1,445,542,794	$1,084,553,697	$(360,989,097)	133.3%	$288,575,870	(125.1)%
June 30, 2001	1,486,666,016	1,193,860,442	(292,805,574)	124.5	316,700,304	(92.5)
June 30, 2002*	1,485,511,793	1,327,291,273	(158,220,520)	111.9	345,849,277	(45.7)
June 30, 2003**	1,467,004,856	1,499,628,782	32,623,926	97.8	374,700,732	8.7
June 30, 2004**	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
June 30, 2005***	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
Total						
June 30, 2000	$6,729,576,328	$4,453,154,831	$(2,276,421,497)	151.1%	$1,740,634,118	(130.8)%
June 30, 2001	6,910,500,565	4,900,142,654	(2,010,357,911)	141.0	1,861,673,600	(108.0)
June 30, 2002*	6,883,298,951	5,492,646,422	(1,390,652,529)	125.3	2,009,032,906	(69.2)
June 30, 2003**	6,753,584,903	5,917,226,584	(836,358,319)	114.1	2,171,151,912	(38.5)
June 30, 2004**	6,645,463,572	6,577,289,608	(68,173,964)	101.0	2,219,433,504	(3.1)
June 30, 2005**	6,511,561,710	7,180,774,025	669,212,315	90.7	2,296,396,728	29.2

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*

***Covered payroll was actuarially computed as opposed to estimated in prior years.*

County Employees Retirement Systems (CERS) - Insurance Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2000	$319,642,694	$1,466,716,928	$1,147,074,234	21.8%	$1,452,058,248	79.0%
June 30, 2001	371,758,628	1,793,710,768	1,421,952,140	20.7	1,544.973,296	92.0
June 30, 2002*	450,497,307	1,977,577,038	1,527,079,731	22.8	1,663,183,629	91.8
June 30, 2003**	520,060,105	2,176,963,259	1,656,903,154	23.9	1,796,451,180	92.2
June 30, 2004**	585,399,072	2,438,734,696	1,853,335,624	24.0	1,826,870,880	101.5
June 30, 2005**	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
Hazardous						
June 30, 2000	$168,657,912	$599,936,029	$431,278,117	28.1%	$288,575,870	149.5%
June 30, 2001	197,875,249	721,605,292	523,730,043	27.4	316,700,304	165.4
June 30, 2002*	234,683,878	781,184,974	546,501,096	30.1	345,849,279	158.0
June 30, 2003**	269,190,080	935,650,662	666,460,582	28.8	374,700,732	177.9
June 30, 2004**	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
June 30, 2005**	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
Total						
June 30, 2000	$488,300,606	$2,066,652,957	$1,578,352,351	23.6%	$1,740,634,118	90.7%
June 30, 2001	569,633,877	2,515,316,060	1,945,682,183	22.6	1,861,673,600	104.5
June 30, 2002*	685,181,185	2,758,762,012	2,073,580,827	24.8	2,009,032,908,	103.2
June 30, 2003**	789,250,185	3,112,613,921	2,323,363,736	25.4	2,171,151,912	107.0
June 30, 2004**	895,977,234	3,464,419,173	2,568,441,939	25.9	2,219,433,504	115.7
June 30, 2005**	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

Required Supplementary Information

Schedule of Funding Progress

State Police Retirement Systems (SPRS) - Pension Funds

Year Ended	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2000	$459,168,574	$336,579,763	$(122,588,811)	136.4	$43,619,383	(281.0)
June 30, 2001	456,160,709	356,211,860	(99,948,849)	128.1	44,646,678	(223.7)
June 30, 2002*	438,955,465	380,790,346	(58,165,119)	115.3	44,314,696	(131.2)
June 30, 2003**	413,063,576	414,881,459	1,817,883	99.6	43,760,832	4.2
June 30, 2004**	385,077,195	437,482,425	52,405,230	88.0	43,835,208	119.6
June 30, 2005**	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4

State Police Retirement Systems (SPRS) - Insurance Funds

Year Ended	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2000	$71,711,712	$138,867,085	$67,155,373	51.6	$43,619,383	154.0
June 30, 2001	79,863,577	158,261,479	78,397,902	50.5	44,646,678	175.6
June 30, 2002*	86,867,391	165,445,412	78,578,021	52.5	44,314,696	177.3
June 30, 2003**	90,747,967	184,501,205	93,753,238	49.2	43,760,832	214.2
June 30, 2004**	96,622,908	197,604,301	100,981,393	48.9	43,835,208	230.4
June 30, 2005**	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*

***Covered payroll was actuarially computed as opposed to estimated in prior years.*

State Police Retirement System

Pension

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$2,973,719	$2,964,037	99.1%
June 30, 2001	1,826,883	1,811,299	99.0
June 30, 2002	1,464,204	1,448,864	99.0
June 30, 2003	0	(20,061)	0
June 30, 2004	1,175,711	1,152,752	98.0
June 30, 2005	3,730,805	2,851,461	76.4

Insurance

	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$7,237,579	$7,251,787	100.2%
June 30, 2001	7,807,870	7,817,613	100.1
June 30, 2002	8,098,907	8,113,391	100.2
June 30, 2003	9,443,588	9,654,313	81.1
June 30, 2004	8,434,834	8,455,498	100.2
June 30, 2005	8,608,536	6,631,031	77.0

Total

	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$10,211,298	$10,215,824	100.0%
June 30, 2001	9,634,753	9,628,912	99.9
June 30, 2002	9,563,111	9,562,256	100.0
June 30, 2003	9,443,588	7,634,252	80.8
June 30, 2004	9,610,545	9,608,250	100.0
June 30, 2005	12,339,341	9,482,492	76.8

Required Supplementary Information

Schedule of Employer Contributions

Kentucky Employees Retirement System (KERS)

Non-Hazardous

Year Ended	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$36,365,221	$38,129,156	104.9	$76,818,004	$76,926,320	100.1
June 30, 2001	21,787,253	23,482,080	107.8	66,874,871	66,874,871	100.0
June 30, 2002	0	1,760,328	0	93,993,177	93,912,017	99.9
June 30, 2003	4,905,399	7,597,450	134.9	92,052,561	65,335,219	71.0
June 30, 2004	47,739,067	21,696,543	45.4	77,951,553	78,016,737	100.1
June 30, 2005	85,798,943	50,332,750	58.7	86,974,271	49,909,228	57.4

Hazardous

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$9,551,817	$9,586,177	100.4	$12,026,502	$12,047,095	100.2
June 30, 2001	9,920,148	10,626,663	107.1	13,226,298	13,226,298	100.0
June 30, 2002	7,742,052	17,933,817	102.5	15,859,932	15,887,399	100.2
June 30, 2003	8,511,402	7,322,607	86.0	15,839,215	15,883,263	100.3
June 30, 2004	9,600,978	9,769,580	101.8	14,942,092	14,959,617	100.1
June 30, 2005	9,449,878	9,758,547	103.3	15,892,977	15,395,977	96.9

Total

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$45,917,038	$47,715,333	103.9	$88,844,506	$88,973,415	100.1
June 30, 2001	31,707,401	34,108,743	107.6	80,101,169	80,101,169	100.0
June 30, 2002	7,742,052	9,694,145	125.2	109,853,109	109,799,416	100.0
June 30, 2003	13,416,801	14,920,057	111.2	107,891,776	81,218,482	75.3
June 30, 2004	57,340,045	31,466,123	54.9	92,893,645	92,976,354	100
June 30, 2005	95,248,821	60,091,297	63.1	102,867,248	65,305,205	63.5

Kentucky Employees Retirement System (KERS)

Non-Hazardous

Total

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$113,183,225	$115,055,476	100.7
June 30, 2001	88,662,124	90,356,951	101.9
June 30, 2002	93,993,177	95,672,345	101.8
June 30, 2003	96,957,960	72,932,669	75.2
June 30, 2004	125,690,620	99,713,280	79.3
June 30, 2005	172,773,214	100,241,978	58.0

Hazardous

Total

	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$21,578,319	$21,633,272	100.3
June 30, 2001	23,146,446	23,852,961	103.1
June 30, 2002	23,601,984	23,821,216	100.9
June 30, 2003	24,350,617	23,205,870	95.3
June 30, 2004	24,543,070	24,729,197	100.8
June 30, 2005	25,342,855	25,154,524	99.3

Total

Total

	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$134,761,544	$136,688,748	101.4
June 30, 2001	111,808,570	114,209,912	102.1
June 30, 2002	117,595,161	119,493,561	101.6
June 30, 2003	121,308,577	96,138,539	79.3
June 30, 2004	150,233,690	124,442,477	82.8
June 30, 2005	198,116,069	125,396,502	63.3

Required Supplementary Information

Schedule of Employer Contributions

County Employees Retirement System (CERS)

Non-Hazardous

Year Ended	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$50,676,832	$51,373,244	101.4	$55,033,008	$55,213,973	100.3
June 30, 2001	35,658,922	48,914,435	137.2	62,292,385	62,292,385	100.0
June 30, 2002	3,326,367	5,528,348	166.2	102,119,475	102,150,543	100.0
June 30, 2003	8,682,257	11,855,694	136.6	102,038,427	99,234,843	97.3
June 30, 2004	43,111,505	44,028,465	102.1	189,289,520	89,344,241	100.1
June 30, 2005	53,117,955	54,616,800	102.8	106,612,633	106,638,253	100.0

Hazardous

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$22,653,206	$23,393,895	103.3	$27,991,859	$28,345,377	101.3
June 30, 2001	19,409,377	20,983,360	108.1	32,149,432	32,149,432	100.0
June 30, 2002	10,582,988	11,054,949	104.5	45,721,274	45,730,333	100.0
June 30, 2003	19,920,223	16,905,556	84.9	43,502,755	45,243,950	104.0
June 30, 2004	27,050,382	27,640,775	102.2	47,018,046	47,036,777	100.0
June 30, 2005	39,437,725	39,947,747	101.3	54,094,495	54,106,577	100.0

Total

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$73,330,038	$74,767,139	102.0	$83,024,867	$83,559,350	100.6
June 30, 2001	55,068,299	69,897,795	126.9	94,441,817	94,441,817	100.0
June 30, 2002	13,909,355	16,583,297	119.2	147,840,749	147,880,876	100.0
June 30, 2003	28,602,480	28,761,250	100.6	145,541,182	144,478,793	99.3
June 30, 2004	70,161,887	71,669,240	102.1	136,307,566	136,381,018	100.1
June 30, 2005	92,555,680	94,564,547	102.2	160,707,128	160,744,830	100.0

County Employees Retirement System (CERS)

Non-Hazardous

Total

Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$105,709,840	$106,587,217	100.8
June 30, 2001	97,951,307	111,206,820	113.5
June 30, 2002	105,445,842	107,678,891	102.1
June 30, 2003	110,720,684	111,090,537	100.3
June 30, 2004	132,401,025	133,372,706	100.7
June 30, 2005	159,730,588	161,255,053	101.0

Hazardous

Total

	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$50,645,065	$51,739,272	102.2
June 30, 2001	51,558,809	53,132,792	103.1
June 30, 2002	56,304,262	56,785,282	100.9
June 30, 2003	63,422,978	62,149,506	98.0
June 30, 2004	74,068,428	74,677,552	100.8
June 30, 2005	93,532,220	94,054,324	100.6

Total

Total

	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2000	$156,354,905	$158,326,489	101.3
June 30, 2001	149,510,116	164,339,612	109.9
June 30, 2002	161,750,104	164,464,173	101.7
June 30, 2003	174,143,662	173,240,043	99.5
June 30, 2004	206,469,453	208,050,258	100.8
June 30, 2005	253,262,808	255,309,377	100.8

Notes to Required Supplementary Information

June 30, 2005 and 2004

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Pension Funds

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2005	June 30, 2005
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Amortization Period (Each Benefit Improvement)	30 Years - Commencing with 1990 Valuation	30 Years - Commencing with 1990 Valuation
Asset Valuation Method	Five-Year Smoothing of Investment Gains and Losses	Five-Year Smoothing of Investment Gains and Losses
Post-Retirement Benefit Increase	2.3%	2.3%
Actuarial Assumptions		
Investment Return	8.25%	8.25%
Projected Salary Increases	6.50%	6.50%
Inflation Rate	5.00%	5.00%

Insurance Funds

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2005	June 30, 2005
Actuarial Cost Method	Targeted Rate	Targeted Rate
Asset Valuation Method-Started With 1996 Valuation	Five-Year Smoothing of Investment Gains and Losses	Five-Year Smoothing of Investment Gains and Losses
Actuarial Assumptions		
Investment Return	8.25%	8.25%
Projected Salary Increases	6.50%	6.50%
Inflation Rate	5.00%	5.00%

Additional Supporting Schedules

Schedule of Administrative Expenses

	2005	2004
	(Dollars in Thousands)	
Personal Services		
Salaries and Per Diem	$ 10,139	$ 9,268
Fringe Benefits	2,500	1,930
Tuition Assistance	66	50
Total Personal Services	***12,705***	***11,248***
Contractual Services		
Actuarial	157	141
Audit	41	40
Legal	397	288
Medical	224	326
Contractual	735	100
Total Contractual Services	***1,554***	***895***
Communication		
Printing	219	139
Telephone	136	150
Postage	549	571
Travel	157	152
Total Communication	***1,061***	***1,012***
Rentals		
Office Space	981	982
Equipment	58	50
Total Rentals	***1,039***	***1,032***
Miscellaneous		
Utilities	147	120
Supplies	137	113
Insurance	56	51
Maintenance	330	170
Other	84	253
Total Miscellaneous	***754***	***707***
Depreciation	319	304
Healthcare Administrative Expenses	1,231	1,034
Total Administrative Expenses	$ 18,663	$ 16,232

Additional Supporting Schedules

Schedule of Investment Expenses

	2005	2004
	(Dollars in Thousands)	
Pension Funds		
Security Lending Fees		
Broker Rebates	$ 47,836	$ 17,869
Lending Agent Fees	1,745	1,559
Total Security Lending	***49,581***	***19,428***
Common Stock Commissions	5,818	5,237
Contractual Services		
Investment Management	9,026	7,253
Security Custody	749	727
Investment Consultant	313	184
Investment Related Travel	50	20
Total Contractual Services	***10,138***	***8,184***
Insurance Funds		
Security Lending Fees		
Broker Rebates	7,668	2,463
Lending Agent Fees	263	195
Total Security Lending	***7,931***	***2,658***
Common Stock Commissions	563	586
Investment Management	1,428	927
Total Investment Expenses	$ *75,459*	$ *37,020*

Schedule of Professional Consultant Fees

	2005	2004
	(Dollars in Thousands)	
Actuarial Services	$ 157	$ 141
Medical Review Services	224	326
Audit Services	41	40
Legal Counsel	397	288
Compliance	79	74
Workflow	236	0
Healthcare	298	0
Banking	60	42
Miscellaneous	62	(16)
Total	$ *1,554*	$ *895*

Combining Schedules of Plan Net Assets

(Dollars in Thousands)	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2005 TOTAL	2004 TOTAL
	Pension Funds						
Assets							
Cash and Short-Term Investments							
Cash	$106	$620	$97	$569	$107	$1,499	$1,955
Short-Term Investments	16,899	101,249	61,360	179,378	(5,831)	353,055	266,019
Total Cash and Short-Term Investments	***17,005***	***101,869***	***61,457***	***179,947***	***(5,724)***	***354,554***	***267,974***
Receivables							
Contributions	2,106	26,502	10,134	26,845	1,012	66,599	63,447
Investment Income	1,694	24,573	6,228	22,680	1,585	56,760	59,857
Total Receivables	***3,800***	***51,075***	***16,362***	***49,525***	***2,597***	***123,359***	***123,304***
Investments, at Fair Value							
Corporate and Government Bonds	116,546	1,702,655	434,812	1,589,889	111,322	3,955,223	3,668,204
Corporate Stocks	241,107	3,247,090	822,879	2,804,717	214,139	7,329,933	7,213,299
Mortgages	18,255	261,911	74,211	270,872	16,700	641,949	605,692
Real Estate	1,942	2,443	2,424	2,396	488	9,693	9,898
Total Investments at Fair Value	***377,850***	***5,214,099***	***1,334,326***	***4,667,874***	***342,649***	***11,936,798***	***11,497,093***
Securities Lending Collateral Invested	84,478	1,140,910	299,059	1,038,902	72,169	2,635,518	1,562,675
Equipment (net of accumulated depreciation)	23	286	43	475	5	832	929
Total Assets	***483,156***	***6,508,239***	***1,711,247***	***5,936,723***	***411,696***	***15,051,061***	***13,451,975***
Liabilities							
Accounts Payable	370	4,698	942	4,221	121	10,352	9,669
Securities Lending Collateral	84,478	1,140,910	299,059	1,038,902	72,169	2,635,518	1,562,675
Total Liabilities	***84,848***	***1,145,608***	***300,001***	***1,043,123***	***72,290***	***2,645,870***	***1,572,344***
Plan Net Assets Held in Trust for Pension Benefits	**398,308**	**5,362,631**	**1,411,246**	**4,893,600**	**339,406**	**12,405,191**	**11,879,631**

Combining Schedules of Changes in Plan Net Assets

(Dollars in Thousands)	Pension Funds 2005 KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2005 Total	2004 Total
Additions							
Members' Contributions	$11,625	$127,801	$39,515	$127,637	$4,228	$310,806	$306,652
Employers' Contributions	9,758	50,333	39,948	54,617	2,852	157,508	104,288
Total Contributions	***21,383***	***178,134***	***79,463***	***182,254***	***7,080***	***468,314***	***410,940***
Investment Income							
From Investing Activities							
Net Appreciation in Fair Value of Investments	22,621	317,764	82,516	280,486	20,444	723,831	1,144,662
Interest/Dividends	10,733	149,411	38,354	136,888	9,543	344,929	306,289
Total Investing Activities Income	33,354	467,175	120,870	417,374	29,987	1,068,760	1,450,951
Investment Expense	335	4,374	1,172	3,977	280	10,138	8,184
Commissions	125	2,703	574	2,311	105	5,818	5,237
Total Investing Activities Expense	***460***	***7,077***	***1,746***	***6,288***	***385***	***15,956***	***13,421***
Net Income from Investing Activities	***32,894***	***460,098***	***119,124***	***411,086***	***29,602***	***1,052,804***	***1,437,530***
From Securities Lending Activities							
Securities Lending Income	1,818	24,033	6,403	22,131	1,517	55,872	24,772
Securities Lending Expense:							
Security Borrower Rebates	1,533	20,708	5,428	18,857	1,310	47,836	17,869
Security Lending Agent Fees	56	755	198	688	48	1,745	1,559
Net Income From Securities Lending Activities	229	2,540	777	2,586	159	6,291	5,344
Total Net Investment Income	***33,123***	***462,638***	***119,901***	***413,672***	***29,761***	***1,059,095***	***1,442,874***
Total Additions	***54,506***	***640,772***	***199,364***	***595,926***	***36,841***	***1,527,409***	***1,853,814***
Deductions							
Benefit Payments	20,495	522,396	90,119	294,590	32,921	960,521	849,172
Refunds	1,760	8,824	2,139	11,042	131	23,896	23,361
Administrative Expenses	511	5,916	872	10,029	104	17,432	15,198
Total Deductions	**22,766**	**537,136**	**93,130**	**315,661**	**33,156**	**1,001,849**	**887,731**
Net Increase in Plan Assets	**31,740**	**103,636**	**106,234**	**280,265**	**3,685**	**525,560**	**966,083**
Plan Net Assets Held in Trust for Pension Benefits							
Beginning of Year	366,568	5,258,995	1,305,012	4,613,335	335,721	11,879,631	10,913,548
End of Year	398,308	5,362,631	1,411,246	4,893,600	339,406	12,405,191	11,879,631

Combining Schedules of Plan Net Assets

Insurance Funds

(Dollars in Thousands)	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2005 TOTAL	2004 TOTAL
Assets							
Cash and Short-Term Investments							
Cash	$41	$68	$28	$50	$20	$207	$80
Short-Term Investments	16,910	84,210	35,091	65,472	8,389	210,072	207,750
Total Cash and Short-Term Investments	**16,951**	**84,278**	**35,119**	**65,522**	**8,409**	**210,279**	**207,830**
Receivables							
Contributions	721	2,882	4,209	10,527	278	18,617	17,133
Investment Income	488	1,590	917	1,651	263	4,909	4,278
Total Receivables	**1,209**	**4,472**	**5,126**	**12,178**	**541**	**23,526**	**21,411**
Investments, at Fair Value							
Corporate and Government Bonds	20,078	65,541	37,421	64,851	11,298	199,189	164,867
Corporate Stocks	150,796	457,486	283,618	526,693	79,248	1,497,841	1,309,322
Total Investments	**170,874**	**523,027**	**321,039**	**591,544**	**90,546**	**1,697,030**	**1,474,189**
Securities Lending Collateral Invested	42,499	137,361	80,601	148,699	22,392	431,552	318,814
Total Assets	**231,533**	**749,138**	**441,885**	**817,943**	**121,888**	**2,362,387**	**2,022,244**
Liabilities							
Accounts Payable	163	876	344	759	88	2,230	1,588
Securities Lending Collateral	42,499	137,361	80,601	148,699	22,392	431,552	318,814
Total Liabilities	**42,662**	**138,237**	**80,945**	**149,458**	**22,480**	**433,782**	**320,402**
Plan Net Assets Held in Trust for Pension Benefits	**188,871**	**610,901**	**360,940**	**668,485**	**99,408**	**1,928,605**	**1,701,842**

Combining Schedules of Changes in Plan Net Assets

(Dollars in Thousands)	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2005 Total	2004 Total
	Insurance Funds						
Additions							
Employer Contributions	$15,396	$49,909	$54,107	$106,638	$6,631	$232,681	$237,813
Insurance Subsidy Appropriation	257	1,523	1,445	994	343	4,562	0
Total Contributions	**15,653**	**51,432**	**55,552**	**107,632**	**6,974**	**237,243**	**237,813**
Investment Income							
From Investing Activities							
Net Appreciation in Fair Value of Investments	12,473	36,485	23,209	43,586	6,374	122,127	228,584
Interest/Dividends	3,603	11,621	6,753	12,482	1,940	36,400	25,243
Total Investing Activities Income	16,076	48,106	29,962	56,068	8,314	158,526	253,827
Investment Expense	129	436	253	545	65	1,428	927
Commissions	59	170	108	195	31	563	586
Total Investing Activities Expense	***188***	***606***	***361***	***740***	***96***	***1,991***	***1,513***
Net Income from Investing Activities	**15,888**	**47,500**	**29,601**	**55,328**	**8,218**	**156,535**	**252,314**
From Securities Lending Activities							
Securities Lending Income	892	2,848	1,699	3,128	472	9,039	3,480
Securities Lending Expense:							
Security Borrower Rebates	755	2,441	1,432	2,642	398	7,669	2,463
Security Lending Agent Fees	26	84	49	91	13	262	195
Net Income From Securities Lending Activities	111	323	218	395	61	1,108	822
Total Net Investment Income	***15,999***	***47,823***	***29,819***	***55,723***	***8,279***	***157,643***	***253,136***
Total Additions	***31,652***	***99,255***	***85,371***	***163,355***	***15,253***	***394,886***	***490,949***
Deductions							
Healthcare Premium Subsidies	4,853	75,571	21,985	58,262	6,221	166,892	131,872
Administrative Expenses	55	464	183	485	44	1,231	1,034
Total Deductions	**4,908**	**76,035**	**22,168**	**58,747**	**6,265**	**168,123**	**132,906**
Net Increase in Plan Assets	**26,744**	**23,220**	**63,203**	**104,608**	**8,988**	**226,763**	**358,043**
Plan Net Assets Held in Trust for Insurance Benefits							
Beginning of Year	162,127	587,681	297,737	563,877	90,420	1,701,842	1,343,799
End of Year	188,871	610,901	360,940	668,485	99,408	1,928,605	1,701,842

Report on compliance and on internal control over financial Reporting based on an audit of financial statements performed In accordance with government auditing standards

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2005, and have issued our report thereon dated August 24, 2005. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

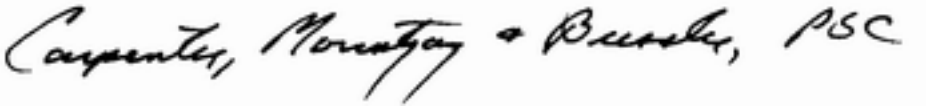
Compliance

As part of obtaining reasonable assurance about whether Kentucky Retirement Systems' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under Government Auditing Standards.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Kentucky Retirement Systems' internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over financial reporting and its operation that we consider to be material weaknesses.

This report is intended for the information of the audit committee, management, and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.



August 24, 2005
Louisville, Kentucky

Investment Section

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Investment Summary

Kentucky Retirement Systems' Board of Trustees is charged with the responsibility of investing the Systems' assets to provide for the benefits of the members. To achieve that goal the Board follows a policy of preserving capital, while seeking means of enhancing revenues and protecting against undue losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in formal compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the Systems. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment objectives, policies, and strategies for both the pension and insurance portfolios.

Investment Objectives

The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

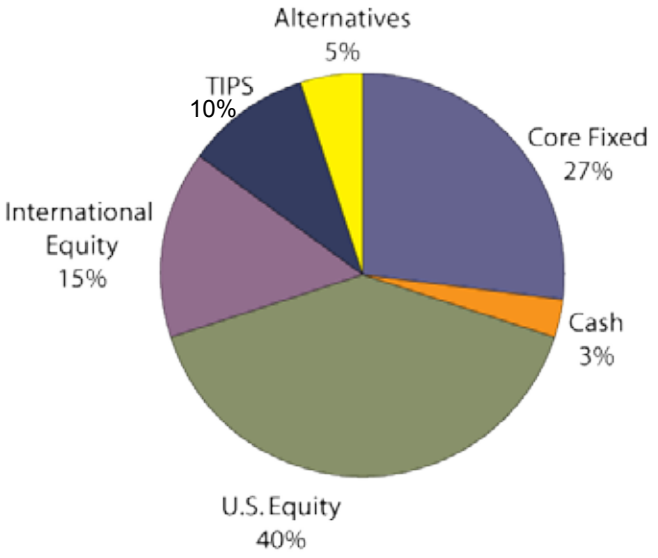
Short-Term: The returns of the particular asset classes of the Systems' managed funds, measured on a year-to-year basis, should exceed the returns achieved by a policy portfolio composed of comparable unmanaged market indices.

Long-Term: The Systems' total assets should achieve a return measured over two market cycles (estimated to be six to ten years) which exceeds the rate of inflation for the period, as measured by the Consumer Price Index for All Urban Consumers, by at least 4%.

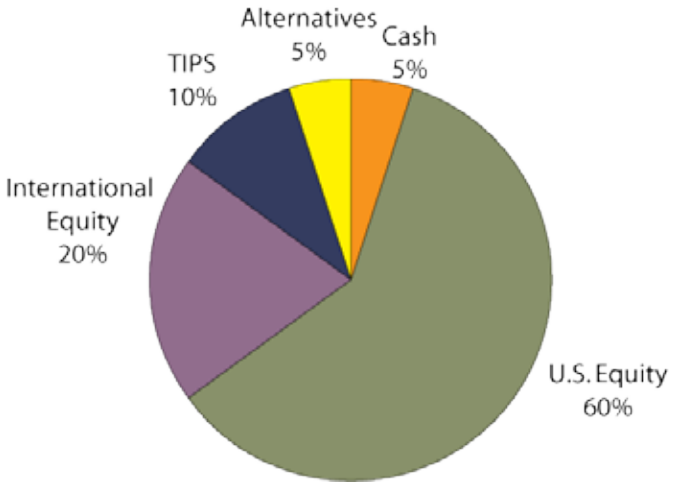
In keeping with its responsibility as trustee and consistent with its fiduciary responsibility, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky

During the fiscal year, the KRS Board of Trustees did not alter its investment policy. As of June 30, 2005, the KRS Pension fund's policy is to invest 40% of the assets in U.S. equities, 15% in international equities, 27% in fixed income, 10% in Treasury Inflation Protected Securities (TIPS), 5% in alternative assets, and 3% in cash or short-term securities. As of June 30, 2005, the KRS Insurance fund's policy is to invest 60% of the assets in U.S. equities, 20% in international equities, 10% in TIPS, 5% in alternative assets, and 5% in cash or short-term securities

Pension Fund Target Allocation (June 30, 2005)



Insurance Fund Target Allocation (June 30, 2005)



Investment Strategies

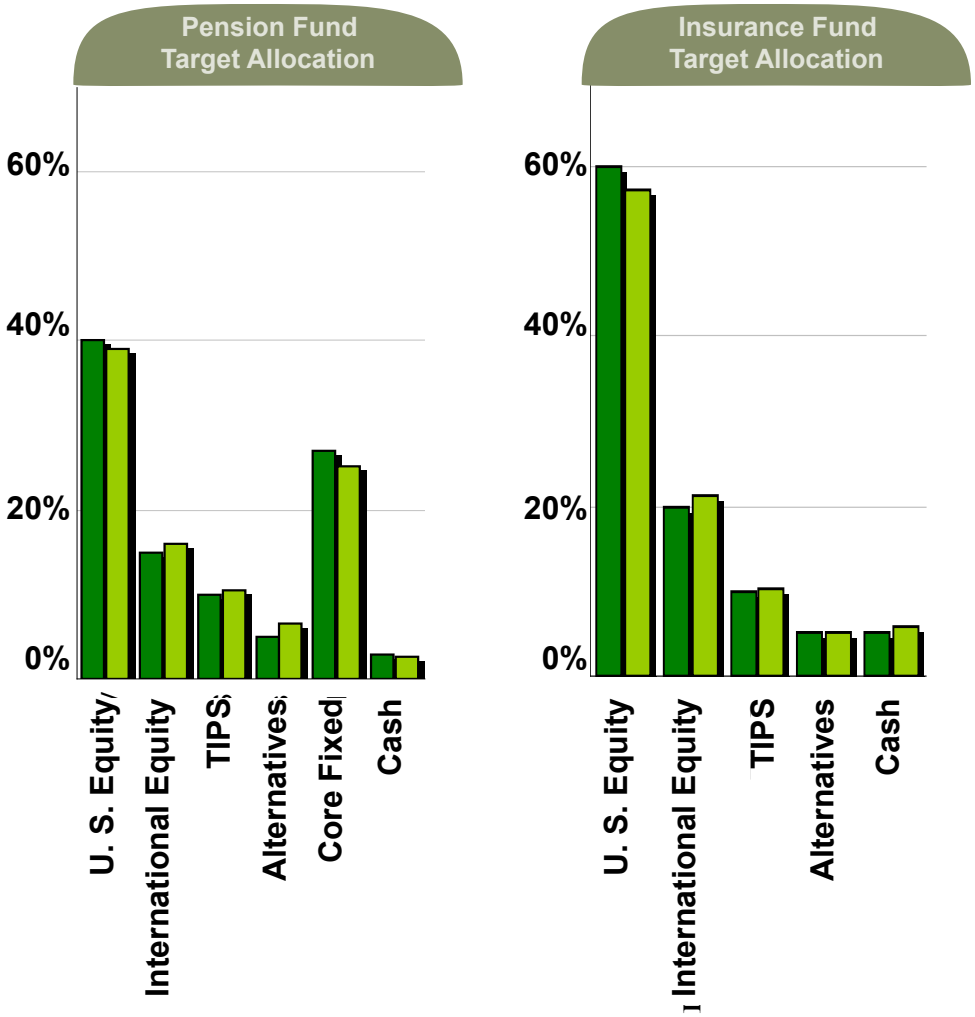
Diversification
The KRS portfolio is diversified on several levels. Portfolios are diversified through the use of multiple asset classes. Asset allocations are revisited on a periodic basis and represent an efficient allocation to achieve overall return and risk characteristics. The individual asset classes are diversified through the use of multiple portfolios that are managed both by the Investment Division staff and by external professional managers. Finally, portfolios within each of the asset classes are diversified through the selection of individual securities. Each portfolio manager is afforded discretion to diversify their portfolio(s) within the parameters established by the Board of Trustees.

Investments Performance Review Procedures
At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. Each month the Investment Division performs tests to assure compliance with the restrictions imposed by the Investment Policy.

Investment Consulting
The Board employs Mercer Investment Consulting, Inc. to review the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from that firm follows this introduction and discusses current allocations, performance and significant changes during the fiscal year.

Rebalancing

Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with investment policy target levels. Such rebalancing is necessary to reflect sizeable cash flows and performance imbalances among asset classes and investment managers. KRS' rebalancing policies call for an immediate rebalancing if an asset class exceeds or falls below its target allocation by 10%. As the following charts depict, the Pension and Insurance portfolios were operating within the ranges established by the investment policies.



	U.S. Equity	International Equity	TIPS	Alternatives	Core Fixed	Cash
Insurance						
Policy	60.0%	20.0%	10.0%	5.0%		5.0%
Actual	57.2%	21.3%	10.4%	5.3%		5.8%
Pension						
Policy	40.0%	15.0%	10.0%	5.0%	27.0%	3.0%
Actual	39.1%	16.1%	10.5%	6.6%	25.1%	2.6%

MERCER
Investment Consulting

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August 15, 2005
The Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Annual Fund Review

Dear Trustees:

Mercer is charged with the duty to advise the Board in its asset management activities. This is our annual review of the asset management of the Kentucky Retirement Systems. Although we recognize that the Board of Trustees is charged with the responsibility of managing the Funds in a manner consistent with the basic long term nature of the participating systems, our comments focus on the year ended June, 2005. In managing the Funds, the Board must maintain formal compliance with the Prudent Person Rule. Therefore, it seeks to maintain proper and appropriate diversification for the Fund.

Market Highlights

The year ending June 2005 was characterized by positive returns across all major asset classes. Improving economic indicators such as encouraging employment numbers and increased capital spending allowed the markets to advance despite concerns over high oil prices, unstable eopolitical factors and the uncertainty that comes with a major election. In the domestic equity market, small cap issues outpaced their larger cap counterparts as the S&P 500 Index gained 6.3% and the Russell 2000 Index returned 9.5%. International equity markets (as measured by the MSCI EAFE Index) advanced 14.1% over the trailing year, outpacing the domestic equity market as a declining dollar in the second half of 2004 bolstered results. The fixed income market was characterized by a flattening yield curve over the one year period as longer duration issues outpaced their shorter duration counterparts. The Lehman Brothers Aggregate Bond Index gained 6.8% for the period.

Systems Highlights

According to the Fund Analytics statements from Northern Trust, The Retirement Fund was valued at $12.3 billion on June 30, 2005, an increase of $0.5 billion since June 2004. The Retirement Fund gained 9.3% over the one year period as compared to the Reference Index return of 8.1% over the same period. The Insurance Fund was valued at $1.8 billion at the end of the fiscal year, a $0.2 billion increase since June 2004. The Fund advanced 9.5% during the one year period, outpacing the Reference Index return by 2.0%. The Reference Indices are constructed according to the individual target asset allocations of the Funds.

The Retirement Fund's allocation was overweight international equity, cash, TIPS and alternatives at the expense of domestic equity and fixed income as of June 30. The Insurance Fund was overweight cash and international equity at the expense of domestic equity.

Asset allocation as of June 30th for the Retirement and Insurance Funds are compared in the table below to their individual asset allocation targets:

	Retirement Fund		Insurance Fund	
Asset Classes	Actual Allocation 6/30/05	Target Asset Allocation	Actual Allocation 6/30/05	Target Asset Allocation
Domestic Equity	38.1	40.0	55.3	60.0
International Equity	16.1	15.0	21.3	20.0
Fixed Income	25.1	27.0	0.0	0.0
Alternatives	6.5	5.0	5.3	5.0
TIPS*	10.5	10.0	10.4	10.0
Cash**	3.7	3.0	7.7	5.0

* Includes Real Estate and Private Equity.
** Includes equitization positions.

Investment Manager Highlights

The Retirement Fund

Within domestic equity, INVESCO underperformed the S&P 500 Index over the one year period ending June 30, gaining 1.0% vs. the Index return of 6.3%. The Weaver MVT portfolio gained 7.2% over the trailing year period, underperforming the Russell 2500 Growth Index by 30 basis points.

Within international equity, Fidelity advanced 15.0% over the trailing year period, leading the MSCI EAFE Index return of 14.1%. The new international equity managers in the Retirement Fund, Barclays Global Investors (BGI) and The Boston Company Asset Management, were unded during the second quarter of 2005 (upon the termination of Bank of Ireland Asset Management).

The Total Equity Composite gained 8.3% over the one year period, trailing the Equity Blended Index by 30 basis points.

Within fixed income, the Weaver Barksdale Core portfolio and NAMCO both gained 7.4% over he one year period, leading the Lehman Brothers G/C Index by 10 basis points. Lincoln Capital advanced 7.0% over the trailing year, leading the LB Aggregate Bond Index return of 6.8%. The Weaver Barksdale TIPS portfolio returned 9.6% over the one year period, exceeding the LB TIPS Index return of 9.3%. The Total Fixed Income composite gained 7.9% over the trailing year, leading the Index by 20 basis points.

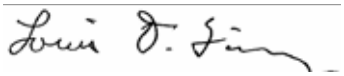
The Insurance Fund

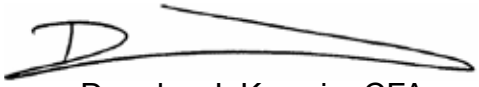
The NAMCO TIPS portfolio performed in- line with the LB TIPS Index over the trailing year period, gaining 9.3%. Within international equity, Fidelity outperformed over the one year period, advancing 14.7% compared to the MSCI EAFE Index return of 14.1%.

Summary

The Fund's domestic equity managers underperformed over the one year period. Within international equity, Fidelity outperformed while two new portfolios, BGI Alpha Tilts and The Boston Company, were funded within the Retirement Plan. The fixed income portfolios generally outperformed their respective benchmarks as well. On a Total Fund level, both plans outperformed their respective benchmarks over the trailing year.

Sincerely,





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Investment Results

Fiscal Year 2005 Results

For the fiscal year ended June 30, 2005, KRS pension fund returned 9.3%, which exceeded the return of its benchmark by 1.2%. The 9.3% return also exceeded the actuarially required rate of return of 8.25% by more than one full per cent. The positive performance of the pension fund was due, in large part, to marginally higher than benchmark weighting in the international equity and alternatives portfolios (two of the highest returning asset classes). Other factors include above benchmark returns by the fixed income, alternative assets, and cash portfolios.

Pension Total Fund Return[1]

	Inception Date	Fiscal Year 2005	3-Year	5-Year	10-Year	Inception
KRS Total Fund	April 1984	9.3%	9.0%	3.2%	9.7%	10.9%
Performance Benchmark		8.1%	8.9%	2.6%	9.5%	11.0%
CPI + 4.0%		6.5%	6.6%	6.4%	6.4%	7.0%

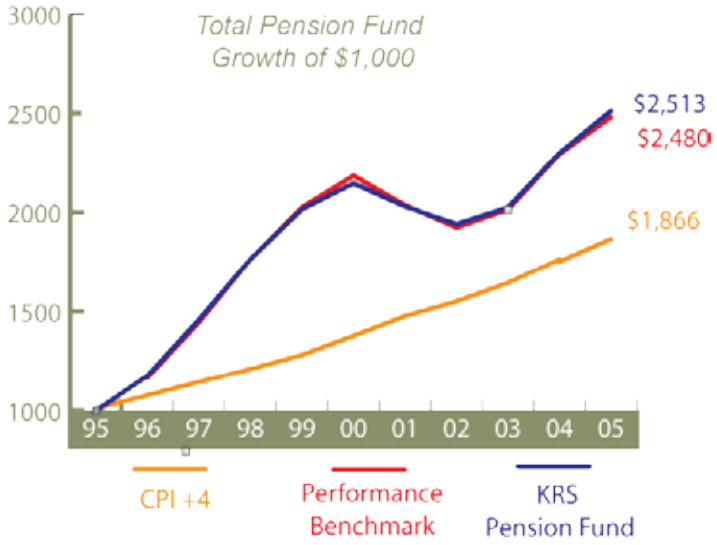
The performance calculations presented above were prepared by the System's custodial bank using a time-weighted rate of return methodology based upon the market value of assets.

The KRS insurance fund also posted a strong return for the fiscal year ended June 30, 2005. The portfolio returned 9.5% compared to the benchmark and actuarially required rates of return of 7.5% and 8.25%, respectively. The above benchmark performance of the insurance fund was also due in large part to higher than benchmark allocations to international equities and alternatives, which was further enhanced by above benchmark returns from all of the asset class portfolios.

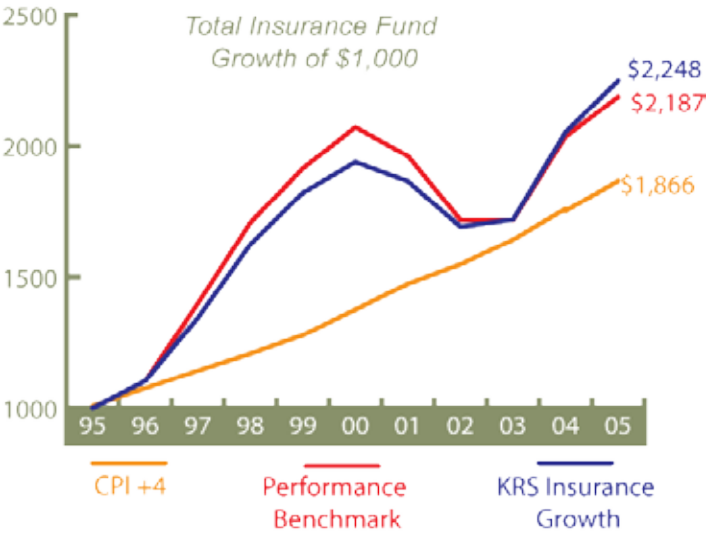
Insurance Total Fund

	Inception Date	Fiscal Year 2005	3-Year	5-Year	10-Year	Inception
KRS Total Fund	April 1987	9.5%	10.0%	3.0%	8.4%	8.9%
Performance Benchmark		7.5%	8.4%	1.1%	8.1%	8.7%
CPI + 4.0%		6.5%	6.6%	6.4%	6.4%	7.0%

Long-Term Results:



The 10-years ended June 30, 2005, provided returns that by historical measures were quite good. The KRS pension fund portfolio earned an annualized total return of 9.7%. As shown in the investment results table, the KRS pension fund return remains ahead of or in line with its benchmark for each of the time periods presented. The consistent, above benchmark performance is best illustrated by the growth of $1,000 invested in the KRS pension portfolio, its policy portfolio, and its actuarial objective (CPI + 4%) over the past 10 years.



The ending point at June 30, 2005, indicates that the $1,000 invested in the pension fund The KRS Insurance Fund also enjoyed a strong period of growth over the past 10 years, earning an annualized 8.4% return for the 10-year period ending June 30, 2005. As shown in the accompanying insurance investment results table, the KRS Insurance Fund return is above benchmark for each of the time periods presented. The consistent, above benchmark performance is best illustrated by the growth of $1,000 invested in the KRS Insurance Portfolio, its Policy Portfolio, and its actuarial objective (CPI + 4%) over the past 10 years.

The ending point at June 30, 2005, indicates that the $1,000 would have grown to $2,248, while the same $1,000 invested in the policy portfolio and its actuarial objective would have grown to $2,187 and $1,866, respectively.

Investment Results

U. S. Equity

	U.S. Equity					
	Inception Date	Fiscal Year 2005	3-Year	5-Year	10-Year	Inception
KRS Pension	April 1984	6.3%	8.6%	-1.1%	10.7%	13.0%
Performance Benchmark		6.4%	8.6%	-1.1%	10.1%	12.7%
KRS Insurance	July 1992	7.4%	8.9%	0.2%	10.4%	10.8%
Performance Benchmark		5.4%	7.1%	-2.7%	8.3%	9.594%
Market Indices						
Russell 1000 (Large Cap)		8.0%	9.7%	-0.7%	11.0%	
Russell 2000 (Small Cap)		10.4%	13.9%	7.6%	11.5%	
Russell 3000 (Large Cap)		8.2%	10.0%	-0.1%	10.9%	

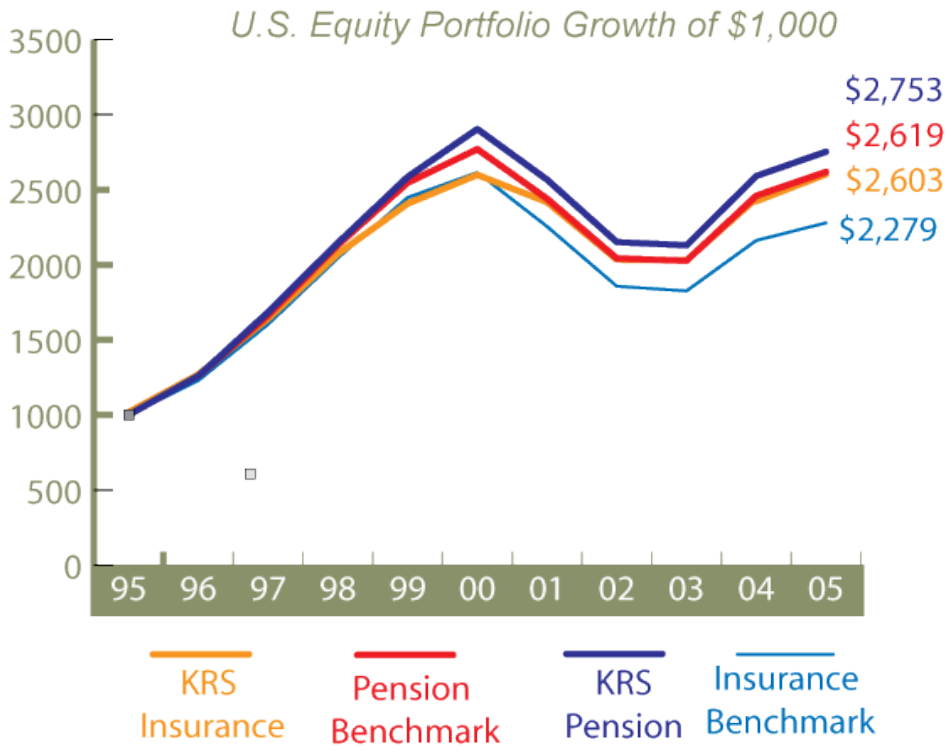
For the fiscal year ending June 30, 2005, the KRS Pension Fund U.S. Equity Portfolio returned 6.3%, slightly trailing its performance benchmark by 0.1%. The KRS insurance U.S. equity portfolio, however, handily outperformed its performance benchmark by 2.0% during FY 2005. As the accompanying table indicates, all segments of the U.S. equity markets posted positive results during the recently completed fiscal year.

Top 10 U.S. Equity Holdings

Pension Fund			Insurance Fund		
Company	**Shares**	**Market Value**	**Company**	**Shares**	Market Value
General Electric Co	3,106,320	$107,633,988	General Electric Co	726,900	$25,187,085
Exxon Mobil Corp	1,741,920	$100,108,142	Exxon Mobil Corp	431,200	$24,781,064
Citigroup	1,652,586	$76,399,051	Microsoft Corp	748,100	$18,582,804
Microsoft Corp	3,008,910	$74,741,324	Citigroup	356,800	$16,494,864
Pfizer, Inc	2,630,880	$72,559,670	Pfizer, Inc	510,700	$14,085,106
Wal-Mart Stores, Inc	1,376,870	$66,365,134	Bank of America	283,300	$13,655,060
Intel Corp	2,144,648	$55,889,527	Wal-Mart Stores, Inc	277,750	$12,668,178
Bank of America	1,212,962	$55,323,197	Johnson & Johnson	192,088	$12,485,720
Johnson & Johnson	846,084	$54,995,460	Intel Corp	413,800	$10,783,628
Proctor & Gamble	879,274	$46,381,704	American Intl Group, Inc	168,784	$9,086,350
Total	**18,600,454**	**$710,397,197**	**Total**	**4,109,422**	**$158,529,859**

U. S. Equity

Over the past three years, U.S. equity investors have received respectable returns from U.S. equity investments. The KRS pension fund portfolio, which matched its performance benchmark during this period, generated an annualized return of 8.6%. During this same time frame the insurance fund had returns of 8.9%. The positive results earned this fiscal year were not enough to bring the five year returns back into positive territory for the pension fund. The 10-year returns for each of the U.S. equity portfolios, once again, show the Systems generating positive, above benchmark returns.



The consistent, above benchmark, performance is best illustrated by the growth of $1,000 invested in the KRS U.S. equity portfolio and its benchmark portfolio over the past 10 years. For the fiscal year ending June 30, 2005, $1,000 invested in the KRS pension fund would have grown to $2,753, while the same $1,000 invested in the benchmark portfolio would have grown to $2,619. For the KRS insurance fund, the ending point at June 30, 2005, indicates that the $1,000 would have grown to $2,603, while the same $1,000 invested in the benchmark portfolio would have grown to $2,279.

Investment Results

International Equity

	International Equity				
	Inception Date	Fiscal Year 2005	3-Year	5-Year	Inception
KRS Pension	July 2000	13.6%	10.9%	-2.7%	-2.7%
Performance Benchmark		14.1%	12.6%	-1.4%	-1.4%
KRS Insurance	July 2000	14.6%	12.8%	-0.8%	-0.8%
Performance Benchmark		14.1%	12.5%	-0.2%	-0.2%
Market Indices					
MSCI EAFE		13.9%	13.0%	1.0%	1.0%
MSCI Emerging Markets		31.5%	23.7%	9.7%	9.7%
MSCI ACWI Ex US		16.4%	14.4%	2.0%	2.0%

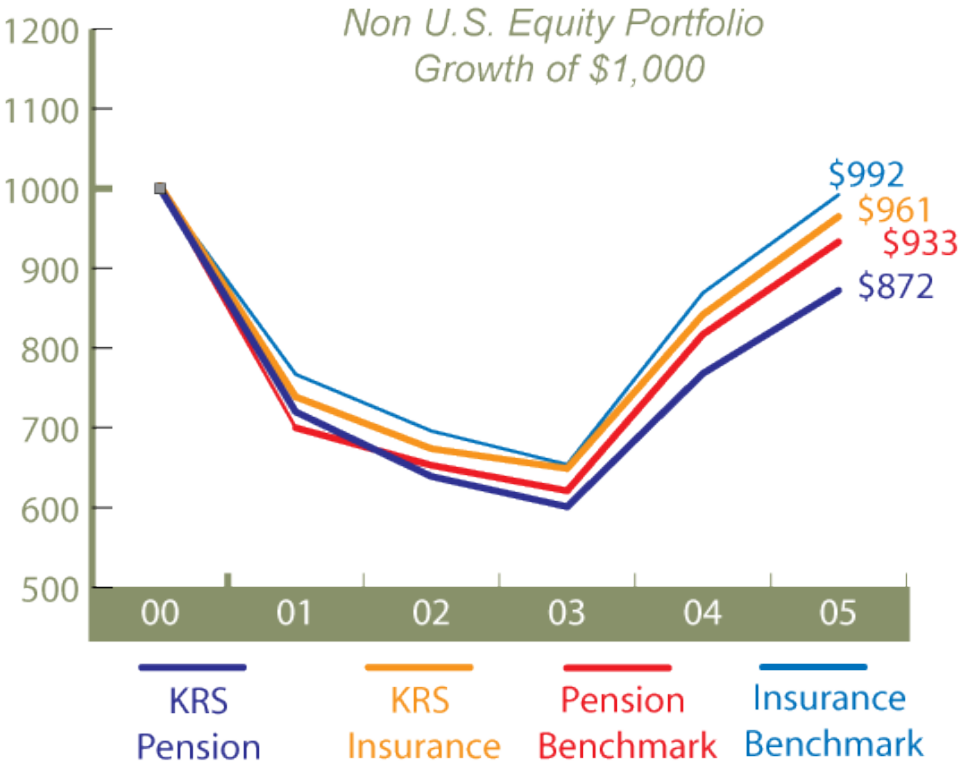
For the fiscal year ending June 30, 2005, the KRS pension fund international equity portfolio returned 13.6%, trailing its performance benchmark, the MSCI EAFE Index, by 0.5%. The KRS insurance international equity portfolio, however, outperformed the MSCI EAFE Index by 0.5% during the same period. As the accompanying table indicates, international equity markets posted strong returns during the recently completed twelve month period.

Top 10 International Equity Holdings

Pension Fund			Insurance Fund		
Company	**Shares**	**Market Value**	**Company**	**Shares**	**Market Value**
Total SA	128,751	$30,286,006	BP Plc	949,100	$9,884,055
BP Plc	2,720,980	28,336,653	Shell Transport & Trading	1,002,278	9,750,684
GlaxoSmithKline Plc	1,084,181	26,254,527	Total SA	40,324	9,485,386
N ovartis AG	505,255	24,077,603	Ericsson LM	2,837,425	9,120,223
ENI S.P.A.	846,550	21,840,101	Altadis, S.A.	175,510	7,366,722
Vodafone Group Plc	8,425,483	20,539,070	Novartis AG	149,938	7,145,199
Nestle S.A.	76,511	19,589,109	ENI S.P.A.	259,850	6,703,857
Shell Transport & Trading	1,931,882	18,794,358	Toyota Motor Corp	186,200	6,671,004
Toyota Motor Corp	510,400	18,286,147	GlaxoSmithKline Plc	270,385	6,547,643
Sumitomo Mitsui Financial	2,682	18,152,694	Vivendi Universal S.A.	192,297	6,066,881
Total	**16,232,675**	**226,156,269**	**Total**	**6,063,307**	**78,741,656**

International Equity

Over the past three years, international equity investors have received very good returns from the asset class. The KRS pension fund portfolio has generated an annualized average return of 10.9% over this three-year period, which fell short of the MSCI EAFE Index return of 12.5%, by 1.6%. The insurance fund generated a 12.8% return for the same time period, outperforming the MSCI EAFE Index by 0.3%. The disparity in returns between the two portfolios is due to a difference in the underlying investment managers and cash flows. Changes were made during the fiscal year, which should correct the under performance of the international equity portfolio in the pension fund. The Systems began its international equity program five years ago in July 2000. Since inception, both portfolios have under performed their benchmark.



The accompanying chart indicates the growth of $1,000 invested in the KRS international equity portfolios and the MSCI EAFE Index since their inception five years ago. For the KRS pension fund, the ending point at June 30, 2005, indicates that the $1,000 would have declined to $872, while the same $1,000 invested in the MSCI EAFE Index would have fallen to $933. For the KRS insurance fund, the ending point at June 30, 2005, indicates that the $1,000 would have declined to $961, while the same $1,000 invested in the index would also have fallen to $992.

Investment Results

Fixed Income

International Equity	Inception Date	Fiscal Year 2005	3-Year	5-Year	10-Year	Inception
KRS Pension	April 1984	7.8%	7.2%	8.1%	7.1%	9.1%
Performance Benchmark		7.6%	7.1%	8.1%	7.1%	8.9%
KRS Insurance	July 1992	9.4%	9.5%	9.7%	8.0%	7.9%
Performance Benchmark		9.3%	9.4%	9.6%	7.9%	7.9%
Market Indices						
LB Aggregate		6.6%	5.7%	7.2%	6.7%	
LB Government Credit		7.1%	6.4%	7.6%	6.8%	

For the fiscal year ending June 30, 2005, the KRS pension fund fixed income portfolio returned 7.8%, exceeding its custom performance benchmark by 0.2%. As the accompanying table indicates both of the broad market indices, the Lehman Brothers Aggregate Index and the Lehman Brothers Intermediate Government Credit Index, posted above historical long-term average returns, which is fairly remarkable during a period when the Federal Reserve has continued to increase short-term interest rates. The KRS insurance fixed income portfolio also posted a strong positive return of 9.4% and outperformed its benchmark, the Lehman Brothers U.S. TIPS Index, by 0.1%.

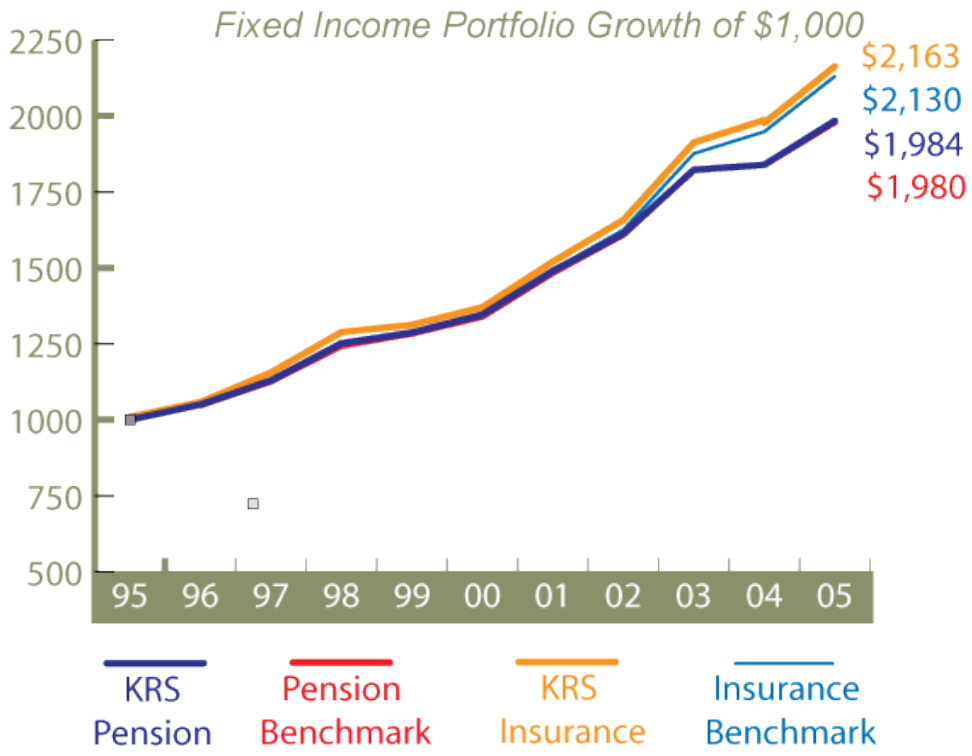
Top 10 Fixed Income Holdings

Pension Fund		
Company	**Par Value**	**Market Value**
US TSY BD INFL Index 3.875 Due 4/15/29	88,500,000	$147,205,984
US TSY BD INFL Index 3.625 Due 4/15/28	83,500,000	$134,957,388
US TSY NT INFL Index 3.000 Due 7/15/12	93,350,000	$110,946,598
US TSY NT INFL Index 3.875 Due 1/15/09	69,000,000	$89,066,450
US TSY NT INFL Index 1.654 Due 1/15/15	86,000,000	$87,307,914
US TSY NT INFL Index 1.875 Due 7/15/13	78,500,000	$84,931,824
US TSY NT INFL Index 2.000 Due 1/15/14	76,150,000	$82,589,954
US TSY NT INFL Index 3.375 Due 1/05/07	64,200,000	$81,340,662
US TSY NT INFL Index 3.500 Due 1/15/11	64,000,000	$79,291,873
US TSY NT INFL Index 3.625 Due 1/15/08	60,500,000	$77,096,712
Total		**$974,735,358**

Insurance Fund		
Company	**Par Value**	**Market Value**
US TSY BD INFL Index 3.875 Due 4/15/29	71,482,000	$118,899,188
US TSY BD INFL Index 3.625 Due 4/15/28	62,427,000	$100,898,022
US TSY NT INFL Index 3.000 Due 7/15/12	75,481,000	$89,709,268
US TSY NT INFL Index 1.654 Due 1/15/15	72,500,000	$73,602,602
US TSY BD INFL Index 5.250 Due 2/15/29	63,235,000	$73,322,565
US TSY NT INFL Index 1.875 Due 7/15/13	66,250,000	$71,678,131
US TSY NT INFL Index 3.875 Due 1/15/09	54,613,000	$70,495,449
US TSY NT INFL Index 2.000 Due 1/15/14	63,650,000	$69,032,838
US TSY NT INFL Index 3.375 Due 1/05/07	51,474,000	$65,216,967
US TSY NT INFL Index 2.000 Due 1/15/14	57,750,000	$61,420,493
Total		**$793,275,523**

Fixed Income

Over the past three years ended June 30, 2005, the KRS pension fund portfolio has generated an annualized average return of 7.2% versus its custom performance benchmark return of 7.1%. The insurance fund portfolio posted a 9.5% return during the same period, also exceeding its benchmark by 0.1%. Over longer time horizons (i.e. five and ten year periods) both the pension and insurance fund fixed income portfolios have performed in line with their benchmarks.



The preceding chart shows the growth of $1,000 invested in the KRS fixed income portfolios and their benchmarks over the past ten years. For the KRS pension fund, the ending point at June 30, 2005 indicates that the $1,000 would have grown to $1,984 while the same $1,000 invested in the benchmark portfolio would have grown to $1,980. For the KRS insurance fund, the ending point at June 30, 2005 indicates that the $1,000 would have grown to $2,163 while the same $1,000 invested in the benchmark portfolio would have grown to $2,130.

Investment Results

Alternative Investments

	Alternative Investments					
	Inception Date	Fiscal Year 2005	3-Year	5-Year	10-Year	Inception
KRS Pension	October 1990	32.2%	20.1%	18.0%	14.2%	13.2%
Performance Benchmark		7.6%	10.2%	8.1%	9.3%	10.4%
KRS Insurance	July 2001	12.6%	10.5%			8.2%
Performance Benchmark		6.5%	8.6%			2.2%

For the fiscal year ending June 30, 2005, the KRS pension fund alternative investments portfolio was the best performing asset class returning 32.2%. The portfolio consists primarily of real estate investment trusts (REITs), or publicly traded real estate securities focused investments and operating companies, and private equity limited partnerships. The custom performance benchmark for the pension alternative investment portfolio returned 7.6% during this same period. The insurance alternative investment portfolio also fared well, generating a return of 12.6% versus a custom performance benchmark return of 6.5% during the fiscal year.

As the accompanying table indicates, the longer term results from the alternative investment portfolios have also been very good. For the three years ended June 30, 2005, the pension fund portfolio has outperformed its custom performance benchmark by nearly 10% on an annualized basis. Since its inception in October, 2000, the portfolio has exceeded its benchmark by nearly 5% each year. The insurance portfolio has also done very well exceeding its benchmark return over the three-year and since inception periods by 1.9% and 6.0%, respectively.

Following are additional schedules which indicate the Investment Advisors employed along with the total assets each of the firm manages for the Systems, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems as of or for the year ended June 30, 2005.

External Investment Advisors, Master Custodian and Consultants

External Investment Advisors	Assets Under Management (in thousands)
Barclays Global Investors, San Francisco, California	$484,952
C.B. Richard Ellis, New York, New York	$200
Fidelity Investments, Boston, Massachusetts	$1,149,934
H.I.G. Venture Partners, Miami, Florida	$1,599
Heitman Capital Management Corp., Chicago, Illinois	$39
INVESCO-National Asset Management Corp, Louisville, Kentucky	$1,937,899
Institutional Venture Partners, Menlo Park, California	$2,894
JW Childs Equity, Boston, Massachusetts	$18,580
Lehman Brothers Asset Management, Chicago, Illinois	$1,616,204
Leonard Green & Partners, L.P., Los Angeles, California	$15,485
Matlin Patterson Global Opportunities, New York, New York	$45,510
Merit Capital Partners, Chicago, Illinois	$1,183
New Mountain Partners, New York, New York	$9,133
Northern Trust Quantitative Advisors, Chicago, Illinois	$661,663
Oak Hill Partners, New York, New York	$8,688
Sun Capital Partners, Boca Raton, Florida	$600
The Boston Company, Boston, Massachusetts	$722,696
Vantagepoint Venture, San Bruno, California	$19,052
Weaver Barksdale & Associates, Brentwood, Tennessee	$2,055,463
Total	**$8,751,774**

Master Custodian & Performance Measurement

The Northern Trust Company, Chicago, Illinois

Investment Consultants

Mercer Investment Consulting, Inc, Chicago, Illinois

Strategic Investment Solutions, San Francisco, California

Pension Fund Summaries

Asset Class	KERS Non Hazardous Market Value	KERS Non Hazardous % Market Value	KERS Hazardous Market Value	KERS Hazardous % Market Value
Bonds	$1,702,654,601	32.0	$116,546,077	29.5
Mortgages	$261,910,512	4.9	$18,255,371	4.7
Short Term	$101,249,248	1.9	$16,899,044	4.2
Alternatives	$350,819,798	6.7	$32,406,135	8.2
Domestic Equities	$2,069,645,883	38.9	$147,135,895	37.3
International Equities	$829,067,598	15.6	$63,507,256	16.1
Total Portfolio	**$5,315,347,640**	**100**	**$394,749,778**	**100**

Asset Class	CERS Non Hazardous Market Value	CERS Non Hazardous % Market Value	CERS Hazardous Market Value	CERS Hazardous % Market Value
Bonds	$1,589,888,984	32.7	$434,811,956	31.2
Mortgages	$270,871,946	5.6	$74,211,579	5.3
Short Term	$179,377,744	3.8	$61,359,681	4.4
Alternatives	$300,938,030	6.2	$88,700,429	6.4
Domestic Equities	$1,752,683,421	36.2	$514,463,369	36.7
International Equities	$753,491,469	15.5	$222,139,481	16.0
Total Portfolio	**$4,847,251,594**	**100**	**$1,395,686,495**	**100**

Asset Class	SPRS Market Value	SPRS % Market Value
Bonds	$111,321,623	33.0
Mortgages	$16,699,734	4.9
Short Term	-$5,830,992	-1,7
Alternatives	$24,463,163	7.3
Domestic Equities	$133,933,198	39.8
International Equities	$56,231,950	16.7
Total Portfolio	**$336,818,676**	**100**

Asset Class	KERS Non Hazardous		KERS Hazardous	
	Market Value	% Market Value	Market Value	% Market Value
Bonds	$65,541,188	10.8	$20,078,066	10.7
Short Term	$84,209,872	13.9	$16,910,390	9.0
Alternatives	$35,275,911	5.8	$9,792,269	5.2
Domestic Equities	$306,742,108	50.5	$98,859,900	52.7
International Equities	$115,467,957	19.0	$42,143,792	22.4
Total Portfolio	**$607,237,036**	**100**	**$187,784,417**	**100**

Asset Class	CERS Non Hazardous		CERS Hazardous	
	Market Value	% Market Value	Market Value	% Market Value
Bonds	$64,851,134	9.9	$37,420,651	10.5
Short Term	$65,472,182	10.0	$35,090,880	9.9
Alternatives	$30,564,424	4.7	$16,505,552	4.6
Domestic Equities	$361,978,299	55.0	$191,608,685	53.8
International Equities	$134,150,192	20.4	$75,503,675	21.2
Total Portfolio	**$657,016,231**	**100**	**$356,129,443**	**100**

Asset Class	SPRS	
	Market Value	% Market Value
Bonds	$11,297,649	11.4
Short Term	$8,388,693	8.5
Alternatives	$5,296,789	5.4
Domestic Equities	$52,686,088	53.3
International Equities	$21,265,630	21.4
Total Portfolio	**$98,934,849**	**100**

External Investment Expenses

Expense	Fees Paid (in thousands)	Expense as a % of Assets
Equity & Fixed Income Portfolio		
Pension Funds	$9,026	0.0750%
Insurance Funds	$1,428	0.0796%
Consulting Fees	$313	0.0023%
Custody Fees	$749	0.0054%
Other Investment-Related Fees	$50	0.0004%
Total Expenses	$11,566	0.0837%

Schedule of Commissions Paid

	Total Shares	Commissions Paid	$ per share
U.S. Equity	74,579,501	$1,998,191	$0.027
	Total Value of Trades	**Commissions Paid**	**As a % of Trade**
Non-U.S. Equity	$4,209,154,513	$4,382,054	0.10%
Total Commissions Paid		**$6,380,245**	

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SEGAL

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November 11, 2005

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The forty-ninth annual actuarial valuation of the Kentucky Employees Retirement System, the forty-sixth annual actuarial valuation of the County Employees Retirement System, and the forty-seventh annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2005 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2006 and ending June 30, 2007.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded actuarial liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any unfunded actuarial liability (UAL) is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) are established as a new amortization base to be amortized over the following 30 years.

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the unfunded actuarial liability (UAL) over a 30 year period. However, current insurance fund contributions are less than this amount and will be systematically increased in accordance with Board policy over the 20-year period beginning with 1997 until the funding objective is reached. As such, the insurance fund contribution is expected to increase each year for the remainder of the 20-year period.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial liabilities. This relationship is known as the funded level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2005 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	73.6%
KERS Hazardous Pension Fund	92.3%
CERS Non-Hazardous Pension Fund	93.9%
CERS Hazardous Pension Fund	80.9%
SPRS Pension Fund	77.1%

The funding level for the insurance fund is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Since 1990, the funded level relative to the insurance fund has improved steadily. This increasing trend in the funded level is the primary objective of the Board's current funding policy. As of June 30, 2005 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	22.7%
KERS Hazardous Insurance Fund	48.6%
CERS Non-Hazardous Insurance Fund	23.8%
CERS Hazardous Insurance Fund	28.0%
SPRS Insurance Fund	42.8%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data, nor has there been any reconciliation of data used in the prior year's valuation with this current valuation data. Any schedules of trend data over the past ten years or less have been based on valuation reports fully prepared by the plan's actuary.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation meet the parameters set for disclosure under GASB Statement No. 25. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in January 2006 and any adjustments will be reflected in the June 30, 2006 actuarial valuation.

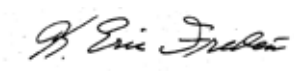
Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the Actuarial Liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,

Leon F. (Rocky) Joyner, Jr., ASA, MAA
Vice President



K. Eric Fredén, FSA, MAAA
Associate Actuary

Summary of Actuarial Assumptions and Methods

(As of June 30, 2005)

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience once every five years through the completion of the Actuarial Experience Study. The most recent study was completed in January 2001 and reviewed plan experience for the period from July 1, 1995 through June 30, 2000. All assumptions used in the June 30, 2005 actuarial valuation were based on the study performed in 2001 and in accordance with the actuary's recommendations. The next Experience Study is scheduled to be completed in January 2006.

1. ***Actuarial Cost Method:*** The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL) over a 30-year period.

Relative to the insurance fund, the employer contribution rate necessary to fund the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL) over a 30-year period has been calculated. However, in accordance with the Retiree Funding Policy adopted by the Board, the employer contribution rate to the insurance fund is set at the amount necessary to incrementally increase the rate to the full EANC amount by 2016.

2. ***UAL Amortization Method:*** Unfunded actuarial liabilities (UAL) resulting from any new actuarial gains and losses are recognized in each valuation and amortized over a 30 year period using the level percent of payroll method as required by state statute. Under this method, amortization payments are designed to remain level as a percent of payroll, and payroll is assumed to increase at 5% per year.

3. ***Asset Valuation Method:*** The actuarial value of assets in the current year's valuation is determined in the following manner for both the Pension Fund and Insurance Fund:

   a. Develop expected assets by projecting the actuarial assets from the prior year valuation using the 8.25% investment return assumption and actual cash flows from the fiscal year ended.

   b. The current year investment gain/loss shall be determined as the difference between actual market value as of the valuation date and expected assets as computed in (a), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.

   c. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.

   d. The actuarial value of assets will be equal to expected assets from (a) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current valuation.

The Asset Valuation Method was adopted by the Board in 2001. Only investment gains/losses occurring after June 30, 2000 are recognized and amortized under this method.

4. ***Retiree Insurance Funding Policy:*** Beginning with the 1997 valuation, the contribution to the insurance fund has been incrementally increasing in order to reach the target rate within 20 years from 1997 (2016 valuation). The target rate is the actuarially determined contribution under the entry age normal cost funding method, and is recomputed in each annual valuation to reflect current actuarial assets and liabilities. This policy was adopted in 2001.
5. ***Investment Return Assumption:*** The future investments earnings of plan assets are assumed to accumulate at a rate of 8.25% per annum. This rate consists of a 5% inflationary component and a 3.25% real rate of return component. This assumption was adopted in 2001.
6. ***Salary Increase Assumption:*** Active member salaries are assumed to increase at a rate of 12% in the first year of employment, 10% in the second year of employment, 8% in the third year of employment and 6.50% per year thereafter, compounded annually. The rates include a 5% percent inflationary component and an additional increase due to promotion based upon plan experience. This assumption was adopted in 2001.
7. ***Payroll Growth Assumption:*** Active member payroll is assumed to increase at a rate of 5% per annum.
8. ***Retiree Cost of Living Adjustments (COLA):*** State statutes require retirement allowances to be increased by the percentage increase in the annual average of the consumer price index for all urban consumers (CPI-U) for the most recent calendar year, not to exceed five percent. Statute only allows the Cost of Living Adjustments (COLAs) awarded as of the valuation date to be recognized for funding purposes and for determining employer contribution rates. The State Legislature has the authority to suspend or reduce cost-of-living adjustments.
9. ***Medical Inflation Rate Assumption:*** The costs for retiree medical premiums are assumed to increase each year by 10% from 2003-2005, by 9% from 2005-2010, by 8% from 2011-2015, by 7.5% from 2016-2020, and by 7% thereafter.
10. ***Retirement Rate Assumption:*** The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 1 on the following page. This assumption was adopted in 2001.

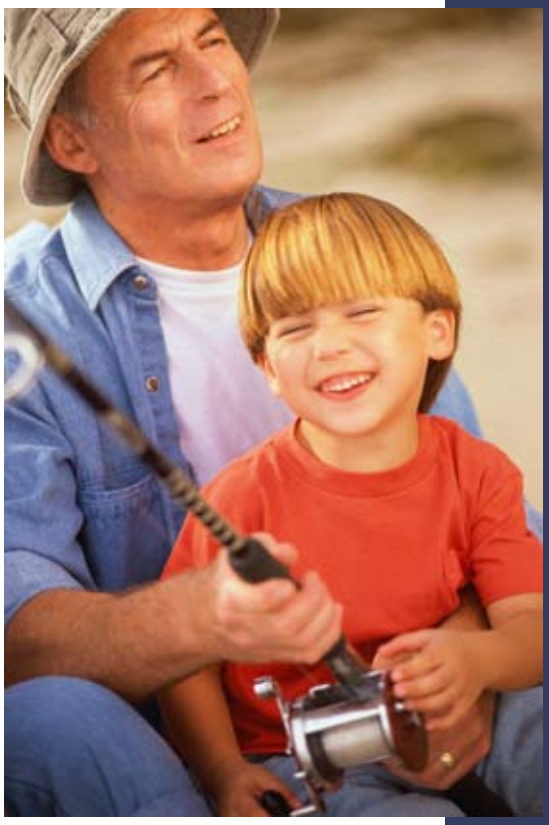


Table 1: Retirement Rate Assumptions

Non-Hazardous

Age	Probability
55-57	4%
58-59	5%
60-61	6%
62	25%
63-64	10%
65	50%
66-67	20%
68	25%
69	40%
70+	100%

At age 55-64 in lieu of age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits with 27 years of creditable service.

Hazardous

- For hazardous duty members of the Kentucky Employees Retirement System it is assumed that 50% will retire as soon as eligible for unreduced benefits with 20 years of creditable service and the balance will continue to age 60.
- For hazardous duty members of the County Employees Retirement System it is assumed that 60% will retire as soon as eligible for unreduced benefits with 20 years of creditable service and the balance will continue to age 55.
- For members of the State Police Retirement System it is assumed that 60% will retire as soon as eligible for unreduced benefits with 20 years of creditable service and the balance will continue to age 55.

11. ***Mortality Assumptions:*** The mortality table used for active and retired members is the 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees. Mortality assumptions for disabled lives are based on Social Security Administration Disability Mortality Rates – Actuarial Study No. 75. Sample annual rates of mortality are shown in Table 2. These assumptions were adopted in 2001.

Table 2: Sample Annual Rates of Mortality

	Active & Retired Member Mortality*		Disabled Member Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.39%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

**Plus 0.05% duty death rate prior to retirement for hazardous duty employees.*

12. ***Withdrawal Rates:*** The probability, or likelihood, of active members terminating employment prior to retirement is provided in Table 3 on the following page. For non-hazardous employees and KERS hazardous duty employees, the withdrawal rate is a function of both age and service. This type of structure is known as “select and ultimate rates”. This structure reflects the fact that both service and age affect the likelihood of a member staying in active employment. The ultimate period for these systems covers a member’s withdrawal rate after the first five years of service. For CERS hazardous duty employees and SPRS employees, the withdrawal rate is a function of age only. These assumptions were adopted in 2001.

Table 3: Selected Rates of Termination Prior to Retirement

KERS & CERS Non-Hazardous

Select Rates		Ultimate Rates	
Service	Probability	Age	Probability
1st Yr. of Service:	35.0%	20	2.4%
2nd Yr. of Service:	10.0%	25	2.4%
3rd Yr. of Service:	7.0%	30	2.4%
4th Yr. of Service:	5.0%	35	2.4%
5th Yr. of Service:	4.0%	40	2.0%
		45	1.8%
		50	1.6%
		55	1.2%
		60	0.2%

KERS Hazardous

Select Rates		Ultimate Rates	
Service	*Probability*	*Age*	*Probability*
1st Yr. of Service:	30.0%	20	3.04%
2nd Yr. of Service:	8.0%	25	3.04%
3rd Yr. of Service:	4.0%	30	3.38%
4th Yr. of Service:	4.0%	35	2.44%
5th Yr. of Service:	4.0%	40	1.50%
		45	0.75%
		50	0.00%
		55	0.00%
		60	0.00%

CERS Hazardous

Ultimate Rates	
Age	*Probability*
20	3.04%
25	3.04%
30	3.38%
35	2.44%
40	1.50%
45	0.75%
50	0.00%
55	0.00%
60	0.00%

SPRS

Ultimate Rates	
Age	*Probability*
20	1.82%
25	1.82%
30	2.03%
35	1.46%
40	0.90%
45	0.45%
50	0.00%
55	0.00%
60	0.00%

13. ***Rates of Disablement:*** KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. These assumptions were adopted in 2001.

Non-Hazardous

Age	*Probability*
20-29	0.033%
30-34	0.039%
35-39	0.057%
40-44	0.105%
45-49	0.207%
50-54	0.423%
55-59	0.794%
60-64	1.395%
65+	0.000%

Hazardous

Age	*Probability*
20-29	0.042%
30-34	0.050%
35-39	0.070%
40-44	0.132%
45-49	0.260%
50-54	0.530%
55-59	0.992%
60-64	1.743%
65+	0.000%

Summary of Actuarial Valuation Results

(As of June 30, 2005)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2006-2007)					
Pension Fund Contribution	10.68%	9.28%	5.97%	13.11%	20.64%
Insurance Fund Contribution	6.45%	14.04%	7.22%	15.10%	21.66%
Recommended Employer Contribution	17.13%	23.32%	13.19%	28.21%	42.30%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$7,579,074,839	$438,994,257	$5,385,156,690	$1,795,617,335	$458,593,576
Actuarial Value of Assets	$5,578,685,746	$405,288,662	$5,059,208,687	$1,452,353,023	$353,511,622
Unfunded Actuarial Liability on Actuarial Value of Assets	$2,000,389,093	$33,705,595	$325,948,003	$343,264,312	$105,081,954
Funding Level as a % of Actuarial Value of Assets	73.6%	92.3%	94.0%	80.9%	77.1%
Market Value of Assets	$5,362,630,697	$398,308,897	$4,893,599,997	$1,411,245,719	$339,405,873
Unfunded Actuarial Liability on Market Value of Assets	$2,216,444,142	$40,685,360	$491,556,693	$384,371,693	$119,187,703
Funding Level on Market Value of Assets	70.8%	90.7%	90.9%	78.6%	74.0%
Insurance Fund					
Actuarially Accrued Liability	$2,680,559,188	$386,844,695	$2,788,754,654	$1,283,299,092	$234,159,510
Actuarial Value of Assets	$607,068,351	$187,947,644	$663,941,949	$359,180,461	$100,207,082
Unfunded Actuarial Liability as a % of Actuarial Value of Assets	$2,073,490,837	$198,897,051	$2,124,812,705	$924,118,631	$133,952,428
Funding Level as a % of Actuarial Value of Assets	22.7%	48.6%	23.8%	28.0%	42.8%
Market Value of Assets	$610,901,623	$188,871,226	$668,485,367	$360,938,669	$99,408,106
Unfunded Actuarial Liability as a % of Market Value of Assets	$2,069,657,565	$197,973,469	$2,120,269,287	$922,360,423	$134,751,404
Funding Level on Market Value of Assets	22.8%	48.8%	24.0%	28.1%	42.5%
Member Data					
Number of Active Members	47,118	4,274	81,240	9,464	987
Total Annual Payroll (Active Members)[1]	$1,655,907,288	$131,687,088	$1,885,275,000	$411,121,728	$43,720,092
Average Annual Pay (Active Members)	$35,144	$30,811	$23,206	$43,441	$44,296
Number of Retired Members & Beneficiaries	30,770	1,752	31,347	4,361	1,036
Average Annual Retirement Allowance	$16,553	$11,210	$8,919	$20,460	$31,838
Number of Vested Inactive Members	5,240	307	7,771	482	42
Number of Inactive Members Due a Refund	23,105	1,997	41,098	1,489	210

Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuate date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2005.

Recommended Employer Contribution Rates

(As of June 30, 2005)

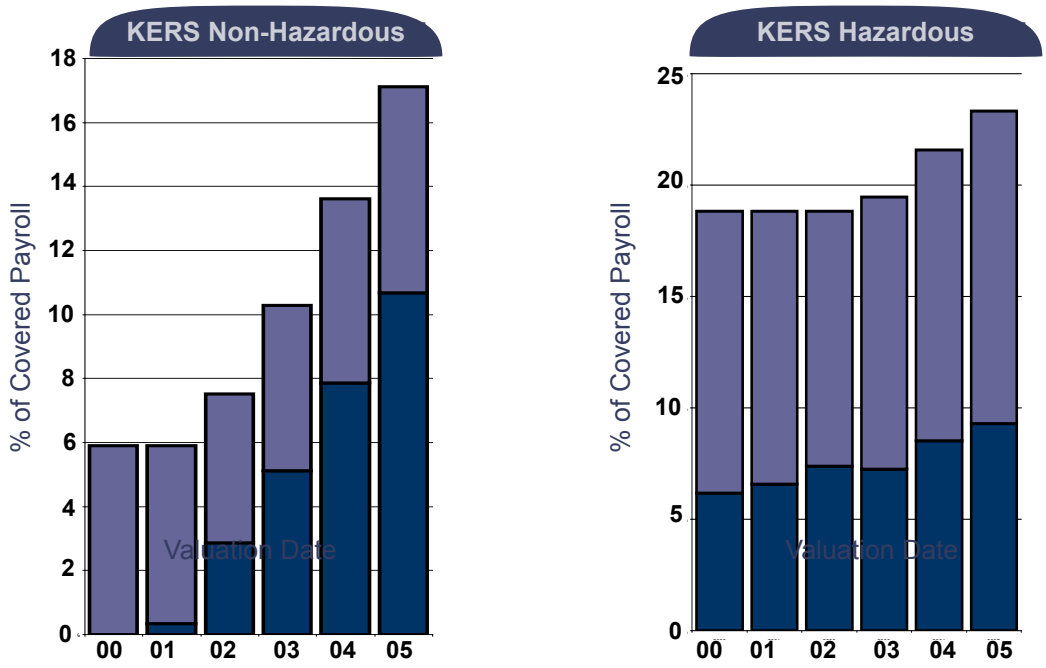
Kentucky Employees Retirement System
(Non-Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/00	2001-2002	5.08%	(6.69%)	0.00%	5.89%	5.89%
6/30/01	2002-2003	5.01%	(4.67%)	0.34%	5.55%	5.89%
6/30/02	2003-2004	5.00%	(2.14%)	2.86%	4.67%	7.53%
6/30/03	2004-2005	4.82%	0.29%	5.11%	5.18%	10.29%
6/30/04	2005-2006	4.89%	2.96%	7.85%	5.77%	13.62%
6/30/05	2006-2007	4.81%	5.87%	10.68%	6.45%	17.13%

Kentucky Employees Retirement System
(Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/00	2001-2002	10.29%	(4.11%)	6.18%	12.66%	18.84%
6/30/01	2002-2003	9.82%	(3.25%)	6.57%	12.27%	18.84%
6/30/02	2003-2004	9.77%	(2.40%)	7.37%	11.47%	18.84%
6/30/03	2004-2005	8.68%	(1.42%)	7.26%	12.21%	19.47%
6/30/04	2005-2006	8.62%	(0.10%)	8.52%	13.07%	21.59%
6/30/05	2006-2007	8.37%	0.91%	9.28%	14.04%	23.32%

KERS
Employer Contribution Rates



The total employer contribution rate is comprised of a contribution to the pension fund and to the insurance fund. The contribution to the pension fund consists of the normal cost and an amortization payment on the unfunded actuarial liability (UAL). The contribution rate to the insurance fund is set according to the Insurance Funding Policy adopted by the Board (See Summary of Actuarial Assumptions & Methods).

Recommended Employer Contribution Rates

(As of June 30, 2005)

County Employees Retirement System
(Non-Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2000	2001-2002	6.40%	(6.20%)	0.20%	6.14%	6.34%
6/30/2001	2002-2003	6.30%	(5.64%)	0.66%	5.68%	6.34%
6/30/2002	2003-2004	6.42%	(4.03%)	2.39%	4.95%	7.34%
6/30/2003	2004-2005	5.71%	(2.89%)	2.82%	5.66%	8.48%
6/30/2004	2005-2006	5.80%	(1.25%)	4.55%	6.43%	10.98%
6/30/2005	2006-2007	5.72%	0.25%	5.97%	7.22%	13.19%

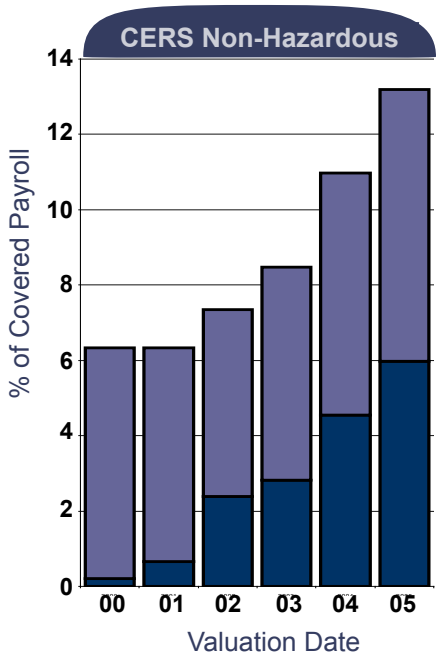
County Employees Retirement System
(Hazardous Employers)

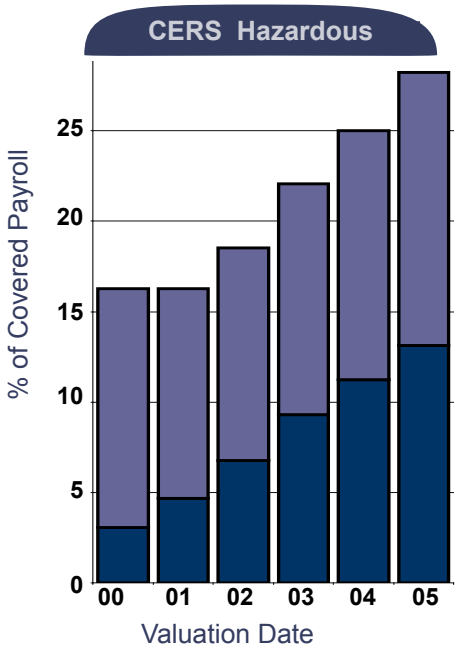
Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2000	2001-2002	8.59%	(5.89%)	3.06%	13.22%	16.28%
6/30/2001	2002-2003	9.01%	(4.34%)	4.67%	11.61%	16.28%
6/30/2002	2003-2004	8.93%	(2.17%)	6.76%	11.75%	18.51%
6/30/2003	2004-2005	8.80%	0.51%	9.31%	12.77%	22.08%
6/30/2004	2005-2006	8.80%	2.42%	11.22%	13.79%	25.01%
6/3 0/2005	2006-2007	8.79%	4.32%	13.11%	15.10%	28.21%

Pension
Insurance

The total employer contribution rate is comprised of a contribution to the pension fund and to the insurance fund. The contribution to the pension fund consists of the normal cost and an amortization payment on the unfunded actuarial liability (UAL). The contribution rate to the insurance fund is set according to the Insurance Funding Policy adopted by the Board (See Summary of Actuarial Assumptions & Methods).

CERS
Employer Contribution Rates





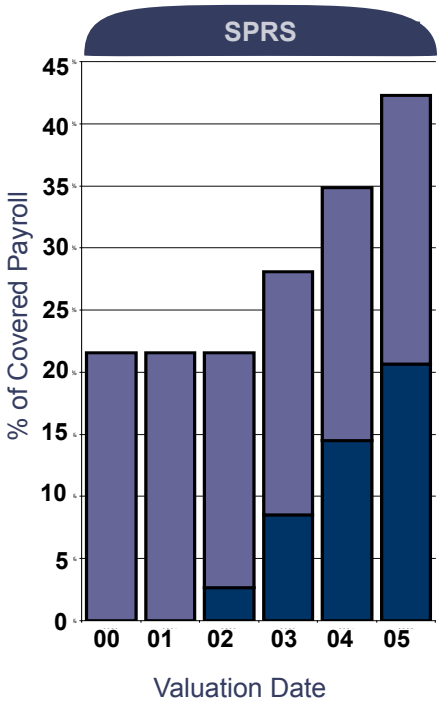
Recommended Employer Contribution Rates

(As of June 30, 2005)

State Police Retirement System

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2000	2001-2002	8.78%	(14.09%)	0.0%	21.58%	21.58%
6/30/2001	2002-2003	9.94%	(11.63%)	0.0%	21.58%	21.58%
6/30/2002	2003-2004	9.85%	(7.21%)	2.64%	18.94%	21.58%
6/30/2003	2004-2005	9.07%	(0.58%)	8.49%	19.59%	28.08%
6/30/2004	2005-2006	9.37%	5.12%	14.49%	20.34%	34.83%
6/30/2005	2006-2007	9.43%	11.21%	20.64%	21.66%	42.30%

SPRS
Employer Contribution Rate



The total employer contribution rate is comprised of a contribution to the pension fund and to the insurance fund. The contribution to the pension fund consists of the normal cost and an amortization payment on the unfunded actuarial liability (UAL). The contribution rate to the insurance fund is set according to the Insurance Funding Policy adopted by the Board (See Summary of Actuarial Assumptions & Methods).

Summary of Actuarially Unfunded Liabilities

(As of June 30, 2005)

Kentucky Employees Retirement System
(Non-Hazardous Pension Fund)

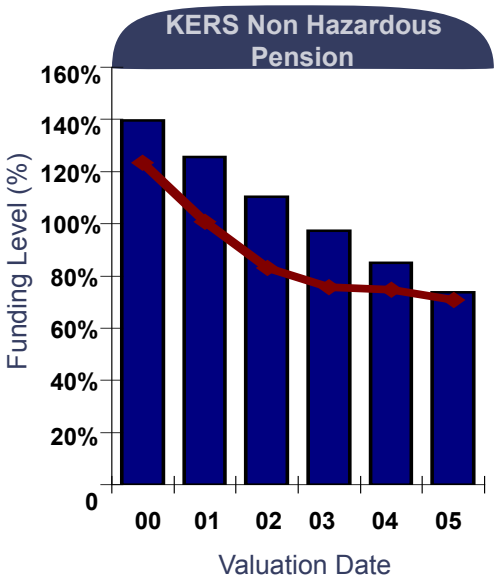
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/00	$4,876,825,772	$6,806,675,460	$6,017,455,841	($1,929,849,688)	($1,140,630,069)	139.6%	123.4%
6/30/01[1]	$5,444,035,294	$6,844,742,687	$5,484,563,749	($1,400,707,393)	($40,528,455)	125.7%	100.7%
6/30/02	$6,026,094,764	$6,654,084,196	$5,005,190,948	($627,989,432)	$1,020,903,816	110.4%	83.1%
6/30/03	$6,520,463,188	$6,351,318,832	$4,929,443,185	$169,144,356	$1,591,020,003	97.4%	75.6%
6/30/04	$7,049,613,171	$6,000,513,743	$5,258,994,145	$1,049,099,428	$1,790,619,026	85.1%	74.6%
6/30/05	$7,579,074,839	$5,578,685,746	$5,362,630,697	$2,000,389,093	$2,216,444,142	73.6%	70.8%

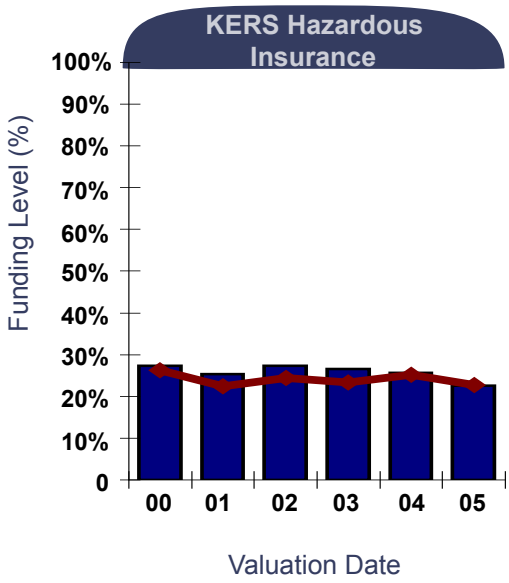
Kentucky Employees Retirement System
(Non-Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/00	$1,457,475,358	$399,560,252	$383,281,220	$1,057,915,106	$1,074,194,138	27.4%	26.3%
6/30/01[1]	$1,769,583,098	$449,630,605	$396,254,063	$1,319,952,493	$1,373,329,035	25.4%	22.4%
6/30/02	$1,907,683,881	$521,250,455	$465,664,515	$1,386,433,426	$1,442,019,366	27.3%	24.4%
6/30/03	$2,093,210,321	$553,885,082	$487,274,973	$1,539,325,239	$1,605,935,348	26.5%	23.3%
6/30/04	$2,335,905,365	$600,586,961	$587,680,647	$1,735,318,404	$1,748,224,718	25.7%	25.2%
6/30/05	$2,680,559,188	$607,068,351	$610,901,623	$2,073,490,837	$2,069,657,565	22.7%	22.8%

Actuarial
Market

The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).





[1] *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

Summary of Actuarially Unfunded Liabilities

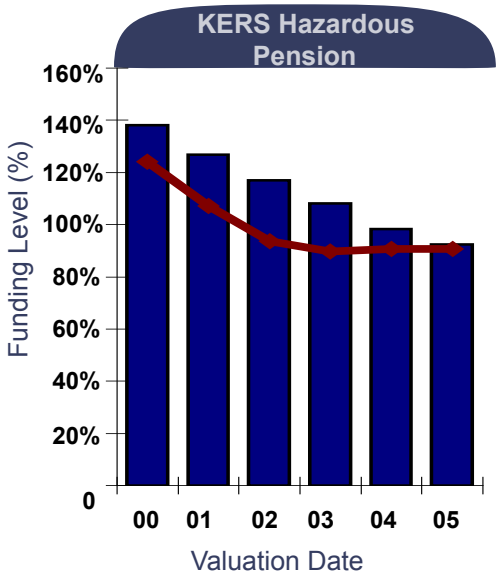
(As of June 30, 2005)

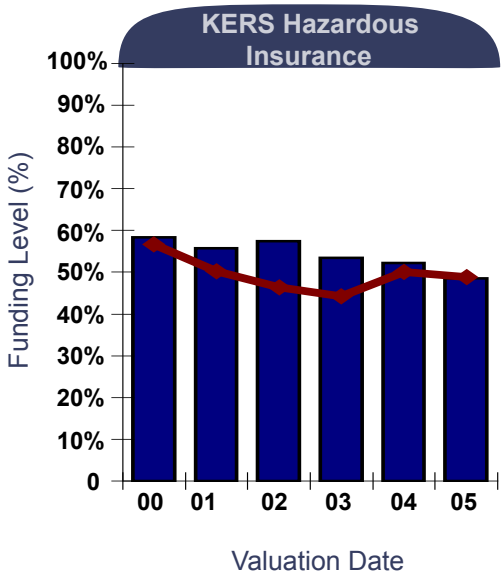
Kentucky Employees Retirement System
(Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/00	$243,365,557	$336,213,464	$301,920,446	($92,847,907)	($58,554,889)	138.2%	124.1%
6/30/01[1]	$285,193,761	$361,677,475	$305,543,701	($76,483,714)	($20,349,940)	126.8%	107.1%
6/30/02	$322,069,164	$376,384,302	$301,799,829	($54,315,138)	$20,269,335	116.9%	93.7%
6/30/03	$356,879,133	$385,925,722	$320,524,691	($29,046,589)	$36,354,442	108.1%	89.8%
6/30/04	$403,578,036	$397,212,763	$366,569,507	$6,365,273	$37,008,529	98.4%	90.8%
6/30/05	$438,994,257	$405,288,662	$398,308,897	$33,705,595	$40,685,360	92.3%	90.7%

Kentucky Employees Retirement System
(Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/00	$175,167,613	$102,212,237	$99,259,857	$72,955,376	$75,907,756	58.4%	56.7%
6/30/01[1]	$214,450,822	$119,372,742	$107,592,284	$95,078,080	$106,858,538	55.7%	50.2%
6/30/02	$236,819,050	$135,874,582	$109,769,410	$100,944,468	$127,049,640	57.4%	46.4%
6/30/03	$283,178,335	$151,459,500	$125,533,413	$131,718,835	$157,644,922	53.5%	44.3%
6/30/04	$323,503,563	$169,158,879	$162,127,373	$154,344,684	$161,376,190	52.3%	50.1%
6/30/05	$386,844,695	$187,947,644	$188,871,226	$198,897,051	$197,973,469	48.6%	48.8%





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[1] *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

Summary of Actuarially Unfunded Liabilities

(As of June 30, 2005)

County Employees Retirement System
(Non-Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/00	$3,368,601,134	$5,284,033,534	$4,673,154,191	($1,915,432,400)	($1,304,553,057)	156.9%	138.7%
6/30/01[1]	$3,706,282,212	$5,423,834,549	$4,397,346,547	($1,717,552,337)	($691,064,335)	146.3%	118.6%
6/30/02	$4,165,355,149	$5,397,787,158	$4,126,756,301	($1,232,432,009)	$38,598,848	129.6%	99.1%
6/30/03	$4,417,597,802	$5,286,580,047	$4,174,881,117	($868,982,245)	$242,716,685	119.7%	94.5%
6/30/04	$4,936,459,488	$5,187,851,530	$4,613,335,957	($251,392,042)	$323,123,531	105.1%	93.5%
6/30/05	$5,385,156,690	$5,059,208,687	$4,893,599,997	$325,948,003	$491,556,693	94.0%	90.9%

County Employees Retirement System
(Non-Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/00	$1,466,716,928	$319,642,694	$307,545,328	$1,147,074,234	$1,159,171,600	21.8%	21.0%
6/30/01[1]	$1,793,710,768	$371,758,628	$331,066,746	$1,421,952,140	$1,462,644,022	20.7%	18.5%
6/30/02	$1,977,577,038	$450,497,307	$365,332,585	$1,527,079,731	$1,612,244,453	22.8%	18.5%
6/30/03	$2,176,963,259	$520,060,105	$435,667,125	$1,656,903,154	$1,741,296,134	23.9%	20.0%
6/30/04	$2,438,734,696	$585,399,072	$563,877,594	$1,853,335,624	$1,874,857,102	24.0%	23.1%
6/30/05	$2,788,754,654	$663,941,949	$668,485,367	$2,124,812,705	$2,120,269,287	23.8%	24.0%

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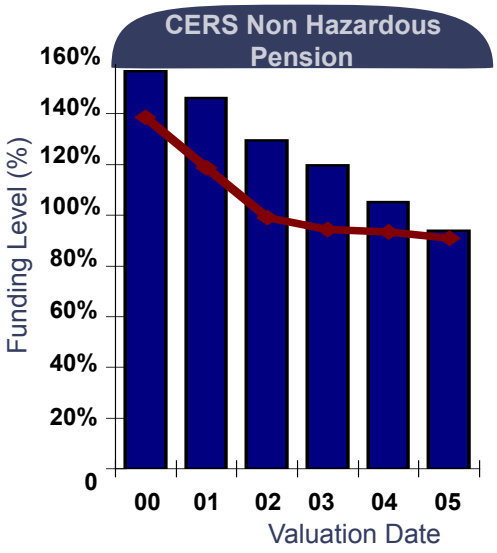
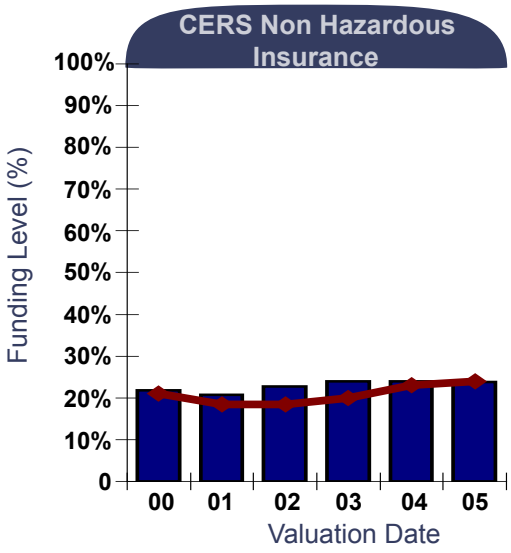




[1] *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

Summary of Actuarially Unfunded Liabilities

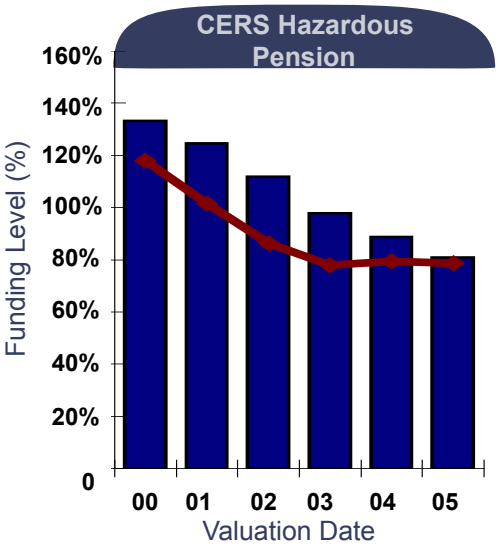
(As of June 30, 2005)

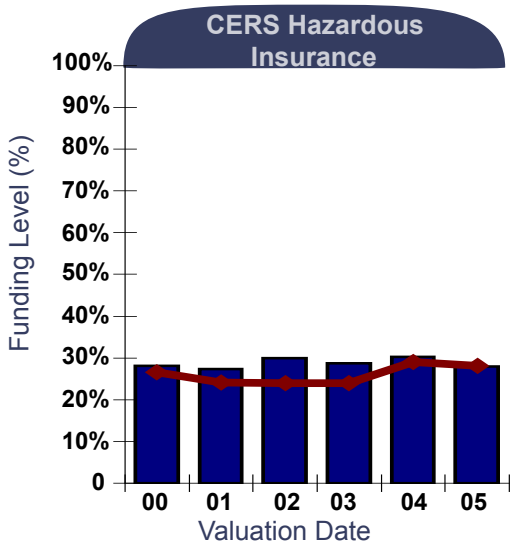
County Employees Retirement System
(Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/00	$1,084,553,697	$1,445,542,794	$1,279,936,150	($360,989,097)	($195,382,453)	133.3%	118.0%
6/30001[1]	$1,193,860,442	$1,486,666,016	$1,211,154,618	($292,805,574)	($17,294,176)	124.5%	101.4%
6/30/02	$1,327,291,273	$1,485,511,793	$1,144,349,093	($158,220,520)	$182,942,180	111.9%	86.2%
6/30/03	$1,499,628,782	$1,467,004,856	$1,168,794,472	$32,623,926	$330,834,310	97.8%	77.9%
6/30/04	$1,640,830,120	$1,457,612,042	$1,305,011,472	$183,218,078	$335,818,648	88.8%	79.5%
6/30/05	$1,795,617,335	$1,452,353,023	$1,411,245,719	$343,264,312	$384,371,616	80.9%	78.6%

County Employees Retirement System
(Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/00	$599,936,029	$168,657,912	$159,688,154	$431,278,117	$440,247,875	28.1%	26.6%
6/30/01[1]	$721,605,292	$197,875,249	$173,636,191	$523,730,043	$547,969,101	27.4%	24.1%
6/30/02	$781,184,974	$234,683,878	$187,533,847	$546,501,096	$593,651,127	30.0%	24.0%
6/30/03	$935,650,662	$269,190,080	$223,212,339	$666,460,582	$712,438,323	28.8%	23.9%
6/30/04	$1,025,684,477	$310,578,162	$297,734,286	$715,106,315	$727,950,191	30.3%	29.0%
6/30/05	$1,283,299,092	$359,180,461	$360,938,669	$924,118,631	$922,360,423	28.0%	28.1%





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[1] *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

Summary of Actuarially Unfunded Liabilities

(As of June 30, 2005)

State Police Retirement System
(Pension)

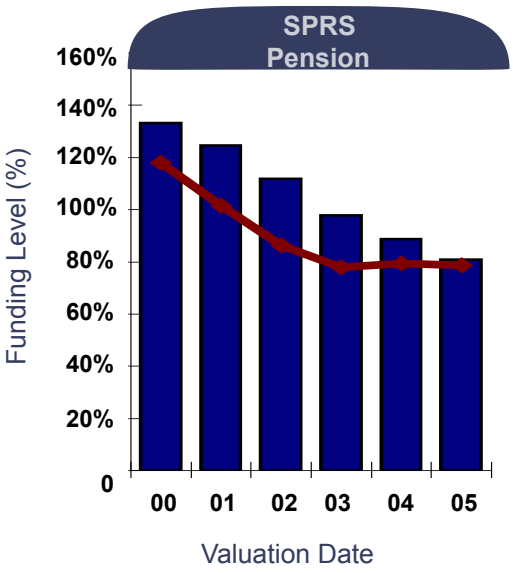
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/00	$336,579,763	$459,168,574	$411,531,207	($122,588,811)	($74,951,444)	136.4%	122.3%
6/30/01[1]	$356,211,860	$456,160,709	$364,591,852	($99,948,849)	($8,379,992)	128.1%	102.4%
6/30/02	$380,790,346	$438,955,465	$328,744,331	($58,165,119)	$52,046,015	115.3%	86.3%
6/30/03	$414,881,459	$413,063,576	$319,116,232	$1,817,883	$95,765,227	99.6%	76.9%
6/30/04	$437,482,425	$385,077,195	$335,720,408	$52,405,230	$101,762,017	88.0%	76.7%
6/30/05	$458,593,576	$353,511,622	$339,405,873	$105,081,954	$119,187,703	77.1%	74.0%

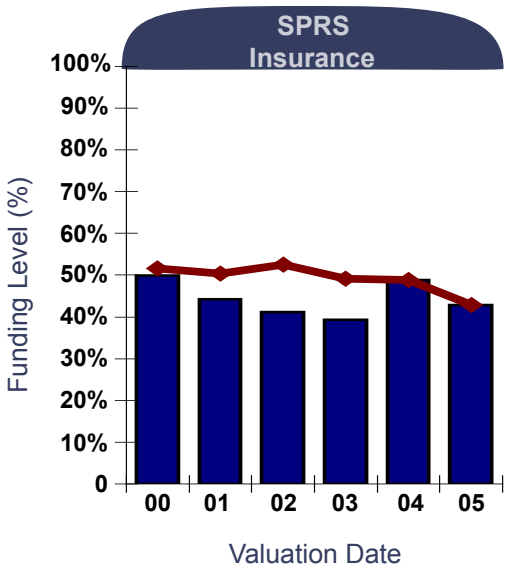
State Police Retirement System
(Insurance)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/00	$138,867,085	$71,711,712	$69,416,345	$67,155,373	$69,450,740	51.6%	50.0%
6/30/01[1]	$158,261,479	$79,863,577	$69,925,891	$78,397,902	$88,335,588	50.5%	44.2%
6/30/02	$165,445,412	$86,867,391	$68,074,444	$78,578,021	$97,370,968	52.5%	41.2%
6/30/03	$184,501,205	$90,747,967	$72,533,617	$93,753,238	$111,967,588	49.2%	39.3%
6/30/04	$197,604,301	$96,622,908	$90,422,080	$100,981,393	$107,182,221	48.9%	45.8%
6/30/ 05	$234,159,510	$100,207,082	$99,408,106	$133,952,428	$134,751,404	42.8%	42.5%

[1] *Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).*

The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).





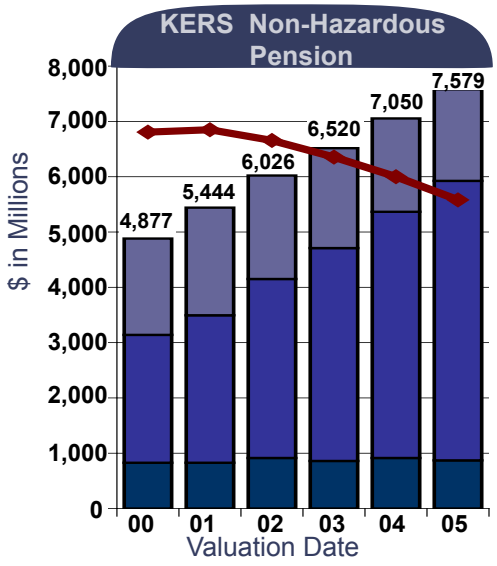
Kentucky Employees Retirement System
(Non-Hazardous Pension Fund)

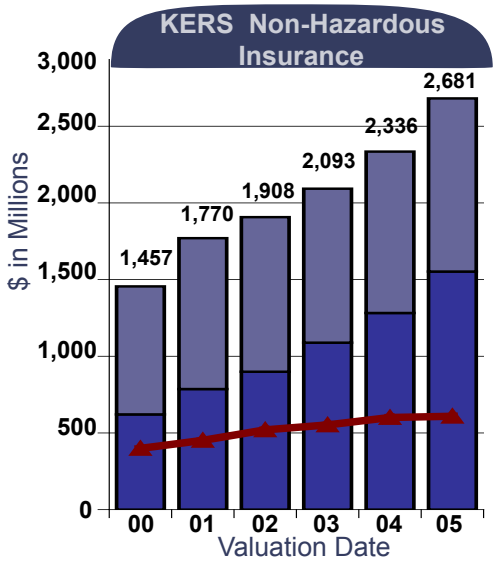
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/00	$830,039,984	$2,311,674,797	$1,735,110,991	$6,806,675,460	100.0%	100.0%	211.2%
6/30/01	$825,433,562	$2,669,755,096	$1,948,846,636	$6,844,742,687	100.0%	100.0%	171.9%
6/30/02	$910,956,664	$3,242,343,193	$1,872,794,907	$6,654,084,196	100.0%	100.0%	133.5%
6/30/03	$859,895,312	$3,844,696,149	$1,815,871,727	$6,351,318,832	100.0%	100.0%	90.7%
6/30/04	$915,105,103	$4,452,864,748	$1,681,643,320	$6,000,513,743	100.0%	100.0%	37.6%
6/30/05	$866,044,474	$5,056,247,608	$1,656,782,757	$5,578,685,746	100.0%	93.2%	--

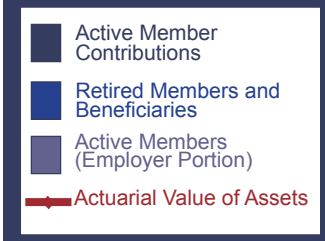
Kentucky Employees Retirement System
(Non-Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/00	$0	$622,714,954	$834,760,404	$399,560,252	100.0%	64.2%	--
6/30/01	$0	$784,547,826	$985,035,272	$449,630,605	100.0%	57.3%	--
6/30/02	$0	$900,313,022	$1,007,370,859	$521,250,455	100.0%	57.9%	--
6/30/03	$0	$1,089,606,122	$1,003,604,199	$553,885,082	100.0%	50.8%	--
6/30/04	$0	$1,282,214,660	$1,053,690,705	$600,586,961	100.0%	46.8%	--
6/30/05	$0	$1,550,619,458	$1,129,939,730	$607,068,351	100.0%	39.2%	--

1 *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*







A solvency test provides measures of the plans ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 covered by actuarial assets over time.

Solvency Test (As of June 30, 2005)

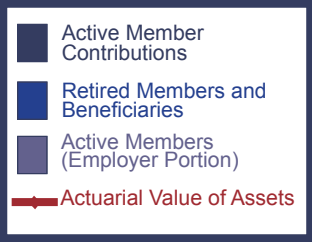
Kentucky Employees Retirement System
(Hazardous Pension Fund)

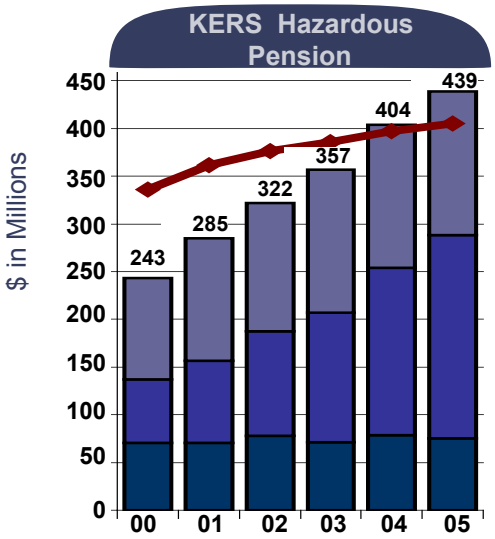
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/00	$70,798,823	$66,561,470	$106,005,264	$336,213,464	100.0%	100.0%	187.6%
6/30/01	$70,405,915	$86,372,269	$128,415,577	$361,677,475	100.0%	100.0%	159.6%
6/30/02	$77,700,666	$110,048,474	$134,320,024	$376,384,302	100.0%	100.0%	140.4%
6/30/03	$71,414,721	$135,622,333	$149,842,079	$385,925,722	100.0%	100.0%	119.4%
6/30/04	$78,817,575	$175,102,848	$149,657,613	$397,212,763	100.0%	100.0%	95.7%
6/30/05	$75,098,321	$213,310,550	$150,585,386	$405,288,662	100.0%	100.0%	77.6%

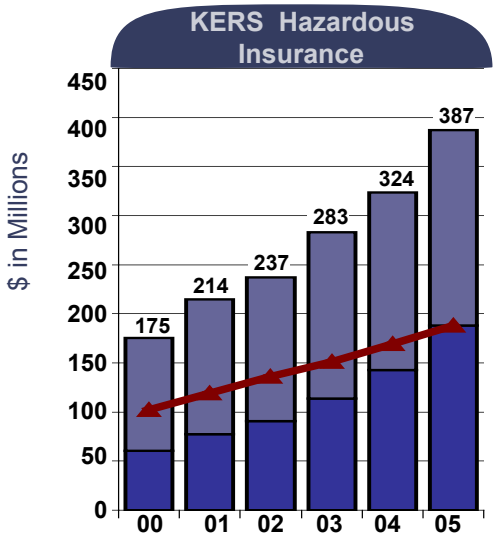
Kentucky Employees Retirement System
(Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/00	$0	$60,407,752	$114,759,861	$102,212,237	100.0%	100.0%	36.4%
6/30/01	$0	$77,157,196	$137,293,626	$119,372,742	100.0%	100.0%	30.7%
6/30/02	$0	$90,978,506	$145,840,544	$135,874,582	100.0%	100.0%	30.8%
6/30/03	$0	$113,979,451	$169,198,884	$151,459,500	100.0%	100.0%	22.2%
6/30/04	$0	$142,872,557	$180,631,006	$169,158,879	100.0%	100.0%	14.6%
6/30/05	$0	$187,883,650	$198,961,045	$187,947,644	100.0%	100.0%	--

1 *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*







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Solvency Test (As of June 30, 2005)

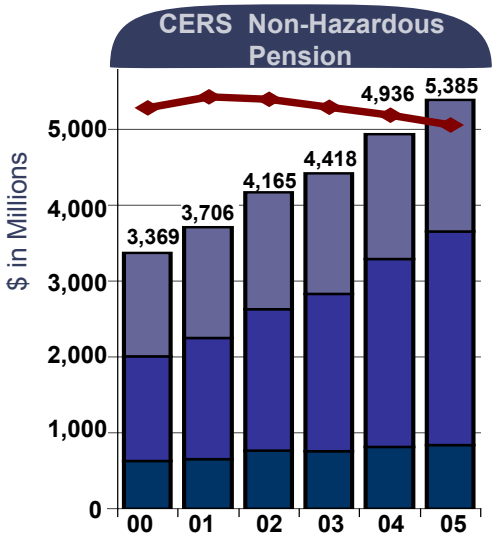
County Employees Retirement System
(Non-Hazardous Pension Fund)

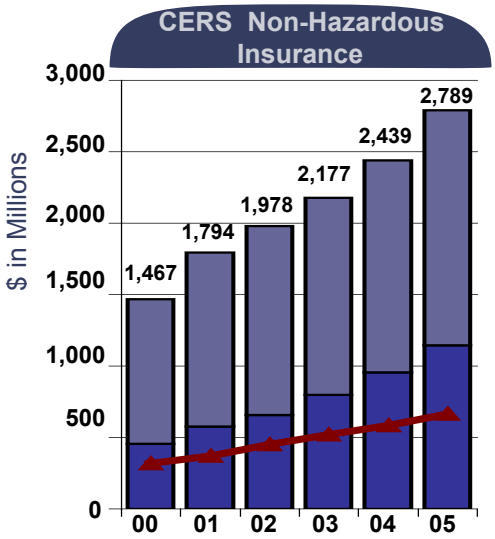
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/00	$627,148,660	$1,383,188,069	$1,358,264,405	$5,284,033,534	100.0%	100.0%	241.0%
6/30/01	$653,242,370	$1,600,436,700	$1,452,603,142	$5,423,834,549	100.0%	100.0%	218.2%
6/30/02	$768,656,315	$1,861,419,517	$1,535,279,317	$5,397,787,158	100.0%	100.0%	180.3%
6/30/03	$759,938,261	$2,068,481,586	$1,589,177,955	$5,286,580,047	100.0%	100.0%	154.7%
6/30/04	$814,908,627	$2,478,195,080	$1,643,355,781	$5,187,851,530	100.0%	100.0%	115.3%
6/30/05	$837,513,907	$2,814,210,355	$1,733,432,428	$5,059,208,687	100.0%	100.0%	81.2%

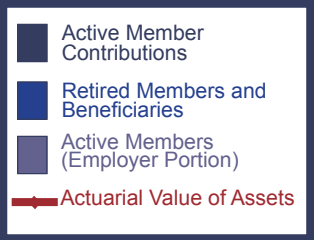
County Employees Retirement System
(Non-Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/00	$0	$457,179,668	$1,009,537,260	$319,642,694	100.0%	69.9%	--
6/30/01	$0	$575,836,839	$1,217,873,929	$371,758,628	100.0%	64.6%	--
6/30/02	$0	$656,812,900	$1,320,764,138	$450,497,307	100.0%	68.6%	--
6/30/03	$0	$799,777,264	$1,377,185,995	$520,060,105	100.0%	65.0%	--
6/30/04	$0	$955,930,091	$1,482,804,605	$585,399,072	100.0%	61.2%	--
6/30/05	$0	$1,144,219,107	$1,644,535,547	$663,941,949	100.0%	58.0%	--

1 *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*







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Solvency Test (As of June 30, 2005)

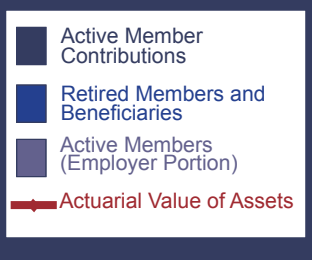
County Employees Retirement System
(Hazardous Pension Fund)

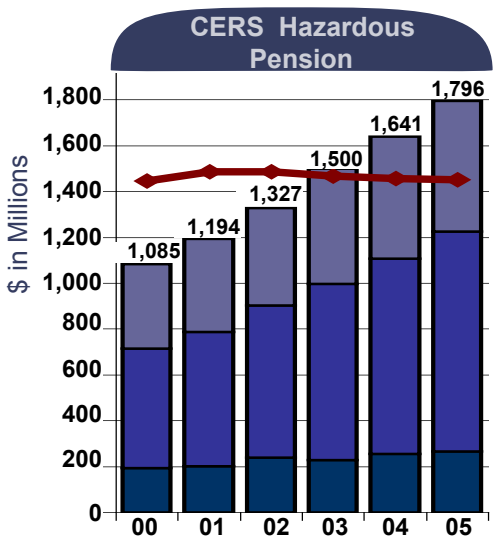
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/00	$194,481,003	$520,994,277	$369,078,417	$1,445,542,794	100.0%	100.0%	197.8%
6/30/01	$202,572,754	$584,940,978	$406,346,710	$1,486,666,016	100.0%	100.0%	172.1%
6/30/02	$238,363,024	$664,188,862	$424,739,387	$1,485,511,793	100.0%	100.0%	137.3%
6/30/03	$227,629,402	$769,804,746	$502,194,634	$1,467,004,856	100.0%	100.0%	93.5%
6/30/04	$256,366,204	$851,354,443	$533,109,473	$1,457,612,042	100.0%	100.0%	65.6%
6/30/05	$264,913,465	$960,052,305	$570,651,565	$1,452,353,023	100.0%	100.0%	39.8%

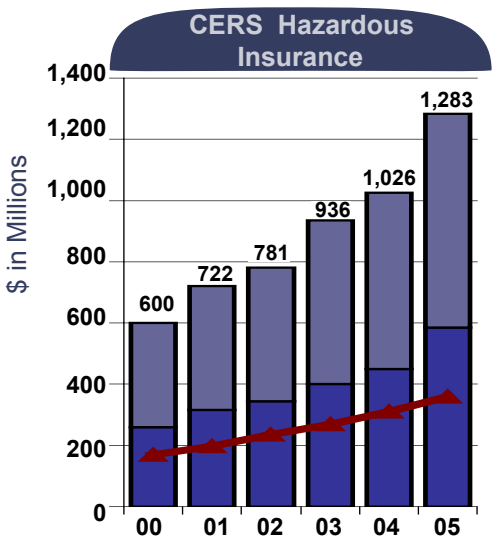
County Employees Retirement System
(Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/00	$0	$259,728,407	$340,207,622	$168,657,912	100.0%	64.9%	--
6/30/01	$0	$316,638,166	$404,967,126	$197,875,249	100.0%	62.5%	--
6/30/02	$0	$343,821,677	$437,363,297	$234,683,878	100.0%	68.3%	--
6/30/03	$0	$401,276,347	$534,374,315	$269,190,080	100.0%	67.1%	--
6/30/04	$0	$450,288,687	$575,395,790	$310,578,162	100.0%	69.0%	--
6/30/05	$0	$586,104,126	$697,194,966	$359,180,461	100.0%	61.3%	--

1 *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*







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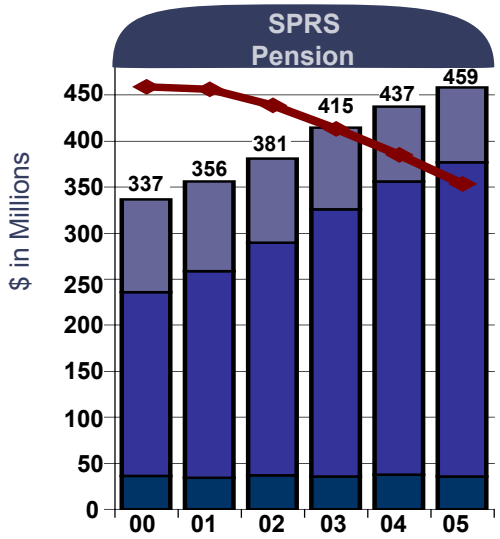
State Police Retirement System
(Pension Fund)

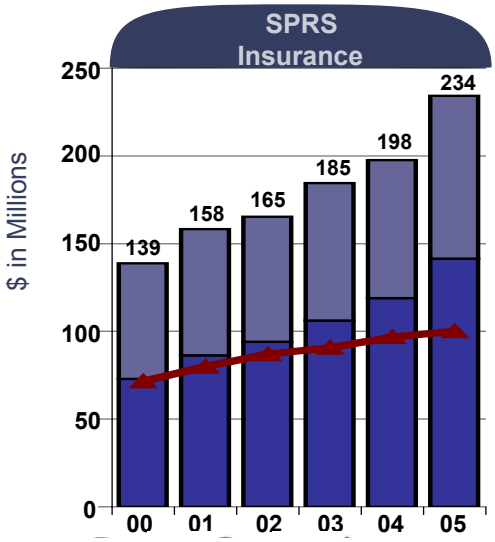
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/00	$36,110,595	$199,748,741	$100,720,427	$459,168,574	100.0%	100.0%	221.7%
6/30/01	$34,338,478	$224,432,772	$97,440,610	$456,160,709	100.0%	100.0%	202.6%
6/30/02	$36,886,477	$252,498,613	$91,405,256	$438,955,613	100.0%	100.0%	163.6%
6/30/03	$35,832,095	$290,012,792	$89,036,572	$413,063,576	100.0%	100.0%	98.0%
6/30/04	$37,658,106	$318,664,694	$81,159,625	$385,077,195	100.0%	100.0%	35.4%
6/30/05	$35,670,717	$341,398,363	$81,524,496	$353,511,622	100.0%	93.1%	--

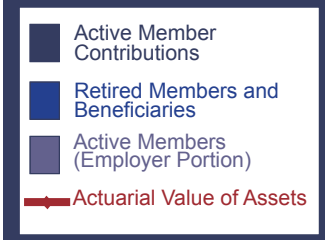
State Police Retirement System
(Insurance Fund)

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/00	$0	$72,939,818	$65,927,267	$71,711,712	100.0%	98.3%	--
6/30/01	$0	$86,469,110	$71,792,369	$79,863,577	100.0%	92.4%	--
6/30/02	$0	$94,205,237	$71,240,175	$86,867,391	100.0%	92.2%	--
6/30/03	$0	$106,317,750	$78,183,455	$90,747,967	100.0%	85.4%	--
6/30/04	$0	$119,104,851	$78,499,450	$96,622,908	100.0%	81.1%	--
6/30/05	$0	$141,585,694	$92,573,816	$100,207,082	100.0%	70.8%	--

1 *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*







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Summary of Active Member Valuation Data

(As of June 30, 2005)

Kentucky Employees Retirement System
(Non-Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/00	N/A	46,897	$1,432,410,156	$30,544	5.2%	42.4	10.6
6/30/01	N/A	47,780	$1,525,188,532	$31,921	4.5%	42.5	10.4
6/30/02	N/A	48,555	$1,597,447,963	$32,900	3.1%	41.5	10.1
6/30/03	N/A	49,158	$1,658,604,696	$33,740	2.6%	42.5	10.0
6/30/04	N/A	47,599	$1,645,412,496	$34,568	2.5%	42.9	10.0
6/30/05	324	47,118	$1,655,907,288	$35,144	1.7%	42.9	9.8

Kentucky Employees Retirement System
(Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/00	N/A	4,007	$115,135,008	$28,733	7.5%	41.8	6.6
6/30/01	N/A	4,228	$123,647,407	$29,245	1.8%	41.6	6.6
6/30/22	N/A	4,211	$125,371,604	$29,772	1.8%	41.8	6.9
6/30/03	N/A	4,189	$129,088,956	$30,816	3.5%	41.6	7.2
6/30/04	N/A	4,014	$126,664,812	$31,556	2.4%	42.7	7.6
6/30/05	26	4,274	$131,687,088	$30,811	(2.4%)	41.9	7.1

County Employees Retirement System
(Non-Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[2]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/00	N/A	77,419	$1,575,632,580	$20,352	4.1%	42.9	7.1
6/30/01	N/A	78,773	$1,597,653,320	$20,282	(0.3%)	43.4	7.3
6/30/02	N/A	79,850	$1,688,460,789	$21,145	4.3%	43.0	7.6
6/30/03	N/A	82,288	$1,796,451,180	$21,831	3.2%	43.8	7.6
6/30/24	N/A	80,922	$1,826,870,880	$22,576	3.4%	44.8	7.9
6/30/05	1,116	81,240	$1,885,275,000	$23,206	2.8%	45.0	8.1

[1]Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuate date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2005.

N/A Not Available

Summary of Active Member Valuation Data

(As of June 30, 2005)

County Employees Retirement System
(Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/00	N/A	7,951	$291,062,928	$36,607	5.3%	37.2	7.8
6/30/01	N/A	8,586	$322,819,064	$37,598	2.7%	37.2	7.6
6/30/02	N/A	8,949	$346,319,146	$38,699	2.9%	36.3	7.8
6/30/03	N/A	9,286	$374,700,732	$40,351	4.3%	37.3	7.8
6/30/04	N/A	9,349	$392,562,624	$41,990	4.1%	38.1	8.1
6/30/05	284	9,464	$411,121,728	$43,441	3.5%	38.0	8.2

State Police Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/00	1	1,023	$43,596,396	$42,616	3.5%	36.7	12.1
6/30/01	1	1,016	$44,209,944	$43,514	2.1%	36.9	11.8
6/30/02	1	1,002	$43,961,844	$43,874	0.8%	35.7	11.4
6/30/03	1	1,019	$43,760,832	$42,945	(2.1%)	35.9	10.9
6/30/04	1	999	$43,835,208	$43,879	2.2%	36.4	10.7
6/30/05	1	987	$43,720,092	$44,296	1.0%	36.5	10.6

Summary of Retired Member Valuation Data

(As of June 30, 2005)

Kentucky Employees Retirement System
(Non-Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances[1]	% Increase in Allowances	Average Annual Allowance
6/30/00	N/A	N/A	N/A	N/A	N/A	N/A
6/30/01	N/A	N/A	N/A	N/A	N/A	N/A
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	2,148	1,618	27,233	$393,048,800	N/A	$14,433
6/30/04	2,473	814	28,892	$449,410,400	14.34%	$15,555
6/30/05	2,481	603	30,770	$509,347,800	13.34%	$16,553

Kentucky Employees Retirement System
(Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/00	N/A	N/A	N/A	N/A	N/A	N/A
6/30/01	N/A	N/A	N/A	N/A	N/A	N/A
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	170	21	1,357	$12,974,700	N/A	$9,561
6/30/04	227	35	1,549	$16,099,000	24.08%	$10,393
6/30/05	234	31	1,752	$19,640,700	22.00%	$11,210

County Employees Retirement System
(Non-Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/2000	N/A	N/A	N/A	N/A	N/A	N/A
6/30/2001	N/A	N/A	N/A	N/A	N/A	N/A
6/30/2002	N/A	N/A	N/A	N/A	N/A	N/A
6/30/2003	2,411	1,466	27,092	$219,848,200	N/A	$8,115
6/30/2004	2,805	768	29,129	$247,534,300	12.6%	$8,498
6/30/2005	2,808	590	31,347	$279,590,300	13.0%	$8,919

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

N/A Not Available

Summary of Retired Member Valuation Data

(As of June 30, 2005)

County Employees Retirement System

(Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/00	N/A	N/A	N/A	N/A	N/A	N/A
6/30/01	N/A	N/A	N/A	N/A	N/A	N/A
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	293	39	3,737	$72,322,200	N/A	$19,353
6/30/04	343	75	4,005	$79,559,200	10.0%	$19,865
6/30/05	403	47	4,361	$89,224,700	12.2%	$20,460

State Police Retirement System

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/00	N/A	N/A	N/A	N/A	N/A	N/A
6/30/01	N/A	N/A	N/A	N/A	N/A	N/A
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	53	9	941	$28,115,500	N/A	$29,878
6/30/04	62	11	992	$30,805,600	9.57%	$31,054
6/30/05	50	6	1,036	$32,983,900	7.07%	$31,838

Retired Member & Beneficiary
Average Annual Allowance

Summary of Benefit Provisions
KERS & CERS Non-Hazardous Plans

Plan Funding

State statute requires active members to contribute 5% of creditable compensation. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565. KERS rates are subject to state budget approval.

Membership Eligibility

For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	5% per year for five years before age 65 or 27 years of service. 4% for each year thereafter.
Any	25	5% each year for five years before age 65 or 27 years of service.

Benefit Formula

Final Compensation	x	Benefit Factor		x	Years of Service
Average of the five highest, or if eligible, three highest fiscal year earnings. To be eligible for three-high final compensation, member must have 27 years of service, age and service of 75 years, and retire prior to 1/09.		KERS 1.97% if:	Member does not have 13 months credit from 1/98- 1/99.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if:	Member has months credit from 1/98- 1/99.		
		KERS 2.20% if:	Member has months credit from 1/98- 1/99, 20 or more years of service, and retires by 1/09.		
		CERS 2.20% if:	Member begins participating prior to 8/1/04.		
		CERS 2.00% if:	Member begins participating on or after 8/1/04.		

Post-Retirement Death Benefits

A retired member If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits

Members participating before 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members participating on or after 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% Final Rate of Pay or the amount calculated under the Benefit Formula noted above based upon actual service.

Members disabled as a result of a single *duty-related injury* or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be *eligible for a monthly* benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the CPI-U for the most recent calendar year, not to exceed five percent (5%). The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 or after are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased annually by the CPI-U.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

Summary of Benefit Provisions
KERS & CERS Hazardous Plans

Plan Funding

State statute requires active members to contribute 8% of creditable compensation. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565. KERS & SPRS rates are subject to state budget approval.

Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	5.5% per year for five years before age 55 or 20 years of service.

Benefit Formula

Final Compensation	X	Benefit Factor	X	Years of Service
Average of the three highest fiscal year earnings.		KERS 2.49% CERS 2.50% SPRS 2.50%		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).

Disability Benefits

Members hired before 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members hired on or after 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% Final Rate of Pay or the amount calculated under the Benefit Formula noted above based upon actual service.

Members disabled as a result of a single *duty-related injury* or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be *eligible for a monthly* benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits

A retired member If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent (5%). The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 or after are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased annually by the CPI-U.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

Changes in Benefit Provisions

(As of June 30, 2005)

The following retirement-related bills were passed by the 2004 Regular Session and 2005 Regular Session of the State Legislature and were first reflected in the June 30, 2005 valuation. The bills created a new structure of benefits for members who began participating after specified dates and effectively reduced the employer contribution rates for KERS and SPRS.

HB 290: 2004 Regular Session *New Structure of Benefits*

CERS Benefit Factor: Members who begin participating in the County Employees Retirement System (CERS) in a non-hazardous position **on August 1, 2004 or after** will be eligible for a 2.0% benefit factor at retirement.

Insurance Benefits: Members who began participating in the retirement systems **on or after July 1, 2003** will be eligible for insurance benefits at retirement based upon a new formula. Non-hazardous members whose participation begins on or after July 1, 2003 will earn a contribution for insurance of $10 per month for each year of earned service. Members working in a hazardous duty position whose participation begins **on or after July 1, 2003** will earn a contribution for insurance of $15 per month for each year of earned hazardous duty service. Upon their death, the spouse of a hazardous duty member will receive a monthly insurance contribution of $10 per month for each year of hazardous duty service provided the spouse is designated as beneficiary and remains eligible for monthly benefits upon the retired member's death. In order to be eligible for these insurance benefits at retirement, members who begin participation **on or after July 1, 2003** will be required to earn 10 years of actual service credit. The monthly contribution will also be increased annually by the change in the Consumer Price Index for all urban consumers (CPI-U).

Service Purchases: Members who begin participating in the retirement systems **on or after August 1, 2004** will not be eligible to use service purchases for determining eligibility for death benefits, disability retirement, normal retirement, or early retirement. Service purchases made by current and future members on or after **August 1, 2004** will not be used to determine insurance benefits at retirement. These provisions will apply to all service purchases made by the member or employer with the exception of omitted service and recontribution of refunded service.

HB 519: 2004 Regular Session *New Structure of Benefits*

Disability Benefits: Members who begin participating in the retirement systems **on or after August 1, 2004** will be eligible for disability benefits based upon a new formula. The new formula for non-hazardous members will provide a disability benefit that is the higher of 20% of Final Rate of Pay or an unreduced benefit based upon actual service credit. The new formula for hazardous duty members will provide a disability benefit that is the higher of 25% of Final Rate of Pay or an unreduced benefit based upon actual service credit. Members hired **on or after August 1, 2004** will also be eligible to apply for disability benefits without regard to eligibility for an unreduced benefit.

HB 267: 2005 Regular Session *Employer Rate Reductions*

KERS & SPRS Employer Rate Reductions

Employer Contribution Rates: HB 267, the Executive Branch Budget Bill, effectively reduced the employer contribution rate recommended by the actuary and adopted by the Board for KERS and SPRS for fiscal year 2004-2005 and 2005-2006. The recommended rate and the rate budgeted by HB 267 are provided in the statistical section. The reduction is $213 million less than actuarially required rates.

Statistical Section

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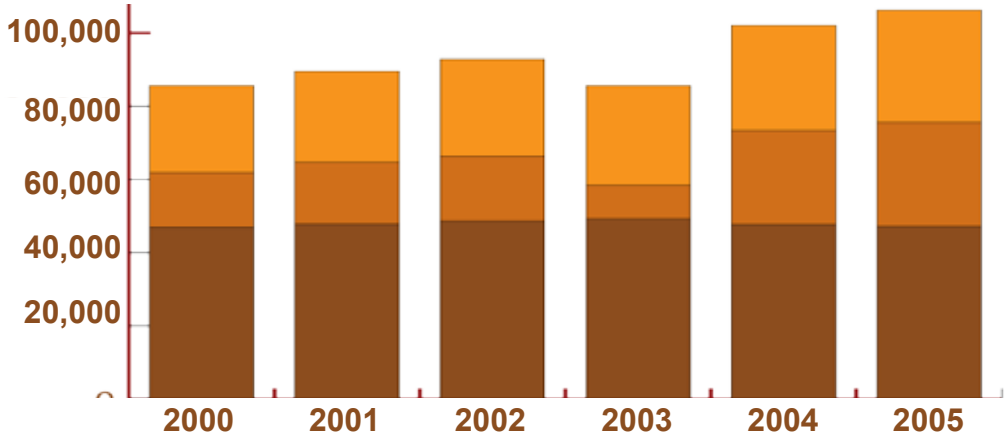
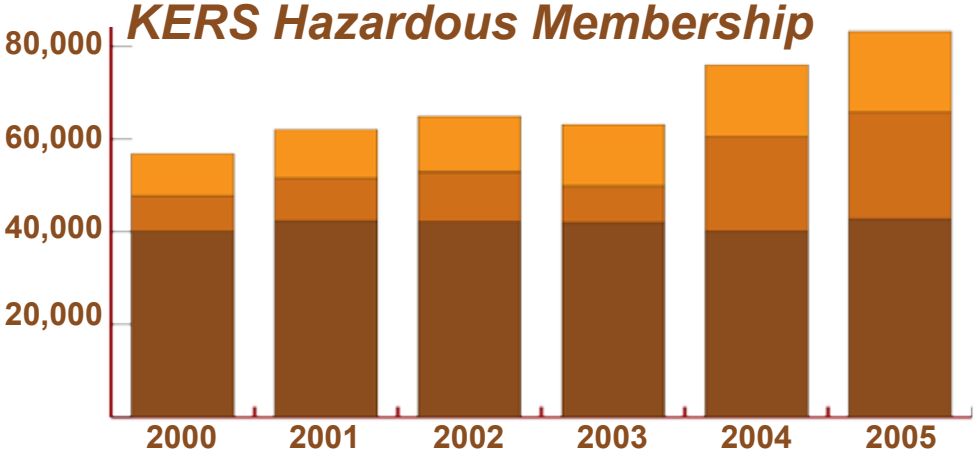
KERS Non-Hazardous Membership



	2000	2001	2002	2003	2004	2005
Active	46,897	47,780	48,555	49,158	47,599	47,118
Inactive	14,959	16,741	17,714	9,241	25,775	28,345
Retired	23,760	25,113	26,703	27,233	28,892	30,770
Total	85,616	89,634	92,972	85,632	102,266	106,233

KERS Hazardous Membership

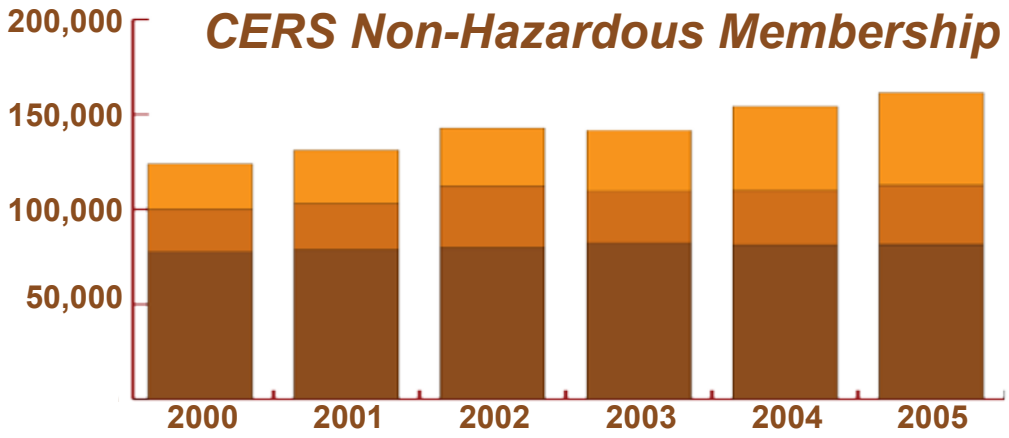


	2000	2001	2002	2003	2004	2005
Active	4,007	4,228	4,211	4,189	4,014	4,274
Inactive	759	922	1,073	782	2,032	2,304
Retired	924	1,053	1,208	1,357	1,549	1,752
Total	5,690	6,203	6,492	6,328	7,595	8,330

SPRS Membership

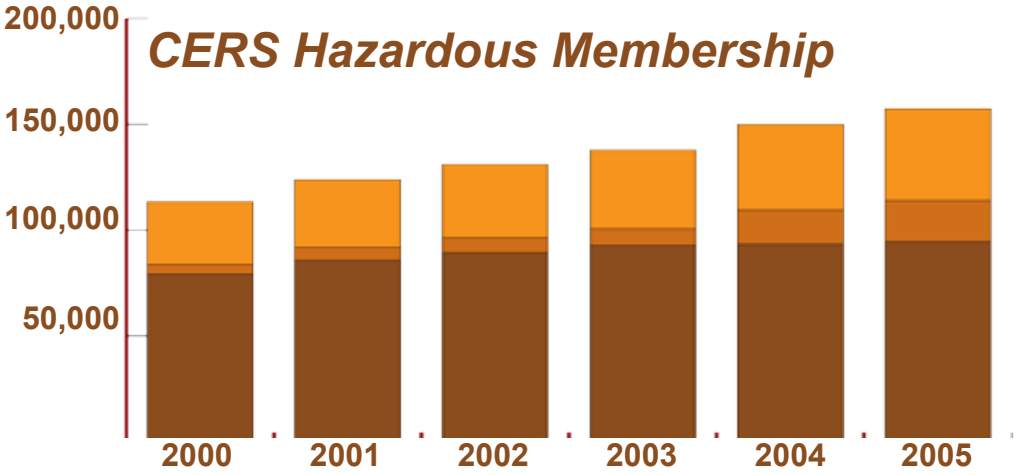
	2000	2001	2002	2003	2004	2005
Active	1,023	1,016	1,002	1,019	999	987
Inactive	78	90	103	113	243	252
Retired	797	842	897	941	992	1,036
Total	1,898	1,948	2,002	2,073	2,234	2,275

CERS Non-Hazardous Membership



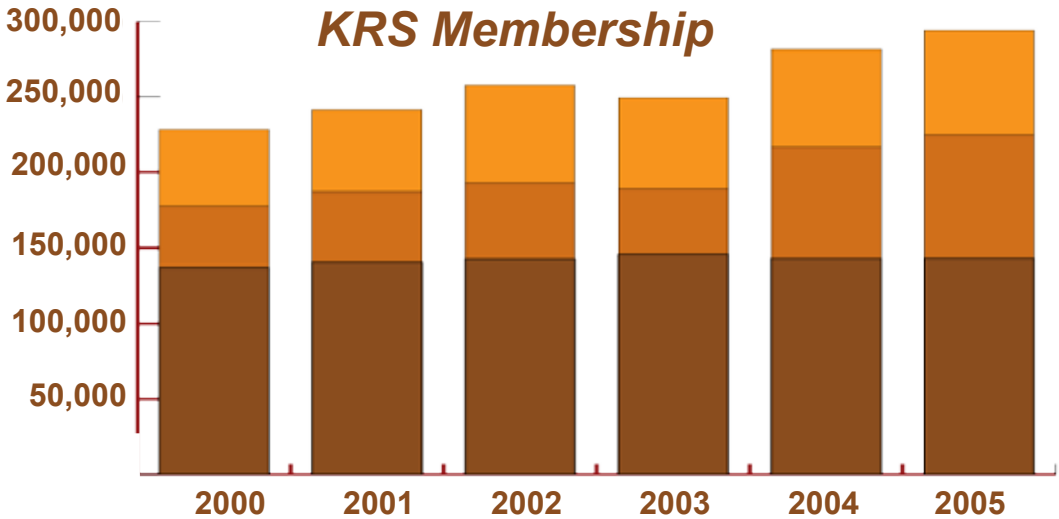
Active	77,419	78,773	79,850	82,288	80,922	81,240
Inactive	24,012	28,356	30,978	32,326	44,419	48,869
Retired	22,708	24,415	32,326	27,092	29,129	31,347
Total	124,139	131,544	143,154	141,706	154,470	161,456

CERS Hazardous Membership



Active	7,951	8,586	8,949	9,286	9,349	9,464
Inactive	451	610	700	781	1,648	1,971
Retired	2,984	3,221	3,483	3,737	4,005	4,361
Total	11,386	12,417	13,132	13,804	15,002	15,796

KRS Membership



Active	137,297	140,383	142,567	145,940	142,883	143,083
Inactive	40,259	46,719	50,568	43,243	74,117	81,741
Retired	51,173	54,644	64,617	60,360	64,567	69,266
Total	228,729	241,746	257,752	249,543	281,567	294,090

Schedule of Participating Employers

Kentucky Employees Retirement System

Agency Classification	Number of Agencies
Agencies Reporting Through State Payroll	137
Other Agencies (universities, mental health boards, health departments)	141
Special Districts and Boards	4
Child Support Offices (county attorneys)	65
Other State-Administered Retirement Systems	3
TOTAL	350

County Employees Retirement System

Agency Classification	Number of Agencies
Area Development Districts	14
Boards of Education	176
Cities	259
County Attorneys	60
County Clerks	13
County Government Agencies	2
Fire Departments	61
Hospitals	3
Jailers	8
Libraries	83
Planning Commissions	9
Police Departments	71
Police & Fire Departments (combined)	44
Sanitation Districts	4
Sheriff Departments	48
Special Districts and Boards	179
Utility Boards	104
Urban County Government Agencies	4
TOTAL	1400

State Police Retirement System

Agency Classification	Number of Agencies
Kentucky State Police-Uniformed Officers	**1**

Kentucky Employees Retirement System

(Dollars in Thousands)

	Non-Hazardous			Hazardous		
	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2000	$6,017,456	$383,281	$6,400,737	$301,920	$99,260	$401,180
June 30 2001	5,484,564	396,254	5,880,818	305,544	107,592	413,136
June 30 2002	5,005,191	465,665	5,470,856	301,800	109,769	411,569
June 30 2003	4,929,319	487,071	5,416,390	320,513	125,522	446,035
June 30 2004	5,258,995	587,681	5,846,676	366,568	162,127	528,695
June 30 2005	5,362,631	610,901	5,973,532	398,308	188,871	587,179

County Employees Retirement System

(Dollars in Thousands)

	Non-Hazardous			Hazardous		
	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2000	$4,673,154	$307,545	$4,980,699	$1,279,936	$159,688	$1,439,624
June 30 2001	4,397,347	331,067	4,728,414	1,211,155	173,636	1,384,791
June 30 2002	4,126,756	365,333	4,492,089	1,144,349	187,534	1,331,883
June 30 2003	4,175,825	435,500	4,611,325	1,168,776	223,168	1,391,944
June 30 2004	4,613,335	563,877	5,177,212	1,305,012	297,737	1,602,749
June 30 2005	4,893,600	668,485	5,562,085	1,411,246	360,940	1,772,186

(Dollars in Thousands)

	State Police Retirement System			Kentucky Retirement Systems Total		
	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2000	$411,531	$69,416	$480,947	$12,683,998	$1,019,191	$13,703,189
June 30 2001	364,592	69,926	434,518	11,763,200	1,078,475	12,841,675
June 30 2002	328,744	68,074	396,818	10,906,841	1,196,375	12,103,216
June 30 2003	319,115	72,538	391,653	10,913,548	1,343,799	12,257,347
June 30 2004	335,721	90,420	426,141	11,879,631	1,701,842	13,581,473
June 30 2005	339,406	99,408	438,814	12,405,191	1,928,605	14,333,796

Additions by Source

KERS Non-Hazardous

(Dollars in Thousands)

	Member Contributions	Employer Contributions Pension	Employer Contributions Insurance	Investment Income	Total
2000	$107,834	$115,055	$76,926	$315,127	$614,942
2001	106,648	23,482	66,875	(376,941)	(179,936)
2002	111,992	1,760	93,912	(216,823)	(9,159)
2003	137,124	7,597	65,335	204,156	414,212
2004	129,077	21,697	78,017	734,596	963,387
2005	127,801	50,333	51,432	510,461	740,027

KERS Hazardous

(Dollars in Thousands)

	Member Contributions	Employer Contributions Pension	Employer Contributions Insurance	Investment Income	Total
2000	$9,375	$21,633	$12,047	$17,879	$60,934
2001	10,577	10,627	13,226	(10,945)	23,485
2002	10,807	7,934	15,887	(22,015)	12,613
2003	11,553	7,322	15,883	17,577	52,335
2004	11,548	9,769	14,959	68,609	104,885
2005	11,625	9,758	15,653	49,122	86,158

SPRS

(Dollars in Thousands)

	Member Contributions	Employer Contributions Pension	Employer Contributions Insurance	Investment Income	Total
2000	$4,202	$10,216	$7,818	$22,601	$44,837
2001	4,138	1,516	8,113	(33,885)	(20,118)
2002	4,499	0	9,580	(22,770)	(8,709)
2003	4,674	0	7,654	15,115	27,423
2004	4,875	1,153	8,456	56,091	70,575
2005	4,228	2,852	6,974	38,040	52,094

CERS Non-Hazardous

(Dollars in Thousands)

Total	Member Contributions	Employer Contributions Pension	Employer Contributions Insurance	Investment Income	
$491,536	$96,676	$106,587	$55,214	$233,059	2000
(-39,292)	101,597	48,914	62,292	(252,095)	2001
8,833	122,428	5,528	102,151	(221,274)	2002
407,127	125,301	11,856	99,235	170,735	2003
893,605	122,484	44,028	89,344	637,749	2004
759,281	127,637	54,617	107,632	469,395	2005

CERS Hazardous

(Dollars in Thousands)

Total	Member Contributions	Employer Contributions Pension	Employer Contributions Insurance	Investment Income	
$171,080	28,476	$ 51,739	$ 28,345	$62,520	**2000**
14,962	27,279	20,983	32,149	(65,449)	**2001**
26,273	37,096	11,055	45,730	(67,608)	**2002**
149,926	36,203	16,906	45,244	51,573	**2003**
312,041	38,668	27,641	47,037	198,695	**2004**
284,735	39,515	39,948	55,552	149,720	**2005**

Kentucky Retirement Systems

(Dollars in Thousands)

Total	Member Contributions	Employer Contributions Pension	Employer Contributions Insurance	Investment Income	
$1,383,329	$246,563	305,230	180,350	651,186	**2000**
(200,899)	250,239	105,522	182,655	(739,315)	**2001**
29,851	286,822	26,259	267,260	(550,490)	**2002**
1,051,023	314,855	43,661	233,351	459,156	**2003**
2,344,493	306,652	104,288	237,813	1,695,740	**2004**
1,922,295	310,806	157,508	237,243	1,216,738	**2005**

Deductions by Source

KERS Non-Hazardous

(Dollars in Thousands)

	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	Total
2000	$252,775	$3,346	$7,901	$30,504	$294,526
2001	291,704	3,826	6,968	37,609	340,107
2002	345,666	4,399	6,657	44,083	400,805
2003	404,896	4,959	7,258	51,979	469,092
2004	459,367	5,262	8,001	60,471	533,101
2005	522,396	5,916	8,824	76,035	613,171

KERS Hazardous

(Dollars in Thousands)

	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	Total
2000	$6,224	$295	$1,140	$1,581	$9,240
2001	7,996	302	1,253	2,009	11,560
2002	10,203	354	1,141	2,482	14,180
2003	13,373	404	1,160	2,965	17,902
2004	16,863	392	1,410	3,560	22,225
2005	20,495	511	1,760	4,908	27,674

SPRS

(Dollars in Thousands)

	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	Total
2000	$19,974	$68	$80	$3,028	$23,150
2001	22,644	64	80	3,575	26,363
2002	24,839	76	25	4,049	28,989
2003	27,862	86	97	4,550	32,595
2004	30,877	91	96	5,023	36,087
2005	32,921	104	131	6,265	39,421

CERS Non-Hazardous

(Dollars in Thousands)

Total	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	
$186,341	$148,015	$5,501	$10,769	$22,056	2000
213,207	170,256	6,174	8,994	27,783	2001
245,157	196,659	7,187	8,325	32,986	2002
288,467	230,317	8,244	10,213	39,693	2003
327,718	260,643	8,694	11,334	47,047	2004
374,408	294,590	10,029	11,042	58,747	2005

CERS Hazardous

(Dollars in Thousands)

Total	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	
$61,311	$49,622	4561	$1,479	$9,649	2000
69,882	56,520	512	1,319	11,531	2001
79,180	63,494	635	1,770	13,281	2002
90,034	72,532	737	1,794	14,971	2003
101,506	81,422	759	2,520	16,805	2004
115,298	90,119	872	2,139	22,168	2005

Kentucky Retirement Systems

(Dollars in Thousands)

Total	Benefit Payments	Administrative Expenses	Refunds	Medical Insurance Expenses	
$574,568	$476,610	$9,771	$21,369	$66,818	2000
661,119	549,120	10,878	18,614	82,507	2001
768,311	640,861	12,651	17,918	96,881	2002
898,090	748,980	14,430	20,522	114,158	2003
1,020,637	849,172	15,198	23,361	132,906	2004
1,169,972	960,521	17,432	23,896	168,123	2005

Schedule of Benefit Expenses by Type

KERS Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 1999-00					
Average Benefit	$681	$1,069	$720	$573	$901
Number	3,881	13,881	1,818	3,512	23,092
Total Monthly Benefits	$2,643,388	$14,839,808	$1,309,392	$2,012,926	$20,805,514
% of Total Monthly Benefits	12.7%	71.3%	6.3%	9.7%	100.0%
FY 2000-01					
Average Benefit	$727	$1,163	$750	$601	$980
Number	3,779	15,101	1,902	3,595	24,377
Total Monthly Benefits	$2,746,184	$17,561,789	$1,426,821	$2,162,372	$23,897,166
% of Total Monthly Benefits	11.5%	73.5%	6.0%	9.0%	100.0%
FY 2001-02					
Average Benefit	$784	$1,314	$783	$650	$1,104
Number	3,714	16,561	1,913	3,659	25,847
Total Monthly Benefits	$2,912,068	$21,755,957	$1,498,690	$2,377,149	$28,543,863
% of Total Monthly Benefits	10.2%	76.2%	5.3%	8.3%	100.0%
FY 2002-03					
Average Benefit	$822	$1,430	$809	$688	$1,203
Number	3,706	17,917	1,922	3,708	27,253
Total Monthly Benefits	$3,045,409	$25,626,447	$1,555,628	$2,551,366	$32,778,849
% of Total Monthly Benefits	9.3%	78.2%	4.7%	7.8%	100.0%
FY 2003-04					
Average Benefit	$859	$1,537	$825	$721	$1,296
Number	3,768	19,477	1,925	3,740	28,910
Total Monthly Benefits	3,237,300	29,941,376	1,587,565	2,697,409	37,463,650
% of Total Monthly Benefits	8.6%	79.9%	4.2%	7.2%	100.0%
FY 2004-05					
Average Benefit	$910	$1,632	$850	$739	$1,379
Number	3,866	21,092	1,910	3,902	30,770
Total Monthly Benefits	$3,516,148	$34,423,089	1,623,500	2,882,916	42,445,653
% of Total Monthly Benefits	8.3%	81.1%	3.8%	6.8%	100.0%

The information in the above table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deductions by Source.

Schedule of Benefit Expenses by Type

KERS Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 1999-00					
Average Benefit	$473	$932	$351	$470	$590
Number	435	264	104	123	926
Total Monthly Benefits	$205,667	$246,083	$36,486	$57,778	$546,014
% of Total Monthly Benefits	37.7%	45.1%	6.7%	10.6%	100.0%
FY 2000-01					
Average Benefit	$517	$1,016	$374	$473	$647
Number	502	318	112	124	1,056
Total Monthly Benefits	$259,552	$323,101	$41,933	$58,596	$683,182
% of Total Monthly Benefits	38.0%	47.3%	6.1%	8.6%	100.0%
FY 2001-02					
Average Benefit	$574	$1,110	$407	$520	$726
Number	559	394	116	143	1,212
Total Monthly Benefits	$321,056	$437,318	$47,180	$74,411	$879,965
% of Total Monthly Benefits	36.5%	49.7%	5.4%	8.5%	100.0%
FY 2002-03					
Average Benefit	$645	$1,173	$435	$576	$799
Number	626	464	115	157	1,362
Total Monthly Benefits	$403,467	$544,066	$50,058	$90,368	$1,087,959
% of Total Monthly Benefits	37.1%	50.0%	4.6%	8.3%	100.0%
FY 2003-04					
Average Benefit	$711	$1,221	$481	$613	$864
Number	718	554	129	157	1,558
Total Monthly Benefits	$510,827	$676,463	$62,112	$96,194	$1,345,596
% of Total Monthly Benefits	38.0%	50.3%	4.6%	7.1%	100.0%
FY 2004-05					
Average Benefit	$775	$1,292	$568	$600	$934
Number	808	647	117	180	1,752
Total Monthly Benefits	$626,082	$836,193	$66,456	$107,998	$1,636,729
% of Total Monthly Benefits	38.3%	51.1%	4.1%	6.6%	100.0%

The information in the above table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. . Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deductions by Source.

Schedule of Benefit Expenses by Type

CERS Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 1999-00					
Average Monthly Benefit	$391	$633	$605	$395	$548
Number	5,000	12,225	2,329	2,538	22,092
Total Monthly Benefits	$1,952,617	$7,740,542	$1,409,139	$1,001,342	$12,103,640
% of Total Monthly Benefits	16.1%	64.0%	11.6%	8.3%	100.0%
FY 2000-01					
Average Monthly Benefit	$410	$682	$628	$412	$587
Number	5,160	13,367	2,531	2,657	23,715
Total Monthly Benefits	$2,113,743	$9,122,653	$1,589,371	$1,095,839	$13,921,607
% of Total Monthly Benefits	15.2%	65.5%	11.4%	7.9%	100.0%
FY 2001-02					
Average Monthly Benefit	$430	$743	$657	$438	$635
Number	5,280	14,669	2,634	2,793	25,376
Total Monthly Benefits	$2,269,733	$10,897,474	$1,731,392	$1,222,866	$16,121,465
% of Total Monthly Benefits	14.1%	67.6%	10.7%	7.6%	100.0%
FY 2002-03					
Average Monthly Benefit	$456	$792	$681	$461	$676
Number	5,583	15,902	2,711	2,923	27,119
Total Monthly Benefits	$2,544,101	$12,598,502	$1,845,513	$1,347,107	$18,335,223
% of Total Monthly Benefits	13.9%	68.7%	10.1%	7.3%	100.0%
FY 2003-04					
Average Monthly Benefit	$463	$829	$697	$491	$708
Number	5,848	17,463	2,814	3,025	29,150
Total Monthly Benefits	$2,708,649	$14,483,996	$1,961,590	$1,486,749	$20,640,984
% of Total Monthly Benefits	13.1%	70.2%	9.5%	7.2%	100.0%
FY 2004-05					
Average Monthly Benefit	$475	$873	$720	$512	$743
Number	6,131	19,075	2,854	3,287	31,347
Total Monthly Benefits	$2,915,109	$16,644,747	$2,054,880	1,684,459	$23,299,195
% of Total Monthly Benefits	12.5%	71.4%	8.8%	7.2%	100.0%

The information in the above table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deductions by Source.

Schedule of Benefit Expenses by Type

CERS Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 1999-00					
Average Monthly Benefit	$1,280	$1,681	$712	$1,074	$1,431
Number	538	1,821	410	218	2,987
Total Monthly Benefits	$688,634	$3,061,231	$291,819	$234,201	$4,275,886
% of Total Monthly Benefits	16.1%	71.6%	6.8%	5.5%	100.0%
FY 2000-01					
Average Monthly Benefit	$1,314	$1,728	$746	$1,100	$1,479
Number	574	1,994	433	224	3,225
Total Monthly Benefits	$753,998	$3,446,219	$323,149	$246,459	$4,769,825
% of Total Monthly Benefits	15.8%	72.3%	6.8%	5.2%	100.0%
FY 2001-02					
Average Monthly Benefit	$1,360	$1,817	$782	$1,126	$1,552
Number	642	2,154	447	245	3,488
Total Monthly Benefits	$873,325	$3,913,768	$349,511	$275,876	$5,412,480
% of Total Monthly Benefits	16.1%	72.3%	6.5%	5.1%	100.0%
FY 2002-03					
Average Monthly Benefit	$1,371	$1,905	$814	$1,142	$1,615
Number	705	2,307	457	273	3,742
Total Monthly Benefits	$966,828	$4,394,088	$371,773	$311,827	$6,044,517
% of Total Monthly Benefits	16.0%	72.7%	6.2%	5.2%	100.0%
FY 2003-04					
Average Monthly Benefit	$1,371	$1,942	$824	$1,177	$1,643
Number	785	2,489	481	299	4,054
Total Monthly Benefits	$1,076,329	$4,834,845	$396,302	$351,804	$6,659,280
% of Total Monthly Benefits	16.2%	72.6%	6.0%	5.3%	100.0%
FY 2004-05					
Average Monthly Benefit	$1,399	$2,031	$1,159	$910	$1,705
Number	865	2,642	332	522	4,361
Total Monthly Benefits	$1,209,803	$5,365,822	$384,788	$474,975	$7,435,388
% of Total Monthly Benefits	16.3%	72.2%	5.2%	6.4%	100.0%

The information in the above table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deductions by Source.

Schedule of Benefit Expenses by Type

SPRS

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 1999-00					
Average Monthly Benefit	$2,583	$2,188	$987	$1,866	$2,126
Number	97	576	54	70	797
Total Monthly Benefits	$250,561	$1,260,151	$53,315	$130,586	$1,694,613
% of Total Monthly Benefits	14.8%	74.4%	3.1%	7.7%	100.0%
FY 2000-01					
Average Monthly Benefit	$2,796	$2,306	$1,013	$1,932	$2,256
Number	98	620	48	76	842
Total Monthly Benefits	$274,013	$1,429,852	$48,647	$146,867	$1,899,379
% of Total Monthly Benefits	14.4%	75.3%	2.6%	7.7%	100.0%
FY 2001-02					
Average Monthly Benefit	$3,008	$2,430	$984	$2,006	$2,383
Number	103	668	47	79	897
Total Monthly Benefits	$309,836	$1,623,011	$46,243	$158,466	$2,137,556
% of Total Monthly Benefits	14.5%	75.9%	2.2%	7.4%	100.0%
FY 2002-03					
Average Monthly Benefit	$3,117	$2,543	$1,056	$2,064	$2,492
Number	110	699	48	84	941
Total Monthly Benefits	$342,894	$1,777,880	$50,705	$173,412	$2,344,891
% of Total Monthly Benefits	14.6%	75.8%	2.2%	7.4%	100.0%
FY 2003-04					
Average Monthly Benefit	$3,199	$2,637	$1,067	$2,108	$2,576
Number	112	748	49	88	997
Total Monthly Benefits	$358,290	$1,972,675	$52,259	$185,517	$2,568,741
% of Total Monthly Benefits	13.9%	76.8%	2.0%	7.2%	100.0%
FY 2004-05					
Average Monthly Benefit	$3,321	$2,741	$1,364	$1,862	$2,653
Number	107	775	35	119	1,036
Total Monthly Benefits	$355,361	$2,123,941	$47,740	$221,615	$2,748,657
% of Total Monthly Benefits	12.9%	77.3%	1.7%	8.1%	100.0%

The information in the above table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deductions by Source.

Average Monthly Benefit by Length of Service

Service Credit Range	KERS Non-Hazardous		CERS Non-Hazardous	
	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	2,394	$134	2,712	$122
5 or more but less than 10	3,727	$298	6,467	$231
10 or more but less than 15	3,802	$498	6,258	$404
15 or more but less than 20	3,446	$746	4,603	$614
20 or more but less than 25	3,698	$1,017	4,425	$810
25 or more but less than 30	6,957	$1,850	4,990	$1,627
30 or more but less than 35	4,721	$2,635	1,431	$2,200
35 or more	2,025	$3,692	461	$2,758
Total	**30,770**	**$1,379**	**31,347**	**$743**

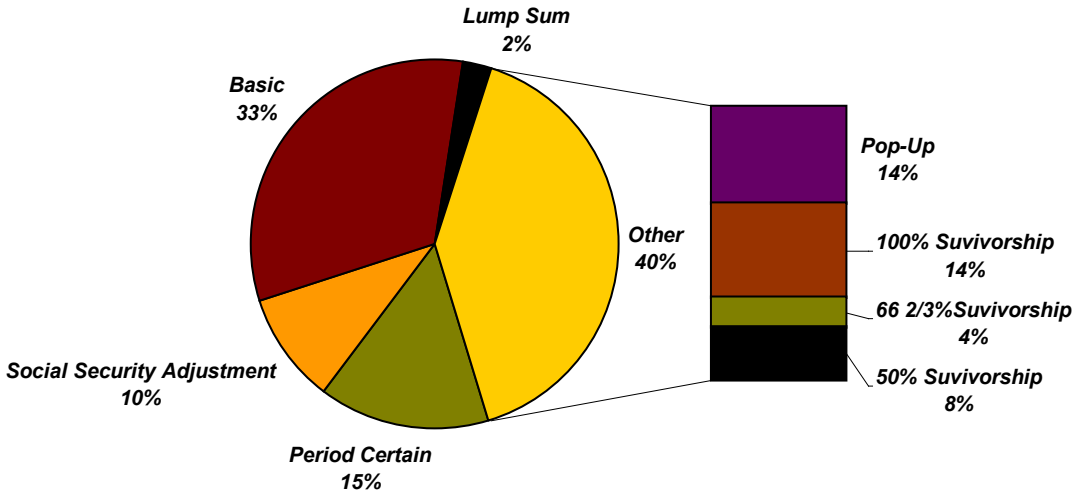
Service Credit Range	KERS Hazardous		CERS Hazardous	
	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	86	$200	358	$383
5 or more but less than 10	200	$372	227	$533
10 or more but less than 15	210	$511	288	$864
15 or more but less than 20	224	$726	288	$1,010
20 or more but less than 25	410	$1,041	1,653	$1,664
25 or more but less than 30	391	$1,154	1,032	$2,204
30 or more but less than 35	180	$1,588	424	$3,018
35 or more	51	$2,189	91	$3,660
Total	**1,752**	**$934**	**4,361**	**$1,705**

Service Credit Range	SPRS	
	Number	Average Monthly Benefit
Under 5 Years	67	$489
5 or more but less than 10	27	$734
10 or more but less than 15	31	$1,060
15 or more but less than 20	57	$1,641
20 or more but less than 25	277	$2,092
25 or more but less than 30	322	$2,944
30 or more but less than 35	194	$3,938
35 or more	61	$4,564
Total	**1,036**	**$2,653**

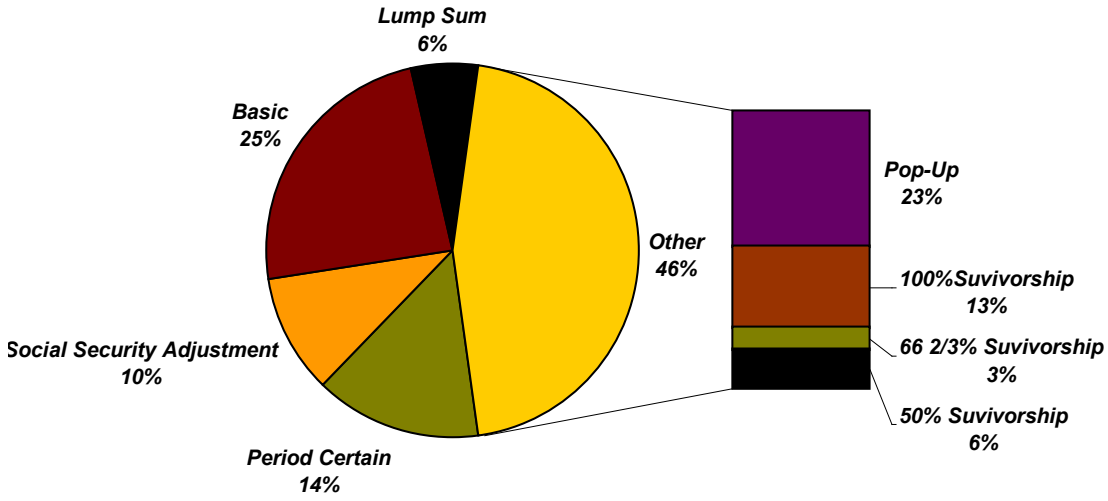
The information in the table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included.

Payment Options by Type

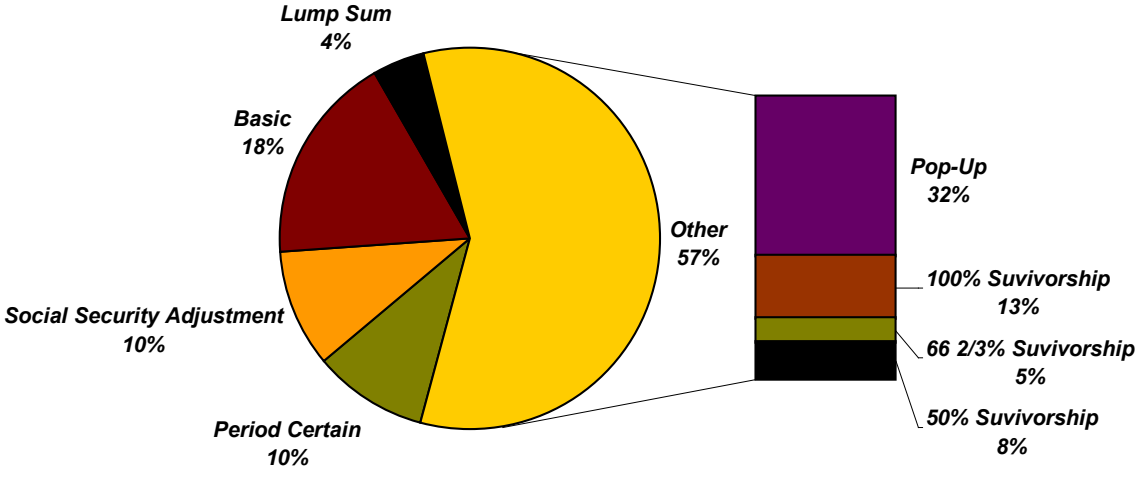
KERS Non-Hazardous



KERS Hazardous

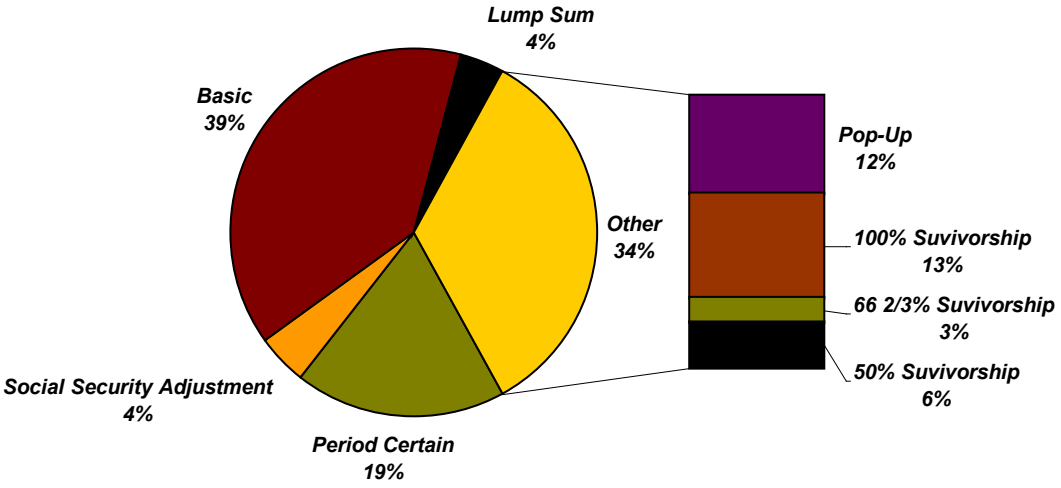


SPRS

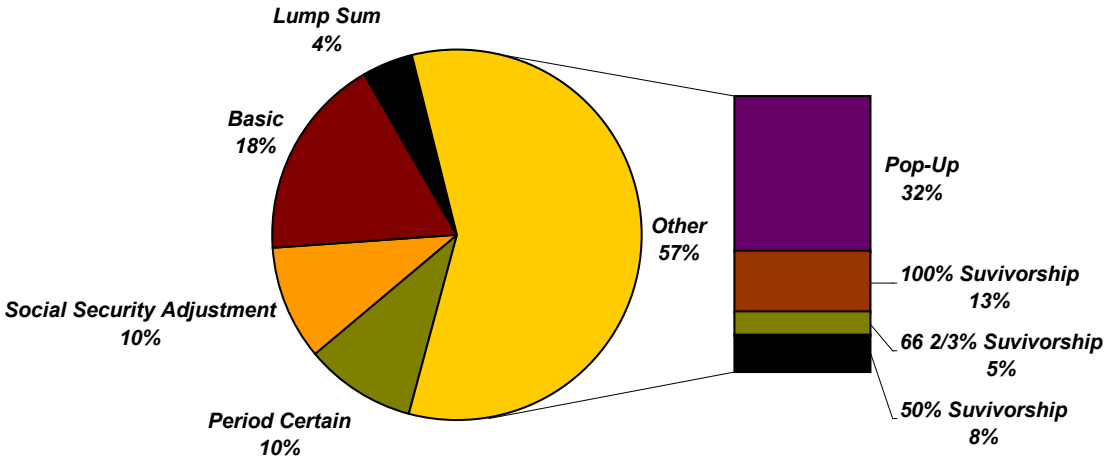


Payment Options by Type

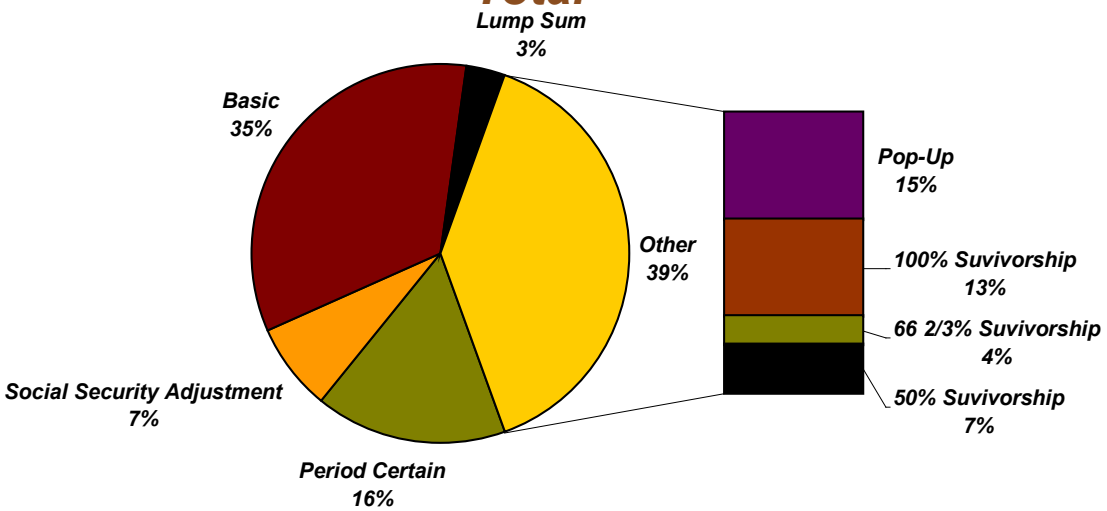
CERS Non-Hazardous



CERS Hazardous



Total



Total Fiscal Year Retirement Payments By County

Adair	$3,375,303	Grant	$4,832,943	Mason	$2,462,887
Allen	$2,299,639.	Graves	$5,892,652	Meade	$2,923,634
Anderson	$14,247,229	Grayson	$4,092,790	Menifee	$1,338,068
Ballard	$1,183,653	Green	$1,812,950	Mercer	$5,920,013
Barren	$7,293,276	Greenup	$3,310,820	Metcalfe	$1,994,106
Bath	$2,537,544	Hancock	$1,141,774	Monroe	$1,414,903
Bell	$5,199,166	Hardin	$14,458,565	Montgomery	$3,859,227
Boone	$12,182,556	Harlan	$4,659,322	Morgan	$3,411,572
Bourbon	$4,525,267	Harrison	$2,950,738	Muhlenberg	$3,158,557
Boyd	$8,010,572	Hart	$2,340,025	Nelson	$6,500,284
Boyle	$7,524,236	Henderson	$7,797,601	Nicholas	$1,391,780
Bracken	$1,250,905	Henry	$9,566,291	Ohio	$2,784,900
Breathitt	$4,466,287	Hickman	$555,145	Oldham	$11,338,760
Breckinridge	$3,191,125	Hopkins	$7,840,252	Owen	$6,060,527
Bullitt	$9,526,144	Jackson	$1,830,705	Owsley	$1,718,674
Butler	$1,859,294	Jefferson	$165,383,958	Pendleton	$2,664,100
Caldwell	$3,736,034	Jessamine	$7,131,705	Perry	$3,790,055
Calloway	$7,526,844	Johnson	$4,334,492	Pike	$8,143,723
Campbell	$11,195,634	Kenton	$18,687,374	Powell	$2,335,200
Carlisle	$1,179,309	Knott	$4,242,475	Pulaski	$17,526,847
Carroll	$2,623,876	Knox	$3,820,391	Robertson	$734,344
Carter	$5,000,637	Larue	$2,505,624	Rockcastle	$2,383,078
Casey	$2,369,054	Laurel	$8,835,929	Rowan	$6,320,751
Christian	$15,309,362	Lawrence	$1,710,634	Russell	$3,369,037
Clark	$5,673,742	Lee	$1,756,755	Scott	$9,004,368
Clay	$6,854,058	Leslie	$1,682,283	Shelby	$19,421,121
Clinton	$1,432,343	Letcher	$3,179,001	Simpson	$1,339,832
Crittenden	$1,311,459	Lewis	$1,823,176	Spencer	$3,780,959
Cumberland	$1589,395	Lincoln	$3,269,384	Taylor	$3,824,861
Daviess	$19,501,203	Livingston	$1,938,776	Todd	$1,736,983
Edmonson	$1,137,800	Logan	$4,041,338	Trigg	$3,869,534
Elliott	$982,033	Lyon	$2,813,209	Trimble	$1,887,950
Estill	$2,282,356	McCracken	$14,031,498	Union	$1,837,273
Fayette	$54,702,182	McCreary	$1,689,115	Warren	$21,,334,929
Fleming	$3,911,874	McClean	$1,857,755	Washington	$2,440,981
Floyd	$7,019,198	Madison	$15,258,268	Wayne	$3,316,846
Franklin	$118,105,285	Magoffin	$1,862,288	Webster	$2,029,276
Fulton	$1,453,189	Marion	$3,061,600	Whitley	$6,806,098
Gallatin	$791,039	Marshall	$5,890,082	Wolfe	$2,290,207
Garrard	$2,544,474	Martin	$1,062,525	Woodford	$10,150,496

Payments to Recipients Living in Kentucky **$917,981,713.35**

Payments to Recipients Living in Other States **$43,175,721.49**

Total Payments **$961,157,434.84**

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
FY 1999-00					
Number	2,232	141	2,171	306	42
Average Service Credit	289	233	216	249	283
Average Final Compensation	$35,859	$33,996	$30,240	$38,717	$53,569
Average Monthly Benefit	$1,609	$739	$880	$1,599	$2,634
FY 2000-01					
Number	1,920	139	1,924	258	53
Average Service Credit	272	245	213	260	341
Average Final Compensation	$38,135	$37,722	$27,601	$41,196	$62,445
Average Monthly Benefit	$1,582	$954	$868	$1,685	$3,453
FY 2001-02					
Number	2,137	162	2,090	281	59
Average Service Credit	289	271	214	267	313
Average Final Compensation	$44,565	$42,196	$28,799	$45,076	$62,779
Average Monthly Benefit	$2,018	$1,104	$913	$1,801	$3,279
FY 2002-03					
Number	2,148	170	2,411	293	62
Average Service Credit	277	264	206	274	313
Average Final Compensation	$45,479	$45,559	$28,883	$49,996	$65,079
Average Monthly Benefit	$1,873	$1,144	$859	$1,780	$3,208
FY 2003-04					
Number	2,473	227	2,805	343	53
Average Service Credit	280	255	209	262	320
Average Final Compensation	$47,872	$43,778	$29,172	$48,607	$68,533
Average Monthly Benefit	$1,932	$1,127	$837	$1,631	$3,468
FY 2004-05					
Number	2,481	234	2,808	403	50
Average Service Credit	276	257	210	248	290
Average Final Compensation	$46,452	$45,654	$29,784	$49,920	$62,395
Average Monthly Benefit	$1,897	$1,216	$902	$1,765	$3,022

Employer Contribution Rates by System

Employers contribute at the rate determined by the Board of Trustees to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statute 61.565. KERS and SPRS employer rates are subject to approval by the State Legislature through the adoption of the biennial Executive Branch Budget. In recent years, the State Legislature has routinely suspended KRS 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the KRS Board of Trustees and its' consulting actuary. The following tables provide the employer contribution rate recommended by the Board and its' consulting actuary and the rate specified by the Executive Branch budget if applicable.

	KERS Non-Hazardous		KERS Hazardous	
Fiscal Year	*Budgeted Rate*	*Recommended Rate*	*Budgeted Rate*	*Recommended Rate*
2000-2001	5.89%	5.89%	18.84%	18.84%
2001-2002	5.89%	5.89%	18.84%	18.84%
2002-2003	3.76%	5.89%	17.60%	18.84%
2003-2004	5.89%	7.53%	18.84%	18.84%
2004-2005	5.89%	10.29%	18.84%	19.47%
2005-2006	5.89%	13.62%	18.84%	21.59%

	CERS Non-Hazardous	CERS Hazardous	SPRS	
Fiscal Year	*Recommended Rate*	*Recommended Rate*	*Budgeted Rate*	*Recommended Rate*
2000-2001	7.17%	16.78%	21.58%	21.58%
2001-2002	6.41%	16.28%	21.58%	21.58%
2002-2003	6.34%	16.28%	17.37%	21.58%
2003-2004	7.34%	18.51%	21.58%	21.58%
2004-2005	8.48%	22.08%	21.58%	28.08%
2005-2006	10.98%	25.01%	21.58%	34.83%

Retirement Windows

Two separate "retirement windows" have been established in past legislative sessions for non-hazardous employees participating in the Kentucky Employees Retirement System (KERS) and the County Employees Retirement System (CERS). The first window, established by SB 142 during the 1998 regular session of the General Assembly, provides for an increased benefit factor for non-hazardous KERS employees (up to 2.2%) if certain service requirements are met and if the employee retires on or before January 1, 2009. The second window, established by HB 278 during the 2001 regular session of the General Assembly, provides for a final compensation based upon a non-hazardous employee's highest three years (3-High) of salary rather than the employee's highest five years (5-high) of salary. In order to qualify for 3-high final compensation a non-hazardous KERS or CERS employee must meet certain age and service requirements and again, retire on or before January 1, 2009.

Each of these two windows influences how retirement benefits are determined for non-hazardous employees participating in KERS and CERS. Consequently, employees who are eligible for one or both of the windows have a strong financial incentive to retire before the windows sunset in 2009. The following information describes the number of employees eligible to retire with and without increased benefits as of January 1, 2006 and three years later when the window expires on January 1, 2009.

Kentucky Retirement Systems (KRS)

KERS & CERS Non-Hazardous Employees Eligible To Retire

Summary	KERS (state government, regional universities, health departments)		CERS (City, county, and classified school board employees)	
	1/2006	1/2009	1/2006	1/2009
Employees Eligible to Retire With An Unreduced or Reduced Benefit	8,850	14,118	15,183	25,559
Breakdown By Eligibility				
Employees with 27 or more Years of Service*	2,359	4,271	1,307	3,064
Employees with 25 But Not More Than 27 Years of Service**	1,263	1,279	1,104	1,400
Employees Age 55 or greater with 20 But Not More Than 25 Years of Service**	880	1,540	1,583	3,181
Employees Age 55 with 5 But Less than 20 Years of Service**	3,738	5,713	9,099	13,361
Employees Age 65 with 4 But Less Than 20 Years of Service**	610	1,315	2,090	4,553
Breakdown By Retirement Window				
Employees Eligible for 2.2% Benefit Factor Window Only***	4,502	7,090	N/A	N/A
Employees Eligible for Both 2.2% Benefit Factor & High-3 Final Compensation Window***	2,130	4,054	1,214	2,974

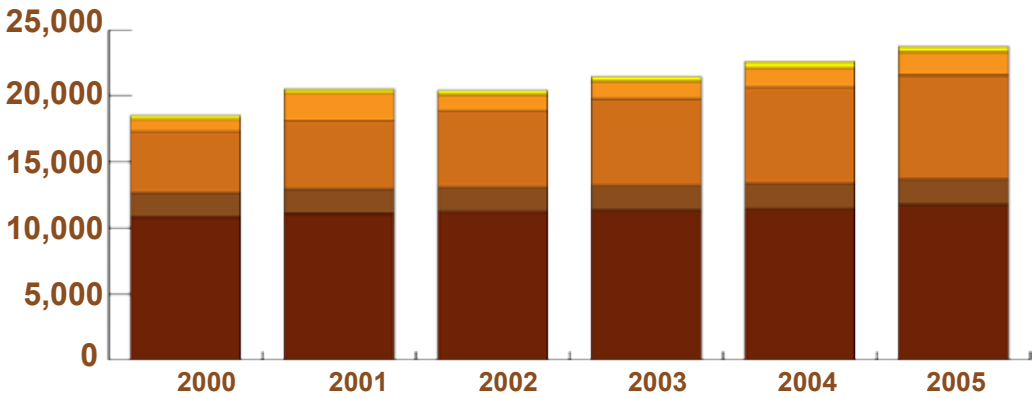
**Employee is eligible for an unreduced benefit upon earning 27 years of service or upon reaching age 65.*

***Employees are eligible for a reduced benefit upon reaching 25 years of service or having a combined age of 55 with 5 years of service.*

****KERS Employees are eligible for a 2.2% benefit factor if the employee has 13 months credit from 1/1/1998 to 1/1/1999, 20 years of service credit at retirement, and retires between 2/1/1999 and 1/1/2009. KERS and CERS employees are eligible for High-3 Final Compensation if the Employee has 27 or more years of service, their age and service equals at least 75 years, and they retire between 8/1/2001 and January 1, 2009.*

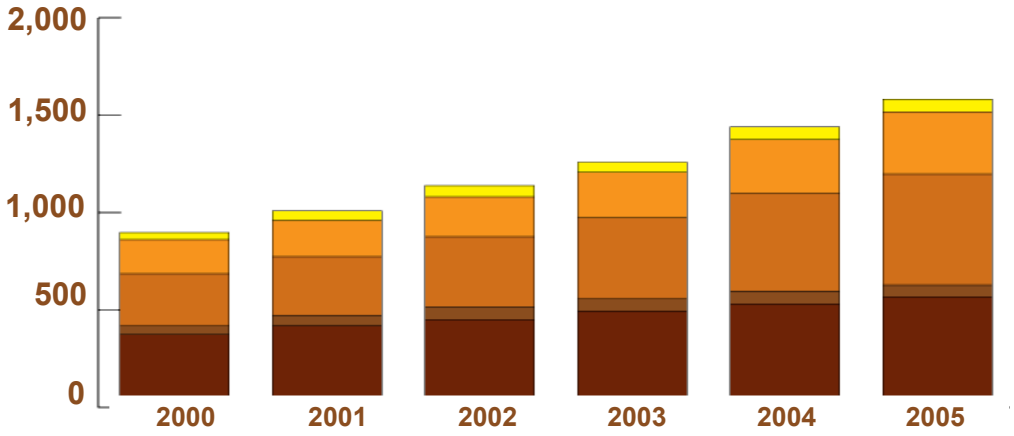
Insurance Contracts by Type

KERS Non-Hazardous



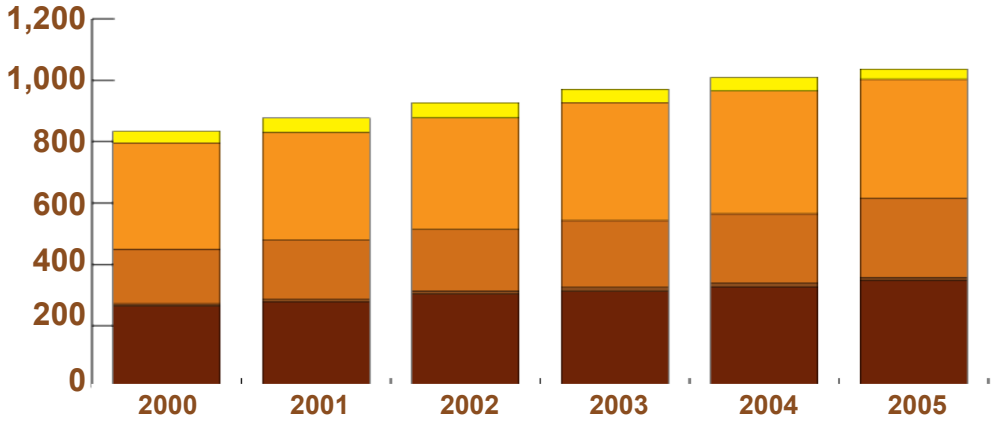
	2000	2001	2002	2003	2004	2005
Medicare High	10,869	11,107	11,229	11,311	11,437	11,764
Medicare Regular	1,802	1,818	1,838	1,855	1,932	1,915
Single	4,619	5,199	5,822	6,602	7,313	7,928
Couple/Family	955	1,070	1,182	1,298	1,462	1,679
Parent Plus	295	346	396	428	443	461

KERS Hazardous



	2000	2001	2002	2003	2004	2005
Medicare High	375	420	451	494	531	567
Medicare Regular	43	52	66	62	65	61
Single	268	302	359	417	502	570
Couple/Family	175	185	205	234	276	319
Parent Plus	37	51	57	53	65	65

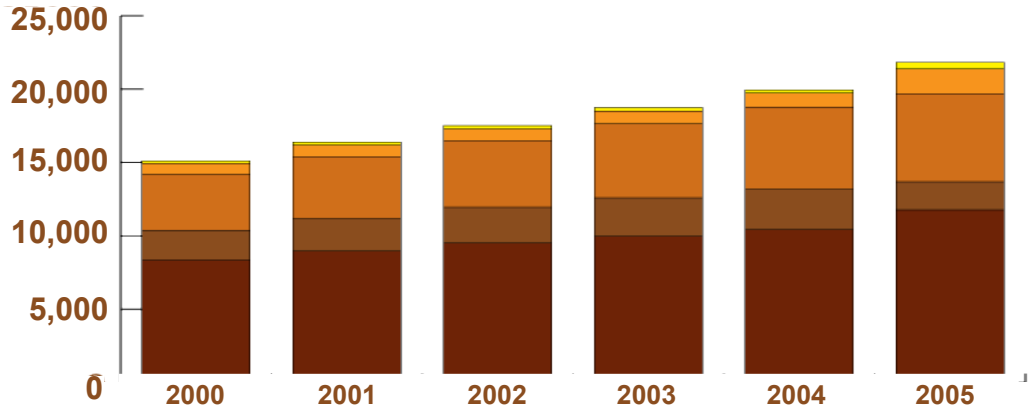
SPRS



	2000	2001	2002	2003	2004	2005
Medicare High	264	278	303	312	326	348
Medicare Regular	8	8	11	13	13	10
Single	178	194	199	218	226	257
Couple/Family	347	350	364	384	400	388
Parent Plus	38	47	50	44	45	34

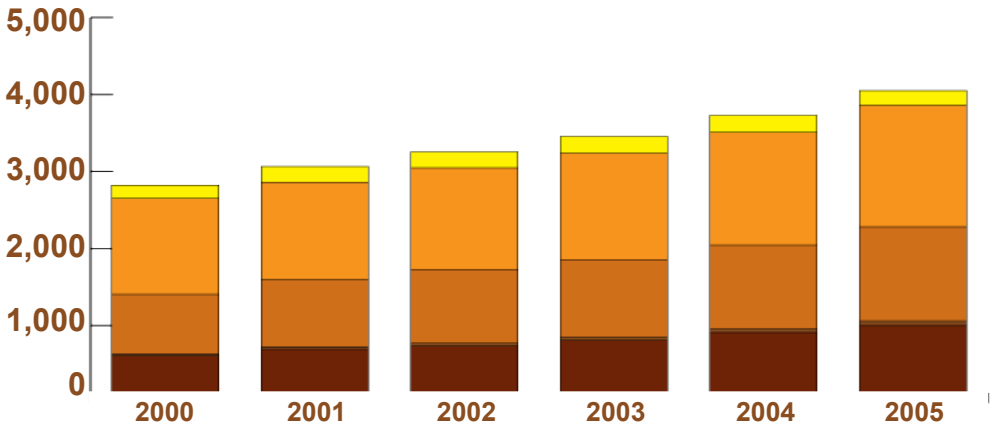
Insurance Contracts by Type

CERS Non-Hazardous



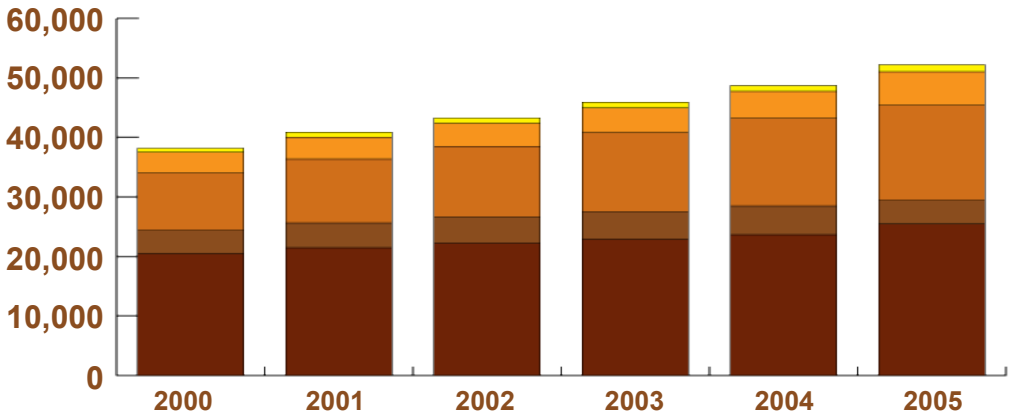
Medicare High	8,314	8,974	9,517	9,958	10,424	11,005
Medicare Regular	2,035	2,212	2,446	2,630	2,756	2,853
Single	3,813	4,215	4,530	5,054	5,598	6,014
Couple/Family	745	791	800	855	946	1,022
Parent Plus	186	204	224	244	246	255

CERS Hazardous



Medicare High	609	694	734	808	913	1,004
Medicare Regular	23	32	38	40	45	55
Single	775	869	956	1,010	1,087	1,220
Couple/Family	1,243	1,267	1,321	1,379	1,463	1,579
Parent Plus	173	202	210	223	223	195

Total



Medicare High	20,458	21,473	22,234	22,883	23,631	24,688
Medicare Regular	3,911	4,122	4,399	4,600	4,811	4,894
Single	9,653	10,779	11,866	13,301	14,726	15,989
Couple/Family	3,465	3,663	3,872	4,150	4,547	4,987
Parent Plus	729	850	937	992	1,022	1,010

Retired Reemployed

Since August 1, 1998, state law has allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service is observed. The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Retirees Who Have Been Reemployed In Full-time Positions Covered By The Same Retirement System

Data as of June 30, 2005

Reemployed Retirees In KRS	KERS			CERS			SPRS
	Non-Hazardous	Hazardous	Total	Non-Hazardous	Hazardous	Total	Total
Total Active Employees	47,118	4,274	51,392	81,240	9,464	90,704	987
Total Retirees	30,770	1,752	32,522	31,347	4,361	35,708	1036
Reemployed Retirees	606	60	666	1,458	608	2,066	3
% of Reemployed Retirees to Total Actives	1.29%	1.40%	1.30%	1.79%	6.42%	2.28%	0.30%
% of Reemployed Retirees to Total Retirees	1.97%	3.42%	2.05%	4.65%	13.94%	5.79%	0.29%
Reemployed Retiree Data*							
Average Age at Initial Retirement	52	50	52	58	48	55	44
Months of Service Credit at Initial Retirement	312	282	309	250	281	259	321
Final Compensation At Initial Retirement	$49,185	$47,767	$49,057	$29,291	$47,050	$36,007	$41,847
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2004-2005 (Second Retirement Account)	$40,119	$32,238	$39,409	$26,913	$37,502	$30,918	$64,184
Retirees Returning to Work for the Same Employer	245	22	267	1208	106	1314	3
% Retirees Returning to Work For Same Employer	40.43%	36.67%	40.09%	82.85%	17.43%	63.60%	100.00%

N/A: Not Applicable

**Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.*

Note: An additional 995 retirees have been reemployed in full-time positions covered by a different retirement system. Of this total, 497 KERS retirees have returned to work with an agency participating in CERS, 275 CERS retirees have returned to work with an agency participating in KERS, 94 SPRS retirees have returned to work with an agency participating in KERS, and 129 SPRS retirees have returned to work with an agency participating in CERS.

Making the Pieces Fit

Comprehensive Annual Financial Report

for fiscal year ended June 30, 2006

KENTUCKY RETIREMENT SYSTEMS

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

A COMPONENT UNIT OF THE COMMONWEALTH OF KENTUCKY

Kentucky Retirement Systems

A Component Unit of the Commonwealth of Kentucky.

Comprehensive Annual Financial Report

For the Fiscal Year Ended ***June 30, 2005***

Prepared by the executive staff of

Kentucky Retirement Systems

Perimeter Park West

1260 Louisville Road

Frankfort, KY 40601

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www.kyret.com

The cost of printing this CAFR is part of the administrative expense of the systems.

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KENTUCKY RETIREMENT SYSTEMS
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Kentucky Employees Retirement Systems
County Employees Retirement Systems
State Police Retirement Systems

William P. Hanes Esq.
Executive Director
Phone: 502-696-8800
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www.kyret.com

The Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601-6124

Dear Board of Trustees and Members:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year ended June 30, 2006. Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the management of the Kentucky Retirement Systems.

The CAFR is divided into five sections:

- An Introductory Section, containing KRS's administrative organization, Systems Highlights and Letter of Transmittal.
- A Financial Section, containing the report of the independent auditor, the financial statements of the systems and certain required supplementary information.
- An Investment Section, containing a report on investment activity, investment policies, investment results and various investment schedules.
- An Actuarial Section, containing the Actuary's Certification Letter and the results of the annual actuarial valuation.
- A Statistical Section, containing information about plan participants and recipients.

We present this information to assist the Board and members of Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) (collectively referred to as KRS) in understanding KRS' financial and actuarial status. This CAFR was prepared to conform with the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. Transactions of the system are reported on the accrual basis of accounting. Additionally, sufficient internal accounting controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis on page 27 for more information.

History

KERS was created in 1956 by the Kentucky General Assembly in order to supplement the benefits provided by Social Security. When the first actuarial valuation was completed June 30, 1957, there were 16,000 employees participating in KERS and assets of $2.8 million. SPRS and CERS were established in 1958. The first actuarial valuation of SPRS was conducted June 30, 1959. No actuarial valuation of CERS was conducted until June 30, 1960 because the statutes did not authorize retirements from the system prior to July 1, 1960. On June 30, 1960, there were 68 counties and 2,617 employees participating in CERS, and SPRS included 415 uniformed state troopers.

As of June 30, 2006, there were more than 302,000 active, inactive and retired members in the combined systems and approximately $15.0 billion in assets. A breakdown of membership by system is provided in the Statistical Section.

KRS staff provides detailed benefit estimates to members upon request. Counselors are available at the Frankfort office for individual counseling, both in office by appointment and by telephone during normal business hours. In addition, staff conducts individual counseling sessions at sites throughout the Commonwealth and holds pre-retirement seminars to help members prepare for retirement. Information including an online benefit calculator and a service purchase calculator is available online at http://www.kyret.com.

Major Initiatives

A major goal for KRS during the fiscal year was to raise awareness of the continued reductions to the KERS and SPRS employer contribution rates by the Kentucky General Assembly. These rates have been less than the amount recommended by the KRS Board of Trustees and its consulting actuary. Through educational initiatives with our membership and with policymakers, KRS received an increase in the employer contribution rate for the 2006-2007 and the 2007-2008 fiscal years. While this was the first increase in the KERS and SPRS employer rates since 2001, contributions remained far short of the actuarially recommended rates. Management believes that these efforts must continue as actuarial funding levels continue to falter.

In 2005, KRS embarked on a project of self-insuring the Medicare eligible retirees. Through these efforts, KRS was able to reduce retiree medical premiums by 6.34% during the 2006 plan year. KRS is continuing to examine the data to better understand the dynamics of our retiree population and has already completed the introductory steps towards implementing a health and wellness program for our retirees. If KRS is to rein in costs something must be done to improve the health of people who currently have chronic disease while in the longer term we must reduce the overall incidence of chronic disease. Developing an effective long term strategy is a priority for KRS and begins with identifying baseline information and formulating programs that bring disease and pharmacy management principles to bear on those with chronic disease.

KRS Administrative staff continued to move forward on other long term initiatives. KRS recently implemented two important technology projects to improve its financial operations. KRS successfully replaced its legacy financial system with the Great Plains integrated financial and accounting system from Microsoft. The Great Plains system includes functions for human resources and payroll processing which has allowed KRS to bring these activities in-house. Additionally, KRS recently completed successful implementation of the ProLaw Case Management system to assist the KRS legal staff in managing legal matters.

KRS is about to embark on a major project initiative to implement a new, state of the art pension administration solution. The project is called Strategic Technology Advancement for the Retirement of Tomorrow (START).

The primary objective of START is to implement a stable, proven, state-of-the-industry, fully integrated and browser based solution capable of supporting the KRS mission well into the 21st century. It will enable KRS staff to perform all of their duties using the workstations (PCs) on each desk tied together through a KRS-wide network via a browser-based system.

Additional objectives of the START initiative include:

- Improved service levels to members;
- Improved system workflow and increased work efficiency;
- Expanded and improved Web-based, self-service functions to members, retirees, and employers;
- Improved accuracy of all information collected, maintained, and provided by KRS;
- Improved timeliness and accuracy of responses to members' inquiries;
- Inclusion of any proven new technologies that can provide cost-effective benefits to KRS members;
- A secure environment for member and retiree data, and
- A secure environment for the receipt and transmittal of information related to members, retirees, and employers.

In addition to the pension application, the new solution will include best practice workflow management elements and business process and organizational changes, as well as the computer hardware and software necessary to support the new system.

As part of the continued commitment to protect our membership information, Kentucky Retirement Systems has identified the need to improve information technology security controls and practices as part of continual improvement processes. Over the past twelve months, KRS has initiated several activities to better protect member's information including:

- Established the position and hired an Information Security Officer.
- Initiated security awareness activities for KRS staff and management.
- Began review of business processes to determine potential security risks.
- Completed a 3rd party assessment of critical information technology infrastructure to identify and remedy weaknesses.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its CAFR for the fiscal year ended June 30, 2005. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. This was the seventh consecutive year that KRS has achieved this award.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Investments

The Board of Trustees of the Kentucky Retirement Systems has a statutory obligation to invest KRS' funds in accordance with the "prudent person rule." The prudent person rule states that fiduciaries shall discharge their investment duties with the same degree of diligence, care and skill that a prudent person would ordinarily exercise under similar circumstances in a comparable position.

The Board has managed the funds in recognition of the basic long-term nature of the Systems. The Board has interpreted this to mean that the assets of the systems should be actively managed — that is, investment decisions regarding the particular securities to be purchased or sold shall be the result of the conscious exercise of discretion. The Board has further recognized that proper diversification of assets must be maintained. It is through these policies that KRS has been able to provide significant returns over the long-term while minimizing investment related expenses. The Investment Section of this report, starting on page 73, contains detailed analysis of investments. This section includes asset allocations, rates of return, discussion of the current year market environment and historical trend schedules.

The pension and insurance investment trusts experienced significant growth during the 2005-2006 fiscal year. The pension portfolio posted a total return of 9.7% for the year, while the insurance portfolio earned 12.4%. Investment income, which includes the appreciation of asset values, dividends, and interest totaled $1,154.8 and $229.4 million, net of investment expenses, for the pension and insurance portfolios, respectively. The majority of this amount was due to the appreciation in value of investments, which totaled $803.6 for the pension portfolio and $188.2 million for the insurance fund. Interest and dividends accounted for $370.0 for the pension portfolio and $43.6 million on the insurance side.

Actuarial Funding

The Kentucky Retirement Systems' funding objective is to meet long-term benefit promises through contributions that remain fairly level as a percent of active member payroll. The progress towards achieving the intended funding objectives for both the pension and insurance funds can be measured by the funding level of the actuarial assets of each fund to the actuarial liabilities. The funding level for the pension funds as of June 30, 2006 are 59.97% for KERS Non-Hazardous, 84.14% for KERS Hazardous, 83.55% for CERS Non-Hazardous, 75.00% for CERS Hazardous and 66.61% for SPRS. These funding levels will fluctuate over time with experience deviations. Since 2001, all systems have experienced reductions in the funding levels for the pension funds due to investment returns less than the assumed rate resulting from market loss, higher than anticipated retirements, increasing payments for retiree cost of living adjustments, and adjustments in actuarial assumptions which were effective with the June 30, 2006 valuation.

The insurance funds, which were established in 1978 to provide funding for retiree medical benefits, has improved in recent years due to the Board's policy of incrementally increasing employer contributions to the funds in order to reach full entry age normal cost by 2016. However, the insurance funds are not at the same funding levels as the pension funds. The funding level for the insurance funds as of June 30, 2006 are 7.82% for KERS Non-Hazardous, 34.26% for KERS Hazardous, 16.88% for CERS Non-Hazardous, 21.92% for CERS Hazardous and 18.12% for SPRS. The insurance funds continue to be a primary concern of the Kentucky Retirement Systems. Total actuarial liabilities for the funds exceed assets by $13.12 billion.

Detailed information of the actuarial soundness of KRS can be found in the Actuarial Section of this report.

Professional Services
A listing of the Board's contract consultants can be found in the organizational chart on page 10. A listing of the external investment managers can be found on page 97 in the Investment Section.

Other Information
Kentucky Statutes require an annual audit by an independent certified public accountant or the Auditor of Public Accounts. Mountjoy & Bressler PSC performed the audit for the fiscal year ended June 30, 2006, and the results of that audit are contained in the Financial Section. The firm gave KRS an unqualified opinion and also indicated that the financial statements present fairly, in all material respects, the plan net assets of Kentucky Retirement Systems.

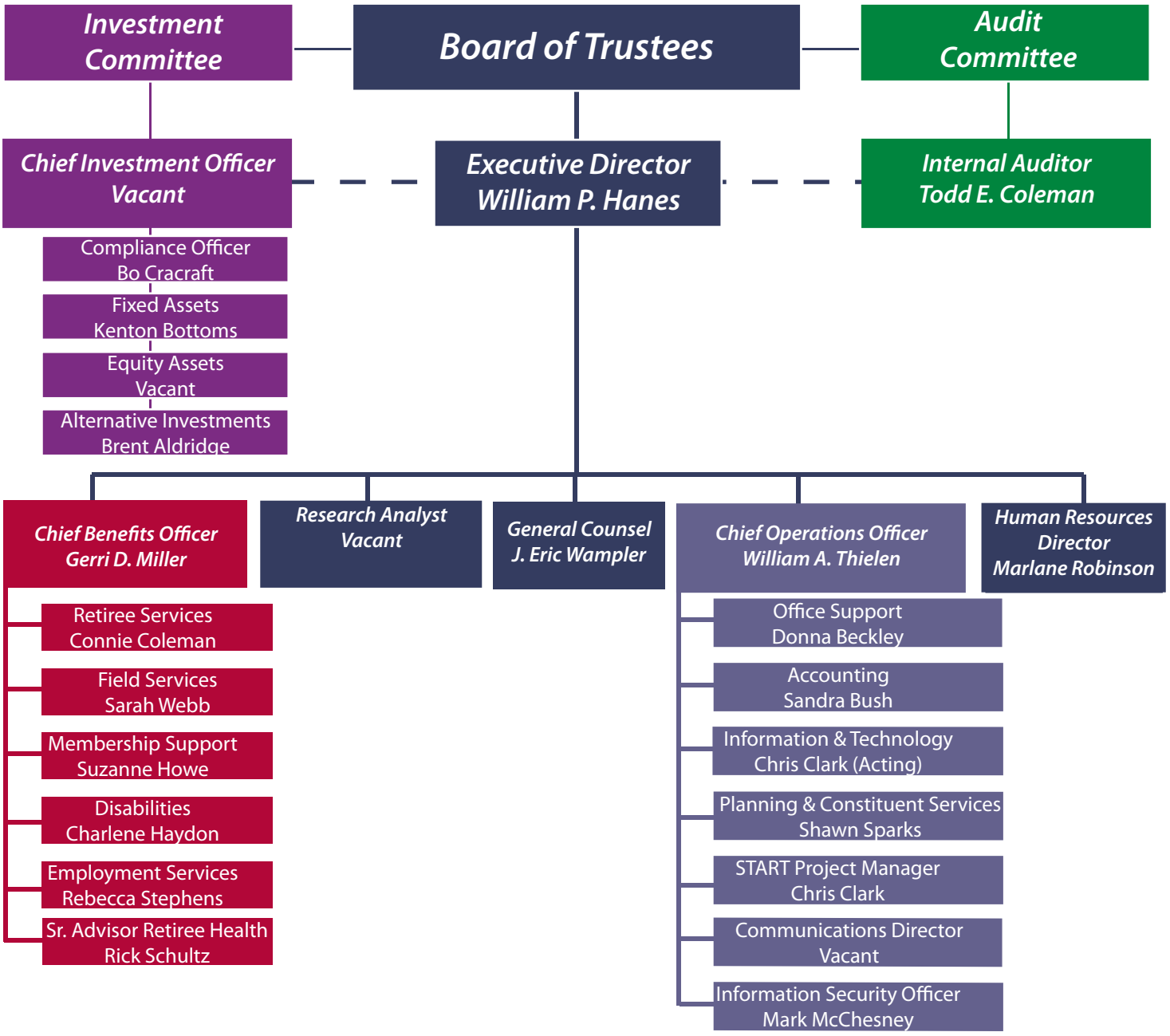
The compilation of this report reflects the combined efforts of the KRS administrative staff under the leadership of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with statutory provisions, and as a means of determining responsible stewardship of KRS funds.

The report is available to all employers participating in the Kentucky Retirement Systems. They form the link between KRS and its membership, and their cooperation contributes significantly to the success of the Kentucky Retirement Systems. We hope the employers and their employees find this report informative. This and past CAFRs can be found on the KRS web site, **www.kyret.com**.

On behalf of the Board of Trustees, I would like to take this opportunity to express my gratitude to the staff, the advisors and the many people who have worked so diligently to assure the successful operation of the Kentucky Retirement Systems.

Respectfully submitted,

William P. Hanes, Esq.
Executive Director



Consultants

Actuarial Services
Cavanaugh Macdonald Consulting, LLC

Auditing Services
Mountjoy & Bressler, LLP

Legal Consultants
Klausner & Kaufman, PA

Legal Services
Stoll Kennon & Park, LLP

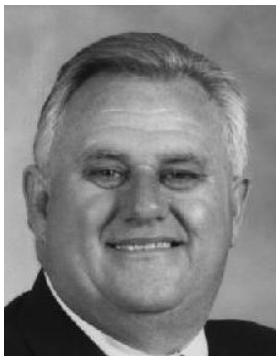
Fiduciary Review Consultants
Ice Miller, LLP

Asset Management
Strategic Investment Solutions

2005 KRS Board of Trustees

A nine-member Board of Trustees administers the Systems: two trustees elected by KERS members; two trustees elected by CERS members; one trustee elected by SPRS members; three trustees appointed by the Governor; and the Secretary of the State Personnel Cabinet. One of the trustees appointed by the Governor must be knowledgeable about the impact of pensions on local governments. Elected trustees may serve no more than five terms consecutively.

Randy J. Overstreet, *Chair*
Elizabethtown
Elected by SPRS
Term Expires March 31, 2007



Walter J. Pagan, , *Vice Chair*
Wilder
Appointed by Governor
Term Expires March 31, 2008

Vince Lang
Frankfort
Elected by CERS
Term Expires March 31, 2009

Lynn T. Harpring
Louisville
Appointed by Governor
Term Expires March 31, 2008

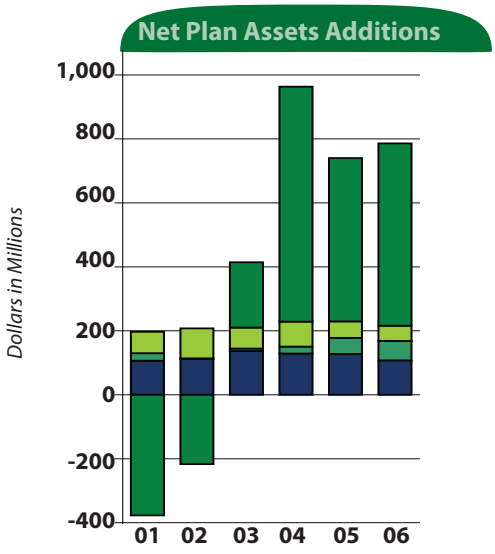
Bobby D. Henson
Frankfort
Elected by KERS
Term Expires March 31, 2010

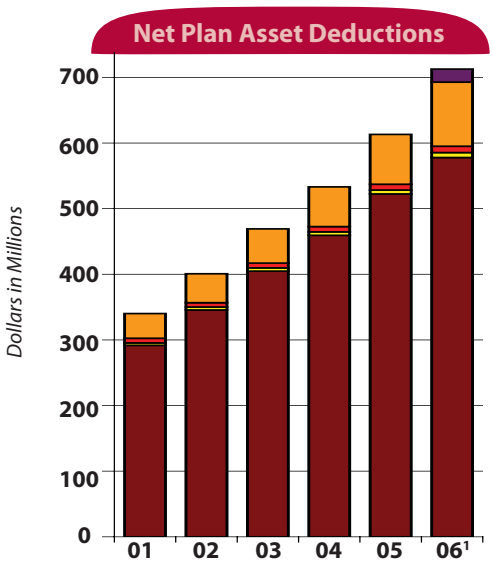
Susan Smith Horne
Lexington
Elected by KERS
Term Expires March 31, 2010

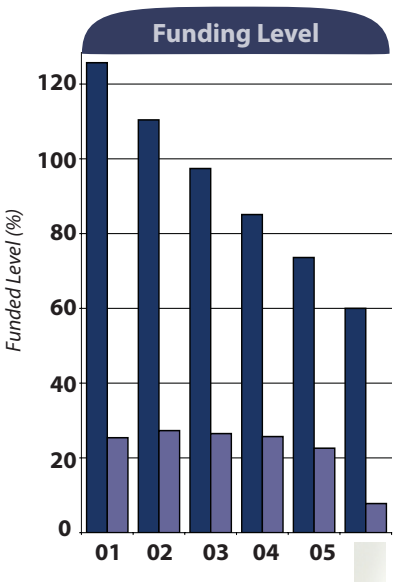
Larry C. Conner
Lexington
Appointed by Governor
Term Expires March 31, 2007

Brian J. Crall
Frankfort
Secretary, Personnel Cabinet
Term Expires Ex-Officio

Patricia Ballenger
Lexington
Elected by CERS
Term Expires March 31, 2009







[1] As of January 1, 2006 the Medical Insurance Exp. includes Self Funding Insurance expenses.

Kentucky Employees Retirement System Non-Hazardous

The Kentucky Employees Retirement System (KERS) was established July 1, 1956 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that averages 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.

	2001	2002	2003	2004	2005	2006
Net Plan Assets Additions	*(Dollars in Millions)*					
Net Investment Income	376.9	216.8	204.2	734.6	510.5	570.1
Employer Cont. (Ins.)	66.9	93.9	65.3	78.0	51.4	47.6
Employer Cont. (Pen.)	23.5	1.8	7.6	21.7	50.3	60.7
Member Contribution	106.6	112.0	137.1	129.1	127.8	107.6
Premiums from Retirees						5.8
Net Plan Assets Deductions	*(Dollars in Millions)*					
Medical Insurance Exp.[1]	37.6	44.1	52.0	60.5	76.0	97.5
Refunds	7.0	6.7	7.3	8.0	8.8	9.6
Administrative Exp.	3.8	4.4	5.0	5.3	5.9	7.6
Benefit Payments	291.7	345.7	404.9	459.4	522.4	577.9
Demutualization Refunds						20.0
Funding Level	*(% of Actuarial Assets to Actuarial Liabilities)*					
Pension	125.7	110.4	97.4	85.1	73.6	60.0
Insurance	25.4	27.3	26.5	25.7	22.6	7.8

System Highlights

Members

Active Members :	46,707
Inactive Members:	29,143
Retired Members and Beneficiaries:	32,140

Active Membership

	Average
Age:	43.0
Average Years of Service:	9.0
Average Annual Salary:	$36,445

Retired Membership

	Average
Age:	66.2
Average Annual Benefit:	$19,256
Number Added:	2,481
Number Removed:	1,111

Normal Retirement

The KERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member may be partially, or fully paid by KRS depending upon the member's years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	5% per year for 5 years before age 65 or 27 years of service. 4% for each year thereafter.
Any	25	5% each year for five years before 65 or 27 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$5,440,133,000
Insurance Fund:	$ 612,585,000
Total:	$6,052,718,000

Contributions

Employees:		5%
Employers:	Pension:	15.55%
	Insurance:	32.82%
	Total	48.37%

(Rate Effective July 1,2007)

KERS employer rates are subject to state budget approval.

System Highlights

Members

Active Members:	4,320
Inactive Members:	2,501
Retired Members and Beneficiaries:	1,980

Active Membership

Average Age:	41.6
Average Years of Service:	7.0
Average Annual Salary:	$32,117

Retired Membership

Average Age:	61.1
Average Annual Benefit:	$12,729
Number Added:	256
Number Removed:	28

Normal Retirement

The KERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member and eligible dependents may be partially, or fully paid by KRS depending upon the member's type and years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	5.5% per year for 5 years before age 55 or 20 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$ 437,030,000
Insurance Fund:	$ 223,458,000
Total:	$ 660,488,000

Contributions

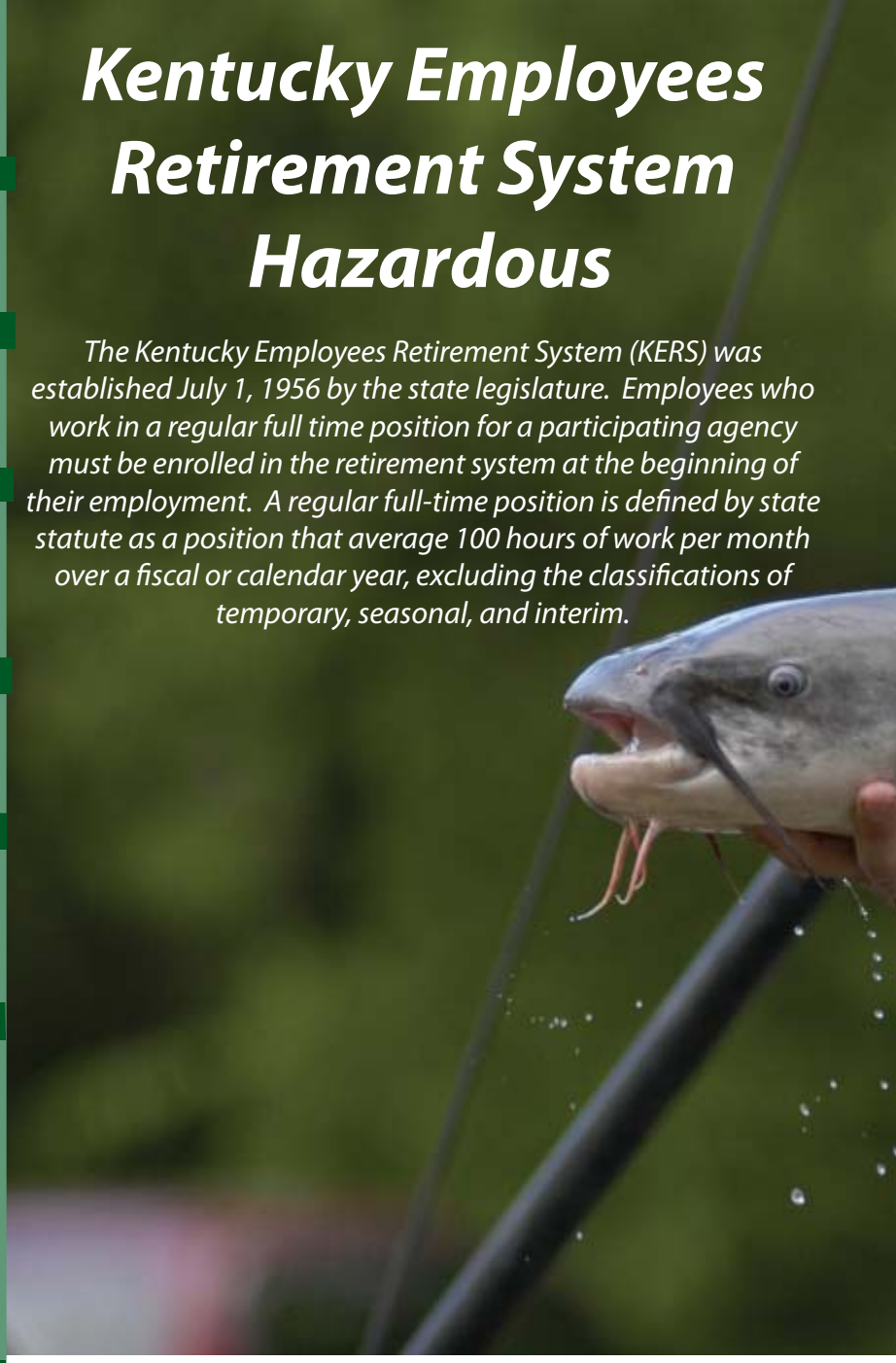
Employees:		8 %
Employers:	Pension:	10.20 %
	Insurance:	36.91 %
	Total:	47.11 %

(Rate Effective July 1,2007)

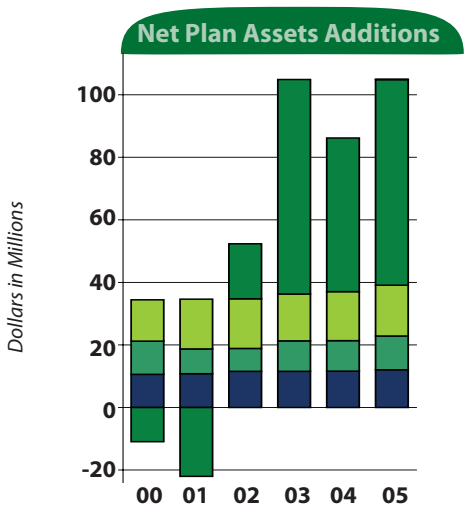
KERS employer rates are subject to state budget approval.

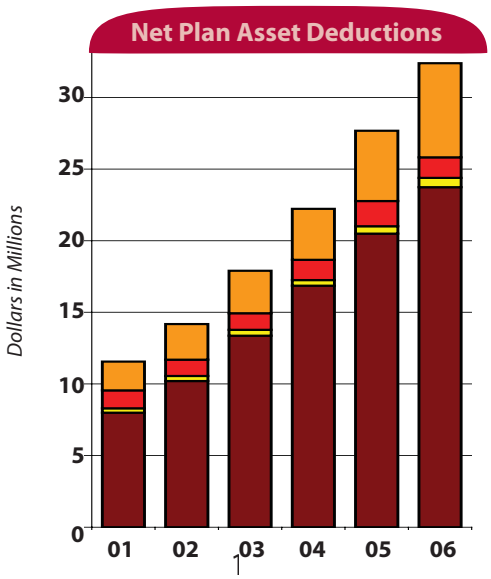
Kentucky Employees Retirement System Hazardous

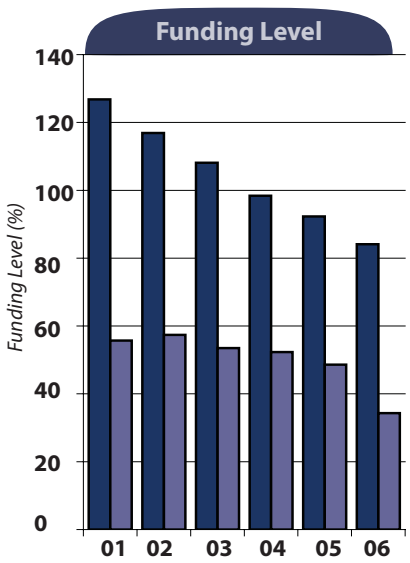
The Kentucky Employees Retirement System (KERS) was established July 1, 1956 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that average 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.



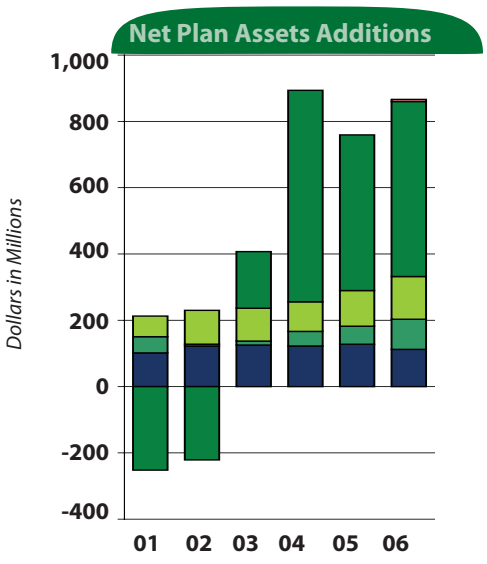
	2001	2002	2003	2004	2005	2006
Net Plan Assets Additions			*(Dollars in Millions)*			
Net Investment Income	10.9	22.0	17.6	68.6	49.1	65.7
Employer Cont. (Ins.)	13.2	15.9	15.9	15.0	15.7	17.0
Employer Cont. (Pen.)	10.6	7.9	7.3	9.8	9.8	10.8
Member Contribution	10.6	10.8	11.6	11.5	11.6	12.1
Premiums from Retirees						.09
Net Plan Assets Deductions			*(Dollars in Millions)*			
Medical Insurance Exp.*	2.0	2.5	3.0	3.6	4.9	6.6
Refunds	1.3	1.1	1.2	1.4	1.8	1.4
Administrative Exp.	.3	.4	.4	.4	.5	.6
Benefit Payments	8.0	10.2	13.4	16.9	20.5	23.7
Funding Level						
Pension	126.8	116.9	108.1	98.4	92.3	84.1
Insurance	55.7	57.4	53.5	52.3	48.6	34.3

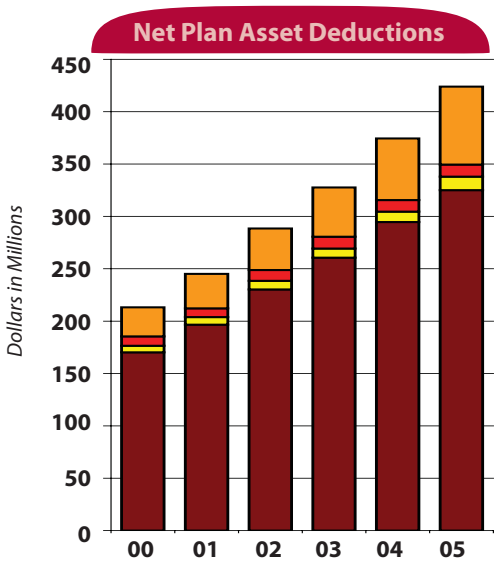


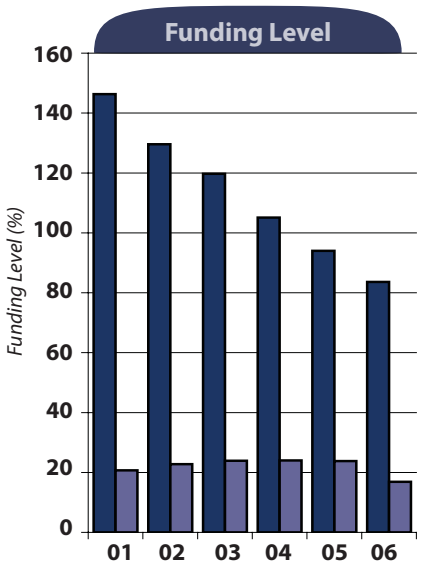




[1] As of January 1, 2006 the Medical Insurance Exp. includes Self Funding Insurance expenses.







[1] As of January 1, 2006 the Medical Insurance Exp. includes Self Funding Insurance expenses.

County Employees Retirement System Non-Hazardous

The County Employees Retirement System (CERS) was established July 1, 1958 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that average 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim. For school board employees participating in the CERS non-hazardous plan, a regular full-time position is defined as a position that requires the employee to average 80 hours of work per month over the actual days worked during the school year.

	2001	2002	2003	2004	2005	2006
Net Plan Assets Additions	*(Dollars in Millions)*					
Net Investment Income	252.1	151.5	170.7	637.7	469.4	527.8
Employer Cont. (Ins.)	62.3	102.2	99.2	89.3	107.6	128.9
Employer Cont. (Pen.)	48.9	5.5	11.9	44.0	54.6	90.8
Member Contribution	101.6	122.4	125.3	122.5	127.6	112.4
Premiums from Retirees						6.4
Net Plan Assets Deductions	*(Dollars in Millions)*					
Medical Insurance Exp.*	27.8	33.0	39.7	47.0	58.7	74.5
Refunds	9.0	8.3	10.2	11.3	11.0	11.6
Administrative Exp.	6.2	7.2	8.2	8.7	10.0	12.8
Benefit Payments	170.3	196.7	230.3	260.6	294.6	325.1
Funding Level	*(% of Actuarial Assets to Actuarial Liabilities)*					
Pension	146.3	129.6	119.7	105.1	94.0	83.6
Insurance	20.7	22.8	23.9	24.0	23.8	16.9

System Highlights

Members

Active Members	83,694
Inactive Members	50,046
Retired Members and Beneficiaries	33,102

Active Membership	Average
Age	45.1
Average Years of Service	8.1
Average Annual Salary	$23,687

Retired Membership	Average
Age	68.1
Average Annual Benefit	$9,711
Number Added	2,782
Number Removed	1,027

Normal Retirement

The CERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member may be partially, or fully paid by KRS depending upon the member's years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	5% per year for 5 years before age 65 or 27 years of service. 4% for each year thereafter.
Any	25	5% each year for five years before 65 or 27 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$5,191,377,000
Insurance Fund:	$ 813,998,000
Total:	$6,005,375,000

Contributions

Employees:		5%
Employers:	Pension:	6.98%
	Insurance:	20.51%
	Total	27.49%

(Rate Effective July 1,2007)

Please see page 106 for a full explanation of the employer contribution rate phase-in.

System Highlights

Members

Active Members	9,635
Inactive Members	1,955
Retired Members and Beneficiaries	4,712

Active Membership

Average Age	37.8
Average Years of Service	8.3
Average Annual Salary	$44,310

Retired Membership

Average Age	58.4
Average Annual Benefit	$23,530
Number Added	427
Number Removed	76

Normal Retirement

The KERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member and eligible dependents may be partially, or fully paid by KRS depending upon the member's type and years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	5.5% per year for 5 years before age 55 or 20 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$1,528,845,000
Insurance Fund:	$ 411,121,000
Total:	$1,939,966,000

Contributions

Employees:		8 %
Employers:	Pension:	15.01 %
	Insurance:	39.52 %
	Total:	54.53 %

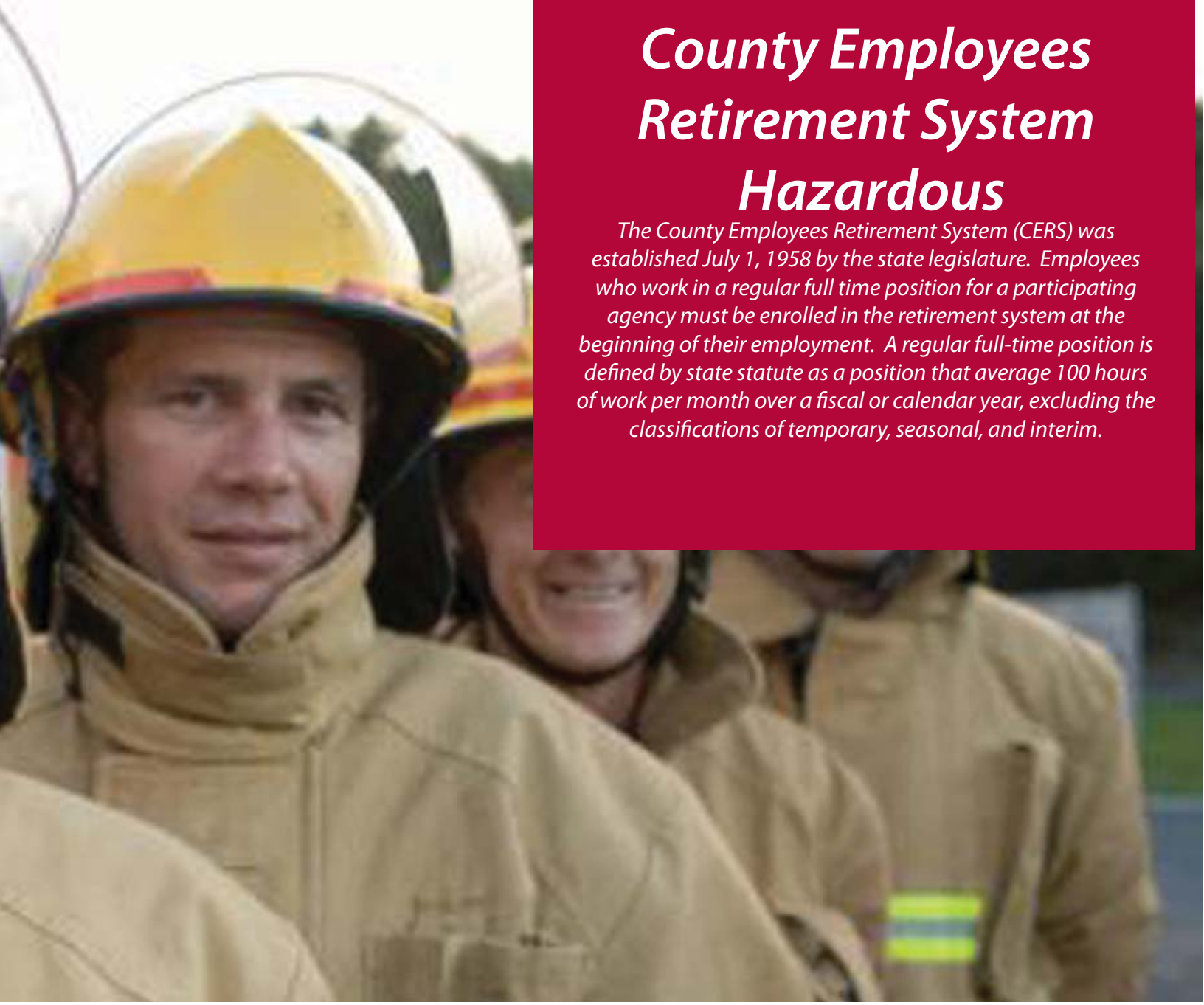
(Rate Effective July 1,2007)

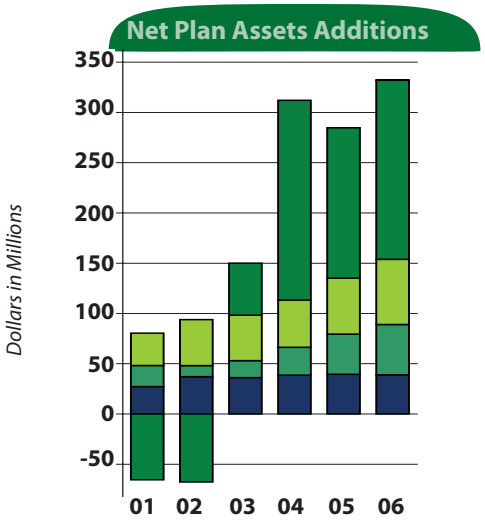
Please see page 106 for a full explanation of the employer contribution rate phase-in.

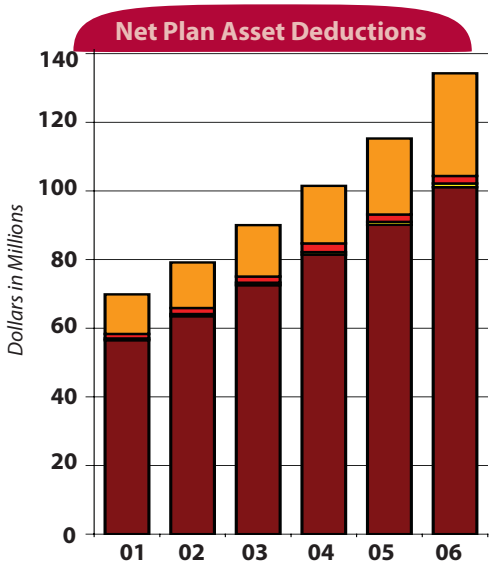
	2001	2002	2003	2004	2005	2006
Net Plan Assets Additions	*(Dollars in Millions)*					
Net Investment Income	65.4	67.6	51.6	199.0	148.7	178.1
Employer Cont. (Ins.)	32.1	45.7	45.2	47.0	55.6	64.9
Employer Cont. (Pen.)	21.0	11.1	16.9	27.6	39.9	50.0
Member Contribution	27.3	37.1	36.2	38.7	39.5	39.1
Premiums from Retirees						1.0
Net Plan Assets Deductions	*(Dollars in Millions)*					
Medical Insurance Exp.*	11.5	13.3	15.0	16.8	22.2	29.9
Refunds	1.3	1.8	1.8	2.5	2.1	2.1
Administrative Exp.	.5	.6	.7	.8	.9	1.1
Benefit Payments	56.5	63.5	72.5	81.4	90.1	101.1
Funding Level	*(% of Actuarial Assets to Actuarial Liabilities)*					
Pension	124.5	111.9	97.8	88.8	80.9	75.0
Insurance	27.4	30.0	28.8	30.3	28.0	21.9

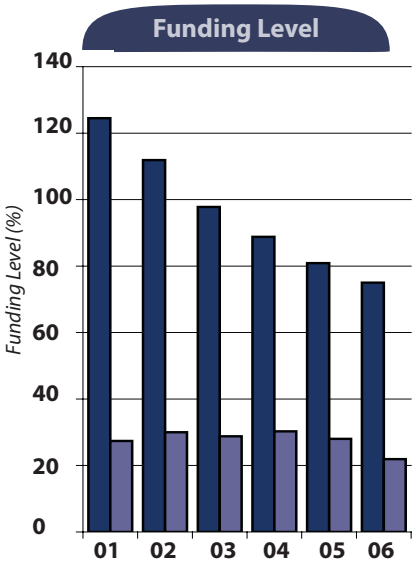
County Employees Retirement System Hazardous

The County Employees Retirement System (CERS) was established July 1, 1958 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that average 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.

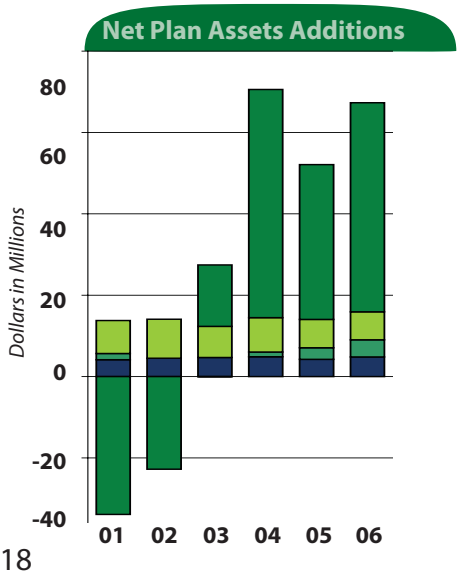


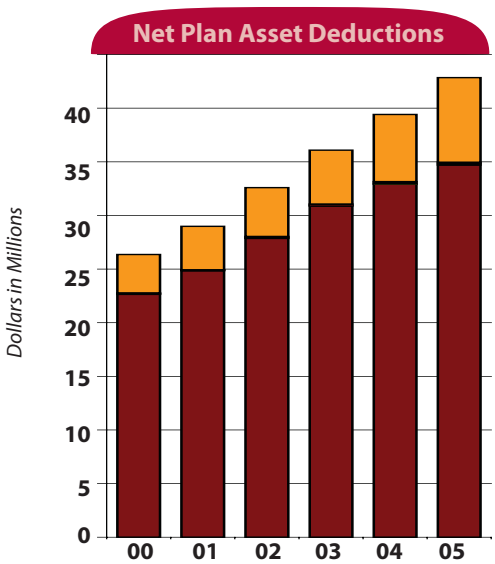


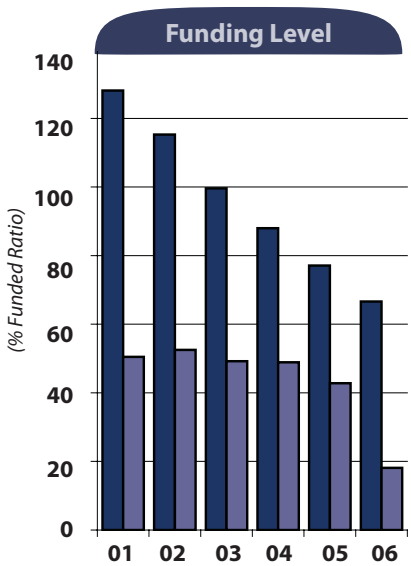




[1] *As of January 1, 2006 the Medical Insurance Exp. includes Self Funding Insurance expenses.*



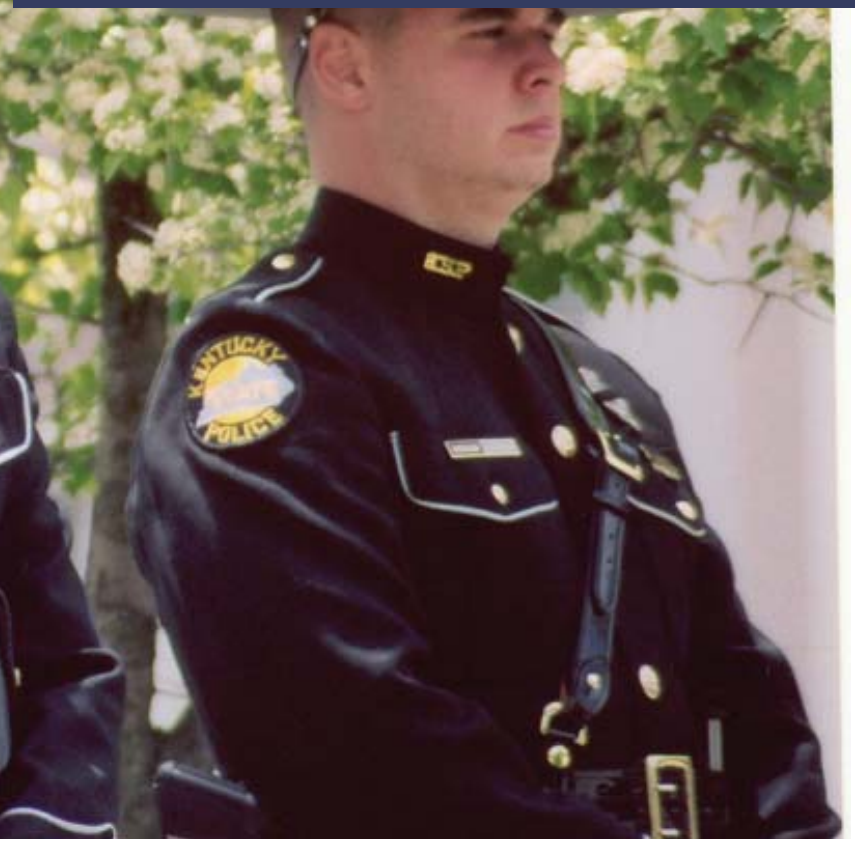




[1] *As of January 1, 2006 the Medical Insurance Exp. includes Self Funding Insurance expenses.*

State Police Retirement System

The State Police Retirement System (SPRS) was established July 1, 1960 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that average 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.



	2001	2002	2003	2004	2005	2006
Net Plan Assets Additions			*(Dollars in Millions)*			
Net Investment Income	33.9	22.8	15.1	56.1	38.0	51.4
Employer Cont. (Ins.)	8.1	9.6	7.7	8.5	7.0	6.9
Employer Cont. (Pen.)	1.5	0	0	1.2	2.9	4.2
Member Contribution	4.1	4.5	4.7	4.9	4.2	4.8
Net Plan Assets Deductions			*(Dollars in Millions)*			
Medical Insurance Exp.*	3.6	4.0	4.5	5.0	6.3	7.9
Refunds	.1	0	.1	.2	.1	.1
Administrative Exp.	.1	.1	.1	.1	.1	.1
Benefit Payments	22.6	24.8	27.9	30.8	32.9	34.7
Funding Level			*(% of Actuarial Assets to Actuarial Liabilities)*			
Pension	128.1	115.3	99.6	88.0	77.1	66.6
Insurance	50.5	52.5	49.2	48.9	42.8	18.1

System Highlights

Members

Active Members	1,028
Inactive Members	266
Retired Members and Beneficiaries	1,067

Active Membership

Average Age	36.5
Average Years of Service	10.5
Average Annual Salary	$44,443

Retired Membership

Average Age	59.8
Average Annual Benefit	$34,497
Number Added	43
Number Removed	10

Normal Retirement

The SPRS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member and eligible dependents may be partially, or fully paid by KRS depending upon the member's type and years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
Any	15	5.5% each year for five years before 55 or 20 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the average consumer price index for all urban consumers for the most recent calendar year not to exceed 5%. The General Assembly may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$ 352,841,000
Insurance Fund:	$ 110,460,000
Total:	$ 463,301,000

Contributions

Employees:		8%
Employers:	Pension:	28.95 %
	Insurance:	91.05 %
	Total:	120.00 %

(Rate Effective July 1,2007)

SPRS employer rates are subject to state budget approval.

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Kentucky Retirement Systems

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2005

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

Carla E. Bridges
President

Jeffrey L. Esser
Executive Director

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Mountjoy & Bressler, LLP
CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITOR'S REPORT

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statement of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2006, as listed in the table of contents. This financial statement is the responsibility of the Kentucky Retirement Systems' management. Our responsibility is to express an opinion on this financial statement based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statement referred to above presents fairly, in all material respects, the plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2006 and the changes in plan net assets for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated August 31,2006 on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

Management's Discussion and Analysis (pages 25 through 29) and the supplementary information included in the schedule of funding progress and schedule of employer contributions (pages 54 through 64) are not a required part of the basic financial statements, but are supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the financial statements taken as a whole. The additional supporting schedules (pages 54 through 71) are presented for the purpose of additional analysis and are not a required part of the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statement and, in our opinion, is fairly stated in all material respects in relation to the financial statement taken as a whole.

Mountjoy & Bressler, LLP

August 31, 2006
Louisville, Kentucky

KENTUCKY RETIREMENT SYSTEMS
MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2006

This discussion and analysis of Kentucky Retirement System's financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2006. Please read it in conjunction with the financial statements, which begin on page 30.

FINANCIAL HIGHLIGHTS -- PENSION FUND

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of all pension funds administered by Kentucky Retirement Systems increased by $545 million during the 2005-2006 fiscal year.

- Covered payroll for 2005-2006 was $4,348 million compared to covered payroll for the 2004-2005 plan year of $4,160.4 million, increasing approximately $187.6 million. The corresponding employer contributions increased by $79.7 million for a total employer contribution amount of $469.9 million. Of the total employer contribution amount, $216.5 million was posted to the pension funds while $253.4 million was posted to the insurance funds. Contributions paid by employees were $275.9 and $310.8 million respectively for the years ended June 30, 2006 and June 30, 2005. This decrease in employee contribution is a result of a decrease in service purchased by KRS members.

- The net appreciation in the fair value of investments was $803.6 million for the year ended June 30, 2006 compared to net appreciation of $723.8 million for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $601.6 million. In comparison, the pension funds realized gains of $474.9 million for the year ended June 30, 2005. The increase in realized gain experienced by the pension funds is due to a favorable change in market conditions.

- Interest, dividend and securities lending income net of their respective expenses was $358.8 million compared to $335.3 million net investment income in last fiscal year.

- Pension benefits paid to retirees and beneficiaries increased $102.1 million bringing total benefit payments to $1,062.6 million. Refund of contributions paid to former members upon termination of employment increased from $23.9 million to $24.9 million.

- Administrative expense increased $4.8 million totaling $22.2 million compared to $17.4 million in the prior year.

KENTUCKY RETIREMENT SYSTEMS
MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2006

FINANCIAL HIGHLIGHTS -- INSURANCE FUND

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of the insurance fund administered by Kentucky Retirement Systems increased by $272 million during the 2005-2006 fiscal year.

- Premiums received from retirees that participated in the self funded plan totaled $12.3 million.

- Employer contributions of $253.4 million were received. This is an increase of $20.7 million over the prior fiscal year. This increase is due to the increase of covered payroll reported by participating employers.

  The net appreciation in the fair value of investments was $188.2 million compared to net appreciation of 122.1 million for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $77.9 million. In comparison, the insurance funds realized gains on investments of $35.9 million in the prior fiscal year. This increase in realized gains is due to a favorable change in market conditions.

- Interest, dividend and securities lending income net of their respective expenses was approximately $42 million compared to net investment income of approximately $36 million in last fiscal year.

- Premiums paid by the fund for hospital and medical insurance coverage totaled $177.5 million. Payments for the self-funded healthcare reimbursements totaled $35.3 million. The total of insurance premiums paid plus self-funded reimbursements was $212.8 million for the 2005-2006 plan year. Insurance premium paid for the prior plan year totaled $166.9 million.

USING THIS FINANCIAL REPORT

This financial report consists of two financial statements and two required schedules of historical trend information. The Combining Statement of Plan Net Assets for the Pension Fund on page 30 and for the Insurance fund on page 31 provides a snapshot of the financial position of the each of the three systems at June 30, 2006. The Combining Statement of Changes in Plan Net Assets for the Pension Fund on page 32 and for the Insurance Fund on page 33 summarize the additions and deductions that occurred for each of the three systems during the period from July 1, 2005 through June 30, 2006.

The Schedule of Funding Progress on pages 54-59 includes historical trend information about the actuarially funded status of each plan from a long-term perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions on pages 60-64 presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY RETIREMENT SYSTEMS AS A WHOLE
Kentucky Retirement Systems' combined plan net assets increased during the year ended June 30, 2006 by approximately $ 837 million from $14,333.8 million to $15,171.3 million. Plan net assets for the prior fiscal year increased by $752.4 million. The increase in plan net assets for the plan year ended June 30, 2006 is primarily attributable to the gains on investment due to favorable market conditions. The analysis below focuses on plan net assets (Table 1) and changes in plan net assets (Table 2) of Kentucky Retirement Systems' pension funds and insurance fund.

KENTUCKY RETIREMENT SYSTEMS
MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2006

Table 1 Plan Net Assets
(in millions)

	Pension Funds			Insurance Funds			Total		
	2006	2005	2004	2006	2005	2004	2006	2005	2004
Cash & Invest.	$16,299.5	$14,926.9	$13,327.7	$2,691.6	$2,338.9	$2,000.8	$18,991.1	$17,265.8	$15,328.5
Receivables	123.4	123.4	123.3	35.7	23.5	21.4	159.1	146.9	144.7
Equip. net of dep.	1.3	0.8	0.9				1.3	0.8	0.9
Total Assets	$16,424.2	$15,051.1	$13,451.9	$2,727.3	$2,362.4	$2,022.2	$19,152.5	$17,413.5	$15,474.1
Total Liabilities	($3,474.0)	($2,645.9)	($1,572.3)	($526.7)	($433.8)	($320.4)	($4,000.7)	($3,079.7)	($1,892.7)
Plan Net Assets	$12,950.2	$12,405.2	$11,879.6	$2,200.6	$1,928.6	$1,701.8	$15,150.8	$14,333.8	$13,581.4

Table 2 Changes in Plan Net Assets
(in millions)

	Pension Funds			Insurance Funds			Total		
	2006	2005	2004	2006	2005	2004	2006	2005	2004
Additions:									
Member Contribution	$275.9	$310.8	$306.7				$275.9	$310.8	$306.7
Employer Contribution	216.5	157.5	104.3	253.4	232.7	237.8	469.9	390.2	342.1
Premiums Received				12.3			12.3		
Insurance Appropriation				11.8	4.6		11.8	4.6	
Investment Income (net)	1,162.4	1,059.1	1,442.9	230.8	157.6	253.1	1,392.2	1,216.7	1,696.0
Total Additions	***$1,654.8***	***$1,527.4***	***$1,853.9***	***$508.3***	***$394.9***	***$490.9***	***$2,162.1***	***$1,922.3***	***$2,344.8***
Deductions:									
Benefit Payments	$1,062.6	$960.5	$849.2				$1,062.6	$960.5	$849.2
Refunds	24.9	23.9	23.4				24.9	23.9	23.4
Administrative Expenses	22.3	17.4	15.2	3.6	1.2	1.0	25.9	18.6	16.2
Healthcare Costs				212.8	166.9	131.9	212.8	166.9	131.9
Demutualization Refund				20.0			20.0		
Total Deductions	***$1109.8***	***$1,001.8***	***$887.8***	***$236.4***	***$168.1***	***$132.9***	***$1,326.2***	***$1,169.9***	***$1,020.7***
Increase (Decrease) in Plan Net Assets									
	545.0	$525.6	$966.1	$271.9	$226.8	$358.0	$835.9	$752.4	$1,324.1

Plan net assets of the pension funds increased by $545 million ($12,950.2 million compared to $12,405.2 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. This plan net asset increase is attributable primarily to the net appreciation in the fair value of investments due to the change in market conditions in general.

Plan net assets of the insurance fund increased by approximately $272 million ($2,220.6 million compared to $1,928.6 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. This increase in net plan assets is primarily attributable to the net appreciation in the fair value of investments which is due to the change in market conditions in general.

KENTUCKY RETIREMENT SYSTEMS
MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2006

Pension Fund Activities

Member contributions decreased by $34.9 million. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit. The decrease in member contributions is a result of a decrease in elective service purchases by KRS members.

Employer contributions increased by $59 million due to the increase in covered payroll reported to KRS and the increase in the contribution rates applied to the pension funds.

Net investment income increased by $103 million (net investment income of $1,162 million compared to net investment income of $1,059 million in the prior year). The pension funds experienced an increase in income primarily due to the increase in gains of sale of investments. This is illustrated in Table 3 as follows:

Table 3 *Investment Income (Pension)*	In Millions 2006	2005	2004
Appreciation in fair value of investments current year end	$1,845	$1,644	$1,395
Appreciation in fair value of investments prior year end	1,644	1,395	478
Net appreciation in fair value of investments	$201	$249	$917
Investment Income net of Investment Expense	359	335	298
Gain (loss) on sale of investments	602	475	228
Investment Income (net)	$1,162	$1,059	$1,443

Pension fund deductions increased by $108 million caused principally by an increase of $102.1 million in benefit payments**.** Retirees received an increase of 2.7% in benefit payments as of July 1, 2005. Refunds of member contributions increased by $1 million.

Insurance Fund Activities

Employer contributions paid into the insurance fund increased by $20.7 million over the prior year. This increase is a result of the increase in covered payroll reported to KRS.

Net investment income increased by approximately $73 million. This increase in net income is due primarily to the increase in the gains on sale of investments. This is illustrated in Table 4 as follows:

Table 4 *Investment Income (Insurance)*	In Millions 2006	2005	2004
Appreciation in fair value of investments current year end	$415	$304	$218
Appreciation in fair value of investments prior year end	304	218	11
Net appreciation in fair value of investments	$111	$86	$207
Investment Income net of Investment Expense	42	36	24
Gain (loss) on sale of investments	78	36	22
Investment Income (net)	$231	$158	$253

Insurance fund deductions increased by $68.3 million primarily due to the increase in healthcare costs.

KENTUCKY RETIREMENT SYSTEMS
MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2006

Historical Trends

Accounting standards require that the statement of plan net assets state asset value at **fair value** and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the pension funds and insurance fund is provided in the Schedule of Funding Progress on pages 54-59. The asset value stated in the Schedule of Funding Progress is the **actuarial value** of assets determined by calculating the difference between the expected valuation of assets and the actual market value of assets adjusted for any unrecognized gains or losses and amortized over a five-year period. The actuarial accrued liability is calculated using the entry age normal cost funding method. The difference in value between the actuarial accrued liability and the actuarial value of assets is known as the unfunded actuarial accrued liability. This unfunded actuarial accrued liability is the measure of the cost of benefits that have been earned to date by KRS members, but not yet paid for.

The unfunded actuarial accrued liability in the pension plans increased by $2,567 million for a total unfunded amount of $5,375.6 million for the year ended June 30, 2006 compared to an unfunded amount of $2,808.6 for the year end June 30, 2005. In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 assumption changes, and increasing expenditures for retiree Cost of Living Adjustments. Within the KERS and SPRS plans, employer contribution rate reductions enacted by the state legislature have limited the plans ability to correct the declining funding levels.

The post-employment healthcare plans continue to have a large unfunded actuarial accrued liability increasing to $13,424.7 million for the plan year ended June 30, 2006 from $5,455.3 million for the plan year ended June 30, 2005. This is an increase in the unfunded amount of $7,969.4 million. While the funding level relative to the insurance funds has improved steadily since 1990, medical inflation rates in excess of the assumed rates as well as recent employer contribution rate reductions under KERS and SPRS have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level.

Annual required contributions of the employers as actuarially determined and actual contributions made by the employers in relation to the required contributions are provided in the Schedule of Employer Contributions on pages 60-64. The difference in the annual required contributions and actual contributions made by employers in the KERS and SPRS funds is attributable to the fact that the statutory employer contribution rate set by the Kentucky General Assembly is less than the rate computed by the actuary.

Combining Statements of Plan Net Assets

Pension Funds

As of June 30, 2006 *(with comparative totals as of June 30, 2005)*

(Dollars in Thousands)	KERS	CERS	SPRS	TOTAL	2005 TOTAL
Assets					
Cash and Short-Term Investments					
Cash	$1,966	$954	$90	$3,010	$1,499
Short-Term Investments	120,777	108,000	12,110	240,887	353,055
Total Cash and Short-Term Investments	122,743	108,954	12,200	243,897	354,554
Receivables					
Contributions	24,891	38,715	1,290	64,896	66,599
Investment Income	25,842	31,070	1,572	58,484	56,760
Total Receivables	50,733	69,785	2,862	123,380	123,359
Investments, at Fair Value					
Corporate and Government Bonds	1,685,307	2,045,088	105,004	3,835,399	3,955,223
Corporate Stocks	3,686,132	4,011,783	211,565	7,909,480	7,329,933
Mortgages	334,067	490,536	20,933	845,536	641,949
Real Estate	4,289	4,775	481	9,545	9,693
Total Investments at Fair Value	5,709,795	6,552,182	337,983	12,599,960	11,936,798
Securities Lending Collateral Invested	1,254,181	2,093,411	108,101	3,455,693	2,635,518
Equipment (net of accumulated depreciation)	473	796	8	1,277	832
Total Assets	7,137,925	8,825,128	461,154	16,424,207	15,051,061
Liabilities					
Accounts Payable	6,581	11,495	212	18,288	10,352
Securities Lending Collateral Obligations	1,254,181	2,093,411	108,101	3,455,693	2,635,518
Total Liabilities	1,260,762	2,104,906	108,313	3,473,981	2,645,870
Plan Net Assets Held in Trust for Pension Benefits	**$5,877,163**	**$6,720,222**	**$352,841**	**$12,950,226**	**$12,405,191**

Combining Statements of Plan Net Assets

As of June 30, 2006 (with comparative totals as of June 30, 2005)	Insurance Funds				2005
(Dollars in Thousands)	KERS	CERS	SPRS	TOTAL	TOTAL
Assets					
Cash and Short-Term Investments					
Cash	$133	$125	$7	$265	$207
Short-Term Investments	120,317	104,467	9,066	233,850	210,072
Total Cash and Short-Term Investments	120,450	104,592	9,073	234,115	210,279
Receivables					
Contributions	4,751	25,164	378	30,293	18,617
Investment Income	2,131	3,042	267	5,440	4,909
Total Receivables	6,882	28,206	645	35,733	23,526
Investments, at Fair Value					
Corporate and Government Bonds	82,777	127,316	10,689	220,782	199,189
Corporate Stocks	647,671	997,385	90,208	1,735,264	1,497,841
Alternative Investment	30	98	7	135	
Total Investments at Fair Value	730,478	1,124,799	100,904	1,956,181	1,697,030
Securities Lending Collateral Invested	131,343	344,439	25,561	501,343	431,552
Total Assets	989,153	1,602,036	136,183	2,727,372	2,362,387
Liabilities					
Accounts Payable	1,767	3,478	162	5,407	2,230
Demutualization Proceeds Payable	20,000			20,000	
Securities Lending Collateral Obligations	131,343	344,439	25,561	501,343	431,552
Total Liabilities	153,110	347,917	25,723	526,750	433,782
Plan Net Assets Held in Trust for Insurance Benefits	***$836,043***	***$ 1,254,119***	***$ 110,460***	***$ 2,200,622***	***$ 1,928,605***

(A schedule of funding progress for each plan is presented on pages 54-59)
See accompanying independent auditor's report and notes to financial statements.

Combined Statements of Changes in Plan Net Assets

Pension Funds

For the Fiscal Year Ended June 30, 2006 **2005**

(with comparative totals for the fiscal year ended June 30, 2005)

(Dollars in Thousands)	KERS	CERS	SPRS	Total	Total
Additions					
Members' Contributions	$ 119,663	$151,427	$4,814	$275,904	$310,806
Employers' Contributions	71,484	140,810	4,244	216,538	157,508
Total Contributions	191,147	292,237	9,058	492,442	468,314
Investment Income					
From Investing Activities:					
Net Appreciation in Fair Value of Investments	385,613	388,362	29,621	803,596	723,831
Interest/Dividends	166,041	193,992	9,976	370,009	344,929
Total Income From Investing Activities	551,654	582,354	39,597	1,173,605	1,068,760
Investment Expense	4,818	5,509	284	10,611	10,138
Commissions	3,728	4,262	222	8,212	5,818
Total Investing Activities Expense	8,546	9,771	506	18,823	15,956
Net Income from Investing Activities	543,108	572,583	39,091	1,154,782	1,052,804
From Securities Lending Activities:					
Securities Lending Income	49,082	81,454	4,234	134,770	55,872
Securities Lending Expense:					
Security Borrower Rebates	45,255	75,538	3,901	124,694	47,836
Security Lending Agent Fees	894	1,492	77	2,463	1,745
Net Income From Securities Lending Activities	2,933	4,424	256	7,613	6,291
Total Net Investment Income	546,041	577,007	39,347	1,162,395	1,059,095
Total Additions	737,188	869,244	48,405	1,654,837	1,527,409
Deductions					
Benefit Payments	601,683	426,222	34,703	1,062,608	960,521
Refunds	11,068	13,736	133	24,937	23,896
Administrative Fees	8,213	13,910	134	22,257	17,432
Total Deductions	620,964	453,868	34,970	1,109,802	1,001,849
Net Increase in Plan Assets	116,224	415,376	13,435	545,035	525,560
Plan Net Assets Held in Trust for Pension Benefits					
Beginning of Year	***5,760,939***	***6,304,846***	***339,406***	***12,405,191***	***11,879,631***
End of Year	***$5,877,163***	***$6,720,222***	***$352,841***	***$12,950,226***	***$12,405,191***

Combined Statements of Changes in Plan Net Assets

Insurance Funds

For the Fiscal Year Ended June 30, 2006 **2005**

(with comparative totals for the fiscal year ended June 30, 2005)

(Dollars in Thousands)	KERS	CERS	SPRS	Total	Total
Additions					
Employers' Contributions	$ 59,992	$ 187,415	$ 5,990	$ 253,397	$232,681
Insurance Appropriation	4,655	6,307	890	11,852	4,562
Premiums Received From Retirees	5,858	6,463	5	12,326	
Total Contributions	70,505	200,185	6,885	277,575	237,243
Investment Income					
From Investing Activities:					
Net Appreciation in Fair Value of Investments	73,309	105,015	9,907	188,231	122,126
Interest/Dividends	17,019	24,360	2,204	43,583	36,400
Total Income from Investing Activities	90,328	129,375	12,111	231,814	158,526
Investment Activities Expense	655	1,133	101	1,889	1,428
Commissions	223	313	31	567	563
Total Investing Activities Expense	878	1,446	132	2,456	1,991
Net Income from Investing Activities	89,450	127,929	11,979	229,358	156,535
From Securities Lending Activities:					
Securities Lending Income	5,806	15,163	1,125	22,094	9,039
Securities Lending Expense:					
Security Borrower Rebates	5,316	13,943	1,035	20,294	7,669
Security Lending Agent Fees	96	252	18	366	262
Net Income From Securities Lending Activities	394	968	72	1,434	1,108
Total Net Investment Income	89,844	128,897	12,051	230,792	157,643
Total Additions	160,349	329,082	18,936	508,367	394,886
Deductions					
Healthcare Premiums Subsidies	84,526	85,699	7,252	177,477	166,892
Administrative Fees	1,742	1,752	68	3,562	1,231
Self Funding Insurance Costs	17,810	16,937	564	35,311	
Demutualization Proceeds Refunded	20,000			20,000	
Total Deductions	124,078	104,388	7,884	236,350	168,123
Net Increase in Plan Assets	36,271	224,694	11,052	272,017	226,763
Plan Net Assets Held in Trust for Insurance Benefits					
Beginning of Year	***799,772***	***1,029,425***	***99,408***	***1,928,605***	***1,701,842***
End of Year	***$ 836,043***	***$ 1,254,119***	***$ 110,460***	***$ 2,200,622***	***$ 1,928,605***

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by Kentucky Retirement Systems: (1) Kentucky Employees Retirement System (KERS); (2) County Employees Retirement System (CERS); and (3) State Police Retirement System (SPRS). The assets of the various insurance funds are commingled for investment purposes. The following notes apply to the various funds administered by Kentucky Retirement Systems.

NOTE A--SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - KRS' financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the Plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan.

Method Used to Value Investments - Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate is based on appraisals. Investments that do not have an established market are reported at estimated fair value.

Estimates - The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment - Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years.

Expense Allocation - Administrative and investment expenses of the Kentucky Retirement Systems are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

Component Unit - Kentucky Retirement Systems is a component unit of the Commonwealth of Kentucky for financial reporting purposes. The Kentucky Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. The County Employees Retirement System was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. The State Police Retirement System was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund consisting of the Kentucky employees Insurance Fund, Kentucky Employee Hazardous Insurance Fund, County Employees Insurance Fund, County Employees Hazardous Insurance Fund and State Police Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Systems' Board of Trustees without further legislative review. The methods used to determine the employer rates for all retirement systems are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION

Membership of each retirement system consisted of the following at June 30, 2006 and 2005:

Kentucky Employees Retirement System

	2006			2005		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and Beneficiaries Receiving Benefits	32,140	1,980	34,120	30,770	1,752	32,522
Inactive Vested Retirements	4,998	265	5,263	5,240	307	5,547
Inactive Vested Memberships	24,145	2,236	26,381	23,105	1,997	25,102
Active Plan Members	46,707	4,320	51,027	47,118	4,274	51,392
Total	**107,990**	**8,801**	**116,791**	**106,233**	**8,330**	**114,563**
Number of Participating Employers			**353**			**350**

County Employees Retirement System

	2006			2005		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and Beneficiaries Receiving Benefits	33,102	4,712	37,814	31,347	4,361	35,708
Inactive Vested Retirements	7,379	393	7,772	7,771	482	8,253
Inactive Vested Memberships	42,667	1,562	44,229	41,098	1,489	42,587
Active Plan Members	83,694	9,635	93,329	81,240	9,464	90,704
Total	**166,842**	**16,302**	**183,144**	**161,456**	**15,796**	**177,252**
Number of Participating Employers			**1,391**			**1,400**

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

State Police Retirement System

Number of Members	2006 Hazardous Position Employees	2005 Hazardous Position Employees
Retirees and Beneficiaries Receiving Benefits	1,067	1,036
Inactive Vested Retirements	48	42
Inactive Vested Memberships	218	210
Active Plan Members	1,028	987
Total	**2,361**	**2,275**
Number of Participating Employers	**1**	**1**

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUNDS

Hospital and medical contracts in force consisted of the following at June 30, 2006 and 2005:

Kentucky Retirement Systems Insurance Fund

	2006					2005				
	Single	Couple/ Family	Parent +	Medicare Without Prescription	Medicare With Prescription	Single	Couple/ Family	Parent +	Medicare Without Prescription	Medicare With Prescription
KERS										
Non-Hazardous	8,393	1,826	490	1,672	12,000	7,928	1,679	461	1,915	11,764
Hazardous	656	378	58	74	603	570	319	65	61	567
CERS										
Non-Hazardous	6,298	1,058	249	2,502	11,803	6,014	1,022	255	2,853	11,005
Hazardous	1,275	1,739	198	52	1,105	1,220	1,579	195	55	1,004
SPRS	260	406	29	9	368	257	388	34	10	348
Total	**16,882**	**5,407**	**1,024**	**4,309**	**25,879**	**15,989**	**4,987**	**1,010**	**4,894**	**24,688**

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. KERS provides retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

Contributions - For the years ended June 30, 2006 and 2005, plan members were required to contribute 5% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2006 and 2005, participating employers contributed 5.89% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2006 and 2005 was 13.62% and 10.29%, respectively, of each employee's creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. KERS provides retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions - For the years ended June 30, 2006 and 2005, plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2006 and 2005, participating employers contributed 18.84% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2006 and 2005 was 21.59% and 19.47%, respectively, of each employee's creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

COUNTY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. CERS provides retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2006 and 2005, plan members were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2006 and 2005, participating employers contributed 10.98% and 8.48%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2006 and 2005 was 10.98% and 8.48%, respectively. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. CERS provides retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2006 and 2005, plan members were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the years ended June 30, 2006 and 2005, participating employers contributed 28.21% and 22.08%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2006 and 2005 was 25.01% and 22.08%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

STATE POLICE RETIREMENT SYSTEM

Plan Description - SPRS is a single-employer defined benefit pension plan that covers all full-time state troopers employed in a hazardous duty position by the Kentucky State Police. SPRS provides retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

Contributions - For the years ended June 30, 2006 and 2005 plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the years ended June 30, 2006 and 2005, the Commonwealth contributed 21.58% of each employee's creditable compensation. The actuarially determined rate set by the Board for the years ended June 30, 2006 and 2005 was 34.83% and 28.08%, respectively, of each employee's creditable compensation. Administrative costs of Kentucky Retirement System are financed through employer contributions and investment earnings.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUNDS

Plan Description - The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System. The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For fiscal 2006, insurance premiums withheld from benefit payments to members of KRS were $23,925,504 and $697,822 for KERS and KERS hazardous, respectively, $23,353,491 and $1,392,261 for CERS and CERS hazardous, respectively, and $203,189 for SPRS. For fiscal year ending 2005, insurance premiums withheld from benefit payments to members of the KRS were $25,491,575 and $781,396 for KERS and KERS hazardous, respectively, $23,110,726 and $1,983,786 for CERS and CERS hazardous, respectively, and $494,223 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2006 the Fund had 73,001 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Funds is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows:

Years of Service	% Paid by Insurance Fund
20 or More	100%
15 – 19	75%
10 - 14	50%
4 - 9	25%
Less Than 4	0%

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

As a result of House Bill 290 (2004 General Assembly), medical insurance benefits are calculated differently for members who began participating on or after July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on or after July 1, 2003 earn ten dollars ($10) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on or after July 1, 2003 earn fifteen dollars ($15) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives ten dollars ($10) per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree cost of living adjustment (COLA), which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years.

Kentucky Retirement Systems commenced self-funding of healthcare benefits for its Medicare Eligible Retirees on January 1, 2006. A self-funded plan is one in which Kentucky Retirement Systems assumes the financial risk for providing healthcare benefits to its retirees. The self-funded plan pays for claims out-of-pocket as they are presented instead of paying a predetermined premium to an insurance carrier for a fully-insured plan. Kentucky Retirement Systems funds the risks directly from its assets. Kentucky Retirement Systems becomes directly responsible for administering benefits under the plan.

The Kentucky Retirement Systems' plan is defined by statute. Kentucky Retirement Systems selected Walgreen's Health Initiatives and Fiserv Health (Wausau Benefits, Inc.) to administer the pharmaceutical and medical benefits for its retirees.

Stop-loss Insurance can be arranged to limit the Kentucky Retirement Systems' loss to a specified amount to ensure that catastrophic claims do not upset the financial integrity of the self-funded plan. The amount of stop-loss insurance is a function of Kentucky Retirement Systems' size, nature of its business, financials, and tolerance for risk. Kentucky Retirement Systems is in the process of evaluating the use of stop-loss insurance.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE C--CASH AND SHORT-TERM INVESTMENTS AND SECURITIES LENDING COLLATERAL

The provisions of Governmental Accounting Standards Board Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions and investments made with that cash be reported as assets on the financial statements. In conjunction with the adoption of Governmental Accounting Standard No. 28, KRS has reclassified certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

Kentucky Employees Retirement System

		2006		2005
Cash	$	1,965,448	$	726,023
Short Term Investments		120,776,512		118,148,292
Securities Lending Collateral Invested		1,254,181,656		1,225,388,483
Total	$	**1,376,923,616**	$	**1,344,262,798**

County Employees Retirement System

		2006		2005
Cash	$	953,952	$	$665,927
Short Term Investments		108,000,545		240,737,425
Securities Lending Collateral Invested		2,093,410,581		1,337960,409
Total	$	**2,202,365,078**	$	**1,579,363,761**

State Police Retirement System

		2006		2005
Cash	$	89,840	$	106,821
Short Term Investments		12,110,352		(5,830,993)
Securities Lending Collateral Invested		108,100,996		72,168,911
Total	$	**120,301,188**	$	**66,444,739**

Kentucky Retirement Systems Insurance Fund

		2006		2005
Cash	$	265,217	$	207,089
Short Term Investments		233,849,473		210,072,016
Securities Lending Collateral Invested		501,343,495		431,551,814
Total	$	**735,458,185**	$	**641,830,919**

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE D--INVESTMENTS

The Board of Trustees of Kentucky Retirement Systems (KRS) and Insurance Funds recognize their duty to invest funds in accordance with the Prudent Person Rule and manage those funds consistent with the long-term nature of KRS. The Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments - Investments may be made in domestic and international common stock, securities convertible into common stock and in preferred stock of publicly traded corporations.

Fixed Income Investments - Publicly traded corporate bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with the current market and economic conditions. Investment may also be made in any debt instrument issued or guaranteed in whole or in part by the U.S. Government or any agency or instrumentality of the U.S. Government.

Mortgages - Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments guaranteed by an agency of the U.S. Government or the Commonwealth of Kentucky.

Alternative Investments/Equity Real Estate - Subject to the specific approval of the investment committee of the Board of Trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, without limitation, venture capital, private equity and private placements which the investment committee believes has excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities - The following short-term investment vehicles are considered acceptable:

Publicly traded investment grade corporate bonds, government and agency bonds, mortgages, and collective STIF's, money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having a BBB or better rating by at least one recognized bond rating service. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur.

Derivatives - Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited.

The Pension Fund and Insurance Fund invest in collateralized mortgage obligations (CMOs) and other asset-backed securities to increase return and adjust duration of the portfolio. The Pension and the Insurance Funds invest in exchange-traded funds to convert cash held in index funds to short-term equity investments. This practice is intended to make the performance of the index funds more closely track the performance of the index that the funds are intended to replicate.

NOTE D--INVESTMENTS--CONTINUED

Collateralized mortgage obligations, asset-backed securities, and exchange-traded funds pose no greater risk than other similar investment grade holdings in the Systems' and the Fund's portfolios. The fair value of CMOs at June 30, 2006 and 2005 was approximately $225 million and $82 million respectively; the fair value of asset-backed securities at June 30, 2006 and 2005 was approximately $195 million and $252 million respectively; and the fair value of exchange-traded funds at June 30, 2006 and 2005 was approximately $328 million and $318 million, respectively.

Custodial Credit Risk for Deposits - Custodial credit risk for deposits is the risk that in the event of a financial institution failure, the System's deposits may not be returned. All non-investment related bank balances are held locally by Farmers Bank & Capital Trust Company. All non-investment related bank balances are held in KRS' name and each individual account is insured up to $100,000. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulation (200 KAR 14:081) to be collateralized at 102% of the principal amount.

At June 30, 2006 and 2005, deposits for KRS pension funds were $4,175,409 and $1,498,771, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

At June 30, 2006 and 2005, deposits for KRS insurance funds were $242,866 and $207,089, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments - Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. Qualified Investment Managers, Custody Banks, Investment Consultants and other service providers are selected by the Investment Committee or Chief Investment Officer as required. The selection is based upon the demonstrated ability of the professional, or professionals, to provide the required expertise or assistance. At June 30, the following investments were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in the System's name.

Pension Funds	2006	2005
Foreign Currency Investments	$4,747,304	$3,059,869

Insurance Funds	2006	2005
Foreign Currency Investments	$25,598	$124,692

Investment Policies - The Kentucky Revised Statute 61.650 grant the responsibility for the investment of plan assets to the Board of Trustees of the Kentucky Retirement Systems. The Board of Trustees has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes the duty to invest the funds in accordance with the Prudent Person Rule and manage those funds consistent with the long-term nature of the Systems. The Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of the Kentucky Retirement Systems. The Statement of Investment Policy – Pension contains the specific guidelines for the investment of pension assets. The Statement of Investment Policy – Insurance contains the specific guidelines for the investment of insurance assets. Additionally, the Committee establishes specific investment guidelines in the Investment Management Agreement for each investment management firm.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

Investment Summary

The following tables present a summary of the investments by type as of June 30, 2006 and 2005.

Pension Funds For the Fiscal Years Ended June 30, 2006 and 2005

Investment Summary	2006	2005
U.S. Gov't & Agency Fixed Income Securities	$ 3,251,063,919	$ 3,313,946,410
U.S. Corporate Fixed Income Securities	1,416,970,614	1,268,342,165
Municipal Debt Securities	12,901,977	14,883,806
Short Term Investments	240,887,409	353,054,725
Equity Securities	7,640,279,994	7,219,482,637
Private Equity Limited Partnerships	269,198,441	110,450,122
Real Estate	9,545,575	9,694,317
Total	***$ 12,840,847,929***	***$ 12,289,854,182***

Insurance Funds For the Fiscal Years Ended June 30, 2006 and 2005

Investment Summary	2006	2005
U.S. Gov't & Agency Fixed Income Securities	$ 220,781,808	$ 189,294,988
Short Term Investments	233,849,474	219,965,717
Equity Securities	1,705,352,668	1,485,569,035
Private Equity Limited Partnerships	29,910,939	12,272,237
Alternative Investment	135,000	
Total	***$ 2,190,029,889***	***$ 1,907,101,978***

Credit Risk of Debt Securities - Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external professional investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension fund debt securities portfolio is managed using the following guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the U.S. government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- The average credit quality of the total portfolio must be A or better.
- Debt obligations must have an investment grade rating at the time of purchase.
- Debt obligations that have been downgraded to below investment grade may be held in the portfolio up to a maximum of 1.5 percent of the total portfolio at market value.
- Debt obligations in the lowest investment grade rating category may not exceed 15 percent of the total portfolio at market value.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE D--INVESTMENTS--CONTINUED

The following tables present the KRS pension fund debt ratings at June 30, 2006 and 2005.

Pension Funds
Debt Securities Investments at Fair Value
For the Fiscal Years Ended June 30, 2006 and 2005

Quality Rating	2006	2005
AAA	$1,677,053,070	$1,481,814,394
AA+		1,439,266
AA	56,357,290	41,927,341
AA-	106,521,997	84,766,981
A+	117,467,811	196,920,079
A	129,605,231	153,635,654
A-	97,696,399	94,502,023
BBB+	93,215,626	138,345,630
BBB	68,755,102	47,195,847
BBB-	54,767,049	81,970,376
BB+	479,237	20,332,710
NR	104,104,572	26,838,395
Total Credit Risk Debt Securities	2,506,023,384	2,369,688,696
U.S. Government & Agencies	2,174,913,125	2,172,535,022
Pooled Investments		54,948,663
Total Debt Securities	**$4,680,936,509**	**$4,597,172,381**

At June 30, 2006 and 2005, the weighted average quality rating of the pension fund debt securities portfolio was AA+ and AA+, respectively. KRS had no below investment grade rated debt securities in the pension portfolio at June 30, 2006 and 2005. The fair value of securities in the lowest investment grade rating category was $-0- at both June 30, 2006 and 2005.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE D--INVESTMENTS--CONTINUED

The insurance fund debt securities portfolio, by guidelines, is to be invested in US government securities. As shown below, as of June 30, 2006, the entire insurance fund was invested in Treasury Inflation Protected Securities (TIPS) which carry a US Government treasury rating. As of June 30, 2005, the entire insurance fund consisted of TIPS and US Governmental Short-Term Investment Funds (STIF's).

Insurance Funds
Credit Risk of Debt Securities
For the Fiscal Years Ended June 30, 2006 and 2005

	2006	2005
U.S. Government & Agencies	$220,781,808	$189,294,988
Pooled Investments		9,893,700
Total Credit Risk	**$220,781,808**	**$199,188,688**

Concentration of Credit Risk Debt Securities - Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

The total debt securities portfolio is managed using the following general guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the U.S. government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Debt obligations of any single U.S. corporation shall be limited to a maximum of 5 percent of the total portfolio at market value.

Except for US government debt securities, there were no individual investments held in either the KRS pension or insurance portfolios at June 30, 2006 or June 30, 2005, that exceeded the maximum issuer 5% limit.

Interest Rate Risk - Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. The effective duration measures the sensitivity of the market price to changes in the yield curve. Effective duration is the most accurate duration measure when a significant portion of the securities are callable (redeemable) prior to maturity. The pension fund portfolio contains a number of securities that are callable and therefore interest rate risk is most appropriately measured by effective duration. KRS does not have a formal policy that constrains the duration of its fixed income portfolio.

The KRS pension fund debt securities portfolio benchmarks its debt securities portfolio to a blended benchmark consisting of the Lehman Brothers Government Credit Index, the Lehman Brothers Aggregate Index and the Lehman Brothers U.S. TIPS index. At June 30, 2006 and 2005, the effective duration of the blended benchmark was 5.70 and 5.34, respectively. At the same points in time, the effective duration of the KRS pension fund debt securities portfolio was 4.45 and 4.44, respectively.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE D--INVESTMENTS--CONTINUED

KRS Pension Fund Interest Rate Risk

	2006	Weighted Average Effective Duration	2005	Weighted Average Effective Duration
Asset Backed Securities	$195,474,695	.80	$252,331,426	1.12
Commercial Mortgage Backed Securities	270,294,818	3.50	109,238,989	3.33
Corporate Bonds	733,297,247	5.67	824,979,866	5.89
Government Agencies	457,938,065	3.58	479,638,805	3.30
Government Bonds	2,167,249,022	4.83	2,189,525,343	5.06
Government Mortgage Backed Securities	625,876,832	4.59	589,833,599	2.91
Municipal Bonds	12,901,977	11.78	14,883,806	12.64
Non-Government Backed Collateralized Mortgage Obligations	217,903,854	2.00	81,791,885	1.19
Pooled Investments			54,948,663	
Total	**$4,680,936,509**	**4.45**	**$4,597,172,381**	**4.44**

The KRS insurance fund long-term debt securities portfolio consists entirely of US government issued bonds which are not callable (redeemable) prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve but does not assume that securities will be called prior to maturity. Since the modified duration measure most accurately reflects the interest rate sensitivity of the insurance fund portfolio, this measure is used for comparative purposes. The KRS insurance fund debt securities portfolio benchmarks its debt securities portfolio to the Lehman Brothers U.S. TIPS Index. At June 30, 2006 and 2005, the modified duration of the benchmark was 7.69 and 8.45 years, respectively. At the same points in time, the modified duration of the KRS insurance fund debt securities portfolio, excluding the pooled fund, was 8.09 and 8.62 years, respectively.

Insurance Funds
Debt Securities Investments at Fair Value
For the Fiscal Years Ended June 30, 2006 and 2005

	2006		2005	
Investment	**Fair Value**	**Weighted Duration**	**Fair Value**	**Weighted Duration**
Index Linked Government Bonds	$220,781,808	8.09	$189,294,988	8.62
Pooled Debt Securities			9,893,700	NA
Total	**$220,781,808**	**8.09**	**$199,188,688**	**8.62**

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE D--INVESTMENTS--CONTINUED

Foreign Currency Risk - Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. KRS doesnot have a formal policy to limit foreign currency risk. The following tables present KRS' exposure at June 30, 2006 and 2005.

Pension Funds
Investments at Fair Value
As of June 30, 2006 and 2005

Foreign Equities	**2006**	**2005**
Australian Dollar	$ 69,810,185	$ 52,122,988
British Pound Sterling	326,927,792	300,642,320
Danish Krone	5,555,604	6,807,087
Euro	534,096,705	492,597,015
Hong Kong Dollar	19,200,448	23,082,401
Japanese Yen	420,352,056	346,791,634
New Zealand Dollar		3,535,112
Norwegian Krone	13,999,004	8,805,025
Singapore Dollar	29,048,766	21,641,967
South African Rand	2,950,033	
South Korean Won		3,366,341
Swedish Krona	46,216,722	49,787,194
Swiss Franc	121,430,006	109,308,104
International Equity Mutual Fund (various currencies)	508,273,254	484,952,191
Total Securities Subject To:		
Foreign Currency Risk	2,097,860,575	1,903,439,380
USD (securities held by International Investment Managers)	45,147,664	78,764,548
Total International Investment Securities	$ ***2,143,008,239***	$ ***1,982,203,928***

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE D--INVESTMENTS--CONTINUED

Insurance Funds
Investments at Fair Value
As of June 30, 2006 and 2005

Foreign Equities	**2006**	**2005**
Australian Dollar	$ 25,007,521	$ 21,058,561
British Pound Sterling	96,076,217	81,925,423
Danish Krone	2,834,941	3,540,224
Euro	135,800,378	125,362,499
Hong Kong Dollar	6,257,704	6,984,939
Japanese Yen	111,488,690	85,596,433
New Zealand Dollar		905,291
Norwegian Krone	7,061,386	4,558,628
Singapore Dollar	5,388,276	3,851,828
Swedish Krona	21,656,351	22,215,317
Swiss Franc	35,962,006	32,258,586
Total Securities Subject To:		
Foreign Currency Risk	447,533,470	388,257,729
USD (securities held by International Investment Managers)	3,676,958	3,610,171
Total International Investment Securities	$ ***451,210,428***	$ ***391,867,900***

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE E--SECURITIES LENDING TRANSACTIONS

Kentucky Revised Statues Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with a fair value of 102 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. At June 30, 2006, the Funds have no credit risk exposure to borrowers because the amounts the Funds owe to borrowers exceed the amounts the borrowers owe the Funds. The contracts with the custodial banks require them to indemnify the Funds if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction, although the average term of the loans was 6 days, 10 days, and 24 days for the three investment portfolios subject to security lending agreements. One custodial bank invests cash collateral in securities that are permitted for investment by state statute and board policy, which at year-end has a weighted-average maturity of 3 days for the Funds. The other custodial bank invests cash collateral in the agent's short-term investment pool as permitted by state statute and Board policy, which at year-end has a weighted-average maturity of 24 days for the Pension Fund only. Neither of the Funds can pledge or sell collateral securities received unless the borrower defaults.

NOTE F--RISKS OF LOSS

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims against the Board of Trustees of Kentucky Retirement Systems or any of its staff as a result of actual or alleged breach of fiduciary duty are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $100,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

NOTE G--CONTINGENCIES

In the normal course of business, KRS is involved in various litigation concerning the right of participants or their beneficiaries to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

NOTE H--INCOME TAX STATUS

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax under income tax law.

NOTE I--ANTHEM DEMUTUALIZATION

In 2002, Anthem Insurance Companies, Inc., an Indiana corporation, underwent a demutualization, as authorized by the Indiana statutes. The demutualization provided, among other things, that "eligible statutory members," as defined by Indiana statutory provision, would receive cash or stock in consideration for giving up their membership interest in Anthem. In some instances application of the statute led to the determination by Anthem that individual members of the retirement plans administered by Kentucky Retirement Systems were the "statutory members" and in other instances the Kentucky Retirement Systems was identified by Anthem as the eligible statutory member to receive cash or stock under the Anthem demutualization plan. According to Anthem, this determination was based upon which of Anthem's subsidiaries was the original provider. The determination was confirmed by the Indiana Department of Insurance.

The approximate $62 million distribution which Kentucky Retirement Systems received on January 4, 2002 under the Anthem demutualization was deposited in the Kentucky Employees Retirement Systems Insurance Fund. The retirement systems included within the Kentucky Retirement Systems for purposes of the Anthem demutualization are the Kentucky Employees Retirement System, (hazardous and non-hazardous), the County Employees Retirement System (hazardous and non-hazardous), the State Police Retirement System, the Legislators' Retirement Plan, and the Judicial Retirement Plan.

Kentucky Retirement Systems was a defendant in a case entitled Jean C. Love, David E. Wiseman, and Belvia Campbell v. Board of Trustees of the Kentucky Retirement Systems, which was in Franklin Circuit Court. At issue was how to distribute the proceeds resulting from Anthem's demutualization. The plaintiffs sought to recover the full amount of the proceeds or, alternatively, the pro rata amount of proceeds attributable to insurance premiums that the employees and/or their beneficiaries paid directly.

On June 30, 2006, the parties in the case entered into a Settlement Agreement that was approved on a preliminary basis by the Circuit Court. The Agreement received final approval from the Circuit Court on September 28, 2006. In accordance with the Agreement, $20 million was transferred to the "Northern Trust Institutional Funds Prime Obligations Portfolio" operated by the Northern Trust Company of Chicago, Illinois (which is the investment custodian for Kentucky Retirement Systems), with such account ("Settlement Fund Savings Account") to be held and controlled exclusively by Kentucky Retirement Systems. This account was created on July 11, 2006.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2006 and 2005

On, or about, the effective date of the Settlement Agreement (October 29, 2006), Kentucky Retirement Systems will cause all funds contained in the Settlement Fund Savings Account, including any interest earned, to be paid to the Plaintiffs' Counsel in trust for the full, complete and final satisfaction of all claims released pursuant to the Settlement Agreement. The Settlement Fund Savings Account shall be distributed by the Plaintiffs' Counsel as ordered by the Court.

One percent of the remaining balance of approximately $42 million, plus earnings thereon, will, at a still to be determined date, be distributed to the Legislators Retirement Plan and the Judicial Retirement Plan. The remainder of the balance will be allocated among the following plans, in the percentages indicated, in the Insurance Fund of Kentucky Retirement Systems: Kentucky Employees Retirement System -Non Hazardous-51.24%; Kentucky Employees Retirement System - Hazardous - 1.4%; County Employees Retirement System - Non Hazardous - 44.51%; County Employees Retirement System - Hazardous - 1.89%; and, State Police Retirement System - .96%. The above percentages were calculated by The Segal Company, the former actuaries of Kentucky Retirement Systems.

NOTE J--DEFINED BENEFIT PENSION PLAN

All eligible employees of Kentucky Retirement Systems (KRS) participate in the Kentucky Employees Retirement System (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers substantially all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The Plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Plan members contributed 5.0% of creditable compensation for the periods ending June 30, 2006, June 30, 2005, and June 30, 2004. KRS contributed 5.89% of covered payroll for the periods ending June 30, 2006, June 30, 2005, and June 30, 2004. The chart below includes the covered payroll and contribution amounts for KRS for the three periods included in this discussion.

	2006	2005	2004
Covered Payroll	$10,960,000	$9,891,000	$9,035,000
Employer Contributions	$ 641,200	$ 572,400	$532,000

NOTE K--EQUIPMENT

Equipment consists of the following:

	As of June 30, 2006	As of June 30, 2005
Equipment at Cost	$ 4,039,537	$ 3,408,106
Less Accumulated Depreciation	(2,763,017)	(2,576,490)
Total	**$ 1,276,520**	**$ 831,615**

Depreciation expense for the fiscal years ended June 30, 2006 and 2005 amounted to $387,292 and $318,840, respectively.

NOTE L--Alternative Investment

On February 6, 2006, the Health Insurance Fund of Kentucky Retirement Systems loaned to Perimeter Park West, Inc., a related party, $700,000 for the purchase of real property at 1300 Louisville Road, Frankfort, KY. The loan is not documented by a note, mortgage contract, or security interest in the property. Subsequent to the lending and purchase, the real property was valued by appraisal from $135,000 to $290,000. The range of appraisal values is based upon considerations of zoning classifications, site preparations and improvements, and other matters. Kentucky Retirement Systems is reflecting the Alternative Investment at the lowest appraisal value for the property. Because of the significant difference in the appraised value of the property and the loan amount, and also because the loan is not documented by a note, mortgage contract, or security interest in the property, the Kentucky Retirement Systems is uncertain whether it will be able to collect any principal (or interest) in excess of the minimum appraised property value. Therefore, KRS' management has elected to write-down the value of the Alternative Investment to an estimated collectible value of $135,000. The difference of $565,000 is included in the Combined Statements of Changes in Plan Net Assets-Insurance Funds as an unrealized loss in "Net Appreciation in Fair Value of Investments". By a letter dated September 26, 2006, Kentucky Retirement Systems filed a notice of claim with its fiduciary insurance carrier (The Federal Insurance Company) asserting monetary damages in excess of $600,000 to the Health Insurance Fund as a result of the loan.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

Kentucky Employees Retirement Systems (KERS) - Pension Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$6,844,742,687	$5,444,035,294	($1,400,707,393)	125.7%	$1,505,299,220	(93.1%)
June 30, 2002*	6,654,084,196	6,026,094,764	(627,989,432)	110.4	1,595,809,458	(39.3)
June 30, 2003**	6,351,318,832	6,520,463,188	169,144,356	97.4	1,658,604,696	10.2
June 30, 2004**	6,000,513,743	7,049,613,171	1,049,099,428	85.1	1,645,412,496	63.8
June 30, 2005**	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
June 30, 2006**	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
Hazardous						
June 30, 2001	$361,677,475	$285,193,761	($76,483,714)	126.8%	$122,857,992	(62.3%)
June 30, 2002*	376,384,302	322,069,164	(54,315,138)	116.9	125,275,925	(43.4)
June 30, 2003**	385,925,722	356,879,133	(29,046,589)	108.1	129,088,956	(22.5)
June 30, 2004**	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
June 30, 2005**	405,288,662	439,013,910	33,725,248	92.3	131,687,088	25.6
June 30, 2006**	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
Total						
June 30, 2001	$7,206,420,162	5,729,229,055	$1,477,191,107	125.8%	$1,628,157,212	(90.7%)
June 30, 2002*	7,030,468,498	6,348,163,928	682,304,570	110.7	1,721,085,383	(39.6)
June 30, 2003**	6,737,244,554	6,877,342,321	140,097,767	98.0	1,787,693,652	11.1
June 30, 2004**	6,397,726,506	7,453,191,207	1,055,464,701	85.8	1,772,077,308	59.6
June 30, 2005**	5,983,974,408	8,018,088,749	2,034,114,341	74.6	1,787,594,376	113.8
June 30, 2006**	5,822,070,515	9,503,482,151	3,681,411,635	61.3	1,840,978,097	200.0

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

Kentucky Employees Retirement Systems (KERS) - Insurance Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$449,630,605	$1,769,583,098	$1,319,952,493	25.4%	$1,505,299,220	87.7%
June 30, 2002*	521,250,455	1,907,683,881	1,386,433,426	27.3	1,595,809,458	86.9
June 30, 2003**	553,885,082	2,093,210,321	1,539,325,239	26.5	1,658,604,696	92.8
June 30, 2004**	600,586,961	2,335,905,365	1,735,318,404	25.7	1,645,412,496	105.5
June 30, 2005**	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
June 30, 2006**	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
Hazardous						
June 30, 2001	$119,372,742	$214,450,822	$95,078,080	55.7%	$122,857,992	77.4%
June 30, 2002*	135,874,582	236,819,050	100,944,468	57.4	125,275,925	80.6
June 30, 2003**	151,459,500	283,178,335	131,718,835	53.5	129,088,956	102.0
June 30, 2004**	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
June 30, 2005**	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
June 30, 2006**	212,833,818	621,237,856	408,404,538	34.3	138,747,320	294.4
Total						
June 30, 2001	569,003,347	$1,984,033,920	$1,415,030,573	28.7%	$1,628,157,212	86.9%
June 30, 2002*	657,125,037	2,144,502,931	1,487,377,894	30.6	1,721,085,383	86.4
June 30, 2003**	705,344,582	2,376,388,656	1,671,044,074	29.7	1,787,693,652	93.5
June 30, 2004**	769,745,840	2,659,408,928	1,889,663,088	28.9	1,772,077,308	106.6
June 30, 2005**	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
June 30, 2006**	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,178,097	413.5

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

County Employees Retirement Systems (CERS) - Pension Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$5,423,834,549	$3,706,282,212	($1,717,552,337)	146.3%	$1,544,973,296	(111.2%)
June 30, 2002*	5,397,787,158	4,165,355,149	(1,232,432,009)	129.6	1,663,183,629	(74.1)
June 30, 2003**	5,286,580,047	4,417,597,802	(868,982,245)	119.7	1,796,451,180	(48.4)
June 30, 2004**	5,187,851,530	4,936,459,488	(251,392,042)	105.1	1,826,870,880	(13.8)
June 30, 2005**	5,059,208,687	5,385,306,505	326,097,818	93.9	1,885,275,000	17.3
June 30, 2006**	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
Hazardous						
June 30, 2001	$1,486,666,016	$1,193,860,442	($292,805,574)	124.5%	$316,700,304	(92.5%)
June 30, 2002*	1,485,511,793	1,327,291,273	(158,220,520)	111.9	345,849,277	(45.7)
June 30, 2003**	1,467,004,856	1,499,628,782	32,623,926	97.8	374,700,732	8.7
June 30, 2004**	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
June 30, 2005**	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
June 30, 2006**	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
Total						
June 30, 2001	$6,910,500,565	$4,900,142,654	($2,010,357,911)	141.0%	$1,861,673,600	(108.0%)
June 30, 2002*	6,883,298,951	5,492,646,422	(1,390,652,529)	125.3	2,009,032,906	(69.2)
June 30, 2003**	6,753,584,903	5,917,226,584	(836,358,319)	114.1	2,171,151,912	(38.5)
June 30, 2004**	6,645,463,572	6,577,289,608	(68,173,964)	101.0	2,219,433,504	(3.1)
June 30, 2005**	6,511,561,710	7,180,923,840	669,362,130	90.7	2,296,396,728	29.2
June 30, 2006**	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

County Employees Retirement Systems (CERS) - Insurance Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$371,758,628	$1,793,710,768	$1,421,952,140	20.7%	$1,544.973,296	92.0%
June 30, 2002*	450,497,307	1,977,577,038	1,527,079,731	22.8	1,663,183,629	91.8
June 30, 2003**	520,060,105	2,176,963,259	1,656,903,154	23.9	1,796,451,180	92.2
June 30, 2004**	585,399,072	2,438,734,696	1,853,335,624	24.0	1,826,870,880	101.5
June 30, 2005**	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
June 30, 2006**	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
Hazardous						
June 30, 2001	$197,875,249	$721,605,292	$523,730,043	27.4%	$316,700,304	165.4%
June 30, 2002*	234,683,878	781,184,974	546,501,096	30.1	345,849,279	158.0
June 30, 2003**	269,190,080	935,650,662	666,460,582	28.8	374,700,732	177.9
June 30, 2004**	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
June 30, 2005**	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
June 30, 2006**	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
Total						
June 30, 2001	$569,633,877	$2,515,316,060	$1,945,682,183	22.6%	$1,861,673,600	104.5%
June 30, 2002*	685,181,185	2,758,762,012	2,073,580,827	24.8	2,009,032,908,	103.2
June 30, 2003**	789,250,185	3,112,613,921	2,323,363,736	25.4	2,171,151,912	107.0
June 30, 2004**	895,977,234	3,464,419,173	2,568,441,939	25.9	2,219,433,504	115.7
June 30, 2005**	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
June 30, 2006**	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

State Police Retirement Systems (SPRS) - Pension Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2001	$456,160,709	$356,211,860	($99,948,849)	128.1%	$44,646,678	(223.7%)
June 30, 2002*	438,955,465	380,790,346	(58,165,119)	115.3	44,314,696	(131.2)
June 30, 2003**	413,063,576	414,881,459	1,817,883	99.6	43,760,832	4.2
June 30, 2004**	385,077,195	437,482,425	52,405,230	88.0	43,835,208	119.6
June 30, 2005**	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
June 30, 2006**	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

State Police Retirement Systems (SPRS) - Insurance Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2001	$79,863,577	$158,261,479	$78,397,902	50.5%	$44,646,678	175.6%
June 30, 2002*	86,867,391	165,445,412	78,578,021	52.5	44,314,696	177.3
June 30, 2003**	90,747,967	184,501,205	93,753,238	49.2	43,760,832	214.2
June 30, 2004**	96,622,908	197,604,301	100,981,393	48.9	43,835,208	230.4
June 30, 2005**	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
June 30, 2006**	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1

Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
****Covered payroll was actuarially computed as opposed to estimated in prior years.***

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Kentucky Employees Retirement System (KERS)

Non-Hazardous

Fiscal Year Ended	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$21,787,253	$23,482,080	107.8%	$66,874,871	$66,874,871	100.0%
June 30, 2002		1,760,328		93,993,177	93,912,017	99.9
June 30, 2003	4,905,399	7,597,450	134.9	92,052,561	65,335,219	71.0
June 30, 2004	47,739,067	21,696,543	45.4	77,951,553	78,016,737	100.1
June 30, 2005	85,798,943	50,332,750	58.7	86,974,271	49,909,228	57.4
June 30, 2006	137,330,718	60,680,607	44.2	100,942,451	43,748,669	43.3

Hazardous

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$9,920,148	$10,626,663	107.1%	$13,226,298	$13,226,298	100.0%
June 30, 2002	7,742,052	17,933,817	102.5	15,859,932	15,887,399	100.2
June 30, 2003	8,511,402	7,322,607	86.0	15,839,215	15,883,263	100.3
June 30, 2004	9,600,978	9,769,580	101.8	14,942,092	14,959,617	100.1
June 30, 2005	9,449,878	9,758,547	103.3	15,892,977	15,395,977	96.9
June 30, 2006	12,128,538	10,803,206	89.1	18,605,633	16,243,103	87.3

Total

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$31,707,401	$34,108,743	107.6%	$80,101,169	$80,101,169	100.0%
June 30, 2002	7,742,052	9,694,145	125.2	109,853,109	109,799,416	100.0
June 30, 2003	13,416,801	14,920,057	111.2	107,891,776	81,218,482	75.3
June 30, 2004	57,340,045	31,466,123	54.9	92,893,645	92,976,354	100.1
June 30, 2005	95,248,821	60,091,297	63.1	102,867,248	65,305,205	63.5
June 30, 2006	149,459,256	71,483,813	47.8	119,548,084	59,991,772	50.2

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Kentucky Employees Retirement System (KERS)

Non-Hazardous

Fiscal Year Ended	Total		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$88,662,124	$90,356,951	101.9%
June 30, 2002	93,993,177	95,672,345	101.8
June 30, 2003	96,957,960	72,932,669	75.2
June 30, 2004	125,690,620	99,713,280	79.3
June 30, 2005	172,773,214	100,241,978	58.0
June 30, 2006	238,273,169	104,429,276	43.8

Hazardous

	Total		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$23,146,446	$23,852,961	103.1%
June 30, 2002	23,601,984	23,821,216	100.9
June 30, 2003	24,350,617	23,205,870	95.3
June 30, 2004	24,543,070	24,729,197	100.8
June 30, 2005	25,342,855	25,154,524	99.3
June 30, 2006	30,734,171	27,046,309	88.0

Total

	Total		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$111,808,570	$114,209,912	102.1%
June 30, 2002	117,595,161	119,493,561	101.6
June 30, 2003	121,308,577	96,138,539	79.3
June 30, 2004	150,233,690	124,442,477	82.8
June 30, 2005	198,116,069	125,396,502	63.3
June 30, 2006	269,007,340	131,475,585	48.9

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS

County Employees Retirement System (CERS)

Non-Hazardous

Fiscal Year Ended	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$35,658,922	$48,914,435	137.2%	$62,292,385	$62,292,385	100.0%
June 30, 2002	3,326,367	5,528,348	166.2	102,119,475	102,150,543	100.0
June 30, 2003	8,682,257	11,855,694	136.6	102,038,427	99,234,843	97.3
June 30, 2004	43,111,505	44,028,465	102.1	89,289,520	89,344,241	100.1
June 30, 2005	53,117,955	54,616,800	102.8	106,612,633	106,638,253	100.0
June 30, 2006	89,486,365	90,834,052	101.5	126,460,952	126,480,816	100.0

Hazardous

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$19,409,377	$20,983,360	108.1%	32,149,432	32,149,432	100.0
June 30, 2002	10,582,988	11,054,949	104.5	45,721,274	45,730,333	100.0
June 30, 2003	19,920,223	16,905,556	84.9	43,502,755	45,243,950	104.0
June 30, 2004	27,050,382	27,640,775	102.2	47,018,046	47,036,777	100.0
June 30, 2005	39,437,725	39,947,747	101.3	54,094,495	54,106,577	100.0
June 30, 2006	49,589,149	49,976,485	100.8	60,947,804	60,933,604	100.0

Total

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	55,068,299	$69,897,795	126.9%	$94,441,817	$94,441,817	100.0%
June 30, 2002	13,909,355	16,583,297	119.2	147,840,749	147,880,876	100.0
June 30, 2003	28,602,480	28,761,250	100.6	145,541,182	144,478,793	99.3
June 30, 2004	70,161,887	71,669,240	102.1	136,307,566	136,381,018	100.1
June 30, 2005	92,555,680	94,564,547	102.2	160,707,128	160,744,830	100.0
June 30, 2006	139,075,514	140,810,537	101.2	187,408,756	187,414,420	100.0

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS

County Employees Retirement System (CERS)

Non-Hazardous

Total

Fiscal Year Ended	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$97,951,307	$111,206,820	113.5%
June 30, 2002	105,445,842	107,678,891	102.1
June 30, 2003	110,720,684	111,090,537	100.3
June 30, 2004	132,401,025	133,372,706	100.7
June 30, 2005	159,730,588	161,255,053	101.0
June 30, 2006	215,947,317	217,314,868	100.6

Hazardous

Total

	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$51,558,809	$53,132,792	103.1%
June 30, 2002	56,304,262	56,785,282	100.9
June 30, 2003	63,422,978	62,149,506	98.0
June 30, 2004	74,068,428	74,677,552	100.8
June 30, 2005	93,532,220	94,054,324	100.6
June 30, 2006	100,536,953	110,910,089	100.3

Total

Total

	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$149,510,116	$164,339,612	109.9%
June 30, 2002	161,750,104	164,464,173	101.7
June 30, 2003	174,143,662	173,240,043	99.5
June 30, 2004	206,469,453	208,050,258	100.8
June 30, 2005	253,262,808	255,309,377	100.8
June 30, 2006	326,484,270	328,224,956	100.5

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS

State Police Retirement System (SPRS)

Fiscal Year Ended	Pension		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$1,535,846	$1,515,521	98.7%
June 30, 2002		(17,463)	
June 30, 2003		(20,061)	
June 30, 2004	1,175,711	1,152,752	98.0
June 30, 2005	3,730,805	2,851,461	76.4
June 30, 2006	6,888,805	4,244,445	61.6

	Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$8,098,907	$8,113,391	100.2%
June 30, 2002	9,563,111	9,579,899	100.1
June 30, 2003	9,443,588	7,654,313	81.1
June 30, 2004	8,434,834	8,455,498	100.2
June 30, 2005	8,608,536	6,631,031	77.0
June 30, 2006	9,669,999	5,990,265	61.9

	Total		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$9,634,753	$9,628,912	99.9%
June 30, 2002	9,563,111	9,562,256	100.0
June 30, 2003	9,443,588	7,634,252	80.8
June 30, 2004	9,610,545	9,608,250	100.0
June 30, 2005	12,339,341	9,482,492	76.8
June 30, 2006	16,558,804	10,234,710	61.8

KENTUCKY RETIREMENT SYSTEMS
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The information presented in the required supplementary schedules as determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Pension Funds

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2006	June 30, 2006
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	14-30 Years	14-30 Years
Asset Valuation Method	Five-Year Smoothed Market	Five-Year Smoothed Market
Actuarial Assumptions:		
Investment Return	7.75%	7.75%
Projected Salary Increases	4.0-13.5%	4.0-14.5%
Cost-of-Living Adjustment	None	None
Includes Inflation Rate at	3.50%	3.50%

Insurance Funds

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2006	June 30, 2006
Actuarial Cost Method	Entry Age	Entry Age
Asset Valuation Method	Five-Year Smoothed Market	Five-Year Smoothed Market
Remaining Amortization Period	30 Years	30 Years
Medical Trend Assumption Year of Ultimate Trend	12.00-5.50% 2027	12.00-5.50% 2027
Actuarial Assumptions:		
Investment Return*	4.50%/7.75%	4.50%/7.75%
Includes Inflation Rate at *	3.5%	3.5%

*Note: Relative to the insurance funds, the investment return assumption for the KERS non-hazardous fund and the SPRS fund is 4.5% as required under GASB Statements No. 43 and 45 due to the lack of pre-funding in these respective funds. The remaining funds utilize a 7.75 % investment return assumption.

KENTUCKY RETIREMENT SYSTEMS
Schedule of Administrative Expenses
For the Fiscal Years Ended June 30, 2006 and 2005

	2006	2005
	(Dollars in Thousands)	
Personal Services		
Salaries and Per Diem	$ 13,041	$ 10,139
Fringe Benefits	2,964	2,500
Tuition Assistance	91	66
Total Personal Services	16,096	12,705
Contractual Services		
Actuarial	161	157
Audit	23	41
Legal	522	397
Medical	288	224
Contractual	1,354	735
Total Contractual Services	2,348	1,554
Communication		
Printing	254	219
Telephone	172	136
Postage	637	549
Travel	218	157
Total Communication	1,281	1,061
Rentals		
Office Space	980	981
Equipment	57	58
Total Rentals	1,037	1,039
Miscellaneous		
Utilities	221	147
Supplies	165	137
Insurance	61	56
Maintenance	300	330
Other	361	84
Total Miscellaneous	1,108	754
Depreciation	387	319
Healthcare Administrative Expenses	3,562	1,231
Total Administrative Expenses	**$ 25,819**	**$ 18,663**

Kentucky Retirement Systems
Schedule of Investment Expenses
For the Fiscal Years Ended June 30, 2006 and 2005

	2006	2005
	(Dollars in Thousands)	
Pension Funds		
Security Lending Fees		
Broker Rebates	$ 124,694	$ 47,836
Lending Agent Fees	2,463	1,745
Total Security Lending	127,157	49,581
Common Stock Commissions	8,212	5,818
Contractual Services		
Investment Management	10,156	9,026
Security Custody	288	749
Investment Consultant	111	313
Investment Related Travel	57	50
Total Contractual Services	10,611	10,138
Insurance Funds		
Security Lending Fees		
Broker Rebates	20,294	7,668
Lending Agent Fees	366	263
Total Security Lending	20,660	7,931
Common Stock Commissions	567	563
Investment Management	1,889	1,428
Total Investment Expenses	**$ 169,096**	**$ 75,459**

Schedule of Professional Consultant Fees
For the Fiscal Years Ended June 30, 2006 and 2005

	2006	2005
	(Dollars in Thousands)	
Actuarial Services	$ 161	$ 157
Medical Review Services	288	224
Audit Services	23	41
Legal Counsel	522	397
Compliance	136	79
Workflow	364	236
Healthcare	750	298
Banking	51	60
Miscellaneous	53	62
Total	$ 2,348	$ 1,554

Information on fees paid to investment professionals can be found in the investment section of the Comprehensive Annual Financial Report.

Kentucky Retirement Systems
Combining Schedules of Plan Net Assets - Pension Funds

Pension Funds

As of June 30, 2006 *(with comparative totals as of June 30, 2005)*

(Dollars in Thousands)	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	TOTAL	2005 TOTAL
Assets							
Cash and Short-Term Investments							
Cash	$76	$1,890	$231	$723	$90	$3,010	$1,499
Short-Term Investments	10,775	110,002	29,125	78,875	12,110	240,887	353,055
Total Cash and Short-Term Investments	10,851	111,892	29,356	79,598	12,200	243,897	354,554
Receivables							
Contributions	2,093	22,798	10,140	28,575	1,290	64,896	66,599
Investment Income	1,857	23,985	6,962	24,108	1,572	58,484	56,760
Total Receivables	3,950	46,783	17,102	52,683	2,862	123,380	123,359
Investments at Fair Value							
Corporate and Government Bonds	119,243	1,566,064	458,433	1,586,655	105,004	3,835,399	3,955,223
Corporate Stocks	273,168	3,412,964	913,987	3,097,796	211,565	7,909,480	7,329,933
Mortgages	28,399	305,668	109,687	380,849	20,933	845,536	641,949
Real Estate	1,943	2,346	2,415	2,360	481	9,545	9,693
Total Investments at Fair Value	422,753	5,287,042	1,484,522	5,067,660	337,983	12,599,960	11,936,798
Securities Lending Collateral Invested	159,497	1,094,684	603,606	1,489,805	108,101	3,455,693	2,635,518
Equipment (net of accumulated depreciation)	36	437	65	731	8	1,277	832
Total Assets	597,087	6,540,838	2,134,651	6,690,477	461,154	16,424,207	15,051,061
Liabilities							
Accounts Payable	560	6,021	2,200	9,295	212	18,288	10,352
Securities Lending Collateral	159,497	1,094,684	603,606	1,489,805	108,101	3,455,693	2,635,518
Total Liabilities	160,057	1,100,705	605,806	1,499,100	108,313	3,473,981	2,645,870
Plan Net Assets Held in Trust for Pension Benefits	**$437,030**	**$5,440,133**	**$1,528,845**	**$5,191,377**	**$352,841**	**$12,950,226**	**$12,405,191**

Kentucky Retirement Systems
Combining Schedules of Plan Net Assets - Insurance Funds

Insurance Funds

As of June 30, 2006 *(with comparative totals as of June 30, 2005)*

(Dollars in Thousands)	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2006 TOTAL	2005 TOTAL
Assets							
Cash and Short-Term Investments							
Cash	$35	$98	$51	$74	$7	$265	$207
Short-Term Investments	20,824	99,493	36,092	68,375	9,066	233,850	210,072
Total Cash and Short-Term Investments	20,859	99,591	36,143	68,449	9,073	234,115	210,279
Receivables							
Contributions	902	3,849	6,855	18,309	378	30,293	18,617
Investment Income	529	1,602	1,085	1,957	267	5,440	4,909
Total Receivables	1,431	5,451	7,940	20,266	645	35,733	23,526
Investments, at Fair Value							
Corporate and Government Bonds	20,994	61,783	46,358	80,958	10,689	220,782	199,189
Corporate Stocks	180,360	467,311	351,926	645,459	90,208	1,735,264	1,497,841
Alternative Investment	15	15	37	61	7	135	
Total Investments	201,369	529,109	398,321	726,478	100,904	1,956,181	1,697,030
Securities Lending Collateral Invested	58,213	73,130	128,623	215,816	25,561	501,343	431,552
Total Assets	281,872	707,281	571,027	1,031,009	136,183	2,727,372	2,362,387
Liabilities							
Accounts Payable	201	1,566	1,283	2,195	162	5,407	2,230
Demutualization Proceeds Ppayable		20,000				20,000	
Securities Lending Collateral	58,213	73,130	128,623	215,816	25,561	501,343	431,552
Total Liabilities	58,414	94,696	129,906	218,011	25,723	526,750	433,782
Plan Net Assets Held in Trust for Pension Benefits	**$223,458**	**$612,585**	**$441,121**	**$812,998**	**$110,460**	**$2,200,622**	**$1,928,605**

KENTUCKY RETIREMENT SYSTEMS
COMBINED SCHEDULES OF CHANGES IN PLAN NET ASSETS--PENSION FUNDS
For the Fiscal Years Ended June 30, 2006 and 2005

(Dollars in Thousands)	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2006 Total	2005 Total
						Pension Funds	
Additions							
Members' Contributions	$12,056	$107,607	$39,055	$112,372	$4,814	$275,904	$310,806
Employers' Contributions	10,803	60,681	49,976	90,834	4,244	216,538	157,508
Total Contributions	22,859	168,288	89,031	203,206	9,058	492,442	468,314
Investment Income							
From Investing Activities:							
Net Appreciation in Fair Value of Investments	29,613	356,000	90,189	298,173	29,621	803,596	723,831
Interest/Dividends	12,393	153,648	43,671	150,321	9,976	370,009	344,929
Total Investing Activities Income	42,006	509,648	133,860	448,494	39,597	1,173,605	1,068,760
Investment Expense	352	4,466	1,257	4,252	284	10,611	10,138
Commissions	301	3,427	963	3,299	222	8,212	5,818
Total Investing Activities Expense	653	7,893	2,220	7,551	506	18,823	15,956
Net Income from Investing Activities	41,353	501,755	131,640	440,943	39,091	1,154,782	1,052,804
From Securities Lending Activities:							
Securities Lending Income	6,196	42,886	23,485	57,969	4,234	134,770	55,872
Securities Lending Expense:							
Security Borrower Rebates	5,755	39,500	21,780	53,758	3,901	124,694	47,836
Security Lending Agent Fees	114	780	430	1,062	77	2,463	1,745
Net Income From Securities Lending Activities	327	2,606	1,275	3,149	256	7,613	6,291
Total Net Investment Income	41,680	504,361	132,915	444,092	39,347	1,162,395	1,059,095
Total Additions	64,539	672,649	221,946	647,298	48,405	1,654,837	1,527,409
Deductions							
Benefit Payments	23,736	577,947	101,087	325,135	34,703	1,062,608	960,521
Refunds	1,436	9,632	2,147	11,589	133	24,937	23,896
Administrative Expenses	645	7,568	1,113	12,797	134	22,257	17,432
Total Deductions	25,817	595,147	104,347	349,521	34,970	1,109,802	1,001,849
Net Increase in Plan Assets	38,722	77,502	117,599	297,777	13,435	545,035	525,560
Plan Net Assets Held in Trust for Pension Benefits							
Beginning of Year	398,308	5,362,631	1,411,246	4,893,600	339,406	12,405,191	11,879,631
End of Year	**$437,030**	**5,440,133**	**$1,528,845**	**$5,191,377**	**$352,841**	**$12,950,226**	**$12,405,191**

KENTUCKY RETIREMENT SYSTEMS
COMBINED SCHEDULES OF CHANGES IN PLAN NET ASSETS--INSURANCE FUNDS
For the Fiscal Years Ended June 30, 2006 and 2005

	Insurance Funds						
	2006						2005
(Dollars in Thousands)	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Additions							
Employer Contributions	$16,243	$43,749	$60,934	$126,481	$5,990	$253,397	$232,681
Premiums Received from Retirees	88	5,770	98	6,365	5	12,326	
Insurance Appropriation	769	3,886	3,920	2,387	890	11,852	4,562
Total Contributions	17,100	53,405	64,952	135,233	6,885	277,575	237,243
Investment Income							
From Investing Activities:							
Net Appreciation in Fair Value of Investments	19,778	53,531	36,684	68,331	9,907	188,231	122,127
Interest/Dividends	4,393	12,626	8,619	15,741	2,204	43,583	36,400
Total Investing Activities Income	24,171	66,157	45,303	84,072	12,111	231,814	158,526
Investment Expense	212	443	392	741	101	1,889	1,428
Commissions	61	162	112	201	31	567	563
Total Investing Activities Expense	273	605	504	942	132	2,456	1,991
Net Income from Investing Activities	23,898	65,552	44,799	83,130	11,979	229,358	156,535
From Securities Lending Activities:							
Securities Lending Income	2,564	3,242	5,661	9,502	1,125	22,094	9,039
Securities Lending Expense:							
Security Borrower Rebates	2,356	2,960	5,207	8,736	1,035	20,294	7,669
Security Lending Agent Fees	43	53	94	158	18	366	262
Net Income From Securities Lending Activities	165	229	360	608	72	1,434	1,108
Total Net Investment Income	24,063	65,781	45,159	83,738	12,051	230,792	157,643
Total Additions	41,163	119,186	110,111	218,971	18,936	508,367	394,886
Deductions							
Healthcare Premium Subsidies	6,370	78,156	28,714	56,985	7,252	177,477	166,892
Administrative Expenses	63	1,679	213	1,539	68	3,562	1,231
Self-funding Insurance Premiums	143	17,667	1,003	15,934	564	35,311	
Demutualization Proceeds Refunded		20,000				20,000	
Total Deductions	6,576	117,502	29,930	74,458	7,884	236,350	168,123
Net Increase in Plan Assets	34,587	1,684	80,181	144,513	11,052	272,017	226,763
Plan Net Assets Held in Trust for Insurance Benefits							
Beginning of Year	188,871	610,901	360,940	668,485	99,408	1,928,605	1,701,842
End of Year	**$223,458**	**$612,585**	**$441,121**	**$813,998**	**$110,460**	**$2,200,622**	**$1,928,605**

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2006, and have issued our report thereon dated August 31, 2006. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

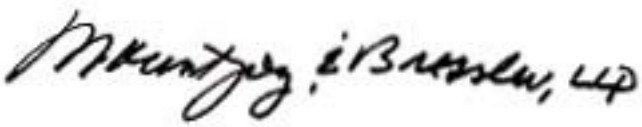
In planning and performing our audit, we considered Kentucky Retirement Systems' internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide an opinion on the internal control over financial reporting. However, we noted one matter involving the internal control over financial reporting and its operation that we consider to be a reportable condition. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control over financial reporting that, in our judgement, could adversely affect Kentucky Retirement Systems' ability to initiate, record, process, and report financial data consistent with the assertions of management in the financial statements. The reportable condition is described in the accompanying Schedule of Finding and Responses as Item 2006-1.

A material weakness is a reportable condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level of risk that misstatements caused by error or fraud in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are considered to be material weaknesses. However, we do not believe that the reportable condition described above is a material weakness.

Compliance And Other Matters

As part of obtaining reasonable assurance about whether Kentucky Retirement Systems' financial statements are free of material mistatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance and other matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information of the audit committee, management, and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.



August 31, 2006
Louisville, Kentucky

Kentucky Retirement Systems
Schedule of Finding and Response

Finding

ITEM 2006-1, Management Override of Internal Controls

During the fiscal year ended June 30, 2006, two officers of Kentucky Retirement Systems' (KRS) Executive Management, the Chief Investment Officer and Chief Operations Officer, circumvented internal control policies and procedures related to an Alternative Investment made by the KRS Insurance Fund.

The Chief Investment Officer and Chief Operations Officer also failed to perform adequate due diligence in violation of agency practice and industry best practice related to an Alternative Investment by the KRS Insurance Fund. In addition, the Chief Investment Officer and the Chief Operations Officer, acted outside the authority granted to them by the Investment Committee when completing the acquisition of the Alternative Investment.

In addition, there was a commingling of funds between the Pension and Insurance Funds to finance the acquisition of the Alternative Investment. This is in violation of the Plan Document and the Internal Revenue Code.

Response

ITEM 2006-1, Management Override of Internal Controls

The Chief Investment Officer and the Chief Operations Officer have resigned.

KRS has retained fiduciary counsel, Ice Miller, LLP, to review the internal controls in place and will issue an opinion regarding the internal controls at KRS and make recommendations, if necessary. Also, the Audit Committee of the Board of Trustees of KRS has directed Internal Audit to review internal controls and make recommendations, if necessary. In the interim it is the opinion of the Executive Management of KRS and Internal Audit that the internal controls are adequate.

Furthermore, Ice Miller, LLP, is in the process of preparing a memorandum with respect to the Alternative Investment and the commingling of funds to detail the self-correcting action taken by KRS.

Investment Section

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Investment Summary

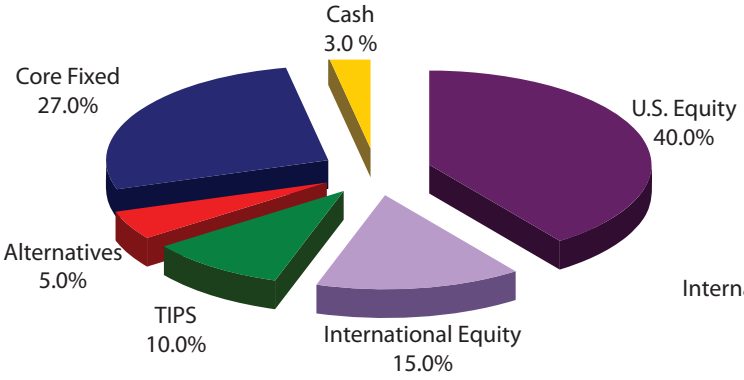
The Board of Trustees is charged with the responsibility of investing Kentucky Retirement Systems' assets to help provide for the benefits paid to KRS members. To achieve that goal the Board follows a policy of preserving capital, while seeking means of enhancing revenues and protecting against undue losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in formal compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of KRS. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policies, objectives and strategies for both the pension and insurance portfolios.

Investment Policy

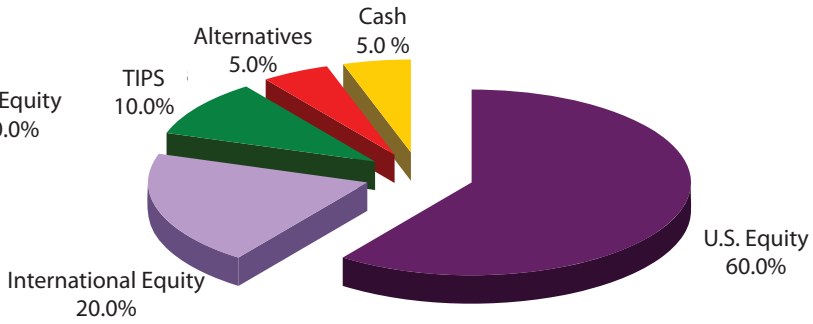
During the fiscal year, the KRS Board of Trustees did not alter its investment policy. As of June 30, 2006, the KRS pension fund's policy is to invest 40% of the assets in U.S. equities, 15% in international equities, 27% in fixed income, 10% in Treasury Inflation Protected Securities (TIPS), 5% in alternative assets, and 3% in cash or short-term securities. As of June 30, 2006, the KRS insurance fund's policy is to invest 60% of the assets in U.S. equities, 20% in international equities, 10% in TIPS, 5% in alternative assets, and 5% in cash or short-term securities.

The following charts graphically depict the Board's investment policy.

Pension Fund Target Allocation (June 30, 2006)



Insurance Fund Target Allocation (June 30, 2006)



Investment Objectives

The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

Short-Term: The returns of the particular asset classes of the managed funds of the Systems, measured on a year-to-year basis, should exceed the returns achieved by a policy portfolio composed of comparable unmanaged market indices.

Long-Term: The total assets of the Systems should achieve a return measured over two market cycles (estimated to be six to ten years) which exceeds the rate of inflation for the period, as measured by the Consumer Price Index for All Urban Consumers, by at least 4%.

In keeping with its responsibility as trustee and wherever consistent with its fiduciary responsibility, the Board encourages the investment of KRS' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

Investment Strategies

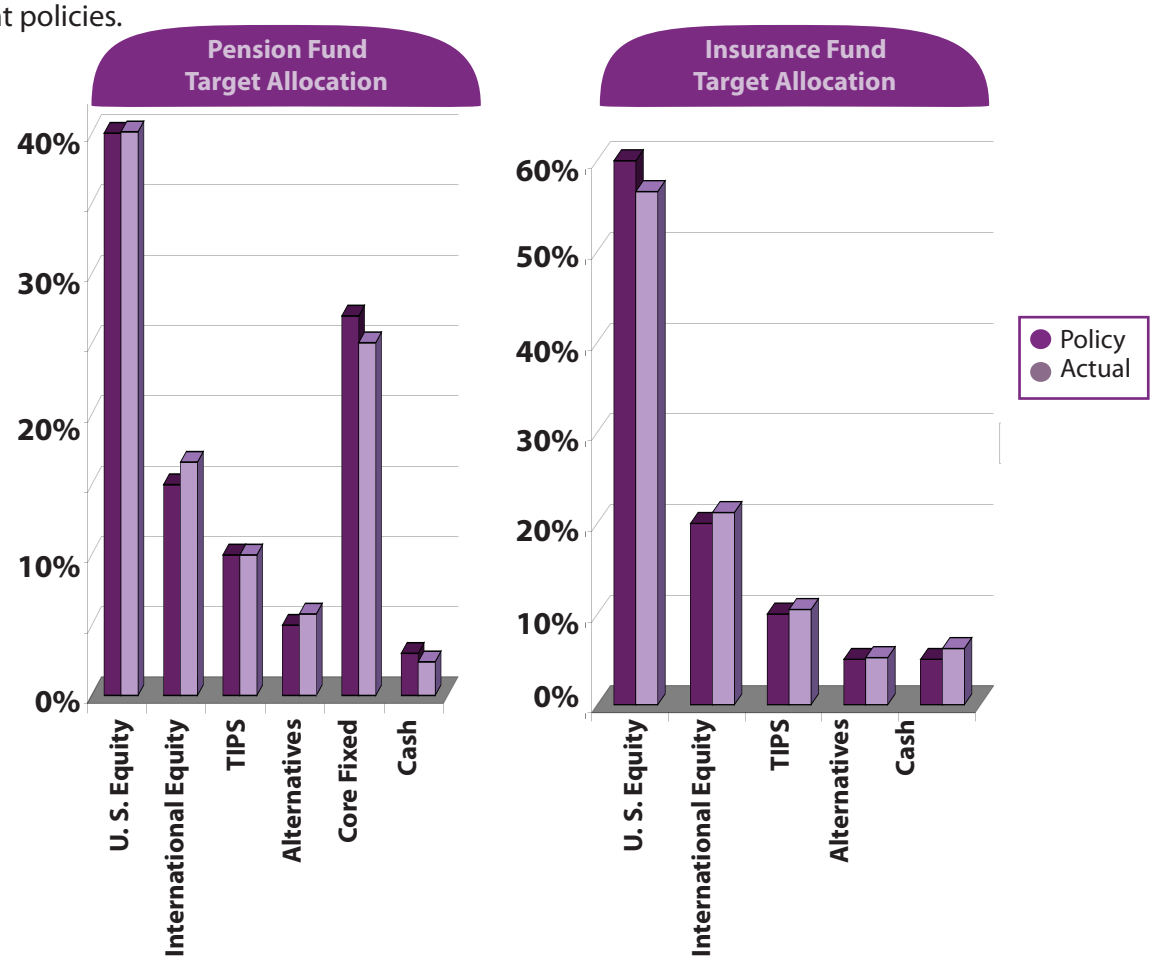
Diversification

The KRS portfolio is diversified on several levels. Portfolios are diversified through the use of multiple asset classes.

Asset allocations are revisited on a periodic basis and represent an efficient allocation to achieve overall return and risk characteristics. The individual asset classes are diversified through the use of multiple portfolios that are managed both by the Investment Division staff and by external professional managers. Finally, portfolios within each of the asset classes are diversified through the selection of individual securities. Each portfolio manager is afforded discretion to diversify its portfolio(s) within the parameters established by the Board of Trustees.

Rebalancing

Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with investment policy target levels. Such rebalancing is necessary to reflect sizeable cash flows and performance imbalances among asset classes and investment managers. KRS' rebalancing policies call for an immediate rebalancing if an asset class exceeds or falls below its target allocation by 10%. As the following charts depict, the Pension and Insurance portfolios were operating within the ranges established by the investment policies.



Investments Performance Review Procedures

At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. Each month the Investment Division performs tests to assure compliance with the restrictions imposed by the Investment Policy.

Investment Consulting

The Board employs Strategic Investment Solutions, Inc. to review the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from that firm follows this introduction and discusses current allocations, performance and significant changes during the fiscal year.

STRATEGIC INVESTMENT SOLUTIONS, INC.

October 25, 2006

The Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Annual Fund Review

Dear Trustees:

Strategic Investment Solutions is charged with the duty to advise the Board in its asset management activities. This is our annual review of the asset management of the Kentucky Retirement Systems. Although we recognize that the Board of Trustees is charged with the responsibility of managing the Funds in a manner consistent with the basic long term nature of the participating systems, our comments focus on the fiscal year ended June 30, 2006. In managing the Funds, the Board must maintain formal compliance with the Prudent Person Rule. Therefore, it seeks to maintain proper and appropriate diversification for the Fund.

Market Highlights

Global equity markets continued their strong recent returns during FY 2006, though it was a tale of two very different six month periods. During the first six months, while concerns about the effects on inflation of high energy prices loomed, strong corporate earnings growth helped boost equity returns. Riskier equity segments such as US small cap and International emerging markets performed well as investors were accepting of market risk. This changed substantially during the second half of the fiscal year. Equities posted weak results due to tighter liquidity, concerns about uncertainty in Iraq and Afghanistan, high energy prices, and inflation fears from strong economic growth. In essence, the price of market risk increased dramatically. On the fixed income side, the Federal Reserve raised short-term interest rates throughout this period; June 29 saw the 17th straight short-term rate hike. As a result, most bond market sectors had flat to negative returns. Alternatives (private markets) did quite well during the fiscal year, particularly buyout opportunities.

The US dollar weakened during this period, boosting International Equity and Fixed Income returns. The S&P 500 Index gained 8.63% over the past year while the MSCI EAFE (International Equity) Index (Net) rose 26.56%. The fixed income markets, as represented by the Lehman Aggregate Bond Index, fell 0.81%.

Systems Highlights

According to the Fund Analytics statements from Northern Trust, the Retirement Fund's assets increased from $12.3 billion on June 30, 2005, to $12.9 billion on June 30, 2006. The Fund returned 9.7% during this period versus 7.5% for the Reference Index. The Insurance Fund's assets increased from $1.8 billion on June 30, 2005 to $2.1 billion on June 30, 2006. It also outperformed its benchmark, returning 12.4% versus 10.0% for the Reference Index. Please note the Reference Indices are constructed according to the individual target asset allocations of the Funds.

The Retirement Fund was overweight international equity and underweight fixed income at the end of FY 2006. The Insurance Fund was overweight international equity and cash equivalents and underweight domestic equity. Both Funds benefited from their overweight positions in international equity during FY 2006, as it was the best-performing major asset class during this period. They also benefited from an increase in Alternatives exposure, as this asset class also performed well.

The asset allocations for the Retirement and Insurance Funds as of June 30 are provided below relative to their allocation targets.

	Retirement Fund		Insurance Fund	
Asset Class	6/30/2006 Allocation	Target Allocation	6/30/2006 Allocation	Target Allocation
Domestic Equity	40.1%	40.0%	56.6%	60.0%
International Equity	16.6%	15.0%	21.2%	20.0%
Fixed Income	25.1%	27.0%	0.0%	0.0%
Alternatives *	5.8%	5.0%	5.2%	5.0%
TIPS	10.0%	10.0%	10.5%	10.0%
Cash **	2.4%	3.0%	6.5%	5.0%

* Includes Private Equity and Real Estate

** Includes equitization positions

All major asset classes are within their allowable ranges. SIS recommends rebalancing back to target on a periodic basis.

Investment Manager Highlights

Retirement Fund

Among domestic equity managers, the INVESCO structured core equity portfolio (return of 15.8% vs. 8.6% for the S&P 500 Index) and the S&P 1500 Index portfolio (9.8% vs. 7.3% for the S&P 1500 Price Only Index) strongly outperformed their respective benchmarks. The NTQA small cap portfolio performed in line with its benchmark, while the Weaver MVT portfolio was liquidated during the year due to poor performance.

On the international side, the Fidelity growth portfolio (27.6% return) and BGI International Alpha Tilts core portfolio (27.5%) both modestly outperformed the MSCI EAFE (Gross) Index (27.1%), while the Boston Company value portfolio trailed the benchmark (24.8%). The Boston Company's performance was disappointing as growth and value strategies were favored more or less equally during the period and their emerging markets exposure would have been expected to aid returns, as this asset class posted strong gains during the year.

Among the five fixed income portfolios, three modestly outperformed their benchmarks: Lincoln Capital (-0.7% vs. -0.8% for the Lehman Aggregate Index); and both TIPS portfolios (the Internal portfolio lost 1.4% vs. -1.6% for the benchmark, while the Barksdale portfolio lost 1.3%). The other two, INVESCO (-1.5%) and Weaver Barksdale Core (-1.4%), essentially matched the return of the Lehman Government/Credit Index. Over longer time periods, Lincoln Capital has exceeded its benchmark net of management fees while the other portfolios have trailed their benchmarks on a net basis.

The Alternatives portfolio continued its strong performance record since inception, with a 17.3% return vs. 6.3% for the Blended Index during the year.

Insurance Fund

The S&P 1500 Index portfolio (9.8% vs. 7.3% for the S&P 1500 Price Only Index) and Fidelity (27.5% vs. 27.1% for the MSCI EAFE Index) both outperformed their respective benchmarks.

Both TIPS portfolios did modestly well against the Lehman TIPS Index (-1.5% each vs. -1.6%).

Summary

During 2006 fiscal year the Retirement and Insurance Funds experienced strong returns and asset growth. Both Funds benefited from generally strong relative and absolute results by their domestic and international equity managers, and their overweight to international equity. Alternatives also helped to boost returns substantially. The fixed income portfolios generally performed in line with their benchmarks, though absolute returns were poor due to a weak fixed income investment environment.

Sincerely,

Peter A. Keliuotis, CFA
(630) 705-3099

cc: B. Cracraft, KRS
B. Aldridge, KRS

Investment Results

Fiscal Year 2006 Results:

For the fiscal year ended June 30, 2006, the KRS pension fund returned 9.7%, which exceeded the return of its benchmark by 2.2%. The 9.7% return also exceeded the actuarially assumed rate of return of 8.25% by more than one full percent. The above benchmark performance of the pension fund was due in large part to an above benchmark weighting to international equities and a below benchmark weighting to fixed income, the best and worst performing asset classes. The excess performance was further enhanced by above benchmark returns from the domestic equity and alternative asset portfolios.

Pension Total Fund Return[1]

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Fund	Apr-84	9.7%	10.8%	6.3%	8.9%	10.9%
Performance Benchmark		7.5%	9.8%	5.6%	8.6%	10.8%
CPI + 4.0%		8.3%	7.4%	6.7%	6.6%	7.1%

[1] Current Policy Benchmark is compromised of 14% LB Aggregate, 13% LB Government/Credit, 10% LB U.S. TIPS, 15% MSCI EAFE, 5% Russell 2000, 31.4% S&P 1500 Composite (Price Only), 6.6% S&P 500, 3% 3-Month Treasury Bill, and 2% LB High Yield Corporate Index.

The KRS insurance fund also posted a strong return for the fiscal year ended June 30, 2006. The portfolio returned 12.4% compared to the benchmark and actuarially assumed rates of return of 10.0% and 8.25%, respectively. The above benchmark performance of the insurance fund was also due in large part to higher than benchmark allocations to international equities and above benchmark performance from the domestic equity asset class.

Insurance Total Fund Return

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Insurance Fund	Apr-84	12.4%	13.7%	6.3%	8.6%	9.0%
Performance Benchmark		10.0%	11.9%	4.2%	8.1%	8.8%
CPI + 4.0%		8.3%	7.4%	6.7%	6.6%	7.1%

1 Current Policy Benchmark is compromised of 10% LB U.S. TIPS, 20% MSCI EAFE, 64% S&P 1500 Composite (Price Only), 5% 3-Month Treasury Bill, and 1% LB High Yield Corporate Index.

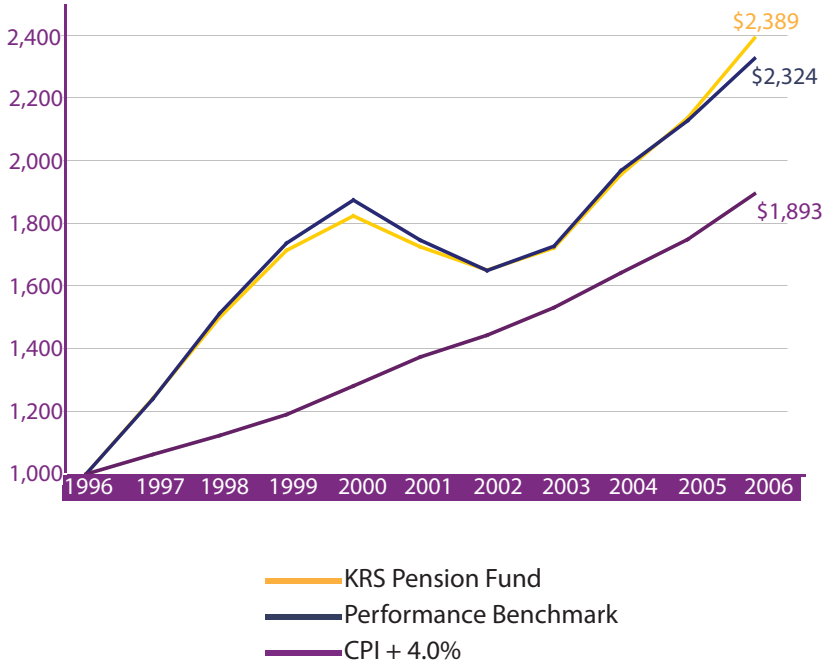
Long-Term Results:

The 10-years ended June 30, 2006, provided returns that by historical measures were quite good. The KRS pension fund portfolio earned an annualized total return of 8.9 %. As shown in the investment results table, the KRS pension fund return remains ahead of or in line with its benchmark for each of the time periods presented. The consistent, above benchmark performance is illustrated in the following charts, which show the growth of $1,000 invested in the KRS pension portfolio, its policy portfolio, and its actuarial objective (CPI + 4%) over the past 10 years.

1 All return calculations are made by the custody bank and were prepared using a time-weighted rate of return.

Investment Results

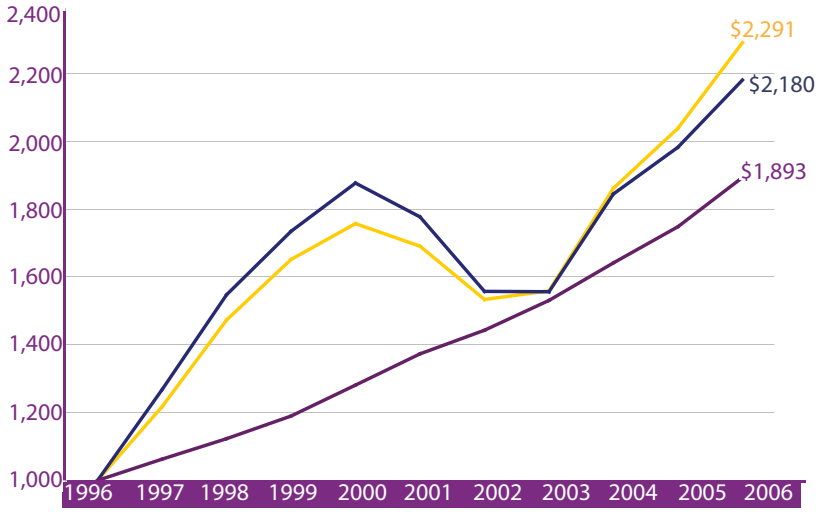
Total Pension Fund Growth of $1,000



The ending points at June 30, 2006, indicate that the $1,000 would have grown to $2,389, while the same $1,000 invested in the policy portfolio and actuarial objective would have grown to $2,324 and $1,893, respectively.

The KRS insurance fund also enjoyed a strong period of growth over the past 10 years, earning an 8.6% return for the 10-year period ending June 30, 2006. As shown in the accompanying insurance investment results table, the KRS insurance fund returns is above benchmark for each of the time periods presented. The consistent, above benchmark performance is best illustrated by the growth of $1,000 invested in the KRS insurance portfolio, its policy portfolio, and its actuarial objective (CPI + 4%) over the past 10 years.

Total Insurance Fund Growth of $1,000



The ending points at June 30, 2006, indicate that the $1,000 would have grown to $2,291, while the same $1,000 invested in the policy portfolio and its actuarial objective would have grown to $2,180 and $1,893, respectively.

Investment Results

U.S. Equities

For the fiscal year ending June 30, 2006, the KRS pension fund U.S. equity portfolio posted a return of 11.9%, outperforming its performance benchmark by 2.6%. The KRS insurance U.S. equity portfolio also performed well, outperforming its performance benchmark by 2.5% during the recently completed fiscal year. As the accompanying table indicates, all segments of the U.S. equity markets posted positive results during the recently completed twelve month period.

U.S. Equity

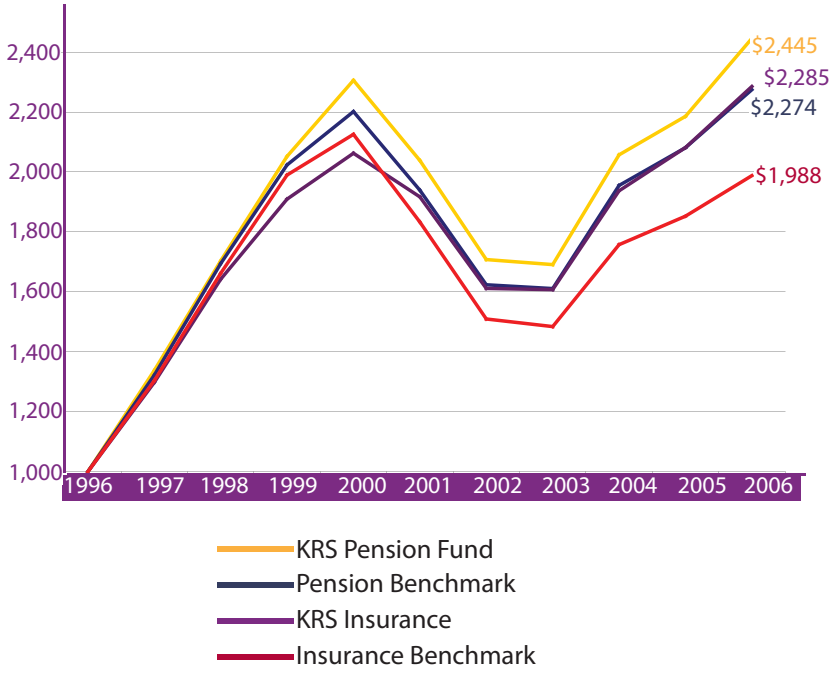
	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Apr-84	11.9%	13.1%	3.7%	9.4%	12.9%
Performance Benchmark		9.3%	12.2%	3.2%	8.6%	12.6%
KRS Insurance	Jul-92	9.8%	12.4%	3.6%	8.6%	10.8%
Performance Benchmark		7.3%	10.2%	1.6%	7.1%	9.6%
Market Indices						
Russell 1000 (Large Cap)		9.1%	12.0%	3.1%	8.6%	
Russell 2000 (Small Cap)		14.6%	18.7%	8.5%	9.0%	
Russell 3000 (Total Equity)		9.6%	12.6%	3.5%	8.5%	

[1] *Current Blended Pension Benchmark consist of 12.5% Russell 2000, 71% S&P 1500 Composite (Price Only), and 16.5% S&P 500*

[2] *Insurance benchmark is S&P 1500 Composite (Price Only)*

Over the past three years, U.S. equity investors have received acceptable returns from U.S. equity investments. The KRS pension fund portfolio has generated an annualized return of 13.1% over this period, exceeding its benchmark by 0.9%. Over the same time period, the insurance fund has produced an annualized return of 12.4%, easily outperforming its performance benchmarks return of 10.2%. Boasted by three years of positive performance, both the pension and insurance portfolios have produced positive, above benchmark returns on a five-year time period. The 10-year returns for each U.S. equity portfolio also indicate strong positive performance. The pension portfolio has generated a annualized average return of 9.4%, while the insurance portfolio has posted an average annual return of 8.6%.

U. S. Equity Portfolio Growth of $1,000



Investment Results

The consistent, above benchmark, performance is best illustrated by the growth of $1,000 invested in the KRS U.S. equity portfolio and its benchmark portfolio over the past 10 years. For the KRS pension fund, the ending points at June 30, 2006, indicate that the $1,000 would have grown to $2,445, while the same $1,000 invested in the benchmark portfolio would have grown to $2,274. For the KRS insurance fund, the ending points at June 30, 2006, indicate that the $1,000 would have grown to $2,285, while the same $1,000 invested in the benchmark portfolio would have grown to $1,988.

Top 10 U.S. Equity Holdings

Pension Fund			Insurance Fund		
Company	**Shares**	**Market Value**	**Company**	**Shares**	**Market Value**
Exxon Mobil Corp	2,196,000	134,724,600	Exxon Mobil Corp	468,500	28,742,475
General Electric Co	3,035,400	100,046,784	General Electric Co	776,700	25,600,032
Citigroup, Inc	1,927,400	92,977,776	Microsoft Corp	791,200	18,434,960
Bank of America Corp	1,777,931	85,518,481	Citigroup, Inc	381,000	18,379,440
Microsoft Corp	3,082,000	71,810,600	Bank of America Corp	353,432	17,000,079
Pfizer, Inc	2,908,360	68,259,209	Wal-Mart Stores, Inc	306,300	14,754,471
Johnson & Johnson	1,065,934	63,870,765	Proctor & Gamble Corp	253,675	14,104,330
Altria Group Inc	760,700	55,858,201	Pfizer, Inc	563,100	13,215,957
IBM Corp	651,800	50,071,276	Johnson & Johnson	209,788	12,570,497
Wal-Mart Stores, Inc	1,022,600	49,258,642	Altria Group Inc	156,800	11,513,824
Total	18,428,125	772,396,335	***Total***	4,260,495	174,316,065

Investment Results

International Equities

For the fiscal year ending June 30, 2006, the KRS pension fund international equity portfolio returned 26.5%, trailing its performance benchmark, the MSCI EAFE Index, by 0.6%. The KRS insurance international equity portfolio, however, outperformed the MSCI EAFE Index by 0.4% during the same twelve month period, posting a return of 27.5%. As the accompanying table indicates, both developed and emerging international equity markets posted strong positive results during the recently completed twelve month period.

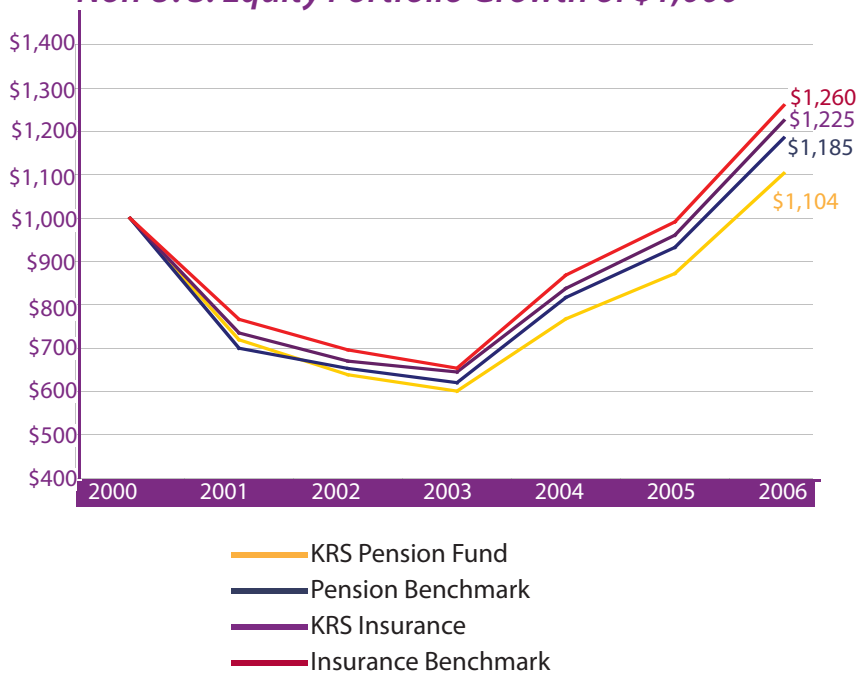
International Equity

	Inception Date	Fiscal Year	3-Year	5-Year	Inception
KRS Pension	Jul-00	26.5%	22.5%	8.9%	1.7%
Performance Benchmark		27.1%	24.1%	11.1%	2.9%
KRS Insurance	Jul-00	27.5%	23.8%	10.8%	3.4%
Performance Benchmark		27.1%	24.4%	10.4%	3.9%
Market Indices					
MSCI EAFE		27.1%	24.4%	10.4%	1.0%
MSCI Emerging Markets		35.9%	34.8%	21.5%	9.7%
MSCI ACWI Ex US		28.4%	25.8%	11.9%	2.0%

2 Pension and Insurance benchmark is the MSCI EAFE Index

Over the past three years, international equity investors have received very good returns from the asset class. The KRS pension fund portfolio has generated an annualized average return of 22.5% over this three-year period, which has fallen short of the MSCI EAFE Index return of 24.1%, by 1.6%. The insurance fund has also trailed the annualized return of the index, generating an average return of 23.8%. The Systems began its international equity program five years ago in July 2000. Since inception, both portfolios have underperformed their benchmark.

Non U. S. Equity Portfolio Growth of $1,000



Investment Results

The chart on the preceding page indicates the growth of $1,000 invested in the KRS international equity portfolios and the MSCI EAFE Index since their inception six years ago. For the KRS pension fund, the ending points at June 30, 2006, indicate that the $1,000 would have grown to $1,104, while the same amount invested in the MSCI EAFE Index would have grown to $1,185. For the KRS insurance fund, the ending points at June 30, 2006, indicate that the $1,000 would have grown to $1,225, while the same $1,000 invested in the index would also have risen to $1,260.

Top 10 International Equity Holdings

Pension Fund			Insurance Fund		
Company	Shares	Market Value	Company	Par	Market Value
Total SA	502,204	33,038,267	BP Plc	939,000	10,950,066
BP Plc	2,816,405	32,843,258	Total SA	145,264	9,556,417
GlaxoSmithKline Plc	1,103,450	30,837,784	Roche Holdings AG	55,127	9,094,830
Novartis AG	463,051	25,023,654	Ericsson LM	2,711,625	8,959,134
ENI S.P.A.	786,650	23,164,727	Altadis, S.A.	186,210	8,800,081
Sumitomo Mitsui Financial	1,998	21,148,406	GlaxoSmithKline Plc	304,285	8,503,761
E.ON AG	176,110	20,270,979	Novartis AG	153,984	8,321,421
BNP Paribas	200,326	19,172,592	Toyota Motor Corp	158,400	8,300,013
HSBC Holdings Plc	1,075,370	18,924,863	E.ON AG	70,800	8,149,369
Roche Holdings AG	107,838	17,791,069	ENI S.P.A.	249,750	7,354,466
Total	7,233,402	242,215,600	***Total***	4,974,445	87,989,558

Investment Results

Fixed Income

For the fiscal year ending June 30, 2006, the KRS pension fund fixed income portfolio declined 1.2%, however the portfolio outperformed its custom index return by 0.1%. As the accompanying table indicates both of the broad market indices, the Lehman Brothers Aggregate Index and the Lehman Brothers Intermediate Government Credit Index, posted negative returns for the most recent twelve month period, as the Federal Reserve continued to increase the short-term interest rate. The KRS insurance fixed income portfolio also posted a negative return of 1.5%, outperforming its benchmark, the Lehman Brothers U.S. TIPS Index, by 0.2%.

Fixed Income

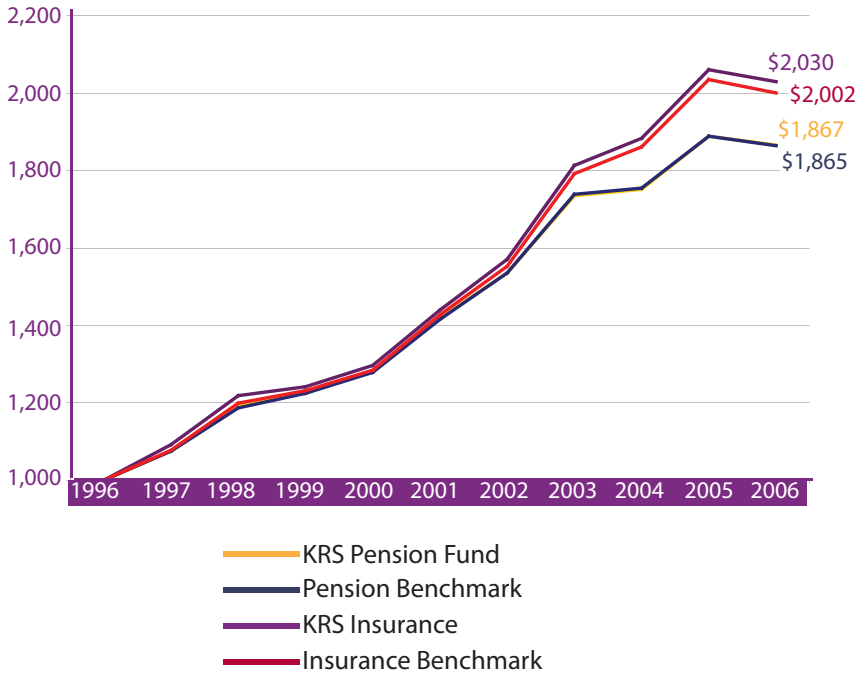
	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Apr-84	-1.2%	2.5%	5.6%	6.4%	8.8%
Performance Benchmark		-1.3%	2.4%	5.7%	6.4%	8.5%
KRS Insurance	Jul-92	-1.5%	3.8%	7.1%	7.3%	7.2%
Performance Benchmark		-1.7%	3.8%	7.0%	7.2%	7.2%
Market Indices						
LB Aggregate		-0.8%	2.1%	5.0%	6.2%	
LB Government/Credit		-1.5%	1.6%	5.1%	6.2%	

[1] *Current Blended Pension Benchmark consists of 38% LB Aggregate, 35% LB Government/Credit, and 27% LB U.S. TIPS*

[1] *Insurance Benchmark is the Lehman Brothers U.S. TIPS Index*

Over the past three years ended June 30, 2006, the KRS pension fund portfolio has generated an annualized average return of 2.5% versus its custom performance benchmark return of 2.4%. The insurance fund portfolio posted a 3.8% return during the same period, matching its benchmark return. Over longer time horizons (i.e. five and ten year periods) both the pension and insurance fund fixed income portfolios have performed in line with their benchmarks.

U. S. Equity Portfolio Growth of $1,000



Investment Results

The chart on the preceding page shows the growth of $1,000 invested in the KRS fixed income portfolios and their benchmarks over the past ten years. For the KRS pension fund, the ending points at June 30, 2006, indicate that the $1,000 would have grown to $1,867, while the same $1,000 invested in the benchmark portfolio would have grown to $1,865. For the KRS insurance fund, the ending points at June 30, 2006, indicate that the $1,000 would have grown to $2,030 while the same $1,000 invested in the benchmark portfolio would have grown to $2,002.

Top 10 Fixed Income Holdings

Pension Fund			Insurance Fund		
Company	Par Value	Market Value	Company	Par Value	Market Value
US TSY BD INFL Index 3.625 Due 4/15/28	65,500,000	96,801,733	US TSY NT INFL Index 0.875 Due 4/15/10	18,550,000	18,606,771
US TSY BD INFL Index 3.875 Due 4/15/29	63,367,000	96,077,312	US TSY BD INFL Index 3.875 Due 4/15/29	11,700,000	17,739,589
US TSY NT INFL Index 2.000 Due 1/15/14	85,750,000	90,235,390	US TSY BD INFL Index 2.375 Due 1/15/25	16,850,000	17,526,122
US TSY NT INFL Index 3.000 Due 7/15/12	76,850,000	88,663,300	US TSY NT INFL Index 3.000 Due 7/15/12	13,450,000	15,517,520
US TSY NT INFL Index 1.875 Due 7/15/13	83,600,000	88,085,664	US TSY NT INFL Index 2.000 Due 1/15/14	13,500,000	14,206,155
US TSY NT INFL Index 0.875 Due 4/15/10	84,700,000	84,959,220	US TSY NT INFL Index 1.875 Due 7/15/13	13,300,000	14,013,628
US TSY NT INFL Index 2.149 Due 7/15/14	81,000,000	83,360,938	US TSY BD INFL Index 3.625 Due 4/15/28	9,315,000	13,766,537
US TSY NT INFL Index 1.625 Due 1/15/15	80,000,000	78,678,467	US TSY NT INFL Index 2.149 Due 7/15/14	12,625,000	12,992,986
US TSY NT INFL Index 3.625 Due 1/15/08	59,400,000	75,338,904	US TSY NT INFL Index 3.625 Due 1/15/08	9,950,000	12,619,901
US TSY BD INFL Index 2.375 Due 1/15/25	70,485,000	73,313,276	US TSY NT INFL Index 1.625 Due 1/15/15	12,500,000	12,293,510
Total	750,652,000	855,514,203	***Total***	131,740,000	149,282,718

Investment Results

Alternative Investments

For the fiscal year ending June 30, 2006, the KRS pension fund alternative investments portfolio posted a return of 17.2%. The portfolio consists primarily of real estate investment trusts (REITs), or publicly traded real estate securities focused investments and operating companies, and private equity limited partnerships. The custom performance benchmark for the pension alternative investment portfolio returned 6.4% during this same period. The insurance alternative investment portfolio also fared well, generating a return of 9.5% versus a custom performance benchmark return of 6.8% during the fiscal year.

As the accompanying table indicates, the longer term results from the alternative investment portfolios have also been excellent. For the three years ended June 30, 2006, the pension fund portfolio has outperformed its custom performance benchmark by nearly 16% on an annualized basis. Since its inception in October, 0, the portfolio has exceeded its benchmark by nearly 3.5% each year. The insurance portfolio has also done very well exceeding its benchmark return over the three-year and since inception periods by 5.6% and 5.3%, respectively.

Alternative Equity

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Oct-90	17.2%	25.5%	18.5%	15.0%	13.5%
Performance Benchmark		6.4%	9.7%	4.6%	8.4%	10.2%
KRS Insurance	Jul-01	9.5%	15.6%	8.4%		8.4%
Performance Benchmark		6.8%	10.0%	3.1%		3.1%

Additional Schedules and Required Supplemental Information

Following are additional schedules which show the external investment advisors employed by KRS along with the total assets each of the firm manages for KRS, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by KRS as of or for the year ended June 30, 2006.

External Investment Advisors

External Investment Advisors	Assets Under Management (in thousands)
Barclays Global Investors, San Francisco, California	$ 508,277
Blackstone Capital Partners V, New York, New York	13,578
Columbia Capital IV, Alexandria, Virginia	3,184
Duff, Ackerman & Goodrich Ventures II, Palo Alto, California	9,000
Fidelity Investments, Boston, Massachusetts	1,336,274
H.I.G. Venture Partners II, Miami, Florida	2,597
INVESCO, Louisville, Kentucky	1,704,559
Institutional Venture Partners XI, Menlo Park, California	5,621
JW Childs Equity III, Boston, Massachusetts	31,481
Lehman Brothers Asset Management, Chicago, Illinois	1,848,775
Leonard Green & Partners, L.P. IV, Los Angeles, California	36,102
Matlin Patterson Global Opportunities I & II, New York, New York	53,707
Merit Capital Partners IV, Chicago, Illinois	6,499
New Mountain Partners II, New York, New York	10,857
Northern Trust Quantitative Advisors, Chicago, Illinois	761,122
Oak Hill Partners II, New York, New York	23,317
Sun Capital Partners IV, Boca Raton, Florida	5,263
Technology Crossover Ventures VI, Palo Alto, California	1,542
The Boston Company, Boston, Massachusetts	754,000
Vantagepoint Venture IV, San Bruno, California	26,166
Warburg Pincus IX, New York, New York	28,154
Wayzata Investment Partners I, Wayzata, Minnesota	50,241
Weaver Barksdale & Associates, Brentwood, Tennessee	1,293,353
Total	**$ 8,513,667**

Master Custodian & Performance Measurement

The Northern Trust Company, Chicago, Illinois

Investment Consultants

Strategic Investment Solutions, San Francisco, California

Pension Fund Summaries

Asset Class	KERS Non Hazardous Market Value	KERS Non Hazardous % Market Value	KERS Hazardous Market Value	KERS Hazardous % Market Value
Bonds	$1,566,064,347	29.0	$119,242,950	27.5
Mortgages	$305,668,161	5.7	$28,399,084	6.6
Short Term	$110,001,924	2.0	$10,774,588	2.5
Alternatives	$289,802,075	5.4	$35,532,171	8.2
Domestic Equities	$2,237,296,761	41.4	$170,058,472	39.2
International Equities	$888,210,591	16.5	$69,520,062	16.0
Total Portfolio	**$5,397,043,859**	**100**	**$394,749,778**	**100**

Asset Class	CERS Non Hazardous Market Value	CERS Non Hazardous % Market Value	CERS Hazardous Market Value	CERS Hazardous % Market Value
Bonds	$1,586,654,690	30.8	$458,433,360	30.3
Mortgages	$380,849,187	7.4	$109,687,104	7.2
Short Term	$78,875,293	1.5	$29,125,252	1.9
Alternatives	$291,687,149	5.7	$87,174,358	5.8
Domestic Equities	$1,953,589,380	38.0	$585,489,701	38.7
International Equities	$854,879,325	16.6	$243,738,172	16.1
Total Portfolio	**$5,146,535,024**	**100**	**$1,513,647,947**	**100**

Asset Class	SPRS Market Value	SPRS % Market Value
Bonds	$105,004,503	30.0
Mortgages	$20,933,123	5.9
Short Term	$12,110,352	3.5
Alternatives	$16,318,795	4.7
Domestic Equities	$141,213,385	40.3
International Equities	$54,513,613	15.6
Total Portfolio	**$350,093,771**	**100**

Insuance Fund Summaries

Asset Class	KERS Non Hazardous Market Value	KERS Non Hazardous % Market Value	KERS Hazardous Market Value	KERS Hazardous % Market Value
Bonds	$61,782,964	9.8	$20,993,841	9.4
Short Term	$99,492,865	15.8	$20,823,474	9.4
Alternatives	$32,336,211	5.2	$11,131,443	5.0
Domestic Equities	$322,559,454	51.3	$118,626,312	53.4
International Equities	$112,488,354	17.9	$50,682,057	22.8
Total Portfolio	**$628,659,848**	**100**	**$222,257,127**	**100**

Asset Class	CERS Non Hazardous Market Value	CERS Non Hazardous % Market Value	CERS Hazardous Market Value	CERS Hazardous % Market Value
Bonds	$80,958,005	10.2	$46,358,538	10.7
Short Term	$68,375,249	8.6	$35,090,880	9.9
Alternatives	$39,254,576	4.9	$16,505,552	4.6
Domestic Equities	$439,904,632	55.3	$191,608,685	53.8
International Equities	$166,613,247	21.0	$75,503,675	21.2
Total Portfolio	**$795,105,709**	**100**	**$356,129,443**	**100**

Asset Class	SPRS Market Value	SPRS % Market Value
Bonds	$11,297,649	11.4
Short Term	$8,388,693	8.5
Alternatives	$5,296,789	5.4
Domestic Equities	$52,686,088	53.3
International Equities	$21,265,630	21.4
Total Portfolio	**$98,934,849**	**100**

External Investment Expenses

Expense	Fees Paid (in thousands)	Expense as a % of Assets
Equity & Fixed Income Portfolio		
Pension Funds	$9,026	0.0750%
Insurance Funds	$1,428	0.0796%
Consulting Fees	$313	0.0023%
Custody Fees	$749	0.0054%
Other Investment-Related Fees	$50	0.0004%
Total Expenses	$11,566	0.0837%

Schedule of Commissions Paid

	Total Shares	Commissions Paid	$ per share
U.S. Equity	139,924,273	$5,983,302	$0.043
	Total Value of Trades	**Commissions Paid**	**As a % of Trade**
Non-U.S. Equity	$2,173,987,871	$2,795,960	0.13%
Total Commissions Paid		**$8,779,262**	

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October 31, 2006

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fiftieth annual actuarial valuation of the Kentucky Employees Retirement System, the forty-seventh annual actuarial valuation of the County Employees Retirement System, and the forty-eighth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2006 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2007 and ending June 30, 2008.

Funding Objectives & Policies
For each retirement system, KRS administers both a pension and insurance fund to provide monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) are established as a new amortization base to be amortized over the following 30 years.

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30 year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. Going forward, new UAL bases will be established at each valuation date and will be amortized over the following 30 years.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

Progress towards Realization of Funding Objectives
The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.
In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 assumption changes, and

increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2006 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	60.0%
KERS Hazardous Pension Fund	84.1%
CERS Non-Hazardous Pension Fund	83.5%
CERS Hazardous Pension Fund	75.0%
SPRS Pension Fund	66.6%

The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. While the funding level relative to the insurance funds has improved steadily since 1990, medical inflation rates in excess of the assumed rates, as well as recent employer contribution rate reductions under KERS and SPRS, have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level. As of June 30, 2006 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	7.8%
KERS Hazardous Insurance Fund	34.3%
CERS Non-Hazardous Insurance Fund	16.9%
CERS Hazardous Insurance Fund	21.9%
SPRS Insurance Fund	18.1%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness and have made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data, nor has there been any reconciliation of data used in the prior year's valuation with this current valuation data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on January 19, 2006 based on the experience investigation report dated January 12, 2006, meet the parameters set for disclosure under GASB Statements No. 25 and 43. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in January 2011 and any adjustments will be reflected in the June 30, 2011 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

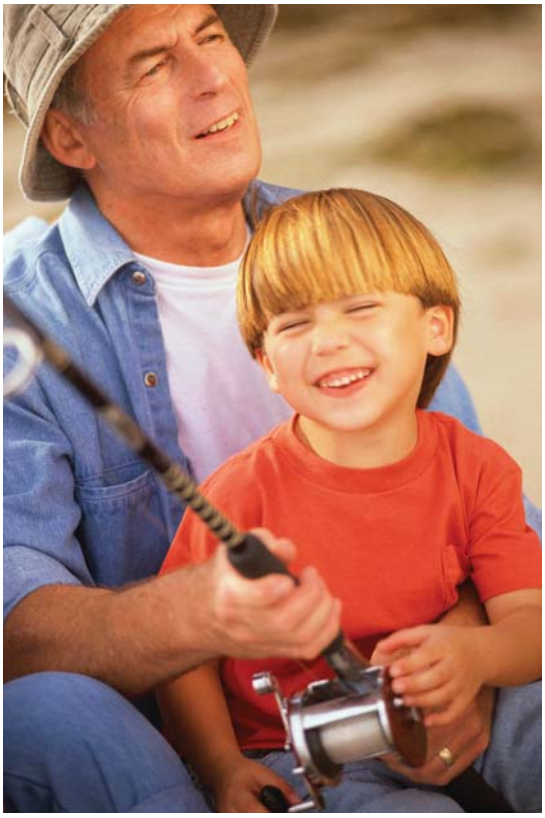
Edward A. Macdonald ASA, FCA, MAAA
President

Summary of Actuarial Assumptions and Methods

(As of June 30, 2006)

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience once every five years through the completion of the Actuarial Experience Study. The most recent study was completed in January 2006 and reviewed plan experience for the period from July 1, 2000 through June 30, 2005. All assumptions used in the June 30, 2006 actuarial valuation were based on the study performed in 2006 and in accordance with the actuary's recommendations. The next Experience Study is scheduled to be completed in January 2011.

1. ***Actuarial Cost Method:*** The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL) over no more than a 30-year period.
2. ***UAL Amortization Method:*** Unfunded actuarial liabilities (UAL) resulting from any new actuarial gains and losses are recognized in each valuation and amortized over a 30 year period using the level percent of payroll method as required by state statute. Under this method, amortization payments are designed to remain level as a percent of payroll, and payroll is assumed to increase at 3.5% per year.
3. ***Asset Valuation Method:*** The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted by the Board in 2006.



4. ***Retiree Insurance Funding Policy:*** The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. Going forward, new UAL bases will be established at each valuation date and will be amortized over the following 30 years. This policy was adopted in 2006.
5. ***Investment Return Assumption:*** The future investments earnings of plan assets are assumed to accumulate at a rate of 7.75% per annum. This rate consists of a 3.5% inflationary component and a 4.25% real rate of return component. In accordance with GASB Statement 43, the investment return assumption has been reduced to a blended rate of 4.5% for KERS and SPRS insurance funds due to a lack of pre-funding benefits. This assumption was adopted in 2006.
6. ***Salary Increase Assumption:*** Active member salaries are assumed to increase at the rates provided in Table 1 on the following page. The rates include a 3.5% percent inflationary component and an additional increase due to promotion based upon plan experience. This assumption was adopted in 2006.

Summary of Actuarial Assumptions and Methods

(As of June 30, 2006)

Table 1: Salary Increase Assumptions

Service	KERS & CERS Non-Hazardous	KERS & CERS Hazardous, SPRS
0-1	13.5%	14.5%
1-2	7.0%	7.5%
2-3	5.5%	7.0%
3-4	5.0%	6.5%
4-5	5.0%	6.0%
5-6	4.5%	5.5%
6-7	4.5%	5.0%
7-8	4.5%	5.0%
8-9	4.0%	4.5%
9-10	4.0%	4.5%
10+	4.0%	4.0%

7. ***Payroll Growth Assumption:*** Active member payroll is assumed to increase at a rate of 3.5% per annum. This assumption was adopted in 2006.
8. ***Retiree Cost of Living Adjustments (COLA):*** State statute requires retirement allowances to be increased by the percentage increase in the annual average of the consumer price index for all urban consumers (CPI-U) for the most recent calendar year, not to exceed five percent. Statute only allows the Cost of Living Adjustments (COLAs) awarded as of the valuation date to be recognized for funding purposes and for determining employer contribution rates. The State Legislature has the authority to suspend or reduce cost of living adjustments.
9. ***Medical Inflation Rate Assumption:*** The costs for retiree medical premiums are assumed to increase each year by 12% from 2006-2008, by 11% from 2009-2011, by 10% from 2012-2014, by 9% from 2015-2017, by 8% from 2018-2020, by 7% from 2021-2023, by 6% from 2024-2026, and by 5.5% thereafter. This assumption was adopted in 2006.
10. ***Retirement Rate Assumption:*** The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 2. This assumption was adopted in 2006.

TABLE 2: RETIREMENT RATE ASSUMPTIONS

Non-Hazardous		Hazardous			
Age	*Probability*	*Service*	*KERS Probability*	*CERS Probability*	*SPRS Probability*
55	8.00%	20	20%	30%	20%
56	8.00%	21	15%	25%	9%
57	8.00%	22	15%	20%	9%
58	8.00%	23	15%	20%	9%
59	8.00%	24	15%	25%	20%
60	10.00%	25	20%	25%	20%
61	20.00%	26	35%	30%	20%
62	25.00%	27	35%	30%	20%
63	25.00%	28	35%	30%	30%
64	25.00%	29	35%	30%	45%
65	25.00%	30	35%	40%	45%
66	25.00%	31	35%	40%	45%
67	25.00%	32	35%	35%	45%
68	25.00%	33	35%	35%	45%
69	25.00%	34	35%	30%	70%
70	25.00%	35+	60%	30%	70%

If service credit is at least 27 years, the rate is 25%. Rates are doubled for KERS Non-hazardous members during the window period (set to expire January 1, 2009). 100% are anticipated to retire at age 75.

- For KERS, 100% are anticipated to retire at age 65.
- For CERS, 100% are anticipated to retire at age 62.
- For SPRS, 100% are anticipated to retire at age 55.

11. ***Mortality Assumptions:*** The mortality table used for active members is the 1994 Group Annuity Mortality (GAM) Table. For members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table to the 1994 GAM table. Mortality assumptions for disabled lives are set using the 1994 GAM table set forward five years. These assumptions were adopted in 2006.

TABLE 3: SAMPLE ANNUAL RATES OF MORTALITY

	*Active & Retired Member Mortality**		*Disabled Member Mortality*	
Age	Males	Females	Males	Females
Under 20	0.04%	0.03%	----	----
22	0.06%	0.03%	----	----
32	0.08%	0.04%	----	----
42	0.13%	0.08%	0.19%	0.11%
52	0.32%	0.17%	0.56%	0.29%
62	1.01%	0.58%	1.80%	1.08%
72	2.85%	1.65%	4.52%	2.84%

**For members retiring on or after July 1, 2006.*

12. ***Withdrawal Rates:*** The probability, or likelihood, of active members terminating employment prior to retirement is provided in Table 4 on the following page. The withdrawal rate is a function of both age and service. This type of structure is known as "select and ultimate rates". This structure reflects the fact that both service and age affect the likelihood of a member staying in active employment. The ultimate period for these systems covers a member's withdrawal rate after the first five years of service. These assumptions were adopted in 2006.

TABLE 4: SELECTED RATES OF TERMINATION PRIOR TO RETIREMENT

KERS & CERS Non-Hazardous

Select Rates		Ultimate Rates	
Service	Probability	Age	Probability
1st Yr. of Service:	15.00%	20	6.00%
2nd Yr. of Service:	14.00%	25	5.40%
3rd Yr. of Service:	10.00%	30	4.80%
4th Yr. of Service:	8.00%	35	3.60%
5th Yr. of Service:	6.00%	40	2.66%
		45	1.98%
		50	1.92%
		55	1.08%
		60	0.75%

KERS Hazardous

Select Rates		Ultimate Rates	
Service	*Probability*	*Age*	*Probability*
1st Yr. of Service:	15.00%	20	6.00%
2nd Yr. of Service:	14.00%	25	5.40%
3rd Yr. of Service:	10.00%	30	4.80%
4th Yr. of Service:	8.00%	35	3.60%
5th Yr. of Service:	6.00%	40	2.66%
		45	1.98%
		50	1.92%
		55	1.08%
		60	0.75%

CERS Hazardous

Select Rates		Ultimate Rates	
Service	Probability	*Age*	*Probability*
1st Yr. of Service:	10.00%	20	4.56%
2nd Yr. of Service:	7.00%	25	3.04%
3rd Yr. of Service:	5.00%	30	3.01%
4th Yr. of Service:	4.00%	35	1.95%
5th Yr. of Service:	3.50%	40	1.50%
		45	0.75%
		50	0.50%
		55	-
		60	-

SPRS

Select Rates		Ultimate Rates	
Service	Probability	*Age*	*Probability*
1st Yr. of Service:	10.00%	20	2.50%
2nd Yr. of Service:	7.00%	25	2.28%
3rd Yr. of Service:	5.00%	30	1.83%
4th Yr. of Service:	4.00%	35	1.31%
5th Yr. of Service:	3.50%	40	0.81%
		45	0.41%
		50	-
		55	-
		60	-

13. ***Rates of Disablement:*** KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. For non-hazardous members, the assumptions are set using three quarters of the Old-Age Survivors and Disability Insurance (OASDI) rates. For hazardous members, the assumptions are set using one times the Old-Age Survivors and Disability Insurance (OASDI) rates. These assumptions were adopted in 2006.

Non-Hazardous

Age	*Probability*
20 - 24	0.0531%
25 - 29	0.0711%
30 - 34	0.0918%
35 - 39	0.1280%
40 - 44	0.1994%
45 - 49	0.3320%
50 - 54	0.5590%
55 - 59	0.9200%
60 - 64	1.4618%

Hazardous

Age	*Probability*
20 - 24	0.0708%
25 - 29	0.0948%
30 - 34	0.1224%
35 - 39	0.1707%
40 - 44	0.2658%
45 - 49	0.4426%
50 - 54	0.7453%
55 - 59	1.2267%
60 - 64	1.9490%

Summary of Actuarial Valuation Results

(As of June 30, 2006)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2006-2007)					
Pension Fund Contribution	15.55%	10.20%	6.98%	15.01%	28.95%
Insurance Fund Contribution	32.82%	36.91%	20.51%	39.52%	91.05%
Recommended Employer Contribution	48.37%	47.11%	27.49%	54.53%	120.00%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$8,994,826,247	$508,655,903	$6,179,569,267	$2,020,142,770	$516,482,298
Actuarial Value of Assets	$5,394,086,323	$427,984,192	$5,162,894,136	$1,515,075,017	$344,016,197
Unfunded Liability on Actuarial Value of Assets	$3,600,739,924	$80,671,711	$1,016,675,131	$505,067,753	$172,466,101
Funding Ratio on Actuarial Value of Assets	59.97%	84.14%	83.55%	75.00%	66.61%
Market Value of Assets	$5,440,132,708	$437,029,583	$5,191,376,948	$1,528,845,357	$352,841,486
Unfunded Liability on Market Value of Assets	$3,554,693,539	$71,626,320	$988,192,319	$491,297,413	$163,640,812
Funding Ratio on Market Value of Assets	60.48%	85.92%	84.01%	75.68%	68.32%
Insurance Fund					
Actuarially Accrued Liability	$7,815,480,774	$621,237,856	$4,607,223,639	$1,928,481,371	$582,580,867
Actuarial Value of Assets	$611,350,765	$212,833,318	$777,726,590	$422,785,042	$105,580,269
Unfunded Liability on Actuarial Value of Assets	$7,204,130,009	$408,404,538	$3,829,497,049	$1,505,696,329	$477,000,598
Funding Ratio on Actuarial Value of Assets	7.82%	34.26%	16.88%	21.92%	18.12%
Market Value of Assets	$632,642,846	$223,523,081	$813,250,744	$441,278,796	$110,491,075
Unfunded Liability on Market Value of Assets	$7,182,837,928	$397,714,775	$3,793,972,895	$1,487,202,575	$472,089,792
Funding Ratio on Market Value of Assets	8.09%	35.98%	17.65%	22.88%	18.97%
Member Data					
Number of Active Members	46,707	4,320	83,694	9,635	1,028
Total Annual Payroll (Active Members)[1]	$1,702,230,777	$138,747,320	$1,982,437,473	$426,927,550	$47,743,865
Average Annual Pay (Active Members)	$36,445	$32,117	$23,687	$44,310	$46,443
Number of Retired Members & Beneficiaries	32,140	1,980	33,102	4,712	1,067
Average Annual Retirement Allowance	$17,611	$11,809	$9,313	$21,284	$32,475
Number of Vested Inactive Members	4,998	265	7,379	393	48
Number of Inactive Members Due a Refund	24,145	2,236	42,667	1,562	218

Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2006.

Recommended Employer Contribution Rates
(As of June 30, 2006)

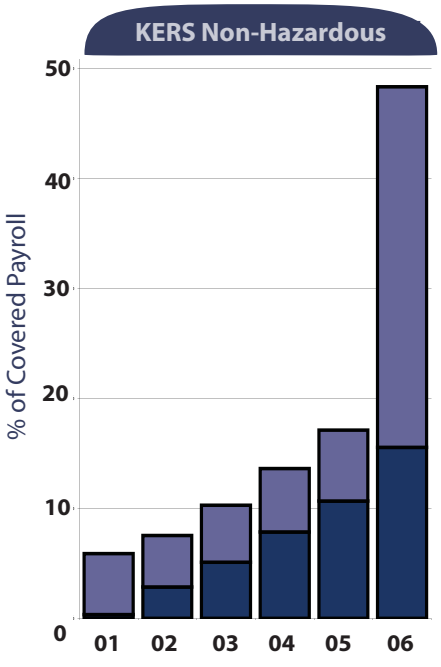
Kentucky Employees Retirement System
(Non-Hazardous Employers)

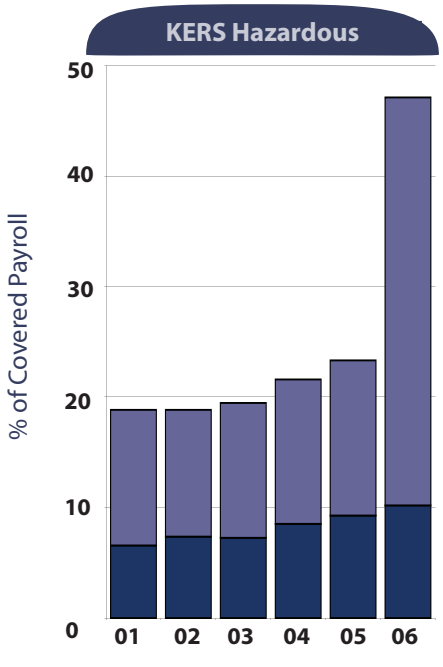
Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/01	2002-2003	5.01%	(4.67%)	0.34%	5.55%	5.89%
6/30/02	2003-2004	5.00%	(2.14%)	2.86%	4.67%	7.53%
6/30/03	2004-2005	4.82%	0.29%	5.11%	5.18%	10.29%
6/30/04	2005-2006	4.89%	2.96%	7.85%	5.77%	13.62%
6/30/05	2006-2007	4.81%	5.87%	10.68%	6.45%	17.13%
6/30/06	2007-2008	3.72%	11.83%	15.55%	32.82%	48.37%

Kentucky Employees Retirement System
(Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/01	2002-2003	9.82%	(3.25%)	6.57%	12.27%	18.84%
6/30/02	2003-2004	9.77%	(2.40%)	7.37%	11.47%	18.84%
6/30/03	2004-2005	8.68%	(1.42%)	7.26%	12.21%	19.47%
6/30/04	2005-2006	8.62%	(0.10%)	8.52%	13.07%	21.59%
6/30/05	2006-2007	8.37%	0.91%	9.28%	14.04%	23.32%
6/30/06	2007-2008	7.27%	2.93%	10.20%	36.91%	47.11%

KERS
Employer Contribution Rates





The total employer contribution rate is comprised of a contribution to the pension fund and to the insurance fund. The contribution to the pension fund and the insurance fund consist of the normal cost and an amortization payment on the unfunded actuarial liability (UAL).

Pension

Insurance

Actuarial Section

Recommended Employer Contribution Rates

(As of June 30, 2006)

County Employees Retirement System
(Non-Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2001	2002-2003	6.30%	(5.64%)	0.66%	5.68%	6.34%
6/30/2002	2003-2004	6.42%	(4.03%)	2.39%	4.95%	7.34%
6/30/2003	2004-2005	5.71%	(2.89%)	2.82%	5.66%	8.48%
6/30/2004	2005-2006	5.80%	(1.25%)	4.55%	6.43%	10.98%
6/30/2005	2006-2007	5.72%	0.25%	5.97%	7.22%	13.19%
6/30/2006	2007-2008	4.69%	2.29%	6.98%	20.51%	27.49%

County Employees Retirement System
(Hazardous Employers)

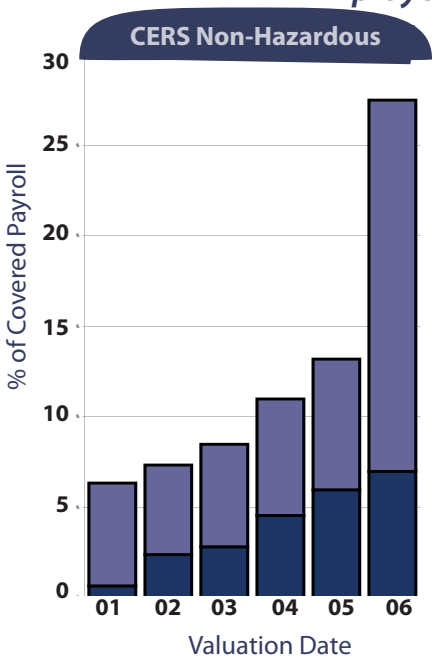
Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2001	2002-2003	9.01%	(4.34%)	4.67%	11.61%	16.28%
6/30/2002	2003-2004	8.93%	(2.17%)	6.76%	11.75%	18.51%
6/30/2003	2004-2005	8.80%	0.51%	9.31%	12.77%	22.08%
6/30/2004	2005-2006	8.80%	2.42%	11.22%	13.79%	25.01%
6/3 0/2005	2006-2007	8.79%	4.32%	13.11%	15.10%	28.21%
6/30/2006	2007-2008	8.12%	6.89%	15.01%	39.52%	54.53%

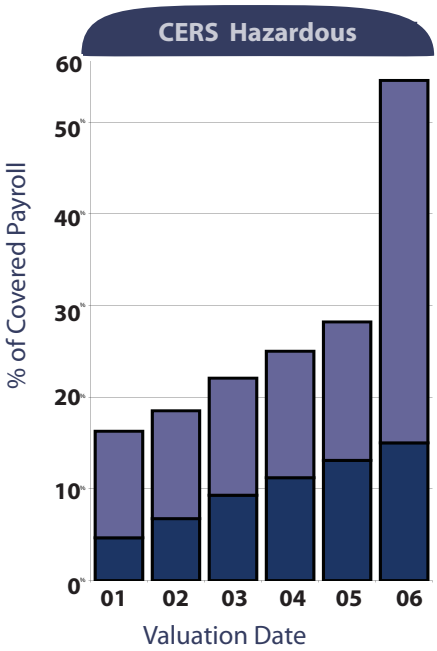
The total employer contribution rate is comprised of a contribution to the pension fund and to the insurance fund. The contribution to the pension fund and the insurance fund consist of the normal cost and an amortization payment on the unfunded actuarial liability (UAL).

Pension

Insurance

CERS
Employer Contribution Rates





The insurance fund contribution rates and t he employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2006 annual valuation. However, in the case of CERS Non-Hazardous and CERS Hazardous, the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2007-2008 is 9.19% and the employer contribution rate is 16.17%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2007-2008 is 18.86% and the employer contribution rate is 33.87%.

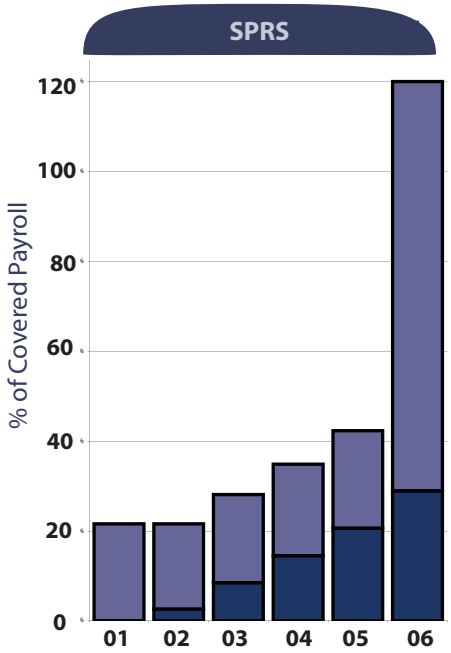
Recommended Employer Contribution Rates

(As of June 30, 2006)

State Police Retirement System

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2001	2002-2003	9.94%	(11.63%)	0.0%	21.58%	21.58%
6/30/2002	2003-2004	9.85%	(7.21%)	2.64%	18.94%	21.58%
6/30/2003	2004-2005	9.07%	(0.58%)	8.49%	19.59%	28.08%
6/30/2004	2005-2006	9.37%	5.12%	14.49%	20.34%	34.83%
6/30/2005	2006-2007	9.43%	11.21%	20.64%	21.66%	42.30%
6/30/2006	2007-2008	9.20%	19.75%	28.95%	91.05%	120.00%

SPRS
Employer Contribution Rate



The total employer contribution rate is comprised of a contribution to the pension fund and to the insurance fund. The contribution to the pension fund and the insurance fund consist of the normal cost and an amortization payment on the unfunded actuarial liability (UAL).

Summary of Actuarially Unfunded Liabilities

(As of June 30, 2006)

Kentucky Employees Retirement System
(Non-Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/01	$5,444,035,294	$6,844,742,687	$5,484,563,749	($1,400,707,393)	($40,528,455)	125.7%	100.7%
6/30/02	$6,026,094,764	$6,654,084,196	$5,005,190,948	($627,989,432)	$1,020,903,816	110.4%	83.1%
6/30/03	$6,520,463,188	$6,351,318,832	$4,929,443,185	$169,144,356	$1,591,020,003	97.4%	75.6%
6/30/04	$7,049,613,171	$6,000,513,743	$5,258,994,145	$1,049,099,428	$1,790,619,026	85.1%	74.6%
6/30/05	$7,579,074,839	$5,578,685,746	$5,362,630,697	$2,000,389,093	$2,216,444,142	73.6%	70.8%
6/30/06	$8,994,826,247	$5,394,086,323	$5,440,132,708	$3,600,739,924	$3,554,693,539	60.0%	60.5%

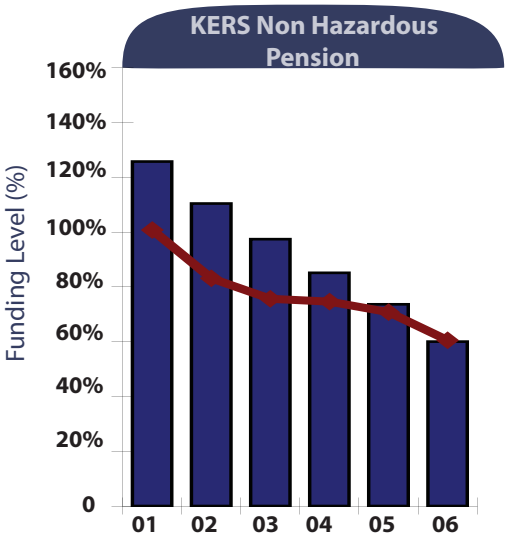
Kentucky Employees Retirement System
(Non-Hazardous Insurance Fund)

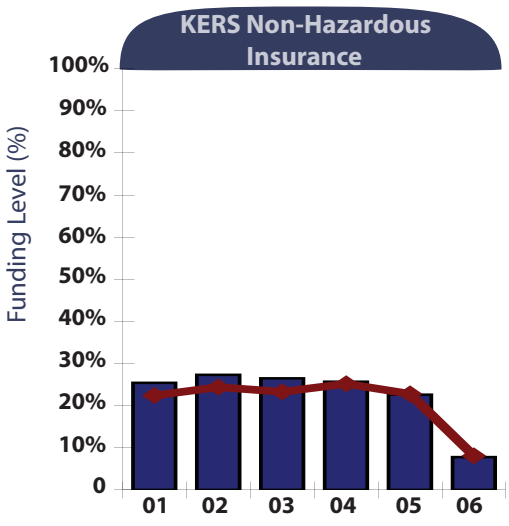
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/01	$1,769,583,098	$449,630,605	$396,254,063	$1,319,952,493	$1,373,329,035	25.4%	22.4%
6/30/02	$1,907,683,881	$521,250,455	$465,664,515	$1,386,433,426	$1,442,019,366	27.3%	24.4%
6/30/03	$2,093,210,321	$553,885,082	$487,274,973	$1,539,325,239	$1,605,935,348	26.5%	23.3%
6/30/04	$2,335,905,365	$600,586,961	$587,680,647	$1,735,318,404	$1,748,224,718	25.7%	25.2%
6/30/05	$2,680,559,188	$607,068,351	$610,901,623	$2,073,490,837	$2,069,657,565	22.7%	22.8%
6/30/06	$7,815,480,774	$611,350,765	$632,642,846	$7,204,130,009	$ 7,182,837,928	7.8%	8.1%

Actuarial

Market

The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).





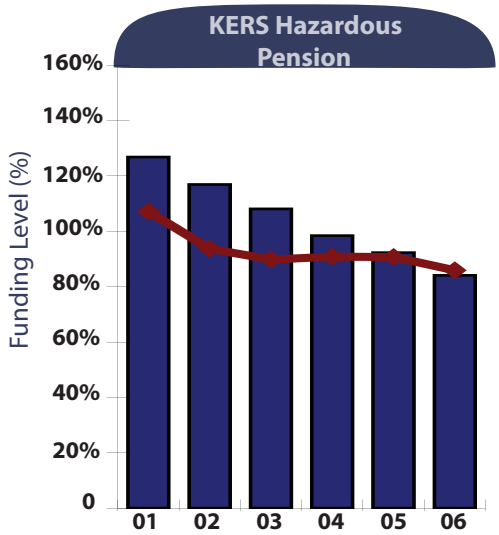
Summary of Actuarially Unfunded Liabilities
(As of June 30, 2006

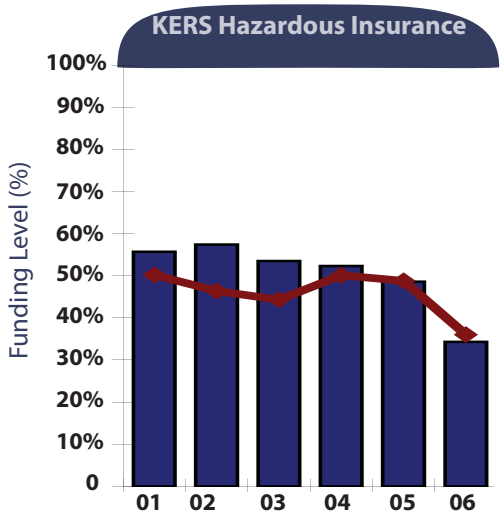
Kentucky Employees Retirement System
(Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/01	$285,193,761	$361,677,475	$305,543,701	($76,483,714)	($20,349,940)	126.8%	107.1%
6/30/02	$322,069,164	$376,384,302	$301,799,829	($54,315,138)	$20,269,335	116.9%	93.7%
6/30/03	$356,879,133	$385,925,722	$320,524,691	($29,046,589)	$36,354,442	108.1%	89.8%
6/30/04	$403,578,036	$397,212,763	$366,569,507	$6,365,273	$37,008,529	98.4%	90.8%
6/30/05	$438,994,257	$405,288,662	$398,308,897	$33,705,595	$40,685,360	92.3%	90.7%
6/30/06	$508,655,903	$427,984,192	$437,029,583	$80,671,711	$71,626,320	84.1%	85.9%

Kentucky Employees Retirement System
(Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/01	$214,450,822	$119,372,742	$107,592,284	$95,078,080	$106,858,538	55.7%	50.2%
6/30/02	$236,819,050	$135,874,582	$109,769,410	$100,944,468	$127,049,640	57.4%	46.4%
6/30/03	$283,178,335	$151,459,500	$125,533,413	$131,718,835	$157,644,922	53.5%	44.3%
6/30/04	$323,503,563	$169,158,879	$162,127,373	$154,344,684	$161,376,190	52.3%	50.1%
6/30/05	$386,844,695	$187,947,644	$188,871,226	$198,897,051	$197,973,469	48.6%	48.8%
6/30/06	$621,237,856	$212,833,318	$223,523,081	$408,404,538	$397,714,775	34.3%	36.0%





The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Summary of Actuarially Unfunded Liabilities

(As of June 30, 2006)

County Employees Retirement System
(Non-Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/01	$3,706,282,212	$5,423,834,549	$4,397,346,547	($1,717,552,337)	($691,064,335)	146.3%	118.6%
6/30/02	$4,165,355,149	$5,397,787,158	$4,126,756,301	($1,232,432,009)	$38,598,848	129.6%	99.1%
6/30/03	$4,417,597,802	$5,286,580,047	$4,174,881,117	($868,982,245)	$242,716,685	119.7%	94.5%
6/30/04	$4,936,459,488	$5,187,851,530	$4,613,335,957	($251,392,042)	$323,123,531	105.1%	93.5%
6/30/05	$5,385,156,690	$5,059,208,687	$4,893,599,997	$325,948,003	$491,556,693	94.0%	90.9%
6/30/06	$6,179,569,267	$5,162,894,136	$5,191,376,948	$1,016,675,131	$988,192,319	83.6%	84.0%

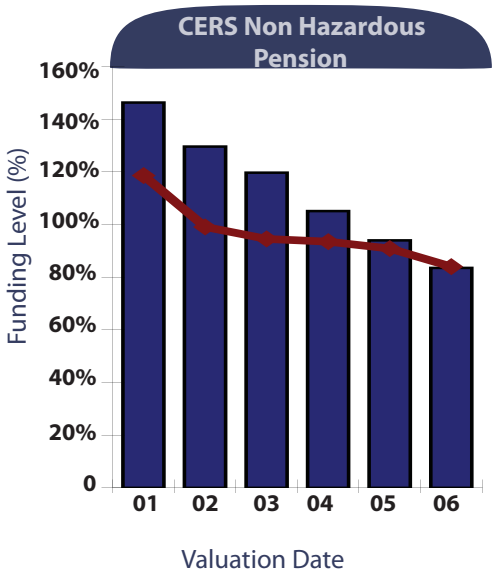
County Employees Retirement System
(Non-Hazardous Insurance Fund)

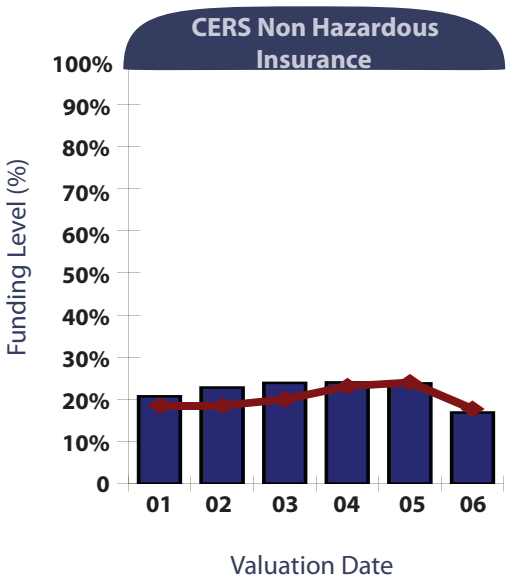
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/01	$1,793,710,768	$371,758,628	$331,066,746	$1,421,952,140	$1,462,644,022	20.7%	18.5%
6/30/02	$1,977,577,038	$450,497,307	$365,332,585	$1,527,079,731	$1,612,244,453	22.8%	18.5%
6/30/03	$2,176,963,259	$520,060,105	$435,667,125	$1,656,903,154	$1,741,296,134	23.9%	20.0%
6/30/04	$2,438,734,696	$585,399,072	$563,877,594	$1,853,335,624	$1,874,857,102	24.0%	23.1%
6/30/05	$2,788,754,654	$663,941,949	$668,485,367	$2,124,812,705	$2,120,269,287	23.8%	24.0%
6/30/06	$4,607,223,639	$777,726,590	$813,250,744	$3,829,497,049	$3,793,972,895	16.9%	17.7%

Actuarial

Market

The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).





Summary of Actuarially Unfunded Liabilities

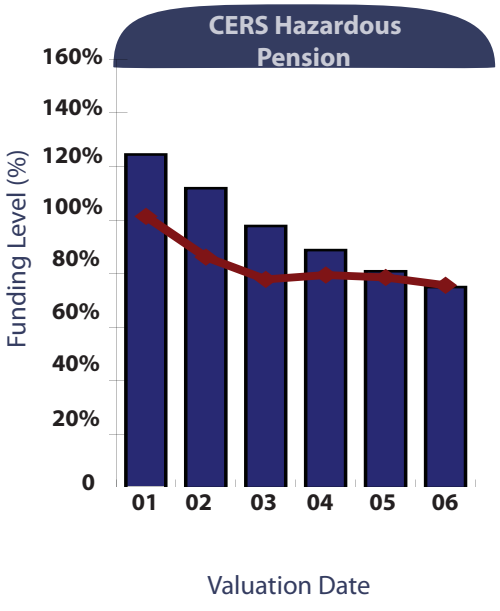
(As of June 30, 2006)

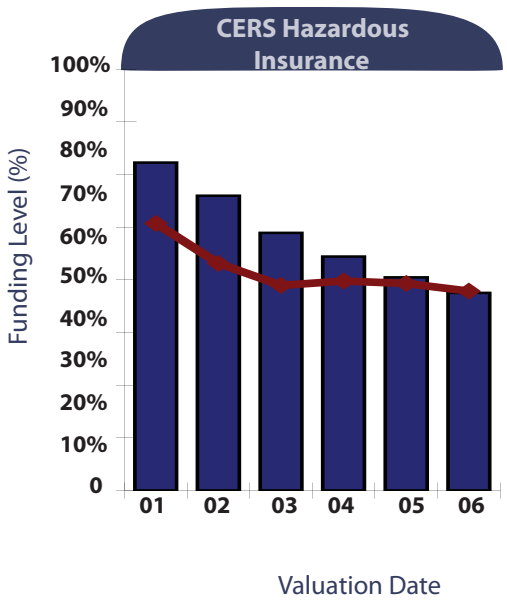
County Employees Retirement System
(Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30001	$1,193,860,442	$1,486,666,016	$1,211,154,618	($292,805,574)	($17,294,176)	124.5%	101.4%
6/30/02	$1,327,291,273	$1,485,511,793	$1,144,349,093	($158,220,520)	$182,942,180	111.9%	86.2%
6/30/03	$1,499,628,782	$1,467,004,856	$1,168,794,472	$32,623,926	$330,834,310	97.8%	77.9%
6/30/04	$1,640,830,120	$1,457,612,042	$1,305,011,472	$183,218,078	$335,818,648	88.8%	79.5%
6/30/05	$1,795,617,335	$1,452,353,023	$1,411,245,719	$343,264,312	$384,371,616	80.9%	78.6%
6/30/06	$2,020,142,770	$1,515,075,017	$1,528,845,357	$505,067,753	$491,297,413	75.0%	75.7%

County Employees Retirement System
(Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/01	$721,605,292	$197,875,249	$173,636,191	$523,730,043	$547,969,101	27.4%	24.1%
6/30/02	$781,184,974	$234,683,878	$187,533,847	$546,501,096	$593,651,127	30.0%	24.0%
6/30/03	$935,650,662	$269,190,080	$223,212,339	$666,460,582	$712,438,323	28.8%	23.9%
6/30/04	$1,025,684,477	$310,578,162	$297,734,286	$715,106,315	$727,950,191	30.3%	29.0%
6/30/05	$1,283,299,092	$359,180,461	$360,938,669	$924,118,631	$922,360,423	28.0%	28.1%
6/30/06	$1,928,481,371	$422,785,042	$441,278,796	$1,505,696,329	$1,487,202,575	21.9%	22.9%





The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Actuarial Section

Summary of Actuarially Unfunded Liabilities

(As of June 30, 2006)

State Police Retirement System
(Pension)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/01	$356,211,860	$456,160,709	$364,591,852	($99,948,849)	($8,379,992)	128.1%	102.4%
6/30/02	$380,790,346	$438,955,465	$328,744,331	($58,165,119)	$52,046,015	115.3%	86.3%
6/30/03	$414,881,459	$413,063,576	$319,116,232	$1,817,883	$95,765,227	99.6%	76.9%
6/30/04	$437,482,425	$385,077,195	$335,720,408	$52,405,230	$101,762,017	88.0%	76.7%
6/30/05	$458,593,576	$353,511,622	$339,405,873	$105,081,954	$119,187,703	77.1%	74.0%
6/30/06	$516,482,298	$344,016,197	$352,841,486	$172,466,101	$163,640,812	66.6%	68.3%

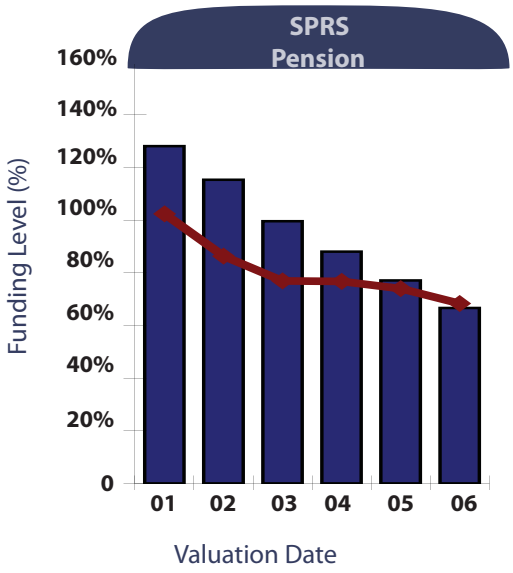
State Police Retirement System
(Insurance)

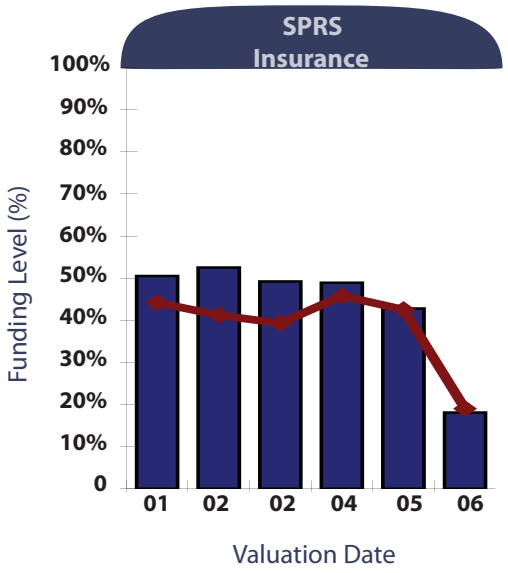
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/01	$158,261,479	$79,863,577	$69,925,891	$78,397,902	$88,335,588	50.5%	44.2%
6/30/02	$165,445,412	$86,867,391	$68,074,444	$78,578,021	$97,370,968	52.5%	41.2%
6/30/03	$184,501,205	$90,747,967	$72,533,617	$93,753,238	$111,967,588	49.2%	39.3%
6/30/04	$197,604,301	$96,622,908	$90,422,080	$100,981,393	$107,182,221	48.9%	45.8%
6/30/ 05	$234,159,510	$100,207,082	$99,408,106	$133,952,428	$134,751,404	42.8%	42.5%
6/30/06	$582,580,867	$105,580,269	$110,491,075	$477,000,598	$472,089,792	18.1%	19.0%

Actuarial

Market

The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).





Analysis of Financial Experience
KERS Non-Hazardous

(As of June 30, 2006)

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/2006	Insurance $ Gain (or Loss) For Year Ending 6/30/2006
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (205.8)	(193.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(2.6)	(1.9)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.2	0.2
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	16.8	15.8
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	15.3	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(17.9)	(16.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(186.1)	(0.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(1.2)	(1.1)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(197.7)	(97.7)
Gain (or Loss) During Year From Financial Experience	$ (579.0)	(295.3)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	(961.4)	(4,617.5)
Composite Gain (or Loss) During Year	$ (1,540.4)	(4,912.8)

Analysis of Financial Experience
KERS Hazardous
(As of June 30, 2006)

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/2006	Insurance $ Gain (or Loss) For Year Ending 6/30/2006
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (7.9)	(6.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.2	0.2
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.2	(0.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	4.8	4.1
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(2.3)	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(3.5)	(2.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(7.2)	(1.7)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(1.2)	(1.0)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(3.7)	(38.5)
Gain (or Loss) During Year From Financial Experience	$ (20.6)	(46.4)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution shortfall	(24.9)	(143.7)
Composite Gain (or Loss) During Year	$ (45.5)	(190.1)

Analysis of Financial Experience
CERS Non-Hazardous

(As of June 30, 2006)

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/2006	Insurance $ Gain (or Loss) For Year Ending 6/30/2006
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (74.3)	(25.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3.0)	(1.0)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.4)	(0.5)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	24.6	8.4
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	32.1	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(19.8)	(6.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(150.4)	(4.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.5	0.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(71.0)	(603.4)
Gain (or Loss) During Year From Financial Experience	$ (262.7)	(633.2)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution shortfall	(406.3)	(869.3)
Composite Gain (or Loss) During Year	$ (669.0)	(1,502.5)

Analysis of Financial Experience
CERS Hazardous
(As of June 30, 2006)

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/2006	Insurance $ Gain (or Loss) For Year Ending 6/30/2006
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (21.6)	(12.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(1.1)	(0.7)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.5	0.3
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	18.9	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(5.3)	(3.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(38.4)	(2.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(3.9)	(2.3)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	9.5	(127.6)
Gain (or Loss) During Year From Financial Experience	$ (41.4)	(149.0)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution shortfall	(111.3)	(358.7)
Composite Gain (or Loss) During Year	$ (152.7)	(507.7)

Analysis of Financial Experience
SPRS
(As of June 30, 2006)

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/2006	Insurance $ Gain (or Loss) For Year Ending 6/30/2006
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (3.9)	(1.8)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.2)	(0.1)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.6	0.3
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(1.7)	0.0
New Members. Additional unfunded accrued liability will produce a loss.	(0.5)	(0.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(10.7)	(1.8)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.4	0.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	0.9	14.9
Gain (or Loss) During Year From Financial Experience	$ (15.1)	11.5
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution shortfall	(48.9)	(343.0)
Composite Gain (or Loss) During Year	$ (64.0)	(331.5)

Solvency Test
(As of June 30, 2006)

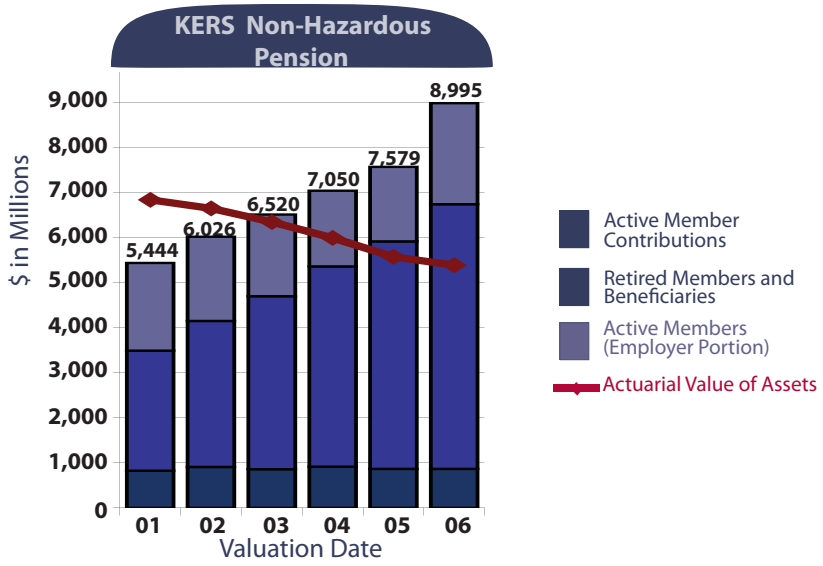
Kentucky Employees Retirement System
(Non-Hazardous Pension Fund)

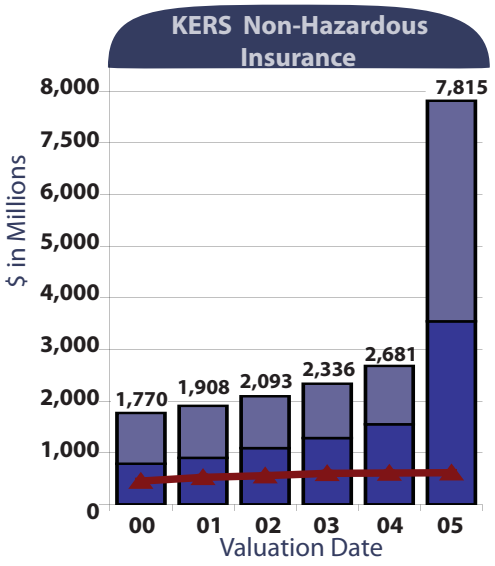
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/01	$825,433,562	$2,669,755,096	$1,948,846,636	$6,844,742,687	100.0%	100.0%	171.9%
6/30/02	$910,956,664	$3,242,343,193	$1,872,794,907	$6,654,084,196	100.0%	100.0%	133.5%
6/30/03	$859,895,312	$3,844,696,149	$1,815,871,727	$6,351,318,832	100.0%	100.0%	90.7%
6/30/04	$915,105,103	$4,452,864,748	$1,681,643,320	$6,000,513,743	100.0%	100.0%	37.6%
6/30/05	$866,044,474	$5,056,247,608	$1,656,782,757	$5,578,685,746	100.0%	93.2%	--
6/30/06	$866,050,799	$5,881,990,853	$2,246,784,595	$5,394,086,323	100.0%	77.0%	--

Kentucky Employees Retirement System
(Non-Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/01	$0	$784,547,826	$985,035,272	$449,630,605	100.0%	57.3%	--
6/30/02	$0	$900,313,022	$1,007,370,859	$521,250,455	100.0%	57.9%	--
6/30/03	$0	$1,089,606,122	$1,003,604,199	$553,885,082	100.0%	50.8%	--
6/30/04	$0	$1,282,214,660	$1,053,690,705	$600,586,961	100.0%	46.8%	--
6/30/05	$0	$1,550,619,458	$1,129,939,730	$607,068,351	100.0%	39.2%	--
6/30/06	$0	$3,543,125,375	$4,272,355,400	$611,350,765	100.0%	17.3%	----

[1] *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*





A solvency test provides measures of the plans ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 covered by actuarial assets over time.

Solvency Test
(As of June 30, 2006)

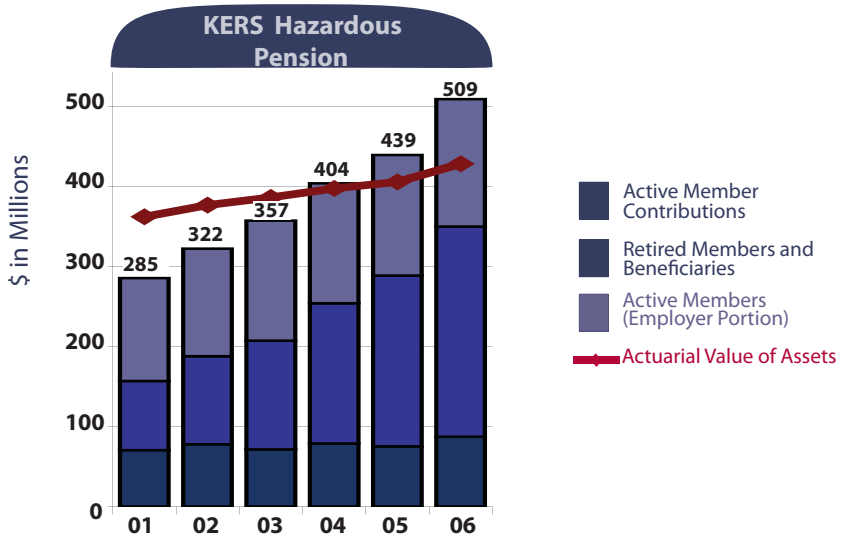
Kentucky Employees Retirement System
(Hazardous Pension Fund)

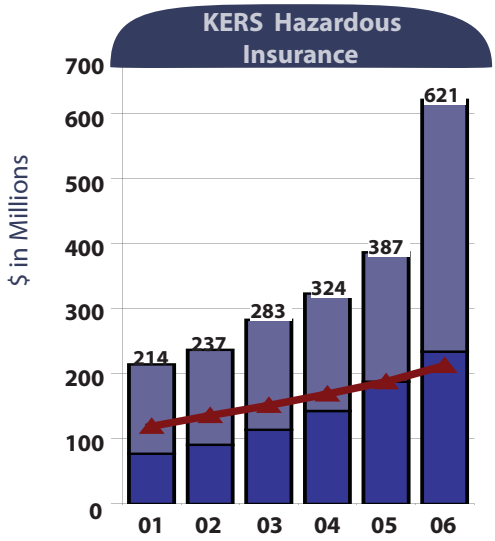
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/01	$70,405,915	$86,372,269	$128,415,577	$361,677,475	100.0%	100.0%	159.6%
6/30/02	$77,700,666	$110,048,474	$134,320,024	$376,384,302	100.0%	100.0%	140.4%
6/30/03	$71,414,721	$135,622,333	$149,842,079	$385,925,722	100.0%	100.0%	119.4%
6/30/04	$78,817,575	$175,102,848	$149,657,613	$397,212,763	100.0%	100.0%	95.7%
6/30/05	$75,098,321	$213,310,550	$150,585,386	$405,288,662	100.0%	100.0%	77.6%
6/30/06	$87,092,538	$262,446,606	$159,116,759	$427,984,172	100.0%	100.0%	49.3%

Kentucky Employees Retirement System
(Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/01	$0	$77,157,196	$137,293,626	$119,372,742	100.0%	100.0%	30.7%
6/30/02	$0	$90,978,506	$145,840,544	$135,874,582	100.0%	100.0%	30.8%
6/30/03	$0	$113,979,451	$169,198,884	$151,459,500	100.0%	100.0%	22.2%
6/30/04	$0	$142,872,557	$180,631,006	$169,158,879	100.0%	100.0%	14.6%
6/30/05	$0	$187,883,650	$198,961,045	$187,947,644	100.0%	100.0%	--
6/30/06	$0	$234,058,715	$387,179,141	$212,833,318	100.0%	90.9%	--

Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.





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Actuarial Section

Solvency Test
(As of June 30, 2006)

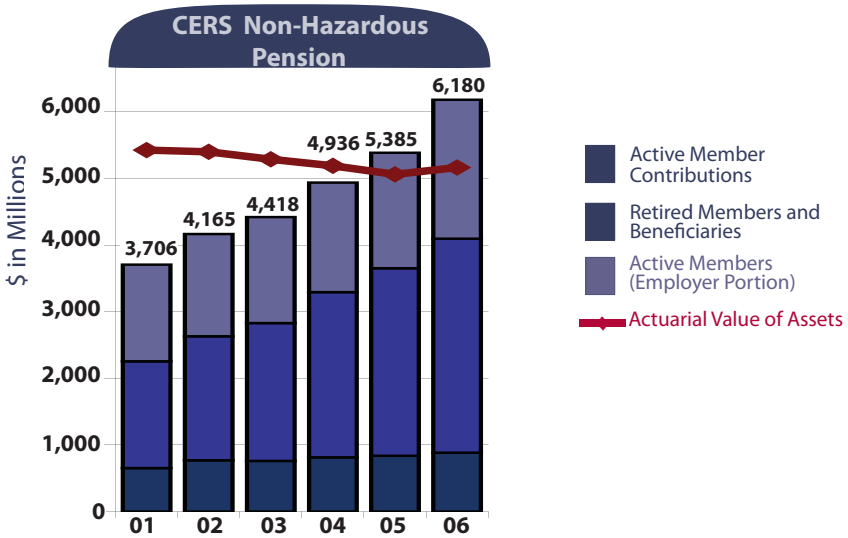
County Employees Retirement System
(Non-Hazardous Pension Fund)

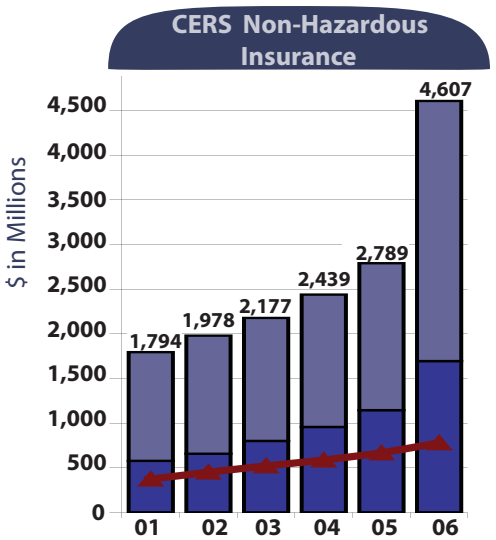
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/01	$653,242,370	$1,600,436,700	$1,452,603,142	$5,423,834,549	100.0%	100.0%	218.2%
6/30/02	$768,656,315	$1,861,419,517	$1,535,279,317	$5,397,787,158	100.0%	100.0%	180.3%
6/30/03	$759,938,261	$2,068,481,586	$1,589,177,955	$5,286,580,047	100.0%	100.0%	154.7%
6/30/04	$814,908,627	$2,478,195,080	$1,643,355,781	$5,187,851,530	100.0%	100.0%	115.3%
6/30/05	$837,513,907	$2,814,210,355	$1,733,432,428	$5,059,208,687	100.0%	100.0%	81.2%
6/30/06	$ 883,946,564	$3,210,095,023	$2,085,527,680	$5,162,894,136	100.0%	100.0%	51.3%

County Employees Retirement System
(Non-Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/01	$0	$575,836,839	$1,217,873,929	$371,758,628	100.0%	64.6%	--
6/30/02	$0	$656,812,900	$1,320,764,138	$450,497,307	100.0%	68.6%	--
6/30/03	$0	$799,777,264	$1,377,185,995	$520,060,105	100.0%	65.0%	--
6/30/04	$0	$955,930,091	$1,482,804,605	$585,399,072	100.0%	61.2%	--
6/30/05	$0	$1,144,219,107	$1,644,535,547	$663,941,949	100.0%	58.0%	--
6/30/06	$0	$1,694,600,143	$2,912,623,496	$777,726,590	100.0%	45.9%	--

[1] *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*





A solvency test provides measures of the plans ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 covered by actuarial assets over time.

Solvency Test
(As of June 30, 2006)

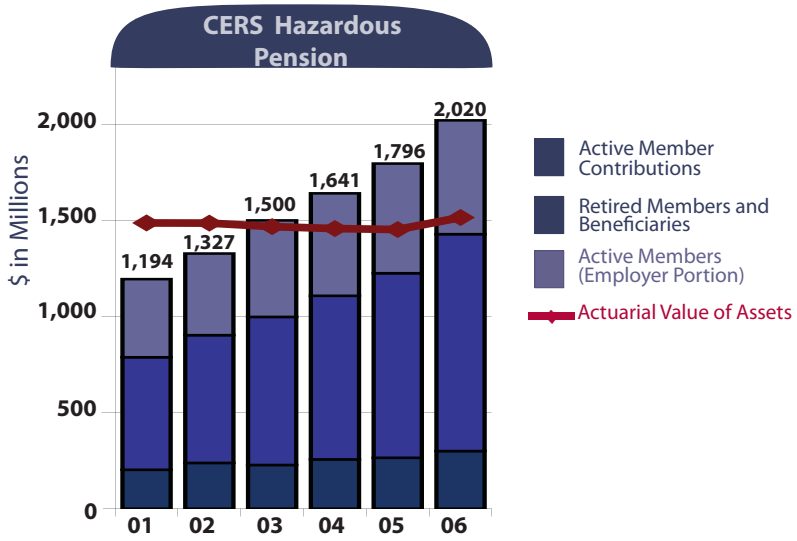
County Employees Retirement System
(Hazardous Pension Fund)

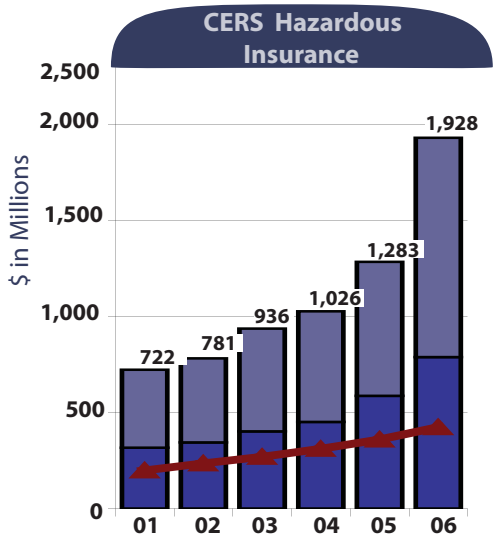
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/01	$202,572,754	$584,940,978	$406,346,710	$1,486,666,016	100.0%	100.0%	172.1%
6/30/02	$238,363,024	$664,188,862	$424,739,387	$1,485,511,793	100.0%	100.0%	137.3%
6/30/03	$227,629,402	$769,804,746	$502,194,634	$1,467,004,856	100.0%	100.0%	93.5%
6/30/04	$256,366,204	$851,354,443	$533,109,473	$1,457,612,042	100.0%	100.0%	65.6%
6/30/05	$264,913,465	$960,052,305	$570,651,565	$1,452,353,023	100.0%	100.0%	39.8%
6/30/06	$300,200,800	$1,128,164,618	$591,777,352	$1,515,075,017	100.0%	100.0%	14.7%

County Employees Retirement System
(Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/01	$0	$316,638,166	$404,967,126	$197,875,249	100.0%	62.5%	--
6/30/02	$0	$343,821,677	$437,363,297	$234,683,878	100.0%	68.3%	--
6/30/03	$0	$401,276,347	$534,374,315	$269,190,080	100.0%	67.1%	--
6/30/04	$0	$450,288,687	$575,395,790	$310,578,162	100.0%	69.0%	--
6/30/05	$0	$586,104,126	$697,194,966	$359,180,461	100.0%	61.3%	--
6/30/06	$0	$787,671,273	$1,140,810,098	$422,785,042	100.0%	53.7%	--

[1] *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*





A solvency test provides measures of the plans ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 covered by actuarial assets over time.

Solvency Test
(As of June 30, 2006)

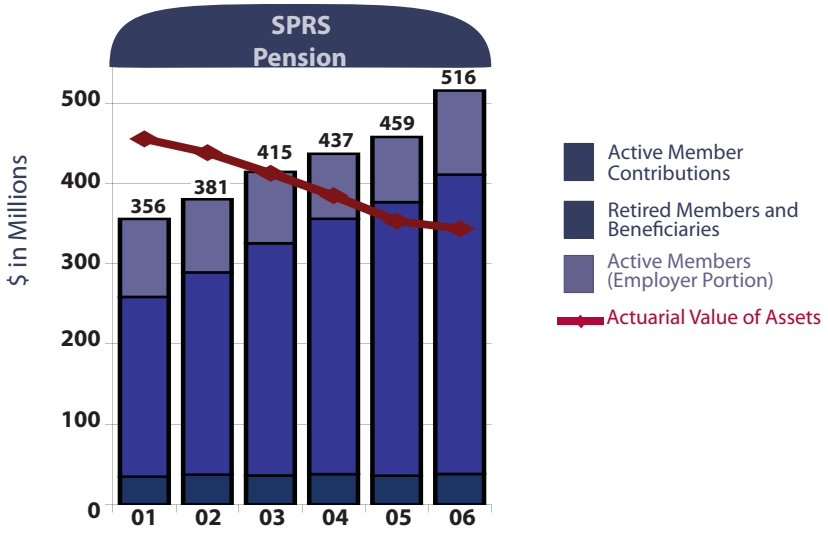
State Police Retirement System
(Pension Fund)

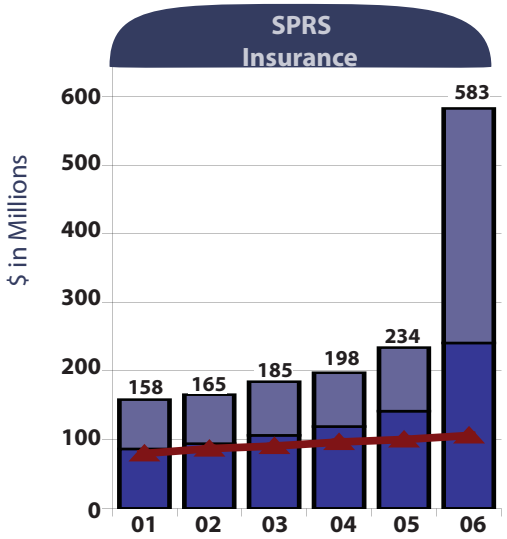
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/01	$34,338,478	$224,432,772	$97,440,610	$456,160,709	100.0%	100.0%	202.6%
6/30/02	$36,886,477	$252,498,613	$91,405,256	$438,955,613	100.0%	100.0%	163.6%
6/30/03	$35,832,095	$290,012,792	$89,036,572	$413,063,576	100.0%	100.0%	98.0%
6/30/04	$37,658,106	$318,664,694	$81,159,625	$385,077,195	100.0%	100.0%	35.4%
6/30/05	$35,670,717	$341,398,363	$81,524,496	$353,511,622	100.0%	93.1%	--
6/30/06	$37,866,774	$373,588,145	$105,027,379	$344,016,197	100.0%	81.9%	--

State Police Retirement System
(Insurance Fund)

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/01	$0	$86,469,110	$71,792,369	$79,863,577	100.0%	92.4%	--
6/30/02	$0	$94,205,237	$71,240,175	$86,867,391	100.0%	92.2%	--
6/30/03	$0	$106,317,750	$78,183,455	$90,747,967	100.0%	85.4%	--
6/30/04	$0	$119,104,851	$78,499,450	$96,622,908	100.0%	81.1%	--
6/30/05	$0	$141,585,694	$92,573,816	$100,207,082	100.0%	70.8%	--
6/30/06	$0	$240,913,868	$341,666,999	$105,580,269	100.0%	43.8%	--

[1] *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*





A solvency test provides measures of the plans ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 covered by actuarial assets over time.

Summary of Active Member Valuation Data

(As of June 30, 2006)

Kentucky Employees Retirement System
(Non-Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/01	N/A	47,780	$1,525,188,532	$31,921	4.5%	42.5	10.4
6/30/02	N/A	48,555	$1,597,447,963	$32,900	3.1%	41.5	10.1
6/30/03	N/A	49,158	$1,658,604,696	$33,740	2.6%	42.5	10.0
6/30/04	N/A	47,599	$1,645,412,496	$34,568	2.5%	42.9	10.0
6/30/05	324	47,118	$1,655,907,288	$35,144	1.7%	42.9	9.8
6/30/06	338	46,707	$1,702,230,777	$36,445	3.7%	43.0	9.7

Kentucky Employees Retirement System
(Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/01	N/A	4,228	$123,647,407	$29,245	1.8%	41.6	6.6
6/30/22	N/A	4,211	$125,371,604	$29,772	1.8%	41.8	6.9
6/30/03	N/A	4,189	$129,088,956	$30,816	3.5%	41.6	7.2
6/30/04	N/A	4,014	$126,664,812	$31,556	2.4%	42.7	7.6
6/30/05	26	4,274	$131,687,088	$30,811	(2.4%)	41.9	7.1
6/30/06	15	4,320	$138,747,320	$32,117	4.2%	41.6	7.0

County Employees Retirement System
(Non-Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[2]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/01	N/A	78,773	$1,597,653,320	$20,282	(0.3%)	43.4	7.3
6/30/02	N/A	79,850	$1,688,460,789	$21,145	4.3%	43.0	7.6
6/30/03	N/A	82,288	$1,796,451,180	$21,831	3.2%	43.8	7.6
6/30/24	N/A	80,922	$1,826,870,880	$22,576	3.4%	44.8	7.9
6/30/05	1,116	81,240	$1,885,275,000	$23,206	2.8%	45.0	8.1
6/30/06	1,099	83,694	$1,982,437,473	$23,687	2.1%	45.1	8.1

[1]Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuate date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2006.

N/A Not Available

Summary of Active Member Valuation Data

(As of June 30, 2006)

County Employees Retirement System (Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/01	N/A	8,586	$322,819,064	$37,598	2.7%	37.2	7.6
6/30/02	N/A	8,949	$346,319,146	$38,699	2.9%	36.3	7.8
6/30/03	N/A	9,286	$374,700,732	$40,351	4.3%	37.3	7.8
6/30/04	N/A	9,349	$392,562,624	$41,990	4.1%	38.1	8.1
6/30/05	284	9,464	$411,121,728	$43,441	3.5%	38.0	8.2
6/30/06	292	9,635	$426,927,550	$44,310	2.0%	37.8	8.3

State Police Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/01	1	1,016	$44,209,944	$43,514	2.1%	36.9	11.8
6/30/02	1	1,002	$43,961,844	$43,874	0.8%	35.7	11.4
6/30/03	1	1,019	$43,760,832	$42,945	(2.1%)	35.9	10.9
6/30/04	1	999	$43,835,208	$43,879	2.2%	36.4	10.7
6/30/05	1	987	$43,720,092	$44,296	1.0%	36.5	10.6
6/30/06	1	1,028	$47,743,865	$46,443	4.8%	36.5	10.5

[1]Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuate date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2006.

N/A Not Available

Summary of Retired Member Valuation Data

(As of June 30, 2006)

Kentucky Employees Retirement System (Non-Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances[1]	% Increase in Allowances	Average Annual Allowance
6/30/01	N/A	N/A	N/A	N/A	N/A	N/A
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	2,148	1,618	27,233	$393,048,800	N/A	$14,433
6/30/04	2,473	814	28,892	$449,410,400	14.34	$15,555
6/30/05	2,481	603	30,770	$509,347,800	13.34	$16,553
6/30/06	2,481	1,111	32,140	$566,167,003	11.31	$17,611

Kentucky Employees Retirement System (Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/01	N/A	N/A	N/A	N/A	N/A	N/A
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	170	21	1,357	$12,974,700	N/A	$9,561
6/30/04	227	35	1,549	$16,099,000	24.08	$10,393
6/30/05	234	31	1,752	$19,640,700	22.00	$11,210
6/30/06	256	28	1,980	$23,381,537	19.25	$11,809

County Employees Retirement System (Non-Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/2001	N/A	N/A	N/A	N/A	N/A	N/A
6/30/2002	N/A	N/A	N/A	N/A	N/A	N/A
6/30/2003	2,411	1,466	27,092	$219,848,200	N/A	$8,115
6/30/2004	2,805	768	29,129	$247,534,300	12.59	$8,498
6/30/2005	2,808	590	31,347	$279,590,300	12.95	$8,919
6/30/06	2,782	1,027	33,102	$308,269,651	10.26	$9,313

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

N/A Not Available

Summary of Retired Member Valuation Data

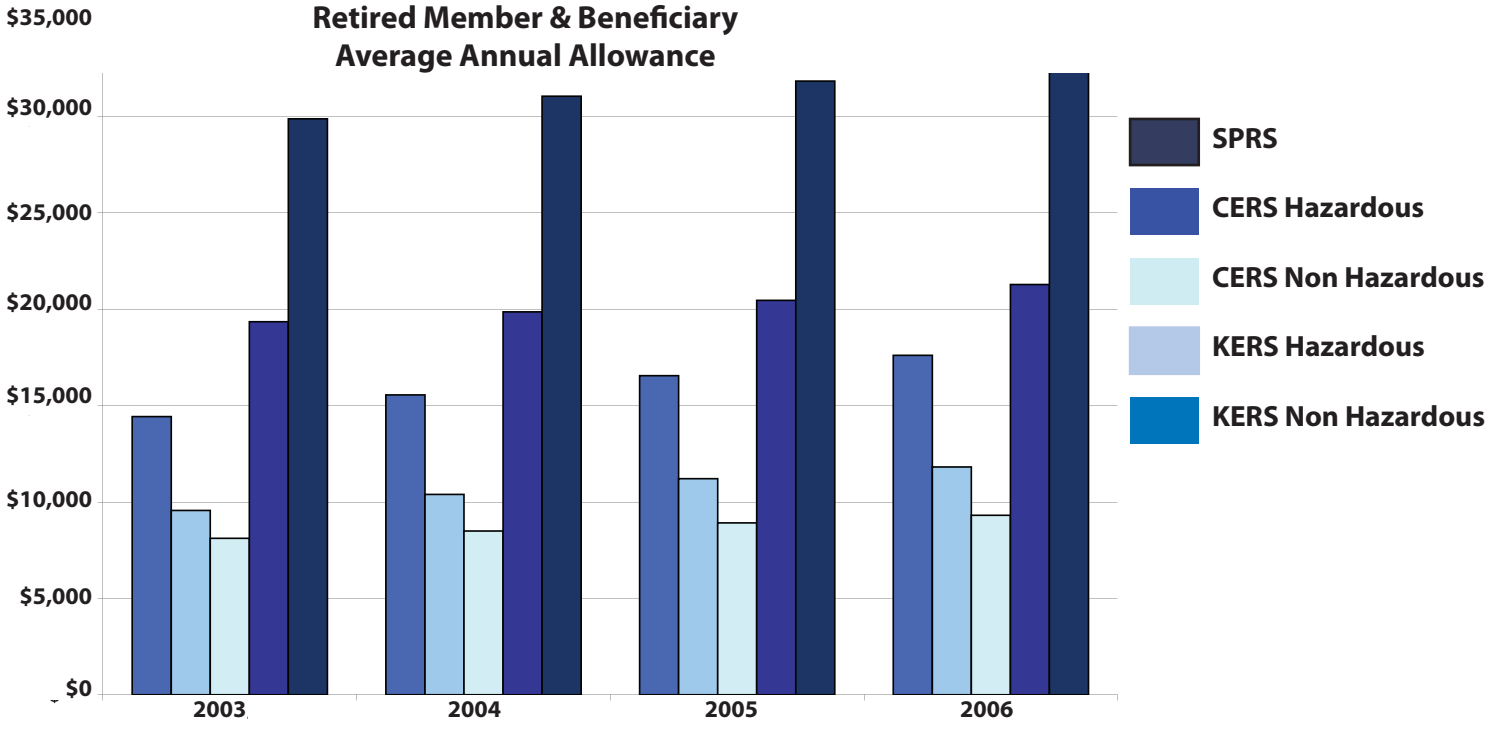
(As of June 30, 2006)

County Employees Retirement System (Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/01	N/A	N/A	N/A	N/A	N/A	N/A
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	293	39	3,737	$72,322,200	N/A	$19,353
6/30/04	343	75	4,005	$79,559,200	10.01	$19,865
6/30/05	403	47	4,361	$89,224,700	12.15	$20,460
6/30/06	427	76	4,712	$100,290,052	12.40	$21,284

State Police Retirement System

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/01	N/A	N/A	N/A	N/A	N/A	N/A
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	53	9	941	$28,115,500	N/A	$29,878
6/30/04	62	11	992	$30,805,600	9.57	$31,054
6/30/05	50	6	1,036	$32,983,900	7.07	$31,838
6/30/06	43	10	1,067	$34,651,251	5.06	$32,475



Summary of Benefit Provisions
KERS & CERS Non Hazardous Plans

Plan Funding

State statute requires active members to contribute 5% of creditable compensation. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS rates are subject to state budget approval.

Membership Eligibility

For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility

Age	*Years of Service*	*Allowance Reduction*
65	4	None
Any	27	None
55	5	5% per year for five years before age 65 or 27 years of service. 4% for each year thereafter.
Any	25	5% each year for five years before age 65 or 27 years of service.

Benefit Formula

Final Compensation	x	*Benefit Factor*		x	*Years of Service*
Average of the five highest, or if eligible, three highest fiscal year earnings. To be eligible for three-high final compensation, member must have 27 years of service, age and service of 75 years, and retire prior to 1/09.		KERS 1.97% if:	Member does not have 13 months credit from 1/98- 1/99.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if:	Member has 13 months credit from 1/98- 1/99.		
		KERS 2.20% if:	20 or more years of service, and retires by 1/09.		
		CERS 2.20% if:	Member begins participating prior to 8/1/04.		
		CERS 2.00% if:	Member begins participating on or after 8/1/04.		

Summary of Benefit Provisions
KERS & CERS Non Hazardous Plans

Post-Retirement Death Benefits
If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits
Members participating before 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members disabled as a result of a single *duty-related injury* or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits
The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment
Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the CPI-U for the most recent calendar year, not to exceed five percent (5%). The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits
For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 or after are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased annually by the CPI-U.

Refunds
Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts
Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

Summary of Benefit Provisions
KERS & CERS Hazardous Plans & SPRS

Plan Funding

State statute requires active members to contribute 8% of creditable compensation. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS & SPRS rates are subject to state budget approval.

Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

Retirement Eligibility

Age	*Years of Service*	*Allowance Reduction*
55	5	None
Any	20	None
50	15	5.5% per year for five years before age 55 or 20 years of service.

Benefit Formula

Final Compensation	X	*Benefit Factor*	X	*Years of Service*
Average of the three highest fiscal year earnings.		KERS 2.49% CERS 2.50% SPRS 2.50%		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).

Disability Benefits

Members hired before 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members hired on or after 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% Final Rate of Pay or the amount calculated under the Benefit Formula noted above based upon actual service.

Members disabled as a result of a single *duty-related injury* or act of violence related to their job may be eligible for special benefits.

Summary of Benefit Provisions
KERS & CERS Hazardous Plans & SPRS

Pre-Retirement Death Benefits
The beneficiary of a deceased active member will be *eligible for a monthly* benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits
If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment
Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent (5%). The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits
For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 or after are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15 for each year of earned service increased annually by the CPI-U.

Refunds
Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts
Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

Changes in Benefit Provisions

HB 380: 2006 Regular Session
KERS & SPRS Employer Rate Reductions

Employer Contribution Rates: HB 380, the Executive Branch Budget Bill, effectively reduced the employer contribution rate recommended by the actuary and adopted by the Board for KERS and SPRS for fiscal year 2006-2007 and 2007-2008. The recommended rate and the rate budgeted by HB 380 are provided in the statistical section.

Statistical Section

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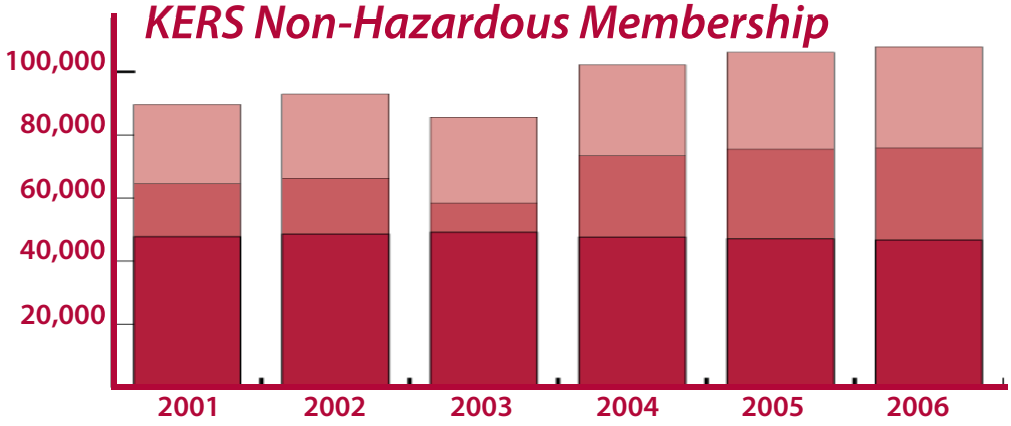
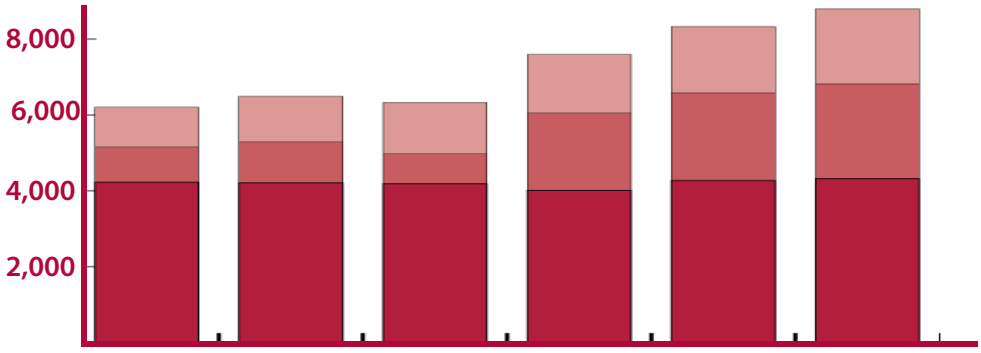
KERS Non-Hazardous Membership



	2001	2002	2003	2004	2005	2006
Retired	25,113	26,703	27,233	28,892	30,770	32,140
Inactive	16,741	17,714	9,241	25,775	28,345	29,143
Active	47,780	48,555	49,158	47,599	47,118	46,707
Total	89,634	92,972	85,632	102,266	106,233	107,990

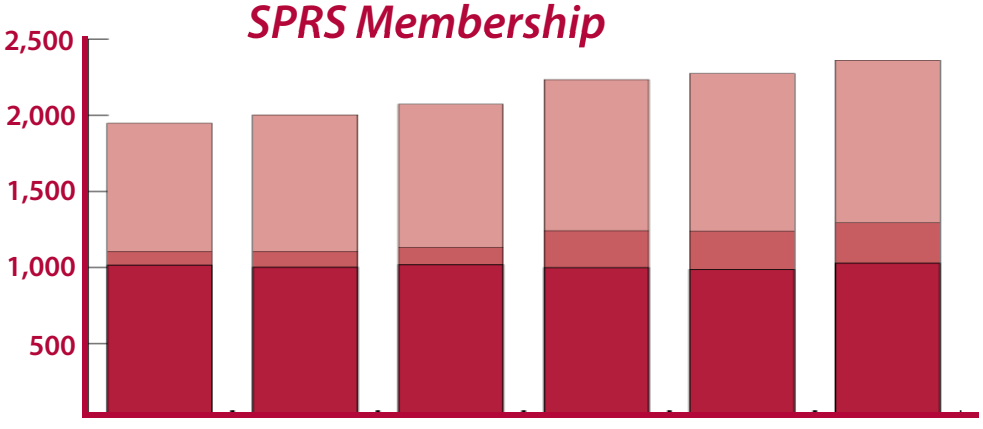
Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

KERS Hazardous Membership



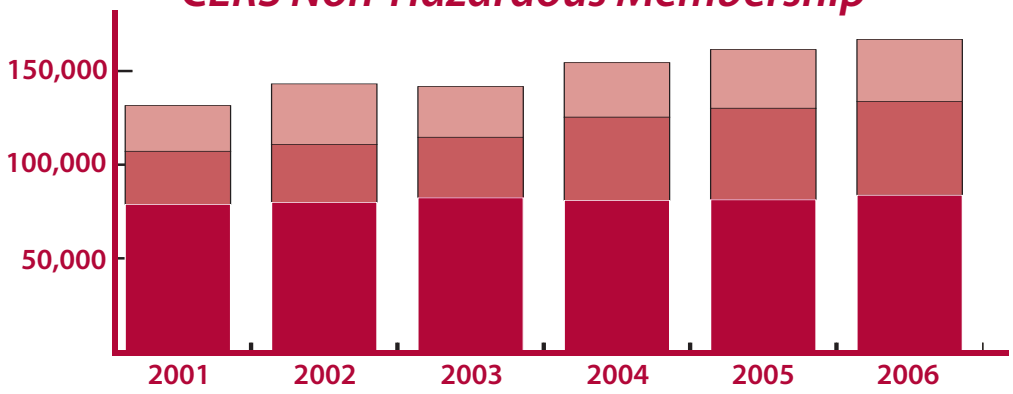
	2001	2002	2003	2004	2005	2006
Retired	1,053	1,208	1,357	1,549	1,752	1,981
Inactive	922	1,073	782	2,032	2,304	2,501
Active	4,228	4,211	4,189	4,014	4,274	4,320
Total	6,203	6,492	6,328	7,595	8,330	8,802

SPRS Membership



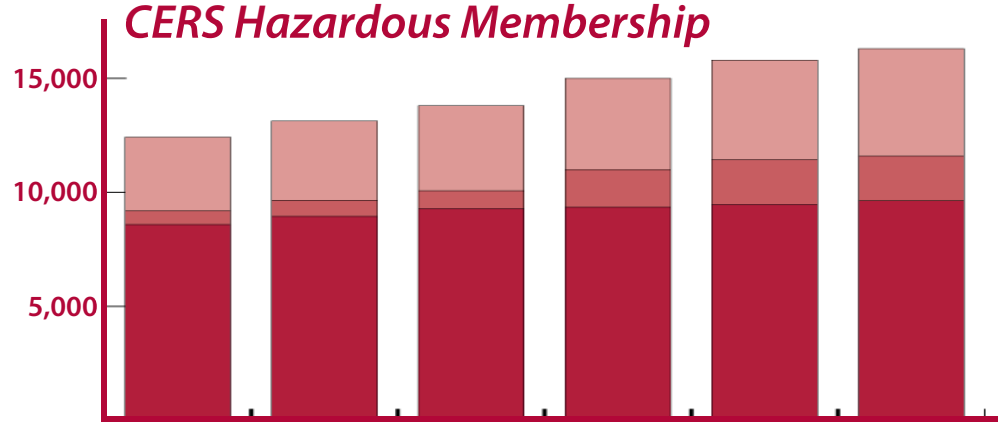
	2001	2002	2003	2004	2005	2006
Retired	842	897	941	992	1,036	1,067
Inactive	90	103	113	243	252	266
Active	1,016	1,002	1,019	999	987	1,028
Total	1,948	2,002	2,073	2,234	2,275	2,361

CERS Non-Hazardous Membership



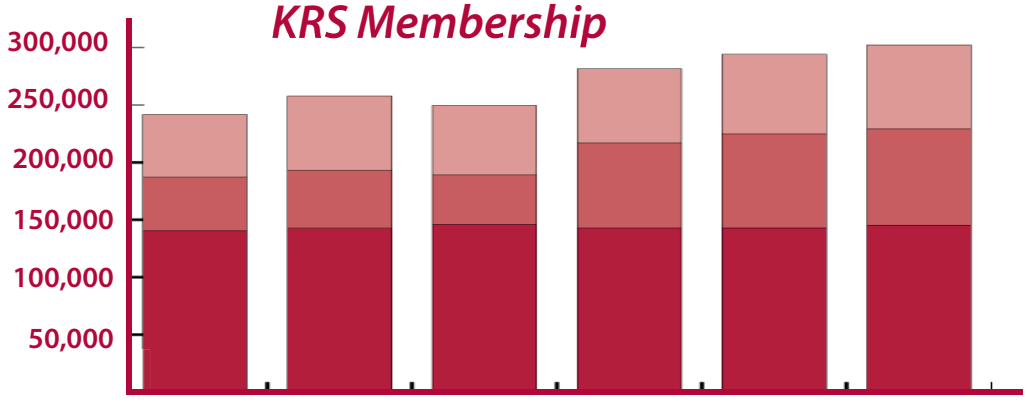
	2001	2002	2003	2004	2005	2006
Retired	24,415	32,326	27,092	29,129	31,347	33,102
Inactive	28,356	30,978	32,326	44,419	48,869	50,046
Active	78,773	79,850	82,288	80,922	81,240	83,694
Total	131,544	143,154	141,706	154,470	161,456	165,786

CERS Hazardous Membership



	2001	2002	2003	2004	2005	2006
Retired	3,221	3,483	3,737	4,005	4,361	4,712
Inactive	610	700	781	1,648	1,971	1,955
Active	8,586	8,949	9,286	9,349	9,464	9,635
Total	12,417	13,132	13,804	15,002	15,796	16,302

KRS Membership



	2001	2002	2003	2004	2005	2006
Retired	54,644	64,617	60,360	64,567	69,266	73,002
Inactive	46,719	50,568	43,243	74,117	81,741	83,911
Active	140,383	142,567	145,940	142,883	143,083	145,384
Total	241,746	257,752	249,543	281,567	294,090	302,297

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

Schedule of Participating Employers

Kentucky Employees Retirement System

Agency Classification	Number of Agencies	Number of Employees
Agencies Reporting Through State Payroll	144	35,569
Other Agencies (universities, mental health boards, health departments)	143	14,513
Special Districts and Boards	4	488
Child Support Offices (county attorneys)	59	173
Other State-Administered Retirement Systems	3	284
TOTAL	353	51,027

County Employees Retirement System

Agency Classification	Number of Agencies	Number of Employees
Area Development Districts	13	14,513
Boards of Education	176	48,135
Cities	214	6,309
County Attorneys	60	586
County Clerks	13	544
County Government Agencies	261	21,203
Fire Departments	64	816
Hospitals	3	329
Jailers	9	432
Libraries	83	959
Planning Commissions	10	169
Police Departments	95	714
Police & Fire Departments (combined)	60	3,311
Sanitation Districts	4	16
Sheriff Departments	53	1,068
Special Districts and Boards	167	1,068
Utility Boards	102	3,242
Urban County Government Agencies	4	1,748
TOTAL	1,391	93,329

State Police Retirement System

Agency Classification	Number of Agencies	Number of Employees
Kentucky State Police-Uniformed Officers	**1**	**1,028**

Principal Participating Employers

Kentucky Employees Retirement System

Participating Employer	Rank	Covered Employees	% of Total System
Health & Family Services Cabinet: Department for Community Based Services	1	4,511	8.84%
Transportation: Department of Highways	2	3,971	7.78%
Justice & Public Safety Cabinet: Department of Corrections	3	3,530	6.92%
Office of Human Resource Management	4	1,726	3.38%
Justice & Public Safety Cabinet: Department of Juvenile Justice	5	1,500	2.94%
Administrative Office of the Courts	6	1,323	2.59%
Bluegrass Regional Mental Health/Mental Retardation Board	7	1,260	2.47%
Seven County Services Inc.	8	1,117	2.19%
Kentucky Department of Parks	9	1,091	2.14%
Unified Prosecutorial System (Child Support Offices)	10	1,048	2.05%
All Others		29,950	58.69%
TOTAL		51,027	100.0%

County Employees Retirement System

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board of Education	1	6,525	6.99%
Louisville/Jefferson County Metro	2	3,298	3.53%
Circuit Clerks	3	2,517	2.70%
Louisville/Jeferson County Metro (Police, Fire, EMS)	4	2,294	2.46%
Fayette County Board of Education	5	1,781	1.91%
Lexington/Fayette Urban County Government	6	1,571	1.68%
Hardin County Board of Education	7	1,050	1.13%
Boone County Board of Education	8	964	1.03%
Pike County Board of Education	9	838	0.90%
Warren County Board of Education	10	824	0.88%
All Others		71,666	76.79%
TOTAL		93,329	100.0%

Net Plan Assets by System

Kentucky Employees Retirement System

(Dollars in Thousands)

	Non-Hazardous			Hazardous		
	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2001	$5,484,564	$396,254	$5,880,818	$305,544	$107,592	$413,136
June 30 2002	5,005,191	465,665	5,470,856	301,800	109,769	411,569
June 30 2003	4,929,319	487,071	5,416,390	320,513	125,522	446,035
June 30 2004	5,258,995	587,681	5,846,676	366,568	162,127	528,695
June 30 2005	5,362,631	610,901	5,973,532	398,308	188,871	587,179
June 30 2006	5,440,133	612,643	6,052,776	437,030	223,523	660,553

County Employees Retirement System

(Dollars in Thousands)

	Non-Hazardous			Hazardous		
	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2001	$4,397,347	$331,067	$4,728,414	$1,211,155	$173,636	$1,384,791
June 30 2002	4,126,756	365,333	4,492,089	1,144,349	187,534	1,331,883
June 30 2003	4,175,825	435,500	4,611,325	1,168,776	223,168	1,391,944
June 30 2004	4,613,335	563,877	5,177,212	1,305,012	297,737	1,602,749
June 30 2005	4,893,600	668,485	5,562,085	1,411,246	360,940	1,772,186
June 30 2006	5,191,377	813,251	6,004,628	1,528,845	441,279	1,970,124

State Police Retirement System

(Dollars in Thousands)

	Pension	Insurance	Total
June 30 2001	$364,592	$69,926	$434,518
June 30 2002	328,744	68,074	396,818
June 30 2003	319,115	72,538	391,653
June 30 2004	335,721	90,420	426,141
June 30 2005	339,406	99,408	438,814
June 30 2006	352,841	110,491	463,332

Kentucky Retirement Systems Total

(Dollars in Thousands)

	Pension	Insurance	Total
June 30 2001	$11,763,200	$1,078,475	$12,841,675
June 30 2002	10,906,841	1,196,375	12,103,216
June 30 2003	10,913,548	1,343,799	12,257,347
June 30 2004	11,879,631	1,701,842	13,581,473
June 30 2005	12,405,191	1,928,605	14,333,796
June 30 2006	12,950,226	2,201,187	15,151,413

Changes in Net Plan Assets by System

Kentucky Employees Retirement System Non-Hazardous Pension Fund

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
Additions						
Member Contributions	$106,648	$111,992	$137,124	$129,077	$127,801	$107,607
Employer Contributions	$23,482	$1,760	$7,597	$21,697	$50,333	$60,681
Net Investment Income	-$360,648	-$236,405	$196,106	$651,532	$462,638	$504,361
Total Additions	**-$230,518**	**-$122,653**	**$340,827**	**$802,306**	**$640,772**	**$672,649**
Deductions						
Benefit Payments	$291,704	$345,666	$404,896	$459,367	$522,396	$577,947
Refunds	$6,968	$6,657	$7,258	$8,001	$8,824	$9,632
Administrative Expenses	$3,826	$4,399	$4,959	$5,262	$5,916	$7,568
Other Expenses	-$125	-$2	$0	$0	$0	$0
Total Deductions	**$302,373**	**$356,720**	**$417,113**	**$472,630**	**$537,136**	**$595,147**
Change in Net Assets	**-$532,892**	**-$479,373**	**-$76,286**	**$329,676**	**$103,636**	**$77,502**

Kentucky Employees Retirement System Non-Hazardous Insurance Fund

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
Additions						
Employer Contributions	$66,875	$65,335	$65,335	$78,017	$51,432	$47,635
Net Investment Income	-$16,293	$19,582	$8,050	$83,064	$47,823	$65,839
Other Income	$0	$0	$0	$0	$0	$5,770
Total Additions	**$50,582**	**$84,917**	**$73,385**	**$161,081**	**$99,255**	**$119,244**
Deductions						
Benefit Payments	$37,301	$43,738	$51,586	$59,987	$75,571	$95,823
Administrative Expenses	$308	$345	$393	$484	$464	$1,679
Other Expenses	$0	$0	$0	$0	$0	$20,000
Total Deductions	**$37,609**	**$44,083**	**$51,979**	**$60,471**	**$76,035**	**$117,502**
Change in Net Assets	**$12,973**	**$69,410**	**$21,406**	**$100,610**	**$23,220**	**$1,742**

Changes in Net Plan Assets by System

Kentucky Employees Retirement System
Hazardous Pension Fund

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
Additions						
Member Contributions	$10,577	$10,807	$11,553	$11,548	$11,625	$12,056
Employer Contributions	$10,627	$7,934	$7,322	$9,769	$9,758	$10,803
Net Investment Income	-$8,059	-$10,786	$14,742	$43,403	$33,123	$41,680
Total Additions	**$13,145**	**$7,954**	**$33,617**	**$64,720**	**$54,506**	**$64,539**
Deductions						
Benefit Payments	$7,996	$10,203	$13,373	$16,863	$20,495	$23,736
Refunds	$1,253	$1,141	$1,160	$1,410	$1,760	$1,436
Administrative Expenses	$302	$354	$404	$392	$511	$645
Other Expenses	-$29	-$1	$0	$0	$0	$0
Total Deductions	**$9,522**	**$11,698**	**$14,937**	**$18,665**	**$22,766**	**$25,817**
Change in Net Assets	**$3,623**	**-$3,744**	**$18,680**	**$46,055**	**$31,740**	**$38,722**

Kentucky Employees Retirement System
Hazardous Insurance Fund

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
Additions						
Employer Contributions	$13,226	$15,887	$15,883	$14,959	$15,653	$17,012
Net Investment Income	-$2,886	-$11,229	$2,835	$25,206	$15,999	$24,128
Other Income	$0	$0	$0	$0	$0	$88
Total Additions	**$10,340**	**$4,658**	**$18,718**	**$ 40,165**	**$31,652**	**$41,228**
Deductions						
Benefit Payments	$1,984	$2,453	$2,938	$3,539	$4,853	$6,513
Administrative Expenses	$25	$29	$27	$21	$55	$63
Other Expenses	$0	$0	$0	$0	$0	$0
Total Deductions	**$2,009**	**$2,482**	**$2,965**	**$3,560**	**$4,908**	**$6,576**
Change in Net Assets	**$8,331**	**$2,177**	**$15,753**	**$36,605**	**$26,744**	**$34,652**

Changes in Net Plan Assets by System

County Employees Retirement System
Non-Hazardous Pension Fund

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
Additions						
Member Contributions	$101,597	$122,428	$125,301	$122,484	$127,637	$112,372
Employer Contributions	$48,914	$5,528	$11,856	$44,028	$54,617	$90,834
Net Investment Income	-$241,107	-$186,375	$160,110	$551,669	$413,672	$444,092
Total Additions	**-$90,596**	**-$58,419**	**$297,267**	**$718,181**	**$595,926**	**$647,298**
Deductions						
Benefit Payments	$170,256	$196,659	$230,317	$260,643	$294,590	$325,135
Refunds	$8,994	$8,325	$10,213	$11,334	$11,042	$11,589
Administrative Expenses	$6,174	$7,187	$8,244	$8,694	$10,029	$12,797
Other Expenses	-$213	$0	$0	$0	$0	$0
Total Deductions	**$185,211**	**$212,171**	**$248,774**	**$280,671**	**$315,661**	**$349,521**
Change in Net Assets	**-$275,808**	**-$270,590**	**$48,493**	**$437,510**	**$280,265**	**$297,777**

County Employees Retirement System
Non-Hazardous Insurance Fund

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
Additions						
Employer Contributions	$62,292	$102,151	$99,235	$89,344	$107,632	$128,868
Net Investment Income	-$10,988	-$34,899	$10,625	$86,080	$55,723	$83,991
Other Income	$0	$0	$0	$0	$0	$6,365
Total Additions	**$51,304**	**$67,252**	**$109,860**	**$175,424**	**$163,355**	**$219,224**
Deductions						
Benefit Payments	$27,539	$32,726	$39,387	$46,654	$58,262	$72,919
Administrative Expenses	$244	$260	$306	$393	$485	$1,539
Other Expenses	$0	$0	$0	$0	$0	$0
Total Deductions	**$27,783**	**$32,986**	**$39,693**	**$47,047**	**$58,747**	**$74,458**
Change in Net Assets	**$23,521**	**$34,265**	**$70,167**	**$128,377**	**$104,608**	**$144,766**

Changes in Net Plan Assets by System

County Employees Retirement System
Hazardous Pension Fund

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
Additions						
Member Contributions	$27,279	$37,096	$36,203	$38,668	$39,515	$39,055
Employer Contributions	$20,983	$11,055	$16,906	$27,641	$39,948	$49,976
Net Investment Income	-$58,887	-$49,057	$46,212	$154,628	$119,901	$132,915
Total Additions	**-$10,625**	**-$906**	**$99,321**	**$220,937**	**$199,364**	**$221,946**
Deductions						
Benefit Payments	$56,520	$63,494	$72,532	$81,422	$90,119	$101,087
Refunds	$1,319	$1,770	$1,794	$2,520	$2,139	$2,147
Administrative Expenses	$512	$635	$737	$759	$872	$1,113
Other Expenses	-$194	$0	$0	$0	$0	$0
Total Deductions	**$58,157**	**$65,900**	**$75,063**	**$84,701**	**$93,130**	**$104,347**
Change in Net Assets	**-$68,782**	**-$66,806**	**$24,258**	**$136,236**	**$106,234**	**$117,599**

County Employees Retirement System
Hazardous Insurance Fund

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
Additions						
Employer Contributions	$32,149	$45,730	$45,244	$47,037	$55,552	$64,854
Net Investment Income	-$6,562	-$18,551	$5,361	$44,337	$29,819	$98
Other Income	$0	$0	$0	$0	$0	$45,317
Total Additions	**$25,587**	**$27,179**	**$50,605**	**$91,374**	**$85,371**	**$110,269**
Deductions						
Benefit Payments	$11,531	$13,166	$14,866	$16,700	$21,985	$29,717
Administrative Expenses	$109	$115	$105	$105	$183	$213
Other Expenses	$0	$0	$0	$0	$0	$0
Total Deductions	**$11,640**	**$13,281**	**$14,971**	**$16,805**	**$22,168**	**$29,930**
Change in Net Assets	**$13,948**	**$13,898**	**$35,634**	**$74,569**	**$63,203**	**$80,339**

Changes in Net Plan Assets by System

State Police Retirement System
Pension Fund

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
Additions						
Member Contributions	$4,138	$4,499	$4,674	$4,875	$4,228	$4,814
Employer Contributions	$1,516	-$18	-$20	$1,153	$2,852	$4,244
Net Investment Income	-$29,856	-$15,388	$13,755	$41,642	$29,761	$39,347
Total Additions	**-$24,202**	**-$10,906**	**$18,409**	**$47,670**	**$36,841**	**$48,405**
Deductions						
Benefit Payments	$22,644	$24,839	$27,862	$30,877	$32,921	$34,703
Refunds	$80	$25	$97	$96	$131	$133
Administrative Expenses	$64	$76	$86	$91	$104	$134
Other Expenses	-$52	$1	$0	$0	$0	$0
Total Deductions	**$22,737**	**$24,941**	**$28,045**	**$31,064**	**$33,156**	**$34,970**
Change in Net Assets	**-$46,939**	**-$35,848**	**-$9,636**	**$16,606**	**$3,685**	**$13,435**

State Police Retirement System
Insurance Fund

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
Additions						
Employer Contributions	$8,113	$9,580	$7,654	$8,456	$6,974	$6,880
Net Investment Income	-$4,029	-$7,382	$1,360	$14,449	$8,279	$12,082
Other Income	$0	$0	$0	$0	$0	$5
Total Additions	**$4,084**	**$2,198**	**$9,014**	**$22,905**	**$15,253**	**$18,967**
Deductions						
Benefit Payments	$3,547	$4,020	$4,519	$4,992	$6,221	$7,816
Administrative Expenses	$28	$29	$31	$31	$44	$68
Other Expenses	$0	$0	$0	$0	$0	$0
Total Deductions	**$3,575**	**$4,049**	**$4,550**	**$5,023**	**$6,265**	**$7,884**
Change in Net Assets	**$509**	**-$1,851**	**$4,464**	**$17,882**	**$8,988**	**$11,083**

Schedule of Benefit Expenses by Type

KERS Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2000-01					
Average Benefit	$727	$1,163	$750	$601	$980
Number	3,779	15,101	1,902	3,595	24,377
Total Monthly Benefits	$2,746,184	$17,561,789	$1,426,821	$2,162,372	$23,897,166
% of Total Monthly Benefits	11.5%	73.5%	6.0%	9.0%	100.0%
FY 2001-02					
Average Benefit	$784	$1,314	$783	$650	$1,104
Number	3,714	16,561	1,913	3,659	25,847
Total Monthly Benefits	$2,912,068	$21,755,957	$1,498,690	$2,377,149	$28,543,863
% of Total Monthly Benefits	10.2%	76.2%	5.3%	8.3%	100.0%
FY 2002-03					
Average Benefit	$822	$1,430	$809	$688	$1,203
Number	3,706	17,917	1,922	3,708	27,253
Total Monthly Benefits	$3,045,409	$25,626,447	$1,555,628	$2,551,366	$32,778,849
% of Total Monthly Benefits	9.3%	78.2%	4.7%	7.8%	100.0%
FY 2003-04					
Average Benefit	$859	$1,537	$825	$721	$1,296
Number	3,768	19,477	1,925	3,740	28,910
Total Monthly Benefits	3,237,300	29,941,376	1,587,565	2,697,409	37,463,650
% of Total Monthly Benefits	8.6%	79.9%	4.2%	7.2%	100.0%
FY 2004-05					
Average Benefit	$910	$1,632	$850	$739	$1,379
Number	3,866	21,092	1,910	3,902	30,770
Total Monthly Benefits	$3,516,148	$34,423,089	1,623,500	2,882,916	42,445,653
% of Total Monthly Benefits	8.3%	81.1%	3.8%	6.8%	100.0%
FY 2005-06					
Average Benefit	$888	$1,670	$834	$868	$1,469
Number	4,616	24,056	2,628	849	32,149
Total Monthly Benefits	$4,099,896	$40,184,892	$2,190,812	$737,173	$47,212,773
% of Total Monthly Benefits	8.7%	85.1%	4.6%	1.6%	100.0%

The information in the above table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deductions by Source.

Schedule of Benefit Expenses by Type

KERS Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2000-01					
Average Benefit	$517	$1,016	$374	$473	$647
Number	502	318	112	124	1,056
Total Monthly Benefits	$259,552	$323,101	$41,933	$58,596	$683,182
% of Total Monthly Benefits	38.0%	47.3%	6.1%	8.6%	100.0%
FY 2001-02					
Average Benefit	$574	$1,110	$407	$520	$726
Number	559	394	116	143	1,212
Total Monthly Benefits	$321,056	$437,318	$47,180	$74,411	$879,965
% of Total Monthly Benefits	36.5%	49.7%	5.4%	8.5%	100.0%
FY 2002-03					
Average Benefit	$645	$1,173	$435	$576	$799
Number	626	464	115	157	1,362
Total Monthly Benefits	$403,467	$544,066	$50,058	$90,368	$1,087,959
% of Total Monthly Benefits	37.1%	50.0%	4.6%	8.3%	100.0%
FY 2003-04					
Average Benefit	$711	$1,221	$481	$613	$864
Number	718	554	129	157	1,558
Total Monthly Benefits	$510,827	$676,463	$62,112	$96,194	$1,345,596
% of Total Monthly Benefits	38.0%	50.3%	4.6%	7.1%	100.0%
FY 2004-05					
Average Benefit	$775	$1,292	$568	$600	$934
Number	808	647	117	180	1,752
Total Monthly Benefits	$626,082	$836,193	$66,456	$107,998	$1,636,729
% of Total Monthly Benefits	38.3%	51.1%	4.1%	6.6%	100.0%
FY 2005-06					
Average Benefit	$802	$1,333	$521	$749	$980
Number	1,002	760	163	67	1,992
Total Monthly Benefits	$803,581	$1,013,373	$84,975	$50,201	$1,952,130
% of Total Monthly Benefits	41.1%	51.9%	4.4%	2.6%	100.0%

The information in the above table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. . Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deductions by Source.

Schedule of Benefit Expenses by Type

CERS Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2000-01					
Average Monthly Benefit	$410	$682	$628	$412	$587
Number	5,160	13,367	2,531	2,657	23,715
Total Monthly Benefits	$2,113,743	$9,122,653	$1,589,371	$1,095,839	$13,921,607
% of Total Monthly Benefits	15.2%	65.5%	11.4%	7.9%	100.0%
FY 2001-02					
Average Monthly Benefit	$430	$743	$657	$438	$635
Number	5,280	14,669	2,634	2,793	25,376
Total Monthly Benefits	$2,269,733	$10,897,474	$1,731,392	$1,222,866	$16,121,465
% of Total Monthly Benefits	14.1%	67.6%	10.7%	7.6%	100.0%
FY 2002-03					
Average Monthly Benefit	$456	$792	$681	$461	$676
Number	5,583	15,902	2,711	2,923	27,119
Total Monthly Benefits	$2,544,101	$12,598,502	$1,845,513	$1,347,107	$18,335,223
% of Total Monthly Benefits	13.9%	68.7%	10.1%	7.3%	100.0%
FY 2003-04					
Average Monthly Benefit	$463	$829	$697	$491	$708
Number	5,848	17,463	2,814	3,025	29,150
Total Monthly Benefits	$2,708,649	$14,483,996	$1,961,590	$1,486,749	$20,640,984
% of Total Monthly Benefits	13.1%	70.2%	9.5%	7.2%	100.0%
FY 2004-05					
Average Monthly Benefit	$475	$873	$720	$512	$743
Number	6,131	19,075	2,854	3,287	31,347
Total Monthly Benefits	$2,915,109	$16,644,747	$2,054,880	1,684,459	$23,299,195
% of Total Monthly Benefits	12.5%	71.4%	8.8%	7.2%	100.0%
FY 2005-06					
Average Monthly Benefit	$484	$889	$715	$534	$774
Number	7,207	21,655	3,582	861	33,305
Total Monthly Benefits	$3,487,493	$19,256,550	$2,560,722	$460,095	$25,764,859
% of Total Monthly Benefits	13.6%	74.7%	9.9%	1.8%	100.0%

Schedule of Benefit Expenses by Type

CERS Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2000-01					
Average Monthly Benefit	$1,314	$1,728	$746	$1,100	$1,479
Number	574	1,994	433	224	3,225
Total Monthly Benefits	$753,998	$3,446,219	$323,149	$246,459	$4,769,825
% of Total Monthly Benefits	15.8%	72.3%	6.8%	5.2%	100.0%
FY 2001-02					
Average Monthly Benefit	$1,360	$1,817	$782	$1,126	$1,552
Number	642	2,154	447	245	3,488
Total Monthly Benefits	$873,325	$3,913,768	$349,511	$275,876	$5,412,480
% of Total Monthly Benefits	16.1%	72.3%	6.5%	5.1%	100.0%
FY 2002-03					
Average Monthly Benefit	$1,371	$1,905	$814	$1,142	$1,615
Number	705	2,307	457	273	3,742
Total Monthly Benefits	$966,828	$4,394,088	$371,773	$311,827	$6,044,517
% of Total Monthly Benefits	16.0%	72.7%	6.2%	5.2%	100.0%
FY 2003-04					
Average Monthly Benefit	$1,371	$1,942	$824	$1,177	$1,643
Number	785	2,489	481	299	4,054
Total Monthly Benefits	$1,076,329	$4,834,845	$396,302	$351,804	$6,659,280
% of Total Monthly Benefits	16.2%	72.6%	6.0%	5.3%	100.0%
FY 2004-05					
Average Monthly Benefit	$1,399	$2,031	$1,159	$910	$1,705
Number	865	2,642	332	522	4,361
Total Monthly Benefits	$1,209,803	$5,365,822	$384,788	$474,975	$7,435,388
% of Total Monthly Benefits	16.3%	72.2%	5.2%	6.4%	100.0%
FY 2005-06					
Average Monthly Benefit	$1,369	$2,059	$899	$974	$1,743
Number	1,079	3,062	580	96	4,817
Total Monthly Benefits	$1,477,504	$6,304,523	$521,285	$93,535	$8,396,847
% of Total Monthly Benefits	17.6%	75.1%	6.2%	1.1%	100.0%

Schedule of Benefit Expenses by Type

SPRS

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2000-01					
Average Monthly Benefit	$2,796	$2,306	$1,013	$1,932	$2,256
Number	98	620	48	76	842
Total Monthly Benefits	$274,013	$1,429,852	$48,647	$146,867	$1,899,379
% of Total Monthly Benefits	14.4%	75.3%	2.6%	7.7%	100.0%
FY 2001-02					
Average Monthly Benefit	$3,008	$2,430	$984	$2,006	$2,383
Number	103	668	47	79	897
Total Monthly Benefits	$309,836	$1,623,011	$46,243	$158,466	$2,137,556
% of Total Monthly Benefits	14.5%	75.9%	2.2%	7.4%	100.0%
FY 2002-03					
Average Monthly Benefit	$3,117	$2,543	$1,056	$2,064	$2,492
Number	110	699	48	84	941
Total Monthly Benefits	$342,894	$1,777,880	$50,705	$173,412	$2,344,891
% of Total Monthly Benefits	14.6%	75.8%	2.2%	7.4%	100.0%
FY 2003-04					
Average Monthly Benefit	$3,199	$2,637	$1,067	$2,108	$2,576
Number	112	748	49	88	997
Total Monthly Benefits	$358,290	$1,972,675	$52,259	$185,517	$2,568,741
% of Total Monthly Benefits	13.9%	76.8%	2.0%	7.2%	100.0%
FY 2004-05					
Average Monthly Benefit	$3,321	$2,741	$1,364	$1,862	$2,653
Number	107	775	35	119	1,036
Total Monthly Benefits	$355,361	$2,123,941	$47,740	$221,615	$2,748,657
% of Total Monthly Benefits	12.9%	77.3%	1.7%	8.1%	100.0%
FY 2004-05					
Average Monthly Benefit	$3,109	$2,698	$1,213	$1,643	$2,650
Number	145	864	56	28	1,093
Total Monthly Benefits	$450,794	$2,331,404	$67,950	$45,997	$2,896,146
% of Total Monthly Benefits	15.5%	80.4%	2.2%	1.9%	100.0%

Average Monthly Benefit by Length of Service

	KERS Non-Hazardous		CERS Non-Hazardous	
Service Credit Range	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	2,557	$139.14	2,982	$123.77
5 or more but less than 10	3,759	$311.66	6,757	$238.71
10 or more but less than 15	3,747	$519.52	6,562	$419.15
15 or more but less than 20	3,459	$780.00	4,834	$632.74
20 or more but less than 25	3,711	$1,058.89	4,664	$834.76
25 or more but less than 30	7,487	$1,921.07	5,473	$1,667.98
30 or more but less than 35	5,257	$2,737.63	1,549	$2,293,68
35 or more	2,172	$3,837.45	484	$2,889.61
Total	**32,149**	**$1,468.56**	**33,305**	$773.60

The information in the table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included.

	KERS Hazardous		CERS Hazardous	
Service Credit Range	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	95	$201.61	375	$380.59
5 or more but less than 10	218	$403.42	262	$535.87
10 or more but less than 15	275	$545.08	310	$973.08
15 or more but less than 20	260	$795.37	326	$1,041.46
20 or more but less than 25	465	$1,116.65	1,818	$1,690.81
25 or more but less than 30	427	$1,219.75	1,153	$2,246.66
30 or more but less than 35	200	$1,649.99	470	$3,097.06
35 or more	52	$2,274.35	103	$3,724.65
Total	**1,992**	**$979.99**	**4,817**	$1,743.17

	SPRS	
Service Credit Range	Number	Average Monthly Benefit
Under 5 Years	73	$484.17
5 or more but less than 10	31	$768.70
10 or more but less than 15	34	$1,042.31
15 or more but less than 20	61	$1,667.83
20 or more but less than 25	291	$2,102.73
25 or more but less than 30	338	$2,948.86
30 or more but less than 35	202	$3,958.74
35 or more	63	$4,627.29
Total	**1,093**	**$2,649.72**

Analysis of Initial Retirees

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
FY 2000-01					
Number	1,920	139	1,924	258	53
Average Service Credit (months)	272	245	213	260	341
Average Final Compensation	$38,135	$37,722	$27,601	$41,196	$62,445
Average Monthly Benefit	$1,582	$954	$868	$1,685	$3,453
FY 2001-02					
Number	2,137	162	2,090	281	59
Average Service Credit (months)	289	271	214	267	313
Average Final Compensation	$44,565	$42,196	$28,799	$45,076	$62,779
Average Monthly Benefit	$2,018	$1,104	$913	$1,801	$3,279
FY 2002-03					
Number	2,148	170	2,411	293	62
Average Service Credit (months)	277	264	206	274	313
Average Final Compensation	$45,479	$45,559	$28,883	$49,996	$65,079
Average Monthly Benefit	$1,873	$1,144	$859	$1,780	$3,208
FY 2003-04					
Number	2,473	227	2,805	343	53
Average Service Credit (months)	280	255	209	262	320
Average Final Compensation	$47,872	$43,778	$29,172	$48,607	$68,533
Average Monthly Benefit	$1,932	$1,127	$837	$1,631	$3,468
FY 2004-05					
Number	2,481	234	2,808	403	50
Average Service Credit (months)	276	257	210	248	290
Average Final Compensation	$46,452	$45,654	$29,784	$49,920	$62,395
Average Monthly Benefit	$1,897	$1,216	$902	$1,765	$3,022
FY 2005-06					
Number	2,295	236	2,543	377	39
Average Service Credit (months)	267	239	197	260	259
Average Final Compensation	$46,746	$43,845	$29,794	$54,358	$62,049
Average Monthly Benefit	$246	$1,185	$851	$2,047	$2,614
Average System Payment for Health Insurance	246	$381	$180	$543	$407

Insurance Benefits Paid to All Retirees and Beneficiaries

	KERS Non-Hazardous		CERS Non-Hazardous	
Service Credit Range	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	177	$162.23	259	$124.53
5 or more but less than 10	1,208	$291.60	2,054	$237.76
10 or more but less than 15	2,064	$505.81	3,5564	$412.90
15 or more but less than 20	2,458	$784.37	3,438	$640.76
20 or more but less than 25	16,534	$2,243.28	10,685	$1,488.89
Total	**22,441**	**$1,802.21**	**20,000**	**$1,005.20**

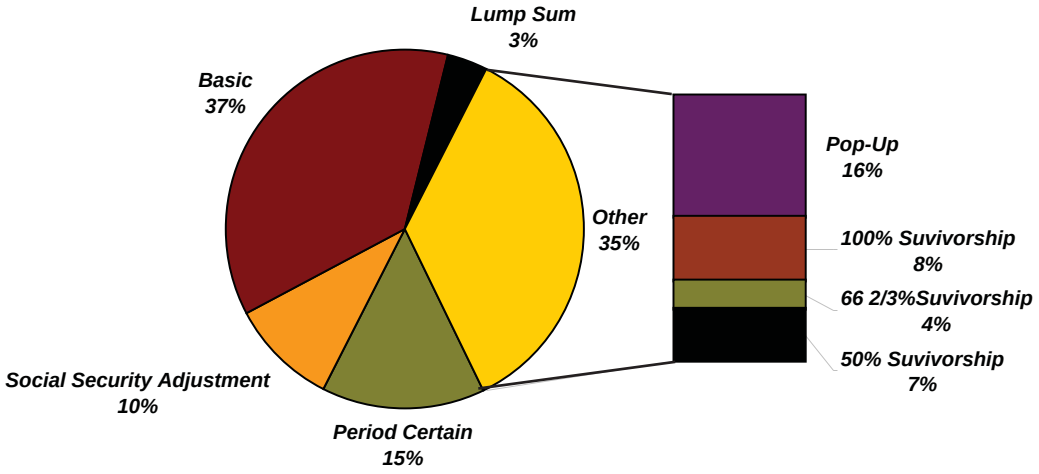
	KERS Hazardous		CERS Hazardous	
Service Credit Range	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	19	$374.25	35	$421.48
5 or more but less than 10	63	$534.49	99	$724.76
10 or more but less than 15	184	$747.74	191	$1,074.35
15 or more but less than 20	177	$1,108.72	261	$1,308.36
20 or more but less than 25	1,066	$2,234.81	3,282	$2,338.50
Total	**1,509**	**$1,826.98**	**3,868**	**$2,147.92**

	SPRS	
Service Credit Range	Number	Average Monthly Benefit
Under 5 Years	3	$266.16
5 or more but less than 10	11	$910.61
10 or more but less than 15	20	$1,086.76
15 or more but less than 20	49	$1,637.36
20 or more but less than 25	833	$3,039.57
Total	**916**	**$2,887.27**

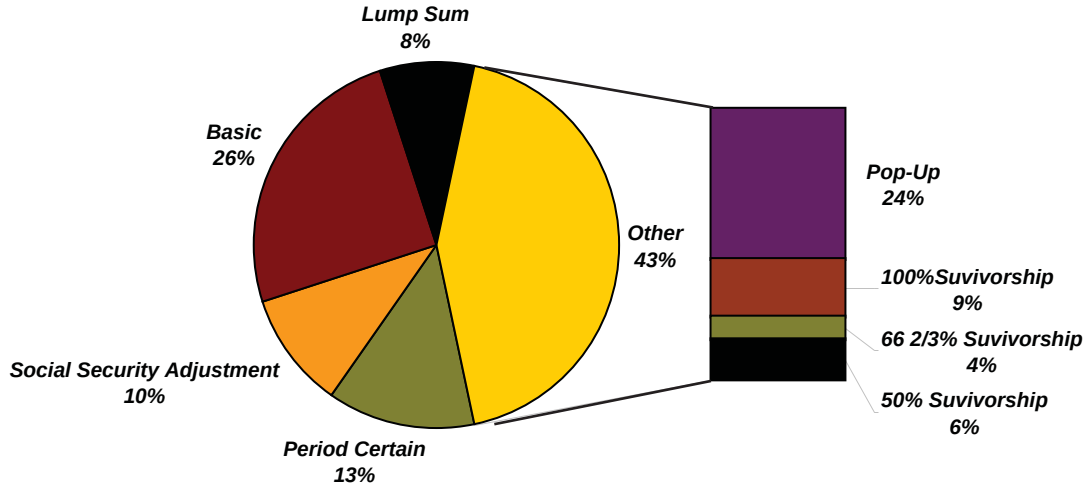
	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Number	22,441	1,509	20,000	3,868	916
Average Service Credit	298	269	238	282	317
Average Monthly System Payment for Health Insurance	$341.32	$493.96	$291.57	$641.91	$651.79
Total Monthly Payments for Health Insurance	$9,689,929.31	$839,474.59	$7,945,855.23	$2,635,157.46	$614,182.80

Payment Options by Type

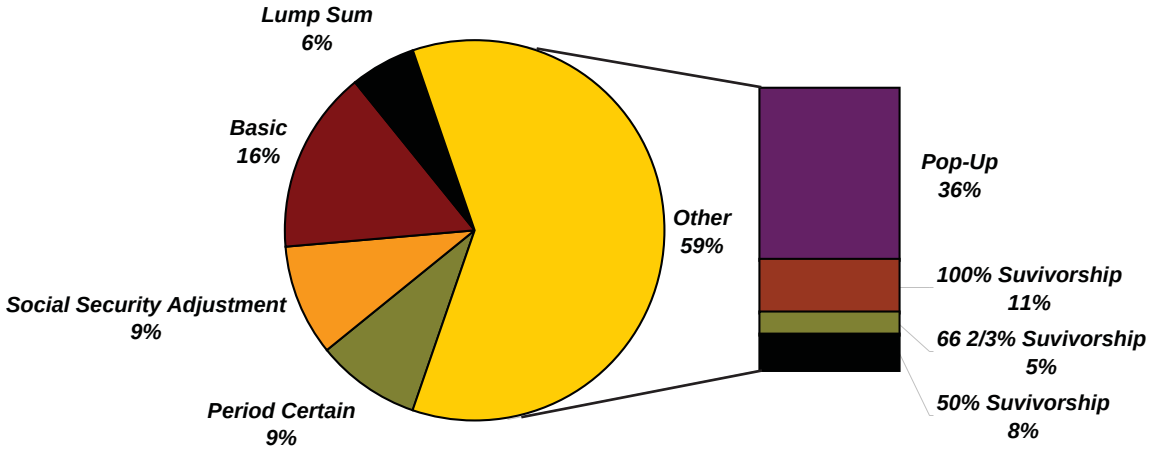
KERS Non-Hazardous



KERS Hazardous

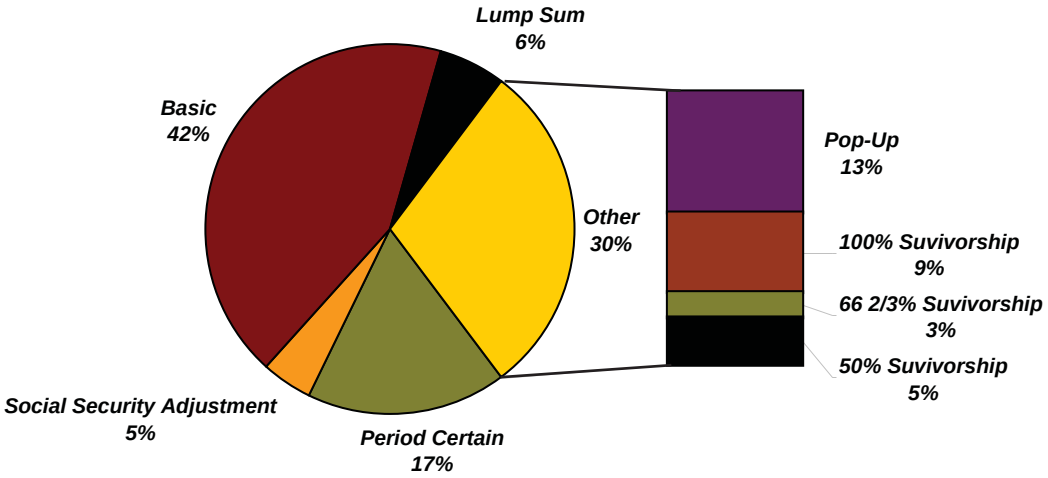


SPRS

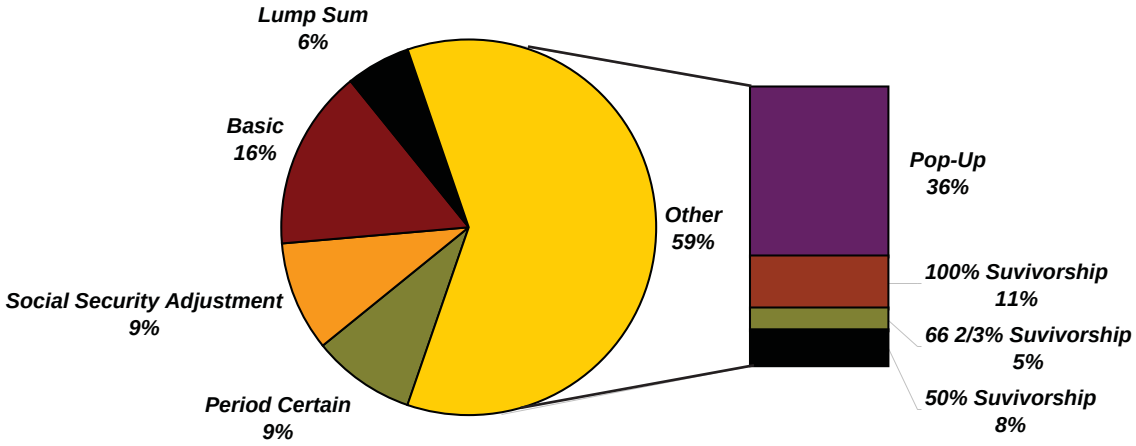


Payment Options by Type

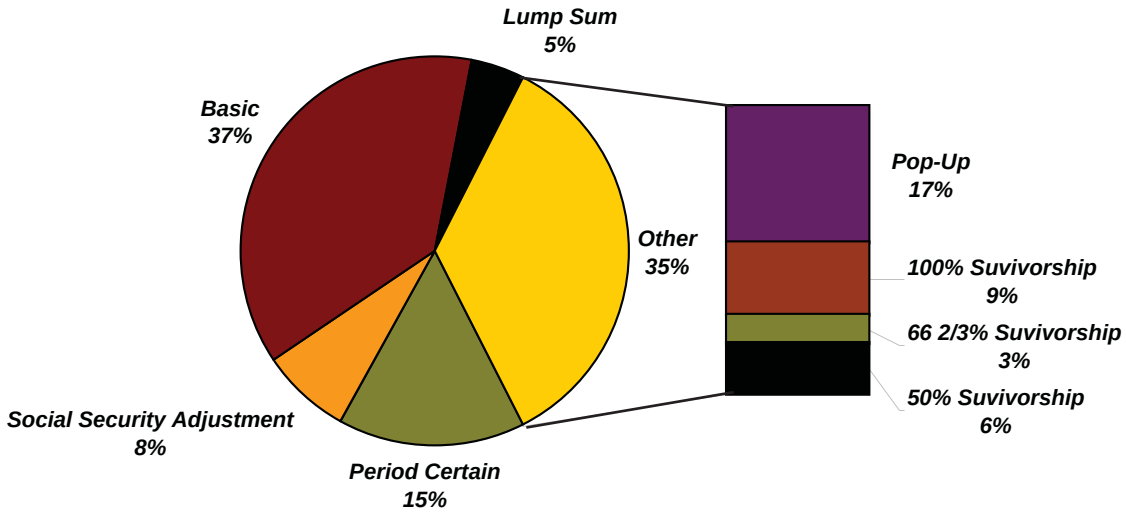
CERS Non-Hazardous



CERS Hazardous



Total



Employer Contribution Rates by System

In KERS, CERS, and SPRS both the employee and the employer contribute a percent of creditable compensation to the Systems. The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employers contribute at the rate determined by the Board of Trustees to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statute 61.565 and 61.752. KERS and SPRS employer rates are subject to approval by the State Legislature through the adoption of the biennial Executive Branch Budget. In recent years, the State Legislature has routinely suspended KRS 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the KRS Board of Trustees and its' consulting actuary. The following tables provide the employer contribution rate recommended by the Board and its' consulting actuary and the rate specified by the Executive Branch budget if applicable.

	KERS Non-Hazardous		KERS Hazardous	
Fiscal Year	*Budgeted Rate*	*Recommended Rate*	*Budgeted Rate*	*Recommended Rate*
2001-2002	5.89%	5.89%	18.84%	18.84%
2002-2003	3.76%	5.89%	17.60%	18.84%
2003-2004	5.89%	7.53%	18.84%	18.84%
2004-2005	5.89%	10.29%	18.84%	19.47%
2005-2006	5.89%	13.62%	18.84%	21.59%
2006-2007	7.75%	17.13%	22.00%	23.32%

	CERS Non-Hazardous	CERS Hazardous	SPRS	
Fiscal Year	*Recommended Rate*	*Recommended Rate*	*Budgeted Rate*	*Recommended Rate*
2001-2002	6.41%	16.28%	21.58%	21.58%
2002-2003	6.34%	16.28%	17.37%	21.58%
2003-2004	7.34%	18.51%	21.58%	21.58%
2004-2005	8.48%	22.08%	21.58%	28.08%
2005-2006	10.98%	25.01%	21.58%	34.83%
2006-2007	13.19%	28.21%	25.50%	42.30%

Retirement Windows

Two separate "retirement windows" have been established in past legislative sessions for non-hazardous employees participating in the Kentucky Employees Retirement System (KERS) and the County Employees Retirement System (CERS). The first window, established by SB 142 during the 1998 regular session of the General Assembly, provides for an increased benefit factor for non-hazardous KERS employees (up to 2.2%) if certain service requirements are met and if the employee retires on or before January 1, 2009. The second window, established by HB 278 during the 2001 regular session of the General Assembly, provides for a final compensation based upon a non-hazardous employee's highest three years (3-High) of salary rather than the employee's highest five years (5-high) of salary. In order to qualify for 3-high final compensation a non-hazardous KERS or CERS employee must meet certain age and service requirements and again, retire on or before January 1, 2009.

Each of these two windows influences how retirement benefits are determined for non-hazardous employees participating in KERS and CERS. Consequently, employees who are eligible for one or both of the windows have a strong financial incentive to retire before the windows sunset in 2009. The following information describes the number of employees eligible to retire with and without increased benefits as of January 1, 2007 and three years later when the window expires on January 1, 2009.

Kentucky Retirement Systems (KRS)

KERS & CERS Non-Hazardous Employees Eligible To Retire

Summary	KERS (state government, regional universities, health departments)		CERS (City, county, and classified school board employees)	
	1/2007	1/2009	1/2007	1/2009
Employees Eligible to Retire With An Unreduced or Reduced Benefit	8,905	12,237	16,245	23,045
Breakdown By Eligibility				
Employees with 27 or more Years of Service*	2,180	3,356	1,346	2,495
Employees with 25 But Not More Than 27 Years of Service**	1,176	1,207	1,149	1,298
Employees Age 55 or greater with 20 But Not More Than 25 Years of Service**	925	1,350	1,650	2,855
Employees Age 55-65 with 5 But Less than 20 Years of Service**	4,011	5,277	9,786	12,555
Employees Age 65 with 4 But Less Than 20 Years of Service**	613	1,047	2,314	3,842
Breakdown By Retirement Window				
Employees Eligible for 2.2% Benefit Factor Window Only***	4,281	5,913	N/A	N/A
Employees Eligible for Both 2.2% Benefit Factor & High-3 Final Compensation Window***	1,914	3,083	1,214	2,329

**Employee is eligible for an unreduced benefit upon earning 27 years of service or upon reaching age 65.*

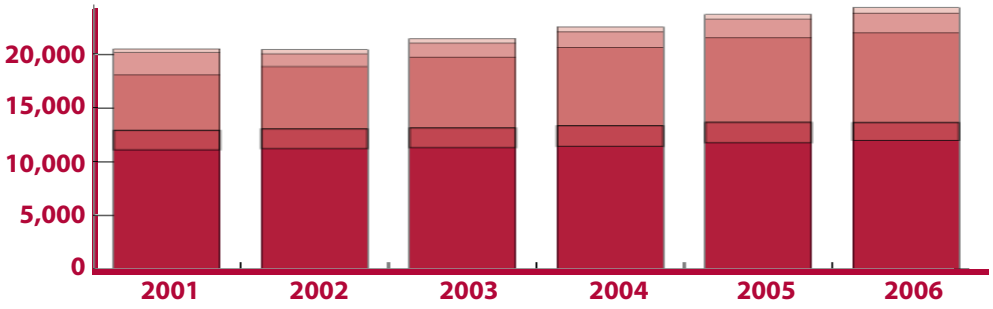
***Employees are eligible for a reduced benefit upon reaching 25 years of service or having a combined age of 55 with 5 years of service.*

****KERS Employees are eligible for a 2.2% benefit factor if the employee has 13 months credit from 1/1/1998 to 1/1/1999, 20 years of service credit at retirement, and retires between 2/1/1999 and 1/1/2009. KERS and CERS employees are eligible for High-3 Final Compensation if the Employee has 27 or more years of service, their age and service equals at least 75 years, and they retire between 8/1/2001 and January 1, 2009.*

Insurance Contracts by Type

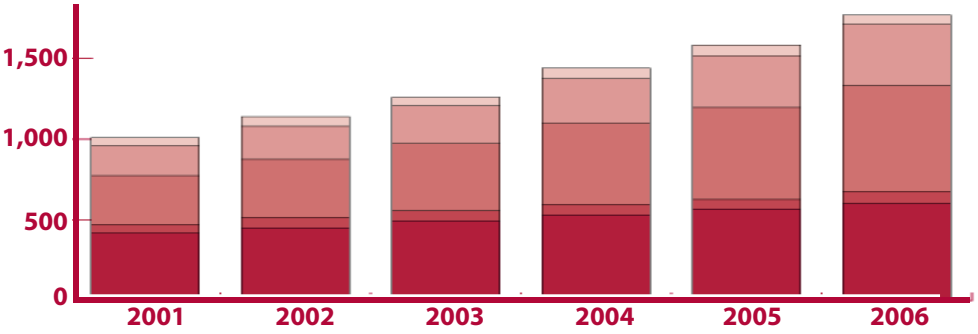
The Systems provides group rates on medical insurance and other managed care coverage for retired members. Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems. Provided below are the contracts for the KEHP plan and the KRS Medicare Plans.

KERS Non-Hazardous



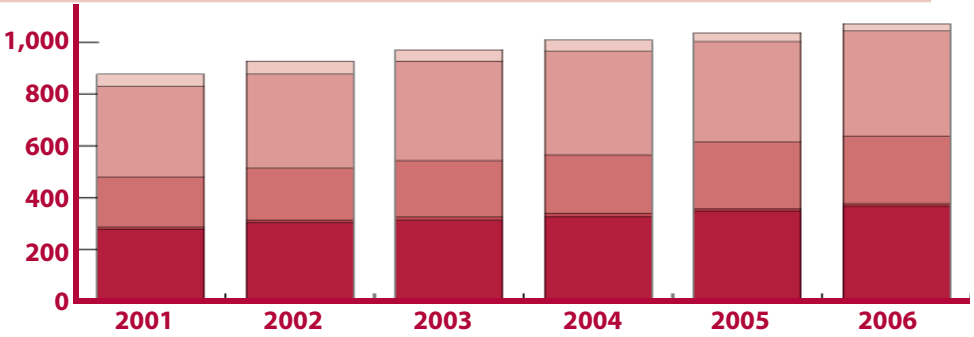
	2001	2002	2003	2004	2005	2006
Medicare With Prescription	11,107	11,229	11,311	11,437	11,764	12,000
Medicare Without Prescription	1,818	1,838	1,855	1,932	1,915	1,672
KEHP Single	5,199	5,822	6,602	7,313	7,928	8,393
KEHP Couple/Family	1,070	1,182	1,298	1,462	1,679	1,826
KEHP Parent Plus	346	396	428	443	461	490

KERS Hazardous



	2001	2002	2003	2004	2005	2006
Medicare With Prescription	420	451	494	531	567	603
Medicare Without Prescription	52	66	62	65	61	74
KEHP Single	302	359	417	502	570	656
KEHP Couple/Family	185	205	234	276	319	378
KEHP Parent Plus	51	57	53	65	65	58

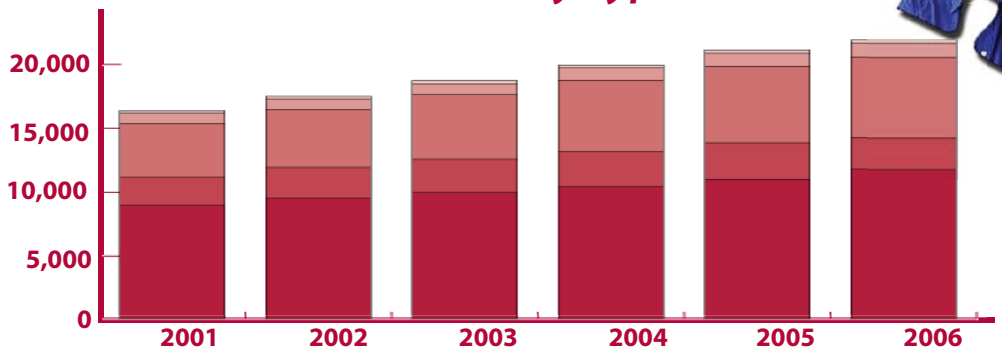
SPRS



	2001	2002	2003	2004	2005	2006
Medicare With Prescription	278	303	312	326	348	368
Medicare Without Prescription	8	11	13	13	10	9
KEHP Single	194	199	218	226	257	260
KEHP Couple/Family	350	364	384	400	388	406
KEHP Parent Plus	47	50	44	45	34	29

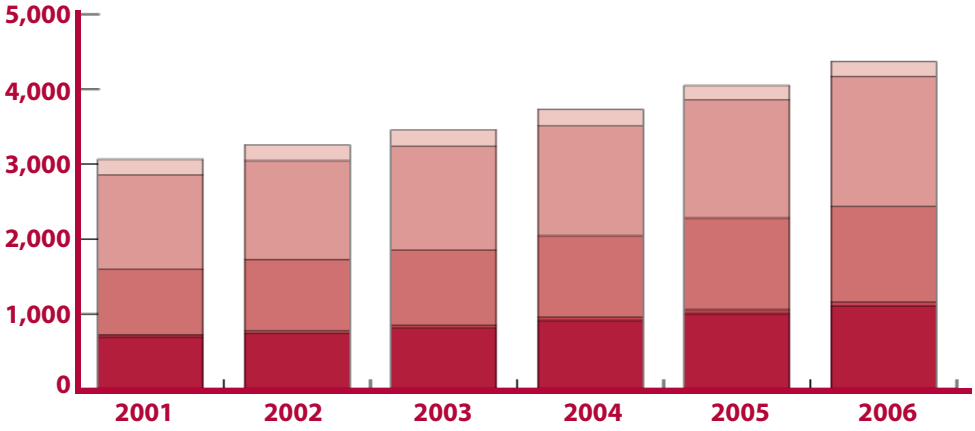
Insurance Contracts by Type

CERS Non-Hazardous



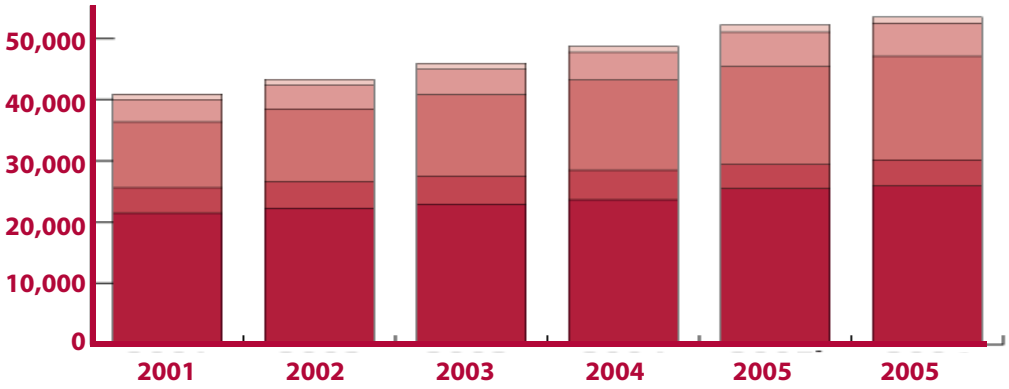
	2001	2002	2003	2004	2005	2006
Medicare With Prescription	8,974	9,517	9,958	10,424	11,005	11,803
Medicare Without Prescription	2,212	2,446	2,630	2,756	2,853	2,502
KEHP Single	4,215	4,530	5,054	5,598	6,014	249
KEHP Couple/Family	791	800	855	946	1,022	1,058
KEHP Parent Plus	204	224	244	246	255	6,298

CERS Hazardous



	2001	2002	2003	2004	2005	2006
Medicare With Prescription	694	734	808	913	1,004	1,105
Medicare Without Prescription	32	38	40	45	55	52
KEHP Single	869	956	1,010	1,087	1,220	1,275
KEHP Couple/Family	1,267	1,321	1,379	1,463	1,579	1,739
KEHP Parent Plus	202	210	223	223	195	198

Total



	2001	2002	2003	2004	2005	2005
Medicare With Prescription	21,473	22,234	22,883	23,631	24,688	25,879
Medicare Without Prescription	4,122	4,399	4,600	4,811	4,894	4,309
KEHP Single	10,779	11,866	13,301	14,726	15,989	16,882
KEHP Couple/Family	3,663	3,872	4,150	4,547	4,987	5,407
KEHP Parent Plus	850	937	992	1,022	1,010	1,024

Retired Reemployed

Since August 1, 1998, state law has allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service is observed. The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Retirees Who Have Been Reemployed In Full-time Positions Covered By The Same Retirement System

Data as of June 30, 2006

Reemployed Retirees In KRS	KERS			CERS			SPRS
	Non-Hazardous	Hazardous	Total	Non-Hazardous	Hazardous	Total	Total
Total Active Employees	46,707	4,320	51,027	78,773	8,586	87,359	1,028
Total Retirees	32,140	1,981	34,121	33,102	4,712	37,814	1,067
Reemployed Retirees	586	55	641	1,184	673	1,857	1
% of Reemployed Retirees to Total Actives	1.25%	1.27%	1.26%	1.50%	7.84%	2.13%	0.10%
% of Reemployed Retirees to Total Retirees	1.82%	2.78%	1.89%	3.58%	14.28%	4.91%	0.09%
Reemployed Retiree Data*							
Average Age at Initial Retirement	52	50	52	56	48	53	41
Months of Service Credit at Initial Retirement	314	286	312	256	282	265	284
Final Compensation At Initial Retirement	$51,192	$48,897	$50,995	$32,616	48,623	38,417	65,817
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2004-2005 (Second Retirement Account)	43,245	$34,931	$42,532	27,611	39,947	32,082	65,847
Retirees Returning to Work for the Same Employer	201	15	216	879	116	995	1
% Retirees Returning to Work For Same Employer	34.30%	27.27%	33.70%	74.24%	17.24%	53.58%	100.00%

N/A: Not Applicable

**Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.*

Note: An additional 995 retirees have been reemployed in full-time positions covered by a different retirement system. Of this total, 497 KERS retirees have returned to work with an agency participating in CERS, 275 CERS retirees have returned to work with an agency participating in KERS, 94 SPRS retirees have returned to work with an agency participating in KERS, and 129 SPRS retirees have returned to work with an agency participating in CERS.

Total Fiscal Year Retirement Payments By County

Adair	$3,572,569	Grant	$5,423,614	Mason	$2,954,538
Allen	$2,592,665	Graves	$6,639,061	Meade	$3,178,576
Anderson	$16,916,390	Grayson	$4,724,917	Menifee	$1,473,249
Ballard	$1,257,225	Green	$2,148,956	Mercer	$6,669,648
Barren	$7,833,672	Greenup	$3,882,048	Metcalfe	$1,843,843
Bath	$2,988,741	Hancock	$1,252,522	Monroe	$1,570,765
Bell	$5,578,005	Hardin	$15,733,354	Montgomery	$4,258,926
Boone	$13,432,604	Harlan	$4,701,788	Morgan	$3,722,441
Bourbon	$4,607,676	Harrison	$3,348,944	Muhlenberg	$3,432,194
Boyd	$8,799,284	Hart	$2,704,4407	Nelson	$7,294,327
Boyle	$8,017,242	Henderson	$8,759,271	Nicholas	$1,451,154
Bracken	$1,503,991	Henry	$10,915,407	Ohio	$3,245,553
Breathitt	$4,602,811	Hickman	$533,290	Oldham	$12,666,838
Breckinridge	$3,464,003	Hopkins	$8,541,548	Owen	$6,585,792
Bullitt	$10,933,441	Jackson	$1,999,964	Owsley	$1,600,504
Butler	$2,199,445	Jefferson	$182,281,409	Pendleton	$2,979,504
Caldwell	$4,145,011	Jessamine	$8,432,539	Perry	$4,256,518
Calloway	$7,963,976	Johnson	$4,916,571	Pike	$8,905,155
Campbell	$12,453,213	Kenton	$21,048,526	Powell	$2,493,819
Carlisle	$1,039,894	Knott	$4,753,961	Pulaski	$19,520,900
Carroll	$2,698,856	Knox	$4,136,018	Robertson	$633,613
Carter	$5,426,589	Larue	$2,758,019	Rockcastle	$2,665,721
Casey	$2,542,241	Laurel	$9,971,647	Rowan	$7,494,801
Christian	$16,898,352	Lawrence	$1,878,277	Russell	$3,897,903
Clark	$6,387,314	Lee	$1,859,702	Scott	$10,175,004
Clay	$4,184,764	Leslie	$1,874,621	Shelby	$21,072,947
Clinton	$1,511,737	Letcher	$3,533,745	Simpson	$1,369,373
Crittenden	$1,714,599	Lewis	$1,993,198	Spencer	$4,204,189
Cumberland	$1,671,412	Lincoln	$3,616,666	Taylor	$4,248,823
Daviess	$21,865,501	Livingston	$2,262,901	Todd	$1,977,143
Edmonson	$1,271,615	Logan	$4,236,062	Trigg	$4,062,703
Elliott	$1,114,731	Lyon	$3,183,278	Trimble	$2,266,306
Estill	$2,646,943	McCracken	$16,024,586	Union	$2,101,605
Fayette	$59,932,856	McCreary	$1,820,159	Warren	$23,510,062
Fleming	$3,712,023	McClean	$1,972,996	Washington	$2,588,977
Floyd	$7,803,437	Madison	$16,733,257	Wayne	$3,782,410
Franklin	$129,900,320	Magoffin	$2,210,221	Webster	$2,191,541
Fulton	$1,480,600	Marion	$3,222,463	Whitley	$7,726,580
Gallatin	$955,162	Marshall	$6,553,469	Wolfe	$2,593,658
Garrard	$2,886,824	Martin	$1,348,775	Woodford	$11,393,366

Payments to Recipients Living in Kentucky	$1,014,516,857
Payments to Recipients Living in Other States	$48,091,366
Total Payments	$1,062,608,224

Unlocking Your FUTURE

Comprehensive Annual Financial Report

for fiscal year ended June 30, 2007

KENTUCKY RETIREMENT SYSTEMS

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

A COMPONENT UNIT OF THE COMMONWEALTH OF KENTUCKY

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A COMPONENT UNIT OF THE COMMONWEALTH OF KENTUCKY

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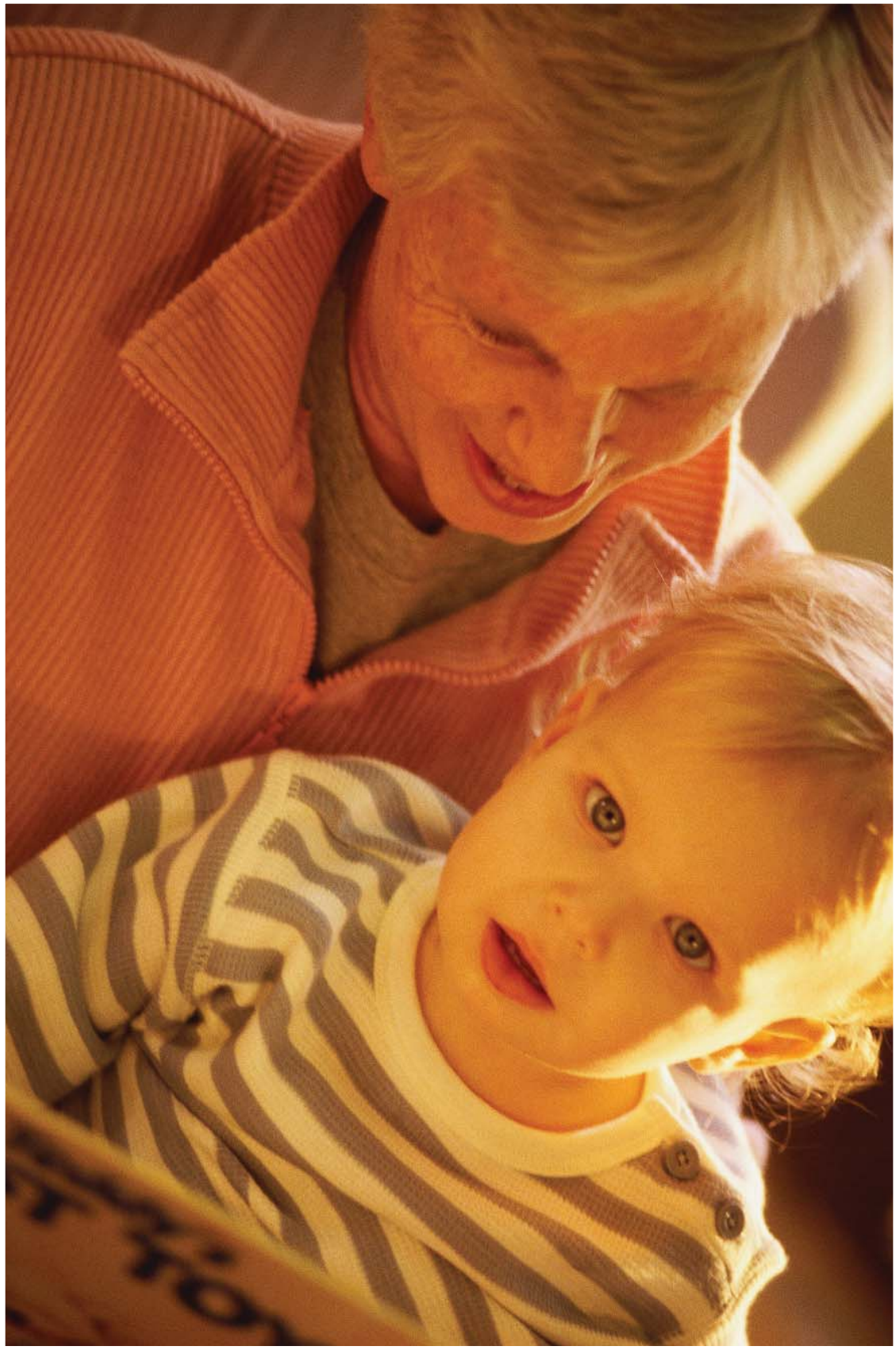

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KENTUCKY RETIREMENT SYSTEMS
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1260 Louisville Road
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Kentucky Employees Retirement Systems
County Employees Retirement Systems
State Police Retirement Systems

William P. Hanes Esq.
Executive Director
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www.kyret.com

November 15, 2007

The Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601-6124

Dear Board of Trustees and Members:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year ended June 30, 2007. Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the management of the Kentucky Retirement Systems.

We present this information to assist the Board and members of Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) (collectively referred to as KRS) in understanding KRS' financial and actuarial status. This CAFR was prepared to conform with the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. Transactions of the system are reported on the accrual basis of accounting. Additionally, sufficient internal accounting controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis on page 29 for more information.

History

KERS was created in 1956 by the Kentucky General Assembly in order to supplement the benefits provided by Social Security. When the first actuarial valuation was completed June 30, 1957, there were 16,000 employees participating in KERS and assets of $2.8 million. SPRS and CERS were established in 1958. The first actuarial valuation of SPRS was conducted June 30, 1959. No actuarial valuation of CERS was conducted until June 30, 1960 because the statutes did not authorize retirements from the system prior to July 1, 1960. On June 30, 1960, there were 68 counties and 2,617 employees participating in CERS, and SPRS included 415 uniformed state troopers.

As of June 30, 2007, there were more than 316,000 active, inactive and retired members in the combined systems and approximately $16.9 billion in assets. A breakdown of membership by system is provided in the Statistical Section.

KRS staff provides detailed benefit estimates to members upon request. Counselors are available at the Frankfort office for individual counseling, both in office by appointment and by telephone during normal business hours. In addition, staff conducts individual counseling sessions at sites throughout the Commonwealth and holds pre-retirement seminars to help members prepare for retirement. Information including an online benefit calculator and a service purchase calculator is available online at http://www.kyret.com.

Major Initiatives

A major goal for KRS during the fiscal year was to raise awareness of the continued reductions to the KERS and SPRS employer contribution rates by the Kentucky General Assembly. These rates have been less than the amount recommended by the KRS Board of Trustees and its consulting actuary. Through educational initiatives with our membership and with policymakers, KRS received an increase in the employer contribution rate for the 2006-2007 and the 2007-2008 fiscal years. While this was the first increase in the KERS and SPRS employer rates since 2001, contributions remained far short of the actuarially recommended rates. Management believes that these efforts must continue as actuarial funding levels continue to falter.

In 2006 KRS offered five new health plans to its Medicare eligible retirees. Three of those offerings were self-insured products and two were Anthem Medicare Advantage plans. Beginning in January 2007 the Anthem Medicare Advantage plans were no longer offered to retirees. This first year saw a 5% increase in generic drug utilization and an overall medical trend in single digits. KRS has supported CMS's preventive screening initiatives for Medicare eligible retirees and participated in the Retiree Drug Subsidy (RDS) program also offered by CMS. The RDS program realized a $13.5 million reimbursement for KRS from CMS for providing pharmaceutical coverage to its retirees. Developing an effective long term strategy is a priority for KRS and begins with identifying baseline information and formulating programs that bring disease and pharmacy management principles to bear on those with chronic disease. It is important to recognize that a program of ongoing prevention activities and education of retirees in self-management skills is a critical piece of an effective long term strategy. In that light KRS has also begun to analyze the under-65 retiree health care utilization trends in an effort to support the long-term program management needs.

KRS has undertaken a major project initiative to implement a new, state of the art pension administration solution. The project is called Strategic Technology Advancement for the Retirement of Tomorrow (START).

The primary objective of START is to implement a stable, proven, state-of-the-industry, fully integrated and browser based solution capable of supporting the KRS mission well into the 21st century.

Objectives of the START initiative include:

- Improved service levels to members;
- Improved system workflow and increased work efficiency;
- Expanded and improved Web-based, self-service functions to members, retirees, and employers;
- Improved accuracy of all information collected, maintained, and provided by KRS;
- Improved timeliness and accuracy of responses to members' inquiries, and
- A secure environment for the receipt and transmittal of information related to members, retirees, and employers.

In addition to the pension application, the new solution will include best practice workflow management elements and business process and organizational changes, as well as the computer hardware and software necessary to support the new system.

As part of the continued commitment to protect our membership information, Kentucky Retirement Systems has identified the need to improve information technology security controls and practices as part of continual improvement processes. Over the past twelve months, KRS has initiated several activities to better protect member's information including:

- Established and implemented a disclosure policy that outlines how KRS will respond in the event member data is exposed in any manner.
- Enhanced security awareness activities for KRS staff and management.
- Provided security awareness presentations for members to help them better understand potential risks associated with technology and the Internet.
- Continued review of business processes to determine potential security risks.
- Completed another 3rd party assessment of critical information technology infrastructure to identify and remedy weaknesses.
- Enhanced the security of our business and technology infrastructure by investing in several security related systems and solutions designed to protect against unauthorized access to our membership information.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Consolidated Annual Financial Report for the fiscal year ended June 30, 2006. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. This was the eighth consecutive year that KRS has achieved this award.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Investments

The Board of Trustees of the Kentucky Retirement Systems has a statutory obligation to invest KRS' funds in accordance with the "prudent person rule." The prudent person rule states that fiduciaries shall discharge their investment duties with the same degree of diligence, care and skill that a prudent person would ordinarily exercise under similar circumstances in a comparable position.

The Board has managed the funds in recognition of the basic long-term nature of the Systems. The Board has interpreted this to mean that the assets of the systems should be actively managed — that is, investment decisions regarding the particular securities to be purchased or sold shall be the result of the conscious exercise of discretion. The Board has further recognized that proper diversification of assets must be maintained. It is through these policies that KRS has been able to provide significant return/risk ratio over the long-term while minimizing investment related expenses. The Investment Section of this report, starting on page 73, contains detailed analysis of investments. This section includes asset allocations, rates of return, discussion of the fiscal year market environment and historical trend schedules.

The pension and insurance investment trusts experienced positive growth during the 2006-2007 fiscal year. The pension portfolio posted a total return of 15.3% for the year, while the insurance portfolio earned 19.3%. Investment income, which includes the appreciation of asset values, dividends, and interest totaled $1,909.2 million and $421.7 million, net of investment expenses, for the pension and insurance portfolios, respectively. The majority of this amount was due to the appreciation in value of investments, which totaled $1,507.8 million for the pension portfolio and $366.8 million for the insurance fund. Interest and dividends accounted for $420.7 million for the pension portfolio and $57.4 million for the insurance portfolio.

Actuarial Funding

The Kentucky Retirement Systems' funding objective is to meet long-term benefit promises through contributions that remain fairly level as a percent of active member payroll. The progress towards achieving the intended funding objectives for both the pension and insurance funds can be measured by the funding level of the actuarial assets of each fund to the actuarial liabilities. The funding level for the pension funds as of June 30, 2007 are 56.89% for KERS Non-Hazardous, 83.59% for KERS Hazardous, 82.11% for CERS Non-Hazardous, 74.22% for CERS Hazardous and 63.66% for SPRS. These funding levels will fluctuate over time with experience deviations. Since 2001, all systems have experienced reductions in the funding levels for the pension funds due to investment returns less than the assumed rate resulting from market loss, higher than anticipated retirements, increasing payments for retiree cost of living adjustments, and adjustments in actuarial assumptions which were effective with the June 30, 2006 valuation.

The insurance funds, which were established in 1978 to provide funding for retiree medical benefits, has improved in recent years due to the Board's policy of incrementally increasing employer contributions to the funds in order to reach full entry age normal cost by 2016. However, the insurance funds are not at the same funding levels as the pension funds. The funding level for the insurance funds as of June 30, 2007 are 11.94% for KERS Non-Hazardous, 49.82% for KERS Hazardous, 28.80% for CERS Non-Hazardous, 31.15% for CERS Hazardous and 16.62% for SPRS. The insurance funds continue to be a primary concern of the Kentucky Retirement Systems. Total actuarial liabilities for the funds exceed the actuarial value of the assets by $8.66 billion.

Detailed information of the actuarial soundness of KRS can be found in the Actuarial Section of this report.

Professional Services

A listing of the Board's contract consultants can be found in the organizational chart on page 14. A listing of the

external investment managers can be found on page 89 in the Investment Section.

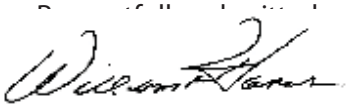
Other Information

Kentucky Statutes require an annual audit by an independent certified public accountant or the Auditor of Public Accounts. Mountjoy & Bressler PSC performed the audit for the fiscal year ended June 30, 2007, and the results of that audit are contained in the Financial Section. The firm gave KRS an unqualified opinion and also indicated that the financial statements present fairly, in all material respects, the plan net assets of Kentucky Retirement Systems.

The compilation of this report reflects the combined efforts of the KRS administrative staff under the leadership of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with statutory provisions, and as a means of determining responsible stewardship of KRS funds.

The report is available to all employers participating in the Kentucky Retirement Systems. They form the link between KRS and its membership, and their cooperation contributes significantly to the success of the Kentucky Retirement Systems. We hope the employers and their employees find this report informative. This and past CAFRs can be found on the KRS web site, **www.kyret.com**.

On behalf of the Board of Trustees, I would like to take this opportunity to express my gratitude to the staff, the advisors and the many people who have worked so diligently to assure the successful operation of the Kentucky Retirement Systems.

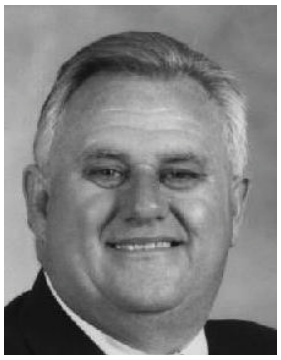


William P. Hanes, Esq.
Executive Director

2007 KRS Board of Trustees

A nine-member Board of Trustees administers the Systems: two trustees elected by KERS members; two trustees elected by CERS members; one trustee elected by SPRS members; three trustees appointed by the Governor; and the Secretary of the State Personnel Cabinet. One of the trustees appointed by the Governor must be knowledgeable about the impact of pensions on local governments. Elected trustees may serve no more than five terms consecutively.

Randy J. Overstreet, *Chair*
Elizabethtown
Elected by SPRS
Term Expires March 31, 2007



Walter J. Pagan, , *Vice Chair*
Wilder
Appointed by Governor
Term Expires March 31, 2008

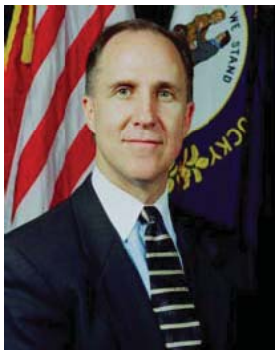
Vince Lang
Frankfort
Elected by CERS
Term Expires March 31, 2009

Lynn T. Harpring
Louisville
Appointed by Governor
Term Expires March 31, 2008

Bobby D. Henson
Frankfort
Elected by KERS
Term Expires March 31, 2010

Susan Smith Horne
Lexington
Elected by KERS
Term Expires March 31, 2010

W. Lewis Reynolds III
Louisville
Appointed by Governor
Term Expires March 31, 2011



Brian J. Crall
Frankfort
Secretary, Personnel Cabinet
Term Expires Ex-Officio

Patricia Ballenger
Lexington
Elected by CERS
Term Expires March 31, 2009

Board of Trustees

Audit Committee

Internal Auditor
Todd E. Coleman

Executive Director
William P. Hanes

Chief Operations Officer
William A. Thielen

Human Resources Director
Marlane Robinson

Office Support
Donna Beckley

Accounting
Sandra Bush

Information and Technology
Chris Clark (Acting)

Planning and Constituent Services
Shawn Sparks

START Project Manager
Chris Clark

Communications
Scarlett Consalvi

Consultants

Actuarial Services
Cavanaugh Macdonald Consulting, LLC

Auditing Services
Mountjoy & Bressler, LLP

Legal Consultants
Klausner & Kaufman, PA

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Chief Investment Officer
Adam Tosh

Compliance Officer
Joseph Gilbert

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Bo Cracraft

Fixed Assets
Kenton Bottoms

Alternative Investments
Brent Aldridge

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J. Eric Wampler

Chief Benefits Officer
Gerri D. Miller

Retiree Services
Lela Hatter (Acting)

Field Services
Sarah Webb

Membership Support
Suzanne Howe

Disabilities
Charlene Haydon

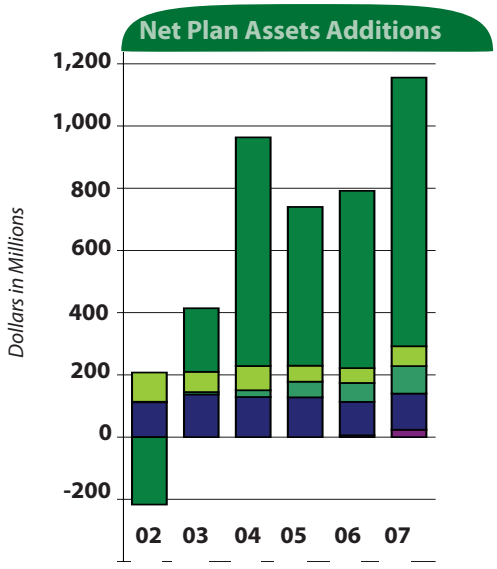
Employment Services
Rebecca Stephens

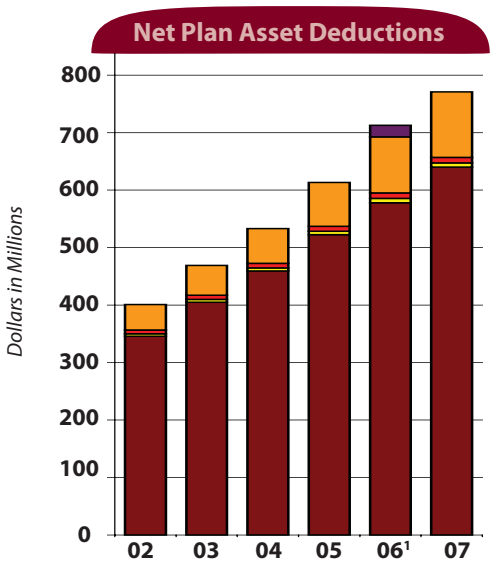
Sr. Advisor Retiree Health
Rick Schultz

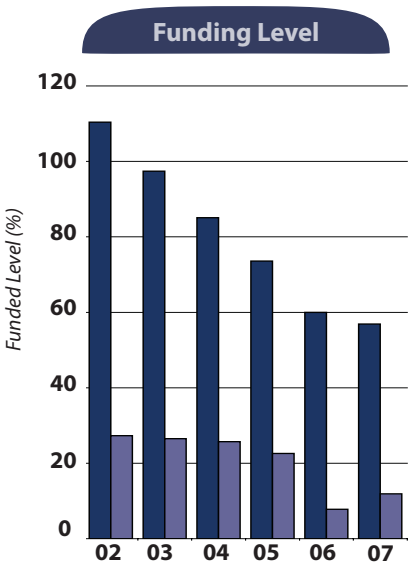
Legal Services
Stoll Kennon & Park, LLP

Fiduciary Review Consultants
Ice Miller, LLP

Asset Management
Strategic Investment Solutions







[1] As of January 1, 2006 the Medical Insurance Exp. includes Self Funding Insurance expenses.

Kentucky Employees Retirement System Non-Hazardous

The Kentucky Employees Retirement System (KERS) was established July 1, 1956 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that averages 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.

	2002	2003	2004	2005	2006	2007
Net Plan Assets Additions			(Dollars in Millions)			
Net Investment Income	216.8	204.2	734.6	510.5	570.1	863.5
Employer Cont. (Ins.)	93.9	65.3	78.0	51.4	47.6	64.0
Employer Cont. (Pen.)	1.8	7.6	21.7	50.3	60.7	88.2
Member Contribution	112.0	137.1	129.1	127.8	107.6	116.3
Other Income					5.8	22.9
Net Plan Assets Deductions			(Dollars in Millions)			
Medical Insurance Exp.	44.1	52.0	60.5	76.0	97.5	114.1
Refunds	6.7	7.3	8.0	8.8	9.6	9.5
Administrative Exp.	4.4	5.0	5.3	5.9	7.6	7.1
Benefit Payments	345.7	404.9	459.4	522.4	577.9	640.2
Demutualization Refunds					20.0	
Funding Level			(% of Actuarial Assets to Actuarial Liabilities)			
Pension	110.4	97.4	85.1	73.6	60.0	56.9
Insurance	27.3	26.5	25.7	22.6	7.8	11.9

System Highlights

Members

Active Members :	47,913
Inactive Members:	30,904
Retired Members and Beneficiaries:	33,849

Active Membership

Average Age:	43.3
Average Years of Service:	9.3
Average Annual Salary:	$37,155

Retired Membership

Average Age:	66.1
Average Annual Benefit:	$20,120
Number Added:	2,440
Number Removed:	731

Normal Retirement

The KERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member may be partially, or fully paid by KRS depending upon the member's years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	5% per year for 5 years before age 65 or 27 years of service. 4% for each year thereafter.
Any	25	5% each year for five years before 65 or 27 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$5,773,157,000
Insurance Fund:	$ 663,558,000
Total:	$6,436,715,000

Contributions

Employees:		5%
Employers:	Pension:	16.54%
	Insurance:	20.38%
	Total	36.92%

(Rate Effective July 1,2008)

KERS employer rates are subject to state budget approval.

System Highlights

Members

Active Members:	4,349
Inactive Members:	2,738
Retired Members and Beneficiaries:	2,202

Active Membership

Average Age:	41.7
Average Years of Service:	7.0
Average Annual Salary:	$33,304

Retired Membership

Average Age:	61.3
Average Annual Benefit:	$13,487
Number Added:	241
Number Removed:	19

Normal Retirement

The KERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member and eligible dependents may be partially, or fully paid by KRS depending upon the member's type and years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	5.5% per year for 5 years before age 55 or 20 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$ 510,775,000
Insurance Fund:	$ 280,886,000
Total:	$ 791,661,000

Contributions

Employees:		8 %
Employers:	Pension:	10.84 %
	Insurance:	23.94 %
	Total:	34.78 %

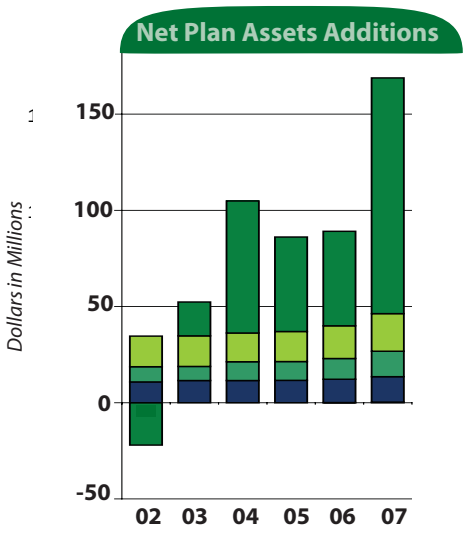
(Rate Effective July 1,2008)

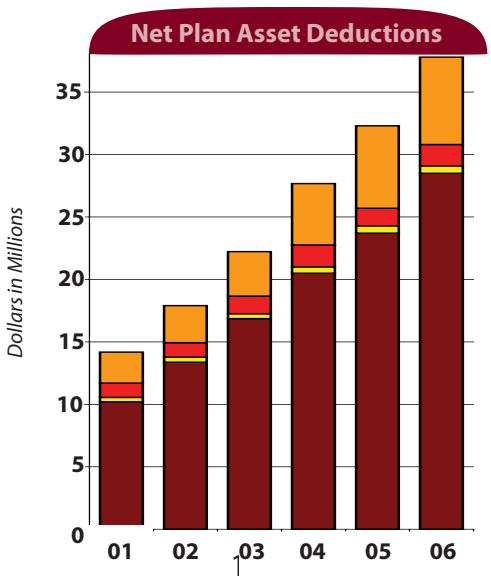
KERS employer rates are subject to state budget approval.

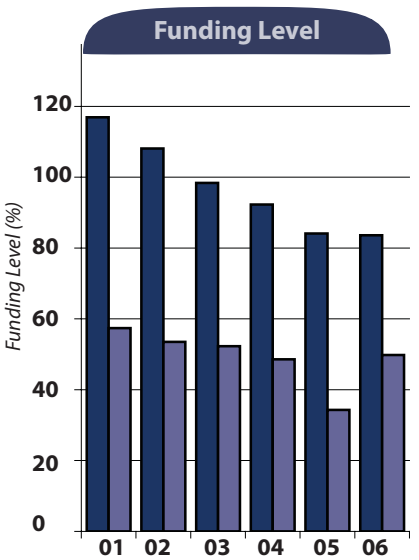
Kentucky Employees Retirement System Hazardous

The Kentucky Employees Retirement System (KERS) was established July 1, 1956 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that averages 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.

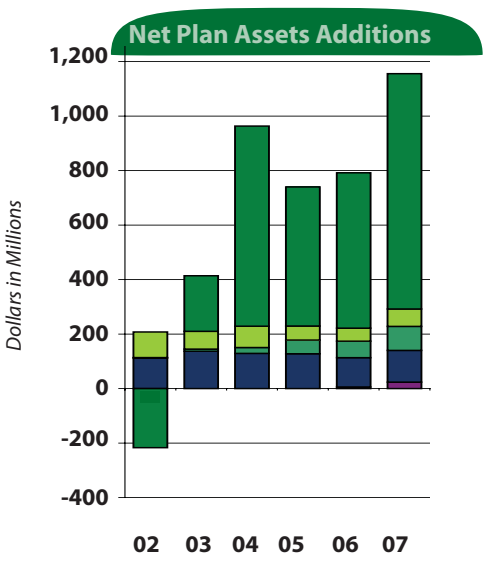
	2002	2003	2004	2005	2006	2007
Net Plan Assets Additions			*(Dollars in Millions)*			
Net Investment Income	22.0	17.6	68.6	49.1	65.7	122.5
Employer Cont. (Ins.)	15.9	15.9	15.0	15.7	17.0	19.5
Employer Cont. (Pen.)	7.9	7.3	9.8	9.8	10.8	13.2
Member Contribution	10.8	11.6	11.5	11.6	12.1	13.2
Other Income					.09	.3
Net Plan Assets Deductions			*(Dollars in Millions)*			
Medical Insurance Exp.[1]	2.5	3.0	3.6	4.9	6.6	7.6
Refunds	1.1	1.2	1.4	1.8	1.4	1.7
Administrative Exp.	.4	.4	.4	.5	.6	.6
Benefit Payments	10.2	13.4	16.9	20.5	23.7	28.5
Funding Level						
Pension	116.9	108.1	98.4	92.3	84.1	83.0
Insurance	57.4	53.5	52.3	48.6	34.3	49.8

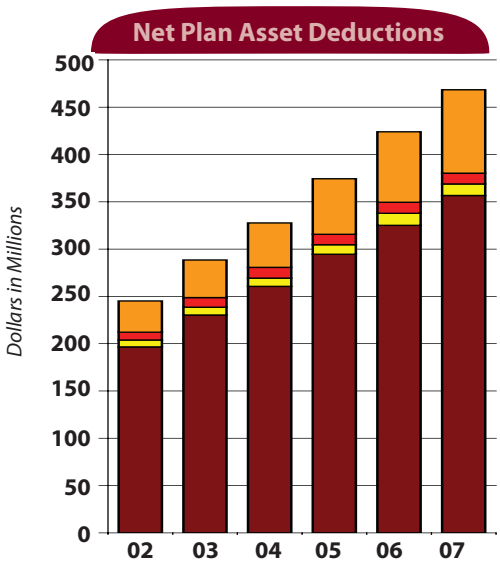


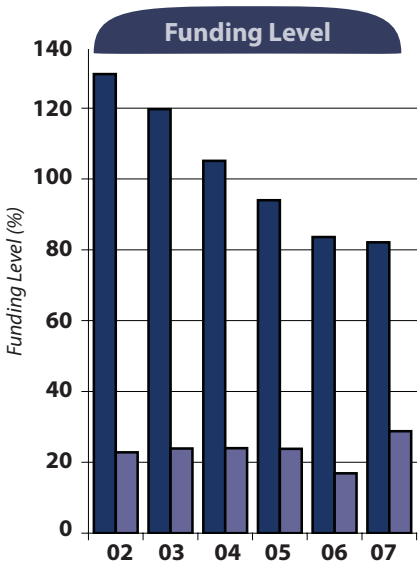




[1] *As of January 1, 2006 the Medical Insurance Exp. includes Self Funding Insurance expenses.*







[1] *As of January 1, 2006 the Medical Insurance Exp. includes Self Funding Insurance expenses.*

County Employees Retirement System Non-Hazardous

The County Employees Retirement System (CERS) was established July 1, 1958 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that average 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim. For school board employees participating in the CERS non-hazardous plan, a regular full-time position is defined as a position that requires the employee to averages 80 hours of work per month over the actual days worked during the school year.

	2002	2003	2004	2005	2006	2007
Net Plan Assets Additions	*(Dollars in Millions)*					
Net Investment Income	151.5	170.7	637.7	469.4	527.8	949.0
Employer Cont. (Ins.)	102.2	99.2	89.3	107.6	128.9	147.6
Employer Cont. (Pen.)	5.5	11.9	44.0	54.6	90.8	124.3
Member Contribution	122.4	125.3	122.5	127.6	112.4	122.0
Other Additions					6.4	23.6
Net Plan Assets Deductions	*(Dollars in Millions)*					
Medical Insurance Exp.[1]	33.0	39.7	47.0	58.7	74.5	88.2
Refunds	8.3	10.2	11.3	11.0	11.6	11.4
Administrative Exp.	7.2	8.2	8.7	10.0	12.8	12.2
Benefit Payments	196.7	230.3	260.6	294.6	325.1	356.6
Funding Level	*(% of Actuarial Assets to Actuarial Liabilities)*					
Pension	129.6	119.7	105.1	94.0	83.6	82.1
Insurance	22.8	23.9	24.0	23.8	16.9	28.8

System Highlights

Members

Active Members	84,920
Inactive Members	53,901
Retired Members and Beneficiaries	35,564

Active Membership

Average Age	45.9
Average Years of Service	8.1
Average Annual Salary	$24,457

Retired Membership

Average Age	68.0
Average Annual Benefit	$10,212
Number Added	3,244
Number Removed	782

Normal Retirement

The CERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member may be partially, or fully paid by KRS depending upon the member's years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	5% per year for 5 years before age 65 or 27 years of service. 4% for each year thereafter.
Any	25	5% each year for five years before 65 or 27 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$5,812,936,000
Insurance Fund:	$1,084,043,000
Total:	$6,896,979,000

Contributions

Employees:		5%
Employers:	Pension:	7.76%
	Insurance:	12.75%
	Total	20.51%

(Rate Effective July 1,2008)

System Highlights

Members

Active Members	10,063
Inactive Members	2,224
Retired Members and Beneficiaries	5,159

Active Membership

Average Age	38.6
Average Years of Service	8.1
Average Annual Salary	$45,613

Retired Membership

Average Age	58.6
Average Annual Benefit	$24,259
Number Added	500
Number Removed	53

Normal Retirement

The KERS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member and eligible dependents may be partially, or fully paid by KRS depending upon the member's type and years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	5.5% per year for 5 years before age 55 or 20 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average consumer price index (CPI-U) for all urban consumers for the most recent calendar year not to exceed 5%. The State Legislature may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$1,754,935,000
Insurance Fund:	$ 570,156,000
Total:	$2,325,091,000

Contributions

Employees:		8 %
Employers:	Pension:	15.04 %
	Insurance:	27.62 %
	Total:	42.66 %

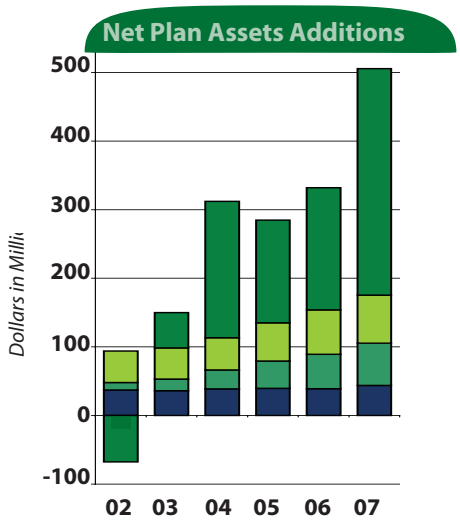
(Rate Effective July 1,2008)

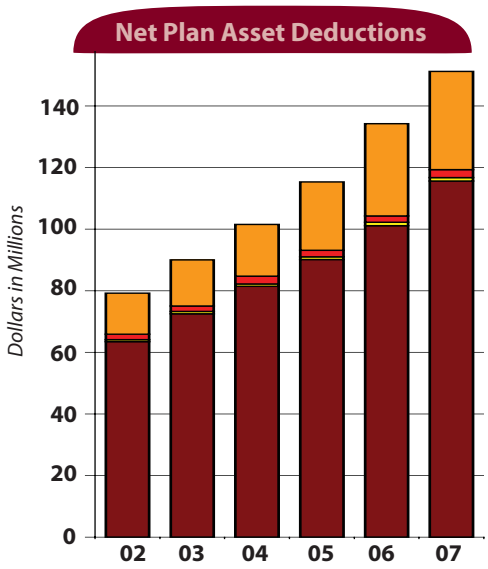
Please see page 106 for a full explanation of the employer contribution rate phase-in.

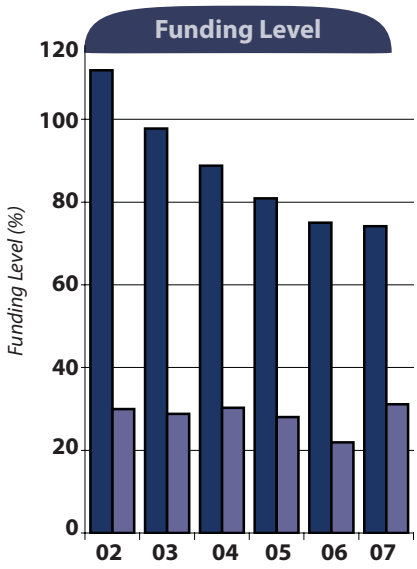
	2002	2003	2004	2005	2006	2007
Net Plan Assets Additions	*(Dollars in Millions)*					
Net Investment Income	67.6	51.6	199.0	148.7	178.1	330.1
Employer Cont. (Ins.)	45.7	45.2	47.0	55.6	64.9	70.1
Employer Cont. (Pen.)	11.1	16.9	27.6	39.9	50.0	61.6
Member Contribution	37.1	36.2	38.7	39.5	39.1	43.7
Other Income					1.0	.8
Net Plan Assets Deductions	*(Dollars in Millions)*					
Medical Insurance Exp.[1]	13.3	15.0	16.8	22.2	29.9	31.9
Refunds	1.8	1.8	2.5	2.1	2.1	2.6
Administrative Exp.	.6	.7	.8	.9	1.1	1.1
Benefit Payments	63.5	72.5	81.4	90.1	101.1	115.6
Funding Level	*(% of Actuarial Assets to Actuarial Liabilities)*					
Pension	111.9	97.8	88.8	80.9	75.0	74.2
Insurance	30.0	28.8	30.3	28.0	21.9	31.2

County Employees Retirement System Hazardous

The County Employees Retirement System (CERS) was established July 1, 1958 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that averages 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.



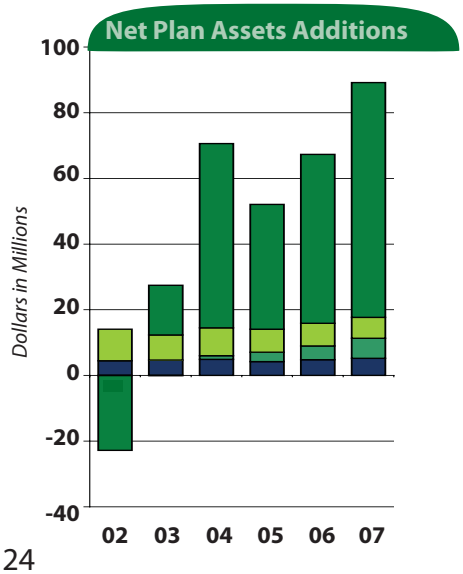


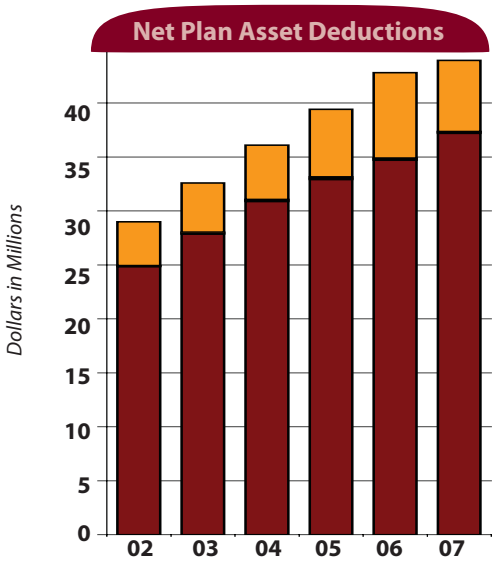


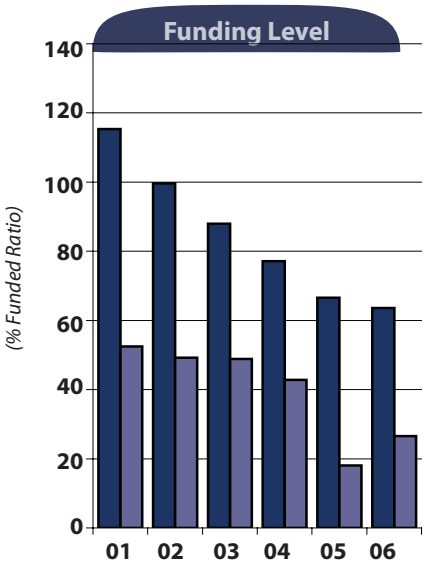
[1] *As of January 1, 2006 the Medical Insurance Exp. includes Self Funding Insurance expenses.*

State Police Retirement System

The State Police Retirement System (SPRS) was established July 1, 1960 by the state legislature. Employees who work in a regular full time position for a participating agency must be enrolled in the retirement system at the beginning of their employment. A regular full-time position is defined by state statute as a position that averages 100 hours of work per month over a fiscal or calendar year, excluding the classifications of temporary, seasonal, and interim.







[1] *As of January 1, 2006 the Medical Insurance Exp. includes Self Funding Insurance expenses.*

	2002	2003	2004	2005	2006	2007
Net Plan Assets Additions	*(Dollars in Millions)*					
Net Investment Income	22.8	15.1	56.1	38.0	51.4	71.5
Employer Cont. (Ins.)	9.6	7.7	8.5	7.0	6.9	6.4
Employer Cont. (Pen.)	0	0	1.2	2.9	4.2	6.1
Member Contribution	4.5	4.7	4.9	4.2	4.8	5.2
Net Plan Assets Deductions	*(Dollars in Millions)*					
Medical Insurance Exp.[1]	4.0	4.5	5.0	6.3	7.9	6.6
Refunds	0	.1	.2	.1	.1	.05
Administrative Exp.	.1	.1	.1	.1	.1	.1
Benefit Payments	24.8	27.9	30.8	32.9	34.7	37.2
Funding Level	*(% of Actuarial Assets to Actuarial Liabilities)*					
Pension	115.3	99.6	88.0	77.1	66.6	63.7
Insurance	52.5	49.2	48.9	42.8	18.1	26.6

System Highlights

Members

Active Members	957
Inactive Members	286
Retired Members and Beneficiaries	1,105

Active Membership

Average Age	37.3
Average Years of Service	11.1
Average Annual Salary	$51,460

Retired Membership

Average Age	60.1
Average Annual Benefit	$35,736
Number Added	49
Number Removed	11

Normal Retirement

The SPRS formula for normal retirement is:

Final Compensation x *Benefit Factor* x *Years of Service*

Insurance Benefits

The cost of insurance for the retired member and eligible dependents may be partially, or fully paid by KRS depending upon the member's type and years of service, the insurance carrier selected and the level of coverage chosen.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
Any	15	5.5% each year for five years before 55 or 20 years of service.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the average consumer price index for all urban consumers for the most recent calendar year not to exceed 5%. The General Assembly may reduce, suspend or eliminate COLAs in the future.

Net Plan Assets

Pension Fund:	$ 376,381,000
Insurance Fund:	$ 132,574,000
Total:	$ 508,955,000

Contributions

Employees:		8 %
Employers:	Pension:	32.39 %
	Insurance:	59.54 %
	Total:	91.93 %

(Rate Effective July 1,2008)

SPRS employer rates are subject to state budget approval.

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For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2006

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President

Executive Director

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Mountjoy & Bressler, LLP
CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITOR'S REPORT

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ended June 30, 2007, as listed in the table of contents. These financial statements are the responsibility of the Kentucky Retirement Systems' management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2007 and the changes in plan net assets for the fiscal year then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated November 15, 2007 on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

Management's Discussion and Analysis (pages 29 through 33) and the required supplementary information included in the schedule of funding progress and schedule of contributions from the employers and other contributing entities (pages 58 through 68) are not a required part of the basic financial statements, but are supplementary information required by auditing standards generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The additional supporting schedules (pages 70 through 71) are presented for the purpose of additional analysis and are not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Mountjoy & Bressler, LLP

November 15, 2007
Louisville, Kentucky

KENTUCKY RETIREMENT SYSTEMS
MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2007

This discussion and analysis of Kentucky Retirement System's financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2007. Please read it in conjunction with the financial statements, which begin on page 34.

FINANCIAL HIGHLIGHTS—PENSION FUND

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of all pension funds administered by Kentucky Retirement Systems increased by $1,276.1 million during the 2006-2007 fiscal year.
- Covered payroll for 2006-2007 was $4,484.4 million compared to covered payroll for the 2005-2006 plan year of $4,348 million, increasing approximately $136.4 million. The corresponding employer contributions increased by $131.2 million for a total employer contribution amount of $601.1 million. Of the total employer contribution amount, $293.4 million was posted to the pension funds while $307.7 million was posted to the insurance fund. Contributions paid by employees were $300.3 and $275.9 million respectively for the fiscal years ended June 30, 2007 and June 30, 2006. This increase in employee contribution is a result of an increase in covered payroll and an increase in service purchased by employees.
- The net appreciation in the fair value of investments was $1,507.8 million for the fiscal year ended June 30, 2007 compared to net appreciation of $803.6 million for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $870.7 million. In comparison, the pension funds realized gains of $601.6 million for the fiscal year ended June 30, 2006. The increase in realized gain experienced by the pension funds is due to a favorable change in market conditions.
- Interest, dividend and securities lending income net of their respective expenses was $407.9 million compared to $358.8 million net investment income in last fiscal year.
- Pension benefits paid to retirees and beneficiaries increased $124.5 million bringing total benefit payments to $1,187.1 million. Refund of contributions paid to former members upon termination of employment increased from $24.9 million to $25.2 million.
- Administrative expense increased $.7 million totaling $21.1 million compared to $20.4 million in the prior year.

KENTUCKY RETIREMENT SYSTEMS
MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2007

FINANCIAL HIGHLIGHTS—INSURANCE FUND

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of the insurance fund administered by Kentucky Retirement Systems increased by $530.6 million during the 2006-2007 fiscal year.
- Premiums received from retirees that participated in the self-funded plan totaled $26.6 million.
- Employer contributions of $307.7 million were received. This is an increase of $54.3 million over the prior fiscal year. This increase is due to the increase of covered payroll reported by participating employers and the employers' increased percentage of covered payroll contributed.
- Retiree Drug Subsidies received were $21.5 million.
- The net appreciation in the fair value of investments was $366.8 million compared to net appreciation of $188.2 million for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $129.5 million. In comparison, the insurance funds realized gains on investments of $77.9 million in the prior fiscal year. This increase in realized gains is due to a favorable change in market conditions.
- Interest, dividend and securities lending income net of their respective expenses was $56.6 million compared to net investment income of approximately $42.6 million in last fiscal year.
- Premiums paid by the fund for hospital and medical insurance coverage totaled $151.5 million. Payments for the self-funded healthcare reimbursements totaled $89.6 million. The total of insurance premiums paid plus self-funded reimbursements was $241.1 million for the 2006-2007 plan year. Insurance premium paid plus self-funded healthcare reimbursements for the prior plan year totaled $212.8 million.

USING THIS FINANCIAL REPORT

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combined Statements of Plan Net Assets for the Pension Fund on page 34 and for the Insurance Fund on page 36 provides a snapshot of the financial position of the each of the three systems at June 30, 2007. The Combined Statement of Changes in Plan Net Assets for the Pension Fund on page 35 and for the Insurance Fund on page 37 summarize the additions and deductions that occurred for each of the three systems during the period from July 1, 2006 through June 30, 2007.

The Schedule of Funding Progress on pages 58-63 includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Contributions from the employers and other contributing entities on pages 64-68 presents historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

Kentucky Retirement Systems' combined plan net assets increased during the year ended June 30, 2007 by $1,806.7 million from $15,152.7 million to $16,959.4 million. Plan net assets for the prior fiscal year increased by $818.9 million. The increase in plan net assets for the plan year ended June 30, 2007 is primarily attributable to the gains on investment due to favorable market conditions. The analysis below focuses on plan net assets (Table 1) and changes in plan net assets (Table 2) of Kentucky Retirement Systems' pension funds and insurance fund.

KENTUCKY RETIREMENT SYSTEMS
MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2007

Table 1 Plan Net Assets
(in millions)

	Pension Funds			Insurance Fund			Total		
	2007	2006	2005	2007	2006	2005	2007	2006	2005
Cash & Invest.	$ 17,245.3	$16,299.5	$14,926.9	$ 3,441.6	$2,691.6	$2,338.9	$ 20,686.9	$18,991.1	$17,265.8
Receivables	125.2	123.4	123.4	41.4	35.7	23.5	166.6	159.1	146.9
Equip. net of dep.	1.9	1.3	0.8				1.9	1.3	0.8
Total Assets	$ 17,372.4	$16,424.2	$15,051.1	$ 3,483.0	$2,727.3	$2,362.4	$ 20,855.4	$19,151.5	$17,413.5
Total Liabilities	(3,144.2)	(3,472.1)	(2,645.9)	(751.8)	(526.7)	(433.8)	(3,896.0)	(3,998.8)	(3,079.7)
Plan Net Assets	$ 14,228.2	$12,952.1	$12,405.2	$ 2,731.2	$2,200.6	$1,928.6	$ 16,959.4	$15,152.7	$14,333.8

Table 2 Changes in Plan Net Assets
(in millions)

	Pension Funds			Insurance Fund			Total		
	2007	2006	2005	2007	2006	2005	2007	2006	2005
Additions:									
Member Contribution	$ 300.3	$275.9	$310.8				$ 300.3	$275.9	$310.8
Employer Contribution	293.4	216.5	157.5	307.7	253.4	232.7	601.1	469.9	390.2
Premiums Received				26.6	12.3		26.6	12.3	
Insurance Appropriation					11.9	4.6		11.9	4.6
Retiree Drug Subsidy				21.5			21.5		
Investment Income (net)	1,915.8	1,162.4	1,059.1	423.4	230.8	157.6	2,339.2	1,393.2	1,216.7
Total Additions	***$2,509.5***	***$1,654.8***	***$1,527.4***	***$ 779.2***	***$508.4***	***$394.9***	***$3,288.7***	***$2,163.2***	***$1,922.3***
Deductions:									
Benefit Payments	$ 1,187.1	$1,062.6	$960.5				$ 1,187.1	$1,062.6	$960.5
Refunds	25 .2	24.9	23.9				25.2	24.0	23.9
Administrative Expenses	21.1	20.4	17.4	6.7	3.6	1.2	27.8	25.9	18.6
Healthcare Costs				241.1	212.8	166.9	241.1	212.8	166.9
Demutualization Refund				0.8	20.0		0.8	20.0	
Total Deductions	***$ 1,233.4***	***$1,107.9***	***$1,001.8***	***$ 248.6***	***$236.4***	***$168.1***	***$1,482.0***	***$1,344.3***	***$1,169.9***
Increase (Decrease) in Plan Net Assets	***$ 1,276.1***	***$546.9***	***$525.6***	***$530.6***	***$272.0***	***$226.8***	***$1,806.7***	***$818.9***	***$752.4***

Plan net assets of the pension funds increased by $1,276.1 million ($14,228.2 million compared to $12,952.1 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. This plan net asset increase is attributable primarily to the net appreciation in the fair value of investments due to the change in market conditions in general.

Plan net assets of the insurance fund increased by approximately $530.6 million ($2,731.2 million compared to $2,200.6 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. This increase in net plan assets is primarily attributable to the net appreciation in the fair value of investments, which is due to the change in market conditions in general.

KENTUCKY RETIREMENT SYSTEMS
MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2007

PENSION FUND ACTIVITIES

Member contributions increased by $24.4 million. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit. The increase in member contributions is a result of an increase in elective service purchases by KRS members over the prior period.

Employer contributions increased by $76.9 million due to the increase in covered payroll reported to KRS and the increase in the employer contribution rate applied to covered payroll.

Net investment income increased by $753.4 million (net investment income of $1,915.8 million compared to net investment income of $1,162.4 million in the prior year). The pension funds experienced an increase in income primarily due to the increase in gains on sale of investments. This can be illustrated in Table 3 as follows:

Table 3 *Investment Income (Pension)*	In Millions 2007	2006	2005
Increase in fair value of investments current year end	$2,483	$1,845	$1,644
Increase in fair value of investments prior year end	$1,845	$1,644	$ 1,395
Net increase in fair value of investments	$638	$201	$249
Investment Income net of Investment Expense	$408	$359	$335
Gain (loss) on sale of investments	$870	$602	$ 475
Investment Income (net)	$1,916	$1,162	$1,059

Pension fund deductions increased by $125.5 million caused principally by an increase of $124.5 million in benefit payments. Retirees received a C.O.L.A. increase of 3.2% in benefit payments as of July 1, 2006. Refunds of member contributions increased by $.3 million and administrative expenses increased by $.7 million.

INSURANCE FUND ACTIVITIES

Employer contributions paid into the insurance fund increased by $54.3 million over the prior year. This increase is a result of the increase in covered payroll reported to KRS and the increase in the rate applied to covered payroll.

Net investment income increased by $192.6 million. This increase in net income is due primarily to the increase in the gains on sale of investments. This can be illustrated in Table 4 as follows:

Table 4 *Investment Income (Insurance)*	In Millions 2007	2006	2005
Increase in fair value of investments current year end	$652	$415	$304
Increase in fair value of investments prior year end	$415	$304	$218
Net increase in fair value of investments	$237	$111	$86
Investment Income net of Investment Expense	$56	$42	$36
Gain (loss) on sale of investments	$130	$78	$36
Investment Income (net)	$423	$231	$158

Insurance fund deductions increased by $12.2 million primarily due to the increase in healthcare costs.

KENTUCKY RETIREMENT SYSTEMS
MANAGEMENT'S DISCUSSION AND ANALYSIS
For the Fiscal Year Ended June 30, 2007

HISTORICAL TRENDS

Accounting standards require that the statement of plan net assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the pension funds and insurance fund is provided in the Schedule of Funding Progress on pages 58-63. The asset value stated in the Schedule of Funding Progress is the actuarial value of assets determined by calculating the difference between the expected valuation assets and the actual market value of assets adjusted for any unrecognized gains or losses and amortized over a five-year period. The actuarial accrued liability is calculated using the entry age normal cost funding method. The difference in value between the actuarial accrued liability and the actuarial value of assets is known as the unfunded actuarial accrued liability. This unfunded actuarial accrued liability is the measure of the cost of benefits that have been earned to date by KRS members, but not yet paid for.

The unfunded actuarial accrued liability in the pension plans increased by $765.5 million for a total unfunded amount of $6,141.1 million for the fiscal year ended June 30, 2007 compared to an unfunded amount of $5,375.6 for the fiscal year ended June 30, 2006. In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2007 assumption changes, and increasing expenditures for retiree Cost of Living Adjustments. Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels.

The Insurance Plan's unfunded actuarial accrued liability has made some improvement for the plan year ended June 30, 2007, decreasing to $8,658.3 million from $13,424.7 million for the plan year ended June 30, 2006. This is a decrease in the unfunded actuarial accrued liability of $4,766.4 million. While the funding level relative to the insurance funds has improved steadily since 1990, medical inflation rates in excess of the assumed rates as well as recent employer contribution rate reductions under KERS and SPRS have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level.

Annual required contributions of the employers as actuarially determined and actual contributions made by the employers in relation to the required contributions are provided in the Schedule of Contributions from the employers and other contributing entities on pages 64-68. The difference in the annual required contributions and actual contributions made by employers in the KERS and SPRS funds is attributable to the statutory employer contribution rate set by the Kentucky General Assembly being less than the rate computed by the actuary.

KENTUCKY RETIREMENT SYSTEMS
COMBINED SCHEDULES OF PLAN NET ASSETS--PENSION FUNDS
For the Fiscal Years Ended June 30, 2007 and 2006

Pension Funds **As of June 30, 2007** *(with comparative totals as of June 30, 2006)*							2006 (Restated)
(Dollars in Thousands)	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	TOTAL	TOTAL
Assets							
Cash and Short-Term Investments							
Cash	$101	$310	$381	$333	$56	$1,181	$3,010
Short-Term Investments	20,977	184,957	63,155	67,102	6,137	342,328	240,887
Total Cash and Short-Term Investments	21,078	185,267	63,536	67,435	6,193	343,509	243,897
Receivables							
Contributions	1,787	21,811	11,753	31,236	1,167	67,754	64,896
Investment Income	2,111	22,755	7,180	23,843	1,553	57,442	58,484
Total Receivables	3,898	44,566	18,933	55,079	2,720	125,196	123,380
Investments at Fair Value							
Corporate and Government Bonds	133,395	1,326,277	432,239	1,434,224	94,457	3,420,592	3,835,399
Corporate Stocks	303,951	3,645,970	1,060,131	3,624,492	234,365	8,868,909	7,909,480
Mortgages	46,952	572,802	178,666	633,529	38,274	1,470,223	845,536
Real Estate	1,943	2,346	2,415	2,360	482	9,546	9,545
Total Investments at Fair Value	486,241	5,547,395	1,673,451	5,694,605	367,578	13,769,270	12,599,960
Securities Lending Collateral Invested	118,723	1,137,425	349,591	1,386,461	140,338	3,132,538	3,455,693
Equipment (net of accumulated depreciation)	54	643	97	1,089	11	1,894	1,277
Total Assets	629,994	6,915,296	2,105,608	7,204,669	516,840	17,372,407	16,424,207
Liabilities							
Accounts Payable	496	4,714	1,082	5,272	121	11,685	16,400
Securities Lending Collateral	118,723	1,137,425	349,591	1,386,461	140,338	3,132,538	3,455,693
Total Liabilities	119,219	1,142,139	350,673	1,391,733	140,459	3,144,223	3,472,093
Plan Net Assets Held in Trust for Pension Benefits	**$510,775**	**$5,773,157**	**$1,754,935**	**$5,812,936**	**$376,381**	**$14,228,184**	**$12,952,114**

(A Schedule of Funding Progress for each Plan is presented beginning on page 58)
See accompanying Independent Auditors Report and Notes to the Financial Statements

KENTUCKY RETIREMENT SYSTEMS
COMBINED SCHEDULES OF CHANGES IN PLAN NET ASSETS--PENSION FUNDS
For the Fiscal Years Ended June 30, 2007 and 2006

Pension Funds **As of June 30, 2007** *(with comparative totals as of June 30, 2006)*							2006 (Restated)
(Dollars in Thousands)	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Additions							
Members' Contributions	$13,245	$116,254	$43,650	$121,979	$5,152	$300,280	$275,904
Employers' Contributions	13,237	88,249	61,553	124,261	6,142	293,442	216,538
Total Contributions	26,482	204,503	105,203	246,240	11,294	593,722	492,442
Investment Income							
From Investing Activities:							
Net Appreciation in Fair Value of Investments	63,641	620,802	190,027	594,889	38,496	1,507,855	803,596
Interest/Dividends	14,820	169,521	51,758	173,310	11,318	420,727	370,009
Total Investing Activities Income	78,461	790,323	241,785	768,199	49,814	1,928,582	1,173,605
Investment Expense	456	4,843	1,654	4,731	307	11,991	10,611
Commissions	262	3,154	842	2,927	201	7,386	8,212
Total Investing Activities Expense	718	7,997	2,496	7,658	508	19,377	18,823
Net Income from Investing Activities	77,743	782,326	239,289	760,541	49,306	1,909,205	1,154,782
From Securities Lending Activities:							
Securities Lending Income	7,109	67,410	20,692	82,521	8,343	186,075	134,770
Securities Lending Expense:							
Security Borrower Rebates	6,774	64,323	19,707	78,613	7,960	177,377	124,694
Security Lending Agent Fees	82	761	139	953	94	2,129	2,463
Net Income From Securities Lending Activities	253	2,326	746	2,955	289	6,569	7,613
Total Net Investment Income	77,996	784,652	240,035	763,496	49,595	1,915,774	1,162,395
Total Additions	104,478	989,155	345,238	1,009,736	60,889	2,509,496	1,654,837
Deductions							
Benefit Payments	28,514	640,201	115,604	365,648	37,187	1,187,154	1,062,608
Refunds	1,662	9,489	2,563	11,396	47	25,157	24,937
Administrative Expenses	611	7,070	1,073	12,197	126	21,077	20,369
Capital Project Expenses	1	13	2	22		38	
Total Deductions	30,788	656,773	119,242	389,263	37,360	1,233,426	1,107,914
Net Increase in Plan Assets	73,690	332,382	225,996	620,473	23,529	1,276,070	546,923
Plan Net Assets Held in Trust for Pension Benefits							
Beginning of Year	**$437,085**	**$5,440,775**	**$1,528,939**	**$5,192,463**	**$352,852**	**$12,952,114**	**$12,405,191**
End of Year	**$510,775**	**$5,773,157**	**$1,754,935**	**$5,812,936**	**$376,381**	**$14,228,184**	**$12,952,114**

(A Schedule of Funding Progress for each Plan is presented beginning on page 58)
See accompanying Independent Auditors Report and Notes to the Financial Statements

KENTUCKY RETIREMENT SYSTEMS
COMBINED SCHEDULES OF PLAN NET ASSETS--INSURANCE FUND
For the Fiscal Years Ended June 30, 2007 and 2006

Insurance Fund

As of June 30, 2007 *(with comparative totals as of June 30, 2006)*

(Dollars in Thousands)	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2007 TOTAL	2006 TOTAL
Assets							
Cash and Short-Term Investments							
Cash	$10	$1	$16	$21	$6	$54	$265
Short-Term Investments	27,737	33,998	51,975	100,996	9,879	224,585	233,850
Total Cash and Short-Term Investments	27,747	33,999	51,991	101,017	9,885	224,639	234,115
Receivables							
Contributions	1,077	6,116	6,743	19,514	366	33,816	30,293
Investment Income	733	1,822	1,607	3,050	368	7,580	5,440
Total Receivables	1,810	7,938	8,350	22,564	734	41,396	35,733
Investments, at Fair Value							
Corporate and Government Bonds	23,331	67,683	64,034	121,460	12,835	289,343	220,782
Corporate Stocks	228,045	555,185	445,919	840,203	109,324	2,178,676	1,735,264
Alternative Investment	15	15	37	61	7	135	135
Total Investments	251,391	622,883	509,990	961,724	122,166	2,468,154	1,956,181
Securities Lending Collateral Invested	82,368	110,898	179,488	344,074	31,974	748,802	501,343
Total Assets	363,316	775,718	749,819	1,429,379	164,759	3,482,991	2,727,372
Liabilities							
Accounts Payable	62	1,262	175	1,262	211	2,972	5,407
Demutualization Proceeds Payable							20,000
Securities Lending Collateral	82,368	110,160	179,488	344,074	31,974	748,802	501,343
Total Liabilities	82,430	112,160	179,663	345,336	32,185	751,774	526,750
Plan Net Assets Held in Trust for Insurance Benefits	**$280,886**	**$663,558**	**$570,156**	**$1,084,043**	**$132,574**	**$2,731,217**	**$2,200,622**

(A Schedule of Funding Progress for each Plan is presented beginning on page 58)
See accompanying Independent Auditors Report and Notes to the Financial Statements

KENTUCKY RETIREMENT SYSTEMS
COMBINED SCHEDULES OF CHANGES IN PLAN NET ASSETS--INSURANCE FUND
For the Fiscal Years Ended June 30, 2007 and 2006

Insurance Fund

As of June 30, 2007 *(with comparative totals as of June 30, 2006)*

(Dollars in Thousands)	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2007 Total	2006 Total
Additions							
Employer Contributions	19,535	64,014	70,073	147,609	6,489	307,720	$253,397
Premiums Received from Retirees	204	12,196	191	13,997	8	26,596	12,326
Retiree Drug Subsidy	105	10,744	657	9,623	361	21,490	
Insurance Appropriation							11,852
Total Contributions	19,844	86,954	70,921	171,299	6,858	355,806	277,575
Investment Income							
From Investing Activities:							
Net Appreciation in Fair Value of Investments	38,760	64,426	78,402	166,070	19,151	366,809	188,231
Interest/Dividends	5,888	14,737	11,789	22,244	2,786	57,444	43,583
Total Investing Activities Income	44,648	79,163	90,191	188,314	21,937	424,253	231,814
Investment Expense	202	367	380	721	93	1,763	1,889
Commissions	84	187	155	277	40	743	567
Total Investing Activities Expense	286	554	535	998	133	2,506	2,456
Net Income from Investing Activities	44,362	78,609	89,656	187,316	21,804	421,747	229,358
From Securities Lending Activities:							
Securities Lending Income	4,055	5,750	8,706	16,645	1,620	36,776	22,094
Securities Lending Expense:							
Security Borrower Rebates	3,839	5,432	8,240	15,751	1,534	34,796	20,294
Security Lending Agent Fees	37	50	81	155	14	337	366
Net Income From Securities Lending Activities	179	268	385	739	72	1,643	1,434
Total Net Investment Income	44,541	78,877	90,041	188,055	21,876	423,390	230,792
Total Additions	64,385	165,831	160,962	359,284	28,734	779,196	508,367
Deductions							
Healthcare Premium Subsidies	6,472	66,590	28,991	44,141	5,288	151,482	177,477
Administrative Expenses	83	3,199	320	3,040	105	6,747	3,562
Self-funding Insurance Premiums	402	44,264	2,616	41,058	1,227	89,567	35,311
Demutualization Proceeds Refunded		805				805	20,000
Total Deductions	6,957	114,858	31,927	88,239	6,620	248,601	236,350
Net Increase in Plan Assets	57,428	50,973	129,035	271,045	22,114	530,595	272,017
Plan Net Assets Held in Trust for Insurance Benefits							
Beginning of Year	223,458	612,585	441,121	812,998	110,460	2,200,622	1,928,605
End of Year	**$280,886**	**$663,558**	**$570,156**	**$1,084,043**	**$132,574**	**$2,731,217**	**$$2,200,622**

(A Schedule of Funding Progress for each Plan is presented beginning on page 58)
See accompanying Independent Auditors Report and Notes to the Financial Statements

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by Kentucky Retirement Systems: (1) Kentucky Employees Retirement System (KERS); (2) County Employees Retirement System (CERS); and (3) State Police Retirement System (SPRS). The assets of the insurance fund are commingled for investment purposes. The following notes apply to the various funds administered by Kentucky Retirement Systems.

NOTE A--SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - KRS financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the Plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the Plan. Premium payments are recognized when due and payable in accordance with terms of the Plan.

Method Used to Value Investments - Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate is based on appraisals. Investments that do not have an established market are reported at estimated fair value.

Estimates - The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment - Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. The capitalization threshold used by KRS for the 2008 and 2006 plan years was $750.

Expense Allocation - Administrative and investment expenses of the Kentucky Retirement Systems are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

Component Unit - Kentucky Retirement Systems is a component unit of the Commonwealth of Kentucky for financial reporting purposes.

The Kentucky Employees Retirement System (KERS) was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statue 61.515. The County Employees Retirement System (CERS) was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statue 78.520. The State Police Retirement System (SPRS) was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statue 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statue 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Systems' Board of Trustees without further legislative review. The methods used to determine the employer rates for all Retirement Systems are specified in Kentucky Revised Statue 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION

Membership of each retirement system consisted of the following at June 30, 2007 and 2006:

Kentucky Employees Retirement System

	2007			2006		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and Beneficiaries Receiving Benefits	33,900	2,206	36,106	32,140	1,980	34,120
Inactive Vested Retirements	5,326	287	5,613	4,998	265	5,263
Inactive Vested Memberships	25,667	2,453	28,120	24,145	2,236	26,381
Active Plan Members	48,033	4,352	52,385	46,707	4,320	51,027
Total	**112,926**	**9,298**	**122,224**	**107,990**	**8,801**	**116,791**
Number of Participating Employers			**359**			**353**

County Employees Retirement System

	2007			2006		
Number of Members	Non-Hazardous Position Employees	Hazardous Position Employees	Total	Non-Hazardous Position Employees	Hazardous Position Employees	Total
Retirees and Beneficiaries Receiving Benefits	35,564	5,159	40,723	33,102	4,712	37,814
Inactive Vested Retirements	8,027	573	8,600	7,379	393	7,772
Inactive Vested Memberships	43,501	4,089	47,590	42,667	1,562	44,229
Active Plan Members	85,367	10,097	95,464	83,694	9,635	93,329
Total	**172,459**	**19,918**	**192,377**	**166,842**	**16,302**	**183,144**
Number of Participating Employers			**1,400**			**1,391**

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

State Police Retirement System

Number of Members	2007 Hazardous Position Employees	2006 Hazardous Position Employees
Retirees and Beneficiaries Receiving Benefits	1,105	1,067
Inactive Vested Retirements	47	48
Inactive Vested Memberships	228	218
Active Plan Members	970	1,028
Total	**2,350**	**2,361**
Number of Participating Employers	**1**	**1**

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

Hospital and medical contracts in force consisted of the following at June 30, 2007 and 2006:

Kentucky Retirement Systems Insurance Fund

	2007					2006				
	Single	Couple/ Family	Parent +	Medicare Without Prescription	Medicare With Prescription	Single	Couple/ Family	Parent +	Medicare Without Prescription	Medicare With Prescription
KERS										
Non-Hazardous	9,144	2,023	538	941	13,144	8,393	1,826	490	1,672	12,000
Hazardous	738	571	82	85	658	656	378	58	74	603
CERS										
Non-Hazardous	6,919	915	280	1,412	13,734	6,298	1,058	249	2,502	11,803
Hazardous	1,379	2,199	219	69	1,230	1,275	1,739	198	52	1,105
SPRS	252	296	19	15	380	260	406	29	9	368
Total	**18,432**	**6,004**	**1,138**	**2,522**	**29,146**	**16,882**	**5,407**	**1,024**	**4,309**	**25,879**

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. KERS provides retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of members under certain circumstances. Cost-of-living (COLA) adjustments are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

Contributions - For the fiscal years ended June 30, 2007 and 2006, plan members were required to contribute 5% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2007 and 2006, participating employers contributed 7.75% and 5.89%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2007 and 2006 was 17.13% and 13.62%, respectively, of each employee's creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in the System. The Plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions - For the fiscal years ended June 30, 2007 and 2006, plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2007 and 2006, participating employers contributed 22% and 18.84%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2007 and 2006 was 23.32% and 21.59%, respectively, of each employee's creditable compensation. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

COUNTY EMPLOYEES RETIREMENT SYSTEM

Non-Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The Plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided at the discretion of the State legislature.

Contributions - For the fiscal years ended June 30, 2007 and 2006, plan members were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2007 and 2006, participating employers contributed 13.19% and 10.98%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2007 and 2006 was 13.19% and 10.98%, respectively. Administrative costs of Kentucky Retirement Systems are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The Plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided at the discretion of the State legislature.

Contributions - For the fiscal years ended June 30, 2007 and 2006, plan members were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2007 and 2006, participating employers contributed 28.21%, and 25.01%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2007 and 2006 was 28.21% and 25.01%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

STATE POLICE RETIREMENT SYSTEM

Plan Description - SPRS is a single-employer defined benefit pension plan that covers all full-time state troopers employed in a hazardous duty position by the Kentucky State Police. The Plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided at the discretion of the State legislature.

Contributions - For the fiscal years ended June 30, 2007 and 2006 plan members were required to contribute 8% of their annual creditable compensation. The State was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2007 and 2006, the Commonwealth contributed 25.50% and 21.58%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2007 and 2006 was 42.30% and 34.83%, respectively, of each employee's creditable compensation. Administrative costs of Kentucky Retirement System are financed through employer contributions and investment earnings.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

Plan Description - The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System. The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ending 2007, insurance premiums withheld from benefit payments for members of the Systems were $24,604,832 and $761,803 for KERS and KERS hazardous, respectively, $23,940,964 and $1,437,509 for CERS and CERS hazardous, respectively, and $163,211 for SPRS. For the fiscal year ended June 30, 2006006, insurance premiums withheld from benefit payments to members of KRS were $23,925,504 and $697,822 for KERS and KERS hazardous, respectively, $23,353,491 and $1,392,261 for CERS and CERS hazardous, respectively, and $203,189 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2007 the Fund had 77,937 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Funds is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows:

Years of Service	% Paid by Insurance Fund
20 or More	100%
15 – 19	75%
10 - 14	50%
4 - 9	25%
Less Than 4	0%

NOTE B--PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION--CONTINUED

As a result of House Bill 290 (2004 General Assembly), medical insurance benefits are calculated differently for members who began participating on or after July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on or after July 1, 2003 earn ten dollars ($10) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on or after July 1, 2003 earn fifteen dollars ($15) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives ten dollars ($10) per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree cost of living adjustment (COLA), which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years.

Kentucky Retirement Systems commenced self-funding of healthcare benefits for its medicare eligible retirees on January 1, 2006. A self-funded plan is one in which Kentucky Retirement Systems assumes the financial risk for providing healthcare benefits to its retirees. The self-funded plan pays for claims out-of-pocket as they are presented instead of paying a pre-determined premium to an insurance carrier for a fully-insured plan. Kentucky Retirement Systems funds the risk directly from its assets. Kentucky Retirement Systems becomes directly responsible for administering benefits under the plan.

Kentucky Retirement Systems' plan is defined by statute. Kentucky Retirement Systems selected Walgreens Health Initiatives and Fiserv Health (Wausau Benefits, Inc.) to administer the pharmaceutical and medical benefits for its retirees.

Stop-loss insurance can be arranged to limit the Kentucky Retirement Systems' loss to a specified amount to ensure that catastrophic claims do not upset the financial integrity of the self-funded plan. The amount of stop-loss insurance is a function of Kentucky Retirement Systems' size, nature of its business, financials, and tolerance for risk. Kentucky Retirement Systems continues to evaluate the use of stop-loss insurance.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE C--CASH AND SHORT-TERM INVESTMENTS AND SECURITIES LENDING COLLATERAL

The provisions of Governmental Accounting Standards Board Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions and investments made with that cash be reported as assets on the financial statements. In conjunction with the adoption of Governmental Accounting Standard No. 28, KRS has reclassified certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

Kentucky Employees Retirement System

		2007		2006
Cash	$	410,633	$	1,965,448
Short Term Investments		205,934,152		120,776,512
Securities Lending Collateral Invested		1,256,147,832		1,254,181,656
Total	$	**1,462,492,617**	$	**1,376,923,616**

County Employees Retirement System

		2007		2006
Cash	$	713,861	$	953,952
Short Term Investments		130,256,739		108,000,545
Securities Lending Collateral Invested		1,736,052,690		2,093,410,581
Total	$	**1,867,023,250**	$	**2,202,365,078**

State Police Retirement System

		2007		2006
Cash	$	56,384	$	89,840
Short Term Investments		6,136,950		12,110,352
Securities Lending Collateral Invested		140,337,713		108,100,996
Total	$	**146,531,047**	$	**120,301,188**

Kentucky Retirement Systems Insurance Fund

		2007		2006
Cash	$	53,838	$	265,217
Short Term Investments		224,584,472		233,849,473
Securities Lending Collateral Invested		448,802,051		501,343,495
Total	$	**973,440,361**	$	**735,458,185**

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE D--INVESTMENTS

The Board of Trustees of the Kentucky Retirement Systems (KRS) recognize their duty to invest funds in accordance with the Prudent Person Rule and manage those funds consistent with the long-term nature of KRS. The Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments - Investments may be made in domestic and international common stock, securities convertible into common stock and in preferred stock of publicly traded corporations.

Fixed Income Investments - Publicly traded corporate bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with the current market and economic conditions. Investment may also be made in any debt instrument issued or guaranteed in whole or in part by the U.S. Government or any agency or instrumentality of the U.S. Government.

Mortgages - Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments guaranteed by an agency of the U.S. Government or the Commonwealth of Kentucky.

Alternative Investments/Equity Real Estate - Subject to the specific approval of the Investment Committee of the Board of Trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, without limitation, venture capital, private equity and private placements which the investment committee believes has excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities - The following short-term investment vehicles are considered acceptable:

Publicly traded investment grade corporate bonds, government and agency bonds, mortgages, and collective STIF's, money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having a BBB or better rating by at least one recognized bond rating service. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur.

Derivatives - Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited.

The Pension and Insurance Funds invest in collateralized mortgage obligations (CMOs) and other asset-backed securities to increase return and adjust duration of the portfolio. The Pension and Insurance Funds invest in exchange-traded funds to convert cash held in index funds to short-term equity investments. This practice is intended to make the performance of the index funds more closely track the performance of the index that the funds are intended to replicate.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE D--INVESTMENTS--CONTINUED

Collateralized mortgage obligations, asset-backed securities, and exchange-traded funds pose no greater risk than other similar investment grade holdings in the Systems' and the Fund's portfolios. The fair value of CMOs at June 30, 2007 and 2006 was approximately $356 million and $225 million respectively; the fair value of asset-backed securities at June 30, 2007 and 2006 was approximately $225 million and $195 million respectively; and the fair value of exchange-traded funds at June 30, 2007 and 2006 was approximately $427 million and $328 million, respectively.

Custodial Credit Risk for Deposits - Custodial credit risk for deposits is the risk that in the event of a financial institution failure, the System's deposits may not be returned. All non-investment related bank balances are held locally by Farmers Bank & Capital Trust Company. All non-investment related bank balances are held in KRS' name and each individual account is insured up to $100,000. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulation (200 KAR 14:081) to be collateralized at 102% of the principal amount.

At June 30, 2007 and 2006, deposits for KRS pension funds were $3,217,697 and $4,175,409, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

At June 30, 2007 and 2006, deposits for KRS insurance fund were $146,289 and $242,866, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments - Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. KRS does not have an explicit policy with regard to Custodial Credit Risk for investments. At June, 30 2007, and 2006, the following investments were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in the System's name.

Pension Funds	2007	2006
Foreign Currency Investments	$3,838,653	$ 4,747,304

Insurance Fund	2007	2006
Foreign Currency Investments	$37,588	$ 25,598

Investment Policies - Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of Trustees of the Kentucky Retirement Systems. The Board of Trustees has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the Prudent Person Rule and manage those funds consistent with the long-term nature of the Systems. The Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of the Kentucky Retirement Systems. The Statement of Investment Policy – Pension contains the specific guidelines for the investment of pension assets. The Statement of Investment Policy – Insurance contains the specific guidelines for the investment of insurance assets. Additionally, the Committee establishes specific investment guidelines in the Investment Management Agreement for each investment management firm.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

Investment Summary

The following tables present a summary of the investments by type as of June 30, 2007 and 2006.

Pension Funds
As of June 30, 2007 and 2006

Investment Summary	2007	2006
U.S. Gov't & Agency Fixed Income Securities	$1,621,746,405	$ 3,251,063,919
U.S. Corporate Fixed Income Securities	3,267,332,169	1,416,970,614
Municipal Debt Securities	1,736,261	12,901,977
Short Term Investments	342,327,842	240,887,409
Equity Securities	8,339,372,635	7,640,279,994
Private Equity Limited Partnerships	529,536,766	269,198,441
Real Estate	9,545,575	9,545,575
Total	***$14,111,597,653***	***$ 12,840,847,929***

Insurance Fund
As of June 30, 2007 and 2006

Investment Summary	2007	2006
U.S. Gov't & Agency Fixed Income Securities	$289,343,176	$ 220,781,808
Short Term Investments	224,584,472	233,849,474
Equity Securities	2,119,830,709	1,705,352,668
Private Equity Limited Partnerships	58,845,081	29,910,939
Alternative Investment	135,000	135,000
Total	***$2,692,738,438***	***$ 2,190,029,889***

Credit Risk of Debt Securities - Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external professional investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension fund debt securities portfolio is managed using the following guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the U.S. government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- The average credit quality of the total portfolio must be A or better.
- Debt obligations must have an investment grade rating at the time of purchase.
- Debt obligations that have been downgraded to below investment grade may be held in the portfolio up to a maximum of 1.5 percent of the total portfolio at market value.
- Debt obligations in the lowest investment grade rating category may not exceed 15 percent of the total portfolio at market value.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE D--INVESTMENTS--CONTINUED

The following tables present the KRS pension fund debt ratings at June 30, 2007 and 2006.

Pension Funds
Debt Securities Investments at Fair Value
As of June 30, 2007 and 2006

Quality Rating	2007	2006
AAA	$3,697,018,884	$1,677,053,070
AA+	4,019,782	
AA	53,385,523	56,357,290
AA-	98,556,277	106,521,997
A+	40,611,902	117,467,811
A	117,081,402	129,605,231
A-	77,178,845	97,696,399
BBB+	100,891,605	93,215,626
BBB	119,298,748	68,755,102
BBB-	73,693,095	54,767,049
BB+	5,470,138	479,237
BB	2,227,931	
BB-	705,765	
NR		104,104,572
Total Credit Risk Debt Securities	$4,390,139,897	$2,506,023,384
U.S. Government & Agencies	500,674,896	2,174,913,125
Total Debt Securities	**$4,890,814,793**	**$4,680,936,509**

At June 30, 2007, and 2006, the weighted average quality rating of the pension fund debt securities portfolio was AA+ and AA+, respectively. As of June 30, 2007, and 2006, KRS had $8,403,834, and $479,237, respectively, in debt securities rated is BBB-. The fair value of securities in the BBB- rating category was $73,693,095, and $54,767,049, respectively, as of June 30, 2007, and 2006.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE D--INVESTMENTS--CONTINUED

The insurance fund debt securities portfolio, by guidelines, is to be invested in US government securities. As shown below, as of June 30, 2007, the entire insurance fund was invested in Treasury Inflation Protected Securities (TIPS) which carry a US Government treasury rating. As of June 30, 2006, the entire insurance fund consisted of TIPS and US Governmental Short-Term Investment Funds (STIF's).

Insurance Fund
Credit Risk of Debt Securities
As of June 30, 2007 and 2006

	2007	2006
U.S. Government & Agencies	$289,343,163	$220,781,808

Concentration of Credit Risk Debt Securities - Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

The total debt securities portfolio is managed using the following general guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the U.S. government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Debt obligations of any single U.S. corporation shall be limited to a maximum of 5 percent of the total portfolio at market value.

Except for US government debt securities, there were no individual investments held in either the KRS pension or insurance portfolios at June 30, 2007 or June 30, 2006, that exceeded the maximum issuer 5% limit.

Interest Rate Risk - Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. The effective duration measures the sensitivity of the market price to changes in the yield curve. Effective duration is the most accurate duration measure when a significant portion of the securities are callable (redeemable) prior to maturity. The pension fund portfolio contains a number of securities that are callable and therefore interest rate risk is most appropriately measured by effective duration. The Systems do not have a formal policy that constrains the duration of its fixed income portfolio.

The KRS pension fund debt securities portfolio benchmarks its debt securities portfolio to a blended benchmark consisting of the Lehman Brothers Government Credit Index, the Lehman Brothers Aggregate Index and the Lehman Brothers U.S. TIPS index. At June 30, 2007 and 2006, the effective duration of the blended benchmark was 4.77 and 5.70, respectively. At the same points in time, the effective duration of the KRS pension fund debt securities portfolio was 4.92 and 4.45, respectively.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE D--INVESTMENTS--CONTINUED

KRS Pension Fund Interest Rate Risk

	2007	Weighted Average Effective Duration	2006	Weighted Average Effective Duration
Asset Backed Securities	$255,198,379	.85	$195,474,695	.80
Commercial Mortgage Backed Securities	359,777,307	3.97	270,294,818	3.50
Corporate Bonds	654,647,912	5.94	733,297,247	5.67
Government Agencies	165,620,722	4.36	457,938,065	3.58
Government Bonds	1,983,611,141	6.61	2,167,249,022	4.83
Government Mortgage Backed Securities	1,114,227,990	3.72	625,876,832	4.59
Municipal Bonds	1,736,261	14.93	12,901,977	11.78
Non-Government Backed Collateralized Mortgage Obligations	355,995,081	1.43	217,903,854	2.00
Total	**$4,890,814,793**	**4.92**	**$4,680,936,510**	**4.45**

The KRS insurance fund long-term debt securities portfolio consists entirely of US government issued bonds which are not callable (redeemable) prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve but does not assume that securities will be called prior to maturity. Since the modified duration measure most accurately reflects the interest rate sensitivity of the insurance fund portfolio, this measure is used for comparative purposes. The KRS insurance fund debt securities portfolio benchmarks its debt securities portfolio to the Lehman Brothers U.S. TIPS Index. At June 30, 2007 and 2006, the modified duration of the benchmark was 6.37 and 7.69 years, respectively. At the same points in time, the modified duration of the KRS insurance fund debt securities portfolio was 7.85 and 8.09 years, respectively.

Insurance Fund
Debt Securities Investments at Fair Value
As of June 30, 2007 and 2006

	2007		2006	
Investment	**Fair Value**	**Weighted Duration**	**Fair Value**	**Weighted Duration**
Index Linked Government Bonds	$289,343,163	7.85	$220,781,808	8.09

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE D--INVESTMENTS--CONTINUED

Foreign Currency Risk - Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. KRS does not have a formal policy to limit foreign currency risk. The following tables present KRS' exposure at June 30, 2007 and 2006.

Pension Funds
Investments at Fair Value
As of June 30, 2007 and 2006

Foreign Equities	**2007**	**2006**
Australian Dollar	$99,886,855	$ 69,810,185
British Pound Sterling	440,922,544	326,927,792
Danish Krone	1,678	5,555,604
Euro	666,125,958	534,096,705
Hong Kong Dollar	36,321,861	19,200,448
Japanese Yen	423,200,251	420,352,056
Malaysian Ringgit	4,940,420	
Norwegian Krone	18,449,939	13,999,004
Singapore Dollar	27,463,397	29,048,766
South African Rand	4,212,526	2,950,033
South Korean Won	10,265,258	
Swedish Krona	21,968,065	46,216,722
Swiss Franc	158,519,487	121,430,006
International Equity Mutual Fund (various currencies)	629,475,754	508,273,254
Total Securities Subject To:		
Foreign Currency Risk	2,541,780,993	2,097,860,575
USD (securities held by International Investment Managers)	61,178,192	45,147,664
Total International Investment Securities	***$2,602,959,185***	$ ***2,143,008,239***

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE D--INVESTMENTS--CONTINUED

Insurance Fund
Investments at Fair Value
As of June 30, 2007 and 2006

Foreign Equities	**2007**	**2006**
Australian Dollar	$ 34,120,308	$ 25,007,521
British Pound Sterling	120,674,789	96,076,217
Danish Krone		2,834,941
Euro	195,444,217	135,800,378
Hong Kong Dollar	9,666,934	6,257,704
Japanese Yen	108,817,816	111,488,690
Norwegian Krone	9,480,847	7,061,386
Singapore Dollar	8,952,357	5,388,276
Swedish Krona	7,170,720	21,656,351
Swiss Franc	49,914,778	35,962,006
Total Securities Subject To:		
Foreign Currency Risk	544,242,766	447,533,470
USD (securities held by International Investment Managers)	3,783,791	3,676,958
Total International Investment Securities	***$548,026,557***	$ ***451,210,428***

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE E--SECURITIES LENDING TRANSACTIONS

Kentucky Revised Statues Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with a fair value of 102 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. At June 30, 2007, the Funds have no credit risk exposure to borrowers because the amounts the Funds owe to borrowers exceed the amounts the borrowers owe the Funds. The contracts with the custodial banks require them to indemnify the Funds if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction, although the average term of the loans was 6 days, 10 days, and 24 days for the three investment portfolios subject to security lending agreements. One custodial bank invests cash collateral in securities that are permitted for investment by state statute and board policy, which at year-end has a weighted-average maturity of 3 days for the Funds. The other custodial bank invests cash collateral in the agent's short-term investment pool as permitted by state statute and Board policy, which at year-end has a weighted-average maturity of 24 days for the Pension Fund only. Neither of the Funds can pledge or sell collateral securities received unless the borrower defaults.

NOTE F--RISKS OF LOSS

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims against the Board of Trustees of Kentucky Retirement Systems or any of its staff as a result of an actual or alleged breach of fiduciary duty are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $100,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

NOTE G--CONTINGENCIES

In the normal course of business, KRS is involved in various litigation concerning the right of participants or their beneficiaries to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

NOTE H--INCOME TAX STATUS

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax under income tax law.

NOTE I--ANTHEM DEMUTUALIZATION

In 2002, Anthem Insurance Companies, Inc., an Indiana corporation, underwent a demutualization, as authorized by the Indiana statutes. The demutualization provided, among other things, that "eligible statutory members," as defined by Indiana statutory provision, would receive cash or stock in consideration for giving up their membership interest in Anthem. In some instances application of the statute led to the determination by Anthem that individual members of the retirement plans administered by Kentucky Retirement Systems were the "statutory members" and in other instances the Kentucky Retirement Systems was identified by Anthem as the eligible statutory member to receive cash or stock under the Anthem demutualization plan. According to Anthem, this determination was based upon which of Anthem's subsidiaries was the original provider. The determination was confirmed by the Indiana Department of Insurance.

The distribution of approximately $62 million, which Kentucky Retirement Systems received on January 4, 2002 under the Anthem demutualization, was deposited in the Kentucky Employees Retirement Systems Insurance Fund. As of November 30, 2006 the date on which all funds were disbursed, the Insurance Fund had earned approximately $4 million in interest, and had appreciated in value approximately $2.8 million. As a result, the value of the distribution at the time of disbursement amounted to approximately $68.8 million. The retirement systems included within the Kentucky Retirement Systems for purposes of the Anthem demutualization are the Kentucky Employees Retirement System, (hazardous and non-hazardous), the County Employees Retirement System (hazardous and non-hazardous), the State Police Retirement System, the Legislators' Retirement Plan, and the Judicial Retirement Plan.

Kentucky Retirement Systems was a defendant in a case entitled Jean C. Love, David E. Wiseman, and Belvia Campbell v. Board of Trustees of the Kentucky Retirement Systems, which was in Franklin Circuit Court. At issue was how to distribute the proceeds resulting from Anthem's demutualization. The plaintiffs sought to recover the full amount of the proceeds or, alternatively, the pro rata amount of proceeds attributable to insurance premiums that the employees and/or their beneficiaries paid directly.

On June 30, 2006, the parties in the case entered into a Settlement Agreement that was approved on a preliminary basis by the Circuit Court. The Agreement received final approval from the Circuit Court on September 28, 2006. In accordance with the Agreement, $20 million was transferred to the "Northern Trust Institutional Funds Prime Obligations Portfolio" operated by the Northern Trust Company of Chicago, Illinois (which is the investment custodian for Kentucky Retirement Systems), with such account ("Settlement Fund Savings Account") to be held and controlled exclusively by Kentucky Retirement Systems. This account was created on July 11, 2006.

KENTUCKY RETIREMENT SYSTEMS
NOTES TO FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 2007 and 2006

On, or about, the effective date of the Settlement Agreement of October 29, 2006, Kentucky Retirement Systems caused all funds contained in the Settlement Fund Savings Account, including any interest earned, to be paid to the Plaintiffs' Counsel in trust for the full, complete and final satisfaction of all claims released pursuant to the Settlement Agreement. The Settlement Fund Savings Account was be distributed by the Plaintiffs' Counsel as ordered by the Court.

The remaining balance of approximately $48.8 million, plus earnings thereon, was distributed on November 30, 2006, as follows: Judicial Retirement Plan, $376,105; Legislators Retirement Plan, $112,343; and, Kentucky Retirement Systems, $48,356,362. Accrued interest was transferred to each account on December 5, 2006 in the following amounts; Judicial Retirement Plan, $1,545; Legislators Retirement Plan, $462; and, Kentucky Retirement System, $198,666. The balance transferred to Kentucky Retirement Systems was further segregated among the various plans it manages, as follows: Kentucky Employees Retirement System-Non-Hazardous, $24,777,800 or $51.24%; Kentucky Employees Retirement System-Hazardous, $676,989, or $1.4%; County Employees Retirement System-Non-Hazardous, $21,523,417 or $44.51%; County Employees Retirement System-Hazardous, $913,935, or $1.89%; and, State Police Retirement System $464,221, or $.96%. The manner of distribution was determined by the Segal Company, the former actuaries of Kentucky Retirement Systems

NOTE J--DEFINED BENEFIT PENSION PLAN

All eligible employees of Kentucky Retirement Systems (KRS) participate in the Kentucky Employees Retirement System (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers substantially all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The Plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Plan members contributed 5.0% of creditable compensation for the periods ending June 30, 2007, June 30, 2006, and June 30, 2005. KRS contributed 7.75%, 5.89% and 5.89%, of covered payroll for the periods ending June 30, 2007, June 30, 2006, and June 30, 2005. The chart below includes the covered payroll and contribution amounts for KRS for the three periods included in this discussion.

	2007	**2006**	**2005**
Covered Payroll	$11,269,800	$10,960,000	$9,891,000
Employer Contributions	$873,400	$ 641,200	$ 572,400

NOTE K--EQUIPMENT

Equipment consists of the following:

	As of June 30, 2007	**As of June 30, 2006**
Equipment, at cost	$ 4,886,710	$ 4,039,537
Less accumulated depreciation	$ (2,992,574)	$ (2,763,017)
Total	$ **1,894,136**	$ **1,276,520**

Depreciation expense for the years ended June 30, 2007 and 2006 amounted to $438,278 and $387,292, respectively.

NOTE L--ALTERNATIVE INVESTMENT

On February 6, 2006, the health insurance fund of Kentucky Retirement Systems loaned to KRS Perimeter Park West, Inc., a related party, $700,000 for the purchase of real property at 1300 Louisville Road, Frankfort, Kentucky. The loan was not documented by a note, mortgage contract, or security interest in the property. Subsequent to the lending and purchase, the real property was valued by appraisal from $135,000 to $290,000. The range of appraisal values is based upon considerations of zoning classifications, site preparations and improvements, and other matters. Kentucky Retirement Systems is reflecting the alternative investment at the lowest appraisal value for the property. Because of the significant difference in the appraised value of the property and the loan amount, and also because the loan was not documented by a note, mortgage contract, or security interest in the property, the Kentucky Retirement Systems is uncertain whether it will be able to collect any principal (or interest) in excess of the minimum appraised property value. Therefore, as of June 30, 2006, KRS Management elected to write down the value of the alternative investment to an estimated collectable value of $135,000.

NOTE M--PRIOR PERIOD ADJUSTMENT

The Pension Fund's net assets as of June 30, 2006, and the net increase in the Pension Fund's net assets for the fiscal year then ended, have been restated to correct for an error in accrued wages at June 30, 2006. The net effect of this correction for reporting purposes was a $1,888,000 decrease in Administrative Expenses (Salaries and Per Diem) for the fiscal year ended June 30, 2006, and a corresponding increase in Pension Fund's net assets as of June 30, 2006.

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

Kentucky Employees Retirement Systems (KERS) - Pension Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$6,844,742,687	$5,444,035,294	($1,400,707,393)	125.7%	$1,505,299,220	(93.1%)
June 30, 2002*	6,654,084,196	6,026,094,764	(627,989,432)	110.4	1,595,809,458	(39.3)
June 30, 2003**	6,351,318,832	6,520,463,188	169,144,356	97.4	1,658,604,696	10.2
June 30, 2004**	6,000,513,743	7,049,613,171	1,049,099,428	85.1	1,645,412,496	63.8
June 30, 2005**	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
June 30, 2006**	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
June 30, 2007**	5,396,782,459	9,485,939,278	4,089,156,819	56.9	1,780,223,493	229.7
Hazardous						
June 30, 2001	$361,677,475	$285,193,761	($76,483,714)	126.8%	$122,857,992	(62.3%)
June 30, 2002*	376,384,302	322,069,164	(54,315,138)	116.9	125,275,925	(43.4)
June 30, 2003**	385,925,722	356,879,133	(29,046,589)	108.1	129,088,956	(22.5)
June 30, 2004**	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
June 30, 2005**	405,288,662	439,013,910	33,725,248	92.3	131,687,088	25.6
June 30, 2006**	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
June 30, 2007**	467,287,809	558,992,327	91,704,518	83.6	144,838,020	63.3
Total						
June 30, 2001	$7,206,420,162	5,729,229,055	$1,477,191,107	125.8%	$1,628,157,212	(90.7%)
June 30, 2002*	7,030,468,498	6,348,163,928	682,304,570	110.7	1,721,085,383	(39.6)
June 30, 2003**	6,737,244,554	6,877,342,321	140,097,767	98.0	1,787,693,652	11.1
June 30, 2004**	6,397,726,506	7,453,191,207	1,055,464,701	85.8	1,772,077,308	59.6
June 30, 2005**	5,983,974,408	8,018,088,749	2,034,114,341	74.6	1,787,594,376	113.8
June 30, 2006**	5,822,070,515	9,503,482,151	3,681,411,635	61.3	1,840,978,097	200.0
June 30, 2007**	5,864,070,268	10,044,931,605	4,180,861,337	58.4	1,925,061,513	217.2

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

County Employees Retirement Systems (CERS) - Pension Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$5,423,834,549	$3,706,282,212	($1,717,552,337)	146.3%	$1,544,973,296	(111.2%)
June 30, 2002*	5,397,787,158	4,165,355,149	(1,232,432,009)	129.6	1,663,183,629	(74.1)
June 30, 2003**	5,286,580,047	4,417,597,802	(868,982,245)	119.7	1,796,451,180	(48.4)
June 30, 2004**	5,187,851,530	4,936,459,488	(251,392,042)	105.1	1,826,870,880	(13.8)
June 30, 2005**	5,059,208,687	5,385,306,505	326,097,818	93.9	1,885,275,000	17.3
June 30, 2006**	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
June 30, 2007**	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
Hazardous						
June 30, 2001	$1,486,666,016	$1,193,860,442	($292,805,574)	124.5%	$316,700,304	(92.5%)
June 30, 2002*	1,485,511,793	1,327,291,273	(158,220,520)	111.9	345,849,277	(45.7)
June 30, 2003**	1,467,004,856	1,499,628,782	32,623,926	97.8	374,700,732	8.7
June 30, 2004**	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
June 30, 2005**	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
June 30, 2006**	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
June 30, 2007**	1,639,288,294	2,208,736,179	569,447,255	74.2	458,998,956	124.1
Total						
June 30, 2001	$6,910,500,565	$4,900,142,654	($2,010,357,911)	141.0%	$1,861,673,600	(108.0%)
June 30, 2002*	6,883,298,951	5,492,646,422	(1,390,652,529)	125.3	2,009,032,906	(69.2)
June 30, 2003**	6,753,584,903	5,917,226,584	(836,358,319)	114.1	2,171,151,912	(38.5)
June 30, 2004**	6,645,463,572	6,577,289,608	(68,173,964)	101.0	2,219,433,504	(3.1)
June 30, 2005**	6,511,561,710	7,180,923,840	669,362,130	90.7	2,296,396,728	29.2
June 30, 2006**	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
June 30, 2007**	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

State Police Retirement Systems (SPRS) - Pension Funds

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2001	$456,160,709	$356,211,860	($99,948,849)	128.1%	$44,646,678	(223.7%)
June 30, 2002*	438,955,465	380,790,346	(58,165,119)	115.3	44,314,696	(131.2)
June 30, 2003**	413,063,576	414,881,459	1,817,883	99.6	43,760,832	4.2
June 30, 2004**	385,077,195	437,482,425	52,405,230	88.0	43,835,208	119.6
June 30, 2005**	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
June 30, 2006**	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
June 30, 2007**	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

Kentucky Employees Retirement Systems (KERS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$449,630,605	$1,769,583,098	$1,319,952,493	25.4%	$1,505,299,220	87.7%
June 30, 2002*	521,250,455	1,907,683,881	1,386,433,426	27.3	1,595,809,458	86.9
June 30, 2003**	553,885,082	2,093,210,321	1,539,325,239	26.5	1,658,604,696	92.8
June 30, 2004**	600,586,961	2,335,905,365	1,735,318,404	25.7	1,645,412,496	105.5
June 30, 2005**	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
June 30, 2006**	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
June 30, 2007**	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
Hazardous						
June 30, 2001	$119,372,742	$214,450,822	$95,078,080	55.7%	$122,857,992	77.4%
June 30, 2002*	135,874,582	236,819,050	100,944,468	57.4	125,275,925	80.6
June 30, 2003**	151,459,500	283,178,335	131,718,835	53.5	129,088,956	102.0
June 30, 2004**	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
June 30, 2005**	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
June 30, 2006**	212,833,818	621,237,856	408,404,538	34.3	138,747,320	294.4
June 30, 2007**	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
Total						
June 30, 2001	569,003,347	$1,984,033,920	$1,415,030,573	28.7%	$1,628,157,212	86.9%
June 30, 2002*	657,125,037	2,144,502,931	1,487,377,894	30.6	1,721,085,383	86.4
June 30, 2003**	705,344,582	2,376,388,656	1,671,044,074	29.7	1,787,693,652	93.5
June 30, 2004**	769,745,840	2,659,408,928	1,889,663,088	28.9	1,772,077,308	106.6
June 30, 2005**	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
June 30, 2006**	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,178,097	413.5
June 30, 2007**	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

County Employees Retirement Systems (CERS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$371,758,628	$1,793,710,768	$1,421,952,140	20.7%	$1,544.973,296	92.0%
June 30, 2002*	450,497,307	1,977,577,038	1,527,079,731	22.8	1,663,183,629	91.8
June 30, 2003**	520,060,105	2,176,963,259	1,656,903,154	23.9	1,796,451,180	92.2
June 30, 2004**	585,399,072	2,438,734,696	1,853,335,624	24.0	1,826,870,880	101.5
June 30, 2005**	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
June 30, 2006**	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
June 30, 2007**	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
Hazardous						
June 30, 2001	$197,875,249	$721,605,292	$523,730,043	27.4%	$316,700,304	165.4%
June 30, 2002*	234,683,878	781,184,974	546,501,096	30.1	345,849,279	158.0
June 30, 2003**	269,190,080	935,650,662	666,460,582	28.8	374,700,732	177.9
June 30, 2004**	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
June 30, 2005**	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
June 30, 2006**	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
June 30, 2007**	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
Total						
June 30, 2001	$569,633,877	$2,515,316,060	$1,945,682,183	22.6%	$1,861,673,600	104.5%
June 30, 2002*	685,181,185	2,758,762,012	2,073,580,827	24.8	2,009,032,908,	103.2
June 30, 2003**	789,250,185	3,112,613,921	2,323,363,736	25.4	2,171,151,912	107.0
June 30, 2004**	895,977,234	3,464,419,173	2,568,441,939	25.9	2,219,433,504	115.7
June 30, 2005**	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
June 30, 2006**	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
June 30, 2007**	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3

**Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.*
***Covered payroll was actuarially computed as opposed to estimated in prior years.*

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

State Police Retirement Systems (SPRS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2001	$79,863,577	$158,261,479	$78,397,902	50.5%	$44,646,678	175.6%
June 30, 2002*	86,867,391	165,445,412	78,578,021	52.5	44,314,696	177.3
June 30, 2003**	90,747,967	184,501,205	93,753,238	49.2	43,760,832	214.2
June 30, 2004**	96,622,908	197,604,301	100,981,393	48.9	43,835,208	230.4
June 30, 2005**	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
June 30, 2006**	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
June 30, 2007**	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8

Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
****Covered payroll was actuarially computed as opposed to estimated in prior years.***

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYERS AND OTHER CONTRIBUTING ENTITIES

Kentucky Employees Retirement System (KERS)

Non-Hazardous

Fiscal Year Ended	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$21,787,253	$23,482,080	107.8%	$66,874,871	$66,874,871	100.0%
June 30, 2002		1,760,328		93,993,177	93,912,017	99.9
June 30, 2003	4,905,399	7,597,450	134.9	92,052,561	65,335,219	71.0
June 30, 2004	47,739,067	21,696,543	45.4	77,951,553	78,016,737	100.1
June 30, 2005	85,798,943	50,332,750	58.7	86,974,271	49,909,228	57.4
June 30, 2006	137,330,718	60,680,607	44.2	100,942,451	43,748,669	43.3
June 30, 2007	190,299,462	88,248,677	46.4	114,928,046	74,758,381	65.0

Hazardous

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$9,920,148	$10,626,663	107.1%	$13,226,298	$13,226,298	100.0%
June 30, 2002	7,742,052	17,933,817	102.5	15,859,932	15,887,399	100.2
June 30, 2003	8,511,402	7,322,607	86.0	15,839,215	15,883,263	100.3
June 30, 2004	9,600,978	9,769,580	101.8	14,942,092	14,959,617	100.1
June 30, 2005	9,449,878	9,758,547	103.3	15,892,977	15,395,977	96.9
June 30, 2006	12,128,538	10,803,206	89.1	18,605,633	16,243,103	87.3
June 30, 2007	13,644,045	13,237,321	97.0	20,642,499	19,639,488	95.1

Total

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$31,707,401	$34,108,743	107.6%	$80,101,169	$80,101,169	100.0%
June 30, 2002	7,742,052	9,694,145	125.2	109,853,109	109,799,416	100.0
June 30, 2003	13,416,801	14,920,057	111.2	107,891,776	81,218,482	75.3
June 30, 2004	57,340,045	31,466,123	54.9	92,893,645	92,976,354	100.1
June 30, 2005	95,248,821	60,091,297	63.1	102,867,248	65,305,205	63.5
June 30, 2006	149,459,256	71,483,813	47.8	119,548,084	59,991,772	50.2
June 30, 2007	203,943,507	101,485,998	49.8	135,570,545	94,397,869	69.6

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYERS AND OTHER CONTRIBUTING ENTITIES

Kentucky Employees Retirement System (KERS)

Fiscal Year Ended	Non-Hazardous Total Annual Required Contributions	Non-Hazardous Total Actual Contributions	Non-Hazardous Total Percentage Contributed
June 30, 2001	$88,662,124	$90,356,951	101.9%
June 30, 2002	93,993,177	95,672,345	101.8
June 30, 2003	96,957,960	72,932,669	75.2
June 30, 2004	125,690,620	99,713,280	79.3
June 30, 2005	172,773,214	100,241,978	58.0
June 30, 2006	238,273,169	104,429,276	43.8
June 30, 2007	305,227,508	163,007,058	53.4

	Hazardous Total Annual Required Contributions	Hazardous Total Actual Contributions	Hazardous Total Percentage Contributed
June 30, 2001	$23,146,446	$23,852,961	103.1%
June 30, 2002	23,601,984	23,821,216	100.9
June 30, 2003	24,350,617	23,205,870	95.3
June 30, 2004	24,543,070	24,729,197	100.8
June 30, 2005	25,342,855	25,154,524	99.3
June 30, 2006	30,734,171	27,046,309	88.0
June 30, 2007	34,286,544	32,876,809	95.9

	Total Total Annual Required Contributions	Total Total Actual Contributions	Total Total Percentage Contributed
June 30, 2001	$111,808,570	$114,209,912	102.1%
June 30, 2002	117,595,161	119,493,561	101.6
June 30, 2003	121,308,577	96,138,539	79.3
June 30, 2004	150,233,690	124,442,477	82.8
June 30, 2005	198,116,069	125,396,502	63.3
June 30, 2006	269,007,340	131,475,585	48.9
June 30, 2007	339,514,052	195,883,867	57.7

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYERS AND OTHER CONTRIBUTING ENTITIES

County Employees Retirement System (CERS)

Non-Hazardous

Fiscal Year Ended	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$35,658,922	$48,914,435	137.2%	$62,292,385	$62,292,385	100.0%
June 30, 2002	3,326,367	5,528,348	166.2	102,119,475	102,150,543	100.0
June 30, 2003	8,682,257	11,855,694	136.6	102,038,427	99,234,843	97.3
June 30, 2004	43,111,505	44,028,465	102.1	89,289,520	89,344,241	100.1
June 30, 2005	53,117,955	54,616,800	102.8	106,612,633	106,638,253	100.0
June 30, 2006	89,486,365	90,834,052	101.5	126,460,952	126,480,816	100.0
June 30, 2007	121,931,495	124,260,850	101.9	147,461,540	157,232,232	106.6

Hazardous

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$19,409,377	$20,983,360	108.1%	32,149,432	32,149,432	100.0
June 30, 2002	10,582,988	11,054,949	104.5	45,721,274	45,730,333	100.0
June 30, 2003	19,920,223	16,905,556	84.9	43,502,755	45,243,950	104.0
June 30, 2004	27,050,382	27,640,775	102.2	47,018,046	47,036,777	100.0
June 30, 2005	39,437,725	39,947,747	101.3	54,094,495	54,106,577	100.0
June 30, 2006	49,589,149	49,976,485	100.8	60,947,804	60,933,604	100.0
June 30, 2007	60,782,567	61,553,118	101.3	70,008,907	70,729,308	101.0

Total

	Pension			Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	55,068,299	$69,897,795	126.9%	$94,441,817	$94,441,817	100.0%
June 30, 2002	13,909,355	16,583,297	119.2	147,840,749	147,880,876	100.0
June 30, 2003	28,602,480	28,761,250	100.6	145,541,182	144,478,793	99.3
June 30, 2004	70,161,887	71,669,240	102.1	136,307,566	136,381,018	100.1
June 30, 2005	92,555,680	94,564,547	102.2	160,707,128	160,744,830	100.0
June 30, 2006	139,075,514	140,810,537	101.2	187,408,756	187,414,420	100.0
June 30, 2007	182,714,062	185,813,968	101.7	217,470,447	227,961,540	104.8

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYERS AND OTHER CONTRIBUTING ENTITIES

County Employees Retirement System (CERS)

Non-Hazardous

Fiscal Year Ended	Total		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$97,951,307	$111,206,820	113.5%
June 30, 2002	105,445,842	107,678,891	102.1
June 30, 2003	110,720,684	111,090,537	100.3
June 30, 2004	132,401,025	133,372,706	100.7
June 30, 2005	159,730,588	161,255,053	101.0
June 30, 2006	215,947,317	217,314,868	100.6
June 30, 2007	269,393,035	281,493,082	104.5

Hazardous

	Total		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$51,558,809	$53,132,792	103.1%
June 30, 2002	56,304,262	56,785,282	100.9
June 30, 2003	63,422,978	62,149,506	98.0
June 30, 2004	74,068,428	74,677,552	100.8
June 30, 2005	93,532,220	94,054,324	100.6
June 30, 2006	100,536,953	110,910,089	100.3
June 30, 2007	130,791,474	132,282,426	101.1

Total

	Total		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$149,510,116	$164,339,612	109.9%
June 30, 2002	161,750,104	164,464,173	101.7
June 30, 2003	174,143,662	173,240,043	99.5
June 30, 2004	206,469,453	208,050,258	100.8
June 30, 2005	253,262,808	255,309,377	100.8
June 30, 2006	326,484,270	328,224,956	100.5
June 30, 2007	400,184,509	413,775,508	103.4

KENTUCKY RETIREMENT SYSTEMS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYERS AND OTHER CONTRIBUTING ENTITIES

State Police Retirement System (SPRS)

Fiscal Year Ended	Pension		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$1,535,846	$1,515,521	98.7%
June 30, 2002		(17,463)	
June 30, 2003		(20,061)	
June 30, 2004	1,175,711	1,152,752	98.0
June 30, 2005	3,730,805	2,851,461	76.4
June 30, 2006	6,888,805	4,244,445	61.6
June 30, 2007	10,227,713	6,142,326	60.1

	Insurance		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$8,098,907	$8,113,391	100.2%
June 30, 2002	9,563,111	9,579,899	100.1
June 30, 2003	9,443,588	7,654,313	81.1
June 30, 2004	8,434,834	8,455,498	100.2
June 30, 2005	8,608,536	6,631,031	77.0
June 30, 2006	9,669,999	5,990,265	61.9
June 30, 2007	10,733,152	6,850,092	63.8

	Total		
	Annual Required Contributions	Actual Contributions	Percentage Contributed
June 30, 2001	$9,634,753	$9,628,912	99.9%
June 30, 2002	9,563,111	9,562,256	100.0
June 30, 2003	9,443,588	7,634,252	80.8
June 30, 2004	9,610,545	9,608,250	100.0
June 30, 2005	12,339,341	9,482,492	76.8
June 30, 2006	16,558,804	10,234,710	61.8
June 30, 2007	20,960,865	12,992,418	62.0

KENTUCKY RETIREMENT SYSTEMS
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The information presented in the required supplementary schedules as determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Pension Funds

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2007	June 30, 2007
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	30 Years	30 Years
Asset Valuation Method	Five-Year Smoothed Market	Five-Year Smoothed Market
Actuarial Assumptions:		
Investment Return	7.75%	7.75%
Projected Salary Increases	4.0-13.5%	4.0-14.5%
Cost-of-Living Adjustment	None	None
Includes Inflation Rate at	3.50%	3.50%

Insurance Fund

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2007	June 30, 2007
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	30 Years	30 Years
Asset Valuation Method	Five-Year Smoothed Market	Five-Year Smoothed Market
Medical Trend Assumption Year of Ultimate Trend	12.00-5.50% 2015	12.00-5.50% 2015
Actuarial Assumptions:		
Investment Return	4.50%	7.75%
Includes Inflation Rate at	3.5%	3.5%

KENTUCKY RETIREMENT SYSTEMS
Schedule of Administrative Expenses
For the Fiscal Years Ended June 30, 2007 and 2006

	2007	2006 (Restated)
	(Dollars in Thousands)	
Personal Services		
Salaries and Per Diem	$ 11,429	$ 11,153
Fringe Benefits	3,230	2,964
Tuition Assistance	53	91
Total Personal Services	14,712	14,208
Contractual Services		
Actuarial	470	161
Audit	42	23
Legal	395	522
Medical	255	288
Contractual	637	1,354
Total Contractual Services	1,799	2,348
Communication		
Printing	331	254
Telephone	147	172
Postage	633	637
Travel	236	218
Total Communication	1,347	1,281
Rentals		
Office Space	979	980
Equipment	67	57
Total Rentals	1,046	1,037
Miscellaneous		
Utilities	274	221
Supplies	268	165
Insurance	64	61
Maintenance	441	300
Other	687	361
Total Miscellaneous	1,734	1,108
Depreciation	439	387
Healthcare Administrative Expenses	6,748	3,562
Total Administrative Expenses	**$ 27,825**	**$ 23,931**

Kentucky Retirement Systems
Schedule of Investment Expenses
For the Fiscal Years Ended June 30, 2007 and 2006

	2007	2006
	(Dollars in Thousands)	
Pension Funds		
Security Lending Fees		
Broker Rebates	$177,377	$ 124,694
Lending Agent Fees	2,129	2,463
Total Security Lending	179,506	127,157
Common Stock Commissions	7,386	8,212
Contractual Services		
Investment Management	10,573	10,156
Security Custody	381	288
Investment Consultant	377	111
Investment Related Travel	25	57
Total Contractual Services	11,356	10,612
Insurance Fund		
Security Lending Fees		
Broker Rebates	34,796	20,294
Lending Agent Fees	338	366
Total Security Lending	35,134	20,660
Common Stock Commissions	744	567
Investment Management	1,438	1,889
Total Investment Expenses	**$235,564**	**$ 169,097**

Schedule of Professional Consultant Fees
For the Fiscal Years Ended June 30, 2007 and 2006

	2007	2006
	(Dollars in Thousands)	
Actuarial Services	$470	$ 161
Medical Review Services	255	288
Audit Services	42	23
Legal Counsel	395	522
Compliance	180	136
Workflow	245	364
Healthcare	133	750
Banking	53	51
Miscellaneous	26	53
Total	$1,799	$ 2,348

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2007, and have issued our report thereon dated November 15, 2007. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

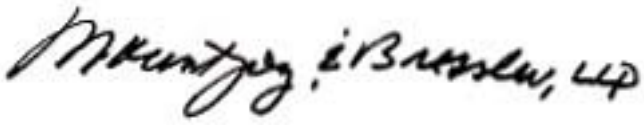
Internal Control Over Financial Reporting
In planning and performing our audit, we considered Kentucky Retirement Systems' internal control over financial reporting in as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements but not for the purpose of expressing an opinion on the effectiveness of the Kentucky Retirement Systems' internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Kentucky Retirement Systems' control over financial reporting.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the entity's ability to initiate, authorize, record, process, or report financial data reliably in accordance with generally accepted accounting principles such tat there is more than a remote likelihood that a misstatement of the entity's financial statements that is more than inconsequential will not be prevented or detected by the entity's internal control.

Our consideration of the internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance And Other Matters
As part of obtaining reasonable assurance about whether Kentucky Retirement Systems' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance and other matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information of the audit committee, management, and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.



November 15, 2007
Louisville, Kentucky

SCHEDULE OF FINDING AND RESPONSE

CURRENT YEAR
Our audit disclosed no findings which are required to be reported in accordance with *Government Auditing Standards.*

PRIOR YEAR
Item 2006-1, Management Override of Internal Controls, was addressed adequately by management.

Investment Section

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Investment Summary

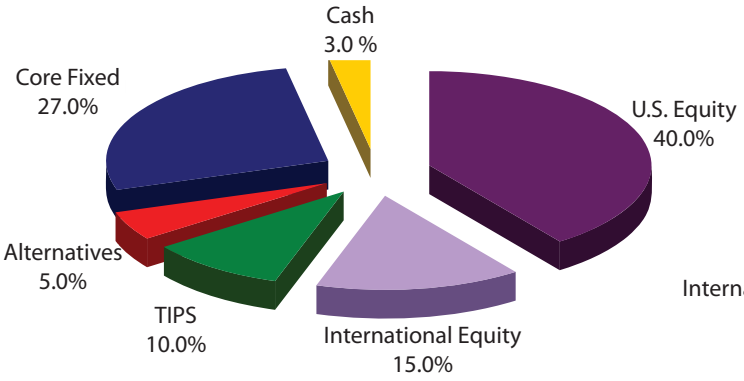
The Board of Trustees is charged with the responsibility of investing Kentucky Retirement Systems' assets in order to provide for the benefits to be paid to KRS members. To achieve that goal the Board follows a policy of preserving capital, while seeking means of enhancing revenues and protecting against undue losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in formal compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the Systems. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policies, objectives and strategies for both the pension and insurance portfolios.

Investment Policy

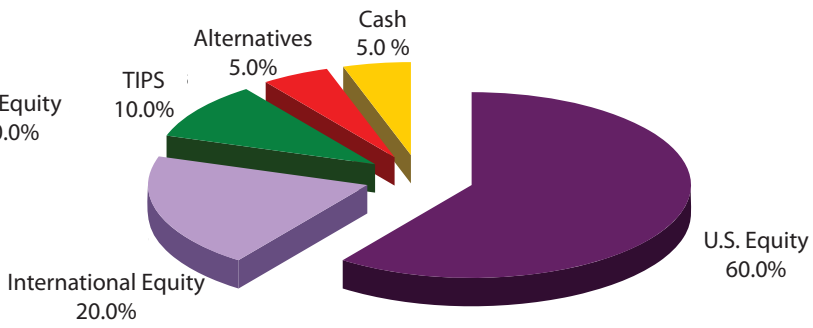
During the fiscal year, the KRS Board of Trustees did not alter its target asset allocation. As of June 30, 2007, the KRS Pension fund's policy allocation invests 40% of the assets in U.S. equities, 15% in international equities, 27% in fixed income, 10% in Treasury Inflation Protected Securities (TIPS), 5% in alternative assets, and 3% in cash or short-term securities. As of June 30, 2007, the KRS Insurance fund's policy allocation invests 60% of the assets in U.S. equities, 20% in international equities, 10% in TIPS, 5% in alternative assets, and 5% in cash or short-term securities.

The following charts graphically depict the Board's investment policy.

Pension Fund Target Allocation
(June 30, 2007)



Insurance Fund Target Allocation
(June 30, 2007)



Investment Objectives

The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

Short-Term: The returns of the particular asset classes of the managed funds of the Systems, measured on a year-to-year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices.

Long-Term: The total assets of the Systems should achieve a return measured over two market cycles (estimated to be six to ten years) which exceeds the actuarially required rate of return of 7.75% while also exceeding the return achieved by its blended performance benchmark.

Consistent with its fiduciary responsibilities, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

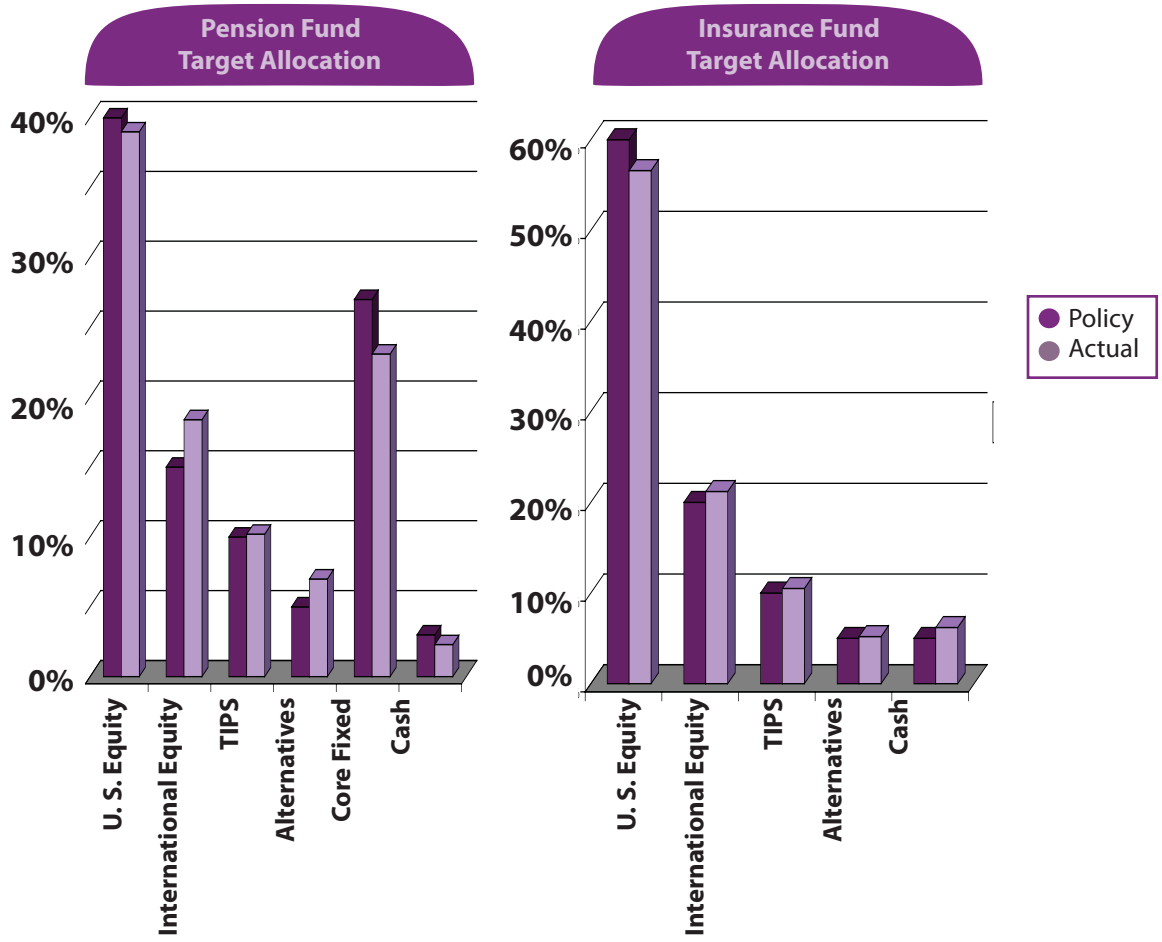
Investment Strategies

Diversification

KRS portfolio is diversified on several levels. Portfolios are diversified through the use of multiple asset classes. Asset allocations are revisited on a periodic basis and represent an efficient allocation to achieve overall return and risk characteristics. The individual asset classes are diversified through the use of multiple portfolios that are managed both by the Investment Division staff and by professional external investment advisors. Finally, portfolios within each of the asset classes are diversified through the selection of individual securities. Each portfolio advisor is afforded discretion to diversify its portfolio(s) within the parameters established by the Board of Trustees.

Rebalancing

Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with investment policy target levels. Rebalancing is necessary to reflect sizeable cash flows and performance imbalances among asset classes and investment advisors. KRS' rebalancing policies call for an immediate rebalancing within established allocation ranges, if an asset class exceeds or falls below its target allocation by 10%. As the following charts depict, the Pension and Insurance portfolios were operating within the ranges established by the investment policies.



Investments Performance Review Procedures

At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. Each month the Investment Division performs tests to assure compliance with the restrictions imposed by the Investment Policy.

Investment Consulting

The Board employs Strategic Investment Solutions, Inc. to review the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from that firm follows this introduction and discusses current allocations, performance and significant changes during the fiscal year.

STRATEGIC INVESTMENT SOLUTIONS, INC.

333 BUSH STREET, STE. 2000
SAN FRANCISCO, CALIFORNIA 94104

TEL 415/362-3484 ■ FAX 415/362-2752

October 26, 2007

The Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Annual Fund Review

Dear Trustees:

Strategic Investment Solutions is charged with the duty to advise the Board in its asset management activities. This is our annual review of the asset management of the Kentucky Retirement Systems. Although we recognize that the Board of Trustees is charged with the responsibility of managing the Funds in a manner consistent with the basic long term nature of the participating systems, our comments focus on the fiscal year ended June 30, 2007. In managing the Funds, the Board must maintain formal compliance with the Prudent Person Rule. Therefore, it seeks to maintain proper and appropriate diversification for the Fund.

Market Highlights

Global equity markets continued their strong recent returns during FY 2007. In the US, corporate earnings growth was strong, offsetting concerns about a deteriorating housing market that began to unfold towards the end of the fiscal year (and which had a much bigger impact on capital markets in the first fiscal quarter of 2008). Inflation remained tame as oil prices stabilized and global market volatility was low throughout the year. While value stocks outperformed growth stocks, most categories of the US equity market posted similarly strong returns. Non-US stocks outpaced US stocks, particularly in emerging markets, which as a group have returned well over 100% over the past 3 years. Investors are betting that emerging market growth will drive the global economy as developed market economies begin to slow. On the fixed income side, short-term interest rates were little changed during the year, after a long period of interest rate hikes, and the yield curve remained flat. Most bond market sectors posted mid-single-digit returns while high yield bonds had double-digit gains. Alternative investments continued to do well during the fiscal year though concerns began to arise about risk relating to excessive leverage and lax borrowing standards by buyout funds.

The US dollar weakened against the Euro and British Pound during this period, boosting International Equity and Fixed Income returns. The S&P 1500 Index gained nearly 20% over the past year while the MSCI EAFE (International Equity) Index (Gross) rose 27.5%. The fixed income markets, as represented by the Lehman Aggregate Bond Index, rose 6.1%.

Systems Highlights

According to the Fund Analytics statements from Northern Trust, the Retirement Fund's assets increased from $12.9 billion on June 30, 2006 to $14.2 billion on June 30, 2007. The Fund returned 15.3% during this period versus 14.9% for the Reference Index. The Insurance Fund's assets increased from $2.1 billion on June 30, 2006 to $2.7 billion on June 30, 2007. It also outperformed its benchmark, returning 19.3% versus 19.1% for the Reference Index. Please note the Reference Indices are constructed according to the individual target asset allocations of the Funds.

The Retirement Fund was overweight domestic equity and underweight international equity, fixed income, and alternative investments at the end of FY 2007. The Insurance Fund was overweight domestic equity and cash equivalents and underweight international equity, alternative investments, and cash equivalents. Note that KRS is in the process of implementing significant changes to the allocation targets of both Funds. The Funds benefited from strong performance in domestic and international equity and alternative investments.

The asset allocations for the Retirement and Insurance Funds as of June 30 are provided below relative to their allocation targets.

	Retirement Fund		Insurance Fund	
Asset Class	6/30/2007 Allocation	Target Allocation	6/30/2007 Allocation	Target Allocation
Domestic Equity	38.4%	30.0%	55.5%	40.0%
International Equity	18.4%	20.0%	20.4%	30.0%
Fixed Income	23.1%	25.0%	0.0%	0.0%
Alternatives *	6.9%	12.0%	5.7%	15.0%
TIPS	10.2%	10.0%	10.9%	12.0%
Cash **	3.0%	3.0%	7.4%	3.0%

* Includes Private Equity and Real Estate

** Includes equitization positions

All major asset classes are within their allowable ranges. New policy targets were adopted midway through the fiscal year. As a result, allocations for certain asset classes are significantly different than their respective targets, as KRS works toward implementing these changes.

Investment Manager Highlights

Retirement Fund

Among domestic equity managers, the INVESCO structured core equity portfolio (return of 20.6%) matched the benchmark return while the S&P 1500 Index portfolio (19.7% vs. 20.3% for the S&P 1500 Total Return Index) underperformed its benchmark. The NTQA small cap portfolio trailed its benchmark (16.2% vs. 16.4% for the Russell 2000 Index).

On the international side, only BGI International Alpha Tilts outperformed its benchmark (27.9% vs. 27.5% for the MSCI EAFE (Gross) Index). The Fidelity growth portfolio (24.2% return), Boston Company value portfolio (22.4% return) both trailed the Index. The Boston Company's performance continues to be disappointing, particularly given its high exposure to emerging market equities, which have posted very strong performance since the portfolio's inception.

Among the three fixed income portfolios active during the entire fiscal year, Lincoln Capital tracked its benchmark (2.75% vs. 2.72% for the Lehman Aggregate Index) while both TIPS portfolios lagged the Lehman US TIPS Index (3.91% for the Internal portfolio and 3.79% for the Barksdale portfolios vs. 3.99% for the Index). Over longer time periods, Lincoln Capital has exceeded its benchmark net of management fees while the other portfolios have performed in line with the benchmark. Two new core fixed income portfolios were funded at the end of calendar year 2006, Baird Advisors and Pyramis, replacing Barksdale and INVESCO.

The Alternatives portfolio continued its strong absolute performance record since inception, with a 15.6% return, though it trailed the 16.8% return of the Blended Index. Over the past three years, the portfolio gained 21.5% vs. 10.9% for the Index, on an annualized basis.

Insurance Fund

The S&P 1500 Index portfolio (19.8% vs. 20.3% for the S&P 1500 Total Return Index) and Fidelity (24.2% vs. 27.5% for the MSCI EAFE Index) both underperformed their respective benchmarks.

The Internal TIPS portfolio modestly trailed the Lehman TIPS Index (3.9% vs. 4.0%).

Summary

During 2007 fiscal year the Retirement and Insurance Funds again experienced strong returns and asset growth. Both Funds benefited from generally strong absolute results by their domestic and international equity portfolios, though relative performance was disappointing. Alternatives boosted returns substantially. The fixed income portfolios generally lagged their benchmarks while posting modest absolute returns. The System is working to implement significant changes made recently to the Funds' asset allocation targets.

Sincerely,

Peter A. Keliuotis, CFA
Managing Director

cc: A. Tosh, K. Bottoms, B. Cracraft, B. Aldridge (KRS)

Investment Results

Fiscal Year 2007 Results:

For the fiscal year ended June 30, 2007, KRS pension fund returned 15.3%, which exceeded the return of its benchmark by 0.4%. The 15.3% return also exceeded the actuarially assumed rate of return of 7.75%. The above benchmark performance of the pension fund was due in large part to an above benchmark weighting to international equities and a below benchmark weighting to fixed income, the best and worst performing asset classes for the measurement period.

Pension Total Fund Return[1]

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Fund	Apr-84	15.3%	11.4%	10.4%	8.1%	11.1%
Performance Benchmark		14.9%	10.5%	10.1%	8.0%	11.1%

[1] *Current Policy Benchmark is compromised of 14% LB Aggregate, 13% LB Government/Credit, 10% LB U.S. TIPS, 15% MSCI EAFE, 5% Russell 2000, 31.4% S&P 1500 Composite (Price Only), 6.6% S&P 500, 3% 3-Month Treasury Bill, and 2% LB High Yield Corporate Index*

The KRS insurance fund also posted a strong return for the fiscal year ending June 30, 2007. The portfolio returned 19.3% compared to the benchmark's 19.1% return and the actuarially assumed rate of 7.75%. The above benchmark performance of the insurance fund was also due in large part to higher than benchmark allocations to international equities and above benchmark performance from the domestic equity asset class.

Insurance Total Fund Return

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Insurance Fund	Apr-84	19.3%	13.7%	12.3%	8.4%	9.5%
Performance Benchmark		19.1%	12.9%	11.8%	8.0%	9.6%

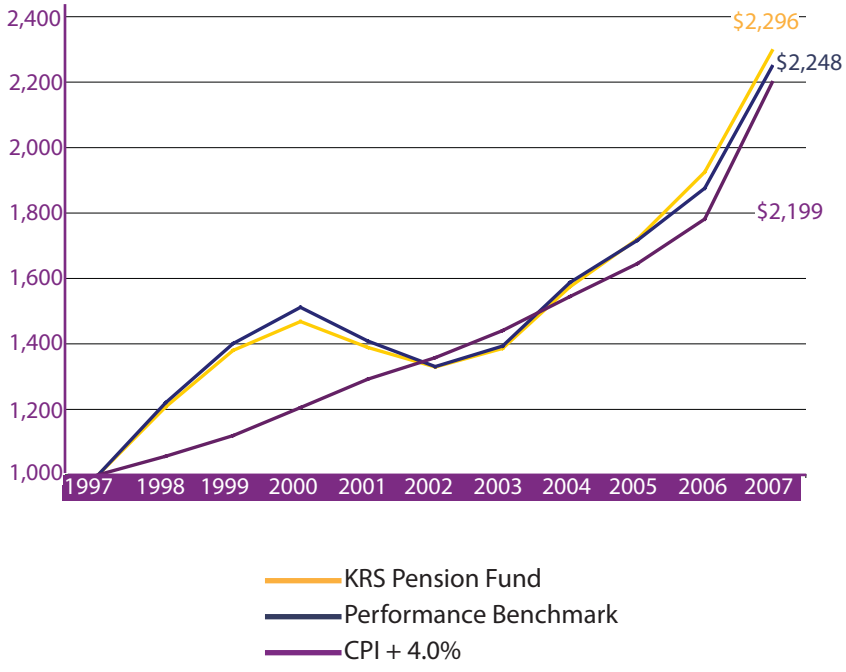
[1] *Current Policy Benchmark is compromised of 10% LB U.S. TIPS, 20% MSCI EAFE, 64% S&P 1500 Composite (Price Only), 5% 3-Month Treasury Bill, and 1% LB High Yield Corporate Index.*

Long-Term Results:

The 10 years ending June 30, 2007, provided returns that by historical measures were quite good. The KRS pension fund portfolio earned an annualized total return of 8.1 %. As shown in the investment results table, the KRS pension fund return remains ahead of or in line with its benchmark for each of the time periods presented. The consistent, above benchmark performance, is best illustrated by the growth of dollars chart. The graph demonstrates the performance of $1,000 invested in the KRS pension portfolio, its policy benchmark portfolio, and its actuarial objective over the past 10 years.

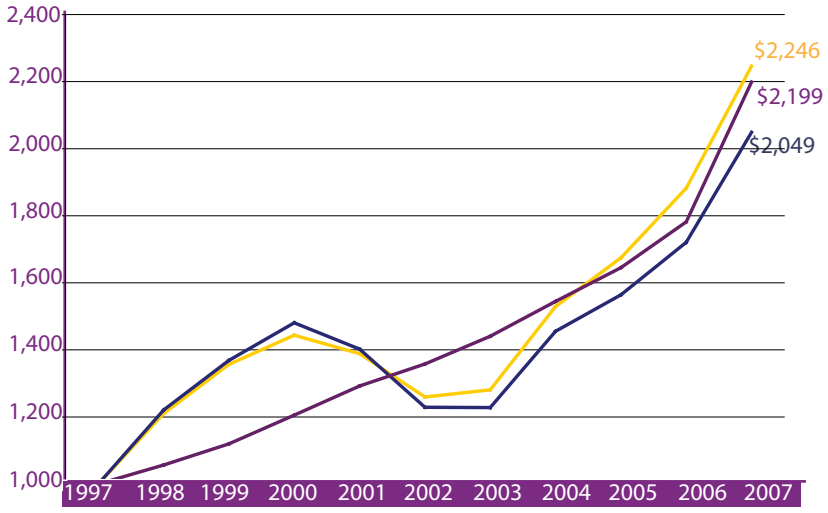
Investment Results

Total Pension Fund Growth of $1,000



As of June 30, 2007, the chart indicates that $1,000 would have grown to $2,296, while the same $1,000 invested in the benchmark or in the actuarial objective would have grown to $2,248 and $2,199, respectively.

Total Insurance Fund Growth of $1,000



The KRS insurance fund also enjoyed a strong period of growth over the past 10 years, earning an 8.4% return for the 10-year period ending June 30, 2007. Consistent performance is best illustrated by the growth of dollars chart. The graph highlights the performance of $1,000 invested in the KRS insurance portfolio ($2,246), benchmark ($2,049), and actuarial objective ($2,199) over the past 10 years.

As the results show in the accompanying insurance charts and table above, the KRS insurance fund's returns have been above or in line with the benchmark for each of the time periods presented.

Investment Results

U.S. Equities

For the fiscal year, ending June 30, 2007, the KRS pension fund's U.S. equity portfolio posted a return of 19.3%, which underperformed the return of its benchmark by 0.6%. The KRS insurance U.S. equity portfolio also enjoyed positive results, posting a return of 19.8%, yet falling short of the return of its benchmark by 0.5%. As the accompanying table indicates, all segments of the U.S. equity markets posted positive results during the twelve month period.

U.S. Equity

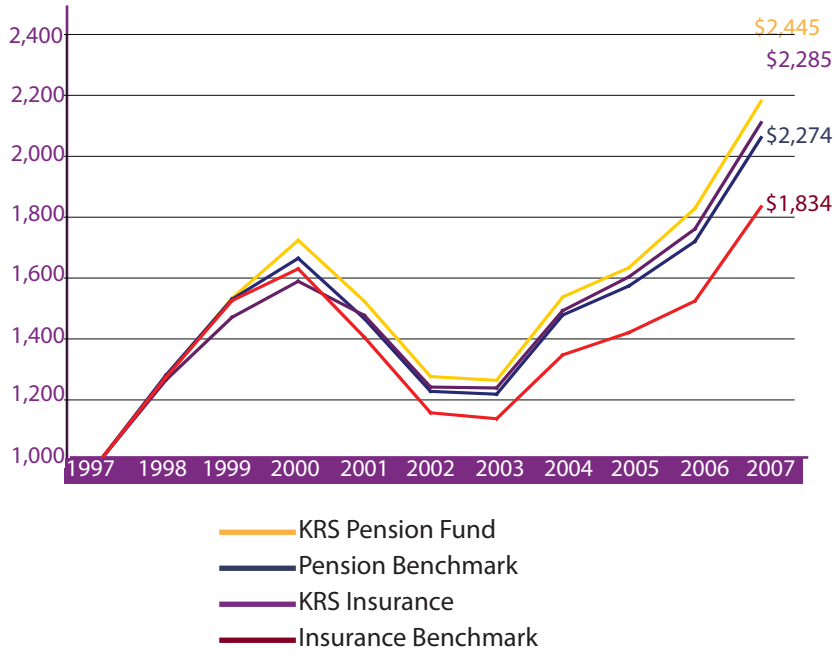
	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Apr-84	19.3%	12.4%	11.3%	8.1%	13.2%
Performance Benchmark		19.9%	12.5%	11.7%	8.0%	13.1%
KRS Insurance	Jul-92	19.8%	12.2%	11.2%	7.8%	11.4%
Performance Benchmark		20.3%	12.1%	11.2%	7.0%	10.9%
Market Indices						
Russell 1000 (Large Cap)		20.4%	12.3%	11.3%	7.5%	
Russell 2000 (Small Cap)		16.4%	13.4%	13.9%	9.1%	
Russell 3000 (Total Equity)		20.1%	12.4%	11.5%	7.6%	

[1] *Current Blended Pension Benchmark consist of 12.5% Russell 2000, 71% S&P 1500 Composite (Price Only), and 16.5% S&P 500*

[2] *Insurance benchmark is S&P 1500 Composite (Price Only)*

Over the past three years, U.S. equity investors have received favorable returns from U.S. equity investments. According to the above table, the KRS pension fund portfolio has generated an annualized return of 12.4% over this period, slightly trailing its benchmark by 0.1%. Over the same time period, the insurance fund has produced an annualized return of 12.2%, slightly outperforming its benchmark return of 12.1%. Boasted by three years of positive performance, both the pension and insurance portfolios have produced positive returns when viewed over a five-year time horizon. The 10-year returns for each U.S. equity portfolio also point to strong positive performance. The pension's equity portfolio has generated an annualized average return of 8.1%, while the insurance equity portfolio posted an average annual return of 7.8%. Both portfolios exceeded their benchmarks for the 10-year period.

U. S. Equity Portfolio Growth of $1,000



Investment Results

The consistent outperformance is best illustrated again by the growth of dollars chart. For the 10-year period ending June 30, 2007, the pension fund's chart indicates that $1,000 would have grown to $2,181, while the same $1,000 invested in the benchmark would have grown to $2,061. For the KRS insurance fund, ending June 30, 2007, a $1,000 investment would have grown to $2,110, while only growing to $1,834 in the benchmark.

Top 10 U.S. Equity Holdings

Pension Fund			Insurance Fund		
Company	**Shares**	**Market Value**	**Company**	**Shares**	**Market Value**
Exxon Mobil Corp	1,926,500	161,594,820	Exxon Mobil Corp	456,900	38,324,772
General Electric Co	2,721,200	104,167,536	General Electric Co	776,700	29,732,076
Microsoft Corp	3,211,600	94,645,852	Microsoft Corp	791,200	23,316,664
Citigroup, Inc	1,732,200	88,844,538	Citigroup, Inc	381,000	19,541,490
Bank of America Corp	1,709,431	83,574,082	AT&T Inc.	465,521	19,319,122
Pfizer, Inc	2,716,960	69,472,667	Bank of America Corp	353,432	17,279,290
AT&T Inc.	1,618,464	67,166,256	Proctor & Gamble Corp	253,675	15,522,373
IBM Corp	630,200	66,328,550	Wal-Mart Stores, Inc	306,300	14,736,093
Chevron Corp	663,459	55,889,786	Chevron Corp	172,216	14,507,476
Hewlett Packard Co	1,214,653	54,197,817	Pfizer, Inc	563,100	14,398,467
Total	18,144,667	845,881,904	***Total***	4,520,044	206,677,823

A complete list of holdings is available upon request.

Investment Results

International Equities

For the fiscal year, ending June 30, 2007, the KRS pension fund's international equity portfolio returned 24.4%, trailing its benchmark, the MSCI EAFE Index, by 3.1%. The KRS insurance international equity portfolio also underperformed the MSCI EAFE Index, posting a return of 24.2% during the same twelve month period. As the accompanying table indicates, both developed and emerging international equity markets posted strong positive results during the twelve month period.

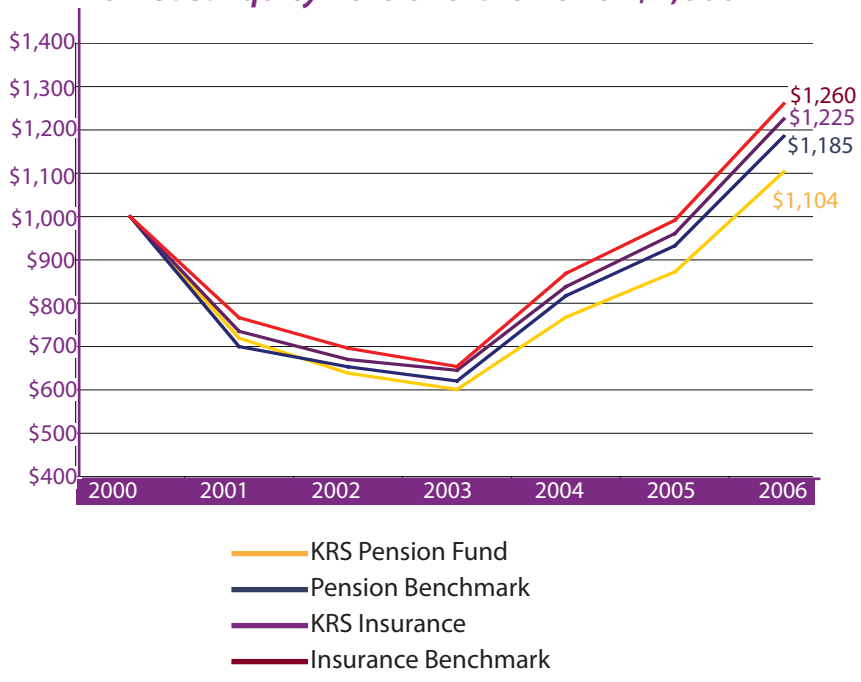
International Equity

	Inception Date	Fiscal Year	3-Year	5-Year	Inception
KRS Pension	Jul-00	24.4%	21.4%	16.6%	4.6%
Performance Benchmark		27.5%	22.8%	18.3%	6.1%
KRS Insurance	Jul-00	24.2%	22.0%	17.8%	4.8%
Performance Benchmark		27.5%	22.8%	18.2%	6.2%
Market Indices					
MSCI EAFE		27.5%	22.7%	18.2%	8.0%
MSCI Emerging Markets		43.1%	37.9%	30.2%	9.2%
MSCI ACWI Ex US		31.4%	25.4%	20.2%	8.7%

2 Pension and Insurance benchmark is the MSCI EAFE Index

Over the past three years, international equity investors have received very favorable returns from the Non-U.S. Equity asset class. The KRS pension fund portfolio has generated an annualized average return of 21.4% over this three-year period, which has fallen short relative to the MSCI EAFE Index return of 22.8%. The insurance fund has also trailed the annualized return of the index, generating an average return of 22.0%. The Systems began their international equity program in July of 2000. Since inception, both portfolios have underperformed their benchmark as more aggressive international equity styles account for the deviation.

Non U. S. Equity Portfolio Growth of $1,000



Investment Results

The accompanying chart depicts the growth of $1,000 invested in the KRS international equity portfolios and the blended benchmarks since inception. For the KRS pension fund, ending June 30, 2007, $1,000 would have grown to $1,373, while the same amount invested in the benchmark would have grown to $1,512. For the KRS insurance fund, ending June 30, 2007, $1,000 would have grown to $1,521, while an investment in the index would have risen to $1,607.

Top 10 International Equity Holdings

Pension Fund			Insurance Fund		
Company	Shares	Market Value	Company	Par	Market Value
Total SA	481,814	39,212,018	Total SA	126,564	10,300,302
Royal Bank of Scotland Group	2,769,094	35,168,037	Vodafone Group Plc	2,978,987	10,029,223
Vodafone Group Plc	10,200,596	34,341,892	Toyota Motor Corp	158,400	10,004,616
BP Plc	2,670,947	32,313,894	Siemens AG NPV	60,800	8,750,829
Novartis AG	539,253	30,359,381	Royal Bank of Scotland Group	661,800	8,404,990
Siemens AG NPV	192,510	27,707,600	Roche Holdings AG	46,830	8,306,823
E.ON AG	151,120	25,366,981	E.ON AG	48,500	8,141,203
Nestle S. A.	64,672	24,589,713	3I GROUP ORD GBP0.62784	331,590	7,750,578
GlaxoSmithKline Plc	908,199	23,779,255	Numico (KON) NV	148,800	7,743,059
Toyota Motor Corp	368,700	23,287,259	Muenchener Rueckve NPV	40,000	7,357,256
Total	18,346,905	296,126,031	***Total***	4,602,271	86,788,879

A complete list of holdings is available upon request.

Investment Results

Fixed Income

For the fiscal year, ending June 30, 2007, the KRS pension fund's fixed income portfolio returned 5.7%, outperforming its custom index by 0.2%. As the accompanying table indicates, both of the broad market indices, the Lehman Brothers Aggregate Index and the Lehman Brothers Intermediate Government Credit Index, posted positive returns for the most recent twelve month period. The KRS insurance TIPS portfolio posted a 3.9% rate of return, which slightly underperformed its benchmark, the Lehman Brothers U.S. TIPS Index, by 0.1%.

Fixed Income

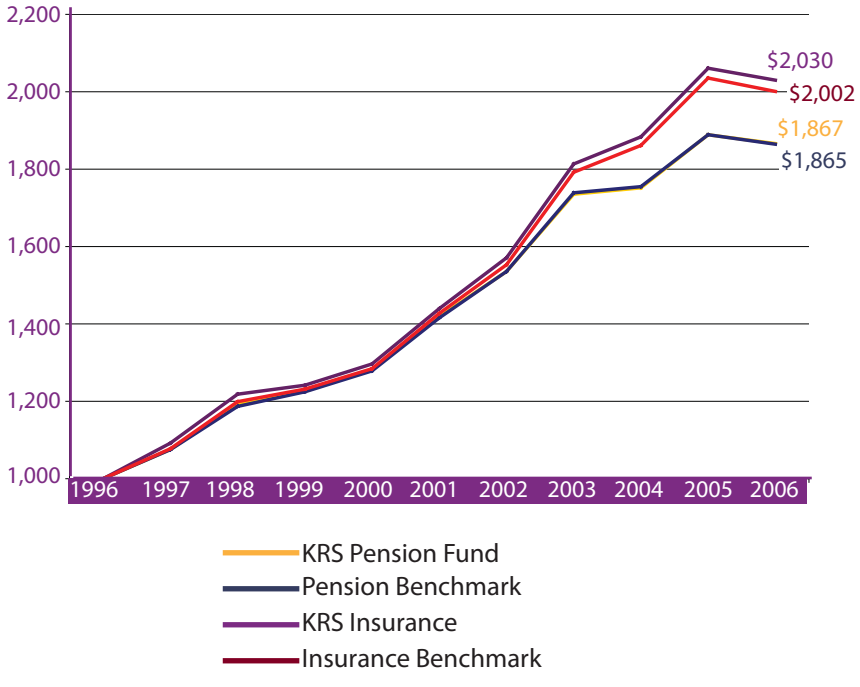
	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Apr-84	5.7%	4.1%	5.2%	6.3%	8.6%
Performance Benchmark		5.5%	3.9%	5.1%	6.2%	8.3%
KRS Insurance	Jul-92	3.9%	3.9%	6.1%	6.8%	7.0%
Performance Benchmark		4.0%	3.8%	6.0%	6.8%	7.0%
Market Indices						
LB Aggregate		7.7%	4.5%	4.8%	6.2%	
LB Government/Credit		7.8%	4.4%	5.0%	6.2%	

[1] *Current Blended Pension Benchmark consists of 38% LB Aggregate, 35% LB Government/Credit, and 27% LB U.S. TIPS*

[1] *Insurance Benchmark is the Lehman Brothers U.S. TIPS Index*

Over the past three years ending June 30, 2007, the KRS pension fund's portfolio has generated an annualized average return of 4.1% versus its custom performance benchmark return of 3.9%. The insurance fund's portfolio posted a 3.9% return during the same period, exceeding its benchmark return by 0.1%. Over longer time horizons (i.e., five and ten year periods) both the pension and insurance funds' fixed income portfolios have performed in line with their benchmarks.

U. S. Equity Portfolio Growth of $1,000



Investment Results

The preceding chart shows the growth of $1,000 invested in KRS fixed income over the past ten years. For the KRS pension fund, ending June 30, 2007, $1,000 would have grown to $1,835, while the same $1,000 invested in the benchmark would have grown to $1,831. For the KRS insurance fund, ending June 30, 2007, $1,000 would have grown to $1,932 when invested portfolio, equal to its benchmark.

Top 10 Fixed Income Holdings

Pension Fund			Insurance Fund		
Company	Par Value	Market Value	Company	Par Value	Market Value
US TSY NT INFL Index 2.000 Due 1/15/14	123,385,000	132,579,848	US TSY NT INFL Index 0.875 Due 4/15/10	20,450,000	21,179,508
US TSY NT INFL Index 0.875 Due 4/15/10	109,900,000	113,820,435	US TSY BD INFL Index 2.375 Due 1/15/25	18,360,000	19,349,442
US TSY BD INFL Index 3.875 Due 4/15/29	67,567,000	102,518,960	US TSY BD INFL Index 3.875 Due 4/15/29	12,525,000	19,004,099
US TSY NT INFL Index 3.000 Due 7/15/12	81,650,000	95,636,861	US TSY NT INFL Index 3.000 Due 7/15/12	15,585,000	18,254,752
US TSY NT INFL Index 2.375 Due 1/15/17	91,635,000	91,654,150	US TSY BD INFL Index 1.875 Due 7/15/13	15,450,000	16,670,350
US TSY NT INFL Index 1.625 Due 1/15/15	84,900,000	85,386,023	US TSY BD INFL Index 3.625 Due 4/15/28	11,075,000	16,388,993
US TSY BD INFL Index 6.250 Due 8/15/23	73,300,000	81,391,660	US TSY NT INFL Index 2.000 Due 1/15/14	15,080,000	16,203,786
US TSY NT INFL Index 3.625 Due 4/15/28	54,400,000	80,502,144	US TSY NT INFL Index 2.000 Due 7/15/14	14,575,000	15,334,266
US TSY NT INFL Index 2.000 Due 7/15/14	76,200,000	80,169,541	US TSY NT INFL Index 1.625 Due 1/15/15	14,425,000	14,507,578
US TSY BD INFL Index 1.875 Due 7/15/13	74,200,000	80,060,841	US TSY NT INFL Index 2.375 Due 4/15/11	13,625,000	14,026,598
Total	750,652,000	855,514,203	***Total***	131,740,000	149,282,718

A complete list of holdings is available upon request.

Investment Results

Alternative Investments

For the fiscal year, ending June 30, 2007, the KRS pension fund's alternative investments portfolio posted a return of 15.6%. The portfolio consists primarily of private equity limited partnerships and real estate investment trusts ("REITs"), publicly traded real estate securities, operating companies, and focused real estate investments. The custom benchmark for the pension alternative investment portfolio returned 16.8% during this same period. The insurance alternative investment portfolio generated a return of 16.7% versus its custom benchmark return of 18.5%.

As the accompanying table indicates, the longer term results from the alternative investment portfolios have also been excellent. For the three years ending June 30, 2007, the pension fund portfolio has outperformed its custom benchmark by nearly 11% on an annualized basis. Since its inception in October, 2000, the portfolio has exceeded its benchmark by 2.7% per year. The insurance portfolio has also done very well exceeding its benchmark return over the three-year period as well as since its inception by 1.2% and 3.0%, respectively.

Alternative Equity

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Oct-90	15.6%	21.5%	18.6%	16.5%	13.6%
Performance Benchmark		16.8%	10.9%	11.6%	7.3%	10.9%
KRS Insurance	Jul-01	16.7%	12.7%	11.4%		9.7%
Performance Benchmark		18.5%	11.5%	11.4%		6.7%

Additional Schedules and Required Supplemental Information

Following are additional schedules, which indicate the Investment Advisors employed along with the total assets each of the firms manage for the Systems, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems for the year ended June 30, 2007.

External Investment Advisors

External Investment Advisors	Assets Under Management (in thousands)
Barclays Global Investors, San Francisco, California	$ 629,481
Blackstone Capital Partners V, New York, New York	58,035
Columbia Capital IV, Alexandria, Virginia	10,656
Duff, Ackerman & Goodrich Ventures II, Palo Alto, California	25,725
Pyramis Global Advisors, Boston, Massachusetts	2,357,968
H.I.G. Venture Partners II, Miami, Florida	5,742
INVESCO, Atlanta, Georgia	937,017
Institutional Venture Partners XI, Menlo Park, California	9,698
JW Childs Equity III, Boston, Massachusetts	20,791
Lehman Brothers Asset Management, Chicago, Illinois	1,863,838
Leonard Green & Partners, L.P.,IV, Los Angeles, California	65,907
Matlin Patterson Global Opportunities I & II, New York, New York	70,753
Merit Capital Partners IV, Chicago, Illinois	13,385
New Mountain Partners II, New York, New York	37,568
Northern Trust Quantitative Advisors, Chicago, Illinois	712,775
Oak Hill Partners II, New York, New York	54,597
Sun Capital Partners IV, Boca Raton, Florida	8,478
Technology Crossover Ventures VI, Palo Alto, California	10,289
The Boston Company, Boston, Massachusetts	904,473
Vantagepoint Venture IV, San Bruno, California	32,284
Warburg Pincus IX, New York, New York	67,793
Wayzata Investment Partners I, Wayzata, Minnesota	86,754
Weaver Barksdale & Associates, Brentwood, Tennessee	634,473
Robert W. Baird & Co., Milwaukee, Wisconsin	674,462
GTCR Golder Rauner IX, Chicago, Illinois	12,063
Harvest Partners V, New York, New York	3,033
Hellman & Friedman VI, New York, New York	13,667
MHR Institutional Advisors III, New York, New York	10,849
Master Custodian & Performance Measurement	
The Northern Trust Company, Chicago, Illinois	
Investment Consultants	
Strategic Investment Solutions, San Francisco, California	

Pension Fund Summaries

Asset Class	KERS Non Hazardous Market Value	KERS Non Hazardous % Market Value	KERS Hazardous Market Value	KERS Hazardous % Market Value
Bonds	1,326,277,518	23.1%	133,395,068	26.3%
Mortgages	572,801,607	10.0%	46,952,013	9.3%
Short Term	184,956,974	3.2%	20,977,178	4.1%
Alternatives	386,099,373	6.7%	44,018,192	8.7%
Domestic Equities	2,179,102,061	38.0%	177,092,659	34.9%
International Equities	1,083,114,648	18.9%	84,783,037	16.7%
Total Portfolio	5,732,352,181	100.0%	507,218,146	100.0%

Asset Class	CERS Non Hazardous Market Value	CERS Non Hazardous % Market Value	CERS Hazardous Market Value	CERS Hazardous % Market Value
Bonds	1,434,223,520	24.9%	432,238,927	24.9%
Mortgages	633,529,054	11.0%	178,665,880	10.3%
Short Term	67,101,619	1.2%	63,155,120	3.6%
Alternatives	379,257,537	6.6%	119,113,418	6.9%
Domestic Equities	2,205,105,562	38.3%	646,473,705	37.2%
International Equities	1,042,489,288	18.1%	296,959,170	17.1%
Total Portfolio	5,761,706,581	100.0%	1,736,606,221	100.0%

Asset Class	SPRS Market Value	SPRS % Market Value
Bonds	94,456,729	25.3%
Mortgages	38,274,517	10.2%
Short Term	6,136,950	1.6%
Alternatives	24,198,572	6.5%
Domestic Equities	144,231,811	38.6%
International Equities	66,415,944	17.8%
Total Portfolio	373,714,522	100.0%

Insuance Fund Summaries

Asset Class	KERS Non Hazardous Market Value	KERS Non Hazardous % Market Value	KERS Hazardous Market Value	KERS Hazardous % Market Value
Bonds	67,683,206	10.3%	23,330,847	8.4%
Short Term	33,997,604	5.2%	27,737,219	9.9%
Alternatives	43,756,064	6.7%	15,238,911	5.5%
Domestic Equities	374,369,825	57.0%	151,189,199	54.2%
International Equities	137,074,460	20.9%	61,631,829	22.1%
Total Portfolio	656,881,159	100.0%	279,128,006	100.0%

Asset Class	CERS Non Hazardous Market Value	CERS Non Hazardous % Market Value	CERS Hazardous Market Value	CERS Hazardous % Market Value
Bonds	121,459,899	11.4%	64,034,173	11.4%
Short Term	100,995,782	9.5%	51,974,891	9.2%
Alternatives	55,088,604	5.2%	27,683,653	4.9%
Domestic Equities	582,798,807	54.8%	304,585,000	54.2%
International Equities	202,376,376	19.0%	113,686,685	20.2%
Total Portfolio	1,062,719,467	100.0%	561,964,402	100.0%

Asset Class	SPRS Market Value	SPRS % Market Value
Bonds	12,835,051	9.7%
Short Term	9,878,976	7.5%
Alternatives	8,025,705	6.1%
Domestic Equities	71,869,774	54.4%
International Equities	29,435,899	22.3%
Total Portfolio	132,045,405	100.0%

External Investment Expenses

Expense	Fees Paid (in thousands)	Expense as a % of Assets
Equity & Fixed Income Portfolio		
Pension Funds	$10,4314	0.0754%
Insurance Funds	$1,272	0.0864%
Consulting Fees	$445	0.0007%
Custody Fees	$450	0.0018%
Other Investment-Related Fees	$196	0.0004%
Total Expenses	$12,794	0.0798%

Schedule of Commissions Paid

	Total Shares	Commissions Paid	$ per share
U.S. Equity	69,322,588	$4,479,297	$0.064
	Total Value of Trades	**Commissions Paid**	**As a % of Trade**
Non-U.S. Equity	$2,775,978,683	$3,649,746	0.131%
Total Commissions Paid		**$8,129,043**	

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November 15, 2007

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fifty-first annual actuarial valuation of the Kentucky Employees Retirement System, the forty-eighth annual actuarial valuation of the County Employees Retirement System, and the forty-ninth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2007 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2008 and ending June 30, 2009.

Funding Objectives & Policies
For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30 year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension Fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2007 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	56.9%
KERS Hazardous Pension Fund	83.6%
CERS Non-Hazardous Pension Fund	82.1%
CERS Hazardous Pension Fund	74.2%
SPRS Pension Fund	63.7%

The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Medical inflation rates in excess of the assumed rates, as well as recent employer contribution rate reductions under KERS and SPRS, have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level. As of June 30, 2007 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	11.9%
KERS Hazardous Insurance Fund	49.8%
CERS Non-Hazardous Insurance Fund	28.8%
CERS Hazardous Insurance Fund	31.2%
SPRS Insurance Fund	26.6%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on January 19, 2006 based on the experience investigation report dated January 12, 2006, meet the parameters set for disclosure under GASB Statements No. 25 and 43. The health care cost trend assumptions were updated for the June 30, 2007 valuation as adopted by the Board November 15, 2007. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in January 2011 and any adjustments will be reflected in the June 30, 2011 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Edward A. Macdonald ASA, FCA, MAAA
President

Summary of Actuarial Assumptions and Methods

(As of June 30, 2007)

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience once every five years through the completion of the Actuarial Experience Study. The most recent study was completed in January 2006 and reviewed plan experience for the period from July 1, 2000 through June 30, 2005. All assumptions used in the June 30, 2006 actuarial valuation were based on the study performed in 2006 and in accordance with the actuary's recommendations. The next Experience Study is scheduled to be completed in January 2011.

1. ***Actuarial Cost Method:*** The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL) over no more than a 30-year period.

2. ***UAL Amortization Method:*** The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

3. ***Asset Valuation Method:*** The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted by the Board in 2006.

4. ***Retiree Insurance Funding Policy:*** The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. As with the pension Fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.

5. ***Investment Return Assumption:*** The future investments earnings of plan assets are assumed to accumulate at a rate of 7.75% per annum. This rate consists of a 3.5% inflationary component and a 4.25% real rate of return component. In accordance with GASB Statement 43, the investment return assumption has been reduced to a blended rate of 4.5% for KERS and SPRS insurance funds due to a lack of pre-funding benefits. This assumption was adopted in 2006.

6. ***Salary Increase Assumption:*** Active member salaries are assumed to increase at the rates provided in Table 1 on the following page. The rates include a 3.5% percent inflationary component and an additional increase due to promotion based upon plan experience. This assumption was adopted in 2006.

Summary of Actuarial Assumptions and Methods

(As of June 30, 2007)

Table 1: Salary Increase Assumptions

Service	KERS & CERS Non-Hazardous	KERS & CERS Hazardous, SPRS
0-1	13.5%	14.5%
1-2	7.0%	7.5%
2-3	5.5%	7.0%
3-4	5.0%	6.5%
4-5	5.0%	6.0%
5-6	4.5%	5.5%
6-7	4.5%	5.0%
7-8	4.5%	5.0%
8-9	4.0%	4.5%
9-10	4.0%	4.5%
10+	4.0%	4.0%

7. ***Payroll Growth Assumption:*** Active member payroll is assumed to increase at a rate of 3.5% per annum. This assumption was adopted in 2006.
8. ***Retiree Cost of Living Adjustments (COLA):*** State statute requires retirement allowances to be increased by the percentage increase in the annual average of the consumer price index for all urban consumers (CPI-U) for the most recent calendar year, not to exceed five percent. Statute only allows the Cost of Living Adjustments (COLAs) awarded as of the valuation date to be recognized for funding purposes and for determining employer contribution rates. The State Legislature has the authority to suspend or reduce cost of living adjustments.
9. ***Medical Inflation Rate Assumption:*** The costs for retiree medical premiums are assumed to increase each year by 12% for 2008, by 11% for 2009, by 10% for 2010, by 9% for 2011, by 8% for 2012, by 7% for 2013, by 6% for 2014, and by 5% thereafter. This assumption was adopted in 2007.
10. ***Retirement Rate Assumption:*** The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 2. This assumption was adopted in 2006.

Summary of Actuarial Assumptions and Methods

(As of June 30, 2007)

Table 2: Retirement Rate Assumptions

Non-Hazardous		Hazardous			
Age	**Probability**	**Service**	**KERS Probability**	**CERS Probability**	**SPRS Probability**
55	8.00%	20	20%	30%	20%
56	8.00%	21	15%	25%	9%
57	8.00%	22	15%	20%	9%
58	8.00%	23	15%	20%	9%
59	8.00%	24	15%	25%	20%
60	10.00%	25	20%	25%	20%
61	20.00%	26	35%	30%	20%
62	25.00%	27	35%	30%	20%
63	25.00%	28	35%	30%	30%
64	25.00%	29	35%	30%	45%
65	25.00%	30	35%	40%	45%
66	25.00%	31	35%	40%	45%
67	25.00%	32	35%	35%	45%
68	25.00%	33	35%	35%	45%
69	25.00%	34	35%	30%	70%
70	25.00%	35+	60%	30%	70%

If service credit is at least 27 years, the rate is 25%. Rates are doubled for KERS Non-hazardous members during the window period (set to expire January 1, 2009). 100% are anticipated to retire at age 75.

- For KERS, 100% are anticipated to retire at age 65.
- For CERS, 100% are anticipated to retire at age 62.
- For SPRS, 100% are anticipated to retire at age 55.

Summary of Actuarial Assumptions and Methods

(As of June 30, 2007)

11. ***Mortality Assumptions:*** The mortality table used for active members is the 1994 Group Annuity Mortality (GAM) Table. For members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table to the 1994 GAM table. Mortality assumptions for disabled lives are set using the 1994 GAM table set forward five years. These assumptions were adopted in 2006.

Table 3: Sample Annual Rates Of Mortality

	Active & Retired Member Mortality*		Disabled Member Mortality	
Age	**Males**	**Females**	**Males**	**Females**
Under 20	0.04%	0.03%	----	----
22	0.06%	0.03%	----	----
32	0.08%	0.04%	----	----
42	0.13%	0.08%	0.19%	0.11%
52	0.32%	0.17%	0.56%	0.29%
62	1.01%	0.58%	1.80%	1.08%
72	2.85%	1.65%	4.52%	2.84%

**For members retiring on or after July 1, 2006.*

12. ***Withdrawal Rates:*** The probability, or likelihood, of active members terminating employment prior to retirement is provided in Table 4 on the following page. The withdrawal rate is a function of both age and service. This type of structure is known as "select and ultimate rates". This structure reflects the fact that both service and age affect the likelihood of a member staying in active employment. The ultimate period for these systems covers a member's withdrawal rate after the first five years of service. These assumptions were adopted in 2006.

Summary of Actuarial Assumptions and Methods

(As of June 30, 2007)

Table 4: Selected Rates Of Termination Prior To Retirement

KERS & CERS Non-Hazardous

Select Rates		Ultimate Rates	
Service	Probability	Age	Probability
1st Yr. of Service:	15.00%	20	6.00%
2nd Yr. of Service:	14.00%	25	5.40%
3rd Yr. of Service:	10.00%	30	4.80%
4th Yr. of Service:	8.00%	35	3.60%
5th Yr. of Service:	6.00%	40	2.66%
		45	1.98%
		50	1.92%
		55	1.08%
		60	0.75%

KERS Hazardous

Select Rates		Ultimate Rates	
Service	Probability	Age	Probability
1st Yr. of Service:	15.00%	20	6.00%
2nd Yr. of Service:	14.00%	25	5.40%
3rd Yr. of Service:	10.00%	30	4.80%
4th Yr. of Service:	8.00%	35	3.60%
5th Yr. of Service:	6.00%	40	2.66%
		45	1.98%
		50	1.92%
		55	1.08%
		60	0.75%

CERS Hazardous

Select Rates		Ultimate Rates	
Service	Probability	Age	Probability
1st Yr. of Service:	10.00%	20	4.56%
2nd Yr. of Service:	7.00%	25	3.04%
3rd Yr. of Service:	5.00%	30	3.01%
4th Yr. of Service:	4.00%	35	1.95%
5th Yr. of Service:	3.50%	40	1.50%
		45	0.75%
		50	0.50%
		55	-
		60	-

SPRS

Select Rates		Ultimate Rates	
Service	Probability	Age	Probability
1st Yr. of Service:	10.00%	20	2.50%
2nd Yr. of Service:	7.00%	25	2.28%
3rd Yr. of Service:	5.00%	30	1.83%
4th Yr. of Service:	4.00%	35	1.31%
5th Yr. of Service:	3.50%	40	0.81%
		45	0.41%
		50	-
		55	-
		60	-

Summary of Actuarial Assumptions and Methods

(As of June 30, 2007)

13. ***Rates of Disablement:*** KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. For non-hazardous members, the assumptions are set using three quarters of the Old-Age Survivors and Disability Insurance (OASDI) rates. For hazardous members, the assumptions are set using one times the Old-Age Survivors and Disability Insurance (OASDI) rates. These assumptions were adopted in 2006.

Non-Hazardous		*Hazardous*	
Age	**Probability**	**Age**	**Probability**
20 - 24	0.0531%	20 - 24	0.0708%
25 - 29	0.0711%	25 - 29	0.0948%
30 - 34	0.0918%	30 - 34	0.1224%
35 - 39	0.1280%	35 - 39	0.1707%
40 - 44	0.1994%	40 - 44	0.2658%
45 - 49	0.3320%	45 - 49	0.4426%
50 - 54	0.5590%	50 - 54	0.7453%
55 - 59	0.9200%	55 - 59	1.2267%
60 - 64	1.4618%	60 - 64	1.9490%

Summary of Actuarial Valuation Results

(As of June 30, 2007)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2006-2007)					
Pension Fund Contribution	16.54%	10.84%	7.76%	15.04%	32.39%
Insurance Fund Contribution	20.38%	23.94%	12.75%	27.62%	59.54%
Recommended Employer Contribution	36.92%	34.78%	20.51%	42.66%	91.93%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$9,485,939,277	$558,992,329	$6,659,446,126	$2,208,736,179	$547,955,286
Actuarial Value of Assets	$5,396,782,459	$467,287,809	$5,467,824,480	$1,639,288,924	$348,806,508
Unfunded Liability on Actuarial Value of Assets	$4,089,156,818	$91,704,520	$1,191,621,646	$569,447,255	$199,148,778
Funding Ratio on Actuarial Value of Assets	56.89%	83.59%	82.11%	74.22%	63.66%
Market Value of Assets	$5,773,156,838	$510,775,499	$5,812,935,251	$1,754,934,764	$376,381,488
Unfunded Liability on Market Value of Assets	$3,712,782,439	$48,216,830	$846,510,875	$453,801,415	$171,573,798
Funding Ratio on Market Value of Assets	60.86%	91.37%	87.29%	79.45%	68.69%
Insurance Fund					
Actuarially Accrued Liability	$5,201,355,055	$504,842,981	$3,333,966,070	$1,646,460,011	$432,763,229
Actuarial Value of Assets	$621,171,658	$251,536,756	$960,285,900	$512,926,549	$115,215,912
Unfunded Liability on Actuarial Value of Assets	$4,580,183,397	$253,306,225	$2,373,680,170	$1,133,533,462	$317,547,317
Funding Ratio on Actuarial Value of Assets	11.94%	49.82%	28.80%	31.15%	26.62%
Market Value of Assets	$663,558,360	$280,885,910	$1,084,042,781	$570,155,702	$132,573,898
Unfunded Liability on Market Value of Assets	$4,537,796,695	$223,957,071	$2,249,923,289	$1,076,304,309	$300,189,331
Funding Ratio on Market Value of Assets	12.76%	55.64%	32.52%	34.63%	30.63%
Member Data					
Number of Active Members	47,913	4,349	84,920	10,063	957
Total Annual Payroll (Active Members)[1]	$1,780,223,493	$144,838,020	$2,076,848,328	$458,998,956	$49,247,580
Average Annual Pay (Active Members)	$37,155	$33,304	$24,457	$45,613	$51,460
Number of Retired Members & Beneficiaries	33,849	2,202	35,564	5,159	1,105
Average Annual Retirement Allowance	$18,477	$12,502	$9,805	$22,046	$33,673
Number of Vested Inactive Members	5,298	278	8,093	436	47
Number of Inactive Members Due a Refund	25,606	2,460	45,808	1,761	239

[1] Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2007.

Recommended Employer Contribution Rates

(As of June 30, 2007)

Kentucky Employees Retirement System
(Non-Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/02	2003-2004	5.00%	(2.14%)	2.86%	4.67%	7.53%
6/30/03	2004-2005	4.82%	0.29%	5.11%	5.18%	10.29%
6/30/04	2005-2006	4.89%	2.96%	7.85%	5.77%	13.62%
6/30/05	2006-2007	4.81%	5.87%	10.68%	6.45%	17.13%
6/30/06	2007-2008	3.72%	11.83%	15.55%	32.82%	48.37%
6/30/07	2008-2009	3.62%	12.92%	16.54%	20.38%	36.92%

Kentucky Employees Retirement System
(Hazardous Employers)

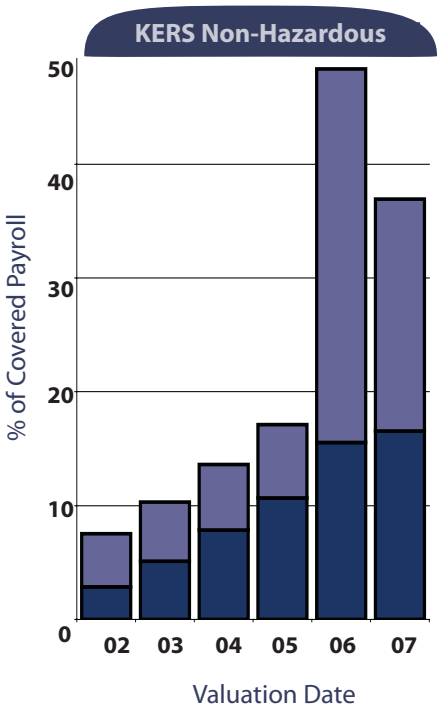
Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/02	2003-2004	9.77%	(2.40%)	7.37%	11.47%	18.84%
6/30/03	2004-2005	8.68%	(1.42%)	7.26%	12.21%	19.47%
6/30/04	2005-2006	8.62%	(0.10%)	8.52%	13.07%	21.59%
6/30/05	2006-2007	8.37%	0.91%	9.28%	14.04%	23.32%
6/30/06	2007-2008	7.27%	2.93%	10.20%	36.91%	47.11%
6/30/07	2008-2009	7.28%	3.56%	10.84%	23.94%	34.78%

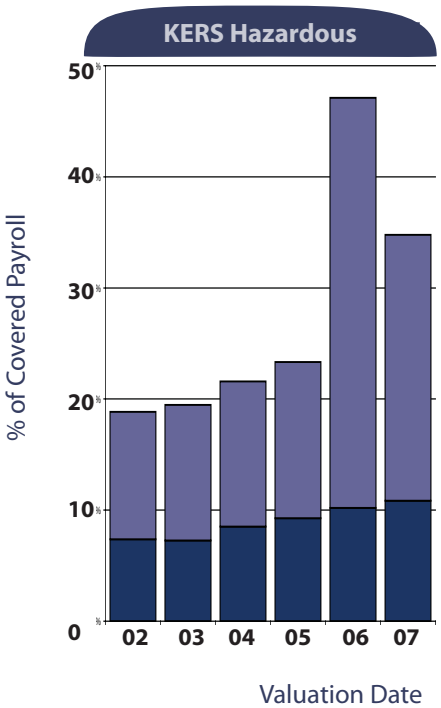
The total employer contribution rate is comprised of a contribution to the pension fund and to the insurance fund. The contribution to the pension fund and the insurance fund consist of the normal cost and an amortization payment on the unfunded actuarial liability (UAL).

Pension

Insurance

KERS
Employer Contribution Rates





Recommended Employer Contribution Rates

(As of June 30, 2007)

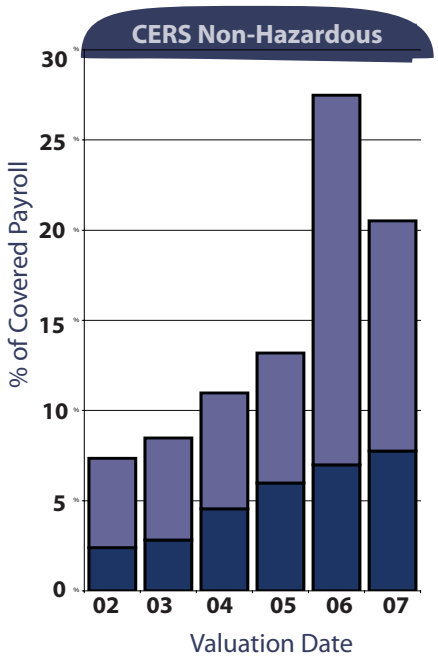
County Employees Retirement System (Non-Hazardous Employers)

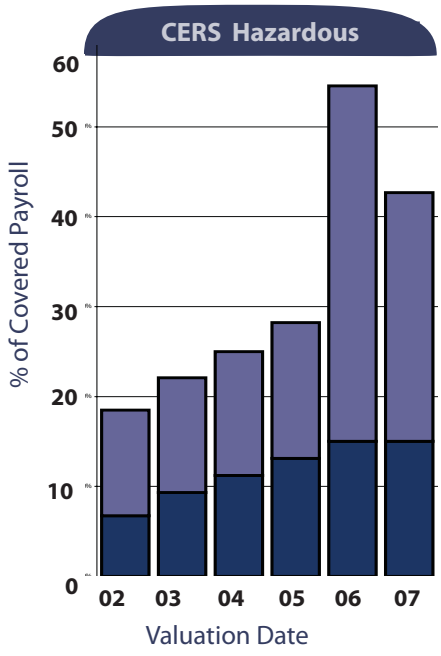
Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2002	2003-2004	6.42%	(4.03%)	2.39%	4.95%	7.34%
6/30/2003	2004-2005	5.71%	(2.89%)	2.82%	5.66%	8.48%
6/30/2004	2005-2006	5.80%	(1.25%)	4.55%	6.43%	10.98%
6/30/2005	2006-2007	5.72%	0.25%	5.97%	7.22%	13.19%
6/30/2006	2007-2008	4.69%	2.29%	6.98%	20.51%	27.49%
6/30/2007	2008-2009	4.53%	3.23%	7.76%	12.75%	20.51%

County Employees Retirement System (Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2002	2003-2004	8.93%	(2.17%)	6.76%	11.75%	18.51%
6/30/2003	2004-2005	8.80%	0.51%	9.31%	12.77%	22.08%
6/30/2004	2005-2006	8.80%	2.42%	11.22%	13.79%	25.01%
6/3 0/2005	2006-2007	8.79%	4.32%	13.11%	15.10%	28.21%
6/30/2006	2007-2008	8.12%	6.89%	15.01%	39.52%	54.53%
6/30/2007	2008-2009	8.06%	6.98%	15.04%	27.62%	42.66%

CERS Employer Contribution Rates





The total employer contribution rate is comprised of a contribution to the pension fund and to the insurance fund. The contribution to the pension fund and the insurance fund consist of the normal cost and an amortization payment on the unfunded actuarial liability (UAL).

Pension

Insurance

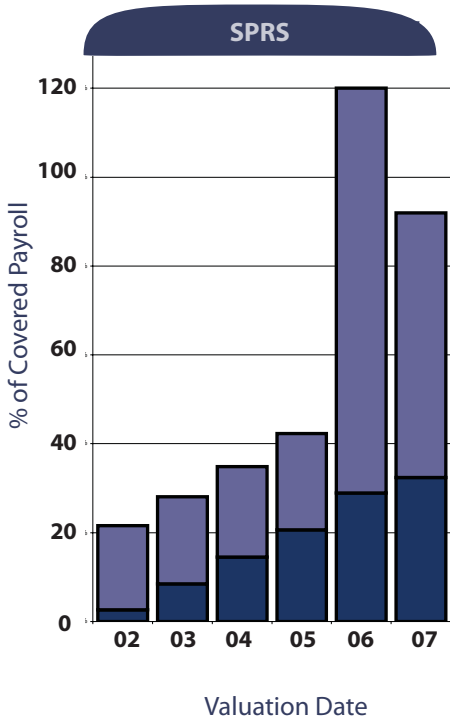
The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2007 annual valuation. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006, the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2008-2009 is 9.19% and the employer contribution rate is 16.17%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2008-2009 is 18.86% and the employer contribution rate is 33.87%.

Recommended Employer Contribution Rates
(As of June 30, 2007)

State Police Retirement System

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2002	2003-2004	9.85%	(7.21%)	2.64%	18.94%	21.58%
6/30/2003	2004-2005	9.07%	(0.58%)	8.49%	19.59%	28.08%
6/30/2004	2005-2006	9.37%	5.12%	14.49%	20.34%	34.83%
6/30/2005	2006-2007	9.43%	11.21%	20.64%	21.66%	42.30%
6/30/2006	2007-2008	9.20%	19.75%	28.95%	91.05%	120.00%
6/30/2007	2008-2009	9.64%	22.75%	32.39%	59.54%	91.93%

SPRS
Employer Contribution Rate



The total employer contribution rate is comprised of a contribution to the pension fund and to the insurance fund. The contribution to the pension fund and the insurance fund consist of the normal cost and an amortization payment on the unfunded actuarial liability (UAL).

Summary of Actuarially Unfunded Liabilities

(As of June 30, 2007)

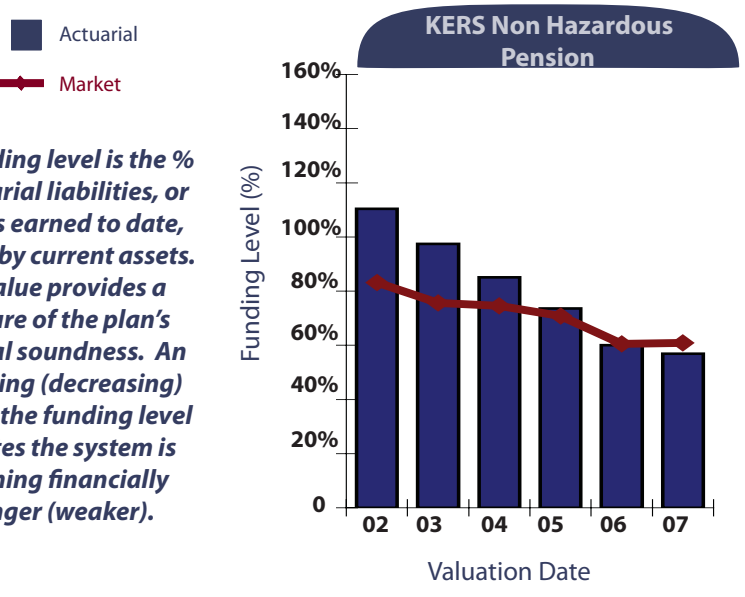
Kentucky Employees Retirement System
(Non-Hazardous Pension Fund)

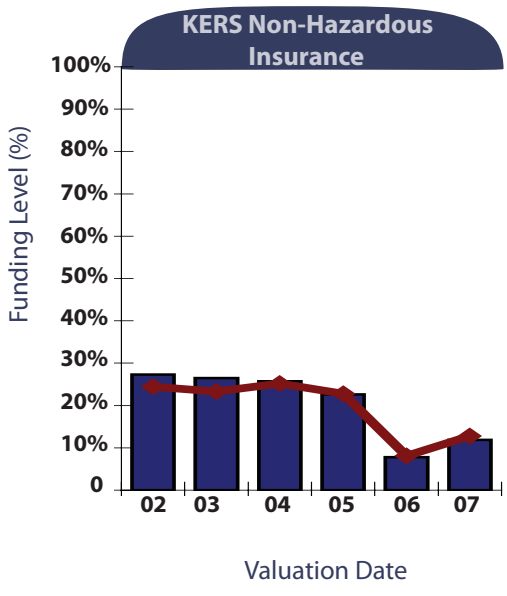
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/02	$6,026,094,764	$6,654,084,196	$5,005,190,948	($627,989,432)	$1,020,903,816	110.4%	83.1%
6/30/03	$6,520,463,188	$6,351,318,832	$4,929,443,185	$169,144,356	$1,591,020,003	97.4%	75.6%
6/30/04	$7,049,613,171	$6,000,513,743	$5,258,994,145	$1,049,099,428	$1,790,619,026	85.1%	74.6%
6/30/05	$7,579,074,839	$5,578,685,746	$5,362,630,697	$2,000,389,093	$2,216,444,142	73.6%	70.8%
6/30/06	$8,994,826,247	$5,394,086,323	$5,440,132,708	$3,600,739,924	$3,554,693,539	60.0%	60.5%
6/30/07	$9,485,939,277	$5,396,782,459	$5,773,156,838	$4,089,156,818	$3,712,782,439	56.9%	60.9%

Kentucky Employees Retirement System
(Non-Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/02	$1,907,683,881	$521,250,455	$465,664,515	$1,386,433,426	$1,442,019,366	27.3%	24.4%
6/30/03	$2,093,210,321	$553,885,082	$487,274,973	$1,539,325,239	$1,605,935,348	26.5%	23.3%
6/30/04	$2,335,905,365	$600,586,961	$587,680,647	$1,735,318,404	$1,748,224,718	25.7%	25.2%
6/30/05	$2,680,559,188	$607,068,351	$610,901,623	$2,073,490,837	$2,069,657,565	22.7%	22.8%
6/30/06	$7,815,480,774	$611,350,765	$632,642,846	$7,204,130,009	$ 7,182,837,928	7.8%	8.1%
6/30/07	$5,201,355,055	$621,171,658	$663,558,360	$4,580,183,397	$4,537,796,695	11.9%	12.8%

The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).





Summary of Actuarially Unfunded Liabilities

(As of June 30, 2007)

Kentucky Employees Retirement System
(Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/02	$322,069,164	$376,384,302	$301,799,829	($54,315,138)	$20,269,335	116.9%	93.7%
6/30/03	$356,879,133	$385,925,722	$320,524,691	($29,046,589)	$36,354,442	108.1%	89.8%
6/30/04	$403,578,036	$397,212,763	$366,569,507	$6,365,273	$37,008,529	98.4%	90.8%
6/30/05	$438,994,257	$405,288,662	$398,308,897	$33,705,595	$40,685,360	92.3%	90.7%
6/30/06	$508,655,903	$427,984,192	$437,029,583	$80,671,711	$71,626,320	84.1%	85.9%
6/30/07	$558,992,329	$467,287,809	$510,775,499	$91,704,520	$48,216,830	83.6%	91.4%

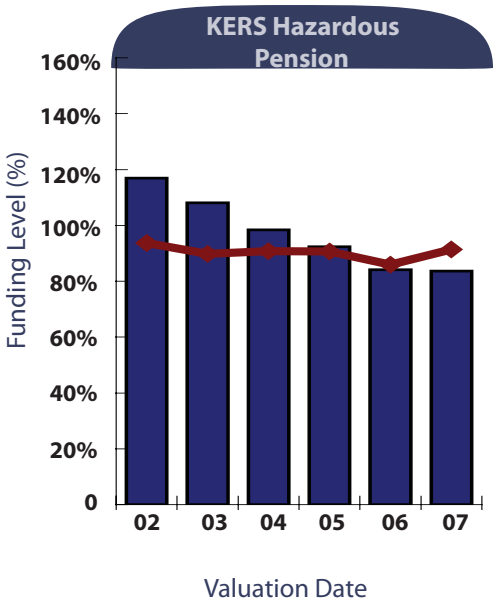
Kentucky Employees Retirement System
(Hazardous Insurance Fund)

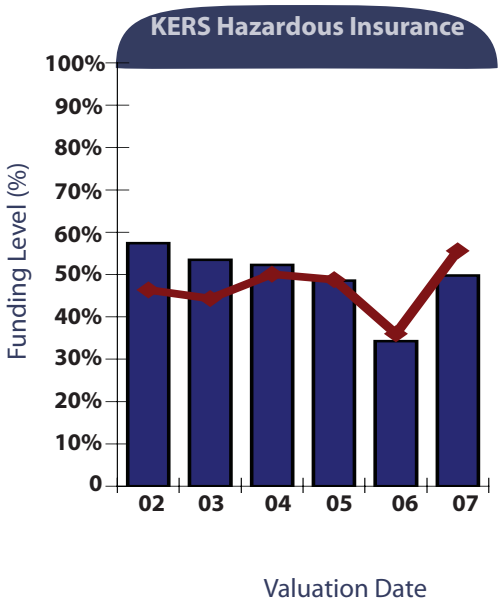
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/02	$236,819,050	$135,874,582	$109,769,410	$100,944,468	$127,049,640	57.4%	46.4%
6/30/03	$283,178,335	$151,459,500	$125,533,413	$131,718,835	$157,644,922	53.5%	44.3%
6/30/04	$323,503,563	$169,158,879	$162,127,373	$154,344,684	$161,376,190	52.3%	50.1%
6/30/05	$386,844,695	$187,947,644	$188,871,226	$198,897,051	$197,973,469	48.6%	48.8%
6/30/06	$621,237,856	$212,833,318	$223,523,081	$408,404,538	$397,714,775	34.3%	36.0%
6/30/07	$504,842,981	$251,536,756	$280,885,910	$253,306,225	$223,957,071	49.8%	55.6%

Actuarial

Market

The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).





Summary of Actuarially Unfunded Liabilities

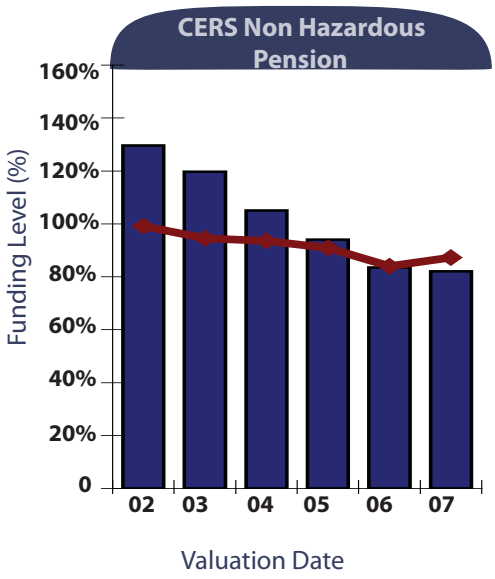
(As of June 30, 2007)

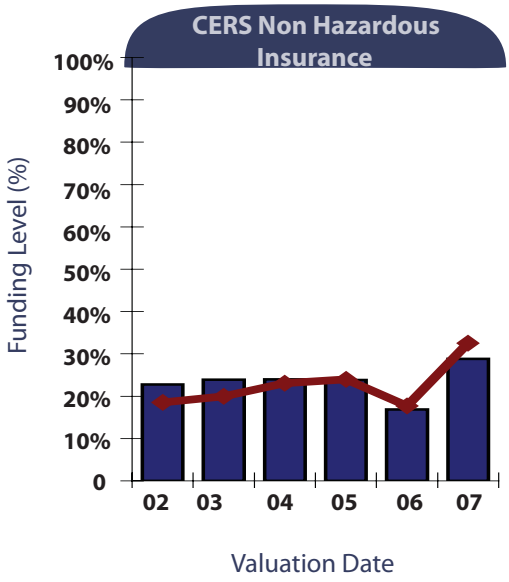
County Employees Retirement System
(Non-Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/02	$4,165,355,149	$5,397,787,158	$4,126,756,301	($1,232,432,009)	$38,598,848	129.6%	99.1%
6/30/03	$4,417,597,802	$5,286,580,047	$4,174,881,117	($868,982,245)	$242,716,685	119.7%	94.5%
6/30/04	$4,936,459,488	$5,187,851,530	$4,613,335,957	($251,392,042)	$323,123,531	105.1%	93.5%
6/30/05	$5,385,156,690	$5,059,208,687	$4,893,599,997	$325,948,003	$491,556,693	94.0%	90.9%
6/30/06	$6,179,569,267	$5,162,894,136	$5,191,376,948	$1,016,675,131	$988,192,319	83.6%	84.0%
6/30/07	$6,659,446,126	$5,467,824,480	$5,812,935,251	$1,191,621,646	$846,510,875	82.1%	87.3%

County Employees Retirement System
(Non-Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/02	$1,977,577,038	$450,497,307	$365,332,585	$1,527,079,731	$1,612,244,453	22.8%	18.5%
6/30/03	$2,176,963,259	$520,060,105	$435,667,125	$1,656,903,154	$1,741,296,134	23.9%	20.0%
6/30/04	$2,438,734,696	$585,399,072	$563,877,594	$1,853,335,624	$1,874,857,102	24.0%	23.1%
6/30/05	$2,788,754,654	$663,941,949	$668,485,367	$2,124,812,705	$2,120,269,287	23.8%	24.0%
6/30/06	$4,607,223,639	$777,726,590	$813,250,744	$3,829,497,049	$3,793,972,895	16.9%	17.7%
6/30/07	$3,333,966,070	$960,285,900	$1,084,042,781	$2,373,680,170	$2,249,923,289	28.8%	32.5%





The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Summary of Actuarially Unfunded Liabilities
(As of June 30, 2007)

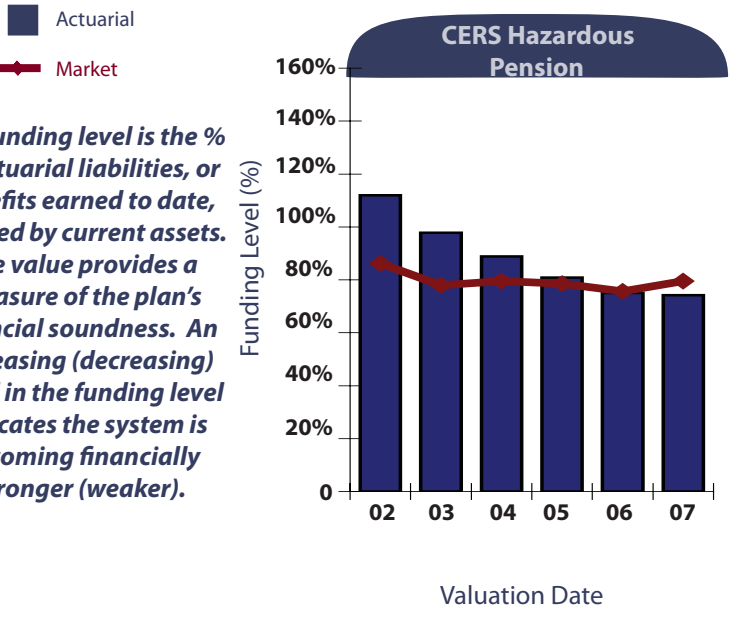
County Employees Retirement System
(Hazardous Pension Fund)

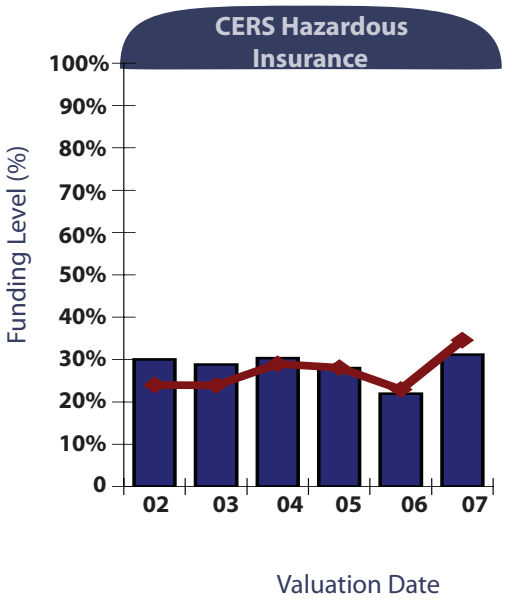
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/02	$1,327,291,273	$1,485,511,793	$1,144,349,093	($158,220,520)	$182,942,180	111.9%	86.2%
6/30/03	$1,499,628,782	$1,467,004,856	$1,168,794,472	$32,623,926	$330,834,310	97.8%	77.9%
6/30/04	$1,640,830,120	$1,457,612,042	$1,305,011,472	$183,218,078	$335,818,648	88.8%	79.5%
6/30/05	$1,795,617,335	$1,452,353,023	$1,411,245,719	$343,264,312	$384,371,616	80.9%	78.6%
6/30/06	$2,020,142,770	$1,515,075,017	$1,528,845,357	$505,067,753	$491,297,413	75.0%	75.7%
6/30/07	$2,208,736,179	$1,639,288,924	$1,754,934,764	$569,447,255	$453,801,415	74.2%	79.5%

County Employees Retirement System
(Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/02	$781,184,974	$234,683,878	$187,533,847	$546,501,096	$593,651,127	30.0%	24.0%
6/30/03	$935,650,662	$269,190,080	$223,212,339	$666,460,582	$712,438,323	28.8%	23.9%
6/30/04	$1,025,684,477	$310,578,162	$297,734,286	$715,106,315	$727,950,191	30.3%	29.0%
6/30/05	$1,283,299,092	$359,180,461	$360,938,669	$924,118,631	$922,360,423	28.0%	28.1%
6/30/06	$1,928,481,371	$422,785,042	$441,278,796	$1,505,696,329	$1,487,202,575	21.9%	22.9%
6/30/07	$1,646,460,011	$512,926,549	$570,155,702	$1,133,533,462	$1,076,304,309	31.2%	34.6%

The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).





Summary of Actuarially Unfunded Liabilities

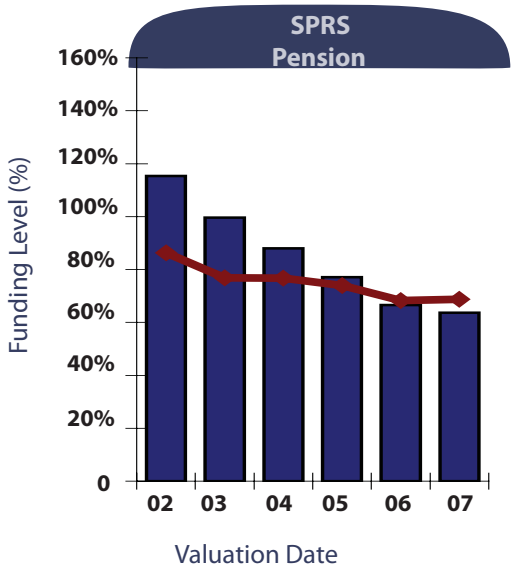
(As of June 30, 2007)

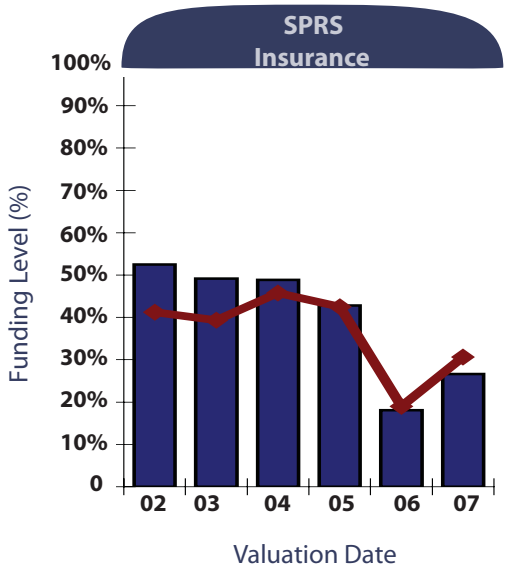
State Police Retirement System (Pension)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/02	$380,790,346	$438,955,465	$328,744,331	($58,165,119)	$52,046,015	115.3%	86.3%
6/30/03	$414,881,459	$413,063,576	$319,116,232	$1,817,883	$95,765,227	99.6%	76.9%
6/30/04	$437,482,425	$385,077,195	$335,720,408	$52,405,230	$101,762,017	88.0%	76.7%
6/30/05	$458,593,576	$353,511,622	$339,405,873	$105,081,954	$119,187,703	77.1%	74.0%
6/30/06	$516,482,298	$344,016,197	$352,841,486	$172,466,101	$163,640,812	66.6%	68.3%
6/30/07	$547,955,286	$348,806,508	$376,381,488	$199,148,778	$171,573,798	63.7%	68.7%

State Police Retirement System (Insurance)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/02	$165,445,412	$86,867,391	$68,074,444	$78,578,021	$97,370,968	52.5%	41.2%
6/30/03	$184,501,205	$90,747,967	$72,533,617	$93,753,238	$111,967,588	49.2%	39.3%
6/30/04	$197,604,301	$96,622,908	$90,422,080	$100,981,393	$107,182,221	48.9%	45.8%
6/30/ 05	$234,159,510	$100,207,082	$99,408,106	$133,952,428	$134,751,404	42.8%	42.5%
6/30/06	$582,580,867	$105,580,269	$110,491,075	$477,000,598	$472,089,792	18.1%	19.0%
6/30/07	$432,763,229	$115,215,912	$132,573,898	$317,547,317	$300,189,331	26.6%	30.6%





Actuarial

Market

The funding level is the % of actuarial liabilities, or benefits earned to date, covered by current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Analysis of Financial Experience
KERS Non-Hazardous

(As of June 30, 2007)

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/2007	Insurance $ Gain (or Loss) For Year Ending 6/30/2007
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (72.6)	(63.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	3.8	3.3
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(3.9)	(3.4)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	7.5	6.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(8.0)	339.4
New Members. Additional unfunded accrued liability will produce a loss.	(10.1)	(8.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	54.5	9.9
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(0.4)	(0.3)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(397.2)	(11.0)
Gain (or Loss) During Year From Financial Experience	$ (426.4)	272.5
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	0.0	2,388.1
Composite Gain (or Loss) During Year	$ (426.4)	2,660.6

Analysis of Financial Experience
KERS Hazardous

(As of June 30, 2007)

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/2007	Insurance $ Gain (or Loss) For Year Ending 6/30/2007
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (8.8)	(10.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	1.1	1.3
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.2)	(0.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	2.0	2.4
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(1.4)	25.4
New Members. Additional unfunded accrued liability will produce a loss.	(1.8)	(2.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	10.6	8.0
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.6	0.7
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(11.3)	(79.1)
Gain (or Loss) During Year From Financial Experience	$ (9.2)	(54.4)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution shortfall	0.0	216.4
Composite Gain (or Loss) During Year	$ (9.2)	162.0

Analysis of Financial Experience
CERS Non-Hazardous

(As of June 30, 2007)

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/2007	Insurance $ Gain (or Loss) For Year Ending 6/30/2007
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (65.0)	(48.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	1.9	1.4
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(5.8)	(4.3)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	16.8	12.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(1.3)	203.6
New Members. Additional unfunded accrued liability will produce a loss.	(12.1)	(9.0)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	53.4	33.3
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	5.8	4.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(138.7)	(27.2)
Gain (or Loss) During Year From Financial Experience	$ (145.0)	166.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution shortfall	0.0	1,354.3
Composite Gain (or Loss) During Year	$ (145.0)	1,520.4

Analysis of Financial Experience
CERS Hazardous

(As of June 30, 2007)

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/2007	Insurance $ Gain (or Loss) For Year Ending 6/30/2007
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (17.2)	(16.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	1.4	1.3
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.5)	(1.4)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	5.4	5.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(7.1)	81.2
New Members. Additional unfunded accrued liability will produce a loss.	(4.3)	(4.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	21.4	15.4
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	1.9	1.8
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(56.9)	(347.6)
Gain (or Loss) During Year From Financial Experience	$ (56.9)	(264.6)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution shortfall	0.0	662.2
Composite Gain (or Loss) During Year	$ (56.9)	397.6

Analysis of Financial Experience
SPRS

(As of June 30, 2007)

Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Millions)

Type of Activity	Retirement $ Gain (or Loss) For Year Ending 6/30/2007	Insurance $ Gain (or Loss) For Year Ending 6/30/2007
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (3.6)	(4.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.2	0.2
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.0	0.0
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(4.8)	24.0
New Members. Additional unfunded accrued liability will produce a loss.	(0.1)	(0.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	5.2	4.4
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(0.1)	(0.1)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(20.3)	(80.7)
Gain (or Loss) During Year From Financial Experience	$ (23.5)	(56.4)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution shortfall	0.0	218.3
Composite Gain (or Loss) During Year	$ (23.5)	161.9

Solvency Test
(As of June 30, 2007)

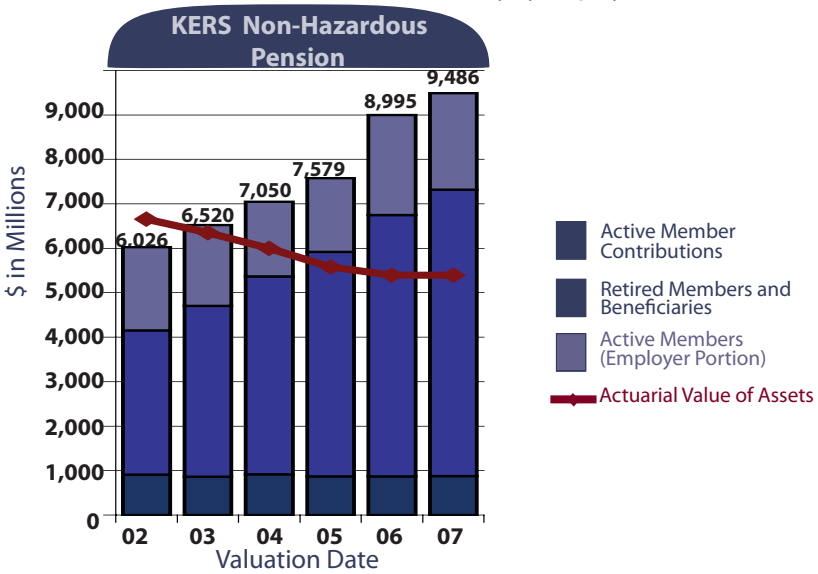
Kentucky Employees Retirement System
(Non-Hazardous Pension Fund)

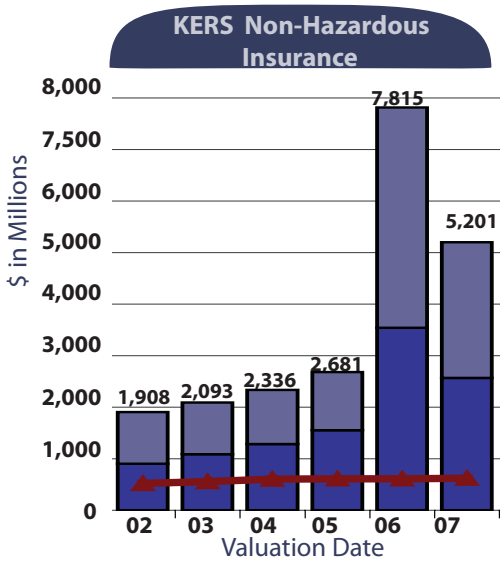
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/02	$910,956,664	$3,242,343,193	$1,872,794,907	$6,654,084,196	100.0%	100.0%	133.5%
6/30/03	$859,895,312	$3,844,696,149	$1,815,871,727	$6,351,318,832	100.0%	100.0%	90.7%
6/30/04	$915,105,103	$4,452,864,748	$1,681,643,320	$6,000,513,743	100.0%	100.0%	37.6%
6/30/05	$866,044,474	$5,056,247,608	$1,656,782,757	$5,578,685,746	100.0%	93.2%	--
6/30/06	$866,050,799	$5,881,990,853	$2,246,784,595	$5,394,086,323	100.0%	77.0%	--
6/30/07	$878,842,180	$6,437,235,593	$2,169,861,504	$5,396,782,459	100.0%	70.2%	--

Kentucky Employees Retirement System
(Non-Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/02	$0	$900,313,022	$1,007,370,859	$521,250,455	100.0%	57.9%	--
6/30/03	$0	$1,089,606,122	$1,003,604,199	$553,885,082	100.0%	50.8%	--
6/30/04	$0	$1,282,214,660	$1,053,690,705	$600,586,961	100.0%	46.8%	--
6/30/05	$0	$1,550,619,458	$1,129,939,730	$607,068,351	100.0%	39.2%	--
6/30/06	$0	$3,543,125,375	$4,272,355,400	$611,350,765	100.0%	17.3%	----
6/30/07	$0	$2,569,197,567	$2,632,157,488	$621,171,658	100.0%	24.2%	--

[1] *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*





A solvency test provides measures of the plans ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 covered by actuarial assets over time.

Solvency Test

(As of June 30, 2007)

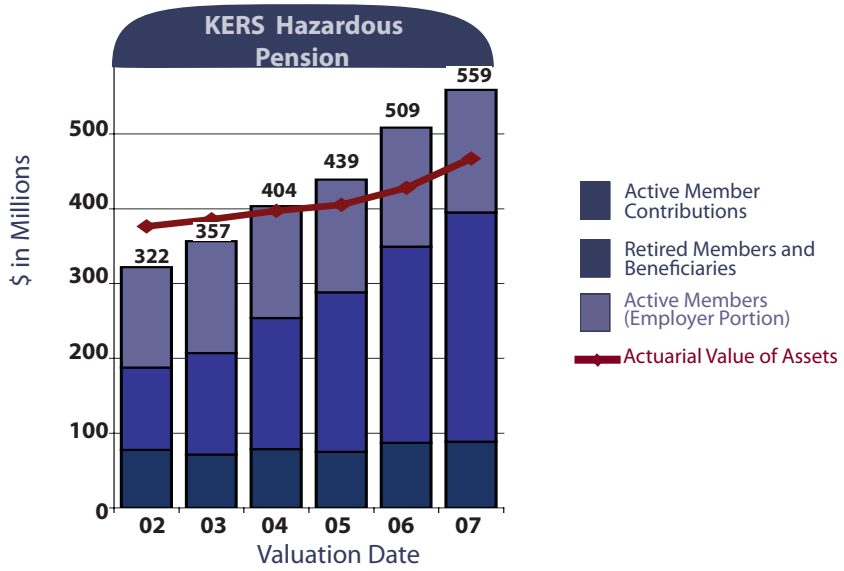
Kentucky Employees Retirement System
(Hazardous Pension Fund)

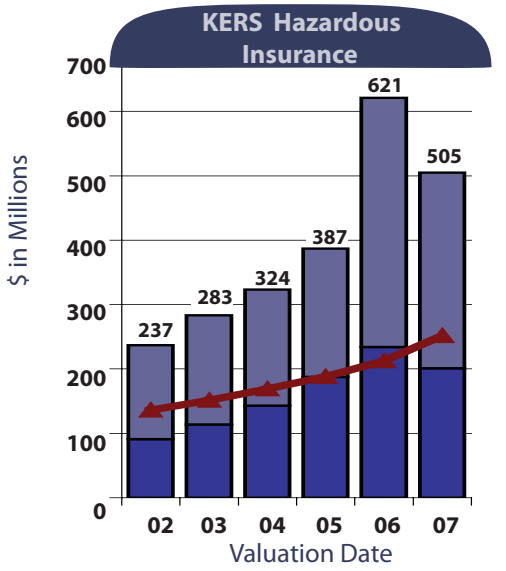
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/02	$77,700,666	$110,048,474	$134,320,024	$376,384,302	100.0%	100.0%	140.4%
6/30/03	$71,414,721	$135,622,333	$149,842,079	$385,925,722	100.0%	100.0%	119.4%
6/30/04	$78,817,575	$175,102,848	$149,657,613	$397,212,763	100.0%	100.0%	95.7%
6/30/05	$75,098,321	$213,310,550	$150,585,386	$405,288,662	100.0%	100.0%	77.6%
6/30/06	$87,092,538	$262,446,606	$159,116,759	$427,984,172	100.0%	100.0%	49.3%
6/30/07	$88,670,847	$306,492,350	$163,829,132	$467,287,809	100.0%	100.0%	44.0%

Kentucky Employees Retirement System
(Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/02	$0	$90,978,506	$145,840,544	$135,874,582	100.0%	100.0%	30.8%
6/30/03	$0	$113,979,451	$169,198,884	$151,459,500	100.0%	100.0%	22.2%
6/30/04	$0	$142,872,557	$180,631,006	$169,158,879	100.0%	100.0%	14.6%
6/30/05	$0	$187,883,650	$198,961,045	$187,947,644	100.0%	100.0%	--
6/30/06	$0	$234,058,715	$387,179,141	$212,833,318	100.0%	90.9%	--
6/30/07	$0	$201,189,546	$303,653,435	$251,536,756	100.0%	100.0%	16.6%

[1]*Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*





A solvency test provides measures of the plans ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 covered by actuarial assets over time.

Solvency Test
(As of June 30, 2006)

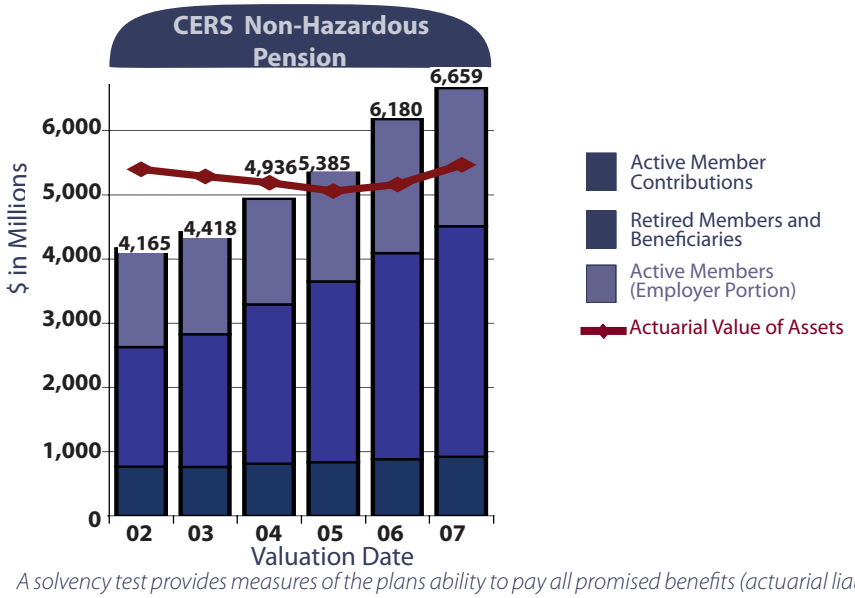
County Employees Retirement System
(Non-Hazardous Pension Fund)

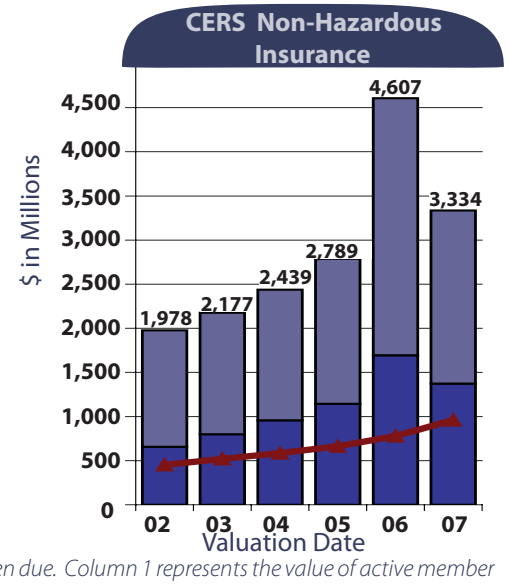
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/02	$768,656,315	$1,861,419,517	$1,535,279,317	$5,397,787,158	100.0%	100.0%	180.3%
6/30/03	$759,938,261	$2,068,481,586	$1,589,177,955	$5,286,580,047	100.0%	100.0%	154.7%
6/30/04	$814,908,627	$2,478,195,080	$1,643,355,781	$5,187,851,530	100.0%	100.0%	115.3%
6/30/05	$837,513,907	$2,814,210,355	$1,733,432,428	$5,059,208,687	100.0%	100.0%	81.2%
6/30/06	$ 883,946,564	$3,210,095,023	$2,085,527,680	$5,162,894,136	100.0%	100.0%	51.3%
6/30/07	$920,126,096	$3,589,512,063	$2,149,807,967	$5,467,824,480	100.0%	100.0%	44.6%

County Employees Retirement System
(Non-Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/02	$0	$656,812,900	$1,320,764,138	$450,497,307	100.0%	68.6%	--
6/30/03	$0	$799,777,264	$1,377,185,995	$520,060,105	100.0%	65.0%	--
6/30/04	$0	$955,930,091	$1,482,804,605	$585,399,072	100.0%	61.2%	--
6/30/05	$0	$1,144,219,107	$1,644,535,547	$663,941,949	100.0%	58.0%	--
6/30/06	$0	$1,694,600,143	$2,912,623,496	$777,726,590	100.0%	45.9%	--
6/30/07	$0	$1,372,128,406	$1,961,837,664	$960,285,900	100.0%	70.0%	--

[1] *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*





A solvency test provides measures of the plans ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 covered by actuarial assets over time.

Solvency Test
(As of June 30, 2007)

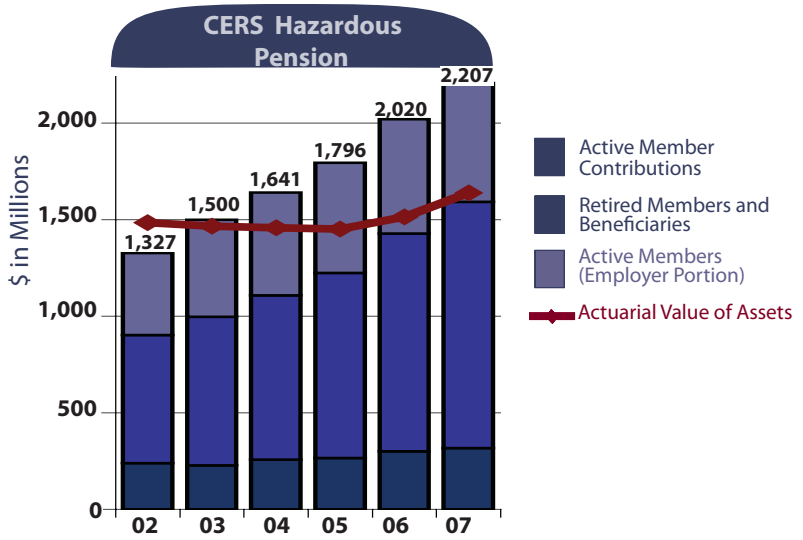
County Employees Retirement System
(Hazardous Pension Fund)

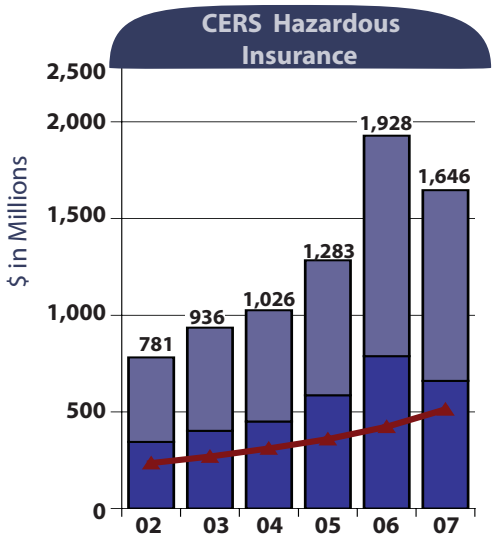
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/02	$238,363,024	$664,188,862	$424,739,387	$1,485,511,793	100.0%	100.0%	137.3%
6/30/03	$227,629,402	$769,804,746	$502,194,634	$1,467,004,856	100.0%	100.0%	93.5%
6/30/04	$256,366,204	$851,354,443	$533,109,473	$1,457,612,042	100.0%	100.0%	65.6%
6/30/05	$264,913,465	$960,052,305	$570,651,565	$1,452,353,023	100.0%	100.0%	39.8%
6/30/06	$300,200,800	$1,128,164,618	$591,777,352	$1,515,075,017	100.0%	100.0%	14.7%
6/30/07	$317,007,367	$1,275,221,775	$616,507,037	$1,639,288,924	100.0%	100.0%	7.6%

County Employees Retirement System
(Hazardous Insurance Fund)[1]

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/02	$0	$343,821,677	$437,363,297	$234,683,878	100.0%	68.3%	--
6/30/03	$0	$401,276,347	$534,374,315	$269,190,080	100.0%	67.1%	--
6/30/04	$0	$450,288,687	$575,395,790	$310,578,162	100.0%	69.0%	--
6/30/05	$0	$586,104,126	$697,194,966	$359,180,461	100.0%	61.3%	--
6/30/06	$0	$787,671,273	$1,140,810,098	$422,785,042	100.0%	53.7%	--
6/30/07	$0	$659,752,978	$986,707,033	$512,926,549	100.0%	77.7%	--

[1] *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*





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Solvency Test
(As of June 30, 2007

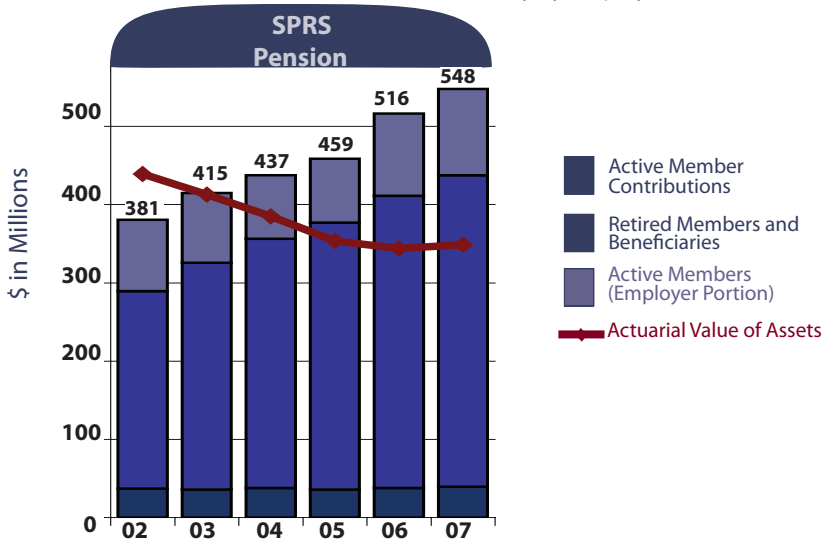
State Police Retirement System
(Pension Fund)

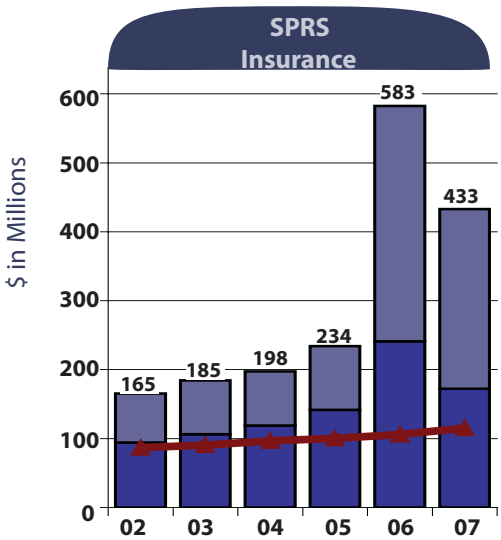
Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/02	$36,886,477	$252,498,613	$91,405,256	$438,955,613	100.0%	100.0%	163.6%
6/30/03	$35,832,095	$290,012,792	$89,036,572	$413,063,576	100.0%	100.0%	98.0%
6/30/04	$37,658,106	$318,664,694	$81,159,625	$385,077,195	100.0%	100.0%	35.4%
6/30/05	$35,670,717	$341,398,363	$81,524,496	$353,511,622	100.0%	93.1%	--
6/30/06	$37,866,774	$373,588,145	$105,027,379	$344,016,197	100.0%	81.9%	--
6/30/07	$39,505,285	$397,863,520	$110,586,481	$348,806,508	100.0%	77.7%	--

State Police Retirement System
(Insurance Fund)

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/02	$0	$94,205,237	$71,240,175	$86,867,391	100.0%	92.2%	--
6/30/03	$0	$106,317,750	$78,183,455	$90,747,967	100.0%	85.4%	--
6/30/04	$0	$119,104,851	$78,499,450	$96,622,908	100.0%	81.1%	--
6/30/05	$0	$141,585,694	$92,573,816	$100,207,082	100.0%	70.8%	--
6/30/06	$0	$240,913,868	$341,666,999	$105,580,269	100.0%	43.8%	--
6/30/07	$0	$172,291,142	$260,472,087	$115,215,912	100.0%	66.9%	--

[1] *Retiree insurance benefits are funded exclusively by employer contributions and any subsequent return on investments.*





A solvency test provides measures of the plans ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 covered by actuarial assets over time.

Summary of Active Member Valuation Data

(As of June 30, 2007)

Kentucky Employees Retirement System (Non-Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/02	N/A	48,555	$1,597,447,963	$32,900	3.1%	41.5	10.1
6/30/03	N/A	49,158	$1,658,604,696	$33,740	2.6%	42.5	10.0
6/30/04	N/A	47,599	$1,645,412,496	$34,568	2.5%	42.9	10.0
6/30/05	324	47,118	$1,655,907,288	$35,144	1.7%	42.9	9.8
6/30/06	338	46,707	$1,702,230,777	$36,445	3.7%	43.0	9.7
6/30/07	317	47,913	$1,780,223,493	$37,155	1.9%	43.3	9.3

Kentucky Employees Retirement System (Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/22	N/A	4,211	$125,371,604	$29,772	1.8%	41.8	6.9
6/30/03	N/A	4,189	$129,088,956	$30,816	3.5%	41.6	7.2
6/30/04	N/A	4,014	$126,664,812	$31,556	2.4%	42.7	7.6
6/30/05	26	4,274	$131,687,088	$30,811	(2.4%)	41.9	7.1
6/30/06	15	4,320	$138,747,320	$32,117	4.2%	41.6	7.0
6/30/07	15	4,349	$144,838,020	$33,304	3.7%	41.7	7.0

County Employees Retirement System (Non-Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[2]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/02	N/A	79,850	$1,688,460,789	$21,145	4.3%	43.0	7.6
6/30/03	N/A	82,288	$1,796,451,180	$21,831	3.2%	43.8	7.6
6/30/24	N/A	80,922	$1,826,870,880	$22,576	3.4%	44.8	7.9
6/30/05	1,116	81,240	$1,885,275,000	$23,206	2.8%	45.0	8.1
6/30/06	1,099	83,694	$1,982,437,473	$23,687	2.1%	45.1	8.1
6/30/07	1,112	84,920	$2,076,848,328	$24,457	3.3%	45.9	8.1

[1]Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2007.

N/A Not Available

Summary of Active Member Valuation Data

(As of June 30, 2007)

County Employees Retirement System (Hazardous)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/02	N/A	8,949	$346,319,146	$38,699	2.9%	36.3	7.8
6/30/03	N/A	9,286	$374,700,732	$40,351	4.3%	37.3	7.8
6/30/04	N/A	9,349	$392,562,624	$41,990	4.1%	38.1	8.1
6/30/05	284	9,464	$411,121,728	$43,441	3.5%	38.0	8.2
6/30/06	292	9,635	$426,927,550	$44,310	2.0%	37.8	8.3
6/30/07	294	10,063	$458,998,956	$45,613	2.9%	38.6	8.1

State Police Retirement System

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/02	1	1,002	$43,961,844	$43,874	0.8%	35.7	11.4
6/30/03	1	1,019	$43,760,832	$42,945	(2.1%)	35.9	10.9
6/30/04	1	999	$43,835,208	$43,879	2.2%	36.4	10.7
6/30/05	1	987	$43,720,092	$44,296	1.0%	36.5	10.6
6/30/06	1	1,028	$47,743,865	$46,443	4.8%	36.5	10.5
6/30/07	1	957	$49,247,580	$51,460	10.8%	37.3	11.1

[1]Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2007.

N/A Not Available

Summary of Retired Member Valuation Data

(As of June 30, 2007)

Kentucky Employees Retirement System (Non-Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances[1]	% Increase in Allowances	Average Annual Allowance
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	2,148	1,618	27,233	$393,048,800	N/A	$14,433
6/30/04	2,473	814	28,892	$449,410,400	14.34	$15,555
6/30/05	2,481	603	30,770	$509,347,800	13.34	$16,553
6/30/06	2,481	1,111	32,140	$566,167,003	11.31	$17,611
6/30/07	2,440	731	33,849	$625,435,416	10.47	$18,477

Kentucky Employees Retirement System (Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	170	21	1,357	$12,974,700	N/A	$9,561
6/30/04	227	35	1,549	$16,099,000	24.08	$10,393
6/30/05	234	31	1,752	$19,640,700	22.00	$11,210
6/30/06	256	28	1,980	$23,381,537	19.25	$11,809
6/30/07	241	19	2,202	$27,528,789	17.74	$12,502

County Employees Retirement System (Non-Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/2002	N/A	N/A	N/A	N/A	N/A	N/A
6/30/2003	2,411	1,466	27,092	$219,848,200	N/A	$8,115
6/30/2004	2,805	768	29,129	$247,534,300	12.59	$8,498
6/30/2005	2,808	590	31,347	$279,590,300	12.95	$8,919
6/30/06	2,782	1,027	33,102	$308,269,651	10.26	$9,313
6/30/07	3,244	782	35,564	$348,712,020	13.12	$9,805

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

N/A Not Available

Summary of Retired Member Valuation Data

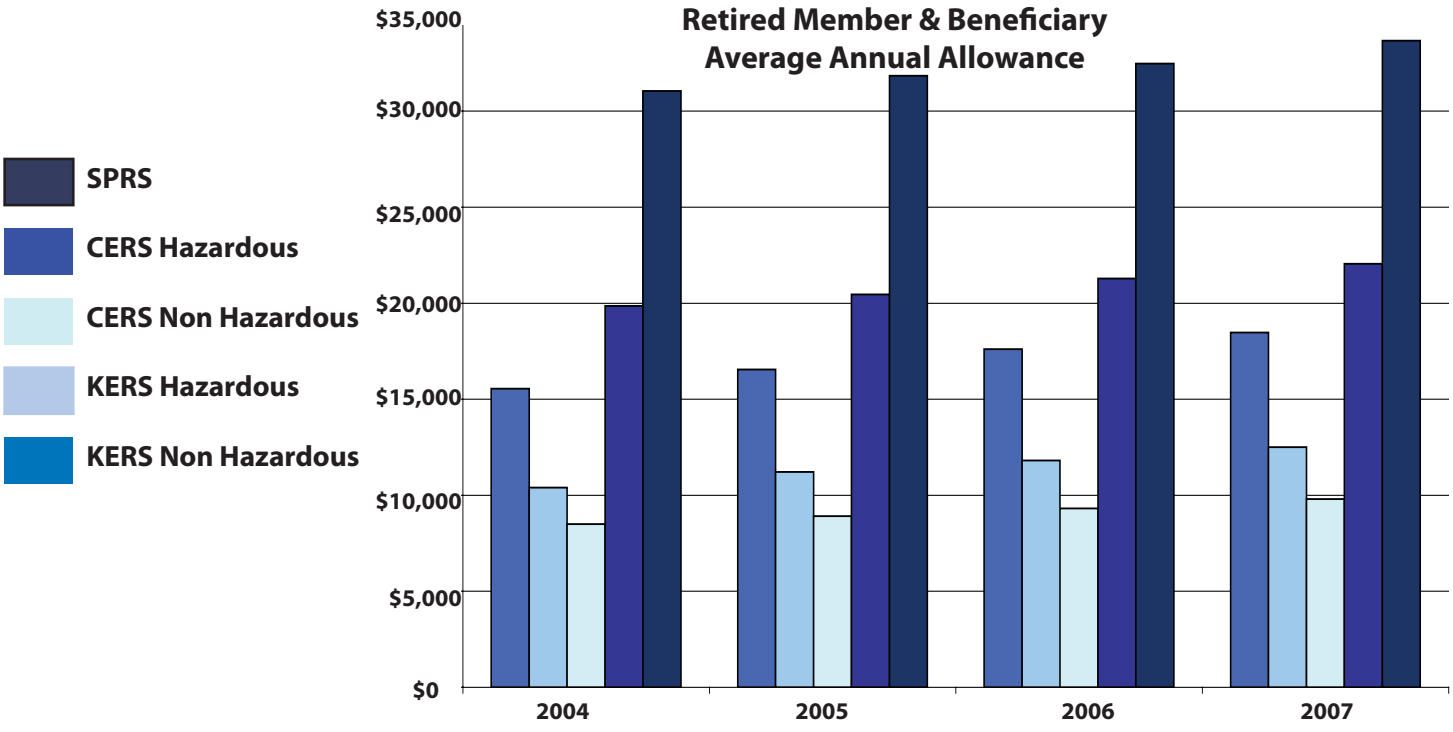
(As of June 30, 2007)

County Employees Retirement System (Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	293	39	3,737	$72,322,200	N/A	$19,353
6/30/04	343	75	4,005	$79,559,200	10.01	$19,865
6/30/05	403	47	4,361	$89,224,700	12.15	$20,460
6/30/06	427	76	4,712	$100,290,052	12.40	$21,284
6/30/07	500	53	5,159	$113,735,850	13.41	$22,046

State Police Retirement System

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/02	N/A	N/A	N/A	N/A	N/A	N/A
6/30/03	53	9	941	$28,115,500	N/A	$29,878
6/30/04	62	11	992	$30,805,600	9.57	$31,054
6/30/05	50	6	1,036	$32,983,900	7.07	$31,838
6/30/06	43	10	1,067	$34,651,251	5.06	$32,475
6/30/07	49	11	1,105	$37,208,377	7.38	$33,673



Summary of Benefit Provisions
KERS & CERS Non Hazardous Plans

Plan Funding

State statute requires active members to contribute 5% of creditable compensation. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS rates are subject to state budget approval.

Membership Eligibility

For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility

Age	*Years of Service*	*Allowance Reduction*
65	4	None
Any	27	None
55	5	5% per year for five years before age 65 or 27 years of service. 4% for each year thereafter.
Any	25	5% each year for five years before age 65 or 27 years of service.

Benefit Formula

Final Compensation	x	*Benefit Factor*		x	*Years of Service*
Average of the five highest, or if eligible, three highest fiscal year earnings. To be eligible for three-high final compensation, member must have 27 years of service, age and service of 75 years, and retire prior to 1/09.		KERS 1.97% if:	Member does not have 13 months credit from 1/98- 1/99.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if:	Member has 13 months credit from 1/98- 1/99.		
		KERS 2.20% if:	20 or more years of service, and retires by 1/09.		
		CERS 2.20% if:	Member begins participating prior to 8/1/04.		
		CERS 2.00% if:	Member begins participating on or after 8/1/04.		

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits

Members participating before 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members disabled as a result of a single *duty-related injury* or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the CPI-U for the most recent calendar year, not to exceed five percent (5%). The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 or after are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased annually by the CPI-U.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

Summary of Benefit Provisions
KERS & CERS Hazardous Plans & SPRS

Plan Funding

State statute requires active members to contribute 8% of creditable compensation. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS & SPRS rates are subject to state budget approval.

Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

Retirement Eligibility

Age	*Years of Service*	*Allowance Reduction*
55	5	None
Any	20	None
50	15	5.5% per year for five years before age 55 or 20 years of service.

Benefit Formula

Final Compensation	X	*Benefit Factor*	X	*Years of Service*
Average of the three highest fiscal year earnings.		KERS 2.49% CERS 2.50% SPRS 2.50%		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).

Disability Benefits

Members hired before 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members hired on or after 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% Final Rate of Pay or the amount calculated under the Benefit Formula noted above based upon actual service.

Members disabled as a result of a single *duty-related injury* or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be *eligible for a monthly* benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent (5%). The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 or after are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15 for each year of earned service increased annually by the CPI-U.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

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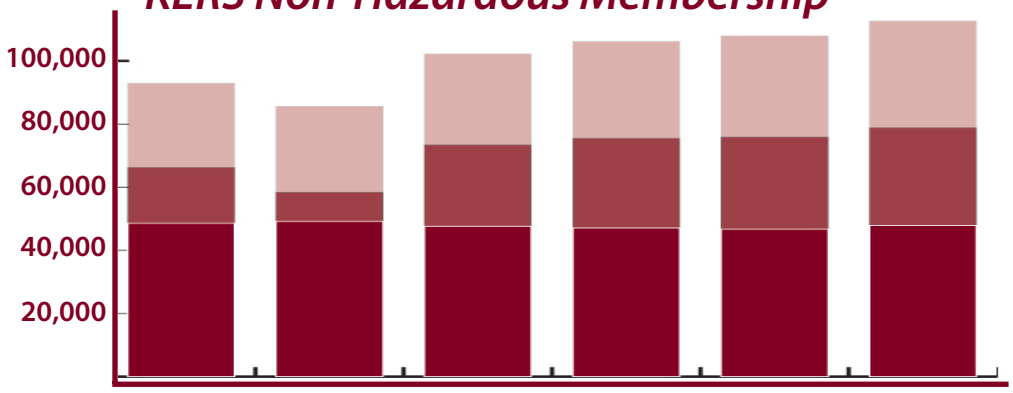
KERS Non-Hazardous Membership



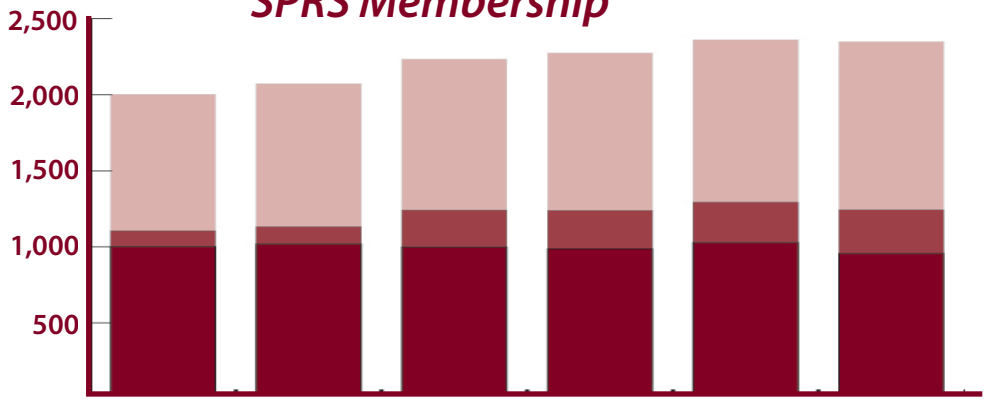
	2002	2003	2004	2005	2006	2007
Retired	26,703	27,233	28,892	30,770	32,140	33,849
Inactive	17,714	18,522	25,775	28,345	29,143	30,904
Active	48,555	49,158	47,599	47,118	46,707	47,913
Total	92,972	85,632	102,266	106,233	107,990	112,666

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

KERS Hazardous Membership

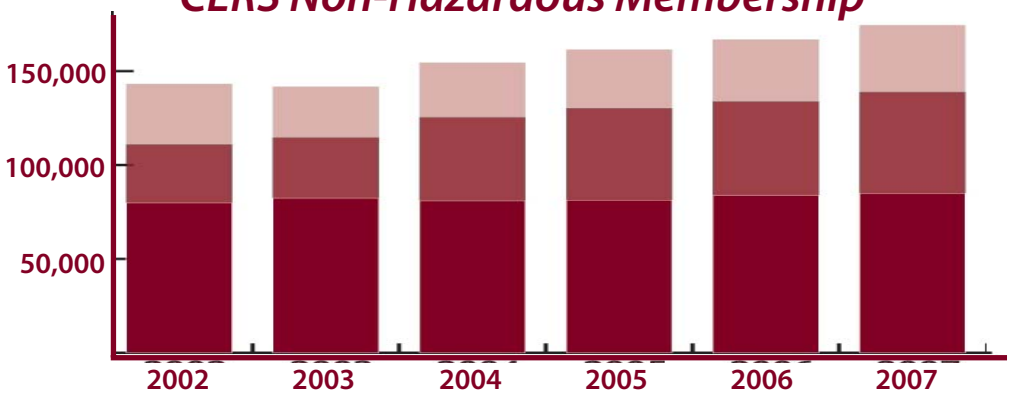
	2002	2003	2004	2005	2006	2007
Retired	1,208	1,357	1,549	1,752	1,981	2,202
Inactive	1,073	782	2,032	2,304	2,501	2,738
Active	4,211	4,189	4,014	4,274	4,320	4,349
Total	6,492	6,328	7,595	8,330	8,802	9,289

SPRS Membership



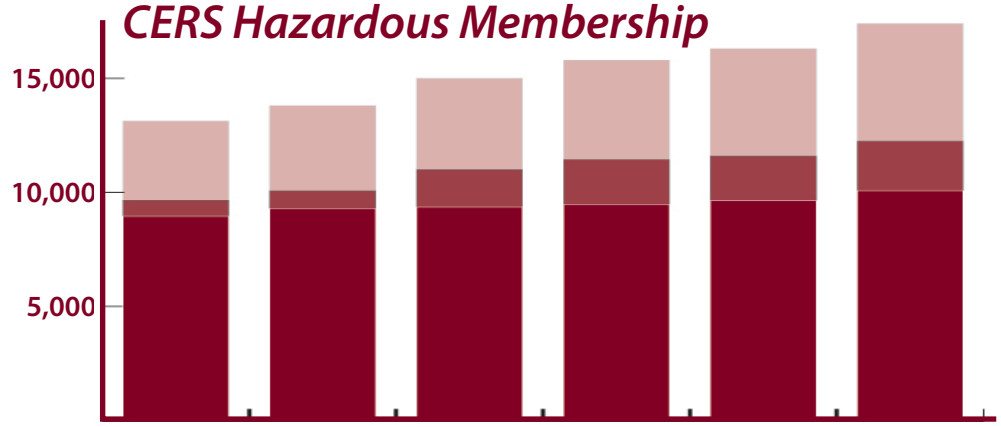
	2002	2003	2004	2005	2006	2007
Retired	897	941	992	1,036	1,0671	1,105
Inactive	103	113	243	252	266	286
Active	1,002	1,019	999	987	1,028	957
Total	2,002	2,073	2,234	2,275	2,361	2,348

CERS Non-Hazardous Membership



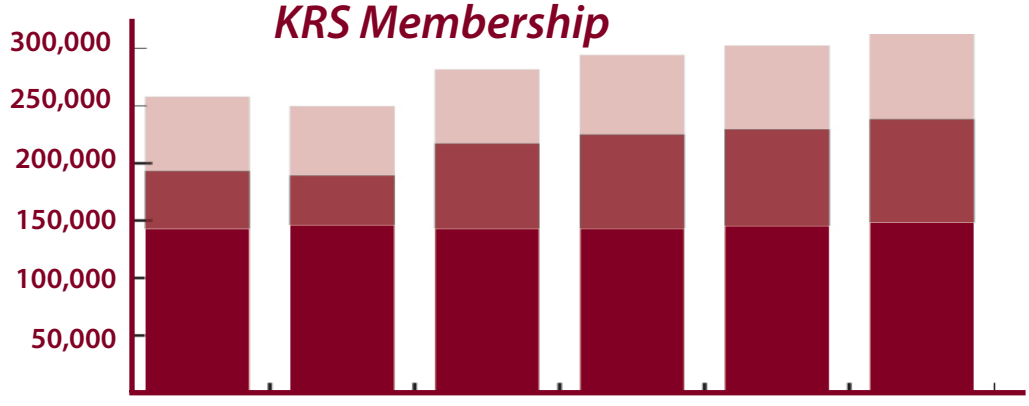
	2002	2003	2004	2005	2006	2007
Retired	32,326	27,092	29,129	31,347	33,102	35,564
Inactive	30,978	32,326	44,419	48,869	50,046	53,901
Active	79,850	82,288	80,922	81,240	83,694	84,920
Total	143,154	141,706	154,470	161,456	165,786	174,385

CERS Hazardous Membership



	2002	2003	2004	2005	2006	2007
Retired	3,483	3,737	4,005	4,361	4,712	5,159
Inactive	700	781	1,648	1,971	1,955	2,197
Active	8,949	9,286	9,349	9,464	9,635	10,063
Total	13,132	13,804	15,002	15,796	16,302	17,419

KRS Membership



	2002	2003	2004	2005	2006	2007
Retired	64,617	60,360	64,567	69,266	73,002	77,879
Inactive	50,568	43,243	74,117	81,741	83,911	90,026
Active	142,567	145,940	142,883	143,083	145,384	148,202
Total	257,752	249,543	281,567	294,090	302,297	316,107

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

Schedule of Participating Employers

Kentucky Employees Retirement System

Agency Classification	Number of Agencies	Number of Employees
Agencies Reporting Through State Payroll	148	34,786
Other Agencies (universities, mental health boards, health departments)	143	16,190
Special Districts and Boards	4	509
Child Support Offices (county attorneys)	59	177
Other State-Administered Retirement Systems	3	285
TOTAL	356	51,947

County Employees Retirement System

Agency Classification	Number of Agencies	Number of Employees
Area Development Districts	13	569
Boards of Education	175	49,711
Cities	215	6,465
County Attorneys	60	576
County Clerks	13	564
County Government Agencies	262	21,604
Fire Departments	68	858
Hospitals	3	315
Jailers	9	441
Libraries	83	1,017
Planning Commissions	10	181
Police Departments	97	728
Police & Fire Departments (combined)	61	3,413
Sanitation Districts	5	68
Sheriff Departments	53	1,132
Special Districts and Boards	168	3,072
Utility Boards	104	3,362
Urban County Government Agencies	4	2,065
TOTAL	1,403	96,141

State Police Retirement System

Agency Classification	Number of Agencies	Number of Employees
Kentucky State Police-Uniformed Officers	**1**	**972**

Principal Participating Employers

Kentucky Employees Retirement System

Participating Employer	Rank	Covered Employees	% of Total System
Health & Family Services Cabinet: Department for Community Based Services	1	4,551	8.76%
Transportation: Department of Highways	2	4,073	7.84%
Justice & Public Safety Cabinet: Department of Corrections	3	3,893	7.49%
Bluegrass Regional Mental Health/Mental Retardation Board	4	2,327	4.48%
Justice & Public Safety Cabinet: Department of Juvenile Justice	5	1,475	2.84%
Administrative Office of the Courts	6	1,413	2.72%
Seven County Services Inc.	7	1,144	2.20%
United Prosecutorial System (Child Support Offices)	8	1,081	2.08%
Kentucky Department of Parks	9	1,049	2.02%
Office of Human Resource Management	10	1,038	2.00%
All Others		29,903	57.56%
TOTAL		51,947	100.00%

County Employees Retirement System

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board of Education	1	6,846	7.12%
Louisville/Jefferson County Metro	2	3,259	3.39%
Louisville/Jeferson County Metro (Police, Fire, EMS)	3	2,288	2.38%
Fayette County Board of Education	4	1,796	1.87%
Circuit Clerks	5	1,785	1.86%
Lexington/Fayette Urban County Government	6	1,604	1.67%
Hardin County Board of Education	7	1,109	1.15%
Boone County Board of Education	8	1,035	1.08%
Daviess County Board of Education	9	905	0.94%
Pike County Board of Education	10	882	0.94%
All Others		74,632	77.63%
TOTAL		96,141	100.00%

Net Plan Assets by System

Kentucky Employees Retirement System

(Dollars in Thousands)

	Non-Hazardous			Hazardous		
	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2002	5,005,191	465,665	5,470,856	301,800	109,769	411,569
June 30 2003	4,929,319	487,071	5,416,390	320,513	125,522	446,035
June 30 2004	5,258,995	587,681	5,846,676	366,568	162,127	528,695
June 30 2005	5,362,631	610,901	5,973,532	398,308	188,871	587,179
June 30 2006	5,440,133	612,643	6,052,776	437,030	223,523	660,553
June 30 2007	5,773,157	663,558	6,436,715	510,775	280,886	791,661

County Employees Retirement System

(Dollars in Thousands)

	Non-Hazardous			Hazardous		
	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2002	4,126,756	365,333	4,492,089	1,144,349	187,534	1,331,883
June 30 2003	4,175,825	435,500	4,611,325	1,168,776	223,168	1,391,944
June 30 2004	4,613,335	563,877	5,177,212	1,305,012	297,737	1,602,749
June 30 2005	4,893,600	668,485	5,562,085	1,411,246	360,940	1,772,186
June 30 2006	5,191,377	813,251	6,004,628	1,528,845	441,279	1,970,124
June 30 2007	5,812,936	1,084,043	6,896,979	1,754,935	570,156	2,325,091

	State Police Retirement System			Kentucky Retirement Systems Total		
	(Dollars in Thousands)			(Dollars in Thousands)		
	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2002	328,744	68,074	396,818	10,906,841	1,196,375	12,103,216
June 30 2003	319,115	72,538	391,653	10,913,548	1,343,799	12,257,347
June 30 2004	335,721	90,420	426,141	11,879,631	1,701,842	13,581,473
June 30 2005	339,406	99,408	438,814	12,405,191	1,928,605	14,333,796
June 30 2006	352,841	110,491	463,332	12,950,226	2,201,187	15,151,413
June 30 2007	376,381	132,574	508,955	14,228,184	2,731,217	16,959,401

Changes in Net Plan Assets by System

Kentucky Employees Retirement System Non-Hazardous Pension Fund

	Fiscal Year					
	2002	2003	2004	2005	2006	2007
Additions						
Member Contributions	$111,992	$137,124	$129,077	$127,801	$107,607	$116,254
Employer Contributions	$1,760	$7,597	$21,697	$50,333	$60,681	$88,249
Net Investment Income	-$236,405	$196,106	$651,532	$462,638	$504,361	$784,652
Total Additions	**-$122,653**	**$340,827**	**$802,306**	**$640,772**	**$672,649**	**$989,155**
Deductions						
Benefit Payments	$345,666	$404,896	$459,367	$522,396	$577,947	$640,201
Refunds	$6,657	$7,258	$8,001	$8,824	$9,632	$9,489
Administrative Expenses	$4,399	$4,959	$5,262	$5,916	$7,568	$7,070
Other Expenses	-$2	$0	$0	$0	$0	$13
Total Deductions	**$356,720**	**$417,113**	**$472,630**	**$537,136**	**$595,147**	**$656,773**
Change in Net Assets	**-$479,373**	**-$76,286**	**$329,676**	**$103,636**	**$77,502**	**$332,382**

Kentucky Employees Retirement System Non-Hazardous Insurance Fund

	Fiscal Year					
	2002	2003	2004	2005	2006	2007
Additions						
Employer Contributions	$65,335	$65,335	$78,017	$51,432	$47,635	$64,014
Net Investment Income	$19,582	$8,050	$83,064	$47,823	$65,839	$78,877
Member Drug Reimbursement	$0	$0	$0	$0	$0	$10,744
Insurance Appropriation	$0	$0	$0	$0	$11,852	$0
Other Income	$0	$0	$0	$0	$5,770	$12,196
Total Additions	**$84,917**	**$73,385**	**$161,081**	**$99,255**	**$131,096**	**$165,831**
Deductions						
Benefit Payments	$43,738	$51,586	$59,987	$75,571	$95,823	$111,659
Administrative Expenses	$345	$393	$484	$464	$1,679	$3,199
Insurance Appropriation	$0	$0	$0	$0	$20,000	$0
Total Deductions	**$44,083**	**$51,979**	**$60,471**	**$76,035**	**$117,502**	**$114,858**
Change in Net Assets	**$69,410**	**$21,406**	**$100,610**	**$23,220**	**$1,742**	**$50,973**

Changes in Net Plan Assets by System

Kentucky Employees Retirement System
Hazardous Pension Fund

	Fiscal Year					
	2002	2003	2004	2005	2006	2007
Additions						
Member Contributions	$10,807	$11,553	$11,548	$11,625	$12,056	$13,245
Employer Contributions	$7,934	$7,322	$9,769	$9,758	$10,803	$13,237
Net Investment Income	-$10,786	$14,742	$43,403	$33,123	$41,680	$77,996
Total Additions	**$7,954**	**$33,617**	**$64,720**	**$54,506**	**$64,539**	**$104,478**
Deductions						
Benefit Payments	$10,203	$13,373	$16,863	$20,495	$23,736	$28,514
Refunds	$1,141	$1,160	$1,410	$1,760	$1,436	$1,662
Administrative Expenses	$354	$404	$392	$511	$645	$611
Other Expenses	-$1	$0	$0	$0	$0	$1
Total Deductions	**$11,698**	**$14,937**	**$18,665**	**$22,766**	**$25,817**	**$38,788**
Change in Net Assets	**-$3,744**	**$18,680**	**$46,055**	**$31,740**	**$38,722**	**$73,690**

Kentucky Employees Retirement System
Hazardous Insurance Fund

	Fiscal Year					
	2002	2003	2004	2005	2006	2007
Additions						
Employer Contributions	$15,887	$15,883	$14,959	$15,653	$17,012	$19,535
Net Investment Income	-$11,229	$2,835	$25,206	$15,999	$24,128	$44,541
Member Drug Reimbursement	$0	$0	$0	$0	$0	$309
Insurance Appropriation	$0	$0	$0	$0	$88	$0
Total Additions	**$4,658**	**$18,718**	**$ 40,165**	**$31,652**	**$41,228**	**$64,385**
Deductions						
Benefit Payments	$2,453	$2,938	$3,539	$4,853	$6,513	$6,874
Administrative Expenses	$29	$27	$21	$55	$63	$83
Other Expenses	$0	$0	$0	$0	$0	$0
Total Deductions	**$2,482**	**$2,965**	**$3,560**	**$4,908**	**$6,576**	**$6,957**
Change in Net Assets	**$2,177**	**$15,753**	**$36,605**	**$26,744**	**$34,652**	**$57,428**

Changes in Net Plan Assets by System

County Employees Retirement System
Non-Hazardous Pension Fund

	Fiscal Year					
	2002	2003	2004	2005	2006	2007
Additions						
Member Contributions	$122,428	$125,301	$122,484	$127,637	$112,372	$121,979
Employer Contributions	$5,528	$11,856	$44,028	$54,617	$90,834	$124,261
Net Investment Income	-$186,375	$160,110	$551,669	$413,672	$444,092	$760,541
Total Additions	**-$58,419**	**$297,267**	**$718,181**	**$595,926**	**$647,298**	**$1,009,736**
Deductions						
Benefit Payments	$196,659	$230,317	$260,643	$294,590	$325,135	$356,648
Refunds	$8,325	$10,213	$11,334	$11,042	$11,589	$11,396
Administrative Expenses	$7,187	$8,244	$8,694	$10,029	$12,797	$12,197
Other Expenses	$0	$0	$0	$0	$0	$22
Total Deductions	**$212,171**	**$248,774**	**$280,671**	**$315,661**	**$349,521**	**$389,263**
Change in Net Assets	**-$270,590**	**$48,493**	**$437,510**	**$280,265**	**$297,777**	**$620,473**

County Employees Retirement System
Non-Hazardous Insurance Fund

	Fiscal Year					
	2002	2003	2004	2005	2006	2007
Additions						
Employer Contributions	$102,151	$99,235	$89,344	$107,632	$128,868	$147,609
Net Investment Income	-$34,899	$10,625	$86,080	$55,723	$83,991	$188,055
Member Drug Reimbursement	$0	$0	$0	$0	$0	$23,620
Insurance Appropriation	$0	$0	$0	$0	$6,365	$0
Total Additions	**$67,252**	**$109,860**	**$175,424**	**$163,355**	**$219,224**	**$359,284**
Deductions						
Benefit Payments	$32,726	$39,387	$46,654	$58,262	$72,919	$85,199
Administrative Expenses	$260	$306	$393	$485	$1,539	3,040
Other Expenses	$0	$0	$0	$0	$0	$0
Total Deductions	**$32,986**	**$39,693**	**$47,047**	**$58,747**	**$74,458**	**$88,239**
Change in Net Assets	**$34,265**	**$70,167**	**$128,377**	**$104,608**	**$144,766**	**$271,045**

Changes in Net Plan Assets by System

County Employees Retirement System
Hazardous Pension Fund

	Fiscal Year					
	2002	2003	2004	2005	2006	2007
Additions						
Member Contributions	$37,096	$36,203	$38,668	$39,515	$39,055	$43,650
Employer Contributions	$11,055	$16,906	$27,641	$39,948	$49,976	$61,553
Net Investment Income	-$49,057	$46,212	$154,628	$119,901	$132,915	$240,035
Total Additions	**-$906**	**$99,321**	**$220,937**	**$199,364**	**$221,946**	**$345,238**
Deductions						
Benefit Payments	$63,494	$72,532	$81,422	$90,119	$101,087	$115,604
Refunds	$1,770	$1,794	$2,520	$2,139	$2,147	$2,563
Administrative Expenses	$635	$737	$759	$872	$1,113	$1,073
Other Expenses	$0	$0	$0	$0	$0	$2
Total Deductions	**$65,900**	**$75,063**	**$84,701**	**$93,130**	**$104,347**	**$119,242**
Change in Net Assets	**-$66,806**	**$24,258**	**$136,236**	**$106,234**	**$117,599**	**$225,996**

County Employees Retirement System
Hazardous Insurance Fund

	Fiscal Year					
	2002	2003	2004	2005	2006	2007
Additions						
Employer Contributions	$45,730	$45,244	$47,037	$55,552	$64,854	$70,073
Net Investment Income	-$18,551	$5,361	$44,337	$29,819	$98	$90,041
Member Drug Reimbursement	$0	$0	$0	$0	$0	$848
Insurance Appropriation	$0	$0	$0	$0	$45,317	$0
Total Additions	**$27,179**	**$50,605**	**$91,374**	**$85,371**	**$110,269**	**$160,962**
Deductions						
Benefit Payments	$13,166	$14,866	$16,700	$21,985	$29,717	$31,607
Administrative Expenses	$115	$105	$105	$183	$213	$320
Other Expenses	$0	$0	$0	$0	$0	$0
Total Deductions	**$13,281**	**$14,971**	**$16,805**	**$22,168**	**$29,930**	**$31,927**
Change in Net Assets	**$13,898**	**$35,634**	**$74,569**	**$63,203**	**$80,339**	**$129,035**

Changes in Net Plan Assets by System

State Police Retirement System
Pension Fund

	Fiscal Year					
	2002	2003	2004	2005	2006	2007
Additions						
Member Contributions	$4,499	$4,674	$4,875	$4,228	$4,814	$5,152
Employer Contributions	-$18	-$20	$1,153	$2,852	$4,244	$6,142
Net Investment Income	-$15,388	$13,755	$41,642	$29,761	$39,347	$49,595
Total Additions	**-$10,906**	**$18,409**	**$47,670**	**$36,841**	**$48,405**	**60,889**
Deductions						
Benefit Payments	$24,839	$27,862	$30,877	$32,921	$34,703	$37,187
Refunds	$25	$97	$96	$131	$133	$47
Administrative Expenses	$76	$86	$91	$104	$134	$126
Other Expenses	$1	$0	$0	$0	$0	$0
Total Deductions	**$24,941**	**$28,045**	**$31,064**	**$33,156**	**$34,970**	**$37,360**
Change in Net Assets	**-$35,848**	**-$9,636**	**$16,606**	**$3,685**	**$13,435**	**$23,529**

State Police Retirement System
Insurance Fund

	Fiscal Year					
	2002	2003	2004	2005	2006	2007
Additions						
Employer Contributions	$9,580	$7,654	$8,456	$6,974	$6,880	$6,489
Net Investment Income	-$7,382	$1,360	$14,449	$8,279	$12,082	$21,876
Member Drug Reimbursement	$0	$0	$0	$0	$0	$369
Insurance Appropriation	$0	$0	$0	$0	$5	$0
Total Additions	**$2,198**	**$9,014**	**$22,905**	**$15,253**	**$18,967**	**$28,734**
Deductions						
Benefit Payments	$4,020	$4,519	$4,992	$6,221	$7,816	$6,515
Administrative Expenses	$29	$31	$31	$44	$68	$105
Other Expenses	$0	$0	$0	$0	$0	$0
Total Deductions	**$4,049**	**$4,550**	**$5,023**	**$6,265**	**$7,884**	**$6,620**
Change in Net Assets	**-$1,851**	**$4,464**	**$17,882**	**$8,988**	**$11,083**	**$22,114**

Schedule of Benefit Expenses by Type

KERS Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2001-02					
Average Benefit	$784	$1,314	$783	$650	$1,104
Number	3,714	16,561	1,913	3,659	25,847
Total Monthly Benefits	$2,912,068	$21,755,957	$1,498,690	$2,377,149	$28,543,863
% of Total Monthly Benefits	10.2%	76.2%	5.3%	8.3%	100.0%
FY 2002-03					
Average Benefit	$822	$1,430	$809	$688	$1,203
Number	3,706	17,917	1,922	3,708	27,253
Total Monthly Benefits	$3,045,409	$25,626,447	$1,555,628	$2,551,366	$32,778,849
% of Total Monthly Benefits	9.3%	78.2%	4.7%	7.8%	100.0%
FY 2003-04					
Average Benefit	$859	$1,537	$825	$721	$1,296
Number	3,768	19,477	1,925	3,740	28,910
Total Monthly Benefits	3,237,300	29,941,376	1,587,565	2,697,409	37,463,650
% of Total Monthly Benefits	8.6%	79.9%	4.2%	7.2%	100.0%
FY 2004-05					
Average Benefit	$910	$1,632	$850	$739	$1,379
Number	3,866	21,092	1,910	3,902	30,770
Total Monthly Benefits	$3,516,148	$34,423,089	1,623,500	2,882,916	42,445,653
% of Total Monthly Benefits	8.3%	81.1%	3.8%	6.8%	100.0%
FY 2005-06					
Average Benefit	$888	$1,670	$834	$868	$1,469
Number	4,616	24,056	2,628	849	32,149
Total Monthly Benefits	$4,099,896	$40,184,892	$2,190,812	$737,173	$47,212,773
% of Total Monthly Benefits	8.7%	85.1%	4.6%	1.6%	100.0%
FY 2006-07					
Average Benefit	$936	$1,745	$865	$869	$1,541
Number	4,767	25,605	2,597	843	33,812
Total Monthly Benefits	$4,463,823	$44,672,320	$2,245,823	$732,470	$52,114,436
% of Total Monthly Benefits	8.6%	85.7%	4.3%	1.4%	100.00%

The information in the above table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deductions by Source.

Schedule of Benefit Expenses by Type

KERS Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2001-02					
Average Benefit	$574	$1,110	$407	$520	$726
Number	559	394	116	143	1,212
Total Monthly Benefits	$321,056	$437,318	$47,180	$74,411	$879,965
% of Total Monthly Benefits	36.5%	49.7%	5.4%	8.5%	100.0%
FY 2002-03					
Average Benefit	$645	$1,173	$435	$576	$799
Number	626	464	115	157	1,362
Total Monthly Benefits	$403,467	$544,066	$50,058	$90,368	$1,087,959
% of Total Monthly Benefits	37.1%	50.0%	4.6%	8.3%	100.0%
FY 2003-04					
Average Benefit	$711	$1,221	$481	$613	$864
Number	718	554	129	157	1,558
Total Monthly Benefits	$510,827	$676,463	$62,112	$96,194	$1,345,596
% of Total Monthly Benefits	38.0%	50.3%	4.6%	7.1%	100.0%
FY 2004-05					
Average Benefit	$775	$1,292	$568	$600	$934
Number	808	647	117	180	1,752
Total Monthly Benefits	$626,082	$836,193	$66,456	$107,998	$1,636,729
% of Total Monthly Benefits	38.3%	51.1%	4.1%	6.6%	100.0%
FY 2005-06					
Average Benefit	$802	$1,333	$521	$749	$980
Number	1,002	760	163	67	1,992
Total Monthly Benefits	$803,581	$1,013,373	$84,975	$50,201	$1,952,130
% of Total Monthly Benefits	41.1%	51.9%	4.4%	2.6%	100.0%
FY 2006-07					
Average Benefit	$862	$1,391	$540	$731	$1,038
Number	1,116	854	167	76	2,213
Total Monthly Benefits	$962,085	$1,188,289	$90,109	$55,536	$2,296,019
% of Total Monthly Benefits	41.9%	51.8%	3.9%	2.4%	100.0%

The information in the above table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. . Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deductions by Source.

Schedule of Benefit Expenses by Type

CERS Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2001-02					
Average Monthly Benefit	$430	$743	$657	$438	$635
Number	5,280	14,669	2,634	2,793	25,376
Total Monthly Benefits	$2,269,733	$10,897,474	$1,731,392	$1,222,866	$16,121,465
% of Total Monthly Benefits	14.1%	67.6%	10.7%	7.6%	100.0%
FY 2002-03					
Average Monthly Benefit	$456	$792	$681	$461	$676
Number	5,583	15,902	2,711	2,923	27,119
Total Monthly Benefits	$2,544,101	$12,598,502	$1,845,513	$1,347,107	$18,335,223
% of Total Monthly Benefits	13.9%	68.7%	10.1%	7.3%	100.0%
FY 2003-04					
Average Monthly Benefit	$463	$829	$697	$491	$708
Number	5,848	17,463	2,814	3,025	29,150
Total Monthly Benefits	$2,708,649	$14,483,996	$1,961,590	$1,486,749	$20,640,984
% of Total Monthly Benefits	13.1%	70.2%	9.5%	7.2%	100.0%
FY 2004-05					
Average Monthly Benefit	$475	$873	$720	$512	$743
Number	6,131	19,075	2,854	3,287	31,347
Total Monthly Benefits	$2,915,109	$16,644,747	$2,054,880	1,684,459	$23,299,195
% of Total Monthly Benefits	12.5%	71.4%	8.8%	7.2%	100.0%
FY 2005-06					
Average Monthly Benefit	$484	$889	$715	$534	$774
Number	7,207	21,655	3,582	861	33,305
Total Monthly Benefits	$3,487,493	$19,256,550	$2,560,722	$460,095	$25,764,859
% of Total Monthly Benefits	13.6%	74.7%	9.9%	1.8%	100.0%
FY 2006-07					
Average Monthly Benefit	$509	$938	$747	$540	$817
Number	7,694	23,460	3,612	864	35,630
Total Monthly Benefits	$3,919,356	$21,999,359	$2,696,721	$484,037	$29,099,472
% of Total Monthly Benefits	13.5%	75.6%	9.2%	1.7%	100.0%

Schedule of Benefit Expenses by Type

CERS Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2001-02					
Average Monthly Benefit	$1,360	$1,817	$782	$1,126	$1,552
Number	642	2,154	447	245	3,488
Total Monthly Benefits	$873,325	$3,913,768	$349,511	$275,876	$5,412,480
% of Total Monthly Benefits	16.1%	72.3%	6.5%	5.1%	100.0%
FY 2002-03					
Average Monthly Benefit	$1,371	$1,905	$814	$1,142	$1,615
Number	705	2,307	457	273	3,742
Total Monthly Benefits	$966,828	$4,394,088	$371,773	$311,827	$6,044,517
% of Total Monthly Benefits	16.0%	72.7%	6.2%	5.2%	100.0%
FY 2003-04					
Average Monthly Benefit	$1,371	$1,942	$824	$1,177	$1,643
Number	785	2,489	481	299	4,054
Total Monthly Benefits	$1,076,329	$4,834,845	$396,302	$351,804	$6,659,280
% of Total Monthly Benefits	16.2%	72.6%	6.0%	5.3%	100.0%
FY 2004-05					
Average Monthly Benefit	$1,399	$2,031	$1,159	$910	$1,705
Number	865	2,642	332	522	4,361
Total Monthly Benefits	$1,209,803	$5,365,822	$384,788	$474,975	$7,435,388
% of Total Monthly Benefits	16.3%	72.2%	5.2%	6.4%	100.0%
FY 2005-06					
Average Monthly Benefit	$1,369	$2,059	$899	$974	$1,743
Number	1,079	3,062	580	96	4,817
Total Monthly Benefits	$1,477,504	$6,304,523	$521,285	$93,535	$8,396,847
% of Total Monthly Benefits	17.6%	75.1%	6.2%	1.1%	100.0%
FY 2006-07					
Average Monthly Benefit	$1,398	$2,147	$937	$944	$1,815
Number	1,212	3,329	592	95	5,228
Total Monthly Benefits	$1,693,771	$7,148,184	$554,911	$89,712	$7,486,579
% of Total Monthly Benefits	17.8%	75.3%	5.9%	1.0%	100.0%

Schedule of Benefit Expenses by Type

SPRS

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2001-02					
Average Monthly Benefit	$3,008	$2,430	$984	$2,006	$2,383
Number	103	668	47	79	897
Total Monthly Benefits	$309,836	$1,623,011	$46,243	$158,466	$2,137,556
% of Total Monthly Benefits	14.5%	75.9%	2.2%	7.4%	100.0%
FY 2002-03					
Average Monthly Benefit	$3,117	$2,543	$1,056	$2,064	$2,492
Number	110	699	48	84	941
Total Monthly Benefits	$342,894	$1,777,880	$50,705	$173,412	$2,344,891
% of Total Monthly Benefits	14.6%	75.8%	2.2%	7.4%	100.0%
FY 2003-04					
Average Monthly Benefit	$3,199	$2,637	$1,067	$2,108	$2,576
Number	112	748	49	88	997
Total Monthly Benefits	$358,290	$1,972,675	$52,259	$185,517	$2,568,741
% of Total Monthly Benefits	13.9%	76.8%	2.0%	7.2%	100.0%
FY 2004-05					
Average Monthly Benefit	$3,321	$2,741	$1,364	$1,862	$2,653
Number	107	775	35	119	1,036
Total Monthly Benefits	$355,361	$2,123,941	$47,740	$221,615	$2,748,657
% of Total Monthly Benefits	12.9%	77.3%	1.7%	8.1%	100.0%
FY 2004-05					
Average Monthly Benefit	$3,109	$2,698	$1,213	$1,643	$2,650
Number	145	864	56	28	1,093
Total Monthly Benefits	$450,794	$2,331,404	$67,950	$45,997	$2,896,146
% of Total Monthly Benefits	15.5%	80.4%	2.2%	1.9%	100.0%
FY 2006-07					
Average Monthly Benefit	$3,178	$2,797	$1,258	$1,761	$2,743
Number	146	900	57	27	1,130
Total Monthly Benefits	$464,053	$2,517,382	$71,724	$47,540	$3,100,699
% of Total Monthly Benefits	15.0%	81.2%	2.3%	1.5%	100.0%

Average Monthly Benefit by Length of Service

	KERS Non-Hazardous		CERS Non-Hazardous	
Service Credit Range	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	2,807	$143.95	3,272	$127.96
5 or more but less than 10	3,923	$330.67	7,073	$248.65
10 or more but less than 15	3,842	$545.84	6,858	$435.42
15 or more but less than 20	3,538	$821.23	5,100	$656.27
20 or more but less than 25	3,907	$1,116.44	4,995	$871.42
25 or more but less than 30	8,036	$2,005.85	6,122	$1,727.03
30 or more but less than 35	5,562	$2,848.05	1,701	$2,406.15
35 or more	2,297	$4,005.40	509	$3,085.43
Total	**33,812**	**$1,541.30**	**35,630**	**$816.71**

The information in the table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included.

	KERS Hazardous		CERS Hazardous	
Service Credit Range	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	111	$205.82	392	$380.54
5 or more but less than 10	247	$411.25	301	$540.20
10 or more but less than 15	286	$563.16	327	$898.72
15 or more but less than 20	294	$852.70	364	$1,073.70
20 or more but less than 25	520	$1,194.53	1,959	$1,757.76
25 or more but less than 30	481	$1,294.38	1,267	$2,344.55
30 or more but less than 35	218	$1,749.10	503	$3,225.95
35 or more	56	$2,406.81	115	$3,942.89
Total	**2,213**	**$1,037.51**	**5,228**	**$1,814.57**

	SPRS	
Service Credit Range	Number	Average Monthly Benefit
Under 5 Years	76	$498.16
5 or more but less than 10	32	$776.90
10 or more but less than 15	35	$1,063.23
15 or more but less than 20	64	$1,731.60
20 or more but less than 25	303	$2,178.71
25 or more but less than 30	352	$3,075.80
30 or more but less than 35	205	$4,113.25
35 or more	63	$4,823.77
Total	**1,130**	**$2,743.98**

Analysis of Initial Retirees

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
FY 2001-02					
Number	2,137	162	2,090	281	59
Average Service Credit (months)	289	271	214	267	313
Average Final Compensation	$44,565	$42,196	$28,799	$45,076	$62,779
Average Monthly Benefit	$2,018	$1,104	$913	$1,801	$3,279
FY 2002-03					
Number	2,148	170	2,411	293	62
Average Service Credit (months)	277	264	206	274	313
Average Final Compensation	$45,479	$45,559	$28,883	$49,996	$65,079
Average Monthly Benefit	$1,873	$1,144	$859	$1,780	$3,208
FY 2003-04					
Number	2,473	227	2,805	343	53
Average Service Credit (months)	280	255	209	262	320
Average Final Compensation	$47,872	$43,778	$29,172	$48,607	$68,533
Average Monthly Benefit	$1,932	$1,127	$837	$1,631	$3,468
FY 2004-05					
Number	2,481	234	2,808	403	50
Average Service Credit (months)	276	257	210	248	290
Average Final Compensation	$46,452	$45,654	$29,784	$49,920	$62,395
Average Monthly Benefit	$1,897	$1,216	$902	$1,765	$3,022
FY 2005-06					
Number	2,295	236	2,543	377	39
Average Service Credit (months)	267	239	197	260	259
Average Final Compensation	$46,746	$43,845	$29,794	$54,358	$62,049
Average Monthly Benefit	$246	$1,185	$851	$2,047	$2,614
Average System Payment for Health Insurance	$246	$381	$180	$543	$407
FY 2006-07					
Number	2,284	228	2,902	433	48
Average Service Credit (months)	246	238	206	255	274
Average Final Compensation	$46,800	$45,142	$32,183	$55,038	$65,826
Average Monthly Benefit	$1,713	$1,289	$962	$1,987	$2,962
Average System Payment for Health Insurance	$225	$342	$194	$599	$ 497

Insurance Benefits Paid to All Retirees and Beneficiaries Fiscal Year 2006-2007

	KERS Non-Hazardous		CERS Non-Hazardous	
Service Credit Range	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	285	$162.00	292	$130.65
5 or more but less than 10	1,252	$330.32	2,078	$248.26
10 or more but less than 15	2,081	$536.42	3,658	$432.82
15 or more but less than 20	2,510	$825.15	3,644	$661.43
20 or more	17,597	$2,355.06	11,744	$1,562.39
Total	**23,725**	**$1,900.49**	**21,416**	**$1069.12**

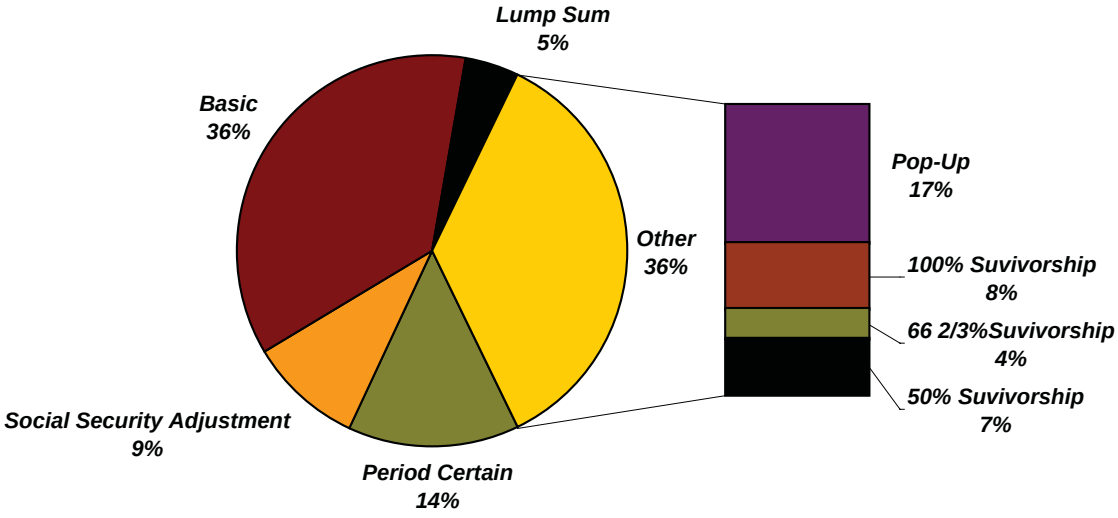
	KERS Hazardous		CERS Hazardous	
Service Credit Range	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	22	$409.53	40	$418.82
5 or more but less than 10	64	$556.68	112	$739.78
10 or more but less than 15	181	$785.11	196	$1,075.72
15 or more but less than 20	202	$1,161.26	271	$1,337.92
20 or more but less than 25	1,164	$2,304.96	3,523	$2,446.22
Total	**1,633**	**$1,900.97**	**4,142**	**$2,243.13**

	SPRS	
Service Credit Range	Number	Average Monthly Benefit
Under 5 Years	3	$275.21
5 or more but less than 10	10	$927.55
10 or more but less than 15	17	$1,135.63
15 or more but less than 20	30	$1,642.01
20 or more but less than 25	744	$3,158.97
Total	**804**	**$2,243.13**

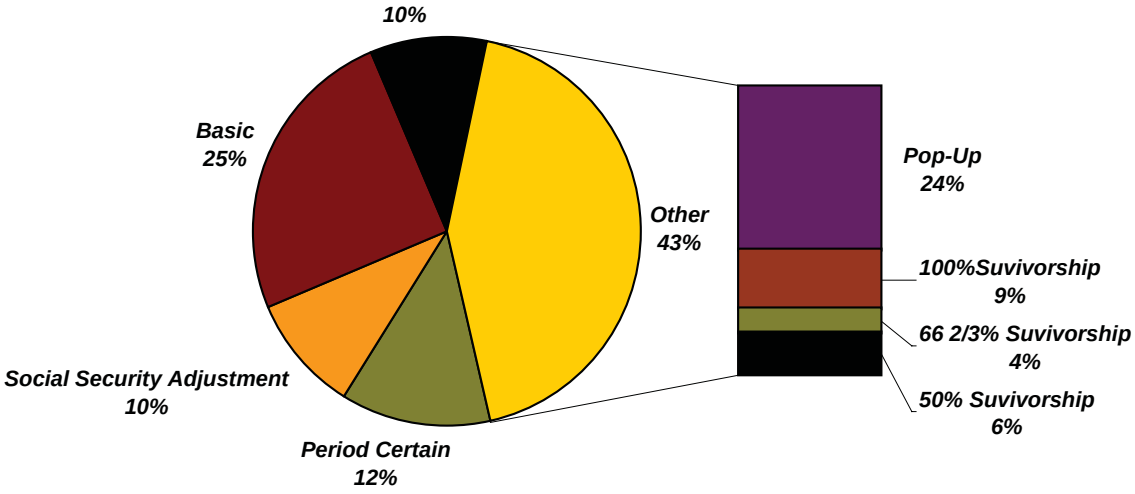
	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Number	23,725	1,633	21,416	4,142	804
Average Service Credit	298	270	240	282	322
Average Monthly System Payment for Health Insurance	$343.51	$506.99	$296.74	$713.06	$715.77
Total Monthly Payments for Health Insurance	$10,304,889.22	$930,822.08	$8,625,104.24	$2,953.503.47	$588,695.26

Payment Options by Type

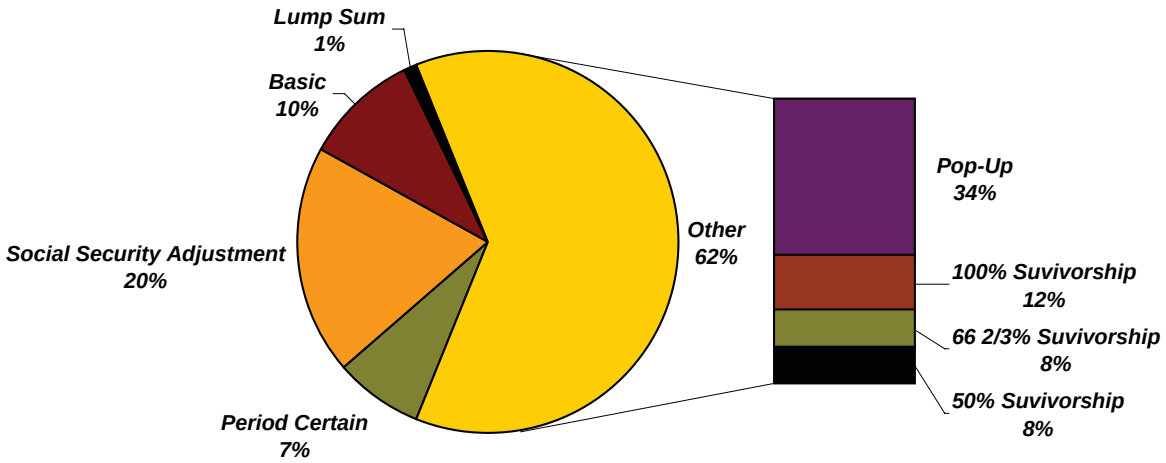
KERS Non-Hazardous



KERS Hazardous

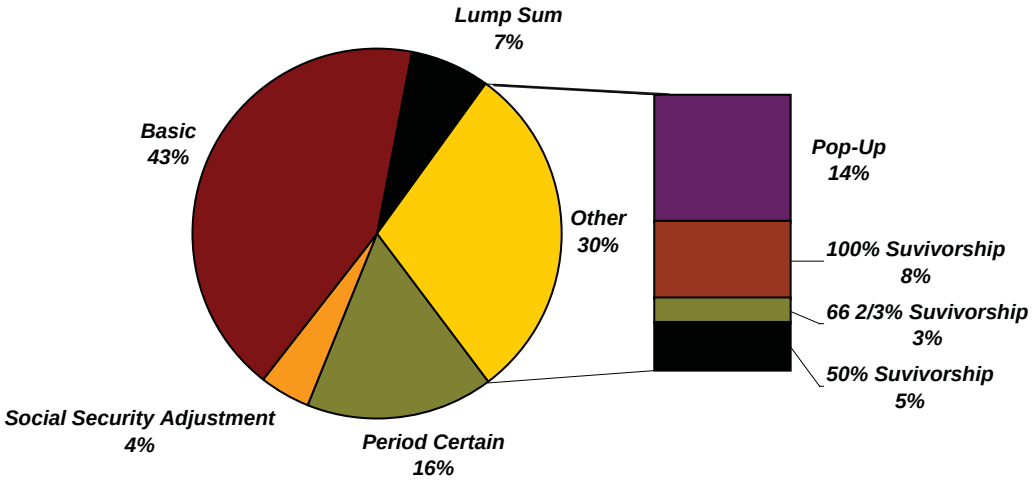


SPRS

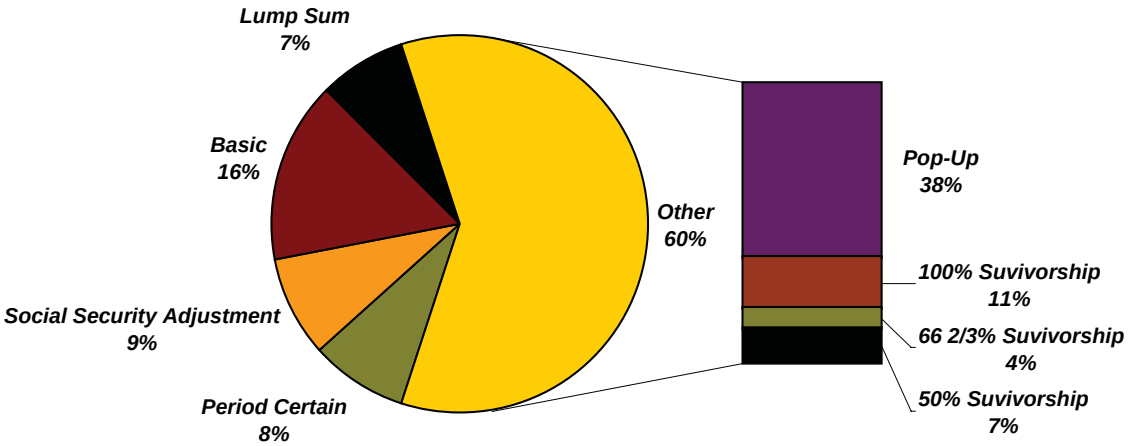


Payment Options by Type

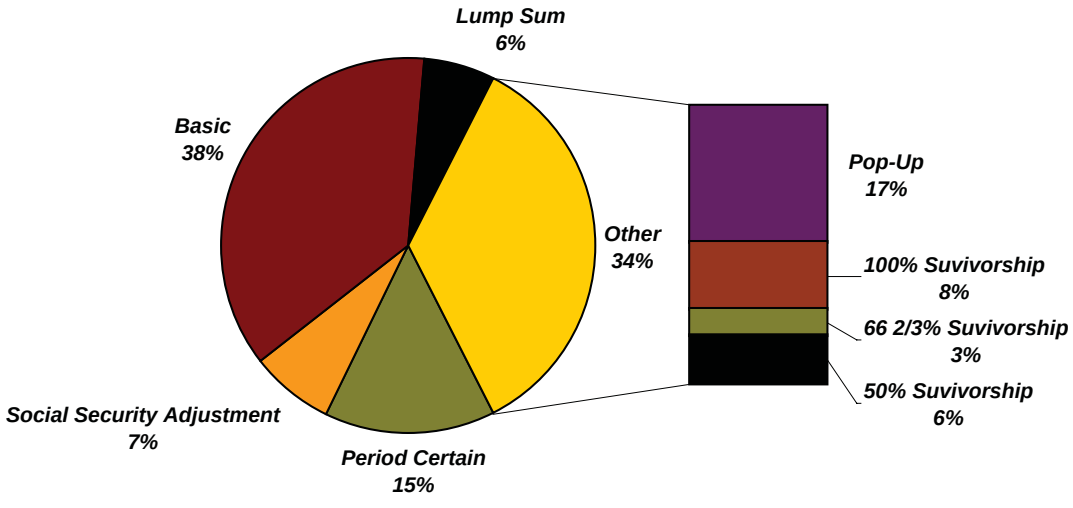
CERS Non-Hazardous



CERS Hazardous



Total



Employer Contribution Rates by System

In KERS, CERS, and SPRS both the employee and the employer contribute a percent of creditable compensation to the Systems. The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employers contribute at the rate determined by the Board of Trustees to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statute 61.565 and 61.752. KERS and SPRS employer rates are subject to approval by the State Legislature through the adoption of the biennial Executive Branch Budget. In recent years, the State Legislature has routinely suspended KRS 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the KRS Board of Trustees and its' consulting actuary. The following tables provide the employer contribution rate recommended by the Board and its' consulting actuary and the rate specified by the Executive Branch budget if applicable.

	KERS Non-Hazardous		KERS Hazardous	
Fiscal Year	*Budgeted Rate*	*Recommended Rate*	*Budgeted Rate*	*Recommended Rate*
2002-2003	3.76%	5.89%	17.60%	18.84%
2003-2004	5.89%	7.53%	18.84%	18.84%
2004-2005	5.89%	10.29%	18.84%	19.47%
2005-2006	5.89%	13.62%	18.84%	21.59%
2006-2007	7.75%	17.13%	22.00%	23.32%
2007-2008	8.50%	48.37%	24.25%	47.11%

	CERS Non-Hazardous	CERS Hazardous	SPRS	
Fiscal Year	*Recommended Rate*	*Recommended Rate*	*Budgeted Rate*	*Recommended Rate*
2002-2003	6.34%	16.28%	17.37%	21.58%
2003-2004	7.34%	18.51%	21.58%	21.58%
2004-2005	8.48%	22.08%	21.58%	28.08%
2005-2006	10.98%	25.01%	21.58%	34.83%
2006-2007	13.19%	28.21%	25.50%	42.30%
2007-2008	16.17%	33.87%	28.00%	120.00%

Retirement Windows

Two separate "retirement windows" have been established in past legislative sessions for non-hazardous employees participating in the Kentucky Employees Retirement System (KERS) and the County Employees Retirement System (CERS). The first window, established by SB 142 during the 1998 regular session of the General Assembly, provides for an increased benefit factor for non-hazardous KERS employees (up to 2.2%) if certain service requirements are met and if the employee retires on or before January 1, 2009. The second window, established by HB 278 during the 2001 regular session of the General Assembly, provides for a final compensation based upon a non-hazardous employee's highest three years (3-High) of salary rather than the employee's highest five years (5-high) of salary. In order to qualify for 3-high final compensation a non-hazardous KERS or CERS employee must meet certain age and service requirements and retire on or before January 1, 2009.

Each of these two windows influences how retirement benefits are determined for non-hazardous employees participating in KERS and CERS. Consequently, employees who are eligible for one or both of the windows have a strong financial incentive to retire before the windows sunset in 2009. The following information describes the number of employees eligible to retire with and without increased benefits as of January 1, 2008 and when the window expires on January 1, 2009.

Kentucky Retirement Systems (KRS)

KERS & CERS Non-Hazardous Employees Eligible To Retire

Summary	KERS (state government, regional universities, health departments)		CERS (City, county, and classified school board employees)	
	1/2008	1/2009	1/2008	1/2009
Employees Eligible to Retire With An Unreduced or Reduced Benefit	10,402	12,096	19,202	22,607
Breakdown By Eligibility				
Employees with 27 or more Years of Service*	2,286	2,906	1,447	2,089
Employees with 25 But Not More Than 27 Years of Service**	1,250	1,159	1,172	1,280
Employees Age 55 or greater with 20 But Not More Than 25 Years of Service**	1,085	1,347	1,941	2,623
Employees Age 55-65 with 5 But Less than 20 Years of Service**	4,829	5,537	10,946	12,385
Employees Age 65 with 4 But Less Than 20 Years of Service**	754	970	2,579	3,337
Breakdown By Retirement Window				
Employees Eligible for 2.2% Benefit Factor Window Only***	4,503	5,253	N/A	N/A
Employees Eligible for Both 2.2% Benefit Factor & High-3 Final Compensation Window***	2,059	2,674	1,403	2,000

**Employee is eligible for an unreduced benefit upon earning 27 years of service or upon reaching age 65.*

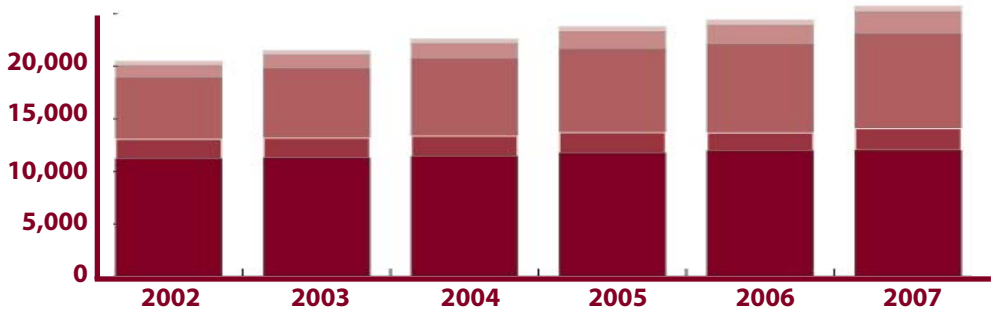
***Employees are eligible for a reduced benefit upon reaching 25 years of service or having a combined age of 55 with 5 years of service.*

****KERS Employees are eligible for a 2.2% benefit factor if the employee has 13 months credit from 1/1/1998 to 1/1/1999, 20 years of service credit at retirement, and retires between 2/1/1999 and 1/1/2009. KERS and CERS employees are eligible for High-3 Final Compensation if the Employee has 27 or more years of service, their age and service equals at least 75 years, and they retire between 8/1/2001 and January 1, 2009.*

Insurance Contracts by Type

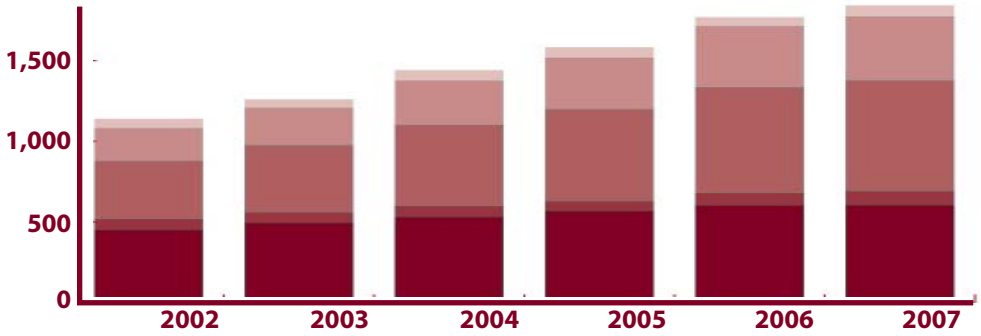
The Systems provides group rates on medical insurance and other managed care coverage for retired members. Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems. Provided below are the contracts for the KEHP plan and the KRS Medicare Plans.

KERS Non-Hazardous



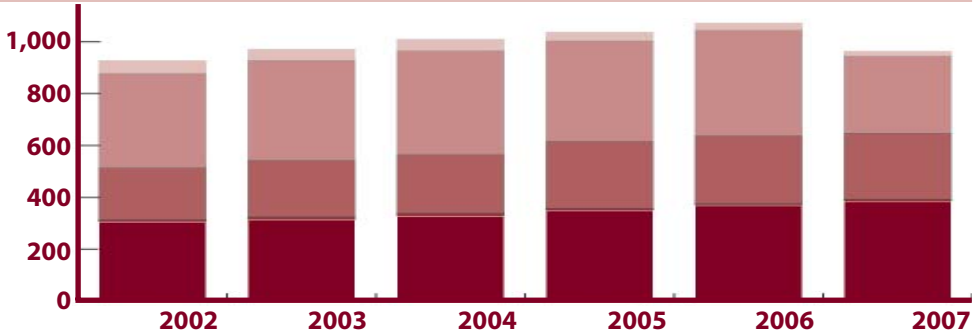
	2002	2003	2004	2005	2006	2007
Medicare With Prescription	11,229	11,311	11,437	11,764	12,000	12,007
Medicare Without Prescription	1,838	1,855	1,932	1,915	1,672	2,056
KEHP Single	5,822	6,602	7,313	7,928	8,393	8,996
KEHP Couple/Family	1,182	1,298	1,462	1,679	1,826	2,131
KEHP Parent Plus	396	428	443	461	490	525

KERS Hazardous



	2002	2003	2004	2005	2006	2007
Medicare With Prescription	451	494	531	567	603	606
Medicare Without Prescription	66	62	65	61	74	82
KEHP Single	359	417	502	570	656	686
KEHP Couple/Family	205	234	276	319	378	398
KEHP Parent Plus	57	53	65	65	58	70

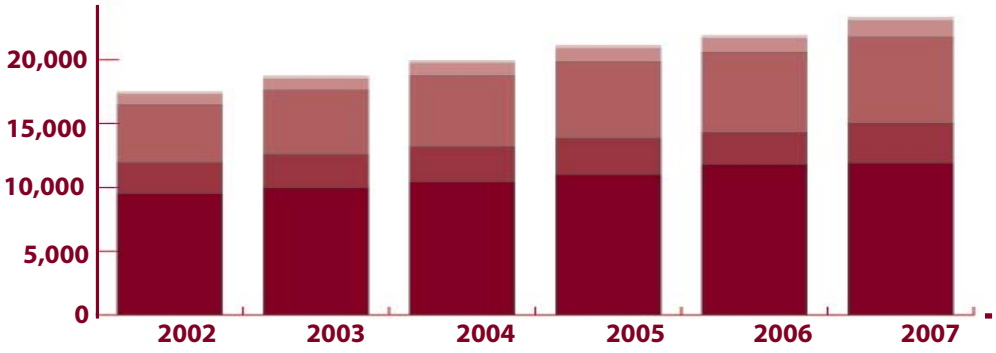
SPRS



	2002	2003	2004	2005	2006	2007
Medicare With Prescription	303	312	326	348	368	384
Medicare Without Prescription	11	13	13	10	9	9
KEHP Single	199	218	226	257	260	254
KEHP Couple/Family	364	384	400	388	406	297
KEHP Parent Plus	50	44	45	34	29	19

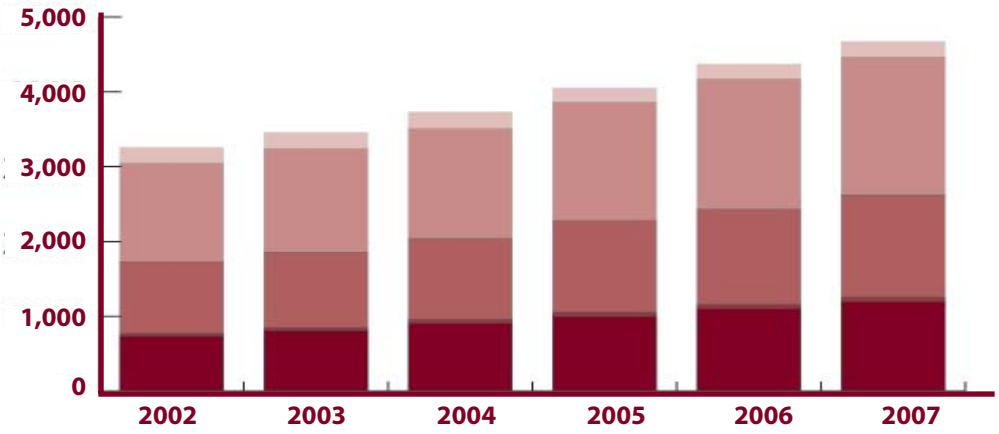
Insurance Contracts by Type

CERS Non-Hazardous



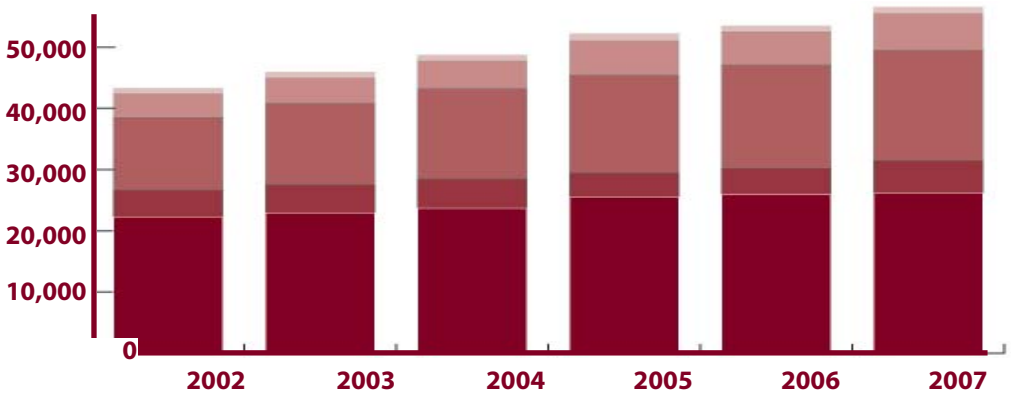
Medicare With Prescription	9,517	9,958	10,424	11,005	11,803	11,908
Medicare Without Prescription	2,446	2,630	2,756	2,853	2,502	3,134
KEHP Single	4,530	5,054	5,598	6,014	6,298	6,767
KEHP Couple/Family	800	855	946	1,022	1,058	1,274
KEHP Parent Plus	224	244	246	255	249	284

CERS Hazardous



Medicare With Prescription	734	808	913	1,004	1,105	1,197
Medicare Without Prescription	38	40	45	55	52	64
KEHP Single	956	1,010	1,087	1,220	1,275	1,363
KEHP Couple/Family	1,321	1,379	1,463	1,579	1,739	1,836
KEHP Parent Plus	210	223	223	195	198	210

Total



Medicare With Prescription	22,234	22,883	23,631	24,688	25,879	26,102
Medicare Without Prescription	4,399	4,600	4,811	4,894	4,309	5,345
KEHP Single	11,866	13,301	14,726	15,989	16,882	18,066
KEHP Couple/Family	3,872	4,150	4,547	4,987	5,407	5,936
KEHP Parent Plus	937	992	1,022	1,010	1,024	1,108

Retired Reemployed

Since August 1, 1998, state law has allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service is observed. The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Retirees Who Have Been Reemployed In Full-time Positions Covered By The Same Retirement System

Data as of June 30, 2007

Reemployed Retirees In KRS	KERS			CERS			SPRS
	Non-Hazardous	Hazardous	Total	Non-Hazardous	Hazardous	Total	Total
Total Active Employees	47,913	4,349	52,262	84,920	10,063	94,983	957
Total Retirees	33,849	2,202	36,051	35,564	5,159	40,723	1,105
Reemployed Retirees	807	64	871	1,838	812	2,650	1
% of Reemployed Retirees to Total Actives	1.68%	1.47%	1.66%	2.16%	8.06%	2.78%	.10%
% of Reemployed Retirees to Total Retirees	2.38%	2.9%	2.41%	5.16%	15.73%	6.50%	.09%
Reemployed Retiree Data*							
Average Age at Initial Retirement	53	51	53	57	48	54	41
Months of Service Credit at Initial Retirement	310	269	307	254	282	263	284
Final Compensation At Initial Retirement	$50,692	$46,633	$50,394	$31,195	$51,002	$37,264	$41,847
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2006-2007 (Second Retirement Account)	$40,586	$36,019	$40,250	$28,172	$40,942	$32,085	$70,149
Retirees Returning to Work for the Same Employer	370	23	393	1,538	212	1,750	1
% Retirees Returning to Work For Same Employer	45%	35%	45%	83%	26%	66%	100%

N/A: Not Applicable

**Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.*

Note: An additional 1,222 retirees have been reemployed in full-time positions covered by a different retirement system. Of this total, 637 KERS retirees have returned to work with an agency participating in CERS, 345 CERS retirees have returned to work with an agency participating in KERS, 110 SPRS retirees have returned to work with an agency participating in KERS, and 130 SPRS retirees have returned to work with an agency participating in CERS.

Total Fiscal Year Retirement Payments By County

Adair	$3,933,447	Grant	$5,706,491	Mason	$3,447,429
Allen	$2,854,547	Graves	$7,434,009	Meade	$3,358,135
Anderson	$19,153,191	Grayson	$5,544,582	Menifee	$1,605,458
Ballard	$1,427,534	Green	$2,431,392	Mercer	$7,677,610
Barren	$8,584,670	Greenup	$4,400,374	Metcalfe	$2,163,376
Bath	$3,271,164	Hancock	$1,375,330	Monroe	$1,695,423
Bell	$6,145,319	Hardin	$17,255,315	Montgomery	$4,762,308
Boone	$14,922,409	Harlan	$5,438,112	Morgan	$4,598,291
Bourbon	$5,151,632	Harrison	$3,685,460	Muhlenberg	$3,934,455
Boyd	$10,233,934	Hart	$2,742,885	Nelson	$8,132,666
Boyle	$9,181,855	Henderson	$9,860,947	Nicholas	$1,667,369
Bracken	$1,643,994	Henry	$12,335,710	Ohio	$3,468,686
Breathitt	$4,888,230	Hickman	$777,963	Oldham	$14,318,501
Breckinridge	$3,798,757	Hopkins	$9,612,115	Owen	$7,247,714
Bullitt	$12,022,901	Jackson	$2,158,579	Owsley	$1,737,057
Butler	$2,486,059	Jefferson	$202,050,280	Pendleton	$3,302,385
Caldwell	$4,438,803	Jessamine	$8,668,594	Perry	$5,778,395
Calloway	$8,581,613	Johnson	$5,139,308	Pike	$9,932,352
Campbell	$13,830,731	Kenton	$24,418,906	Powell	$2,851,183
Carlisle	$1,131,437	Knott	$3,835,405	Pulaski	$21,862,131
Carroll	$2,850,723	Knox	$4,678,119	Robertson	$725,949
Carter	$6,112,511	Larue	$3,336,504	Rockcastle	$2,837,200
Casey	$2,803,522	Laurel	$10,547,472	Rowan	$8,153,565
Christian	$17,945,188	Lawrence	$2,209,479	Russell	$4,297,210
Clark	$7,401,175	Lee	$2,159,223	Scott	$12,168,995
Clay	$4,760,609	Leslie	$1,962,541	Shelby	$23,189,665
Clinton	$1,611,972	Letcher	$4,117,982	Simpson	$1,574,656
Crittenden	$1,687,982	Lewis	$2,215,748	Spencer	$4,606,096
Cumberland	$1,648,855	Lincoln	$4,013,382	Taylor	$4,708,267
Daviess	$24,070,990	Livingston	$2,331,548	Todd	$2,209,874
Edmonson	$1,507,328	Logan	$4,767,552	Trigg	$4,582,163
Elliott	$1,342,208	Lyon	$3,502,371	Trimble	$2,454,170
Estill	$2,722,377	McCracken	$17,138,065	Union	$2,359,461
Fayette	$65,869,049	McCreary	$2,124,438	Warren	$26,718,987
Fleming	$4,567,257	McClean	$2,145,697	Washington	$2,881,716
Floyd	$8,699,500	Madison	$18,499,606	Wayne	$4,049,314
Franklin	$141,994,040	Magoffin	$2,621,754	Webster	$2,624,048
Fulton	$1,520,150	Marion	$3,815,321	Whitley	$8,467,732
Gallatin	$953,120	Marshall	$7,374,823	Wolfe	$2,734,139
Garrard	$3,234,894	Martin	$1,399,825	Woodford	$12,701,117

Payments to Recipients Living in Kentucky	$1,124,404,135
Payments to Recipients Living in Other States	$55,956,154
Total Payments	$1,180,360,288

Kentucky Retirement Systems
A component unit of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

Comprehensive Annual Financial Report

FISCAL YEAR ENDED JUNE 30, 2008

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November 20, 2008

Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Board of Trustees & Members:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS) and State Police Retirement System (SPRS) for the fiscal year ended June 30, 2008. Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the management of the Kentucky Retirement Systems.

We present this information to assist the Board and members of Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) (collectively referred to as KRS) in understanding KRS' financial and actuarial status.

This CAFR was prepared to conform to the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. Transactions of the system are reported on the accrual basis of accounting. Additionally, sufficient internal accounting controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

History

KERS was created in 1956 by the Kentucky General Assembly in order to supplement the benefits provided by Social Security. When the first actuarial valuation was completed June 30, 1957, there were 16,000 employees participating in KERS and assets of $2.8 million. SPRS and CERS were established in 1958. The first actuarial valuation of SPRS was conducted June 30, 1959. No actuarial valuation of CERS was conducted until June 30, 1960 because the statutes did not authorize retirements from the system prior to July 1, 1960.

On June 30, 1960, there were 68 counties and 2,617 employees participating in CERS, and SPRS included 415 uniformed state troopers. As of June 30, 2008, there were more than 230,000 active, inactive and retired members in the combined systems and approximately $19.3 billion in assets. A breakdown of membership by system is provided in the Statistical Section.

KRS staff provides detailed benefit estimates to members upon request. Counselors are available at the Frankfort office for individual counseling, both in office by appointment and by telephone during normal business hours. In addition, staff conducts individual counseling sessions at sites throughout the Commonwealth and holds pre-retirement seminars to help members prepare for retirement. Information including an online benefit calculator and a service purchase calculator is available online at http://www.kyret.com.

Major Initiatives

A major goal for KRS was to raise awareness of the continued reductions to the KERS and SPRS employer contribution rates by the Kentucky General Assembly. These rates have been less than the amount recommended by the KRS Board of Trustees and its consulting actuary. Through educational initiatives with our membership and with policymakers, KRS received an increase in the employer contribution rate for fiscals 2007 and 2008. While this was the first increase in the KERS and SPRS employer rates since fiscal 2001, contributions remained far short of the actuarially recommended rates.

Management believes that these efforts must continue as actuarial funding levels continue to falter. In fiscal 2006 KRS offered five new health plans to its Medicare Eligible Retirees. Three of those offerings were self-insured products and two were Anthem Medicare Advantage plans. Beginning in January 2007, the Anthem Medicare Advantage plans were no longer offered to retirees, but KRS continued to provide the three self-funded plans. There was a 5% increase in generic drug utilization and an overall medical claims trend in single digits in 2006.

KRS has supported the Centers for Medicare and Medicaid Services (CMS) preventive screening initiatives for Medicare Eligible Retirees and participated in the Retiree Drug Subsidy (RDS) program also offered by CMS. The RDS program realized a $13.5 million reimbursement for KRS from CMS. If KRS is to decrease costs, something must be done to improve the health of people who currently have chronic

disease, while reducing the overall incidence of chronic disease in the long term. Developing an effective long term strategy is a priority for KRS and begins with identifying baseline information and formulating programs that bring disease and pharmacy management principles to bear on those with chronic disease. To enhance the quality and efficiency of services to our retirees, KRS is undertaking a significant technology improvement project. This project is called START, meaning Strategic Technology Advancements for the Retirement of Tomorrow. START will change the way that KRS conducts business by replacing the technology tools that have been in use for almost thirty years. Although existing computer systems have served staff and our customers well, it is time for KRS to modernize its technologies and its business practices. START will allow KRS to better assist customers by:

- Providing workers with modern, intelligent technology
- Enhancing business services and improving operational efficiency
- Offering Internet-based self-service functions to members, retirees, and employers
- Improving the accuracy of information collected, maintained, and provided by KRS
- Improving the timeliness and accuracy of responses to member inquiries

KRS has completed the initial planning and design phases of START, and will be implementing the imaging, workflow, and payroll functions of the system by Fiscal 2009. Final system completion is expected by Fiscal 2011. Constituents can keep current on information regarding START via the KRS newsletter and on our website at http://www.kyret.com.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Consolidated Annual Financial Report for the fiscal year ended June 30, 2007. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. This was the ninth consecutive year that KRS has achieved this award.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Investments

The Board of Trustees of the Kentucky Retirement Systems has a statutory obligation to invest KRS' funds in accordance with the "prudent person rule." The prudent person rule states that fiduciaries shall discharge their investment duties with the same degree of diligence, care and skill that a prudent person would ordinarily exercise under similar circumstances in a comparable position.

The Board has managed the funds in recognition of the basic long-term nature of the Systems. The Board has interpreted this to mean that the assets of the systems should be actively managed — that is, investment decisions regarding the particular securities to be purchased or sold shall be the result of the conscious exercise of discretion. The Board has further recognized that proper diversification of assets must be maintained. It is through these policies that KRS has been able to provide significant return/risk ratio over the long-term while minimizing investment related expenses. The Investment Section of this report contains detailed analysis of investments. This section includes asset allocations, rates of return, discussion of the fiscal year market environment and historical trend schedules.

The pension and insurance investment trusts experienced negative returns during fiscal 2008. The pension portfolio posted a total negative return of 4.21% for the fiscal year, while the insurance portfolio posted a total negative return of 7.85%. Investment income (loss), which includes the appreciation of asset values, dividends, and interest, totaled ($578.6) million and ($221.5) million for the pension and insurance portfolios, respectively. The majority of this loss was due to the depreciation in the value of investments which totaled ($997.4) million for the pension portfolio and ($282.4) million for the insurance fund. Interest and dividends accounted for $418.8 million for the pension portfolio and $60.9 million for the insurance portfolio, consistent with the prior fiscal year.

Actuarial Funding

KRS' funding objective is to meet long-term benefit obligations through employer contributions that remain fairly level as a percent of active member payroll. The progress towards achieving the intended funding objectives for both the pension and insurance funds can be measured by the relationship of the actuarial assets of each fund to the actuarial liabilities. This relationship is known as the "funding level" and, over time, it should increase until it reaches 100%. The funding level for the pension funds as of June 30, 2008 are 52.5% for KERS Non-Hazardous, 81.3% for KERS Hazardous, 78.5% for CERS Non-Hazardous, 72.9% for CERS Hazardous and 59.8% for SPRS. These funding levels will fluctuate over time with experience deviations. Since 2001, all systems have experienced reductions in the funding levels for the pension funds due to investment returns less than the assumed rate resulting from market loss, higher than anticipated retirements, increasing payments for retiree cost of living adjustments, and adjustments in actuarial

assumptions. Total actuarial liabilities for the pension funds exceed the actuarial value of assets by $7.39 billion.

The insurance funds, which were established in 1978 to provide funding for retiree medical benefits, have improved in recent years; however, the insurance funds are not at the same funding levels as the pension funds. The funding level for the insurance funds as of June 30, 2008 are 11.1% for KERS Non-Hazardous, 53.2% for KERS Hazardous, 32.6% for CERS Non-Hazardous, 34.7% for CERS Hazardous and 27.9% for SPRS. The funding level of the insurance funds continues to be a primary concern of the Kentucky Retirement Systems. Total actuarial liabilities for the insurance funds exceed the actuarial value of assets by $8.97 billion. Detailed information of the actuarial soundness of KRS can be found in the Actuarial Section of this report.

Professional Services

A listing of the Board's contract consultants can be found in the organizational chart on page 10. A listing of the external investment managers can be found in the Investment Section.

Other Information

Kentucky Statutes require an annual audit by an independent certified public accountant or the Auditor of Public Accounts. Dean, Dorton & Ford, PSC, Certified Public Accountants, performed the audit for the fiscal year ended June 30, 2008, and the results of that audit are contained in the Financial Section. The firm gave KRS an unqualified opinion and also indicated that the financial statements present fairly, in all material respects, the plan net assets of KRS.

The compilation of this report reflects the combined efforts of the KRS administrative staff under the leadership of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with statutory provisions, and as a means of determining responsible stewardship of KRS funds. The report is available to all employers participating in the Kentucky Retirement Systems. They form the link between KRS and its membership, and their cooperation contributes significantly to the success of the Kentucky Retirement Systems. We hope the employers and their employees find this report informative. This and past CAFRs can be found by visiting http://www.kyret.com.

On behalf of the Board of Trustees, I would like to take this opportunity to express my gratitude to the staff, the advisors and the many people who have worked so diligently to assure the successful operation of KRS.

Respectfully,

Robert M. Burnside, MS
Executive Director

Board of Trustees

Randy Overstreet, Chair
Elected by SPRS to serve through March 2011

Susan S. Horne, Vice Chair
Elected by KERS to serve through March 2010

Patricia Ballenger
Elected by CERS to serve through March 2009

Bobby D. Henson
Elected by KERS to serve through March 2010

Nikki R. Jackson
Secretary of Personnel Cabinet, appointed by the Governor

Vince Lang
Elected by CERS to serve through March 2009

W. Lewis Reynolds III
Appointed by the Governor to serve through March 2011

Christopher B. Tobe
Appointed by the Governor to serve through March 2012

Henry Clay Owen
Appointed by the Governor to serve through March 2012

The Board of Trustees is comprised of nine representatives: two elected by KERS members; two elected by CERS members; one elected by SPRS members; three appointed by Governor Steve Beshear, one of which must be knowledgeable about the impact of pensions on local governments; and Secretary of the State Personnel Cabinet. Elected trustees may serve up to five consecutive terms.

Audit Committee

Internal Auditor
Connie Davis

Investments Committee

Chief Investments Officer
Adam Tosh

Compliance Officer
Joseph Gilbert

Fixed Income
Vacant Position

Equity Assets
Bo Cracraft

Alternative Investments
Brent Aldridge

Executive Director
Robert M. Burnside

Chief Operations Officer
William A. Thielen

Accounting
Todd E. Coleman

Communications
Scarlett Consalvi

Information Security
Mark McChesney

Information Technology
Chris Clark (Acting)

Office Support
Donna Beckley

Planning & Constituent Services
Shawn Sparks

START Project Manager
Chris Clark

Chief Benefits Officer
Gerri D. Miller

Disabilities
Charlene Haydon

Employment Services
Rebecca Stephens

Field Services
Sarah Webb

Membership Support
Suzanne Howe

Retiree Services
Lela Hatter (Acting)

Senior Advisor Retiree Health
Rick Schultz

General Counsel
Vacant Position

Human Resources Director
Marlane Robinson

Consultants

Actuarial Services
Cavanaugh Macdonald Consulting, LLC

Asset Management
Strategic Investment Solutions, Inc.

Auditing Services
Dean, Dorton, Ford, PSC

Legal Consultants
Klausner & Kaufman, PA

Legal Services
Stoll Kennon Ogden, PLLC

Fiduciary Review Consultants
Ice Miller, LLP

35,307
Retired/Beneficiary

48,083
Active Members

33,202
Inactive Members

KERS Non-Hazardous System Highlights

Kentucky Employees Retirement System (KERS) was established July 1, 1956 by the state legislature. The State Legislature determined that Cost of Living Adjustment (COLA) retirement allowances are increased by 1.5% every July.

Net Plan Assets Expressed in Thousands ($)

Fund	2003	2004	2005	2006	2007	2008
Pension	$4,929,319	$5,258,995	$5,362,631	$5,440,133	$5,773,157	$5,056,869
Insurance	487,071	587,681	610,901	612,585	663,558	574,479
						$5,631,348

Eligible to Retire (Age & Service in Years)

Age	Service	Allowance Reduction
Hired Before September 1, 2008		
65	4	None
Any	27	None
55	5	6.5% yearly for 5 years before age 65 or 27 years of service, then 4% yearly
Any	25	6.5% yearly for 5 years before age 65 or 27 years of service
Hired On/After September 1, 2008		
65	5	None
57	Age plus Service must be 87	None
60	10	Depends on age, service

Contribution Rate (%) as of July 1, 2009

Group	Pension	Insurance	Total
Employers [1]	18.96%	20.49%	39.49%
Employees	-	-	5.00

[1] Employer rates subject to state budget approval.

Member Averages (Age & Service in Years)

Type	Age	Service	Annual Income
Active	43.2	9.1	$38, 221
Retired	66.1	-	21,851

Net Plan Assets Additions & Deductions in Millions ($)

Additions	2003	2004	2005	2006	2007	2008
Net Investment Income	$204.2	$734.6	$510.5	$570.1	$863.5	-$260.5
Employer Contributions (Insurance)	65.3	78.0	51.4	47.6	64.0	56.7
Employer Contributions (Pension)	7.6	21.7	50.3	60.7	88.2	104.7
Member Contributions	137.1	129.1	127.8	107.6	116.3	116.5
Other Income	-	-	-	5.8	22.9	19.6
Deductions						
Medical Insurance Expenses [1]	$52.0	$60.5	$76.0	$97.5	$114.1	$126.4
Refunds	7.3	8.0	8.8	9.6	9.5	9.1
Administrative Expenses	5.0	5.3	5.9	7.6	7.1	7.7
Benefit Payments	404.9	459.4	522.4	577.9	640.2	699.1
Demutualization Refunds	-	-	-	20.0	-	-

[1] As of 2006, the Medical Insurance Expenses include Self Funding Insurance Expenses.

Funding Levels (%) of Actuarial Assets to Liabilities

Fund	2003	2004	2005	2006	2007	2008
Pension Fund	97.4%	85.1%	73.6%	60.0%	56.9%	52.5%
Insurance Fund	26.5	25.7	22.6	7.8	11.9	11.1

2,404
Retired/Beneficiary

4,393
Active Members

2,927
Inactive Members

KERS Hazardous System Highlights

Kentucky Employees Retirement System (KERS) was established July 1, 1956 by the state legislature. The State Legislature determined that Cost of Living Adjustment (COLA) retirement allowances are increased by 1.5% every July.

Net Plan Assets Expressed in Thousands ($)

Fund	2003	2004	2005	2006	2007	2008
Pension	$320,513	$366,568	$398,308	$437,030	$510,775	$484,438
Insurance	125,522	162,127	188,871	223,523	280,886	269,300
						$753,738

Eligible to Retire (Age & Service in Years)

Age	Service	Allowance Reduction
Hired Before September 1, 2008		
55	5	None
Any	20	None
50	15	6.5% yearly for 5 years before age 55 or 20 years of service
Hired On/After September 1, 2008		
Any	25	None
60	5	None
60	10, 15	Depends on age, service

Contribution Rate (%) as of July 1, 2009

Group	Pension	Insurance	Total
Employers [1]	11.98%	23.56%	35.54%
Employees	-	-	8.00

[1] Employer rates subject to state budget approval.

Member Averages (Age & Service in Years)

Type	Age	Service	Annual Income
Active	41.4	6.9	$33,852
Retired	61.5	-	15,023

Net Plan Assets Additions & Deductions in Millions ($)

Additions	2003	2004	2005	2006	2007	2008
Net Investment Income	$17.6	$68.6	$49.1	$65.7	$122.5	-$20.7
Employer Contributions (Insurance)	15.9	15.0	15.7	17.0	19.5	22.0
Employer Contributions (Pension)	7.3	9.8	9.8	10.8	13.2	15.3
Member Contributions	11.6	11.5	11.6	12.1	13.2	13.1
Other Income	-	-	-	0.09	0.3	0.3
Deductions						
Medical Insurance Expenses [1]	$3.0	$3.6	$4.9	$6.6	$7.0	$8.2
Refunds	1.2	1.4	1.8	1.4	1.7	1.7
Administrative Expenses	0.4	0.4	0.5	0.6	0.6	0.7
Benefit Payments	13.4	16.9	20.5	23.7	28.5	31.6

[1] As of 2006, the Medical Insurance Expenses include Self Funding Insurance Expenses.

Funding Levels (%) of Actuarial Assets to Liabilities

Fund	2003	2004	2005	2006	2007	2008
Pension Fund	108.1%	98.4%	92.3%	84.1%	83.6%	81.3%
Insurance Fund	53.5	52.3	48.6	34.3	49.8	53.2

37,579
Retired/Beneficiary

85,221
Active Members

57,775
Inactive Members

CERS Non-Hazardous System Highlights

County Employees Retirement System (CERS) was established July 1, 1958 by the state legislature. The State Legislature determined that Cost of Living Adjustment (COLA) retirement allowances are increased by 1.5% every July.

Net Plan Assets Expressed in Thousands ($)

Fund	2003	2004	2005	2006	2007	2008
Pension	$4,175,825	$4,613,335	$4,893,600	$5,191,377	$5,812,936	$5,413,735
Insurance	435,500	563,877	668,485	813,251	1,084,043	1,105,945
						$6,519,680

Eligible to Retire (Age & Service in Years)

Age	Service	Allowance Reduction
Hired Before September 1, 2008		
65	4	None
Any	27	None
55	5	6.5% yearly for 5 years before age 65 or 27 years of service, then 4% yearly
Any	25	6.5% yearly for 5 years before age 65 or 27 years of service
Hired On/After September 1, 2008		
65	5	None
57	Age plus Service must be 87	None
60	10	Depends on age, service

Contribution Rate (%) as of July 1, 2009

Group	Pension	Insurance	Total
Employers [1]	8.62%	12.29%	20.19%
Employees	-	-	5.00

[1] More about the contribution rate on page xxx.

Member Averages (Age & Service in Years)

Type	Age	Service	Annual Income
Active	45.9	8.3	$25.423
Retired	68.1	-	10,913

Net Plan Assets Additions & Deductions in Millions ($)

Additions	2003	2004	2005	2006	2007	2008
Net Investment Income	$170.7	$637.7	$469.4	$527.8	$949.0	-$228.0
Employer Contributions (Insurance)	99.2	89.3	107.6	128.9	147.6	196.1
Employer Contributions (Pension)	11.9	44.0	54.6	90.8	124.3	150.9
Member Contributions	125.3	122.5	127.6	112.4	122.0	125.0
Other Income	-	-	-	6.4	23.6	21.1
Deductions						
Medical Insurance Expenses [1]	$39.7	$47.0	$58.7	$74.5	$88.2	$99.4
Refunds	10.2	11.3	11.0	11.6	11.4	12.0
Administrative Expenses	8.2	8.7	10.0	12.8	12.2	13.2
Benefit Payments	230.3	260.6	294.6	325.1	356.6	404.0

[1] As of 2006, the Medical Insurance Expenses include Self Funding Insurance Expenses.

Funding Levels (%) of Actuarial Assets to Liabilities

Fund	2003	2004	2005	2006	2007	2008
Pension Fund	119.7%	105.1%	94.0%	83.6%	82.1%	78.5%
Insurance Fund	23.9	24.0	23.8	16.9	28.8	32.6

5,422
Retired/Beneficiary

10,173
Active Members

2,376
Inactive Members

CERS Hazardous System Highlights

County Employees Retirement System (CERS) was established July 1, 1958 by the state legislature. The State Legislature determined that Cost of Living Adjustment (COLA) retirement allowances are increased by 1.5% every July.

Net Plan Assets Expressed in Thousands ($)

Fund	2003	2004	2005	2006	2007	2008
Pension	$1,168,776	$1,305,012	$1,411,246	$1,528,845	$1,754,935	$1,644,982
Insurance	223,168	297,737	360,940	441,279	570,156	576,414
						$2,221,396

Eligible to Retire (Age & Service in Years)

Age	Service	Allowance Reduction
Hired Before September 1, 2008		
55	5	None
Any	20	None
50	15	6.5% yearly for 5 years before age 55 or 20 years of service
Hired On/After September 1, 2008		
Any	25	None
60	5	None
60	15	Depends on age, service

Contribution Rate (%) as of July 1, 2009

Group	Pension	Insurance	Total
Employers [1]	16.11%	27.25%	43.36%
Employees	-	-	8.00

[1] More about the contribution rate on page xxx.

Member Averages (Age & Service in Years)

Type	Age	Service	Annual Income
Active	38.7	8.3	$46,618
Retired	57.9	-	23,511

Net Plan Assets Additions & Deductions in Millions ($)

Additions	2003	2004	2005	2006	2007	2008
Net Investment Income	$51.6	$199.0	$148.7	$178.1	$330.1	-$97.4
Employer Contributions (Insurance)	45.2	47.0	55.6	64.9	70.1	90.1
Employer Contributions (Pension)	16.9	27.6	39.9	50.0	61.6	72.2
Member Contributions	36.2	38.7	39.5	39.1	43.7	44.3
Other Income	-	-	-	1.0	0.8	0.6
Deductions						
Medical Insurance Expenses [1]	$15.0	$16.8	$22.2	$29.9	$31.9	$36.0
Refunds	1.8	2.5	2.1	2.1	2.6	2.6
Administrative Expenses	0.7	0.8	0.9	1.1	1.1	1.1
Benefit Payments	72.5	81.4	90.1	101.1	115.6	125.2

[1] As of 2006, the Medical Insurance Expenses include Self Funding Insurance Expenses.

Funding Levels (%) of Actuarial Assets to Liabilities

Fund	2003	2004	2005	2006	2007	2008
Pension Fund	97.8%	88.8%	80.9%	75.0%	74.2%	72.9%
Insurance Fund	28.8	30.3	28.0	21.9	31.2	34.7

1,135
Retired/Beneficiary

993
Active Members

301
Inactive Members

SPRS System Highlights

State Police Retirement System (SPRS) was established July 1, 1960 by the state legislature. The State Legislature determined that Cost of Living Adjustment (COLA) retirement allowances are increased by 1.5% every July.

Net Plan Assets Expressed in Thousands ($)

Fund	2003	2004	2005	2006	2007	2008
Pension	$319,115	$335,721	$339,406	$352,841	$376,381	$337,359
Insurance	72,538	90,420	99,408	110,491	132,574	121,782
						$459,141

Eligible to Retire (Age & Service in Years)

Age	Service	Allowance Reduction
Hired Before September 1, 2008		
55	5	None
Any	20	None
50	15	6.5% yearly for 5 years before age 55 or 20 years of service
Hired On/After September 1, 2008		
Any	25	None
60	5	None
60	15	Depends on age, service

Contribution Rate (%) as of July 1, 2009

Group	Pension	Insurance	Total
Employers [1]	35.23%	56.89%	92.12%
Employees	-	-	8.00

[1] Employer rates subject to state budget approval.

Member Averages (Age & Service in Years)

Type	Age	Service	Annual Income
Active	36.9	10.8	$53,645
Retired	60.7	-	36,382

Net Plan Assets Additions & Deductions in Millions ($)

Additions	2003	2004	2005	2006	2007	2008
Net Investment Income	$15.1	$56.1	$38.0	$51.4	$71.5	-$12.3
Employer Contributions (Insurance)	7.7	8.5	7.0	6.9	6.4	7.3
Employer Contributions (Pension)	-	1.2	2.9	4.2	6.1	7.4
Member Contributions	4.7	4.9	4.2	4.8	5.2	5.4
Other Income	-	-	-	-	0.4	0.2
Deductions						
Medical Insurance Expenses [1]	$4.5	$5.0	$6.3	$7.9	$6.6	$6.9
Refunds	0.1	0.2	0.1	0.1	.05	.08
Administrative Expenses	0.1	0.1	0.1	0.1	0.1	0.1
Benefit Payments	27.9	30.8	32.9	34.7	37.2	39.4

[1] As of 2006, the Medical Insurance Expenses include Self Funding Insurance Expenses.

Funding Levels (%) of Actuarial Assets to Liabilities

Fund	2003	2004	2005	2006	2007	2008
Pension Fund	99.6%	88.0%	77.1%	66.6%	63.7%	59.8%
Insurance Fund	49.2	48.9	42.8	18.1	26.6	27.9

Certificate of Achievement for Excellence in Financial Reporting

Kentucky Retirement Systems was again awarded the Government Finance Officers Association's Certificate of Achievement, our ninth consecutive year.

Financial Section

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Kentucky Retirement Systems
A component unit of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

Management's Responsibility for Financial Reporting

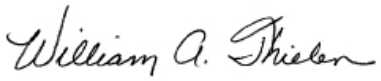
November 17, 2008

Management has prepared the basic financial statements of Kentucky Retirement Systems (KRS) and is responsible for the integrity and fairness of the information presented. Some amounts included in the financial statements may be based on estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these basic financial statements conform with US Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the basic financial statements.

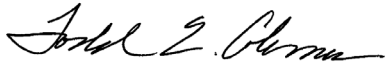
Ultimate responsibility for the basic financial statements and annual report rests with the Board of Trustees. The Executive Director and the rest of KRS' staff assist the Board in its responsibilities. Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training of employees, the establishment of an organizational structure, and the communication of policies and guidelines throughout the organization. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and the Board of Trustees.

Kentucky Retirement Systems' external auditors, Dean, Dorton & Ford, PSC, Certified Public Accountants, have conducted an independent audit of the basic financial statements in accordance with US Generally Accepted Auditing Standards. This audit is described in their Independent Auditors' Report on page 25. Management has provided the external auditors with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of financial statements.

Robert M. Burnside, MS
Executive Director



William A. Thielen, Esq.
Chief Operations Officer



Todd E. Coleman, CPA
Controller

DEAN || DORTON || FORD
PSC

Independent Auditors' Report

Board of Trustees of the Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ended June 30, 2008, as listed in the table of contents. These financial statements are the responsibility of the Kentucky Retirement Systems' management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of Kentucky Retirement Systems as of and for the fiscal year ended June 30, 2007, were audited by other auditors whose report dated November 15, 2007, expressed an unqualified opinion on those statements.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2008, and the changes in plan net assets for the fiscal year then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated November 17, 2008, on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

The Management's Discussion and Analysis (pages 27 through 34) and the Schedule of Funding Progress and Schedule of Contributions from Employers and Other Contributing Entities (pages 74 through 93) are not a required part of the basic financial statements, but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The additional supporting schedules (pages 94 through 98) are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

November 17, 2008
Lexington, Kentucky

Management's Discussion & Analysis Financial Highlights: Pension Funds

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of all pension funds administered by Kentucky Retirement Systems decreased by $1,272.8 million during fiscal 2008.

- Actual covered payroll reported for fiscal 2008 was $4,716.1 million compared to covered payroll for fiscal 2007 of $4,484.4 million, increasing approximately $231.7 million. The corresponding employer contributions increased by $121.6 million for a total employer contribution amount of $722.7 million. Of the total employer contribution amount, $350.4 million was posted to the pension funds while $372.3 million was posted to the insurance funds. Contributions paid by employees were $304.3 million and $300.3 million, respectively, for the fiscal years ended June 30, 2008 and June 30, 2007. This increase in employee contribution is a result of an increase in covered payroll and an increase in service purchased by employees.

- The net depreciation in the fair value of investments was ($997.4) million for the fiscal year ended June 30, 2008 compared to net appreciation of $1,507.8 million for the prior fiscal year. Included in this net depreciation were realized gains on sales of investments of $360.1 million. In comparison, the pension funds realized gains of $870.7 million for the fiscal year ended June 30, 2007. The decrease in realized gain experienced by the pension funds is due to an unfavorable change in market conditions.

- Net interest, dividend and securities lending income was $417.4 million compared to $407.9 million in last fiscal year.

- Pension benefits paid to retirees and beneficiaries increased $112 million bringing total benefit payments to $1,299.2 million. Refund of contributions paid to former members upon termination of employment increased from $25.2 million to $25.5 million.

- Administrative expense increased $1.8 million, totaling $22.9 million, compared to $21.1 million in the prior fiscal year.

Financial Highlights: Insurance Funds

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of the insurance fund administered by Kentucky Retirement Systems decreased by $83.3 million during fiscal 2008.

- Premiums received from retirees who participated in the Medicare eligible self-funded plan totaled $28.5 million.

- Employer contributions of $372.3 million were received. This is an increase of $64.6 million over the prior fiscal year. This increase is due to the increase of covered payroll reported by participating employers and the employers' increased percentage of covered payroll contributed.

- Retiree drug subsidies received were $13.3 million.

- The net depreciation in the fair value of investments was ($282.4) million compared to net appreciation of $366.8 million for the prior fiscal year. Included in this net depreciation were realized gains on sales of investments of $104.9 million. In comparison, the insurance funds realized gains on investments of $129.5 million in the prior fiscal year. This decrease in realized gains is due to an unfavorable change in market conditions.

- Net interest, dividend and securities lending income was $61.8 million compared to income of approximately $56.6 million in last fiscal year.

- Premiums paid by the fund for hospital and medical insurance coverage totaled $167.8 million. Payments for the self-funded healthcare reimbursements totaled $101.6 million. The total of insurance premiums paid plus self-funded reimbursements was $269.4 million for fiscal 2008. Insurance premiums paid plus self-funded healthcare reimbursements for the prior plan year totaled $241.1 million.

Using This Financial Report

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combined Statements of Plan Net Assets for the Pension Funds, on pages 36 through 37 , and the Combined Statement of Plan Net Assets for the Insurance Funds, on pages 40 through 41, provides a snapshot of the financial position of each of the three systems at June 30, 2008. The Combined Statement of Changes in Plan Net Assets for the Pension Funds, on pages 38 through 39 , and the Combined Statement of Changes in Plan Net Assets for the Insurance Funds, on pages 42 through 43, summarize the additions and deductions that occurred for each of the three systems during fiscal 2008.

The Schedule of Funding Progress, on pages 74 through 83, includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Contributions from Employers and Other Contributing Entities, on pages 84 through 93, presents historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

Kentucky Retirement Systems as a Whole

Kentucky Retirement Systems' combined plan net assets decreased, during the fiscal year ended June 30, 2008, by $1,356 million from $16,959.4 million to $15,603.3 million. Plan net assets for the prior fiscal year increased by $1,806.7 million. The decrease in plan net assets for the plan year ended June 30, 2008 is primarily attributable to overall losses in the stock market. The analysis below focuses on plan net assets (Table 1) and changes in plan net assets (Table 2) of Kentucky Retirement Systems' Pension and Insurance Funds.

Plan net assets of the pension funds decreased by $1,272.8 million ($12,955.4 million compared to $14,228.2 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. This plan net asset decrease is attributable primarily to the overall losses in the fair value of investments due to the change in market conditions in general.

Plan net assets of the insurance fund decreased by approximately $83.3 million ($2,647.9 million compared to $2,731.2 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. This decrease in net plan assets is primarily attributable to the overall losses in the fair value of investments, which is due to the change in market conditions in general.

FYI: The Securities and Exchange Commission adopted requirements for Management Discussion and Analysis in 1974 to have management provide a narrative explanation of the financial statements. The idea was to allow the user to see the entity's financial position and operating results through management's eyes.

Table 1: Plan Net Assets Dollars in Millions ($)

	Pension Fund			Insurance Fund			Total		
	2008	2007	2006	2008	2007	2006	2008	2007	2006
Cash & Invest.	$ 15,768.8	$ 17,245.3	$16,299.5	$ 3,379.9	$ 3,441.6	$2,691.6	$ 19,148.7	$ 20,686.9	$18,991.1
Receivables	122.4	125.2	123.4	45.5	41.4	35.7	167.9	166.6	159.1
Equipment net of depreciation	8.5	1.9	1.3	-	-	-	8.5	1.9	1.3
Total Assets	15,899.7	17,372.4	16,424.2	3,425.4	3,483.0	$2,727.3	19,325.1	20,855.4	19,151.5
Total Liabilities	(2,944.3)	(3,144.2)	(3,472.1)	(777.5)	(751.8)	(526.7)	(3,721.8)	(3,896.0)	(3,998.8)
Plan Net Assets	**$12,955.4**	**$14,228.2**	**$12,952.1**	**$2,647.9**	**$2,731.2**	**$2,200.6**	**$15,603.3**	**$ 16,959.4**	**$15,152.7**

Table 2: Changes in Plan Net Assets Dollars in Millions ($)

	Pension Fund			Insurance Fund			Total		
Additions	**2008**	**2007**	**2006**	**2008**	**2007**	**2006**	**2008**	**2007**	**2006**
Member Contribution	$ 304.3	$ 300.3	$275.9	-	-	-	$ 304.3	$ 300.3	$275.9
Employer Contribution	350.4	293.4	216.5	$372.3	$ 307.7	$253.4	722.7	601.1	469.9
Premiums Received	-	-	-	28.5	26.6	12.3	28.5	26.6	12.3
Insurance Appropriation	-	-	-	-	-	11.9	-	-	11.9
Retiree Drug Subsidy	-	-	-	13.3	21.5	-	13.3	21.5	-
Investment Income (net)	(579.9)	1,915.8	1,162.4	(220.6)	423.4	230.8	(800.5)	2,339.2	1,393.2
Total Additions	74.8	2,509.5	1,654.8	193.5	779.2	508.4	268.3	3,288.7	2,163.2
Deductions									
Benefit Payments	1,299.2	1,187.1	1,062.6	-	-	-	1,299.2	$ 1,187.1	1,062.6
Refunds	25.5	25 .2	24.9	-	-	-	25.5	25.2	24.9
Administrative Expenses	22.9	21.1	20.4	7.5	6.7	3.6	30.4	27.8	24.0
Healthcare Costs	-	-	-	269.3	241.1	212.8	269.3	241.1	212.8
Demutualization Refund	-	-	-	-	0.8	20.0	-	0.8	20.0
Total Deductions	1,347.6	1,233.4	1,107.9	276.8	248.6	236.4	1,624.4	1,482.0	1,344.3
Increase (Decrease) in Plan Net Assets									
	$(1,272.8)	**$1,276.1**	**$546.9**	**$(83.3)**	**$530.6**	**$272.0**	**$(1,356.1)**	**$1,806.7**	**$818.9**

Pension Fund Activities

Member contributions increased by $4 million. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit. The increase in member contributions is a result of an increase in elective service purchases by Kentucky Retirement Systems' members over the prior period. Employer contributions increased by $57 million due to the increase in covered payroll reported to Kentucky Retirement Systems and the increase in the employer contribution rate applied to covered payroll.

Net investment income decreased by $2,495.7 million (net investment loss of $579.9 million compared to net investment income of $1,915.8 million in the prior year). The pension funds experienced a decrease in income primarily due to the decrease in gains on sale of investments. This can be illustrated in Table 3.

Pension fund deductions increased by $114 million caused principally by an increase of $112 million in benefit payments. Retirees received a Cost of Living Adjustment (COLA) increase of 3.2% in benefit payments as of July 1, 2007. Refunds of member contributions increased by $.3 million and administrative expenses increased by $1.8 million.

Table 3: Pension Investment (Loss) Income-Pension

Dollars in Millions ($)

Investment Income	2008	2007	2006
(Decrease) Increase in fair value of investments	$(1,357)	$638	$201
Investment Income net of Investment Expense	417	408	359
Gain on sale of investments	360	870	602
Net investment (loss) income	$(580)	$1,916	$1,162

Insurance Fund Activities

Employer contributions paid into the insurance fund increased by $64.5 million over the prior fiscal year. This increase is a result of the increase in covered payroll reported to Kentucky Retirement Systems and the increase in the employer contribution rate applied to covered payroll.

Net investment income decreased by $643 million. This decrease in net income is due primarily to the decrease in the gains on sale of investments. This can be illustrated in Table 4.

Insurance fund deductions increased by $28 million due to the increase in overall healthcare costs.

Historical Trends

Accounting standards require that the Statement of Plan Net Assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the Schedule of Funding Progress on pages 74 through 83. The asset value stated in the Schedule of Funding Progress is the actuarial value of assets determined by calculating the difference between the expected valuation assets and the actual market value of assets adjusted for any unrecognized gains or losses and amortized over a five-year period. The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by Kentucky Retirement Systems' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is known as the unfunded actuarial accrued liability. The unfunded actuarial accrued liability in the pension plans increased by

Table 4: Insurance Investment (Loss) Income

Dollars in Millions ($)

Investment Income	2008	2007	2006
(Decrease) Increase in fair value of investments	$(387)	$237	$111
Investment Income net of Investment Expense	62	56	42
Gain on sale of investments	105	130	78
Net investment (loss) income	$(220)	$423	$231

$1,246.9 million for a total unfunded amount of $7,387.9 million for the fiscal year ended June 30, 2008, compared to an unfunded amount of $6,141.1 for the fiscal year ended June 30, 2007. In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2008 assumption changes, and increasing expenditures for retiree Cost of Living Adjustments. Within the KERS and SPRS plans, employer contribution rate reductions enacted by the Kentucky General Assembly have limited the plans ability to correct the declining funding levels.

The insurance plan's unfunded actuarial accrued liability for the plan year ended June 30, 2008, increased to $8,973.5 million from $8,658.3 million for the plan year ended June 30, 2007. This is an increase in the unfunded actuarial accrued liability of $315.2 million. Medical inflation rates in excess of the assumed rates as well as recent employer contribution rate reductions under KERS and SPRS have significantly caused this increase. The recent adoption of new actuarial assumptions and the application of Governmental Accounting Standards Board Statement No. 43 "Financial Reporting for Postemployment Benefit Plans other than Pension Plans" have further reduced the measured funding level.

Annual required contributions of the employers as actuarially determined and actual contributions made by employers and other contributing entities in relation to the required contributions are provided in the Schedule of Contributions from Employers and Other Contributing Entities on pages 84 through 93. The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS funds is attributable to the statutory employer contribution rate set by the Kentucky General Assembly being less than the rate computed by the actuary.

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Combined Statement of Plan Net Assets - Pension Funds Dollars in Thousands($)

As of June 30, 2008 (with comparative totals as of June 30, 2007)

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2008 TOTAL	2007 TOTAL
Assets							
Cash and Short-Term Investments							
Cash	$118	$203	$238	$323	$87	$969	$1,181
Short-Term Investments	15,682	68,261	46,799	67,450	1,601	199,793	342,328
Total Cash and Short-Term Investments	15,800	68,464	47,037	67,773	1,688	200,762	343,509
Receivables							
Contributions	1,642	21,955	11,386	32,028	1,149	68,160	67,754
Investment Income	2,054	21,058	6,857	22,799	1,481	54,249	57,442
Total Receivables	3,696	43,013	18,243	54,827	2,630	122,409	125,196
Investments at Fair Value							
Corporate and Government Bonds	135,247	1,236,656	425,700	1,393,037	93,619	3,284,259	3,420,592
Corporate Stocks	281,760	3,208,116	984,533	3,319,682	201,825	7,995,916	8,868,909

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2008 TOTAL	2007 TOTAL
Mortgages	46,158	499,605	167,578	593,436	37,183	1,343,960	1,470,223
Real Estate	1,943	2,346	2,415	2,360	481	9,545	9,546
Total Investments at Fair Value	465,108	4,946,723	1,580,226	5,308,515	333,108	12,633,680	13,769,270
Securities Lending Collateral Invested	109,935	1,146,607	372,005	1,229,252	76,544	2,934,343	3,132,538
Equipment (net of accumulated depreciation)	215	2,518	375	4,305	45	7,458	1,894
Intangible Assets (net of accumulated amortization)	31	364	54	624	6	1,079	
Total Assets	594,785	6,207,689	2,017,940	6,665,296	414,021	15,899,731	17,372,407
Liabilities							
Accounts Payable	412	4213	953	4,309	118	10,005	11,685
Securities Lending Collateral	109,935	1,146,607	372,005	1,229,252	76,544	2,934,343	3,132,538
Total Liabilities	110,347	1,150,820	372,958	1,233,561	76,662	2,944,348	3,144,223
Plan Net Assets Held in Trust for Pension Benefits							
	$484,438	**$5,056,869**	**$1,644,982**	**$5,431,735**	**$337,359**	**$12,955,383**	**$14,228,184**

(A Schedule of Funding Progress for each Plan is presented beginning on page 74). See accompanying Independent Auditors' Report and Notes to the Financial Statements

Combined Statement of Changes in Plan Net Assets — Pension Funds Dollars in Thousands($)

For the Fiscal Year Ended June 30, 2008 (with comparative totals for the Fiscal Year ended June 30, 2007)

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2008 TOTAL	2007 TOTAL
Additions							
Members' Contributions	$ 13,091	$ 116,487	$ 44,260	$ 125,014	$ 5,407	$ 304,259	$ 300,280
Employers' Contributions	15,257	104,655	72,155	150,925	7,443	350,435	293,442
Total Contributions	28,348	221,142	116,415	275,939	12,850	654,694	593,722
Investment Income							
From Investing Activities							
Net (Depreciation) Appreciation in Fair Value of Investments	(36,278)	(386,227)	(150,666)	(401,080)	(23,118)	(997,369)	1,507,855
Interest/Dividends	15,631	165,355	53,352	173,562	10,902	418,802	420,727
Total Investing Activities (Loss) Income	(20,647)	(220,872)	(97,314)	(227,518)	(12,216)	(578,567)	1,928,582
Investment Expense	460	5,200	1,604	5,136	350	12,750	11,991
Commissions	300	3,130	951	3,308	226	7,915	7,386
Total Investing Activities Expense	760	8,330	2,555	8,444	576	20,665	19,377
Net (Loss) Income from Investing Activities	(21,407)	(229,202)	(99,869)	(235,962)	(12,792)	(599,232)	1,909,205

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2008 TOTAL	2007 TOTAL
From Securities Lending Activities							
Securities Lending Income	5,263	54,870	17,805	58,594	3,663	140,195	186,075
Securities Lending Expense:							
Security Borrower Rebates	4,344	45,312	14,701	48,578	3,025	115,960	177,377
Security Lending Agent Fees	185	1,934	628	2,074	129	4,950	2,129
Net Income From Securities Lending Activities	734	7,624	2,476	7,942	509	19,285	6,569
Total Net Investment (Loss) Income	(20,673)	(221,578)	(97,393)	(228,020)	(12,283)	(579,947)	1,915,774
Total Additions (Loss)	7,675	(436)	19,022	47,919	567	74,747	2,509,496
Deductions							
Benefit Payments	31,606	699,052	125,191	403,958	39,367	1,299,174	1,187,154
Refunds	1,742	9,076	2,641	11,924	85	25,468	25,157
Administrative Expenses	664	7,724	1,143	13,238	137	22,906	21,077
Capital Project Expenses							38
Total Deductions	34,012	715,852	128,975	429,120	39,589	1,347,548	1,233,426
Net (Decrease) Increase in Plan Assets	(26,337)	(716,288)	(109,953)	(381,201)	(39,022)	(1,272,801)	1,276,070
Plan Net Assets Held in Trust for Pension Benefits							
Beginning of Year	510,775	5,773,157	1,754,935	5,812,936	376,381	14,228,184	12,952,114
End of Year	**$ 484,438**	**$ 5,056,869**	**$ 1,644,982**	**$ 5,431,735**	**$ 337,359**	**$12,955,383**	**$14,228,184**

(A Schedule of Funding Progress for each Plan is presented beginning on page 74). See accompanying Independent Auditors' Report and Notes to the Financial Statements

Combined Statement of Plan Net Assets — Insurance Funds Dollars in Thousands($)

As of June 30, 2008 (with comparative totals as of June 30, 2007)

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2008 TOTAL	2007 TOTAL
Assets							
Cash and Short-Term Investments							
Cash	$24	$88	$7	$70	$32	$221	$54
Short-Term Investments	30,925	41,445	77,803	147,657	9,015	306,845	224,585
Total Cash and Short-Term Investments	30,949	41,533	77,810	147,727	9,047	307,066	224,639
Receivables							
Contributions	1,000	7,021	6,716	22,124	402	37,263	33,816
Investment Income	818	1,948	1,779	3,307	400	8,252	7,580
Total Receivables	1,818	8,969	8,495	25,431	802	45,515	41,396
Investments at Fair Value							
Corporate and Government Bonds	26,480	76,539	72,754	140,228	14,534	330,535	289,343
Corporate Stocks	210,122	449,054	417,555	794,147	97,452	1,968,330	2,178,676
Alternative Investment	15	15	37	61	7	135	135

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2008 TOTAL	2007 TOTAL
Total Investments at Fair Value	236,617	525,608	490,346	934,436	111,993	2,299,000	2,468,154
Securities Lending Collateral Invested	79,439	168,431	168,708	321,321	35,938	773,837	748,802
Total Assets	348,823	744,541	745,359	1,428,915	157,780	3,425,418	3,482,991
Liabilities							
Accounts Payable	84	1,631	237	1,649	60	3,661	2,972
Securities Lending Collateral	79,439	168,431	168,708	321,321	35,938	773,837	748,802
Total Liabilities	79,523	170,062	168,945	322,970	35,998	777,498	751,774
Plan Net Assets Held in Trust for Insurance Benefits							
	$269,300	**$574,479**	**$576,414**	**$1,105,945**	**$121,782**	**$2,647,920**	**$2,731,217**

(A Schedule of Funding Progress for each Plan is presented beginning on page 74). See accompanying Independent Auditors' Report and Notes to the Financial Statements

Combined Statement of Changes in Plan Net Assets — Insurance Funds Dollars in Thousands($)

For the Fiscal Year Ended June 30, 2008 (with comparative totals for the Fiscal Year Ended June 30, 2007)

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2008 TOTAL	2007 TOTAL
Additions							
Employers' Contributions	$ 21,997	$ 56,745	$ 90,113	$ 196,110	$ 7,329	$ 372,294	$ 307,720
Premiums Received from Retirees	247	12,940	222	15,104	9	28,522	26,596
Retiree Drug Subsidy	74	6,634	420	6,003	184	13,315	21,490
Total Contributions	22,318	76,319	90,755	217,217	7,522	414,131	355,806
Investment Income							
From Investing Activities							
Net Appreciation (Depreciation) in Fair Value of Investments	(32,147)	(52,716)	(61,936)	(121,282)	(14,304)	(282,385)	366,809
Interest/Dividends	6,322	13,596	13,188	25,028	2,828	60,962	57,444
Total (Loss) Income from Investing Activities	(25,825)	(39,120)	(48,748)	(96,254)	(11,476)	(221,423)	424,253
Investment Activities Expense	187	391	389	744	85	1,796	1,763
Commissions	133	309	257	488	62	1,249	743
Total Investing Activities Expense	320	700	646	1,232	147	3,045	2,506
Net (Loss) Income from Investing Activities	(26,145)	(39,820)	(49,394)	(97,486)	(11,623)	(224,468)	421,747

	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	2008 TOTAL	2007 TOTAL
From Securities Lending Activities:							
Securities Lending Income	3,329	7,054	7,075	13,390	1,506	32,354	36,776
Securities Lending Expense							
Security Borrower Rebates	2,821	5,980	5,990	11,409	1,276	27,476	34,796
Security Lending Agent Fees	103	219	220	419	47	1,008	337
Net Income from Securities Lending Activities	405	855	865	1,562	183	3,870	1,643
Total Net Investment (Loss) Income	(25,740)	(38,965)	(48,529)	(95,924)	(11,440)	(220,598)	(423,390)
Total Additions (Loss)	(3,422)	37,354	42,226	121,293	(3,918)	193,533	779,196
Deductions							
Healthcare Premiums Subsidies	7,598	73,160	32,644	48,789	5,557	167,748	151,482
Administrative Fees	95	3,487	364	3,425	106	7,477	6,747
Self Funding Insurance Costs	471	49,786	2,960	47,177	1,211	101,605	89,567
Demutualization Proceeds Refunded							805
Total Deductions	8,164	126,433	35,968	99,391	6,874	276,830	248,601
Net Increase (Decrease) in Plan Assets	(11,586)	(89,079)	6,258	21,902	(10,792)	(83,297)	530,595
Plan Net Assets Held in Trust for Insurance Benefits							
Beginning of Year	280,886	663,558	570,156	1,084,043	132,574	2,731,217	2,200,622
End of Year	**$269,300**	**$574,479**	**$576,414**	**$1,105,945**	**$121,782**	**$2,647,920**	**$2,731,217**

(A Schedule of Funding Progress for each Plan is presented beginning on page 74). See accompanying Independent Auditors' Report and Notes to the Financial Statements

Notes to the Financial Statements

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by Kentucky Retirement Systems: (1) Kentucky Employees Retirement System (KERS); (2) County Employees Retirement System (CERS); and (3) State Police Retirement System (SPRS). The assets of the insurance fund are commingled for investment purposes. The following notes apply to the various funds administered by Kentucky Retirement Systems:

Note A-Summary Of Significant Accounting Policies

KRS financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan.

Method Used to Value Investments

Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate is based on appraisals. Investments that do not have an established market are reported at estimated fair value.

Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment

Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged to expense as incurred. KRS increased its capitalization threshold to $3,000 in fiscal 2008. The capitalization threshold used in fiscal 2007 was $750.

Intangible Assets

Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is ten years. The capitalization threshold used in fiscal 2008 was $3,000 (see Note K for further information).

Expense Allocation

Administrative and investment expenses of KRS are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

Component Unit

KRS is a component unit of the Commonwealth of Kentucky for financial reporting purposes.

The Kentucky Employees Retirement System (KERS) was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. The County Employees Retirement System (CERS) was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. The State Police Retirement System (SPRS) was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the KRS Board of Trustees without further legislative review. The methods used to determine the employer rates for all Retirement Systems are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

FYI — Notes to the Financial Statements are designed to provide the reader with specific information about estimates, accounting, and other material information found in the financial statements.

Note B--Plan Descriptions and Contribution Information

Membership of each retirement system consisted of the following at June 30, 2008 and 2007:

Kentucky Employees Retirement System Membership Totals

	2008			2007		
Number of Members	Non-Hazardous Employees	Hazardous Employees	Total	Non-Hazardous Employees	Hazardous Employees	Total
Retirees and Beneficiaries Receiving Benefits	35,307	2,404	37,711	33,900	2,206	36,106
Inactive Vested Memberships	33,202	2,927	36,129	30,993	2,740	33,733
Active Plan Members	48,085	4,393	52,478	48,033	4,352	52,385
Total	116,594	9,724	126,318	112,926	9,298	122,224
Number of Participating Employers			317			359

County Employees Retirement System Membership Totals

	2008			2007		
Number of Members	Non-Hazardous Employees	Hazardous Employees	Total	Non-Hazardous Employees	Hazardous Employees	Total
Retirees and Beneficiaries Receiving Benefits	37,579	5,422	43,001	35,564	5,159	40,723
Inactive Vested Memberships	57,755	2,376	60,131	51,528	4,662	56,190
Active Plan Members	85,221	10,173	95,394	85,367	10,097	95,464
Total	180,555	17,971	198,526	172,459	19,918	192,377
Number of Participating Employers			1,468			1,400

State Police Retirement System Membership Totals

	2008	2007
Number of Members	Hazardous Position Employees	Hazardous Position Employees
Retirees and Beneficiaries Receiving Benefits	1,135	1,105
Inactive Vested Memberships	301	275
Active Plan Members	993	970
Total	2,429	2,350
Number of Participating Employers	1	1

Kentucky Retirement Systems Insurance Fund

Hospital and medical contracts in force consisted of the following at June 30, 2008 and 2007:

	2008					2007				
	Single	Couple/ Family	Parent Plus	Medicare Without Prescription	Medicare With Prescription	Single	Couple/ Family	Parent Plus	Medicare Without Prescription	Medicare With Prescription
KERS										
Non-Hazardous	9,631	2,099	584	1,960	12,653	9,144	2,023	538	941	13,144
Hazardous	795	618	93	96	749	738	571	82	85	658
CERS										
Non-Hazardous	7,306	1,278	291	3,112	12,829	6,919	915	280	1,412	13,734
Hazardous	1,411	2,017	232	77	1,396	1,379	2,199	219	69	1,230
SPRS										
	241	302	17	7	407	252	296	19	15	380
Totals	19,384	6,314	1,217	5,252	28,034	18,432	6,004	1,138	2,522	29,146

Note B -- Plan Descriptions and Contribution Information, continued
Kentucky Employees Retirement System

Non-Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions - For the fiscal years ended June 30, 2008 and 2007, plan members were required to contribute 5% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2008 and 2007, participating employers contributed 8.5% and 7.75%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2008 and 2007 was 48.37% and 17.13%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the

Commonwealth so demands.

Contributions - For the fiscal years ended June 30, 2008 and 2007, plan members were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2008 and 2007, participating employers contributed 24.25% and 22%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2008 and 2007 was 47.11% and 23.32%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

County Employees Retirement System

Non-Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate in CERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions - For the fiscal years ended June 30, 2008 and 2007, plan members were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2008 and 2007, participating employers contributed 16.17% and 13.19%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2008 and 2007 was 16.17% and 13.19%, respectively. Administrative costs

of KRS are financed through employer contributions and investment earnings.

Hazardous Employees Pension Plan

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in CERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions - For the fiscal years ended June 30, 2008 and 2007, plan members were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2008 and 2007, participating employers contributed 33.87% and 28.21%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2008 and 2007 was 33.87% and 28.21%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

State Police Retirement System

Plan Description - SPRS is a single-employer defined benefit pension plan that covers all full-time state troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent in any plan year. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions - For the fiscal years ended June 30, 2008 and 2007 plan members were required to contribute 8% of their annual creditable compensation. The Commonwealth

was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2008 and 2007, the Commonwealth contributed 28% and 25.50%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2008 and 2007 was 120% and 42.30%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

KRS Insurance Fund

Plan Description - The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2008, insurance premiums withheld from benefit payments for members of the systems were $25,897,389 and $861,730 for KERS non-hazardous and hazardous, respectively; $25,809,726 and $1,571,639 for CERS non-hazardous and hazardous, respectively; and, $167,965 for SPRS. For fiscal 2007, insurance premiums withheld from benefit payments for members of KRS were $24,604,832 and $761,803 for KERS non-hazardous and KERS hazardous, respectively; $23,940,964 and $1,437,509 for CERS non-hazardous and CERS hazardous, respectively; and, $163,211 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous

Years of Service	% Paid by Insurance Fund
20 or More	100%
15-19	75%
10-14	50%
4-9	25%
Less Than 4	0%

members killed in the line of duty. As of June 30, 2008, the Fund had 76,131 retirees and beneficiaries for whom benefits were available.The amount of contribution paid by the Funds is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are listed on the previous page.

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on or after July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on or after July 1, 2003 earn ten dollars ($10) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on or after July 1, 2003 earn fifteen dollars ($15) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives ten dollars ($10) per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree cost of living adjustment (COLA), which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years.

KRS commenced self-funding of healthcare benefits for its Medicare eligible retirees on January 1, 2006. A self-funded plan is one in which KRS assumes the financial risk for providing healthcare benefits to its retirees. The self-funded plan pays for claims out-of-pocket as they are presented instead of paying a pre-determined premium to an insurance carrier for a fully-insured plan. KRS funds the risk directly from its assets. KRS becomes directly responsible for administering benefits under the plan.

KRS' plan is defined by statute. KRS selected Walgreens Health Initiatives and Fiserv Health (Wausau Benefits, Inc.) to administer the pharmaceutical and medical benefits for its retirees.

Stop-loss insurance can be arranged to limit KRS' loss to a specified amount to ensure that catastrophic claims do not upset the financial integrity of the self-funded plan. The amount of stop-loss insurance is a function of KRS' size, nature of its business, financials, and tolerance for risk. KRS continues to evaluate the use of stop-loss insurance.

Note C - Cash And Short-Term Investments And Securities Lending Collateral

The provisions of Governmental Accounting Standards Board (GASB) Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions and investments made with that cash be reported as assets on the financial statements. In conjunction with the adoption of GASB No. 28, KRS has reclassified certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

Kentucky Employees Retirement System

	2008	2007
Cash	$ 321,001	$ 410,633
Short Term Investments	83,942,355	205,934,152
Securities Lending Collateral Invested	1,256,541,062	1,256,147,832
Total	$1,340,804,418	$1,462,492,617

County Employees Retirement System

	2008	2007
Cash	$ 561,437	$ 713,861
Short Term Investments	114,249,050	130,256,739
Securities Lending Collateral Invested	1,601,257,307	1,736,052,690
Total	$1,716,067,794	$1,867,023,290

State Police Retirement System

	2008	2007
Cash	$ 86,526	$ 56,384
Short Term Investments	1,601,088	6,136,950
Securities Lending Collateral Invested	76,543,782	140,337,713
Total	$78,231,396	$146,531,047

KRS Insurance Funds

	2008	2007
Cash	$ 220,702	$ 53,838
Short Term Investments	306,845,068	224,584,472
Securities Lending Collateral Invested	773,837,984	748,802,051
Total	$1,080,903,754	$ 973,440,361

Note D-Investments

The Board of Trustees of KRS recognizes its duty to invest funds in accordance with the Prudent Person Rule and manage those funds consistent with the long-term nature of KRS. The Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments - Investments may be made in domestic and international common stock, securities convertible into common stock and in preferred stock of publicly traded corporations.

Fixed Income Investments - Publicly traded corporate bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with the current market and economic conditions. Investment may also be made in any debt instrument issued or guaranteed in whole or in part by the US Government or any agency or instrumentality of the US Government.

Mortgages - Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments guaranteed by an agency of the US Government or the Commonwealth of Kentucky.

Alternative Investment/Equity Real Estate - Subject to the specific approval of the Investment Committee of the Board of Trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, without limitation, venture capital, private equity and private placements which the Investment Committee believes has excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities - The following short-term investment vehicles are considered acceptable: publicly traded investment grade corporate bonds, government and agency bonds, mortgages, and collective Short Term Investment Funds (STIF's), money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having an investment grade rating by at least one recognized bond rating service. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur.

Derivatives – Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited.

The Pension and Insurance Funds invest in collateralized mortgage obligations (CMOs) and other asset-backed securities to increase return and adjust duration of the portfolio. The Pension and Insurance Funds invest in exchange-traded funds to convert cash held in index funds to short-term equity investments. This practice is intended to make the performance of the index funds more closely track the performance of the index that the funds are intended to replicate.

Collateralized mortgage obligations, asset-backed securities, and exchange-traded funds pose no greater risk than other similar investment grade holdings in KRS' and the Fund's portfolios. The fair value of CMOs at June 30, 2008 and 2007, was approximately $282 million and $356 million, respectively; the fair value of asset-backed securities at June 30, 2008 and 2007, was approximately $219 million and $225 million, respectively; and, the fair value of exchange-traded funds at June 30, 2008 and 2007, was approximately $451 million and $427 million, respectively.

Custodial Credit Risk for Deposits - Custodial credit risk for deposits is the risk that in the event of a financial institution failure, KRS' deposits may not be returned. All non-investment related bank balances are held locally by Farmer's Bank & Capital Trust Company. All non-investment related bank balances are held in KRS' name and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). Effective October 3, 2008, FDIC deposit insurance temporarily increased from $100,000 to $250,000 for each individual account through December 31, 2009. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount.

At June 30, 2008 and 2007, deposits for KRS pension funds were $7,685,550 and $3,217,697, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

At June 30, 2008 and 2007, deposits for KRS insurance fund were $204,343 and $146,289, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments - Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. KRS does not have an explicit policy with regards to Custodial Credit Risk for investments. At June 30 2008 and 2007, the following investments were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name.

	2008	2007
Pension Funds		
Foreign Currency Investments	$3,486,140	$3,838,653
Insurance Funds		
Foreign Currency Investments	$1,103,211	$37,588

Investment Summary

The following tables present a summary of the investments by type as of June 30, 2008 and 2007:

Pension Funds as of June 30, 2008 and 2007

Investment Summary	2008	2007
US Gov't &Agency Fixed Income Securities	$3,167,327,985	$1,621,746,405
US Corporate Fixed Income Securities	1,457,701,305	3,267,332,169
Municipal Debt Securities	3,189,898	1,736,261
Short-term Investments	199,792,495	342,327,842
Equity Securities	7,093,291,910	8,339,372,635
Private Equity Limited Partnerships	902,624,336	529,536,766
Real Estate	9,545,575	9,545,575
	$12,833,473,504	$14,111,597,653

Insurance Funds as of June 30, 2008 and 2007

Investment Summary	2008	2007
US Gov't &Agency Fixed Income Securities	$330,535,852	$289,343,163
Short-term Investments	306,845,080	224,584,472
Equity Securities	1,868,037,394	2,119,830,709
Private Equity Limited Partnerships	100,291,617	58,845,081
Alternative Investment	135,000	135,000
	$2,605,844,943	$2,692,738,425

Investment Policies - Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of Trustees of KRS. The Board of Trustees has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the Prudent Person Rule and manage those funds consistent with the long-term nature of the Systems. The Committee has adopted a *Statement of Investment Policy* that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS. *The Statement of Investment Policy – Pension* contains the specific guidelines for the investment of pension assets. *The Statement of Investment Policy – Insurance* contains the specific guidelines for the investment of insurance assets. Additionally, the Committee establishes specific investment guidelines in the Investment Management Agreement for each investment management firm.

Credit Risk of Debt Securities - Credit risk

is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external professional investment management firms. All portfolio managers are required by the *Statement of Investment Policy* to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension fund debt securities portfolio is managed using the following guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- The duration of the total fixed income portfolio shall not deviate from the blended Lehman Brothers Aggregate Index/KRS High Yield Index by more than 10%.
- The duration of the TIPS portfolio shall not deviate from the Lehman Brothers TIPS Index by more than 10%.
- The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS' assets.
- No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short term instrument, with the exception of US Government issued, guaranteed or agency obligations.
- The amount invested in SEC Rule 144a securities shall not exceed 7.5% of the market value of the aggregate market value of KRS' fixed income investments.

The following tables present the KRS pension fund debt ratings at June 30, 2008 and 2007:

Pension Funds Debt Securities Investments at Fair Value as of June 30, 2008 and 2007

	2008	2007
AAA	$1,852,092,028	$3,697,018,926
AA+	3,146,943	4,019,782
AA	55,711,654	53,385,523
AA-	69,155,369	98,556,277
A+	64,663,074	40,611,902
A	94,408,564	117,081,402
A-	74,151,200	77,178,845
BBB+	107,130,804	100,891,605
BBB	106,177,690	119,298,748
BBB-	74,797,060	73,693,095
BB+	2,156,766	5,470,138
BB	8,702,285	2,227,931
BB-	-	705,765
B-	3,403,560	-
NR	166,287,656	-
Total Credit Risk Debt Securities	2,681,984,653	4,390,139,939
Government Bonds	267,456,013	480,795,784
Government Mortgage-Backed Securities (GNMA)	48,454,865	19,879,112
Indexed Linked Bonds	1,630,323,657	-
Total Debt Securities	$4,628,219,188	$4,890,814,835

At both June 30, 2008 and 2007, the weighted average quality rating of the pension fund debt securities portfolio was AA+ and AA+. As of June 30, 2008 and 2007, the KRS pension portfolio had $14,262,611 and $8,403,834, respectively, in debt securities rated below BBB-. The fair value of securities in the BBB- rating category was $74,797,060 and $73,693,095, respectively, as of June 30, 2008 and 2007.

The insurance fund debt securities portfolio, by guidelines, is to be invested in US Government securities. As shown below, as of June 30, 2008 and 2007, the entire insurance fund was invested in Treasury Inflation Protected Securities (TIPS) which carry a US Government treasury rating.

Insurance Fund
Credit Risk of Debt Securities

As of June 30,	2008	2007
Treasury Inflation Protected Securities	$330,535,852	$289,343,163

Concentration of Credit Risk Debt Securities - Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

The total debt securities portfolio is managed using the following general guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.

- Debt obligations of any single US Corporation shall be limited to a maximum of 5 percent of the total portfolio at market value.

As of June 30, 2008, the Insurance Fund held 8% of its investments in Exchange Traded Funds (ETF's). The amount totaled $209,263,681 as of June 30, 2008. ETF's are securities that represent ownership in a long term unit investment trust that holds a portfolio of common stocks designed to track the performance of a designated index. Similar to a stock, ETF's can be traded continuously throughout the trading day, or can be held for the long term.

As of June 30, 2008, the Pension Fund held 5.49% of its investment in the Federal National Mortgage Association (Fannie Mae). The amount totaled $708,164,873 as of June 30, 2008. Historically, Fannie Mae has been a publicly owned government corporation, recently entering conservatorship by the US Government, to purchase mortgages from lenders and resell them to investors; shares of Fannie Mae are traded on the New York Stock Exchange. Fannie Mae's debt has been perceived to be nearly as safe as US Treasury debt, given the US Government's implicit guarantee which has allowed it to pay lower interest rates to its debt holders.

Interest Rate Risk – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The risk is managed by using the effective duration or option adjusted methodology. It is widely used in the management of fixed income portfolios by quantifying the risk of inherent rate changes. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. The effective duration measures the sensitivity of the market price to changes in the yield curve. Effective duration is the most accurate duration measure when a significant portion of the securities are callable (redeemable) prior to maturity. The pension fund portfolio contains a number of securities that are callable and therefore interest rate risk is most appropriately measured by effective duration. KRS does not have a formal policy that constrains the duration of its fixed income portfolio.

The KRS pension fund debt securities portfolio benchmarks its debt securities portfolio to a weighted average benchmark consisting of the Lehman Brothers Aggregate Index and the Lehman Brothers US TIPS Index. At June 30, 2008 and 2007, the effective duration of the benchmark was 5.34 and 4.77, respectively. At the same points in time, the effective duration of the KRS pension fund debt securities portfolio was 5.25 and 4.92, respectively.

The KRS insurance fund long-term debt securities portfolio consists entirely of US Government issued bonds which are not callable (redeemable) prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve but does not assume that securities will be called prior to maturity. Since the modified duration measure most accurately reflects the interest rate sensitivity of the insurance fund portfolio, this measure is used for comparative purposes. The KRS insurance fund debt securities portfolio benchmarks its debt securities portfolio to the Lehman Brothers US TIPS Index. At June 30, 2008 and 2007, the modified duration of the benchmark was 7.00 and 6.37, respectively. At the same points in time, the modified duration of the KRS insurance fund debt securities portfolio, excluding the pooled fund, was 7.8 and 7.85, respectively.

Foreign Currency Risk - Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. KRS' currency risk exposure, or exchange rate risk, primarily resides within KRS' international equity holdings. KRS does not have a formal policy to limit foreign currency risk. The following tables present KRS' exposure to foreign currency risk at June 30, 2008 and 2007:

Pension Fund Investments at Fair Value as of June 30, 2008 and 2007

Foreign Equities	2008	2007
Australian Dollar	$108,703,282	$99,886,855
British Pound Sterling	347,502,090	440,922,544
Danish Krone	10,215,805	1,678
Euro	602,712,262	666,152,958
Hong Kong Dollar	42,788,359	36,321,861
Japanese Yen	360,039,117	423,200,251
Malaysian Ringgit	4,822,484	4,940,420
Norwegian Krone	8,462,661	18,449,939
Singapore Dollar	33,380,301	27,463,397
South African Rand	2,724,924	4,212,526
South Korean Won	8,878,461	10,265,258
Swedish Krona	22,736,416	21,968,065
Swiss Franc	132,737,018	158,519,487
International Equity Mutual Fund (various currencies)	3,375,984	629,475,754
Total Securities Subject To:		
Foreign Currency Risk	1,689,079,164	2,541,780,993
USD (securities held by International Investment Managers)	899,009,887	61,178,192
Total International Investment Securities	$2,588,089,051	$2,602,959,185

Insurance Fund Investments at Fair Value as of June 30, 2008 and 2007

Foreign Equities	2008	2007
Australian Dollar	$35,134,773	$34,120,308
British Pound Sterling	109,029,509	120,674,789
Danish Krone	3,306,933	-
Euro	189,066,281	195,444,217
Hong Kong Dollar	13,504,229	9,666,934
Japanese Yen	112,165,271	108,817,816
Malaysian Ringgit	1,373,536	-
New Taiwan Dollar	1,278,371	-
Norwegian Krone	2,758,439	9,480,847
Singapore Dollar	10,752,813	8,952,357
South African Rand	825,396	-
South Korean Won	2,678,342	-
Swedish Krona	7,113,693	7,170,720
Swiss Franc	41,108,670	49,914,778
Total Securities Subject To:		
Foreign Currency Risk	530,096,256	544,242,766
USD (securities held by International Investment Managers)	161,203,986	3,783,791
Total International Investment Securities	$691,300,242	$548,026,557

KRS Pension Funds Interest Rate Risk

	2008	Weighted Average Effective Duration	2007	Weighted Average Effective Duration
Asset Backed Securities	$219,570,012	0.65	$255,198,379	0.85
Commercial Mortgage Backed Securities	284,582,636	4.69	359,777,307	3.97
Corporate Bonds	676,082,460	6.36	654,647,912	5.94
Government Agencies	156,429,791	3.75	165,620,722	4.36
Government Bonds	1,938,543,143	6.84	1,983,611,183	6.61
Government Mortgage Backed Securities	1,063,447,866	3.92	1,114,227,990	3.72
Municipal Bonds	3,189,898	8.20	1,736,261	14.93
Non-Government Backed Collateralized Mortgage Obligations	280,513,429	1.66	355,995,081	1.43
Other Fixed Income	5,859,953	-	-	-
Total	$4,628,219,188	5.25	$4,890,814,835	4.92

Insurance Fund

Debt Securities Investments at Fair Value

As of June 30, 2008 and 2007

	2008		2007	
Investment	Fair Value	Weighted Duration	Fair Value	Weighted Duration
Index Linked Government Bonds	$330,535,852	7.80	$289,343,163	7.85

Note E-Securities Lending Transactions

Kentucky Revised Statues Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with a fair value of 102 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. At June 30, 2008, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction, although the average term of the loans was 6 days, 10 days, and 24 days for the three investment portfolios subject to security lending agreements. One custodial bank invests cash collateral in securities that are permitted for investment by state statute and Board policy, which at year-end has a weighted-average maturity of 3 days for KRS. The other custodial bank invests cash collateral in the agent's short-term investment pool as permitted by state statute and Board policy, which at year-end has a weighted-average maturity of 24 days for the Pension Fund only. Neither of the Funds can pledge or sell collateral securities received unless the borrower defaults.

Note F-Risks Of Loss

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims against the Board of Trustees of KRS, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $100,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

Note G-Contingencies

In the normal course of business, KRS is involved in litigation concerning the right of participants, or their beneficiaries, to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

Note H-Income Tax Status

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax.

Note I-Defined Benefit Pension Plan

All eligible employees of KRS participate in KERS (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers substantially all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Plan members contributed 5% of creditable compensation for the periods ended June 30, 2008, 2007, and 2006. The Commonwealth contributed 8.5%, 7.75%, and 5.89% of covered payroll for the periods ended June 30, 2008, 2007, and 2006, respectively. The chart below includes the covered payroll and contribution amounts for KRS for the three periods included in this discussion.

	2008	2007	2006
Covered Payroll	$11,846,700	$11,269,800	$10,960,000
Employer Contributions	$1,007,00	$873,400	$641,200

Note J-Equipment

Equipment consists of the following:

Equipment as of June 30, 2008 and 2007

	2008	2007
Equipment, at cost	$10,211,395	$4,886,710
Less Accumulated Depreciation	(2,753,294)	(2,992,574)
	$7,458,101	$1,894,136

Depreciation expense for the fiscal years ended June 30, 2008 and 2007 amounted to $378,887 and $438,278, respectively.

Note K-Intangible Assets

The provisions of Governmental Accounting Standards Board (GASB) Statement No. 51, "Accounting and Financial Reporting for Intangible Assets" require that intangible assets be recognized in the Statement of Plan Net Assets only if they are considered identifiable. In conjunction with the adoption of GASB No. 51, KRS has capitalized software costs in the amount of $1,199,829 in fiscal 2008. This capitalization was due to the software costs incurred to date for the Strategic Technology Advancements for the Retirement of Tomorrow (START) project.

Software as of June 30, 2008 and 2007

	2008	2007
Software, at cost	$1,199,829	$0
Less Accumulated Amortization	(119,983)	(0)
	$1,079,846	0

Amortization expense for the fiscal year ended June 30, 2008 amounted to $119,983. The financial statements for fiscal 2007 require no adjustment since the software purchases were made in fiscal 2008.

In fiscal 2007, KRS initiated the START project. It is anticipated that START will be completed in its entirety in fiscal 2011. The objectives of the project are to provide employees with a technology solution that will enable them to serve more customers more quickly while providing continued superior service; to enhance business services and improve operational efficiency; to improve the accuracy of the information collected, maintained, and provided; to improve the timeliness and accuracy of responses to members' inquiries; to provide internet based, self-service capabilities to members, retirees, and employers; and, to ensure that retirees receive monthly benefits without error or disruption.

Note L-Alternative Investment

On February 6, 2006, the health insurance fund of KRS loaned to KRS Perimeter Park West, Inc., a related party, $700,000 for the purchase of real property at 1300 Louisville Road, Frankfort, Kentucky. The loan was not documented by a note, mortgage contract, or security interest in the property. Subsequent to the lending and purchase, the real property was valued by appraisal from $135,000 to $290,000. The range of appraisal values is based upon considerations of zoning classifications, site preparations and improvements, and other matters. KRS is reflecting the alternative investment at the lowest appraisal value for the property. Because of the significant difference in the appraised value of the property and the loan amount, and also because the loan was not documented by a note, mortgage contract, or security interest in the property, KRS is uncertain whether it will be able to collect any principal (or interest) in excess of the minimum appraised property value. Therefore, as of June 30, 2006, KRS management elected to write-down the value of the Alternative Investment to an estimated collectible value of $135,000.

Note M-Actuarial Valuation

The provisions of Governmental Accounting Standards Board (GASB) No. 50, "Pension Disclosures, an Amendment of GASB No. 25 and No. 27", require that actuarial information included in the Notes to the Required Supplementary Information be moved to the Notes to the Financial Statements. In conjunction with the adoption of GASB No. 50, KRS has moved the information on the following page from the Notes to the Required Supplementary Information to the Notes to the Financial Statements:

Pension Funds

	Non-Hazardous	Hazardous
Valuation Date	6/30/2008	6/30/2008
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	30 Years	30 Years
Asset Valuation Method	5-year Smoothed Market	5-year Smoothed Market
Actuarial Assumptions:		
Investment Return	7.75%	7.75%
Projected Salary Increases	4.0-13.5%	4.0-14.5%
Cost-of-Living Adjustment	None	None
Includes Inflation Rate	3.50%	3.50%

Insurance Funds

	Non-Hazardous	Hazardous
Valuation Date	6/30/2008	6/30/2008
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	30 Years	30 Years
Asset Valuation Method	5-year Smoothed Market	5-year Smoothed Market
Medical Trend Assumption	12.00-5.00%	12.00-5.00%
Year of Ultimate Trend	2015	2015
Actuarial Assumptions:		
Investment Return	4.50%	7.75%
Includes Inflation Rate	3.50%	3.50%

As of June 30, 2008, the most recent actuarial valuation date, KRS had the following Unfunded Actuarial Accrued Liabilities:

Pension Funds	
Kentucky Employees Retirement System (Hazardous and Non-Hazardous)	$4,926,775,705
County Employees Retirement System (Hazardous and Non-Hazardous)	2,224,969,975
State Police Retirement System	236,237,806
Total Pension Funds	7,387,983,486
Insurance Funds	
Kentucky Employees Retirement System (Hazardous and Non-Hazardous)	5,081,796,979
County Employees Retirement System (Hazardous and Non-Hazardous)	3,570,566,934
State Police Retirement System	321,146,271
Total Insurance Funds	8,973,510,184
Total Unfunded Liability as of June 30, 2008	**$16,361,493,670**

The Schedule of Funding Progress for the Pension Funds is on pages 76 through 78. The Schedule of Funding Progress for the Insurance Funds is on pages 79 through 83.

Note N — House Bill 1 Pension Reform

House Bill 1 was signed by the Governor of the Commonwealth on June 27, 2008. It contains a list of changes that KRS must implement by September 1, 2008. House Bill 1 also contains statutory changes to Kentucky Revised Statute 61.637, the law governing members who become reemployed following retirement.

Employee contributions for non-hazardous employees who begin participating with KRS on, or after, September 1, 2008, will contribute a total of 6% of all their creditable compensation to KRS. Five percent of this contribution will be deposited to the individual employee's account, while the other 1% will be deposited to an account created under 26 USC Section 401(h) in the KRS Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Hazardous employees who begin participating with KRS on, or after, September 1, 2008, will contribute a total of 9% of all their creditable compensation, with 8% credited to the member's account, and 1% deposited to the KRS Pension Fund. Interest paid each June on these members' accounts will now be set at a rate of 2.5%. If a member terminates his/her employment and applies to take a refund, the member will be entitled to a full refund of contributions and interest in his/her account; however, the 1% contributed to the 401(h) account in the KRS Pension Fund is non-refundable and will be forfeited.

Employer contribution rates for KERS and SPRS for fiscal 2009 were established in the 2008-2010 Executive Branch Budget (House Bill 460) during the 2008 session of the Kentucky General Assembly. Employer contribution rates for CERS for fiscal 2009 were enacted by House Bill 1 in the 2008 Special Legislative Session. The Employer contribution rates are established as follows (effective July 1, 2008):

KERS -Non Hazardous	10.01%
KERS - Hazardous	24.35%
CERS -Non Hazardous	13.50%
CERS - Hazardous	29.50%
SPRS	30.07%

These rates are less than the rates established by the Board of Trustees of KRS.

Although the majority of changes in this legislation will only impact new hires on, or after, September 1, 2008, there are some changes that will affect all members and retirees of KRS:

- Cost of Living Adjustment (COLA): Beginning July 1, 2009, COLA for retirees will now be set at 1.5% each July 1. The Kentucky General Assembly may increase this percentage at any time, but only if appropriate funding is allocated.

- Service Purchase Costs: The actuarial factors used to determine the cost to purchase a service will now assume the earliest date a member can retire with an

unreduced benefit, and will also include a COLA. This change will result in an increased service purchase cost for any purchase calculated on, or after, September 1, 2008. This change will also affect the cost billed to employers for sick leave when an employee retires.

- Payment Options: The Partial Lump Sum Payment Options will only be available for those employees who retire on, or before, January 1, 2009.

- Kentucky Revised Statute 61.637 was modified significantly by House Bill 1. Specifically, a retiree reemployed on, or after, September 1, 2008, may not accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions will be used to reduce the unfunded actuarial liability.

Additionally, if the retiree is reemployed in a regular full time position and has chosen health insurance coverage through KRS, his/her employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate.

Note O — Market Risk

Subsequent to June 30, 2008, the United States financial markets have experienced significant volatility. The investments of KRS are subject to potential loss arising from adverse changes in quoted market prices on equity securities and interest rates on fixed income securities. For the period from June 30, 2008 to October 31, 2008, it is estimated that KRS' investments have declined in market value approximately $2,645 million. KRS will continue to monitor its investments as it has done in the past, but mitigates this risk through a diverse investment portfolio.

Schedule of Funding Progress

Kentucky Employees Retirement System (KERS) - Pension Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$6,844,742,687	$5,444,035,294	($1,400,707,393)	125.7%	$1,505,299,220	(93.1%)
June 30, 2002*	6,654,084,196	6,026,094,764	(627,989,432)	110.4	1,595,809,458	(39.3)
June 30, 2003**	6,351,318,832	6,520,463,188	169,144,356	97.4	1,658,604,696	10.2
June 30, 2004**	6,000,513,743	7,049,613,171	1,049,099,428	85.1	1,645,412,496	63.8
June 30, 2005**	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
June 30, 2006**	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
June 30, 2007**	5,396,782,459	9,485,939,278	4,089,156,819	56.9	1,780,223,493	229.7
June 30, 2008**	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8

Hazardous						
June 30, 2001	$361,677,475	$285,193,761	($76,483,714)	126.8%	$122,857,992	(62.3%)
June 30, 2002*	376,384,302	322,069,164	(54,315,138)	116.9	125,275,925	(43.4)
June 30, 2003**	385,925,722	356,879,133	(29,046,589)	108.1	129,088,956	(22.5)
June 30, 2004**	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
June 30, 2005**	405,288,662	439,013,910	33,725,248	92.3	131,687,088	25.6
June 30, 2006**	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
June 30, 2007**	467,287,809	558,992,327	91,704,518	83.6	144,838,020	63.3
June 30, 2008**	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
Total						
June 30, 2001	$7,206,420,162	$5,729,229,055	($1,477,191,107)	125.8%	$1,628,157,212	(90.7%)
June 30, 2002*	7,030,468,498	6,348,163,928	(682,304,570)	110.7	1,721,085,383	(39.6)
June 30, 2003**	6,737,244,554	6,877,342,321	140,097,767	98.0	1,787,693,652	7.8
June 30, 2004**	6,397,726,506	7,453,191,207	1,055,464,701	85.8	1,772,077,308	59.6
June 30, 2005**	5,983,974,408	8,018,088,749	2,034,114,341	74.6	1,787,594,376	113.8
June 30, 2006**	5,822,070,515	9,503,482,151	3,681,411,634	61.3	1,840,978,097	200.0
June 30, 2007**	5,864,070,268	10,044,931,605	4,180,861,337	58.4	1,925,061,513	217.2
June 30, 2008**	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
**Covered payroll was actuarially computed as opposed to estimated in prior years.

Schedule of Funding Progress

County Employees Retirement System (CERS) - Pension Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$5,423,834,549	$3,706,282,212	($1,717,552,337)	146.3%	$1,544,973,296	(111.2%)
June 30, 2002*	5,397,787,158	4,165,355,149	(1,232,432,009)	129.6	1,663,183,629	(74.1)
June 30, 2003**	5,286,580,047	4,417,597,802	(868,982,245)	119.7	1,796,451,180	(48.4)
June 30, 2004**	5,187,851,530	4,936,459,488	(251,392,042)	105.1	1,826,870,880	(13.8)
June 30, 2005**	5,059,208,687	5,385,306,505	326,097,818	93.9	1,885,275,000	17.3
June 30, 2006**	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
June 30, 2007**	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
June 30, 2008**	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6

Hazardous						
June 30, 2001	$1,486,666,016	$1,193,860,442	($292,805,574)	124.5%	$316,700,304	(92.5%)
June 30, 2002*	1,485,511,793	1,327,291,273	(158,220,520)	111.9	345,849,277	(45.7)
June 30, 2003**	1,467,004,856	1,499,628,782	32,623,926	97.8	374,700,732	8.7
June 30, 2004**	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
June 30, 2005**	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
June 30, 2006**	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
June 30, 2007**	1,639,288,294	2,208,736,179	569,447,885	74.2	458,998,956	124.1
June 30, 2008**	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
Total						
June 30, 2001	$6,910,500,565	$4,900,142,654	($2,010,357,911)	141.0%	$1,861,673,600	(108.0%)
June 30, 2002*	6,883,298,951	5,492,646,422	(1,390,652,529)	125.3	2,009,032,906	(69.2)
June 30, 2003**	6,753,584,903	5,917,226,584	(836,358,319)	114.1	2,171,151,912	(38.5)
June 30, 2004**	6,645,463,572	6,577,289,608	(68,173,964)	101.0	2,219,433,504	(3.1)
June 30, 2005**	6,511,561,710	7,180,923,840	669,362,130	90.7	2,296,396,728	29.2
June 30, 2006**	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
June 30, 2007**	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4
June 30, 2008**	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
**Covered payroll was actuarially computed as opposed to estimated in prior years.

Schedule of Funding Progress

State Police Retirement System (SPRS) - Pension Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2001	$456,160,709	$356,211,860	($99,948,849)	128.1%	$44,646,678	(223.7%)
June 30, 2002*	438,955,465	380,790,346	(58,165,119)	115.3	44,314,696	(131.2)
June 30, 2003**	413,063,576	414,881,459	1,817,883	99.6	43,760,832	4.2
June 30, 2004**	385,077,195	437,482,425	52,405,230	88.0	43,835,208	119.6
June 30, 2005**	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
June 30, 2006**	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
June 30, 2007**	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
June 30, 2008**	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
**Covered payroll was actuarially computed as opposed to estimated in prior years.

Schedule of Funding Progress

State Police Retirement System (SPRS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2001	$79,863,577	$158,261,479	$78,397,902	50.5%	$44,646,678	175.6%
June 30, 2002*	86,867,391	165,445,412	78,578,021	52.5	44,314,696	177.3
June 30, 2003**	90,747,967	184,501,205	93,753,238	49.2	43,760,832	214.2
June 30, 2004**	96,622,908	197,604,301	100,981,393	48.9	43,835,208	230.4
June 30, 2005**	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
June 30, 2006**	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
June 30, 2007**	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
June 30, 2008**	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
**Covered payroll was actuarially computed as opposed to estimated in prior years.

Schedule of Funding Progress

Kentucky Employees Retirement System (KERS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$449,630,605	$1,769,583,098	$1,319,952,493	25.4%	$1,505,299,220	87.7%
June 30, 2002*	521,250,455	1,907,683,881	1,386,433,426	27.3	1,595,809,458	86.9
June 30, 2003**	553,885,082	2,093,210,321	1,539,325,239	26.5	1,658,604,696	92.8
June 30, 2004**	600,586,961	2,335,905,365	1,735,318,404	25.7	1,645,412,496	105.5
June 30, 2005**	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
June 30, 2006**	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
June 30, 2007**	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
June 30, 2008**	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7

Hazardous						
June 30, 2001	$119,372,742	$214,450,822	$95,078,080	55.7%	$122,857,992	77.4%
June 30, 2002*	135,874,582	236,819,050	100,944,468	57.4	125,275,925	80.6
June 30, 2003**	151,459,500	283,178,335	131,718,835	53.5	129,088,956	102.0
June 30, 2004**	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
June 30, 2005**	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
June 30, 2006**	212,833,818	621,237,856	408,404,038	34.3	138,747,320	294.4
June 30, 2007**	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
June 30, 2008**	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
Total						
June 30, 2001	569,003,347	$1,984,033,920	$1,415,030,573	28.7%	$1,628,157,212	86.9%
June 30, 2002*	657,125,037	2,144,502,931	1,487,377,894	30.6	1,721,085,383	86.4
June 30, 2003**	705,344,582	2,376,388,656	1,671,044,074	29.7	1,787,693,652	93.5
June 30, 2004**	769,745,840	2,659,408,928	1,889,663,088	28.9	1,772,077,308	106.6
June 30, 2005**	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
June 30, 2006**	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,178,097	413.5
June 30, 2007**	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
June 30, 2008**	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
**Covered payroll was actuarially computed as opposed to estimated in prior years.

Schedule of Funding Progress

County Employees Retirement System (CERS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2001	$371,758,628	$1,793,710,768	$1,421,952,140	20.7%	$1,544.973,296	92.0%
June 30, 2002*	450,497,307	1,977,577,038	1,527,079,731	22.8	1,663,183,629	91.8
June 30, 2003**	520,060,105	2,176,963,259	1,656,903,154	23.9	1,796,451,180	92.2
June 30, 2004**	585,399,072	2,438,734,696	1,853,335,624	24.0	1,826,870,880	101.5
June 30, 2005**	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
June 30, 2006**	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
June 30, 2007**	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
June 30, 2008**	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4

Hazardous						
June 30, 2001	$197,875,249	$721,605,292	$523,730,043	27.4%	$316,700,304	165.4%
June 30, 2002*	234,683,878	781,184,974	546,501,096	30.1	345,849,279	158.0
June 30, 2003**	269,190,080	935,650,662	666,460,582	28.8	374,700,732	177.9
June 30, 2004**	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
June 30, 2005**	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
June 30, 2006**	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
June 30, 2007**	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
June 30, 2008**	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
Total						
June 30, 2001	$569,633,877	$2,515,316,060	$1,945,682,183	22.6%	$1,861,673,600	104.5%
June 30, 2002*	685,181,185	2,758,762,012	2,073,580,827	24.8	2,009,032,908,	103.2
June 30, 2003**	789,250,185	3,112,613,921	2,323,363,736	25.4	2,171,151,912	107.0
June 30, 2004**	895,977,234	3,464,419,173	2,568,441,939	25.9	2,219,433,504	115.7
June 30, 2005**	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
June 30, 2006**	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
June 30, 2007**	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
June 30, 2008**	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2

*Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and the following four years.
**Covered payroll was actuarially computed as opposed to estimated in prior years.

Schedule of Contributions From Employers and Other Contributing Entities

Kentucky Employees Retirement System (KERS) Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2001	$21,787,253	$23,482,080		107.8
June 30, 2002		$1,760,328		
June 30, 2003	$4,905,399	$7,597,450		154.9
June 30, 2004	$47,739,067	$21,696,543		45.4
June 30, 2005	$85,798,943	$50,332,750		58.7
June 30, 2006	$129,125,800	$60,680,607		47.0
June 30, 2007	$176,774,106	$88,248,677		49.9
June 30, 2008	$264,742,985	$104,655,217		39.5

	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Insurance				
June 30, 2001	$66,874,871	$66,874,871		100
June 30, 2002	$93,993,177	$93,912,017		99.9
June 30, 2003	$92,052,561	$65,335,219		71.0
June 30, 2004	$77,951,553	$78,016,737		100.1
June 30, 2005	$86,974,271	$49,909,228		57.4
June 30, 2006	$202,498,302	$47,634,639		23.5
June 30, 2007	$219,268,964	$64,014,332	$10,744,049	34.0
June 30, 2008	$558,745,820	$56,744,942	$6,633,538	11.3
Total				
June 30, 2001	$88,662,124	$90,356,951		101.9
June 30, 2002	$93,993,177	$95,672,345		101.8
June 30, 2003	$96,957,960	$72,932,669		75.2
June 30, 2004	$125,690,620	$99,713,280		79.3
June 30, 2005	$172,773,214	$100,241,978		58.0
June 30, 2006	$331,624,102	$108,315,246		43.8
June 30, 2007	$396,543,070	$152,263,009	$10,744,049	39.8
June 30, 2008	$823,488,805	$161,400,159	$6,633,538	20.4

Schedule of Contributions From Employers and Other Contributing Entities

Kentucky Employees Retirement System (KERS) Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2001	$9,920,148	$10,626,663		107.1
June 30, 2002	$7,742,052	$7,933,817		102.5
June 30, 2003	$8,511,402	$7,322,607		86.0
June 30, 2004	$9,600,978	$9,769,580		101.8
June 30, 2005	$9,449,878	$9,758,547		103.3
June 30, 2006	$10,787,472	$10,803,206		100.1
June 30, 2007	$12,219,689	$13,237,321		108.3
June 30, 2008	$14,147,341	$15,257,079		107.8

	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Insurance				
June 30, 2001	$13,226,298	$13,226,298		100
June 30, 2002	$15,859,932	$15,887,399		100.2
June 30, 2003	$15,839,215	$15,883,263		100.3
June 30, 2004	$14,942,092	$14,959,617		100.1
June 30, 2005	$15,892,977	$15,395,977		96.9
June 30, 2006	$28,517,563	$17,011,745		59.7
June 30, 2007	$31,304,778	$19,534,819	$104,669	62.7
June 30, 2008	$51,214,929	$21,997,341	$73,891	43.1
Total				
June 30, 2001	$23,146,446	$23,852,961		103.1
June 30, 2002	$23,601,984	$23,821,216		100.9
June 30, 2003	$24,350,617	$23,205,870		95.3
June 30, 2004	$24,543,070	$24,729,197		100.8
June 30, 2005	$25,342,855	$25,154,524		99.3
June 30, 2006	$39,305,035	$27,814,951		70.8
June 30, 2007	$43,524,467	$32,772,140	$104,669	75.3
June 30, 2008	$65,362,270	$37,254,420	$73,891	57.1

Schedule of Contributions From Employers and Other Contributing Entities

County Employees Retirement System (CERS) Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2001	$35,658,922	$48,914,435		137.2
June 30, 2002	$3,326,367	$5,528,348		166.2
June 30, 2003	$8,682,257	$11,855,694		136.6
June 30, 2004	$43,111,505	$44,028,465		102.1
June 30, 2005	$53,117,955	$54,616,800		102.8
June 30, 2006	$83,123,669	$90,834,052		109.3
June 30, 2007	$112,508,305	$124,260,850		110.4
June 30, 2008	$138,311,398	$150,925,334		109.1

	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Insurance				
June 30, 2001	$62,292,385	$62,292,385		100.0
June 30, 2002	$102,119,475	$102,150,543		100.0
June 30, 2003	$102,038,427	$99,234,843		97.3
June 30, 2004	$89,289,520	$89,344,241		100.1
June 30, 2005	$106,612,633	$106,638,253		100.0
June 30, 2006	$272,942,757	$128,867,817		47.2
June 30, 2007	$285,600,490	$147,608,801	$9,623,431	55.1
June 30, 2008	$406,541,729	$196,110,111	$6,003,181	49.7
Total				
June 30, 2001	$97,951,307	$111,206,820		113.5
June 30, 2002	$105,445,842	$107,678,891		102.1
June 30, 2003	$110,720,684	$111,090,537		100.3
June 30, 2004	$132,401,025	$133,372,706		100.7
June 30, 2005	$159,730,588	$161,255,053		101.0
June 30, 2006	$356,066,426	$219,701,869		61.7
June 30, 2007	$398,108,795	$271,869,651	$9,623,431	70.7
June 30, 2008	$544,853,127	$347,035,445	$6,003,181	64.8

Schedule of Contributions From Employers and Other Contributing Entities

County Employees Retirement System (CERS) Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2001	$19,409,377	$20,983,360		108.1
June 30, 2002	$10,582,988	$11,054,949		104.5
June 30, 2003	$19,920,223	$16,905,556		84.9
June 30, 2004	$27,050,382	$27,640,775		102.2
June 30, 2005	$39,437,725	$39,947,747		101.3
June 30, 2006	$44,059,404	$49,976,485		113.4
June 30, 2007	$53,889,838	$61,553,118		114.2
June 30, 2008	$64,082,063	$72,154,734		112.6

	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Insurance				
June 30, 2001	$32,149,432	$32,149,432		100.0
June 30, 2002	$45,721,274	$45,730,333		100.0
June 30, 2003	$43,502,755	$45,243,950		104.0
June 30, 2004	$47,018,046	$47,036,777		100.0
June 30, 2005	$54,094,495	$54,106,577		100.0
June 30, 2006	$98,297,535	$64,853,778		66.0
June 30, 2007	$115,938,899	$70,072,785	$656,523	61.0
June 30, 2008	$168,723,639	$90,113,200	$419,774	53.7
Total				
June 30, 2001	$51,558,809	$53,132,792		103.1
June 30, 2002	$56,304,262	$56,785,282		100.9
June 30, 2003	$63,422,978	$62,149,506		98.0
June 30, 2004	$74,068,428	$74,677,552		100.8
June 30, 2005	$93,532,220	$94,054,324		100.6
June 30, 2006	$142,356,939	$114,830,263		80.7
June 30, 2007	$169,828,737	$131,625,903	$656,523	101.6
June 30, 2008	$232,805,702	$162,267,934	$419,774	70.0

Schedule of Contributions From Employers and Other Contributing Entities

State Police Retirement System (SPRS)

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2001	$1,535,846	$1,515,521		98.7
June 30, 2002		$(17,643)		
June 30, 2003		$(20,061)		
June 30, 2004	$1,175,711	$1,152,752		98.0
June 30, 2005	$3,730,805	$2,851,461		76.4
June 30, 2006	$6,352,777	$4,244,445		66.8
June 30, 2007	$9,023,665	$6,142,326		68.1
June 30, 2008	$13,823,490	$7,443,277		53.8

	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Insurance				
June 30, 2001	$8,098,907	$8,113,391		100.2
June 30, 2002	$9,563,111	$9,579,899		100.1
June 30, 2003	$9,443,588	$7,654,313		81.1
June 30, 2004	$8,434,834	$8,455,498		100.2
June 30, 2005	$8,608,536	$6,631,031		77
June 30, 2006	$12,554,648	$6,880,517		54.8
June 30, 2007	$15,233,320	$6,488,600	$361,942	45.0
June 30, 2008	$43,469,735	$7,329,229	$183,564	17.3
Total				
June 30, 2001	$9,634,753	$9,628,912		99.9
June 30, 2002	$9,563,111	$9,562,256		100
June 30, 2003	$9,443,588	$7,634,252		80.8
June 30, 2004	$9,610,545	$9,608,250		100
June 30, 2005	$12,339,341	$9,482,492		76.8
June 30, 2006	$18,907,425	$11,124,962		58.8
June 30, 2007	$24,256,985	$12,630,926	$361,942	54.0
June 30, 2008	$57,293,225	$14,772,506	$183,564	26.0

Schedule of Administrative Expenses Dollars in Thousands ($)

For the Fiscal Year Ended June 30,	2008	2007
Personal Services		
Salaries and Per Diem	$12,339	$ 11,429
Fringe Benefits	3,445	3,230
Tuition Assistance	56	53
Total Personal Services	15,840	14,712
Contractual Services		
Actuarial	474	470
Audit	49	42
Legal	843	395
Medical	222	255
Contractual	774	637
Total Contractual Services	2,362	1,799
Communication		
Printing	325	331
Telephone	138	147
Postage	634	633
Travel	205	236
Total Communication	1,302	1,347

	2008	2007
Rentals		
Office Space	1,056	979
Equipment	86	67
Total Rentals	1,142	1,046
Miscellaneous		
Utilities	258	274
Supplies	230	268
Insurance	64	64
Maintenance	642	441
Other	569	687
Total Miscellaneous	1,763	1,734
Depreciation/Amortization	498	439
Total Pension Fund Administrative Expense	22,907	21,077
Healthcare Administrative Expenses	7,477	6,748
Total Administrative Expenses	**$30,384**	**$27,825**

Schedule of Investment Expenses Dollars in Thousands ($)

For the Fiscal Year Ended June 30,	2008	2007
Pension Funds		
Security Lending Fees		
Broker Rebates	$115,960	$177,377
Lending Agent Fees	4,950	2,129
Total Security Lending	120,910	179,506
Common Stock Commissions	7,915	7,386
Contractual Services		
Investment Management	12,273	10,573
Security Custody	209	381
Investment Consultant	231	377
Investment Related Travel	37	25
Total Contractual Services	12,750	11,356
Insurance Funds		
Security Lending Fees		
Broker Rebates	27,476	34,796
Lending Agent Fees	1,008	338

	2008	2007
Total Security Lending	28,484	35,134
Common Stock Commissions	1,249	744
Contractual Services		
Investment Management	1,702	1,297
Security Custody	41	69
Investment Consultant	46	68
Investment Related Travel	7	4
Total Contractual Services	1,796	1,438
Total Administrative Expenses	**$173,104**	**$235,564**

Schedule of Professional Consultant Fees
For the Fiscal Years Ended June 30, 2008 and 2007

	2008	2007
(Dollars in Thousands)		
Actuarial Services	$474	$470
Medical Review Services	221	255
Audit Services	49	42
Legal Counsel	843	395
Compliance	120	180
Workflow	424	245
Healthcare	17	133
Banking	48	53
Human Resource	104	
Miscellaneous	62	26
Total	**$2,362**	**$1,799**

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Report On Internal Control Over Financial Reporting and On Compliance and Other Matters Based On An Audit Of Financial Statements Performed In Accordance with *Government Auditing Standards*

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ended June 30, 2008, and have issued our report thereon dated November 17, 2008. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Kentucky Retirement Systems' internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Kentucky Retirement Systems' internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Kentucky Retirement Systems' internal control over financial reporting.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the entity's ability to initiate, authorize, record, process, or report financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of the entity's financial statements that is more than inconsequential will not be prevented or detected by the entity's internal control.

A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the financial statements will not be prevented or detected by the entity's internal control.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance & Other Matters

As part of obtaining reasonable assurance about whether Kentucky Retirement Systems' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

This report is intended solely for the information of the audit committee, management, and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

November 17, 2008
Lexington, Kentucky

Current Year

Our audit disclosed no findings which are required to be reported in accordance with *Government Auditing Standards*.

Investments Section

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Kentucky Retirement Systems
A component unit of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

Investment Oversight

The Board of Trustees is responsible for overseeing the investment decisions of the Kentucky Retirement Systems. While enhancing revenues is a vital component of maintaining member benefits, the Board also takes great care to preserve capital and protect funds against undue losses.

The Board recognizes their fiduciary duty not only to formally invest in compliance with the Prudent Person Rule, but also to manage in recognition of the long-term nature of the Systems.

◂ What is the Prudent Person Rule?
A legal maxim restricting the discretion in a client's account to investments that a prudent person seeking reasonable income and preservation of capital might buy for their own portfolio.

Short Term & Long Term

Short-term investment objectives stipulate that annual returns of managed funds should exceed returns achieved by a policy benchmark portfolio, composed of comparable unmanaged market indices (Ex. S&P 500, Russell 1000, MSCI EAFE, etcetera).

Long-term investment objectives stipulate that returns measured over two market cycles (estimated as six to ten years) should exceed the 7.75% Actuarially Required Rate of Return, as well as surpass returns achieved by the fund benchmark.

Additionally, the Board encourages investment in securities of corporations that provide a positive economic contribution to the Commonwealth of Kentucky.

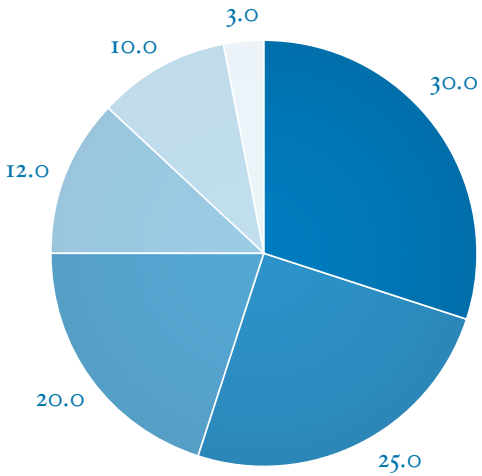
◂ Contributing to Kentucky's Economy
KRS invests in many companies that impact our economy, several include Yum! Brands, Coca-Cola, and Toyota.

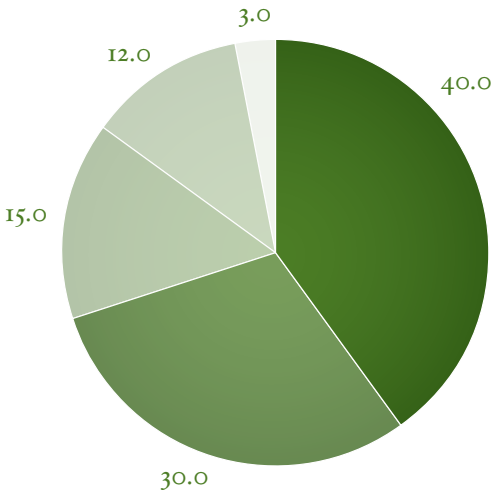
Target Allocations (%) for Pension & Insurance Funds

The Board approved a new target asset allocation, beginning July 1, 2007. The following graphs depict the Board's investment policy as of June 30, 2008.

Asset Class	Pension
U.S. Equity	30.0%
Fixed Income	25.0
International Equity	20.0
Alternatives	12.0
TIPS	10.0
Cash	3.0

Asset Class	Insurance
U.S. Equity	40.0%
International Equity	30.0
Alternatives	15.0
TIPS	12.0
Cash	3.0





◂ **What are Alternative investments?**
Assets like Private Equity and Real Estate

◂ **What does TIPS stand for?**
Treasury Inflation Protected Securities

Diversifying Assets & Rebalancing Allocations

Portfolios are diversified through the use of multiple asset classes. Within each asset class portfolios are diversified through the selection of individual securities. Each asset class is diversified through the use of multiple portfolios that are managed by KRS staff, professional consultants, external money managers and advisors. Advisors are afforded discretion to diversify within the guideline parameters established by the Board. Both the Pension and Insurance portfolios remained within this established range in fiscal 2008.

Proper implementation of the investment policy requires that a periodic adjustment of assets be made. Such rebalancing is necessary to ensure conformance with the Statement of Investment Policy target levels, which also calls for an immediate rebalancing to allocation ranges if an asset class exceeds or falls below its target by 10%.

◂ **Statement of Investment Policies**
View the Pension Fund policy by visiting
www.kyret.com/investments/psoip.pdf

View the Insurance Fund policy by visiting
www.kyret.com/investments/isoip.pdf

Performance Review Procedures

At least once each quarter the Investment Committee, on behalf of the Board of Directors, reviews portfolio performances to ensure compliance with the Statement of Investment Policy. Additionally, the KRS Investment Division performs daily tests to assure compliance with the investment policy.

Investment Consulting

The Board employs industry-leading consultants to independently assist in reviewing asset allocation guidelines, as well as the performance of internally managed and externally managed assets.

◂ **Consultant Perspective**
A review from Strategic Investment Solutions, Inc., is available in the following section. Get their perspective on our allocations and performance.

Strategic Investment Solutions, Inc.

333 Bush Street, Ste 2000, San Francisco, California 94104
Tel 415/362-3484 ■ Fax 415/362-2752

The following is a review of KRS funds by Strategic Investment Solutions, Inc., a professional investment consultant.

STRATEGIC INVESTMENT SOLUTIONS, INC.
333 BUSH STREET, STE 2000, SAN FRANCISCO, CALIFORNIA 94104
TEL 415/362-3484 ■ FAX 415/362-2752

DATE: SEPTEMBER 19, 2008
SUBJECT: ANNUAL FUND REVIEW

The Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West, 1260 Louisville Rd., Frankfort, KY 40601

Dear Trustees:
Strategic Investment Solutions is charged with the duty to advise the Board in its asset management activities. This is our annual review of the asset management of the Kentucky Retirement Systems. Although we recognize that the Board of Trustees is charged with the responsibility of managing the Funds in a manner consistent with the basic long term nature of the participating systems, our comments focus on the fiscal year ended June 30, 2008. In managing the Funds, the Board must maintain formal compliance with the Prudent Person Rule. Therefore, it seeks to maintain proper and appropriate diversification for the Fund.

Market Highlights

Global equity markets experienced a sharp drop during FY 2008. In the US, the follow-on effects of the sub-prime meltdown and the de-leveraging of financial positions have led to massive write-downs of asset values by major financial services firms. The forced sale of Bear Stearns to JP Morgan on March 14 was a precursor to several other massive write-down and bankruptcy announcements later in 2008. Inflation became a serious concern during the latter part of the year as energy, food, and raw materials prices increased dramatically. This presented the Federal Reserve with a dilemma: provide the markets with greater liquidity to help avert more severe economic pain or tighten monetary policy to help stem accelerating inflation. Uncertainty led to much higher market volatility during FY 2008. Growth stocks outperformed value stocks but this seemed like a Pyrrhic victory as both were negative over the year. Most of this decline occurred in just the month of June as financial turmoil battered the market. Non-US stocks were no safe haven, especially in June, though emerging market stocks held up relatively well over the year due to their benefiting from higher commodities prices.

On the fixed income side, interest rates fell as the Fed began easing aggressively, also leading to a steepening yield curve, while high yield bonds were hurt by credit concerns and illiquidity. Alternative investments continued to do well relative to public markets.

The US dollar weakened against the Euro and Japanese Yen during this period, boosting International Equity and Fixed Income returns. The S&P 1500 Index fell 12.7% over the

past year while the MSCI EAFE (International Equity) Index (Gross) fell 10.1%. The fixed income markets, as represented by the Lehman Aggregate Bond Index, rose 7.1%.

Systems Highlights

According to the Fund Analytics statements from Northern Trust, the Pension Fund's assets decreased from $14.2 billion on June 30, 2007 to $12.9 billion on June 30, 2008. The Fund returned -4.2% during this period versus -3.8% for the Reference Index. The Insurance Fund's assets decreased from $2.7 billion on June 30, 2007 to $2.6 billion on June 30, 2008. It also modestly outperformed its benchmark, returning -7.8% versus -7.9% for the Reference Index. Please note the Reference Indices are constructed according to the individual target asset allocations of the Funds.

The Pension Fund was overweight domestic equity, at target for international equity and fixed income, and underweight alternative investments at the end of FY 2008. The Insurance Fund was overweight domestic equity and cash equivalents and underweight international equity, fixed income, and alternative investments. KRS continues to be in the process of implementing significant changes to the allocation targets of both Funds. The Funds benefited from strong relative performance in public equities and Alternative Investments.

The asset allocations for the Pension and Insurance Funds as of June 30 are provided (at right) relative to their allocation targets.

Pension Allocations (%) as of June 30, 2008

Asset Class	Target	Actual
U.S. Equity	30.0%	33.2%
International Equity	20.0	20.2
Fixed Income	25.0	22.1
Alternatives [1]	12.0	9.5
TIPS	10.0	12.8
Cash [2]	3.0	2.2

Insurance Allocations (%) as of June 30, 2008

Asset Class	Target	Actual
U.S. Equity	40.0%	43.3%
International Equity	30.0	26.7
Alternatives [1]	15.0	7.0
TIPS	12.0	12.8
Cash [2]	3.0	10.2

[1] Includes Private Equity and Real Estate
[2] Includes equitization positions

All major asset classes are within their allowable ranges. Differences between actual and target allocations are generally the result of KRS working towards implementing recent asset allocation changes.

Investment Manager Highlights

Pension Fund

Among domestic equity managers, the INVESCO structured equity portfolio (-10.1%) beat the benchmark return (-13.1%) while the S&P 1500 Index portfolio (-12.7%) matched its benchmark. The NTQA small cap portfolio lagged (-17.1% vs. -16.2% for the Russell 2000 Index).

On the international side, the BGI International Alpha Tilts core and Boston Company value portfolios trailed their benchmarks (-11.5% and -14.3%, respectively, vs. -10.1% for the MSCI EAFE (Gross) Index). The Fidelity growth portfolio (-4.7%) well exceeded the Index. KRS funded two new emerging market equity portfolios in March, Aberdeen and Wellington.

All three core fixed income portfolios trailed their benchmark during the entire fiscal year: Lincoln Capital (4.54% vs. 7.12% for the Lehman Aggregate Index), Baird (3.75%), and Pyramis (6.09%). Fortunately, both TIPS portfolios beat the Lehman US TIPS Index (15.4% for the Internal portfolio and 15.2% for the Barksdale portfolio vs. 15.1% for the Index). Over longer periods the managers have met or trailed the benchmark net of management fees due to the recent credit crisis, as most active managers have underweighted Treasuries.

The Alternatives portfolio continued its strong performance record relative to public equities since inception, with a 4.9% return, beating the 3.3% return of the Blended Index. Over the past three years, the portfolio gained 5.0% vs. 4.1% for the Index on an annualized basis.

Insurance Fund

The S&P 1500 Index portfolio met the index return (-13.0% vs. -12.7% for the S&P 1500 Total Return Index) while Fidelity (-4.5% vs. -10.1% for the MSCI EAFE Index) did quite well. The Internal TIPS portfolio exceeded the Lehman TIPS Index return (15.3% vs. 15.1%).

Summary

During the 2008 fiscal year the Pension and Insurance Funds were hurt by the credit crisis and deteriorating economy, though improved diversification helped to protect the Funds' assets. The System continues to implement the Funds' long-term asset allocation changes.

Sincerely,

Peter A. Keliuotis, CFA
Managing Director

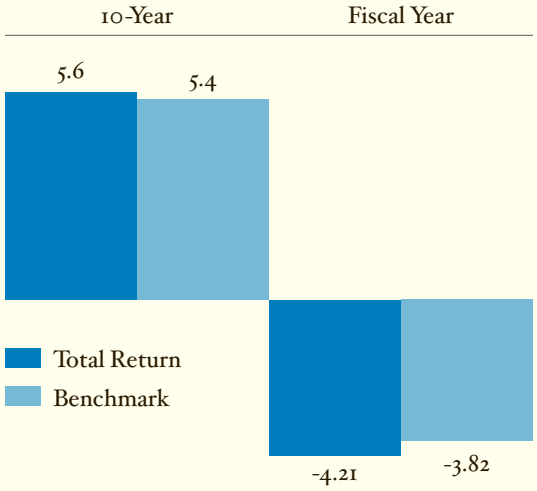
cc: A. Tosh, B. Cracraft, B. Aldridge (KRS)

Investment Results as of June 30, 2008

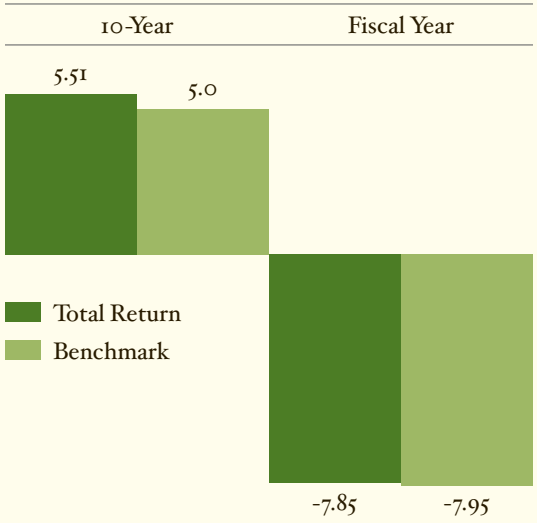
The Pension Fund returned -4.21%, which trailed the return of its benchmark by 0.39% and also fell short of the actuarially required rate of return of 7.75%. The below benchmark performance of the Pension Fund was due, in large part, to an above benchmark weighting to domestic equities (the worst performing asset class for the period) and below benchmark performance from the fixed income asset class.

The Insurance Fund also posted a negative return of -7.85% compared to the benchmark's -7.95% and the actuarially required rate of 7.75%. The fund outpaced its benchmark in large part due to above benchmark performance from the international equity portfolio, and a below benchmark allocation to the alternative asset portfolio, which was one of the worst performing asset classes as reflected by its respective benchmark's return.

Pension Fund & Benchmark Returns (%)



Insurance Fund & Benchmark Returns (%)



Benchmarks

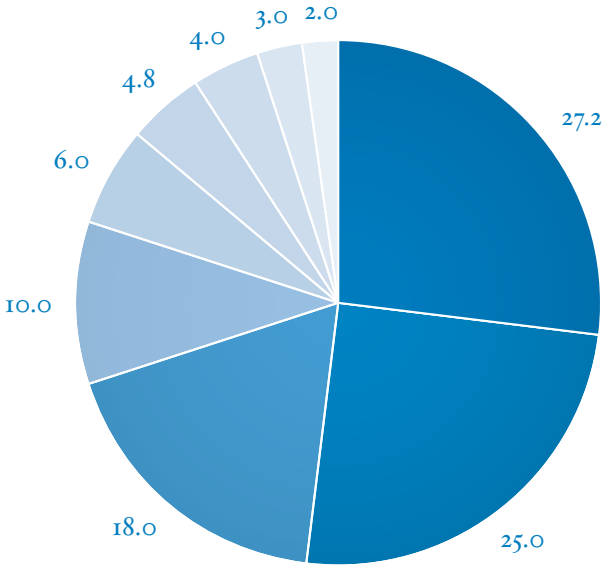
Benchmarks utilized to measure the Pension and Insurance Funds are a weighted average composite of the various asset class indicies consisting within each KRS investment portfolio.

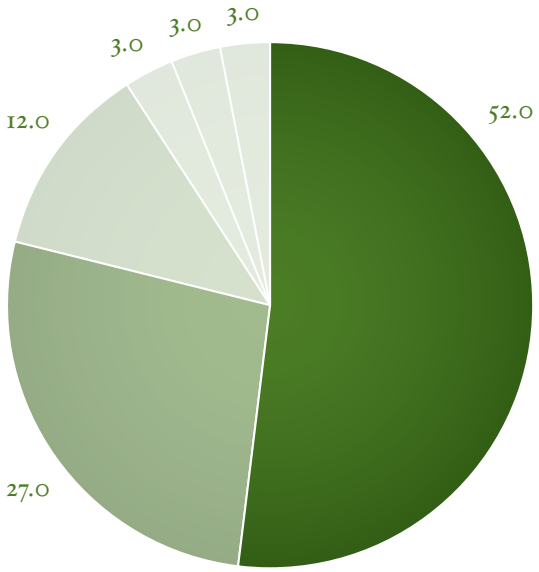
These benchmarks are intended to be objective, measurable, investable/replicable, and representative of the investment mandates. They are developed from publicly available information, and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate. KRS' Investment Division and consultant recommend the indicies and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the Board of Trustees. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total Benchmarks will evolve to reflect these exposures.

Pension & Insurance Funds Benchmark Allocations (%)

Benchmarks are a weighted average composite of the various asset class indicies consisting within each KRS investment portfolio. Following is the Pension and Insurance Total Fund Benchmark composition.

Index	Pension Fund	Insurance Fund
S&P 1500 Composite	27.2%	52.0%
Lehman Brothers Aggregate	25.0	-
MSCI Europe, Australia and Far East	18.0	27.0
Lehman Brothers TIPS	10.0	12.0
S&P 500 Composite	6.0	-
Lehman Brothers High Yield Corporate	4.8	3.0
Russell 2000 Index	4.0	-
3-Month U.S. Treasury Bill	3.0	3.0
MSCI Emerging Markets	2.0	3.0



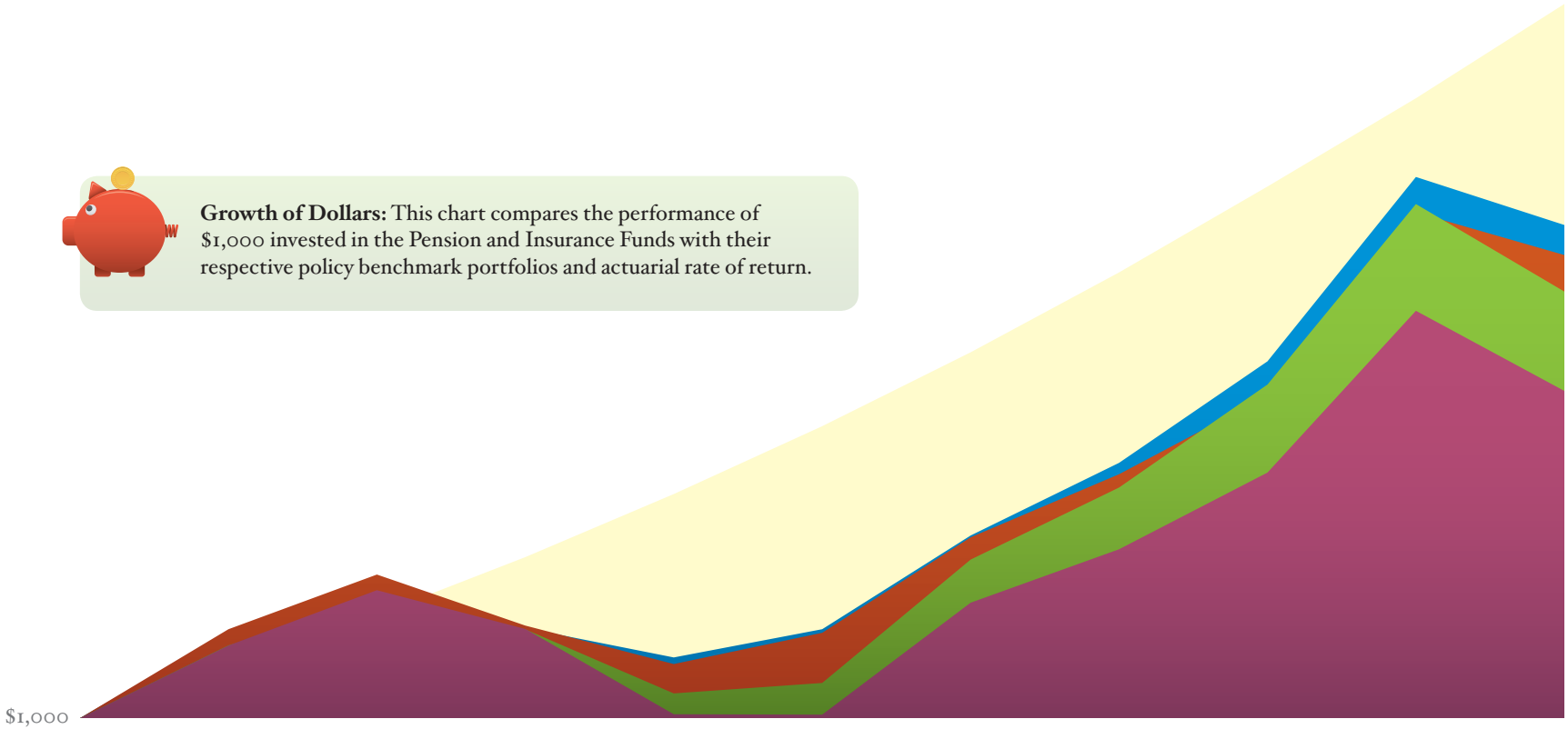


Long-Term Results

The 10-years ending June 30, 2008, the Pension Fund earned an annualized total return of 5.60% and remains ahead of, or in line with, its benchmark for each of the time periods except the current fiscal year. The Insurance Fund continued to outperform its benchmark, earning a 5.51% return for the same period. Returns have been above, or in line with, the benchmark for each.

Investment	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Pension Fund	$1,000	$1,143	$1,216	$1,150	$1,101	$1,148	$1,304	$1,425	$1,594	$1,901	$1,821
Pension Fund Benchmark	1,000	1,148	1,239	1,154	1,090	1,142	1,301	1,406	1,537	1,842	1,771
Insurance Fund	1,000	1,121	1,193	1,148	1,041	1,059	1,264	1,384	1,555	1,856	1,710
Insurance Fund Benchmark	1,000	1,121	1,213	1,148	1,006	1,006	1,192	1,281	1,409	1,678	1,545
Actuarial Assumed ROR	1,000	1,083	1,172	1,268	1,373	1,486	1,609	1,742	1,885	2,032	2,189

Growth of Dollars: This chart compares the performance of $1,000 invested in the Pension and Insurance Funds with their respective policy benchmark portfolios and actuarial rate of return.



U.S. Equity

For the fiscal year, ending June 30, 2008, the Pension Fund's U.S. equity portfolio posted a return of -12.85%, which outperformed the return of its benchmark by 0.47%. The Insurance Fund's U.S. equity portfolio posted a return of -13.04%, falling short of the return of its benchmark by 0.37%. All segments of the U.S. equity markets posted sharply negative results during the 12-month period.

Despite the market's extreme volatility, U.S. equity investors have received favorable returns from U.S. equity investments over the past three years. The KRS Pension Fund has generated an annualized return of 5.17% over this period, outgaining its benchmark by 0.39%. Over the same time period, the Insurance Fund has produced an annualized return of 4.58%, underperforming its benchmark return of 4.70%. Both the pension and insurance portfolios have produced positive returns when viewed over a five-year time horizon.

The 10-year returns for each U.S. equity portfolio also point to solid positive performance. The pension's equity portfolio has generated an annualized average return of 4.09%, while the insurance equity portfolio posted an average annual return of 3.78%. Both portfolios exceeded their benchmarks for the 10-year period.

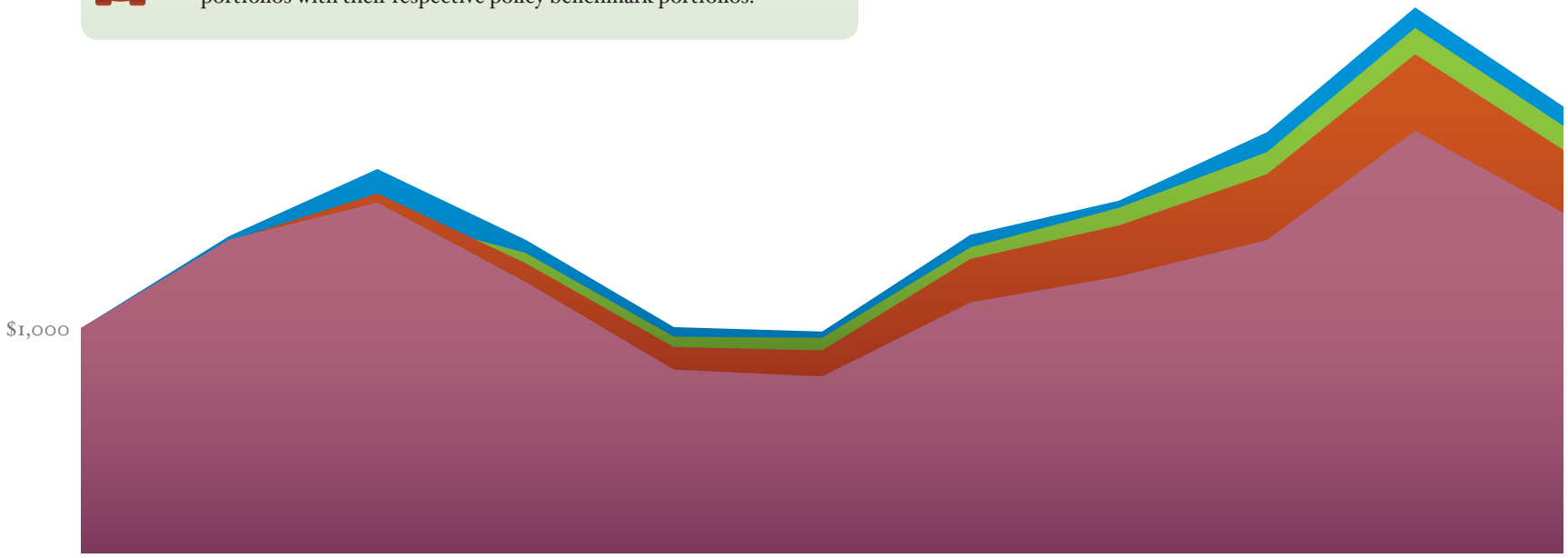
U.S. Equity Returns (%) of Pension Fund, Insurance Fund vs. Benchmarks, Indicies

Fund, Benchmark or Index	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	-12.85%	5.17%	8.50%	4.09%	11.95% [3]
Pension Fund Performance Benchmark [1]	-13.22	4.78	8.60	3.82	11.83
Insurance Fund	-13.04	4.58	8.17	3.78	9.64 [4]
Insurance Fund Performance Benchmark [2]	-12.67	4.70	8.18	3.01	9.25
S&P 500 (Large Cap)	-13.12	4.41	7.58	2.88	-
S&P 1500 (Total Equity)	-12.67	4.70	8.18	3.54	-
Russell 1000 (Large Cap)	-12.36	4.81	8.22	3.38	-
Russell 2000 (Small Cap)	-16.19	3.79	10.29	5.53	-
Russell 3000 (Total Equity)	-12.69	4.73	8.37	3.51	-

[1] Pension Fund Performance Benchmark consists of 67% S&P 1500 Composite (Total), 20% S&P 500 and 13% Russell 2000
[2] Insurance Fund Performance Benchmark is S&P 1500 Composite
[3] Inception Date of Pension Fund is April 1984
[4] Inception Date of Insurance Fund is July 1992

Investment	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Pension Fund	$1,000	$1,205	$1,354	$1,197	$1,003	$993	$1,208	$1,283	$1,435	$1,712	$1,492
Pension Fund Benchmark	1,000	1,194	1,299	1,144	958	951	1,154	1,228	1,342	1,609	1,396
Insurance Fund	1,000	1,163	1,256	1,167	981	979	1,180	1,267	1,391	1,667	1,450
Insurance Fund Benchmark	1,000	1,197	1,279	1,103	908	893	1,057	1,115	1,196	1,438	1,256

Growth of Dollars: This chart compares the performance of $1,000 invested in the Pension and Insurance Funds' U.S. Equity portfolios with their respective policy benchmark portfolios.



Top 10 U.S. Equity Holdings & Market Value ($)

Pension Fund		
Company	**Shares**	**Market Value**
Exxon Mobil Corp.	1,728,800	$152,359,144
Microsoft Corp.	3,058,100	84,128,331
Chevron Corp.	766,759	76,008,820
General Electric	2,594,200	69,239,198
Wal-Mart Stores Inc.	1,053,300	59,195,460
Conoco Phillips	589,808	55,671,977
IBM Corp.	449,000	53,219,970
Apple Inc.	302,750	50,692,460
Coca Cola Co.	966,000	50,212,680
AT&T Inc.	1,407,064	47,403,986

Insurance Fund		
Company	**Shares**	**Market Value**
Exxon Mobil Corp.	366,500	$32,299,645
General Electric	677,900	18,093,151
Microsoft Corp.	628,900	17,301,039
Wal-Mart Stores Inc.	269,400	15,140,280
Chevron Corp.	139,716	13,850,047
AT&T Inc.	409,121	13,783,286
Johnson & Johnson	209,788	13,497,760
Proctor & Gamble	209,375	12,732,094
Google Inc.	22,200	11,686,524
Apple Inc.	66,400	11,118,016

A complete list of holdings is available upon request.

International Equity

For the fiscal year, ending June 30, 2008, the Pension Fund's international equity portfolio returned -9.62%, outperforming its benchmark by 0.64%. The Insurance Fund's international equity portfolio substantially outperformed its benchmark, posting a return of -6.25% during the same 12-month period. Developed international equity markets experienced strong negative returns, while emerging international equity markets posted positive results during the 12-month period.

Over the past three years, international equity investors have received very favorable returns from the Non-U.S. Equity asset class. The KRS Pension Fund portfolio has generated an annualized average return of 12.47% over this three-year period, which has fallen short relative to the benchmark's return of 13.30%. The Insurance Fund, in contrast, has outpaced the annualized return of the benchmark, generating an average return of 14.07%. The Systems began their international equity program in July of 2000. Since inception, the pension international equity portfolio has underperformed the benchmark, while the insurance international equity portfolio has outperformed the benchmark.

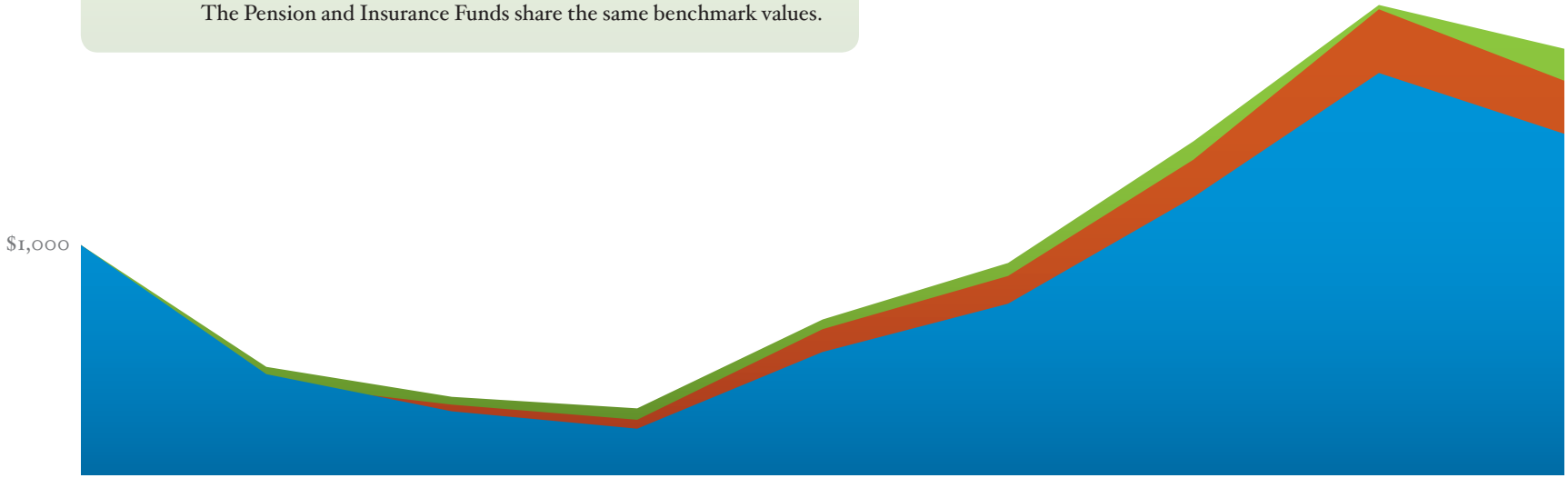
International Equity Returns (%) of Pension Fund, Insurance Fund vs. Benchmarks, Indicies

Fund, Benchmark or Index	Fiscal Year	3-Year	5-Year	Inception
Pension Fund	-9.62%	12.47%	15.60%	2.74% [2]
Pension Fund Performance Benchmark [1]	-10.26	13.30	16.93	3.89
Insurance Fund	-6.25	14.07	17.19	4.54 [3]
Insurance Fund Performance Benchmark [1]	-10.26	13.30	16.93	3.89
MSCI EAFE	-10.15	13.34	17.16	-
MSCI EM	4.89	27.52	30.15	-
MSCI ACWI Ex US	-6.20	16.16	19.42	-

[1] Pension & Insurance Fund Performance Benchmarks consists of 90% MSCI EAFE and 10% MSCI EM
[2] Inception Date of Pension Fund is July 2000
[3] Inception Date of Insurance Fund is July 2000

Investment	2000	2001	2002	2003	2004	2005	2006	2007	2008
Pension Fund	$1,000	$720	$639	$601	$768	$872	$1,104	$1,373	$1,241
Pension Fund Benchmark	1,000	700	653	621	817	933	1,185	1,512	1,357
Insurance Fund	1,000	735	670	645	838	961	1,225	1,521	1,426
Insurance Fund Benchmark	1,000	700	653	621	817	933	1,185	1,512	1,357

Growth of Dollars: This chart compares the performance of $1,000 invested in the Pension and Insurance Funds' International Equity portfolios with their respective policy benchmark portfolios. The Pension and Insurance Funds share the same benchmark values.



Top 10 International Equity Holdings & Market Value ($)

Pension Fund		
Company	**Shares**	**Market Value**
HSBC Holdings Ord.	2,586,619	$39,933,746
BP Ord.	3,317,845	38,512,050
Nestle SA	686,720	31,120,160
Total SA	356,894	30,476,895
Vodafone Group Ord.	9,866,938	29,288,117
Novartis AG	523,377	28,902,372
Royal Dutch Shell	596,893	23,995,713
GlaxoSmithKline PLC	981,128	21,732,347
E.ON AG	105,160	21,232,512
Siemens AG NPV	190,110	21,122,701

Insurance Fund		
Company	**Shares**	**Market Value**
HSBC Holdings Ord	811,195	$12,523,706
BP Ord	1,023,690	11,882,532
Nestle SA	213,770	9,687,437
Total SA	109,314	9,334,848
Vodafone Group Ord	3,077,787	9,135,822
Novartis AG	158,026	8,726,647
Royal Dutch Shell	192,987	7,758,276
GlaxoSmithKline PLC	301,945	6,688,193
Siemens AG NPV	59,700	6,633,135
E.ON AG	32,200	6,501,397

A complete list of holdings is available upon request. All Open Records Requests should be addressed to the KRS General Counsel.

Fixed Income

For the fiscal year, ending June 30, 2008, the Pension Fund's fixed income portfolio returned 8.06%, underperforming its performance benchmark by 1.34%. Both of the broad market indices, the Lehman Brothers Aggregate Index and the Lehman Brothers Intermediate Government Credit Index, posted positive returns for the most recent 12-month period. The KRS insurance TIPS portfolio posted a 15.33% rate of return, which outperformed its benchmark, the Lehman Brothers U.S. TIPS Index, by 0.24%.

Over the past three years, ending June 30, 2008, the pension portfolio has generated an annualized average return of 4.13% versus its custom performance benchmark return of 4.46%. The insurance portfolio posted a 5.69% return during the same period, exceeding its benchmark return by 0.10%. Over the five-year period both the pension and insurance funds' fixed income portfolios have performed in line with their benchmarks. Over the 10-year period, the Pension Fund has lagged the benchmark, while the Insurance Fund has performed in line.

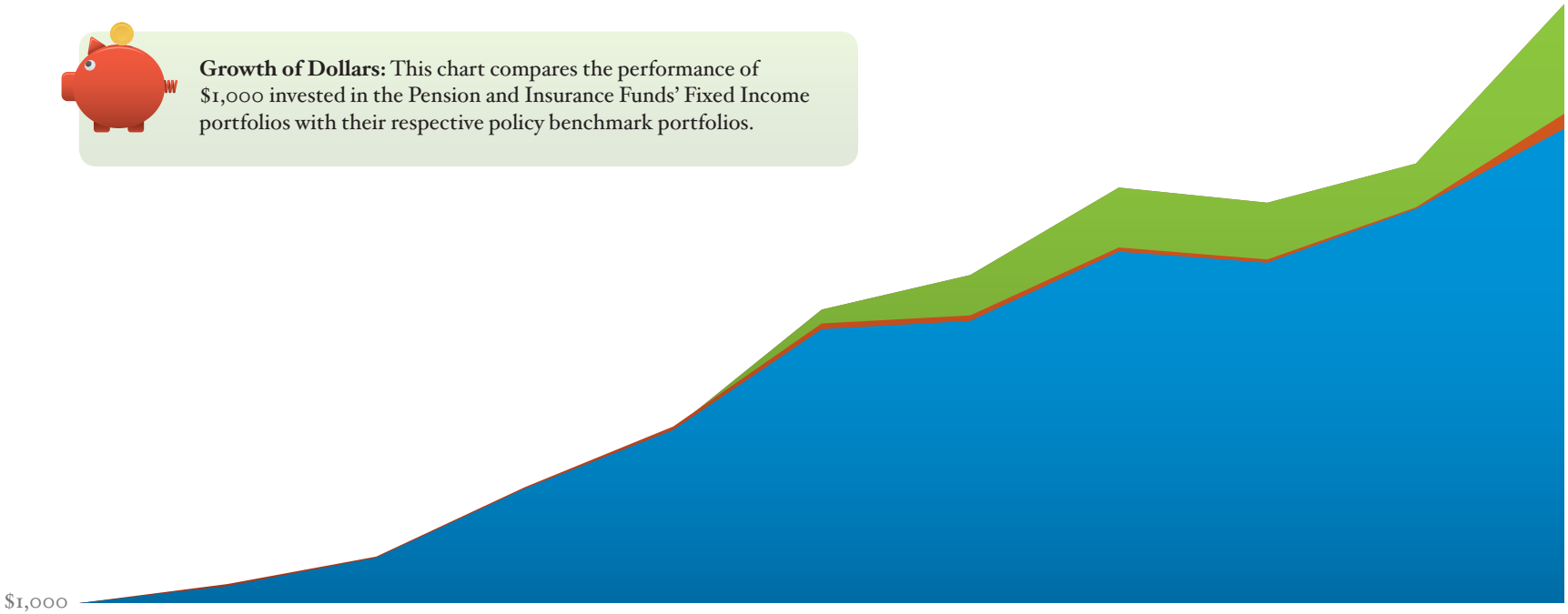
Fixed Income Returns (%) of Pension Fund, Insurance Fund vs. Benchmarks, Indicies

Fund, Benchmark or Index	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	8.06%	4.13%	4.21%	5.99%	8.60% [3]
Pension Fund Performance Benchmark [1]	9.40	4.46	4.36	6.41	8.38
Insurance Fund	15.33	5.69	6.05	7.16	7.48 [4]
Insurance Fund Performance Benchmark [2]	15.09	5.59	5.98	7.17	7.44
Lehman Brothers Aggregate	7.13	4.08	3.86	5.68	-
Lehman Brothers U.S. TIPS	15.09	5.59	5.98	7.79	-
Lehman Brothers Government Credit Index	7.24	3.84	3.58	5.68	-

[1] Pension Fund Performance Benchmark consists of 71.43% Lehman Brothers Aggregate and 28.57% Lehman Brothers U.S. TIPS
[2] Insurance Fund Performance Benchmark is Lehman Brothers U.S. TIPS
[3] Inception Date of Pension Fund is April 1984
[4] Inception Date of Insurance Fund is July 1992

Investment	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Pension Fund	$1,000	$1,028	$1,075	$1,190	$1,288	$1,456	$1,469	$1,585	$1,566	$1,656	$1,789
Pension Fund Benchmark	1,000	1,032	1,077	1,193	1,294	1,465	1,479	1,592	1,572	1,658	1,814
Insurance Fund	1,000	1,019	1,064	1,181	1,289	1,488	1,546	1,691	1,666	1,731	1,997
Insurance Fund Benchmark	1,000	1,027	1,071	1,190	1,295	1,495	1,552	1,697	1,669	1,736	1,998

Growth of Dollars: This chart compares the performance of $1,000 invested in the Pension and Insurance Funds' Fixed Income portfolios with their respective policy benchmark portfolios.



Top 10 Fixed Income Holdings & Market Value ($)

Pension Fund		
Company (Due)	**Par Value**	**Market Value**
US TSY NT INFL Index 0.875 (04/15/10)	$110,450,000	$127,411,836
US TSY BD INFL Index 3.875 (04/15/29)	67,567,000	114,517,823
US TSY NT INFL Index 2.375 (01/15/17)	96,035,000	110,759,300
US TSY BD INFL Index 3.000 (07/15/12)	79,350,000	104,110,750
US TSY NT INFL Index 2.000 (01/15/14)	81,950,000	101,174,231
US TSY BD INFL Index 1.625 (01/15/15)	84,900,000	98,668,011
US TSY NT INFL Index 2.000 (07/15/14)	76,200,000	92,245,138
US TSY BD INFL Index 1.875 (07/15/13)	74,200,000	91,745,973
US TSY BD INFL Index 3.625 (04/15/28)	54,400,000	90,005,803
US TSY BD INFL Index 2.000 (01/15/26)	83,200,000	89,168,910

Insurance Fund		
Company (Due)	**Par Value**	**Market Value**
US TSY NT INFL Index 0.875 (04/15/10)	$23,590,512	$20,450,000
US TSY BD INFL Index 2.375 (01/15/25)	21,922,004	18,360,000
US TSY BD INFL Index 3.875 (04/15/29)	21,228,347	12,525,000
US TSY BD INFL Index 3.000 (07/15/12)	20,448,217	15,585,000
US TSY BD INFL Index 1.875 (07/15/13)	19,103,440	15,450,000
US TSY NT INFL Index 2.000 (01/15/14)	18,617,540	15,080,000
US TSY BD INFL Index 3.625 (04/15/28)	18,323,792	11,075,000
US TSY NT INFL Index 2.000 (07/15/14)	17,644,001	14,575,000
US TSY BD INFL Index 1.625 (01/15/15)	16,764,265	14,425,000
US TSY NT INFL Index 2.375 (04/15/11)	15,624,635	13,625,000

A complete list of holdings is available upon request. All Open Records Requests should be addressed to the KRS General Counsel.

Alternative Investments

For the fiscal year, ending June 30, 2008, the Pension Fund's alternative investments portfolio generated a return of 0.04%. The portfolio consists primarily of private equity limited partnerships and real estate investment trusts (REIT), publicly traded real estate securities, operating companies, and focused real estate investments. The custom benchmark for the pension alternative investment portfolio returned -8.58% during this same period. The insurance alternative investment portfolio posted a return of -1.94% versus its performance benchmark return of -10.64%. The longer term results from the alternative investment portfolios have been excellent. For the three years ending June 30, 2008, the Pension Fund has outperformed its custom benchmark by nearly 6% on an annualized basis. Since its inception in October 1990, the portfolio has exceeded its benchmark by 4.49% per year. The Insurance Fund has also done very well, exceeding its benchmark return over the three-year period since its inception by 2.89% and 3.89%, respectively.

Alternative Investment Returns (%) of Pension Fund, Insurance Fund vs. Benchmarks

Fund or Benchmark	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	0.04%	10.68%	17.97%	14.92%	12.80% [3]
Pension Fund Performance Benchmark [1]	-8.58	4.69	7.74	5.56	8.31
Insurance Fund	-1.94	7.60	11.93	-	7.92 [4]
Insurance Fund Performance Benchmark [2]	-10.64	4.71	7.97	-	4.03

[1] Pension Fund Performance Benchmark consists of 60% S&P 1500 (Total) and 40% Lehman Brothers High Yield Corporate
[2] Insurance Fund Performance Benchmark consists of 80% S&P 1500 (Total) and 20% Lehman Brothers High Yield Corporate
[3] Inception Date of Pension Fund is October 1990 [4] Inception Date of Insurance Fund is July 2001

Cash

For the fiscal year, ending June 30, 2008, the KRS Pension Fund's cash portfolio returned 4.91%, outpacing its benchmark, the Citi Group 3-month Treasury by 1.58%. The KRS Insurance Fund's cash portfolio also outperformed the index, posting a return of 4.26% during the same 12-month period.

The longer term results from the cash portfolios have been excellent with comparison to their benchmark. For the five years ending June 30, 2008, the Pension Fund portfolio has outperformed its custom benchmark by 1.17% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.87% per year. The Insurance Fund portfolio has also done very well, exceeding its benchmark return over the five-year period since its inception by 0.84% and 0.32%, respectively.

Cash Returns (%) of Pension Fund, Insurance Fund vs. Benchmarks

Fund or Benchmark	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	4.91%	5.01%	4.23%	4.79%	5.42% [2]
Pension Fund Performance Benchmark [1]	3.33	4.11	3.06	3.48	4.55
Insurance Fund	4.26	5.05	3.90	3.97	4.22 [3]
Insurance Fund Performance Benchmark [1]	3.33	4.11	3.06	3.48	3.90

[1] Pension and Insurance Fund Performance Benchmarks is the Citi Group 3-month Treasury
[2] Inception Date of Pension Fund is January 1988
[3] Inception Date of Insurance Fund is July 1992

Additional Schedules & Supplemental Information

Following are additional schedules which indicated the Investment Advisors employed along with the total assets each of the firm manages for the Systems, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems for the year ended June 30, 2008.

Kentucky Employees Retirement System (KERS) Pension Fund as of June 30, 2008

	Non-Hazardous		Hazardous	
Asset Class	**Market Value ($)**	**Allocation (%)**	**Market Value ($)**	**Allocation (%)**
Bonds	$1,236,655,507	24.7%	$135,246,638	28.1%
Mortgages	499,604,688	10.0	46,158,485	9.6
Short-term	68,260,583	1.4	15,681,772	3.3
Alternatives	367,775,959	7.3	41,335,692	8.6
U.S. Equity	1,776,480,823	35.4	156,982,586	32.7
International Equity	1,066,204,600	21.3	85,384,907	17.8
Total Portfolio	$5,014,982,160	100.0%	$480,790,080	100.0%

Kentucky Employees Retirement System (KERS) Insurance Fund as of June 30, 2008

	Non-Hazardous		Hazardous	
Asset Class	**Market Value ($)**	**Allocation (%)**	**Market Value ($)**	**Allocation (%)**
Bonds	$76,538,936	13.5%	$26,479,906	9.9%
Short-term	41,445,179	7.3	30,925,336	11.6
Alternatives	25,590,515	4.5	10,857,206	4.1
U.S. Equity	238,780,788	42.1	117,390,781	43.9
International Equity	184,697,969	32.6	81,888,642	30.6
Total Portfolio	$567,053,387	100.0%	$267,541,871	100.0%

County Employees Retirement System (CERS) Pension Fund as of June 30, 2008

	Non-Hazardous		Hazardous	
Asset Class	**Market Value ($)**	**Allocation (%)**	**Market Value ($)**	**Allocation (%)**
Bonds	$1,393,036,579	25.9%	$425,700,173	26.2%
Mortgages	593,436,385	11.0	167,578,379	10.3
Short-term	67,449,964	1.3	46,799,086	2.9
Alternatives	365,521,511	6.8	113,635,369	7.0
U.S. Equity	1,919,754,723	35.7	576,627,695	35.4
International Equity	1,036,766,225	19.3	296,685,410	18.2
Total Portfolio	$5,375,965,387	100.0%	$1,627,026,111	100.0%

County Employees Retirement System (CERS) Insurance Fund as of June 30, 2008

	Non-Hazardous		Hazardous	
Asset Class	**Market Value ($)**	**Allocation (%)**	**Market Value ($)**	**Allocation (%)**
Bonds	$140,228,289	13.0%	$72,754,406	12.8%
Short-term	147,656,566	13.6	77,802,927	13.7
Alternatives	38,409,559	3.5	20,515,943	3.6
U.S. Equity	458,472,096	42.4	239,502,575	42.2
International Equity	297,326,305	27.5	157,572,991	27.7
Total Portfolio	$1,082,092,816	100.0%	$568,148,842	100.0%

State Police Retirement System (SPRS) Funds as of June 30, 2008

	Pension Fund		Insurance Fund	
Asset Class	**Market Value ($)**	**Allocation (%)**	**Market Value ($)**	**Allocation (%)**
Bonds	$93,618,662	28.0%	$14,534,328	12.0%
Mortgages	37,183,358	11.1	-	-
Short-term	1,601,088	0.5	9,015,060	7.4
Alternatives	23,901,381	7.1	5,053,393	4.2
U.S. Equity	112,416,908	33.6	54,745,812	45.2
International Equity	65,988,033	19.7	37,659,435	31.1
Total Portfolio	$334,709,431	100.0%	$121,008,027	100.0%

External Investment Advisors & Assets ($) Under Management — 1 of 3

Advising Company	Location	Assets
Aberdeen Asset Management	Aberdeen, Scotland	$200,732
Arbor Investments II	Chicago, Illinois	4,363
Avenue Capital V	New York, New York	31,426
Barclays Global Investors	San Francisco, California	537,855
Blackstone Capital Partners V	New York, New York	84,833
Bay Hills Emerging Partners I	San Francisco, California	6,641
Columbia Capital IV	Alexandria, Virginia	24,409
Duff, Ackerman & Goodrich Ventures II	Palo Alto, California	47,645
GTCR Golder Rauner IX	Chicago, Illinois	13,870
H.I.G. Venture Partners II	Miami, Florida	9,308
Harvest Partners V	New York, New York	3,731
Hellman & Friedman VI	New York, New York	38,734
Institutional Venture Partners XI	Menlo Park, California	$19,185

External Investment Advisors & Assets ($) Under Management — 2 of 3

Advising Company	Location	Assets
Invesco	Atlanta, Georgia	825,795
JW Childs Equity III	Boston, Massachusetts	30,383
Lehman Brothers Asset Management	Chicago, Illinois	1,600,619
Leonard Green & Partners, L.P.,IV	Los Angeles, California	79,177
Matlin Patterson Global Opportunities I & II	New York, New York	78,322
Merit Capital Partners IV	Chicago, Illinois	19,632
MHR Insitituional Advisors III	New York, New York	19,722
Mill Road Capital	Greenwich, Connecticut	2,876
New Mountain Partners II	New York, New York	51,806
Northern Trust Quantitative Advisors	Chicago, Illinois	582,559
Oak Hill Partners II	New York, New York	98,394
Oak Tree Opportunities VIIB	Los Angeles, California	5,625

External Investment Advisors & Assets ($) Under Management — 3 of 3

Advising Company	Location	Assets
Pyramis Global Advisors	Boston, Massachusetts	1,962,490
Robert W. Baird & Co.	Milwauke, Wisconsin	615,677
Sun Capital Partners IV	Boca Raton, Florida	14,487
Technology Crossover Ventures VI	Palo Alto, California	25,004
The Boston Company	Boston, Massachusetts	982,575
Vantagepoint Venture IV	San Bruno, California	39,355
Vista Equity Partners III	San Francisco, California	19,932
Warburg Pincus IX	New York, New York	119,999
Wayzata Investment Partners I	Wayzata, Minnesota	115,287
Weaver Barksdale & Associates	Brentwood, Tennessee	713,628
Wellington Management Company	Boston, Massachusetts	205,597
Total		$9,332,552

External Expenses Represented in Thousands ($)

Expenses	Fees ($)	Assets Used (%)
Pension Funds	$12,002	0.0891%
Insurance Funds	1,662	0.0627
Consulting Fees	277	0.0017
Custody Fees	250	0.0016
Other Investment-Related Fees	358	0.0022
Total	$14,549	0.0902%

Schedule of Commissions Paid

Asset Class	Total Shares	Commissions	$ per share
U.S. Equities	58,922,601	$5,138,302	$0.087
Asset Class	**Total Value of Trades**	**Commissions**	**% of Trade**
Non-U.S. Equities	$3,811,664,662	$4,025,320	0.106%
Total	-	**$9,163,622**	-

Performance Calculations were prepared by the System's custodial bank using a time-weighted rate or return methodology based upon the market value of assets.

Master Custodian & Performance Manager

The Northern Trust Company
Chicago, Illinois

Investment Consultant

Strategic Investment Solutions
San Francisco, California

Actuarial Section

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Kentucky Retirement Systems
A component unit of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

Cavanaugh Macdonald
CONSULTING, LLC.

The following is a certification of actuarial results by Cavanaugh Macdonald Consulting, LLC.

DATE: NOVEMBER 20, 2008
SUBJECT: CERTIFICATION OF ACTUARIAL RESULTS

The Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West, 1260 Louisville Rd., Frankfort, KY 40601

Dear Trustees:
The fifty-second annual actuarial valuation of the Kentucky Employees Retirement System, the forty-ninth annual actuarial valuation of the County Employees Retirement System, and the fiftieth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates. Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2008 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2009 and ending June 30, 2010.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund. Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on). Overall, the total contribution for the pension fund is expected

to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30 year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future. Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels.

The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Medical inflation rates in excess of the assumed rates, as well as recent employer contribution rate reductions under KERS and SPRS, have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement No. 43 requirements have further reduced the measured funding level. As of June 30, 2008 the funding levels for the pension and insurance funds are as follows on page 137.

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section,

Funding Levels (%) for Retirement Systems

Retirement System	Pension Fund	Insurance Fund
KERS Non-Hazardous	52.5%	11.1%
KERS Hazardous	81.3	53.2
CERS Non-Hazardous	78.5	32.6
CERS Hazardous	72.9	34.7
SPRS	59.8	27.9

as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on January 19, 2006 based on the experience investigation report dated January 12, 2006, meet the parameters set for disclosure under GASB Statements No. 25 and 43. The health care cost trend assumptions were updated for the June 30, 2007 valuation by a Board decision adopted on November 15, 2007. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is scheduled to be completed in January 2011 and any adjustments will be reflected in the June 30, 2011 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being made for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,
Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Actuarial Assumptions & Methods as of June 30, 2008

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience once every five years through the completion of the Actuarial Experience Study. The most recent study was completed in January 2006 and reviewed plan experience for the period from July 1, 2000 through June 30, 2005. All assumptions, with the exception of health care trend rates, used in the June 30, 2008 actuarial valuation were based on the study performed in 2006 and in accordance with the actuary's recommendations. The health care trend rates used in the June 30, 2008 valuation are those adopted by the Board on November 15, 2007. The next Experience Study is scheduled to be completed in January 2011.

1. Actuarial Cost Method

The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL) over no more than a 30-year period.

2. UAL Amortization Method

The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

3. Asset Valuation Method
The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted by the Board in 2006.

4. Retiree Insurance Funding Policy
The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. As with the pension Fund, going forward, the combined UAL bases will be amortized over a 30-year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.

5. Investment Return Assumption
The future investments earnings of plan assets are assumed to accumulate at a rate of 7.75% per annum. This rate consists of a 3.5% inflationary component and a 4.25% real rate of return component. In accordance with GASB Statement No. 43 the investment return assumption has been reduced to a blended rate of 4.5% for KERS and SPRS insurance funds due to a lack of pre-funding benefits. This assumption was adopted in 2006.

6. Salary Increase Assumptions
Active member salaries are assumed to increase at the rates provided below. The rates include a 3.5% inflationary component and an additional increase due to promotion based upon plan experience. This assumption was adopted in 2006.

Service (Years) & Salary Increase Assumptions

Service	KERS/CERS Non-Hazardous	KERS/CERS Hazardous, SPRS
0 - 1	13.5%	14.5%
1 - 2	7.0	7.5
2 - 3	5.5	7.0
3 - 4	5.0	6.5
4 - 5	5.0	6.0
5 - 6	4.5	5.5
6 - 8	4.5	5.0
8 - 10	4.0	4.5
10+	4.0	4.0

7. Payroll Growth Assumption
Active member payroll is assumed to increase at a rate of 3.5% per annum. This assumption was adopted in 2006.

8. Retiree Cost of Living Adjustments (COLA)
State statute requires retirement allowances to be increased by the percentage increase in the annual average of the consumer price index for all urban consumers (CPI-U) for the most recent calendar year, not to exceed five percent. Statute only allows COLAs awarded as of the valuation date to be recognized for funding purposes and for determining employer contribution rates. The Legislature has the authority to suspend or reduce COLA rates.

9. Medical Inflation Rate Assumption
The costs for retiree medical premiums are assumed to increase each year by 11% for 2009, by 10% for 2010, by 9% for 2011, by 8% for 2012, by 7% for 2013, by 6% for 2014, and by 5% thereafter. This assumption was adopted in 2007.

10. Retirement Rate Assumption
The tables to the right display the probability that a member will retire at a specified age or level of service. This assumption was adopted in 2006. Rates are doubled for KERS Non-Hazardous members during the window period, which expires January 1, 2009. 100% are anticipated to retire by age 75. For KERS Hazardous members, 100% are anticipated to retire by age 65; for CERS Hazardous, 100% are anticipated to retire by age 62; for SPRS, 100% are anticipated to retire by age 55.

Age (Years) & Non-Hazardous Retirement Probability (%)

55 - 59	8.0%
60	10.0
61	20.0
62 - 70	25.0

Hazardous Service (Years) & Retirement Probability (%)

Service	KERS	CERS	SPRS
20	20.0%	30.0%	20.0%
21	15.0	25.0	9.0
22 - 23	15.0	20.0	9.0
24	15.0	25.0	20.0
25	20.0	25.0	20.0
26 - 28	35.0	30.0	20.0
29	35.0	30.0	45.0
30 - 31	35.0	40.0	45.0
32 - 33	35.0	35.0	45.0
34	35.0	30.0	70.0
35+	60.0	30.0	70.0

11. Mortality Assumptions

The mortality table used for active members is the 1994 Group Annuity Mortality (GAM) Table. For members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table to the 1994 GAM table. Mortality assumptions for disabled lives are set using the 1994 GAM table set forward five years. These assumptions were adopted in 2006.

Sample Annual Rates of Mortality: Active & Retired Members*		
Age (Years)	**Males**	**Females**
< 20	0.04%	0.03%
22	0.06	0.03
32	0.08	0.04
42	0.13	0.08
52	0.32	0.17
62	1.01	0.58
72	2.85	1.65
Sample Annual Rates of Mortality: Disabled Member Mortality		
< 20, 22, 32	-	-
42	0.19%	0.11%
52	0.56	0.29
62	1.80	1.08
72	4.52	2.84

*Members retiring on/after July 1, 2006

12. Withdrawal Rates

The probability, or likelihood, of active members terminating employment prior to retirement is provided below. The withdrawal rate is a function of both age and service. This type of structure is known as "select and ultimate rates". This structure reflects the fact that both service and age affect the likelihood of a member staying in active employment. The ultimate period for these systems covers a member's withdrawal rate after the first five years of service. These assumptions were adopted in 2006.

Selected Rates of Termination Prior to Retirement

KERS & CERS Non-Hazardous

Select Rates		Ultimate Rates	
Service	**Probability**	**Age**	**Probability**
1st Yr. of Service	15.00%	20	6.00%
2nd Yr. of Service	14.00	25	5.40
3rd Yr. of Service	10.00	30	4.80
4th Yr. of Service	8.00	35	3.60
5th Yr. of Service	6.00	40	2.66
		45	1.98
		50	1.92
		55	1.08
		60	0.75

Selected Rates of Termination Prior to Retirement

KERS Hazardous				CERS Hazardous			
Select Rates		**Ultimate Rates**		**Select Rates**		**Ultimate Rates**	
Service	**Probability**	**Age**	**Probability**	**Service**	**Probability**	**Age**	**Probability**
1st Year of Service	15.00%	20	6.00%	1st Year of Service	15.00%	20	4.56%
2nd Year of Service	14.00	25	5.40	2nd Year of Service	14.00	25	3.04
3rd Year of Service	10.00	30	4.80	3rd Year of Service	10.00	30	3.01
4th Year of Service	8.00	35	3.60	4th Year of Service	8.00	35	1.95
5th Year of Service	6.00	40	2.66	5th Year of Service	6.00	40	1.50
		45	1.98			45	0.75
		50	1.92			50	0.50
		55	1.08			55	-
		60	0.75			60	-
SPRS							
1st Year of Service	10.00%	20	2.50%				
2nd Year of Service	7.00	25	2.28				
3rd Year of Service	5.00	30	1.83				
4th Year of Service	4.00	35	1.31				
5th Year of Service	3.00	40	0.81				
		45	0.41				
		50	-				
		55	-				
		60	-				

13. Rates of Disablement

KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. For non-hazardous members, the assumptions are set using three quarters of the Old-Age Survivors and Disability Insurance (OASDI) rates. For hazardous members, the assumptions are set using one times the Old-Age Survivors and Disability Insurance (OASDI) rates. These assumptions were adopted in 2006.

Probability of Becoming Disabled During Employment

Age	Non-Hazardous	Hazardous
20 - 24	0.0531%	0.0708%
25 - 29	0.0711	0.0948
30 - 34	0.0918	0.1224
35 - 39	0.1280	0.1707
40 - 44	0.1994	0.2658
45 - 49	0.3320	0.4426
50 - 54	0.5590	0.7453
55 - 59	0.9200	1.2267
60 - 64	1.4618	1.9490

Summary of Results

The 2008 Actuarial Valuation of Kentucky Retirement Systems describes the current actuarial condition of the KRS, determines the calculated employer contribution rates, and analyzes fluctuations in these contribution rates. Under state statute, the Board of Trustees must approve the employer contribution rates for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. The information on the following pages is a summary of the valuation findings.

Summary of Actuarial Valuation Results as of June 30, 2008 — 1 of 2

	KERS Non Hazardous	KERS Hazardous	CERS Non Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2006-2007)					
Pension Fund Contribution	18.96%	11.98%	8.62%	16.11%	35.23%
Insurance Fund Contribution	20.49	23.56	12.29	27.25	56.89
Recommended Employer Contribution	39.45	35.54	20.91	43.36	92.12
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$10,129,689,985	$618,010,827	$7,304,217,691	$2,403,122,095	$587,129,257
Actuarial Value of Assets	5,318,792,893	502,132,214	5,731,502,438	1,750,867,373	350,891,451
Unfunded Liability on Actuarial Value of Assets	4,810,897,092	115,878,613	1,572,715,253	652,254,722	236,237,806
Funding Ratio on Actuarial Value of Assets	52.5%	81.3%	78.5%	72.9%	59.8%
Market Value of Assets	5,056,867,294	484,440,015	5,431,735,605	1,644,983,243	337,358,918
Unfunded Liability on Market Value of Assets	5,072,822,691	133,570,812	1,872,482,086	758,138,852	249,770,339
Funding Ratio on Market Value of Assets	49.9%	78.4%	74.4%	68.5%	57.5%

Summary of Actuarial Valuation Results as of June 30, 2008 — 2 of 2

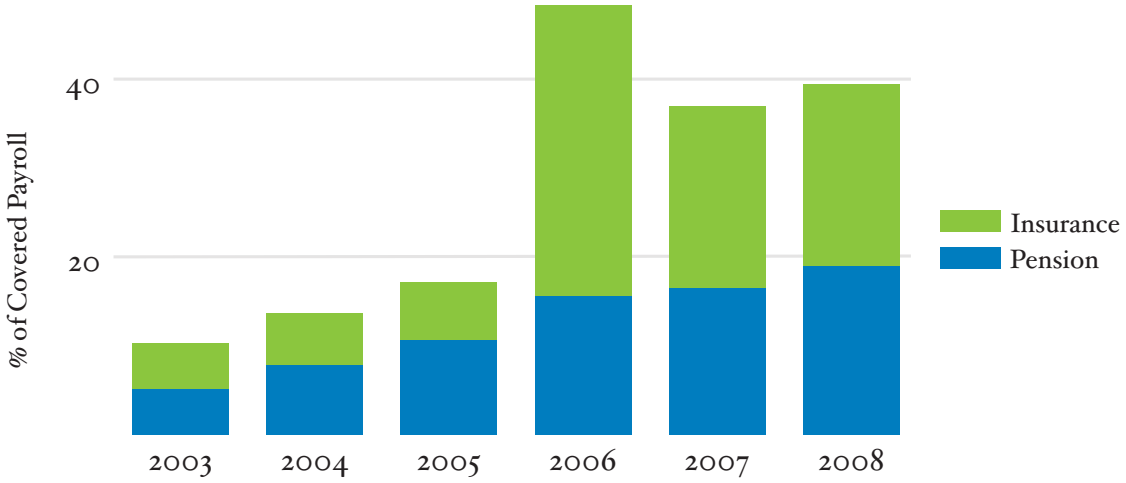
Insurance Fund	KERS Non Hazardous	KERS Hazardous	CERS Non Hazardous	CERS Hazardous	SPRS
Actuarial Liability	$5,431,499,285	$541,657,214	$3,583,193,466	$1,769,782,957	$445,107,468
Actuarial Value of Assets	603,197,761	288,161,759	1,168,883,170	613,526,319	123,961,197
Unfunded Liability on Actuarial Value of Assets	4,828,301,524	253,495,455	2,414,310,296	1,156,256,638	321,146,271
Funding Ratio on Actuarial Value of Assets	11.1%	53.2%	32.6%	34.7%	27.9%
Market Value of Assets	574,480,809	269,299,859	1,105,944,178	576,414,457	121,781,967
Unfunded Liability on Market Value of Assets	4,857,018,476	272,357,355	2,477,249,288	1,193,368,500	323,325,501
Funding Ratio on Market Value of Assets	10.6%	49.7%	30.9%	32.6%	27.4%
Member Data					
Number of Active Members	48,085	4,393	85,221	10,173	993
Total Annual Payroll (Active Members) [1]	$1,837,873,488	$148,710,060	$2,166,612,648	$474,241,332	$53,269,080
Average Annual Pay (Active Members)	38,221	33,852	25,423	46,618	53,645
Number of Retired Members & Beneficiaries	35,307	2,404	37,579	5,422	1,135
Average Annual Retirement Allowance	20,124	13,972	10,478	23,511	36,382
Number of Vested Inactive Members	5,605	287	8,693	487	55
Number of Inactive Members Due a Refund	27,597	2,640	49,062	1,889	246

1 Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of the fiscal year ending June 30, 2008.

Recommended Employer Contribution Rates as of June 30, 2008

Kentucky Employees Retirement System Non-Hazardous Employers

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/03	2004-2005	4.82%	0.29%	5.11%	5.18%	10.29%
6/30/04	2005-2006	4.89	2.96	7.85	5.77	13.62
6/30/05	2006-2007	4.81	5.87	10.68	6.45	17.13
6/30/06	2007-2008	3.72	11.83	15.55	32.82	48.37
6/30/07	2008-2009	3.62	12.92	16.54	20.38	36.92
6/30/08	2009-2010	3.97	14.99	18.96	20.49[1]	39.45[1]

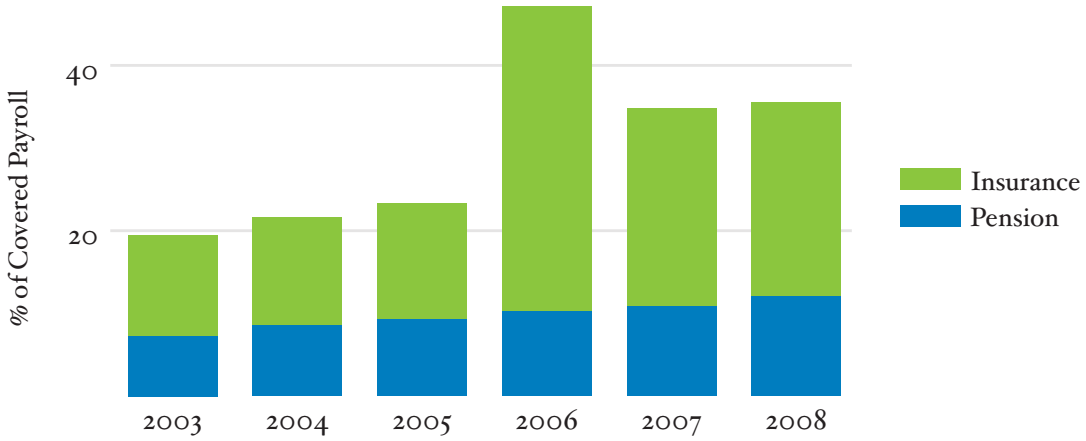


[1]The "Insurance Fund Contribution" rates and the "Recommended Employer Contribution" rates shown above are the GASB 45 compliant rates as shown in the 2008 annual valuation, which are based on a blended, assumed rate of return on investments of 4.5%. However in the case of KERS Non-Hazardous, the actuary recommended a full funding rate, which is based on the KRS actual assumed rate of return on investments of 7.75%. As a result, the KERS Non-Hazardous insurance fund contribution rate actually recommended and adopted by the Board of Trustees for 2009-2010 is 12.33% and the empolyer contribution rate is 31.29%.

Recommended Employer Contribution Rates as of June 30, 2008

Kentucky Employees Retirement System Hazardous Employers

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/03	2004-2005	8.68%	(1.42%)	7.26%	12.21%	19.47%
6/30/04	2005-2006	8.62	(0.10)	8.52	13.07	21.59
6/30/05	2006-2007	8.37	0.91	9.28	14.04	23.32
6/30/06	2007-2008	7.27	2.93	10.20	36.91	47.11
6/30/07	2008-2009	7.28	3.56	10.84	23.94	34.78
6/30/08	2009-2010	7.52	4.46	11.98	23.56	35.54

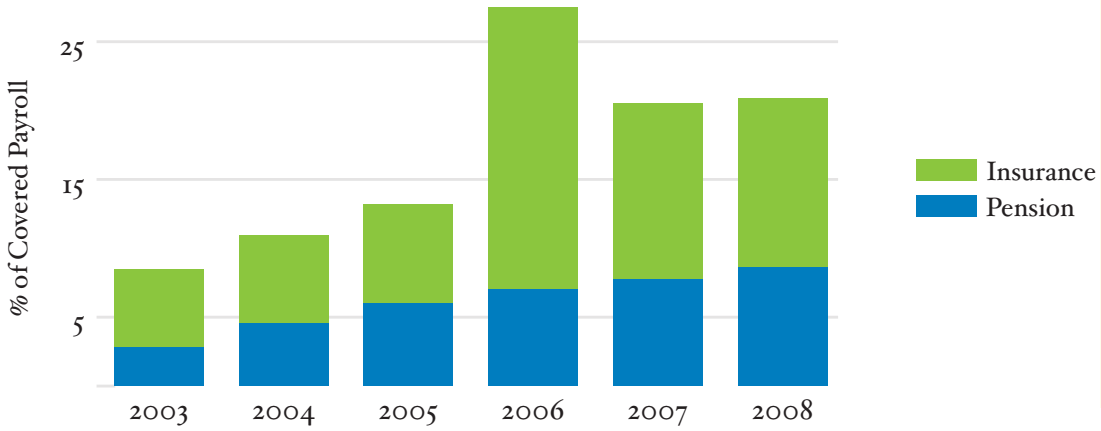


The total employer contribution rate is comprised of a contribution to the pension fund and to the insurance fund. The contribution to the pension fund and the insurance fund consist of the normal cost and an amortization payment on the unfunded actuarial liability (UAL).

Recommended Employer Contribution Rates as of June 30, 2008

County Employees Retirement System Non-Hazardous Employers

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/03	2004-2005	5.71%	(2.89%)	2.82%	5.66%	8.48%
6/30/04	2005-2006	5.80	(1.25)	4.55	6.43	10.98
6/3 0/05	2006-2007	5.72	0.25	5.97	7.22	13.19
6/30/06	2007-2008	4.69	2.29	6.98	20.51	27.49
6/30/07	2008-2009	4.53	3.23	7.76	12.75	20.51
6/30/08	2009-2010	4.46	4.16	8.62	12.29[1]	20.91[1]

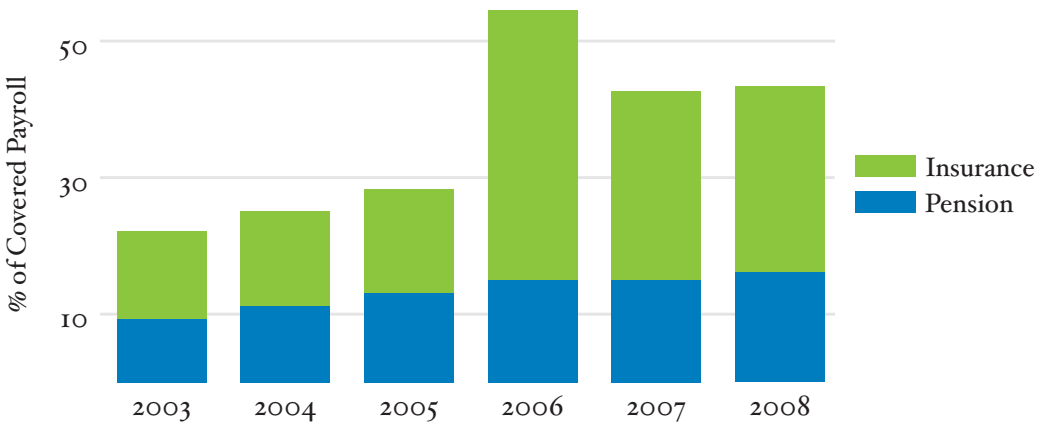


[1]The insurance fund and employer contribution rates for CERS systems shown above are the full funding rates presented by the actuary in the 2008 annual valuation. However, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2009-2010 is 8.75% and the employer contribution rate is 17.37%.

Recommended Employer Contribution Rates as of June 30, 2008

County Employees Retirement System Hazardous Employers

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/03	2004-2005	8.80%	0.51%	9.31%	12.77%	22.08%
6/30/04	2005-2006	8.80	2.42	11.22	13.79	25.01
6/3 0/05	2006-2007	8.79	4.32	13.11	15.10	28.21
6/30/06	2007-2008	8.12	6.89	15.01	39.52	54.53
6/30/07	2008-2009	8.06	6.98	15.04	27.62	42.66
6/30/08	2009-2010	8.23	7.88	16.11	27.25[1]	43.36[1]

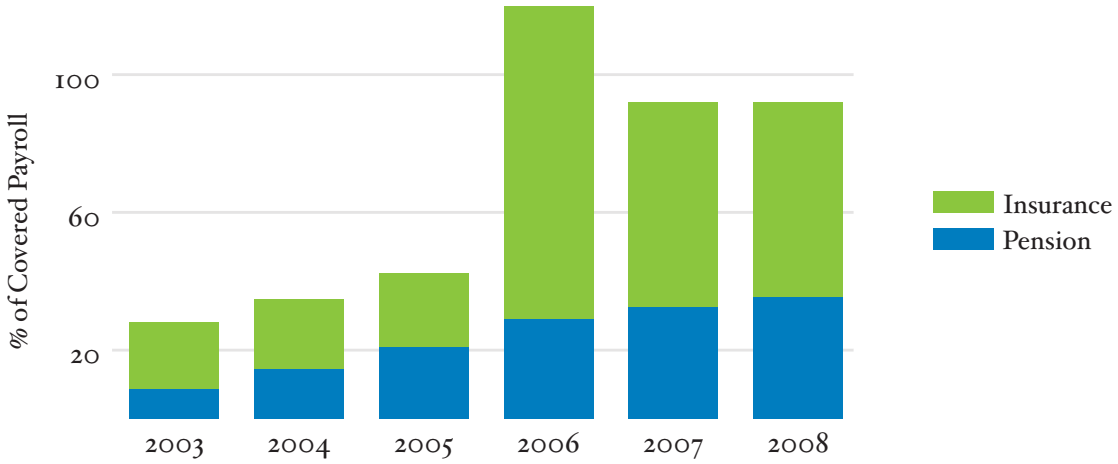


[1]The insurance fund and employer contribution rates for CERS systems shown above are the full funding rates presented by the actuary in the 2008 annual valuation. However, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. As a result, the CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2009-2010 the insurance fund contribution rate is 19.50% and the employer contribution rate is 35.61%.

Recommended Employer Contribution Rates as of June 30, 2008

State Police Retirement System

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/03	2004-2005	9.07%	(0.58%)	8.49%	19.59%	28.08%
6/30/04	2005-2006	9.37	5.12	14.49	20.34	34.83
6/30/05	2006-2007	9.43	11.21	20.64	21.66	42.30
6/30/06	2007-2008	9.20	19.75	28.95	91.05	120.00
6/30/07	2008-2009	9.64	22.75	32.39	59.54	91.93
6/30/08	2009-2010	9.83	25.40	35.23	56.89[1]	92.12[1]



[1]The "Insurance Fund Contribution" rates and the "Recommended Employer Contribution" rates shown above are the GASB 45 compliant rates as shown in the 2008 annual valuation, which are based on a blended, assumed rate of return on investments of 4.5%. However in the case of SPRS, the actuary recommended a full funding rate, which is based on the KRS actual assumed rate of return on investments of 7.75%. As a result, the SPRS insurance fund contribution rate actually recommended and adopted by the Board of Trustees for 2009-2010 is 26.64% and the empolyer contribution rate is 61.87%.

Analysis of Financial Experience KERS Non-Hazardous as of June 30, 2008

Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement	Insurance
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$(265.6)	$(89.0)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.9	6.0
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	1.9	(3.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	71.1	34.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(21.3)	202.2
New Members. Additional unfunded accrued liability will produce a loss.	(14.1)	(28.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(11.5)	3.4
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	99.5	114.7
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(513.6)	(464.5)
Gain (or Loss) During Year From Financial Experience	(652.7)	(224.8)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	0.0	0.0
Composite Gain (or Loss) During Year	(652.7)	(224.8)

Analysis of Financial Experience KERS Hazardous as of June 30, 2008

Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement	Insurance
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$(21.0)	$(13.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.6	1.3
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.5	0.4
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	11.5	12.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(0.1)	21.2
New Members. Additional unfunded accrued liability will produce a loss.	(2.5)	(4.4)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	1.1	0.2
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	2.0	8.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(14.8)	(22.6)
Gain (or Loss) During Year From Financial Experience	(22.7)	4.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	0.0	0.0
Composite Gain (or Loss) During Year	(22.7)	4.0

Analysis of Financial Experience CERS Non-Hazardous as of June 30, 2008

Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement	Insurance
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$(169.9)	$(82.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(4.6)	8.6
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.2)	(4.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	58.3	30.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(29.9)	127.6
New Members. Additional unfunded accrued liability will produce a loss.	(13.1)	(21.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(27.7)	2.2
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	76.5	96.9
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(250.4)	(157.8)
Gain (or Loss) During Year From Financial Experience	(361.0)	(0.6)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	0.0	0.0
Composite Gain (or Loss) During Year	(361.0)	(0.6)

Analysis of Financial Experience CERS Hazardous as of June 30, 2008

Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement	Insurance
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$(58.2)	$(89.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.7)	0.9
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	1.1	0.5
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	21.9	23.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	5.8	75.7
New Members. Additional unfunded accrued liability will produce a loss.	(5.4)	(20.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(11.4)	(0.5)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	27.3	91.6
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(53.7)	(85.6)
Gain (or Loss) During Year From Financial Experience	(73.3)	(3.7)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	0.0	0.0
Composite Gain (or Loss) During Year	(73.3)	(3.7)

Analysis of Financial Experience SPRS as of June 30, 2008

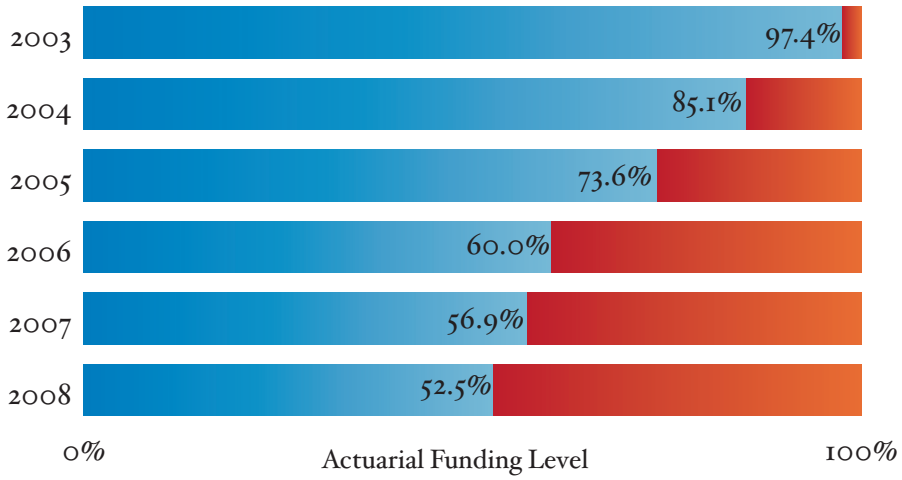
Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement	Insurance
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$(3.3)	$3.2
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.3	0.4
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.7	2.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(5.4)	19.8
New Members. Additional unfunded accrued liability will produce a loss.	(0.4)	(0.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	0.7	2.1
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(0.7)	2.8
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(26.1)	(31.9)
Gain (or Loss) During Year From Financial Experience	(34.2)	(2.0)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	0.0	0.0
Composite Gain (or Loss) During Year	(34.2)	(2.0)

Summary of Actuarially Unfunded Liabilities as of June 30, 2008

Kentucky Employees Retirement System Non-Hazardous Pension Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$6,520,463,188	$6,351,318,832	$4,929,443,185	$169,144,356	$1,591,020,003	97.4%	75.6%
6/30/04	7,049,613,171	6,000,513,743	5,258,994,145	1,049,099,428	1,790,619,026	85.1	74.6
6/30/05	7,579,074,839	5,578,685,746	5,362,630,697	2,000,389,093	2,216,444,142	73.6	70.8
6/30/06	8,994,826,247	5,394,086,323	5,440,132,708	3,600,739,924	3,554,693,539	60.0	60.5
6/30/07	9,485,939,277	5,396,782,459	5,773,156,838	4,089,156,818	3,712,782,439	56.9	60.9
6/30/08	10,129,689,985	5,318,792,893	5,056,867,294	4,810,897,092	5,072,822,691	52.5	49.9

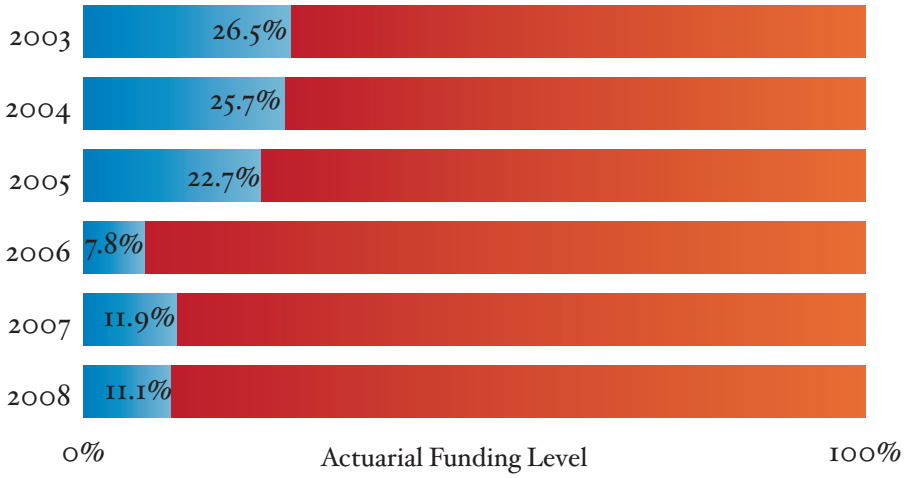


The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Summary of Actuarially Unfunded Liabilities as of June 30, 2008

Kentucky Employees Retirement System Non-Hazardous Insurance Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$2,093,210,321	$553,885,082	$487,274,973	$1,539,325,239	$1,605,935,348	26.5%	23.3%
6/30/04	2,335,905,365	600,586,961	587,680,647	1,735,318,404	1,748,224,718	25.7	25.2
6/30/05	2,680,559,188	607,068,351	610,901,623	2,073,490,837	2,069,657,565	22.7	22.8
6/30/06	7,815,480,774	611,350,765	632,642,846	7,204,130,009	7,182,837,928	7.8	8.1
6/30/07	5,201,355,055	621,171,658	663,558,360	4,580,183,397	4,537,796,695	11.9	12.8
6/30/08	5,431,499,285	603,197,761	574,480,809	4,828,301,524	4,857,018,476	11.1	10.6

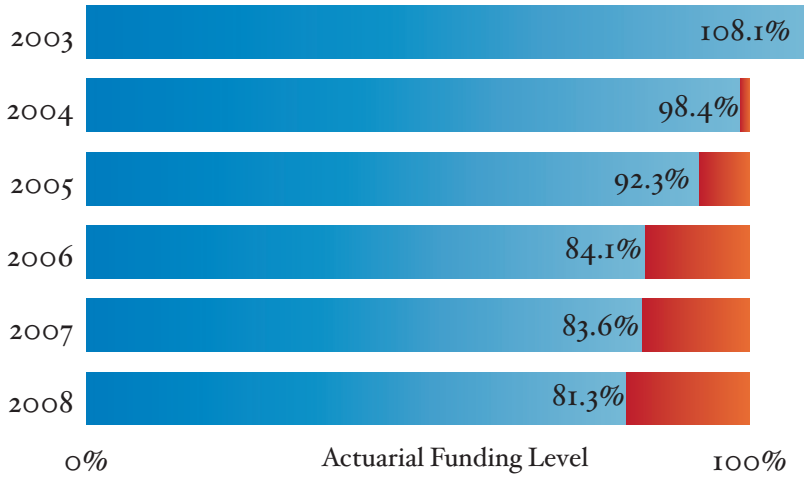


The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Summary of Actuarially Unfunded Liabilities as of June 30, 2008

Kentucky Employees Retirement System Hazardous Pension Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$356,879,133	$385,925,722	$320,524,691	($29,046,589)	$36,354,442	108.1%	89.8%
6/30/04	403,578,036	397,212,763	366,569,507	6,365,273	37,008,529	98.4	90.8
6/30/05	438,994,257	405,288,662	398,308,897	33,705,595	40,685,360	92.3	90.7
6/30/06	508,655,903	427,984,192	437,029,583	80,671,711	71,626,320	84.1	85.9
6/30/07	558,992,329	467,287,809	510,775,499	91,704,520	48,216,830	83.6	91.4
6/30/08	618,010,827	502,132,214	484,440,015	115,878,613	133,570,812	81.3	78.4

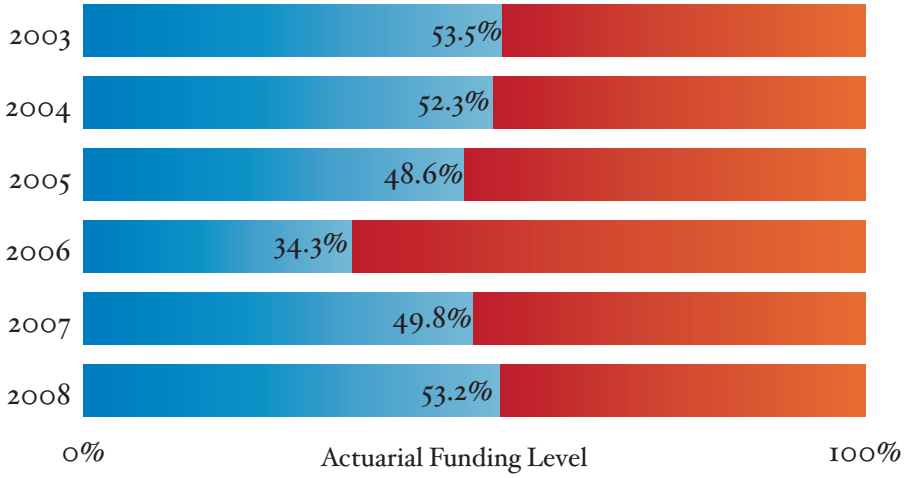


The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Summary of Actuarially Unfunded Liabilities as of June 30, 2008

Kentucky Employees Retirement System Hazardous Insurance Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$283,178,335	$151,459,500	$125,533,413	$131,718,835	$157,644,922	53.5%	44.3%
6/30/04	323,503,563	169,158,879	162,127,373	154,344,684	161,376,190	52.3	50.1
6/30/05	386,844,695	187,947,644	188,871,226	198,897,051	197,973,469	48.6	48.8
6/30/06	621,237,856	212,833,318	223,523,081	408,404,538	397,714,775	34.3	36.0
6/30/07	504,842,981	251,536,756	280,885,910	253,306,225	223,957,071	49.8	55.6
6/30/08	541,657,214	288,161,759	269,299,859	253,495,455	272,357,355	53.2	49.7

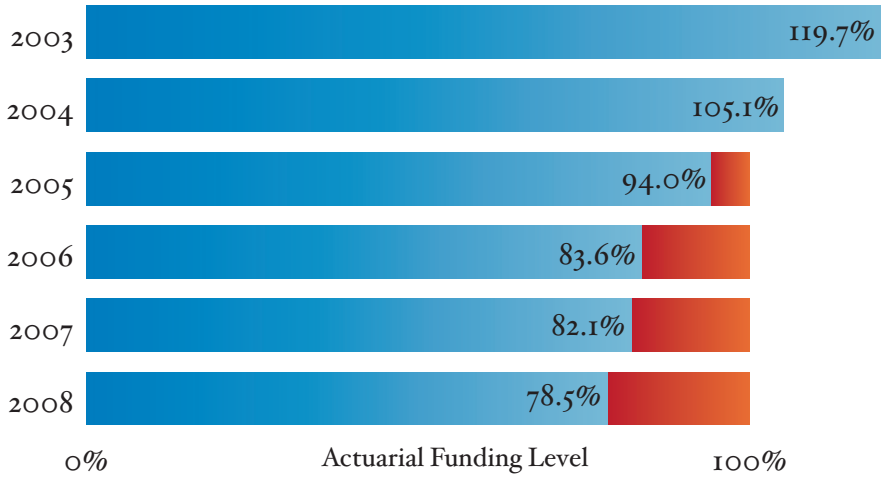


The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Summary of Actuarially Unfunded Liabilities as of June 30, 2008

County Employees Retirement System Non-Hazardous Pension Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$4,417,597,802	$5,286,580,047	$4,174,881,117	($868,982,245)	$242,716,685	119.7%	94.5%
6/30/04	4,936,459,488	5,187,851,530	4,613,335,957	(251,392,042)	323,123,531	105.1	93.5
6/30/05	5,385,156,690	5,059,208,687	4,893,599,997	325,948,003	491,556,693	94.0	90.9
6/30/06	6,179,569,267	5,162,894,136	5,191,376,948	1,016,675,131	988,192,319	83.6	84.0
6/30/07	6,659,446,126	5,467,824,480	5,812,935,251	1,191,621,646	846,510,875	82.1	87.3
6/30/08	7,304,217,691	5,731,502,438	5,431,735,605	1,572,715,253	1,872,482,086	78.5	74.4

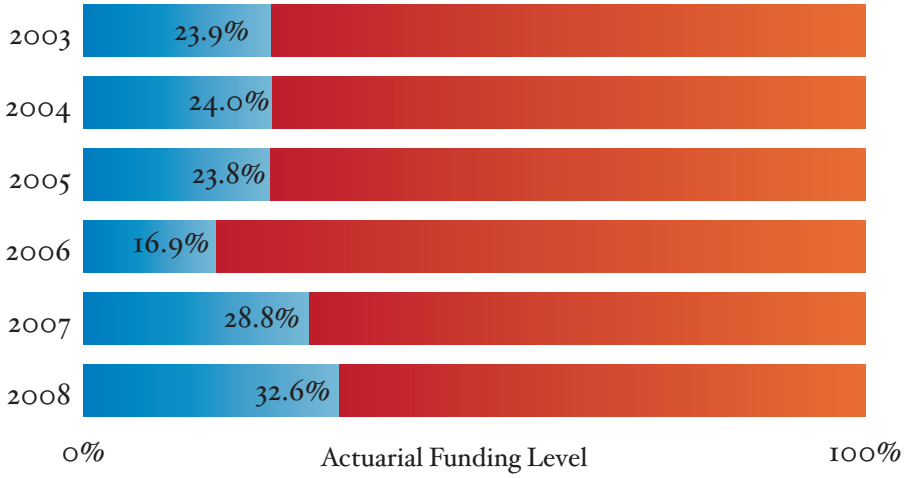


The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Summary of Actuarially Unfunded Liabilities as of June 30, 2008

County Employees Retirement System Non-Hazardous Insurance Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$2,176,963,259	$520,060,105	$435,667,125	$1,656,903,154	$1,741,296,134	23.9%	20.0%
6/30/04	2,438,734,696	585,399,072	563,877,594	1,853,335,624	1,874,857,102	24.0	23.1
6/30/05	2,788,754,654	663,941,949	668,485,367	2,124,812,705	2,120,269,287	23.8	24.0
6/30/06	4,607,223,639	777,726,590	813,250,744	3,829,497,049	3,793,972,895	16.9	17.7
6/30/07	3,333,966,070	960,285,900	1,084,042,781	2,373,680,170	2,249,923,289	28.8	32.5
6/30/08	3,583,193,466	1,168,883,170	1,105,944,178	2,414,310,296	2,477,249,288	32.6	30.9



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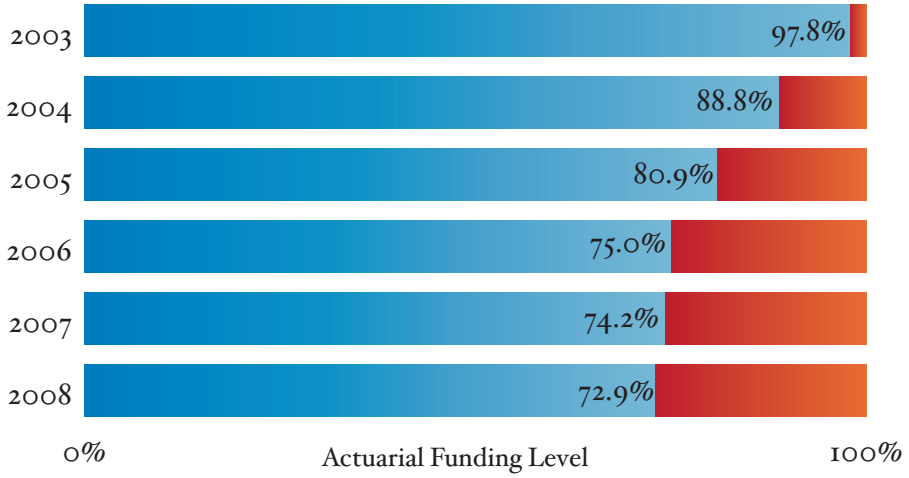
Summary of Actuarially Unfunded Liabilities as of June 30, 2008

County Employees Retirement System Hazardous Pension Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$1,499,628,782	$1,467,004,856	$1,168,794,472	$32,623,926	$330,834,310	97.8%	77.9%
6/30/04	1,640,830,120	1,457,612,042	1,305,011,472	183,218,078	335,818,648	88.8	79.5
6/30/05	1,795,617,335	1,452,353,023	1,411,245,719	343,264,312	384,371,616	80.9	78.6
6/30/06	2,020,142,770	1,515,075,017	1,528,845,357	505,067,753	491,297,413	75.0	75.7
6/30/07	2,208,736,179	1,639,288,924	1,754,934,764	569,447,255	453,801,415	74.2	79.5
6/30/08	2,403,122,095	1,750,867,373	1,644,983,243	652,254,722	758,138,852	72.9	68.5



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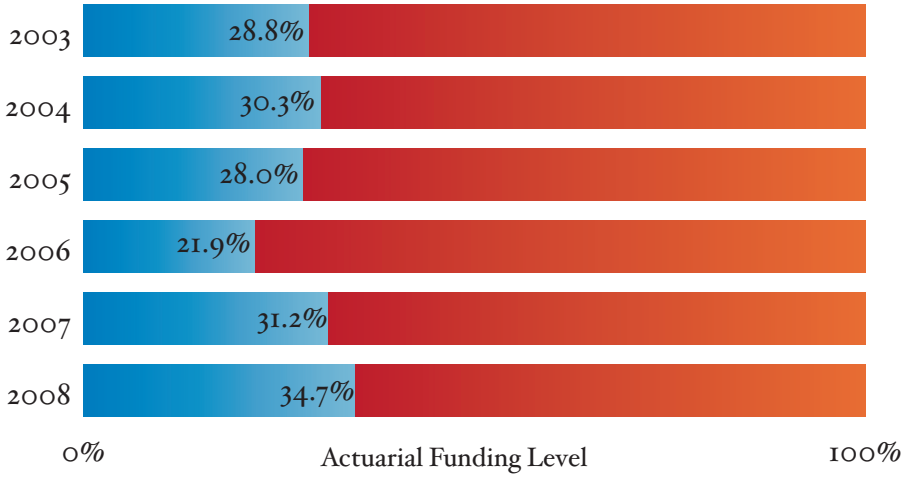
Summary of Actuarially Unfunded Liabilities as of June 30, 2008

County Employees Retirement System Hazardous Insurance Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$935,650,662	$269,190,080	$223,212,339	$666,460,582	$712,438,323	28.8%	23.9%
6/30/04	1,025,684,477	310,578,162	297,734,286	715,106,315	727,950,191	30.3	29.0
6/30/05	1,283,299,092	359,180,461	360,938,669	924,118,631	922,360,423	28.0	28.1
6/30/06	1,928,481,371	422,785,042	441,278,796	1,505,696,329	1,487,202,575	21.9	22.9
6/30/07	1,646,460,011	512,926,549	570,155,702	1,133,533,462	1,076,304,309	31.2	34.6
6/30/08	1,769,782,957	613,526,319	576,414,457	1,156,256,638	1,193,368,500	34.7	32.6



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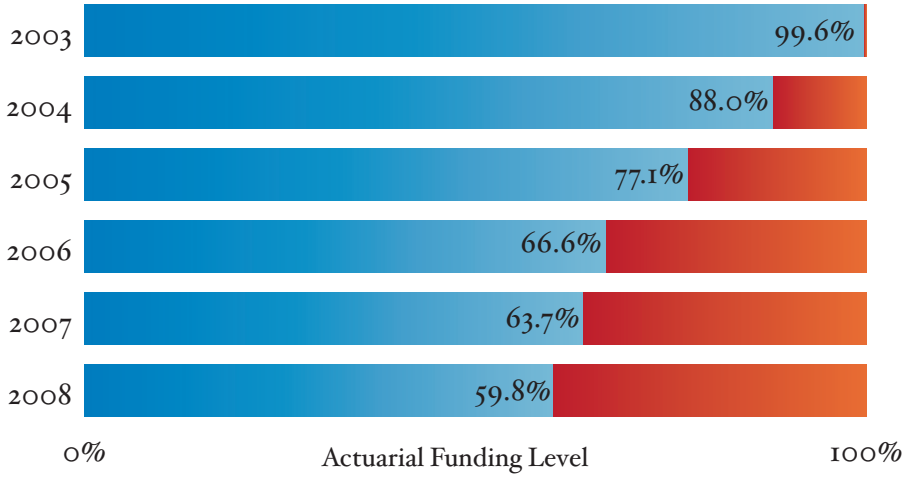
Summary of Actuarially Unfunded Liabilities as of June 30, 2008

State Police Retirement System Pension

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$414,881,459	$413,063,576	$319,116,232	$1,817,883	$95,765,227	99.6%	76.9%
6/30/04	437,482,425	385,077,195	335,720,408	52,405,230	101,762,017	88.0	76.7
6/30/05	458,593,576	353,511,622	339,405,873	105,081,954	119,187,703	77.1	74.0
6/30/06	516,482,298	344,016,197	352,841,486	172,466,101	163,640,812	66.6	68.3
6/30/07	547,955,286	348,806,508	376,381,488	199,148,778	171,573,798	63.7	68.7
6/30/08	587,129,257	350,891,451	337,358,918	236,237,806	249,770,339	59.8	57.5

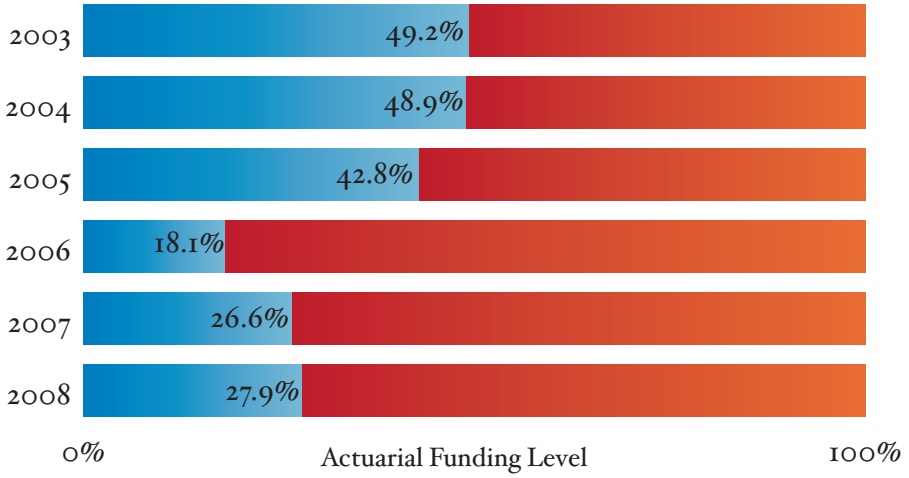


The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Summary of Actuarially Unfunded Liabilities as of June 30, 2008

State Police Retirement System Insurance

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$184,501,205	$90,747,967	$72,533,617	$93,753,238	$111,967,588	49.2%	39.3%
6/30/04	197,604,301	96,622,908	90,422,080	100,981,393	107,182,221	48.9	45.8
6/30/ 05	234,159,510	100,207,082	99,408,106	133,952,428	134,751,404	42.8	42.5
6/30/06	582,580,867	105,580,269	110,491,075	477,000,598	472,089,792	18.1	19.0
6/30/07	432,763,229	115,215,912	132,573,898	317,547,317	300,189,331	26.6	30.6
6/30/08	445,107,468	123,961,197	121,781,967	321,146,271	323,325,501	27.9	27.4



The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

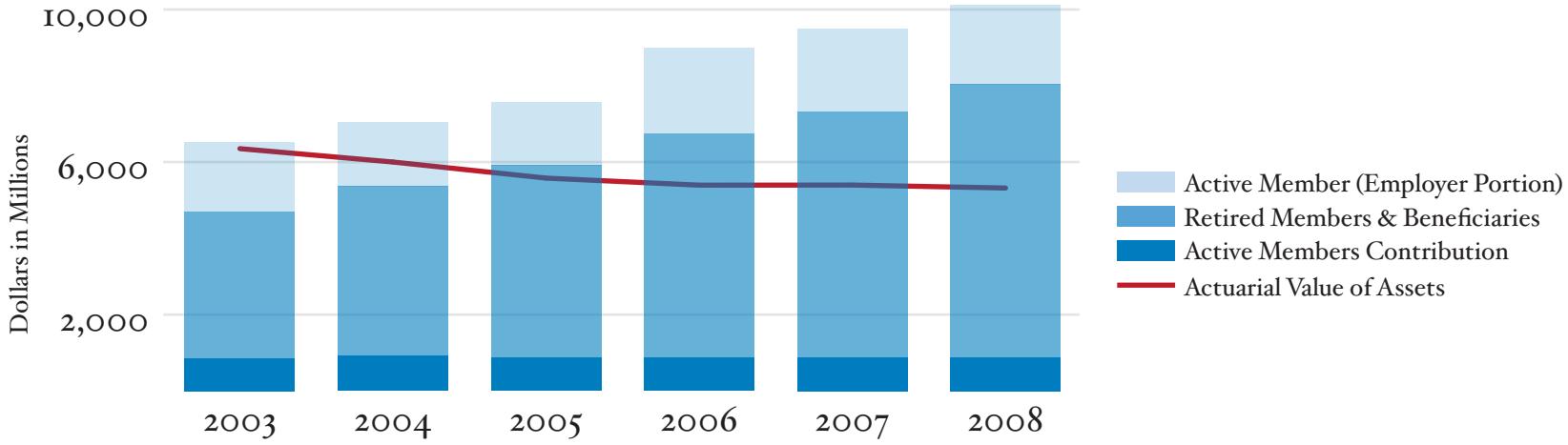
Solvency Test as of June 30, 2008

Kentucky Employees Retirement System Non-Hazardous Pension Fund

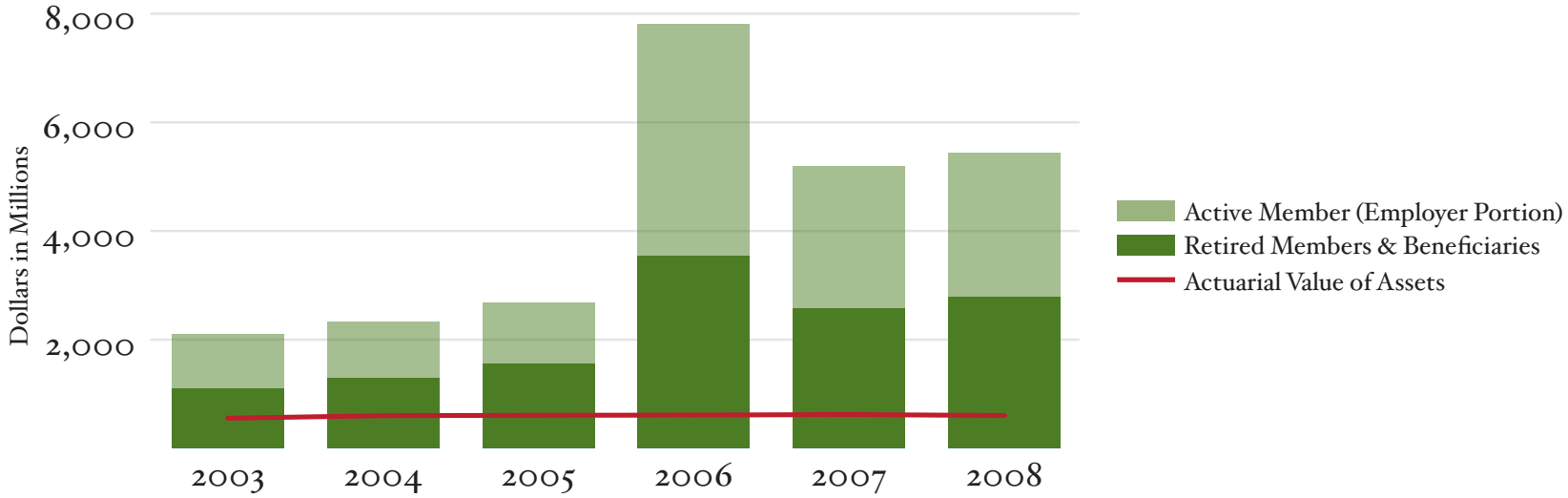
	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/03	$859,895,312	$3,844,696,149	$1,815,871,727	$6,351,318,832	100.0%	100.0%	90.7%
6/30/04	915,105,103	4,452,864,748	1,681,643,320	6,000,513,743	100.0	100.0	37.6
6/30/05	866,044,474	5,056,247,608	1,656,782,757	5,578,685,746	100.0	93.2	-
6/30/06	866,050,799	5,881,990,853	2,246,784,595	5,394,086,323	100.0	77.0	-
6/30/07	878,842,180	6,437,235,593	2,169,861,504	5,396,782,459	100.0	70.2	-
6/30/08	875,178,069	7,162,496,700	2,092,015,217	5,318,792,893	100.0	62.0	-
Kentucky Employees Retirement System Non-Hazardous Insurance Fund							
6/30/03	$0	$1,089,606,122	$1,003,604,199	$553,885,082	100.0%	50.8%	-
6/30/04	0	1,282,214,660	1,053,690,705	600,586,961	100.0	46.8	-
6/30/05	0	1,550,619,458	1,129,939,730	607,068,351	100.0	39.2	-
6/30/06	0	3,543,125,375	4,272,355,400	611,350,765	100.0	17.3	-
6/30/07	0	2,569,197,567	2,632,157,488	621,171,658	100.0	24.2	-
6/30/08	0	2,788,189,754	2,643,309,531	603,197,761	100.0	21.6	-

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

KERS Non-Hazardous Pension



KERS Non-Hazardous Insurance



Solvency Test as of June 30, 2008

Kentucky Employees Retirement System Hazardous Pension Fund

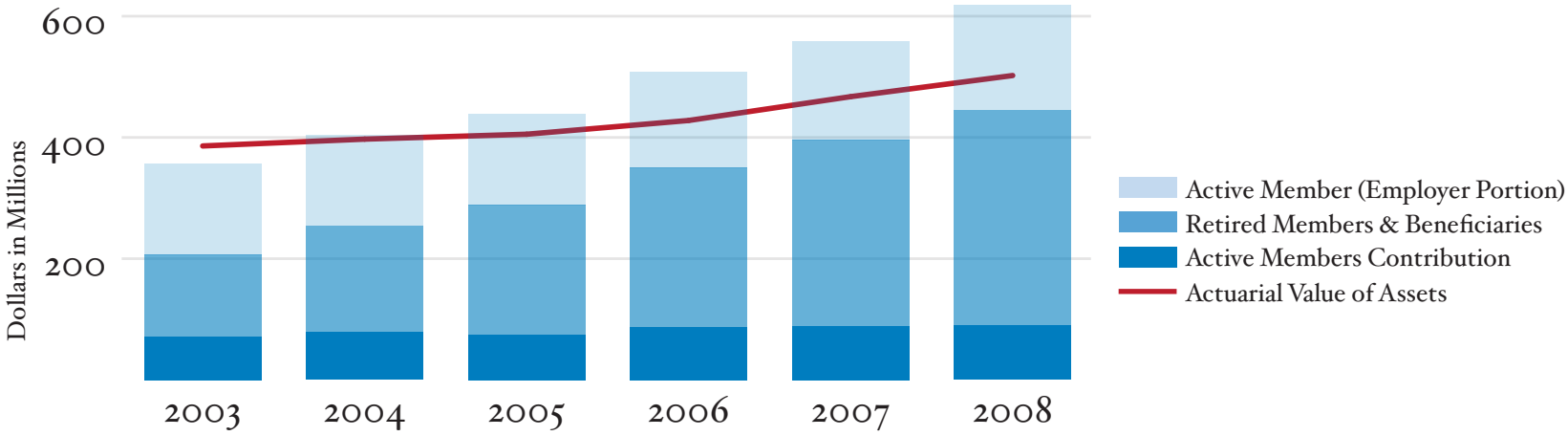
	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/03	$71,414,721	$135,622,333	$149,842,079	$385,925,722	100.0%	100.0%	119.4%
6/30/04	78,817,575	175,102,848	149,657,613	397,212,763	100.0	100.0	95.7
6/30/05	75,098,321	213,310,550	150,585,386	405,288,662	100.0	100.0	77.6
6/30/06	87,092,538	262,446,606	159,116,759	427,984,192	100.0	100.0	49.3
6/30/07	88,670,847	306,492,350	163,829,132	467,287,809	100.0	100.0	44.0
6/30/08	89,590,638	355,771,877	172,648,312	502,132,214	100.0	100.0	32.9

Kentucky Employees Retirement System Hazardous Insurance Fund

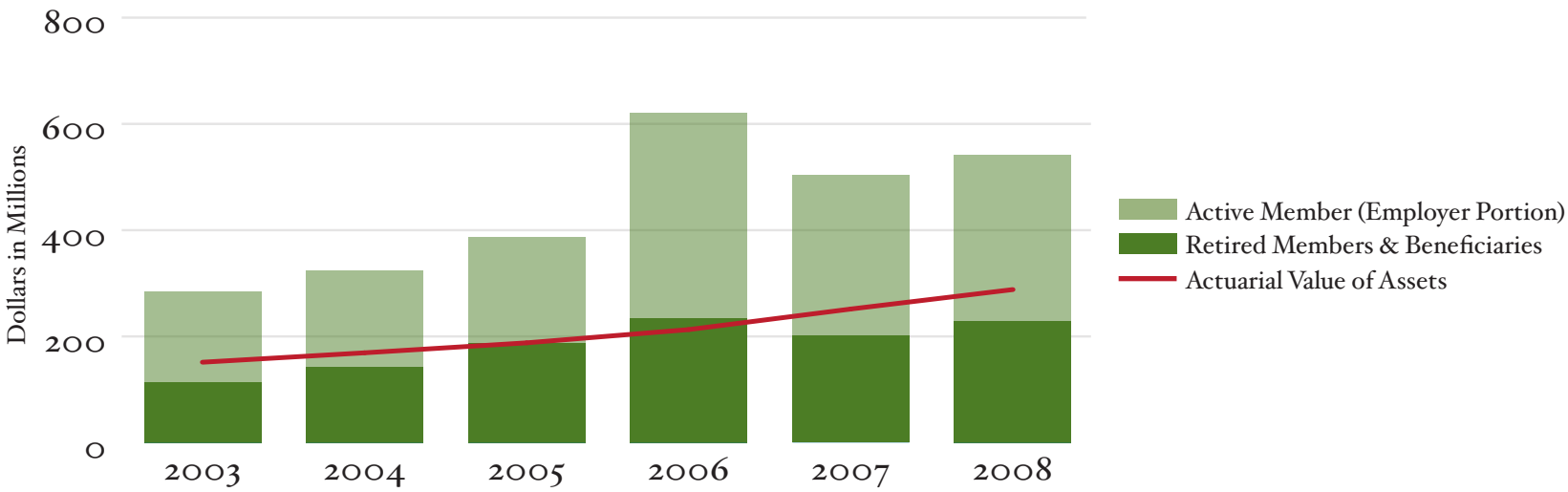
6/30/03	$0	$113.979,451	$169,198,884	$151,459,500	100.0%	100.0%	22.2%
6/30/04	0	142,872,557	180,631,006	169,158,879	100.0	100.0	14.6
6/30/05	0	187,883,650	198,961,045	187,947,644	100.0	100.0	-
6/30/06	0	234,058,715	387,179,141	212,833,318	100.0	100.0	-
6/30/07	0	201,189,546	303,653,435	251,536,756	100.0	100.0	16.6
6/30/08	0	228,834,940	312,822,274	288,161,759	100.0	100.0	19.0

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

KERS Hazardous Pension



KERS Hazardous Insurance



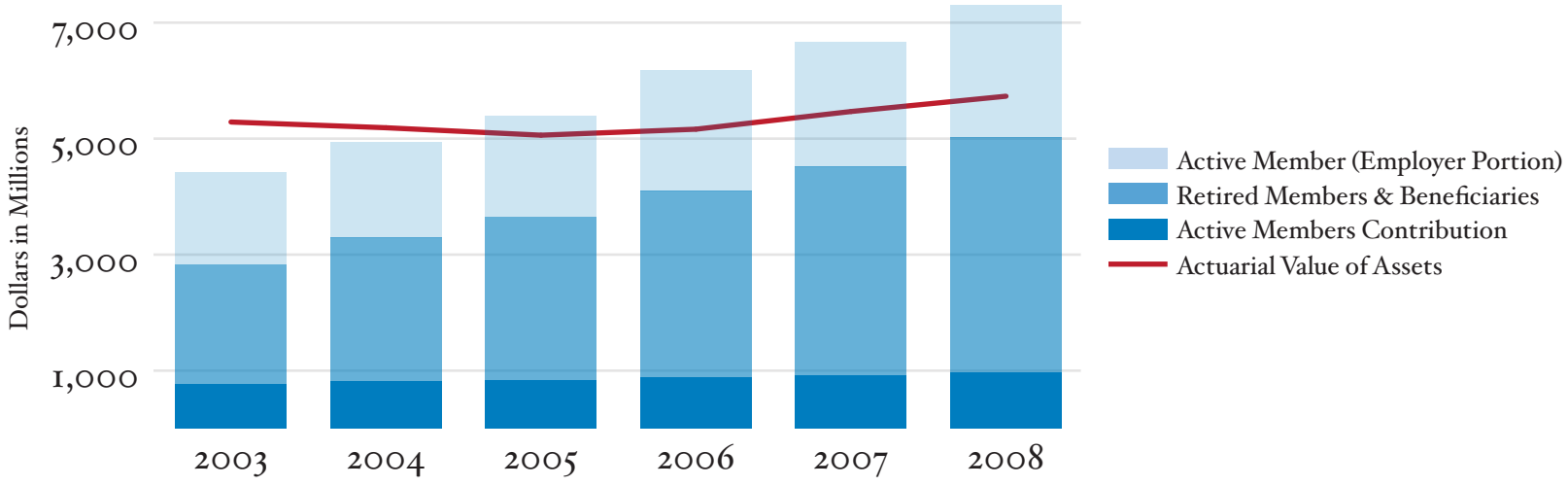
Solvency Test as of June 30, 2008

County Employees Retirement System Non-Hazardous Pension Fund

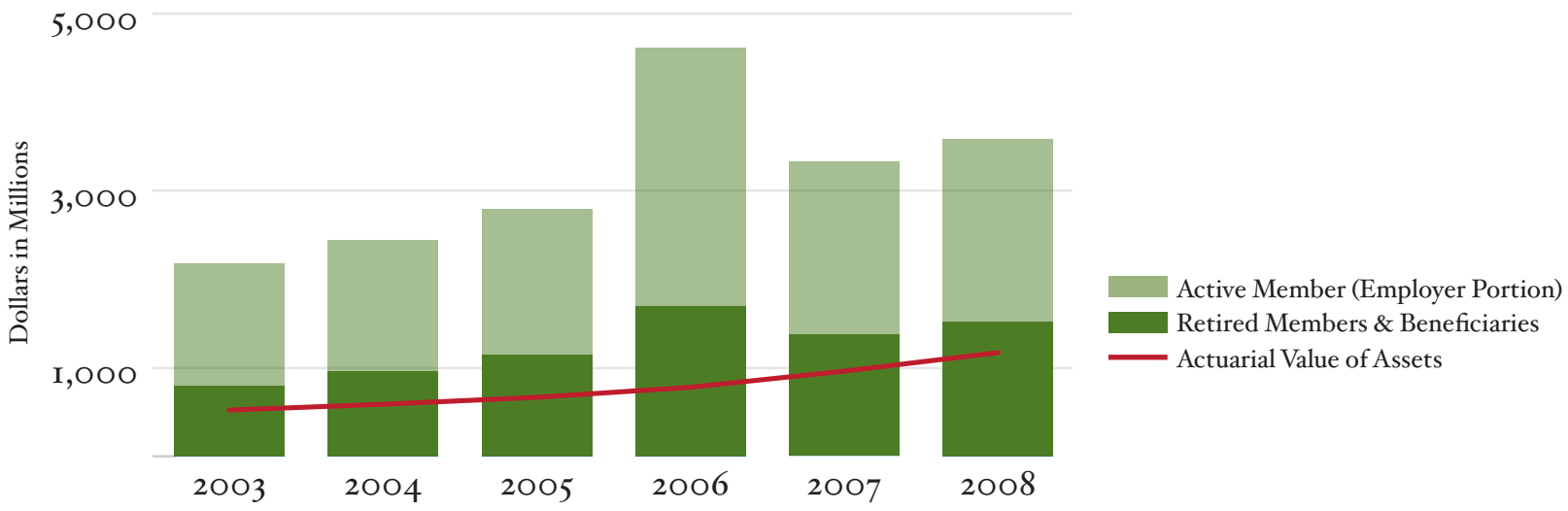
	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/03	$759,938,261	$2,068,481,586	$1,589,177,955	$5,286,580,047	100.0%	100.0%	154.7%
6/30/04	814,908,627	2,478,195,080	1,643,355,781	5,187,851,530	100.0	100.0	115.3
6/30/05	837,513,907	2,814,210,355	1,733,432,428	5,059,208,687	100.0	100.0	81.2
6/30/06	883,946,564	3,210,095,023	2,085,527,680	5,162,894,136	100.0	100.0	51.3
6/30/07	920,126,096	3,589,512,063	2,149,807,967	5,467,824,480	100.0	100.0	44.6
6/30/08	963,213,677	4,058,767,419	2,282,236,595	5,731,502,438	100.0	100.0	31.1
County Employees Retirement System Non-Hazardous Insurance Fund							
6/30/03	$0	$799,777,264	$1,377,185,995	$520,060,105	100.0%	65.0%	-
6/30/04	0	955,930,091	1,482,804,605	585,399,072	100.0	61.2	-
6/30/05	0	1,144,219,107	1,644,535,547	663,941,949	100.0	58.0	-
6/30/06	0	1,694,600,143	2,912,623,496	777,726,590	100.0	45.9	-
6/30/07	0	1,372,128,406	1,961,837,664	960,285,900	100.0	70.0	-
6/30/08	0	1,521,450,274	2,061,743,192	1,168,883,170	100.0	76.8	-

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

CERS Non-Hazardous Pension



CERS Non-Hazardous Insurance



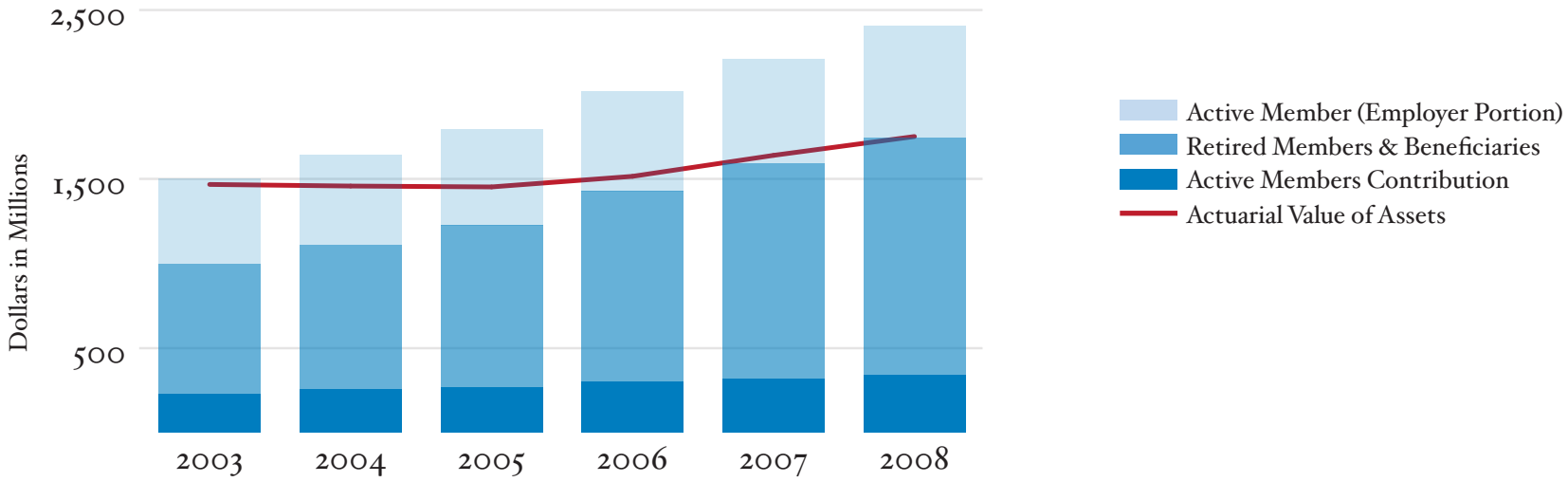
Solvency Test as of June 30, 2008

County Employees Retirement System Hazardous Pension Fund

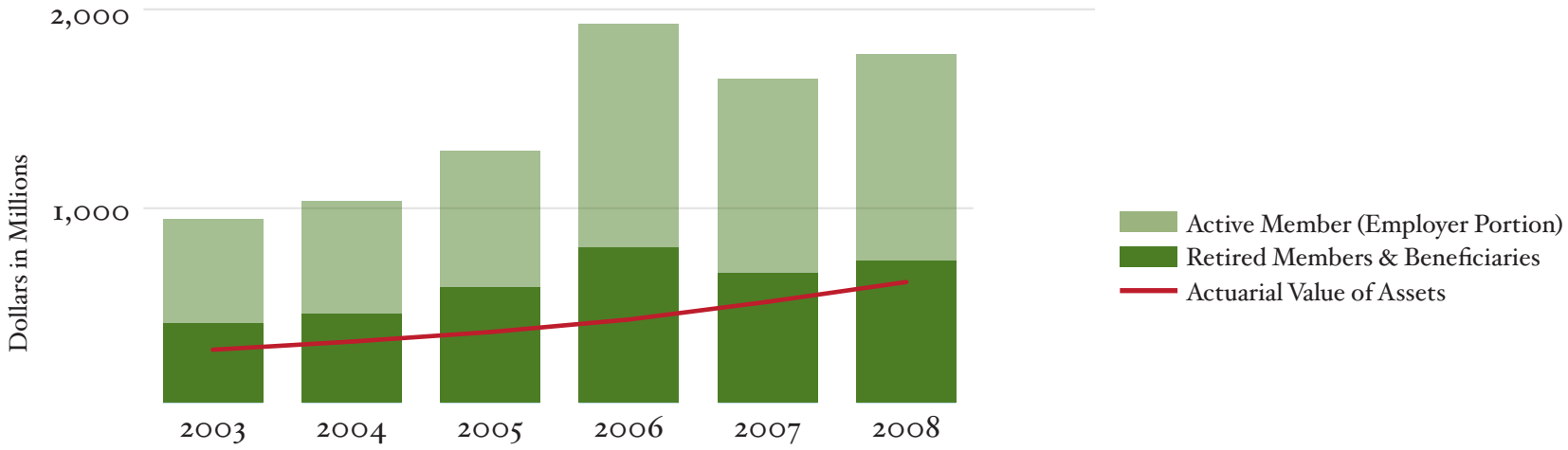
	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/03	$227,629,402	$769,804,746	$502,194,634	$1,467,004,856	100.0%	100.0%	93.5%
6/30/04	256,366,204	851,354,443	533,109,473	1,457,612,042	100.0	100.0	65.6
6/30/05	264,913,465	960,052,305	570,651,565	1,452,353,023	100.0	100.0	39.8
6/30/06	300,200,800	1,128,164,618	591,777,352	1,515,075,017	100.0	100.0	14.7
6/30/07	317,007,367	1,275,221,775	616,507,037	1,639,288,924	100.0	100.0	7.6
6/30/08	338,324,362	1,406,982,409	657,815,324	1,750,867,373	100.0	100.0	0.8
County Employees Retirement System Hazardous Insurance Fund							
6/30/03	$0	$401,276,347	$534,374,315	$269,190,080	100.0%	67.1%	-
6/30/04	0	450,288,687	575,395,790	310,578,162	100.0	69.0	-
6/30/05	0	586,104,126	697,194,966	359,180,461	100.0	61.3	-
6/30/06	0	787,671,273	1,140,810,098	422,785,042	100.0	53.7	-
6/30/07	0	659,752,978	986,707,033	512,926,549	100.0	77.7	-
6/30/08	0	722,435,184	1,047,347,773	613,526,319	100.0	84.9	-

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

CERS Hazardous Pension



CERS Hazardous Insurance



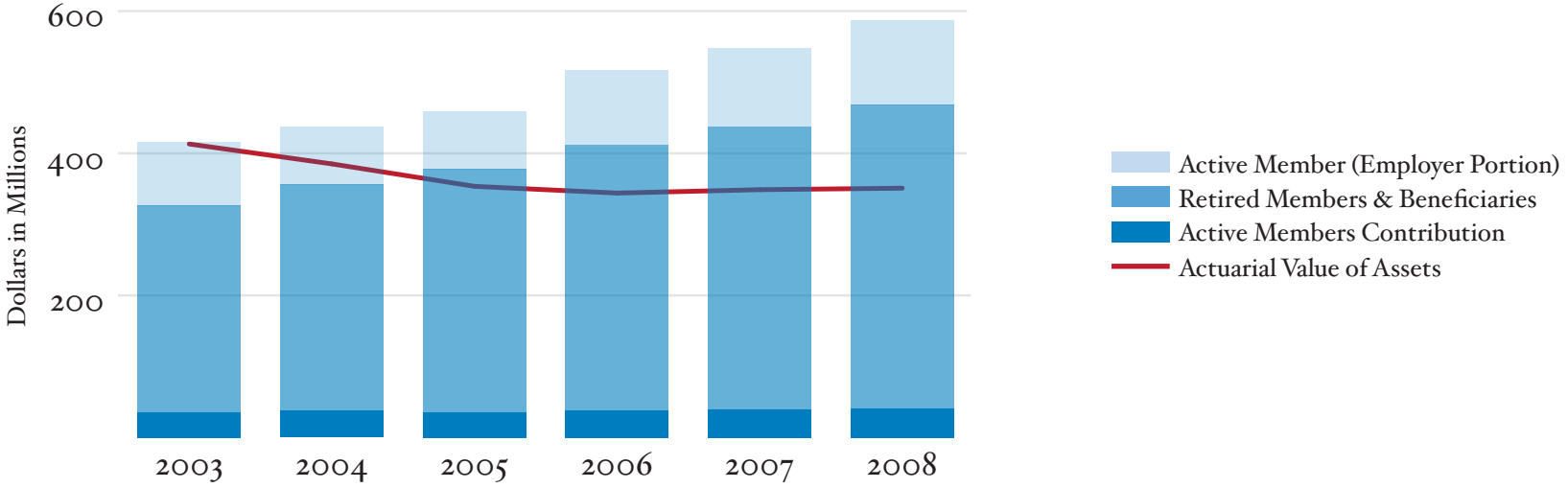
Solvency Test as of June 30, 2008

State Police Retirement System Pension Fund

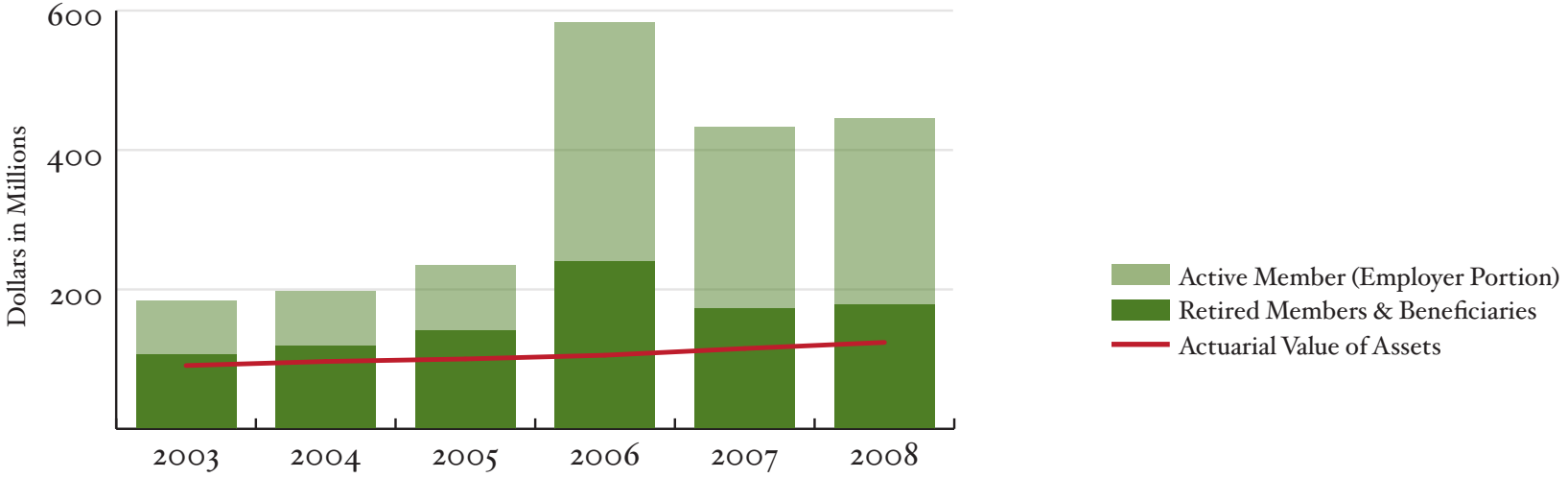
	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/03	$35,832,095	$290,012,792	$89,036,572	$413,063,576	100.0%	100.0%	98.0%
6/30/04	37,658,106	318,664,694	81,159,625	385,077,195	100.0	100.0	35.4
6/30/05	35,670,717	341,398,363	81,524,496	353,511,622	100.0	93.1	-
6/30/06	37,866,774	373,588,145	105,027,379	344,016,197	100.0	81.9	-
6/30/07	39,505,285	397,863,520	110,586,481	348,806,508	100.0	77.7	-
6/30/08	41,391,416	426,311,368	119,426,473	350,891,451	100.0	72.6	-
State Police Retirement System Insurance Fund							
6/30/03	$0	$106,317,750	$78,183,455	$90,747,967	100.0%	85.4%	-
6/30/04	0	119,104,851	78,499,450	96,622,908	100.0	81.1	-
6/30/05	0	141,585,694	92,573,816	100,207,082	100.0	70.8	-
6/30/06	0	240,913,868	341,666,999	105,580,269	100.0	43.8	-
6/30/07	0	172,291,142	260,472,087	115,215,912	100.0	66.9	-
6/30/08	0	178,655,245	266,452,223	123,961,197	100.0	69.4	-

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 covered by actuarial assets over time.

SPRS Pension



SPRS Insurance



Summary of Active Member Valuation Data as of June 30, 2008

Kentucky Employees Retirement System Non-Hazardous

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/03	N/A	49,158	$1,658,604,696	$33,740	2.6%	42.5	10.0
6/30/04	N/A	47,599	1,645,412,496	34,568	2.5	42.9	10.0
6/30/05	324	47,118	1,655,907,288	35,144	1.7	42.9	9.8
6/30/06	338	46,707	1,702,230,777	36,445	3.7	43.0	9.7
6/30/07	317	47,913	1,780,223,493	37,155	1.9	43.3	9.3
6/30/08	414	48,085	1,837,873,488	38,221	2.9	43.2	9.1

Kentucky Employees Retirement System Hazardous

6/30/03	N/A	4,189	$129,088,956	$30,816	3.5%	41.6	7.2
6/30/04	N/A	4,014	126,664,812	31,556	2.4	42.7	7.6
6/30/05	26	4,274	131,687,088	30,811	(2.4)	41.9	7.1
6/30/06	15	4,320	138,747,320	32,117	4.2	41.6	7.0
6/30/07	15	4,349	144,838,020	33,304	3.7	41.7	7.0
6/30/08	16	4,393	148,710,060	33,852	1.6	41.4	6.9

[1]Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the Financial Section is based upon the sum of the monthly payroll for active members recorded for each month of the fiscal year ending June 30, 2008.

N/A= Not Available

Summary of Active Member Valuation Data as of June 30, 2008

County Employees Retirement System Non-Hazardous

Valuation Date	Number of Employer	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/03	N/A	82,288	$1,796,451,180	$21,831	3.2%	43.8	7.6
6/30/24	N/A	80,922	1,826,870,880	22,576	3.4	44.8	7.9
6/30/05	1,116	81,240	1,885,275,000	23,206	2.8	45.0	8.1
6/30/06	1,099	83,694	1,982,437,473	23,687	2.1	45.1	8.1
6/30/07	1,112	84,920	2,076,848,328	24,457	3.3	45.9	8.1
6/30/08	1,110	85,221	2,166,612,648	25,423	3.9	45.9	8.3

County Employees Retirement System Hazardous

6/30/03	N/A	9,286	$374,700,732	$40,351	4.3%	37.3	7.8
6/30/04	N/A	9,349	392,562,624	41,990	4.1	38.1	8.1
6/30/05	284	9,464	411,121,728	43,441	3.5	38.0	8.2
6/30/06	292	9,635	426,927,550	44,310	2.0	37.8	8.3
6/30/07	294	10,063	458,998,956	45,613	2.9	38.6	8.1
6/30/08	299	10,173	474,241,332	46,618	2.2	38.7	8.3

[1]Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the Financial Section is based upon the sum of the monthly payroll for active members recorded for each month of the fiscal year ending June 30, 2008.

N/A=Not Available

Summary of Active Member Valuation Data as of June 30, 2008

State Police Retirement System

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/03	1	1,019	$43,760,832	$42,945	(2.1%)	35.9	10.9
6/30/04	1	999	43,835,208	43,879	2.2	36.4	10.7
6/30/05	1	987	43,720,092	44,296	1.0	36.5	10.6
6/30/06	1	1,028	47,743,865	46,443	4.8	36.5	10.5
6/30/07	1	957	49,247,580	51,460	10.8	37.3	11.1
6/30/08	1	993	53,269,080	53,645	4.2	36.9	10.8

Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2008.

Summary of Retired Member Valuation Data as of June 30, 2008

Kentucky Employees Retirement System Non-Hazardous

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/03	2,148	1,618	27,233	$393,048,800	N/A	$14,433
6/30/04	2,473	814	28,892	449,410,400	14.34	15,555
6/30/05	2,481	603	30,770	509,347,800	13.34	16,553
6/30/06	2,481	1,111	32,140	566,167,003	11.31	17,611
6/30/07	2,440	731	33,849	625,435,416	10.47	18,477
6/30/08	2,573	1,115	35,307	710,505,270	13.60	20,124

Kentucky Employees Retirement System Hazardous

6/30/03	170	21	1,357	$12,974,700	N/A	$9,561
6/30/04	227	35	1,549	16,099,000	24.08	10,393
6/30/05	234	31	1,752	19,640,700	22.00	11,210
6/30/06	256	28	1,980	23,381,537	19.25	11,809
6/30/07	241	19	2,202	27,528,789	17.74	12,502
6/30/08	261	59	2,404	33,588,993	22.01	13,972

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

N/A = Not Available

Summary of Retired Member Valuation Data as of June 30, 2008

County Employees Retirement System Non-Hazardous

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/03	2,411	1,466	27,092	$219,848,200	N/A	$8,115
6/30/04	2,805	768	29,129	247,534,300	12.59	8,498
6/30/05	2,808	590	31,347	279,590,300	12.95	8,919
6/30/06	2,782	1,027	33,102	308,269,651	10.26	9,313
6/30/07	3,244	782	35,564	348,712,020	13.12	9,805
6/30/08	3,366	1,351	37,759	393,757,510	12.92	10,478

County Employees Retirement System Hazardous

6/30/03	293	39	3,737	$72,322,200	N/A	$19,353
6/30/04	343	75	4,005	79,559,200	10.01	$19,865
6/30/05	403	47	4,361	89,224,700	12.15	$20,460
6/30/06	427	76	4,712	100,290,052	12.40	$21,284
6/30/07	500	53	5,159	113,735,850	13.41	$22,046
6/30/08	469	206	5,422	127,477,109	12.08	$23,511

N/A = Not Available

Summary of Active Member Valuation Data as of June 30, 2008

State Police Retirement System

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/03	53	9	941	$28,115,500	N/A	$29,878
6/30/04	62	11	992	30,805,600	9.57	31,054
6/30/05	50	6	1,036	32,983,900	7.07	31,838
6/30/06	43	10	1,067	34,651,251	5.06	32,475
6/30/07	49	11	1,105	37,208,377	7.38	33,673
6/30/08	42	12	1,135	41,293,016	10.98	36,382

N/A = Not Available

Summary of Benefit Provisions
KERS & CERS Non- Hazardous Plans

Plan Funding

State statute requires active members to contribute 5% of creditable compensation. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS rates are subject to state budget approval.

Membership Eligibility

For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	6.5% yearly for 5 years before age 65 or 27 years of service, then 4% yearly
Any	25	6.5% yearly for 5 years before age 65 or 27 years of service

Benefit Formula

Final Compensation	x	Benefit Factor	x	Years of Service
Average of the five highest, or if eligible, three highest fiscal years earnings. To be eligible for three-high final compensation, member must have 27 years of service, age and service of 75 years and retire prior to 1/09.		KERS 1.97% if: Member does not have 13 months credit from 1/98- 1/99.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if: Member has 13 months credit from 1/98- 1/99.		
		KERS 2.20% if: 20 or more years of service, and retires by 1/09.		
		CERS 2.20% if: Member begins participating prior to 8/1/04.		
		CERS 2.00% if: Member begins participating on or after 8/1/04.		

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits

Members participating before 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the CPI-U for the most recent calendar year, not to exceed five percent (5%). The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased annually by the CPI-U.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

Summary of Benefit Provisions
KERS & CERS Hazardous Plans & SPRS

Plan Funding

State statute requires active members to contribute 8% of creditable compensation. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS & SPRS rates are subject to state budget approval.

Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

Retirement Eligibility

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	6.5% yearly for 5 years before age 55 or 20 years of service

Benefit Formula

Final Compensation	x	Benefit Factor	x	Years of Service
Average of the three highest fiscal years earnings.		KERS 2.49% CERS 2.50% SPRS 2.50%		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).

Disability Benefits

Members hired before 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members hired on or after 8/1/04 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% Final Rate of Pay or the amount calculated under the Benefit

Formula noted above based upon actual service.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed five percent (5%). The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15 for each year of earned service increased annually by the CPI-U.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

Changes in Benefit Provisions

HB 380: 2006 Regular Session KERS & SPRS Employer Rate Reductions

Employer Contribution Rates: HB 380, the Executive Branch Budget Bill, effectively reduced the employer contribution rate recommended by the actuary and adopted by the Board for KERS and SPRS for fiscal year 2006-2007 and 2007-2008. The recommended rate and the rate budgeted by HB 380 are provided in the statistical section.

House Bill 1, Pension Reform legislation, was enacted by the 2008 Special Session of the Kentucky General Assembly. This law is a comprehensive pension reform that significantly impacts retirement benefits for employees who begin participating with KRS on or after September 1, 2008. The law also has provisions that will affect current employees and retirees. Provisions of this legislation became effective in Fiscal Year 2008-09 and will be detailed in the 2009 report.

Statistical Section

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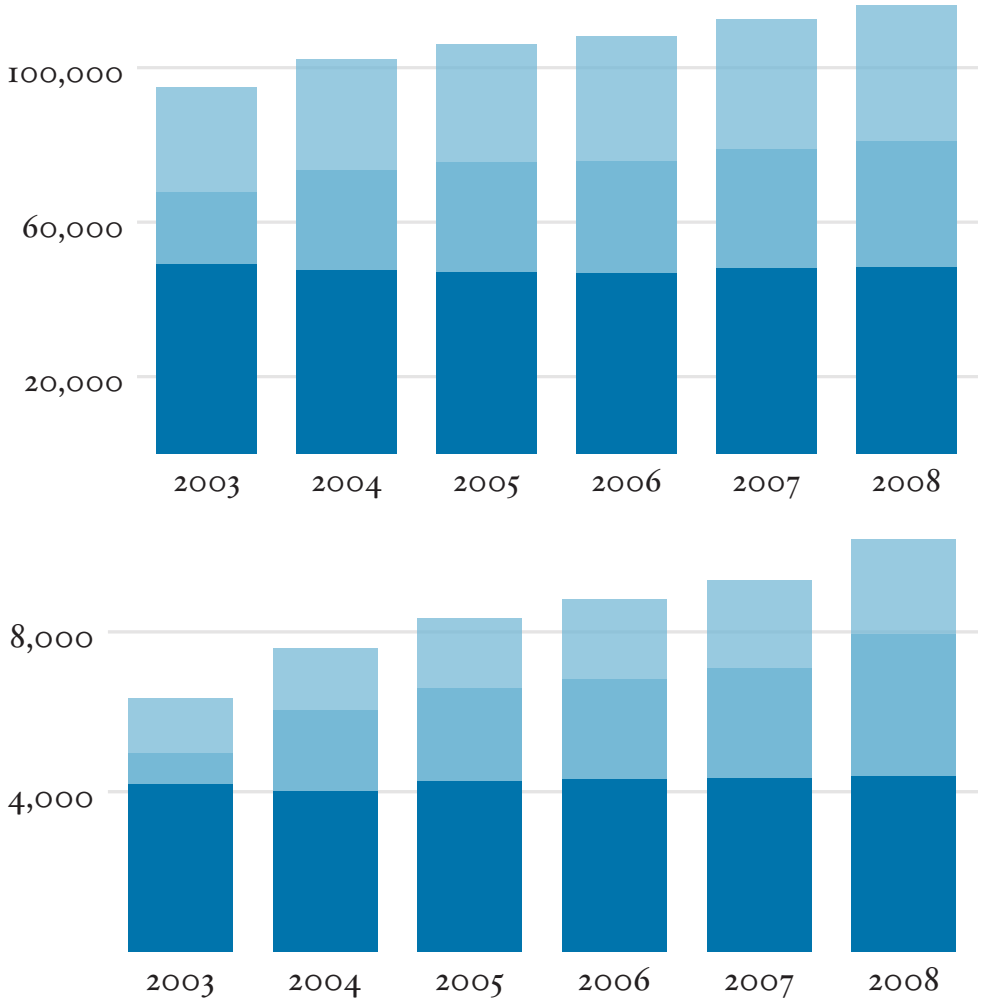
Kentucky Retirement Systems
A component unit of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

Membership by System



KERS Non-Hazardous Membership

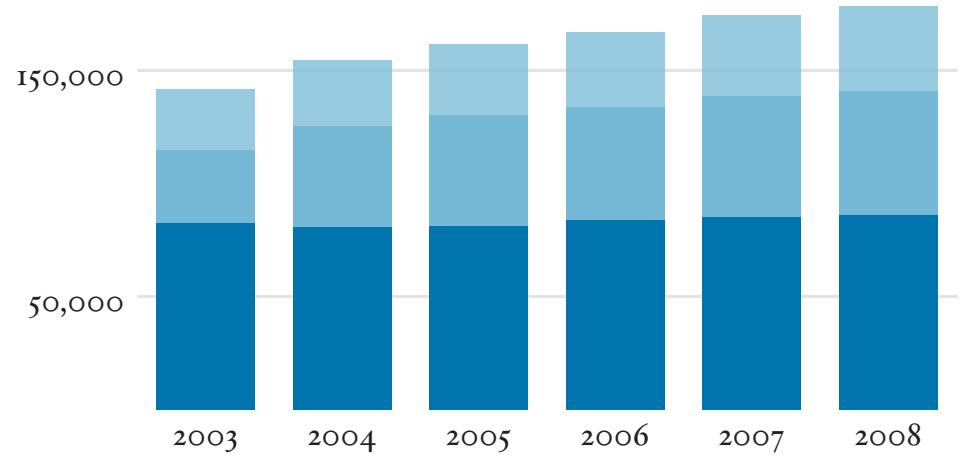
	Active	Inactive	Retired	Total
2003	49,158	18,522	27,233	94,913
2004	47,599	25,775	28,892	102,266
2005	47,118	28,345	30,770	106,233
2006	46,707	29,143	32,140	107,990
2007	47,913	30,904	33,849	112,666
2008	48,202	32,717	35,286	116,205

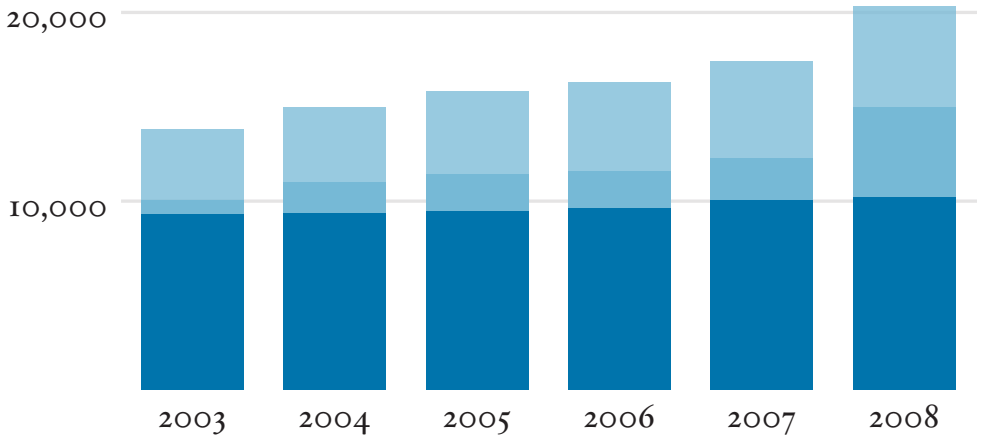
KERS Hazardous Membership

	Active	Inactive	Retired	Total
2003	4,189	782	1,357	6,328
2004	4,014	2,032	1,549	7,595
2005	4,274	2,304	1,752	8,330
2006	4,320	2,501	1,981	8,802
2007	4,349	2,738	2,202	9,289
2008	4,397	3,534	2,402	10,333

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

Membership by System





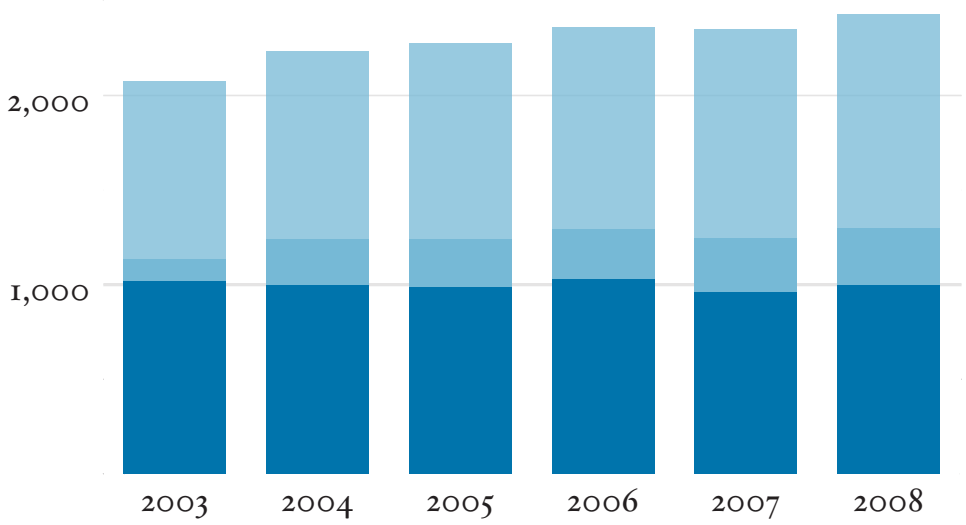
CERS Non-Hazardous Membership

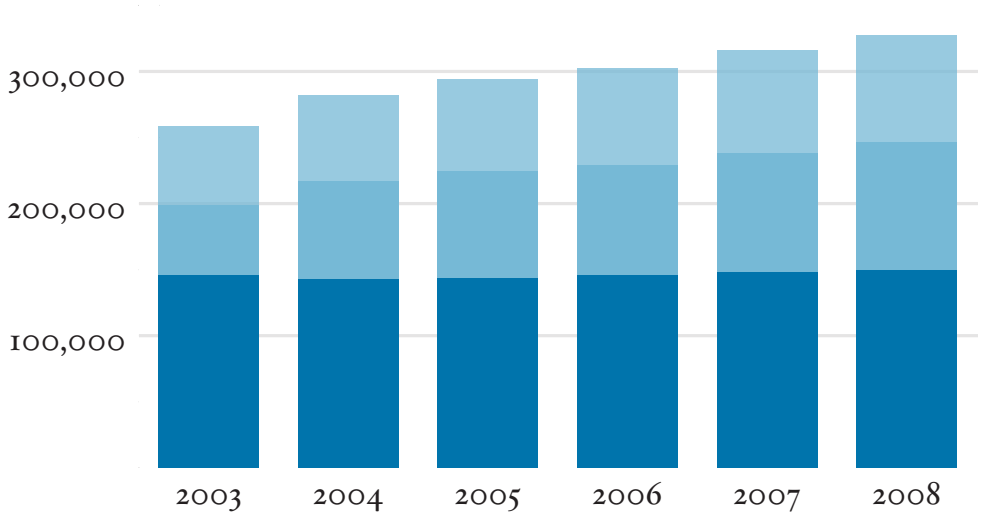
	Active	Inactive	Retired	Total
2003	82,288	32,326	27,092	141,706
2004	80,922	44,419	29,129	154,470
2005	81,240	48,869	31,347	161,456
2006	83,694	50,046	33,102	166,842
2007	84,920	53,901	35,564	174,385
2008	85,803	55,279	37,558	178,640

CERS Hazardous Membership

	Active	Inactive	Retired	Total
2003	9,286	781	3,737	13,804
2004	9,349	1,648	4,005	15,002
2005	9,464	1,971	4,361	15,796
2006	9,635	1,955	4,712	16,302
2007	10,063	2,197	5,159	17,419
2008	10,185	4,815	5,314	20,314

Membership by System





SPRS Membership

	Active	Inactive	Retired	Total
2003	1,019	113	941	2,073
2004	999	243	992	2,234
2005	987	252	1,036	2,275
2006	1,028	266	1,067	2,361
2007	957	286	1,105	2,348
2008	995	302	1,136	2,433

KRS Total Membership

	Active	Inactive	Retired	Total
2003	145,940	52,524	60,360	258,824
2004	142,883	74,117	64,567	281,567
2005	143,083	81,741	69,266	294,090
2006	145,384	83,911	73,002	302,297
2007	148,202	90,026	77,879	316,107
2008	149,582	96,647	81,696	327,925

Average Monthly Benefit by Length of Service

	KERS Non-Hazardous		CERS Non-Hazardous		KERS Hazardous		CERS Hazardous		SPRS	
Service Credit Range	Number	Average Monthly Benefit	Number	Average Monthly Benefit	Number	Average Monthly Benefit	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	3,017	$147.51	3,565	$131.04	126	$206.57	407	$386.85	78	$478.43
5 or more but less than 10	4,037	345.67	7,341	259.14	275	423.64	346	552.00	34	827.02
10 or more but less than 15	3,855	570.27	7,128	448.76	306	611.23	339	943.59	36	1,097.84
15 or more but less than 20	3,601	862.82	5,383	674.53	314	895.41	399	1,128.45	66	1,816.22
20 or more but less than 25	3,869	1,171.41	5,262	899.39	590	1,274.77	2,097	1,833.10	310	2,244.76
25 or more but less than 30	8,682	2,100.79	6,685	1,779.29	527	1,364.03	1,352	2,444.51	365	3,204.87
30 or more but less than 35	5,860	2,969.50	1,835	2,495.47	232	1,804.74	515	3,353.97	210	4,260.28
35 or more	2,422	4,165.19	535	3,239.35	64	2,520.61	118	4,177.45	64	5,017.61
Total	35,343	1,624.27	37,734	851.72	2,434	1,093.55	5,573	1,881.89	1,163	2,842.88

The information in the above table includes only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included.

Schedule of Participating Employers — 1 of 2

Kentucky Employees Retirement System

Agency Classification	Number of Agencies	Number of Employees
Agencies Reporting Through State Payroll	177	36,060
Other Agencies (universities, mental health boards, health departments)	141	16,820
Special Districts and Boards	4	458
Child Support Offices (county attorneys)	60	211
Other State-Administered Retirement Systems	3	291
Total	385	53,840

State Police Retirement System

Agency Classification	Number of Agencies	Number of Employees
Kentucky State Police-Uniformed Officers	1	996

Schedule of Participating Employers — 2 of 2

County Employees Retirement System

Agency Classification	Number of Agencies	Number of Employees
Area Development Districts	13	634
Boards of Education	174	48,731
Cities	216	6,482
County Attorneys	61	604
County Clerks	13	583
County Government Agencies	260	19,738
Fire Departments	67	869
Hospitals	3	335
Jailers	9	439
Libraries	83	1,046
Planning Commissions	11	200
Police Departments	96	740
Police & Fire Departments (combined)	61	3,459
Sanitation Districts	5	65
Sheriff Departments	53	1,174
Special Districts and Boards	166	3,011
Utility Boards	105	3,417
Urban County Government Agencies	4	2,049
Total	1,400	93,576

Principal Participating Employers — 1 of 2

Kentucky Employees Retirement System

Participating Employer	Rank	Covered Employees	% of Total System
Health & Family Services Cabinet: Department for Community Based Services	1	4,333	8.05
Transportation: Department of Highways	2	3,915	7.27
Justice & Public Safety Cabinet: Department of Corrections	3	3,632	6.75
Bluegrass Regional Mental Health/Mental Retardation Board	4	2,560	4.75
Administrative Office of the Courts	5	1,538	2.86
Justice & Public Safety Cabinet: Department of Juvenile Justice	6	1,490	2.77
Seven County Services Inc.	7	1,144	2.12
Unified Prosecutorial System (Child Support Offices)	8	1,079	2.00
Kentucky Department of Parks	9	1,049	1.95
Eastern Kentucky University	10	1,048	1.95
All Others		32,052	59.53
Total		53,840	100.00

Principal Participating Employers — 2 of 2

County Employees Retirement System

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board of Education	1	6,702	7.16%
Louisville/Jefferson County Metro	2	3,198	3.42
Louisville/Jefferson County Metro (Police, Fire, EMS)	3	2,290	2.45
Fayette County Board of Education	4	1,885	2.01
Circuit Clerks	5	1,857	1.98
Lexington/Fayette Urban County Government	6	1,619	1.73
Hardin County Board of Education	7	1,113	1.19
Boone County Board of Education	8	1,058	1.13
Warren County Board of Education	9	892	0.95
Bullitt County Board of Education	10	871	0.93
All Others		72,091	77.04
Total		93,576	100.00

Plan Net Assets

Kentucky Employees Retirement System (KERS)

Dollars in Thousands ($)	Non-Hazardous			Hazardous		
	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2003	$4,929,319	$487,071	$5,416,390	$320,513	$125,522	$446,035
June 30 2004	5,258,995	587,681	5,846,676	366,568	162,127	528,695
June 30 2005	5,362,631	610,901	5,973,532	398,308	188,871	587,179
June 30 2006	5,440,133	612,643	6,052,776	437,030	223,523	660,553
June 30 2007	5,773,157	663,558	6,436,715	510,775	280,886	791,661
June 30 2008	5,056,869	574,479	5,631,348	484,438	269,300	753,738

County Employees Retirement System (CERS)

Dollars in Thousands ($)	Non-Hazardous			Hazardous		
	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2003	$4,175,825	$435,500	$4,611,325	$1,168,776	$223,168	$1,391,944
June 30 2004	4,613,335	563,877	5,177,212	1,305,012	297,737	1,602,749
June 30 2005	4,893,600	668,485	5,562,085	1,411,246	360,940	1,772,186
June 30 2006	5,191,377	813,251	6,004,628	1,528,845	441,279	1,970,124
June 30 2007	5,812,936	1,084,043	6,896,979	1,754,935	570,156	2,325,091
June 30 2008	5,431,735	1,105,945	6,537,680	1,644,982	576,414	2,221,396

Plan Net Assets

State Police Retirement System (SPRS)

Dollars in Thousands($)	Pension	Insurance	Total
June 30 2003	$319,115	$72,538	$391,653
June 30 2004	335,721	90,420	426,141
June 30 2005	339,406	99,408	438,814
June 30 2006	352,841	110,491	463,332
June 30 2007	376,381	132,574	508,955
June 30 2008	337,359	121,782	459,141

Kentucky Retirement Systems Total

Dollars in Thousands($)	Pension	Insurance	Total
June 30 2003	$10,913,548	$1,343,799	$12,257,347
June 30 2004	11,879,631	1,701,842	13,581,473
June 30 2005	12,405,191	1,928,605	14,333,796
June 30 2006	12,950,226	2,201,187	15,151,413
June 30 2007	14,228,184	2,731,217	16,959,401
June 30 2008	12,955,383	2,647,920	15,603,303

Changes in Plan Net Assets Dollars in Thousands ($)

Kentucky Employees Retirement System (KERS) Non-Hazardous Pension Fund

Fiscal Year	2003	2004	2005	2006	2007	2008
Additions						
Member Contributions	$137,124	$129,077	$127,801	$107,607	$116,254	$116,487
Employer Contributions	7,597	21,697	50,333	60,681	88,249	104,655
Net Investment Income	196,106	651,532	462,638	504,361	784,652	(221,578)
Total Additions	340,827	802,306	640,772	672,649	989,155	(436)
Deductions						
Benefit Payments	404,896	459,367	522,396	577,947	640,201	699,052
Refunds	7,258	8,001	8,824	9,632	9,489	9,076
Administrative Expenses	4,959	5,262	5,916	7,568	7,070	7,724
Other Expenses	0	0	0	0	13	0
Total Deductions	417,113	472,630	537,136	595,147	656,773	715,852
Change in Net Assets	**(76,286)**	**$329,676**	**$103,636**	**$77,502**	**$332,382**	**(716,288)**

Changes in Plan Net Assets Dollars in Thousands ($)

Kentucky Employees Retirement System (KERS) Non-Hazardous Insurance Fund

Fiscal Year	2003	2004	2005	2006	2007	2008
Additions						
Employer Contributions	$65,335	$78,017	$51,432	$47,635	$64,014	$56,745
Net Investment Income	8,050	83,064	47,823	65,839	78,877	(38,965)
Member Drug Reimbursement	0	0	0	0	10,744	6,634
Insurance Appropriation	0	0	0	11,852	0	0
Other Income	0	0	0	5,770	12,196	12,940
Total Additions	73,385	161,081	99,255	131,096	165,831	37,354
Deductions						
Benefit Payments	51,586	59,987	75,571	95,823	111,659	122,946
Administrative Expenses	393	484	464	1,679	3,199	3,487
Insurance Appropriation	0	0	0	20,000	0	0
Total Deductions	51,979	60,471	76,035	117,502	114,858	126,433
Change in Net Assets	**$21,406**	**$100,610**	**$23,220**	**$1,742**	**$50,973**	**(89,079)**

Changes in Plan Net Assets Dollars in Thousands ($)

Kentucky Employees Retirement System (KERS) Hazardous Pension Fund

Fiscal Year	2003	2004	2005	2006	2007	2008
Additions						
Member Contributions	$11,553	$11,548	$11,625	$12,056	$13,245	$13,091
Employer Contributions	7,322	9,769	9,758	10,803	13,237	15,257
Net Investment Income	14,742	43,403	33,123	41,680	77,996	(20,673)
Total Additions	33,617	64,720	54,506	64,539	104,478	7,675
Deductions						
Benefit Payments	13,373	16,863	20,495	23,736	28,514	31,606
Refunds	1,160	1,410	1,760	1,436	1,662	1,742
Administrative Expenses	404	392	511	645	611	664
Other Expenses	0	0	0	0	1	0
Total Deductions	14,937	18,665	22,766	25,817	38,788	34,012
Change in Net Assets	**$18,680**	**$46,055**	**$31,740**	**$38,722**	**$73,690**	**(26,337)**

Changes in Plan Net Assets Dollars in Thousands ($)

Kentucky Employees Retirement System (KERS) Hazardous Insurance Fund

Fiscal Year	2003	2004	2005	2006	2007	2008
Additions						
Employer Contributions	$15,883	$14,959	$15,653	$17,012	$19,535	$21,997
Net Investment Income	2,835	25,206	15,999	24,128	44,541	(25,740)
Member Drug Reimbursement	0	0	0	0	105	74
Insurance Appropriation	0	0	0	88	0	0
Other Income	0	0	0	0	204	247
Total Additions	18,718	40,165	31,652	41,228	64,385	(3,422)
Deductions						
Benefit Payments	2,938	3,539	4,853	6,513	6,874	8,069
Administrative Expenses	27	21	55	63	83	95
Total Deductions	2,965	3,560	4,908	6,576	6,957	8,164
Change in Net Assets	**$15,753**	**$36,605**	**$26,744**	**$34,652**	**$57,428**	**(11,586)**

Changes in Plan Net Assets Dollars in Thousands ($)

County Employees Retirement System (CERS) Non-Hazardous Pension Fund

Fiscal Year	2003	2004	2005	2006	2007	2008
Additions						
Member Contributions	$125,301	$122,484	$127,637	$112,372	$121,979	$125,014
Employer Contributions	11,856	44,028	54,617	90,834	124,261	150,925
Net Investment Income	160,110	551,669	413,672	444,092	760,541	(228,020)
Total Additions	297,267	718,181	595,926	647,298	1,009,736	47,919
Deductions						
Benefit Payments	230,317	260,643	294,590	325,135	356,648	403,958
Refunds	10,213	11,334	11,042	11,589	11,396	11,924
Administrative Expenses	8,244	8,694	10,029	12,797	12,197	13,238
Other Expenses	0	0	0	0	22	0
Total Deductions	248,774	280,671	315,661	349,521	389,263	429,120
Change in Net Assets	**$48,493**	**$437,510**	**$280,265**	**$297,777**	**$620,473**	**(381,201)**

Changes in Plan Net Assets Dollars in Thousands ($)

County Employees Retirement System (CERS) Non-Hazardous Insurance Fund

Fiscal Year	2003	2004	2005	2006	2007	2008
Additions						
Employer Contributions	$99,235	$89,344	$107,632	$128,868	$147,609	$196,110
Net Investment Income	10,625	86,080	55,723	83,991	188,055	(95,924)
Member Drug Reimbursement	0	0	0	0	9,623	6,003
Insurance Appropriation	0	0	0	6,365	0	0
Other Income	0	0	0	0	13,997	15,104
Total Additions	109,860	175,424	163,355	219,224	359,284	121,293
Deductions						
Benefit Payments	39,387	46,654	58,262	72,919	85,199	95,966
Administrative Expenses	306	393	485	1,539	3,040	3,425
Total Deductions	39,693	47,047	58,747	74,458	88,239	99,391
Change in Net Assets	**$70,167**	**$128,377**	**$104,608**	**$144,766**	**$271,045**	**$21,902**

Changes in Plan Net Assets Dollars in Thousands ($)

County Employees Retirement System (CERS) Hazardous Pension Fund

Fiscal Year	2003	2004	2005	2006	2007	2008
Additions						
Member Contributions	$36,203	$38,668	$39,515	$39,055	$43,650	$44,260
Employer Contributions	16,906	27,641	39,948	49,976	61,553	72,155
Net Investment Income	46,212	154,628	119,901	132,915	240,035	(97,393)
Total Additions	99,321	220,937	199,364	221,946	345,238	19,022
Deductions						
Benefit Payments	72,532	81,422	90,119	101,087	115,604	125,191
Refunds	1,794	2,520	2,139	2,147	2,563	2,641
Administrative Expenses	737	759	872	1,113	1,073	1,143
Other Expenses	0	0	0	0	2	0
Total Deductions	75,063	84,701	93,130	104,347	119,242	128,975
Change in Net Assets	**$24,258**	**$136,236**	**$106,234**	**$117,599**	**$225,996**	**(109,953)**

Changes in Plan Net Assets Dollars in Thousands ($)

County Employees Retirement System (CERS) Hazardous Insurance Fund

Fiscal Year	2003	2004	2005	2006	2007	2008
Additions						
Employer Contributions	$45,244	$47,037	$55,552	$64,854	$70,073	$90,113
Net Investment Income	5,361	44,337	29,819	98	90,041	(48,529)
Member Drug Reimbursement	0	0	0	0	657	420
Insurance Appropriation	0	0	0	45,317	0	0
Other Income	0	0	0	0	191	222
Total Additions	50,605	91,374	85,371	110,269	160,962	42,226
Deductions						
Benefit Payments	14,866	16,700	21,985	29,717	31,607	35,604
Administrative Expenses	105	105	183	213	320	364
Total Deductions	14,971	16,805	22,168	29,930	31,927	35,968
Change in Net Assets	**$35,634**	**$74,569**	**$63,203**	**$80,339**	**$129,035**	**$6,258**

Changes in Plan Net Assets Dollars in Thousands ($)

State Police Retirement System (SPRS) Pension Fund

Fiscal Year	2003	2004	2005	2006	2007	2008
Additions						
Member Contributions	$4,674	$4,875	$4,228	$4,814	$5,152	$5,407
Employer Contributions	-20	1,153	2,852	4,244	6,142	7,443
Net Investment Income	13,755	41,642	29,761	39,347	49,595	(12,283)
Total Additions	18,409	47,670	36,841	48,405	60,889	567
Deductions						
Benefit Payments	27,862	30,877	32,921	34,703	37,187	39,367
Refunds	97	96	131	133	47	85
Administrative Expenses	86	91	104	134	126	137
Other Expenses	0	0	0	0	0	0
Total Deductions	28,045	31,064	33,156	34,970	37,360	39,589
Change in Net Assets	**(9,636)**	**$16,606**	**$3,685**	**$13,435**	**$23,529**	**(39,022)**

Changes in Plan Net Assets Dollars in Thousands ($)

State Police Retirement System (SPRS) Insurance Fund

Fiscal Year	2003	2004	2005	2006	2007	2008
Additions						
Employer Contributions	$7,654	$8,456	$6,974	$6,880	$6,489	$7,329
Net Investment Income	1,360	14,449	8,279	12,082	21,876	(11,440)
Member Drug Reimbursement	0	0	0	0	361	184
Insurance Appropriation	0	0	0	5	0	0
Other Income	0	0	0	0	8	9
Total Additions	9,014	22,905	15,253	18,967	28,734	(3,918)
Deductions						
Benefit Payments	4,519	4,992	6,221	7,816	6,515	6,768
Administrative Expenses	31	31	44	68	105	106
Total Deductions	4,550	5,023	6,265	7,884	6,620	6,874
Change in Net Assets	**$4,464**	**$17,882**	**$8,988**	**$11,083**	**$22,114**	**(10,792)**

KERS Non-Hazardous Schedule of Benefit Expenses by Type — 1 of 2

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2002-03					
Average Benefit	$822	$1,430	$809	$688	$1,203
Number	3,706	17,917	1,922	3,708	27,253
Total Monthly Benefits	$3,045,409	$25,626,447	$1,555,628	$2,551,366	$32,778,849
% of Total Monthly Benefits	9.3%	78.2%	4.7%	7.8%	100.0%
FY 2003-04					
Average Benefit	$859	$1,537	$825	$721	$1,296
Number	3,768	19,477	1,925	3,740	28,910
Total Monthly Benefits	$3,237,300	$29,941,376	$1,587,565	$2,697,409	$37,463,650
% of Total Monthly Benefits	8.6%	79.9%	4.2%	7.2%	100.0%
FY 2004-05					
Average Benefit	$910	$1,632	$850	$739	$1,379
Number	3,866	21,092	1,910	3,902	30,770
Total Monthly Benefits	$3,516,148	$34,423,089	$1,623,500	$2,882,916	$42,445,653
% of Total Monthly Benefits	8.3%	81.1%	3.8%	6.8%	100.0%

KERS Non-Hazardous Schedule of Benefit Expenses by Type — 2 of 2

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2005-06					
Average Benefit	$888	$1,670	$834	$868	$1,469
Number	4,616	24,056	2,628	849	32,149
Total Monthly Benefits	$4,099,896	$40,184,892	$2,190,812	$737,173	$47,212,773
% of Total Monthly Benefits	8.7%	85.1%	4.6%	1.6%	100.0%
FY 2006-07					
Average Benefit	$936	$1,745	$865	$869	$1,541
Number	4,767	25,605	2,597	843	33,812
Total Monthly Benefits	$4,463,823	$44,672,320	$2,245,823	$732,470	$52,114,436
% of Total Monthly Benefits	8.6%	85.7%	4.3%	1.4%	100.0%
FY 2007-08					
Average Benefit	$980	$1,831	$897	$906	$1,624
Number	4,845	27,080	2,579	839	35,343
Total Monthly Benefits	$4,747,523	$49,585,033	$2,313,860	$760,088	$57,406,504
% of Total Monthly Benefits	8.3%	86.4%	4.0%	1.3%	100.0%

The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

KERS Hazardous Schedule of Benefit Expenses by Type — 1 of 2

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2002-03					
Average Benefit	$645	$1,173	$435	$576	$799
Number	626	464	115	157	1,362
Total Monthly Benefits	$403,467	$544,066	$50,058	$90,368	$1,087,959
% of Total Monthly Benefits	37.1%	50.0%	4.6%	8.3%	100.0%
FY 2003-04					
Average Benefit	$711	$1,221	$481	$613	$864
Number	718	554	129	157	1,558
Total Monthly Benefits	$510,827	$676,463	$62,112	$96,194	$1,345,596
% of Total Monthly Benefits	38.0%	50.3%	4.6%	7.1%	100.0%
FY 2004-05					
Average Benefit	$775	$1,292	$568	$600	$934
Number	808	647	117	180	1,752
Total Monthly Benefits	$626,082	$836,193	$66,456	$107,998	$1,636,729
% of Total Monthly Benefits	38.3%	51.1%	4.1%	6.6%	100.0%

KERS Hazardous Schedule of Benefit Expenses by Type — 2 of 2

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2005-06					
Average Benefit	$802	$1,333	$521	$749	$980
Number	1,002	760	163	67	1,992
Total Monthly Benefits	$803,581	$1,013,373	$84,975	$50,201	$1,952,130
% of Total Monthly Benefits	41.1%	51.9%	4.4%	2.6%	100.0%
FY 2006-07					
Average Benefit	$862	$1,391	$540	$731	$1,038
Number	1,116	854	167	76	2,213
Total Monthly Benefits	$962,085	$1,188,289	$90,109	$55,536	$2,296,019
% of Total Monthly Benefits	41.9%	51.8%	3.9%	2.4%	100.0%
FY 2007-08					
Average Benefit	$912	$1,455	$549	$751	$1,094
Number	1,231	952	173	78	2,434
Total Monthly Benefits	$1,123,281	$1,384,856	$94,999	$58,567	$2,661,703
% of Total Monthly Benefits	42.2%	52.0%	3.6%	2.2%	100.0%

The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

CERS Non-Hazardous Schedule of Benefit Expenses by Type — 1 of 2

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2002-03					
Average Monthly Benefit	$456	$792	$681	$461	$676
Number	5,583	15,902	2,711	2,923	27,119
Total Monthly Benefits	$2,544,101	$12,598,502	$1,845,513	$1,347,107	$18,335,223
% of Total Monthly Benefits	13.9%	68.7%	10.1%	7.3%	100.0%
FY 2003-04					
Average Monthly Benefit	$463	$829	$697	$491	$708
Number	5,848	17,463	2,814	3,025	29,150
Total Monthly Benefits	$2,708,649	$14,483,996	$1,961,590	$1,486,749	$20,640,984
% of Total Monthly Benefits	13.1%	70.2%	9.5%	7.2%	100.0%
FY 2004-05					
Average Monthly Benefit	$475	$873	$720	$512	$743
Number	6,131	19,075	2,854	3,287	31,347
Total Monthly Benefits	$2,915,109	$16,644,747	$2,054,880	1,684,459	$23,299,195
% of Total Monthly Benefits	12.5%	71.4%	8.8%	7.2%	100.0%

CERS Non-Hazardous Schedule of Benefit Expenses by Type — 2 of 2

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2005-06					
Average Monthly Benefit	$484	$889	$715	$534	$774
Number	7,207	21,655	3,582	861	33,305
Total Monthly Benefits	$3,487,493	$19,256,550	$2,560,722	$460,095	$25,764,859
% of Total Monthly Benefits	13.6%	74.7%	9.9%	1.8%	100.0%
FY 2006-07					
Average Monthly Benefit	$509	$938	$747	$540	$817
Number	7,694	23,460	3,612	864	35,630
Total Monthly Benefits	$3,919,356	$21,999,359	$2,696,721	$484,037	$29,099,472
% of Total Monthly Benefits	13.5%	75.6%	9.2%	1.7%	100.0%
FY 2007-08					
Average Monthly Benefit	$523	$978	$776	$582	$852
Number	8,109	25,070	3,679	876	37,734
Total Monthly Benefits	$4,241,906	24,530,372	2,856,173	510,523	32,138,704
% of Total Monthly Benefits	13.2%	76.3%	8.9%	1.6%	100.0%

The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

CERS Hazardous Schedule of Benefit Expenses by Type — 1 of 2

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2002-03					
Average Monthly Benefit	$1,371	$1,905	$814	$1,142	$1,615
Number	705	2,307	457	273	3,742
Total Monthly Benefits	$966,828	$4,394,088	$371,773	$311,827	$6,044,517
% of Total Monthly Benefits	16.0%	72.7%	6.2%	5.2%	100.0%
FY 2003-04					
Average Monthly Benefit	$1,371	$1,942	$824	$1,177	$1,643
Number	785	2,489	481	299	4,054
Total Monthly Benefits	$1,076,329	$4,834,845	$396,302	$351,804	$6,659,280
% of Total Monthly Benefits	16.2%	72.6%	6.0%	5.3%	100.0%
FY 2004-05					
Average Monthly Benefit	$1,399	$2,031	$1,159	$910	$1,705
Number	865	2,642	332	522	4,361
Total Monthly Benefits	$1,209,803	$5,365,822	$384,788	$474,975	$7,435,388
% of Total Monthly Benefits	16.3%	72.2%	5.2%	6.4%	100.0%

CERS Hazardous Schedule of Benefit Expenses by Type — 2 of 2

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2005-06					
Average Monthly Benefit	$1,369	$2,059	$899	$974	$1,743
Number	1,079	3,062	580	96	4,817
Total Monthly Benefits	$1,477,504	$6,304,523	$521,285	$93,535	$8,396,847
% of Total Monthly Benefits	17.6%	75.1%	6.2%	1.1%	100.0%
FY 2006-07					
Average Monthly Benefit	$1,398	$2,147	$937	$944	$1,815
Number	1,212	3,329	592	95	5,228
Total Monthly Benefits	$1,693,771	$7,148,184	$554,911	$89,712	$7,486,579
% of Total Monthly Benefits	17.8%	75.3%	5.9%	1.0%	100.0%
FY 2007-08					
Average Monthly Benefit	$1,424	$2,228	$986	$1,021	$1,882
Number	1,307	3,555	610	101	5,573
Total Monthly Benefits	$1,861,441	7,922,072	601,207	103,077	10,487,797
% of Total Monthly Benefits	17.8%	75.5%	5.7%	1.0%	100.0%

The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

SPRS Schedule of Benefit Expenses by Type — 1 of 2

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2002-03					
Average Monthly Benefit	$3,117	$2,543	$1,056	$2,064	$2,492
Number	110	699	48	84	941
Total Monthly Benefits	$342,894	$1,777,880	$50,705	$173,412	$2,344,891
% of Total Monthly Benefits	14.6%	75.8%	2.2%	7.4%	100.0%
FY 2003-04					
Average Monthly Benefit	$3,199	$2,637	$1,067	$2,108	$2,576
Number	112	748	49	88	997
Total Monthly Benefits	$358,290	$1,972,675	$52,259	$185,517	$2,568,741
% of Total Monthly Benefits	13.9%	76.8%	2.0%	7.2%	100.0%
FY 2004-05					
Average Monthly Benefit	$3,321	$2,741	$1,364	$1,862	$2,653
Number	107	775	35	119	1,036
Total Monthly Benefits	$355,361	$2,123,941	$47,740	$221,615	$2,748,657
% of Total Monthly Benefits	12.9%	77.3%	1.7%	8.1%	100.0%

SPRS Schedule of Benefit Expenses by Type — 2 of 2

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2005-06					
Average Monthly Benefit	$3,109	$2,698	$1,213	$1,643	$2,650
Number	145	864	56	28	1,093
Total Monthly Benefits	$450,794	$2,331,404	$67,950	$45,997	$2,896,146
% of Total Monthly Benefits	15.5%	80.4%	2.2%	1.9%	100.0%
FY 2006-07					
Average Monthly Benefit	$3,178	$2,797	$1,258	$1,761	$2,743
Number	146	900	57	27	1,130
Total Monthly Benefits	$464,053	$2,517,382	$71,724	$47,540	$3,100,699
% of Total Monthly Benefits	15.0%	81.2%	2.3%	1.5%	100.0%
FY 2007-08					
Average Monthly Benefit	$3,281	$2,892	$1,265	$1,970	$2,843
Number	150	931	56	26	1,163
Total Monthly Benefits	$492,198	$2,692,030	$70,822	$51,215	$3,306,265
% of Total Monthly Benefits	14.9%	81.4%	2.1%	1.6%	100.0%

The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included. As a result, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

Analysis of Initial Retirees — 1 of 2

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
FY 2002-03					
Number	2,148	170	2,411	293	62
Average Service Credit (months)	277	264	206	274	313
Average Final Compensation	$45,479	$45,559	$28,883	$49,996	$65,079
Average Monthly Benefit	$1,873	$1,144	$859	$1,780	$3,208
FY 2003-04					
Number	2,473	227	2,805	343	53
Average Service Credit (months)	280	255	209	262	320
Average Final Compensation	$47,872	$43,778	$29,172	$48,607	$68,533
Average Monthly Benefit	$1,932	$1,127	$837	$1,631	$3,468
FY 2004-05					
Number	2,481	234	2,808	403	50
Average Service Credit (months)	276	257	210	248	290
Average Final Compensation	$46,452	$45,654	$29,784	$49,920	$62,395
Average Monthly Benefit	$1,897	$1,216	$902	$1,765	$3,022

Analysis of Initial Retirees — 2 of 2

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
FY 2005-06					
Number	2,295	236	2,543	377	39
Average Service Credit (months)	267	239	197	260	259
Average Final Compensation	$46,746	$43,845	$29,794	$54,358	$62,049
Average Monthly Benefit	$1,885	$1,185	$851	$2,047	$2,614
Average System Payment for Health Insurance	$246	$381	$180	$543	$407
FY 2006-07					
Number	2,284	228	2,902	433	48
Average Service Credit (months)	246	238	206	255	274
Average Final Compensation	$46,800	$45,142	$32,183	$55,038	$65,826
Average Monthly Benefit	$1,713	$1,289	$962	$1,987	$2,962
Average System Payment for Health Insurance	$225	$342	$194	$599	$ 497
FY 2007-08					
Number	2,219	243	2,736	355	40
Average Service Credit (months)	261	233	204	240	275
Average Final Compensation	$49,414	$44,992	$31,447	$54,223	$67,775
Average Monthly Benefit	$1,929	$1,289	$917	$2,014	$3,239
Average System Payment for Health Insurance	$221	$381	$181	$625	$501

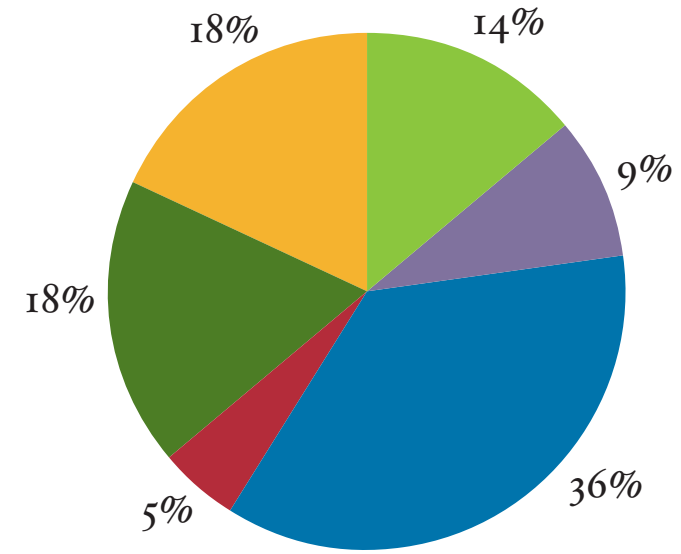
Benefits Paid to All Retirees and Beneficiaries Fiscal Year 2007-2008

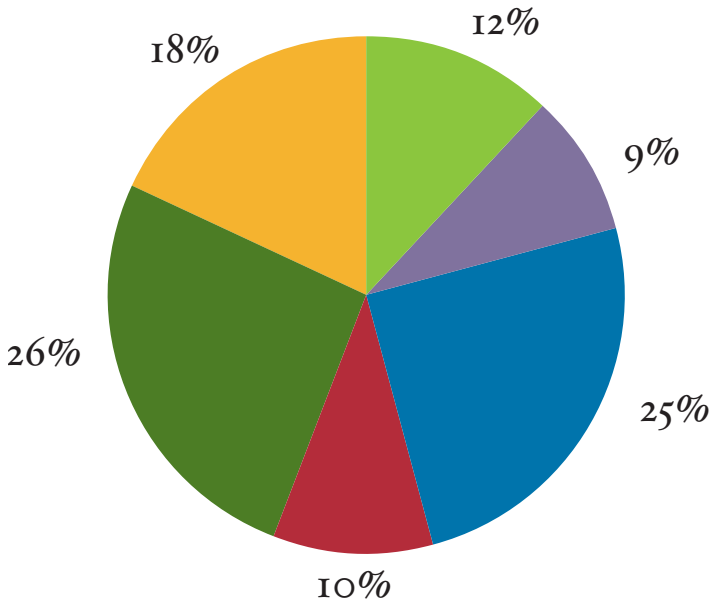
Pension Benefit

	KERS Non-Hazardous		CERS Non-Hazardous		KERS Hazardous		CERS Hazardous		SPRS	
Service Credit Range	Number	Average Monthly Benefit	Number	Average Monthly Benefit	Number	Average Monthly Benefit	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	308	$165.78	304	$137.63	23	$399.64	43	$438.76	3	$284.01
5 or more but less than 10	1,261	348.40	2,094	257.58	68	568.43	113	768.18	9	1,033.05
10 or more but less than 15	2,092	563.56	3,777	445.40	188	811.96	195	1,137.81	16	1,190.86
15 or more but less than 20	2,554	863.34	3,819	684.14	219	1,196.53	300	1,381.19	30	1,708.41
20 or more	18,517	2,457.57	12,586	1,626.26	1,298	2,378.92	3,763	2,539.75	759	3,285.88
Total	24,732	1,996.65	22,580	1,122.42	1,796	1,976.82	4,414	2,333.26	817	3,151.09

Insurance Benefit	KERS Non Hazardous	CERS Non-Hazardous	KERS Hazardous	CERS Hazardous	SPRS
Number	24,732	22,580	1,796	4,414	817
Average Service Credit	300	242	271	282	323
Average Monthly System Payment for Health Insurance	$358.74	$308.64	$533.26	$747.82	$744.82
Total Monthly Payments for Health Insurance	$11,110,345.96	$9,346,037.61	$1,068,301.60	$3,475,748.18	$622,428.54

Payment Options By Type





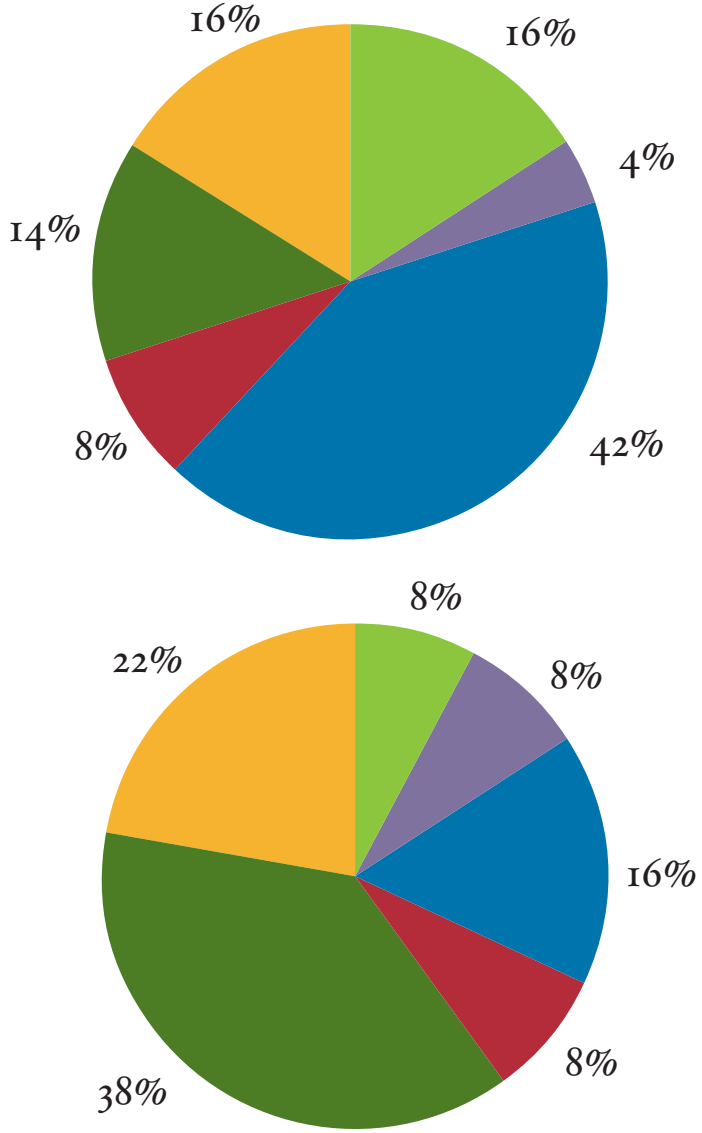
KERS Non-Hazardous

Payment Option	Total
Basic	11,365
Social Security Adjustment	2,855
Period Certain	4,332
Survivorship	5,733
Pop-Up	5,593
Lump Sum	1,646

KERS Hazardous

Payment Option	Total
Basic	541
Social Security Adjustment	200
Period Certain	256
Survivorship	397
Pop-Up	562
Lump Sum	221

Payment Options By Type



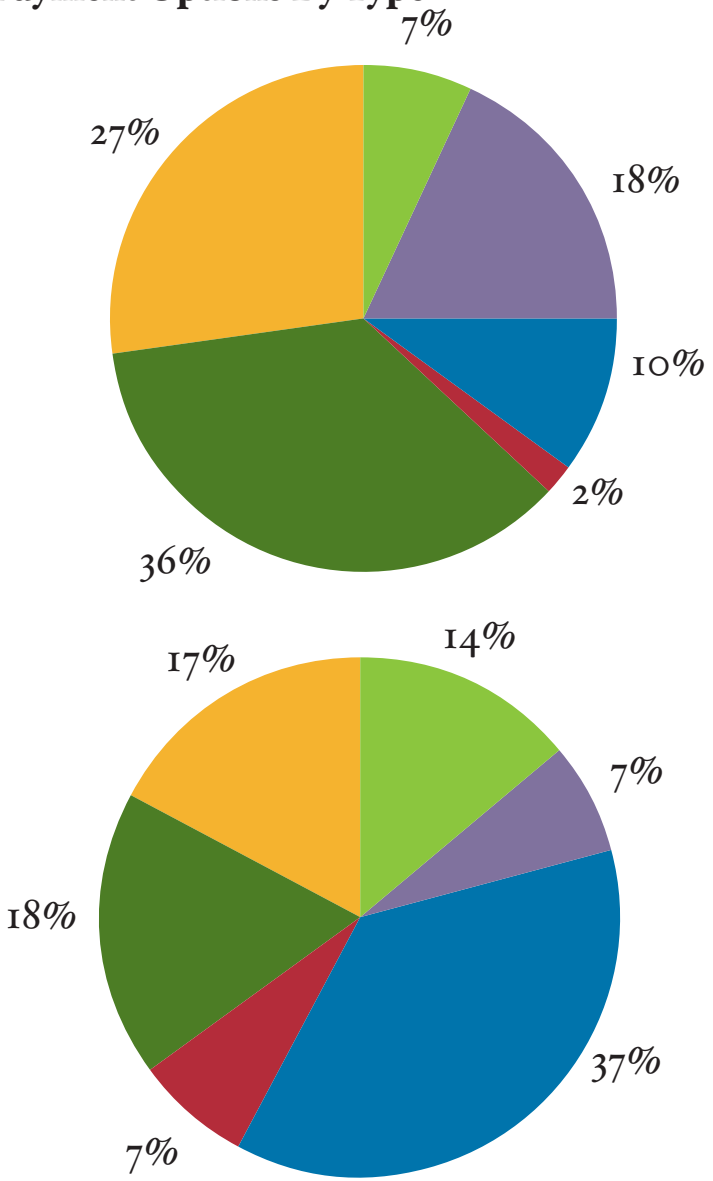
CERS Non-Hazardous

Payment Option	Total
Basic	14,365
Social Security Adjustment	1,468
Period Certain	5,365
Survivorship	5,343
Pop-Up	4,854
Lump Sum	2,761

CERS Hazardous

Payment Option	Total
Basic	773
Social Security Adjustment	391
Period Certain	401
Survivorship	1,060
Pop-Up	1,855
Lump Sum	386

Payment Options By Type



SPRS

Payment Option	Total
Basic	96
Social Security Adjustment	187
Period Certain	73
Survivorship	271
Pop-Up	362
Lump Sum	16

KRS Total

Payment Option	Total
Basic	27,140
Social Security Adjustment	5,101
Period Certain	10,427
Survivorship	12,804
Pop-Up	13,226
Lump Sum	5,030

Employer Contribution Rates

In KERS, CERS, and SPRS both the employee and the employer contribute a percent of creditable compensation to the Systems. The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. KERS and SPRS employer rates are subject to approval by the State Legislature through the adoption of the biennial Executive Branch Budget. In recent years, the State Legislature has routinely suspended KRS 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the KRS Board of Trustees and its' consulting actuary. CERS employer rates for fiscal year 2008-2009 were enacted by House Bill 1 in the 2008 Special Legislative Session and were reduced from the rate recommended by the KRS Board of Trustees and it's consulting actuary. The following tables provide the employer contribution rate recommended by the Board and its' consulting actuary and the rate specified by the Executive Branch budget.

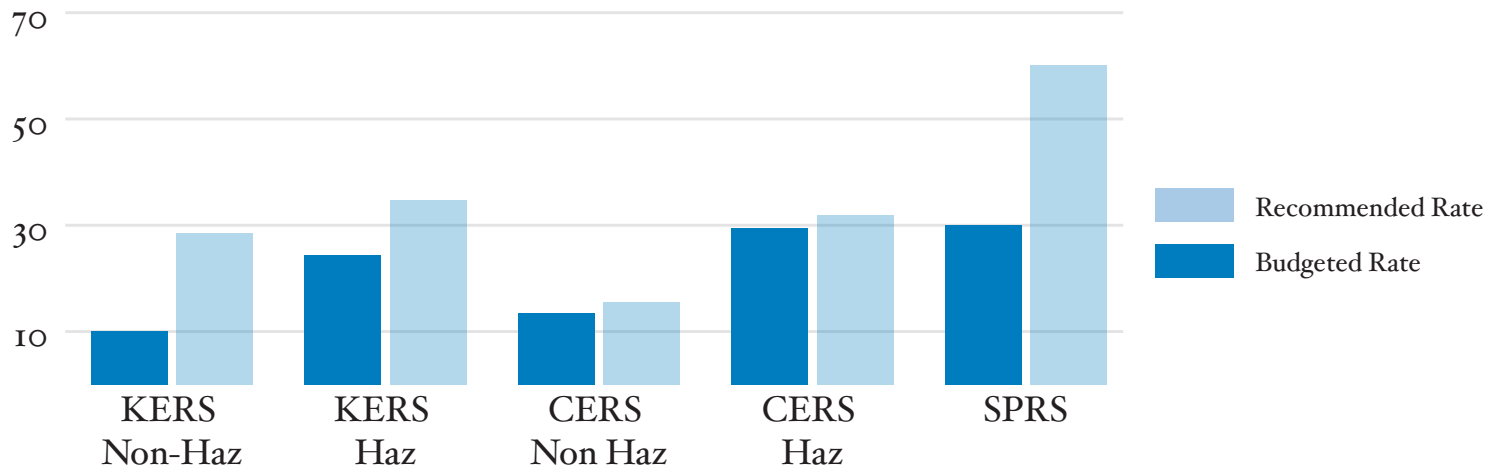
Employer Contribution Rates by System — 1 of 2

	KERS Non-Hazardous		KERS Hazardous	
Fiscal Year	Budgeted Rate	Recommended Rate	Budgeted Rate	Recommended Rate
2003-2004	5.89%	7.53%	18.84%	18.84%
2004-2005	5.89	10.29	18.84	19.47
2005-2006	5.89	13.62	18.84	21.59
2006-2007	7.75	17.13	22.00	23.32
2007-2008	8.50	48.37	24.25	47.11
2008-2009	10.01	28.60	24.35	34.78

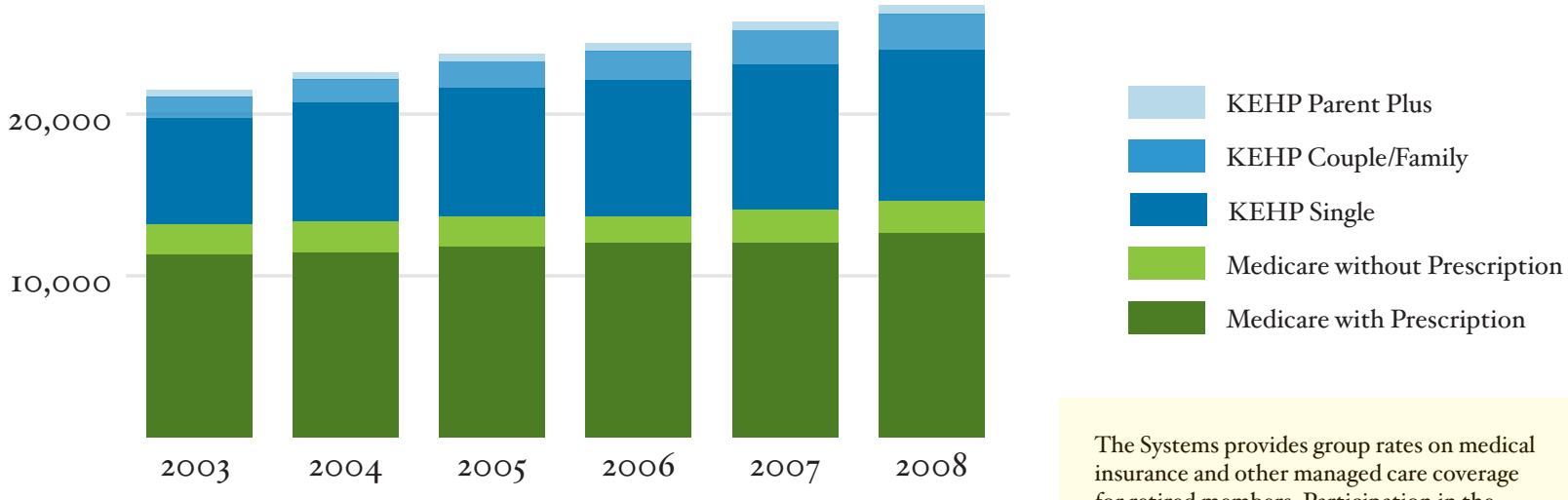
Employer Contribution Rates by System — 2 of 2

	CERS Non-Hazardous		CERS Hazardous		SPRS	
Fiscal Year	Budgeted Rate	Recommended Rate	Budgeted Rate	Recommended Rate	Budgeted Rate	Recommended Rate
2003-2004	7.34%	7.34%	18.51%	18.51%	21.58%	21.58%
2004-2005	8.48	8.48	22.08	22.08	21.58	28.08
2005-2006	10.98	10.98	25.01	25.01	21.58	34.83
2006-2007	13.19	13.19	28.21	28.21	25.50	42.30
2007-2008	16.17	16.17	33.87	33.87	28.00	120.00
2008-2009	13.50	15.58	29.50	31.991	30.07	60.14

2008-2009 Employer Contribution Rates by System



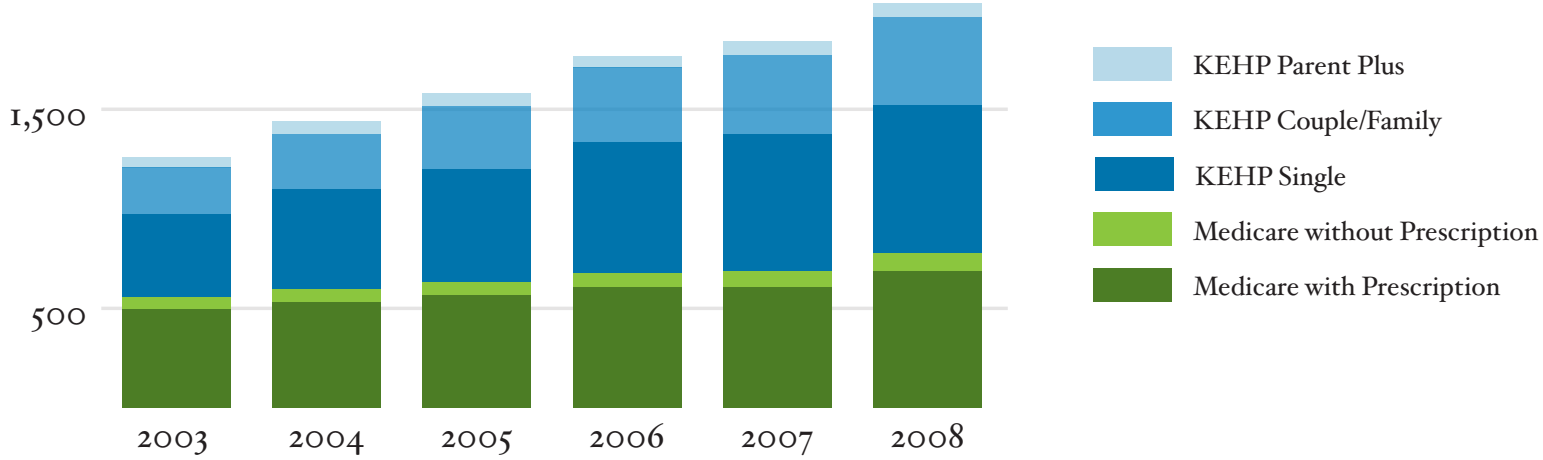
Insurance Contracts by Type — KERS Non Hazardous



	2003	2004	2005	2006	2007	2008
KEHP Parent Plus	428	443	461	490	525	568
KEHP Couple/ Family	1,298	1,462	1,679	1,826	2,131	2,187
KEHP Single	6,602	7,313	7,928	8,393	8,996	9,383
Medicare without Prescription	1,855	1,932	1,915	1,672	2,056	1,969
Medicare with Prescription	11,311	11,437	11,764	12,000	12,007	12,636

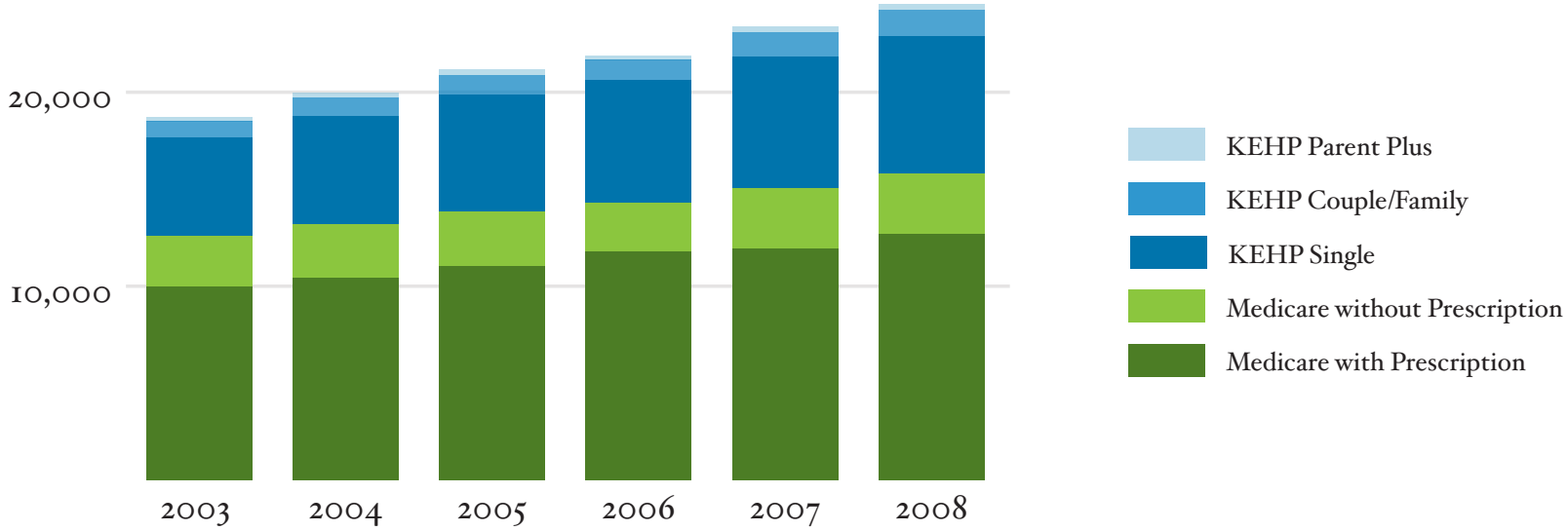
The Systems provides group rates on medical insurance and other managed care coverage for retired members. Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems. This page and the following pages provide the contracts for the KEHP
plan and the KRS Medicare Plans.

Insurance Contracts by Type — KERS Hazardous



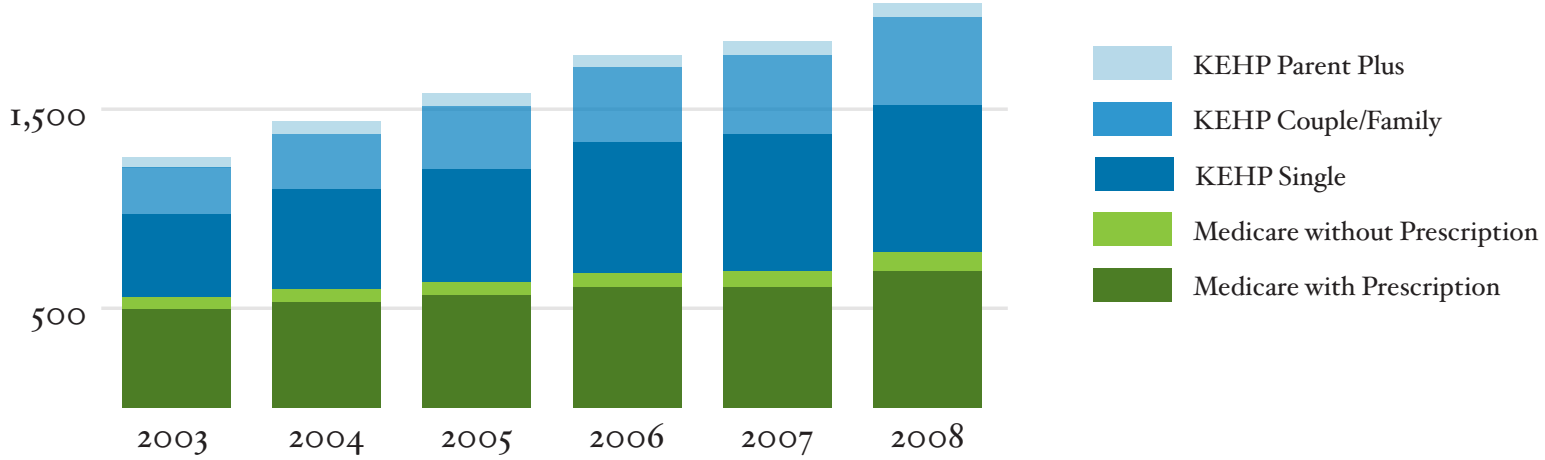
	2003	2004	2005	2006	2007	2008
KEHP Parent Plus	53	65	65	58	70	69
KEHP Couple/ Family	234	276	319	378	398	443
KEHP Single	417	502	570	656	686	741
Medicare without Prescription	62	65	61	74	82	91
Medicare with Prescription	494	531	567	603	606	687

Insurance Contracts by Type — CERS Non Hazardous



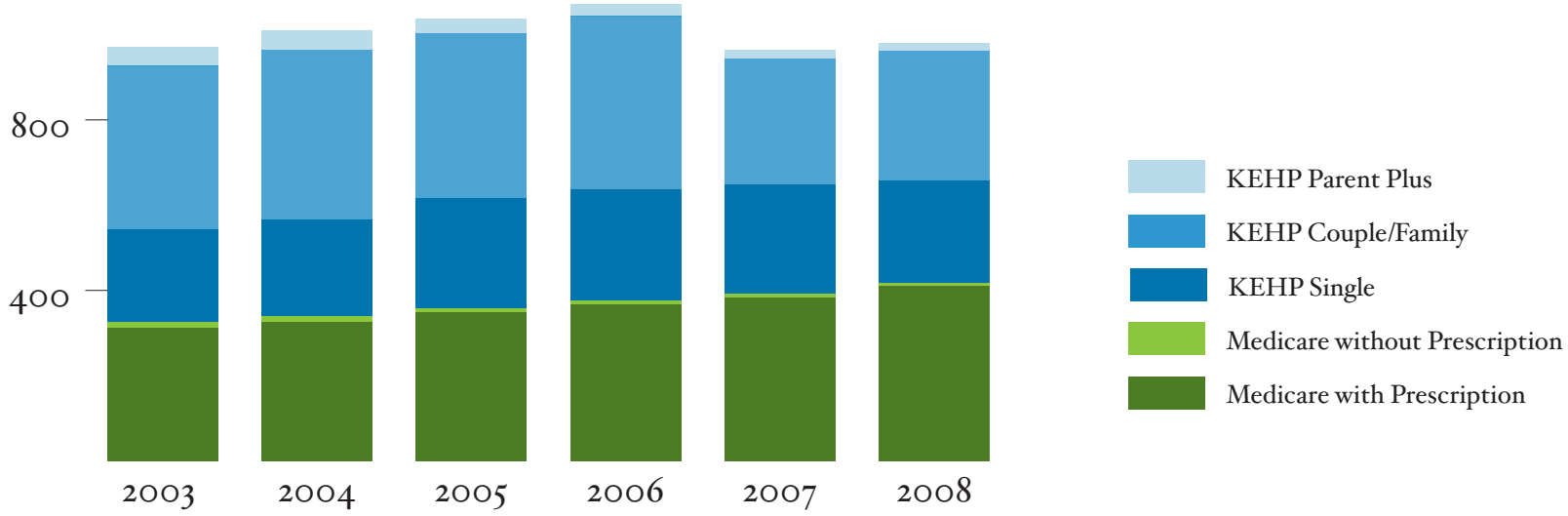
	2003	2004	2005	2006	2007	2008
KEHP Parent Plus	244	246	255	249	284	292
KEHP Couple/ Family	855	946	1,022	1,058	1,274	1,320
KEHP Single	5,054	5,598	6,014	6,298	6,767	7,126
Medicare without Prescription	2,630	2,756	2,853	2,502	3,134	3,105
Medicare with Prescription	9,958	10,424	11,005	11,803	11,908	12,684

Insurance Contracts by Type — CERS Hazardous



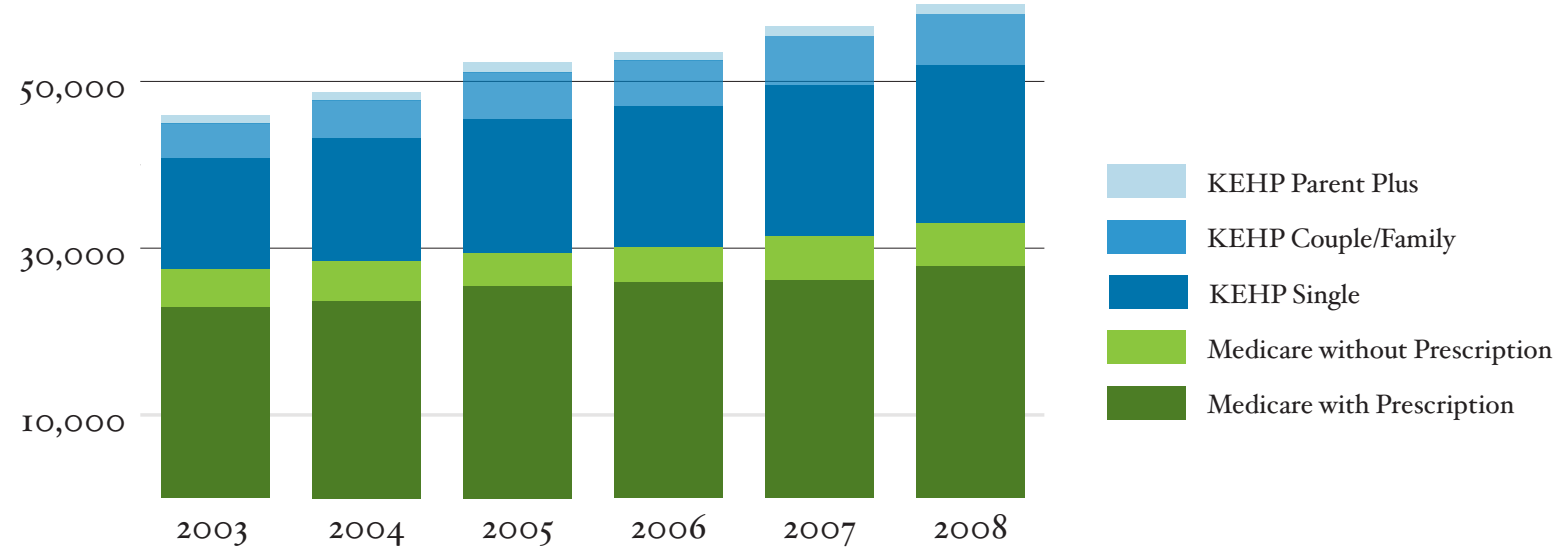
	2003	2004	2005	2006	2007	2008
KEHP Parent Plus	223	223	195	198	210	226
KEHP Couple/ Family	1,379	1,463	1,579	1,739	1,836	1,947
KEHP Single	1,010	1,087	1,220	1,275	1,363	1,394
Medicare without Prescription	40	45	55	52	64	73
Medicare with Prescription	808	913	1,004	1,105	1,197	1,367

Insurance Contracts by Type — SPRS



	2003	2004	2005	2006	2007	2008
KEHP Parent Plus	44	45	34	29	19	17
KEHP Couple/ Family	384	400	388	406	297	305
KEHP Single	218	226	257	260	254	240
Medicare without Prescription	13	13	10	9	9	7
Medicare with Prescription	312	326	348	368	384	410

Insurance Contracts by Type — KRS Total



	2003	2004	2005	2006	2007	2008
KEHP Parent Plus	992	1,022	1,010	1,024	1,108	1,172
KEHP Couple/ Family	4,150	4,547	4,987	5,407	5,936	6,202
KEHP Single	13,301	14,726	15,989	16,882	18,066	18,884
Medicare without Prescription	4,600	4,811	4,894	4,309	5,345	5,245
Medicare with Prescription	22,883	23,631	24,688	25,879	26,102	27,784

Retired Reemployed

Since August 1, 1998, state law has allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service is observed. The following tables provide information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Retirees Who Have Been Reemployed In Full-time Positions Covered By The Same Retirement System — 1 of 2

Reemployed Retirees In KRS	KERS			CERS			SPRS
	Non-Hazardous	Hazardous	Total	Non-Hazardous	Hazardous	Total	Total
Total Active Employees	48,202	4,397	52,599	85,803	10,185	95,988	995
Total Retirees	35,286	2,402	37,688	37,558	5,314	42,872	1,136
Reemployed Retirees	932	81	1,013	1,972	843	2,815	0
% of Reemployed Retirees to Total Actives	1.93%	1.84%	1.93%	2.30%	8.28%	2.93%	0%
% of Reemployed Retirees to Total Retirees	2.64%	3.37%	2.69%	5.25%	15.86%	6.57%	0%

Retirees Who Have Been Reemployed In Full-time Positions Covered By The Same Retirement System — 2 of 2

Reemployed Retiree Data[1]	KERS			CERS			SPRS
	Non-Hazardous	Hazardous	Total	Non-Hazardous	Hazardous	Total	Total
Average Age at Initial Retirement	52	51	52	57	48	54	0
Months of Service Credit at Initial Retirement	315	264	311	259	281	266	0
Final Compensation At Initial Retirement	$53,279	$49,691	$52,992	$31,865	$52,306	$37,986	$0
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2007-2008 (Second Retirement Account)	$42,601	$36,801	$42,137	$29,645	$42,402	$33,465	$0
Retirees Returning to Work for the Same Employer	437	33	470	1,645	202	1,847	0
% Retirees Returning to Work For Same Employer	47%	41%	46%	83%	24%	66%	0%

[1] Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.

An additional 1,281 retirees have been reemployed in full-time positions covered by a different retirement system. Of this total, 690 KERS retirees have returned to work with an agency participating in CERS, 358 CERS retirees have returned to work with an agency participating in KERS, 101 SPRS retirees have returned to work with an agency participating in KERS, and 132 SPRS retirees have returned to work with an agency participating in CERS.

Total Fiscal Year Retirement Payments By County — 1 of 2

Adair	$4,442,764	Christian	19,563,090	Hardin	19,681,840
Allen	3,159,929	Clark	8,248,127	Harlan	6,102,936
Anderson	21,567,534	Clay	5,104,584	Harrison	4,187,396
Ballard	1,565,228	Clinton	1,920,042	Hart	3,134,951
Barren	9,656,018	Crittenden	1,886,051	Henderson	10,635,227
Bath	3,961,667	Cumberland	1,829,729	Henry	13,249,236
Bell	6,451,788	Daviess	26,369,477	Hickman	1,027,833
Boone	17,174,796	Edmonson	1,740,624	Hopkins	10,621,915
Bourbon	5,369,775	Elliott	1,344,132	Jackson	2,456,722
Boyd	10,915,500	Estill	3,102,885	Jefferson	221,478,341
Boyle	10,313,923	Fayette	72,674,576	Jessamine	10,163,872
Bracken	1,849,058	Fleming	4,940,611	Johnson	5,708,420
Breathitt	5,293,238	Floyd	9,384,991	Kenton	26,678,982
Breckinridge	4,167,475	Franklin	156,216,787	Knott	4,157,706
Bullitt	13,399,973	Fulton	1,685,760	Knox	5,164,741
Butler	2,588,448	Gallatin	1,087,561	Larue	3,355,218
Caldwell	4,915,091	Garrard	3,557,488	Laurel	12,253,734
Calloway	9,192,830	Grant	6,389,372	Lawrence	2,287,919
Campbell	15,310,794	Graves	8,134,649	Lee	2,313,499
Carlisle	1,225,978	Grayson	6,100,087	Leslie	2,208,204
Carroll	3,088,349	Green	2,555,334	Letcher	4,738,725
Carter	6,687,808	Greenup	4,832,965	Lewis	2,377,544
Casey	3,195,959	Hancock	1,686,451	Lincoln	4,545,409

Total Fiscal Year Retirement Payments By County — 2 of 2

Livingston	2,670,666	Montgomery	5,462,745	Russell	4,898,623
Logan	5,256,931	Morgan	4,854,421	Scott	13,494,147
Lyon	3,907,868	Muhlenberg	4,344,070	Shelby	25,611,309
McCracken	18,858,631	Nelson	9,121,069	Simpson	1,623,558
McCreary	2,252,656	Nicholas	2,000,083	Spencer	5,522,077
McLean	2,354,558	Ohio	3,830,524	Taylor	5,372,077
Madison	20,328,222	Oldham	15,978,148	Todd	2,336,300
Magoffin	2,860,229	Owen	8,026,668	Trigg	5,149,575
Marion	3,995,717	Owsley	1,810,574	Trimble	2,596,510
Marshall	8,116,622	Pendleton	3,803,228	Union	2,503,894
Martin	1,460,017	Perry	6,238,286	Warren	29,685,134
Mason	3,982,254	Pike	10,987,037	Washington	3,082,284
Meade	3,531,130	Powell	3,104,085	Wayne	4,554,544
Menifee	1,778,877	Pulaski	23,901,575	Webster	2,930,327
Mercer	8,440,635	Robertson	613,734	Whitley	9,181,153
Metcalfe	2,399,861	Rockcastle	3,032,096	Wolfe	3,195,997
Monroe	1,830,096	Rowan	9,207,480	Woodford	13,668,373

Payments to Recipients Living in Kentucky	$1,240,126,337	95.4%
Payments to Recipients Living in Other States	59,428,236	4.6%
Total Payments	**1,299,554,573**	**100.0%**

Kentucky Retirement Systems
Perimeter Park West, 1260 Louisville Road
Frankfort, Kentucky 40601
1-800-928-4646 • http://www.kyret.com

Legal Notice

If you have any questions about the material printed in this publication please contact Kentucky Retirement Systems (KRS) at 1-800-928-4646. This publication is intended merely as a general information reference for members of the KRS. If you have any specific questions about the subjects covered by this publication, you should contact the retirement office. This publication is not intended as a substitute for applicable Federal or state law, nor will its interpretation prevail should a conflict arise between its contents and applicable Federal or state law. Before making decisions about your retirement, you should contact KRS.

Comprehensive Annual Financial Report
FISCAL YEAR ENDED JUNE 30, 2009

Kentucky Retirement Systems
A component unit of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

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Dear Board of Trustees & Membership

November 19, 2009
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS) and State Police Retirement System (SPRS) for the fiscal year ended June 30, 2009. Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the management of the Kentucky Retirement Systems. We present this information to assist the Board and members of Kentucky Employees Retirement System, County Employees Retirement System, and State Police Retirement System (collectively referred to as KRS) in understanding KRS' financial and actuarial status. This CAFR conforms to the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. KRS' financial transactions are reported on the accrual basis of accounting. Additionally, internal accounting controls provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

Major Initiatives

An ongoing priority for KRS is to raise awareness of the continued reductions to the KERS and SPRS employer contribution rates in the biennial budget process. These rates have been less than the amount recommended by the KRS Board of Trustees and its consulting actuary for 11 of the last 17 years. Through educational initiatives with our membership and with policymakers, KRS received an increase in the employer contribution rate for fiscals 2009 and 2010.

Additionally, in June 2008 the General Assembly passed major pension reform legislation during the 2008 Extraordinary Session. The legislation reduced benefits for all employees hired after September 1, 2008 and established a schedule to increase employer funding until they attain the full actuarial contribution rate by 2020 for the SPRS and 2025 for KERS Non-Hazardous systems. While the combination of reduced benefits and increased funding will have a positive impact over time, funding levels will continue to drop for many years. This is due to the impact of the economic recession and the rate of increase in the number of participants receiving benefit payments. It is critical that all employers honor the funding schedules set forth in the pension reform legislation. Without that commitment, it will be extremely difficult to maintain viable funding for the various trusts managed.

In 2009, KRS received approval from the Centers for Medicare and Medicaid Services (CMS) to pursue a direct contract with CMS utilizing the Employer Group Waiver program (EGWP). The EGWP utilizes Medication Therapy Management programs that identify members with high drug spend and chronic diseases and provides education and counseling by pharmacists that will improve long term management. The EGWP also allows KRS to improve benefit coverage for retirees, increase drug subsidy dollars to approximately $20 million and reduce Other Post Employment Benefit (OPEB) liabilities. Combined with utilization rates that are lower than projected over the last three years, the EGWP has reduced the OPEB unfunded liability by over $1.7 billion for the fiscal year ending June 30, 2009.

KRS has made major progress in implementing a technology upgrade that will enhance the quality and efficiency of services to our retirees. The START (Strategic Technology Advancements for the Retirement of Tomorrow) program is changing the way that KRS conducts business by replacing the technology tools that have been in use for almost thirty years. KRS is on schedule to complete implementation of the project during the second quarter of 2010-2011. Constituents can keep current via the KRS newsletter and on our website at http://kyret.ky.gov.

Investments

In September and October 2008, the national economy experienced a rapid decline in financial markets and a recession that has not been experienced since the stock market crash of 1929. Accelerated by the collapse of Lehman Brothers and numerous other financial institutions, the recession resulted in financial losses for all major institutional

investors. However, because of the positioning of its portfolio, KRS performed in the top quartile of all pension funds nationwide, experiencing a loss of 17.21% of the market value of its portfolio, while other major funds declined by 25-30%. As markets have improved in the third and fourth quarters of the fiscal year just ended, KRS is rebalancing its portfolios to take advantage of market opportunities in several economic sectors. The Board has made strategic decisions over the last half of the fiscal year to diversify the portfolio to improve returns while reducing risk. Toward this end, the Board approved a new allocation to absolute return strategies and global fixed income investments, and approved a strategy to allocate up to 5% of the System's assets to investments that are uniquely positioned to take advantage of dislocated markets.

The Board also made strategic decisions in revising securities litigation policies, hiring a securities litigation consultant and retaining the services of a new general consultant for investment matters. As financial markets continue to be uncertain, KRS staff and the Board of Trustees continue to seek ways to protect assets while maximizing growth potential.

Actuarial Funding

KRS administers both a pension and an insurance fund for each of the systems it manages to provide monthly retirement and insurance benefits for retirees. Employee contributions are defined in statute, with non-hazardous employees contributing 5% of their salary toward their pension benefits. Hazardous employees contribute 8%, and all employees hired on or after September 1, 2008, contribute an additional, non-refundable 1% of their salary toward their retiree health insurance benefits. The total employer contribution rate is comprised of a contribution to both the pension and insurance funds. Employer contributions for pension benefits include calculations for the normal cost of benefits plus an amortized payment on the unfunded liability of the system. Insurance payments are calculated in much the same manner, with both a normal cost and an unfunded liability component. Employer contribution rates are calculated annually by the Board's actuary and then approved by the Board of Trustees.

In recent years, funding levels for pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, increasing expenditures for an unfunded Retiree Cost of Living Adjustment, and, in the case of the KERS nonhazardous and SPRS plans, shortfalls in the

Our History

KERS was created in 1956 by the Kentucky General Assembly in order to supplement the benefits provided by Social Security.

SPRS and CERS were established in 1958. When the first actuarial valuation of KERS was completed as of June 30, 1957, there were 16,000 employees participating in KERS and and the plan had assets of $2.8 million. The first actuarial valuation of SPRS was conducted June 30, 1959. No actuarial valuation of CERS was conducted until June 30, 1960 because the statutes did not authorize retirements from the system prior to July 1, 1960.

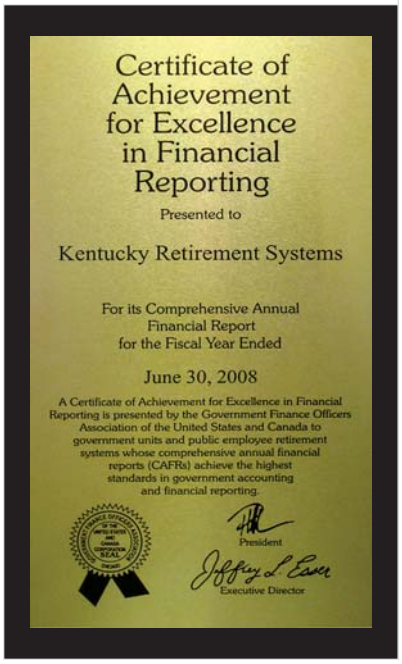
As of June 30, 2009, there were more than 332,000 active, inactive and retired members in the combined systems and approximately $11.8 billion in assets.

employer contribution rate. For KERS and SPRS, employer contributions are set by the General Assembly in the biennial budget process. For a number of years, approved employer contribution rates have been well below the actuarially recommended rate, limiting the ability of KRS to correct declining funding levels. The funding levels of all systems as of June 30, 2009 are listed on pages 4 and 5 of the Actuarial Section.

Professional Services

Similar to other defined benefit plans, KRS engages a number of professional consultants to assist the trustees and staff in key business areas. These areas include complex tax and securities legal questions, accounting, auditing, and specialized investment strategies. A listing of the Board's contract consultants can be found in the organizational chart on page 9. A listing of the external investment managers can be found in the Investment Section.

Certificate of Achievement



Certificate of Achievement for Excellence in Financial Reporting

KRS was awarded the Government Finance Officers Association's Certificate of Achievement, our eleventh consecutive year.

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Consolidated Annual Financial Report for the fiscal year ended June 30, 2008. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. This was the eleventh consecutive year that KRS has achieved this award. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of 1 year. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Other Information

Kentucky Statutes require an annual audit by an independent certified public accountant or the Auditor of Public Accounts. Dean, Dorton & Ford, PSC, Certified Public Accountants, performed the audit for the fiscal year ended June 30, 2009, and the results of that audit are

contained in the Financial Section. The firm gave KRS an unqualified opinion and also indicated that the financial statements present fairly, in all material respects, the plan net assets of KRS. This report reflects the combined efforts of the KRS administrative staff under the leadership of the Board of Trustees. We believe it provides complete and reliable information as a basis for making management decisions, as a means of determining compliance with statutory provisions, and as a means of determining responsible stewardship of KRS funds. The report is available to all employers participating in the Kentucky Retirement Systems. They form the link between KRS and its membership, and their cooperation contributes significantly to the success of the Kentucky Retirement Systems. We hope the employers and their employees find this report informative. On behalf of the Board of Trustees, I would like to take this opportunity to express my gratitude to the staff, the advisors and the many people who have worked so diligently to assure the successful operation of KRS.

Respectfully,

Robert M. Burnside
Executive Director
Kentucky Retirement Systems

Board of Trustees

The Kentucky Retirement Systems (KRS) Board of Trustees is comprised of 9 members.

Two elected by KERS members, two elected by CERS members, one elected by SPRS members, three appointed by Governor Steve Beshear and Secretary of the State Personnel Cabinet.

Jennifer Elliott
Governor Appointment

Bobby D. Henson
Elected by KERS

Nikki R. Jackson
Personnel Secretary

Vince Lang
Elected by CERS

Randy Overstreet
Elected by SPRS

W. Lewis Reynolds III
Governor Appointment

Christopher Tobe
Governor Appointment

Robert Wilcher
Elected by CERS

Vacant Position
Elected by KERS

Agency Structure

Board of Trustees

Audit Committee

Internal Auditor
Connie Davis

Compliance Officer
Ann Case

Investments Committee

Chief Investments Officer
Adam Tosh, CFA

Alternative Investments
Brent Aldridge

Equity Assets
Bo Cracraft

Fixed Income
David Peden

Executive Director
Robert M. Burnside

Chief Operations Officer
William A. Thielen

Accounting
Todd E. Coleman

Communications
Scarlett Consalvi

Information Security
Mark McChesney

Information Technology
Chris Clark (Acting)

Procurement & Office Services
Joe Morris

Planning & Constituent Services
Shawn Sparks

START Project Manager
Chris Clark

Chief Benefits Officer
Charlene Haydon

Disabilities
Liza Welch

Employment Services
Rebecca Stephens

Field Services
Sarah Webb

Membership Support
Suzanne Howe

Retiree Services
Lela Hatter

Senior Advisor Retiree Health
Rick Schultz

General Counsel
Schuyler Olt

Human Resources Director
Marlane Robinson

Consultants

Actuarial Services
Cavanaugh Macdonald Consulting, LLC

Asset Management
Strategic Investment Solutions, Inc.

Auditing Services
Dean, Dorton, Ford PSC

Investment Consultant
R.V. Kuhns

Legal Consultant
Klausner & Kaufman, PA

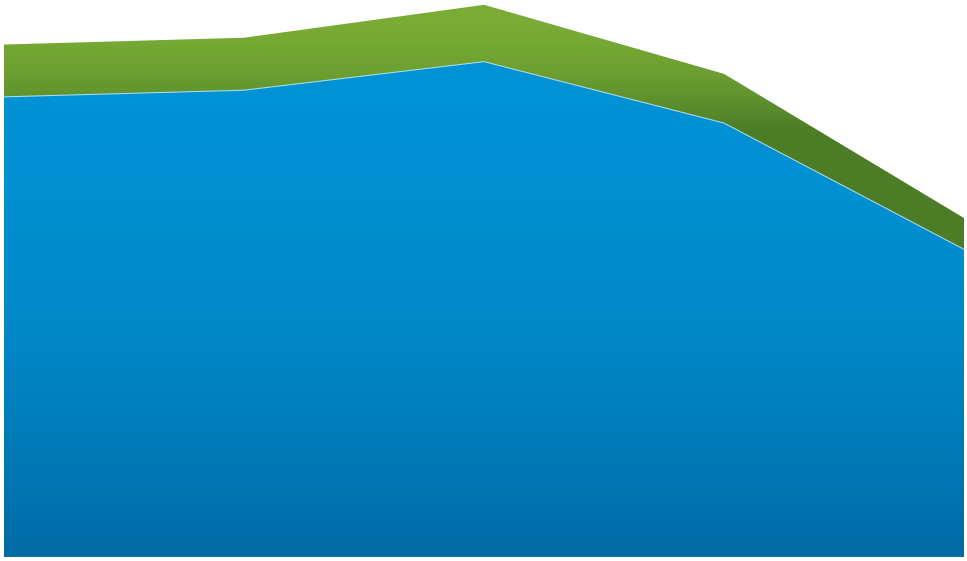
Legal Services
Stoll Kennon Ogden, PLLC

Fiduciary Review Consultants
Ice Miller, LLP

Real Estate Consultant
ORG

KERS
Non-Hazardous

Kentucky Employees Retirement System was established July 1, 1956 by the state legislature.



Net Assets Expressed in Thousands ($)

Fund	2005	2006	2007	2008	2009
Pension	$5,362,631	$5,440,133	$5,773,157	$5,056,869	$3,584,601
Insurance	610,901	612,585	663,558	574,479	365,367
					$3,949,968

Funding Level (% Pension)

44.98

Membership Totals

37,883
Retired

46,060
Active

34,515
Inactive

Funding Level (% Insurance)

11.85

Additions & Deductions in Millions ($)

Additions	2005	2006	2007	2008	2009
Income & Assets	$740.00	$791.80	$1,154.90	$37.00	($706.50)
Deductions					
Benefits, Refunds & Expenses	$613.10	$712.60	$770.90	$842.30	$974.88

Expanded data on pages 27-33 of the Financial Section.

KERS Hazardous

Kentucky Employees Retirement System was established July 1, 1956 by the state legislature.

Net Assets Expressed in Thousands ($)

Fund	2005	2006	2007	2008	2009
Pension	$398,308	$437,030	$510,775	$484,438	$388,951
Insurance	188,871	223,523	280,886	269,300	219,500
					$608,451

Membership Totals

2,648
Retired

4,334
Active

3,056
Inactive

Additions & Deductions in Millions ($)

Additions	2005	2006	2007	2008	2009
Income & Assets	$86.20	$105.69	$168.70	$30.00	($95.29)
Deductions					
Benefits, Refunds & Expenses	$27.70	$32.30	$37.80	$42.20	$39.55

Expanded data on pages 27-33 of the Financial Section.

Funding Level (% Pension)

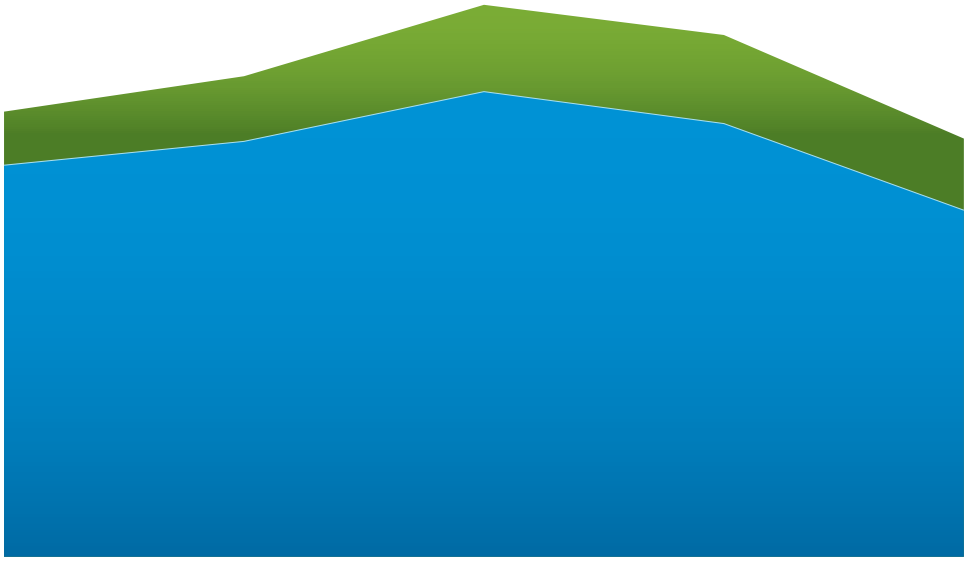
74.51

Funding Level (% Insurance)

61.42

CERS
Non-Hazardous

County Employees Retirement System was established July 1, 1958 by the state legislature.



Net Assets Expressed in Thousands ($)

Fund	2005	2006	2007	2008	2009
Pension	$4,893,600	$5,191,377	$5,812,936	$5,413,735	$4,331,010
Insurance	668,485	813,251	1,084,043	1,105,945	894,490
					$5,225,500

Funding Level (% Pension)

71.41

Membership Totals

39,756
Retired

83,724
Active

60,275
Inactive

Funding Level (% Insurance)

39.62

Additions & Deductions in Millions ($)

Additions	2005	2006	2007	2008	2009
Income & Assets	$759.20	$866.30	$1,366.50	$265.10	($723.28)
Deductions					
Benefits, Refunds & Expenses	$374.30	$424.00	$468.40	$528.60	$588.90

Expanded data on pages 27-33 of the Financial Section.

CERS
Hazardous

County Employees Retirement System was established July 1, 1958 by the state legislature.

Net Assets Expressed in Thousands ($)

Fund	2005	2006	2007	2008	2009
Pension	$1,411,246	$1,528,845	1,754,935	$1,644,982	$1,320,560
Insurance	360,940	441,279	570,156	576,414	483,233
					$1,803,793

Membership Totals

5,808
Retired

9,757
Active

2,522
Inactive

Additions & Deductions in Millions ($)

Additions	2005	2006	2007	2008	2009
Income & Assets	$283.70	$333.10	$506.30	$109.80	($233.70)
Deductions					
Benefits, Refunds & Expenses	$115.30	$134.20	$151.20	$164.90	$183.91

Expanded data on pages 27-33 of the Financial Section.

Funding Level (% Pension)

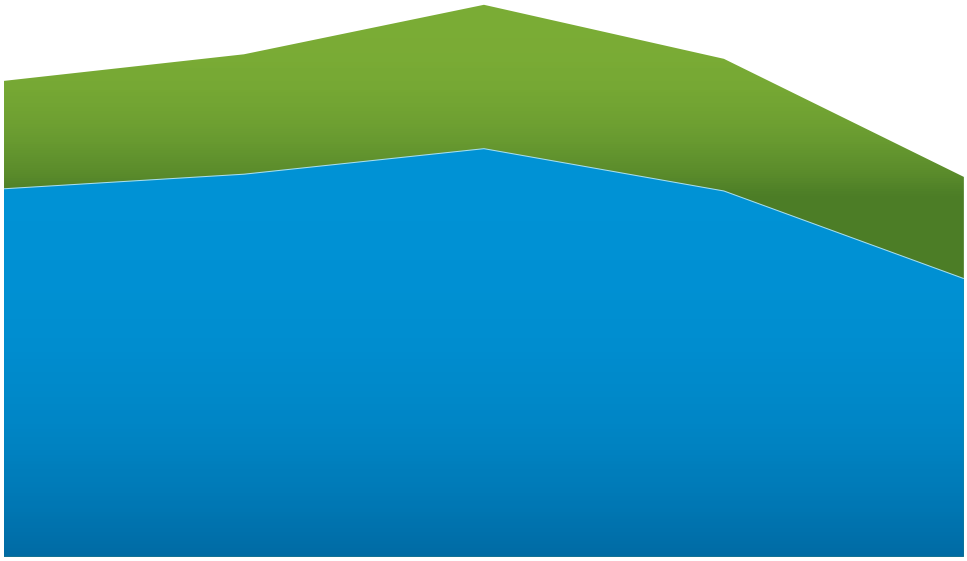
67.93

Funding Level (% Insurance)

40.86

SPRS
Hazardous

State Police Retirement System was established July 1, 1960 by the state legislature.



Net Assets Expressed in Thousands ($)

Fund	2005	2006	2007	2008	2009
Pension	$339,406	$352,841	376,381	$337,359	$256,575
Insurance	99,408	110,491	132,574	121,782	93,682
					$350,257

Funding Level (% Pension)

54.78

Membership Totals

1,184
Retired

946
Active

332
Inactive

Funding Level (% Insurance)

33.93

Additions & Deductions in Millions ($)

Additions	2005	2006	2007	2008	2009
Income & Assets	$52.10	$67.30	$89.60	$8.00	($58.55)
Deductions					
Benefits, Refunds & Expenses	$39.40	$42.80	$43.95	$46.48	$50.34

Expanded data on pages 27-33 of the Financial Section.

Financial

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Management's Responsibility for Financial Reporting

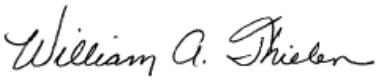
November 19, 2009

Management has prepared the basic financial statements of Kentucky Retirement Systems (KRS) and is responsible for the integrity and fairness of the information presented. Some amounts included in the financial statements may be based on estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these basic financial statements conform with US Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the basic financial statements.

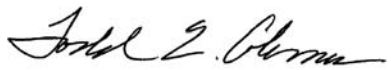
Ultimate responsibility for the basic financial statements and annual report rests with the Board of Trustees. The Executive Director and staff assist the Board in its responsibilities. Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training of employees, the establishment of an organizational structure, and the communication of policies and guidelines throughout the organization. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and the Board of Trustees. Kentucky Retirement Systems' external auditors, Dean, Dorton & Ford, PSC, Certified Public Accountants, have conducted an independent audit of the basic financial statements in accordance

with US Generally Accepted Auditing Standards and Generally Accepted Government Auditing Standards, issued by the Comptroller General of the United States. This audit is described in their Independent Auditors' Report on page 18. Management has provided the external auditors with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of financial statements.

Robert M. Burnside, MS
Executive Director



William A. Thielen, Esq.
Chief Operations Officer



Todd E. Coleman, CPA
Controller

DEAN || DORTON || FORD PSC

Independent Auditors' Report

FYI

The Financial Audit is one of many assurance or attestation functions provided by accounting firms, whereby the firm provides an independent opinion on published information. Financial Audits are performed by firms of practicing Certified Public Accountants due to the specialized financial reporting knowledge they require.

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal years ended June 30, 2009 and 2008, as listed in the table of contents. These financial statements are the responsibility of the Kentucky Retirement Systems' management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2009 and 2008, and the changes in plan net assets for the fiscal years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated November 19, 2009, on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and on our tests of its compliance with certain provisions of

laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

The Management's Discussion and Analysis (pages 20 through 26) and the Schedule of Funding Progress and Schedule of Contributions from Employers and Other Contributing Entities (pages 72 through 75) are not a required part of the basic financial statements, but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The additional supporting schedules (pages 81 through 84) are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

The *Introductory, Actuarial, Investment*, and *Statistical* sections are presented for purposes of additional analysis and are not a required part of the basic financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and, accordingly, we express no opinion on them.

November 19, 2009
Lexington, Kentucky

Financial Highlights-Pension Funds

This discussion and analysis of Kentucky Retirement Systems' financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2009. Please read it in conjunction with the financial statements, which begin on page 27. The following highlights are explained in more detail later in this discussion.

FYI

The Securities and Exchange Commission adopted requirements for Management Dicussion and Analysis in 1974 to have management provide a narrative explanation of the financial statements. The idea was to allow the user to see the entity's financial position and operating results through management's eyes.

- The combined plan net assets of all pension funds administered by Kentucky Retirement Systems decreased by $3,073,688,450 during fiscal 2009.
- Member and Employer contributions reported for fiscal 2009, totaled $685,589,301 compared to $654,695,129 in fiscal 2008. This increase is due to an increase in the covered payroll reported (in the case of the CERS Non-Hazardous plan), an increase in the employer contribution rates, and the collection of additional health insurance contributions passed by House Bill 1 in September 2008. Member contributions decreased $13,417,992 due to a decrease in service purchases which have become more expensive as a result of the passage of House Bill 1.
- The net depreciation in the fair value of investments was $2,538,596,591 for the fiscal year ended June 30, 2009 compared to net depreciation of $997,367,356 for the prior fiscal year. Included in this net depreciation were realized losses on sales of investments of $750,132,021. In comparison, the pension funds realized gains of $360,063,389 for the fiscal year ended June 30, 2008. The decrease in realized gains experienced by the pension funds is due to unfavorable market conditions.
- Interest, dividend and securities lending income was $350,470,742 compared to $558,997,536 in last fiscal year.
- Pension benefits paid to retirees and beneficiaries totaled $1,478,730,332. Refund of contributions paid to former members upon termination of employment totaled $23,627,909.
- Administrative expense totaled $23,970,064 compared to $22,907,272 in the prior fiscal year.
- The member health insurance contribution, as a result of the passage of House Bill 1 (effective September 1, 2008), totaled $898,946 for the ten months ended June 30, 2009.
- An impairment totaling $39,279,421 was incurred during fiscal 2009. This was for unrealized losses associated with KRS' participation in the securities lending program at Northern Trust (the custodial bank of KRS).

Financial Highlights-Insurance Funds

The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of the insurance fund administered by Kentucky Retirement Systems decreased by $591,649,232 during fiscal 2009.
- Premiums received from retirees who participated in the Medicare eligible self-funded plan totaled $27,121,929.
- Employer contributions of $297,194,679 were received compared to $372,294,824 in fiscal 2008. This decrease is due to a decrease in the insurance contribution rate.
- Retiree drug subsidies totaled $16,834,869 compared to $13,313,947 in fiscal 2008.
- The net depreciation in the fair value of investments was $656,699,368 compared to net depreciation of $282,385,971 for the prior fiscal year. Included in this net depreciation were realized losses on sales of investments of $205,178,412. In comparison, the insurance funds realized gains on investments of $104,964,501 in the prior fiscal year. This decrease in realized gains is due to unfavorable market conditions.
- Interest, dividend and securities lending income was $52,228,249 compared to income of $93,315,951 in fiscal 2008. This decrease was due to unfavorable market conditions.
- Premiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled $198,272,571. Payments for the self-funded healthcare reimbursements (over age 65) totaled $114,554,929. The total of insurance premiums paid plus self-funded reimbursements was $312,827,500 for fiscal 2009. Insurance premiums paid plus self-funded healthcare reimbursements for the prior fiscal year totaled $269,351,915.
- As part of the application process to the Centers for Medicare & Medicaid Services to enter into a contract to offer a Medicare Prescription Drug Plan, KRS was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents, and is invested on a daily basis.
- The reimbursement of retired-reemployed health insurance, as a result of the passage of House Bill 1 (effective September 1, 2008), totaled $206,859 for the ten months ended June 30, 2009.
- An impairment totaling $8,984,210 was incurred in fiscal 2009. This was for unrealized losses associated with KRS' participation in the securities lending program at Northern Trust (the custodial bank of KRS).

Using This Financial Report

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combined Statements of Plan Net Assets for the Pension Funds, on page 27, and the Combined Statement of Plan Net Assets for the Insurance Funds, on pages 30 and 31, provide a snapshot of the financial position of each of the three systems at June 30, 2009. The Combined Statement of Changes in Plan Net Assets for the Pension Funds, on pages 28 and 29, and the Combined Statement of Changes in Plan Net Assets for the Insurance Funds, on pages 32 and 33, summarize the additions and deductions that occurred for each of the 3 systems during fiscal 2009.

The Schedule of Funding Progress, on pages 71 through 75 , includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Contributions from Employers and Other Contributing Entities, on pages 76 through 80, presents historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

Kentucky Retirement Systems As A Whole

Kentucky Retirement Systems' combined plan net assets decreased, during the fiscal year ended June 30, 2009, by $3,665.4 million from $15,603.3 million to $11,937.9 million. Plan net assets for the prior fiscal year decreased by $1,356.1 million. The decrease in plan net assets for the fiscal year ended June 30, 2009 is primarily attributable to overall losses in the stock market. The resultant decrease in net plan assets is particularly significant in the KERS Non-Hazardous and State Police (SPRS) plans, which show a negative cash flow where $1,025 million in benefits, refunds, and expenses were paid out and contributions and net investment earnings showed a loss of $765 million. The analysis on the following page focuses on plan net assets (Table 1) and changes in plan net assets (Table 2) of Kentucky Retirement Systems' Pension and Insurance Funds.

Table 1: Plan Net Assets *($) in Millions*

	Pension			Insurance			Total		
	2009	2008	2007	2009	2008	2007	2009	2008	2007
Cash & Investments	$11,645.5	$15,768.8	$17,245.3	$2,460.2	$3,379.9	$3,441.6	$14,105.7	$19,148.7	$20,686.9
Receivables	113.9	122.4	125.2	38.7	45.5	41.4	152.6	167.9	166.6
Equip./Int. Assets Net of Dep./Amort.	8.1	8.5	1.9	--	--	--	8.1	8.5	1.9
Total Assets	11,767.5	15,899.7	17,372.4	2,498.9	3,425.4	3,483.0	14,266.4	19,325.1	20,855.4
Total Liabilities	(1,885.8)	(2,944.3)	(3,144.2)	(442.7)	(777.5)	(751.8)	(2,328.5)	(3,721.8)	(3,896.0)
Plan Net Assets	$9,881.7	$12,955.4	$14,228.2	$2,056.2	$2,647.9	$2,731.2	$11,937.9	$15,603.3	$16,959.4

Table 2: Changes in Plan Net Assets *($) in Millions*

	Pension			Insurance			Total		
	2009	2008	2007	2009	2008	2007	2009	2008	2007
Additions									
Member Cont.	$290.8	$ 304.3	$ 300.3	$	$	$	$290.8	$ 304.3	$ 300.3
Employer Cont.	393.8	350.4	293.4	297.2	372.3	307.7	691.0	722.7	601.1
Health Ins. Cont.	0.9	--	--	--	--	--	0.9	--	--
Premiums Rcvd	--	--	--	27.1	28.5	26.6	27.1	28.5	26.6
Ret. Reemp. Insurance	--	--	--	0.2	--	--	0.2	--	--
Medicare Subsidy	--	--	--	16.8	13.3	21.5	16.8	13.3	21.5
Invest. Inc. (net)	(2,232.0)	(579.9)	1,915.8	(611.3)	(220.6)	423.4	(2,843.3)	(800.5)	2,339.2
Total Additions	(1,547.4)	74.8	2,509.5	(270.0)	193.5	779.2	(1,817.4)	268.3	3,288.7
Deductions									
Ben. Payments	1,478.7	1,299.2	1,187.1	--	--	--	1,478.7	1,299.2	1,187.1
Refunds	23.6	25.5	25 .2	--	--	--	23.6	25.5	25.2
Admin. Expenses	24.0	22.9	21.1	8.8	7.5	6.7	32.8	30.4	27.8
Healthcare Costs	--	--	--	312.9	269.3	241.1	312.9	269.3	241.1
Demut. Refund	--	--	--	--	--	0.8	--	--	0.8
Total Deductions	1,526.3	1,347.6	1,233.4	321.7	276.8	248.6	1,848.0	1,624.4	1,482.0
Increase (Decrease) in Plan Net Assets									
	$(3,073.7)	$(1,272.8)	$1,276.1	$(591.7)	$(83.3)	$530.6	$(3,665.4)	$(1,356.1)	$1,806.7

Kentucky Retirement Systems As A Whole, continued

Plan net assets of the pension funds decreased by $3,073.7 million ($9,881.7 million compared to $12,955.4 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. This plan net asset decrease is attributable primarily to the overall losses in the fair value of investments due to adverse market conditions.

Plan net assets of the insurance fund decreased by approximately $591.7 million ($2,056.2 million compared to $2,647.9 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. This decrease in net plan assets is primarily attributable to the overall losses in the fair value of investments, which is due to adverse market conditions.

Pension Fund Activities

Member contributions decreased by $13.5 million. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit. The decrease in member contributions is a result of a decrease in elective service purchases by Kentucky Retirement Systems' members over the prior period.

Employer contributions increased by $43.5 million due to the increase in covered payroll reported to Kentucky Retirement Systems (in the case of the CERS Non-Hazardous plan) and the increase in the employer contribution rate applied to covered payroll.

Net investment income decreased by $1,653 million (net investment loss of $2,232.9 million compared to net investment loss of $579.9 million in the prior year). The pension funds experienced a decrease in income primarily due to the decrease in gains on sale of investments. This is illustrated in Table 3 to the left.

Pension fund deductions increased by $178.8 million, caused principally by an increase of $179.6 million in benefit payments. Retirees received a Cost of Living Adjustment (COLA) increase of 2.8% in benefit payments as of July 1, 2008. Refunds of member contributions decreased by $1.8 million and administrative expenses increased by $1.1 million.

Table 3: Investment Income (Loss) Pension

($) in Millions

Investment Income (Loss)	2009	2008	2007
(Decrease) Increase in fair value of investments	$(1,788)	$(1,357)	$638
Investment Income net of Investment Expense	305	417	408
(Loss) gain on sale of investments	(750)	360	870
Net investment (loss) income	$(2,233)	$(580)	$1,916

Insurance Fund Activities

Employer contributions paid into the insurance fund decreased by $75.1 million over the prior fiscal year. This decrease is a result of the decrease in the employer contribution rate applied to covered payroll.

Net investment income decreased by $390.9 million. This decrease in net income is due primarily to the decrease in the gains on sale of investments. This is illustrated in Table 4 to the right.

Insurance fund deductions increased by $44.9 million due to the increase in overall healthcare costs.

Table 4: Investment Income (Loss)
Insurance
($) in Millions

Investment Income (Loss)	2009	2008	2007
(Decrease) Increase in fair value of investments	$(451)	$(387)	$237
Investment Income net of Investment Expense	45	62	56
(Loss) gain on sale of investments	(205)	105	130
Net investment income (loss)	$(611)	$(220)	$423

Historical Trends

Accounting standards require that the Statement of Plan Net Assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the Schedule of Funding Progress on pages 71 through 75. The asset value stated in the Schedule of Funding Progress is the actuarial value of assets determined by calculating the difference between the expected valuation assets and the actual market value of assets adjusted for any unrecognized gains or losses and amortized over a five-year period. The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by Kentucky Retirement Systems' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is defined as the unfunded actuarial accrued liability.

The unfunded actuarial accrued liability in the pension plans increased by $2,009.3 million for a total unfunded amount of $9,397.2 million for the fiscal year ended June 30, 2009, compared to an unfunded amount of $7,387.9 million for the fiscal year ended June 30, 2008. In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less

than the actuarially assumed rate, higher than anticipated retirement rates and expenditures for unfunded retiree Cost of Living Adjustments. Within the KERS and SPRS plans, employer contribution rate reductions enacted by the Kentucky General Assembly have limited the plans ability to correct the declining funding levels.

The insurance plan's unfunded actuarial accrued liability for the fiscal year ended June 30, 2009, decreased to $7,199.3 million from $8,973.5 million for the fiscal year ended June 30, 2008. This is a decrease in the unfunded actuarial accrued liability of $1,774.2 million. This reduction is the result of the recent adoption of new actuarial assumptions and KRS' adoption of an Employer Group Waiver Plan (EGWP) in connection with its Medicare eligible drug program, which allows KRS to apply monetary reimbursements from the Centers for Medicare and Medicaid Services to reduce unfunded actuarial liabilities.

Annual required contributions of the employers as actuarially determined and actual contributions made by employers and other contributing entities in relation to the required contributions are provided in the Schedule of Contributions from Employers and Other Contributing Entities on pages 76 through 80. The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS funds is attributable to the statutory employer contribution rate set by the Kentucky General Assembly being less than the rate computed by the actuary.

Combined Statement of Plan Net Assets-Pension Funds *($) in Thousands*

As of June 20, 2009 (with comparative totals as of June 30, 2008)

	2009						2008
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Assets							
Cash & Short Term Investments							
Cash	$106	$264	$111	$268	$103	$852	$969
Short Term Investments	86,443	199,920	203,131	495,768	32,171	1,017,433	199,793
Total Cash & Short Term Investments	86,549	200,184	203,242	496,036	32,274	1,018,285	200,762
Receivables							
Contributions	1,494	20,802	11,880	35,939	1,040	71,155	68,160
Investment Income	1,415	16,690	5,207	18,383	1,147	42,842	54,249
Total Receivables	2,909	37,492	17,087	54,322	2,187	113,997	122,409
Investments, at fair value							
Corporate and Gov't Bonds	75,234	895,494	282,141	1,011,886	64,905	2,329,660	3,284,259
Corporate Stocks	194,094	2,119,414	711,815	2,387,299	133,347	5,545,969	7,995,916
Mortgages	31,063	331,383	112,451	398,781	24,739	898,417	1,343,960
Real Estate	2,150	4,349	3,121	4,703	623	14,946	9,545
Total Invest., at fmv	302,541	3,350,640	1,109,528	3,802,669	223,614	8,788,992	12,633,680
Securities Lending Collateral Invested	72,600	667,843	245,246	804,609	47,879	1,838,177	2,934,343
Equipment (net of accumulated depreciation)	178	2,075	309	3,556	37	6,155	6,398
Int. Assets (net of accumulated. amort.)	54	648	96	1,104	11	1,913	2,139
Total Assets	464,831	4,258,882	1,575,508	5,162,296	306,002	11,767,519	15,899,731
Liabilities							
Accounts Payable	334	3,335	668	3,895	134	8,366	10,005
Securities Lending Collateral	72,600	667,843	245,246	804,609	47,879	1,838,177	2,934,343
Impairment-Securities Lending	2,946	3,103	9,034	22,782	1,414	39,279	--
Total Liabilities	75,880	674,281	254,948	831,286	49,427	1,885,822	2,944,348
Plan Net Assets Held in Trust for Pension Benefits							
	$388,951	$3,584,601	$1,320,560	$4,331,010	$256,575	$9,881,697	$12,955,383

See accompanying notes to the Financial Statements.

Combined Statement of Changes in Plan Net Assets-Pension Funds *($) in Thousands*

For the Fiscal Year Ended June 20, 2009 (with comparative totals for the Fiscal Year Ended June 30, 2008)

	2009						2008
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Additions							
Members' Contributions	$12,442	$108,362	$42,582	$122,518	$4,938	$290,842	$304,259
Employers' Contributions	15,843	112,383	78,151	179,286	8,186	393,849	350,435
Health Insurance Contributions (HB1)	38	404	37	415	5	899	--
Total Contributions	28,323	221,149	120,770	302,219	13,129	685,590	654,694
Investment Income							
From Investing Activities:							
Net Depreciation in Fair Value of Investments	(95,459)	(981,576)	(342,163)	(1,060,080)	(59,319)	(2,538,597)	(997,369)
Interest/Dividends	11,334	116,332	39,736	134,548	8,290	310,240	418,802
Total Investing Activities Loss	(84,125)	(865,244)	(302,427)	(925,532)	(51,029)	(2,228,357)	(578,567)
Investment Expense	468	5,332	1,540	5,616	345	13,301	12,750
Commissions	337	3,156	1,039	3,572	238	8,342	7,915
Total Investing Activities Expense	805	8,488	2,579	9,188	583	21,643	20,665
Net Loss from Investing Activities	(84,930)	(873,732)	(305,006)	(934,720)	(51,612)	(2,250,000)	(599,232)

Combined Statement of Changes in Plan Net Assets-Pension Funds *($) in Thousands*

For the Fiscal Year Ended June 20, 2009 (with comparative totals for the Fiscal Year Ended June 30, 2008)

	2009						2008
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
From Securities Lending Activities:							
Securities Lending Income	1,583	14,479	5,350	17,778	1,041	40,231	140,195
Securities Lending Expense:							
Security Borrower Rebates	770	7,084	2,601	8,535	508	19,498	115,960
Security Lending Agent Fees	145	1,338	491	1,613	96	3,683	4,950
Net Income from Securities Lending Activities	668	6,057	2,258	7,630	437	17,050	19,285
Total Net Investment Loss	(84,262)	(867,675)	(302,748)	(927,090)	(51,175)	(2,232,950)	(579,947)
Total (Loss) Additions	(55,939)	(646,526)	(181,978)	(624,871)	(38,046)	(1,547,360)	74,747
Deductions							
Benefit Payments	37,556	808,513	138,810	451,304	42,547	1,478,730	1,299,174
Refunds	1,277	9,127	2,436	10,719	69	23,628	25,468
Administrative Exp.	715	8,102	1,198	13,831	122	23,968	22,906
Total Deductions	39,548	825,742	142,444	475,854	42,738	1,526,326	1,347,548
Net Decrease in Plan Assets	(95,487)	(1,472,268)	(324,422)	(1,100,725)	(80,784)	(3,073,686)	(1,272,801)
Plan Net Assets Held in Trust for Pension Benefits							
Beginning of Year	484,438	5,056,869	1,644,982	5,431,735	337,359	12,955,383	14,228,184
End of Year	388,951	3,584,601	1,320,560	4,331,010	256,575	9,881,697	12,955,383

See accompanying notes to the Financial Statements.

Combined Statement of Plan Net Assets-Insurance Funds *($) in Thousands*

As of June 20, 2009 (with comparative totals as of June 30, 2008)

	2009						2008
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Assets							
Cash & Short Term Investments							
Cash	23	57	17	79	4	180	221
Short Term Investments	47,414	85,346	131,383	213,453	17,526	495,122	306,845
Medicare Drug Deposit	11	20	23	41	5	100	--
Total Cash & Short Term Investments	47,448	85,423	131,423	213,573	17,535	495,402	307,066
Receivables							
Contributions	1,059	7,778	6,126	16,346	454	31,763	37,263
Investment Income	753	1,317	1,549	2,936	338	6,893	8,252
Loan Interest Receivable (Holly Hill)	13	13	33	54	6	119	--
Total Receivables	1,825	9,108	7,708	19,336	798	38,775	45,515

Combined Statement of Plan Net Assets-Insurance Funds *($) in Thousands*

As of June 20, 2009 (with comparative totals as of June 30, 2008)

	2009						2008
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Investments, at fair value							
Corporate and Gov't Bonds	19,688	34,291	48,985	90,515	9,825	203,304	330,535
Corporate Stocks	151,587	240,585	297,692	576,137	65,960	1,331,961	1,968,330
Alternative Investment	15	15	37	61	7	135	135
Real Estate	64	113	139	256	28	600	--
Total Investments, at fair value	171,354	275,004	346,853	666,969	75,820	1,536,000	2,299,000
Securities Lending Collateral Invested	46,177	76, 048	100,868	186,022	19,716	428,831	773,837
Total Assets	266,804	445,583	586,852	1,085,900	113,869	2,499,008	3,425,418
Liabilities							
Accounts Payable	94	2,326	227	2,198	76	4,921	3,661
Securities Lending Collateral Obligations	46,177	76,048	100,868	186,022	19,716	428,831	773,837
Impairment-Securities Lending	1,033	1,842	2,524	3,190	395	8,984	--
Total Liabilities	47,304	80,216	103,619	191,410	20,187	442,736	777,498
Plan Net Assets Held in Trust for Insurance Benefits							
	$219,500	$365,367	$483,233	$894,490	$93,682	$2,056,272	$2,647,920

See accompanying notes to the Financial Statements.

Combined Statement of Changes in Plan Net Assets-Insurance Funds *($) in Thousands*

For the Fiscal Year Ended June 20, 2009 (with comparative totals for the Fiscal Year Ended June 30, 2008)

	2009						2008
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Additions							
Employers' Contributions	$20,803	$74,434	$70,783	$123,761	$7,414	$297,195	$372,294
Retiree Drug Subsidy	186	8,168	628	7,624	229	16,835	13,315
Premiums Received from Retirees	296	12,211	328	14,264	23	27,122	28,522
Retired Reemployed Healthcare (HB1)	4	109	2	92	--	207	--
Total Contributions	21,289	94,922	71,741	145,741	7,666	341,359	414,131
Investment Income							
From Investing Activities:							
Net Depreciation in Fair Value of Investments	(65,502)	(163,532)	(133,716)	(263,645)	(30,304)	(656,699)	(282,385)
Interest/Dividends	4,722	8,651	9,937	18,883	2,090	44,283	60,962
Interest Income (Holly Hill)	13	13	33	54	6	119	--
Total Investing Activities Loss	(60,767)	(154,868)	(123,746)	(244,708)	(28,208)	(612,297)	(221,423)
Investment Activities Expense	120	371	278	555	59	1,383	1,796
Commissions	103	204	201	375	46	929	1,249
Total Investing Activities Expense	223	575	479	930	105	2,312	3,045
Net Loss from Investing Activities	(60,990)	(155,443)	(124,225)	(245,638)	(28,313)	(614,609)	(224,468)
From Securities Lending Activities:							
Securities Lending Income	849	1,373	1,857	3,506	360	7,945	32,354

Combined Statement of Changes in Plan Net Assets-Insurance Funds *($) in Thousands*

For the Fiscal Year Ended June 20, 2009 (with comparative totals for the Fiscal Year Ended June 30, 2008)

	2009						2008
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Securities Lending Expense							
Security Borrower Rebates	425	701	929	1,715	181	3,951	27,476
Security Lending Agent Fees	75	123	164	301	32	695	1,008
Net Income from Securities Lending Activities	349	549	764	1,490	147	3,299	3,870
Total Net Investment Loss	(60,641)	(154,894)	(123,461)	(244,148)	(28,166)	(611,310)	(220,598)
Total (Loss) Additions	(39,352)	(59,972)	(51,720)	(98,407)	(20,500)	(269,951)	193,533
Deductions							
Healthcare Premiums Subsidies	9,187	89,542	37, 184	56,355	6,005	198,273	167,748
Administrative Fees	144	4,104	444	4,053	124	8,869	7,477
Self Funding Insurance Costs	1,117	55,494	3,833	52,640	1,471	114,555	101,605
Total Deductions	10,448	149,140	41,461	113,048	7,600	321,697	276,830
Net Decrease in Plan Assets	(49,800)	(209,112)	(93,181)	(211,455)	(28,100)	(591,648)	(83,297)
Plan Net Assets Held in Trust for Insurance Benefits							
Beginning of Year	269,300	574,479	576,414	1,105,945	121,782	2,647,920	2,731,217
End of Year	219,500	365,367	483,233	894,490	93,682	2,056,272	2,647,920

See accompanying notes to the Financial Statements.

Notes to the Financial Statements

FYI

Notes to the Financial Statements are designed to provide the reader with specific information about estimates, accounting, and other material information found in the financial statements.

General

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of Trustees of Kentucky Retirement Systems (KRS) administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by Kentucky Retirement Systems: (1) Kentucky Employees Retirement System (KERS); (2) County Employees Retirement System (CERS); and (3) State Police Retirement System (SPRS). The assets of the insurance fund are commingled for investment purposes. The following notes apply to the various funds administered by Kentucky Retirement Systems:

Note A-Summary of Significant Accounting Policies

Basis of Accounting KRS financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and investment expenses are recognized when incurred.

Method Used to Value Investments Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate is based on appraisals. Investments that do not have an established market are reported at estimated fair value.

Estimates The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged to expense as incurred. The capitalization threshold used in fiscals 2009 and 2008, was $3,000 (see Note J for further information).

Intangible Assets Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is ten years. The capitalization threshold used in fiscals 2009 and 2008, was $3,000 (see Note K for further information).

Reclassification Certain 2008 amounts have been reclassified to conform with 2009 presentation with no effect on net assets or changes in net assets.

Expense Allocation Administrative and investment expenses of KRS are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments.

Component Unit KRS is a component unit of the Commonwealth of Kentucky for financial reporting purposes.

The Kentucky Employees Retirement System (KERS) was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. The County Employees Retirement System (CERS) was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. The State Police Retirement System (SPRS) was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510.

The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the KRS Board of Trustees without further legislative review. The methods used to determine the employer rates for all Retirement Systems are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

Recent Accounting Pronouncement In June 2008, the Governmental Accounting Standards Board (GASB) issued Statement No. 53, *"Accounting and Financial Reporting for Derivative Instruments",* effective for financial statements issued for periods beginning after June 15, 2009. The objective of this Statement is to enhance the usefulness and comparability of derivative instrument information reported by state and local governments. It also provides a comprehensive framework for the measurement, recognition, and disclosure of derivative instrument transactions. KRS is currently evaluating the provisions of GASB No. 53.

Note B-Plan Descriptions And Contribution Information

Membership of each Retirement Plan consisted of the following at June 30, 2009 and 2008:

KERS Membership

	2009			2008		
	Non-Hazardous Employees	Hazardous Employees	Total	Non-Hazardous Employees	Hazardous Employees	Total
Retirees and beneficiaries receiving benefits	37,883	2,648	40,531	35,307	2,404	37,711
Inactive vested members	34,515	3,056	37,571	33,202	2,927	36,129
Active plan members	46,060	4,334	50,394	48,085	4,393	52,478
Total	118,458	10,038	128,496	116,594	9,724	126,318
Number of participating employers			386			317

CERS Membership

	2009			2008		
	Non-Hazardous Employees	Hazardous Employees	Total	Non-Hazardous Employees	Hazardous Employees	Total
Retirees and beneficiaries receiving benefits	39,756	5,808	45,564	37,579	5,422	43,001
Inactive vested members	60,275	2,522	62,797	57,755	2,376	60,131
Active plan members	83,724	9,757	93,481	85,221	10,173	95,394
Total	183,755	18,087	201,842	180,555	17,971	198,526
Number of participating employers			1,398			1,468

SPRS Membership

	2009	2008
	Hazardous Employees	Hazardous Employees
Retirees and beneficiaries receiving benefits	1,184	1,135
Inactive vested members	332	301
Active plan members	946	993
Total	2,462	2,429
Number of participating employers	1	1

Hospital and Medical Contracts Issued *(As of June 30 2009, and 2008)*

	2009					2008				
	A	B	C	D	E	A	B	C	D	E
KERS Non-Hazardous	10,536	2,417	739	1,904	13,189	9,631	2,099	584	1,960	12,653
KERS Hazardous	866	690	95	93	832	795	618	93	96	749
CERS Non-Hazardous	7,503	1,364	326	3,099	13,607	7,306	1,278	291	3,112	12,829
CERS Hazardous	1,438	2,108	254	82	1,558	1,411	2,017	232	77	1,396
SPRS	221	311	20	9	419	241	302	17	7	407
Total	20,564	6,890	1,434	5,187	29,605	19,384	6,314	1,217	5,252	28,034

A= Single, B=Couple/Family, C=Parent Plus, D= Medicare Without Prescription, E=Medicare With Prescription

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
Non-Hazardous Employees Pension Plan

Plan Description

KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least 12 months prior to the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions

For the fiscal years ended June 30, 2009 and 2008, plan members were required to contribute 5% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2009 and 2008, participating employers contributed 10.01% and 8.5%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2009 and 2008 was 28.6% and 48.37%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% of their annual creditable compensation.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
Hazardous Employees Pension Plan

Plan Description

KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least 12 months prior to the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions

For the fiscal years ended June 30, 2009 and 2008, plan members were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal

contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2009 and 2008, participating employers contributed 24.35% and 24.25%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2009 and 2008 was 34.78% and 47.11%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

COUNTY EMPLOYEES RETIREMENT SYSTEM
Non-Hazardous Employees Pension Plan

Plan Description

CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate in CERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided annually equal to the percentage

increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least 12 months prior to the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions

For the fiscal years ended June 30, 2009 and 2008, plan members were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board.

For the fiscal years ended June 30, 2009 and 2008, participating employers contributed 13.5% and 16.17%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2009 and 2008 were 15.58% and 16.17%, respectively. Administrative costs of KRS are financed through employer contributions and investment earnings.

In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% of their annual creditable compensation.

COUNTY EMPLOYEES RETIREMENT SYSTEM
Hazardous Employees Pension Plan

Plan Description

CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in CERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least 12 months prior to the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions

For the fiscal years ended June 30, 2009 and 2008, plan members were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2009 and 2008, participating employers contributed 29.5% and 33.87%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2009 and 2008 were 31.99% and 33.87%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after,

September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

STATE POLICE RETIREMENT SYSTEM

Plan Description

SPRS is a single-employer defined benefit pension plan that covers all full-time state troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living adjustments (COLA) are provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least 12 months prior to the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if in its judgment the welfare of the Commonwealth so demands.

Contributions

For the fiscal years ended June 30, 2009 and 2008 plan members were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined

in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2009 and 2008, the Commonwealth contributed 30.07% and 28%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the fiscal years ended June 30, 2009 and 2008 was 60.14% and 120%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

Plan Description

The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2009, insurance premiums withheld from benefit payments for members of the systems were $28,345,215 and $973,502 for KERS non-hazardous and hazardous, respectively; $27,593,841 and $1,634,508 for CERS non-hazardous and hazardous, respectively; and, $160,190 for SPRS. For fiscal 2008, insurance premiums withheld from benefit payments for members of KERS were $25,897,389 and $861,730 for KERS non-hazardous and KERS hazardous, respectively; $25,809,726 and $1,571,639 for CERS non-hazardous and CERS hazardous, respectively; and, $167,965 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the

spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2009, the Fund had 87,279 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Funds is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are shown at the right.

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after, July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on, or after, July 1, 2003 earn ten dollars ($10) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn fifteen dollars ($15) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives ten dollars ($10) per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree cost of living adjustment (COLA), which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if in its judgment the welfare of the Commonwealth so demands.

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years.

KRS commenced self-funding of healthcare benefits for its Medicare eligible retirees on January 1, 2006. A self-funded plan pays for claims out-of-pocket as they are presented instead of paying a pre-determined premium to an insurance carrier for a fully-insured plan.

Insurance Contribution By Years Of Service

For members participating prior to July 1, 2003

Years of Service	% Paid by Insurance Fund
20 or More	100%
15-19	75%
10-14	50%
4-9	25%
Less than 4	0%

KRS selected Walgreens Health Initiatives and UMR to administer the pharmaceutical and medical benefits, respectively, for its retirees.

KRS funds the risk for its self-insured program directly from its insurance assets. Stop-loss insurance can be arranged to limit KRS' loss to a specified amount to ensure that catastrophic claims do not upset the financial integrity of the self funded plan. The amount of stop-loss insurance is a function of KRS's size, nature of its business, financials and tolerance for risk. KRS continues to evaluate the use of stop-loss insurance.

NOTE C-CASH AND SHORT-TERM INVESTMENTS AND SECURITIES LENDING COLLATERAL

The provisions of Governmental Accounting Standards Board (GASB) Statement No. 28, "*Accounting and Financial Reporting for Securities Lending Transactions*" require that cash received as collateral on securities lending transactions and investments made with that cash be reported as assets on the financial statements. In conjunction with the adoption of GASB No. 28, KRS has reclassified certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

Kentucky Employees Retirement System

	2009	2008
Cash	$369,675	$321,001
Short Term Investments	286,363,442	83,942,355
Securities Lending Collateral Invested	740,443,331	1,256,541,062
Total	$1,027,176,448	$1,340,804,418

County Employees Retirement System

	2009	2008
Cash	$379,842	$561,437
Short Term Investments	698,898,569	114,249,050
Securities Lending Collateral Invested	1,049,855,428	1,601,257,307
Total	$1,749,133,839	$1,716,067,794

State Police Retirement System

	2009	2008
Cash	$102,694	$86,526
Short Term Investments	32,170,928	1,601,088
Securities Lending Collateral Invested	47,878,450	76,543,782
Total	$80,152,072	$78,231,396

Kentucky Retirement Systems Insurance Funds

	2009	2008
Cash	$179,764	$220,702
Short Term Investments	495,121,909	306,845,068
Medicare Drug Deposit	100,000	--
Securities Lending Collateral Invested	428,831,036	773,837,984
Total	$924,232,709	$1,080,903,754

NOTE D-INVESTMENTS

The Board of Trustees of KRS recognizes its duty to invest funds in accordance with the "Prudent Person Rule" and manage those funds consistent with the long-term nature of KRS. The Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments

Investments may be made in domestic and international common stock, securities convertible into common stock and in preferred stock of publicly traded corporations.

Fixed Income Investments

Publicly traded corporate bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with the current market and economic conditions. Investment may also be made in any debt instrument issued or guaranteed in whole or in part by the US Government or any agency or instrumentality of the US Government.

Mortgages

Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments guaranteed by an agency of the US Government or the Commonwealth of Kentucky.

Alternative Investments/Equity Real Estate

Subject to the specific approval of the Investment Committee of the Board of Trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, without limitation, venture capital, private equity and private placements which the Investment Committee believes has excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities

The following short-term investment vehicles are considered acceptable:

Publicly traded investment grade corporate bonds, government and agency bonds, mortgages, and collective Short Term Investment Funds (STIF's), money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having an investment grade rating by at least one recognized bond rating service. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur.

Derivatives

Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited.

The Pension and Insurance Funds invest in collateralized mortgage obligations (CMOs) and other asset-backed securities to increase return and adjust duration of the portfolio. The Pension and Insurance Funds invest in exchange-traded funds to convert cash held in index funds to short-term equity investments. This practice is intended to make the performance of the index funds more closely track the performance of the index that the funds are intended to replicate.

Collateralized mortgage obligations, asset-backed securities, and exchange-traded funds pose no greater risk than other similar investment grade holdings in KRS' and the Fund's portfolios. The fair value of CMOs at June 30, 2009 and 2008, was approximately $266 million and $282 million, respectively; the fair value of asset-backed securities at June 30, 2009 and 2008, was approximately $102 million and $219 million, respectively; and, the fair value of exchange-traded funds at June 30, 2009 and 2008, was approximately $196 million and $451 million, respectively.

Custodial Credit Risk for Deposits

Custodial credit risk for deposits is the risk that in the event of a financial institution failure, KRS' deposits may not be returned. All non-investment related bank balances are held locally by Farmer's Bank & Capital Trust Company. All non-investment related bank balances are held in KRS' name and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). Effective October 3, 2008, FDIC deposit insurance temporarily increased from $100,000 to $250,000 for each individual account through December 31, 2009. On May 20, 2009, the temporary inclusion in FDIC deposit insurance coverage from $100,000 to $250,000 for each depositor was extended through December 13, 2013. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount.

At June 30, 2009 and 2008, deposits for KRS pension funds were $3,568,343 and $7,685,550, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

At June 30, 2009 and 2008, deposits for KRS insurance fund were $289,006 and $204,343, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments

Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. KRS does not have an explicit policy regarding Custodial Credit Risk for investments.

At June 30, 2009 and 2008, the following investments were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name.

Pension Fund	2008	2009
Foreign Currency Investments	$5,064,552	$3,486,140
Insurance Fund		
Foreign Currency Investments	$2,550,222	$1,103,211

Investment Policies

Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of Trustees of KRS. The Board of Trustees has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the "Prudent Person Rule" set forth in Kentucky Revised Statute 61.650 and manage those funds consistent with the long-term nature of the Systems. The Committee has adopted a *Statement of Investment Policy* that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS. The *Statement of Investment Policy – Pension* contains the specific guidelines for the investment of pension assets. The *Statement of Investment Policy – Insurance* contains the specific guidelines for the investment of insurance assets. Additionally, the Committee establishes specific investment guidelines in the Investment Management Agreement for each investment management firm.

Investment Summary

The following tables present a summary of the investments by type as of June 30, 2009 and 2008:

Pension Funds

As of June 30, 2009 and 2008

Investment Summary	2009	2008
US Gov't &Agency Fixed Income Securities	$2,301,499,200	$3,167,327,985
US Corporate Fixed Income Securities	906,485,006	1,457,701,305
Municipal Debt Securities	20,093,413	3,189,898
Short-term Investments	1,017,432,938	199,792,495
Equity Securities	4,567,119,849	7,093,291,910
Private Equity Limited Partnerships	978,848,929	902,624,336
Real Estate	14,945,575	9,545,575
Impairment-Securities Lending*	(39,279,421)	--
	$9.767.145.489	$12,833,473,504

Insurance Funds

As of June 30, 2009 and 2008

Investment Summary	2009	2008
US Gov't & Agency Fixed Income Securities	$203,303,796	$330,535,852
Short-term Investments	495,221,921	306,845,080
Equity Securities	1,222,700,032	1,868,037,394
Private Equity Limited Partnerships	109,261,059	100,291,617
Alternative Investment	135,000	135,000
Real Estate	600,000	--
Impairment-Securities Lending*	(8,984,210)	--
	$2,022,237,598	$2,605,844,943

**See Note E for detailed information.*

Credit Risk of Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external professional investment management firms. All portfolio managers are required by the *Statement of Investment Policy* to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension fund debt securities portfolio is managed using the following guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- The duration of the total fixed income portfolio shall not deviate from the blended Barclays Capital Aggregate Index/KRS High Yield Index by more than 10%.
- The duration of the TIPS portfolio shall not deviate from the Barclays Capital TIPS Index by more than 10%.
- The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS' assets.
- No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short term instrument, with the exception of US Government issued, guaranteed or agency obligations.
- The amount invested in SEC Rule 144a securities shall not exceed 7.5% of the market value of the aggregate market value of KRS' fixed income investments.

The table on the following page presents the KRS pension fund debt ratings at June 30, 2009 and 2008.

Pension Funds Debt Securities Investments at Fair Value

As of June 30, 2009 and 2008

	2009	2008
AAA	$443,511,715	$1,852,092,028
AA+	16,824,633	3,146,943
AA	29,223,881	55,711,654
AA-	14,112,366	69,155,369
A+	64,261,249	64,663,074
A	156,858,363	94,408,564
A-	60,256,001	74,151,200
BBB+	81,424,712	107,130,804
BBB	107,077,314	106,177,690
BBB-	62,510,693	74,797,060
BB+	6,241,124	2,156,766
BB	13,693,541	8,702,285
BB-	2,212,888	--
B+	3,389,891	--
B	4,189,229	--
B-	923,953	3,403,560
CCC	7,319, 295	--
CC	278,130	--
NR	46,927,613	166,287,656
Total Credit Risk Debt Securities	1,121,236,591	2,681,984,653
Government Bonds	394,575,945	267,456,013
Government Mortgage-Backed Securities (GNMA)	736,182,469	48,454,865
Indexed Linked Bonds	976,082,613	1,630,323,657
Total Debt Securities	$3,228,077,618	$4,628,219,188

At both June 30, 2009 and 2008, the weighted average quality rating of the pension fund debt securities portfolio was AA+. As of June 30, 2009 and 2008, the KRS pension portfolio had $38,248,051 and $14,262,611, respectively, in debt securities rated below BBB-. The fair value of securities in the BBB- rating category was $62,510,693 and $74,797,060, respectively, as of June 30, 2009 and 2008.

The insurance fund debt securities portfolio, by guidelines, is to be invested in US Government securities. As shown below, as of June 30, 2009 and 2008, the entire insurance fund was invested in Treasury Inflation Protected Securities (TIPS) which carry a US Government treasury rating.

Insurance Fund Credit Risk of Debt Securities

As of June 30, 2009 and 2008

	2009	2008
Treasury Inflation Protected Securities	$203,303,796	$330,535,852

Concentration of Credit Risk Debt Securities

Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

The total debt securities portfolio is managed using the following general guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Debt obligations of any single US Corporation shall be limited to a maximum of 5 percent of the total portfolio at market value.

As of June 30, 2009, the Insurance Fund held 6% of its investments in Exchange Traded Funds (ETF's). The amount totaled $131,013,116 as of June 30, 2009. ETF's are securities that represent ownership in a long term unit investment trust that holds a portfolio of common stocks designed to track the performance of a designated index. Similar to a stock, ETF's can be traded continuously throughout the trading day, or can be held for the long term.

As of June 30, 2009, the Pension Fund held 5.18% of its investment in the Federal National Mortgage Association (Fannie Mae). The amount totaled $508,465,653 as of June 30, 2009. Historically, Fannie Mae has been a publicly owned government corporation, recently entering conservatorship by the US Government, to purchase mortgages from lenders and resell them to investors; shares of Fannie Mae are traded on the New York Stock Exchange. Fannie Mae's debt has been perceived to be nearly as safe as US Treasury debt, given the US Government's implicit guarantee which has allowed it to pay lower interest rates to its debt holders.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The risk is managed by using the effective duration or option adjusted methodology. It is widely used in the management of fixed income portfolios by quantifying the risk of inherent rate changes. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. The effective duration measures the sensitivity of the market price to changes in the yield curve. Effective duration is the most accurate duration measure when a significant portion of the securities are callable (redeemable) prior to maturity. The pension fund portfolio contains a number of securities that are callable and therefore interest rate risk is most appropriately measured by effective duration. KRS does not have a formal policy that constrains the duration of its fixed income portfolio.

The KRS pension fund debt securities portfolio benchmarks its debt securities portfolio to a weighted average benchmark consisting of the Barclays Capital Aggregate Index and the Barclays Capital US TIPS Index. At June 30, 2009 and 2008, the effective duration of the benchmark was 4.196 and 5.34, respectively. At the same points in time, the effective duration of the KRS pension fund debt securities portfolio was 4.45 and 5.25, respectively.

KRS Pension Funds Interest Rate Risk

	2009	Weighted Average Effective Duration	2008	Weighted Average Effective Duration
Asset Backed Securities	$101,699,907	0.36	$219,570,012	0.65
Commercial Mortgage Backed Securities	106,131,129	4.40	284,582,636	4.69
Corporate Bonds	538,973,533	6.01	676,082,460	6.36
Government Agencies	131,949,021	3.70	156,429,791	3.75
Government Bonds	1,370,658,558	5.22	1,938,543,143	6.84
Government Mortgage Backed Securities	736,182,469	3.36	1,063,447,866	3.92
Municipal Bonds	20,093,413	7.48	3,189,898	8.20
Non-Government Backed Collateralized Mortgage Obligations	162,234,869	1.38	280,513,429	1.66
Other Fixed Income	60,154,719	2.45	5,859,953	--
Total	$3,228,077,618	4.45	$4,628,219,188	5.25

The KRS insurance fund long-term debt securities portfolio consists entirely of US Government issued bonds which are not callable (redeemable) prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve but does not assume that securities will be called prior to maturity. Since the modified duration measure most accurately reflects the interest rate sensitivity of the insurance fund portfolio, this measure is used for comparative purposes. The KRS insurance fund debt securities portfolio benchmarks its debt securities portfolio to the Barclays Capital US TIPS Index. At June 30, 2009 and 2008, the modified duration of the benchmark was 4.21 and 7.00, respectively. At the same points in time, the modified duration of the KRS insurance fund debt securities portfolio, excluding the pooled fund, was 7.46 and 7.8, respectively.

Insurance Fund Debt Securities Investments at Fair Value

As of June 30, 2009 and 2008

	2009		2008	
Investment	Fair Value	Weighted Duration	Fair Value	Weighted Duration
Index Linked Government Bonds	$203,303,796	7.46	$330,535,852	7.80

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. KRS' currency risk exposure, or exchange rate risk, primarily resides within KRS' international equity holdings. KRS does not have a formal policy to limit foreign currency risk. The tables on the following pages present KRS' exposure to foreign currency risk at June 30, 2009 and 2008.

Pension Funds Investments at Fair Value

As of June 30, 2009 and 2008

Foreign Equities	2009	2008
Australian Dollar	$52,486,171	$108,703,282
British Pound Sterling	224,888,843	347,502,090
Canadian Dollar	50,996,657	--
Danish Krone	2,837,998	10,215,805
Euro	321,770,916	602,712,262
Hong Kong Dollar	30,196,000	42,788,359
Japanese Yen	247,828,407	360,039,117
Malaysian Ringgit	5,471,194	4,822,484
New Taiwan Dollar	3,081,020	--
Norwegian Krone	6,671,898	8,462,661
Singapore Dollar	22,514,427	33,380,301
South African Rand	3,065,838	2,724,924
South Korean Won	7,575,310	8,878,461
Swedish Krona	12,083,380	22,736,416
Swiss Franc	87,953,959	132,737,018
International Equity Mutual Fund (various currencies)	484,383,452	3,375,984
Total Securities Subject To:		
Foreign Currency Risk	1,563, 805,470	1,689,079,164
USD (securities held by International Investment Managers)	507,357,622	899,009,887
Total International Investment Securities	$2,071,163,092	$2,588,089,051

Insurance Funds Investments at Fair Value

As of June 30, 2009 and 2008

Foreign Equities	2009	2008
Australian Dollar	$21,131,446	$35,134,773
Brazilian Real	360,704	--
British Pound Sterling	83,508,340	109,029,509
Canadian Dollar	28,155,840	--
Danish Krone	1,352,355	3,306,933
Euro	123,126,478	189,066,281
Hong Kong Dollar	13,879,837	13,504,229
Japanese Yen	92,771,022	112,165,271
Malaysian Ringgit	1,576,196	1,373,536
Mexican Peso	58,868	--
New Taiwan Dollar	1,846,498	1,278,371
Norwegian Krone	3,071,113	2,758,439
Singapore Dollar	7,427,113	10,752,813
South African Rand	1,104,155	825,396
South Korean Won	3,859,160	2,678,342
Swedish Krona	4,425,313	7,113,693
Swiss Franc	32,594,627	41,108,670
International Equity Mutual Fund (various currencies)	80,975,131	102,752,830
Total Securities Subject To:		
Foreign Currency Risk	501,224,196	632,849,086
USD (securities held by International Investment Managers)	20,578,322	58,451,156
Total International Investment Securities	521,802,518	$691,300,242

NOTE E-SECURITIES LENDING TRANSACTIONS

Kentucky Revised Statutes Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with a fair value of 102 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. The types of securities lent include US Treasuries, US Agencies, US Corporate Bonds, US Equities, Global Fixed Income Securities, and Global Equities Securities. The *Statement of Investment Policy - Pension* and the *Statement of Investment Policy - Insurance* do not address any restrictions on the amount of loans that can be made. At June 30, 2009, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction, although the average term of the loans was 6 days, 10 days, and 24 days for the three investment portfolios subject to security lending agreements. One custodial bank invests cash collateral in securities that are permitted for investment by state statute and Board policy, which at year-end has a weighted-average maturity of 3 days for KRS. The other custodial bank invests cash collateral in the agent's short-term investment pool as permitted by state statute and Board policy, which at year-end has a weighted-average maturity of 24 days for the Pension Fund only. Neither of the Funds can pledge or sell collateral securities received unless the borrower defaults.

In September 2008, the ongoing financial market crisis took an adverse turn. Securities issued by many financial institutions and other entities experienced significant financial distress as a result of the financial market turmoil. Several government sponsored entities were put under the conservatorship of the US Government, and other foreign and domestic financial institutions received capital infusions or other types of capital support from their respective governments' central banks. The US Federal Reserve and US Treasury initiated various actions to enhance liquidity to stabilize the financial markets.

Following the cumulative effect of these factors, Northern Trust (the custodial bank for KRS) determined that certain securities held within the collateral pools had experienced impairment in value. Accordingly, Northern Trust determined in September 2008 a "Collateral Deficiency" assessment (in broad terms, the shortfall between the market NAV and the $1 NAV) in its collateral pools under the terms of its Securities Lending Authorization Agreement.

Per the Agreement, each participant (including KRS) in the collateral pool was allocated their share of the Collateral Deficiency which comprised both unrealized (primarily) and realized losses. Northern Trust elected to book this obligation as a receivable to each collateral pool, avoiding any immediate cash outflows by participants. Northern Trust determined that the receivable could be removed or reduced through a variety of mechanisms such as potential future "reversal" of the unrealized Collateral Deficiency loss. In addition, the affected collateral pools were closed to new investors (ensuring that any "reversal" would not be shared with new investors which is disadvantageous to KRS). The ultimate value of these impaired assets will be driven by a variety of factors including market and regulatory forces, as well as the outcome of bankruptcy proceedings.

Subsequent to the Collateral Deficiency, Northern Trust made a direct cash contribution of approximately $5.7 million to KRS whose cash collateral was invested in the Core and Global Collateral Pools. Northern Trust also reduced its portion of the fee split relating to revenues generated in the affected collateral pools by 20% (effective October 1, 2008 and continuing for the next 12 months).

KRS maintains a conservative approach to investing the cash collateral with Northern Trust for its securities lending collateral pools, emphasizing capital preservation, liquidity, and credit quality.

As of June 30, 2009, the impairment in the pension funds totaled $39,279,421 and the impairment in the insurance fund totaled $8,984,210, for a total impairment of $48,263,631. This is an unrealized loss and may decrease with time if market values of assets increase.

NOTE F-RISKS OF LOSS

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of

negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims against the Board of Trustees of KRS, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $100,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

NOTE G-CONTINGENCIES

In the normal course of business, KRS is involved in litigation concerning the right of participants, or their beneficiaries, to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

NOTE H-INCOME TAX STATUS

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax.

NOTE I-DEFINED BENEFIT PENSION PLAN

All eligible employees of KRS participate in KERS (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers substantially all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Plan members contributed 5% of creditable compensation for the periods ended June 30, 2009, 2008, and 2007. The Commonwealth contributed 10.01%, 8.5%, and 7.75% of covered payroll for the periods ended June 30, 2009, 2008, and 2007, respectively. The chart below includes the covered payroll and contribution amounts for KRS for the three periods included in this discussion.

	2009	2008	2007
Covered Payroll	$12,864,700	$11,846,700	$11,269,800
Employer Contributions	$1,287,800	$1,007,000	$873,400

NOTE J-EQUIPMENT

Equipment consists of the following:

As of June 30, 2009 and 2008

	2009	2008
Equipment, at cost	$8,870,569	$9,151,744
Less Accumulated Depreciation	(2,715,603)	(2,753,294)
	$6,154,966	$6,398,450

Depreciation expense for the fiscal years ended June 30, 2009 and 2008, amounted to $299,578 and $378,887, respectively.

As of June 30, 2009, KRS had approximately $4.8 million in assets yet to be depreciated in relation to the Strategic Technology Advancements for the Retirement of Tomorrow (START) project. See Note K for further information regarding the START project.

NOTE K-INTANGIBLE ASSETS

The provisions of Governmental Accounting Standards Board (GASB) Statement No. 51, "*Accounting and Financial Reporting for Intangible Assets*" require that intangible assets be recognized in the Statement of Plan Net Assets only if they are considered identifiable. In conjunction with the adoption of GASB No. 51, KRS has capitalized software costs as indicated below for the START project.

Software consists of the following:

As of June 30, 2009 and 2008

	2009	2008
Software, at cost	$2,259,480	$2,259,480
Less Accumulated Amortization	(345,931)	(119,983)
	$1,913,549	$2,139,497

Amortization expense for the fiscal years ended June 30, 2009 and 2008, amounted to $225,948 and $119,983, respectively.

In fiscal 2007, KRS initiated the START project. It is anticipated that START will be completed in its entirety in fiscal 2011. The objectives of the project are to provide employees with a technology solution that will enable them to serve more customers more quickly while providing continued superior service; to enhance business services and improve operational efficiency; to improve the accuracy of the information collected, maintained, and provided; to improve the timeliness and accuracy of responses to members' inquiries; to provide internet based, self-service capabilities to members, retirees, and employers; and, to ensure that retirees receive monthly benefits without error or disruption.

NOTE L-ALTERNATIVE INVESTMENTS

On February 6, 2006, the health insurance fund of KRS loaned to KRS Perimeter Park West, Inc., a related party, $700,000 for the purchase of real property at 1300 Louisville Road, Frankfort, Kentucky. The loan was not documented by a note, mortgage contract, or security interest in the property. The transfer of funds involved a commingling with the pension fund which was in violation of Internal Revenue Code Sections 401 and 420. However, KRS voluntarily self-corrected the violation in accordance with Revenue Procedure 2006-27 of the Internal Revenue Bulletin 2006-22, page 945, "*Employee Plans Compliance Resolution System (EPCRS)*", and Section 1101 of the Pension Protection Act of 2006. The self-correction process involved a Letter of Direction sent to Northern Trust (the custodial bank of KRS) to reverse (and to correct the commingling of funds) the loan in the investment accounts.

Subsequent to the loan and purchase, the real property was valued by appraisal from $135,000 to $290,000. The range of appraisal values was based upon considerations of zoning classifications, site preparations and improvements, and other matters. KRS decided to reflect the alternative investment at the lowest appraisal value for the property in accordance with Governmental Accounting Standards Board (GASB) Statement No. 43 "*Financial Reporting for Postemployment Benefit Plans other than Pension Plans*", paragraphs 22 and 92 , and in accordance with the Principle of Conservatism of Generally Accepted Accounting Principles. Because of the significant difference in the appraised value of the property and the loan amount, and also because the loan was not documented by a note, mortgage contract, or security interest in the property, KRS was uncertain whether it would collect any principal (or interest) in excess of the minimum appraised property value. Therefore, as of June 30, 2006, KRS management elected to write-down the value of the Alternative Investment to an estimated collectible value of $135,000, which has been the investment's carrying value since the date of the loan. As a result, the unrealized loss amounted to $565,000 ($700,000 - $135,000), which was included in the Combined Statement of Changes in Plan Net Assets – Insurance Funds for the 2006 fiscal year.

On June 11, 2009, the property at 1300 Louisville Road, along with Building B (a part of the Perimeter Park Complex purchased in 1998) was sold for a combined sale price of $3,200,000 to the Commonwealth of Kentucky. The two properties were appraised individually on December 15, 2008, by the Forrestal Group, Inc., of Evansville, Indiana. The property at 1300 Louisville Road appraised for $295,000, and Building B appraised for $2,725,000.

On September 15, 2009, the management of KRS Perimeter Park West, Inc. repaid $700,000 out of the proceeds from the sale of these two properties to the health insurance fund of KRS to repay the aforementioned loan. In addition to the repayment of the principal, interest in the amount of $127,298 was paid. The simple interest was computed at 5.04% and the period of 1,317 days outstanding (February 6, 2006, to September 15, 2009) was used for the calculation. Interest in the amount of $119,855 has been accrued as a receivable as of June 30, 2009. In addition, KRS reimbursed KRS Perimeter Park West, Inc. for expenses it incurred as part of the purchase of the real property at 1300 Louisville Road; the amount reimbursed totaled $52,502. The Kentucky Finance and Administration Cabinet, Office of Policy and Audit, completed a comprehensive audit of the 1300 Louisville Road property purchase and issued a report in July 2009. KRS has fully implemented the four recommendations contained in the report.

NOTE M-ACTUARIAL VALUATION

The provisions of Governmental Accounting Standards Board (GASB) Statement No. 50, "*Pension Disclosures, an Amendment of GASB No. 25 and No. 27*", require that actuarial information included in the Notes to the Required Supplementary Information be moved to the Notes to the Financial Statements. In conjunction with the adoption of GASB No. 50, KRS has moved the following information from the Notes to the Required Supplementary Information to the Notes to the Financial Statements:

Pension Funds

	Non-Hazardous	Hazardous
Valuation Date	6/30/2009	6/30/2009
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	28 Years	28 Years
Asset Valuation Method	5-year Smoothed Market	5-year Smoothed Market
Actuarial Assumptions:		
Investment Return*	7.75%	7.75%
*Includes Inflation Rate	4.5%	4.5%
Projected Salary Increases	4.75% - 17.0%	4.5% - 21.0%
Cost of Living Adjustment	None	None

Insurance Funds

	Non-Hazardous	Hazardous
Valuation Date	6/30/2009	6/30/2009
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	28 Years	28 Years
Asset Valuation Method	5-year Smoothed Market	5-year Smoothed Market
Medical Trend Assumption	10.5% - 5.0%	10.5% - 5.0%
Year of Ultimate Trend	2017	2017
Actuarial Assumptions:		
Investment Return*	7.75%**	7.75%
*Includes Inflation Rate	4.5%	4.5%

***The actuarial investment rate of return for developing insurance liabilities and contribution rates is 4.5% for KERS non-hazardous and SPRS. The lower rate is required under the parameters set by the Governmental Accounting Standards Board Statement No. 43 and No. 45 given the lack of pre-funding of insurance benefits.*

KRS had the following Unfunded Actuarial Accrued Liabilities as of June 30, 2009 and 2008:

Pension Funds	2009	2008
Kentucky Employees Retirement System Non-Hazardous	$5,863,938,167	$4,810,897,092
Kentucky Employees Retirement System Hazardous	171,908,494	115,878,613
County Employees Retirement System Non-Hazardous	2,262,123,521	1,572,715,253
County Employees Retirement System Hazardous	826,957,060	652,254,722
State Police Retirement System	272,361,879	236,237,806
Total Pension Funds	$9,397,289,121	$7,387,923,486
Insurance Funds	**2009**	**2008**
Kentucky Employees Retirement System Non-Hazardous	$3,973,152,991	$4,828,301,524
Kentucky Employees Retirement System Hazardous	189,497,578	253,495,455
County Employees Retirement System Non-Hazardous	1,853,754,249	2,414,310,296
County Employees Retirement System Hazardous	942,417,481	1,156,256,638
State Police Retirement System	240,504,494	321,146,271
Total Insurance Funds	7,199,326,793	8,973,510,184
Total Unfunded Actuarial Accrued Liability	$16,596,615,914	$16,361,493,670

The Schedule of Funding Progress for the Pension Funds is on pages 71 through 73. The Schedule of Funding Progress for the Insurance Funds is on pages 73 through 75.

NOTE N-HOUSE BILL 1 PENSION REFORM

House Bill 1 was signed by the Governor of the Commonwealth on June 27, 2008. It contained a number of changes that KRS implemented effective September 1, 2008. House Bill 1 also contained statutory changes to Kentucky Revised Statute 61.637, the law governing members who become reemployed following retirement.

Employee contributions for non-hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 6% of all their creditable compensation to KRS. Five percent of this contribution was deposited to the individual employee's account, while the other 1% was deposited to an account created under 26 USC Section 401(h) in the KRS Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 9% of all their creditable compensation, with 8% credited to the member's account, and 1% deposited to the KRS Pension Fund 401(h) account. Interest paid each June on these members' accounts is set at a rate of 2.5%. If a member terminates his/her employment and applies to take a refund, the member is entitled to a full refund of contributions and interest in his/her account; however, the 1% contributed to the 401(h) account in the KRS Pension Fund is non-refundable and is forfeited.

Employer contribution rates for KERS and SPRS for fiscal 2009 were established in the 2008-2010 Executive Branch Budget (House Bill 460) during the 2008 session of the Kentucky General Assembly. Employer contribution rates for CERS for fiscal 2009 were enacted by House Bill 1 in the 2008 Special Legislative Session. The Employer contribution rates were established as follows (effective July 1, 2008):

KERS-Non Hazardous	10.01%
KERS-Hazardous	24.35%
CERS-Non Hazardous	13.50%
CERS-Hazardous	29.50%
SPRS	30.07%

Although the majority of changes in this legislation only impacted new hires on, or after, September 1, 2008, there were some changes that affected all members and retirees of KRS:

- Cost of Living Adjustment (COLA): Beginning July 1, 2009, COLA for retirees will now be set at 1.5% each July 1. The Kentucky General Assembly may increase this percentage at any time, but only if appropriate funding is allocated. The General Assembly may also reduce or suspend the annual COLA.
- Service Purchase Costs: The actuarial factors used to determine the cost to purchase a service will now assume the earliest date a member can retire with an unreduced benefit, and will also include a COLA. This change will result in an increased service purchase cost for any purchase calculated on, or after, September 1, 2008. This change will also affect the cost billed to employers for sick leave when an employee retires.
- Payment Options: The Partial Lump Sum Payment Options was only available for those employees who retired on, or before, January 1, 2009.

Kentucky Revised Statute 61.637 was modified significantly by House Bill 1. Specifically, a retiree reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.

NOTE O–MEDICARE PRESCRIPTION DRUG PLAN

In fiscal 2009, Kentucky Retirement Systems submitted an application to the Centers for Medicare & Medicaid Services, of the Department of Health & Human Services, to enter into a contract to offer a Medicare Prescription Drug Plan (PDP), as described in the Medicare Prescription Drug Benefit Final Rule published in the Federal Register on January 28, 2005 (70 Fed. Reg. 4194). As part of the application process, KRS was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents and is invested on a daily basis. On February 19, 2009, KRS established the KRS Insurance Prescription Drug Fund at its custodial bank.

NOTE P – REIMBURSEMENT OF RETIRED – REEMPLOYED HEALTH INSURANCE

As a result of the passage of House Bill 1, if a retiree is reemployed on or after September 1, 2008 in a regular full time position and has chosen health insurance coverage through KRS, the employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate. KRS has begun collecting these reimbursement payments. As of June 30, 2009, the reimbursement totaled $206,859.

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Funding Progress

Kentucky Employees Retirement System (KERS) - Pension Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2002*	$6,654,084,196	$6,026,094,764	$(627,989,432)	110.4%	$1,595,809,458	(39.3)%
June 30, 2003**	6,351,318,832	6,520,463,188	169,144,356	97.4	1,658,604,696	10.2
June 30, 2004**	6,000,513,743	7,049,613,171	1,049,099,428	85.1	1,645,412,496	63.8
June 30, 2005**	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
June 30, 2006**	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
June 30, 2007**	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
June 30, 2008**	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
June 30, 2009**	4,794,611,365	10,658,549,532	5,863,938,167	45.0	1,754,412,912	334.2
Hazardous						
June 30, 2002*	$376,384,302	$322,069,164	$(54,315,138)	116.9%	$125,275,925	(43.4)%
June 30, 2003**	385,925,722	356,879,133	(29,046,589)	108.1	129,088,956	(22.5)
June 30, 2004**	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
June 30, 2005**	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
June 30, 2006**	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
June 30, 2007**	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
June 30, 2008**	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
June 30, 2009**	502,503,287	674,411,781	171,908,494	74.5	146,043,576	117.7
Total						
June 30, 2002*	$7,030,468,498	$6,348,163,928	$(682,304,570)	110.7%	$1,721,085,383	(39.6)%
June 30, 2003**	6,737,244,554	6,877,342,321	140,097,767	98.0	1,787,693,652	7.8
June 30, 2004**	6,397,726,506	7,453,191,207	1,055,464,701	85.8	1,772,077,308	59.6
June 30, 2005**	5,983,974,408	8,018,069,096	2,034,094,688	74.6	1,787,594,376	113.8
June 30, 2006**	5,822,070,515	9,503,482,150	3,681,411,634	61.3	1,840,978,097	200.0
June 30, 2007**	5,864,070,268	10,044,931,606	4,180,861,338	58.4	1,925,061,513	217.2
June 30, 2008**	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0
June 30, 2009**	5,297,114,652	11,332,961,313	6,035,846,661	46.7	1,900,456,488	317.6

** Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and following four years*
***Covered payroll was actuarially computed as opposed to estimated in prior years*

Schedule of Funding Progress

County Employees Retirement System (CERS) - Pension Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2002*	$5,397,787,158	$4,165,355,149	$(1,232,432,009)	129.6%	$1,663,183,629	(74.1)%
June 30, 2003**	5,286,580,047	4,417,597,802	(868,982,245)	119.7	1,796,451,180	(48.4)
June 30, 2004**	5,187,851,530	4,936,459,488	(251,392,042)	105.1	1,826,870,880	(13.8)
June 30, 2005**	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
June 30, 2006**	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
June 30, 2007**	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
June 30, 2008**	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
June 30, 2009**	5,650,789,991	7,912,913,512	2,262,123,521	71.4	2,183,611,848	103.6
Hazardous						
June 30, 2002*	$1,485,511,793	$1,327,291,273	$(158,220,520)	111.9%	$345,849,277	(45.7)%
June 30, 2003**	1,467,004,856	1,499,628,782	32,623,926	97.8	374,700,732	8.7
June 30, 2004**	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
June 30, 2005**	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
June 30, 2006**	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
June 30, 2007**	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
June 30, 2008**	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
June 30, 2009**	1,751,487,540	2,578,444,600	826,957,060	67.9	469,315,464	176.2
Total						
June 30, 2002*	$6,883,298,951	$5,492,646,422	$(1,390,652,529)	125.3%	$2,009,032,906	(69.2)%
June 30, 2003**	6,753,584,903	5,917,226,584	(836,358,319)	114.1	2,171,151,912	(38.5)
June 30, 2004**	6,645,463,572	6,577,289,608	(68,173,964)	101.0	2,219,433,504	(3.1)
June 30, 2005**	6,511,561,710	7,180,774,025	669,212,315	90.7	2,296,396,728	29.2
June 30, 2006**	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
June 30, 2007**	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4
June 30, 2008**	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3
June 30, 2009**	7,402,277,531	10,491,358,112	3,089,080,581	70.6	2,652,927,312	116.4

** Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and following four years*

***Covered payroll was actuarially computed as opposed to estimated in prior years*

Schedule of Funding Progress

State Police Retirement System (SPRS) - Pension Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2002*	$438,955,465	$380,790,346	$(58,165,119)	115.3%	%44,314,696	(131.2)%
June 30, 2003**	413,063,576	414,881,459	1,817,883	99.6	43,760,832	4.2
June 30, 2004**	385,077,195	437,482,425	52,405,230	88.0	43,835,208	119.6
June 30, 2005**	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
June 30, 2006**	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
June 30, 2007**	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
June 30, 2008**	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5
June 30, 2009**	329,966,989	602,328,868	272,361,879	54.8	51,660,396	527.2

** Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and following four years*
***Covered payroll was actuarially computed as opposed to estimated in prior years*

Schedule of Funding Progress

State Police Retirement System (SPRS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2002*	$86,867,391	$165,445,412	$78,578,021	52.5%	$44,314,696	177.3%
June 30, 2003**	90,747,967	184,501,205	93,753,238	49.2	43,760,832	214.2
June 30, 2004**	96,622,908	197,604,301	100,981,393	48.9	43,835,208	230.4
June 30, 2005**	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
June 30, 2006**	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
June 30, 2007**	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
June 30, 2008**	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
June 30, 2009**	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5

** Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and following four years*
***Covered payroll was actuarially computed as opposed to estimated in prior years*

Schedule of Funding Progress

Kentucky Employees Retirement System (KERS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2002*	$521,250,455	$1,907,683,881	$1,386,433,426	27.3%	$1,595,809,458	86.9%
June 30, 2003**	553,885,082	2,093,210,321	1,539,325,239	26.5	1,658,604,696	92.8
June 30, 2004**	600,586,961	2,335,905,365	1,735,318,404	25.7	1,645,412,496	105.5
June 30, 2005**	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
June 30, 2006**	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
June 30, 2007**	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
June 30, 2008**	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
June 30, 2009**	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
Hazardous						
June 30, 2002*	$135,874,582	$236,819,050	$100,944,468	57.4%	$125,275,925	80.6%
June 30, 2003**	151,459,500	283,178,335	131,718,835	53.5	129,088,956	102.0
June 30, 2004**	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
June 30, 2005**	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
June 30, 2006**	212,833,818	621,237,856	408,404,538	34.3	138,747,320	294.4
June 30, 2007**	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
June 30, 2008**	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
June 30, 2009**	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
Total						
June 30, 2002*	$657,125,037	$2,144,502,931	$1,487,377,894	30.6%	$1,721,085,383	86.4%
June 30, 2003**	705,344,582	2,376,388,656	1,671,044,074	29.7	1,787,693,652	93.5
June 30, 2004**	769,745,840	2,659,408,928	1,889,663,088	28.9	1,772,077,308	106.6
June 30, 2005**	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
June 30, 2006**	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,178,097	413.5
June 30, 2007**	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
June 30, 2008**	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
June 30, 2009**	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0

** Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and following four years*

***Covered payroll was actuarially computed as opposed to estimated in prior years*

Schedule of Funding Progress

County Employees Retirement System (CERS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2002*	$450,497,307	$1,977,577,038	$1,527,079,731	22.8%	$1,663,183,629	91.8%
June 30, 2003**	520,060,105	2,176,963,259	1,656,903,154	23.9	1,796,451,180	92.2
June 30, 2004**	585,399,072	2,438,734,696	1,853,335,624	24.0	1,826,870,880	101.5
June 30, 2005**	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
June 30, 2006**	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
June 30, 2007**	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
June 30, 2008**	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
June 30, 2009**	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
Hazardous						
June 30, 2002*	$234,683,878	$781,184,974	$546,501,096	30.1%	$345,849,279	158.0%
June 30, 2003**	269,190,080	935,650,662	666,460,582	28.8	374,700,732	177.9
June 30, 2004**	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
June 30, 2005**	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
June 30, 2006**	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
June 30, 2007**	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
June 30, 2008**	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
June 30, 2009**	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
Total						
June 30, 2002*	$685,181,185	$2,758,762,012	$2,073,580,827	24.8%	$2,009,032,908	103.2%
June 30, 2003**	789,250,185	3,112,613,921	2,323,363,736	25.4	2,171,151,912	107.0
June 30, 2004**	895,977,234	3,464,419,173	2,568,441,939	25.9	2,219,433,504	115.7
June 30, 2005**	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
June 30, 2006**	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
June 30, 2007**	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
June 30, 2008**	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
June 30, 2009**	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4

** Asset valuation method was changed to reflect the amount of investment gain/loss for the current year equally over the current year and following four years*

***Covered payroll was actuarially computed as opposed to estimated in prior years*

Schedule of Contributions From Employers and Other Contributing Entities
Kentucky Employees Retirement System (KERS) Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2002	--	$1,760,328	--	--
June 30, 2003	$4,905,399	7,597,450	--	154.9%
June 30, 2004	47,739,067	21,696,543	--	45.4
June 30, 2005	85,798,943	50,332,750	--	58.7
June 30, 2006	129,125,800	60,680,607	--	47.0
June 30, 2007	176,774,106	88,248,677	--	49.9
June 30, 2008	264,742,985	104,655,217	--	39.5
June 30, 2009	294,495,010	112,383,083	--	38.2
Insurance				
June 30, 2002	$93,993,177	$93,912,017	--	99.9%
June 30, 2003	92,052,561	65,335,219	--	71.0
June 30, 2004	77,951,553	78,016,737	--	100.1
June 30, 2005	86,974,271	49,909,228	--	57.4
June 30, 2006	202,498,302	47,634,639	--	23.5
June 30, 2007	217,268,964	64,014,332	$10,744,049	34.0
June 30, 2008	558,745,820	56,744,942	6,633,538	11.3
June 30, 2009	362,707,378	74,542,932	8,167,982	22.8
Total				
June 30, 2002	$93,993,177	$95,672,345	--	101.8%
June 30, 2003	96,957,960	72,932,669	--	75.2
June 30, 2004	125,690,620	99,713,280	--	79.3
June 30, 2005	172,773,214	100,241,978	--	58.0
June 30, 2006	331,624,102	108,315,246	--	43.8
June 30, 2007	396,543,070	152,263,009	$10,744,049	39.8
June 30, 2008	823,488,805	161,400,159	6,633,538	20.4
June 30, 2009	657,202,388	186,926,015	8,167,982	29.7

Schedule of Contributions From Employers and Other Contributing Entities

Kentucky Employees Retirement System (KERS) Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2002	$7,742,052	$7,933,817	--	102.5%
June 30, 2003	8,511,402	7,322,607	--	86.0
June 30, 2004	9,600,978	9,769,580	--	101.8
June 30, 2005	9,449,878	9,758,547	--	103.3
June 30, 2006	10,787,472	10,803,206	--	100.1
June 30, 2007	12,219,689	13,237,321	--	108.3
June 30, 2008	14,147,341	15,257,079	--	107.8
June 30, 2009	15,708,254	15,843,289	--	100.9
Insurance				
June 30, 2002	$15,859,932	$15,887,399	--	100.2%
June 30, 2003	15,839,215	15,883,263	--	100.3
June 30, 2004	14,942,092	14,959,617	--	100.1
June 30, 2005	15,892,977	15,395,977	--	96.9
June 30, 2006	28,517,563	17,011,745	--	59.7
June 30, 2007	31,304,778	19,534,819	$104,669	62.7
June 30, 2008	51,214,929	21,997,341	73,891	43.1
June 30, 2009	34,670,467	20,807,204	186,081	60.6
Total				
June 30, 2002	$23,601,984	$23,821,216	--	100.9%
June 30, 2003	24,350,617	23,205,870	--	95.3
June 30, 2004	24,543,070	24,729,197	--	100.8
June 30, 2005	25,342,855	25,154,524	--	99.3
June 30, 2006	39,305,035	27,814,951	--	70.8
June 30, 2007	43,524,467	32,772,140	$104,669	75.3
June 30, 2008	65,362,270	37,254,420	73,891	57.1
June 30, 2009	50,378,721	36,650,493	186,081	73.1

Schedule of Contributions From Employers and Other Contributing Entities

County Employees Retirement System (CERS) Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2002	$3,326,367	$5,528,348	--	166.2%
June 30, 2003	8,682,257	11,855,694	--	136.6
June 30, 2004	43,111,505	44,028,465	--	102.1
June 30, 2005	53,117,955	54,616,800	--	102.8
June 30, 2006	83,123,669	90,834,052	--	109.3
June 30, 2007	112,508,305	124,260,850	--	110.4
June 30, 2008	138,311,398	150,925,334	--	109.1
June 30, 2009	161,097,151	179,284,551	--	111.3
Insurance				
June 30, 2002	$102,119,475	$102,150,543	--	100.0%
June 30, 2003	102,038,427	99,234,843	--	97.3
June 30, 2004	89,289,520	89,344,241	--	100.1
June 30, 2005	106,612,633	106,638,253	--	100.0
June 30, 2006	272,942,757	128,867,817	--	47.2
June 30, 2007	285,600,490	147,608,801	$9,623,431	55.1
June 30, 2008	406,541,729	196,110,111	6,003,181	49.7
June 30, 2009	264,733,532	123,761,611	7,623,628	49.7
Total				
June 30, 2002	$105,445,842	$107,678,891	--	102.1%
June 30, 2003	110,720,684	111,090,537	--	100.3
June 30, 2004	132,401,025	133,372,706	--	100.7
June 30, 2005	159,730,588	161,255,053	--	101.0
June 30, 2006	356,066,426	219,701,869	--	61.7
June 30, 2007	398,108,795	271,869,651	$9,623,431	70.7
June 30, 2008	544,853,127	347,035,445	6,003,181	64.8
June 30, 2009	425,830,683	303,046,162	7,623,628	72.9

Schedule of Contributions From Employers and Other Contributing Entities

County Employees Retirement System (CERS) Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2002	$10,582,988	$11,054,949	--	104.5%
June 30, 2003	19,920,223	16,905,556	--	84.9
June 30, 2004	27,050,382	27,640,775	--	102.2
June 30, 2005	39,437,725	39,947,747	--	101.3
June 30, 2006	44,059,404	49,976,485	--	113.4
June 30, 2007	53,889,838	61,553,118	--	114.2
June 30, 2008	64,082,063	72,154,734	--	112.6
June 30, 2009	69,056,365	78,151,677	--	113.2
Insurance				
June 30, 2002	$45,721,274	$45,730,333	--	100.0%
June 30, 2003	43,502,755	45,243,950	--	104.0
June 30, 2004	47,018,046	47,036,777	--	100.0
June 30, 2005	54,094,495	54,106,577	--	100.0
June 30, 2006	98,297,535	64,853,778	--	66.0
June 30, 2007	115,938,899	70,072,785	$656,523	61.0
June 30, 2008	168,723,639	90,113,200	419,774	53.7
June 30, 2009	126,757,348	70,785,241	627,938	56.3
Total				
June 30, 2002	$56,304,262	$56,785,282	--	100.9%
June 30, 2003	63,422,978	62,149,506	--	98.0
June 30, 2004	74,068,428	74,677,552	--	100.8
June 30, 2005	93,532,220	94,054,324	--	100.6
June 30, 2006	142,356,939	114,830,263	--	80.7
June 30, 2007	169,828,737	131,625,903	$656,523	101.6
June 30, 2008	232,805,702	162,267,934	419,774	70.0
June 30, 2009	195,813,713	148,936,918	627,938	76.4

Schedule of Contributions From Employers and Other Contributing Entities

State Police Retirement System (SPRS)

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2002	--	$(17,643)	--	--
June 30, 2003	--	(20,061)	--	--
June 30, 2004	$1,175,711	1,152,752	--	98.0%
June 30, 2005	3,730,805	2,851,461	--	76.4
June 30, 2006	6,352,777	4,244,445	--	66.8
June 30, 2007	9,023,665	6,142,326	--	68.1
June 30, 2008	13,823,490	7,443,277	--	53.8
June 30, 2009	15,951,841	8,186,259	--	51.3
Insurance				
June 30, 2002	$9,563,111	$9,579,899	--	100.1%
June 30, 2003	9,443,588	9,654,313	--	102.2
June 30, 2004	8,434,834	8,455,498	--	100.2
June 30, 2005	8,608,536	6,631,031	--	77.0
June 30, 2006	12,554,648	6,880,517	--	54.8
June 30, 2007	15,233,320	6,488,600	$361,942	45.0
June 30, 2008	43,469,735	7,329,229	183,564	17.3
June 30, 2009	29,324,666	7,413,552	229,240	26.1
Total				
June 30, 2002	$9,563,111	$9,562,256	--	100.0%
June 30, 2003	9,443,588	7,634,252	--	102.0
June 30, 2004	9,610,545	9,608,250	--	100.0
June 30, 2005	12,339,341	9,482,492	--	76.8
June 30, 2006	18,907,425	11,124,962	--	58.8
June 30, 2007	24,256,985	12,630,926	$361,942	54.0
June 30, 2008	57,293,225	14,772,506	183,564	26.0
June 30, 2009	45,276,507	15,599,811	229,240	34.9

ADDITIONAL SUPPORTING SCHEDULES

Schedule of Administrative Expenses

For the Fiscal Years Ended June 30, 2009, and 2008

(Dollars in Thousands)	2009	2008
Personal Services		
Salaries and Per Diem	$13,323	$12,339
Fringe Benefits	3,964	3,445
Tuition Assistance	62	56
Total Personal Services	17,349	15,840
Contractual Services		
Actuarial	263	474
Audit	49	49
Legal	231	843
Medical	298	222
Contractual	755	774
Total Contractual Services	1,596	2,362
Communication		
Printing	433	325
Telephone	170	138
Postage	655	634
Travel	166	205
Total Communication	1,424	1,302
Rentals		
Office Space	1,057	1,056
Equipment	97	86
Total Rentals	1,154	1,142
Miscellaneous		
Utilities	191	258
Supplies	220	230
Insurance	80	64
Maintenance	11	642
Other	1,418	569
Total Miscellaneous	1,920	1,763
Depreciation/Amortization	525	498
Total Pension Fund Administrative Expense	23,968	22,907
Healthcare Administrative Expenses	8,869	7,477
Total Administrative Expenses	$32,837	$30,384

Schedule of Investment Expenses

For the Fiscal Years Ended June 30, 2009 and 2008

(Dollars in Thousands)	2009	2008
Pension Funds		
Security Lending Fees		
Broker Rebates	$19,498	$115,960
Lending Agent Fees	3,683	4,950
Total Security Lending	23,181	120,910
Common Stock Commissions	8,342	7,915
Contractual Services		
Investment Management	12,440	12,273
Security Custody	208	209
Investment Consultant	621	231
Investment Related Travel	32	37
Total Contractual Services	13,301	12,750
Insurance Funds		
Security Lending Fees		
Broker Rebates	3,951	27,476
Lending Agent Fees	695	1,008
Total Security Lending	4,646	28,484
Common Stock Commissions	929	1,249
Contractual Services		
Investment Management	1,214	1,702
Security Custody	42	41
Investment Consultant	120	46
Investment Related Travel	7	7
Total Contractual Services	1,383	1,796
Total Investment Expenses	$51,782	$173,104

Schedule of Professional Consultant Fees
For the Fiscal Years Ended June 30, 2009 and 2008

(Dollars in Thousands)	2009	2008
Actuarial Services	$263	$474
Medical Review Services	298	221
Audit Services	49	49
Legal Counsel	231	843
Compliance	105	120
Workflow	433	424
Healthcare	82	17
Banking	51	48
Human Resource	26	104
Miscellaneous	58	62
Total	$1,596	$2,362

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Report on Internal Control over Financial Reporting and on Compliance and Other Matters based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ended June 30, 2009, and have issued our report thereon dated November 19, 2009. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control over Financial Reporting

In planning and performing our audit, we considered Kentucky Retirement Systems' internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Kentucky Retirement Systems' internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Kentucky Retirement Systems' internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be deficiences, significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Kentucky Retirement Systems' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion.

The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

This report is intended solely for the information of the audit committee, management, and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

November 19, 2009
Lexington, Kentucky

Schedule of Finding and Response

CURRENT YEAR

Our audit disclosed no findings which are required to be reported in accordance with *Government Auditing Standards*.

Investments

2 Investment Summary

6 Consultant's Letter

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INVESTMENT SUMMARY

The Investment Landscape Has Changed

The past fiscal year has been full of challenges...with no shortage of ups and downs. The global financial crisis has been a real shock to the financial system and to global investors. At its worst point, following the collapse of US investment bank Lehman Brothers in September 2008, it became a crisis of confidence that affected every part of the global financial system. The crisis has caused the greatest credit contraction since the Great Depression as corporations and investors, for a period, could not secure financing. The collapse wiped out some of the oldest Wall Street investment banks and caused the whole or partial nationalization of some of the world's largest financial institutions both here and abroad. The near melt-down forced governments to underpin financial markets with guarantees and print unprecedented amounts of money to keep credit flowing and fund economic stimulus programs.

After the third worst stock market performance in nearly a century, pension funds around the country closed their books on a year that saw the stock market decline to levels below those of 10 years ago. The 2008 stock market tumble marked the worst year for the Dow since 1931. The volatility during the latter part of 2008 and early part of 2009 was simply stunning; with many trading days experiencing 400 and 500 point swings. Much of the market's intraday movement occurred during the last hour (or less) of trading.

The collapse during 2008 of some of Wall Streets' most venerable financial institutions, along with banks such as Washington Mutual and Wachovia and mortgage giants Fannie Mae and Freddie Mac, have changed the look of both Wall Street and Main Street. The resulting fallout reverberated around the globe, and the losses for the world's major indices were almost surreal in their magnitude.

Commodity prices experienced wild gyrations in 2008-2009, with oil prices peaking at $145.29 per barrel in late summer, they then dropped to $33.87 while finishing the fiscal year at $72.20. Gold held its ground during the fiscal year, but also saw significant fluctuations, logging a high of $1,019.60 and a low of $715.20 over the time period.

Bonds also experienced an extremely high level of pain during this period, initiated by Lehman Brothers filing for bankruptcy. That event essentially triggered an ensuing barrage of default concerns, and without government intervention, AIG and Citigroup may well have also gone under. Bond holdings across the board came under pressure and declined in value, with the exception of Cash and U.S. Treasury positions, 2008-2009 can only be described as a horrific year for the fixed income markets.

KRS Investment Summary

The Board of Trustees is charged with the responsibility of investing the Systems' assets to provide for the benefits of the members of several pension and insurance trusts managed by KRS. To achieve that goal the Board follows a policy of preserving capital, while seeking means of enhancing revenues and protecting against undue losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in formal compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the Systems. In carrying out their fiduciary duties, the Trustees have established clearly defined investment policies, objectives and strategies for both the pension and insurance portfolios.

Short-Term & Long-Term

Short-term investment objectives stipulate that annual returns of managed funds should exceed returns achieved by a policy benchmark portfolio, composed of comparable unmanaged market indices (Ex. S&P 500, Russell 1000, MSCI EAFE, etcetera).

Long-term investment objectives stipulate that returns measured over two market cycles (estimated as six to ten years) should exceed the 7.75% Actuarially Required Rate of Return, as well as surpass returns achieved by the fund benchmark.

Additionally, the Board encourages investment in securities of corporations that provide a positive economic contribution to the Commonwealth of Kentucky.

What are Alternative investments?

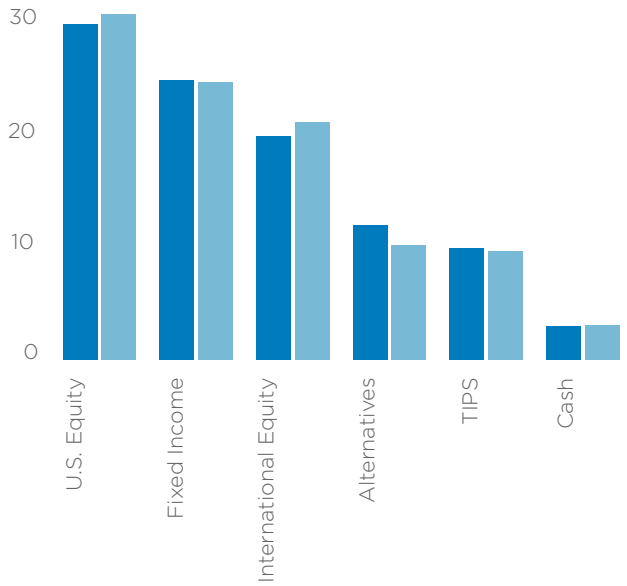
Assets like Private Equity and Real Estate

What does TIPS stand for?

Treasury Inflation Protected Securities

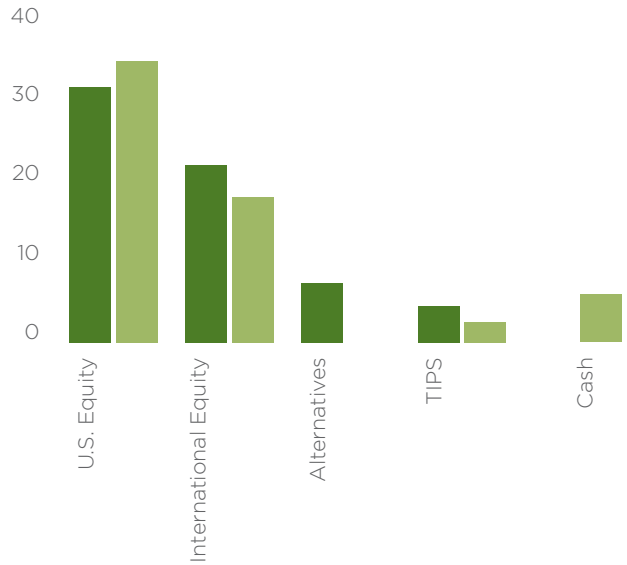
Target Allocations (%) for Pension & Insurance Funds

The Board approved a new target asset allocation, beginning July 1, 2007. The following graphs depict the Board's investment policy as of June 30, 2009.



Pension Fund Allocations

Asset Class	Target	Actual
U.S. Equity	30.0%	30.9%
Fixed Income	25.0	24.8
International Equity	20.0	21.2
Alternatives	12.0	10.2
TIPS	10.0	9.7
Cash	3.0	3.1



Insurance Fund Allocations

Asset Class	Target	Actual
U.S. Equity	40.0%	43.3%
International Equity	30.0	25.9
Alternatives	15.0	7.3
TIPS	12.0	10.0
Cash	3.0	13.5

Diversifying Assets & Rebalancing Allocations

Portfolios are diversified through the use of multiple asset classes. Within each asset class portfolios are diversified through the selection of individual securities. Each asset class is diversified through the use of multiple portfolios that are managed by KRS staff, professional consultants, external money managers and advisors. Advisors are afforded discretion to diversify within the parameters established by the Board. Both the Pension and Insurance (with the exception of cash) portfolios remained within this established range in fiscal 2009.

Proper implementation of the investment policy requires that a periodic adjustment of assets be made. Such rebalancing is necessary to ensure conformance with the Statement of Investment Policy target levels, which also calls for an immediate rebalancing to allocation ranges if an asset class is within one percentage point of the allowable range boundary.

Portfolios

Due to the downturn in the financial markets, the Insurance Fund's cash portfolio was held above range as a means of downside protection because the fund has no dedicated allocation to the core fixed income space. This action was approved by the Investment Committee of the KRS Board of Trustees.

Performance Review Procedures

At least once each quarter the Investment Committee, on behalf of the Board of Trustees, reviews portfolio performances to ensure compliance with the Statement of Investment Policy. Additionally, the KRS Investment Division performs daily tests to assure compliance with the investment policy.

Statement of Investment Policies

View the Pension Fund policy by visiting www.kyret.ky.gov/investments/policies/pension_fund_investment_policy.pdf

View the Insurance Fund policy by visiting www.kyret.com/investments/policies/insurance_fund_investment_policy.pdf

Investment Consulting

The Board employs industry-leading consultants to independently assist in reviewing asset allocation guidelines, as well as the performance of internally managed and externally managed assets. KRS' investment consultants are R.V. Kuhns & Associates, Strategic Investment Solutions and ORG Portfolio Management.

RVKuhns
& ASSOCIATES, INC.

October 12, 2009

Board of Trustees
Kentucky Retirement System
c/o Robert M. Burnside, MS
Executive Director
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Board Members:

Economic Review

The twelve months in the fiscal year ended June 30, 2009 were marked by extreme market conditions in the U.S. and Global economy, with turbulent investment markets, extraordinary government intervention through monetary and financial stimulus, and large swings in inflation expectations.

U.S. Gross Domestic Product ("GDP") declined in every quarter of the fiscal year beginning July 1, 2008 as the country experienced one of the worst recessions in history. The economy as measured by GDP contracted by -3.8% during fiscal year end June 30, 2009.1 U.S. companies shed nearly 6 million jobs from nonfarm payrolls as the unemployment rate rose from 5.6% to 9.5% during the fiscal year.2 Inflation, as measured by the Consumer Price Index, was 0.7 at the end of the fiscal year. The U.S. Federal Reserve continued to lower short-term interest rates from a target rate of 2.00% set before the start of the fiscal year to historic lows of maintaining a range between 0.00% and 0.25% through the second half of the fiscal year.

Capital Markets Review

The fiscal year is a tale of two markets: a weak first half and a recovering second half. The first half of the fiscal year 2008/09 was favorable for only Treasury securities and the highest quality cash and bond instruments. Almost all other risk-oriented market segments posted the worst performance in decades, including both traditional and alternative investment sectors.

Massive and simultaneous efforts by market participants to decrease risks in their holdings led to great illiquidity in the markets and significantly wide spreads. Treasury yields significantly declined across their range of maturities leading into December 2008 during a time when liquidity disappeared in most global markets causing investors to bid up Treasury prices during their flight to safety. Although markets remained weak in the beginning of 2009, Treasury yields began rising toward fiscal year end when investors resumed buying riskier assets.

1 Based on data provided by the U.S. Department of Commerce, Bureau of Economic Analysis
2 Based on data provided by the U.S. Department of Labor

In the U.S., the S&P 500 Index returned –28.5% from July 1, 2008 through December 31, 2008. International markets fared worse, with developed countries losing -36.3% (as measured by the MSCI EAFE Index) and developing countries returning -47.0% (as measured by the MSCI Emerging Markets Index). Investment grade fixed income securities earned 4.1% (Barclays Capital Aggregate Bond Index) while below investment grade returned -25.2% (Barclays US Corporate High Yield Index).

During the period from January 1, 2009 through June 30, 2009, specifically starting in mid-March 2009, most major markets reversed course as U.S. and international government recovery and stimulus programs bolstered investor confidence in riskier assets. The U.S. stock market rose 3.9%, the developed international equity markets were up 6.7%, and the developing equity markets were up 36.2%. The investment grade fixed income market returned 1.9% while the riskier non-investment grade market returned 30.4%.

Despite the rebound, most equity and non-government fixed income markets posted negative returns for the twelve months ending June 30, 2009.

Pension Plan Review

The market value of the Kentucky Retirement System (System) Pension Plan assets decreased from $12.9 billion on June 30, 2008 to $9.8 billion on June 30, 2009. The Fund's investments collectively returned -17.22% during the same period compared to the -14.91% return earned by its target allocation benchmark. The Fund's three-year annualized return of -2.95% trailed slightly its target allocation benchmark of -2.04%. The Fund's five-year annualized return of 1.84% trailed its target allocation benchmark of 1.98%. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal.

Kentucky Retirement Systems-Pension Plan

Asset Allocation vs. Target Allocation

Asset Class	Market Value ($)	Allocation (%)	Target (%)
Domestic Equity	3,031,977,096	30.9	30.0
International Equity	2,082,070,820	21.2	20.0
Fixed Income	2,428,988,792	24.8	25.0
Real Return	953,600,460	9.7	10.0
Real Estate	30,149,944	0.3	5.0
Private Equity	969,352,386	9.9	7.0
Cash Equivalent	312,975,044	3.2	3.0
Total	9,809,114,543	100.0	100.0

The System's current pension plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging). The fixed income portfolio is primarily comprised of U.S. investment grade investments. The System also invests in real return assets (currently U.S. Treasury Inflation Protection Securities or TIPS), real estate and private equity. As of June 30, 2009, the portfolio's asset allocation was within an acceptable range compared to the target allocation. The allocation to real estate will continue to increase toward its target in a methodical manner over time.

Insurance Plan Review

The market value of the Kentucky Insurance Plan assets decreased from $2.6 billion on June 30, 2008 to $2.0 billion on June 30, 2009. The Fund's investments returned -23.18% during the same period compared to -22.94% for its target allocation benchmark. The Fund's three-year annualized return of -5.47% narrowly exceeded its target allocation benchmark of -5.48%. The Fund's five-year annualized return of 0.77% exceeded its target allocation benchmark of 0.40%. The current actuarial assumed rate of return is 7.75%, which represent the long-term return goals.

Kentucky Retirement Systems-Pension Plan

Asset Allocation vs. Target Allocation

Asset Class	Market Value ($)	Allocation (%)	Target (%)
Domestic Equity	878,398,037	43.3	40.0
International Equity	525,164,839	25.9	30.0
Fixed Income	203,721,107	10.0	12.0
Real Estate	2,080,836	0.1	5.0
Private Equity	146,288,504	7.2	10.0
Cash Equivalent	273,204,113	13.5	3.0
Total	2,028,857,436	100.0	100.0

The System's insurance plan investments are diversified across global equity markets, U.S. fixed income, private equity, and a small initial allocation to real estate. As of June 30, 2009, the portfolio was overweight domestic equity and cash equivalents and underweight all other asset classes. In particular, the Plan's underweight position in fixed income approached the lower boundary for that asset class while cash temporarily exceeded its target allocation by a wide margin.

Investment Manager Review

Pension Plan

INVESCO's Structured Core Equity portfolio posted a negative return of -23.8% for the fiscal year, which outperformed the S&P 500 Index's return of -26.2% and was the best return among the three domestic equity managers. The Northern Trust Structured Small Cap portfolio returned -24.0%,

which beat the Russell 2000 Index return of -25.0%. The internally managed S&P 1500 Index portfolio outperformed its benchmark by returning -25.4% vs. -26.3%.

The international equity portfolio is allocated across value, growth and core investment styles. Both style-specific managers did well during the fiscal year relative to their respective benchmarks. The Boston Company Non-US Value Equity portfolio outperformed the MSCI EAFE Value Index by a wide margin (-21.2% vs. -28.4%) and The Pyramis International Growth portfolio beat the MSCI EAFE Growth Index, -32.7% vs. -33.4%. The core portfolio managed by Barclays Global Investors, returned -32.8% and lagged the MSCI EAFE Index's return of -31.0%. The Board recently added an international small capitalization equity fund managed by Northern Trust that performed relatively well. The Plan's two emerging market equity portfolios managed by Aberdeen Asset Management and Wellington Management beat the -27.8% fiscal year return of MSCI Emerging Markets Index (-15.0% and -25.4%, respectively).

The Plan had three investment grade fixed income portfolios managed by Pyramis, RW Baird, and NISA (added mid-fiscal year). Both Pyramis and RW Baird underperformed the Barclays Capital US Aggregate Bond Index twelve-month return of 6.1% (4.1% and -0.7%, respectively). Although the internally managed TIPS portfolio's return of -1.3% fell slightly below the -1.1% return for the Barclays Capital US TIPS Index, the Weaver Barksdale TIPS portfolio outperformed for the fiscal year with a return of -0.7%.

The Plan's alternative investment portfolio consists of private equity and the beginning of a diversified real estate allocation, which are long-term investments. Over the past five years, the total private equity portfolio beat its public market equivalent benchmark, the MSCI Broad US Market Index + 5% (4.8% vs. 3.4%). The real estate program has not had significant assets historically, but the small allocation provided a lesser though positive return of 3.6% vs. the stronger 7.6% return of the NCREIF Property Index.

Insurance Plan

The Insurance Plan invests in the System's internally managed S&P 1500 Index portfolio, the international portfolios managed by the Boston Company, Pyramis, Aberdeen, and Wellington, the internally managed TIPS portfolio, and the alternative investment portfolios. The Board added a core international mandate managed by Artio Global Investors late in fiscal year. Although the insurance plan returns slightly differ from the returns earned in the pension plan because of investment restrictions, the relative under/outperformance was similar for the fiscal year.

Board Initiatives

During the last half of the fiscal year, the Board made strategic decisions to further diversify the portfolio to improve returns while reducing risk. The market downturn during the first half of the fiscal year created investment opportunities that could benefit the System during a market recovery. The Board approved a new allocation to diversified absolute return strategies and to global non-investment grade fixed income investments. The Board also approved an ability to allocate up to 5% of the System's assets to investments that are uniquely positioned to take advantage of dislocated markets. The Board may make these opportunistic investments within any of the existing asset classes. We believe that the recent actions taken by the Board offer opportunities to enhance future portfolio returns with a commensurate, yet moderate, increase in risk.

Oversight

The System's investment policies, goals, and objectives, as well as the performance of its assets are regularly monitored by KRS staff, the Board, Strategic Investment Solutions, Inc., and by R.V. Kuhns & Associates, Inc. These evaluations include reviews of the investment management firms and the custodial bank that serve the System.

The System's assets are held in custody at Northern Trust. Market values and investment performance returns referenced above are based upon financial statements prepared by Northern Trust. We rely on their data and have not independently audited it. However, their financial statements are, to the best of our knowledge, believed to be reliable.

Summary

An uncertain market environment demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the System's employee participants. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the System to meet its long-term goals and objectives.

Most sincerely,

Rebecca A. Gratsinger
CEO, Principal

STRATEGIC INVESTMENT SOLUTIONS, INC.
333 BUSH STREET, STE 2000, SAN FRANCISCO, CALIFORNIA 94104
TEL 415/362-3484 ■ FAX 415/362-2752

DATE: OCTOBER 13,2009
SUBJECT: ANNUAL PRIVATE EQUITY REVIEW

The Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Trustees:

Strategic Investment Solutions is charged with the duty to advise the Kentucky Retirement Systems (KRS) Board of Trustees and Staff in its private equity investment activities. This is our annual review of the KRS private equity investment program. Note that, due to delays in reporting by private equity managers, KRS market values are reported as of December 31, 2008 while the market overview is as of June 30, 2009. The investment program is managed in accordance with the KRS Investment Policies and Procedures.

Market Highlights

No doubt many investors, GPs and LPs, had long anticipated looking beyond 2008 and setting their sights on a more benign, settled private equity environment for 2009. Certainly the public markets, equity and debt, will be crucial to how this scenario plays out but equally important, if not more so, is the funding/liquidity status of the LP base and their ability to continue to commit capital at a pace witnessed over the past several years. While the "denominator effect" has been widely discussed, we believe a more pertinent issue is the $470 billion "overhang" of uncalled capital, largely within the buyout space, and its impact on the ability of limited partners to commit new capital.

Total buyout fund raising, in dollars, declined 73% in Q4 on a year-over-year basis and 64% sequentially. In Q1 2009, the GPs fared no better. M & A activity, not coincidentally, has also dropped precipitously. Much of the transaction activity, on a dollars basis, has emanated from the large LBO side of the buyout ledger. GPs, in particular the very large ("mega") funds, were increasingly looking to the public markets as a source of deal flow as reflected below. Given the current state of the debt markets and an environment moving forward where it will be difficult to finance larger transactions, buyout volume on a dollar basis will be much lower to the extent large LBOs are drivers of deal activity. The combination of a decrease in deal activity, the limited availability of leverage, and the near-term inability of limited partners to make commitments, should theoretically result in reduced fund sizes (as LPs make smaller commitments) and/or fewer general partners over the long term. The LP/GP issues reviewed above are, as one would expect, creating opportunities on several fronts for those investors that are not capital constrained.

As one might expect, debt-related opportunities abound. Investors are seeking to capitalize on the distressed marketplace and huge dislocations in the credit markets. Also, no longer seeing a market for buyouts, a slew of private equity funds are offering new debt strategies. Annex funds are the current fad, though some observers believe certain GPs were too early during the initial commitment phase of their most recent funds and now are looking to average down as prices have fallen. In addition, U.S. Treasury and Federal Reserve have implemented a series of initiatives as part of the Financial Stability Plan, to revitalize the flow of capital and increase liquidity in the credit markets. The two primary initiatives that have been introduced are the Public-Private Investment Program ("PPIP") and the Term Asset-Backed Securities Loan Facility ("TALF"). Overall, the opportunities in debt-related strategies are very attractive; investors should take particular note of manager selection, fees and investment period.

The good news continued within the VC space in 2009 in the sense that capital is not being thrown at VCs as it had been in the 1996-2000 period. Just 40 funds raised $4.3 b in capital during the first quarter of 2009; the amount of capital raised declined by 39% YOY. We believe the venture model is evolving and the emphasis has shifted to building companies for long-term wealth creation and not to sell for a quick short-term return. Additionally, we are seeing a closer alignment of interests between GPs and LPs. The landscape is changing as the traditional suppliers of capital to the VC space, foundations/endowments and high-net-worth investors, are under liquidity pressures. This should allow long-term investors with available capital to pursue attractive opportunities in this space.

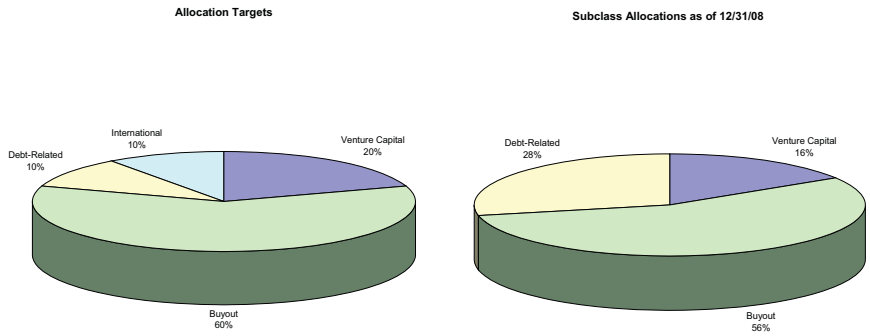
Private Equity Performance and Asset Allocation Highlights

- 2008 was another year of significant contributions relative to distributions with capital drawdown totaling $407.8 mm and distributions, the return of capital (gains and losses), equating to $27.9mm. The capital draw-downs were relatively on par with 2007 outflows of $402 million however the return of capital was substantially less relative to 2007 distributions of $126mm. The portfolio had been moving towards the more mature phase of the private equity Program as the gap between contributions and distributions was starting to narrow in 2007 – the impact of the J-Curve was starting to become less pronounced. However the stresses within the credit markets and the current global recession have limited general private equity activity, particularly in the way of distributions. The driver behind the capital draw-downs has been to a large degree the Program's commitments to distressed strategies which theoretically stand to benefit during times of market dislocation and economic stress. Just over 40% of the capital called during 2008 was driven by strategies that invest in the debt securities of companies that are having operating and/or financial issues or those that are perceived in the Markets to have such issues.
- OCM Opportunities Fund VIIb ($52.5mm), Wayzata Opportunities Fund II ($51.75mm), Avenue Special Situations Fund V($26.8mm), Vista Equity Partners III ($24.5mm) and Hellman & Friedman VI ($19.6mm) led the investment pace in 2008 as these five partnerships accounted for a combined $175.3mm or 43% of the total capital called in 2008. Distributions as mentioned

were fairly sparse however the top five leaders in distributions for the year were: Green Equity IV ($4.7mm), Warburg Pincus Private Equity IX ($4mm), Merit Mezzanine IV ($3.8mm), Harvest Partners V ($3.5mm) and Institutional Venture Partners XI ($2.9MM). In aggregate, these partnerships comprised 68% of the total capital received in 2008. Of the 41 partnerships in the Program, 18 returned capital during 2008.

- As of December 31, 2008, the KRS Private Equity portfolio had committed to 41 different partnerships with 29 managers. Relative to 2007, the number of new relationships with managers increased by five and the number of new commitments increased by seven to 41. The new relationships introduced in 2008 were Crestview Partners (focus on middle-market buyouts), Essex Woodlands (multi-stage venture fund focused on Healthcare), Millroad Capital (microcap buyouts), Tenaska Power Fund (buyout focused on the Energy & Power industries) and Vista Equity Partners III (buyout fund focused primarily on the software segment of the Information Technology sector). These commitments were driven by the general partners demonstrating the acumen and foresight in their respective sectors, which fundamentally also present an attractive investment opportunity set, that we believe most generalist funds do not possess to generate sufficient risk-adjusted returns.
- As of December 31, 2008, the KRS Private Equity Program had made total commitments of $2.35 billion to 41 different partnerships. The percent funded or invested of the committed amount at year-end was $1.3 billion or 55.4% of committed capital.

KRS
Subclass Target Allocation vs. Actual as of 12/31/08



- As of December 31, 2008, Private Markets as a percentage of the total fund was 8.7% of the total KRS portfolio (this total includes the Insurance Fund) compared to the target level of 7%. This level compares with 5.1% as of 12/31/07. The dramatic increase in the private equity allocation is largely a function of the drop in the Plan's value to $11.9 B at the end of 2008 from $16.8 B at the end of 2007. Roughly 70% of the increase from 2009 to 2008 in the Plan's allocation to PE can be attributed to the drop in value of the Plan. The balance, 30%, is largely a function of the level of contributions remaining on par with 2007 contributions and distributions decreasing 76% relative to 2007 as the credit crisis negatively impacted liquidity in the financial markets – financing options such as IPOs, expansion capital, M&A and working capital funding were non-existent for even for the most credit-worthy borrowers. The increase in contributions was largely driven by the Program's commitment to debt related strategies which generally tend to benefit during times of stress.

Summary

As KRS enters the seventh year of the private equity implementation, we believe the portfolio has now taken considerable shape as the "core" managers appear to be identified and accessed. Mindful of the current over-allocation to Private Equity, we envision future emphasis on filling around the periphery and vetting the existing Portfolio, assessing the Portfolio's liquidity profile. As such, it is anticipated that in 2009 and 2010, the Plan will assess the viability of committing to partnerships that focus on the international markets and a co-investment vehicle to further diversify the portfolio and increase the return profile of the plan. The current targeted private markets international allocation is 5%-15%. Any commitment to a co-investment vehicle would fall under the purview of the Plan's buyout allocation.

We are optimistic that the capital markets will continue to show improvement; private equity commitments made during the 2008-2010 vintage years should provide superior long-term returns and contribute to the success of the KRS private equity investment program.

Sincerely,

Peter A. Keliuotis, CFA
Managing Director

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September 23, 2009

ORG Portfolio Management serves as the Real Estate Investment Consultant for Kentucky Retirement Systems. It is ORG's responsibility to present potential investment opportunities to the Investment Staff and Board and to make recommendations related to KRS' real estate portfolio. It is ORG' s commitment to assist KRS in building a successful long term real estate investment portfolio for the KRS pension fund members.

U.S. Market Overview

U.S. commercial real estate debt and equity valuations have materially decreased since the bankruptcy of Lehman Brothers in September 2008, and the real estate market in general has declined with the economy. Property fundamentals and values are deteriorating, and the delinquency rates of underlying mortgages have increased with the slowdown of the economy. Real estate strategies with short-term (2009-2011) debt maturities will face significant refinancing challenges, and investors should be prepared for three to five years of market and manager instability.

The retail sector of the market continues to be challenged as property values have dropped an estimated 30-40%. Grocery-anchored retail centers are the only sector that has held up reasonably well in this group, and most grocers have reported positive same-store sales growth in 2009.

The U.S. office sector is in the early stage of a protracted downturn in occupancy and rents due to the most pronounced reduction in white-collar employment in more than a decade. It appears that the employment decline is a sizable driver of the office market downtown, as demand for office space and market rents is forecast to continue to decline nationally.

Apartment fundamentals continue to be negatively impacted by the U.S. employment market. Historically, changes in apartment demand have lagged employment growth/losses by three to six months, which means that the current downturn is expected to exert pressure on rental rates and occupancy for apartment owners well into 2010 or 2011.

Global industrial production, inventories and the flow of goods have all declined at an unprecedented pace resulting in sizable negative net industrial absorption in the U.S., and the warehouse industry is forecast to endure several years of declining occupancies and market rents as real estate decisions lag economic reality.

ORG's View

Although the current real estate market is facing many challenges in the current economic climate, there are emerging opportunities in the secondary market, with numerous investors seeking to liquidate private market real estate holdings and looking for relief from remaining capital commitments. The best opportunities in this market are likely to come from small institutional, individual and distressed foreign investors. Direct secondary trades provide the buyer with the opportunity to strategically, opportunistically and selectively average down existing positions, gain access to complementary strategies and eliminate the J-curve associated with a new fund commitment. Investors taking advantage of primary market opportunities should invest with managers who have the ability to access opportunities at distressed prices, and to manage the assets through recovery without a lot of distractions from legacy issues. Investors should focus on complementing existing funds with niche managers with favorable alignment of interest.

Kentucky Retirement Systems Real Estate Investments

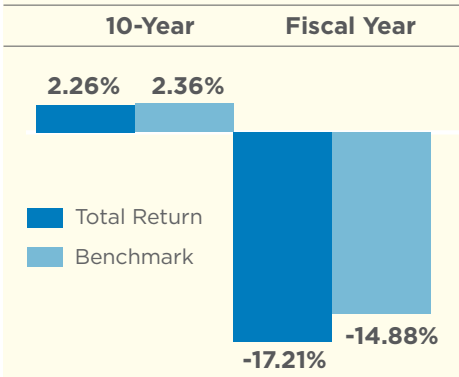
Kentucky Retirement Systems invested in Walton Street Real Estate Fund VI in fourth quarter 2008, and in Mesa West Real Estate Income Fund II and PRIMA Mortgage Investment Trust in 2009. As of September 30, 2009, Walton Street Real Estate Fund VI has called $10.4 million of Kentucky Retirement Systems' $40 commitment of capital to the Fund; PRIMA Mortgage Investment Trust called Kentucky Retirement Systems' entire $40 million commitment, and Mesa West Real Estate Income Fund II has not yet made a capital call. Total Commitment for Mesa West II is $40 million.

Investment Results as of June 30, 2009

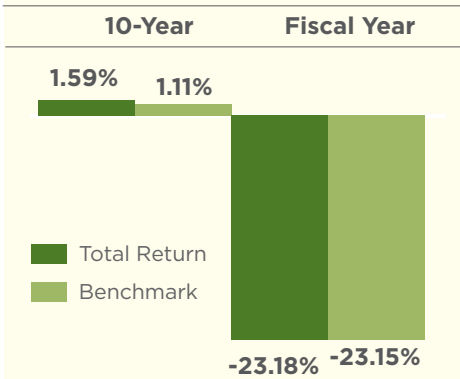
The Pension Fund returned -17.21%, which trailed the return of its benchmark by 2.33% and also fell short of the actuarially required rate of return of 7.75%. The below benchmark performance of the Pension Fund was due, in large part, to an above benchmark weighting to international equities (the worst performing asset class for the period) and below benchmark performance from the core fixed income and alternative asset class.

The Insurance Fund also posted a negative return of -23.18% compared to the benchmark's -23.15 % and the actuarially required rate of 7.75%. The fund remained in line with its benchmark due in part to the outperformance of both the U.S. and Non-U.S. Equity portfolios, and an overweight to cash, which were offset by the below benchmark performance of the alternative asset portfolio.

Pension Fund & Benchmark Returns (%)



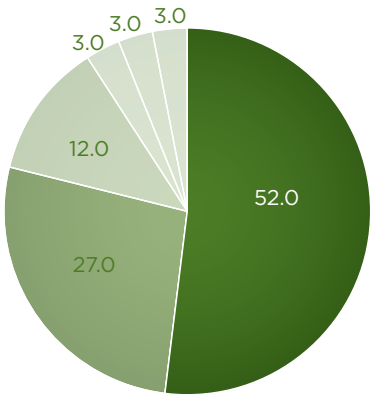
Insurance Fund & Benchmark Returns (%)

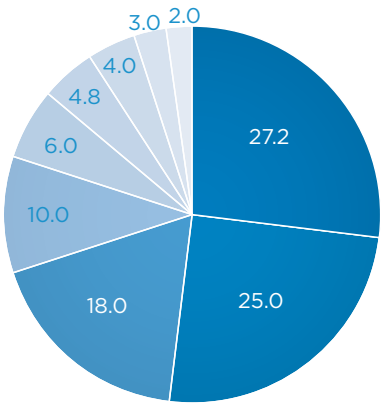


Benchmarks

Benchmarks utilized to measure the Pension and Insurance Funds are a weighted average composite of the various asset class indicies existing within each KRS investment portfolio.

These benchmarks are intended to be objective, measurable, investable/replicable, and representative of the investment mandates. They are developed from publicly available information, and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate. KRS' Investment Division and consultant recommend the indicies and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the Board of Trustees. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total Benchmarks will evolve to reflect these exposures.





Pension & Insurance Funds Benchmark Allocations (%)

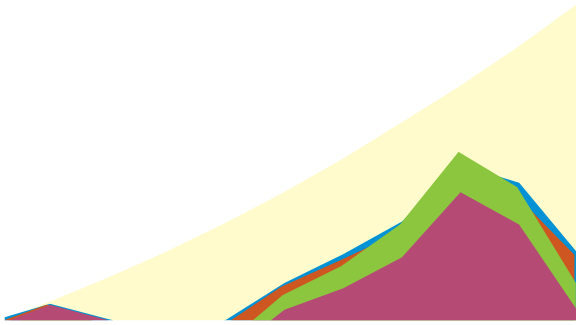
Benchmarks are a weighted average composite of the various asset class indicies consisting within each KRS investment portfolio. Following is the Pension and Insurance Total Fund Benchmark composition.

Index	Pension Fund	Insurance Fund
S&P 1500 Composite	27.2%	52.0%
S&P 500 Composite	6.0	-
Russell 2000 Index	4.0	-
MSCI Europe, Australia and Far East	18.0	27.0
MSCI Emerging Markets	2.0	3.0
Barclays Capital High Yield Corporate*	4.8	3.0
Barclays Capital TIPS*	10.0	12.0
Barclays Capital Aggregate*	25.0	-
3-Month U.S. Treasury Bill	3.0	3.0

** Formerly Lehman Brothers*

Long-Term Results:

The 10-years ending June 30, 2009, the Pension Fund earned an annualized total return of 2.26% and has fallen behind the benchmark in the shorter time periods, yet remains in line during the longer measurement period. The Insurance Fund continued to outperform its benchmark, earning a 1.59% return for the same period. Insurance returns have been above, or in line with, the benchmark.



Growth of Dollars:

This chart compares the performance of $1,000 invested in the Pension and Insurance Funds with their respective policy benchmark portfolios and actuarial rate of return.

Growth of A Dollar-Total Fund

Investment	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Pension Fund	$1,000	$1,064	$1,007	$963	$1,005	$1,141	$1,247	$1,367	$1,576	$1,510	$1,250
Pension Fund Benchmark	1,000	1,079	1,006	953	1,001	1,145	1,242	1,343	1,543	1,484	1,263
Insurance Fund	1,000	1,064	1,024	929	944	1,127	1,234	1,387	1,655	1,525	1,172
Insurance Fund Benchmark	1,000	1,082	1,025	898	897	1,064	1,143	1,257	1,497	1,378	1,059
Actuarial Assumed ROR	1,000	1,083	1,172	1,268	1,373	1,486	1,609	1,742	1,877	2,022	2,179

U.S. Equity

For the fiscal year, ending June 30, 2009, the Pension Fund's U.S. equity portfolio posted a return of -24.78%, which outperformed the return of its benchmark by 1.31%. The Insurance Fund's U.S. equity portfolio posted a return of -25.1%, which also outperformed the benchmark return of -26.34%. All segments of the U.S. equity markets posted sharply negative results during the 12-month period.

U.S. Equity

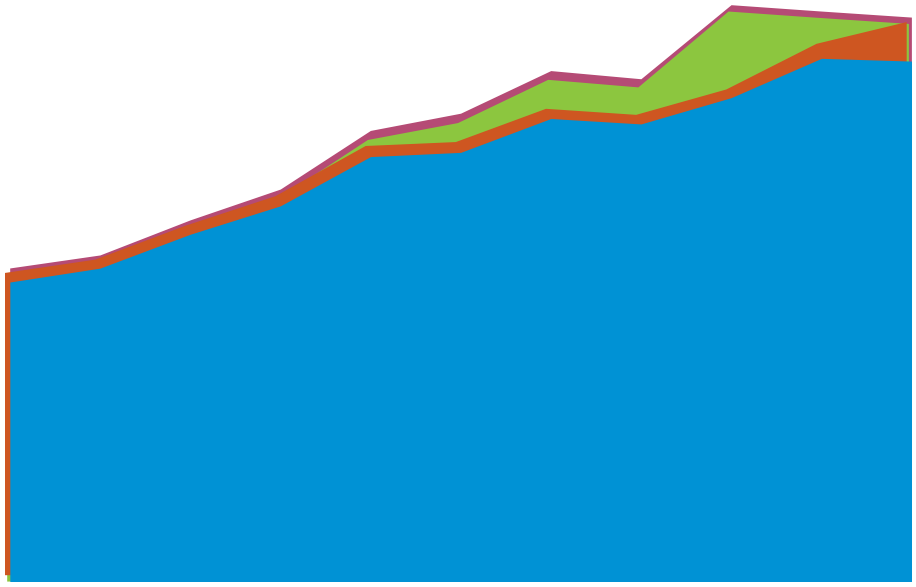
	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Apr-84	-24.78%	-7.86%	-1.45%	-0.70%	10.20%
Performance Benchmark[1]		-26.09%	-8.39%	-1.81%	-1.04%	10.01%
KRS Insurance	Jul-92	-25.10%	-7.93%	-1.65%	-0.68%	7.21%
Performance Benchmark[2]		-26.34%	-8.20%	-1.94%	-1.47%	6.75%
Market Indices						
Russell 1000 (Large Cap)		-26.69%	-8.20%	-1.85%	-1.75%	
Russell 2000 (Small Cap)		-25.01%	-9.89%	-1.71%	2.38%	
Russell 3000 (Total Equity)		-26.56%	-8.35%	-1.84%	-1.46%	

[1] Pension Benchmark consist of 13% Russell 2000, 67% S&P 1500 Composite (Total), and 20% S&P 500
[2] Insurance benchmark is S&P 1500 Composite (Total)

Basis for Calculations

KRS uses the Modified Dietz Method as its basis for calculations. This method is used to determine the performance of an investment portfolio based on a time-weighted cash flow. In the absence of daily portfolio valuations, the Modified Dietz Method weights individual cash flows by the amount of time these cash flows are held (or absent) from the portfolio. The result is an approximation of a time-weighted return.

The market volatility experienced over the past two years has led U.S. equity investors to experience negative returns over the past three years. According to the above table, the KRS pension fund portfolio has generated an annualized return of -7.86% over this period, which has exceeded its benchmark by 0.53%. Over the same time period, the insurance fund has produced an annualized return of -7.93%, outperforming its benchmark return of -8.20%. While both funds have experience negative absolute returns over the long term, both have produced positive relative returns when viewed over a five and ten-year time horizon. The pension's equity portfolio has generated an annualized average return of -0.70% over ten years, while the insurance equity portfolio posted an average annual return of -0.68%.



Growth of Dollars:

This chart compares the performance of $1,000 invested in the Pension and Insurance Funds with their respective policy benchmark portfolios.

Growth of A Dollar-US Equity Fund

Investment	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Pension Fund	$1,000	$1,124	$993	$832	$824	$1,002	$1,065	$1,191	$1,422	$1,239	$932
Pension Fund Benchmark	1,000	1,088	958	802	796	966	1,028	1,124	1,347	1,169	864
Insurance Fund	1,000	1,080	1,004	844	842	1,015	1,090	1,196	1,434	1,247	934
Insurance Fund Benchmark	1,000	1,068	921	759	746	883	931	999	1,202	1,049	773

Top 10 U.S. Equity Holdings

Pension Fund			Insurance Fund		
Company	Shares	Market Value	Company	Shares	Market Value
EXXON MOBIL CORP	1,437,900	100,523,589	EXXON MOBIL CORP	282,100	19,721,611
MICROSOFT CORP	2,329,200	55,365,084	MICROSOFT CORP	493,300	11,725,741
JOHNSON & JOHNSON	910,534	51,718,331	WAL-MART STORES INC	219,100	10,613,204
WAL-MART STORES INC	1,030,700	49,927,108	JOHNSON & JOHNSON	154,988	8,803,318
PROCTER & GAMBLE CO	966,572	49,391,829	PROCTER & GAMBLE CO	164,275	8,394,453
CHEVRON CORP	665,159	44,066,784	AT&T INC	329,521	8,185,302
APPLE INC	304,300	43,341,449	IBM CORP	75,100	7,841,942
IBM CORP	403,400	42,123,028	CHEVRON CORP	112,716	7,467,435
AT&T INC	1,494,564	37,124,970	GOOGLE INC	17,200	7,251,348
GENERAL ELECTRIC CO	2,553,400	29,925,848	JPMORGAN CHASE & CO	206,975	7,059,917
Total	12,095,729	503,508,020	Total	2,055,275	97,064,271

International Equities

For the fiscal year, ending June 30, 2009, the KRS pension fund's international equity portfolio returned -26.05%, substantially outperforming its benchmark by 3.31%. The KRS insurance international equity portfolio also greatly outperformed its benchmark, posting a return of -26.78% during the same twelve month period. As the accompanying table indicates, both developed and emerging international equity markets experienced strong negative returns during the trailing year period.

International Equity

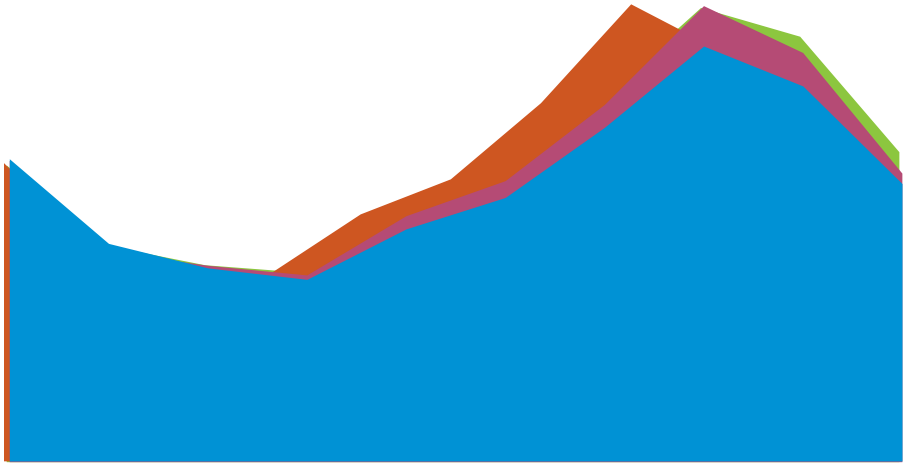
	Inception Date	Fiscal Year	3-Year	5-Year	Inception
KRS Pension	Jul-00	-26.05%	-5.97%	3.64%	-0.95%
Performance Benchmark[1]		-29.36%	-6.84%	3.23%	-0.47%
KRS Insurance	Apr-00	-26.78%	-5.19%	4.49%	-0.41%
Performance Benchmark[1]		-29.36%	-6.84%	3.23%	-1.24%
Market Indices					
MSCI EAFE		-30.96%	-7.51%	2.79%	
MSCI Emerging Markets		-27.82%	3.27%	15.09%	
MSCI ACWI Ex US		-30.54%	-5.35%	4.95%	

[1] Pension and Insurance benchmarks consist of 90% MSCI EAFE Index, and 10% MSCI EM Index.

Basis for Calculations

KRS uses the Modified Dietz Method as its basis for calculations. This method is used to determine the performance of an investment portfolio based on a time-weighted cash flow. In the absence of daily portfolio valuations, the Modified Dietz Method weights individual cash flows by the amount of time these cash flows are held (or absent) from the portfolio. The result is an approximation of a time-weighted return.

International equity investors have experienced a volatile period of returns over the past five years. After four consecutive years of favorable results, investors witnessed significant market losses over the past two fiscal years. The KRS pension fund portfolio has generated an annualized return of -5.97% over the trailing three-year period, while the insurance fund saw returns fall by an average of -5.19% during the same period. Over the past five years, both funds have added value, while also exceeding the return of its performance benchmark. The KRS Pension and Insurance funds have posted annualized returns of 3.64% and 4.49% annually. The Systems began their international equity program in 2000. Since inception, the pension international equity portfolio has underperformed the benchmark, while the insurance international equity portfolio has outperformed the benchmark.



Growth of Dollars:

This chart compares the performance of $1,000 invested in the Pension and Insurance Funds with their respective policy benchmark portfolios.

Growth of A Dollar-International Equity Fund

Investment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Pension Fund	$1,000	$720	$639	$601	$768	$872	$1,104	$1,373	$1,241	$918
Pension Fund Benchmark	1,000	700	653	621	817	933	1,185	1,512	1,357	958
Insurance Fund	1,000	735	670	645	838	961	1,225	1,521	1,426	1,044
Insurance Fund Benchmark	1,000	700	653	621	817	933	1,185	1,512	1,357	958

Top 10 International Equity Holdings

Pension Fund			Insurance Fund		
Company	Shares	Market Value	Company	Shares	Market Value
HSBC HLDGS ORD	3,020,997	25,000,025	VODAFONE GROUP ORD	3,000,043	5,790,408
VODAFONE GROUP ORD	12,482,500	24,092,577	BP ORD	732,625	5,764,770
BP ORD	3,008,041	23,669,221	NOVARTIS AG	130,247	5,274,312
NESTLE SA	528,837	19,897,945	TOTAL	97,267	5,249,887
NOVARTIS AG	475,473	19,254,132	HSBC HLDGS ORD	570,351	4,719,895
TOTAL	347,154	18,737,281	UNILEVER PLC ORD	188,934	4,430,719
GLAXOSMITHKLINE ORD	987,923	17,384,079	SANOFI-AVENTIS	69,983	4,110,029
UNILEVER PLC ORD	718,967	16,860,600	GLAXOSMITHKLINE ORD	223,671	3,935,848
SANOFI-AVENTIS	261,480	15,356,448	NESTLE SA	97,709	3,676,385
ROCHE HLDGS AG	109,937	14,930,527	ANGLO AMERICAN	117,237	3,404,821
Total	21,941,309	195,182,836	Total	5,228,067	46,357,072

Fixed Income

For the fiscal year, ending June 30, 2009, the KRS pension fund's fixed income portfolio returned - 0.53%, underperforming its performance benchmark by 4.59%. As the accompanying table indicates, both of the broad market indices, the Barclays Aggregate Index and the Barclays Intermediate Government Credit Index, posted positive returns for the twelve month period ending June 30, 2009. The KRS insurance TIPS portfolio posted a -1.08% rate of return, which edged its benchmark, the Barclays U.S. TIPS Index, by 0.03%.

Fixed Income

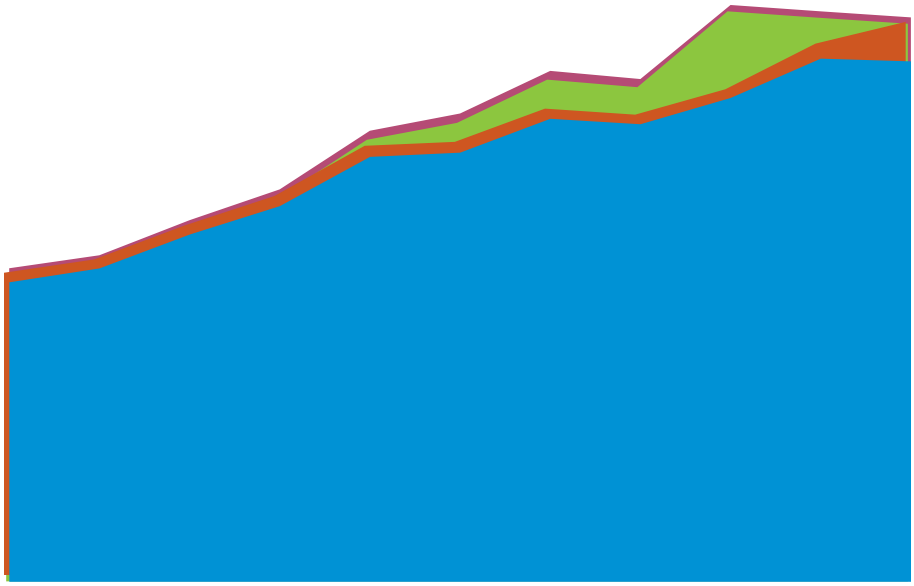
	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Apr-84	-0.53%	4.35%	3.91%	5.64%	8.22%
Performance Benchmark[1]		4.06%	6.30%	5.00%	6.23%	8.20%
KRS Insurance	Jul-92	-1.08%	5.83%	5.02%	6.84%	6.95%
Performance Benchmark[2]		-1.11%	5.77%	4.94%	6.76%	6.92%
Market Indices						
BC Aggregate		6.06%	6.43%	5.02%	5.98%	
BC Government/Credit		-1.11%	5.77%	4.94%	7.24%	

[1] Pension Benchmark consists of 71.43% Barclays Aggregate, and 28.57% Barclays U.S. TIPS
[2] Insurance Benchmark is the Barclays U.S. TIPS Index

Basis for Calculations

KRS uses the Modified Dietz Method as its basis for calculations. This method is used to determine the performance of an investment portfolio based on a time-weighted cash flow. In the absence of daily portfolio valuations, the Modified Dietz Method weights individual cash flows by the amount of time these cash flows are held (or absent) from the portfolio. The result is an approximation of a time-weighted return.

Over the past three years ending June 30, 2009, the KRS pension fund's portfolio has generated an annualized average return of 4.35% versus its custom performance benchmark return of 6.30%. The insurance fund's portfolio posted a 5.83% return during the same period, exceeding its benchmark return by 0.06%. Over the five year period, the pension fund has lagged the benchmark, while the insurance fund outperformed its benchmark. Over the ten year period, the pension fund has lagged the benchmark by 0.59%, while the insurance fund has slightly outperformed the benchmark by 8 basis points.



Growth of Dollars:

This chart compares the performance of $1,000 invested in the Pension and Insurance Funds with their respective policy benchmark portfolios.

Growth of A Dollar- Fixed Income

Investment	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Pension Fund	$1,000	$1,046	$1,158	$1,252	$1,415	$1,429	$1,541	$1,523	$1,610	$1,740	$1,731
Pension Fund Benchmark	1,000	1,044	1,156	1,254	1,420	1,433	1,543	1,523	1,607	1,758	1,830
Insurance Fund	1,000	1,044	1,159	1,265	1,461	1,517	1,660	1,635	1,886	1,865	1,845
Insurance Fund Benchmark	1,000	1,043	1,159	1,261	1,455	1,512	1,653	1,626	1,871	1,850	1,830

Top 10 Fixed Income Holding & Market Value ($)

Pension Fund			Insurance Fund		
Company	Par Value	Market Value	Company	Par Value	Market Value
US TSY NT INFL Index 2.375 DUE 01/15/17	95,893,000	105,792,747	US TSY NT INFL Index 0.875 DUE 04/15/10	11,081,000	12,471,776
US TSY BD INFL Index 6.250 DUE 08/15/23	54,760,000	66,704,525	US TSY BD INFL Index 2.000 DUE 01/15/14	10,395,500	12,269,644
US TSY NT INFL Index 2.000 DUE 07/15/14	53,458,000	61,887,384	US TSY BD INFL Index 3.000 DUE 07/15/12	9,718,000	12,208,745
US TSY BD INFL Index 2.375 DUE 01/15/25	49,397,000	57,430,439	US TSY BD INFL Index 2.375 DUE 01/15/25	10,040,500	11,673,388
US TSY NT INFL Index 0.875 DUE 04/15/10	46,602,000	52,451,017	US TSY BD INFL Index 1.875 DUE 07/15/13	9,583,000	11,410,275
US TSY BD INFL Index 3.875 DUE 04/15/29	31549,000	51,917,249	US TSY NT INFL Index 1.625 DUE 01/15/15	9,740,500	10,825,933
US TSY NT INFL Index 2.500 DUE 07/15/16	43,822,000	48,566,655	US TSY BD INFL Index 3.625 DUE 04/15/28	6,390,500	10,251,680
US TSY BD INFL Index 3.000 DUE 07/15/12	37,608,000	47,247,014	US TSY NT INFL Index 2.000 DUE 07/15/14	8,708,000	10,081,098
US TSY BD INFL Index 3.625 DUE 04/15/28	29,004,000	46,528,400	US TSY BD INFL Index 2.000 DUE 01/15/26	8,415,500	8,851,394
US TSY BD INFL Index 1.875 DUE 07/15/13	38,458,000	45,791,126	US TSY NT INFL Index 2.375 DUE 04/15/11	7,758,000	8,581,372
Total	480,551,000	584,316,556	Total	91,830,500	108,625,305

Alternative Investments

For the fiscal year, ending June 30, 2009, the KRS pension fund's alternative investments portfolio posted a return of -29.51%. The portfolio consists primarily of private equity limited partnerships and real estate investment trusts ("REITs"), publicly traded real estate securities, operating companies, and focused real estate investments. The custom benchmark for the pension alternative investment portfolio returned -17.20% during this same period. The insurance alternative investment portfolio returned -26.07% versus its performance benchmark return of -21.86%.

Private equity returns saw their steepest declines in 2008 as the value of firms' investment portfolios tumbled in the wake of the credit crisis. As the accompanying table indicates, the market's volatility impacted longer term results in the alternative investment portfolios. For the three years ending June 30, 2009, the pension fund portfolio has generated an annualized average return of -6.58% versus its custom performance benchmark of -4.04%. Over this same time period, the insurance fund returned -5.43% on an annualized basis outperforming its custom benchmark by 0.69%. While both funds have experienced negative returns over the short term, both have produced positive returns when viewed over a five-year, ten-year, and since inception time horizon. Since its inception in October 1990, the pension portfolio has outpaced its benchmark by 3.22% per year, while the insurance portfolio has outperformed its benchmark by 2.65% since its July 2001 inception.

Basis for Calculations

KRS uses the Modified Dietz Method as its basis for calculations. This method is used to determine the performance of an investment portfolio based on a time-weighted cash flow. In the absence of daily portfolio valuations, the Modified Dietz Method weights individual cash flows by the amount of time these cash flows are held (or absent) from the portfolio. The result is an approximation of a time-weighted return.

Alternative Equity

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Oct-90	-29.51%	-6.58%	4.79%	9.21%	10.01%
Performance Benchmark[1]		-17.20%	-4.04%	.65%	4.37%	6.79%
KRS Insurance	Jul-01	-26.07%	-5.43%	.73%		2.93%
Performance Benchmark[2]		-21.86%	-6.12%	-.64%		.28%

[1] Pension Benchmark consists of 60% S&P 1500 (Total), and 40% LB High Yield Corporate.
[2] Insurance Benchmark consists of 80% S&P 1500 (Total), and 20% LB High Yield Corporate.

Cash

For the fiscal year, ending June 30, 2009, the KRS pension fund's cash portfolio returned 1.25%, outpacing its benchmark, the Citi Group 3-month Treasury by 0.47%. The KRS insurance cash portfolio also outperformed the index, posting a return of 0.80% during the same twelve month period.

The longer term results from the cash portfolios have also been excellent with comparison to their benchmark. For the five years ending June 30, 2009, the pension fund portfolio has outperformed its custom benchmark by 0.98% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.42% per year. The insurance portfolio has also done very well exceeding its benchmark return over the five-year period as well as since its inception by 0.69% and 0.31%, respectively.

Cash Returns

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Jan-88	1.25%	4.00%	4.01%	4.39%	5.23%
Performance Benchmark[1]		0.78%	3.05%	3.03%	3.09%	4.81%
KRS Insurance	Jul-92	0.80%	3.67%	3.71%	3.61%	4.03%
Performance Benchmark[1]		0.78%	3.05%	3.02%	3.09%	3.72%

[1] Pension and Insurance benchmark is the Citi Group 3-month Treasury

Additional Schedules & Required Supplemental Information

Following are additional schedules which identify the Investment Advisors employed along with the total assets each firm manages for the Systems, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems as of or for the year ended June 30, 2009.

External Investment Advisors

	Assets Under Management (in thousands)
Aberdeen Asset Management, Aberdeen, Scotland	175,626
Arbor Investments II, Chicago, Illinois	11,096
Artio Global Investors, New York, NY	65,474
Avenue Capital V, New York, New York	42,188
Barclays Global Investors, San Francisco, California	347,016
Bay Hills Emerging Partners I, San Francisco, California	22,807
Blackstone Capital Partners V, New York, New York	66,767
Columbia Capital IV, Alexandria, Virginia	24,993
Commerce Street Income Partners LP, Dallas, Texas	8,749
Crestview Partners II, New York, New York	547
Duff, Ackerman & Goodrich Ventures II, Palo Alto, California	63,264
Essex Woodland VIII, Palo Alto, California	3,850
GTCR Golder Rauner IX, Chicago, Illinois	17,519
H.I.G. Venture Partners II, Miami, Florida	10,351
Harvest Partners V, New York, New York	1,482
Hellman & Friedman VI, New York, New York	40,010
Horsley Bridge International V LLC, San Fransico, California	791
Institutional Venture Partners XI, Menlo Park, California	26,950
Invesco, Atlanta, Georgia	612,687
JW Childs Equity III, Boston, Massachusetts	25,882
Leonard Green & Partners, L.P.,IV, Los Angeles, California	74,100

External Investment Advisors

	Assets Under Management (in thousands)
Matlin Patterson Global Opportunities I & II, New York, New York	43,358
Merit Capital Partners IV, Chicago, Illinois	22,057
MHR Insitituional Advisors III, New York, New York	18,503
Mill Road Capital, Greenwich, Connecticut	6,729
Neuberger Berman, Chicago, Illinois (formerly Lehman Brothers)	280,779
New Mountain Partners II, New York, New York	60,297
NISA Investment Advisors, St. Louis, Missouri	1,214,262
Northern Trust Quantitative Advisors, Chicago, Illinois	699,547
Oak Hill Partners II, New York, New York	98,135
Oak Tree Opportunities VIIB, Los Angeles, California	49,918
Prima Mortgage, New York, New York	16,271
Pyramis Global Advisors, Boston, Massachusetts	1,379,108
Robert W. Baird & Co., Milwauke, Wisconsin	435,506
Sun Capital Partners IV, Boca Raton, Florida	16,896
Technology Crossover Ventures VI, Palo Alto, California	13,249
Tenaska Power Fund II, Omaha, Nebraska	11,410
The Boston Company, Boston, Massachusetts	769,065
Tortoise Capital, Leawodd, Kansas	2,718
Vantagepoint Venture IV, San Bruno, California	39,993
Vista Equity Partners III, San Francisco, California	26,364
Walton Street Real Estate Fund, Chicago, Illinois	6,000
Warburg Pincus IX, New York, New York	104,155
Wayzata Investment Partners I, Wayzata, Minnesota	125,685
Weaver Barksdale & Associates, Brentwood, Tennessee	471,812
Wellington Management Company, Boston, Massachusetts	153,461
Total	$ 7,707,431

Master Custodian & Performance Measurement
The Northern Trust Company, Chicago, Illinois

Investment Consultants
ORG Real Property, Cleveland, Ohio
R.V. Kuhns & Associates, Portland, Oregon
Strategic Investment Solutions, San Francisco, California

KERS – Pension

% of Market Value as of June 30, 2009

	Non Hazardous		Hazardous	
Asset Class	Market value	Allocation (%)	Market value	Allocation (%)
Bonds	1,226,888,707	34.6%	106,311,983	27.5%
Short-Term	196,805,524	5.5%	83,481,858	21.6%
Alternatives	377,560,336	10.6%	42,995,401	11.1%
Domestic Equities	555,889,420	15.7%	52,509,296	13.6%
International Equities	1,190,312,861	33.6%	100,739,350	26.1%
Total Portfolio	3,547,456,847	100.0%	386,037,888	100.0%

CERS – Pension

% of Market Value as of June 30, 2009

	Non Hazardous		Hazardous	
Asset Class	Market value	Allocation (%)	Market value	Allocation (%)
Bonds	1,410,667,855	33.0%	394,574,686	30.3%
Short-Term	472,985,438	11.1%	194,113,758	14.9%
Alternatives	421,860,143	9.9%	126,496,195	9.7%
Domestic Equities	793,279,609	18.6%	248,394,685	19.1%
International Equities	1,176,862,257	27.5%	340,044,964	26.1%
Total Portfolio	4,275,655,301	100.0%	1,303,624,288	100.0%

SPRS – Pension

% of Market Value as of June 30, 2009

Asset Class	Market value	Allocation (%)
Bonds	89,634,388	35.2%
Short-Term	30,766,940	12.1%
Alternatives	24,882,430	9.8%
Domestic Equities	29,465,153	11.6%
International Equities	79,622,253	31.3%
Total Portfolio	254,371,164	100.0%

KERS – Insurance

% of Market Value as of June 30, 2009

	Non Hazardous		Hazardous	
Asset Class	Market value	Allocation (%)	Market value	Allocation (%)
Bonds	34,286,453	9.6%	19,691,574	9.0%
Short-Term	83,527,259	23.3%	46,388,549	21.3%
Alternatives	26,287,438	7.3%	11,777,288	5.4%
Domestic Equities	92,448,852	25.8%	78,640,634	36.1%
International Equities	121,977,350	34.0%	61,247,736	28.1%
Total Portfolio	358,527,352	100.0%	217,745,781	100.0%

CERS – Insurance

% of Market Value as of June 30, 2009

	Non Hazardous		Hazardous	
Asset Class	Market value	Allocation (%)	Market value	Allocation (%)
Bonds	90,518,238	10.3%	48,986,427	10.3%
Short-Term	210,302,909	24.0%	128,879,448	27.1%
Alternatives	43,393,361	4.9%	23,135,593	4.9%
Domestic Equities	312,246,462	35.6%	155,023,587	32.6%
International Equities	220,813,632	25.2%	119,709,311	25.2%
Total Portfolio	877,274,602	100.0%	475,734,365	100.0%

SPRS – Insurance

% of Market Value as of June 30, 2009

Asset Class	Market value	Allocation (%)
Bonds	9,821,117	10.6%
Short-Term	17,139,534	18.4%
Alternatives	5,402,378	5.8%
Domestic Equities	33,287,044	35.8%
International Equities	27,305,425	29.4%
Total Portfolio	92,955,497	100.0%

External Investment Expenses

Expense	Fees Paid (in thousands)	Expense as a % of Assets
Equity & Fixed Income Portfolio		
Pension Funds	$ 11,313	0.0999%
Insurance Funds	1,140	0.0436%
Consulting Fees	741	0.0053%
Custody Fees	250	0.0018%
Other Investment-Related Fees	1,240	0.0089%
Total Expenses	14,684	0.1054%

Schedule of Commissions Paid

	Total Shares	Commissions Paid	$ per share
U.S. Equities	114,656,319	$6,331,970	$0.055

	Total Value of Trades	Commissions Paid	As a % of Trade
Non-U.S. Equities	$5,377,475,231	$2,939,260	0.055%
Total Commissions Paid		$9,271,230	

The Performance Calculations presented above were prepared by the System's custodial bank using a time-weighted rate of return methodology based upon the market value of assets.

Actuarial

2 Certification Letter

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15 Recommended Employer Contribution Rates

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23 Analysis of Financial Experience

28 Solvency Test

33 Summary of Active Member Valuation Data

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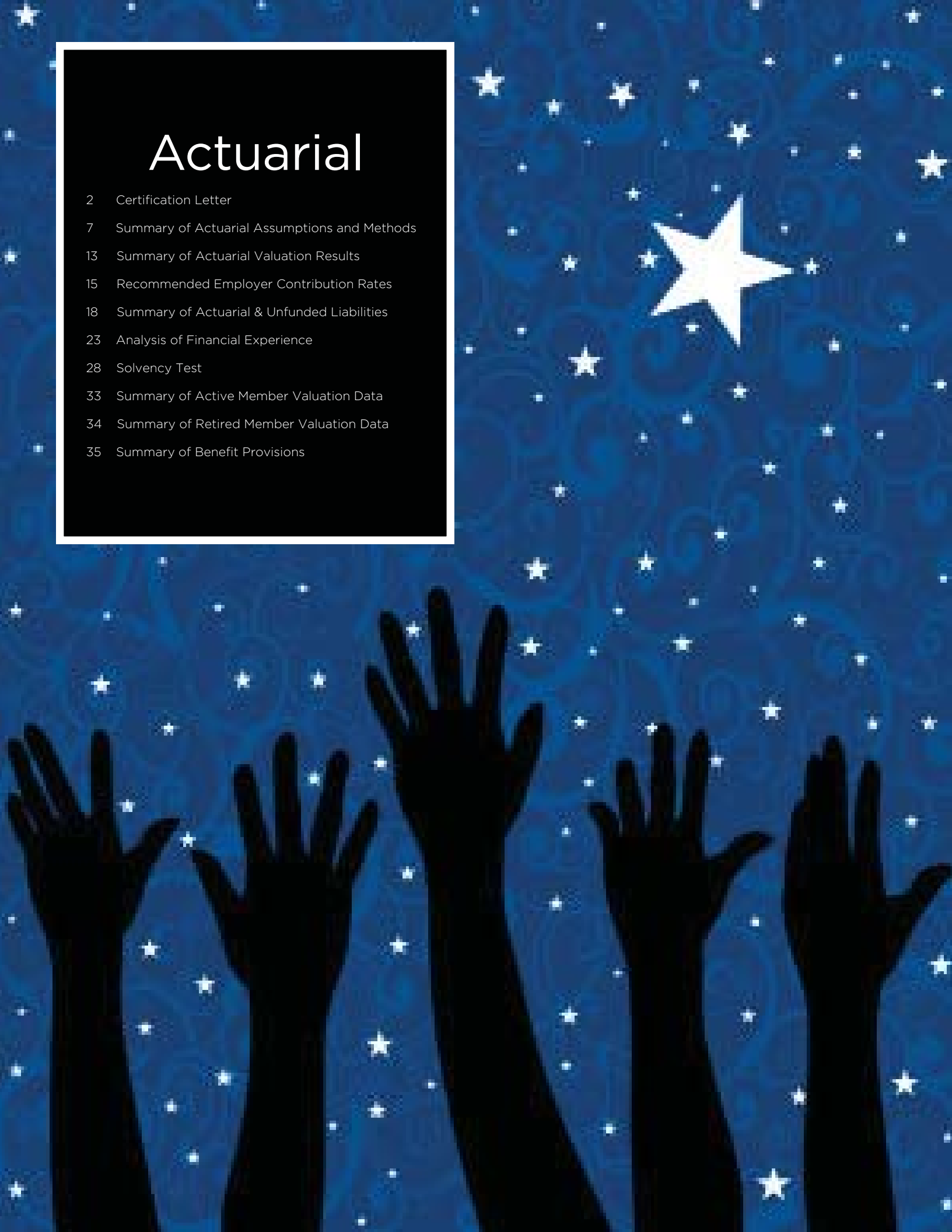
35 Summary of Benefit Provisions



The following is a certification of actuarial results by Cavanaugh Macdonald Consulting, LLC.

Cavanaugh Macdonald
CONSULTING, LLC.

November 20, 2009

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fifty-third annual actuarial valuation of the Kentucky Employees Retirement System, the fiftieth annual actuarial valuation of the County Employees Retirement System, and the fifty-first annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2009 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2010 and ending June 30, 2011.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) are established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30 year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

The impact of House Bill 1 passed into law in 2008 will be to eventually reduce the contribution rates otherwise required as more

active members are covered under the lower benefit structure effective for those hired after August 31, 2008.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 and 2009 assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2009 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	45.0%
KERS Hazardous Pension Fund	74.5%
CERS Non-Hazardous Pension Fund	71.4%
CERS Hazardous Pension Fund	67.9%
SPRS Pension Fund	54.8%

The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Medical inflation rates in excess of the assumed rates, as well as recent employer contribution rate reductions under KERS and SPRS, have significantly limited this improvement. As of June 30, 2009 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	11.9%
KERS Hazardous Insurance Fund	61.4%
CERS Non-Hazardous Insurance Fund	39.6%
CERS Hazardous Insurance Fund	40.9%
SPRS Insurance Fund	33.9%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. At least once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on August 20, 2009 based on the experience investigation report dated August 17, 2009, meet the parameters set for disclosure under GASB Statements No. 25 and 43. The health care cost trend assumptions were updated for the June 30, 2007 valuation adopted by the Board November 15, 2007. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is scheduled to be completed in January 2014 and any adjustments will be reflected in the June 30, 2014 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Summary of Actuarial Assumptions and Methods

(As of June 30, 2009)

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study. The most recent study was completed in August 2009 and reviewed plan experience for the period from July 1, 2005 through June 30, 2008. All assumptions, with the exception of health care trend rates, used in the June 30, 2009 actuarial valuation were based on the study performed in 2009 and in accordance with the actuary's recommendations. The health care trend rates used in the June 30, 2008 valuation are those adopted by the Board on November 15, 2007. The next Experience Study is scheduled to be completed in January 2014.

1. Actuarial Cost Method: The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the UAL over no more than a 30-year period.
2. UAL Amortization Method: The amortization of any UAL is made over 30 years from the establishment of the amortization base

using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) are established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

3. Asset Valuation Method: The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted by the Board in 2006.
4. Retiree Insurance Funding Policy: The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.
5. Investment Return Assumption: The future investments earnings of plan assets are assumed to accumulate at a rate of 7.75% per annum. This rate consists of a 3.5% inflationary component and a 4.25% real rate of return component. In accordance with GASB Statement No. 43, the investment return assumption has been reduced to a blended rate of 4.5% for KERS and SPRS insurance funds due to a lack of pre-funding benefits. This assumption was adopted in 2006.
6. Salary Increase Assumption: Active member salaries are assumed to increase at the rates provided in Table 1 on the following page. The rates include a 4.5% percent inflationary component and an additional increase due to promotion based upon plan experience. This assumption was adopted in 2009.

Table 1: Salary Increase Assumptions

Service	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
0-1	17.00%	21.00%	13.00%	20.00%	17.00%
1-2	9.00%	9.00%	9.50%	10.50%	12.00%
2-3	6.50%	7.00%	6.00%	6.50%	10.00%
3-4	6.00%	6.50%	6.00%	5.75%	9.00%
4-5	6.00%	6.00%	5.50%	5.50%	8.00%
5-6	6.00%	5.50%	5.50%	5.00%	7.00%
6-7	5.50%	5.00%	5.25%	4.50%	6.00%
7-8	5.50%	5.00%	5.25%	4.50%	6.50%
8-9	5.50%	5.00%	5.00%	4.50%	5.50%
9-10	5.00%	5.00%	5.00%	4.50%	5.00%
10+	5.00%	5.00%	4.75%	4.50%	4.50%

7. Payroll Growth Assumption: Active member payroll is assumed to increase at a rate of 4.5% per annum. This assumption was adopted in 2009.
8. Retiree Cost of Living Adjustments (COLA): State statutes require retirement allowances to be increased by the percentage increase in the annual average of the consumer price index for all urban consumers (CPI-U) for the most recent calendar year, not to exceed five percent. The statutes only allow the Cost of Living Adjustments (COLAs) awarded as of the valuation date to be recognized for funding purposes and for determining employer contribution rates. The Kentucky General Assembly has the authority to suspend or reduce cost of living adjustments.

Age (Years) & Non-Hazardous Retirement Probability (%)

Age	KERS	CERS
55 - 59	8.0%	8.0%
60	10.0	10.0
61	20.0	10.0
62 - 70	22.5	22.0

If service credit is at least 27 years, the rate is 25%. 100% are anticipated to retire at age 75.

Hazardous Service (Years) & Retirement Probability (%)

Service	KERS	CERS	SPRS
20	22.0%	20.0%	9.0%
21	22.0	20.0	10.0
22 - 24	22.0	20.0	22.0
25	35.0	33.0	22.0
26 - 27	37.0	33.0	25.0
28	39.0	39.0	25.0
29	38.0	33.0	25.0
30 - 31	38.0	33.0	33.3
32	50.0	50.0	33.3
33 - 34	50.0	40.0	33.3
35+	60.0	40.0	33.3

For KERS, 100% are anticipated to retire at age 65.
For CERS, 100% are anticipated to retire at age 62.
For SPRS, 100% are anticipated to retire at age 55.

9. Medical Inflation Rate Assumption: The costs for retiree medical premiums are assumed to increase each year by 11% for 2009, by 10% for 2010, by 9% for 2011, by 8% for 2012, by 7% for 2013, by 6% for 2014, and by 5% thereafter. This assumption was adopted in 2007.
10. Retirement Rate Assumption: The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in the tables to the left. This assumption was adopted in 2009.
11. Mortality Assumptions: The mortality table used for active members is the 1994 Group Annuity Mortality (GAM) Table. For members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table to the 1994 GAM table. Mortality assumptions for disabled lives are set using the 1994 GAM table set forward five years. These assumptions were adopted in 2006.

Sample Annual Rates of Mortality: Active & Retired Members*

Age (Years)	Males	Females
< 20	0.04%	0.03%
22	0.06	0.03
32	0.08	0.04
42	0.13	0.08
52	0.32	0.17
62	1.01	0.58
72	2.85	1.65
Sample Annual Rates of Mortality: Disabled Member Mortality		
< 20, 22, 32	-	-
42	0.19%	0.11%
52	0.56	0.29
62	1.80	1.08
72	4.52	2.84

**For members retiring on or after July 1, 2006.*

12. Withdrawal Rates: The probability, or likelihood, of active members terminating employment prior to retirement is provided in the table on the following page. The withdrawal rate is a function of both age and service. This type of structure is known as "select and ultimate rates". This structure reflects the fact that both service and age affect the likelihood of a member staying in active employment. The ultimate period for these systems covers a member's withdrawal rate after the first five years of service. These assumptions were adopted in 2009.

Selected Rates of Termination Prior to Retirement

Select Rates		Ultimate Rates		Select Rates		Ultimate Rates	
Service	Probability	Age	Probability	Service	Probability	Age	Probability
KERS Non-Hazardous				**CERS Non-Hazardous**			
1st Year of Service	19.00%	20	6.00%	1st Year of Service	25.00%	20	5.75%
2nd Year of Service	13.00	25	5.08	2nd Year of Service	14.00	25	5.75%
3rd Year of Service	10.00	30	4.26	3rd Year of Service	10.00	30	5.30
4th Year of Service	9.00	35	3.21	4th Year of Service	8.00	35	4.40
5th Year of Service	6.50	40	3.0	5th Year of Service	6.50	40	3.70
		45	3.0			45	3.02
		50	3.0			50	2.70
		55	3.0			55	2.20
		60	3.0			60	0.75
KERS Hazardous				**CERS Hazardous**			
1st Year of Service	15.00%	20	4.0%	1st Year of Service	14.00%	20	3.0%
2nd Year of Service	14.00	25	4.0	2nd Year of Service	7.5	25	2.7
3rd Year of Service	10.00	30	3.5	3rd Year of Service	6.0	30	2.5
4th Year of Service	8.00	35	3.0	4th Year of Service	4.5	35	2.5
5th Year of Service	6.00	40	3.0	5th Year of Service	4.0	40	2.5
		45	3.0			45	2.5
		50	3.0			50	2.5
		55	3.0			55	2.5
		60	3.0			60	2.5
SPRS							
1st Year of Service	20.0%	20	2.5%				
2nd Year of Service	7.5	25	2.5%				
3rd Year of Service	3.0	30	2.5%				
4th Year of Service	3.0	35	2.5%				
5th Year of Service	3.0	40	2.5%				
		45	2.5%				
		50	2.5%				
		55	-				
		60	-				

13. Rates of Disablement: KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. For non-hazardous members, the assumptions are set using three quarters of the Old-Age Survivors and Disability Insurance (OASDI) rates. For hazardous members, the assumptions are set using one times the Old-Age Survivors and Disability Insurance (OASDI) rates. These assumptions were adopted in 2009.

Probability of Becoming Disabled During Employment

Non-Hazardous			Hazardous	
Age	Probability		Age	Probability
20 - 24	0.0354%		20 - 24	0.0531%
25 - 29	0.0474%		25 - 29	0.0711%
30 - 34	0.0612%		30 - 34	0.0918%
35 - 39	0.0853%		35 - 39	0.1280%
40 - 44	0.1329%		40 - 44	0.1994%
45 - 49	0.2213%		45 - 49	0.3320%
50 - 54	0.3727%		50 - 54	0.5590%
55 - 59	0.6133%		55 - 59	0.9200%
60 - 64	0.9745%		60 - 64	1.4618%

Summary of Actuarial Valuation Results
(As of June 30, 2009)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2010-2011)					
Pension Fund Contribution	21.77%	14.11%	10.03%	16.79%	35.74%
Insurance Fund Contribution	16.81	20.26	9.78	23.27	49.89
Recommended Employer Contribution	38.58	34.37	19.81	40.06	85.63
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$10,658,549,532	$674,411,781	$7,912,913,512	$2,578,444,600	$602,328,868
Actuarial Value of Assets	4,794,611,365	50,503,287	5,650,789,991	1,751,487,540	329,966,989
Unfunded Liability on Actuarial Value of Assets	5,863,938,167	171,908,494	2,262,123,521	826,957,060	272,361,879
Funding Ratio on Actuarial Value of Assets	44.98%	74.51%	71.41%	67.93%	54.78%
Market Value of Assets	3,584,196,429	388,913,374	4,330,593,934	1,320,522,868	256,571,073
Unfunded Liability on Market Value of Assets	7,074,353,103	285,498,407	3,582,319,578	1,257,921,732	345,757,795
Funding Ratio on Market Value of Assets	33.63%	57.67%	54.73%	51.21%	42.60%
Insurance Fund					
Actuarial Liability	$4,507,325,571	$491,132,170	$3,070,386,018	$1,593,548,263	$364,031,141
Actuarial Value of Assets	534,172,580	301,634,592	1,216,631,769	651,130,782	123,526,647
Unfunded Liability on Actuarial Value of Assets	3,973,152,991	189,497,578	1,853,754,249	942,417,481	240,504,494
Funding Ratio on Actuarial Value of Assets	11.85%	61.42%	39.62%	40.86%	33.93%
Market Value of Assets	365,771,088	219,537,255	894,905,841	483,269,862	93,686,940
Unfunded Liability on Market Value of Assets	4,141,554,483	271,594,915	2,175,480,177	1,110,278,401	270,344,201
Funding Ratio on Market Value of Assets	8.12%	44.70%	29.15%	30.33%	25.74%

Summary of Actuarial Valuation Results
(As of June 30, 2009)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Member Data					
Number of Active Members	46,060	4,334	83,724	9,757	946
Total Annual Payroll (Active Members)[1]	$1,754,412,912	$146,043,576	$2,183,611,848	$469,315,464	$51,660,396
Average Annual Pay (Active Members)	$38,090	$33,697	$26,081	$48,100	$54,609
Number of Retired Members & Beneficiaries	37,883	2,648	39,756	5,808	1,184
Average Annual Retirement Allowance	$21,449	$14,613	$11,069	$24,085	$37,394
Number of Vested Inactive Members	5,745	303	9,182	549	58
Number of Inactive Members Due a Refund	28,770	2,753	51,093	1,973	274

[1] Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2009.

Recommended Employer Contribution Rates

(As of June 30, 2009)

Kentucky Employees Retirement System (Non-Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/04	2005-2006	4.89%	2.96%	7.85%	5.77%	13.62%
6/30/05	2006-2007	4.81%	5.87%	10.68%	6.45%	17.13%
6/30/06	2007-2008	3.72%	11.83%	15.55%	32.82%	48.37%
6/30/07	2008-2009	3.62%	12.92%	16.54%	20.38%	36.92%
6/30/08	2009-2010	3.97%	14.99%	18.96%	20.49%	39.45%
6/30/09	2010-2011	4.26%	17.51%	21.77%	16.81%	38.58%

Kentucky Employees Retirement System (Hazardous Employers)

6/30/04	2005-2006	8.62%	(0.10%)	8.52%	13.07%	21.59%
6/30/05	2006-2007	8.37%	0.91%	9.28%	14.04%	23.32%
6/30/06	2007-2008	7.27%	2.93%	10.20%	36.91%	47.11%
6/30/07	2008-2009	7.28%	3.56%	10.84%	23.94%	34.78%
6/30/08	2009-2010	7.52%	4.46%	11.98%	23.56%	35.54%
6/30/09	2010-2011	7.94%	6.17%	14.11%	20.26%	34.37%

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the above tables are the actuarially required contribution (ARC) rates presented by the actuary in the 2006 through 2009 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the applicable statute now calls for an employer contribution rate at an increasing percentage of the ARC rates until 100% is achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous.

Recommended Employer Contribution Rates

(As of June 30, 2009)

County Employees Retirement System
(Non-Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2004	2005-2006	5.80%	(1.25%)	4.55%	6.43%	10.98%
6/30/2005	2006-2007	5.72	0.25	5.97	7.22	13.19
6/30/2006	2007-2008	4.69	2.29	6.98	20.51	27.49
6/30/2007	2008-2009	4.53	3.23	7.76	12.75	20.51
6/30/08	2009-2010	4.46	4.16	8.62	12.29	20.91
6/30/09	2010-2011	4.60	5.43	10.03	9.78	19.81

County Employees Retirement System
(Hazardous Employers)

6/30/2004	2005-2006	8.80%	2.42%	11.22%	13.79%	25.01%
6/3 0/2005	2006-2007	8.79	4.32	13.11	15.10	28.21
6/30/2006	2007-2008	8.12	6.89	15.01	39.52	54.53
6/30/2007	2008-2009	8.06	6.98	15.04	27.62	42.66
6/30/08	2009-2010	8.23	7.88	16.11	27.25	43.36
6/30/09	2010-2011	7.56	9.23	16.79	23.27	40.06

The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the actuarially required contribution (ARC) rates presented by the actuary in the 2006 through 2009 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this was changed to a ten-year phase-in from the initial starting date due to legislation enacted by the Kentucky General Assembly. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2010-2011 is 6.90% and the employer contribution rate is 16.93%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2010-2011 is 16.46% and the employer contribution rate is 33.25%.

Recommended Employer Contribution Rates

(As of June 30, 2009)

State Police Retirement System

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2004	2005-2006	9.37%	5.12%	14.49%	20.34%	34.83%
6/30/2005	2006-2007	9.43	11.21	20.64	21.66	42.30
6/30/2006	2007-2008	9.20	19.75	28.95	91.05	120.00
6/30/2007	2008-2009	9.64	22.75	32.39	59.54	91.93
6/30/08	2009-2010	9.83	25.40	35.23	56.89	92.12
6/30/09	2010-2011	8.12	27.62	35.74	49.89	85.63

The contribution rates for SPRS shown in the above tables are the actuarially required contribution (ARC) rates presented by the actuary in the 2006 through 2009 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of House Bill 1 passed in 2008 the applicable statute now calls for an employer contribution rate at an increasing percentage of the ARC rates until 100% is achieved in 2020 for SPRS.

Summary of Actuarial Unfunded Liabilities
(As of June 30, 2009)

Kentucky Employees Retirement System

(Non-Hazardous Pension Fund)

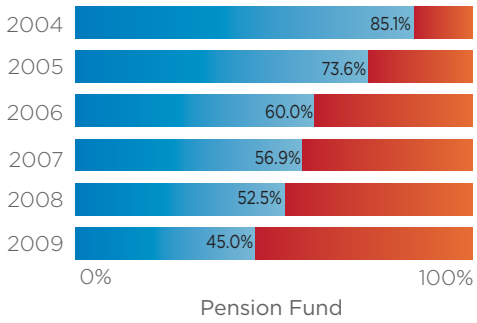
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$6,520,463,188	$6,351,318,832	$4,929,443,185	$169,144,356	$1,591,020,003	97.4%	75.6%
6/30/04	$7,049,613,171	$6,000,513,743	$5,258,994,145	$1,049,099,428	$1,790,619,026	85.1%	74.6%
6/30/05	$7,579,074,839	$5,578,685,746	$5,362,630,697	$2,000,389,093	$2,216,444,142	73.6%	70.8%
6/30/06	$8,994,826,247	$5,394,086,323	$5,440,132,708	$3,600,739,924	$3,554,693,539	60.0%	60.5%
6/30/07	$9,485,939,277	$5,396,782,459	$5,773,156,838	$4,089,156,818	$3,712,782,439	56.9%	60.9%
6/30/08	$10,129,689,985	$5,318,792,893	$5,056,867,294	$4,810,897,092	$5,072,822,691	52.5%	49.9%
6/30/09	$10,658,549,532	$4,794,611,365	$3,584,196,429	$5,863,938,167	$7,074,353,103	45.0%	33.6%

Kentucky Employees Retirement System

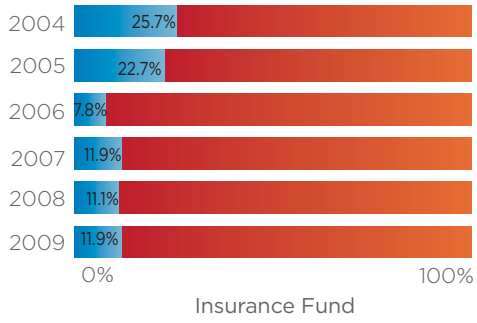
(Non-Hazardous Insurance Fund)

6/30/03	$2,093,210,321	$553,885,082	$487,274,973	$1,539,325,239	$1,605,935,348	26.5%	23.3%
6/30/04	$2,335,905,365	$600,586,961	$587,680,647	$1,735,318,404	$1,748,224,718	25.7%	25.2%
6/30/05	$2,680,559,188	$607,068,351	$610,901,623	$2,073,490,837	$2,069,657,565	22.7%	22.8%
6/30/06	$7,815,480,774	$611,350,765	$632,642,846	$7,204,130,009	$ 7,182,837,928	7.8%	8.1%
6/30/07	$5,201,355,055	$621,171,658	$663,558,360	$4,580,183,397	$4,537,796,695	11.9%	12.8%
6/30/08	$5,431,499,285	$603,197,761	$574,480,809	$4,828,301,524	$4,857,018,476	11.1%	10.6%
6/30/09	$4,507,325,571	$534,172,580	$365,771,088	$3,973,152,991	$4,141,554,483	11.9%	8.1%

The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).



Pension Fund



Insurance Fund

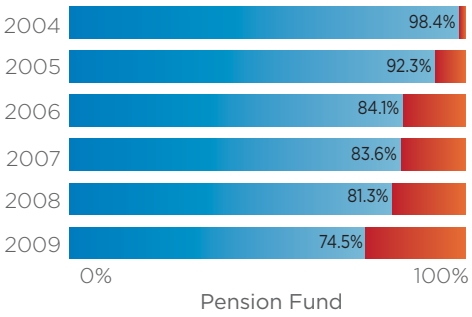
Summary of Actuarial Unfunded Liabilities
(As of June 30, 2009)

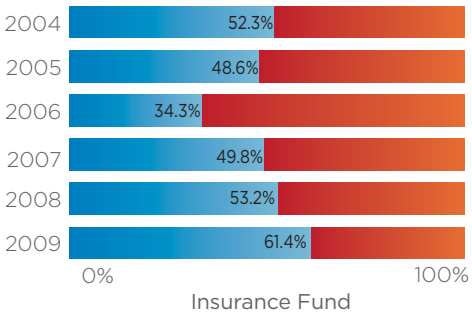
Kentucky Employees Retirement System
(Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$356,879,133	$385,925,722	$320,524,691	($29,046,589)	$36,354,442	108.1%	89.8%
6/30/04	$403,578,036	$397,212,763	$366,569,507	$6,365,273	$37,008,529	98.4%	90.8%
6/30/05	$438,994,257	$405,288,662	$398,308,897	$33,705,595	$40,685,360	92.3%	90.7%
6/30/06	$508,655,903	$427,984,192	$437,029,583	$80,671,711	$71,626,320	84.1%	85.9%
6/30/07	$558,992,329	$467,287,809	$510,775,499	$91,704,520	$48,216,830	83.6%	91.4%
6/30/08	$618,010,827	$502,132,214	$484,440,015	$115,878,613	$133,570,812	81.3%	78.4%
6/30/09	$674,411,781	$502,503,287	$388,913,374	$171,908,494	$285,498,406	74.5%	57.7%

Kentucky Employees Retirement System
(Hazardous Insurance Fund)

6/30/03	$283,178,335	$151,459,500	$125,533,413	$131,718,835	$157,644,922	53.5%	44.3%
6/30/04	$323,503,563	$169,158,879	$162,127,373	$154,344,684	$161,376,190	52.3%	50.1%
6/30/05	$386,844,695	$187,947,644	$188,871,226	$198,897,051	$197,973,469	48.6%	48.8%
6/30/06	$621,237,856	$212,833,318	$223,523,081	$408,404,538	$397,714,775	34.3%	36.0%
6/30/07	$504,842,981	$251,536,756	$280,885,910	$253,306,225	$223,957,071	49.8%	55.6%
6/30/08	$541,657,214	$288,161,759	$269,299,859	$253,495,455	$272,357,355	53.2%	49.7%
6/30/09	$491,132,170	$301,634,592	$219,537,255	$189,497,578	$271,594,915	61.4%	44.7%





The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Summary of Actuarial Unfunded Liabilities
(As of June 30, 2009)

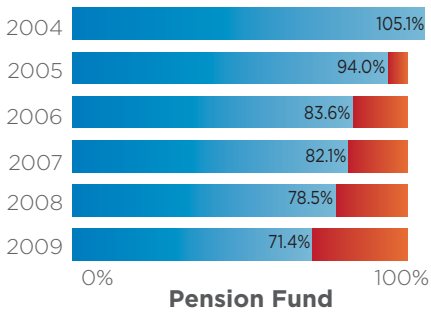
County Employees Retirement System
(Non-Hazardous Pension Fund)

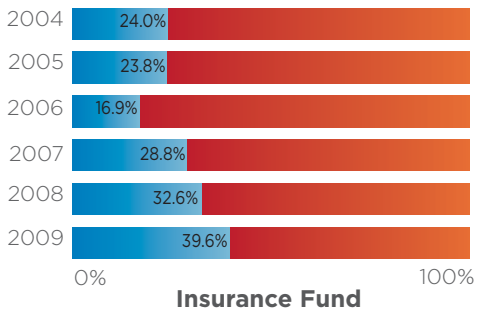
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$4,417,597,802	$5,286,580,047	$4,174,881,117	($868,982,245)	$242,716,685	119.7%	94.5%
6/30/04	$4,936,459,488	$5,187,851,530	$4,613,335,957	($251,392,042)	$323,123,531	105.1%	93.5%
6/30/05	$5,385,156,690	$5,059,208,687	$4,893,599,997	$325,948,003	$491,556,693	94.0%	90.9%
6/30/06	$6,179,569,267	$5,162,894,136	$5,191,376,948	$1,016,675,131	$988,192,319	83.6%	84.0%
6/30/07	$6,659,446,126	$5,467,824,480	$5,812,935,251	$1,191,621,646	$846,510,875	82.1%	87.3%
6/30/08	$7,304,217,691	$5,731,502,438	$5,431,735,605	$1,572,715,253	$1,872,482,086	78.5%	74.4%
6/30/09	$7,912,913,512	$5,650,789,991	$4,330,593,934	$2,262,123,521	$3,582,319,578	71.4%	54.7%

County Employees Retirement System
(Non-Hazardous Insurance Fund)

6/30/03	$2,176,963,259	$520,060,105	$435,667,125	$1,656,903,154	$1,741,296,134	23.9%	20.0%
6/30/04	$2,438,734,696	$585,399,072	$563,877,594	$1,853,335,624	$1,874,857,102	24.0%	23.1%
6/30/05	$2,788,754,654	$663,941,949	$668,485,367	$2,124,812,705	$2,120,269,287	23.8%	24.0%
6/30/06	$4,607,223,639	$777,726,590	$813,250,744	$3,829,497,049	$3,793,972,895	16.9%	17.7%
6/30/07	$3,333,966,070	$960,285,900	$1,084,042,781	$2,373,680,170	$2,249,923,289	28.8%	32.5%
6/30/08	$3,583,193,466	$1,168,883,170	$1,105,944,178	$2,414,310,296	$2,477,249,288	32.6%	30.9%
6/30/09	$3,070,386,018	$1,216,631,769	$894,905,841	$1,853,754,249	$2,175,480,177	39.6%	29.2%

The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).





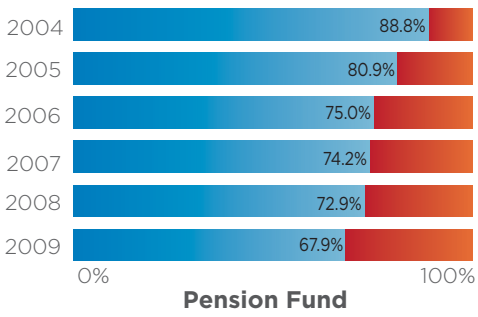
Summary of Actuarial Unfunded Liabilities
(As of June 30, 2009)

County Employees Retirement System
(Hazardous Pension Fund)

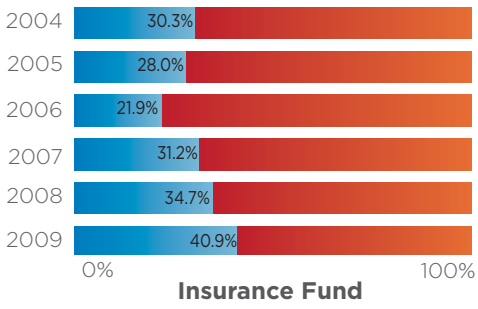
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$1,499,628,782	$1,467,004,856	$1,168,794,472	$32,623,926	$330,834,310	97.8%	77.9%
6/30/04	$1,640,830,120	$1,457,612,042	$1,305,011,472	$183,218,078	$335,818,648	88.8%	79.5%
6/30/05	$1,795,617,335	$1,452,353,023	$1,411,245,719	$343,264,312	$384,371,616	80.9%	78.6%
6/30/06	$2,020,142,770	$1,515,075,017	$1,528,845,357	$505,067,753	$491,297,413	75.0%	75.7%
6/30/07	$2,208,736,179	$1,639,288,924	$1,754,934,764	$569,447,255	$453,801,415	74.2%	79.5%
6/30/08	$2,403,122,095	$1,750,867,373	$1,644,983,243	$652,254,722	$758,138,852	72.9%	68.5%
6/30/09	$2,578,444,600	$1,751,487,540	$1,320,522,868	$826,957,060	$1,257,921,732	67.9%	51.2%

County Employees Retirement System
(Hazardous Insurance Fund)

6/30/03	$935,650,662	$269,190,080	$223,212,339	$666,460,582	$712,438,323	28.8%	23.9%
6/30/04	$1,025,684,477	$310,578,162	$297,734,286	$715,106,315	$727,950,191	30.3%	29.0%
6/30/05	$1,283,299,092	$359,180,461	$360,938,669	$924,118,631	$922,360,423	28.0%	28.1%
6/30/06	$1,928,481,371	$422,785,042	$441,278,796	$1,505,696,329	$1,487,202,575	21.9%	22.9%
6/30/07	$1,646,460,011	$512,926,549	$570,155,702	$1,133,533,462	$1,076,304,309	31.2%	34.6%
6/30/08	$1,769,782,957	$613,526,319	$576,414,457	$1,156,256,638	$1,193,368,500	34.7%	32.6%
6/30/09	$1,593,548,263	$651,130,782	$483,269,862	$942,417,481	$1,110,278,401	40.9%	30.3%



Pension Fund



Insurance Fund

The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Summary of Actuarial Unfunded Liabilities
(As of June 30, 2009)

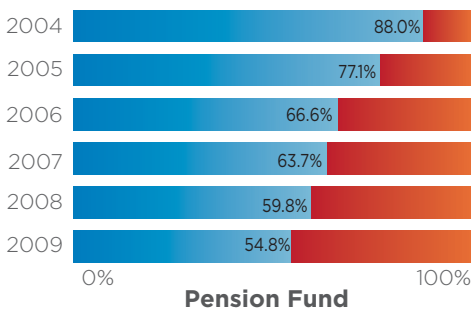
State Police Retirement System
(Pension Fund)

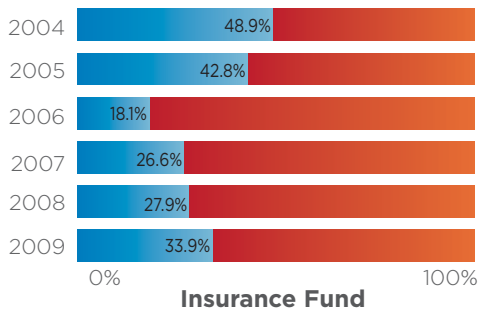
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/03	$414,881,459	$413,063,576	$319,116,232	$1,817,883	$95,765,227	99.6%	76.9%
6/30/04	$437,482,425	$385,077,195	$335,720,408	$52,405,230	$101,762,017	88.0%	76.7%
6/30/05	$458,593,576	$353,511,622	$339,405,873	$105,081,954	$119,187,703	77.1%	74.0%
6/30/06	$516,482,298	$344,016,197	$352,841,486	$172,466,101	$163,640,812	66.6%	68.3%
6/30/07	$547,955,286	$348,806,508	$376,381,488	$199,148,778	$171,573,798	63.7%	68.7%
6/30/08	$587,129,257	$350,891,451	$337,358,918	$236,237,806	$249,770,339	59.8%	57.5%
6/30/09	$602,328,868	$329,966,989	$256,571,073	$272,361,879	$345,757,795	54.8%	42.6%

State Police Retirement System
(Insurance Fund)

6/30/03	$184,501,205	$90,747,967	$72,533,617	$93,753,238	$111,967,588	49.2%	39.3%
6/30/04	$197,604,301	$96,622,908	$90,422,080	$100,981,393	$107,182,221	48.9%	45.8%
6/30/ 05	$234,159,510	$100,207,082	$99,408,106	$133,952,428	$134,751,404	42.8%	42.5%
6/30/06	$582,580,867	$105,580,269	$110,491,075	$477,000,598	$472,089,792	18.1%	19.0%
6/30/07	$432,763,229	$115,215,912	$132,573,898	$317,547,317	$300,189,331	26.6%	30.6%
6/30/08	$445,107,468	$123,961,197	$121,781,967	$321,146,271	$323,325,501	27.9%	27.4%
6/30/09	$364,031,141	$123,526,647	$93,686,940	$240,504,494	$270,344,201	33.9%	25.7%

The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).





Analysis of Financial Experience

(As of June 30, 2009)

Kentucky Employees Retirement System Non-Hazardous
Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss)	Insurance $ Gain (or Loss)
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(312.8)	(167.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.2	5.4
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.3)	(5.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	169.9	38.7
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	17.0	260.3
New Members. Additional unfunded accrued liability will produce a loss.	(9.0)	(15.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(307.9)	(39.8)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	5.2	44.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(344.9)	(524.3)
Gain (or Loss) During Year From Financial Experience	(783.6)	(404.5)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	56.9	1,278.4
Composite Gain (or Loss) During Year	(726.7)	873.9

Analysis of Financial Experience

(As of June 30, 2009)

Kentucky Employees Retirement System Hazardous Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss)	Insurance $ Gain (or Loss)
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(20.4)	(10.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.9	1.0
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.2	0.2
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	14.9	9.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	4.0	25.4
New Members. Additional unfunded accrued liability will produce a loss.	(1.1)	(1.0)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(26.8)	(18.7)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	1..4	6.7
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(20.9)	(30.2)
Gain (or Loss) During Year From Financial Experience	(47.8)	(18.1)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	(4.3)	86.1
Composite Gain (or Loss) During Year	(52.1)	68.0

Analysis of Financial Experience

(As of June 30, 2009)

County Employees Retirement System Non-Hazardous
Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss)	Insurance $ Gain (or Loss)
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(117.8)	(55.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3.0)	9.4
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(2.7)	(6.3)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	85.4	24.6
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	11.1	166.0
New Members. Additional unfunded accrued liability will produce a loss.	(12.3)	(12.4)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(344.1)	(72.4)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	3.6	31.8
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(240.6)	(266.0)
Gain (or Loss) During Year From Financial Experience	(620.4)	(180.8)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	(43.5)	779.4
Composite Gain (or Loss) During Year	(663.9)	598.6

Analysis of Financial Experience

(As of June 30, 2009)

County Employees Retirement System Hazardous
Gains & Losses in Accrued Liabilities Resulting from Difference Between
Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss)	Insurance $ Gain (or Loss)
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(23.3)	(1.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.8)	0.8
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.4	0.3
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	42.5	29.6
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(3.7)	77.0
New Members. Additional unfunded accrued liability will produce a loss.	(5.0)	(7.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(112.5)	(38.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(3.5)	13.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(62.3)	(125.5)
Gain (or Loss) During Year From Financial Experience	(168.2)	(52.0)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	3.7	284.2
Composite Gain (or Loss) During Year	(164.5)	232.2

Analysis of Financial Experience

(As of June 30, 2009)

State Police Retirement System
Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss)	Insurance $ Gain (or Loss)
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(4.8)	8.1
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.2)	0.5
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	1.6	5.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	2.1	20.9
New Members. Additional unfunded accrued liability will produce a loss.	(0.1)	(0.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(17.4)	(6.0)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.0	0.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(15.7)	(40.3)
Gain (or Loss) During Year From Financial Experience	(34.5)	(6.2)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	13.6	88.1
Composite Gain (or Loss) During Year	(20.9)	81.9

Solvency Test

(As of June 30, 2009)

Kentucky Employees Retirement System
(Non-Hazardous Pension Fund)

Valuation Date	Actuarial Liabilities			Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)		(1)	(2)	(3)
6/30/04	$915,105,103	$4,452,864,748	$1,681,643,320	$6,000,513,743	100.0%	100.0%	37.6%
6/30/05	866,044,474	5,056,247,608	1,656,782,757	5,578,685,746	100.0	93.2	--
6/30/06	866,050,799	5,881,990,853	2,246,784,595	5,394,086,323	100.0	77.0	--
6/30/07	878,842,180	6,437,235,593	2,169,861,504	5,396,782,459	100.0	70.2	--
6/30/08	875,178,069	7,162,496,700	2,092,015,217	5,318,792,893	100.0	62.0	--
6/30/09	793,574,765	8,205,155,691	1,659,819,076	4,794,611,365	100.0	48.8	--

Kentucky Employees Retirement System
(Non-Hazardous Insurance Fund)

Valuation Date	Actuarial Liabilities			Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)		(1)	(2)	(3)
6/30/04	$0	$1,282,214,660	$1,053,690,705	$600,586,961	100.0%	46.8%	--
6/30/05	0	1,550,619,458	1,129,939,730	607,068,351	100.0	39.2	--
6/30/06	0	3,543,125,375	4,272,355,400	611,350,765	100.0	17.3	--
6/30/07	0	2,569,197,567	2,632,157,488	621,171,658	100.0	24.2	--
6/30/08	0	2,788,189,754	2,643,309,531	603,197,761	100.0	21.6	--
6/30/09	0	2,861,867,088	1,645,458,483	534,172,580	100.0	18.7	--

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

Solvency Test

(As of June 30, 2009)

Kentucky Employees Retirement System
(Hazardous Pension Fund)

Valuation Date	Actuarial Liabilities			Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)		(1)	(2)	(3)
6/30/04	$78,817,575	$175,102,848	$149,657,613	$397,212,763	100.0%	100.0%	95.7%
6/30/05	75,098,321	213,310,550	150,585,386	405,288,662	100.0	100.0	77.6
6/30/06	87,092,538	262,446,606	159,116,759	427,984,192	100.0	100.0	49.3
6/30/07	88,670,847	306,492,350	163,829,132	467,287,809	100.0	100.0	44.0
6/30/08	89,590,638	355,771,877	172,648,312	502,132,214	100.0	100.0	32.9
6/30/09	87,779,938	413,972,356	172,659,487	502,503,288	100.0	100.0	0.4

Kentucky Employees Retirement System
(Hazardous Insurance Fund)

Valuation Date	Actuarial Liabilities			Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)		(1)	(2)	(3)
6/30/04	$0	$142,872,557	$180,631,006	$169,158,879	100.0%	100.0%	14.6%
6/30/05	0	187,883,650	198,961,045	187,947,644	100.0	100.0	--
6/30/06	0	234,058,715	387,179,141	212,833,318	100.0	90.9	--
6/30/07	0	201,189,546	303,653,435	251,536,756	100.0	100.0	16.6
6/30/08	0	228,834,940	312,822,274	288,161,759	100.0	100.0	19.0
6/30/09	0	242,123,365	249,008,805	301,634,592	100.0	100.0	23.9

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

Solvency Test

(As of June 30, 2009)

County Employees Retirement System (Non-Hazardous Pension Fund)

	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets for		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/04	$814,908,627	$2,478,195,080	$1,643,355,781	$5,187,851,530	100.0%	100.0%	115.3%
6/30/05	837,513,907	2,814,210,355	1,733,432,428	5,059,208,687	100.0	100.0	81.2
6/30/06	883,946,564	3,210,095,023	2,085,527,680	5,162,894,136	100.0	100.0	51.3
6/30/07	920,126,096	3,589,512,063	2,149,807,967	5,467,824,480	100.0	100.0	44.6
6/30/08	963,213,677	4,058,767,419	2,282,236,595	5,731,502,438	100.0	100.0	31.1
6/30/09	991,628,551	4,542,483,102	2,378,801,859	5,650,789,991	100.0	100.0	4.9

County Employees Retirement System (Non-Hazardous Insurance Fund)

	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets for		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/04	$0	$955,930,091	$1,482,804,605	$585,399,072	100.0%	61.2%	--
6/30/05	0	1,144,219,107	1,644,535,547	663,941,949	100.0	58.0	--
6/30/06	0	1,694,600,143	2,912,623,496	777,726,590	100.0	45.9	--
6/30/07	0	1,372,128,406	1,961,837,664	960,285,900	100.0	70.0	--
6/30/08	0	1,521,450,274	2,061,743,192	1,168,883,170	100.0	76.8	--
6/30/09	0	1,478,782,753	1,591,603,265	1,216,631,769	100.0	82.3	--

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

Solvency Test

(As of June 30, 2009)

County Employees Retirement System
(Hazardous Pension Fund)

Valuation Date	Actuarial Liabilities			Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)		(1)	(2)	(3)
6/30/04	$256,366,204	$851,354,443	$533,109,473	$1,457,612,042	100.0%	100.0%	65.6%
6/30/05	264,913,465	960,052,305	570,651,565	1,452,353,023	100.0	100.0	39.8
6/30/06	300,200,800	1,128,164,618	591,777,352	1,515,075,017	100.0	100.0	14.7
6/30/07	317,007,367	1,275,221,775	616,507,037	1,639,288,924	100.0	100.0	7.6
6/30/08	338,324,362	1,406,982,409	657,815,324	1,750,867,373	100.0	100.0	0.8
6/30/09	350,308,879	1,540,262,587	687,873,134	1,751,487,540	100.0	91.0	--

County Employees Retirement System
(Hazardous Insurance Fund)

Valuation Date	Actuarial Liabilities			Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)		(1)	(2)	(3)
6/30/04	$0	$450,288,687	$575,395,790	$310,578,162	100.0%	69.0%	--
6/30/05	0	586,104,126	697,194,966	359,180,461	100.0	61.3	--
6/30/06	0	787,671,273	1,140,810,098	422,785,042	100.0	53.7	--
6/30/07	0	659,752,978	986,707,033	512,926,549	100.0	77.7	--
6/30/08	0	722,435,184	1,047,347,773	613,526,319	100.0	84.9	--
6/30/09	0	725,899,836	867,648,427	651,130,782	100.0	89.7	--

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

Solvency Test

(As of June 30, 2009)

State Police Retirement System
(Pension Fund)

Valuation Date	Actuarial Liabilities			Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)		(1)	(2)	(3)
6/30/04	$37,658,106	$318,664,694	$81,159,625	$385,077,195	100.0%	100.0%	35.4%
6/30/05	35,670,717	341,398,363	81,524,496	353,511,622	100.0	93.1	--
6/30/06	37,866,774	373,588,145	105,027,379	344,016,197	100.0	81.9	--
6/30/07	39,505,285	397,863,520	110,586,481	348,806,508	100.0	77.7	--
6/30/08	41,391,416	426,311,368	119,426,473	350,891,451	100.0	72.6	--
6/30/09	$41,664,469	$459,585,353	$101,079,046	$329,966,989	100.0%	62.7%	--

State Police Retirement System
(Insurance Fund)

Valuation Date	Actuarial Liabilities			Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)		(1)	(2)	(3)
6/30/04	$0	$119,104,851	$78,499,450	$96,622,908	100.0%	81.1%	--
6/30/05	0	141,585,694	92,573,816	100,207,082	100.0	70.8	--
6/30/06	0	240,913,868	341,666,999	105,580,269	100.0	43.8	--
6/30/07	0	172,291,142	260,472,087	115,215,912	100.0	66.9	--
6/30/08	0	178,655,245	266,452,223	123,961,197	100.0	69.4	--
6/30/09	$0	$167,091,453	$196,939,688	$123,526,647	100.0%	73.9%	--

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

Summary of Active Member Valuation Data as of June 30, 2009

	Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
Kentucky Employees Retirement System Non-Hazardous	6/30/04	N/A	47,599	$1,645,412,496	$34,568	2.5	42.9	10.0
	6/30/05	324	47,118	1,655,907,288	35,144	1.7	42.9	9.8
	6/30/06	338	46,707	1,702,230,777	36,445	3.7	43.0	9.7
	6/30/07	317	47,913	1,780,223,493	37,155	1.9	43.3	9.3
	6/30/08	414	48,085	1,837,873,488	38,221	2.9	43.2	9.1
	6/30/09	334	46,060	1,754,412,912	38,090	(0.3)	43.0	8.7
Kentucky Employees Retirement System Hazardous	6/30/04	N/A	4,014	126,664,812	$31,556	2.4	42.7	7.6
	6/30/05	26	4,274	131,687,088	30,811	(2.4)	41.9	7.1
	6/30/06	15	4,320	138,747,320	32,117	4.2	41.6	7.0
	6/30/07	15	4,349	144,838,020	33,304	3.7	41.7	7.0
	6/30/08	16	4,393	148,710,060	33,852	1.6	41.4	6.9
	6/30/09	20	4,334	146,043,576	33,697	(0.5)	41.4	7.0
County Employees Retirement System Non-Hazardous	6/30/04	N/A	80,922	1,826,870,880	22,576	3.4	44.8	7.9
	6/30/05	1,116	81,240	1,885,275,000	23,206	2.8	45.0	8.1
	6/30/06	1,099	83,694	1,982,437,473	23,687	2.1	45.1	8.1
	6/30/07	1,112	84,920	2,076,848,328	24,457	3.3	45.9	8.1
	6/30/08	1,110	85,221	2,166,612,648	25,423	3.9	45.9	8.3
	6/30/09	1,108	83,724	2,183,611,848	26,081	2.6	46.2	8.6
County Employees Retirement System Hazardous	6/30/04	N/A	9,349	392,562,624	41,990	4.1	38.1	8.1
	6/30/05	284	9,464	411,121,728	43,441	3.5	38.0	8.2
	6/30/06	292	9,635	426,927,550	44,310	2.0	37.8	8.3
	6/30/07	294	10,063	458,998,956	45,613	2.9	38.6	8.1
	6/30/08	299	10,173	474,241,332	46,618	2.2	38.7	8.3
	6/30/09	290	9,757	469,315,464	48,100	3.2	38.4	8.8
State Police Retirement System	6/30/04	1	999	43,835,208	43,879	2.2	36.4	10.7
	6/30/05	1	987	43,720,092	44,296	1.0	36.5	10.6
	6/30/06	1	1,028	47,743,865	46,443	4.8	36.5	10.5
	6/30/07	1	957	49,247,580	51,460	10.8	37.3	11.1
	6/30/08	1	993	53,269,080	53,645	4.2	36.9	10.8
	6/30/09	1	946	$51,660,396	$54,609	1.8	37.3	11.0

[1] Annual payroll included in the Summary of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2009.

Schedule of Retirees & Beneficiaries Added to and Removed from Rolls as of June 30, 2009

	Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances[1]	% Increase in Allowances	Average Annual Allowance
Kentucky Employees Retirement System Non-Hazardous	6/30/04	2,473	814	28,892	$449,410,400	14.34	$15,555
	6/30/05	2,481	603	30,770	509,347,800	13.34	16,553
	6/30/06	2,481	1,111	32,140	566,167,003	11.31	17,611
	6/30/07	2,440	731	33,849	625,435,416	10.47	18,477
	6/30/08	2,573	1,115	35,307	710,505,270	13.60	20,124
	6/30/09	3,465	889	37,883	812,559,070	14.36	21,449
Kentucky Employees Retirement System Hazardous	6/30/04	227	35	1,549	16,099,000	24.08	10,393
	6/30/05	234	31	1,752	19,640,700	22.00	11,210
	6/30/06	256	28	1,980	23,381,537	19.25	11,809
	6/30/07	241	19	2,202	27,528,789	17.74	12,502
	6/30/08	261	59	2,404	33,588,993	22.01	13,972
	6/30/09	339	95	2,648	38,695,501	15.20	14,613
County Employees Retirement System Non-Hazardous	6/30/04	2,805	768	29,129	247,534,300	12.59	8,498
	6/30/05	2,808	590	31,347	279,590,300	12.95	8,919
	6/30/06	2,782	1,027	33,102	308,269,651	10.26	9,313
	6/30/07	3,244	782	35,564	348,712,020	13.12	9,805
	6/30/08	3,366	1,351	37,759	393,757,510	12.92	10,478
	6/30/09	3,060	883	39,756	440,061,418	11.76	11,069
County Employees Retirement System Hazardous	6/30/04	343	75	4,005	79,559,200	10.01	19,865
	6/30/05	403	47	4,361	89,224,700	12.15	20,460
	6/30/06	427	76	4,712	100,290,052	12.40	21,284
	6/30/07	500	53	5,159	113,735,850	13.41	22,046
	6/30/08	469	206	5,422	127,477,109	12.08	23,511
	6/30/09	650	264	5,808	139,886,751	9.73	24,085
State Police Retirement System	6/30/04	62	11	992	30,805,600	9.57	31,054
	6/30/05	50	6	1,036	32,983,900	7.07	31,838
	6/30/06	43	10	1,067	34,651,251	5.06	32,475
	6/30/07	49	11	1,105	37,208,377	7.38	33,673
	6/30/08	42	12	1,135	41,293,016	10.98	36,382
	6/30/09	75	26	1,184	$44,273,937	7.22	$37,394

[1] The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

Summary of Benefit Provisions

KERS & CERS Non Hazardous Plans

Plan Funding

State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statute 61.565 and Kentucky Revised Statute 61.752. KERS rates are subject to state budget approval.

Membership Eligibility

For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility

Members whose participation began before 9/1/2008

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	5% per year for five years before age 65 or 27 years of service. 4% for each year thereafter.
Any	25	5% each year for five years before age 65 or 27 years of service.

Retirement Eligibility

Members whose participation began on or after 9/1/2008

Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None
60	10	5% per year for five years before age 65 or Rule of 87 (age plus years of service). 4% for each year thereafter.

Benefit Formula

Final Compensation	X	Benefit Factor		X	Years of Service
Average of the five highest, or if participation began on or after 9/1/2008 average of the last five.		KERS 1.97% if:	Member does not have 13 months credit from 1/98 - 1/99.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if:	Member has 13 months credit from 1/98 - 1/99.		
		KERS 2.20% if:	20 or more years of service, and retires by 1/09.		
		CERS 2.20% if:	Member begins participating prior to 8/1/04.		
		CERS 2.00% if:	Member begins participating on or after 8/1/04 and before 9/1/08.		
		KERS and CERS increasing percent based on service at retirement *(see chart to left)* plus 2.00% for each year of service over 30 if:	Member begins participating on or after 9/1/08.		

Benefit Factors for members with a participation date on or after 9/1/08

Service	Benefit Factor
10 years or less	1.10%
10+ to 20 years	1.30%
20+ to 26 years	1.50%
26+ to 30 years	1.75%
Additional years over 30	2.00%

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits

Members participating before August 1, 2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after August 1, 2004 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or, (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the CPI-U for the most recent calendar year, not to exceed 5%. The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit and be age 60 or meet the rule of 87 (age plus years of service) in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased annually by 1.5% from July 1, 2008.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

KERS & CERS Hazardous Plans & SPRS

Plan Funding

State statutes require active members to contribute 8% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statute 61.565 and Kentucky Revised Statute 61.752. KERS & SPRS rates are subject to state budget approval.

Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

Retirement Eligibility
Members whose participation began before 9/1/2008

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	6.5% per year for five years after 4.5% for remaining years before age 55 or 20 years of service.

Retirement Eligibility
Members whose participation began on or after 9/1/2008

Age	Years of Service	Allowance Reduction
60	5	None
Any	25	None
50	15	6.5% per year for five years and 4.5% for remaining years before age 55 or 20 years of service.

Benefit Factors for members with a participation date on or after 9/1/08

Service	Benefit Factor
10 years or less	1.30%
10+ to 20 years	1.50%
20+ to 25 years	2.25%
25+ Years	2.50%

Benefit Formula

Final Compensation	X	Benefit Factor		X	Years of Service
Average of the three highest, or if participation began on or after 9/1/2008 average of the last three.		KERS 2.49% CERS 2.50% SPRS 2.50%, if:	Member begins participating before 9/1/08.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS, CERS and SPRS increasing percent based on service at retirement *(see chart to left)* if:	Member begins participating on or after 9/1/08.		

Disability Benefits

Members hired before August 1, 2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members hired on or after August 1, 2004 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% Final Rate of Pay or the amount calculated under the Benefit Formula noted above based upon actual service.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or, (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least 4 years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5%. The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15 for each year of earned service increased annually by 1.5% after July 1, 2008.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

Data provided in the Statistical Section is calculated using different methodologies and may differ slightly from data found in the Actuarial and Financial Sections.

Statistical

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Membership by System

	Fiscal Year	Active	Inactive	Retired	Total
Kentucky Employees Retirement System Non-Hazardous	2004	47,599	25,775	28,892	102,266
	2005	47,118	28,345	30,770	106,233
	2006	46,707	29,143	32,140	107,990
	2007	47,913	30,904	33,849	112,666
	2008	48,202	32,717	35,286	116,205
	2009	46,060	34,515	37,883	118,458
Kentucky Employees Retirement System Hazardous	2004	4,014	2,032	1,549	7,595
	2005	4,274	2,304	1,752	8,330
	2006	4,320	2,501	1,981	8,802
	2007	4,349	2,738	2,202	9,289
	2008	4,397	3,534	2,402	10,333
	2009	4,334	3,056	2,648	10,038
County Employees Retirement System Non-Hazardous	2004	80,922	44,419	29,129	154,470
	2005	81,240	48,869	31,347	161,456
	2006	83,694	50,046	33,102	166,842
	2007	84,920	53,901	35,564	174,385
	2008	85,803	55,279	37,558	178,640
	2009	83,724	60,275	39,756	183,755

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

Membership by System

	Fiscal Year	Active	Inactive	Retired	Total
County Employees Retirement System Hazardous	2004	9,349	1,648	4,005	15,002
	2005	9,464	1,971	4,361	15,796
	2006	9,635	1,955	4,712	16,302
	2007	10,063	2,197	5,159	17,419
	2008	10,185	4,815	5,314	20,314
	2009	9,757	2,522	5,808	18,087
State Police Retirement System	2004	999	243	992	2,234
	2005	987	252	1,036	2,275
	2006	1,028	266	1,067	2,361
	2007	957	286	1,105	2,348
	2008	995	302	1,136	2,433
	2009	946	332	1,184	2,462
Kentucky Retirement Systems Total	2004	142,883	74,117	64,567	281,567
	2005	143,083	81,741	69,266	294,090
	2006	145,384	83,911	73,002	302,297
	2007	148,202	90,026	77,879	316,107
	2008	149,582	96,647	81,696	327,925
	2009	144,821	101,552	87,279	333,652

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

Average Monthly Benefit by Length of Service

	KERS Non-Hazardous		KERS Hazardous	
Service Credit Range	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	3,249	152.48	140	207.57
5 or more but less than 10	4,208	360.84	298	430.69
10 or more but less than 15	3,926	595.33	324	633.54
15 or more but less than 20	3,681	898.87	334	916.76
20 or more but less than 25	4,041	1,226.80	673	1,353.25
25 or more but less than 30	9,804	2,202.79	575	1,412.80
30 or more but less than 35	6,296	3,080.52	253	1,894.72
35 or more	2,649	4,300.04	69	2,552.66
Total	37,854	1,717.10	2,666	1,143.08
	CERS Non-Hazardous		CERS Hazardous	
Under 5 Years	3,876	135.54	436	386.84
5 or more but less than 10	7,591	270.92	374	569.49
10 or more but less than 15	7,353	461.47	361	962.74
15 or more but less than 20	5,625	696.70	422	1,150.57
20 or more but less than 25	5,558	930.21	2,212	1,896.52
25 or more but less than 30	7,290	1,832.98	1,434	2,527.18
30 or more but less than 35	1,976	2,591.53	523	3,474.51
35 or more	567	3,388.07	122	4,353.60
Total	39,836	890.24	5,884	1,934.42
	SPRS			
Under 5 Years	82	495.18		
5 or more but less than 10	36	825.2		
10 or more but less than 15	37	1,135.60		
15 or more but less than 20	69	1,876.48		
20 or more but less than 25	324	2,339.12		
25 or more but less than 30	381	3,309,35		
30 or more but less than 35	217	4,395.95		
35 or more	62	5,311.23		
Total	1,208	2,933.57		

The information in the above table includes only individuals receiving a monthly benefit as of June 30, 2009. Retired reemployed members and individuals deceased prior to June are not included; therefore, the numbers in this section may differ from the numbers in the Financial and Actuarial Sections.

Schedule of Participating Employers

Agency Classification	Number of Agencies	Number of Employees
Kentucky Employees Retirement System		
Agencies Reporting Through State Payroll	170	33,425
Other Agencies (universities, mental health boards, health departments)	144	16,754
Special Districts and Boards	4	407
Child Support Offices (county attorneys)	62	216
Other State-Administered Retirement Systems	3	294
Total	383	51,096
State Police Retirement System		
Kentucky State Police-Uniformed Officers	1	946
County Employees Retirement System		
Area Development Districts	13	666
Boards of Education	174	48,946
Cities	216	6,427
County Attorneys	64	588
County Clerks	14	583
County Government Agencies	261	21,848
Fire Departments	67	910
Hospitals	3	346
Jailers	9	427
Libraries	83	1,096
Planning Commissions	11	189
Police Departments	92	704
Police & Fire Departments (combined)	61	3,482
Sanitation Districts	5	58
Sheriff Departments	53	1,152
Special Districts and Boards	165	3,021
Utility boards	104	3,465
Urban County Government Agencies	4	2,088
Total	1,399	95,996

Principal Participating Employers- KERS and CERS

Participating Employer	Rank	Covered Employees	% of Total System
Kentucky Employees Retirement System			
Health & Family Services Cabinet: Department for Community Based Services	1	4243	8.30%
Transportation: Department of Highways	2	3874	7.58%
Justice & Public Safety Cabinet: Department of Corrections	3	3638	7.12%
Bluegrass Regional Mental Health/Mental Retardation Board	4	2421	4.74%
Administrative Office of the Courts	5	1525	2.98%
Justice & Public Safety Cabinet: Department of Juvenile Justice	6	1504	2.94%
Seven County Services Inc.	7	1119	2.19%
Unified Prosecutorial System (Child Support Offices)	8	1054	2.06%
Eastern Kentucky University	9	1037	2.03%
Kentucky Department of Parks	10	1017	1.99%
All Others		29,664	58.06%
Total		51,096	100.00%
County Employees Retirement System			
Jefferson County Board of Education	1	6642	6.92%
Louisville/Jefferson County Metro	2	3137	3.27%
Louisville/Jefferson County Metro (Police, Fire, EMS)	3	2301	2.40%
Fayette County Board of Education	4	1892	1.97%
Circuit Clerks	5	1856	1.93%
Lexington/Fayette Urban County Government	6	1582	1.65%
Boone County Board of Education	7	1112	1.16%
Hardin County Board of Education	8	1086	1.13%
Warren County Board of Education	9	926	0.96%
Bullitt County Board of Education	10	909	0.95%
All Others		74,553	77.66%
Total	.	95,996	100.00%

Plan Net Assets Dollars in Thousands ($)

		Non-Hazardous			Hazardous		
		Pension	Insurance	Total	Pension	Insurance	Total
Kentucky Employees Retirement System	June 30 2004	5,258,995	587,681	5,846,676	366,568	162,127	528,695
	June 30 2005	5,362,631	610,901	5,973,532	398,308	188,871	587,179
	June 30 2006	5,440,133	612,643	6,052,776	437,030	223,523	660,553
	June 30 2007	5,773,157	663,558	6,436,715	510,775	280,886	791,661
	June 30 2008	5,056,869	574,479	5,631,348	484,438	269,300	753,738
	June 30 2009	3,584,601	365,367	3,949,968	388,951	219,500	608,451

		Non-Hazardous			Hazardous		
		Pension	Insurance	Total	Pension	Insurance	Total
County Employees Retirement System	June 30 2004	4,613,335	563,877	5,177,212	1,305,012	297,737	1,602,749
	June 30 2005	4,893,600	668,485	5,562,085	1,411,246	360,940	1,772,186
	June 30 2006	5,191,377	813,251	6,004,628	1,528,845	441,279	1,970,124
	June 30 2007	5,812,936	1,084,043	6,896,979	1,754,935	570,156	2,325,091
	June 30 2008	5,431,735	1,105,945	6,537,680	1,644,982	576,414	2,221,396
	June 30 2009	4,331,010	894,490	5,225,500	1,320,560	483,233	1,803,793

		Pension	Insurance	Total
State Police Retirement System	June 30 2004	335,721	90,420	426,141
	June 30 2005	339,406	99,408	438,814
	June 30 2006	352,841	110,491	463,332
	June 30 2007	376,381	132,574	508,955
	June 30 2008	337,359	121,782	459,141
	June 30 2009	256,575	93,682	350,257

		Pension	Insurance	Total
Kentucky Retirement Systems Total	June 30 2004	11,879,631	1,701,842	13,581,473
	June 30 2005	12,405,191	1,928,605	14,333,796
	June 30 2006	12,950,226	2,201,187	15,151,413
	June 30 2007	14,228,184	2,731,217	16,959,401
	June 30 2008	12,955,383	2,647,920	15,603,303
	June 30 2009	9,881,697	2,056,272	11,937,969

Changes in Plan Net Assets Dollars in Thousands ($)

Kentucky Employees Retirement System Non-Hazardous Pension Fund

	2004	2005	2006	2007	2008	2009
Additions						
Member Contributions	$129,077	$127,801	$107,607	$116,254	$116,487	$108,362
Employer Contributions	21,697	50,333	60,681	88,249	104,655	112,383
Health Insurance Contribution (HB1)	0	0	0	0	0	404
Net Investment Income	651,532	462,638	504,361	784,652	(221,578)	(867,675)
Total Additions	802,306	640,772	672,649	989,155	(436)	(646,526)
Deductions						
Benefit Payments	459,367	522,396	577,947	640,201	699,052	808,513
Refunds	8,001	8,824	9,632	9,489	9,076	9,127
Administrative Expenses	5,262	5,916	7,568	7,070	7,724	8,102
Other Expenses	0	0	0	13	0	0
Total Deductions	472,630	537,136	595,147	656,773	715,852	825,742
Change in Plan Net Assets (Difference between Additions and Deductions)	**$329,676**	**$103,636**	**$77,502**	**$332,382**	**(716,288)**	**(1,472,268)**

Kentucky Employees Retirement System Non-Hazardous Insurance Fund

	2004	2005	2006	2007	2008	2009
Additions						
Employer Contributions	$78,017	$51,432	$47,635	$64,014	$56,745	$74,434
Net Investment Income	83,064	47,823	65,839	78,877	(38,965)	(154,894)
Member Drug Reimbursement	0	0	0	10,744	6,634	8,168
Insurance Appropriation	0	0	11,852	0	0	0
Premiums Rec'd from Retirees	0	0	5,770	12,196	12,940	12,230
Total Additions	161,081	99,255	131,096	165,831	37,354	(59,972)
Deductions						
Benefit Payments	59,987	75,571	95,823	111,659	122,946	145,036
Administrative Expenses	484	464	1,679	3,199	3,487	4,104
Insurance Appropriation	0	0	20,000	0	0	0
Total Deductions	60,471	76,035	117,502	114,858	126,433	149,140
Change in Plan Net Assets (Difference between Additions and Deductions)	**$100,610**	**$23,220**	**$1,742**	**$50,973**	**(89,079)**	**(209,112)**

Changes in Plan Net Assets Dollars in Thousands ($)

Kentucky Employees Retirement System Hazardous Pension Fund

	2004	2005	2006	2007	2008	2009
Additions						
Member Contributions	$11,548	$11,625	$12,056	$13,245	$13,091	12,442
Employer Contributions	9,769	9,758	10,803	13,237	15,257	15,843
Health Insurance Contribution (HB1)	0	0	0	0	0	38
Net Investment Income	43,403	33,123	41,680	77,996	(20,673)	(84,262)
Total Additions	64,720	54,506	64,539	104,478	7,675	(55,939)
Deductions						
Benefit Payments	16,863	20,495	23,736	28,514	31,606	37,556
Refunds	1,410	1,760	1,436	1,662	1,742	1,277
Administrative Expenses	392	511	645	611	664	715
Other Expenses	0	0	0	1	0	0
Total Deductions	18,665	22,766	25,817	38,788	34,012	39,548
Change in Plan Net Assets (Difference between Additions and Deductions)	**$46,055**	**$31,740**	**$38,722**	**$73,690**	**(26,337)**	**(95,487)**

Kentucky Employees Retirement System Hazardous Insurance Fund

	2004	2005	2006	2007	2008	2009
Additions						
Employer Contributions	$14,959	$15,653	$17,012	$19,535	$21,997	20,803
Net Investment Income	25,206	15,999	24,128	44,541	(25,740)	(60,641)
Member Drug Reimbursement	0	0	0	105	74	186
Insurance Appropriation	0	0	88	0	0	0
Premiums Rec'd from Retirees	0	0	0	204	247	300
Total Additions	40,165	31,652	41,228	64,385	(3,422)	(39,352)
Deductions						
Benefit Payments	3,539	4,853	6,513	6,874	8,069	10,304
Administrative Expenses	21	55	63	83	95	144
Total Deductions	3,560	4,908	6,576	6,957	8,164	10,448
Change in Plan Net Assets (Difference between Additions and Deductions)	**$36,605**	**$26,744**	**$34,652**	**$57,428**	**(11,586)**	**(49,800)**

Changes in Plan Net Assets Dollars in Thousands ($)

	2004	2005	2006	2007	2008	2009
County Employees Retirement System Non-Hazardous Pension Fund						
Additions						
Member Contributions	$122,484	$127,637	$112,372	$121,979	$125,014	$122,518
Employer Contributions	44,028	54,617	90,834	124,261	150,925	179,286
Health Insurance Contribution (HB1)	0	0	0	0	0	415
Net Investment Income	551,669	413,672	444,092	760,541	(228,020)	(927,090)
Total Additions	718,181	595,926	647,298	1,009,736	47,919	(624,871)
Deductions						
Benefit Payments	260,643	294,590	325,135	356,648	403,958	451,304
Refunds	11,334	11,042	11,589	11,396	11,924	10,719
Administrative Expenses	8,694	10,029	12,797	12,197	13,238	13,831
Other Expenses	0	0	0	22	0	0
Total Deductions	280,671	315,661	349,521	389,263	429,120	475,854
Change in Net Assets (Difference between Additions and Deductions)	**$437,510**	**$280,265**	**$297,777**	**$620,473**	**(381,201)**	**(1,100,725)**
County Employees Retirement System Non-Hazardous Insurance Fund						
Additions						
Employer Contributions	$89,344	$107,632	$128,868	$147,609	$196,110	123,761
Net Investment Income	86,080	55,723	83,991	188,055	(95,924)	(244,148)
Member Drug Reimbursement	0	0	0	9,623	6,003	7,624
Insurance Appropriation	0	0	6,365	0	0	0
Premiums Rec'd from Retirees	0	0	0	13,997	15,104	14,356
Total Additions	175,424	163,355	219,224	359,284	121,293	(98,407)
Deductions						
Benefit Payments	46,654	58,262	72,919	85,199	95,966	108,995
Administrative Expenses	393	485	1,539	3,040	3,425	4,053
Total Deductions	47,047	58,747	74,458	88,239	99,391	113,048
Change in Net Assets (Difference between Additions and	**$128,377**	**$104,608**	**$144,766**	**$271,045**	**$21,902**	**(211,455)**

Changes in Plan Net Assets Dollars in Thousands ($)

	2004	2005	2006	2007	2008	2009
County Employees Retirement System Hazardous Pension Fund						
Additions						
Member Contributions	$38,668	$39,515	$39,055	$43,650	$44,260	$42,582
Employer Contributions	27,641	39,948	49,976	61,553	72,155	78,151
Health Insurance Contribution (HB1)	0	0	0	0	0	37
Net Investment Income	154,628	119,901	132,915	240,035	(97,393)	(302,748)
Total Additions	220,937	199,364	221,946	345,238	19,022	(181,978)
Deductions						
Benefit Payments	81,422	90,119	101,087	115,604	125,191	138,810
Refunds	2,520	2,139	2,147	2,563	2,641	2,436
Administrative Expenses	759	872	1,113	1,073	1,143	1,198
Other Expenses	0	0	0	2	0	0
Total Deductions	84,701	93,130	104,347	119,242	128,975	142,444
Change in Net Assets (Difference between Additions and Deductions)	**$136,236**	**$106,234**	**$117,599**	**$225,996**	**(109,953)**	**(324,422)**
County Employees Retirement System Hazardous Insurance Fund						
Additions						
Employer Contributions	$47,037	$55,552	$64,854	$70,073	$90,113	70,783
Net Investment Income	44,337	29,819	98	90,041	(48,529)	(123,461)
Member Drug Reimbursement	0	0	0	657	420	628
Insurance Appropriation	0	0	45,317	0	0	0
Premiums Rec'd from Retirees	0	0	0	191	222	330
Total Additions	91,374	85,371	110,269	160,962	42,226	(51,720)
Deductions						
Benefit Payments	16,700	21,985	29,717	31,607	35,604	41,017
Administrative Expenses	105	183	213	320	364	444
Total Deductions	16,805	22,168	29,930	31,927	35,968	41,461
Change in Net Assets (Difference between Additions and Deductions)	**$74,569**	**$63,203**	**$80,339**	**$129,035**	**$6,258**	**(93,181)**

Changes in Plan Net Assets Dollars in Thousands ($)

State Police Retirement System Hazardous Pension Fund

	2004	2005	2006	2007	2008	2009
Additions						
Member Contributions	$4,875	$4,228	$4,814	$5,152	$5,407	$4,938
Employer Contributions	1,153	2,852	4,244	6,142	7,443	8,186
Health Insurance Contribution (HB1)	0	0	0	0	0	5
Net Investment Income	41,642	29,761	39,347	49,595	(12,283)	(51,175)
Total Additions	47,670	36,841	48,405	60,889	567	(38,046)
Deductions						
Benefit Payments	30,877	32,921	34,703	37,187	39,367	42,547
Refunds	96	131	133	47	85	69
Administrative Expenses	91	104	134	126	137	122
Other Expenses	0	0	0	0	0	0
Total Deductions	31,064	33,156	34,970	37,360	39,589	42,738
Change in Net Assets (Difference between Additions and Deductions)	**$16,606**	**$3,685**	**$13,435**	**$23,529**	**(39,022)**	**(80,784)**

State Police Retirement System Hazardous Insurance Fund

Additions						
Employer Contributions	$8,456	$6,974	$6,880	$6,489	$7,329	7,414
Net Investment Income	14,449	8,279	12,082	21,876	(11,440)	(28,166)
Member Drug Reimbursement	0	0	0	361	184	229
Insurance Appropriation	0	0	5	0	0	0
Premiums Rec'd from Retirees	0	0	0	8	9	23
Total Additions	22,905	15,253	18,967	28,734	(3,918)	(20,500)
Deductions						
Benefit Payments	4,992	6,221	7,816	6,515	6,768	7,476
Administrative Expenses	31	44	68	105	106	124
Total Deductions	5,023	6,265	7,884	6,620	6,874	7,600
Change in Net Assets (Difference between Additions and Deductions)	**$17,882**	**$8,988**	**$11,083**	**$22,114**	**(10,792)**	**28,100**

Schedule of Benefit Expenses by Type

Kentucky Employees Retirement System Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2003-04					
Average Benefit	$859	$1,537	$825	$721	$1,296
Number	3,768	19,477	1,925	3,740	28,910
Total Monthly Benefits	$3,237,300	$29,941,376	$1,587,565	$2,697,409	$37,463,650
% of Total Monthly Benefits	8.6%	79.9%	4.2%	7.2%	100.0%
FY 2004-05					
Average Benefit	$910	$1,632	$850	$739	$1,379
Number	3,866	21,092	1,910	3,902	30,770
Total Monthly Benefits	$3,516,148	$34,423,089	$1,623,500	$2,882,916	$42,445,653
% of Total Monthly Benefits	8.3%	81.1%	3.8%	6.8%	100.0%
FY 2005-06					
Average Benefit	$888	$1,670	$834	$868	$1,469
Number	4,616	24,056	2,628	849	32,149
Total Monthly Benefits	$4,099,896	$40,184,892	$2,190,812	$737,173	$47,212,773
% of Total Monthly Benefits	8.7%	85.1%	4.6%	1.6%	100.0%
FY 2006-07					
Average Benefit	$936	$1,745	$865	$869	$1,541
Number	4,767	25,605	2,597	843	33,812
Total Monthly Benefits	$4,463,823	$44,672,320	$2,245,823	$732,470	$52,114,436
% of Total Monthly Benefits	8.6%	85.7%	4.3%	1.4%	100.0%
FY 2007-08					
Average Benefit	$980	$1,831	$897	$906	$1,624
Number	4,845	27,080	2,579	839	35,343
Total Monthly Benefits	$4,747,523	$49,585,033	$2,313,860	$760,088	$57,406,504
% of Total Monthly Benefits	8.3%	86.4%	4.0%	1.3%	100.0%
FY 2008-09					
Average Benefit	$ 1,036	$1,926	$927	$931	$1,717
Number	5,041	29,386	2,566	861	37,854
Total Monthly Benefits	5,223,184	56,596,178	2,377,856	801,966	64,999,184
% of Total Monthly Benefits	8.0%	87.1%	3.7%	1.2%	100.0%

Note:

The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. Also, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

Schedule of Benefit Expenses by Type

Kentucky Employees Retirement System Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2003-04					
Average Benefit	$711	$1,221	$481	$613	$864
Number	718	554	129	157	1,558
Total Monthly Benefits	$510,827	$676,463	$62,112	$96,194	$1,345,596
% of Total Monthly Benefits	38.0%	50.3%	4.6%	7.1%	100.0%
FY 2004-05					
Average Benefit	$775	$1,292	$568	$600	$934
Number	808	647	117	180	1,752
Total Monthly Benefits	$626,082	$836,193	$66,456	$107,998	$1,636,729
% of Total Monthly Benefits	38.3%	51.1%	4.1%	6.6%	100.0%
FY 2005-06					
Average Benefit	$802	$1,333	$521	$749	$980
Number	1,002	760	163	67	1,992
Total Monthly Benefits	$803,581	$1,013,373	$84,975	$50,201	$1,952,130
% of Total Monthly Benefits	41.1%	51.9%	4.4%	2.6%	100.0%
FY 2006-07					
Average Benefit	$862	$1,391	$540	$731	$1,038
Number	1,116	854	167	76	2,213
Total Monthly Benefits	$962,085	$1,188,289	$90,109	$55,536	$2,296,019
% of Total Monthly Benefits	41.9%	51.8%	3.9%	2.4%	100.0%
FY 2007-08					
Average Benefit	$912	$1,455	$549	$751	$1,094
Number	1,231	952	173	78	2,434
Total Monthly Benefits	$1,123,281	$1,384,856	$94,999	$58,567	$2,661,703
% of Total Monthly Benefits	42.2%	52.0%	3.6%	2.2%	100.0%
FY 2008-09					
Average Benefit	941	1,517	576	778	1,143
Number	1,353	1,066	173	74	2,666
Total Monthly Benefits	1,272,796	1,617,453	99,607	57,607	3,047,462
% of Total Monthly Benefits	41.8%	53.1%	3.3%	1.8%	100.0%

Note:

The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. Also, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

Schedule of Benefit Expenses by Type

County Employees Retirement System Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2003-04					
Average Benefit	$463	$829	$697	$491	$708
Number	5,848	17,463	2,814	3,025	29,150
Total Monthly Benefits	$2,708,649	$14,483,996	$1,961,590	$1,486,749	$20,640,984
% of Total Monthly Benefits	13.1%	70.2%	9.5%	7.2%	100.0%
FY 2004-05					
Average Benefit	$475	$873	$720	$512	$743
Number	6,131	19,075	2,854	3,287	31,347
Total Monthly Benefits	$2,915,109	$16,644,747	$2,054,880	1,684,459	$23,299,195
% of Total Monthly Benefits	12.5%	71.4%	8.8%	7.2%	100.0%
FY 2005-06					
Average Benefit	$484	$889	$715	$534	$774
Number	7,207	21,655	3,582	861	33,305
Total Monthly Benefits	$3,487,493	$19,256,550	$2,560,722	$460,095	$25,764,859
% of Total Monthly Benefits	13.6%	74.7%	9.9%	1.8%	100.0%
FY 2006-07					
Average Benefit	$509	$938	$747	$540	$817
Number	7,694	23,460	3,612	864	35,630
Total Monthly Benefits	$3,919,356	$21,999,359	$2,696,721	$484,037	$29,099,472
% of Total Monthly Benefits	13.5%	75.6%	9.2%	1.7%	100.0%
FY 2007-08					
Average Benefit	$523	$978	$776	$582	$852
Number	8,109	25,070	3,679	876	37,734
Total Monthly Benefits	$4,241,906	24,530,372	2,856,173	510,523	32,138,704
% of Total Monthly Benefits	13.2%	76.3%	8.9%	1.6%	100.0%
FY 2008-09					
Average Benefit	547	1,021	804	613	890
Number	8,471	26,720	3,728	917	39,836
Total Monthly Benefits	4,634,447	27,268,861	2,998,565	561,804	35,463,676
% of Total Monthly Benefits	13.1%	76.9%	8.5%	1.5%	100.0%

Note:

The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. Also, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

Schedule of Benefit Expenses by Type

County Employees Retirement System Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2003-04					
Average Benefit	$1,371	$1,942	$824	$1,177	$1,643
Number	785	2,489	481	299	4,054
Total Monthly Benefits	$1,076,329	$4,834,845	$396,302	$351,804	$6,659,280
% of Total Monthly Benefits	16.2%	72.6%	6.0%	5.3%	100.0%
FY 2004-05					
Average Benefit	$1,399	$2,031	$1,159	$910	$1,705
Number	865	2,642	332	522	4,361
Total Monthly Benefits	$1,209,803	$5,365,822	$384,788	$474,975	$7,435,388
% of Total Monthly Benefits	16.3%	72.2%	5.2%	6.4%	100.0%
FY 2005-06					
Average Benefit	$1,369	$2,059	$899	$974	$1,743
Number	1,079	3,062	580	96	4,817
Total Monthly Benefits	$1,477,504	$6,304,523	$521,285	$93,535	$8,396,847
% of Total Monthly Benefits	17.6%	75.1%	6.2%	1.1%	100.0%
FY 2006-07					
Average Benefit	$1,398	$2,147	$937	$944	$1,815
Number	1,212	3,329	592	95	5,228
Total Monthly Benefits	$1,693,771	$7,148,184	$554,911	$89,712	$7,486,579
% of Total Monthly Benefits	17.8%	75.3%	5.9%	1.0%	100.0%
FY 2007-08					
Average Benefit	$1,424	$2,228	$986	$1,021	$1,882
Number	1,307	3,555	610	101	5,573
Total Monthly Benefits	$1,861,441	7,922,072	601,207	103,077	10,487,797
% of Total Monthly Benefits	17.8%	75.5%	5.7%	1.0%	100.0%
FY 2008-09					
Average Benefit	1,452	2,299	1,014	1,020	1,934
Number	1,413	3,733	634	104	5,884
Total Monthly Benefits	2,052,162	8,581,241	642,604	106,103	11,382,110
% of Total Monthly Benefits	18.0%	75.4%	5.7%	0.9%	100.0%

Note:

The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. Also, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

Schedule of Benefit Expenses by Type
State Police Retirement System

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2003-04					
Average Benefit	$3,199	$2,637	$1,067	$2,108	$2,576
Number	112	748	49	88	997
Total Monthly Benefits	$358,290	$1,972,675	$52,259	$185,517	$2,568,741
% of Total Monthly Benefits	13.9%	76.8%	2.0%	7.2%	100.0%
FY 2004-05					
Average Benefit	$3,321	$2,741	$1,364	$1,862	$2,653
Number	107	775	35	119	1,036
Total Monthly Benefits	$355,361	$2,123,941	$47,740	$221,615	$2,748,657
% of Total Monthly Benefits	12.9%	77.3%	1.7%	8.1%	100.0%
FY 2005-06					
Average Benefit	$3,109	$2,698	$1,213	$1,643	$2,650
Number	145	864	56	28	1,093
Total Monthly Benefits	$450,794	$2,331,404	$67,950	$45,997	$2,896,146
% of Total Monthly Benefits	15.5%	80.4%	2.2%	1.9%	100.0%
FY 2006-07					
Average Benefit	$3,178	$2,797	$1,258	$1,761	$2,743
Number	146	900	57	27	1,130
Total Monthly Benefits	$464,053	$2,517,382	$71,724	$47,540	$3,100,699
% of Total Monthly Benefits	15.0%	81.2%	2.3%	1.5%	100.0%
FY 2007-08					
Average Benefit	$3,281	$2,892	$1,265	$1,970	$2,843
Number	150	931	56	26	1,163
Total Monthly Benefits	$492,198	$2,692,030	$70,822	$51,215	$3,306,265
% of Total Monthly Benefits	14.9%	81.4%	2.1%	1.6%	100.0%
FY 2008-09					
Average Benefit	3,400	2,985	1,293	2,025	2,934
Number	146	978	58	26	1,208
Total Monthly Benefits	496,355	2,919,782	74,971	52,649	3,543,757
% of Total Monthly Benefits	14.0%	82.4%	2.1%	1.5%	100.0%

Note:
The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. Also, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

Analysis of Initial Retirees

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
FY 2003-04					
Number	2,473	227	2,805	343	53
Average Service Credit (months)	280	255	209	262	320
Average Final Compensation	$47,872	$43,778	$29,172	$48,607	$68,533
Average Monthly Benefit	$1,932	$1,127	$837	$1,631	$3,468
FY 2004-05					
Number	2,481	234	2,808	403	50
Average Service Credit (months)	276	257	210	248	290
Average Final Compensation	$46,452	$45,654	$29,784	$49,920	$62,395
Average Monthly Benefit	$1,897	$1,216	$902	$1,765	$3,022
FY 2005-06					
Number	2,295	236	2,543	377	39
Average Service Credit (months)	267	239	197	260	259
Average Final Compensation	$46,746	$43,845	$29,794	$54,358	$62,049
Average Monthly Benefit	$1,885	$1,185	$851	$2,047	$2,614
Average System Payment for Health Insurance	$246	$381	$180	$543	$407

Analysis of Initial Retirees

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
FY 2006-07					
Number	2,284	228	2,902	433	48
Average Service Credit (months)	246	238	206	255	274
Average Final Compensation	$46,800	$45,142	$32,183	$55,038	$65,826
Average Monthly Benefit	$1,713	$1,289	$962	$1,987	$2,962
Average System Payment for Health Insurance	$225	$342	$194	$599	$ 497
FY 2007-08					
Number	2,219	243	2,736	355	40
Average Service Credit (months)	261	233	204	240	275
Average Final Compensation	$49,414	$44,992	$31,447	$54,223	$67,775
Average Monthly Benefit	$1,929	$1,289	$917	$2,014	$3,239
Average System Payment for Health Insurance	$221	$381	$181	$625	$501
FY 2008-09					
Number	3,229	257	2,761	322	59
Average Service Credit (months)	277	241	205	242	269
Average Final Compensation	51,617	48,542	34,940	57,016	69,388
Average Monthly Benefit	2,105	1,387	1,029	2,005	3,146
Average System Payment for Health Insurance	396	520	274	715	461

Pension Benefits Paid to Retirees and Beneficiaries Participating in a KRS Health Insurance Plan

		Under 5 Years	5-10 Years	10-15 Years	15-20 Years	More than 20 Years	Total
Kentucky Employees Retirement System Non-Hazardous	Number	327	1,262	2,111	2,620	20,832	27,152
	Average Monthly Benefit	174.80	371.60	585.47	905.93	2,568.41	2,122.89
Kentucky Employees Retirement System Hazardous	Number	22	76	201	233	1,474	2,006
	Average Monthly Benefit	413.87	572.99	827.05	1,224.94	2,439.09	2,043.63
County Employees Retirement System Non-Hazardous	Number	310	2,072	3,881	4,043	13,853	24,159
	Average Monthly Benefit	140.64	271.45	457,86	698.41	1,673.45	1,175.09
County Employees Retirement System Hazardous	Number	44	122	200	315	3,964	4,645
	Average Monthly Benefit	454.08	809.45	1,176.96	1,424.86	2,620.18	2,408.90
State Police Retirement System	Number	0	10	16	26	766	820
	Average Monthly Benefit	313.74	1,031.86	1,224.20	1,736.03	3,393.44	3,262.25

Insurance Benefits Paid to Retirees and Beneficiaries Participating in a KRS Health Insurance Plan

	KERS Non-Hazardous	CERS Non-Hazardous	KERS Hazardous	CERS Hazardous	SPRS
Number	27,152	24,159	2,006	4,645	820
Average Service Credit	304	246	272	281	323
Avg Monthly System Payment for Health Insurance	$400	$338	$580	$809	$807
Avg Monthly Member Payment for Health Insurance	$92	$107	$64	$38	$15
Total Monthly Payment for Health Insurance	$ 13,366,415.68	$ 10,753,018.14	$ 1,292,496.31	$3,932,475.79	$ 674,144.44

Payment Options Selected by Retired Members

		Basic	Social Security Adjustment	Period Certain	Suvivorship	Pop Up	Lump Sum
Kentucky Employees Retirement System Non-Hazardous	Number	12,105	2,890	4,522	6,050	6,290	2,099
	Monthly Benefits	$19,262,373	$8,162,731	$7,323,519	$12,532,065	$14,286,730	$2,416,976
Kentucky Employees Retirement System Hazardous	Number	596	214	271	433	615	264
	Monthly Benefits	$633,452	$451,084	$296,501	$552,775	$849,894	$273,397
County Employees Retirement System Non-Hazardous	Number	15,020	1,502	5,525	5,608	5,204	3,270
	Monthly Benefits	$11,183,716	$3,331,334	$4,470,127	$6,400,952	$6,885,208	$2,081,786
County Employees Retirement System Hazardous	Number	824	392	418	1,097	1,964	458
	Monthly Benefits	$1,525,205	$878,131	$760,995	$2,336,137	$4,723,176	$745,306
State Police Retirement System	Number	95	185	77	271	398	22
	Monthly Benefits	$296,484	$558,964	$231,906	$905,646	$1,372,788	$49,248
Kentucky Retirement System Total	Number	28,640	5,183	10,813	13,459	14,471	6,113
	Monthly Benefits	$32,901,230	$13,382,244	$13,083,040	$22,727,575	$28,117,786	$5,566,713

Retired Reemployed

From August 1, 1998 through August 31, 2008, state law allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service was observed. The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Retirees Who Have Been Reemployed In Full-time Positions
Covered By The Same Retirement System and Are Contributing to a New Account

Reemployed Retirees In KRS	KERS			CERS			SPRS
	Non-Haz	Haz	Total	Non-Haz	Haz	Total	Total
Total Active Employees	46,060	4,334	50,394	83,724	9,757	93,481	946
Total Retirees	37,883	2,648	40,531	39,756	5,808	45,564	1,184
Reemployed Retirees	761	66	827	1461	779	2240	0
% of Reemployed Retirees to Total Actives	1.65%	1.52%	1.64%	1.75%	7.98%	2.40%	0.00%
% of Reemployed Retirees to Total Retirees	2.01%	2.49%	2.04%	3.67%	13.41%	4.92%	0.00%
Average Age at Initial Retirement	52	50	52	57	48	54	0
Months of Service Credit at Initial Retirement	318	271	314	260	281	267	0
Final Compensation At Initial Retirement	$54,687	$52,458	$54,509	$32,798	$52,505	$39,651	$0
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2008-2009 (Second Retirement Account)	$47,304	$44,520	$47,082	$32,196	$44,796	$36,578	$0
Retirees Returning to Work for the Same Employer	298	25	323	1156	170	1326	0
% Retirees Returning to Work For Same Employer	39%	38%	39%	79%	22%	59%	0%

Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.
An additional 1,156 retirees have been reemployed in full-time positions covered by a different retirement system. Of this total, 616 KERS retirees have returned to work with an agency participating in CERS, 316 CERS retirees have returned to work with an agency participating in KERS, 99 SPRS retirees have returned to work with an agency participating in KERS, and 125 SPRS retirees have returned to work with an agency participating in CERS.

Employer Contribution Rates

In KERS, CERS, and SPRS both the employee and the employer contribute a percent of creditable compensation to the Systems. The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employees hired on or after September 1, 2008 contribute an additional 1% to health insurance. KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. In recent years, the Kentucky General Assembly has routinely suspended KRS 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the KRS Board of Trustees and its' consulting actuary. CERS employer rates for fiscal year 2008-2009 were enacted by House Bill 1 in the 2008 Special Legislative Session and were reduced from the rate recommended by the KRS Board of Trustees and it's consulting actuary. The following tables provide the employer contribution rate recommended by the Board and its' consulting actuary and the rate specified by the Executive Branch budget.

		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Kentucky Employees Retirement System Non-Hazardous	Budgeted Rate	5.89	5.89	7.75	8.50	10.01	11.61
	Recommended Rate	10.29	13.62	17.13	48.37	28.60	31.29
Kentucky Employees Retirement System Hazardous	Budgeted Rate	18.84	18.84	22.00	24.25	24.35	24.69
	Recommended Rate	19.47	21.50	23.32	47.11	34.78	35.54
County Employees Retirement System Non-Hazardous	Budgeted Rate	8.48	10.98	13.19	16.17	13.50	16.16
	Recommended Rate	8.48	10.98	13.19	16.17	15.58	20.19
County Employees Retirement System Hazardous	Budgeted Rate	22.08	25.01	28.21	33.87	29.50	33.08
	Recommended Rate	22.08	25.01	28.21	33.87	31.91	61.87
State Police Retirement System	Budgeted Rate	21.58	21.58	25.50	28.00	30.07	32.97
	Recommended Rate	28.08	34.83	42.30	120.00	60.14	43.36

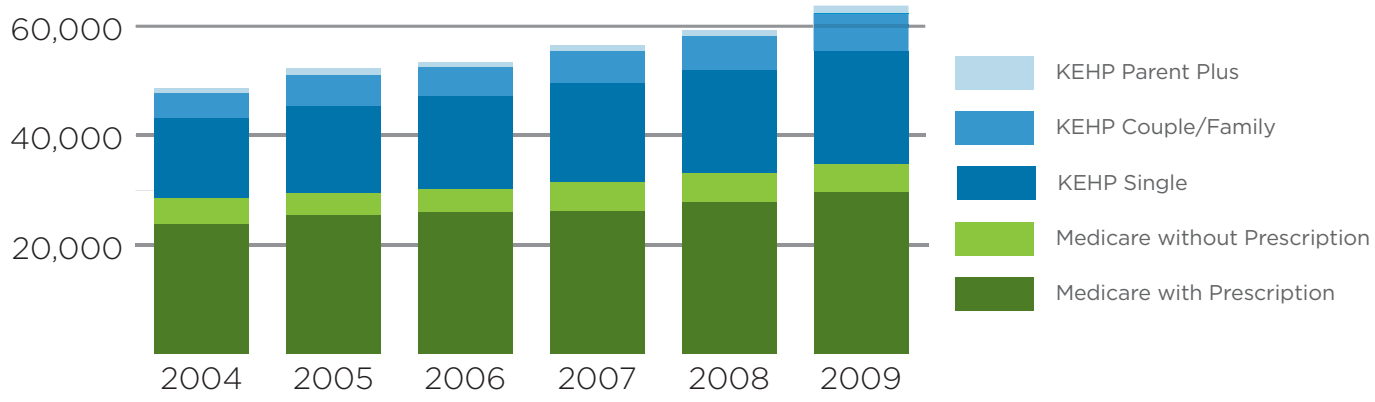
Insurance Contracts by Type

		2004	2005	2006	2007	2008	2009
Kentucky Employees Retirement System Non Hazardous	KEHP Parent Plus	443	461	490	525	568	762
	KEHP Couple/Family	1,462	1,679	1,826	2,131	2,187	2,621
	KEHP Single	7,313	7,928	8,393	8,996	9,383	10,635
	Medicare without Prescription	1,932	1,915	1,672	2,056	1,969	1,920
	Medicare with Prescription	11,437	11,764	12,000	12,007	12,636	13,231
Kentucky Employees Retirement System Hazardous	KEHP Parent Plus	65	65	58	70	69	74
	KEHP Couple/Family	276	319	378	398	443	502
	KEHP Single	502	570	656	686	741	823
	Medicare without Prescription	65	61	74	82	91	88
	Medicare with Prescription	531	567	603	606	687	763
County Employees Retirement System Non Hazardous	KEHP Parent Plus	246	255	249	284	292	335
	KEHP Couple/Family	946	1,022	1,058	1,274	1,320	1,456
	KEHP Single	5,598	6,014	6,298	6,767	7,126	7,609
	Medicare without Prescription	2,756	2,853	2,502	3,134	3,105	3,110
	Medicare with Prescription	10,424	11,005	11,803	11,908	12,684	13,583
County Employees Retirement System Hazardous	KEHP Parent Plus	223	195	198	210	226	245
	KEHP Couple/Family	1,463	1,579	1,739	1,836	1,947	2,041
	KEHP Single	1,087	1,220	1,275	1,363	1,394	1,404
	Medicare without Prescription	45	55	52	64	73	80
	Medicare with Prescription	913	1,004	1,105	1,197	1,367	1,518
State Police Retirement System Non Hazardous	KEHP Parent Plus	45	34	29	19	17	22
	KEHP Couple/Family	400	388	406	297	305	311
	KEHP Single	226	257	260	254	240	221
	Medicare without Prescription	13	10	9	9	7	9
	Medicare with Prescription	326	348	368	384	410	418

Insurance Contracts by Type

		2004	2005	2006	2007	2008	2009
Kentucky Retirement Systems Total	KEHP Parent Plus	1,022	1,010	1,024	1,108	1,172	1,438
	KEHP Couple/Family	4,547	4,987	5,407	5,936	6,202	6,931
	KEHP Single	14,726	15,989	16,882	18,066	18,884	20,692
	Medicare without Prescription	4,811	4,894	4,309	5,345	5,245	5,207
	Medicare with Prescription	23,631	24,688	25,879	26,102	27,784	29,513

Insurance Contracts by Type — KRS Total



Kentucky Retirement Systems Insurance Contracts

The Systems provides group rates on medical insurance and other managed care coverage for retired members. Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems.

Total Fiscal Year Retirement Payments by County

Adair	$5,050,049	Grant	$7,172,712	Mason	$4,741,600
Allen	$3,512,207	Graves	$9,412,375	Meade	$4,170,243
Anderson	$24,750,230	Grayson	$6,924,363	Menifee	$1,921,368
Ballard	$1,836,646	Green	$3,019,288	Mercer	$9,645,832
Barren	$10,957,361	Greenup	$5,671,504	Metcalfe	$2,522,621
Bath	$4,255,464	Hancock	$1,944,689	Monroe	$1,967,697
Bell	$7,640,732	Hardin	$22,682,375	Montgomery	$5,975,998
Boone	$19,787,319	Harlan	$7,189,530	Morgan	$5,954,532
Bourbon	$6,087,974	Harrison	$4,772,145	Muhlenberg	$4,786,881
Boyd	$12,245,787	Hart	$3,507,348	Nelson	$10,618,868
Boyle	$11,440,137	Henderson	$12,316,006	Nicholas	$1,946,003
Bracken	$2,089,936	Henry	$15,540,097	Ohio	$4,417,609
Breathitt	$5,880,090	Hickman	$1,205,099	Oldham	$17,890,838
Breckinridge	$4,541,461	Hopkins	$12,501,206	Owen	$9,304,824
Bullitt	$15,626,483	Jackson	$2,770,838	Owsley	$2,044,641
Butler	$2,984,324	Jefferson	$248,491,659	Pendleton	$4,011,850
Caldwell	$5,372,658	Jessamine	$11,062,643	Perry	$7,543,050
Calloway	$10,570,448	Johnson	$6,435,665	Pike	$12,128,614
Campbell	$17,495,850	Kenton	$29,469,154	Powell	$3,625,695
Carlisle	$1,362,695	Knott	$4,835,477	Pulaski	$27,296,955

Total Fiscal Year Retirement Payments by County

Carroll	$3,532,231	Knox	$5,764,505	Robertson	$788,392
Carter	$7,574,564	Larue	$3,675,756	Rockcastle	$3,577,106
Casey	$3,626,805	Laurel	$14,052,399	Rowan	$10,658,490
Christian	$20,935,650	Lawrence	$2,743,507	Russell	$5,358,997
Clark	$9,143,301	Lee	$2,669,096	Scott	$16,016,595
Clay	$5,873,737	Leslie	$2,480,082	Shelby	$29,746,273
Clinton	$2,337,043	Letcher	$5,512,897	Simpson	$1,876,215
Crittenden	$2,002,998	Lewis	$2,533,719	Spencer	$6,231,639
Cumberland	$1,947,954	Lincoln	$5,346,549	Taylor	$5,948,473
Daviess	$30,049,515	Livingston	$3,090,235	Todd	$2,640,885
Edmonson	$1,878,550	Logan	$5,576,441	Trigg	$5,894,511
Elliott	$1,608,200	Lyon	$4,368,440	Trimble	$3,225,601
Estill	$3,760,036	McCracken	$21,772,554	Union	$2,756,641
Fayette	$84,478,934	McCreary	$2,960,742	Warren	$33,616,504
Fleming	$7,093,524	McClean	$2,671,488	Washington	$3,380,470
Floyd	$10,501,487	Madison	$24,428,936	Wayne	$5,268,473
Franklin	$177,035,593	Magoffin	$3,016,429	Webster	$3,243,682
Fulton	$1,879,230	Marion	$4,802,064	Whitley	$10,214,010
Gallatin	$1,308,442	Marshall	$9,227,854	Wolfe	$3,524,787
Garrard	$4,379,341	Martin	$1,741,448	Woodford	$17,022,870

Comprehensive Annual Financial Report

Fiscal Year Ended June 30, 2010

Balance For Your Future

Kentucky Retirement Systems
A component unit of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

The Divisions of Accounting, Communications, Information Technology and Investments are responsible for the preparation of this document.

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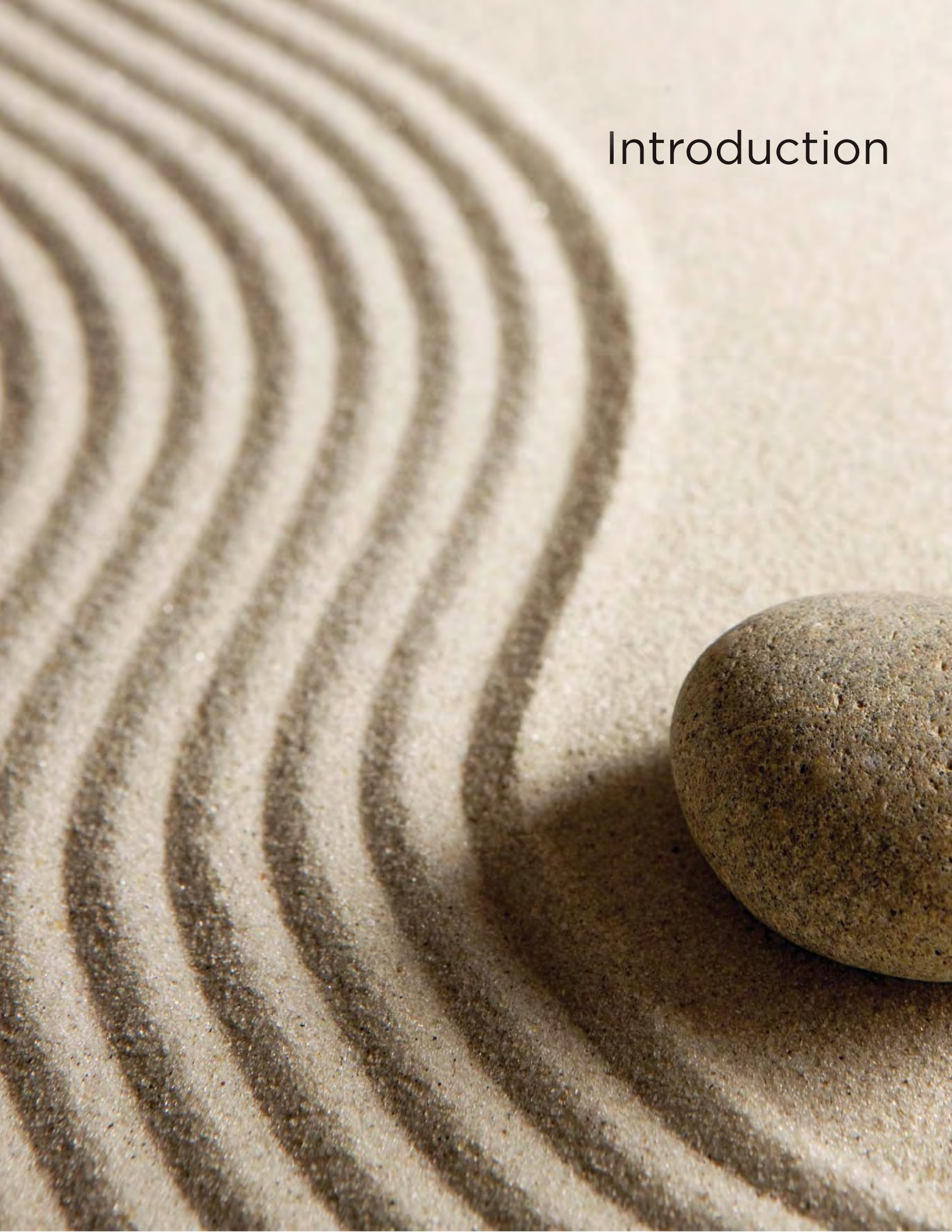
Introduction



Dear Board of Trustees & Membership

November 18, 2010
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year ended June 30, 2010. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation rests with the management of the Kentucky Retirement Systems. We present this information to assist the Board and members of KERS, CERS and SPRS (collectively referred to as KRS) in understanding KRS' financial and actuarial status. This CAFR conforms to the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. KRS' financial transactions are reported on the accrual basis of accounting. Additionally, internal accounting controls provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

Major Initiatives

KRS has continued an ongoing effort to raise awareness of the impact of reductions to the employer contribution rates for KERS and SPRS. For 12 out of the last 17 years, the State has appropriated less money than requested by the Board of Trustees to adequately fund the annual required contribution (ARC). This underfunding, coupled with increased benefits, unfunded annual cost of living allowances and two major economic recessions in the last decade, has resulted in funding ratios for the KERS non-hazardous and SPRS pension trusts that are dropping to alarmingly low levels. In 2008, the Kentucky General Assembly passed

a pension reform bill that included a schedule to increase employer contributions over the next several years until reaching the full ARC in 2025 for KERS non-hazardous, 2019 for KERS hazardous and 2020 for the SPRS system. According to the pension reform bill, employer contributions were to start increasing in the fiscal year beginning July 1, 2010 and ending June 30, 2011. It was, therefore, critical to receive that first increment in the 2010-2012 Biennial Budget. Thanks to support in both the Governor's Recommended Budget and the final budget enacted by the General Assembly, KERS and SPRS employers met their obligation to reach the contribution levels called for in the 2008 legislation. This should have a favorable effect by slowing the growth rate of unfunded liability and therefore the employer contributions in future years. KRS will continue to monitor and ask for support in the years ahead, as the ARC will continue to increase until employers reach paying the full ARC.

In 2009, KRS entered into a contract with the Centers for Medicare and Medicaid Services (CMS) to establish an Employee Group Waiver Plan for pharmacy benefits for Medicare-eligible retirees. This contract allows KRS to apply the full amount of the drug subsidy received from CMS toward its unfunded liability for medical benefits. KRS has just completed its first full year under this program, which brought an immediate reduction of over $1.7 billion to the unfunded medical liability for the fiscal year ended June 30, 2009. The reduced unfunded liability had an immediate favorable impact on employer contributions by reducing the amount of their contribution toward retiree health care.

KRS implemented a major phase of a new technology system in September 2009 which allows retirees to access their account information and service their accounts online. In order to train members on how to access and use the system, KRS staff conducted 17 different training sessions across the state in the spring of 2010, meeting with an average of over 200 retirees at each location. The most recent release of the Strategic Technology Advancements for the Retirement of Tomorrow (START) program allows retirees to conduct online open enrollment for health insurance as well offering the ability to change addresses, tax withholding information and other account servicing without having to speak with a counselor or submit hard copies. Constituents can keep current on future changes to START and access their account information on the KRS website at http://kyret.ky.gov.

Investments

Investment performance for the year ending June 30, 2010 improved significantly over the previous fiscal year. In FY 2009, KRS investments lost 17.21% of the market value of the portfolio but still performed in the top quartile of all pension funds nationwide through diversification of its portfolio. In FY 2010, KRS gained 15.8% on the total portfolio, for an increase in market value of just over $1.0 billion. Because the funding ratios of the various trust funds managed by KRS are diverging, the Investment Committee felt it necessary to conduct individual asset liability studies for each fund to determine if they need to be managed separately and assigned individual asset allocations. Pursuant to the objective, R.V. Kuhns, the general investment consultant for KRS, began the effort of conducting the individual studies and presented the first of their results in May 2010. Based on the data for the KERS pension and insurance trusts, the Board voted to make slight changes to the asset allocation model, and KRS investment staff is currently in the process of rebalancing the portfolio to accommodate those changes. Studies for CERS and SPRS were completed and presented to the Board in November 2010.

Actuarial Funding

KRS administers both a pension fund and an insurance fund for each of the systems it manages. These trusts are used to fund monthly pension and health care payment to and on behalf of retirees. Non-hazardous employees are statutorily required to contribute 5% of the pre-tax salary to their pension benefit, while hazardous employees contribute 8% on a pre-tax basis. All employees hired with an initial participation date on or after September 1, 2008 must contribute an additional 1% of their pre-tax income toward their retiree health insurance benefits. These monies are deposited in a 401(h) account within the pension trust. Employer contributions are calculated annually by the Board of Trustees and include the normal cost of pension and insurance benefits plus an amortized contribution toward the unfunded liability of the pension and insurance trusts. Employer contributions also include an administrative fee that is used to pay annual operating expenses of KRS.

Funding ratios have fallen both steadily and significantly over the last decade as a result of unfavorable market conditions, higher than anticipated retirement rates, employer underfunding and increased expenses for annual Cost of Living Allowance adjustments that are not pre-funded by the employers. While improved market conditions in FY 2010 have slowed the growth of the unfunded liabilities of the various systems, KRS uses a five-year smoothing method and the full effects of the market losses in 2008 and 2009 will not be realized for another four years. The funding levels of all systems as of June 30, 2010 are listed on pages 128 and 129 of the Actuarial Section.

Our History

KERS was created in 1956 by the Kentucky General Assembly in order to supplement the benefits provided by Social Security.

SPRS and CERS were established in 1958. When the first actuarial valuation of KERS was completed as of June 30, 1957, there were 16,000 employees participating in KERS and and the plan had assets of $2.8 million. The first actuarial valuation of SPRS was conducted June 30, 1959. No actuarial valuation of CERS was conducted until June 30, 1960 because the statutes did not authorize retirements from the system prior to July 1, 1960.

As of June 30, 2010, there were more than 318,000 active, inactive and retired members in the combined systems and approximately $12.9 billion in assets.

Professional Services

KRS continues to engage a number of professional consultants to assist trustees and staff in key business areas such as investments, taxes, auditing services and legal representation. A list of the Board's contract consultants can be found in the organizational chart on page 7. A list of external investment managers can be found in the Investment Section of this report.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2009. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports and is valid for a period of one year. This was the twelfth consecutive award earned by KRS. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized document. The report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe our current CAFR continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA for their consideration.

Other Information

Kentucky statutes require an annual audit by either an independent certified public accountant or the Auditor of Public Accounts. Dean, Dorton & Ford, PSC, Certified Public Accountants, performed the audit for the fiscal year ended June 30, 2010, and the results of that audit are contained in the Financial Section.

Respectfully,

Robert M. Burnside
Executive Director
Kentucky Retirement Systems

Certificate of Achievement for Excellence in Financial Reporting

KRS was awarded the Government Finance Officers Association's Certificate of Achievement, our twelfth consecutive year.

Board of Trustees

The Kentucky Retirement Systems (KRS) Board of Trustees is comprised of 9 members.

Two elected by KERS members, two elected by CERS members, one elected by SPRS members, three appointed by Governor Steve Beshear and the Secretary of the State Personnel Cabinet.

Jennifer Elliott
Governor Appointment

Bobby D. Henson
Elected by KERS

Nikki R. Jackson
Personnel Secretary

Vince Lang
Elected by CERS

Randy Overstreet
Elected by SPRS

W. Lewis Reynolds III
Governor Appointment

Susan Smith
Elected by KERS

Christopher Tobe
Governor Appointment

Robert Wilcher
Elected by CERS

Agency Structure

Board of Trustees

Audit Committee

Internal Auditor
Connie Davis

Compliance Officer
Ann Case

Investments Committee

Chief Investments Officer
Brent Aldridge (Interim)

Alternative Investments
Brent Aldridge

Equity Assets
Bo Cracraft

Fixed Income
David Peden

Executive Director
Robert M. Burnside

Chief Operations Officer
William A. Thielen

Chief Benefits Officer
Charlene Haydon

General Counsel
Schuyler Olt

Human Resources Director
Marlane Robinson

Accounting
Todd E. Coleman

Communications
Scarlett Consalvi

Employer Compliance & Education
Sarah Webb

Information Security
Mark McChesney

Information Technology
Chris Clark (Acting)

Procurement & Office Services
Joe Morris

Planning & Constituent Services
Shawn Sparks

START Project Manager
Chris Clark

Disabilities
Liza Welch

Member Services
Rebecca Stephens

Membership Support
Suzanne Howe

Retiree Services
Lela Hatter

Senior Advisor Retiree Health
Rick Schultz

Consultants

Actuarial Services
Cavanaugh Macdonald Consulting, LLC

Asset Management
Strategic Investment Solutions, Inc.

Auditing Services
Dean, Dorton, Ford PSC

Investment Consultant
R.V. Kuhns

Legal Consultant
Klausner & Kaufman, PA

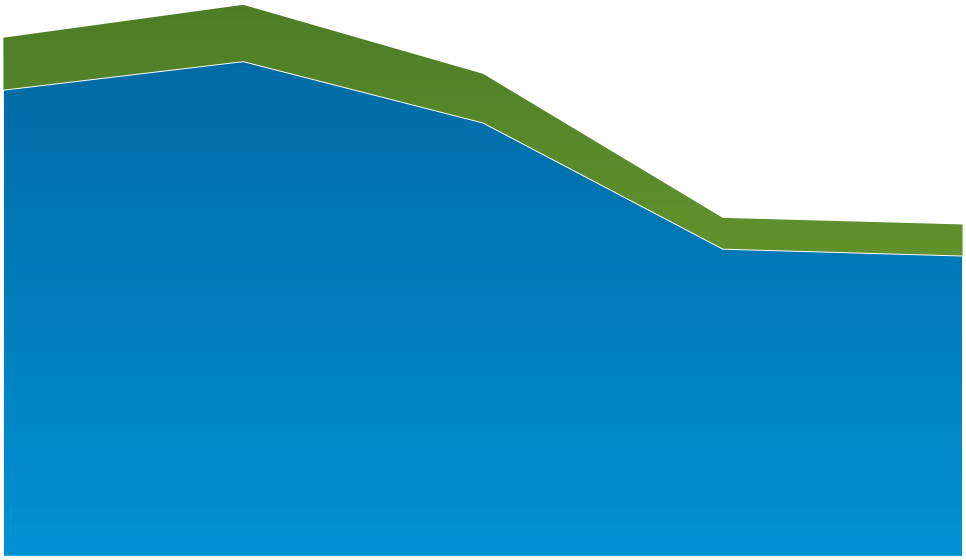
Legal Services
Stoll Keenon Ogden, PLLC

Fiduciary Review Consultants
Ice Miller, LLP

Real Estate Consultant
ORG

KERS
Non-Hazardous

Kentucky Employees Retirement System was established July 1, 1956 by the state legislature.



Net Assets Expressed in Thousands ($)

Fund	2006	2007	2008	2009	2010
Pension	$5,440,133	$5,773,157	$5,056,869	$3,584,601	$3,504,502
Insurance	612,585	663,558	574,479	365,367	368,798
					$3,873,300

Funding Level (% Pension)

38.26

Funding Level (% Insurance)

10.55

Membership Totals

35,733
Retired

46,710
Active

32,461
Inactive

Additions & Deductions in Millions ($)

Additions	2006	2007	2008	2009	2010
Income & Assets	$791.80	$1,154.90	$37.00	($706.50)	$928.42
Deductions					
Benefits, Refunds & Expenses	$712.60	$770.90	$842.30	$974.88	$1,005.09

Expanded data on pages 25-31 of the Financial Section.

KERS Hazardous

Kentucky Employees Retirement System was established July 1, 1956 by the state legislature.

Net Assets Expressed in Thousands ($)

Fund	2006	2007	2008	2009	2010
Pension	$437,030	$510,775	$484,438	$388,951	$443,606
Insurance	223,523	280,886	269,300	219,500	271,239
					$714,845

Membership Totals

1,900 Retired

4,049 Active

2,285 Inactive

Additions & Deductions in Millions ($)

Additions	2006	2007	2008	2009	2010
Income & Assets	$105.69	$168.70	$30.00	($95.29)	$159.87
Deductions					
Benefits, Refunds & Expenses	$32.30	$37.80	$42.20	$39.55	$53.48

Expanded data on pages 25-31 of the Financial Section.

Funding Level (% Pension)

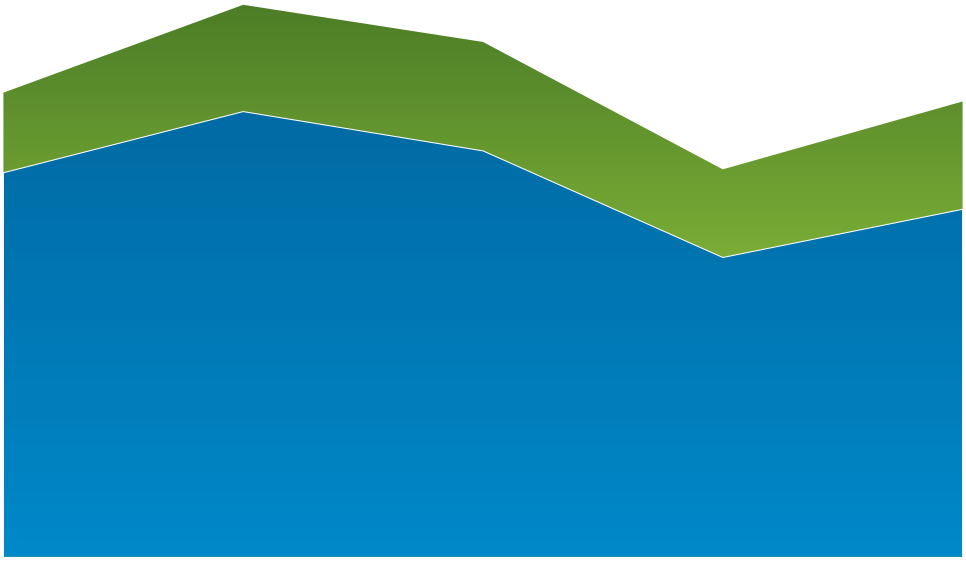
73.06

Funding Level (% Insurance)

63.74

CERS
Non-Hazardous

County Employees Retirement System was established July 1, 1958 by the state legislature.



Net Assets Expressed in Thousands ($)

Fund	2006	2007	2008	2009	2010
Pension	$5,191,377	$5,812,936	$5,413,735	$4,331,010	$4,820,488
Insurance	813,251	1,084,043	1,105,945	894,490	1,094,822
					$5,915,310

Funding Level (% Pension)

65.57

Membership Totals

38,261
Retired

84,010
Active

55,423
Inactive

Funding Level (% Insurance)

40.94

Additions & Deductions in Millions ($)

Additions	2006	2007	2008	2009	2010
Income & Assets	$866.30	$1,366.50	$265.10	($723.28)	$1,311.99
Deductions					
Benefits, Refunds & Expenses	$424.00	$468.40	$528.60	$588.90	$622.17

Expanded data on pages 25-31 of the Financial Section.

Net Assets Expressed in Thousands ($)

Fund	2006	2007	2008	2009	2010
Pension	$1,528,845	1,754,935	$1,644,982	$1,320,560	$1,506,894
Insurance	441,279	570,156	576,414	483,233	586,617
					$2,093,511

Membership Totals

4,867 Retired

9,120 Active

2,009 Inactive

Additions & Deductions in Millions ($)

Additions	2006	2007	2008	2009	2010
Income & Assets	$333.10	$506.30	$109.80	($233.70)	$478.59
Deductions					
Benefits, Refunds & Expenses	$134.20	$151.20	$164.90	$183.91	$188.87

Expanded data on pages 25-31 of the Financial Section.

CERS Hazardous

County Employees Retirement System was established July 1, 1958 by the state legislature.

Funding Level (% Pension)

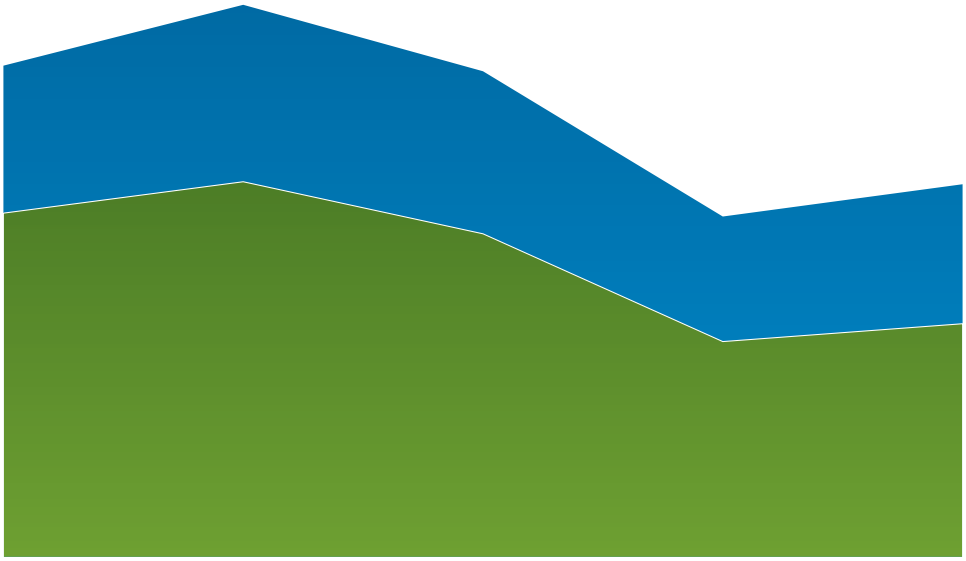
65.47

Funding Level (% Insurance)

41.37

SPRS
Hazardous

State Police Retirement System was established July 1, 1960 by the state legislature.



Net Assets Expressed in Thousands ($)

Fund	2006	2007	2008	2009	2010
Pension	$352,841	376,381	$337,359	$256,575	$264,949
Insurance	110,491	132,574	121,782	93,682	104,511
					$369,460

Funding Level (% Pension)

49.73

Membership Totals

1,004 Retired

948 Active

201 Inactive

Funding Level (% Insurance)

27.86

Additions & Deductions in Millions ($)

Additions	2006	2007	2008	2009	2010
Income & Assets	$67.30	$89.60	$8.00	($58.55)	$75.97
Deductions					
Benefits, Refunds & Expenses	$42.80	$43.95	$46.48	$50.34	$56.77

Expanded data on pages 25-31 of the Financial Section.

Financial

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Management's Responsibility for Financial Reporting

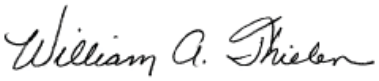
November 18, 2010

Management has prepared the basic financial statements of Kentucky Retirement Systems (KRS) and is responsible for the integrity and fairness of the information presented. Some amounts included in the financial statements may be based on estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these basic financial statements conform with US Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the basic financial statements.

Ultimate responsibility for the basic financial statements and annual report rests with the Board of Trustees. The Executive Director and staff assist the Board in its responsibilities. Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training of employees, the establishment of an organizational structure, and the communication of policies and guidelines throughout the organization. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and the Board of Trustees. Kentucky Retirement Systems' external auditors, Dean, Dorton & Ford, PSC, Certified Public Accountants, have conducted an independent audit of the basic financial statements in accordance

with US Generally Accepted Auditing Standards and Generally Accepted Government Auditing Standards, issued by the Comptroller General of the United States. This audit is described in their Independent Auditors' Report on page 16. Management has provided the external auditors with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of financial statements.

Robert M. Burnside, MS
Executive Director



William A. Thielen, Esq.
Chief Operations Officer

Todd E. Coleman, CPA
Controller

DEAN || DORTON || FORD PSC

Independent Auditors' Report

FYI

The Financial Audit is one of many assurance or attestation functions provided by accounting firms, whereby the firm provides an independent opinion on published information. Financial Audits are performed by firms of practicing Certified Public Accountants due to the specialized financial reporting knowledge they require.

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal years ended June 30, 2010 and 2009, as listed in the table of contents. These financial statements are the responsibility of the Kentucky Retirement Systems' management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2010 and 2009, and the changes in plan net assets for the fiscal years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated November 18, 2010, on our consideration of the Kentucky Retirement Systems' internal control over financial

reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audit.

The Management's Discussion and Analysis (pages 18 through 24) and the Schedule of Funding Progress and Schedule of Contributions from Employers and Other Contributing Entities (pages 72 through 81) are not a required part of the basic financial statements, but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The additional supporting schedules (pages 82 through 85) are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

The *Introductory, Actuarial, Investment, and Statistical* sections are presented for purposes of additional analysis and are not a required part of the basic financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and, accordingly, we express no opinion on them.

November 18, 2010
Lexington, Kentucky

Financial Highlights-Pension Funds

This discussion and analysis of Kentucky Retirement Systems' financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2010. Please read it in conjunction with the financial statements, which begin on page 25.

FYI

The Securities and Exchange Commission adopted requirements for Management Discussion and Analysis in 1974 to have management provide a narrative explanation of the financial statements. The idea was to allow the user to see the entity's financial position and operating results through management's eyes.

The following highlights are explained in more detail later in this discussion.

The combined plan net assets of all pension funds administered by Kentucky Retirement Systems increased by $658,743,265 during fiscal 2010.

Member and Employer contributions reported for fiscal 2010, totaled $714,383,768 compared to $685,589,301 in fiscal 2009. This increase is due to an increase in the covered payroll reported (in the case of the CERS Non-Hazardous plan), an increase in the employer contribution rates, and the collection of additional health insurance contributions passed by House Bill 1 in September 2008. Member contributions decreased $41,066,387 due to a decrease in service purchases which have become more expensive as a result of the passage of House Bill 1.

The net appreciation in the fair value of investments was $1,283,982,686 for the fiscal year ended June 30, 2010 compared to net depreciation of $2,538,596,591 for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $217,499,189. In comparison, the pension funds realized losses of $750,132,021 for the fiscal year ended June 30, 2009. The increase in realized gains experienced by the pension funds is due to more favorable market conditions.

Interest, dividend and net securities lending income was $266,361,224 compared to $327,290,507 in last fiscal year.

Pension benefits paid to retirees and beneficiaries totaled $1,516,062,239. Refund of contributions paid to former members upon termination of employment totaled $22,274,413.

Administrative expense totaled $24,848,036 compared to $23,970,064 in the prior fiscal year.

The member health insurance contribution, as a result of the passage of House Bill 1 (effective September 1, 2008) totaled $3,447,674, for the fiscal year ended June 30, 2010, compared to $898,946 in the prior fiscal year.

The impairment, incurred for unrealized losses associated with KRS' participation in the securities lending program at Northern Trust, totaled $0 as of June 30, 2010. Northern Trust reversed the remaining collateral deficiency payable in the Funds Collateral Pool. This reversal, effective March 15, 2010, in conjunction with the partial reversal processed on November 30, 2009, eliminated the payable amount originally posted to the various Common and Collective Funds using the Funds Collateral Pool in September 2008.

Financial Highlights-Insurance Fund

The following highlights are explained in more detail later in this discussion.

The combined plan net assets of the insurance fund administered by Kentucky Retirement Systems increased by $369,715,055 during fiscal 2010.

Premiums received from retirees who participated in the Medicare eligible self-funded plan totaled $29,130,888, compared to $27,121,929 in the prior fiscal year.

Employer contributions of $371,885,194 were received compared to $297,194,679 in fiscal 2009. This increase is due to an increase in the insurance contribution rate.

Retiree drug subsidies totaled $19,794,088 compared to $16,834,869 in fiscal 2009.

The net appreciation in the fair value of investments was $274,315,992 compared to net depreciation of $656,699,368 for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $91,605,212. In comparison, the insurance fund realized losses on investments of $205,178,412 in the prior fiscal year. This increase in realized gains is due to more favorable market conditions.

Interest, dividend and net securities lending income was $42,321,860 per compared to income of $47,701,924 in fiscal 2009.

Premiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled $223,352,760. Payments for the self-funded healthcare reimbursements (over age 65) totaled $130,142,423. The total of insurance premiums paid plus self-funded reimbursements was $353,495,183 for fiscal 2010. Insurance premiums paid plus self-funded healthcare reimbursements for the prior plan year totaled $312,827,500.

As part of the application process to the Centers for Medicare & Medicaid Services to enter into a contract to offer a Medicare Prescription Drug Plan, KRS was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents, and is invested on a daily basis. The balance as of June 30, 2010, totaled $100,446.

The reimbursement of retired-reemployed health insurance, as a result of the passage of House Bill 1 (effective September 1, 2008) totaled $2,032,659 for the fiscal year ended June 30, 2010, compared to $206,859 in the prior fiscal year.

The impairment, incurred for unrealized losses associated with KRS' participation in the securities lending program at Northern Trust, totaled $0 as of June 30, 2010. Northern Trust reversed the remaining collateral deficiency payable in the Funds Collateral Pool. This reversal, effective March 15, 2010, in conjunction with the partial reversal processed on November 30, 2009, eliminated the payable amount originally posted to the various Common and Collective Funds using the Funds Collateral Pool in September 2008.

Using This Financial Report

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combined Statement of Plan Net Assets for the Pension Funds, on page 25, and the Combined Statement of Plan Net Assets for the Insurance Fund, on page 28, provide a snapshot of the financial position of each of the three systems at June 30, 2010. The Combined Statement of Changes in Plan Net Assets for the Pension Funds, on pages 25-27, and the Combined Statement of Changes in Plan Net Assets for the Insurance Fund, on pages 30-31, summarize the additions and deductions that occurred for each of the three systems during fiscal 2010.

The Schedule of Funding Progress, on pages 72-76 , includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Contributions from Employers and Other Contributing Entities, on pages 77-81, presents historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to an understanding of the changes over time in the funded status of the plans.

Kentucky Retirement Systems As A Whole

Kentucky Retirement Systems' combined plan net assets increased, during the fiscal year ended June 30, 2010, by $1,028.5 million from $11,937.9 million to $12,966.4 million. Plan net assets for the prior fiscal year decreased by $3,665.4 million. The increase in plan net assets for the plan year ended June 30, 2010 is primarily attributable to more favorable market conditions. However, the net plan assets in the KERS Non-Hazardous Pension Plan decreased by $80,099,593. This is due to a decrease in investment returns with an increase in the amount of retiree benefit payments. The analysis below focuses on plan net assets (Table 1) and changes in plan net assets (Table 2) of Kentucky Retirement Systems' Pension and Insurance Funds.

Table 1: Plan Net Assets *($) in Millions*

	Pension			Insurance			Total		
	2010	2009	2008	2010	2009	2008	2010	2009	2008
Cash & Investments	$12,690.2	$11,645.5	$15,768.8	$2,961.3	$2,460.2	$3,379.9	$15,651.5	$14,105.7	$19,148.7
Receivables	108.6	113.9	122.4	33.6	38.7	45.5	142.2	152.6	167.9
Equip./Int. Assets Net of Dep./Amort.	9.3	8.1	8.5				9.3	8.1	8.5
Total Assets	12,808.1	11,767.5	15,899.7	2,994.9	2,498.9	3,425.4	15,803.0	14,266.4	19,325.1
Total Liabilities	(2,267.7)	(1,885.8)	(2,944.3)	(568.9)	(442.7)	(777.5)	(2,836.6)	(2,328.5)	(3,721.8)
Plan Net Assets	$10,540.4	$9,881.7	$12,955.4	$2,426.0	$2,056.2	$2,647.9	$12,966.4	$11,937.9	$15,603.3

Table 2: Changes in Plan Net Assets *($) in Millions*

	Pension			Insurance			Total		
	2010	2009	2008	2010	2009	2008	2010	2009	2008
Additions									
Member Cont.	$249.8	$290.8	$304.3	--	--	--	$249.8	$290.8	$304.3
Employer Cont.	461.2	393.8	350.4	371.9	297.2	372.3	833.1	691.0	722.7
Health Ins. Cont.	3.4	0.9	--	--	--	--	3.4	0.9	--
Premiums Rcvd	--	--	--	29.1	27.1	28.5	29.1	27.1	28.5
Ret. Reemp. Insurance	--	--	--	2.0	0.2	--	2.0	0.2	--
Medicare Subsidy	--	--	--	19.8	16.8	13.3	19.8	16.8	13.3
Invest. Inc. (net)	1,507.5	(2,232.9)	(579.9)	310.1	(611.3)	(220.6)	1,817.6	(2,844.2)	(800.5)
Total Additions	2,221.9	(1,547.4)	74.8	732.9	(270.0)	193.5	2,954.8	(1,817.4)	268.3
Deductions									
Ben. Payments	1,516.1	1,478.7	1,299.2	--	--	--	1,516.1	1,478.7	1,299.2
Refunds	22.3	23.6	25.5	--	--	--	22.3	23.6	25.5
Admin. Expenses	24.8	24.0	22.9	9.7	8.8	7.5	34.5	32.8	30.4
Healthcare Costs	--	--	--	353.4	312.9	269.3	353.4	312.9	269.3
Total Deductions	1,563.2	1,526.3	1,347.6	363.1	321.7	276.8	1,926.3	1,848.0	1,624.4
Increase (Decrease) in Plan Net Assets									
	$658.7	$(3,073.7)	$(1,272.8)	$369.8	$(591.7)	$(83.3)	$1,028.5	$(3,665.4)	$(1,356.1)

Kentucky Retirement Systems As A Whole, continued

Plan net assets of the pension funds increased by $658.7 million ($10,540.4 million compared to $9,881.7 million). All of these assets are restricted in use to provide monthly retirement allowances to members, who contributed to the pension funds as employees, and their beneficiaries. This plan net assets increase is attributable primarily to more favorable market conditions.

Plan net assets of the insurance fund increased by $369.8 million ($2,426.0 million compared to $2,056.2 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. This increase in net plan assets is primarily attributable to more favorable market conditions.

Pension Fund Activities

Member contributions decreased by $41 million. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit. The decrease in member contributions is a result of a decrease in service purchases by Kentucky Retirement Systems' members over the prior period.

Employer contributions increased by $67.4 million due to the increase in covered payroll reported to Kentucky Retirement Systems (in the case of the CERS Non-Hazardous plan) and the increase in the employer contribution rate applied to covered payroll.

Net investment income increased by $3,740.4 million (net investment gain of $1,507.5 million compared to net investment loss of $2,232.9 million in the prior year). The pension funds experienced an increase in income primarily due to the increase in gains on sale of investments. This can be illustrated in Table 3 as follows:

Pension fund deductions increased by $36.9 million caused principally by an increase of $37.4 million in benefit payments. Retirees received a Cost of Living Adjustment (COLA) increase of 1.5% in benefit payments as of July 1, 2009. Refunds of member contributions decreased by $1.3 million and administrative expenses increased by $.8 million.

Table 3: Investment Income (Loss) Pension

($) in Millions

Investment Income (Loss)	2010	2009	2008
Increase (Decrease) in fair value of investments	$1,066	$(1,788)	$(1,357)
Investment Income net of Investment Expense	224	305	417
Gain (Loss) on sale of investments	218	(750)	360
Net investment (loss) income	$1,508	$(2,233)	$(580)

Insurance Fund Activities

Employer contributions paid into the insurance fund increased by $74.7 million over the prior fiscal year. This increase is a result of the increase in the employer contribution rate applied to covered payroll.
Net investment income increased by $921.4 million. This increase in net income is due primarily to the increase in the gains on sale of investments. This can be illustrated in Table 4 as follows:

Insurance fund deductions increased by $41.7 million due to the increase in overall healthcare costs.

Table 4: Investment Income (Loss)
Insurance
($) in Millions

Investment Income (Loss)	2010	2009	2008
Increase (Decrease) in fair value of investments	$183	$(451)	$(387)
Investment Income net of Investment Expense	35	45	62
Gain (Loss) on sale of investments	92	(205)	105
Net investment income (loss)	$310	$(611)	$(220)

Historical Trends

Accounting standards require that the Statement of Plan Net Assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the Schedule of Funding Progress on pages 68-76. The asset value stated in the Schedule of Funding Progress is the actuarial value of assets. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by Kentucky Retirement Systems' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is defined as the unfunded actuarial accrued liability.

The unfunded actuarial accrued liability in the pension plans increased by $1,725.4 million for a total unfunded amount of $11,122.7 million for the fiscal year ended June 30, 2010, compared to an unfunded amount of

$9,397.2 million for the fiscal year ended June 30, 2009. In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, and expenditures for unfunded retiree Cost of Living Adjustments. Within the KERS and SPRS plans, employer contribution rate reductions enacted by the Kentucky General Assembly have limited the plans ability to correct the declining funding levels.

The insurance plan's unfunded actuarial accrued liability for the plan year ended June 30, 2010, increased to $7,334.7 million from $7,199.3 million for the plan year ended June 30, 2009. This is an increase in the unfunded actuarial accrued liability of $135.4 million.

Annual required contributions of the employers as actuarially determined and actual contributions made by employers and other contributing entities in relation to the required contributions are provided in the Schedule of Contributions from Employers and Other Contributing Entities on pages 77-81. The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS funds is attributable to the fact that the statutory employer contribution rate set by the Kentucky General Assembly was less than the rate computed by the actuary.

Combined Statement of Plan Net Assets-Pension Funds *($) in Thousands*

As of June 30, 2010 (with comparative totals as of June 30, 2009)

	2010						2009
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Assets							
Cash & Short Term Investments							
Cash	$104	$797	$235	$749	$150	$2,035	$852
Short Term Investments	78,398	114,677	141,692	246,699	19,635	601,101	1,017,433
Total Cash & Short Term Investments	78,502	115,474	141,927	247,448	19,785	603,136	1,018,285
Receivables							
Contributions	1,376	19,657	9,742	35,246	963	66,984	71,155
Investment Income	1,446	14,565	5,430	19,149	1,046	41,636	42,842
Total Receivables	2,822	34,222	15,172	54,395	2,009	108,620	113,997
Investments, at fair value							
Corporate and Gov't Bonds	85,356	860,776	325,073	1,164,624	66,743	2,502,572	2,329,660
Equity Contracts	12,802	128,881	48,213	174,100	10,331	374,327	567,521
Interest Rate Contracts	8,275	81,330	30,499	109,937	6,383	236,424	
Corporate Stocks	231,382	2,094,663	860,553	2,773,921	144,431	6,104,950	4,978,448
Mortgages	22,010	184,890	81,924	290,020	14,677	593,521	898,417
Real Estate	2,407	3,708	3,438	4,947	575	15,075	14,946
Total Invest., at fmv	362,232	3,354, 248	1,349, 700	4,517,549	243,140	9,826,869	8,788,992
Securities Lending Collateral Invested	95,378	751,949	323,200	1,032,658	56,956	2,260,141	1,838,177
Equipment (net of accumulated depreciation)	110	1,301	196	2,239	25	3,871	6,155
Int. Assets (net of accumulated. amort.)	161	1,859	273	3,161	30	5,484	1,913
Total Assets	539,205	4,259,053	1,830,468	5,857,450	321,945	12,808,122	11,767,519
Liabilities							
Accounts Payable	221	2,602	374	4,304	40	7,541	8,366
Securities Lending Collateral	95,378	751,949	323,200	1032,658	56,956	2,260,141	1,838,177
Impairment-Securities Lending							39,279
Total Liabilities	95,599	754,551	323,574	1,036,962	56,996	2,267,682	1,885,822
Plan Net Assets Held in Trust for Pension Benefits							
	$443,606	$3,504,502	$1,506,894	$4,820,488	$264,949	$10,540,440	$9,881,697

See accompanying notes to the Financial Statements.

Combined Statement of Changes in Plan Net Assets-Pension Funds *($) in Thousands*

For the Fiscal Year Ended June 30, 2010 (with comparative totals for the Fiscal Year Ended June 30, 2009)

	2010						2009
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Additions							
Members' Contributions	$11,110	$90,780	$37,200	$106,558	$4,127	$249,775	$290,842
Employers' Contributions	17,658	144,051	82,887	207,076	9,489	461,161	393,849
Health Insurance Contributions (HB1)	118	1,799	174	1,345	12	3,448	899
Total Contributions	28,886	236,630	120,261	314,979	13,628	714,384	685,590
Investment Income							
From Investing Activities:							
Net Appreciation (Depreciation) in Fair Value of Investments	57,391	449,280	175,317	567,120	34,874	1,283,982	(2,538,597)
Interest/Dividends	9,719	90,808	35,057	118,487	6,602	260,673	310,240
Total Investing Activities Income (Loss)	67,110	540,088	210,374	685,607	41,476	1,544,655	(2,228,357)
Investment Expense	1,480	12,902	4,217	16,017	811	35,427	13,301
Commissions	285	2,843	905	3,135	206	7,374	8,342
Total Investing Activities Expense	1,765	15,745	5,122	19,152	1,017	42,801	21,643
Net Income (Loss) from Investing Activities	$63,345	$524,343	$205,252	$666,455	$40,459	$1,501,854	$(2,250,000)

Combined Statement of Changes in Plan Net Assets-Pension Funds *($) in Thousands*

For the Fiscal Year Ended June 30, 2010 (with comparative totals for the Fiscal Year Ended June 30, 2009)

	2010						2009
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
From Securities Lending Activities:							
Securities Lending Income	$378	$2,931	$1,279	$4,079	$223	$8,890	$40,231
Securities Lending Expense:							
Security Borrower Rebates	74	584	251	802	44	1,755	19,498
Security Lending Agent Fees	61	481	207	660	36	1,445	3,683
Net Income from Securities Lending Activities	243	1,866	821	2,617	143	5,690	17,050
Total Net Investment Income (Loss)	65,588	526,209	206,073	669,072	40,602	1,507,544	(2,232,950)
Total Additions (Loss)	94,474	762,839	326,334	984,051	54,230	2,221,928	(1,547,360)
Deductions							
Benefit Payments	37,796	825,627	136,810	470,249	45,582	1,516,064	1,478,730
Refunds	1,286	8,887	1,956	10,001	144	22,274	23,628
Administrative Exp.	737	8,424	1,234	14,323	130	24,848	23,968
Total Deductions	39,819	842,938	140,000	494,571	45,856	1,563,186	1,526,326
Net Increase (Decrease) in Plan Assets	54,655	(80,099)	186,334	489,478	8,374	658,742	(3,073,686)
Plan Net Assets Held in Trust for Pension Benefits							
Beginning of Year	388,951	3,584,601	1,320,560	4,331,010	256,575	9,881,697	12,955,383
End of Year	$443,606	$3,504,502	$1,506,894	$4,820,488	$264,949	$10,540,442	$9,881,697

See accompanying notes to the Financial Statements.

Combined Statement of Plan Net Assets-Insurance Funds *($) in Thousands*

As of June 30, 2010 (with comparative totals as of June 30, 2009)

	2010						2009
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Assets							
Cash & Short Term Investments							
Cash	$58	$378	$31	$509	$52	$1,028	$180
Short Term Investments	61,539	39,019	153,167	268,927	12,985	535,637	495,122
Medicare Drug Deposit	11	20	23	42	4	100	100
Total Cash & Short Term Investments	61,608	39,417	153,221	269,478	13,041	536,767	495,402
Receivables							
Contributions	917	4,411	5,213	14,743	371	25,655	31,763
Investment Income	878	1,497	1,835	3,370	386	7,966	6,893
Loan Interest Receivable (Holly Hill)							119
Total Receivables	$1,795	$5,908	$7,048	$18,113	$757	$33,621	$38,775

Combined Statement of Plan Net Assets-Insurance Funds *($) in Thousands*

As of June 30, 2010 (with comparative totals as of June 30, 2009)

	2010						2009
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Investments, at fair value							
Corporate and Gov't Bonds	$28,288	$43,244	$71,248	$121,051	$12,796	$276,627	$203,304
Equity Contracts	43,535	66,582	110,117	186,942	19,633	426,809	415,866
Corporate Stocks	136,021	215,243	245,027	500,856	58,298	1,155,445	916,095
Alternative Investment							135
Real Estate	67	102	146	272	28	614	600
Total Investments, at fair value	207,911	325,171	426,538	809,121	90,755	1,859,496	1,536,000
Securities Lending Collateral Invested	63,563	85,994	136,732	254,253	24,465	565,007	428,831
Total Assets	334,877	456,490	723,539	1,350,965	129,018	2,994,889	2,499,008
Liabilities							
Accounts Payable	75	1,698	190	1,891	43	3,897	4,921
Securities Lending Collateral Obligations	63,563	85,994	136,732	254,253	24,465	565,007	428,831
Impairment-Securities Lending							8,984
Total Liabilities	63,638	87,692	136,922	256,144	24,508	568,904	442,736
Plan Net Assets Held in Trust for Insurance Benefits							
	$271,239	$368,798	$586,617	$1,094,821	$104,510	$2,425,985	$2,056,272

See accompanying notes to the Financial Statements.

Combined Statement of Changes in Plan Net Assets-Insurance Funds *($) in Thousands*

For the Fiscal Year Ended June 30, 2010 (with comparative totals for the Fiscal Year Ended June 30, 2009)

	2010						2009
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Additions							
Employers' Contributions	$21,835	$92,679	$82,970	$166,032	$8,369	$371,885	$297,195
Retiree Drug Subsidy	319	8,551	1,493	9,157	274	19,794	16,835
Premiums Received from Retirees	749	12,290	435	15,641	16	29,131	27,122
Retired Reemployed Healthcare (HB1)	86	1,298	73	575		2,032	207
Total Contributions	22,989	114,818	84,971	191,405	8,659	422,842	341,359
Investment Income							
From Investing Activities:							
Net Appreciation (Depreciation) in the Fair Value of Investments	38,367	44,706	58,828	121,101	11,314	274,316	(656,699)
Interest/Dividends	4,583	7,290	9,507	17,726	1,970	41,076	44,283
Interest Income (Holly Hill)							119
Total Investing Activities Income (Loss)	42,950	51,996	68,335	138,827	13,284	315,392	(612,297)
Investment Activities Expense	552	1,138	1,089	2,391	195	5,365	1,383
Commissions	133	277	261	471	58	1,200	929
Total Investing Activities Expense	685	1,415	1,350	2,862	253	6,565	2,312
Net Income (Loss) from Investing Activities	42,265	50,581	66,985	135,965	13,031	308,827	(614,609)
From Securities Lending Activities:							
Securities Lending Income	$183	$242	$394	$733	$70	$1,622	$7,945

Combined Statement of Changes in Plan Net Assets-Insurance Funds *($) in Thousands*

For the Fiscal Year Ended June 30, 2010 (with comparative totals for the Fiscal Year Ended June 30, 2009)

	2010						2009
	KERS Hazardous	KERS Non-Hazardous	CERS Hazardous	CERS Non-Hazardous	SPRS	Total	Total
Securities Lending Expense:							
Security Borrower Rebates	$8	$11	$17	$32	$3	$71	$3,951
Security Lending Agent Fees	34	47	74	138	13	306	695
Net Income from Securities Lending Activities	141	184	303	563	54	1,245	3,299
Total Net Investment Income (Loss)	42,406	50,765	67,288	136,528	13,085	310,072	(611,310)
Total Additions (Loss)	65,395	165,583	152,259	327,933	21,744	732,914	(269,951)
Deductions							
Healthcare Premiums Subsidies	11,220	96,943	43,033	63,089	9,071	223,356	198,273
Administrative Fees	200	4,333	554	4,469	147	9,703	8,869
Self Funding Insurance Costs	2,236	60,876	5,288	60,044	1,698	130,142	114,555
Total Deductions	13,656	162,152	48,875	127,602	10,916	363,201	321,697
Net Increase (Decrease) in Plan Assets	51,739	3,431	103,384	200,331	10,828	369,713	(591,648)
Plan Net Assets Held in Trust for Insurance Benefits							
Beginning of Year	219,500	365,367	483,233	894,490	93,682	2,056,272	2,647,920
End of Year	$271,239	$368,798	$586,617	$1,094,821	$104,510	$2,425,985	$2,056,272

See accompanying notes to the Financial Statements.

Notes to the Financial Statements

FYI

Notes to the Financial Statements are designed to provide the reader with specific information about estimates, accounting, and other material information found in the financial statements.

General

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees (the Board) of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of KRS administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by KRS: (1) KERS; (2) CERS; and (3) SPRS. The assets of the insurance fund are commingled for investment purposes. The following notes apply to the various funds administered by KRS:

Note A-Summary Of Significant Accounting Policies

Basis of Accounting KRS' financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and Investment Expenses are recognized when incurred.

Method Used to Value Investments Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate is based on appraisals. Investments that do not have an established market are reported at estimated fair value.

Estimates The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged to expense as incurred. The capitalization threshold used in fiscal years ended 2010 and 2009 was $3,000 (see Note J for further information).

Intangible Assets Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is ten years. The capitalization threshold used in fiscal years ended 2010 and 2009 was $3,000 (see Note K for further information).

Expense Allocation Administrative and investment expenses of KRS are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

Component Unit KRS is a component unit of the Commonwealth of Kentucky for financial reporting purposes.

KERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. CERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. SPRS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the KRS Board of Trustees without further legislative review. The methods used to determine the employer rates for all Systems are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

Recent Accounting Pronouncements

In December 2009, the Governmental Accounting Standards Board (GASB) issued Statement No. 57, "OPEB Measurements by Agent Employer and Agent Multiple-Employer Plans". The objective of this statement is to address issues related to the use of the alternative measurement method and the frequency and timing of measurements by employers that participate in agent multiple employer other postemployment benefit (OPEB) plans. KRS is currently evaluating the provisions of GASB No. 57.

In June 2010, the Governmental Accounting Standards Board (GASB) issued Statement No. 59, "Financial Instruments Omnibus". The objective of this statement is to update and improve existing standards regarding financial reporting and disclosure requirements of certain financial instruments and external investment pools for which significant issues have been identified. KRS is currently evaluating the provisions of GASB No. 59.

Note B-Plan Descriptions And Contribution Information

Membership in each Retirement Plan consisted of the following at June 30, 2010 and 2009:

KERS Membership

	2010			2009		
	Non-Hazardous Employees	Hazardous Employees	Total	Non-Hazardous Employees	Hazardous Employees	Total
Retirees and Beneficiaries Receiving Benefits	37,945	2,835	40,780	37,883	2,648	40,531
Inactive Vested Members	37,681	3,155	40,836	34,515	3,056	37,571
Active Plan Members	47,090	4,291	51,381	46,060	4,334	50,394
Total	122,716	10,281	132,997	118,458	10,038	128,496
Number of Participating Employers			372			386

CERS Membership

	2010			2009		
	Non-Hazardous Employees	Hazardous Employees	Total	Non-Hazardous Employees	Hazardous Employees	Total
Retirees and Beneficiaries Receiving Benefits	41,038	6,086	47,106	39,756	5,808	45,564
Inactive Vested Members	64,004	2,631	66,635	60,275	2,522	62,797
Active Plan Members	84,681	9,562	94,243	83,724	9,757	93,481
Total	189,723	18,261	207,984	183,755	18,087	201,842
Number of Participating Employers			1,396			1,398

SPRS Membership

	2010	2009
	Hazardous Employees	Hazardous Employees
Retirees and Beneficiaries Receiving Benefits	1,223	1,184
Inactive Vested Members	345	332
Active Plan Members	961	946
Total	2,529	2,462
Number of Participating Employers	1	1

Hospital and Medical Contracts Issued *(As of June 30 2010, and 2009)*

	2010					2009				
	A	B	C	D	E	A	B	C	D	E
KERS Non-Hazardous	10,420	1,971	722	1,831	13,765	10,536	2,417	739	1,904	13,189
KERS Hazardous	599	453	66	63	525	866	690	95	93	832
CERS Non-Hazardous	7,692	1,369	342	3,106	14,477	7,503	1,364	326	3,099	13,607
CERS Hazardous	1,274	2,062	239	58	1,438	1,438	2,108	254	82	1,558
SPRS	264	462	47	12	467	221	311	20	9	419
Total	20,249	6,317	1,416	5,070	30,672	20,564	6,890	1,434	5,187	29,605

A= Single, B=Couple/Family, C=Parent Plus, D= Medicare Without Prescription, E=Medicare With Prescription

Kentucky Employees Retirement System Non-Hazardous Employees Pension Plan

Plan Description

KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands.

Contributions

For the fiscal years ended June 30, 2010 and 2009, plan members were required to contribute 5% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2010 and 2009, participating employers contributed 11.61% and 10.01%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended

June 30, 2010 and 2009, were 39.45% and 28.6%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401 (h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% of their annual creditable compensation.

Kentucky Employees Retirement System Hazardous Employees Pension Plan

Plan Description

KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands.

Contributions

For the fiscal years ended June 30, 2010 and 2009, plan members were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2010 and 2009, participating employers contributed 24.69% and 24.35%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2010 and 2009, were 35.54% and 34.78%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

County Employees Retirement System Non-Hazardous Employees Pension Plan

Plan Description

CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate in CERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands.

Contributions

For the fiscal years ended June 30, 2010 and 2009, plan members were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2010 and 2009, participating employers contributed 16.16% and 13.5%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2010 and 2009, were 20.91% and 15.58%, respectively. Administrative costs of KRS

are financed through employer contributions and investment earnings.

In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% of their annual creditable compensation.

County Employees Retirement System Hazardous Employees Pension Plan

Plan Description

CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in CERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands.

Contributions

For the fiscal years ended June 30, 2010 and 2009, plan members were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2010 and 2009, participating employers contributed 32.97% and 29.5%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2010 and 2009, were 43.36% and 31.99%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

State Police Retirement System

Plan Description

SPRS is a single-employer defined benefit pension plan that covers all full-time state troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended

to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands.

Contributions

For the fiscal years ended June 30, 2010 and 2009, plan members were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2010 and 2009, the Commonwealth contributed 33.08% and 30.07%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2010 and 2009 were 92.12% and 60.14%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies

to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

Kentucky Retirement Systems Insurance Fund

Plan Description

The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2010, insurance premiums withheld from benefit payments for members of the systems were $29,181,932 and $1,665,204 for KERS non-hazardous and hazardous, respectively; $29,667,911 and $1,804,656 for CERS non-hazardous and hazardous, respectively; and, $234,577 for SPRS. For fiscal 2009, insurance premiums withheld from benefit payments for members of KERS were $28,345,215 and $973,502 for KERS non-hazardous and KERS hazardous, respectively; $27,593,841 and $1,634,508 for CERS non-hazardous and CERS hazardous, respectively; and, $160,190 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2010, the Fund had 89,101 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Funds is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are shown at right.

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after, July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on, or after, July 1, 2003 earn ten dollars ($10) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn fifteen dollars ($15) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar

Insurance Contribution By Years Of Service

For members participating prior to July 1, 2003

Years of Service	% Paid by Insurance Fund
20 or More	100%
15-19	75%
10-14	50%
4-9	25%
Less than 4	0%

amount. Upon death of a hazardous employee, the employee's spouse receives ten dollars ($10) per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree cost of living adjustment (COLA), which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years.

KRS commenced self-funding of healthcare benefits for its Medicare eligible retirees on January 1, 2006. A self-funded plan is one in which KRS assumes the financial risk for providing healthcare benefits to its retirees. The self-funded plan pays for claims out-of-pocket as they are presented instead of paying a pre-determined premium to an insurance carrier for a fully-insured plan. KRS funds the risk of its self-insured program directly from its insurance assets.

KRS selected Catalyst Rx and UMR to administer the pharmaceutical and medical benefits, respectively, for its retirees. The pharmaceutical contract with Walgreens Health Initiatives ended December 31, 2009.

Stop-loss insurance can be arranged to limit KRS' loss to a specified amount to ensure that catastrophic claims do not upset the financial integrity of the self-funded plan. The amount of stop-loss insurance is a function of KRS' size, nature of its business, financials, and tolerance for risk. KRS continues to evaluate the use of stop-loss insurance.

Note C-Cash And Short-Term Investments And Securities Lending Collateral

The provisions of Governmental Accounting Standards Board (GASB) Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions, and investments made with that cash, be reported as assets on the financial statements. In conjunction with the adoption of GASB No. 28, KRS has reclassified certain other investments, not related to the securities lending

program, as short-term. Cash and short-term investments consist of the following:

Kentucky Employees Retirement System

	2010	2009
Cash	$901,440	$369,675
Short Term Investments	193,075,338	286,363,442
Securities Lending Collateral Invested	847,326,415	740,443,331
Total	$1,041,303,193	$1,027,176,448

County Employees Retirement System

	2010	2009
Cash	$984,279	$379,842
Short Term Investments	388,391,558	698,898,569
Securities Lending Collateral Invested	1,355,857,873	1,049,855,428
Total	$1,745,233,710	$1,749,133,839

State Police Retirement System

	2010	2009
Cash	$149,615	$102,694
Short Term Investments	19,635,485	32,170,928
Securities Lending Collateral Invested	56,955,523	47,878,450
Total	$76,740,623	$80,152,072

Kentucky Retirement Systems Insurance Funds

	2010	2009
Cash	$1,029,033	$179,764
Short Term Investments	535,639,023	495,121,909
Medicare Drug Deposit	100,446	100,000
Securities Lending Collateral Invested	565,007,164	428,831,036
Total	$1,101,775,666	$924,232,709

Note D-Investments

The Board of Trustees of KRS recognizes its duty to invest funds in accordance with the "Prudent Person Rule" and manage those funds consistent with the long-term nature of KRS. The Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments

Investments may be made in domestic and international common stock, securities convertible into common stock and in preferred stock of publicly traded corporations.

Fixed Income Investments

Publicly traded corporate bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with the current market and economic conditions. Investment may also be made in any debt instrument issued or guaranteed in whole or in part by the US Government or any agency or instrumentality of the US Government.

The Pension and Insurance Funds invest in collateralized mortgage obligations (CMOs) and other asset-backed securities to increase return and adjust duration of the portfolio. The Pension and Insurance Funds invest in exchange-traded funds to convert cash held in index funds to short-term equity investments. This practice is intended to make the performance of the index funds more closely track the performance of the index that the funds are intended to replicate. Collateralized mortgage obligations, asset-backed securities, and exchange-traded funds pose no greater risk than other similar investment grade holdings in KRS' portfolios.

The fair value of CMOs at June 30, 2010 and 2009, was approximately $95.9 million and $266 million, respectively; the fair value of asset-backed securities at June 30, 2010 and 2009, was approximately $81 million and $102 million, respectively; and, the fair value of exchange-traded funds at June 30, 2010 and 2009, was approximately $231 million and $196 million, respectively.

Mortgages

Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments guaranteed by an agency of the US Government or the Commonwealth of Kentucky.

Alternative Investments/Equity Real Estate

Subject to the specific approval of the Investment Committee of the Board of Trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, without limitation, venture capital, private equity and private placements which the Investment Committee believes have excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities

The following short-term investment vehicles are considered acceptable:
Publicly traded investment grade corporate bonds, government and agency bonds, mortgages, and collective Short Term Investment Funds (STIF's), money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having an investment grade rating by at least one recognized bond rating service. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur.

Derivatives

Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited.

In conjunction with the adoption of Governmental Accounting Standards Board (GASB) Statement No. 53, "Accounting and Financial Reporting for Derivative Instruments", KRS provides this additional disclosure regarding its derivatives:

Background Information

As of June 30, 2010, KRS has the following derivative instruments outstanding:

Item	Type	Objective	Notional Amount	Effective Date	Maturity Date	Terms	FMV
Pension							
A	Equity Contracts	Exchange for common stock once the security reaches maturity	$152,435	Various	Various	Exchange occurs once maturity date reached	$374,327,395
B	Interest Rate Contracts	Hedge against the risk that interest rates will move in an adverse direction	$235,597,600	Various	Various	Various	$236,424,275
Insurance							
C	Equity Contracts	Exchange for common stock once the security reaches maturity	-0-	Various	Various	Exchange occurs once maturity date reached	$426,808,950

It is the policy of KRS that investment managers may invest in derivative securities, or strategies which make use of derivative investments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Examples of such derivatives include, but are not limited to, foreign currency forward contracts, collateralized mortgage obligations, treasury inflation protected securities, futures, options and swaps.

Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flows, such as interest only, principal only, inverse floater, or structured note securities are permitted only

to the extent authorized in an alternative investment offering memorandum or agreement.

Investments in securities such as collateralized mortgage obligations and planned amortization class issues are allowed if, in the judgment of the investment manager, they are not expected to be subject to large or unanticipated changes in duration or cash flows. Investment managers may make use of derivative securities for defensive or hedging purposes. Any derivative security shall be sufficiently liquid that it can be expected to be sold at, or near, its most recently quoted market price.

Derivative Instruments A and C are exchanged for common stock with an investment that is recorded at fair value.

Derivative Instrument B hedges against the risk that interest rates will move in an adverse direction.

For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combined Statement of Plan Net Assets for both Pension and Insurance.

Risks:

Basis Risk: Derivative Instruments A and C expose KRS to basis risk in that the value of the common stock exchanged may decrease in fair value.

Interest Rate Risk: Derivative Instrument B exposes KRS to interest rate risk in that changes in interest rates will adversely affect the fair values of KRS' financial instruments.

Custodial Credit Risk for Deposits

Custodial credit risk for deposits is the risk that in the event of a financial institution failure, KRS' deposits may not be returned. All non-investment related bank balances are held locally by Farmer's Bank & Capital Trust Company. All non-investment related bank balances are held in KRS' name and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). Effective October 3, 2008, FDIC deposit insurance temporarily increased from $100,000 to $250,000 for each individual account through December 31, 2009. On May 20, 2009, the temporary increase in FDIC deposit insurance coverage from $100,000 to $250,000 for each depositor was extended through December 31, 2013. In 2010, the US Congress passed the Financial Crisis Bill; the $250,000 insurance coverage became permanent. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount.

At June 30, 2010 and 2009, deposits for KRS pension funds were $5,481,332 and $3,568,343, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

At June 30, 2010 and 2009, deposits for KRS insurance fund were $1,023,289 and $289,006, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments

Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. KRS does not have an explicit policy with regards to Custodial Credit Risk for investments. At June 30, 2010 and 2009, the following investments were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name.

Pension Fund	2010	2009
Foreign Currency Investments	$9,439,108	$5,064,552
Insurance Fund		
Foreign Currency Investments	$3,106,813	$2,550,222

Investment Policies

Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of Trustees of KRS. The Board of Trustees has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the "Prudent Person Rule" (set forth in Kentucky Revised Statute 61.650) and manage those funds consistent with the long-term nature of the Systems. The Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS. The *Statement of Investment Policy – Pension* contains the specific guidelines for the investment of pension assets. The *Statement of Investment Policy – Insurance* contains the specific guidelines for the investment of insurance assets.

Additionally, the Committee establishes specific investment guidelines in the Investment Management Agreement for each investment management firm.

Investment Summary

The following tables present a summary of the investments by type as of June 30. 2010 and 2009:

Pension Funds

As of June 30, 2010 and 2009

Investment Summary	2010	2009
US Gov't &Agency Fixed Income Securities	$2,585,430,034	$2,301,499,200
US Corporate Fixed Income Securities	689,815,783	906,485,006
Municipal Debt Securities	57,330,669	20,093,413
Short-term Investments	601,104,211	1,017,432,938
Equity Securities	4,931,386,776	4,567,119,849
Private Equity Limited Partnerships	1,547,888,010	978,848,929
Real Estate	15,075,788	14,945,575
Other	(59,897)	
Impairment-Securities Lending*		(39,279,421)
	$10,427,971,374	$9.767.145.489

Insurance Funds

As of June 30, 2010 and 2009

Investment Summary	2010	2009
US Gov't & Agency Fixed Income Securities	$276,626,088	$203,303,796
Short-term Investments	535,739,469	495,221,921
Equity Securities	1,385,112,612	1,222,700,032
Private Equity Limited Partnerships	197,141,097	109,261,059
Alternative Investment		135,000
Real Estate	614,468	600,000
Impairment-Securities Lending*		(8,984,210)
	$2,395,233,734	$2,022,237,598

*See Note E for detailed information.

Credit Risk of Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external professional investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension fund debt securities portfolio is managed using the following guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- The duration of the total fixed income portfolio shall not deviate from the blended Barclays Capital Aggregate Index/KRS High Yield Index by more than 10%.
- The duration of the TIPS portfolio shall not deviate from the Barclays Capital TIPS Index by more than 10%.
- The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS' assets.
- No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short term instrument, with the exception of US Government issued, guaranteed or agency obligations.
- The amount invested in SEC Rule 144a securities shall not exceed 7.5% of the market value of the aggregate market value of KRS' fixed income investments.

Pension Funds Debt Securities Investments at Fair Value

As of June 30, 2010 and 2009

	2010	2009
AAA	$1,863,001,127	$443,511,715
AA+	48,288,094	16,824,633
AA	30,226,149	29,223,881
AA-	46,648,330	14,112,366
A+	59,293,411	64,261,249
A	156,019,707	156,858,363
A-	72,715,716	60,256,001
BBB+	59,200,990	81,424,712
BBB		107,077,314
BBB-	144,675,132	62,510,693
BB+	2,206,904	6,241,124
BB	10,978,677	13,693,541
BB-	2,475,945	2,212,888
B+	4,457,839	3,389,891
B		4,189,229
B-	15,903,098	923,953
CCC	2,836,252	7,319, 295
CC	1,843,910	278,130
NR	70,462,745	46,927,613
Total Credit Risk Debt Securities	2,591,234,026	1,121,236,591
Government Bonds	115,820,255	394,575,946
Government Mortgage-Backed Securities (GNMA)	575,727,459	736,182,469
Gov't Issued Commercial Mortgage Backed	4,631,391	
Government Agencies	6,265,527	
Indexed Linked Bonds	38,894,681	976,082,613
Total Debt Securities	$3,332,568,339	$3,228,077,619

At both June 30, 2010 and 2009, the weighted average quality rating of the pension fund debt securities portfolio was AA+. As of June 30, 2010 and 2009, the KRS pension portfolio had $40,702,625 and $38,248,051, respectively, in debt securities rated below BBB-. The fair value of securities in the BBB- rating category was $144,675,132 and $62,510,693, respectively, as of June 30, 2010 and 2009.

The insurance fund debt securities portfolio, by guidelines, is to be invested in US Government securities. As shown below, as of June 30, 2009, the entire insurance fund was invested in Treasury Inflation Protected Securities (TIPS) which carry a US Government Treasury rating. As of June 30, 2010, the insurance fund was invested in Fixed Income, Index Linked Government Bonds, and Treasury Inflation Protected Securities. All carry a US Government Treasury rating.

Insurance Fund Credit Risk of Debt Securities

As of June 30, 2010 and 2009

	2010	2009
Fixed Income	$1,336,930	
Index Linked Government Bonds	$266,877,756	
Treasury Inflation Protected Securities	$8,411,402	$203,303,796
Total Credit Risk	$276,626,088	$203,303,796

Concentration of Credit Risk Debt Securities

Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

- The total debt securities portfolio is managed using the following general guidelines adopted by the KRS Board of Trustees:
- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Debt obligations of any single US Corporation shall be limited to a maximum of 5 percent of the total portfolio at market value.

As of June 30, 2010, the Insurance Fund held 9.1% of its investments in Exchange Traded Funds (ETF's). The amount totaled $218.1 million as of June 30, 2010. ETF's are securities that represent ownership in a long term unit investment trust that holds a portfolio of common stocks designed to track the performance of a designated index. Similar to a stock, ETF's can be traded continuously throughout the trading day, or can be held for the long term.

As of June 30, 2010, the Pension Fund held 3.3% of its investment in the Federal National Mortgage Association (Fannie Mae). The amount totaled $340,775,972 as of June 30, 2010. Historically, Fannie Mae has been a publicly owned government corporation, recently entering conservatorship by the US Government,

to purchase mortgages from lenders and resell them to investors; shares of Fannie Mae are traded on the New York Stock Exchange. Fannie Mae's debt has been perceived to be nearly as safe as US Treasury debt, given the US Government's implicit guarantee which has allowed it to pay lower interest rates to its debt holders.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The risk is managed by using the effective duration or option adjusted methodology. It is widely used in the management of fixed income portfolios by quantifying the risk of inherent rate changes. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. The effective duration measures the sensitivity of the market price to changes in the yield curve. Effective duration is the most accurate duration measure when a significant portion of the securities are callable (redeemable) prior to maturity. The pension fund portfolio contains a number of securities that are callable and therefore interest rate risk is most appropriately measured by effective duration. KRS does not have a formal policy that constrains the duration of its fixed income portfolio.

The KRS pension fund debt securities portfolio benchmarks its debt securities

KRS Pension Funds Interest Rate Risk

	2010	Weighted Average Effective Duration	2009	Weighted Average Effective Duration
Asset Backed Securities	$80,459,816	0.93	$101,699,907	0.36
Commercial Mortgage Backed Securities	78,536,394	4.68	106,131,129	4.40
Corporate Bonds	513,442,002	5.53	538,973,533	6.01
Government Agencies	68,876,742	4.85	131,949,021	3.70
Government Bonds	915,274,910	5.40	1,370,658,559	5.22
Government Mortgage Backed Securities	576,152,433	2.18	736,182,469	3.36
Gov't Issued Commercial Mortgage Backed Securities	4,631,391	3.31		
Guaranteed Fixed Income	45,610,184	2.01		
Indexed Linked Government Bonds	967,658,299	4.95		
Municipal Bonds	57,330,669	11.36	20,093,413	7.48
Non-Government Backed Collateralized Mortgage Obligations	17,369,425	1.45	162,234,869	1.38
Other Fixed Income	7,174,169	.38	60,154,719	2.45
Total	$3,332,568,339	4.57	$3,228,077,619	4.45

portfolio to a weighted average benchmark consisting of the Barclays Capital Aggregate Index and the Barclays Capital US TIPS Index. At June 30, 2010 and 2009, the effective duration of the benchmark was 5.35 and 4.20, respectively. At the same points in time, the effective duration of the KRS pension fund debt securities portfolio was 4.57 and 4.45, respectively.

The KRS insurance fund long-term debt securities portfolio consists entirely of US Government issued bonds which are not callable (redeemable) prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve but does not assume that securities will be called prior to maturity. Since the modified duration measure most accurately reflects the interest rate sensitivity of the insurance fund portfolio, this measure is used for comparative purposes. The KRS insurance fund debt securities portfolio benchmarks its debt securities portfolio to the Barclays Capital US TIPS Index. At June 30, 2010 and 2009, the modified duration of the benchmark was 5.26 and 4.21, respectively. At the same points in time, the modified duration of the KRS insurance fund debt securities portfolio, excluding the pooled fund, was 7.12 and 7.46, respectively.

Insurance Fund Debt Securities Investments at Fair Value

As of June 30, 2010 and 2009

	2010		2009	
Investment	Fair Value	Weighted Duration	Fair Value	Weighted Duration
Index Linked Government Bonds	$276,626,088	8.24	$203,303,796	7.46

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. KRS' currency risk exposure, or exchange rate risk, primarily resides within KRS' international equity holdings. KRS does not have a formal policy to limit foreign currency risk. The following tables present KRS' exposure to foreign currency risk at June 30, 2010 and 2009:

Pension Funds Investments at Fair Value

As of June 30, 2010 and 2009

Foreign Equities	2010	2009
Australian Dollar	$25,036,391	$52,486,171
Brazilian Real	$2,694,860	
British Pound Sterling	16,602,057	224,888,843
Canadian Dollar	114,533,022	50,996,657
Czech Koruna	157,720	
Danish Krone	10,286,579	2,837,998
Euro	(30,181,148)	321,770,916
Hong Kong Dollar	37,363,932	30,196,000
Hungarian Forint	221,870	
Indonesian Rupiah	303,437	
Japanese Yen	277,826,132	247,828,407
Malaysian Ringgit	387,001	5,471,194
Mexican Peso	835,982	
New Taiwan Dollar	7,634,477	3,081,020
Norwegian Krone	8,531,898	6,671,898
Polish Zloty	1,761,559	
Singapore Dollar	22,180,537	22,514,427
South African Rand	3,216,614	3,065,838
South Korean Won	2,920,668	7,575,310
Swedish Krona	2,732,084	12,083,380
Swiss Franc	21,699,339	87,953,959
International Equity Mutual Fund (various currencies)	795,533,850	484,383,452
Total Securities Subject To Foreign Currency Risk	1,322,278,861	1,563,805,470
USD (securities held by International Investment Managers)	840,612,985	507,357,622
Total International Investment Securities	2,162,891,846	$2,071,163,092

Insurance Funds Investments at Fair Value

As of June 30, 2010 and 2009

Foreign Equities	2010	2009
Australian Dollar	$9,589,648	$21,131,446
Brazilian Real	1,003,876	360,704
British Pound Sterling	8,051,772	83,508,340
Canadian Dollar	43,845,544	28,155,840
Czech Koruna	67,148	
Danish Krone	4,042,009	1,352,355
Euro	(7,500,903)	123,126,478
Hong Kong Dollar	13,824,640	13,879,837
Hungarian Forint	75,604	
Indonesian Rupiah	105,386	
Japanese Yen	104,237,243	92,771,022
Malaysian Ringgit	29,102	1,576,196
Mexican Peso	278,282	58,868
New Taiwan Dollar	2,302,510	1,846,498
Norwegian Krone	3,174,376	3,071,113
Polish Zloty	684,280	
Singapore Dollar	8,164,651	7,427,113
South African Rand	1,145,561	1,104,155
South Korean Won	980,970	3,859,160
Swedish Krona	1,109,872	4,425,313
Swiss Franc	8,941,929	32,594,627
International Equity Mutual Fund (various currencies)	101,560,347	80,975,131
Total Securities Subject To Foreign Currency Risk	305,713,847	501,224,196
USD (securities held by International Investment Managers)	310,656,636	20,578,322
Total International Investment Securities	616,370,483	521,802,518

NOTE E-SECURITIES LENDING TRANSACTIONS

Kentucky Revised Statutes Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with a fair value of 102 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. The types of securities lent include US Treasuries, US Agencies, US Corporate Bonds, US Equities, Global Fixed Income Securities, and Global Equities Securities. The *Statement of Investment Policy-Pension* and the *Statement of Investment Policy-Insurance* do not address any restrictions on the amount of loans that can be made. At June 30, 2010, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction, although the average term of the loans was 6 days, 10 days, and 24 days for the three investment portfolios subject to security lending agreements. One custodial bank invests cash collateral in securities that are permitted for investment by state statute and Board policy, which at year-end has a weighted-average maturity of 3 days for KRS. The other custodial bank invests cash collateral in the agent's short-term investment pool as permitted by state statute and Board policy, which at year-end has a weighted-average maturity of 24 days for the Pension Fund only. Neither of the Funds can pledge or sell collateral securities received unless the borrower defaults.

In September 2008, the ongoing financial market crisis took an adverse turn. Securities issued by many financial institutions and other entities experienced significant financial distress as a result of the financial market turmoil. Several government sponsored entities were put under the conservatorship of the US Government, and other foreign and domestic financial institutions received capital infusions or other

types of capital support from their respective governments' central banks. The US Federal Reserve and US Treasury initiated various actions to enhance liquidity to stabilize the financial markets.

Following the cumulative effect of these factors, Northern Trust (the custodial bank for KRS) determined that certain securities held within the collateral pools had experienced impairment in value. Accordingly, Northern Trust determined in September 2008 a "Collateral Deficiency" assessment (in broad terms, the shortfall between the market NAV and the $1 NAV) in its collateral pools under the terms of its Securities Lending Authorization Agreement.

Per the Agreement, each participant (including KRS) in the collateral pool was allocated their share of the Collateral Deficiency which comprised both unrealized (primarily) and realized losses. Northern Trust elected to book this obligation as a receivable to each collateral pool, avoiding any immediate cash outflows by participants. Northern Trust determined that the receivable could be removed or reduced through a variety of mechanisms such as potential future "reversal" of the unrealized Collateral Deficiency loss. In addition, the affected collateral pools were closed to new investors (ensuring that any "reversal" would not be shared with new investors which is disadvantageous to KRS). The ultimate value of these impaired assets will be driven by a variety of factors including market and regulatory forces, as well as the outcome of bankruptcy proceedings.

Subsequent to the Collateral Deficiency, Northern Trust made a direct cash contribution of approximately $5.7 million to KRS whose cash collateral was invested in the Core and Global Collateral Pools. Northern Trust also reduced its portion of the fee split relating to revenues generated in the affected collateral pools by 20% (effective October 1, 2008 and continuing for the next 12 months).
KRS maintains a conservative approach to investing the cash collateral with Northern Trust for its securities lending collateral pools, emphasizing capital preservation, liquidity, and credit quality.

As of June 30, 2010 and 2009, the impairment in the pension funds totaled $0 and $39,279,421, respectively, and the impairment in the insurance fund totaled $0 and $8,984,210 respectively, for a total impairment of $0 and $48,263,631, respectively. This was an unrealized loss. Northern Trust reversed the remaining collateral deficiency payable in the Funds Collateral Pool. This reversal, effective March 15, 2010, in conjunction with the partial reversal processed on November 30, 2009, eliminated the payable amount originally posted to the Various Common and Collective Funds using the Funds Collateral Pool in September 2008.

NOTE F-RISKS OF LOSS

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims against the Board of Trustees of KRS, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $200,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

NOTE G-CONTINGENCIES

In the normal course of business, KRS is involved in litigation concerning the right of participants, or their beneficiaries, to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

NOTE H-INCOME TAX STATUS

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, generally, not subject to tax. KRS continues to be subject to income tax on its unrelated business income.

NOTE I-DEFINED BENEFIT PENSION PLAN

All eligible employees of KRS participate in KERS (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers substantially all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Plan members contributed 5% of creditable compensation for the periods ended June 30, 2010, 2009, and 2008. The Commonwealth contributed 11.61%, 10.01%, and 8.5% of covered payroll for the periods ended June 30, 2010, 2009, and 2008, respectively. The chart below includes the covered payroll and contribution amounts for KRS for the three periods included in this discussion.

	2010	2009	2008
Covered Payroll	$ 13,383,859	$12,864,700	$11,846,700
Required Employer Contributions	$1,553,865	$1,287,800	$1,007,000
Employer Percentage Contributed	100%	100%	100%

NOTE J-EQUIPMENT

Equipment consists of the following:

As of June 30, 2010 and 2009

	2010	2009
Equipment, at cost	$6,795,760	$8,870,569
Less Accumulated Depreciation	(2,924,895)	(2,715,603)
	$3,870,865	$6,154,966

Depreciation expense for the fiscal years ended June 30, 2010 and 2009 amounted to $215,200 and $299,578, respectively.
Equipment decreased $2.1 million due to the reclassification of certain assets to intangible assets as result of the implementation of GASB No. 51, noted in Note K.

NOTE K—INTANGIBLE ASSETS

The provisions of Governmental Accounting Standards Board (GASB) Statement No. 51, "Accounting and Financial Reporting for Intangible Assets" require that intangible assets be recognized in the Statement of Plan Net Assets only if they are considered identifiable. In conjunction with the adoption of GASB No. 51, KRS has capitalized software costs as indicated below for the Strategic Technology Advancements for the Retirement of Tomorrow (START) project.

Software consists of the following:

As of June 30, 2010 and 2009

	2010	2009
Software, at cost	$6,478,561	$2,259,480
Less Accumulated Amortization	(993,788)	(345,931)
	$5,484,773	$1,913,549

Amortization expense for the fiscal years ended June 30, 2010 and 2009 amounted to $647,857 and $225,948, respectively.

In fiscal 2007, KRS initiated the START project. It is anticipated that START will be completed in its entirety in fiscal 2013. The objectives of the project are to provide employees with a technology solution that will enable them to serve more customers more quickly while providing continued superior service; to enhance business services and improve operational efficiency; to improve the accuracy of the information collected, maintained, and provided; to improve the timeliness and accuracy of responses to members' inquiries; to provide internet based, self-service capabilities to members, retirees, and employers; and, to ensure that retirees receive monthly benefits without error or disruption.

NOTE L-ALTERNATIVE INVESTMENTS

On February 6, 2006, the health insurance fund of KRS loaned to KRS Perimeter Park West, Inc., a related party, $700,000 for the purchase of real property at 1300 Louisville Road, Frankfort, Kentucky. The loan was not documented by a note, mortgage contract, or security interest in the property. The transfer of funds involved a commingling with the pension fund which was in violation of Internal Revenue Code Sections 401 and 420. However, KRS voluntarily self-corrected the violation in accordance with Revenue Procedure 2006-27 of the Internal Revenue Bulletin 2006-22, page 945, "Employee Plans Compliance Resolution System (EPCRS)", and Section 1101 of the Pension Protection Act of 2006. The self-correction process involved a Letter of Direction sent to Northern Trust (the custodial bank of KRS) to reverse (and to correct the commingling of funds) the loan in the investment accounts.

Subsequent to the loan and purchase, the real property was valued by appraisal from $135,000 to $290,000. The range of appraisal values was based upon considerations of zoning classifications, site preparations and improvements, and other matters. KRS decided to reflect the alternative investment at the lowest appraisal value for the property in accordance with Governmental Accounting Standards Board (GASB) Statement No. 43 "Financial Reporting for Postemployment Benefit Plans other than Pension Plans", paragraphs 22 and 92 , and in accordance with the Principle of Conservatism of Generally Accepted Accounting Principles. Because of the significant difference in the appraised value of the property and the loan amount, and also because the loan was not documented by a note, mortgage contract, or security interest in the property, KRS was uncertain whether it would collect any principal (or interest) in excess of the minimum appraised property value. Therefore, as of June 30, 2006, KRS management elected to write-down the value of the Alternative Investment to an estimated

collectible value of $135,000, which was the investment's carrying value since the date of the loan. As a result, the unrealized loss amounted to $565,000 ($700,000 - $135,000), which was included in the Combined Statement of Changes in Plan Net Assets – Insurance Fund for the 2006 fiscal year.

On June 11, 2009, the property at 1300 Louisville Road, along with Building B (a part of the Perimeter Park Complex purchased in 1998) was sold for a combined sale price of $3,200,000 to the Commonwealth of Kentucky. The two properties were appraised individually on December 15, 2008, by the Forrestal Group, Inc., of Evansville, Indiana. The property at 1300 Louisville Road appraised for $295,000, and Building B appraised for $2,725,000.

On September 15, 2009, the management of KRS Perimeter Park West, Inc. repaid $700,000 out of the proceeds from the sale of these two properties to the health insurance fund of KRS to repay the aforementioned loan. In addition to the repayment of the principal, interest in the amount of $127,298 has been paid. The simple interest was computed at 5.04% and the period of 1,317 days outstanding (February 6, 2006, to September 15, 2009) was used for the calculation. Interest in the amount of $119,855 was accrued as a receivable as of June 30, 2009. In addition, KRS reimbursed KRS Perimeter Park West, Inc. for expenses it incurred as part of the purchase of the real property at 1300 Louisville Road; the amount reimbursed totaled $52,503.

The Kentucky Finance and Administration Cabinet, Office of Policy and Audit, completed a comprehensive audit of the 1300 Louisville Road property purchased and issued a report in July 2009. KRS has fully implemented the recommendations contained in the report.

NOTE M—ACTUARIAL VALUATION

The provisions of Governmental Accounting Standards Board (GASB) Statement No. 50, "Pension Disclosures, an Amendment of GASB No. 25 and No. 27", require that actuarial information included in the Notes to the Required Supplementary Information be moved to the Notes to the Financial Statements. In conjunction with the adoption of GASB No. 50, KRS has moved the following information from the Notes to the Required Supplementary Information to the Notes to the Financial Statements:

Pension Funds

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2010	June 30, 2010
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	27 Years	27 Years
Asset Valuation Method	5-year Smoothed Market	5-year Smoothed Market
Actuarial Assumptions:		
Investment Return*	7.75%	7.75%
*Includes Price Inflation at	3.5%	3.5%
Projected Salary Increases**	5.0% - 17.0%	5.0% - 21.0%
Cost of Living Adjustment	None	None
**Includes Wage Inflation at	4.5%	4.5%

Insurance Funds***

	Non-Hazardous	Hazardous
Valuation Date	June 30, 2010	June 30, 2010
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	27 Years	27 Years
Asset Valuation Method	5-year Smoothed Market	5-year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	10.5% - 5.00%	10.5% - 5.00%
Medical Trend Assumption (Post-Medicare)	9.0%-5.0%	9.0%-5.0%
Year of Ultimate Trend	2018	2018
Actuarial Assumptions:		
Investment Rate of Return*	4.50%**	7.75%
*Includes Price Inflation at	3.5%	3.5%

***The actuarial investment rate of return for developing insurance liabilities and contribution rates is 4.5% for KERS non-hazardous and SPRS. The lower rate is required under the parameters set by the Governmental Accounting Standards Board Statement No. 43 and No. 45 given the lack of pre-funding of insurance benefits.*
****The Actuarial Valuation for the Insurance Fund involves estimates of the value of reported amounts and assumptions about the probability of future events. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations are based on the benefits provided under the terms of insurance plan in effect at the time of each valuation and on the pattern of varying costs between the employer and non members as of the valuation date. Actuarial calculation of the insurance plan reflect a long term perspective.*

KRS had the following Unfunded Actuarial Accrued Liabilities as of June 30. 2010 and 2009:

Pension Funds	2010	2009
Kentucky Employees Retirement System (Non-Hazardous)	$6,794,579,504	$5,863,938,167
Kentucky Employees Retirement System (Hazardous)	185,420,442	171,908,494
County Employees Retirement System (Non-Hazardous)	2,912,164,989	2,262,123,521
County Employees Retirement System (Hazardous)	922,687,519	826,957,060
State Police Retirement System	307,867,514	272,361,879
Total Pension Funds	$11,122,719,968	$9,397,289,121
Insurance Funds	**2010**	**2009**
Kentucky Employees Retirement System (Non-Hazardous)	$3,994,794,413	$3,973,152,991
Kentucky Employees Retirement System (Hazardous)	178,870,233	189,497,578
County Employees Retirement System (Non-Hazardous)	1,865,301,581	1,853,754,249
County Employees Retirement System (Hazardous)	981,933,446	942,417,481
State Police Retirement System	313,785,412	240,504,494
Total Insurance Funds	7,334,685,085	7,199,326,793
Total Unfunded Actuarial Accrued Liability	$18,457,405,053	$16,596,615,914

The following is the Schedule of Funding Progress for the fiscal year ended June 30, 2010:

Pension Funds:

	Actuarial Value of Assets	Actuarial Accrued Liability (AAL) Entry Age Normal	Percent Funded	Covered Payroll	Unfunded AAL as a % of Covered Payroll
Kentucky Employees Retirement System (Non-Hazardous)	$4,210,215,585	$11,004,795,089	38.3%	$1,815,146,388	374.3%
Kentucky Employees Retirement System (Hazardous)	502,729,009	688,149,451	73.1	143,557,944	129.2
County Employees Retirement System (Non-Hazardous)	5,546,857,291	8,459,022,280	65.6	2,236,855,380	130.2
County Employees Retirement System (Hazardous)	1,749,464,388	2,672,151,907	65.5	466,548,660	197.8
State Police Retirement System	304,577,292	612,444,806	49.7	51,506,712	597.7
Total Pension Funds	$12,313,843,565	$23,436.563.533	52.5%	$4,713,615,084	235.9%

Insurance Fund:

	Actuarial Value of Assets	Actuarial Accrued Liability (AAL) Entry Age Normal	Percent Funded	Covered Payroll	Unfunded AAL as a % of Covered Payroll
Kentucky Employees Retirement System (Non-Hazardous)	$471,341,628	$4,466,136,041	10.6%	1,815,146,388	220.1%
Kentucky Employees Retirement System (Hazardous)	314,427,296	493,297,529	63.7	143,557,944	124.6
County Employees Retirement System (Non-Hazardous)	1,293,038,593	3,158,340,174	40.9	2,236,855,380	83.4
County Employees Retirement System (Hazardous)	692,769,770	1,674,703,216	41.4	466,548,660	210.5
State Police Retirement System	121,175,083	434,960,495	27.9	51,506,712	609.2
Total Insurance Fund	$2,892,752,370	$10,227,437,455	28.3	$4,713,615,084	155.6
Totals	$15,206,595,935	$33,664,000,988	45.2%	$9,427,230,168	195.8%

The Schedule of Funding Progress for the Pension Funds is on pages 72 through 74. The Schedule of Funding Progress for the Insurance Funds is on pages 74 through 76.

NOTE N—HOUSE BILL 1 PENSION REFORM

House Bill 1 was signed by the Governor of the Commonwealth on June 27, 2008. It contained a number of changes that KRS implemented effective September 1, 2008. House Bill 1 also contained statutory changes to Kentucky Revised Statute 61.637, the law governing members who become reemployed following retirement.

Employee contributions for non-hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 6% of all their creditable compensation to KRS. Five percent of this contribution was deposited to the individual employee's account, while the other 1% was deposited to an account created under 26 USC Section 401(h) in the KRS Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 9% of all their creditable compensation, with 8% credited to the member's account, and 1% deposited to the KRS Pension Fund 401(h) account. Interest paid each June on these members' accounts is set at a rate of 2.5%. If a member terminates his/her employment and applies to take a refund, the member is entitled to a full refund of contributions and interest in his/her account; however, the 1% contributed to the 401(h) account in the KRS Pension Fund is non-refundable and is forfeited.

Employer contribution rates for KERS and SPRS for fiscal 2010 were established in the 2008-2010 Executive Branch Budget (House Bill 460) during the 2008 session of the Kentucky General Assembly. Employer contribution rates for CERS for fiscal 2010 were enacted by House Bill 1 in the 2008 Special Legislative Session. The Employer contribution rates were established as follows (effective July 1, 2009):

KERS-Non Hazardous	11.61%
KERS-Hazardous	24.69%
CERS-Non Hazardous	16.16%
CERS-Hazardous	32.97%
SPRS	33.08%

Although the majority of changes in this legislation only impacted new hires on, or after, September 1, 2008, there were some changes that affected all members and retirees of KRS:

- Cost of Living Adjustment (COLA): Beginning July 1, 2009, COLA for retirees will now be set at 1.5% each July 1. The Kentucky General Assembly may increase this percentage at any time, but only if appropriate funding is allocated. The General Assembly may also reduce or suspend the annual COLA.
- Service Purchase Costs: The actuarial factors used to determine the cost to purchase a service will now assume the earliest date a member can retire with an unreduced benefit, and will also include a COLA. This change will result in an increased service purchase cost for any purchase calculated on, or after, September 1, 2008. This change will also affect the cost billed to employers for sick leave when an employee retires.
- Payment Options: The Partial Lump Sum Payment Option was only available for those employees who retired on, or before, January 1, 2009.

Kentucky Revised Statute 61.637 was modified significantly by House Bill 1. Specifically, a retiree reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.

NOTE O – MEDICARE PRESCRIPTION DRUG PLAN

In fiscal 2009, Kentucky Retirement Systems submitted an application to the Centers for Medicare & Medicaid Services, of the Department of Health & Human Services, to enter into a contract to offer a Medicare Prescription Drug Plan (PDP), as described in the Medicare Prescription Drug Benefit Final Rule published in the Federal Register on January 28, 2005 (70 Fed. Reg. 4194). As part of the application process, KRS was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents and is invested on a daily basis. On February 19, 2009, KRS established the KRS Insurance Prescription Drug Fund at its custodial bank (Northern Trust). As of June 30, 2010 and 2009, the Insolvency Account amounted to $100,446 and $100,000, respectively.

NOTE P – REIMBURSEMENT OF RETIRED – REEMPLOYED HEALTH INSURANCE

As a result of the passage of House Bill 1 on September 1, 2008, if a retiree is reemployed in a regular full time position and has chosen health insurance coverage through KRS, the employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate. As of June 30, 2010 and 2009, the reimbursement totaled $2,032,659 and $206,859, respectively.

NOTE Q – LOUISVILLE/JEFFERSON COUNTY METRO FIREFIGHTERS

Firefighter employees of Louisville/Jefferson County Metro Government were awarded a total of $28,440,159 for back- pay. Of that total, $28,425,232, was determined to be the amount of creditable compensation. The total contributions owed to KRS were calculated by applying the contribution rate in effect for each fiscal year awarded (fiscal 1986 to fiscal 2009) while considering the appropriate participation status, hazardous or non-hazardous, of each employee. These calculations established that the total employer contribution owed is $5,113,511, and the total employee contribution owed is $2,083,310, for a total of $7,196,821. This amount was received on July 27, 2010.

KRS also calculated the impact of the increased final compensation caused by the retroactive benefits owed to those firefighters who have already initiated their retirement benefits. KRS will be required to pay retroactive benefit payments totaling $6,221,219, reflecting additional benefits due to the increase in final compensation. This liability was properly accounted for in fiscal 2011. The liability was paid on August 22, 2010, by issuance of benefit payments to the individual firefighter members. Kentucky Revised Statute 61.675(3)(b) requires that KRS collect interest on unmade or delinquent contributions. The interest owed by the Metro Government, as calculated by KRS' actuaries, amounted to $12,020,731. Therefore, the total amount due KRS is $19,415,669. As stated earlier, $7,196,821 has been received.

NOTE R – SUBSEQUENT EVENTS

Management has evaluated subsequent events for accounting and disclosure requirements through November 18, 2010, the date that the financial statements were available to be issued.

Schedule of Funding Progress

Kentucky Employees Retirement System (KERS) - Pension Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2003**	$6,351,318,832	$6,520,463,188	$169,144,356	97.4%	$1,658,604,696	10.2%
June 30, 2004**	6,000,513,743	7,049,613,171	1,049,099,428	85.1	1,645,412,496	63.8
June 30, 2005**	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
June 30, 2006**	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
June 30, 2007**	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
June 30, 2008**	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
June 30, 2009**	4,794,611,365	10,658,549,532	5,863,938,167	45.0	1,754,412,912	334.2
June 30, 2010**	4,210,215,585	11,004,795,089	6,794,579,504	38.3	1,815,146,388	374.3
Hazardous						
June 30, 2003**	$385,925,722	$356,879,133	$(29,046,589)	108.1%	$129,088,956	(22.5)%
June 30, 2004**	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
June 30, 2005**	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
June 30, 2006**	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
June 30, 2007**	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
June 30, 2008**	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
June 30, 2009**	502,503,287	674,411,781	171,908,494	74.5	146,043,576	117.7
June 30, 2010**	502,729,009	688,149,451	185,420,442	73.1	143,557,944	129.2
Total						
June 30, 2003**	$6,737,244,554	$6,877,342,321	$140,097,767	98.0%	$1,787,693,652	7.8%
June 30, 2004**	6,397,726,506	7,453,191,207	1,055,464,701	85.8	1,772,077,308	59.6
June 30, 2005**	5,983,974,408	8,018,069,096	2,034,094,688	74.6	1,787,594,376	113.8
June 30, 2006**	5,822,070,515	9,503,482,150	3,681,411,635	61.3	1,840,978,097	200.0
June 30, 2007**	5,864,070,268	10,044,931,606	4,180,861,338	58.4	1,925,061,513	217.2
June 30, 2008**	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0
June 30, 2009**	5,297,114,652	11,332,961,313	6,035,846,661	46.7	1,900,456,488	317.6
June 30, 2010**	4,712,944,594	11,692,944,540	6,979,999,946	40.3	1,958. 704,332	356.4

***Covered payroll was actuarially computed.*

Schedule of Funding Progress

County Employees Retirement System (CERS) - Pension Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2003**	$5,286,580,047	$4,417,597,802	$(868,982,245)	119.7%	$1,796,451,180	(48.4)%
June 30, 2004**	5,187,851,530	4,936,459,488	(251,392,042)	105.1	1,826,870,880	(13.8)
June 30, 2005**	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
June 30, 2006**	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
June 30, 2007**	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
June 30, 2008**	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
June 30, 2009**	5,650,789,991	7,912,913,512	2,262,123,521	71.4	2,183,611,848	103.6
June 30, 2010**	5,546,857,291	8,459,022,280	2,912,164,9898	65.6	2,236,855,380	130.2
Hazardous						
June 30, 2003**	$1,467,004,856	$1,499,628,782	$32,623,926	97.8%	$374,700,732	8.7%
June 30, 2004**	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
June 30, 2005**	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
June 30, 2006**	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
June 30, 2007**	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
June 30, 2008**	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
June 30, 2009**	1,751,487,540	2,578,444,600	826,957,060	67.9	469,315,464	176.2
June 30, 2010**	1,749, 464,388	2,672,151,907	922,687,519	65.5	466,548,660	197.8
Total						
June 30, 2003**	$6,753,584,903	$5,917,226,584	$(836,358,319)	114.1%	$2,171,151,912	(38.5)%
June 30, 2004**	6,645,463,572	6,577,289,608	(68,173,964)	101.0	2,219,433,504	(3.1)
June 30, 2005**	6,511,561,710	7,180,774,025	669,212,315	90.7	2,296,396,728	29.2
June 30, 2006**	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
June 30, 2007**	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4
June 30, 2008**	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3
June 30, 2009**	7,402,277,531	10,491,358,112	3,089,080,581	70.6	2,652,927,312	116.4
June 30, 2010**	7,296,321,679	11,131,174,187	3,834,852,508	65.5	2,703,404,040	141.9

***Covered payroll was actuarially computed.*

Schedule of Funding Progress

State Police Retirement System (SPRS) - Pension Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2003**	$413,063,576	$414,881,459	$1,817,883	99.6%	$43,760,832	4.2%
June 30, 2004**	385,077,195	437,482,425	52,405,230	88.0	43,835,208	119.6
June 30, 2005**	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
June 30, 2006**	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
June 30, 2007**	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
June 30, 2008**	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5
June 30, 2009**	329,966,989	602,328,868	272,361,879	54.8	51,660,396	527.2
June 30, 2010**	304,577,292	612,444,806	307,867,514	49.7	51,506,712	597.7

***Covered payroll was actuarially computed.*

Schedule of Funding Progress

State Police Retirement System (SPRS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
June 30, 2003**	$90,747,967	$184,501,205	$93,753,238	49.2%	$43,760,832	214.2%
June 30, 2004**	96,622,908	197,604,301	100,981,393	48.9	43,835,208	230.4
June 30, 2005**	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
June 30, 2006**	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
June 30, 2007**	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
June 30, 2008**	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
June 30, 2009**	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
June 30, 2010**	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2

***Covered payroll was actuarially computed.*

Schedule of Funding Progress

Kentucky Employees Retirement System (KERS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2003**	$553,885,082	$2,093,210,321	$1,539,325,239	26.5%	$1,658,604,696	92.8%
June 30, 2004**	600,586,961	2,335,905,365	1,735,318,404	25.7	1,645,412,496	105.5
June 30, 2005**	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
June 30, 2006**	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
June 30, 2007**	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
June 30, 2008**	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
June 30, 2009**	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
June 30, 2010**	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
Hazardous						
June 30, 2003**	$151,459,500	$283,178,335	$131,718,835	53.5%	$129,088,956	102.0%
June 30, 2004**	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
June 30, 2005**	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
June 30, 2006**	212,833,318	621,237,856	408,404,538	34.3	138,747,320	294.4
June 30, 2007**	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
June 30, 2008**	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
June 30, 2009**	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
June 30, 2010**	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
Total						
June 30, 2003**	$705,344,582	$2,376,388,656	$1,671,044,074	29.7%	$1,787,693,652	93.5%
June 30, 2004**	769,745,840	2,659,408,928	1,889,663,088	28.9	1,772,077,308	106.6
June 30, 2005**	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
June 30, 2006**	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,978,097	413.5
June 30, 2007**	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
June 30, 2008**	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
June 30, 2009**	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0
June 30, 2010**	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1

***Covered payroll was actuarially computed.*

Schedule of Funding Progress

County Employees Retirement System (CERS) - Insurance Fund

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age Normal (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2003**	$520,060,105	$2,176,963,259	$1,656,903,154	23.9%	$1,796,451,180	92.2%
June 30, 2004**	585,399,072	2,438,734,696	1,853,335,624	24.0	1,826,870,880	101.5
June 30, 2005**	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
June 30, 2006**	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
June 30, 2007**	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
June 30, 2008**	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
June 30, 2009**	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
June 30, 2010*	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
Hazardous						
June 30, 2003**	$269,190,080	$935,650,662	$666,460,582	28.8%	$374,700,732	177.9%
June 30, 2004**	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
June 30, 2005**	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
June 30, 2006**	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
June 30, 2007**	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
June 30, 2008**	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
June 30, 2009**	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
June 30, 2010*	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
Total						
June 30, 2003**	$789,250,185	$3,112,613,921	$2,323,363,736	25.4%	$2,171,151,912	107.0%
June 30, 2004**	895,977,234	3,464,419,173	2,568,441,939	25.9	2,219,433,504	115.7
June 30, 2005**	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
June 30, 2006**	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
June 30, 2007**	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
June 30, 2008**	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
June 30, 2009**	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4
June 30, 2010*	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3

***Covered payroll was actuarially computed.*

Schedule of Contributions From Employers and Other Contributing Entities
Kentucky Employees Retirement System (KERS) Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2003	$4,905,399	$ 7,597,450	--	154.9%
June 30, 2004	47,739,067	21,696,543	--	45.4
June 30, 2005	85,798,943	50,332,750	--	58.7
June 30, 2006	129,125,800	60,680,607	--	47.0
June 30, 2007	176,774,106	88,248,677	--	49.9
June 30, 2008	264,742,985	104,655,217	--	39.5
June 30, 2009	294,495,010	112,383,083	--	38.2
June 30, 2010	348,494,678	144,050,560		41.3
Insurance				
June 30, 2003	$ 92,052,561	$65,335,219	$ --	71.0%
June 30, 2004	77,951,553	78,016,737	--	100.1
June 30, 2005	86,974,271	49,909,228	--	57.4
June 30, 2006	202,498,302	47,634,639	--	23.5
June 30, 2007	219,768,964	64,014,332	10,744,049	34.0
June 30, 2008	558,745,820	56,744,942	6,633,538	11.3
June 30, 2009	362,707,378	74,542,932	8,167,982	22.8
June 30, 2010	376,556,187	93,976,917	8,550,914	27.2
Total				
June 30, 2003	$96,957,960	$72,932,669	$ --	75.2%
June 30, 2004	125,690,620	99,713,280	--	79.3
June 30, 2005	172,773,214	100,241,978	--	58.0
June 30, 2006	331,624,102	108,315,246	--	32.7
June 30, 2007	396,543,070	152,263,009	10,744,049	41.1
June 30, 2008	823,488,805	161,400,159	6,633,538	20.4
June 30, 2009	657,202,388	186,926,015	8,167,982	29.7
June 30, 2010	725,050,865	238,027,477	8,550,914	34.0

Schedule of Contributions From Employers and Other Contributing Entities

Kentucky Employees Retirement System (KERS) Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2003	$8,511,402	$7,322,607	--	86.0%
June 30, 2004	9,600,978	9,769,580	--	101.8
June 30, 2005	9,449,878	9,758,547	--	103.3
June 30, 2006	10,787,472	10,803,206	--	100.1
June 30, 2007	12,219,689	13,237,321	--	108.3
June 30, 2008	14,147,341	15,257,079	--	107.8
June 30, 2009	15,708,254	15,843,289	--	100.9
June 30, 2010	17,814,630	17,658,058		99.1
Insurance				
June 30, 2003	$15,839,215	$15,883,263	$ --	100.3%
June 30, 2004	14,942,092	14,959,617	--	100.1
June 30, 2005	15,892,977	15,395,977	--	96.9
June 30, 2006	28,517,563	17,011,745	--	59.7
June 30, 2007	31,304,778	19,534,819	104,669	62.7
June 30, 2008	51,214,929	21,997,341	73,891	43.1
June 30, 2009	34,670,467	20,807,204	186,081	60.6
June 30, 2010	35,045,278	21,921,535	319,059	63.5
Total				
June 30, 2003	$24,350,617	$23,205,870	$ --	95.3%
June 30, 2004	24,543,070	24,729,197	--	100.8
June 30, 2005	25,342,855	25,154,524	--	99.3
June 30, 2006	39,305,035	27,814,951	--	70.8
June 30, 2007	43,524,467	32,772,140	104,669	75.5
June 30, 2008	65,362,270	37,254,420	73,891	57.1
June 30, 2009	50,378,721	36,650,493	186,081	73.1
June 30, 2010	52,859,908	39,579,593	319,059	75.5

Schedule of Contributions From Employers and Other Contributing Entities

County Employees Retirement System (CERS) Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2003	$8,682,257	$11,855,694	--	136.6%
June 30, 2004	43,111,505	44,028,465	--	102.1
June 30, 2005	53,117,955	54,616,800	--	102.8
June 30, 2006	83,123,669	90,834,052	--	109.3
June 30, 2007	112,508,305	124,260,850	--	110.4
June 30, 2008	138,311,398	150,925,334	--	109.1
June 30, 2009	161,097,151	179,284,551	--	111.3
June 30, 2010	186,724,383	207,075,842		110.9
Insurance				
June 30, 2003	$102,038,427	$99,234,843	$ --	97.3%
June 30, 2004	89,289,520	89,344,241	--	100.1
June 30, 2005	106,612,633	106,638,253	--	100.0
June 30, 2006	272,942,757	128,867,817	--	47.2
June 30, 2007	285,600,490	147,608,801	9,623,431	55.1
June 30, 2008	406,541,729	196,110,111	6,003,181	49.7
June 30, 2009	264,733,532	123,761,611	7,623,628	49.6
June 30, 2010	266,331,326	166,607,097	9,156,991	66.0
Total				
June 30, 2003	$110,720,684	$111,090,537	$ --	100.3%
June 30, 2004	132,401,025	133,372,706	--	100.7
June 30, 2005	159,730,588	161,255,053	--	101.0
June 30, 2006	356,066,426	219,701,869	--	61.7
June 30, 2007	398,108,795	271,869,651	9,623,431	70.7
June 30, 2008	544,853,127	347,035,445	6,003,181	64.8
June 30, 2009	425,830,683	303,046,162	7,623,628	73.0
June 30, 2010	453,055,709	373,682,939	9,156,991	84.5

Schedule of Contributions From Employers and Other Contributing Entities

County Employees Retirement System (CERS) Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2003	$19,920,223	$16,905,556	--	84.9%
June 30, 2004	27,050,382	27,640,775	--	102.2
June 30, 2005	39,437,725	39,947,747	--	101.3
June 30, 2006	44,059,404	49,976,485	--	113.4
June 30, 2007	53,889,838	61,553,118	--	114.2
June 30, 2008	64,082,063	72,154,734	--	112.6
June 30, 2009	69,056,365	78,151,677	--	113.2
June 30, 2010	76,390,669	82,887,128		108.5
Insurance				
June 30, 2003	$43,502,755	$45,243,950	$ --	104.0%
June 30, 2004	47,018,046	47,036,777	--	100.0
June 30, 2005	54,094,495	54,106,577	--	100.0
June 30, 2006	98,297,535	64,853,778	--	66.0
June 30, 2007	115,938,899	70,072,785	656,523	61.0
June 30, 2008	168,723,639	90,113,200	419,774	53.7
June 30, 2009	126,757,348	70,785,241	627,938	56.3
June 30, 2010	129,227,449	83,042,875	1,493,440	65.4
Total				
June 30, 2003	$63,422,978	$62,149,506	$ --	98.0%
June 30, 2004	74,068,428	74,677,552	--	100.8
June 30, 2005	93,532,220	94,054,324	--	100.6
June 30, 2006	142,356,939	114,830,263	--	80.7
June 30, 2007	169,828,737	131,625,903	656,523	77.9
June 30, 2008	232,805,702	162,267,934	419,774	70.0
June 30, 2009	195,813,713	148,936,918	627,938	76.4
June 30, 2010	205,618,118	165,930,003	1,493,440	81.4

Schedule of Contributions From Employers and Other Contributing Entities
State Police Retirement System (SPRS)

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension				
June 30, 2003	$ --	$(20,061)	--	--%
June 30, 2004	1,175,711	1,152,752	--	98.0
June 30, 2005	3,730,805	2,851,461	--	76.4
June 30, 2006	6,352,777	4,244,445	--	66.8
June 30, 2007	9,023,665	6,142,326	--	68.1
June 30, 2008	13,823,490	7,443,277	--	53.8
June 30, 2009	15,951,841	8,186,259	--	51.3
June 30, 2010	18,764,941	9,489,399		50.6
Insurance				
June 30, 2003	$9,443,588	$9,654,313	$ --	102.2%
June 30, 2004	8,434,834	8,455,498	--	100.2
June 30, 2005	8,608,536	6,631,031	--	77.0
June 30, 2006	12,554,648	6,880,517	--	54.8
June 30, 2007	15,233,320	6,488,600	361,942	45.0
June 30, 2008	43,469,735	7,329,229	183,564	17.3
June 30, 2009	29,324,666	7,413,552	229,240	26.1
June 30, 2010	30,302,151	8,643,112	273,684	29.4
Total				
June 30, 2003	$9,443,588	$7,634,252	$ --	102.0%
June 30, 2004	9,610,545	9,608,250	--	100.0
June 30, 2005	12,339,341	9,482,492	--	76.8
June 30, 2006	18,907,425	11,124,962	--	58.8
June 30, 2007	24,256,985	12,630,926	361,942	53.6
June 30, 2008	57,293,225	14,772,506	183,564	26.1
June 30, 2009	45,276,507	15,599,811	229,240	35.0
June 30, 2010	49,067,092	18,132,511	273,684	37.5

ADDITIONAL SUPPORTING SCHEDULES

Schedule of Administrative Expenses

For the Fiscal Years Ended June 30, 2010 and 2009

(Dollars in Thousands)	2010	2009
Personal Services		
Salaries and Per Diem	$13,678	$13,323
Fringe Benefits	4,407	3,964
Tuition Assistance	27	62
Total Personal Services	18,112	17,349
Contractual Services		
Actuarial	251	263
Audit	58	49
Legal	308	231
Medical	273	298
Contractual	719	755
Total Contractual Services	1,609	1,596
Communication		
Printing	302	433
Telephone	143	170
Postage	577	655
Travel	163	166
Total Communication	1,185	1,424
Rentals		
Office Space	1,106	1,057
Equipment	91	97
Total Rentals	1,197	1,154
Miscellaneous		
Utilities	195	191
Supplies	156	220
Insurance	80	80
Maintenance	4	11
Other	1,447	1,418
Total Miscellaneous	1,882	1,920
Depreciation/Amortization	863	525
Total Pension Fund Administrative Expense	24,848	23,968
Healthcare Administrative Expenses	9,703	8,869
Total Administrative Expenses	$34,551	$32,837

Schedule of Investment Expenses

For the Fiscal Years Ended June 30, 2010 and 2009

(Dollars in Thousands)	2010	2009
Pension Funds		
Security Lending Fees		
Broker Rebates	$1,755	$19,498
Lending Agent Fees	1,445	3,683
Total Security Lending	3,200	23,181
Common Stock Commissions	7,374	8,342
Contractual Services		
Investment Management	33,492	12,045
Security Custody	155	208
Investment Consultant	880	621
Investment Related Travel	29	32
Software	125	201
Miscellaneous	10	5
Legal Counsel	736	189
Total Contractual Services	35,427	13,301
Insurance Funds		
Security Lending Fees		
Broker Rebates	71	3,951
Lending Agent Fees	306	695
Total Security Lending	377	4,646
Common Stock Commissions	1,200	929
Contractual Services		
Investment Management	5,007	1,133
Security Custody	32	42
Investment Consultant	270	120
Investment Related Travel	6	7
Software	2	1
Miscellaneous	26	41
Legal Counsel	22	39
Total Contractual Services	5,365	1,383
Total Investment Expenses	$52,943	$51,782

Schedule of Professional Consultant Fees

For the Fiscal Years Ended June 30, 2010 and 2009

(Dollars in Thousands)	2010	2009
Actuarial Services	$251	$263
Medical Review Services	273	298
Audit Services	58	49
Legal Counsel	308	231
Compliance		105
Workflow	392	433
Healthcare	166	82
Banking	47	51
Human Resource		26
Miscellaneous	114	58
Total	$1,609	$1,596

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Report On Internal Control Over Financial Reporting And On Compliance And Other Matters Based On An Audit Of Financial Statements Performed In Accordance With Government Auditing Standards

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ended June 30, 2010, and have issued our report thereon dated November 18, 2010. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Kentucky Retirement Systems' internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Kentucky Retirement Systems' internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Kentucky Retirement Systems' internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Kentucky Retirement Systems' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion.

The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information of the audit committee, management, and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

November 18, 2010
Lexington, Kentucky

KENTUCKY RETIREMENT SYSTEMS
Schedule of Finding and Response

CURRENT YEAR
Our audit disclosed no findings which are required to be reported in accordance with Government Auditing Standards.

Investments

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INVESTMENT SUMMARY

A New Horizon

The prior fiscal year was marked by a global financial crisis that resulted in the largest credit contraction experienced since the Great Depression. Governments were forced to prop up financial markets, having to use the phrase “with the full faith and credit” many times, and print large sums of currency to fund economic stimulus programs in order to avoid a complete melt-down and ensure that credit was available.

This fiscal year has brought about a much needed reversal to that experienced just the year before. The equity markets that began their surge in late March 2009 continued their strength through much of the 2010 fiscal year, while bond markets also were solid.

Both domestic and international equity investors enjoyed markets that seemed poised for upward movement at every whisper of good, or in some cases, less bad than expected, economic data. However, despite the S&P 1500 and the MSCI ACWI Ex-US equity indices being up 15.58% and 10.87% for the fiscal year, respectively; a few bumps along the way were felt. Most notably was the sting of May that shed 8% off domestic equities and nearly 11% off international stocks, as concerns regarding the sovereign debt crisis in the Euro zone came to light. In addition, unemployment continued to remain stubbornly high despite improving GDP growth rates.

U.S. bond markets were good performers throughout the fiscal year with ten months of positive performance. Both investment grade corporate credit and high yield corporate credit performed well during the first half of the 2010 fiscal year. Due to a slowing U.S. economy, weakening job numbers, and issues arising in the Euro zone, U.S. Treasuries performed well in the latter half. The volatility still inherent in the equity markets, perhaps combined with the bad taste left in the mouths of investors from prior year, helped to contribute to a net inflow of capital into the bond market. The strong demand for bonds caused prices to rise spurring the Barclays Aggregate Index to return 9.5% for the period and yields to depress with the ten-year treasury now below 3%.

The economy which in early 2009 seemed to be in a spiral, collapsing at a 6% annual rate during the first quarter, has turned and is now experiencing slow to moderate growth. However, some are concerned as markets have trended sideways for some time, and confidence is beginning to erode. The Federal Reserve Bank recently described the economy to Congress as "unusually uncertain" but believed that a double-dip recession was not an imminent threat. However, the hope of the consumer stepping in to continue the turnaround is in question. As economic stimulus through transfer payments, direct government spending, and financial asset purchases slow, the country will begin to experience a gradual fiscal and monetary tightening, a great concern for a struggling economy.

Some argue that the experience of the last couple of years is reshaping America and creating a "new normal"; one of diminished expectations, where households, businesses, and governments must de-lever and shrink the debt on their respective balance sheets. Lower consumption rates will be born from the act of de-leveraging, and thus will result in slower economic growth, and higher structural unemployment. This appears to be taking shape as America has already shifted to be a nation of net savers. A new horizon may be emerging as the country goes back to the basics.

KRS Investment Summary

The Board of Trustees is charged with the responsibility of investing the Systems' assets to provide for the benefits that must be paid to members of the Systems. To achieve that goal the Board follows a policy of preserving capital, while seeking means of enhancing revenues and protecting against undue losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in formal compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the Systems. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policies, objectives and strategies for both the pension and insurance portfolios.

Target Allocations (%) for Pension & Insurance Funds

The Board approved a new target asset allocation, beginning July 1, 2007. The following tables depict the Board's investment policy as of June 30, 2010.

Pension Fund Allocations

Asset Class	Target	Actual
U.S. Equity	30.0%	30.3%
International Equity	20.0	20.2
Fixed Income	25.0	22.1
Opportunistic Fixed	0.0	1.6
TIPS	10.0	9.4
Alternatives	12.0	14.2
Absolute Return	0.0	0.7
Currency Overlay	0.0	0.6
Cash	3.0	0.9

Insurance Fund Allocations

Asset Class	Target	Actual
U.S. Equity	40.0%	41.4%
International Equity	30.0	24.8
TIPS	12.0	11.6
Alternatives	15.0	9.1
Absolute Return	0.0	1.2
Currency Overlay	0.0	1.0
Cash	3.0	10.9

What are Alternative investments?

Assets like Private Equity and Real Estate

What does TIPS stand for?

Treasury Inflation Protected Securities

Short-Term & Long-Term

Short-term investment objectives stipulate that annual returns of managed funds should exceed returns achieved by a policy benchmark portfolio, composed of comparable unmanaged market indices (Ex. S&P 500, Russell 1000, MSCI EAFE, etcetera).

Long-term investment objectives stipulate that returns measured over two market cycles (estimated as six to ten years) should exceed the 7.75% Actuarially Required Rate of Return, as well as surpass returns achieved by the fund benchmark.

Additionally, the Board encourages investment in securities of corporations that provide a positive economic contribution to the Commonwealth of Kentucky.

Diversifying Assets & Rebalancing Allocations

Portfolios are diversified through the use of multiple asset classes. Each asset class is diversified through the use of multiple portfolios that are managed by KRS staff, professional consultants, external money managers and advisors. Within each asset class portfolios are diversified through the selection of individual securities. Advisors are afforded discretion to diversify within the parameters established by the Board.

Proper implementation of the investment policy requires that a periodic adjustment of assets be made. Such rebalancing is necessary to reflect sizeable cash flows and performance imbalances among asset classes and investment advisors. KRS' rebalancing policies call for an immediate rebalancing to within its allocation ranges, if an asset class exceeds or falls below its target allocation by 10%. Both the Pension and Insurance (with the exception of cash) portfolios remained within this established range in fiscal 2010.

Statement of Investment Policies

View the Pension Fund policy by visiting www.kyret.ky.gov/investments/policies/pension_fund_investment_policy.pdf

View the Insurance Fund policy by visiting www.kyret.com/investments/policies/insurance_fund_investment_policy.pdf

Performance Review Procedures

At least once each quarter the Investment Committee, on behalf of the Board of Trustees, reviews portfolio performance to ensure compliance with the Statement of Investment Policy. Additionally, the Audit Department performs periodic tests to assure compliance with the Investment Policy. This responsibility will remain that of the Compliance Officer; however, that position was reassigned to report to the Audit Department beginning in the Fall of 2009.

Portfolios

Due to the downturn in the financial markets, the Insurance Fund's cash portfolio was held above policy range as a means of downside protection because the fund has no dedicated allocation to the core fixed income space. This action was approved by the Investment Committee.

Investment Consulting

The Board employs industry-leading consultants to independently assist in reviewing asset allocation guidelines, as well as the performance of internally managed and externally managed assets. KRS' investment consultants are R.V. Kuhns & Associates, Strategic Investment Solutions and ORG Portfolio Management.

RVKuhns & ASSOCIATES, INC.

September 23, 2010

Board of Trustees
Kentucky Retirement System
c/o Robert M. Burnside, MS
Executive Director
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Board Members:

Economic Review

The first ten months of the fiscal year ending June 30, 2010 experienced a global recovery as government economic stimulus programs and low interest rates provided comfort to investors in most regions and asset classes. The markets continued to climb from the March 9, 2009 bottom, but lost ground leading into June 30 as fears mounted over the Greek sovereign debt crisis, the cessation of the stimulus packages, and lowered economic growth prospects.

Domestic Economic Indicators As of June 30, 2010

Indicator	Measure	June 2010	June 2009	Yr/Yr
U.s. Real GDP YOY Change	Business Activity	2.98%	-4.11%	▲
Unemployment Rate	Business Activity	9.50%	9.50%	--
Breakeven Inflation	Inflation Expectation	1.84%	1.77%	▲
10 Year Treasury Note Yield	Interest Rates	2.97%	3.53%	▼
Leading Economic Index	Aggregate Indicator	109.78	101.10	▲
Coincident Economic Index	Aggregate Indicator	101.40	99.70	▲
Consumer Confidence Index	Confidence	52.90	49.30	▲

Economic Indicator Commentary

- *National Unemployment Rate fell slightly in June, ending at 9.50%.*
- *Breakeven Inflation decreased month-over-month and quarter-over-quarter but is still up since this time last year.*
- *The yield on the 10 year treasury note fell by 0.34% from the previous month and 0.56% from the previous year.*
- *Leading Economic Index has been rising since April 2009 after falling for twenty months since its peak in July 2007.*
- *Coincident Economic Index continues to show slow expansion of economic activity through June.*
- *Consumer Confidence Index has increased to 52.90 in June from 49.30 last year.*

U.S. Gross Domestic Product ("GDP") increased in every quarter of the fiscal year beginning July 1, 2009 as the country recovered from the recession experienced during the prior fiscal year. [1] In fact, the National Bureau of Economic Research recently issued a statement that the U.S. recession ended in June 2009. Despite the economic growth and end of the recession, the unemployment rate remained high but steady throughout the fiscal year. It climbed as high as 10.1% before settling back to 9.5% by the end of the fiscal year.[2] Inflation, as measured by the Consumer Price Index, returned 1.05% for the fiscal year, primarily from a 0.78% rise between January 2010 and March 2010. The U.S. Federal Reserve maintained its 0% to 0.25% policy with no indications of shifting its policy any time soon.

Capital Markets Review

The fiscal year began with most capital markets continuing their ascent from the low point of March 9, 2009. Most risk-oriented securities generated strong returns for the year ending June 30, 2010. Top performing broad asset classes included REITS (+55.5%), commercial mortgage-backed securities (+30.5%), U.S. high yield bonds (+26.8%), U.S. mid cap stocks (+25.1 %), and emerging market equities (+23.5%), The inflow of capital from global governments and in particular the stimulus packages in the U.S. through the Term Asset-Backed Loan Facility (TALF) and Public-Private Investment Program (PIPP), helped backstop and boost credit markets.

While the Fed maintained its low interest rate policy in tandem with the stimulus programs, investors felt as though impending inflation would lead the Fed to begin raising rates. Therefore, investors sold off longer-term bonds. The U.S. Treasury yield curve was the steepest it had ever been in history by March 31, 2010 with spread between 2-Year and 10-Year Treasury Notes reaching 282 basis points. However, the combination of ending the stimulus packages in early 2010, concerns about the Greek sovereign debt crisis, and a slowdown in growth in the U.S. and China in May 2010 sent investors back into Treasurys. Globally, stock markets gave back all the 2010 gains through April and ended the first six months of 2010 with losses. The table below shows the returns earned by the major markets.

One-Year Trailing Period Performance through June 30, 2010

Index	Description	Return
S&P 500	Large Cap U.S. Equity	14.4%
Russell Mid Cap	Mid Cap U.S. Equity	25.1%
Russell 2000	Small Cap U.S. Equity	21.5%
MSCI EAFE (Gross)	Large Cap Inti Equity	6.4%
MSCI EAFE SC (Gross)	Small Cap Inti Equity	12.6%
MSCI EM (Gross)	Emerging Mkt Equity	23 .5%
BC US Agg Bond	U.S. Invrnt Grade Bond	9.5%
BC US Treasury	U.S. Treasury Bonds	6.7%
BC US Corp High Yield	U.S. High Yield Bonds	26.8%
Wishire REIT	U.S. Real Estate Inv Trust	55.5%
BofA ML 3 Mo US T-Bill	U.S. Cash Equivalent	0.2%

[1] *Based on data provided by the U.S. Department of Commerce, Bureau of Economic Analysis*
[2] *Based on data provided by the U.S. Department of Labor*

Pension Plan Review

The market value of the Kentucky Retirement Systems (Systems) Pension Plan assets increased from $9.8 billion on June 30, 2009 to $10.5 billion on June 30, 2010. The Fund's investments collectively returned an impressive 15.8% return for the fiscal year compared to the 12.3% return earned by its target allocation benchmark. The Fund's three-year annualized return of -2.8% was in line with its target allocation benchmark of -2.8%. The Fund's five-year annualized return of 3.0% outperformed the target allocation benchmark's return of 2.7%. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal.

Kentucky Retirement Systems-Pension Plan

Asset Allocation vs. Target Allocation

Asset Class	Market Value ($)	Allocation (%)	Target (%)
Domestic Equity*	3,244,579,934	31.2	30.0
International Equity	2,105,669,867	20.2	20.0
Fixed Income	2,486,231,299	23.9	25.0
Real Return	979,195,798	9.4	10.0
Real Estate	58,060,488	0.6	5.0
Private Equity	1,428,739,442	13.7	7.0
Cash Equivalent	99,090,390	1.0	3.0
Total Fund Ex-Cash Overlay	10,401,567,218	100.0	100.0
Total	10,469,099,555	100.0	100.0

**The Absolute Return Composite is included in the Domestic Equity Allocation.*

The Systems' current pension plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging). The fixed income portfolio primarily consists of U.S. investment grade investments with a small allocation to high yield securities. The Systems also invests in real return assets (currently U.S. Treasury Inflation Protection Securities or TIPS), real estate, and private equity. As of June 30, 2010, the portfolio's asset allocation was within an acceptable range compared to the target allocation. The Systems completed a small initial investment (0.7% of total assets) to an absolute return manager (hedge fund) during the fiscal year, which complied with a Board decision to allocate up to 5.0% of the plan to absolute return strategies. Absolute return strategies are currently included in the domestic equity allocation, but will be shown as a separate allocation pursuant to a newly approved target asset allocation.

As of June 30, 2010, the allocation to private equity was almost double its target allocation and real estate was below its target allocation. The current deviations to the target will be addressed by a new target asset allocation and brought closer to the new target allocations in a prudent manner over time.

Insurance Plan Review

The market value of the Kentucky Retirement Systems Insurance Plan assets increased from $2.0 billion on June 30, 2009 to $2.4 billion on June 30, 2010. The Fund's investments returned 15.5% during the same period compared to 13.5% for its target allocation benchmark. The Fund's three-year annualized return of -6.5% exceeded its target allocation benchmark of -6.9%. The Fund's five-year annualized return of 1.8% exceeded its target allocation benchmark of 1.4%. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal.

Kentucky Retirement Systems-Insurance Plan

Asset Allocation vs. Target Allocation

Asset Class	Market Value ($)	Allocation (%)	Target (%)
Domestic Equity*	1,023,698,280	43.3	40.0
International Equity	595,703,885	25.9	30.0
Fixed Income	279,105,028	10.0	12.0
Real Estate	5,234,220	0.1	5.0
Private Equity	212,527,609	7.2	10.0
Cash Equivalent	262,065,644	13.5	3.0
Total Fund Ex-Cash Overlay	2,378,334,666	100.0	100.0
Total	2,402,999,116	100.0	100.0

**The Absolute Return Composite is included in the Domestic Equity Allocation.*

The Systems' Insurance plan investments are diversified across global equity markets, U.S. fixed income, private equity, and a small initial allocation to real estate. As of June 30, 2010, the portfolio was overweight domestic equity and cash equivalents and underweight all other asset classes. In particular, the Plan's overweight to domestic equity included a small initial investment (1.2% of total assets) in an absolute return manager (hedge fund) during the fiscal year, which complied with a Board decision to allocate up to 5.0% of the plan to absolute return strategies. Absolute return strategies are currently included in the domestic equity allocation, but will be shown as a separate allocation pursuant to a newly approved target asset allocation. It is important to note that the Systems held an overweight position to cash equivalents compared to its target while maintaining an underweight position to non-U.S. equity, private equity and real estate. The current deviations to the target will be addressed by a new target asset allocation and brought closer to the new target allocations in a prudent manner over time.

Investment Manager Review

Pension Plan

INVESCO's Structured Core Equity portfolio posted a return of 10.4% for the fiscal year, which was strong on an absolute basis but fell below the S&P 500 Index's return of 14.4%. The Northern Trust Structured Small Cap portfolio posted the best return among the three domestic equity portfolios with a return of 24.1 %, which beat the Russell 2000 Index return of 21.5%. The internally managed S&P 1500 Index portfolio underperformed its benchmark with a return of 14.5% vs. the S&P 1500 Comp Index return of 15.6%.

The relative performance among the international equity managers was mixed, but collectively the total international equity portfolio outperformed the MSCI All Country World (ACW) ex US Investable Market Index (Gross) for the fiscal year (12.1% vs. 11.9%). The Boston Company Non-US Value Equity portfolio outperformed the MSCI World ex US Index (7.6% vs. 7.5%) as did the Pyramis International Growth portfolio (8.5% vs. 7.5%). Both managers expanded their investment universe to include Canadian companies. The core portfolio was expanded after the start of the fiscal year to include Artio Global Investors to complement the existing BlackRock Institutional Trust Company (BTC)3. Therefore, only BlackRock posted a full year's return to observe, which fell slightly below its new benchmark, the MSCI ACW ex US Index, for the year (10.5% vs. 10.9%). BTC's original mandate changed from developed non-US markets only to include emerging markets in June 2009. The international small capitalization equity fund managed by Northern Trust ended the fiscal year below its benchmark, the MSCI ACW ex US Small Cap Index, but earned a very strong absolute return (19.8% vs. 20.3%). The Plan's two emerging market equity portfolios managed by Aberdeen Asset Management and Wellington Management generated very different and mixed returns for the year. Aberdeen earned an impressive 33.7% relative to the MSCI Emerging Markets Index return of 23.5%, but Wellington only earned 18.6% over the same fiscal year period.

The Systems made some improvements to the fixed income portfolio during the fiscal year. The investment grade assets managed by Pyramis and RW Baird were transitioned to the PIMCO Core Fixed Income portfolio over several months. PIMCO has not earned a full fiscal year return but the return through June 30 was 4.1 % compared to 5.0% for the Barclays Capital US Aggregate Bond Index since the inception of the initial funding in November 2009. Both the internally managed TIPS portfolio (9.7%) and the Weaver Barksdale TIPS portfolio (9.6%) outperformed the 9.5% return for the Barclays Capital US TIPS Index for the fiscal year. The Systems' investment in Commerce Street Income Partners has outperformed its benchmark, the Barclays Capital US Corporate High Yield Index by a wide margin over the trailing 12-months (29.5% vs. 26.8%). The sector-specific manager Waterfall, funded during the second half of the fiscal year, has significantly outperformed the Barclays Capital ABS Floating Rate Aaa Index since its inception in February 2010 (7.5% vs. 1.5%).

The Plan's alternative investment portfolio consists of a developing absolute return strategies portfolio, longer term investments in real estate (still developing), and private equity (mature program). The Systems made an initial investment in Arrowhawk Durable Alpha Fund in January 2010 and posted a relative gain against the HFN Fund of Funds Multi-Strat Index, although both posted losses in the last quarter of the fiscal year (-2.5% vs. -2.7%). The fiscal year return for the real estate portfolio composite was -2.9% versus -1.5% for the NCREIF Property Index. Over the past five years ending June 30, the total private equity portfolio return of 3.9% underperformed the Venture Economics All Private Equity Index return of 8.6% and fell short of its public market equivalent benchmark, the MSCI Broad US Market Index + 5%, which posted a 4.8% return.

Insurance Plan

The Insurance Plan invests in the Systems' internally managed S&P 1500 Index portfolio, the international portfolios managed by The Boston Company, Artio, Pyramis, Aberdeen, and Wellington, the internally managed TIPS portfolio, and the alternative investment portfolios. Although the insurance plan returns slightly differ from the returns earned in the pension plan because of investment restrictions, the relative under/outperformance was similar for the fiscal year.

Board Initiatives

Toward the end of the fiscal year, the Board made an important decision to commission RVK to conduct asset-liability studies for the KERS, CERS, and SPRS pension and insurance plans. The studies, normally conducted every three to five years, were done because the severe market downturn in 2008 into early 2009 significantly lowered the funded ratio across all investment plans. It became evident to the Board that it was necessary to better align the asset allocation decisions of the plans with the future and growing corresponding liabilities. The studies were completed in stages, and RVK completed the KERS pension and insurance plans during the fiscal year. The asset-liability studies for CERS and SPRS were completed within the first quarter of the following fiscal year.

The studies revealed that several plans, particularly the KERS Non-Hazardous Pension Plan, face the possibility of converting to a pay-as-you-go model. Using 'what if' scenarios, analysis shows that under very weak investment market conditions coupled with the consistent underfunding of the pension contributions over the next 10 years, the pension fund could deplete its assets in an attempt to meet escalating benefit payments. The asset-liability study assisted the Board with deciding on the most effective asset allocation strategies for each pension and insurance plan under its purview in order to lower risk, control the level of illiquidity in the portfolios, and generate a return expected to exceed the actuarially assumed rate of return of 7.75%. All of the asset-liability studies were completed in the first quarter of fiscal year 2010-11 and the Board began transitioning to the new target allocations shortly thereafter in a prudent manner.

Oversight

The Systems' investment policies, goals, and objectives, as well as the performance of its assets are regularly monitored by KRS staff, the Board, and R.V. Kuhns & Associates, Inc. These evaluations include reviews of the investment management firms and the custodial bank that serve the Systems. The Systems' assets are held in custody at Northern Trust. Market values and investment performance returns referenced above are based upon financial statements prepared by Northern Trust. We rely on their data and have not independently audited it. However, their financial statements are, to the best of our knowledge, believed to be reliable.

Summary

An uncertain market environment demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the Systems' employee participants. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the Systems to meet its long-term goals and objectives.

Most sincerely,

Jim Voytko
President, Principal
Director of Research, Senior Consultant
R.V. Kuhns & Associates, Inc.

STRATEGIC INVESTMENT SOLUTIONS, INC.
333 Bush Street, Ste 2000, San Francisco, California 94104
TEL 415/362-3484 ◘ FAX 415/362-2752

Date: September 24, 2010
Subject: Annual Private Equity Review

The Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Trustees:

Strategic Investment Solutions is charged with the duty to advise the Kentucky Retirement Systems (KRS) Board of Trustees and Staff in its private equity investment activities. This is our annual review of the KRS private equity investment program. The private equity managers have all reported through June 30, 2010 with the exception of one manager. The market overview and performance data is as of June 30, 2010. The investment program is managed in accordance with the KRS Investment Policies and Procedures.

Market Highlights

Given the decline in stock market valuations through 2008, some portfolios faced significant mark-downs as private equity managers were forced to adopt mark-to-market valuation policies. As a result, many managers have been focusing their time and resources on maintaining value within their existing portfolios rather than actively pursuing new deal flow. With the additional strain of the restricted availability of debt to finance new transactions, there was a dearth of new deals during 2009. On the investor (or 'limited partner', LP) front, the industry faced significant issues in 2008 and 2009. Liquidity constraints caused by the 'denominator effect' led to forced selling from some investors as their private equity exposures overshot their target allocations. While this problem has abated for some investors to an extent as markets have rebounded, other LPs are expected to face liquidity challenges when deal flow picks up along with new capital calls.

While the media focus appears to be on large-cap buyout strategies, where there has been minimal deal activity and significant portfolio issues, it is possible to identify niche areas of private equity that are less reliant on leverage and can add genuine operational and strategic value to complete transactions and generate returns. Such strategies are relatively well positioned to take advantage of the lower pricing and increased inefficiency in global capital markets.

Portfolio company operating performance appears to be stabilizing (as the broader global economy stabilizes), pricing for new deals is becoming more compelling from a buyer's perspective (as sellers' expectations correct to the new reality of today's valuations) and financing packages are increasingly available for the right businesses. A flurry of deal activity announced in early 2010 is testament to

the potential for transactions to be created for the right businesses if managers have the skill set and capacity to aggressively seek new deals. While target firms exist across the size and geographical spectrum, we are seeing increasing opportunities in the small- to mid-market buyout space and in emerging markets.

There are also niche opportunities that we find attractive from a thematic perspective, such as distressed-for-control and turnaround managers, which appear to have an increasing supply of opportunities given the economic situation. In addition, history suggests that periods of economic contraction are attractive years to invest in private equity (although we note that, in some markets, the weight of capital could mean history does not repeat itself).

The venture capital industry remains in turmoil, but there are some exciting investment opportunities for those that survive to exploit. We also expect the industry to become increasingly global with both China and India becoming more and more important.

Most of the opportunities would appear to be in industries in which venture capital funds are especially well entrenched, for example, IT, healthcare, and alternative energy, positioning them favorably to take advantage of some important trends. Another opportunity comes in the form of a globalization of venture capital. Entrepreneurship has begun to take solid roots in important economies like India and China. Given the trends previously outlined and the flux of the industry, we believe that having a fixed allocation to venture capital and building a diversified program across early stage to later stage investments is likely to lead to disappointment. Perhaps given the pace of change in the industry, a more opportunistic approach of backing only those groups with a real competitive advantage, including some non-US investment opportunities, is likely to be a winning strategy. Our current focus is on early stage venture capital investing where there would appear to be the most attractive capital to opportunity imbalance right now.

Many distressed funds raised in late 2008 and 2009 could be classified as passive. A strategy that is highly tactical and predominantly focused on purchasing performing or mildly stressed assets trading at a discount to general market sentiment. The key driver of returns in this strategy is market beta (that is due to market movement as opposed to skill). An 'active' strategy is when managers intend to take operational control of companies via a controlling position in the debt.

The required skill set to execute a distressed for control strategy includes:

- Deep fundamental credit skills
- Experience in bankruptcy proceedings and creditor negotiations, with a track record in leading companies through a financial restructuring
- Access to credit opportunities other than intermediated companies in order to build controlling positions in the debt of companies
- A track record of restructuring operations and growing earnings to allow the business to become a viable going concern.

The distressed story in 2009 was a beta driven credit rally with a strong recovery across credit markets particularly both secured and unsecured corporate credit. Going forward, we expect opportunities will be more idiosyncratic as highly levered companies struggle to refinance existing debt, opening the door for skilled active distressed managers to find opportunities in corporate credit and rescue finance to generate alpha dominated returns.

We believe it is a good time for clients to consider exposure to experienced distressed-for-control managers. However, investors must be cognizant that the opportunity set has already narrowed following the rebound in credit markets and with, defaults expected to fall further, the focus should be on funds that have strong sourcing capabilities away from well–intermediated restructuring opportunities.

As the recent market crisis unfolded, one area of the private equity landscape that commentators suggested would inadvertently benefit from market conditions was secondaries. The widely accepted expectation was that the supply-demand imbalance of opportunities would allow buyers to dictate prices amid a period of significant deal activity in the secondary market. However this expectation has not born out in reality. Actual deal activity between the fourth quarter of 2008 and the present was modest with various secondary intermediaries suggesting transaction volume in 2009 was down 50% to 60% compared to 2008.

We believe there were three main impediments to deal activity:

- Buyer-Seller dislocation
- LP liquidity crisis abated (temporarily?)
- Significant divergence between available assets from sellers and buyer preferences

Broadly speaking, some level of stability in the wider economy and therefore transparent on the operating performance of underlying portfolio companies has proven to be necessary for secondary deal activity to occur.

Despite the cautionary note above, experienced and long-term investors in the asset class are well positioned to opportunistically invest in secondary transactions as part of a broader private equity program.

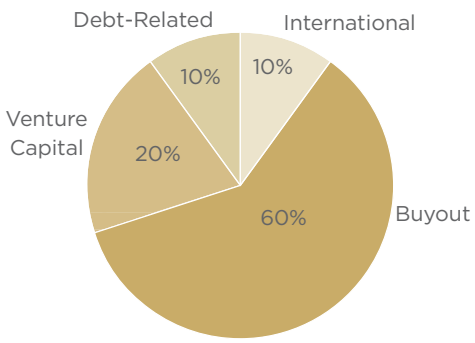
As PE fund managers scan the expanding range of sectors and geographies that now comprise the PE universe of promising places to invest, several areas that drew interest in 2009 continue to offer hot prospects in 2010. Energy and healthcare topped a recent poll of sectors where PE fund managers expect to see significant levels of investment over the coming year. Both had been among industries that increased their share of total PE deal making during the rising PE market of 2003 to 2007, and they look poised to continue their ascent. Additionally, the Asia-Pacific region has garnered increased attention, particularly among investors seeking returns akin to venture capital during the mid-late 1990s, though many believe this region is becoming attracting an excess of capital given existing opportunities to realize value.

Private Equity Performance and Asset Allocation Highlights

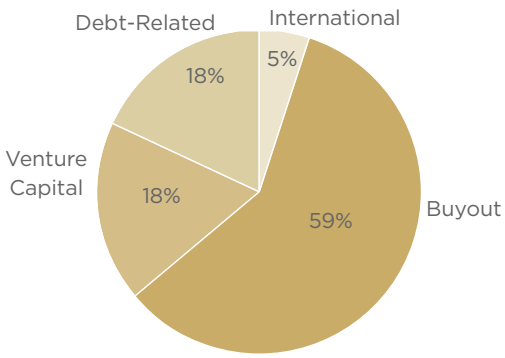
• Fiscal Year to Date ending June 30, 2010 was another year of significant contributions relative to distributions with capital draw-downs totaling $301.3mm and distributions, the return of capital (gains and losses), equating to $104.2mm. The capital draw-downs were below the FY 2009 outflows of $334 million and the return of capital was substantially more relative to FY 2009 distributions of $25mm. As global economies emerged from the 2007-2008 environment and earnings and revenue visibility has increased, M&A activity has picked up. As a result, companies have begun making strategic acquisitions, which is reflected in the increase in distributions from the KRS portfolio.

• Crestview II ($19.5mm), GTCR Fund IX ($25.2mm), DAG Ventures III ($26.5mm), Oak Hill Capital Partners III ($40mm) and Tortoise Capital Advisors ($25mm) led the investment pace in FY 2010 as these six partnerships accounted for a combined $136.2mm or 45% of the total capital called in FY 2010. Distributions increased substantially from the prior year and the top five leaders in distributions for the fiscal year were: Green Equity V ($6.7mm), Warburg Pincus Private Equity IX ($10.7mm), Oak Hill Capital Partners II ($10.1mm), and Wayzata Opportunities I and II ($12.2mm, $12.1mm). In aggregate, these partnerships comprised 50% of the total capital received in FY 2010. Of the 48 partnerships in the Program, 35 returned capital during FY 2010.

Approximate Allocation Targets



Subclass Allocations as of 06/30/10



• As of June 30, 2010, the KRS Private Equity portfolio had committed to 48 different partnerships with 35 managers. Relative to the prior year, the number of new relationships with managers increased by six. The new relationships introduced were Horsley Bridge International V (fund of funds focused in international buyouts and venture), Tortoise Capital Advisors (separate account focused on publicly traded energy infrastructure MLP's), The Camelot Group (direct secondaries), Keyhaven (European fund of funds), Arcano Capital (separate account with a regional focus primarily in Europe and Latin America) and Doll Capital (early stage venture capital). These commitments were to niche areas that were meant to complement the core portfolio and improve risk-adjusted returns.

• As of June 30, 2010 the KRS Private Equity Program had made total commitments of $2.6 billion to 48 different partnerships. The percent funded or invested of the committed amount at fiscal year-end was $1.7 billion or 63.9% of committed capital.

• As of June 30, 2010, Private Markets as a percentage of the total fund was 12.1% of the total KRS portfolio (this total includes the Insurance Fund) compared to the target level of 7%. This level compares with 8.7% as of 12/31/08. The dramatic increase in the private equity allocation is largely a function of the decrease in the Plan's value at $12.8B at fiscal year end of 2010 from $16B at fiscal year end 2009. In short, the "denominator effect" continues to create an over-allocation to private equity relative to its current target.

Summary

Mindful of the current over-allocation to private equity, we expect to continue our focus on smaller niche sectors and potential liquidity opportunities to free up additional private equity capital. As expected, international investments have become a larger portion of the KRS private equity program and are expected to grow over time.

Now that capital markets have stabilized relative to the 2008-2009 period, we are hopeful that the pace of realizations and distributions will continue to increase and return capital to KRS. As private equity typically performs well when exiting a recession, SIS believes commitments made during the 2008-2010 vintage years should provide superior long-term returns and contribute to the success of the KRS private equity investment program.

Peter A. Keliuotis, CFA
Managing Director

3733 park east drive ▯ cleveland, oh 44122-4334 ▯ tel: 216.468.0055 ▯ fax: 216.468.005

September 16, 2010

ORG Portfolio Management ("ORG") serves as the Real Estate Investment Consultant for Kentucky Retirement Systems ("KRS"). It is ORG's responsibility to present potential investment opportunities to the Investment Staff and Board and to make recommendations related to KRS' real estate portfolio. It is ORG' s commitment to assist KRS in building a successful long term real estate investment portfolio for the KRS pension fund members.

U.S. Market Overview

In the first quarter 2010, the conditions in the domestic commercial real estate transaction market began to improve. Despite a number of significant difficulties being experienced by property owners, such as lack of demand, leasing challenges, debt expirations and covenant defaults, properties are beginning to come to market. 2010 has shown an increase in volume and values of properties offered for sale that was not seen in the 4th quarter of 2009.

The office sector of the U.S. market is showing a slow trend in improvement as sales of office properties increased significantly to $7.8 billion in the 2nd quarter of 2010, as compared to $4.5 billion in prior quarter. Strong demand for the acquisition of office properties in prominent business locations such as Washington DC and New York City has pushed capitalization rates down slightly during the quarter. Tenants continue to take advantage of weak conditions to upgrade to quality and location as rents continue on a downward trend. The average vacancy rate for central business districts across the country is 13.1%, while suburban office markets ended the quarter with vacancy of 18.6%.

The retail market continues to struggle, as consumer confidence dropped in the second quarter of 2010. Real estate growth was significantly less than forecast; sales of retail properties declined to $2.9 billion in the 2nd quarter, down from $3.2 billion during the previous quarter. The number of properties on the market increased substantially and retailers returned another 1.9 million square feet of space to the market, increasing the national vacancy rate to 10.9%.

Although transaction levels are low in the industrial sector, sales of industrial properties increased 63.5% to $3.0 billion in the 2nd quarter of 2010 from $1.8 billion in the 1st quarter; capitalization rates declined by 34 basis points. National vacancies increased only 10 basis points to 14.1% as industrial tenants returned 5.5 million square feet to the market.

Sales of apartment properties rose slightly to $4.9 billion in the 2nd quarter of 2010 from $4.6 billion in the 1st quarter, possibly a reflection of the increased volume of product on the market. There has been some positive impact from the struggling economy on the apartment sector, as the market has shown a decline in homeownership and limited new development of single family homes. Apartment occupancy improved by 20 basis points during the 2nd quarter of 2010 to a national average of 92.2%.

ORG's View

ORG has noted reserved optimism among market participants that commercial real estate market conditions are near the bottom. In ORG's view, this optimism is the result of debt becoming widely available for "core" properties and growth in the number of lenders that are competing fiercely for the few transactions meeting their definition of "core." ORG has noticed many of the managers it tracks are beginning to refocus their efforts on property acquisition. While ORG is encouraged by signs of a warm up in the transaction market, it is important to recognize that the weak economy and job market will continue to have a negative effect on real estate in general. Investors should consider funds that capitalize on pending commercial mortgage maturities and on complementing existing funds with niche managers with favorable alignment of interests. Other opportunities in the current market will likely be found in the secondary markets, as well as in funds with global opportunistic and value added strategies that capitalize on market distress.

Kentucky Retirement Systems Real Estate Investments

Kentucky Retirement Systems invested in Walton Street Real Estate Fund VI in the 4th quarter 2008, and in Mesa West Real Estate Income Fund II and PRIMA Mortgage Investment Trust in 2009.

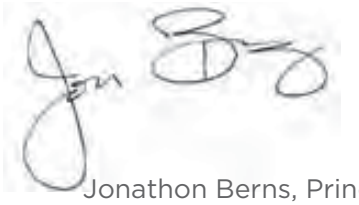
PRIMA Mortgage Investment Trust called Kentucky Retirement Systems' entire $40 million commitment by 3rd quarter 2009. As of September 15, 2010, PRIMA Mortgage Investment Trust has distributed $3.8 million to KRS.

In 2010, Mesa West Real Estate Income Fund II made three capital calls year to date, totaling $3.7 million, returning approximately $0.1 million in adjustments. Total commitment for Mesa West II is $40 million, with $36.3 in remaining capital to be called.

Walton Street Real Estate Fund VI capital calls total $13.6 million year to date. KRS' total commitment for Walton Fund VI is $40 million, with $26.4 million in remaining capital to be called.

Sincerely,

Edward Schwartz, Principal



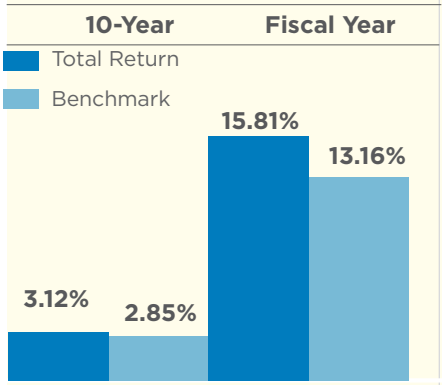
Jonathon Berns, Principal

Investment Results as of June 30, 2010

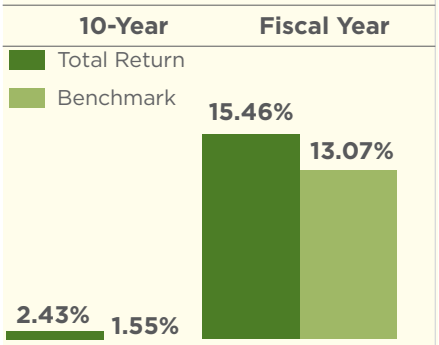
The Pension Fund returned 15.81%, which outpaced the return of its benchmark by 2.65% and exceeded the actuarially required rate of return of 7.75%. The above benchmark performance of the pension fund was a direct result of the outperformance experienced in each of the four major asset classes; and an above benchmark weighting to alternative assets and domestic equities, the two best performing asset classes for the period as demonstrated by their respective benchmark returns of 20.15% and 16.18%.

The Insurance Fund also posted a strong positive return for the fiscal year ending June 30, 2010. The portfolio returned 15.46% compared to the benchmark's 13.07% return and the actuarially required rate of 7.75%. Like the pension fund, the insurance fund's outperformance over its benchmark was due to the solid performance of each individual asset class; combined with an overweight to U.S. Equities, one of the better performing asset classes for the period.

Pension Fund & Benchmark Returns (%)



Insurance Fund & Benchmark Returns (%)



Benchmarks

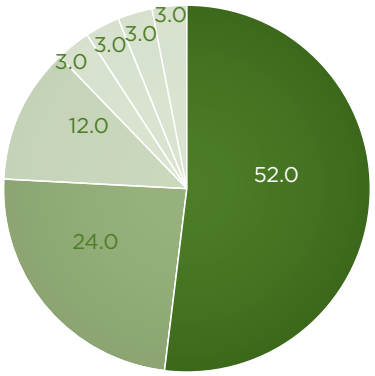
Benchmarks utilized to measure the Pension and Insurance Funds are a weighted average composite of the various asset class indicies existing within each KRS investment portfolio.

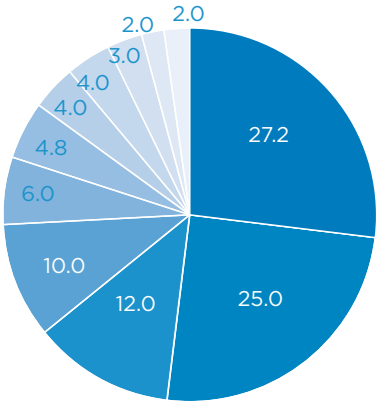
These benchmarks are intended to be objective, measurable, investable, replicable, and representative of the investment mandates. The benchmarks are developed from publicly available information, and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate and status. KRS' Investment Staff and Consultant recommend the indexes and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the Board of Trustees. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total Benchmarks will evolve to reflect these exposures. Note: At the May 2010 Investment Committee meeting new benchmarks were adopted and subsequently ratified by the Board; however, the new benchmarks will not be placed into service until new mandates requiring those are funded.

Pension & Insurance Funds Benchmark Allocations (%)

Benchmarks are a weighted average composite of the various asset class indicies consisting within each KRS investment portfolio. Following is the Pension and Insurance Total Fund Benchmark composition.

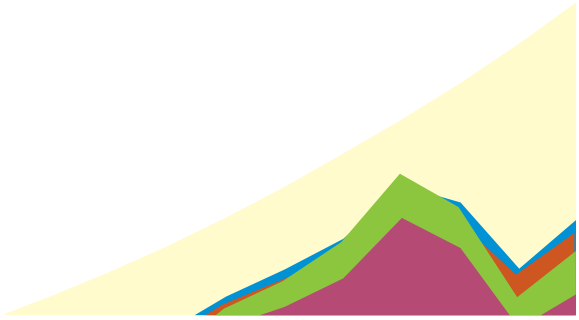
Index	Pension Fund	Insurance Fund
S&P 1500 Composite	27.2%	52.0%
S&P 500 Composite	6.0	-
Russell 2000 Index	4.0	-
MSCI World Ex-US	12.0	24.0
MSCI All World Country Index Ex-US	4.0	3.0
MSCI AWCI Ex-US Small Cap	2.0	-
MSCI Emerging Markets	2.0	3.0
Barclays Capital High Yield Corporate	4.8	3.0
Barclays Capital TIPS	10.0	12.0
Barclays Capital Aggregate	25.0	-
3-Month U.S. Treasury Bill	3.0	3.0





Long-Term Results

The 10-years ending June 30, 2010, the Pension Fund earned an annualized total return of 3.12% and has outpaced the benchmark in all measured time periods with the exception of the 3-year and inception mark. The Insurance Fund continued to outperform its benchmark, earning a 2.43% return for the same period. Insurance returns have been above the benchmark.



Growth of Dollars:

This chart compares the performance of $1,000 invested in the Pension and Insurance Funds with their respective policy benchmark portfolios and actuarial rate of return.

Growth of A Dollar-Total Fund

Investment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Pension Fund	$1,000	$946	$905	$944	$1,072	$1,172	$1,285	$1,481	$1,419	$1,175	$1,360
Pension Fund Benchmark	1,000	932	883	928	1,061	1,151	1,245	1,430	1,375	1,171	1,325
Insurance Fund	1,000	962	873	887	1,059	1,160	1,304	1,556	1,433	1,101	1,271
Insurance Fund Benchmark	1,000	947	830	829	983	1,056	1,161	1,384	1,273	978	1,106
Actuarial Assumed ROR	1,000	1,083	1,172	1,268	1,373	1,486	1,609	1,734	1,868	2,013	2,169

U.S. Equity

For the fiscal year, ending June 30, 2010, the Pension Fund's U.S. equity portfolio posted a return of 16.90%, which outperformed the return of its benchmark by 0.72%. The Insurance Fund's U.S. equity portfolio posted a return of 18.74%, which also outperformed its benchmark return of 15.58%. All segments of the U.S. equity markets posted strong positive results during the 12-month period.

U.S. Equity

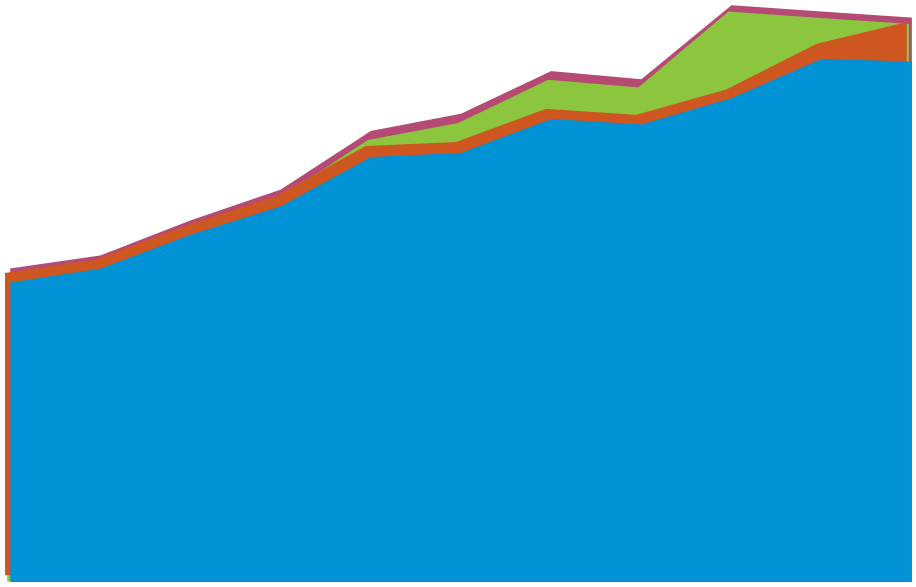
	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Apr-84	16.90%	-9.42%	0.02%	-0.49%	10.64%
Performance Benchmark[1]		16.18%	-9.34%	-0.25%	-0.39%	10.60%
KRS Insurance	Jul-92	18.74%	-10.49%	-0.64%	-0.22%	8.24%
Performance Benchmark[2]		15.58%	-9.41%	-0.46%	-0.95%	7.58%
Market Indices						
Russell 1000 (Large Cap)		15.22%	-9.55%	-0.56%	-1.23%	
Russell 2000 (Small Cap)		21.48%	-8.60%	0.37%	3.00%	
Russell 3000 (Total Equity)		15.72%	-9.47%	-0.48%	-0.92%	

[1] Pension Benchmark consist of 13% Russell 2000, 67% S&P 1500 Composite (Total), and 20% S&P 500
[2] Insurance benchmark is S&P 1500 Composite (Total)

Despite the strong market performance during this fiscal year, the market volatility experienced over the prior two years has led U.S. equity investors to experience sharp negative returns over the past three years, and flat returns over the 5-year and 10-year periods. While both funds have experienced negative absolute returns over several of the periods noted above, the since inception performance still remains solid. The pension's equity portfolio has generated an annualized average return of 10.64% throughout its duration, while the insurance equity portfolio posted an average annual return of 8.24%.

Basis for Calculations

KRS uses the Modified Dietz Method as its basis for calculations. This method is used to determine the performance of an investment portfolio based on a time-weighted cash flow. In the absence of daily portfolio valuations, the Modified Dietz Method weights individual cash flows by the amount of time these cash flows are held (or absent) from the portfolio. The result is an approximation of a time-weighted return.



Growth of Dollars:

This chart compares the performance of $1,000 invested in the Pension and Insurance Funds with their respective policy benchmark portfolios.

Growth of A Dollar-US Equity Fund

Investment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Pension Fund	$1,000	$884	$741	$733	$892	$948	$1,060	$1,265	$1,103	$829	$969
Pension Fund Benchmark	1,000	881	738	732	888	945	1,033	1,238	1,074	794	922
Insurance Fund	1,000	929	781	779	939	1,009	1,108	1,327	1,154	864	1,026
Insurance Fund Benchmark	1,000	862	710	698	827	872	935	1,125	982	723	836

Top 10 U.S. Equity Holdings

Pension Fund			Insurance Fund		
Company	Shares	Market Value	Company	Shares	Market Value
EXXON MOBIL CORP	1,360,546	77,646,381	EXXON MOBIL CORP	304,167	17,358,836
PROCTER & GAMBLE CO	963,072	57,765,059	APPLE INC	49,600	12,400,429
JOHNSON & JOHNSON	905,534	53,480,838	PROCTER & GAMBLE CO	49,300	9,853,215
IBM CORP	424,300	52,392,564	MICROSOFT CORP	422,100	9,712,521
MICROSOFT CORP	2,269,400	52,218,894	IBM CORP	75,100	9,273,348
APPLE INC	190,950	48,029,654	JOHNSON & JOHNSON	154,988	9,153,591
AT&T INC	1,840,664	44,525,662	GENERAL ELECTRIC CO	602,600	8,689,492
CHEVRON CORP	593,559	40,278,914	JPMORGAN CHASE & CO	222,975	8,163,115
COCA COLA CO	593,559	39,309,116	BANK OF AMERICA CORP	560,774	8,058,322
PFIZER INC	2,732,709	38,968,430	AT&T INC	329,521	7,971,113
Total	12,065,034	504,615,512	Total	2,885,800	100,633,982

International Equity

For the fiscal year, ending June 30, 2010, the KRS pension fund's international equity portfolio returned 12.07%, substantially outperforming its benchmark by 1.10%. The KRS insurance international equity portfolio also greatly outperformed its benchmark, posting a return of 10.92% during the same twelve month period. As the accompanying table indicates, both developed and emerging international equity markets experienced strong positive returns during the trailing year period.

International Equity

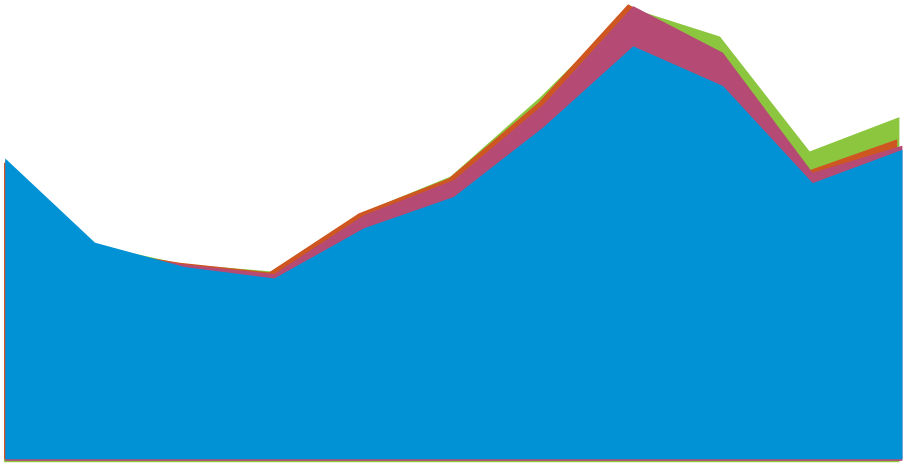
	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Jul-00	12.07%	-9.18%	3.35%	0.28%	1.06%
Performance Benchmark[1]		10.97%	-11.07%	2.66%	0.62%	1.48%
KRS Insurance	Apr-00	10.92%	-8.68%	3.81%	1.48%	1.39%
Performance Benchmark[2]		9.37%	-11.49%	2.36%	0.47%	0.56%
Market Indices						
MSCI EAFE		6.36%	-12.95%	1.35%	0.59%	
MSCI Emerging Markets		23.47%	-2.22%	13.07%	10.34%	
MSCI ACWI Ex US		10.88%	-10.28%	4.04%	2.39%	

[1] *Pension Benchmarks consist of 60% MSCI World Ex-US, 20.0% MSCI AWCI Ex-US, 10.0% MSCI AWCI Ex-US SC, and 10% MSCI EM.*
[2] *Insurance Benchmarks consist of 80% MSCI World Ex-US, 10.0% MSCI AWCI Ex-US, and 10% MSCI EM Index.*

International equity investors have experienced a volatile period of returns over the past several years. After four consecutive years of favorable results, investors witnessed significant market losses over the prior two fiscal years, and experienced a welcomed reprieve this fiscal year. The KRS pension fund portfolio has generated an annualized return of -9.18% over the trailing three-year period, while the insurance fund saw returns fall by an average of -8.68% during the same period. Over the past five years, both funds have added value, while also exceeding the return of its performance benchmark. The KRS Pension and Insurance funds have posted annualized returns of 3.35% and 3.81% respectively. The Systems began their international equity program in 2000. Since inception, the pension international equity portfolio has underperformed the benchmark, while the insurance international equity portfolio has outperformed the benchmark.

Basis for Calculations

KRS uses the Modified Dietz Method as its basis for calculations. This method is used to determine the performance of an investment portfolio based on a time-weighted cash flow. In the absence of daily portfolio valuations, the Modified Dietz Method weights individual cash flows by the amount of time these cash flows are held (or absent) from the portfolio. The result is an approximation of a time-weighted return.



Growth of Dollars:

This chart compares the performance of $1,000 invested in the Pension and Insurance Funds with their respective policy benchmark portfolios.

Growth of A Dollar-International Equity Fund

Investment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Pension Fund	$1,000	$720	$639	$601	$768	$872	$1,104	$1,373	$1,241	$918	$1,029
Pension Fund Benchmark	1,000	700	653	621	817	933	1,185	1,512	1,357	958	1,063
Insurance Fund	1,000	735	670	645	838	961	1,225	1,521	1,426	1,044	1,158
Insurance Fund Benchmark	1,000	700	653	621	817	933	1,185	1,512	1,357	958	1,048

Top 10 International Equity Holdings

Pension Fund			Insurance Fund		
Company	Shares	Market Value	Company	Shares	Market Value
NOVARTIS AG	432,238	21,083,803	NOVARTIS AG	160,325	7,820,369
HSBC HLDGS	2,125,207	19,560,421	HSBC HLDGS	795,918	7,325,635
SANOFI-AVENTIS	278,222	16,879,533	VODAFONE GROUP	3,123,646	6,502,879
VODAFONE GROUP	8,074,165	16,808,984	SANOFI-AVENTIS	103,534	6,281,335
GLAXOSMITHKLINE	926,164	15,837,797	ROCHE HLDGS	42,632	5,894,590
TOTAL	346,755	15,700,521	TOTAL	128,953	5,838,789
ROCHE HLDGS	113,054	15,631,614	GLAXOSMITHKLINE	341,093	5,832,835
ROYAL DUTCH SHELL	604,456	15,363,261	ROYAL DUTCH SHELL	208,563	5,300,978
MITSUBISHI UFJ FIN	2,792,700	12,781,597	MITSUBISHI UFJ FIN	1,041,100	4,764,894
BP	2,511,029	11,980,278	BP	950,980	4,537,186
Total	18,203,990	161,627,808	Total	6,896,744	60,099,489

Fixed Income

For the fiscal year, ending June 30, 2010, the KRS pension fund's fixed income portfolio returned 11.80%, outperforming its performance benchmark by 2.28%. As the accompanying table indicates, both of the broad market indices, the Barclays Aggregate Index and the Barclays Intermediate Government Credit Index, posted positive returns for the twelve month period ending June 30, 2010. The KRS insurance TIPS portfolio posted a 9.58% rate of return, which edged its benchmark, the Barclays U.S. TIPS Index by 0.06%.

Fixed Income

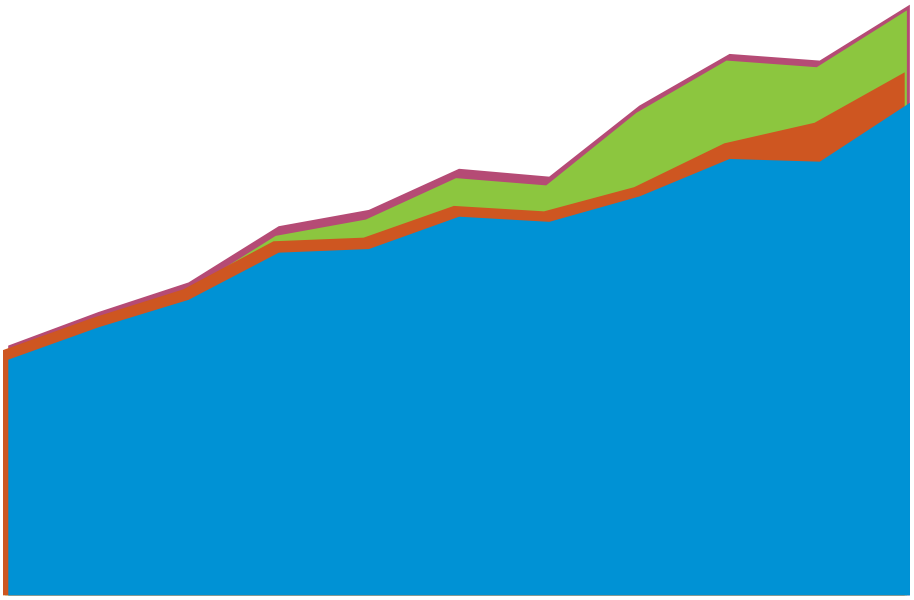
	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Apr-84	11.80%	6.32%	4.66%	6.35%	8.36%
Performance Benchmark[1]		9.52%	7.63%	5.37%	6.73%	8.26%
KRS Insurance	Jul-92	9.58%	7.73%	5.06%	7.36%	7.06%
Performance Benchmark[2]		9.52%	7.62%	4.98%	7.29%	7.04%
Market Indices						
BC Aggregate		9.50%	7.55%	5.54%	6.47%	
BC Government/Credit		9.65%	7.37%	5.26%	6.48%	
BC U.S. TIPS		9.52%	7.62%	4.98%	7.45%	

[1] Pension Benchmark consists of 71.43% Barclays Aggregate, and 28.57% Barclays U.S. TIPS
[2] Insurance Benchmark is the Barclays U.S. TIPS Index

Over the past three years ending June 30, 2010, the KRS pension fund's fixed portfolio has generated an annualized average return of 6.32% versus its custom performance benchmark return of 7.63%. The insurance fund's fixed portfolio posted a 7.73% return during the same period, exceeding its benchmark return by 0.11%. Over the five year period, the pension fund has lagged the benchmark by 71 basis points, while the insurance fund outperformed its benchmark. Over the ten year period, the pension fund has lagged the benchmark by 0.38%, while the insurance fund has slightly outperformed the benchmark by 7 basis points.

Basis for Calculations

KRS uses the Modified Dietz Method as its basis for calculations. This method is used to determine the performance of an investment portfolio based on a time-weighted cash flow. In the absence of daily portfolio valuations, the Modified Dietz Method weights individual cash flows by the amount of time these cash flows are held (or absent) from the portfolio. The result is an approximation of a time-weighted return.



Growth of Dollars:

This chart compares the performance of $1,000 invested in the Pension and Insurance Funds with their respective policy benchmark portfolios.

Growth of A Dollar- Fixed Income

Investment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Pension Fund	$1,000	$1,107	$1,198	$1,354	$1,366	$1,473	$1,456	$1,540	$1,664	$1,655	$1,850
Pension Fund Benchmark	1,000	1,107	1,201	1,360	1,372	1,477	1,459	1,539	1,684	1,752	1,919
Insurance Fund	1,000	1,110	1,212	1,399	1,453	1,590	1,566	1,806	1,979	1,957	2,145
Insurance Fund Benchmark	1,000	1,111	1,209	1,395	1,449	1,585	1,559	1,794	1,965	1,943	2,128

Top 10 Fixed Income Holding & Market Value ($)

Pension Fund			Insurance Fund		
Company	Par Value	Market Value	Company	Par Value	Market Value
US TSY NT 2.500 DUE 03/31/15	134,500,000	139,375,625	US TSY BD INFL Index 2.375 DUE 01/15/25	12,540,500	16,088,232
US TSY NT 1.000 DUE 04/30/12	94,400,000	95,108,000	US TSY BD INFL Index 3.875 DUE 04/15/29	8,840,000	15,731,878
US TSY NT 3.625 DUE 08/15/19	79,505,000	84,070,336	US TSY BD INFL Index 3.000 DUE 07/15/12	10,718,000	13,824,372
US TSY NT INFL Index 2.375 DUE 01/15/17	62,558,000	74,656,446	US TSY NT INFL Index 2.000 DUE 01/15/14	10,395,500	13,065,637
US TSY NT INFL Index 2.000 DUE 07/15/14	53,458,000	66,335,425	US TSY BD INFL Index 1.875 DUE 07/15/13	10,083,000	12,658,765
US TSY NT INFL Index 2.375 DUE 01/15/25	49,397,000	63,371,509	US TSY NT INFL Index 2.000 DUE 07/15/14	9,708,000	12,046,547
US TSY NT INFL Index 3.875 DUE 04/15/29	32,349,000	57,565,809	US TSY BD INFL Index 3.625 DUE 04/15/28	6,890,500	12,018,886
US TSY BD INFL Index 2.500 DUE 07/15/16	43,822,000	52,640,078	US TSY NT INFL Index 1.625 DUE 01/15/15	9,740,500	11,739,011
US TSY BD INFL Index 3.625 DUE 02/15/20	44,935,000	47,476,613	US TSY BD INFL Index 2.500 DUE 07/15/16	9,095,500	10,925,741
US TSY BD INFL Index 3.625 DUE 04/15/28	27,004,000	47,102,243	US TSY NT INFL Index 2.000 DUE 01/15/26	8,915,500	10,354,541
Total	621,928,000	727,702,085	Total	96,927,500	128,453,611

Alternative Investments

For the fiscal year, ending June 30, 2010, the KRS pension fund's alternative investments portfolio posted a return of 26.75%. The portfolio consists primarily of private equity limited partnerships, publicly traded real estate securities, operating companies, and focused real estate investments. The custom benchmark for the pension alternative investment portfolio returned 20.15% during this same period. The insurance alternative investment portfolio returned 26.01% versus its performance benchmark return of 17.88%.

Private equity returns saw their steepest declines in 2008 as the value of firms' investment portfolios tumbled in the wake of the credit crisis. As the accompanying table indicates, the market's volatility impacted longer term results in the alternative investment portfolios. For the three years ending June 30, 2010, the pension fund portfolio has generated an annualized average return of -3.68% versus its custom performance benchmark of -3.11%. Over this same time period, the insurance fund returned -2.97% on an annualized basis outperforming its custom benchmark by 3.32%. Both funds experienced strong returns over the short term, which has helped to bolster positive returns when viewed over a five-year, ten-year, and since inception time horizon. Since its inception in October 1990, the pension portfolio has outpaced its benchmark by 2.86% per year, while the insurance portfolio has outperformed its benchmark by 2.55% since its July 2001 inception.

Basis for Calculations

KRS uses the Modified Dietz Method as its basis for calculations. This method is used to determine the performance of an investment portfolio based on a time-weighted cash flow. In the absence of daily portfolio valuations, the Modified Dietz Method weights individual cash flows by the amount of time these cash flows are held (or absent) from the portfolio. The result is an approximation of a time-weighted return.

Alternative Equity

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Oct-90	26.75%	-3.68%	3.91%	10.75%	10.76%
Performance Benchmark[1]		20.15%	-3.11%	2.68%	5.76%	8.90%
KRS Insurance	Jul-01	26.01%	-2.97%	3.02%		5.40%
Performance Benchmark[2]		17.88%	-6.29%	1.12%		2.85%

[1] Pension Benchmark consists of 60% S&P 1500 (Total), and 40% BC High Yield Corporate.
[2] Insurance Benchmark consists of 80% S&P 1500 (Total), and 20% BC High Yield Corporate.

Cash

For the fiscal year, ending June 30, 2010, the KRS pension fund's cash portfolio returned 1.26%, outpacing its benchmark, the Citi Group 3-month Treasury by 1.16%. The KRS insurance cash portfolio also outperformed the index, posting a return of 0.26% during the same twelve month period.

As the accompanying table indicates, the longer term results from the cash portfolios have also been excellent with comparison to their benchmark. For the five years ending June 30, 2010, the pension fund portfolio has outperformed its custom benchmark by 0.86% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark again by 0.86% per year. The insurance portfolio has also done very well, exceeding its benchmark return over the five-year period as well as since its inception by 0.58% and 0.30%, respectively.

Cash Returns

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Jan-88	1.26%	2.46%	3.49%	3.94%	5.03%
Performance Benchmark[1]		0.10%	1.40%	2.63%	2.56%	4.17%
KRS Insurance	Jul-92	0.26%	1.76%	3.21%	3.14%	3.80%
Performance Benchmark[1]		0.10%	1.40%	2.63%	2.56%	4.17%

[1] Pension and Insurance benchmark is the Citi Group 3-month Treasury

Additional Schedules & Required Supplemental Information

Following are additional schedules which identify the Investment Advisors employed along with the total assets each firm manages for the Systems, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems as of or for the year ended June 30, 2010.

External Investment Advisors

	Assets Under Management (in thousands)
Aberdeen Asset Management, Aberdeen, Scotland	228,208
Arbor Investments II, Chicago, Illinois	14,969
Arcano Capital, New York, New York	2,000
Arrowhawk Capital Partners, Darien, Connecticut	97,874
Artio Global Investors, New York, New York	249,398
Avenue Capital V, New York, New York	89,853
Bay Hills Emerging Partners I, San Francisco, California	34,004
BlackRock Global Investors, San Francisco, California	236,541
Blackstone Capital Partners V, New York, New York	89,695
Columbia Capital IV, Alexandria, Virginia	26,189
Commerce Street Income Partners LP, Dallas, Texas	54,799
Crestview Partners II, New York, New York	21,097
Duff, Ackerman & Goodrich Ventures II, Palo Alto, California	94,769
Doll Capital Management, Menlo Park, California	1,875
Essex Woodland VIII, Palo Alto, California	11,699
GTCR Golder Rauner IX, Chicago, Illinois	40,433
H.I.G. Venture Partners II, Miami, Florida	11,630
Harvest Partners V, New York, New York	13,911
Hellman & Friedman VI, New York, New York	57,399
Horsley Bridge International V LLC, San Fransico, California	1,132
Institutional Venture Partners XI, Menlo Park, California	37,167
Invesco, Atlanta, Georgia	663,108

External Investment Advisors

	Assets Under Management (in thousands)
JW Childs Equity III, Boston, Massachusetts	29,535
Keyhaven Capital Partners, London, England	2,845
Leonard Green & Partners, L.P.,IV, Los Angeles, California	108,714
Matlin Patterson Global Opportunities I & II, New York, New York	56,618
Merit Capital Partners IV, Chicago, Illinois	23,078
Mesa West, Los Angeles, California	2,423
MHR Insitituional Advisors III, New York, New York	18,543
Mill Road Capital, Greenwich, Connecticut	17,102
New Mountain Partners II, New York, New York	66,021
NISA Investment Advisors, St. Louis, Missouri	1,177,868
Northern Trust Global Investors, Chicago, Illinois	1,269,853
Oak Hill Partners II, New York, New York	138,551
Oak Tree Opportunities VIIB, Los Angeles, California	94,691
PIMCO, New Port Beach, California	1,138,887
Prima Mortgage, New York, New York	43,775
Pyramis Global Advisors, Boston, Massachusetts	785,728
Record Currency Management, Windsor Berkshire, England	92,197
Sun Capital Partners IV, Boca Raton, Florida	22,981
Technology Crossover Ventures VI, Palo Alto, California	14,426
Tenaska Power Fund II, Omaha, Nebraska	13,986
The Boston Company, Boston, Massachusetts	768,716
The Camelot Group, New York, New York	0
Tortoise Capital, Leawodd, Kansas	34,073
Vantagepoint Venture IV, San Bruno, California	44,064
Vista Equity Partners III, San Francisco, California	50,355
Walton Street Real Estate Fund, Chicago, Illinois	6,145
Warburg Pincus IX, New York, New York	132,020
Wayzata Investment Partners I, Wayzata, Minnesota	167,454
Weaver Barksdale & Associates, Brentwood, Tennessee	464,257
Wellington Management Company, Boston, Massachusetts	174,568
Total	$9,036,890

Master Custodian & Performance Measurement

The Northern Trust Company
Chicago, Illinois

Investment Consultants

ORG Real Property
Cleveland, Ohio

R.V. Kuhns & Associates
Portland, Oregon

Strategic Investment Solutions
San Francisco, California

KERS – Pension

% of Market Value as of June 30, 2010

	Non Hazardous		Hazardous	
Asset Class	Market value	Allocation (%)	Market value	Allocation (%)
Bonds	1,045,705,427	30.1%	107,443,323	24.4%
Short-Term	195,968,138	5.6%	86,595,685	19.7%
Alternatives	537,480,865	15.5%	75,101,413	17.0%
Domestic Equities	894,154,614	25.8%	93,100,497	21.1%
International Equities	795,615,888	22.9%	78,389,242	17.8%
Total Portfolio	3,468,924,932	100.0%	440,630,160	100.0%

CERS – Pension

% of Market Value as of June 30, 2010

	Non Hazardous		Hazardous	
Asset Class	Market value	Allocation (%)	Market value	Allocation (%)
Bonds	1,454,652,678	30.5%	406,533,344	27.3%
Short-Term	356,627,678	7.5%	172,654,677	11.6%
Alternatives	687,542,965	14.4%	225,715,453	15.1%
Domestic Equities	1,367,792,850	28.7%	416,080,540	27.9%
International Equities	897,632,919	18.8%	270,407,925	18.1%
Total Portfolio	4,764,249,090	100.0%	1,491,391,938	100.0%

SPRS – Pension

% of Market Value as of June 30, 2010

Asset Class	Market value	Allocation (%)
Bonds	81,749,395	31.1%
Short-Term	25,688,625	9.8%
Alternatives	37,123,100	14.1%
Domestic Equities	63,554,165	24.2%
International Equities	54,659,968	20.8%
Total Portfolio	262,775,253	100.0%

KERS – Insurance

% of Market Value as of June 30, 2010

	Non Hazardous		Hazardous	
Asset Class	Market value	Allocation (%)	Market value	Allocation (%)
Bonds	43,243,670	11.9%	28,288,129	10.5%
Short-Term	39,039,344	10.7%	61,550,013	22.8%
Alternatives	41,650,368	11.4%	21,024,616	7.8%
Domestic Equities	104,102,614	28.6%	88,553,785	32.9%
International Equities	136,174,641	37.4%	70,044,396	26.0%
Total Portfolio	364,210,637	100.0%	269,460,938	100.0%

CERS – Insurance

% of Market Value as of June 30, 2010

	Non Hazardous		Hazardous	
Asset Class	Market value	Allocation (%)	Market value	Allocation (%)
Bonds	121,050,676	11.2%	71,247,658	12.3%
Short-Term	268,969,898	24.9%	153,190,116	26.4%
Alternatives	82,132,180	7.6%	43,679,502	7.5%
Domestic Equities	351,607,108	32.6%	174,565,289	30.1%
International Equities	254,330,347	23.6%	137,044,987	23.6%
Total Portfolio	1,078,090,209	100.0%	579,727,552	100.0%

SPRS – Insurance

% of Market Value as of June 30, 2010

Asset Class	Market value	Allocation (%)
Bonds	12,795,955	12.3%
Short-Term	12,990,110	12.5%
Alternatives	9,268,900	8.9%
Domestic Equities	37,483,085	36.1%
International Equities	31,206,348	30.1%
Total Portfolio	103,744,397	100.0%

External Investment Expenses

Expense	Fees Paid (in thousands)	Expense as a % of Assets
Equity & Fixed Income Portfolio		
Pension Funds	$33,490	0.3310%
Insurance Funds	5,007	0.2262%
Consulting Fees	1,150	0.0093%
Custody Fees	187	0.0015%
Other Investment-Related Fees	956	0.0078%
Total Expenses	40,790	0.3308%

Schedule of Commissions Paid

	Total Shares	Commissions Paid	$ per share
U.S. Equities	98,259,423	$3,979,566	$0.041

	Total Value of Trades	Commissions Paid	As a % of Trade
Non-U.S. Equities	$4,542,568,630	$4,590,567	0.101%
Total Commissions Paid		$8,570,133	

The Performance Calculations presented above were prepared by the Systems' custodial bank using a time-weighted rate of return methodology based upon the market value of assets.

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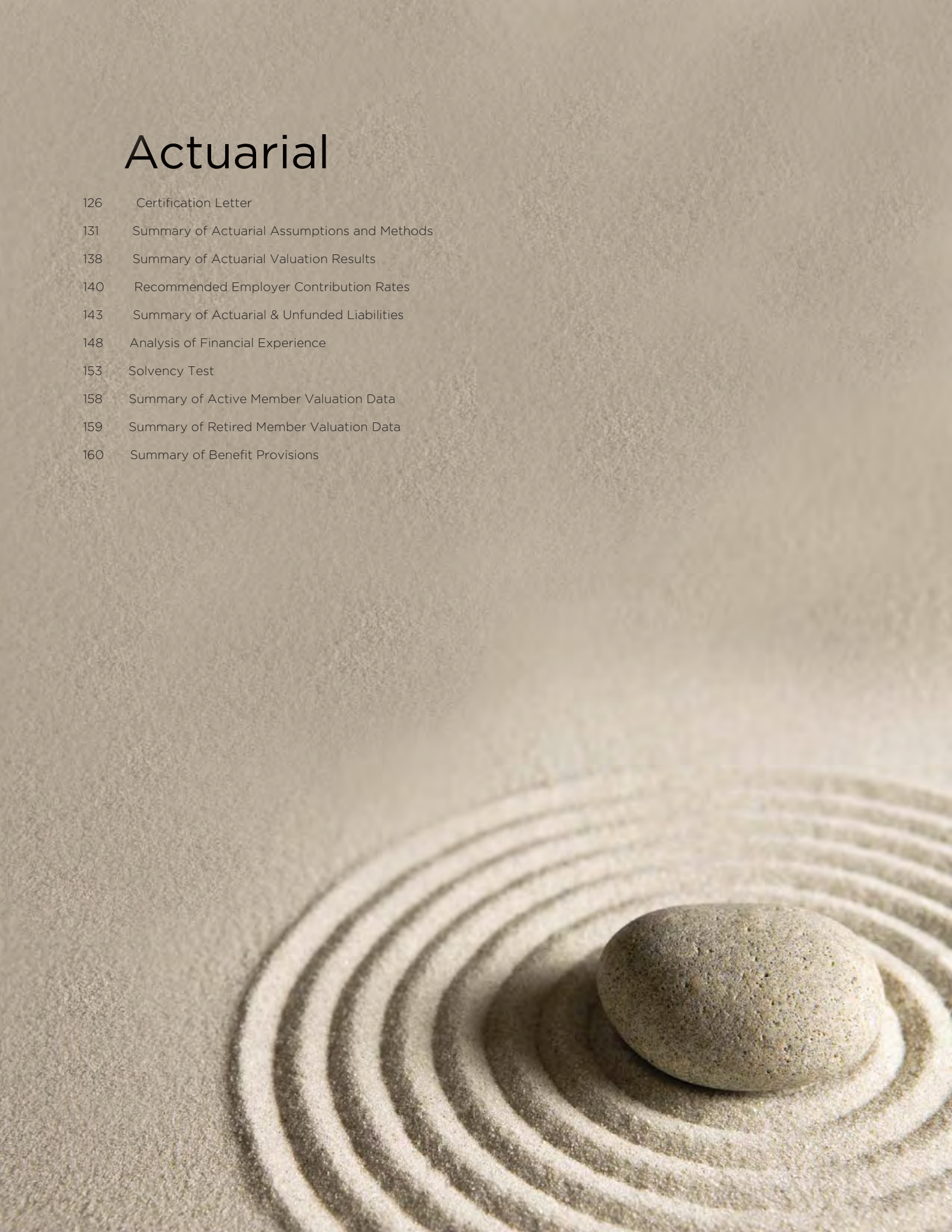

The following is a certification of actuarial results by Cavanaugh Macdonald Consulting, LLC.

Cavanaugh Macdonald
CONSULTING, LLC.

November 19, 2010

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fifty-fourth annual actuarial valuation of the Kentucky Employees Retirement System, the fifty-first annual actuarial valuation of the County Employees Retirement System, and the fifty-second annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2010 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2011 and ending June 30, 2012.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30 year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years. The impact of HB1, which was enacted into law in 2008 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 and 2009 assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2010 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	38.3%
KERS Hazardous Pension Fund	73.1%
CERS Non-Hazardous Pension Fund	65.6%
CERS Hazardous Pension Fund	65.5%
SPRS Pension Fund	49.7%

The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Medical inflation rates in excess of the assumed rates, as well as recent employer contribution rate reductions under KERS and SPRS, have significantly limited this improvement. The

recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level. As of June 30, 2010 the funding level for the insurance funds are as follows:

System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	10.6%
KERS Hazardous Insurance Fund	63.7%
CERS Non-Hazardous Insurance Fund	40.9%
CERS Hazardous Insurance Fund	41.4%
SPRS Insurance Fund	27.9%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on August 20, 2009 based on the experience investigation report dated August 17, 2009, meet the parameters set for disclosure under GASB Statements No. 25 and 43. The health care cost trend assumptions were updated for the June 30, 2007 valuation adopted by the Board November 15, 2007. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in

January 2014 and any adjustments will be reflected in the June 30, 2014 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer

Summary of Actuarial Assumptions and Methods

(As of June 30, 2010)

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience once every five years through the completion of the Actuarial Experience Study. The most recent study was completed in August 2009 and reviewed plan experience for the period from July 1, 2005 through June 30, 2008. All assumptions, with the exception of health care trend rates, used in the June 30, 2010 actuarial valuation were based on the study performed in 2009 and in accordance with the actuary's recommendations. The health care trend rates used in the June 30, 2010 valuation are those adopted by the Board on November 15, 2007. The next Experience Study is scheduled to be completed in January 2014.

1. Actuarial Cost Method: The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL) over no more than a 30-year period.

2. UAL Amortization Method: The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).
3. Asset Valuation Method: The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted by the Board in 2006.
4. Retiree Insurance Funding Policy: The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.
5. Investment Return Assumption: The future investments earnings of plan assets are assumed to accumulate at a rate of 7.75% per annum. This rate consists of a 3.5% inflationary component and a 4.25% real rate of return component. In accordance with GASB Statement No. 43, the investment return assumption has been reduced to a blended rate of 4.5% for KERS and SPRS insurance funds due to a lack of pre-funding benefits. This assumption was adopted in 2006.
6. Salary Increase Assumption: Active member salaries are assumed to increase at the rates provided in Table 1 on the following page. The rates include a 4.5% percent inflationary component and an additional increase due to promotion based upon plan experience. This assumption was adopted in 2009.

Table 1: Salary Increase Assumptions

Service	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
0-1	17.00%	21.00%	13.00%	20.00%	17.00%
1-2	9.00%	9.00%	9.50%	10.50%	12.00%
2-3	6.50%	7.00%	6.00%	6.50%	10.00%
3-4	6.00%	6.50%	6.00%	5.75%	9.00%
4-5	6.00%	6.00%	5.50%	5.50%	8.00%
5-6	6.00%	5.50%	5.50%	5.00%	7.00%
6-7	5.50%	5.00%	5.25%	4.50%	6.00%
7-8	5.50%	5.00%	5.25%	4.50%	6.50%
8-9	5.50%	5.00%	5.00%	4.50%	5.50%
9-10	5.00%	5.00%	5.00%	4.50%	5.00%
10+	5.00%	5.00%	4.75%	4.50%	4.50%

7. Payroll Growth Assumption: Active member payroll is assumed to increase at a rate of 4.5% per annum. This assumption was adopted in 2009.
8. Retiree Cost of Living Adjustments (COLA): State statutes require retirement allowances to be increased by the percentage increase in the annual average of the consumer price index for all urban consumers (CPI-U) for the most recent calendar year, not to exceed five percent. The statutes only allow the Cost of Living Adjustments (COLAs) awarded as of the valuation date to be recognized for funding purposes and for determining employer contribution rates. The Kentucky General Assembly has the authority to suspend or reduce cost of living adjustments.

Table 3: Age (Years) & Non-Hazardous Retirement Probability (%)

Age	KERS	CERS
55 - 59	8.0%	8.0%
60	10.0	10.0
61	20.0	10.0
62 - 70	22.5	22.0

If service credit is at least 27 years, the rate is 25%. 100% are anticipated to retire at age 75.

Hazardous Service (Years) & Retirement Probability (%)

Service	KERS	CERS	SPRS
20	22.0%	20.0%	9.0%
21	22.0	20.0	10.0
22 - 24	22.0	20.0	22.0
25	35.0	33.0	22.0
26 - 27	37.0	33.0	25.0
28	39.0	39.0	25.0
29	38.0	33.0	25.0
30 - 31	38.0	33.0	33.3
32	50.0	50.0	33.3
33 - 34	50.0	40.0	33.3
35+	60.0	40.0	33.3

For KERS, 100% are anticipated to retire at age 65.
For CERS, 100% are anticipated to retire at age 62.
For SPRS, 100% are anticipated to retire at age 55.

9. Medical Inflation Rate Assumption: The costs for retiree medical premiums are assumed to increase according to the assumptions provided in Table 2:

Table 2

Fiscal Year Ended	Trend	
	Under Age 65	Age 65 and Over
2011	10.5%	9.0%
2012	9.5%	8.5%
2013	8.5%	7.5%
2014	7.5%	7.0%
2014	6.5%	6.5%
2016	6.0%	6.0%
2017	5.5%	5.5%
2018 and beyond	5.0%	5.0%

10. Retirement Rate Assumption: The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in the tables to the left. This assumption was adopted in 2009.

11. Mortality Assumptions: The mortality table used for active members is the 1994 Group Annuity Mortality (GAM) Table. For members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table to the 1994 GAM table. Mortality assumptions for disabled lives are set using the 1994 GAM table set forward five years. These assumptions were adopted in 2006.

Sample Annual Rates of Mortality: Active & Retired Members*

Age (Years)	Males	Females
< 20	0.04%	0.03%
22	0.06	0.03
32	0.08	0.04
42	0.13	0.08
52	0.32	0.17
62	1.01	0.58
72	2.85	1.65
Sample Annual Rates of Mortality: Disabled Member Mortality		
< 20, 22, 32	-	-
42	0.19%	0.11%
52	0.56	0.29
62	1.80	1.08
72	4.52	2.84
*For members retiring on or after July 1, 2006.		

12. Withdrawal Rates: The probability, or likelihood, of active members terminating employment prior to retirement is provided in the table on the following page. The withdrawal rate is a function of both age and service. This type of structure is known as "select and ultimate rates". This structure reflects the fact that both service and age affect the likelihood of a member staying in active employment. The ultimate period for these systems covers a member's withdrawal rate after the first five years of service. These assumptions were adopted in 2009.

Selected Rates of Termination Prior to Retirement

Select Rates		Ultimate Rates		Select Rates		Ultimate Rates	
Service	Probability	Age	Probability	Service	Probability	Age	Probability
KERS Non-Hazardous				**CERS Non-Hazardous**			
1st Year of Service	19.00%	20	6.00%	1st Year of Service	25.00%	20	5.75%
2nd Year of Service	13.00	25	5.08	2nd Year of Service	14.00	25	5.75%
3rd Year of Service	10.00	30	4.26	3rd Year of Service	10.00	30	5.30
4th Year of Service	9.00	35	3.21	4th Year of Service	8.00	35	4.40
5th Year of Service	6.50	40	3.0	5th Year of Service	6.50	40	3.70
		45	3.0			45	3.02
		50	3.0			50	2.70
		55	3.0			55	2.20
		60	3.0			60	0.75
KERS Hazardous				**CERS Hazardous**			
1st Year of Service	15.00%	20	4.0%	1st Year of Service	14.00%	20	3.0%
2nd Year of Service	14.00	25	4.0	2nd Year of Service	7.5	25	2.7
3rd Year of Service	10.00	30	3.5	3rd Year of Service	6.0	30	2.5
4th Year of Service	8.00	35	3.0	4th Year of Service	4.5	35	2.5
5th Year of Service	6.00	40	3.0	5th Year of Service	4.0	40	2.5
		45	3.0			45	2.5
		50	3.0			50	2.5
		55	3.0			55	2.5
		60	3.0			60	2.5
SPRS							
1st Year of Service	20.0%	20	2.5%				
2nd Year of Service	7.5	25	2.5%				
3rd Year of Service	3.0	30	2.5%				
4th Year of Service	3.0	35	2.5%				
5th Year of Service	3.0	40	2.5%				
		45	2.5%				
		50	2.5%				
		55	-				
		60	-				

13. Rates of Disablement: KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. For non-hazardous members, the assumptions are set using three quarters of the Old-Age Survivors and Disability Insurance (OASDI) rates. For hazardous members, the assumptions are set using one times the Old-Age Survivors and Disability Insurance (OASDI) rates. These assumptions were adopted in 2009.

Probability of Becoming Disabled During Employment

Non-Hazardous			Hazardous	
Age	Probability		Age	Probability
20 - 24	0.0354%		20 - 24	0.0531%
25 - 29	0.0474%		25 - 29	0.0711%
30 - 34	0.0612%		30 - 34	0.0918%
35 - 39	0.0853%		35 - 39	0.1280%
40 - 44	0.1329%		40 - 44	0.1994%
45 - 49	0.2213%		45 - 49	0.3320%
50 - 54	0.3727%		50 - 54	0.5590%
55 - 59	0.6133%		55 - 59	0.9200%
60 - 64	0.9745%		60 - 64	1.4618%

Summary of Actuarial Valuation Results
(As of June 30, 2010)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2011-2012)					
Pension Fund Contribution	24.3%	14.11%	11.70%	17.91%	39.80%
Insurance Fund Contribution	16.41	19.73	9.59	23.74	54.83
Recommended Employer Contribution	40.71	33.84	21.29	41.65	94.63
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$11,004,795,089	$688,149,451	$8,459,022,280	$2,672,151,907	$612,444,806
Actuarial Value of Assets	$4,210,215,585	$502,729,009	$5,546,857,291	$1,749,464,388	$304,577,292
Unfunded Liability on Actuarial Value of Assets	$6,794,579,504	$185,420,442	$2,912,164,989	$922,687,519	$307,867,514
Funding Ratio on Actuarial Value of Assets	38.26%	73.06%	65.57%	65.47%	49.73%
Market Value of Assets	$3,503,007,035	$443,511,663	$4,819,933,717	$1,506,787,429	$264,944,089
Unfunded Liability on Market Value of Assets	$7,501,788,054	$244,673,788	$3,639,088,563	$1,165,364,478	$347,500,717
Funding Ratio on Market Value of Assets	31.83%	64.45%	56.98%	56.39%	43.26%
Insurance Fund					
Actuarial Liability	$4,466,136,041	$493,297,529	$3,158,340,174	$1,674,703,216	$434,960,495
Actuarial Value of Assets	$471,341,628	$314,427,296	$1,293,038,593	$692,769,770	$121,175,083
Unfunded Liability on Actuarial Value of Assets	$3,994,794,413	$178,870,233	$1,865,301,581	$981,933,446	$313,785,412
Funding Ratio on Actuarial Value of Assets	10.55%	63.74%	40.94%	41.37%	27.86%
Market Value of Assets	$371,002,484	$271,395,843	$1,096,581,872	$586,826,965	$104,526,550
Unfunded Liability on Market Value of Assets	$4,095,133,557	$221,901,686	$2,061,758,302	$1,087,876,251	$330,433,945
Funding Ratio on Market Value of Assets	8.31%	55.02%	34.72%	35.04%	24.03%

Summary of Actuarial Valuation Results
(As of June 30, 2009)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Member Data					
Number of Active Members	47,090	4,291	84,681	9,562	961
Total Annual Payroll (Active Members)[1]	$1,815,146,388	$143,557,944	$2,236,855,380	$466,548,660	$51,506,712
Average Annual Pay (Active Members)	$38,546	$33,456	$26,415	$48,792	$53,597
Number of Retired Members & Beneficiaries	37,945	2,836	41,038	6,068	1,223
Average Annual Retirement Allowance	$21,133	$14,503	$11,029	$24,212	$37,217
Number of Vested Inactive Members	5,875	319	9,430	545	55
Number of Inactive Members Due a Refund	31,806	2,836	54,574	2,086	290

[1] Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2010.

Recommended Employer Contribution Rates

(As of June 30, 2010)

Kentucky Employees Retirement System (Non-Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/05	2006-2007	4.81%	5.87%	10.68%	6.45%	17.13%
6/30/06	2007-2008	3.72%	11.83%	15.55%	32.82%	48.37%
6/30/07	2008-2009	3.62%	12.92%	16.54%	20.38%	36.92%
6/30/08	2009-2010	3.97%	14.99%	18.96%	20.49%	39.45%
6/30/09	2010-2011	4.26%	17.51%	21.77%	16.81%	38.58%
6/30/10	2011-2012	4.23%	20.07%	24.30%	16.41%	40.71%

Kentucky Employees Retirement System (Hazardous Employers)

6/30/05	2006-2007	8.37%	0.91%	9.28%	14.04%	23.32%
6/30/06	2007-2008	7.27%	2.93%	10.20%	36.91%	47.11%
6/30/07	2008-2009	7.28%	3.56%	10.84%	23.94%	34.78%
6/30/08	2009-2010	7.52%	4.46%	11.98%	23.56%	35.54%
6/30/09	2010-2011	7.94%	6.17%	14.11%	20.26%	34.37%
6/30/10	2011-2012	7.19%	6.92%	14.11%	19.73%	33.84%

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the above tables are the actuarially required contribution (ARC) rates presented by the actuary in the 2006 through 2010 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the applicable statute now calls for an employer contribution rate at an increasing percentage of the ARC rates until 100% is achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous.

Recommended Employer Contribution Rates

(As of June 30, 2010)

County Employees Retirement System (Non-Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/05	2006-2007	5.72	0.25	5.97	7.22	13.19
6/30/06	2007-2008	4.69	2.29	6.98	20.51	27.49
6/30/07	2008-2009	4.53	3.23	7.76	12.75	20.51
6/30/08	2009-2010	4.46	4.16	8.62	12.29	20.91
6/30/09	2010-2011	4.60	5.43	10.03	9.78	19.81
6/30/10	2011-2012	4.72%	6.98%	11.70%	9.59%	21.29%

County Employees Retirement System (Hazardous Employers)

6/3 0/05	2006-2007	8.79	4.32	13.11	15.10	28.21
6/30/06	2007-2008	8.12	6.89	15.01	39.52	54.53
6/30/07	2008-2009	8.06	6.98	15.04	27.62	42.66
6/30/08	2009-2010	8.23	7.88	16.11	27.25	43.36
6/30/09	2010-2011	7.56	9.23	16.79	23.27	40.06
6/30/10	2011-2012	7.31%	10.60%	17.91%	23.74%	41.65%

The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the actuarially required contribution (ARC) rates presented by the actuary in the 2006 through 2010 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this was changed to a ten-year phase-in from the initial starting date due to legislation enacted by the Kentucky General Assembly. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2011-2012 is 7.26% and the employer contribution rate is 18.96%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2011-2012 is 17.85% and the employer contribution rate is 35.76%.

Recommended Employer Contribution Rates

(As of June 30, 2010)

State Police Retirement System

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/05	2006-2007	9.43	11.21	20.64	21.66	42.30
6/30/06	2007-2008	9.20	19.75	28.95	91.05	120.00
6/30/07	2008-2009	9.64	22.75	32.39	59.54	91.93
6/30/08	2009-2010	9.83	25.40	35.23	56.89	92.12
6/30/09	2010-2011	8.12	27.62	35.74	49.89	85.63
6/30/10	2011-2012	7.75%	32.05%	39.80%	54.83%	94.63%

The contribution rates for SPRS shown in the above tables are the actuarially required contribution (ARC) rates presented by the actuary in the 2006 through 2010 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of House Bill 1 passed in 2008 the applicable statute now calls for an employer contribution rate at an increasing percentage of the ARC rates until 100% is achieved in 2020 for SPRS.

Summary of Actuarial Unfunded Liabilities
(As of June 30, 2010)

Kentucky Employees Retirement System

(Non-Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/05	$7,579,074,839	$5,578,685,746	$5,362,630,697	$2,000,389,093	$2,216,444,142	73.6%	70.8%
6/30/06	$8,994,826,247	$5,394,086,323	$5,440,132,708	$3,600,739,924	$3,554,693,539	60.0%	60.5%
6/30/07	$9,485,939,277	$5,396,782,459	$5,773,156,838	$4,089,156,818	$3,712,782,439	56.9%	60.9%
6/30/08	$10,129,689,985	$5,318,792,893	$5,056,867,294	$4,810,897,092	$5,072,822,691	52.5%	49.9%
6/30/09	$10,658,549,532	$4,794,611,365	$3,584,196,429	$5,863,938,167	$7,074,353,103	45.0%	33.6%
6/30/10	$11,004,795,089	$4,210,215,585	$3,503,007,035	$6,794,579,504	$7,501,788,054	38.3%	31.8%

Kentucky Employees Retirement System

(Non-Hazardous Insurance Fund)

6/30/05	$2,680,559,188	$607,068,351	$610,901,623	$2,073,490,837	$2,069,657,565	22.7%	22.8%
6/30/06	$7,815,480,774	$611,350,765	$632,642,846	$7,204,130,009	$ 7,182,837,928	7.8%	8.1%
6/30/07	$5,201,355,055	$621,171,658	$663,558,360	$4,580,183,397	$4,537,796,695	11.9%	12.8%
6/30/08	$5,431,499,285	$603,197,761	$574,480,809	$4,828,301,524	$4,857,018,476	11.1%	10.6%
6/30/09	$4,507,325,571	$534,172,580	$365,771,088	$3,973,152,991	$4,141,554,483	11.9%	8.1%
6/30/10	$4,466,136,041	$471,341,628	$371,002,484	$3,994,794,413	$4,095,133,557	10.6%	8.3%

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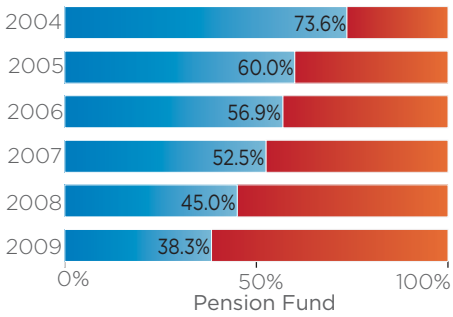
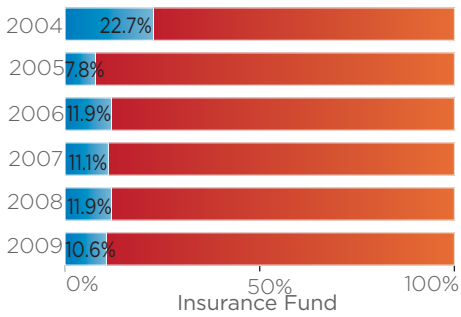




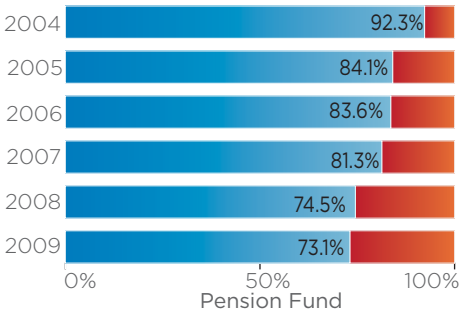
Summary of Actuarial Unfunded Liabilities
(As of June 30, 2010)

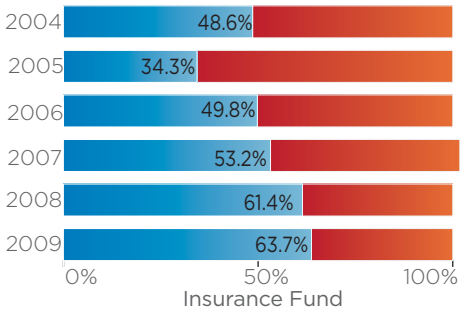
Kentucky Employees Retirement System
(Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/05	$438,994,257	$405,288,662	$398,308,897	$33,705,595	$40,685,360	92.3%	90.7%
6/30/06	$508,655,903	$427,984,192	$437,029,583	$80,671,711	$71,626,320	84.1%	85.9%
6/30/07	$558,992,329	$467,287,809	$510,775,499	$91,704,520	$48,216,830	83.6%	91.4%
6/30/08	$618,010,827	$502,132,214	$484,440,015	$115,878,613	$133,570,812	81.3%	78.4%
6/30/09	$674,411,781	$502,503,287	$388,913,374	$171,908,494	$285,498,406	74.5%	57.7%
6/30/10	$688,149,451	$502,729,009	$443,511,663	$185,420,442	$244,637,788	73.1%	64.5%

Kentucky Employees Retirement System
(Hazardous Insurance Fund)

6/30/05	$386,844,695	$187,947,644	$188,871,226	$198,897,051	$197,973,469	48.6%	48.8%
6/30/06	$621,237,856	$212,833,318	$223,523,081	$408,404,538	$397,714,775	34.3%	36.0%
6/30/07	$504,842,981	$251,536,756	$280,885,910	$253,306,225	$223,957,071	49.8%	55.6%
6/30/08	$541,657,214	$288,161,759	$269,299,859	$253,495,455	$272,357,355	53.2%	49.7%
6/30/09	$491,132,170	$301,634,592	$219,537,255	$189,497,578	$271,594,915	61.4%	44.7%
6/30/10	$493,297,529	$314,427,296	$271,395,843	$178,870,233	$221,901,686	63.7%	55.0%





The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).

Summary of Actuarial Unfunded Liabilities
(As of June 30, 2010)

County Employees Retirement System
(Non-Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/05	$5,385,156,690	$5,059,208,687	$4,893,599,997	$325,948,003	$491,556,693	94.0%	90.9%
6/30/06	$6,179,569,267	$5,162,894,136	$5,191,376,948	$1,016,675,131	$988,192,319	83.6%	84.0%
6/30/07	$6,659,446,126	$5,467,824,480	$5,812,935,251	$1,191,621,646	$846,510,875	82.1%	87.3%
6/30/08	$7,304,217,691	$5,731,502,438	$5,431,735,605	$1,572,715,253	$1,872,482,086	78.5%	74.4%
6/30/09	$7,912,913,512	$5,650,789,991	$4,330,593,934	$2,262,123,521	$3,582,319,578	71.4%	54.7%
6/30/10	$8,459,022,280	$5,546,857,291	$4,819,933,717	$2,912,164,989	$3,639,088,563	65.6%	57.0%

County Employees Retirement System
(Non-Hazardous Insurance Fund)

6/30/05	$2,788,754,654	$663,941,949	$668,485,367	$2,124,812,705	$2,120,269,287	23.8%	24.0%
6/30/06	$4,607,223,639	$777,726,590	$813,250,744	$3,829,497,049	$3,793,972,895	16.9%	17.7%
6/30/07	$3,333,966,070	$960,285,900	$1,084,042,781	$2,373,680,170	$2,249,923,289	28.8%	32.5%
6/30/08	$3,583,193,466	$1,168,883,170	$1,105,944,178	$2,414,310,296	$2,477,249,288	32.6%	30.9%
6/30/09	$3,070,386,018	$1,216,631,769	$894,905,841	$1,853,754,249	$2,175,480,177	39.6%	29.2%
6/30/10	$3,158,340,174	$1,293,038,593	$1,096,581,872	$1,865,301,581	$2,061,758,302	40.9%	34.7%

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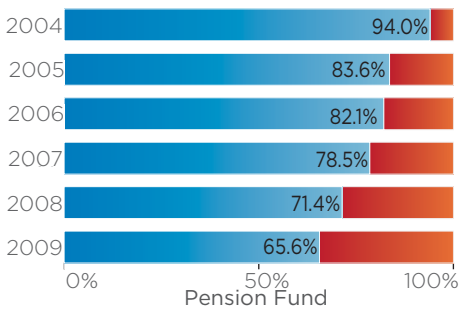
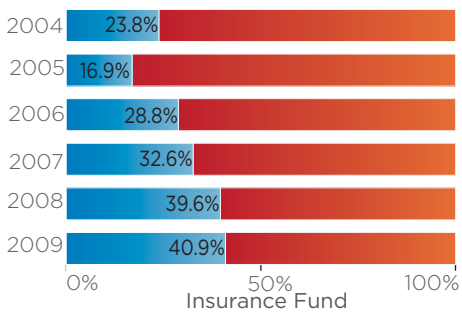




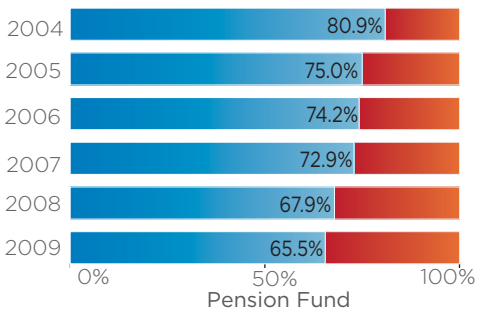
Summary of Actuarial Unfunded Liabilities
(As of June 30, 2010)

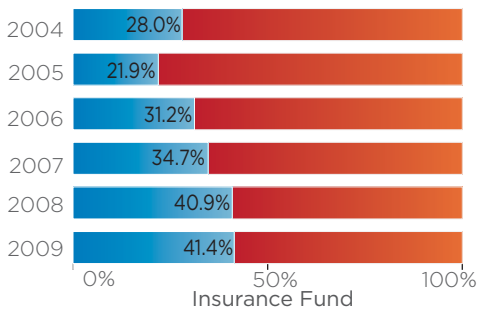
County Employees Retirement System
(Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/05	$1,795,617,335	$1,452,353,023	$1,411,245,719	$343,264,312	$384,371,616	80.9%	78.6%
6/30/06	$2,020,142,770	$1,515,075,017	$1,528,845,357	$505,067,753	$491,297,413	75.0%	75.7%
6/30/07	$2,208,736,179	$1,639,288,924	$1,754,934,764	$569,447,255	$453,801,415	74.2%	79.5%
6/30/08	$2,403,122,095	$1,750,867,373	$1,644,983,243	$652,254,722	$758,138,852	72.9%	68.5%
6/30/09	$2,578,444,600	$1,751,487,540	$1,320,522,868	$826,957,060	$1,257,921,732	67.9%	51.2%
6/30/10	$2,672,151,907	$1,749,464,388	$1,506,787,429	$922,687,519	$1,165,364,478	65.5%	56.4%

County Employees Retirement System
(Hazardous Insurance Fund)

6/30/05	$1,283,299,092	$359,180,461	$360,938,669	$924,118,631	$922,360,423	28.0%	28.1%
6/30/06	$1,928,481,371	$422,785,042	$441,278,796	$1,505,696,329	$1,487,202,575	21.9%	22.9%
6/30/07	$1,646,460,011	$512,926,549	$570,155,702	$1,133,533,462	$1,076,304,309	31.2%	34.6%
6/30/08	$1,769,782,957	$613,526,319	$576,414,457	$1,156,256,638	$1,193,368,500	34.7%	32.6%
6/30/09	$1,593,548,263	$651,130,782	$483,269,862	$942,417,481	$1,110,278,401	40.9%	30.3%
6/30/10	$1,674,703,216	$692,769,770	$586,826,965	$981,933,446	$1,087,876,251	41.4%	35.0%





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Summary of Actuarial Unfunded Liabilities
(As of June 30, 2010)

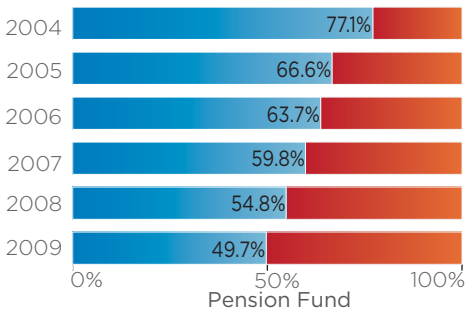
State Police Retirement System
(Pension Fund)

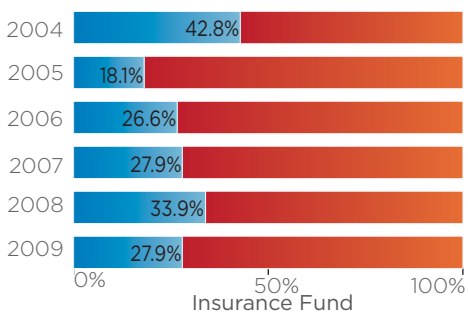
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/05	$458,593,576	$353,511,622	$339,405,873	$105,081,954	$119,187,703	77.1%	74.0%
6/30/06	$516,482,298	$344,016,197	$352,841,486	$172,466,101	$163,640,812	66.6%	68.3%
6/30/07	$547,955,286	$348,806,508	$376,381,488	$199,148,778	$171,573,798	63.7%	68.7%
6/30/08	$587,129,257	$350,891,451	$337,358,918	$236,237,806	$249,770,339	59.8%	57.5%
6/30/09	$602,328,868	$329,966,989	$256,571,073	$272,361,879	$345,757,795	54.8%	42.6%
6/30/10	$612,444,806	$304,577,292	$264,944,089	$307,867,514	$347,500,717	49.7%	43.3%

State Police Retirement System
(Insurance Fund)

6/30/ 05	$234,159,510	$100,207,082	$99,408,106	$133,952,428	$134,751,404	42.8%	42.5%
6/30/06	$582,580,867	$105,580,269	$110,491,075	$477,000,598	$472,089,792	18.1%	19.0%
6/30/07	$432,763,229	$115,215,912	$132,573,898	$317,547,317	$300,189,331	26.6%	30.6%
6/30/08	$445,107,468	$123,961,197	$121,781,967	$321,146,271	$323,325,501	27.9%	27.4%
6/30/09	$364,031,141	$123,526,647	$93,686,940	$240,504,494	$270,344,201	33.9%	25.7%
6/30/10	$434,960,495	$121,175,083	$104,526,550	$313,785,412	$330,433,945	27.9%	24.0%

The funding level is the percentage of actuarial liabilities, or benefits earned to date, covered by the current assets. The value provides a measure of the plan's financial soundness. An increasing (decreasing) trend in the funding level indicates the system is becoming financially stronger (weaker).





Analysis of Financial Experience

(As of June 30, 2010)

Kentucky Employees Retirement System Non-Hazardous
Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss)	Insurance $ Gain (or Loss)
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(39.4)	(4.3)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(4.1)	2.9
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.9)	(1.8)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	6.9	10.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	68.5	306.0
New Members. Additional unfunded accrued liability will produce a loss.	(8.4)	(8.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(324.2)	(32.7)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	14.2	58.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(258.0)	(375.1)
Gain (or Loss) During Year From Financial Experience	(545.4)	(44.1)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	0.0	53.0
Composite Gain (or Loss) During Year	(545.4)	8.9

Analysis of Financial Experience

(As of June 30, 2010)

Kentucky Employees Retirement System Hazardous
Gains & Losses in Accrued Liabilities Resulting from Difference Between
Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss)	Insurance $ Gain (or Loss)
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(31.7)	(2.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.4	0.8
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	15.9	9.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	7.3	36.0
New Members. Additional unfunded accrued liability will produce a loss.	(1.4)	(0.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(27.2)	(14.0)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	5.1	9.9
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	25.4	(23.2)
Gain (or Loss) During Year From Financial Experience	(6.1)	15.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	(4.3)	(0.4)
Composite Gain (or Loss) During Year	(6.1)	14.6

Analysis of Financial Experience

(As of June 30, 2010)

County Employees Retirement System Non-Hazardous
Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss)	Insurance $ Gain (or Loss)
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(91.3)	(13.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(14.3)	6.1
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.5)	(2.5)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	21.0	10.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	77.6	209.8
New Members. Additional unfunded accrued liability will produce a loss.	(11.2)	(7.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(353.8)	(60.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	13.1	10.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(221.3)	(153.6)
Gain (or Loss) During Year From Financial Experience	(581.7)	(0.7)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	0.0	28.2
Composite Gain (or Loss) During Year	(581.7)	27.5

Analysis of Financial Experience

(As of June 30, 2010)

County Employees Retirement System Hazardous
Gains & Losses in Accrued Liabilities Resulting from Difference Between
Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss)	Insurance $ Gain (or Loss)
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(46.2)	(8.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.3	0.5
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	3.9
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	19.4	17.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	29.8	123.9
New Members. Additional unfunded accrued liability will produce a loss.	(4.8)	(6.6)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(117.1)	(33.5)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	4.5	18.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	34.5	(114.5)
Gain (or Loss) During Year From Financial Experience	(79.5)	0.4
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	0.0	(20.1)
Composite Gain (or Loss) During Year	(79.5)	(19.7)

Analysis of Financial Experience

(As of June 30, 2010)

State Police Retirement System

Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience ($ Millions)

Type of Activity	Retirement $ Gain (or Loss)	Insurance $ Gain (or Loss)
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(7.5)	(1.3)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.1)	(0.3)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.7	2.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	3.0	32.8
New Members. Additional unfunded accrued liability will produce a loss.	0.0	(0.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(17.5)	(4.3)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(0.3)	4.7
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	2.0	(44.1)
Gain (or Loss) During Year From Financial Experience	(19.7)	(10.5)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or contribution timing.	0.0	(61.0)
Composite Gain (or Loss) During Year	(19.7)	(71.5)

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

Solvency Test

(As of June 30, 2010)

Kentucky Employees Retirement System
(Non-Hazardous Pension Fund)

	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets for		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/05	866,044,474	5,056,247,608	1,656,782,757	5,578,685,746	100.0	93.2%	--
6/30/06	866,050,799	5,881,990,853	2,246,784,595	5,394,086,323	100.0	77.0	--
6/30/07	878,842,180	6,437,235,593	2,169,861,504	5,396,782,459	100.0	70.2	--
6/30/08	875,178,069	7,162,496,700	2,092,015,217	5,318,792,893	100.0	62.0	--
6/30/09	793,574,765	8,205,155,691	1,659,819,076	4,794,611,365	100.0	48.8	--
6/30/10	869,484,042	8,329,757,802	1,805,553,245	4,210,215,585	100.0%	40.1	--

Kentucky Employees Retirement System
(Non-Hazardous Insurance Fund)

	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets for		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/05	0	1,550,619,458	1,129,939,730	607,068,351	100.0	39.2	--
6/30/06	0	3,543,125,375	4,272,355,400	611,350,765	100.0	17.3	--
6/30/07	0	2,569,197,567	2,632,157,488	621,171,658	100.0	24.2	--
6/30/08	0	2,788,189,754	2,643,309,531	603,197,761	100.0	21.6	--
6/30/09	0	2,861,867,088	1,645,458,483	534,172,580	100.0	18.7	--
6/30/10	0	2,744,534,054	1,721,601,987	471,341,628	100.0	17.2	--

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

Solvency Test

(As of June 30, 2010)

Kentucky Employees Retirement System
(Hazardous Pension Fund)

	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets for		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/05	75,098,321	213,310,550	150,585,386	405,288,662	100.0	100.0	77.6
6/30/06	87,092,538	262,446,606	159,116,759	427,984,192	100.0	100.0	49.3
6/30/07	88,670,847	306,492,350	163,829,132	467,287,809	100.0	100.0	44.0
6/30/08	89,590,638	355,771,877	172,648,312	502,132,214	100.0	100.0	32.9
6/30/09	87,779,938	413,972,356	172,659,487	502,503,288	100.0	100.0	0.4
6/30/10	88,511,283	441,657,241	157,980,927	502,729,009	100.0	93.8	--

Kentucky Employees Retirement System
(Hazardous Insurance Fund)

	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets for		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/05	0	187,883,650	198,961,045	187,947,644	100.0	100.0	--
6/30/06	0	234,058,715	387,179,141	212,833,318	100.0	90.9	--
6/30/07	0	201,189,546	303,653,435	251,536,756	100.0	100.0	16.6
6/30/08	0	228,834,940	312,822,274	288,161,759	100.0	100.0	19.0
6/30/09	0	242,123,365	249,008,805	301,634,592	100.0	100.0	23.9
6/30/10	0	268,510,709	224,786,820	314,427,296	100.0	100.0	20.4

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

Solvency Test

(As of June 30, 2010)

County Employees Retirement System
(Non-Hazardous Pension Fund)

	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets for		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/05	837,513,907	2,814,210,355	1,733,432,428	5,059,208,687	100.0	100.0	81.2
6/30/06	883,946,564	3,210,095,023	2,085,527,680	5,162,894,136	100.0	100.0	51.3
6/30/07	920,126,096	3,589,512,063	2,149,807,967	5,467,824,480	100.0	100.0	44.6
6/30/08	963,213,677	4,058,767,419	2,282,236,595	5,731,502,438	100.0	100.0	31.1
6/30/09	991,628,551	4,542,483,102	2,378,801,859	5,650,789,991	100.0	100.0	4.9
6/30/10	1,063,746,826	4,890,659,077	2,504,616,377	5,546,857,291	100.0	91.7	--

County Employees Retirement System
(Non-Hazardous Insurance Fund)

	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets for		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/05	0	1,144,219,107	1,644,535,547	663,941,949	100.0	58.0	--
6/30/06	0	1,694,600,143	2,912,623,496	777,726,590	100.0	45.9	--
6/30/07	0	1,372,128,406	1,961,837,664	960,285,900	100.0	70.0	--
6/30/08	0	1,521,450,274	2,061,743,192	1,168,883,170	100.0	76.8	--
6/30/09	0	1,478,782,753	1,591,603,265	1,216,631,769	100.0	82.3	--
6/30/10	0	1,526,533,372	1,631,806,802	1,293,038,593	100.0	84.7	--

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

Solvency Test

(As of June 30, 2010)

County Employees Retirement System (Hazardous Pension Fund)

	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets for		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/05	264,913,465	960,052,305	570,651,565	1,452,353,023	100.0	100.0	39.8
6/30/06	300,200,800	1,128,164,618	591,777,352	1,515,075,017	100.0	100.0	14.7
6/30/07	317,007,367	1,275,221,775	616,507,037	1,639,288,924	100.0	100.0	7.6
6/30/08	338,324,362	1,406,982,409	657,815,324	1,750,867,373	100.0	100.0	0.8
6/30/09	350,308,879	1,540,262,587	687,873,134	1,751,487,540	100.0	91.0	--
6/30/10	369,612,720	1,622,684,455	679,854,732	1,749,464,388	100.0	85.0	--

County Employees Retirement System (Hazardous Insurance Fund)

	Actuarial Liabilities				% of Actuarial Liabilities Covered by Actuarial Assets for		
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	(1)	(2)	(3)
6/30/05	0	586,104,126	697,194,966	359,180,461	100.0	61.3	--
6/30/06	0	787,671,273	1,140,810,098	422,785,042	100.0	53.7	--
6/30/07	0	659,752,978	986,707,033	512,926,549	100.0	77.7	--
6/30/08	0	722,435,184	1,047,347,773	613,526,319	100.0	84.9	--
6/30/09	0	725,899,836	867,648,427	651,130,782	100.0	89.7	--
6/30/10	0	814,300,256	860,402,960	692,769,770	100.0	85.1	--

A solvency test provides measures of the plan's ability to pay all promised benefits (actuarial liabilities) when due. Column 1 represents the value of active member contributions. Column 2 represents the amount necessary to pay retired member and beneficiary benefits. Column 3 represents the employer's portion of active member benefits accrued to date that will be paid in the future. In a system receiving the actuarially recommended employer contribution, the total actuarial liabilities in Column 1 and 2 should be fully covered by actuarial assets, and the portion of the actuarial liabilities in Column 3 should be covered by actuarial assets over time.

Solvency Test

(As of June 30, 2010)

State Police Retirement System
(Pension Fund)

Valuation Date	Actuarial Liabilities			Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)		(1)	(2)	(3)
6/30/05	35,670,717	341,398,363	81,524,496	353,511,622	100.0	93.1	--
6/30/06	37,866,774	373,588,145	105,027,379	344,016,197	100.0	81.9	--
6/30/07	39,505,285	397,863,520	110,586,481	348,806,508	100.0	77.7	--
6/30/08	41,391,416	426,311,368	119,426,473	350,891,451	100.0	72.6	--
6/30/09	41,664,469	459,585,353	101,079,046	329,966,989	100.0	62.7	--
6/30/10	42,011,523	475,892,659	94,540,624	304,577,292	100.0	55.2	--

State Police Retirement System
(Insurance Fund)

Valuation Date	Actuarial Liabilities			Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)		(1)	(2)	(3)
6/30/05	0	141,585,694	92,573,816	100,207,082	100.0	70.8	--
6/30/06	0	240,913,868	341,666,999	105,580,269	100.0	43.8	--
6/30/07	0	172,291,142	260,472,087	115,215,912	100.0	66.9	--
6/30/08	0	178,655,245	266,452,223	123,961,197	100.0	69.4	--
6/30/09	0	167,091,453	196,939,688	123,526,647	100.0	73.9	--
6/30/10	0	253,580,827	181,379,668	121,175,083	100.0	47.8	

Summary of Active Member Valuation Data as of June 30, 2010

	Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Avg. Pay	% Increase In Avg. Pay	Average Age	Avg. Yrs of Service Credit
Kentucky Employees Retirement System Non-Hazardous	6/30/05	324	47,118	1,655,907,288	35,144	1.7	42.9	9.8
	6/30/06	338	46,707	1,702,230,777	36,445	3.7	43.0	9.7
	6/30/07	317	47,913	1,780,223,493	37,155	1.9	43.3	9.3
	6/30/08	414	48,085	1,837,873,488	38,221	2.9	43.2	9.1
	6/30/09	334	46,060	1,754,412,912	38,090	(0.3)	43.0	8.7
	6/30/10	334	47,090	$1,815,146,388	$38,546	1.2%	43.4	9.0
Kentucky Employees Retirement System Hazardous	6/30/05	26	4,274	131,687,088	30,811	(2.4)	41.9	7.1
	6/30/06	15	4,320	138,747,320	32,117	4.2	41.6	7.0
	6/30/07	15	4,349	144,838,020	33,304	3.7	41.7	7.0
	6/30/08	16	4,393	148,710,060	33,852	1.6	41.4	6.9
	6/30/09	20	4,334	146,043,576	33,697	(0.5)	41.4	7.0
	6/30/10	18	4,291	$143,557,944	$33,456	(0.7)%	41.4	7.0
County Employees Retirement System Non-Hazardous	6/30/05	1,116	81,240	1,885,275,000	23,206	2.8	45.0	8.1
	6/30/06	1,099	83,694	1,982,437,473	23,687	2.1	45.1	8.1
	6/30/07	1,112	84,920	2,076,848,328	24,457	3.3	45.9	8.1
	6/30/08	1,110	85,221	2,166,612,648	25,423	3.9	45.9	8.3
	6/30/09	1,108	83,724	2,183,611,848	26,081	2.6	46.2	8.6
	6/30/10	1,102	84,681	$2,236,855,380	$26,415	1.3%	46.6	8.8
County Employees Retirement System Hazardous	6/30/05	284	9,464	411,121,728	43,441	3.5	38.0	8.2
	6/30/06	292	9,635	426,927,550	44,310	2.0	37.8	8.3
	6/30/07	294	10,063	458,998,956	45,613	2.9	38.6	8.1
	6/30/08	299	10,173	474,241,332	46,618	2.2	38.7	8.3
	6/30/09	290	9,757	469,315,464	48,100	3.2	38.4	8.8
	6/30/10	282	9,562	$466,548,660	$48,792	1.4%	38.8	9.2
State Police Retirement System	6/30/05	1	987	43,720,092	44,296	1.0	36.5	10.6
	6/30/06	1	1,028	47,743,865	46,443	4.8	36.5	10.5
	6/30/07	1	957	49,247,580	51,460	10.8	37.3	11.1
	6/30/08	1	993	53,269,080	53,645	4.2	36.9	10.8
	6/30/09	1	946	$51,660,396	$54,609	1.8	37.3	11.0
	6/30/10	1	961	$51,506,712	$53,597	(1.9)%	37.2	10.6

[1] Annual payroll included in the Summary of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2010.

Schedule of Retirees & Beneficiaries Added to and Removed from Rolls as of June 30, 2010

	Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances[1]	% Increase in Allowances	Average Annual Allowance
Kentucky Employees Retirement System Non-Hazardous	6/30/05	2,481	603	30,770	509,347,800	13.34	16,553
	6/30/06	2,481	1,111	32,140	566,167,003	11.31	17,611
	6/30/07	2,440	731	33,849	625,435,416	10.47	18,477
	6/30/08	2,573	1,115	35,307	710,505,270	13.60	20,124
	6/30/09	3,465	889	37,883	812,559,070	14.36	21,449
	6/30/10	1,162	1,100	37,945	$801,881,911	(1.31)	$21,133
Kentucky Employees Retirement System Hazardous	6/30/05	234	31	1,752	19,640,700	22.00	11,210
	6/30/06	256	28	1,980	23,381,537	19.25	11,809
	6/30/07	241	19	2,202	27,528,789	17.74	12,502
	6/30/08	261	59	2,404	33,588,993	22.01	13,972
	6/30/09	339	95	2,648	38,695,501	15.20	14,613
	6/30/09	282	95	2,835	41,114,800	6.25	14,503
County Employees Retirement System Non-Hazardous	6/30/05	2,808	590	31,347	279,590,300	12.95	8,919
	6/30/06	2,782	1,027	33,102	308,269,651	10.26	9,313
	6/30/07	3,244	782	35,564	348,712,020	13.12	9,805
	6/30/08	3,366	1,351	37,759	393,757,510	12.92	10,478
	6/30/09	3,060	883	39,756	440,061,418	11.76	11,069
	6/30/10	2,565	1,283	41,038	$452,613,550	2.85	11,029
County Employees Retirement System Hazardous	6/30/05	403	47	4,361	89,224,700	12.15	20,460
	6/30/06	427	76	4,712	100,290,052	12.40	21,284
	6/30/07	500	53	5,159	113,735,850	13.41	22,046
	6/30/08	469	206	5,422	127,477,109	12.08	23,511
	6/30/09	650	264	5,808	139,886,751	9.73	24,085
	6/30/10	423	163	6,068	146,916,812	5.03	24,212
State Police Retirement System	6/30/05	50	6	1,036	32,983,900	7.07	31,838
	6/30/06	43	10	1,067	34,651,251	5.06	32,475
	6/30/07	49	11	1,105	37,208,377	7.38	33,673
	6/30/08	42	12	1,135	41,293,016	10.98	36,382
	6/30/09	75	26	1,184	$44,273,937	7.22	$37,394
	6/30/10	54	15	1,223	$45,515,797	2.80	$37,217

[1] *The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.*

Summary of Benefit Provisions

KERS & CERS Non Hazardous Plans

Plan Funding

State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statute 61.565 and Kentucky Revised Statute 61.752. KERS rates are subject to state budget approval.

Membership Eligibility

For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility

Members whose participation began before 9/1/2008

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	5% per year for five years before age 65 or 27 years of service. 4% for each year thereafter.
Any	25	5% each year for five years before age 65 or 27 years of service.

Retirement Eligibility

Members whose participation began on or after 9/1/2008

Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None
60	10	5% per year for five years before age 65 or Rule of 87 (age plus years of service). 4% for each year thereafter.

Benefit Formula

Final Compensation	X	Benefit Factor		X	Years of Service
Average of the five highest, or if participation began on or after 9/1/2008 average of the last five.		KERS 1.97% if:	Member does not have 13 months credit from 1/98 - 1/99.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if:	Member has 13 months credit from 1/98 - 1/99.		
		KERS 2.20% if:	20 or more years of service, and retires by 1/09.		
		CERS 2.20% if:	Member begins participating prior to 8/1/04.		
		CERS 2.00% if:	Member begins participating on or after 8/1/04 and before 9/1/08.		
		KERS and CERS increasing percent based on service at retirement *(see chart to left)* plus 2.00% for each year of service over 30 if:	Member begins participating on or after 9/1/08.		

Benefit Factors for members with a participation date on or after 9/1/08

Service	Benefit Factor
10 years or less	1.10%
10+ to 20 years	1.30%
20+ to 26 years	1.50%
26+ to 30 years	1.75%
Additional years over 30	2.00%

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits

Members participating before August 1, 2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after August 1, 2004 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or, (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the CPI-U for the most recent calendar year, not to exceed 5%. The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10

years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit and be age 60 or meet the rule of 87 (age plus years of service) in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased annually by 1.5% from July 1, 2008.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

KERS & CERS Hazardous Plans & SPRS

Plan Funding

State statutes require active members to contribute 8% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statute 61.565 and Kentucky Revised Statute 61.752. KERS & SPRS rates are subject to state budget approval.

Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

Retirement Eligibility
Members whose participation began before 9/1/2008

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	6.5% per year for five years after 4.5% for remaining years before age 55 or 20 years of service.

Retirement Eligibility
Members whose participation began on or after 9/1/2008

Age	Years of Service	Allowance Reduction
60	5	None
Any	25	None
50	15	6.5% per year for five years and 4.5% for remaining years before age 55 or 20 years of service.

Benefit Formula

Final Compensation	X	Benefit Factor		X	Years of Service
Average of the three highest, or if participation began on or after 9/1/2008 average of the last three.		KERS 2.49% CERS 2.50% SPRS 2.50%, if:	Member begins participating before 9/1/08.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS, CERS and SPRS increasing percent based on service at retirement *(see chart to left)* if:	Member begins participating on or after 9/1/08.		

Benefit Factors for members with a participation date on or after 9/1/08

Service	Benefit Factor
10 years or less	1.30%
10+ to 20 years	1.50%
20+ to 25 years	2.25%
25+ Years	2.50%

Disability Benefits

Members hired before August 1, 2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members hired on or after August 1, 2004 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% Final Rate of Pay or the amount calculated under the Benefit Formula noted above based upon actual service.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or, (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least 4 years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5%. The Kentucky General Assembly has the authority to suspend or reduce Cost of Living Adjustments.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15 for each year of earned service increased annually by 1.5% after July 1, 2008.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter.

Statistical

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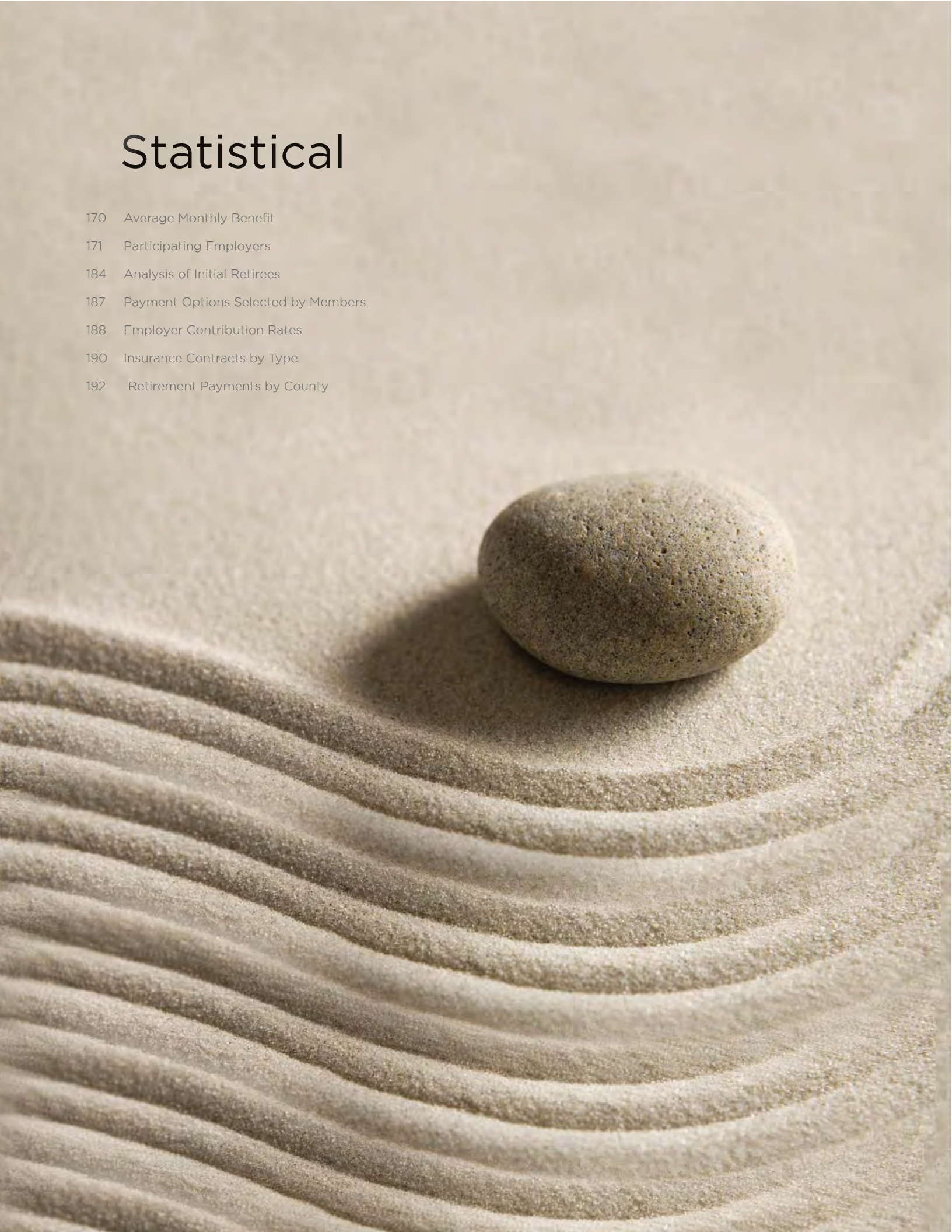

Membership by System

	Fiscal Year	Active	Inactive	Retired	Total
Kentucky Employees Retirement System Non-Hazardous	2005	47,118	28,345	30,770	106,233
	2006	46,707	29,143	32,140	107,990
	2007	47,913	30,904	33,849	112,666
	2008	48,202	32,717	35,286	116,205
	2009	46,060	34,515	37,883	118,458
	2010	46,710	32,461	35,733	114,904
Kentucky Employees Retirement System Hazardous	2005	4,274	2,304	1,752	8,330
	2006	4,320	2,501	1,981	8,802
	2007	4,349	2,738	2,202	9,289
	2008	4,397	3,534	2,402	10,333
	2009	4,334	3,056	2,648	10,038
	2010	4,049	2,285	1,900	8,234
County Employees Retirement System Non-Hazardous	2005	81,240	48,869	31,347	161,456
	2006	83,694	50,046	33,102	166,842
	2007	84,920	53,901	35,564	174,385
	2008	85,803	55,279	37,558	178,640
	2009	83,724	60,275	39,756	183,755
	2010	84,010	55,423	38,261	177,694

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

The data for years 2005-2009 reflects the number of accounts in each system. A single member may have multiple accounts, which contribute to one pension. Note for 2010: Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-hazardous, then KERS Non-hazardous.

Membership by System

	Fiscal Year	Active	Inactive	Retired	Total
County Employees Retirement System Hazardous	2005	9,464	1,971	4,361	15,796
	2006	9,635	1,955	4,712	16,302
	2007	10,063	2,197	5,159	17,419
	2008	10,185	4,815	5,314	20,314
	2009	9,757	2,522	5,808	18,087
	2010	9,120	2,009	4,867	15,996
State Police Retirement System	2005	987	252	1,036	2,275
	2006	1,028	266	1,067	2,361
	2007	957	286	1,105	2,348
	2008	995	302	1,136	2,433
	2009	946	332	1,184	2,462
	2010	948	201	1,004	2,153
Kentucky Retirement Systems Total	2005	143,083	81,741	69,266	294,090
	2006	145,384	83,911	73,002	302,297
	2007	148,202	90,026	77,879	316,107
	2008	149,582	96,647	81,696	327,925
	2009	144,821	101,552	87,279	333,652
	2010	144,837	92,379	81,765	318,981

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

The data for years 2005-2009 reflects the number of accounts in each system. A single member may have multiple accounts, which contribute to one pension. Note for 2010: Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-hazardous, then KERS Non-hazardous.

Average Monthly Benefit by Length of Service

	KERS Non-Hazardous		KERS Hazardous	
Service Credit Range	Number of Accounts	Average Monthly Benefit	Number	Average Monthly Benefit
Under 5 Years	3,855	145.82	528	184.91
5 or more but less than 10	4,711	393.51	599	552.63
10 or more but less than 15	4,303	643.66	550	994.78
15 or more but less than 20	3,874	952.46	478	1,494.74
20 or more but less than 25	4,207	1,289.95	481	2,027.34
25 or more but less than 30	9,913	2,230.24	122	2,570.74
30 or more but less than 35	6,246	3,108.19	56	3,352.64
35 or more	2,623	4,346.68	10	4,484.65
Total	39,732	1,691.98	2,824	1,137.27
	CERS Non-Hazardous		CERS Hazardous	
Under 5 Years	4,671	138.70	539	206.95
5 or more but less than 10	8,356	307.73	707	619.94
10 or more but less than 15	7,785	499.03	513	1,149.58
15 or more but less than 20	6,026	741.73	514	1,653.87
20 or more but less than 25	5,966	958.28	2,145	2,224.99
25 or more but less than 30	7,582	1,855.65	1,015	3,174.27
30 or more but less than 35	1,998	2,626.28	383	3,929.08
35 or more	568	3,453.47	92	4,806.14
Total	42,952	897.96	5,908	2,019.49
	SPRS			
Under 5 Years	58	346.56		
5 or more but less than 10	36	831.07		
10 or more but less than 15	39	1,187.10		
15 or more but less than 20	71	1,893.47		
20 or more but less than 25	345	2,398.84		
25 or more but less than 30	394	3,371.11		
30 or more but less than 35	222	4,489.37		
35 or more	62	5,436.54		
Total	1,227	3,032.01		

The information in the tables on this page include only individuals receiving a monthly benefit as of June 30, 2010.

The information in the tables on this page represent accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

Retired reemployed members and individuals deceased prior to June 2010 are not included; therefore, the numbers in this section may differ from the numbers in the Financial and Actuarial Sections.

Schedule of Participating Employers

Agency Classification	Number of Agencies	Number of Employees
Kentucky Employees Retirement System		
Agencies Reporting Through State Payroll	169	34,223
Other Agencies (universities, mental health boards, health departments)	144	17,121
Special Districts and Boards	4	351
Child Support Offices (county attorneys)	60	208
Other State-Administered Retirement Systems	3	292
Total	380	52,195
State Police Retirement System		
Kentucky State Police-Uniformed Officers	1	961
County Employees Retirement System		
Area Development Districts	13	719
Boards of Education	174	48,951
Cities	218	6,452
County Attorneys	67	598
County Clerks	15	2,383
County Government Agencies	260	20,378
Fire Departments	71	933
Hospitals	3	379
Jailers	9	395
Libraries	83	1,102
Planning Commissions	11	187
Police Departments	91	712
Police & Fire Departments (combined)	61	3,492
Sanitation Districts	6	65
Sheriff Departments	53	1,112
Special Districts and Boards	161	2,973
Utility boards	104	3,496
Urban County Government Agencies	4	1,971
Total	1,404	96,298

Principal Participating Employers- KERS and CERS

Participating Employer	Rank	Covered Employees	% of Total System
Kentucky Employees Retirement System			
Health & Family Services Cabinet: Dept. for Community Based Services	1	4,419	8.47%
Transportation: Department of Highways	2	4,110	7.87%
Justice and Public Safety: Dept of Corrections	3	3,601	6.90%
Bluegrass Reg Mental Health/Mental Retardation Board	4	2,257	4.32%
Dept of Juvenile Justice	5	1,408	2.70%
Administrative Office of the Court	6	1,401	2.68%
Seven Co Services	7	1,198	2.30%
Unified Prosecutorial System	8	1,066	2.04%
Eastern Kentucky University	9	1,038	1.99%
Department Workforce Investment	10	1,036	1.98%
All Others		30,661	58.74%
Total		52,195	100.00%
County Employees Retirement System			
Jefferson Co Board of Education	1	6,661	6.92%
Louisville/Jefferson County Metro	2	3,131	3.25%
Louisville/Jefferson County Metro	3	2,304	2.39%
Fayette Co Bd Educatoin	4	1,930	2.00%
Circuit Clerks	5	1,808	1.88%
Lex/Fayette Urban Co Govt	6	1,558	1.62%
Boone Co Bd of Ed	7	1,158	1.20%
Hardin Co Bd of Ed	8	1,123	1.17%
Warren County Bd of Ed	9	959	1.00%
Bullitt Co Bd of Ed	10	923	0.96%
All Others		74,743	77.62%
Total		96,298	100.00%

Plan Net Assets Dollars in Thousands ($)

		Non-Hazardous			Hazardous		
		Pension	Insurance	Total	Pension	Insurance	Total
Kentucky Employees Retirement System	June 30 2005	5,362,631	610,901	5,973,532	398,308	188,871	587,179
	June 30 2006	5,440,133	612,643	6,052,776	437,030	223,523	660,553
	June 30 2007	5,773,157	663,558	6,436,715	510,775	280,886	791,661
	June 30 2008	5,056,869	574,479	5,631,348	484,438	269,300	753,738
	June 30 2009	3,584,601	365,367	3,949,968	388,951	219,500	608,451
	June 30 2010	3,504,501	368,799	3,873,300	443,606	271,240	714,846

		Non-Hazardous			Hazardous		
		Pension	Insurance	Total	Pension	Insurance	Total
County Employees Retirement System	June 30 2005	4,893,600	668,485	5,562,085	1,411,246	360,940	1,772,186
	June 30 2006	5,191,377	813,251	6,004,628	1,528,845	441,279	1,970,124
	June 30 2007	5,812,936	1,084,043	6,896,979	1,754,935	570,156	2,325,091
	June 30 2008	5,431,735	1,105,945	6,537,680	1,644,982	576,414	2,221,396
	June 30 2009	4,331,010	894,490	5,225,500	1,320,560	483,233	1,803,793
	June 30 2010	4,820,490	1,094,821	5,915,311	1,506,894	586,614	2,093,508

		Pension	Insurance	Total
State Police Retirement System	June 30 2005	339,406	99,408	438,814
	June 30 2006	352,841	110,491	463,332
	June 30 2007	376,381	132,574	508,955
	June 30 2008	337,359	121,782	459,141
	June 30 2009	256,575	93,682	350,257
	June 30 2010	264,949	104,511	369,460

		Pension	Insurance	Total
Kentucky Retirement Systems Total	June 30 2005	12,405,191	1,928,605	14,333,796
	June 30 2006	12,950,226	2,201,187	15,151,413
	June 30 2007	14,228,184	2,731,217	16,959,401
	June 30 2008	12,955,383	2,647,920	15,603,303
	June 30 2009	9,881,697	2,056,272	11,937,969
	June 30 2010	10,540,440	2,425,987	12,966,427

Changes in Plan Net Assets Dollars in Thousands ($)

Kentucky Employees Retirement System Non-Hazardous Pension Fund

	2005	2006	2007	2008	2009	2010
Additions						
Member Contributions	$127,801	$107,607	$116,254	$116,487	$108,362	$90,780
Employer Contributions	50,333	60,681	88,249	104,655	112,383	144,051
Health Insurance Contribution (HB1)	0	0	0	0	404	1,799
Net Investment Income	462,638	504,361	784,652	(221,578)	(867,675)	526,209
Total Additions	640,772	672,649	989,155	(436)	(646,526)	762,839
Deductions						
Benefit Payments	522,396	577,947	640,201	699,052	808,513	825,627
Refunds	8,824	9,632	9,489	9,076	9,127	8,887
Administrative Expenses	5,916	7,568	7,070	7,724	8,102	8,424
Other Expenses	0	0	0	0	0	0
Total Deductions	537,136	595,147	656,773	715,852	825,742	842,938
Change in Plan Net Assets (Difference between Additions and Deductions)	**$103,636**	**$77,502**	**$332,382**	**(716,288)**	**(1,472,268)**	**(80,099)**

Kentucky Employees Retirement System Non-Hazardous Insurance Fund

	2005	2006	2007	2008	2009	2010
Additions						
Employer Contributions	$51,432	$47,635	$64,014	$56,745	$74,434	$$92,679
Net Investment Income	47,823	65,839	78,877	(38,965)	(154,894)	50,765
Member Drug Reimbursement	0	0	10,744	6,634	8,168	8,551
Insurance Appropriation	0	11,852	0	0	0	0
Premiums Rec'd from Retirees	0	5,770	12,196	12,940	12,320	13,588
Total Additions	99,255	131,096	165,831	37,354	(59,972)	165,583
Deductions						
Benefit Payments	75,571	95,823	111,659	122,946	145,036	157,819
Administrative Expenses	464	1,679	3,199	3,487	4,104	4,333
Insurance Appropriation	0	20,000	0	0	0	0
Total Deductions	76,035	117,502	114,858	126,433	149,140	162,152
Change in Plan Net Assets (Difference between Additions and Deductions)	**$23,220**	**$1,742**	**$50,973**	**(89,079)**	**(209,112)**	**3,431**

Changes in Plan Net Assets Dollars in Thousands ($)

Kentucky Employees Retirement System Hazardous Pension Fund

	2005	2006	2007	2008	2009	2010
Additions						
Member Contributions	$11,625	$12,056	$13,245	$13,091	$12,442	$11,110
Employer Contributions	9,758	10,803	13,237	15,257	15,843	17,658
Health Insurance Contribution (HB1)	0	0	0	0	38	118
Net Investment Income	33,123	41,680	77,996	(20,673)	(84,262)	65,588
Total Additions	54,506	64,539	104,478	7,675	(55,939)	94,474
Deductions						
Benefit Payments	20,495	23,736	28,514	31,606	37,556	37,796
Refunds	1,760	1,436	1,662	1,742	1,277	1,286
Administrative Expenses	511	645	611	664	715	737
Other Expenses	0	0	1	0	0	0
Total Deductions	22,766	25,817	38,788	34,012	39,548	39,819
Change in Plan Net Assets (Difference between Additions and Deductions)	**$31,740**	**$38,722**	**$73,690**	**(26,337)**	**(95,487)**	**54,655**

Kentucky Employees Retirement System Hazardous Insurance Fund

	2005	2006	2007	2008	2009	2010
Additions						
Employer Contributions	$15,653	$17,012	$19,535	$21,997	$20,803	$21,835
Net Investment Income	15,999	24,128	44,541	(25,740)	(60,641)	42,406
Member Drug Reimbursement	0	0	105	74	186	319
Insurance Appropriation	0	88	0	0	0	0
Premiums Rec'd from Retirees	0	0	204	247	300	835
Total Additions	31,652	41,228	64,385	(3,422)	(39,352)	65,395
Deductions						
Benefit Payments	4,853	6,513	6,874	8,069	10,304	13,456
Administrative Expenses	55	63	83	95	144	200
Total Deductions	4,908	6,576	6,957	8,164	10,448	13,656
Change in Plan Net Assets (Difference between Additions and Deductions)	**$26,744**	**$34,652**	**$57,428**	**(11,586)**	**(49,800)**	**51,739**

Changes in Plan Net Assets Dollars in Thousands ($)

County Employees Retirement System Non-Hazardous Pension Fund

	2005	2006	2007	2008	2009	2010
Additions						
Member Contributions	$127,637	$112,372	$121,979	$125,014	$122,518	$106,558
Employer Contributions	54,617	90,834	124,261	150,925	179,286	207,076
Health Insurance Contribution (HB1)	0	0	0	0	415	1,345
Net Investment Income	413,672	444,092	760,541	(228,020)	(927,090)	669,072
Total Additions	595,926	647,298	1,009,736	47,919	(624,871)	984,051
Deductions						
Benefit Payments	294,590	325,135	356,648	403,958	451,304	470,249
Refunds	11,042	11,589	11,396	11,924	10,719	10,001
Administrative Expenses	10,029	12,797	12,197	13,238	13,831	14,323
Other Expenses	0	0	22	0	0	0
Total Deductions	315,661	349,521	389,263	429,120	475,854	494,571
Change in Net Assets (Difference between Additions and Deductions)	**$280,265**	**$297,777**	**$620,473**	**(381,201)**	**(1,100,725)**	**489,478**

County Employees Retirement System Non-Hazardous Insurance Fund

Additions						
Employer Contributions	$107,632	$128,868	$147,609	$196,110	$123,761	$166,032
Net Investment Income	55,723	83,991	188,055	(95,924)	(244,148)	136,528
Member Drug Reimbursement	0	0	9,623	6,003	7,624	9,157
Insurance Appropriation	0	6,365	0	0	0	0
Premiums Rec'd from Retirees	0	0	13,997	15,104	14,356	16,216
Total Additions	163,355	219,224	359,284	121,293	(98,407)	327,933
Deductions						
Benefit Payments	58,262	72,919	85,199	95,966	108,995	123,133
Administrative Expenses	485	1,539	3,040	3,425	4,053	4,469
Total Deductions	58,747	74,458	88,239	99,391	113,048	127,602
Change in Net Assets (Difference between Additions and Deductions)	**$104,608**	**$144,766**	**$271,045**	**$21,902**	**(211,455)**	**200,331**

Changes in Plan Net Assets Dollars in Thousands ($)

County Employees Retirement System Hazardous Pension Fund

	2005	2006	2007	2008	2009	2010
Additions						
Member Contributions	$39,515	$39,055	$43,650	$44,260	$42,582	$37,200
Employer Contributions	39,948	49,976	61,553	72,155	78,151	82,887
Health Insurance Contribution (HB1)	0	0	0	0	37	174
Net Investment Income	119,901	132,915	240,035	(97,393)	(302,748)	206,073
Total Additions	199,364	221,946	345,238	19,022	(181,978)	326,334
Deductions						
Benefit Payments	90,119	101,087	115,604	125,191	138,810	136,810
Refunds	2,139	2,147	2,563	2,641	2,436	1,956
Administrative Expenses	872	1,113	1,073	1,143	1,198	1,234
Other Expenses	0	0	2	0	0	0
Total Deductions	93,130	104,347	119,242	128,975	142,444	140,000
Change in Net Assets (Difference between Additions and Deductions)	**$106,234**	**$117,599**	**$225,996**	**(109,953)**	**(324,422)**	**186,334**

County Employees Retirement System Hazardous Insurance Fund

Additions						
Employer Contributions	$55,552	$64,854	$70,073	$90,113	$70,783	$82,970
Net Investment Income	29,819	98	90,041	(48,529)	(123,461)	67,288
Member Drug Reimbursement	0	0	657	420	628	1,493
Insurance Appropriation	0	45,317	0	0	0	0
Premiums Rec'd from Retirees	0	0	191	222	330	508
Total Additions	85,371	110,269	160,962	42,226	(51,720)	152,259
Deductions						
Benefit Payments	21,985	29,717	31,607	35,604	41,017	48,321
Administrative Expenses	183	213	320	364	444	554
Total Deductions	22,168	29,930	31,927	35,968	41,461	48,875
Change in Net Assets (Difference between Additions and Deductions)	**$63,203**	**$80,339**	**$129,035**	**$6,258**	**$(93,181)**	**$103,384**

Changes in Plan Net Assets Dollars in Thousands ($)

	2005	2006	2007	2008	2009	2010
State Police Retirement System Hazardous Pension Fund						
Additions						
Member Contributions	$4,228	$4,814	$5,152	$5,407	$4,938	$4,127
Employer Contributions	2,852	4,244	6,142	7,443	8,186	9,489
Health Insurance Contribution (HB1)	0	0	0	0	5	12
Net Investment Income	29,761	39,347	49,595	(12,283)	(51,175)	40,602
Total Additions	36,841	48,405	60,889	567	(38,046)	54,230
Deductions						
Benefit Payments	32,921	34,703	37,187	39,367	42,547	45,582
Refunds	131	133	47	85	69	144
Administrative Expenses	104	134	126	137	122	130
Other Expenses	0	0	0	0	0	0
Total Deductions	33,156	34,970	37,360	39,589	42,738	45,856
Change in Net Assets (Difference between Additions and Deductions)	**$3,685**	**$13,435**	**$23,529**	**(39,022)**	**(80,784)**	**8,374**
State Police Retirement System Hazardous Insurance Fund						
Additions						
Employer Contributions	$6,974	$6,880	$6,489	$7,329	$7,414	$8,369
Net Investment Income	8,279	12,082	21,876	(11,440)	(28,166)	13,085
Member Drug Reimbursement	0	0	361	184	229	274
Insurance Appropriation	0	5	0	0	0	0
Premiums Rec'd from Retirees	0	0	8	9	23	16
Total Additions	15,253	18,967	28,734	(3,918)	(20,500)	21,744
Deductions						
Benefit Payments	6,221	7,816	6,515	6,768	7,476	10,769
Administrative Expenses	44	68	105	106	124	147
Total Deductions	6,265	7,884	6,620	6,874	7,600	10,916
Change in Net Assets (Difference between Additions and Deductions)	**$8,988**	**$11,083**	**$22,114**	**(10,792)**	**28,100**	**10,828**

Schedule of Benefit Expenses by Type

Kentucky Employees Retirement System Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2004-05					
Average Benefit	$910	$1,632	$850	$739	$1,379
Number of Accounts	3,866	21,092	1,910	3,902	30,770
Total Monthly Benefits	$3,516,148	$34,423,089	$1,623,500	$2,882,916	$42,445,653
% of Total Monthly Benefits	8.3%	81.1%	3.8%	6.8%	100.0%
FY 2005-06					
Average Benefit	$888	$1,670	$834	$868	$1,469
Number of Accounts	4,616	24,056	2,628	849	32,149
Total Monthly Benefits	$4,099,896	$40,184,892	$2,190,812	$737,173	$47,212,773
% of Total Monthly Benefits	8.7%	85.1%	4.6%	1.6%	100.0%
FY 2006-07					
Average Benefit	$936	$1,745	$865	$869	$1,541
Number of Accounts	4,767	25,605	2,597	843	33,812
Total Monthly Benefits	$4,463,823	$44,672,320	$2,245,823	$732,470	$52,114,436
% of Total Monthly Benefits	8.6%	85.7%	4.3%	1.4%	100.0%
FY 2007-08					
Average Benefit	$980	$1,831	$897	$906	$1,624
Number of Accounts	4,845	27,080	2,579	839	35,343
Total Monthly Benefits	$4,747,523	$49,585,033	$2,313,860	$760,088	$57,406,504
% of Total Monthly Benefits	8.3%	86.4%	4.0%	1.3%	100.0%
FY 2008-09					
Average Benefit	$ 1,036	$1,926	$927	$931	$1,717
Number of Accounts	5,041	29,386	2,566	861	37,854
Total Monthly Benefits	$5,223,184	$56,596,178	$2,377,856	$801,966	$64,999,184
% of Total Monthly Benefits	8.0%	87.1%	3.7%	1.2%	100.0%
FY 2009-10					
Average Benefit	1,009	1,912	936	963	1,692
Number of Accounts	5,991	30,303	2,625	813	39,732
Total Monthly Benefits	$6,046,047	$57,939,304	$2,457,461	$782,980	$67,225,791
% of Total Monthly Benefits	9.00%	86.20%	3.60%	1.20%	100.00%

Note:

The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June 2010 are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. Also, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

The information in these tables represent accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

Schedule of Benefit Expenses by Type

Kentucky Employees Retirement System Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2004-05					
Average Benefit	$775	$1,292	$568	$600	$934
Number of Accounts	808	647	117	180	1,752
Total Monthly Benefits	$626,082	$836,193	$66,456	$107,998	$1,636,729
% of Total Monthly Benefits	38.3%	51.1%	4.1%	6.6%	100.0%
FY 2005-06					
Average Benefit	$802	$1,333	$521	$749	$980
Number of Accounts	1,002	760	163	67	1,992
Total Monthly Benefits	$803,581	$1,013,373	$84,975	$50,201	$1,952,130
% of Total Monthly Benefits	41.1%	51.9%	4.4%	2.6%	100.0%
FY 2006-07					
Average Benefit	$862	$1,391	$540	$731	$1,038
Number of Accounts	1,116	854	167	76	2,213
Total Monthly Benefits	$962,085	$1,188,289	$90,109	$55,536	$2,296,019
% of Total Monthly Benefits	41.9%	51.8%	3.9%	2.4%	100.0%
FY 2007-08					
Average Benefit	$912	$1,455	$549	$751	$1,094
Number of Accounts	1,231	952	173	78	2,434
Total Monthly Benefits	$1,123,281	$1,384,856	$94,999	$58,567	$2,661,703
% of Total Monthly Benefits	42.2%	52.0%	3.6%	2.2%	100.0%
FY 2008-09					
Average Benefit	$941	$1,517	$576	$778	$1,143
Number of Accounts	1,353	1,066	173	74	2,666
Total Monthly Benefits	$1,272,796	$1,617,453	$99,607	$57,607	$3,047,462
% of Total Monthly Benefits	41.8%	53.1%	3.3%	1.8%	100.0%
FY 2009-10					
Average Benefit	933	1,489	593	843	1,137
Number of Accounts	1,446	1,146	157	75	2,824
Total Monthly Benefits	$1,348,511	$1,706,876	$93,064	$63,194	$3,211,645
% of Total Monthly Benefits	42.00%	53.10%	2.90%	2.00%	100.00%

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Schedule of Benefit Expenses by Type

County Employees Retirement System Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2004-05					
Average Benefit	$475	$873	$720	$512	$743
Number of Accounts	6,131	19,075	2,854	3,287	31,347
Total Monthly Benefits	$2,915,109	$16,644,747	$2,054,880	1,684,459	$23,299,195
% of Total Monthly Benefits	12.5%	71.4%	8.8%	7.2%	100.0%
FY 2005-06					
Average Benefit	$484	$889	$715	$534	$774
Number of Accounts	7,207	21,655	3,582	861	33,305
Total Monthly Benefits	$3,487,493	$19,256,550	$2,560,722	$460,095	$25,764,859
% of Total Monthly Benefits	13.6%	74.7%	9.9%	1.8%	100.0%
FY 2006-07					
Average Benefit	$509	$938	$747	$540	$817
Number of Accounts	7,694	23,460	3,612	864	35,630
Total Monthly Benefits	$3,919,356	$21,999,359	$2,696,721	$484,037	$29,099,472
% of Total Monthly Benefits	13.5%	75.6%	9.2%	1.7%	100.0%
FY 2007-08					
Average Benefit	$523	$978	$776	$582	$852
Number of Accounts	8,109	25,070	3,679	876	37,734
Total Monthly Benefits	$4,241,906	24,530,372	2,856,173	510,523	32,138,704
% of Total Monthly Benefits	13.2%	76.3%	8.9%	1.6%	100.0%
FY 2008-09					
Average Benefit	547	1,021	804	613	890
Number of Accounts	8,471	26,720	3,728	917	39,836
Total Monthly Benefits	$4,634,447	$27,268,861	$2,998,565	$561,804	$35,463,676
% of Total Monthly Benefits	13.1%	76.9%	8.5%	1.5%	100.0%
FY 2009-10					
Average Benefit	570	1,022	835	623	898
Number of Accounts	9,418	28,747	3,951	836	42,952
Total Monthly Benefits	$5,372,501	$29,377,417	$3,298,478	$520,995	$38,569,391
% of Total Monthly Benefits	13.90%	76.20%	8.60%	1.30%	100.00%

Note:

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Schedule of Benefit Expenses by Type

County Employees Retirement System Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2004-05					
Average Benefit	$1,399	$2,031	$1,159	$910	$1,705
Number of Accounts	865	2,642	332	522	4,361
Total Monthly Benefits	$1,209,803	$5,365,822	$384,788	$474,975	$7,435,388
% of Total Monthly Benefits	16.3%	72.2%	5.2%	6.4%	100.0%
FY 2005-06					
Average Benefit	$1,369	$2,059	$899	$974	$1,743
Number of Accounts	1,079	3,062	580	96	4,817
Total Monthly Benefits	$1,477,504	$6,304,523	$521,285	$93,535	$8,396,847
% of Total Monthly Benefits	17.6%	75.1%	6.2%	1.1%	100.0%
FY 2006-07					
Average Benefit	$1,398	$2,147	$937	$944	$1,815
Number of Accounts	1,212	3,329	592	95	5,228
Total Monthly Benefits	$1,693,771	$7,148,184	$554,911	$89,712	$7,486,579
% of Total Monthly Benefits	17.8%	75.3%	5.9%	1.0%	100.0%
FY 2007-08					
Average Benefit	$1,424	$2,228	$986	$1,021	$1,882
Number of Accounts	1,307	3,555	610	101	5,573
Total Monthly Benefits	$1,861,441	7,922,072	601,207	103,077	10,487,797
% of Total Monthly Benefits	17.8%	75.5%	5.7%	1.0%	100.0%
FY 2008-09					
Average Benefit	$1,452	$2,299	$1,014	$1,020	$1,934
Number of Accounts	1,413	3,733	634	104	5,884
Total Monthly Benefits	$2,052,162	$8,581,241	$642,604	$106,103	$11,382,110
% of Total Monthly Benefits	18.0%	75.4%	5.7%	0.9%	100.0%
FY 2009-10					
Average Benefit	1,427	2,362	1,261	1,130	2,019
Number of Accounts	1,495	3,856	468	89	5,908
Total Monthly Benefits	$2,133,697	$9,106,888	$590,020	$100,562	1$1,931,167
% of Total Monthly Benefits	17.90%	76.30%	5.00%	0.80%	100.00%

Note:

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Schedule of Benefit Expenses by Type

State Police Retirement System

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2004-05					
Average Benefit	$3,321	$2,741	$1,364	$1,862	$2,653
Number of Accounts	107	775	35	119	1,036
Total Monthly Benefits	$355,361	$2,123,941	$47,740	$221,615	$2,748,657
% of Total Monthly Benefits	12.9%	77.3%	1.7%	8.1%	100.0%
FY 2005-06					
Average Benefit	$3,109	$2,698	$1,213	$1,643	$2,650
Number of Accounts	145	864	56	28	1,093
Total Monthly Benefits	$450,794	$2,331,404	$67,950	$45,997	$2,896,146
% of Total Monthly Benefits	15.5%	80.4%	2.2%	1.9%	100.0%
FY 2006-07					
Average Benefit	$3,178	$2,797	$1,258	$1,761	$2,743
Number of Accounts	146	900	57	27	1,130
Total Monthly Benefits	$464,053	$2,517,382	$71,724	$47,540	$3,100,699
% of Total Monthly Benefits	15.0%	81.2%	2.3%	1.5%	100.0%
FY 2007-08					
Average Benefit	$3,281	$2,892	$1,265	$1,970	$2,843
Number of Accounts	150	931	56	26	1,163
Total Monthly Benefits	$492,198	$2,692,030	$70,822	$51,215	$3,306,265
% of Total Monthly Benefits	14.9%	81.4%	2.1%	1.6%	100.0%
FY 2008-09					
Average Benefit	$3,400	$2,985	$1,293	$2,025	$2,934
Number of Accounts	146	978	58	26	1,208
Total Monthly Benefits	$496,355	$2,919,782	$74,971	$52,649	$3,543,757
% of Total Monthly Benefits	14.0%	82.4%	2.1%	1.5%	100.0%
FY 2008-09					
Average Benefit	3,492	3,066	1,467	2,130	3,032
Number of Accounts	147	1,004	50	26	1,227
Total Monthly Benefits	$513,322	$3,078,221	$73,354	$55,379	$3,720,275
% of Total Monthly Benefits	13.80%	82.70%	2.00%	1.50%	100.00%

Note:

The information in these tables include only individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June 2010 are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. Also, the information for the current year will differ from the benefit payment totals listed in the Deduction by Source.

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Analysis of Initial Retirees

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
FY 2004-05					
Number of Accounts	2,481	234	2,808	403	50
Average Service Credit (months)	276	257	210	248	290
Average Final Compensation	$46,452	$45,654	$29,784	$49,920	$62,395
Average Monthly Benefit	$1,897	$1,216	$902	$1,765	$3,022
FY 2005-06					
Number of Accounts	2,295	236	2,543	377	39
Average Service Credit (months)	267	239	197	260	259
Average Final Compensation	$46,746	$43,845	$29,794	$54,358	$62,049
Average Monthly Benefit	$1,885	$1,185	$851	$2,047	$2,614
Average System Payment for Health Insurance	$246	$381	$180	$543	$407
FY 2006-07					
Number of Accounts	2,284	228	2,902	433	48
Average Service Credit (months)	246	238	206	255	274
Average Final Compensation	$46,800	$45,142	$32,183	$55,038	$65,826
Average Monthly Benefit	$1,713	$1,289	$962	$1,987	$2,962
Average System Payment for Health Insurance	$225	$342	$194	$599	$ 497

Note:
The information in these tables represent accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

Analysis of Initial Retirees

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
FY 2007-08					
Number of Accounts	2,219	243	2,736	355	40
Average Service Credit (months)	261	233	204	240	275
Average Final Compensation	$49,414	$44,992	$31,447	$54,223	$67,775
Average Monthly Benefit	$1,929	$1,289	$917	$2,014	$3,239
Average System Payment for Health Insurance	$221	$381	$181	$625	$501
FY 2008-09					
Number of Accounts	3,229	257	2,761	322	59
Average Service Credit (months)	277	241	205	242	269
Average Final Compensation	$51,617	$48,542	$34,940	$57,016	$69,388
Average Monthly Benefit	$2,105	$1,387	$1,029	$2,005	$3,146
Average System Payment for Health Insurance	$396	$520	$274	$715	$461
FY 2009-10					
Number of Accounts	1,007	212	2,252	329	54
Average Service Credit (months)	153	194	186	224	276
Average Final Compensation	$41,811	$45,499	$30,203	$56,408	$70,704
Average Monthly Benefit	$802	$1,494	$760	$2,127	$3,323
Average System Payment for Health Insurance	$202	$572	$239	$766	$894

Note:
The information in these tables represent accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

Insurance Benefits Paid to Retirees and Beneficiaries Participating in a KRS Health Insurance Plan

	KERS Non-Hazardous	CERS Non-Hazardous	KERS Hazardous	CERS Hazardous	SPRS
Number	26,708	1,528	25,004	4,440	1,057
Average Service Credit	314	272	256	291	351
Avg Monthly System Payment for Health Insurance	$415	$672	$355	$898	$868
Avg Monthly Member Payment for Health Insurance	$92	$63	$96	$36	$19
Total Monthly Payment for Health Insurance	$13,543,838.00	$1,122,719.00	$11,275,453.00	$4,145,712.00	$938,081.00

Payment Options Selected by Retired Members

		Basic	Social Security Adjustment	Period Certain	Suvivorship	Pop Up	Lump Sum
Kentucky Employees Retirement System Non-Hazardous	Number of Accounts	12,664	3,309	5,210	9,071	7,323	2,311
	Monthly Benefits	$19,835,816	$5,991,600	$8,130,795	$15,214,410	$15,587,471	$2,571,544
Kentucky Employees Retirement System Hazardous	Number of Accounts	649	246	339	602	741	273
	Monthly Benefits	$666,466	$297,573	$341,949	$671,554	$979,065	$264,251
County Employees Retirement System Non-Hazardous	Number of Accounts	16,094	1,775	6,605	8,499	6,662	3,545
	Monthly Benefits	$12,149,142	$2,381,226	$5,371,697	$8,247,127	$8,259,188	$2,285,342
County Employees Retirement System Hazardous	Number of Accounts	920	471	564	1,408	2,278	489
	Monthly Benefits	$1,659,379	$720,615	$853,824	$2,728,742	$5,337,808	$749,358
State Police Retirement System	Number of Accounts	105	208	116	357	443	22
	Monthly Benefits	$320,160	$449,483	$279,641	$1,122,120	$1,520,033	$49,954
Kentucky Retirement System Total	Number of Accounts	30,432	6,009	12,834	19,937	17,447	6,640
	Monthly Benefits	$34,630,963	$9,840,497	$14,977,906	$27,983,953	$31,683,565	$5,920,449

Note:
The information in these tables represent accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

Employer Contribution Rates

In KERS, CERS, and SPRS both the employee and the employer contribute a percent of creditable compensation to the Systems. The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employees hired on or after September 1, 2008 contribute an additional 1% to health insurance.

Under KRS 61.565, KERS and SPRS employer contribution rates are set by the KRS Board of Trustees based on an annual actuarial valuation. However, KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. In recent years, the Kentucky General Assembly has routinely suspended KRS 61.565 in the budget in order to provide an employer contribution rate that is less than the amount set by the KRS Board and recommended by its' consulting actuary. The tables on the following page show the KERS and SPRS employer contribution rates that were actuarially recommended and set by the KRS Board and the rate specified by the Executive Branch budget bill for each fiscal year.

The CERS employer contribution rates are also set by the KRS Board under KRS 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. The CERS employer contribution rates for fiscal year 2008-2009 were reduced from the actuarially recommended rate set by the KRS Board as a result of the passage of House Bill (HB) 1 during the 2008 Extraordinary Session of the Kentucky General Assembly. Also, during its 2009 Regular Session, the Kentucky General Assembly enacted HB 117, which mandated an extension of the phase-in of insurance contribution rates that had been previously approved by the KRS Board from five years to ten years to mitigate the impact of the application of Governmental Accounting Standards Board Statements 43 and 45 for CERS employer contribution rates for health insurance. For the 2009-2010 and 2010-2011 fiscal years, the "Recommended Rate" shown for CERS non-hazardous and hazardous plans are the actuarially recommended rates set by the KRS Board. The "Budgeted Rate" shown for the two plans is the rate by required by the ten year phase-in mandated in HB 117

Employer Contribution Rates

		2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
16entucky Employees Retirement System Non-Hazardous	Budgeted Rate	5.89	7.75	8.50	10.01	11.61	16.98
	Recommended Rate	13.62	17.13	48.37	28.60	31.29	38.58
Kentucky Employees Retirement System Hazardous	Budgeted Rate	18.84	22.00	24.25	24.35	24.69	26.12
	Recommended Rate	21.50	23.32	47.11	34.78	35.54	34.37
County Employees Retirement System Non-Hazardous	Budgeted Rate	10.98	13.19	16.17	13.50	16.16	16.93
	Recommended Rate	10.98	13.19	16.17	15.58	20.19	19.81
County Employees Retirement System Hazardous	Budgeted Rate	25.01	28.21	33.87	29.50	32.97	33.25
	Recommended Rate	25.01	28.21	33.87	31.91	61.87	40.06
State Police Retirement System	Budgeted Rate	21.58	25.50	28.00	30.07	33.08	45.54
	Recommended Rate	34.83	42.30	120.00	60.14	43.36	85.63

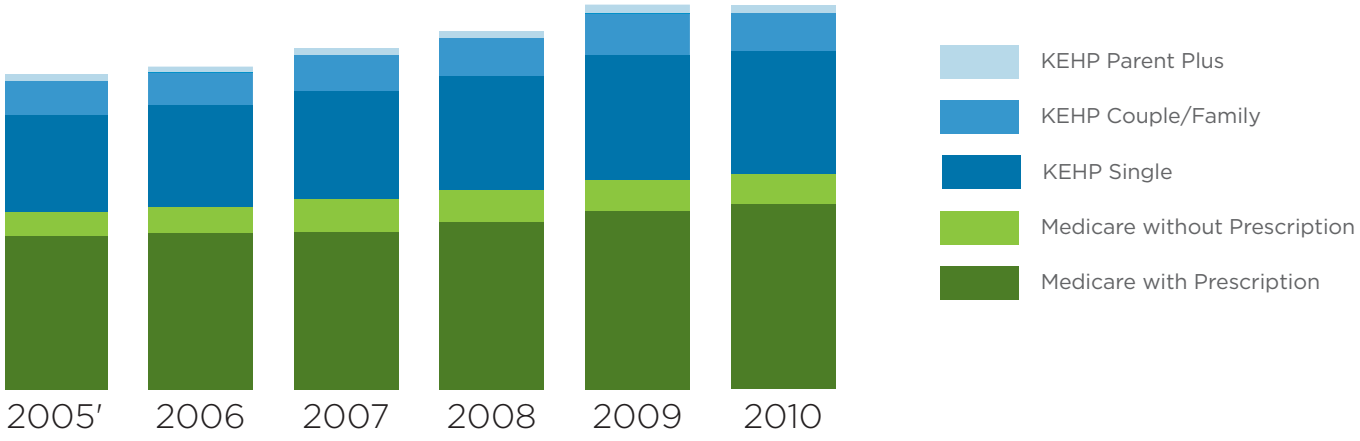
Insurance Contracts by Type

		2005	2006	2007	2008	2009	2010
Kentucky Employees Retirement System Non Hazardous	KEHP Parent Plus	461	490	525	568	762	722
	KEHP Couple/Family	1,679	1,826	2,131	2,187	2,621	1,971
	KEHP Single	7,928	8,393	8,996	9,383	10,635	10,420
	Medicare without Prescription	1,915	1,672	2,056	1,969	1,920	1,831
	Medicare with Prescription	11,764	12,000	12,007	12,636	13,231	13,765
Kentucky Employees Retirement System Hazardous	KEHP Parent Plus	65	58	70	69	74	66
	KEHP Couple/Family	319	378	398	443	502	453
	KEHP Single	570	656	686	741	823	599
	Medicare without Prescription	61	74	82	91	88	63
	Medicare with Prescription	567	603	606	687	763	525
County Employees Retirement System Non Hazardous	KEHP Parent Plus	255	249	284	292	335	342
	KEHP Couple/Family	1,022	1,058	1,274	1,320	1,456	1,369
	KEHP Single	6,014	6,298	6,767	7,126	7,609	7,692
	Medicare without Prescription	2,853	2,502	3,134	3,105	3,110	3,106
	Medicare with Prescription	11,005	11,803	11,908	12,684	13,583	14,477
County Employees Retirement System Hazardous	KEHP Parent Plus	195	198	210	226	245	239
	KEHP Couple/Family	1,579	1,739	1,836	1,947	2,041	2,062
	KEHP Single	1,220	1,275	1,363	1,394	1,404	1,274
	Medicare without Prescription	55	52	64	73	80	58
	Medicare with Prescription	1,004	1,105	1,197	1,367	1,518	1,438
State Police Retirement System Non Hazardous	KEHP Parent Plus	34	29	19	17	22	47
	KEHP Couple/Family	388	406	297	305	311	462
	KEHP Single	257	260	254	240	221	264
	Medicare without Prescription	10	9	9	7	9	12
	Medicare with Prescription	348	368	384	410	418	467

Insurance Contracts by Type

		2005	2006	2007	2008	2009	2010
Kentucky Retirement Systems Total	KEHP Parent Plus	1,010	1,024	1,108	1,172	1,438	1,416
	KEHP Couple/Family	4,987	5,407	5,936	6,202	6,931	6,317
	KEHP Single	15,989	16,882	18,066	18,884	20,692	20,249
	Medicare without Prescription	4,894	4,309	5,345	5,245	5,207	5,070
	Medicare with Prescription	24,688	25,879	26,102	27,784	29,513	30,672

Insurance Contracts by Type — KRS Total



Kentucky Retirement Systems Insurance Contracts

The Systems provides group rates on medical insurance and other managed care coverage for retired members. Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems.

Total Fiscal Year Retirement Payments by County

County	Number	Total Payments	County	Number	Total Payments	County	Number	Total Payments
Adair	346	5,465,262.95	Carroll	251	3,691,188.98	Grant	439	7,511,111.99
Allen	294	3,515,890.06	Carter	594	7,806,041.56	Graves	718	9,899,125.65
Anderson	1,072	25,822,341.96	Casey	298	3,800,330.88	Grayson	488	7,018,881.49
Ballard	164	1,844,027.19	Christian	1,340	21,717,570.85	Green	219	3,066,839.95
Barren	768	11,418,524.44	Clark	655	10,052,929.57	Greenup	481	5,897,625.06
Bath	302	4,418,852.38	Clay	459	6,291,272.57	Hancock	179	2,071,155.95
Bell	545	7,864,570.83	Clinton	201	2,462,871.15	Hardin	1,508	23,250,819.36
Boone	1,186	20,967,632.90	Crittenden	189	2,205,154.33	Harlan	505	7,271,694.02
Bourbon	406	6,154,054.16	Cumberland	152	2,121,214.79	Harrison	358	4,917,211.35
Boyd	852	12,783,281.53	Daviess	1,896	31,553,415.79	Hart	272	3,804,167.62
Boyle	730	12,086,221.69	Edmonson	156	2,024,048.27	Henderson	817	12,611,667.19
Bracken	186	2,292,892.18	Elliott	135	1,653,160.10	Henry	765	15,854,664.07
Breathitt	369	5,607,444.11	Estill	310	3,976,622.78	Hickman	91	1,292,604.77
Breckinridge	348	4,729,227.86	Fayette	4,255	87,847,708.86	Hopkins	951	12,611,924.16
Bullitt	1,001	16,325,481.62	Fleming	366	6,146,217.83	Jackson	226	2,866,825.99
Butler	249	3,093,980.79	Floyd	738	11,117,453.53	Jefferson	13,397	257,757,102.26
Caldwell	416	5,507,316.81	Franklin	5,977	178,950,169.72	Jessamine	741	11,890,808.71
Calloway	909	10,981,762.55	Fulton	171	1,845,251.85	Johnson	507	6,854,196.09
Campbell	1,168	18,765,932.77	Gallatin	88	1,407,435.27	Kenton	1,689	31,250,393.48
Carlisle	113	1,484,909.64	Garrard	362	4,726,256.87	Knott	320	4,981,753.75

Total Fiscal Year Retirement Payments by County

County	Number	Total Payments	County	Number	Total Payments	County	Number	Total Payments
Knox	444	6,247,301.30	Mclean	246	2,875,211.93	Robertson	62	821,302.15
Larue	287	3,995,500.31	Meade	325	4,358,515.06	Rockcastle	304	3,747,301.27
Laurel	925	14,956,922.19	Menifee	158	2,050,382.99	Rowan	687	11,171,687.00
Lawrence	228	2,816,128.15	Mercer	600	10,104,572.45	Russell	402	5,645,944.64
Lee	204	2,936,413.16	Metcalfe	250	2,632,025.39	Scott	849	16,711,135.48
Leslie	215	2,739,324.86	Monroe	183	2,011,199.97	Shelby	1,311	30,396,737.99
Letcher	458	5,640,464.24	Montgomery	457	6,518,363.30	Simpson	217	2,203,558.47
Lewis	242	2,756,048.76	Morgan	425	6,512,411.75	Spencer	368	6,648,776.73
Lincoln	497	5,585,807.37	Muhlenberg	509	5,126,297.05	Taylor	456	6,171,364.39
Livingston	204	3,189,787.76	Nelson	697	11,150,042.36	Todd	244	2,936,871.44
Logan	482	5,971,920.20	Nicholas	170	2,077,404.72	Trigg	425	5,966,544.55
Lyon	277	4,686,330.92	Ohio	454	4,759,869.76	Trimble	219	3,050,256.55
Madison	1,707	25,748,794.45	Oldham	977	18,731,144.11	Union	276	3,029,248.16
Magoffin	250	3,120,916.56	Owen	431	9,511,040.76	Warren	2,120	34,950,848.50
Marion	414	5,111,074.30	Owsley	156	2,108,429.89	Washington	260	3,837,007.28
Marshall	651	9,160,678.66	Pendleton	269	4,083,845.87	Wayne	426	5,653,856.55
Martin	199	2,059,752.72	Perry	602	8,087,274.19	Webster	280	3,401,269.62
Mason	312	4,746,799.31	Pike	964	12,916,943.83	Whitley	788	10,955,566.32
Mccracken	1,288	22,351,510.02	Powell	295	3,856,395.58	Wolfe	248	3,650,947.00
Mccreary	312	2,853,720.40	Pulaski	1,786	28,718,094.36	Woodford	702	17,496,827.41

Kentucky Total	84,882	$1,468,518,209.34
Out of State	5,289	$71,530,005.40
Grand Total	90,171	$1,540,048,214.74

Retired Reemployed

From August 1, 1998 through August 31, 2008, state law allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service was observed. The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Retirees Who Have Been Reemployed In Full-time Positions
Covered By The Same Retirement System and Are Contributing to a New Account

Reemployed Retirees In KRS	KERS			CERS			SPRS
	Non-Haz	Haz	Total	Non-Haz	Haz	Total	Total
Total Active Employees	46,710	4,049	50,759	84,010	9,120	93,130	948
Total Retirees	35,733	1,900	37,633	38,261	4,867	43,128	1,004
Reemployed Retirees	968	77	1,045	1172	713	1,885	168
% of Reemployed Retirees to Total Actives	2.07%	1.90%	2.06%	1.40%	7.82%	2.02%	17.72%
% of Reemployed Retirees to Total Retirees	2.71%	4.05%	2.78%	3.06%	14.65%	4.37%	16.73%
Average Age at Initial Retirement	50	48	49	53	46	50	47
Months of Service Credit at Initial Retirement	339	290	335	296	289	293	336
Final Compensation At Initial Retirement	$51,558.82	$43,511.63	$50,966	$36,070.82	$52,479.12	$42,277	$57,376.31
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2008-2009 (Second Retirement Account)	$42,236.64	$34,540.68	$41,670	$47,550.96	$46,350.96	$47,097	$34,070.88
Retirees Returning to Work for the Same Employer	248	0	248	506	30	536	1
% Retirees Returning to Work For Same Employer	25.62%	0.00%	23.73%	43.17%	4.21%	28.44%	0.60%

Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency. An additional 396 retirees have returned to work after the implementation of House Bill 1 in the 2008 Special Legislative Session. These retirees are not eligible to contribute to a new account.

Comprehensive Annual Financial Report

Fiscal Year Ended June 30, 2011 Kentucky Retirement Systems is a component unit of the Commonwealth of Kentucky. This Comprehensive Annual Financial Report reports data for each of our three (3) systems.

- Kentucky Employees Retirement System (KERS)
  County Employees Retirement System (CERS)
  State Police Retirement System (SPRS)

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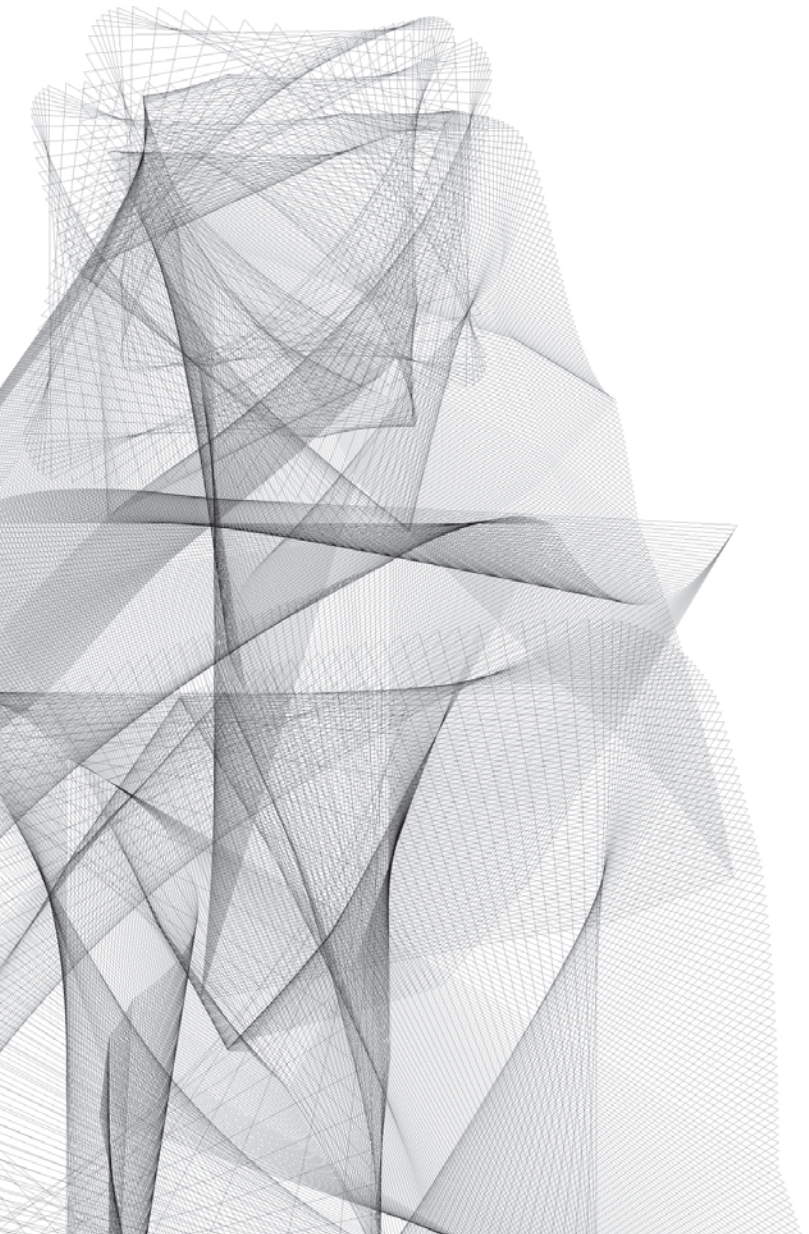

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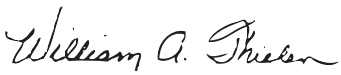
*Management has prepared the basic financial statements of Kentucky Retirement Systems and is **responsible for the integrity and fairness** of the information presented.*

November 17, 2011 Some amounts included in the financial statements may be based on estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these basic financial statements conform with US Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the basic financial statements.

Responsibility Ultimate responsibility for the basic financial statements and annual report rests with the Board of Trustees. The Interim Executive Director and KRS' staff assist the Board in its responsibilities. Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training of employees, the establishment of an organizational structure, and the communications of policies and guidelines throughout the organization. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and the Board of Trustees.

Kentucky Retirement Systems' external auditors, Dean Dorton Allen Ford, PLLC, have conducted an independent audit of the basic financial statements in accordance with US Generally Accepted Auditing Standards. This audit is described in their Independent Auditors' Report on page 17. Management has provided the external auditors with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of financial statements.



William A. Thielen, Esq. // Chief Operations Officer
Interim Executive Director

Todd E. Coleman, CPA // Controller

To the Trustees & Membership

I am pleased to present the Comprehensive Annual Financial Report of the Kentucky Employees Retirement System, County Employees Retirement System, and State Police Retirement System for the fiscal year ended June 30, 2011.

November 17, 2011 Responsibility for both the accuracy of the data and the completeness and fairness of the presentation rests with the management of the Kentucky Retirement Systems. We present this information to assist the Board and members of KERS, CERS and SPRS (collectively referred to as KRS) in understanding KRS' financial and actuarial status. This CAFR conforms to the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. KRS' financial transactions are reported on the accrual basis of accounting. Additionally, internal accounting controls provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

MAJOR INITIATIVES

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

ARC
Annual Required Contribution

KRS has continued its effort to raise awareness of the impact of reductions to the actuarially recommended employer contribution rates for the KERS and SPRS plans. For 13 out of the last 18 years and for 10 years in a row, the State has appropriated less money than recommended by the KRS actuary and established by the Board of Trustees to adequately fund the annual required contribution (ARC). This underfunding, coupled with past increased benefits, unfunded annual cost of living allowances and two major economic recessions in the last decade, has resulted in funding ratios (the ratio of assets to accrued liabilities) for the KERS nonhazardous and SPRS pension trusts that have dropped to alarmingly low levels. As of June 30, 2011, the funded ratio of the KRS nonhazardous plan is 33.33% of the actuarial value of assets. The funded ratio of the SPRS plan is 45.02% of the actuarial value of assets. The Kentucky General Assembly passed a pension reform bill (House Bill 1) that included a schedule to increase employer contributions over the next several years until reaching the full ARC in 2025 for KERS non-hazardous, 2019 for KERS hazardous and 2020 for the SPRS system. For the past two fiscal years, the Governor and the Kentucky General Assembly have met the increased funding schedule set forth in House Bill 1. It is vitally important that they continue, at a minimum, to increase funding according to the House Bill 1 schedule during the next biennium. This will have a favorable effect by slowing the growth rate of the unfunded liability and the expected growth rate of employer contributions in future years. KRS will continue to monitor and ask for increased funding support from the Governor and the General Assembly in the years ahead.

CMS
Centers for Medicare & Medicaid Services

In 2011, KRS continued to contract with the Centers for Medicare and Medicaid Services (CMS) for an Employee Group Waiver Plan for pharmacy benefits for Medicare-eligible retirees. This contract allows KRS to apply the full amount of the drug subsidy received from CMS toward its unfunded liability for medical benefits. For the first year of the EGWP contract approximately $20 million dollars in reimbursement was received from CMS for provision of the drug benefit to retirees. KRS is in its second year under this program and the application of the subsidy to the unfunded liability for medical benefits will result in a reduction of over $1.47 billion for the fiscal year ended

June 30, 2011. The reduced unfunded liability has a favorable impact on employers by reducing the amount of their contribution toward retiree health care. The overall trend for the Medicare eligible population medical/pharmacy benefit has remained relatively flat for the last year while the under-65 retiree population has experienced a growth of around 10%. Both groups together comprise a population of approximately 80,000 retirees.

KRS implemented the final phase of its new technology system in August 2011, which provides employer online functionality, and allows active members, as well as retirees, to access their account information and service their accounts online. In preparation for implementation of this final phase of the Project, KRS staff coordinated employer readiness beginning in March of 2010 and file certification activities beginning in March of 2011. KRS staff conducted over 100 different employer training sessions across the state in the summer of 2011 to train employers to access and use the system. The most recent release of the Strategic Technology Advancements for the Retirement of Tomorrow (START) program allows employers to submit contributions and salary information for their employees online and also adds active member functionality to the retiree self service functionality released in September 2009. Members now can perform ad hoc service purchase cost and retirement estimates as well as request services online from KRS. Constituents can keep current on future changes to START and access their account information on the KRS website at http://kyret.ky.gov.

START
Strategic Technology Advancements for the Retirement of Tomorrow

INVESTMENTS

Investment performance for the year ending June 30, 2011 continued to improve again over the most recent fiscal years. In FY 2011, KRS gained 18.96% on a total portfolio basis, underperforming its benchmark return of 20.34%.

FY
Fiscal Year

However, this is still a nominal improvement over FY 2010, when KRS investments gained 15.81% outperforming its benchmark of 13.16%. This performance resulted in an increase in total pension fund market value of approximately $1.065 billion for FY 2011. As discussed last year, because funding ratios for the various trust funds managed by KRS are diverging, the Investment Committee felt it was necessary to conduct individual asset liability studies for each fund to determine if they need to be managed separately and assigned individual asset allocations. Pursuant to this objective, R.V. Kuhns, the general investment consultant for KRS, conducted individual studies and presented their recommendations during the fiscal year. Based on these analyses and a review of all the information for each pension and insurance trust, the Board voted to made changes to individual plan asset allocations, and KRS investment staff worked throughout the year to rebalance the portfolios to align with these new targets.

ACTUARIAL FUNDING

Kentucky Retirement Systems administers both a pension fund and an insurance fund for each of the systems it manages. These trusts are used to fund monthly pension and health care payments to and on behalf of retirees.

Non-hazardous employees are statutorily required to contribute 5% of pre-tax salary to their pension benefit, while hazardous employees contribute 8% on a pre-tax basis. All employees hired with an initial participation date on or after September 1, 2008 must contribute an additional 1% of their pre-tax compensation toward their retiree health insurance benefits. These monies are deposited in a 401(h) account within the pension trust. Employer contributions are calculated annually by the Board of Trustees and include the normal cost of pension and insurance benefits plus an amortized contribution toward the unfunded liability of the pension and insurance trusts. Employer contributions also include an administrative fee that is used to pay annual operating expenses of KRS.

★ **Note:** Section 401(h) of the Internal Revenue Code allows KRS to provide for payment of benefits for sickness, hospitalization and medical expenses for retirees.

Funding ratios have fallen both steadily and significantly over the last decade as a result of unfavorable market conditions, higher than anticipated retirement rates, employer underfunding in the KERS nonhazardous and SPRS plans and increased expenses for annual cost of living adjustments that are not pre-funded by the employers. While improved market conditions and the increased funding in the KERS and SPRS plans in FY 2011 have slowed the growth of the unfunded liabilities of the various systems, KRS uses a five-year smoothing method and the full effects of the market losses in 2008 and 2009 will not be realized for another three years. The funding levels of all systems as of June 30, 2011 are listed on page 56-59 in the Financial Section.

PROFESSIONAL SERVICES

KRS continues to engage a number of professional consultants to assist trustees and staff in key business areas such as investments, taxes, auditing services and legal representation.

A list of the Board's contract consultants can be found in the organizational chart on page 9. A list of external investment managers can be found in the investment section of this report.

CERTIFICATE OF **ACHIEVEMENT**

GFOA
Government Finance Officers Association

CAFR
Comprehensive Annual Financial Report

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to KRS for its CAFR for the fiscal year ended June 30, 2010. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports and is valid for a period of one year. This was the thirteenth consecutive award earned by KRS. In order to be awarded, a government unit must publish an easily readable and efficiently organized document. The report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe our current CAFR continues to meet achievement requirements, and we are submitting it to the GFOA for their consideration.

The purpose of GFOA is to enhance and promote the professional management of governments for the public benefit by identifying best practices and promoting their use through education, training, facilitation of member networking, and leadership.

The Government Finance Officers Association of the United States and Canada awarded a Certificate of Achievement for Excellence in Financial Reporting to KRS for its Comprehensive Annual Financial Report for the fiscal year ended June 30, 2010.

Other Information Kentucky statutes require an annual audit by either an independent certified public accountant or the Auditor of Public Accounts. Dean Dorton Allen Ford, PLLC, Certified Public Accountants, performed the audit for the fiscal year ended June 30, 2011, and the results of that audit are contained in the Financial Section.

William A. Thielen

William A. Thielen, Esq. // Chief Operations Officer
Interim Executive Director

Board of Trustees

The Board of Trustees are comprised of nine members. Two elected by KERS members, two elected by CERS members, one elected by SPRS members, three appointed by Governor Steve Beshear and the Secretary of the State Personnel Cabinet.

Committee Meetings Online
Visit kyret.ky.gov/index.php/board to download materials from previous Board meetings. You may also browse a list of upcoming meetings. Click "Meet the Board" to email any Board member.

Jennifer Elliott, *Chair*
Governor Appointee
Term ends March 31, 2012

Thomas Elliott, *Vice Chair*
Governor Appointee
Term ends March 31, 2015

Bobby Henson
Elected by KERS
Term ends March 31, 2014

Vince Lang
Elected by CERS
Term ends March 31, 2013

Randy Overstreet
Elected by SPRS
Term ends March 31, 2015

Susan Smith
Elected by KERS
Term ends March 31, 2014

Christopher Tobe
Governor Appointee
Term ends March 31, 2012

Robert Wilcher
Elected by CERS
Term ends March 31, 2013

Tim Longmeyer
Personnel Secretary
Term ends Ex-Officio

Organizational Structure

Kentucky Retirement Systems is governed by the Board of Trustees and a structure of committees and officer oversight. Below is an outline of that structure and independent consulting agencies.

Board of Trustees > ***Administration***

William A. Thielen // Chief Operations Officer & Interim Executive Director

- **Todd E. Coleman** // Accounting
- **Scarlett Consalvi** // Communications
- **Sarah Webb** // Employer Compliance & Education
- **Shawn Sparks** // Planning & Constituent Services
- **Mark McChesney** // Information Security
- **Pam Gibbs** // Information Technolgy
- **Joe Morris** // Procurement & Office Services

Charlene Haydon // Chief Benefits Officer

- **Liza Welch** // Disabilities
- **Rebecca Stephens** // Member Services
- **Suzanne Howe** // Membership Support
- **Vacant** // Retiree Health Care
- **Lela Hatter** // Retiree Services

Jennifer A. Jones // Interim General Counsel

Marlane Robinson // Director of Human Resources

Board of Trustees > ***Investments Committee***

T.J. Carlson // Chief Investments Officer

- **Brent Aldridge** // Alternative Investments
- **Bo Cracraft** // Equity Assets
- **David Peden** // Fixed Income

Board of Trustees > ***Audit Committee***

Connie Davis // Internal Auditor

- **Ann Case** // Compliance Officer

Board of Trustees & Administration > ***Consultants***

- **Strategic Investment Solutions, Inc.** // Asset Management
- **Dean Dorton Allen Ford, PLLC** // Auditing
- **Cavanaugh Macdonald Consulting, LLC** // Actuarial
- **Reinhart Boerner Van Deuren** // Investment Counsel
- **R.V. Kuhns, Inc.** // Investment Consultant
- **ORG, Inc.** // Real Estate Consultant
- **Ice Miller, LLP** // Fiduciary Review
- **Stoll Keenan Ogden, PLLC** // Legal Services

KERS Non-Hazardous

RETIRED MEMBERS

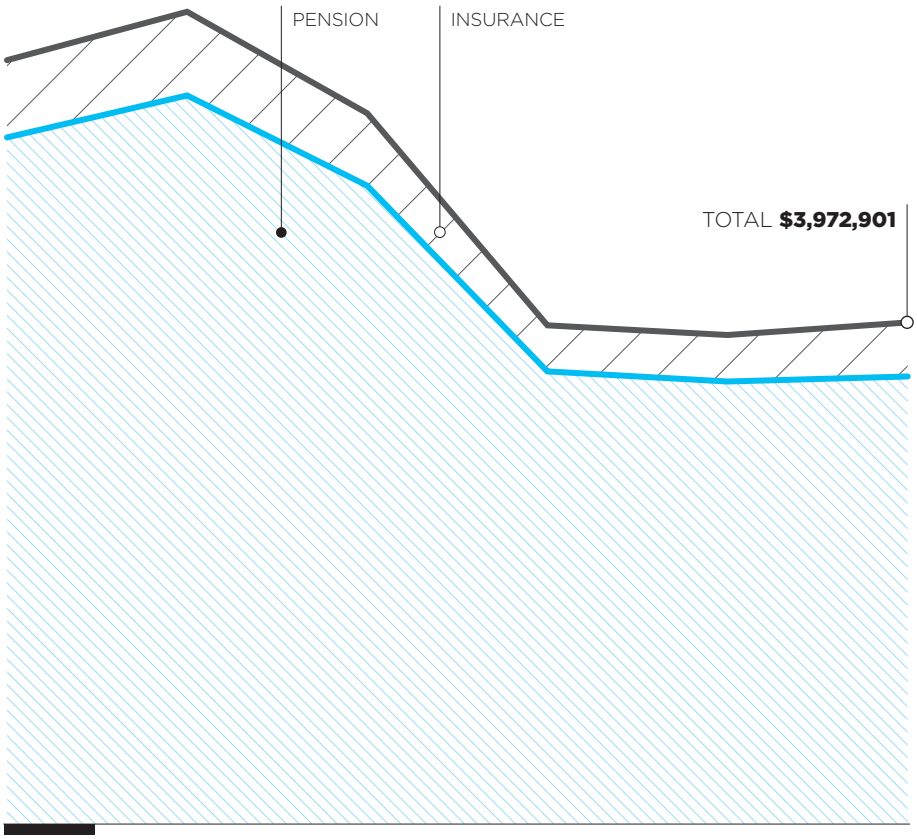
35,733

ACTIVE MEMBERS

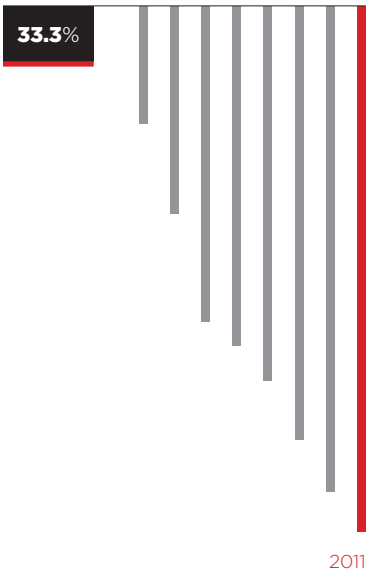
46,710

INACTIVE MEMBERS

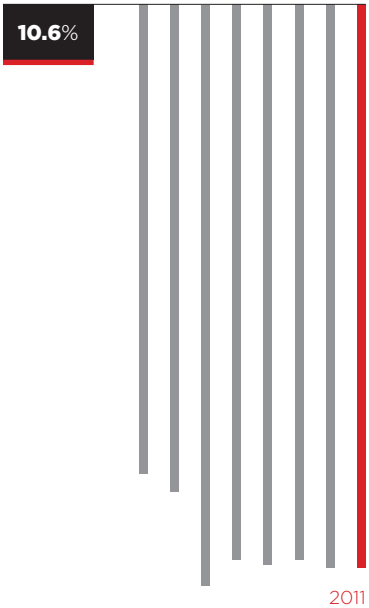
33,461



PENSION FUNDING LEVEL



INSURANCE FUNDING LEVEL



Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011
Pension	$5,773,157	$5,056,869	$3,584,601	$3,504,501	$3,544,242
Insurance	$663,558	$574,479	$365,367	$368,799	$428,659
Total	**$6,436,715**	**$5,631,348**	**$3,949,968**	**$3,873,300**	**$3,972,901**

KERS **HISTORY**

*Kentucky Employees Retirement System (KERS) was established **July 1, 1956** by the state legislature.*

KERS Hazardous

RETIRED MEMBERS

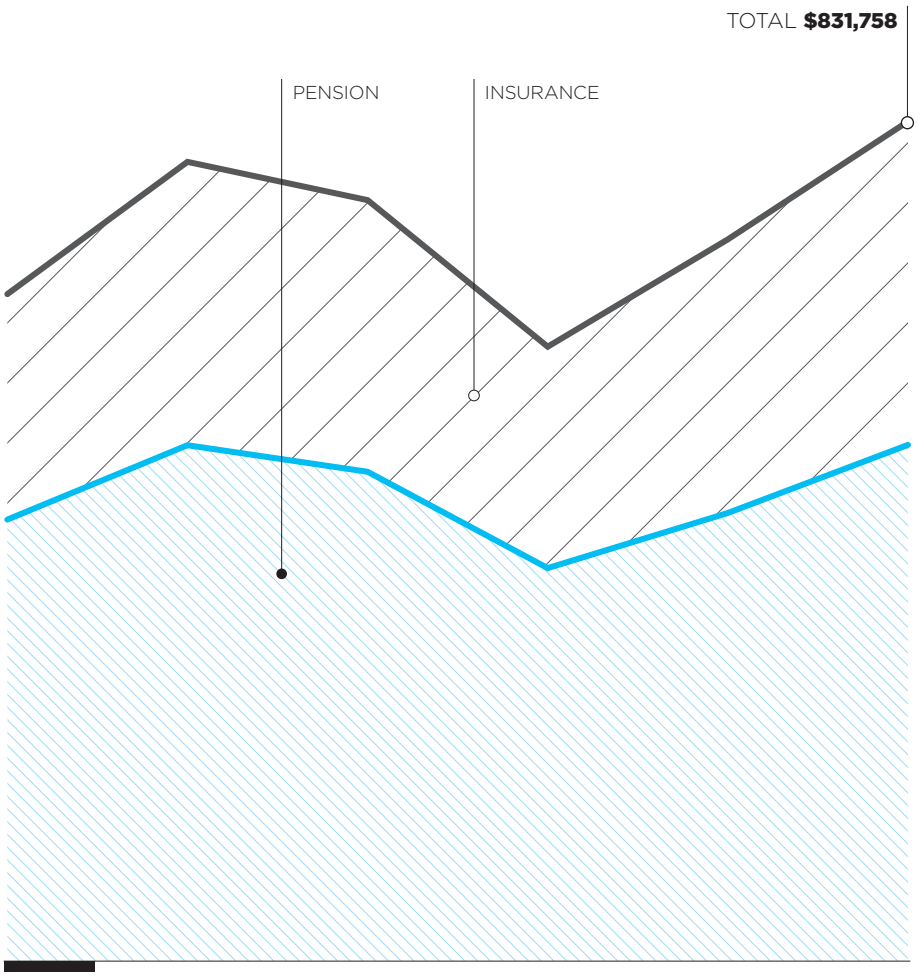
2,090

ACTIVE MEMBERS

4,049

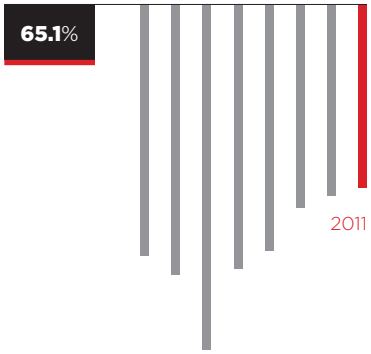
INACTIVE MEMBERS

2,285



PENSION FUNDING LEVEL

INSURANCE FUNDING LEVEL



Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011
Pension	$510,775	$484,438	$388,951	$443,606	$3,544,242
Insurance	$280,886	$269,300	$219,500	$271,239	$428,659
Total	**$791,661**	**$753,738**	**$608,451**	**$714,846**	**$831,758**

KERS **HISTORY**

*Kentucky Employees Retirement System (KERS) was established **July 1, 1956** by the state legislature.*

CERS Non-Hazardous

RETIRED MEMBERS

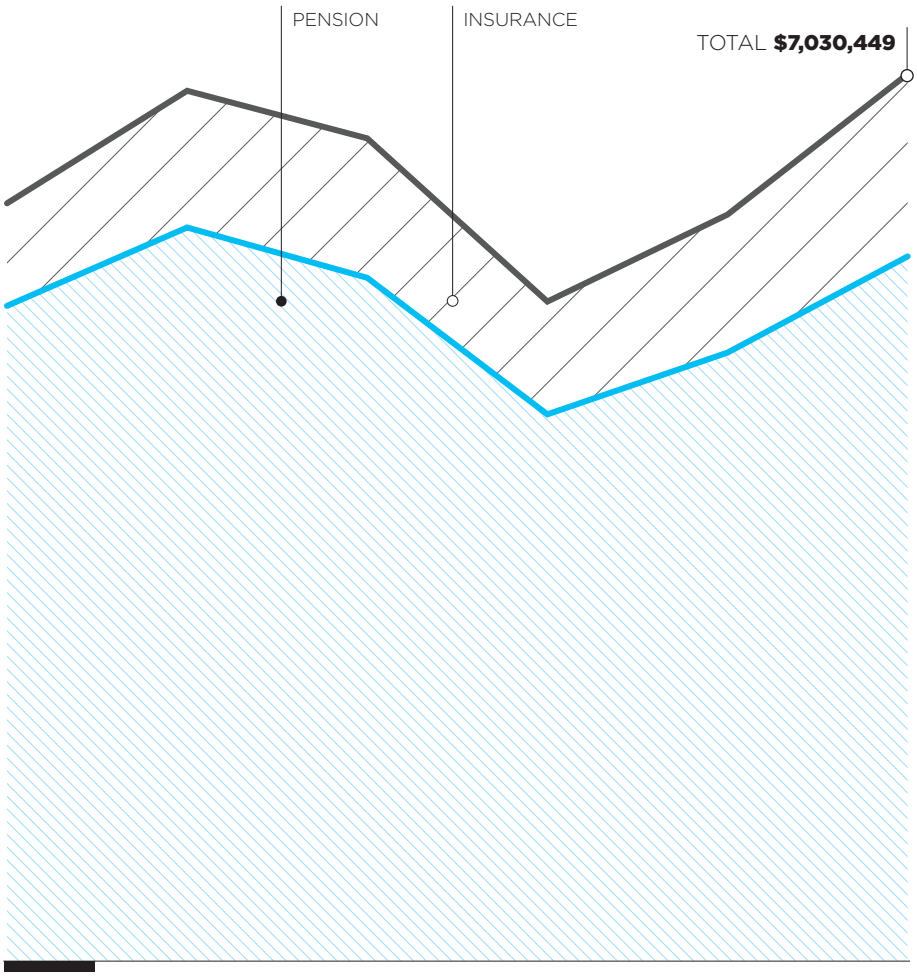
40,174

ACTIVE MEMBERS

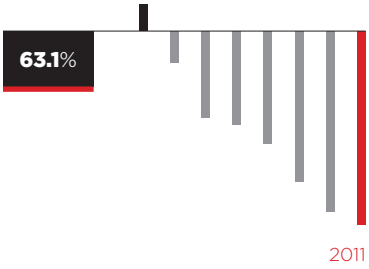
84,010

INACTIVE MEMBERS

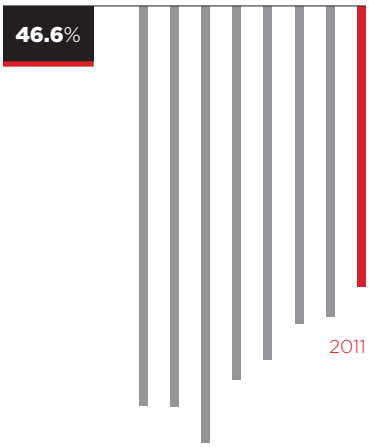
57,073



PENSION FUNDING LEVEL



INSURANCE FUNDING LEVEL



Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011
Pension	$5,812,936	$5,431,735	$4,331,010	$4,820,490	$5,583,451
Insurance	$1,084,043	$1,105,945	$894,490	$1,094,821	$1,446,998
Total	**$6,896,979**	**$6,537,680**	**$5,225,500**	**$5,915,311**	**$7,030,449**

CERS **HISTORY**

*County Employees Retirement System (CERS) was established **July 1, 1958** by the state legislature.*

CERS Hazardous

RETIRED MEMBERS

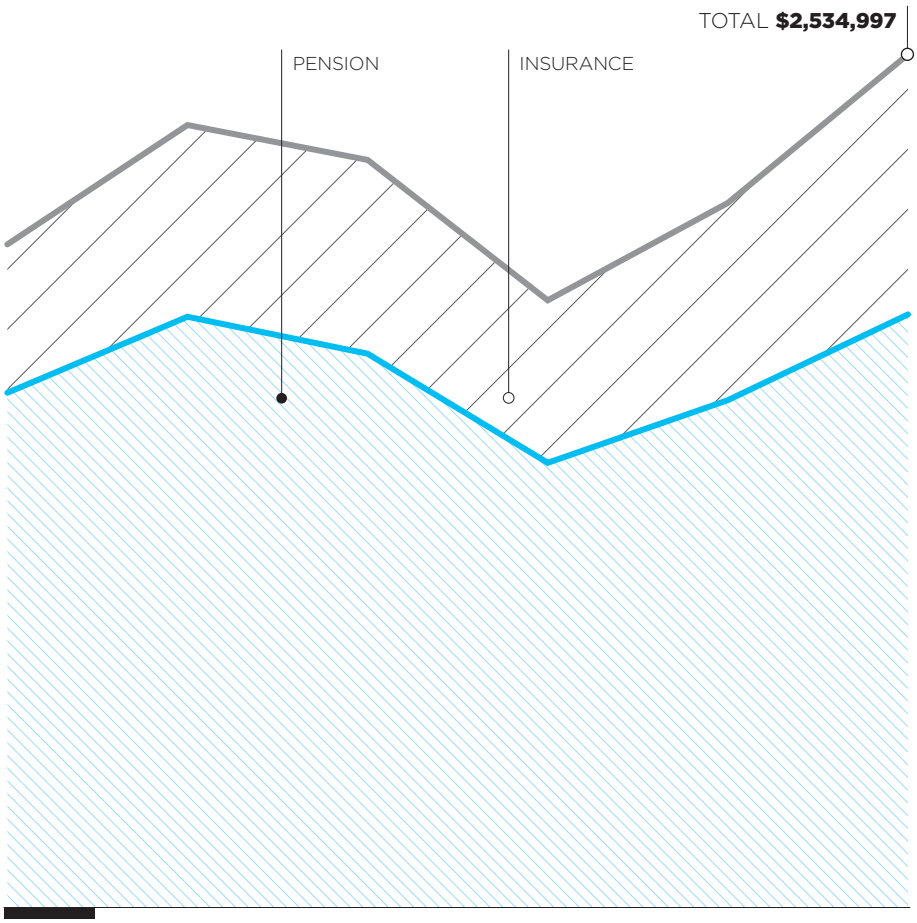
5,158

ACTIVE MEMBERS

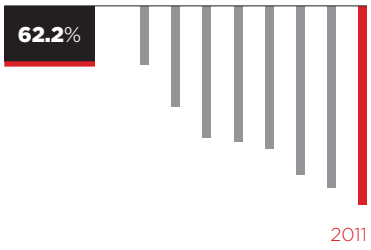
2,047

INACTIVE MEMBERS

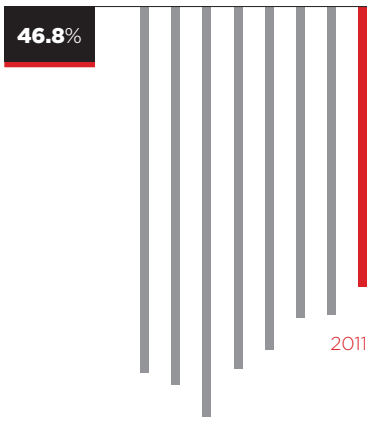
9,019



PENSION FUNDING LEVEL



INSURANCE FUNDING LEVEL



Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011
Pension	$1,754,935	$1,644,982	$1,320,560	$1,506,894	$1,761,858
Insurance	$570,156	$576,414	$483,233	$586,614	$773,139
Total	**$2,325,091**	**$2,221,396**	**$1,803,793**	**$2,093,508**	**$2,534,997**

CERS **HISTORY**

*County Employees Retirement System (CERS) was established **July 1, 1958** by the state legislature.*

SPRS

RETIRED MEMBERS

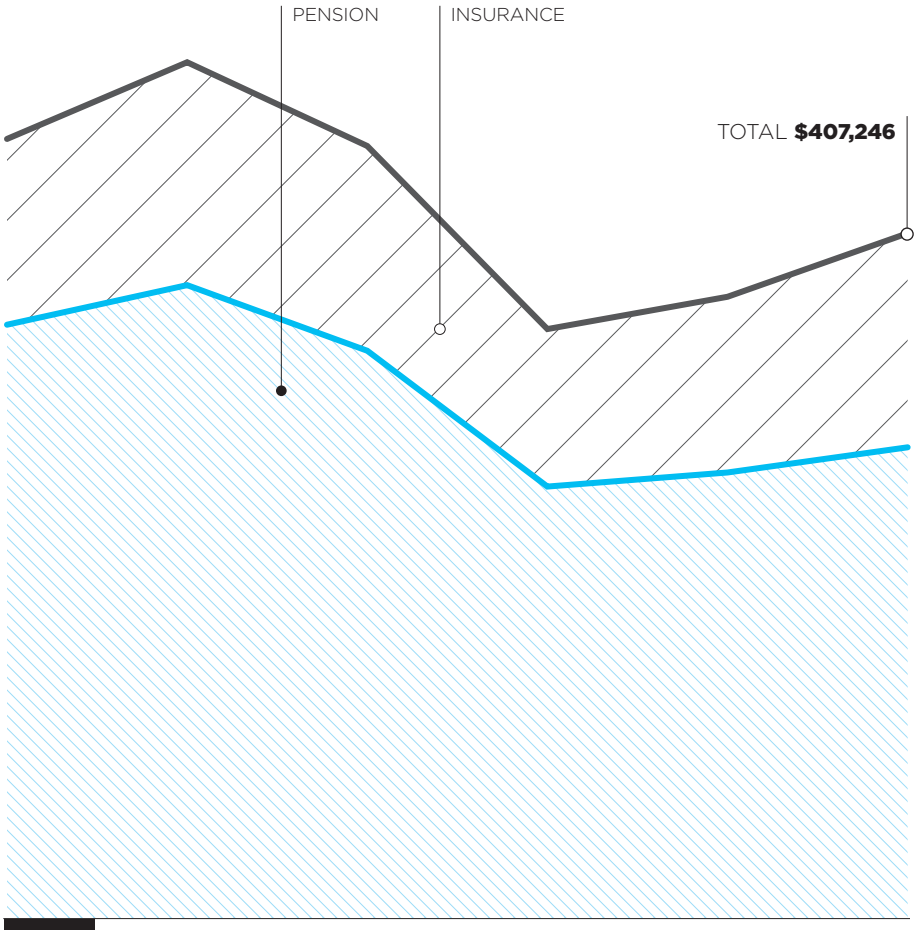
1,019

ACTIVE MEMBERS

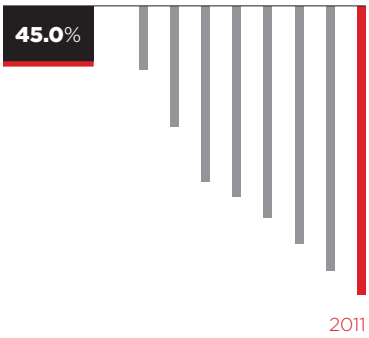
949

INACTIVE MEMBERS

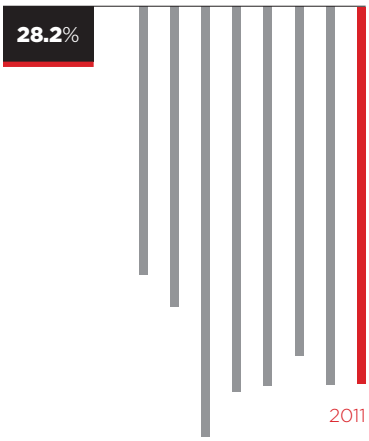
204



PENSION FUNDING LEVEL



INSURANCE FUNDING LEVEL



Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011
Pension	$376,381	$337,359	$256,575	$264,949	$279,927
Insurance	$132,574	$121,782	$93,682	$104,511	$127,319
Total	**$508,955**	**$459,141**	**$350,257**	**$369,460**	**$407,246**

SPRS **HISTORY**

*State Police Retirement System (SPRS) was established **July 1, 1960** by the state legislature.*

Total System

RETIRED MEMBERS

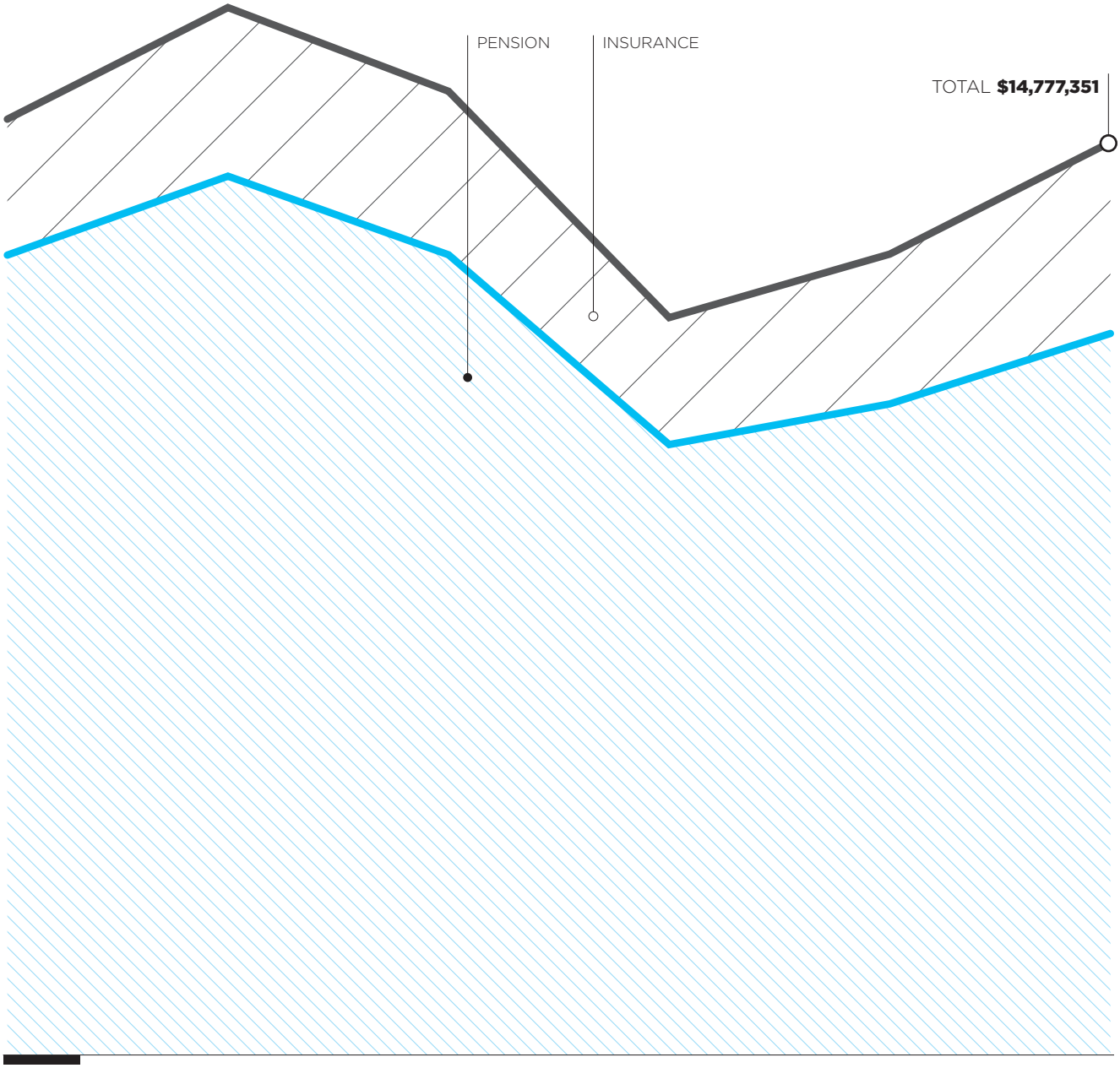
84,680

ACTIVE MEMBERS

144,894

INACTIVE MEMBERS

95,025



Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011
Pension	$14,228,184	$12,955,383	$9,881,697	$10,540,440	$11,680,563
Insurance	$2,731,217	$2,647,920	$2,056,272	$2,425,987	$3,096,788
Total	**$16,959,401**	**$15,603,303**	**$11,937,969**	**$12,966,427**	**$14,777,351**

Financial Section

Independent Auditors' Report

A financial statement audit is one of many attestation functions provided by certified accounting firms, whereby the firm provides an independent opinion on published information. Financial audits are performed by CPAs due to the specialized financial reporting knowledge required.

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Dean Dorton Allen Ford, PLLC To the Board of Trustees, Kentucky Retirement Systems in Frankfort, Kentucky: We have audited the financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ended June 30, 2011, as listed in the Table of Contents. These financial statements are the responsibility of the Kentucky Retirement Systems' management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of Kentucky Retirement Systems as of and for the fiscal year ended June 30, 2010, were audited by Dean, Dorton & Ford, PSC, whose report dated November 18, 2010, expressed an unqualified opinion on those statements.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion. In our opinion, the financial statements in the Financial Section present fairly, in all material respects, the plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2011 and the changes in plan net assets for the fiscal year then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated November 17, 2011, on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audit.

The Management's Discussion & Analysis (page 18) and the Schedule of Funding Progress and Schedule of Contributions from Employers and

Other Contributing Entities (pages 56-64) are not a required part of the basic financial statements, but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it. Our audit was conducted for the purpose of forming an opinion on the 2011 financial statements taken as a whole. The additional supporting schedules (page 65) are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such 2011 information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole. The additional supporting schedules, as of and for the fiscal year ended June 30, 2010, audited by Dean, Dorton & Ford, PSC whose report dated November 18, 2010, expressed an opinion that the fiscal year 2010 additional supporting schedules were fairly stated in all material respects in relation to the fiscal year 2010 financial statements taken as a whole. The Introductory, Actuarial, Investments, and Statistical sections are presented for purposes of additional analysis and are not a required part of the financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we express no opinion on them.

Dean Dorton Allen Ford, PLLC

Dean Dorton Allen Ford, PLLC
November 17, 2011 Lexington, Kentucky

Management's Discussion & Analysis

This analysis of financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2011. Please read it in conjunction with the financial statements, which begin on page 23.

Pension Fund The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of all pension funds administered by Kentucky Rtirement Systems increased by $1,140.2 million during fiscal 2011.
- Member and Employer contributions reported for fiscal 2011, totaled $882.1 million compared to $714.4 million in fiscal 2010. This increase is due to an increase in the covered payroll reported (in the case of the CERS Non-Hazardous plan), an increase in the employer contribution rates, and the collection of additional health insurance contributions required by the passage of House Bill 1, which became effective September 1, 2008.
- The net appreciation in the fair value of investments was $1,658.5 million for the fiscal year ended June 30, 2011 compared to net appreciation of $1,283.9 million for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $951 million. The increase in realized gains experienced by the pension funds is due to favorable market conditions.
- Interest, dividend and net securities lending income was $300.9 million compared to $266.4 million in fiscal year 2010.
- Pension benefits paid to retirees and beneficiaries totaled $1,591.5 million compared to $1,516.1 million in the prior year. Refund of contributions paid to former members upon termination of employment totaled $27.5 million compared to $22.3 million in the prior year.
- Administrative expense totaled $24.9 million compared to $24.8 million in the prior fiscal year. Capital Project Expenses incurred, as a result of the START Project, totaled $195,000. Capital Project Expenses in prior years were capitalized between fixed assets and intangible assets, as appropriate. Costs incurred in fiscal 2011 were deemed to be non-capitalizable.
- The member health insurance contribution, as a result of the passage of House Bill 1 (September 1, 2008) totaled $7.1 million, for the fiscal year ended June 30, 2011, compared to $3.4 million in the prior fiscal year.

Insurance Fund The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of the insurance fund increased by $670.8 million during fiscal 2011.
- Premiums received from retirees who participated in the Medicare eligible self-funded plan totaled $30.9 million, compared to $29.1 million in the prior fiscal year.
- Employer contributions of $435.9 million were received compared to $371.9 million in fiscal 2010. This increase is due to an increase in the insurance contribution rate.
- Employer Group Waiver Plan receipts totaled $22.1 million compared to $19.8 million in fiscal 2010.
- The net appreciation in the fair value of investments was $517.0 million compared to net appreciation of $274.3 million for the prior fiscal year. Included in this net appreciation were realized gains on sales of investments of $347.8 million. This increase in realized gains is due to favorable market conditions.
- Interest, dividend and net securities lending income was $53.1 million compared to $42.3 million in fiscal 2010.
- Premiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled $242.8 million. Payments for the self-funded healthcare reimbursements (over age 65) totaled $130.3 million. The total of insurance premiums paid plus self-funded reimbursements was $373.1 million for fiscal 2011. Insurance premiums paid plus self-funded healthcare reimbursements for the prior plan year totaled $353.5 million.
- As part of the application process to the Centers for Medicare & Medicaid Services to enter into a contract to offer a Medicare Prescription Drug Plan, Kentucky Retirement Systems was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents, and is invested on a daily basis. The balance as of June 30, 2011, totaled $101,000.
- The reimbursement of retired-reemployed health insurance, as a result of the passage of House Bill 1 (effective September 1, 2008) totaled $4.0 million for the fiscal year ended June 30, 2011, compared to $2.0 million in the prior fiscal year.

Using This Financial Report Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combined Statement of Plan Net Assets for the Pension Funds, on page 23, and the Combined Statement of Plan Net Assets for the Insurance Fund, on page 23, provide a snapshot of the financial position of each of the three systems at June 30, 2011. The Combined Statement of Changes in Plan Net Assets for the Pension Funds, on page 24, and the Combined Statement of Changes in Plan Net Assets for the Insurance Fund, on page 26, summarize the additions and deductions that occurred for each of the three systems during fiscal 2011.

The Schedule of Funding Progress, on pages 56-59, includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Contributions from Employers and Other Contributing Entities, on pages 60-64, presents historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

Funds as a Whole KRS' combined plan net assets increased, during the fiscal year ended June 30, 2011, by $1,811 million from $12,966.4 million to $14,777.4 million. Plan net assets for the prior fiscal year increased by $1,028.5 million. The increase in plan net assets for the plan year ended June 30, 2011 is primarily attributable to favorable market conditions. The analysis below focuses on plan net assets (Table 1 on page 20) and changes in plan net assets (Table 2 on page 20) of KRS' Pension and Insurance Funds.

Plan net assets of the pension funds increased by $1,140.2 million ($11,680.6 million compared to $10,540.4 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. This plan net assets increase is attributable primarily to favorable market conditions. Plan net assets of the insurance fund increased by $670.8 million ($3,096.8 million compared to $2,426.0 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. This increase in net plan assets is primarily attributable to favorable market conditions.

Table 1. Plan Net Assets (in Millions)

	Pension Funds			Insurance Fund			Total		
Assets	**2011**	**2010**	**2009**	**2011**	**2010**	**2009**	**2011**	**2010**	**2009**
Cash & Investments	$13,217.4	$12,690.2	$11,645.5	$3,458.4	$2,961.3	$2,460.2	$16,675.8	$15,651.5	$14,105.7
Receivables	178.1	108.6	113.9	80.8	33.6	38.7	258.9	142.2	152.6
Equip/Int Assets, net of dep/amort.	9.7	9.3	8.1	-	-	-	9.7	9.3	8.1
Total Assets	**13,405.2**	**12,808.1**	**11,767.5**	**3,539.2**	**2,994.9**	**2,498.9**	**16,944.4**	**15,803.0**	**14,266.4**
Total Liabilities	**(1,724.6)**	**(2,267.7)**	**(1,885.8)**	**(442.4)**	**(568.9)**	**(442.7)**	**(2,167.0)**	**(2,836.6)**	**(2,328.5)**
Plan Net Assets	**$11,680.6**	**$10,540.4**	**$9,881.7**	**$3,096.8**	**$2,426.0**	**$2,056.2**	**$14,777.4**	**$12,966.4**	**$11,937.9**

Table 2. Changes in Plan Net Assets (in Millions)

	Pension Funds			Insurance Fund			Total		
Additions	**2011**	**2010**	**2009**	**2011**	**2010**	**2009**	**2011**	**2010**	**2009**
Member Cont.	$326.9	$249.8	$290.8	-	-	-	$326.9	$249.8	$290.8
Employer Cont.	548.1	461.2	393.8	436.0	371.9	297.2	984.1	833.1	691.0
Heath Ins. Cont.	7.1	3.4	0.9	-	-	-	7.1	3.4	0.9
Premiums Rec'd	-	-	-	31.0	29.1	27.1	31.0	29.1	27.1
Retired Remp Ins.	-	-	-	4.0	2.0	0.2	4.0	2.0	0.2
Medicare Subsidy	-	-	-	22.1	19.8	16.8	22.1	19.8	16.8
Invest. Inc. (net)	1,902.2	1,507.5	(2,232.9)	561.2	310.1	(611.3)	2,463.4	1,817.6	(2,844.2)
Total Additions	2,784.3	2,221.9	(1,547.4)	1,054.3	732.9	(270.0)	3,838.6	2,954.8	(1,817.4)
Deductions									
Benefit payments	1,591.5	1,516.1	1,478.7	-	-	-	1,591.5	1,516.1	1,478.7
Refunds	27.5	22.3	23.6	-	-	-	27.5	22.3	23.6
Administrative Ex.	24.9	24.8	24.0	10.4	9.7	8.8	35.3	34.5	32.8
Capital Projects Ex.	0.2	-	-	-	-	-	0.2	-	-
Healthcare Costs	-	-	-	373.1	353.4	312.9	373.1	353.4	312.9
Total Deductions	1,644.1	1,563.2	1,526.3	383.5	363.1	321.7	2,027.6	1,926.3	1,848.0
Increase (Decrease) in Plan Net Assets	**$1,140.2**	**$658.7**	**$(3,073.7)**	**$670.8**	**$369.8**	**$(591.7)**	**$1,811.0**	**$1,028.5**	**$(3,665.4)**

FUND ACTIVITIES

In Thousands or Millions
Much of the data presented in this report is abbreviated "in thousands" or "in millions". For example $1,000 represented "in millions" is really $1,000,000,000.

Pension Fund Activities Member contributions increased by $77.1 million. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions increased by $86.9 million due to the increase in covered payroll reported to Kentucky Retirement Systems and the increase in the employer contribution rate applied to covered payroll. Net investment income increased by $394.7 million ($1,902.2 million compared to $1,507.5 million in the prior year). The pension funds experienced an increase in income primarily due to the increase in fair value of investments. This can be illustrated in Table 3 as follows:

Table 3. Investment Income (or Loss) for Pension Funds (in Millions)

Asset	2011	2010	2009
Increase (decrease) in fair value of investments	$707	$1,066	$(1,788)
Investment income net of investment expense	244	224	305
Gain (loss) on sale of investments	951	218	(750)
Net investment income (loss)	**$1,902**	**$1,508**	**$(2,233)**

Table 4. Investment Income (or Loss) for Insurance Fund (in Millions)

Asset	2011	2010	2009
Increase (decrease) in fair value of investments	$169	$183	$(451)
Investment income net of investment expense	44	35	45
Gain (loss) on sale of investments	348	92	(205)
Net investment income (loss)	**$561**	**$310**	**$(611)**

*Kentucky Retirement Systems' **combined plan net assets increased**, during the fiscal year ended June 30, 2011, by $1,811 million from $12,966.4 million to $14,776.4 million.*

COLA
Cost of Living Adjustment

START
Strategic Technology Advancements for the Retirment of Tomorrow

Pension fund deductions increased by $80.9 million caused principally by an increase of $73.3 million in benefit payments. Retirees received a Cost of Living Adjustment (COLA) increase of 1.5% in benefit payments as of July 1, 2010. Refunds of member contributions increased by $5.2 million and administrative expenses increased by $0.1 million. Capital Project Expenses, incurred as a result of the START Project, totaled $0.2 million. These costs were capitalized in prior years, however, in fiscal 2011 these costs were deemed uncapitalizable.

Insurance Fund Activities Employer contributions paid into the insurance fund increased by $64.1 million over the prior fiscal year. This increase is a result of the increase in the employer contribution rate applied to covered payroll.

Net investment income increased by $251.1 million. This increase in net income is due primarily to the increase in the gains on sale of investments. This can be illustrated in Table 4 above. Insurance fund deductions increased by $20.4 million due to the increase in overall healthcare costs.

HISTORICAL TRENDS

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

Accounting standards require that the Statement of Plan Net Assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the Schedule of Funding Progress on pages 56-59. The asset value stated in the Schedule of Funding Progress is the actuarial value of assets. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value.

Actuarial Accrued Liability The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by Kentucky Retirement

Systems' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is defined as the unfunded actuarial accrued liability.

Unfunded Liability The unfunded actuarial accrued liability in the pension plans increased by $1,259.8 million for a total unfunded amount of $12,382.5 million for the fiscal year ended June 30, 2011, compared to an unfunded amount of $11,122.7 million for the fiscal year ended June 30, 2010. In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, and expenditures for unfunded retiree Cost of Living Adjustments. Within the KERS and SPRS plans, employer contribution rate reductions enacted by the Kentucky General Assembly have limited the plans ability to correct the declining funding levels.

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

The insurance plan's unfunded actuarial accrued liability for the plan year ended June 30, 2011, decreased to $6,837.7 million from $7,334.7 million for the plan year ended June 30, 2010. This is a decrease in the unfunded actuarial accrued liability of $497 million.

Annual required contributions of the employers as actuarially determined and actual contributions made by employers and other contributing entities in relation to the required contributions are provided in the Schedule of Contributions from Employers and Other Contributing Entities on pages 60-64. The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS funds is attributable to the statutory employer contribution rate set by the Kentucky General Assembly being less than the rate computed by the actuary.

Financial Notes See accompanying notes to the following financial statements on these pages.

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Combined Statement of Plan Net Assets for Pension Funds (in Thousands) as of June 30, 2011 with Comparative Totals as of June 30, 2010

Assets	2011						2010
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Total
Cash & Short-Term Investments							
Cash	$240	$957	$464	$787	$292	$2,740	$2,035
Short-Term Investments	68,087	319,900	234,803	658,095	28,452	1,309,337	601,101
Total Cash and Short-Short Term Investments	68,327	320,857	235,267	658,882	28,744	1,312,077	603,136
Receivables							
Contributions	3,955	34,554	20,088	78,252	1,959	138,808	66,984
Investment Income	1,602	12,091	5,711	18,932	974	39,310	41,636
Total Receivables	5,557	46,645	25,799	97,184	2,933	178,118	108,620
Investments at Fair Value							
Corporate and Government Bonds	116,192	884,790	415,501	1,394,596	71,812	2,882,891	2,502,572
Equity Contracts	25,195	297,997	41,703	499,558	4,343	868,796	374,327
Interest Rate Contracts	10,690	126,431	17,693	211,947	1,843	368,604	236,424
Corporate Stocks	253,716	1,625,996	915,061	2,335,680	150,201	5,280,654	6,104,950
Mortgages	27,790	230,767	104,177	369,658	19,061	751,453	593,521
Real Estate	3,394	8,767	6,198	12,958	935	32,252	15,075
Total Investments at Fair Value	436,977	3,174,748	1,500,333	4,824,397	248,195	10,184,650	9,826,869
Securities Lending Collateral Invested	75,427	521,479	259,983	822,399	41,307	1,720,595	2,260,141
Equipment (net of accumulated depreciation)	113	1,339	202	2,304	26	3,984	3,871
Intangible Assets (net of accumulated amortization)	169	1,947	286	3,310	32	5,744	5,484
Total Assets	**$586,570**	**$4,067,015**	**$2,021,870**	**$6,408,476**	**$321,237**	**$13,405,168**	**$12,808,121**
Liabilities							
Accounts Payable	58	1,294	29	2,626	3	4,010	7,541
Securities Lending Collateral Obligations	75,427	521,479	259,983	822,399	41,307	1,720,595	2,260,141
Total Liabilities	75,485	522,773	260,012	825,025	41,310	1,724,605	2,267,682
Plan Net Assets Held in Trust for Pension Benefits	**$511,085**	**$3,544,242**	**$1,761,858**	**$5,583,451**	**$279,927**	**$11,680,563**	**$10,540,439**

See accompanying notes to the financial statements.

Combined Statement of Changes in Plan Net Assets for Pension Funds (in Thousands) as of June 30, 2011 with Comparative Totals as of June 30, 2010

Additions						**2011**	**2010**
	KERS Haz	**KERS Non-Haz**	**CERS Haz**	**CERS Non-Haz**	**SPRS**	**Total**	**Total**
Members' Contributions	$12,959	$109,879	$53,918	$144,861	$5,225	$326,842	$249,775
Employers' Contributions	18,085	185,558	84,595	247,968	11,920	548,126	461,161
Health Insurance Contributions (HB1)	241	2,441	1,157	3,216	31	7,086	3,448
Total Contributions	31,285	297,878	139,670	396,045	17,176	882,054	714,384
Investment Income							
From Investing Activities							
↘ Net Appreciation in FV	73,813	521,475	252,410	772,005	38,845	1,658,548	1,283,982
↘ Interest/Dividends	11,844	97,186	49,178	128,434	9,907	296,549	260,673
↘ Total Investing Activities Income	85,657	618,661	301,588	900,439	48,752	1,955,097	1,544,655
↘ Investment Expense	2,056	17,622	14,534	11,451	3,912	49,575	35,427
↘ Commissions	300	2,551	1,026	3,562	204	7,643	7,374
Total Investing Activities Expense	2,356	20,173	15,560	15,013	4,116	57,218	42,801
Net Income from Investing Activities	83,301	598,488	286,028	885,426	44,636	1,897,879	1,501,854
From Securities Lending Activities							
↘ Securities Lending Income	342	2,344	1,180	3,731	186	7,783	8,890
From Securities Lending Expense							
↘ Security Borrower Rebates	100	690	344	1,088	55	2,277	1,755
↘ Security Lending Agent Fees	51	352	176	555	28	1,162	1,445
Net Income from Securities Lending Activities	191	1,302	660	2,088	103	4,344	5,690
Total Net Investment Income	83,492	599,790	286,688	887,514	44,739	1,902,223	1,507,544
Total Additions	**$114,777**	**$897,668**	**$426,358**	**$1,283,559**	**$61,915**	**$2,784,277**	**$2,221,928**
Deductions							
Benefit Payments	44,509	838,372	167,540	494,344	46,754	1,591,519	1,516,064
Refunds	2,062	10,931	2,654	11,816	58	27,521	22,274
Administrative Expenses	721	8,558	1,191	14,324	124	24,918	24,848
Capital Project Expenses	6	67	9	112	1	195	
Total Deductions	47,298	857,928	171,394	520,596	46,937	1,644,153	1,563,186
Net Increase in Plan Assets	67,479	39,740	254,964	762,963	14,978	1,140,124	658,742
Plan Net Assets Held in Trust for Pension Benefits							
Beginning of Year	443,606	3,504,502	1,506,894	4,820,488	264,949	10,540,439	9,881,697
End of Year	**$511,085**	**$3,544,242**	**$1,761,858**	**$5,583,451**	**$279,927**	**$11,680,563**	**$10,540,439**

See accompanying notes to the financial statements.

Combined Statement of Plan Net Assets for Insurance Funds (in Thousands) as of June 30, 2011 with Comparative Totals as of June 30, 2010

Assets	2011						2010
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Total
Cash and Short-Term Investments							
Cash	$98	$943	$29	$922	$24	$2,016	$1,028
Short-Term Investments	78,770	90,548	199,213	361,230	29,132	758,893	535,637
Medicare Drug Deposit	11	20	23	42	5	101	100
Total Cash and Short-Short Term Investments	78,879	91,511	199,265	362,194	29,161	761,010	536,765
Receivables							
Contributions	922	9,508	17,463	43,242	591	71,726	25,655
Investment Income	961	1,283	2,234	4,200	388	9,066	7,966
Total Receivables	1,883	10,791	19,697	47,442	979	80,792	33,621
Investments at Fair Value							
Corporate and Government Bonds	63,286	78,502	148,241	277,636	25,924	593,589	276,627
Equity Contracts	15,291	180,855	25,309	303,183	2,636	527,274	426,809
Interest Rate Contracts	974	11,519	1,612	19,311	168	33,584	-
SWAPs	10	113	15	188	2	328	-
Corporate Stocks	147,600	41,591	349,177	382,943	63,413	984,724	1,155,445
Mortgages	12,480	14,994	29,248	54,779	4,946	116,447	-
Real Estate	272	476	579	1,080	116	2,523	615
Total Investments at Fair Value	239,913	328,050	554,181	1,039,120	97,205	2,258,469	1,859,496
Securities Lending Collateral Invested	46,353	60,889	109,577	203,681	18,377	438,877	565,007
Total Assets	**$367,028**	**$491,241**	**$882,720**	**$1,652,437**	**$145,722**	**$3,539,148**	**$2,994,889**
Liabilities							
Accounts Payable	2	1,693	4	1,758	26	3,483	3,897
Securities Lending Collateral Obligations	46,353	60,889	109,577	203,681	18,377	438,877	565,007
Total Liabilities	46,355	62,582	109,581	205,439	18,403	442,360	568,904
Plan Net Assets Held in Trust for Pension Benefits	**$320,673**	**$428,659**	**$773,139**	**$1,446,998**	**$127,319**	**$3,096,788**	**$2,425,985**

See accompanying notes to the financial statements.

Combined Statement of Changes in Plan Net Assets for Insurance Fund (in Thousands) as of June 30, 2011 with Comparative Totals as of June 30, 2010

Additions					**2011**		**2010**
	KERS Haz	**KERS Non-Haz**	**CERS Haz**	**CERS Non-Haz**	**SPRS**	**Total**	**Total**
Employers' Contributions	$18,826	$123,256	$98,203	$185,639	$10,051	$435,975	$371,885
Employer Group Waiver Plan	365	10,025	972	10,449	318	22,129	19,794
Premiums Received from Retirees	329	13,235	317	17,060	18	30,959	29,131
Retired Reemployed Healthcare (HBI)	259	2,591	199	993	-	4,042	2,032
Total Contributions	19,779	149,107	99,691	214,141	10,387	493,105	422,842
Investment Income							
From Investing Activities							
↘ Net Appreciation in FV	40,316	69,615	129,003	255,384	22,724	517,042	274,316
↘ Interest/Dividends	5,729	9,092	12,501	21,577	2,909	51,808	41,076
↘ Total Investing Activities Income	46,045	78,707	141,504	276,961	25,633	568,850	315,392
↘ Investment Expense	843	1,385	2,329	2,347	848	7,752	5,365
↘ Commissions	137	280	265	487	67	1,236	1,200
Total Investing Activities Expense	980	1,665	2,594	2,834	915	8,988	6,565
Net Income from Investing Activities	45,065	77,042	138,910	274,127	24,718	559,862	308,827
From Securities Lending Activities							
↘ Securities Lending Income	199	261	473	879	79	1,891	1,622
From Securities Lending Expense							
↘ Security Borrower Rebates	25	33	60	112	10	240	71
↘ Security Lending Agent Fees	34	45	81	151	14	325	306
Net Income from Securities Lending Activities	140	183	332	616	55	1,326	1,245
Total Net Investment Income	45,205	77,225	139,242	274,743	24,773	561,188	310,072
Total Additions	**$64,984**	**$226,332**	**$238,933**	**$488,884**	**$35,160**	**$1,054,293**	**$732,914**
Deductions							
Healthcare Premiums Subsidies	12,723	101,785	46,180	71,859	10,271	242,818	223,356
Administrative Fees	223	4,667	580	4,763	179	10,412	9,703
Self Funding Insurance Costs	2,604	60,019	5,651	60,085	1,901	130,260	130,142
Total Deductions	15,550	166,471	52,411	136,707	12,351	383,490	363,201
Net Increase in Plan Assets	49,434	59,861	186,522	352,177	22,809	670,803	369,713
Plan Net Assets Held in Trust for Insurance Benefits							
Beginning of Year	271,239	368,798	586,617	1,094,821	104,510	2,425,985	2,056,272
End of Year	**$320,673**	**$428,659**	**$773,139**	**$1,446,998**	**$127,319**	**$3,096,788**	**$2,425,985**

See accompanying notes to the financial statements.

*Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the **members of that plan**, in accordance with the provisions of KRS Sections 16.555, 61.570, and 78.630.*

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees (the Board) of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS).

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of KRS administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by KRS: (1) KERS; (2) CERS; and (3) SPRS. The assets of the insurance fund are commingled for investment purposes. The following notes apply to the various funds administered by KRS.

NOTE **A.**

Note A. Summary of Significant Accounting Policies

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Basis of Accounting KRS' financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and investment expenses are recognized when incurred.

Methods to Value Investments Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate is based on appraisals. Investments that do not have an established market are reported at estimated fair value.

Estimates The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged to expense as incurred. The capitalization threshold used in fiscal years ended June 30, 2011 and 2010 was $3,000 (see Note J for further information).

Intangible Assets Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is ten years. The capitalization threshold used in fiscal years ended June 30, 2011 and 2010 was $3,000 (see Note K for further information).

Expense Allocation Administrative and investment expenses of KRS are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

Component Unit KRS is a component unit of the Commonwealth of Kentucky for financial reporting purposes. KERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. CERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. SPRS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the KRS Board of Trustees without further legislative review. The methods used to determine the employer rates for all Systems are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

GASB
Governmental Accounting Standards Board

Recent Accounting Pronouncements In November 2010, the Governmental Accounting Standards Board (GASB) issued Statement No. 61, "The Financial Reporting Entity: Omnibus, an amendment of GASB Statements No. 14 and No. 34". The objective of this statement is to improve financial reporting for a governmental financial reporting entity. The requirements of Statement No. 14, "The Financial Reporting Entity", and the related financial reporting requirements of Statement No. 34, "Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments" were amended to better meet user needs and to address reporting entity issues that have arisen since the issuance of those Statements. KRS is currently evaluating the provisions of GASB No. 61.

Haz or Non-Haz
Hazardous or Non-Hazardous
(i.e. KERS Haz or CERS Non-Haz)

Note B. Plan Descriptions & Contribution Information

KERS Employees

	2011			2010		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	38,597	3,064	41,661	37,945	2,835	40,780
Inactive Vested Memberships	38,597	3,264	41,861	37,681	3,155	40,836
Active Plan Members	46,617	4,291	50,908	47,090	4,291	51,381
Total	**123,811**	**10,619**	**134,430**	**122,716**	**10,281**	**132,997**
Number of Participating Employers			372			372

CERS Employees

	2011			2010		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	43,211	6,468	49,679	41,038	6,068	47,106
Inactive Vested Memberships	65,914	2,774	68,688	64,004	2,631	66,635
Active Plan Members	85,285	9,407	94,692	84,681	9,562	94,243
Total	**194,410**	**18,649**	**213,059**	**189,723**	**18,261**	**207,984**
Number of Participating Employers			1,396			1,396

SPRS Employees

Members	2011	2010
Retirees and Beneficiaries Receiving Benefits	1,263	1,223
Inactive Vested Memberships	357	345
Active Plan Members	965	961
Total	**2,585**	**2,529**
Number of Participating Employers	1	1

2011 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Haz	10,321	2,155	732	1,821	13,988
KERS Haz	615	21	75	60	570
CERS Non-Haz	8,013	1,552	351	3,167	15,100
CERS Haz	1,310	2,156	253	58	1,527
SPRS	278	474	52	14	499
Total	**20,537**	**6,358**	**1,463**	**5,120**	**31,684**

2010 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Haz	10,420	1,971	722	1,831	13,765
KERS Haz	599	453	66	63	525
CERS Non-Haz	7,692	1,369	342	3,106	14,477
CERS Haz	1,274	2,062	239	58	1,438
SPRS	264	462	47	12	467
Total	**20,249**	**6,317**	**1,416**	**5,070**	**30,672**

KERS NON-HAZ PENSION

For the fiscal years ended June 30, 2011 and 2010, participating employers contributed 16.98% and 11.61%, respectively, of each [KERS Non-Haz] employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2011 and 2010, were 38.58% and 39.45%, respectively, of each employee's creditable compensation.

COLA
Cost of Living Adjustment

KAR
Kentucky Administrative Regulation

Plan Description KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to

suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands.

Contributions For the fiscal years ended June 30, 2011 and 2010, plan members were required to contribute 5% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2011 and 2010, participating employers contributed 16.98% and 11.61%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2011 and 2010, were 38.58% and 39.45%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401 (h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% of their annual creditable compensation.

KERS HAZ PENSION

For the fiscal years ended June 30, 2011 and 2010, participating employers contributed 26.12% and 24.69%, respectively, of each [KERS Haz] employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2011 and 2010, were 34.37% and 35.54%, respectively, of each employee's creditable compensation.

Plan Description KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands.

Contributions For the fiscal years ended June 30, 2011 and 2010, plan members were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2011 and 2010, participating employers contributed 26.12% and 24.69%, respectively, of each

employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2011 and 2010, were 34.37% and 35.54%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with HB 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

CERS NON-HAZ PENSION

For the fiscal years ended June 30, 2011 and 2010, participating employers contributed 16.93% and 16.16%, respectively, of each [CERS Non-Haz] employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2011 and 2010, were 19.81% and 20.91%, respectively.

Plan Description CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands.

Contributions For the fiscal years ended June 30, 2011 and 2010, plan members were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2011 and 2010, participating employers contributed 16.93% and 16.16%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2011 and 2010, were 19.81% and 20.91%, respectively. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% of their annual creditable compensation.

For the fiscal years ended June 30, 2011 and 2010, participating employers contributed 33.25% and 32.97%, respectively, of each [CERS Haz] employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2011 and 2010, were 40.06% and 43.36%, respectively, of each employee's creditable compensation.

Plan Description CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each participating county, city and school board, and any additional eligible local agencies electing to participate in CERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands.

Contributions For the fiscal years ended June 30, 2011 and 2010, plan members were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2011 and 2010, participating employers contributed 33.25% and 32.97%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2011 and 2010, were 40.06% and 43.36%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

For the fiscal years ended June 30, 2011 and 2010, the Commonwealth contributed 45.54% and 33.08%, respectively, of each [SPRS] employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2011 and 2010 were 85.63% and 92.12%, respectively, of each employee's creditable compensation.

Plan Description SPRS is a single-employer defined benefit pension plan that covers all full-time state troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands.

Contributions For the fiscal years ended June 30, 2011 and 2010, plan members were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board.

However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2011 and 2010, the Commonwealth contributed 45.54% and 33.08%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2011 and 2010 were 85.63% and 92.12%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

For fiscal 2011, insurance premiums withheld from benefits for members of KERS were $29,350,195 and $1,225,236 for KERS non-haz and KERS haz, respectively; $29,219,273 and $2,017,208 for CERS non-haz and CERS haz, respectively; and, $250,282 for SPRS.

Plan Description The KRS Insurance Fund was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2011, insurance premiums withheld from benefit payments for members of the systems were $29,350,195 and $1,225,236 for KERS non-hazardous and hazardous, respectively; $29,219,273 and $2,017,208 for CERS non-hazardous and hazardous, respectively; and, $250,282 for SPRS. For fiscal 2010, insurance premiums withheld from benefit payments for members of KERS were $29,181,932 and $1,665,204 for KERS non-hazardous and KERS hazardous, respectively; $29,677,911 and $1,804,656 for CERS non-hazardous and CERS hazardous, respectively; and, $234,577 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2011, the Fund had 92,989 retirees and beneficiaries for whom benefits were available. The amount of contribution paid by the Funds is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows.

Portion Paid by Insurance Fund

Years of Service	Paid by Insurance Fund (%)
20+ years	100%
15-19 years	75%
10-14 years	50%
4-9 years	25%
Less than 4 years	0%

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after, July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on, or after, July 1, 2003 earn ten dollars ($10) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn fifteen dollars ($15) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives ten dollars ($10) per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree cost of living adjustment (COLA), which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands. In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years.

Self-Funding KRS commenced self-funding of healthcare benefits for its Medicare eligible retirees on January 1, 2006. A self-funded plan is one in which KRS assumes the financial risk for providing healthcare benefits to its retirees. The self-funded plan pays for claims out-of-pocket as they are presented instead of paying a pre-determined premium to an insurance carrier for a fully-insured plan. KRS funds the risk of its self-insured program directly from its insurance assets.

Administrators KRS selected Catalyst Rx and UMR to administer the pharmaceutical and medical benefits, respectively, for its retirees. Stop-loss insurance can be arranged to limit KRS' loss to a specified amount to ensure that catastrophic claims do not upset the financial integrity of the self-funded plan. The amount of stop-loss insurance is a function of KRS' size, nature of its business, financials, and tolerance for risk. KRS continues to evaluate the use of stop-loss insurance.

Note C. Cash, Short-Term Investments & Securities Lending Collateral

GASB
Governmental Accounting Standards Board

The provisions of Governmental Accounting Standards Board (GASB) Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions, and investments made with that cash, be reported as assets on the financial statements. In conjunction with the adoption of GASB No. 28, KRS has reclassified certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following

Cash & Short-Term Investments
KERS

Assets	**2011**	**2010**
Cash	$1,197,306	$901,440
Short-Term Investments	387,987,312	193,075,338
Securities Lending Collateral Invested	596,906,253	847,326,415
KERS Total	**$986,090,871**	**$1,041,303,193**

CERS

Assets	**2011**	**2010**
Cash	$1,250,932	$984,279
Short-Term Investments	892,898,087	388,391,558
Securities Lending Collateral Invested	1,082,381,468	1,355,857,873
CERS Total	**$1,976,530,487**	**$1,745,233,710**

SPRS

Assets	**2011**	**2010**
Cash	$292,029	$149,615
Short-Term Investments	28,452,304	19,635,485
Securities Lending Collateral Invested	41,306,830	56,955,523
SPRS Total	**$70,051,163**	**$76,740,623**

KRS Insurance Fund

Assets	**2011**	**2010**
Cash	$2,015,579	$1,029,033
Short-Term Investments	758,893,370	535,639,023
Medicare Drug Deposit	100,620	100,466
Securities Lending Collateral Invested	438,877,452	565,007,164
Insurance Fund Total	**$1,199,887,021**	**$1,101,775,666**

Note D. Investments

The Board of Trustees of KRS recognizes its duty to invest funds in accordance with the "Prudent Person Rule" and manage those funds consistent with the long-term nature of KRS. The Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments Investments may be made in domestic and international common stock, securities convertible into common stock and in preferred stock of publicly traded corporations.

Fixed Income Investments Publicly traded corporate bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with the current market and economic conditions. Investment may also be made in any debt instrument issued or guaranteed in whole or in part by the US Government or any agency or instrumentality of the US Government.

CMO
Collateralized Mortgage Obligation

STIF
Short Term Investment Fund

IO
Interest Only

PO
Principal Only

Mortgages Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments guaranteed by an agency of the US Government or the Commonwealth of Kentucky.

Private Equity, Equity Real Estate, Real Return, Absolute Return Investments Subject to the specific approval of the Investment Committee of the Board of Trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, but not limited to and without limitation, venture capital, private equity, private placements, real assets and absolute return investments which the Investment Committee believes have excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities The following short-term investment vehicles are considered acceptable: Publicly traded investment grade corporate bonds, variable rate demand notes, government and agency bonds, mortgages, and collective STIFs, money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the intrument has a split rating, the lower of the two ratings shall prevail. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time left until the next interest rate reset occurs, but in no case will any security have a stated final maturity of more than three years.

Derivatives Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use

of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited unless specifically allowed by a managers contract. In conjunction with the adoption of Governmental Accounting Standards Board (GASB) Statement No. 53, "Accounting and Financial Reporting for Derivative Instruments", KRS provides this additional disclosure regarding its derivatives:

Background Info As of June 30, 2011, KRS has the following derivative instruments outstanding (see table below). All have various Effective Dates and Maturity Dates.

Item	Type	Objective	Terms	Cost	Notional Cost	Market Value	Notional Market Value
Pension							
A	Equity Contracts	Substitute for common stock	Various	$460,878	-	$68,921	$868,796,035
B	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	($29,317,818)	-
C	Interest Rate Contracts	Hedge against the risk that interest rates will move in an adverse direction	Various	-	$367,665,325	-	$368,603,638
D	SWAPs	Hedge against sudden or dramatic shifts in interest rates	Various	($677,925)	-	($1,982,285)	-
Insurance							
E	Equity Contracts	Substitute for common stock	Various	-	-	-	$527,274,305
F	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	($11,307,268)	-
G	Interest Rate Contracts	Hedge against the risk that interest rates will move in an adverse direction	Exchange occurs once maturity date reached	-	$33,530,613	-	-
H	SWAPs	Hedge against sudden or dramatic shifts in interest rates	Various	$100,634	-	$296,233	$33,584,200

Derivative Policy It is the policy of KRS that investment managers may invest in derivative securities, or strategies which make use of derivative investments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Examples of such derivatives include, but are not limited to, foreign currency forward contracts, collateralized mortgage obligations, treasury inflation protected securities, futures, options and swaps. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flows, such as interest only, principal only, inverse floater, or structured note securities are permitted only to the extent authorized in an alternative investment offering memorandum or agreement.

CMOs Investments in securities such as collateralized mortgage obligations and planned amortization class issues are allowed if, in the judgment of the investment manager, they are not expected to be subject to large or unanticipated changes in duration or cash flows. Investment managers may make use of derivative securities for defensive or hedging purposes. Any derivative security shall be sufficiently liquid that it can be expected to be sold at, or near, its most recently quoted market price.

Derivative instruments A and E are substitutes for common stock with an investment that is recorded at fair value. Derivative instruments B and F hedge against the decrease of non US dollar currencies. For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combined Statement of Plan Net Assets for both Pension and Insurance.

Basis Risk Derivative instruments A and E expose KRS to basis risk in that the value of the underlying equity index future may decrease in fair value relative to the cash market. Derivative instruments B and F expose KRS to basis risk in that the value of the foreign currency futures or forwards may decrease in fair value relative to the cash market.

Interest Rate Risk Derivative instruments C, D, G, and H expose KRS to interest rate risk in that changes in interest rates will adversely affect the fair values of KRS' financial instruments.

Custodial Credit Risk for Deposits Custodial credit risk for deposits is the risk that in the event of a financial institution failure, KRS' deposits may not be returned. All non-investment related bank balances are held locally by Farmer's Bank & Capital Trust Company. All non-investment related bank balances are held in KRS' name and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). In 2010, the US Congress passed the Financial Crisis Bill and permanently increased the FDIC deposit insurance coverage to $250,000. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount. These funds are cash held by KRS' Global Managers and consist of various currencies.

As of June 30, 2011 and 2010, deposits for KRS pension funds were $4,795,307 and $5,481,332, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

As of June 30, 2011 and 2010, deposits for KRS insurance fund were $2,020,499 and $1,023,289, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. KRS does not have an explicit policy with regards to Custodial Credit Risk for investments. As of June 30, 2011 and 2010, the following investments were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name. These funds are cash held by KRS' Global Managers and consist of various currencies.

Custodial Credit Risk

Pension Fund	2011	2010
Foreign Currency	$8,971,696	$9,439,108
Insurance Fund		
Foreign Currency	$3,703,274	$3,106,813

Investment Policies Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of Trustees of KRS. The Board of Trustees has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the "Prudent Person Rule" (set forth in Kentucky Revised Statute 61.650) and manage those funds consistent with the long-term nature of the Systems. The Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS.

The Statement of Investment Policy contains the specific guidelines for the investment of pension and insurance assets. Additionally, the Committee establishes specific investment guidelines in the Investment Management Agreement for each investment management firm.

Pension Fund Investments Summary As of June 30, 2011 & 2010

Type	2011	2010
US Gov't & Agency Fixed Income Securities	$2,474,974,219	$2,585,430,034
US Corporate Fixed Income Securities	1,063,223,703	689,815,783
Municipal Debt Securities	78,975,354	57,330,669
Short-Term Investments	1,677,941,341	601,104,211
Equity Securities	5,994,749,969	4,931,386,776
Private Equity Limited Partnerships	1,392,099,971	1,547,888,010
Real Estate	32,251,271	15,075,788
Other*	(1,220,227,180)	(59,897)
Total	**$11,493,988,648**	**$10,427,971,374**

**This balance consists of the following*

Type	Balances
Cash Collateral - US Dollars	$2,570,028
Sukuk	94,750
Real Estate	16,500,000
Derivative Offsets	
↘ US Dollars	(368,603,638)
↘ Equity Futures	(868,796,035)
Derivative Offsets Total	**$(1,237,399,673)**
Liabilities	
↘ Obligation to Return Cash Collateral - US Dollars	(1,992,285)
Total	**$(1,220,227,180)**

Insurance Fund Investments Summary As of June 30, 2011 & 2010

Type	2011	2010
US Gov't & Agency Fixed Income Securities	$537,586,644	$276,626,088
US Corporate Fixed Income Securities	154,320,004	-
Municipal Debt Securities	14,331,627	-
Short-Term Investments	792,578,190	535,739,469
Equity Securities	1,847,247,012	1,385,112,612
Private Equity Limited Partnerships	225,938,724	197,141,097
Real Estate	2,522,855	614,468
Other**	(557,062,260)	-
Total	**$3,017,462,796**	**$2,395,233,734**

***This balance consists of the following*

Type	Balances
Cash Collateral - US Dollars	$328,313
Real Estate	3,500,000
Derivative Offsets	
↘ US Dollars	(33,584,200)
↘ Equity Futures	(527,274,305)
Derivative Offsets Total	**$(560,858,505)**
Liabilities	
↘ Swaps - US Dollars	(32,068)
Total	**$(557,062,260)**

Credit Risk of Debt Securities Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external professional investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension fund debt securities portfolio is managed using the following:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible and may be held without restrictions.
- The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income Index by more than 25%.
- The duration of the TIPS portfolio shall not deviate from the Barclays Capital TIPS Index by more than 10%.
- The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS' assets.
- No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short term instrument, with the exception of US Government issued, guaranteed or agency obligations.
- The amount invested in SEC Rule 144a securities shall not exceed 15% of the market value of the aggregate market value of KRS' fixed income investments.

Pension Fund Debt Securities at Fair Value as of June 30, 2011 & 2010

Quality Rating	2011	2010
AAA	$91,317,082	$1,863,001,127
AA+	34,390,755	48,288,094
AA	39,864,586	30,226,149
AA-	50,219,759	46,648,330
A+	104,187,245	59,293,411
A	146,999,473	156,019,707
A-	152,567,548	72,715,716
BBB+	64,799,988	59,200,990
BBB	112,518,837	-
BBB-	56,358,144	144,675,132
BB+	$7,166,376	2,206,904
BB	13,417,689	10,978,677
BB-	28,485,658	2,475,945
B+	27,997,068	4,457,839
B	21,129,569	-
B-	32,172,492	15,903,098
CCC+	6,138,146	-
CCC	8,838,429	2,836,252
CCC-	1,590,633	-
CC	-	1,843,910
D	3,394,737	-
NR	138,644,843	70,462,745
Total Credit Risk Debt Securities	**$1,142,199,057**	**$2,591,234,026**
Government Bonds	508,207,024	115,820,255
Government Mortgage-Backed Securities (GNMA)	725,318,403	575,722,459
Governmentt Issued Commercial Mortgage Backed	6,325,040	4,631,391
Government Agencies	95,545,823	6,265,527
Indexed Linked Bonds	1,139,577,929	38,894,681
Total Debt Securities	**$3,617,173,276**	**$3,332,568,339**

Pension Fund Securities At both June 30, 2011 and 2010, the weighted average quality rating of the pension fund debt securities portfolio was AA+. As of June 30, 2011 and 2010, the KRS pension portfolio had $150,330,797 and $40,702,625, respectively, in debt securities rated below BBB-. The fair value of securities in the BBB- rating category was $56,358,144 and $144,675,132, respectively, as of June 30, 2011 and 2010.

Insurance Fund Debt Securities at Fair Value as of June 30, 2011 & 2010

Quality Rating	2011	2010
AAA	$43,946,738	-
AA+	2,359,902	-
AA	7,044,017	-
AA-	7,138,193	-
A+	20,243,053	-
A	18,381,398	-
A-	21,875,607	-
BBB+	7,975,298	-
BBB	15,146,772	-
BBB-	7,256,147	-
BB+	202,742	-
BB	1,156,866	-
BB-	1,916,666	-
B+	3,169,797	-
B	2,226,250	-
B-	2,486,016	-
CCC+	259,375	-
NR	8,352,810	-
Total Credit Risk Debt Securities	**$168,651,631**	**-**
Government Bonds	94,082,811	-
Government Mortgage-Backed Securities (GNMA)	114,153,699	-
Government Issued Commercial Mortgage Backed	761,681	-
Government Agencies	13,394,544	-
Indexed Linked Bonds	315,193,909	276,626,088
Total Debt Securities	**$706,238,275**	**$276,626,088**

Insurance Fund Securities As a result of the most recently approved Asset/Liability Modeling Study, the investment staff began to diversify the insurance fixed income allocation to mirror that of the pension funds. As part of this process, the TIPS allocation (previously the only fixed income exposure within the insurance portfolio) was moved to the newly created Real Return Asset Class.

As of June 30, 2011, the Pension Funds held $847,510,267, or 8.3%, and the Insurance Fund held $184,842,522, or 8.2%, of its investments in Exchange Traded Funds.

Concentration of Credit Risk Debt Securities Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer. The total debt securities portfolio is managed using the following general guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Debt obligations of any single US Corporation shall be limited to a maximum of 5% of the total portfolio at market value.

ETF
Exchange Traded Fund

Fannie Mae
Federal National Mortgage Association

As of June 30, 2011, the Pension Funds held $847,510,267, or 8.3%, and the Insurance Fund held $184,842,522, or 8.2%, of its investments in Exchange Traded Funds (ETF's). ETF's are securities that represent ownership in a long term unit investment trust that holds a portfolio of common stocks designed to track the performance of a designated index. Similar to a stock, ETF's can be traded continuously throughout the trading day, or can be held for the long term.

As of June 30, 2011, the Pension Fund held $457,059,745, or 4.5%, of its investment in the Federal National Mortgage Association (Fannie Mae). Historically, Fannie Mae has been a publicly owned government corporation, recently entering conservatorship by the US Government, to purchase mortgages from lenders and resell them to investors; shares of Fannie Mae are traded on the New York Stock Exchange. Fannie Mae's debt has been perceived to be nearly as safe as US Treasury debt, given the US Government's implicit guarantee which has allowed it to pay lower interest rates to its debt holders.

Interest Rate Risk Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The risk is managed by using the effective duration or option adjusted methodology. It is widely used in the management of fixed income portfolios by quantifying the risk of inherent rate changes. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. The effective duration measures the sensitivity of the market price to changes in the yield curve. Effective duration is the most accurate duration measure when a significant portion of the securities are callable (redeemable) prior to maturity.

The KRS pension fund portfolio benchmarks its debt securities portfolio to a weighted average benchmark consisting of the Barclays Capital Aggregate Index and the Barclays Capital US TIPS Index. As of June 30, 2011 and 2010, the effective duration of the benchmark was 6.03 and 5.35, respectively. At the same points in time, the effective duration of the KRS pension fund debt securities portfolio was 3.83 and 4.57, respectively.

Pension Fund Interest Rate Risk

Type	2011	Weighted Average Effective Duration	2010	Weighted Average Effective Duration
Asset Backed Securities	$86,628,031	0.64	$80,459,816	0.93
Bank Loans	$41,962,680	0.35	-	-
Collateralized Bonds	$6,325,040	-0.22	-	-
Commercial Mortgage Backed Securities	$88,520,168	4.68	78,536,394	4.68
Corporate Bonds	$735,281,195	4.78	513,442,002	5.53
Government Agencies	$93,545,823	3.97	68,928,647	4.85
Government Bonds	$508,207,024	4.73	915,274,910	5.40
Government Mortgage Backed Securities	$707,971,763	2.91	576,152,433	2.18
Government Issued Commercial Mortgage Backed Securities	$5,211,936	3.22	4,631,391	3.31
Guaranteed Fixed Income	$18,882,082	1.37	45,610,184	2.01
Indexed Linked Government Bonds	$1,139,577,929	3.68	967,658,299	4.95
Municipal Bonds	$78,975,354	10.54	57,330,669	11.36
Non-Government Backed CMOs	$15,576,827	1.83	17,369,425	1.45
Other Fixed Income	-	-	7,174,169	0.38
Short Term Bills/Notes	$90,412,674	0.38	-	-
Sukuk	$94,750	0.09	-	-
Total	**$3,617,173,276**	**3.83**	**$3,332,568,339**	**4.57**

The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve but does not assume that securities will be called prior to maturity. Since the modified duration measure most accurately reflects the interest rate sensitivity of the insurance fund portfolio, this measure is used for comparative purposes. The KRS insurance fund debt securities portfolio benchmarks its debt securities portfolio to a weighted average benchmark consisting of the Barclays Capital Aggregate Index and the Barclays Capital US TIPS Index (beginning April 2011). At June 30, 2011 and 2010 (the previous benchmark), the modified duration of the benchmark was 7.14 and 5.26, respectively. At the same points in time, the modified duration of the KRS insurance fund debt securities portfolio, excluding the pooled fund, was 5.83 and 7.12, respectively.

*Interest Rate Risk is the risk that **changes in interest rates will adversely affect** the fair value of an investment. The risk is managed by using the effective duration or option adjusted methodology.*

Insurance Fund Debt Securities Investments at Fair Value as of June 30, 2011 & 2010

	2011		2010	
Investment	**Fair Value**	**Weighted Duration**	**Fair Value**	**Weighted Duration**
Asset Backed Securities	$1,000,340	1.73	-	-
Bank Loans	$5,808,008	3.58	-	-
Commercial Mortgage	$11,977,676	4.42	-	-
Corporate Bonds	$69,145,598	5.78	-	-
Government Agencies	$13,394,544	4.34	-	-
Government Bonds	$94,082,811	4.79	-	-
Government Mortgage Backed Securities	$114,153,699	4.19	-	-
Government Issued Commerical Mortgages	$534,001	3.51	-	-
Guaranteed Fixed Income	$4,439,819	1.85	-	-
Index Linked Government Bonds	$315,193,909	7.78	$276,626,088	8.24
Municipal/Provincial Bonds	$14,331,627	10.74	-	-
Non-Government Backed CMOs	$2,293,809	3.47	-	-
Short Term Bills/Notes	$59,882,434	0.39	-	-
Total	**$706,238,275**	**5.83**	**$276,626,088**	**8.24**

*Foreign currency risk is the risk that changes in exchange rates will **adversely affect the value** of a non-US dollar based investment or deposit with the KRS portfolio.*

Foreign Currency Risk Foreign currency risk is the risk that changes in exchange rates will adversely affect the value of a non-US dollar based investment or deposit with the KRS portfolio. KRS' currency risk exposure, or exchange rate risk, primarily resides with KRS' international equity holdings, but also affects other asset classes. KRS does not have a formal policy to limit foreign currency risk, however, KRS employs a third party vendor to hedge major currency exposures as described below.

All foreign currency transactions are classified as Short-Term Investments. All gains and losses associated with these transactions are recorded in the Net Appreciation (Depreciation) in the Fair Value of Investments on the financial statements.

RCM
Record Currency Management Program

KRS transferred $12,043,264 of the Pension Funds, and $4,197,722 of the Insurance Fund, to the Record Currency Management Program (RCM), a total of $16,243,160. The RCM program began in September 2009. The RCM account experienced a tremendous amount of growth through May 2011 when it peaked with a market value of $82,001,355 in the Pension Funds, and $30,026,900 in the Insurance Fund, a total of $112,028,255. It began to lose ground in June 2011, which led to a loss of $6,752,497 in the Pension Funds, and $3,516,224 in the Insurance Fund, for a total overall RCM loss of $10,268,721 in fiscal 2011.

KRS employs a currency manager to hedge some exchange rate risk by utilizing a trend following strategy which increases or decreases the currency hedge ratio as risk increases or decreases. The following tables present KRS' exposure to foreign currency risk as of June 30, 2011 and 2010.

Pension Fund Investments at Fair Value as of June 30, 2011 & 2010

Foreign Equities	**2011**	**2010**
Argentine Peso	$1,196,140	-
Australian Dollar	94,694,698	$25,036,391
Brazilian Real	4,278,639	2,694,860
British Pound Sterling	134,777,442	16,602,057
Canadian Dollar	134,071,078	114,533,022
Chinese Yuan	521,787	-
Columbian Peso	1,222,930	-
Czech Koruna	1,658,886	157,720
Danish Krone	16,152,506	10,286,579
Euro	433,029,933	(30,181,148)
Hong Kong Dollar	68,788,630	37,363,932
Hungarian Forint	-	221,870
Indonesian Rupiah	2,243,714	303,437
Japanese Yen	265,405,175	277,826,132
Malaysian Ringgit	2,426,541	387,001
Mexican Peso	3,661,558	835,982
New Taiwan Dollar	5,254,844	7,634,477
New Zealand Dollar	1,338,143	-
Norwegian Krone	11,346,709	8,531,898
Philippine Peso	138,885	-
Polish Zloty	-	1,761,559
Russian Ruble	1,036,961	-
Singapore Dollar	22,053,536	22,180,537
South African Rand	2,758,884	3,216,614
South Korean Won	4,512,110	2,920,668
Swedish Krona	23,544,658	2,732,084
Swiss Franc	95,068,382	21,699,339
International Equity Mutual Fund (various currencies)	920,141,284	795,533,850
Total Securities Subject to Foreign Currency Risk	**$2,274,946,954**	**$1,322,278,861**
USD (securities held by International Investment Managers)	1,659,713,681	840,612,985
Total International Investment Securities	**$3,911,037,734**	**$2,162,891,846**

Insurance Fund Investments at Fair Value as of June 30, 2011 & 2010

Foreign Equities	**2011**	**2010**
Australian Dollar	$37,342,712	$9,589,648
Brazilian Real	607,112	1,003,876
British Pound Sterling	50,278,435	8,051,772
Canadian Dollar	53,058,136	43,845,544
Czech Koruna	427,698	67,148
Danish Krone	5,937,869	4,042,009
Euro	167,585,939	(7,500,903)
Hong Kong Dollar	24,192,383	13,824,640
Hungarian Forint	71	75,604
Indonesian Rupiah	2,832	105,386
Japanese Yen	104,116,859	104,237,243
Malaysian Ringgit	-	29,102
Mexican Peso	370,341	278,282
New Taiwan Dollar	1,351,967	2,302,510
New Zealand Dollar	556,742	-
Norwegian Krone	4,589,032	3,174,376
Polish Zloty	-	684,280
Singapore Dollar	8,739,442	8,164,651
South African Rand	307,167	1,145,561
South Korean Won	1,165,059	980,970
Swedish Krona	8,758,300	1,109,872
Swiss Franc	36,824,057	8,941,929
International Equity Mutual Fund (various currencies)	199,878,520	101,560,347
Total Securities subject to Foreign Currency Risk	**$706,090,673**	**$305,713,847**
USD (securities held by International Investment Managers)	524,261,020	310,656,636
Total International Investment Securities	**$1,230,351,693**	**$616,370,483**

NOTE **E.**

Note E. Securities Lending Transactions

Kentucky Revised Statutes Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with a fair value of 102 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date.

Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. The types of securities lent include US Treasuries, US Agencies, US Corporate Bonds, US Equities, Global Fixed Income Securities, and Global Equities Securities. The Statement of Investment does not address any restrictions on the amount of loans that can be made. At June 30, 2011, KRS had no credit risk exposure to

borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction. The custodial bank invests cash collateral in the agent's short-term investment pool as permitted by state statute and Board policy. The custodian of the Funds cannot pledge or sell collateral securities received unless the borrower defaults.

KRS maintains a conservative approach to investing the cash collateral with Northern Trust for its securities lending collateral pools, emphasizing capital preservation, liquidity, and credit quality.

NOTE **F.**

Note F. Risk of Loss

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims Against Board Claims against the Board of Trustees of KRS, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $200,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Job-Related Illness Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66⅔%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

NOTE **G.**

Note G. Contingencies

In the normal course of business, KRS is involved in litigation concerning the right of participants, or their beneficiaries, to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

NOTE **H.**

Note H. Income Tax Status

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, generally, not subject to tax. KRS continues to be subject to income tax on its unrelated business income.

NOTE **I.**

Note I. Defined Benefit Pension Plan

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

All eligible employees of KRS participate in KERS (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers substantially all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Plan members contributed 5% of creditable compensation for the periods ended June 30, 2011, 2010, and 2009. KRS contributed 16.98%, 11.61%, and 10.01% of covered payroll for the periods ended June 30, 2011, 2010, and 2009, respectively. The chart below includes the covered payroll and contribution amounts for KRS for the three periods included in this discussion.

Payroll & Contributions

	2011	2010	2009
Covered Payroll	$13,444,315	$13,383,859	$12,864,700
Required Employer Contributions	$2,282,864	$1,553,865	$1,287,800
Employer Percentage Contributed	100%	100%	100%

Note J. Equipment

Equipment Expenses as of June 30

Expense	2011	2010
Equipment At-Cost	$6,971,185	$6,795,760
Less Accumulated Depreciation	(2,987,098)	(2,924,895)
Total	**$3,984,087**	**$3,870,865**

Depreciation expense for the fiscal years ended June 30, 2011 and 2010 amounted to $62,203 and $215,200, respectively. In fiscal 2010, several fixed assets were fully depreciated (this amount totaled $988,347), therefore, depreciation expense decreased from the prior fiscal year.

Note K. Intangible Assets

GASB
Governmental Accounting Standards Board

START
Strategic Technology Advancements for the Retirement of Tomorrow

The provisions of Governmental Accounting Standards Board (GASB) Statement No. 51, "Accounting and Financial Reporting for Intangible Assets" require that intangible assets be recognized in the Statement of Plan Net Assets only if they are considered identifiable. In conjunction with the adoption of GASB No. 51, KRS has capitalized software costs as indicated below for the Strategic Technology Advancements for the Retirement of Tomorrow (START) project.

Software Expenses as of June 30

Expense	2011	2010
Software At-Cost	$7,424,611	$6,478,561
Less Accumulated Amortization	(1,682,261)	(993,788)
Total	**$5,742,350**	**$5,484,773**

Amortization expense for the fiscal years ended June 30, 2011 and 2010 amounted to $688,473 and $647,857, respectively.

START Project In fiscal 2007, KRS initiated the START project. It is anticipated that START will be completed in its entirety in fiscal 2013. The objectives of the project are to provide employees with a technology solution that will enable them to serve more customers more quickly while providing continued superior service; to enhance business services and improve operational efficiency; to improve the accuracy of the information collected, maintained, and provided; to improve the timeliness and accuracy of responses to members' inquiries; to provide internet based, self-service capabilities to members, retirees, and employers; and, to ensure that retirees receive monthly benefits without error or disruption.

Note L. Alternative Investments

On February 6, 2006, the health insurance fund of KRS loaned to KRS Perimeter Park West, Inc., a related party, $700,000 for the purchase of real property at 1300 Louisville Road, Frankfort, Kentucky. The loan was not documented by a note, mortgage contract, or security interest in the property. The transfer of funds involved a commingling with the pension fund which was in violation of Internal Revenue Code Sections 401 and 420. However, KRS voluntarily self-corrected the violation in accordance with Revenue Procedure 2006-27 of the Internal Revenue Bulletin 2006-22, page 945, "Employee Plans Compliance Resolution System (EPCRS)", and Section 1101 of the Pension Protection Act of 2006. The self-correction process involved a Letter of Direction sent to Northern Trust (the custodial bank of KRS) to reverse (and to correct the commingling of funds) the loan in the investment accounts.

EPCRS
Employee Plans Compliance Resolution System

On June 11, 2009, the property at 1300 Louisville Road, along with Building B (a part of the Perimeter Park Complex purchased in 1998) was sold for a ***combined sale price of $3,200,000*** *to the Commonwealth.*

Subsequent to the loan and purchase, the real property was valued by appraisal from $135,000 to $290,000. The range of appraisal values was based upon considerations of zoning classifications, site preparations and improvements, and other matters. KRS decided to reflect the alternative investment at the lowest appraisal value for the property in accordance with Governmental Accounting Standards Board (GASB) Statement No. 43 "Financial Reporting for Postemployment Benefit Plans other than Pension Plans", paragraphs 22 and 92 , and in accordance with the Principle of Conservatism of Generally Accepted Accounting Principles. Because of the significant difference in the appraised value of the property and the loan amount, and also because the loan was not documented by a note, mortgage contract, or security interest in the property, KRS was uncertain whether it would collect any principal (or interest) in excess of the minimum appraised property value. Therefore, as of June 30, 2006, KRS management elected to write-down the value of the Alternative Investment to an estimated collectible value of $135,000, which was the investment's carrying value since the date of the loan. As a result, the unrealized loss amounted to $565,000 ($700,000 - $135,000), which was included in the Combined Statement of Changes in Plan Net Assets: Insurance Fund for the 2006 fiscal year.

On June 11, 2009, the property at 1300 Louisville Road, along with Building B (a part of the Perimeter Park Complex purchased in 1998) was sold for a combined sale price of $3,200,000 to the Commonwealth of Kentucky. The two properties were appraised individually on December 15, 2008, by the Forrestal Group, Inc., of Evansville, Indiana. The property at 1300 Louisville Road appraised for $295,000, and Building B appraised for $2,725,000.

On September 15, 2009, the management of KRS Perimeter Park West, Inc. repaid $700,000 out of the proceeds from the sale of these two properties to the health insurance fund of KRS to repay the aforementioned loan. In addition to the repayment of the principal, interest in the amount of $127,298 was paid. The simple interest was computed at 5.04% and the period of 1,317 days outstanding (February 6, 2006, to September 15, 2009) was used for the calculation. Interest in the amount of $119,855 was accrued as a receivable as of June 30, 2009. In addition, KRS reimbursed KRS Perimeter Park West, Inc. for expenses it incurred as part of the purchase of the real property at 1300 Louisville Road; the amount reimbursed totaled $52,503.

The Kentucky Finance and Administration Cabinet, Office of Policy and Audit, completed a comprehensive audit of the 1300 Louisville Road property purchased and issued a report in July 2009. KRS has fully implemented the recommendations contained in the report.

Note M. Actuarial Valuation

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

The provisions of Governmental Accounting Standards Board (GASB) Statement No. 50, "Pension Disclosures, an Amendment of GASB No. 25 and No. 27", require that actuarial information included in the Notes to the Required Supplementary Information be moved to the Notes to the Financial Statements. In conjunction with the adoption of GASB No. 50, KRS has moved the following information from the Notes to the Required Supplementary Information to the Notes to the Financial Statements:

Pension Fund Valuation

	Non-Haz	Haz
Valuation Date	June 30, 2011	June 30, 2011
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	26 Years	26 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Actuarial Assumptions		
Investment Rate of Return	7.75%	7.75%
↘ Includes Price Inflation at	3.5%	3.5%
Projected Salary Increases	4.75-13.0%	4.5-20.0%
↘ Includes Wage Inflation at	4.5%	4.5%
Cost of Living Adjustment	None	None

Insurance Fund Valuation[1]

	Non-Haz	Haz
Valuation Date	June 30, 2011	June 30, 2011
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	26 Years	26 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	10.5-5.0%	10.5-5.0%
Medical Trend Assumption (Post-Medicare)	8.5-5.0%	8.5-5.0%
Year of Ultimate Trend	2019	2019
Actuarial Assumptions		
Investment Rate of Return	7.75%[2]	7.75%
↘ Includes Price Inflation at	3.5%	3.5%

[1]The actuarial valuation for the Insurance Fund involves estimates of the value of reported amounts and assumptions about the probability of future events. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations are based on the benefits provided under the terms of the insurance plan in effect at the time of each valuation and on the pattern of sharing costs between the employer and plan members as of the valuation date. Actuarial calculations of the insurance plan reflect a long-term perspective.

[2]The actuarial investment rate of return for developing insurance liabilities and contribution rates is 4.5% for the Kentucky Employees Retirement System (non-hazardous) and the State Police Retirement System. The lower rate is required under the parameters set by the Governmental Accounting Standards Board (GASB) Statements 43 and 45 given the lack of pre-funding of insurance benefits.

Unfunded Actuarial Accrued Liability KRS had the following Unfunded Actuarial Accrued Liabilities as of June 30 2011 and 2010:

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

AAL
Actuarial Accrued Liability

Unfunded Actuarial Accrued Liabilities as of June 30 Pension Fund

System	2011	2010
KERS Non-Haz	$7,455,155,945	$6,794,579,504
KERS Haz	210,544,939	185,420,442
CERS Non-Haz	3,288,473,842	2,912,164,989
CERS Haz	1,079,495,659	922,687,519
SPRS	348,798,770	307,867,514
Total Pension Funds	**$12,382,469,455**	**$11,122,719,968**

Unfunded Actuarial Accrued Liabilities as of June 30 Insurance Fund

System	2011	2010
KERS Non-Haz	$3,828,469,191	$3,994,794,413
KERS Haz	177,097,152	178,870,233
CERS Non-Haz	1,640,522,412	1,865,301,581
CERS Haz	876,912,481	981,933,446
SPRS	314,740,474	313,785,412
Total Insurance Funds	**$6,837,741,710**	**$7,334,685,085**
Total Unfunded Actuarial Accrued Liability	**$19,220,210,865**	**$18,457,405,053**

The Schedule of Funding Progress for Pension Funds begins on page 56. The Schedule of Funding Progress for the Insurance Fund begins on page 58.

Pension Fund Schedule of Funding Progress

System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non-Haz	$3,726,986,087	$11,182,142,032	33.3%	$1,731,632,748	430.5%
KERS Haz	510,748,505	721,293,444	70.8	133,053,792	158.2
CERS Non-Haz	5,629,611,183	8,918,085,025	63.1	2,276,595,948	144.4
KERS Haz	1,779,545,393	2,859,041,052	62.2	466,963,860	231.2
SPRS	285,580,631	634,379,401	45.0	48,692,616	716.3
Total Pension Funds	**$11,932,471,799**	**$24,314,940,954**	**49.1%**	**$4,656,938,964**	**265.9%**

Insurance Fund Schedule of Funding Progress

System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non-Haz	$451,620,442	$4,280,089,633	10.6%	$1,731,632,748	221.1%
KERS Haz	329,961,615	507,058,767	65.1	133,053,792	133.1
CERS Non-Haz	1,433,450,793	3,073,973,205	46.6	2,276,595,948	72.1
CERS Haz	770,790,274	1,647,702,755	46.8	466,963,860	187.8
SPRS	123,687,289	438,427,763	28.2	48,692,616	646.4
Total Pension Funds	**$3,109,510,413**	**$9,947,252,123**	**31.3%**	**$4,656,938,964**	**146.8%**
Totals	**$15,041,982,212**	**$34,262,193,077**	**43.9%**	**$9,313,877,928**	**206.4%**

NOTE **N.**

Note N. House Bill 1 Pension Reform

House Bill 1 was signed by the Governor of the Commonwealth on June 27, 2008. It contained a number of changes that KRS implemented effective September 1, 2008.

House Bill 1 also contained statutory changes to Kentucky Revised Statute 61.637, the law governing members who become reemployed following retirement.

Employee Contributions Employee contributions for non-hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 6% of all their creditable compensation to KRS. Five percent of this contribution was deposited to the individual employee's account, while the other 1% was deposited to an account created under 26 USC Section 401(h) in the KRS Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 9% of all their creditable compensation, with 8% credited to the member's account, and 1% deposited to the KRS Pension Fund 401(h) account. Interest paid each June on these members' accounts is set at a rate of 2.5%. If a member terminates his/her employment and applies to take a refund, the member is entitled to a full refund of contributions and interest in his/her account; however, the 1% contributed to the 401(h) account in the KRS Pension Fund is non-refundable and is forfeited.

Employer Rates Employer contribution rates for KERS and SPRS for fiscal 2011 were established in the 2008-2010 Executive Branch Budget (House Bill 460) during the 2008 session of the Kentucky General Assembly. Employer contribution rates for CERS for fiscal 2011 were enacted by House Bill 1 in the 2008 Special Legislative Session. The Employer contribution rates were established as follows (effective July 1, 2010):

Employer Contribution Rates
Fiscal Year 2011

System	Rate
KERS Non-Haz	16.98%
KERS Haz	26.12%
CERS Non-Haz	16.93%
KERS Haz	33.25%
SPRS	45.54%

Although the majority of changes in this legislation only impacted new hires on, or after, September 1, 2008, there were some changes that affected all members and retirees of KRS:

- **Cost of Living Adjustment** Beginning July 1, 2009, COLA for retirees will now be set at 1.5% each July 1. The Kentucky General Assembly may increase this percentage at any time, but only if appropriate funding is allocated. The General Assembly may also reduce or suspend the annual COLA.

COLA
Cost of Living Adjustment

- **Service Purchase Costs** The actuarial factors used to determine the cost to purchase a service will now assume the earliest date a member can retire with an unreduced benefit, and will also include a COLA. This change will result in an increased service purchase cost for any purchase calculated on, or after, September 1, 2008. This change will also affect the cost billed to employers for sick leave when an employee retires.
- **Payment Options** The Partial Lump Sum Payment Option was only available for those employees who retired on, or before, January 1, 2009.

Kentucky Revised Statute 61.637 was modified significantly by House Bill 1. Specifically, a retiree who is reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.

NOTE **O.**

Note O. Medicare Prescription Drug Plan

PDP
Prescription Drug Plan

In fiscal 2009, Kentucky Retirement Systems submitted an application to the Centers for Medicare & Medicaid Services, of the Department of Health & Human Services, to enter into a contract to offer a Medicare Prescription Drug Plan (PDP), as described in the Medicare Prescription Drug Benefit Final Rule published in the Federal Register on January 28, 2005 (70 Fed. Reg. 4194). As part of the application process, KRS was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents and is invested on a daily basis. On February 19, 2009, KRS established the KRS Insurance Prescription Drug Fund at its custodial bank (Northern Trust). As of June 30, 2011 and 2010, the Insolvency Account amounted to $100,620 and $100,446, respectively.

NOTE **P.**

Note P. Reimbursement of Retired-Reemployed Health Insurance

As a result of the passage of House Bill 1 on September 1, 2008, if a retiree is reemployed in a regular full time position and has chosen health insurance coverage through KRS, the employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate. As of June 30, 2011 and 2010, the reimbursement totaled $4,041,974 and $2,032,659, respectively.

Note Q. Louisville/Jefferson County Metro Firefighters

Firefighter employees of Louisville/Jefferson County Metro Government were awarded a total of $28,440,159 for back-pay. Of that total, $28,425,232, was determined to be the amount of creditable compensation. The total contributions owed to KRS were calculated by applying the contribution rate in effect for each fiscal year awarded (fiscal 1986 to fiscal 2009) while considering the appropriate participation status, hazardous or non-hazardous, of each employee. These calculations established that the total employer contribution owed is $5,113,511, and the total employee contribution owed is $2,083,310, for a total of $7,196,821. This amount was received on July 27, 2010.

KRS also calculated the impact of the increased final compensation caused by the retroactive benefits owed to those firefighters who have already initiated their retirement benefits. KRS will be required to pay retroactive benefit payments totaling $6,221,219, reflecting additional benefits due to the increase in final compensation. This liability was properly accounted for in fiscal 2011. The liability was paid on August 22, 2010, by issuance of benefit payments to the individual firefighter members.

Kentucky Revised Statute 61.675(3)(b) requires that KRS collect interest on unmade or delinquent contributions. The interest owed by the Metro Government, as calculated by KRS' actuaries, amounted to $12,020,731. Therefore, the total amount due KRS is $19,217,552. As stated earlier, $7,196,821 has been received.

Note R. Subsequent Events

AAL
Actuarial Accrued Liability

U**AAL**
Unfunded Actuarial Accrued Liability

Management has evaluated the period from June 30, 2011, to November 17, 2011, (the date the financial statements were available to be issued) for items requiring recognition or disclosure in the financial statements. There were no events occurring during the evaluation period that require disclosure, and there were no events that require recognition in the financial statements.

Required Supplementary Information

Schedule of Funding Progress for KERS Pension Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$6,000,513,743	$7,049,613,171	$1,049,099,428	85.1%	$1,645,412,496	63.8%
June 30, 2005	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
June 30, 2006	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
June 30, 2007	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
June 30, 2008	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
June 30, 2009	4,794,611,365	10,658,549,532	5,863,938,167	45.0	1,754,412,912	334.2
June 30, 2010	4,210,215,585	11,004,795,089	6,794,579,504	38.3	1,815,146,388	374.3
June 30, 2011	3,726,986,087	11,182,142,032	7,455,155,945	33.3	1,731,632,748	430.5
Hazardous						
June 30, 2004	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
June 30, 2005	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
June 30, 2006	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
June 30, 2007	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
June 30, 2008	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
June 30, 2009	502,503,287	674,411,781	171,908,494	74.5	146,043,576	117.7
June 30, 2010	502,729,009	688,149,451	185,420,442	73.1	143,557,944	129.2
June 30, 2011	510,748,505	721,293,444	210,544,239	70.8	133,053,792	158.2
Total						
June 30, 2004	$6,397,726,506	$7,453,191,207	$1,055,464,701	85.8%	$1,772,077,308	59.6%
June 30, 2005	$5,983,974,408	$8,018,069,096	$2,034,094,688	74.6%	$1,787,594,376	113.8%
June 30, 2006	$5,822,070,515	$9,503,482,150	$3,681,411,635	61.3%	$1,840,978,097	200.0%
June 30, 2007	$5,864,070,268	$10,044,931,606	$4,180,861,338	58.4%	$1,925,061,513	217.2%
June 30, 2008	$5,820,925,107	$10,747,700,812	$4,926,775,705	54.2%	$1,986,583,548	248.0%
June 30, 2009	$5,297,114,652	$11,332,961,313	$6,035,846,661	46.7%	$1,900,456,488	317.6%
June 30, 2010	$4,712,944,594	$11,692,944,540	$6,979,999,946	40.3%	$1,958,704,332	356.4%
June 30, 2011	$4,237,734,592	$11,903,435,476	$7,665,700,884	35.6%	$1,864,686,540	411.1%

** *Covered payroll was actuarially computed*

Schedule of Funding Progress for CERS Pension Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$5,187,851,530	$4,936,459,488	$(251,392,042)	105.1%	$1,826,870,880	(13.8)%
June 30, 2005	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
June 30, 2006	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
June 30, 2007	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
June 30, 2008	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
June 30, 2009	5,650,789,991	7,912,913,512	2,262,123,521	71.4	2,183,611,848	103.6
June 30, 2010	5,546,857,291	8,459,022,280	2,912,164,989	65.6	2,236,855,380	130.2
June 30, 2011	5,629,611,183	8,918,085,025	3,288,473,842	63.1	2,276,595,948	144.4
Hazardous						
June 30, 2004	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
June 30, 2005	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
June 30, 2006	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
June 30, 2007	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
June 30, 2008	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
June 30, 2009	1,751,487,540	2,578,444,600	826,957,060	67.9	469,315,464	176.2
June 30, 2010	1,749,464,388	2,672,151,907	922,687,519	65.5	466,548,660	197.8
June 30, 2011	1,779,545,393	2,859,041,052	1,079,495,659	62.2	466,963,860	231.2
Total						
June 30, 2004	$6,645,463,572	$6,577,289,608	$(68,173,964)	101.0%	$2,219,433,504	(3.1)%
June 30, 2005	$6,511,561,710	$7,180,774,025	$669,212,315	90.7%	$2,296,396,728	29.2%
June 30, 2006	$6,677,969,153	$8,199,712,037	$1,521,742,884	81.4%	$2,409,365,023	63.2%
June 30, 2007	$7,107,113,404	$8,868,182,305	$1,761,068,901	80.1%	$2,535,847,284	69.4%
June 30, 2008	$7,482,369,811	$9,707,339,786	$2,224,969,975	77.1%	$2,640,853,980	84.3%
June 30, 2009	$7,402,277,531	$10,491,358,112	$3,089,080,581	70.6%	$2,652,927,312	116.4%
June 30, 2010	$7,296,321,679	$11,131,174,187	$3,834,852,508	65.5%	$2,703,404,040	141.9%
June 30, 2011	$7,409,156,576	$11,777,126,077	$4,367,969,501	62.9%	$2,743,559,808	159.2%

Schedule of Funding Progress for SPRS Pension Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
June 30, 2004	$385,077,195	$437,482,425	$52,405,230	88.0%	$43,835,208	119.6%
June 30, 2005	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
June 30, 2006	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
June 30, 2007	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
June 30, 2008	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5
June 30, 2009	329,966,989	602,328,868	272,361,879	54.8	51,660,396	527.2
June 30, 2010	304,577,292	612,444,806	307,867,514	49.7	51,506,712	597.7
June 30, 2011	285,580,631	634,379,401	348,798,770	45.0	48,692,616	716.3

** *Covered payroll was actuarially computed*

Schedule of Funding Progress for KERS Insurance Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$600,586,961	$2,335,905,365	$1,735,318,404	25.7%	$1,645,412,496	105.5%
June 30, 2005	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
June 30, 2006	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
June 30, 2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
June 30, 2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
June 30, 2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
June 30, 2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
June 30, 2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
Hazardous						
June 30, 2004	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
June 30, 2005	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
June 30, 2006	212,833,318	621,237,856	408,404,538	34.3	138,747,320	294.4
June 30, 2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
June 30, 2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
June 30, 2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
June 30, 2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
June 30, 2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
Total						
June 30, 2004	$769,745,840	$2,659,408,928	$1,889,663,088	28.9%	$1,772,077,308	106.6%
June 30, 2005	$795,015,995	$3,067,403,883	$2,272,387,888	25.9%	$1,787,594,376	127.1%
June 30, 2006	$824,184,083	$8,436,718,630	$7,612,534,547	9.8%	$1,840,978,097	413.5%
June 30, 2007	$872,708,414	$5,706,198,036	$4,833,489,622	15.3%	$1,925,061,513	251.1%
June 30, 2008	$891,359,520	$5,973,156,499	$5,081,796,979	14.9%	$1,986,583,548	255.8%
June 30, 2009	$835,807,172	$4,998,457,741	$4,162,650,569	16.7%	$1,900,456,488	219.0%
June 30, 2010	$785,768,924	$4,959,433,570	$4,173,664,646	15.8%	$1,958,704,332	213.1%
June 30, 2011	$781,582,057	$4,787,148,400	$4,005,566,343	16.3%	$1,864,686,540	214.8%

** *Covered payroll was actuarially computed*

Schedule of Funding Progress for CERS Insurance Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$585,399,072	$2,438,734,696	$1,853,335,624	24.0%	$1,826,870,880	101.5%
June 30, 2005	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
June 30, 2006	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
June 30, 2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
June 30, 2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
June 30, 2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
June 30, 2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
June 30, 2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
Hazardous						
June 30, 2004	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
June 30, 2005	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
June 30, 2006	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
June 30, 2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
June 30, 2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
June 30, 2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
June 30, 2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
June 30, 2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
Total						
June 30, 2004	$895,977,234	$3,464,419,173	$2,568,441,939	25.9%	$2,219,433,504	115.7%
June 30, 2005	$1,023,122,410	$4,072,053,746	$3,048,931,336	25.1%	$2,296,396,728	132.8%
June 30, 2006	$1,200,511,632	$6,535,705,010	$5,335,193,378	18.4%	$2,409,365,023	221.4%
June 30, 2007	$1,473,212,449	$4,980,426,081	$3,507,213,632	29.6%	$2,535,847,284	138.3%
June 30, 2008	$1,782,409,489	$5,352,976,423	$3,570,566,934	33.3%	$2,640,853,980	135.2%
June 30, 2009	$1,867,762,551	$4,663,934,281	$2,796,171,730	40.0%	$2,652,927,312	105.4%
June 30, 2010	$1,985,808,363	$4,833,043,390	$2,847,235,027	41.1%	$2,703,404,040	105.3%
June 30, 2011	$2,204,241,067	$4,721,675,960	$2,517,434,893	46.7%	$2,743,559,808	91.8%

Schedule of Funding Progress for SPRS Insurance Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
June 30, 2004	$96,622,908	$197,604,301	$100,981,393	48.9%	$43,835,208	230.4%
June 30, 2005	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
June 30, 2006	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
June 30, 2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
June 30, 2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
June 30, 2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
June 30, 2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2
June 30, 2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4

** *Covered payroll was actuarially computed*

Schedule of Contributions from Employers & Other Contributing Entities
KERS Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$47,739,067	$21,696,543	-	45.4%
June 30, 2005	85,798,943	50,332,750	-	58.7
June 30, 2006	129,125,800	60,680,607	-	47.0
June 30, 2007	176,774,106	88,248,677	-	49.9
June 30, 2008	264,742,985	104,655,217	-	39.5
June 30, 2009	294,495,010	112,383,083	-	38.2
June 30, 2010	348,494,678	144,050,560	-	41.3
June 30, 2011	381,915,236	193,754,471	-	50.7
Insurance Funds				
June 30, 2004	77,951,553	78,016,737	-	100.1
June 30, 2005	86,974,271	49,909,228	-	57.4
June 30, 2006	202,498,302	47,634,639	-	23.5
June 30, 2007	219,768,964	64,014,332	10,744,049	34.0
June 30, 2008	558,745,820	56,744,942	6,633,538	11.3
June 30, 2009	362,707,378	74,542,932	8,167,982	22.8
June 30, 2010	376,556,187	93,976,917	8,550,914	27.2
June 30, 2011	294,897,813	129,335,552	-	43.9
Total				
June 30, 2004	125,690,620	99,713,280		79.3
June 30, 2005	172,773,214	100,241,978		58.0
June 30, 2006	331,624,102	108,315,246		32.7
June 30, 2007	396,543,070	152,263,009	10,744,049	41.1
June 30, 2008	823,488,805	161,400,159	6,633,538	20.4
June 30, 2009	657,202,388	186,926,015	8,167,982	29.7
June 30, 2010	725,050,865	238,027,477	8,550,914	34.0
June 30, 2011	676,813,049	323,090,023	-	47.7

Schedule of Contributions from Employers & Other Contributing Entities
KERS Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$9,600,978	$9,769,580	-	101.8%
June 30, 2005	9,449,878	9,758,547	-	103.3
June 30, 2006	10,787,472	10,803,206	-	100.1
June 30, 2007	12,219,689	13,237,321	-	108.3
June 30, 2008	14,147,341	15,257,079	-	107.8
June 30, 2009	15,708,254	15,843,289	-	100.9
June 30, 2010	17,814,630	17,658,058	-	99.1
June 30, 2011	20,605,070	19,140,508	-	92.9
Insurance Funds				
June 30, 2004	14,942,092	14,959,617	-	100.1
June 30, 2005	15,892,977	15,395,977	-	96.9
June 30, 2006	28,517,563	17,011,745	-	59.7
June 30, 2007	31,304,778	19,534,819	104,669	62.7
June 30, 2008	51,214,929	21,997,341	73,891	43.1
June 30, 2009	34,670,467	20,807,204	186,081	60.6
June 30, 2010	35,045,278	21,921,535	319,059	63.5
June 30, 2011	29,585,257	19,952,580	-	67.4
Total				
June 30, 2004	24,543,070	24,729,197	-	100.8
June 30, 2005	25,342,855	25,154,524	-	99.3
June 30, 2006	39,305,035	27,814,951	-	70.8
June 30, 2007	43,524,467	32,772,140	104,669	75.5
June 30, 2008	65,362,270	37,254,420	73,891	57.1
June 30, 2009	50,378,721	36,650,493	186,081	73.1
June 30, 2010	52,859,908	39,579,593	319,059	75.5
June 30, 2011	50,190,327	39,093,088	-	77.9

Schedule of Contributions from Employers & Other Contributing Entities
CERS Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$43,111,505	$44,028,465	-	102.1%
June 30, 2005	53,117,955	54,616,800	-	102.8
June 30, 2006	83,123,669	90,834,052	-	109.3
June 30, 2007	112,508,305	124,260,850	-	110.4
June 30, 2008	138,311,398	150,925,334	-	109.1
June 30, 2009	161,097,151	179,284,551	-	111.3
June 30, 2010	186,724,383	207,075,842	-	110.9
June 30, 2011	218,984,628	248,518,574	-	113.5
Insurance Funds				
June 30, 2004	89,289,520	89,344,241	-	100.1
June 30, 2005	106,612,633	106,638,253	-	100.0
June 30, 2006	272,942,757	128,867,817	-	47.2
June 30, 2007	285,600,490	147,608,801	9,623,431	55.1
June 30, 2008	406,541,729	196,110,111	6,003,181	49.7
June 30, 2009	264,733,532	123,761,611	7,623,628	49.6
June 30, 2010	266,331,326	166,607,097	9,156,991	66.0
June 30, 2011	213,429,424	186,885,576	-	87.6
Total				
June 30, 2004	132,401,025	133,372,706		100.7
June 30, 2005	159,730,588	161,255,053		101.0
June 30, 2006	356,066,426	219,701,869		61.7
June 30, 2007	398,108,795	271,869,651	9,623,431	70.7
June 30, 2008	544,853,127	347,035,445	6,003,181	64.8
June 30, 2009	425,830,683	303,046,162	7,623,628	73.0
June 30, 2010	453,055,709	373,682,939	9,156,991	84.5
June 30, 2011	432,414,052	435,404,150	-	100.7

Schedule of Contributions from Employers & Other Contributing Entities
CERS Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$27,050,382	$27,640,775	-	102.2%
June 30, 2005	39,437,725	39,947,747	-	101.3
June 30, 2006	44,059,404	49,976,485	-	113.4
June 30, 2007	53,889,838	61,553,118	-	114.2
June 30, 2008	64,082,063	72,154,734	-	112.6
June 30, 2009	69,056,365	78,151,677	-	113.2
June 30, 2010	76,390,669	82,887,128	-	108.5
June 30, 2011	78,765,602	85,078,181	-	108.0
Insurance Funds				
June 30, 2004	47,018,046	47,036,777	-	100.0
June 30, 2005	54,094,495	54,106,577	-	100.0
June 30, 2006	98,297,535	64,853,778	-	66.0
June 30, 2007	115,938,899	70,072,785	656,523	61.0
June 30, 2008	168,723,639	90,113,200	419,774	53.7
June 30, 2009	126,757,348	70,785,241	627,938	56.3
June 30, 2010	129,227,449	83,042,875	1,493,440	65.4
June 30, 2011	109,226,667	98,592,286	-	90.3
Total				
June 30, 2004	74,068,428	74,677,552	-	100.8
June 30, 2005	93,532,220	94,054,324	-	100.6
June 30, 2006	142,356,939	114,830,263	-	80.7
June 30, 2007	169,828,737	131,625,903	656,523	77.9
June 30, 2008	232,805,702	162,267,934	419,774	70.0
June 30, 2009	195,813,713	148,936,918	627,938	76.4
June 30, 2010	205,618,118	165,930,003	1,493,440	81.4
June 30, 2011	187,992,269	183,670,467	-	97.7

Schedule of Contributions from Employers & Other Contributing Entities
SPRS

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$1,175,711	$1,152,752	-	98.0%
June 30, 2005	3,730,805	2,851,461	-	76.4
June 30, 2006	6,352,777	4,244,445	-	66.8
June 30, 2007	9,023,665	6,142,326	-	68.1
June 30, 2008	13,823,490	7,443,277	-	53.8
June 30, 2009	15,951,841	8,186,259	-	51.3
June 30, 2010	18,764,941	9,489,399	-	50.6
June 30, 2011	18,463,372	12,657,225		68.6
Insurance Funds				
June 30, 2004	8,434,834	8,455,498	-	100.2
June 30, 2005	8,608,536	6,631,031	-	77.0
June 30, 2006	12,554,648	6,880,517	-	54.8
June 30, 2007	15,233,320	6,488,600	361,942	45.0
June 30, 2008	43,469,735	7,329,229	183,564	17.3
June 30, 2009	29,324,666	7,413,552	229,240	26.1
June 30, 2010	30,302,151	8,643,112	273,684	29.4
June 30, 2011	25,772,574	11,050,964	-	42.9
Total				
June 30, 2004	9,610,545	9,608,250	-	100.0
June 30, 2005	12,339,341	9,482,492	-	76.8
June 30, 2006	18,907,425	11,124,962	-	58.8
June 30, 2007	24,256,985	12,630,926	361,942	53.6
June 30, 2008	57,293,225	14,772,506	183,564	26.1
June 30, 2009	45,276,507	15,599,811	229,240	35.0
June 30, 2010	49,067,092	18,132,511	273,684	37.5
June 30, 2011	44,235,946	23,708,189	-	53.6

Additional Supporting Schedules

Schedule of Administrative Expenses (in Thousands)

Expense	2011	2010
Personal Services		
Salaries and Per Diem	$13,889	$13,678
Fringe Benefits	5,179	4,407
Tuition Assistance	23	27
Total Personal Services	$19,091	$18,112
Contractual Services		
Actuarial	$270	$251
Audit	111	58
Legal	231	308
Medical	306	273
Contractual	1,353	719
Total Contractual Services	$2,271	$1,609
Communication		
Printing	$286	$302
Telephone	118	143
Postage	593	577
Travel	118	163
Total Communication	$1,115	$1,185
Rentals		
Office Space	$1,125	$1,106
Equipment	90	91
Total Rentals	$1,215	$1,197
Miscellaneous		
Utilities	$217	$195
Supplies	176	156
Insurance	78	80
Maintanence	5	4
Other	-	1,447
Total Miscellaneous	$476	$1,882
Depreciation/Amortization	750	863
Total Pension Fund Administrative Expenses	24,918	24,848
Healthcare Administrative Fees	10,412	9,703
Total Administrative Expenses	**$35,330**	**$34,551**

Schedule of Investment Expenses (in Thousands)

	2011	2010
Pension Funds		
Security Lending Fees		
↘ Broker Rebates	$2,277	$1,755
↘ Lending Agent Fees	1,162	1,445
Total Security Lending	3,439	3,200
Common Stock Commissions	7,643	7,374
Contractual Services		
↘ Investment Management	47,265	33,492
↘ Security Custody	203	155
↘ Investment Consultant	876	880
↘ Investment Related Travel	27	29
↘ Software	148	125
↘ Miscellaneous	113	10
↘ Legal Counsel	943	736
Total Contractual Services	49,575	35,427
Insurance Funds		
Security Lending Fees		
↘ Broker Rebates	240	71
↘ Lending Agent Fees	325	306
Total Security Lending	565	377
Common Stock Commissions	1,236	1,200
Contractual Services		
↘ Investment Management	7,323	5,007
↘ Security Custody	47	32
↘ Investment Consultant	293	270
↘ Investment Related Travel	6	6
↘ Software	26	2
↘ Miscellaneous	34	26
↘ Legal Counsel	23	22
Total Contractual Services	7,752	5,365
Total Investment Expenses	**$70,210**	**$52,943**

Schedule of Professional Consultant Fees (in Thousands)

Fees	2011	2010
Actuarial Services	$270	$251
Medical Review Services	306	273
Audit Services	111	58
Legal Counsel	231	308
Compliance	771	-
Workflow	209	392
Healthcare	113	166
Banking	55	47
Miscellaneous	205	114
Total	**$2,271**	**$1,609**

Report on Internal Control Over Financial Reporting, Compliance & Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards To the Board of Trustees, Kentucky Retirement Systems in Frankfort, Kentucky: We have audited the financial statements of KRS as of and for the fiscal year ended June 30, 2011, in accordance with auditing standards generally accepted in the United States and applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General.

Internal Control Over Financial Reporting In planning and performing our audit, we considered KRS' internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of KRS' internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of KRS' internal control over financial reporting. A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance & Other Matters As part of obtaining reasonable assurance about whether KRS' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*. This report is intended solely for the information of the audit committee, management, and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

Dean Dorton Allen Ford, PLLC

Dean Dorton Allen Ford, PLLC
November 17, 2011 Lexington, Kentucky

SCHEDULE OF **FINDING & RESPONSE**

Our audit disclosed no findings which are required to be reported in accordance with Government Auditing Standards.

Investments Section

A New Horizon Coming to Fruition

"Some argue that the experience of the last couple of years is reshaping America and creating a 'new normal'; one of diminished expectations where households, businesses, and governments must de-lever and shrink the debt on their respective balance sheets. Lower consumption rates will be born from the act of de-leveraging, and thus will result in slower economic growth, and higher structural unemployment. This appears to be taking shape as America has already shifted to be a nation of net savers. A new horizon may be emerging as the country goes back to the basics."

Excerpt from 2010 CAFR, ***New Horizon*** *(page 90)*

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One Year Later This idea appears to still be holding true and has even begun to manifest itself into reality. In the two plus years after the initial credit crisis, the surge of debt incurred in the 10 years leading up to the meltdown has been reduced by 20%. To add some relevance, the de-levering that was required post The Great Depression lasted for 18 years. It appears the path may be shorter this time. However, slower economic growth is painfully apparent with the average expansion of gross domestic product here in the U.S. hovering around 2% annually. While economic activity continues to move forward, it is growing at an extremely sluggish pace in comparison to recoveries of the past, and most concernedly, at too slow a pace to meaningfully lower the excess capacity in the economy, in particular, the stubbornly high unemployment rate.

De-Levering The need to de-lever has been addressed by much of the corporate community over the last couple of years, cost-cutting at nearly every point possible. Today, corporations are the healthiest they have been in years with lean balance sheets and ample cash balances poised for growth. Consumers and governments at all levels must follow suit. As much as de-levering is needed for the long term health of our economy, growth is also needed. The problem is that growth typically requires increased spending, which runs counter to our efforts for debt reduction. The Federal Reserve has continued to hold short-term rates near zero for quite some time and has signaled this will not change for at least two years. Low rates are supposed to increase borrowing and thus lead to economic expansion and investment. Low rates also encourage investors to reach for yield, reflating asset prices and hopefully having a positive wealth effect on personal spending and increased consumer confidence.

Financing one's existence with an abundance of debt is not sustainable. This has led some to call for the need and a reemergence of production in America. Arguments have been made that conditions for such are taking shape. While emerging economies such as China (now the second largest economy) and India have experienced substantial wage growth over the past decade, the U.S.' wage rate has flat-lined. While still heavily tilted towards the U.S., the wage rate disparity has narrowed and combined with an excess supply of labor here at home, it makes this idea fairly intriguing. Many argue this is a far cry from happening yet, still others believe a renaissance of American manufacturing could be on the horizon.

Pension Funds Respond Lower growth rates and higher unemployment at home, a massive European sovereign debt crisis, and rising inflation threatening to slow emerging economies make for volatile global markets. Questions surrounding how pension funds will meet their expected return targets and thus fund their liabilities are valid. Many funds are faced with the need to boost returns in this environment and have turned to alternative investment markets such as private equity, real estate, real return strategies, and absolute return strategies. This change has been accomplished most often at the expense of traditional public equities allocations. KRS has also moved in this direction. New target asset allocations were approved during this fiscal year for each plan, in response to recently completed asset liability modeling studies. These new asset allocation guidelines generally call for a decrease in U.S. public equity, a more diversified fixed income portfolio, and new allocations to the real return and absolute return buckets, so going forward, the portfolio is more diversified than ever.

INVESTMENT **SUMMARY**

Investment Policies
Visit kyret.ky.gov/index.php/investments to read our Statement of Investment policy. Other policies include Brokerage, Securities Trading, Placement Agents, Proxy Voting, and more.

The Board of Trustees is charged with the responsibility of investing the Systems' assets to provide for the benefits of the members of the Systems. To achieve that goal the Board follows a policy of preserving capital, while seeking various means of enhancing revenues and protecting against undue losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in formal compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the Systems. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policies, objectives and strategies for both the pension and insurance portfolios.

Investment Policy The Board of Trustees approved the current target asset allocation beginning July 1, 2007. As of June 30, 2011, the KRS Pension fund's policy allocation invests the following. (Note: This allocation is changing as of July 1, 2011.)

Board Investment Policy for Fund Asset Allocation

Asset	Pension Fund	Insurance Fund
U.S. Equity	30.0%	40.0%
International Equity	20.0%	30.0%
Core Fixed	25.0%	-
TIPS	10.0%	12.0%
Alternatives	12.0%	15.0%
Cash	3.0%	3.0%

TIPS
Treasury Inflation Protection Securities

INVESTMENT **OBJECTIVES**

Investing for Kentucky
In keeping with the Trustees' fiduciary responsibility, the Board encourages the investment of assets in securities of corporations that provide a positive contribution to Kentucky's economy.

The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

Short-Term The returns of the particular asset classes of the managed funds, measured on a year-to-year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices.

Long-Term The total assets of the Systems should achieve a return measured over an actuarially appropriate time period (estimated to be 30 to 40 years) which exceeds the actuarially required rate of return of 7.75% while also exceeding the return achieved by its total fund benchmark.

Diversification Portfolios are diversified through the use of multiple asset classes. Asset allocations are revisited on a periodic basis and represent an efficient allocation to achieve overall return and risk characteristics. The individual asset classes are diversified through the use of multiple portfolios that are managed both by the Investment Division Staff and by professional external investment advisors. Finally, each of the asset classes are diversified through the selection of individual securities. Each portfolio advisor is afforded discretion to diversify within Board parameters.

★ **Note:** Due to the recently approved Asset Liability Model study, cash was raised above the normal policy limits in both the pension and insurance funds in anticipation of funding newly approved asset classes during the first quarter of the 2012 fiscal year.

Rebalancing Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with KRS' Statement of Investment Policy. Such rebalancing is necessary to reflect sizeable cash flows and performance imbalances among asset classes and investment advisors. Rebalancing policies generally call for an immediate rebalancing to within its allocation ranges, if an asset class exceeds or falls below its target allocation by 10%. The Pension and Insurance (with the exception of cash) portfolios were operating within the ranges established by the investment policies.

Asset Allocation
Board Policy vs. Actual (Rebalanced)

Asset	Policy's Pension Asset Allocation	Actual Pension Asset Allocation	Policy's Insurance Asset Allocation	Actual Insurance Asset Allocation
U.S. Equity	30.0%	23.7%	40.0%	31.0%
International Equity	20.0%	23.9%	30.0%	24.9%
Core Fixed	25.0%	18.5%	-	12.5%
Opportunistic Fixed	-	1.7%	-	1.0%
TIPS	10.0%	9.9%	12.0%	10.2%
High Yield	-	1.0%	-	0.9%
Non-U.S. Fixed Income	-	1.0%	-	0.9%
Alternatives	12.0%	12.1%	15.0%	6.9%
Absolute Return	-	0.6%	-	1.0%
Currency Overlay	-	-0.1%	-	-0.1%
Cash	3.0%	7.6%	3.0%	10.7%

The objectives of the portfolios are to produce results that ***exceed the stated goals****.*

Performance Review Procedures At least once each quarter the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. On a periodic basis (daily, monthly, quarterly), the Internal Audit Department performs tests to assure compliance with the restrictions imposed by the Investment Policy. Note: This function/responsibility will remain that of the Compliance Officer; however, that position was reassigned to report to the Internal Audit Department beginning in the fall of 2009.

Consulting The Board employs industry-leading external consultants to assist in determining and reviewing the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from each consulting firm utilized follows this introduction and discusses current allocations, performance and significant changes during the fiscal year.

ECONOMIC REVIEW

By Rebecca A. Gratsinger
CEO, Principal
R.V. Kuhns & Associates

*The fiscal year began with investors ignoring dreary economic forecasts surrounding serious sovereign debt issues in Europe and fears of a double-dip recession in the U.S., embracing figures that suggested global economies were **still growing**.*

By November 2010, the Federal Reserve had formally announced that it would purchase $600 billion of Treasurys (the second quantitative easing program nicknamed "QE2"), which lifted U.S. stocks and helped strengthen the dollar against the euro that struggled under the negative impact of the European debt crisis.

QE2
Quantitative Easing

GDP
Gross Domestic Product

Fed
Federal Reserve

The second half of the fiscal year saw the optimism of the first six months start to fade away as several events unfolded. The social and political unrest in several Middle Eastern and North African oil-producing countries raised energy concerns and provided a headwind to the global equity rally initiated during the first half. The largest recorded earthquake to strike Japan as well as the tsunami and nuclear crisis that followed caused markets to stumble. European sovereign debt fears escalated as Portugal's government collapsed and Greece continued to teeter on the brink of default. Finally, the possibility that the U.S. would default on its debt because of a political impasse about the debt ceiling contributed to the fall of the U.S. dollar against the euro and the yen.

Commodities Commodity prices surged during the first nine months of the fiscal year before retreating toward then end of the fiscal year. Oil prices rose above $100 per barrel for the first time since 2008, but settled back to $95 per barrel by June 2011. Although rising farm food and crude oil prices pushed headline inflation higher in the U.S., core inflation (which excludes food and energy prices) hovered around 1.6% throughout the by year-end 2010.

Inflationary concerns continued to materialize in emerging markets, as evidenced by the People's Bank of China tightening monetary policy for most of the fiscal year by raising loan and deposit rates as well as increasing the reserve-requirement ratio.

In the U.S., Real Gross Domestic Product (GDP) fell from 3.3% at the end of June 2010 to an estimated 1.6% by June 2011[1]. The recovery of the job market looked promising with the unemployment rate falling to a low of 8.8% in March 2011 and a 4-week average of jobless claims at 389,500 — a level generally considered consistent with sustainable employment growth — before climbing back to 9.2% by the end of the fiscal year[2]. Despite a year-over-year increase in personal consumption expenditures, much of that growth came at the expense of consumer personal savings, which fell over the same period.

The Fed maintained a Federal Funds Target Rate range of 0% to 0.25% throughout the twelve months and stated that it intended to maintain low interest rates for an extended period of time after ending the QE2 program.

[1]Based on data provided by the U.S. Department of Commerce, Bureau of Economic Analysis

[2]Based on data provided by the U.S. Department of Labor

Domestic Economic Indicators as of June 30, 2011

Indicator	June 2011	June 2010	Yr/Yr	20 Year	40 Year
Capacity Utilization	76.70	74.50	▲	79.50	80.40
↘ Unemployment Rate	9.20%	9.50%	▼	5.90%	6.40%
↘ PMI - Manufacturing	55.30	55.30	-	52.10	52.40
↘ Baltic Dry Index - Shipping	1,413	2,406	▼	2,433	2,127
Real GDP Year-Over-Year	1.60%	3.30%	▼	2.50%	2.90%
Consumer Confidence	57.60	54.30	▲	93.19	92.75
Breakeven Inflation - 10 Year	2.38	1.84	▲	N/A	N/A
CPI Year-Over-Year (Headline)*	3.60%	1.10%	▲	2.60%	4.40%
CPI Year-Over-Year (Core)*	1.60%	0.90%	▲	2.40%	4.30%
PPI Year-Over-Year	7.00%	2.70%	▲	2.20%	4.00%
M2 Year-Over-Year	6.00%	1.60%	▲	5.30%	6.90%
Personal Savings	5.50%	5.80%	▼	4.30%	6.60%
Disposable Personal Income	0.20%	0.10%	▲	0.40%	0.60%
Personal Consumption Expenditures	2.60%	1.50%	▲	2.10%	3.90%
US Dollar Total Weighted Index	69.16	78.82	▼	88.56	96.21
WTI Crude Oil per Barrel	$95.00	$76.00	▲	$39.00	$35.00
Gold Spot per Oz**	$1,500.00	$1,242.00	▲	$274.00	$315.00

* *CPI figures are cyclically adjusted.*
** *20- and 40-year average Gold spot prices are adjusted for inflation (based on data courtesy of Bloomberg Professional Services)*

CAPITAL MARKETS REVIEW

*Global equities rallied throughout the fiscal year as investors **sought riskier securities** to earn higher returns.*

Despite slumps in August, May, and June, most developed and emerging countries posted double-digit returns close to or above 30% for the period ending June 30, 2011. In most cases, small and mid-sized company stocks outperformed large cap stocks and growth-oriented stocks produced better returns than value-oriented stocks. The most notable laggards were stocks within the Portugal, Italy, Ireland, Greece, and Spain markets, which continued to suffer under their significant economic woes. While economically sensitive sectors led the rally, defensive sectors, such as health care, consumer staples, and utilities, led the way toward the end of the fiscal year. As noted earlier, commodities prices provided investors with strong gains, accompanied by inflationary concerns in numerous emerging markets — notably China, India, and Brazil.

Fixed Income Within the fixed income markets, Treasury yields declined to historic lows and credit spreads tightened during the first three months of the fiscal year.

One-Year Trailing Performance through June 30, 2011

Index	Description	Return
S&P 500	Large Cap U.S. Equity	30.70%
R Mid Cap	Mid Cap U.S. Equity	38.50%
R 2000	Small Cap U.S. Equity	37.40%
MSCI EAFE (Gross)	Large Cap International Equity	30.90%
MSCI EAFE SC (Gross)	Small Cap International Equity	36.80%
MSCI Emg Mkts (Gross)	Emerging Markets Equity	28.20%
BC US Agg Bond	U.S. Investment Grade Bonds	3.90%
BC US Trsy	U.S. Treasury Bonds	2.20%
BC US Trsy: US TIPS	U.S. TIPS	7.70%
BC US Corp: Hi Yld	U.S. High Yield Bonds	15.60%
Wilshire US REIT	U.S. Real Estate Investment Trusts	35.60%
BofA ML 3 Mo US T-Bill	U.S. Cash Equivalents	0.20%

Treasuries Investor sentiment about Treasurys shifted throughout the period as investors attempted to project how long the Fed would keep short-term interest rates low, deal with the uncertain results of expanding the Fed balance sheet, and navigate the possibility of default among certain European countries. Over the twelve-month period ending June 30, 2011, developed market and emerging high yield bonds earned the strongest returns compared to government and investment-grade credit securities.

Of note, average price on high yield debt broke the 100-cents-on-the-dollar barrier in September 2010. The table to the right summarizes returns earned by the major markets for trailing one-year period ending June 30, 2011.

ASSET ALLOCATION REVIEW

RVK
R.V. Kuhns & Associates, Inc.

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Towards the end of the fiscal year 2009-10, the Board commissioned RVK to conduct asset-liability studies for the KERS, CERS, and SPRS pension and insurance plans. The asset-liability studies assisted the Board with deciding on the most effective asset allocation strategies for each pension and insurance plan under its purview in order to lower risk, control the level of illiquidity in the portfolios, and generate a return expected to exceed the actuarially assumed rate of return of 7.75%.

All of the asset-liability studies were completed by the first quarter of the fiscal year 2010-11 and the Board has been transitioning to the new plan specific target asset allocations in a prudent manner. In May 2011, the statement of investment policy issued by the Board incorporated the new plan specific target asset allocations to be effective at the beginning of the fiscal year 2011-12.

PENSION PLAN REVIEW

TIPS
Treasury Inflation Protection Securities

The market value of the KRS Pension Plan assets increased from $10.5 billion on June 30, 2010 to $11.5 billion on June 30, 2011. The Fund's investments collectively returned an impressive 18.9% return for the fiscal year; however, compared to the 20.3% return earned by its target allocation benchmark, the Fund underperformed by 1.4%. The Fund's three-year annualized return of 4.5% slightly trailed its target allocation benchmark of 5.0%. The Fund's five-year annualized return of 4.7% also trailed the target allocation benchmark's return of 5.1%. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal.

The System's current pension plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging). The fixed

KERS & CERS Pension Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Current Target	New Target
Domestic Equity	$2,669,499,143	23.7%	30.0%	20.0%
Non U.S. Equity	$2,687,267,243	23.9%	20.0%	24.0%
Core Fixed Income	$2,071,995,848	18.4%	25.0%	10.0%
High Yield	$316,066,041	2.8%	-	5.0%
Global Fixed Income	$115,819,637	1.0%	-	5.0%
Real Return	$1,108,607,359	9.8%	10.0%	10.0%
Real Estate	$90,740,590	0.8%	5.0%	5.0%
Absolute Return	$71,808,225	0.6%	-	10.0%
Private Equity	$1,271,752,639	11.3%	7.0%	10.0%
Cash Equivalent	$851,383,165	7.6%	3.0%	1.0%
Total Fund (excluding SPRS)	**$11,254,939,890**	**100.0%**	**100.0%**	**100.0%**
Total Fund	**$11,532,850,302**			

SPRS Pension Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Current Target	New Target
Domestic Equity	$63,334,412	22.8%	30.0%	20.0%
Non U.S. Equity	$66,881,172	24.1%	20.0%	24.0%
Core Fixed Income	$59,380,684	21.4%	25.0%	10.0%
High Yield	$2,870,902	1.0%	-	5.0%
Global Fixed Income	$2,835,762	1.0%	-	5.0%
Real Return	$27,431,504	9.9%	10.0%	10.0%
Real Estate	$2,804,506	1.0%	5.0%	5.0%
Absolute Return	$1,307,803	0.5%	-	12.0%
Private Equity	$30,888,981	11.1%	7.0%	7.0%
Cash Equivalent	$20,174,685	7.3%	3.0%	2.0%
Total Fund	**$277,910,412**	**100.0%**	**100.0%**	**100.0%**

New Non-U.S. Equity target consists of 20% dedicated Non-U.S. Equity, 4% dedicated Emerging Markets. New Target is effective July 1, 2011.

income portfolio primarily consists of U.S. investment grade investments with small allocations to high yield and global fixed income securities. The System also invests in real return assets (currently TIPS), real estate, absolute return, and private equity. As of June 30, 2011, the portfolio's asset allocation was in transition from its current target to its new plan specific target asset allocation. As shown above, the new target asset allocation for KRS (not including SPRS) are all the same. The new target asset allocation for the SPRS plan, as shown below, is slightly different with a smaller allocation to private equity and a greater allocation to absolute return strategies and cash equivalents. For each plan, the current deviations to the targets are being brought closer to the new target allocations in a prudent manner over time.

INSURANCE PLAN REVIEW

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

The market value of the KRS Insurance Plan assets increased from $2.4 billion on June 30, 2010 to $3.0 billion on June 30, 2011. The Fund's investments returned 23.5% for the fiscal year; however, compared to the target allocation benchmark of 26.9%, the Fund underperformed by 3.4%. As a result of an impressive one-year return, the Fund's three-year annualized return went from a -6.5% as of June 30, 2010, to a positive 3.1%; however, still slightly lagging its target allocation benchmark of 3.3%. The Fund's five-year annualized return of 3.8% also lagged its target allocation benchmark of 3.9%. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal.

CERS & SPRS Insurance Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Current Target	New Target
Domestic Equity	$764,761,605	33.5%	40.0%	20.0%
Non U.S. Equity	$566,215,239	24.8%	30.0%	24.0%
Fixed Income	$590,551,279	25.9%	12.0%	30.0%
Real Estate	$7,173,050	0.3%	5.0%	5.0%
Absolute Return	$23,233,409	1.0%	-	10.0%
Private Equity	$133,676,804	5.9%	10.0%	10.0%
Cash Equivalent	$198,553,344	8.7%	3.0%	1.0%
Total Fund (excluding KERS)	**$2,284,164,730**	**100.0%**	**100.0%**	**100.0%**
Total Fund	**$3,026,302,995**			

New Fixed Income target consists of 10% Core Fixed Income, 5% High Yield, 5% Global Fixed Income, and 10% Real Return. New Non-U.S. Equity target consists of 20% dedicated Non-U.S. Equity and 4% dedicated Emerging Markets. New Target is effective July 1, 2011.

KERS Non-Haz Pension Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Current Target	New Target
Domestic Equity	$85,473,432	20.3%	40.0%	28.0%
Non U.S. Equity	$108,752,185	25.9%	30.0%	27.0%
Fixed Income	$100,293,225	23.9%	12.0%	35.0%
Real Estate	$872,002	0.2%	5.0%	-
Absolute Return	$4,686,523	1.1%	-	10.0%
Private Equity	$43,417,019	10.3%	10.0%	-
Cash Equivalent	$77,004,576	18.3%	3.0%	-
Total Fund	**$420,498,961**	**100.0%**	**100.0%**	**100.0%**

New Fixed Income target consists of 15% Core Fixed Income and 20% Real Return. New Target is effective July 1, 2011.

The System's current insurance plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging). The fixed income portfolio primarily consists of U.S. investment grade investments and TIPS with small allocations to high yield and global fixed income securities. KRS also invests in real estate, absolute return strategies, and private equity.

Asset Allocation As of June 30, 2011, the portfolio's asset allocation was in transition from its current target to its new plan specific target asset allocation. As shown at left, the new target asset allocation for CERS Non-Haz, CERS Haz, and SPRS plans are all the same. The new target asset allocation for the KERS Haz plan varies slightly from the majority of the other insurance plans with a smaller allocation to fixed income securities (7% real return assets), and a greater allocation to absolute return strategies and cash equivalents.

Target Allocation The new target asset allocation for the KERS Non-Haz Plan is the only plan that is significantly different than the other plans with no allocation to real estate, private equity, or cash equivalents and a greater allocation to fixed income (more specifically real return assets). For each plan, the current deviations to the targets are being brought closer to the new target allocations in a prudent manner over time.

"We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the System to meet its long-term goals and objectives."

Rebecca A. Gratsinger
CEO, Principal
R.V. Kuhns & Associates

KERS Haz Pension Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Current Target	New Target
Domestic Equity	$87,504,205	27.2%	40.0%	20.0%
Non U.S. Equity	$76,461,094	23.8%	30.0%	24.0%
Fixed Income	$82,682,066	25.7%	12.0%	27.0%
Real Estate	$1,052,526	0.3%	5.0%	5.0%
Absolute Return	$3,138,413	1.0%	-	12.0%
Private Equity	$21,252,995	6.6%	10.0%	10.0%
Cash Equivalent	$49,548,006	15.4%	3.0%	2.0%
Total Fund	**$321,639,304**	**100.0%**	**100.0%**	**100.0%**

New Fixed Income target consists of 10% Core Fixed Income, 5% High Yield, 5% Global Fixed Income, and 7% Real Return. New Non-U.S. Equity target consists of 20% dedicated Non-U.S. Equity and 4% dedicated Emerging Markets. New Target is effective July 1, 2011.

The System started to make structural shifts within the domestic equity portfolio at the end of the fiscal year. Three new all-cap managers were added to the portfolio: River Road Asset Management, Westwood Management and Westfield Capital.

S&P
Standard & Poors

PIMCO
Pacific Investment Management Company

TIPS
Treasury Inflation Protection Securities

MSCI
Morgan Stanley Capital International

In addition, an internally managed Mid Cap portfolio was introduced and the current internally managed S&P 1500 Index portfolio transitioned to an S&P 500 Index mandate at the end of June. The INVESCO's Structured Core Equity portfolio posted a return of 31.2% for the fiscal year, which was strong on an absolute and relative basis exceeding the S&P 500 Index's return of 30.7%. The Northern Trust Structured Small Cap portfolio posted the best return among the three domestic equity portfolios with a return of 39.4%, which exceeded the Russell 2000 Index return of 37.4%. The internally managed S&P 1500 Index portfolio outperformed its current benchmark with a return of 32.2% vs. the S&P 1500 Comp Index return of 31.7%.

The relative performance among the international equity managers was mixed, and collectively the total international equity portfolio underperformed the Non-U.S. Equity Custom Index for the fiscal year (29.1% vs. 31.0%). The Boston Company World Ex US Equity portfolio significantly underperformed the MSCI World ex US Index (24.6% vs. 30.9%) whereas the Pyramis International Growth portfolio had the highest return within the international equity portfolio, outperforming the index (33.6% vs. 30.9%). The BlackRock ACW Ex US Index portfolio fell slightly below its benchmark, the MSCI ACW ex US Index, for the year (30.1% vs. 30.3%). BlackRock's original mandate changed from only developed non-US markets to include emerging markets in June 2009. Artio International Equity significantly underperformed the MSCI ACW Ex US Index for the year (24.6% vs. 30.3%). The international small capitalization equity fund managed by Northern Trust ended the fiscal year below its benchmark, the MSCI ACW ex US Small Cap Index, but earned a very strong absolute return (31.1% vs. 34.3%). The Plan's two emerging market equity portfolios managed by Aberdeen Asset Management and Wellington Management generated very different and mixed returns for the year, similar to last year. Aberdeen earned 29.7% relative to the MSCI Emerging Markets Index return of 28.2%, but Wellington only earned 22.1% over the same fiscal year period, a lag of -6.1%.

The System made some enhancements to the fixed income portfolio during the fiscal year with the addition of a high yield/bank loan manager, Shenkman, and a global fixed income manager, Stone Harbor. PIMCO (4.5%) and NISA (4.0%) both exceeded the Barclays Capital US Aggregate Bond Index return of 3.9% for the fiscal year. Both the internally managed TIPS portfolio (7.7%) and the Weaver Barksdale TIPS portfolio (7.7%) performed in line with the 7.7% return for the Barclays Capital US TIPS Index for the fiscal year. The System's investment in Commerce Street Income Partners has outperformed the Opportunistic Fixed Income Custom Index, the Barclays Capital US Corporate High Yield Index and Barclays Capital ABS US Floating Rate Index, over the trailing 12-months (10.9% vs. 9.8%). The sector-specific manager, Waterfall, has significantly outperformed the Opportunistic Fixed Income Custom Index for the fiscal year (24.6% vs. 9.8%). The Plan's alternative investment portfolio consists of a developing absolute return strategies portfolio, longer term investments in real estate (still developing), and private equity (mature program). The System's

current absolute return strategies manager, Arrowhawk Durable Alpha Fund, posted a relative gain against the HFN Fund of Funds Multi-Strat Index for the fiscal year (6.4% vs. 5.7%). The fiscal year return for the real estate portfolio composite was 22.4% versus 16.0% for the one-quarter lagged NCREIF Property Index. Over the past five years ending June 30, the total private equity portfolio return of 3.2% underperformed the Venture Economics All Private Equity Index return of 5.8%.

Insurance Plan The Insurance Plan invests in the System's internally managed S&P 1500 Index portfolio, the recently funded River Road All Cap, Westwood All Cap, Westfield All Cap, and the internally managed Mid Cap portfolio, the international portfolios managed by The Boston Company, Artio, Pyramis, Aberdeen, and Wellington, the internally managed TIPS portfolio, and the alternative investment portfolios. Although the insurance plan returns slightly differ from the returns earned in the pension plan because of investment restrictions, the relative under/outperformance was similar for the fiscal year.

Board Initiatives As part of the asset allocation studies for each plan, the Board approved an allocation of 10-12% to absolute return strategies within the Pension and Insurance Plans. The meaningful allocations are expected to provide greater diversification within the portfolios, improve long-term returns, and reduce total portfolio return volatility. The Board approved the search for well-diversified fund of hedge fund investment managers who invest in a broad spectrum of hedge fund strategies. This approach gives the Board an expedited way to gain full and immediate exposure to several different strategies at one time. The top fund of hedge fund firms have access to competitive, difficult to access hedge fund managers based on their years of experience in the industry, their reputations for being good partners with hedge funds, and their thorough investment and back office due diligence processes. The Board expects to fund the funds of hedge funds in the first half of the fiscal year 2011-12. Another initiative approved by the Board is the diversification of the real return portfolio. Currently, TIPS represent the real return allocation within the Pension and Insurance Plans. Following the asset allocation studies, the Board approved the diversification of the TIPS allocation into other inflation-sensitive strategies that tend to perform well during rising inflationary environments (which appears likely in the near future). Like TIPS, diversified real return strategies are designed to hedge against the erosion of inflation on plan assets by targeting returns that exceed the rate of inflation. The Board expects to fund this initiative within the first half of the fiscal year 2011-12.

Oversight The System's investment policies, goals, and objectives, as well as the performance of its assets are regularly monitored by KRS staff, the Board, and R.V. Kuhns & Associates, Inc. These evaluations include reviews of the investment management firms and the custodial bank that serve the System. The System's assets are held in custody at Northern Trust. Market values and investment performance returns referenced above are based upon financial statements prepared by Northern Trust. We rely on their data and have not independently audited it. However, their financial statements are, to the best of our knowledge, believed to be reliable.

Summary An uncertain market environment demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the System's employee participants. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the System to meet its long-term goals and objectives.

Rebecca A. Gratsinger // CEO, Principal
R.V. Kuhns & Associates, Inc.
November 1, 2011

R.V. Kuhns & Associates, Inc. supports KRS' Investment Committee and Staff by providing expertise on an array of investment topics primarily focusing on the public markets. The firm is tasked with assisting KRS with asset allocation decisions, new initiative research, investment performance review, and current external manager monitoring.

MARKET HIGHLIGHTS

By Peter A. Keliuotis, CFA
Managing Director
Strategic Investing Solutions

*This current fiscal year has been a **tale of two markets**, from early on, one of inflation concerns and excess capital in the system as the economic recovery took hold to the more recent deflation fears (again) and market participants schizophrenically calling for monetary and fiscal policy to be more accommodative to counter growing recession fears.*

Although 2010 can be generally summarized as a year of recovery, upon deeper probing a path of divergent recoveries becomes evident. The contrast is seen in the growth rates of developed versus emerging economies, financial performance and flexibility of large versus small companies, performance of investment grade versus high yield bonds, actual and/or perceived benefits of stimulus versus austerity, and the list goes on. The cost-cutting initiatives that were first implemented in 2008 continued to bear fruit in 2010 with earnings and cash flow benefiting from cost structure resets and scaled back capital expenditure programs. Many companies have a high degree of operating leverage and are positioned well for recovery, but revenue stability and gains are elusive, depending on sector, size, geography etc.

Capital markets until recently had continued to show depth and resilience. Private equity portfolios have benefited from robust capital market activity, whether through investor interest in junk bonds, initial public offerings (IPO), and a meaningful increase in merger/acquisition activity. The debt markets continued to support the "amend and extend" phenomenon and even showed some appetite for dividend recaps. This balance sheet activity has allowed companies to lower their costs of capital, extend maturities, and help to return investor capital and protect internal rates of return, as investment holding periods have been extended.

IPO
Initial Public Offering

Further, IPO demand has not only provided an exit alternative for healthy growth companies, it has also provided a lifeline and currency to companies that, up until recently, seemed to have few options. While this is all good news for private equity investors, it is important to note that this activity has almost solely benefited large-capitalization companies. There have been some knock-on effects, but small-capitalization companies continue to lack access to the liquid public markets, and the number of private market lenders has dwindled to a small fraction of its 2007 highs/levels.

LIQUIDITY & VALUATIONS

Liquidity and valuations however improved in most private equity portfolios. According to the State Street Private Equity Index, Q1 2011 saw more distributions than has been reported ***since the financial crisis****. Distributions relative to drawn down capital or "DPI", came in at 1.68 in Q1 2011, the highest number since 2008.*

As well, the first quarter of 2011 marked the eighth consecutive quarter of positive returns, prior to which the private equity asset class witnessed five consecutive quarters of a decrease in valuations.

In light of the improvement in liquidity and valuations, investors viewed it also as an opportune time to rebalance their portfolios, shedding under-performing assets and/or those relationships deemed non-core to their portfolios. The first half of 2011 saw secondary transaction volume reach roughly $14 billion. Transaction volume for all of 2010 was only in the range of $20-$23 billion. Public and financial institutions selling fund interests comprised 60% of the volume — financial institutions are seeking to sell or evaluating the option as regulatory pressures, such as the Volcker Rule, severely restrict bank-owned private equity operations. The strong market rebound trough 2010 and into the early part of 2011 allowed sellers to attract prices for their interests that were meaningfully higher relative to valuations at the depth of the crisis... high bids averaged 91.7% of NAV in the first half of 2011 compared to the 60% discount of NAV some well-known partnerships were attracting in 2008/2009. At the height of the crisis as some LPs, including some well-regarded endowments, were facing liquidity issues, some partnerships were being sold for pennies on the dollar to help reduce the future liability from being over-exposed to illiquid assets.

Ironically, the recent increased liquidity and the strength of the rebound has reaffirmed for some investors the ability of the asset class to generate returns in excess of the public markets. According to Global Private Equity Barometer, 25% of LPs surveyed stated they will increase their target allocations over the next twelve months. Many investors expected the recession would create abundant opportunities to buy companies "cheaply." This did not quite happen. The rebound and bottoming process in public markets occurred quickly enough that many investors did not even realize it had happened. However, the improving capital markets, the increase in availability of debt and increased confidence on behalf of buyers and sellers helped drive the rebound in buyout transaction volume. The value of deals reached $108 billion in the first half of the year, a 10% increase compared to the same period last year and up 132% from the 46.3 billion value in the first half of 2009, according to Dealogic. However deal value is still down from peak levels, down 27% from the $147 billion reached in the first half of 2008 and roughly 80% lower than the same period in 2007, where then deal value was $516 billion. Although prices paid could not generally be characterized as great values, valuations were based on lower levels of EBITDA, with leverage initially more

Volcker Rule
Named after Paul Volcker, former Chairman of the Federal Reserve, the Volcker Rule prohibits certain institutions from owning a hedge fund or private equity fund, as well as limiting the liabilities that the largest banks could hold.
http://en.wikipedia.org/wiki/Volcker_Rule

NAV
Net Asset Value

LPs
Limited Partnerships

EBITDA
Earnings Before Interest, Taxes, Depreciation, and Amortization

PE
Private Equity

in line with historical averages... however investor exuberance and the search for yield precipitated a rebound in the increased utilization of leverage as illustrated below. The strength of the high yield market facilitated refinance and buyout activity as PE-backed companies issued a record $18.1 billion of high yield debt last year, through June 30, 2011, an additional $10.5 billion

EMERGING MARKETS

We see pockets of opportunity in emerging markets as well as developed markets. Emerging market economies grew at an average real annual rate of 6.4% since the beginning of the decade, ***compared to 2.2% for the developed economies****.*

GDP
Gross Domestic Product

With strong balance sheets and an increasing share of global GDP, emerging markets are likely to outperform the developed markets due in part to strong domestic consumption. Consumer spending in emerging markets is stronger than in more developed economies, with consumer spending in developed economies flat to negative.

The profiles for these countries have also changed and they no longer present the same risks once associated with emerging markets. In many of these countries, there is more stability and better governance helping to create a market environment where companies are able to grow their businesses. In the more mature developed markets, opportunities are available at the smaller end. Managers with strong, extensive networks that have produced quality, non-auction deal flow will be well positioned in this environment. Non-auction deals often allow managers to negotiate purchase price multiples at discounts to the market average. These managers tend to focus on adding value through operational improvements and organic growth and use little, if any, leverage. The current environment presents strong opportunities for investors to allocate a portion of their overall portfolios to buyout managers that are cycle tested.

VENTURE CAPITAL

Venture capital has witnessed a resurgence as valuation concerns are ***once again at the forefront****. For some, the current valuations assigned to various social networking and gaming companies, is once again a replay of the 1990s, when investor exuberance led to "stretched" valuations.*

Bubbles in private equity are difficult to identify however one possible intimation is when venture capital gets pushed to the front page of the mainstream press. Several companies have garnered mass media interest as some recently were the subject of articles in the Wall Street Journal and Bloomberg.

Late last year, Groupon reportedly turned down a $6 billion offer from Google in December, less than three years after receiving its first funding from a venture firm.

*The sovereign debt crisis is **further compounding** the difficulties of the banks, as countries grapple with high unemployment and severe austerity measures to reduce debt burdens and placate creditors.*

Goldman Sachs led a $1.5 billion investment in Facebook at a $50 billion valuation, which was initially was ridiculed until soon thereafter the valuation in private transactions surpassed $74 billion. Zynga, an online gaming company and creator of FarmVille among other games, is reportedly in discussions with potential investors that would value the three-year-old company between $7 billion and $9 billion. Google and Facebook reportedly entertained discussions with Twitter that valued the company at between $8 billion and $10 billion.

Coming to Market To be fair, these companies are (reportedly) generating revenue of $100 million or more (in some cases several hundred million) a year, which is something few of the dot.com companies in the late 1990s ever achieved. Whether or not their current valuations are sustainable remains to be seen. The venture funds that backed them maintain ownership stakes and still need to fully exit their positions, which likely won't happen until an IPO occurs. None the less, the market has rebounded strongly as the second quarter of 2011 marked the strongest three month period, in dollars, for venture backed IPOs since the third quarter of 2000. Twenty two venture backed IPOs, valued at $5.5 billion came to market in the second quarter of 2011 — this is more than triple the dollar value seen during the second quarter of 2010 and a 29% increase by number of offerings relative to the comparable period last year.

Crucial Class Venture capital is a very cyclical asset class. There will be periods of innovation where new, large, disruptive markets are discovered and investor enthusiasm will drive capital flows and valuations until such time as the growth ameliorates and investors await the next boom/innovation. As we've maintained, the one sub-asset class within private equity where GP selection is crucial, is venture. Given the difficulty in timing the next innovation cycle, it is better to emphasize committing capital to those investors that have a better relative probability of being at the forefront of the next innovation cycle.

DEBT-RELATED

EBITDA
Earnings Before Interest, Taxes, Depreciation, and Amortization

Within debt related, the U.S. market has been more sanguine relative to Europe. On a trailing twelve month basis, according to Fitch, revenue, EBITDA and capex increased 9.4%, 15.5% and 27.1% respectively, through June versus the prior twelve months ending June 2010. Two-thirds of companies in Fitch's sample reported higher EBITDA in the second quarter of 2011 relative to the prior year's second quarter and 72% reported higher cap-ex. The speed at which balance sheets have been repaired lowered the trailing twelve month U.S. high yield default rate to 1.2% from 1.3% in July. Conversely, the deterioration within certain European economies following the recession and near failure of the major U.S. and European banks in 2008 and 2009 led to major concerns about European sovereign credits and their financial systems. One consequence of this was a more stringent Basel III regulatory environment, requiring banks to de-lever and raise Core Tier 1 (Common Equity) capital from 2% under Basel II to 7% under Basel III. The objective is to provide greater stability to the European banking system and promote confidence in capital markets.

This will lead banks to sell performing non-core assets and non-performing and other "legacy assets" that would be assigned a higher risk weighting, and re-focus on their core markets and services. The term "legacy assets" refers to previously underwritten assets, many of which have become distressed due to economic conditions and financial turmoil and have lost a considerable amount of value. In the case of banks, the bulk of these assets are "legacy loans," primarily real estate related loans, many of which are carried on bank balance sheets above their current market value. Uncertainty about the value of these legacy loans casts doubt upon the strength of bank balance sheets, compromising the ability of banks to raise additional capital, and their ability and willingness to increase lending. PwC estimates that European banking sector non-core assets exceed €1.3 trillion, including €800 billion in NPLs.

The sovereign debt crisis is further compounding the difficulties of the banks, as countries grapple with high unemployment and severe austerity measures to reduce debt burdens and placate creditors. The problems in Europe are complex, from excessive leverage, to structural/regulatory issues, both in the private and public sector, that while opportunities seemingly abound, in reality those with patience and the resources will be rewarded given the complexity of the current crisis. Markets are difficult to time, however being early can also negatively impact returns. Investors should exercise patience, committing to those managers with the resources to understand and navigate the crisis. The headwinds that adversely affected markets in 2010 will continue to challenge them in 2011, but the key will be picking regions, sectors and funds that will help to ensure excess returns, regardless of the macroeconomic environment. The private credit markets in the US and Western Europe will continue to provide opportunity throughout 2011. The secular void of traditional financing, muted growth environment and impending leveraged loan and high yield maturities will continue to create opportunities. Opportunities will be especially acute within the middle market (defined as companies with less than US $100 million of EBITDA) where companies lack capital structure flexibility, asset optionality and depth of resources. Secondary debt markets will be active, but "buying the market" will be much less rewarding, and return prospects for senior debt will likely revert to historical averages.

Private Equity In the private equity markets of the US and the UK, France and other parts of Northern Europe, a focus on managers and funds who invest in small-and middle-market enterprise valuation companies should generate disproportionate returns. Specifically, a focus on managers who have strong operating and buy-and-build expertise will help drive growth and returns. In addition, debt-to-equity conversion strategies and operational turnarounds will also become more prevalent and generators of good risk-adjusted returns. Although investments in the regions do not come without considerable risk, the developing economies of Asia and Latin America will be a bright spot for investments. These regions continue to demonstrate the best prospects for continued and sustainable economic growth, based on strong underlying economic fundamentals; large population bases with favorable demographics; rapid urbanization and the rising affluence of a middle income class; as well as a shift from export-dependent to domestic consumption economies.

Given the Program's maturity, barring another recession, we anticipate the level of distributions to ***continue to increase****.*

For the period ending June 30, 2011, the Private Equity Program generated a return since inception of 9.19%, outperforming its benchmark, the S&P 500 + 300 basis points, which returned 5.88%. Since March 2009, during the midst of the "Great Recession", when the Program's performance bottomed at -4.93%, the Portfolio has shown a sequential improvement in performance each quarter through June 30, 2011.

During the first half of 2011, KRS completed a partial sale of its private equity portfolio, rebalancing the portfolio for non-core relationships and bringing the Program's PE exposure

Performance continues to improve, the Program continues to ***out-perform its benchmark*** *and net cash flows are turning positive.*

to within the low end of the 5-15% policy range. Post the secondary sale, the Program's exposure to private equity is 9.95% as of June 30, 2011, with a steady decline anticipated over the next several years as the level of distributions start to accelerate.

Program Distributions During this past fiscal year, the level of distributions, surpassed the level of contributions for the first time — the level of distributions, adjusted for the secondary sale, equated to $302 million relative to the $283 million in drawdowns for the same period. As mentioned, given the Program's maturity, barring another recession, we anticipate the level of distributions to continue to increase, factoring in new commitments. New commitments, given the PE portfolio is well represented within the mid-large end of the buyout segment, as well in venture, we would emphasize, should be more opportunistic, selectively seeking exposure to niche or narrow strategies within the small/mid-market buyout space, distressed strategies emphasizing Europe and direct international commitments, identifying groups/strategies that are differentiated and can generate attractive risk adjusted returns. While having exposure to different sub-assets perhaps leads to portfolio diversification, we would emphasize in private equity it is equally or perhaps more important to focus on superior risk adjusted returns. Hence the need to review a prospective commitment to an international firm relative to a domestic buyout firm or venture firm, in the context of returns relative to risk.

Current allocations, post the secondary sale are 59% Buyout, 22% Venture Capital, 18% Debt Related and 0.8% International. While the current allocation to private equity is close to 10%, above the 7% target but within the policy range of 5-15%, we would recommend a commitment pace equating to $250 million per annum, subject to opportunities that meet the Program's return criteria.

Approximate Allocation
(Post Secondary Sale)

Asset	Allocation Targets
Buyout	59.0%
Venture Capital	22.0%
Debt-Related	18.0%
International	0.8%

Final Thoughts In summary, performance continues to improve, the Program continues to out-perform its benchmark and net cash flows are turning positive. It is projected the Program will be below its 7% target by 2015, at which point new commitments should in large part become self-funding, provided the pacing of new commitments is reasonable and to investments that can continue to generate returns in line with expectations.

Peter A. Keliuotis, CFA // Managing Director
Strategic Investment Solutions, Inc.
October 3, 2011

Strategic Investment Solutions is charged with the duty to advise KRS in its private equity investment activities. Market performance data is as of June 30, 2011.

MARKET OVERVIEW

By Jonathan Berns
Principal
ORG Portfolio Management

*The U.S. commercial real estate market has seen a **gradual, albeit slow**, improvement in 2011. Despite the economy's painstaking lagged recovery from recession, demand for property is improving in all sectors.*

Recovery is most apparent in the apartment sector, followed by select office and retail markets across the country. The apartment sector continues to strengthen. Modest job growth in the first quarter of 2011 and minimal new supply has helped to increase demand for apartment properties and vacancy rates have fallen to 6% by the end of the second quarter 2011. Although the outlook for job growth for the second half of 2011 is negative, this is not expected to have any real impact on the fundamentals of the apartment sector. Several areas of concern include increases in construction activity and the improved housing affordability following the collapse in housing prices over the past several years.

Office Sector The office sector in the U.S. market is improving overall and pockets of select metro areas have shown marked growth over the first and second quarters of 2011. Recognition by investors of improved demand caused by a freeze in new construction in most markets has led to a more optimistic market outlook. Major gateway metros such as New York City, San Francisco and Washington D.C. all saw stronger office markets by the end of the second quarter. Vacancy rates are expected to decline in most markets, and the recovery rate will improve as rents stabilize and new construction remains at historically low levels. Areas of concern include anemic job growth and a potential downsize of the U.S. government employment located in Washington, D.C.

Retail Sector The retail sector has seen some improvement in consumer spending and the forecast for the market is cautiously optimistic. High end retailers are bouncing back more quickly than their big box counterparts. This trend is reflective of the overall economic recovery, in which those with disposable income are beginning to feel more confident in their ability to spend on luxury items and those who are still feeling the pinch of unemployment continue to only participate in necessity spending.

ORG'S VIEW

*ORG has noted that commercial real estate market conditions have been continuing their **modest recovery** through the first half of 2011.*

During the second quarter of 2011, ORG was optimistic that property prices would continue to recover in a modest fashion as a result of debt becoming widely available for "core" properties and a growth in the number of lenders that were competing fiercely for the few transactions meeting their definition of "core." However, this sentiment

CMBS
Commercial Mortgage-Backed Security

changed to a more cautious outlook on the recovery when the CMBS lending market shut down in the third quarter as several rating agencies abruptly pulled their ratings from several issuances that were about to enter the market. The reemergence of a difficult lending environment will likely lead to pressure on core managers who acquired properties at low capitalization rates with aggressive growth and exit assumptions. At the same time, there will likely be additional value added and opportunistic investment opportunities that capitalize on debt maturities and overleveraged properties. Commercial mortgage investment opportunities will also likely to be attractive for those lenders that are able to remain active originating new loans or acquiring loans from distressed sellers.

REAL ESTATE INVESTMENTS

Kentucky Retirement Systems made $40 million commitments each to Mesa West Real Estate Income Fund II, PRIMA Mortgage Investment Trust and Walton Street Real Estate Fund VI in December 2008.

Through September 2011, Mesa West Real Estate Income Fund II made three capital calls totaling $7.8 million and returned $0.6 million in adjustments and preferred return distributions. Since inception, $21.9 million has been funded with $18.1 million remaining capital to be called.

PRIMA Mortgage Investment Trust called Kentucky Retirement Systems' entire $40 million commitment by the end of the 3rd quarter 2009 and the investment is fully funded. As of September 16, 2011, PRIMA Mortgage Investment Trust has distributed $6.5 million to KRS.

Through September 2011, Walton Street Real Estate Fund VI made one capital call of $6 million. Since inception, $23.9 million has been funded with $16.1 million remaining capital to be called.

Jonathan Berns // Principal
ORG Portfolio Management, LLC
September 19, 2011

ORG Portfolio Management serves as the Real Estate Investment Consultant for KRS and makes recommendations related to the real estate portfolio.

Investment Results

For the fiscal year ended June 30, 2011, the KRS pension fund returned 18.96%, while strong on a nominal basis, fell short of the return of its benchmark by 1.38%. The 18.96% return also bested the actuarially required rate of return of 7.75%.

Fiscal Year 2011 Results The below benchmark performance of the pension fund was a result of the underperformance experienced in the Non-U.S. Equity and Alternatives asset classes; and the currency hedging program which deducted 84 basis points off of the fund's return at the hands of a weak U.S. Dollar. The KRS insurance fund also posted a strong positive return for the fiscal year ending June 30, 2011. The portfolio returned 23.47% compared to the benchmark's 26.93% return and the actuarially required rate of 7.75%. Like the pension fund, the insurance fund experienced underperformance from the Non-U.S. Equity and Alternatives asset classes; and gave up 146 basis points due to poor performance experienced in the currency hedging program.

Pension Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Fund	April-84	18.96%	4.47%	4.71%	5.51%	9.72%
Performance Benchmark[2]	-	20.34%	5.05%	5.07%	5.52%	9.81%

Insurance Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Insurance Fund	April-87	23.47%	3.07%	3.78%	5.02%	7.93%
Performance Benchmark[3]	-	26.93%	3.32%	3.87%	4.57%	7.99%

[1]*The Performance Calculations presented above were prepared by the System's custodial bank using a time-weighted rate or return methodology based upon the market value of assets.*
[2]*Current Performance Benchmark is compromised of 25% BC Aggregate, 10% BC U.S. TIPS, 12% MSCI World Ex-US, 4% MSCI AWCI Ex-US, 2% MSCI AWCI Ex-US Small Cap, 2% MSCI EM, 4% Russell 2000, 27.2% S&P 1500 Composite, 6% S&P 500, 3% 3-Month Treasury Bill, and 4.8% BC High Yield Corporate Index.*
[3]*Prior Policy Benchmark was compromised of 12% BC U.S. TIPS, 24% MSCI World Ex-US, 3% MSCI AWCI Ex-US, 3% MSCI EM, 52% S&P 1500 Composite, 3% 3-Month Treasury Bill, and 3% BC High Yield Corporate Index. (Note: Utilized 07/01/10 – 03/31/11) Current Policy Benchmark is compromised of 8.4% BC U.S. TIPS, 3.6% BC Aggregate, 24% MSCI World Ex-US, 3% MSCI AWCI Ex-US, 3% MSCI EM, 52% S&P 1500 Composite, 3% 3-Month Treasury Bill, and 3% BC High Yield Corporate Index. (Note: Utilized 04/01/11 – 06/30/11)*

BENCHMARKS

Benchmarks utilized to measure the Kentucky Retirement Systems' Pension and Insurance Funds are a weighted average composite of the various asset class indices consisting within each portfolio. The Total Fund Benchmarks are shown on page 89.

★ **Note:** At the May 2011 Investment Committee Meeting new benchmarks were adopted and ratified by the Board; however, the new benchmarks were not placed into service until July 1, 2011.

These benchmarks are intended to be objective, measurable, investable/replicable, and representative of the investment mandates. The benchmarks are developed from publicly available information, and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate and status. KRS' Investment Staff and Consultant recommend the indices and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the Board of Trustees. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total Benchmarks will evolve to reflect these exposures.

Total Fund Benchmarks

Index	Pension Fund	Insurance Fund
Standard & Poor's 1500 Composite	27.2%	52.0%
Standard & Poor's 500 Composite	6.0%	-
Russell 2000 Index	4.0%	-
MSCI World Ex-US	12.0%	24.0%
MSCI All World Country Index Ex-US	4.0%	3.0%
MSCI AWCI Ex-US Small Cap	2.0%	-
MSCI Emerging Markets	2.0%	3.0%
Barclays Capital High Yield Corporate	4.8%	3.0%
Barclays Capital TIPS	10.0%	12.0%
Barclays Capital Aggregate	25.0%	-
3-Mo U.S. Treasury Bill	3.0%	3.0%

LONG-TERM RESULTS

Pension Fund For the 10-years ending June 30, 2011, the KRS pension fund portfolio earned an annualized total return of 5.51%. As shown in the investment results table above, the KRS pension total fund return has trailed the benchmark somewhat over all measured time periods. The cumulative impact from performance on asset growth is illustrated below in a growth of dollar chart. The table compares the ending asset values that result from $1,000 being invested in the KRS pension portfolio, its policy benchmark portfolio, and its actuarial objective over the past 10 years. As of June 30, 2011, the table indicates that $1,000 invested in the fund actually grew to $1,711, while the same $1,000 invested in the benchmark or in the actuarial objective would have grown to $1,711 and $2,159, respectively.

Insurance Fund The insurance fund continued to outperform its benchmark, earning a 5.02% return for the 10-year period ending June 30, 2011. The table highlights the difference between $1,000 being invested in the KRS insurance portfolio ($1,632), the benchmark ($1,483), and the actuarial objective ($2,159) over the past 10 years. As the results show in the accompanying insurance table above, the KRS insurance fund's returns have been in-line with the benchmark over longer term periods.

Total Pension Fund Growth of $1,000

Portfolio	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Pension Fund Growth	$1,000	$957	$998	$1,134	$1,239	$1,358	$1,566	$1,500	$1,242	$1,438	$1,711
Performance Benchmark	$1,000	$947	$995	$1,138	$1,235	$1,336	$1,535	$1,476	$1,256	$1,422	$1,711
Actuarial Assumed Rate of Return	$1,000	$1,083	$1,172	$1,268	$1,373	$1,486	$1,602	$1,726	$1,859	$2,004	$2,159

Total Insurance Fund Growth of $1,000

Portfolio	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Insurance Fund Growth	$1,000	$907	$922	$1,101	$1,206	$1,355	$1,617	$1,490	$1,145	$1,321	$1,632
Performance Benchmark	$1,000	$876	$876	$1,038	$1,115	$1,227	$1,461	$1,345	$1,033	$1,168	$1,483
Actuarial Assumed Rate of Return	$1,000	$1,083	$1,172	$1,268	$1,373	$1,486	$1,602	$1,726	$1,859	$2,004	$2,159

U.S. Equity

For the fiscal year ending June 30, 2011, the KRS pension fund's U.S. equity portfolio posted a return of 33.03%, which outperformed the return of its benchmark by 0.77%. The KRS insurance U.S. equity portfolio posted a return of 33.05%, which also outperformed its benchmark return of 31.68%.

★ **Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

The U.S. equity portfolio posted strong positive results during most historic periods. Since inception performance remains solid where the pension's equity portfolio has generated an annualized average return of 11.14% throughout its duration, while the insurance equity portfolio posted an average annual return of 8.82%.

Growth of $1,000 For the 10-year period ending June 30, 2011, the pension fund's chart on page 91 indicates that $1,000 would have resulted in $1,435 while the same $1,000 invested in the benchmark would result in $1,385. For the KRS insurance fund, ending June 30, 2011, a $1,000 investment would be valued at $1,419, compared to $1,277 for the benchmark.

Top 10 U.S. Equity Holdings Pension Fund

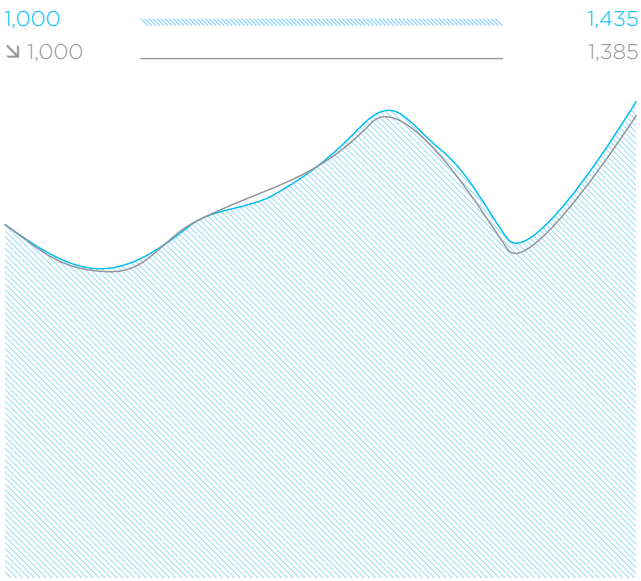
Company	Shares	Market Value
EXXON MOBIL CORP	603,297	$49,096,310
APPLE INC	104,230	$34,986,884
CHEVRON CORP	286,843	$29,498,934
IBM CORP	161,661	$27,732,945
GENERAL ELECTRIC	1,406,729	$26,530,909
MICROSOFT CORP	957,205	$24,887,330
PFIZER INC	1,165,889	$24,0177,313
JPMORGAN CHASE & CO	553,154	$22,646,125
JOHNSON & JOHNSON	326,753	$21,735,610
WELLS FARGO & CO	772,053	$21,663,807
Total	**6,337,814**	**$282,796,166**

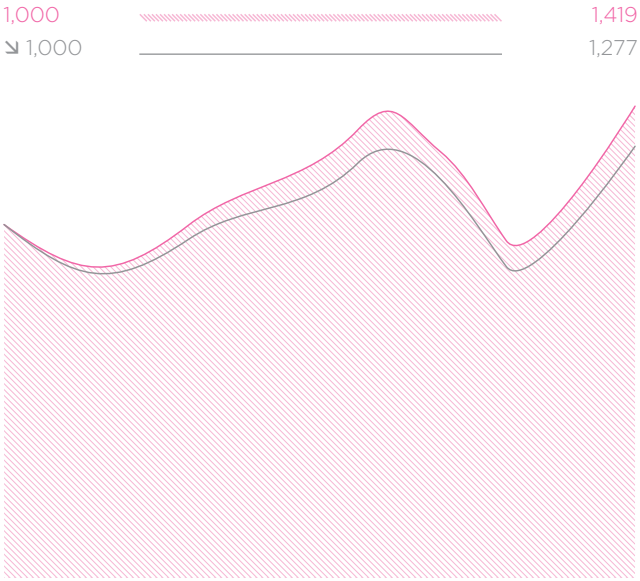
Top 10 U.S. Equity Holdings Insurance Fund

Company	Shares	Market Value
EXXON MOBIL CORP	121,920	$9,921,850
APPLE INC	25,984	$8,722,049
CHEVRON CORP	59,340	$6,102,526
GENERAL ELECTRIC	298,986	$5,638,876
JOHNSON & JOHNSON	80,905	$5,381,801
IBM CORP	29,943	$5,136,722
PFIZER INC	236,525	$4,872,415
MICROSOFT CORP	183,013	$4,758,338
AT&T INC	146,130	$4,589,943
PROCTER & GAMBLE	72,122	$4,376,404
Total	**1,254,868**	**$59,709,315**

U.S. Equity Portfolio Growth of $1,000

Portfolio	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Pension Fund Growth	$1,000	$838	$830	$1,009	$1,072	$1,200	$1,431	$1,247	$938	$1,079	$1,435
↘ Performance Benchmark	$1,000	$837	$831	$1,008	$1,073	$1,173	$1,405	$1,220	$901	$1,047	$1,385
Insurance Fund Growth	$1,000	$841	$839	$1,011	$1,086	$1,192	$1,428	$1,242	$930	$1,067	$1,419
↘ Performance Benchmark	$1,000	$824	$810	$959	$1,011	$1,084	$1,304	$1,139	$839	$970	$1,277





Return on U.S. Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	33.03%	4.78%	3.65%	3.68%	11.14%
↘ Performance Benchmark[1]	-	32.26%	4.33%	3.39%	3.74%	10.98%
Insurance Fund	Jul-92	33.05%	4.55%	3.55%	3.56%	8.82%
↘ Performance Benchmark[2]	-	31.68%	3.88%	3.32%	3.33%	8.38%
Market Indices						
Russell 1000 (Large Cap)	-	31.93%	3.68%	3.30%	3.21%	-
Russell 2000 (Small Cap)	-	37.41%	7.77%	4.08%	6.27%	-
Russell 3000 (Total Equity)	-	32.37%	4.00%	3.35%	3.44%	-

[1]Pension Benchmark consists of 13% Russell 2000, 67% S&P 1500 Composite (Total), and 20% S&P 500
[2]Insurance benchmark is S&P 1500 Composite (Total)

International Equity

For the fiscal year, ending June 30, 2011, the KRS pension fund's international equity portfolio returned 29.08%, underperforming its benchmark by 1.87%. The KRS insurance international equity portfolio also fell short of its benchmark, posting a return of 28.23% versus 30.66% during the same twelve month period.

★ **Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

While relative returns were disappointing this year, the fund did experience strong nominal returns during the trailing year period. International equity investors have experience a volatile period of returns over the past several years. After four consecutive years of favorable results, investors then witnessed significant market losses for two fiscal years, and have now experienced a reversal of that for the past two year fiscal years. The pension fund portfolio has generated an annualized return of 2.28% over the trailing three-year period, while the insurance fund saw returns on average of 1.36% during the same period. Over the past five years, the Pension and Insurance funds have posted annualized returns of 3.76% and 3.92% respectively exceeding the return of the relative benchmarks. The Systems began their international equity program in 2000. Since inception, the pension international equity portfolio has underperformed the benchmark somewhat, while the insurance international equity portfolio has outperformed the benchmark.

Growth of $1,000 The chart on page 93 depicts the growth of $1,000 invested in the KRS international equity portfolios as well as the blended benchmark since FY01. For the KRS pension fund, ending June 30, 2011, $1,000 would have resulted in $1,846, while the same amount invested in the benchmark would have resulted in $1,989. For the KRS insurance fund, ending June 30, 2011, $1,000 would have grown to $2,020, while an investment in the index would have been valued $1,956.

Top 10 International Equity Holdings Pension Fund

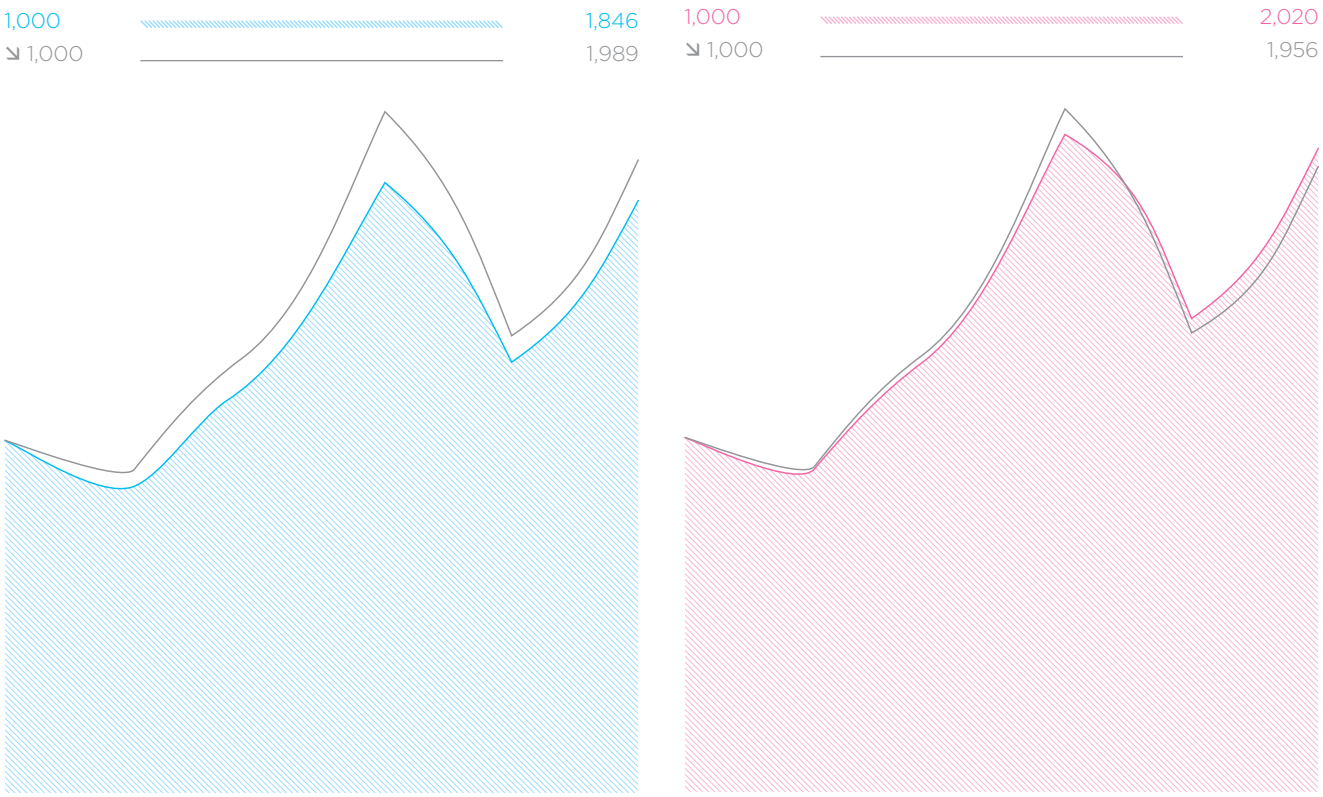
Company	Shares	Market Value
HBSC HOLDINGS	2,621,254	$26,024,080
TOTAL	342,255	$19,789,191
SANOFI-AVENTIS	235,963	$18,966,632
NOVARTIS	308,249	$18,853,710
TOYOTA MOTOR CORP	447,000	$18,265,230
UBS	993,694	$18,091,840
VODAFONE GROUP	6,575,386	$17,449,818
ROCHE HOLDINGS	103,194	$17,243,938
BP	2,327,132	$17,135,596
GLAXOSMITHKLINE	701,424	$15,022,190
Total	**14,655,551**	**$186,842,225**

Top 10 International Equity Holdings Insurance Fund

Company	Shares	Market Value
HSBC HOLDINGS	1,007,627	$10,003,825
TOTAL	132,863	$7,682,141
SANOFI-AVENTIS	93,290	$7,498,621
NOVARTIS	119,027	$7,280,155
UBS	391,013	$7,119,037
TOYOTA MOTOR CORP	171,700	$7,015,973
VODAFONE GROUP	2,557,118	$6,786,103
BP	917,627	$6,756,852
ROCHE HOLDINGS	39,974	$6,679,741
GLAXOSMITHKLINE	277,403	$5,941,058
Total	**5,707,642**	**$72,763,505**

International Equity Portfolio
Growth of $1,000

Portfolio	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Pension Fund Growth	$1,000	$888	$835	$1,067	$1,213	$1,534	$1,909	$1,725	$1,276	$1,430	$1,846
↘ Performance Benchmark	$1,000	$933	$886	$1,167	$1,332	$1,693	$2,159	$1,938	$1,369	$1,519	$1,989
Insurance Fund Growth	$1,000	$912	$878	$1,140	$1,307	$1,666	$2,069	$1,939	$1,420	$1,575	$2,020
↘ Performance Benchmark	$1,000	$933	$886	$1,167	$1,332	$1,693	$2,159	$1,938	$1,369	$1,497	$1,956



Return on International Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-00	29.08%	2.28%	3.76%	6.32%	2.61%
↘ Performance Benchmark[1]	-	30.95%	0.87%	3.27%	7.12%	3.05%
Insurance Fund	Apr-00	28.23%	1.36%	3.92%	7.28%	2.83%
↘ Performance Benchmark[2]	-	30.66%	0.31%	2.93%	6.94%	2.13%
Market Indices						
MSCI World Ex-US	-	30.92%	-1.07%	2.52%	6.60%	-
MSCI Emerging Markets	-	28.17%	4.53%	11.75%	16.54%	-
MSCI ACWI Ex US	-	30.27%	0.11%	4.14%	7.92%	-

[1]*Pension Benchmark consists of 60% MSCI World Ex-US, 20.0% MSCI AWCI Ex-US, 10.0% MSCI AWCI Ex-US SC, and 10% MSCI EM.*
[2]*Insurance Benchmark consists of 80% MSCI World Ex-US, 10.0% MSCI AWCI Ex-US, and 10% MSCI EM Index.*

Fixed Income

For the fiscal year, ending June 30, 2011, the KRS pension fund's fixed income portfolio returned 6.13%, outperforming its performance benchmark by 1.13%.

★ **Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

Both of the broad market indices, the Barclays Aggregate Index and the Barclays Intermediate Government Credit Index, posted positive returns for the twelve month period ending June 30, 2011. The KRS insurance fixed income portfolio posted a 6.64% rate of return, trailing its benchmark by 0.38%. Over the past three years ending June 30, 2011, the KRS pension fund's fixed portfolio has generated an annualized average return of 5.68% versus its custom performance benchmark return of 6.17%. The insurance fund's fixed portfolio posted a 4.95% return during the same period, falling short of its benchmark return by 0.09%. Over the five year period, the pension fund has lagged the benchmark by 52 basis points, while the insurance fund essentially matched its benchmark, trailing by just 3 basis points. Over the ten year period, the pension fund has lagged the benchmark by 0.27% or 27 basis points, while the insurance fund has outperformed its benchmark by 5 basis points.

Growth of $1,000 The chart on page 95 shows the growth of $1,000 invested in KRS fixed income portfolio over the past ten years. For the KRS pension fund, ending June 30, 2011, $1,000 would have grown to $1,774, while the same $1,000 invested in the benchmark would have grown to $1,820. For the KRS insurance fund, ending June 30, 2011, $1,000 would have grown to $2,060, which earned $11 more than the benchmark's growth.

Top 10 Fixed Income Holdings Pension Fund

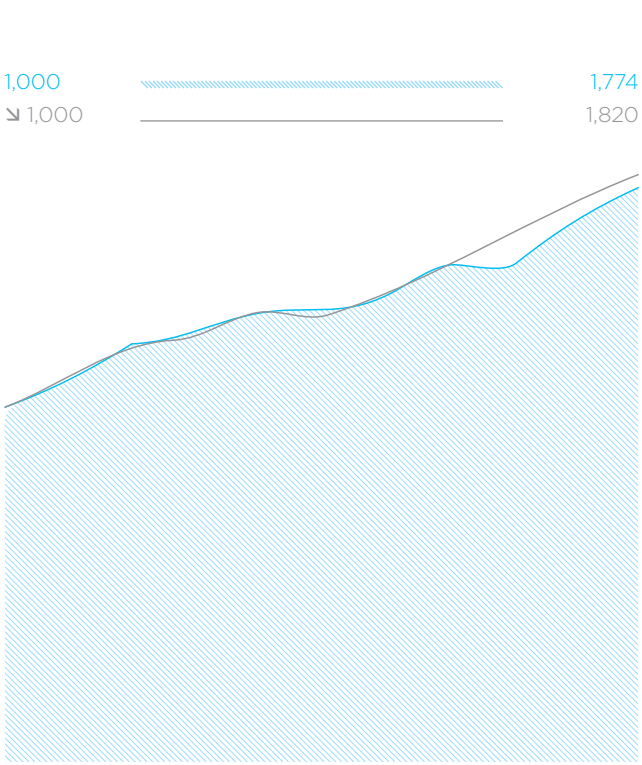
Company	Par Value	Market Value
US TSY NTS TIPS DTD 00340 DUE 04/15/16	$91,000,000	$94,794,718
US TSY NTS 1.125 TIPS DUE 01/15/21	$72,000,000	$76,854,298
US TSY NTS IND LNKD 2.000 DUE 01/15/16	$59,390,000	$74,779,313
US TSY NTS DTD 2.500 DUE 03/31/15	$59,500,000	$62,419,070
US TSY NTS 1.125 TIPS 04/15/20	$57,000,000	$62,168,055
FNMA 30 YEAR PASS-THRU 5.5 SET JULY	$55,000,000	$59,468,750
US TSY NTS IND LNKD 1.875 DUE 01/15/17	$43,558,000	$55,405,002
US TSY NTS IND LNKD 2.375 DUE 07/15/19	$46,600,000	$54,883,385
US TSY INFL LNKD BDS 2.375 DUE 01/15/25	$39,397,000	$54,016,810
US TSY INFL LNKD BDS 2.125 DUE 01/15/19	$40,600,000	$48,314,243
Total	**$564,045,000**	**$643,103,644**

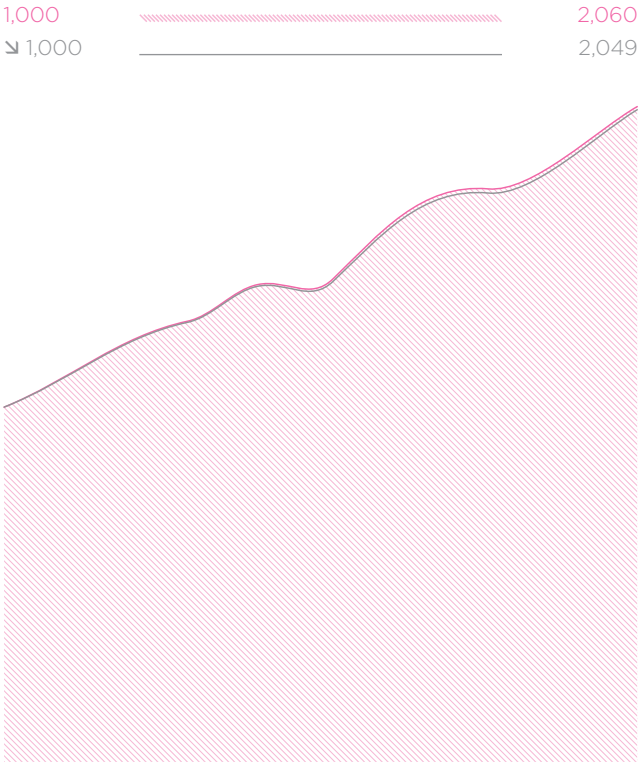
Top 10 Fixed Income Holdings Insurance Fund

Company	Par Value	Market Value
FNMA MTG PL# AH5849 4.500 DUE 02/01/41	$24,641,695	$25,607,896
FNMA SINGLE FAM 4.000 15YR SET JULY	$23,200,000	$24,164,238
US TSY NTS TIPS DTD 00347 DUE 03/31/13	$20,000,000	$20,117,200
US TSY INFL LNKD BDS DUE 04/15/28	$9,890,500	$18,106,181
US TSY NTS 1.125 TIPS DUE 01/15/21	$15,000,000	$16,011,312
US TSY NTS 1.250 TIPS DUE 04/15/20	$14,000,000	$15,269,347
US TSY INFL LNKD BDS 2.375 DUE 01/15/25	$10,540,500	$14,451,968
US TSY INFL LNKD BDS 3.875 DUE 04/15/29	$7,340,500	$13,757,710
US TSY NTS TIPS DTD 00340 DUE 04/15/16	$13,000,000	$13,542,103
US TSY NTS IND LNKD 2.000 DUE 01/15/16	$10,480,500	$13,196,238
Total	**$148,093,695**	**$174,224,193**

Fixed Income Portfolio
Growth of $1,000

Portfolio	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Pension Fund Growth	$1,000	$1,082	$1,223	$1,234	$1,331	$1,316	$1,391	$1,503	$1,495	$1,672	$1,774
↘ Performance Benchmark	$1,000	$1,085	$1,228	$1,240	$1,334	$1,318	$1,390	$1,521	$1,583	$1,733	$1,820
Insurance Fund Growth	$1,000	$1,091	$1,260	$1,308	$1,432	$1,410	$1,627	$1,782	$1,763	$1,932	$2,060
↘ Performance Benchmark	$1,000	$1,088	$1,256	$1,304	$1,426	$1,402	$1,614	$1,768	$1,748	$1,915	$2,049





Return on Fixed Income

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	6.13%	5.68%	6.16%	5.90%	8.27%
↘ Performance Benchmark[1]	-	5.00%	6.17%	6.68%	6.17%	8.13%
Insurance Fund	Jul-92	6.64%	4.95%	6.73%	6.93%	7.07%
↘ Performance Benchmark[2]	-	7.02%	5.04%	6.76%	6.88%	7.06%
Market Indices						
BC Aggregate	-	3.90%	6.46%	6.52%	5.74%	-
BC Corporate High Yield	-	15.09%	12.64%	9.39%	8.99%	-
BC U.S. TIPS	-	7.74%	5.28%	6.91%	6.95%	-

[1]Pension Benchmark consists of 71.43% Barclays Aggregate, and 28.57% Barclays U.S. TIPS.
[2]Insurance Benchmark was the Barclays U.S. TIPS Index from July 1, 2010 through March 31, 2011. From April 1, 2011 to June 30, 2011, the benchmark consisted of 70% Barclays U.S. TIPS, and 30% Barclays Aggregate.

Private Equity

For the fiscal year ending June 30, 2011 the pension fund's private equity portfolio posted a return of 13.38%.

The portfolio consists primarily of private equity limited partnerships and operating companies investments. The custom benchmark for the pension private equity portfolio returned 25.17% during this same period. The insurance alternative investment portfolio returned 20.07% versus its performance benchmark return of 28.43%. Two events weighed heavily on the private equity relative returns in the short to intermediate time periods. For fiscal year 2011, the pension fund experienced a drag on performance due to a secondary sale aimed at bolstering the funds much needed liquidity; $426 million worth of assets were sold at 91 cents on the dollar. Also, private equity returns saw their steepest declines in 2008 as the value of firms' investment portfolios tumbled in the wake of the credit crisis. As the table below indicates, the market's volatility impacted the intermediate results in the private equity portfolios. For the three and five years ending June 30, 2011, the pension fund portfolio trailed its benchmark by 7.16% and 2.63%, respectively. For the three year time period, the insurance fund returned 3.80% on an annualized basis underperforming its custom benchmark by 1.96%. Since its inception in October 1990, the pension portfolio has outpaced its benchmark by 1.54% per year, while the insurance portfolio has outperformed its benchmark by 2.12% since its July 2001 inception. Benchmark misfit also contributed meaningfully to the presented underperformance.

Return on Private Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Oct-90	13.38%	0.43%	3.22%	10.58%	10.92%
↘ Performance Benchmark[1]	-	25.17%	7.59%	5.85%	5.73%	9.38%
Insurance Fund	Jul-01	20.07%	3.80%	5.06%	6.67%	6.67%
↘ Performance Benchmark[2]	-	28.43%	5.76%	4.61%	4.55%	4.55%

[1]*Pension Benchmark consists of 60% S&P 1500 (Total), and 40% BC High Yield Corporate.*
[2]*Insurance Benchmark consists of 80% S&P 1500 (Total), and 20% BC High Yield Corporate.*

Real Estate

The Real Estate portfolio consists primarily of private REITs, publicly traded real estate securities, and focused investments.

Return on Real Estate[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Sep-09	22.41%	-	-	-	9.87%
↘ Performance Benchmark[2]	-	16.03%	-	-	-	2.64%
Insurance Fund	Sep-09	27.21%	-	-	-	11.27%
↘ Performance Benchmark[2]	-	16.03%	-	-	-	2.64%

[1]*Performance reported from initial investment with external management.*
[2]*Pension and Insurance Benchmark consists of 100% NCREIF Property Blended Index.*

Absolute Return

The Absolute Return portfolio consists primarily of one direct multi-strategy hedge fund investment, which was meaningfully diversified early in fiscal year 2012.

Return on Absolute Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Mar-10	6.36%	-	-	-	3.62%
↘ Performance Benchmark[1]	-	7.09%	-	-	-	6.83%
Insurance Fund	Mar-10	6.57%	-	-	-	3.35%
↘ Performance Benchmark[1]	-	7.09%	-	-	-	6.83%

[1]*Pension and Insurance Benchmark consists of 100% 12 month LIBOR +500 bps*

Cash

For the fiscal year, ending June 30, 2011, the KRS pension fund's cash portfolio returned 0.44%, outpacing its benchmark, the Citi Group 3-month Treasury by 0.32%.

★ **Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

For the fiscal year, ending June 30, 2011, the KRS pension fund's cash portfolio returned 0.44%, outpacing its benchmark, the Citi Group 3-month Treasury by 0.32%. The KRS insurance cash portfolio also outperformed the index, posting a return of 0.29% during the same twelve month period.

As the table below indicates, the longer term results from the cash portfolios have been excellent when compared to their benchmark. For the five years ending June 30, 2011, the pension fund portfolio has outperformed its custom benchmark by 0.87% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.84% per year. The insurance portfolio has also done very well, exceeding its benchmark return over the five-year period as well as since its inception by 0.43% and 0.30%, respectively.

Return on Cash

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jan-88	0.44%	1.00%	2.74%	3.31%	4.85%
↘ Performance Benchmark[1]	-	0.12%	0.33%	1.87%	2.01%	4.01%
Insurance Fund	Jul-92	0.29%	0.45%	2.30%	2.57%	3.63%
↘ Performance Benchmark[1]	-	0.12%	0.33%	1.87%	2.01%	3.33%

[1]*Pension and Insurance Cash Benchmark is the Citi Group 3-month Treasury.*

Following are additional schedules which indicated the Investment Advisors employed along with the total assets each of the firm manages for KRS, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems as of or for the year ended June 30, 2011.

External Investment Advisors & Assets Under Management (in Thousands)

Advisor	Assets Under Management
Aberdeen Asset Management, Aberdeen, Scotland	$356,017
Arbor Investments II, Chicago, Illinois	$23,642
Arcano Capital, New York, New York	$1,498
Arrowhawk Capital Partners, Darien, Connecticut	$104,174
Artio Global Investors, New York, New York	$289,603
Avenue Capital V, New York, New York	$1,108
Bay Hills Emerging Partners I, San Francisco, California	$49,127
BlackRock Global Investors, San Francisco, California	$299,259
Blackstone Capital Partners V, New York, New York	$50,090
Camelot Capital, New York, New York	$18,421
Columbia Capital IV, Alexandria, Virginia	$29,880
Commerce Street Income Partners LP, Dallas, Texas	$61,223
Crestview Partners II, New York, New York	$38,335
Doll Capital Management, Menlo Park, California	$4,697
Duff, Ackerman & Goodrich Ventures II, Palo Alto, California	$146,267
Essex Woodland VIII, Palo Alto, California	$9,048
GTCR Golder Rauner IX, Chicago, Illinois	$59,475
H.I.G BIO Venture II, Miami, Florida	$375
H.I.G. Venture Partners II, Miami, Florida	$18,906
H/2 Credit Partners, Stamford, Connecticut	$20,000
Harvest Partners V, New York, New York	$30,668
Hellman & Friedman VI, New York, New York	$24,750
Horsley Bridge International V LLC, San Fransico, California	$4,340
Institutional Venture Partners XI, Menlo Park, California	$47,145
Invesco, Atlanta, Georgia	$259,624
JW Childs Equity III, Boston, Massachusetts	$19,415
Keyhaven Capital Partners, London, England	$7,191
Leonard Green & Partners, L.P.,IV, Los Angeles, California	$154,242
Matlin Patterson Global Opportunities I & II, New York, New York	$43,428
Merit Capital Partners IV, Chicago, Illinois	$21,771
Mesa West, Los Angeles, California	$17,915
MHR Insitituional Advisors III, New York, New York	$3,285
Mill Road Capital, Greenwich, Connecticut	$32,978
New Mountain Partners II, New York, New York	$46,812

NISA Investment Advisors, St. Louis, Missouri	$1,265,204
Northern Trust Global Investors, Chicago, Illinois	$480,269
Oak Hill Partners II, New York, New York	$115,216
Oak Tree Opportunities VIIB, Los Angeles, California	$7,706
PIMCO, New Port Beach, California	$1,245,581
Prima Mortgage, New York, New York	$47,833
Pyramis Global Advisors, Boston, Massachusetts	$982,934
Record Currency Management, Windsor Berkshire, England	-$10,269
River Road Asset Mgmt, Louisville, Kentucky	$46,226
Shenkman Capital, Stamford, Connecticut	$143,711
Stone Harbor Investments, New York, New York	$145,310
Sun Capital Partners IV, Boca Raton, Florida	$22,050
Technology Crossover Ventures VI, Palo Alto, California	$10,185
Tenaska Power Fund II, Omaha, Nebraska	$15,207
The Boston Company, Boston, Massachusetts	$907,932
The Camelot Group, New York, New York	$18,421
Tortoise Capital, Leawodd, Kansas	$40,394
Vantagepoint Venture IV, San Bruno, California	$41,416
Vista Equity Partners III, San Francisco, California	$48,850
Walton Street Real Estate Fund, Chicago, Illinois	$25,229
Warburg Pincus IX, New York, New York	$97,474
Waterfall Investment, New York, New York	$181,126
Wayzata Investment Partners I, Wayzata, Minnesota	$180,406
Weaver Barksdale & Associates, Brentwood, Tennessee	$415,604
Wellington Management Company, Boston, Massachusetts	$208,779
Westfield Capital, Boston, Massachusetts	$164,264
Westwood Management, Dallas, Texas	$152,181
Total	**$9,293,952**

CONSULTANTS

Master Custodian is **Northern Trust Company**, from Chicago, Illinois. Investment consultants are **ORG Real Property** from Cleveland, Ohio; **R.V. Kuhns & Associates, Inc.** from Portland, Oregon; and **Strategic Investment Solutions** from San Francisco, California.

Schedule of Commissions Paid

Asset	Total Shares	Commissions Paid	Price per Share
U.S. Equities	293,851,266	$4,829,954	$0.016
	Total Value of Trades	**Commissions Paid**	**As a % of Trade**
International Equities	$3,664,170,864	$4,051,411	0.111%
Total Commissions Paid		**$8,881,365**	

External Investment Expenses (in Thousands)
Equity & Fixed Income Portfolio

Expense	Fees Paid	Share of Assets
Pension Funds	$47,265	0.4311%
Insurance Funds	$7,323	0.2704%
Consulting Fees	$1,169	0.0086%
Custody Fees	$250	0.0018%
Other Investment-Related Fees	$1,320	0.0097%
Total Commissions Paid	**$57,327**	**0.4193%**

PORTFOLIO SUMMARIES

KERS Non-Haz
Pension Fund (as of June 30, 2011)

Asset	Market Value	Share of Market Value
Bonds	$992,119,899	28.4%
Short-Term	$438,274,711	12.5%
Alternatives	$491,422,712	14.1%
Domestic Equities	$744,924,279	21.3%
International Equities	$827,906,151	23.7%
Total Portfolio	**$3,494,647,752**	**100.0%**

KERS Non-Haz
Insurance Fund (as of June 30, 2011)

Asset	Market Value	Share of Market Value
Bonds	$93,006,970	22.2%
Short-Term	$90,567,611	21.6%
Alternatives	$47,864,562	11.4%
Domestic Equities	$80,298,349	19.2%
International Equities	$106,880,246	25.5%
Total Portfolio	**$418,617,737**	**100.0%**

KERS Haz
Pension Fund (as of June 30, 2011)

Asset	Market Value	Share of Market Value
Bonds	$129,976,322	25.7%
Short-Term	$81,367,727	16.1%
Alternatives	$70,856,022	14.0%
Domestic Equities	$101,797,011	20.2%
International Equities	$121,067,184	24.0%
Total Portfolio	**$505,064,266**	**100.0%**

KERS Haz
Insurance Fund (as of June 30, 2011)

Asset	Market Value	Share of Market Value
Bonds	$71,224,539	22.3%
Short-Term	$82,951,916	26.0%
Alternatives	$24,714,568	7.8%
Domestic Equities	$62,523,778	19.6%
International Equities	$77,279,336	24.2%
Total Portfolio	**$318,694,136**	**100.0%**

CERS Non-Haz
Pension Fund (as of June 30, 2011)

Asset	Market Value	Share of Market Value
Bonds	$1,577,120,825	28.8%
Short-Term	$837,394,721	15.3%
Alternatives	$631,715,838	11.5%
Domestic Equities	$1,129,646,095	20.6%
International Equities	$1,306,614,801	23.8%
Total Portfolio	**$5,482,492,281**	**100.0%**

CERS Non-Haz
Insurance Fund (as of June 30, 2011)

Asset	Market Value	Share of Market Value
Bonds	$312,476,869	22.3%
Short-Term	$379,584,531	27.1%
Alternatives	$96,985,494	6.9%
Domestic Equities	$272,815,803	19.5%
International Equities	$338,529,880	24.2%
Total Portfolio	**$1,400,392,577**	**100.0%**

CERS Haz
Pension Fund (as of June 30, 2011)

Asset	Market Value	Share of Market Value
Bonds	$466,864,529	26.9%
Short-Term	$285,138,256	16.4%
Alternatives	$212,775,183	12.3%
Domestic Equities	$356,688,092	20.6%
International Equities	$413,670,806	23.8%
Total Portfolio	**$1,735,136,866**	**100.0%**

CERS Haz
Insurance Fund (as of June 30, 2011)

Asset	Market Value	Share of Market Value
Bonds	$166,842,521	22.1%
Short-Term	$209,012,994	27.7%
Alternatives	$51,628,727	6.9%
Domestic Equities	$145,117,906	193%
International Equities	$180,813,793	24.0%
Total Portfolio	**$753,415,942**	**100.0%**

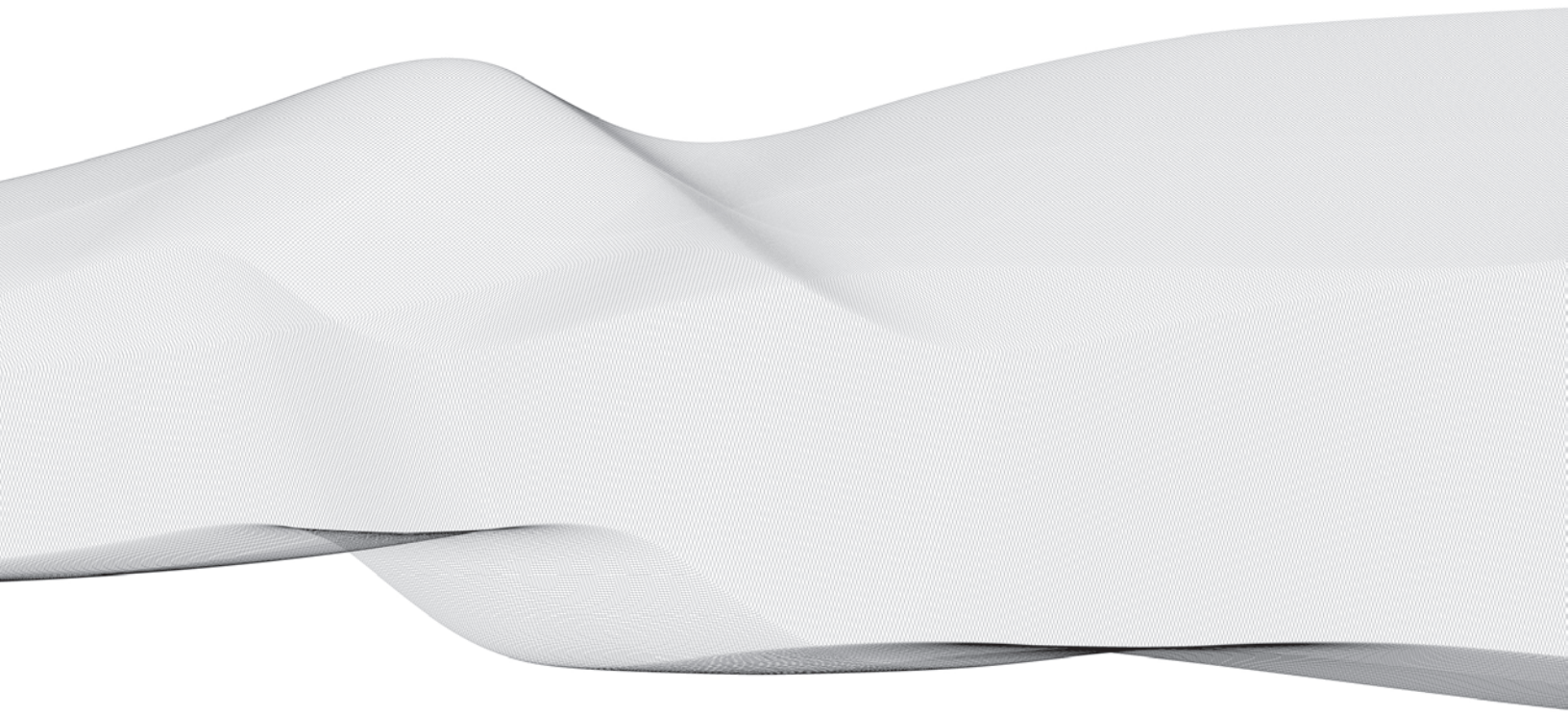
SPRS
Pension Fund (as of June 30, 2011)

Asset	Market Value	Share of Market Value
Bonds	$80,590,527	29.1%
Short-Term	$38,335,954	13.9%
Alternatives	$34,081,488	12.3%
Domestic Equities	$56,813,715	20.5%
International Equities	$66,825,800	24.2%
Total Portfolio	**$276,647,484**	**100.0%**

SPRS
Insurance Fund (as of June 30, 2011)

Asset	Market Value	Share of Market Value
Bonds	$29,071,108	23.0%
Short-Term	$30,789,451	24.4%
Alternatives	$10,768,227	8.5%
Domestic Equities	$24,896,707	19.7%
International Equities	$30,816,910	24.4%
Total Portfolio	**$126,342,403**	**100.0%**

Actuarial Section



Certification of Actuarial Results

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The fifty-fifth annual actuarial valuation of the Kentucky Employees Retirement System, the fifty-second annual actuarial valuation of the County Employees Retirement System, and the fifty-third annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared.

These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2011 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2012 and ending June 30, 2013.

Funding Objectives & Policies For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

UAL
Unfunded Accrued Liability

GASB
Governmental Accounting Standards Board

HB
House Bill

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

COLA
Cost of Living Adjustment

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30-year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the combined UAL bases will be amortized over a 30-year period beginning June 30, 2007. The amortization period will decrease by one each year in the future. Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

The impact of HB1 passed into law in 2008 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008.

Progress Towards Realization of Funding Objectives The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 (and for KERS Hazardous and CERS Non-Hazardous the 2009) assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans' ability to correct the declining funding levels. As of June 30, 2011 the funding levels for the pension [and insurance] funds are as follows:

Funding Level of Pension Fund

System	Funding Level
KERS Non-Hazardous	33.3%
KERS Hazardous	70.8%
CERS Non-Hazardous	63.1%
CERS Hazardous	62.2%
SPRS	45.0%

Funding Level of Insurance Fund

System	Funding Level
KERS Non-Hazardous	10.6%
KERS Hazardous	65.1%
CERS Non-Hazardous	46.6%
CERS Hazardous	46.8%
SPRS	28.2%

System Pension Funding Level The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Recent employer contribution rate reductions under KERS and SPRS have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level.

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities.

Data In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. At least once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on August 20, 2009 based on the experience investigation report dated August 17, 2009, meet the parameters set for disclosure under GASB Statements No. 25 and 43. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in January, 2014 and any adjustments will be reflected in the June 30, 2014 actuarial valuation.

Closing The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Thomas J. Cavanaugh FSA, FCA, MAAA, EA // CEO
Cavanaugh Macdonald Consulting, LLC
November 18, 2011

Summary of Actuarial Assumptions

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against ***actual plan experience at least once every five years*** *through the completion of the Actuarial Experience Study.*

As of June 30, 2011 The most recent study was completed in August 2009 and reviewed plan experience for the period from July 1, 2005 through June 30, 2008. All assumptions, with the exception of health care trend rates, used in the June 30, 2011 actuarial valuation were based on the study performed in 2009 and in accordance with the actuary's recommendations. The next Experience Study is scheduled to be completed in January, 2014.

Actuarial Cost Method The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL) over no more than a 30-year period.

UAL Amortization Method The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year June 30, 2009, and so on.)

Asset Valuation Method The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

Retiree Insurance Funding Policy The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. As with the pension Fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one, each year in the future.

Investment Return Assumption The future investment earnings of plan assets are assumed to accumulate at a rate of 7.75% per annum. This rate consists of a 3.5% inflationary component and a 4.25% real rate of return component. In accordance with GASB Statement 43, the investment return assumption has been reduced to a blended rate of 4.5% for KERS and SPRS insurance funds due to a lack of pre-funding benefits. This assumption was adopted in 2006.

Salary Increase Assumptions Active member salaries are assumed to increase at the rates provided in Table 1. The rates include a 4.5% percent inflationary component and an additional increase due to promotion based upon plan experience. These assumptions were adopted in 2009.

Table 1. Salary Increase Assumptions

Service	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
0-1	17.00%	21.00%	13.00%	20.00%	17.00%
0-2	9.00%	9.00%	9.50%	10.50%	12.00%
0-3	6.50%	7.00%	6.00%	6.50%	10.00%
0-4	6.00%	6.50%	6.00%	5.75%	9.00%
0-5	6.00%	6.00%	5.50%	5.50%	8.00%
0-6	6.00%	5.50%	5.50%	5.00%	7.00%
0-7	5.50%	5.00%	5.25%	4.50%	6.00%
0-8	5.50%	5.00%	5.25%	4.50%	6.50%
0-9	5.50%	5.00%	5.00%	4.50%	5.50%
0-10	5.00%	5.00%	5.00%	4.50%	5.00%
0-11	5.00%	5.00%	4.75%	4.50%	4.50%

Payroll Growth Assumption Active member payroll is assumed to increase at a rate of 4.5% per annum. This assumption was adopted in 2006.

COLA
Cost of Living Adjustment

Retiree COLAs State statute requires retirement allowances to be increased by 1.5 percent annually. Statute only allows the Cost of Living Adjustments (COLAs) awarded as of the valuation date to be recognized for funding purposes and for determining employer contribution rates. The State Legislature has the authority to suspend or reduce cost of living adjustments.

Medical Inflation Assumption The costs for retiree medical premiums are assumed to increase each according to the assumptions provided in Table 2 below.

Table 2. Cost of Retiree Medical Premiums

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2012	10.5%	8.5%
2013	9.5%	7.5%
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

Retirement Rate Assumptions The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 3 on page 108. These assumptions were adopted in 2009.

Table 3. Retirement Rate Assumptions

	Non-Hazardous				Hazardous					
Age	KERS[1]	KERS[2]	CERS[3]	Service	KERS[4]	KERS[5]	CERS[6]	CERS[7]	SPRS[8]	SPRS[9]
55	8.0%		8.0%	20	22.0%		20.0%		9.0%	
56	8.0%		8.0%	21	22.0%		20.0%		9.0%	
57	8.0%		8.0%	22	22.0%		20.0%		10.0%	
58	8.0%		8.0%	23	22.0%		20.0%		22.0%	
59	8.0%		8.0%	24	22.0%		30.0%		22.0%	
60	10.0%	10.0%	10.0%	25	35.0%	22.0%	33.0%	20.0%	22.0%	9.0%
61	20.0%	20.0%	20.0%	26	37.0%	22.0%	33.0%	20.0%	22.0%	9.0%
62	22.5%	22.5%	22.0%	27	37.0%	22.0%	33.0%	20.0%	25.0%	10.0%
63	22.5%	22.5%	22.0%	28	39.0%	22.0%	39.0%	20.0%	25.0%	22.0%
64	22.5%	22.5%	22.0%	29	38.0%	22.0%	33.0%	30.0%	25.0%	22.0%
65	22.5%	25.0%	22.0%	30	38.0%	35.0%	33.0%	33.0%	25.0%	22.0%
66	22.5%	25.0%	22.0%	31	38.0%	37.0%	33.0%	33.0%	33.3%	22.0%
67	22.5%	25.0%	22.0%	32	50.0%	37.0%	50.0%	33.0%	33.3%	25.0%
68	22.5%	25.0%	22.0%	33	50.0%	39.0%	40.0%	39.0%	33.3%	25.0%
69	22.5%	25.0%	22.0%	34	50.0%	38.0%	40.0%	33.0%	33.3%	25.0%
70	22.5%	25.0%	22.0%	35	60.0%	38.0%	40.0%	33.0%	33.3%	25.0%
71	22.5%	25.0%	22.0%	36	60.0%	38.0%	40.0%	33.0%	33.3%	33.3%
72	22.5%	25.0%	22.0%	37	60.0%	50.0%	40.0%	50.0%	33.3%	33.3%
73	22.5%	25.0%	22.0%	38	60.0%	50.0%	40.0%	40.0%	33.3%	33.3%
74	22.5%	25.0%	22.0%	39	60.0%	50.0%	40.0%	40.0%	33.3%	33.3%
75+	100.0%	100.0%	100.0%	40+	60.0%	60.0%	40.0%	40.0%	33.3%	33.3%

[1]*For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.*
[2]*For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 25%.*
[3]*If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.*
[4]*For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.*
[5]*For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*
[6]*For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.*
[7]*For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*
[8]*For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.*
[9]*For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

GAM
Group Annuity Mortality

Mortality Assumptions The mortality table used for active members is 50% of the 1994 Group Annuity Mortality (GAM) Table. For non-disabled members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table to the 1994 GAM table. For disabled members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table set forward five years to the 1994 GAM table set forward five years. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted. The pre-retirement mortality assumption was adopted in 2009 and the post-retirement mortality assumptions were adopted in 2006.

Table 4. Sample Annual Rates of Mortality

	Active Member Mortality		Retired Member Mortality*		Disabled Member Mortality*	
Age	Males	Females	Males	Females	Males	Females
Under 20	0.02%	0.01%	0.04%	0.03%	-	-
22	0.03%	0.01%	0.06%	0.03%	-	-
32	0.04%	0.02%	0.08%	0.04%	-	-
42	0.06%	0.04%	0.13%	0.08%	0.19%	0.11%
52	0.16%	0.09%	0.32%	0.17%	0.56%	0.29%
62	0.51%	0.29%	1.01%	0.58%	1.80%	1.08%
72	1.42%	0.83%	2.85%	1.65%	4.52%	2.84%

** For members retiring on or after July 1, 2006.*

Withdrawal Rates The withdrawal rate is a function of both age and service. This type of structure is known as "select and ultimate rates". This structure reflects the fact that both service and age affect the likelihood of a member staying in active employment. The ultimate period for these systems covers a member's withdrawal rate after the first five years of service. These assumptions were adopted in 2009.

Table 5. Selected Rates of Termination Prior to Retirement

KERS Non-Hazardous			
Select Rates		Ultimate Rates	
Years of Service	Probability	Age	Probability
1	19.00%	20	6.00%
2	13.00%	25	5.08%
3	10.00%	30	4.26%
4	9.00%	35	3.21%
5	6.50%	40	3.00%
		45	3.00%
		50	3.00%
		55	3.00%
		60	3.00%

KERS Hazardous			
Select Rates		Ultimate Rates	
Years of Service	Probability	Age	Probability
1	26.00%	20	4.00%
2	11.50%	25	4.00%
3	8.25%	30	3.50%
4	7.50%	35	3.00%
5	7.00%	40	3.00%
		45	3.00%
		50	3.00%
		55	3.00%
		60	3.00%

CERS Non-Hazardous			
Select Rates		Ultimate Rates	
Years of Service	Probability	Age	Probability
1	25.00%	20	5.75%
2	14.00%	25	5.75%
3	10.00%	30	5.30%
4	8.00%	35	4.40%
5	6.50%	40	3.70%
		45	3.02%
		50	2.70%
		55	2.20%
		60	0.75%

CERS Hazardous			
Select Rates		Ultimate Rates	
Years of Service	Probability	Age	Probability
1	14.00%	20	3.00%
2	7.50%	25	2.70%
3	6.00%	30	2.50%
4	4.50%	35	2.50%
5	4.00%	40	2.50%
		45	2.50%
		50	2.50%
		55	-
		60	-

Table 5 Continued. Selected Rates of Termination Prior to Retirement

SPRS Non-Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	20.00%	20	2.50%
2	7.50%	25	2.50%
3	3.00%	30	2.50%
4	3.00%	35	2.50%
5	3.00%	40	2.50%
		45	2.50%
		50	2.50%
		55	-
		60	-

Rates of Disablement KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. For non-hazardous members, the assumptions are set using three quarters of the Old-Age Survivors and Disability Insurance (OASDI) rates. For hazardous members, the assumptions are set using one times the OASDI rates. These assumptions were adopted in 2009.

OASDI
Old-Age Survivors & Disability Insurance

This assumption provides the probability, or likelihood, that a member will ***become disabled during the course of employment*** *for various age levels.*

Rate of Disablement

Non-Hazardous		Hazardous	
Age	Probability	Age	Probability
20-24	0.0354%	20-24	0.0531%
25-29	0.0474%	25-29	0.0711%
30-34	0.0612%	30-34	0.0918%
35-39	0.0853%	35-39	0.1280%
40-44	0.1329%	40-44	0.1994%
45-49	0.2213%	45-49	0.3320%
50-54	0.3727%	50-54	0.5590%
55-59	0.6133%	55-59	0.9200%
60-64	0.9745%	60-64	1.4618%

Summary of Actuarial Valuation Results as of June 30, 2011

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Recommended Rate Fiscal 2012-2013					
Pension Fund Contribution	28.03%	16.16%	12.62%	20.10%	47.48%
Insurance Fund Contribution	16.52%	19.73%	8.59%	21.84%	55.93%
Recommended Employer Contribution	44.55%	35.89%	21.21%	41.94%	103.41%
Funded Status as of Valuation Date					
Pension Fund					
↘ Actuarial Liability	$11,182,142,032	$721,293,444	$8,918,085,025	$2,859,041,052	$634,379,401
↘ Actuarial Value of Assets	$3,276,986,087	$510,748,505	$5,629,611,183	$1,779,545,393	$285,580,631
↘ Unfunded Liability on Actuarial Value of Assets	$7,455,155,945	$210,544,939	$3,288,473,842	$1,079,495,659	$348,798,770
↘ Funding Ratio on Actuarial Value of Assets	33.33%	70.81%	63.13%	62.24%	45.02%
↘ Market Value of Assets	$3,538,878,093	$510,628,492	$5,577,252,295	$1,760,602,934	$279,934,443
↘ Unfunded Liability on Market Value of Assets	$7,643,263,939	$210,664,952	$3,340,832,730	$1,098,438,118	$354,444,958
↘ Funding Ratio on Market Value of Assets	31.65%	70.79%	62.54%	61.58%	44.13%
Insurance Fund					
↘ Actuarial Liability	$4,280,089,633	$507,058,767	$3,073,973,205	$1,647,702,255	$438,427,763
↘ Actuarial Value of Assets	$451,620,442	$329,961,615	$1,433,450,793	$770,790,274	$123,687,289
↘ Unfunded Liability on Actuarial Value of Assets	$3,828,469,191	$177,097,152	$1,640,522,412	$876,912,481	$314,740,474
↘ Funding Ratio on Actuarial Value of Assets	10.55%	65.07%	46.63%	46.78%	28.21%
↘ Market Value of Assets	$433,305,243	$312,071,515	$1,451,984,026	$774,509,101	$127,367,947
↘ Unfunded Liability on Market Value of Assets	$3,846,784,390	$185,987,252	$1,621,989,179	$873,193,654	$311,059,816
↘ Funding Ratio on Market Value of Assets	10.12%	63.32%	47.23%	47.01%	29.05%
Member Data					
Number of Active Members	46,617	4,291	85,285	9,407	965
Total Annual Payroll (Active Members)[1]	$1,731,632,748	$133,053,792	$2,276,595,948	$466,963,860	$48,692,616
Average Annual Pay (Active Members)	$37,146	$31,008	$26,694	$49,640	$50,549
Number of Retired Members & Beneficiaries	38,597	3,064	43,211	6,468	1,263
Average Annual Retirement Allowance	$21,276	$14,886	$11,191	$24,777	$37,583
Number of Vested Inactive Members	6,265	334	9,902	580	52
Number of Inactive Members Due a Refund	32,332	2,930	56,012	2,194	305

[1]*Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2011.*

Recommended Employer Contribution Rates as of June 30, 2011
KERS Non-Haz

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/06	2007-2008	3.72%	11.83%	15.55%	32.82%	48.37%
6/30/07	2008-2009	3.62%	12.92%	16.54%	20.38%	36.92%
6/30/08	2009-2010	3.97%	14.99%	18.96%	20.49%	39.45%
6/30/09	2010-2011	4.26%	17.51%	21.77%	16.81%	38.58%
6/30/10	2011-2012	4.23%	20.07%	24.30%	16.41%	40.71%
6/30/11	2012-2013	4.38%	23.65%	28.03%	16.52%	44.55%

KERS Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/06	2007-2008	7.27%	2.93%	10.20%	36.91%	47.11%
6/30/07	2008-2009	7.28%	3.56%	10.84%	23.94%	34.78%
6/30/08	2009-2010	7.52%	4.46%	11.98%	23.56%	35.54%
6/30/09	2010-2011	7.94%	6.17%	14.11%	20.26%	34.37%
6/30/10	2011-2012	7.19%	6.92%	14.11%	19.73%	33.84%
6/30/11	2012-2013	7.47%	8.69%	16.16%	19.73%	35.89%

CERS Non-Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/06	2007-2008	4.69%	2.29%	6.98%	20.51%	27.49%
6/30/07	2008-2009	4.53%	3.23%	7.76%	12.75%	20.51%
6/30/08	2009-2010	4.46%	4.16%	8.62%	12.29%	20.91%
6/30/09	2010-2011	4.60%	5.43%	10.03%	9.78%	19.81%
6/30/10	2011-2012	4.72%	6.98%	11.70%	9.59%	21.29%
6/30/11	2012-2013	4.68%	7.94%	12.62%	8.59%	21.21%

CERS Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/06	2007-2008	8.12%	6.89%	15.01%	39.52%	54.53%
6/30/07	2008-2009	8.06%	6.98%	15.04%	27.62%	42.66%
6/30/08	2009-2010	8.23%	7.88%	16.11%	27.25%	43.36%
6/30/09	2010-2011	7.56%	9.23%	16.79%	23.27%	40.06%
6/30/10	2011-2012	7.31%	10.60%	17.91%	23.74%	41.65%
6/30/11	2012-2013	7.40%	12.70%	20.10%	21.84%	41.94%

Contiunued. Recommended Employer Contribution Rates as of June 30, 2011
SPRS

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/06	2007-2008	9.20%	19.75%	28.95%	91.05%	120.00%
6/30/07	2008-2009	9.64%	22.75%	32.39%	59.54%	91.93%
6/30/08	2009-2010	9.83%	25.40%	35.23%	56.89%	92.12%
6/30/09	2010-2011	8.12%	27.62%	35.74%	49.89%	85.63%
6/30/10	2011-2012	7.75%	32.05%	39.80%	54.83%	94.63%
6/30/11	2012-2013	8.12%	39.36%	47.48%	55.93%	103.41%

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

UAL
Unfunded Accrued Liability

KERS Funds The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the tables on page 112 are the full funding rates presented by the actuary in the 2006 through 2011 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statue now calls for an employer contribution rate at an increasing percentage of the full funding rates until 100% is achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous.

CERS Funds The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2006 through 2011 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2012-2013 is 6.93% and the employer contribution rate is 19.55%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2012-2013 is 17.50% and the employer contribution rate is 37.60%.

SPRS Funds The contribution rates for SPRS shown in the above tables are the full funding rates presented by the actuary in the 2006 through 2011 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statue now calls for an employer contribution rate at an increasing percentage of the full funding rates until 100% is achieved in 2020 for SPRS.

Summary of Actuarially Unfunded Liabilities as of June 30, 2011
KERS Non-Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/06	$8,994,826,247	$5,394,086,323	$5,440,132,708	$3,600,739,924	$3,554,693,539	60.0%	60.5%
6/30/07	$9,485,939,277	$5,396,782,459	$5,773,156,838	$4,089,156,818	$3,712,782,439	56.9%	60.9%
6/30/08	$10,129,689,985	$5,318,792,893	$5,056,867,294	$4,810,897,092	$5,072,822,691	52.5%	49.9%
6/30/09	$10,658,549,532	$4,794,611,365	$3,584,196,429	$5,863,938,167	$7,074,353,103	45.0%	33.6%
6/30/10	$11,004,795,089	$4,210,215,585	$3,503,007,035	$6,794,579,504	$7,501,788,054	38.3%	31.8%
6/30/11	$11,182,142,032	$3,276,986,087	$3,538,878,093	$7,455,155,945	$7,643,263,939	33.3%	31.7%

KERS Non-Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/06	$7,815,480,774	$611,350,765	$632,642,846	$7,204,130,009	$7,182,837,928	7.8%	8.1%
6/30/07	$5,201,355,055	$621,171,658	$663,558,360	$4,580,183,397	$4,537,796,695	11.9%	12.8%
6/30/08	$5,431,499,285	$603,197,761	$574,480,809	$4,828,301,524	$4,857,018,476	11.1%	10.6%
6/30/09	$4,507,325,571	$534,172,580	$365,771,088	$3,973,152,991	$4,141,554,483	11.9%	8.1%
6/30/10	$4,466,136,041	$471,341,628	$371,002,484	$3,994,794,413	$4,095,133,557	10.6%	8.3%
6/30/11	$4,280,089,633	$451,620,442	$433,305,243	$3,828,469,191	$3,846,784,390	10.6%	10.1%

KERS Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/06	$508,655,903	$427,984,192	$437,029,583	$80,671,711	$71,626,320	84.1%	85.9%
6/30/07	$558,992,329	$467,287,809	$510,775,499	$91,704,520	$48,216,830	83.6%	91.4%
6/30/08	$618,010,827	$502,132,214	$484,440,015	$115,878,613	$133,570,812	81.3%	78.4%
6/30/09	$674,411,781	$502,503,287	$388,913,374	$171,908,494	$285,498,406	74.5%	57.7%
6/30/10	$688,149,451	$502,729,009	$443,511,663	$185,420,442	$244,637,788	73.1%	64.5%
6/30/11	$721,293,444	$510,748,505	$510,628,492	$210,544,939	$210,664,952	70.8%	70.8%

KERS Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/06	$621,237,856	$212,833,318	$223,523,081	$408,404,538	$397,714,775	34.3%	36.0%
6/30/07	$504,842,981	$251,536,756	$280,885,910	$253,306,225	$223,957,071	49.8%	55.6%
6/30/08	$541,657,214	$288,161,759	$269,299,859	$253,495,455	$272,357,355	53.2%	49.7%
6/30/09	$491,132,170	$301,634,592	$219,537,255	$189,497,578	$271,594,915	61.4%	44.7%
6/30/10	$493,297,529	$314,427,296	$271,395,843	$178,870,233	$221,901,686	63.7%	55.0%
6/30/11	$507,058,767	$329,961,615	$321,071,515	$177,097,152	$185,987,252	65.1%	63.3%

Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2011
CERS Non-Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/06	$6,179,569,267	$5,162,894,136	$5,191,376,948	$1,016,675,131	$988,192,319	83.6%	84.0%
6/30/07	$6,659,446,126	$5,467,824,480	$5,812,935,251	$1,191,621,646	$846,510,875	82.1%	87.3%
6/30/08	$7,304,217,691	$5,731,502,438	$5,431,735,605	$1,572,715,253	$1,872,482,086	78.5%	74.4%
6/30/09	$7,912,913,512	$5,650,789,991	$4,330,593,934	$2,262,123,521	$3,582,319,578	71.4%	54.7%
6/30/10	$8,459,022,280	$5,546,857,291	$4,819,933,717	$2,912,164,989	$3,639,088,563	65.6%	57.0%
6/30/11	$8,918,085,025	$5,629,611,183	$5,577,252,295	$3,288,473,842	$3,340,832,730	63.1%	62.5%

CERS Non-Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/06	$4,607,223,639	$777,726,590	$813,250,744	$3,829,497,049	$3,793,972,895	16.9%	17.7%
6/30/07	$3,333,966,070	$960,285,900	$1,084,042,781	$2,373,680,170	$2,249,923,289	28.8%	32.5%
6/30/08	$3,583,193,466	$1,168,883,170	$1,105,944,178	$2,414,310,296	$2,477,249,288	32.6%	30.9%
6/30/09	$3,070,386,018	$1,216,631,769	$894,905,841	$1,853,754,249	$2,175,480,177	39.6%	29.2%
6/30/10	$3,158,340,174	$1,293,038,593	$1,096,581,872	$1,865,301,581	$2,061,758,302	40.9%	34.7%
6/30/11	$3,073,973,205	$1,433,450,793	$1,451,984,026	$1,640,522,412	$1,621,989,179	46.6%	47.2%

CERS Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/06	$2,020,142,770	$1,515,075,017	$1,528,845,357	$505,067,753	$491,297,413	75.0%	75.7%
6/30/07	$2,208,736,179	$1,639,288,924	$1,754,934,764	$569,447,255	$453,801,415	74.2%	79.5%
6/30/08	$2,403,122,095	$1,750,867,373	$1,644,983,243	$652,254,722	$758,138,852	72.9%	68.5%
6/30/09	$2,578,444,600	$1,751,487,540	$1,320,522,868	$826,957,060	$1,257,921,732	67.9%	51.2%
6/30/10	$2,672,151,907	$1,749,464,388	$1,506,787,429	$922,687,519	$1,165,364,478	65.5%	56.4%
6/30/11	$2,859,041,052	$1,779,545,393	$1,760,602,934	$1,079,495,659	$1,098,438,118	62.2%	61.6%

CERS Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/06	$1,928,481,371	$422,785,042	$441,278,796	$1,505,696,329	$1,487,202,575	21.9%	22.9%
6/30/07	$1,646,460,011	$512,926,549	$570,155,702	$1,133,533,462	$1,076,304,309	31.2%	34.6%
6/30/08	$1,769,782,957	$613,526,319	$576,414,457	$1,156,256,638	$1,193,368,500	34.7%	32.6%
6/30/09	$1,593,548,263	$651,130,782	$483,269,862	$942,417,481	$1,110,278,401	40.9%	30.3%
6/30/10	$1,674,703,216	$692,769,770	$586,826,965	$981,933,446	$1,087,876,251	41.4%	35.0%
6/30/11	$1,647,702,755	$770,790,274	$774,509,101	$876,912,481	$873,193,654	46.8%	47.0%

Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2011

SPRS Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/06	$516,482,298	$344,016,197	$352,841,486	$172,466,101	$163,640,812	66.6%	68.3%
6/30/07	$547,955,286	$348,806,508	$376,381,488	$199,148,778	$171,573,798	63.7%	68.7%
6/30/08	$587,129,257	$350,891,451	$337,358,918	$236,237,806	$249,770,339	59.8%	57.5%
6/30/09	$602,328,868	$329,966,989	$256,571,073	$272,361,879	$345,757,795	54.8%	42.6%
6/30/10	$612,444,806	$304,577,292	$264,944,089	$307,867,514	$347,500,717	49.7%	43.3%
6/30/11	$634,379,401	$285,580,631	$279,934,443	$348,798,770	$354,444,958	45.0%	44.1%

SPRS Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/06	$582,580,867	$105,580,269	$110,491,075	$477,000,598	$472,089,792	18.1%	19.0%
6/30/07	$432,763,229	$115,215,912	$132,573,898	$317,547,317	$300,189,331	26.6%	30.6%
6/30/08	$445,107,468	$123,961,197	$121,781,967	$321,146,271	$323,325,501	27.9%	27.4%
6/30/09	$364,031,141	$123,526,647	$93,686,940	$240,504,494	$270,344,201	33.9%	25.7%
6/30/10	$434,960,495	$121,175,083	$104,526,550	$313,785,412	$330,433,945	27.9%	24.0%
6/30/11	$438,427,763	$123,687,289	$127,367,947	$314,740,474	$311,059,816	28.2%	29.1%

Analysis of Financial Experience

Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2011

Type of Activity	Retirement Gain	Insurance Gain
KERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	$(108.3)	$1,265,204
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(14.2)	480,269
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.9)	115,216
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	42.3	7,706
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	194.1	1,245,581
New Members. Additional unfunded accrued liability will produce a loss.	(6.2)	47,833
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(242.7)	982,934
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	22.4	41.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(139.1)	(129.7)
Gain (or Loss) During Year From Financial Experience	**$(252.6)**	**$191.4**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	-	-
Composite Gain (or Loss) During Year	**$(252.6)**	**$191.4**
KERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(36.4)	(21.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.3)	0.7
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.3)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	18.5	7.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	18.6	39.7
New Members. Additional unfunded accrued liability will produce a loss.	(1.2)	(0.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(15.9)	(11.0)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	2.6	10.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(5.5)	(19.1)
Gain (or Loss) During Year From Financial Experience	**$(19.5)**	**$5.3**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**$(19.5)**	**$5.3**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2011

Type of Activity	Retirement Gain	Insurance Gain
CERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	$(144.9)	$(12.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(23.1)	4.4
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.4)	(2.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	52.5	18.0
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	74.6	243.0
New Members. Additional unfunded accrued liability will produce a loss.	(12.5)	(8.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(230.0)	(28.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	19.9	33.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(30.0)	14.3
Gain (or Loss) During Year From Financial Experience	**$(294.9)**	**$261.6**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	-	-
Composite Gain (or Loss) During Year	**$(294.9)**	**$261.6**
CERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	$(72.2)	$(41.2)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(2.3)	(0.1)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	30.4	18.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	17.6	130.5
New Members. Additional unfunded accrued liability will produce a loss.	(3.9)	(4.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(73.1)	(18.0)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	1.9	27.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(35.4)	12.7
Gain (or Loss) During Year From Financial Experience	**$(136.9)**	**$124.4**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**$(136.9)**	**$124.4**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience *&* Actual Experience (in Millions) as of June 30, 2011

Type of Activity	Retirement Gain	Insurance Gain
SPRS		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	$(14.1)	$(12.8)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(1.0)	0.1
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	4.1	3.0
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	7.3	33.5
New Members. Additional unfunded accrued liability will produce a loss.	0.0	(1.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(13.2)	(1.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.6	9.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(9.6)	(29.6)
Gain (or Loss) During Year From Financial Experience	**$(25.9)**	**$1.1**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	-	-
Composite Gain (or Loss) During Year	**$(25.9)**	**$1.1**

Solvency Test

Solvency Test for KERS Non-Hazardous Pension Fund as of June 30, 2011

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/06	$866,050,799	$5,881,990,853	$2,246,784,595	$5,394,086,323	100.0%	77.0%	-
6/30/07	$878,842,180	$6,437,235,593	$2,169,861,504	$5,396,782,459	100.0%	70.2%	-
6/30/08	$875,178,068	$7,162,496,700	$2,092,015,217	$5,318,792,893	100.0%	62.0%	-
6/30/09	$793,574,765	$8,205,155,691	$1,659,819,076	$4,794,611,365	100.0%	48.8%	-
6/30/10	$869,484,042	$8,329,757,802	$1,805,553,245	$4,210,215,585	100.0%	40.1%	-
6/30/11	$916,568,932	$8,482,714,356	$1,782,858,744	$3,726,986,087	100.0%	33.1%	-

Continued. Solvency Test for KERS Non-Hazardous Insurance Fund as of June 30, 2011

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/06	-	$3,543,125,375	$4,272,355,400	$611,350,765	100.0%	17.3%	-
6/30/07	-	$2,569,197,567	$2,632,157,488	$621,171,658	100.0%	24.2%	-
6/30/08	-	$2,788,189,754	$2,643,309,531	$603,197,761	100.0%	21.6%	-
6/30/09	-	$2,861,867,088	$1,645,458,483	$534,172,580	100.0%	18.7%	-
6/30/10	-	$2,744,534,054	$1,721,601,987	$471,341,628	100.0%	17.2%	-
6/30/11	-	$2,568,002,978	$1,712,086,655	$451,620,442	100.0%	17.6%	-

KERS Hazardous Pension Fund as of June 30, 2011

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/06	$87,092,538	$262,446,606	$159,116,759	$427,984,192	100.0%	100.0%	49.3%
6/30/07	$88,670,847	$306,492,350	$163,829,132	$467,287,809	100.0%	100.0%	44.0%
6/30/08	$89,590,638	$355,771,877	$172,648,312	$502,132,214	100.0%	100.0%	32.9%
6/30/09	$87,779,938	$413,972,356	$172,659,487	$502,503,287	100.0%	100.0%	0.4%
6/30/10	$88,511,283	$441,657,241	$157,980,927	$502,729,009	100.0%	93.8%	-
6/30/11	$86,614,205	$490,395,078	$144,284,161	$510,748,505	100.0%	86.5%	-

KERS Hazardous Insurance Fund as of June 30, 2011

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/06	-	$234,058,715	$387,179,141	$212,833,318	100.0%	90.9%	-
6/30/07	-	$201,189,546	$303,653,435	$251,536,756	100.0%	100.0%	16.6%
6/30/08	-	$228,834,940	$312,822,274	$288,161,759	100.0%	100.0%	19.0%
6/30/09	-	$242,123,365	$249,008,805	$301,634,592	100.0%	100.0%	23.9%
6/30/10	-	$268,510,709	$224,786,820	$314,427,296	100.0%	100.0%	20.4%
6/30/11	-	$285,539,861	$221,518,906	$329,961,615	100.0%	100.0%	20.1%

CERS Non-Hazardous Pension Fund as of June 30, 2011

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/06	$883,946,564	$3,210,095,023	$2,085,527,680	$5,162,894,136	100.0%	100.0%	51.3%
6/30/07	$920,126,096	$3,589,512,063	$2,149,807,967	$5,467,824,480	100.0%	100.0%	44.6%
6/30/08	$963,213,677	$4,058,767,419	$2,282,236,595	$5,731,502,438	100.0%	100.0%	31.1%
6/30/09	$991,628,551	$4,542,483,102	$2,378,801,859	$5,650,789,991	100.0%	100.0%	4.9%
6/30/10	$1,063,746,826	$4,890,659,077	$2,504,616,377	$5,546,857,291	100.0%	91.7%	-
6/30/11	$1,110,967,160	$5,209,783,924	$2,597,333,941	$5,629,611,183	100.0%	86.7%	-

Continued. Solvency Test for CERS Non-Hazardous Insurance Fund as of June 30, 2011

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/06	-	$1,694,600,143	$2,912,623,496	$777,726,590	100.0%	45.9%	-
6/30/07	-	$1,372,128,406	$1,961,837,664	$960,285,900	100.0%	70.0%	-
6/30/08	-	$1,521,450,274	$2,061,743,192	$1,168,883,170	100.0%	76.8%	-
6/30/09	-	$1,478,782,753	$1,591,603,265	$1,216,631,769	100.0%	82.3%	-
6/30/10	-	$1,526,533,372	$1,631,806,802	$1,293,038,593	100.0	84.7%	-
6/30/11	-	$1,460,808,255	$1,613,164,950	$1,433,450,793	100.0	98.1%	-

CERS Hazardous Pension Fund as of June 30, 2011

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/06	$300,200,800	$1,128,164,618	$591,777,352	$1,515,075,017	100.0%	100.0%	14.7%
6/30/07	$317,007,367	$1,275,221,775	$616,507,037	$1,639,288,924	100.0%	100.0%	7.6%
6/30/08	$338,324,362	$1,406,982,409	$657,815,324	$1,750,867,373	100.0%	100.0%	0.8%
6/30/09	$350,308,879	$1,540,262,587	$687,873,134	$1,751,487,540	100.0%	91.0%	-
6/30/10	$369,612,720	$1,622,684,455	$679,854,732	$1,749,464,388	100.0%	85.0%	-
6/30/11	$382,072,055	$1,768,511,545	$708,457,452	$1,779,545,393	100.0%	79.0%	-

CERS Hazardous Insurance Fund as of June 30, 2011

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/06	-	$787,671,273	$1,140,810,098	$422,785,042	100.0%	53.7%	-
6/30/07	-	$659,752,978	$986,707,033	$512,926,549	100.0%	77.7%	-
6/30/08	-	$722,435,184	$1,047,347,773	$613,526,319	100.0%	84.9%	-
6/30/09	-	$725,899,836	$867,648,427	$651,130,782	100.0%	89.7%	-
6/30/10	-	$814,300,256	$860,402,960	$692,769,770	100.0%	85.1%	-
6/30/11	-	$771,631,287	$876,071,468	$770,790,274	100.0%	99.9%	-

SPRS Pension Fund as of June 30, 2011

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/06	$37,866,774	$373,588,145	$105,027,379	$344,016,197	100.0%	81.9%	-
6/30/07	$39,505,285	$397,863,520	$110,583,481	$348,806,508	100.0%	77.7%	-
6/30/08	$41,391,416	$426,311,368	$119,426,473	$350,891,451	100.0%	72.6%	-
6/30/09	$41,664,469	$459,585,353	$101,079,046	$329,966,989	100.0%	62.7%	-
6/30/10	$42,011,523	$475,892,659	$94,540,624	$304,577,292	100.0%	55.2%	-
6/30/11	$43,574,097	$499,194,229	$91,611,075	$285,580,631	100.0%	48.5%	-

Continued. Solvency Test for SPRS Insurance Fund as of June 30, 2011

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/06	-	$240,913,868	$341,666,999	$105,580,269	100.0%	43.8%	-
6/30/07	-	$172,291,142	$260,472,087	$115,215,912	100.0%	66.9%	-
6/30/08	-	$178,655,245	$266,452,223	$123,961,197	100.0%	69.4%	-
6/30/09	-	$167,091,453	$196,939,688	$123,526,647	100.0%	73.9%	-
6/30/10	-	$253,580,827	$181,379,668	$121,175,083	100.0%	47.8%	-
6/30/11	-	$252,439,726	$185,988,037	$123,687,289	100.0%	49.0%	-

Active Member Valuation

Methodology The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

Summary of Active Member Valuation Data for KERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/06	338	46,707	$1,702,230,777	$36,445	3.7%	43.0	9.7
6/30/07	317	47,913	$1,780,223,493	$37,155	1.9%	43.3	9.3
6/30/08	414	48,085	$1,837,873,488	$38,221	2.9%	43.2	9.1
6/30/09	334	46,060	$1,754,412,912	$38,090	(0.3)%	43.0	8.7
6/30/10	334	47,090	$1,815,146,388	$38,546	1.2%	43.4	9.0
6/30/11	427	46,617	$1,731,632,748	$37,146	(3.6)%	43.8	9.4

KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/06	15	4,320	$138,747,320	$32,117	4.2%	41.6	7.0
6/30/07	15	4,349	$144,838,020	$33,304	3.7%	41.7	7.0
6/30/08	16	4,393	$148,710,060	$33,852	1.6%	41.4	6.9
6/30/09	20	4,334	$146,043,576	$33,697	(0.5)%	41.4	7.0
6/30/10	18	4,291	$143,557,944	$33,456	(0.7)%	41.4	7.0
6/30/11	16	4,291	$133,053,792	$31,008	(7.3)%	41.3	6.9

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2011*

Continued. Summary of Active Member Valuation Data for CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/06	1,099	83,694	$1,982,437,473	$23,687	2.1%	45.1	8.1
6/30/07	1,112	84,920	$2,076,848,328	$24,457	3.3%	45.9	8.1
6/30/08	1,110	85,221	$2,166,612,648	$25,423	3.9%	45.9	8.3
6/30/09	1,108	83,724	$2,183,611,848	$26,081	2.6%	46.2	8.6
6/30/10	1,102	84,681	$2,236,855,380	$26,415	1.3%	46.6	8.8
6/30/11	1,102	85,285	$2,276,595,948	$26,694	1.1%	46.8	9.0

CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/06	292	9,635	$426,927,550	$44,310	2.0%	37.8	8.3
6/30/07	294	10,063	$458,998,956	$45,613	2.9%	38.6	8.1
6/30/08	299	10,173	$474,241,332	$46,618	2.2%	38.7	8.3
6/30/09	290	9,757	$469,315,464	$48,100	3.2%	38.4	8.8
6/30/10	282	9,562	$466,548,660	$48,792	1.4%	38.8	9.2
6/30/11	281	9,407	$466,963,860	$49,640	1.7%	39.1	9.5

SPRS

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/06	1	1,028	$47,743,865	$46,443	4.8%	36.5	10.5
6/30/07	1	957	$49,247,580	$51,460	10.8%	37.3	11.1
6/30/08	1	993	$53,269,080	$53,645	4.2%	36.9	10.8
6/30/09	1	946	$51,660,396	$54,609	1.8%	37.3	11.0
6/30/10	1	961	$51,506,712	$53,597	(1.9)%	37.2	10.6
6/30/11	1	965	$48,692,616	$50,459	(5.9)%	37.7	10.6

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2011*

Retired Member Valuation

Summary of Retired Member Valuation Data for KERS Non-Haz

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/06	2,481	1,111	32,140	$566,167,003	11.31%	$17,616
6/30/07	2,440	731	33,849	$625,435,416	10.47%	$18,472
6/30/08	2,573	1,115	35,307	$710,505,270	13.60%	$20,124
6/30/09	3,465	889	37,883	$812,559,070	14.36%	$21,449
6/30/10	1,162	1,100	37,945	$801,881,911	(1.31%)	$21,133
6/30/11	1,592	940	38,597	$821,197,278	2.41%	$21,276

KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/06	256	28	1,980	$23,381,489	19.05%	$11,809
6/30/07	241	19	2,202	$27,528,837	17.94%	$12,502
6/30/08	261	59	2,404	$33,588,993	22.01%	$13,972
6/30/09	339	95	2,648	$38,695,501	15.20%	$14,613
6/30/10	282	95	2,835	$41,114,800	6.25%	$14,503
6/30/11	288	59	3,064	$45,609,229	10.93%	$14,886

CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/06	2,782	1,027	33,102	$308,269,651	10.26%	$9,313
6/30/07	3,244	782	35,564	$348,712,020	13.12%	$9,805
6/30/08	3,366	1,351	37,759	$393,757,510	12.92%	$10,478
6/30/09	3,060	883	39,756	$440,061,418	11.76%	$11,069
6/30/10	2,565	1,283	41,038	$452,613,550	2.85%	$11,029
6/30/11	3,250	1,077	43,211	$483,594,068	6.84%	$11,191

CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/06	427	76	4,712	$100,290,052	12.40%	$21,284
6/30/07	500	53	5,159	$113,735,850	13.41%	$22,046
6/30/08	469	206	5,422	$127,477,109	12.08%	$23,511
6/30/09	650	264	5,808	$139,886,751	9.73%	$24,085
6/30/10	423	163	6,068	$146,916,812	5.03%	$24,212
6/30/11	502	102	6,468	$160,259,395	9.08%	$24,777

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

Continued. Summary of Retired Member Valuation Data for SPRS

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/06	43	10	1,067	$34,651,251	5.06%	$32,475
6/30/07	49	11	1,105	$37,208,377	7.38%	$33,673
6/30/08	42	12	1,135	$41,293,017	10.98%	$36,382
6/30/09	75	26	1,184	$44,273,937	7.22%	$37,394
6/30/10	54	15	1,223	$45,515,797	2.80%	$37,217
6/30/11	52	12	1,263	$47,467,404	4.29%	$37,583

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

Summary of Benefit Provisions KERS & CERS Non-Hazardous Plans

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

CPI
Consumer Price Index

Plan Funding State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statutes 61.565 and Kentucky Revised Statutes 61.752. KERS rates are subject to state budget approval.

Membership Eligibility For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility for Members Whose Participation Began Before 9/1/08

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	5% per year for first five years, and 4% for next five years before age 65 or 27 years of service.
Any	25	5% per year for first five years, and 4% for next five years before age 65 or 27 years of service.

Retirement Eligibility for Members Whose Participation Began On or After 9/1/08

Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None
60	10	5% per year for first five years, and 4% for next five years before age 65 or Rule of 87 (age plus years of service).

State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required.

Benefit Formula

Final Compensation	x	Benefit Factor		x	Years of Service
Average of the five highest if participation began before 9/1/2008.		KERS 1.97% if:	Member does not have 13 months credit for 1/1/1998-1/1/1999.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if:	Member has 13 months credit from 1/1/1998-1/1/1999.		
		KERS 2.20% if:	Member has 20 or more years of service, including 13 months from 1/1/1998-1/1/1999 and retires by 1/1/2009.		
		CERS 2.20% if:	Member begins participating prior to 8/1/2004.		
		CERS 2.00% if:	Member begins participating on or after 8/1/2004 and before 9/1/2008.		
Average of the last five if participation began on or after 9/1/2008.		KERS & CERS increasing percent based on service at retirement* plus 2.00% for each year of service over 30 if:	Member begins participating on or after 9/1/2008.		

* ***Service*** *(and Benefit Factor):* ***10 years or less*** *(1.10%);* ***10 - 20 years*** *(1.30%);* ***20 - 26 years*** *(1.50%);* ***26 - 30 years*** *(1.75%)*

Post-Retirement Death Benefits If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits Members participating before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula. Members participating on or after 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service. Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to suspend or reduce COLAs.

COLA
Cost of Living Adjustment

CPI
Consumer Price Index

Insurance Benefits For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased by the CPI prior to July 1, 2008, and by 1.5% annually from July 1, 2008.

Refunds Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees hired prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees hired on or after September 1, 2008, interest will be credited at a rate of 2.5%.

Summary of Benefit Provisions
KERS, CERS & SPRS Plans

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Plan Funding State statute requires active members to contribute 8% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statutes 61.565 and Kentucky Revised Statutes 61.752. KERS and SPRS rates are subject to state budget approval.

Membership Eligibility All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

Retirement Eligibility for Members Whose Participation Began Before 9/1/08

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 55 or 20 years of service.

Retirement Eligibility for Members Whose Participation Began On or After 9/1/08

Age	Years of Service	Allowance Reduction
60	5	None
Any	25	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 60 or 25 years of service.

Disability Benefits Members hired before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted on page 129.

Members hired on or after 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% of Final Rate of Pay or the amount calculated under the Benefit Formula noted above based upon actual service.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Benefit Formula

Final Compensation	x	Benefit Factor		x	Years of Service
Average of the three highest if participation began before 9/1/2008.		KERS 2.49%, CERS 2.50%, SPRS 2.50%, if:	Member begins participating before 9/1/2008.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
Average of the three highest full years if participation began on or after 9/1/2008.		KERS, CERS and SPRS increasing percent based on service at retirement* if:	Member begins participating on or after 9/1/2008.		

* ***Service*** *(with Benefit Factor):* ***10 years or less*** *(1.30%);* ***10 - 20 years*** *(1.50%);* ***20 - 25 years*** *(2.50%)*

Pre-Retirement Death Benefits The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to suspend or reduce COLAs.

COLA
Cost of Living Adjustment

CPI
Consumer Price Index

Insurance Benefits For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15 for each year of earned service increased by the CPI prior to July 1, 2008, and by 1.5% annually from July 1, 2008.

Refunds Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1980; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees hired prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees hired on or after September 1, 2008, interest will be credited at a rate of 2.5%.

Statistical Section

Fund Statistics

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Definitions Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

Member Breakdown The data for years 2006-2009 reflects the number of accounts in each system. A single member may have multiple accounts, which contribute to one pension. Beginning in 2010: Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-hazardous, then KERS Non-hazardous.

KERS Non-Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2006	46,707	29,143	32,140	107,990
2007	47,913	30,904	33,849	112,666
2008	48,202	32,717	35,286	116,205
2009	46,060	34,515	37,883	118,458
2010	46,710	32,461	35,733	114,904
2011	46,044	33,350	36,239	115,633

KERS Haz Membership

2006	4,320	2,501	1,981	8,802
2007	4,349	2,738	2,202	9,289
2008	4,397	3,534	2,402	10,333
2009	4,334	3,056	2,648	10,038
2010	4,049	2,285	1,900	8,234
2011	4,045	2,351	2,090	8,486

CERS Non-Haz Membership

2006	83,694	50,046	33,102	166,842
2007	84,920	53,901	35,564	174,385
2008	85,803	55,279	37,558	178,640
2009	83,724	60,275	39,756	183,755
2010	84,010	55,423	38,261	177,694
2011	84,837	57,073	40,174	182,084

Continued. CERS Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2006	9,635	1,955	4,712	16,302
2007	10,063	2,197	5,159	17,419
2008	10,185	4,815	5,314	20,314
2009	9,757	2,522	5,808	18,087
2010	9,120	2,009	4,867	15,996
2011	9,019	2,047	5,158	16,224
SPRS				
2006	1,028	266	1,067	2,361
2007	957	286	1,105	2,348
2008	995	302	1,136	2,433
2009	946	332	1,184	2,462
2010	948	201	1,004	2,153
2011	949	204	1,019	2,172
Kentucky Retirement Systems Membership Totals				
2006	145,384	83,911	73,002	302,297
2007	148,202	90,026	77,879	316,107
2008	149,582	96,647	81,696	327,925
2009	144,821	101,552	87,279	333,652
2010	144,837	92,379	81,765	318,981
2011	144,894	95,025	84,680	324,599

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

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Average Monthly Benefit by Length of Service in KERS

	KERS Non-Hazardous		KERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	4,101	$148.63	552	$183.74
5 or more but less than 10	4,885	398.06	632	549.37
10 or more but less than 15	4,388	666.01	564	996.79
15 or more but less than 20	3,914	978.48	510	1,513.13
20 or more but less than 25	4,276	1,339.53	592	1,995.89
25 or more but less than 30	10,109	2,257.70	131	2,661.45
30 or more but less than 35	6,209	3,155.17	57	3,443.48
35 or more	2,600	4,420.25	10	4,551.92
Total	**40,482**	**$1,702.99**	**3,048**	**$1,166.18**

Average Monthly Benefit by Length of Service in CERS

	CERS Non-Hazardous		CERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	5,032	140.85	568	212.53
5 or more but less than 10	8,751	316.25	778	656.73
10 or more but less than 15	8,157	500.01	572	1,204.36
15 or more but less than 20	6,333	752.69	547	1,671.10
20 or more but less than 25	6,349	975.25	2,296	2,292.75
25 or more but less than 30	7,991	1,877.96	1,061	3,251.52
30 or more but less than 35	2,060	2,648.59	389	4,016.19
35 or more	573	3,514.36	91	4,915.72
Total	**45,246**	**$905.94**	**6,302**	**$2,056.22**

Average Monthly Benefit by Length of Service in SPRS

Under 5 Years	61	323.48
5 or more but less than 10	39	874.58
10 or more but less than 15	41	1,267.45
15 or more but less than 20	75	1,967.10
20 or more but less than 25	362	2,440.55
25 or more but less than 30	400	3,422.54
30 or more but less than 35	224	4,605.43
35 or more	62	5,531.56
Total	**1,264**	**$3,069.94**

Schedule of Participating Employers in KERS

Agency Classification	Number of Agencies	Number of Employees
Agencies Reporting Through State Payroll	163	34,008
Other Agencies (universities, mental health boards, health departments)	148	16,662
Special Districts and Boards	4	314
Child Support Offices (county attorneys)	61	329
Other State-Administered Retirement Systems	3	290
Total	**379**	**51,603**

Schedule of Participating Employers in SPRS

Kentucky State Police - Uniformed Officers	1	949

Schedule of Participating Employers in CERS

Area Development Districts	13	702
Boards of Education	174	49,605
Cities	218	6,399
County Attorneys	71	652
County and Circuit Clerks	15	2,302
County Government Agencies	259	20,465
Fire Departments	69	890
Hospitals	3	391
Jailers	9	380
Libraries	83	1,121
Planning Commissions	11	186
Police Departments	89	688
Police & Fire Departments (combined)	61	3,461
Sanitation Districts	6	61
Sheriff Departments	53	1,060
Special Districts and Boards	160	3,002
Utility boards	104	3,527
Urban County Government Agencies	4	1,898
Total	**1,402**	**96,790**

Principal Participating Employers in KERS

Participating Employer	Rank	Covered Employees	% of Total System
Health & Family Services Cabinet: Department for Community Based Services	1	4,396	8.52%
Transportation: Department of Highways	2	4,104	7.95%
Justice and Public Safety: Department of Corrections	3	3,522	6.83%
Bluegrass Regional Mental Health/Mental Retardation Board	4	2,181	4.23%
Department of Juvenile Justice	5	1,442	2.79%
Administrative Office of the Court	6	1,368	2.65%
Seven Company Services	7	1,228	2.38%
Department for Mental Health & Mental Retardation	8	1,136	2.20%
Department Workforce Investment	9	1,041	2.02%
Eastern Kentucky University	10	1,035	2.01%
All Others		30,150	58.43%
Total		**51,603**	**100.00%**

Principal Participating Employers in CERS

Jefferson County Board of Education	1	6,784	7.01%
Louisville/Jefferson County Metro (C256)	2	3,057	3.16%
Louisville/Jefferson County Metro (CA56)	3	2,247	2.32%
Fayette County Board of Education	4	1,969	2.03%
Circuit Clerks	5	1,732	1.79%
Lexington Fayette Urban County Government	6	1,484	1.53%
Boone County Board of Education	7	1,179	1.22%
Hardin County Board of Education	8	1,137	1.17%
Warren County Board of Education	9	1,012	1.05%
Bullitt County Board of Education	10	949	0.98%
All Others		75,240	77.74%
Total		**96,790**	**100.00%**

Plan Net Assets Dollars (in Thousands) for KERS

	Non-Hazardous			Hazardous		
Fiscal Year	**Pension**	**Insurance**	**Total**	**Pension**	**Insurance**	**Total**
June 30 2006	$5,440,133	$612,643	$6,052,776	$437,030	$223,523	$660,553
June 30 2007	5,773,157	663,558	6,436,715	510,775	280,886	791,661
June 30 2008	5,056,869	574,479	5,631,348	484,438	269,300	753,738
June 30 2009	3,584,601	365,367	3,949,968	388,951	219,500	608,451
June 30 2010	3,504,501	368,799	3,873,300	443,606	271,240	714,846
June 30, 2011	$3,544,242	$428,659	$3,972,901	$511,085	$320,673	$831,758

CERS

June 30 2006	$5,191,377	$813,251	$6,004,628	$1,528,845	$441,279	$1,970,124
June 30 2007	5,812,936	1,084,043	6,896,979	1,754,935	570,156	2,325,091
June 30 2008	5,431,735	1,105,945	6,537,680	1,644,982	576,414	2,221,396
June 30 2009	4,331,010	894,490	5,225,500	1,320,560	483,233	1,803,793
June 30 2010	4,820,490	1,094,821	5,915,311	1,506,894	586,614	2,093,508
June 30, 2011	$5,583,451	$1,446,998	$7,030,449	$1,761,858	$773,139	$2,534,997

SPRS

June 30 2006	$352,841	$110,491	$463,332
June 30 2007	376,381	132,574	508,955
June 30 2008	337,359	121,782	459,141
June 30 2009	256,575	93,682	350,257
June 30 2010	264,949	104,511	369,460
June 30, 2011	$279,927	$127,319	$407,246

Kentucky Retirement Systems Total

Fiscal Year	**Pension**	**Insurance**	**Total**
June 30 2006	$12,950,226	$2,201,187	$15,151,413
June 30 2007	14,228,184	2,731,217	16,959,401
June 30 2008	12,955,383	2,647,920	15,603,303
June 30 2009	9,881,697	2,056,272	11,937,969
June 30 2010	10,540,440	2,425,987	12,966,427
June 30, 2011	$11,680,563	$3,096,788	$14,777,351

Changes in Plan Net Assets (in Thousands) for KERS Non-Haz Pension Fund

Additions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Members' Contributions	$107,607	$116,254	$116,487	$108,362	$90,780	$109,879
Employers' Contributions	60,681	88,249	104,655	112,383	144,051	185,558
Health Insurance Contributions (HB1)	-	-	-	404	1,799	2,441
Net Investment Income	504,361	784,652	(221,578)	(867,675)	526,209	599,790
Total Additions	672,649	989,155	(436)	(646,526)	762,839	$897,668
Deductions						
Benefit Payments	577,947	640,201	699,052	808,513	825,627	838,372
Refunds	9,632	9,489	9,076	9,127	8,887	10,931
Administrative Expenses	7,568	7,070	7,724	8,102	8,424	8,558
Capital Project Expenses	-	-	-	-	-	67
Other Expenses	-	-	-	-	-	-
Total Deductions	595,147	656,773	715,852	825,742	842,938	857,928
Total Changes in Plan Net Assets	**$77,502**	**$332,382**	**$(716,288)**	**$(1,472,268)**	**$(80,099)**	**$39,740**

KERS Non-Haz Insurance Fund

Additions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Employers' Contributions	$47,635	$64,014	$56,745	$74,434	$$92,679	$123,256
Net Investment Income	65,839	78,877	(38,965)	(154,894)	50,765	77,225
Member Drug Reimbursement	-	10,744	6,634	8,168	8,551	10,025
Insurance Appropriation	11,852	-	-	-	-	-
Premiums Rec'd from Retirees	5,770	12,196	12,940	12,320	13,588	15,826
Total Additions	131,096	165,831	37,354	(59,972)	165,583	$226,332
Deductions						
Benefit Payments	95,823	111,659	122,946	145,036	157,819	161,804
Administrative Expenses	1,679	3,199	3,487	4,104	4,333	4,667
Insurance Appropriation	20,000	-	-	-	-	-
Total Deductions	117,502	114,858	126,433	149,140	162,152	166,471
Total Changes in Plan Net Assets	**$1,742**	**$50,973**	**$(89,079)**	**$(209,112)**	**$3,431**	**$59,861**

KERS Haz Pension Fund

Additions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Member Contributions	$12,056	$13,245	$13,091	$12,442	$11,110	$12,959
Employer Contributions	10,803	13,237	15,257	15,843	17,658	18,085
Health Insurance Contribution (HB1)	-	-	-	38	118	241
Net Investment Income	41,680	77,996	(20,673)	(84,262)	65,588	83,492
Total Additions	64,539	104,478	7,675	(55,939)	94,474	$114,777
Deductions						
Benefit Payments	23,736	28,514	31,606	37,556	37,796	44,509
Refunds	1,436	1,662	1,742	1,277	1,286	2,062
Administrative Expenses	645	611	664	715	737	721
Other Expenses	-	1	-	-	-	-

Continued. Changes in Plan Net Assets (in Thousands) for KERS Haz Pension Fund

Continued. Deductions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Capital Project Expenses	-	-	-	-	-	6
Total Deductions	25,817	38,788	34,012	39,548	39,819	47,298
Total Changes in Plan Net Assets	**$38,722**	**$73,690**	**$(26,337)**	**$(95,487)**	**$54,655**	**$67,479**

KERS Haz Insurance Fund

Additions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Employers' Contributions	$17,012	$19,535	$21,997	$20,803	$21,835	$18,826
Net Investment Income	24,128	44,541	(25,740)	(60,641)	42,406	45,205
Member Drug Reimbursement	-	105	74	186	319	365
Insurance Appropriation	88	-	-	-	-	-
Premiums Rec'd from Retirees	-	204	247	300	835	588
Total Additions	41,228	64,385	(3,422)	(39,352)	65,395	$64,984
Deductions						
Benefit Payments	6,513	6,874	8,069	10,304	13,456	15,327
Administrative Expenses	63	83	95	144	200	223
Total Deductions	6,576	6,957	8,164	10,448	13,656	15,550
Total Changes in Plan Net Assets	**$34,652**	**$57,428**	**$(11,586)**	**$(49,800)**	**$51,739**	**$49,434**

CERS Non-Haz Pension Fund

Additions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Members' Contributions	$112,372	$121,979	$125,014	$122,518	$106,558	$144,861
Employers' Contributions	90,834	124,261	150,925	179,286	207,076	247,968
Health Insurance Contribution (HB1)	-	-	-	415	1,345	3,216
Net Investment Income	444,092	760,541	(228,020)	(927,090)	669,072	887,514
Total Additions	647,298	1,009,736	47,919	(624,871)	984,051	$1,283,559
Deductions						
Benefit Payments	325,135	356,648	403,958	451,304	470,249	494,344
Refunds	11,589	11,396	11,924	10,719	10,001	11,816
Administrative Expenses	12,797	12,197	13,238	13,831	14,323	14,324
Capital Project Expenses	-	-	-	-	-	112
Other Expenses	-	22	-	-	-	0
Total Deductions	349,521	389,263	429,120	475,854	494,571	520,596
Total Changes in Plan Net Assets	**$297,777**	**$620,473**	**$(381,201)**	**$(1,100,725)**	**$489,478**	**$762,963**

CERS Non-Haz Insurance Fund

Additions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Employer Contributions	$128,868	$147,609	$196,110	$123,761	$166,032	$185,639
Net Investment Income	83,991	188,055	(95,924)	(244,148)	136,528	274,743
Member Drug Reimbursement	-	9,623	6,003	7,624	9,157	10,449
Insurance Appropriation	6,365	-	-	-	-	-
Premiums Rec'd from Retirees	-	13,997	15,104	14,356	16,216	18,053
Total Additions	219,224	359,284	121,293	(98,407)	327,933	$488,884

Continued. Changes in Plan Net Assets (in Thousands) for CERS Non-Haz Insurance Fund

Deductions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Benefit Payments	72,919	85,199	95,966	108,995	123,133	131,945
Administrative Expenses	1,539	3,040	3,425	4,053	4,469	4,763
Total Deductions	74,458	88,239	99,391	113,048	127,602	136,708
Benefit Payments	72,919	85,199	95,966	108,995	123,133	131,945
Administrative Expenses	1,539	3,040	3,425	4,053	4,469	4,763
Total Deductions	74,458	88,239	99,391	113,048	127,602	136,708
Total Changes in Plan Net Assets	**$144,766**	**$271,045**	**$21,902**	**$(211,455)**	**$200,331**	**$352,176**

CERS Haz Pension Fund

Additions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Members' Contributions	$39,055	$43,650	$44,260	$42,582	$37,200	$53,918
Employers' Contributions	49,976	61,553	72,155	78,151	82,887	84,595
Health Insurance Contribution (HB1)	-	-	-	37	174	1,157
Net Investment Income	132,915	240,035	(97,393)	(302,748)	206,073	286,688
Total Additions	221,946	345,238	19,022	(181,978)	326,334	$426,358
Deductions						
Benefit Payments	101,087	115,604	125,191	138,810	136,810	167,540
Refunds	2,147	2,563	2,641	2,436	1,956	2,654
Administrative Expenses	1,113	1,073	1,143	1,198	1,234	1,191
Capital Project Expenses	-	-	-	-	-	9
Other Expenses	-	2	-	-	-	-
Total Deductions	104,347	119,242	128,975	142,444	140,000	171,394
Total Changes in Plan Net Assets	**$117,599**	**$225,996**	**$(109,953)**	**$(324,422)**	**$186,334**	**$254,964**

CERS Haz Insurance Fund

Additions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Employers' Contributions	$64,854	$70,073	$90,113	$70,783	$82,970	$98,203
Net Investment Income	98	90,041	(48,529)	(123,461)	67,288	139,242
Member Drug Reimbursement	-	657	420	628	1,493	972
Insurance Appropriation	45,317	-	-	-	-	-
Premiums Rec'd from Retirees	-	191	222	330	508	516
Total Additions	110,269	160,962	42,226	(51,720)	152,259	$238,933
Deductions						
Benefit Payments	29,717	31,607	35,604	41,017	48,321	51,831
Administrative Expenses	213	320	364	444	554	580
Total Deductions	29,930	31,927	35,968	41,461	48,875	52,411
Total Changes in Plan Net Assets	**$80,339**	**$129,035**	**$6,258**	**$(93,181)**	**$103,384**	**$186,522**

Continued. Changes in Plan Net Assets (in Thousands) for SPRS Pension Fund

Additions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Members' Contributions	$4,814	$5,152	$5,407	$4,938	$4,127	$5,225
Employers' Contributions	4,244	6,142	7,443	8,186	9,489	11,920
Health Insurance Contribution (HB1)	-	-	-	5	12	31
Net Investment Income	39,347	49,595	(12,283)	(51,175)	40,602	44,739
Total Additions	48,405	60,889	567	(38,046)	54,230	$61,915
Deductions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Benefit Payments	34,703	37,187	39,367	42,547	45,582	46,754
Refunds	133	47	85	69	144	58
Administrative Expenses	134	126	137	122	130	124
Capital Project Expenses	-	-	-	-	-	1
Other Expenses	-	-	-	-	-	-
Total Deductions	34,970	37,360	39,589	42,738	45,856	46,937
Total Changes in Plan Net Assets	**$13,435**	**$23,529**	**$(39,022)**	**$(80,784)**	**$8,374**	**$14,978**

SPRS Insurance Fund

Additions	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Employer Contributions	$6,880	$6,489	$7,329	$7,414	$8,369	$10,051
Net Investment Income	12,082	21,876	(11,440)	(28,166)	13,085	24,773
Member Drug Reimbursement	-	361	184	229	274	318
Insurance Appropriation	5	-	-	-	-	-
Premiums Rec'd from Retirees	-	8	9	23	16	18
Total Additions	18,967	28,734	(3,918)	(20,500)	21,744	$35,160
Deductions						
Benefit Payments	7,816	6,515	6,768	7,476	10,769	12,172
Administrative Expenses	68	105	106	124	147	179
Total Deductions	7,884	6,620	6,874	7,600	10,916	12,351
Total Changes in Plan Net Assets	**$11,083**	**$22,114**	**$(10,792)**	**$28,100**	**$10,828**	**$22,809**

Schedule of Benefit Expenses for KERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2005-06					
Average Benefit	$888	$1,670	$834	$868	$1,469
Number of Accounts	4,616	24,056	2,628	849	32,149
Total Monthly Benefits	$4,099,896	$40,184,892	$2,190,812	$737,173	$47,212,773
% of Total Monthly Benefits	8.7%	85.1%	4.6%	1.6%	100.0%
FY 2006-07					
Average Benefit	$936	$1,745	$865	$869	$1,541
Number of Accounts	4,767	25,605	2,597	843	33,812
Total Monthly Benefits	$4,463,823	$44,672,320	$2,245,823	$732,470	$52,114,436
% of Total Monthly Benefits	8.6%	85.7%	4.3%	1.4%	100.0%
FY 2007-08					
Average Benefit	$980	$1,831	$897	$906	$1,624
Number of Accounts	4,845	27,080	2,579	839	35,343
Total Monthly Benefits	$4,747,523	$49,585,033	$2,313,860	$760,088	$57,406,504
% of Total Monthly Benefits	8.3%	86.4%	4.0%	1.3%	100.0%
FY 2008-09					
Average Benefit	$1,036	$1,926	$927	$931	$1,717
Number of Accounts	5,041	29,386	2,566	861	37,854
Total Monthly Benefits	$5,223,184	$56,596,178	$2,377,856	$801,966	$64,999,184
% of Total Monthly Benefits	8.0%	87.1%	3.7%	1.2%	100.0%
FY 2009-10					
Average Benefit	$1,009	$1,912	$936	$963	$1,692
Number of Accounts	5,991	30,303	2,625	813	39,732
Total Monthly Benefits	$6,046,047	$57,939,304	$2,457,461	$782,980	$67,225,791
% of Total Monthly Benefits	9.00%	86.20%	3.60%	1.20%	100.00%
FY 2010-11					
Average Benefit	$1,008	$1,920	$974	$1,071	$1,703
Number of Accounts	6,118	30,900	2,629	835	40,482
Total Monthly Benefits	$6,166,372	$59,318,561	$2,561,377	$894,077	$68,940,387
% of Total Monthly Benefits	8.94%	86.04%	3.72%	1.30%	100.00%

KERS Haz

FY 2005-06					
Average Benefit	$802	$1,333	$521	$749	$980
Number of Accounts	1,002	760	163	67	1,992
Total Monthly Benefits	$803,581	$1,013,373	$84,975	$50,201	$1,952,130
% of Total Monthly Benefits	41.1%	51.9%	4.4%	2.6%	100.0%

Continued. Schedule of Benefit Expenses for KERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2006-07					
Average Benefit	$862	$1,391	$540	$731	$1,038
Number of Accounts	1,116	854	167	76	2,213
Total Monthly Benefits	$962,085	$1,188,289	$90,109	$55,536	$2,296,019
% of Total Monthly Benefits	41.9%	51.8%	3.9%	2.4%	100.0%
FY 2007-08					
Average Benefit	$912	$1,455	$549	$751	$1,094
Number of Accounts	1,231	952	173	78	2,434
Total Monthly Benefits	$1,123,281	$1,384,856	$94,999	$58,567	$2,661,703
% of Total Monthly Benefits	42.2%	52.0%	3.6%	2.2%	100.0%
FY 2008-09					
Average Benefit	$941	$1,517	$576	$778	$1,143
Number of Accounts	1,353	1,066	173	74	2,666
Total Monthly Benefits	$1,272,796	$1,617,453	$99,607	$57,607	$3,047,462
% of Total Monthly Benefits	41.8%	53.1%	3.3%	1.8%	100.0%
FY 2009-10					
Average Benefit	$933	$1,489	$593	843	$1,137
Number of Accounts	1,446	1,146	157	75	2,824
Total Monthly Benefits	$1,348,511	$1,706,876	$93,064	$63,194	$3,211,645
% of Total Monthly Benefits	42.00%	53.10%	2.90%	2.00%	100.00%
FY 2010-11					
Average Benefit	$957	$1,526	$600	$814	$1,166
Number of Accounts	1,571	1,240	158	79	3,048
Total Monthly Benefits	$1,503,160	$1,892,300	$94,766	$64,299	$3,554,525
% of Total Monthly Benefits	42.29%	53.24%	2.66%	1.81%	100.00%

CERS Non-Haz

FY 2005-06					
Average Benefit	$484	$889	$715	$534	$774
Number of Accounts	7,207	21,655	3,582	861	33,305
Total Monthly Benefits	$3,487,493	$19,256,550	$2,560,722	$460,095	$25,764,859
% of Total Monthly Benefits	13.6%	74.7%	9.9%	1.8%	100.0%
FY 2006-07					
Average Benefit	$509	$938	$747	$540	$817
Number of Accounts	7,694	23,460	3,612	864	35,630
Total Monthly Benefits	$3,919,356	$21,999,359	$2,696,721	$484,037	$29,099,472
% of Total Monthly Benefits	13.5%	75.6%	9.2%	1.7%	100.0%

These tables (pages 140-141) include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June 2011 are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. The information for the current year will differ from the benefit payment totals listed in the Deduction by Source. A single member may have multiple accounts, which contribute to one pension.

Continued. Schedule of Benefit Expenses for CERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2007-08					
Average Benefit	$523	$978	$776	$582	$852
Number of Accounts	8,109	25,070	3,679	876	37,734
Total Monthly Benefits	$4,241,906	24,530,372	2,856,173	510,523	32,138,704
% of Total Monthly Benefits	13.2%	76.3%	8.9%	1.6%	100.0%
FY 2008-09					
Average Benefit	$547	$1,021	$804	$613	$890
Number of Accounts	8,471	26,720	3,728	917	39,836
Total Monthly Benefits	$4,634,447	$27,268,861	$2,998,565	$561,804	$35,463,676
% of Total Monthly Benefits	13.1%	76.9%	8.5%	1.5%	100.0%
FY 2009-10					
Average Benefit	$570	$1,022	$835	$623	$898
Number of Accounts	9,418	28,747	3,951	836	42,952
Total Monthly Benefits	$5,372,501	$29,377,417	$3,298,478	$520,995	$38,569,391
% of Total Monthly Benefits	13.90%	76.20%	8.60%	1.30%	100.00%
FY 2010-11					
Average Benefit	$577	$1,031	$847	$651	$906
Number of Accounts	10,054	30,224	4,095	873	45,246
Total Monthly Benefits	$5,802,568	$31,149,398	$3,469,974	$568,188	$40,990,128
% of Total Monthly Benefits	14.16%	75.99%	8.47%	1.38%	100.00%

CERS Haz

FY 2005-06					
Average Benefit	$1,369	$2,059	$899	$974	$1,743
Number of Accounts	1,079	3,062	580	96	4,817
Total Monthly Benefits	$1,477,504	$6,304,523	$521,285	$93,535	$8,396,847
% of Total Monthly Benefits	17.6%	75.1%	6.2%	1.1%	100.0%
FY 2006-07					
Average Benefit	$1,398	$2,147	$937	$944	$1,815
Number of Accounts	1,212	3,329	592	95	5,228
Total Monthly Benefits	$1,693,771	$7,148,184	$554,911	$89,712	$7,486,579
% of Total Monthly Benefits	17.8%	75.3%	5.9%	1.0%	100.0%
FY 2007-08					
Average Benefit	$1,424	$2,228	$986	$1,021	$1,882
Number of Accounts	1,307	3,555	610	101	5,573
Total Monthly Benefits	$1,861,441	7,922,072	601,207	103,077	10,487,797
% of Total Monthly Benefits	17.8%	75.5%	5.7%	1.0%	100.0%

Continued. Schedule of Benefit Expenses for CERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2008-09					
Average Benefit	$1,452	$2,299	$1,014	$1,020	$1,934
Number of Accounts	1,413	3,733	634	104	5,884
Total Monthly Benefits	$2,052,162	$8,581,241	$642,604	$106,103	$11,382,110
% of Total Monthly Benefits	18.0%	75.4%	5.7%	0.9%	100.0%
FY 2009-10					
Average Benefit	$1,427	$2,362	$1,261	$1,130	$2,019
Number of Accounts	1,495	3,856	468	89	5,908
Total Monthly Benefits	$2,133,697	$9,106,888	$590,020	$100,562	1$1,931,167
% of Total Monthly Benefits	17.90%	76.30%	5.00%	0.80%	100.00%
FY 2010-11					
Average Benefit	$1,432	$2,410	$1,362	$1,153	$2,056
Number of Accounts	1,643	4,082	487	90	6,302
Total Monthly Benefits	$2,352,710	$9,838,311	$663,455	$103,808	$12,958,284
% of Total Monthly Benefits	18.16%	75.92%	5.12%	0.80%	100.00%

SPRS

FY 2005-06					
Average Benefit	$3,109	$2,698	$1,213	$1,643	$2,650
Number of Accounts	145	864	56	28	1,093
Total Monthly Benefits	$450,794	$2,331,404	$67,950	$45,997	$2,896,146
% of Total Monthly Benefits	15.5%	80.4%	2.2%	1.9%	100.0%
FY 2006-07					
Average Benefit	$3,178	$2,797	$1,258	$1,761	$2,743
Number of Accounts	146	900	57	27	1,130
Total Monthly Benefits	$464,053	$2,517,382	$71,724	$47,540	$3,100,699
% of Total Monthly Benefits	15.0%	81.2%	2.3%	1.5%	100.0%
FY 2007-08					
Average Benefit	$3,281	$2,892	$1,265	$1,970	$2,843
Number of Accounts	150	931	56	26	1,163
Total Monthly Benefits	$492,198	$2,692,030	$70,822	$51,215	$3,306,265
% of Total Monthly Benefits	14.9%	81.4%	2.1%	1.6%	100.0%
FY 2008-09					
Average Benefit	$3,400	$2,985	$1,293	$2,025	$2,934
Number of Accounts	146	978	58	26	1,208
Total Monthly Benefits	$496,355	$2,919,782	$74,971	$52,649	$3,543,757
% of Total Monthly Benefits	14.0%	82.4%	2.1%	1.5%	100.0%

These tables (pages 142-143) include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June 2011 are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. The information for the current year will differ from the benefit payment totals listed in the Deduction by Source. A single member may have multiple accounts, which contribute to one pension.

Continued. Schedule of Benefit Expenses for CERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2009-10					
Average Benefit	$3,492	$3,066	$1,467	$2,130	$3,032
Number of Accounts	147	1,004	50	26	1,227
Total Monthly Benefits	$513,322	$3,078,221	$73,354	$55,379	$3,720,275
% of Total Monthly Benefits	13.80%	82.70%	2.00%	1.50%	100.00%
FY 2010-11					
Average Benefit	$3,529	$3,112	$1,494	$2,162	$3,070
Number of Accounts	146	1,037	55	26	1,264
Total Monthly Benefits	$515,270	$3,226,744	$82,184	$56,210	$3,880,408
% of Total Monthly Benefits	13.28%	83.15%	2.12%	1.45%	100.00%

This table includes individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June 2011 are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. The information for the current year will differ from the benefit payment totals listed in the Deduction by Source. A single member may have multiple accounts, which contribute to one pension.

Analysis of Initial Retirees

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
FY 2005-06					
Number of Accounts	2,295	236	2,543	377	39
Average Service Credit (months)	267	239	197	260	259
Average Final Compensation	$46,746	$43,845	$29,794	$54,358	$62,049
Average Monthly Benefit	$1,885	$1,185	$851	$2,047	$2,614
Average System Payment for Health Insurance	$246	$381	$180	$543	$407
FY 2006-07					
Number of Accounts	2,284	228	2,902	433	48
Average Service Credit (months)	246	238	206	255	274
Average Final Compensation	$46,800	$45,142	$32,183	$55,038	$65,826
Average Monthly Benefit	$1,713	$1,289	$962	$1,987	$2,962
Average System Payment for Health Insurance	$225	$342	$194	$599	$497
FY 2007-08					
Number of Accounts	2,219	243	2,736	355	40
Average Service Credit (months)	261	233	204	240	275
Average Final Compensation	$49,414	$44,992	$31,447	$54,223	$67,775
Average Monthly Benefit	$1,929	$1,289	$917	$2,014	$3,239
Average System Payment for Health Insurance	$221	$381	$181	$625	$501

Continued. Analysis of Initial Retirees

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
FY 2008-09					
Number of Accounts	3,229	257	2,761	322	59
Average Service Credit (months)	277	241	205	242	269
Average Final Compensation	$51,617	$48,542	$34,940	$57,016	$69,388
Average Monthly Benefit	$2,105	$1,387	$1,029	$2,005	$3,146
Average System Payment for Health Insurance	$396	$520	$274	$715	$461
FY 2009-10					
Number of Accounts	1,007	212	2,252	329	54
Average Service Credit (months)	153	194	186	224	276
Average Final Compensation	$41,811	$45,499	$30,203	$56,408	$70,704
Average Monthly Benefit	$802	$1,494	$760	$2,127	$3,323
Average System Payment for Health Insurance	$202	$572	$239	$766	$894
FY 2010-11					
Number of Accounts	1,486	247	3,045	415	46
Average Service Credit (months)	174	184	182	204	260
Average Final Compensation	$44,341	$44,821	$32,359	$58,814	$71,501
Average Monthly Benefit	$1,047	$1,379	$824	$2,114	$3,296
Average System Payment for Health Insurance	$264	$516	$284	$777	$874

The information in these tables (Analysis, pages 144-145) represent accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

Payment Options Selected by Retired Members

	Basic	Social Security Adjustment	Period Certain	Suvivorship	Pop Up	Lump Sum
KERS Non-Haz						
Number of Accounts	13,027	3,322	5,254	9,169	7,596	2,292
Monthly Benefits	$20,478,285	$5,996,961	$8,269,178	$15,643,778	$16,080,012	$2,593,728
KERS Haz						
Number of Accounts	720	259	368	641	823	269
Monthly Benefits	$763,259	$318,020	$374,052	$732,152	$1,112,134	$265,566
CERS Non-Haz						
Number of Accounts	17,168	1,846	6,867	8,968	7,126	3,510
Monthly Benefits	$13,034,846	$2,488,332	$5,677,137	$8,806,495	$8,781,886	$2,302,947
CERS Haz						
Number of Accounts	997	491	590	1,487	2,467	493
Monthly Benefits	$1,824,090	$778,392	$906,571	$2,923,815	$5,875,929	$770,458

Continued. Payment Options Selected by Retired Members

	Basic	Social Security Adjustment	Period Certain	Suvivorship	Pop Up	Lump Sum
SPRS						
Number of Accounts	114	206	118	367	463	22
Monthly Benefits	$353,438	$443,474	$272,660	$1,175,563	$1,609,372	$50,704
KRS Total						
Number of Accounts	32,026	6,124	13,197	20,632	18,475	6,586
Monthly Benefits	$36,453,918	$10,025,179	$15,499,598	$29,281,803	$33,459,333	$5,983,403

The information in these tables (Payment Options, pages 145-146) represents accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

Employer Contribution Rates

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

HB
House Bill

In KERS, CERS, and SPRS both the employee and the employer contribute a percent of creditable compensation to the Systems.

The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employees hired on or after September 1, 2008 contribute an additional 1% to health insurance.

Under Kentucky Revised Statutes 61.565, KERS and SPRS employer contribution rates are set by the KRS Board of Trustees based on an annual actuarial valuation. However, KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. In recent years, the Kentucky General Assembly has routinely suspended Kentucky Revised Statutes 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the Board's consulting actuary. The table on page 147 shows the KERS and SPRS employer contribution rates that were actuarially recommended in the annual valuation without any adjustments and the rate specified by the Executive Branch budget bill for each fiscal year.

The CERS employer contribution rates are also set by the Systems' Board under Kentucky Revised Statutes 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. The CERS employer contribution rates for fiscal year 2008-2009 were reduced from the actuarially recommended rate as a result of the passage of House Bill (HB) 1 during the 2008 Extraordinary Session of the Kentucky General Assembly. Also, during its 2009 Regular Session, the Kentucky General Assembly enacted HB 117, which mandated an extension of the phase-in of insurance contribution rates that had been previously approved by the KRS Board in 2006 from five years to ten years to further mitigate the impact of the application of Governmental Accounting Standards Board Statements 43 and 45 on CERS

employer contribution rates for health insurance. The "Recommended Rate" shown for CERS non-hazardous and hazardous plans are the actuarially recommended rates as set forth in the annual valuation. The "Budgeted Rate" shown for the two plans is the rate required by the ten year phase-in mandated in KRS 61.565(6).

Employer Contribution Rates

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
KERS Non-Haz						
Budgeted Rate	7.75	8.50	10.01	11.61	16.98	19.82
Recommended Rate	17.13	48.37	36.92	39.45	38.58	40.71
KERS Haz						
Budgeted Rate	22.00	24.25	24.35	24.69	26.12	28.98
Recommended Rate	23.32	47.11	34.78	35.54	34.37	33.84
CERS Non-Haz						
Budgeted Rate	13.19	16.17	13.50	16.16	16.93	18.96
Recommended Rate	13.19	27.49	20.51	20.91	19.81	21.29
CERS Haz						
Budgeted Rate	28.21	33.87	29.50	32.97	33.25	35.76
Recommended Rate	28.21	54.53	42.66	43.36	40.06	41.65
SPRS						
Budgeted Rate	25.50	28.00	30.07	33.08	45.54	52.13
Recommended Rate	42.30	120.00	91.93	92.12	85.63	94.63

Insurance Contracts

The Systems provides group rates on medical insurance and other managed care coverage for retired members.

KEHP
Kentucky Employees Group Health Plan

Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems.

Insurance Benefits Paid to Retirees & Beneficiaries Participating in a KRS Health Insurance Plan

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Number	27,118	26,235	1,612	4,640	1098
Average Service Credit (Months)	311	254	266	284	332
Avg Monthly System Payment for Health Insurance	$439	$375	$725	$942	$902
Avg Monthly Member Payment for Health Insurance	$90	$94	$60	$36	$20
Total Monthly Payment for Health Insurance	$14,367,630	$12,287,877	$1,266,284	$4,535,504	$1,011,415

Insurance Contracts by Type for KERS Non-Haz

	2006	2007	2008	2009	2010	2011
KEHP Parent Plus	490	525	568	762	722	732
KEHP Couple/Family	1,826	2,131	2,187	2,621	1,971	2,155
KEHP Single	8,393	8,996	9,383	10,635	10,420	10,321
Medicare without Prescription	1,672	2,056	1,969	1,920	1,831	1,821
Medicare with Prescription	12,000	12,007	12,636	13,231	13,765	13,988

KERS Haz

KEHP Parent Plus	58	70	69	74	66	75
KEHP Couple/Family	378	398	443	502	453	521
KEHP Single	656	686	741	823	599	615
Medicare without Prescription	74	82	91	88	63	60
Medicare with Prescription	603	606	687	763	525	570

Continued. Insurance Contracts by Type for CERS Non-Haz

KEHP Parent Plus	249	284	292	335	342	351
KEHP Couple/Family	1,058	1,274	1,320	1,456	1,369	1,552
KEHP Single	6,298	6,767	7,126	7,609	7,692	8,013
Medicare without Prescription	2,502	3,134	3,105	3,110	3,106	3,167
Medicare with Prescription	11,803	11,908	12,684	13,583	14,477	15,100

CERS Haz

KEHP Parent Plus	198	210	226	245	239	253
KEHP Couple/Family	1,739	1,836	1,947	2,041	2,062	2,156
KEHP Single	1,275	1,363	1,394	1,404	1,274	1,310
Medicare without Prescription	52	64	73	80	58	58
Medicare with Prescription	1,105	1,197	1,367	1,518	1,438	1,527

SPRS

KEHP Parent Plus	29	19	17	22	47	52
KEHP Couple/Family	406	297	305	311	462	474
KEHP Single	260	254	240	221	264	278
Medicare without Prescription	9	9	7	9	12	14
Medicare with Prescription	368	384	410	418	467	499

KRS Total

KEHP Parent Plus	1,024	1,108	1,172	1,438	1,416	1,463
KEHP Couple/Family	5,407	5,936	6,202	6,931	6,317	6,858
KEHP Single	16,882	18,066	18,884	20,692	20,249	20,537
Medicare without Prescription	4,309	5,345	5,245	5,207	5,070	5,120
Medicare with Prescription	25,879	26,102	27,784	29,513	30,672	31,684

Total Fiscal Year Retirement Payments by County

County	Payees	Total	County	Payees	Total	County	Payees	Total
Adair	359	$5,851,052.76	*Grant*	452	$7,958,507.52	*Mclean*	247	$2,993,881.19
Allen	302	$3,663,352.73	*Graves*	728	$10,083,261.13	*Meade*	341	$4,485,937.73
Anderson	1,111	$26,765,344.36	*Grayson*	513	$7,502,481.33	*Menifee*	167	$2,186,899.23
Ballard	177	$2,019,606.85	*Green*	236	$3,220,789.84	*Mercer*	618	$10,620,401.80
Barren	784	$11,851,931.51	*Greenup*	511	$6,247,135.81	*Metcalfe*	243	$2,677,347.60
Bath	306	$4,592,095.16	*Hancock*	182	$2,084,642.77	*Monroe*	184	$2,070,167.26
Bell	569	$8,206,533.41	*Hardin*	1,599	$24,219,362.14	*Montgomery*	484	$6,933,269.54
Boone	1,235	$23,006,746.61	*Harlan*	514	$7,266,727.36	*Morgan*	439	$6,886,473.65
Bourbon	444	$6,432,678.87	*Harrison*	372	$5,125,835.75	*Muhlenberg*	519	$5,520,014.39
Boyd	856	$12,996,871.10	*Hart*	275	$3,865,002.62	*Nelson*	725	$11,826,775.58
Boyle	729	$12,584,693.19	*Henderson*	843	$13,083,834.89	*Nicholas*	167	$2,120,227.98
Bracken	189	$2,220,992.48	*Henry*	795	$16,350,181.41	*Ohio*	457	$4,950,266.11
Breathitt	398	$5,817,799.37	*Hickman*	89	$1,320,259.19	*Oldham*	1,032	$19,843,453.98
Breckinridge	365	$5,011,879.63	*Hopkins*	1,002	$13,385,820.89	*Owen*	445	$9,724,749.69
Bullitt	1,031	$17,905,196.31	*Jackson*	234	$2,992,937.21	*Owsley*	162	$2,141,820.70
Butler	282	$3,448,976.38	*Jefferson*	13,806	$276,899,744.79	*Pendleton*	294	$4,379,891.93
Caldwell	444	$6,120,096.59	*Jessamine*	756	$11,843,878.11	*Perry*	642	$8,585,349.61
Calloway	903	$11,389,424.72	*Johnson*	534	$7,295,071.64	*Pike*	1,014	$13,459,953.42
Campbell	1,194	$19,891,535.85	*Kenton*	1,792	$33,836,303.91	*Powell*	309	$3,936,007.77
Carlisle	116	$1,467,335.31	*Knott*	340	$5,194,037.23	*Pulaski*	1,867	$30,073,300.91
Carroll	275	$4,001,413.05	*Knox*	456	$6,533,053.96	*Robertson*	64	$852,497.39
Carter	626	$7,824,441.37	*Larue*	293	$4,117,265.77	*Rockcastle*	314	$3,867,508.42
Casey	290	$3,816,186.24	*Laurel*	969	$15,312,778.18	*Rowan*	701	$11,564,223.84
Christian	1,371	$22,311,731.31	*Lawrence*	254	$3,022,913.33	*Russell*	414	$5,876,994.56
Clark	714	$10,943,805.82	*Lee*	219	$3,212,104.59	*Scott*	927	$17,779,446.52
Clay	468	$6,433,796.43	*Leslie*	230	$2,956,746.04	*Shelby*	1364	$31,957,739.48
Clinton	195	$2,448,061.48	*Letcher*	481	$5,915,687.01	*Simpson*	224	$2,407,502.02
Crittenden	193	$2,371,857.38	*Lewis*	265	$3,006,442.99	*Spencer*	380	$7,106,404.70
Cumberland	167	$2,256,801.68	*Lincoln*	517	$5,964,795.66	*Taylor*	497	$6,786,025.74
Daviess	1,959	$32,386,115.50	*Livingston*	227	$3,486,458.96	*Todd*	242	$2,865,624.13
Edmonson	171	$2,125,889.93	*Logan*	499	$6,197,862.93	*Trigg*	427	$6,180,165.78
Elliott	158	$1,846,993.70	*Lyon*	300	$5,065,539.75	*Trimble*	237	$3,281,675.43
Estill	308	$4,045,035.90	*Madison*	1,829	$27,415,760.74	*Union*	296	$3,387,057.98
Fayette	4,408	$91,714,968.15	*Magoffin*	275	$3,363,739.30	*Warren*	2,194	$36,201,083.02
Fleming	382	$6,406,761.14	*Marion*	435	$5,601,687.18	*Washington*	266	$3,990,975.40
Floyd	758	$11,258,699.23	*Marshall*	696	$9,447,163.88	*Wayne*	430	$5,720,624.43
Franklin	6,025	$182,078,902.71	*Martin*	196	$2,070,969.37	*Webster*	281	$3,461,769.46
Fulton	173	$1,941,224.68	*Mason*	322	$5,177,153.65	*Whitley*	834	$11,351,792.64
Gallatin	86	$1,411,673.21	*Mccracken*	1,325	$22,952,441.71	*Wolfe*	277	$4,055,102.95
Garrard	356	$4,886,273.68	*Mccreary*	342	$3,024,684.22	*Woodford*	736	$18,160,735.59

Total Fiscal Year Retirement Payments

	Payees	Payments
Kentucky Total	88,041	$1,539,646,980.09
Out of State	5,381	$76,054,005.71
Grand Total	**93,422**	**$1,615,700,985.80**

Retired Reemployed

From August 1, 1998 through August 31, 2008, state law allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service was observed. The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Reemployed Retirees in Full-Time Positions Covered by Same System & Contributing to a New Account

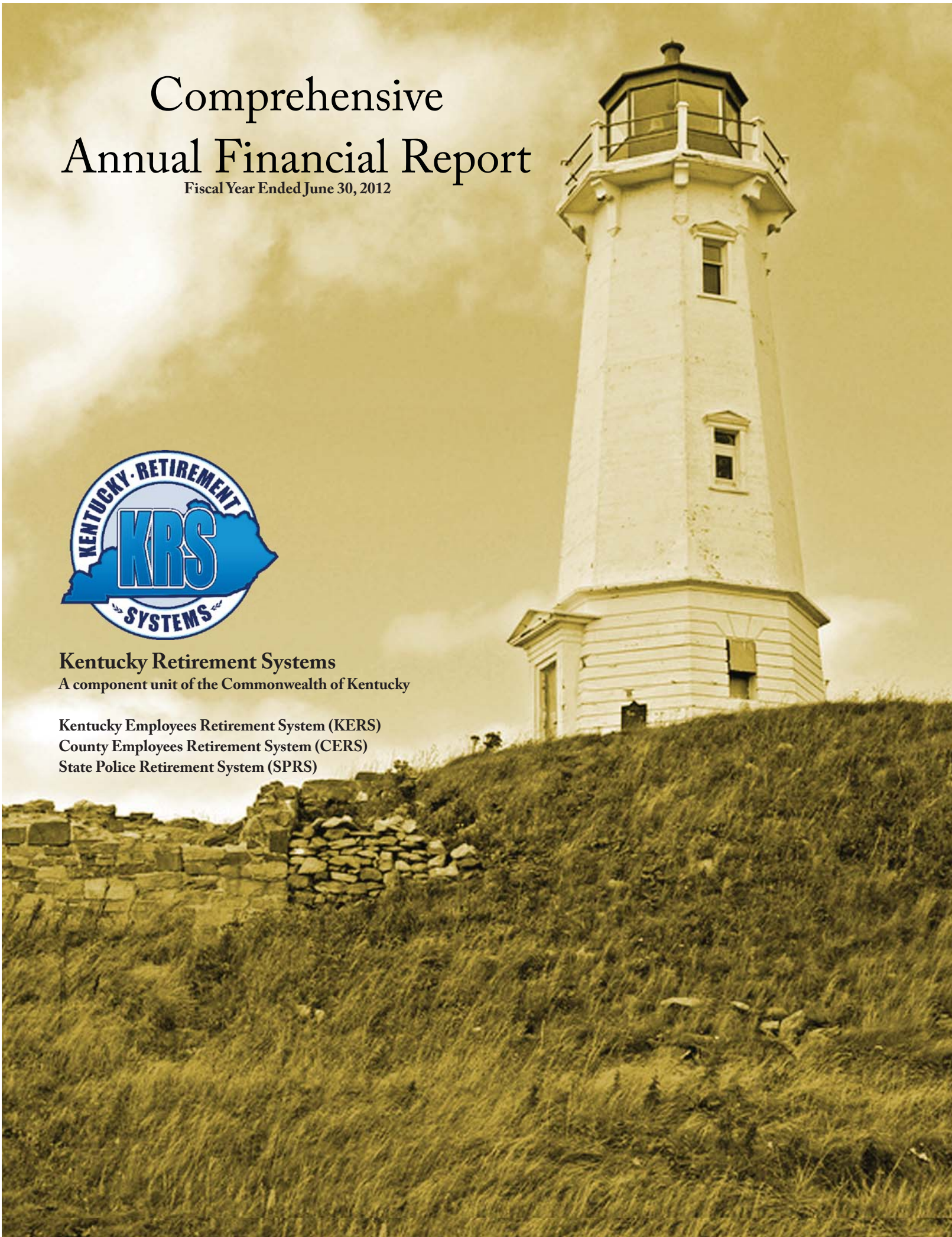
	KERS			CERS			SPRS
Reemployed Retirees in KRS	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**	**Total**
Total Active Employees	46,044	4,045	50,089	84,837	9,019	93,856	949
Total Retirees	36,239	2,090	38,329	40,174	5,158	45,332	1,019
Reemployed Retirees	868	71	939	1,017	639	1,656	139
% of Reemployed Retirees to Total Actives	1.89%	1.76%	1.87%	1.20%	7.09%	1.76%	14.65%
% of Reemployed Retirees to Total Retirees	2.40%	3.40%	2.45%	2.53%	12.39%	3.65%	13.64%
Average Age at Initial Retirement	50	48	49	53	46	50	46
Months of Service Credit at Initial Retirement	342	290	338	301	290	297	334
Final Compensation At Initial Retirement	$52,030.32	$43,878.38	$51,413.93	$36,584.67	$53,488.46	$43,107.33	$57,359.40
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2009-2010 (Second Retirement Account)	$41,516.52	$35,553.60	$41,065.65	$47,747.16	$47,119.08	$47,504.80	$34,554.72
Retirees Returning to Work for the Same Employer	226	0	226	446	26	472	1
% Retirees Returning to Work For Same Employer	26.04%	0.00%	24.07%	43.85%	4.07%	28.50%	0.72%

Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency. An additional 239 retirees have returned to work after the implementation of House Bill 1 in the 2008 Special Legislative Session. These retirees are not eligible to contribute to a new account.

Kentucky Retirement Systems
Ph. **1-800-928-4646** http://**kyret.ky.gov**

Comprehensive Annual Financial Report

Fiscal Year Ended June 30, 2012



Kentucky Retirement Systems

A component unit of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

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Management's Responsibility for Financial Reporting

Management has prepared the basic financial statements of Kentucky Retirement Systems and is ***responsible for the integrity and fairness*** *of the information presented.*

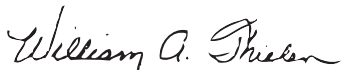
December 5, 2012

Some amounts included in the financial statements may be based on estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these basic financial statements conform with US Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the basic financial statements.

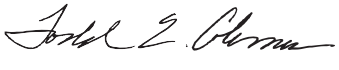
Responsibility

Ultimate responsibility for the basic financial statements and annual report rests with the Board of Trustees. The Executive Director and KRS' staff assist the Board in its responsibilities. Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training of employees, the establishment of an organizational structure, and the communications of policies and guidelines throughout the organization. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and the Board of Trustees.

Kentucky Retirement Systems' external auditors, Dean Dorton Allen Ford, PLLC, have conducted an independent audit of the basic financial statements in accordance with US Generally Accepted Auditing Standards. This audit is described in their Independent Auditors' Report on page 17. Management has provided the external auditors with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of financial statements.



William A. Thielen, Esq. // Executive Director
Chief Operations Officer



Todd E. Coleman, CPA // Controller

To the Trustees & Membership

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year ended June 30, 2012.

December 5, 2012 Responsibility for both the accuracy of the data and the completeness and fairness of the presentation rests with the management of the Kentucky Retirement Systems. We present this information to assist the Board, the members of KERS, CERS and SPRS (collectively referred to as KRS) and the general public in understanding KRS' financial and actuarial status. This CAFR conforms to the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. KRS' financial transactions are reported on the accrual basis of accounting. Additionally, internal accounting controls provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

MAJOR INITIATIVES

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

ARC
Annual Required Contribution

KRS continued during the 2012 fiscal year, whenever the opportunity presented itself, to educate its members, participating employers, legislators, executive branch officials and the general public about the funded status of its retirement plans, including the impact of reductions to the actuarially recommended employer contribution rates for the KERS and SPRS plans. This underfunding, along with past benefit increases, unfunded annual cost of living allowances (COLAs), and two major economic recessions in the last decade, has resulted in a decline of funding ratios (the ratio of assets to accrued liabilities) for the KERS nonhazardous and SPRS pension trusts to alarmingly low levels. As of June 30, 2012, the funded ratio of the KRS nonhazardous plan is 27.30% of the actuarial value of assets. The funded ratio of the SPRS plan is 40.11% of the actuarial value of assets. In 2008, the Kentucky General Assembly passed a pension reform bill (House Bill 1) that included a schedule to increase employer contributions over the next several years until reaching the full ARC in 2025 for KERS non-hazardous, 2019 for KERS hazardous and 2020 for the SPRS system. For the past three fiscal years, the Governor and the Kentucky General Assembly have met the increased funding schedule set forth in House Bill 1. During its 2012 Regular Session, the General Assembly passed House Concurrent Resolution 162, which created the Kentucky Public Pensions Task Force. The Task Force was charged with the responsibility of studying and developing recommendations concerning the benefits, investments, and funding of the State administered retirement systems. The Task Force will issue its final report and recommendations on or before December 7, 2012.

CMS
Centers for Medicare & Medicaid Services

In 2012, KRS continued to contract with the Centers for Medicare and Medicaid Services (CMS) for an Employee Group Waiver Plan for medical and pharmacy insurance benefits for Medicare-eligible retirees. This contract allows KRS to apply the full amount of the drug subsidy received from CMS toward its unfunded liability for medical benefits. For the first two years of the EGWP contract approximately $40 million dollars in reimbursement was received from CMS for provision of the drug benefit to retirees. KRS is in its third year under this program and the application of the subsidy to the unfunded liability for medical benefits resulted in a continued reduction of that

liability for the fiscal year ended June 30, 2012. The reduced unfunded liability has a favorable impact on employers by reducing the amount of their contribution toward retiree health care. The overall trend for the Medicare eligible population medical/pharmacy benefit has decreased with a trend of -13% while the under-65 retiree population has experienced a growth of around 12%. Both groups together comprise a population of slightly over 87,000 retirees.

START
Strategic Technology Advancements for the Retirement of Tomorrow

KRS implemented the final phase of its new technology system during the 2012 fiscal year, which provides employer online functionality, and allows active members, as well as retirees, to access their account information online. The most recent release of the Strategic Technology Advancements for the Retirement of Tomorrow (START) program allows employers to submit contributions and salary information for their employees online and adds active member functionality to the retiree self service functionality released in September 2009. Outreach training sessions were conducted to encourage members and retirees to utilize the service purchase cost and retirement estimate functionality. Employer refresher training sessions were held, and KRS' Employer Compliance and Education and Accounting staff continue to assist employers with the transition to the new system. The START project warranty period will complete in the 2012-2013 fiscal year with the exception of enhancements which KRS staff will continue to implement. Constituents can keep current on future changes to START and access their account information on the KRS website at http://kyret.ky.gov.

KRS continues to seek new ways to serve and educate our membership. In the spring of 2012, KRS launched a member education and outreach program, which included both on-site and online training opportunities for active members. Twelve Pre-Retirement Education Program (PREP) programs were conducted throughout the Commonwealth. These programs offer a general retirement education and planning curriculum as well as focused training on how to utilize the Active Member Self Service feature on the KRS website. Over 1,700 appointments were scheduled for the general retirement program and 900 appointments for the Active Member Self Service computer lab sessions. KRS staff also conducted a series of Active Member Self Service computer lab sessions at the KY Transportation Cabinet which served approximately 700 members. In partnership with the Kentucky Department of Libraries and Archives, we were able to offer a series of 10 webinars to our KERS members. These webinars focused on general benefit information and retirement planning. Our staff will continue to explore educational outreach opportunities and will expand upon these efforts in 2013.

iNVESTMENTS

The theme last year was personal and corporate balance sheet rebuilding, along with an expansion of the Federal Reserve's balance sheet, to create a stable environment that would promote growth and result in reduced unemployment. Despite the improvement in the economy, and the strengthening of both personal and especially corporate balance sheets, too much uncertainty has held back the recovery and led to lackluster job growth.

To help address this uncertainty, the KRS Board of Trustees approved a new target asset allocation beginning July 1, 2011. As of June 30, 2012, the KRS Pension fund's policy allocation invests 20% of the assets in U.S. equities, 20% in broad market international equities, 4% in emerging market equities, 20% in fixed income, 10% in private equity, 10% in real return strategies, 10% in absolute return strategies, 5% in real estate, and 1% in cash or short-term securities. As of June 30, 2012, the KRS Insurance fund's policy allocation invests 21.1% of the assets in U.S. equities, 21.1% in broad market international equities, 3.4% in emerging market equities, 19.3% in fixed income, 8.2%

in private equity, 11.4% in real return strategies, 10.2% in absolute return strategies, 4.3% in real estate, and 1% in cash or short-term securities.

For the fiscal year ended June 30, 2012, the KRS pension fund returned 0.14%, which fell 0.76% short of the benchmark return of 0.90%. The KRS insurance fund lost -1.71% for the fiscal year ending June 30, 2012, compared to the benchmark's 0.58% return and the actuarially assumed rate of 7.75%. The underperformance of both the pension fund and the insurance fund is primarily attributable to weakness in the U.S. and Non-U.S. Equity portfolios, including the terminated dynamic currency hedging program.

For the 10-years ending June 30, 2012, the KRS pension fund portfolio earned an annualized total return of 5.99%, slightly underperforming the benchmark return of 6.18%. The KRS insurance fund underperformed its benchmark by an even closer margin for the 10-year period ending June 30, 2012, earning 5.86% versus 5.93%.

ACTUARIAL FUNDING

Kentucky Retirement Systems administers both a pension fund and an insurance fund for each of the systems it manages. These trusts are used to fund monthly pension and health care payments to and on behalf of retirees.

Non-hazardous employees are statutorily required to contribute 5% of pre-tax salary to their pension benefit, while hazardous employees contribute 8% on a pre-tax basis. All employees hired with an initial participation date on or after September 1, 2008 must contribute an additional 1% of their pre-tax compensation toward their retiree health insurance benefits. These monies are deposited in a 401(h) account within the pension trust. Employer contributions are calculated annually by the Board of Trustees and include the normal cost of pension and insurance benefits plus a contribution toward the unfunded liability of the pension and insurance trusts designed to amortize that liability over a period no longer than 30 years.. Employer contributions also include an administrative fee that is used to pay annual operating expenses of KRS. The administrative expense is shared among the plans based on the ration of a plan's membership to the total membership at the beginning of a fiscal year.

Funding ratios have fallen both steadily and significantly over the last decade as a result of unfavorable market conditions, higher than anticipated retirement rates, employer underfunding in the KERS nonhazardous and SPRS plans, and increased expenses for annual cost of living adjustments that are not pre-funded by the employers. While improved market conditions and the increased funding in the KERS and SPRS plans have slowed the growth of the unfunded liabilities of the various systems, KRS uses a five-year smoothing method and the full effects of the market losses in 2008 and 2009 will not be realized for another two years. The funding levels of all systems as of June 30, 2012 are listed on page 113 of the Actuarial Section.

PROFESSIONAL SERVICES

KRS continues to engage a number of professional consultants to assist trustees and staff in key business areas such as investments, taxes, auditing services and legal representation. A list of the Board's contract consultants can be found in the organizational chart on page 9. A list of external investment managers can be found in the investment section of this report.

The purpose of GFOA is to enhance and promote the professional management of governments for the public benefit by identifying best practices and promoting their use through education, training, facilitation of member networking, and leadership.

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2011. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports and is valid for a period of one year. This was the fourteenth consecutive award earned by KRS. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized document. The report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe our 2012 CAFR will continue to meet the Certificate of Achievement Program's requirements, and we will be submitting it to the GFOA for their consideration.

KRS also received a 2012 Recognition Award for Administration that was presented by the Public Pension Coordinating Council, a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR). The award is given in recognition of meeting professional standards for plan administrators set forth in the Public Pension Standards.

Other Information

Kentucky statutes require an annual audit by either an independent certified public accountant or the Auditor of Public Accounts. Dean, Dorton Allen Ford, PSC, Certified Public Accountants, performed the audit for the fiscal year ended June 30, 2012. The results of that audit are contained in the Financial Section.

William A. Thielen

William A. Thielen, Esq. // Executive Director

Board of Trustees

The Board of Trustees are comprised of nine members. Two elected by KERS members, two elected by CERS members, one elected by SPRS members, three appointed by Governor Steve Beshear and the Secretary of the State Personnel Cabinet.

Committee Meetings Online
Visit kyret.ky.gov/index.php/board to download materials from previous Board meetings. You may also browse a list of upcoming meetings. Click "Meet the Board" to email any Board member.

Thomas Elliott, *Chair*
Governor Appointee
Term ends March 31, 2015

Dr. Daniel Bauer, *Vice Chair*
Governor Appointee
Term ends March 31, 2016

Jennifer Elliott
Governor Appointee
Term ends March 31, 2016

Vince Lang
Elected by CERS
Term ends March 31, 2013

Randy Overstreet
Elected by SPRS
Term ends March 31, 2015

Susan Smith
Elected by KERS
Term ends March 31, 2014

Vacant
Elected by CERS
Term ends March 31, 2012

Bobby Henson
Elected by KERS
Term ends March 31, 2014

Tim Longmeyer
Personnel Secretary
Term ends Ex-Officio

Agency Structure

Board of Trustees

Investment Committee

Chief Investment Officer
T.J. Carlson

Alternative Investments
Brent Aldridge

Absolute & Real Return
Chris Schelling

Equity Assets
Bo Cracraft

Fixed Income
David Peden

Audit Committee

Internal Auditor
Connie Davis

Compliance Officer
Ann Case

Executive Director
William A. Thielen

Chief Operations Officer
Vacant

Chief Benefits Officer
Charlene Haydon

General Counsel
Jennifer Jones, Interim

Human Resources Director
Marlane Robinson

Accounting
Todd E. Coleman

Communications
Scarlett Consalvi

Employer Compliance & Education
Sarah Webb

Information Security
Mark McChesney

Information Technology
Pam Gibbs

Procurement & Office Services
Joe Morris

Planning & Constituent Services
Shawn Sparks

Disabilities
Liza Welch

Member Services
Rebecca Stephens

Membership Support
Suzanne Howe

Retiree Services
Lela Hatter

Consultants

Actuarial Services
Cavanaugh Macdonald Consulting, LLC

Asset Management
Altius Associates

Auditing Services
Dean Dorton Allen Ford PSC

Investment Consultant
R.V. Kuhns

Legal Services
Stoll Keenon Ogden, PLLC

Fiduciary Review Consultants
Ice Miller, LLP

Real Estate Consultant
ORG

KERS Non-Hazardous

RETIRED MEMBERS

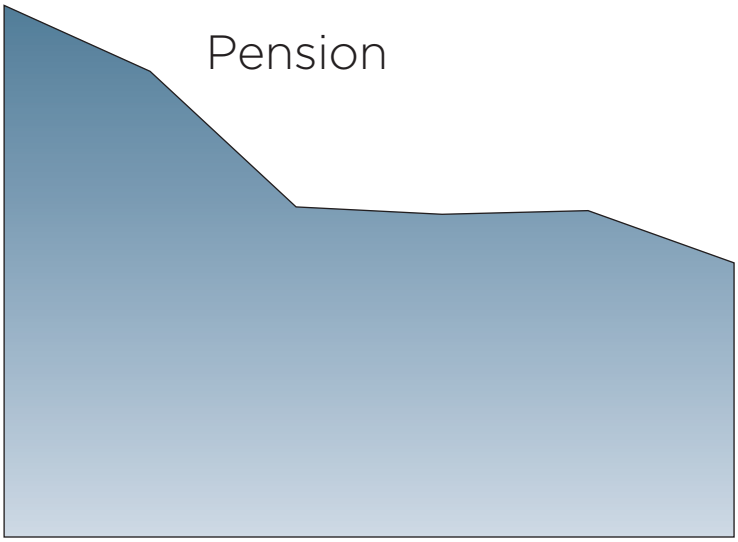
36,508

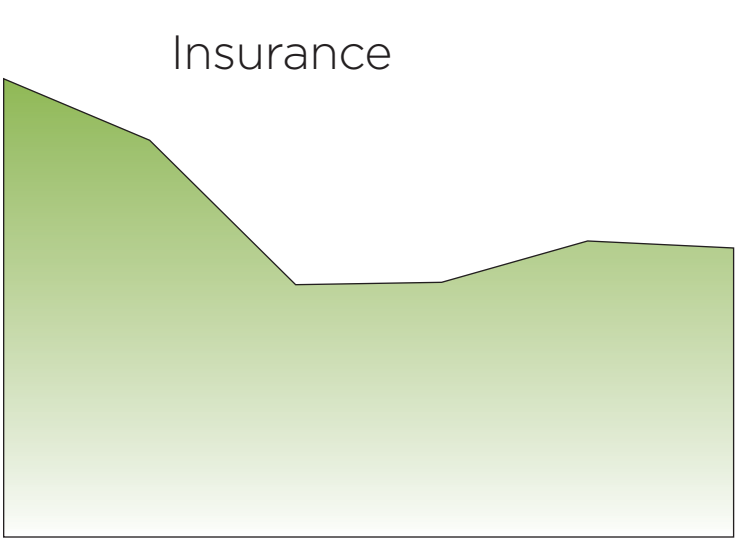
ACTIVE MEMBERS

41,743

INACTIVE MEMBERS

39,338





Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011	2012
Pension	$5,773,157	$5,056,869	$3,584,601	$3,504,501	$3,533,393	$2,977,069
Insurance	$663,558	$574,479	$365,367	$368,799	$421,972	$418,490
Total	**$6,436,715**	**$5,631,348**	**$3,949,968**	**$3,873,300**	**$3,955,365**	**$3,395,559**

KERS **HISTORY**

*Kentucky Employees Retirement System (KERS) was established **July 1, 1956** by the state legislature.*

KERS Hazardous

RETIRED MEMBERS

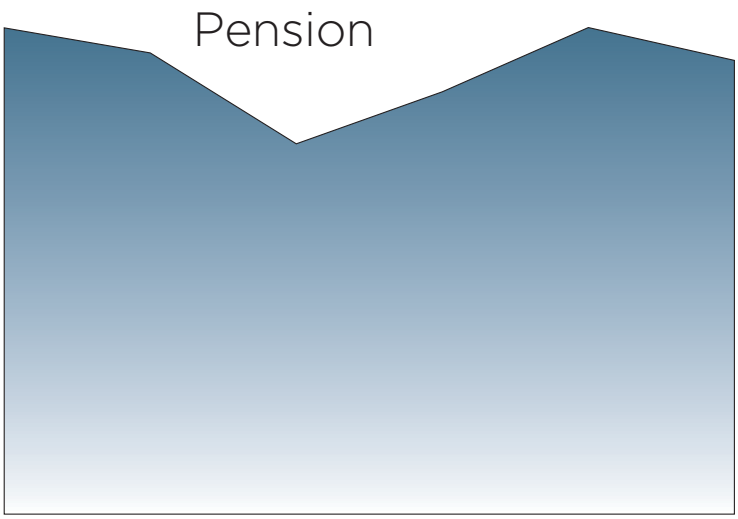
2,180

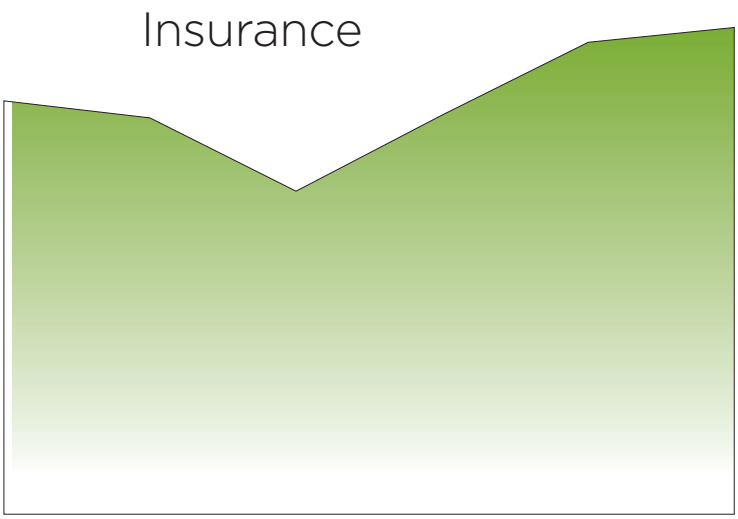
ACTIVE MEMBERS

4,007

INACTIVE MEMBERS

2,597





Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011	2012
Pension	$510,775	$484,438	$388,951	$443,606	$509,120	$476,589
Insurance	$280,886	$269,300	$219,500	$271,239	$319,736	$330,730
Total	**$791,661**	**$753,738**	**$608,451**	**$714,846**	**$828,856**	**$807,319**

KERS **HISTORY**

*Kentucky Employees Retirement System (KERS) was established **July 1, 1956** by the state legislature.*

CERS Non-Hazardous

RETIRED MEMBERS

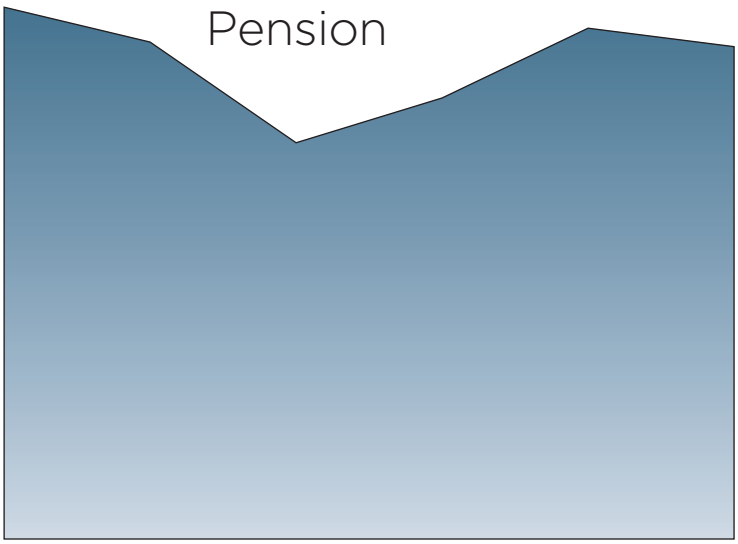
42,068

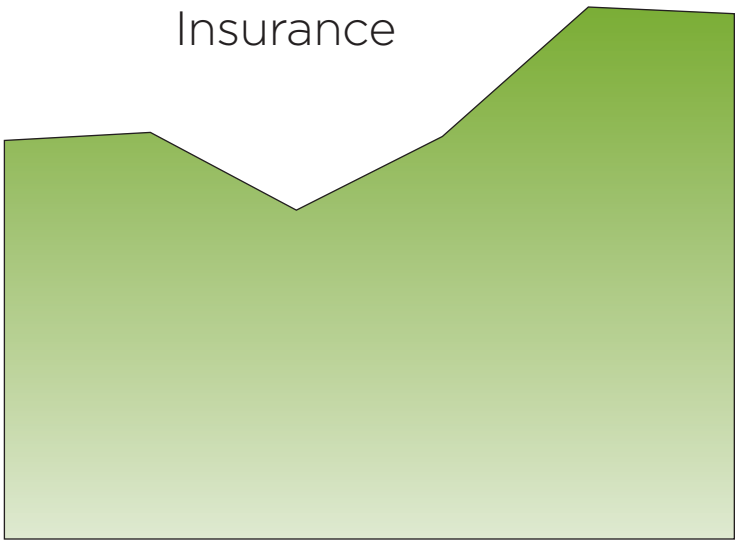
ACTIVE MEMBERS

83,658

INACTIVE MEMBERS

63,280





Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011	2012
Pension	$5,812,936	$5,431,735	$4,331,010	$4,820,490	$5,543,962	$5,381,602
Insurance	$1,084,043	$1,105,945	$894,490	$1,094,821	$1,418,818	$1,428,821
Total	**$6,896,979**	**$6,537,680**	**$5,225,500**	**$5,915,311**	**$6,962,780**	**$6,810,423**

CERS **HISTORY**

*County Employees Retirement System (CERS) was established **July 1, 1958** by the state legislature.*

CERS Hazardous

RETIRED MEMBERS

5,513

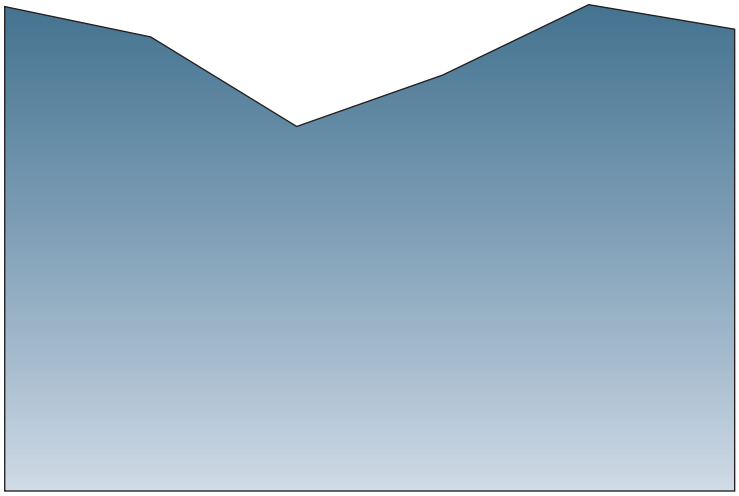
ACTIVE MEMBERS

9,040

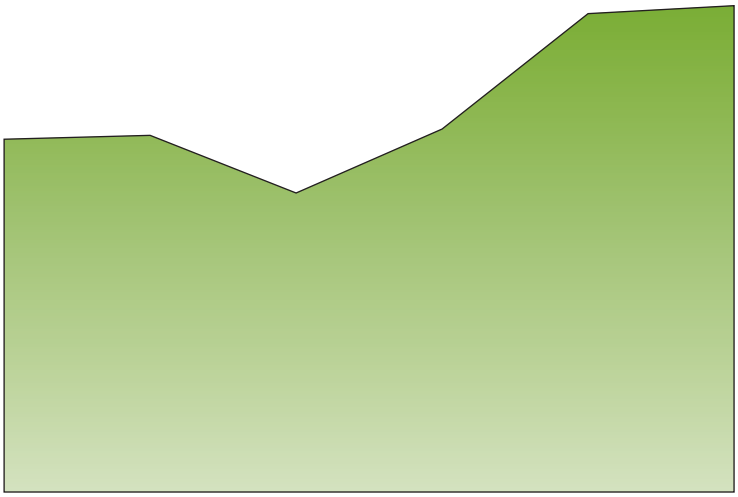
INACTIVE MEMBERS

1,914

Pension



Insurance



Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011	2012
Pension	$1,754,935	$1,644,982	$1,320,560	$1,506,894	$1,751,962	$1,672,970
Insurance	$570,156	$576,414	$483,233	$586,614	$761,075	$785,874
Total	**$2,325,091**	**$2,221,396**	**$1,803,793**	**$2,093,508**	**$2,513,037**	**$2,458,844**

CERS **HISTORY**

*County Employees Retirement System (CERS) was established **July 1, 1958** by the state legislature.*

SPRS

RETIRED MEMBERS

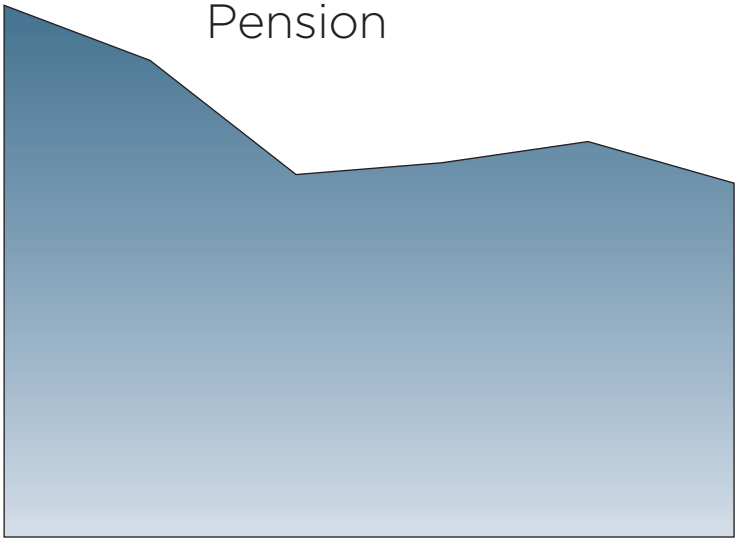
1,203

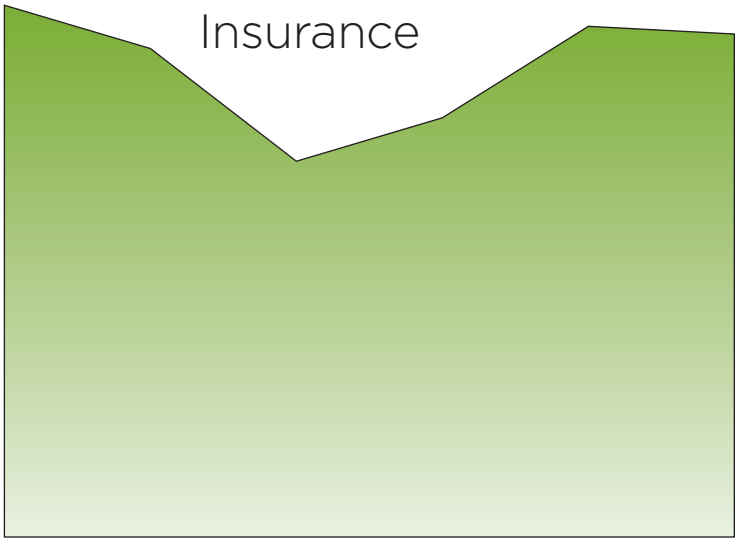
ACTIVE MEMBERS

904

INACTIVE MEMBERS

224





Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011	2012
Pension	$376,381	$337,359	$256,575	$264,949	$279,283	$250,476
Insurance	$132,574	$121,782	$93,682	$104,511	$126,737	$125,398
Total	**$508,955**	**$459,141**	**$350,257**	**$369,460**	**$406,020**	**$375,874**

SPRS **HISTORY**

*State Police Retirement System (SPRS) was established **July 1, 1958** by the state legislature.*

Total System

RETIRED MEMBERS

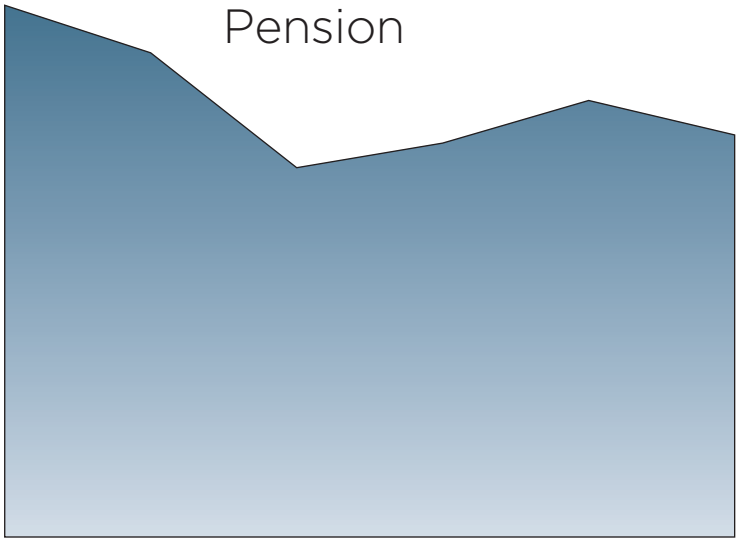
87,472

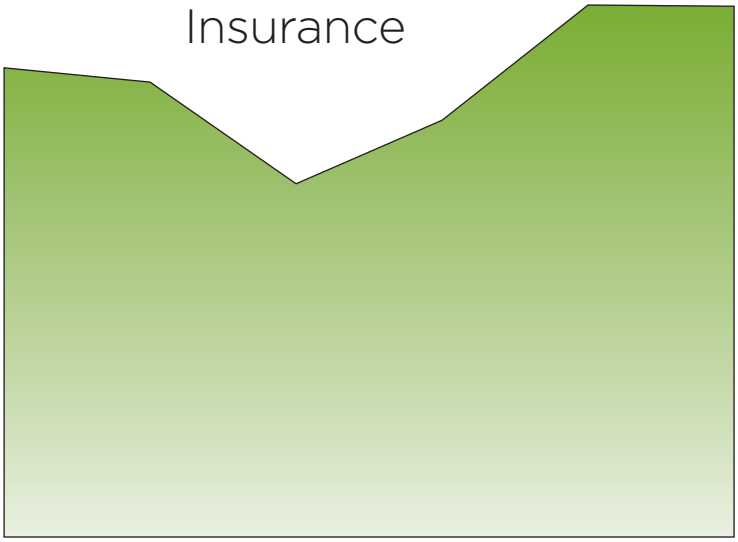
ACTIVE MEMBERS

139,352

INACTIVE MEMBERS

107,353





Plan Net Assets (in Thousands)

Fund	2007	2008	2009	2010	2011	2012
Pension	$14,228,184	$12,955,383	$9,881,697	$10,540,440	$11,617,720	$10,758,706
Insurance	$2,731,217	$2,647,920	$2,056,272	$2,425,987	$3,048,338	$3,089,313
Total	**$16,959,401**	**$15,603,303**	**$11,937,969**	**$12,966,427**	**$14,666,058**	**$13,848,019**

Financial Section

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Independent Auditors' Report

A financial statement audit is one of many attestation functions provided by certified public accounting firms, whereby the firm provides an independent opinion on published information. Financial audits are performed by CPAs due to the specialized financial reporting knowledge required.

Dean Dorton Allen Ford, PLLC

To the Board of Trustees, Kentucky Retirement Systems in Frankfort, Kentucky: We have audited the accompanying combining financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal years ended June 30, 2012 and 2011, as listed in the table of contents. These financial statements are the responsibility of the Kentucky Retirement Systems' management. Our responsibility is to express opinions on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Kentucky Retirement Systems' internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinions.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2012 and 2011 and the changes in plan net assets for the fiscal years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated December 5, 2012, on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audits.

Accounting principles, generally accepted in the United States of America require that the Management's Discussion and Analysis (pages 18 through 27) and the Schedules of Funding Progress and Schedules of Contributions from Employers and Other Contributing Entities (pages 58 through 66) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Our audits were conducted for the purpose of forming opinions on the combining financial statements of the Kentucky Retirement Systems as a whole. The additional supporting schedules (page 67) are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements taken as a whole. The Introductory, Actuarial, Investments, and Statistical sections are presented for purposes of additional analysis and are not a required part of the financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we express no opinion on them.

As described in Note S to the combining financial statements, the 2011 financial statements have been restated to correct accrued pension and insurance contributions as of June 30, 2011.

Dean Dorton Allen Ford, PLLC

Dean Dorton Allen Ford, PLLC

December 5, 2012 Lexington, Kentucky

Management's Discussion & Analysis

This discussion and analysis of Kentucky Retirement Systems' financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2012. Please read it in conjunction with the financial statements, which begin on page 23.

Pension Fund The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of all pension funds administered by Kentucky Retirement Systems decreased by $859.1 million during fiscal 2012.
- Member and Employer contributions reported for fiscal 2012, totaled $877.4 million compared to $819.2 million (as restated) in fiscal 2011. This increase is due to an increase in the employer contribution rates and the collection of additional health insurance contributions passed by House Bill 1 in September 1, 2008.
- The Pension Funds' Net Assets as of June 30, 2011, and the increase in the Pension Funds for the fiscal year then ended, have been restated to correct accrued contributions as of June 30, 2011. The net effect of this correction for reporting purposes is a decrease of $62.8 million in pension contributions for the fiscal year ended June 30, 2011, and a corresponding decrease in the Pension Funds' Net Assets as of June 30, 2011. The restatement resulted from the double posting of an accrual of contributions in fiscal 2011.
- The net depreciation in the fair value of investments was $261.2 million for the fiscal year ended June 30, 2012 compared to net appreciation of $1,658.5 million for the prior fiscal year. Included in this net depreciation in fiscal 2012 were realized losses on sales of investments of $22.8 million.
- The plan allocations for the Pension Investment Accounts in which exposure to the Record Currency Management Dynamic Currency Hedging Program (RCM) were adjusted. This adjustment is a revision of previously estimated plan allocation percentages applied. Individual gains and losses were revised using updated estimates; however, there was no change to the net balance of the RCM Pension Account. An additional minor adjustment may be needed once final disposition of the RCM account is complete. In accordance with accounting principles generally accepted in the United States, this is deemed a change in estimate. A change in estimate is accounted for only in current and future years; prior years are not adjusted. The audited financial statements for fiscal 2012 include Footnote D regarding the nature and reasons for the change.
- Interest, dividend and net securities lending income was $270.3 million compared to $300.9 million in fiscal 2011.
- Pension benefits paid to retirees and beneficiaries totaled $1,649.2 million compared to $1,591.5 million in fiscal 2011. Refund of contributions paid to former members upon termination of employment totaled $30.9 million compared to $27.5 million in fiscal 2011.
- Administrative expense totaled $27.8 million compared to $24.9 million in the prior fiscal year. A supplemental appropriation of $12.96 million was approved by the State Budget Office in fiscal 2012. This supplemental appropriation enabled KRS to implement the recommendations of the Kentucky Auditor of Public Accounts to include certain health and investment administrative expenses for the first time in the KRS administrative budget. Capital Project Expenses incurred, as a result of the START Project, totaled approximately $17,000. Certain START Project costs were capitalized in fiscal 2012 between fixed assets and intangible assets, as appropriate.
- The Kentucky Auditor of Public Accounts recommended that KRS include expenses for the health care fees, investments, and internal audit as separate line items of the Administrative Expense budget. This has been implemented in fiscal 2012; see pages 67 and 68.
- The member health insurance contribution, as a result of the passage of House Bill 1 (effective September 1, 2008) totaled $11.9 million, for the fiscal year ended June 30, 2012, compared to $6.6 million (as restated) in the prior fiscal year.

Insurance Fund The following highlights are explained in more detail later in this discussion.

- The combined plan net assets of the insurance fund administered by Kentucky Retirement Systems increased by $41.1 million during fiscal 2012.
- Premiums received from retirees who participated in the Medicare eligible self-funded plan totaled $28.4 million, compared to $31 million in the prior fiscal year. The decrease is a result of CMS paying a portion of the retirees' premium. In addition, the decrease is attributable to changes in coverage chosen by retirees.
- Employer contributions of $436.2 million were received compared to $387.5 million (as restated) in fiscal 2011. This increase is due to an increase in the insurance contribution rate.
- The Insurance Funds' net assets as of June 30, 2011, and the increase in the insurance funds for the fiscal year then ended, have been restated to correct accrued contributions as of June 30, 2011. The net effect of this correction for reporting purposes is a decrease of $48.5 million in insurance contributions

for the fiscal year ended June 30, 2011, and a corresponding decrease in the Insurance Funds' net assets as of June 30, 2011. The restatement resulted from the double posting of an accrual of contributions in fiscal 2011.

- The Employer Group Waiver Plan receipts from the Centers for Medicare & Medicaid Services (CMS) subsidies totaled $17.8 million compared to $22.1 million in fiscal 2011. Changes in receipts depend upon the fluctuation of membership in the Plan.

- The net depreciation in the fair value of investments was $118.7 million compared to net appreciation of $517.0 million for the prior fiscal year. Included in this net depreciation in fiscal 2012 were realized losses on sales of investments of $97.7 million.

- The plan allocations for the Insurance Investment Accounts in which exposure to the Record Currency Management Dynamic Currency Hedging Program (RCM) were adjusted. This adjustment is a revision of previously estimated plan allocation percentages applied. Individual gains and losses were revised using updated estimates; however, there was no change to the net balance of the RCM Insurance Account. An additional minor adjustment may be needed once final disposition of the RCM account is complete. In accordance with accounting principles generally accepted in the United States, this is deemed a change in estimate. A change in estimate is accounted for only in current and future years; prior years are not adjusted. The audited financial statements for fiscal 2012 include Footnote D regarding the nature and reasons for the change.

- Interest, dividend and net securities lending income was $71.4 million compared to $53.1 million in fiscal 2011.

- Premiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled $248.3 million. Payments for the self-funded healthcare reimbursements (over age 65) totaled $132.1 million. The total of insurance premiums paid plus self-funded reimbursements was $380.4 million for fiscal 2012. Insurance premiums paid plus self-funded healthcare reimbursements for the prior plan year totaled $373.1 million. On August 6, 2012, the Board of Trustees voted to cease self-funding of healthcare benefits for most KRS Medicare eligible retirees. The Board elected to contract with Humana Insurance Company to provide healthcare benefits to KRS' retirees through a fully insured Medicare Advantage Plan. The Humana Medicare Advantage Plan becomes effective January 1, 2013.

- As part of the application process to the Centers for Medicare & Medicaid Services to enter into a contract to offer a Medicare Prescription Drug Plan, Kentucky Retirement Systems was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents, and is invested on a daily basis. The balance as of June 30, 2012, totaled $100,691.

- The reimbursement of retired-reemployed health insurance, as a result of the passage of House Bill 1 (effective September 1, 2008), totaled $6.3 million for the fiscal year ended June 30, 2012, compared to $4.0 million in the prior fiscal year.

Using This Financial Report Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combining Statement of Plan Net Assets for the Pension Funds, on page 23, and the Combining Statement of Plan Net Assets for the Insurance Fund, on page 25, provide a snapshot of the financial position of each of the three systems at June 30, 2012. The Combining Statement of Changes in Plan Net Assets for the Pension Funds, on page 24, and the Combining Statement of Changes in Plan Net Assets for the Insurance Fund, on page 26, summarize the additions and deductions that occurred for each of the three systems during fiscal 2012.

The Schedules of Funding Progress, on pages 58-61, includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of Contributions from Employers and Other Contributing Entities, on pages 62-66, presents historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

Funds as a Whole Kentucky Retirement Systems' combined plan net assets decreased, during the fiscal year ended June 30, 2012, by $818 million from $14,666 million to $13,848 million. Restated plan net assets for the prior fiscal year increased by $1,699.6 million. The decrease in plan net assets for the plan year ended June 30, 2012 is primarily attributable to an increase in benefit payments, a decrease in member contributions, a net depreciation in the fair value of investments, and a decrease in securities lending income. The analysis below focuses on plan net assets (Table 1) and changes in plan net assets (Table 2) of Kentucky Retirement Systems' Pension and Insurance Funds.

Plan net assets of the pension funds decreased by $859.4 million ($10,758.7 million compared to $11,617.7 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries.

Plan net assets of the insurance fund increased by $41.4 million ($3,089.7 million compared to $3,048.3 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. The increase in net plan assets is primarily attributable to the increase in employer contribution rates for insurance.

Table 1. Plan Net Assets (in Millions)

	Pension Funds			Insurance Fund			Total		
Assets	**2012**	**2011**	**2010**	**2012**	**2011**	**2010**	**2012**	**2011**	**2010**
Cash & Investments	$11,922.7	$13,217.3	$12,690.2	$3,243.5	$3,458.4	$2,961.3	$15,166.2	$16,675.7	$15,651.5
Receivables	150.2	115.3	108.6	71.9	32.3	33.6	222.1	147.6	142.2
Equip/Int Assets, net of dep/amort.	13.8	9.7	9.3	-	-	-	13.8	9.7	9.3
Total Assets	**12,086.7**	**13,342.3**	**12,808.1**	**3,315.4**	**3,490.7**	**2,994.9**	**15,402.1**	**16,833.0**	**15,803.0**
Total Liabilities	**(1,328.1)**	**(1,724.6)**	**(2,267.7)**	**(226.0)**	**(442.4)**	**(568.9)**	**(1,554.1)**	**(2,167.0)**	**(2,836.6)**
Plan Net Assets	**$10,758.6**	**$11,617.7**	**$10,540.4**	**$3,089.4**	**$3,048.3**	**$2,426.0**	**$13,848.0**	**$14,666.0**	**$12,966.4**

Table 2. Changes in Plan Net Assets (in Millions)

	Pension Funds			Insurance Fund			Total		
Additions	**2012**	**2011**	**2010**	**2012**	**2011**	**2010**	**2012**	**2011**	**2010**
Member Cont.	$274.1	$306.0	$249.8	-	-	-	$274.1	$306.0	$249.8
Employer Cont.	591.4	506.6	461.2	436.2	387.5	371.9	1,027.6	894.1	833.1
Heath Ins. Cont.	11.9	6.6	3.4	-	-	-	11.9	6.6	3.4
Premiums Rec'd	-	-	-	28.4	31.0	29.1	28.4	31.0	29.1
Retired Remp Ins.	-	-	-	6.3	4.0	2.0	6.3	4.0	2.0
Medicare Subsidy	-	-	-	17.8	22.1	19.8	17.8	22.1	19.8
Invest. Inc. (net)	(28.5)	1,902.2	1,507.5	(55.3)	561.2	310.1	(83.8)	2,463.4	1,817.6
Total Additions	848.9	2,721.4	2,221.9	433.4	1,005.8	732.9	1,282.3	3,727.2	2,954.8
Deductions									
Benefit payments	1,649.2	1,591.5	1,516.1	-	-	-	1,649.2	1,591.5	1,516.1
Refunds	31.0	27.5	22.3	-	-	-	31.0	27.5	22.3
Administrative Ex.	27.8	24.9	24.8	11.9	10.4	9.7	39.7	35.3	34.5
Capital Projects Ex.	-	0.2	-	-	-	-	-	0.2	-
Healthcare Costs	-	-	-	380.4	373.1	353.4	380.4	373.1	353.4
Total Deductions	1,708.0	1,644.1	1,563.2	392.3	383.5	363.1	2,100.3	2,027.6	1,926.3
Increase (Decrease) in Plan Net Assets	**$(859.1)**	**$1,077.3**	**$658.7**	**$41.1**	**$622.3**	**$369.8**	**$(818.0)**	**$1,699.6**	**$1,028.5**

FUND ACTIVITIES

In Thousands or Millions
Much of the data presented in this report is abbreviated "in thousands" or "in millions". For example $1,000 represented "in millions" is really $1,000,000,000.

Pension Fund Activities After the restatement of fiscal 2011 contributions, member contributions decreased by $31.9 million. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Non-hazardous members pay pension contributions of 5% of creditable compensation and hazardous members contribute 8% of creditable compensation. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

After the restatement of fiscal 2011 contributions, employer contributions increased by $84.8 million due to the increase in the employer contribution rate applied to covered payroll.

Table 3. Investment (Loss) Income for Pension Funds (in Millions)

Asset	2012	2011	2010
(Decrease) Increase in fair value of investments	$(238)	$707	$1,066
Investment income net of investment expense	232	244	224
(Loss) Gain on sale of investments	(23)	951	218
Net Investment (Loss) Income	**$(29)**	**$1,902**	**$1,508**

Table 4. Investment (Loss) Income for Insurance Fund (in Millions)

Asset	2012	2011	2010
(Decrease) Increase in fair value of investments	$(21)	$169	$183
Investment income net of investment expense	63	44	35
(Loss) Gain on sale of investments	(97)	348	92
Net Investment (Loss) Income	**(55)**	**$561**	**$310**

Insurance fund deductions increased by $8.8 million due to the increase in overall healthcare costs.

Net investment income decreased by $1,930.7 million (a $28.5 million net investment loss in fiscal 2012 compared to $1,902.2 million net investment income in fiscal 2011). The pension funds experienced a decrease in income primarily due to a decrease in investment income. This can be illustrated in Table 3.

Pension fund deductions increased by $63.9 million caused principally by an increase of $57.7 million in benefit payments. Retirees received a Cost of Living Adjustment (COLA) increase of 1.5% in benefit payments as of July 1, 2011. Refunds of member contributions increased by $3.5 million and administrative expenses increased by $2.9 million. Capital Project Expenses, incurred as a result of the START Project, totaled $0.02 million. Certain START Project costs were capitalized in fiscal 2012 between fixed assets and intangible assets, as appropriate.

Insurance Fund Activities After the restatement of fiscal 2011 contributions, employer contributions paid into the insurance fund increased by $48.7 million over the prior fiscal year. This increase is a result of the increase in the employer contribution rate applied to covered payroll.

Net investment income decreased $616.5 million. This decrease in net investment income is due primarily to the loss on sale of investments. This is illustrated in Table 4 above.

Insurance fund deductions increased by $8.8 million due to the increase in overall healthcare costs.

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

Accounting standards require that the Statement of Plan Net Assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the Schedules of Funding Progress on pages 58-61. The asset value stated in the Schedules of Funding Progress is the actuarial value of assets. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by Kentucky Retirement Systems' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is defined as the unfunded actuarial accrued liability.

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

The unfunded actuarial accrued liability in the pension plans increased by $1,375.5million for a total unfunded amount of $13,758 million for the fiscal year ended June 30, 2012, compared to an unfunded amount of $12,382.5 million for the fiscal year ended June 30, 2011. In recent years, funding levels for the pension funds have fallen dramatically due to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, and expenditures for unfunded retiree Cost of Living Adjustments. Within the KERS and SPRS plans, employer contribution rate reductions enacted by the Kentucky General Assembly have limited the plans' ability to correct the declining funding levels.

The insurance plan's unfunded actuarial accrued liability for the plan year ended June 30, 2012, decreased to $4,321.5 million from $6,837.7 million for the plan year ended June 30, 2011. This is a decrease in the unfunded actuarial accrued liability of $2,516.2 million. This decrease is due to the change for the Medicare-eligible retirees from the self-insured health plans to fully insured Medicare Advantage plans administered by Humana.

Annual required contributions of the employers as actuarially determined and actual contributions made by employers and other contributing entities in relation to the required contributions are provided in the Schedules of Contributions from Employers and Other Contributing Entities on pages 62-66. The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS funds is attributable to the fact that the employer contribution rate set by the Kentucky General Assembly is less than the rate recommended by the KRS Actuary and adopted by the KRS Board of Trustees.

Combining Statement of Plan Net Assets for Pension Funds (in Thousands) as of June 30, 2012 with Comparative Totals as of June 30, 2011

Assets	2012						2011-Restated
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Total
Cash & Short-Term Investments							
Cash	$316	$1,024	$592	$760	$246	$2,938	$2,740
Short-Term Investments	18,546	101,548	59,946	183,733	11,566	375,339	1,309,337
Total Cash and Short-Short Term Investments	18,862	102,572	60,538	184,493	11,812	378,277	1,312,077
Receivables							
Contributions	4,664	40,290	14,188	51,375	2,205	112,722	75,965
Investment Income	1,641	10,273	5,872	18,895	842	37,523	39,310
Total Receivables	6,305	50,563	20,060	70,270	3,047	150,245	115,275
Investments at Fair Value							
Corporate and Government Bonds	159,055	972,045	573,583	1,850,724	83,980	3,639,387	2,882,891
Equity Contracts	2	14	8	25	1	50	868,796
Interest Rate Contracts	1,326	8,165	4,598	14,709	679	29,477	368,604
Foreign Exchange Contracts	2,798	17,225	9,701	31,030	1,430	62,184	
Swaps	70	430	242	774	36	1,552	
Options	39	242	136	436	20	873	
Corporate Stocks	274,644	1,757,066	957,644	3,061,343	144,779	6,195,476	5,280,654
Mortgages	11,677	69,786	43,460	142,047	5,671	272,641	751,453
Real Estate	4,516	12,891	10,036	25,160	1,444	54,047	32,252
Total Investments at Fair Value	454,127	2,837,864	1,599,408	5,126,248	238,040	10,255,687	10,184,650
Securities Lending Collateral Invested	33,456	731,422	120,548	385,278	18,109	1,288,813	1,720,595
Equipment (net of accumulated depreciation)	112	1,328	200	2,284	25	3,949	3,984
Intangible Assets (net of accumulated amortization)	290	3,335	483	5,671	53	9,832	5,744
Total Assets	**513,152**	**3,727,084**	**1,801,237**	**5,774,244**	**271,086**	**12,086,803**	**13,342,325**
Liabilities							
Accounts Payable	3,107	18,593	7,719	7,364	2,501	39,284	4,010
Securities Lending Collateral Obligations	33,456	731,422	120,548	385,278	18,109	1,288,813	1,720,595
Total Liabilities	**36,563**	**750,015**	**128,267**	**392,642**	**20,610**	**1,328,097**	**1,724,605**
Plan Net Assets Held in Trust for Pension Benefits	**$476,589**	**$2,977,069**	**$1,672,970**	**$5,381,602**	**$250,476**	**$10,758,706**	**$11,617,720**

See accompanying notes to the combining financial statements.

Combining Statement of Changes in Plan Net Assets for Pension Funds (in Thousands) as of June 30, 2012 with Comparative Totals as of June 30, 2011

Additions	2012						2011-Restated
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Total
Members' Contributions	$11,602	$96,418	$41,797	$119,123	$5,154	$274,094	$306,033
Employers' Contributions	17,367	211,071	77,311	270,664	15,040	591,453	506,592
Health Insurance Contributions (HB1)	629	5,337	811	5,101	46	11,924	6,586
Total Contributions	29,598	312,826	119,919	394,888	20,240	877,471	819,211
Investment Income							
From Investing Activities							
↘ Net Appreciation in FV	(20,338)	(57,548)	(60,565)	(117,311)	(5,418)	(261,180)	1,658,548
↘ Interest/Dividends	11,672	79,998	41,001	130,934	6,419	270,024	296,549
↘ Total Investing Activities Income	(8,666)	22,450	(19,564)	13,623	1,001	8,844	1,955,097
↘ Investment Expense	1,461	11,550	4,604	14,986	870	33,471	49,575
↘ Commissions	185	1,260	650	2,062	102	4,259	7,643
Total Investing Activities Expense	1,646	12,810	5,254	17,048	972	37,730	57,218
Net Income from Investing Activities	(10,312)	9,640	(24,818)	(3,425)	29	(28,886)	1,897,879
From Securities Lending Activities							
↘ Securities Lending Income	25	141	89	59	13	327	7,783
From Securities Lending Expense							
↘ Security Borrower Rebates	(11)	(71)	(41)	(132)	(6)	(261)	2,277
↘ Security Lending Agent Fees	10	63	36	115	5	229	1,162
Net Income from Securities Lending Activities	26	149	94	76	14	359	4,344
Total Net Investment Income	(10,286)	9,789	(24,724)	(3,349)	43	(28,527)	1,902,223
Total Additions	**19,312**	**322,615**	**95,195**	**391,539**	**20,283**	**848,944**	**2,721,434**
Deductions							
Benefit Payments	48,424	858,151	169,352	524,385	48,867	1,649,179	1,591,519
Refunds	2,543	12,004	3,516	12,765	149	30,977	27,521
Administrative Expenses	877	8,776	1,319	16,740	73	27,785	24,918
Capital Project Expenses		8		9		17	195
Total Deductions	**51,844**	**878,939**	**174,187**	**553,899**	**49,089**	**1,707,958**	**1,644,153**
Net Increase in Plan Assets	(32,532)	(556,324)	(79,992)	(162,360)	(28,806)	(859,014)	1,077,281
Plan Net Assets Held in Trust for Pension Benefits							
Beginning of Year	509,121	3,533,393	1,751,962	5,543,962	279,282	11,617,720	10,540,439
End of Year	**$476,589**	**$2,977,069**	**$1,672,970**	**$5,381,602**	**$250,476**	**$10,758,706**	**$11,617,720**

See accompanying notes to the combining financial statements.

Combining Statement of Plan Net Assets for Insurance Funds (in Thousands) as of June 30, 2012 with Comparative Totals as of June 30, 2011

Assets	2012						2011-Restated
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Total
Cash and Short-Term Investments							
Cash	$34	$555	$39	$570	$34	$1,232	$2,016
Short-Term Investments	24,366	33,748	39,452	80,072	7,748	185,386	758,893
Medicare Drug Deposit	11	20	23	42	5	101	101
Total Cash and Short-Short Term Investments	24,411	34,323	39,514	80,684	7,787	186,719	761,010
Receivables							
Contributions	5,544	15,908	16,169	20,705	2,996	61,322	23,276
Investment Income	1,133	1,302	2,732	5,024	425	10,616	9,066
Total Receivables	6,677	17,210	18,901	25,729	3,421	71,938	32,342
Investments at Fair Value							
Corporate and Government Bonds	122,004	123,864	282,365	515,716	41,542	1,085,491	593,589
Equity Contracts			1	1		2	527,274
Interest Rate Contracts	772	961	1,856	3,399	291	7,279	33,584
Swaps	30	38	74	135	12	289	328
Foreign Exchange Contracts	2,399	2,987	5,771	10,568	905	22,630	
Options	15	19	37	68	6	145	
Corporate Stocks	168,218	232,238	419,192	770,083	68,481	1,658,212	984,724
Mortgages	7,079	17,798	16,592	31,071	2,807	75,347	116,447
Real Estate	950	519	2,196	4,058	378	8,101	2,523
Total Investments at Fair Value	301,467	378,424	728,084	1,335,099	114,422	2,857,496	2,258,469
Securities Lending Collateral Invested	19,920	31,234	49,003	91,073	7,988	199,218	438,877
Total Assets	**352,475**	**461,191**	**835,502**	**1,532,585**	**133,618**	**3,315,371**	**3,490,698**
Liabilities							
Accounts Payable	1,825	11,467	625	12,691	232	26,840	3,483
Securities Lending Collateral Obligations	19,920	31,234	49,003	91,073	7,988	199,218	438,877
Total Liabilities	**21,745**	**42,701**	**49,627**	**103,764**	**8,220**	**226,058**	**442,360**
Plan Net Assets Held in Trust for Pension Benefits	**$330,730**	**$418,490**	**$785,874**	**$1,428,821**	**$125,398**	**$3,089,313**	**$3,048,338**

See accompanying notes to the combining financial statements.

Combining Statement of Changes in Plan Net Assets for Insurance Funds (in Thousands) as of June 30, 2012 with Comparative Totals as of June 30, 2011

Additions	2012						2011-Restated
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Total
Employers' Contributions	$23,984	$146,844	$90,204	$164,297	$10,808	$436,137	$387,525
Employer Group Waiver Plan	351	7,856	871	8,443	279	17,800	22,129
Premiums Received from Retirees	339	12,229	290	15,525	20	28,403	30,959
Retired Reemployed Healthcare (HBI)	537	3,437	405	1,968	2	6,349	4,042
Total Contributions	25,211	170,366	91,770	190,233	11,109	488,689	444,655
Investment Income							
From Investing Activities							
↘ Net Appreciation in FV	(6,675)	(12,575)	(32,299)	(63,013)	(4,139)	(118,701)	517,042
↘ Interest/Dividends	7,702	9,167	17,951	33,381	3,040	71,241	51,808
↘ Total Investing Activities Income	1,027	(3,408)	(14,348)	(29,632)	(1,099)	(47,460)	568,850
↘ Investment Expense	857	1,196	1,517	2,870	314	6,754	7,752
↘ Commissions	128	224	304	568	51	1,275	1,236
Total Investing Activities Expense	985	1,420	1,821	3,438	365	8,029	8,988
Net Income from Investing Activities	42	(4,828)	(16,169)	(33,070)	(1,464)	(55,489)	559,862
From Securities Lending Activities							
↘ Securities Lending Income	9	12	21	39	3	84	1,891
From Securities Lending Expense							
↘ Security Borrower Rebates	(16)	(23)	(38)	(70)	(6)	(153)	240
↘ Security Lending Agent Fees	7	10	17	31	3	68	325
Net Income from Securities Lending Activities	18	25	42	78	6	169	1,326
Total Net Investment Income	60	(4,803)	(16,127)	(32,992)	(1,458)	(55,320)	561,188
Total Additions	**25,271**	**165,563**	**75,643**	**157,241**	**9,651**	**433,369**	**1,005,843**
Deductions							
Healthcare Premiums Subsidies	11,047	104,900	44,225	79,378	8,728	248,278	242,818
Administrative Fees	335	5,203	688	5,545	201	11,972	10,412
Self Funding Insurance Costs	2,894	58,941	5,930	62,316	2,063	132,144	130,260
Total Deductions	**14,276**	**169,044**	**50,843**	**147,239**	**10,992**	**392,394**	**383,490**
Net Increase in Plan Assets	10,995	(3,481)	24,800	10,002	(1,341)	40,975	622,353
Plan Net Assets Held in Trust for Insurance Benefits							
Beginning of Year	319,735	421,971	761,074	1,418,819	126,739	3,048,338	2,425,985
End of Year	**$330,730**	**$418,490**	**$785,874**	**$1,428,821**	**$125,398**	**$3,089,313**	**$3,048,338**

See accompanying notes to the combining financial statements.

*Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the **members of that plan**, and a pro-rata share of administrative costs in accordance with the provisions of KRS Sections 16.555, 61.570, and 78.630.*

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees (the Board) of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS).

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of KRS administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by KRS: (1) KERS; (2) CERS; and (3) SPRS. The assets of the insurance fund are commingled for investment purposes. The following notes apply to the various funds administered by KRS.

NOTE **A.**

Note A. Summary of Significant Accounting Policies

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Basis of Accounting KRS' combining financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and investment expenses are recognized when incurred.

Methods Used to Value Investments Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Short-term investments are reported at cost, which approximates fair value. See Note D for further discussion of fair value measurements. Purchases and sales of securities are recorded on a trade date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Gain (loss) on investments includes KRS gains and losses on investments bought and sold as well as held during the fiscal year.

Estimates The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged to expense as incurred. The capitalization threshold used in fiscal years ended June 30, 2012 and 2011 was $3,000 (see Note J for further information).

Intangible Assets Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is ten years. The capitalization threshold used in fiscal years ended June 30, 2012 and 2011 was $3,000 (see Note K for further information).

Contributions Receivable Contributions receivable consists of amounts due from employers. The management of KRS considers contributions receivable to be fully collectable; accordingly, no allowance for doubtful accounts is considered necessary. If amounts become uncollectable, they will be charged to operations when that determination is made. If amounts previously written off are collected, they will be credited to income when received.

Payment of Benefits Benefits are recorded when paid.

Expense Allocation Administrative expenses of KRS are allocated in proportion to the number of active members participating in each plan and direct investment manager expenses are allocated in proportion to the percentage of investment assets held by each plan.

Component Unit KRS is a component unit of the Commonwealth of Kentucky for financial reporting purposes. KERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. CERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. SPRS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the KRS Board of Trustees without further legislative review. The methods used to determine the employer rates for all Systems are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

GASB
Governmental Accounting Standards Board

Recent Accounting Pronouncements In December 2010, the Governmental Accounting Standards Board (GASB) issued Statement No. 62, "Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements". The objective of this Statement is to incorporate into the GASB's authoritative literature certain accounting and financial reporting guidance that is included in the following pronouncements issued on, or before, November 30, 1989, which does not conflict with, or contradict, GASB pronouncements: Financial Accounting Standards Board (FASB) Statements and Interpretations; Accounting Principles Board Opinions; and, Accounting Research Bulletins of the American Institute of Certified Public Accountants' (AICPA) Committee on Accounting Procedure. KRS has noted this Statement and has implemented its requirements.

In June 2011, the GASB issued Statement No. 64, "Derivative Instruments: Application of Hedge Accounting Termination Provisions-an amendment of GASB Statement No. 53". The objective of this Statement is to clarify whether an effective hedging relationship continues after the replacement of a swap counterparty or a swap counterparty's credit support provider. This Statement sets forth criteria that establish when the effective hedging relationship continues and hedge accounting should continue to be applied. KRS has noted this Statement and has implemented its requirements in an additional disclosure in Footnote D-Investments.

In June 2012, the GASB issued Statement No. 67, "Financial Reporting for Pension Plans-an amendment of GASB Statement No. 25". The objective of this Statement is to improve financial reporting by state and local governmental pension plans. This Statement requires defined benefit pension plans to present two financial statements – a statement of fiduciary net position and a statement of changes in fiduciary net position. In addition, the Statement requires that notes to the financial statements include descriptive information, such as the types of benefits provided,

the classes of plan members covered, and the composition of the pension plan's board, among other detailed requirements. The Statement becomes effective for the fiscal year beginning July 1, 2013. KRS is currently reviewing the Statement's requirements.

In June 2012, the GASB issued Statement No. 68, "Accounting and Financial Reporting for Pensions-an amendment of GASB Statement No. 27". The objective of this Statement is to improve financial reporting by state and local governmental pension plans. In addition, it requires the liability of the employers and nonemployer contributing entities to employees for defined benefit pensions (net pension liability) to be measured as the portion of the present value of projected benefit payments to be provided through the pension plan to current active and inactive employees that is attributed to those employees' past periods of service (total pension liability), less the amount of the pension plan's fiduciary net position. In addition, this Statement requires additional changes to the Required Supplementary Information, among other extensive changes. This Statement becomes effective for the fiscal year beginning July 1, 2014. KRS is currently reviewing the Statement's requirements.

NOTE **B.**

Haz or Non-Haz
Hazardous or Non-Hazardous
(i.e. KERS Haz or CERS Non-Haz)

Note B. Plan Descriptions & Contribution Information

Membership Information

KERS Employees

	2012			2011		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	36,508	2,180	38,688	38,597	3,064	41,661
Inactive Vested Memberships	39,445	2,490	41,935	38,597	3,264	41,861
Active Plan Members	42,210	3,540	45,750	46,617	4,291	50,908
Total	**118,163**	**8,210**	**126,373**	**123,811**	**10,619**	**134,430**
Number of Participating Employers			385			372

CERS Employees

	2012			2011		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	42,068	5,513	47,581	43,211	6,468	49,679
Inactive Vested Memberships	63,564	1,643	65,207	65,914	2,774	68,688
Active Plan Members	85,779	6,906	92,685	85,285	9,407	94,692
Total	**191,411**	**14,062**	**205,473**	**194,410**	**18,649**	**213,059**
Number of Participating Employers			1,129			1,396

SPRS Employees

Members	**2012**	**2011**
Retirees and Beneficiaries Receiving Benefits	1,203	1,263
Inactive Vested Memberships	224	357
Active Plan Members	904	965
Total	**2,331**	**2,585**
Number of Participating Employers	1	1

2012 Hospital & Medical Contracts
Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Haz	9,764	1,917	734	1,721	15,015
KERS Haz	645	517	93	67	751
CERS Non-Haz	7,972	1,317	383	3,119	16,355
CERS Haz	1,385	2,237	310	73	1,853
SPRS	291	444	62	15	581
Total	**20,057**	**6,432**	**1,582**	**4,995**	**34,555**

2011 Hospital & Medical Contracts
Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Haz	10,321	2,155	732	1,821	13,988
KERS Haz	615	21	75	60	570
CERS Non-Haz	8,013	1,552	351	3,167	15,100
CERS Haz	1,310	2,156	253	58	1,527
SPRS	278	474	52	14	499
Total	**20,537**	**6,358**	**1,463**	**5,120**	**31,684**

KERS NON-HAZ PENSION

For the fiscal years ended June 30, 2012 and 2011, participating employers contributed 19.82% and 16.98%, respectively, of each employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2012 and 2011, were 40.71% and 38.58%, respectively, of each employee's creditable compensation.

COLA
Cost of Living Adjustment

KAR
Kentucky Administrative Regulation

Plan Description KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to

suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2012, the COLA was not granted.

Contributions For the fiscal years ended June 30, 2012 and 2011, plan members who began participating prior to September 1, 2008 were required to contribute 5% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2012 and 2011, participating employers contributed 19.82% and 16.98%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2012 and 2011, were 40.71% and 38.58%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401 (h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% of their annual creditable compensation.

For the fiscal years ended June 30, 2012 and 2011, participating employers contributed 28.98% and 26.12%, respectively, of each employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2012 and 2011, were 33.84% and 34.37%, respectively, of each employee's creditable compensation.

Plan Description KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2012, the COLA was not granted.

Contributions For the fiscal years ended June 30, 2011 and 2010, plan members who began participating prior to September 1, 2008 were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2012 and 2011, participating employers

contributed 28.98% and 26.12%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2012 and 2011, were 33.84% and 34.37%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with HB 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

CERS NON-HAZ PENSION

For the fiscal years ended June 30, 2012 and 2011, participating employers contributed 18.96% and 16.93%, respectively, of each employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2012 and 2011, were 18.96% and 16.93%, respectively.

Plan Description CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2012, the COLA was not granted.

Contributions For the fiscal years ended June 30, 2012 and 2011, plan members who began participating prior to September 1, 2008 were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2012 and 2011, participating employers contributed 18.96% and 16.93%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2012 and 2011, were 18.96% and 16.93%, respectively. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% of their annual creditable compensation.

For the fiscal years ended June 30, 2012 and 2011, participating employers contributed 35.76% and 33.25%, respectively, of each employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2012 and 2011, were 35.76% and 33.25%, respectively, of each employee's creditable compensation.

Plan Description CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each participating county, city and school board, and any additional eligible local agencies electing to participate in CERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2012, the COLA was not granted.

Contributions For the fiscal years ended June 30, 2012 and 2011, plan members who began participating prior to September 1, 2008 were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2012 and 2011, participating employers contributed 35.76% and 33.25%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2012 and 2011, were 35.76% and 33.25%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

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For the fiscal years ended June 30, 2012 and 2011, the Commonwealth contributed 52.13% and 45.54%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2012 and 2011 were 94.63% and 85.63%, respectively, of each employee's creditable compensation.

Plan Description SPRS is a single-employer defined benefit pension plan that covers all full-time state troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2012, the COLA was not granted.

Contributions For the fiscal years ended June 30, 2012 and 2011, plan members who began participating prior to September 1, 2008 were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board.

However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2012 and 2011, the Commonwealth contributed 52.13% and 45.54%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2012 and 2011 were 94.63% and 85.63%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

For fiscal 2012, insurance premiums withheld from benefits for members of KERS were $29,136,828 and $1,235,155 for KERS non-haz and KERS haz, respectively; $27,541,099 and $1,982,303 for CERS non-haz and CERS haz, respectively; and, $246,384 for SPRS.

Plan Description The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2012, insurance premiums withheld from benefit payments for members of the systems were $29,136,828 and $1,235,155 for KERS non-hazardous and hazardous, respectively; $27,541,099 and $1,982,303 for CERS non-hazardous and hazardous, respectively; and, $246,384 for SPRS. For fiscal 2011, insurance premiums withheld from benefit payments for members of KERS were $29,350,195 and $1,225,236 for KERS non-hazardous and KERS hazardous, respectively; $29,219,273 and $2,017,208 for CERS non-hazardous and CERS hazardous, respectively; and, $250,282 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2012, the Fund had 96,742 retirees and beneficiaries for whom benefits were available. The amount of contribution paid by the Funds is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows.

Portion Paid by Insurance Fund

Years of Service	Paid by Insurance Fund (%)
20+ years	100%
15-19 years	75%
10-14 years	50%
4-9 years	25%
Less than 4 years	0%

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after, July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on, or after, July 1, 2003 earn ten dollars ($10) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn fifteen dollars ($15) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives ten dollars ($10) per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree cost of living adjustment (COLA), which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands. In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years.

Self-Funding KRS commenced self-funding of healthcare benefits for its Medicare eligible retirees on January 1, 2006. A self-funded plan is one in which KRS assumes the financial risk for providing healthcare benefits to its retirees. The self-funded plan pays for claims out-of-pocket as they are presented instead of paying a pre-determined premium to an insurance carrier for a fully-insured plan. KRS funds the risk of its self-insured program directly from its insurance assets.

Administrators KRS contracts with Catalyst Rx and UMR to administer the pharmaceutical and medical benefits, respectively, for its retirees. Stop-loss insurance can be arranged to limit KRS' loss to a specified amount to ensure that catastrophic claims do not upset the financial integrity of the self-funded plan. The amount of stop-loss insurance is a function of KRS' size, nature of its business, financials, and tolerance for risk.

On August 6, 2012 the Board voted to cease self-funding of healthcare benefits for most KRS Medicare eligible retirees. The Board elected to contract with Humana Insurance Company to provide healthcare benefits to KRS' retirees through a fully insured Medicare Advantage Plan. The Humana Medicare Advantage Plan becomes effective January 1, 2013.

Note C. Cash, Short-Term Investments & Securities Lending Collateral

GASB
Governmental Accounting Standards Board

The provisions of GASB Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions, and investments made with that cash, be reported as assets on the financial statements. In accordance with GASB No. 28, KRS classifies certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

Cash & Short-Term Investments
KERS

Assets	**2012**	**2011**
Cash	$1,340,506	$1,197,306
Short-Term Investments	120,094,230	387,987,312
Securities Lending Collateral Invested	764,877,463	596,906,253
KERS Total	**$886,312,199**	**$986,090,871**

CERS

Assets	**2012**	**2011**
Cash	$1,352,380	$1,250,932
Short-Term Investments	243,678,862	892,898,087
Securities Lending Collateral Invested	505,826,461	1,082,381,468
CERS Total	**$750,857,703**	**$1,976,530,487**

SPRS

Assets	**2012**	**2011**
Cash	$245,955	$292,029
Short-Term Investments	11,565,956	28,452,304
Securities Lending Collateral Invested	18,109,078	41,306,830
SPRS Total	**$29,920,989**	**$70,051,163**

KRS Insurance Fund

Assets	**2012**	**2011**
Cash	$1,230,685	$2,015,579
Short-Term Investments	185,385,495	758,893,370
Medicare Drug Deposit	100,691	100,620
Securities Lending Collateral Invested	199,217,159	438,877,452
Insurance Fund Total	**$385,934,030**	**$1,199,887,021**

Note D. Investments

CMO
Collateralized Mortgage Obligation

STIF
Short Term Investment Fund

ETF
Exchange Traded Fund

IO
Interest Only

PO
Principal Only

The Board of Trustees of KRS recognizes its duty to invest funds in accordance with the "Prudent Person Rule" and manage those funds consistent with the long-term nature of KRS. For assets not managed internally by staff, the Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments Investments may be made in common stock, securities convertible into common stock, preferred stock of publicly traded companies on stock markets, asset class relevant ETF's or any other type of security contained in a manager's benchmark. Each individual equity account has a comprehensive set of investment guidelines prepared, which contains a listing of permissible investments, portfolio restrictions and standards of performance.

Fixed Income Investments The fixed income accounts may include, but are not limited to, the following fixed income securities: US Government and Agency bonds; investment grade US corporate credit; investment grade non-US corporate credit; non-investment grade US corporate credit including both bonds and bank loans; non-investment grade non-US corporate credit including bonds and bank loans; municipal bonds; non-US sovereign debt; mortgages, including residential mortgage backed securities; commercial mortgage backed securities, and whole loans; asset-backed securities and emerging market debt (EMD), including both sovereign EMD and corporate EMD; and, asset class relevant ETF's.

Mortgages Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments.

Private Equity, Equity Real Estate, Real Return, Absolute Return Investments Subject to the specific approval of the Investment Committee of the Board of Trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, but not limited to and without limitation, venture capital, private equity, private placements, real assets and absolute return investments which the Investment Committee believes has excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities The following short-term investment vehicles are considered acceptable: Publicly traded investment grade corporate bonds, variable rate demand notes, government and agency bonds, mortgages, municipal bonds, and collective STIF's, money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements, relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the instrument has a split rating, the lower of the two ratings shall prevail. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time left until the next interest rate reset occurs, but in no case will any security have a stated final maturity of more than three years.

KRS' fixed income managers, who utilize cash equivalent securities as an integral part of their investment strategy, are exempt from the permissible investments contained in the preceding paragraph. Permissible short-term investments for fixed income managers shall be included in the investment manager's investment guidelines.

Derivatives Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited, unless specifically allowed by a manager's contract. In accordance with GASB Statement No. 53, "Accounting and Financial Reporting for Derivative Instruments", KRS provides this additional disclosure regarding its derivatives:

Background Info As of June 30, 2012, KRS has the following derivative instruments outstanding (see table below). All have various Effective Dates and Maturity Dates.

Item	Type	Objective	Terms	Cost	Notional Cost	Market Value	Notional Market Value
Pension-Assets							
A	Equity Contracts	Substitute for common stock	Various	$445,4530	-	$50,330	-
B	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	$29,412,924	-
C	Interest Rate Contracts/Swaps	Hedge against the risk that interest rates will move in an adverse direction	Various	$11,233,015	_	18,535,034	-
D	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	$804,115	-	$744,053	-
E	Options	Hedge against the holding of an asset	Various	$882,930	_	$318,988	_
Pension-Liabilities							
F	Interest Rate Contracts/SWAPs	Hedge against the risk that interest rates will move in an adverse direction	Various	($5,268,395)	-	($10,941,944)	-
G	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	($16,007)	-	($32,771,445)	-
H	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	($959,569)	_	($808,199)	_
I	Options	Hedge against the holding of an asset	Various	($1,090,105)	-	($553,615)	-
Insurance-Assets							
J	Equity Contracts	Substitute for common stock	Various	-	-	$2,520	_
K	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	$10,852,566	-
L	Interest Rate Contracts/Swaps	Hedge against the risk that interest rates will move in an adverse direction	Various	$2,505,989	_	$4,528,506	-
M	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	$96,114	-	$100,127	_
N	Options	Hedge against the holding of an asset	Various	$152,192	_	$52,920	_
Insurance-Liabilities							
O	Interest Rate Contracts/Swaps	Hedge against the risk that interest rates will move in an adverse direction	Various	($1,719,335)	-	($2,750,159)	_
P	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	($3,607)	-	($11,777,583)	-
Q	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	($226,846)	_	($189,210)	-
R	Options	Hedge against the holding of an asset	Various	($187,000)	-	($91,819)	_

Derivative Policy It is the policy of KRS that investment managers may invest in derivative securities, or strategies which make use of derivative investments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Examples of such derivatives include, but are not limited to, foreign currency forward contracts, collateralized mortgage obligations, treasury inflation protected securities, futures, options and swaps. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flows, such as interest only, principal only, inverse floater, or structured note securities are permitted only to the extent authorized in an alternative investment offering memorandum or agreement.

CMOs Investments in securities such as collateralized mortgage obligations and planned amortization class issues are allowed if, in the judgment of the investment manager, they are not expected to be subject to large or unanticipated changes in duration or cash flows. Investment managers may make use of derivative securities for defensive or hedging purposes. Any derivative security

shall be sufficiently liquid that it can be expected to be sold at, or near, its most recently quoted market price.

Derivative instruments A and J are substitutes for common stock with an investment that is recorded at fair value. Derivative instruments B, G, K, and P hedge against the decrease of non US dollar currencies. For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combined Statement of Plan Net Assets for both Pension and Insurance.

RISKS

Basis Risk Derivative instruments A and J expose KRS to basis risk in that the value of the underlying equity index future may decrease in fair value relative to the cash market. Derivative instruments B, G, K, and P expose KRS to basis risk in that the value of the foreign currency futures or forwards may decrease in fair value relative to the cash market.

Interest Rate Risk Derivative instruments C, D, E, F, H, I, L, M, N, O, Q, and R expose KRS to interest rate risk in that changes in interest rates will adversely affect the fair values of KRS' financial instruments.

In June 2011, the GASB issued Statement No. 64, "Derivative Instruments: Application of Hedge Accounting Termination Provisions, an Amendment of GASB Statement No. 53". The objective of this Statement is to clarify whether an effective hedging relationship continues and hedge accounting should be continued to be applied. Upon the termination of a hedging derivative instrument, hedge accounting should cease and investment income should immediately recognize deferred outflows of resources or deferred inflows of resources. KRS maintains its derivative instruments as investment derivative instruments for all accounting and financial reporting purposes. Therefore, hedge accounting and the related effectiveness testing is not performed.

Custodial Credit Risk for Deposits Custodial credit risk for deposits is the risk that in the event of a financial institution failure, KRS' deposits may not be returned. All non-investment related bank balances are held by JP Morgan Chase, which became the depository bank of KRS on July 1, 2011. All non-investment related bank balances are held in KRS' name and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). In 2010, the US Congress passed the Financial Crisis Bill and permanently increased the FDIC deposit insurance coverage to $250,000. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount.

As of June 30, 2012 and 2011, deposits for KRS pension funds were $30,925,504 and $4,795,307, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels. The increase from prior year is attributable to the implementation of the START project (see Note K for further information regarding START). Employer and member contributions are reported via START and the contributions in fiscal 2012 were being reconciled for qualification and investment purposes as of June 30, 2012. A receiveable was recorded for these payrolls as of June 30, 2012. This accounts for the large balance on hand in current year as compared to prior year.

As of June 30, 2012 and 2011, deposits for KRS insurance fund were $3,130,778 and $2,020,499, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. KRS does not have an explicit policy with regards to Custodial Credit Risk for investments. As of June 30, 2012 and 2011, the following currencies were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name. These funds are cash held by KRS' Global Managers and consist of various currencies.

Custodial Credit Risk

Pension Fund	2012	2011
Foreign Currency	$4,509,853	$8,971,696
Insurance Fund		
Foreign Currency	$1,736,160	$3,703,274

Investment Policies Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of Trustees of KRS. The Board of Trustees has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the "Prudent Person Rule" (set forth in Kentucky Revised Statute 61.650) and manage those funds consistent with the long-term nature of the Systems. The Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS.

The Statement of Investment Policy contains the specific guidelines for the investment of pension and insurance assets. Additionally, the Committee establishes specific investment guidelines in the Investment Management Agreement for each investment management firm.

Pension Fund Investments Summary
As of June 30, 2012 & 2011

Type	2012	2011
US Gov't & Agency Fixed Income Securities	$1,789,467,703	$2,474,974,219
US Corporate Fixed Income Securities	1,222,776,472	1,063,223,703
Municipal Debt Securities	79,109,093	78,975,354
Short-Term Investments	375,339,048	1,677,941,341
Equity Securities	4,504,816,279	5,994,749,969
Private Equity Limited Partnerships	1,797,263,220	1,392,099,971
Real Estate	54,047,344	32,251,271
Other*	808,209,209	(1,220,227,180)
Total	**$10,631,028,368**	**$11,493,988,648**

**This balance consists of the following*

Type	2012	2011
Cash Collateral - US Dollars	$21,644,777	$2,570,028
Sukuk[1]	495,200	94,750
Real Estate		16,500,000
Derivative Offsets		
↘ US Dollars		(368,603,638)
↘ Equity Futures	(12,467,000)	(868,796,035)
↘ Hedge Funds	817,486,374	
Liabilities		
↘ Obligation to Return Cash Collateral - US Dollars	(18,950,142)	(1,992,285)
Total	**$808,209,209**	**$(1,220,227,180)**

[1] Sukuk is the Arabic name for financial certificates, but commonly refers to the Islamic equivalent of bonds.

Insurance Fund Investments Summary
As of June 30, 2012 & 2011

Type	2012	2011
US Gov't & Agency Fixed Income Securities	$596,153,822	$537,586,644
US Corporate Fixed Income Securities	322,100,002	154,320,004
Municipal Debt Securities	15,609,402	14,331,627
Short-Term Investments	185,486,186	792,578,190
Equity Securities	1,368,123,183	1,847,247,012
Private Equity Limited Partnerships	323,438,095	225,938,724
Real Estate	8,100,453	2,522,855
Other**	223,968,702	(557,062,260)
Total	**$3,042,979,845**	**$3,017,462,796**

***This balance consists of the following*

Type	2012	2011
Cash Collateral - US Dollars	$5,119,746	$328,313
Real Estate		3,500,000
Derivative Offsets		
↘ US Dollars		(33,584,200)
↘ Equity Futures	(3,005,800)	(527,274,305)
↘ Hedge Funds	226,403,187	
Liabilities		
↘ Swaps - US Dollars	(2,858,431)	(32,068)
↘ Obligation to Return Cash Collateral - US Dollars	(1,690,000)	
Total	**$223,968,702**	**$(557,062,260)**

Credit Risk of Debt Securities Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external professional investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension fund debt securities portfolio is managed using the following guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Fixed income investments will be similar in type to those securities found in the KRS fixed income benchmarks and the characteristics of the KRS fixed income portfolio will be similar to the KRS fixed income benchmarks. The fixed income accounts may include, but are not limited to the following fixed income securities: US Government and Agency bonds; investment grade US corporate credit; investment grade non-US corporate credit; non-investment grade US corporate credit including bonds and bank loans; municipal bonds; non-US sovereign debt; mortgages, including residential mortgage backed securities, commercial mortgage backed securities, and whole loans, asset backed securities, and emerging market debt (EMD) including both sovereign EMD and corporate EMD; and, asset class relevant ETF's.
- The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income by more than 25%.
- The duration of the TIPS portfolio shall not deviate from the KRS Fixed Income Index by more than 25%.
- The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS assets.
- No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short term instrument, with the exception of US Government issued, guaranteed or agency obligations.
- The amount invested in SEC Rule 144a securities shall not exceed 15% of the market value of the aggregate market value of KRS' fixed income investments.

Pension Fund Debt Securities at Fair Value as of June 30, 2012 & 2011

Quality Rating	2012	2011
AAA	$176,752,688	$91,317,082
AA+	51,817,259	34,390,755
AA	19,865,864	39,864,586
AA-	40,184,012	50,219,759
A+	31,408,066	104,187,245
A	80,076,147	146,999,473
A-	108,297,775	152,567,548
BBB+	57,879,171	64,799,988
BBB	103,233,884	112,518,837
BBB-	81,350,025	56,358,144
BB+	56,241,281	7,166,376
BB	63,795,374	13,417,689
BB-	74,378,918	28,485,658
B+	69,386,148	27,997,068
B	70,846,202	21,129,569
B-	57,149,848	32,172,492
CCC+	27,020,113	6,138,146
CCC	20,493,357	8,838,429
CCC-	5,572,497	1,590,633
CC	720,167	-
D	6,361,973	3,394,737
NR	99,054,796	138,644,843
Total Credit Risk Debt Securities	**1,301,885,565**	**1,142,199,057**
Government Bonds	607,041,559	508,207,024
Government Mortgage-Backed Securities (GNMA)	248,950,785	725,318,403
Government Issued Commercial Mortgage Backed	10,311,861	6,325,040
Government Agencies	32,423,616	95,545,823
Indexed Linked Bonds	890,739,882	1,139,577,929
Total Debt Securities	**$3,091,353,268**	**$3,617,173,276**

Pension Fund Securities At both June 30, 2012 and 2011, the weighted average quality rating of the pension fund debt securities portfolio was AA+. As of June 30, 2012 and 2011, the KRS pension portfolio had $451,965,878 and $150,330,797, respectively, in debt securities rated below BBB-. The fair value of securities in the BBB- rating category was $81,350,025 and $56,358,144, respectively, as of June 30, 2012 and 2011.

Insurance Fund Debt Securities at Fair Value as of June 30, 2012 & 2011

Quality Rating	2012	2011
AAA	$99,272,032	$43,946,738
AA+	8,741,517	2,359,902
AA	6,899,008	7,044,017
AA-	7,739,207	7,138,193
A+	11,301,734	20,243,053
A	20,358,203	18,381,398
A-	24,992,822	21,875,607
BBB+	11,979,181	7,975,298
BBB	22,934,068	15,146,772
BBB-	15,084,027	7,256,147
BB+	11,563,376	202,742
BB	15,166,400	1,156,866
BB-	17,353,229	1,916,666
B+	14,268,206	3,169,797
B	16,588,386	2,226,250
B-	14,831,663	
CC	961,988	
CCC	5,522,254	
CCC+	5,323,130	259,375
CCC-	1,086,041	
D	2,118,411	
NR	3,624,521	8,352,810
Total Credit Risk Debt Securities	**337,709,404**	**168,651,631**
Government Bonds	164,367,747	94,082,811
Government Mortgage-Backed Securities (GNMA)	70,007,438	114,153,699
Government Issued Commercial Mortgage Backed	3,156,940	761,681
Government Agencies	7,506,492	13,394,544
Indexed Linked Bonds	351,115,205	315,193,909
Total Debt Securities	**$933,863,226**	**$706,238,275**

Insurance Fund Securities As a result of the most recently approved Asset/Liability Modeling Study, the investment staff began to diversify the insurance fixed income allocation to mirror that of the pension funds. As part of this process, the TIPS allocation (previously the only fixed income exposure within the insurance portfolio) was moved to the newly created Real Return Asset Class.

As of June 30, 2012, the Pension Funds held $8,003,335, or .01%, and the Insurance Fund held $15,424,404, or 0.5%, of its investments in Exchange Traded Funds.

Concentration of Credit Risk Debt Securities Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer. The total debt securities portfolio is managed using the following general guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Debt obligations of any single US Corporation shall be limited to a maximum of 5% of the total portfolio at market value.

ETF
Exchange Traded Fund

Fannie Mae
Federal National Mortgage Association

As of June 30, 2012, the Pension Funds held $8,003,335, or 0.1%, and the Insurance Fund held $15,424,404, or 0.5%, of its investments in Exchange Traded Funds (ETF's). ETF's are securities that represent ownership in a long term unit investment trust that holds a portfolio of common stocks designed to track the performance of a designated index. Similar to a stock, ETF's can be traded continuously throughout the trading day, or can be held for the long term.

As of June 30, 2012, the Pension Funds held $165,626,504, or 1.6%, of its investment in the Federal National Mortgage Association (Fannie Mae). Historically, Fannie Mae has been a publicly owned government corporation, recently entering conservatorship by the US Government, to purchase mortgages from lenders and resell them to investors; shares of Fannie Mae are traded on the New York Stock Exchange. Fannie Mae's debt has been perceived to be nearly as safe as US Treasury debt, given the US Government's implicit guarantee which has allowed it to pay lower interest rates to its debt holders.

Interest Rate Risk Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration measures the sensitivity of the market prices of fixed income securities to changes in the yield curve. Duration is measured using two methodologies: effective and modified duration. Effective duration uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price and makes adjustments for any bond features that would retire the bonds prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve, but does not assume the securities will be called prior to maturity.

The KRS pension fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. Prior to June 30, 2011 the KRS pension fund benchmark for its fixed income securities was a combination of the Barclays Aggregate Index and the Barclays TIPS Index. As of June 30, 2012 and 2011, the modified duration of the KRS fixed income benchmark was 5.02 and 6.03, respectively. At the same points in time, the modified duration of the KRS pension fund fixed income securities portfolio was 5.61 and 5.85 respectively.

The KRS insurance fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. Prior to June 30, 2011 the KRS insurance fund benchmark for its fixed income securities was a combination of the Barclays Aggregate Index and the Barclays TIPS Index. As of June 30, 2012 and 2011, the modified duration of the KRS fixed income benchmark was 5.02 and 7.14, respectively. At the same points in time, the modified duration of the KRS insurance fund fixed income securities portfolio was 5.66 and 6.60 respectively.

Pension Fund Interest Rate Risk

Type	2012	Weighted Average Effective Duration	2011	Weighted Average Effective Duration
Asset Backed Securities	$69,305,698	1.28	$86,628,031	0.64
Bank Loans	91,076,272	0.14	41,962,680	0.35
Collateralized Bonds	14,259,490	0.07	6,325,040	(0.22)
Commercial Mortgage Backed Securities	59,670,935	2.90	88,520,168	4.68
Corporate Bonds	333,162,366	4.70	735,281,195	4.78
Corporate Convertable Bonds	16,819,919	4.10		
Government Agencies	32,423,616	5.20	93,545,823	3.97
Government Bonds	607,041,559	5.70	508,207,024	4.73
Government Mortgage Backed Securities	248,950,785	1.40	707,971,763	2.91
Government Issued Commercial Mortgage Backed Securities	10,311,861	3.30	5,211,936	3.22
Guaranteed Fixed Income	-	-	18,882,082	1.37
Hedge Funds	335,635,038	-	-	-
Hedge Multi Strategy	3,738,246	-	-	-
Indexed Linked Government Bonds	890,739,882	8.30	1,139,577,929	3.68
Municipal Bonds	79,109,093	10.70	78,975,354	10.54
Non-Government Backed CMOs	23,690,395	0.93	15,576,827	1.83
Other Fixed Income	227,154,341	-	-	-
Short Term Investments	39,719,110	-	-	-
Short Term Bills/Notes	8,049,462	0.34	90,412,674	0.38
Sukuk*	495,200	4.20	94,750	0.09
Total	**$3,091,353,268**	**5.85**	**$3,617,173,276**	**3.83**

** The Arabic name for financial certificates, but commonly refers to the Islamic equivalent of bonds; since fixed income interest bearing bonds are not permissible in Islam, Sukuk securities are structured to comply with Islamic Law and its investment principles, which prohibits the charging, or paying, of interest.*

Interest Fund Interest Rate Risk

	2012		2011	
Investment	**Fair Value**	**Weighted Duration**	**Fair Value**	**Weighted Duration**
Asset Backed Securities	$20,616,445	2.40	$1,000,340	1.73
Bank Loans	19,461,761	3.90	5,808,008	3.58
Collateralized Bonds	5,256,039	0.80		
Commercial Mortgage Backed Securities	12,783,807	3.30	11,977,676	4.42
Corporate Bonds	71,656,715	5.80	69,145,598	5.78
Corporate Convertible Bonds	3,788,169	7.90		
Fixed Income	83,061,859			
Government Agencies	7,506,492	6.40	13,394,544	4.34
Government Bonds	164,367,747	5.80	94,082,811	4.79
Government Mortgage Backed Securities	70,007,438	3.10	114,153,699	4.19
Government Issued Commercial Mortgages	3,156,940	3.60	534,001	3.51
Guaranteed Fixed Income			4,439,819	1.85
Hedge Fund	85,762,072			
Hedge Multi Strategy	1,584,968			
Index Linked Government Bonds	351,115,205	8.30	315,193,909	7.78
Municipal/Provincial Bonds	15,609,402	10.00	14,331,627	10.74
Non-Government Backed CMOs	5,339,625	1.10	2,293,809	3.47
Short Term Investments	11,619,360			
Short Term Bills/Notes	1,169,182	.50	59,882,434	0.39
Total	**$933,863,226**	**6.60**	**$706,238,275**	**5.83**

*Foreign currency risk is the risk that changes in exchange rates will **adversely affect the value** of a non-US dollar based investment or deposit with the KRS portfolio.*

Foreign Currency Risk Foreign currency risk is the risk that changes in exchange rates will adversely affect the value of a non-US dollar based investment or deposit with the KRS portfolio. KRS' currency risk exposure, or exchange rate risk, primarily resides with KRS' international equity holdings, but also affects other asset classes. KRS does not have a formal policy to limit foreign currency risk, however, during the fiscal year, KRS employed a third party vendor to dynamically hedge some major currency exposures.

All foreign currency transactions are classified as Short-Term Investments. All gains and losses associated with these transactions are recorded in the Net Appreciation (Depreciation) in the Fair Value of Investments on the financial statements.

RCM
Record Currency Management Dynamic Currency Hedging Program

KRS originally invested $12,043,264 of the Pension Funds, and $4,197,722 of the Insurance Fund, in the Record Currency Management Dynamic Currency Hedging Program (RCM), for a total of $16,243,160. The RCM program began in September 2009. The RCM account experienced a tremendous amount of growth through May 2011 when it peaked with a market value of $82,001,355 in the Pension Funds, and $30,026,900 in the Insurance Fund, a total of $112,028,255. It began to lose ground in June 2011, which led to a cumulative inception to date loss of $6,752,497 in the Pension Funds, and $3,516,224 in the Insurance Fund, for a total overall RCM loss of $10,268,721 as of June 30, 2011. The dynamic currency hedging program previously run by RCM was terminated on November 3, 2011 and is expected to be completely unwound in November 2012. The tables on the following pages present KRS' exposure to foreign currency risk as of June 30, 2012 and 2011.

Pension Fund Investments at Fair Value as of June 30, 2012 & 2011

Foreign Equities	**2012**	**2011**
Argentine Peso	$592,995	$1,196,140
Australian Dollar	58,388,163	94,694,698
Brazilian Real	23,932,101	4,278,639
British Pound Sterling	196,765,497	134,777,442
Canadian Dollar	103,163,185	134,071,078
Chilean Peso	2,675,122	-
Chinese Yuan	5,183,187	521,787
Columbian Peso	3,148,357	1,222,930
Czech Koruna	3,158,280	1,658,886
Danish Krone	8,606,995	16,152,506
Euro	312,248,180	433,029,933
Hong Kong Dollar	90,614,411	68,788,630
Hungarian Forint	1,251,857	-
Indian Rupee	3,536,235	-
Indonesian Rupiah	14,715,167	2,243,714
Israeli Shekel	1,703,453	-
Japanese Yen	232,665,797	265,405,175
Malaysian Ringgit	3,068,235	2,426,541
Mexican Peso	18,202,265	3,661,558
New Taiwan Dollar	25,479,684	5,254,844
New Zealand Dollar	1,013,380	1,338,143
Norwegian Krone	4,046,964	11,346,709
Peruvian Nuevo Sol	1,216,727	-
Philippine Peso	6,438,447	138,885
Polish Zloty	4,802,910	-
Russian Ruble	7,570,244	1,036,961
Singapore Dollar	22,349,886	22,053,536
South African Rand	23,545,955	2,758,884
South Korean Won	70,999,258	4,512,110
Swedish Krona	27,191,886	23,544,658
Swiss Franc	81,004,268	95,068,382
Thai Bhat	9,159,880	-
Turkish Lira	6,233,784	-
International Equity Mutual Fund (various currencies)	-	920,141,284
Total Securities Subject to Foreign Currency Risk	**1,374,672,755**	**$2,251,324,053**
USD (securities held by International Investment Managers)	9,256,355,650	1,659,713,681
Total International Investment Securities	**$10,631,028,405**	**$3,911,037,734**

Insurance Fund Investments at Fair Value as of June 30, 2012 & 2011

Foreign Equities	**2012**	**2011**
Australian Dollar	$20,374,499	$37,342,712
Brazilian Real	6,775,870	607,112
British Pound Sterling	69,217,342	50,278,435
Canadian Dollar	35,948,462	53,058,136
Chilean Peso	786,711	-
Chinese Yuan	1,298,990	-
Columbian Peso	796,126	-
Czech Koruna	990,353	427,698
Danish Krone	2,959,795	5,937,869
Euro	105,768,977	167,585,939
Hong Kong Dollar	31,672,609	24,192,383
Hungarian Forint	315,114	71
Indian Rupee	882,340	-
Indonesian Rupiah	4,828,536	2,832
Israeli Shekel	429,103	-
Japanese Yen	79,821,116	104,116,859
Malaysian Ringgit	740,285	-
Mexican Peso	4,224,645	370,341
New Taiwan Dollar	8,671,587	1,351,967
New Zealand Dollar	296,011	556,742
Norwegian Krone	1,355,472	4,589,032
Peruvian Nuevo Sol	304,965	-
Philippine Peso	1,699,557	-
Polish Zloty	1,263,786	-
Russian Ruble	1,762,447	-
Singapore Dollar	7,014,550	8,739,442
South African Rand	7,916,313	307,167
South Korean Won	23,790,001	1,165,059
Swedish Krona	9,210,394	8,758,300
Swiss Franc	28,469,252	36,824,057
Thai Bhat	3,108,109	-
Turkish Lira	2,072,912	-
International Equity Mutual Fund (various currencies)	-	199,878,520
Total Securities Subject to Foreign Currency Risk	**464,766,229**	**706,090,673**
USD (securities held by International Investment Managers)	2,578,213,716	524,261,020
Total International Investment Securities	**$3,042,979,945**	**$1,230,351,693**

Note E. Securities Lending Transactions

Kentucky Revised Statutes Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with a fair value of 102 or 105 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. The types of securities lent include US Treasuries, US Agencies, US Corporate Bonds, US Equities, Global Fixed Income Securities, and Global Equities Securities. The Statement of Investment Policy does not address any restrictions on the amount of loans that can be made. At June 30, 2012, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction. Deutsche Bank invests cash collateral as permitted by state statute and Board policy. The agent of the Funds cannot pledge or sell collateral securities received unless the borrower defaults.

KRS maintains a conservative approach to investing the cash collateral with Deutsche Bank, emphasizing capital preservation, liquidity, and credit quality.

Note F. Risk of Loss

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims Against Board Claims against the Board of KRS, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $200,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Job-Related Illness Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-third percent (66⅔%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

NOTE **G.**

Note G. Contingencies

In the normal course of business, KRS is involved in litigation concerning the right of participants, or their beneficiaries, to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

NOTE **H.**

Note H. Income Tax Status

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, generally, not subject to tax. KRS is subject to income tax on any unrelated business income;however, KRS had no unrelated business income in 2012.

NOTE **I.**

Note I. Defined Benefit Pension Plan

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

All eligible employees of KRS participate in KERS (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers substantially all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Plan members who began participating prior to September 1, 2008, contributed 5% of creditable compensation for the periods ended June 30, 2012, 2011, and 2010. Plan members who began participating on or after September 1, 2008, contributed 6% of creditable compensation for the periods ended June 30, 2012, 2011, and 2010. KRS contributed 19.82%, 16.98%, and 11.61% of covered payroll for the periods ended June 30, 2012, 2011, and 2010, respectively. The chart below includes the covered payroll and contribution amounts for KRS for the three periods included in this discussion.

Payroll & Contributions

	2012	2011	2010
Covered Payroll	$13,784,847	$13,444,315	$13,383,859
Required Employer Contributions	$2,726,780	$2,282,864	$1,553,865
Employer Percentage Contributed	100%	100%	100%

Note J. Equipment

Equipment Expenses as of June 30

Expense	2012	2011
Equipment At-Cost	$6,753,648	$6,971,185
Less Accumulated Depreciation	(2,805,034)	(2,987,098)
Total	**$3,948,614**	**$3,984,087**

Depreciation expense for the fiscal years ended June 30, 2012 and 2011 amounted to $68,471 and $62,203, respectively. The decrease in equipment at cost is due to some assets being fully depreciated as of June 30, 2012.

Note K. Intangible Assets

GASB
Governmental Accounting Standards Board

START
Strategic Technology Advancements for the Retirement of Tomorrow

The provisions of GASB Statement No. 51, "Accounting and Financial Reporting for Intangible Assets" require that intangible assets be recognized in the Statement of Plan Net Assets only if they are considered identifiable. In accordance with GASB No. 51, KRS has capitalized software costs as indicated below for the Strategic Technology Advancements for the Retirement of Tomorrow (START) project.

Software Expenses as of June 30

Expense	2012	2011
Software At-Cost	$12,724,117	$7,424,611
Less Accumulated Amortization	(2,893,011)	(1,682,261)
Total	**$9,831,106**	**$5,742,350**

Amortization expense for the fiscal years ended June 30, 2012 and 2011 amounted to $1,210,750 and $688,473, respectively.

START Project In fiscal 2007, KRS initiated the START project. It is anticipated that START will be completed in its entirety in fiscal 2013. The objectives of the project are to provide employees with a technology solution that will enable them to serve more customers more quickly while providing continued superior service; to enhance business services and improve operational efficiency; to improve the accuracy of the information collected, maintained, and provided; to improve the timeliness and accuracy of responses to members' inquiries; to provide internet based, self-service capabilities to members, retirees, and employers; and, to ensure that retirees receive monthly benefits without error or disruption.

Note L. Actuarial Valuation

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

The provisions of GASB Statement No. 50, "Pension Disclosures, an Amendment of GASB No. 25 and No. 27", require that actuarial information included in the Notes to the Required Supplementary Information be moved to the Notes to the Financial Statements. In accordance with GASB No. 50, KRS has moved the following information from the Notes to the Required Supplementary Information to the Notes to the Financial Statements:

Pension Fund Valuation

	Non-Haz	Haz
Valuation Date	June 30, 2012	June 30, 2012
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	25 Years	25 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Actuarial Assumptions		
Investment Rate of Return	7.75%	7.75%
↘ Includes Price Inflation at	3.5%	3.5%
Projected Salary Increases	4.75-17.0%	4.5-21.0%
↘ Includes Wage Inflation at	4.5%	4.5%
Cost of Living Adjustment	None	None

Insurance Fund Valuation[1]

	Non-Haz	Haz
Valuation Date	June 30, 2012	June 30, 2012
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	25 Years	25 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	9.5-5.0%	9.5-5.0%
Medical Trend Assumption (Post-Medicare)	7.5-5.0%	7.5-5.0%
Year of Ultimate Trend	2019	2019
Actuarial Assumptions		
Investment Rate of Return	4.5% and 7.75%[2]	4.5% and 7.75%
↘ Includes Price Inflation at	3.5%	3.5%

[1]The actuarial valuation for the Insurance Fund involves estimates of the value of reported amounts and assumptions about the probability of future events. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations are based on the benefits provided under the terms of the insurance plan in effect at the time of each valuation and on the pattern of sharing costs between the employer and plan members as of the valuation date. Actuarial calculations of the insurance plan reflect a long-term perspective.

[2]The actuarial investment rate of return for developing insurance liabilities and contribution rates is 4.5% for the Kentucky Employees Retirement System (non-hazardous) and the State Police Retirement System. The lower rate is required under the parameters set by the Governmental Accounting Standards Board (GASB) Statements 43 and 45 given the lack of pre-funding of insurance benefits.

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

AAL
Actuarial Accrued Liability

Unfunded Actuarial Accrued Liability KRS had the following Unfunded Actuarial Accrued Liabilities as of June 30 2012 and 2011:

Unfunded Actuarial Accrued Liabilities as of June 30
Pension Fund

System	2012	2011
KERS Non-Haz	$8,259,731,398	$7,455,155,945
KERS Haz	255,473,161	210,544,939
CERS Non-Haz	3,592,332,096	3,288,473,842
CERS Haz	1,262,612,750	1,079,495,659
SPRS	387,897,090	348,798,770
Total Pension Funds	**$13,758,046,495**	**$12,382,469,155**

Unfunded Actuarial Accrued Liabilities as of June 30
Insurance Fund

System	2012	2011
KERS Non-Haz	$2,679,249,646	$3,828,469,191
KERS Haz	39,018,458	177,097,152
CERS Non-Haz	857,917,437	1,640,522,412
CERS Haz	535,802,215	876,912,481
SPRS	209,531,710	314,740,474
Total Insurance Funds	**$4,321,519,466**	**$6,837,741,710**
Total Unfunded Actuarial Accrued Liability	**$18,079,565,961**	**$19,220,210,865**

The Schedule of Funding Progress for Pension Funds begins on page 58. The Schedule of Funding Progress for the Insurance Fund begins on page 60.

Pension Fund Schedule of Funding Progress

System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non-Haz	$3,101,316,738	$11,361,048,136	27.3%	$1,644,896,681	502.1%
KERS Haz	497,226,296	752,699,457	66.1%	131,976,754	193.6%
CERS Non-Haz	5,547,235,599	9,139,567,695	60.7%	2,236,546,345	160.6%
CERS Haz	1,747,379,297	3,009,992,047	58.1%	464,228,923	272.0%
SPRS	259,791,575	647,688,665	40.1%	48,372,506	801.9%
Total Pension Funds	**$11,152,949,505**	**$24,910,996,000**	**44.8%**	**$4,526,021,209**	**304.0%**

Insurance Fund Schedule of Funding Progress

System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non-Haz	$446,080,511	$3,125,330,157	14.3%	$1,644,896,681	162.9%
KERS Haz	345,573,948	384,592,406	89.9%	131,976,754	29.6%
CERS Non-Haz	1,512,853,851	2,370,771,288	63.8%	2,236,546,345	38.4%
CERS Haz	829,040,842	1,364,843,057	60.7%	464,228,923	115.4%
SPRS	124,372,072	333,903,782	37.2%	48,372,506	433.2%
Total Pension Funds	**$3,257,921,224**	**$7,579,440,690**	**42.9%**	**$4,526,021,209**	**95.5%**
Totals	**$14,410,870,729**	**$32,490,436,690**	**44.4%**	**$9,052,042,418**	**199.7%**

NOTE **M.**

Note M. House Bill 1 Pension Reform

House Bill 1 was signed by the Governor of the Commonwealth on June 27, 2008. It contained a number of changes that KRS implemented effective September 1, 2008.

House Bill 1 also contained statutory changes to Kentucky Revised Statute 61.637, the law governing members who become reemployed following retirement.

Employee Contributions Employee contributions for non-hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 6% of all their creditable compensation to KRS. Five percent of this contribution was deposited to the individual employee's account, while the other 1% was deposited to an account created under 26 USC Section 401(h) in the KRS Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 9% of all their creditable compensation, with 8% credited to the member's account, and 1% deposited to the KRS Pension Fund 401(h) account. Interest paid each June on these members' accounts is set at a rate of 2.5%. If a member terminates his/her employment and applies to take a refund, the member is entitled to a full refund of contributions and interest in his/her account; however, the 1% contributed to the 401(h) account in the KRS Pension Fund is non-refundable and is forfeited.

Employer Rates Employer contribution rates for KERS and SPRS for fiscal 2012 were established in the 2010-2012 Executive Branch Budget (House Bill 1) during the 2010 Extraordinary Session of the Kentucky General Assembly. Employer contribution rates for CERS for fiscal 2012 were adopted by the KRS Board of Trustees based on the actuarially recommended rates. The Employer contribution rates were established as follows (effective July 1, 2011) for fiscal 2012:

Employer Contribution Rates
Fiscal Year 2012

System	Rate
KERS Non-Haz	19.82%
KERS Haz	28.98%
CERS Non-Haz	18.96%
KERS Haz	35.76%
SPRS	52.13%

Although the majority of changes in this legislation only impacted new hires on, or after, September 1, 2008, there were some changes that affected all members and retirees of KRS:

- **Cost of Living Adjustment** Beginning July 1, 2009, COLA for retirees are set by statute at 1.5% each July 1. The Kentucky General Assembly may increase this percentage at any time, but only if appropriate funding is allocated. The General Assembly may also reduce or suspend the annual COLA.

COLA
Cost of Living Adjustment

- **Service Purchase Costs** The actuarial factors used to determine the cost to purchase a service must assume the earliest date a member can retire with an unreduced benefit, and must also assume a 1.5% COLA will be enacted. This change results in an increased service purchase cost for any purchase calculated on, or after, September 1, 2008. This change also affects the cost billed to employers for sick leave when an employee retires.

- **Payment Options** The Partial Lump Sum Payment Option was made available only to those employees who retired on, or before, January 1, 2009.

Kentucky Revised Statute 61.637 was modified significantly by House Bill 1. Specifically, a retiree who is reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.

NOTE **N.**

Note N. Medicare Prescription Drug Plan

PDP
Prescription Drug Plan

In fiscal 2009, Kentucky Retirement Systems submitted an application to the Centers for Medicare & Medicaid Services, of the Department of Health & Human Services, to enter into a contract to offer a Medicare Prescription Drug Plan (PDP), as described in the Medicare Prescription Drug Benefit Final Rule published in the Federal Register on January 28, 2005 (70 Fed. Reg. 4194). As part of the application process, KRS was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents and is invested on a daily basis. On February 19, 2009, KRS established the KRS Insurance Prescription Drug Fund at Northern Trust. As of June 30, 2012 and 2011, the Insolvency Account amounted to $100,691 and $100,620, respectively.

NOTE **O.**

Note O. House Bill 300 Pension Reform

House Bill 300 was signed by the Governor on April 11, 2012. The Bill makes changes/additions to information and definitions regarding placement agents, audits to be performed on KRS by the Kentucky Auditor of Public Accounts, terms of service of Trustees of the Board, terms of service of Board officers (Chair and Vice-Chair), among other changes.

Note P. Reimbursement Of Retired – Reemployed Health Insurance

As a result of the passage of House Bill 1 on September 1, 2008, if a retiree is reemployed in a regular full time position and has chosen health insurance coverage through KRS, the employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate. As of June 30, 2012 and 2011, the reimbursement totaled $6,349,929 and $4,041,974, respectively.

Note Q. Louisville/Jefferson County Metro Firefighters

Firefighter employees of Louisville/Jefferson County Metro Government were awarded a total of $28,440,159 for back-pay. Of that total, $28,425,232, was determined to be the amount of creditable compensation. The total contributions owed to KRS were calculated by applying the contribution rate in effect for each fiscal year awarded (fiscal 1986 to fiscal 2009) while considering the appropriate participation status, hazardous or non-hazardous, of each employee. These calculations established that the total employer contribution owed was $5,113,511, and the total employee contribution owed was $2,083,310, for a total of $7,196,821. These amounts were received on July 27, 2010.

KRS also calculated the impact on final compensation caused by the retroactive benefits paid to those firefighters who have already retired. KRS was required to pay retroactive benefit payments totaling $6,221,219, reflecting additional benefits due to the increase in final compensation. The liability was paid on August 22, 2010, by issuance of benefit payments to the individual firefighter members.

Kentucky Revised Statute 61.675(3)(b) requires that KRS collect interest on unmade or delinquent contributions. The interest owed by the Louisville/Jefferson County Metro Government, as calculated by KRS' actuaries, amounted to $12,020,731. Therefore, the total amount due KRS was $19,217,552. As stated earlier, $7,196,821 was received on July 27, 2010.

On July 2, 2012, KRS received an additional $7,000,000, for interest owed, which by settlement extinguished the liability to KRS.

NOTE **R.**

Note R. Reciprocity Agreement

KRS has a reciprocity agreement with Kentucky Teachers' Retirement System (KTRS) for the payment of insurance benefits for those members who have creditable service in both systems. As of June 30, 2012, KTRS has estimated a receivable due from KRS in the amount of $3.8 million. However, KRS has chosen not to record a payable or receivable under the reciprocity agreement since, in KRS' view, it cannot be reasonably estimated as of June 30, 2012.

NOTE **S.**

Note S. Restatement of Prior Year Financial Statements

The Pension and Insurance Funds' Net Assets as of June 30, 2011, and the increase in the Pension and Insurance Funds' Net Assets for the fiscal year then ended, have been restated to correct accrued contributions at June 30, 2011. The net effect of these corrections for reporting purposes were decreases of $62,843,424 and $48,449,690 in pension and insurance contributions, respectively, for the fiscal year ended June 30, 2011, and a corresponding decrease in the pension and insurance funds' net assets at June 30, 2011, respectively. The restatement resulted from the double posting of an accrual of contributions in fiscal 2011.

Restatement of Fiscal 2011 Financial Statements

	As Previously Reported	As Restated
Pension Funds:		
Contributions Receivable	$138,808	$75,695
Plan Net Assets held in Trust for Pension Benefits	11,680,563	11,617,720
Members' Contributions	326,842	306,033
Employers' Contributions	548,126	506,592
Health Insurance Contributions	7,086	6,586
Net Increase in Plan Assets	$1,140,124	$1,077,281
Insurance Fund:		
Contributions Receivable	$71,726	23,276
Plan Net Assets held in Trust for Insurance Benefits	3,096,788	3,048,338
Employers' Contributions	435,975	387,525
Net Increase in Plan Assets	$670,803	$622,353

NOTE **T.**

Note T. Subsequent Events

Management has evaluated the period from June 30, 2012, to December 5, 2012, (the date the financial statements were available to be issued) for items requiring recognition or disclosure in the financial statements except as disclosed in Notes B and Q, there were no events occuring during the evaluation period that require disclosure, and there were no events that require recognition in the financial statements.

Required Supplementary Information

Required Supplementary Information

Schedules of Funding Progress for KERS Pension Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$6,000,513,743	$7,049,613,171	$1,049,099,428	85.1%	$1,645,412,496	63.8%
June 30, 2005	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
June 30, 2006	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
June 30, 2007	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
June 30, 2008	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
June 30, 2009	4,794,611,365	10,658,549,532	5,863,938,167	45.0	1,754,412,912	334.2
June 30, 2010	4,210,215,585	11,004,795,089	6,794,579,504	38.3	1,815,146,388	374.3
June 30, 2011	3,726,986,087	11,182,142,032	7,455,155,945	33.3	1,731,632,748	430.5
June 30, 2012	3,101,316,738	11,361,048,136	8,259,731,398	27.3	1,644,896,681	502.1
Hazardous						
June 30, 2004	$397,212,763	$403,578,036	$6,365,273	98.4%	$126,664,812	5.0%
June 30, 2005	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
June 30, 2006	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
June 30, 2007	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
June 30, 2008	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
June 30, 2009	502,503,287	674,411,781	171,908,494	74.5	146,043,576	117.7
June 30, 2010	502,729,009	688,149,451	185,420,442	73.1	143,557,944	129.2
June 30, 2011	510,748,505	721,293,444	210,544,239	70.8	133,053,792	158.2
June 30, 2012	497,226,296	752,699,457	255,473,161	66.1	131,976,754	193.6
Total						
June 30, 2004	$6,397,726,506	$7,453,191,207	$1,055,464,701	85.8%	$1,772,077,308	59.6%
June 30, 2005	5,983,974,408	8,018,069,096	2,034,094,688	74.6	1,787,594,376	113.8
June 30, 2006	5,822,070,515	9,503,482,150	3,681,411,635	61.3	1,840,978,097	200.0
June 30, 2007	5,864,070,268	10,044,931,606	4,180,861,338	58.4	1,925,061,513	217.2
June 30, 2008	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0
June 30, 2009	5,297,114,652	11,332,961,313	6,035,846,661	46.7	1,900,456,488	317.6
June 30, 2010	4,712,944,594	11,692,944,540	6,979,999,946	40.3	1,958,704,332	356.4
June 30, 2011	4,237,734,592	11,903,435,476	7,665,700,884	35.6	1,864,686,540	411.1
June 30, 2012	3,598,543,034	12,113,747,593	8,515,204,559	29.7	1,776,873,435	479.2

*** Covered payroll was actuarially computed*

See Independent Auditors' Report.

Schedules of Funding Progress for CERS Pension Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$5,187,851,530	$4,936,459,488	$(251,392,042)	105.1%	$1,826,870,880	(13.8)%
June 30, 2005	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
June 30, 2006	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
June 30, 2007	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
June 30, 2008	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
June 30, 2009	5,650,789,991	7,912,913,512	2,262,123,521	71.4	2,183,611,848	103.6
June 30, 2010	5,546,857,291	8,459,022,280	2,912,164,989	65.6	2,236,855,380	130.2
June 30, 2011	5,629,611,183	8,918,085,025	3,288,473,842	63.1	2,276,595,948	144.4
June 30, 2012	5,547,235,599	9,139,567,695	3,592,332,096	60.7	2,236,546,345	160.6
Hazardous						
June 30, 2004	$1,457,612,042	$1,640,830,120	$183,218,078	88.8%	$392,562,624	46.7%
June 30, 2005	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
June 30, 2006	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
June 30, 2007	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
June 30, 2008	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
June 30, 2009	1,751,487,540	2,578,444,600	826,957,060	67.9	469,315,464	176.2
June 30, 2010	1,749,464,388	2,672,151,907	922,687,519	65.5	466,548,660	197.8
June 30, 2011	1,779,545,393	2,859,041,052	1,079,495,659	62.2	466,963,860	231.2
June 30, 2012	1,747,379,297	3,009,992,047	1,262,612,750	58.1	464,228,923	272.0
Total						
June 30, 2004	$6,645,463,572	$6,577,289,608	$(68,173,964)	101.0%	$2,219,433,504	(3.1)%
June 30, 2005	6,511,561,710	7,180,774,025	669,212,315	90.7	2,296,396,728	29.2
June 30, 2006	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
June 30, 2007	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4
June 30, 2008	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3
June 30, 2009	7,402,277,531	10,491,358,112	3,089,080,581	70.6	2,652,927,312	116.4
June 30, 2010	7,296,321,679	11,131,174,187	3,834,852,508	65.5	2,703,404,040	141.9
June 30, 2011	7,409,156,576	11,777,126,077	4,367,969,501	62.9	2,743,559,808	159.2
June 30, 2012	7,294,614,896	12,149,559,743	4,854,944,847	60.0	2,700,775,268	179.8

Schedules of Funding Progress for SPRS Pension Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
June 30, 2004	$385,077,195	$437,482,425	$52,405,230	88.0%	$43,835,208	119.6%
June 30, 2005	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
June 30, 2006	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
June 30, 2007	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
June 30, 2008	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5
June 30, 2009	329,966,989	602,328,868	272,361,879	54.8	51,660,396	527.2
June 30, 2010	304,577,292	612,444,806	307,867,514	49.7	51,506,712	597.7
June 30, 2011	285,580,631	634,379,401	348,798,770	45.0	48,692,616	716.3
June 30, 2012	259,791,575	647,688,665	387,897,090	40.1	48,372,506	801.9

*** Covered payroll was actuarially computed*

Schedules of Funding Progress for KERS Insurance Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$600,586,961	$2,335,905,365	$1,735,318,404	25.7%	$1,645,412,496	105.5%
June 30, 2005	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
June 30, 2006	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
June 30, 2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
June 30, 2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
June 30, 2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
June 30, 2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
June 30, 2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
June 30, 2012	446,080,511	3,125,330,157	2,679,249,646	14.3	1,644,896,681	162.9
Hazardous						
June 30, 2004	$169,158,879	$323,503,563	$154,344,684	52.3%	$126,664,812	121.9%
June 30, 2005	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
June 30, 2006	212,833,318	621,237,856	408,404,538	34.3	138,747,320	294.4
June 30, 2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
June 30, 2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
June 30, 2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
June 30, 2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
June 30, 2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
June 30, 2012	345,573,948	384,592,406	39,018,458	89.9	131,976,754	29.6
Total						
June 30, 2004	$769,745,840	$2,659,408,928	$1,889,663,088	28.9%	$1,772,077,308	106.6%
June 30, 2005	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
June 30, 2006	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,978,097	413.5
June 30, 2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
June 30, 2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
June 30, 2009	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0
June 30, 2010	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1
June 30, 2011	781,582,057	4,787,148,400	4,005,566,343	16.3	1,864,686,540	214.8
June 30, 2012	791,654,459	3,509,922,563	2,718,268,104	22.6	1,776,873,435	153.0

** *Covered payroll was actuarially computed*

See Independent Auditors' Report.

Schedules of Funding Progress for CERS Insurance Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$585,399,072	$2,438,734,696	$1,853,335,624	24.0%	$1,826,870,880	101.5%
June 30, 2005	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
June 30, 2006	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
June 30, 2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
June 30, 2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
June 30, 2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
June 30, 2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
June 30, 2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
June 30, 2012	1,512,853,851	2,370,771,288	857,917,437	63.8	2,236,546,345	38.4
Hazardous						
June 30, 2004	$310,578,162	$1,025,684,477	$715,106,315	30.3%	$392,562,624	182.2%
June 30, 2005	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
June 30, 2006	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
June 30, 2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
June 30, 2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
June 30, 2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
June 30, 2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
June 30, 2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
June 30, 2012	829,040,842	1,364,843,057	535,802,215	60.7	464,228,923	115.4
Total						
June 30, 2004	$895,977,234	$3,464,419,173	$2,568,441,939	25.9%	$2,219,433,504	115.7%
June 30, 2005	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
June 30, 2006	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
June 30, 2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
June 30, 2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
June 30, 2009	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4
June 30, 2010	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3
June 30, 2011	2,204,241,067	4,721,675,960	2,517,434,893	46.7	2,743,559,808	91.8
June 30, 2012	2,341,894,693	3,735,614,345	1,393,719,652	62.7	2,700,775,268	51.6

Schedules of Funding Progress for SPRS Insurance Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
June 30, 2004	$96,622,908	$197,604,301	$100,981,393	48.9%	$43,835,208	230.4%
June 30, 2005	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
June 30, 2006	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
June 30, 2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
June 30, 2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
June 30, 2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
June 30, 2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2
June 30, 2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4
June 30, 2012	124,372,072	333,903,782	209,531,710	37.2	48,372,506	433.2

*** Covered payroll was actuarially computed*

Schedules of Contributions from Employers & Other Contributing Entities
KERS Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$47,739,067	$21,696,543	-	45.4%
June 30, 2005	85,798,943	50,332,750	-	58.7
June 30, 2006	129,125,800	60,680,607	-	47.0
June 30, 2007	176,774,106	88,248,677	-	49.9
June 30, 2008	264,742,985	104,655,217	-	39.5
June 30, 2009	294,495,010	112,383,083	-	38.2
June 30, 2010	348,494,678	144,050,560	-	41.3
June 30, 2011	381,915,236	193,754,471	-	50.7
June 30, 2012	441,094,470	214,786,132	-	48.7
Insurance Funds				
June 30, 2004	$77,951,553	$78,016,737	-	100.1%
June 30, 2005	86,974,271	49,909,228	-	57.4
June 30, 2006	202,498,302	47,634,639	-	23.5
June 30, 2007	219,768,964	64,014,332	$10,744,049	34.0
June 30, 2008	558,745,820	56,744,942	6,633,538	11.3
June 30, 2009	362,707,378	74,542,932	8,167,982	22.8
June 30, 2010	376,556,187	93,976,917	8,550,914	27.2
June 30, 2011	294,897,813	129,335,552	-	43.9
June 30, 2012	297,904,224	156,057,216	-	52.4
Total				
June 30, 2004	$125,690,620	$99,713,280	-	79.3%
June 30, 2005	172,773,214	100,241,978	-	58.0
June 30, 2006	331,624,102	108,315,246	-	32.7
June 30, 2007	396,543,070	152,263,009	$10,744,049	41.1
June 30, 2008	823,488,805	161,400,159	6,633,538	20.4
June 30, 2009	657,202,388	186,926,015	8,167,982	29.7
June 30, 2010	725,050,865	238,027,477	8,550,914	34.0
June 30, 2011	676,813,049	323,090,023	-	47.7
June 30, 2012	738,998,694	370,843,348	-	50.2

See Independent Auditors' Report.

Schedules of Contributions from Employers & Other Contributing Entities
KERS Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$9,600,978	$9,769,580	-	101.8%
June 30, 2005	9,449,878	9,758,547	-	103.3
June 30, 2006	10,787,472	10,803,206	-	100.1
June 30, 2007	12,219,689	13,237,321	-	108.3
June 30, 2008	14,147,341	15,257,079	-	107.8
June 30, 2009	15,708,254	15,843,289	-	100.9
June 30, 2010	17,814,630	17,658,058	-	99.1
June 30, 2011	20,605,070	19,140,508	-	92.9
June 30, 2012	20,264,754	20,808,540	-	102.7
Insurance Funds				
June 30, 2004	$14,942,092	$14,959,617	-	100.1%
June 30, 2005	15,892,977	15,395,977	-	96.9
June 30, 2006	28,517,563	17,011,745	-	59.7
June 30, 2007	31,304,778	19,534,819	$104,669	62.7
June 30, 2008	51,214,929	21,997,341	73,891	43.1
June 30, 2009	34,670,467	20,807,204	186,081	60.6
June 30, 2010	35,045,278	21,921,535	319,059	63.5
June 30, 2011	29,585,257	19,952,580	-	67.4
June 30, 2012	28,326,206	24,538,087	-	86.6
Total				
June 30, 2004	$24,543,070	$24,729,197	-	100.8%
June 30, 2005	25,342,855	25,154,524	-	99.3
June 30, 2006	39,305,035	27,814,951	-	70.8
June 30, 2007	43,524,467	32,772,140	$104,669	75.5
June 30, 2008	65,362,270	37,254,420	73,891	57.1
June 30, 2009	50,378,721	36,650,493	186,081	73.1
June 30, 2010	52,859,908	39,579,593	319,059	75.5
June 30, 2011	50,190,327	39,093,088	-	77.9
June 30, 2012	48,590,960	45,346,627	-	93.3

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Schedules of Contributions from Employers & Other Contributing Entities
CERS Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$43,111,505	$44,028,465	-	102.1%
June 30, 2005	53,117,955	54,616,800	-	102.8
June 30, 2006	83,123,669	90,834,052	-	109.3
June 30, 2007	112,508,305	124,260,850	-	110.4
June 30, 2008	138,311,398	150,925,334	-	109.1
June 30, 2009	161,097,151	179,284,551	-	111.3
June 30, 2010	186,724,383	207,075,842	-	110.9
June 30, 2011	218,984,628	248,518,574	-	113.5
June 30, 2012	261,764,019	275,736,191	-	105.3
Insurance Funds				
June 30, 2004	$89,289,520	$89,344,241	-	100.1%
June 30, 2005	106,612,633	106,638,253	-	100.0
June 30, 2006	272,942,757	128,867,817	-	47.2
June 30, 2007	285,600,490	147,608,801	$9,623,431	55.1
June 30, 2008	406,541,729	196,110,111	6,003,181	49.7
June 30, 2009	264,733,532	123,852,611	7,623,628	49.6
June 30, 2010	266,331,326	166,607,097	9,156,991	66.0
June 30, 2011	213,429,424	186,885,576	-	87.6
June 30, 2012	214,421,008	171,924,836	-	80.2
Total				
June 30, 2004	$132,401,025	$133,372,706	-	100.7%
June 30, 2005	159,730,588	161,255,053	-	101.0
June 30, 2006	356,066,426	219,701,869	-	61.7
June 30, 2007	398,108,795	271,869,651	$9,623,431	70.7
June 30, 2008	544,853,127	347,035,445	6,003,181	64.8
June 30, 2009	425,830,683	303,137,162	7,623,628	73.0
June 30, 2010	453,055,709	373,682,939	9,156,991	84.5
June 30, 2011	432,414,052	435,404,150	-	100.7
June 30, 2012	476,185,027	447,661,027	-	94.0

See Independent Auditors' Report.

Schedules of Contributions from Employers & Other Contributing Entities
CERS Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$27,050,382	$27,640,775	-	102.2%
June 30, 2005	39,437,725	39,947,747	-	101.3
June 30, 2006	44,059,404	49,976,485	-	113.4
June 30, 2007	53,889,838	61,553,118	-	114.2
June 30, 2008	64,082,063	72,154,734	-	112.6
June 30, 2009	69,056,365	78,151,677	-	113.2
June 30, 2010	76,390,669	82,887,128	-	108.5
June 30, 2011	78,765,602	85,078,181	-	108.0
June 30, 2012	83,588,958	89,329,217	-	106.9
Insurance Funds				
June 30, 2004	$47,018,046	$47,036,777	-	100.0%
June 30, 2005	54,094,495	54,106,577	-	100.0
June 30, 2006	98,297,535	64,853,778	-	66.0
June 30, 2007	115,938,899	70,072,785	$656,523	61.0
June 30, 2008	168,723,639	90,113,200	419,774	53.7
June 30, 2009	126,757,348	70,785,241	627,938	56.3
June 30, 2010	129,227,449	83,042,875	1,493,440	65.4
June 30, 2011	109,226,667	98,592,286	-	90.3
June 30, 2012	110,762,577	92,563,664	-	83.6
Total				
June 30, 2004	$74,068,428	$74,677,552	-	100.8%
June 30, 2005	93,532,220	94,054,324	-	100.6
June 30, 2006	142,356,939	114,830,263	-	80.7
June 30, 2007	169,828,737	131,625,903	$656,523	77.9
June 30, 2008	232,805,702	162,267,934	419,774	70.0
June 30, 2009	195,813,713	148,936,918	627,938	76.4
June 30, 2010	205,618,118	165,930,003	1,493,440	81.4
June 30, 2011	187,992,269	183,670,467	-	97.7
June 30, 2012	194,351,535	181,892,881	-	93.6

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Schedules of Contributions from Employers & Other Contributing Entities
SPRS

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$1,175,711	$1,152,752	-	98.0%
June 30, 2005	3,730,805	2,851,461	-	76.4
June 30, 2006	6,352,777	4,244,445	-	66.8
June 30, 2007	9,023,665	6,142,326	-	68.1
June 30, 2008	13,823,490	7,443,277	-	53.8
June 30, 2009	15,951,841	8,186,259	-	51.3
June 30, 2010	18,764,941	9,489,399	-	50.6
June 30, 2011	18,463,372	12,657,225	-	68.6
June 30, 2012	20,497,924	15,361,781	-	74.9
Insurance Funds				
June 30, 2004	$8,434,834	$8,455,498	-	100.2%
June 30, 2005	8,608,536	6,631,031	-	77.0
June 30, 2006	12,554,648	6,880,517	-	54.8
June 30, 2007	15,233,320	6,488,600	$361,942	45.0
June 30, 2008	43,469,735	7,329,229	183,564	17.3
June 30, 2009	29,324,666	7,413,552	229,240	26.1
June 30, 2010	30,302,151	8,369,428	273,684	28.5
June 30, 2011	25,772,574	11,050,964	-	42.9
June 30, 2012	28,246,786	11,960,468	-	42.3
Total				
June 30, 2004	$9,610,545	$9,608,250	-	100.0%
June 30, 2005	12,339,341	9,482,492	-	76.8
June 30, 2006	18,907,425	11,124,962	-	58.8
June 30, 2007	24,256,985	12,630,926	$361,942	53.6
June 30, 2008	57,293,225	14,772,506	183,564	26.1
June 30, 2009	45,276,507	15,599,811	229,240	35.0
June 30, 2010	49,067,092	17,858,827	273,684	37.0
June 30, 2011	44,235,946	23,708,189	-	53.6
June 30, 2012	48,744,710	27,322,249	-	56.0

See Independent Auditors' Report.

Additional Supporting Schedules

Schedule of Administrative Expenses (in Thousands)

Expense	2012	2011
Personnel Services		
Salaries and Per Diem	$14,316	$13,889
Fringe Benefits	5,561	5,179
Tuition Assistance	31	23
Total Personnel Services	$19,908	$19,091
Contractual Services		
Actuarial	$297	$270
Audit	30	111
Human Resources	40	
Legal	806	231
Medical	229	306
Contractual	1,008	1,353
Total Contractual Services	$2,410	$2,271
Communication		
Printing	$299	$286
Telephone	132	118
Postage	525	593
Travel	182	118
Total Communication	$1,138	$1,115
Internal Audit		
Travel/Conferences	$1	
Dues/Subscriptions	2	
Miscellaneous	1	
Total Internal Audit	$4	
Investments (Pension Fund)		
Travel/Conferences	$41	
Dues/Subscriptions	26	
Computer	149	
Contractual	858	
Miscellaneous	15	
Legal	265	
Total Investments	$1,354	
Rentals		
Office Space	$1,144	$1,125
Equipment	91	90
Total Rentals	$1,235	$1,215
Miscellaneous		
Utilities	$201	$217
Supplies	140	176
Insurance	76	78
Maintenance	40	5
Total Miscellaneous	$457	$476
Depreciation/Amortization	1,279	750
Total Pension Fund Administrative Expenses	$27,785	$24,918
Investment Expenses (Insurance Fund)		
Investment Consultant	$246	
Investment Related Travel	9	
Dues & Subscriptions	7	
Conferences	3	
Miscellaneous	4	
Software	43	
Legal Counsel	76	
Subtotal	388	
Healthcare Fees	11,584	10,412
Total Insurance Fund Administrative Expenses	$11,972	$10,412
Total Administrative Expenses	$39,757	$35,330

Note: In fiscal 2012, Administrative Expenses include the Healthcare Fees and Investment Expenses which are paid through the Pension Funds and reimbursed by the Insurance Fund.

See Independent Auditors' Report.

Schedule of Direct Investment Expenses (in Thousands)

	2012	2011
Pension Funds		
Security Lending Fees		
↘ Broker Rebates	$(261)	$2,277
↘ Lending Agent Fees	229	1,162
Total Security Lending	(32)	3,439
Common Stock Commissions	4,259	7,643
Contractual Services		
↘ Investment Management	33,471	47,265
↘ Security Custody/Investment Consultant	858*	1,079
↘ Investment Related Travel	31*	27
↘ Software	149*	148
↘ Dues & Subscriptions	26*	
↘ Conferences	10*	
↘ Miscellaneous	15*	113
↘ Legal Counsel	265*	943
Total Contractual Services	34,825	49,575
Insurance Funds		
Security Lending Fees		
↘ Broker Rebates	(153)	240
↘ Lending Agent Fees	68	325
Total Security Lending	(85)	565
Common Stock Commissions	1,275	1,236
Contractual Services		
↘ Investment Management	6,754	7,323
↘ Security Custody/Investment Consultant	246*	340
↘ Investment Related Travel	9*	6
↘ Software	43*	26
↘ Dues & Subscriptions	7*	
↘ Conferences	3*	
↘ Miscellaneous	4*	34
↘ Legal Counsel	76*	23
Total Contractual Services	7,142	7,752
Total Investment Expenses	**$47,384**	**$70,210**

**In fiscal 2012, Investment travel, software, dues, etc., were funded through the Administrative Expense account, see page _.*

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Schedule of Professional Consultant Fees (in Thousands)

Fees	2012	2011
Actuarial Services	$297	$270
Medical Review Services	229	306
Audit Services	30	111
Legal Counsel	806	231
Compliance	98	771
Workflow	28	209
Healthcare	699	113
Banking	66	55
Human Resources	40	
Miscellaneous	117	205
Total	**2,410**	**$2,271**

Report on Internal Control Over Financial Reporting, Compliance & Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards To the Board of Trustees, Kentucky Retirement Systems, Frankfort, Kentucky: We have audited the combining financial statements of KRS, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ended June 30, 2012, and have issued our report thereon dated December 5, 2012. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting Management of Kentucky Retirement Systems is responsible for establishing and maintaining effective internal control over financial reporting. In planning and performing our audit, we considered KRS' internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the combining financial statements, but not for the purpose of expressing an opinion on the effectiveness of KRS' internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of KRS' internal control over financial reporting. A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance & Other Matters As part of obtaining reasonable assurance about whether KRS' combining financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*. This report is intended solely for the information and use of the Board of Trustees, the audit committee, management, and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

Dean Dorton Allen Ford, PLLC

December 5, 2012
Lexington, Kentucky

SCHEDULE OF **FINDING & RESPONSE**

Our audit disclosed no findings which are required to be reported in accordance with Government Auditing Standards.

Investment Section

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A Two Track Recovery at Home
A Global Economic Focus – An Uncertain Future

The theme of last year's commentary was one of personal and corporate balance sheet rebuilding along with an expansion of the Federal Reserve's balance sheet to create a stable environment which would promote growth and create an environment in which unemployment would be reduced. Despite the economy improving to some degree and both personal and especially corporate balance sheets strengthening, too much uncertainty has held back the recovery and led to lackluster job growth.

One Year Later These themes of healing appear to be continuing, albeit in a slightly modified way, as solutions to the Federal Reserve's dual mandate (promotion of economic stability and job creation) have thus far appeared to be inadequate as consistent, stable economic growth which leads to persistent job creation has been elusive. In the four years since the initial credit crisis, the amount of debt on consumers' balance sheets has been substantially reduced and thanks to several bond purchasing programs by the Federal Reserve the amount of people underwater on their mortgages in the United States has been reduced. The Federal Reserve as well as other central banks around the world have substantially reduced interest rates and have also taken other highly accommodative monetary policy stances to blunt the effects of the financial crisis on what appears to be an increasingly competitive global economy. Since September of 2009, the Federal Reserve's balance sheet for bond purchases and other accommodative monetary policy programs has ballooned from $750 billion to just under $3 trillion in assets.

While economic activity continues, it is growing at a sluggish pace in comparison to recoveries of the past, and most concernedly, as companies seem to have right sized their employee headcount necessary to reach production capacity, many companies seem to be doing more with less due to increased global competition. This is a concern of paramount proportions to the Federal Reserve because if companies are stagnant in hiring, the amount of money spent by all consumers is also stagnant which mutes economic expansion. While the unemployment rate has fallen in the last four years, evidence of this right sized economy can be seen by a labor participation rate that fell from about 67% to 63%. While this may seem like a small change in terms of percentage, the amount is astounding when you consider that the participation rate has not been this low in over 30 years.

As much as fiscal responsibility and competiveness for both the workforce and businesses are necessary conditions for the overall health of the economy, growth is also necessary to promote lasting positive economic conditions. The problem is that growth typically requires increased spending, which runs counter to efforts on debt reduction. The Federal Reserve continues to hold short-term interest rates near zero and has signaled that this will not change until well after the economy shows strong signs of being on a sustainable mend. Low rates are supposed to increase borrowing and thus lead to economic expansion and investment. Low rates also encourage investors to take more risk in order to reach for yield, thus inflating asset prices, stabilizing housing prices and hopefully having a positive wealth effect pushing up personal spending and increased consumer confidence.

Consumer confidence figures have been inconsistent over the last year as well. In today's world of instant news feeds and ever more rapid responses from the markets, informational and economic flows from around the world have impacted consumers, private sector economic decision makers, and policy makers. While the Federal Reserve has maintained an accommodative policy response to blunt economic shocks (the European Debt crisis, unrest in the Middle East, natural disasters, lasting impacts from the financial crisis, etc), policymakers in Washington D.C. have been at a stalemate. Another factor compounding this uncertainty is the U.S. Election in November. Simply put, both the economic uncertainty brought from a globalized economy and an uncertain future regulatory environment has led to a frozen, wait and see, response from private sector economic decision makers.

Pension Funds Respond Lower growth rates and higher unemployment at home, a massive European sovereign debt crisis, and rising inflation threatening to slow emerging economies make for volatile global markets. Questions surrounding how pension funds will meet their expected return targets and thus fund their liabilities are valid. Many funds are faced with the need to boost returns in this environment and have turned to alternative investment markets such as private equity, real estate, real return strategies, and absolute return strategies. This change has been accomplished most often at the expense of traditional public equities allocations. KRS has also moved in this direction. New target asset allocations were approved during this fiscal year for each plan, in response to recently completed asset liability modeling studies. These new asset allocation guidelines generally call for a decrease in U.S. public equity, a more diversified fixed income portfolio, and new allocations to the real return and absolute return buckets, so going forward, the portfolio is more diversified than ever.

INVESTMENT **SUMMARY**

Investment Policies
Visit kyret.ky.gov/index.php/investments to read our Statement of Investment policy. Other policies include Brokerage, Securities Trading, Placement Agents, Proxy Voting, and more.

The Board of Trustees is charged with the responsibility of investing the Systems' assets to provide for the benefits of the members of the Systems. To achieve that goal, the Board follows a policy of thoughtfully growing our asset base while protecting against undue risk and losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the Systems. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policies, objectives and strategies for both the pension and insurance portfolios.

Investment Policy The KRS Board of Trustees approved a new target asset allocation beginning July 1, 2011. As of June 30, 2012, the fund's policy allocation invests the following.

Board Investment Policy for Fund Asset Allocation

Asset	Pension Fund	Insurance Fund
U.S. Equity	20.0%	21.1%
International Equity	20.0%	21.0%
Emerging Market Equity	4.0%	3.4%
Core Fixed	10.0%	14.1%
Global Fixed	5.0%	1.7%
High Yield	5.0%	3.5%
Private Equity	10.0%	8.3%
Real Estate	5.0%	4.3%
Absolute Return	10.0%	10.2%
Real Return	10.0%	11.4%
Cash	1.0%	1.0%

INVESTMENT **OBJECTIVES**

Investing for Kentucky
In keeping with the Board of Trustees' fiduciary responsibility, where all else equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

Short-Term (5 years and less) The returns of the particular asset classes of the managed funds of the Systems, measured on a year-to-year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices.

Medium-Term (5 to 30 years) The returns of the particular asset classes of the managed funds of the Systems, measured on a rolling year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices and perform above median in an appropriate peer universe if there is one.

Longer-Term The total assets of the Systems should achieve a return measured over 30 to 40 years which exceeds the actuarially required rate of return of 7.75% while also exceeding the return achieved by its total fund benchmark.

INVESTMENT **STRATEGIES**

Diversification KRS portfolios are diversified on several levels. Portfolios are diversified through the use of multiple asset classes. Asset allocations are revisited on a periodic basis and represent an efficient allocation to achieve overall return and risk characteristics. The individual asset classes are diversified through the use of multiple portfolios that are managed both by the Investment Division Staff and by external investment advisors. Finally, portfolios within each of the asset classes are diversified through the selection of individual securities. Each portfolio advisor is afforded discretion to diversify its portfolio(s) within the parameters established by the Board of Trustees.

Rebalancing Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with KRS' Statement of Investment Policy target levels. Such rebalancing is necessary to reflect sizeable cash flows and performance imbalances among asset classes and investment advisors. KRS' rebalancing policies call for an immediate rebalancing to within its allocation ranges, if an asset class exceeds or falls below its target allocation by an appropriate percentage defined in the investment Policy Statement. As the following charts depict, the Pension and Insurance portfolios were operating within the ranges established by the investment policies.

Asset Allocation
Board Policy vs. Actual (Rebalanced)

Asset	Policy's Pension Asset Allocation	Actual Pension Asset Allocation	Policy's Insurance Asset Allocation	Actual Insurance Asset Allocation
U.S. Equity	20.0%	19.1%	21.1%	22.1%
International Equity	20.0%	19.1%	21.0%	19.3%
Emerging Market Equity	4.0%	3.8%	3.4%	3.0%
Core Fixed	10.0%	10.4%	14.1%	11.0%
High Yield	5.0%	5.5%	3.5%	4.7%
Global Fixed	5.0%	5.3%	1.7%	4.5%
Private Equity	10.0%	12.3%	8.3%	6.7%
Real Estate	5.0%	2.0%	4.3%	1.1%
Absolute Return	10.0%	10.2%	10.2%	10.2%
Real Return	10.0%	10.8%	11.4%	13.8%
Cash	1.0%	1.6%	1.0%	3.7%

*The objectives of the portfolios are to produce results that **exceed the stated goals**.*

Performance Review Procedures At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. The Investment Committee also reviews a report created and presented by the KRS Compliance Officer who is part of the independent Internal Audit Department. The Compliance Officer performs tests daily, monthly, and quarterly to assure compliance with the restrictions imposed by the Investment Policy.

Consulting The Board employs industry leading external consultants to assist in determining and reviewing the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from each consulting firm utilized follows this introduction and discusses current allocations, performance and significant changes during the fiscal year.

ECONOMIC REVIEW

By Rebecca A. Gratsinger
CEO, Principal
R.V. Kuhns & Associates

The start of the fiscal year ushered in a period filled with episodic market cycles coined as"risk on/risk off' phases. Throughout the past 12-months ending June 30, 2012, global macroeconomic events pushed investors from a "rush to risk" to a "flight to safety" mode numerous times.

GDP
Gross Domestic Product

Fed
Federal Reserve

The markets quickly reacted to growing and endless news about the mounting sovereign debt in many European countries and the fragility of the European Union. With many global businesses impacted by issues in Europe, the U.S. Treasury became the investment of choice, which drove down yields to historic lows.

The first half of the fiscal year began with several negative events that sparked a "risk off" mode in the global financial markets. In the U.S., political stalemate over raising the country's debt ceiling led credit rating agency Standard & Poor's to downgrade the U.S. debt from AAA to AA+, the first downgrade in U.S. history. However, the gravity of the historical event eluded investors as fear mounted over uncertainty with global capital markets and they continued to buy U.S. Treasurys. High unemployment in the U.S. at 9.1 % coupled with a possible double-dip recession led the Fed to launch "Operation Twist," a stimulus program designed to keep long-term rates low by selling short-term Treasurys and buying long-term Treasurys. In Europe, investors worried about Greece defaulting on its debt without a substantial restructuring plan and even more about the magnitude of possible bailouts for countries like Spain, Italy, and Ireland. The Japanese economy experienced a recovery from the devastating tsunami earlier in the calendar year.

Toward the end of the first half of the fiscal year, six Central Banks around the world (including the U.S.) offered European banks access to low interest rate loans to inject liquidity and confidence back into the global markets. The International Monetary Fund ("IMF") stepped in to establish the European Financial Stabilization Fund ("ESFS"), which provided additional liquidity to troubled countries unable to access the capital markets at reasonable borrowing rates. In the U.S., the Gross Domestic Product ("GDP") growth for the third quarter of 2011 was revised down to an annual growth rate of 1.8%. The significant injections of liquidity in the European markets coupled with improving economic data in the U.S. (signs of growth) helped motivate investors to sell out of U.S. Treasurys and buy riskier assets.

The second half of the fiscal year continued the strong market upswing in the U.S. supported by cleaner corporate balance sheets, positive earnings reports, and signs of improved growth. The final estimate for GDP growth for the fourth quarter was 3.0% annualized and both the manufacturing and services industries showed improvements. In Europe, the member countries created the Long-Term Refinance Operation, or the LTRO, which offered additional loans to banks, and Greece finally established a plan to significantly reduce the par value of it bonds. The new lending facility along with certainty about the Greek debt temporarily encouraged investors to begin buying non-U.S. Treasury securities. In Asia, the Bank of Japan announced a 1.0% inflation target to combat deflationary pressures. China, citing decreased exports resulting from slowed global growth, reduced their 2012 GDP growth target from 8.0% to 7.5%.

The positive sentiment faded toward the end of the fiscal year with a downward revision of GDP growth in the U.S. for the first quarter to 1.9%. European economic conditions sank to near-recessionary levels, posting a contraction in economic growth. Brazil and China, concerned over diminishing growth prospects at home and abroad, cut their primary interest rates in an effort to reinvigorate their economies. Finally, the Bank of Japan stepped up its bond buying programs in order to fight against ongoing deflationary pressures. The "risk off" mode of the capital markets pushed skittish investors back into long-term U.S. Treasurys and flattened the yield curve. By the end of the quarter, the yield on the 10-year Treasury had fallen from 3.2% on June 30, 2011 to a very low 1.6%.

Domestic Economic Indicators as of June 30, 2012

Indicator	June 2012	June 2011	Yr/Yr	20 Year	40 Year
Capacity Utilization	78.90	76.70	▲	79.20	80.20
↘ Unemployment Rate	8.20%	9.20%	▲	6.00%	6.40%
↘ PMI - Manufacturing	49.70	55.30	▼	52.20	52.30
↘ Baltic Dry Index - Shipping	1,004	1,413	▼	2,432	2,108
Real GDP Year-Over-Year	2.20%	1.60%	▲	2.60%	2.80%
Consumer Confidence	62.00	57.60	▲	92.97	92.13
Breakeven Inflation - 10 Year	2.10	2.38	▼	N/A	N/A
CPI Year-Over-Year (Headline)*	1.70%	3.60%	▼	2.50%	4.40%
CPI Year-Over-Year (Core)*	2.20%	1.60%	▲	2.30%	4.30%
PPI Year-Over-Year	0.70%	7.00%	▼	2.30%	4.00%
M2 Year-Over-Year	9.30%	6.00%	▲	5.60%	6.80%
Personal Savings	4.40%	5.50%	▼	4.20%	6.50%
Disposable Personal Income	0.40%	0.20%	▲	0.40%	0.60%
Personal Consumption Expenditures	1.50%	2.60%	▼	2.10%	3.90%
US Dollar Total Weighted Index	72.74	69.16	▲	87.92	95.64
WTI Crude Oil per Barrel	$85	$95.00	▼	$42.00	$37.00
Gold Spot per Oz**	$1,597	$1,500.00	▲	$292.00	$324.00

* *CPI figures are cyclically adjusted.*
** *20- and 40-year average Gold spot prices are adjusted for inflation (based on data courtesy of Bloomberg Professional Services[1])*

CAPITAL MARKETS REVIEW

Global Equities Global equities tumbled early in the fiscal year to post double-digit losses, but recovered some of those losses at the close of the first half of the fiscal year, more so in the U.S. than in international markets. By the end of the fiscal year, the major indices posted low to negative returns. U.S. large capitalization stocks produced single digit returns, with growth stocks edging out value stocks. U.S. mid and small capitalization stocks earned negative returns for the year. The developed non-U.S. equity markets generated negative returns in the teens for the fiscal year, led mostly by poor results in European countries. Emerging markets produced similar negative returns based on slowed demands.

TIPS
Treasury Inflation Protection Securities

Fixed Income Within the fixed income markets, the rotating risk on/risk off market environments kept all capital markets unbalanced, which benefited the U.S. Treasury and U.S. TIPS markets the most, and led to a positive year for bonds in general. Longer-term U.S. Treasurys earned over 30% for the year, which contributed to the 9.0% return for the broad U.S. Treasury index, followed by an 11.7% return for U.S. Treasury Inflation Protection Securities ("TIPS"). As investor fear of inflation grew amid a slow-to-no growth economy, prices for TIPS soars and yields fell to negative territory. Investors showed a preference for preserving spending power at a slight cost.

One-Year Trailing Performance through June 30, 2012

Index	Description	Return
S&P 500	Large Cap U.S. Equity	5.5%
R Mid Cap	Mid Cap U.S. Equity	-1.7%
R 2000	Small Cap U.S. Equity	-2.1%
MSCI EAFE (Gross)	Large Cap International Equity	-13.4%
MSCI EAFE SC (Gross)	Small Cap International Equity	-14.8%
MSCI Emg Mkts (Gross)	Emerging Markets Equity	-15.7%
Barclays US Agg Bond	U.S. Investment Grade Bonds	7.5%
Bareclays US Trsy	U.S. Treasury Bonds	9.0%
Barclays US Trsy: US TIPS	U.S. TIPS	11.7%
Barclays US Corp: Hi Yld	U.S. High Yield Bonds	7.3%
Wilshire US REIT	U.S. Real Estate Investment Trusts	13.2%
BofA ML 3 Mo US T-Bill	U.S. Cash Equivalents	0.1%

ASSET ALLOCATION REVIEW

RVK
R.V. Kuhns & Associates, Inc.

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Towards the end of the 2010-11 fiscal year, the Board commissioned RVK to conduct asset liability studies for the KERS, CERS, and SPRS pension and insurance plans. The asset-liability studies assisted the Board with deciding on the most effective asset allocation strategies for each pension and insurance plan under its purview in order to lower risk, control the level of illiquidity in the portfolios, and generate a return expected to exceed the actuarially assumed rate of return of 7.75%.

All of the asset-liability studies were completed by the first quarter of fiscal year 2010-11. In May 2011, the statement of investment policy issued by the Board incorporated the new plan specific target asset allocations to be effective at the beginning of the 2011-12 fiscal year. Over the last year, the Board has been transitioning to the new plan specific target asset allocations in a prudent manner.

PENSION PLAN REVIEW

TIPS
Treasury Inflation Protection Securities

The market value of the Kentucky Retirement Systems ("Systems") Pension Plan assets ("The Fund") decreased from $11.5 billion on June 30, 2011 to $10.7 billion on June 30, 2012. The Fund's investments collectively returned 0.1 % for the fiscal year and compared to the 0.9% return earned by its target allocation benchmark, the Fund underperformed by 0.8%. The Fund's three-year annualized return of 11.3% slightly outperformed its target allocation benchmark of 11.2%. The Fund's five-year annualized return of 1.8% trailed the target allocation benchmark's return of 2.4%. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal.

KERS & CERS Pension Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Current Target
U.S. Equity	$1,991,870,055	19.1%	20.0%
Non U.S. Equity	$1,983,942,841	19.0%	20.0%
Emerging Markets Equity	$393,761,218	3.8%	4.0%
Fixed Income	$2,215,015,354	21.3%	20.0%
Real Return	$1,123,208,288	10.8%	10.0%
Real Estate	$207,773,289	2.0%	5.0%
Absolute Return	$1,062,503,647	10.2%	10.0%
Private Equity	$1,281,276,645	12.3%	10.0%
Cash Equivalent	$158,409,311	1.5%	1.0%
Total Fund (excluding SPRS)	**$10,417,760,647**	**100.0%**	**100.0%**

SPRS Pension Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Current Target
U.S. Equity	$47,071,900	18.8%	20.0%
Non U.S. Equity	$46,009,277	18.4%	20.0%
Emerging Markets Equity	$9,255,462	3.7%	4.0%
Fixed Income	$49,559,159	19.8%	20.0%
Real Return	$24,419,498	9.8%	10.0%
Real Estate	$5,627,669	2.2%	5.0%
Absolute Return	$30,840,326	12.3%	12.0%
Private Equity	$30,659,594	12.2%	7.0%
Cash Equivalent	$6,998,506	2.8%	2.0%
Total SPRS Fund	**$250,441,391**	**100.0%**	**100.0%**

The Systems' current pension plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The Systems also invests in real return assets, real estate, absolute return strategies, and private equity.

As shown above, the current target asset allocation for KERS Non-Hazardous, KERS Hazardous, CERS Non-Hazardous, and CERS Hazardous plans are all the same. The current target asset allocation for the SPRS plan, as shown above, is slightly different with a smaller allocation to private equity and a greater allocation to absolute return strategies and cash equivalents.

For each plan, the current deviations to the targets are being brought closer to the current target allocations in a prudent manner over time. For less liquid asset classes (private equity and real estate), it may take years before the current allocation is in line with the current target.

INSURANCE PLAN REVIEW

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

The market value of the Kentucky Retirement Systems Insurance Plan assets increased from $3.0 billion on June 30, 2011 to $3.1 billion on June 30, 2012. The Fund's investments returned -1.7% for the fiscal year and compared to the target allocation benchmark of 0.60%, the Fund underperformed by -2.3%. The Fund's three-year annualized return went from 3.1% as of June 30, 2011, to 11.9% as of June 30, 2012; however, still slightly lagging its target allocation benchmark of 13.0%. The Fund's five-year annualized return of -0.2% also lagged its target allocation benchmark of 0.4%. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal.

CERS & SPRS Insurance Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Current Target
U.S. Equity	$538,205,313	23.3%	20.0%
Non U.S. Equity	$428,717,127	18.5%	20.0%
Emerging Markets Equity	$81,465,204	3.5%	4.0%
Fixed Income	$484,456,455	20.9%	20.0%
Real Return	$314,561,381	13.6%	10.0%
Real Estate	$29,212,840	1.3%	5.0%
Absolute Return	$231,495,422	10.0%	10.0%
Private Equity	$139,961,284	6.1%	10.0%
Cash Equivalent	$64,980,890	2.8%	1.0%
Total Fund (excluding KERS)	**$2,313,055,915**	**100.0%**	**100.0%**

KERS Non-Haz Insurance Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Current Target
U.S. Equity	$72,543,138	17.5%	28.0%
Non U.S. Equity	$100,320,559	24.3%	27.0%
Fixed Income	$64,001,265	15.5%	15.0%
Real Return	$61,344,946	14.8%	20.0%
Real Estate	$1,211,693	0.3%	0.0%
Absolute Return	$40,819,477	9.9%	10.0%
Private Equity	$42,078,795	10.2%	0.0%
Cash Equivalent	$31,153,395	7.5%	0.0%
Total KERS Non-Haz Fund	**$413,473,268**	**100.0%**	**100.0%**

"We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the Systems to meet its long-term goals and objectives."

Rebecca A. Gratsinger
CEO, Principal
R.V. Kuhns & Associates

The Systems' current insurance plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The Systems also invests in real return, real estate, absolute return strategies, and private equity.

Asset Allocation As shown above, the current target asset allocation for CERS Non-Hazardous, CERS Hazardous, and SPRS plans are all the same. The target asset allocation for the KERS Hazardous Plan, as shown below, varies slightly from the majority of the other insurance plans with a smaller allocation to private equity and a greater allocation to absolute return strategies and cash equivalents.

Target Allocation The current target asset allocation for the KERS Non-Hazardous plan, as shown above, is the only plan that is significantly different than the other plans with no allocation to real estate, private equity, or cash equivalents and a greater allocation to real return (more specifically Treasury Inflation Protected Securities ("TIPS")).

For each plan, the current deviations to the targets are being brought closer to the current target allocations in a prudent manner over time. For less liquid asset classes (private equity), it may take years before the current allocation is in line with the current target.

KERS Haz Insurance Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Current Target
U.S. Equity	$63,360,680	19.4%	20.0%
Non U.S. Equity	$59,882,865	18.3%	20.0%
Emerging Markets Equity	$11,424,244	3.5%	4.0%
Fixed Income	$67,921,367	20.8%	20.0%
Real Return	$ 43,986,371	13.5%	10.0%
Real Estate	$4,181,561	1.3%	5.0%
Absolute Return	$39,039,078	11.9%	12.0%
Private Equity	$21,438,648	6.6%	7.0%
Cash Equivalent	$15,730,038	4.8%	2.0%
Total KERS Haz Fund	**$326,964,851**	**100.0%**	**100.0%**

The Systems continued to make structural shifts within the domestic equity portfolio at the end of the fiscal year. Three new domestic mid-cap managers were added to the portfolio: Sasco Capital Mid Cap Value, Systematic Financial Management Mid Cap Value, and Geneva Capital Management Mid Cap Growth, while the internally managed Mid Cap portfolio was subsequently liquidated.

S&P
Standard & Poors

PIMCO
Pacific Investment Management Company

TIPS
Treasury Inflation Protection Securities

MSCI
Morgan Stanley Capital International

In addition, the internally managed S&P 1500 Index portfolio was transitioned to an S&P 500 Index mandate at the start of the fiscal year. The INVESCO's Structured Core Equity portfolio posted a return of 4.2% for the fiscal year, trailing the S&P 500 Index's return of 5.5%. The River Road All Cap Value portfolio posted the best return among the domestic equity portfolios with a return of 6.8%, which exceeded the Russell 3000 Value Index return of 2.6%. Westwood All Cap Value struggled during its first year within the Fund, returning -4.5% vs. 2.6% for the Russell 3000 Value Index. In addition, Westfield All Cap Growth returned -2.0% for the fiscal year, which significantly trailed the Russell 3000 Growth Index's return of 5.1%. While a return of 0.4% for the Northern Trust Structured Small Cap portfolio may not be high in absolute terms, the portfolio exceeded its benchmark, the Russell 2000 Index, by 2.4%. In total, the U.S. equity portfolio underperformed its US Equity Custom Index (2.2% vs. 3.8%) for the fiscal year.

During the fiscal year, small structural shifts were made within the international equity portfolio. The Boston Company and Pyramis International Growth portfolios transitioned from World ex US mandates to All Country World ex US mandates (added emerging markets exposure) while Artio International Equity was terminated. The relative performance among the international equity managers was mixed, and collectively the total international equity portfolio underperformed the Non-U.S. Equity Custom Index for the fiscal year (-17.3% vs. -14.2%). The Boston Company Non-US Value Equity portfolio significantly underperformed The Boston Co Blended Index (-18.6% vs. -13.4%) whereas the Pyramis International Growth portfolio posted similar returns to the Pyramis Blended Index (-13.5% vs. -13.4%). The passive BlackRock ACW Ex US Index portfolio was in line with its benchmark, the MSCI ACW Ex US Index, for the fiscal year (-14.3% vs. -14.6%). The Northern Trust Small Cap Equity Index fund ended the year slightly above its benchmark, the MSCI ACW Ex US Small Cap Index, (-16.2% vs. -16.4%). The Plan's two emerging market equity portfolios managed by Aberdeen Asset Management and Wellington Management generated very different and mixed returns for the fiscal year, similar to last year. Aberdeen earned an impressive -3.3% relative to the MSCI Emerging Markets Index return of -15.7%, while Wellington slightly underperformed the benchmark with a return of -15.9% over the same fiscal year period.

The Systems made some enhancements to the fixed income portfolio during the fiscal year with the addition of two high yield managers, Columbia Management and Loomis, Sayles & Company, and one global bond manager, Manulife Asset Management. Structural changes were also made as fixed income and real return assets were separated into two composites, with differing target allocations. Core fixed income managers, PIMCO (7.4%) and NISA (7.7%) both performed in line with the Barclays US Aggregate Bond Index return of 7.5% for the fiscal year. The Systems' investment in Commerce Street Income Partners underperformed the Opportunistic Fixed Income Custom Index (Barclays US Corporate High Yield Index and Barclays ABS US Floating Rate Index), over the trailing 12-months (-4.0% vs. 4.5%). The sector-specific manager, Waterfall, significantly outperformed the Opportunistic Fixed

Income Custom Index for the fiscal year (7.4% vs. 4.5%). The high yield/bank loans investment managed by Shenkman returned 5.4%, consistent with the US High Yield/Bank Loans Blended Index (5.4%). Stone Harbor, the Systems' emerging market debt manager produced a return of 8.7%, underperforming its benchmark, the JPMorgan Emerging Market Bond Global Diversified Index, by -1.1%. Overall, the total fixed income portfolio returned 8.1% for the fiscal year, outperforming the Fixed Income Custom Index by 0.8%.

The new real return composite consists primarily of the Systems' TIPS managers, with smaller allocations to a couple alternative real return portfolios, Tenaska Power Fund and Tortoise Capital MLPs. In addition, PIMCO All Asset fund was added during the fiscal year to diversify the real return portfolio. The internally managed TIPS portfolio slightly underperformed the Barclays US TIPS Index (11.3% vs. 11.7%) while the Weaver Barksdale TIPS portfolio (11.8%) performed in line with the benchmark over the fiscal year. In total, the real return portfolio returned 12.0%, exceeding the Consumer Price Index +3% by 7.3% for the fiscal year.

The Plan's alternative investment portfolio consists of an absolute return strategy portfolio, longer term investments in real estate, and private equity. The System continued to develop the absolute return strategy portfolio during the fiscal year with the addition of three multistrategy funds of hedge funds, Blackstone Alternative Asset Management ("BAAM"), Pacific Alternative Asset Management Company ("PAAMCO"), and Prisma Capital Partners. The real estate portfolio was further developed with the addition of H/2 Credit Partners and Harrison Street Core. The fiscal year return for the real estate portfolio was 7.5% vs. 12.4% for the Real Estate Blended Index. The Systems' only absolute return strategy manager with enough performance history, Arrowhawk Durable Alpha Fund, posted a relative gain against the one-quarter lagged HFN Fund of Funds Diversified Index for the fiscal year (-3.2% vs. -4.7%). Over the past five years ending June 30, 2012, the total private equity portfolio return of 2.7% underperformed the Alternatives Custom Index return of 4.9%.

Insurance Plan The Insurance Plan invests in all of the same portfolios as the Pension Plan with the exception of a few investments: INVESCO Structured Core Equity and Northern Trust International Small Cap Equity Index. In addition, the Insurance Plan has an allocation to an Internal International Equity portfolio, which tracks the MSCI Emerging Markets Index. For the fiscal year, the portfolio return was in line with the index (-15.9% vs. -15.7%). Although the insurance plan returns slightly differ from the returns earned in the pension plan because of investment restrictions, the relative under/outperformance was similar for the fiscal year.

Board Initiatives The Board continues to review the effectiveness of the approved asset allocation to meet the assumed rates of returns for the pension and insurance plans. Research, selection, and implementation of investments within alternative investment and inflation-protection strategies continue as a means to protect the portfolios in the event of market shocks and potentially higher inflationary environment. Presently, there is no clear outlook on when inflation will become a significant threat to the purchasing power of earnings generated by the portfolios. However, the Board proactively seeks investment strategies expected to mitigate the effects while contributing to the growth of the portfolios.

Oversight The Systems' investment policies, goals, and objectives, as well as the performance of its assets are regularly monitored by KRS staff, the Board, and R.V. Kuhns & Associates, Inc. These evaluations include reviews of the investment management firms and the custodial bank that serve the Systems. The Systems' assets are held in custody at Northern Trust. Market values and investment performance returns referenced above are based upon financial statements prepared by Northern Trust. We rely on their data and have not independently audited it. However, their financial statements are, to the best of our knowledge, believed to be reliable.

Summary An uncertain market environment demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the Systems' employee participants. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the Systems to meet its long-term goals and objectives.

Rebecca A. Gratsinger // CEO, Principal
R.V. Kuhns & Associates, Inc.
October 3, 2012

ALTIUS ASSOCIATES®

The Board of Trustees of the Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Annual Private Equity Review

Dear Trustees:

Kentucky Retirement Systems Private Equity Portfolio Review

Altius Associates was hired in December of 2011 to advise the Kentucky Retirement Systems ("KRS") Board of Trustees and Staff in its private equity investment activities. This is our first annual review of the KRS private equity investment program. Unless otherwise noted, all data is through June 30, 2012. The investment program is managed in accordance with the KRS Investment Policies and Procedures.

Private Equity Market Overview

Overall, the private equity market has continued to improve, as the pace of fundraising has increased and exit opportunities remain robust. While, as with the broader economy, expectations of the market in the medium term are mixed, regulatory and structural disruptions occurring in the macroeconomic background are largely outweighed by strategic buyers flush with cash, a persistently low interest rate environment, and LPs search for return and uncertainty in more traditional investments. Altius expects the pace of both investment and distribution to accelerate, which will mainly be driven by activity in the US and other world economies.

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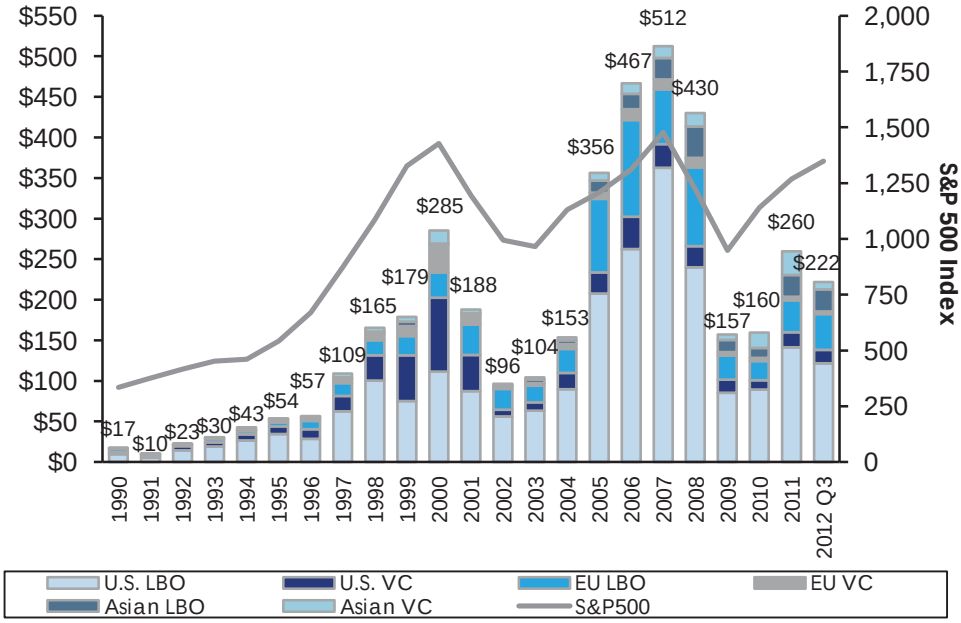
Global Fundraising from 1988 - 2012 Q3

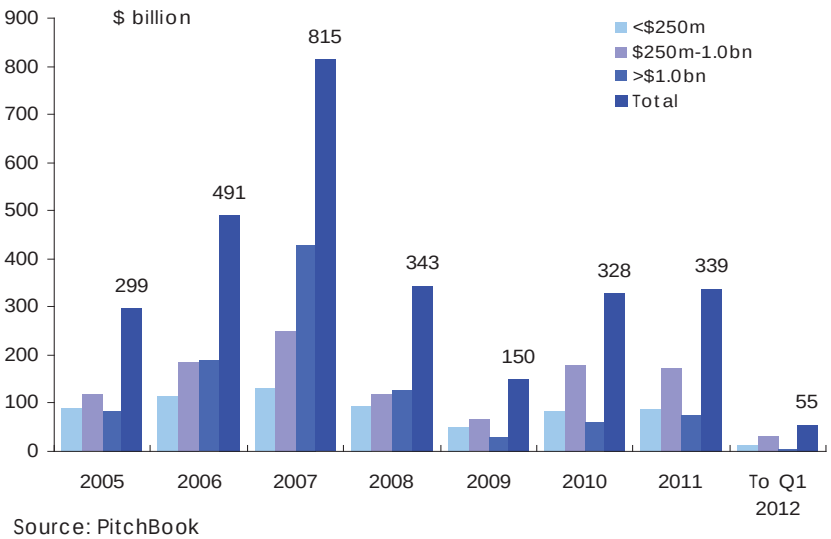
($ in Billions)



Source: Thomson One

Global private equity fundraising has continued to improve since the industry trough in 2009, and while there was a temporary delay in fundraising activity in Q1 2012, global private equity fundraising has accelerated in Q2 2012 and Q3 2012. 2012 is now on track to being the best year for fundraising since 2008. The average time to close a fund has fallen to 13.1 months from a high of 19 months in 2009. It took on average 9.6 months to raise a fund at market peak.

Total US Buyout Investment by Transaction Size



Source: PitchBook

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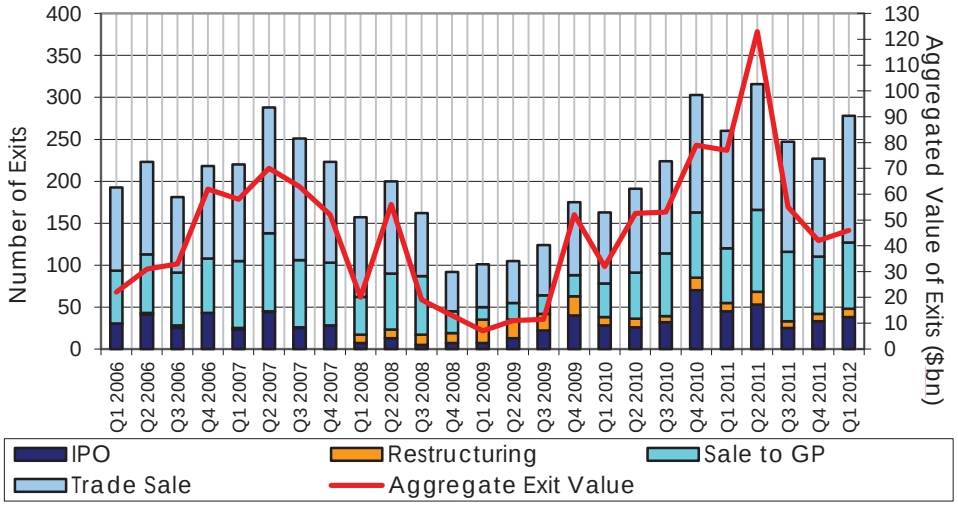
Similar to fundraising, US LBO transaction volume remained tepid into Q1 2012, while still on target to being greater than volumes in 2009. Altius expects the pace of LBOs to increase throughout 2012.

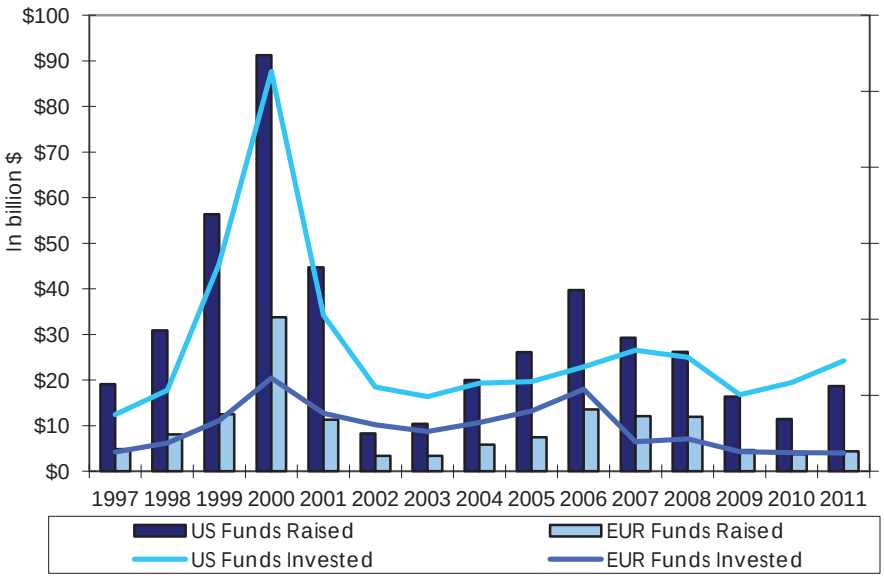
Private Equity Backed Exits by Type



Source: Preqin

In regards to private equity exit opportunities, the 15 months between 2011 and Q1 2012 was a great period for exits, even when compared to the peak market years. More strategic buyers are becoming active in the market, and the proportion of exits due to restructuring continues to decrease from its height in 2009.

US & Europe - VC & Growth Equity Fundraising Activity



Source: Thomson One, NVCA, EVCA

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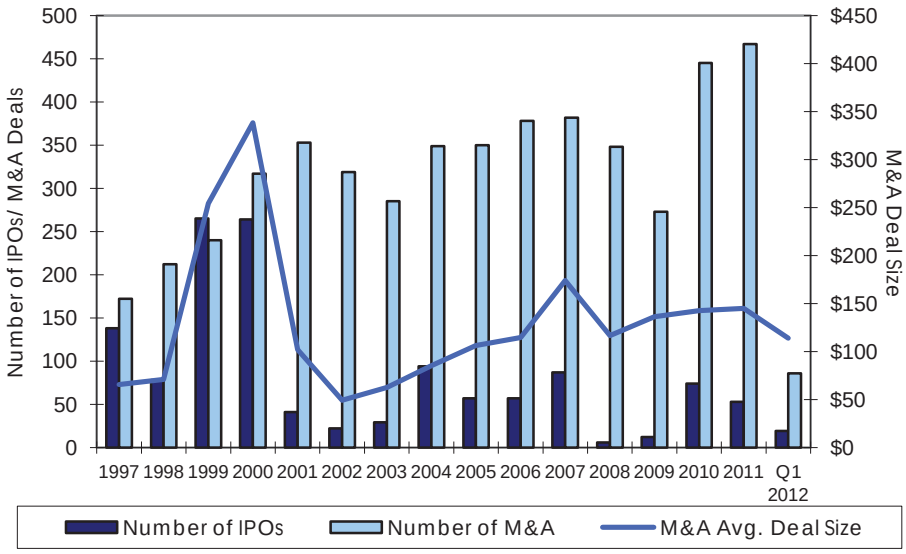
While US fundraising for VC and growth equity funds is finally showing signs of life, fundraising for European funds has failed to gain momentum. Fundraising for VC has never recovered to its previous high water mark set in 2000.

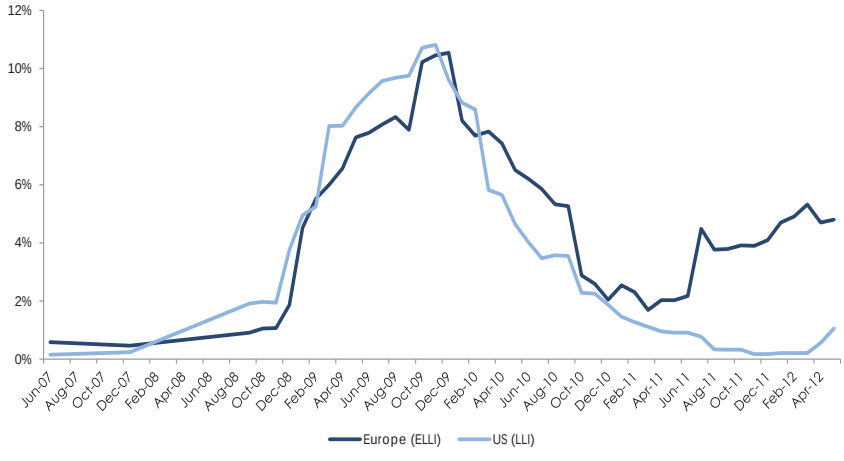
VC & Growth Equity US Exit Activity



Source: Thomson One, NVCA, EVCA

Exits of venture-backed companies by IPOs have been challenging for smaller companies, but there have been some exceptions for larger well-known companies such as Facebook and LinkedIn. US M&A activity in 2011 hit a peak of 467 exits of VC backed companies in 2011 – the highest single year since 1997. Altius finds it likely that the exit market for VC firms will remain healthy through 2012.

Leveraged Loan Default Rates



Source: Moody's, S&P LCD

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In past economic cycles, the distressed debt opportunity has been short-lived. With the recent spike in European leveraged loan default rates, Altius expects that European opportunistic and distressed strategies will continue to outperform. Furthermore, the "amend and extend" of loans by lenders is slowing down and default rates are increasing. The poor credit quality of 2006-08 vintage year loans has resulted in a wall of debt maturing over the next three years. Altius continues to view this sector as attractive.

Kentucky Retirement Systems Private Equity Program

At Altius' hiring in 2011, KRS had committed $2.15 billion to 50 managers across the private markets spectrum including Buyout, Venture/Growth, and Credit-oriented Strategies. KRS also has exposure to a number of funds of funds as well as more opportunistic strategies. The portfolio is well diversified across strategies, in large, mid and small market buyout (60% by commitments); venture and growth capital (18%); and the remainder in credit and other strategies. On December 31, 2011 the capital invested was $1.52 billion. In the six months through June 30th 2012, an additional $45.9 million was drawn by underlying managers and $83.9 million distributed. The NAV of the portfolio on June 30th was $1.528 billion.

Looking forward, Altius identified the following areas of focus for further development of the portfolio:

- Pursue a global fund allocation and increase direct exposure to non-US general partners
- Smooth out investment pace and refrain from being too tactical with pacing
- Maintain smaller/mid-market buyout bias without increasing the number of managers
- Increase allocation per commitment and focus on maintaining a manageable number of manager relationships
- Opportunistically invest in secondary market
- Slowly reduce exposure to pure venture capital

KRS' exposure to non – US private equity is mainly drawn from two sources: diversified global private equity funds and funds of funds. These will naturally run off over time and KRS will look to replace this exposure with commitments directly to non-US based general partners. Altius has recommended that KRS first start with diversified European funds and move into Asia and other emerging markets as the plan develops. The vision is to eventually reach an allocation of about 60% US, 25% Europe and 15% rest of world.

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Moving forward, Altius has modeled out that KRS should commit on average $300 million per year to maintain its current allocation to private equity. Taking into account existing managers with whom KRS would recommit, this implies making 5-6 commitments per year with an average size of $50-60 million.

Altius advises to continue to bias buyout investments towards smaller and mid-market managers. In addition, Altius recommends increasing allocation per fund commitment in order to better maintain manager relationships.

KRS has a healthy allocation of 18% to venture capital and, like the fund of funds that are in the portfolio, we recommend that those allocations be allowed to run off or self-liquidate to bring the allocation in to line with recommended policy. This will be achieved by recommitting to only a select group of venture managers which will allow the allocation level to naturally decline.

KRS has used the secondary market effectively in the past to reduce exposure to the asset class. Going forward, Altius will recommend continued use of secondaries, mostly on the buy-side to aide in portfolio construction.

Overall, the KRS private equity is well diversified across venture, buyout and opportunistic strategies in the US. The program is now sufficiently mature to begin to make commitments internationally and Altius is well positioned to assist KRS with the continued development of the portfolio.

Sincerely,

P. Bradford Young
Partner and Executive Director

MARKET OVERVIEW

By Jonathan Berns
Principal
ORG Portfolio Management

The U.S. commercial real estate market continued to see improvement in 2012 although the second quarter saw declines. The GDP only expanded at an annualized rate of 1.5% (compared to 2.0% and 4.1% in the prior two quarters) resulting in softer labor conditions and continued unemployment hovering close to 8%. Overall U.S. employment growth remains sluggish, falling considerably below historical norms.

GDP
Gross Domestic Product

Capitalization Rates	2nd Qtr. 2011	2nd Qtr. 2012	Basis Point Change
Total	5.79%	5.56%	-0.23
Apartments	5.27%	5.15%	-0.12
Retail	6.27%	5.88%	-0.39
Office	5.77%	5.46%	-0.31
Industrial/Warehouse	6.16%	6.04%	-0.12

Source: NCREIF – Current Value Weighted Capitalization Rates

Capitalization rates at the top tier of the market continue to decline with interest rates remain low. The 10 year Treasury yield fell below 1.4% in July and is currently approximately 1.6%. However, ongoing weakness in U.S. economic data and the problems in Europe leave capitalization rate spreads elevated, especially in tertiary markets and for non-stabilized assets.

Property Sector	10 Year Average	2nd Qtr. 2011	2nd Qtr. 2012	Change %	Forecast 2013	Change %
Apartments	6.2%	5.9%	4.7%	-1.2%	4.2%	-0.5%
Retail	7.2%	11.0%	10.8%	-0.2%	10.0%	-0.8%
Office	15.0%	16.2%	15.7%	-0.5%	14.8%	-0.9%
Industrial/Warehouse	11.9%	14.0%	13.2%	-0.8%	11.9%	-1.3%

Source: Torto Wheaton Research, REIS and L&B Research

The current apartment vacancy rate is 4.7% and reflects consistent year over year occupancy gains. New apartment supply is expected to come on line in 2013. Demand for apartments continue to look promising although home ownership has become less expensive than renting in many markets which has resulted in slower rent growth especially in suburban locations. While the outlook for apartments is still positive, the supply/demand equation will become more balanced.

Vacancy is down across the national office market. Office construction completions are currently at the lowest in nearly 20 years. While some projects are proposed, few are getting started because rents do not support the construction.

Retail fundamentals continue to tighten due to a combination of weak but positive absorption and complete shutdown of construction. Same store sales are rising for mall and lifestyle anchors but weakening for outdoor format big-box tenants (e.g., Best Buy). Regional and super-regional malls are reporting the strongest operating results in years. Neighborhood center operating results (typically anchored by grocery and convenience retail) have also been improving.

The vacancy rate for industrial properties has declined to 13.2%. Older and small to mid-sized properties are struggling to fill vacancies in most market while large distribution spaces are being leased by E-retailers and third-party logistics firms.

ORG'S VIEW

ORG has noted that commercial real estate market is continuing to improve over 2011 levels.

The NCREIF Property Index reports a 13.4% trailing 4 quarter return. During the second quarter of 2012, ORG recognizes that core properties located in gateway markets (e.g., Washington D.C., Manhattan, Boston, San Francisco and Los Angeles) have experienced a dramatic decline in capitalization rates. These low going in income returns will require substantial rental rate growth in order for the properties to generate the projected 8-9% rate of return expected for core. ORG is concerned that the strategies targeting gateway core markets will underperform expectations for core real estate.

As an alternative, ORG has recommended that investors focus on investment strategies where going in income returns are higher in certain overlooked strategies. The suggested focus includes secondary markets (e.g., Atlanta, Houston, Dallas and Seattle among numerous others), real estate debt and alternative core property types such as student housing, medical office, senior housing and self-storage.

ORG also recommends strategies in distressed opportunistic funds where investors can capitalize on the continual de-leveraging of real estate that continues as debt originated during 2005-2007 continues to mature over the next several years. These opportunities to recapitalize high quality properties that have often been neglected could generate attractive risk adjusted returns over the next several years.

REAL ESTATE INVESTMENTS

2008-2010 Investment Activity Kentucky Retirement Systems made $40 million commitments each to Mesa West Real Estate Income Fund II, PRIMA Mortgage Investment Trust and Walton Street Real Estate Fund VI in December 2008.

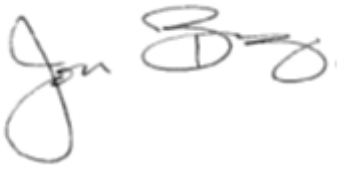
- Year to Date through September 2012, Mesa West Real Estate Income Fund II made three capital calls totaling $8.7 million and returned $1.6 million in adjustments and preferred return distributions. Since inception, $33.4 million has been funded with $6.6 million remaining capital to be called.
- PRIMA Mortgage Investment Trust called Kentucky Retirement Systems' entire $40 million commitment by the end of the 3rd quarter 2009 and the investment is fully funded. Year to Date through September 2012, PRIMA Mortgage Investment Trust distributed $1.9 million to KRS. Since inception, PRIMA has returned $9.2 million.
- Year to Date through September 2012, Walton Street Real Estate Fund VI made two capital calls totaling $10 million. Since inception, $28.4 million has been funded with $11.6 million remaining capital to be called.

2011 Investment Activity Kentucky Retirement Systems made a $100 million commitment to H/2 Credit Partners in April 2011 and a $101.9 million commitment to Harrison Street Core Property Fund in December 2011.

- H/2 Credit called Kentucky Retirement Systems' entire $100 million commitment during 2011 and the investment is fully funded.
- Year to Date through September 2012, Harrison Street Core Property Fund II made five capital calls totaling $66.6 million and returned $0.4 million of income distributions. Since inception, $66.6 million has been funded with $35.3 million remaining capital to be called.

2012 Investment Activity Kentucky Retirement Systems made a $52.5 million investment in Walton Street Fund VII and has made no capital calls. In addition, an open end fund is under legal review:

- Mesa West Core Fund – a newly formed core open ended fund that will originate commercial mortgages utilizing existing commercial mortgage platform.



Jonathan Berns // Principal
ORG Portfolio Management, LLC
October 3, 2012

ORG Portfolio Management serves as the Real Estate Investment Consultant for KRS and makes recommendations related to the real estate portfolio.

Investment Results

Fiscal Year 2012 Results The KRS pension fund returned 0.14%, which fell short of the return of its benchmark by 0.76%. The 0.14% return did not meet the actuarially required rate of return of 7.75%, for the period. This actuarially required rate is an annualized return that may not be met, or possibly greatly surpassed in any given year (this objective has been met over the long-term). The below benchmark performance of the pension fund can primarily be attributed to underperformance experienced in both the U.S. and Non-U.S. Equity asset classes; and the previously implemented dynamic currency hedging program, which magnified the shortfall experienced within the Non-U.S. space. The dynamic currency hedging program was terminated in November 2012.

The KRS insurance fund lost -1.71% for the fiscal year ending June 30, 2012, compared to the benchmark's 0.58% return and the actuarially required rate of 7.75%. Like the pension fund, the insurance fund's underperformance can be primarily attributed to weakness from the U.S. and Non-U.S. Equity portfolios; performance was further hampered by the same terminated dynamic currency hedging program.

Pension Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Fund	April-84	0.14%	11.30%	1.80%	5.99%	9.36%
Performance Benchmark[2]	-	0.90%	11.16%	2.38%	6.18%	9.48%

Insurance Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Insurance Fund	Apr-87	-1.71%	11.90%	-0.16%	5.86%	7.53%
Performance Benchmark[3]	-	0.58%	13.01%	0.42%	5.93%	7.69%

[1]The Performance Calculations presented above were prepared by the Systems' custodial bank using a time-weighted rate or return methodology based upon the market value of assets.
[2]Current Policy Benchmark is compromised of 20% Russell 3000, 20% MSCI ACWI ex-US GD, 4% MSCI EM GD, 20% BC Universal, 10% Russell 3000 Quarter Lagged + 400b ps, 10% HFR FOF: Diversified Lagged, 10% CPI + 300bps, 5% NCREIF Open-End Diversified Core GR, and 1% CG 3-Month US Treasury Bill.
[3]Current Policy Benchmark is compromised of 21.1% Russell 3000, 21.1% MSCI ACWI ex-US GD, 3.4% MSCI EM GD, 19.3% BC Universal, 8.2% Russell 3000 Quarter Lagged + 400bps, 10.2% HFR FOF: Diversified Lagged, 11.4% CPI + 300bps, 4.3% NCREIF Open-End Diversified Core GR, and 1% CG 3-Month US Treasury Bill.

BENCHMARKS

Benchmarks utilized to measure the Kentucky Retirement Systems' Pension and Insurance Funds are a weighted average composite of the various asset class indexes consisting within each KRS' investment portfolio. The Total Fund Benchmarks are shown on page 95.

These benchmarks are intended to be objective, measurable, investable/replicable, and representative of the investment mandates. The benchmarks are developed from publicly available information, and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate and status. KRS' Investment Staff and Consultant recommend the indexes and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the Board of Trustees. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total Benchmarks will evolve to reflect these exposures.

Total Fund Benchmarks

Index	Pension Fund	Insurance Fund
Russell 3000	20.0%	21.1%
MSCI ACWI ex US GD	20.0%	21.1%
MSCI Emerging Markets GD	4.0%	3.4%
Barclays Capital US Universal	20.0%	19.3%
Russell 3000 Quarter Lagged + 400 bps	10.0%	8.2%
HFR FOF: Diversified Lagged	10.0%	10.2%
CPI + 300 bps	10.0%	11.4%
NCREIF Open-End Diversified Core GR	5.0%	4.3%
CG 3-Mo U.S. Treasury Bill	1.0%	1.0%

LONG-TERM RESULTS

Pension Fund For the 10-years ending June 30, 2012, the KRS pension fund portfolio earned an annualized total return of 5.99%. As shown in the investment results table, the KRS pension fund return has trailed the benchmark in all measured time periods, except for the three-year return period, where the fund has added an additional 14 basis points annually over the benchmark. Performance is displayed below in a growth of dollars table. The table demonstrates the performance of $1,000 invested in the KRS pension portfolio, its policy benchmark portfolio, and its actuarial objective over the past 10 years. As of June 30, 2012, $1,000 would have grown to $1,790, while the same $1,000 invested in the benchmark or in the actuarial objective would have grown to $1,822 and $2,149, respectively.

Insurance Fund The KRS insurance fund has just underperformed its benchmark for the 10-year period ending June 30, 2012, earning 5.86% versus 5.93%. Performance is displayed below in a growth of dollars table. The table highlights the performance of $1,000 invested in the KRS insurance portfolio ($1,768), benchmark ($1,779), and actuarial objective ($2,149) over the past 10 years.

As the results show in the accompanying insurance charts and table above, the insurance fund has struggled during all measured standard return ranges.

Total Pension Fund Growth of $1,000

Portfolio	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Pension Fund Growth	$1,000	$1,043	$1,185	$1,294	$1,420	$1,636	$1,567	$1,298	$1,503	$1,788	$1,790
Performance Benchmark	$1,000	$1,051	$1,202	$1,304	$1,410	$1,620	$1,558	$1,326	$1,501	$1,806	$1,822
Actuarial Assumed Rate of Return	$1,000	$1,083	$1,172	$1,268	$1,373	$1,480	$1,594	$1,718	$1,851	$1,994	$2,149

Total Insurance Fund Growth of $1,000

Portfolio	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Insurance Fund Growth	$1,000	$1,017	$1,214	$1,329	$1,494	$1,782	$1,643	$1,262	$1,457	$1,799	$1,768
Performance Benchmark	$1,000	$1,011	$1,210	$1,315	$1,463	$1,743	$1,604	$1,232	$1,393	$1,769	$1,779
Actuarial Assumed Rate of Return	$1,000	$1,083	$1,172	$1,268	$1,373	$1,480	$1,594	$1,718	$1,851	$1,994	$2,149

U.S. Equity

For the fiscal year ending June 30, 2012, the KRS pension fund's U.S. equity portfolio posted a return of 2.16%, which underperformed the return of its benchmark by 1.68%. The KRS insurance U.S. equity portfolio posted a return of 2.04%, underperforming its benchmark return of 3.84%.

★ **Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

Since inception performance remains good; the pension's equity portfolio has generated an annualized average return of 2.16% throughout its duration, while the insurance equity portfolio posted an average annual return of 2.47% (both outpacing their respective benchmarks).

Return on U.S. Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	2.16%	16.03%	0.48%	5.73%	10.80%
↘ Performance Benchmark[1]	-	3.84%	15.85%	-0.66%	4.83%	10.28%
Insurance Fund	Jul-92	2.04%	15.72%	0.18%	5.54%	8.45%
↘ Performance Benchmark[1]	-	3.84%	16.49%	0.33%	5.61%	--
Market Indices						
Russell 1000 (Large Cap)	-	4.37%	16.64%	0.39%	5.72%	-
Russell 2000 (Small Cap)	-	-2.08%	17.80%	0.54%	7.00%	-
Russell 3000 (Total Equity)	-	3.84%	16.73%	0.39%	5.81%	-

[1] *Pension and Insurance benchmark is the Russell 3000; this became effective July 1, 2011.*

Top 10 U.S. Equity Holdings Pension Fund

Company	Shares	Market Value
HSBC HLDGS ORD USD0.50(UK REG)	2,890,676	25,439,606
ROCHE HLDGS AG GENUSSCHEINE	107,074	18,507,455
VODAFONE GROUP ORD	5,901,327	16,591,267
NOVARTIS AG CHF0.50(REGD)	296,451	16,568,682
TOYOTA MOTOR CORP NPV	407,500	16,291,829
SANOFI	202,195	15,329,019
TOTAL EUR2.5	318,025	14,327,432
MITSUBISHI UFJ FIN NPV	2,942,500	13,939,905
ROYAL DUTCH SHELL 'A' SHS EUR0.07	354,225	11,931,171
SUMITOMO MITSUI FINANCIAL CORP	351,800	11,516,501
Total	**13,771,773**	**160,442,867**

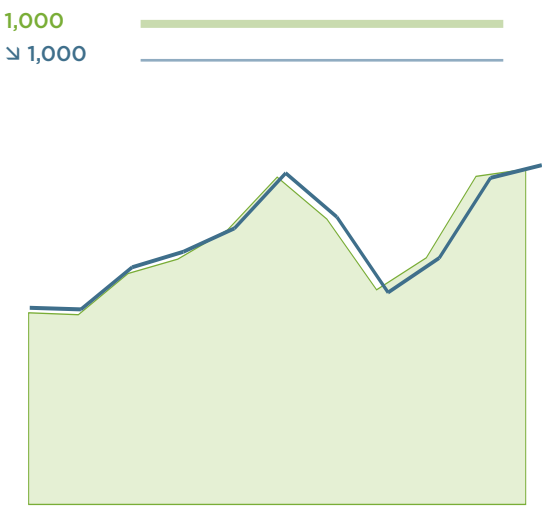
Top 10 U.S. Equity Holdings Insurance Fund

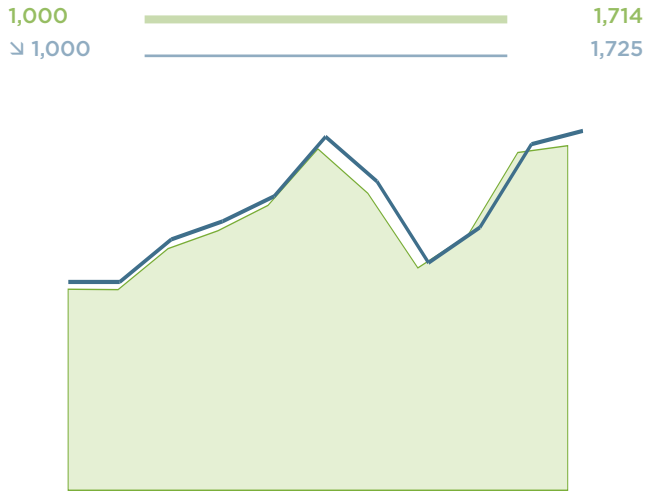
Company	Shares	Market Value
HSBC HLDGS ORD USD0.50(UK REG)	1,015,893	8,940,441
ROCHE HLDGS AG GENUSSCHEINE	37,664	6,510,122
VODAFONE GROUP ORD	2,099,816	5,903,521
NOVARTIS AG CHF0.50(REGD)	102,565	5,732,370
TOYOTA MOTOR CORP NPV	141,400	5,653,165
SANOFI	70,722	5,361,650
TOTAL EUR2.5	109,773	4,945,414
MITSUBISHI UFJ FIN NPV	1,023,200	4,847,344
SUMITOMO MITSUI FINANCIAL CORP	124,100	4,062,529
UBS AG CHF0.10	331,220	3,866,858
Total	**5,056,353**	**55,823,414**

For the 10-year period ending June 30, 2012, the pension fund's chart indicates that $1,000 would have resulted in $1,749 while the same $1,000 invested in the benchmark would result in $1,718. For the KRS insurance fund, ending June 30, 2012, a $1,000 investment would be valued at $1,714, compared to $1,725 in the benchmark.

U.S. Equity Portfolio
Growth of $1,000

Portfolio	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Pension Fund Growth	$1,000	$990	$1,205	$1,280	$1,432	$1,708	$1,489	$1,120	$1,287	$1,712	$1,749
↘ Performance Benchmark	$1,000	$992	$1,204	$1,282	$1,400	$1,678	$1,457	$1,077	$1,251	$1,654	$1,718
Insurance Fund Growth	$1,000	$998	$1,202	$1,291	$1,417	$1,698	$1,477	$1,106	$1,268	$1,680	$1,714
↘ Performance Benchmark	$1,000	$1,000	$1,204	$1,291	$1,411	$1,697	$1,482	$1,092	$1,262	$1,661	$1,725





International Equity

For the fiscal year, ending June 30, 2012, the KRS pension fund's international equity portfolio lost -17.25%, underperforming its benchmark by 3.10%. The KRS insurance international equity portfolio also fell compared to its benchmark, posting a return of -17.66% versus -14.15% during the same twelve month period.

★ **Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

As the accompanying table indicates, both developed and emerging international equity markets experienced strong negative returns during the trailing year period. International equity investors have experienced a volatile period of returns over the past several years, resulting in a chart that resembles a roller coaster. The KRS pension funds non-US equity portfolio has generated an annualized return of 5.84% over the trailing three-year period, while the insurance funds non-US equity portfolio saw returns that averaged 5.00% during the same period. Over the past five years, both funds have provided downside protection over the performance benchmark, especially in the case of the insurance portfolio. The KRS Pension and Insurance funds have posted annualized returns for the period of -4.54% and -4.50% respectively, compared to respective benchmark returns of -4.58% and -5.23%. The Systems began their international equity program in 2000. Since inception, the pension international equity portfolio has underperformed the benchmark, while the insurance international equity portfolio has outperformed the benchmark.

Return on International Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-00	-17.25%	5.84%	-4.54%	5.46%	0.67%
↘ Performance Benchmark[1]	-	-14.15%	7.66%	-4.58%	6.23%	1.50%
Insurance Fund	Apr-00	-17.66%	5.00%	-4.50%	6.02%	1.55%
↘ Performance Benchmark[1]	-	-14.15%	7.05%	-5.23%	5.86%	0.30%
Market Indices						
MSCI ACWI Ex US	-	-14.15%	7.43%	-4.18%	7.20%	-
MSCI Emerging Markets	-	-15.67%	10.10%	0.21%	14.42%	-

[1]Pension and Insurance benchmark is the MSCI ACWI ex-US; this became effective July 1, 2011.

Top 10 International Equity Holdings Pension Fund

Company	Shares	Market Value
HSBC HLDGS ORD	98,049	$57,260,616
EXXON MOBILE CORP	491,684	$42,073,400
MICROSOFT CORP	937,060	$28,664,665
GENERAL ELECTRIC	1,276,368	$26,599,509
CHEVRON CORP	232,661	$24,545,736
IBM CORP	120,754	$23,617,067
JOHNSON & JOHNSON	322,691	$21,801,004
JPMORGAN CHASE	608,083	$21,726,806
AT&T INC	601,493	$21,449,240
PFIZER INC	907,280	$20,867,440
Total	**5,596,123**	**$288,605,483**

Top 10 International Equity Holdings Insurance Fund

Company	Shares	Market Value
APPLE INC	34,406	$20,093,104
EXXON MOBILE CORP	151,131	$12,932,280
MICROSOFT CORP	268,915	$8,226,110
GENERAL ELECTRIC	367,434	$7,657,325
IBM CORP	37,280	$7,291,222
CHEVRON CORP	65,652	$6,926,286
JOHNSON & JOHNSON	100,536	$6,792,212
AT&T INC	189,489	$6,757,178
WELLS FARGO	193,143	$6,458,702
JPMORGAN CHASE	163,899	$5,856,111
Total	**1,571,885**	**$88,990,530**

The chart below depicts the growth of $1,000 invested in the KRS international equity portfolios and the blended benchmarks since fiscal year 2002. For the KRS pension fund, ending June 30, 2012, $1,000 would have resulted in $1,720, while the same amount invested in the benchmark would have resulted in $1,830. For the KRS insurance fund, ending June 30, 2012, $1,000 would have grown to $1,824, while an investment in the index would have been valued $1,799.

Non U.S. Equity Portfolio
Growth of $1,000

Portfolio	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Pension Fund Growth	$1,000	$941	$1,202	$1,366	$1,728	$2,150	$1,943	$1,437	$1,610	$2,078	$1,720
↘ Performance Benchmark	$1,000	$950	$1,251	$1,427	$1,814	$2,313	$2,076	$1,467	$1,627	$2,131	$1,830
Insurance Fund Growth	$1,000	$963	$1,251	$1,434	$1,828	$2,269	$2,128	$1,558	$1,728	$2,216	$1,824
↘ Performance Benchmark	$1,000	$950	$1,251	$1,427	$1,814	$2,313	$2,076	$1,467	$1,604	$2,096	$1,799

The non U.S. equity portfolio included emerging market equity exposure from 03/31/08 through 06/30/11; a separate growth of a dollar chart for the emerging market equity asset class will be produced once the Systems have experienced a sufficient history within the space. In addition, the non U.S. equity portfolio growth chart includes the currency overlay for the 2012 fiscal year; in prior years the impact of the currency overlay program was rolled up into the aggregate return of the funds.

Fixed Income

For the fiscal year, ending June 30, 2012, the KRS pension fund's fixed income portfolio returned 8.12%, outperforming its performance benchmark by 0.76%.

Note: KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

Both of the broad market indices, the Barclays Aggregate Index and the Barclays US Universal Index, posted positive returns for the twelve month period ending June 30, 2012; in addition, the Barclays High Yield Index also performed well during the period. The KRS insurance fixed income portfolio posted a 8.14% rate of return, which outpaced the index by 78 basis points. Over the past three years ending June 30, 2012, the KRS pension fund's fixed portfolio has generated an annualized average return of 8.63% versus its custom performance benchmark return of 7.28%. The insurance fund's fixed portfolio posted an 8.15% return during the same period, outpacing its benchmark return by 0.09%. Over the five year period, the pension fund has lagged the benchmark by 41 basis points, while the insurance fund has added 17 basis points annually over its index. Over the ten year period, the pension fund has lagged the benchmark by 0.17%, while the insurance fund has outperformed its benchmark by 12 basis points, or 0.12%.

Return on Fixed Income

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	8.12%	8.63%	6.62%	5.88%	8.27%
↘ Performance Benchmark[1]	-	7.36%	7.28%	7.03%	6.05%	8.10%
Insurance Fund	Jul-92	8.14%	8.15%	7.68%	6.89%	7.19%
↘ Performance Benchmark[1]	-	7.36%	8.06%	7.51%	6.77%	7.09%
Market Indices						
BC Aggregate	-	7.47%	6.93%	6.79%	5.63%	-
BC Corporate High Yield	-	7.27%	16.29%	8.45%	10.16%	-
BC U.S. TIPS	-	7.36%	7.54%	6.73%	5.95%	-

[1]*Pension and Insurance benchmark is the Barclays US Universal; this became effective July 1, 2011.*

Top 10 Fixed Income Holdings Pension Fund

Company	Par Value	Market Value
US TSY NTS TIPS DTD 00340 04-15-2016	$91,000,000	$94,794,718
US TSY NTS 1.125% TIPS 01-15-2021	$72,000,000	$76,854,298
US TSY INDEX LINKED 2.00% 01-15-2016	$59,390,000	$74,779,313
US TSY NTS DTD 00285 2.50% 03-31-2015	$59,500,000	$62,419,070
US TSY NTS1.25% TIPS 07-15-2020	$57,000,000	$62,148,055
FNMA 30 YEAR PASS-THRU 5.50%	$55,000,000	$59,468,750
US TSY INDEX LINKED 2.375% 01-15-2017	$43,558,000	$55,405,002
US TSY LINKED 1.875% 07-15-2019	$46,600,000	$54,883,385
US TSY INFL IND BDS 2.375% 01-15-2025	$39,397,000	$54,016,810
US TSY NTS LINKED 2.125% 01-15-2019	$40,600,000	$48,314,243
Total	**$564,045,000**	**$643,103,644**

Top 10 Fixed Income Holdings Insurance Fund

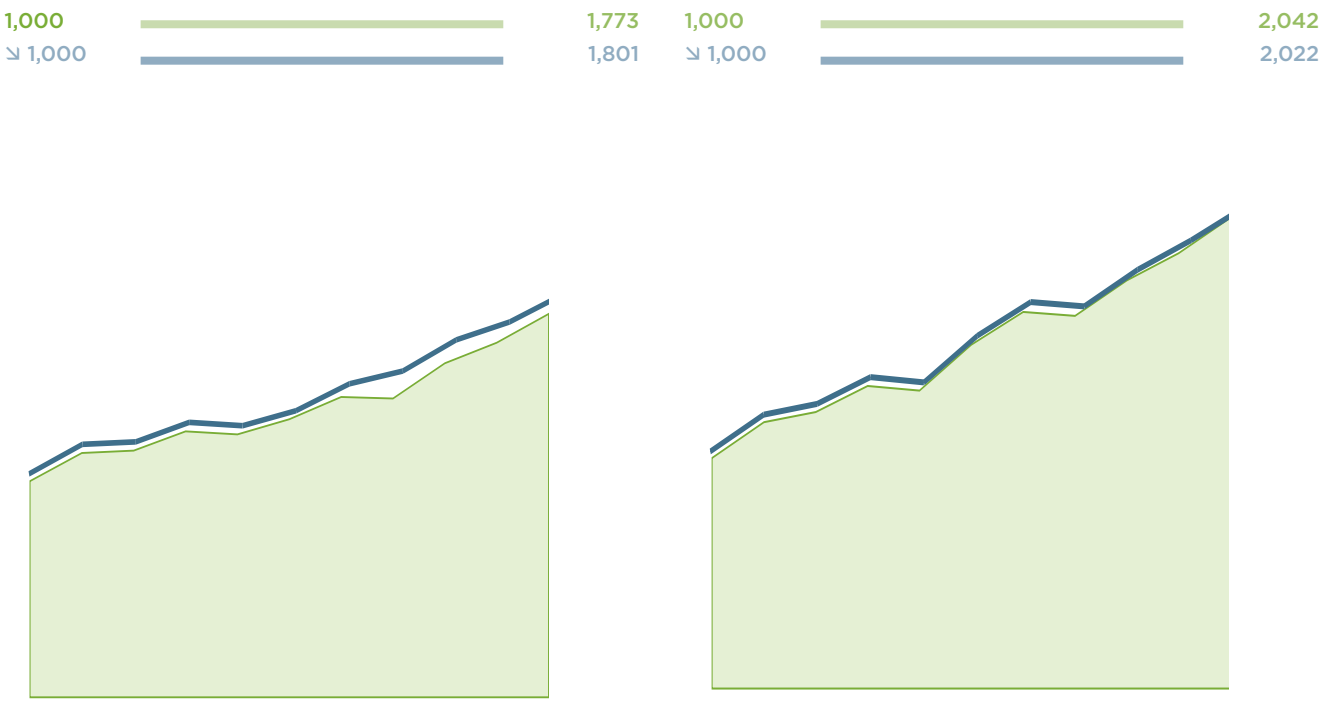
Company	Par Value	Market Value
US TSY NTS 2.00% 02-15-2022	$27,855,000	$28,792,934
US TSY NTS LINKED 0.125% 01-15-2022	$26,100,000	$28,067,085
FNMA GTD MTG POOL #AH5849 4.5% 2-1-41	$22,519,035	$24,707,659
US TSY NTS TIPS DTD 00340 04-15-2016	$16,500,000	$17,898,408
US TSY NTS TIPS DTD 07-15-2021	$14,500,000	$16,482,859
US TSY NTS 1.125% TIPS 01-15-2021	$13,200,000	$15,973,977
US TSY INFL INDEX BONDS 2.375% 01-15-25	$9,840,500	$15,815,615
US TSY NTS 1.25% TIPS 07-15-2020	$12,600,000	$15,431,643
US TSY BDS INFLATION 3.875% 04-15-2029	$6,340,500	$14,335,837
US TSY NTS INDEX 2.3643% DUE 01-15-2014	$9,395,500	$12,144,893
Total	**$158,850,535**	**189,650,910**

The chart below shows the growth of $1,000 invested in KRS fixed income portfolio over the past ten years. For the KRS pension fund, ending June 30, 2012, $1,000 would have grown to $1,773, while the same $1,000 invested in the benchmark would have grown to $1,801. For the KRS insurance fund, ending June 30, 2012, $1,000 would have grown to $2,042, which earned $20 more than the benchmark's growth.

Fixed Income Portfolio
Growth of $1,000

Portfolio	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Pension Fund Growth	$1,000	$1,130	$1,141	$1,230	$1,216	$1,286	$1,389	$1,382	$1,545	$1,640	$1,773
↘ Performance Benchmark	$1,000	$1,132	$1,143	$1,230	$1,215	$1,282	$1,402	$1,459	$1,598	$1,678	$1,801
Insurance Fund Growth	$1,000	$1,155	$1,199	$1,312	$1,292	$1,491	$1,633	$1,616	$1,770	$1,888	$2,042
↘ Performance Benchmark	$1,000	$1,154	$1,199	$1,311	$1,289	$1,484	$1,625	$1,607	$1,760	$1,883	$2,022

The fixed income portfolio included US TIPS exposure prior to the 2012 fiscal year; the exposure was moved to the real return asset class as part of the new asset allocation rebalance that took place effective 07/01/12. A separate growth of a dollar chart for the real return asset class will be produced once the Systems have experienced a sufficient history within the space.



Private Equity

For the fiscal year ending June 30, 2012, the KRS pension fund's private equity portfolio posted a return of 12.79%.

The portfolio consists primarily of investments within many private equity limited partnerships. The custom benchmark for the pension private equity portfolio returned 11.45% during this same period. The insurance private equity portfolio returned 10.88% versus its performance benchmark return of 11.45%.

As the accompanying table indicates, the market's recent volatility (prior couple years) has impacted the intermediate results in the private equity portfolios, most notably within the pension fund. For the three and five years ending June 30, 2012, the pension fund's private equity portfolio trailed its benchmark by 0.42% and 1.12%, respectively. For the three and five-year time period, the insurance fund's private equity portfolio has outperformed its benchmark by 1.00%and 2.04%, respectively. Since its inception in October 1990, the pension portfolio has outpaced its benchmark by 1.53% per year, while the insurance portfolio has outperformed its benchmark by 3.49% since its July 2001 inception.

Return on Private Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Oct-90	12.79%	17.45%	2.70%	10.36%	11.01%
↘ Performance Benchmark[1]	-	11.45%	17.87%	3.82%	7.08%	9.48%
Insurance Fund	Jul-01	10.88%	18.81%	3.99%	7.61%	6.99%
↘ Performance Benchmark[1]	-	11.45%	17.81%	1.95%	5.83%	3.50%

[1]*Pension and Insurance benchmark is the Russell 3000 Quarter Lagged + 400bps.*

Real Estate

For the fiscal year, ending June 30, 2012, the KRS pension fund's real estate portfolio gained 7.46%; however, it underperformed its benchmark which gained 12.42%.

The KRS insurance real estate portfolio also fell to its benchmark, losing 491 basis points to the index, returning 7.53% for the period. For the three year ending June 30, 2012, the pension fund portfolio outpaced its benchmark by 2.85%, and the insurance fund outperformed its benchmark by 3.70%.

Return on Real Estate[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-84	7.46%	8.50%	5.11%	4.50%	5.35%
↘ Performance Benchmark[1]		12.42%	5.65%	2.70%	8.08%	-
Insurance Fund	May-09	7.53%	9.35%	-	-	8.84%
↘ Performance Benchmark[1]		12.42%	5.65%	-	-	2.84%

[1]*Pension and Insurance benchmark is the NCREIF Open-End Diversified Core Gross Non Lagged.*

Absolute Return

For the fiscal year, ending June 30, 2012, the KRS pension fund's absolute return portfolio gained 0.68% versus its benchmark which fell –4.58%.

The KRS insurance absolute return portfolio also bested the benchmark, out earning the index by 527 basis points, returning 0.59% for the period. Note: Though the allocation's inception date is April, 2010, the current book of managers, now consisting of three funds of funds, were employed in September 2011.

Return on Absolute Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-10	0.68%	-	-	-	1.94%
↘ Performance Benchmark[1]		-4.58%	-	-	-	0.81%
Insurance Fund	Apr-10	0.59%	-	-	-	1.74%
↘ Performance Benchmark[1]		-4.58%	-	-	-	0.81%

[1]*Pension and Insurance benchmark is the HFR FOF: Diversified Lagged.*

Real Return

For the fiscal year, ending June 30, 2012, the KRS pension fund's real return portfolio gained 12.02% versus its benchmark return of 4.71%.

The KRS insurance real return portfolio bested the index by 720 basis points, returning 11.91% for the period. Note: The real return allocation was formed effective July 1, 2011.

Return on Absolute Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-11	12.02%	-	-	-	12.02%
↘ Performance Benchmark[1]		4.71%	-	-	-	4.71%
Insurance Fund	Jul-11	11.91%	-	-	-	11.91%
↘ Performance Benchmark[1]		4.71%	-	-	-	4.71%

[1]*Pension and Insurance benchmark is CPI + 300bps*

Cash

For the fiscal year, ending June 30, 2012, the KRS pension fund's cash portfolio returned 0.22%, outpacing its benchmark, the Citi Group 3-month Treasury by 0.18%.

★ **Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

The KRS insurance cash portfolio also outperformed the index, posting a return of 0.19% during the same twelve month period.

As the accompanying table indicates, the longer term results from the cash portfolios have also been excellent with comparison to their benchmark. For the five years ending June 30, 2012, the pension fund portfolio has outperformed its custom benchmark by 0.75% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.81% per year. The insurance portfolio has also done very well, exceeding its benchmark return over the five-year period and since inception, both time frames by 0.27%.

Return on Cash

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jan-88	0.22%	0.66%	1.62%	2.70%	4.65%
↘ Performance Benchmark[1]	-	0.04%	0.10%	0.87%	1.77%	3.84%
Insurance Fund	Jul-92	0.19%	0.24%	1.14%	2.28%	3.44%
↘ Performance Benchmark[1]	-	0.04%	0.10%	0.87%	1.77%	3.17%

[1]*Pension and Insurance Cash benchmark is the Citi Group 3-month Treasury.*

Following are additional schedules which indicated the Investment Advisors employed along with the total assets each of the firm manages for KRS, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems as of or for the year ended June 30, 2012.

External Investment Advisors & Assets Under Management (in Thousands)

Advisor	Assets Under Management
Aberdeen Asset Management, Aberdeen, Scotland	$325,031
Arbor Investments II, Chicago, Illinois	$26,684
Arcano Capital, New York, New York	$4,626
Arrowhawk Capital Partners, Darien, Connecticut	$5,324
Artio Global Investors, New York, New York	$248
Avenue Capital V, New York, New York	$506
Bay Hills Emerging Partners I, San Francisco, California	$71,967
BlackRock Global Investors, San Francisco, California	$680,100
Blackstone Alternative Asset Management, New York, New York	$467,475
Blackstone Capital Partners V & VI, New York, New York	$63,962
Columbia Asset Management, Minneapolis, Minnesota	$214,714
Columbia Capital IV, Alexandria, Virginia	$36,845
Commerce Street Income Partners LP, Dallas, Texas	$53,483
Crestview Partners II, New York, New York	$55,014
Doll Capital Management, Menlo Park, California	$5,694
Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California	$165,268
Essex Woodland VIII, Palo Alto, California	$15,284
Geneva Capital Management, Milwaukee, Wisconsin	$249,748
GTCR Golder Rauner IX, Chicago, Illinois	$66,335
H.I.G BIO Venture II, Miami, Florida	$610
H.I.G. Venture Partners II, Miami, Florida	$14,254
H/2 Credit Partners, Stamford, Connecticut	$105,896
Harrison Street, Chicago, Illinois	$25,100
Harvest Partners V, New York, New York	$41,320
Hellman & Friedman VI, New York, New York	$21,406
Horsley Bridge International V LLC, San Fransico, California	$8,682
Institutional Venture Partners XI, Menlo Park, California	$51,467
Invesco, Atlanta, Georgia	$229,450
JW Childs Equity III, Boston, Massachusetts	$32,118
Keyhaven Capital Partners, London, England	$9,135
Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California	$167,398
Loomis, Sayles & Company, Boston, Massachusetts	$216,480
Manulife Financial, Boston, Massachusetts	$141,552
Matlin Patterson Global Opportunities I & II, New York, New York	$27,785

External Investment Advisors & Assets Under Management (in Thousands)

Advisor	Assets Under Management
Merit Capital Partners IV, Chicago, Illinois	$14,450
Mesa West, Los Angeles, California	$29,334
MHR Insitituional Advisors III, New York, New York	$3,272
Mill Road Capital, Greenwich, Connecticut	$29,541
New Mountain Partners II, New York, New York	$47,624
NISA Investment Advisors, St. Louis, Missouri	$772,809
Northern Trust Global Investors, Chicago, Illinois	$442,482
Oak Hill Partners II, New York, New York	$99,068
Oak Tree Opportunities VIIB, Los Angeles, California	$4,574
Pacific Alternative Asset Management Company, Irvine, California	$465,198
PIMCO, New Port Beach, California	$1,314,234
Prima Mortgage, New York, New York	$48,898
Prisma Capital Partners, New York, New York	$466,702
Pyramis Global Advisors, Boston, Massachusetts	$912,162
Record Currency Management, Windsor Berkshire, England	-$3,596
River Road Asset Management, Louisville, Kentucky	$48,015
Sasco Capital, Fairfield, Connecticut	$50,685
Shenkman Capital, Stamford, Connecticut	$147,339
Stone Harbor Investments, New York, New York	$147,827
Sun Capital Partners IV, Boca Raton, Florida	$2,340
Systematic Financial Management, Teaneck, New Jersey	$203,433
Technology Crossover Ventures VI, Palo Alto, California	$1,016
Tenaska Power Fund II, Omaha, Nebraska	$16,565
The Boston Company, Boston, Massachusetts	$861,461
The Camelot Group, New York, New York	$34,538
Tortoise Capital, Leawodd, Kansas	$74,793
Vantagepoint Venture IV, San Bruno, California	$37,676
Vista Equity Partners III & IV, San Francisco, California	$91,444
Walton Street Real Estate Fund, Chicago, Illinois	$28,988
Warburg Pincus IX, New York, New York	$108,242
Waterfall Investment, New York, New York	$148,106
Wayzata Investment Partners I & III, Wayzata, Minnesota	$152,829
Weaver Barksdale & Associates, Brentwood, Tennessee	$395,025
Wellington Management Company, Boston, Massachusetts	$170,875
Westfield Capital, Boston, Massachusetts	$157,522
Westwood Management, Dallas, Texas	$143,067
Total	**$11,269,497**

CONSULTANTS

Master Custodian is **Northern Trust Company**, from Chicago, Illinois. Investment consultants are **ORG Real Property** from Cleveland, Ohio; **R.V. Kuhns & Associates** from Portland, Oregon; and **Altius Associates** from Richmond, Virginia.

Schedule of Commissions Paid

Asset	Total Shares	Commissions Paid	Price per Share
U.S. Equities	92,841,788	$1,366,785	$0.015
	Total Value of Trades	**Commissions Paid**	**As a % of Trade**
Non-U.S. Equities	$4,359,301,909	$4,173,572	0.096%
Total Commissions Paid		**$5,540,357**	

External Investment Expenses (in Thousands)
Equity & Fixed Income Portfolio

Expense	Fees Paid	Share of Assets
Pension Funds	$33,471	0.3137%
Insurance Funds	$6,754	0.2212%
Consulting Fees	$854	0.0062%
Custody Fees	$250	0.0018%
Other Investment-Related Fees	$6,054	0.0441%
Total Commissions Paid	**$47,383**	**0.3453%**

PORTFOLIO SUMMARIES

KERS Non-Haz
Pension Fund (as of June 30, 2012)

Asset	Market Value	Share of Market Value
Bonds	$804,764,089	27.4%
Short-Term	$107,711,879	3.7%
Alternatives	$852,880,160	29.1%
Domestic Equities	$490,937,467	16.7%
International Equities	$678,162,374	23.1%
Total Portfolio	**$2,934,455,967**	**100.0%**

KERS Non-Haz
Insurance Fund (as of June 30, 2012)

Asset	Market Value	Share of Market Value
Bonds	$114,398,439	27.8%
Short-Term	$33,768,161	8.2%
Alternatives	$85,701,087	20.8%
Domestic Equities	$71,843,210	17.4%
International Equities	$106,480,801	25.8%
Total Portfolio	**$412,191,698**	**100.0%**

KERS Haz
Pension Fund (as of June 30, 2012)

Asset	Market Value	Share of Market Value
Bonds	$133,670,475	28.3%
Short-Term	$19,538,442	4.1%
Alternatives	$123,001,629	26.1%
Domestic Equities	$88,313,277	18.7%
International Equities	$107,296,516	23.1%
Total Portfolio	**$471,820,339**	**100.0%**

KERS Haz
Insurance Fund (as of June 30, 2012)

Asset	Market Value	Share of Market Value
Bonds	$100,101,744	30.7%
Short-Term	$25,006,132	7.7%
Alternatives	$65,597,684	20.1%
Domestic Equities	$63,427,002	19.5%
International Equities	$71,709,953	22.0%
Total Portfolio	**$325,842,515**	**100.0%**

CERS Non-Haz
Pension Fund (as of June 30, 2012)

Asset	Market Value	Share of Market Value
Bonds	$1,578,573,610	29.8%
Short-Term	$194,866,879	3.7%
Alternatives	$1,235,805,122	23.3%
Domestic Equities	$1,077,993,405	20.3%
International Equities	$1,213,686,328	22.9%
Total Portfolio	**$5,300,925,344**	**100.0%**

CERS Non-Haz
Insurance Fund (as of June 30, 2012)

Asset	Market Value	Share of Market Value
Bonds	$439,238,657	31.0%
Short-Term	$82,879,005	5.9%
Alternatives	$248,202,862	17.5%
Domestic Equities	$330,452,106	23.3%
International Equities	$314,441,340	22.2%
Total Portfolio	**$1,415,213,971**	**100.0%**

CERS Haz
Pension Fund (as of June 30, 2012)

Asset	Market Value	Share of Market Value
Bonds	$486,830,481	29.4%
Short-Term	$63,571,191	3.8%
Alternatives	$391,397,254	23.6%
Domestic Equities	$337,496,190	20.4%
International Equities	$377,162,042	22.8%
Total Portfolio	**$1,656,457,159**	**100.0%**

CERS Haz
Insurance Fund (as of June 30, 2012)

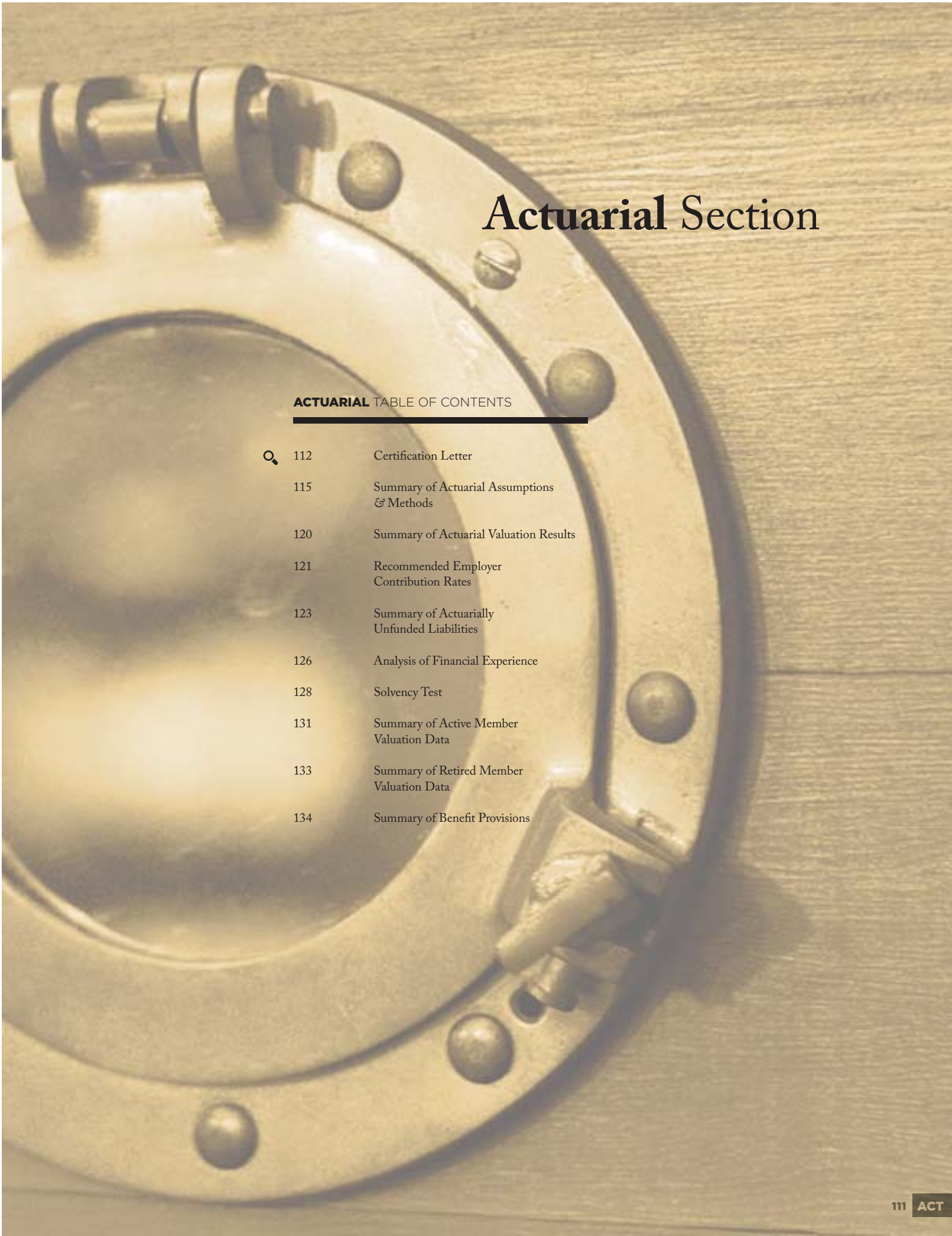
Asset	Market Value	Share of Market Value
Bonds	$240,596,007	31.3%
Short-Term	$40,951,003	5.3%
Alternatives	$134,515,461	17.5%
Domestic Equities	$179,539,758	23.4%
International Equities	$171,955,812	22.4%
Total Portfolio	**$767,558,041**	**100.0%**

SPRS
Pension Fund (as of June 30, 2012)

Asset	Market Value	Share of Market Value
Bonds	$66,437,690	26.7%
Short-Term	$12,063,254	4.8%
Alternatives	$68,345,840	27.4%
Domestic Equities	$47,152,589	18.9%
International Equities	$55,199,195	22.2%
Total Portfolio	**$249,198,568**	**100.0%**

SPRS
Insurance Fund (as of June 30, 2012)

Asset	Market Value	Share of Market Value
Bonds	$34,979,948	28.6%
Short-Term	$8,001,630	6.5%
Alternatives	$23,924,642	19.6%
Domestic Equities	$27,906,575	22.8%
International Equities	$27,360,825	24.4%
Total Portfolio	**$122,173,621**	**100.0%**



Actuarial Section

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Certification of Actuarial Results

The fifty-sixth annual actuarial valuation of the Kentucky Employees Retirement System, the fifty-third annual actuarial valuation of the County Employees Retirement System, and the fifty-fourth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared.

These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2012 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2013 and ending June 30, 2014.

Funding Objectives & Policies For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

UAL
Unfunded Accrued Liability

GASB
Governmental Accounting Standards Board

HB
House Bill

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

COLA
Cost of Living Adjustment

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30-year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the combined UAL bases will be amortized over a 30-year period beginning June 30, 2007. The amortization period will decrease by one each year in the future. Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

The impact of HB1 passed into law in 2008 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008.

Progress Towards Realization of Funding Objectives The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 (and for KERS Hazardous and CERS Non-Hazardous the 2009) assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have severely limited the plans' ability to correct the declining funding levels. As of June 30, 2012 the funding levels for the pension [and insurance] funds are as follows:

Funding Level of Pension Fund

System	Funding Level
KERS Non-Hazardous	27.3%
KERS Hazardous	66.1%
CERS Non-Hazardous	60.7%
CERS Hazardous	58.1%
SPRS	40.1%

Funding Level of Insurance Fund

System	Funding Level
KERS Non-Hazardous	14.3%
KERS Hazardous	89.9%
CERS Non-Hazardous	63.8%
CERS Hazardous	60.7%
SPRS	37.3%

System Pension Funding Level Except for the KERS Hazardous Insurance Fund, the funding levels for the insurance funds are not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Recent employer contribution rate reductions under KERS and SPRS have significantly limited this improvement.

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities.

Data In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. At least once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on August 20, 2009 based on the experience investigation report dated August 17, 2009, meet the parameters set for disclosure under GASB Statements No. 25 and 43. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is scheduled to be completed in January, 2014 and any adjustments will be reflected in the June 30, 2014 actuarial valuation.

Closing The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose. However, it is up to the state legislature to follow through with the required funding. The contribution phase-in anticipated under statute, particularly for KERS Non-Hazardous and State Police, leave those funds with little or no ability to withstand any significant short term adverse financial and/or demographic experience.

Thomas J. Cavanaugh FSA, FCA, MAAA, EA // CEO
Cavanaugh Macdonald Consulting, LLC
December 5, 2012

Summary of Actuarial Assumptions

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against ***actual plan experience at least once every five years*** *through the completion of the Actuarial Experience Study.*

As of June 30, 2011 The most recent study was completed in August 2009 and reviewed plan experience for the period from July 1, 2005 through June 30, 2008. All assumptions, with the exception of health care trend rates, used in the June 30, 2011 actuarial valuation were based on the study performed in 2009 and in accordance with the actuary's recommendations. The next Experience Study is scheduled to be completed in January, 2014.

Actuarial Cost Method The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL) over no more than a 30-year period.

UAL Amortization Method The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) were established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year June 30, 2009, and so on.)

Asset Valuation Method The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

Retiree Insurance Funding Policy The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. As with the pension Fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one, each year in the future.

Investment Return Assumption The future investment earnings of plan assets are assumed to accumulate at a rate of 7.75% per annum. This rate consists of a 3.5% inflationary component and a 4.25% real rate of return component. In accordance with GASB Statement 43, the investment return assumption has been reduced to a blended rate of 4.5% for KERS and SPRS insurance funds due to a lack of pre-funding benefits. This assumption was adopted in 2006.

Salary Increase Assumptions Active member salaries are assumed to increase at the rates provided in Table 1. The rates include a 4.5% percent inflationary component and an additional increase due to promotion based upon plan experience. These assumptions were adopted in 2009.

Table 1. Salary Increase Assumptions

Service	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
0-1	17.00%	21.00%	13.00%	20.00%	17.00%
0-2	9.00%	9.00%	9.50%	10.50%	12.00%
0-3	6.50%	7.00%	6.00%	6.50%	10.00%
0-4	6.00%	6.50%	6.00%	5.75%	9.00%
0-5	6.00%	6.00%	5.50%	5.50%	8.00%
0-6	6.00%	5.50%	5.50%	5.00%	7.00%
0-7	5.50%	5.00%	5.25%	4.50%	6.00%
0-8	5.50%	5.00%	5.25%	4.50%	6.50%
0-9	5.50%	5.00%	5.00%	4.50%	5.50%
0-10	5.00%	5.00%	5.00%	4.50%	5.00%
0-11	5.00%	5.00%	4.75%	4.50%	4.50%

Payroll Growth Assumption Active member payroll is assumed to increase at a rate of 4.5% per annum. This assumption was adopted in 2006.

COLA
Cost of Living Adjustment

Retiree COLAs State statute requires retirement allowances to be increased by 1.5 percent annually. State statute only allows the Cost of Living Adjustments (COLAs) awarded as of the valuation date to be recognized for funding purposes and for determining employer contribution rates. The Kentucky General Assembly has the authority to suspend or reduce cost of living adjustments.

Medical Inflation Assumption The costs for retiree medical premiums are assumed to increase each year according to the assumptions provided in Table 2 below.

Table 2. Cost of Retiree Medical Premiums

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2013	9.5%	7.5%
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

Retirement Rate Assumptions The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 3 on page 117. These assumptions were adopted in 2009.

Table 3. Retirement Rate Assumptions

Non-Hazardous					Hazardous					
Age	KERS[1]	KERS[2]	CERS[3]	Service	KERS[4]	KERS[5]	CERS[6]	CERS[7]	SPRS[8]	SPRS[9]
55	8.0%		8.0%	20	22.0%		20.0%		9.0%	
56	8.0%		8.0%	21	22.0%		20.0%		9.0%	
57	8.0%		8.0%	22	22.0%		20.0%		10.0%	
58	8.0%		8.0%	23	22.0%		20.0%		22.0%	
59	8.0%		8.0%	24	22.0%		30.0%		22.0%	
60	10.0%	10.0%	10.0%	25	35.0%	22.0%	33.0%	20.0%	22.0%	9.0%
61	20.0%	20.0%	20.0%	26	37.0%	22.0%	33.0%	20.0%	22.0%	9.0%
62	22.5%	22.5%	22.0%	27	37.0%	22.0%	33.0%	20.0%	25.0%	10.0%
63	22.5%	22.5%	22.0%	28	39.0%	22.0%	39.0%	20.0%	25.0%	22.0%
64	22.5%	22.5%	22.0%	29	38.0%	22.0%	33.0%	30.0%	25.0%	22.0%
65	22.5%	25.0%	22.0%	30	38.0%	35.0%	33.0%	33.0%	25.0%	22.0%
66	22.5%	25.0%	22.0%	31	38.0%	37.0%	33.0%	33.0%	33.3%	22.0%
67	22.5%	25.0%	22.0%	32	50.0%	37.0%	50.0%	33.0%	33.3%	25.0%
68	22.5%	25.0%	22.0%	33	50.0%	39.0%	40.0%	39.0%	33.3%	25.0%
69	22.5%	25.0%	22.0%	34	50.0%	38.0%	40.0%	33.0%	33.3%	25.0%
70	22.5%	25.0%	22.0%	35	60.0%	38.0%	40.0%	33.0%	33.3%	25.0%
71	22.5%	25.0%	22.0%	36	60.0%	38.0%	40.0%	33.0%	33.3%	33.3%
72	22.5%	25.0%	22.0%	37	60.0%	50.0%	40.0%	50.0%	33.3%	33.3%
73	22.5%	25.0%	22.0%	38	60.0%	50.0%	40.0%	40.0%	33.3%	33.3%
74	22.5%	25.0%	22.0%	39	60.0%	50.0%	40.0%	40.0%	33.3%	33.3%
75+	100.0%	100.0%	100.0%	40+	60.0%	60.0%	40.0%	40.0%	33.3%	33.3%

[1]*For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.*
[2]*For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 25%.*
[3]*If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.*
[4]*For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.*
[5]*For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*
[6]*For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.*
[7]*For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*
[8]*For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.*
[9]*For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

GAM
Group Annuity Mortality

Mortality Assumptions The mortality table used for active members is 50% of the 1994 Group Annuity Mortality (GAM) Table. For non-disabled members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table to the 1994 GAM table. For disabled members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table set forward five years to the 1994 GAM table set forward five years. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted. The pre-retirement mortality assumption was adopted in 2009 and the post-retirement mortality assumptions were adopted in 2006.

Table 4. Sample Annual Rates of Mortality

	Active Member Mortality		Retired Member Mortality*		Disabled Member Mortality*	
Age	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**
Under 20	0.02%	0.01%	0.04%	0.03%	-	-
22	0.03%	0.01%	0.06%	0.03%	-	-
32	0.04%	0.02%	0.08%	0.04%	-	-
42	0.06%	0.04%	0.13%	0.08%	0.19%	0.11%
52	0.16%	0.09%	0.32%	0.17%	0.56%	0.29%
62	0.51%	0.29%	1.01%	0.58%	1.80%	1.08%
72	1.42%	0.83%	2.85%	1.65%	4.52%	2.84%

** For members retiring on or after July 1, 2006.*

Withdrawal Rates The withdrawal rate is a function of both age and service. This type of structure is known as "select and ultimate rates". This structure reflects the fact that both service and age affect the likelihood of a member staying in active employment. The ultimate period for these systems covers a member's withdrawal rate after the first five years of service. These assumptions were adopted in 2009.

Table 5. Selected Rates of Termination Prior to Retirement

KERS Non-Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	19.00%	20	6.00%
2	13.00%	25	5.08%
3	10.00%	30	4.26%
4	9.00%	35	3.21%
5	6.50%	40	3.00%
		45	3.00%
		50	3.00%
		55	3.00%
		60	3.00%

KERS Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	26.00%	20	4.00%
2	11.50%	25	4.00%
3	8.25%	30	3.50%
4	7.50%	35	3.00%
5	7.00%	40	3.00%
		45	3.00%
		50	3.00%
		55	3.00%
		60	3.00%

CERS Non-Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	25.00%	20	5.75%
2	14.00%	25	5.75%
3	10.00%	30	5.30%
4	8.00%	35	4.40%
5	6.50%	40	3.70%
		45	3.02%
		50	2.70%
		55	2.20%
		60	0.75%

CERS Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	14.00%	20	3.00%
2	7.50%	25	2.70%
3	6.00%	30	2.50%
4	4.50%	35	2.50%
5	4.00%	40	2.50%
		45	2.50%
		50	2.50%
		55	-
		60	-

Table 5 Continued. Selected Rates of Termination Prior to Retirement

SPRS Non-Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	20.00%	20	2.50%
2	7.50%	25	2.50%
3	3.00%	30	2.50%
4	3.00%	35	2.50%
5	3.00%	40	2.50%
		45	2.50%
		50	2.50%
		55	-
		60	-

Rates of Disablement KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. For non-hazardous members, the assumptions are set using three quarters of the Old-Age Survivors and Disability Insurance (OASDI) rates. For hazardous members, the assumptions are set using one times the OASDI rates. These assumptions were adopted in 2009.

OASDI
Old-Age Survivors & Disability Insurance

This assumption provides the probability, or likelihood, that a member will ***become disabled during the course of employment*** *for various age levels.*

Rate of Disablement

Non-Hazardous		Hazardous	
Age	Probability	Age	Probability
20-24	0.0354%	20-24	0.0531%
25-29	0.0474%	25-29	0.0711%
30-34	0.0612%	30-34	0.0918%
35-39	0.0853%	35-39	0.1280%
40-44	0.1329%	40-44	0.1994%
45-49	0.2213%	45-49	0.3320%
50-54	0.3727%	50-54	0.5590%
55-59	0.6133%	55-59	0.9200%
60-64	0.9745%	60-64	1.4618%

Summary of Actuarial Valuation Results as of June 30, 2012

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Recommended Rate Fiscal 2012-2013					
Pension Fund Contribution	32.57%	17.00%	13.74%	21.77%	53.35%
Insurance Fund Contribution	12.71%	11.84%	5.84%	16.02%	43.17%
Recommended Employer Contribution	45.28%	28.84%	19.58%	37.79%	96.52%
Funded Status as of Valuation Date					
Pension Fund					
↘ Actuarial Liability	$11,361,048,136	$752,699,457	$9,139,567,695	$3,009,992,047	$647,688,665
↘ Actuarial Value of Assets	$3,101,316,738	$497,226,296	$5,547,235,599	$1,747,379,297	$259,791,575
↘ Unfunded Liability on Actuarial Value of Assets	$8,259,731,398	$255,473,161	$3,592,332,096	$1,262,612,750	$387,897,090
↘ Funding Ratio on Actuarial Value of Assets	27.30%	66.06%	60.69%	58.05%	40.11%
↘ Market Value of Assets	$2,980,401,603	$478,103,794	$5,372,769,813	$1,677,940,479	$252,896,868
↘ Unfunded Liability on Market Value of Assets	$8,380,646,533	$274,595,663	$3,766,797,882	$1,332,051,568	$394,791,797
↘ Funding Ratio on Market Value of Assets	26.23%	63.52%	58.79%	55.75%	39.05%
Insurance Fund					
↘ Actuarial Liability	$3,125,330,157	$384,592,406	$2,370,771,288	$1,364,843,057	$333,903,782
↘ Actuarial Value of Assets	$446,080,511	$345,573,948	$1,512,853,851	$829,040,842	$124,372,072
↘ Unfunded Liability on Actuarial Value of Assets	$2,679,249,646	$39,018,458	$857,917,437	$535,802,215	$209,531,710
↘ Funding Ratio on Actuarial Value of Assets	14.27%	89.85%	63.81%	60.74%	37.25%
↘ Market Value of Assets	$430,805,726	$333,298,119	$1,439,226,170	$788,070,813	$125,567,846
↘ Unfunded Liability on Market Value of Assets	$2,694,524,431	$51,294,287	$931,545,118	$576,772,244	$208,335,936
↘ Funding Ratio on Market Value of Assets	13.78%	86.66%	60.71%	57.74%	37.61%
Member Data					
Number of Active Members	42,196	4,086	83,052	9,130	907
Total Annual Payroll (Active Members)[1]	$1,644,896,681	$131,976,754	$2,236,546,345	$464,228,923	$48,372,506
Average Annual Pay (Active Members)	$38,982	$32,300	$26,929	$50,847	$53,332
Number of Retired Members & Beneficiaries	39,226	3,253	45,304	6,878	1,299
Average Annual Retirement Allowance	$21,539	$15,134	$11,368	$25,185	$38,404
Number of Vested Inactive Members	8,976	347	12,071	617	58
Number of Inactive Members Due a Refund	35,130	2,821	57,645	1,794	322

[1]*Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2012.*

Recommended Employer Contribution Rates as of June 30, 2012
KERS Non-Haz

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/07	2008-2009	3.62%	12.92%	16.54%	20.38%	36.92%
6/30/08	2009-2010	3.97%	14.99%	18.96%	20.49%	39.45%
6/30/09	2010-2011	4.26%	17.51%	21.77%	16.81%	38.58%
6/30/10	2011-2012	4.23%	20.07%	24.30%	16.41%	40.71%
6/30/11	2012-2013	4.38%	23.65%	28.03%	16.52%	44.55%
6/30/12	2013-2014	4.26%	28.31%	32.57%	12.71%	45.28%

KERS Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/07	2008-2009	7.28%	3.56%	10.84%	23.94%	34.78%
6/30/08	2009-2010	7.52%	4.46%	11.98%	23.56%	35.54%
6/30/09	2010-2011	7.94%	6.17%	14.11%	20.26%	34.37%
6/30/10	2011-2012	7.19%	6.92%	14.11%	19.73%	33.84%
6/30/11	2012-2013	7.47%	8.69%	16.16%	19.73%	35.89%
6/30/12	2013-2014	6.09%	10.91%	17.00%	11.84%	28.84%

CERS Non-Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/07	2008-2009	4.53%	3.23%	7.76%	12.75%	20.51%
6/30/08	2009-2010	4.46%	4.16%	8.62%	12.29%	20.91%
6/30/09	2010-2011	4.60%	5.43%	10.03%	9.78%	19.81%
6/30/10	2011-2012	4.72%	6.98%	11.70%	9.59%	21.29%
6/30/11	2012-2013	4.68%	7.94%	12.62%	8.59%	21.21%
6/30/12	2013-2014	4.68%	9.06%	13.74%	5.84%	19.58%

CERS Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/07	2008-2009	8.06%	6.98%	15.04%	27.62%	42.66%
6/30/08	2009-2010	8.23%	7.88%	16.11%	27.25%	43.36%
6/30/09	2010-2011	7.56%	9.23%	16.79%	23.27%	40.06%
6/30/10	2011-2012	7.31%	10.60%	17.91%	23.74%	41.65%
6/30/11	2012-2013	7.40%	12.70%	20.10%	21.84%	41.94%
6/30/12	2013-2014	6.44%	15.33%	21.77%	16.02%	37.79%

Recommended Employer Contribution Rates as of June 30, 2012
SPRS

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/07	2008-2009	9.64%	22.75%	32.39%	59.54%	91.93%
6/30/08	2009-2010	9.83%	25.40%	35.23%	56.89%	92.12%
6/30/09	2010-2011	8.12%	27.62%	35.74%	49.89%	85.63%
6/30/10	2011-2012	7.75%	32.05%	39.80%	54.83%	94.63%
6/30/11	2012-2013	8.12%	39.36%	47.48%	55.93%	103.41%
6/30/12	2013-2014	8.14%	45.21%	53.35%	43.17%	96.52%

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

UAL
Unfunded Accrued Liability

KERS Funds The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the tables on page 121 are the full funding rates presented by the actuary in the 2007 through 2012 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statute now calls for an employer contribution rate at an increasing percentage of the full funding rates until 100% is achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous.

CERS Funds The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the tables on page 121 are the full funding rates presented by the actuary in the 2007 through 2012 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2013-2014 is 5.15% and the employer contribution rate is 18.89%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2013-2014 is 13.93% and the employer contribution rate is 35.70%.

SPRS Funds The contribution rates for SPRS shown in the tables on page 121 are the full funding rates presented by the actuary in the 2007 through 2012 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statute now calls for an employer contribution rate at an increasing percentage of the full funding rates until 100% is achieved in 2020 for SPRS.

Summary of Actuarially Unfunded Liabilities as of June 30, 2012
KERS Non-Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/07	$9,485,939,277	$5,396,782,459	$5,773,156,838	$4,089,156,818	$3,712,782,439	56.9%	60.9%
6/30/08	$10,129,689,985	$5,318,792,893	$5,056,867,294	$4,810,897,092	$5,072,822,691	52.5%	49.9%
6/30/09	$10,658,549,532	$4,794,611,365	$3,584,196,429	$5,863,938,167	$7,074,353,103	45.0%	33.6%
6/30/10	$11,004,795,089	$4,210,215,585	$3,503,007,035	$6,794,579,504	$7,501,788,054	38.3%	31.8%
6/30/11	$11,182,142,032	$3,276,986,087	$3,538,878,093	$7,455,155,945	$7,643,263,939	33.3%	31.7%
6/30/12	$11,361,048,136	$3,101,316,738	$2,980,401,603	$8,259,731,398	$8,380,646,533	27.3%	26.2%

KERS Non-Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/07	$5,201,355,055	$621,171,658	$663,558,360	$4,580,183,397	$4,537,796,695	11.9%	12.8%
6/30/08	$5,431,499,285	$603,197,761	$574,480,809	$4,828,301,524	$4,857,018,476	11.1%	10.6%
6/30/09	$4,507,325,571	$534,172,580	$365,771,088	$3,973,152,991	$4,141,554,483	11.9%	8.1%
6/30/10	$4,466,136,041	$471,341,628	$371,002,484	$3,994,794,413	$4,095,133,557	10.6%	8.3%
6/30/11	$4,280,089,633	$451,620,442	$433,305,243	$3,828,469,191	$3,846,784,390	10.6%	10.1%
6/30/12	$3,125,330,157	$446,080,511	$430,805,726	$2,679,249,646	$2,694,524,431	14.3%	13.8%

KERS Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/07	$558,992,329	$467,287,809	$510,775,499	$91,704,520	$48,216,830	83.6%	91.4%
6/30/08	$618,010,827	$502,132,214	$484,440,015	$115,878,613	$133,570,812	81.3%	78.4%
6/30/09	$674,411,781	$502,503,287	$388,913,374	$171,908,494	$285,498,406	74.5%	57.7%
6/30/10	$688,149,451	$502,729,009	$443,511,663	$185,420,442	$244,637,788	73.1%	64.5%
6/30/11	$721,293,444	$510,748,505	$510,628,492	$210,544,939	$210,664,952	70.8%	70.8%
6/30/12	$752,699,457	$497,226,296	$478,103,794	$255,473,161	$274,595,663	66.1%	63.5%

KERS Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/07	$504,842,981	$251,536,756	$280,885,910	$253,306,225	$223,957,071	49.8%	55.6%
6/30/08	$541,657,214	$288,161,759	$269,299,859	$253,495,455	$272,357,355	53.2%	49.7%
6/30/09	$491,132,170	$301,634,592	$219,537,255	$189,497,578	$271,594,915	61.4%	44.7%
6/30/10	$493,297,529	$314,427,296	$271,395,843	$178,870,233	$221,901,686	63.7%	55.0%
6/30/11	$507,058,767	$329,961,615	$321,071,515	$177,097,152	$185,987,252	65.1%	63.3%
6/30/12	$384,592,406	$345,573,948	$333,298,119	$39,018,458	$51,294,287	89.9%	86.7%

Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2012

CERS Non-Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/07	$6,659,446,126	$5,467,824,480	$5,812,935,251	$1,191,621,646	$846,510,875	82.1%	87.3%
6/30/08	$7,304,217,691	$5,731,502,438	$5,431,735,605	$1,572,715,253	$1,872,482,086	78.5%	74.4%
6/30/09	$7,912,913,512	$5,650,789,991	$4,330,593,934	$2,262,123,521	$3,582,319,578	71.4%	54.7%
6/30/10	$8,459,022,280	$5,546,857,291	$4,819,933,717	$2,912,164,989	$3,639,088,563	65.6%	57.0%
6/30/11	$8,918,085,025	$5,629,611,183	$5,577,252,295	$3,288,473,842	$3,340,832,730	63.1%	62.5%
6/30/12	$9,139,567,695	$5,547,235,599	$5,372,769,813	$3,592,332,096	$3,766,797,882	60.7%	58.8%

CERS Non-Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/07	$3,333,966,070	$960,285,900	$1,084,042,781	$2,373,680,170	$2,249,923,289	28.8%	32.5%
6/30/08	$3,583,193,466	$1,168,883,170	$1,105,944,178	$2,414,310,296	$2,477,249,288	32.6%	30.9%
6/30/09	$3,070,386,018	$1,216,631,769	$894,905,841	$1,853,754,249	$2,175,480,177	39.6%	29.2%
6/30/10	$3,158,340,174	$1,293,038,593	$1,096,581,872	$1,865,301,581	$2,061,758,302	40.9%	34.7%
6/30/11	$3,073,973,205	$1,433,450,793	$1,451,984,026	$1,640,522,412	$1,621,989,179	46.6%	47.2%
6/30/12	$2,370,771,288	$1,512,853,851	$1,439,226,170	$857,917,437	$931,545,118	63.8%	60.7%

CERS Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/07	$2,208,736,179	$1,639,288,924	$1,754,934,764	$569,447,255	$453,801,415	74.2%	79.5%
6/30/08	$2,403,122,095	$1,750,867,373	$1,644,983,243	$652,254,722	$758,138,852	72.9%	68.5%
6/30/09	$2,578,444,600	$1,751,487,540	$1,320,522,868	$826,957,060	$1,257,921,732	67.9%	51.2%
6/30/10	$2,672,151,907	$1,749,464,388	$1,506,787,429	$922,687,519	$1,165,364,478	65.5%	56.4%
6/30/11	$2,859,041,052	$1,779,545,393	$1,760,602,934	$1,079,495,659	$1,098,438,118	62.2%	61.6%
6/30/12	$3,009,992,047	$1,747,379,297	$1,677,940,479	$1,262,612,750	$1,332,051,568	58.1%	55.8%

CERS Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/07	$1,646,460,011	$512,926,549	$570,155,702	$1,133,533,462	$1,076,304,309	31.2%	34.6%
6/30/08	$1,769,782,957	$613,526,319	$576,414,457	$1,156,256,638	$1,193,368,500	34.7%	32.6%
6/30/09	$1,593,548,263	$651,130,782	$483,269,862	$942,417,481	$1,110,278,401	40.9%	30.3%
6/30/10	$1,674,703,216	$692,769,770	$586,826,965	$981,933,446	$1,087,876,251	41.4%	35.0%
6/30/11	$1,647,702,755	$770,790,274	$774,509,101	$876,912,481	$873,193,654	46.8%	47.0%
6/30/12	$1,364,843,057	$829,040,842	$788,070,813	$535,802,215	$576,772,244	60.7%	57.7%

Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2012
SPRS Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/07	$547,955,286	$348,806,508	$376,381,488	$199,148,778	$171,573,798	63.7%	68.7%
6/30/08	$587,129,257	$350,891,451	$337,358,918	$236,237,806	$249,770,339	59.8%	57.5%
6/30/09	$602,328,868	$329,966,989	$256,571,073	$272,361,879	$345,757,795	54.8%	42.6%
6/30/10	$612,444,806	$304,577,292	$264,944,089	$307,867,514	$347,500,717	49.7%	43.3%
6/30/11	$634,379,401	$285,580,631	$279,934,443	$348,798,770	$354,444,958	45.0%	44.1%
6/30/12	$647,688,665	$259,791,575	$252,896,868	$387,897,090	$394,791,797	40.1%	39.1%

SPRS Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/07	$432,763,229	$115,215,912	$132,573,898	$317,547,317	$300,189,331	26.6%	30.6%
6/30/08	$445,107,468	$123,961,197	$121,781,967	$321,146,271	$323,325,501	27.9%	27.4%
6/30/09	$364,031,141	$123,526,647	$93,686,940	$240,504,494	$270,344,201	33.9%	25.7%
6/30/10	$434,960,495	$121,175,083	$104,526,550	$313,785,412	$330,433,945	27.9%	24.0%
6/30/11	$438,427,763	$123,687,289	$127,367,947	$314,740,474	$311,059,816	28.2%	29.1%
6/30/12	$333,903,782	$124,372,072	$125,567,846	$209,531,710	$208,3335,936	37.3%	37.6%

Analysis of Financial Experience

Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2012

Type of Activity	Retirement Gain	Insurance Gain
KERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(61.3)	20.2
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(26.1)	1.4
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.6)	(2.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	141.0	(27.4)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(7.1)	111.8
New Members. Additional unfunded accrued liability will produce a loss.	(7.8)	(3.4)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(325.1)	(37.9)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	15.0	33.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(96.2)	(179.4)
Gain (or Loss) During Year From Financial Experience	**(368.2)**	**(83.2)**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	1,251.0
Composite Gain (or Loss) During Year	**(368.2)**	**1,167.8**
KERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(12.0)	2.4
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.8)	0.4
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	20.1	10.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(3.8)	19.3
New Members. Additional unfunded accrued liability will produce a loss.	(2.7)	(2.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(29.9)	(21.3)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	3.9	7.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(14.5)	19.2
Gain (or Loss) During Year From Financial Experience	**(39.6)**	**35.6**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	105.8
Composite Gain (or Loss) During Year	**(39.6)**	**141.4**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2012

Type of Activity	Retirement Gain	Insurance Gain
CERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(41.7)	2.2
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(36.1)	1.1
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.3)	(2.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	71.4	7.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	70.8	90.0
New Members. Additional unfunded accrued liability will produce a loss.	(14.9)	(4.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(341.0)	(89.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	22.9	28.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	49.4	(53.8)
Gain (or Loss) During Year From Financial Experience	**(220.6)**	**(21.2)**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	833.9
Composite Gain (or Loss) During Year	**(220.6)**	**812.7**
CERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(19.3)	(2.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(5.2)	(1.4)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.2	(0.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	40.8	28.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	7.0	71.0
New Members. Additional unfunded accrued liability will produce a loss.	(12.7)	(8.6)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(112.2)	(47.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.1	12.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(53.6)	40.5
Gain (or Loss) During Year From Financial Experience	**(154.9)**	**91.3**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	265.8
Composite Gain (or Loss) During Year	**(154.9)**	**357.1**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2012

Type of Activity	Retirement Gain	Insurance Gain
SPRS		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	2.9	8.0
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.3)	(0.6)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	1.9	4.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(1.8)	14.2
New Members. Additional unfunded accrued liability will produce a loss.	0.0	0.0
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(19.1)	(6.4)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.5	2.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(7.9)	(17.8)
Gain (or Loss) During Year From Financial Experience	**(23.8)**	**4.0**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	102.7
Composite Gain (or Loss) During Year	**(23.8)**	**106.7**

SOLVENCY

Solvency Test

Solvency Test for KERS Non-Hazardous Pension Fund as of June 30, 2012

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/07	$878,842,180	$6,437,235,593	$2,169,861,504	$5,396,782,459	100.0%	70.2%	-
6/30/08	$875,178,068	$7,162,496,700	$2,092,015,217	$5,318,792,893	100.0%	62.0%	-
6/30/09	$793,574,765	$8,205,155,691	$1,659,819,076	$4,794,611,365	100.0%	48.8%	-
6/30/10	$869,484,042	$8,329,757,802	$1,805,553,245	$4,210,215,585	100.0%	40.1%	-
6/30/11	$916,568,932	$8,482,714,356	$1,782,858,744	$3,726,986,087	100.0%	33.1%	-
6/30/12	$885,1387,183	$8,708,536,338	$1,767,374,615	$3,101,316,738	100.0%	25.4%	--

Continued. Solvency Test for KERS Non-Hazardous Insurance Fund as of June 30, 2012

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/07	$0	$2,569,197,567	$2,632,157,488	$621,171,658	100.0%	24.2%	--
6/30/08	$0	$2,788,189,754	$2,643,309,531	$603,197,761	100.0%	21.6%	--
6/30/09	$0	$2,861,867,088	$1,645,458,483	$534,172,580	100.0%	18.7%	--
6/30/10	$0	$2,744,534,054	$1,721,601,987	$471,341,628	100.0%	17.2%	--
6/30/11	$0	$2,568,002,978	$1,712,086,655	$451,620,442	100.0%	17.6%	--
6/30/12	$0	$1,924,068,623	$1,201,261,534	$446,080,511	100.0%	23.2%	--

KERS Hazardous Pension Fund as of June 30, 2012

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/07	$88,670,847	$306,492,350	$163,829,132	$467,287,809	100.0%	100.0%	44.0%
6/30/08	$89,590,638	$355,771,877	$172,648,312	$502,132,214	100.0%	100.0%	32.9%
6/30/09	$87,779,938	$413,972,356	$172,659,487	$502,503,287	100.0%	100.0%	0.4%
6/30/10	$88,511,283	$441,657,241	$157,980,927	$502,729,009	100.0%	93.8%	--
6/30/11	$86,614,205	$490,395,078	$144,284,161	$510,748,505	100.0%	86.5%	--
6/30/12	$82,100,877	$521,688,803	$148,909,777	$497,226,296	100.0%	79.6%	--

KERS Hazardous Insurance Fund as of June 30, 2012

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/07	$0	$201,189,546	$303,653,435	$251,536,756	100.0%	100.0%	16.6%
6/30/08	$0	$228,834,940	$312,822,274	$288,161,759	100.0%	100.0%	19.0%
6/30/09	$0	$242,123,365	$249,008,805	$301,634,592	100.0%	100.0%	23.9%
6/30/10	$0	$268,510,709	$224,786,820	$314,427,296	100.0%	100.0%	20.4%
6/30/11	$0	$285,539,861	$221,518,906	$329,961,615	100.0%	100.0%	20.1%
6/30/12	$0	$196,578,935	$188,013,471	$345,573,948	100.0%	100.0%	79.2%

CERS Non-Hazardous Pension Fund as of June 30, 2012

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/07	$920,126,096	$3,589,512,063	$2,149,807,967	$5,467,824,480	100.0%	100.0%	44.6%
6/30/08	$963,213,677	$4,058,767,419	$2,282,236,595	$5,731,502,438	100.0%	100.0%	31.1%
6/30/09	$991,628,551	$4,542,483,102	$2,378,801,859	$5,650,789,991	100.0%	100.0%	4.9%
6/30/10	$1,063,746,826	$4,890,659,077	$2,504,616,377	$5,546,857,291	100.0%	91.7%	--
6/30/11	$1,110,967,160	$5,209,783,924	$2,597,333,941	$5,629,611,183	100.0%	86.7%	--
6/30/12	$1,117,549,337	$5,416,932,995	$2,605,085,363	$5,547,235,599	100.0%	81.8%	--

Continued. Solvency Test for CERS Non-Hazardous Insurance Fund as of June 30, 2012

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/07	$0	$1,372,128,406	$1,961,837,664	$960,285,900	100.0%	70.0%	--
6/30/08	$0	$1,521,450,274	$2,061,743,192	$1,168,883,170	100.0%	76.8%	--
6/30/09	$0	$1,478,782,753	$1,591,603,265	$1,216,631,769	100.0%	82.3%	--
6/30/10	$0	$1,526,533,372	$1,631,806,802	$1,293,038,593	100.0%	84.7%	--
6/30/11	$0	$1,460,808,255	$1,613,164,950	$1,433,450,793	100.0%	98.1%	--
6/30/12	$0	$1,146,907,750	$1,223,863,538	$1,512,853,851	100.0%	100.0%	29.9%

CERS Hazardous Pension Fund as of June 30, 2012

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/07	$317,007,367	$1,275,221,775	$616,507,037	$1,639,288,924	100.0%	100.0%	7.6%
6/30/08	$338,324,362	$1,406,982,409	$657,815,324	$1,750,867,373	100.0%	100.0%	0.8%
6/30/09	$350,308,879	$1,540,262,587	$687,873,134	$1,751,487,540	100.0%	91.0%	--
6/30/10	$369,612,720	$1,622,684,455	$679,854,732	$1,749,464,388	100.0%	85.0%	--
6/30/11	$382,072,055	$1,768,511,545	$708,457,452	$1,779,545,393	100.0%	79.0%	--
6/30/12	$381,672,428	$1,889,884,303	$738,435,316	$1,747,379,297	100.0%	72.3%	--

CERS Hazardous Insurance Fund as of June 30, 2012

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/07	$0	$659,752,978	$986,707,033	$512,926,549	100.0%	77.7%	--
6/30/08	$0	$722,435,184	$1,047,347,773	$613,526,319	100.0%	84.9%	--
6/30/09	$0	$725,899,836	$867,648,427	$651,130,782	100.0%	89.7%	--
6/30/10	$0	$814,300,256	$860,402,960	$692,769,770	100.0%	85.1%	--
6/30/11	$0	$771,631,287	$876,071,468	$770,790,274	100.0%	99.9%	--
6/30/12	$0	$575,099,089	$789,743,968	$829,040,842	100.0%	100.0%	32.2%

SPRS Pension Fund as of June 30, 2012

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/07	$39,505,285	$397,863,520	$110,583,481	$348,806,508	100.0%	77.7%	--
6/30/08	$41,391,416	$426,311,368	$119,426,473	$350,891,451	100.0%	72.6%	--
6/30/09	$41,664,469	$459,585,353	$101,079,046	$329,966,989	100.0%	62.7%	--
6/30/10	$42,011,523	$475,892,659	$94,540,624	$304,577,292	100.0%	55.2%	--
6/30/11	$43,574,097	$499,194,229	$91,611,075	$285,580,631	100.0%	48.5%	--
6/30/12	$41,139,306	$523,016,647	$83,532,712	$259,791,575	100.0%	41.8%	--

Continued. Solvency Test for SPRS Insurance Fund as of June 30, 2012

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/07	$0	$172,291,142	$260,472,087	$115,215,912	100.0%	66.9%	--
6/30/08	$0	$178,655,245	$266,452,223	$123,961,197	100.0%	69.4%	--
6/30/09	$0	$167,091,453	$196,939,688	$123,526,647	100.0%	73.9%	--
6/30/10	$0	$253,580,827	$181,379,668	$121,175,083	100.0%	47.8%	--
6/30/11	$0	$252,439,726	$185,988,037	$123,687,289	100.0%	49.0%	--
6/30/12	$0	$190,258,729	$143,645,053	$124,372,072	100.0%	65.4%	--

Active Member Valuation

Methodology The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

Summary of Active Member Valuation Data for KERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/07	317	47,913	$1,780,223,493	$37,155	1.9%	43.3	9.3
6/30/08	414	48,085	$1,837,873,488	$38,221	2.9%	43.2	9.1
6/30/09	334	46,060	$1,754,412,912	$38,090	(0.3)%	43.0	8.7
6/30/10	334	47,090	$1,815,146,388	$38,546	1.2%	43.4	9.0
6/30/11	427	46,617	$1,731,632,748	$37,146	(3.6)%	43.8	9.4
6/30/12	286	42,196	$1,644,896,681	$38,982	4.9%	44.3	9.8

KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/07	15	4,349	$144,838,020	$33,304	3.7%	41.7	7.0
6/30/08	16	4,393	$148,710,060	$33,852	1.6%	41.4	6.9
6/30/09	20	4,334	$146,043,576	$33,697	(0.5)%	41.4	7.0
6/30/10	18	4,291	$143,557,944	$33,456	(0.7)%	41.4	7.0
6/30/11	16	4,291	$133,053,792	$31,008	(7.3)%	41.3	6.9
6/30/12	14	4,086	$131,976,754	$32,300	4.2%	41.1	7.3

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2012.*

Summary of Active Member Valuation Data for CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/07	1,112	84,920	$2,076,848,328	$24,457	3.3%	45.9	8.1
6/30/08	1,110	85,221	$2,166,612,648	$25,423	3.9%	45.9	8.3
6/30/09	1,108	83,724	$2,183,611,848	$26,081	2.6%	46.2	8.6
6/30/10	1,102	84,681	$2,236,855,380	$26,415	1.3%	46.6	8.8
6/30/11	1,102	85,285	$2,276,595,948	$26,694	1.1%	46.8	9.0
6/30/12	1,080	83,052	$2,236,546,345	$26,929	0.9%	47.5	9.1

CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/07	294	10,063	$458,998,956	$45,613	2.9%	38.6	8.1
6/30/08	299	10,173	$474,241,332	$46,618	2.2%	38.7	8.3
6/30/09	290	9,757	$469,315,464	$48,100	3.2%	38.4	8.8
6/30/10	282	9,562	$466,548,660	$48,792	1.4%	38.8	9.2
6/30/11	281	9,407	$466,963,860	$49,640	1.7%	39.1	9.5
6/30/12	254	9,130	$464,228,923	$50,847	2.4%	39.3	10.3

SPRS

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/07	1	957	$49,247,580	$51,460	10.8%	37.3	11.1
6/30/08	1	993	$53,269,080	$53,645	4.2%	36.9	10.8
6/30/09	1	946	$51,660,396	$54,609	1.8%	37.3	11.0
6/30/10	1	961	$51,506,712	$53,597	(1.9)%	37.2	10.6
6/30/11	1	965	$48,692,616	$50,459	(5.9)%	37.7	10.6
6/30/12	1	907	$48,372,506	$53,332	5.7%	37.3	10.4

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2012*

Retired Member Valuation

Summary of Retired Member Valuation Data for KERS Non-Haz

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/07	2,440	731	33,849	$625,435,416	10.47%	$18,472
6/30/08	2,573	1,115	35,307	$710,505,270	13.60%	$20,124
6/30/09	3,465	889	37,883	$ 812,559,070	14.36%	$21,449
6/30/10	1,162	1,100	37,945	$801,881,911	(1.31%)	$21,133
6/30/11	1,592	940	38,597	$821,197,278	2.41%	$21,276
6/30/12	1,707	1,078	39,226	$844,880,945	2.88%	$21,539

KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/07	241	19	2,202	$27,528,837	17.94%	$12,502
6/30/08	261	59	2,404	$33,588,993	22.01%	$13,972
6/30/09	339	95	2,648	$38,695,501	15.20%	$14,613
6/30/10	282	95	2,835	$41,114,800	6.25%	$14,503
6/30/11	288	59	3,064	$45,609,229	10.93%	$14,886
6/30/12	243	54	3,253	$49,231,205	7.94%	$15,134

CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/07	3,244	782	35,564	$348,712,020	13.12%	$9,805
6/30/08	3,366	1,351	37,759	$393,757,510	12.92%	$10,478
6/30/09	3,060	883	39,756	$ 440,061,418	11.76%	$11,069
6/30/10	2,565	1,283	41,038	$452,613,550	2.85%	$11,029
6/30/11	3,250	1,077	43,211	$483,594,068	6.84%	$11,191
6/30/12	3,300	1,207	45,304	$515,008,362	6.50%	$11,368

CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/07	500	53	5,159	$113,735,850	13.41%	$22,046
6/30/08	469	206	5,422	$127,477,109	12.08%	$23,511
6/30/09	650	264	5,808	$ 139,886,751	9.73%	$24,085
6/30/10	423	163	6,068	$146,916,812	5.03%	$24,212
6/30/11	502	102	6,468	$160,259,395	9.08%	$24,777
6/30/12	483	73	6,878	$173,221,483	8.09%	$25,185

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

Summary of Retired Member Valuation Data for SPRS

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/07	49	11	1,105	$37,208,377	7.38%	$33,673
6/30/08	42	12	1,135	$41,293,017	10.98%	$36,382
6/30/09	75	26	1,184	$44,273,937	7.22%	$37,394
6/30/10	54	15	1,223	$45,515,797	2.80%	$37,217
6/30/11	52	12	1,263	$47,467,404	4.29%	$37,583
6/30/12	52	16	1,299	$49,887,093	5.10%	$38,404

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

Summary of Benefit Provisions KERS & CERS Non-Hazardous Plans

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

CPI
Consumer Price Index

Plan Funding State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statutes 61.565 and Kentucky Revised Statutes 61.752. KERS rates are subject to state budget approval.

Membership Eligibility For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility for Members Whose Participation Began Before 9/1/08

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
Any	25	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.

Retirement Eligibility for Members Whose Participation Began On or After 9/1/08

Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None
60	10	6.5% per year for first five years, and 4.5% for next five years before age 65 or Rule of 87 (age plus years of service).

State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required.

Benefit Formula

Final Compensation	x	Benefit Factor		x	Years of Service
Average of the five highest if participation began before 9/1/2008.		KERS 1.97% if:	Member does not have 13 months credit for 1/1/1998-1/1/1999.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if:	Member has 13 months credit from 1/1/1998-1/1/1999.		
		KERS 2.20% if:	Member has 20 or more years of service, including 13 months from 1/1/1998-1/1/1999 and retires by 1/1/2009.		
		CERS 2.20% if:	Member begins participating prior to 8/1/2004.		
		CERS 2.00% if:	Member begins participating on or after 8/1/2004 and before 9/1/2008.		
Average of the last complete five if participation began on or after 9/1/2008.		KERS & CERS increasing percent based on service at retirement* plus 2.00% for each year of service over 30 if:	Member begins participating on or after 9/1/2008.		

* ***Service*** *(and Benefit Factor):* ***10 years or less*** *(1.10%);* ***10 - 20 years*** *(1.30%);* ***20 - 26 years*** *(1.50%);* ***26 - 30 years*** *(1.75%)*

Post-Retirement Death Benefits If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits Members participating before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula. Members participating on or after 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service. Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to suspend or reduce COLAs. HB 265 of 2012 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees.

COLA
Cost of Living Adjustment

CPI
Consumer Price Index

Insurance Benefits For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased by the CPI prior to July 1, 2008, and by 1.5% annually from July 1, 2008.

Refunds Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1981; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees hired prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees hired on or after September 1, 2008, interest will be credited at a rate of 2.5%.

Summary of Benefit Provisions
KERS Hazardous, CERS Hazardous & SPRS

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Plan Funding State statute requires active members to contribute 8% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statutes 61.565 and Kentucky Revised Statutes 61.752. KERS and SPRS rates are subject to state budget approval.

Membership Eligibility All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

Retirement Eligibility for Members Whose Participation Began Before 9/1/08

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 55 or 20 years of service.

Retirement Eligibility for Members Whose Participation Began On or After 9/1/08

Age	Years of Service	Allowance Reduction
60	5	None
Any	25	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 60 or 25 years of service.

Disability Benefits Members hired before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted on page 129.

Members hired on or after 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% of Final Rate of Pay or the amount calculated under the Benefit Formula noted above based upon actual service.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Benefit Formula

Final Compensation	x	Benefit Factor		Years of Service
Average of the three highest if participation began before 9/1/2008.		KERS 2.49%, CERS 2.50%, SPRS 2.50%, if:	Member begins participating before 9/1/2008.	Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
Average of the three highest complete years if participation began on or after 9/1/2008.		KERS, CERS and SPRS increasing percent based on service at retirement* if:	Member begins participating on or after 9/1/2008.	

* ***Service*** *(with Benefit Factor):* ***10 years or less*** *(1.30%);* ***10 - 20 years*** *(1.50%);* ***20 - 25 years*** *(2.50%)*

Pre-Retirement Death Benefits The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to suspend or reduce COLAs. HB 265 of 2012 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees.

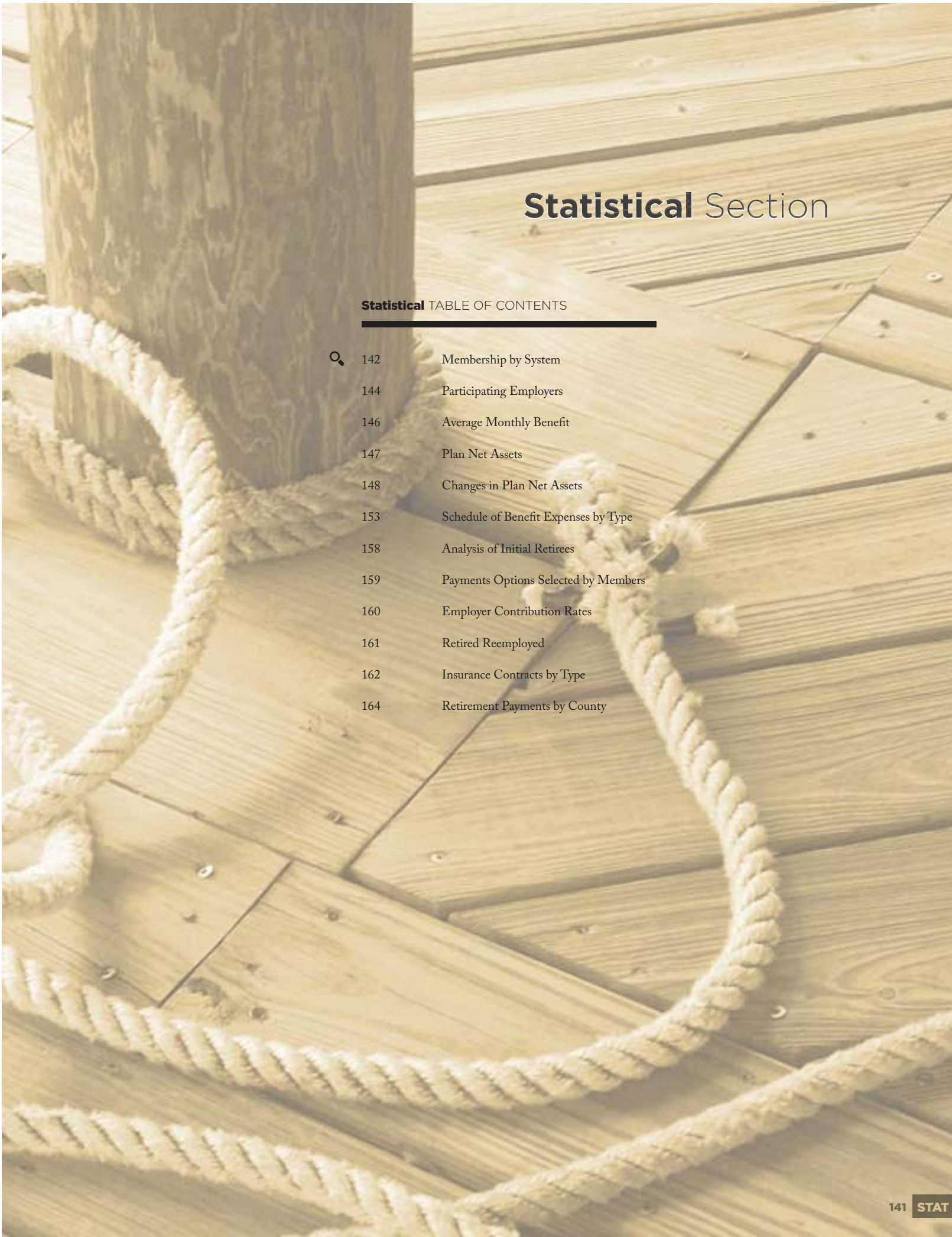
COLA
Cost of Living Adjustment

CPI
Consumer Price Index

Insurance Benefits For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15 for each year of earned service increased by the CPI prior to July 1, 2008, and by 1.5% annually from July 1, 2008.

Refunds Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1981; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees hired prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees hired on or after September 1, 2008, interest will be credited at a rate of 2.5%.



Statistical Section

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Fund Statistics

Definitions Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

Member Breakdown The data for years 2006-2009 reflects the number of accounts in each system. A single member may have multiple accounts, which contribute to one pension. Beginning in 2010: Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-hazardous, then KERS Non-hazardous.

KERS Non-Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2007	47,913	30,904	33,849	112,666
2008	48,202	32,717	35,286	116,205
2009	46,060	34,515	37,883	118,458
2010	46,710	32,461	35,733	114,904
2011	46,044	33,350	36,239	115,633
2012	41,743	39,338	36,508	117,589

KERS Haz Membership

2007	4,349	2,738	2,202	9,289
2008	4,397	3,534	2,402	10,333
2009	4,334	3,056	2,648	10,038
2010	4,049	2,285	1,900	8,234
2011	4,045	2,351	2,090	8,486
2012	4,007	2,597	2,180	8,784

CERS Non-Haz Membership

2007	84,920	53,901	35,564	174,385
2008	85,803	55,279	37,558	178,640
2009	83,724	60,275	39,756	183,755
2010	84,010	55,423	38,261	177,694
2011	84,837	57,073	40,174	182,084
2012	83,658	63,280	42,068	189,006

Continued. CERS Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2007	10,063	2,197	5,159	17,419
2008	10,185	4,815	5,314	20,314
2009	9,757	2,522	5,808	18,087
2010	9,120	2,009	4,867	15,996
2011	9,019	2,047	5,158	16,224
2012	9,040	1,914	5,513	16,467
SPRS				
2007	957	286	1,105	2,348
2008	995	302	1,136	2,433
2009	946	332	1,184	2,462
2010	948	201	1,004	2,153
2011	949	204	1,019	2,172
2012	904	224	1,203	2,331
Kentucky Retirement Systems Membership Totals				
2007	148,202	90,026	77,879	316,107
2008	149,582	96,647	81,696	327,925
2009	144,821	101,552	87,279	333,652
2010	144,837	92,379	81,765	318,981
2011	144,894	95,025	84,680	324,599
2012	139,352	107,353	87,472	334,177

Schedule of Participating Employers in CERS

Agency Classification	Number of Agencies	Number of Employees
Airport Boards	5	504
Ambulance Services	21	434
Area Development Districts	14	690
Boards of Education	174	49363
Cities	219	10146
Community Action Agencies	22	2816
Conservation Districts	45	61
County Attorneys	68	690
County Clerks	16	596
Development Authorities	6	10
Fire Departments	39	757
Fiscal Courts	117	10884
Health Departments	1	283
Housing Authorities	41	435
Jailers	2	33
Libraries	86	1159
Other Retirement Systems	2	3
P1 State Agencies	1	1696
Parks and Recreation	8	62
Planning Commissions	16	206
Police Departments	2	15
Riverport Authorities	5	67
Sanitation Districts	9	348
Sheriff Departments	12	980
Special Districts & Boards	54	1564
Tourist Commissions	22	177
Urban Government Agencies	2	6763
Utility Boards	119	3894
Total	**1,128**	**94,636**

Schedule of Participating Employers in KERS

Agency Classification	Number of Agencies	Number of Employees
County Attorneys	61	353
Health Departments	57	3,449
Master Commissioner	32	74
Non-P1 State Agencies	39	1381
Other Retirement Systems	2	288
P1 State Agencies	135	31751
Regional Mental Health Units	13	5823
Universities	7	3929
Total	**346**	**47,048**

Schedule of Participating Employers in SPRS

Kentucky State Police - Uniformed Officers	1	909

Principal Participating Employers in KERS

Participating Employer	Rank	Covered Employees	% of Total System
Department For Community Based Services(53736)	1	4,289	7.49%
Department Of Highways(35625)	2	3,997	6.98%
Department Of Corrections(54527)	3	3,620	6.32%
Judicial Department Administrative Office Of The Courts(20025)	4	3,014	5.26%
Kentucky State Police(54520)	5	1,870	3.27%
Bluegrass Regional Mental Health Mental Retardation Board(8210)	6	1,766	3.08%
Department Of Juvenile Justice(54523)	7	1,365	2.38%
Seven County Services Inc(8024)	8	1,182	2.06%
Eastern Kentucky University(1430)	9	995	1.74%
Department Of Workforce Investment(51531)	10	992	1.73%
All Others		34,156	59.67%
Total		**57,246**	**100.00%**

Principal Participating Employers in CERS

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board Of Education(V156)	1	6,603	6.01%
Louisville Jefferson County Metro Government(C256)	2	5,169	4.70%
Department Of Corrections(54527)	3	3,620	3.29%
Judicial Department Administrative Office Of The Courts(20025)	4	3,014	2.74%
Fayette County Board Of Education(M034)	5	2,027	1.84%
Lexington Fayette Urban County Government(K034)	6	1,594	1.45%
Boone County Board Of Education(L008)	7	1,103	1.00%
Hardin County Board Of Education(K047)	8	1,070	0.97%
Bullitt County Board Of Education(J015)	9	1,037	0.94%
Pike County Board Of Education(J098)	10	994	0.90%
All Others		83,634	76.12%
Total		**109,865**	**100.00%**

Average Monthly Benefit by Length of Service in KERS

	KERS Non-Hazardous		KERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	4,325	$150.49	587	$181.70
5 or more but less than 10	5,008	$408.60	655	$553.84
10 or more but less than 15	4,459	$688.30	592	$1,033.04
15 or more but less than 20	3,919	$1,016.26	522	$1,527.56
20 or more but less than 25	4,337	$1,341.63	669	$1,997.37
25 or more but less than 30	10,352	$2,287.02	137	$2,749.64
30 or more but less than 35	6,189	$3,201.35	57	$3,561.63
35 or more	2,561	$4,499.56	9	$4,940.73
Total	**41,150**	**$1,715.17**	**3,228**	**$1,189.22**

Average Monthly Benefit by Length of Service in CERS

	CERS Non-Hazardous		CERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	5,438	$146.08	587	$212.74
5 or more but less than 10	9,097	$321.79	834	$652.07
10 or more but less than 15	8,473	$512.17	624	$1,350.38
15 or more but less than 20	6,621	$771.76	591	$1,701.22
20 or more but less than 25	6,742	$989.68	2,464	$2,347.43
25 or more but less than 30	8,374	$1,902.72	1,109	$3,316.15
30 or more but less than 35	2,130	$2,673.77	388	$4,099.91
35 or more	577	$3,593.59	87	$4,948.15
Total	**47,452**	**$917.68**	**6,684**	**$2,094.51**

Average Monthly Benefit by Length of Service in SPRS

Under 5 Years	62	$327.46
5 or more but less than 10	41	$883.14
10 or more but less than 15	41	$1,286.64
15 or more but less than 20	76	$1,980.92
20 or more but less than 25	374	$2,501.30
25 or more but less than 30	408	$3,506.64
30 or more but less than 35	229	$4,658.86
35 or more	63	$5,649.10
Total	**1,294**	**$3,128.89**

Plan Net Assets Dollars (in Thousands) for KERS

	Non-Hazardous			Hazardous		
Fiscal Year	**Pension**	**Insurance**	**Total**	**Pension**	**Insurance**	**Total**
June 30 2007	5,773,157	663,558	6,436,715	510,775	280,886	791,661
June 30 2008	5,056,869	574,479	5,631,348	484,438	269,300	753,738
June 30 2009	3,584,601	365,367	3,949,968	388,951	219,500	608,451
June 30 2010	3,504,501	368,799	3,873,300	443,606	271,240	714,846
June 30, 2011	3,544,242	428,659	3,972,901	511,085	320,673	831,758
June 30, 2012	2,977,935	418,490	3,396,425	476,589	330,730	807,319

CERS

June 30 2007	5,812,936	1,084,043	6,896,979	1,754,935	570,156	2,325,091
June 30 2008	5,431,735	1,105,945	6,537,680	1,644,982	576,414	2,221,396
June 30 2009	4,331,010	894,490	5,225,500	1,320,560	483,233	1,803,793
June 30 2010	4,820,490	1,094,821	5,915,311	1,506,894	586,614	2,093,508
June 30, 2011	5,583,451	1,446,998	7,030,449	1,761,858	773,139	2,534,997
June 30, 2012	5,381,602	1,428,821	6,810,423	1,672,970	785,874	2,458,844

SPRS

June 30 2007	376,381	132,574	508,955
June 30 2008	337,359	121,782	459,141
June 30 2009	256,575	93,682	350,257
June 30 2010	264,949	104,511	369,460
June 30, 2011	279,927	127,319	407,246
June 30, 2012	250,476	125,398	375,874

Kentucky Retirement Systems Total

Fiscal Year	**Pension**	**Insurance**	**Total**
June 30 2007	14,228,184	2,731,217	16,959,401
June 30 2008	12,955,383	2,647,920	15,603,303
June 30 2009	9,881,697	2,056,272	11,937,969
June 30 2010	10,540,440	2,425,987	12,966,427
June 30, 2011	11,680,563	3,096,788	14,777,351
June 30, 2012	10,758,706	3,089,313	13,848,019

Changes in Plan Net Assets (in Thousands) for KERS Non-Haz Pension Fund

Additions	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Members' Contributions	$116,254	$116,487	$108,362	$90,780	$109,879	$96,418
Employers' Contributions	88,249	104,655	112,383	144,051	185,558	211,071
Health Insurance Contributions (HB1)	-	-	404	1,799	2,441	5,337
Net Investment Income	784,652	(221,578)	(867,675)	526,209	599,790	9,789
Total Additions	989,155	(436)	(646,526)	762,839	$897,668	322,615
Deductions						
Benefit Payments	640,201	699,052	808,513	825,627	838,372	858,151
Refunds	9,489	9,076	9,127	8,887	10,931	12,004
Administrative Expenses	7,070	7,724	8,102	8,424	8,558	8,776
Capital Project Expenses	-	-	-	-	67	8
Other Expenses	-	-	-	-	-	-
Total Deductions	656,773	715,852	825,742	842,938	857,928	878,939
Total Changes in Plan Net Assets	**$332,382**	**$(716,288)**	**$(1,472,268)**	**$(80,099)**	**$39,740**	**$(556,324)**

KERS Non-Haz Insurance Fund

Additions	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Employers' Contributions	$64,014	$56,745	$74,434	$$92,679	$123,256	$146,844
Net Investment Income	78,877	(38,965)	(154,894)	50,765	77,225	(4,803)
Member Drug Reimbursement	10,744	6,634	8,168	8,551	10,025	7,856
Insurance Appropriation	-	-	-	-	-	-
Premiums Rec'd from Retirees	12,196	12,940	12,320	13,588	15,826	15,666
Total Additions	165,831	37,354	(59,972)	165,583	$226,332	$165,563
Deductions						
Benefit Payments	111,659	122,946	145,036	157,819	161,804	163,841
Administrative Expenses	3,199	3,487	4,104	4,333	4,667	5,203
Insurance Appropriation	-	-	-	-	-	
Total Deductions	114,858	126,433	149,140	162,152	166,471	169,044
Total Changes in Plan Net Assets	**$50,973**	**$(89,079)**	**$(209,112)**	**$3,431**	**$59,861**	**169,044**

KERS Haz Pension Fund

Additions	2007	2008	2009	2010	2011	2012
Member Contributions	$13,245	$13,091	$12,442	$11,110	$12,959	$11,602
Employer Contributions	13,237	15,257	15,843	17,658	18,085	17,367
Health Insurance Contribution (HB1)	-	-	38	118	241	629
Net Investment Income	77,996	(20,673)	(84,262)	65,588	83,492	(10,286)
Total Additions	104,478	7,675	(55,939)	94,474	$114,777	19,312
Deductions						
Benefit Payments	28,514	31,606	37,556	37,796	44,509	48,424
Refunds	1,662	1,742	1,277	1,286	2,062	2,543
Administrative Expenses	611	664	715	737	721	877
Other Expenses	1	-	-	-	-	-
Capital Project Expenses	-	-	-	-	6	-
Total Deductions	38,788	34,012	39,548	39,819	47,298	51,844
Total Changes in Plan Net Assets	**$73,690**	**$(26,337)**	**$(95,487)**	**$54,655**	**$67,479**	**$(32,532)**

KERS Haz Insurance Fund

Additions	2007	2008	2009	2010	2011	2012
Employers' Contributions	$19,535	$21,997	$20,803	$21,835	$18,826	$23,984
Net Investment Income	44,541	(25,740)	(60,641)	42,406	45,205	60
Member Drug Reimbursement	105	74	186	319	365	351
Insurance Appropriation	-	-	-	-	-	-
Premiums Rec'd from Retirees	204	247	300	835	588	876
Total Additions	64,385	(3,422)	(39,352)	65,395	$64,984	$25,271
Deductions						
Benefit Payments	6,874	8,069	10,304	13,456	15,327	13,941
Administrative Expenses	83	95	144	200	223	335
Total Deductions	6,957	8,164	10,448	13,656	15,550	14,276
Total Changes in Plan Net Assets	**$57,428**	**$(11,586)**	**$(49,800)**	**$51,739**	**$49,434**	**$10,995**

CERS Non-Haz Pension Fund

Additions	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Members' Contributions	$121,979	$125,014	$122,518	$106,558	$144,861	$119,123
Employers' Contributions	124,261	150,925	179,286	207,076	247,968	270,664
Health Insurance Contribution (HB1)	-	-	415	1,345	3,216	5,101
Net Investment Income	760,541	(228,020)	(927,090)	669,072	887,514	(3,349)
Total Additions	1,009,736	47,919	(624,871)	984,051	$1,283,559	$391,539
Deductions						
Benefit Payments	356,648	403,958	451,304	470,249	494,344	524,385
Refunds	11,396	11,924	10,719	10,001	11,816	12,765
Administrative Expenses	12,197	13,238	13,831	14,323	14,324	16,740
Capital Project Expenses	-	-	-	-	112	9
Other Expenses	22	-	-	-	-	-
Total Deductions	389,263	429,120	475,854	494,571	520,596	553,899
Total Changes in Plan Net Assets	**$620,473**	**$(381,201)**	**$(1,100,725)**	**$489,478**	**$762,963**	**$(162,360)**

CERS Non-Haz Insurance Fund

Additions	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Employer Contributions	$147,609	$196,110	$123,761	$166,032	$185,639	$164,297
Net Investment Income	188,055	(95,924)	(244,148)	136,528	274,743	(32,992)
Member Drug Reimbursement	9,623	6,003	7,624	9,157	10,449	8,443
Insurance Appropriation	-	-	-	-	-	-
Premiums Rec'd from Retirees	13,997	15,104	14,356	16,216	18,053	17,493
Total Additions	359,284	121,293	(98,407)	327,933	$488,884	$157,241
Deductions	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Benefit Payments	85,199	95,966	108,995	123,133	131,945	141,694
Administrative Expenses	3,040	3,425	4,053	4,469	4,763	5,545
Total Deductions	88,239	99,391	113,048	127,602	136,708	147,239
Total Changes in Plan Net Assets	**$271,045**	**$21,902**	**$(211,455)**	**$200,331**	**$352,176**	**$10,002**

CERS Haz Pension Fund

Additions	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Members' Contributions	$43,650	$44,260	$42,582	$37,200	$53,918	$41,797
Employers' Contributions	61,553	72,155	78,151	82,887	84,595	77,311
Health Insurance Contribution (HB1)	-	-	37	174	1,157	811
Net Investment Income	240,035	(97,393)	(302,748)	206,073	286,688	(24,724)
Total Additions	345,238	19,022	(181,978)	326,334	$426,358	95,195
Deductions						
Benefit Payments	115,604	125,191	138,810	136,810	167,540	169,352
Refunds	2,563	2,641	2,436	1,956	2,654	3,516
Administrative Expenses	1,073	1,143	1,198	1,234	1,191	1,319
Capital Project Expenses	-	-	-	-	9	-
Other Expenses	2	-	-	-	-	-
Total Deductions	119,242	128,975	142,444	140,000	171,394	174,187
Total Changes in Plan Net Assets	**$225,996**	**$(109,953)**	**$(324,422)**	**$186,334**	**$254,964**	**$(79,992)**

CERS Haz Insurance Fund

Additions	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Employers' Contributions	$70,073	$90,113	$70,783	$82,970	$98,203	$90,204
Net Investment Income	90,041	(48,529)	(123,461)	67,288	139,242	(16,127)
Member Drug Reimbursement	657	420	628	1,493	972	871
Insurance Appropriation	-	-	-	-	-	-
Premiums Rec'd from Retirees	191	222	330	508	516	695
Total Additions	160,962	42,226	(51,720)	152,259	$238,933	$75,643
Deductions						
Benefit Payments	31,607	35,604	41,017	48,321	51,831	50,155
Administrative Expenses	320	364	444	554	580	688
Total Deductions	31,927	35,968	41,461	48,875	52,411	50,843
Total Changes in Plan Net Assets	**$129,035**	**$6,258**	**$(93,181)**	**$103,384**	**$186,522**	**$24,800**

Changes in Plan Net Assets (in Thousands) for SPRS Pension Fund

Additions	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Members' Contributions	$5,152	$5,407	$4,938	$4,127	$5,225	$5,154
Employers' Contributions	6,142	7,443	8,186	9,489	11,920	15,040
Health Insurance Contribution (HB1)	-	-	5	12	31	46
Net Investment Income	49,595	(12,283)	(51,175)	40,602	44,739	43
Total Additions	60,889	567	(38,046)	54,230	$61,915	$20,283
Deductions	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Benefit Payments	37,187	39,367	42,547	45,582	46,754	48,867
Refunds	47	85	69	144	58	149
Administrative Expenses	126	137	122	130	124	73
Capital Project Expenses	-	-	-	-	1	-
Other Expenses	-	-	-	-	-	-
Total Deductions	37,360	39,589	42,738	45,856	46,937	49,089
Total Changes in Plan Net Assets	**$23,529**	**$(39,022)**	**$(80,784)**	**$8,374**	**$14,978**	**$(28,806)**

SPRS Insurance Fund

Additions	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Employer Contributions	$6,489	$7,329	$7,414	$8,369	$10,051	10,810
Net Investment Income	21,876	(11,440)	(28,166)	13,085	24,773	(1,458)
Member Drug Reimbursement	361	184	229	274	318	279
Insurance Appropriation	-	-	-	-	-	-
Premiums Rec'd from Retirees	8	9	23	16	18	20
Total Additions	28,734	(3,918)	(20,500)	21,744	$35,160	$9,651
Deductions						
Benefit Payments	6,515	6,768	7,476	10,769	12,172	10,791
Administrative Expenses	105	106	124	147	179	201
Total Deductions	6,620	6,874	7,600	10,916	12,351	10,992
Total Changes in Plan Net Assets	**$22,114**	**$(10,792)**	**$28,100**	**$10,828**	**$22,809**	**$(1,341)**

Schedule of Benefit Expenses for KERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2006-07					
Average Benefit	$936	$1,745	$865	$869	$1,541
Number of Accounts	4,767	25,605	2,597	843	33,812
Total Monthly Benefits	$4,463,823	$44,672,320	$2,245,823	$732,470	$52,114,436
% of Total Monthly Benefits	8.6%	85.7%	4.3%	1.4%	100.0%
FY 2007-08					
Average Benefit	$980	$1,831	$897	$906	$1,624
Number of Accounts	4,845	27,080	2,579	839	35,343
Total Monthly Benefits	$4,747,523	$49,585,033	$2,313,860	$760,088	$57,406,504
% of Total Monthly Benefits	8.3%	86.4%	4.0%	1.3%	100.0%
FY 2008-09					
Average Benefit	$1,036	$1,926	$927	$931	$1,717
Number of Accounts	5,041	29,386	2,566	861	37,854
Total Monthly Benefits	$5,223,184	$56,596,178	$2,377,856	$801,966	$64,999,184
% of Total Monthly Benefits	8.0%	87.1%	3.7%	1.2%	100.0%
FY 2009-10					
Average Benefit	$1,009	$1,912	$936	$963	$1,692
Number of Accounts	5,991	30,303	2,625	813	39,732
Total Monthly Benefits	$6,046,047	$57,939,304	$2,457,461	$782,980	$67,225,791
% of Total Monthly Benefits	9.00%	86.20%	3.60%	1.20%	100.00%
FY 2010-11					
Average Benefit	$1,008	$1,920	$974	$1,071	$1,703
Number of Accounts	6,118	30,900	2,629	835	40,482
Total Monthly Benefits	$6,166,372	$59,318,561	$2,561,377	$894,077	$68,940,387
% of Total Monthly Benefits	8.94%	86.04%	3.72%	1.30%	100.00%
FY 2011-12					
Average Benefit	$1,008	$1,927	$1,029	$925	$1,709
Number of Accounts	6,218	31,580	2,626	959	41,383
Total Monthly Benefits	$6,269,576	$60,879,802	$2,702,410	$887,236	$70,739,025
% of Total Monthly Benefits	8.86%	86.06%	3.82%	1.25%	100.00%

Schedule of Benefit Expenses for KERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2006-07					
Average Benefit	$862	$1,391	$540	$731	$1,038
Number of Accounts	1,116	854	167	76	2,213
Total Monthly Benefits	$962,085	$1,188,289	$90,109	$55,536	$2,296,019
% of Total Monthly Benefits	41.9%	51.8%	3.9%	2.4%	100.0%
FY 2007-08					
Average Benefit	$912	$1,455	$549	$751	$1,094
Number of Accounts	1,231	952	173	78	2,434
Total Monthly Benefits	$1,123,281	$1,384,856	$94,999	$58,567	$2,661,703
% of Total Monthly Benefits	42.2%	52.0%	3.6%	2.2%	100.0%
FY 2008-09					
Average Benefit	$941	$1,517	$576	$778	$1,143
Number of Accounts	1,353	1,066	173	74	2,666
Total Monthly Benefits	$1,272,796	$1,617,453	$99,607	$57,607	$3,047,462
% of Total Monthly Benefits	41.8%	53.1%	3.3%	1.8%	100.0%
FY 2009-10					
Average Benefit	$933	$1,489	$593	843	$1,137
Number of Accounts	1,446	1,146	157	75	2,824
Total Monthly Benefits	$1,348,511	$1,706,876	$93,064	$63,194	$3,211,645
% of Total Monthly Benefits	42.00%	53.10%	2.90%	2.00%	100.00%
FY 2010-11					
Average Benefit	$957	$1,526	$600	$814	$1,166
Number of Accounts	1,571	1,240	158	79	3,048
Total Monthly Benefits	$1,503,160	$1,892,300	$94,766	$64,299	$3,554,525
% of Total Monthly Benefits	42.29%	53.24%	2.66%	1.81%	100.00%
FY 2011-12					
Average Benefit	$976.67	$1,541.49	$581	$721	$1,179
Number of Accounts	1,657	1,339	180	92	3,268
Total Monthly Benefits	$1,618,343	$2,064,050	$104,644	$66,409	$3,853,449
% of Total Monthly Benefits	42.00%	53.56%	2.72%	1.72%	100.00%

These tables (pages 153-154) include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June 2012 are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. The information for the current year will differ from the benefit payment totals listed in the Deduction by Source. A single member may have multiple accounts, which contribute to one pension.

Schedule of Benefit Expenses for CERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2006-07					
Average Benefit	$509	$938	$747	$540	$817
Number of Accounts	7,694	23,460	3,612	864	35,630
Total Monthly Benefits	$3,919,356	$21,999,359	$2,696,721	$484,037	$29,099,472
% of Total Monthly Benefits	13.5%	75.6%	9.2%	1.7%	100.0%
FY 2007-08					
Average Benefit	$523	$978	$776	$582	$852
Number of Accounts	8,109	25,070	3,679	876	37,734
Total Monthly Benefits	$4,241,906	24,530,372	2,856,173	510,523	32,138,704
% of Total Monthly Benefits	13.2%	76.3%	8.9%	1.6%	100.0%
FY 2008-09					
Average Benefit	$547	$1,021	$804	$613	$890
Number of Accounts	8,471	26,720	3,728	917	39,836
Total Monthly Benefits	$4,634,447	$27,268,861	$2,998,565	$561,804	$35,463,676
% of Total Monthly Benefits	13.1%	76.9%	8.5%	1.5%	100.0%
FY 2009-10					
Average Benefit	$570	$1,022	$835	$623	$898
Number of Accounts	9,418	28,747	3,951	836	42,952
Total Monthly Benefits	$5,372,501	$29,377,417	$3,298,478	$520,995	$38,569,391
% of Total Monthly Benefits	13.90%	76.20%	8.60%	1.30%	100.00%
FY 2010-11					
Average Benefit	$577	$1,031	$847	$651	$906
Number of Accounts	10,054	30,224	4,095	873	45,246
Total Monthly Benefits	$5,802,568	$31,149,398	$3,469,974	$568,188	$40,990,128
% of Total Monthly Benefits	14.16%	75.99%	8.47%	1.38%	100.00%
FY 2011-12					
Average Benefit	$587	$1,039	$870	$636	$914
Number of Accounts	10,620	31,797	4,280	1,052	47,749
Total Monthly Benefits	$6,237,369	$33,041,035	$3,724,859	$669,377	$43,672,642
% of Total Monthly Benefits	14.28%	75.66%	8.53%	1.53%	100.00%

Continued. Schedule of Benefit Expenses for CERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2006-07					
Average Benefit	$1,398	$2,147	$937	$944	$1,815
Number of Accounts	1,212	3,329	592	95	5,228
Total Monthly Benefits	$1,693,771	$7,148,184	$554,911	$89,712	$7,486,579
% of Total Monthly Benefits	17.8%	75.3%	5.9%	1.0%	100.0%
FY 2007-08					
Average Benefit	$1,424	$2,228	$986	$1,021	$1,882
Number of Accounts	1,307	3,555	610	101	5,573
Total Monthly Benefits	$1,861,441	7,922,072	601,207	103,077	10,487,797
% of Total Monthly Benefits	17.8%	75.5%	5.7%	1.0%	100.0%
FY 2008-09					
Average Benefit	$1,452	$2,299	$1,014	$1,020	$1,934
Number of Accounts	1,413	3,733	634	104	5,884
Total Monthly Benefits	$2,052,162	$8,581,241	$642,604	$106,103	$11,382,110
% of Total Monthly Benefits	18.0%	75.4%	5.7%	0.9%	100.0%
FY 2009-10					
Average Benefit	$1,427	$2,362	$1,261	$1,130	$2,019
Number of Accounts	1,495	3,856	468	89	5,908
Total Monthly Benefits	$2,133,697	$9,106,888	$590,020	$100,562	1$1,931,167
% of Total Monthly Benefits	17.90%	76.30%	5.00%	0.80%	100.00%
FY 2010-11					
Average Benefit	$1,432	$2,410	$1,362	$1,153	$2,056
Number of Accounts	1,643	4,082	487	90	6,302
Total Monthly Benefits	$2,352,710	$9,838,311	$663,455	$103,808	$12,958,284
% of Total Monthly Benefits	18.16%	75.92%	5.12%	0.80%	100.00%
FY 2011-12					
Average Benefit	$1,430	$2,422	$1,300	$1,046	$2,041
Number of Accounts	1,766	4,407	662	110	6,945
Total Monthly Benefits	$2,526,722	$10,673,928	$861,223	$115,107	$14,176,981
% of Total Monthly Benefits	17.82%	75.29%	6.07%	0.81%	100.00%

These tables (pages 155-156) include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June 2012 are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. The information for the current year will differ from the benefit payment totals listed in the Deduction by Source. A single member may have multiple accounts, which contribute to one pension.

Schedule of Benefit Expenses for SPRS

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2006-07					
Average Benefit	$3,178	$2,797	$1,258	$1,761	$2,743
Number of Accounts	146	900	57	27	1,130
Total Monthly Benefits	$464,053	$2,517,382	$71,724	$47,540	$3,100,699
% of Total Monthly Benefits	15.0%	81.2%	2.3%	1.5%	100.0%
FY 2007-08					
Average Benefit	$3,281	$2,892	$1,265	$1,970	$2,843
Number of Accounts	150	931	56	26	1,163
Total Monthly Benefits	$492,198	$2,692,030	$70,822	$51,215	$3,306,265
% of Total Monthly Benefits	14.9%	81.4%	2.1%	1.6%	100.0%
FY 2008-09					
Average Benefit	$3,400	$2,985	$1,293	$2,025	$2,934
Number of Accounts	146	978	58	26	1,208
Total Monthly Benefits	$496,355	$2,919,782	$74,971	$52,649	$3,543,757
% of Total Monthly Benefits	14.0%	82.4%	2.1%	1.5%	100.0%
FY 2009-10					
Average Benefit	$3,492	$3,066	$1,467	$2,130	$3,032
Number of Accounts	147	1,004	50	26	1,227
Total Monthly Benefits	$513,322	$3,078,221	$73,354	$55,379	$3,720,275
% of Total Monthly Benefits	13.80%	82.70%	2.00%	1.50%	100.00%
FY 2010-11					
Average Benefit	$3,529	$3,112	$1,494	$2,162	$3,070
Number of Accounts	146	1,037	55	26	1,264
Total Monthly Benefits	$515,270	$3,226,744	$82,184	$56,210	$3,880,408
% of Total Monthly Benefits	13.28%	83.15%	2.12%	1.45%	100.00%
FY 2011-12					
Average Benefit	$3,560	$3,135	$1,372	$2,136	$3,077
Number of Accounts	150	1,083	66	25	1,324
Total Monthly Benefits	$534,132	$3,396,203	$90,562	$53,404	$4,074,303
% of Total Monthly Benefits	13.11%	83.36%	2.22%	1.31%	100.00%

This table includes individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. Retired reemployed members and individuals deceased prior to June 2012 are not included; therefore, the numbers in this section may differ slightly from the numbers in the Financial and Actuarial Sections. The information for the current year will differ from the benefit payment totals listed in the Deduction by Source. A single member may have multiple accounts, which contribute to one pension.

Analysis of Initial Retirees

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
FY 2006-07					
Number of Accounts	2,284	228	2,902	433	48
Average Service Credit (months)	246	238	206	255	274
Average Final Compensation	$46,800	$45,142	$32,183	$55,038	$65,826
Average Monthly Benefit	$1,713	$1,289	$962	$1,987	$2,962
Average System Payment for Health Insurance	$225	$342	$194	$599	$497
FY 2007-08					
Number of Accounts	2,219	243	2,736	355	40
Average Service Credit (months)	261	233	204	240	275
Average Final Compensation	$49,414	$44,992	$31,447	$54,223	$67,775
Average Monthly Benefit	$1,929	$1,289	$917	$2,014	$3,239
Average System Payment for Health Insurance	$221	$381	$181	$625	$501
FY 2008-09					
Number of Accounts	3,229	257	2,761	322	59
Average Service Credit (months)	277	241	205	242	269
Average Final Compensation	$51,617	$48,542	$34,940	$57,016	$69,388
Average Monthly Benefit	$2,105	$1,387	$1,029	$2,005	$3,146
Average System Payment for Health Insurance	$396	$520	$274	$715	$461
FY 2009-10					
Number of Accounts	1,007	212	2,252	329	54
Average Service Credit (months)	153	194	186	224	276
Average Final Compensation	$41,811	$45,499	$30,203	$56,408	$70,704
Average Monthly Benefit	$802	$1,494	$760	$2,127	$3,323
Average System Payment for Health Insurance	$202	$572	$239	$766	$894
FY 2010-11					
Number of Accounts	1,486	247	3,045	415	46
Average Service Credit (months)	174	184	182	204	260
Average Final Compensation	$44,341	$44,821	$32,359	$58,814	$71,501
Average Monthly Benefit	$1,047	$1,379	$824	$2,114	$3,296
Average System Payment for Health Insurance	$264	$516	$284	$777	$874
FY 2011-12					
Number of Accounts	1,641	206	3,160	410	47
Average Service Credit (months)	190	169	185	210	276
Average Final Compensation	$45,528	$45,815	$32,709	$57,756	$71,298
Average Monthly Benefit	$1,162	$1,312	$872	$2,149	$3,556
Average System Payment for Health Insurance	$291	$496	$271	$826	$981

The information in this table represents accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

Payment Options Selected by Retired Members

	Basic	Social Security Adjustment	Period Certain	Suvivorship	Pop Up	Lump Sum
KERS Non-Haz						
Number of Accounts	12,831	2,851	4,563	6,103	6,698	2008
Monthly Benefits	$20,718,634	$6,526,262	$7,644,396	$13,091,706	15,353,282	$2,435,522
KERS Haz						
Number of Accounts	775	241	321	514	833	253
Monthly Benefits	$853,881	$533,808	$355,153	$671,605	$1,187,480	$256,567
CERS Non-Haz						
Number of Accounts	17,886	1,594	6,076	6,434	6,136	3,093
Monthly Benefits	$13,916,692	$2,881,364	$5,219,770	$7,603,784	$8,260,122	$2,097,204
CERS Haz						
Number of Accounts	1,026	416	494	1,276	2,472	441
Monthly Benefits	$1,923,957	$919,148	$921,989	$2,784,824	6,215,232	$741,705
SPRS						
Number of Accounts	117	170	86	289	462	22
Monthly Benefits	$375,229	$445,378	$268,136	$1,016,814	$1,652,002	$51,463
KRS Total						
Number of Accounts	32,635	5,272	11,540	14,616	16,601	5,817
Monthly Benefits	$37,788,393	$11,305,960	$14,409,444	$25,168,733	$32,668,118	$5,582,461

The information in this table represents accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

Employer Contribution Rates

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

HB
House Bill

In KERS, CERS, and SPRS both the employee and the employer contribute a percent of creditable compensation to the Systems.

The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employees hired on or after September 1, 2008 contribute an additional 1% to health insurance.

Under Kentucky Revised Statutes 61.565, KERS and SPRS employer contribution rates are set by the KRS Board of Trustees based on an annual actuarial valuation. However, KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. In recent years, the Kentucky General Assembly has routinely suspended Kentucky Revised Statutes 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the Board's consulting actuary. The table on page 147 shows the KERS and SPRS employer contribution rates that were actuarially recommended in the annual valuation without any adjustments and the rate specified by the Executive Branch budget bill for each fiscal year.

The CERS employer contribution rates are also set by the Systems' Board under Kentucky Revised Statutes 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. The CERS employer contribution rates for fiscal year 2008-2009 were reduced from the actuarially recommended rate as a result of the passage of House Bill (HB) 1 during the 2008 Extraordinary Session of the Kentucky General Assembly. Also, during its 2009 Regular Session, the Kentucky General Assembly enacted HB 117, which mandated an extension of the phase-in of insurance contribution rates that had been previously approved by the KRS Board in 2006 from five years to ten years to further mitigate the impact of the application of Governmental Accounting Standards Board Statements 43 and 45 on CERS employer contribution rates for health insurance. The "Recommended Rate" shown for CERS non-hazardous and hazardous plans are the actuarially recommended rates as set forth in the annual valuation. The "Budgeted Rate" shown for the two plans is the rate required by the ten year phase-in mandated in KRS 61.565(6).

Employer Contribution Rates

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
KERS Non-Haz						
Budgeted Rate	8.50	10.01	11.61	16.98	19.82	23.61
Recommended Rate	48.37	36.92	39.45	38.58	40.71	44.55
KERS Haz						
Budgeted Rate	24.25	24.35	24.69	26.12	28.98	29.79
Recommended Rate	47.11	34.78	35.54	34.37	33.84	35.89
CERS Non-Haz						
Budgeted Rate	16.17	13.50	16.16	16.93	18.96	19.55
Recommended Rate	27.49	20.51	20.91	19.81	21.29	21.21
CERS Haz						
Budgeted Rate	33.87	29.50	32.97	33.25	35.76	37.60
Recommended Rate	54.53	42.66	43.36	40.06	41.65	41.94
SPRS						
Budgeted Rate	28.00	30.07	33.08	45.54	52.13	63.67
Recommended Rate	120.00	91.93	92.12	85.63	94.63	103.41

Retired Reemployed

From August 1, 1998 through August 31, 2008, state law allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service was observed.

The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Reemployed Retirees in Full-Time Positions Covered by Same System & Contributing to a New Account

	KERS			CERS			SPRS
Reemployed Retirees in KRS	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**	**Total**
Total Active Employees	41,743	4,007	45750	83,658	9,040	92698	904
Total Retirees	36,508	2,180	38688	42,068	5,513	47581	1,203
Reemployed Retirees	719	59	778	900	603	1503	132.00
% of Reemployed Retirees to Total Actives	1.72%	1.47%	1.70%	1.08%	6.67%	1.62%	14.60%
% of Reemployed Retirees to Total Retirees	1.97%	2.71%	2.01%	2.14%	10.94%	3.16%	10.97%
Average Age at Initial Retirement	50	48	49.89	53	46	52	47.00
Months of Service Credit at Initial Retirement	345	295	342.18	304	288	302	336
Final Compensation At Initial Retirement	52,013	43,801	51550.27	37,297	53,920	39223	59,175
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2011-2012 (Second Retirement Account)	40,982	35,888		36,805	46,999		47,002
Retirees Returning to Work for the Same Employer	245	8	253.00	621	93		0.00
% Retirees Returning to Work For Same Employer	34.08%	13.56%	32.52%	69.00%	15.42%	0.00%	0.00%

Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.

Insurance Contracts

The Systems provides group rates on medical insurance and other managed care coverage for retired members.

KEHP
Kentucky Employees Group Health Plan

Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems.

Insurance Benefits Paid to Retirees & Beneficiaries Participating in a KRS Health Insurance Plan

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Number	27,123	1,809	27,089	5,033	1,129
Average Service Credit (Months)	311	266	255	282	330
Avg Monthly System Payment for Health Insurance	$469	$776	$398	$998	$958
Avg Monthly Member Payment for Health Insurance	$91	$59	$99	$34	$18
Total Monthly Payment for Health Insurance	$15,234,731	$1,512,125	$13,490,165	$5,197,599	$1,102,974

Insurance Contracts by Type for KERS Non-Haz

	2007	2008	2009	2010	2011	2012
KEHP Parent Plus	525	568	762	722	732	734
KEHP Couple/Family	2,131	2,187	2,621	1,971	2,155	1,917
KEHP Single	8,996	9,383	10,635	10,420	10,321	9,764
Medicare without Prescription	2,056	1,969	1,920	1,831	1,821	1721
Medicare with Prescription	12,007	12,636	13,231	13,765	13,988	15,015

KERS Haz

KEHP Parent Plus	70	69	74	66	75	93
KEHP Couple/Family	398	443	502	453	521	517
KEHP Single	686	741	823	599	615	645
Medicare without Prescription	82	91	88	63	60	67
Medicare with Prescription	606	687	763	525	570	751

Continued. Insurance Contracts by Type for CERS Non-Haz

KEHP Parent Plus	284	292	335	342	351	383
KEHP Couple/Family	1,274	1,320	1,456	1,369	1,552	1317
KEHP Single	6,767	7,126	7,609	7,692	8,013	7972
Medicare without Prescription	3,134	3,105	3,110	3,106	3,167	3119
Medicare with Prescription	11,908	12,684	13,583	14,477	15,100	16355

CERS Haz

KEHP Parent Plus	210	226	245	239	253	310
KEHP Couple/Family	1,836	1,947	2,041	2,062	2,156	2,237
KEHP Single	1,363	1,394	1,404	1,274	1,310	1,385
Medicare without Prescription	64	73	80	58	58	73
Medicare with Prescription	1,197	1,367	1,518	1,438	1,527	1,853

SPRS

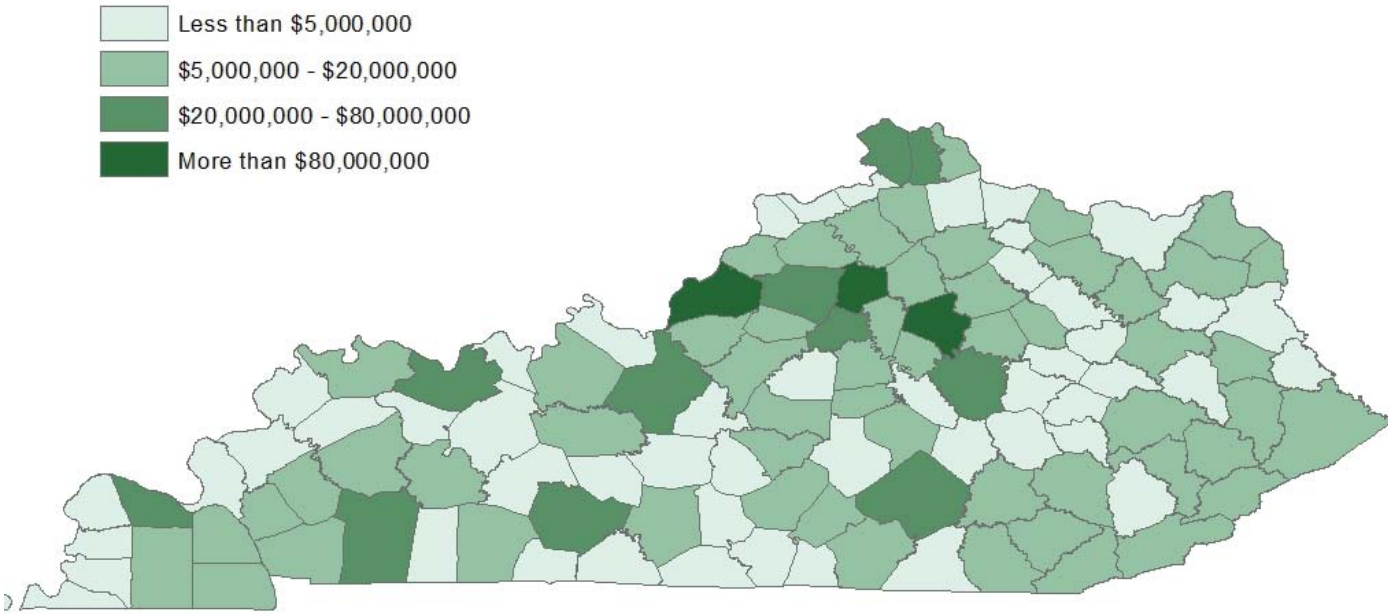
KEHP Parent Plus	19	17	22	47	52	62
KEHP Couple/Family	297	305	311	462	474	444
KEHP Single	254	240	221	264	278	291
Medicare without Prescription	9	7	9	12	14	15
Medicare with Prescription	384	410	418	467	499	581

KRS Total

KEHP Parent Plus	1,108	1,172	1,438	1,416	1,463	1,582
KEHP Couple/Family	5,936	6,202	6,931	6,317	6,858	6,432
KEHP Single	18,066	18,884	20,692	20,249	20,537	20,057
Medicare without Prescription	5,345	5,245	5,207	5,070	5,120	4,995
Medicare with Prescription	26,102	27,784	29,513	30,672	31,684	34,555

Total Fiscal Year Retirement Payments by County

County	Payees	Total	County	Payees	Total	County	Payees	Total
Adair	391	$5,946,296.58	*Grant*	474	$7,788,890.54	*Mclean*	257	$3,109,929.94
Allen	325	$3,745,449.95	*Graves*	720	$10,002,315.35	*Meade*	330	$4,261,143.02
Anderson	1,176	$26,834,406.49	*Grayson*	566	$7,556,392.03	*Menifee*	182	$2,232,422.45
Ballard	170	$2,045,242.21	*Green*	235	$3,292,988.19	*Mercer*	622	$10,502,942.17
Barren	829	$12,113,256.28	*Greenup*	524	$6,407,209.62	*Metcalfe*	270	$2,759,242.86
Bath	310	$4,365,917.84	*Hancock*	191	$2,190,416.26	*Monroe*	206	$2,295,418.43
Bell	591	$8,396,524.45	*Hardin*	1,645	$24,321,041.65	*Montgomery*	517	$7,106,038.04
Boone	1,274	$22,696,252.42	*Harlan*	519	$7,069,069.60	*Morgan*	477	$7,157,667.18
Bourbon	448	$6,387,656.20	*Harrison*	404	$5,157,618.36	*Muhlenberg*	518	$5,407,993.74
Boyd	852	$13,083,407.43	*Hart*	278	$3,830,648.34	*Nelson*	764	$12,010,699.78
Boyle	756	$12,495,205.35	*Henderson*	872	$13,547,099.29	*Nicholas*	172	$2,104,756.20
Bracken	193	$2,214,126.22	*Henry*	844	$16,625,869.36	*Ohio*	483	$5,002,395.58
Breathitt	390	$5,745,784.31	*Hickman*	106	$1,461,532.75	*Oldham*	1,103	$20,172,780.34
Breckinridge	368	$4,859,596.51	*Hopkins*	994	$13,432,014.68	*Owen*	477	$9,847,765.72
Bullitt	1,091	$17,518,815.49	*Jackson*	243	$3,128,037.33	*Owsley*	173	$2,219,684.66
Butler	283	$3,493,197.79	*Jefferson*	14,148	$268,912,487.55	*Pendleton*	295	$4,443,680.52
Caldwell	447	$5,943,784.57	*Jessamine*	745	$12,075,395.55	*Perry*	619	$8,676,171.17
Calloway	933	$11,332,649.41	*Johnson*	525	$7,287,077.04	*Pike*	1,007	$13,609,885.47
Campbell	1,212	$20,116,086.45	*Kenton*	1,829	$34,331,549.28	*Powell*	319	$4,017,744.71
Carlisle	121	$1,419,485.86	*Knott*	344	$4,997,258.81	*Pulaski*	1,897	$29,578,968.38
Carroll	275	$3,884,727.89	*Knox*	460	$6,572,162.36	*Robertson*	70	$858,009.44
Carter	642	$7,697,536.99	*Larue*	308	$4,164,058.37	*Rockcastle*	315	$4,041,331.81
Casey	293	$3,693,609.69	*Laurel*	993	$15,437,438.30	*Rowan*	781	$11,928,528.24
Christian	1,397	$22,360,980.95	*Lawrence*	269	$3,142,188.03	*Russell*	452	$6,016,947.69
Clark	715	$10,994,989.25	*Lee*	236	$3,337,566.38	*Scott*	943	$18,067,228.52
Clay	473	$6,107,196.36	*Leslie*	217	$2,858,752.16	*Shelby*	1,462	$32,040,779.37
Clinton	215	$2,443,593.78	*Letcher*	479	$5,884,132.32	*Simpson*	222	$2,339,288.13
Crittenden	191	$2,286,692.05	*Lewis*	261	$2,868,458.07	*Spencer*	397	$7,171,601.98
Cumberland	166	$2,311,094.29	*Lincoln*	517	$5,894,855.13	*Taylor*	527	$6,661,245.36
Daviess	2,033	$33,215,311.41	*Livingston*	218	$3,297,177.15	*Todd*	239	$2,802,710.29
Edmonson	195	$2,409,851.93	*Logan*	498	$6,144,461.77	*Trigg*	461	$6,293,999.11
Elliott	167	$1,901,458.89	*Lyon*	315	$5,196,332.36	*Trimble*	230	$3,090,875.32
Estill	313	$3,876,351.02	*Madison*	1,896	$27,656,189.28	*Union*	299	$3,344,094.25
Fayette	4,501	$91,497,287.32	*Magoffin*	281	$3,476,535.13	*Warren*	2,265	$36,025,832.09
Fleming	392	$6,323,286.32	*Marion*	440	$5,474,703.35	*Washington*	291	$4,108,602.40
Floyd	737	$11,210,046.57	*Marshall*	704	$9,399,193.07	*Wayne*	432	$5,770,162.99
Franklin	6,521	$180,981,080.95	*Martin*	186	$1,904,187.94	*Webster*	293	$3,594,533.61
Fulton	164	$1,747,331.78	*Mason*	337	$5,050,602.05	*Whitley*	816	$11,333,752.44
Gallatin	96	$1,449,587.08	*Mccracken*	1,341	$22,795,818.68	*Wolfe*	280	$4,081,744.81
Garrard	344	$4,719,246.00	*Mccreary*	310	$2,892,481.37	*Woodford*	790	$18,520,503.53



Benefits paid to retirees and beneficiaries of Kentucky Retirement Systems have a wide ranging impact on the state's economic health. In fiscal year 2012, KRS paid more than $1.6 billion dollars to its recipients. More than 95 percent of these recipients live in Kentucky. Not only do these dollars impact those receiving a benefit, but according to the National Institute of Retirement Security (NIRS), each dollar paid out in pension benefits supported 1.24 dollars in total economic activity in Kentucky. As you can see in the chart, each county in the Commonwealth is impacted by pension benfits, and in an unsteady economy, the consistent addition of the pension funds into the economy is a stabilizing element.

Total Fiscal Year Retirement Payments

	Payees	Payments
Kentucky Total	88,041	$1,539,646,980.09
Out of State	5,381	$76,054,005.71
Grand Total	**93,422**	**$1,615,700,985.80**

Comprehensive Annual Financial Report

Fiscal Year Ended June 30, 2013

Kentucky Retirement Systems

A component unit of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

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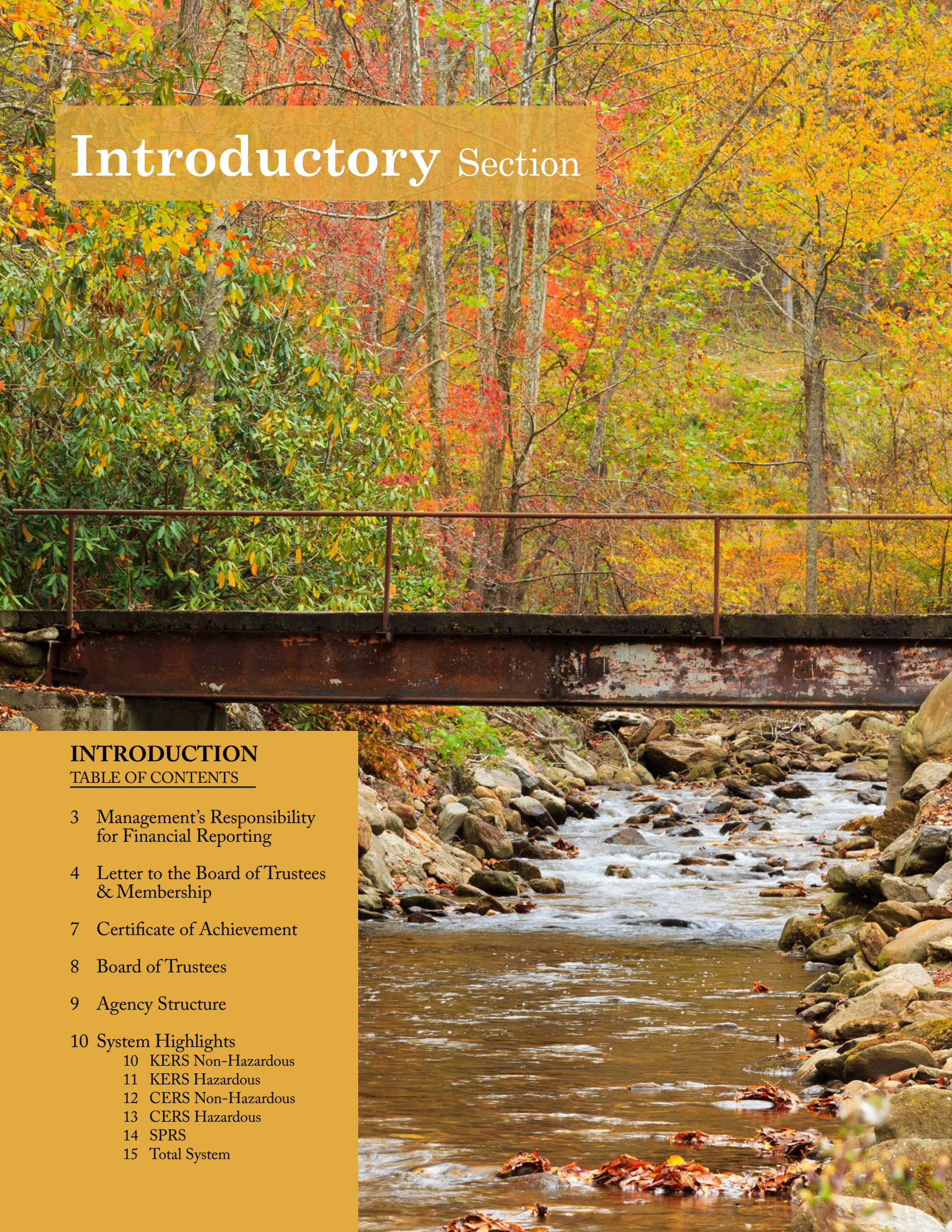

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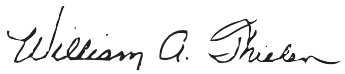
Management's Responsibility for Financial Reporting

Management has prepared the basic financial statements of Kentucky Retirement Systems and is ***responsible for the integrity and fairness*** *of the information presented.*

December 5, 2013 Management has prepared the basic financial statements of Kentucky Retirement Systems and is responsible for the integrity and fairness of the information presented. Some amounts included in the financial statements may be based upon estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these basic financial statements conform to US Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the basic financial statements.

Responsibility Ultimate responsibility for the basic financial statements and annual report rests with the Board of Trustees. The Executive Director and KRS' staff assist the Board in its responsibilities. Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training employees, the establishment of an organizational structure, and the communications of policies and guidelines throughout the organization. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and Board of Trustees.

Kentucky Retirement Systems' external auditors, Kentucky Auditor of Public Accounts, have conducted an independent audit of the basic financial statements in accordance with US Generally Accepted Auditing Standards. This audit is described in their Independent Auditors' Report on page eighteen of the Financial Section. Management has provided the external auditors with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of financial statements.



William A. Thielen, Esq. // Executive Director

Karen D. Roggenkamp // Chief Operations Officer

Todd E. Coleman, CPA // Controller

To the Trustees & Membership

I am pleased to present the Comprehensive Annual Financial Report of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year ended June 30, 2013.

December 5, 2013 I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year that ended June 30, 2013. Responsibility for the accuracy of the data as well as the completeness and fairness of the presentation rests with the management of the Kentucky Retirement Systems. We present this information to assist the Board of Trustees, the members of KERS, CERS and SPRS (collectively referred to as KRS) and the general public in understanding KRS' financial and actuarial status. This CAFR conforms to the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. KRS' financial transactions are reported on the accrual basis of accounting. Additionally, internal accounting controls provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

MAJOR INITIATIVES

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

ARC
Annual Required Contribution

One of the most consequential events that occurred during the 2013 fiscal year was the passage of Senate Bill 2 (SB 2) – a significant pension reform bill – during the Kentucky General Assembly's 2013 Regular Session. The major changes made by SB 2 included the following: 1) inserting language in Kentucky Revised Statutes 61.565(5) that requires the payment of the full actuarially required contribution rate to KERS and SPRS in fiscal years occurring on or after July 1, 2014; 2) establishing a hybrid cash balance plan for all members who begin participating in KERS, SPRS and CERS on or after January 1, 2014; 3) establishing limits on the granting of Cost of Living Adjustments (COLAs); 4) requiring the last participating employer to pay the actuarial cost of "pension spiking", i.e., annual increases in an employee's creditable compensation greater than ten percent (10%) over the employee's last five (5) fiscal years of employment that are not the direct result of a bona fide promotion or career advancement; 5) establishing a Public Pension Oversight Board, the purpose of which is "to review, analyze, and provide oversight to the General Assembly on the benefits, administration, investments, funding, laws and administrative regulations, and legislation pertaining to the Kentucky Retirement Systems"; and 6) expanding the KRS Board of Trustees from nine to thirteen members by adding three new Governor appointees and one new CERS elected member to the board.

In April 2013, immediately following the end of the legislative session, the KRS staff began extensive efforts to design and implement changes to our technology system to accommodate the new hybrid cash balance benefit tier and the pension spiking provisions. Additionally, the KRS Board of Trustees approved a plan submitted by staff to renovate the KRS board room to provide sufficient space for the enlarged board, KRS staff and members of the public desiring to attend board meetings.

Another significant issue that continued to impact KRS during FY 2013 is ongoing lawsuits involving KRS member agencies which are seeking legal determinations that will allow them to terminate participation in KERS and CERS. If these agencies are successful in obtaining legal rulings that allow them to withdraw without paying their proportionate share of the unfunded liability of the KERS and CERS systems, then all other participating employers would be adversely affected through the payment of higher employer contribution rates. Consequently, KRS is expending significant monetary and staff resources defending these various lawsuits.

KRS continued during the 2013 fiscal year, whenever the opportunity presented itself, to educate its members, participating employers, legislators, executive branch officials and the general public about the funded status of its retirement plans, including the impact of reductions to the actuarially recommended employer contribution rates for the KERS and SPRS plans. This underfunding, along with unfunded annual cost of living allowances (COLAs) and two major economic recessions in the last decade, have resulted in a decline of funding ratios (the ratio of assets to accrued liabilities) for the KERS nonhazardous and SPRS pension trusts to alarmingly low levels. As of June 30, 2013, the funded ratio of the KERS nonhazardous pension plan is 23.20% of the actuarial value of assets. The funded ratio of the SPRS pension plan is 37.10% of the actuarial value of assets.

CMS
Centers for Medicare & Medicaid Services

EGWP
Employer Group Waiver Plan

During the first six months of the 2013 fiscal year, KRS continued to contract with the Centers for Medicare and Medicaid Services (CMS) for an Employee Group Waiver Plan (EGWP) that provided medical and pharmacy insurance benefits for Medicare-eligible retirees. However, in August 2012, the KRS Board of Trustees approved a recommendation made by the KRS Retiree Health Plan Committee to provide Medicare Advantage plans to Medicare eligible retirees beginning January 1, 2013. The Medicare Advantage plans are fully insured health insurance plans provided by Humana Insurance Company, Inc. (Humana). These plans replaced the self-insured EGWP. In addition to the Medicare Advantage plans that provide both medical and pharmacy benefits, KRS did maintain a self-insured Medical Only plan that is also administered by Humana. The projected cost savings of moving to the Medicare Advantage plans was very significant. Premium costs to KRS members were significantly below the rates projected for the self-insured EGWP plans. Based on Humana's contractual commitments for a two-year period, KRS' actuary, Cavanaugh Macdonald, projected that the cost savings would be between $45.6 million dollars and $67.8 million dollars, which would be shared on roughly a 50-50 basis by retirees who pay all or a portion of their health insurance premiums and the underfunded KRS health insurance trust.

START
Strategic Technology Advancements for the Retirement of Tomorrow

KRS' progress continued on our technology system deployment. Strategic Technology Advancements for the Retirement of Tomorrow (START) provides employer interface and web based functionality, and allows active members, as well as retirees, to access their account information online. The warranty period was completed in November 2012. Additionally, our technology staff has been making the required changes dictated by the provisions of SB 2, which will be implemented beginning January 1, 2014. Our Employer Reporting, Compliance, and Education (ERCE) staff continued to work with employers through on-site visits and correspondence. Our employer education included additional outreach to participating universities and boards of education to accommodate special reporting needs.

To assist both employers and members, KRS completed a redesign of our website (http://www.kyret.ky.gov). The updated website provides improved navigation and research capabilities, in addition to allowing active members and retirees to access their account information in a secure manner.

During the 2013 fiscal year, KRS continued its member education and outreach program, which included seminars throughout the Commonwealth, on-site workshops and online training opportunities. Nine Pre-Retirement Education Program (PREP) programs were conducted throughout the state. These programs offer a general retirement education and planning curriculum as well as focused training on how to utilize the active Member Self Service feature on the KRS website. In May, KRS staff launched a series of Active Member Self Service workshops onsite, assisting 130 members through instructor led computer lab sessions.

KRS continues to seek new ways to serve and educate our membership. KRS is exploring more online communications platforms and recently distributed the first electronic newsletter to 41,000 active members and retirees. Since KRS started offering webinars in April, more than 40 have been hosted providing active members with general benefit and planning information. During the month of October, KRS staff scheduled 19 webinars to provide information to retirees enrolling in the non-Medicare insurance plans during the open enrollment period. To date, nearly 1,200 active members and retirees have participated in a webinar. KRS also launched its Facebook page (www.facebook/kyretirement) in October and continues to analyze the potential for additional social media channels. Our staff will continue to explore educational outreach opportunities and will expand upon these efforts in 2014.

The economic problems in the post financial crisis period continue to overhang the financial markets; however, the financial markets and economy continue to move forward with the support of the Federal Reserve. For the 2013 fiscal year, the economy was healthier and the financial markets were in somewhat better shape than they had been for several years.

The 2013 fiscal year was full of uncertainty, which caused volatility spikes in the market throughout the twelve-month period. When the dust settled, public equities performed well, especially within the developed markets, and high yield fixed income investors were rewarded. Investments in real estate and absolute return strategies were also solid performers, while more traditional fixed income investors suffered losses.

Despite a strong surge from the public equity and high yield fixed income spaces, questions surrounding how pension funds will meet their expected return targets, and thus fund their liabilities, are valid and taking center stage. Now more than ever, funds are faced with the challenge to meet return expectations in a slow growth environment and have turned to alternative investment strategies to do just that. Asset classes like private equity, real estate, real return, and absolute return strategies are being employed more significantly with a concurrent reduction in both traditional bonds and public equities. KRS has already moved in this direction while still carefully monitoring how the new asset classes impact returns, risks, and liquidity within the portfolios. Along with the additional asset classes now at staff's disposal, recently approved target asset allocations for each plan (in response to the changing nature of the markets and individual plan needs) have been implemented by staff. The fiscal year was characterized by a continued build out of the portfolios.

For the fiscal year ended June 30, 2013, the KRS pension fund returned 10.82%, which was 0.39% short of the benchmark return of 11.21%. The KRS insurance fund returned 10.11% for the fiscal year compared to the benchmark's 11.05% return. These investment gains are net of fees and expenses, and it should be noted that they exceeded the actuarially assumed rate of 7.75% by a significant margin.

For the 10-years ending June 30, 2013, the KRS pension fund portfolio earned an annualized total return of 6.60%, slightly underperforming the benchmark return of 6.79%. The KRS insurance fund also missed its benchmark for the 10-year period ending June 30, 2013, earning 6.18% versus 6.93% for the benchmark.

ACTUARIAL FUNDING

KRS administers both a pension fund and an insurance fund for each of the systems it manages. These trusts are used to fund monthly pension and health care payments to and on behalf of retirees. Non-hazardous employees are statutorily required to contribute 5% of pre-tax salary to their pension benefit, while hazardous employees contribute 8% on a pre-tax basis. All employees hired with an initial participation date on or after September 1, 2008 must contribute an additional 1% of their pre-tax compensation toward their retiree health insurance benefits. These monies are deposited in a 401(h) account within the pension trust. Employer contributions are calculated annually by the Board of Trustees and include the normal cost of pension and insurance benefits plus a contribution toward the unfunded liability of the pension and insurance trusts designed to amortize that liability over a period no longer than 30 years. Employer contributions also include an administrative fee that is used to pay annual operating expenses of KRS. The administrative expense is shared among the plans based on the ratio of a plan's membership to the total system membership at the beginning of a fiscal year.

Funding ratios have fallen both steadily and significantly over the last decade as a result of unfavorable market conditions, higher than anticipated retirement rates, employer underfunding in the KERS nonhazardous and SPRS plans, and increased expenses for annual cost of living adjustments that were not pre-funded by the employers. While improved market conditions and the increased funding in the KERS and SPRS plans have slowed the growth of the unfunded liabilities of the various systems, the pension funding levels continued to decline for 2013. One of the reasons is that KRS uses a five-year smoothing method to lessen the impact of annual market gains and losses. Twenty percent (20%) of the market gains or losses are recognized each year over the five-year smoothing period. The full effects of the market losses in 2009 will not be eliminated until after the 2013 fiscal year. The funding levels of all systems as of June 30, 2013 are listed on page 119 of the Actuarial Section.

PROFESSIONAL SERVICES

KRS continues to engage a number of professional consultants to assist trustees and staff in key business areas such as investments, taxes, auditing services and legal representation. A list of the Board's contract consultants can be found in the organizational chart on page nine. A list of external investment managers can be found in the investment section of this report.

CERTIFICATE OF **ACHIEVEMENT**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2012. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports and is valid for a period of one year. This was the fifteenth consecutive award earned by KRS. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized document. The report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe our 2013 CAFR will continue to meet the Certificate of Achievement Program's requirements, and we will be submitting it to the GFOA for their consideration.

KRS also received a 2012 Recognition Award for Administration that was presented by the Public Pension Coordinating Council, a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR). The award is given in recognition of meeting professional standards for plan administrators set forth in the Public Pension Standards.

OTHER INFORMATION

Kentucky statutes require an annual audit by either an independent certified public accountant or the Auditor of Public Accounts. In addition, during the 2013 legislative session language was added to Kentucky Revised Statutes 61.645(12) by the enactment of SB 2 which requires the Kentucky Auditor of Public Accounts to conduct the annual financial statements audit at least once every five years. The Auditor of Public Accounts performed the audit for the fiscal year ended June 30, 2013. The results of that audit are contained in the Financial Section.

CONCLUSION

Copies of this report will be provided to the Governor, the State Auditor of Public Accounts, all 138 State Legislators, key Legislative Research Commission staff, and the State Budget Director. A complete copy of the report will be posted on the KRS website.

I would like to take this opportunity to thank the KRS Board of Trustees, the staff, and our advisors and service providers who worked tirelessly during FY 2013 to make this a successful year for KRS. We look forward to continuing to provide service of the highest quality to our members.

William A. Thielen

William A. Thielen, Esq. // Executive Director

Board of Trustees

The Board of Trustees is comprised of thirteen members: two elected by KERS members, three elected by CERS members, one elected by SPRS members, the Secretary of the State Personnel Cabinet, and six appointed by Governor Steve Beshear. Three of the six appointees are selected from lists of nominees provided by the Kentucky Association of Counties, the Kentucky League of Cities, and the Kentucky School Board Association, so that each organization has a representative.

Randy Overstreet, *Chair*
Elected by SPRS
Term ends March 31, 2015

Dr. Daniel Bauer, *Vice Chair*
Governor Appointee
Term ends March 31, 2016

Mike Cherry
Governor Appointee
Term ends March 31, 2016

Edwin Davis
Elected by CERS
Term ends March 31, 2017

Thomas Elliott
Governor Appointee
Term ends March 31, 2015

J.T. Fulkerson
Governor Appointee
Term ends July 1, 2017

Joseph Hardesty
Governor Appointee
Term ends July 1, 2017

Bobby Henson
Elected by KERS
Term ends March 31, 2014

Tim Longmeyer
Personnel Secretary
Term ends Ex-Officio

David Rich
Elected by CERS
Term ends October 31, 2017

Susan Smith
Elected by KERS
Term ends March 31, 2014

Richard Tanner
Governor Appointee
Term ends July 1, 2017

Vacancy
Elected by CERS
Term ends March 31, 2017

Agency Structure as of December 1, 2013

KERS Non-Hazardous

RETIRED MEMBERS

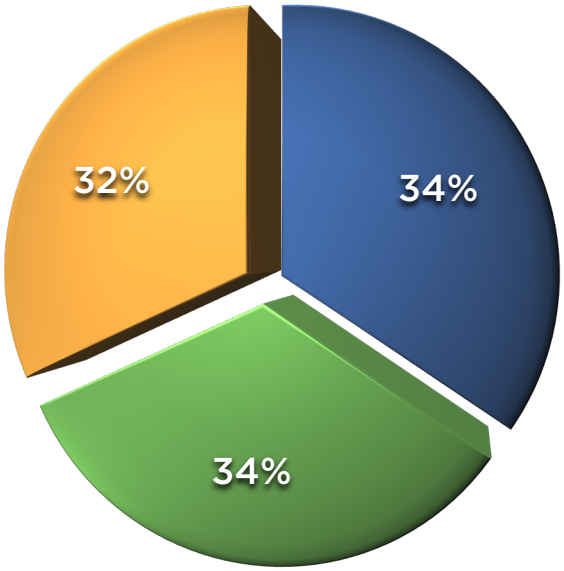
37,240

ACTIVE MEMBERS

40,710

INACTIVE MEMBERS

40,375



RETIRED MEMBERSHIP

AVERAGE AGE

67.6

AVERAGE ANNUAL BENEFIT PAYMENT

$21,698

ACTIVE MEMBERSHIP

AVERAGE AGE

44.5

AVERAGE SALARY

$38,943

KERS **HISTORY**

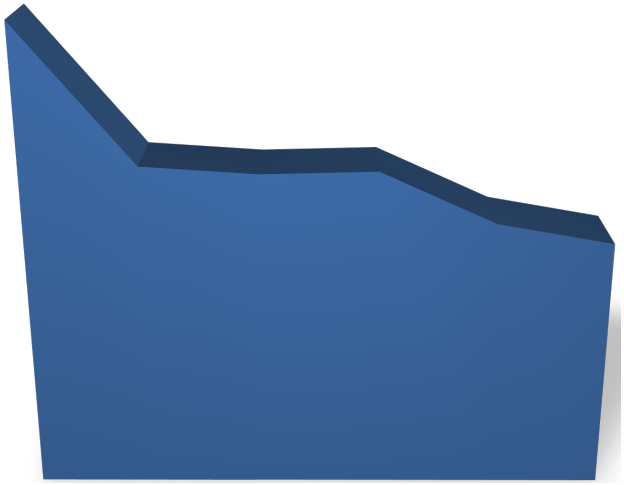
*Kentucky Employees Retirement System (KERS) was established **July 1, 1956** by the state legislature.*

PLAN NET POSITION

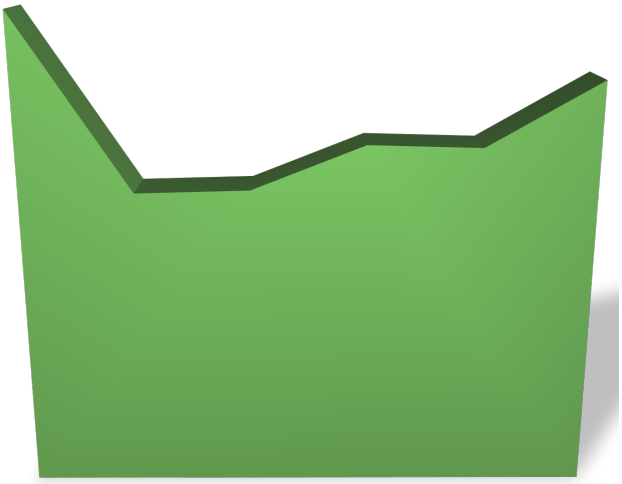
Plan Net Position (in Thousands)

Fund	2008	2009	2010	2011	2012	2013
Pension	$5,056,869	$3,584,601	$3,504,501	$3,533,393	$2,977,069	$2,760,753
Insurance	$574,479	$365,367	$368,799	$421,972	$418,490	$496,040
Total	**$5,631,348**	**$3,949,968**	**$3,873,300**	**$3,955,365**	**$3,395,559**	**$3,256,793**

Pension



Insurance



KERS Hazardous

RETIRED MEMBERS

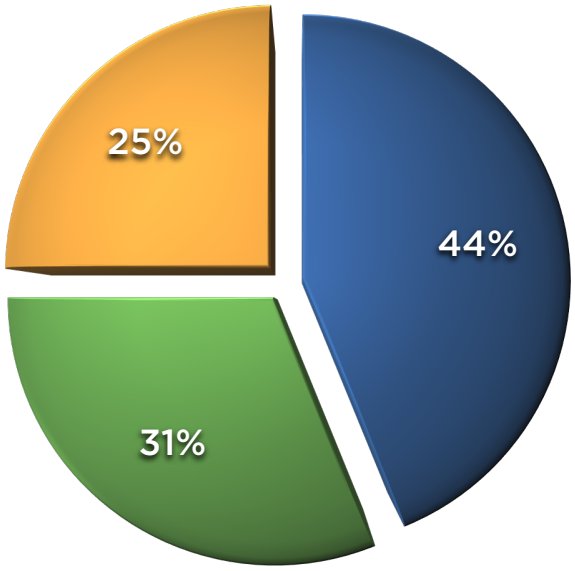
2,312

ACTIVE MEMBERS

4,057

INACTIVE MEMBERS

2,882



RETIRED MEMBERSHIP

AVERAGE AGE

62.7

AVERAGE ANNUAL BENEFIT PAYMENT

$14,905

ACTIVE MEMBERSHIP

AVERAGE AGE

40.6

AVERAGE SALARY

$31,988

KERS **HISTORY**

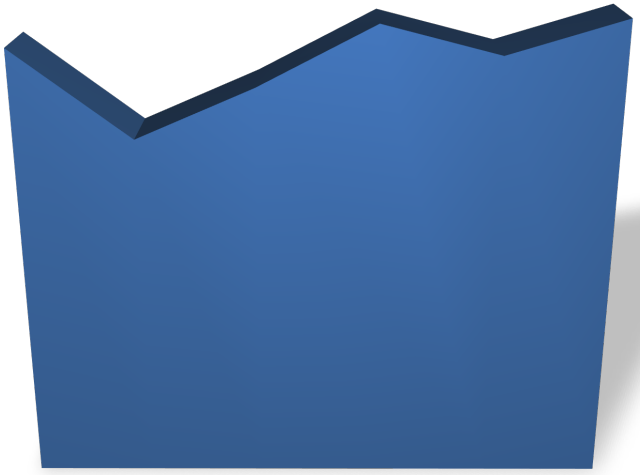
*Kentucky Employees Retirement System (KERS) was established **July 1, 1956** by the state legislature.*

PLAN NET POSITION

Plan Net Position (in Thousands)

Fund	2008	2009	2010	2011	2012	2013
Pension	$484,438	$388,951	$443,606	$509,120	$476,589	$514,592
Insurance	$269,300	$219,500	$271,239	$319,736	$330,730	$372,883
Total	**$753,738**	**$608,451**	**$714,846**	**$828,856**	**$807,319**	**$887,475**

Pension



Insurance

CERS Non-Hazardous

RETIRED MEMBERS

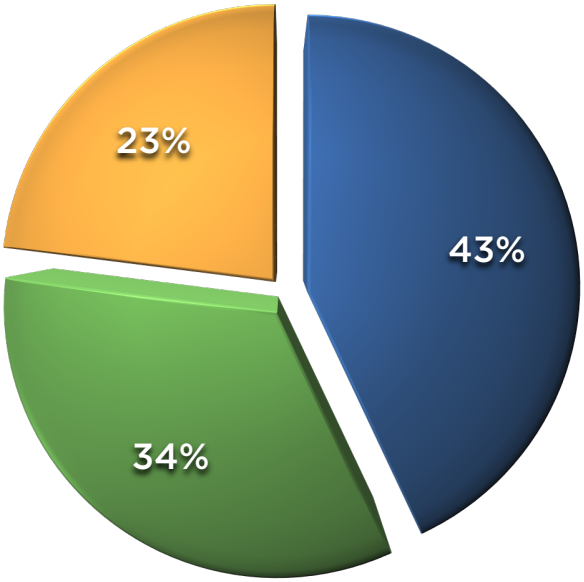
44,164

ACTIVE MEMBERS

82,631

INACTIVE MEMBERS

67,013



RETIRED MEMBERSHIP

AVERAGE AGE

68.7

AVERAGE ANNUAL BENEFIT PAYMENT

$11,704

ACTIVE MEMBERSHIP

AVERAGE AGE

47.8

AVERAGE SALARY

$27,333

CERS **HISTORY**

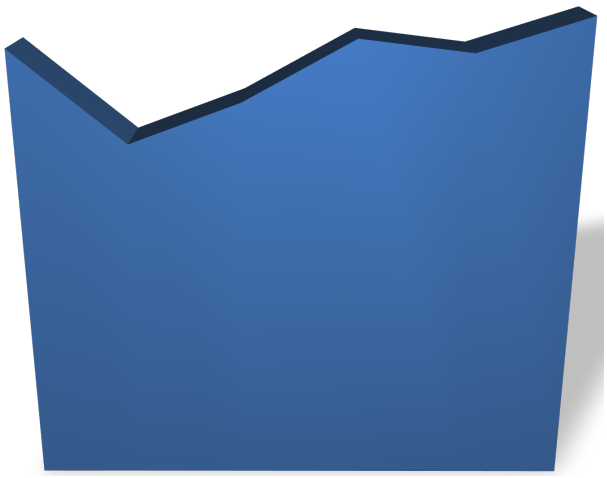
*County Employees Retirement System (CERS) was established **July 1, 1958** by the state legislature.*

PLAN NET POSITION

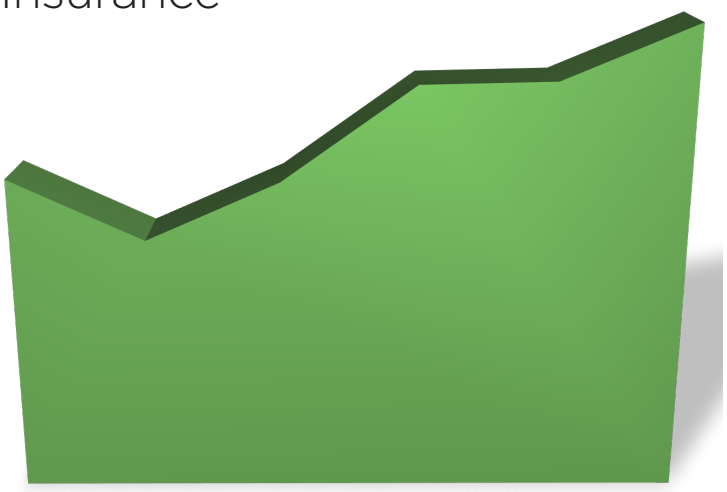
Plan Net Position (in Thousands)

Fund	2008	2009	2010	2011	2012	2013
Pension	$5,431,735	$4,331,010	$4,820,490	$5,543,962	$5,381,602	$5,795,568
Insurance	$1,105,945	$894,490	$1,094,821	$1,418,818	$1,428,821	$1,618,960
Total	**$6,537,680**	**$5,225,500**	**$5,915,311**	**$6,962,780**	**$6,810,423**	**$7,414,528**

Pension



Insurance



CERS Hazardous

RETIRED MEMBERS

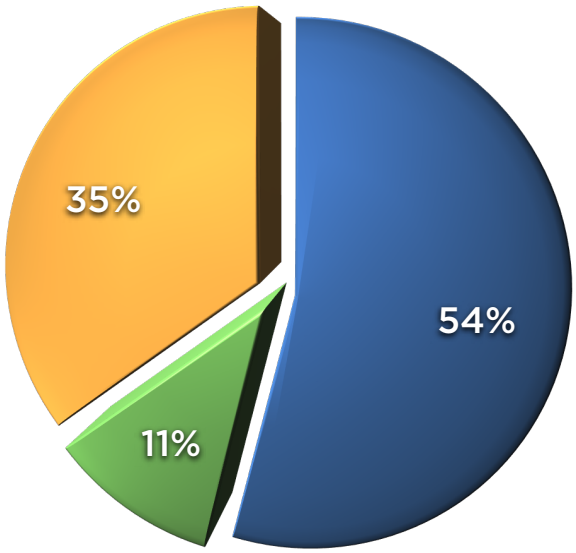
5,840

ACTIVE MEMBERS

9,069

INACTIVE MEMBERS

1,956



RETIRED MEMBERSHIP

AVERAGE AGE

59.6

AVERAGE ANNUAL BENEFIT PAYMENT

$25,042

ACTIVE MEMBERSHIP

AVERAGE AGE

39.1

AVERAGE SALARY

$50,605

CERS **HISTORY**

*County Employees Retirement System (CERS) was established **July 1, 1958** by the state legislature.*

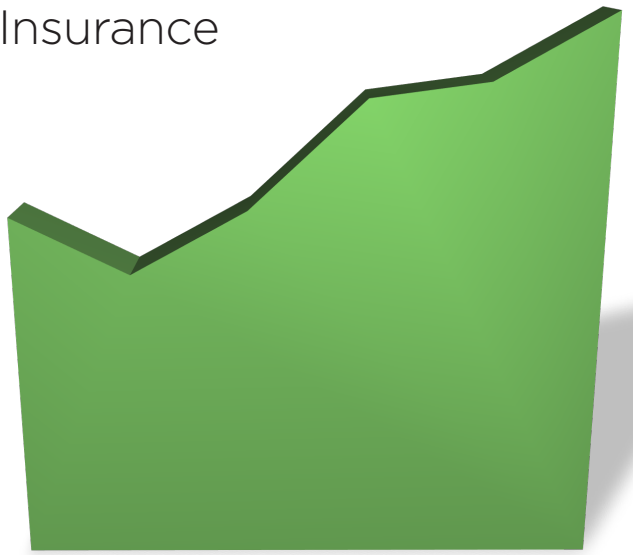
PLAN NET POSITION

Plan Net Position (in Thousands)

Fund	2008	2009	2010	2011	2012	2013
Pension	$1,644,982	$1,320,560	$1,506,894	$1,751,962	$1,672,970	$1,833,571
Insurance	$576,414	$483,233	$586,614	$761,075	$785,874	$891,320
Total	**$2,221,396**	**$1,803,793**	**$2,093,508**	**$2,513,037**	**$2,458,844**	**$2,724,891**

Pension

Insurance



SPRS

RETIRED MEMBERS

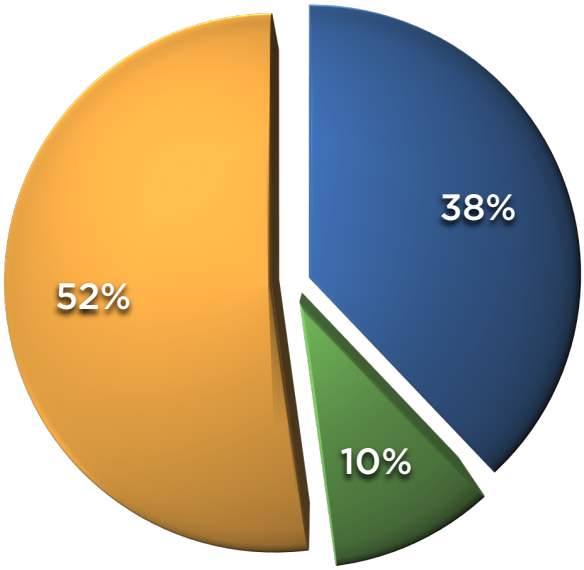
1,240

ACTIVE MEMBERS

901

INACTIVE MEMBERS

236



RETIRED MEMBERSHIP

AVERAGE AGE

61.8

AVERAGE ANNUAL BENEFIT PAYMENT

$37,820

ACTIVE MEMBERSHIP

AVERAGE AGE

37.0

AVERAGE SALARY

$50,173

SPRS **HISTORY**

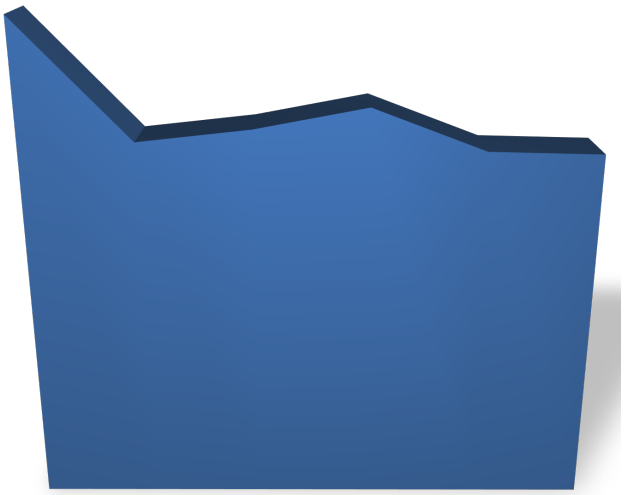
*State Police Retirement System (SPRS) was established **July 1, 1958** by the state legislature.*

PLAN NET POSITION

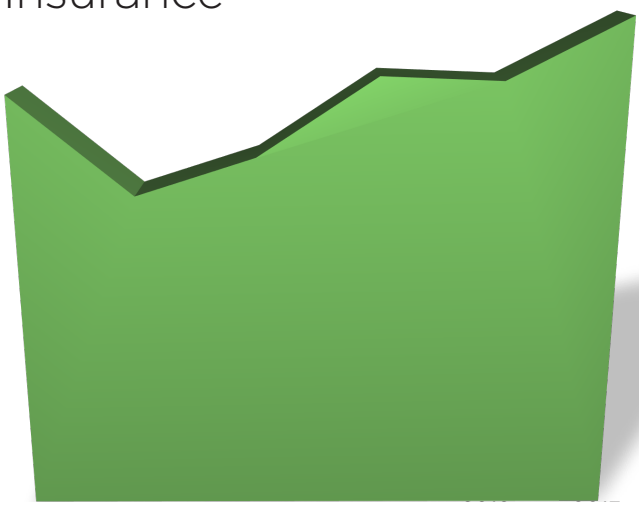
Plan Net Position (in Thousands)

Fund	2008	2009	2010	2011	2012	2013
Pension	$337,359	$256,575	$264,949	$279,283	$250,476	$248,698
Insurance	$121,782	$93,682	$104,511	$126,737	$125,398	$142,691
Total	**$459,141**	**$350,257**	**$369,460**	**$406,020**	**$375,874**	**$391,389**

Pension



Insurance



Total System

RETIRED MEMBERS

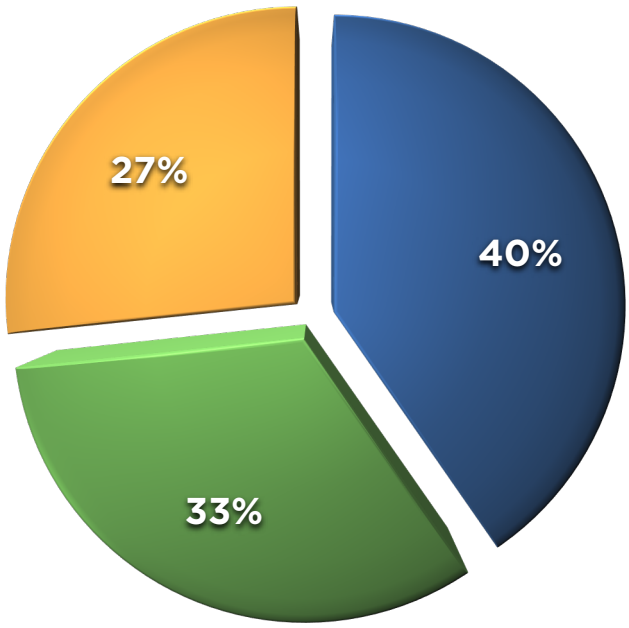
90,796

ACTIVE MEMBERS

137,368

INACTIVE MEMBERS

112,462

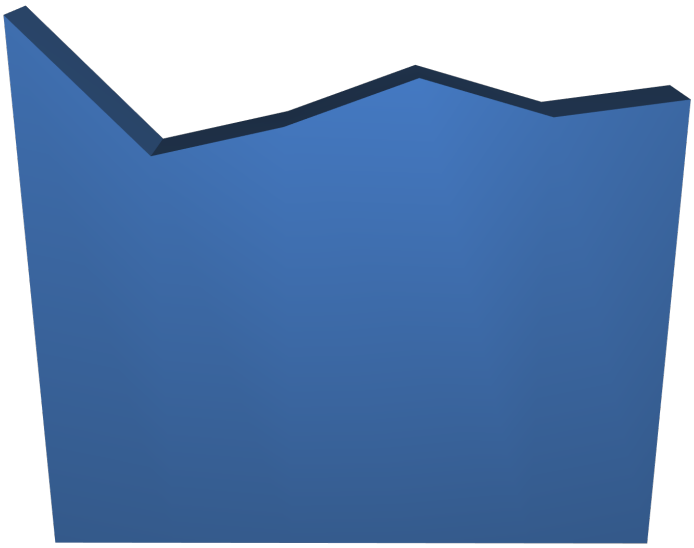


NET POSITION

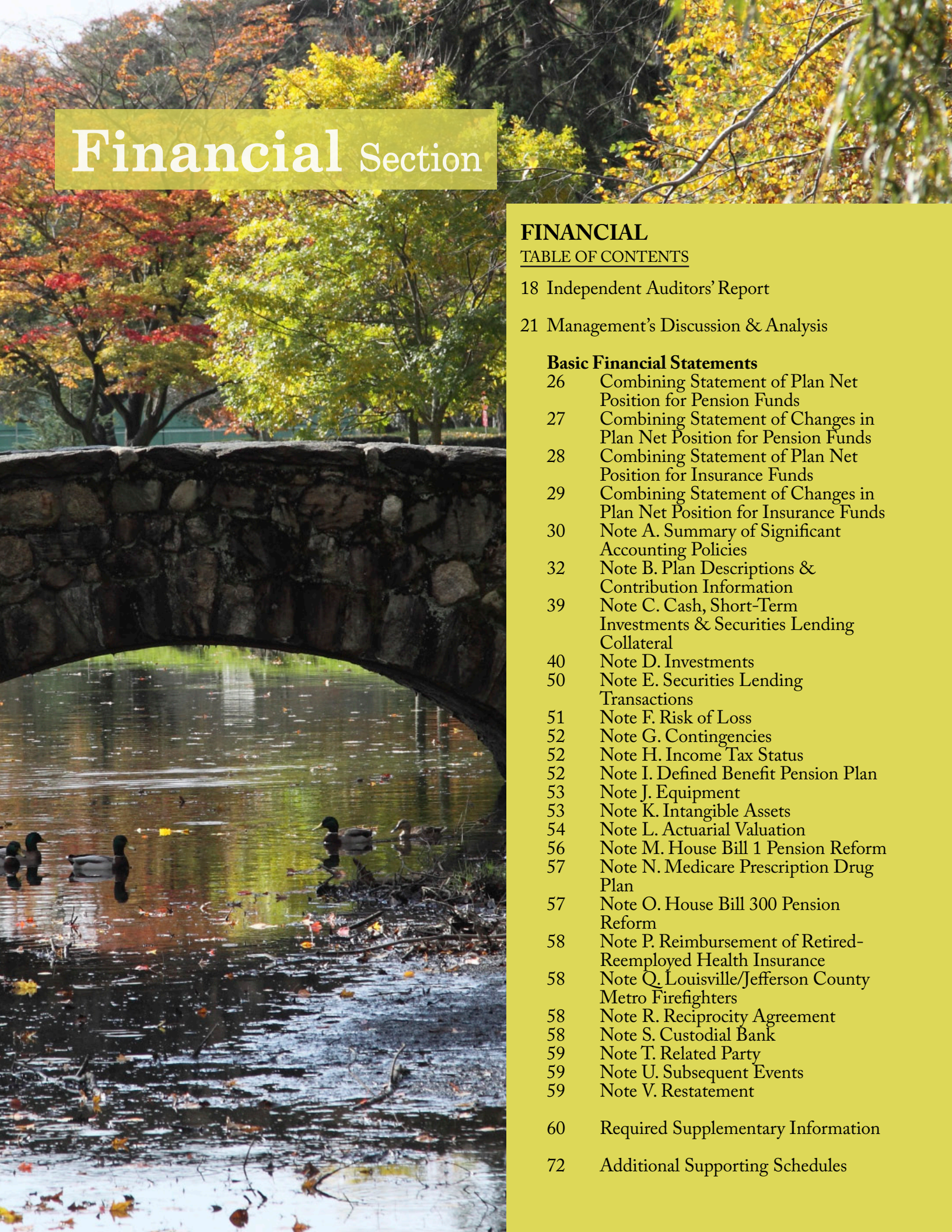
Net Position (in Thousands)

Fund	2008	2009	2010	2011	2012	2013
Pension	$12,955,383	$9,881,697	$10,540,440	$11,617,720	$10,754,057	$11,153,182
Insurance	$2,647,920	$2,056,272	$2,425,987	$3,048,338	$3,089,313	$3,521,894
Total	**$15,603,303**	**$11,937,969**	**$12,966,427**	**$14,666,058**	**$13,843,370**	**$14,675,076**

Pension



Insurance



Financial Section

FINANCIAL

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ADAM H. EDELEN
AUDITOR OF PUBLIC ACCOUNTS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

Independent Auditor's Report

Report on the Financial Statements

We have audited the accompanying combining financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2013, and the related notes to the financial statements, which collectively comprise the Kentucky Retirement Systems basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Kentucky Retirement Systems' management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Kentucky Retirement Systems' preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Kentucky Retirement Systems' internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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WWW.AUDITOR.KY.GOV
AN EQUAL OPPORTUNITY EMPLOYER M/F/D

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2013 and the changes in plan net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Emphasis-of-Matters

Reporting Entity

As discussed in Note A, the financial statements present only the Kentucky Retirement Systems, and are not intended to present fairly the financial position of the Commonwealth of Kentucky, or the results of its operations in conformity with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

The combining financial statements of Kentucky Retirement Systems for the year ended June 30, 2012 were audited by other auditors whose report dated December 5, 2012, stated that the plan net assets (position) as of June 30, 2012 and changes in plan net assets (position) for the year then ended were in conformity with accounting principles generally accepted in the United States of America. The combining financial statements for the year then ended (not presented herein), were audited by other auditors whose report, dated December 5, 2012, expressed an unqualified opinion on those statements.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (pages 7 through 12) and the Schedules of Funding Progress and Schedules of Contributions from Employers and Contributing Entities (pages 69 through 79) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic financial statements in an appropriate operational, economical, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with

knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures did not provide us with sufficient evidence to express an opinion or provide any assurance.

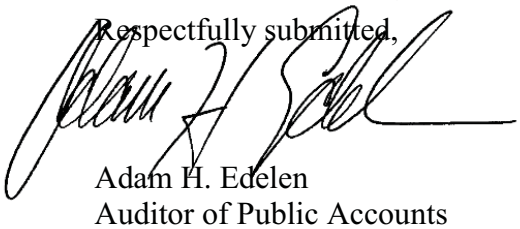
Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Kentucky Retirement System's basic financial statements. The additional supporting schedules (pages 83 through 86) are presented for purposes of additional analysis and are not a required part of the basic financial statements. The supporting schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supporting schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 5, 2013 on our consideration of the Kentucky Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering KRS' internal control over financial reporting and compliance.

Respectfully submitted,



Adam H. Edelen
Auditor of Public Accounts

Management's Discussion & Analysis

This discussion and analysis of Kentucky Retirement Systems' financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2013. Please read it in conjunction with the financial statements, which begin on page 10.

Pension Fund The following highlights are explained in more detail later in this discussion.

- The combined net position of all pension funds administered by Kentucky Retirement Systems increased by $399.1 million during fiscal 2013.
- Member and Employer contributions reported for fiscal 2013, totaled $1,027.2 million compared to $872.8 million in fiscal 2012. This increase is due to an increase in the employer contribution rates and the collection of additional health insurance contributions.
- The net appreciation in the fair value of investments was $890.6 million for the fiscal year ended June 30, 2013 compared to net depreciation of $261.2 million for the prior fiscal year. Included in this net appreciation in fiscal 2013 were realized gains on sales of investments of $464.6 million.
- Interest, dividend and net securities lending income was $291.3 million compared to $270.3 million in fiscal 2012.
- Pension benefits paid to retirees and beneficiaries totaled $1,706.2 million compared to $1,649.2 million in fiscal 2012. Refund of contributions paid to former members upon termination of employment totaled $32.2 million compared to $31.0 million in fiscal 2012.
- The Administrative Expense Budget includes expenses for health care fees, investments, and internal audit as separate line items. Administrative expense totaled $30.5 million compared to $27.8 million in the prior fiscal year. Certain START Project costs were capitalized in fiscal 2013 between fixed assets and intangible assets, as appropriate.
- The member health insurance contribution totaled $9.1 million, for the fiscal year ended June 30, 2013, compared to $7.3 million in the prior fiscal year.

Insurance Fund The following highlights are explained in more detail later in this discussion.

- The combined net position of the insurance fund administered by Kentucky Retirement Systems increased by $432.5 million during fiscal 2013.
- Premiums received from retirees who participated in the Medicare eligible self-funded plan totaled $26.3 million, compared to $28.4 million in fiscal 2012. The decrease is a result of Centers for Medicare & Medicaid Services (CMS) paying a portion of the retiree's premium. In addition, the decrease is attributable to changes in coverage chosen by retirees.
- Employer contributions of $447.3 million were received compared to $436.2 million in fiscal 2012. This increase is due to an increase in the insurance contribution rate.
- The Employer Group Waiver Plan receipts from the CMS subsidies totaled $11.2 million compared to $17.8 million in fiscal 2012. Changes in receipts depend upon the fluctuation of membership in the Plan.
- The net appreciation in the fair value of investments was $232.9 million compared to net depreciation of $118.7 million for the prior fiscal year. Included in this net depreciation in fiscal 2013 were realized gains on sales of investments of $108.4 million.
- Interest, dividend and net securities lending income was $90.4 million compared to $71.4 million in fiscal 2012.
- Premiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled $283.1 million. Payments for the self-funded healthcare reimbursements (over age 65) totaled $78.8 million. The total of insurance premiums paid plus self-funded reimbursements was $361.9 million for fiscal 2013. Insurance premiums paid plus self-funded healthcare reimbursements for the prior plan year totaled $380.4 million. On August 6, 2012, the Board of Trustees voted to cease self-funding of healthcare benefits for most KRS Medicare eligible retirees. The Board elected to contract with Humana Insurance Company to provide healthcare benefits to KRS' retirees through a fully-insured Medicare Advantage Plan. The Humana Medicare Advantage Plan became effective January 1, 2013.
- As part of the application process to the Centers for Medicare & Medicaid Services to enter into a contract to offer a Medicare Prescription Drug Plan, Kentucky Retirement Systems was required to establish a segregated Insolvency Account in the amount of $100 thousand; this account must retain a minimum balance of $100 thousand. The account consists of cash and/or cash equivalents, and is invested on a daily basis. The balance as of June 30, 2013, totaled $100 thousand.
- The reimbursement of retired-reemployed health insurance totaled $5.8 million for the fiscal year ended June 30, 2013, compared to $6.3 million in the prior fiscal year.

Using This Financial Report Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combining Statement of Plan Net Position for the Pension Funds, on page 26 and the Combining Statement of Plan Net Position for the Insurance Fund, on page 28, provide a snapshot of the financial position of each of the three systems at June 30, 2013. The Combining Statement of Changes in Plan Net Position for the Pension Funds, on page 27, and the Combining Statement of Changes in Plan Net Position for the Insurance Fund, on page 29, summarize the additions and deductions that occurred for each of the three systems during fiscal 2013.

The Schedules of Funding Progress, on pages 61-63, includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of Contributions from Employers and Other Contributing Entities, on pages 67-71, presents historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

Funds as a Whole Kentucky Retirement Systems' combined net position increased, during the fiscal year ended June 30, 2013, by $831.6 million from $13,843.4 million to $14,675.0 million. Net position for the prior fiscal year decreased by $822.6 million. The increase in net position for the plan year ended June 30, 2013 is primarily attributable to a net appreciation in the fair value of investments, an increase in in member contributions and a decrease in health care costs. The analysis below focuses on net position (Table 1) and changes in net position (Table 2) of Kentucky Retirement Systems' Pension and Insurance Funds.

Table 1. Plan Net Position (in Millions)

	Pension Funds			Insurance Fund			Total		
Assets	2013	2012	2011	2013	2012	2011	2013	2012	2011
Cash & Investments	$12,431.7	$11,922.7	$13,217.3	$3,992.1	$3,243.5	$3,458.4	$16,423.8	$15,166.2	$16,675.7
Receivables	136.1	145.6	115.3	49.1	71.9	32.3	185.2	217.5	147.6
Equip/Int Assets, net of dep/amort.	16.1	13.8	9.7				16.1	13.8	9.7
Total Assets	12,583.9	12,082.1	13,342.3	4,041.2	3,315.4	3,490.7	16,625.1	15,397.5	16,833.0
Total Liabilities	(1,430.8)	(1,328.1)	(1,724.6)	(519.3)	(226.0)	(442.4)	(1,950.1)	(1,554.1)	(2,167.0)
Plan Net Position	$11,153.1	$10,754.0	$11,617.7	$3,521.9	$3,089.4	$3,048.3	$14,675.0	$13,843.4	$14,666.0

Table 2. Changes in Plan Net Position (in Millions)

	Pension Funds			Insurance Fund			Total		
Additions	2013	2012	2011	2013	2012	2011	2013	2012	2011
Member Cont.	$276.3	$274.1	$306.0	$	$	$	$276.3	$274.1	$306.0
Employer Cont.	741.8	591.4	506.6	447.3	436.2	387.5	1,189.1	1,027.6	894.1
Heath Ins. Cont.	9.1	7.3	6.6				9.1	7.3	6.6
Premiums Rec'd				26.3	28.4	31.0	26.3	28.4	31.0
Retired Remp Ins.				5.8	6.3	4.0	5.8	6.3	4.0
Employer Group Waiver Plan				11.2	17.8	22.1	11.2	17.8	22.1
Invest. Inc. (net)	1,140.8	(28.5)	1,902.2	313.6	(55.3)	561.2	1,454.4	(83.8)	2,463.4
Total Additions	2,168.0	844.3	2,721.4	804.2	433.4	1,005.8	2,972.2	1,277.7	3,727.2
Deductions									
Benefit payments	1,706.2	1,649.2	1,591.5				1,706.2	1,649.2	1,591.5
Refunds	32.2	31.0	27.5				32.2	31.0	27.5
Administrative Ex.	30.5	27.8	24.9	9.8	11.9	10.4	40.3	39.7	3o5.3
Capital Projects Ex.			0.2						0.2
Healthcare Costs				361.9	380.4	373.1	361.9	380.4	373.1
Total Deductions	1,768.9	1,708.0	1,644.1	371.7	392.3	383.5	2,140.6	2,100.3	2,027.6
Increase (Decrease) in Plan Net Position	$399.1	$(863.7)	$1,077.3	$432.5	$41.1	$622.3	$831.6	$(822.6)	$1,699.6

In Thousands or Millions
Much of the data presented in this report is abbreviated "in thousands" or "in millions". For example $1,000 represented "in millions" is really $1,000,000,000.

Pension Fund Activities

Member contributions increased by $2.2 million. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Nonhazardous members pay pension contributions of 5% of creditable compensation and hazardous members contribute 8% of creditable compensation. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions increased by $150.4 million due to the increase in employer contribution rate applied to covered payroll.

Table 3. Investment (Loss) Income for Pension Funds (in Millions)

Asset	2013	2012	2011
(Decrease) Increase in fair value of investments	$426	$(238)	$707
Investment income net of investment expense	250	232	244
(Loss) Gain on sale of investments	465	(23)	951
Net Investment (Loss) Income	**$1,141**	**$(29)**	**$1,902**

Table 4. Investment (Loss) Income for Insurance Fund (in Millions)

Asset	2013	2012	2011
(Decrease) Increase in fair value of investments	$125	$(21)	$169
Investment income net of investment expense	81	63	44
(Loss) Gain on sale of investments	108	(97)	348
Net Investment (Loss) Income	**$314**	**$(55)**	**$561**

Insurance fund deductions decreased by $20.6 million due to the cessation of the self funding plan.

Insurance fund net position increased by $432.5 million due to the increase in insurance contribution rates.

Net position of the pension funds increased by $399.1 million ($11,153.1 million compared to $10,754.0 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. Net position of the insurance fund increased by $432.5 million ($3,521.9 million compared to $3,089.4 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance. The increase in net position is primarily attributable to the increase in employer contribution rates for insurance.

Net investment income increased by $1,170 million. This can be illustrated in Table 3. The pension funds experienced an increase in income primarily due to the gain on the sale of investments.

Pension fund deductions increased by $60.9 million caused principally by an increase of $57 million in benefit payments. Refunds of member contributions increased by $1.2 million and administrative expenses increased by $2.7 million. Certain START Project costs were capitalized in fiscal 2013 between fixed assets and intangible assets, as appropriate.

Insurance Fund Activities Employer contributions paid into the insurance fund increased by $11.1 million over the prior fiscal year. This increase is a result of the increase in the employer contribution rate applied to covered payroll.

Net investment income increased $369.0 million. This increase in net investment income is due primarily to the increase in the fair value of investments. This is illustrated in Table 4 above.

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

Accounting standards require that the Statement of Net Position state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the Schedules of Funding Progress beginning on page 61. The asset value stated in the Schedules of Funding Progress is the actuarial value of assets. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by Kentucky Retirement Systems' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is defined as the unfunded actuarial accrued liability.

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

The unfunded actuarial accrued liability in the pension plans increased by $744.9 million for a total unfunded amount of $14,502.9 million for the fiscal year ended June 30, 2013, compared to an unfunded amount of $13,758.0 million for the fiscal year ended June 30, 2012. In recent years, funding levels for the pension funds have fallen dramatically due to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, and expenditures for unfunded retiree Cost of Living Adjustments. In addition, KERS, KERS Hazardous, and SPRS are funded less than the actuarially determined rate. Within the KERS and SPRS plans, employer contribution rate reductions enacted by the Kentucky General Assembly have limited the Plans' ability to correct the declining funding levels.

The insurance plan's unfunded actuarial accrued liability for the plan year ended June 30, 2013, decreased to $3,092.1 million from $4,321.5 million for the plan year ended June 30, 2012. This is a decrease in the unfunded actuarial accrued liability of $1,229.4 million. This decrease is due to the change for the Medicare-eligible retirees from the self-insured health plans to fully insured Medicare Advantage plans administered by Humana.

Annual required contributions of the employers as actuarially determined and actual contributions made by employers and other contributing entities in relation to the required contributions are provided in the Schedules of Contributions from Employers and Other Contributing Entities on pages 67-71. The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS funds is attributable to the fact that the employer contribution rate set by the Kentucky General Assembly is less than the rate recommended by the KRS Actuary and adopted by the KRS Board of Trustees.

Combining Statement of Plan Net Position for Pension Funds (in Thousands) as of June 30, 2013 with Comparative Totals as of June 30, 2012

Assets	2013						2012-Restated
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Total
Cash & Short-Term Investments							
Cash	$211	$2,308	$399	$2,631	$163	$5,712	$2,938
Short-Term Investments	26,067	93,239	79,031	210,316	10,528	419,181	375,339
Total Cash and Short-Term Investments	26,278	95,547	79,430	212,947	10,691	424,893	378,277
Receivables							
Contributions	3,793	36,852	11,293	47,972	2,393	102,303	108,073
Investment Income	1,499	8,401	5,553	17,608	698	33,759	37,523
Total Receivables	5,292	45,253	16,846	65,580	3,091	136,062	145,596
Investments at Fair Value							
Corporate and Government Bonds	156,139	862,989	578,076	1,846,615	76,709	3,520,528	3,639,387
Equity Contracts	12	62	42	132	3	251	50
Interest Rate Contracts	1,395	7,563	5,021	15,935	682	30,596	29,477
Foreign Exchange Contracts	593	3,212	2,132	6,768	290	12,995	62,184
Swaps	184	996	661	2,099	90	4,030	1,552
Options	44	238	158	501	22	963	873
Corporate Stocks	297,104	1,615,528	1,055,658	3,350,598	145,365	6,464,253	6,195,476
Mortgages	16,119	97,139	61,915	189,099	7,668	371,940	272,641
Real Estate	11,081	28,248	33,052	98,537	4,026	174,944	54,047
Total Investments at Fair Value	482,671	2,615,975	1,736,715	5,510,284	234,855	10,580,500	10,255,687
Securities Lending Collateral Invested	67,714	258,692	251,414	813,671	34,947	1,426,438	1,288,813
Equipment (net of accumulated depreciation)	111	1,309	197	2,254	25	3,896	3,949
Intangible Assets (net of accumulated amortization)	351	4,163	585	7,027	68	12,194	9,832
Total Assets	**582,417**	**3,020,939**	**2,085,187**	**6,611,763**	**283,677**	**12,583,983**	**12,082,154**
Liabilities							
Accounts Payable	111	1,494	202	2,524	32	4,363	39,284
Securities Lending Collateral Obligations	67,714	258,692	251,414	813,671	34,947	1,426,438	1,288,813
Total Liabilities	**67,825**	**260,186**	**251,616**	**816,195**	**34,979**	**1,430,801**	**1,328,097**
Total Net Position Held in Trust for Employee	**$514,592**	**$2,760,753**	**$1,833,571**	**$5,795,568**	**$248,698**	**$11,153,182**	**$10,754,057**

See accompanying notes to the combining financial statements.

Combining Statement of Changes in Plan Net Position for Pension Funds (in Thousands) as of June 30, 2013 with Comparative Totals as of June 30, 2012

Additions	2013						2012-Restated
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Total
Members' Contributions	$11,467	$96,744	$42,863	$120,777	$4,495	$276,346	$274,094
Employers' Contributions	27,334	280,874	120,140	294,914	18,501	741,763	591,453
Health Insurance Contributions (HB1)	402	3,344	734	4,659	48	9,187	7,275
Total Contributions	39,203	380,962	163,737	420,350	23,044	1,027,296	872,822
Investment Income							
From Investing Activities							
↘ Net Appreciation in FV	40,302	236,845	141,113	452,088	20,293	890,641	(261,180)
↘ Interest/Dividends	12,657	76,966	45,198	144,667	6,511	285,999	270,024
↘ Total Investing Activities Income	52,959	313,811	186,311	596,755	26,804	1,176,640	8,844
↘ Investment Expense	1,816	12,325	6,111	19,876	999	41,127	37,730
Net Income from Investing Activities	51,143	301,486	180,200	576,879	25,805	1,135,513	(28,886)
From Securities Lending Activities							
↘ Securities Lending Income	367	1,726	1,055	2,615	159	5,922	327
From Securities Lending Expense							
↘ Security Borrower Rebates	(25)	(9)	(57)	(124)	(9)	(224)	(261)
↘ Security Lending Agent Fees	38	210	141	457	19	865	229
Net Income from Securities Lending Activities	354	1,525	971	2,282	149	5,281	359
Total Net Investment Income	51,497	303,011	181,171	579,161	25,954	1,140,794	(28,527)
Total Additions	**90,700**	**683,973**	**344,908**	**999,511**	**48,998**	**2,168,090**	**844,295**
Deductions							
Benefit Payments	48,855	873,906	179,696	553,204	50,559	1,706,220	1,649,179
Refunds	2,762	12,907	3,158	13,306	31	32,164	30,977
Administrative Expenses	733	10,719	1,202	17,743	184	30,581	27,785
Capital Project Expenses							17
Total Deductions	52,350	897,532	184,056	584,253	50,774	1,768,965	1,707,958
Net Increase in Plan Position	38,350	(213,559)	160,852	415,258	(1,776)	399,125	(863,663)
Total Net Position Held in Trust for Employee							
Beginning of Year	476,242	2,974,312	1,672,719	5,380,310	250,474	10,754,057	11,617,720
End of Year	**$514,592**	**$2,760,753**	**$1,833,571**	**$5,795,568**	**$248,698**	**$11,153,182**	**$10,754,057**

See accompanying notes to the combining financial statements.

Combining Statement of Plan Net Position for Insurance Funds (in Thousands) as of June 30, 2013 with Comparative Totals as of June 30, 2012

Assets	2013						2012
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Total
Cash and Short-Term Investments							
Cash	$84	$695	$74	$516	$54	$1,423	$1,232
Short-Term Investments	14,954	34,002	39,709	68,156	6,515	163,336	185,386
Medicare Drug Deposit	11	20	23	43	5	102	101
Total Cash and Short Term Investments	15,049	34,717	39,806	68,715	6,574	164,861	186,719
Receivables							
Contributions	2,096	12,555	6,196	16,877	1,271	38,995	61,322
Investment Income	1,071	1,382	2,577	4,684	409	10,123	10,616
Total Receivables	3,167	13,937	8,773	21,561	1,680	49,118	71,938
Investments at Fair Value							
Corporate and Government Bonds	128,023	159,403	309,623	557,748	48,310	1,203,107	1,085,491
Equity Contracts	7	10	18	32	2	69	2
Interest Rate Contracts	595	756	1,414	2,570	226	5,561	7,279
Swaps	159	202	378	689	60	1,488	289
Foreign Exchange Contracts	365	464	868	1,579	139	3,415	22,630
Options	30	38	71	129	11	279	145
Corporate Stocks	208,979	268,256	491,215	897,454	79,459	1,945,363	1,658,212
Mortgages	11,068	14,003	26,376	47,826	4,215	103,488	75,347
Real Estate	5,638	7,741	13,324	24,439	2,161	53,303	8,101
Total Investments at Fair Value	354,864	450,873	843,287	1,532,466	134,583	3,316,073	2,857,496
Securities Lending Collateral Invested	54,464	62,666	134,020	240,037	19,921	511,108	199,218
Total Assets	**427,544**	**562,193**	**1,025,886**	**1,862,779**	**162,758**	**4,041,160**	**3,315,371**
Liabilities							
Accounts Payable	197	3,487	546	3,782	146	8,158	26,840
Securities Lending Collateral Obligations	54,464	62,666	134,020	240,037	19,921	511,108	199,218
Total Liabilities	**54,661**	**66,153**	**134,566**	**243,819**	**20,067**	**519,266**	**226,058**
Total Net Position Held in Trust for Other Post Employment Benefits	**$372,883**	**$496,040**	**$891,320**	**$1,618,960**	**$142,691**	**$3,521,894**	**$3,089,313**

See accompanying notes to the combining financial statements.

Combining Statement of Changes in Plan Net Position for Insurance Funds (in Thousands) as of June 30, 2013 with Comparative Totals as of June 30, 2012

Additions	2013						2012
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Total
Employers' Contributions	$25,144	$162,191	$84,962	$158,212	$16,829	$447,338	$436,137
Employer Group Waiver Plan	243	4,846	562	5,360	178	11,189	17,800
Premiums Received from Retirees	357	11,154	300	14,512	23	26,346	28,403
Retired Reemployed Healthcare (HBI)	538	3,140	357	1,781		5,816	6,349
Total Contributions	26,282	181,331	86,181	179,865	17,030	490,689	488,689
Investment Income							
From Investing Activities							
↘ Net Appreciation in FV	24,273	30,061	59,305	109,582	9,642	232,863	(118,701)
↘ Interest/Dividends	9,406	11,734	22,496	41,307	3,702	88,645	71,241
↘ Total Investing Activities Income	33,679	41,795	81,801	150,889	13,344	321,508	(47,460)
↘ Investment Expense	1,018	1,571	2,306	4,280	424	9,599	8,029
Net Income from Investing Activities	32,661	40,224	79,495	146,609	12,920	311,909	(55,489)
From Securities Lending Activities							
↘ Securities Lending Income	260	471	471	723	83	2,008	84
From Securities Lending Expense							
↘ Security Borrower Rebates	4	(2)	8	6	(1)	15	(153)
↘ Security Lending Agent Fees	30	36	73	132	11	282	68
Net Income from Securities Lending Activities	226	437	390	585	73	1,711	169
Total Net Investment Income	32,887	40,661	79,885	147,194	12,993	313,620	(55,320)
Total Additions	**59,169**	**221,992**	**166,066**	**327,059**	**30,023**	**804,309**	**433,369**
Deductions							
Healthcare Premiums Subsidies	14,793	109,932	55,842	91,272	11,279	283,118	248,278
Administrative Fees	179	4,285	679	4,431	184	9,758	11,972
Self Funding Insurance Costs	2,044	30,225	4,099	41,217	1,267	78,852	132,144
Total Deductions	**17,016**	**144,442**	**60,620**	**136,920**	**12,730**	**371,728**	**392,394**
Net Increase in Net Position	42,153	77,550	105,446	190,139	17,293	432,581	40,975
Total Net Position Held in Trust for Other Post Employment Benefits							
Beginning of Year	330,730	418,490	785,874	1,428,821	125,398	3,089,313	3,048,338
End of Year	**$372,883**	**$496,040**	**$891,320**	**$1,618,960**	**$142,691**	**$3,521,894**	**$3,089,313**

See accompanying notes to the combining financial statements.

*Although the assets of the plans are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to the **members of that plan**, and a pro-rata share of administrative costs in accordance with the provisions of KRS Sections 16.555, 61.570, and 78.630.*

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees (the Board) of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS).

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of KRS administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by KRS: (1) KERS; (2) CERS; and (3) SPRS. The assets of the insurance fund are commingled for investment purposes. Although, the funds are comingled, each plan pays only its pro-rata share of expenses based on the proportionate amount of funds it has invested and each fund is allocated only its share of gains and losses. The following notes apply to the various funds administered by KRS.

Note A. Summary of Significant Accounting Policies

This summary of significant accounting policies of he Kentucky Retirement Systems (KRS) is presented to assist in understanding KRS' financial statements. The financial statements and notes are representations of KRS' management, which is responsible for their integrity and objectivity. The accounting policies conform to generally accepted accounting principles and have been consistently applied in the preparation of the financial statements.

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Basis of Accounting KRS' combining financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and investment expenses are recognized when incurred.

Methods Used to Value Investments Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Short-term investments are reported at cost, which approximates fair value. See Note D for further discussion of fair value measurements. Purchases and sales of securities are recorded on a trade date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Gain (loss) on investments includes KRS gains and losses on investments bought and sold as well as held during the fiscal year.

Estimates The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged to expense as incurred. The capitalization threshold used in fiscal years ended June 30, 2013 and 2012 was $3,000 (see Note J for further information).
Intangible Assets Intangible assets, currently computer software, are valued at

historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is ten years. The capitalization threshold used in fiscal years ended June 30, 2013 and 2012 was $3,000 (see Note K for further information).

Contributions Receivable Contributions receivable consists of amounts due from employers. The management of KRS considers contributions receivable to be fully collectable; accordingly, no allowance for doubtful accounts is considered necessary. If amounts become uncollectable, they will be charged to operations when that determination is made. If amounts previously written off are collected, they will be credited to income when received.

Investment Income Due to the timing of receiving partnership financial information, the fair values of the investments in certain limited partnerships have been estimated using the net asset value of the ownership interest in partners' capital as of March 31 of each fiscal year. KRS management will monitor differences in the fair values of these investments between March 31 and June 30, of each fiscal year, and will disclose any and all material differences.

Payment of Benefits Benefits are recorded when paid.

Expense Allocation Administrative expenses of KRS are allocated in proportion to the number of total members participating in each plan and direct investment manager expenses are allocated in proportion to the percentage of investment assets held by each plan.

Component Unit KRS is a component unit of the Commonwealth of Kentucky for financial reporting purposes. KERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. CERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. SPRS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the KRS Board of Trustees without further legislative review. The methods used to determine the employer rates for all Systems are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

GASB
Governmental Accounting Standards Board

Recent Accounting Pronouncements In June 2012, the GASB issued Statement No. 67, "Financial Reporting for Pension Plans-an amendment of GASB Statement No. 25". The objective of this Statement is to improve financial reporting by state and local governmental pension plans. This Statement requires defined benefit pension plans to present two financial statements – a statement of fiduciary net position and a statement of changes in fiduciary net position. In addition, the Statement requires that notes to the financial statements include descriptive information, such as the types of benefits provided, the classes of plan members covered, and the composition of the pension plan's board, among other detailed requirements. The Statement becomes effective for the fiscal year beginning July 1, 2013. KRS intends to comply with the Statement's requirements.

In June 2012, the GASB issued Statement No. 68, "Accounting and Financial Reporting for Pensions-an amendment of GASB Statement No. 27". The objective of this Statement is to improve financial reporting by state and local governmental pension plans. In addition, it requires the liability of the employers and nonemployer contributing entities to employees for defined benefit pensions (net pension liability) to be measured as the portion of the present value of projected benefit payments to be provided through the pension plan to current active and inactive employees that is attributed to those employees' past periods of service (total pension liability), less the amount of the pension plan's fiduciary net position. In addition, this Statement requires additional changes to the Required Supplementary Information, among other extensive changes. This Statement becomes effective for the fiscal year beginning July 1, 2014. KRS intends to comply the Statement's requirements.

Haz or Non-Haz
Hazardous or Non-Hazardous
(i.e. KERS Haz or CERS Non-Haz)

Note B. Plan Descriptions & Contribution Information

Membership Information *

KERS Employees

	2013			2012		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	37,240	2,312	39,552	36,508	2,180	38,688
Inactive Vested Memberships	40,375	2,882	43,257	39,445	2,490	41,935
Active Plan Members	40,710	4,057	44,767	42,210	3,540	45,750
Total	**118,325**	**9,251**	**127,576**	**118,163**	**8,210**	**126,373**
Number of Participating Employers			348			385

CERS Employees

	2013			2012		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	44,164	5,840	50,004	42,068	5,513	47,581
Inactive Vested Memberships	67,013	1,956	68,969	63,564	1,643	65,207
Active Plan Members	82,631	9,069	91,700	85,779	6,906	92,685
Total	**193,808**	**16,865**	**210,673**	**191,411**	**14,062**	**205,473**
Number of Participating Employers			1,126			1,129

SPRS Employees

Members	**2013**	**2012**
Retirees and Beneficiaries Receiving Benefits	1,240	1,203
Inactive Vested Memberships	236	224
Active Plan Members	901	904
Total	**2,377**	**2,331**
Number of Participating Employers	1	1

** Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-Hazardous, then KERS Non-hazardous.*

2013 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Haz	9,364	1,276	618	1,474	16,834
KERS Haz	625	451	106	60	985
CERS Non-Haz	7,652	857	340	2,707	18,824
CERS Haz	1,425	2,155	400	79	2,324
SPRS	283	421	76	20	682
Total	**19,349**	**5,160**	**1,540**	**4,340**	**39,649**

2012 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Haz	9,764	1,917	734	1,721	15,015
KERS Haz	645	517	93	67	751
CERS Non-Haz	7,972	1,317	383	3,119	16,355
CERS Haz	1,385	2,237	310	73	1,853
SPRS	291	444	62	15	581
Total	**20,057**	**6,432**	**1,582**	**4,995**	**34,555**

KERS NON-HAZ PENSION

COLA
Cost of Living Adjustment

KAR
Kentucky Administrative Regulation

For the fiscal years ended June 30, 2013 and 2012 participating employers contributed 23.61% and 19.82%, respectively, of each employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2013 and 2012, were 44.55% and 40.71%, respectively, of each employee's creditable compensation.

Plan Description KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2013, the COLA was not granted.

Contributions For the fiscal years ended June 30, 2013 and 2012, plan members who began participating prior to September 1, 2008, were required to contribute 5% of their annual creditable compensation. The Commonwealth

was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2013 and 2012, participating employers contributed 23.61% and 19.82%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012, were 44.55% and 40.71%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401 (h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% of their annual creditable compensation.

For the fiscal years ended June 30, 2013 and 2012, participating employers contributed 29.79% and 28.98%, respectively, of each employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2013 and 2012, were 35.89% and 33.84%, respectively, of each employee's creditable compensation.

Plan Description KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2013, the COLA was not granted.

ContributionsFor the fiscal years ended June 30, 2013 and 2012, plan members who began participating prior to September 1, 2008, were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined

in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2013 and 2012, participating employers contributed 29.79% and 28.98%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012, were 35.89% and 33.84%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with HB 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

CERS NON-HAZ PENSION

Plan Description CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2013, the COLA was not granted.

ContributionsFor the fiscal years ended June 30, 2013 and 2012, plan members who began participating prior to September 1, 2008, were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2013 and 2012, participating employers contributed 19.55% and 18.96%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012, were 19.55% and 18.96%, respectively. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% of their annual creditable compensation.

For the fiscal years ended June 30, 2013 and 2012, participating employers contributed 37.60% and 35.76%, respectively, of each employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2013 and 2012, were 37.60% and 35.76%, respectively, of each employee's creditable compensation.

Plan Description CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each participating county, city and school board, and any additional eligible local agencies electing to participate in CERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2013, the COLA was not granted.

ContributionsFor the fiscal years ended June 30, 2013 and 2012, plan members who began participating prior to September 1, 2008, were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2013 and 2012, participating employers contributed 37.6% and 35.76%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012, were 37.6% and 35.76%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

For the fiscal years ended June 30, 2013 and 2012, the Commonwealth contributed 63.67% and 52.13%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012 were 103.41% and 94.63%, respectively, of each employee's creditable compensation.

Plan Description SPRS is a single-employer defined benefit pension plan that covers all full-time state troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2013, the COLA was not granted.

ContributionsFor the fiscal years ended June 30, 2013 and 2012, plan members who began participating prior to September 1, 2008, were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget. For the fiscal years ended June 30, 2013 and 2012, the Commonwealth contributed 63.67% and 52.13%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012 were 103.41% and 94.63%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

House Bill 1 In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 8% of their annual creditable compensation.

Plan Description The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2013, insurance premiums withheld from benefit payments for members of the systems were $27,574,678 and $1,209,245 for KERS non-hazardous and hazardous, respectively; $27,804,392 and $2,068,890 for CERS non-hazardous and hazardous, respectively; and, $238,774 for SPRS. For fiscal 2012, insurance premiums withheld from benefit payments for members of KERS were $29,136,828 and $1,235,155 for KERS non-hazardous and KERS hazardous, respectively; $27,541,099 and $1,982,303 for CERS non-hazardous and CERS hazardous, respectively; and, $246,384 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2013, the Fund had 100,708 retirees and beneficiaries for whom benefits were available.
The amount of contribution paid by the Funds is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows:

Portion Paid by Insurance Fund

Years of Service	Paid by Insurance Fund (%)
20+ years	100%
15-19 years	75%
10-14 years	50%
4-9 years	25%
Less than 4 years	0%

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after, July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on, or after, July 1, 2003 earn ten dollars ($10) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn fifteen dollars ($15) per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives ten dollars ($10) per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree cost of living adjustment (COLA), which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years.

KRS commenced self-funding of healthcare benefits for its Medicare eligible retirees on January 1, 2006. A self-funded plan is one in which KRS assumes the financial risk for providing healthcare benefits to its retirees. The self-funded plan pays for claims out-of-pocket as they are presented instead of paying a pre-determined premium to an insurance carrier for a fully-insured plan. KRS funds the risk of its self-insured program directly from its insurance assets.

Stop-loss insurance can be arranged to limit KRS' loss to a specified amount to ensure that catastrophic claims do not upset the financial integrity of the self-funded plan. The amount of stop-loss insurance is a function of KRS' size, nature of its business, financials, and tolerance for risk.

On August 6, 2012, the Board voted to cease self-funding of healthcare benefits for most KRS Medicare eligible retirees. The Board elected to contract with Humana Insurance Company to provide healthcare benefits to KRS' retirees through a fully-insured Medicare Advantage Plan. The Humana Medicare Advantage Plan became effective January 1, 2013.

Note C. Cash, Short-Term Investments & Securities Lending Collateral

GASB
Governmental Accounting Standards Board

The provisions of GASB Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions" require that cash received as collateral on securities lending transactions, and investments made with that cash, be reported as assets on the financial statements. In accordance with GASB No. 28, KRS classifies certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

Cash & Short-Term Investments
KERS

Assets	**2013**	**2012**
Cash	$2,519,457	$1,340,506
Short-Term Investments	119,306,174	120,094,230
Securities Lending Collateral Invested	326,406,362	764,877,463
KERS Total	**$448,231,993**	**$886,312,199**

CERS

Assets	**2013**	**2012**
Cash	$3,030,064	$1,352,380
Short-Term Investments	289,346,687	243,678,862
Securities Lending Collateral Invested	1,065,084,771	505,826,461
CERS Total	**$1,357,461,522**	**$750,857,703**

SPRS

Assets	**2013**	**2012**
Cash	$162,872	$245,955
Short-Term Investments	10,528,027	11,565,956
Securities Lending Collateral Invested	34,947,388	18,109,078
SPRS Total	**$45,638,287**	**$29,920,989**

KRS Insurance Fund

Assets	**2013**	**2012**
Cash	$1,422,780	$1,230,685
Short-Term Investments	163,336,293	185,385,495
Medicare Drug Deposit	100,001	100,691
Securities Lending Collateral Invested	511,107,721	199,217,159
Insurance Fund Total	**$675,966,795**	**$385,934,030**

Note D. Investments

The Board of Trustees of KRS recognizes its duty to invest funds in accordance with the "Prudent Person Rule" and manage those funds consistent with the long-term nature of KRS. For assets not managed internally by staff, the Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

Equity Investments Investments may be made in common stock, securities convertible into common stock, preferred stock of publicly traded companies on stock markets, asset class relevant ETF's or any other type of security contained in a manager's benchmark. Each individual equity account has a comprehensive set of investment guidelines prepared, which contains a listing of permissible investments, portfolio restrictions and standards of performance.

Fixed Income Investments The fixed income accounts may include, but are not limited to, the following fixed income securities: US Government and Agency bonds; investment grade US corporate credit; investment grade non-US corporate credit; non-investment grade US corporate credit including both bonds and bank loans; non-investment grade non-US corporate credit including bonds and bank loans; municipal bonds; non-US sovereign debt; mortgages, including residential mortgage backed securities; commercial mortgage backed securities, and whole loans; asset-backed securities and emerging market debt (EMD), including both sovereign EMD and corporate EMD; and, asset class relevant ETF's.

Mortgages Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments.

Private Equity, Equity Real Estate, Real Return, Absolute Return Investments Subject to the specific approval of the Investment Committee of the Board of Trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, but not limited to and without limitation, venture capital, private equity, private placements, real assets and absolute return investments which the Investment Committee believes has excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities The following short-term investment vehicles are considered acceptable:
Publicly traded investment grade corporate bonds, variable rate demand notes, government and agency bonds, mortgages, municipal bonds, and collective STIF's, money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements, relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the instrument has a split rating, the lower of the two ratings shall prevail. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time left until the next interest rate reset occurs, but in no case will any security have a stated final maturity of more than three years.

KRS' fixed income managers, who utilize cash equivalent securities as an integral part of their investment strategy, are exempt from the permissible investments contained in the preceding paragraph. Permissible short-term investments for fixed income managers shall be included in the investment manager's investment guidelines.

Derivatives Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited, unless specifically allowed by a manager's contract. In accordance with GASB Statement No. 53, "Accounting and Financial Reporting for Derivative Instruments", KRS provides this additional disclosure regarding its derivatives:
Background Info As of June 30, 2013, KRS has the following derivative instruments outstanding (see table below). All have various Effective Dates and Maturity Dates.

Item	Type	Objective	Terms	Cost	Notional Cost	Market Value	Notional Market Value
Pension-Assets							
A	Equity Contracts	Substitute for common stock	Various	$644,329	-	$253,980	-
B	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	$5,671,744	-
C	Interest Rate Contracts/Swaps	Hedge against the risk that interest rates will move in an adverse direction	Various	$11,277,287	_	12,909,640	-
D	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	$494,460	-	$1,249,208	-
Pension-Liabilities							
E	Interest Rate Contracts/SWAPs	Hedge against the risk that interest rates will move in an adverse direction	Various	$11,364,674	-	$17,685,865	-
F	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	$7,323,378	-
G	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	$3,854,687	_	$2,781,142	_
H	Options	Hedge against the holding of an asset	Various	$552,357	-	$963,493	-
Insurance-Assets							
I	Equity Contracts	Substitute for common stock	Various	$63,771	-	$69,368	_
J	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	$1,231,522	-
K	Interest Rate Contracts/Swaps	Hedge against the risk that interest rates will move in an adverse direction	Various	$1,323,467	_	$2,244,024	-
L	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	$230,412	-	$457,509	_
Insurance-Liabilities							
M	Interest Rate Contracts/Swaps	Hedge against the risk that interest rates will move in an adverse direction	Various	$1,543,967	-	$3,316,619	_
N	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	$2,184,902	-
O	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	$1,041,230	_	$1,030,306	-
P	Options	Hedge against the holding of an asset	Various	$160,853	-	$279,432	_

Derivative Policy It is the policy of KRS that investment managers may invest in derivative securities, or strategies which make use of derivative investments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Examples of such derivatives include, but are not limited to, foreign currency forward contracts, collateralized mortgage obligations, treasury inflation protected securities, futures, options and swaps. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flows, such as interest only, principal only, inverse floater, or structured note securities are permitted only to the extent authorized in a contract or an alternative investment offering memorandum or agreement.

CMOs Investments in securities such as collateralized mortgage obligations and planned amortization class issues are allowed if, in the judgment of the investment manager, they are not expected to be subject to large or unanticipated changes in duration or cash flows. Investment managers may make use of derivative securities for defensive or hedging purposes. Any derivative security shall be sufficiently liquid that it can be expected to be sold at, or near, its most recently quoted market price.

Derivative instruments A and I are substitutes for common stock with an investment that is recorded at fair value. Derivative instruments B, F, J and N hedge against the decrease of non US dollar currencies. For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combined Statement of Plan Net Position for both Pension and Insurance.

RISKS

Basis Risk Derivative instruments A and I expose KRS to basis risk in that the value of the underlying equity index future may decrease in fair value relative to the cash market. Derivative instruments B, F, J, and N expose KRS to basis risk in that the value of the foreign currency futures or forwards may decrease in fair value relative to the cash market.

Interest Rate Risk Derivative instruments C, D, E, G, H, K, L, M, O, and P expose KRS to interest rate risk in that changes in interest rates will adversely affect the fair values of KRS' financial instruments.

In June 2011, the GASB issued Statement No. 64, "Derivative Instruments: Application of Hedge Accounting Termination Provisions, an Amendment of GASB Statement No. 53". The objective of this Statement is to clarify whether an effective hedging relationship continues and hedge accounting should be continued to be applied. Upon the termination of a hedging derivative instrument, hedge accounting should cease and investment income should immediately recognize deferred outflows of resources or deferred inflows of resources. KRS maintains its derivative instruments as investment derivative instruments for all accounting and financial reporting purposes. Therefore, hedge accounting and the related effectiveness testing is not performed.

Custodial Credit Risk for Deposits Custodial credit risk for deposits is the risk that in the event of a financial institution failure, KRS' deposits may not be returned. All non-investment related bank balances are held by JP Morgan Chase, which became the depository bank of KRS on July 1, 2011. All non-investment related bank balances are held in KRS' name and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). In 2010, the US Congress passed the Financial Crisis Bill and permanently increased the FDIC deposit insurance coverage to $250,000. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount.

As of June 30, 2013 and 2012, deposits for KRS pension funds were $9,333,855 and $30,925,504, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

As of June 30, 2013 and 2012, deposits for KRS insurance fund were $1,430,267 and $3,130,778, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. KRS does not have an explicit policy with regards to Custodial Credit Risk for investments. As of June 30, 2013 and 2012, the following currencies were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name. These funds are cash held by KRS' Global Managers and consist of various currencies.

Custodial Credit Risk

Pension Fund	2013	2012
Foreign Currency	$7,380,209	$4,509,853
Insurance Fund		
Foreign Currency	$2,352,683	$1,736,160

Investment Policies Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of Trustees of KRS. The Board of Trustees has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the "Prudent Person Rule" (set forth in Kentucky Revised Statute 61.650) and manage those funds consistent with the long-term nature of the Systems. The Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS.

The Statement of Investment Policy contains the specific guidelines for the investment of pension and insurance assets. Additionally, the Committee establishes specific investment guidelines in the Investment Management Agreement for each investment management firm.

The following tables present a summary of the investments by type as of June 30, 2013 and 2012:

Pension Fund Investments Summary
As of June 30, 2013 & 2012

Type	2013	2012
US Gov't & Agency Fixed Income Securities	$1,582,604,644	$1,789,467,703
US Corporate Fixed Income Securities	1,297,990,113	1,222,776,472
Municipal Debt Securities	70,363,221	79,109,093
Short-Term Investments	425,404,014	375,339,048
Equity Securities	4,764,035,886	4,504,816,279
Private Equity Limited Partnerships	1,705,481,097	1,797,263,220
Real Estate	174,943,810	54,047,344
Other*	978,860,163	808,209,209
Total	**$10,999,682,948**	**$10,631,028,368**

**This balance consists of the following*

Type	2013	2012
Cash Collateral - US Dollars	$13,401,306	$21,644,777
Sukuk[1]	263,923	495,200
Derivative Offsets		
↘ Equity Futures	(1,739,458)	(12,467,000)
↘ Hedge Funds	988,790,368	817,486,374
Liabilities		
↘ Obligation to Return Cash Collateral - US Dollars	(21,855,976)	(18,950,142)
Total	**$978,860,163**	**$808,209,209**

[1] The Arabic name for financial certificates, but commonly refers to the Islamic equivalent of bonds; since fixed income interest bearing bonds are not permissible in Islam, Sukuk securities are structured to comply with Islamic Law and its investment principles, which prohibits the charging, or paying, of interest.

Insurance Fund Investments Summary
As of June 30, 2013 & 2012

Type	2013	2012
US Gov't & Agency Fixed Income Securities	$555,483,396	$596,153,822
US Corporate Fixed Income Securities	407,385,223	322,100,002
Municipal Debt Securities	14,780,723	15,609,402
Short-Term Investments	164,183,759	185,486,186
Equity Securities	1,605,002,880	1,368,123,183
Private Equity Limited Partnerships	343,283,318	323,438,095
Real Estate	53,302,498	8,100,453
Other**	336,086,682	223,968,702
Total	**$3,479,508,479**	**$3,042,979,845**

***This balance consists of the following*

Type	2013	2012
Cash Collateral - US Dollars	$2,569,213	$5,119,746
Derivative Offsets		
↘ Equity Futures	25,664,188	(3,005,800)
↘ Hedge Funds	312,234,300	226,403,187
Liabilities		
↘ Swaps - US Dollars		(2,858,431)
↘ Obligation to Return Cash Collateral - US Dollars	(4,381,019)	(1,690,000)
Total	**$336,086,682**	**$223,968,702**

Credit Risk of Debt Securities Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external professional investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension funds debt securities portfolio are managed using the following guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Fixed income investments will be similar in type to those securities found in the KRS fixed income benchmarks and the characteristics of the KRS fixed income portfolio will be similar to the KRS fixed income benchmarks. The fixed income accounts may include, but are not limited to the following fixed income securities: US Government and Agency bonds; investment grade US corporate credit; investment grade non-US corporate credit; non-investment grade US corporate credit including bonds and bank loans; municipal bonds; non-US sovereign debt; mortgages, including residential mortgage backed securities, commercial mortgage backed securities, and whole loans, asset backed securities, and emerging market debt (EMD) including both sovereign EMD and corporate EMD; and, asset class relevant ETF's.
- The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income by more than 25%.
- The duration of the TIPS portfolio shall not deviate from the KRS Fixed Income Index by more than 25%.
- The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS assets.
- No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short term instrument, with the exception of US Government issued, guaranteed or agency obligations.
- The amount invested in SEC Rule 144a securities shall not exceed 15% of the market value of the aggregate market value of KRS' fixed income investments.

The following tables present the KRS pension and insurance fund's debt ratings as of June 30, 2013 and 2012:

Pension Fund Debt Securities at Fair Value as of June 30, 2013 & 2012

Quality Rating	2013	2012
AAA	$56,665,771	$176,752,688
AA+	68,857,699	51,817,259
AA	19,419,263	19,865,864
AA-	30,605,331	40,184,012
A+	32,370,283	31,408,066
A	71,719,597	80,076,147
A-	109,560,109	108,297,775
BBB+	36,533,579	57,879,171
BBB	109,743,197	103,233,884
BBB-	81,558,127	81,350,025
BB+	62,890,911	56,241,281
BB	66,451,521	63,795,374
BB-	60,743,226	74,378,918
B+	82,924,826	69,386,148
B	77,704,921	70,846,202
B-	50,252,951	57,149,848
CCC+	41,097,638	27,020,113
CCC	17,224,076	20,493,357
CCC-	13,687,724	5,572,497
CC	4,457,848	720,167
D	3,937,401	6,361,973
NR	99,198,973	99,054,796
Total Credit Risk Debt Securities	**1,197,604,972**	**1,301,885,565**
Government Bonds	474,844,831	607,041,559
Government Mortgage-Backed Securities (GNMA)	338,663,465	248,950,785
Government Issued Commercial Mortgage Backed	9,811,110	10,311,861
Government Agencies	34,674,668	32,423,616
Indexed Linked Bonds	708,142,577	890,739,882
Total Debt Securities	**$2,763,741,623**	**$3,091,353,268**

Insurance Fund Debt Securities at Fair Value as of June 30, 2013 & 2012

Quality Rating	2013	2012
AAA	$17,298,219	$99,272,032
AA+	19,036,700	8,741,517
AA	7,906,648	6,899,008
AA-	4,369,454	7,739,207
A+	11,034,344	11,301,734
A	18,123,716	20,358,203
A-	29,449,395	24,992,822
BBB+	8,243,645	11,979,181
BBB	24,640,602	22,934,068
BBB-	25,801,896	15,084,027
BB+	22,285,959	11,563,376
BB	23,613,368	15,166,400
BB-	20,795,416	17,353,229
B+	25,323,893	14,268,206
B	19,984,139	16,588,386
B-	16,449,995	14,831,663
CC	816,507	961,988
CCC	5,087,979	5,522,254
CCC+	10,899,205	5,323,130
CCC-	3,039,033	1,086,041
D	1,088,434	2,118,411
NR	55,438,787	3,624,521
Total Credit Risk Debt Securities	**370,727,334**	**337,709,404**
Government Bonds	152,008,017	164,367,747
Government Mortgage-Backed Securities (GNMA)	97,015,116	70,007,438
Government Issued Commercial Mortgage Backed	3,007,215	3,156,940
Government Agencies	9,505,690	7,506,492
Indexed Linked Bonds	292,931,190	351,115,205
Total Debt Securities	**$925,194,562**	**$933,863,226**

Pension Fund Securities At both June 30, 2013 and 2012, the weighted average quality rating of the pension fund debt securities portfolio was AA+. As of June 30, 2013 and 2012, the KRS pension portfolio had $580,572,016 and $451,965,878, respectively, in debt securities rated below BBB-.

Insurance Fund Securities As a result of the most recently approved Asset/Liability Modeling Study, the investment staff began to diversify the insurance fixed income allocation to mirror that of the pension funds. As part of this process, the TIPS allocation (previously the only fixed income exposure within the insurance portfolio) was moved to the newly created Real Return Asset Class.

As of June 30, 2013, the Pension Funds held $1,604,688, or .02%, and the Insurance Fund held $517,120, or .02%, of its investments in Exchange Traded Funds.

Concentration of Credit Risk Debt Securities Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer. The total debt securities portfolio is managed using the following general guidelines adopted by the KRS Board of Trustees:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Debt obligations of any single US Corporation shall be limited to a maximum of 5% of the total portfolio at market value.

ETF
Exchange Traded Fund

Fannie Mae
Federal National Mortgage Association

As of June 30, 2013, the Pension Funds held $1,604,688, or .02%, and the Insurance Fund held $517,120, or .02%, of its investments in Exchange Traded Funds (ETF's). ETF's are securities that represent ownership in a long term unit investment trust that holds a portfolio of common stocks or other securities designed to track the performance of a designated index. Similar to a stock, ETF's can be traded continuously throughout the trading day, or can be held for the long term.

As of June 30, 2013, the Pension Funds held $235,623,204, or 2.2%, of its investment in the Federal National Mortgage Association (Fannie Mae). Historically, Fannie Mae has been a publicly owned government corporation, recently entering conservatorship by the US Government, to purchase mortgages from lenders and resell them to investors; shares of Fannie Mae are traded on the New York Stock Exchange. Fannie Mae's debt has been perceived to be nearly as safe as US Treasury debt, given the US Government's implicit guarantee which has allowed it to pay lower interest rates to its debt holders.

Interest Rate Risk Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration measures the sensitivity of the market prices of fixed income securities to changes in the yield curve. Duration is measured using two methodologies: effective and modified duration. Effective duration uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price and makes adjustments for any bond features that would retire the bonds prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve, but does not assume the securities will be called prior to maturity.

The KRS pension fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. Prior to June 30, 2011, the KRS pension fund benchmark for its fixed income securities was a combination of the Barclays Aggregate Index and the Barclays TIPS Index. As of June 30, 2013 and 2012, the modified duration of the KRS pension fund fixed income benchmark was 5.38 and 5.02, respectively. At the same points in time, the modified duration of the KRS pension fund fixed income securities portfolio was 5.73 and 5.61, respectively.

The KRS insurance fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. Prior to June 30, 2011, the KRS insurance fund benchmark for its fixed income securities was a combination of the Barclays Aggregate Index and the Barclays TIPS Index. As of June 30, 2013 and 2012, the modified duration of the KRS insurance fund fixed income benchmark was 5.38 and 5.02, respectively. At the same points in time, the modified duration of the KRS insurance fund fixed income securities portfolio was 5.91 and 5.66, respectively.

KRS Pension Funds Interest Rate Risk As of June 30,

Pension Fund Interest Rate Risk

Type	2013	Weighted Average Modified Duration	2012	Weighted Average Modified Duration
Asset Backed Securities	$44,213,100	2.71	$69,305,698	1.28
Bank Loans	105,603,296	4.72	91,076,272	0.14
Collateralized Bonds	14,222,649	0.72	14,259,490	0.07
Commercial Mortgage Backed Securities	66,526,681	3.10	59,670,935	2.90
Commercial Paper	74,997,823	0.02		
Corporate Bonds	674,221,512	5.36	333,162,366	4.70
Corporate Convertable Bonds	19,949,113	8.58	16,819,919	4.10
Government Agencies	34,674,668	5.12	32,423,616	5.20
Government Bonds	474,844,831	5.66	607,041,559	5.70
Government Mortgage Backed Securities	338,663,465	4.20	248,950,785	1.40
Government Issued Commercial Mortgage Backed Securities	9,811,110	2.66	10,311,861	3.30
Hedge Funds	-	-	335,635,038	-
Hedge Multi Strategy	-	-	3,738,246	-
Indexed Linked Government Bonds	708,142,577	8.18	890,739,882	8.30
Municipal Bonds	70,363,221	10.29	79,109,093	10.70
Non-Government Backed CMOs	10,612,072	2.04	23,690,395	0.93
Other Fixed Income	-		227,154,341	
Short Term Investments	-		39,719,110	
Short Term Bills/Notes	116,631,583	0.17	8,049,462	0.34
Sukuk*	263,923	6.55	495,200	4.20
Total	**$2,763,741,624**	**5.67**	**$3,091,353,268**	**5.85**

** The Arabic name for financial certificates, but commonly refers to the Islamic equivalent of bonds; since fixed income interest bearing bonds are not permissible in Islam, Sukuk securities are structured to comply with Islamic Law and its investment principles, which prohibits the charging, or paying, of interest.*

KRS Insurance Fund Interest Rate Risk As of June 30,

Insurance Fund Interest Rate Risk

Type	2013	Weighted Average Modified Duration	2012	Weighted Average Modified Duration
Asset Backed Securities	$14,649,066	3.18	$20,616,445	2.40
Bank Loans	28,930,449	4.72	19,461,761	3.90
Collateralized Bonds	4,841,918	1.13	5,256,039	0.80
Commercial Mortgage Backed Securities	17,161,225	3.67	12,783,807	3.30
Commercial Paper	24,998,658	0.04		
Corporate Bonds	216,295,976	5.34	71,656,715	5.80
Corporate Convertible Bonds	4,909,873	8.44	3,788,169	7.90
Fixed Income			83,061,859	
Government Agencies	9,505,690	5.46	7,506,492	6.40
Government Bonds	152,008,017	5.83	164,367,747	5.80
Government Mortgage Backed Securities	97,015,116	4.79	70,007,438	3.10
Government Issued Commercial Mortgages	3,007,215	2.72	3,156,940	3.60
Hedge Fund			85,762,072	
Hedge Multi Strategy			1,584,968	
Index Linked Government Bonds	292,931,190	8.25	351,115,205	8.30
Municipal/Provincial Bonds	14,780,723	9.60	15,609,402	10.00
Non-Government Backed CMOs	2,572,249	1.77	5,339,625	1.10
Short Term Investments			11,619,360	
Short Term Bills/Notes	41,587,197	0.15	1,169,182	.50
Total	**$925,194,562**	**5.92**	**$933,863,226**	**6.60**

*Foreign currency risk is the risk that changes in exchange rates will **adversely affect the value** of a non-US dollar based investment or deposit with the KRS portfolio.*

Foreign Currency Risk Foreign currency risk is the risk that changes in exchange rates will adversely affect the value of a non-US dollar based investment or deposit within the KRS portfolio. KRS' currency risk exposure, or exchange rate risk, primarily resides with KRS' international equity holdings, but also affects other asset classes. KRS does not have a formal policy to limit foreign currency risk; however, some individual managers are given the latitude to hedge some currency exposures.

RCM
Record Currency Management Dynamic Currency Hedging Program

All foreign currency transactions are classified as Short-Term Investments. All gains and losses associated with these transactions are recorded in the Net Appreciation (Depreciation) in the Fair Value of Investments on the financial statements.

The dynamic currency hedging program previously run by Record Currency Management was terminated on November 3, 2011, and was completely unwound by October 2012.

Pension Fund Investments at Fair Value as of June 30, 2013 & 2012

Foreign Equities	2013	2012
Argentine Peso		$592,995
Australian Dollar	59,808,966	58,388,163
Brazilian Real	40,565,297	23,932,101
British Pound Sterling	191,809,147	196,765,497
Canadian Dollar	79,160,793	103,163,185
Chilean Peso	8,572,207	2,675,122
Chinese Yuan	3,921,175	5,183,187
Columbian Peso	4,030,792	3,148,357
Czech Koruna	3,152,676	3,158,280
Danish Krone	12,793,980	8,606,995
Euro	329,323,153	312,248,180
Hong Kong Dollar	96,949,251	90,614,411
Hungarian Forint	4,448,425	1,251,857
Indian Rupee	3,759,830	3,536,235
Indonesian Rupiah	7,187,236	14,715,167
Israeli Shekel	2,069,010	1,703,453
Japanese Yen	263,796,152	232,665,797
Malaysian Ringgit	5,704,224	3,068,235
Mexican Peso	22,181,651	18,202,265
New Taiwan Dollar		25,479,684
New Zealand Dollar	7,500,911	1,013,380
Norwegian Krone	9,727,168	4,046,964
Peruvian Nuevo Sol	471,934	1,216,727
Philippine Peso	3,021,216	6,438,447
Polish Zloty	5,945,095	4,802,910
Russian Ruble	7,159,994	7,570,244
Singapore Dollar	19,834,359	22,349,886
South African Rand	23,424,203	23,545,955
South Korean Won	50,679,693	70,999,258
Swedish Krona	28,143,780	27,191,886
Swiss Franc	96,580,108	81,004,268
Taiwan Dollar	35,426,792	
Thai Bhat	5,867,698	9,159,880
Turkish Lira	4,549,826	6,233,784
Total Securities Subject to Foreign Currency Risk	**1,437,566,742**	**1,374,672,755**
USD (securities held by International Investment Managers)	9,562,116,206	9,256,355,650
Total International Investment Securities	**$10,999,682,948**	**$10,631,028,405**

Insurance Fund Investments at Fair Value as of June 30, 2013 & 2012

Foreign Equities	**2013**	**2012**
Australian Dollar	$17,372,842	$20,374,499
Brazilian Real	11,659,097	6,775,870
British Pound Sterling	61,860,945	69,217,342
Canadian Dollar	25,663,239	35,948,462
Chilean Peso	2,724,948	786,711
Chinese Yuan	1,214,863	1,298,990
Columbian Peso	1,036,746	796,126
Czech Koruna	1,072,552	990,353
Danish Krone	4,233,231	2,959,795
Euro	105,942,398	105,768,977
Hong Kong Dollar	30,780,462	31,672,609
Hungarian Forint	1,415,885	315,114
Indian Rupee	1,149,108	882,340
Indonesian Rupiah	2,005,381	4,828,536
Israeli Shekel	639,441	429,103
Japanese Yen	84,659,071	79,821,116
Malaysian Ringgit	1,618,726	740,285
Mexican Peso	6,607,537	4,224,645
New Taiwan Dollar		8,671,587
New Zealand Dollar	2,131,571	296,011
Norwegian Krone	3,039,601	1,355,472
Peruvian Nuevo Sol	108,768	304,965
Philippine Peso	633,481	1,699,557
Polish Zloty	1,829,456	1,263,786
Russian Ruble	2,274,414	1,762,447
Singapore Dollar	6,063,920	7,014,550
South African Rand	7,537,217	7,916,313
South Korean Won	15,998,698	23,790,001
Swedish Krona	9,106,266	9,210,394
Swiss Franc	30,623,672	28,469,252
Taiwan Dollar	11,121,400	
Thai Bhat	1,627,962	3,108,109
Turkish Lira	1,456,908	2,072,912
Total Securities Subject to Foreign Currency Risk	**455,209,806**	**464,766,229**
USD (securities held by International Investment Managers)	3,024,298,673	2,578,213,716
Total International Investment Securities	**$3,479,508,479**	**$3,042,979,945**

Note E. Securities Lending Transactions

Kentucky Revised Statutes Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with an initial fair value of 102 or 105 percent of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. The types of securities lent include US Treasuries, US Agencies, US Corporate Bonds, US Equities, Global Fixed Income Securities, and Global Equities Securities. The Statement of Investment Policy does not address any restrictions on the amount of loans that can be made. At June 30, 2013, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction. Deutsche Bank invests cash collateral as permitted by state statute and Board policy. The agent of the Funds cannot pledge or sell collateral securities received unless the borrower defaults.

KRS maintains a conservative approach to investing the cash collateral with Deutsche Bank, emphasizing capital preservation, liquidity, and credit quality.

Note F. Risk of Loss

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims Against Board Claims against the Board of KRS, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a self-insured retention of $250,000 for each claim. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Job-Related Illness Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to sixty-six and two-third percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

NOTE **G.**

Note G. Contingencies

In the normal course of business, KRS is exposed to risks of loss from various legal proceedings, some of which could have a material impact if the decisions are adverse. However, as of the date of this report, the likelihood of incurring such a loss cannot be determined and a dollar amount cannot be reasonably estimated.

NOTE **H.**

Note H. Income Tax Status

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, generally, not subject to tax. KRS is subject to income tax on any unrelated business income; however, KRS had no unrelated business income in fiscal 2013.

NOTE **I.**

Note I. Defined Benefit Pension Plan

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

All eligible employees of KRS participate in KERS (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers substantially all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Plan members who began participating prior to September 1, 2008, contributed 5% of creditable compensation for the periods ended June 30, 2013, 2012, and 2011. Plan members who began participating on, or after, September 1, 2008, contributed 6% of creditable compensation for the periods ended June 30, 2013, 2012, and 2011. KRS contributed 23.61%, 19.82%, and 16.98%, of covered payroll for the periods ended June 30, 2013, 2012, and 2011, respectively. The chart below includes the covered payroll and contribution amounts for KRS for the three periods included in this discussion.

Payroll & Contributions

	2013	2012	2011
Covered Payroll	$ 13,925,712	$13,784,847	$13,444,315
Required Employer Contributions	$3,271,165	$2,726,780	$2,282,864
Employer Percentage Contributed	100%	100%	100%

Note J. Equipment

Equipment Expenses as of June 30

Expense	2013	2012
Equipment At-Cost	$ 6,752,838	$6,753,648
Less Accumulated Depreciation	(2,856,799)	(2,805,034)
Total	**$3,896,039**	**$3,948,614**

Depreciation expense for the fiscal years ended June 30, 2013 and 2012 amounted to $52,575 and $68,471, respectively. The decrease in equipment at cost is due to some assets being fully depreciated as of June 30, 2013.

Note K. Intangible Assets

GASB
Governmental Accounting Standards Board

START
Strategic Technology Advancements for the Retirement of Tomorrow

The provisions of GASB Statement No. 51, "Accounting and Financial Reporting for Intangible Assets" require that intangible assets be recognized in the Statement of Plan Net Position only if they are considered identifiable. In accordance with GASB No. 51, KRS has capitalized software costs as indicated below for the Strategic Technology Advancements for the Retirement of Tomorrow (START) project.

Software Expenses as of June 30

Expense	2013	2012
Software At-Cost	$16,254,290	$12,724,117
Less Accumulated Amortization	(4,059,389)	(2,893,011)
Total	**$12,194,901**	**$9,831,106**

Amortization expense for the fiscal years ended June 30, 2013 and 2012 amounted to $1,166,377 and $1,210,750, respectively. The increase in software at cost is due to the capitalization of the final costs associated with the START project.

Note L. Actuarial Valuation

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

The provisions of GASB Statement No. 50, "Pension Disclosures, an Amendment of GASB No. 25 and No. 27", require that actuarial information included in the Notes to the Required Supplementary Information be moved to the Notes to the Financial Statements. In accordance with GASB No. 50, KRS has moved the following information from the Notes to the Required Supplementary Information to the Notes to the Financial Statements:

Pension Fund Valuation

	Non-Haz	Haz
Valuation Date	June 30, 2013	June 30, 2013
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	30 Years	30 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Actuarial Assumptions		
Investment Rate of Return	7.75%	7.75%
↘ Includes Price Inflation at	3.5%	3.5%
Projected Salary Increases	4.75-17.0%	4.5-21.0%
↘ Includes Wage Inflation at	4.5%	4.5%

Insurance Fund Valuation[1]

	Non-Haz	Haz
Valuation Date	June 30, 2013	June 30, 2013
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	30 Years	30 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	8.5-5.0%	8.5-5.0%
Medical Trend Assumption (Post-Medicare)	7.0-5.0%	7.0-5.0%
Year of Ultimate Trend	2019	2019
Actuarial Assumptions		
Investment Rate of Return	7.75%[2]	7.75%
↘ Includes Price Inflation at	3.5%	3.5%

[1]The actuarial investment rate of return for developing insurance liabilities and contribution rates is 7.75% for the Kentucky Employees Retirement System (non-hazardous) and the State Police Retirement System. The lower rate is required under the parameters set by the Governmental Accounting Standards Board (GASB) Statements 43 and 45 since the actual rate contributed by the employers is less than the actuarially recommended rate. The actuarial investment rate of return for developing insurance liabilities and contribution rates assumptions were changed for Fiscal 2012 from 4.5% to 7.5 % in Fiscal 2013. The change impacted the Schedule of Funding Progress-Insurance Actuarial Accrued Liability for KERS Non-Hazardous and SPRS. The Fiscal 2012 information in the Schedule of Funding Progress was not restated from Fiscal 2012. However, the revised assumption rate of 7.5% was used in calculating the Fiscal 2013 Actuarial Accrued Liability.

[2]The actuarial valuation for the Insurance Fund involves estimates of the value of reported amounts and assumptions about the probability of future events. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations are based on the benefits provided under the terms of the insurance plan in effect at the time of each valuation and on the pattern of sharing costs between the employer and plan members as of the valuation date. Actuarial calculations of the insurance plan reflect a long-term perspective.

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

AAL
Actuarial Accrued Liability

Unfunded Actuarial Accrued Liability KRS had the following Unfunded Actuarial Accrued Liabilities as of June 30 2013 and 2012:

Unfunded Actuarial Accrued Liabilities as of June 30 Pension Fund

System	2013	2012
KERS Non-Haz	$8,750,479,307	$8,259,731,398
KERS Haz	278,323,786	255,473,161
CERS Non-Haz	3,741,781,631	3,592,332,096
CERS Haz	1,322,514,183	1,262,612,750
SPRS	409,780,326	387,897,090
Total Pension Funds	**$14,502,879,233**	**$13,758,046,495**

Unfunded Actuarial Accrued Liabilities as of June 30 Insurance Fund

System	2013	2012
KERS Non-Haz	$1,631,169,807	$2,679,249,646
KERS Haz	14,743,272	39,018,458
CERS Non-Haz	815,649,903	857,917,437
CERS Haz	544,558,426	535,802,215
SPRS	86,005,683	209,531,710
Total Insurance Funds	**$3,092,127,091**	**$4,321,519,466**
Total Unfunded Actuarial Accrued Liability	**$17,595,006,324**	**$18,079,565,961**

The Schedule of Funding Progress for Pension Funds begins on page 61. The Schedule of Funding Progress for the Insurance Fund begins on page 64.

Pension Fund Schedule of Funding Progress

System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non-Haz	$2,636,122,852	$11,386,602,159	23.2	$1,644,408,698	532.1
KERS Haz	505,656,808	783,980,594	64.5	132,015,368	210.8
CERS Non-Haz	5,637,094,483	9,378,876,114	60.1	2,236,277,489	167.3
CERS Haz	1,801,691,410	3,124,205,593	57.7	461,672,567	286.5
SPRS	241,800,328	651,580,654	37.1	45,256,202	905.5
Total Pension Funds	**10,822,365,881**	**25,325,245,114**	**42.6**	**4,519,630,324**	**562.3**

Insurance Fund Schedule of Funding Progress

System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non-Haz	497,584,327	2,128,754,134	23.4	1,644,408,698	99.2
KERS Haz	370,774,403	385,517,675	96.2	132,015,368	11.2
CERS Non-Haz	1,628,244,197	2,443,894,100	66.6	2,236,277,489	36.5
CERS Haz	892,774,391	1,437,332,817	62.1	461,672,567	118.0
SPRS	136,321,060	222,326,743	61.3	45,256,202	190.0
Total Insurance Funds	**3,525,698,378**	**6,617,825,469**	**53.3**	**4,519,630,324**	**146.4**
Totals	**$14,348,064,259**	**$31,943,070,583**	**44.8%**	**$9,039,260,648**	**354.4**

NOTE **M.**

Note M. House Bill 1 Pension Reform

House Bill 1 was signed by the Governor of the Commonwealth on June 27, 2008. It contained a number of changes that KRS implemented effective September 1, 2008.

House Bill 1 also contained statutory changes to Kentucky Revised Statute 61.637, the law governing members who become reemployed following retirement.

Employee Contributions Employee contributions for non-hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 6% of all their creditable compensation to KRS. Five percent of this contribution was deposited to the individual employee's account, while the other 1% was deposited to an account created under 26 USC Section 401(h) in the KRS Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 9% of all their creditable compensation, with 8% credited to the member's account, and 1% deposited to the KRS Pension Fund 401(h) account. Interest paid each June on these members' accounts is set at a rate of 2.5%. If a member terminates his/her employment and applies to take a refund, the member is entitled to a full refund of contributions and interest in his/her account; however, the 1% contributed to the 401(h) account in the KRS Pension Fund is non-refundable and is forfeited.

Employer Rates Employer contribution rates for KERS and SPRS for fiscal 2013 were established in the 2010-2012 Executive Branch Budget (House Bill 1) during the 2010 Extraordinary Session of the Kentucky General Assembly. Employer contribution rates for CERS for fiscal 2013 were adopted by the KRS Board of Trustees based on the actuarially recommended rates. The Employer contribution rates were established as follows (effective July 1, 2012) for fiscal 2013:

Employer Contribution Rates
Fiscal Year 2013

System	Rate
KERS Non-Haz	23.61%
KERS Haz	29.79%
CERS Non-Haz	19.55%
KERS Haz	37.60%
SPRS	63.67%

Although the majority of changes in this legislation only impacted new hires on, or after, September 1, 2008, there were some changes that affected all members and retirees of KRS:

- **Cost of Living Adjustment** Beginning July 1, 2009, COLA for retirees are set by statute at 1.5% each July 1. The Kentucky General Assembly may increase this percentage at any time, but only if appropriate funding is allocated. The General Assembly may also reduce or suspend the annual COLA.

COLA
Cost of Living Adjustment

- **Service Purchase Costs** The actuarial factors used to determine the cost to purchase a service must assume the earliest date a member can retire with an unreduced benefit, and must also assume a 1.5% COLA will be enacted. This change results in an increased service purchase cost for any purchase calculated on, or after, September 1, 2008. This change also affects the cost billed to employers for sick leave when an employee retires.
- **Payment Options** The Partial Lump Sum Payment Option was made available only to those employees who retired on, or before, January 1, 2009.

Kentucky Revised Statute 61.637 was modified significantly by House Bill 1. Specifically, a member who retired and is reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.

NOTE **N.**

Note N. Medicare Prescription Drug Plan

PDP
Prescription Drug Plan

In fiscal 2009, Kentucky Retirement Systems submitted an application to the Centers for Medicare & Medicaid Services, of the Department of Health & Human Services, to enter into a contract to offer a Medicare Prescription Drug Plan (PDP), as described in the Medicare Prescription Drug Benefit Final Rule published in the Federal Register on January 28, 2005 (70 Fed. Reg. 4194). As part of the application process, KRS was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents and is invested on a daily basis. On February 19, 2009, KRS established the KRS Insurance Prescription Drug Fund at Northern Trust. As of June 30, 2013 and 2012, the Insolvency Account amounted to $100,001 and $100,691, respectively.

NOTE **O.**

Note O. House Bill 300 Pension Reform

House Bill 300 was signed by the Governor on April 11, 2012. The Bill makes changes/additions to information and definitions regarding placement agents, audits to be performed on KRS by the Kentucky Auditor of Public Accounts, terms of service of Trustees of the Board, terms of service of Board officers (Chair and Vice Chair), among other changes.

NOTE **P.**

Note P. Reimbursement Of Retired – Reemployed Health Insurance

As a result of the passage of House Bill 1 on September 1, 2008, if a retiree is reemployed in a regular full time position and has chosen health insurance coverage through KRS, the employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate. As of June 30, 2013 and 2012, the reimbursement totaled $9,187,367 and $6,349,929, respectively.

NOTE **Q.**

Note Q. Louisville/Jefferson County Metro Firefighters

Firefighter employees of Louisville/Jefferson County Metro Government were awarded a total of $28,440,159 for back-pay. Of that total, $28,425,232, was determined to be the amount of creditable compensation. The total contributions owed to KRS were calculated by applying the contribution rate in effect for each fiscal year awarded (fiscal 1986 to fiscal 2009) while considering the appropriate participation status, hazardous or non-hazardous, of each employee. These calculations established that the total employer contribution owed was $5,113,511, and the total employee contribution owed was $2,083,310, for a total of $7,196,821. These amounts were received on July 27, 2010.

KRS also calculated the impact on final compensation caused by the retroactive benefits paid to those firefighters who have already retired. KRS was required to pay retroactive benefit payments totaling $6,221,219, reflecting additional benefits due to the increase in final compensation. The liability was paid on August 22, 2010, by issuance of benefit payments to the individual firefighter members.

Kentucky Revised Statute 61.675(3)(b) requires that KRS collect interest on unmade or delinquent contributions. The interest owed by the Louisville/Jefferson County Metro Government, as calculated by KRS' actuaries, amounted to $12,020,731. Therefore, the total amount due KRS was $19,217,552. As stated earlier, $7,196,821 was received on July 27, 2010.

In April 2012, KRS received $3,866,429 and in July 2012, KRS received an additional $7,000,000, for interest owed, which by settlement extinguished the liability to KRS.

NOTE **R.**

Note R. Reciprocity Agreement

KRS has a reciprocity agreement with Kentucky Teachers' Retirement System (KTRS) for the payment of insurance benefits for those members who have creditable service in both systems.

NOTE **S.**

Note S. Custodial Bank

As a result of a thorough RFP process and effective July 1, 2013, Bank of New York-Mellon became responsible for providing KRS all required global custodial services. Bank of New York-Mellon took these duties over from Northern Trust, the former custodial bank.

NOTE **T.**

Note T. Related Party

Perimeter Park West, Inc. (PPW) is a legally separate, tax-exempt Kentucky corporation established in 1998 to own the land and buildings in which KRS is located. PPW leases the buildings to KRS (the lease is renewed every five years) and provides maintenance for the buildings and land. PPW is considered a related party to KRS and has its own separate financial audit. The following presents the amounts recorded between KRS and PPW for the fiscal year ended June 30, 2013:

Lease payments to PPW from KRS:	$1,131,065
Dividends to KRS from PPW:	$ 485,030

NOTE **U.**

Note U. Subsequent Events

Management has evaluated the period from June 30, 2013, to December 5, 2013, (the date the financial statements were available to be issued) for items requiring recognition or disclosure in the financial statements.

NOTE **V.**

Note V. Restatement

The Pension Funds' Net Position as of June 30, 2012, and the decrease in the Pension Funds' Net Position for the fiscal year then ended, have been restated to correct accrued contributions and Health Insurance Contributions at June 30, 2012. See detailed note below. The net effect of this correction for reporting purposes was a decrease of $4,647,263 in pension contributions and health insurance contributions for the fiscal year ended June 30, 2012. The restatement resulted from the failure of an adjusting entry to be reflected in the financial statements.

Restatement of Fiscal 2012 Financial Statements

	As Previously Reported	As Restated
Pension Funds:		
Contributions Receivable	$112,722	$108,073
Total Net Position	$10,758,706	$10,754,057
Insurance Fund:		
Health Insurance Contributions	$11,924	$ 7,275
Net Decrease in Net Position	$859,014	$863,663

Required Supplementary Information

Required Supplementary Information

Schedules of Funding Progress for KERS Pension Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$6,000,513,743	$7,049,613,171	$1,049,099,428	85.1%	$1,645,412,496	63.8%
June 30, 2005	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
June 30, 2006	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
June 30, 2007	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
June 30, 2008	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
June 30, 2009	4,794,611,365	10,658,549,532	5,863,938,167	45.0	1,754,412,912	334.2
June 30, 2010	4,210,215,585	11,004,795,089	6,794,579,504	38.3	1,815,146,388	374.3
June 30, 2011	3,726,986,087	11,182,142,032	7,455,155,945	33.3	1,731,632,748	430.5
June 30, 2012	3,101,316,738	11,361,048,136	8,259,731,398	27.3	1,644,896,681	502.1
June 30, 2013	2,636,122,852	11,386,602,159	8,750,479,307	23.2	1,644,408,698	532.1
Hazardous						
June 30, 2004	$397,212,763	$403,578,036	$6,365,273	98.4%	$126,664,812	5.0%
June 30, 2005	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
June 30, 2006	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
June 30, 2007	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
June 30, 2008	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
June 30, 2009	502,503,287	674,411,781	171,908,494	74.5	146,043,576	117.7
June 30, 2010	502,729,009	688,149,451	185,420,442	73.1	143,557,944	129.2
June 30, 2011	510,748,505	721,293,444	210,544,239	70.8	133,053,792	158.2
June 30, 2012	497,226,296	752,699,457	255,473,161	66.1	131,976,754	193.6
June 30, 2013	505,656,808	783,980,594	278,323,786	64.5	132,015,368	210.8
Total						
June 30, 2004	$6,397,726,506	$7,453,191,207	$1,055,464,701	85.8%	$1,772,077,308	59.6%
June 30, 2005	5,983,974,408	8,018,069,096	2,034,094,688	74.6	1,787,594,376	113.8
June 30, 2006	5,822,070,515	9,503,482,150	3,681,411,635	61.3	1,840,978,097	200.0
June 30, 2007	5,864,070,268	10,044,931,606	4,180,861,338	58.4	1,925,061,513	217.2
June 30, 2008	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0
June 30, 2009	5,297,114,652	11,332,961,313	6,035,846,661	46.7	1,900,456,488	317.6
June 30, 2010	4,712,944,594	11,692,944,540	6,979,999,946	40.3	1,958,704,332	356.4
June 30, 2011	4,237,734,592	11,903,435,476	7,665,700,884	35.6	1,864,686,540	411.1
June 30, 2012	3,598,543,034	12,113,747,593	8,515,204,559	29.7	1,776,873,435	479.2
June 30, 2013	3,141,779,660	12,170,582,753	9,028,803,093	25.8	1,776,424,066	508.3

*** Covered payroll was actuarially computed*

See Independent Auditors' Report.

Schedules of Funding Progress for CERS Pension Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$5,187,851,530	$4,936,459,488	$(251,392,042)	105.1%	$1,826,870,880	(13.8)%
June 30, 2005	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
June 30, 2006	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
June 30, 2007	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
June 30, 2008	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
June 30, 2009	5,650,789,991	7,912,913,512	2,262,123,521	71.4	2,183,611,848	103.6
June 30, 2010	5,546,857,291	8,459,022,280	2,912,164,989	65.6	2,236,855,380	130.2
June 30, 2011	5,629,611,183	8,918,085,025	3,288,473,842	63.1	2,276,595,948	144.4
June 30, 2012	5,547,235,599	9,139,567,695	3,592,332,096	60.7	2,236,546,345	160.6
June 30, 2013	5,637,094,483	9,378,876,114	3,741,781,631	60.1	2,236,277,489	167.3
Hazardous						
June 30, 2004	$1,457,612,042	$1,640,830,120	$183,218,078	88.8%	$392,562,624	46.7%
June 30, 2005	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
June 30, 2006	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
June 30, 2007	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
June 30, 2008	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
June 30, 2009	1,751,487,540	2,578,444,600	826,957,060	67.9	469,315,464	176.2
June 30, 2010	1,749,464,388	2,672,151,907	922,687,519	65.5	466,548,660	197.8
June 30, 2011	1,779,545,393	2,859,041,052	1,079,495,659	62.2	466,963,860	231.2
June 30, 2012	1,747,379,297	3,009,992,047	1,262,612,750	58.1	464,228,923	272.0
June 30, 2013	1,801,691,410	3,124,205,593	1,322,514,183	57.7	461,672,567	286.5
Total						
June 30, 2004	$6,645,463,572	$6,577,289,608	$(68,173,964)	101.0%	$2,219,433,504	(3.1)%
June 30, 2005	6,511,561,710	7,180,774,025	669,212,315	90.7	2,296,396,728	29.2
June 30, 2006	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
June 30, 2007	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4
June 30, 2008	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3
June 30, 2009	7,402,277,531	10,491,358,112	3,089,080,581	70.6	2,652,927,312	116.4
June 30, 2010	7,296,321,679	11,131,174,187	3,834,852,508	65.5	2,703,404,040	141.9
June 30, 2011	7,409,156,576	11,777,126,077	4,367,969,501	62.9	2,743,559,808	159.2
June 30, 2012	7,294,614,896	12,149,559,742	4,854,944,846	60.0	2,700,775,268	179.8
June 30, 2013	7,438,785,893	12,503,081,707	5,064,295,814	59.5	2,697,950,056	187.7

** *Covered payroll was actuarially computed*

Schedules of Funding Progress for SPRS Pension Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
June 30, 2004	$385,077,195	$437,482,425	$52,405,230	88.0%	$43,835,208	119.6%
June 30, 2005	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
June 30, 2006	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
June 30, 2007	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
June 30, 2008	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5
June 30, 2009	329,966,989	602,328,868	272,361,879	54.8	51,660,396	527.2
June 30, 2010	304,577,292	612,444,806	307,867,514	49.7	51,506,712	597.7
June 30, 2011	285,580,631	634,379,401	348,798,770	45.0	48,692,616	716.3
June 30, 2012	259,791,575	647,688,665	387,897,090	40.1	48,372,506	801.9
June 30, 2013	241,800,328	651,580,654	409,780,326	37.1	45,256,202	905.5

** *Covered payroll was actuarially computed*

Schedules of Funding Progress for KERS Insurance Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$600,586,961	$2,335,905,365	$1,735,318,404	25.7%	$1,645,412,496	105.5%
June 30, 2005	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
June 30, 2006	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
June 30, 2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
June 30, 2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
June 30, 2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
June 30, 2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
June 30, 2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
June 30, 2012	446,080,511	3,125,330,157	2,679,249,646	14.3	1,644,896,681	162.9
June 30, 2013	497,584,327	2,128,754,134	1,631,169,807	23.4	1,644,408,698	99.2
Hazardous						
June 30, 2004	$169,158,879	$323,503,563	$154,344,684	52.3%	$126,664,812	121.9%
June 30, 2005	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
June 30, 2006	212,833,318	621,237,856	408,404,538	34.3	138,747,320	294.4
June 30, 2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
June 30, 2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
June 30, 2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
June 30, 2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
June 30, 2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
June 30, 2012	345,573,948	384,592,406	39,018,458	89.9	131,976,754	29.6
June 30, 2013	370,774,403	385,517,675	14,743,272	96.2	132,015,368	11.2
Total						
June 30, 2004	$769,745,840	$2,659,408,928	$1,889,663,088	28.9%	$1,772,077,308	106.6%
June 30, 2005	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
June 30, 2006	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,978,097	413.5
June 30, 2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
June 30, 2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
June 30, 2009	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0
June 30, 2010	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1
June 30, 2011	781,582,057	4,787,148,400	4,005,566,343	16.3	1,864,686,540	214.8
June 30, 2012	791,654,459	3,509,922,563	2,718,268,104	22.6	1,776,873,435	153.0
June 30, 2013	868,358,730	2,514,271,809	1,645,913,079	34.5	1,776,424,066	92.7

** *Covered payroll was actuarially computed*

See Independent Auditors' Report.

Schedules of Funding Progress for CERS Insurance Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2004	$585,399,072	$2,438,734,696	$1,853,335,624	24.0%	$1,826,870,880	101.5%
June 30, 2005	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
June 30, 2006	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
June 30, 2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
June 30, 2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
June 30, 2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
June 30, 2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
June 30, 2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
June 30, 2012	1,512,853,851	2,370,771,288	857,917,437	63.8	2,236,546,345	38.4
June 30, 2013	1,628,244,197	2,443,894,100	815,649,903	66.6	2,236,277,489	36.5
Hazardous						
June 30, 2004	$310,578,162	$1,025,684,477	$715,106,315	30.3%	$392,562,624	182.2%
June 30, 2005	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
June 30, 2006	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
June 30, 2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
June 30, 2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
June 30, 2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
June 30, 2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
June 30, 2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
June 30, 2012	829,040,842	1,364,843,057	535,802,215	60.7	464,228,923	115.4
June 30, 2013	892,774,391	1,437,332,817	544,558,426	62.1	461,672,567	118.0
Total						
June 30, 2004	$895,977,234	$3,464,419,173	$2,568,441,939	25.9%	$2,219,433,504	115.7%
June 30, 2005	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
June 30, 2006	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
June 30, 2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
June 30, 2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
June 30, 2009	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4
June 30, 2010	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3
June 30, 2011	2,204,241,067	4,721,675,960	2,517,434,893	46.7	2,743,559,808	91.8
June 30, 2012	2,341,894,693	3,735,614,345	1,393,719,652	62.7	2,700,775,268	51.6
June 30, 2013	2,521,018,588	3,881,226,917	1,360,208,329	65.0	2,697,950,056	50.4

** *Covered payroll was actuarially computed*

See Independent Auditors' Report.

Schedules of Funding Progress for SPRS Insurance Funds

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
June 30, 2004	$96,622,908	$197,604,301	$100,981,393	48.9%	$43,835,208	230.4%
June 30, 2005	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
June 30, 2006	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
June 30, 2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
June 30, 2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
June 30, 2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
June 30, 2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2
June 30, 2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4
June 30, 2012	124,372,072	333,903,782	209,531,710	37.2	48,372,506	433.2
June 30, 2013	136,321,060	222,326,743	86,005,683	61.3	45,256,202	190.0

** *Covered payroll was actuarially computed*

See Independent Auditors' Report.

Schedules of Contributions from Employers & Other Contributing Entities
KERS Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$47,739,067	$21,696,543	-	45.4%
June 30, 2005	85,798,943	50,332,750	-	58.7
June 30, 2006	129,125,800	60,680,607	-	47.0
June 30, 2007	176,774,106	88,248,677	-	49.9
June 30, 2008	264,742,985	104,655,217	-	39.5
June 30, 2009	294,495,010	112,383,083	-	38.2
June 30, 2010	348,494,678	144,050,560	-	41.3
June 30, 2011	381,915,236	193,754,471	-	50.7
June 30, 2012	441,094,470	214,786,132	-	48.7
June 30, 2013	485,395,934	280,874,152	-	57.9
Insurance Funds				
June 30, 2004	$77,951,553	$78,016,737	-	100.1%
June 30, 2005	86,974,271	49,909,228	-	57.4
June 30, 2006	202,498,302	47,634,639	-	23.5
June 30, 2007	219,768,964	64,014,332	$10,744,049	34.0
June 30, 2008	558,745,820	56,744,942	6,633,538	11.3
June 30, 2009	362,707,378	74,542,932	8,167,982	22.8
June 30, 2010	376,556,187	93,976,917	8,550,914	27.2
June 30, 2011	294,897,813	129,335,552	-	43.9
June 30, 2012	297,904,224	156,057,216	-	52.4
June 30, 2013	286,143,134	165,330,557	-	57.8
Total				
June 30, 2004	$125,690,620	$99,713,280	-	79.3%
June 30, 2005	172,773,214	100,241,978	-	58.0
June 30, 2006	331,624,102	108,315,246	-	32.7
June 30, 2007	396,543,070	152,263,009	$10,744,049	41.1
June 30, 2008	823,488,805	161,400,159	6,633,538	20.4
June 30, 2009	657,202,388	186,926,015	8,167,982	29.7
June 30, 2010	725,050,865	238,027,477	8,550,914	34.0
June 30, 2011	676,813,049	323,090,023	-	47.7
June 30, 2012	738,998,694	370,843,348	-	50.2
June 30, 2013	771,539,068	446,204,709	-	57.8

Schedules of Contributions from Employers & Other Contributing Entities
KERS Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$9,600,978	$9,769,580	-	101.8%
June 30, 2005	9,449,878	9,758,547	-	103.3
June 30, 2006	10,787,472	10,803,206	-	100.1
June 30, 2007	12,219,689	13,237,321	-	108.3
June 30, 2008	14,147,341	15,257,079	-	107.8
June 30, 2009	15,708,254	15,843,289	-	100.9
June 30, 2010	17,814,630	17,658,058	-	99.1
June 30, 2011	20,605,070	19,140,508	-	92.9
June 30, 2012	20,264,754	20,808,540	-	102.7
June 30, 2013	21,501,581	27,333,681	-	127.1
Insurance Funds				
June 30, 2004	$14,942,092	$14,959,617	-	100.1%
June 30, 2005	15,892,977	15,395,977	-	96.9
June 30, 2006	28,517,563	17,011,745	-	59.7
June 30, 2007	31,304,778	19,534,819	$104,669	62.7
June 30, 2008	51,214,929	21,997,341	73,891	43.1
June 30, 2009	34,670,467	20,807,204	186,081	60.6
June 30, 2010	35,045,278	21,921,535	319,059	63.5
June 30, 2011	29,585,257	19,952,580	-	67.4
June 30, 2012	28,326,206	24,538,087	-	86.6
June 30, 2013	26,252,911	25,682,403	-	97.8
Total				
June 30, 2004	$24,543,070	$24,729,197	-	100.8%
June 30, 2005	25,342,855	25,154,524	-	99.3
June 30, 2006	39,305,035	27,814,951	-	70.8
June 30, 2007	43,524,467	32,772,140	$104,669	75.5
June 30, 2008	65,362,270	37,254,420	73,891	57.1
June 30, 2009	50,378,721	36,650,493	186,081	73.1
June 30, 2010	52,859,908	39,579,593	319,059	75.5
June 30, 2011	50,190,327	39,093,088	-	77.9
June 30, 2012	48,590,960	45,346,627	-	93.3
June 30, 2013	47,754,492	53,016,084	-	111.0

See Independent Auditors' Report.

Schedules of Contributions from Employers & Other Contributing Entities
CERS Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$43,111,505	$44,028,465	-	102.1%
June 30, 2005	53,117,955	54,616,800	-	102.8
June 30, 2006	83,123,669	90,834,052	-	109.3
June 30, 2007	112,508,305	124,260,850	-	110.4
June 30, 2008	138,311,398	150,925,334	-	109.1
June 30, 2009	161,097,151	179,284,551	-	111.3
June 30, 2010	186,724,383	207,075,842	-	110.9
June 30, 2011	218,984,628	248,518,574	-	113.5
June 30, 2012	261,764,019	275,736,191	-	105.3
June 30, 2013	294,914,244	294,914,244		100.0
Insurance Funds				
June 30, 2004	$89,289,520	$89,344,241	-	100.1%
June 30, 2005	106,612,633	106,638,253	-	100.0
June 30, 2006	272,942,757	128,867,817	-	47.2
June 30, 2007	285,600,490	147,608,801	$9,623,431	55.1
June 30, 2008	406,541,729	196,110,111	6,003,181	49.7
June 30, 2009	264,733,532	123,852,611	7,623,628	49.7
June 30, 2010	266,331,326	166,607,097	9,156,991	66.0
June 30, 2011	213,429,424	186,885,576	-	87.6
June 30, 2012	214,421,008	171,924,836	-	80.2
June 30, 2013	195,560,870	159,992,643	-	81.8
Total				
June 30, 2004	$132,401,025	$133,372,706	-	100.7%
June 30, 2005	159,730,588	161,255,053	-	101.0
June 30, 2006	356,066,426	219,701,869	-	61.7
June 30, 2007	398,108,795	271,869,651	$9,623,431	70.7
June 30, 2008	544,853,127	347,035,445	6,003,181	64.8
June 30, 2009	425,830,683	303,137,162	7,623,628	73.0
June 30, 2010	453,055,709	373,682,939	9,156,991	84.5
June 30, 2011	432,414,052	435,404,150	-	100.7
June 30, 2012	476,185,027	447,661,027	-	94.0
June 30, 2013	490,475,114	454,906,887	-	92.7

See Independent Auditors' Report.

Schedules of Contributions from Employers & Other Contributing Entities
CERS Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$27,050,382	$27,640,775	-	102.2%
June 30, 2005	39,437,725	39,947,747	-	101.3
June 30, 2006	44,059,404	49,976,485	-	113.4
June 30, 2007	53,889,838	61,553,118	-	114.2
June 30, 2008	64,082,063	72,154,734	-	112.6
June 30, 2009	69,056,365	78,151,677	-	113.2
June 30, 2010	76,390,669	82,887,128	-	108.5
June 30, 2011	78,795,602	85,078,181	-	108.0
June 30, 2012	83,588,958	89,329,217	-	106.9
June 30, 2013	120,139,906	120,139,906		100.0
Insurance Funds				
June 30, 2004	$47,018,046	$47,036,777	-	100.0%
June 30, 2005	54,094,495	54,106,577	-	100.0
June 30, 2006	98,297,535	64,853,778	-	66.0
June 30, 2007	115,938,899	70,072,785	$656,523	61.0
June 30, 2008	168,723,639	90,113,200	419,774	53.7
June 30, 2009	126,757,348	70,785,241	627,938	56.3
June 30, 2010	129,227,449	83,042,875	1,493,440	65.4
June 30, 2011	109,226,667	98,592,286	-	90.3
June 30, 2012	110,762,577	92,563,664	-	83.6
June 30, 2013	102,010,672	85,319,393	-	83.6
Total				
June 30, 2004	$74,068,428	$74,677,552	-	100.8%
June 30, 2005	93,532,220	94,054,324	-	100.6
June 30, 2006	142,356,939	114,830,263	-	80.7
June 30, 2007	169,828,737	131,625,903	$656,523	77.9
June 30, 2008	232,805,702	162,267,934	419,774	70.0
June 30, 2009	195,813,713	148,936,918	627,938	76.4
June 30, 2010	205,618,118	165,930,003	1,493,440	81.4
June 30, 2011	188,022,269	183,670,467	-	97.7
June 30, 2012	194,351,535	181,892,881	-	93.6
June 30, 2013	222,150,578	205,459,299	-	92.5

See Independent Auditors' Report.

Schedules of Contributions from Employers & Other Contributing Entities
SPRS

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	$1,175,711	$1,152,752	-	98.0%
June 30, 2005	3,730,805	2,851,461	-	76.4
June 30, 2006	6,352,777	4,244,445	-	66.8
June 30, 2007	9,023,665	6,142,326	-	68.1
June 30, 2008	13,823,490	7,443,277	-	53.8
June 30, 2009	15,951,841	8,186,259	-	51.3
June 30, 2010	18,764,941	9,489,399	-	50.6
June 30, 2011	18,463,372	12,657,225	-	68.6
June 30, 2012	20,497,924	15,361,781	-	74.9
June 30, 2013	23,117,291	18,501,090	-	80.0
Insurance Funds				
June 30, 2004	$8,434,834	$8,455,498	-	100.2%
June 30, 2005	8,608,536	6,631,031	-	77.0
June 30, 2006	12,554,648	6,880,517	-	54.8
June 30, 2007	15,233,320	6,488,600	$361,942	45.0
June 30, 2008	43,469,735	7,329,229	183,564	17.3
June 30, 2009	29,324,666	7,413,552	229,240	26.1
June 30, 2010	30,302,151	8,369,428	273,684	28.5
June 30, 2011	25,772,574	11,050,964	-	42.9
June 30, 2012	28,246,786	11,960,468	-	42.3
June 30, 2013	27,234,229	16,828,681	-	61.8
Total				
June 30, 2004	$9,610,545	$9,608,250	-	100.0%
June 30, 2005	12,339,341	9,482,492	-	76.8
June 30, 2006	18,907,425	11,124,962	-	58.8
June 30, 2007	24,256,985	12,630,926	$361,942	53.6
June 30, 2008	57,293,225	14,772,506	183,564	26.1
June 30, 2009	45,276,507	15,599,811	229,240	35.0
June 30, 2010	49,067,092	17,858,827	273,684	37.5
June 30, 2011	44,235,946	23,708,189	-	53.6
June 30, 2012	48,744,710	27,322,249	-	56.0
June 30, 2013	50,351,520	35,329,771	-	70.2

See Independent Auditors' Report.

Additional Supporting Schedules

Schedule of Administrative Expenses (in Thousands)

Expense	2013	2012
Personnel		
Salaries and Per Diem	$14,987	$14,316
Fringe Benefits	6,349	5,561
Tuition Assistance	26	31
Total Personnel	$21,362	$19,908
Contractual Services		
Actuarial	$401	$297
Audit	169	30
Healthcare	135	
Human Resources	54	40
Legal	746	806
Medical	381	229
Miscellaneous	194	1,008
Total Contractual Services	$2,080	$2,410
Communication		
Printing	$272	$299
Telephone	154	132
Postage	507	525
Travel	101	182
Total Communication	$1,034	$1,138
Internal Audit		
Travel/Conferences	$3	$1
Dues/Subscriptions	1	2
Miscellaneous	0	1
Total Internal Audit	$4	$4
Note: In fiscal 2012, Administrative Expenses include the Healthcare Fees and Investment Expenses which are paid through the Pension Funds and reimbursed by the Insurance Fund.		
Investments (Pension Fund)		
Travel/Conferences	$60	$41
Dues/Subscriptions	41	26
Software	180	149
Contractual	1,513	858
Miscellaneous	9	15
Legal	126	265
Total Investments	$1,929	$1,354
Rentals		
Office Space	$1,165	$1,144
Equipment	54	91
Total Rentals	$1,219	$1,235
Miscellaneous		
Utilities	$206	$201
Software	1,168	
Supplies	153	140
Insurance	67	76
Maintenance	15	40
Other	122	
Total Miscellaneous	$1,731	$457
Depreciation/Amortization	1,219	1,279
Total Pension Fund Administrative Expenses	$30,578	$27,785
Investment Expenses (Insurance Fund)		
Investment Consultant		$246
Investment Related Travel		9
Dues & Subscriptions		7
Conferences		3
Miscellaneous		4
Software		43
Legal Counsel		76
Subtotal		388
Healthcare Fees	9,759	11,584
Total Insurance Fund Administrative Expenses	$9,759	$11,972
Total Administrative Expenses	$40,337	$39,757

See Independent Auditors' Report.

Schedule of Direct Investment Expenses (in Thousands)

	2013	2012
Pension Funds		
Security Lending Fees		
↘ Broker Rebates	$(224)	$(261)
↘ Lending Agent Fees	865	229
Total Security Lending	641	(32)
Contractual Services		
↘ Investment Management	41,128	37,730
↘ Security Custody/Investment Consultant	1,513	858
↘ Investment Related Travel	52	31
↘ Software	180	149
↘ Dues & Subscriptions	41	26
↘ Conferences	8	10
↘ Miscellaneous	9	15
↘ Legal Counsel	126	265
Total Contractual Services	43,057	39,084
Insurance Funds		
Security Lending Fees		
↘ Broker Rebates	15	(153)
↘ Lending Agent Fees	282	68
Total Security Lending	297	(85)
Contractual Services		
↘ Investment Management	9,599	8,029
↘ Security Custody/Investment Consultant		246
↘ Investment Related Travel		9
↘ Software		43
↘ Dues & Subscriptions		7
↘ Conferences		3
↘ Miscellaneous		4
↘ Legal Counsel	0	76
Total Contractual Services	9,599	8,417
Total Investment Expenses	**$53,594**	**$47,384**

See Independent Auditors' Report.

Schedule of Professional Consultant Fees (in Thousands)

Fees	2013	2012
Actuarial Services	$401	$297
Medical Review Services	381	229
Audit Services	169	30
Legal Counsel	872	806
Compliance		98
Workflow		28
Healthcare	135	699
Banking	9	66
Human Resources	54	40
Miscellaneous	186	117
Total	**2,207**	**2,410**

Investments

INVESTMENTS

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A Better Foothold – Yet Uncertainty Remains

The economic problems post financial crisis continue to overhang the financial markets; however, the financial markets and economy continue to move forward with the support of the Federal Reserve. For the 2013 fiscal year, the economy was healthier and the financial markets were in somewhat better shape than they had been for several years.

Individuals' personal balance sheets have been strengthened and this has given consumers confidence to increase their spending. Corporations have worked to strengthen their own balance sheets, but have had little motivation to invest in plant and equipment or hire additional workers. Despite the improved conditions, the theme for the year was one of market uncertainty, brought on by issues in Europe, Federal Reserve actions, and U.S. politics. The fixed income markets would prove susceptible to these influences; however, the equity markets, in particular within the developed world, would prove to be resilient.

The European debt crisis had reached a peak by the start of the fiscal year leaving global investors to consider the implications of a Eurozone break up. A European recession seemed inevitable, and the question became to what extent would this effect the fragile U.S. recovery. Investors piled into U.S. Treasuries seeking safety while flattening the yield curve. In response to debt crisis in Europe and the fear of contagion, the European Central Bank along with several other central banks, including the Fed, issued additional economic stimulus plans. This reassured investors and a rotation transpired from risk-off to risk-on investments, meaning securities with higher risk, and potentially higher returns, were sought after causing a sell-off of U.S. Treasuries (several months of negative returns). Efforts to stabilize the global economy continued during the year with several central banks pledging to support economic efforts giving rise to investor sentiment and ultimately riskier assets.

Leading up to U.S. elections, the Fed announced that it would begin another round of quantitative easing which would entail purchasing $40 billion worth of mortgage-backed securities per month, in conjunction with the already monthly purchase of $45 billion of Agency MBS. This program would soon end and another would take its place, this time the $45 billion monthly purchase would be aimed at long-term Treasuries. At the same time, the Fed stated that it would no longer estimate when it would lift its federal funds rate, but rather stated the program would continue until reaching an unemployment rate below 6.5% and an inflation rate at or above 2.5%.
Coming out of the November elections, the U.S. was essentially left with a house divided, and a new source of uncertainty was looming. As if the Eurozone debt debacle and uncertainty brought about with the elections were not enough, the U.S. was now standing at the edge of a "Fiscal Cliff", with global markets anxiously paying attention to policymakers. Essentially, the U.S. was faced with the expiration of the Bush-era tax cuts and the large spending cuts set to take place. This was considered a double-edged sword for the frail economy; effectively increased taxes in conjunction with less government spending could hamper the economy from two sides. Despite healthy debate, congress was able to reach an agreement regarding taxes which minimized the impact felt; spending cuts were delayed and an increase in the debt-ceiling was reached.

During the last quarter of the 2013 fiscal year, additional market volatility was felt, not from an impending crisis or economic or political turmoil, which seemed to persist during the period, but from a statement made by the Federal Reserve. The Fed announced that it might begin to taper its support of the economy by the end of 2013, and end its stimulus package by mid-2014. Volatility in the markets spiked, stock markets fell and interest rates spiked; markets normalized once the Fed stated its policies would not change in the near-term.

Fed
Federal Reserve

MBS
Mortgage Backed Securities

GDP
Gross Domestic Product

Currently, economic growth, which to date has been primarily driven by support by the Fed, continues to plug along at a slow pace, around 2% as measured by GDP. The unemployment rate has come down steadily for a few years now, but has been stubborn in doing so. Job growth that was once spurred by government positions, is now being led by the private market. Despite the unemployment rate dropping, a factor in that is the decline in the labor participation rate, which is near the lowest levels in decades, obviously a concern and stumbling block for future growth. A bright spot in today's economy is the housing market, which many point to as a driving factor of the 2008 recession. Housing starts and existing home sales have improved, and prices seem to have stabilized and shown signs of improvement as well. A jump start to the housing market is vitally important from a manufacturing and employment perspective, but also from a wealth effect. Many Americans greatest asset is their home, and when one feels more stable and secure, consumer confidence usually follows.

The 2013 fiscal year was full of uncertainty, which caused volatility spikes in the market throughout the twelve month period. As stated above, when the dust settled, public equities performed well, especially within the developed markets, and high yield fixed income investors were rewarded. In addition, investments in real estate and absolute return strategies were solid performers, while more traditional fixed income investors suffered losses.

Pension Funds Respond Despite a strong surge from the public equity and high yield fixed income spaces, questions surrounding how pension funds will meet their expected return targets and thus fund their liabilities are valid and taking center stage. Now more than ever, funds are faced with the challenge to meet return expectations in a slow growth environment and have turned to alternative investment strategies to do just that; private equity, real estate, real return strategies (such as inflation linked bonds and commodities), and absolute return strategies, achieved through a reduction in both traditional bonds and public equities, are being employed more significantly. KRS has already moved in this direction while still keeping a close eye on how the new asset classes impact returns, risks, and liquidity within the portfolios. Along with the additional asset classes now at staff's disposal, recently approved target asset allocations for each plan (in response to the changing nature of the markets and individual plan needs) have been implemented by Staff. The fiscal year was characterized by a continued build out of the portfolios.

INVESTMENT **SUMMARY**

Investment Policies
Visit https://kyret.ky.gov/investments to read our Statement of Investment policy. Other policies include Brokerage, Securities Trading, Placement Agents, Proxy Voting and more.

The Board of Trustees is charged with the responsibility of investing the Systems' assets to provide benefits to the members of the Systems. To achieve that goal, the Board follows a policy of thoughtfully growing our asset base while protecting against undue risk and losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the Systems. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policies, objectives and strategies for both the pension and insurance portfolios.

Investment Policy The Board of Trustees approved a new target asset allocation beginning July 1, 2011. The Board's investment policy as of June 30, 2013 is outlined below.

Board Investment Policy for Fund Asset Allocation

Asset	Pension Fund	Insurance Fund
U.S. Equity	20.5%	20.0%
International Equity	20.0%	20.0%
Emerging Market Equity	2.9%	4.0%
Core Fixed	9.6%	10.0%
High Yield	4.8%	5.0%
Global Fixed	4.9%	5.0%
Private Equity	10.0%	10.0%
Real Estate	4.5%	5.0%
Absolute Return	10.0%	10.0%
Real Return	10.0%	10.0%
Cash	2.8%	1.0%

Investing in Kentucky
In keeping with the Board of Trustees' fiduciary responsibility, where all else equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

Short-Term (5 years and less) The returns of the particular asset classes of the managed funds of the Systems, measured on a year-to-year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices.

Medium-Term (5 to 30 years) The returns of the particular asset classes of the managed funds of the Systems, measured on a rolling year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices and perform above median in an appropriate peer universe if there is one.

Longer-Term The total assets of the Systems should achieve a return measured over 30 to 40 years which exceeds the actuarially required rate of return of 7.75% while also exceeding the return achieved by its total fund benchmark.

INVESTMENT **STRATEGIES**

The objectives of the portfolios are to produce results that exceed the stated goals.

Diversification KRS portfolios are diversified on several levels. Portfolios are diversified through the use of multiple asset classes. Asset allocations are revisited on a periodic basis and represent an efficient allocation to achieve overall return and risk characteristics. The individual asset classes are diversified through the use of multiple portfolios that are managed both by the Investment Division Staff and by external investment advisors. Finally, portfolios within each of the asset classes are diversified through the selection of individual securities. Each portfolio advisor is afforded discretion to diversify its portfolio(s) within the parameters established by the Board of Trustees.

Rebalancing Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with KRS' Statement of Investment Policy target levels. Such rebalancing is necessary to reflect sizeable cash flows and performance imbalances among asset classes and investment advisors. KRS' rebalancing policies call for an immediate rebalancing to within its allocation ranges, if an asset class exceeds or falls below its target allocation by an appropriate percentage defined in the Investment Policy. As the following charts depict, the Pension and Insurance portfolios were operating within the ranges established by the investment policies.

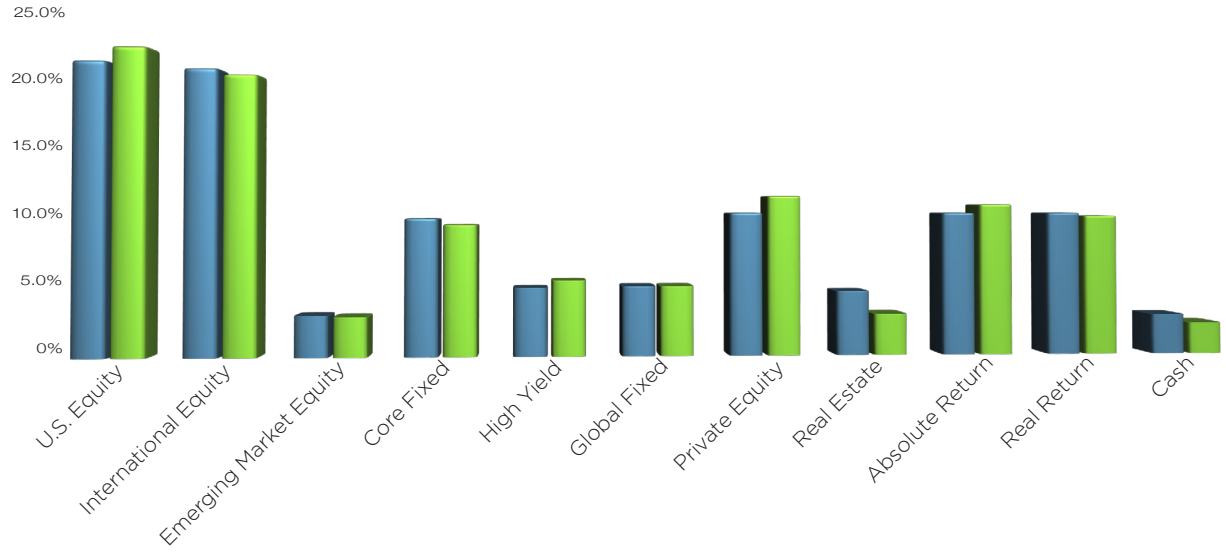
Performance Review Procedures At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. The Investment Committee also reviews a report created and presented by the KRS Compliance Officer who is part of the independent Internal Audit Department. The Compliance Officer performs tests daily, monthly, and quarterly to assure compliance with the restrictions imposed by the Investment Policy.

Consulting The Board employs industry leading external consultants to assist in determining and reviewing the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from each consulting firm utilized follows this introduction and discusses current allocations, performance and significant changes during the fiscal year.

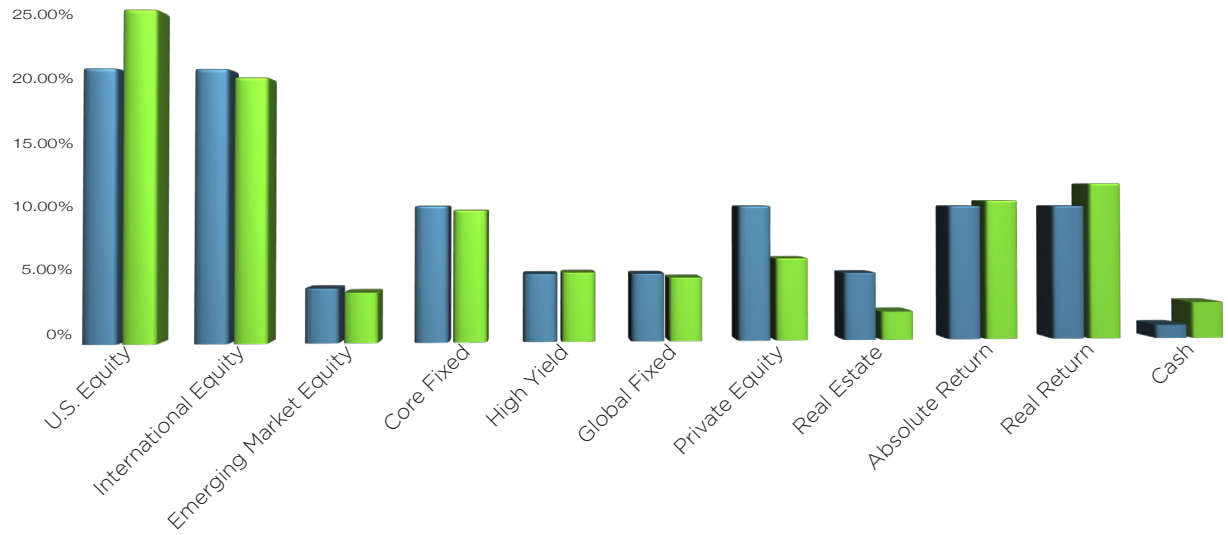
Asset Allocation
Board Policy vs. Actual (Rebalanced)

Asset	Policy's Pension Asset Allocation	Actual Pension Asset Allocation	Policy's Insurance Asset Allocation	Actual Insurance Asset Allocation
U.S. Equity	20.5%	21.5%	20.0%	24.3%
International Equity	20.0%	19.6%	20.0%	19.4%
Emerging Market Equity	2.9%	2.8%	4.0%	3.7%
Core Fixed	9.6%	9.2%	10.0%	9.7%
High Yield	4.8%	5.3%	5.0%	5.1%
Global Fixed	4.9%	4.9%	5.0%	4.7%
Private Equity	10.0%	11.2%	10.0%	6.1%
Real Estate	4.5%	2.9%	5.0%	2.1%
Absolute Return	10.0%	10.6%	10.0%	10.4%
Real Return	10.0%	9.8%	10.0%	11.7%
Cash	2.8%	2.2%	1.0%	2.7%

PENSION FUND



INSURANCE FUND



ECONOMIC REVIEW

By Rebecca A. Gratsinger
CEO, Principal
R.V. Kuhns & Associates

The start of the fiscal year proved difficult for global investors grappling with fears of a disorderly breakup of the Eurozone, which pushed the 10-year U.S. Treasury yield to a record low of 1.4% in July 2012.

To protect their struggling economies, most major central banks issued unprecedented stimulus packages that propelled markets from a "risk-off' environment (risk adverse) to a "risk-on" environment (risk appetite). U.S. Treasury yields rose from the record low to 2.5% by the end of the fiscal year in June 2013.

Fears surrounding the U.S. facing a "fiscal cliff" (expiration of Bush-era tax cuts and commencement of large spending cuts) peaked after the November elections, which resulted in split-party control of the two Legislative Branches. Those fears allayed following a late deal that minimized the number of tax payers affected by tax hikes. The spending cuts to the U.S. budget, referred to as budget sequestration or sequester, which threatened to derail U.S. economic growth commenced on March 1, 2013, had limited immediate impact on Wall Street as capital markets continued to climb higher. By the second half of the fiscal year, the housing market showed continued signs of recovery as housing starts rose above levels not seen since July 2008.

The first quarter of the fiscal year (CY 3Ql2) began with a strong statement from the European Central Bank ("ECB") followed by several other central banks around the global with new stimulus packages to support their waning economies. Leading into the first fiscal quarter, investors feared there would be an economic setback in the U.S., and Europe was quickly heading toward a recession. The negative sentiment pushed investors into U.S. Treasuries and flattened the yield curve. Once the Federal Reserve, ECB, and China issued plans for economic stimulus packages, followed by South
Africa and Brazil cutting their respective interest rates, investors flipped the switch from risk-off to risk-on. Securities with higher risk became more attractive, and U.S. Treasuries actually returned negative results for the months of August and September, starting a trend that would continue for the next three quarters.

The developed and emerging markets benefited from the ECB firmly supporting the euro and stable rates by committing to buy short-term government debt of struggling euro countries. In July, ECB President Mario Draghi released a statement confirming that the ECB would do "whatever it takes" to support the euro. By September, the ECB had launched a bond purchase program called "Outright Monetary Transactions", which offered countries support for sovereign debt under the condition that participating countries commit to strict fiscal reforms. The condition was a difficult one for those countries that had recently completed election cycles where austerity was a big and unloved topic.

One country in dire need of capital was Spain, whose government feared the possible downgrade to a junk rating by Moody's. Such a move would have triggered an automatic sell of their sovereign debt by certain investors with ratings restrictions, and subsequently raise Spain's borrowing rate. In October, Moody's kept them at investment grade but on negative watch.

In September, the Fed announced the newest round of quantitative easing ("QE3") which involved purchasing $40 billion per month of Agency mortgage-backed securities ("MBS") until the Fed saw signs of improvement in the jobs market. This was in addition to the $45 billion the Fed was purchasing per month in Agency MBS from coupons and prepayments from their current MBS portfolio, known as Operation Twist.

Riskier markets gained momentum during the second fiscal quarter (CY 4Q12) as the global stimulus packages boosted investor sentiment.

ECB
European Central Bank

Fed
Federal Reserve

MBS
Mortgage Backed Securities

Remaining consistent with its policy of transparency, the Fed announced at the end of 2012 that they would no longer estimate the year and quarter by which they anticipated raising the federal funds rate. Instead, they targeted an unemployment rate at or below 6.5% and an inflation rate at or above 2.5%. In addition, the Fed announced it would extend the bond purchase program, with plans to initially purchase $45 billion in long-term Treasuries per month as a replacement to Operation Twist. During the quarter, Japan also announced plans to institute a similar bond purchase program to jump-start its long-languishing economy, further increasing the supply of money around the globe. As the quarter came to a close, headlines were dominated with the "Fiscal cliff', a group of tax increases and spending cuts that were scheduled to take effect at the beginning of 2013.

At the start of the third fiscal quarter (CY 1Q13), lawmakers reached a deal on tax issues, postponed $85B in spending cuts, known as the sequester, until March 1, and extended the debt ceiling until May 19. The Bureau of Economic Analysis released the calendar fourth quarter 2012 U.S. GDP estimate at 0.4%, which was an upward revision from -0.1 %. Unemployment figures, a key statistic for the Fed's monetary policy, hovered around 7.6%, still far above the 6.5% milestone. Internationally, a bailout deal in Cyprus dominated headlines as the quarter came to a close. After a €1 0 billion deal was reached, the country was forced to impose capital controls to prevent a bank run, a first in the history of the Eurozone.

The Fed continued to make full use of another non-traditional policy tool - communication - with various degrees of success during the fourth fiscal quarter (CY 2Q13), causing market volatility. The Fed announced that they may begin to taper QE3 by the end of the calendar year and may end the program by mid-2014 based on their economic projections. Markets initially responded negatively, as interest rates rose and stock prices dropped, before rebounding on assurance that the Fed would not take action in the short term.

Domestic Economic Indicators as of June 30, 2013[1]

Indicator	June 2013	June 2012	Yr/Yr	20 Year	40 Year
Capacity Utilization	77.80	78.90	▼	79.00	80.00
↘ Unemployment Rate	7.60%	8.20%	▲	6.00%	6.50%
↘ PMI - Manufacturing	50.90	49.70	▲	52.00	51.80
↘ Baltic Dry Index - Shipping	1,171	1,004	▲	2,414	2,056
Real GDP Year-Over-Year	1.60%	2.20%	▼	2.50%	2.70%
Consumer Confidence	82.10	62.00	▲	93.26	91.09
Breakeven Inflation - 10 Year	1.99	2.10	▼	N/A	N/A
CPI Year-Over-Year (Headline)*	1.80%	1.70%	▲	2.50%	4.40%
CPI Year-Over-Year (Core)*	1.60%	2.20%	▼	2.20%	4.20%
PPI Year-Over-Year	2.50%	0.70%	▲	2.30%	3.90%
M2 Year-Over-Year	6.80%	9.30%	▼	5.90%	6.60%
Personal Savings	4.40%	4.40%	--	3.90%	6.30%
Disposable Personal Income	0.30%	0.40%	▼	0.40%	0.50%
Personal Consumption Expenditures	1.30%	1.50%	▼	2.00%	3.90%
US Dollar Total Weighted Index	77.55	72.74	▲	87.08	94.90
WTI Crude Oil per Barrel	$97	$85	▲	$48	$39
Gold Spot per Oz**	$1,235	$1,597	▼	$320	$336

[1] Based on data courtesy of Bloomberg Professional Services
** CPI figures are cyclically adjusted*
*** 20- and 40-year average Gold spot prices are adjusted for inflation*

GDP
Gross Domestic Product

For the first half of the fiscal year, investors favored global stocks and global spread sectors over U.S. Treasuries as prevailing central bank policies helped push investors toward higher yielding assets. The six-month period ending December 31 generally produced strong returns for equities and riskier fixed income securities. Within the alternative investment space, U.S. and non-U.S. commercial real estate and multi-family housing showed signs of life with increased construction amid economic uncertainty and tepid GDP growth. Broadly speaking, private equity valuations rose and generated positive returns as pent-up distributions began flowing back to investors. Hedge funds posted positive returns between those of equities and fixed income with macro strategies posting the lowest returns.

The start of the second half of the fiscal year marked an all-time high for global stock markets (the U.S. outperformed Non-U.S. markets), and U.S. stocks generally continued that momentum through the end of the fiscal year with a few bumps along the way. The Fed's announcement of a possible tapering of the U.S. stimulus programs negatively affected international markets, particularly emerging markets, which ended the second half in negative territory. Most affected by the Fed's announcement were fixed income markets around the world. A massive selloff crushed bonds as investors reallocated assets in anticipation of the Fed slowing or halting its purchase programs (they later affirmed there would be no change in the short term). The rising rate environment led to significant losses across the maturity spectrum. Commodity-producing emerging market countries were further hurt by the strengthening of the U.S. dollar during the second half of the year. As the fiscal year ended, 10-year U.S. Treasury yields had risen from a low of 1.6% to 2.5% by June 30 (the highest level since the August 2011 debt ceiling crisis). Real estate values continued to climb as the U.S. enjoyed falling commercial occupancy rates while Europe experienced increases in capital inflows and transaction volumes. The Asian markets saw mixed results across the region as China experienced a liquidity shortage and slowing of economic growth, while Japan continued to be a bright spot in the global economy, as investors reacted positively to Shinzo Abe's economic revitalization strategy. Private equity continued a favorable upward trend and hedge funds generated strong returns (with the exception of macro and emerging market strategies posting negative returns).

The following table summarizes the returns earned by the major markets for the trailing one-year period ending June 30, 2013.

One-Year Trailing Performance as of June 30, 2013

Index	Description	Return
S&P 500	Large Cap U.S. Equity	20.60%
R Mid Cap	Mid Cap U.S. Equity	25.41%
R 2000	Small Cap U.S. Equity	24.20%
MSCI EAFE (Gross)	Large Cap International Equity	19.14%
MSCI EAFE SC (Gross)	Small Cap International Equity	21.25%
MSCI Emg Mkts (Gross)	Emerging Markets Equity	3.23%
Barclays US Agg Bond	U.S. Investment Grade Bonds	-0.69%
Barclays US Trsy	U.S. Treasury Bonds	-1.64%
Barclays US Trsy: US TIPS	U.S. TIPS	-4.78%
Barclays US Corp: Hi Yld	U.S. High Yield Bonds	9.49%
Wilshire US REIT	U.S. Real Estate Investment Trusts	8.41%
NCREIF ODCE (Gross)	U.S. Open End Core Real Estate	12.17%
HFRI FOF Diversified	Absolute Return	7.19%
BofA ML 3 Mo US T-Bill	U.S. Cash Equivalents	0.11%

"An uncertain market environment demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the Systems' employee participants. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the Systems to meet its long-term goals and objectives."

Rebecca A. Gratsinger
CEO, Principal
R.V. Kuhns & Associates

ASSET ALLOCATION REVIEW

KERS
Kentucky Employees Retirement System

At the beginning of the second fiscal quarter, the Board completed a review of the asset allocation strategies for each of the pension and insurance plans. The purpose of the study was to review each plan's specific asset allocation strategy against its current and future cash flow requirements. The study resulted in small changes to the cash equivalents targets to better align with the liquidity needs of each plan. In addition, the KERS Non-Hazardous plan also saw a reduction in its emerging markets equity target asset allocation. In October, 2012, the statement of investment policy issued by the Board incorporated the new plan specific target asset allocations to be effective on January 1, 2013. The Board has been transitioning to the new plan specific target asset allocations in a prudent manner.

PENSION PLAN REVIEW

The combined market value of the Kentucky Retirement Systems ("Systems") Pension Plan assets (collectively called hereafter, "The Fund") increased from $10.7 billion on June 30, 2012 to $11.0 billion on June 30, 2013. The Fund's investments collectively returned 11.0% for the fiscal year and compared to the 11.2% return earned by its target allocation benchmark, the Fund underperformed by 0.2%. The Fund's three- and five-year annualized returns of 9.8% and 4.9%, respectively, underperformed its target allocation benchmark of 10.5% and 5.4%, respectively. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal.

The Systems' current pension plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The Systems also invests in real return assets, real estate, absolute return strategies, and private equity.

Pension Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	KERS Target	KERS Haz Target	CERS Target	CERS Haz Target	SPRS Target
U.S. Equity	$2,377,421,805	21.5%	22.0%	20.0%	20.0%	20.0%	20.0%
Non U.S. Equity	$2,158,471,074	19.6%	20.0%	20.0%	20.0%	20.0%	20.0%
Emerging Markets Equity	$307,266,001	2.8%	0.0%	4.0%	4.0%	4.0%	4.0%
Fixed Income	$2,144,008,289	19.4%	20.0%	19.0%	19.0%	19.0%	18.0%
Real Return	$1,086,124,317	9.8%	10.0%	10.0%	10.0%	10.0%	10.0%
Real Estate	$325,232,577	2.9%	3.0%	5.0%	5.0%	5.0%	5.0%
Absolute Return	$1,165,274,234	10.6%	10.0%	10.0%	10.0%	10.0%	10.0%
Private Equity	$1,231,630,294	11.2%	10.0%	10.0%	10.0%	10.0%	10.0%
Cash Equivalent	$237,229,107	2.2%	5.0%	2.0%	2.0%	2.0%	3.0%
Total	**$11,032,657,699**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Effective January 1, 2013, the Board established an updated asset allocation strategy for each of the pension plans reflective of a cash equivalents target that is aligned with current and future cash flow requirements. In addition, the KERS Non-Hazardous plan removed its dedicated allocation to emerging markets equity. The table above shows the updated asset allocation strategies for each pension plan.

For each plan, the current deviations to the targets are being brought closer to the current target allocations in a prudent manner over time. For less liquid asset classes (private equity and real estate), it may take years before the current allocation is in line with the current target.

INSURANCE PLAN REVIEW

The combined market value of the Kentucky Retirement Systems Insurance Plan assets increased from $3.1 billion on June 30, 2012 to $3.5 billion on June 30, 2013. The Fund's investments returned 10.3% for the fiscal year, underperforming the target allocation benchmark of 11.1% by -0.8%. The Fund's three-year annualized return of 10.2% also trailed the target allocation benchmark of 12.3%. The Fund's five-year annualized return moved into positive territory, increasing from -0.2% as of June 30, 2012 to 3.5% as of June 30, 2013, but still falling short of its benchmark by -0.8%. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal.

The Systems' current insurance plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The Systems also invests in real return, real estate, absolute return strategies, and private equity.

Insurance Plan
Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Insurance Target
U.S. Equity	$848,562,262	24.3%	20.0%
Non U.S. Equity	$675,998,028	19.4%	20.0%
Emerging Markets Equity	$127,994,361	3.7%	4.0%
Fixed Income	$682,330,224	19.6%	20.0%
Real Return	$409,589,939	11.7%	10.0%
Real Estate	$73,968,816	2.1%	5.0%
Absolute Return	$361,434,527	10.4%	10.0%
Private Equity	$214,467,277	6.1%	10.0%
Cash Equivalent	$95,034,500	2.7%	1.0%
Total	**$3,489,379,935**	**100.0%**	**100.0%**

Effective January 1, 2013, the Board established an updated asset allocation strategy for the insurance plans reflective of a cash equivalents target that is better aligned with current and future cash flow requirements. The changes resulted in consistent target asset allocation strategies across all of the insurance plans, as shown in the table above.

For each plan, the current deviations to the targets are being brought closer to the current target allocations in a prudent manner over time. For less liquid asset classes (private equity), it may take years before the current allocation is in line with the current target.

Pension Plan The domestic equity portfolio remained relatively unchanged over the trailing fiscal year and performed well on both an absolute and relative basis. The internally managed S&P 500 Index portfolio performed in line with the Index for the fiscal year, returning 20.4% versus 20.6%, respectively. The return dispersion is primarily attributed to the effect that the portfolio's small cash exposure had on performance as equity markets appreciated. Active management had a positive effect on INVESCO's Structured Core Equity portfolio as it posted a strong return of 23.8% for the fiscal year, besting the S&P 500 Index by 3.2%. Returns were mixed across the all-cap managers relative to their respective benchmarks, but posted strong double-digit returns. Within value, River Road All Cap Value [22.0%] unperformed, while Westwood All Cap Value [29.0%] outperformed the Russell 3000 Value Index return of 25.3%. Within growth, Westfield All Cap Growth returned 26.8% for the fiscal year and significantly outperformed the Russell 3000 Growth Index return of 17.6%. All three of the mid-cap managers that were funded in June 2012, Sasco Capital, Systematic Financial Management, and Geneva Capital Management, struggled to keep pace. The two value managers, Sasco and Systematic, returned 17.9% and 23.9%, respectively, both lagging the impressive Russell Mid Cap Value Index return of 27.7%. On the growth side, Geneva Capital returned 14.8% versus the Russell Mid Cap Growth Index, which returned 22.9%. The Northern Trust Structured Small Cap portfolio exceeded its benchmark, the Russell 2000 Index, by 1.2%. In total, the U.S. equity portfolio outperformed its U.S. Equity Custom Index (21.6% vs. 21.5%) for the fiscal year.

Within international equity, the non-U.S. equity portfolios all posted positive returns. The Boston Company Non-US Value Equity portfolio, which held the largest allocation within the composite as of June 2013, was the best performer, returning 19.1%, outperforming the MSCI ACW Ex US Index by 5.0%. Pyramis International Growth had strong performance compared to the Index (17.0% vs. 14.1%), while the passive BlackRock ACW Ex US Index portfolio performed in line with its benchmark (13 .9% vs. 13.6%). The Northern Trust Small Cap Equity Index portfolio ended the year
slightly above its benchmark, the MSCI ACW Ex US Small Cap Index (17.0% vs. 15.9%). In aggregate, the non-U.S. equity portfolio outperformed the MSCI ACW Ex US Index by 2.6% over the fiscal year. Within the emerging markets equity portfolio, the Systems added the BlackRock Emerging Markets Equity Index fund at the end of the fiscal year. The Plan's two emerging market equity portfolios managed by Aberdeen Asset Management and Wellington Management Company both outperformed the MSCI Emerging Markets Index, which returned 3.2% for the fiscal year. While capital in both funds appreciated, the positions sizes were subsequently reduced as a result of rebalancing and capacity concerns surrounding Aberdeen's rapidly increasing assets under management. Aberdeen continued to be the top performer, besting the benchmark by 3.2%, while Wellington also contributed to performance, outperforming by 1.1%. In aggregate, the emerging market equity portfolio outperformed the MSCI Emerging Markets Index by 2.3% over the fiscal year.

There were minimal structural changes to the fixed income portfolio over the fiscal year as the only significant change was the liquidation of Commerce Street Income Partners. Both core managers, NISA (-0.6%) and PIMCO (-0.6%) performed in line with the Barclays US Aggregate Bond Index return of -0.7%. The two high yield managers, Columbia (9.8%) and Loomis Sayles (13.2%), both added value on a relative and absolute basis, besting the Barclays US Corporate High Yield Index (9.5%) by 0.3% and 3.7%, respectfully. Manulife, the global bond manager, had an exceptional year, significantly outperforming the Barclays Multiverse Index (6.0% vs. 1.7%). The sector-specific manager, Waterfall, also significantly outperformed its benchmark, the Opportunistic Fixed Income Custom Index (Barclays US Corporate High Yield Index and Barclays ABS US Floating Rate Index), for the fiscal year (14.4% vs. 6.5%). The high yield/bank loans investment managed by Shenkman returned 7.5%, lagging the US High Yield/Bank Loans Blended Index by 1.0%. Stone Harbor, the Systems' emerging market debt manager, produced a return of 0.7%, underperforming its benchmark, the JPMorgan Emerging Market Bond Global Diversified Index, which returned 1.1%. Overall, the total fixed income portfolio returned 3.1% for the fiscal year, outperforming the Fixed Income Custom Index by 2.8%.
The Systems' real return composite primarily consists of the Systems' two TIPS managers and the PIMCO All Asset fund, with smaller allocations to three alternative real return portfolios, Tenaska Power Fund, Tortoise Capital, and the recently added, Amerra Fund. During the fiscal year, the internally managed TIPS portfolio was reduced as a result

of rebalancing; a portion of these proceeds were directed toward the PIMCO All Asset fund. While TIPS had a difficult year, both the internally managed portfolio (-4.7%) and the Weaver Barksdale TIPS portfolio (-4.6%) performed in line with the Barclays US TIPS Index (-4.8%). The PIMCO All Asset fund, which serves to diversify the real return portfolio returned 5.8%, significantly outperforming both the Barclays US Treasury 1-10 Year Index (-3.1%) and the All Asset Composite Index (2.6%). In total, the real return portfolio returned -0.6%, trailing the Consumer Price Index + 3% by -5.5%, which returned 4.8% for the fiscal year.

The alternative investment portfolio consists of an absolute return strategy portfolio, longer term investments in real estate, and private equity. The Systems continued to develop the real estate portfolio during the fiscal year with the addition of a second Walton Street Real Estate Fund and Greenfield Acquisition Partners. The fiscal year return for the real estate portfolio was 12.0% vs. 12.2% for the Real Estate Blended Index. The three multi-strategy funds of hedge funds, Blackstone Alternative Asset Management ("BAAM"), Pacific Alternative Asset Management Company ("P AAMCO"), and Prisma Capital Partners all posted strong relative performance against the one quarter lagged HFN Fund of Funds Diversified Index (8.2%), returning 12.9%, 13.1 %, and 11.0%, respectively. Additionally, the Systems' investment in Arrowhawk Durable Alpha Fund was liquidated. In aggregate, the absolute return portfolio returned 12.3% for the fiscal year. Over the past five years ending June 30, 2012, the total private equity portfolio has underperformed the Alternatives Custom Index (4.9% vs. 10.6%). However, over a longer period of 10 years, the portfolio has exceeded the Alternatives Custom Index by 2.1%.

Insurance Plan The Insurance Plan invests in all of the same portfolios as the Pension Plan with the exception of investments in INVESCO Structured Core Equity and Northern Trust International Small Cap Equity Index. During the fiscal year, the Internal International Equity portfolio was fully liquidated and the BlackRock ACWI Ex US Small Cap portfolio was funded in place of the Northern Trust International Small Cap Equity Index. Although the insurance plan returns slightly differ from the returns earned in the pension plan because of investment restrictions, the relative under/outperformance was similar for the fiscal year.

Board Initiatives During the first quarter of the fiscal year, the Board initiated a Request for Proposal (RFP) for custody services. After a comprehensive due diligence process, and with the assistance of KRS staff and R.V. Kuhns & Associates, the Board selected Bank of New York Mellon Asset Servicing during the third quarter of the fiscal year. Preparations for the transition from Northern Trust to Bank of New York Mellon commenced thereafter, and assets were transitioned at the end of the fiscal year.

The Board continues to review the effectiveness of the approved asset allocation to meet the assumed rates of returns for the pension and insurance plans. Research, selection, and implementation of investments within alternative investment and inflation-protection strategies continue as a means to protect the portfolios in the event of market shocks and potentially higher inflationary environment. Presently, there is no clear outlook on when inflation will become a significant threat to the purchasing power of earnings generated by the portfolios. However, the Board proactively seeks investment strategies expected to mitigate the effects while contributing to the growth of the portfolios.

Oversight The Systems' investment policies, goals, and objectives, as well as the performance of its assets are regularly monitored by KRS staff, the Board, and R.V. Kuhns & Associates, Inc. These evaluations include reviews of the investment management firms and the custodial bank that serve the Systems. Market values and investment performance returns referenced above are based upon financial statements prepared by Northern Trust. We rely on their data and have not independently audited it. However, their financial statements are, to the best of our knowledge, believed to be reliable.

Summary An uncertain market environment demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the Systems' employee participants. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the Systems to meet its long-term goals and objectives.

Rebecca A. Gratsinger // CEO, Principal
R.V. Kuhns & Associates, Inc.
October 18, 2013

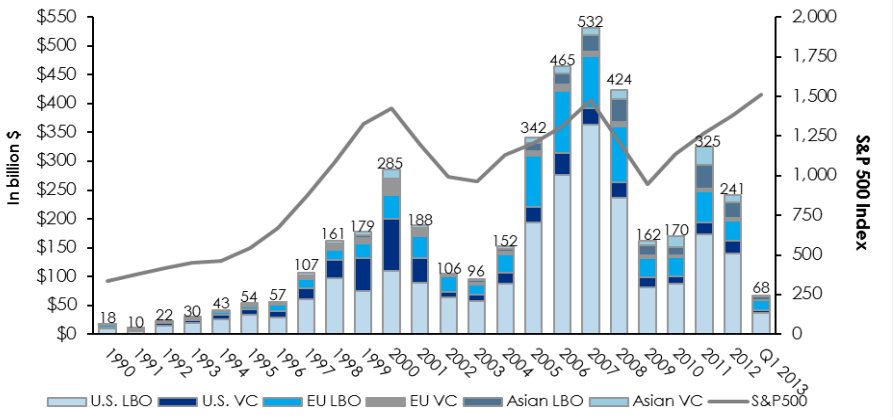
By P. Bradford Young
Co-CEO, Head of Investments
Altius Associates

Altius Associates was hired in December 2011 to advise the KRS Board of Trustees and Staff in its private equity investment activities. This is our second annual review of the KRS private equity investment program.

Overall, the private equity market continues to gain momentum since the recession. Highlights include:

Fundraising Fundraising remains challenging, but is improving for top firms. Top private equity firms have been able to quickly raise funds at target, and even cap amounts, while funds with uncertain or average performance are having difficulty fundraising. The following chart highlights global private equity fundraising since 1990:

Global Private Equity Fundraising from 1990-Q1 2013

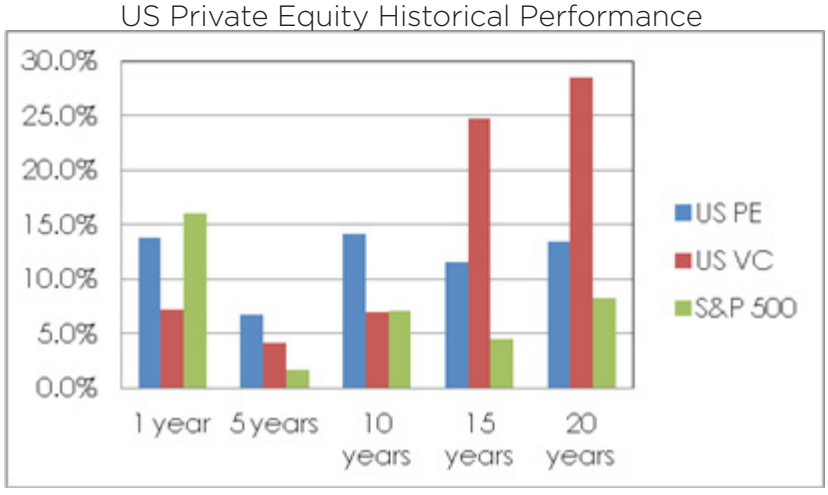


Source
Thomson One

Deal Flow Deal flow is stable and valuations have remained relatively steady. Many private equity firms have been actively looking for exit opportunities for existing portfolio holdings, while selectively looking for new acquisitions. The credit markets have remained liquid and favorable for strong companies.

Distributions Distributions for private equity portfolios have been strong over the past year. This has been a combination of recaps, dividends, exits and IPOs.

US Private Equity Historical Performance



Source
Cambridge Associates LLC, Standard and Poor's, and Thomson Datastream as of 12/31/2012

Performance Performance of the broader private equity industry has been solid over the past year. Five, ten, fifteen, and twenty year performance for the private equity industry remains well above public indices, as shown in the following chart.
At Altius' hiring in 2011, KRS had committed $2.15 billion to 50 managers across the private markets spectrum including buyout, venture/growth, and credit-oriented strategies. KRS also has exposure to a number of funds as well as more opportunistic strategies. The portfolio is well diversified across strategies, in large, mid and small market buyout; venture and growth capital; and the remainder in credit and other strategies.

Altius has previously identified the following areas of focus for further development of the portfolio:

- Pursue a global fund allocation and increase direct exposure to non-US general partners
- Smooth out investment pace and refrain from being too tactical with pacing

Fund Investments	Commitment Date	Committed (in millions)	Drawn %
CVC VI	Jul-13	$45,8	--
Triton IV	Apr-13	$49.2	--
Riverside Capital Appreciation Fund VI	Dec-12	$54.2	--
Wayzata Opportunities Fund VI	Jun-12	$54.2	5.7%
Harvest Partners VI	May-12	$40.0	43.0%
As of 06/30/2013			

- Maintain smaller/mid-market buyout bias without increasing the number of managers
- Increase allocation per commitment and focus on maintaining a manageable number of manager relationships
- Opportunistically invest in the secondary market
- Slowly reduce exposure to pure venture capital

IPO
Initial Public Offering

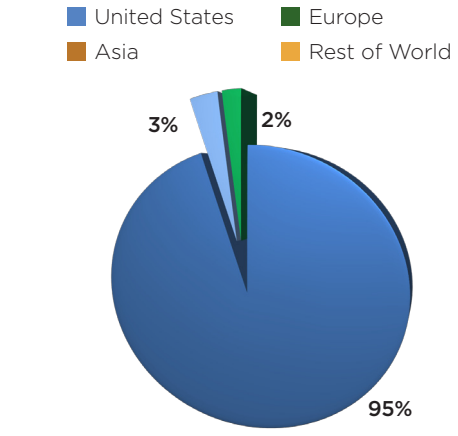
USD
United States Dollar

KRS committed to the following funds in the last 18 months:
The commitments to Triton IV and CVC VI were the first direct European private equity investments KRS has made to date. Altius will continue to introduce KRS to strong European managers in order to increase its exposure in the region. The next step in diversifying across regions would be to make investments in areas such as Asia and Latin America, which Altius considers to be attractive markets.

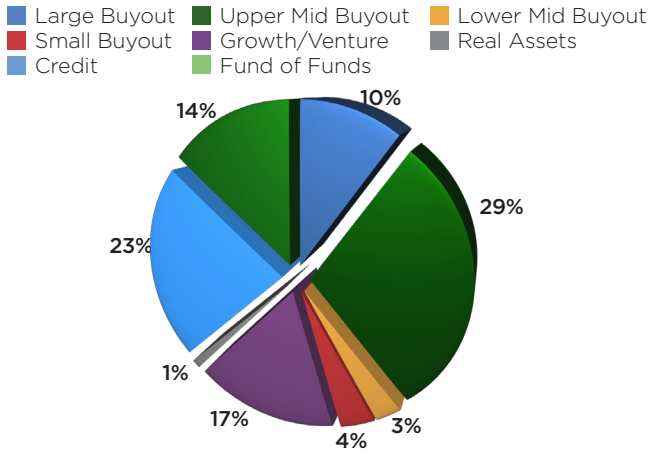
PRIVATE EQUITY EXPOSURE

As of June 30, 2013 KRS has USD2.6 billion in commitments to private equity of which USD2.0 billion has been drawn. KRS has experienced capital calls of USD28.3 million for new and follow-on investments

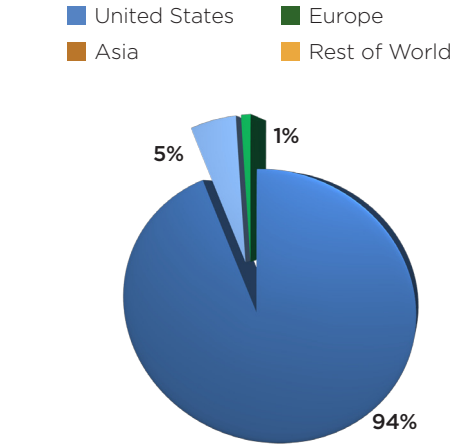
Pension Exposure by Commitments



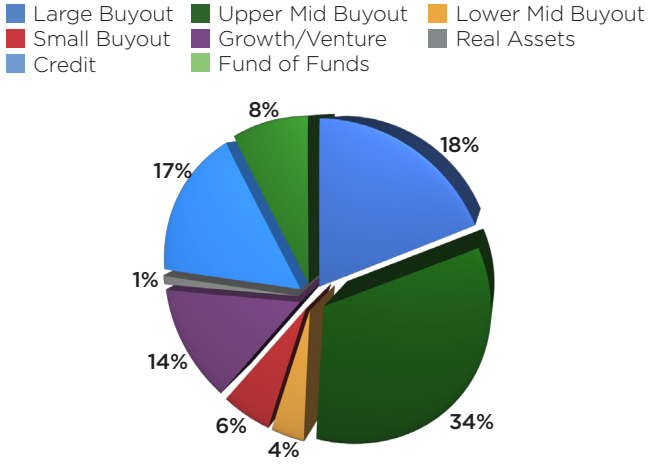
Pension Exposure by Committed Capital



Insurance Exposure by Commitments



Insurance Exposure by Committed Capital



over the first half of 2013. In that same timeframe, there have been USD121.7 million in distributions generated by the portfolio investments. The strong distributions have been driven by the combination of exits, recapitalizations, dividends, and IPOs. The KRS pension and insurance portfolios have appreciated in 2013 (from December 31, 2012 to June 30, 2013) on a net multiple basis to 1.37x from 1.34x and 1.41x from 1.38x, respectively.

P. Bradford Young // Co-CEO, Head of Investments
Altius Associates
October 2013

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By Jonathan Berns
Principal
ORG Portfolio Management

ORG Portfolio Management LLC ("ORG") serves as the Real Estate Investment Consultant for KRS. It is ORG's responsibility to present potential investment opportunities to the Investment Staff and Board and to make recommendations related to KRS' real estate portfolio. It is ORG's commitment to assist KRS in building a successful long term real estate investment portfolio for the KRS pension fund members.

U.S. MARKET OVERVIEW

To this point, the KRS portfolio has been concentrated in the US, but this will become less pronounced as more commitments are made to other regions. The aim, as the portfolio matures, is to reach an allocation of approximately 60% US, 25% Europe and 15% rest of World. The exposure to different segments of the private equity space is spread quite well, given the relative attractiveness of those markets. Further, it is worth mentioning that during the year KRS was recognized by Pensions & Investments (July 2nd, 2013 press release) as being a top 10 private equity investor over the last decade amongst a universe of pension plans.

Overall, the KRS private equity portfolio is well diversified across venture, buyout and opportunistic strategies in the US. The program is now sufficiently mature to begin to make commitments internationally and Altius is well positioned to assist KRS with the continued development of the portfolio.

The U.S. economy continues its period of sustained, if still modest, growth. Consumer confidence continues to strengthen due to the improving job outlook, rising home and stock prices and increased credit availability although the prospect of credit tapering at the Federal Reserve may cause an initial spike in interest rates and increase volatility. Employment continues to grow with additional jobs in construction and office, although many of these jobs are part-time. Corporations continue to hold cash on their balance sheet and only using this cash as necessary for growth which further impacts economic growth.

The U.S. commercial real estate market continued to see improvement in 2013. The capitalization rates as of June 30, 2013 for all sectors have declined from the prior year ending June 2012.

The industrial sector continued to improve, with vacancy rates declining for twelve consecutive quarters. The greatest decline in vacancy was in Fort Worth and Nashville and leasing activity was also reportedly strong in the Dallas, Houston and Riverside markets. Class A warehouses have been spearheading the sector recovery thus far, but leasing activity has also picked up in medium and small warehouses as well.

The apartment sector performance was lower for the period ending June 30, 2013 by over 2.5%. Outlook remains strong, however, for recovery given recent social trends in education, marriage and family planning. New supply continues to come on to the market in response to continued strong demand and rental rates increased in every market. Class B and C properties are reportedly outpacing Class A properties in rent and occupancy, but rents are expected to remain at record levels across all classes in major metros, especially San Francisco, Texas markets, New York, Seattle and Denver.

Office sector fundamentals are showing improvement, particularly in regions with strong employment in energy, technology and professional services. Vacancy rates declined particularly in Central Business District areas, trailed by suburban markets and the market has seen a strong demand for Class A buildings as both investors and tenants search for quality and efficiency. Increased demand tempered by muted supply is expected to contribute to continued absorption.

The retail sector has continued the trend of moderate growth, with necessity and high-end retailers reporting the strongest sales as compared to their mid-market peers. A number of retailers are attempting to keep pace with the economy by experimenting with smaller footprints and scaled-back sales projections. Retailers and Class A shopping malls located in primary markets are recovering at a much quicker pace than those Class B and C malls and other retailers in secondary market locations.

Capitalization Rates	2nd Qtr. 2013	2nd Qtr. 2012	Basis Point Change
Total	5.38%	5.56%	-0.12
Apartments	5.05%	5.15%	-0.10
Retail	5.64%	5.88%	-0.24
Office	5.31%	5.46%	-0.15
Industrial/Warehouse	6.16%	6.04%	-0.12

Source: NCREIF – Current Value Weighted Capitalization Rates

ORG'S VIEW

ORG has noted that commercial real estate market slowed down over the 2012 levels based upon the National Council of Real Estate Investment Fiduciaries ("NCREIF") Property Index ("NPI") which had a 10.7% return for the period ending June 30, 2013 vs. the 12.0% return for the one year period ending June 30, 2012. The U.S. labor market continues to grow on the strength of consumer spending, although many of the new jobs are part-time. The labor participation rate is also not high by historical standards. The ratio of part-time to full-time workers remains high compared to pre-recession levels as employers are reviewing the impact of the new healthcare laws.

ORG has noted that the one year income return as of 6/30/2013 for core open end funds gross of fees as reported by the NCREIF Open-End Diversified Core Equity ("ODCE") Index is 5.3%. This low income returns will require substantial rental rate growth or appreciation growth in order for the funds to generate the projected 8-9% rate of return expected for core. ORG is concerned that the strategies targeting gateway core markets will underperform expectations for core real estate.

As an alternative, ORG continues to recommend that investors focus on investment strategies where going in income returns are higher in certain overlooked strategies. The suggested focus includes secondary markets (e.g., Atlanta, Houston, Dallas and Seattle among numerous others) and real estate debt.

ORG also recommends strategies in distressed opportunistic funds where investors can capitalize on the continual de-leveraging of real estate that continues as debt originated during 2005-2007 continues to mature over the next several years. These opportunities to recapitalize high quality properties that have often been neglected could generate attractive risk adjusted returns over the next several years.

REAL ESTATE INVESTMENTS

2008-2010 Investment Activity In December 2008, Kentucky Retirement Systems made $40 million commitments each to 1) Mesa West Real Estate Income Fund II, 2) PRIMA Mortgage Investment Trust and 3) Walton Street Real Estate Fund VI.

- Year to Date through September 2013, Mesa West Real Estate Income Fund II made no capital calls and returned $15.9 million in capital and preferred return distributions. Since inception, $19.1 million has been funded with $20.9 million remaining capital to be called.
- PRIMA Mortgage Investment Trust called Kentucky Retirement Systems' entire $40 million commitment by the end of the 3rd quarter 2009 and the investment is fully funded. Year to Date through September 2013, PRIMA Mortgage Investment Trust distributed $2.3 million to KRS. Since inception, PRIMA has distributed $12.2 million.
- Year to Date through September 2012, Walton Street Real Estate Fund VI made one capital call totaling $1.6 million. Since inception, $28.2 million has been funded with $11.8 million remaining capital to be called.

2011 Investment Activity Kentucky Retirement Systems made 1) a $100 million commitment to H/2 Credit Partners in April 2011 with an additional $3 million commitment in October 2012 for a total commitment of $103 million and 2) a $101.9 million commitment to Harrison Street Core Property Fund in December 2011 with an additional $3.8 million commitment in October 2012 and $17.9 million commitment in June 2013 for a total commitment of $123.6 million.

- H/2 Credit Partners called $100 million commitment during 2011 and the additional $3 million was called in 2012. This investment is fully funded.
- Year to Date through September 2013, Harrison Street Core Property Fund II made one capital call totaling $3.8 million and returned $2.0 million of income distributions. Since inception, $105.7 million has been funded with $17.9 million remaining capital to be called.

2012 Investment Activity Kentucky Retirement Systems made 1) a $52.5 million commitment to Walton Street Real Estate Fund VII in August 2012 with an additional $2.4 million commitment in October 2012 for a total commitment of $54.9 million and 2) a $54.9 million commitment to Greenfield Acquisition Partners VI in December and 3) an $83 million commitment to Mesa West Core Lending Fund in December 2012.

- Year to Date through September 2013, Walton Street Real Estate Fund VII made one capital call totaling $5.3 million. Since inception, $5.3 million has been funded with $49.6 million remaining capital to be called.
- Year to Date through September 2013, Greenfield Acquisition Partners VI made six capital calls totaling $47.8 million and returned $4.4 million in capital and income distributions. Since inception, $44.6 million has been funded with $10.3 million remaining capital to be called.
- Year to Date through September 2013, Mesa West Core Lending Fund made five capital calls totaling $68.1 million. Since inception, $68.1 million has been funded with $14.9 million remaining capital to be called.

2013 Investment Activity Kentucky Retirement Systems made a $30 million investment in Rubenstein Properties II, L.P. and has made no capital calls to date.

Jonathan Berns // Principal
ORG Portfolio Management, LLC
October 18, 2013

By Gailen Krug
Partner
Senior Portfolio Analyst

KRS staff have developed a thoughtful and careful strategy, selecting managers to build a direct portfolio that is, even in its early stages, well-diversified, risk-mitigating, and structured to achieve the intended objectives.

The KRS Absolute Return and Real Return direct investment portfolios are both progressing per the portfolio structures approved during the February 5th Investment Committee Meeting.

REAL RETURN DISCUSSION

The Real Return portfolio has focused on maintaining a balance with respect to liquidity and diversification objectives. Thus far manager selection has focused on finding managers which feature intermediate duration and higher cash flow potential, whilst maintaining strong downside protection. When pursuing such managers, the challenge is seeking opportunities that will provide a high probability of meeting minimum return requirements and an implied optionality for inflation participation. Consideration has also been given to the existing real return exposures and in particular diversification away from the current TIPS allocation. Thus far successful allocations have been made to two managers. Our objectives going forward will be to continue to diversify across subsectors and strategies whilst reducing the overall TIPS exposure.

TIPS
Treasury Inflation Protection Securities

Through May and June 2013 TIPS came under significant pressure, losing almost 10% of their value, but appear to have stabilized at current levels. The abrupt response was due to signaling from the US Federal Reserve with respect to interest rates and market participation. The events of May and June highlighted the sensitivity of the asset class in an ongoing low rate environment. Thus we continue to recommend reduction of exposure to TIPs in favor of other assets that have a higher probability of meeting the minimum return requirements of institutional investors such as Kentucky Retirement Systems. As part of a diversified portfolio, TIPS have the advantage of ongoing inflationary protection; however, the return expectations, when held to maturity, are relatively unattractive. The trade-off between liquidity and performance must be carefully considered.

MARKET & REAL ASSET COMMENTS

Though global economic conditions continue to improve, it is increasingly easy to envisage either an acceleration in growth or events that might combine to cause activity to stumble. The sharp rise in long term interest rates over the summer emphasized the degree of skill (and luck) that will be needed for the Central Banks to smoothly unwind quantitative easing, as well as the consequences, which could lead to a rapid re-pricing of assets. Plus, in the short term, the recent US government shutdown and the stalemate surrounding the debt ceiling have added to the potential future downside risks. Thus we anticipate inflationary conditions to be muted over the short term as US economic growth continues to gradually gather pace. The recovery in Europe is likely to be gradual. Fiscal policy will be less of a drag over the coming year. In China, manufacturing data suggests that growth has started to re-accelerate, helped both by external demand and modest policy changes. Japan, the latest country to embark on aggressive monetary easing, is showing encouraging signs both in terms of growth and a rise in inflation. We anticipate the global influence on monetary inflation to be negligible over the short term, but expect increasing upward pressure on both asset and monetary inflation over the longer term. Uncertainty will remain with respect to the magnitude of anticipated increases in inflation over the long term.

The real asset universe has seen several changes over the previous 12 months. We continue to see the development of new investment vehicles in capital assets and agriculture. The traditional asset classes of timber, infrastructure and energy have shown improvements with respect to their respective investment environments. Timber investments have shown a modest recovery reporting year-over-year gains of 9%, agriculture is experiencing regional fluctuations with respect to performance with the rapid acceleration of values in the US Midwest slowing to more reasonable performance profiles.

Infrastructure has seen an increase in interest over the previous 12 months with select managers raising record size funds. Over the previous 12 months, performance in core infrastructure has been within historic norms of 8% – 12%, with greenfield projects and emerging markets performing in the mid teens. We continued to favor greenfield strategies and operational-oriented General Partners (GPs) over brownfield GPs given the higher potential returns and leverage limitations in the current market. To date, despite over 20 US states having enabled PPP legislation, a lack of political will has been a major contributor towards the limited PPP penetration in the US market. PPPs will need to be increasingly considered as a value for money alternative to the municipal bond markets, particularly in states with a poor financial position and economic outlook, where the ability to raise sufficient capital through the municipal bond markets may be challenging. Given the modest GDP growth prospects across much of the world, assets such as toll roads, airports, and ports are likely to perform in line with growth expectations. Increasingly, contracted and/or regulated assets are likely to continue to attract high valuations in light of the fact that these assets are better positioned for any forthcoming economic downturn.

Energy is still a favorable sector going forward for real assets and is anticipated to benefit greatly in an inflationary environment. Despite continuing pressure on natural gas prices and crude oil being fairly range bound over the previous 12 months, there appears to be a strong appetite for the space. Fundraising for oil and gas funds was buoyant in 2012, almost reaching $20 billion. The energy space is one of the few sectors where M&A activity is robust. The midstream space may be particularly compelling as producers look for more efficient ways to get their products to market from emerging resource plays. Pricing for fully developed, contracted assets looks to be on the high side given the relative stability of midstream assets and low cost the capital of public MLPs and infrastructure funds. However, there still appears to be ample opportunity for new development. Another sector of particular interest is mining, where equity valuations remain at multiyear lows and financing for the industry is in short supply.

PPP
Public Private Partnerships

M&A
Mergers & Acquisitions

MLPs
Master Limited Partnerships

Overall, we believe that opportunities are setting up quite nicely for real assets and that investors such as Kentucky Retirement Systems will have ample opportunities to develop well-diversified portfolios to capture growing global demand and potential inflationary pressures arising out of this.

ABSOLUTE RETURN DISCUSSION

The Absolute Return portfolio has begun implementation, with the structure approved as of the February 5th 2013 Investment Committee Meeting. An initial slate of five managers was approved for implementation during the August meeting, and these managers were selected in order to minimize creating any overweights to particular strategies during the investment process. Implementation of the total portfolio is planned to occur over a multi-year timeframe, with the goal of reducing current hedge fund of funds exposure and replacing it with direct hedge fund investments. We expect the direct portfolio to enhance the absolute return allocation in a number of ways, including reducing overall fee drag, increasing transparency, and giving better access to high quality managers. The KRS portfolio is being structured to enhance performance and mitigate risk.

EU
European Union

CTA
Commodity Trading Advisors

FOMC
Federal Open Market Committee

QE
Quantitative Easing

ECB
European Central Bank

This fiscal year was punctuated by many events which impacted the market environment on a month by month basis; the following commentary is therefore designed to be a blow by blow discussion of each month during the year.

The year began in July 2012 on an upbeat note in the wake of the June 28 EU summit announcements. By mid month US corporate earnings were looking better than expected and spirits were lifted again. However in the third week of the month Italian and Spanish yields shot up, and in the case of Spain, rose into bailout territory. This finally prompted support from Mario Draghi (President of the European Central Bank), to state his willingness to do "whatever it takes" to make the Euro work, which sparked a strong risk asset rally into month-end. Most discretionary fundamental hedge fund managers were cautious on positioning at the time, with many having been whipsawed by previous changes in market sentiment; however, despite the conservative positioning, all major strategies were positive. CTAs were the strongest performers.

During August, risk markets traded up following Draghi's July 26th pledge to take control of European sovereign interest rates, and safe haven bonds sold off. Bonds reversed their sell-off on the release of FOMC minutes on August 22, noting a deceleration of economic activity and paving the way for another round of QE. Equities and commodities however continued the rally. August was a positive month for most fundamental equity and credit hedge fund strategies, while those in the directional space suffered. Only CTAs and Global Macro managers were negative for the month. Higher beta strategies were the strongest performers with the Equity Long/Short and Event Driven managers posting the biggest numbers.

In September risk assets were strong, particularly in the first two weeks as the markets rallied in response to the ECB's sovereign buying announcement, and the Fed's QE3 in the US. The month continued to be a respite from the risk-on/risk-off market environment. The rally helped bolster overall hedge fund returns during the month. The structured credit space benefited from the Fed's actions, while CTAs were negative.

Performance of risk assets was a mixed bag in October: the month saw choppy trading in equities; Europe was the only region in which broad equity indices closed positive. Risky credit however continued to rally, and Europe too had a particularly good month. Commodities on the other hand were dismal. Across the developed world investor attention shifted away from Europe and toward the US elections and the impending fiscal cliff negotiations. It was a tough month for hedge funds that had become more bullish during Q3. The systematic and macro strategies were the worst performers. Structured credit managers continued to outperform on a relative basis.

November was a moderately good month for risk assets. Markets sold off at the beginning of the month after the US election, bounded back in the middle of the month, traded sideways for a while, and then turned up in the last week of the month. It was a positive but unspectacular month for most hedge fund strategies with Global Macro managers being the weakest performers. Equity Long/Short managers also disappointed, unable to navigate the markets. Toward the end of the month, managers slightly increased risk on the back of stronger market tones.

December was dominated by the discussions taking place in Washington surrounding the resolution to the fiscal cliff, and a last second deal was reached that averted the full impacts coming into force. Even with the uncertainty markets managed to be positive for the month. All of the major hedge fund strategies were positive for the month with Distressed being the standout performer. The month ended a year where the market movements made it a difficult environment for managers, characterized as "risk on, risk off."

January 2013 proved to be a risk-on month, though it also highlighted that correlations and in particular volatility had been more subdued versus six months earlier. The rally in assets gave hedge funds a good start to the year with all major strategies positive. The higher beta strategies were the best performers, led primarily by Equity Long/Short and Distressed managers. CTA managers were also able to participate in the rally, posting meaningful gains.

Risk asset returns were mixed to poor in February, with the exception of the US stock market. Although markets started out continuing the gains

of December and January, the Italian elections, the FOMC minutes showing concern for QE, and the UK's sovereign downgrade cast a chill over risk assets. Despite a relatively difficult month for markets, hedge funds performed well with most strategies positive for the month. CTA and Global Macro managers were the most negative strategies, versus Distressed and Structured Credit managers on the positive side.

In March, a strong beginning to the month was interrupted by the eruption in Cyprus. The fallout however proved to be less than many observers thought would be the case, despite the new and aggressive restructuring actions, and the worry that these could be used in future bailouts. Hedge funds broadly performed well, with all major strategies positive for the month. Equity Long/Short was the strongest of the major strategies, while Global Macro managers struggled the most.

During April risk assets broadly rose. The S&P closed the month at an all time high, we saw history's largest corporate bond issuance at historically low rates, and periphery sovereign spreads in Europe dropped to pre Euro-crisis levels. This was in spite of a weak ISM print and the worst payroll miss since June 2012. Equity volatility was subdued in the month, except for a spike on the day of the Boston bombings, and settled to a level not seen since early 2007. Hedge funds continued their good 2013 performance, although it was Macro and CTA's that performed the best. Equity Long/Short struggled the most.

May started well with positive economic data coming from the US, towards the end of the month the Case-Shiller housing index showed the strongest gain in house prices since 2006. This upbeat data and Bernanke's comments led to a surge in treasury yields. The fixed income markets in particular saw significant volatility. With the exception of CTA and Global Macro, hedge funds had a broadly positive month. Equity Long/Short and Event Driven strategies led the positive performers, while Global Macro and CTAs were hit badly. In particular, returns from some of the larger and more well-known CTA managers were significantly worse than average.

The big event during June was the Fed's press conference on the 19th, perceived as more hawkish than expected. Bernanke's comments dislocated the US treasury curve, causing a significant blow to risk assets across the board. It was a difficult month for the majority of hedge fund strategies with few areas to hide; CTA's were the worst hit, but all major strategies were down for the month. Equity market neutral managers faired the best, closing the month flat.

Hedge funds are an effective business model for deploying risk capital; they benefit from markets moving toward efficiency, and we continue to believe that they are the most appropriate way to achieve the objectives set forth in the KRS Absolute Return portfolio.

Gailen Krug // Partner
Senior Portfolio Analyst
Albourne
October 20, 2013

Investment Results

Returns reported by KRS are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

Fiscal Year 2013 Results The KRS pension fund produced a net return of 10.82%, which fell short of the benchmark return of 11.21%. However, the 10.82% return did meet the actuarially required rate of return of 7.75%, for the period. It should be noted that this actuarially required rate is an annualized return that may not be met, or possibly greatly surpassed in any given year; this objective has been met over the long-term.

The below benchmark performance of the pension fund can primarily be attributed to underperformance experienced in both the Private Equity and Real Return asset classes. The underperformance of the two asset classes can be explained in great part due to benchmarking. Private equity is a difficult asset class to appropriately benchmark as a "perfect" private equity index does not exist. There are a number of ways to address this. KRS has adopted a public equity index plus a premium model. The issue with this is when public equities perform very strongly, private equity managers are usually slower to mark the portfolio to market; this, plus a premium, exacerbates underperformance.
The effectiveness of a private equity portfolio is better assessed at longer-term intervals. The underperformance experienced at the total fund resulting from weakness in the Real Return portfolio is also in part due to a benchmarking issue. The KRS Real Return portfolio has a healthy allocation to the U.S. TIPS market, which struggled greatly the last two months of the fiscal year due to the Fed's mention of tapering its stimulus package support. The Barclays U.S. TIPS Index is not part of the total fund's performance index, thus the benchmark is not a true rollup of the asset class's exposure. This mismatch helped to create the perceived underperformance at the total fund level.

The KRS insurance fund gained 10.11% net of expenses for the fiscal year ending June 30, 2013, compared to the benchmark's 11.05% return and the actuarially required rate of 7.75%. Like the pension fund, the insurance fund's underperformance can be primarily attributed to weakness from the Private Equity and Real Return portfolios; due to similar benchmarking issues.

Pension Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Fund	Apr-84	10.82%	9.59%	4.75%	6.60%	9.40%
Performance Benchmark[2]	-	11.21%	10.52%	5.39%	6.79%	9.54%

Insurance Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Insurance Fund	Apr-87	10.11%	10.10%	3.42%	6.18%	7.42%
Performance Benchmark[3]	-	11.05%	12.33%	4.26%	6.93%	7.81%

[1] *The Performance Calculations presented above were prepared by the Systems' custodial bank using a time-weighted rate of return methodology based upon the market value of assets.*
[2] *Current Policy Benchmark is compromised of 20.5% Russell 3000, 20.0% MSCI ACWI ex-US GD, 2.9% MSCI EM GD, 19.3% BC Universal, 10.0% Russell 3000 Quarter Lagged + 400bps, 10.0% HFR FOF: Diversified Lagged, 10.0% CPI + 300bps, 4.5% NCREIF Open-End Diversified Core GR, and 2.8% CG 3-Month US Treasury Bill.*
[3] *Current Policy Benchmark is compromised of 20.0% Russell 3000, 20.0% MSCI ACWI ex-US GD, 4.0% MSCI EM GD, 20.0% BC Universal, 10.0% Russell 3000 Quarter Lagged + 400bps, 10.0% HFR FOF: Diversified Lagged, 10.0% CPI + 300bps, 5.0% NCREIF Open-End Diversified Core GR, and 1.0% CG 3-Month US Treasury Bill.*

★ **Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

Benchmarks utilized to measure the Kentucky Retirement Systems' Pension and Insurance Funds are a weighted average composite of the various asset class indexes consisting within each KRS' investment portfolio. The Total Fund Benchmarks are shown below.

These benchmarks are intended to be objective, measurable, investable/replicable, and representative of the investment mandates. The benchmarks are developed from publicly available information, and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate and status. KRS' Investment Staff and Consultant recommend the indexes and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the Board of Trustees. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total Benchmarks will evolve to reflect these exposures.

Total Fund Benchmarks

Index	Pension Fund	Insurance Fund
Russell 3000	20.5%	20.0%
MSCI ACWI ex US GD	20.0%	20.0%
MSCI Emerging Markets GD	2.9%	4.0%
Barclays Capital US Universal	19.3%	20.0%
Russell 3000 Quarter Lagged + 400 bps	10.0%	10.0%
HFR FOF: Diversified Lagged	10.0%	10.0%
CPI + 300 bps	10.0%	10.0%
NCREIF Open-End Diversified Core GR	4.5%	5.0%
CG 3-Mo U.S. Treasury Bill	2.8%	1.0%

It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total Benchmarks will evolve to reflect these exposures.

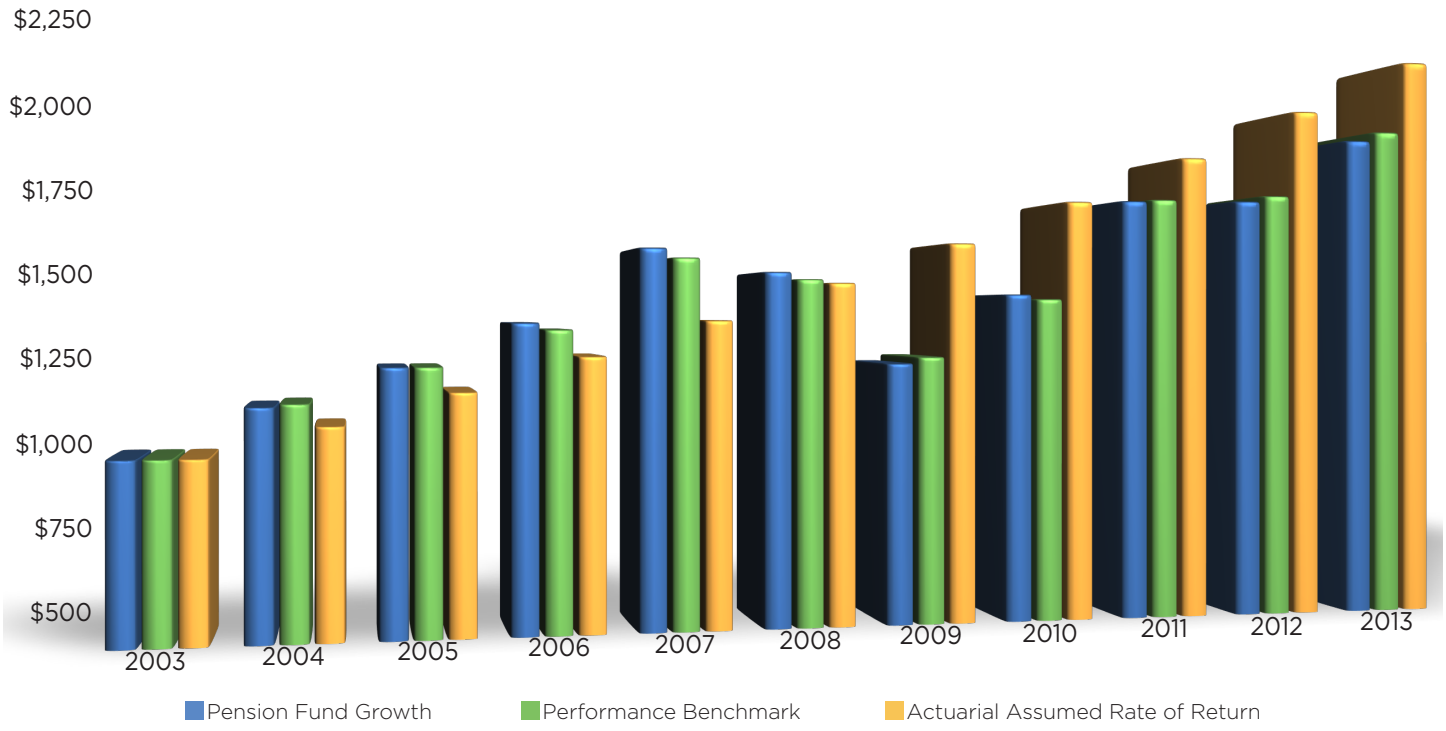
★ **Note:** Returns reported by KRS are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

For the 10-years ending June 30, 2013, the KRS pension fund portfolio earned an annualized total net return of 6.60%. As shown in the investment results table, the KRS pension fund return has trailed the benchmark in all measured time periods. Performance is illustrated below in a growth of dollars chart. The graph demonstrates the performance of $1,000 invested in the KRS pension portfolio, its policy benchmark portfolio, and its actuarial objective over the past 10 years.

As of June 30, 2013, the chart indicates that $1,000 would have grown to $1,902, while the same $1,000 invested in the benchmark or in the actuarial objective would have grown to $1,929 and $2,139, respectively.

Total Pension Fund Growth of $1,000

Portfolio	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pension Fund Growth	$1,000	$1,136	$1,241	$1,361	$1,569	$1,503	$1,244	$1,441	$1,714	$1,717	$1,902
Performance Benchmark	$1,000	$1,144	$1,241	$1,342	$1,542	$1,483	$1,262	$1,428	$1,719	$1,734	$1,929
Actuarial Assumed Rate of Return	$1,000	$1,083	$1,172	$1,268	$1,367	$1,473	$1,587	$1,710	$1,842	$1,985	$2,139

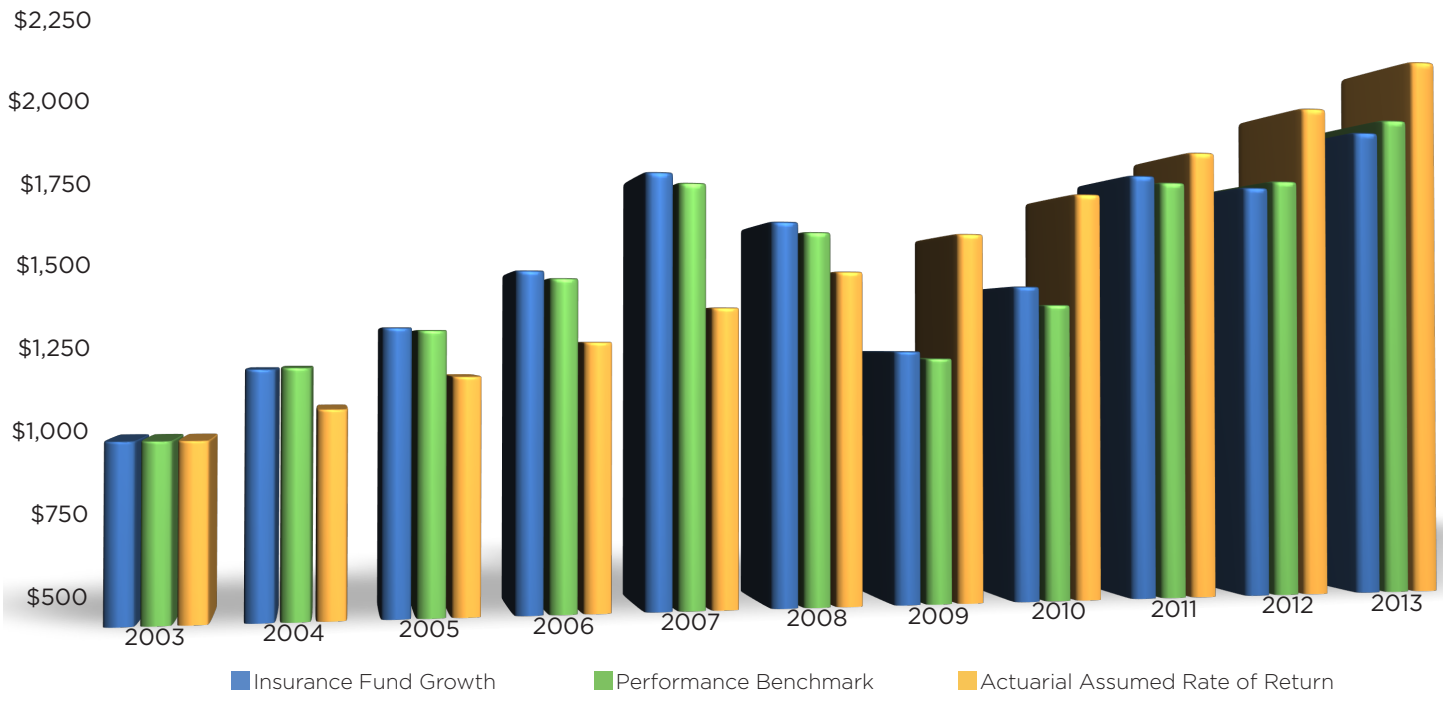


The KRS insurance fund has just underperformed its benchmark for the 10-year period ending June 30, 2013, earning 6.18% versus 6.93%. Performance is illustrated by the growth of dollars chart below. The graph highlights the performance of $1,000 invested in the KRS insurance portfolio ($1,915), benchmark ($1,955), and actuarial objective ($2,139) over the past 10 years.

As the results show in the accompanying insurance chart and table below, the KRS insurance fund has struggled during all measured standard return ranges.

Total Insurance Fund Growth of $1,000

Portfolio	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Insurance Fund Growth	$1,000	$1,194	$1,308	$1,469	$1,753	$1,616	$1,241	$1,433	$1,769	$1,739	$1,915
Performance Benchmark	$1,000	$1,198	$1,301	$1,448	$1,724	$1,587	$1,220	$1,379	$1,750	$1,760	$1,955
Actuarial Assumed Rate of Return	$1,000	$1,083	$1,172	$1,268	$1,367	$1,473	$1,587	$1,710	$1,842	$1,985	$2,139



U.S. Equity

For the fiscal year ending June 30, 2013, the KRS pension fund's U.S. equity portfolio posted a return of 21.41%, which just trailed its benchmark by 0.05%. The KRS insurance U.S. equity portfolio posted a return of 21.30%, underperforming its benchmark return by 0.16%.

★ Note: Returns reported by KRS are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

Since inception performance remains good; the pension's equity portfolio has generated an annualized average return of 11.14% throughout its duration, while the insurance equity portfolio posted an average annual return of 9.02% (the pension fund just edging out its benchmark, while the insurance fund's allocation has trailed by 42 basis points).

Return on U.S. Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-00	21.41%	18.13%	7.35%	7.92%	11.14%
↘ Performance Benchmark[1]	-	21.46%	18.60%	7.46%	8.02%	11.07%
Insurance Fund	Jul-00	21.30%	17.88%	7.06%	7.61%	9.02%
↘ Performance Benchmark[1]	-	21.46%	18.43%	7.18%	7.68%	9.44%
Market Indices						
Russell 1000 (Large Cap)	-	21.24%	18.63%	7.12%	7.67%	-
Russell 2000 (Small Cap)	-	24.21%	18.67%	8.77%	9.53%	-
Russell 3000 (Total Equity)	-	21.46%	18.63%	7.25%	7.81%	-

[1] Pension and Insurance benchmark is the Russell 3000; this became effective July 1, 2011.

Top 10 U.S. Equity Holdings Pension Fund

Company	Shares	Market Value
EXXON MOBIL CORP COM	486,601	$43,964,400
APPLE INC COM STK	102,082	$40,432,639
JOHNSON & JOHNSON	332,431	$28,542,526
GENERAL ELECTRIC CO	1,207,582	$28,003,827
CHEVRON CORP COM	235,667	$27,888,833
JPMORGAN CHASE & CO	524,218	$27,673,468
MICROSOFT CORP COM	770,987	$26,622,181
GOOGLE INC CL A CL A	28,577	$25,158,333
PFIZER INC COM	840,083	$23,530,725
BERKSHIRE HATHAWAY B	187,697	$21,007,048
Total	**4,715,925**	**$292,823,980**

Top 10 U.S. Equity Holdings Insurance Fund

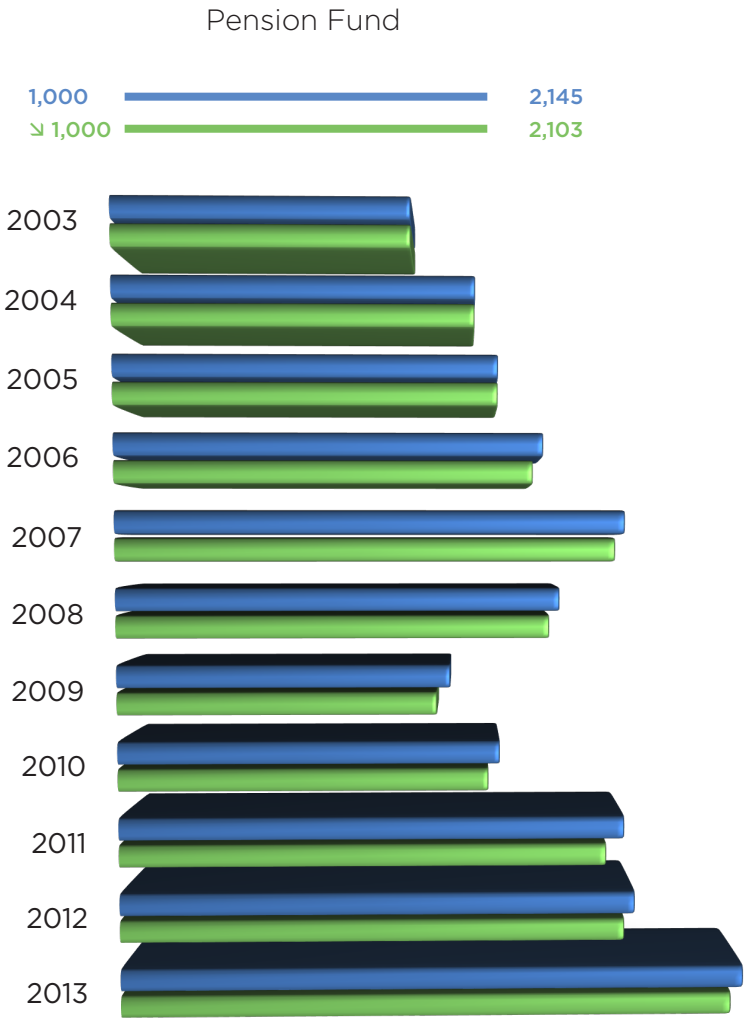
Company	Shares	Market Value
APPLE INC COM STK	38,475	$15,239,178
EXXON MOBIL CORP COM	158,136	$14,287,588
MICROSOFT CORP COM	302,683	$10,451,644
GOOGLE INC CL A	11,355	$9,996,601
JOHNSON & JOHNSON	111,704	$9,590,905
GENERAL ELECTRIC CO	367,766	$8,528,494
WELLS FARGO & CO NEW	204,436	$8,437,074
CHEVRON CORP COM	70,850	$8,384,389
JPMORGAN CHASE & CO	158,358	$8,359,719
PROCTER & GAMBLE COM	99,612	$7,669,128
Total	**1,523,375**	**$100,944,719**

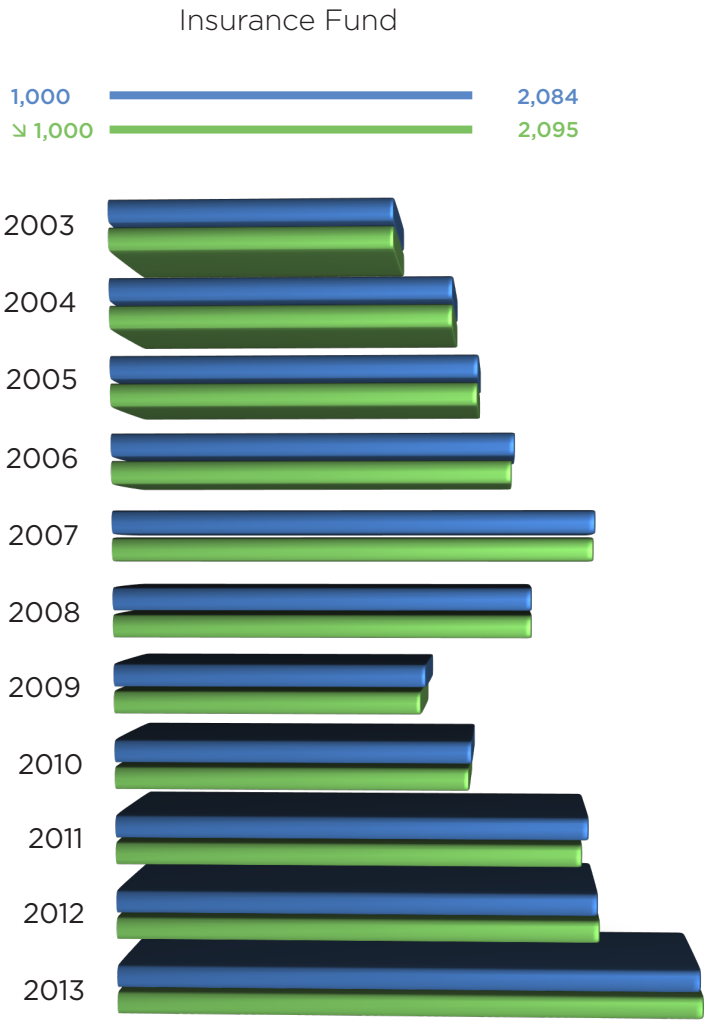
★ **Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

The relative performance is best illustrated again by the growth of a dollar charts. For the 10-year period ending June 30, 2013, the pension fund's chart indicates that $1,000 would have resulted in $2,145 while the same $1,000 invested in the benchmark would result in $2,103. For the KRS insurance fund, ending June 30, 2013, a $1,000 investment would be valued at $2,084, compared to $2,095 in the benchmark.

U.S. Equity Portfolio Growth of $1,000

Portfolio	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pension Fund Growth	$1,000	$1,216	$1,293	$1,446	$1,725	$1,503	$1,131	$1,300	$1,729	$1,767	$2,145
↘ Performance Benchmark	$1,000	$1,214	$1,292	$1,411	$1,692	$1,468	$1,085	$1,261	$1,667	$1,731	$2,103
Insurance Fund Growth	$1,000	$1,205	$1,294	$1,421	$1,703	$1,481	$1,109	$1,271	$1,684	$1,718	$2,084
↘ Performance Benchmark	$1,000	$1,204	$1,291	$1,410	$1,697	$1,481	$1,091	$1,261	$1,661	$1,725	$2,095





International Equity

For the fiscal year, ending June 30, 2013, the KRS pension fund's international equity portfolio gained 16.45%, outperforming its benchmark by 2.31%. The KRS insurance international equity portfolio also outpaced its benchmark, posting a return of 15.96% versus 14.14% during the same twelve month period.

★ **Note:** Returns reported by KRS are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

As the accompanying table indicates, international equities experienced positive results during the fiscal year, though it should be noted that developed market investors enjoyed significant performance.

International equity investors have experienced a volatile period of returns over the past several years, resulting in a chart that resembles a roller coaster (below). The KRS pension funds non-US equity portfolio has generated an annualized return of 6.22% over the trailing three-year period, while the insurance funds non-US equity portfolio saw returns that averaged 5.25% during the same period. Over the past five years, though relatively flat, both funds have outperformed their respective benchmarks. The KRS Pension and Insurance funds have posted annualized returns for the period of 0.36% and -0.43% respectively, compared to respective benchmark returns of 0.12% and -0.56%. The Systems began their international equity program in 2000. Since inception, the pension international equity portfolio has underperformed the benchmark, while the insurance international equity portfolio has outperformed the benchmark.

Return on International Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-00	16.45%	6.22%	0.36%	7.69%	1.78%
↘ Performance Benchmark[1]	-	14.14%	8.67%	0.12%	8.20%	2.42%
Insurance Fund	Apr-00	15.96%	5.25%	-0.43%	8.01%	1.78%
↘ Performance Benchmark[1]	-	14.14%	8.58%	-0.56%	7.85%	1.28%
Market Indices						
MSCI ACWI Ex US	-	14.14%	8.48%	-0.34%	9.09%	-
MSCI Emerging Markets	-	3.23%	3.72%	-0.11%	7.67%	-

[1]Pension and Insurance benchmark is the MSCI ACWI ex-US; this became effective July 1, 2011.

Top 10 International Equity Holdings Pension Fund

Company	Shares	Market Value
HSBC HLDGS ORD	2,614,560	$27,044,730
TOYOTA MOTOR CORP	424,500	$25,597,775
NOVARTIS AG	305,380	$21,657,240
ROCHE HLDGS AG	84,890	$21,084,553
TOTAL	379,245	$18,488,526
MITSUBISHI UFJ FIN	2,740,100	$16,881,675
UBS AG	938,371	$15,947,794
SANOFI	153,671	$15,904,036
ROYAL DUTCH SHELL 'A'	419,599	$13,364,521
BP ORD USD0.25	1,931,589	$13,337,190
Total	**9,991,905**	**$189,308,042**

Top 10 International Equity Holdings Insurance Fund

Company	Shares	Market Value
HSBC HLDGS ORD	837,023	$8,658,077
TOYOTA MOTOR CORP	135,900	$8,194,906
NOVARTIS AG	97,443	$6,910,559
ROCHE HLDGS AG	27,660	$6,870,052
TOTAL	121,613	$5,928,740
MITSUBISHI UFJ FIN	879,000	$5,415,493
SANOFI	49,266	$5,098,738
UBS AG	286,987	$4,877,399
BP ORD USD0.25	635,291	$4,386,542
ROYAL DUTCH SHELL 'A'	134,520	$4,284,556
Total	**3,204,703**	**$60,625,063**

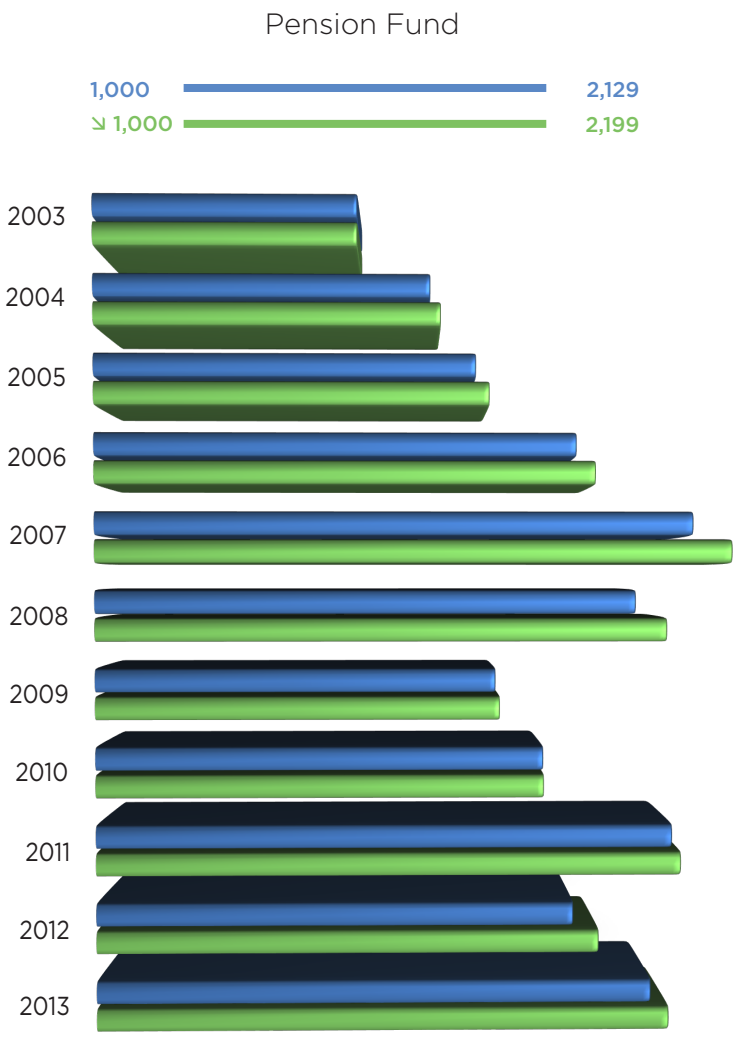
★ **Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

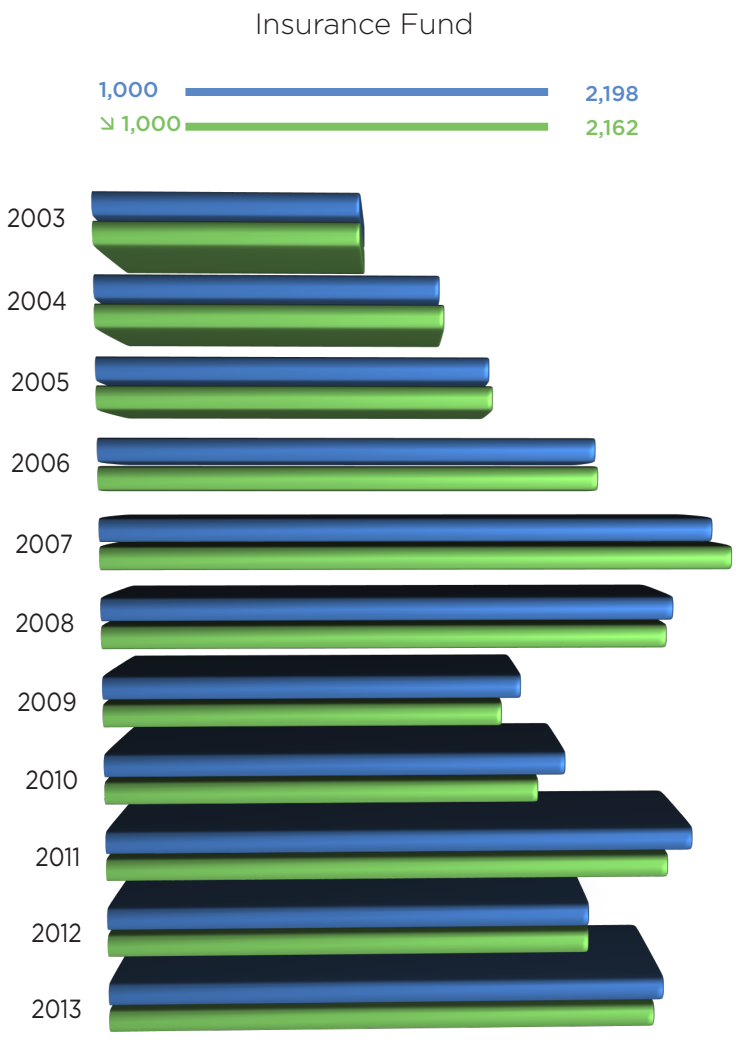
The following chart depicts the growth of $1,000 invested in the KRS international equity portfolios and the blended benchmarks since FY03. For the KRS pension fund, ending June 30, 2013, $1,000 would have resulted in $2,129, while the same amount invested in the benchmark would have resulted in $2,199. For the KRS insurance fund, ending June 30, 2013, $1,000 would have grown to $2,198, while an investment in the index would have been valued $2,162.

Non U.S. Equity Portfolio Growth of $1,000

Portfolio	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pension Fund Growth	$1,000	$1,277	$1,451	$1,836	$2,285	$2,065	$1,527	$1,711	$2,209	$1,828	$2,129
↘ Performance Benchmark	$1,000	$1,317	$1,503	$1,910	$2,436	$2,186	$1,544	$1,714	$2,244	$1,927	$2,199
Insurance Fund Growth	$1,000	$1,299	$1,489	$1,899	$2,357	$2,210	$1,618	$1,795	$2,302	$1,895	$2,198
↘ Performance Benchmark	$1,000	$1,317	$1,503	$1,910	$2,436	$2,186	$1,544	$1,689	$2,207	$1,895	$2,162

The non-U.S. equity portfolio included emerging market equity exposure from 03/31/08 through 06/30/11; a separate growth of a dollar chart for the emerging market equity asset class will be produced once the Systems have experienced a sufficient history within the space. In addition, the non-U.S. equity portfolio growth chart includes the currency overlay for the 2012 fiscal year; in prior years the impact of the currency overlay program was rolled up into the aggregate return of the funds. The Systems no longer employ a currency overlay mandate.





Fixed Income

For the fiscal year, ending June 30, 2013, the KRS pension fund's fixed income portfolio returned 2.67%, outperforming its performance benchmark by 2.43%.

★ Note: Returns reported by KRS are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

As the accompanying table indicates, both of the broad market indices, the Barclays Aggregate Index and the Barclays US Universal Index, posted fairly flat returns for the twelve month period ending June 30, 2013; however, the Barclays High Yield Index performed very well during the period. The KRS insurance fixed income portfolio posted a 2.46% rate of return, which outpaced the index by 222 basis points.

Over the past three years ending June 30, 2013, the KRS pension fund's fixed portfolio has generated an annualized average net return of 5.55% versus its custom performance benchmark return of 4.16%. The insurance fund's fixed portfolio posted a 5.56% return during the same period, outpacing its benchmark return by 0.64%. Over the five year period, the pension fund has outpaced the benchmark by 41 basis points, while the insurance fund has added 49 basis points annually over its index. Over the ten year period, the pension fund has edged the benchmark by 0.13%, while the insurance fund has outperformed its benchmark by 31 basis points.

Top 10 Fixed Income Holdings Pension Fund

Company	Par Value	Market Value
MFO PIMCO FDS PAC INVT MGMT SER ALL AST FD INSTL CL	$27,010,972	$323,321,331
UNITED STATES TREAS NTS DTD 02/15/2013 2% DUE 02-15-2023 REG	$56,900,000	$54,761,812
US TREAS BDS INDEX LINKED NOTES 2.375 DUE 01-15-2027 REG	$35,310,000	$49,024,766
UNITED STATES TREAS NTS INDEX LINKED 2.375 DUE 01-15-2017 REG	$32,200,000	$41,158,959
UNITED STATES TREAS BDS INFLATION INDEX LINKED 3.875% 04-15-2029	$18,399,000	$37,512,534
UNITED STATES TREAS BDS INDEX LINKED 1.75 DUE 01-15-2028 REG	$25,310,000	$31,478,362
USA TREASURY NTS 1.125% TIPS 15/1/21 USD1000 01-15-2021	$26,000,000	$29,560,322
FNMA SINGLE FAMILY MORTGAGE 3% 15 YEARS SETTLES JULY	$28,000,000	$28,800,632
US TREAS BDS INDEX LINKED 2.00 DUE 01-15-2026 REG	$20,638,000	$27,924,025
FNMA SINGLE FAMILY MORTGAGE 4% 30 YEARS SETTLES JULY	$26,000,000	$27,085,708
Total	**$295,767,972**	**$650,628,451**

Top 10 Fixed Income Holdings Insurance Fund

Company	Par Value	Market Value
MFO PIMCO FDS PAC INVT MGMT SER ALL AST FD INSTL CL	$8,459,107	$101,255,515
MFO STONE HBR INVT FDS EMERGING MKTS DEBT FD INSTL CL	$2,863,662	$30,727,094
FNMA SINGLE FAMILY MORTGAGE 3% 15 YEARS SETTLES JULY	$24,000,000	$24,686,256
UNITED STATES TREAS NTS DTD 02/15/2013 2% DUE 02-15-2023 REG	$23,800,000	$22,905,644
FEDERAL NATL MTG ASSN GTD MTG POOL #AH5849 4.5% 02-01-2041 BEO	$19,059,967	$20,599,822
US TREAS BDS INDEX LINKED NOTES 2.375 DUE 01-15-2027 REG	$13,675,000	$18,986,510
UNITED STATES TREAS NTS DTD 11/15/2012 1.625% DUE 11-15-2022 REG	$17,000,000	$15,869,772
UNITED STATES TREAS NTS DTD 00399 04-15-2017	$15,000,000	$15,757,759
USA TREASURY NTS TIPS DTD 00340 04-15-2016	$13,000,000	$14,048,449
US TREAS NTS TIPS 07-15-2022	$14,000,000	$13,838,126
Total	$150,857,736	$278,674,945

Note: The above table does not include mutual fund and commingled positions.

Return on Fixed Income

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	2.67%	5.55%	5.60%	4.90%	8.07%
↘ Performance Benchmark[1]	-	0.24%	4.16%	5.19%	4.77%	7.82%
Insurance Fund	Jul-00	2.46%	5.56%	5.07%	5.58%	6.94%
↘ Performance Benchmark[1]	-	0.24%	4.92%	4.58%	5.27%	6.75%
Market Indices						
BC Aggregate	-	-0.69%	3.51%	5.19%	4.52%	-
BC Corporate High Yield	-	9.49%	10.74%	10.94%	8.91%	-
BC U.S. Universal	-	0.24%	4.09%	5.53%	4.84%	-

[1]Pension and Insurance benchmark is the Barclays US Universal; this became effective July 1, 2011.

GROWTH OF $1,000

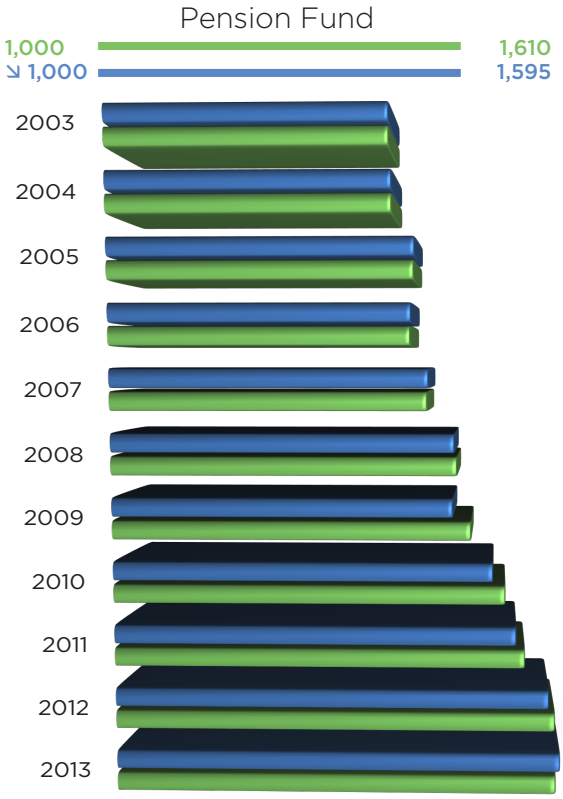
★ **Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

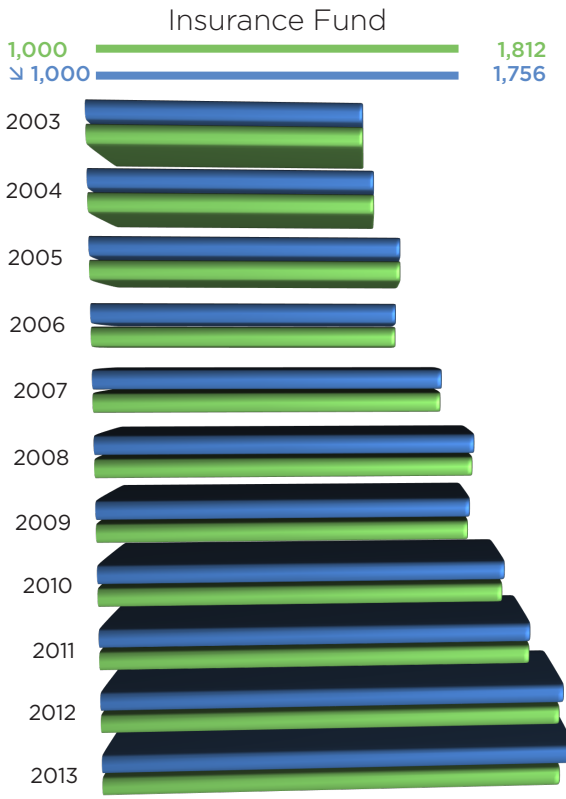
The chart below shows the growth of $1,000 invested in KRS fixed income portfolio over the past ten years. For the KRS pension fund, ending June 30, 2013, $1,000 would have grown to $1,610, while the same $1,000 invested in the benchmark would have grown to $1,595. For the KRS insurance fund, ending June 30, 2013, $1,000 would have grown to $1,812, which earned $56 more than the benchmark's growth.

Fixed Income Portfolio Growth of $1,000

Portfolio	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pension Fund Growth	$1,000	$1,009	$1,089	$1,076	$1,137	$1,229	$1,223	$1,367	$1,451	$1,569	$1,610
↘ Performance Benchmark	$1,000	$1,009	$1,086	$1,073	$1,132	$1,238	$1,288	$1,411	$1,482	$1,591	$1,595
Insurance Fund Growth	$1,000	$1,039	$1,136	$1,119	$1,291	$1,415	$1,399	$1,534	$1,635	$1,768	$1,812
↘ Performance Benchmark	$1,000	$1,039	$1,136	$1,117	$1,286	$1,408	$1,392	$1,525	$1,632	$1,752	$1,756

The fixed income portfolio included US TIPS exposure prior to the 2012 fiscal year; the exposure was moved to the real return asset class as part of the new asset allocation rebalance that took place effective 07/01/12. A separate growth of a dollar chart for the real return asset class will be produced once the Systems have experienced a sufficient history within the space.





Private Equity

For the fiscal year ending June 30, 2013, the KRS pension fund's private equity portfolio posted a return of 11.12%.

The portfolio consists primarily of investments within many private equity limited partnerships. The custom benchmark for the pension private equity portfolio returned 19.10% during this same period. The insurance private equity portfolio returned 11.19% versus its performance benchmark return of 19.10%. It is worth noting that it is difficult to accurately benchmark private equity investments over short time periods. Performance is typically based on appraisals of a business' value, and managers are often slow to mark valuations up or down, which can distort relative performance against a public market benchmark when that index moves dramatically. A better indication of the health of the program would be the mid to longer-term time periods. This is because businesses have likely been sold and transacted at a true price (rather than estimate of value), thus providing a better performance measurement.

As the accompanying table indicates, the past few years of market volatility combined with very strong public markets this past fiscal year has impacted the intermediate results in the private equity portfolios. For the three and five years ending June 30, 2013, the pension fund's private equity portfolio trailed its benchmark by -6.02% and -5.68%, respectively. For the three and five-year time period, the insurance fund's private equity portfolio has underperformed its benchmark by -5.50% and -2.83%, respectively. However, for the ten year period, both the pension and insurance funds have outpaced their respective indices by 2.09% and 0.52%. Since its inception in October 1990, the pension portfolio has outpaced its benchmark by 1.11% per year, while the insurance portfolio has outperformed its benchmark by 1.30% since its July 2001 inception.

Return on Private Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Oct-90	11.12%	12.42%	4.89%	11.24%	11.00%
↘ Performance Benchmark[1]		19.10%	18.44%	10.57%	9.15%	9.89%
Insurance Fund	Jul-01	11.19%	13.96%	6.62%	9.23%	7.31%
↘ Performance Benchmark[1]		19.10%	19.46%	9.45%	8.71%	6.01%

[1]*Pension and Insurance benchmark is the Russell 3000 Quarter Lagged + 400bps.*

Real Estate

For the fiscal year, ending June 30, 2013, the KRS pension fund's real estate portfolio gained 12.03%, just trailing its benchmark which gained 12.17%.

The KRS insurance real estate portfolio also fell to its benchmark, losing 173 basis points to the index, returning 10.44% for the period. For the three year ending June 30, 2013, the pension fund portfolio outpaced its benchmark by 0.26%, and the insurance fund outperformed its benchmark by 1.21%.

Return on Real Estate[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-84	12.03%	13.79%	7.46%	6.67%	5.57%
↘ Performance Benchmark[1]		12.17%	13.53%	2.45%	8.58%	7.55%
Insurance Fund	May-09	10.44%	14.74%	--	--	9.22%
↘ Performance Benchmark[1]		12.17%	13.53%	--	--	5.01%

[1]*Pension and Insurance benchmark is the NCREIF Open-End Diversified Core Gross Non Lagged.*

Absolute Return

For the fiscal year, ending June 30, 2013, the KRS pension fund's absolute return portfolio gained 12.30% versus its benchmark which earned 8.16%.

★ Note: Returns reported by KRS are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

The KRS insurance absolute return portfolio also bested the benchmark, out earning the index by 404 basis points, returning 12.20% for the period. Note: Though the allocation's inception date is April, 2010, the current book of managers, now consisting of three funds of funds, were employed in September 2011.

Return on Absolute Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-10	12.30%	6.34%	--	--	5.02%
↘ Performance Benchmark[1]		8.16%	3.21%	--	--	2.99%
Insurance Fund	Apr-10	12.20%	6.35%	--	--	4.85%
↘ Performance Benchmark[1]		8.16%	3.21%	--	--	2.99%

[1]*Pension and Insurance benchmark is the HFR FOF: Diversified Lagged.*

Real Return

For the fiscal year, ending June 30, 2013, the KRS pension fund's real return portfolio fell -0.69% versus its benchmark return of 4.80%.

The KRS insurance real return portfolio trailed its index by 648 basis points, falling -1.68% for the period. The real return portfolio was a source of relative underperformance for the fiscal year, due primarily to the U.S. TIPS investments. Through the first 10 months of the fiscal year, KRS' investments within the asset class were ahead of the benchmark.

However, during the month of May, the Fed made note of its intention to temper easing, which sent the bond market into a tail spin, rates increased nearly a point, and the U.S. TIPS market fell dramatically in a very short-time period. Unfortunately, KRS had a healthy weight to those securities and fell behind the asset class' benchmark. Note: The real return allocation was formed effective July 1, 2011.

Return on Real Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-11	-0.69%	--	--	--	5.45%
↘ Performance Benchmark[1]		4.80%	--	--	--	4.76%
Insurance Fund	Jul-11	-1.68%	--	--	--	4.89%
↘ Performance Benchmark[1]		4.80%	--	--	--	2.99%

[1]*Pension and Insurance benchmark is CPI + 300bps*

Cash

For the fiscal year, ending June 30, 2013, the KRS pension fund's cash portfolio returned 0.32%, outpacing its benchmark, the Citi Group 3-month Treasury by 0.24%.

The KRS insurance cash portfolio also outperformed the index, posting a return of 0.49% during the same twelve month period.

As the accompanying table indicates, the longer term results from the cash portfolios have also been excellent with comparison to their benchmark. For the five years ending June 30, 2013, the pension fund portfolio has outperformed its custom benchmark by 0.48% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.46% per year. The insurance portfolio has also done very well, exceeding its benchmark return over the five-year and since inception periods by 0.17% and 0.21%, respectively.

Return on Cash

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jan-88	0.32%	0.33%	0.71%	2.18%	4.15%
↘ Performance Benchmark[1]		0.08%	0.09%	0.23%	1.64%	3.69%
Insurance Fund	Jul-92	0.49%	0.32%	0.40%	2.10%	3.23%
↘ Performance Benchmark[1]		0.08%	0.09%	0.23%	1.64%	3.02%

[1]*Pension and Insurance Cash benchmark is the Citi Group 3-month Treasury.*

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Following are additional schedules which indicate the Investment Advisors employed along with the total assets each firm manages for the Systems, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems as of or for the year ended June 30, 2013.

External Investment Advisors & Assets Under Management (in Thousands)

Advisor	Assets Under Management
Aberdeen Asset Management, Aberdeen, Scotland	159,722
AMERRA AG Fund II, New York, New York	29,535
Arbor Investments II, Chicago, Illinois	18,167
Arcano Capital, New York, New York	11,315
Arrowhawk Capital Partners, Darien, Connecticut	-
Artio Global Investors, New York, New York	52
Avenue Capital V, New York, New York	137
Bay Hills Emerging Partners I, San Francisco, California	87,502
BlackRock Global Investors, San Francisco, California	1,042,234
Blackstone Alternative Asset Management, New York, New York	509,494
Blackstone Capital Partners V & VI, New York, New York	81,174
Columbia Asset Management, Minneapolis, Minnesota	221,085
Columbia Capital IV, Alexandria, Virginia	30,969
Commerce Street Income Partners LP, Dallas, Texas	-
Crestview Partners II, New York, New York	58,779
Doll Capital Management, Menlo Park, California	8,570
Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California	155,386
Essex Woodland VIII, Palo Alto, California	19,429
Geneva Capital Management, Milwaukee, Wisconsin	285,651
GTCR Golder Rauner IX, Chicago, Illinois	56,343
H.I.G BIO Venture II, Miami, Florida	2,225
H.I.G. Venture Partners II, Miami, Florida	11,852
H/2 Credit Partners, Stamford, Connecticut	120,973
Harrison Street, Chicago, Illinois	107,087
Harvest Partners V & VI, New York, New York	47,498
Hellman & Friedman VI, New York, New York	14,975
Horsley Bridge International V LLC, San Fransico, California	13,376
Institutional Venture Partners XI, Menlo Park, California	35,618
Invesco, Atlanta, Georgia	216,490
JW Childs Equity III, Boston, Massachusetts	22,514
Keyhaven Capital Partners, London, England	9,758
Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California	195,832
Loomis, Sayles & Company, Boston, Massachusetts	225,913
Manulife Financial, Boston, Massachusetts	149,744
Matlin Patterson Global Opportunities I & II, New York, New York	36,044

External Investment Advisors & Assets Under Management (in Thousands)

Advisor	Assets Under Management
Merit Capital Partners IV, Chicago, Illinois	14,143
Mesa West, Los Angeles, California	82,258
MHR Insitituional Advisors III, New York, New York	3,255
Mill Road Capital, Greenwich, Connecticut	28,198
New Mountain Partners II, New York, New York	49,176
NISA Investment Advisors, St. Louis, Missouri	733,459
Northern Trust Global Investors, Chicago, Illinois	463,045
Oak Hill Partners II, New York, New York	77,151
Oak Tree Opportunities VIIB, Los Angeles, California	2,170
Pacific Alternative Asset Management Company, Irvine, California	510,837
PIMCO, New Port Beach, California	1,457,400
Prima Mortgage, New York, New York	49,970
Prisma Capital Partners, New York, New York	506,378
Pyramis Global Advisors, Boston, Massachusetts	862,000
River Road Asset Management, Louisville, Kentucky	45,764
Riverside Capital VI, NewYork, New York	-
Sasco Capital, Fairfield, Connecticut	59,510
Shenkman Capital, Stamford, Connecticut	154,249
Stone Harbor Investments, New York, New York	146,563
Sun Capital Partners IV, Boca Raton, Florida	2,211
Systematic Financial Management, Teaneck, New Jersey	251,267
Technology Crossover Ventures VI, Palo Alto, California	691
Tenaska Power Fund II, Omaha, Nebraska	15,405
The Boston Company, Boston, Massachusetts	876,297
The Camelot Group, New York, New York	28,008
Tortoise Capital, Leawodd, Kansas	85,305
Vantagepoint Venture IV, San Bruno, California	33,704
Vista Equity Partners III & IV, San Francisco, California	70,553
Walton Street Real Estate Fund &VII, Chicago, Illinois	38,351
Warburg Pincus IX, New York, New York	84,485
Waterfall Investment, New York, New York	162,502
Wayzata Investment Partners I & III, Wayzata, Minnesota	122,886
Weaver Barksdale & Associates, Brentwood, Tennessee	370,511
Wellington Management Company, Boston, Massachusetts	159,194
Westfield Capital, Boston, Massachusetts	154,870
Westwood Management, Dallas, Texas	142,615
Total	**$11,829,824**

CONSULTANTS

Master Custodian is **Northern Trust Company,** from Chicago, Illinois. Investment consultants are **R.V. Kuhns & Associates** from Portland, Oregon; **Albourne America, LLC** from San Francisco, California; **Altius Associates** from Richmond, Virginia; and **ORG Real Property** from Cleveland, Ohio.

Schedule of Commissions Paid

Asset	Total Shares	Commissions Paid	Price per Share
U.S. Equities	84,386,389	$1,549,904	$0.018
	Total Value of Trades	**Commissions Paid**	**As a % of Trade**
Non-U.S. Equities	$4,056,852,601	$3,919,843	0.097%
Total Commissions Paid		**$5,469,747**	

External Investment Expenses (in Thousands) Equity & Fixed Income Portfolio

Expense	Fees Paid	Share of Assets
Pension Funds	$41,769	0.3797%
Insurance Funds	$9,896	0.2844%
Contractual	$1,513	0.0104%
Other Investment-Related Fees	$416	0.0029%
Total Expenses	**$53,594**	**0.3701%**

PORTFOLIO SUMMARIES

KERS Non-Haz Pension Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	$738,920	27.3%
Short-Term	$98,546	3.6%
Alternatives	$801,824	29.6%
Domestic Equities	$513,161	18.9%
International Equities	$556,763	20.6%
Total Portfolio	**$2,709,214**	**100.0%**

KERS Non-Haz Insurance Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	$131,716	27.2%
Short-Term	$34,486	7.1%
Alternatives	$106,933	22.0%
Domestic Equities	$108,579	22.4%
International Equities	$103,181	21.3%
Total Portfolio	**$484,895**	**100.0%**

KERS Haz Pension Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	$126,667	24.9%
Short-Term	$26,925	5.3%
Alternatives	$136,628	26.8%
Domestic Equities	$106,638	21.0%
International Equities	$111,880	22.0%
Total Portfolio	**$508,738**	**100.0%**

KERS Haz Insurance Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	$106,570	28.8%
Short-Term	$15,318	4.2%
Alternatives	$74,947	20.3%
Domestic Equities	$91,821	24.8%
International Equities	$81,173	21.9%
Total Portfolio	**369,829**	**100.0%**

CERS Non-Haz Pension Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	$1,527,114	26.8%
Short-Term	$220,009	3.8%
Alternatives	$1,413,709	24.7%
Domestic Equities	$1,300,867	22.7%
International Equities	$1,258,901	22.0%
Total Portfolio	**$5,720,600**	**100.0%**

CERS Non-Haz Insurance Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	$465,187	29.1%
Short-Term	$69,721	4.3%
Alternatives	$320,458	20.0%
Domestic Equities	$395,650	24.8%
International Equities	$349,649	21.8%
Total Portfolio	**$1,600,665**	**100.0%**

CERS Haz Pension Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	$479,093	26.4%
Short-Term	$82,394	4.5%
Alternatives	$449,270	24.8%
Domestic Equities	$407,283	22.4%
International Equities	$397,706	21.9%
Total Portfolio	**$1,815,746**	**100.0%**

CERS Haz Insurance Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	$258,356	29.3%
Short-Term	$40,573	4.6%
Alternatives	$176,311	20.0%
Domestic Equities	$214,973	24.3%
International Equities	$192,806	21.8%
Total Portfolio	**$883,019**	**100.0%**

SPRS Pension Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	$61,096	24.9%
Short-Term	$10,932	4.5%
Alternatives	$67,782	27.6%
Domestic Equities	$51,484	21.0%
International Equities	$54,089	22.0%
Total Portfolio	**$245,383**	**100.0%**

SPRS Insurance Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	$40,027	28.3%
Short-Term	$6,655	4.7%
Alternatives	$30,172	21.4%
Domestic Equities	$33,424	23.7%
International Equities	$30,825	21.9%
Total Portfolio	**$141,103**	**100.0%**

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Actuarial Section

ACTUARIAL

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Certification of Actuarial Results

The fifty-seventh annual actuarial valuation of the Kentucky Employees Retirement System (KERS), the fifty-fourth annual actuarial valuation of the County Employees Retirement System(CERS), and the fifty-fifth annual actuarial valuation of the State Police Retirement System(SPRS) have been completed and the reports prepared.

These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rates for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2013 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2014 and ending June 30, 2015 for KERS, CERS and SPRS. The same rates will be used for the fiscal year beginning July 1, 2015 and ending June 30, 2016 for KERS and SPRS.

Funding Objectives & Policies For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statue made by Senate Bill 2 (SB2), the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future. Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30-year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the UAL

UAL
Unfunded Accrued Liability

GASB
Governmental Accounting Standards Board

HB
House Bill

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

COLA
Cost of Living Adjustment

will be amortized over a 30-year period beginning June 30, 2013. The amortization period will decrease by one each year in the future. Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

The impact of HB1 passed into law in 2008 and SB2 passed into law in 2013 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008 and January 1, 2014. SB2 introduced a Cash Blance Plan for members hired on or after January 1, 2014. The Cash Balance Plan limits the employers' exposure to increased contribution rates due to less than anticipated investment experience.

Progress Towards Realization of Funding Objectives The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 (and for KERS Hazardous and CERS Non-Hazardous the 2009) assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have severely limited the plans' ability to correct the declining funding levels. SB 2 requires the state to contribute the full actuarially determined employer contribution rates compared to the HB 1 phase-in rates which would not have required the full actuarially determined employer contribution rate for many years. As of June 30, 2013 the funding levels for the pension [and insurance] funds are as follows:

Funding Level of Pension Fund

System	Funding Level
KERS Non-Hazardous	23.2%
KERS Hazardous	64.5%
CERS Non-Hazardous	60.1%
CERS Hazardous	57.7%
SPRS	37.1%

Funding Level of Insurance Fund

System	Funding Level
KERS Non-Hazardous	23.4%
KERS Hazardous	96.2%
CERS Non-Hazardous	66.6%
CERS Hazardous	62.1%
SPRS	61.3%

System Pension Funding Level The Board's funding objective for the insurance funds is to increase the funded level consistently over time.

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities.

Data In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. At least once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on August 20, 2009 based on the experience investigation report dated August 17, 2009, meet the parameters set for disclosure under GASB Statements No. 25 and 43. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is scheduled to be completed in early, 2014 and any adjustments will be reflected in the June 30, 2014 actuarial valuation.

Closing The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose. However, it is up to the state legislature to follow through with the required funding. As noted above, SB2 calls for KERS and SPRS contributions at the actuarially determined rates beginning with fiscal year 2014-2015, which is a positive development for the long term sustainability of those systems. CERS has always received the actuarially determined contributions, and its sustainability is not in question.

Thomas J. Cavanaugh FSA, FCA, MAAA, EA // CEO
Cavanaugh Macdonald Consulting, LLC
December 5, 2013

Summary of Actuarial Assumptions

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against ***actual plan experience at least once every five years*** *through the completion of the Actuarial Experience Study.*

As of June 30, 2013 The most recent study was completed in August 2009 and reviewed plan experience for the period from July 1, 2005 through June 30, 2008. All assumptions, with the exception of health care trend rates, used in the June 30, 2011 actuarial valuation were based on the study performed in 2009 and in accordance with the actuary's recommendations. The next Experience Study is scheduled to be completed in early 2014.

Actuarial Cost Method The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL) over no more than a 30-year period.

UAL Amortization Method The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance withthe changes to statute made by SB2, the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

Asset Valuation Method The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

Retiree Insurance Funding Policy The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. As with the Pension Fund, the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

Investment Return Assumption The future investment earnings of plan assets are assumed to accumulate at a rate of 7.75% per annum. This rate consists of a 3.5% inflationary component and a 4.25% real rate of return component. In accordance with GASB Statement 43, the investment return assumption had been reduced to a blended rate of 4.5% for KERS and SPRS insurance funds due to a lack of pre-funding benefits. This assumption was adopted in 2006. However, given the requirement for full actuarially determined contributions beginning with the results of the June 30, 2013 actuarial valuation, the investment return assumption for all funds is 7.75% per annum.

Salary Increase Assumptions Active member salaries are assumed to increase at the rates provided in Table 1. The rates include a 4.5% percent inflationary component and an additional increase due to promotion based upon plan experience. These assumptions were adopted in 2009.

Table 1. Salary Increase Assumptions

Service	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
0-1	17.00%	21.00%	13.00%	20.00%	17.00%
0-2	9.00%	9.00%	9.50%	10.50%	12.00%
0-3	6.50%	7.00%	6.00%	6.50%	10.00%
0-4	6.00%	6.50%	6.00%	5.75%	9.00%
0-5	6.00%	6.00%	5.50%	5.50%	8.00%
0-6	6.00%	5.50%	5.50%	5.00%	7.00%
0-7	5.50%	5.00%	5.25%	4.50%	6.00%
0-8	5.50%	5.00%	5.25%	4.50%	6.50%
0-9	5.50%	5.00%	5.00%	4.50%	5.50%
0-10	5.00%	5.00%	5.00%	4.50%	5.00%
0-11	5.00%	5.00%	4.75%	4.50%	4.50%

Payroll Growth Assumption Active member payroll is assumed to increase at a rate of 4.5% per annum. This assumption was adopted in 2006.

COLA
Cost of Living Adjustment

Retiree COLAs SB2 only allows the Cost of Living Adjustments (COLAs) to be awarded on a biennial basis. The Kentucky General Assembly authorizes and either (i) the system is over 100% funded or (ii) the General Assembly appropriates sufficient funds to pay the increased liability for the COLA.

Medical Inflation Assumption The costs for retiree medical premiums are assumed to increase each year according to the assumptions provided in Table 2 below.

Table 2. Cost of Retiree Medical Premiums

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2014	8.5%	7.0%
2015	7.5%	6.5%
2016	6.5%	6.0%
2017	6.0%	5.5%
2018	5.5%	5.0%
2019 and beyond	5.0%	5.0%

Retirement Rate Assumptions The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 3. These assumptions were adopted in 2009.

Table 3. Retirement Rate Assumptions

	Non-Hazardous				Hazardous					
Age	KERS[1]	KERS[2]	CERS[3]	Service	KERS[4]	KERS[5]	CERS[6]	CERS[7]	SPRS[8]	SPRS[9]
55	8.0%		8.0%	20	22.0%		20.0%		9.0%	
56	8.0%		8.0%	21	22.0%		20.0%		9.0%	
57	8.0%		8.0%	22	22.0%		20.0%		10.0%	
58	8.0%		8.0%	23	22.0%		20.0%		22.0%	
59	8.0%		8.0%	24	22.0%		30.0%		22.0%	
60	10.0%	10.0%	10.0%	25	35.0%	22.0%	33.0%	20.0%	22.0%	9.0%
61	20.0%	20.0%	20.0%	26	37.0%	22.0%	33.0%	20.0%	22.0%	9.0%
62	22.5%	22.5%	22.0%	27	37.0%	22.0%	33.0%	20.0%	25.0%	10.0%
63	22.5%	22.5%	22.0%	28	39.0%	22.0%	39.0%	20.0%	25.0%	22.0%
64	22.5%	22.5%	22.0%	29	38.0%	22.0%	33.0%	30.0%	25.0%	22.0%
65	22.5%	25.0%	22.0%	30	38.0%	35.0%	33.0%	33.0%	25.0%	22.0%
66	22.5%	25.0%	22.0%	31	38.0%	37.0%	33.0%	33.0%	33.3%	22.0%
67	22.5%	25.0%	22.0%	32	50.0%	37.0%	50.0%	33.0%	33.3%	25.0%
68	22.5%	25.0%	22.0%	33	50.0%	39.0%	40.0%	39.0%	33.3%	25.0%
69	22.5%	25.0%	22.0%	34	50.0%	38.0%	40.0%	33.0%	33.3%	25.0%
70	22.5%	25.0%	22.0%	35	60.0%	38.0%	40.0%	33.0%	33.3%	25.0%
71	22.5%	25.0%	22.0%	36	60.0%	38.0%	40.0%	33.0%	33.3%	33.3%
72	22.5%	25.0%	22.0%	37	60.0%	50.0%	40.0%	50.0%	33.3%	33.3%
73	22.5%	25.0%	22.0%	38	60.0%	50.0%	40.0%	40.0%	33.3%	33.3%
74	22.5%	25.0%	22.0%	39	60.0%	50.0%	40.0%	40.0%	33.3%	33.3%
75+	100.0%	100.0%	100.0%	40+	60.0%	60.0%	40.0%	40.0%	33.3%	33.3%

[1]*For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.*
[2]*For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 25%.*
[3]*If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.*
[4]*For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.*
[5]*For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*
[6]*For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.*
[7]*For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*
[8]*For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.*
[9]*For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

GAM
Group Annuity Mortality

Mortality Assumptions The mortality table used for active members is 50% of the 1994 Group Annuity Mortality (GAM) Table. For non-disabled members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table to the 1994 GAM table. For disabled members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table set forward five years to the 1994 GAM table set forward five years. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted. The pre-retirement mortality assumption was adopted in 2009 and the post-retirement mortality assumptions were adopted in 2006.

Table 4. Sample Annual Rates of Mortality

	Active Member Mortality		Retired Member Mortality*		Disabled Member Mortality*	
Age	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**
Under 20	0.02%	0.01%	0.04%	0.03%	-	-
22	0.03%	0.01%	0.06%	0.03%	-	-
32	0.04%	0.02%	0.08%	0.04%	-	-
42	0.06%	0.04%	0.13%	0.08%	0.19%	0.11%
52	0.16%	0.09%	0.32%	0.17%	0.56%	0.29%
62	0.51%	0.29%	1.01%	0.58%	1.80%	1.08%
72	1.42%	0.83%	2.85%	1.65%	4.52%	2.84%

** For members retiring on or after July 1, 2006.*

Withdrawal Rates The withdrawal rate is a function of both age and service. This type of structure is known as "select and ultimate rates". This structure reflects the fact that both service and age affect the likelihood of a member staying in active employment. The ultimate period for these systems covers a member's withdrawal rate after the first five years of service. These assumptions were adopted in 2009.

Table 5. Selected Rates of Termination Prior to Retirement

KERS Non-Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	19.00%	20	6.00%
2	13.00%	25	5.08%
3	10.00%	30	4.26%
4	9.00%	35	3.21%
5	6.50%	40	3.00%
		45	3.00%
		50	3.00%
		55	3.00%
		60	3.00%

KERS Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	26.00%	20	4.00%
2	11.50%	25	4.00%
3	8.25%	30	3.50%
4	7.50%	35	3.00%
5	7.00%	40	3.00%
		45	3.00%
		50	3.00%
		55	3.00%
		60	3.00%

CERS Non-Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	25.00%	20	5.75%
2	14.00%	25	5.75%
3	10.00%	30	5.30%
4	8.00%	35	4.40%
5	6.50%	40	3.70%
		45	3.02%
		50	2.70%
		55	2.20%
		60	0.75%

CERS Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	14.00%	20	3.00%
2	7.50%	25	2.70%
3	6.00%	30	2.50%
4	4.50%	35	2.50%
5	4.00%	40	2.50%
		45	2.50%
		50	2.50%
		55	-
		60	-

Table 5 Continued. Selected Rates of Termination Prior to Retirement

SPRS Non-Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	20.00%	20	2.50%
2	7.50%	25	2.50%
3	3.00%	30	2.50%
4	3.00%	35	2.50%
5	3.00%	40	2.50%
		45	2.50%
		50	2.50%
		55	-
		60	-

Rates of Disablement KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. For non-hazardous members, the assumptions are set using three quarters of the Old-Age Survivors and Disability Insurance (OASDI) rates. For hazardous members, the assumptions are set using one times the OASDI rates. These assumptions were adopted in 2009.

OASDI
Old-Age Survivors & Disability Insurance

*This assumption provides the probability, or likelihood, that a member will **become disabled during the course of employment** for various age levels.*

Rate of Disablement

Non-Hazardous		Hazardous	
Age	Probability	Age	Probability
20-24	0.0354%	20-24	0.0531%
25-29	0.0474%	25-29	0.0711%
30-34	0.0612%	30-34	0.0918%
35-39	0.0853%	35-39	0.1280%
40-44	0.1329%	40-44	0.1994%
45-49	0.2213%	45-49	0.3320%
50-54	0.3727%	50-54	0.5590%
55-59	0.6133%	55-59	0.9200%
60-64	0.9745%	60-64	1.4618%

Summary of Actuarial Valuation Results as of June 30, 2013

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Recommended Rate Fiscal 2014-2015					
Pension Fund Contribution	30.84%	16.37%	12.75%	20.73%	53.90%
Insurance Fund Contribution	7.93	9.97	5.35	14.97	21.86
Recommended Employer Contribution	38.77%	26.34%	18.10%	35.70%	75.76%
Funded Status as of Valuation Date					
Pension Fund					
↘ Actuarial Liability	$11,386,602,159	$783,980,594	$9,378,876,114	$3,124,205,593	$651,580,654
↘ Actuarial Value of Assets	$2,636,122,852	$505,656,808	$5,637,094,483	$1,801,691,410	$241,800,328
↘ Unfunded Liability on Actuarial Value of Assets	$8,750,479,307	$278,323,786	$3,741,781,631	$1,322,514,183	$409,780,326
↘ Funding Ratio on Actuarial Value of Assets	23.15%	64.50%	60.10%	57.67%	37.11%
↘ Market Value of Assets	$2,747,428,086	$513,162,166	$5,780,830,355	$1,830,657,969	$248,559,040
↘ Unfunded Liability on Market Value of Assets	$8,639,174,073	$270,818,428	$3,598,045,759	$1,293,547,624	$403,021,614
↘ Funding Ratio on Market Value of Assets	24.13%	65.46%	61.64%	58.60%	38.15%
Insurance Fund					
↘ Actuarial Liability	$2,128,754,134	$385,517,675	$2,443,894,100	$1,437,332,817	$222,326,743
↘ Actuarial Value of Assets	$497,584,327	$370,774,403	$1,628,244,197	$892,774,391	$136,321,060
↘ Unfunded Liability on Actuarial Value of Assets	$1,631,169,807	$14,743,272	$815,649,903	$544,558,426	$86,005,683
↘ Funding Ratio on Actuarial Value of Assets	23.37%	96.18%	66.62%	62.11%	61.32%
↘ Market Value of Assets	$509,364,080	$374,309,576	$1,633,696,661	$894,232,297	$142,830,916
↘ Unfunded Liability on Market Value of Assets	$1,619,390,054	$11,208,099	$810,197,439	$543,100,520	$79,495,827
↘ Funding Ratio on Market Value of Assets	23.93%	97.09%	66.85%	62.21%	64.24%
Member Data					
Number of Active Members	42,226	4,127	81,815	9,123	902
Total Annual Payroll (Active Members)[1]	$1,644,408,698	$132,015,368	$2,236,277,489	$461,672,567	$45,256,202
Average Annual Pay (Active Members)	$38,943	$31,988	$27,333	$50,605	$50,173
Number of Retired Members & Beneficiaries	40,194	3,430	47,676	7,293	1,346
Average Annual Retirement Allowance	$21,698	$14,905	$11,704	$25,042	$37,820
Number of Vested Inactive Members	8,189	368	11,899	614	60
Number of Inactive Members Due a Refund	35,857	3,117	61,179	1,802	330

[1]*Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2013.*

Recommended Employer Contribution Rates as of June 30, 2013

KERS Non-Haz

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/08	2009-2010	3.97%	14.99%	18.96%	20.49%	39.45%
6/30/09	2010-2011	4.26%	17.51%	21.77%	16.81%	38.58%
6/30/10	2011-2013	4.23%	20.07%	24.30%	16.41%	40.71%
6/30/11	2013-2013	4.38%	23.65%	28.03%	16.52%	44.55%
6/30/12	2013-2014	4.26%	28.31%	32.57%	12.71%	45.28%
6/30/13	2014-2015	4.13%	26.71%	30.84%	7.93%	38.77%

KERS Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/08	2009-2010	7.52%	4.46%	11.98%	23.56%	35.54%
6/30/09	2010-2011	7.94%	6.17%	14.11%	20.26%	34.37%
6/30/10	2011-2013	7.19%	6.92%	14.11%	19.73%	33.84%
6/30/11	2013-2013	7.47%	8.69%	16.16%	19.73%	35.89%
6/30/12	2013-2014	6.09%	10.91%	17.00%	11.84%	28.84%
6/30/13	2014-2015	5.79%	10.58%	16.37%	9.97%	26.34%

CERS Non-Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/08	2009-2010	4.46%	4.16%	8.62%	12.29%	20.91%
6/30/09	2010-2011	4.60%	5.43%	10.03%	9.78%	19.81%
6/30/10	2011-2013	4.72%	6.98%	11.70%	9.59%	21.29%
6/30/11	2013-2013	4.68%	7.94%	12.62%	8.59%	21.21%
6/30/12	2013-2014	4.68%	9.06%	13.74%	5.84%	19.58%
6/30/13	2014-2015	4.35%	8.40%	12.75%	5.35%	18.10%

CERS Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/08	2009-2010	8.23%	7.88%	16.11%	27.25%	43.36%
6/30/09	2010-2011	7.56%	9.23%	16.79%	23.27%	40.06%
6/30/10	2011-2013	7.31%	10.60%	17.91%	23.74%	41.65%
6/30/11	2013-2013	7.40%	12.70%	20.10%	21.84%	41.94%
6/30/12	2013-2014	6.44%	15.33%	21.77%	16.02%	37.79%
6/30/13	2014-2015	6.35%	14.38%	20.73%	14.97%	35.70%

Recommended Employer Contribution Rates as of June 30, 2013
SPRS

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/08	2009-2010	9.83%	25.40%	35.23%	56.89%	92.12%
6/30/09	2010-2011	8.12%	27.62%	35.74%	49.89%	85.63%
6/30/10	2011-2013	7.75%	32.05%	39.80%	54.83%	94.63%
6/30/11	2013-2013	8.12%	39.36%	47.48%	55.93%	103.41%
6/30/12	2013-2014	8.14%	45.21%	53.35%	43.17%	96.52%
6/30/13	2014-2015	8.46%	45.44%	53.90%	21.86%	75.76%

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

UAL
Unfunded Accrued Liability

KERS Funds The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the tables on page 11 are the full funding rates presented by the actuary in the 2008 through 2013 annual valuations. However, the actual employer contribution rates have been less than those shown above for the years prior to 2014-2015. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

CERS Funds The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the tables on page 11 are the full funding rates presented by the actuary in the 2008 through 2013 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date as a result of the passage of HB 1 by the Kentucky General Assembly. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2014-2015 is 4.92% and the employer contribution rate is 17.67%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2014-2015 is 13.58% and the employer contribution rate is 34.31%.

SPRS Funds The contribution rates for SPRS shown in the tables on page 12 are the full funding rates presented by the actuary in the 2008 through 2013 annual valuations. However, the actual employer contribution rates have been less than those shown above for the years prior to 2014-2015. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2018 for SPRS. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

Summary of Actuarially Unfunded Liabilities as of June 30, 2013
KERS Non-Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$10,129,689,985	$5,318,792,893	$5,056,867,294	$4,810,897,092	$5,072,822,691	52.5%	49.9%
6/30/09	$10,658,549,532	$4,794,611,365	$3,584,196,429	$5,863,938,167	$7,074,353,103	45.0%	33.6%
6/30/10	$11,004,795,089	$4,210,215,585	$3,503,007,035	$6,794,579,504	$7,501,788,054	38.3%	31.8%
6/30/11	$11,182,142,032	$3,276,986,087	$3,538,878,093	$7,455,155,945	$7,643,263,939	33.3%	31.7%
6/30/12	$11,361,048,136	$3,101,316,738	$2,980,401,603	$8,259,731,398	$8,380,646,533	27.3%	26.2%
6/30/13	$11,386,602,159	$2,636,122,852	$2,747,428,086	$8,750,479,307	$8,639,174,073	23.2%	24.1%

KERS Non-Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$5,431,499,285	$603,197,761	$574,480,809	$4,828,301,524	$4,857,018,476	11.1%	10.6%
6/30/09	$4,507,325,571	$534,172,580	$365,771,088	$3,973,152,991	$4,141,554,483	11.9%	8.1%
6/30/10	$4,466,136,041	$471,341,628	$371,002,484	$3,994,794,413	$4,095,133,557	10.6%	8.3%
6/30/11	$4,280,089,633	$451,620,442	$433,305,243	$3,828,469,191	$3,846,784,390	10.6%	10.1%
6/30/12	$3,125,330,157	$446,080,511	$430,805,726	$2,679,249,646	$2,694,524,431	14.3%	13.8%
6/30/13	$2,128,754,134	$497,584,327	$509,364,080	$1,631,169,807	$1,619,390,054	23.4%	23.9%

KERS Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$618,010,827	$502,132,214	$484,440,015	$115,878,613	$133,570,812	81.3%	78.4%
6/30/09	$674,411,781	$502,503,287	$388,913,374	$171,908,494	$285,498,406	74.5%	57.7%
6/30/10	$688,149,451	$502,729,009	$443,511,663	$185,420,442	$244,637,788	73.1%	64.5%
6/30/11	$721,293,444	$510,748,505	$510,628,492	$210,544,939	$210,664,952	70.8%	70.8%
6/30/12	$752,699,457	$497,226,296	$478,103,794	$255,473,161	$274,595,663	66.1%	63.5%
6/30/13	$783,980,594	$505,656,808	$513,162,166	$278,323,786	$270,818,428	64.5%	65.5%

KERS Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$541,657,214	$288,161,759	$269,299,859	$253,495,455	$272,357,355	53.2%	49.7%
6/30/09	$491,132,170	$301,634,592	$219,537,255	$189,497,578	$271,594,915	61.4%	44.7%
6/30/10	$493,297,529	$314,427,296	$271,395,843	$178,870,233	$221,901,686	63.7%	55.0%
6/30/11	$507,058,767	$329,961,615	$321,071,515	$177,097,152	$185,987,252	65.1%	63.3%
6/30/12	$384,592,406	$345,573,948	$333,298,119	$39,018,458	$51,294,287	89.9%	86.7%
6/30/13	$ 385,517,675	$370,774,403	$ 374,309,576	$14,743,272	$11,208,099	96.2%	97.1%

Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2013

CERS Non-Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$7,304,217,691	$5,731,502,438	$5,431,735,605	$1,572,715,253	$1,872,482,086	78.5%	74.4%
6/30/09	$7,912,913,512	$5,650,789,991	$4,330,593,934	$2,262,123,521	$3,582,319,578	71.4%	54.7%
6/30/10	$8,459,022,280	$5,546,857,291	$4,819,933,717	$2,912,164,989	$3,639,088,563	65.6%	57.0%
6/30/11	$8,918,085,025	$5,629,611,183	$5,577,252,295	$3,288,473,842	$3,340,832,730	63.1%	62.5%
6/30/12	$9,139,567,695	$5,547,235,599	$5,372,769,813	$3,592,332,096	$3,766,797,882	60.7%	58.8%
6/30/13	$9,378,876,114	$5,637,094,483	5,780,830,355	$3,741,781,631	$3,598,045,759	60.1%	61.6%

CERS Non-Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$3,583,193,466	$1,168,883,170	$1,105,944,178	$2,414,310,296	$2,477,249,288	32.6%	30.9%
6/30/09	$3,070,386,018	$1,216,631,769	$894,905,841	$1,853,754,249	$2,175,480,177	39.6%	29.2%
6/30/10	$3,158,340,174	$1,293,038,593	$1,096,581,872	$1,865,301,581	$2,061,758,302	40.9%	34.7%
6/30/11	$3,073,973,205	$1,433,450,793	$1,451,984,026	$1,640,522,412	$1,621,989,179	46.6%	47.2%
6/30/12	$2,370,771,288	$1,512,853,851	$1,439,226,170	$857,917,437	$931,545,118	63.8%	60.7%
6/30/13	$2,443,894,100	$1,628,244,197	$1,633,696,661	$815,649,903	$810,197,439	66.6%	66.9%

CERS Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$2,403,122,095	$1,750,867,373	$1,644,983,243	$652,254,722	$758,138,852	72.9%	68.5%
6/30/09	$2,578,444,600	$1,751,487,540	$1,320,522,868	$826,957,060	$1,257,921,732	67.9%	51.2%
6/30/10	$2,672,151,907	$1,749,464,388	$1,506,787,429	$922,687,519	$1,165,364,478	65.5%	56.4%
6/30/11	$2,859,041,052	$1,779,545,393	$1,760,602,934	$1,079,495,659	$1,098,438,118	62.2%	61.6%
6/30/12	$3,009,992,047	$1,747,379,297	$1,677,940,479	$1,262,612,750	$1,332,051,568	58.1%	55.8%
6/30/13	$3,124,205,593	$1,801,691,410	$1,830,657,969	$1,322,514,183	$1,293,547,624	57.7%	58.6%

CERS Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$1,769,782,957	$613,526,319	$576,414,457	$1,156,256,638	$1,193,368,500	34.7%	32.6%
6/30/09	$1,593,548,263	$651,130,782	$483,269,862	$942,417,481	$1,110,278,401	40.9%	30.3%
6/30/10	$1,674,703,216	$692,769,770	$586,826,965	$981,933,446	$1,087,876,251	41.4%	35.0%
6/30/11	$1,647,702,755	$770,790,274	$774,509,101	$876,912,481	$873,193,654	46.8%	47.0%
6/30/12	$1,364,843,057	$829,040,842	$788,070,813	$535,802,215	$576,772,244	60.7%	57.7%
6/30/13	$1,437,332,817	$892,774,391	$894,232,297	$544,558,426	$543,100,520	62.1%	62.2%

Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2013

SPRS Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$587,129,257	$350,891,451	$337,358,918	$236,237,806	$249,770,339	59.8%	57.5%
6/30/09	$602,328,868	$329,966,989	$256,571,073	$272,361,879	$345,757,795	54.8%	42.6%
6/30/10	$612,444,806	$304,577,292	$264,944,089	$307,867,514	$347,500,717	49.7%	43.3%
6/30/11	$634,379,401	$285,580,631	$279,934,443	$348,798,770	$354,444,958	45.0%	44.1%
6/30/12	$647,688,665	$259,791,575	$252,896,868	$387,897,090	$394,791,797	40.1%	39.1%
6/30/13	$651,580,654	$241,800,328	$248,559,040	$409,780,326	$403,021,614	37.1%	38.2%

SPRS Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$445,107,468	$123,961,197	$121,781,967	$321,146,271	$323,325,501	27.9%	27.4%
6/30/09	$364,031,141	$123,526,647	$93,686,940	$240,504,494	$270,344,201	33.9%	25.7%
6/30/10	$434,960,495	$121,175,083	$104,526,550	$313,785,412	$330,433,945	27.9%	24.0%
6/30/11	$438,427,763	$123,687,289	$127,367,947	$314,740,474	$311,059,816	28.2%	29.1%
6/30/12	$333,903,782	$124,372,072	$125,567,846	$209,531,710	$208,3335,936	37.3%	37.6%
6/30/13	$222,326,743	$136,321,060	$142,830,916	$86,005,683	$79,495,827	61.3%	64.2%

Analysis of Financial Experience

Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2013

Type of Activity	Retirement Gain	Insurance Gain
KERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(112.6)	(29.3)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(26.8)	(2.8)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.6)	(1.4)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	72.2	24.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	81.9	41.2
New Members. Additional unfunded accrued liability will produce a loss.	(13.2)	(3.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(165.5)	(24.9)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	16.8	54.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	69.1	(15.4)
Gain (or Loss) During Year From Financial Experience	**(78.7)**	**42.1**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	1,014.4
Composite Gain (or Loss) During Year	**(78.7)**	**1,056.5**
KERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(16.7)	2.0
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3.0)	(0.2)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	16.6	9.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	6.3	10.8
New Members. Additional unfunded accrued liability will produce a loss.	(3.4)	(3.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(16.0)	(11.6)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	2.2	6.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(9.4)	11.8
Gain (or Loss) During Year From Financial Experience	**(23.3)**	**25.0**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**(23.3)**	**25.0**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2013

Type of Activity	Retirement Gain	Insurance Gain
CERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(227.3)	(13.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	77.5	(4.1)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.2)	(1.9)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	56.7	16.7
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	77.1	35.7
New Members. Additional unfunded accrued liability will produce a loss.	(12.3)	(3.0)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(165.0)	(51.3)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.4	39.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	124.5	38.1
Gain (or Loss) During Year From Financial Experience	**(69.6)**	**56.6**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**(69.6)**	**56.6**
CERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(46.3)	(8.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(6.7)	(0.2)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.2	(0.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	38.9	24.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	25.5	44.8
New Members. Additional unfunded accrued liability will produce a loss.	(7.4)	(3.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(59.2)	(27.8)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(1.9)	10.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(2.2)	(38.8)
Gain (or Loss) During Year From Financial Experience	**(59.2)**	**0.2**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**(59.2)**	**0.2**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2013

Type of Activity	Retirement Gain	Insurance Gain
SPRS		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(8.2)	(5.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.2)	(0.7)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	4.4	7.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	4.4	8.9
New Members. Additional unfunded accrued liability will produce a loss.	(0.1)	(0.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(9.3)	(2.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(1.0)	2.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	2.7	(2.8)
Gain (or Loss) During Year From Financial Experience	**(7.3)**	**7.1**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	117.0
Composite Gain (or Loss) During Year	**(7.3)**	**124.1**

Solvency Test

Solvency Test for KERS Non-Hazardous Pension Fund as of June 30, 2013

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	$875,178,068	$7,162,496,700	$2,092,015,217	$5,318,792,893	100.0%	62.0%	--
6/30/09	$793,574,765	$8,205,155,691	$1,659,819,076	$4,794,611,365	100.0%	48.8%	--
6/30/10	$869,484,042	$8,329,757,802	$1,805,553,245	$4,210,215,585	100.0%	40.1%	--
6/30/11	$916,568,932	$8,482,714,356	$1,782,858,744	$3,726,986,087	100.0%	33.1%	--
6/30/12	$885,137,183	$8,708,536,338	$1,767,374,615	$3,101,316,738	100.0%	25.4%	--
6/30/13	$922,928,027	$8,709,323,622	$1,754,350,510	$2,636,122,852	100.0%	19.7%	--

Continued. Solvency Test for KERS Non-Hazardous Insurance Fund as of June 30, 2013

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	$0	$2,788,189,754	$2,643,309,531	$603,197,761	100.0%	21.6%	--
6/30/09	$0	$2,861,867,088	$1,645,458,483	$534,172,580	100.0%	18.7%	--
6/30/10	$0	$2,744,534,054	$1,721,601,987	$471,341,628	100.0%	17.2%	--
6/30/11	$0	$2,568,002,978	$1,712,086,655	$451,620,442	100.0%	17.6%	--
6/30/12	$0	$1,924,068,623	$1,201,261,534	$446,080,511	100.0%	23.2%	--
6/30/13	$0	$1,338,772,860	$789,981,274	$497,584,327	100.0%	37.2%	--

KERS Hazardous Pension Fund as of June 30, 2013

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	$89,590,638	$355,771,877	$172,648,312	$502,132,214	100.0%	100.0%	32.9%
6/30/09	$87,779,938	$413,972,356	$172,659,487	$502,503,287	100.0%	100.0%	0.4%
6/30/10	$88,511,283	$441,657,241	$157,980,927	$502,729,009	100.0%	93.8%	--
6/30/11	$86,614,205	$490,395,078	$144,284,161	$510,748,505	100.0%	86.5%	--
6/30/12	$82,100,877	$521,688,803	$148,909,777	$497,226,296	100.0%	79.6%	--
6/30/13	$82,145,602	$545,596,534	$156,238,458	$505,656,808	100.0%	77.6%	--

KERS Hazardous Insurance Fund as of June 30, 2013

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	$0	$228,834,940	$312,822,274	$288,161,759	100.0%	100.0%	19.0%
6/30/09	$0	$242,123,365	$249,008,805	$301,634,592	100.0%	100.0%	23.9%
6/30/10	$0	$268,510,709	$224,786,820	$314,427,296	100.0%	100.0%	20.4%
6/30/11	$0	$285,539,861	$221,518,906	$329,961,615	100.0%	100.0%	20.1%
6/30/12	$0	$196,578,935	$188,013,471	$345,573,948	100.0%	100.0%	79.2%
6/30/13	$0	$202,031,515	$183,486,160	$370,774,403	100.0%	100.0%	92.0%

CERS Non-Hazardous Pension Fund as of June 30, 2013

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	$963,213,677	$4,058,767,419	$2,282,236,595	$5,731,502,438	100.0%	100.0%	31.1%
6/30/09	$991,628,551	$4,542,483,102	$2,378,801,859	$5,650,789,991	100.0%	100.0%	4.9%
6/30/10	$1,063,746,826	$4,890,659,077	$2,504,616,377	$5,546,857,291	100.0%	91.7%	--
6/30/11	$1,110,967,160	$5,209,783,924	$2,597,333,941	$5,629,611,183	100.0%	86.7%	--
6/30/12	$1,117,549,337	$5,416,932,995	$2,605,085,363	$5,547,235,599	100.0%	81.8%	--
6/30/13	$1,149,610,832	$5,638,370,836	$2,590,894,446	$5,637,094,483	100.0%	79.6%	--

Continued. Solvency Test for CERS Non-Hazardous Insurance Fund as of June 30, 2013

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	$0	$1,521,450,274	$2,061,743,192	$1,168,883,170	100.0%	76.8%	--
6/30/09	$0	$1,478,782,753	$1,591,603,265	$1,216,631,769	100.0%	82.3%	--
6/30/10	$0	$1,526,533,372	$1,631,806,802	$1,293,038,593	100.0%	84.7%	--
6/30/11	$0	$1,460,808,255	$1,613,164,950	$1,433,450,793	100.0%	98.1%	--
6/30/12	$0	$1,146,907,750	$1,223,863,538	$1,512,853,851	100.0%	100.0%	29.9%
6/30/13	$0	$1,205,599,287	$1,238,294,813	$1,628,244,197	100.0%	100.0%	34.1%

CERS Hazardous Pension Fund as of June 30, 2013

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	$338,324,362	$1,406,982,409	$657,815,324	$1,750,867,373	100.0%	100.0%	0.8%
6/30/09	$350,308,879	$1,540,262,587	$687,873,134	$1,751,487,540	100.0%	91.0%	--
6/30/10	$369,612,720	$1,622,684,455	$679,854,732	$1,749,464,388	100.0%	85.0%	--
6/30/11	$382,072,055	$1,768,511,545	$708,457,452	$1,779,545,393	100.0%	79.0%	--
6/30/12	$381,672,428	$1,889,884,303	$738,435,316	$1,747,379,297	100.0%	72.3%	--
6/30/13	$390,471,059	$1,988,029,963	$745,704,571	$1,801,691,410	100.0%	71.0%	--

CERS Hazardous Insurance Fund as of June 30, 2013

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	$0	$722,435,184	$1,047,347,773	$613,526,319	100.0%	84.9%	--
6/30/09	$0	$725,899,836	$867,648,427	$651,130,782	100.0%	89.7%	--
6/30/10	$0	$814,300,256	$860,402,960	$692,769,770	100.0%	85.1%	--
6/30/11	$0	$771,631,287	$876,071,468	$770,790,274	100.0%	99.9%	--
6/30/12	$0	$575,099,089	$789,743,968	$829,040,842	100.0%	100.0%	32.2%
6/30/13	$0	$660,955,331	$776,377,486	$892,774,391	100.0%	100.0%	29.9%

SPRS Pension Fund as of June 30, 2013

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	$41,391,416	$426,311,368	$119,426,473	$350,891,451	100.0%	72.6%	--
6/30/09	$41,664,469	$459,585,353	$101,079,046	$329,966,989	100.0%	62.7%	--
6/30/10	$42,011,523	$475,892,659	$94,540,624	$304,577,292	100.0%	55.2%	--
6/30/11	$43,574,097	$499,194,229	$91,611,075	$285,580,631	100.0%	48.5%	--
6/30/12	$41,139,306	$523,016,647	$83,532,712	$259,791,575	100.0%	41.8%	--
6/30/13	$39,788,421	$535,720,195	$76,072,038	$241,800,328	100.0%	37.7%	--

Continued. Solvency Test for SPRS Insurance Fund as of June 30, 2013

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	$0	$178,655,245	$266,452,223	$123,961,197	100.0%	69.4%	--
6/30/09	$0	$167,091,453	$196,939,688	$123,526,647	100.0%	73.9%	--
6/30/10	$0	$253,580,827	$181,379,668	$121,175,083	100.0%	47.8%	--
6/30/11	$0	$252,439,726	$185,988,037	$123,687,289	100.0%	49.0%	--
6/30/12	$0	$190,258,729	$143,645,053	$124,372,072	100.0%	65.4%	--
6/30/13	$0	$139,508,590	$82,818,153	$136,321,060	100.0%	97.7%	--

Active Member Valuation

Methodology The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

Summary of Active Member Valuation Data for KERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	414	48,085	$1,837,873,488	$38,221	2.9%	43.2	9.1
6/30/09	334	46,060	$1,754,412,912	$38,090	(0.3)%	43.0	8.7
6/30/10	334	47,090	$1,815,146,388	$38,546	1.2%	43.4	9.0
6/30/11	427	46,617	$1,731,632,748	$37,146	(3.6)%	43.8	9.4
6/30/12	286	42,196	$1,644,896,681	$38,982	4.9%	44.3	9.8
6/30/13	285	42,226	$1,644,408,698	$38,943	(0.1)%	44.5	10.1

KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	16	4,393	$148,710,060	$33,852	1.6%	41.4	6.9
6/30/09	20	4,334	$146,043,576	$33,697	(0.5)%	41.4	7.0
6/30/10	18	4,291	$143,557,944	$33,456	(0.7)%	41.4	7.0
6/30/11	16	4,291	$133,053,792	$31,008	(7.3)%	41.3	6.9
6/30/12	14	4,086	$131,976,754	$32,300	4.2%	41.1	7.3
6/30/13	14	4,127	$132,015,368	$31,988	(1.0)%	40.6	7.2

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2013.*

Summary of Active Member Valuation Data for CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	1,110	85,221	$2,166,612,648	$25,423	3.9%	45.9	8.3
6/30/09	1,108	83,724	$2,183,611,848	$26,081	2.6%	46.2	8.6
6/30/10	1,102	84,681	$2,236,855,380	$26,415	1.3%	46.6	8.8
6/30/11	1,102	85,285	$2,276,595,948	$26,694	1.1%	46.8	9.0
6/30/12	1,080	83,052	$2,236,546,345	$26,929	0.9%	47.5	9.1
6/30/13	1,081	81,815	$2,236,277,489	$27,333	1.5%	47.8	9.3

CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	299	10,173	$474,241,332	$46,618	2.2%	38.7	8.3
6/30/09	290	9,757	$469,315,464	$48,100	3.2%	38.4	8.8
6/30/10	282	9,562	$466,548,660	$48,792	1.4%	38.8	9.2
6/30/11	281	9,407	$466,963,860	$49,640	1.7%	39.1	9.5
6/30/12	254	9,130	$464,228,923	$50,847	2.4%	39.3	10.3
6/30/13	248	9,123	$461,672,567	$50,605	(0.5)%	39.1	10.3

SPRS

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	1	993	$53,269,080	$53,645	4.2%	36.9	10.8
6/30/09	1	946	$51,660,396	$54,609	1.8%	37.3	11.0
6/30/10	1	961	$51,506,712	$53,597	(1.9)%	37.2	10.6
6/30/11	1	965	$48,692,616	$50,459	(5.9)%	37.7	10.6
6/30/12	1	907	$48,372,506	$53,332	5.7%	37.3	10.4
6/30/13	1	902	$45,256,202	$50,173	(5.9)%	37.0	10.0

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2013*

Retired Member Valuation

Summary of Retired Member Valuation Data for KERS Non-Haz

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/08	2,573	1,115	35,307	$710,505,270	13.60%	$20,124
6/30/09	3,465	889	37,883	$ 812,559,070	14.36%	$21,449
6/30/10	1,162	1,100	37,945	$801,881,911	(1.31%)	$21,133
6/30/11	1,592	940	38,597	$821,197,278	2.41%	$21,276
6/30/12	1,707	1,078	39,226	$844,880,945	2.88%	$21,539
6/30/13	1,982	1,014	40,194	$872,139,782	3.23%	$21,698

KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	261	59	2,404	$33,588,993	22.01%	$13,972
6/30/09	339	95	2,648	$38,695,501	15.20%	$14,613
6/30/10	282	95	2,835	$41,114,800	6.25%	$14,503
6/30/11	288	59	3,064	$45,609,229	10.93%	$14,886
6/30/12	243	54	3,253	$49,231,205	7.94%	$15,134
6/30/13	229	52	3,430	$51,122,456	3.84%	$14,905

CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	3,366	1,351	37,759	$393,757,510	12.92%	$10,478
6/30/09	3,060	883	39,756	$ 440,061,418	11.76%	$11,069
6/30/10	2,565	1,283	41,038	$452,613,550	2.85%	$11,029
6/30/11	3,250	1,077	43,211	$483,594,068	6.84%	$11,191
6/30/12	3,300	1,207	45,304	$515,008,362	6.50%	$11,368
6/30/13	3,570	1,198	47,676	$557,979,192	8.34%	$11,704

CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	469	206	5,422	$127,477,109	12.08%	$23,511
6/30/09	650	264	5,808	$ 139,886,751	9.73%	$24,085
6/30/10	423	163	6,068	$146,916,812	5.03%	$24,212
6/30/11	502	102	6,468	$160,259,395	9.08%	$24,777
6/30/12	483	73	6,878	$173,221,483	8.09%	$25,185
6/30/13	519	104	7,293	$182,634,895	5.43%	$25,042

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

Summary of Retired Member Valuation Data for SPRS

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/08	42	12	1,135	$41,293,017	10.98%	$36,382
6/30/09	75	26	1,184	$44,273,937	7.22%	$37,394
6/30/10	54	15	1,223	$45,515,797	2.80%	$37,217
6/30/11	52	12	1,263	$47,467,404	4.29%	$37,583
6/30/12	52	16	1,299	$49,887,093	5.10%	$38,404
6/30/13	63	16	1,346	$50,905,789	2.04%	$37,820

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

Summary of Benefit Provisions KERS & CERS Non-Hazardous Plans

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

CPI
Consumer Price Index

Plan Funding State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statutes 61.565 and Kentucky Revised Statutes 61.752. KERS rates are subject to state budget approval.

Membership Eligibility For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility for Members Whose Participation Began Before 9/1/08

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
Any	25	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.

Retirement Eligibility for Members Whose Participation Began On or After 9/1/08

Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None
60	10	6.5% per year for first five years, and 4.5% for next five years before age 65 or Rule of 87 (age plus years of service).

State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required.

Benefit Formula

Final Compensation	x	Benefit Factor		x	Years of Service
Average of the five highest if participation began before 9/1/2008.		KERS 1.97% if:	Member does not have 13 months credit for 1/1/1998-1/1/1999.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if:	Member has 13 months credit from 1/1/1998-1/1/1999.		
		KERS 2.20% if:	Member has 20 or more years of service, including 13 months from 1/1/1998-1/1/1999 and retires by 1/1/2009.		
		CERS 2.20% if:	Member begins participating prior to 8/1/2004.		
		CERS 2.00% if:	Member begins participating on or after 8/1/2004 and before 9/1/2008.		
Average of the last complete five if participation began on or after 9/1/2008.		KERS & CERS increasing percent based on service at retirement* plus 2.00% for each year of service over 30 if:	Member begins participating on or after 9/1/2008.		

* ***Service*** *(and Benefit Factor):* ***10 years or less*** *(1.10%);* ***10 - 20 years*** *(1.30%);* ***20 - 26 years*** *(1.50%);* ***26 - 30 years*** *(1.75%)*

Post-Retirement Death Benefits If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits Members participating before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula. Members participating on or after 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service. Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

COLA
Cost of Living Adjustment

CPI
Consumer Price Index

Cost of Living Adjustment Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to suspend or reduce COLAs. HB 265 of 2013 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees.

Insurance Benefits For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased by the CPI prior to July 1, 2008, and by 1.5% annually from July 1, 2008.

Refunds Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1981; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees hired prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees hired on or after September 1, 2008, interest will be credited at a rate of 2.5%.

Summary of Benefit Provisions
KERS Hazardous, CERS Hazardous & SPRS Plans

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Plan Funding State statute requires active members to contribute 8% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statutes 61.565 and Kentucky Revised Statutes 61.752. KERS and SPRS rates are subject to state budget approval.

Membership Eligibility All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

Retirement Eligibility for Members Whose Participation Began Before 9/1/08

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 55 or 20 years of service.

Retirement Eligibility for Members Whose Participation Began On or After 9/1/08

Age	Years of Service	Allowance Reduction
60	5	None
Any	25	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 60 or 25 years of service.

Disability Benefits Members hired before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula.

Members hired on or after 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% of Final Rate of Pay or the amount calculated under the Benefit Formula noted above based upon actual service.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Benefit Formula

Final Compensation	X	Benefit Factor		Years of Service
Average of the three highest if participation began before 9/1/2008.		KERS 2.49%, CERS 2.50%, SPRS 2.50%, if:	Member begins participating before 9/1/2008.	Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
Average of the three highest complete years if participation began on or after 9/1/2008.		KERS, CERS and SPRS increasing percent based on service at retirement* if:	Member begins participating on or after 9/1/2008.	

* ***Service*** *(with Benefit Factor):* ***10 years or less*** *(1.30%);* ***10 - 20 years*** *(1.50%);* ***20 - 25 years*** *(2.50%)*

Pre-Retirement Death Benefits The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to suspend or reduce COLAs. HB 265 of 2013 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees. SB2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

COLA
Cost of Living Adjustment

CPI
Consumer Price Index

Insurance Benefits For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15 for each year of earned service increased by the CPI prior to July 1, 2008, and by 1.5% annually from July 1, 2008.

Refunds Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1981; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees hired prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees hired on or after September 1, 2008, interest will be credited at a rate of 2.5%.

Statistical Section

STATISTICAL
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Fund Statistics

Definitions Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

Member Breakdown The data for years 2006-2009 reflects the number of accounts in each system. A single member may have multiple accounts, which contribute to one pension. Beginning in 2010: each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in the retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-Hazardous, then KERS Non-Hazardous. This table does not include individuals receiving payments under dependent child accounts, Qualified Domestic Relations Orders or multiple beneficiary accounts.

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

Haz
Hazardous (i.e. KERS Haz)

Non-Haz
Non-Hazardous (i.e. CERS Non-Haz)

KERS Non-Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2008	48,202	32,717	35,286	116,205
2009	46,060	34,515	37,883	118,458
2010	46,710	32,461	35,733	114,904
2011	46,044	33,350	36,239	115,633
2012	41,743	39,338	36,508	117,589
2013	40,710	40,375	37,240	118,325

KERS Haz Membership

2008	4,397	3,534	2,402	10,333
2009	4,334	3,056	2,648	10,038
2010	4,049	2,285	1,900	8,234
2011	4,045	2,351	2,090	8,486
2012	4,007	2,597	2,180	8,784
2013	4,057	2,882	2,312	9,251

CERS Non-Haz Membership

2008	85,803	55,279	37,558	178,640
2009	83,724	60,275	39,756	183,755
2010	84,010	55,423	38,261	177,694
2011	84,837	57,073	40,174	182,084
2012	83,658	63,280	42,068	189,006
2013	82,631	67,013	44,164	193,808

Continued. CERS Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2008	10,185	4,815	5,314	20,314
2009	9,757	2,522	5,808	18,087
2010	9,120	2,009	4,867	15,996
2011	9,019	2,047	5,158	16,224
2012	9,040	1,914	5,513	16,467
2013	9,069	1,956	5,840	16,865
SPRS				
2008	995	302	1,136	2,433
2009	946	332	1,184	2,462
2010	948	201	1,004	2,153
2011	949	204	1,019	2,172
2012	904	224	1,203	2,331
2013	901	236	1,240	2,377
Kentucky Retirement Systems Membership Totals				
2008	149,582	96,647	81,696	327,925
2009	144,821	101,552	87,279	333,652
2010	144,837	92,379	81,765	318,981
2011	144,894	95,025	84,680	324,599
2012	139,352	107,353	87,472	334,177
2013	137,368	112,462	90,796	340,626

Schedule of Participating Employers in CERS

Agency Classification	Number of Agencies	Number of Employees
Airport Boards	5	508
Ambulance Services	20	405
Area Development Districts	14	699
Boards of Education	174	48,634
Cities	220	10,112
Community Action Agencies	22	2,718
Conservation Districts	44	57
County Attorneys	69	645
County Clerks	16	594
Development Authorities	5	9
Fire Departments	39	762
Fiscal Courts	118	11,017
Health Departments	1	297
Housing Authorities	41	430
Jailers	2	33
Libraries	86	1,174
Other Retirement Systems	2	3
P1 State Agencies	1	1,679
Parks and Recreation	7	62
Planning Commissions	16	211
Police Departments	2	16
Riverport Authorities	5	66
Sanitation Districts	9	355
Sheriff Departments	12	820
Special Districts & Boards	51	1,413
Tourist Commissions	23	176
Urban Government Agencies	2	6,705
Utility Boards	119	3,883
Total	**1,125**	**93,483**

Schedule of Participating Employers in KERS

Agency Classification	Number of Agencies	Number of Employees
County Attorneys	61	352
Health Departments	58	3,124
Master Commissioner	32	75
Non-P1 State Agencies	38	1,381
Other Retirement Systems	2	287
P1 State Agencies	137	32,412
Regional Mental Health Units	13	4,510
Universities	7	3,828
Total	**348**	**45,969**

Schedule of Participating Employers in SPRS

Kentucky State Police - Uniformed Officers	1	906

Principal Participating Employers in KERS

Participating Employer	Rank	Covered Employees	% of Total System
Department For Community Based Services	1	4,328	9.42%
Department Of Highways	2	3,962	8.62%
Department Of Corrections	3	3,905	8.49%
Bluegrass Regional Mental Health Mental Retardation Board	4	1,534	3.34%
Judicial Department Administrative Office Of The Courts	5	1,329	2.89%
Department Of Juvenile Justice	6	1,279	2.78%
Department for Behavioral Health Developmental Intellectual Disabilities	7	1,085	2.36%
Northern Kentucky University	8	962	2.09%
Kentucky State Police	9	949	2.06%
Department Of Revenue	10	934	2.03%
All Others		25,702	55.91%
Total		**45,969**	**100%**

Principal Participating Employers in CERS

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board Of Education	1	6,590	7.05%
Louisville Jefferson County Metro Government	2	5,150	5.51%
Fayette County Board Of Education	3	1,991	2.13%
Judicial Department Administrative Office Of The Courts	4	1,679	1.80%
Lexington Fayette Urban County Government	5	1,555	1.66%
Boone County Board Of Education	6	1,119	1.20%
Bullitt County Board Of Education	7	1,048	1.12%
Hardin County Board Of Education	8	1,017	1.09%
Pike County Board Of Education	9	992	1.06%
Warren County Board Of Education	10	913	0.98%
All Others		71,429	76.41%
Total		**93,483**	**100%**

Average Monthly Benefit by Length of Service in KERS

	KERS Non-Hazardous		KERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	4,580	$151	621	$180
5 or more but less than 10	5,158	$416	695	$579
10 or more but less than 15	4,604	$689	625	$1,013
15 or more but less than 20	3,985	$1,022	542	$1,538
20 or more but less than 25	4,419	$1,349	721	$2,001
25 or more but less than 30	10,668	$2,285	141	$2,747
30 or more but less than 35	6,184	$3,207	57	$3,562
35 or more	2,550	$4,512	9	$3,704
Total	**42,148**	**$1,702**	**3,411**	**$1,186**

Average Monthly Benefit by Length of Service in CERS

	CERS Non-Hazardous		CERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	5,828	$146	612	$219
5 or more but less than 10	9,424	$328	889	$658
10 or more but less than 15	8,842	$520	678	$1,210
15 or more but less than 20	6,994	$767	622	$1,703
20 or more but less than 25	7,202	$988	2,666	$2,386
25 or more but less than 30	8,833	$1,911	1,138	$3,326
30 or more but less than 35	2,215	$2,668	391	$4,111
35 or more	592	$3,619	87	$5,061
Total	**49,930**	**$920**	**7,083**	**$2,088**

Average Monthly Benefit by Length of Service in SPRS

Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	67	$326
5 or more but less than 10	44	$884
10 or more but less than 15	44	$1,311
15 or more but less than 20	78	$1,988
20 or more but less than 25	395	$2,529
25 or more but less than 30	419	$3,541
30 or more but less than 35	228	$4,699
35 or more	62	$5,706
Total	**1,337**	**$3,127**

This table reflects the Average Monthly Pension Benefit. A single member may have multiple accounts, which contribute to one pension. This table does not reflect dependent child accounts, Qualified Domestic Relations Order (QDRO) accounts or multiple beneficiary accounts.

Plan Net Position (in Thousands) for KERS

	Non-Hazardous			Hazardous		
Fiscal Year	**Pension**	**Insurance**	**Total**	**Pension**	**Insurance**	**Total**
June 30 2008	5,056,869	574,479	5,631,348	484,438	269,300	753,738
June 30 2009	3,584,601	365,367	3,949,968	388,951	219,500	608,451
June 30 2010	3,504,501	368,799	3,873,300	443,606	271,240	714,846
June 30, 2011	3,544,242	428,659	3,972,901	511,085	320,673	831,758
June 30, 2012	2,977,935	418,490	3,396,425	476,589	330,730	807,319
June 30, 2013	2,760,753	496,040	3,256,793	514,592	372,883	887,475

CERS

June 30 2008	5,431,735	1,105,945	6,537,680	1,644,982	576,414	2,221,396
June 30 2009	4,331,010	894,490	5,225,500	1,320,560	483,233	1,803,793
June 30 2010	4,820,490	1,094,821	5,915,311	1,506,894	586,614	2,093,508
June 30, 2011	5,583,451	1,446,998	7,030,449	1,761,858	773,139	2,534,997
June 30, 2012	5,381,602	1,428,821	6,810,423	1,672,970	785,874	2,458,844
June 30, 2013	5,795,568	1,618,960	7,414,528	1,833,571	891,320	2,724,891

SPRS

June 30 2008	337,359	121,782	459,141
June 30 2009	256,575	93,682	350,257
June 30 2010	264,949	104,511	369,460
June 30, 2011	279,927	127,319	407,246
June 30, 2012	250,476	125,398	375,874
June 30, 2013	248,698	142,691	391,389

Kentucky Retirement Systems Total

Fiscal Year	**Pension**	**Insurance**	**Total**
June 30 2008	12,955,383	2,647,920	15,603,303
June 30 2009	9,881,697	2,056,272	11,937,969
June 30 2010	10,540,440	2,425,987	12,966,427
June 30, 2011	11,680,563	3,096,788	14,777,351
June 30, 2012	10,758,706	3,089,313	13,848,019
June 30, 2013	11,153,182	3,521,894	14,675,076

Changes in Plan Net Position (in Thousands) for KERS Non-Haz Pension Fund

Additions	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Members' Contributions	$116,487	$108,362	$90,780	$109,879	$96,418	$96,744
Employers' Contributions	104,655	112,383	144,051	185,558	211,071	280,874
Health Insurance Contributions (HB1)	-	404	1,799	2,441	5,337	3,344
Net Investment Income	(221,578)	(867,675)	526,209	599,790	9,789	303,011
Total Additions	(436)	(646,526)	762,839	$897,668	322,615	683,973
Deductions						
Benefit Payments	699,052	808,513	825,627	838,372	858,151	873,906
Refunds	9,076	9,127	8,887	10,931	12,004	12,907
Administrative Expenses	7,724	8,102	8,424	8,558	8,776	10,719
Capital Project Expenses	-	-	-	67	8	
Other Expenses	-	-	-	-	-	
Total Deductions	715,852	825,742	842,938	857,928	878,939	897,532
Total Changes in Plan Net Position	**$(716,288)**	**$(1,472,268)**	**$(80,099)**	**$39,740**	**$(556,324)**	**$(213,559)**

KERS Non-Haz Insurance Fund

Additions	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Employers' Contributions	$56,745	$74,434	$$92,679	$123,256	$146,844	$162,191
Net Investment Income	(38,965)	(154,894)	50,765	77,225	(4,803)	40,661
Member Drug Reimbursement	6,634	8,168	8,551	10,025	7,865	4,846
Premiums Rec'd from Retirees	12,940	12,320	13,588	15,826	15,666	14,294
Total Additions	37,354	(59,972)	165,583	$226,332	$165,563	221,992
Deductions						
Benefit Payments	122,946	145,036	157,819	161,804	163,841	140,157
Administrative Expenses	3,487	4,104	4,333	4,667	5,203	4,285
Total Deductions	126,433	149,140	162,152	166,471	169,044	144,442
Total Changes in Plan Net Position	**$(89,079)**	**$(209,112)**	**$3,431**	**$59,861**	**169,044**	**77,550**

KERS Haz Pension Fund

Additions	2008	2009	2010	2011	2012	2013
Member Contributions	$13,091	$12,442	$11,110	$12,959	$11,602	$11,467
Employer Contributions	15,257	15,843	17,658	18,085	17,367	27,334
Health Insurance Contribution (HB1)	-	38	118	241	629	402
Net Investment Income	(20,673)	(84,262)	65,588	83,492	(10,286)	51,497
Total Additions	7,675	(55,939)	94,474	$114,777	19,312	90,700
Deductions						
Benefit Payments	31,606	37,556	37,796	44,509	48,424	48,855
Refunds	1,742	1,277	1,286	2,062	2,543	2,762
Administrative Expenses	664	715	737	721	877	733
Capital Project Expenses	-	-	-	6	-	-
Total Deductions	34,012	39,548	39,819	47,298	51,844	52,350
Total Changes in Plan Net Position	**$(26,337)**	**$(95,487)**	**$54,655**	**$67,479**	**$(32,532)**	**$38,350**

KERS Haz Insurance Fund

Additions	2008	2009	2010	2011	2012	2013
Employers' Contributions	$21,997	$20,803	$21,835	$18,826	$23,984	$25,144
Net Investment Income	(25,740)	(60,641)	42,406	45,205	60	32,887
Member Drug Reimbursement	74	186	319	365	351	243
Premiums Rec'd from Retirees	247	300	835	588	876	895
Total Additions	(3,422)	(39,352)	65,395	$64,984	$25,271	$59,169
Deductions						
Benefit Payments	8,069	10,304	13,456	15,327	13,941	16,837
Administrative Expenses	95	144	200	223	335	179
Total Deductions	8,164	10,448	13,656	15,550	14,276	17,016
Total Changes in Plan Net Position	**$(11,586)**	**$(49,800)**	**$51,739**	**$49,434**	**$10,995**	**$42,153**

CERS Non-Haz Pension Fund

Additions	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Members' Contributions	$125,014	$122,518	$106,558	$144,861	$119,123	$120,777
Employers' Contributions	150,925	179,286	207,076	247,968	270,664	294,914
Health Insurance Contribution (HB1)	-	415	1,345	3,216	5,101	4,659
Net Investment Income	(228,020)	(927,090)	669,072	887,514	(3,349)	579,161
Total Additions	47,919	(624,871)	984,051	$1,283,559	$391,539	$999,511
Deductions						
Benefit Payments	403,958	451,304	470,249	494,344	524,385	553,204
Refunds	11,924	10,719	10,001	11,816	12.765	13,306
Administrative Expenses	13,238	13,831	14,323	14,324	16,740	17,743
Capital Project Expenses	-	-	-	112	9	-
Other Expenses	-	-	-	-	-	-
Total Deductions	429,120	475,854	494,571	520,596	553,899	584,253
Total Changes in Plan Net Position	**$(381,201)**	**$(1,100,725)**	**$489,478**	**$762,963**	**$(162,360)**	**$415,258**

CERS Non-Haz Insurance Fund

Additions	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Employer Contributions	$196,110	$123,761	$166,032	$185,639	$164,297	$158,212
Net Investment Income	(95,924)	(244,148)	136,528	274,743	(32,992)	147,194
Member Drug Reimbursement	6,003	7,624	9,157	10,449	8,443	5,360
Premiums Rec'd from Retirees	15,104	14,356	16,216	18,053	17,493	16,293
Total Additions	121,293	(98,407)	327,933	$488,884	$157,241	327,059
Deductions						
Benefit Payments	95,966	108,995	123,133	131,945	141,694	132,489
Administrative Expenses	3,425	4,053	4,469	4,763	5,545	4,431
Total Deductions	99,391	113,048	127,602	136,708	147,239	136,920
Total Changes in Plan Net Position	**$21,902**	**$(211,455)**	**$200,331**	**$352,176**	**$10,002**	**$190,139**

CERS Haz Pension Fund

Additions	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Members' Contributions	$44,260	$42,582	$37,200	$53,918	$41,797	$42,863
Employers' Contributions	72,155	78,151	82,887	84,595	77,311	120,140
Health Insurance Contribution (HB1)	-	37	174	1,157	811	734
Net Investment Income	(97,393)	(302,748)	206,073	286,688	(24,724)	181,171
Total Additions	19,022	(181,978)	326,334	$426,358	95,195	344,908
Deductions						
Benefit Payments	125,191	138,810	136,810	167,540	169,352	179,696
Refunds	2,641	2,436	1,956	2,654	3,516	3,158
Administrative Expenses	1,143	1,198	1,234	1,191	1,319	1,202
Capital Project Expenses	-	-	-	9	-	
Other Expenses	-	-	-	-	-	
Total Deductions	128,975	142,444	140,000	171,394	174,187	184,056
Total Changes in Plan Net Position	**$(109,953)**	**$(324,422)**	**$186,334**	**$254,964**	**$(79,992)**	**$ 160,852**

CERS Haz Insurance Fund

Additions	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Employers' Contributions	$90,113	$70,783	$82,970	$98,203	$90,204	$84,962
Net Investment Income	(48,529)	(123,461)	67,288	139,242	(16,127)	79,885
Member Drug Reimbursement	420	628	1,493	972	871	562
Premiums Rec'd from Retirees	222	330	508	516	695	657
Total Additions	42,226	(51,720)	152,259	$238,933	$75,643	$166,066
Deductions						
Benefit Payments	35,604	41,017	48,321	51,831	50,155	59,941
Administrative Expenses	364	444	554	580	688	679
Total Deductions	35,968	41,461	48,875	52,411	50,843	60,620
Total Changes in Plan Net Position	**$6,258**	**$(93,181)**	**$103,384**	**$186,522**	**$24,800**	**$105,446**

Changes in Plan Net Position(in Thousands) for SPRS Pension Fund

Additions	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Members' Contributions	$5,407	$4,938	$4,127	$5,225	$5,154	$4,495
Employers' Contributions	7,443	8,186	9,489	11,920	15,040	18,501
Health Insurance Contribution (HB1)	-	5	12	31	46	48
Net Investment Income	(12,283)	(51,175)	40,602	44,739	43	25,954
Total Additions	567	(38,046)	54,230	$61,915	$20,283	$48,998
Deductions						
Benefit Payments	39,367	42,547	45,582	46,754	48,867	50,559
Refunds	85	69	144	58	149	31
Administrative Expenses	137	122	130	124	73	184
Capital Project Expenses	-	-	-	1	-	
Other Expenses	-	-	-	-	-	
Total Deductions	39,589	42,738	45,856	46,937	49,089	50,774
Total Changes in Plan Net Position	**$(39,022)**	**$(80,784)**	**$8,374**	**$14,978**	**$(28,806)**	**$(1,776)**

SPRS Insurance Fund

Additions	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Employer Contributions	$7,329	$7,414	$8,369	$10,051	10,810	$16,829
Net Investment Income	(11,440)	(28,166)	13,085	24,773	(1,458)	12,993
Member Drug Reimbursement	184	229	274	318	279	178
Insurance Appropriation	-	-	-	-	-	
Premiums Rec'd from Retirees	9	23	16	18	20	23
Total Additions	(3,918)	(20,500)	21,744	$35,160	$9,651	$30,023
Deductions						
Benefit Payments	6,768	7,476	10,769	12,172	10,791	12,546
Administrative Expenses	106	124	147	179	201	184
Total Deductions	6,874	7,600	10,916	12,351	10,992	12,730
Total Changes in Plan Net Position	**$(10,792)**	**$28,100**	**$10,828**	**$22,809**	**$(1,341)**	**$17,293**

Schedule of Benefit Expenses for KERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2007-08					
Average Benefit	$980	$1,831	$897	$906	$1,624
Number of Accounts	4,845	27,080	2,579	839	35,343
Total Monthly Benefits	$4,747,523	$49,585,033	$2,313,860	$760,088	$57,406,504
% of Total Monthly Benefits	8.3%	86.4%	4.0%	1.3%	100.0%
FY 2008-09					
Average Benefit	$1,036	$1,926	$927	$931	$1,717
Number of Accounts	5,041	29,386	2,566	861	37,854
Total Monthly Benefits	$5,223,184	$56,596,178	$2,377,856	$801,966	$64,999,184
% of Total Monthly Benefits	8.0%	87.1%	3.7%	1.2%	100.0%
FY 2009-10					
Average Benefit	$1,009	$1,912	$936	$963	$1,692
Number of Accounts	5,991	30,303	2,625	813	39,732
Total Monthly Benefits	$6,046,047	$57,939,304	$2,457,461	$782,980	$67,225,791
% of Total Monthly Benefits	9.00%	86.20%	3.60%	1.20%	100.00%
FY 2010-11					
Average Benefit	$1,008	$1,920	$974	$1,071	$1,703
Number of Accounts	6,118	30,900	2,629	835	40,482
Total Monthly Benefits	$6,166,372	$59,318,561	$2,561,377	$894,077	$68,940,387
% of Total Monthly Benefits	8.94%	86.04%	3.72%	1.30%	100.00%
FY 2011-12					
Average Benefit	$1,008	$1,927	$1,029	$925	$1,709
Number of Accounts	6,218	31,580	2,626	959	41,383
Total Monthly Benefits	$6,269,576	$60,879,802	$2,702,410	$887,236	$70,739,025
% of Total Monthly Benefits	8.86%	86.06%	3.82%	1.25%	100.00%
FY 2012-13					
Average Benefit	$1,003	$1,915	$1,020	$889	$1,696
Number of Accounts	6,441	32,310	2,687	962	42,400
Total Monthly Benefits	$6,459,840	$61,882,399	$2,740,491	$855,033	$71,937,763
% of Total Monthly Benefits	8.98%	86.02%	3.81%	1.19%	100.00%

These tables (pages 13-17) include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses for KERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2007-08					
Average Benefit	$912	$1,455	$549	$751	$1,094
Number of Accounts	1,231	952	173	78	2,434
Total Monthly Benefits	$1,123,281	$1,384,856	$94,999	$58,567	$2,661,703
% of Total Monthly Benefits	42.2%	52.0%	3.6%	2.2%	100.0%
FY 2008-09					
Average Benefit	$941	$1,517	$576	$778	$1,143
Number of Accounts	1,353	1,066	173	74	2,666
Total Monthly Benefits	$1,272,796	$1,617,453	$99,607	$57,607	$3,047,462
% of Total Monthly Benefits	41.8%	53.1%	3.3%	1.8%	100.0%
FY 2009-10					
Average Benefit	$933	$1,489	$593	843	$1,137
Number of Accounts	1,446	1,146	157	75	2,824
Total Monthly Benefits	$1,348,511	$1,706,876	$93,064	$63,194	$3,211,645
% of Total Monthly Benefits	42.00%	53.10%	2.90%	2.00%	100.00%
FY 2010-11					
Average Benefit	$957	$1,526	$600	$814	$1,166
Number of Accounts	1,571	1,240	158	79	3,048
Total Monthly Benefits	$1,503,160	$1,892,300	$94,766	$64,299	$3,554,525
% of Total Monthly Benefits	42.29%	53.24%	2.66%	1.81%	100.00%
FY 2011-12					
Average Benefit	$976.67	$1,541.49	$581	$721	$1,179
Number of Accounts	1,657	1,339	180	92	3,268
Total Monthly Benefits	$1,618,343	$2,064,050	$104,644	$66,409	$3,853,449
% of Total Monthly Benefits	42.00%	53.56%	2.72%	1.72%	100.00%
FY 2012-13					
Average Benefit	$961	$1,543	$662	$725	$1,177
Number of Accounts	1,751	1,417	190	93	3,451
Total Monthly Benefits	$1,682,541	$2,186,334	$125,704	$67,440	$4,062,019
% of Total Monthly Benefits	41.42%	53.82%	3.10%	1.66%	100.00%

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Schedule of Benefit Expenses for CERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2007-08					
Average Benefit	$523	$978	$776	$582	$852
Number of Accounts	8,109	25,070	3,679	876	37,734
Total Monthly Benefits	$4,241,906	24,530,372	2,856,173	510,523	32,138,704
% of Total Monthly Benefits	13.2%	76.3%	8.9%	1.6%	100.0%
FY 2008-09					
Average Benefit	$547	$1,021	$804	$613	$890
Number of Accounts	8,471	26,720	3,728	917	39,836
Total Monthly Benefits	$4,634,447	$27,268,861	$2,998,565	$561,804	$35,463,676
% of Total Monthly Benefits	13.1%	76.9%	8.5%	1.5%	100.0%
FY 2009-10					
Average Benefit	$570	$1,022	$835	$623	$898
Number of Accounts	9,418	28,747	3,951	836	42,952
Total Monthly Benefits	$5,372,501	$29,377,417	$3,298,478	$520,995	$38,569,391
% of Total Monthly Benefits	13.90%	76.20%	8.60%	1.30%	100.00%
FY 2010-11					
Average Benefit	$577	$1,031	$847	$651	$906
Number of Accounts	10,054	30,224	4,095	873	45,246
Total Monthly Benefits	$5,802,568	$31,149,398	$3,469,974	$568,188	$40,990,128
% of Total Monthly Benefits	14.16%	75.99%	8.47%	1.38%	100.00%
FY 2011-12					
Average Benefit	$587	$1,039	$870	$636	$914
Number of Accounts	10,620	31,797	4,280	1,052	47,749
Total Monthly Benefits	$6,237,369	$33,041,035	$3,724,859	$669,377	$43,672,642
% of Total Monthly Benefits	14.28%	75.66%	8.53%	1.53%	100.00%
FY 2012-13					
Average Benefit	$591	$1,042	$878	$625	$917
Number of Accounts	11,266	33,393	4,537	1,075	50,271
Total Monthly Benefits	$6,661,524	$34,797,169	$3,982,213	$672,310	$46,113,216
% of Total Monthly Benefits	14.45%	75.46%	8.64%	1.45%	100.00%

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Continued. Schedule of Benefit Expenses for CERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2007-08					
Average Benefit	$1,424	$2,228	$986	$1,021	$1,882
Number of Accounts	1,307	3,555	610	101	5,573
Total Monthly Benefits	$1,861,441	7,922,072	601,207	103,077	10,487,797
% of Total Monthly Benefits	17.8%	75.5%	5.7%	1.0%	100.0%
FY 2008-09					
Average Benefit	$1,452	$2,299	$1,014	$1,020	$1,934
Number of Accounts	1,413	3,733	634	104	5,884
Total Monthly Benefits	$2,052,162	$8,581,241	$642,604	$106,103	$11,382,110
% of Total Monthly Benefits	18.0%	75.4%	5.7%	0.9%	100.0%
FY 2009-10					
Average Benefit	$1,427	$2,362	$1,261	$1,130	$2,019
Number of Accounts	1,495	3,856	468	89	5,908
Total Monthly Benefits	$2,133,697	$9,106,888	$590,020	$100,562	$11,931,167
% of Total Monthly Benefits	17.90%	76.30%	5.00%	0.80%	100.00%
FY 2010-11					
Average Benefit	$1,432	$2,410	$1,362	$1,153	$2,056
Number of Accounts	1,643	4,082	487	90	6,302
Total Monthly Benefits	$2,352,710	$9,838,311	$663,455	$103,808	$12,958,284
% of Total Monthly Benefits	18.16%	75.92%	5.12%	0.80%	100.00%
FY 2011-12					
Average Benefit	$1,430	$2,422	$1,300	$1,046	$2,041
Number of Accounts	1,766	4,407	662	110	6,945
Total Monthly Benefits	$2,526,722	$10,673,928	$861,223	$115,107	$14,176,981
% of Total Monthly Benefits	17.82%	75.29%	6.07%	0.81%	100.00%
FY 2012-13					
Average Benefit	$1,433	$2,429	$1,121	$1,073	$2,031
Number of Accounts	1,883	4,683	681	119	7,366
Total Monthly Benefits	$2,699,176	$11,374,811	$763,700	$127,689	$14,965,376
% of Total Monthly Benefits	18.04%	76.01%	5.10%	0.85%	100.00%

These tables (pages 13-17) include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses for SPRS

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2007-08					
Average Benefit	$3,281	$2,892	$1,265	$1,970	$2,843
Number of Accounts	150	931	56	26	1,163
Total Monthly Benefits	$492,198	$2,692,030	$70,822	$51,215	$3,306,265
% of Total Monthly Benefits	14.9%	81.4%	2.1%	1.6%	100.0%
FY 2008-09					
Average Benefit	$3,400	$2,985	$1,293	$2,025	$2,934
Number of Accounts	146	978	58	26	1,208
Total Monthly Benefits	$496,355	$2,919,782	$74,971	$52,649	$3,543,757
% of Total Monthly Benefits	14.0%	82.4%	2.1%	1.5%	100.0%
FY 2009-10					
Average Benefit	$3,492	$3,066	$1,467	$2,130	$3,032
Number of Accounts	147	1,004	50	26	1,227
Total Monthly Benefits	$513,322	$3,078,221	$73,354	$55,379	$3,720,275
% of Total Monthly Benefits	13.80%	82.70%	2.00%	1.50%	100.00%
FY 2010-11					
Average Benefit	$3,529	$3,112	$1,494	$2,162	$3,070
Number of Accounts	146	1,037	55	26	1,264
Total Monthly Benefits	$515,270	$3,226,744	$82,184	$56,210	$3,880,408
% of Total Monthly Benefits	13.28%	83.15%	2.12%	1.45%	100.00%
FY 2011-12					
Average Benefit	$3,560	$3,135	$1,372	$2,136	$3,077
Number of Accounts	150	1,083	66	25	1,324
Total Monthly Benefits	$534,132	$3,396,203	$90,562	$53,404	$4,074,303
% of Total Monthly Benefits	13.11%	83.36%	2.22%	1.31%	100.00%
FY 2012-13					
Average Benefit	$3,601	$3,130	$1,320	$2,198	$3,068
Number of Accounts	149	1,126	74	23	1,372
Total Monthly Benefits	$536,481	$3,524,248	$97,681	$50,563	$4,208,973
% of Total Monthly Benefits	12.75%	83.73%	2.32%	1.20%	100.00%

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Analysis of Initial Retirees

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
FY 2007-08					
Number of Accounts	2,219	243	2,736	355	40
Average Service Credit (months)	261	233	204	240	275
Average Final Compensation	$49,414	$44,992	$31,447	$54,223	$67,775
Average Monthly Benefit	$1,929	$1,289	$917	$2,014	$3,239
Average System Payment for Health Insurance	$221	$381	$181	$625	$501
FY 2008-09					
Number of Accounts	3,229	257	2,761	322	59
Average Service Credit (months)	277	241	205	242	269
Average Final Compensation	$51,617	$48,542	$34,940	$57,016	$69,388
Average Monthly Benefit	$2,105	$1,387	$1,029	$2,005	$3,146
Average System Payment for Health Insurance	$396	$520	$274	$715	$461
FY 2009-10					
Number of Accounts	1,007	212	2,252	329	54
Average Service Credit (months)	153	194	186	224	276
Average Final Compensation	$41,811	$45,499	$30,203	$56,408	$70,704
Average Monthly Benefit	$802	$1,494	$760	$2,127	$3,323
Average System Payment for Health Insurance	$202	$572	$239	$766	$894
FY 2010-11					
Number of Accounts	1,486	247	3,045	415	46
Average Service Credit (months)	174	184	182	204	260
Average Final Compensation	$44,341	$44,821	$32,359	$58,814	$71,501
Average Monthly Benefit	$1,047	$1,379	$824	$2,114	$3,296
Average System Payment for Health Insurance	$264	$516	$284	$777	$874
FY 2011-12					
Number of Accounts	1,641	206	3,160	410	47
Average Service Credit (months)	190	169	185	210	276
Average Final Compensation	$45,528	$45,815	$32,709	$57,756	$71,298
Average Monthly Benefit	$1,162	$1,312	$872	$2,149	$3,556
Average System Payment for Health Insurance	$291	$496	$271	$826	$981
FY 2012-13					
Number of Accounts	1,810	205	3,303	443	59
Average Service Credit (months)	199	157	189	202	234
Average Final Compensation	$47,168	$46,456	$34,292	$58,516	$69,325
Average Monthly Benefit	$1,275	$1,250	$938	$2,196	$2,893
Average System Payment for Health Insurance	$303	$433	$259	$853	$994

This table represents all individuals who had an initial retirement date within the fiscal year.

Payment Options Selected by Retired Members

	Basic	Social Security Adjustment	Period Certain	Suvivorship	Pop Up	Lump Sum
KERS Non-Haz						
Number of Accounts	13,903	3,309	5,433	9,413	8,092	2,235
Monthly Benefits	$21,742,312	$5,885,623	$8,576,398	$16,104,686	$17,037,050	$2,578,805
KERS Haz						
Number of Accounts	856	267	399	724	935	266
Monthly Benefits	$921,023	$330,043	$414,280	$414,280	$1,280,230	$267,670
CERS Non-Haz						
Number of Accounts	19,641	1,921	7,369	9,906	7,999	3,417
Monthly Benefits	$15,195,983	$2,562,996	$6,266,451	$9,909,288	$9,891,754	$2,279,399
CERS Haz						
Number of Accounts	1,164	513	666	1,675	2,845	482
Monthly Benefits	$2,141,610	$832,212	$1,051,623	$3,328,258	$6,842,002	$758,963
SPRS						
Number of Accounts	130	202	121	378	519	22
Monthly Benefits	$392,132	$432,444	$289,957	$1,222,592	$1,820,383	$51,464
KRS Total						
Number of Accounts	35,694	6,212	13,988	22,096	20,390	6,422
Monthly Benefits	$40,393,060	$10,043,318	$16,598,709	$30,979,104	$36,871,419	$5,936,301

The information in this table represents accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

Employer Contribution Rates

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

HB
House Bill

In KERS, CERS, and SPRS both the employee and the employer contribute a percent of creditable compensation to the Systems.

The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employees hired on or after September 1, 2008 contribute an additional 1% to health insurance.

Under Kentucky Revised Statutes 61.565, KERS and SPRS employer contribution rates are set by the KRS Board of Trustees based on an annual actuarial valuation. However, KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. In recent years, the Kentucky General Assembly has routinely suspended Kentucky Revised Statutes 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the Board's consulting actuary. The table in the Actuarial Section shows the KERS and SPRS employer contribution rates that were actuarially recommended in the annual valuation without any adjustments (Recommended Rate) and the rate specified by the Executive Branch budget bill for each fiscal year (Budgeted Rate).

The CERS employer contribution rates are also set by the Systems' Board under Kentucky Revised Statutes 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. The CERS employer contribution rates for fiscal year 2008-2009 were reduced from the actuarially recommended rate as a result of the passage of House Bill (HB) 1 during the 2008 Extraordinary Session of the Kentucky General Assembly. Also, during its 2009 Regular Session, the Kentucky General Assembly enacted HB 117, which mandated an extension of the phase-in of insurance contribution rates that had been previously approved by the KRS Board in 2006 from five years to ten years to further mitigate the impact of the application of Governmental Accounting Standards Board Statements 43 and 45 on CERS employer contribution rates for health insurance. The "Recommended Rate" shown for CERS non-hazardous and hazardous plans are the actuarially recommended rates as set forth in the annual valuation. The "Budgeted Rate" shown for the two plans is the rate required by the ten year phase-in mandated in KRS 61.565(6).

Employer Contribution Rates as of June 30, 2013

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
KERS Non-Haz						
Budgeted Rate	10.01	11.61	16.98	19.82	23.61	26.79
Recommended Rate	36.92	39.45	38.58	40.71	44.55	45.28
KERS Haz						
Budgeted Rate	24.35	24.69	26.12	28.98	29.79	32.21
Recommended Rate	34.78	35.54	34.37	33.84	35.89	28.84
CERS Non-Haz						
Budgeted Rate	13.50	16.16	16.93	18.96	19.55	18.89
Recommended Rate	20.51	20.91	19.81	21.29	21.21	19.58
CERS Haz						
Budgeted Rate	29.50	32.97	33.25	35.76	37.60	35.70
Recommended Rate	42.66	43.36	40.06	41.65	41.94	37.79
SPRS						
Budgeted Rate	30.07	33.08	45.54	52.13	63.67	71.15
Recommended Rate	91.93	92.12	85.63	94.63	103.41	96.52

Retired Reemployed

From August 1, 1998 through August 31, 2008, state law allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service was observed. The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Reemployed Retirees in Full-Time Positions Covered by Same System & Contributing to a New Account

	KERS			CERS			SPRS
Reemployed Retirees in KRS	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**	**Total**
Total Active Employees	40,884	3,913	44,797	81,916	8,795	90,711	885
Total Retirees	37,240	2,312	39,552	44,164	5,840	50,004	1,240
Reemployed Retirees	624	53	677	756	546	1,302	113
% of Reemployed Retirees to Total Actives	1.53%	1.35%	1.51%	0.92%	6.21%	1.44%	12.77%
% of Reemployed Retirees to Total Retirees	1.68%	2.29%	1.71%	1.71%	9.35%	2.60%	9.11%
Average Age at Initial Retirement	50	48	50	52	46	49	47
Months of Service Credit at Initial Retirement	348	302	344	309	288	300	335
Final Compensation At Initial Retirement	$52,798	$45,308	$52,212	$38,804	$54,215	$45,267	$59,145
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2012-2013 (Second Retirement Account)	$43,185	$36,270	$42,644	$39,218	$49,274	$43,435	$52,343
Retirees Returning to Work for the Same Employer	210	7	217	507	85	592	0
% Retirees Returning to Work For Same Employer	33.65%	13.21%	32.05%	67.06%	15.57%	45.47%	0.00%

Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.

Insurance Contracts

The Systems provides group rates on medical insurance and other managed care coverage for retired members.

KEHP
Kentucky Employees Group Health Plan

Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems.

Insurance Benefits Paid to Retirees & Beneficiaries Participating in a KRS Health Insurance Plan

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Number	27,378	1,871	28,095	5,310	1,164
Average Service Credit (Months)	311	266	257	281	329
Avg Monthly System Payment for Health Insurance	$353	$681	$290	$928	$863
Avg Monthly Member Payment for Health Insurance	$82	$51	$82	$34	$17
Total Monthly Payment for Health Insurance	$11,911,989	$1,370,116	$10,450,560	$5,106,501	$1,024,992

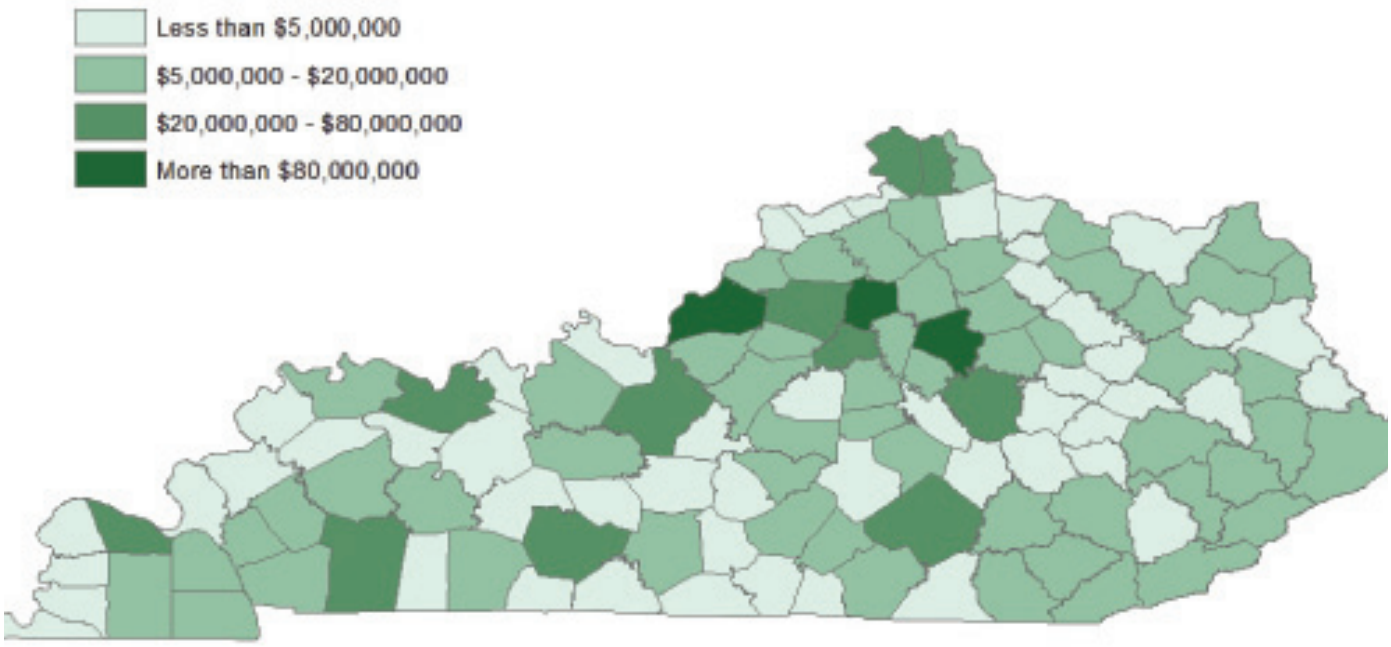
Insurance Contracts by Type

KERS Non-Haz	2008	2009	2010	2011	2012	2013
KEHP Parent Plus	568	762	722	732	734	618
KEHP Couple/Family	2,187	2,621	1,971	2,155	1,917	1,276
KEHP Single	9,383	10,635	10,420	10,321	9,764	9,364
Medicare without Prescription	1,969	1,920	1,831	1,821	1,721	1,474
Medicare with Prescription	12,636	13,231	13,765	13,988	15,015	16,834
KERS Haz						
KEHP Parent Plus	69	74	66	75	93	106
KEHP Couple/Family	443	502	453	521	517	451
KEHP Single	741	823	599	615	645	625
Medicare without Prescription	91	88	63	60	67	60
Medicare with Prescription	687	763	525	570	751	985

CERS Non-Haz	2008	2009	2010	2011	2012	2013
KEHP Parent Plus	292	335	342	351	383	340
KEHP Couple/Family	1,320	1,456	1,369	1,552	1,317	857
KEHP Single	7,126	7,609	7,692	8,013	7,972	7,652
Medicare without Prescription	3,105	3,110	3,106	3,167	3,119	2,707
Medicare with Prescription	12,684	13,583	14,477	15,100	16,355	18,824
CERS Haz						
KEHP Parent Plus	226	245	239	253	310	400
KEHP Couple/Family	1,947	2,041	2,062	2,156	2,237	2,155
KEHP Single	1,394	1,404	1,274	1,310	1,385	1,425
Medicare without Prescription	73	80	58	58	73	79
Medicare with Prescription	1,367	1,518	1,438	1,527	1,853	2,324
SPRS						
KEHP Parent Plus	17	22	47	52	62	76
KEHP Couple/Family	305	311	462	474	444	421
KEHP Single	240	221	264	278	291	283
Medicare without Prescription	7	9	12	14	15	20
Medicare with Prescription	410	418	467	499	581	682
KRS Total						
KEHP Parent Plus	1,172	1,438	1,416	1,463	1,582	1,540
KEHP Couple/Family	6,202	6,931	6,317	6,858	6,432	5,160
KEHP Single	18,884	20,692	20,249	20,537	20,057	19,349
Medicare without Prescription	5,245	5,207	5,070	5,120	4,995	4,340
Medicare with Prescription	27,784	29,513	30,672	31,684	34,555	39,649

Total Fiscal Year Retirement Payments by County

County	Payees	Total	County	Payees	Total	County	Payees	Total
Adair	398	$6,025,104	*Grant*	499	$8,091,857	*Mclean*	258	$3,179,407
Allen	341	$3,804,205	*Graves*	726	$10,389,556	*Meade*	349	$4,437,436
Anderson	1,204	$27,057,376	*Grayson*	587	$7,701,829	*Menifee*	194	$2,408,944
Ballard	180	$2,196,783	*Green*	236	$3,239,032	*Mercer*	645	$10,754,380
Barren	868	$12,741,318	*Greenup*	547	$6,745,905	*Metcalfe*	275	$2,852,120
Bath	320	$4,394,868	*Hancock*	198	$2,265,655	*Monroe*	217	$2,376,132
Bell	613	$8,766,085	*Hardin*	1,721	$25,548,392	*Montgomery*	548	$7,533,230
Boone	1,367	$24,212,531	*Harlan*	523	$7,261,397	*Morgan*	502	$7,588,866
Bourbon	462	$6,663,175	*Harrison*	420	$5,351,328	*Muhlenberg*	555	$5,790,242
Boyd	867	$13,163,374	*Hart*	284	$3,935,402	*Nelson*	811	$12,699,372
Boyle	793	$12,972,184	*Henderson*	910	$14,126,341	*Nicholas*	178	$2,105,572
Bracken	202	$2,319,537	*Henry*	864	$16,826,931	*Ohio*	519	$5,233,364
Breathitt	410	$5,726,015	*Hickman*	110	$1,559,050	*Oldham*	1,162	$21,143,208
Breckinridge	383	$4,928,326	*Hopkins*	1,030	$14,022,079	*Owen*	499	$10,208,812
Bullitt	1,161	$18,520,711	*Jackson*	262	$3,219,687	*Owsley*	170	$2,262,362
Butler	295	$3,698,595	*Jefferson*	14,654	$278,677,737	*Pendleton*	305	$4,691,356
Caldwell	468	$6,273,373	*Jessamine*	785	$12,630,397	*Perry*	639	$8,933,564
Calloway	939	$11,461,665	*Johnson*	549	$7,682,779	*Pike*	1,050	$14,104,870
Campbell	1,271	$21,208,567	*Kenton*	1,903	$35,772,794	*Powell*	322	$3,898,967
Carlisle	119	$1,503,426	*Knott*	368	$5,325,162	*Pulaski*	1,968	$30,157,601
Carroll	284	$4,014,392	*Knox*	502	$7,062,247	*Robertson*	77	$891,727
Carter	680	$7,955,120	*Larue*	320	$4,328,756	*Rockcastle*	340	$4,224,019
Casey	314	$3,824,287	*Laurel*	1,036	$16,071,035	*Rowan*	806	$12,063,548
Christian	1,420	$22,606,179	*Lawrence*	284	$3,314,122	*Russell*	489	$6,277,618
Clark	780	$11,980,890	*Lee*	256	$3,814,042	*Scott*	980	$18,225,419
Clay	507	$6,554,796	*Leslie*	224	$3,040,290	*Shelby*	1,541	$33,189,976
Clinton	227	$2,542,074	*Letcher*	503	$6,327,196	*Simpson*	244	$2,595,145
Crittenden	201	$2,388,905	*Lewis*	273	$3,000,560	*Spencer*	426	$7,728,557
Cumberland	174	$2,279,016	*Lincoln*	538	$6,125,439	*Taylor*	560	$7,211,769
Daviess	2,149	$34,468,183	*Livingston*	218	$3,379,817	*Todd*	251	$2,885,747
Edmonson	199	$2,473,685	*Logan*	507	$6,130,861	*Trigg*	467	$6,595,238
Elliott	176	$2,007,345	*Lyon*	327	$5,326,282	*Trimble*	240	$3,190,131
Estill	323	$3,976,127	*Madison*	1,974	$28,655,268	*Union*	306	$3,336,024
Fayette	4,678	$93,674,837	*Magoffin*	304	$3,868,974	*Warren*	2,356	$36,923,238
Fleming	398	$6,362,824	*Marion*	465	$5,743,588	*Washington*	296	$4,215,884
Floyd	785	$11,908,364	*Marshall*	745	$9,765,408	*Wayne*	449	$5,810,949
Franklin	6,615	$181,096,841	*Martin*	208	$2,212,429	*Webster*	311	$3,757,917
Fulton	169	$1,825,960	*Mason*	339	$5,071,729	*Whitley*	857	$11,474,064
Gallatin	101	$1,590,693	*Mccracken*	1,385	$23,036,840	*Wolfe*	293	$4,215,958
Garrard	358	$5,058,500	*Mccreary*	335	$3,111,070	*Woodford*	827	$19,115,078



Benefits paid to retirees and beneficiaries of Kentucky Retirement Systems have a wide ranging impact on the state's economic health. In fiscal year 2013, KRS paid more than $1.6 billion dollars to its recipients. More than 95 percent of these recipients live in Kentucky. Not only do these dollars impact those receiving a benefit, but according to the National Institute of Retirement Security (NIRS), each dollar paid out in pension benefits supported 1.24 dollars in total economic activity in Kentucky. As you can see in the chart, each county in the Commonwealth is impacted by pension benfits, and in an unsteady economy, the consistent addition of the pension funds into the economy is a stabilizing element.

Total Fiscal Year Retirement Payments

	Payees	Payments
Kentucky Total	94,400	$1,582,273,309
Out of State	5,665	$82,106,379
Grand Total	**100,065**	**$1,664,379,688***

* This table represents all payees receiving a monthly payment during the fiscal year.

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BUILDING a better FUTURE for Kentuckians

2014

Comprehensive Annual FINANCIAL REPORT

For The Fiscal Year Ended June 30, 2014

Kentucky Retirement Systems
A component of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

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For The Fiscal Year Ended June 30, 2014
Document Prepared By KRS Communication Division

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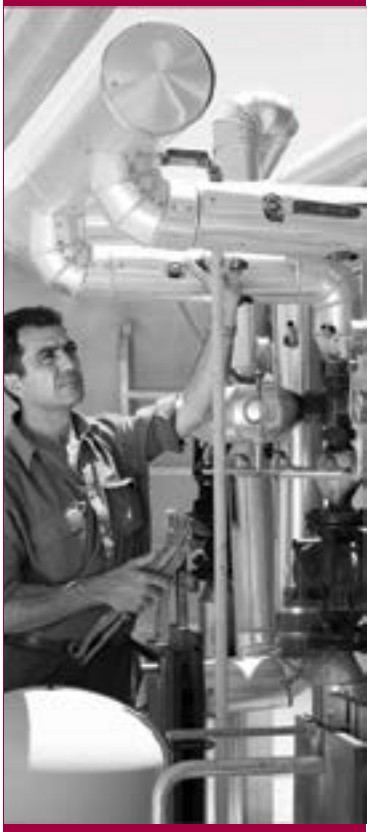
Management's Responsibility for Financial Reporting

Management has prepared the basic financial statements of Kentucky Retirement Systems and is ***responsible for the integrity and fairness*** *of the information presented.*

December 4, 2014 Management has prepared the basic financial statements of Kentucky Retirement Systems and is responsible for the integrity and fairness of the information presented. Some amounts included in the financial statements may be based upon estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these basic financial statements conform to US Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the basic financial statements.

Responsibility Ultimate responsibility for the basic financial statements and annual report rests with the Board of Trustees. The Executive Director and KRS' staff assist the Board in its responsibilities. Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training employees, the establishment of an organizational structure, and the communications of policies and guidelines throughout the organization. The cost of a control should not exceed the benefits to be derived, the objective is to provide reasonable, rather than absolute assurance, that the financial statements are free of any material mistatements. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and Board of Trustees.

Kentucky Retirement Systems' external auditors, Dean Dorton Allen Ford, PLLC, have conducted an independent audit of the basic financial statements in accordance with US Generally Accepted Auditing Standards. This audit is described in their Independent Auditors' Report on page two of the Financial Section. Management has provided the external auditors with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of financial statements.



William A. Thielen

William A. Thielen, Esq. // Executive Director

Karen D. Roggenkamp

Karen D. Roggenkamp // Chief Operations Officer

Todd E. Coleman

Todd E. Coleman, CPA // Controller

To the **Trustees & Membership**

It is my pleasure to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year that ended June 30, 2014. Responsibility for the accuracy of the data as well as the completeness and fairness of the presentation rests with the management of the Kentucky Retirement Systems. We present this information to assist the Board of Trustees, members of KERS, CERS and SPRS (collectively referred to as KRS), State executive and legislative branch officials, and the general public in understanding KRS' financial and actuarial status. This CAFR conforms to the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. KRS' financial transactions are reported on the accrual basis of accounting. Additionally, internal accounting controls provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

Major Issues and Initiatives

One of KRS' most pressing issues during fiscal year 2014 involved the implementation of the significant pension reforms brought about by the passage of Senate Bill 2 (SB 2) during the 2013 Regular Session of the Kentucky General Assembly. Most notably, SB 2 established a new hybrid cash balance plan benefit tier for members of KERS, SPRS and CERS participating on or after January 1, 2014. Additionally, SB 2 attempted to address the underfunding of the pension system by requiring the payment of the full actuarially required contribution rate to KERS and SPRS in fiscal years beginning on or after July 1, 2014, establishing limits on the granting of Cost of Living Adjustments (COLAs), and requiring the last participating employer to pay the actuarial cost of what is commonly known as "pension spiking", i.e., annual increases in an employee's creditable compensation during an employee's last years of employment, which result in a greater retirement benefit. Finally, SB 2 altered the governance structure of Kentucky Retirement Systems by expanding the Board of Trustees from nine to thirteen members, including three new Governor appointees and one new CERS elected member and establishing the Public Pension Oversight Board, intended "... to review, analyze, and provide oversight to the General Assembly on the benefits, administration, investments, funding, laws and administrative regulations, and legislation pertaining to the Kentucky Retirement Systems."

In addition to the implementation of SB 2, Kentucky Retirement Systems continued to deal with a number of ongoing lawsuits involving member agencies regarding their attempts to terminate participation in KERS and CERS. The most significant of these suits involves a Chapter 11 Federal bankruptcy action filed by Seven Counties Services, the Commonwealth's designated mental health services provider for Jefferson County and its six contiguous counties, in an attempt to remove its self from KERS. On May 30, 2014, the United States Bankruptcy Court issued an Opinion that held that Seven Counties is not a "governmental unit", as that term is defined in the Bankruptcy Code, and it is, therefore, eligible to proceed under Chapter 11 of the Bankruptcy Code. The Bankruptcy Court also held that the relationship between Seven Counties and Kentucky Employees Retirement System ("KERS") is an "executory contract" and Seven Counties may reject that contract in accordance with the provisions of the Bankruptcy Code. Kentucky Retirement Systems has appealed. However, if Seven Counties Services or any of the other agencies are successful in obtaining legal rulings that allow them to withdraw without paying their proportionate share of the unfunded liability of the KERS and CERS systems, then all other participating employers would be adversely affected through the payment of higher employer contribution rates. Kentucky Retirement Systems is also defending a lawuit filed in June 2014 by the City of Fort Wright, Kentucky, alleging improprieties in the investment decisions made by the KRS Investment Committee and Board of Trustees. The defense of these and other lawsuits is causing Kentucky Retirement Systems to expend significant monetary and staff resources.

KERS
Kentucky Employees Retirement System

CERS
County Employees Retirement System

SPRS
State Police Retirement System

ARC
Annual Required Contribution

CMS
Centers for Medicare & Medicaid Services

EGWP
Employer Group Waiver Plan

START
Strategic Technology Advancements for the Retirement of Tomorrow

As always, KRS continued during the 2014 fiscal year, whenever the opportunity presented itself, to educate its members, participating employers, legislators, executive branch officials and the general public about the funded status of its retirement plans, including the impact of reductions to the actuarially recommended employer contribution rates for the KERS and SPRS plans. This underfunding, along with unfunded annual cost of living allowances (COLAs) and two major economic recessions in the last twelve years, have resulted in a decline of funding ratios (the ratio of assets to accrued liabilities) for the KERS nonhazardous and SPRS pension trusts to alarmingly low levels. As of June 30, 2014, the funded ratio of the KRS nonhazardous pension plan is 21% of the actuarial value of assets. The funded ratio of the SPRS pension plan is 35.64% of the actuarial value of assets. The KERS nonhazardous plan continues in a negative cash flow situation such that more money is paid out in benefits than is contributed by employees and employers and earned in investment returns. This is true for the 2014 fiscal year during which the KERS nonhazardous fund asset base decreased by approximately $182 million dollars even though the investment return for the plan was approximately 15.5%.

Our educational efforts during the 2014 fiscal year involved numerous appearances before the newly created Public Pension Oversight Board (PPOB). The PPOB began meeting monthly in March 2014. Kentucky Retirement System's staff has been present at each meeting of the PPOB and presented materials designed to educate the members about our retirement system. We will continue to do so in the months ahead.

Health Insurance

KRS administered approximately 70,000 health insurance contracts for benefit recipients during fiscal year 2014. Continuing the positive impacts on both funding status and benefits resulting from the Board of Trustees August 2012 decision to move to a Medicare Advantage plan, the Board approved a recommendation made by the Retiree Health Plan Committee to continue to provide Medicare Advantage plan to Medicare eligible retirees beginning January 1, 2015. The Medicare Advantage Plans are fully insured health insurance plans provided by Humana. Premium costs to KRS members were significantly below the rates projected in 2013 for the self-insured Employer Group Waiver Plans (EGWP). The actual savings for plan year 2013 was $30,598,162.09. The cost savings is shared on roughly a 50-50 basis by retirees who pay all or a portion of their health insurance premiums and the underfunded health insurance trust.

The Board also continued to offer a Medical Only plan to the Medicare eligible retirees. This plan allows retirees who do not have Medicare Part B, or who are covered under another drug plan, to participate in coverage with the retirement systems. The Medical Only plan is self-insured and provides coverage after original Medicare. Humana is the claims administrator for this plan.

The Board of Trustees has approved a recommendation made by the Retiree Health Plan Committee to submit a Request for Proposal for Medicare Advantage Plans during 2015 for the 2016 plan year and beyond.

Information Technology, Employer Reporting and Communications

During fiscal year 2014, KRS' Information Technology business area has expended over 7,500 labor hours to complete programming, development, and testing to implement Senate Bill 2 (Tier 3 benefit plan). In addition to this major work effort, KRS has continued to enhance our technology capabilities to better serve the changing needs of our members. Starting in September 2014 (in time for insurance open enrollments), we added Call Back Assist functionality to our Call Center. This popular feature allows a member to receive a call back at a designated time from one of our retirement counselors. Also we have enhanced our self service portal (My Retirement) to calculate retirement benefits, and over 9,500 members used our web site to complete health insurance enrollment during the month of October. Data security and disaster recovery are also key priorities. Our Information Security staff members are very proactive in safeguarding against cyber attacks and protecting member information. We continually remind KRS reporting employers to send information across our secure portal. During the fiscal year, we have taken significant steps toward improving our disaster recovery capabilities and have deployed equipment to the Commonwealth Office of Technology to help establish redundant processing capabilities.

Employer Reporting, Compliance, and Education (ERCE) staff continued to work with reporting employers through on-site visits and correspondence. As a result, reporting errors and outstanding invoices have decreased especially for school boards. This has resulted in both improved monetary receipts and better retirement information. This team is also very involved in working with employers regarding Senate Bill 2 pension spiking provisions, GASB 68 impacts, and House Bill 364, which was enacted during the 2014 legislative session on the issue of reemployment for retired sheriffs.

As both our membership and eligible retirees grows, KRS Communications continues to expand our website (https://kyret.ky.gov) content to meet membership information needs. During the past 12 months, we had over 1.0 million website views. We have added video offerings to increase awareness and education on benefits by tier, insurance options, governance, self- service, and investment strategies. To reach more employers and members across Kentucky, we have increased the usage of webinars (over 2,600), social media (www.facebook/kyretirement), digital newsletters, launched KRS YouTube, and added video conferencing capability.

Investments

The investment landscape presented opportunities in the fiscal year for each KRS asset class to achieve positive returns. The KRS Pension fund returned 15.55% beating its benchmark, of 14.91%. The KRS Insurance fund returned 14.89% versus its benchmark return of 15.03%. U.S. equities led the way followed by non U.S. equities, private equity, and emerging markets equity all showing significant double digit returns. Also performing well were real estate, both credit and interest rate sensitive fixed income, and most absolute return strategies were positive, though some of those strategies performed better than others. The inflation sensitive assets and strategies were positive contributors, though challenged due to lingering deflationary concerns and a strengthening dollar.

The positive performance of the capital markets for the fiscal year allowed most public pensions across the country to improve their funding status. The exception was KERS Nonhazardous Pension, the principal balance of this plan has decreased to a level where significant positive investment performance does not offset the amount of KERS Nonhazardous assets that need to be sold to fund benefit payments to its retired members each year.

Many public pensions around the country continue to evaluate appropriate asset allocation strategies and there is on-going debate as to the longevity of the strong bull market in U.S. equities. KRS reevaluates the asset allocation for the ten portfolios it manages every year with its Investment Committee and consultant looking for minor changes that need to be made. Once every five years KRS works with its general investment consultant, RV Kuhns, to conduct an asset liability study and potentially make more meaningful changes to the asset allocation during that process. KRS made no significant changes to any of the five systems' pension or insurance portfolio allocations during the fiscal year and KRS' investment portfolios remained in the bottom third of risk takers in the public pension space as measured by a peer group of 80 funds using our ten year standard deviation.

During the fiscal year significant progress was made in building out the real estate asset allocation, real return asset allocation, and the direct hedge fund program for each of the systems that have exposure to those asset classes. All three of these asset classes were strategic initiatives put in place four years ago during the last asset liability study process and approved by the KRS Investment Committee for each of the respective systems.

KRS did change custodial banks at the beginning of the 2013-14 fiscal year and made a switch in investment reporting methodologies from the plan allocation method to the unitization method to better track ownership of each system's assets. This now allows for KRS to produce a rate of return performance measurement for each KRS system on a monthly and ongoing basis.

In a response to a call from our constituents to understand better the investment process, David Peden, the KRS Chief Investment Officer, presented a five part town hall series on the KRS investment process. KRS has archived this town hall series and made it available as an educational resource. And, as earlier mentioned,the Kentucky Retirement Systems has made use of the opportunity to present to the PPOB every month and has viewed these meetings as a way to keep the legislature, our constituents, and the broader public informed on various topics related to KRS investments and demonstrate how the KRS investment portfolio is being affected by the capital markets. KRS staff looks forward to the continued work of the PPOB.

Actuarial Funding

KRS administers both a pension fund and an insurance fund for each of the systems it manages. These trusts are used to fund monthly pension and health care payments to and on behalf of retirees. Non-hazardous employees are statutorily required to contribute 5% of pre-tax salary to their pension benefit, while hazardous employees contribute 8% on a pre-tax basis. All employees hired with an initial participation date on or after September 1, 2008 must contribute an additional 1% of their pre-tax compensation toward their retiree health insurance benefits. These monies are deposited in a 401(h) account within the pension trust. Employer contributions are calculated annually by the Board of Trustees and include the normal cost of pension and insurance benefits, plus a contribution toward the unfunded liability of the pension and insurance trusts designed to amortize that liability over a period no longer than 30 years. Employer contributions also include an administrative fee that is used to pay annual operating expenses of KRS. The administrative expense is shared among the plans based on the ratio of a plan's membership to the total system membership at the beginning of a fiscal year.

Funding ratios have fallen both steadily and significantly over the last decade as a result of unfavorable market conditions, principally during 2008-2009, higher than anticipated retirement rates, employer underfunding in the KERS nonhazardous and SPRS plans, and increased expenses for annual cost of living adjustments that were not pre-funded by the employers. While improved market conditions and the increased funding in the KERS and SPRS plans have slowed the growth of the unfunded liabilities of the various systems, the pension funding levels for the KERS nonhazardous and SPRS plans continued to decline for 2014. The funding levels of all systems as of June 30, 2014 are listed on pages 131 the Actuarial Section.

Professional Services

KRS continues to engage a number of professional consultants to assist trustees and staff in key business areas such as investments, taxes, auditing services and legal representation. A list of the Board's contract consultants can be found in the organizational chart on page 12. A list of external investment managers can be found in the investment section of this report.

Conclusion

Summary versions of the 2014 CAFR will be provided to the Governor, the State Auditor of Public Accounts, all 138 state legislators, to key Legislative Research Commission staff, and the State Budget Director. A complete copy of the report will be posted on the KRS website.

I would like to take this opportunity to thank the KRS Board of Trustees, the staff, and our advisors and service providers who worked tirelessly during FY 2014 to make this a successful year for KRS. We look forward to continuing success during FY 2015 and endeavor to provide service of the highest quality to our members.

William A. Thielen

William A. Thielen, Esq. // Executive Director

Board of Trustees

The Board of Trustees is comprised of thirteen members: two elected by KERS members, three elected by CERS members, one elected by SPRS members, the Secretary of the State Personnel Cabinet serves ex officio, and six are appointed by Governor Steve Beshear. Three of the six appointees are selected from lists of nominees provided by the Kentucky Association of Counties, the Kentucky League of Cities, and the Kentucky School Board Association, so that each organization has a representative.

Thomas Elliott, *Chair*
Governor Appointee
Term ends March 31, 2015

Dr. Daniel Bauer, *Vice Chair*
Governor Appointee
Term ends March 31, 2016

Mike Cherry
Governor Appointee
Term ends March 31, 2016

Edwin Davis
Elected by CERS
Term ends March 31, 2017

Randy Overstreet
Elected by SPRS
Term ends March 31, 2015

J.T. Fulkerson
Governor Appointee
Term ends July 1, 2017

William Summers
Elected by CERS
Term ends March 31, 2017

Tim Longmeyer
Personnel Secretary
Term ends Ex-Officio

Vince Lang
Elected by KERS
Term ends March 31, 2017

Joseph Hardesty
Governor Appointee
Term ends July 1, 2017

David Rich
Elected by CERS
Term ends October 31, 2017

Mary Helen Peter
Elected by KERS
Term ends March 31, 2017

Randy Stevens
Governor Appointee
Term ends July 1, 2017

Certificate of Achievement

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2013. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports and is valid for a period of one year. This was the sixteenth consecutive award earned by KRS. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized document. The report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe our 2014 CAFR will continue to meet the Certificate of Achievement Program's requirements, and we will be submitting it to the GFOA for their consideration.

Agency Structure as of December 1, 2014

Board of Trustees

- **Audit Committee**
  - **Internal Audit** — Connie Davis
  - **Compliance Officer** — Erica Bradley
- **Investment Committee**
- **Chief Investment Officer** — David Peden
- **Deputy CIO** — Chris Schelling
  - **Private Equity** — Brent Aldridge
  - **Public Equity** — Joe Gilbert
  - **Absolute** — Chris Schelling
  - **Fixed Income**
  - **Real Return**
  - **Real Estate**

Executive Director — William A. Thielen

- **Chief Benefits Officer** — Rebecca Stephens
  - **Disability & Death** — Liza Welch
  - **Member Services** — Shauna Miller
  - **Membership Support** — Kevin Gaines
  - **Retiree Payroll** — David Nix
  - **Retiree Health Care** — Connie Pettyjohn
- **General Counsel** — Brian Thomas
- **Human Resources** — Marlane Robinson
- **Investment Division & Internal Audit Division**
- **Chief Operations Officer** — Karen Roggenkamp
  - **Accounting** — Todd E. Coleman
  - **Communications** — Scarlett Consalvi
  - **Employer Reporting, Compliance & Education** — Sarah Webb
  - **Information Security** — Mark McChesney
  - **Information Technology** — Jeff Luckett
  - **Procurement & Office Services** — Joe C. Gilbert
  - **Planning & Constituent Services** — Shawn Sparks

Consultants

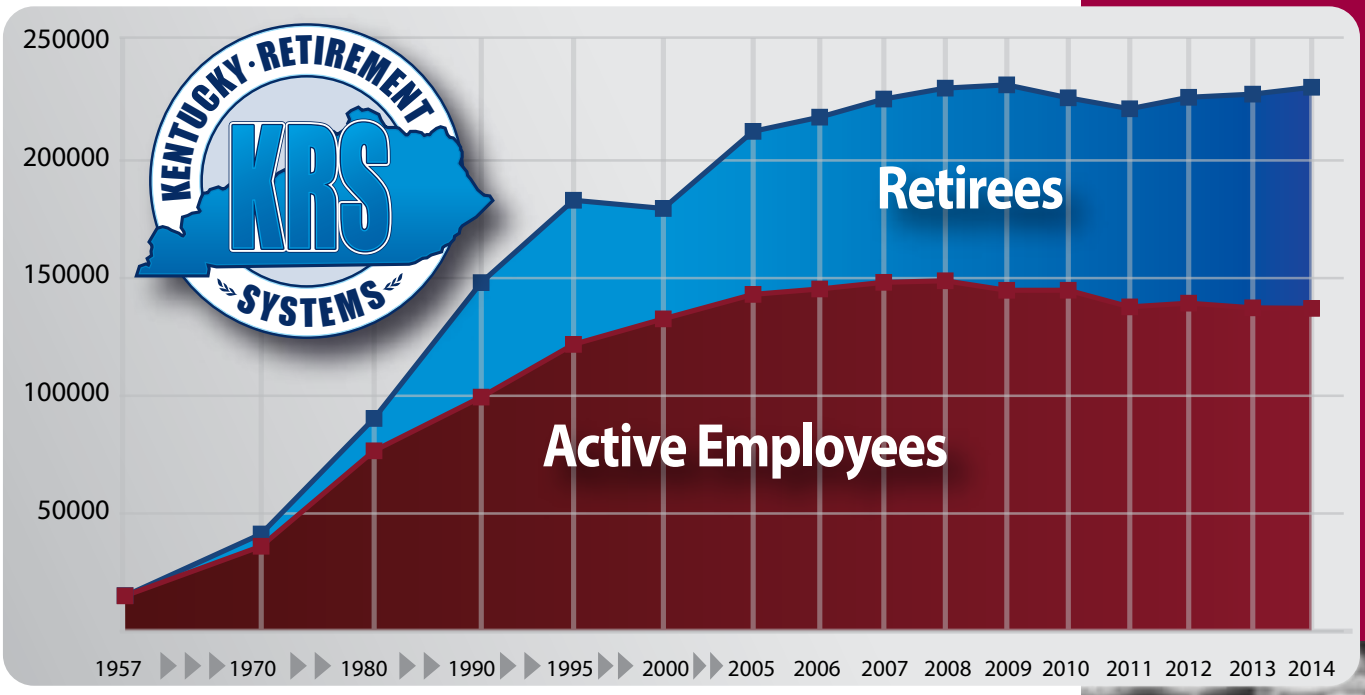
Actuarial Services
Cavanaugh Macdonald Consulting, LLC

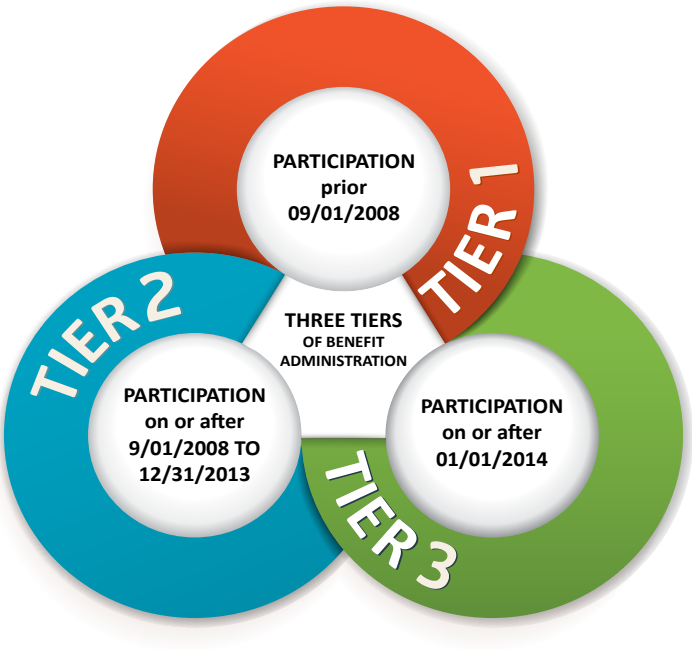
Auditing Services
Dean Dorton Allen Ford, PLLC

Legal Services
Polsinelli
Reinhart Boerner Van Deuren
Stoll Keenon Ogden, PLLC

Fiduciary Review Consultants
Ice Miller, LLP

Investment Consultants
R.V. Kuhns
ORG Real Property
Albourne
Altius Associates
PCA Associates





BENEFIT TIERS

KRS currently administers three different pension benefit tiers within our defined benefit plans. The Hybrid Cash Balance plan was established as a part of Senate Bill 2, which enacted by the Kentucky General Assembly during 2013 Regular Session.

Kentucky Employees Retirement System (KERS) was established ***July 1, 1956*** *by the state legislature.*

KERS Nonhazardous

RETIRED MEMBERSHIP

AVERAGE AGE

67.7

AVERAGE ANNUAL BENEFIT PAYMENT

$22,404

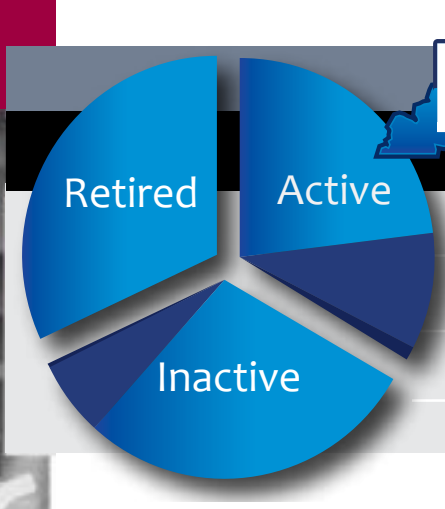
ACTIVE MEMBERSHIP

AVERAGE AGE

44.8

AVERAGE SALARY

$39,081



KERS nonhazardous

	ACTIVE	INACTIVE	RETIRED	TOTAL PERSONS
Tier 1	27,869	33,941	38,022	**99,832**
Tier 2	11,145	7,102	0	**18,247**
Tier 3	1,486	170	0	**1,656**
TOTAL	**40,500**	**41,213**	**38,022**	**119,735**

Plan Net Position (in Thousands)

Fund	2009	2010	2011	2012	2013	2014
Pension	$3,584,601	$3,504,501	$3,533,393	$2,977,069	$2,760,753	$2,578,291
Insurance	$365,367	$368,799	$421,972	$418,490	$496,040	$646,904
Total	**$3,949,968**	**$3,873,300**	**$3,955,365**	**$3,395,559**	**$3,256,793**	**$3,225,195**

KERS Hazardous

RETIRED MEMBERSHIP

AVERAGE AGE

63.1

AVERAGE ANNUAL BENEFIT PAYMENT

$15,952

ACTIVE MEMBERSHIP

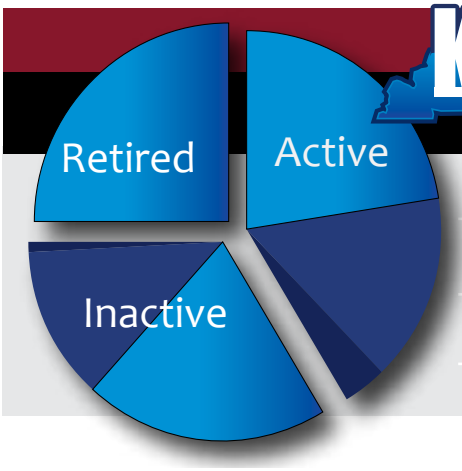
AVERAGE AGE

40.6

AVERAGE SALARY

$32,077

Kentucky Employees Retirement System (KERS) was established ***July 1, 1956*** *by the state legislature.*



KERS hazardous

	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	2,232	2,002	2,467	**6,701**
Tier 2	1,505	1,231	0	**2,736**
Tier 3	357	85	0	**442**
TOTAL	**4,094**	**3,318**	**2,467**	**9,879**

Plan Net Position (in Thousands)

Fund	2009	2010	2011	2012	2013	2014
Pension	$388,951	$443,606	$509,120	$476,589	$514,592	$561,484
Insurance	$219,500	$271,239	$319,736	$330,730	$372,883	$433,525
Total	**$608,451**	**$714,846**	**$828,856**	**$807,319**	**$887,475**	**$995,009**

County Employees Retirement System (CERS) was established ***July 1, 1958*** *by the state legislature.*

CERS Nonhazardous

RETIRED MEMBERSHIP

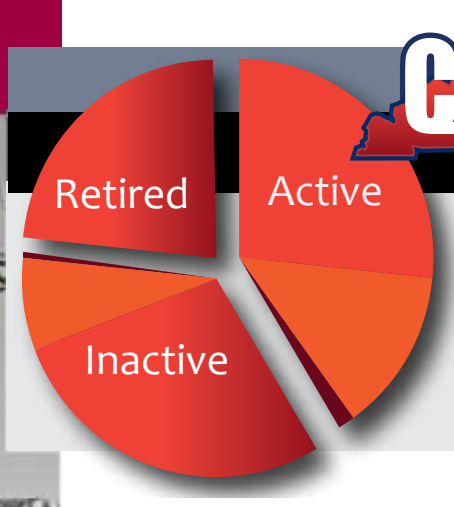
AVERAGE AGE
69.5

AVERAGE ANNUAL BENEFIT PAYMENT
$11,569

ACTIVE MEMBERSHIP

AVERAGE AGE
48.1

AVERAGE SALARY
$28,013



CERS nonhazardous

	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	53,190	55,520	46,111	**154,821**
Tier 2	26,419	14,521	1	**40,941**
Tier 3	2,885	190	0	**3,075**
TOTAL	**82,494**	**70,231**	**46,112**	**198,837**

Plan Net Position (in Thousands)

Fund	2009	2010	2011	2012	2013	2014
Pension	$4,331,010	$4,820,490	$5,543,962	$5,381,602	$5,795,568	$6,528,146
Insurance	$894,490	$1,094,821	$1,418,818	$1,428,821	$1,618,960	$1,878,711
Total	**$5,225,500**	**$5,915,311**	**$6,962,780**	**$6,810,423**	**$7,414,528**	**$8,406,857**

CERS Hazardous

RETIRED MEMBERSHIP

AVERAGE AGE

61.0

AVERAGE ANNUAL BENEFIT PAYMENT

$27,135

ACTIVE MEMBERSHIP

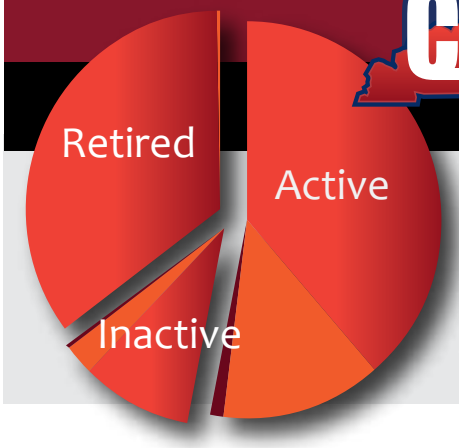
AVERAGE AGE

39.2

AVERAGE SALARY

$52,117

County Employees Retirement System (CERS) was established ***July 1, 1958*** *by the state legislature.*



CERS hazardous

	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	6,710	1,607	6,065	**14,382**
Tier 2	2,281	425	1	**2,707**
Tier 3	198	6	0	**204**
TOTAL	**9,189**	**2,038**	**6,066**	**17,293**

Plan Net Position *(in Thousands)*

Fund	2009	2010	2011	2012	2013	2014
Pension	$1,320,560	$1,506,894	$1,751,962	$1,672,970	$1,833,571	$2,087,002
Insurance	$483,233	$586,614	$761,075	$785,874	$891,320	$1,030,303
Total	**$1,803,793**	**$2,093,508**	**$2,513,037**	**$2,458,844**	**$2,724,891**	**$3,117,305**

State Police Retirement System (SPRS) was established ***July 1, 1958*** *by the state legislature.*

SPRS

RETIRED MEMBERSHIP

AVERAGE AGE

61.8

AVERAGE ANNUAL BENEFIT PAYMENT

$40,330

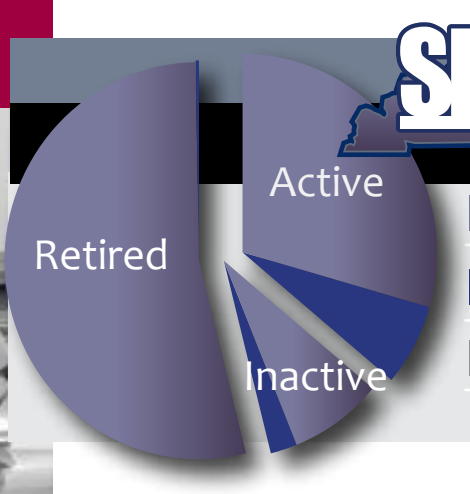
ACTIVE MEMBERSHIP

AVERAGE AGE

37.8

AVERAGE SALARY

$52,182



	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	704	185	1,278	**2,167**
Tier 2	157	54	1	**212**
Tier 3	0	0	0	**0**
TOTAL	**861**	**239**	**1,279**	**2,379**

Plan Net Position *(in Thousands)*

Fund	2009	2010	2011	2012	2013	2014
Pension	$256,575	$264,949	$279,283	$250,476	$248,698	$260,974
Insurance	$93,682	$104,511	$126,737	$125,398	$142,691	$164,958
Total	**$350,257**	**$369,460**	**$406,020**	**$375,874**	**$391,389**	**$425,932**

Total System

RETIRED MEMBERS

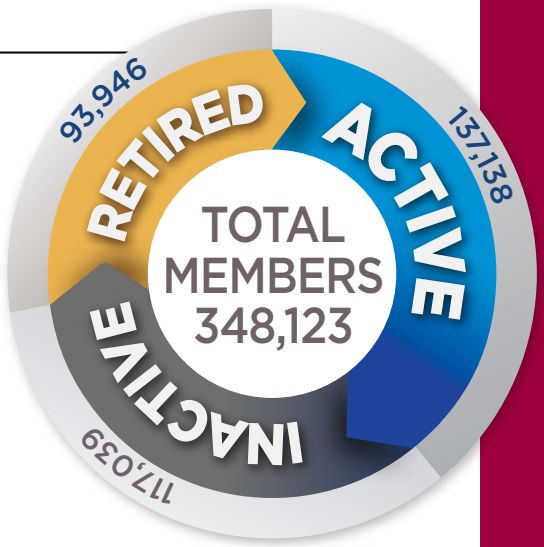
93,946

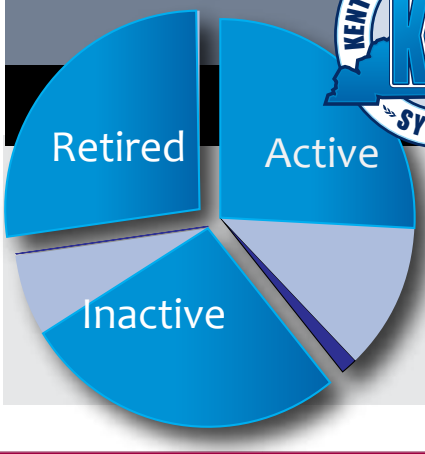
ACTIVE MEMBERS

137,138

INACTIVE MEMBERS

117,039





	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	90,705	93,255	93,943	**277,903**
Tier 2	41, 507	23,333	3	**64,843**
Tier 3	4,926	451	0	**5,377**
TOTAL	**137,138**	**117,039**	**93,946**	**348,123**

Plan Net Position *(in Thousands)*

Fund	2009	2010	2011	2012	2013	2014
Pension	$9,881,697	$10,540,440	$11,617,720	$10,754,057	$11,153,182	$12,015,897
Insurance	$2,056,272	$2,425,987	$3,048,338	$3,089,313	$3,521,894	$4,154,401
Total	**$11,937,969**	**$12,966,427**	**$14,666,058**	**$13,843,370**	**$14,675,076**	**$16,170,298**

Financial

SECTION

FINANCIAL
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DEANDORTON
DEAN DORTON ALLEN FORD, PLLC

Report of
Independent Auditors

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

Report on the Financial Statements

We have audited the accompanying combining financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ended June 30, 2014, and the related notes to the combining financial statements, which collectively comprise the Kentucky Retirement System's basic combining financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these combining financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of combining financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these combining financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combining financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combining financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation

of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the combining financial statements.

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the combining financial statements referred to above present fairly, in all material respects, the respective combining plan net position of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2014 and the respective combining changes in plan net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

The combining financial statement of Kentucky Retirement Systems as of and for the fiscal year ended June 30, 2013, (not presented herein), were audited by other auditors whose report dated December 5, 2013, expressed an unmodified opinion on those statements. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended June 30, 2013, is consistent, in all material respects, with the audited combining financial statements from which it has been derived.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on the following page and the Schedules of Changes in the Net Pension Liability, Schedules of Net Pension Liability Schedules Funding Progress, Schedules of Employer Contributions, Schedules of Funding Progress, and Schedules of Contributions from Employers and Contributing Entities (pages 68 through 80) be presented to supplement the basic combining financial statements. Such information, although not a part of the basic combining financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic combining financial statements in an appropriate operational, economical, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of

inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic combining financial statements, and other knowledge we obtained during our audit of the basic combining financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures did not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the combining financial statements that collectively comprise the Kentucky Retirement Systems' basic combining financial statements. The additional supporting schedules (pages 81 and 82) are presented for purposes of additional analysis and are not a required part of the basic combining financial statements. These schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic combining financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic combining financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the additional supporting schedules are fairly stated, in all material respects, in relation to the basic combining financial statements as a whole. The Introductory, Actuarial, Investments, and Statistical sections are presented for purposes for additional analysis and are not a required part of the combining financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the combining financial statements, and accordingly, we express no opinion on them.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated December 4, 2014 on our consideration of the Kentucky Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering Kentucky Retirement System's internal control over financial reporting and compliance.

Dean Dorton Allen Ford, PLLC

December 4, 2014
Lexington, Kentucky

Management's Discussion & Analysis

This discussion and analysis of Kentucky Retirement Systems' financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2014. Please read it in conjunction with the combining financial statements, which begin on page 30.

Pension Funds

The following highlights are explained in more detail later in this discussion.

- The combined net position of all pension funds administered by Kentucky Retirement Systems increased by $862.8 million during fiscal 2014.
- Total contributions reported for fiscal 2014, totaled $1,055.7 million compared to $1,027.2 million in fiscal 2013. This increase is due to a rise in the employer contribution rates and the collection of additional health insurance contributions.
- The member health insurance contribution totaled $12.4 million, for the fiscal year ended June 30, 2014, compared to $9.1 million in the prior fiscal year.
- The net appreciation in the fair value of investments was $1,361.9 million for the fiscal year ended June 30, 2014 compared to net appreciation of $890.6 million for the prior fiscal year.
- Interest, dividend and net securities lending income was $327.5 million compared to $291.3 million in fiscal 2013.
- Pension benefits paid to retirees and beneficiaries for fiscal 2014 totaled $1,769.7 million compared to $1,706.2 million in fiscal 2013. Refund of contributions paid to former members upon termination of employment totaled $33.6 million compared to $32.2 million in fiscal 2013.
- 2014 administrative expenses totaled $34.2 million (Pension $32.6 million; Insurance $1.6 million) compared to $40.3 million (Pension $30.6 million; Insurance $9.8 million) for the prior year. The decrease of $6.1 million is related to lower health care fees ($8.2 million) partially offset by higher legal and technology expenses (see Schedule of Administrative Expenses on page 77).

Insurance Fund

The following highlights are explained in detail later in this discussion.

- The Board contracted with Humana Insurance Company to provide healthcare benefits to KRS' retirees through a fully-insured Medicare Advantage Plan. The Humana Medicare Advantage Plan became effective January 1, 2013. Prior to this, KRS assumed the financial risk for providing health care benefits for its retirees.
- The combined net position of the insurance fund administered by Kentucky Retirement Systems increased by $632.5 million during fiscal 2014.
- Premiums received from retirees who participated in the Medicare eligible self-funded plan totaled $2.4 million, compared to $26.3 million in fiscal 2013. The decrease is a result of Centers for Medicare & Medicaid Services (CMS) paying a portion of the retiree's premium. In addition, the decrease is attributable to the cessation of the self funding plan.
- Employer contributions of $397.4 million were received for fiscal 2014 compared to $447.3 million in fiscal 2013. This change is due to a decrease in the insurance contribution rate applied to CERS covered payroll.
- The reimbursement of retired-reemployed health insurance for fiscal 2014 totaled $5.6 million for the fiscal year ended June 30, 2014, compared to $5.8 million in the prior fiscal year.
- The Employer Group Waiver Plan receipts from the CMS subsidies for fiscal 2014 totaled $14,295 compared to $11.2 million in fiscal 2013. This decrease is due to the cessation of the self funding plan.
- The net appreciation in the fair value of investments for fiscal 2014 was $445.7 million compared to net appreciation of $232.9 million for the prior fiscal year.
- Interest, dividend and net securities lending income for fiscal 2014 was $97.1 million compared to $90.4 million in fiscal 2013.
- On August 6, 2012, the Board of Trustees voted to cease self-funding of healthcare benefits for most KRS Medicare eligible retirees. Premiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled $292.2 million. Payments for the self-funded healthcare reimbursements (over age 65) continued to decline and totaled $6.2 million. The total of insurance premiums paid was $298.4 million for fiscal 2014 compared to the prior plan year totaled $361.9 million.
- As part of the application process to the CMS to enter into a contract to offer a Medicare Prescription Drug Plan, Kentucky Retirement Systems was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents, and is invested on a daily basis. The balance as of June 30, 2014, totaled $100,039.

This discussion and analysis of Kentucky Retirement Systems' financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2014. Please read it in conjunction with the financial statements, which begins on page 68.

Using This Financial Report Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the combining financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two combining financial statements and two required schedules of historical trend information. The Combining Statement of Plan Net Position for the Pension Funds, on page 30, and the Combining Statement of Plan Net Position for the Insurance Fund, on page 32, provides a snapshot of the financial position of each of the three systems at June 30, 2014. The Combining Statement of Changes in Plan Net Position for the Pension Funds and the Combining Statement of Changes in Plan Net Position for the Insurance Fund summarizes the additions and deductions that occurred for each of the three systems during fiscal 2014.

The Schedules of the Net Pension Liability, the Schedules of Changes of Net Pension Liability, and Schedules of Funding Progress, on page 68, include current and historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of Employer Contribution, Schedules of Contributions from Employers and Other Contributing Entities, starting on page 71, present current and historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans

Funds as a Whole Kentucky Retirement Systems' combined net position increased $1,495.3 million, during the fiscal year ended June 30, 2014. Net position for the prior fiscal year increased by $831.6 million. The increase in net position for the plan year ended June 30, 2014 is primarily attributable to a net appreciation in the fair value of investments, an increase in member contributions and a decrease in health care costs. The analysis below focuses on net position (Table 1) and changes in net position (Table 2) of Kentucky Retirement Systems' Pension and Insurance Funds.

Table 1. Plan Net Position (in Millions)

	Pension Funds			Insurance Fund			Total		
Assets	**2014**	**2013**	**2012**	**2014**	**2013**	**2012**	**2014**	**2013**	**2012**
Cash & Investments	$12,758.2	$12,431.7	$11,922.7	$4,392.4	$3,992.1	$3,243.5	$17,150.6	$16,423.8	$15,166.2
Receivables	750.2	136.1	145.6	289.3	49.1	71.9	1,039.5	185.2	217.5
Equip/Int Assets, net of dep/amort.	10.5	16.1	13.8				10.5	16.1	13.8
Total Assets	**13,518.9**	**12,583.9**	**12,082.1**	**4,681.7**	**4,041.2**	**3,315.4**	**18,200.6**	**16,625.1**	**15,397.5**
Total Liabilities	**(1,503.0)**	**(1,430.8)**	**(1,328.1)**	**(527.3)**	**(519.3)**	**(226.0)**	**(2,030.3)**	**(1,950.1)**	**(1,554.1)**
Plan Net Position	**$12,015.9**	**$11,153.1**	**$10,754.0**	**$4,154.4**	**$3,521.9**	**$3,089.4**	**$16,170.3**	**$14,675.0**	**$13,843.4**

Table 2. Changes in Plan Net Position (in Millions)

	Pension Funds			Insurance Fund			Total		
Additions	**2014**	**2013**	**2012**	**2014**	**2013**	**2012**	**2014**	**2013**	**2012**
Member Cont.	$275.0	$276.3	$274.1	$	$	$	$275.0	$276.3	$274.1
Employer Cont.	768.3	741.8	591.4	397.4	447.3	436.2	1,165.7	1,189.1	1,027.6
Health Ins. Cont.	12.4	9.1	7.3				12.4	9.1	7.3
Premiums Rec'd				2.4	26.3	28.4	2.4	26.3	28.4
Retired Remp Ins.				5.6	5.8	6.3	5.6	5.8	6.3
Employer Group Waiver Plan					11.2	17.8		11.2	17.8
Invest. Inc. (net)	1,643.0	1,140.8	(28.5)	527.1	313.6	(55.3)	2,170.1	1,454.4	(83.8)
Total Additions	2,698.7	2,168.0	844.3	932.5	804.2	433.4	3,631.2	2,972.2	1,277.7
Deductions									
Benefit payments	1,769.7	1,706.2	1,649.2				1,769.7	1,706.2	1,649.2
Refunds	33.6	32.2	31.0				33.6	32.2	31.0
Administrative Ex.	32.6	30.5	27.8	1.6	9.8	11.9	34.2	40.3	39.7
Healthcare Costs				298.4	361.9	380.4	298.4	361.9	380.4
Total Deductions	1,835.9	1,768.9	1,708.0	300	371.7	392.3	2,135.9	2,140.6	2,100.3
Increase (Decrease) in Plan Net Position	**$862.8**	**$399.1**	**$(863.7)**	**632.5**	**$432.5**	**$41.1**	**1,495.3**	**$831.6**	**$(822.6)**

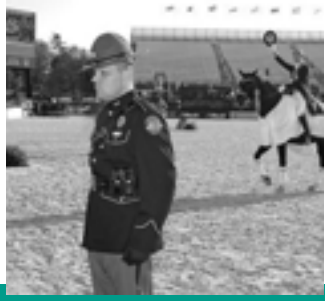
FUND ACTIVITIES

Pension Fund Activities

Member contributions decreased by $1.3 million. This is due to a cessation of the contributions from Seven Counties Services, Inc., a former member employer. In addition, there were lower services purchases. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Nonhazardous members pay pension contributions of 5% of creditable compensation and hazardous members contribute 8% of creditable compensation. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions increased by $26.5 million due to the rise in employer contribution rate applied to covered payroll.

Much of the data presented in this report is abbreviated ***"in thousands"*** or ***"in millions."***



Net position of the pension funds increased by $862.8 million ($12,015.9 million compared to $11,153.1 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. Net position of the insurance fund increased by $632.5 million ($4,154.4 million compared to $3,521.9 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance.

Table 3. Investment Income (Loss) for Pension Funds (in Millions)

Asset	2014	2013	2012
Increase (Decrease) in fair value of investments	$489	$426	$(238)
Investment income net of investment expense	281	250	232
Gain (Loss) on sale of investments	873	465	(23)
Net Investment Income (Loss)	**$1,643**	**$1,141**	**$(29)**

Table 4. Investment Income (Loss) for Insurance Fund (in Millions)

Asset	2014	2013	2012
Increase (Decrease) in fair value of investments	$288	$125	$(21)
Investment income net of investment expense	81	81	63
Gain (Loss) on sale of investments	158	108	(97)
Net Investment Income (Loss)	**$527**	**$314**	**$(55)**

Insurance fund deductions decreased by $71.7 million due to the cessation of the self funding plan.

Net investment income increased by $502 million. This is illustrated in Table 3. The pension funds experienced an increase in income primarily due to the gain on the sale of investments.

Pension fund deductions increased by $67.0 million caused principally by an increase of $63.5 million in benefit payments. Refunds of member contributions increased by $1.5 million.

Insurance Fund Activities Employer contributions paid into the insurance fund decreased by $49.9 million over the prior fiscal year. This decrease is a result of the reduction of the employer contribution rates applied to CERS Nonhazardous and CERS Hazardous covered payrolls, as well as the loss of insurance contributions from Seven Counties Services, Inc.

Net investment income increased $213 million. This increase in net investment income is due primarily to the rise in the fair value of investments. This is illustrated in Table 4.

Historical Trends

Accounting standards require that the Statement of Net Position state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the Schedules of Net Pension Liability and the Schedules of Funding Progress beginning on page 68. The asset value stated in the Schedules of Funding Progress is the actuarial value of assets. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by Kentucky Retirement Systems' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is defined as the unfunded actuarial accrued liability.

The unfunded actuarial accrued liability in the pension plans increased by $327.2 million for a total unfunded amount of $14,830.1 million as of June 30, 2014, compared to an unfunded amount of $14,502.9 million as of June 30, 2013. In recent years, funding levels for the pension funds have fallen significantly due to investment returns less than the actuarially assumed rate and have been higher than anticipated retirement rates. In addition, KERS, KERS Hazardous, and SPRS are funded less than the actuarially determined rate. Within the KERS and SPRS systems, employer contribution rate reductions enacted by the Kentucky General Assembly have limited the ability of KRS to correct the declining funding levels.

The insurance plan's unfunded actuarial accrued liability as of June 30, 2014, decreased to $2,943.6 million from $3,092.1 million as of June 30, 2013. This is a decrease in the unfunded actuarial accrued liability of $148.5 million. This decrease is due to the change for the Medicare-eligible retirees from the self-insured health plans to fully insured Medicare Advantage plans administered by Humana.

Annual required contributions of the employers as actuarially determined and actual contributions made by employers and other contributing entities in relation to the required contributions are provided in the Schedules of Employer Contributions and in the Schedules of Contributions from Employers and Other Contributing Entities on page 71. The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS systems is attributable to the fact that the employer contribution rate set by the Kentucky General Assembly is less than the rate recommended by the KRS Actuary and adopted by the KRS Board of Trustees.

Combining Statement of Plan Net Position for Pension Funds *(in Thousands)*

as of June 30, 2014 with Comparative Totals as of June 30, 2013

Assets	KERS Haz	KERS Non Haz	CERS Haz	CERS Non Haz	SPRS	2014 KRS Total	2013 KRS Total
Cash & Short-Term Investments							
Cash	$117	$1,408	$222	$1,724	$273	$3,744	$5,712
Short-Term Investments	21,453	109,678	60,761	238,111	10,980	440,983	419,181
Total Cash and Short-Short Term Investments	**21,570**	**111,086**	**60,983**	**239,835**	**11,253**	**444,727**	**424,893**
Receivables							
Contributions	4,398	36,521	12,765	51,683	2,683	108,050	102,303
Investment Income	29,441	153,768	110,363	334,389	14,140	642,101	33,759
Total Receivables	**33,839**	**190,289**	**123,128**	**386,072**	**16,823**	**750,151**	**136,062**
Investments at Fair Value							
Corporate & Government Bonds	135,640	702,249	534,434	1,616,383	62,596	3,051,302	3,520,528
Absolute Return	61,379	302,079	219,359	690,883	29,497	1,303,197	
Private Equities	61,393	394,632	197,409	605,579	28,453	1,287,466	
Derivatives	195	811	723	2,233	89	4,051	
Equity Contracts							251
Interest Rate Contracts							30,596
Foreign Exchange Contracts							12,995
Swaps							4,030
Options							963
Corporate Stocks	254,625	932,372	982,307	3,072,452	116,524	5,358,280	6,464,253
Mortgages							371,940
Real Estate	22,586	89,558	74,546	230,961	9,455	427,106	174,944
Total Investments at Fair Value	**535,818**	**2,421,701**	**2,008,778**	**6,218,491**	**246,614**	**11,431,402**	**10,580,500**
Securities Lending Collateral Invested	41,482	184,071	154,899	482,685	18,960	882,097	1,426,438
Equipment (net of accumulated depreciation)	7	70	12	131	1	221	3,896
Intangible Assets (net of accumulated amortization)	301	3,505	494	5,965	53	10,318	12,194
Total Assets	**633,017**	**2,910,722**	**2,348,294**	**7,333,179**	**293,704**	**13,518,916**	**12,583,983**
Liabilities							
Accounts Payable	1,990	2,138	1,186	3,340	282	8,936	4,363
Investment Accounts Payable	28,061	146,223	105,207	319,007	13,488	611,986	
Securities Lending Collateral Obligations	41,482	184,071	154,899	482,685	18,960	882,097	1,426,438
Total Liabilities	**71,533**	**332,432**	**261,292**	**805,032**	**32,730**	**1,503,019**	**1,430,801**
Total Net Position for Pension Benefits	**$561,484**	**$2,578,290**	**$2,087,002**	**$6,528,147**	**$260,974**	**$12,015,897**	**$11,153,182**

See accompanying notes to the combining financial statements.

Combining Statement of Changes in Plan Net Position for Pension Funds *(in Thousands)*

for the fiscal year ended June 30, 2014 with Comparative Totals for the fiscal year ended June 30, 2013

Additions	KERS Haz	KERS Non Haz	CERS Haz	CERS Non Haz	SPRS	2014 KRS Total	2013 KRS Total
Members' Contributions	$11,995	$92,941	$42,631	$122,459	$5,006	$275,032	$276,346
Employers' Contributions	11,671	296,836	115,240	324,231	20,279	768,257	741,763
Health Insurance Contributions (HB1)	551	4,546	1,091	6,109	70	12,367	9,187
Total Contributions	**24,217**	**394,323**	**158,962**	**452,799**	**25,355**	**1,055,656**	**1,027,296**
Investment Income							
From Investing Activities							
↘ Net Appreciation in FV	66,475	265,388	241,913	757,252	30,912	1,361,940	890,641
↘ Interest/Dividends	16,335	80,939	54,124	161,830	10,399	323,627	285,999
↘ Total Investing Activities Income	82,810	346,327	296,037	919,082	41,311	1,685,567	1,176,640
↘ Investment Expense	2,261	9,153	8,221	25,695	1,020	46,350	41,127
Net Income from Investing Activities	80,549	337,174	287,816	893,387	40,291	1,639,217	1,135,513
From Securities Lending Activities							
↘ Securities Lending Income	181	852	702	2,243	88	4,066	5,922
From Securities Lending Expense							
↘ Security Borrower (income)	(25)	(30)	(91)	(277)	(10)	(433)	(224)
↘ Security Lending Agent Fees	31	134	119	376	15	675	865
Net Income from Securities Lending Activities	175	748	674	2,144	83	3,824	5,281
Total Net Investment Income	**80,724**	**337,922**	**288,490**	**895,531**	**40,374**	**1,643,041**	**1,140,794**
Total Additions	**104,941**	**732,245**	**447,452**	**1,348,330**	**65,729**	**2,698,697**	**2,168,090**
Deductions							
Benefit Payments	54,321	889,936	189,635	582,850	53,026	1,769,768	1,706,220
Refunds	2,830	13,627	2,665	14,286	214	33,621	32,164
Administrative Expenses	898	11,145	1,721	18,615	214	32,593	30,581
Total Deductions	**58,049**	**914,708**	**194,021**	**615,751**	**53,453**	**1,835,982**	**1,768,965**
Net Increase in Plan Position	46,892	(182,463)	253,431	732,579	12,276	862,715	399,125
Total Net Position for Pension Benefits							
Beginning of Year	514,592	2,760,753	1,833,571	5,795,568	248,698	11,153,182	10,754,057
End of Year	**$561,484**	**$2,578,290**	**$2,087,002**	**$6,528,147**	**$260,974**	**$12,015,897**	**$11,153,182**

See accompanying notes to the combining financial statements.

"The displayed market values include investable assets held by each System, and its associated contributions, payables, and equipment and intangible assets; unlike those found in the Investment Section (pages 105-107), which include only those investable assets held by each System."

Combining Statement of Plan Net Position for Insurance Funds (in Thousands)

as of June 30, 2014 with Comparative Totals as of June 30, 2013

Assets	KERS Haz	KERS Non Haz	CERS Haz	CERS Non Haz	SPRS	2014 KRS Total	2013 KRS Total
Cash and Short-Term Investments							
Cash	$50	$101	$2	$101	$100	$354	$1,423
Short-Term Investments	14,788	31,821	28,645	57,968	5,467	138,689	163,336
Medicare Drug Deposit	10	20	23	42	5	100	102
Total Cash and Short Term Investments	**14,848**	**31,942**	**28,670**	**58,111**	**5,572**	**139,143**	**164,861**
Receivables							
Contributions	2,194	14,398	5,222	13,617	1,237	36,668	38,995
Investment Income	27,308	39,256	62,179	113,965	9,969	252,677	10,123
Total Receivables	29,502	53,654	67,401	127,582	11,206	289,345	49,118
Investments at Fair Value							
Corporate & Government Bonds	150,261	224,946	359,809	652,955	57,459	1,445,430	1,203,107
Derivatives	91	111	225	405	36	868	
Private Equities	27,003	39,791	68,507	123,385	12,155	270,841	
Absolute Return	45,241	67,749	108,162	191,587	17,270	430,009	
Equity Contracts							69
Interest Rate Contracts							5,561
Swaps							1,488
Foreign Exchange Contracts							3,415
Options							279
Corporate Stocks	175,794	243,662	417,006	760,918	64,359	1,661,739	1,945,363
Mortgages							103,488
Real Estate	16,039	21,459	38,076	69,293	6,138	151,005	53,303
Total Investments at Fair Value	414,429	597,718	991,785	1,798,543	157,417	3,959,892	3,316,073
Securities Lending Collateral Invested	8,470	66,345	44,714	169,211	4,630	293,370	511,108
Total Assets	**467,249**	**749,659**	**1,132,570**	**2,153,447**	**178,825**	**4,681,750**	**4,041,160**
Liabilities							
Accounts Payable	2	9	6	28	2	47	8,158
Investment Accounts Payable	25,252	36,400	57,547	105,497	9,235	233,931	
Securities Lending Collateral Obligations	8,470	66,345	44,714	169,211	4,630	293,370	511,108
Total Liabilities	**33,724**	**102,754**	**102,267**	**274,736**	**13,867**	**527,348**	**519,266**
Total Plan Net Position for Insurance Benefits	**$433,525**	**$646,905**	**$1,030,303**	**$1,878,711**	**$164,958**	**$4,154,402**	**$3,521,894**

See accompanying notes to the combining financial statements.

"The displayed market values include investable assets held by each System, and its associated contributions, payables, and equipment and intangible assets; unlike those found in the Investment Section (pages 105-107), which include only those investable assets held by each System."

Combining Statement of Changes in Plan Net Position for Insurance Funds (in Thousands)

for the fiscal year ended June 30, 2014 with Comparative Totals for the fiscal year ended June 30, 2013

Additions	KERS Haz	KERS Non Haz	CERS Haz	CERS Non Haz	SPRS	2014 KRS Total	2013 KRS Total
Employers' Contributions	$23,336	$164,176	$74,265	$121,160	$14,498	$397,435	$447,338
Employer Group Waiver Plan		8		6		14	11,189
Premiums Received from Retirees	38	917	31	1,450	11	2,447	26,346
Retired Reemployed Healthcare (HBI)	538	2,434	527	2,117	(5)	5,611	5,816
Total Contributions	**23,912**	**167,535**	**74,823**	**124,733**	**14,504**	**405,507**	**490,689**
Investment Income							
From Investing Activities							
↘ Net Appreciation in FV	43,411	83,783	105,346	195,952	17,168	445,660	232,863
↘ Interest/Dividends	10,293	14,724	23,681	43,178	3,937	95,813	88,645
↘ Total Investing Activities Income	53,704	98,507	129,027	239,130	21,105	541,473	321,508
↘ Investment Expense	1,622	1,929	4,075	7,388	647	15,661	9,599
Net Income from Investing Activities	52,082	96,578	124,952	231,742	20,458	525,812	311,909
From Securities Lending Activities							
↘ Securities Lending Income	144	175	354	638	54	1,365	2,008
From Securities Lending Expense							
↘ Security Borrower (income)	(11)	(14)	(28)	(54)	(5)	(112)	15
↘ Security Lending Agent Fees	23	30	57	103	9	222	282
Net Income from Securities Lending Activities	132	159	325	589	50	1,255	1,711
Total Net Investment Income	**52,214**	**96,737**	**125,277**	**232,331**	**20,508**	**527,067**	**313,620**
Total Additions	**76,126**	**264,272**	**200,100**	**357,064**	**35,012**	**932,574**	**804,309**
Deductions							
Healthcare Premiums Subsidies	15,448	111,051	60,522	92,637	12,584	292,242	283,118
Administrative Fees	77	719	273	488	57	1,614	9,758
Excise Tax	1	17	1	20	1	40	-
Self Funding Insurance Costs	(42)	1,620	321	4,168	103	6,170	78,852
Total Deductions	**15,484**	**113,407**	**61,117**	**97,313**	**12,745**	**300,066**	**371,728**
Net Increase in Net Position	60,642	150,865	138,983	259,751	22,267	632,508	432,581
Total Plan Net Position for Insurance Benefits							
Beginning of Year	372,883	496,040	891,320	1,618,960	142,691	3,521,894	3,089,313
End of Year	**$433,525**	**$646,905**	**$1,030,303**	**$1,878,711**	**$164,958**	**$4,154,402**	**$3,521,894**

See accompanying notes to the combining financial statements.

NOTE A. Summary of Significant Accounting Policies

This summary of significant accounting policies of the Kentucky Retirement Systems (KRS) is presented to assist in understanding KRS' combining financial statements. The combining financial statements and notes are representations of KRS' management, which is responsible for their integrity and objectivity. These accounting policies conform to accounting principles generally accepted in the United States of America and have been consistently applied in the preparation of the combining financial statements.

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees (the Board) of KRS administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Each system's assets are used only for the payment of benefits to the members of that system, and a pro rata share of administrative costs, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

The Board consists of: Thomas K. Elliott, Chair, Governor Appointee; Daniel Bauer, Vice Chair, Governor Appointee; Mike Cherry, Governor Appointee; Edwin Davis, elected by CERS; J.T. Fulkerson, Governor Appointee; Joseph Hardesty, Governor Appointee; Vince Lang, elected by KERS; Tim Longmeyer, Personnel Secretary; Randy J. Overstreet, elected by SPRS; Mary Helen Peter, elected by KERS; David Rich, elected by CERS; Randy K. Stevens, Governor Appointee; and, William Summers, elected by CERS.

Under the provisions of Kentucky Revised Statute Section 61.701, the KRS Board of Trustees administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by KRS: (1) KERS; (2) CERS; and (3) SPRS. The following notes apply to the various funds administered by KRS.

Basis of Accounting KRS' combining financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and investment expenses are recognized when incurred.

Methods Used to Value Investments Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Short-term investments are reported at cost, which approximates fair value. See Note D for further discussion of fair value measurements. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Gain (loss) on investments includes KRS' gains and losses on investments bought and sold as well held during the fiscal year.

Estimates The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged to expense as incurred. The capitalization threshold used in fiscal years 2014 and 2013 was $3,000 *(see Note J for further information).*

Intangible Assets Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is ten years. The capitalization threshold used in fiscal years 2014 and 2013 was $3,000 *(see Note K for further information)*.

Contributions Receivable Contributions receivable consist of amounts due from employers. The management of KRS considers contributions receivable to be fully collectible; accordingly, no allowance for doubtful accounts is considered necessary. If amounts become uncollectible, they will be charged to operations when that determination is made. If amounts previously written off are collected, they will be credited to income when received.

Investment Income/Receivable/Payable Due to the timing of receiving partnership financial information, the fair values of the investments in certain limited partnerships have been estimated using the net asset value of the ownership interest in partners' capital as of March 31 of each fiscal year. KRS management will monitor differences in the fair values of these investments between March 31 and June 30, of each fiscal year, and will disclose any and all material differences. The investment receivable payable accounts consists of buys and sells of securities, as well as all investment related accruals.

Payment of Benefits Benefits are recorded when paid.

Expense Allocation Administrative expenses of KRS are allocated in proportion to the number of total members participating in each plan and direct investment manager expenses are allocated in proportion to the percentage of investment assets held by each plan.

Component Unit KRS is a component unit of the Commonwealth of Kentucky (the Commonwealth) for financial reporting purposes.

KERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. CERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. SPRS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Board of KRS without further legislative review. The methods used to determine the employer rates for all systems are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

Reclassifications Certain amounts in 2013 combining financial statements have been reclassified to conform to the 2014 presentation with no impact on total assets, liabilities, plan net position, or changes in plan net positions.

Recent Accounting Pronouncements In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 67, *Financial Reporting for Pensions-an Amendment of GASB Statement No. 25*. The objective of this statement was to improve financial reporting by state and local governmental pension plans. The statement required defined benefit pension plans to present two financial statement fiduciary net position and a statement of changes in fiduciary net position. In addition, the statement required that notes to the financial statements include descriptive information, such as the types of benefits provided, the classes of plan members covered, and the composition of the pension plans board, among other detailed requirements. KRS adopted the requirements of this statement. It has only impacted the pension funds. The insurance fund was not impacted and remains consistent with fiscal 2013.

In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 68, *Accounting and Financial Reporting for Pensions-an Amendment of GASB Statement No. 27*. The objective of this Statement is to improve financial reporting by state and local governmental pension plans. In addition, it requires the liability of the employers and non-employer contributing entities to employees for defined benefit pensions (net pension liability) to be measured as the portion of the present value of projected benefit payments to be provided through the pension plan to current active and inactive employees that is attributed to those employees' past periods of service (total pension liability), less the amount of the pension plan's fiduciary net position. In addition, this Statement requires additional changes to the Required Supplementary Information, among other extensive changes. This Statement becomes effective for the fiscal year beginning July 1, 2014. This statement will impact KRS and will be implemented in fiscal 2015.

In November 2013, the GASB issued Statement No. 71, *Pension Transition for Contributions made Subsequent to the Measurement Date-an Amendment of GASB Statement No. 68.* The objective of this Statement is to address an issue regarding application of the transition provisions of GASB Statement No. 68. The issue relates to amounts associated with contributions, if any, made by a state or local government employer or non-employer contributing entity to a defined benefit pension plan after the measurement date of the government's beginning net pension liability. This Statement becomes effective for the fiscal year beginning July 1, 2014. KRS is currently reviewing the Statement's requirements. This statement will impact KRS and will be implemented in fiscal 2015.

House Bill 1 was signed by the Governor of the Commonwealth on June 27, 2008. It contained a number of changes that KRS implemented effective September 1, 2008.

Note B. Plan Descriptions & Contribution Information

Membership Information *

KERS Employees

	2014			2013		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	38,022	2,467	40,489	37,240	2,312	39,552
Inactive Memberships	41,213	3,318	44,531	40,375	2,882	43,257
Active Plan Members	40,500	4,094	44,594	40,710	4,057	44,767
Total	**119,735**	**9,879**	**129,614**	**118,325**	**9,251**	**127,576**
Number of Participating Employers			354			348

CERS Employees

	2014			2013		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	46,112	6,066	52,178	44,164	5,840	50,004
Inactive Memberships	70,231	2,038	72,269	67,013	1,956	68,969
Active Plan Members	82,494	9,189	91,683	82,631	9,069	91,700
Total	**198,837**	**17,293**	**216,130**	**193,808**	**16,865**	**210,673**
Number of Participating Employers			1,137			1,126

SPRS Employees

Members	**2014**	**2013**
Retirees and Beneficiaries Receiving Benefits	1,279	1,240
Inactive Memberships	239	236
Active Plan Members	861	901
Total	**2,379**	**2,377**
Number of Participating Employers	1	1

* *Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Nonhazardous, then KERS Nonhazardous.*

2014 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non Haz	9,491	797	506	1,370	17,738
KERS Haz	647	448	110	56	1,104
CERS Non Haz	7,843	546	278	2,583	20,200
CERS Haz	1,447	2,184	432	89	2,510
SPRS	263	444	78	20	712
Total	**19,691**	**4,419**	**1,404**	**4,118**	**42,264**

2013 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non Haz	9,364	1,276	618	1,474	16,834
KERS Haz	625	451	106	60	985
CERS Non Haz	7,652	857	340	2,707	18,824
CERS Haz	1,425	2,155	400	79	2,324
SPRS	283	421	76	20	682
Total	**19,349**	**5,160**	**1,540**	**4,340**	**39,649**

Senate Bill 2 was signed by the Governor on April 4, 2013. Plan members who began participating on, or after, January 1, 2014, are required to participate in the Tier 3 plan.

KRS Pension Plans

Pension Plan Descriptions

KERS - (Kentucky Employees Retirement System) This system consists of two plans - ***Nonhazardous and Hazardous***. Each plan is a cost-sharing multiple-employer defined benefit pension plan that covers all regular full-time members employed positions of any state department, board, or agency directed by Executive Order to participate in KERS.

CERS - (County Employees Retirement System) This system consists of two plans - ***Nonhazardous and Hazardous***. Each plan is a cost-sharing multiple-employer defined benefit pension plan that covers all regular full-time members employed in nonhazardous positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate in CERS.

SPRS - (State Police Retirement System) This system is a single-employer defined benefit pension plan that covers all full-time state troopers employed position by the Kentucky State Police.

These systems provide for retirement, disability, and death benefits to system members. Retirement benefits may be extended to beneficiaries of members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year.

Cost of Living Adjustment (COLA) On July 1, 2013, the COLA was not granted. Effective July 1, 2009, and on July 1 of each year thereafter through June 30, 2014, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least 12 months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than 12 months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the 12 months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce the COLA if, in its judgment, the welfare of the Commonwealth so demands.

Contributions For the fiscal years ended June 30, 2014 and 2013, plan members who began participating prior to September 1, 2008, were required to contribute 5% nonhazardous and 8% hazardous of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate for KERS and SPRS pensions. Participating employers were required to contribute at an actuarially determined rate for CERS pensions. Per Kentucky Revised Statute Sections {KERS 61.565(3); CERS 78.545(33); SPRS 16.645(18)}, normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget for KERS and SPRS.

For the fiscal year ended June 30, 2014 participating employers contributed a percentage of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years was a percentage of each employee's creditable compensation. See Chart below for the 2014 and 2013 fiscal year percentages.

PENSION	Employer Contribution Rates		Actuarially Recommended Rates	
	2014	2013	2014	2013
KERS Nonhazardous	17.29%	14.86%	32.57%	28.03%
KERS Hazardous	14.89%	13.41%	17.00%	16.16%
CERS Nonhazardous	13.74%	12.62%	13.74%	12.62%
CERS Hazardous	21.77%	20.10%	21.77%	20.10%
SPRS	39.50%	33.24%	53.35%	47.48%

In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% for nonhazardous and 9% for hazardous of their annual creditable compensation. 5% for nonhazardous and 8% for hazardous of the contribution was deposited to the member's account while the 1% was deposited to an account created for the payment of health insurance benefits under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% for nonhazardous and 8% for hazardous of their annual creditable compensation.

In accordance with Senate Bill 2, signed by the Governor on April 4, 2013, plan members who began participating on, or after, January 1, 2014, were required to contribute to the Cash Balance Plan. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. Members in the plan contribute a set percentage of their salary each month to their own account. Members contribute 5% (nonhazardous) and 8% (hazardous) of their annual creditable compensation and 1% to the health insurance fund which is not credited to the member's account and is not refundable. The employer contribution rate is set annually by the Board based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A member's account is credited with a 4% (nonhazardous) and 7.5% (hazardous) employer pay credit. The employer pay credit represents a portion of the employer contribution.

KRS Insurance

Plan Description The Kentucky Retirement Systems Insurance Fund (Insurance Fund) was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The Insurance Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2014, insurance premiums withheld from benefit payments for members of the systems were $24,002,506 and $1,117,614 for KERS nonhazardous and hazardous, respectively; $24,206,307 and $1,936,349 for CERS nonhazardous and hazardous, respectively; and, $177,804 for SPRS. For fiscal year 2013, insurance premiums withheld from benefit payments for members of KERS were $27,574,678 and $1,209,245 for KERS nonhazardous and KERS hazardous, respectively; $27,804,392 and $2,068,890 for CERS nonhazardous and CERS hazardous, respectively; and, $238,774 for SPRS. The Insurance Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2014, the Insurance Fund had 104,635 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Insurance Fund is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are shown in the chart.

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after, July 1, 2003. Once members reach a minimum vesting period of ten years, nonhazardous employees whose participation began on, or after, July 1, 2003 earn $10 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn $15 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives $10 per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree COLA, which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within 20 years.

On August 6, 2012, the Board voted to cease self-funding of healthcare benefits for most KRS Medicare eligible retirees. The Board elected to contract with Humana Insurance Company to provide healthcare benefits to KRS' retirees through a fully-insured Medicare Advantage Plan. The Humana Medicare Advantage Plan became effective January 1, 2013.

INSURANCE

	Employer Contribution Rates		Actuarially Recommended Rates	
	2014	2013	2014	2013
KERS Nonhazardous	9.50%	8.75%	12.71%	16.52%
KERS Hazardous	17.32%	16.38%	11.84%	19.73%
CERS Nonhazardous	5.15%*	6.93%*	5.84%	8.59%
CERS Hazardous	13.93%*	17.5%*	16.02%	20.10%
SPRS	31.65%	30.43%	43.17%	55.93%

** Final rate as a result of the 10 year phase-in of increases to the insurance rate.*

Portion Paid by Insurance Fund

Years of Service	Paid by Insurance Fund (%)
20+ years	100%
15-19 years	75%
10-14 years	50%
4-9 years	25%
Less than 4 years	0%

Note C. Cash, Short-Term Investments & Securities Lending Collateral

The provisions of GASB Statement No. 28, *Accounting and Financial Reporting for Securities Lending Transactions* require that cash received as collateral on securities lending transactions, and investments made with that cash, be reported as assets on the financial statements. In accordance with GASB No. 28, KRS classifies certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following at June 30:

Cash & Short-Term Investments

KERS

Assets	2014	2013
Cash	$1,525,039	$2,519,457
Short-Term Investments	131,130,977	119,306,174
Securities Lending Collateral Invested	225,552,963	326,406,362
KERS Total	**$358,208,979**	**$448,231,993**

CERS

Assets	2014	2013
Cash	$1,945,877	$3,030,064
Short-Term Investments	298,872,570	289,346,687
Securities Lending Collateral Invested	637,584,374	1,065,084,771
CERS Total	**$938,402,821**	**$1,357,461,522**

SPRS

Assets	2014	2013
Cash	$273,391	$162,872
Short-Term Investments	10,979,712	10,528,027
Securities Lending Collateral Invested	18,959,641	34,947,388
SPRS Total	**$30,212,744**	**$45,638,287**

KRS Insurance Fund

Assets	2014	2013
Cash	$354,145	$1,422,780
Short-Term Investments	138,688,699	163,336,293
Medicare Drug Deposit	100,039	100,691
Securities Lending Collateral Invested	293,369,587	511,107,721
Insurance Fund Total	**$432,512,470**	**$675,967,485**

Each plan's assets are used only for the payment of benefits to the members of that plan and pro rata share of administrative cost in accordance with the provisions of Kentucky Revised Statute sections 16.555, 61.570, and 78.630.

Note D. Investments

PRUDENT PERSON RULE -
A legal maxim restricting the discretion in a client's account to investments that a prudent person seeking reasonable income and preservation of capital might buy for his or her own portfolio.

Investment Policies Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of KRS. The Board has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the "Prudent Person Rule" (set forth in Kentucky Revised Statute 61.650) and manage those funds consistent with the long-term nature of the systems. The Investment Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS. The Statement of Investment Policy contains the specific guidelines for the investment of pension and insurance assets. Additionally, the Investment Committee establishes specific investment guidelines in the Investment Management Agreement for each investment management firm.

Equity Investments Investments may be made in common stock, securities convertible into common stock, preferred stock of publicly traded companies on stock markets, asset class relevant Exchange Traded Funds' (ETF's) or any other type of security contained in a manager's benchmark. Each individual equity account has a comprehensive set of investment guidelines prepared, which contains a listing of permissible investments, portfolio restrictions and standards of performance.

Fixed Income Investments The fixed income accounts may include, but are not limited to, the following fixed income securities: US Government and Agency bonds; investment grade US corporate credit; investment grade non-US corporate credit; non-investment grade US corporate credit including both bonds and bank loans; non-investment grade non-US corporate credit including bonds and bank loans; municipal bonds; non-US sovereign debt; mortgages, including residential mortgage backed securities; commercial mortgage backed securities, and whole loans; asset-backed securities and emerging market debt (EMD), including both sovereign EMD and corporate EMD; and, asset class relevant ETF's.

Private Equity, Equity Real Estate, Real Return, Absolute Return Investments Subject to the specific approval of the Investment Committee of the Board, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, but not limited to and without limitation, venture capital, private equity, private placements, real assets and absolute return investments which the Investment Committee believes has excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities The following short-term investment vehicles are considered acceptable: Publicly traded investment grade corporate bonds, variable rate demand notes, government and agency bonds, mortgages, municipal bonds, and collective Short Term Investment Fund's (STIF), money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements, relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the instrument has a split rating, the lower of the two ratings shall prevail. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time

In accordance with GASB Statement No. 53, Accounting and Financial Reporting for Derivative Instruments, KRS provides this additional disclosure regarding its derivatives. As of June 30, 2014, KRS has the following derivative instruments outstanding:

NOTE D: INVESTMENTS

Item	Type	Objective	Cost	Notional Cost	Market Value	Terms	Notional Market Value
PENSION:							
A	Equity Private	Hedge against changes in interest rates	$2,291,237	$0	$3,027,212	Various	$0
B	US Equity Index Futures	Hedge against the risk that interest rates will move in an adverse direction	0	6,639,010	145,700	Various	6,784,710
C	International Government Bond Futures	Hedge against sudden or dramatic shifts in interest rates	0	(49,289,734)	(1,039,224)	Various	(50,328,958)
D	Interest Rate Swaps	Hedge against sudden or dramatic shifts in interest rates	87,898	0	1,113,524	Various	0
E	Credit Default Swaps	Hedge against sudden or dramatic shifts in interest rates	(892,077)	0	871,689	Various	0
F	Treasury Notes	Hedge against sudden or dramatic shifts in interest rates	$0	(34,999,286)	(51,433)	Various	(35,050,719)
G	Treasury Bonds	Hedge against sudden or dramatic shifts in interest rates	$0	(3,201,879)	(17,183)	Various	(3,219,062)
INSURANCE:							
H	Equity Private Placements	Hedge against changes in interest rates	869,759	0	1,157,266	Various	0
I	US Equity Index Futures	Hedge against risk that interest rates will move in an adverse direction	0	5,353,003	122,377	Various	5,475,380
J	International Government Bond Futures	Hedge against sudden or dramatic shifts in interest rates	0	(14,986,768)	(316,145)	Various	(15,302,913)
K	Interest Rate Swaps	Hedge against sudden or dramatic shifts interest rates	(438,660)	0	(213,601)	Various	0
L	Credit Default Swaps	Hedge against sudden or dramatic shifts in interest rates	(507,545)	0	155,993	Various	0
M	Treasury Notes	Hedge against sudden or dramatic shifts in interest rates	0	(19,783,259)	(33,982)	Various	(19,817,241)
N	Treasury Bonds	Hedge against sudden or dramatic shifts in interest rates	0	(956,539)	(3,774)	Various	(960,313)

For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combining Statement of Plan Net Position for both Pension and Insurance funds.

left until the next interest rate reset occurs, but in no case will any security have a stated final maturity of more than three years.

KRS' fixed income managers, who utilize cash equivalent securities as an integral part of their investment strategy, are exempt from the permissible investments contained in the preceding paragraph. Permissible short-term investments for fixed income managers shall be included in the investment manager's investment guidelines.

Mortgages Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments.

Investment Expenses In accordance with GASB Statement No. 25, *Financial Reporting for Defined Pension Benefit Plans, and Note Disclosures for Defined Contribution Plans,* KRS has exercised professional judgement to report investment expenses. It is not cost beneficial to separate certain investment expenses from either the related investment income or the general administrative expenses.

Derivatives Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position.

Derivative Policy All of the above derivative instruments have various effective dates and maturity dates.

It is the policy of KRS that investment managers may invest in derivative securities, or strategies which make use of derivative investments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Examples of such derivatives include, but are not limited to, foreign currency forward contracts, collateralized mortgage obligations, treasury inflation protected securities, futures, options and swaps.

Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flows, such as interest only, principal only, inverse floater, or structured note securities are permitted only to the extent authorized in a contract or an alternative investment offering memorandum or agreement.

Investments in securities such as collateralized mortgage obligations and planned amortization class issues are allowed if, in the judgment of the investment manager, they are not expected to be subject to large or unanticipated changes in duration or cash flows. Investment managers may make use of derivative securities for defensive or hedging purposes. Any derivative security shall be sufficiently liquid that it can be expected to be sold at, or near, its most recently quoted market price.

For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combining Statement of Plan Net Position for both Pension and Insurance Funds.

Basis Risk Derivative instruments B and I expose KRS to basis risk in that the value of the underlying equity index future may decrease in fair value relative to the cash market.

Interest Rate Risk Derivative instruments A, C, D, E, F, G, H, J, K, L, M, and N expose KRS to interest rate risk in that changes in interest rates will adversely affect the fair values of KRS' financial instruments.

In June 2011, the GASB issued Statement No. 64, *Derivative Instruments: Application of Hedge Accounting Termination Provisions, an Amendment of GASB Statement No. 53*. The objective of this Statement is to clarify whether an effective hedging relationship continues and hedge accounting should continue to be applied. Upon the termination of a hedging derivative instrument, hedge accounting should cease and investment income should immediately recognize deferred outflows of resources or deferred inflows of resources. KRS maintains its derivative instruments as investment derivative instruments for all accounting and financial reporting purposes. Therefore, hedge accounting and the related effectiveness testing is not performed.

Custodial Credit Risk for Deposits Custodial credit risk for deposits is the risk that in the event of a financial institution failure, KRS' deposits may not be returned. All non-investment related bank balances are held by JP Morgan Chase. All non-investment related bank balances are held in KRS' name and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). In 2010, the US Congress passed the Financial Crisis Bill and permanently increased the FDIC deposit insurance coverage to $250,000. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount.

As of June 30, 2014 and 2013, deposits for KRS pension funds were $4,041,524 and $9,333,855, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

As of June 30, 2014 and 2013, deposits for KRS insurance fund were $1,445,674 and $1,430,267, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. KRS does not have an explicit policy with regards to Custodial Credit Risk for investments. As of June 30, 2014 and 2013, the following currencies were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name. These funds are cash held by KRS' Global Managers and consist of various currencies.

Pension Funds Investments Summary As of June 30, 2014 & 2013

Type	2014	2013
US Gov't & Agency Fixed Income Securities	$-	$1,582,604,644
US Corporate Fixed Income Securities	-	1,297,990,113
Municipal Debt Securities	-	70,363,221
Fixed Income Securities	3,051,301,974	
Short-Term Investments	440,983,259	425,404,014
Equity Securities	5,358,280,375	4,764,035,886
Private Equity Limited Partnerships	1,287,466,227	1,705,481,097
Real Estate	427,105,738	174,943,810
Derivatives	4,050,284	
Absolute Return	1,303,197,181	
Other*	-	978,860,163
Total	**$11,872,385,038**	**$10,999,682,948**

**This balance consists of the following*

Type	2014	2013
Cash Collateral - US Dollars	$-	$13,401,306
Sukuk[1]	-	263,923
Derivative Offsets:		
↘ Equity Futures	-	(1,739,458)
↘ Hedge Funds	-	988,790,368
Liabilities		
↘ Obligation to Return Cash Collateral - US Dollars	-	(21,855,976)
Total	**$0**	**$978,860,163**

[1] The Arabic name for financial certificates, but commonly refers to the Islamic equivalent of bonds; since fixed income interest bearing bonds are not permissible in Islam, Sukuk securities are structured to comply with Islamic Law and its investment principles, which prohibits the charging, or paying, of interest.

Custodial Credit Risk

Pension Fund	2014	2013
Foreign Currency	$9,692,881	$7,380,209
Insurance Fund		
Foreign Currency	$3,145,400	$2,352,683

Insurance Fund Investments Summary As of June 30, 2014 & 2013

Type	2014	2013
US Gov't & Agency Fixed Income Securities	$-	$555,483,396
US Corporate Fixed Income Securities	-	407,385,223
Municipal Debt Securities	-	14,780,723
Fixed Income Securities	1,445,430,202	
Short-Term Investments	138,688,699	164,183,759
Equity Securities	1,661,738,753	1,605,002,880
Private Equity Limited Partnerships	270,841,221	343,283,318
Real Estate	151,004,974	53,302,498
Derivatives	868,135	
Absolute Return	430,008,984	
Other**	-	336,086,682
Total	**$4,098,580,968**	**$3,479,508,479**

***This balance consists of the following*

Type	2014	2013
Cash Collateral - US Dollars	$-	$2,569,213
Derivative Offsets:		
↘ Equity Futures	-	25,664,188
↘ Hedge Funds	-	312,234,300
Liabilities		
↘ Obligation to Return Cash Collateral - US Dollars	-	(4,381,019)
Total	**$0**	**$336,086,682**

Credit Risk of Debt Securities Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension and insurance funds debt securities portfolios are managed using the following guidelines adopted by the Board of KRS:

» Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.

» Fixed income investments will be similar in type to those securities found in the KRS fixed income benchmarks and the characteristics of the KRS fixed income portfolio will be similar to the KRS fixed income benchmarks. The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income by more than 25%.

» The duration of the Treasury Inflation Protected Securities (TIPS) portfolio shall not deviate from the KRS Fixed Income Index by more than 25%.

» The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS' assets.

» No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short-term instrument, with the exception of US Government issued, guaranteed or agency obligations.

» The amount invested in SEC Rule 144a securities shall not exceed 15% of the market value of the aggregate market value of KRS' fixed income investments.

The following tables present the KRS, pension funds and insurance fund debt ratings as of June 30, 2014 and 2013:

Pension Funds Debt Securities at Fair Value as of June 30, 2014 & 2013

Quality Rating	2014	2013
AAA	$40,306,583	$56,665,771
AA+	62,002,369	68,857,699
AA	21,388,493	19,419,263
AA-	27,797,954	30,605,331
A+	34,695,288	32,370,283
A	99,344,507	71,719,597
A-	117,151,936	109,560,109
BBB+	84,269,097	36,533,579
BBB	64,675,676	109,743,197
BBB-	89,120,107	81,558,127
BB+	87,235,873	62,890,911
BB	93,648,993	66,451,521
BB-	83,840,452	60,743,226
B+	75,094,584	82,924,826
B	84,811,455	77,704,921
B-	61,972,436	50,252,951
CCC+	42,517,725	41,097,638
CCC	11,865,038	17,224,076
CCC-	4,487,098	13,687,724
CC	1,925,471	4,457,848
D	6,999,911	3,937,401
NR	659,751,771	99,198,973
Total Credit Risk Debt Securities	**1,854,902,817**	**1,197,604,972**
Government Agencies	5,222,397	474,844,831
Government Mortgage-Backed Securities (GNMA)	179,134,299	338,663,465
Government Issued Commercial Mortgage Backed	4,479,667	9,811,110
Government Bonds	385,836,479	34,674,668
Indexed Linked Bonds	621,726,315	708,142,577
Total Debt Securities	**$3,051,301,974**	**$2,763,741,623**

Insurance Fund Debt Securities at Fair Value as of June 30, 2014 & 2013

Quality Rating	2014	2013
AAA	$12,231,453	$17,298,219
AA+	8,736,341	19,036,700
AA	6,724,487	7,906,648
AA-	7,319,989	4,369,454
A+	16,055,561	11,034,344
A	29,080,777	18,123,716
A-	38,388,115	29,449,395
BBB+	28,031,588	8,243,645
BBB	24,786,892	24,640,602
BBB-	28,672,541	25,801,896
BB+	29,313,139	22,285,959
BB	30,971,226	23,613,368
BB-	28,542,731	20,795,416
B+	27,461,463	25,323,893
B	30,109,234	19,984,139
B-	20,447,164	16,449,995
CC	623,198	816,507
CCC	2,695,453	5,087,979
CCC+	12,603,007	10,899,205
CCC-	1,145,250	3,039,033
D	2,556,978	1,088,434
NR	586,985,099	55,438,787
Total Credit Risk Debt Securities	**983,481,686**	**370,727,334**
Government Agencies	1,511,319	152,008,017
Government Mortgage-Backed Securities (GNMA)	65,071,852	97,015,116
Government Issued Commercial Mortgage Backed	1,497,608	3,007,215
Government Bonds	142,080,994	9,505,690
Indexed Linked Bonds	251,786,743	292,931,190
Total Debt Securities	**$1,445,430,202**	**$925,194,562**

Pension Fund Securities At both June 30, 2014 and 2013, the weighted average quality rating of the pension fund debt securities portfolio was AA+. As of June 30, 2014 and 2013, the KRS pension portfolio had $1,214,150,807 and $580,572,016, respectively, in debt securities rated below BBB-.

Insurance Fund Securities As a result of the most recently approved Asset/Liability Modeling Study, the investment staff began to diversify the insurance fixed income allocation to mirror that of the pension funds. As part of this process, the TIPS allocation (previously the only fixed income exposure within the insurance portfolio) was moved to the newly created Real Return Asset Class.

Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the board of KRS. The Board has established an investment committee which is specifically charged with the oversight and investment of plan assets.

Concentration of Credit Risk Debt Securities Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

The total debt securities portfolio is managed using the following general guidelines adopted by the Board of KRS:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.

- Debt obligations of any single US Corporation shall be limited to a maximum of 5% of the total portfolio at market value.

Interest Rate Risk Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration measures the sensitivity of the market prices of fixed income securities to changes in the yield curve. Duration is measured using two methodologies: effective and modified duration. Effective duration uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price and makes adjustments for any bond features that would retire the bonds prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve, but does not assume the securities will be called prior to maturity.

The KRS pension fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. As of June 30, 2014 and 2013, the modified duration of the KRS pension fund fixed income benchmark was 5.37 and 5.38, respectively. At the same points in time, the modified duration of the KRS pension fund fixed income securities portfolio was 5.37 and 5.73, respectively.

The KRS insurance fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. As of June 30, 2014 and 2013, the modified duration of the KRS insurance fund fixed income benchmark was 5.37 and 5.38, respectively. At the same points in time, the modified duration of the KRS insurance fund fixed income securities portfolio was 3.99 and 5.91, respectively.

KRS Pension Funds Interest Rate Risk As of June 30, 2014 and 2013

Pension Funds Interest Rate Risk

Type	2014	Weighted Average Modified Duration	2013	Weighted Average Modified Duration
Asset Backed Securities	$86,379,081	9.12	$44,213,100	2.71
Bank Loans	327,431,127	4.19	105,603,296	4.72
Collateralized Bonds	23,113,753	3.62	14,222,649	0.72
Commercial Mortgage Backed Securities	77,841,331	2.10	66,526,681	3.10
Commercial Paper	-	-	74,997,823	0.02
Corporate Bonds	390,494,755	5.67	674,221,512	5.36
Corporate Bonds - Industrial	40,955,705	6.27		
Corporate Convertable Bonds	-	-	19,949,113	8.58
Government Agencies	65,501,546	4.75	34,674,668	5.12
Government Bonds	125,600,774	6.10	474,844,831	5.66
Government Mortgage Backed Securities	178,480,106	5.21	338,663,465	4.20
Government Issued Commercial Mortgage Backed Securities	-	-	9,811,110	2.66
Covered Bonds	878,873	1.80	-	-
Indexed Linked Government Bonds	-	-	708,142,577	8.18
Municipal Bonds	79,048,655	10.31	70,363,221	10.29
Non-Government Backed CMOs	-	-	10,612,072	2.04
Supranational Bonds	6,341,105	1.82	-	
Treasuries	1,207,419,080	7.04		
Swaps	4,298,025	0.58		
Mutual Funds	396,848,860	-		
Other	40,669,198	3.96		
Short Term Bills/Notes	-	-	116,631,5832	0.17
Sukuk*	-	-	263,923	6.55
Total	**$3,051,301,974**	**5.37**	**$2,763,741,623**	**5.67**

** The Arabic name for financial certificates, but commonly refers to the Islamic equivalent of bonds; since fixed income interest bearing bonds are not permissible in Islam, Sukuk securities are structured to comply with Islamic Law and its investment principles, which prohibits the charging, or paying, of interest.*

KRS Insurance Fund Interest Rate Risk As of June 30, 2014 and 2013

Insurance Fund Interest Rate Risk				
Type	**2014**	**Weighted Average Modified Duration**	**2013**	**Weighted Average Modified Duration**
Asset Backed Securities	$32,726,218	8.67	$14,649,066	3.18
Bank Loans	125,099,366	4.38	28,930,449	4.72
Collateralized Bonds	3,750,470	3.99	4,841,918	1.13
Commercial Mortgage Backed Securities	24,807,988	2.16	17,161,225	3.67
Commercial Paper	-	-	24,998,658	0.04
Corporate Bonds	140,705,415	5.56	216,295,976	5.34
Corporate Bonds - Utilities	16,095,997	6.26		
Corporate Convertible Bonds	-	-	4,909,873	8.44
Government Agencies	15,681,837	4.90	9,505,690	5.46
Government Bonds	16,254,026	4.00	152,008,017	5.83
Government Mortgage Backed Securities	65,071,852	5.52	97,015,116	4.79
Covered Bonds	1,171,830	1.80		
Government Issued Commercial Mortgages	-	-	3,007,215	2.72
Index Linked Government Bonds	-	-	292,931,190	8.25
Municipal/Provincial Bonds	17,791,073	9.00	14,780,723	9.60
Supranational Bonds	2,166,067	2.04		
Treasuries	464,396,484	7.01		
Swaps	391,233,379	-		
Mutual Funds	121,882,992	-		
Other	6,595,211	6.98		
Non-Government Backed CMOs	-	-	2,572,249	1.77
Short Term Bills/Notes	-	-	41,587,197	0.15
Total	**$1,445,430,202**	**3.99**	**$925,194,562**	**5.92**

Foreign currency risk is the risk that changes in exchange rates will ***adversely affect the value*** *of a non-US dollar based investment or deposit with the KRS portfolio.*

Foreign Currency Risk Foreign currency risk is the risk that changes in exchange rates will adversely affect the value of a non-US dollar based investment or deposit within the KRS portfolio. KRS' currency risk exposure, or exchange rate risk, primarily resides with KRS' international equity holdings, but also affects other asset classes. KRS does not have a formal policy to limit foreign currency risk; however, some individual managers are given the latitude to hedge some currency exposures.

All foreign currency transactions are classified as Short-Term Investments.

All gains and losses associated with these transactions are recorded in the Net Appreciation (Depreciation) in the Fair Value of Investments on the combining financial statements.

The dynamic currency hedging program previously run by Record Currency Management was terminated on November 3, 2011, and was completely unwound by October 2012.

The following tables present KRS' exposure to foreign currency risk as of June 30, 2014 and 2013:

Pension Funds Investments at Fair Value as of June 30, 2014 & 2013		
Foreign Equities	**2014**	**2013**
Australian Dollar	63,542,348	59,808,966
Brazilian Real	28,173,468	40,565,297
British Pound Sterling	225,259,654	191,809,147
Canadian Dollar	41,437,776	79,160,793
Chilean Peso	4,818,876	8,572,207
Chinese Yuan	4,109,501	3,921,175
Columbian Peso	4,865,113	4,030,792
Czech Koruna	1,662,246	3,152,676
Danish Krone	27,618,618	12,793,980
Euro	325,339,051	329,323,153
Hong Kong Dollar	45,368,576	96,949,251
Hungarian Forint	730,125	4,448,425
Indian Rupee	23,379,225	3,759,830
Indonesian Rupiah	12,326,348	7,187,236
Israeli Shekel	4,250,242	2,069,010
Japanese Yen	186,247,197	263,796,152
Malaysian Ringgit	6,116,803	5,704,224
Mexican Peso	27,518,975	22,181,651
New Zealand Dollar	13,863,381	7,500,911
Norwegian Krone	14,222,852	9,727,168
Peruvian Nuevo Sol	469,626	471,934
Philippine Peso	6,423,771	3,021,216
Polish Zloty	4,131,804	5,945,095
Russian Ruble	13,292,845	7,159,994
Singapore Dollar	15,472,920	19,834,359
South African Rand	9,392,321	23,424,203
South Korean Won	36,562,132	50,679,693
Swedish Krona	36,459,940	28,143,780
Swiss Franc	73,390,790	96,580,108
Taiwan Dollar	24,529,304	35,426,792
Thai Bhat	8,824,588	5,867,698
Turkish Lira	6,681,457	4,549,826
Total Securities Subject to Foreign Currency Risk	**1,266,367,170**	**1,437,566,742**
USD (securities held by International Investment Managers)	10,606,017,868	9,562,116,206
Total International Investment Securities	**$11,872,385,038**	**$10,999,682,948**

Insurance Fund Investments at Fair Value as of June 30, 2014 & 2013

Foreign Equities	2014	2013
Australian Dollar	$21,159,098	$17,372,842
Brazilian Real	9,868,083	11,659,097
British Pound Sterling	78,588,743	61,860,945
Canadian Dollar	15,048,631	25,663,239
Chilean Peso	1,575,128	2,724,948
Chinese Yuan	1,636,081	1,214,863
Columbian Peso	807,218	1,036,746
Czech Koruna	588,014	1,072,552
Danish Krone	9,378,996	4,233,231
Euro	118,658,845	105,942,398
Hong Kong Dollar	15,678,888	30,780,462
Hungarian Forint	286,753	1,415,885
Indian Rupee	8,677,608	1,149,108
Indonesian Rupiah	3,629,915	2,005,381
Israeli Shekel	1,372,593	639,441
Japanese Yen	67,029,052	84,659,071
Malaysian Ringgit	2,079,289	1,618,726
Mexican Peso	8,877,951	6,607,537
New Taiwan Dollar	8,240.119	11,121,400
New Zealand Dollar	5,220,476	2,131,571
Norwegian Krone	4,809,239	3,039,604
Peruvian Nuevo Sol	-	108,768
Philippine Peso	2,341,661	633,481
Polish Zloty	1,674,073	1,829,456
Russian Ruble	5,374,587	2,274,414
Singapore Dollar	5,421,756	6,063,920
South African Rand	3,143,309	7,537,217
South Korean Won	13,915,662	15,998,698
Swedish Krona	12,354,751	9,106,266
Swiss Franc	24,820,751	30,623,672
Thai Bhat	3,288,977	1,627,962
Turkish Lira	2,494,686	1,456,908
Total Securities Subject to Foreign Currency Risk	**439,185,835**	**455,209,806**
USD (securities held by International Investment Managers)	3,659,395,133	3,024,298,673
Total International Investment Securities	**$4,098,580,968**	**$3,479,508,479**

In accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans,* KRS provides this additional disclosure regarding its money-weighted rate of return for the pension funds. The money weighted rate of return is a method of calculating period-by-period returns on pension plan investments that adjusts for the changing amounts actually invested. For purposes of this Statement, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense. See below for the money-weighted rate of return as of June 30, 2014, as calculated by the custodial bank, BNY-Mellon:

Pension Funds				
KERS	KHAZ	CERZ	CHAZ	SPRS
15.50	15.65	15.56	15.50	15.66

Insurance Fund				
KERS	KHAZ	CERZ	CHAZ	SPRS
14.28	15.14	15.02	15.00	15.03

The money weighted rate of return is a method of calculating period-by-period returns on pension plan investments that adjusts for the changing amounts actually invested. For purposes of this Statement, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.

Note E. Securities Lending Transactions

Kentucky Revised Statutes Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with an initial fair value of 102% or 105% of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. The types of securities lent include US Treasuries, US Agencies, US Corporate Bonds, US Equities, Global Fixed Income Securities, and Global Equities Securities. The Statement of Investment Policy does not address any restrictions on the amount of loans that can be made. At June 30, 2014, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction. Deutsche Bank invests cash collateral as permitted by state statute and Board policy. The agent of the Funds cannot pledge or sell collateral securities received unless the borrower defaults.

KRS maintains a conservative approach to investing the cash collateral with Deutsche Bank, emphasizing capital preservation, liquidity, and credit quality.

TORT-
The area of law that covers the majority of all civil lawsuits. Essentially, every claim that arises in civil court with the exception of contractual disputes falls under tort law. The concept of tort law is to redress a wrong done to a person, usually by awarding them monetary damages as compensation.

Note F. Risk of Loss

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board of Claims.

Claims against the Board of KRS, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a self-insured retention of $250,000 for each claim. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to 66.67% of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll. Settlements did not exceed insurance coverage in any of the past three fiscal years, thus no secondary insurance had to be utilized. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

Note G. Contingencies

In the normal course of business, KRS is exposed to risks of loss from various legal proceedings, some of which could have a material impact if the decisions are adverse. However, as of the date of this report, the likelihood of incurring such a loss cannot be determined and a dollar amount cannot be reasonably estimated.

Note H. Income Tax Status

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, generally, not subject to tax. KRS is subject to income tax on any unrelated business income; however, KRS had no unrelated business income in fiscal year 2014.

Note I. Defined Benefit Pension Plan

All eligible employees of KRS participate in KERS (nonhazardous), a cost-sharing, multiple-employer defined pension plan that covers regular full-time employees in nonhazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Plan members who began participating prior to September 1, 2008, contributed 5% of creditable compensation for the periods ended June 30, 2014, 2013, and 2012. Plan members who began participating on, or after, September 1, 2008, contributed 6% of creditable compensation for the periods ended June 30, 2014, 2013, and 2012. Plan members who began participating, on or after, January 1, 2014, contributed 6% of creditable compensation for the period ended June 30, 2014. KRS contributed 26.79%, 23.61%, and 19.82%, of covered payroll for the periods ended June 30, 2014, 2013, and 2012, respectively. The chart below includes the covered payroll and contribution amounts for KRS for the three periods ended June 30 included in this discussion.

COVERED PAYROLL-
The employee payroll that is subject to Pension Contributions Withholding.

Payroll & Contributions

	2014	2013	2012
Covered Payroll	$ 13,916,055	$ 13,925,712	$13,784,847
Required Employer Contributions	$3,722,937	$3,271,165	$2,726,780
Employer Percentage Contributed	100%	100%	100%

INTANGIBLE ASSET-
An asset that is not physical in nature. Corporate intellectual property (items such as patents, trademarks, copyrights, business methodologies), goodwill and brand recognition are all common intangible assets in today's marketplace.

Note J. Equipment

Equipment Expenses *(as of June 30, 2014)*

Expense	2014	2013
Equipment At-Cost	$ 2,569,251	$ 6,752,838
Less Accumulated Depreciation	(2,348,055)	(2,856,799)
Total	**$221,196**	**$3,896,039**

Depreciation expense for the fiscal years ended June 30, 2014 and 2013 amounted to $44,714 and $52,575, respectively. The decrease in equipment at cost is due to some assets being fully depreciated as of June 30, 2014, as well as several changes to the fixed asset policy regarding capitalization. The capitalization threshold was increased from $1,000 to $3,000. The fixed asset register was updated to remove those items that were classified as inventory, but were not depreciable assets.

Note K. Intangible Assets

The provisions of GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets* require that intangible assets be recognized in the Statement of Plan Net Position only if they are considered identifiable. In accordance with GASB No. 51, KRS has capitalized software costs as indicated below for the Strategic Technology Advancements for the Retirement of Tomorrow (START) project.

Software Expenses *(as of June 30, 2014)*

Expense	2014	2013
Software At-Cost	$16,254,290	$16,254,290
Less Accumulated Amortization	(5,935,919)	(4,059,389)
Total	**$10,318,371**	**$12,194,901**

Amortization expense for the fiscal years ended June 30, 2014 and 2013 amounted to $1,876,530 and $1,166,377, respectively. The increase is due to the capitalization of all START expenses through June 30, 2014.

ACTUARIAL VALUATION - A type of appraisal which requires making economic and demographic assumptions in order to estimate future liabilities. The assumptions are typically based on a mix of statistical studies and experienced judgment.

Note L. Actuarial Valuation

The following details significant actuarial information and assumptions utilized in determining the unfunded actuarial accrued liabilities:

Insurance Fund Valuation [1]	*(Valuation Date June 30, 2014)*	
	Non-Haz	**Haz**
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	29 Years	29 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	7.75-5.0%	7.75-5.0%
Medical Trend Assumption (Post-Medicare)	6.0-5.0%	6.0-5.0%
Year of Ultimate Trend	2020	2020
Actuarial Assumptions		
Investment Rate of Return	7.75%	7.75%
↘ Includes Price Inflation at	3.5%	3.5%

[1]The actuarial valuation for the Insurance Fund involves estimates of the value of reported amounts and assumptions about the probability of future events. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations are based on the benefits provided under the terms of the insurance plan in effect at the time of each valuation and on the pattern of sharing costs between the employer and plan members as of the valuation date. Actuarial calculations of the insurance plan reflect a long-term perspective.

Unfunded Actuarial Accrued Liability KRS Pension and Insurance Funds had the following Unfunded Actuarial Accrued Liabilities as of June 30:

Pension Funds - *Unfunded Actuarial Accrued Liabilities as of June 30*		
System	2014	2013
KERS Non Haz	$9,126,153,508	$8,750,479,307
KERS Haz	288,952,802	278,323,786
CERS Non Haz	3,655,388,924	3,741,781,631
CERS Haz	1,321,158,726	1,322,514,183
SPRS	438,376,677	409,780,326
Total Pension Funds	**$14,830,057,627**	**$14,502,879,233**

Insurance Fund - *Unfunded Actuarial Accrued Liabilities as of June 30*		
System	2014	2013
KERS Non Haz	$1,605,523,279	$1,631,169,807
KERS Haz	(22,409,047)	14,743,272
CERS Non Haz	785,715,135	815,649,903
CERS Haz	496,131,142	544,558,426
SPRS	78,676,367	86,005,683
Total Insurance Fund	**$2,943,636,876**	**$3,092,127,091**
Total Unfunded Actuarial Accrued Liability	**$17,773,694,503**	**$17,595,006,324**

The Schedule of Funding Progress for the Insurance Fund begins on page 68.

Pension Funds Schedule of Funding Progress					
System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non Haz	$2,423,956,716	$11,550,110,224	21	$1,577,496,447	578.5
KERS Haz	527,897,261	816,850,063	64.6	129,076,038	223.9
CERS Non Haz	6,117,133,692	9,772,522,616	62.6	2,272,270,287	160.9
CERS Haz	1,967,640,027	3,288,825,753	59.8	479,164,016	275.7
SPRS	242,741,735	681,118,402	35.6	44,615,885	982.6
Total Pension Funds	**11,279,369,431**	**26,109,427,058**	**43.2**	**4,502,622,673**	**329.4**

Insurance Fund Schedule of Funding Progress					
System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non Haz	621,236,646	2,226,759,925	27.9	1,577,496,447	101.8
KERS Haz	419,395,867	396,986,820	105.6	129,076,038	(17.4)
CERS Non Haz	1,831,199,465	2,616,914,600	70	2,272,270,287	34.6
CERS Haz	997,733,237	1,493,864,379	66.8	479,164,016	103.5
SPRS	155,594,760	234,271,127	66.4	44,615,885	176.3
Total Insurance Fund	**4,025,159,975**	**6,968,796,851**	**57.7**	**4,502,622,673**	**65.4**
Totals	**$15,304,529,406**	**$33,078,223,909**	**46.3%**	**$9,005,245,346**	**197.4**

Note M. GASB 67

The provisions of GASB Statement No. 67, *Financial Reporting for Pension Plans,* were issued in June 2012. This Statement replaces the requirements of Statements No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans,* and No. 50, *Pension Disclosures*, as they relate to pension plans that are administered through trusts or equivalent arrangements that meet that criteria.

The total pension liability was determined by an actuarial valuation as of June 30, 2014, using the following actuarial assumptions, applied to all periods included in the measurement:

- *Inflation 3.5 percent*
- *Salary increases 4.5 percent, average, including inflation;*
- *Investment rate of return 7.75 percent, net of pension plan investment expense, including inflation.*

The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

The actuarial assumptions used in the June 30, 2014 valuation were based on the results of an actuarial experience study for the period July 1, 2005 – June 30, 2008.

The long-term expected return on system assets is reviewed as part of the regular experience studies prepared every five years. The most recent analysis, performed for the period covering fiscal years 2005 through 2008, is outlined in a report dated August 25, 2009. Several factors are considered in evaluating the long-term rate of return assumption including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best estimate ranges of expected future real rates of return (expected return and net of investment expense) were developed by the

The objective of GASB 67 was to improve financial reporting by state and local governmental pension plans. The statement requires defined benefit pension plans to present two financial statements, a statement of fiduciary net position and a statement of changes in fiduciary net position. In addition, the statement requires that notes to the financial statements include descriptive information, such as the types of benefits provided, the classes of plan members covered, and the composition of the pension plans board, among other detailed requirements.

Table Note: Net Pension Liability

	KERS		CERS		SPRS
	Non Haz	HAZ	Non Haz	HAZ	HAZ
Total Pension Liability	$11,550,110	$816,850	$9,772,523	$3,288,826	$681,119
Fiduciary Net Position	2,578,290	561,484	6,528,147	2,087,002	260,974
Net Pension Liability	8,971,820	255,366	3,244,376	1,201,824	420,145
Ratio of Fiduciary Net Position to Total Pension Liability	22.32%	68.74%	66.80%	63.46%	38.32%
Inflation	3.5%	3.5%	3.5%	3.5%	3.5%
Salary Increases (average including inflation)	4.5%	4.5%	4.5%	4.5%	4.5%
Investment Rate of Return (Net of Pension Plan Investment Expense including Inflation)	7.75%	7.75%	7.75%	7.75%	7.75%

The Total Pension Liability was determined by an actuarial valuation as of June 30, 2014, using the following actuarial assumptions, applied to all periods included in the measurement.

The Net Pension Liability is equal to the Total Pension Liability minus the Fiduciary Net Position. That result as of June 30, 2014, for the plan is presented in the table above ($ thousands). The Total Pension Liability was determined by an actuarial valuation as of June 30, 2014, using the following actuarial assumptions, applied to all periods included in the measurement.

investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions developed by the investment consultant are intended for use over a 10-year horizon and may not be useful in setting the long-term rate of return for funding pension plans which covers a longer timeframe. The assumption is intended to be a long term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The discount rate determination does not use a municipal bond rate. Projected future benefit payments for all current plan members were projected through 2116.

The projection of cash flows used to determine the discount rate assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 29 year amortization period of the unfunded actuarial accrued liability. The actuarial determined contribution rate is adjusted to reflect the phase in of anticipated gains on actuarial value of assets over the first four years of the projection period.

June 30, 2014 is the actuarial valuation date upon which the Total Pension Liability is based.

Table Note

Asset Class	Target Allocation	Long Term Expected Nominal Return
Domestic Equity	30%	8.45%
International Equity	22%	8.85%
Emerging Market Equity	5%	10.5%
Private Equity	7%	11.25%
Real Estate	5%	7%
Core US Fixed Income	10%	5.25%
High Yield US Fixed Income	5%	7.25%
Non US Fixed Income	5%	5.5%
Commodities	5%	7.75%
TIPS	5%	5%
Cash	1%	3.25%
Total	**100%**	

No update procedures were used to determine the Total Pension Liability. An expected Total Pension Liability is determined as of July 1, 2013 using standard roll back techniques. The roll back calculation subtracts the annual normal cost (also called the service cost), adds the actual benefit payments and refunds for the plan year and then applies the expected investment rate of return for the year. The procedure was used to determine the Total Pension Liability as of July 1, 2013,

The Discount Rate is defined as the single rate of return that when applied to all projected benefit payments results in an actuarial value of projected benefit payments.

The discount rate used to measure the total pension liability for the systems was 7.75% for both, nonhazardous and hazardous. The following presents the net pension liability, calculated using the discount rate of percent, as well as what the systems' net position liability would be if it were calculated using a discount rate that is one percentage point lower (6.75%) or one percentage point higher (8.75%) than the current rate for nonhazardous and (6.75%) or one percentage point higher (8.75%) than the current rate for hazardous ($ thousands):

Net Pension Liability

KERS	1% Decrease	Current Discount Rate	1% Increase
Nonhazardous	(6.75%)	(7.75%)	(8.75%)
	$10,093,046	**$8,971,820**	**$7,960,935**
Hazardous	(6.75%)	(7.75%)	(8.75%)
	342,685	**255,366**	**180,571**
CERS			
Nonhazardous	(6.75%)	(7.75%)	(8.75%)
	$4,269,383	**$3,244,376**	**$2,338,760**
Hazardous	(6.75%)	(7.75%)	(8.75%)
	1,572,178	**1,201,824**	**887,365**
SPRS			
Hazardous	(6.75%)	(7.75%)	(8.75%)
	$489,185	**$420,145**	**$361,457**

Note N. House Bill 1 Pension Reform

House Bill 1 was signed by the Governor of the Commonwealth on June 27, 2008. It contained a number of changes that KRS implemented effective September 1, 2008. House Bill 1 also contained statutory changes to Kentucky Revised Statute 61.637, the law governing members who become reemployed following retirement.

Employee contributions for nonhazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 6% of all their creditable compensation to KRS. Five percent of this contribution was deposited to the individual employee's account, while the other 1% was deposited to an account created under 26 USC Section 401(h) in the KRS Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E) for the payment of health insurance benefits. Hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 9% of all their creditable compensation, with 8% credited to the member's account, and 1% deposited to the KRS Pension Fund 401(h) account for the payment of health insurance benefits. Interest paid each June on these members' accounts is set at a rate of 2.5%. If a member terminates his/her employment and applies to take a refund, the member is entitled to a full refund of contributions and interest in his/her account; however, the 1% contributed to the 401(h) account in the KRS Pension Fund is non-refundable and is forfeited.

Employer contribution rates for KERS and SPRS for fiscal 2014 were established in the 2010-2012 Executive Branch Budget (House Bill 1) during the 2010 Extraordinary Session of the Kentucky General Assembly. Employer contribution rates for CERS for fiscal year 2014 were adopted by the Board of KRS based on the actuarially recommended rates. The Employer contribution rates were established as follows (effective July 1, 2013) for fiscal year 2014:

Employer Contribution Rates	
KERS Nonhazardous	26.79%
KERS Hazardous	32.21%
CERS Nonhazardous	18.89%
CERS Hazardous	35.70%
SPRS	71.15%

Although the majority of changes enacted in House Bill 1 only impacted new hires on, or after, September 1, 2008, there were some changes that affected all members and retirees of KRS:

- *Cost of Living Adjustment (COLA):* Beginning July 1, 2009, COLA for retirees were set by statute at 1.5% each July 1 of each year thereafter through June 30, 2014. The Kentucky General Assembly may increase this percentage at any time, but only if appropriate funding is allocated. The General Assembly may also reduce or suspend the annual COLA.

- *Service Purchase Costs:* The actuarial factors used to determine the cost to purchase a service must assume the earliest date a member can retire with an unreduced benefit, and must also assume a 1.5% COLA will be enacted. This change results in an increased service purchase cost for any purchase calculated on, or after, September 1, 2008. This change also affects the cost billed to employers for sick leave when an employee retires.

- *Payment Options:* The Partial Lump Sum Payment Option was made available only to those employees who retired on, or before, January 1, 2009.

- *Kentucky Revised Statute 61.637 was modified significantly by House Bill 1.* A retired member who was reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.

Note O. Medicare Prescription Drug Plan

In fiscal year 2009, KRS submitted an application to the Centers for Medicare & Medicaid Services, of the Department of Health & Human Services, to enter into a contract to offer a Medicare Prescription Drug Plan (PDP), as described in the Medicare Prescription Drug Benefit Final Rule published in the Federal Register on January 28, 2005 (70 Fed. Reg. 4194). As part of the application process, KRS was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents and is invested on a daily basis. On February 19, 2009, KRS established the KRS Insurance Prescription Drug Fund. As of June 30, 2014 and 2013, the Insolvency Account amounted to $100,039 and $100,691, respectively.

Note P. House Bill 300 Pension Reform

House Bill 300 was signed by the Governor on April 11, 2012. The Bill makes changes/additions to information and definitions regarding placement agents, audits to be performed on KRS by the Kentucky Auditor of Public Accounts, terms of service of Trustees of the Board, terms of service of Board officers (Chair and Vice Chair), among other changes.

Note Q. Reimbursement Of Retired-Reemployed Health Insurance

As a result of the passage of House Bill 1 on September 1, 2008, if a retiree is reemployed in a regular full time position and has chosen health insurance coverage through KRS, the employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate. As of June 30, 2014 and 2013, the reimbursement totaled $12,366,990 and $9,187,367, respectively.

Note R. Louisville/Jefferson County Metro Firefighters

Firefighter employees of Louisville/Jefferson County Metro Government were awarded a total of $28,440,159 for back-pay. Of that total, $28,425,232 was determined to be the amount of creditable compensation. The total contributions owed to KRS were calculated by applying the contribution rate in effect for each fiscal year awarded (fiscal year 1986 to fiscal year 2009) while considering the appropriate participation status, hazardous or nonhazardous, of each employee. These calculations established that the total employer contribution owed was $5,113,511, and the total employee contribution owed was $2,083,310, for a total of $7,196,821. These amounts were received on July 27, 2010.

KRS also calculated the impact on final compensation caused by the retroactive benefits paid to those firefighters who have already retired. KRS was required to pay retroactive benefit payments totaling $6,221,219, reflecting additional benefits due to the increase in final compensation. The liability was paid on August 22, 2010, by issuance of benefit payments to the individual firefighter members.

Kentucky Revised Statute 61.675(3) (b) requires that KRS collect interest on unmade or delinquent contributions. The interest owed by the Louisville/Jefferson County Metro Government, as calculated by KRS' actuaries, amounted to $12,020,731. Therefore, the total amount due KRS was $19,217,552. As stated earlier, $7,196,821 was received on July 27, 2010.

In April 2012, KRS received $3,866,429 and in July 2012, KRS received an additional $7,000,000, for interest owed, which by settlement extinguished the liability to KRS.

Note S. Reciprocity Agreement

KRS has a reciprocity agreement with Kentucky Teachers' Retirement System (KTRS) for the payment of insurance benefits for those members who have creditable service in both systems.

Note T. Custodial Bank

As a result of a thorough Request for Proposal (RFP) process, and effective July 1, 2013, Bank of New York-Mellon became responsible for providing KRS all required global custodial services. Bank of New York-Mellon took these duties over from Northern Trust, the former custodial bank.

Note U. Related Party

Perimeter Park West, Inc. (PPW) is a legally separate, tax-exempt Kentucky corporation established in 1998 to own the land and buildings on which KRS is located. PPW leases the buildings to KRS (the lease is renewed periodically) and provides maintenance for the buildings and land. PPW is considered a related party to KRS and has its own separate financial audit. The following presents the amounts recorded between KRS and PPW for the fiscal year ended June 30, 2014:

Lease payments to PPW from KRS:	$674,320
Dividends to KRS from PPW:	$ 0

RE-EMPLOYED-
A retired member who was reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.

All regular full-time employees who began participation with KRS on, or after, January 1, 2014 contribute to the hybrid cash balance plan. Participation in the plan is mandatory unless the employee is employed in a non-participating position.

Note V. Senate Bill 2 Pension Reform

Senate Bill 2 was signed by the Governor on April 4, 2013. It contained a number of changes to the pension system that KRS implemented, effective January 1, 2014. The Bill created the hybrid cash balance plan for members who began participation on, or after, January 1, 2014. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. The plan resembles a defined contribution plan because it determines the value of benefits for each participant based on individual accounts. However, the assets of the plan remain in a single investment pool like a traditional defined benefit plan. The plan is a defined benefit plan since it uses a specific formula to determine benefits.

All regular full-time employees who began participation with KRS on, or after, January 1, 2014 contribute to the hybrid cash balance plan. Participation in the plan is mandatory unless the employee is employed in a non-participating position. Employment classifications that are non-participating include part-time, seasonal, temporary, probationary (CERS only), interim, emergency, and independent contractors.

Members and employers contribute a specified amount into the member's account. The account earns a guaranteed amount of interest at the end of each fiscal year. If the member has participated in the plan during the fiscal year, there may be an additional interest credit added to the member's account depending on KRS' investment returns. All interest is paid on the preceding year's balance.

When a member is eligible to retire, the benefit is calculated based on the member's accumulated account balance. A member earns service credit for each month they contribute to the plan. Once a member obtains 60 months of service credit, the member is considered vested. Vesting may change the level of benefits to which the member is entitled.

Members in the hybrid cash balance plan contribute a set percentage of their salary each month to their own account as required by Kentucky law:

- ***Nonhazardous member***s – 5% of creditable compensation
- ***Hazardous members*** – 8% of creditable compensation
- ***All members*** – 1% to the health insurance fund which is not credited to the member's account and is not refundable

The employer contribution rate is based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. If the member is

nonhazardous, the member's account is credited with a 4% employer pay credit. If the member is hazardous, the member's account is credited with a 7.5% employer pay credit. The employer pay credit represents a portion of the employer contribution.

In addition, Senate Bill 2 implemented provisions requiring employers to pay the actuarial cost of increases in an employee's salary in the last five years prior to retirement which result in increases the employee's pension, commonly known as pension spiking. All salary increases greater than 10% from one fiscal year to the next are presumed pension spikes. The law specifically excludes three situations from being considered pension spiking: 1. bona fide promotions; 2. career advancements; and 3. lump sum compensatory time paid at termination. For all members who retire on, or after, January 1, 2014, KRS will analyze the last five years of wages used in the retirement calculation to determine if a pension spike has occurred. If a pension spike has occurred, KRS will notify the last employer. Regardless of when the pension spike occurred, the last participating employer shall be required to pay for any additional actuarial costs resulting from annual increases in employee salary greater than ten percent (10%), which do qualify under one of three exceptions. If there were multiple last employers, the cost is divided equally amongst them. The employer is permitted a 12-month period to remit the amount due without interest.

The combined net position of all pension funds administered by Kentucky Retirement Systems increased by $862.8 million during fiscal 2014.

Note W. City Of Fort Wright

In June 2014, the City of Fort Wright (the City), a participating employer in CERS, filed a lawsuit against KRS alleging that the Board invested CERS funds in investments that were prohibited by both statutory and common law. In addition, the City alleged that the Board paid substantial asset management fees, which the suit alleges were improper. Although the exact nature and source of the relief sought is unclear, it appears that the City is seeking a declaration of rights, an injunction barring the placement of CERS assets in certain types of investments, an accounting of CERS assets, restitution of management fees to CERS, and attorney fees. As noted above, the exact nature and scope of the relief sought in this suit is unclear; therefore, no provision has been made in the combining financial statements.

Note X. Seven Counties Services, Inc.

Seven Counties Services, Inc., a formally participating employer in KERS, filed for Chapter 11 bankruptcy protection on April 4, 2013, in part to terminate its employees' continued participation in KERS and its obligation to remit monthly contributions to KRS. Following the filing of the bankruptcy petition, Seven Counties Services ceased making retirement contributions on approximately 900 of its approximately 1,200 employees. On May 30, 2014, the United States Bankruptcy Court for the Western District of Kentucky issued a Memorandum Opinion that held that Seven Counties Services was entitled to seek Chapter 11 relief and reject what the Court considered to be an executory contract with KERS. Following the May 30, 2014 Opinion, Seven Counties Services ceased making contributions on behalf of all its employees.

The net appreciation in the fair value of investments was $1,361.9 million for the fiscal year ended June 30, 2014 compared to net appreciation of $890.6 million for the prior fiscal year.

Note Y. Write Off Of Receivable

With the implementation of START, employers reported June wages earned in the following month of July (next fiscal year) and the new Annual Required Contribution (ARC) rate was applied. The Commonwealth approved budget guidelines that paid contributions at the fiscal year ARC rate in effect in when wages were earned. It is unlikely that KRS will receive payments at the new ARC rate for that period, and therefore contribution receivables have been reduced as shown.

KERS Hazardous	$5,216,615
CERS Nonhazardous	102,823
CERS Hazardous	91,305
SPRS	571,336
Total	**$5,982,079**

Note Z. Bank of America Settlement

In August 2014, Bank of America reached a $16.65 billion settlement with US regulators to settle charges that it misled investors into buying troubled mortgage-backed securities. The settlement called for the bank to pay a $9.65 billion cash penalty and provide $7 billion of consumer relief to homeowners and communities. Bank of America admitted having sold billions of dollars of risky mortgage-backed securities while concealing key facts about the quality of the underlying loans. It also admitted to having made misrepresentations to Fannie Mae and Freddie Mac about the quality of loans sold to those government-controlled mortgage companies. KRS' share of this settlement amounted to $23,000,000, and was received on October 24, 2014. The amount was allocated among the plans as shown.

KERS	$8,442,347
KERS H	767,141
CERS	10,280,391
CERS H	2,865,365
SPRS	644,756
Total	**$23,000,000**

Note Aa. Subsequent Events

Management has evaluated the period from June 30, 2014, to December 4, 2014, (the date the combining financial statements were available to be issued) for items requiring recognition or disclosure in the combining financial statements.

REQUIRED

SUPPLEMENTARY INFORMATION

Schedules of Funding Progress for KERS Insurance Fund

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Nonhazardous						
June 30, 2004	$600,586,961	$2,335,905,365	$1,735,318,404	25.7%	$1,645,412,496	105.5%
June 30, 2005	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
June 30, 2006	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
June 30, 2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
June 30, 2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
June 30, 2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
June 30, 2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
June 30, 2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
June 30, 2012	446,080,511	3,125,330,157	2,679,249,646	14.3	1,644,896,681	162.9
June 30, 2013	497,584,327	2,128,754,134	1,631,169,807	23.4	1,644,408,698	99.2
June 30, 2014	621,236,646	2,226,759,925	1,605,523,279	27.9	1,577,496,447	101.8
Hazardous						
June 30, 2004	$169,158,879	$323,503,563	$154,344,684	52.3%	$126,664,812	121.9%
June 30, 2005	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
June 30, 2006	212,833,318	621,237,856	408,404,538	34.3	138,747,320	294.4
June 30, 2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
June 30, 2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
June 30, 2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
June 30, 2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
June 30, 2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
June 30, 2012	345,573,948	384,592,406	39,018,458	89.9	131,976,754	29.6
June 30, 2013	370,774,403	385,517,675	14,743,272	96.2	132,015,368	11.2
June 30, 2014	419,395,867	396,986,820	(22,409,047)	105.6	129,076,038	(17.4)
Total						
June 30, 2004	$769,745,840	$2,659,408,928	$1,889,663,088	28.9%	$1,772,077,308	106.6%
June 30, 2005	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
June 30, 2006	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,978,097	413.5
June 30, 2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
June 30, 2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
June 30, 2009	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0
June 30, 2010	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1
June 30, 2011	781,582,057	4,787,148,400	4,005,566,343	16.3	1,864,686,540	214.8
June 30, 2012	791,654,459	3,509,922,563	2,718,268,104	22.6	1,776,873,435	153.0
June 30, 2013	868,358,730	2,514,271,809	1,645,913,079	34.5	1,776,424,066	92.7
June 30, 2014	1,040,632,513	2,623,746,745	1,583,114,232	39.7	1,706,572,485	92.8

See Independent Auditors' Report. ** *Covered payroll was actuarially computed*

Schedules of Funding Progress for CERS Insurance Fund

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
Nonhazardous						
June 30, 2004	$585,399,072	$2,438,734,696	$1,853,335,624	24.0%	$1,826,870,880	101.5%
June 30, 2005	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
June 30, 2006	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
June 30, 2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
June 30, 2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
June 30, 2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
June 30, 2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
June 30, 2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
June 30, 2012	1,512,853,851	2,370,771,288	857,917,437	63.8	2,236,546,345	38.4
June 30, 2013	1,628,244,197	2,443,894,100	815,649,903	66.6	2,236,277,489	36.5
June 30, 2014	1,831,199,465	2,616,914,600	785,715,135	70.0	2,272,270,287	34.6
Hazardous						
June 30, 2004	$310,578,162	$1,025,684,477	$715,106,315	30.3%	$392,562,624	182.2%
June 30, 2005	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
June 30, 2006	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
June 30, 2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
June 30, 2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
June 30, 2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
June 30, 2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
June 30, 2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
June 30, 2012	829,040,842	1,364,843,057	535,802,215	60.7	464,228,923	115.4
June 30, 2013	892,774,391	1,437,332,817	544,558,426	62.1	461,672,567	118.0
June 30, 2014	997,733,237	1,493,864,379	496,131,142	66.8	479,164,016	103.5
Total						
June 30, 2004	$895,977,234	$3,464,419,173	$2,568,441,939	25.9%	$2,219,433,504	115.7%
June 30, 2005	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
June 30, 2006	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
June 30, 2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
June 30, 2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
June 30, 2009	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4
June 30, 2010	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3
June 30, 2011	2,204,241,067	4,721,675,960	2,517,434,893	46.7	2,743,559,808	91.8
June 30, 2012	2,341,894,693	3,735,614,345	1,393,719,652	62.7	2,700,775,268	51.6
June 30, 2013	2,521,018,588	3,881,226,917	1,360,208,329	65.0	2,697,950,056	50.4
June 30, 2014	2,828,932,702	4,110,778,979	1,281,846,277	68.8	2,751,434,303	46.6

See Independent Auditors' Report. ** *Covered payroll was actuarially computed*

Schedules of Funding Progress for SPRS Insurance Fund

Year Ended**	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b-a)/c]
June 30, 2004	$96,622,908	$197,604,301	$100,981,393	48.9%	$43,835,208	230.4%
June 30, 2005	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
June 30, 2006	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
June 30, 2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
June 30, 2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
June 30, 2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
June 30, 2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2
June 30, 2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4
June 30, 2012	124,372,072	333,903,782	209,531,710	37.2	48,372,506	433.2
June 30, 2013	136,321,060	222,326,743	86,005,683	61.3	45,256,202	190.0
June 30, 2014	155,594,760	234,271,127	78,676,367	66.4	44,615,885	176.3

See Independent Auditors' Report. ** *Covered payroll was actuarially computed*

Schedules of Contributions from Employers & Other Contributing Entities

KERS Nonhazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Insurance Fund				
June 30, 2004	$77,951,553	$78,016,737	-	100.1%
June 30, 2005	86,974,271	49,909,228	-	57.4
June 30, 2006	202,498,302	47,634,639	-	23.5
June 30, 2007	219,768,964	64,014,332	$10,744,049	34.0
June 30, 2008	558,745,820	56,744,942	6,633,538	11.3
June 30, 2009	362,707,378	74,542,932	8,167,982	22.8
June 30, 2010	376,556,187	93,976,917	8,550,914	27.2
June 30, 2011	294,897,813	129,335,552	-	43.9
June 30, 2012	297,904,224	156,057,216	-	52.4
June 30, 2013	286,143,134	165,330,557	-	57.8
June 30, 2014	208,880,813	166,609,592	-	79.8

KERS Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Insurance Fund				
June 30, 2004	$14,942,092	$14,959,617	-	100.1%
June 30, 2005	15,892,977	15,395,977	-	96.9
June 30, 2006	28,517,563	17,011,745	-	59.7
June 30, 2007	31,304,778	19,534,819	$104,669	62.7
June 30, 2008	51,214,929	21,997,341	73,891	43.1
June 30, 2009	34,670,467	20,807,204	186,081	60.6
June 30, 2010	35,045,278	21,921,535	319,059	63.5
June 30, 2011	29,585,257	19,952,580	-	67.4
June 30, 2012	28,326,206	24,538,087	-	86.6
June 30, 2013	26,252,911	25,682,403	-	97.8
June 30, 2014	15,627,018	23,873,967	-	152.8

See Independent Auditors' Report.

Schedules of Contributions from Employers & Other Contributing Entities

CERS Nonhazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Insurance Fund				
June 30, 2004	$89,289,520	$89,344,241	-	100.1%
June 30, 2005	106,612,633	106,638,253	-	100.0
June 30, 2006	272,942,757	128,867,817	-	47.2
June 30, 2007	285,600,490	147,608,801	$9,623,431	55.1
June 30, 2008	406,541,729	196,110,111	6,003,181	49.7
June 30, 2009	264,733,532	123,852,611	7,623,628	49.7
June 30, 2010	266,331,326	166,607,097	9,156,991	66.0
June 30, 2011	213,429,424	186,885,576	-	87.6
June 30, 2012	214,421,008	171,924,836	-	80.2
June 30, 2013	195,560,870	159,992,643	-	81.8
June 30, 2014	130,651,800	123,278,028	-	94.4

See Independent Auditors' Report.

CERS Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Insurance Fund				
June 30, 2004	$47,018,046	$47,036,777	-	100.0%
June 30, 2005	54,094,495	54,106,577	-	100.0
June 30, 2006	98,297,535	64,853,778	-	66.0
June 30, 2007	115,938,899	70,072,785	$656,523	61.0
June 30, 2008	168,723,639	90,113,200	419,774	53.7
June 30, 2009	126,757,348	70,785,241	627,938	56.3
June 30, 2010	129,227,449	83,042,875	1,493,440	65.4
June 30, 2011	109,226,667	98,592,286	-	90.3
June 30, 2012	110,762,577	92,563,664	-	83.6
June 30, 2013	102,010,672	85,319,393	-	83.6
June 30, 2014	74,360,438	74,791,619	-	100.6

See Independent Auditors' Report.

Schedules of Contributions from Employers & Other Contributing Entities

SPRS

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Insurance Fund				
June 30, 2004	$8,434,834	$8,455,498	-	100.2%
June 30, 2005	8,608,536	6,631,031	-	77.0
June 30, 2006	12,554,648	6,880,517	-	54.8
June 30, 2007	15,233,320	6,488,600	$361,942	45.0
June 30, 2008	43,469,735	7,329,229	183,564	17.3
June 30, 2009	29,324,666	7,413,552	229,240	26.1
June 30, 2010	30,302,151	8,369,428	273,684	28.5
June 30, 2011	25,772,574	11,050,964	-	42.9
June 30, 2012	28,246,786	11,960,468	-	42.3
June 30, 2013	27,234,229	16,828,681	-	61.8
June 30, 2014	20,879,022	14,493,242	-	69.4

See Independent Auditors' Report.

Method and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates are determined on a biennial basis beginning with the fiscal years ended 2015 and 2016, determined as of July 1, 2013. The amortization period of the unfunded liability has been reset as of July 1, 2013 to a closed 30-year period. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

Actuarial Cost Method	Entry Age
Amortization Method	Level of Percentage of Payroll, closed
Remaining Amortization Period	29 years
Asset Valuation Method	5 year Smoothed Market
Inflation	3.5%
Salary Increase	4.5%, average, including Inflation
Investment Rate of Return	7.75%, for both Non Hazardous and Hazardous, Net of Pension Plan Investment Expense, including Inflation

There were no changes of benefit terms or assumptions.

Schedule of Employer Contributions - Pension Funds

KERS Nonhazardous	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Actuarially Determined Employer Contribution	$520,765	$485,396	$441,094	$381,915	$348,495	$294,495	$264,743	$176,774	$129,126	$85,799
Actual Employer Contributions	296,836	280,874	214,786	193,754	144,051	112,383	104,655	88,249	60,681	50,333
Annual Contribution Deficiency (Excess)	223,929	204,522	226,308	188,161	204,444	182,112	160,088	88,525	68,445	35,466
Covered Employee Payroll	1,577,496	1,644,409	1,644,897	1,731,633	1,815,146	1,754,413	1,837,873	1,780,223	1,702,231	1,655,907
Actual Contributions as a Percentage of Covered Employee Payroll	18.82%	17.08%	13.06%	11.19%	7.94%	6.41%	5.69%	4.96%	3.56%	3.04%

Schedule of Employer Contributions- Pension Funds

KERS Hazardous	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Actuarially Determined Employer Contribution	$13,570	$21,502	$20,265	$20,605	$17,815	$15,708	$14,147	$12,220	$10,787	$9,450
Actual Employer Contributions	11,670	27,334	20,809	19,141	17,658	15,843	15,257	13,237	10,803	9,759
Annual Contribution Deficiency (Excess)	1,900	(5,832)	(544)	1,464	157	(135)	(1,110)	(1,017)	(16)	(309)
Covered Employee Payroll	129,076	132,015	131,977	133,054	143,558	146,044	148,710	144,838	138,747	131,687
Actual Contributions as a Percentage of Covered Employee Payroll	9.04%	20.7%	15.77%	14.39%	12.3%	10.85%	10.26%	9.14%	7.79%	7.41%

Schedule of Employer Contributions- Pension Funds

CERS Nonhazardous	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Actuarially Determined Employer Contribution	$324,231	$294,914	$261,764	$218,985	$186,724	$161,097	$138,311	$112,508	$83,124	$53,118
Actual Employer Contributions	324,231	294,914	275,736	248,519	207,076	179,285	150,925	124,261	90,834	54,617
Annual Contribution Deficiency (Excess)	0	0	(13,972)	(29,534)	(20,352)	(18,188)	12,614	(11,753)	(7,710)	(1,499)
Covered Employee Payroll	2,272,270	2,236,277	2,236,546	2,276,596	2,236,855	2,183,612	2,166,613	2,076,848	1,982,437	1,885,275
Actual Contributions as a Percentage of Covered Employee Payroll	14.27%	13.19%	12.33%	10.92%	9.26%	8.21%	6.97%	5.98%	4.58%	2.9%

Schedule of Employer Contributions- Pension Funds

CERS Hazardous	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Actuarially Determined Employer Contribution	$115,240	$120,140	$83,589	$78,796	$76,391	$69,056	$64,082	$53,890	$44,059	$39,438
Actual Employer Contributions	115,240	120,140	89,329	85,078	82,887	78,152	72,155	61,553	49,979	39,948
Annual Contribution Deficiency (Excess)	0	0	(5,740)	(6,282)	(6,496)	(9,096)	(8,073)	(7,663)	(5,917)	(510)
Covered Employee Payroll	479,164	461,673	464,229	466,964	466,549	469,315	474,241	458,999	429,928	411,122
Actual Contributions as a Percentage of Covered Employee Payroll	24.05%	26.02%	19.24%	18.22%	17.77%	16.65%	15.21%	13.41%	11.71%	9.72%

Schedule of Employer Contributions- Pension Funds

SPRS	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Actuarially Determined Employer Contribution	$25,808	$23,117	$20,498	$18,463	$18,765	$15,952	$13,823	$9,024	$6,353	$3,731
Actual Employer Contributions	20,279	18,501	15,362	12,657	9,489	8,186	7,443	6,142	4,244	2,851
Annual Contribution Deficiency (Excess)	5,529	4,616	5,136	5,806	9,276	7,766	6,380	2,882	2,109	880
Covered Employee Payroll	44,616	45,256	48,373	48,693	51,507	51,660	53,269	49,248	47,744	43,720
Actual Contributions as a Percentage of Covered Employee Payroll	45.45%	40.88%	31.76%	25.99%	18.42%	15.85%	13.97%	12.47%	8.89%	6.52%

Schedule of Changes in Net Pension Liability *(in Thousands)*

	KERS Nonhazardous	KERS Hazardous	CERS Nonhazardous	CERS Hazardous	SPRS Hazardous
Total Pension Liability (TPL)	**2014**	**2014**	**2014**	**2014**	**2014**
Service Cost	$133,361	$16,880	$192,482	$66,762	$7,142
Interest	853,653	59,594	710,527	238,665	50,391
Benefit Changes	0	0	0	0	0
Difference between Expected and Actual Experience	0	0	0	0	0
Changes of Assumptions	0	0	0	0	0
Benefit Payments	(889,936)	(54,321)	(582,850)	(189,635)	(53,026)
Refunds of Contributions	(13,627)	(2,830)	(14,286)	(2,664)	(213)
Net Change in TPL	83,450	19,323	305,873	113,127	4,294
TPL - Beginning	11,466,660	797,527	9,466,650	3,175,699	676,825
TPL - Ending (a)	**11,550,110**	**816,850**	**9,772,323**	**3,288,826**	**681,119**
Plan Net Position					
Contributions - Employers	296,836	11,671	324,231	115,240	20,279
Contributions-Members	97,487	12,546	128,568	43,722	5,076
Net Investment Income	337,922	80,724	895,531	288,490	40,374
Benefit Payments	(889,936)	(54,321)	(582,850)	(189,635)	(53,026)
Administrative Expense	(11,145)	(898)	(18,615)	(1,721)	(215)
Refunds of Contributions	(13,627)	(2,830)	(14,286)	(2,665)	(213)
Other	0	0	0	0	0
Net Change in Plan Position	(182,463)	46,892	732,579	253,431	12,276
Plan Net Position-Beginning	2,760,753	514,592	5,795,568	1,833,571	248,698
Plan Net Position-Ending (b)	**2,578,290**	**561,484**	**6,528,147**	**2,087,002**	**260,974**
Net Pension Liability - Ending (a-b)	**$8,971,820**	**255,366**	**3,244,376**	**1,201,824**	**420,145**
Ratio of Plan Net Position to TPL	22.32%	68.74%	66.80%	63.46%	38.32%
Covered Employee Payroll	$1,577,496	$129,076	2,272,270	479,164	44,616
Net Pension Liability as a percentage of Covered Employee Payroll	568.74%	197.84%	142.78%	250.82%	941.69%

Additional Supporting Schedules

Schedule of Administrative Expenses

(in Thousands) for the fiscal years ended June 30, 2014

Expense	2014	2013
Personnel		
Salaries and Per Diem	$13,869	$14,987
Fringe Benefits	6,899	6,349
Tuition Assistance	33	26
Total Personnel	20,801	21,362
Contractual Services		
Actuarial	521	401
Audit	76	169
Healthcare	257	135
Human Resources	-	54
Legal	1,787	746
Medical	258	381
Miscellaneous	312	194
Total Contractual Services	3,211	2,080
Communication		
Printing	359	272
Telephone	123	154
Postage	545	507
Travel	159	101
Total Communication	1,186	1,034
Rentals		
Office Space	706	1,165
Equipment	84	54
Total Rentals	790	1,219
Internal Audit		
Travel/Conferences	$4	$3
Dues/Subscriptions	1	1
Total Internal Audit	$5	$4

Expense	2014	2013
Investments (Pension Fund)		
Travel/Conferences	61	60
Dues/Subscriptions	34	41
Computer	169	180
Contractual	1,490	1,513
Miscellaneous	7	9
Legal	449	126
Total Investments	2,210	1,929
Miscellaneous		
Utilities	225	206
Software	2,268	1,168
Supplies	122	153
Insurance	67	67
Dues & Subscriptions	47	
Maintenance	6	15
Other	21	125
Total Miscellaneous	2,756	1,734
Depreciation/Amortization	1,634	1,219
Total Pension Fund Administrative Expenses	32,593	30,581
Healthcare Fees	1,614	9,758
Total Insurance Fund Administrative Expenses	1,614	9,758
Total Administrative Expenses	34,207	40,339

Schedule of Direct Investment Expenses *(in Thousands)* for the fiscal years ended June 30

	2014	2013
Pension Funds		
Security Lending Fees		
↘ Broker Rebates	$(433)	$(224)
↘ Lending Agent Fees	675	865
Total Security Lending	242	641
Contractual Services		
↘ Investment Management	42,867	39,198
↘ Security Custody/Investment Consultant	2,763	1,513
↘ Investment Related Travel	54	52
↘ Software	169	180
↘ Dues & Subscriptions	34	41
↘ Conferences	7	8
↘ Miscellaneous	7	9
↘ Legal Counsel	449	126
Total Contractual Services	46,350	41,127
Insurance Funds		
Security Lending Fees		
↘ Broker Rebates	(112)	15
↘ Lending Agent Fees	222	282
Total Security Lending	110	297
Contractual Services		
↘ Investment Management	14,896	9,599
↘ Security Custody/Investment Consultant	765	
Total Contractual Services	15,661	9,599
Total Investment Expenses	**$62,363**	**$51,664**

Schedule of Professional Consultant Fees *(in Thousands)* for the fiscal years ended June 30

Fees	**2014**	**2013**
Actuarial Services	$521	$401
Medical Review Services	258	381
Audit Services	76	169
Legal Counsel	1,787	746
Healthcare	257	135
Human Resources	-	54
Miscellaneous	312	194
Total	**3,211**	**2,207**

REPORT ON
INTERNAL CONTROL

over financial reporting and on compliance and other matters based on an audit of financial statements performed in accordance with government auditing standards

REPORT OF INDEPENDENT AUDITORS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the combining financial statements of the Kentucky Retirement Systems as of and for the fiscal year ended June 30, 2014, and the related notes to the combining financial statements, which collectively comprise the Kentucky Retirement Systems' basic combining financial statements, and have issued our report thereon dated December 4, 2014.

Internal Control Over Financial Reporting

In planning and performing our audit of the combining financial statements, we considered the Kentucky Retirement Systems' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the combining financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Kentucky Retirement Systems' internal control. Accordingly, we do not express an opinion on the effectiveness of the Kentucky Retirement Systems' internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Kentucky Retirement Systems' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of combining financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with Governmental Auditing Standards in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Dean Dorton Allen Ford, PLLC

December 4, 2014
Lexington, Kentucky

Actuarial

SECTION

ACTUARIAL

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Certification of Actuarial Results

The fifty-seventh annual actuarial valuation of the Kentucky Employees Retirement System (KERS), the fifty-fourth annual actuarial valuation of the County Employees Retirement System(CERS), and the fifty-fifth annual actuarial valuation of the State Police Retirement System(SPRS) have been completed and the reports prepared.

The fifty-eighth annual actuarial valuation of the Kentucky Employees Retirement System (KERS), the fifty-fifth annual actuarial valuation of the County Employees Retirement System (CERS), and the fifty-sixth annual actuarial valuation of the State Police Retirement System (SPRS) have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rates for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2014 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2015 and ending June 30, 2016 for CERS. The rate determined based on the June 30, 2013 actuarial valuation will be used for the fiscal year beginning July 1, 2015 and ending June 30, 2016 for KERS and SPRS.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by SB2, the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30-year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the UAL will be amortized over a 30-year period beginning June 30, 2013. The amortization period will decrease by one each year in the future.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain relatively stable as a percentage of payroll over future years.

The impact of HB1 passed into law in 2008 and SB2 passed into law in 2013 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008 and January 1, 2014, respectively. SB2 introduced a Cash Balance Plan for members hired on or after January 1, 2014. The cash balance plan limits the employers' exposure to increased contribution rates due to less than anticipated investment experience.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives relative to, both the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated

retirement rates, the 2006 (and for KERS Hazardous and CERS Non-Hazardous the 2009) assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have severely limited the plans ability to correct the declining funding levels. SB 2 requires the state to contribute the full actuarially determined employer contribution rates compared to the HB 1 phase-in rates which would not have required the full actuarially determined employer contribution rate for many years. As of June 30, 2014 the funding levels for the pension funds are as follows:

Funding Level of Pension Fund

System	Pension Fund	Insurance Fund
KERS Nonhazardous	21.0%	27.9%
KERS Hazardous	64.6%	105.6%
CERS Nonhazardous	62.6%	70.0%
CERS Hazardous	59.8%	66.8%
SPRS	35.6%	66.4%

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities.

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on August 20, 2009 based on the experience investigation report dated August 17, 2009, meet the parameters set for disclosure under GASB Statements No. 25 and 43. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The most recent experience study was completed on April 30, 2014 but no changes had been adopted by the Board as of the June 30, 2014 valuation date.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose. However, it is up to the state legislature to follow through with the required funding. As noted above, SB2 calls for KERS and SPRS contributions at the actuarially determined rates beginning with fiscal year 2014-2015, which is a positive development for the long term sustainability of those systems. CERS has always received the actuarially determined contributions, and its sustainability is not in question.

Thomas J. Cavanaugh FSA, FCA, MAAA, EA // CEO
Cavanaugh Macdonald Consulting, LLC
December 4, 2014

Summary of Actuarial Assumptions

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study.

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study. An Experience study was completed in August 2009 and reviewed plan experience for the period from July 1, 2005 through June 30, 2008. All assumptions, with the exception of health care trend rates, used in the June 30, 2012 actuarial valuation were based on the study performed in 2009 and in accordance with the actuary's recommendations. The most recent experience study was completed on April 30, 2014 but no changes had been adopted by the Board as of the June 30, 2014 valuation date.

Actuarial Cost Method: The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL) over no more than a 30-year period.

UAL Amortization Method: The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by SB2, the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

Asset Valuation Method: The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted by the Board in 2006.

Retiree Insurance Funding Policy: The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. As with the pension Fund, the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

Investment Return Assumption: The future investment earnings of plan assets are assumed to accumulate at a rate of 7.75% per annum. This rate consists of a 3.5% inflationary component and a 4.25% real rate of return component. In accordance with GASB Statement 43, the investment return assumption had been reduced to a blended rate of 4.5% for KERS and SPRS insurance funds due to a lack of pre-funding benefits. This assumption was adopted in 2006. However given the requirement for full actuarially determined contributions beginning with the results of the June 30, 2013 actuarial valuation, the investment return assumption for all funds is 7.75% per annum.

Salary Increase Assumptions: Active member salaries are assumed to increase at the rates provided in Table 1 on the following page. The rates include a 4.5% percent inflationary component and an additional increase due to promotion based upon plan experience. These assumptions were adopted in 2009.

Table 1. Salary Increase Assumptions

Service	KERS NonHaz	KERS Haz	CERS NonHaz	CERS Haz	SPRS
0-1	17.00%	21.00%	13.00%	20.00%	17.00%
1-2	9.00%	9.00%	9.50%	10.50%	12.00%
2-3	6.50%	7.00%	6.00%	6.50%	10.00%
3-4	6.00%	6.50%	6.00%	5.75%	9.00%
4-5	6.00%	6.00%	5.50%	5.50%	8.00%
5-6	6.00%	5.50%	5.50%	5.00%	7.00%
6-7	5.50%	5.00%	5.25%	4.50%	6.00%
7-8	5.50%	5.00%	5.25%	4.50%	6.50%
8-9	5.50%	5.00%	5.00%	4.50%	5.50%
9-10	5.00%	5.00%	5.00%	4.50%	5.00%
10+	5.00%	5.00%	4.75%	4.50%	4.50%

Payroll Growth Assumption: Active member payroll is assumed to increase at a rate of 4.5% per annum. This assumption was adopted in 2006.

Retiree Cost of Living Adjustments (COLA): SB2 only allows the Cost of Living Adjustments (COLAs) to be awarded on a biennial basis if the State Legislature so authorizes and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to prepay the increased liability for the COLA.

Medical Inflation Rate Assumption: The costs for retiree medical premiums are assumed to increase each according to the assumptions provided in Table 2 below:

Table 2. Cost of Retiree Medical Premiums

	Trend	
Fiscal Year Ended	Under Age 65	Age 65 and Over
2015	7.75%	6.00%
2016	6.75%	5.75%
2017	6.25%	5.50%
2018	5.75%	5.25%
2019	5.25%	5.00%
2020 and beyond	5.00%	5.00%

Retirement Rate Assumptions The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 3. These assumptions were adopted in 2009.

Table 3. Retirement Rate Assumptions

	Non-Hazardous				Hazardous					
Age	KERS[1]	KERS[2]	CERS[3]	Service	KERS[4]	KERS[5]	CERS[6]	CERS[7]	SPRS[8]	SPRS[9]
55	8.0%		8.0%	20	22.0%		20.0%		9.0%	
56	8.0%		8.0%	21	22.0%		20.0%		9.0%	
57	8.0%		8.0%	22	22.0%		20.0%		10.0%	
58	8.0%		8.0%	23	22.0%		20.0%		22.0%	
59	8.0%		8.0%	24	22.0%		30.0%		22.0%	
60	10.0%	10.0%	10.0%	25	35.0%	22.0%	33.0%	20.0%	22.0%	9.0%
61	20.0%	20.0%	20.0%	26	37.0%	22.0%	33.0%	20.0%	22.0%	9.0%
62	22.5%	22.5%	22.0%	27	37.0%	22.0%	33.0%	20.0%	25.0%	10.0%
63	22.5%	22.5%	22.0%	28	39.0%	22.0%	39.0%	20.0%	25.0%	22.0%
64	22.5%	22.5%	22.0%	29	38.0%	22.0%	33.0%	30.0%	25.0%	22.0%
65	22.5%	25.0%	22.0%	30	38.0%	35.0%	33.0%	33.0%	25.0%	22.0%
66	22.5%	25.0%	22.0%	31	38.0%	37.0%	33.0%	33.0%	33.3%	22.0%
67	22.5%	25.0%	22.0%	32	50.0%	37.0%	50.0%	33.0%	33.3%	25.0%
68	22.5%	25.0%	22.0%	33	50.0%	39.0%	40.0%	39.0%	33.3%	25.0%
69	22.5%	25.0%	22.0%	34	50.0%	38.0%	40.0%	33.0%	33.3%	25.0%
70	22.5%	25.0%	22.0%	35	60.0%	38.0%	40.0%	33.0%	33.3%	25.0%
71	22.5%	25.0%	22.0%	36	60.0%	38.0%	40.0%	33.0%	33.3%	33.3%
72	22.5%	25.0%	22.0%	37	60.0%	50.0%	40.0%	50.0%	33.3%	33.3%
73	22.5%	25.0%	22.0%	38	60.0%	50.0%	40.0%	40.0%	33.3%	33.3%
74	22.5%	25.0%	22.0%	39	60.0%	50.0%	40.0%	40.0%	33.3%	33.3%
75+	100.0%	100.0%	100.0%	40+	60.0%	60.0%	40.0%	40.0%	33.3%	33.3%

[1]*For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.*
[2]*For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 25%.*
[3]*If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.*
[4]*For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.*
[5]*For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*
[6]*For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.*
[7]*For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*
[8]*For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.*
[9]*For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.*

Mortality Assumptions The mortality table used for active members is 50% of the 1994 Group Annuity Mortality (GAM) Table. For non-disabled members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table to the 1994 GAM table. For disabled members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table set forward five years to the 1994 GAM table set forward five years. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted. The pre-retirement mortality assumption was adopted in 2009 and the post-retirement mortality assumptions were adopted in 2006.

Table 4. Sample Annual Rates of Mortality

	Active Member Mortality		Retired Member Mortality*		Disabled Member Mortality*	
Age	Males	Females	Males	Females	Males	Females
Under 20	0.02%	0.01%	0.04%	0.03%	-	-
22	0.03%	0.01%	0.06%	0.03%	-	-
32	0.04%	0.02%	0.08%	0.04%	-	-
42	0.06%	0.04%	0.13%	0.08%	0.19%	0.11%
52	0.16%	0.09%	0.32%	0.17%	0.56%	0.29%
62	0.51%	0.29%	1.01%	0.58%	1.80%	1.08%
72	1.42%	0.83%	2.85%	1.65%	4.52%	2.84%

** For members retiring on or after July 1, 2006.*

Withdrawal Rates The probability, or likelihood, of active members terminating employment prior to retirement is provided in Table 4 on the following page. The withdrawal rate is a function of both age and service. This type of structure is known as "select and ultimate rates". This structure reflects the fact that both service and age affect the likelihood of a member staying in active employment. The ultimate period for these systems covers a member's withdrawal rate after the first five years of service. These assumptions were adopted in 2009.

Table 5. Selected Rates of Termination Prior to Retirement

KERS Non-Hazardous			
Select Rates		Ultimate Rates	
Years of Service	Probability	Age	Probability
1	19.00%	20	6.00%
2	13.00%	25	5.08%
3	10.00%	30	4.26%
4	9.00%	35	3.21%
5	6.50%	40	3.00%
		45	3.00%
		50	3.00%
		55	3.00%
		60	3.00%

KERS Hazardous			
Select Rates		Ultimate Rates	
Years of Service	Probability	Age	Probability
1	26.00%	20	4.00%
2	11.50%	25	4.00%
3	8.25%	30	3.50%
4	7.50%	35	3.00%
5	7.00%	40	3.00%
		45	3.00%
		50	3.00%
		55	3.00%
		60	3.00%

CERS Non-Hazardous			
Select Rates		Ultimate Rates	
Years of Service	Probability	Age	Probability
1	25.00%	20	5.75%
2	14.00%	25	5.75%
3	10.00%	30	5.30%
4	8.00%	35	4.40%
5	6.50%	40	3.70%
		45	3.02%
		50	2.70%
		55	2.20%
		60	0.75%

CERS Hazardous			
Select Rates		Ultimate Rates	
Years of Service	Probability	Age	Probability
1	14.00%	20	3.00%
2	7.50%	25	2.70%
3	6.00%	30	2.50%
4	4.50%	35	2.50%
5	4.00%	40	2.50%
		45	2.50%
		50	2.50%
		55	-
		60	-

Table 5 Continued. Selected Rates of Termination Prior to Retirement

SPRS Non-Hazardous			
Select Rates		**Ultimate Rates**	
Years of Service	Probability	Age	Probability
1	20.00%	20	2.50%
2	7.50%	25	2.50%
3	3.00%	30	2.50%
4	3.00%	35	2.50%
5	3.00%	40	2.50%
		45	2.50%
		50	2.50%
		55	-
		60	-

OASDI
Old-Age Survivors & Disability Insurance

Rates of Disablement KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. For non-hazardous members, the assumptions are set using three quarters of the Old-Age Survivors and Disability Insurance (OASDI) rates. For hazardous members, the assumptions are set using one times the Old-Age Survivors and Disability Insurance (OASDI) rates. These assumptions were adopted in 2009.

This assumption provides the probability, or likelihood, that a member will ***become disabled during the course of employment*** *for various age levels.*

Rate of Disablement

Non-Hazardous		**Hazardous**	
Age	Probability	Age	Probability
20-24	0.0354%	20-24	0.0531%
25-29	0.0474%	25-29	0.0711%
30-34	0.0612%	30-34	0.0918%
35-39	0.0853%	35-39	0.1280%
40-44	0.1329%	40-44	0.1994%
45-49	0.2213%	45-49	0.3320%
50-54	0.3727%	50-54	0.5590%
55-59	0.6133%	55-59	0.9200%
60-64	0.9745%	60-64	1.4618%

Summary of Actuarial Valuation Results

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Recommended Rate Fiscal 2015-2016					
Pension Fund Contribution	33.57%	17.09%	12.42%	20.26%	58.44%
Insurance Fund Contribution	7.74%	7.12%	4.88%	13.42%	19.17%
Recommended Employer Contribution	41.31%	24.21%	17.30%	33.68%	77.61%
Funded Status as of Valuation Date					
Pension Fund					
↘ Actuarial Liability	$11,550,110,224	$816,850,063	$9,772,522,616	$3,288,825,753	$681,118,402
↘ Actuarial Value of Assets	$2,423,956,716	$527,897,261	$6,117,133,692	$1,967,640,027	$242,741,735
↘ Unfunded Liability on Actuarial Value of Assets	$9,126,153,508	$288,952,802	$3,655,388,924	$1,321,185,726	$438,376,667
↘ Funding Ratio on Actuarial Value of Assets	20.99%	64.63%	62.60%	59.83%	35.64%
↘ Market Value of Assets	$2,560,419,519	$559,504,340	$6,507,300,157	$2,082,998,414	$260,763,486
↘ Unfunded Liability on Market Value of Assets	$8,989,690,705	$257,345,723	$3,265,222,459	$1,205,827,339	$420,354,916
↘ Funding Ratio on Market Value of Assets	22.17%	68.50%	66.59%	63.34%	38.28%
Insurance Fund					
↘ Actuarial Liability	$2,226,759,925	$396,986,820	$2,616,914,600	$1,493,864,379	$234,271,127
↘ Actuarial Value of Assets	$621,236,646	$419,395,867	$1,831,199,465	$997,733,237	$155,594,760
↘ Unfunded Liability on Actuarial Value of Assets	$1,605,523,279	($22,409,047)	$785,715,135	$496,131,142	$78,676,367
↘ Funding Ratio on Actuarial Value of Assets	27.90%	105.64%	69.98%	66.79%	66.42%
↘ Market Value of Assets	$664,775,708	$435,503,976	$1,899,557,376	$1,034,307,636	$165,167,805
↘ Unfunded Liability on Market Value of Assets	$1,561,984,217	($38,517,156)	$717,357,224	$459,556,743	$69,103,322
↘ Funding Ratio on Market Value of Assets	29.85%	109.70%	72.59%	69.24%	70.50%
Member Data					
Number of Active Members	40,365	4,024	81,115	9,194	855
Total Annual Payroll (Active Members)[1]	$1,577,496,447	$129,076,038	$2,272,270,287	$479,164,016	$44,615,885
Average Annual Pay (Active Members)	$39,081	$32,077	$28,013	$52,117	$52,182
Number of Retired Members & Beneficiaries	41,223	3,620	49,935	7,646	1,413
Average Annual Retirement Allowance	$21,009	$14,992	$11,246	$24,981	$37,815
Number of Vested Inactive Members	7,891	365	10,329	588	59
Number of Inactive Members Due a Refund	38,748	3,643	66,661	1,940	349

[1]*Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2014.*

Recommended Employer Contribution Rates as of June 30, 2014

KERS Nonhazardous

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/09	2010-2011	4.26%	17.51%	21.77%	16.81%	38.58%
6/30/10	2011-2012	4.23%	20.07%	24.30%	16.41%	40.71%
6/30/11	2012-2013	4.38%	23.65%	28.03%	16.52%	44.55%
6/30/12	2013-2014	4.26%	28.31%	32.57%	12.71%	45.28%
6/30/13	2014-2015	4.13%	26.71%	30.84%	7.93%	38.77%
6/30/14	2015-2016	4.10%	29.47%	33.57%	7.74%	41.31%

KERS Hazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/09	2010-2011	7.94%	6.17%	14.11%	20.26%	34.37%
6/30/10	2011-2012	7.19%	6.92%	14.11%	19.73%	33.84%
6/30/11	2012-2013	7.47%	8.69%	16.16%	19.73%	35.89%
6/30/12	2013-2014	6.09%	10.91%	17.00%	11.84%	28.84%
6/30/13	2014-2015	5.79%	10.58%	16.37%	9.97%	26.34%
6/30/14	2015-2016	5.69%	11.40%	17.09%	7.12%	24.21%

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2009 through 2014 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

KERS Funds

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the tables above are the full funding rates presented by the actuary in the 2009 through 2014annual valuations. However, the actual employer contribution rates have been less than those shown above for the years prior to 2014-2015. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

CERS Funds

The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the tables above are the full funding rates presented by the actuary in the 2009 through 2014 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date as a result of the passage of HB 1 by the Kentucky General Assembly. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2014-2015 is 4.92% and the employer contribution rate is 17.67%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2014-2015 is 13.58% and the employer contribution rate is 34.31%.

Recommended Employer Contribution Rates as of June 30, 2014

CERS Nonhazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/09	2010-2011	4.60%	5.43%	10.03%	9.78%	19.81%
6/30/10	2011-2012	4.72%	6.98%	11.70%	9.59%	21.29%
6/30/11	2012-2013	4.68%	7.94%	12.62%	8.59%	21.21%
6/30/12	2013-2014	4.68%	9.06%	13.74%	5.84%	19.58%
6/30/13	2014-2015	4.35%	8.40%	12.75%	5.35%	18.10%
6/30/14	2015-2016	4.23%	8.19%	12.42%	4.88%	17.30%

CERS Hazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/09	2010-2011	7.56%	9.23%	16.79%	23.27%	40.06%
6/30/10	2011-2012	7.31%	10.60%	17.91%	23.74%	41.65%
6/30/11	2012-2013	7.40%	12.70%	20.10%	21.84%	41.94%
6/30/12	2013-2014	6.44%	15.33%	21.77%	16.02%	37.79%
6/30/13	2014-2015	6.35%	14.38%	20.73%	14.97%	35.70%
6/30/14	2015-2016	6.21%	14.05%	20.26%	13.42%	33.68%

The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2009 through 2014 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary based on the phase-in and adopted by the Board for 2015-2016 is 4.64% and the employer contribution rate is 17.06%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2015-2016 is 12.69% and the employer contribution rate is 32.95%.

Recommended Employer Contribution Rates as of June 30, 2014

SPRS

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/09	2010-2011	8.12%	27.62%	35.74%	49.89%	85.63%
6/30/10	2011-2012	7.75%	32.05%	39.80%	54.83%	94.63%
6/30/11	2012-2013	8.12%	39.36%	47.48%	55.93%	103.41%
6/30/12	2013-2014	8.14%	45.21%	53.35%	43.17%	96.52%
6/30/13	2014-2015	8.46%	45.44%	53.90%	21.86%	75.76%
6/30/14	2015-2016	8.39%	50.05%	58.44%	19.17%	77.61%

The contribution rates for SPRS shown in the above tables are the full funding rates presented by the actuary in the 2009 through 2014 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statue called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

SPRS Funds

The contribution rates for SPRS shown in the tables above are the full funding rates presented by the actuary in the 2009 through 2014 annual valuations. However, the actual employer contribution rates have been less than those shown above for the years prior to 2014-2015. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2018 for SPRS. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

Summary of Actuarially Unfunded Liabilities as of June 30, 2014

KERS Non-Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/09	$10,658,549,532	$4,794,611,365	$3,584,196,429	$5,863,938,167	$7,074,353,103	45.0%	33.6%
6/30/10	$11,004,795,089	$4,210,215,585	$3,503,007,035	$6,794,579,504	$7,501,788,054	38.3%	31.8%
6/30/11	$11,182,142,032	$3,276,986,087	$3,538,878,093	$7,455,155,945	$7,643,263,939	33.3%	31.7%
6/30/12	$11,361,048,136	$3,101,316,738	$2,980,401,603	$8,259,731,398	$8,380,646,533	27.3%	26.2%
6/30/13	$11,386,602,159	$2,636,122,852	$2,747,428,086	$8,750,479,307	$8,639,174,073	23.2%	24.1%
6/30/14	$11,550,110,224	$2,423,956,716	$2,560,419,519	$9,126,153,508	$8,989,690,705	21.0%	22.2%

KERS Non-Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/09	$4,507,325,571	$534,172,580	$365,771,088	$3,973,152,991	$4,141,554,483	11.9%	8.1%
6/30/10	$4,466,136,041	$471,341,628	$371,002,484	$3,994,794,413	$4,095,133,557	10.6%	8.3%
6/30/11	$4,280,089,633	$451,620,442	$433,305,243	$3,828,469,191	$3,846,784,390	10.6%	10.1%
6/30/12	$3,125,330,157	$446,080,511	$430,805,726	$2,679,249,646	$2,694,524,431	14.3%	13.8%
6/30/13	$2,128,754,134	$497,584,327	$509,364,080	$1,631,169,807	$1,619,390,054	23.4%	23.9%
6/30/14	$2,226,759,925	$621,236,646	$664,775,708	$1,605,523,279	$1,561,984,217	27.9%	29.9%

KERS Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/09	$674,411,781	$502,503,287	$388,913,374	$171,908,494	$285,498,406	74.5%	57.7%
6/30/10	$688,149,451	$502,729,009	$443,511,663	$185,420,442	$244,637,788	73.1%	64.5%
6/30/11	$721,293,444	$510,748,505	$510,628,492	$210,544,939	$210,664,952	70.8%	70.8%
6/30/12	$752,699,457	$497,226,296	$478,103,794	$255,473,161	$274,595,663	66.1%	63.5%
6/30/13	$783,980,594	$505,656,808	$513,162,166	$278,323,786	$270,818,428	64.5%	65.5%
6/30/14	$816,850,063	$527,897,261	$559,504,340	$288,952,802	$257,345,723	64.6%	68.5%

KERS Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/09	$491,132,170	$301,634,592	$219,537,255	$189,497,578	$271,594,915	61.4%	44.7%
6/30/10	$493,297,529	$314,427,296	$271,395,843	$178,870,233	$221,901,686	63.7%	55.0%
6/30/11	$507,058,767	$329,961,615	$321,071,515	$177,097,152	$185,987,252	65.1%	63.3%
6/30/12	$384,592,406	$345,573,948	$333,298,119	$39,018,458	$51,294,287	89.9%	86.7%
6/30/13	$ 385,517,675	$370,774,403	$ 374,309,576	$14,743,272	$11,208,099	96.2%	97.1%
6/30/14	$396,986,820	$419,395,867	$435,503,976	($22,409,047)	($38,517,156)	105.6%	109.7%

Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2014

CERS Non-Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/09	$7,912,913,512	$5,650,789,991	$4,330,593,934	$2,262,123,521	$3,582,319,578	71.4%	54.7%
6/30/10	$8,459,022,280	$5,546,857,291	$4,819,933,717	$2,912,164,989	$3,639,088,563	65.6%	57.0%
6/30/11	$8,918,085,025	$5,629,611,183	$5,577,252,295	$3,288,473,842	$3,340,832,730	63.1%	62.5%
6/30/12	$9,139,567,695	$5,547,235,599	$5,372,769,813	$3,592,332,096	$3,766,797,882	60.7%	58.8%
6/30/13	$9,378,876,114	$5,637,094,483	5,780,830,355	$3,741,781,631	$3,598,045,759	60.1%	61.6%
6/30/14	$9,772,522,616	$6,117,133,692	$6,507,300,157	$3,655,388,924	$3,265,222,459	62.6%	66.6%

CERS Non-Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/09	$3,070,386,018	$1,216,631,769	$894,905,841	$1,853,754,249	$2,175,480,177	39.6%	29.2%
6/30/10	$3,158,340,174	$1,293,038,593	$1,096,581,872	$1,865,301,581	$2,061,758,302	40.9%	34.7%
6/30/11	$3,073,973,205	$1,433,450,793	$1,451,984,026	$1,640,522,412	$1,621,989,179	46.6%	47.2%
6/30/12	$2,370,771,288	$1,512,853,851	$1,439,226,170	$857,917,437	$931,545,118	63.8%	60.7%
6/30/13	$2,443,894,100	$1,628,244,197	$1,633,696,661	$815,649,903	$810,197,439	66.6%	66.9%
6/30/14	$2,616,914,600	$1,831,199,465	$1,899,557,376	$785,715,135	$717,357,224	70.0%	72.6%

CERS Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/09	$2,578,444,600	$1,751,487,540	$1,320,522,868	$826,957,060	$1,257,921,732	67.9%	51.2%
6/30/10	$2,672,151,907	$1,749,464,388	$1,506,787,429	$922,687,519	$1,165,364,478	65.5%	56.4%
6/30/11	$2,859,041,052	$1,779,545,393	$1,760,602,934	$1,079,495,659	$1,098,438,118	62.2%	61.6%
6/30/12	$3,009,992,047	$1,747,379,297	$1,677,940,479	$1,262,612,750	$1,332,051,568	58.1%	55.8%
6/30/13	$3,124,205,593	$1,801,691,410	$1,830,657,969	$1,322,514,183	$1,293,547,624	56.7%	58.6%
6/30/14	$3,288,825,753	$1,967,640,027	$2,082,998,414	$1,321,185,726	$1,205,827,339	59.8%	63.3%

CERS Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/09	$1,593,548,263	$651,130,782	$483,269,862	$942,417,481	$1,110,278,401	40.9%	30.3%
6/30/10	$1,674,703,216	$692,769,770	$586,826,965	$981,933,446	$1,087,876,251	41.4%	35.0%
6/30/11	$1,647,702,755	$770,790,274	$774,509,101	$876,912,481	$873,193,654	46.8%	47.0%
6/30/12	$1,364,843,057	$829,040,842	$788,070,813	$535,802,215	$576,772,244	60.7%	57.7%
6/30/13	$1,437,332,817	$892,774,391	$894,232,297	$544,558,426	$543,100,520	62.1%	62.2%
6/30/14	$1,493,864,379	$997,733,237	$1,034,307,636	$496,131,142	$459,556,743	66.8%	69.2%

Continued. **Summary of Actuarially Unfunded Liabilities** as of June 30, 2014

SPRS Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/09	$602,328,868	$329,966,989	$256,571,073	$272,361,879	$345,757,795	54.8%	42.6%
6/30/10	$612,444,806	$304,577,292	$264,944,089	$307,867,514	$347,500,717	49.7%	43.3%
6/30/11	$634,379,401	$285,580,631	$279,934,443	$348,798,770	$354,444,958	45.0%	44.1%
6/30/12	$647,688,665	$259,791,575	$252,896,868	$387,897,090	$394,791,797	40.1%	39.1%
6/30/13	$651,580,654	$241,800,328	$248,559,040	$409,780,326	$403,021,614	37.1%	38.2%
6/30/14	$681,118,402	$242,741,735	$260,763,486	$438,376,667	$420,354,916	35.6%	38.3%

SPRS Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/09	$364,031,141	$123,526,647	$93,686,940	$240,504,494	$270,344,201	33.9%	25.7%
6/30/10	$434,960,495	$121,175,083	$104,526,550	$313,785,412	$330,433,945	27.9%	24.0%
6/30/11	$438,427,763	$123,687,289	$127,367,947	$314,740,474	$311,059,816	28.2%	29.1%
6/30/12	$333,903,782	$124,372,072	$125,567,846	$209,531,710	$208,335,936	37.3%	37.6%
6/30/13	$222,326,743	$136,321,060	$142,830,916	$86,005,683	$79,495,827	61.3%	64.2%
6/30/14	$234,271,127	$155,594,760	$165,167,805	$78,676,367	$69,103,322	66.4%	70.5%

Valuation Blance Sheets give the basis for determining the percentage rates for contributions to be made by employers.

Analysis of Financial Experience

Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience *(in Millions)* as of June 30, 2014

Type of Activity	Retirement Gain	Insurance Gain
KERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(228.9)	(33.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(8.1)	0.0
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.5)	(1.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	92.0	5.0
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	68.9	(13.5)
New Members. Additional unfunded accrued liability will produce a loss.	(11.4)	(2.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	128.8	24.1
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	19.8	59.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(1.1)	26.0
Gain (or Loss) During Year From Financial Experience	**59.4**	**63.9**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.		0.0
Composite Gain (or Loss) During Year	**59.4**	**63.9**
KERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(34.7)	(3.8)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.8)	0.7
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	20.0	3.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	7.0	7.1
New Members. Additional unfunded accrued liability will produce a loss.	(7.2)	(4.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	18.8	10.6
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	4.0	21.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(1.2)	3.2
Gain (or Loss) During Year From Financial Experience	**5.9**	**37.5**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**5.9**	**37.5**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience *(in Millions)* as of June 30, 2014

Type of Activity	Retirement Gain	Insurance Gain
CERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(153.8)	(28.2)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(22.3)	(1.3)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.1)	(2.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	44.7	9.7
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	63.0	(27.5)
New Members. Additional unfunded accrued liability will produce a loss.	(15.1)	(4.4)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	218.8	41.9
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	1.4	60.8
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	2.0	0.0
Gain (or Loss) During Year From Financial Experience	**137.7**	**49.0**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**137.7**	**49.0**
CERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(72.1)	(11.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3.7)	1.3
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	22.0	2.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	7.5	45.0
New Members. Additional unfunded accrued liability will produce a loss.	(8.4)	(3.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	63.9	20.4
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	2.8	30.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(0.8)	(22.7)
Gain (or Loss) During Year From Financial Experience	**11.2**	**61.3**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**11.2**	**61.3**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience *(in Millions)* as of June 30, 2014

Type of Activity	Retirement Gain	Insurance Gain
SPRS		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(26.3)	(10.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.2)	0.2
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(0.7)	(0.7)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	4.4	5.3
New Members. Additional unfunded accrued liability will produce a loss.	(0.1)	0.0
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	11.5	6.8
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(1.0)	13.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(2.7)	(4.9)
Gain (or Loss) During Year From Financial Experience	**(15.1)**	**9.3**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**(15.1)**	**9.3**

Solvency Test *per Funds* as of June 30, 2014

KERS Non-Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/09	$793,574,765	$8,205,155,691	$1,659,819,076	$4,794,611,365	100.0%	48.8%	--
6/30/10	$869,484,042	$8,329,757,802	$1,805,553,245	$4,210,215,585	100.0%	40.1%	--
6/30/11	$916,568,932	$8,482,714,356	$1,782,858,744	$3,726,986,087	100.0%	33.1%	--
6/30/12	$885,137,183	$8,708,536,338	$1,767,374,615	$3,101,316,738	100.0%	25.4%	--
6/30/13	$922,928,027	$8,709,323,622	$1,754,350,510	$2,636,122,852	100.0%	19.7%	--
6/30/14	$928,557,540	$8,870,692,596	$1,750,860,088	$2,423,956,716	100.0%	16.9%	--

KERS Non-Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/09	$0	$2,861,867,088	$1,645,458,483	$534,172,580	100.0%	18.7%	--
6/30/10	$0	$2,744,534,054	$1,721,601,987	$471,341,628	100.0%	17.2%	--
6/30/11	$0	$2,568,002,978	$1,712,086,655	$451,620,442	100.0%	17.6%	--
6/30/12	$0	$1,924,068,623	$1,201,261,534	$446,080,511	100.0%	23.2%	--
6/30/13	$0	$1,338,772,860	$789,981,274	$497,584,327	100.0%	37.2%	--
6/30/14	$0	$1,425,604,569	$801,155,356	$621,236,646	100.0%	43.6%	

KERS Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/09	$87,779,938	$413,972,356	$172,659,487	$502,503,287	100.0%	100.0%	0.4%
6/30/10	$88,511,283	$441,657,241	$157,980,927	$502,729,009	100.0%	93.8%	--
6/30/11	$86,614,205	$490,395,078	$144,284,161	$510,748,505	100.0%	86.5%	--
6/30/12	$82,100,877	$521,688,803	$148,909,777	$497,226,296	100.0%	79.6%	--
6/30/13	$82,145,602	$545,596,534	$156,238,458	$505,656,808	100.0%	77.6%	--
6/30/14	$83,663,535	$581,231,300	$151,955,228	$527,897,261	100.0%	76.4%	

KERS Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/09	$0	$242,123,365	$249,008,805	$301,634,592	100.0%	100.0%	23.9%
6/30/10	$0	$268,510,709	$224,786,820	$314,427,296	100.0%	100.0%	20.4%
6/30/11	$0	$285,539,861	$221,518,906	$329,961,615	100.0%	100.0%	20.1%
6/30/12	$0	$196,578,935	$188,013,471	$345,573,948	100.0%	100.0%	79.2%
6/30/13	$0	$202,031,515	$183,486,160	$370,774,403	100.0%	100.0%	92.0%
6/30/14	$0	$206,477,405	$190,509,415	$419,395,867	100.0%	100.0%	100%

Continued. Solvency Test as of June 30, 2014

CERS Non-Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/09	$991,628,551	$4,542,483,102	$2,378,801,859	$5,650,789,991	100.0%	100.0%	4.9%
6/30/10	$1,063,746,826	$4,890,659,077	$2,504,616,377	$5,546,857,291	100.0%	91.7%	--
6/30/11	$1,110,967,160	$5,209,783,924	$2,597,333,941	$5,629,611,183	100.0%	86.7%	--
6/30/12	$1,117,549,337	$5,416,932,995	$2,605,085,363	$5,547,235,599	100.0%	81.8%	--
6/30/13	$1,149,610,832	$5,638,370,836	$2,590,894,446	$5,637,094,483	100.0%	79.6%	--
6/30/14	$1,204,383,085	$5,873,279,494	$2,694,860,037	$6,117,133,692	100.0%	83.6%	

CERS Non-Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/09	$0	$1,478,782,753	$1,591,603,265	$1,216,631,769	100.0%	82.3%	--
6/30/10	$0	$1,526,533,372	$1,631,806,802	$1,293,038,593	100.0%	84.7%	--
6/30/11	$0	$1,460,808,255	$1,613,164,950	$1,433,450,793	100.0%	98.1%	--
6/30/12	$0	$1,146,907,750	$1,223,863,538	$1,512,853,851	100.0%	100.0%	29.9%
6/30/13	$0	$1,205,599,287	$1,238,294,813	$1,628,244,197	100.0%	100.0%	34.1%
6/30/14	$0	$1,318,182,882	$1,298,731,718	$1,831,199,465	100.0%	100.0%	39.5%

CERS Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/09	$350,308,879	$1,540,262,587	$687,873,134	$1,751,487,540	100.0%	91.0%	--
6/30/10	$369,612,720	$1,622,684,455	$679,854,732	$1,749,464,388	100.0%	85.0%	--
6/30/11	$382,072,055	$1,768,511,545	$708,457,452	$1,779,545,393	100.0%	79.0%	--
6/30/12	$381,672,428	$1,889,884,303	$738,435,316	$1,747,379,297	100.0%	72.3%	--
6/30/13	$390,471,059	$1,988,029,963	$745,704,571	$1,801,691,410	100.0%	71.0%	--
6/30/14	$415,069,629	$2,077,516,709	$796,239,415	$1,967,640,027	100.0%	74.7%	

CERS Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/09	$0	$725,899,836	$867,648,427	$651,130,782	100.0%	89.7%	--
6/30/10	$0	$814,300,256	$860,402,960	$692,769,770	100.0%	85.1%	--
6/30/11	$0	$771,631,287	$876,071,468	$770,790,274	100.0%	99.9%	--
6/30/12	$0	$575,099,089	$789,743,968	$829,040,842	100.0%	100.0%	32.2%
6/30/13	$0	$660,955,331	$776,377,486	$892,774,391	100.0%	100.0%	29.9%
6/30/14	$0	$700,311,599	$793,552,780	$997,733,237	100.0%	100.0%	37.5%

Continued. Solvency Test as of June 30,2014

SPRS Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/09	$41,664,469	$459,585,353	$101,079,046	$329,966,989	100.0%	62.7%	--
6/30/10	$42,011,523	$475,892,659	$94,540,624	$304,577,292	100.0%	55.2%	--
6/30/11	$43,574,097	$499,194,229	$91,611,075	$285,580,631	100.0%	48.5%	--
6/30/12	$41,139,306	$523,016,647	$83,532,712	$259,791,575	100.0%	41.8%	--
6/30/13	$39,788,421	$535,720,195	$76,072,038	$241,800,328	100.0%	37.7%	--
6/30/14	$41,831,465	$563,011,026	$76,275,911	$242,741,735	100.0%	35.7%	

SPRS Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/09	$0	$167,091,453	$196,939,688	$123,526,647	100.0%	73.9%	--
6/30/10	$0	$253,580,827	$181,379,668	$121,175,083	100.0%	47.8%	--
6/30/11	$0	$252,439,726	$185,988,037	$123,687,289	100.0%	49.0%	--
6/30/12	$0	$190,258,729	$143,645,053	$124,372,072	100.0%	65.4%	--
6/30/13	$0	$139,508,590	$82,818,153	$136,321,060	100.0%	97.7%	--
6/30/14	$0	$143,402,126	$90,869,001	$155,594,760	100.0%	100.0%	13.4%

Active Member Valuation

Methodology The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

Summary of Active Member Valuation Data

KERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/09	334	46,060	$1,754,412,912	$38,090	(0.3)%	43.0	8.7
6/30/10	334	47,090	$1,815,146,388	$38,546	1.2%	43.4	9.0
6/30/11	427	46,617	$1,731,632,748	$37,146	(3.6)%	43.8	9.4
6/30/12	286	42,196	$1,644,896,681	$38,982	4.9%	44.3	9.8
6/30/13	285	42,226	$1,644,408,698	$38,943	(0.1)%	44.5	10.1
6/30/14	353	40,365	$1,577,496,447	$39,081	0.4%	44.8	10.5

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2014.*

KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/09	20	4,334	$146,043,576	$33,697	(0.5)%	41.4	7.0
6/30/10	18	4,291	$143,557,944	$33,456	(0.7)%	41.4	7.0
6/30/11	16	4,291	$133,053,792	$31,008	(7.3)%	41.3	6.9
6/30/12	14	4,086	$131,976,754	$32,300	4.2%	41.1	7.3
6/30/13	14	4,127	$132,015,368	$31,988	(1.0)%	40.6	7.2
6/30/14	18	4,024	$129,076,038	$32,077	0.3%	40.6	7.4

CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/09	1,108	83,724	$2,183,611,848	$26,081	2.6%	46.2	8.6
6/30/10	1,102	84,681	$2,236,855,380	$26,415	1.3%	46.6	8.8
6/30/11	1,102	85,285	$2,276,595,948	$26,694	1.1%	46.8	9.0
6/30/12	1,080	83,052	$2,236,546,345	$26,929	0.9%	47.5	9.1
6/30/13	1,081	81,815	$2,236,277,489	$27,333	1.5%	47.8	9.3
6/30/14	1,101	81,115	$2,272,270,287	$28,013	2.5%	48.1	9.6

CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/09	290	9,757	$469,315,464	$48,100	3.2%	38.4	8.8
6/30/10	282	9,562	$466,548,660	$48,792	1.4%	38.8	9.2
6/30/11	281	9,407	$466,963,860	$49,640	1.7%	39.1	9.5
6/30/12	254	9,130	$464,228,923	$50,847	2.4%	39.3	10.3
6/30/13	248	9,123	$461,672,567	$50,605	(0.5)%	39.1	10.3
6/30/14	254	9,194	$479,164,016	$52,117	3.0%	39.2	10.6

SPRS

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/09	1	946	$51,660,396	$54,609	1.8%	37.3	11.0
6/30/10	1	961	$51,506,712	$53,597	(1.9)%	37.2	10.6
6/30/11	1	965	$48,692,616	$50,459	(5.9)%	37.7	10.6
6/30/12	1	907	$48,372,506	$53,332	5.7%	37.3	10.4
6/30/13	1	902	$45,256,202	$50,173	(5.9)%	37.0	10.0
6/30/14	1	855	$44,615,885	$52,182	4.0%	37.8	10.9

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2014.*

Retired Member Valuation

Summary of Retired Member Valuation Data

KERS Non-Haz

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/09	3,465	889	37,883	$ 812,559,070	14.36%	$21,449
6/30/10	1,162	1,100	37,945	$801,881,911	(1.31%)	$21,133
6/30/11	1,592	940	38,597	$821,197,278	2.41%	$21,276
6/30/12	1,707	1,078	39,226	$844,880,945	2.88%	$21,539
6/30/13	1,982	1,014	40,194	$872,139,782	3.23%	$21,698
6/30/14	2,067	1,038	41,223	$888,430,310	1.87%	$21,552

KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/09	339	95	2,648	$38,695,501	15.20%	$14,613
6/30/10	282	95	2,835	$41,114,800	6.25%	$14,503
6/30/11	288	59	3,064	$45,609,229	10.93%	$14,886
6/30/12	243	54	3,253	$49,231,205	7.94%	$15,134
6/30/13	229	52	3,430	$51,122,456	3.84%	$14,905
6/30/14	256	66	3,620	$54,271,718	6.16%	$14,992

CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/09	3,060	883	39,756	$ 440,061,418	11.76%	$11,069
6/30/10	2,565	1,283	41,038	$452,613,550	2.85%	$11,029
6/30/11	3,250	1,077	43,211	$483,594,068	6.84%	$11,191
6/30/12	3,300	1,207	45,304	$515,008,362	6.50%	$11,368
6/30/13	3,570	1,198	47,676	$557,979,192	8.34%	$11,704
6/30/14	3,480	1,221	49,935	$582,957,825	4.48%	$11,674

CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/09	650	264	5,808	$ 139,886,751	9.73%	$24,085
6/30/10	423	163	6,068	$146,916,812	5.03%	$24,212
6/30/11	502	102	6,468	$160,259,395	9.08%	$24,777
6/30/12	483	73	6,878	$173,221,483	8.09%	$25,185
6/30/13	519	104	7,293	$182,634,895	5.43%	$25,042
6/30/14	469	116	7,646	$191,007,832	4.58%	$24,981

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section

SPRS						
Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/09	75	26	1,184	$44,273,937	7.22%	$37,394
6/30/10	54	15	1,223	$45,515,797	2.80%	$37,217
6/30/11	52	12	1,263	$47,467,404	4.29%	$37,583
6/30/12	52	16	1,299	$49,887,093	5.10%	$38,404
6/30/13	63	16	1,346	$50,905,789	2.04%	$37,820
6/30/14	95	28	1,413	$53,432,446	4.96%	$37,815

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

Summary of Benefit Provisions
KERS & CERS Non-Hazardous Plans

Plan Funding State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS rates are subject to state budget approval.

Membership Eligibility For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility for Members Whose Participation Began Before 9/1/08		
Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
Any	25	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.

Retirement Eligibility for Members Whose Participation Began On or After 9/1/08		
Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None
60	10	6.5% per year for first five years, and 4.5% for next five years before age 65 or Rule of 87 (age plus years of service).

State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required for health insurance.

Benefit Formula

Final Compensation		Benefit Factor		Years of Service
Average of the five highest if participation began before 9/1/2008.	KERS 1.97% if:	Member does not have 13 months credit for 1/1/1998-1/1/1999.	x	Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
	KERS 2.00% if:	Member has 13 months credit from 1/1/1998-1/1/1999.		
	KERS 2.20% if:	Member has 20 or more years of service, including 13 months from 1/1/1998-1/1/1999 and retires by 1/1/2009.		
	CERS 2.20% if:	Member begins participating prior to 8/1/2004.		
	CERS 2.00% if:	Member begins participating on or after 8/1/2004 and before 9/1/2008.		
Average of the last complete five if participation began on or after 9/1/2008.	KERS & CERS increasing percent based on service at retirement* plus 2.00% for each year of service over 30 if:	Member begins participating on or after 9/1/2008.		

* ***Service*** *(and Benefit Factor):* ***10 years or less*** *(1.10%);* ***10 - 20 years*** *(1.30%);* ***20 - 26 years*** *(1.50%);* ***26 - 30 years*** *(1.75%)*

Post-Retirement Death Benefits If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits Members participating before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after 8/1/2004 but before 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from

the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to increase, suspend or reduce Cost of Living Adjustments. HB 265 of 2012 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees. SB 2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

Insurance Benefits For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

Refunds Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1981; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees participating prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees participating on or after September 1, 2008 but before January 1, 2014, interest will be credited at a rate of 2.5%. For employees participating on or after January 1, 2014, interest will be credited at a minimum rate of 4.0%.

Summary of Benefit Provisions

KERS Hazardous, CERS Hazardous & SPRS Systems

Plan Funding State statute requires active members to contribute 8% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS & SPRS rates are subject to state budget approval

Membership Eligibility All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

Retirement Eligibility - Participation Began Before 9/1/08

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 55 or 20 years of service.

Retirement Eligibility - Participation began on/after 9/1/2008 & before 1/1/2014

Age	Years of Service	Allowance Reduction
60	5	None
Any	25	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 60 or 25 years of service.

Retirement Eligibility - Participation began on/after 1/1/2014

Age	Years of Service	Allowance Reduction
60	5	
Any	25	

Member begins participating on or after 1/1/2014: Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into an account. This account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Disability Benefits Members hired before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members hired on or after 8/1/2004 but before 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. The account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Benefit Formula

Final Compensation	x	Benefit Factor		Years of Service
Average of the three highest if participation began before 9/1/2008.		KERS 2.49%, CERS 2.50%, SPRS 2.50%, if:	Member begins participating before 9/1/2008.	Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
Average of the three highest complete years if participation began on or after 9/1/2008.		KERS, CERS and SPRS increasing percent based on service at retirement* if:	Member begins participating on or after 9/1/2008 but before 1/1/2014.	

* ***Service*** *(with Benefit Factor):* ***10 years or less*** *(1.30%);* ***10 - 20 years*** *(1.50%);* ***20 - 25 years*** *(2.25%)* ***25 + years*** *(2.50%)*

Cost of Living Adjustment Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to increase, suspend or reduce Cost of Living Adjustments. HB 265 of 2012 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees. SB2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

Insurance Benefits For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

Refunds Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1981; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees hired prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees hired on or after September 1, 2008, interest will be credited at a rate of 2.5%.

Investment

SECTION

INVESTMENT

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Fed
Federal Reserve

MBS
Mortgage Backed Securities

GDP
Gross Domestic Product

U.S. Economy Getting Stronger
Producing Strong Investment Results

Investment returns were driven by the U.S. public equity market for the fiscal year, continuing the multi-year positive run for U.S. stocks. Investors really haven't seen these types of returns or the duration of the current rally since the late 1990s. In addition, the recent IPO market has been robust, allowing private companies to offer shares to the public.

Investors finally saw some signs of economic growth in the spring of 2014 after a tough winter where we saw dismal GDP growth and only moderate employment growth. Employment numbers improved in the spring with all monthly job gains exceeding 200,000 per month, plus GDP in the second quarter of 2014 was positive 4.2 percent annualized versus negative 2.1 percent annualized for the first quarter of 2014. The second quarter numbers gave some evidence that the U.S. stock market was not getting ahead of itself and staved off any selloff or correction.

While the domestic economy is improving, the world is not without its worry. The Ukraine and Russia conflict was exacerbated with the downing of the Malaysian Airlines flight, resulting in further economic sanctions placed on Russia. This situation has caused an already weak European economy to get worse and slip back into recession. The economic weakness is forcing the European Central Bank to take accommodative actions and increase money supply resulting in extremely low interest rates. European banks still have yet to clean up many bad loans on their books post financial crisis. The Israel and Hamas conflict has been an active military engagement for a number of months now and as the fiscal year was ending, Iraq was in a deteriorating situation politically and militarily, though maybe some progress has been made more recently.

The Federal Reserve continues to taper its bond buying program. Treasury yields really haven't risen since the taper actually began with yields on the 10 year and 30 year range bound. The Fed's message to the markets at the last Federal Open Market Committee meeting is that it intends to keep rates on cash instruments low until the summer of 2015. As a result, high yield fixed income has continued to do tremendously well as market participants search for yield.

Absolute Return strategies are doing well as an overall portfolio diversifier because for the first time post financial crisis, not every asset is either going up or down together. Credit related strategies are doing extremely well, but Long/Short equity managers are struggling a bit due to the overall strength of the equity market. In calendar year 2013, 92% of the companies in the S&P 500 had positive performance, creating a tough environment to try to short stocks. In addition, March 2014 was an incredibly difficult month for long/short equity managers as many of the companies that hedge funds owned traded down in a significant way, though most of those same names rebounded in April. A portfolio's total absolute return performance was driven by how much net long exposure to equities it had and how much European exposure it had.

Commercial real estate, specifically core real estate, appears to be priced at fair value. It's hard to imagine an economic scenario that allows commercial real estate to continue to go up in value in the short run. The better value in the real estate markets are properties where owners and property managers can rehab and add value through structural investments in or repurposing existing properties making them more valuable to tenants or potential purchasers.

Private equity realization of returns has been stronger with the IPO markets being robust for the past 12 months. Investors are starting to see quality returns as firms seek to utilize the robust IPO market or sell companies to strategic buyers. Along the same lines, guidance from the Fed with respect to historically low short-term interest rates has allowed underlying portfolio companies to clean up their balance sheets making them more valuable on a cash flow basis and to potential buyers.

INVESTMENT SUMMARY

The Board of Trustees is charged with the responsibility of investing the Systems' assets to provide for the benefits of the members of the Systems. To achieve that goal, the Board follows a policy of thoughtfully growing our asset base while protecting against undue risk and losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the Systems. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policies, objectives and strategies for both the pension and insurance portfolios.

Investment Policy The KRS Board of Trustees approved a new target asset allocation beginning July 1, 2011. As of June 30, 2014, the KRS Pension fund's policy allocation invests 20.5% of the assets in U.S. equities, 20.0% in broad market international equities, 2.9% in emerging market equities, 9.6% in core fixed income, 4.8% in high yield fixed income, 4.9% in global fixed income, 10.0% in private equity, 10.0% in real return strategies, 10.0% in absolute return strategies, 4.5% in real estate, and 2.8% in cash or short-term securities. As of June 30, 2014, the KRS Insurance fund's policy allocation invests 20.0% of the assets in U.S. equities, 20.0% in broad market international equities, 4.0% in emerging market equities, 10.0% in core fixed income, 5.0% in high yield fixed income, 5.0% in global fixed income, 10.0% in private equity, 10.0% in real return strategies, 10.0% in absolute return strategies, 5.0% in real estate, and 1.0% in cash or short-term securities.

The following charts graphically depict the Board's investment policy.

Asset Allocation Board Policy vs. Actual (Rebalanced)

Asset	Policy's Pension Asset Allocation	Actual Pension Asset Allocation	Policy's Insurance Asset Allocation	Actual Insurance Asset Allocation
U.S. Equity	20.5%	21.5%	20.0%	24.3%
International Equity	20.0%	19.6%	20.0%	19.4%
Emerging Market Equity	2.9%	2.8%	4.0%	3.7%
Core Fixed	9.6%	9.2%	10.0%	9.7%
High Yield	4.8%	5.3%	5.0%	5.1%
Global Fixed	4.9%	4.9%	5.0%	4.7%
Private Equity	10.0%	11.2%	10.0%	6.1%
Real Estate	4.5%	2.9%	5.0%	2.1%
Absolute Return	10.0%	10.6%	10.0%	10.4%
Real Return	10.0%	9.8%	10.0%	11.7%
Cash	2.8%	2.2%	1.0%	2.7%

Investment Policies
Visit https://kyret.ky.gov/investments to read our Statement of Investment policy. Other policies include Brokerage, Securities Trading, Placement Agents, Proxy Voting and more.

Investing in Kentucky
In keeping with the Board of Trustees' fiduciary responsibility, where all else equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

INVESTMENT **STRATEGIES**

Diversification KRS portfolios are diversified on several levels. Portfolios are diversified through the use of multiple asset classes. Asset allocations are revisited on a periodic basis and represent an efficient allocation to achieve overall return and risk characteristics. The individual asset classes are diversified through the use of multiple portfolios that are managed both by the Investment Division Staff and by external investment advisors. Finally, portfolios within each of the asset classes are diversified through both investment styles and the selection of individual securities. Each portfolio advisor is afforded discretion to diversify its portfolio(s) within the parameters established by the Board of Trustees.

Rebalancing Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with KRS' Statement of Investment Policy target levels. Such rebalancing is necessary to reflect sizeable cash flows and performance imbalances among asset classes and investment advisors. KRS' rebalancing policies call for an immediate rebalancing to within its allocation ranges, if an asset class exceeds or falls below its target allocation by an appropriate percentage defined in the investment Policy Statement. As the following charts depict, the Pension and Insurance portfolios were operating within the ranges established by the investment policies.

Performance Review Procedures At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. The investment Committee also reviews a report created and presented by the KRS Compliance Officer who is part of the independent internal Audit Department. The Compliance Officer performs tests daily, monthly, and quarterly to assure compliance with the restrictions imposed by the Investment Policy.

Investment Consulting The Board employs industry leading external consultants to assist in determining and reviewing the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from each consulting firm utilized, starting at page 108, discusses current allocations, performance, and significant changes during the fiscal year.

Over the long-term, the investment program seeks to exceed the actuarially required rate of return of 7.75%, while also exceeding the return allowed by its total fund benchmark.

INVESTMENT **OBJECTIVES**

The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

Shorter-Term *(5 years and less):* The returns of the particular asset classes of the managed funds of the Systems, measured on a year-to-year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices.

Medium-Term *(5 to 30 years):* The returns of the particular asset classes of the managed funds of the Systems, measured on a rolling year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices and perform above median in an appropriate peer universe, if there is one.

Longer-Term: The total assets of the Systems should achieve a return measured over 30 to 40 years which exceeds the actuarially required rate of return of 7.75% while also exceeding the return achieved by its total fund benchmark.

In keeping with the Board of Trustees' fiduciary responsibility, where all else equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

Investment Results

Returns reported by KRS are "net." For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

Fiscal Year 2014 Results For the fiscal year ended June 30, 2014, the KRS pension fund produced a net return of 15.55%, which outpaced the benchmark return of 14.91%, as well as the actuarially required rate of return of 7.75%. It should be noted that the actuarially required rate is an annualized return that may not be met, or possibly greatly surpassed in any given year; this objective has been met over the long-term.

The outperformance of the pension fund can primarily be attributed to the overweight to U.S. equities, the strongest performing asset class, combined with the relative outperformance provided by the Fixed Income allocation. Further, fund outperformance was influenced by the strong relative performance of the Real Return and Absolute Return allocations. Overall outperformance was somewhat tamed by the slight relative underperformance of the Public Equity allocation, coupled with the underperformance of the Real Estate portfolio.

The KRS insurance fund gained 14.89% net of expenses for the fiscal year ending June 30, 2014, compared to the benchmark's 15.03% return and the actuarially required rate of 7.75%. The underperformance versus the pension fund was due primarily to a slightly lower allocation to total equities (public + private) and a higher allocation to fixed income, which was one of the lower returning asset classes.

INVESTMENT RESULTS TABLE

Pension Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Pension Fund	Apr-84	15.55%	8.59%	11.97%	6.78%	9.60%
Performance Benchmark[2]	-	14.91%	8.84%	11.91%	6.84%	9.71%

Insurance Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Insurance Fund	Apr-87	14.89%	7.48%	12.10%	6.28%	7.69%
Performance Benchmark[3]	-	15.03%	8.71%	13.02%	6.50%	8.07%

[1]The Performance Calculations presented above were prepared by the Systems' custodial bank using a time-weighted rate of return methodology based upon the market value of assets.
[2]Current Policy Benchmark is compromised of 20.5% Russell 3000, 20.0% MSCI ACWI ex-US GD, 2.9% MSCI EM GD, 19.3% BC Universal, 10.0% Russell 3000 Quarter Lagged + 400bps, 10.0% HFR FOF: Diversified Lagged, 10.0% CPI + 300bps, 4.5% NCREIF Open-End Diversified Core GR, and 2.8% CG 3-Month US Treasury Bill.
[3]Current Policy Benchmark is compromised of 20.0% Russell 3000, 20.0% MSCI ACWI ex-US GD, 4.0% MSCI EM GD, 20.0% BC Universal, 10.0% Russell 3000 Quarter Lagged + 400bps, 10.0% HFR FOF: Diversified Lagged, 10.0% CPI + 300bps, 5.0% NCREIF Open-End Diversified Core GR, and 1.0% CG 3-Month US Treasury Bill.

Note: KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

BENCHMARKS

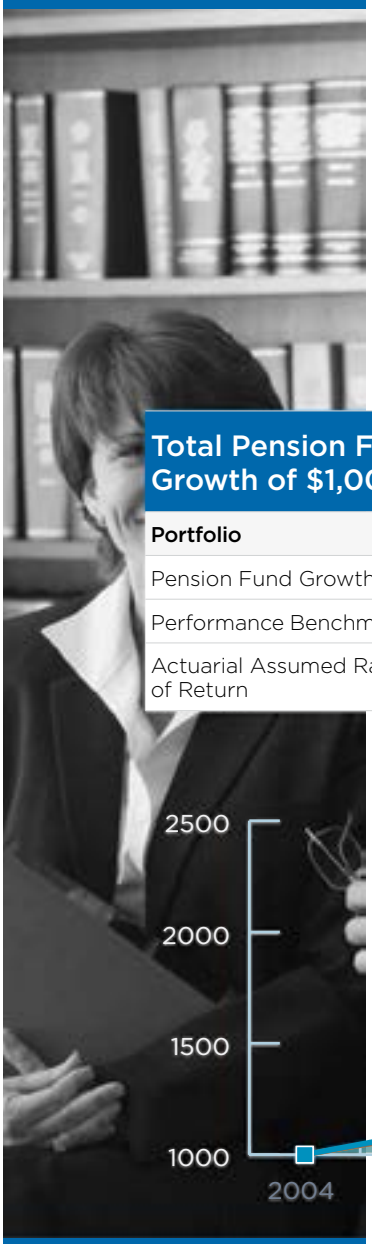
Benchmarks utilized to measure The Kentucky Retirement Systems' Pension and Insurance Funds are a weighted average composite of the various asset class indexes consisting within each KRS' investment portfolio. The Total Fund Benchmarks are shown below:

Total Fund Benchmarks

Index	Pension Fund	Insurance Fund
Russell 3000	20.5%	20.0%
MSCI ACWI ex US GD	20.0%	20.0%
MSCI Emerging Markets GD	2.9%	4.0%
Barclays Capital US Universal	19.3%	20.0%
Russell 3000 Quarter Lagged + 400 bps	10.0%	10.0%
HFR FOF: Diversified Lagged	10.0%	10.0%
CPI + 300 bps	10.0%	10.0%
NCREIF Open-End Diversified Core GR	4.5%	5.0%
CG 3-Mo U.S. Treasury Bill	2.8%	1.0%

These benchmarks are intended to be objective, measurable, investable/replicable, and representative of the investment mandates. The benchmarks are developed from publicly available information, and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate and status. KRS' Investment Staff and Consultant recommend the indexes and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the Board of Trustees. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total Benchmarks will evolve to reflect these exposures.

LONG-TERM RESULTS

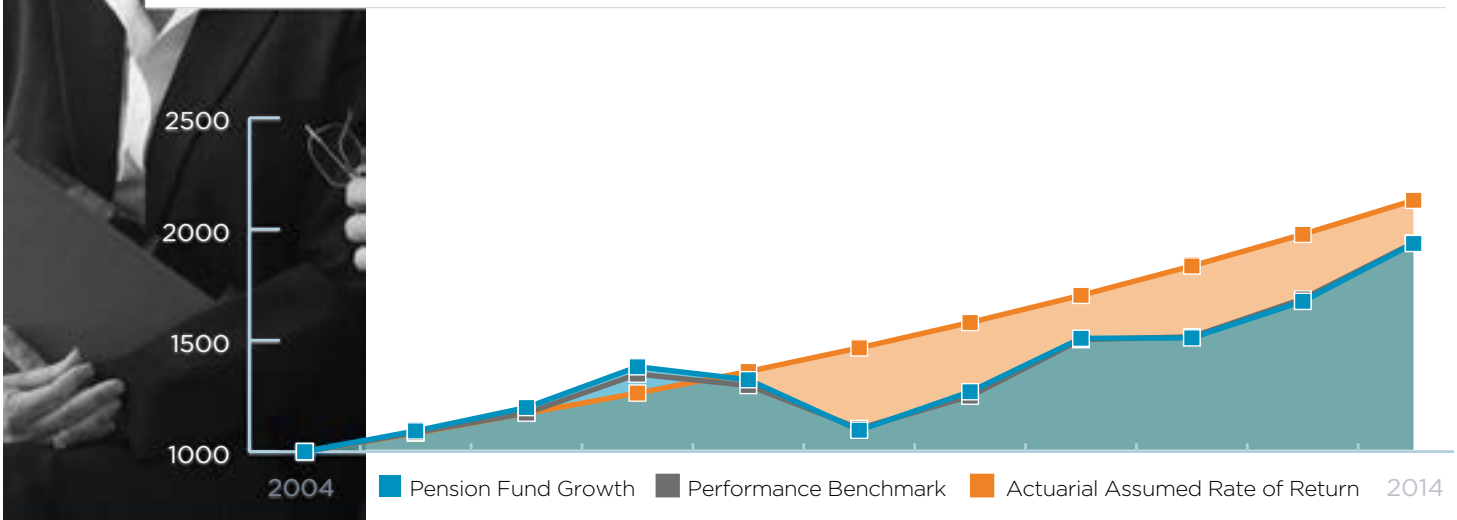


Long-Term Results:

For the 10-years ending June 30, 2014, the KRS pension fund portfolio earned an annualized total net return of 6.78% versus the benchmark annualized return of 6.84%. As shown in the investment results table on page 88, the KRS pension fund return has trailed the benchmark over the 10 year period but has performed better than the benchmark over the past 5 years. Performance is illustrated below in a growth of dollars chart. The graph demonstrates the performance of $1,000 invested in the KRS pension portfolio, its policy benchmark portfolio, and its actuarial objective over the past 10 years.

Total Pension Fund Growth of $1,000

Portfolio	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pension Fund Growth	$1,000	$1,093	$1,198	$1,381	$1,323	$1,096	$1,269	$1,509	$1,511	$1,675	$1,935
Performance Benchmark	$1,000	$1,085	$1,173	$1,348	$1,297	$1,104	$1,249	$1,503	$1,516	$1,686	$1,938
Actuarial Assumed Rate of Return	$1,000	$1,083	$1,172	$1,263	$1,360	$1,466	$1,580	$1,702	$1,834	$1,976	$2,129



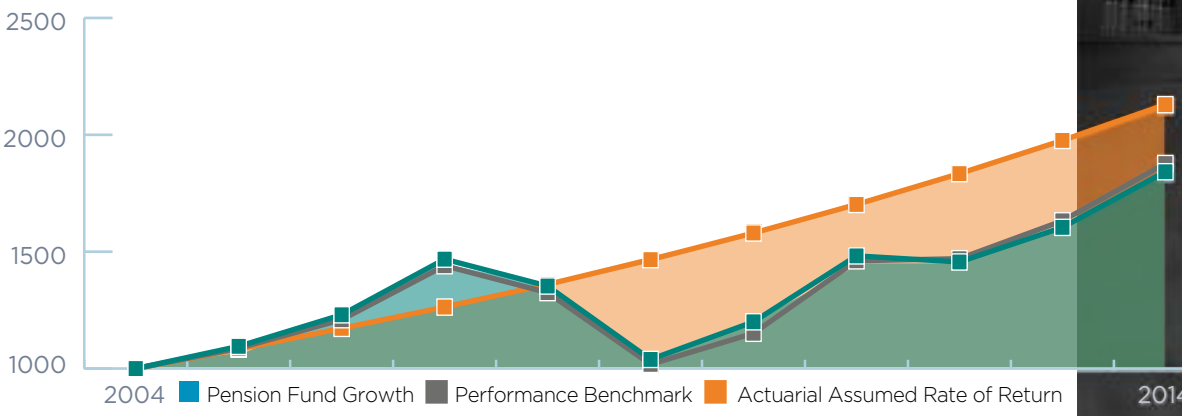
As of June 30, 2014, the chart indicates that $1,000 would have grown to $1,935, while the same $1,000 invested in the benchmark or in the actuarial objective would have grown to $1,938 and $2,129, respectively.

The KRS insurance fund has slightly underperformed its benchmark for the 10-year period ending June 30, 2014, earning 6.28% versus 6.50%. Performance is illustrated by the growth of dollars chart below. The graph highlights the performance of $1,000 invested in the KRS insurance portfolio ($1,842), benchmark ($1,877), and actuarial objective ($2,129) over the past 10 years.

As the results show in the accompanying investment results table on page 88, the KRS insurance fund has struggled during all measured standard return ranges.

Total Insurance Fund Growth of $1,000

Portfolio	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Insurance Fund Growth	$1,000	$1,095	$1,230	$1,468	$1,353	$1,039	$1,200	$1,482	$1,456	$1,604	$1,842
Performance Benchmark	$1,000	$1,087	$1,209	$1,440	$1,325	$1,018	$1,151	$1,461	$1,470	$1,632	$1,877
Actuarial Assumed Rate of Return	$1,000	$1,083	$1,172	$1,263	$1,360	$1,466	$1,580	$1,702	$1,834	$1,976	$2,129



U.S. Equity

For the fiscal year ending June 30, 2014, the KRS pension fund's U.S. equity portfolio posted a return of 24.87%, versus the benchmark return of 25.22%. The KRS insurance U.S. equity portfolio posted a return of 24.45%, underperforming the benchmark return by 0.77%.

Since inception performance remains solid; the pension's equity portfolio has generated an annualized return of 11.57% throughout its duration, while the benchmark posted an annualized annual return of 11.51%. The insurance fund returned 9.68% since inception, while the benchmark returned 9.45%.

The relative performance is best illustrated again by the growth of a dollar charts on following page. For the 10-year period ending June 30, 2014, the pension fund's chart below indicates that $1,000 would have resulted in $2,202 while the same $1,000 invested in the benchmark would result in $2,170. For the KRS insurance fund, ending June 30, 2014, a $1,000 investment would be valued at $2,153, compared to $2,179 in the benchmark.

Note: Returns reported by KRS are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

Return on U.S. Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-00	24.87%	15.67%	18.80%	8.20%	11.57%
↘ Performance Benchmark[1]	-	25.22%	16.46%	19.40%	8.28%	11.51%
Insurance Fund	Jul-00	24.45%	15.46%	18.51%	7.96%	9.68%
↘ Performance Benchmark[1]	-	25.22%	16.46%	19.18%	8.10%	9.45%
Market Indices						
Russell 1000 (Large Cap)	-	25.35%	16.63%	19.25%	8.19%	-
Russell 2000 (Small Cap)	-	23.64%	14.57%	20.21%	8.70%	-
Russell 3000 (Total Equity)	-	25.22%	16.46%	19.33%	8.23%	-

[1] Pension and Insurance benchmark is the Russell 3000; this became effective July 1, 2011.

Top 10 U.S. Equity Holdings Pension Fund

Company	Shares	Market Value
APPLE INC COM STK	631,530	$58,688,083
EXXON MOBIL CORP COM	356,828	$35,925,443
MICROSOFT CORP COM	627,282	$26,157,659
JOHNSON & JOHNSON	246,621	$25,801,489
WELLS FARGO & CO	436,027	$22,917,579
GENERAL ELECTRIC CO	862,420	$22,664,398
PFIZER INC COM	705,702	$20,945,235
BERKSHIRE HATHAWAY INC	163,290	$20,665,982
JP MORGAN CHASE & CO.	351,773	$20,269,160
VERIZON COMMUNICATIONS	412,206	$20,169,240
Total	**4,793,679**	**$274,204,269**

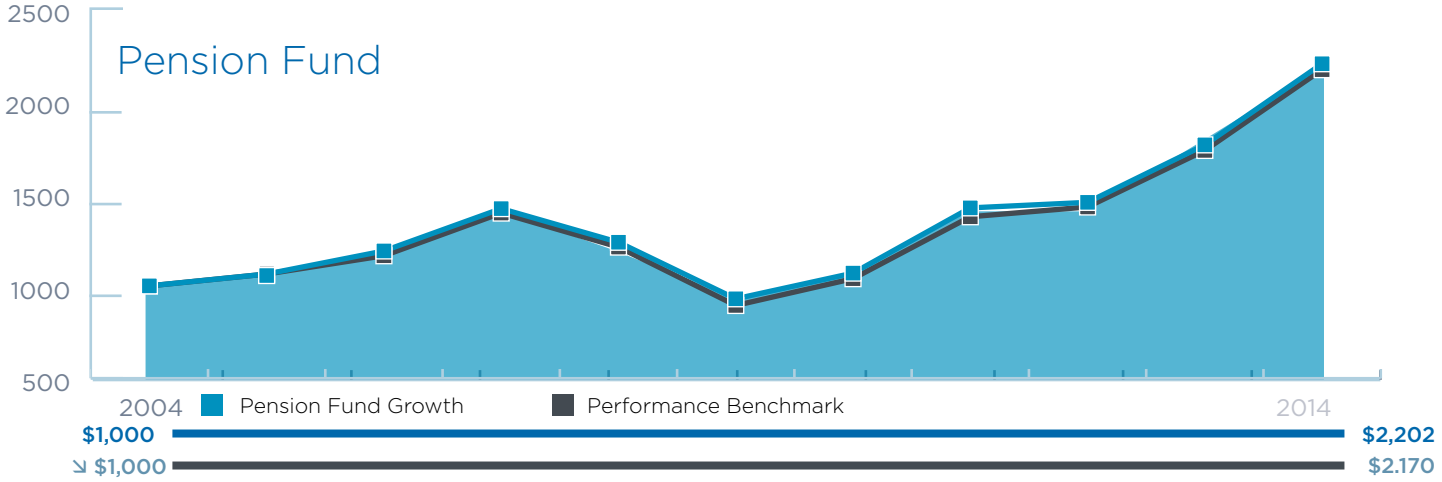
Top 10 U.S. Equity Holdings Insurance Fund

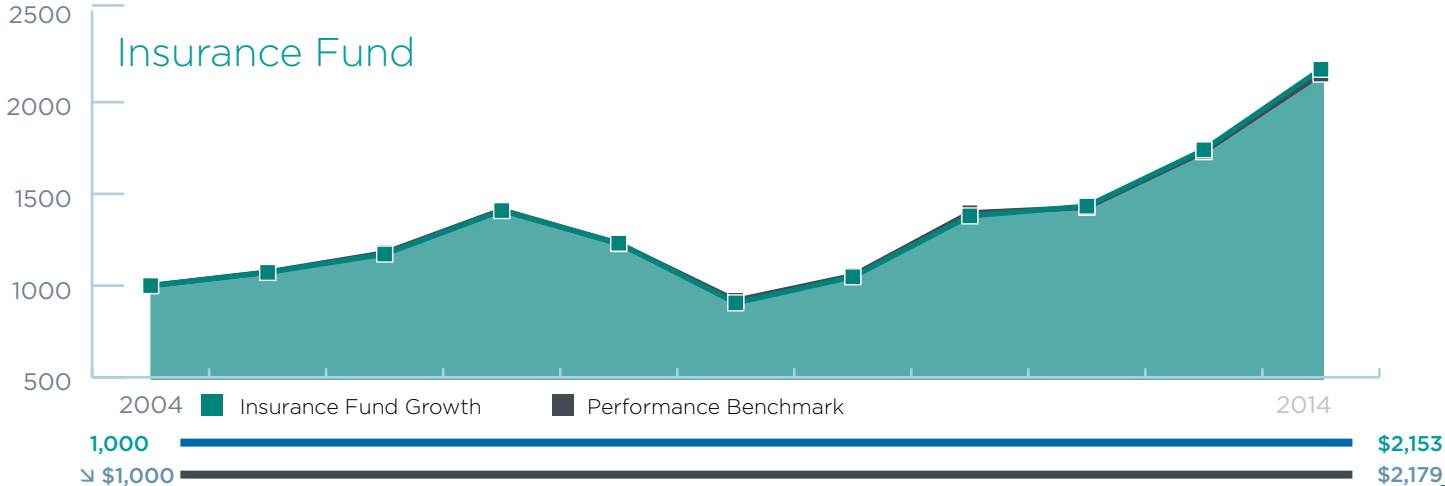
Company	Shares	Market Value
APPLE INC COM STK	247,572	$23,006,866
EXXON MOBIL CORP COM	151,211	$15,223,923
MICROSOFT CORP COM	272,142	$11,348,321
JOHNSON & JOHNSON	106,917	$11,185,657
WELLS FARGO & CO	191,970	$10,089,943
GENERAL ELECTRIC CO	353,092	$9,279,258
CHEVRON CORP COM	68,552	$8,949,464
JPMORGAN CHASE & CO	153,715	$8,857,058
VERIZON COMMUNICATIONS	178,830	$8,750,152
BERKSHIRE HATHAWAY INC	63,398	$8,023,651
Total	**1,787,399**	**$114,714,293**

GROWTH OF $1,000 - U.S. Equity

U.S. Equity Portfolio
Growth of $1,000

Portfolio	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pension Fund Growth	$1,000	$1,063	$1,189	$1,418	$1,236	$930	$1,069	$1,422	$1,452	$1,763	$2,202
↘ Performance Benchmark	$1,000	$1,064	$1,163	$1,394	$1,210	$894	$1,039	$1,374	$1,427	$1,733	$2,170
Insurance Fund Growth	$1,000	$1,074	$1,179	$1,413	$1,229	$920	$1,055	$1,397	$1,426	$1,730	$2,153
↘ Performance Benchmark	$1,000	$1,072	$1,172	$1,409	$1,231	$906	$1,048	$1,380	$1,433	$1,740	$2,179





International Equity

For the fiscal year, ending June 30, 2014, the KRS pension fund's international equity portfolio gained 21.07%, underperforming its benchmark by 1.20%. The KRS insurance international equity portfolio also trailed its benchmark, posting a return of 21.01% versus 22.27% during the same twelve month period.

As the accompanying table indicates, international equities experienced positive results during the fiscal year, though it should be noted that developed market investors enjoyed significant outperformance versus the emerging markets.

International equity investors have experienced a volatile period of returns over the past several years, resulting in a chart that resembles a roller coaster (below). Over the past five years both funds have underperformed their respective benchmarks. The KRS Pension and Insurance funds have posted annualized returns for the period of 10.76% and 10.21% respectively, compared to respective benchmark returns of 11.73% and 11.36%. The Systems began their international equity program in 2000. Since inception, the pension international equity portfolio has underperformed the benchmark, while the insurance international equity portfolio has outperformed the benchmark.

Return on International Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-00	21.07%	5.18%	10.76%	7.13%	3.05%
↘ Performance Benchmark[1]	-	22.27%	6.21%	11.73%	7.40%	3.73%
Insurance Fund	Apr-00	21.01%	4.99%	10.21%	7.31%	3.06%
↘ Performance Benchmark[1]	-	22.27%	6.21%	11.36%	7.03%	2.63%
Market Indices						
MSCI ACWI Ex US	-	22.27%	6.21%	11.59%	8.22%	-
MSCI Emerging Markets	-	14.68%	-0.06%	9.58%	12.30%	-

[1]Pension and Insurance benchmark is the MSCI ACWI ex-US; this became effective July 1, 2011.

Top 10 International Equity Holdings Pension Fund

Company	Shares	Market Value
NOVARTIS AG	140,346	$12,708,371
LLOYDS BANKING	9,531,992	$12,101,470
ROCHE HLDGS AG	39,436	$11,762,316
PRUDENTIAL PLC	446,377	$10,235,018
GN STORE NORD DKK4	342,754	$9,819,589
SYMRISE AG NPV	176,751	$9,630,336
RECKITT BENCKISER	105,662	$9,213,975
BG GROUP PLC ORD	432,299	$9,128,706
INT'L CONSOLIDATED	1,436,479	$9,100,086
BAYER AG ORD NPV	63,092	$8,910,345
Total	**12,715,188**	**$102,610,212**

Top 10 International Equity Holdings Insurance Fund

Company	Shares	Market Value
SANOFI	56,178	$5,967,152
NOVARTIS AG	48,980	$4,435,153
LLOYDS BANKING	3,224,676	$4,093,931
ROCHE HLDGS AG	13,710	$4,089,191
PRUDENTIAL PLC	151,150	$3,465,732
GN STORE NORD DKK4	115,730	$3,315,559
SYMRISE AG NPV	59,466	$3,240,024
RECKITT BENCKISER	35,745	$3,117,048
BG GROUP PLC ORD	146,930	$3,102,669
INT'L CONSOLIDATED	485,354	$3,074,715
Total	**4,337,919**	**$37,901,174**

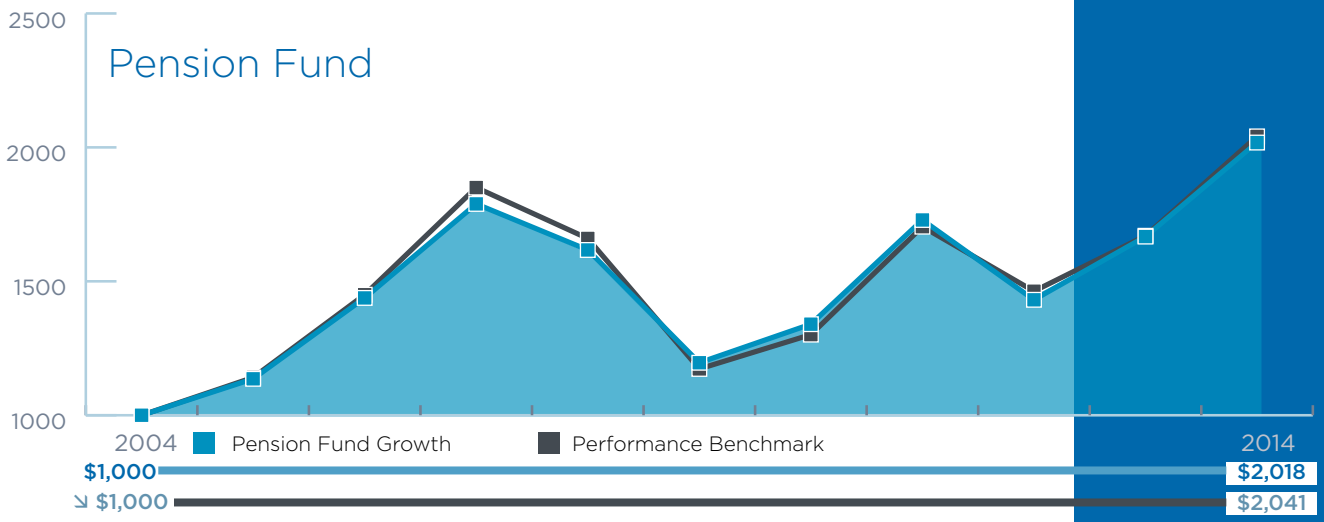
GROWTH OF $1,000 - Non U.S. Equity

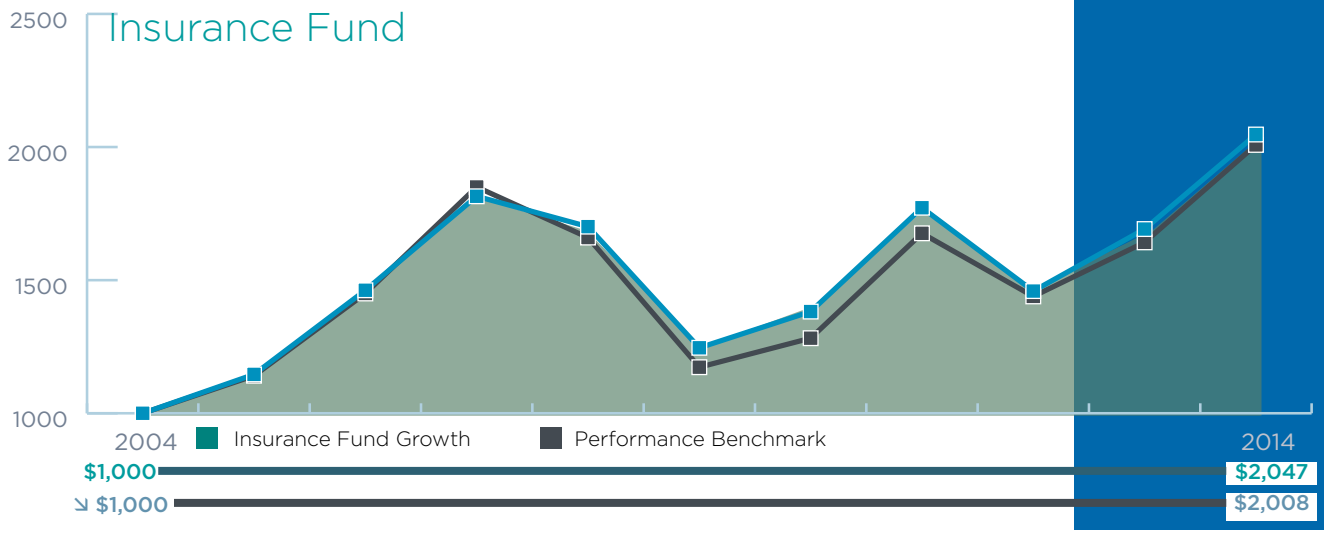
The following chart depicts the growth of $1,000 invested in the KRS international equity portfolios and the blended benchmarks since the beginning of the 2004 fiscal year. For the KRS pension fund, ending June 30, 2014, $1,000 would have resulted in $2,018, while the same amount invested in the benchmark would have resulted in $2,041. For the KRS insurance fund, ending June 30, 2014, $1,000 would have grown to $2,047, while an investment in the index would have been valued $2,008.

Non U.S. Equity Portfolio Growth of $1,000

Portfolio	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pension Fund Growth	$1,000	$1,136	$1,438	$1,789	$1,617	$1,196	$1,340	$1,729	$1,431	$1.667	$2,018
↘ Performance Benchmark	$1,000	$1,141	$1,450	$1,850	$1,660	$1,173	$1,301	$1,704	$1,463	$1,670	$2,041
Insurance Fund Growth	$1,000	$1,146	$1,462	$1,815	$1,701	$1,246	$1,382	$1,772	$1,459	$1,692	$2,047
↘ Performance Benchmark	$1,000	$1,141	$1,450	$1,850	$1,660	$1,173	$1,282	$1,676	$1,439	$1,642	$2,008

a The non-U.S. equity portfolio included emerging market equity exposure from 03/31/08 through 06/30/11; a separate growth of a dollar chart for the emerging market equity asset class will be produced once the Systems have experienced a sufficient history within the space. In addition, the non-U.S. equity portfolio growth chart includes the currency overlay for the 2012 fiscal year; in prior years the impact of the currency overlay program was rolled up into the aggregate return of the funds. The Systems no longer employ a currency overlay mandate.





Top 10 Fixed Income Holdings Pension Fund

Company	Par Value	Market Value
US TREASURY NOTE DD 02/15/2014 2.75% DUE 02-15-2024	$108,800,000	$111,273,459
AUSTRALIA GOVERNMENT BOND 5.25% 03/15/2019	$37,200,000	$38,619,884
US TREAS NOTE 2.375% DUE 01-15-2021 DD02/28/14	$31,700,000	$31,571,235
AUSTRALIA GOVERNMENT BOND 5.25% 03/15/2019	$26,200,000	$26,531,357
US TREAS-CPI INFLAT 2.375% 01-15-2027 DD 01/15/07	$21,522,490	$26,410,441
UNITED STATES NOTE 2.5% 05-15-2024 DD 05/15/14	$23,950,000	$23,916,326
MORGAN ST REV REPO 0.15% 07/01/14 DD 06/30/14	$23,100,000	$23,100,000
ITALY BUONI POLIENNALI DEL TES 5.5% 11/01/2022	$13,200,000	$22,166,084
BRAZIL NOTAS DO TESOURO NACION 10.0% 01/01/2021	$20,638,000	$27,924,025
LOOMIS SAYLES FULL DISCRETION INSTITUTIONAL SECURITIZED FUND	$1,594,017	$18,426,832
Total	**$333,591,506**	**$341,220,095**

Top 10 Fixed Income Holdings Insurance Fund

Company	Par Value	Market Value
STONE HARBOR EMERGING	$4,280,481	$47,684,559
US TREASURY NOTE 01/31/2014 2.75% DUE 01/31/2021	$39,800,000	$40,704,813
US TREASURY NOTE 01/31/2021 2.125% DD 01/31/2014	$21,500,000	$21,605,823
FNMA POOL #0AH5849 4.5% 2/01/41 DD 2/01/11	$17,058,013	$18,654,966
US TREAS-CPI INFLAT 2.375% 01-15-2027 DD 01/15/07	$10,108,870	$12,404,685
AUSTRALIA GOVERNMENT BOND 5.25% 03/15/2019	$10,200,000	$10,589,323
BNP PARIBAS CAT 2 REPO 0.14% 07/01/14 DD 06/30/14	$9,600,000	$9,600,000
ITALY BUONI POLIENNALI DEL TES 5.5% 11/01/2022	$5,100,000	$8,564,169
SLOVENIA GOVERNMENT INTERNATIO 4.75% 5/10/18	$7,700,000	$8,296,750
US TREASURY NOTE 09/31/2016 2.75% DUE 09/30/2011	$8,150,000	$8,228,957
Total	**$33,407,365**	**$186,334,046**

Note: The above table does not include mutual fund and commingled positions.

Fixed Income

For the fiscal year, ending June 30, 2014, the KRS pension fund's fixed income portfolio returned 7.05%, outperforming its performance benchmark by 1.85%.

As the accompanying table indicates, both of the broad market indices, the Barclays Aggregate Index and the Barclays US Universal Index, posted moderate returns for the twelve month period ending June 30, 2014; however, the Barclays High Yield Index performed very well. The KRS insurance fixed income portfolio posted a 6.52% rate of return, which outpaced the index by 132 basis points.

Over the five year period, the pension fund has outpaced the benchmark by 174 basis points, while the insurance fund has added 69 basis points annually over its index. Over the ten year period, the pension fund has edged the benchmark by 0.31%, while the insurance fund has outperformed its benchmark by 43 basis points.

The chart on the following page shows the growth of $1,000 invested in KRS fixed income portfolio over the past ten years. For the KRS pension fund, ending June 30, 2014, $1,000 would have grown to $1,708, while the same $1,000 invested in the benchmark would have grown to $1,662. For the KRS insurance fund, ending June 30, 2014, $1,000 would have grown to $1,858, more than the $1,779 of the benchmark.

Return on Fixed Income

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	7.05%	5.85%	7.16%	5.52%	8.04%
↘ Performance Benchmark[1]	-	5.20%	4.22%	5.42%	5.21%	7.74%
Insurance Fund	Jul-00	6.52%	5.62%	6.57%	5.84%	6.92%
↘ Performance Benchmark[1]	-	5.20%	4.22%	5.88%	5.41%	6.68%
Market Indices						
BC Aggregate	-	4.37%	3.66%	4.85%	4.93%	-
BC Corporate High Yield	-	11.73%	9.48%	13.98%	9.05%	-
BC U.S. Universal	-	5.20%	4.17%	5.58%	5.27%	-

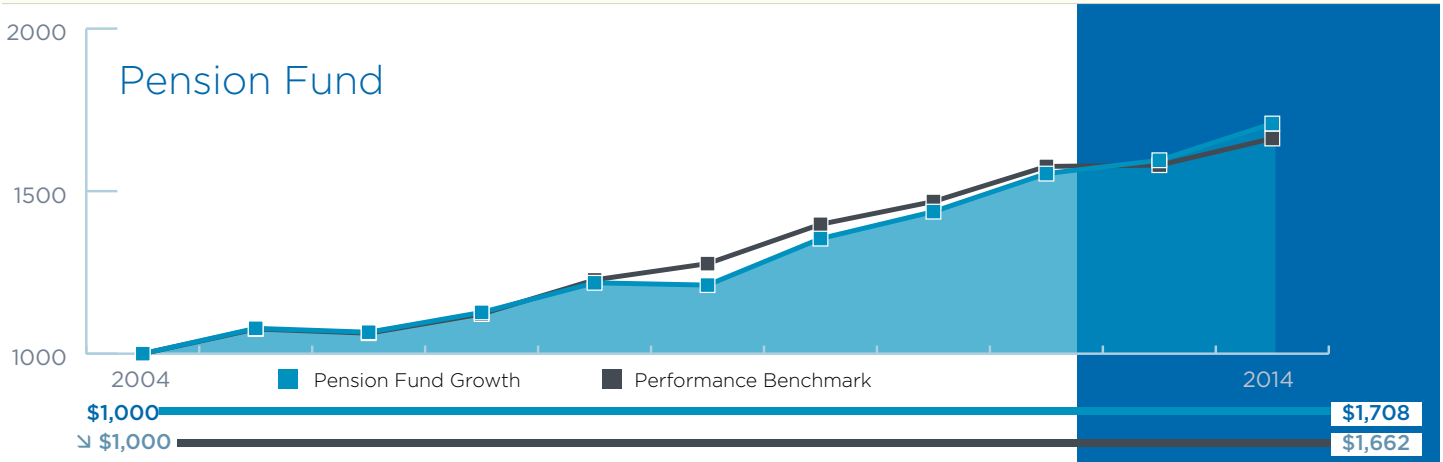
[1]*Pension and Insurance benchmark is the Barclays US Universal; this became effective July 1, 2011.*

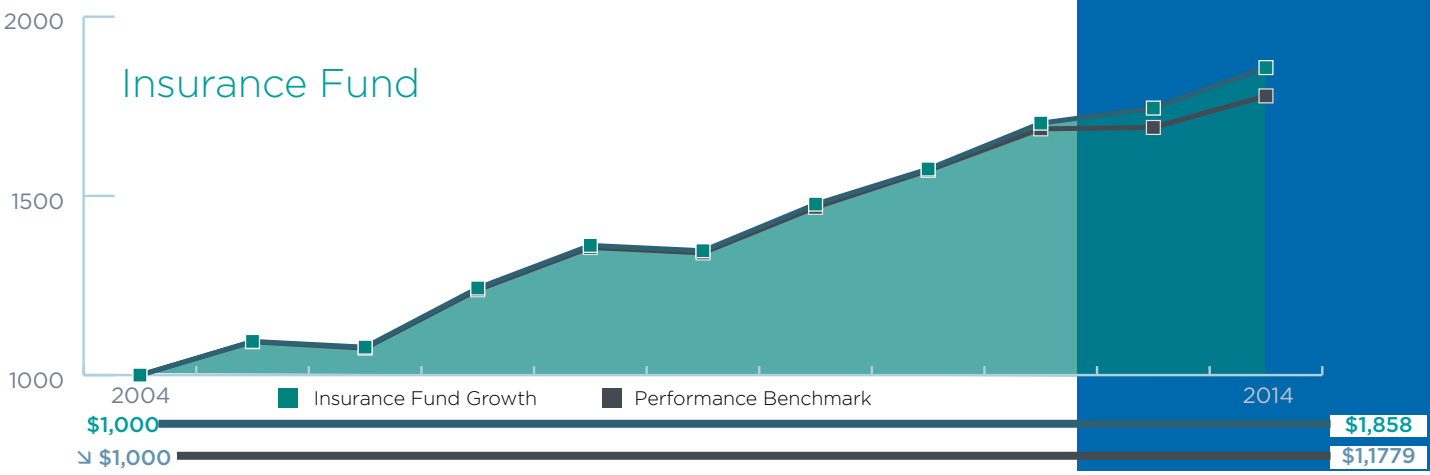
GROWTH OF $1,000 - Fixed Income

Fixed Income Portfolio Growth of $1,000

Portfolio	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pension Fund Growth	$1,000	$1,078	$1,066	$1,127	$1,218	$1,211	$1,354	$1,437	$1,554	$1,595	$1,708
↘ Performance Benchmark	$1,000	$1,076	$1,063	$1,122	$1,227	$1,277	$1,398	$1,468	$1,576	$1,580	$1,662
Insurance Fund Growth	$1,000	$1094	$1,078	$1,243	$1,362	$1,347	$1,477	$1,575	$1,703	$1,745	$1,858
↘ Performance Benchmark	$1,000	$1,093	$1,075	$1,238	$1,356	$1,341	$1,468	$1,571	$1,687	$1,691	$1,779

The fixed income portfolio included US TIPS exposure prior to the 2012 fiscal year; the exposure was moved to the real return asset class as part of the new asset allocation rebalance that took place effective 07/01/12. A separate growth of a dollar chart for the real return asset class will be produced once the Systems have experienced a sufficient history within the space.





Private Equity

For the fiscal year ending June 30, 2014, the KRS pension fund's private equity portfolio posted a return of 22.71%; the portfolio consists primarily of investments within many private equity limited partnerships.

The insurance private equity portfolio returned 22.07%. During the fiscal year it was decided that the short-term benchmark (1- & 3-year) would match the actual performance experienced by the portfolios; due to the difficulty in assessing short term returns. Performance is typically based on appraisals of a business' value, and managers are often slow to mark valuations up or down, which can distort relative performance against a public market benchmark when that index moves dramatically. A better indication of the health of the program would be the mid to longer-term time periods. This is because businesses have likely been sold and transacted at a true price (rather than estimate of value), thus providing a better performance measurement.

For the five years ending June 30, 2014, the pension fund's private equity portfolio trailed its benchmark by -3.02%. For the same five-year time period, the insurance fund's private equity portfolio has underperformed its benchmark by -2.48%. However, for the ten year period, the pension fund outperformed its benchmark by 0.80%, while the insurance fund has underperformed by -0.40%. Since its inception in October 1990, the pension portfolio has outpaced its benchmark by an annualized 97 basis points per year, while the insurance portfolio has underperformed its benchmark by an annualized 63 basis points since its July 2001 inception.

Return on Private Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Oct-90	22.71%	15.43%	17.18%	10.79%	11.39%
↘ Performance Benchmark[1]		22.71%	15.43%	20.20%	9.99%	10.42%
Insurance Fund	Jul-01	22.07%	14.60%	17.88%	8.95%	9.03%
↘ Performance Benchmark[1]		22.07%	14.60%	20.36%	9.35%	9.66%

[1]Pension and Insurance benchmark 5 years and beyond is the Russell 3000 Quarter Lagged + 400bps. For shorter-term periods, the benchmark matches actual performance experienced.

Real Estate

For the fiscal year ending June 30, 2014, the KRS pension fund's real estate portfolio gained 8.06%, trailing its benchmark returns of 12.74%.

The KRS insurance real estate portfolio also fell short of its benchmark, losing 567 basis points to the index. For the five years ending June 30, 2014, both the pension and insurance fund portfolios outperformed their benchmarks' return by 280 basis points.

Return on Real Estate[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-84	8.06%	9.16%	9.11%	6.31%	5.66%
↘ Performance Benchmark[1]		12.74%	11.99%	6.31%	6.19%	6.01%
Insurance Fund	May-09	7.07%	8.34%	9.11%	--	8.80%
↘ Performance Benchmark[1]		12.74%	11.99%	6.31%	--	3.07%

[1]Pension and Insurance benchmark is the NCREIF Open-End Diversified Core Gross Non Lagged.

Absolute Return

For the fiscal year, ending June 30, 2014, the KRS pension fund's absolute return portfolio gained 8.46% versus its benchmark which earned 5.08%.

The KRS insurance absolute return portfolio also bested the benchmark, outperforming the index by 329 basis points, returning 8.37% for the period. For the three years ending June 30, 2014 the pension and insurance portfolios outperformed the benchmark by an annualized 4.32% and 4.24%, respectively. Since inception, the portfolio has provided steady returns, annualized at 5.82% for the pension portfolio and 5.67% for the insurance portfolio. The portfolio is comprised of three fund of funds, and five direct relationships.

Return on Absolute Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-10	8.46%	7.03%	--	--	5.82%
↘ Performance Benchmark[1]		5.08%	2.71%	--	--	3.48%
Insurance Fund	Apr-10	8.37%	6.95%	--	--	5.67%
↘ Performance Benchmark[1]		5.08%	2.71%	--	--	3.48%

[1]*Pension and Insurance benchmark is the HFR FOF: Diversified Lagged.*

Real Return

For the fiscal year ending June 30, 2014, the KRS pension fund's real return portfolio gained 8.99% versus its benchmark return of 5.67%.

The KRS insurance real return portfolio outpaced its index by 291 basis points, posting a return of 8.56% for the period. Over the past three years, the real return portfolios have outperformed the benchmark by 171 basis points in the pension fund and 120 basis points in the insurance fund.

Return on Real Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-11	8.99%	6.62%	--	--	6.62%
↘ Performance Benchmark[1]		5.67%	4.91%	--	--	4.91%
Insurance Fund	Jul-11	8.56%	6.10%	--	--	6.10%
↘ Performance Benchmark[1]		5.65%	4.90%	--	--	4.90%

[1]*Pension and Insurance benchmark is CPI + 300bps*

Top 10 Alternatives Asset Holdings Pension Fund

Company	SUB ASSET	Market Value
PACIFIC ALT ASST MGT CO	ABS RET	$395,876,831
BLACKSTONE ALT ASST MGT	ABS RET	$389,395,011
PACIFIC INV MGT CO	REAL RET	$379,951,824
PRISMA CAPITAL PARTNERS	ABS RET	$373,572,915
INTERNAL TIPS	REAL RET	$297,346,486
WEAVER BARKDALE TIPS DUFF, ACKEMAN & GOODRICH	REAL RET	$286,283,789
DAG VENTURES	PRIVATE EQ	$108,789,508
TORTOISE CAPITAL	REAL RET	$101,237,134
H/2 CREDIT PARTNERS	REAL EST	$96,146,880
HARRIZON STREET	REAL EST	$92,897,238
Total		**$2,521,497,615**

Top 10 Alternatives Asset Holdings Insurance Fund

Company	Par Value	Market Value
INTERNAL TIPS	REAL RET	$231,034,678
BLACKSTONE ALT ASST MGT	ABS RET	$130,482,519
PACIFIC ALT ASST MGT CO	ABS RET	$126,933,486
PRISMA CAPITAL PARTNERS	ABS RET	$126,522,395
PRIMA MORTGAGE	REAL RET	$116,406,086
PACIFIC INV MGT CO	REAL EST	$34,771,836
HARRISON STREET	REAL EST	$31,743,561
TORTOISE CAPITAL	REAL RET	$30,597,224
H/2 CREDIT PARTNERS	REAL EST	$27,361,565
MAGNETAR CAPITAL MTP	REAL RET	$25,790,846
Total		**$881,644,196**

Note: The above table does not include mutual fund and commingled positions.

Cash

For the fiscal year, ending June 30, 2014, the KRS pension fund's cash portfolio returned 0.61%, outpacing its benchmark, the Citi Group 3-month Treasury by 0.57%.

The KRS insurance cash portfolio also outperformed the index, posting a return of 0.22% during the same twelve month period.

As the accompanying table indicates, the longer term results from the cash portfolios have also been excellent with comparison to their benchmark. For the five years ending June 30, 2014, the pension fund portfolio has outperformed its custom benchmark by 0.50% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.46% per year. The insurance portfolio has also done very well, exceeding its benchmark return over the five-year and since inception periods by 0.21% and 0.12%, respectively.

Return on Cash

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jan-88	0.61%	0.38%	0.58%	2.12%	4.01%
↘ Performance Benchmark[1]		0.04%	0.05%	0.08%	1.54%	3.55%
Insurance Fund	Jul-92	0.22%	0.30%	0.29%	1.94%	3.00%
↘ Performance Benchmark[1]		0.04%	0.05%	0.08%	1.54%	2.88%

[1]*Pension and Insurance Cash benchmark is the Citi Group 3-month Treasury.*

Additional Schedules & Required Supplemental Information

Following are additional schedules which indicate the Investment Advisors employed along with the assets each of the firms manages for the Systems, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems as of year ended June 30, 2014.

External Investment Advisors & Assets Under Management *(in Thousands)*

Advisor	Assets Under Management
Aberdeen Asset Management, Aberdeen, Scotland	175,122
American Century Investments, Kansas City, Kansas	197,558
AMERRA AG Fund II, New York, New York	47,266
Arbor Investments II, Chicago, Illinois	18,116
Arcano Capital, New York, New York	18,445
Avenue Capital V, New York, New York	41
Bay Hills Emerging Partners I, II, III, San Francisco, California	117,148
BlackRock Global Investors, San Francisco, California	1,580,668
Blackstone Alternative Asset Management, New York, New York	519,878
Blackstone Capital Partners V & VI, New York, New York	104,324
Conway MacKenzie Growth Partners I, Chicago, Illinois	13,629
Columbia Asset Management, Minneapolis, Minnesota	220,904
Columbia Capital IV, Alexandria, Virginia	34,911
Crestview Partners II, New York, New York	69,935
CVC Capital Partners VI, London, England	361
DivcoWest IV, San Francisco, California	6,945
Doll Capital Management, Menlo Park, California	12,684
Duff, Ackerman & Goodrich Ventures II, III, IV, V, Palo Alto, CA	207,578
Essex Woodland VIII, Palo Alto, California	26,124
Franklin Templeton, New York, New York	195,766
Geneva Capital Management, Milwaukee, Wisconsin	303,644
Greenfield Acquisition Partners VI, Westport, Connecticut	54,353
GTCR Golder Rauner IX, Chicago, Illinois	53,389
H/2 Core Real Estate Debt, Stamford, Connecticut	7,178
H/2 Credit Partners, Stamford, Connecticut	123,508
Harrison Street, Chicago, Illinois	124,641
Harvest Partners V & VI, New York, New York	58,233
HBK II, Dallas, Texas	20,945
Hellman & Friedman VI, New York, New York	13,243
H.I.G BIO Venture II, Miami, Florida	4,293
H.I.G. Capital Partners V, Miami, Florida	763
H.I.G. Venture Partners II, Miami, Florida	13,794
Horsley Bridge International V LLC, San Fransico, California	23,415
Institutional Venture Partners XI & XII, Menlo Park, California	29,590
Invesco, Atlanta, Georgia	227,882

External Investment Advisors & Assets Under Management *(continued)*

Advisor	Assets Under Management
JW Childs Equity III, Boston, Massachusetts	4,501
Keyhaven Capital Partners, London, England	10,969
Knighthead Capital, New York, New York	21,338
Lazard Asset Management, New York, New York	398,090
Leonard Green & Partners, L.P.,IV & VI, Los Angeles, CA	138,668
Levine Leichtman V, Los Angeles, California	7,865
Loomis, Sayles & Company, Boston, Massachusetts	233,649
LSV Asset Management, Chicago, Illinois	200,615
Luxor Capital, New York, New York	20,184
Magnetar Capital MTP, Evanston, Illinois	109,304
Manulife Financial, Boston, Massachusetts	167,112
Matlin Patterson Global Opportunities I, II, III, New York, NY	38,582
Merit Capital Partners IV, Chicago, Illinois	11,378
Mesa West, Los Angeles, California	22,015
Mesa West Core Lending, Los Angeles, California	76,435
MHR Insitituional Advisors III, New York, New York	3,001
Mill Road Capital, Greenwich, Connecticut	28,577
MKP Opportunity, New York, New York	19,825
New Mountain Partners II & III, New York, New York	44,382
NISA Investment Advisors, St. Louis, Missouri	762,865
Northern Trust Global Investors, Chicago, Illinois	513,786
Oak Hill Partners II & III, New York, New York	55,368
Oak Tree Opportunities VIIB, Los Angeles, California	1,647
Pacific Alternative Asset Management Company, Irvine, CA	522,810
PIMCO, New Port Beach, California	1,629,822
Pine River Capital, Minntonka, MN	19,772
Prima Mortgage, New York, New York	91,697
Prisma Capital Partners, New York, New York	500,095
Pyramis Global Advisors, Boston, Massachusetts	407,593
River Road Asset Management, Louisville, Kentucky	45,362
Riverside Capital VI, NewYork, New York	5,113
Rubenstein PF II, Oakland, California	6,837
Sasco Capital, Fairfield, Connecticut	73,010
Shenkman Capital, Stamford, Connecticut	157,361
Stockbridge, San Francisco, California	52,414
Stone Harbor Investments, New York, New York	166,194
Sun Capital Partners IV, Boca Raton, Florida	2,079
Systematic Financial Management, Teaneck, New Jersey	287,576
Technology Crossover Ventures VI, Palo Alto, California	723
Tenaska Power Fund II, Omaha, Nebraska	16,603

Continued next page

External Investment Advisors & Assets Under Management *(continued)*

Advisor	Assets Under Management
The Boston Company, Boston, Massachusetts	202,425
Tortoise Capital, Leawodd, Kansas	131,834
Triton Fund IV, Frankfurt, Germany	6,778
Vantagepoint Venture IV, San Bruno, California	28,168
Vista Equity Partners III & IV, San Francisco, California	81,876
Walton Street Real Estate Fund VI & VII, Chicago, Illinois	59,140
Warburg Pincus IX & X, New York, New York	65,378
Waterfall Investment, New York, New York	184,811
Wayzata Investment Partners I, II, III, Wayzata, Minnesota	64,370
Weaver Barksdale & Associates, Brentwood, Tennessee	286,284
Wellington Management Company, Boston, Massachusetts	181,569
Westfield Capital, Boston, Massachusetts	174,974
Westwood Management, Dallas, Texas	150,213
Total	**13,119,311**

CONSULTANTS

Master Custodian is **Bank of New York-Mellon,** from New York, New York. Investment consultants are **R.V. Kuhns & Associates** from Portland, Oregon; **Albourne America, LLC** from San Francisco, California; and **Pension Consulting Alliance** from Portland, Oregan; **ORG Real Property** from Cleveland, Ohio.

Schedule of Commissions Paid

Asset	Total Shares	Commissions Paid	Price per Share
U.S. Equities	69,619,982	$2,277,700	$0.033
	Total Value of Trades	**Commissions Paid**	**As a % of Trade**
Non-U.S. Equities	$2,619,583,575	$3,727,340	0.14%
Total Commissions Paid		**$6,005,040**	

External Investment Expenses *(in Thousands)*

Pension Fund	Fees Paid	Share of Assets
Portfolio Management Expense	$45,077	0.3787%
Custody Expense	1,273	0.0107%
Total Pension Expense	46,350	0.3894%
Insurance Fund		
Portfolio Management Expense	14,896	0.3618%
Custody Expense	765	0.0186%
Total Insurance Expense	15,661	0.3804%
Contractual	110	0.0026%
Total Expenses	**$62,363**	**0.3856%**

External Investment Expense - Asset Class/Type Breakdown

Pension Fund

	U.S. Public	Non U.S. Equity	Emerging Market	Fixed Income	Real Return	Private Equity	Real estate	Absolute Return	Cash	Total
Investment Advisory Fees	4,410,303	4,670,690	1,923,004	8,535,158	1,682,412	3,796,750	1,878,971	6,346,511	-	**33,243,799**
TMPG Charges	--	--	--	18,195	--	--	--	--	--	**18,195**
Stock Loan Fees	216,900	115,533	--	110,288	181,438	--	--	--	--	**624,160**
Miscellaneous	402.85	85,758	7.36	711	--	161	6,094	--	--	**93,134**
Taxes & Insurance	--	1,222,128	--	--	--	--	--	--	--	**1,222,128**
Interest Expense	1.04	15.00	--	--	--	(9,151)	(51,786)	--	--	**(60,921)**
Other	9,347	106,778	--	--	--	3,138,857	2,713,595	--	--	**5,968,578**
Commission on Future Contracts	1,671	4,650	--	27,084	--	--	--	--	--	**33,405**
Commission on Swaps Contracts	--	--	--	4,885	--	--	--	--	--	**4,885**
Miscellaneous Tax	--	--	--	479	--	--	--	--	--	**479**
Custodial Fees	--	--	--	--	--	--	--	--	766,325	**766,325**
	4,638,625	**6,205,552**	**1,923,011**	**8,696,800**	**1,863,850**	**6,926,617**	**4,546,874**	**6,346,511**	**766,325**	**41,914,166**
							Financial Statement Reported Expenses			46,349,957
								Difference Due to Accurals		4,435,791

Insurance Fund

Investment Advisory Fees	1,753,798	1,811,799	788,645	2,756,880	462,524	1,447,074	16,090	2,040,250	--	**11,577,060**
TMPG Charges	--	--	--	(280)	--	--	--	--	--	**(280)**
Stock Loan Fees	69,672	33,354	--	33,173	64,542	--	--	--	--	**200,742**
Miscellaneous	20,275	25,224	--	2,311	--	--	--	--	--	**47,810**
Taxes & Insurance	--	404,057	--	--	--	--	--	--	--	**404,057**
Interest Expense	--	--	--	--	--	(7,617)	(22,781)	--	--	**(30,398)**
Other	3,346	36,337	--	--	--	695,243	800,063	--	--	**1,534,989**
Commission on Future Contracts	834	1,375	--	8,656	--	--	--	--	--	**10,865**
Commission on Swaps Contracts	--	--	--	2,387	--	--	--	--	--	**2,387**
Custodial Fees	--	--	--	--	--	--	--	--	458,880	**458,880**
	1,847,925	**2,312,147**	**788,645**	**2,803,127**	**527,066**	**2,134,701**	**1,293,371**	**2,040,250**	**458,880**	**14,206,112**
							Financial Statement Reported Expenses			15,660,650
								Difference Due to Accurals		1,454,538

The Governmental Accounting Standards Board recognizes that it may not be possible or cost-beneficial to separate certain investments expenses from either the related investment income or the general administrative expenses of the plan. KRS has displayed all investment related fees and expenses identifiable and captured by our custodial bank, BNY Mellon and KRS staff.

Market Values by Plan

KERS

Pension Fund

	Non Hazardous		Hazardous	
Asset	**Market Value**	**Share of Market Value**	**Market Value**	**Share of Market Value**
US Equity	$414,144,666	16.3%	$117,890,274	21.1%
Non- US Equity	506,941,517	20%	112,562,290	20.1%
Emerging Markets	-	0%	23,081,789	4.1%
Total Public Equity	**$921,086,183**	**36.3%**	**$253,534,353**	**45.4%**
Core	334,847,451	13.2%	58,731,777	10.5%
Global	53,168,364	2.1%	10,921,143	2.0%
High Yield	129,622,107	5.1%	26,841,417	4.8%
Fixed Income	**$517,637,922**	**20.4**	**$96,494,337**	**17.3%**
Real Return	258,878,223	10.2%	55,453,468	9.9%
Private Equity	386,206,070	15.2%	55,566,808	9.9%
Real Estate	88,306,039	3.5%	23,378,481	4.2%
Absolute Return	284,325,621	11.2%	58,310,920	10.4%
Cash	80,713,135	3.2%	14,395,182	2.6%
Miscellaneous	1,770,883	0%	1,516,893	0.3%
TOTAL PORTFOLIO	**2,538,924,077**	**100.00%**	**$558,650,442**	**100.00%**

Insurance Fund

US Equity	151,931,929	24.0%	106,334,399	24.7%
Non- US Equity	123,749,799	19.6%	85,444,072	19.8%
Emerging Markets	24,538,464	3.9%	16,984,733	3.9%
Total Public Equity	**$300,220,192**	**47.5%**	**$208,763,204**	**48.4%**
Core	334,847,451	12.7%	57,461,505	13.3%
Global	53,168,364	2.4%	9,492,237	2.2%
High Yield	129,622,107	4.8%	20,624,192	4.8%
Total Fixed Income	**$126,154,010**	**19.9%**	**$87,577,934**	**20.3%**
Real Return	60,810,691	9.6%	43,453,807	10.1%
Private Equity	34,496,043	5.5%	23,060,070	5.3%
Real Estate	23,811,374	3.8%	17,801,928	4.1%
Absolute Return	65,075,804	10.3%	43,029,533	10.0%
Cash	21,874,195	3.5%	7,617,934	1.8%
Miscellaneous	(27,445)	0.%	(21,596)	0.0%
TOTAL PORTFOLIO	**$632,414,863**	**100.0%**	**$431,282,815**	**100%**

"The displayed market values here within the Investment Section only include those investable assets held by each System, and therefore, do not include associated contributions, payables, and the Start Program software, which are included in those market values displayed in the Financial Section on pages 30 and 32."

CERS

Pension Fund

	Non Hazardous		Hazardous	
Asset	**Market Value**	**Share of Market Value**	**Market Value**	**Share of Market Value**
US Equity	$1,503,287,882	23.2%	$480,352,490	23.2%
Non- US Equity	1,288,514,682	19.9%	412,087,162	19.9%
Emerging Markets	268,364,989	4.1%	86,007,572	4.1%
Total Public Equity	**$3,060,167,554**	**47.3%**	**$978,447,225**	**47.2%**
Core	697,295,066	10.8%	243,901,131	11.8%
Global	127,826,109	2.0%	40,019,124	1.9%
High Yield	326,579,773	5.0%	102,654,156	4.9%
Fixed Income	**$1,151,700,948**	**17.8%**	**$386,574,410**	**18.6%**
Real Return	650,974,211	10.1%	207,895,299	10.0%
Private Equity	540,943,858	8.4%	176,969,991	8.5%
Real Estate	256,445,295	4.0%	81,179,575	3.9%
Absolute Return	656,344,356	10.1%	208,449,852	10.0%
Cash	154,000,822	2.4%	33,436,793	1.6%
Miscellaneous	1,406,318	0%	1,743,210	0.1%
TOTAL PORTFOLIO	**$6,471,983,361**	**100.00%**	**$2,074,696,355**	**100.00%**

Insurance Fund

US Equity	460,970,914	24.7%	251,487,445	24.5%
Non- US Equity	372,020,686	19.9%	204,142,931	19.9%
Emerging Markets	73,907,174	4.0%	40,569,478	4.0%
Total Public Equity	**$906,898,774**	**48.6%**	**$496,199,854**	**48.4%**
Core	241,003,856	12.9%	132,084,739	12.9%
Global	43,169,654	2.3%	23,637,900	2.3%
High Yield	90,417,782	4.8%	49,643,167	4.8%
Total Fixed Income	**$374,591,293**	**20.1%**	**$205,365,806**	**20.0%**
Real Return	191,088,044	10.2%	107,531,837	10.5%
Private Equity	106,441,573	5.7%	59,203,509	5.8%
Real Estate	76,949,489	4.1%	42,235,761	4.1%
Absolute Return	182,020,385	9.8%	102,898,881	10.0%
Cash	27,128,204	1.5%	11,703,370	1.1%
Miscellaneous	(96,467)	0.%	(53,558)	0.0%
TOTAL PORTFOLIO	**$1,865,021,295**	**100.0%**	**$1,025,085,460**	**100%**

SPRS

Pension Fund

	Non Hazardous	
Asset	**Market Value**	**Share of Market Value**
US Equity	$53,269,325	20.6%
Non- US Equity	51,984,913	20.1%
Emerging Markets	10,882,192	4.2%
Total Public Equity	**$116,136,430**	**45.0%**
Core	28,804,910	11.2%
Global	5,267,194	2.0%
High Yield	12,405,674	4.8%
Fixed Income	**$46,477,778**	**18.0%**
Real Return	23,755,890	9.2%
Private Equity	25,890,859	10.0%
Real Estate	9,928,438	3.8%
Absolute Return	27,961,970	10.8%
Cash	7,739,962	3.0%
Miscellaneous	354,180	0.1%
TOTAL PORTFOLIO	**$258,245,507**	**100.00%**

Insurance Fund

US Equity	$37,915,544	23.2%
Non- US Equity	32,567,621	19.9%
Emerging Markets	6,473,502	4.0%
Total Public Equity	**$76,956,668**	**47.0%**
Core	21,646,686	13.2%
Global	4,393,955	2.7%
High Yield	7,744,758	4.7%
Total Fixed Income	**$33,785,399**	**20.6%**
Real Return	16,188,832	9.9%
Private Equity	10,659,641	6.5%
Real Estate	6,802,180	4.2%
Absolute Return	16,429,784	10.0%
Cash	2,806,684	1.7%
Miscellaneous	(7,557)	0%
TOTAL PORTFOLIO	**$163,621,631**	**100.00%**

Letters from Investment Consultants

RVK

ALBOURNE

PCA | PENSION CONSULTING ALLIANCE

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Dear Board of Trustees,

Economic Review

The fiscal year began in July 2013 with softer U.S. economic growth, fiscal uncertainty, and minimal inflationary pressure. Given that as the backdrop, the Federal Reserve surprised many market participants in September with its decision to delay tapering of its quantitative easing (QE) program. The headline unemployment rate declined from 7.6% to 7.3% during the quarter. Job growth was slow but steady, with a significant portion of the improvement due to reduced labor force participation. While real GDP growth remained low, stock prices traded near record highs intra-quarter and bond yields remained near historical lows. Despite the increasing threat of U.S. involvement in Syria, geopolitical events had limited market impact.

During the quarter, the Fed simultaneously quadrupled the size of its balance sheet through QE programs leading to the U.S. federal government having the highest public debt levels relative to GDP since post-WWII. These developments appeared to magnify political polarization as Congress missed its deadline to continue funding discretionary spending, which forced a partial government shutdown on the last day of the quarter.

The second fiscal quarter (CY 4Q2013) marked the first negative calendar year for bonds in over fourteen years. While there were continued concerns around future interest rate hikes, the steep yield curve during the quarter suggested the market had already priced in substantial rate increases for 2014. After a 16-day federal shut-down, both sides of Congress came to an interim agreement on appropriations and postponed the debt ceiling until February 7, 2014.

During the quarter, the Fed stated they would likely keep the Federal Funds Rate at 0.00-0.25% even after unemployment had reached their 6.5% threshold.

Federal actions were largely consistent with economic indicators, which continued to show progress throughout the quarter. The unemployment rate dropped to 7.0% on job gains of 203,000 in November and 200,000 in October. While strong jobs numbers were a positive sign for the economy, a persistently low participation rate suggested that the job market was not yet back to full health. Final GDP figures for the first fiscal quarter were revised upwards from an initial reading of 2.8% to 4.1% based on stronger consumer spending and private inventory growth, while inflation remained tepid at 1.7%.

Investors began the third quarter of the fiscal year (CY 1Q2014) fixated on the economic impact of severe weather conditions in the U.S. and escalation of the conflict in Ukraine. The Russian annexation of Crimea contributed to sharp declines in Russian equity and currency markets. Outside of nearby emerging markets, global markets largely withstood the geopolitical turmoil. In the Asia-Pacific region, China's economic growth outlook slowed, while the results of Prime Minister Shinzo Abe's structural reforms in Japan appeared increasingly uncertain.

In the U.S., the Fed released the results of its bank stress tests, which indicated continued quality improvement in the U.S. banking industry. Janet Yellen assumed office to succeed Ben Bernanke as Fed Chair. In her first press conference as Fed chair, Janet Yellen focused on the persistently below target rate of inflation, distancing the Fed from its previously suggested unemployment rate threshold target of 6.5% as the actual rate held steady at 6.7%. The move gave Yellen more flexibility surrounding the asset purchase program.

During the fourth quarter of the fiscal year (CY 2Q2014), the fixed income markets benefited from narrowing of credit spreads and falling real interest rates. In particular, longer-term treasuries benefitted from the yield curve flattening, which stemmed from lower consensus expectations for economic growth. In June, the minutes from the Fed's meeting revealed it would end its quantitative easing program by October 2014, and that it had no set date to raise rates.

On the international front, the European Central Bank (ECB) announced several policy changes intended to increase liquidity for stressed banks and businesses. The benchmark policy rate was lowered by 10 basis points to 0.15%, bringing the interest rate on excess deposits to -0.10%. The negative rate requires banks to pay the ECB interest on excess reserves, which incentivizes banks to extend credit to the economy. The ECB also announced a long-term loan program targeted toward peripheral Europe's most stressed banks. China reduced the reserve requirement ratios for banks that lend to small- and medium-sized business, as well as agricultural borrowers.

	June 2014	June 2013	Yr/ Yr	20 Year	40 Year
Capacity Utilization	79.10	77.80	☒	78.80	79.70
Unemployment Rate	6.10%	7.50%	☒	6.00%	6.50%
PMI – Manufacturing	55.30	52.50	☒	52.10	51.70
Baltic Dry Index - Shipping	850	1,171	☒	1,619	1,440
Real GDP YoY	2.60%	1.80%	☒	2.50%	2.70%
Consumer Confidence (Conf. Bd.)	85.18	82.13	☒	93.42	90.85
Breakeven Inflation - 10 Year	2.24	1.99	☒	2.05	2.05
CPI YoY (Headline)*	2.10%	1.80%	☒	2.40%	4.20%
CPI YoY (Core)*	1.90%	1.60%	☒	2.10%	4.20%
PPI YoY	2.70%	2.30%	☒	2.40%	3.70%
M2 YoY	6.70%	6.90%	☒	6.00%	6.60%
Personal Savings	5.40%	5.30%	☒	5.00%	7.30%
Disposable Personal Income	0.50%	0.50%	-	0.40%	0.50%
Personal Consumption Expenditures	1.60%	1.40%	☒	1.90%	3.70%
US Dollar Total Weighted Index	75.91	77.72	☒	86.43	94.33
WTI Crude Oil per Barrel	$105	$97	☒	$52	$41
Gold Spot per Oz**	$1,327	$1,235	☒	$335	$342

* CPI figures are cyclically adjusted. ** 20- and 40-year average Gold spot prices are adjusted for inflation.

Capital Markets Review

Global Equity

At the start of the fiscal year, the U.S. Equity market produced positive returns for the quarter led by high beta stocks, which outperformed low beta stocks. The preference for lower quality securities supported the view that investors were willing to pay more for companies with less stable financial profiles. As the first half of the fiscal year came to a close, markets began experiencing a decrease of intra-stock correlations (all stock not moving in tandem as much) and a greater role of fundamentals in determining stock prices (a plus for the KRS active managers).

The new year and beginning of the second half of the fiscal year saw U.S. stock returns falter but recover as market preferences shifted toward favoring high-dividend paying stocks during a period when interest rates fell from their highs achieved in 2013. This change hurt some active managers' bias toward stocks with high-dividend growth potential rather than those with high current payouts in preparation for rising rates. Active managers continued to struggle relative to their respective indexes through the end of the fiscal year despite posting strong absolute returns.

Outside of the U.S., despite increased international market volatility, the first half of the fiscal year ended in double digits for developed markets and single digits for emerging markets, which also lagged the U.S. equity market. Investors shifted away from those areas of the markets that have been perceived as "safe" or "defensive" and moved into more economically sensitive areas of the market. The second half of the fiscal year began with weaker performance in developed markets and negative results within the emerging markets. Stocks sold off in January because of slowing growth and economic concerns. The main drivers were a surprise contraction in China's manufacturing activity along with eased controls on dollar purchases in Argentina following a devaluation of the currency.

Both developed and emerging markets generated strong absolute returns in last fiscal quarter. Emerging markets outperformed domestic and developed international markets. Initially, Russia and surrounding markets weighed heavily on emerging markets as turmoil in Ukraine persisted. However, concerns dissipated, and Russian stocks responded with a greater than 10% return in May. India equities generated double digit returns due to expected economic and social reforms resulting from the election of Prime Minister Narendra Modi.

Global Fixed Income

The fixed income market performance was solid across the board for the fiscal year ending June 30, 2014. The appetite for yield was prevalent as Convertibles and U.S. Caa Credit posted the highest returns across the global fixed income sector for the second year in a row. After a difficult end to the previous fiscal year, fixed income markets regained lost ground during the first fiscal quarter, although not without interest rate volatility caused by the Fed's announcement to continue purchasing $40 billion per month of MBS under the QE program. However, yields continued to rise through the end of the first half of the fiscal year as investors looked to exit ahead of the Fed's tapering of QE purchases. In a search for greater yielding securities, demand was high for sectors like high yield and bank loans.

In the developed markets, real policy rates remained low across the globe. Japan kept their government bond yields under 1% and the European Central Bank reduced interest rates from 50 basis points to 25 basis points. Both hard currency and local currency emerging market debt had a difficult first half of the fiscal year after selling off drastically because of the "taper tantrum."

During the third fiscal quarter and start of 2014, the Fed began tapering the QE program. The Treasury yield curve significantly flattened (benefiting longer maturity securities) and credits gained favor and earned strong returns as investors pushed further out the risk spectrum. Turning abroad, hard currency EMD outperformed local currency EMD following heightened currency volatility early in the quarter.

Alternatives

Within hedge funds, long-biased long/short strategies, both equity and fixed income, were among the best-performing strategies, driven mostly by strong global equity markets and tightening spreads. Midway through the first half of the fiscal year, some hedge funds protected assets by increasing their hedges and reducing net exposures given uncertainty (and volatile markets) surrounding a potential shutdown of the U.S. government and debt ceiling debate.

The second half of the fiscal year offered hedge funds an opportunity to demonstrate their role in pension plans with impressive downside protection relative to equity markets early in 2014 and a February rally in most risk assets providing a tailwind. Fundamental analysis proved profitable while macro, discretionary, and systematic strategies lagged other strategies amid trend reversals. Short biased strategies were not only the worst performers but also the only broad strategy to post negative returns.

Real Return

The fiscal year experienced a muted inflationary environment, which challenged many strategies heavily reliant upon higher inflation. Having such strategies typically dragged on total portfolio returns, but stand ready to protect assets when inflation starts to rise. A brief quarter of positive returns in the first fiscal quarter gave way to negative returns broadly distributed among various strategies. While resource equities and floating rate bonds fared relatively well, precious metals and TIPS did not.

The second half of the fiscal year yielded stronger results despite the continued low expectations for inflation at least through the end of the fiscal year. It appeared the global monetary stimulation was not effective enough to move inflation in any meaningful way. TIPS, REITs, and MLPs performed well, but commodities and natural resources produced mixed results.

Real Estate

Investor appetite for risk positively affected the core (public) and non-core (private) real estate market, especially commercial property that was boosted by an ability to attract and raise capital in the secondary markets. The office market expansion has been driven by private sector job growth, particularly in areas with heavy concentrations of technology and energy companies. According to CBRE, 45 of 63 of the largest regional markets have experienced declines in office and industrial vacancy for 16 quarters in a row.

The following table summarizes the returns earned by the major markets for the trailing oneyear period ending June 30, 2014:

One-Year Trailing Asset Class Performance
As of June 30, 2014

Index	Description	Return
S&P 500	Large Cap U.S. Equity	24.61
R Mid Cap	Mid Cap U.S. Equity	26.85
R 2000	Small Cap U.S. Equity	23.64
MSCI EAFE (Gross)	Large Cap Intl Equity	24.09
MSCI EAFE SC (Gross)	Small Cap Intl Equity	29.48
MSCI Emg Mkts (Gross)	Emerging Mkts Equity	14.68
Barclays US Agg Bond	U.S. Invmt Grade Bonds	4.38
Barclays US Trsy	U.S. Treasury Bonds	2.04
Barclays US Trsy: US TIPS	U.S. TIPS	4.44
Barclays US Corp: Hi Yld	U.S. High Yield Bonds	11.73
Wilshire US REIT	U.S. Real Estate Inv Trusts	13.54
NCREIF ODCE (Gross)	U.S. Open End Core Real Estate	12.75
HFRI FOF Diversified	Absolute Return	7.54
BofA ML 3 Mo US T-Bill	U.S. Cash Equivalents	0.06

Asset Allocation Review

As is customary, the Board reviewed the asset allocation for each of the pension and insurance plans and concluded that any consideration for changes should originate from an asset liability study. The last study was completed in 2009. Since then, plan demographic and actuarial assumptions have changed, the actuary completed a five-year experience study, and contributions into the Plans have improved. Furthermore, there has been significant governmental influence on capital markets in an attempt to stimulate economic growth around the world to recover from the Great Recession of 2008. Such unprecedented monetary stimulus and artificial depression of interest rates globally have not only affected current valuations, but also influence expectations when governments will eventually withdraw from capital markets.

A comprehensive asset liability study, as required by the Board within the Investment Policy Statement every five years, informs the Board on how to structure the investments of each plan based on each plan's projected liabilities and forecasted net cash flows using certain actuarial assumptions. The Board prudently balances the need for investment growth with the need for liquidity to structure the asset allocation of each plan, and expects to review the asset liability study and approve asset allocation targets during fiscal year 2014-2015.

Pension Plan Review

The combined market value of the Kentucky Retirement System ("System") Pension Plan assets (collectively called hereafter, "The Fund") increased from $11.0 billion on June 30, 2013 to $11.9 billion on June 30, 2014. The Fund's investments collectively returned 15.5%, net of fees1, for the fiscal year and compared to the 14.9% return earned by its target allocation benchmark, the Fund outperformed by 0.6%. The Fund's three- and five-year annualized returns of 8.6% and 12.0%, respectively, closely matched and outperformed the target allocation benchmark returns of 8.8% and 11.9%, respectively, over the same time periods. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal. Over the longer term, the Fund has exceeded this important funding target.

The System's current pension plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The System also invests in real return strategies, real estate, absolute return strategies, and private equity. The Board aggressively negotiates fees on all investments. The table below shows aggregate actual and target allocations.

Kentucky Retirement Systems Pension Plans Asset Allocation vs. Target Allocation

	Market Value ($)	Allocation (%)	Pension Target (%)
U.S. Equity	2,568,944,638	21.6	20.5
Non-U.S. Equity	2,372,090,567	19.9	20.0
Emg. Markets Equity	388,336,543	3.3	2.9
Fixed Income	2,198,885,388	18.5	19.3
Real Return	1,196,957,093	10.1	10.0
Real Estate	459,237,829	3.9	4.5
Absolute Return	1,235,392,719	10.4	10.0
Private Equity	1,185,577,588	10.0	10.0
Cash Equivalent	290,285,893	2.4	2.8
Other	6,791,484	0.1	-
Total	**11,902,499,742**	**100.0**	**100.0**

The current deviations of each plan are within an allowable and acceptable range. The allocations across plans differ based on plan-specific liquidity requirements.

Insurance Plan Review

The combined market value of the Kentucky Retirement System Insurance Plan assets increased from $3.5 billion on June 30, 2013 to $4.1 billion on June 30, 2014. The Fund's investments returned 14.9% for the fiscal year, underperforming the target allocation benchmark of 15.0% by 0.1%. The Fund's three-year annualized return of 7.5% trailed the target allocation benchmark of 8.7%, and the five-year annualized return of 12.1% fell short of its benchmark's return of 13.0% by -0.9%. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal. Over the longer term, the Fund has exceeded this important funding target.

The System's current insurance plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The System also invests in real return strategies, real estate, absolute return strategies, and private equity. The Board aggressively negotiates fees on all investments. The table below shows aggregate actual and target allocations.

	Market Value ($)	Allocation (%)	Insurance Target (%)
U.S. Equity	1,008,640,233	24.5	20.0
Non-U.S. Equity	817,925,113	19.9	20.0
Emg. Markets Equity	162,473,351	3.9	4.0
Fixed Income	827,474,441	20.1	20.0
Real Return	419,073,211	10.2	10.0
Real Estate	167,600,732	4.1	5.0
Absolute Return	409,454,386	9.9	10.0
Private Equity	233,860,836	5.7	10.0
Cash Equivalent	71,230,429	1.7	1.0
Total	**4,117,426,006**	**100.0**	**100.0**

The current deviations of each plan are within an allowable and acceptable range. The allocations across plans differ based on plan-specific liquidity requirements. For less liquid asset classes (private equity), it may take years before the current allocation is in line with the target allocation.

Investment Portfolio Review

Pension Plan

The domestic equity portfolio remained relatively unchanged over the fiscal year and performed well on an absolute basis but trailed the Russell 3000 Index by 35 basis points (24.9% versus 25.2%).

Although there were no changes to the non-U.S. portfolio during the fiscal year, work began during the fiscal year to restructure the non-U.S. portfolio by expanding mandates to include both developed and emerging market securities (diversified "core" strategies) and repositioning current managers in addition to hiring new managers with more concentrated strategies to "satellite" or complement the core strategies. The implementation occurred after the end of the fiscal year. For the fiscal year, the non-U.S. equity portfolio posted a 21.1%, which trailed the MSCI All Country World Ex U.S. Index return of 22.3% by 1.2%.

The dedicated emerging market portfolio also trailed the benchmark return of the MSCI Emerging Markets Index by 1.0% (13.7% versus 14.7%). There were no changes to the portfolio during the fiscal year.

The global fixed income portfolio remained unchanged over the fiscal year and outperformed the Barclays Universal Bond Index by 1.8% (7.0% versus 5.2%).

The growing allocation to the real return portfolio consists of Treasury Inflation Protected Securities (TIPS), a diversified real return fund, energy-related investments, and an agricultural fund recently added at the beginning of the fiscal year. Having hired a dedicated consultant focused on real assets, the plan is to continue building a portfolio diversified across several strategies that, when combined, offers inflation protection and capital appreciation. During the fiscal year, the real return portfolio earned a 9.0% return, which outperformed its custom benchmark that incorporates the various strategies (5.7%) by 3.3%.

The real estate portfolio continually evolves as new deals are sourced and funded in a prudent manner. Because many of the real estate funds are closed-end funds with the ability to exit after several years, it is more appropriate to measure the returns over periods longer than a 12-month period. While the real estate portfolio's fiscal year return lagged the benchmark, the NCREIF ODCE Index (8.1% versus 12.7%), it does exceed the benchmark by 2.8% over the trailing five-year period with a return of 9.1% versus 6.3%.

The absolute return portfolio was originally developed with fund-of-hedge funds to gain immediate exposure to the space. During the fiscal year, the fund-of-hedge funds have served as sources of capital to fund prudently selected and well negotiated direct hedge fund investments. The migration to direct strategies should continue into the future as opportunities best suited for the Fund become available. During the fiscal year, the absolute return portfolio earned an 8.5% return, which outperformed the HFRI Fund of Funds Diversified Index (5.1%) by 3.4%.

The private equity portfolio continually evolves as new deals are sourced and funded in a prudent manner. Because the private equity funds are closed-end funds with the ability to exit after several years, it is more appropriate to

[1] All plan returns are net of fees as provided by the custodian bank, BNYMellon

measure the returns over periods longer than a 12-month period. There are two benchmarks used to measure the success of the private equity portfolio. The first is a shorter-term custom benchmark, which matches the return of private equity portfolio (22.7%) over the fiscal year. Over a five-year period, the private equity portfolio earned a strong absolute return of 17.2%, but lagged its second benchmark, the Russell 3000 Index + 4%, by 3.0%.

The cash and equivalents held in the portfolio is not expected to add significant value to the portfolio. Rather, it is expected to maintain the market value of the assets held in cash with a return that keeps pace with 3-month Treasury Bills. For the fiscal year, the cash equivalents portfolio earned 0.6% relative to the "cash" benchmark of 3-month Treasury Bills Index's return of 0.0%.

Insurance Plan

The Insurance Plan invests in all of the same portfolios as the Pension Plan with the exception of a few certain investments across the portfolio. Although the insurance plan returns slightly differ from the returns earned in the pension plan because of investment restrictions, the relative under/outperformance was similar for the fiscal year.

Board Initiatives

As previously mentioned, the Board continues to review the effectiveness of the approved asset allocation to meet the assumed rates of returns for the pension and insurance plans. To better align the liabilities and net cash flows of the pension and insurance plans with the investment asset allocation, the Board requested that the general consultant RVK, Inc. complete an asset liability study for all plans before the close of the next fiscal year. The study should either confirm the current allocations or drive a decision to implement adjustments based on the cash flow demands of each portfolio within each plan.

Research, selection, and implementation of investments within hedge funds and inflationprotection strategies continue as a means to protect the portfolios in the event of market shocks and potentially higher inflationary environment. Presently, there is no clear outlook on when inflation will become a significant threat to the purchasing power of earnings generated by the portfolios. However, the Board proactively seeks investment strategies expected to mitigate the effects while contributing to the growth of the portfolios.

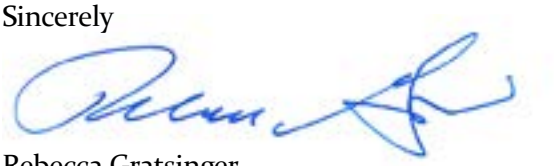
While the Fed has indicated current forecasts of economic improvements in the U.S. could lead to raising interests rates, the global fixed income portfolio has adaptive strategies in place to mitigate the negative effects of such an event. Furthermore, the Board plans to reevaluate the fixed income portfolio's structure in the next fiscal year to position the portfolio to benefit from a higher interest rate environment.

Oversight
The System's investment policies, goals, and objectives, as well as the performance of its assets are regularly monitored by KRS staff, the Board, and RVK, Inc. These evaluations include reviews of the investment mangement firms and the custodial bank that serve the system.

Market values and investment performance returns referenced above are based upon financial statements prepared by Bank of New York Melon (previously prepared by Northern Trust) in their capacity as custodian bank. We rely on their data and have not independently audited those statements. However, their financial statements are, to the best of our knowledge, believed to be reliable.

Summary
An uncertain market environment demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the system's employee participants. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the system to meet its long-term goals and objectives.

Sincerely



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Real Return Discussion

The Real Return portfolio has recently undergone a policy shift that has resulted in the addition of Real Estate as part of the overall strategic allocation. This decision was agreed upon and implemented after the departure of the former CIO and a restructuring of staff responsibilities. It should be noted that this is not an uncommon approach for many institutional plans. .

Due to the complex nature of the KRS plan, liquidity has been a major consideration with respect to the construction of the portfolio. Manager selection has focused on finding strategies which feature intermediate duration and high cash flow potential. We continue to source opportunities with strong downside protection, thus the majority of strategies are considered conservative in nature with characteristics of strong asset protection. While keeping the objective of inflation protection and risk reduction whilst maintaining a suitable liquidity profile intact, the portfolio has continued to evolve with the addition of three strategies in the previous reporting year. The strategies continue to build on the existing real return exposure and continue to provide diversification away from the core holdings in TIPS. They are also expected to provide implied optionality for inflation participation. Allocations have been added to Timber, Mining (Debt), and Royalties to complement the existing exposure to Agriculture and Energy. The portfolio is performing in line with expectations considering its vintage, with capital drawn in strategies from the previous year and the beginnings of an emergence from the shallow "J curves" typical of new programs. The most recent allocations in the current reporting year have yet to deploy capital in a meaningful manner; hence we cannot ascertain performance expectations. Earlier allocations, including TIPS in particular, have improved from the interest rate dislocation of 2013 and are showing moderate to strong performance relative to expectations.

Market and Real Asset comments

Global economic conditions continue to improve, particularly in the US, but global instability is proving to be a threat that has weighed heavily on commodities such as metals and energy. Recent global events such as the crisis in the Ukraine, instability in the Middle East and the potential of the growing terrorist threat have made traders overly cautious across the entire commodity spectrum. Energy prices have generally trended downward largely driven by increased US production but also due to low forecasted economic growth globally. The mining sector is continually being pressured although it appears to have stabilized from the poor conditions of 2012. Recovery in Europe is proving to be more of a challenge and political events do not seem to be assisting. The recent shift to monetary policy suggests that growth may have stalled relative to the expectations of 2013. We anticipate the global influence on monetary inflation to be negligible over the short term due to both low growth rates in economic activity and the global instability mentioned above. However, we do expect increasing upward pressure on both asset and monetary inflation over the longer term. Uncertainty will remain with respect to the magnitude of anticipated increases in inflation over the long-term thus our strategy selection will remain conservative and focus on strategies that are more likely to participate in an optional format to unanticipated inflation.

The process of portfolio construction has involved in-depth analysis by staff, in conjunction with Albourne, and extensive due diligence including site visits with a wide array of managers. By focusing on income generating strategies, the portfolio has successfully navigated the most recent tumultuous environment yet we have continued to improve diversification and have added strategies that are likely to participate in economic growth whilst maintaining strong downside protection and asset stability. Liquidity considerations will continue to be emphasized over the short term and we will continue to source opportunities that focus on inflation linked income characteristics and inflation protection through participation.

Absolute Return discussion

Now in its second fiscal year, the Absolute Return portfolio is steadily growing its number of direct manager strategies and, consequently, its diversification and return potential.

During the fiscal year, the KRS investment staff presented several managers for the Investment Committee's consideration and approval. This process involved in-depth analysis by staff, research and analysis by Albourne, site visits, triangulating the research with the portfolio's existing fund-of-fund managers, general consultants and other professional resources. A broad and diverse field of fund candidates was evaluated before winnowing the group to the final presentations. These managers were selected in order to avoid disproportionate over- or under-weighting in specific strategies during the transitional investment process, scheduled to occur over a multi-year time frame.

Ultimately, the portfolio will consist of direct fund investments, reducing the reliance on fund-of-fund managers. The portfolio will benefit from lower fees, increased transparency, more flexibility in committing and/or redeeming from investments, increased return potential, and risk mitigation.

Market and Hedge Fund Comments

This fiscal year was punctuated by many events which individually had an impact on the market environment on a month by month basis; the following commentary is therefore designed to be a discussion of each month during the year.

After a tumultuous June, **July 2013** provided some respite with talk of central banks keeping rates lower for longer. The broad equity markets rallied during the month on generally positive economic data and were encouraged by US Federal Reserve Chairman Ben Bernanke's confirmation that the withdrawal of quantitative easing was not on a "preset course." Even Detroit's municipal bond default did not impact bond markets negatively. The Emerging Markets saw some relief, however, fears of China's slow-down weighed on the markets, in addition to country specific issues. The US dollar started strongly, but slid against a basket of other currencies later in the month. It was a good month for the majority of hedge fund strategies; the higher beta equity strategies were up however, both systematic and discretionary Macro strategies suffered.

Going into **August 2013** it looked like the broad market rally might continue. European economic data started to look mildly positive. However, concerns that the Federal Reserve might be scaling back its monthly asset purchases created a weakness and provided a turning point in the market. Debate as to who will take over the US Federal Reserve's chair, a sell-off in the Emerging Market currencies, equities and bonds in addition to heightened tensions in the Middle East made August a poor month for risk assets. The prospect of the end of the flood of global liquidity influenced investor confidence, and commodities were the only major area to be positive for the month. August was generally not a great month for most hedge fund strategies either. Dispersion ranges varied significantly by strategy as did average returns. Relative Value strategies were on the strong end of the return spectrum, while systematic strategies such as CTAs and Quantitative Equity Market Neutral were at the weak end. Global macro and multi-strategy funds also had a difficult month.

After a poor August, risk assets performed well in **September 2013** in a month where tapering, or rather the lack thereof, was the key theme; the extension of the quantitative easing programme coupled with a decline in Middle East tensions led to oil prices dropping and markets performing well. Equity markets were positive across the globe with the Emerging Markets leading the way and Japan leading the developed markets. Credit markets mirrored the rises in equity while commodities were the one area of the market that did suffer in September. Most hedge funds had a strong month. That said, September was a challenging environment for the majority of Global Macro managers to navigate as they were generally surprised by the US Federal Reserve's decision to delay tapering. CTAs also continued to struggle and commodity strategies were down on average.

October 2013 was dominated by the shutdown of the US government following the failure to agree on a new budget. Although some risk assets struggled at the beginning of the month, the markets were surprisingly resilient and the mid-month resolution sprouted an equity market rally. The MSCI World, FTSE 100 and S&P 500 all ended positively for the month, and the Emerging Markets and European peripheries also managed to participate in the rally. In contrast, Asia performed worse: Japan's growth in exports fell and China was hurt by its large holding of US Treasury bonds. Government bond yields broadly declined during the month and commodities continued their poor year with only Silver and Brent oil posting any significant positive returns. It was a good month for hedge funds with most strategies in positive territory. Equity Long/Short came out on top whilst limited risk exposure for Global Macro prompted a cautious approach and muted returns.

November 2013 was predominantly a good month for the markets. Developed equity markets continued to rally and the Japanese Nikkei reached a six year high. Strong US GDP and job data led to an increase in Treasury yields. In Europe, the ECB cut interest rates causing the Euro to fall versus the Dollar and a rally in European stocks. The Emerging Markets initially plummeted in the first half of the month but had some respite following US Federal Reserve Chair Janet Yellen's dovish testimony supporting loose monetary policy. However, this proved to be only a temporary relief and the markets fell a second time as the end of the month approached. Commodities once again struggled: precious metals were hit the hardest with gold reaching a four month low. November was a strong month in general for hedge funds. CTAs performed well: aided by their exposure to Japan, and Global Macro managers reversed a cautious approach to take advantage of the steepening of the developed market yield curve. Emerging Market equities and fixed income proved to be challenging, though Discretionary Commodities struggled the most; they were severely caught out by the high WTI/Brent spread.

December 2013 was a strong month to end the year, marked largely by the decision from the US Federal Reserve's Open Market Committee to start tapering and the subsequent Developed Market equity rally. However, the Emerging Markets did not react to the tapering well and credit concerns caused China's markets to weaken further. Developed Market bond yields increased significantly during the month, notably US 5 year yields. The start of the month brought about a 5 year high for the GBP while the US Dollar also strengthened against most currencies. December marked the end of an all around poor year for commodities with the exception of oil which was up 6.1%. After a 12 year streak of annual gains, gold ended the year down and similarly corn plummeted this year after a 3 year boom. Hedge funds finished the year strong with most strategies posting positive returns for the month. Asia Pacific Equity Long/Short was the top performing strategy and Multi-Strategy managers finished the year on a high with few negative numbers seen throughout.

After the highs of December, **January 2014** proved to be a jittery and influential month, with risk assets selling off sharply. A combination of concerns over US interest rate rises, soft economic data, continued tapering and specific country events saw sentiment turn negative with the Emerging Markets feeling a wave of concern. This triggered a scramble to defend Emerging Market currencies and in turn a flurry of unsuccessful interest rate and policy reactions. There was significant divergence between hedge fund strategies: Multi-strategy, fixed income, fundamental equity market neutral and developed equity had a strong start to the year. On the other hand, Global Macro and CTAs suffered from the significant sell off, increased market volatility and multiple market reversals.

February 2014 marked a broad market recovery. In particular, equities rallied following the waiver of the US debt ceiling for another year and commodities had their best month since October 2011, helped mostly by coffee. Increasing tension in Ukraine prompted a downgrade in credit rating and a sharp fall in their currency versus the dollar. Similarly, China witnessed the steepest dive in currency versus the dollar since 2005, caused by an increase in negative credit stories. Despite some mixed performances for both Global Macro and CTAs, it was a generally positive month for most hedge fund strategies, especially for Equity Long Short.

ALBOURNE

In **March 2014**, continued negative sentiment in China and mounting tensions in Ukraine halted February's rally. After positive jobs data in the US, 10 year Treasury yields saw their largest weekly rise of the year and the US Dollar rallied, marking a strong month for US bonds and currency. Following the confirmation that the US Federal Reserve will continue to taper by another $10bn, a surprise came in the form of continued strong performances in the Emerging Markets with Brazil and India leading the charge. March proved to be a difficult month for most hedge fund strategies with only Relative Value Credit and Fixed Income avoiding losses on average. In contrast to February, Equity Long Short across all regions had the most challenging month.

April 2014 was a mixed month for both the markets and hedge fund strategies. Natural gas led the recovery in commodities from their halt in performance last month. Equities saw substantial volatility throughout the month: a poor start was the result of a reversal in momentum caused primarily by the technology sector; however a pick-up in M&A activity brought about a mixed recovery towards the end of the month. The crisis in the Ukraine escalated, causing the Russian Ruble and the Ukrainian Hryvnia to weaken. The US dollar also fell against most currencies. Whilst Fixed Income returns were mildly positive, government bond yields fell across the board, particularly Greece, Spain and Italy. Following a very poor first quarter, CTAs had a positive month, especially commodity focused strategies. Equity Long Short struggled with the correction in momentum and Global Macro continued to battle against low and falling volatility (as in January). Structured Credit performed well aided by strong technicals, cash bonds and fundamentals.

May 2014 was a quiet yet fairly positive month: global equities and developed market government bonds performed well, spurred on by the expectation of the ECB loosening monetary policy at the start of June. The US dollar recovered and corporate credit had a positive month with outperformance from the Emerging Markets. Commodities had their second down month of the year. There were significant elections in the European Parliament, India and Ukraine, while the ripple effect of the Ukrainian crisis temporarily eased. Notably, the markets grappled with the continued slide in US Treasury yields. For most hedge fund strategies, the average return was positive, albeit in some cases only marginally. Hedge funds were aided by strengthening in the equity markets and a broad recovery in growth stocks. CTAs had a good month, with longer term trend followers benefitting from the equity and bond rally, although commodity and currency exposure proved more challenging.

June 2014 was a mixed month beginning with the ECB's rate cut and lending boost followed by mid-month flare ups between Russia and Ukraine. In equities, led by Emerging Markets, positive performance came from most countries/regions with the exception of Europe. US government bond yields reversed their previous downward trajectory while Sterling rallied against the dollar on the back of a hawkish tone from the Bank of England. European bond yields continued to decline, reaching new all-time lows in several countries. Commodities were mixed after a poor previous month. June was generally another positive month for hedge fund strategies; average returns for strategies tended to be in line with or slightly below May's performance (with the exception of Distressed and Relative Value Credit-both of which had a slightly better month). CTAs had a third consecutive strong month.

July 2014 was a challenging month. The S&P 500 continued its three month streak of reaching all-time highs until US and European equity markets saw gains reverse at month end. A missile attack on a Malaysian passenger jet and fears of an earlier rate rise in the US weighed on sentiment. Equities ended down on the month (with the exception of Japan and Emerging Markets). Outside of the US and Greece, government bond yields continued their descent. Most commodities including oil fell on the month. July was challenging for most hedge fund strategies as well; returns were on average negative to mildly positive. The sharp equity sell off at the end of the month, spurred on by Argentina's second default, in many cases tipped managers into negative territory. The bright spot, however, was global macro; long US Dollar trades finally benefitted, whilst in contrast CTAs were hurt by their short US Dollar positioning.

ALBOURNE

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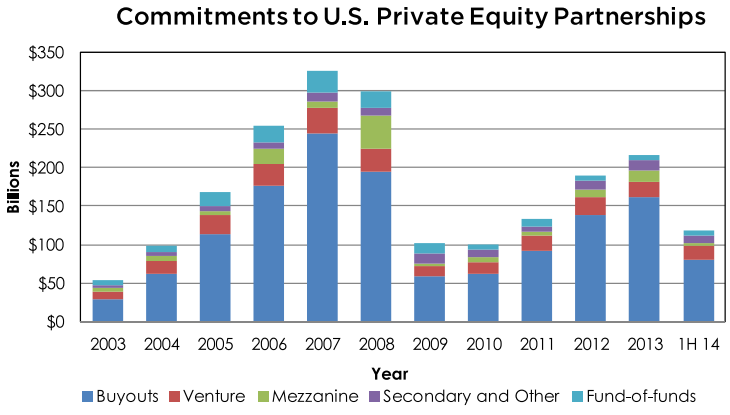
September 30, 2014

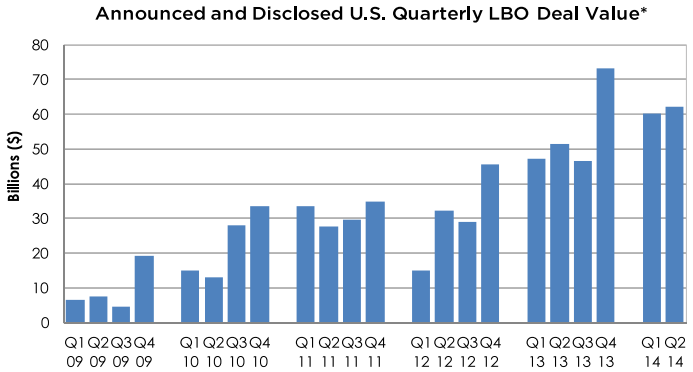
Pension Consulting Alliance, Inc. (PCA) was hired in April 2014 to advise the KRS Board of Trustees and Staff in its private equity investment activities. This is PCA's first annual review of the KRS private equity investment Program.

Private Equity Industry Trends:

• Fundraising activities continue to exhibit increases from lows seen early in the financial crisis. Approximately $119 billion of commitments were raised domestically in the first half of 2014, with buyouts continuing to represent the largest proportion of capital raised. This pace is on track to exceed the full calendar year 2013 commitment amount of $217 billion.



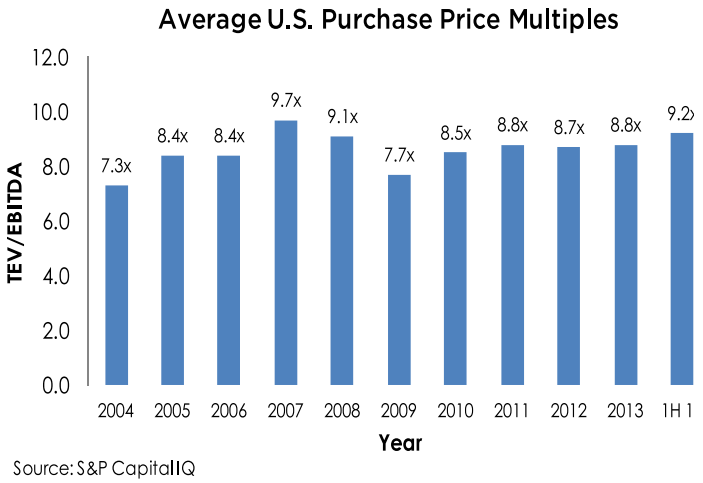
Source: *Private Equity Analyst* through June 2014



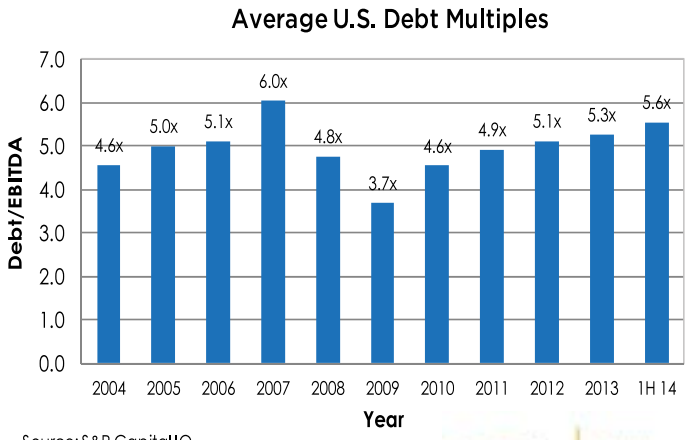
* Total deal size (both equity and debt).
Source: *Thomson Reuters Buyouts*

• Announced U.S. buyout deal volume exhibited an increase in Q2 2014 from the prior quarter and is on pace to exceed 2013 levels. Total announced U.S. buyout deal volume was $62.2 billion in Q2 2014, up from $60.2 billion in the first quarter but down from $73.3 billion in the fourth quarter of 2013. At $219 billion in 2013, activity last year was the highest annual level over the past six years.

• Risk metrics in the leveraged buyout market increased during the first half of 2014 as both purchase price multiples and debt multiples increased. The average purchase price multiple in the first half of 2014, at 9.2x, increased from 8.8x in 2013 and was well above the ten-year average of 8.5x. Debt multiples for the first half of 2014 were at 5.6x, above the 5.3x level for the 2013 calendar year.



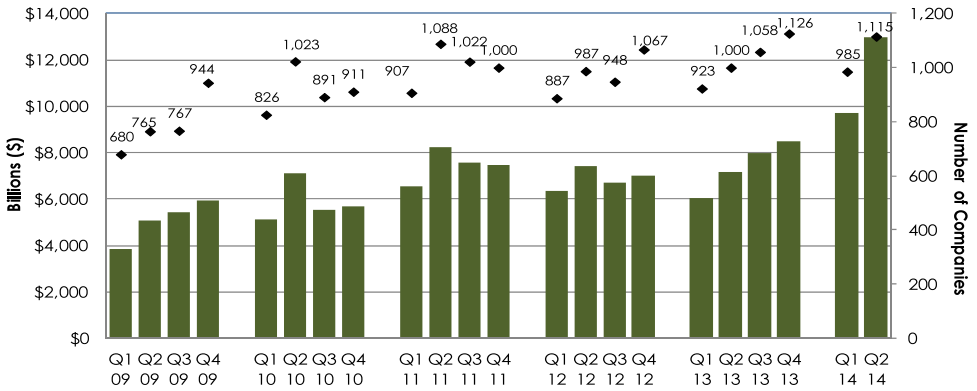
Source: S&P CapitalIQ



Source: S&P CapitalIQ

• Venture capital investment activity continued to increase in the first half of 2014. Approximately $13.0 billion was invested across 1,115 companies during the second quarter of 2014 which exceeded the $9.7 billion invested across 985 companies in the first quarter. In the 2013 calendar year, $29.7 billion was invested across approximately 4,100 companies.

Quarterly U.S. Venture Capital Deal Volume*



* Only includes equity portion of deal value.
Source: Thomson Reuters

• Exit activity for venture capital investments continued to show strength in the first half of 2014. The number of merger and acquisition (M&A) transactions increased in the first half of 2014, and annualized, is on pace to exceed 2013 levels. The initial public offering (IPO) market also exhibited increases in the first half of 2014 and is on pace to exceed 2013 levels.

Performance:
Performance of the broader private equity industry has been strong over the past several years, but has lagged the dramatic performance posted by the public equity markets. Over longer time-periods (i.e. ten-years or greater), the private equity markets have outperformed the public equity markets.

Public Market Performance Comparison, as of March 31, 2014

Index	1 Yr	3 Yr	5 Yr	10 Yr	20 Yr
All Private Equity*	19.3%	13.6%	15.7%	12.1%	14.3%
Russell 3000	22.6%	14.6%	21.9%	7.9%	9.6%
MSCI EAFE	18.1%	7.7%	16.6%	7.0%	5.9%

*Thomson ONE, Cambridge Associates all Asset Class/Strategies

KRS Private Equity Portfolio:
As of June 30, 2014, KRS had committed $2.9 billion to 38 managers (60 partnerships) gaining exposure across the spectrum of private equity strategies including buyout, venture/growth, and credit-oriented strategies. Approximately $2.5 billion has been drawn down while $2.1 billion of capital has been returned. During the first six months of 2014, $73.18 million has been drawn down to fund investments and $201.3 million of distributions have been returned.

The Pension Plan had $2.35 billion of commitments and the Insurance Plan had $490 million of active commitments as of mid-year 2014. The portfolio is well diversified across target investment strategies.

KRS Commitments:
Over the past twelve months ending June 30, 2014, KRS has committed $120.0 million across two partnerships.

KRS Commitment Activity, last twelve months

Fund Investment	Approval Date	Commitment Amount (M)
Levine Leichtman Capital Partners V	Nov-2013	$70.0
New Mountain Partners IV	Nov-2013	$50.0

As of 6/30/2014

Subsequent to mid-year 2014, $60.0 million was committed to Crestview Partners III and $100.0 million to Secondary Opportunities Fund III.

Program Development:

In dialogue with KRS Staff, PCA has identified the following areas of focus for further development of the portfolio:

• Continue a disciplined approach to annual commitment pacing and partnership commitment sizing, making larger commitments to fewer managers in order to maintain a manageable number of relationships while progressing towards target allocations.

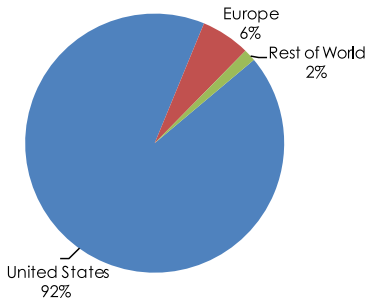
• Consider additional global exposure, committing to direct partnerships where appropriate while utilizing fund of funds where access to a unique segment of the market warrants.

• Revisit approach to the venture capital investments and explore other approaches to gain exposure across the venture capital/growth equity segment.

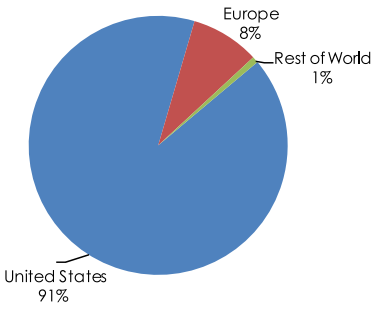
• Explore cost-effective approaches to deploying capital, such as co-investing, to maximize returns while minimizing expenses.

Please feel free to contact me regarding any of the information above.
Sincerely,

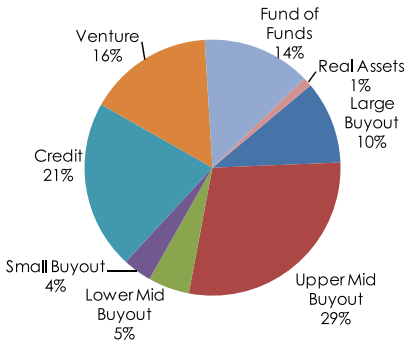
Tad Fergusson, CFA
Managing Director
Pension Consulting Alliance, Inc.



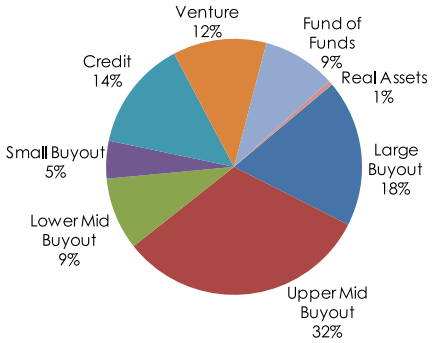
Insurance Geographic Exposure: by commitment



Pension Sector Exposure: by commitment



Insurance Sector Exposure: by commitment



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September 30, 2014

ORG Portfolio Management LLC ("ORG") serves as the Real Estate Investment Consultant for Kentucky Retirement Systems ("KRS"). It is ORG's responsibility to present potential investment opportunities to the Investment Staff and Board and to make recommendations related to KRS' real estate portfolio. It is ORG' s commitment to assist KRS in building a successful long term real estate investment portfolio for the KRS pension fund members.

U.S. Market Overview

The U.S. economy continues its period of sustained, if still modest, growth although the U.S. economic growth was below expectations for the first quarter, growing only 0.1%. This was mainly attributable to the severe winter experienced by the eastern half of the nation, negative contributions from inventories and trade and a reduction of government spending. The U.S.labor market growth was also slightly below expectations adding an average of 182,000 jobs per month. The unemployment rate was steady at 6.7% as the labor force increased slightly offsetting the growth in employment. However, payroll employment logged considerable improvement recovering the total number of private sector jobs lost during the Global Financial Crisis.

The U.S. commercial real estate market continued to see improvement in 2014. The capitalization rates as of June 30, 2014 for all sectors have declined from the prior year ending June 30, 2013.

Capitalization Rates	2nd Qtr. 2014	2nd Qtr. 2013	Basis Point Change
Total	5.18%	5.38%	-0.20
Apartments	4.84%	5.05%	-0.21
Retail	5.42%	5.64%	-0.22
Office	5.11%	5.31%	-0.20
Industrial/Warehouse	5.60%	5.73%	-0.13
Source: NCREIF – Current Value Weighted Capitalization Rates			

The industrial sector continues to be a strong performer, as manufacturing activity, import/export and online retail sales all have had a positive demand on the warehousing market. Demand for industrial real estate increased during the quarter and net absorption is running more than double the supply of new completions pushing vacancy rates below pre-crisis levels to 6.5%. Rent growth was slightly below in comparison to the previous year. Rent growth is expected to tick upward in subsequent quarters due to various contractual rent increases.

Demand in the apartment sector remained strong, although rent growth continued to grow at a more moderate pace. Effective rent growth increased only by 0.6%, however this increase still puts rent levels near historical peaks. New construction declined slightly with new units numbering 25,745 in comparison to last quarter's 41,881 units. Apartment demand remains solid with the maturation of echo boomers and the continued tight mortgage credit trends which are expected to continue over the next several years. The vacancy rate declined slightly to 4.2% to 4.0%, which is below the cyclical peak of 8.0% at the end of 2009. Based on the change in vacancy, the top performing major markets are Houston, Riverside, Atlanta and Sacramento.

Office fundamentals continue to improve with employment growth. The office growth rate is only one-half the pace of job creation. The areas with most steady growth are those regions with strong energy and technology sectors, although the financial and health/medical services are also recovering steadily. Suburban office is recovering more quickly than Central Business Districts. New supply continues to be limited especially in the suburbs where construction appears to be lower in every region in comparison the last cycle. Two regional exceptions are 1) the expanding Texas markets including Austin and 2) Boston's hot tech suburbs. Also, doing well on the construction project side are 1) New York as it delivers One World Trade Center and 2) San Francisco as it builds into the tech boom.

The retail mall sector remains solid as a whole with vacancy rates unchanged at 10.4%. However, tenant sales growth and same-store NOI growth have decelerated. Operating results from the REITs, who are large owners in the mall universe, indicate that tenant sales growth slowed last year in both Class A and Class B properties. Annual effective rent growth continued to trend upwards reaching 1.6% and regional malls continued to outperform most neighborhood and community shopping centers with vacancy levels of 7.9%. Consumer demand continues to favor necessity retailers and high-end specialty retailers. The top performing markets based on the improvement in vacancy rates are Orlando, Sacramento, San Jose, Suburban Virginia and Tampa.

ORG's View

The returns for the real estate market increased over the 2013 levels based upon the National Council of Real Estate Investment Fiduciaries ("NCREIF") Property Index ("NPI") which had a 11.2% return for the period ending June 30, 2014 vs. the 10.7% return for the one year period ending June 30, 2013.

ORG has noted that the one-year income return as of June 30, 2014 for core open end funds gross of fees as reported by the NCREIF Open-End Diversified Core Equity ("ODCE") Index is 5.2%. This low income return will require substantial rental rate growth or appreciation growth in order for the funds to generate the projected 8-9% rate of return expected for core. The long-term Since Inception appreciation return for the ODCE is 1%. ORG is concerned that the As an alternative, ORG continues to recommend that investors focus on investment strategies where going in income returns are higher in certain overlooked strategies. The suggested focus includes secondary markets (e.g., Atlanta, Houston, Dallas and Seattle among numerous others) and real estate debt.

ORG also recommends strategies in distressed opportunistic funds where investors can capitalize on the continual de-leveraging of real estate that continues as debt originated during 2005-2007 continues to mature over the next several years. These opportunities to recapitalize high quality properties that have often been neglected could generate attractive risk adjusted returns over the next several years.

Kentucky Retirement Systems Real Estate Investments

2008-2010 Investment Activity: In December 2008, Kentucky Retirement Systems made $40 million commitments each to 1) Mesa West Real Estate Income Fund II, L.P., 2) PRIMA Mortgage Investment Trust and 3) Walton Street Real Estate Fund VI, L.P. In July 2013, an additional $48.0 million was committed to PRIMA Mortgage Investment Trust increasing the total KRS commitment to $82.0 million.

• Year to Date through September 2014, Mesa West Real Estate Income Fund II made no capital calls and returned $3.8 million in capital and preferred return distributions. Since inception, $12.4 million has been funded with $27.6 million remaining capital to be called.

• Year to Date through September 2014, PRIMA Mortgage Investment Trust distributed $3.3 million in income distributions. The investment is fully funded. Since inception, PRIMA has distributed $16.4 million.

• Year to Date through September 2014, Walton Street Real Estate Fund VI made no capital calls and returned $4.8 million in capital and gain distributions. Since inception, $28.2 million has been funded with $11.8 million remaining capital to be called.

2011 Investment Activity: Kentucky Retirement Systems made 1) a $100 million commitment to H/2 Credit Partners, L.P. in April with an additional $3 million commitment in October 2012. In 2013, $3.3 million was withdrawn from the fund for a total commitment of $99.7 million and 2) a $101.9 million commitment to Harrison Street Core Property Fund, L.P. in December with an additional $3.8 million commitment in October 2012 and $17.9 million commitment in June 2013 for a total commitment of $123.6 million.

• H/2 Credit Partners is fully funded.

• Year to Date through September 2014, Harrison Street Core Property Fund made one capital call totaling $9.5 million and returned $3.8 million of income distributions. This investment is fully funded

2012 Investment Activity: Kentucky Retirement Systems made 1) a $52.5 million commitment to Walton Street Real Estate Fund VII, L.P. in August with an additional $2.4 million commitment in October for a total commitment of $54.9 million, 2) a $54.9 million commitment to Greenfield Acquisition Partners VI, L.P. in December and 3) an $83 million commitment to Mesa West Core Lending Fund, L.P. in December 2012.

• Year to Date through September 2014, Walton Street Real Estate Fund VII made three capital calls totaling $16.6 million and returned $1.0 million of capital and income distributions. Since inception, $19.8 million has been funded with $35.1 million remaining capital to be called.

Year to Date through September 2014, Greenfield Acquisition Partners VI made three capital calls totaling $3.6 million and returned $4.8 million of capital and income distributions. Since inception, $52.7 million has been funded with $2.2 million remaining capital to be called.

• Year to Date through September 2014, Mesa West Core Lending Fund made two capital calls totaling $4.9 million and returned $2.3 million of income distributions. Since inception, $78.7 million has been funded with $4.3 million remaining capital to be called. 2013 Investment Activity: Kentucky Retirement Systems made 1) a $30 million commitment to Rubenstein Properties II, L.P. in July, 2) a $30 million to H/2 Core Debt Fund, L.P. in August, 3) a

$70 million commitment to Prologis Targeted U.S. Logistics Fund in October and 4) a $95 million commitment in Stockbridge Smart Markets, L.P. in December.

• Year to Date through September 2014, Rubenstein Properties II made one capital call totaling $2.1 million and returned $4.5 million of capital and income distributions. Since inception, $7.2 million has been funded with $22.8 million remaining capital to be called.

• Year to Date through September 2014, H/2 Core Debt Fund made three capital calls totaling $2.7 million. Since inception, $7.1 million has been funded with $22.9 million remaining capital to be called.

• Prologis Targeted U.S. Logistics Fund has made no capital calls.

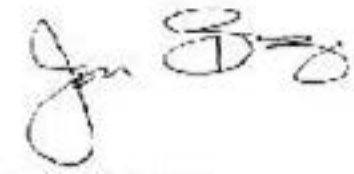
• Year to Date through September 2014, Stockbridge Smart Markets made one capital call totaling $52.4 and returned $0.3 million of income distributions. Since inception, $52.4 has been funded with $42.6 remaining to be called.
2014 Investment Activity: Kentucky Retirement Systems made 1) a $40 million commitment to Lubert-Adler Real Estate Fund VII, L.P. in March, 2) a $30 million commitment to Divco West IV, L.P. in April and 3) $40 million commitment to Greenfield Acquisition Partners VII, L.P. in July.

• Year to Date through September 2014, Lubert-Adler Real Estate Fund VII made one capital call totaling $4.0 million. Since inception, $4.0 million has been funded with $36.0 million remaining to be called.

• Year to Date through September 2014, Divco West IV made three capital calls totaling $10.5 million. Since inception, $10.5 million has been funded with $19.5 million remaining to be called.

• Year to Date through September 2014, Greenfield Acquisition Partners VII made two capital calls totaling $8.8 million and returned $39,400. Since inception, $8.8 million has been funded with $31.2 million remaining capital to be called.

Please feel free to contact me regarding any of the information above.
Very truly yours,



Jonathan Berns
Principal

Statistical

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Kentucky Retirement Systems Membership Totals

Fiscal Year	Active	Inactive	Retired	Total
2009	144,821	101,552	87,279	333,652
2010	144,837	92,379	81,765	318,981
2011	144,894	95,025	84,680	324,599
2012	139,352	107,353	87,472	334,177
2013	137,368	112,462	90,796	340,626
2014	137,138	117,039	93,946	348,123

FUND Statistics

Definitions Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

Member Breakdown The 2009 data reflects the number of accounts in each system. A single member may have multiple accounts, which contribute to one pension. Beginning in 2010: each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in the retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-Hazardous, then KERS Non-Hazardous. This table does not include individuals receiving payments under dependent child accounts, Qualified Domestic Relations Orders or multiple beneficiary accounts.

KERS Non-Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2009	46,060	34,515	37,883	118,458
2010	46,710	32,461	35,733	114,904
2011	46,044	33,350	36,239	115,633
2012	41,743	39,338	36,508	117,589
2013	40,710	40,375	37,240	118,325
2014	40,500	41,213	38,022	119,735

CERS Non-Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2009	83,724	60,275	39,756	183,755
2010	84,010	55,423	38,261	177,694
2011	84,837	57,073	40,174	182,084
2012	83,658	63,280	42,068	189,006
2013	82,631	67,013	44,164	193,808
2014	82,494	70,231	46,112	198,837

KERS Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2009	4,334	3,056	2,648	10,038
2010	4,049	2,285	1,900	8,234
2011	4,045	2,351	2,090	8,486
2012	4,007	2,597	2,180	8,784
2013	4,057	2,882	2,312	9,251
2014	4,094	3,318	2,467	9,879

CERS Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2009	9,757	2,522	5,808	18,087
2010	9,120	2,009	4,867	15,996
2011	9,019	2,047	5,158	16,224
2012	9,040	1,914	5,513	16,467
2013	9,069	1,956	5,840	16,865
2014	9,189	2,038	6,066	17,293

SPRS

Fiscal Year	Active	Inactive	Retired	Total
2009	946	332	1,184	2,462
2010	948	201	1,004	2,153
2011	949	204	1,019	2,172
2012	904	224	1,203	2,331
2013	901	236	1,240	2,377
2014	861	239	1,279	2,379

Principal Participating Employers in KERS

Participating Employer	Rank	Covered Employees	% of Total System
Department For Community Based Services	1	4,409	9.66%
Department Of Highways	2	3,988	8.74%
Department Of Corrections	3	3,917	8.58%
Judicial Department Administrative Office Of The Courts	4	1,317	2.89%
Department Of Juvenile Justice	5	1,296	2.84%
Bluegrass ORG	6	1,103	2.42%
Department for Behavioral Health Developmental Intellectual Disabilities	7	1,015	2.22%
Department Of Revenue	8	934	2.05%
Kentucky State Police	9	934	2.05%
Northern Kentucky University	10	925	2.03%
All Others		25,803	56.53%
Total		**45,641**	**100%**

Schedule of Participating Employers in KERS

Agency Classification	Number of Agencies	Number of Employees
County Attorneys	61	327
Health Departments	60	2,962
Master Commissioner	33	79
Non-P1 State Agencies	39	1,394
Other Retirement Systems	2	291
P1 State Agencies	139	32,401
Regional Mental Health Units	13	3,643
Universities	7	4,544
Total	**354**	**45,641**

Schedule of Participating Employers in CERS

Agency Classification	Number of Agencies	Number of Employees
Airport Boards	5	510
Ambulance Services	20	400
Area Development Districts	14	724
Boards of Education	173	48,201
Cities	220	10,180
Community Action Agencies	22	2,618
Conservation Districts	47	59
County Attorneys	74	701
County Clerks	16	601
Development Authorities	6	11
Fire Departments	38	805
Fiscal Courts	118	10,999
Health Departments	1	292
Housing Authorities	41	429
Jailers	2	29
Libraries	86	1,226
Other Retirement Systems	2	3
P1 State Agencies	4	1,640
Parks and Recreation	7	66
Planning Commissions	16	217
Police Departments	2	11
Riverport Authorities	5	66
Sanitation Districts	9	357
Sheriff Departments	12	827
Special Districts & Boards	53	1,406
Tourist Commissions	23	173
Urban Government Agencies	2	6,634
Utility Boards	119	3,879
Tier 1		**61,246**
Tier 2		**28,734**
Tier 3		**3,084**
Total	**1,137**	**93,064**

Schedule of Participating Employers in SPRS

Kentucky State Police - Uniformed Officers	1	862

Principal Participating Employers in CERS

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board Of Education	1	6,562	7.05%
Louisville Jefferson County Metro Government	2	5,149	5.53%
Fayette County Board Of Education	3	1,968	2.11%
Judicial Department Administrative Office Of The Courts	4	1,640	1.76%
Lexington Fayette Urban County Government	5	1,485	1.60%
Pike County Board Of Education	6	1,107	1.19%
Boone County Board Of Education	7	1,099	1.18%
Bullitt County Board Of Education	8	1,045	1.12%
Hardin County Board Of Education	9	985	1.06%
Warren County Board Of Education	10	888	0.95%
All Others		71,136	76.44%
Total		**93,064**	**100%**

Average Monthly Benefit by Length of Service in KERS

	KERS Non-Hazardous		KERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	4,973	$170	674	$197
5 or more but less than 10	5,380	$412	731	$569
10 or more but less than 15	4,788	$691	649	$1,018
15 or more but less than 20	4,070	$1,015	572	$1,534
20 or more but less than 25	4,510	$1,356	792	$2,014
25 or more but less than 30	11,006	$2,292	146	$2,772
30 or more but less than 35	6,189	$3,237	56	$3,627
35 or more	2,528	$4,556	8	$4,322
Total	**43,444**	**$1,689**	**3,628**	**$1,192**

Average Monthly Benefit by Length of Service in CERS

	CERS Non-Hazardous		CERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	6,499	$156	918	$340
5 or more but less than 10	9,825	$329	926	$662
10 or more but less than 15	9,213	$519	727	$1,211
15 or more but less than 20	7,286	$765	657	$1,724
20 or more but less than 25	7,611	$990	2,792	$2,415
25 or more but less than 30	9,280	$1,903	1,168	$3,373
30 or more but less than 35	2,314	$2,672	383	$4,166
35 or more	607	$3,637	90	$5,079
Total	**52,635**	**$915**	**7,661**	**$2,046**

Average Monthly Benefit by Length of Service in SPRS

Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	110	$495
5 or more but less than 10	44	$901
10 or more but less than 15	47	$1,352
15 or more but less than 20	82	$1,997
20 or more but less than 25	417	$2,629
25 or more but less than 30	429	$3,642
30 or more but less than 35	225	$4,808
35 or more	62	$5,866
Total	**1,416**	**$3,126**

This table reflects the Average Monthly Pension Benefit. A single member may have multiple accounts, which contribute to one pension. This table does not reflect dependent child accounts, Qualified Domestic Relations Order (QDRO) accounts or multiple beneficiary accounts.

Plan Net Position *(in Thousands)*

KERS

	Non-Hazardous			Hazardous		
Fiscal Year	**Pension**	**Insurance**	**Total**	**Pension**	**Insurance**	**Total**
June 30 2008	5,056,869	574,479	5,631,348	484,438	269,300	753,738
June 30 2009	3,584,601	365,367	3,949,968	388,951	219,500	608,451
June 30 2010	3,504,501	368,799	3,873,300	443,606	271,240	714,846
June 30, 2011	3,544,242	428,659	3,972,901	511,085	320,673	831,758
June 30, 2012	2,977,935	418,490	3,396,425	476,589	330,730	807,319
June 30, 2013	2,760,753	496,040	3,256,793	514,592	372,883	887,475
June 30, 2014	2,578,290	646,905	3,225,195	561,484	433,525	995,009

CERS

June 30 2008	5,431,735	1,105,945	6,537,680	1,644,982	576,414	2,221,396
June 30 2009	4,331,010	894,490	5,225,500	1,320,560	483,233	1,803,793
June 30 2010	4,820,490	1,094,821	5,915,311	1,506,894	586,614	2,093,508
June 30, 2011	5,583,451	1,446,998	7,030,449	1,761,858	773,139	2,534,997
June 30, 2012	5,381,602	1,428,821	6,810,423	1,672,970	785,874	2,458,844
June 30, 2013	5,795,568	1,618,960	7,414,528	1,833,571	891,320	2,724,891
June 30, 2014	6,528,147	1,878,711	8,406,858	2,087,002	1,030,303	3,117,305

SPRS

June 30 2008	337,359	121,782	459,141
June 30 2009	256,575	93,682	350,257
June 30 2010	264,949	104,511	369,460
June 30, 2011	279,927	127,319	407,246
June 30, 2012	250,476	125,398	375,874
June 30, 2013	248,698	142,691	391,389
June 30, 2014	260,974	164,958	425,932

Kentucky Retirement Systems Total

Fiscal Year	**Pension**	**Insurance**	**Total**
June 30 2008	12,955,383	2,647,920	15,603,303
June 30 2009	9,881,697	2,056,272	11,937,969
June 30 2010	10,540,440	2,425,987	12,966,427
June 30, 2011	11,680,563	3,096,788	14,777,351
June 30, 2012	10,758,706	3,089,313	13,848,019
June 30, 2013	11,153,182	3,521,894	14,675,076
June 30, 2014	12,015,897	4,154,402	16,170,299

Changes in Plan Net Position *(in Thousands)*

KERS Non-Haz Pension Fund

Additions	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Members' Contributions	$108,362	$90,780	$109,879	$96,418	$??	$92,941
Employers' Contributions	112,383	144,051	185,558	211,071	280,874	296,836
Health Insurance Contributions (HB1)	404	1,799	2,441	5,337	3,344	4,546
Net Investment Income	(867,675)	526,209	599,790	9,789	303,011	337,174
Total Additions	(646,526)	762,839	$897,668	322,615	683,973	732,246
Deductions						
Benefit Payments	808,513	825,627	838,372	858,151	873,906	889,937
Refunds	9,127	8,887	10,931	12,004	12,907	13,627
Administrative Expenses	8,102	8,424	8,558	8,776	10,719	11,145
Capital Project Expenses	-	-	67	8		
Total Deductions	825,742	842,938	857,928	878,939	897,532	914,709
Total Changes in Plan Net Position	**(1,472,268)**	**(80,099)**	**39,740**	**(556,324)**	**(213,559)**	**(182,463)**

KERS Non-Haz Insurance Fund

Additions	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Employers' Contributions	$74,434	$$92,679	$123,256	$146,844	$162,191	$164,176
Net Investment Income	(154,894)	50,765	77,225	(4,803)	40,661	96,578
Member Drug Reimbursement	8,168	8,551	10,025	7,865	4,846	8
Premiums Rec'd from Retirees	12,320	13,588	15,826	15,666	14,294	918
Total Additions	(59,972)	165,583	$226,332	$165,563	221,992	264,273
Deductions						
Benefit Payments	145,036	157,819	161,804	163,841	140,157	112,671
Administrative Expenses	4,104	4,333	4,667	5,203	4,285	736
Total Deductions	149,140	162,152	166,471	169,044	144,442	113,407
Total Changes in Plan Net Position	**(209,112)**	**3,431**	**59,861**	**169,044**	**77,550**	**150,865**

Changes in Plan Net Position *(in Thousands)*

KERS Haz Pension Fund

Additions	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Member Contributions	$12,442	$11,110	$12,959	$11,602	$11,467	$11,995
Employer Contributions	15,843	17,658	18,085	17,367	27,334	11,670
Health Insurance Contribution (HB1)	38	118	241	629	402	551
Net Investment Income	(84,262)	65,588	83,492	(10,286)	51,497	80,549
Total Additions	(55,939)	94,474	$114,777	19,312	90,700	104,941
Deductions						
Benefit Payments	37,556	37,796	44,509	48,424	48,855	54,320
Refunds	1,277	1,286	2,062	2,543	2,762	2,830
Administrative Expenses	715	737	721	877	733	897
Capital Project Expenses	-	-	6	-	-	
Total Deductions	39,548	39,819	47,298	51,844	52,350	58,048
Total Changes in Plan Net Position	**$(95,487)**	**$54,655**	**$67,479**	**$(32,532)**	**$38,350**	**46,892**

KERS Haz Insurance Fund

Additions	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Employers' Contributions	$20,803	$21,835	$18,826	$23,984	$25,144	$23,336
Net Investment Income	(60,641)	42,406	45,205	60	32,887	52,082
Member Drug Reimbursement	186	319	365	351	243	0
Premiums Rec'd from Retirees	300	835	588	876	895	37
Total Additions	(39,352)	65,395	64,984	25,271	59,169	76,126
Deductions						
Benefit Payments	10,304	13,456	15,327	13,941	16,837	15,405
Administrative Expenses	144	200	223	335	179	78
Total Deductions	10,448	13,656	15,550	14,276	17,016	15,482
Total Changes in Plan Net Position	**(49,800)**	**51,739**	**49,434**	**10,995**	**42,153**	**60,642**

Changes in Plan Net Position *(in Thousands)*

CERS Non-Haz Pension Fund

Additions	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Members' Contributions	$122,518	$106,558	$144,861	$119,123	$120,777	$122,459
Employers' Contributions	179,286	207,076	247,968	270,664	294,914	324,231
Health Insurance Contribution (HB1)	415	1,345	3,216	5,101	4,659	6,109
Net Investment Income	(927,090)	669,072	887,514	(3,349)	579,161	893,386
Total Additions	(624,871)	984,051	$1,283,559	$391,539	$999,511	1,348,330
Deductions						
Benefit Payments	451,304	470,249	494,344	524,385	553,204	582,850
Refunds	10,719	10,001	11,816	12.765	13,306	14,286
Administrative Expenses	13,831	14,323	14,324	16,740	17,743	18,615
Capital Project Expenses	-	-	112	9	-	
Total Deductions	475,854	494,571	520,596	553,899	584,253	615,751
Total Changes in Plan Net Position	**$(1,100,725)**	**$489,478**	**$762,963**	**$(162,360)**	**$415,258**	**732,579**

CERS Non-Haz Insurance Fund

Additions	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Employer Contributions	$123,761	$166,032	$185,639	$164,297	$158,212	$121,161
Net Investment Income	(244,148)	136,528	274,743	(32,992)	147,194	231,743
Member Drug Reimbursement	7,624	9,157	10,449	8,443	5,360	6
Premiums Rec'd from Retirees	14,356	16,216	18,053	17,493	16,293	1,449
Total Additions	(98,407)	327,933	$488,884	$157,241	327,059	357,064
Deductions						
Benefit Payments	108,995	123,133	131,945	141,694	132,489	96,804
Administrative Expenses	4,053	4,469	4,763	5,545	4,431	508
Total Deductions	113,048	127,602	136,708	147,239	136,920	97,312
Total Changes in Plan Net Position	**(211,455)**	**200,331**	**352,176**	**10,002**	**190,139**	**259,751**

Changes in Plan Net Position *(in Thousands)*

CERS Haz Pension Fund

Additions	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Members' Contributions	$42,582	$37,200	$53,918	$41,797	$42,863	$42,631
Employers' Contributions	78,151	82,887	84,595	77,311	120,140	115,240
Health Insurance Contribution (HB1)	37	174	1,157	811	734	1,091
Net Investment Income	(302,748)	206,073	286,688	(24,724)	181,171	287,816
Total Additions	(181,978)	326,334	$426,358	95,195	344,908	447,452
Deductions						
Benefit Payments	138,810	136,810	167,540	169,352	179,696	189,635
Refunds	2,436	1,956	2,654	3,516	3,158	2,664
Administrative Expenses	1,198	1,234	1,191	1,319	1,202	1,721
Capital Project Expenses	-	-	9	-		
Total Deductions	142,444	140,000	171,394	174,187	184,056	194,020
Total Changes in Plan Net Position	**(324,422)**	**186,334**	**254,964**	**(79,992)**	**160,852**	**253,431**

CERS Haz Insurance Fund

Additions	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Employers' Contributions	$70,783	$82,970	$98,203	$90,204	$84,962	$74,265
Net Investment Income	(123,461)	67,288	139,242	(16,127)	79,885	124,952
Member Drug Reimbursement	628	1,493	972	871	562	0
Premiums Rec'd from Retirees	330	508	516	695	657	32
Total Additions	(51,720)	152,259	$238,933	$75,643	$166,066	200,101
Deductions						
Benefit Payments	41,017	48,321	51,831	50,155	59,941	60,843
Administrative Expenses	444	554	580	688	679	275
Total Deductions	41,461	48,875	52,411	50,843	60,620	61,117
Total Changes in Plan Net Position	**(93,181)**	**103,384**	**186,522**	**24,800**	**105,446**	**138,983**

Changes in Plan Net Position *(in Thousands)*

SPRS Pension Fund

Additions	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Members' Contributions	$4,938	$4,127	$5,225	$5,154	$4,495	$5,005
Employers' Contributions	8,186	9,489	11,920	15,040	18,501	20,279
Health Insurance Contribution (HB1)	5	12	31	46	48	70
Net Investment Income	(51,175)	40,602	44,739	43	25,954	40,291
Total Additions	(38,046)	54,230	61,915	20,283	48,998	65,729
Deductions						
Benefit Payments	42,547	45,582	46,754	48,867	50,559	53,026
Refunds	69	144	58	149	31	214
Administrative Expenses	122	130	124	73	184	215
Capital Project Expenses	-	-	1	-		
Other Expenses	-	-	-	-		
Total Deductions	42,738	45,856	46,937	49,089	50,774	53,454
Total Changes in Plan Net Position	**(80,784)**	**8,374**	**14,978**	**(28,806)**	**(1,776)**	**12,276**

SPRS Insurance Fund

Additions	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Employer Contributions	$7,414	$8,369	$10,051	10,810	$16,829	$14,498
Net Investment Income	(28,166)	13,085	24,773	(1,458)	12,993	20,458
Member Drug Reimbursement	229	274	318	279	178	0
Insurance Appropriation	-	-	-	-		
Premiums Rec'd from Retirees	23	16	18	20	23	11
Total Additions	(20,500)	21,744	$35,160	$9,651	$30,023	$35,012
Deductions						
Benefit Payments	7,476	10,769	12,172	10,791	12,546	12,688
Administrative Expenses	124	147	179	201	184	58
Total Deductions	7,600	10,916	12,351	10,992	12,730	12,745
Total Changes in Plan Net Position	**28,100**	**10,828**	**22,809**	**(1,341)**	**17,293**	**22,267**

Schedule of Benefit Expenses

KERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2008-09				
Average Benefit	$1,036	$1,926	$927	$931
Number of Accounts	5,041	29,386	2,566	861
Total Monthly Benefits	$5,223,184	$56,596,178	$2,377,856	$801,966
% of Total Monthly Benefits	8.0%	87.1%	3.7%	1.2%
FY 2009-10				
Average Benefit	$1,009	$1,912	$936	$963
Number of Accounts	5,991	30,303	2,625	813
Total Monthly Benefits	$6,046,047	$57,939,304	$2,457,461	$782,980
% of Total Monthly Benefits	9.00%	86.20%	3.60%	1.20%
FY 2010-11				
Average Benefit	$1,008	$1,920	$974	$1,071
Number of Accounts	6,118	30,900	2,629	835
Total Monthly Benefits	$6,166,372	$59,318,561	$2,561,377	$894,077
% of Total Monthly Benefits	8.94%	86.04%	3.72%	1.30%
FY 2011-12				
Average Benefit	$1,008	$1,927	$1,029	$925
Number of Accounts	6,218	31,580	2,626	959
Total Monthly Benefits	$6,269,576	$60,879,802	$2,702,410	$887,236
% of Total Monthly Benefits	8.86%	86.06%	3.82%	1.25%
FY 2012-13				
Average Benefit	$1,003	$1,915	$1,020	$889
Number of Accounts	6,441	32,310	2,687	962
Total Monthly Benefits	$6,459,840	$61,882,399	$2,740,491	$855,033
% of Total Monthly Benefits	8.98%	86.02%	3.81%	1.19%
FY 2013-14				
Average Benefit	$992	$1,911	$987	$886
Number of Accounts	6,678	33,106	2,706	954
Total Monthly Benefits	$6,624,472	$63,255,779	$2,671,749	$845,468
% of Total Monthly Benefits	9.03%	86.18%	3.64%	1.15%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

KERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2008-09				
Average Benefit	$941	$1,517	$576	$778
Number of Accounts	1,353	1,066	173	74
Total Monthly Benefits	$1,272,796	$1,617,453	$99,607	$57,607
% of Total Monthly Benefits	41.8%	53.1%	3.3%	1.8%
FY 2009-10				
Average Benefit	$933	$1,489	$593	843
Number of Accounts	1,446	1,146	157	75
Total Monthly Benefits	$1,348,511	$1,706,876	$93,064	$63,194
% of Total Monthly Benefits	42.00%	53.10%	2.90%	2.00%
FY 2010-11				
Average Benefit	$957	$1,526	$600	$814
Number of Accounts	1,571	1,240	158	79
Total Monthly Benefits	$1,503,160	$1,892,300	$94,766	$64,299
% of Total Monthly Benefits	42.29%	53.24%	2.66%	1.81%
FY 2011-12				
Average Benefit	$976.67	$1,541.49	$581	$721
Number of Accounts	1,657	1,339	180	92
Total Monthly Benefits	$1,618,343	$2,064,050	$104,644	$66,409
% of Total Monthly Benefits	42.00%	53.56%	2.72%	1.72%
FY 2012-13				
Average Benefit	$961	$1,543	$662	$725
Number of Accounts	1,751	1,417	190	93
Total Monthly Benefits	$1,682,541	$2,186,334	$125,704	$67,440
% of Total Monthly Benefits	41.42%	53.82%	3.10%	1.66%
FY 2013-14				
Average Benefit	$971	$1,560	$649	$749
Number of Accounts	1,851	1,497	191	89
Total Monthly Benefits	$1,797,900	$2,335,190	$123,867	$66,679
% of Total Monthly Benefits	41.58%	54.01%	2.86%	1.54%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

CERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2008-09				
Average Benefit	$547	$1,021	$804	$613
Number of Accounts	8,471	26,720	3,728	917
Total Monthly Benefits	$4,634,447	$27,268,861	$2,998,565	$561,804
% of Total Monthly Benefits	13.1%	76.9%	8.5%	1.5%
FY 2009-10				
Average Benefit	$570	$1,022	$835	$623
Number of Accounts	9,418	28,747	3,951	836
Total Monthly Benefits	$5,372,501	$29,377,417	$3,298,478	$520,995
% of Total Monthly Benefits	13.90%	76.20%	8.60%	1.30%
FY 2010-11				
Average Benefit	$577	$1,031	$847	$651
Number of Accounts	10,054	30,224	4,095	873
Total Monthly Benefits	$5,802,568	$31,149,398	$3,469,974	$568,188
% of Total Monthly Benefits	14.16%	75.99%	8.47%	1.38%
FY 2011-12				
Average Benefit	$587	$1,039	$870	$636
Number of Accounts	10,620	31,797	4,280	1,052
Total Monthly Benefits	$6,237,369	$33,041,035	$3,724,859	$669,377
% of Total Monthly Benefits	14.28%	75.66%	8.53%	1.53%
FY 2012-13				
Average Benefit	$591	$1,042	$878	$625
Number of Accounts	11,266	33,393	4,537	1,075
Total Monthly Benefits	$6,661,524	$34,797,169	$3,982,213	$672,310
% of Total Monthly Benefits	14.45%	75.46%	8.64%	1.45%
FY 2012-13				
Average Benefit	$596	$1,042	$856	$613
Number of Accounts	11,885	34,911	4,729	1,110
Total Monthly Benefits	$7,081,048	$36,375,607	$4,047,035	$680,784
% of Total Monthly Benefits	14.70%	75.49%	8.40%	1.41%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

CERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2008-09				
Average Benefit	$1,452	$2,299	$1,014	$1,020
Number of Accounts	1,413	3,733	634	104
Total Monthly Benefits	$2,052,162	$8,581,241	$642,604	$106,103
% of Total Monthly Benefits	18.0%	75.4%	5.7%	0.9%
FY 2009-10				
Average Benefit	$1,427	$2,362	$1,261	$1,130
Number of Accounts	1,495	3,856	468	89
Total Monthly Benefits	$2,133,697	$9,106,888	$590,020	$100,562
% of Total Monthly Benefits	17.90%	76.30%	5.00%	0.80%
FY 2010-11				
Average Benefit	$1,432	$2,410	$1,362	$1,153
Number of Accounts	1,643	4,082	487	90
Total Monthly Benefits	$2,352,710	$9,838,311	$663,455	$103,808
% of Total Monthly Benefits	18.16%	75.92%	5.12%	0.80%
FY 2011-12				
Average Benefit	$1,430	$2,422	$1,300	$1,046
Number of Accounts	1,766	4,407	662	110
Total Monthly Benefits	$2,526,722	$10,673,928	$861,223	$115,107
% of Total Monthly Benefits	17.82%	75.29%	6.07%	0.81%
FY 2012-13				
Average Benefit	$1,433	$2,429	$1,121	$1,073
Number of Accounts	1,883	4,683	681	119
Total Monthly Benefits	$2,699,176	$11,374,811	$763,700	$127,689
% of Total Monthly Benefits	18.04%	76.01%	5.10%	0.85%
FY 2013-14				
Average Benefit	$1,467	$2,437	$1,125	$1,008
Number of Accounts	1,974	4,873	695	119
Total Monthly Benefits	$2,895,353	$11,876,578	$781,685	$119,935
% of Total Monthly Benefits	18.47%	75.77%	4.99,%	0.77%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

SPRS

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2008-09				
Average Benefit	$3,400	$2,985	$1,293	$2,025
Number of Accounts	146	978	58	26
Total Monthly Benefits	$496,355	$2,919,782	$74,971	$52,649
% of Total Monthly Benefits	14.0%	82.4%	2.1%	1.5%
FY 2009-10				
Average Benefit	$3,492	$3,066	$1,467	$2,130
Number of Accounts	147	1,004	50	26
Total Monthly Benefits	$513,322	$3,078,221	$73,354	$55,379
% of Total Monthly Benefits	13.80%	82.70%	2.00%	1.50%
FY 2010-11				
Average Benefit	$3,529	$3,112	$1,494	$2,162
Number of Accounts	146	1,037	55	26
Total Monthly Benefits	$515,270	$3,226,744	$82,184	$56,210
% of Total Monthly Benefits	13.28%	83.15%	2.12%	1.45%
FY 2011-12				
Average Benefit	$3,560	$3,135	$1,372	$2,136
Number of Accounts	150	1,083	66	25
Total Monthly Benefits	$534,132	$3,396,203	$90,562	$53,404
% of Total Monthly Benefits	13.11%	83.36%	2.22%	1.31%
FY 2012-13				
Average Benefit	$3,601	$3,130	$1,320	$2,198
Number of Accounts	149	1,126	74	23
Total Monthly Benefits	$536,481	$3,524,248	$97,681	$50,563
% of Total Monthly Benefits	12.75%	83.73%	2.32%	1.20%
FY 2013-14				
Average Benefit	$3,621	$3,197	$1,346	$2,196
Number of Accounts	146	1,172	75	23
Total Monthly Benefits	$528,611	$3,747,012	$100,974	$49,197
% of Total Monthly Benefits	11.94%	84.66%	2.28%	1.11%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Analysis of Initial Retirees

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
FY 2008-09					
Number of Accounts	3,229	257	2,761	322	59
Average Service Credit (months)	277	241	205	242	269
Average Final Compensation	$51,617	$48,542	$34,940	$57,016	$69,388
Average Monthly Benefit	$2,105	$1,387	$1,029	$2,005	$3,146
Average System Payment for Health Insurance	$396	$520	$274	$715	$461
FY 2009-10					
Number of Accounts	1,007	212	2,252	329	54
Average Service Credit (months)	153	194	186	224	276
Average Final Compensation	$41,811	$45,499	$30,203	$56,408	$70,704
Average Monthly Benefit	$802	$1,494	$760	$2,127	$3,323
Average System Payment for Health Insurance	$202	$572	$239	$766	$894
FY 2010-11					
Number of Accounts	1,486	247	3,045	415	46
Average Service Credit (months)	174	184	182	204	260
Average Final Compensation	$44,341	$44,821	$32,359	$58,814	$71,501
Average Monthly Benefit	$1,047	$1,379	$824	$2,114	$3,296
Average System Payment for Health Insurance	$264	$516	$284	$777	$874
FY 2011-12					
Number of Accounts	1,641	206	3,160	410	47
Average Service Credit (months)	190	169	185	210	276
Average Final Compensation	$45,528	$45,815	$32,709	$57,756	$71,298
Average Monthly Benefit	$1,162	$1,312	$872	$2,149	$3,556
Average System Payment for Health Insurance	$291	$496	$271	$826	$981
FY 2012-13					
Number of Accounts	1,810	205	3,303	443	59
Average Service Credit (months)	199	157	189	202	234
Average Final Compensation	$47,168	$46,456	$34,292	$58,516	$69,325
Average Monthly Benefit	$1,275	$1,250	$938	$2,196	$2,893
Average System Payment for Health Insurance	$303	$433	$259	$853	$994
FY 2013-14					
Number of Accounts	2,037	245	3,529	430	77
Average Service Credit (months)	202	165	182	194	260
Average Final Compensation	$46,480	$46,595	$33,816	$57,718	$70,009
Average Monthly Benefit	$1,278	$1,296	$879	$2,021	$3,322
Average System Payment for Health Insurance	$534	$937	$486	$1,279	$1,378

This table represents all individuals who had an initial retirement date within the fiscal year.

Payment Options Selected by Retired Members

	Basic	Social Security Adjustment	Other	Period Certain	Suvivorship	Pop Up	Lump Sum
KERS Non-Haz							
Number of Accounts	14,426	3,309	16	5,518	9,653	8,312	2,210
Monthly Benefits	$22,323,719	$5,825,060	$12,534	$8,698,542	$16,489,955	$17,486,337	$2,561,321
KERS Haz							
Number of Accounts	919	275	4	400	778	990	262
Monthly Benefits	$995,786	$335,910	$2,414	$444,721	$896,058	$1,383,873	$264,874
CERS Non-Haz							
Number of Accounts	20,894	1,955	18	7,588	10,429	8,395	3,356
Monthly Benefits	$16,237,650	$2,568,201	$7,635	$6,345,577	$10,475,415	$10,320,713	$2,229,283
CERS Haz							
Number of Accounts	1,238	518	23	642	1,765	2,994	481
Monthly Benefits	$2,269,796	$820,389	$12,108	$1,128,871	$3,492,084	$7,194,654	$755,650
SPRS							
Number of Accounts	144	200	1	103	389	557	22
Monthly Benefits	$434,294	$416,029	$893	$301,877	$1,255,309	$1,965,927	$51,466
KRS Total							
Number of Accounts	37,621	6,257	62	14,251	23,014	21,248	6,331
Monthly Benefits	$42,261,245	$9,965,589	$35,584	$16,919,588	$32,608,821	$38,351,504	$5,862,594

The information in this table represents accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

Employer Contribution Rates

In KERS, CERS, and SPRS both the employee and the employer contribute a percentage of creditable compensation to the Systems.

The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employees hired on or after September 1, 2008 contribute an additional 1% to health insurance.

Under Kentucky Revised Statutes 61.565, KERS and SPRS employer contribution rates are set by the KRS Board of Trustees based on an annual actuarial valuation. However, KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. In recent years, the Kentucky General Assembly has routinely suspended Kentucky Revised Statutes 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the Board's consulting actuary. The table in the Actuarial Section shows the KERS and SPRS employer contribution rates that were actuarially recommended in the annual valuation without any adjustments (Recommended Rate) and the rate specified by the Executive Branch budget bill for each fiscal year (Budgeted Rate).

The CERS employer contribution rates are also set by the Systems' Board under Kentucky Revised Statutes 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. The CERS employer contribution rates for fiscal year 2008-2009 were reduced from the actuarially recommended rate as a result of the passage of House Bill (HB) 1 during the 2008 Extraordinary Session of the Kentucky General Assembly. Also, during its 2009 Regular Session, the Kentucky General Assembly enacted HB 117, which mandated an extension of the phase-in of insurance contribution rates that had been previously approved by the KRS Board in 2006 from five years to ten years to further mitigate the impact of the application of Governmental Accounting Standards Board Statements 43 and 45 on CERS employer contribution rates for health insurance. The "Recommended Rate" shown for CERS non-hazardous and hazardous plans are the actuarially recommended rates as set forth in the annual valuation. The "Budgeted Rate" shown for the two plans is the rate required by the ten year phase-in mandated in KRS 61.565(6).

Employer Contribution Rates

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
KERS Non-Haz						
Budgeted Rate	10.01	11.61	16.98	19.82	23.61	26.79
Recommended Rate	36.92	39.45	38.58	40.71	44.55	45.28
KERS Haz						
Budgeted Rate	24.35	24.69	26.12	28.98	29.79	32.21
Recommended Rate	34.78	35.54	34.37	33.84	35.89	28.84
CERS Non-Haz						
Budgeted Rate	13.50	16.16	16.93	18.96	19.55	18.89
Recommended Rate	20.51	20.91	19.81	21.29	21.21	19.58
CERS Haz						
Budgeted Rate	29.50	32.97	33.25	35.76	37.60	35.70
Recommended Rate	42.66	43.36	40.06	41.65	41.94	37.79
SPRS						
Budgeted Rate	30.07	33.08	45.54	52.13	63.67	71.15
Recommended Rate	91.93	92.12	85.63	94.63	103.41	96.52

Retired Reemployed

From August 1, 1998 through August 31, 2008, state law allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service was observed. The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Reemployed Retirees in Full-Time Positions Covered by Same System & Contributing to a New Account

	KERS			CERS			SPRS
Reemployed Retirees in KRS	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**	**Total**
Total Active Employees	40,500	4,094	44,594	82,494	9,189	91,683	861
Total Retirees	38,022	2,467	40,489	46,112	6,066	52,178	1,279
Reemployed Retirees	529	46	575	640	480	1,120	99
% of Reemployed Retirees to Total Actives	1.31%	1.12%	1.29%	0.78%	5.22%	1.22%	11.50%
% of Reemployed Retirees to Total Retirees	1.39%	1.86%	1.42%	1.39%	7.91%	2.15%	7.74%
Average Age at Initial Retirement	50	48	50	52	46	51	47
Months of Service Credit at Initial Retirement	349	302	346	313	288	310	335
Final Compensation At Initial Retirement	$53,786	$46,249	$53,327	$39,356	$55,086	$46,097	$59,295
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2012-2013 (Second Retirement Account)	$44,239	$38,622	$43,790	$40,589	$51,019	$45,059	$52,028

Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.

Insurance Contracts

The Systems provides medical insurance and other managed care coverage for eligible retired members.

Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems.

Insurance Benefits Paid to Retirees & Beneficiaries Participating in a KRS Health Insurance Plan

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Number	29,903	2,365	31,450	6,663	1,518
Average Service Credit (Months)	311	266	258	281	328
Avg Monthly System Payment for Health Insurance	$366	$700	$303	$959	$911
Avg Monthly Member Payment for Health Insurance	$67	$48	$69	$27	$10
Total Monthly Payment for Health Insurance	$12,009,741	$1,472,404	$10,861,450	$5,416,515	$1,101,274

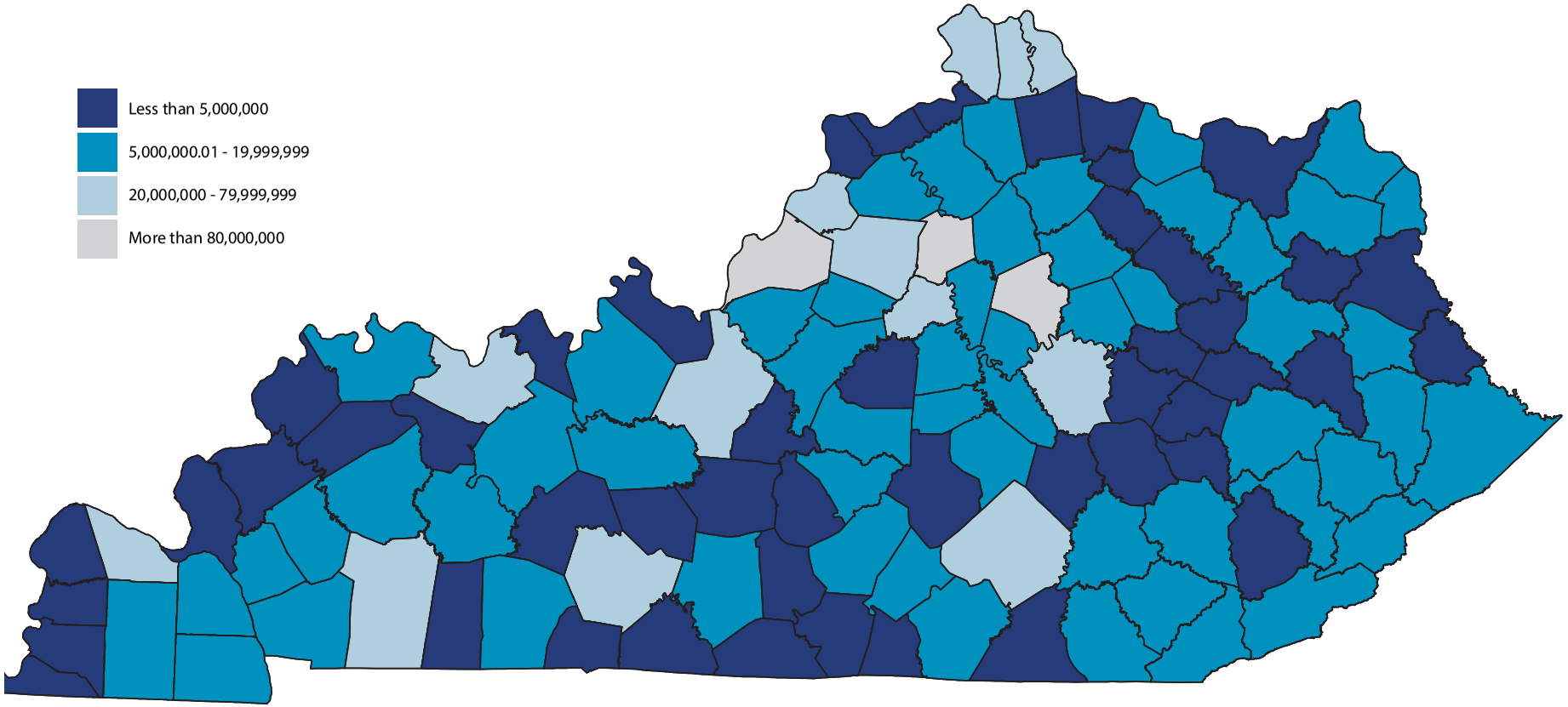
Insurance Contracts by Type

KERS Non-Haz	2009	2010	2011	2012	2013	2014
KEHP Parent Plus	762	722	732	734	618	506
KEHP Couple/Family	2,621	1,971	2,155	1,917	1,276	797
KEHP Single	10,635	10,420	10,321	9,764	9,364	9,491
Medicare without Prescription	1,920	1,831	1,821	1,721	1,474	1,370
Medicare with Prescription	13,231	13,765	13,988	15,015	16,834	17,738
KERS Haz						
KEHP Parent Plus	74	66	75	93	106	110
KEHP Couple/Family	502	453	521	517	451	448
KEHP Single	823	599	615	645	625	647
Medicare without Prescription	88	63	60	67	60	56
Medicare with Prescription	763	525	570	751	985	1104

Insurance Contracts by Type						
CERS Non-Haz	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
KEHP Parent Plus	335	342	351	383	340	278
KEHP Couple/Family	1,456	1,369	1,552	1,317	857	546
KEHP Single	7,609	7,692	8,013	7,972	7,652	7,843
Medicare without Prescription	3,110	3,106	3,167	3,119	2,707	2,583
Medicare with Prescription	13,583	14,477	15,100	16,355	18,824	20,200
CERS Haz						
KEHP Parent Plus	245	239	253	310	400	432
KEHP Couple/Family	2,041	2,062	2,156	2,237	2,155	2,184
KEHP Single	1,404	1,274	1,310	1,385	1,425	1,447
Medicare without Prescription	80	58	58	73	79	89
Medicare with Prescription	1,518	1,438	1,527	1,853	2,324	2,510
SPRS						
KEHP Parent Plus	22	47	52	62	76	78
KEHP Couple/Family	311	462	474	444	421	444
KEHP Single	221	264	278	291	283	263
Medicare without Prescription	9	12	14	15	20	20
Medicare with Prescription	418	467	499	581	682	712
KRS Total						
KEHP Parent Plus	1,438	1,416	1,463	1,582	1,540	1,404
KEHP Couple/Family	6,931	6,317	6,858	6,432	5,160	4,419
KEHP Single	20,692	20,249	20,537	20,057	19,349	19,691
Medicare without Prescription	5,207	5,070	5,120	4,995	4,340	4,118
Medicare with Prescription	29,513	30,672	31,684	34,555	39,649	42,264

2014 Total Fiscal Year Pension Benefits by County

County	Payees	Total	County	Payees	Total	County	Payees	Total
Adair	423	$6,336,619	*Grant*	537	$8,965,710	*Mclean*	270	$3,465,659
Allen	357	$4,045,686	*Graves*	764	$10,799,675	*Meade*	367	$4,750,731
Anderson	1,246	$27,686,314	*Grayson*	628	$8,481,884	*Menifee*	211	$2,620,734
Ballard	201	$2,507,023	*Green*	240	$3,247,260	*Mercer*	663	$10,848,997
Barren	919	$13,154,068	*Greenup*	549	$6,618,197	*Metcalfe*	291	$3,083,648
Bath	330	$4,636,960	*Hancock*	203	$2,296,719	*Monroe*	213	$2,341,876
Bell	639	$8,993,313	*Hardin*	1,797	$26,819,314	*Montgomery*	556	$7,672,319
Boone	1,453	$25,847,617	*Harlan*	545	$7,812,839	*Morgan*	547	$8,038,987
Bourbon	475	$6,880,493	*Harrison*	416	$5,442,298	*Muhlenberg*	590	$6,332,076
Boyd	884	$13,695,210	*Hart*	290	$3,789,252	*Nelson*	858	$13,530,208
Boyle	813	$12,967,586	*Henderson*	930	$14,095,405	*Nicholas*	188	$2,207,406
Bracken	204	$2,384,571	*Henry*	881	$17,313,215	*Ohio*	550	$5,389,372
Breathitt	429	$5,943,594	*Hickman*	108	$1,539,428	*Oldham*	1,171	$21,409,387
Breckinridge	387	$5,108,502	*Hopkins*	1,053	$14,330,819	*Owen*	517	$10,638,775
Bullitt	1,210	$19,328,202	*Jackson*	277	$3,378,655	*Owsley*	189	$2,466,067
Butler	295	$3,544,952	*Jefferson*	15,149	$289,349,458	*Pendleton*	290	$4,369,395
Caldwell	480	$6,389,368	*Jessamine*	860	$13,688,422	*Perry*	680	$9,171,323
Calloway	961	$11,812,240	*Johnson*	570	$7,959,191	*Pike*	1,086	$14,611,096
Campbell	1,327	$22,575,080	*Kenton*	1,964	$36,510,327	*Powell*	336	$4,178,531
Carlisle	116	$1,454,260	*Knott*	383	$5,393,684	*Pulaski*	2,055	$31,214,491
Carroll	300	$4,081,928	*Knox*	499	$7,024,233	*Robertson*	75	$934,124
Carter	727	$8,323,028	*Larue*	327	$4,583,868	*Rockcastle*	349	$4,416,080
Casey	316	$3,831,313	*Laurel*	1,078	$16,552,519	*Rowan*	832	$12,120,411
Christian	1,463	$22,870,547	*Lawrence*	285	$3,286,371	*Russell*	508	$6,441,461
Clark	714	$10,856,694	*Lee*	208	$2,775,831	*Scott*	1,065	$19,221,376
Clay	518	$6,736,063	*Leslie*	220	$3,020,281	*Shelby*	1,556	$33,310,768
Clinton	230	$2,576,757	*Letcher*	527	$6,416,789	*Simpson*	246	$2,503,716
Crittenden	215	$2,487,272	*Lewis*	296	$3,250,524	*Spencer*	437	$7,894,291
Cumberland	175	$2,266,364	*Lincoln*	595	$6,829,983	*Taylor*	567	$7,425,990
Daviess	2,245	$35,883,786	*Livingston*	229	$3,389,426	*Todd*	253	$2,916,042
Edmonson	193	$2,433,737	*Logan*	543	$6,663,545	*Trigg*	495	$6,830,812
Elliott	167	$1,912,389	*Lyon*	331	$5,427,703	*Trimble*	250	$3,297,339
Estill	337	$4,142,489	*Madison*	2,095	$30,596,360	*Union*	318	$3,356,923
Fayette	4,858	$97,289,271	*Magoffin*	325	$4,074,854	*Warren*	2,500	$39,141,909
Fleming	403	$6,594,171	*Marion*	489	$6,016,392	*Washington*	298	$4,276,041
Floyd	792	$11,576,658	*Marshall*	766	$10,041,357	*Wayne*	473	$6,133,691
Franklin	6,630	$180,723,291	*Martin*	224	$2,265,171	*Webster*	317	$3,747,086
Fulton	159	$1,676,279	*Mason*	359	$5,374,167	*Whitley*	920	$12,053,387
Gallatin	118	$1,837,012	*Mccracken*	1,408	$23,339,196	*Wolfe*	304	$4,370,368
Garrard	385	$5,393,728	*Mccreary*	349	$3,327,965	*Woodford*	871	$19,215,071



Pension Benefits paid to retirees and beneficiaries of Kentucky Retirement Systems have a wide ranging impact on the state's economic health. In fiscal year 2014, KRS paid ***more than $1.7 billion*** *to its recipients. More than 94 percent of these recipients live in Kentucky. Not only do these dollars impact those receiving a benefit, but according to the National Institute of Retirement Security (NIRS),* ***each $1.00 paid out in pension benefits supported $1.67 in total economic activity in Kentucky****. As you can see in the chart, each county in the Commonwealth is impacted by pension benefits, and in an unsteady economy, the consistent addition of pension funds into the economy is a stabilizing element.*

Total Fiscal Year Retirement Payments

	Payees	%	Payments
Kentucky Total	97,653	94.46%	$1,628,820,682
Out of State	6,249	5.54%	$95,499,855
Grand Total	**103,902**	**100.00%**	**$1,724,320,537***

* This table represents all payees receiving a monthly payment during the fiscal year.

2015

COMPREHENSIVE ANNUAL FINANCIAL REPORT

Kentucky Retirement Systems
A component of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

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2015 Comprehensive Annual Financial Report
For The Fiscal Year Ended June 30, 2015
Document Prepared By KRS Communications Division

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DUCTION

AMBULANCE
E.M.T.
EMS

Management's Responsibility for Financial Reporting

Management has prepared the combining financial statements of Kentucky Retirement Systems and is ***responsible for the integrity and fairness*** *of the information presented.*

December 3, 2015 Management has prepared the combining financial statements of Kentucky Retirement Systems and is responsible for the integrity and fairness of the information presented. Some amounts included in the combining financial statements may be based upon estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these combining financial statements conform to US Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the combining financial statements.

Responsibility Ultimate responsibility for the combining financial statements and annual report rests with the Board of Trustees. The Executive Director and KRS' staff assist the Board in its responsibilities. Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training employees, the establishment of an organizational structure, and the communications of policies and guidelines throughout the organization. The cost of a control should not exceed the benefits to be derived; the objective is to provide reasonable, rather than absolute assurance, that the combining financial statements are free of any material misstatements. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and Board of Trustees.

Kentucky Retirement Systems' external auditors, Dean Dorton Allen Ford, PLLC, have conducted an independent audit of the combining financial statements in accordance with US Generally Accepted Government Auditing Standards. This audit is described in their Independent Auditors' Report on page two of the Financial Section. Management has provided the external auditors with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of combining financial statements.

William A. Thielen, Esq. // Executive Director

Karen D. Roggenkamp // Chief Operations Officer

Todd E. Coleman, CPA // Controller

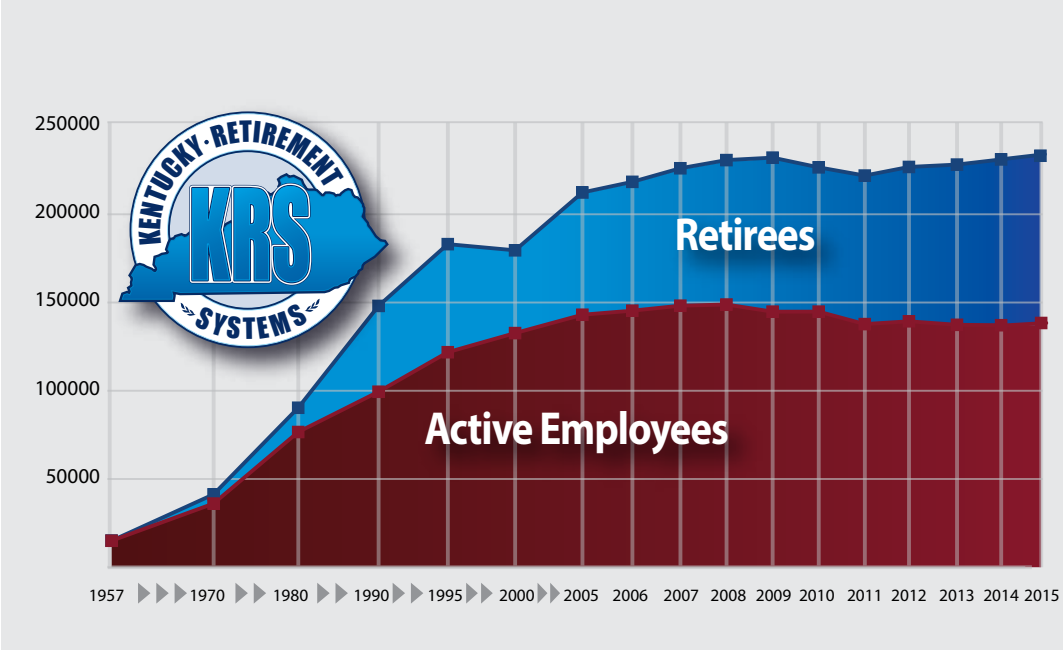
To the **Trustees & Membership**

It is my pleasure to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year that ended June 30, 2015. Responsibility for the accuracy of the data, as well as the completeness and fairness of the presentation, rests with the management of the Kentucky Retirement Systems. We present this information to assist the Board of Trustees, members of KERS, CERS and SPRS (collectively referred to as KRS), State executive and legislative branch officials, and the general public in understanding KRS' financial and actuarial status. This CAFR conforms to the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. KRS' financial transactions are reported on the accrual basis of accounting. Additionally, internal accounting controls provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

Major Issues and Initiatives

The 2015 General Assembly session once again generated a significant work effort on the part of KRS staff during the latter part of the 2015 fiscal year (FY2015). House Bill 62, which created an avenue for certain types of participating employers to exit the KERS or CERS systems, was enacted during the 2015 session. Efforts began at KRS as early as April 2015 to begin the process of working through complex issues and drafting regulations to implement HB 62. This process is continuing during the current 2016 fiscal year.

Kentucky Retirement Systems continued in FY 2015 to deal with a number of ongoing lawsuits involving member agency attempts to terminate participation in KERS and CERS. The most significant of these suits involves a Chapter 11 Federal bankruptcy action filed by Seven Counties Services, the Commonwealth's designated mental health services provider for Jefferson County and its six contiguous counties, in an attempt to remove its self from KERS. On May 30, 2014, the United States Bankruptcy Court issued a decision that Seven Counties is not a "governmental unit", as that term is defined in the Bankruptcy Code, and it is, therefore, eligible to proceed under Chapter 11 of the Bankruptcy Code. The Bankruptcy Court also held that the relationship between Seven Counties and Kentucky Employees Retirement System ("KERS") is an "executory contract" and Seven Counties may reject that contract in accordance with the provisions of the Bankruptcy Code. Kentucky Retirement Systems appealed the adverse bankruptcy ruling. This appeal was ongoing



throughout FY 2015. If Seven Counties Services is ultimately successful in obtaining a legal ruling that allows it to withdraw from KERS without paying its proportionate share of the unfunded liability of the system, then all other participating employers would be adversely affected through the payment of higher employer contribution rates. Also, Kentucky Retirement Systems continued during FY 2015 to defend a lawsuit filed in June 2014 by the City of Fort Wright, Kentucky, alleging improprieties in the investment decisions made by the KRS Investment Committee and Board of Trustees.

The severe underfunding in the KERS nonhazardous pension plan continued as a very significant issue for KRS. The 2014 valuation, which was received by the Board of Trustees in December 2014, showed that the KERS nonhazardous pension plan funding level had dropped to 21.1%. KRS continued during FY 2015 in a variety of forums to educate its members, participating employers, legislators, executive branch officials and the general public about the funded status of all its retirement plans, including, most importantly the KERS nonhazardous pension plan. You can find the funding level of all plans as of June 30, 2015 on page 156 in the actuarial section of this CAFR. We also focused during the year on the critical importance of the General Assembly's commitment to fully fund the actuarially required contribution (ARC) and we encouraged the General Assembly to find additional funds over and above the ARC when and if feasible.

During 2014, the KRS actuary conducted an experience study for the years 2008-2013. Based on the results of that experience study, at its December 2014 meeting, the KRS Board of Trustees made changes in the actuarial assumptions used to produce the annual valuation and to develop recommended employer contribution rates for each plan. The most important changes were to reduce the assumed rate of return on investments from 7.75% to 7.50% and to make changes in the mortality table to account for the fact that retirees are living longer.

Our educational efforts during the 2015 fiscal year involved monthly appearances before the Public Pension Oversight Board (PPOB) where we provided investment and operational performance information, as requested. During FY 2015, the KRS Board of Trustees authorized two independent studies of importance. In February 2015, the Board approved the issuance of a Request for Proposals for an independent actuarial audit to be conducted on work performed by KRS' consulting actuary – Cavanaugh Macdonald Consulting. KRS later selected Segal Consulting to conduct the actuarial audit. The KRS Board of Trustees also authorized KRS to enter into a sole source contract with CEM Benchmarking, Inc., an international consulting firm, to conduct an investment cost effectiveness analysis. Both the Segal audit and the CEM study were presented to the KRS Board and the legislature's PPOB early in the current 2016 fiscal year.

Senate Bill 2 (SB2) - Tier 3 Benefit Structure

As required by the passage of SB2, which was enacted by the 2013 legislative session,Tier 3 pension members who began participating in January 2014, received interest on contribution payments for the first time at the conclusion of the 2015 fiscal year. The Tier 3 account is guaranteed 4% interest credit on the member's account balance as of June 30, 2014. The member's account may be credited with additional interest if the System's five-year average investment returns exceed 4%. If the member was actively employed and participating in the fiscal year, and if the System's average geometric investment return for the previous five years exceeds 4%, then the member's account is credited with 75% of the amount of the returns over 4% on the account balance as of June 30 of the previous year. It is possible that one system in KRS will get an upside sharing percentage, while another may not.

For the Fiscal Year ended June 30, 2015, the rates (including the 4% and upside sharing) were as follows:
KERS Non-Hazardous: 7.78%
KERS Hazardous: 7.83 %
CERS Non-Hazardous: 7.77%
CERS Hazardous: 7.84%
SPRS: No qualifying participants in 2015

Health Insurance

KRS administered approximately 75,000 health insurance contracts for benefit recipients through the end of fiscal year 2015. The positive impacts on both funding status and benefits resulting from the Board of Trustees August 2012 decision to move to a Medicare Advantage plan continued during the 2015 plan year. The Medicare Advantage Plans are fully insured health insurance plans provided by Humana. Premium costs to KRS members were significantly below the rates projected in 2013 for the self-insured Employer Group Waiver Plans (EGWP). The actual savings for plan year 2013 was $30,598,162. The cost savings is shared on roughly a 50-50 basis by retirees who pay all or a portion of their health insurance premiums and the underfunded health insurance trust.

The Board also continued to offer a Medical Only plan to the Medicare eligible retirees. This plan allows retirees who do not have Medicare Part B, or who are covered under another drug plan, to participate in coverage with the retirement systems. The Medical Only plan is self-insured and provides coverage after original Medicare. Humana is the claims administrator for this plan.

Benefits Services

KRS processed over 7,000 retirement applications, an increase of approximately 7.5% over fiscal year ending 6/30/2014. Staff also performed post retirement audits on approximately 6,000 benefit accounts to ensure paid benefits comply with state and federal statutory and regulatory requirements. The Benefits Services team implemented a plan to reduce the backlog of members' requests for benefit estimates and service purchase cost calculations that had developed as a result of our efforts to implement the requirements of Senate Bill 2, which was enacted during the 2013 General Assembly session. The number of service purchases calculated increased 36% from the previous year resulting in approximately $5 million of voluntary employee contributions added to the pension funds.

During the fiscal year, KRS received over 253,000 calls from active members, retirees, and others, touching on a variety of retirement subjects such as retirement eligibility, member self-service features, health insurance open enrollment, scheduling office appointments, and coordinating refund and retirement paperwork submission.

KRS implemented a new Callback Assist feature for those members who need to call but prefer not to wait on the phone to speak to a representative. When this option is selected, it allows the caller to retain his or her place in queue without having to remain on the phone.

Governmental Accounting Standards Board (GASB) 68

During FY 2015, our accounting team has worked with our actuary, external auditor, and others to assist our reporting agencies with the implementation of GASB 68. This accounting standard replaced Statement 27 Accounting for Pension by State and Local Governments. The new standard affects the financial statements of employers. Employers need to recognize and report on their financial statements a proportionate share of their plan's net pension liability less the market value of their plan's net assets, as well as the annual actuarially determined pension expense. The KRS staff has provided educational materials, conducted webinars, attended agency meetings, responded quickly to questions, and provided audited schedules by agency.

Technology, Employer Reporting, and Communications

KRS' Information Technology business area continues to be challenged with legislative mandates while keeping abreast of Technology advancements, and proactively adopting improved data security standards. During the year, we have completed disaster recovery equipment deployment and process replication, and worked closely with Kizan Technologies to complete a multiyear technology needs assessment. This assessment along with the results from the CEM Administrative study will help us continue to improve membership services in a data secure environment.

Employer Reporting, Compliance, and Education (ERCE) staff continued to work with reporting employers through on-site visits and correspondence. As a result, reporting errors and outstanding invoices have decreased. The team worked closely with our technology group to complete billing for sick leave contributions. Of the $24.5 million billed in June 2015, 65 percent of the balance has been paid.

As both our membership and eligible retirees grow, KRS communications staff continues to expand our website (https://kyret.ky.gov) content to meet membership information needs. During the past 12 months, we had over 1.2 million website views. Our frequently viewed web site areas are the home page News, Tier 1 and 2 benefit publications, and insurance updates. Our video offerings increase awareness and education on pension and insurance benefits. Beginning in August, we reactivated our Pre-Retirement Education Program (PREP) across the Commonwealth. These all day sessions cover pension benefits, insurance eligibility, Social Security benefits, and deferred compensation plans offered by the State.

Investments

The KRS Pension fund returned 2.01% (net of fees) trailing its benchmark return of 3.13%. The KRS Insurance fund returned 1.89% versus its benchmark return of 3.79% (net of fees). The fiscal year was a tale of two halves. Anything energy or commodity related, or negatively affected by a strong dollar did poorly in the first half. These poor performers reversed in the second half, but not enough so to erase first half losses. U.S equity performed well in the first half of the fiscal year, and then stalled in the second half of the fiscal year, as geopolitical concerns and an anticipated U.S. rate hike weighed on the markets. For the entire fiscal year U.S. private equity led the way followed by real estate and U.S. public equities. Non-U.S. Equities, Emerging Market Equities, and anything inflation sensitive like real return were negative performers. As a whole, fixed income performed well during the fiscal year, with interest rate fixed income securities driving performance, while credit sensitive fixed income investments struggled. Absolute Return was also a positive contributor.

The performance of the capital markets for the fiscal year made it difficult for most public pensions across the country to reach their expected returns. Allocation decisions at the total portfolio level drove performance. The greater role private equity, real estate, and U.S. public equities (particularly large cap growth equity) played in the total portfolio, the better a pension plan's return. The less credit sensitive fixed income, non-U.S. equities, emerging market equities, and real return strategies within a plan's portfolio mix, the better a public plan performed.

Every five years KRS works with its general investment consultant RVK, Inc (formally R.V. Kuhns and Associates, Inc) to conduct an asset liability study that leads into an asset allocation study. KRS did engage RVK, Inc in that process during the fiscal year and the results of the asset liability study were presented in May 2015. The results of the asset allocation study will be known in fiscal year 2016 and changes are expected to be adopted and implemented in the 2016 calendar year.

During the fiscal year significant progress was made in building out the real return asset allocation as KRS added exposure that included timber, drug royalties, mining finance, and a manager that allocates tactically to MLPs, REITS, and listed infrastructure. Staff also started a structure study of the U.S. public equity allocation and staff continued to build out its direct hedge fund program as it moves away from fund of hedge funds model.

KRS is continuously working on investment transparency and communication with its constituents. KRS staff added a report to the investment section of the KRS website that shows a list of every external investment manager KRS utilizes and the standard fee rate charged by that manager. KRS also made changes to its investment accounting methodology that better captures the detail surrounding fees associated with certain types of investments. Transparency is an ongoing effort and KRS staff looks forward to bringing even greater level of detail in the future.

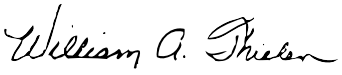
Professional Services

KRS continues to engage a number of professional consultants to assist trustees and staff in key business areas such as investments, taxes, auditing services and legal representation. A list of the Board's contract consultants can be found in the organizational chart on page 13. A list of external investment managers can be found in the investment section of this report.

Conclusion

A summary version of the 2015 CAFR will be provided to the Governor, the State Auditor of Public Accounts, all 138 state legislators, key Legislative Research Commission staff, and the State Budget Director. A complete copy of the report will be posted on the KRS website.

I would like to take this opportunity to thank the KRS Board of Trustees, the staff, and our advisors and service providers who worked tirelessly during FY 2015 to make this a successful year for KRS. We look forward to continuing success during FY 2016 and endeavor to provide information and services of the highest quality to our members.



William A. Thielen, Esq. // Executive Director

Certificate of Achievement

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2014. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports and is valid for a period of one year. This was the sixteenth consecutive award earned by KRS. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized document. The report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe our 2015 CAFR will continue to meet the Certificate of Achievement Program's requirements, and we will be submitting it to the GFOA for their consideration.

Board of **Trustees** as of December 1, 2015

The Board of Trustees is comprised of thirteen members: two elected by KERS members, three elected by CERS members, one elected by SPRS members, the Secretary of the State Personnel Cabinet serves ex officio, and six are appointed by Governor Steve Beshear. Three of the six appointees are selected from lists of nominees provided by the Kentucky Association of Counties, the Kentucky League of Cities, and the Kentucky School Board Association, so that each organization has a representative.

Thomas Elliott
Chair
Governor Appointee
Term ends March 31, 2019

Dr. Daniel Bauer
Vice Chair
Governor Appointee
Term ends March 31, 2016

Mike Cherry
Governor Appointee
Term ends March 31, 2016

Edwin Davis
Elected by CERS
Term ends March 31, 2017

Keith Peercy
Elected by SPRS
Term ends March 31, 2019

J.T. Fulkerson
Governor Appointee
Term ends July 1, 2017

William Summers
Elected by CERS
Term ends March 31, 2017

Dinah T. Bevington
Interim Personnel Secretary
Term ends Ex-Officio

Vince Lang
Elected by KERS
Term ends March 31, 2017

Joseph Hardesty
Governor Appointee
Term ends July 1, 2017

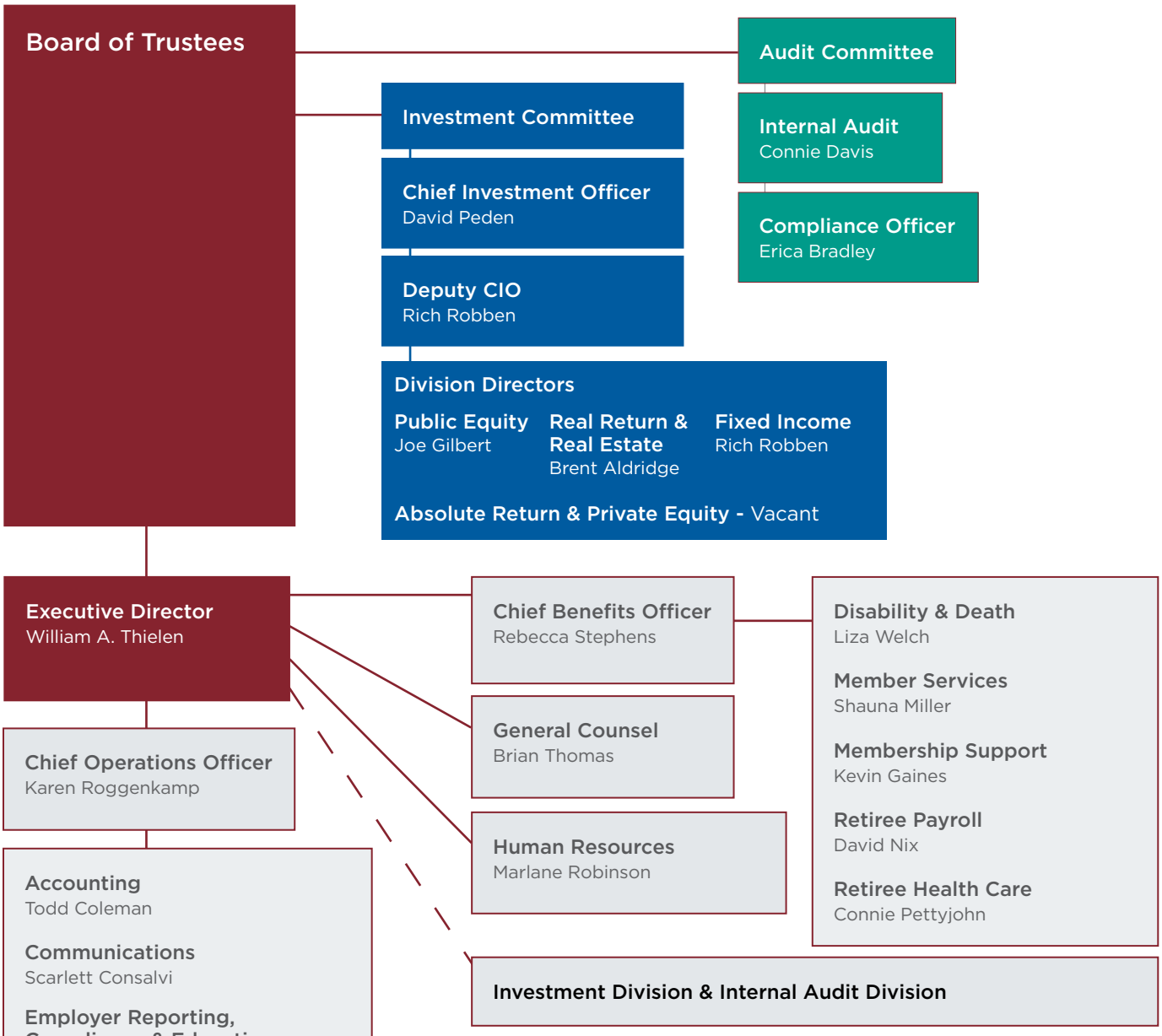
David Rich
Elected by CERS
Term ends October 31, 2017

Mary Helen Peter
Elected by KERS
Term ends March 31, 2017

Randy Stevens
Governor Appointee
Term ends July 1, 2017

2015

Agency **Structure** as of December 1, 2015



Consultants

Actuarial Services
Cavanaugh Macdonald Consulting, LLC

Auditing Services
Dean Dorton Allen Ford, PLLC

Legal Services
Polsinelli
Reinhart Boerner Van Deuren
Stoll Keenon Ogden, PLLC

Fiduciary Review Consultants
Ice Miller, LLP

Investment Consultants
R.V. Kuhns
ORG Real Property
Albourne
PCA Associates

Master Custodian
Bank of New York, Mellon

BENEFIT TIERS

KRS currently administers three different pension benefit tiers within our defined benefit plans. The Hybrid Cash Balance plan was established as a part of Senate Bill 2, which enacted by the Kentucky General Assembly during 2013 Regular Session.

TIER 1

Members participating before September 1, 2008

TIER 2

Members participating on or after September 1, 2008 through December 31, 2013

TIER 3

Members participating on or after January 1, 2014

Total Systems

See comparative totals and more detailed information on page 179.

RETIRED MEMBERS

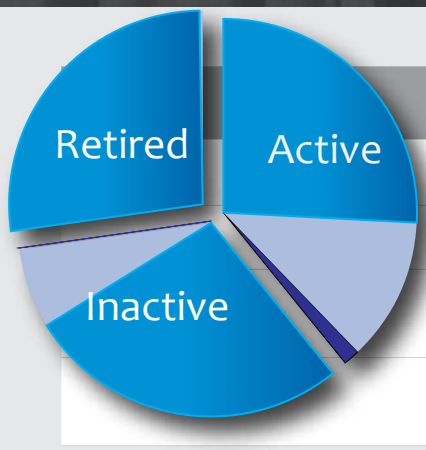
97,630

ACTIVE MEMBERS

136,318

INACTIVE MEMBERS

121,604



	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	83,502	92,379	97,608	273,489
Tier 2	35,891	25,821	22	61,734
Tier 3	16,925	3,404	0	20,329
TOTAL	136,318	121,604	97,630	355,552

Plan Net Position (in Thousands)

Fund	2010	2011	2012	2013	2014	2015
Pension	$10,540,440	$11,680,563	$10,758,706	$11,153,182	$12,015,897	$11,646,481
Insurance	$2,425,987	$3,096,788	$3,089,313	$3,521,894	$4,154,401	$4,246,892
Total	**$12,966,427**	**$14,777,351**	**$13,848,019**	**$14,675,076**	**$16,170,298**	**$15,893,373**

KERS

NONHAZARDOUS

ACTIVE MEMBERSHIP

AVERAGE AGE
45.0

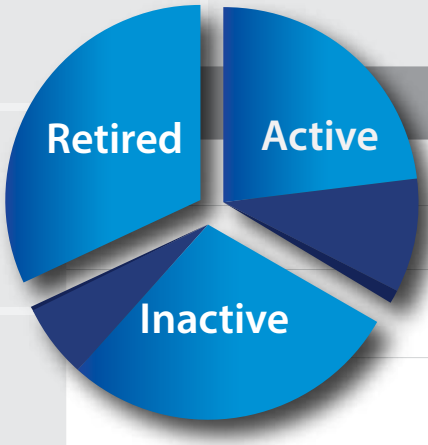
AVERAGE SALARY
$39,539

RETIRED MEMBERSHIP

AVERAGE AGE
68.0

AVERAGE ANNUAL BENEFIT PAYMENT
$22,215

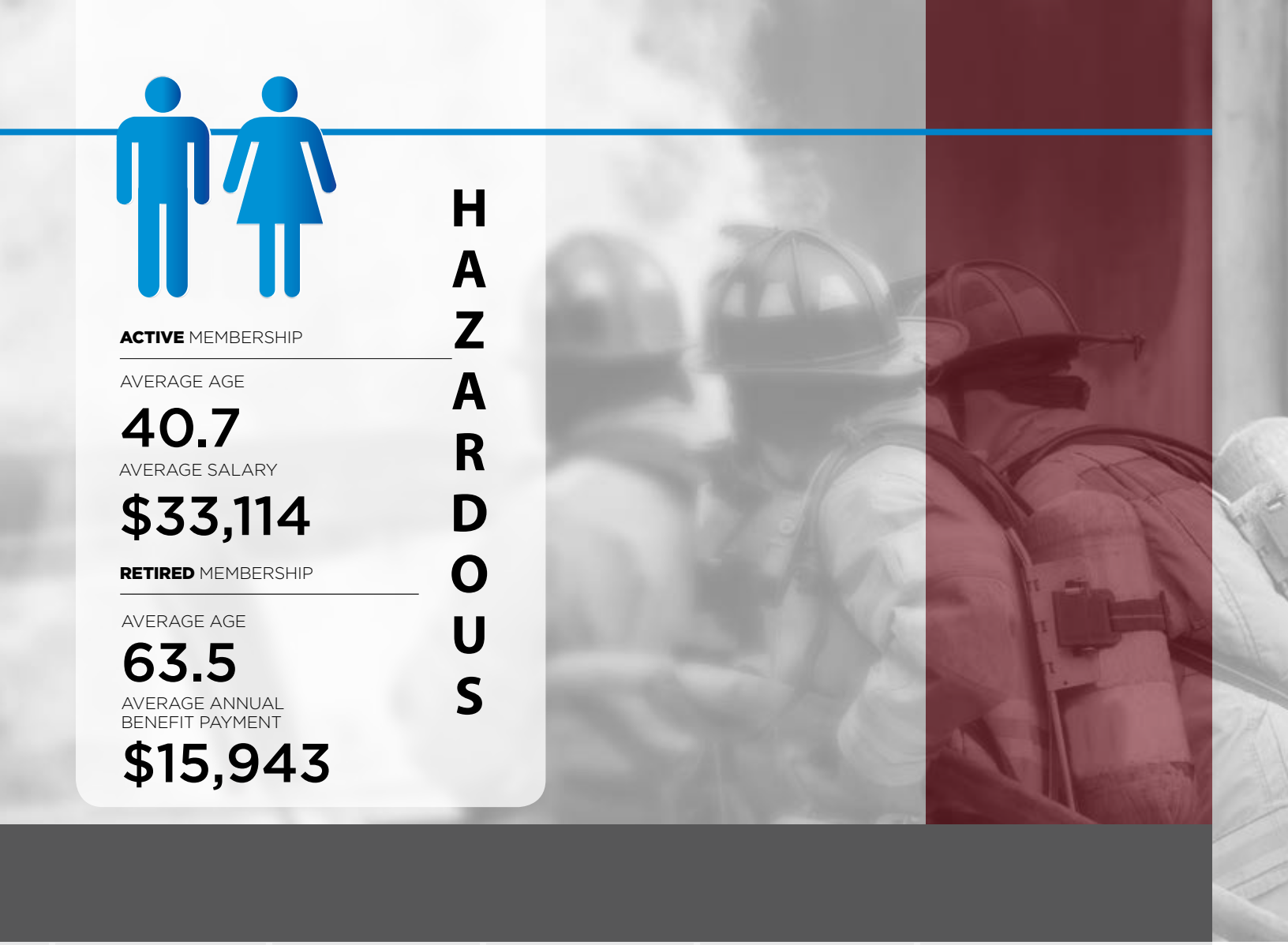
Kentucky Employees Retirement System (KERS)
was established July 1, 1956 by the state legislature.



	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	25,560	33,700	38,821	98,081
Tier 2	9,525	7,831	6	17,362
Tier 3	4,204	948	0	5,152
TOTAL	39,289	42,479	38,827	120,595

Plan Net Position (in Thousands)

Fund	2010	2011	2012	2013	2014	2015
Pension	$3,504,501	$3,544,242	$2,977,069	$2,760,753	$2,578,291	$2,327,782
Insurance	$368,799	$428,659	$418,490	$496,040	$646,904	665,639
Total	**$3,873,300**	**$3,972,901**	**$3,395,559**	**$3,256,793**	**$3,225,195**	**$2,993,421**



HAZARDOUS

ACTIVE MEMBERSHIP

AVERAGE AGE

40.7

AVERAGE SALARY

$33,114

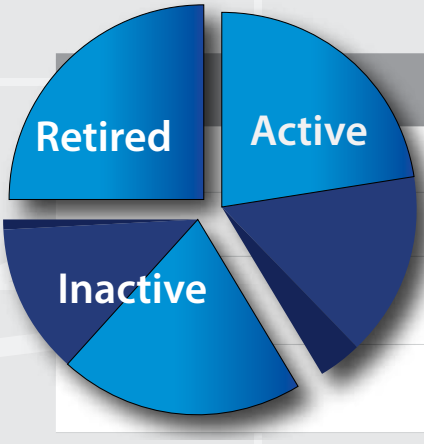
RETIRED MEMBERSHIP

AVERAGE AGE

63.5

AVERAGE ANNUAL BENEFIT PAYMENT

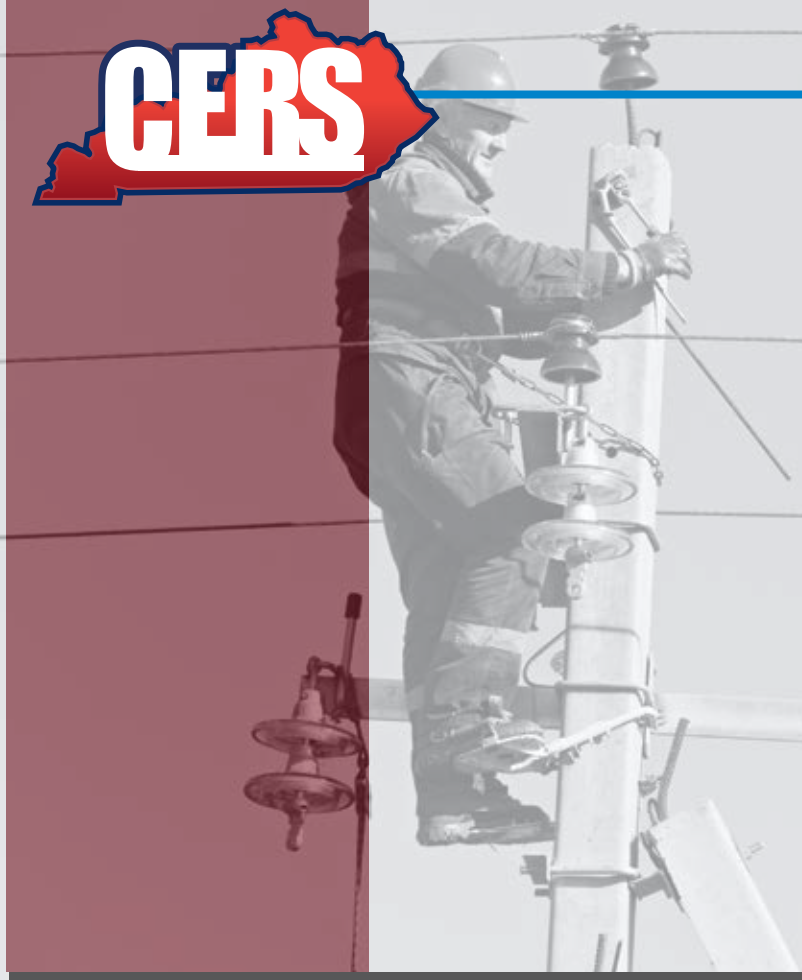
$15,943



	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	2,019	1,977	2,573	6,569
Tier 2	1,175	1,299	2	2,476
Tier 3	738	485	0	1,223
TOTAL	3,932	3,761	2,575	10,268

Plan Net Position (in Thousands)

Fund	2010	2011	2012	2013	2014	2015
Pension	$443,606	$511,085	$476,589	$514,592	$561,484	$552,468
Insurance	$271,239	$320,673	$330,730	$372,883	$433,525	$439,113
Total	**$714,845**	**$831,758**	**$807,319**	**$887,475**	**$995,009**	**$991,581**



NONHAZARDOUS

ACTIVE MEMBERSHIP

AVERAGE AGE
48.0

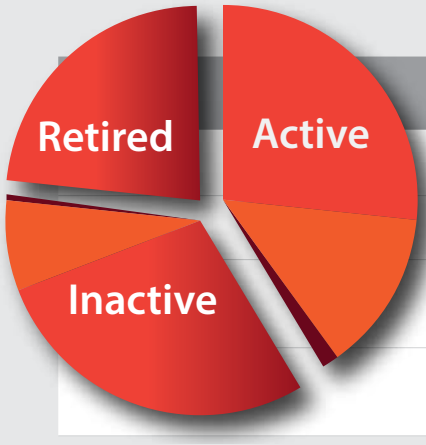
AVERAGE SALARY
$28,406

RETIRED MEMBERSHIP

AVERAGE AGE
69.7

AVERAGE ANNUAL BENEFIT PAYMENT
$11,611

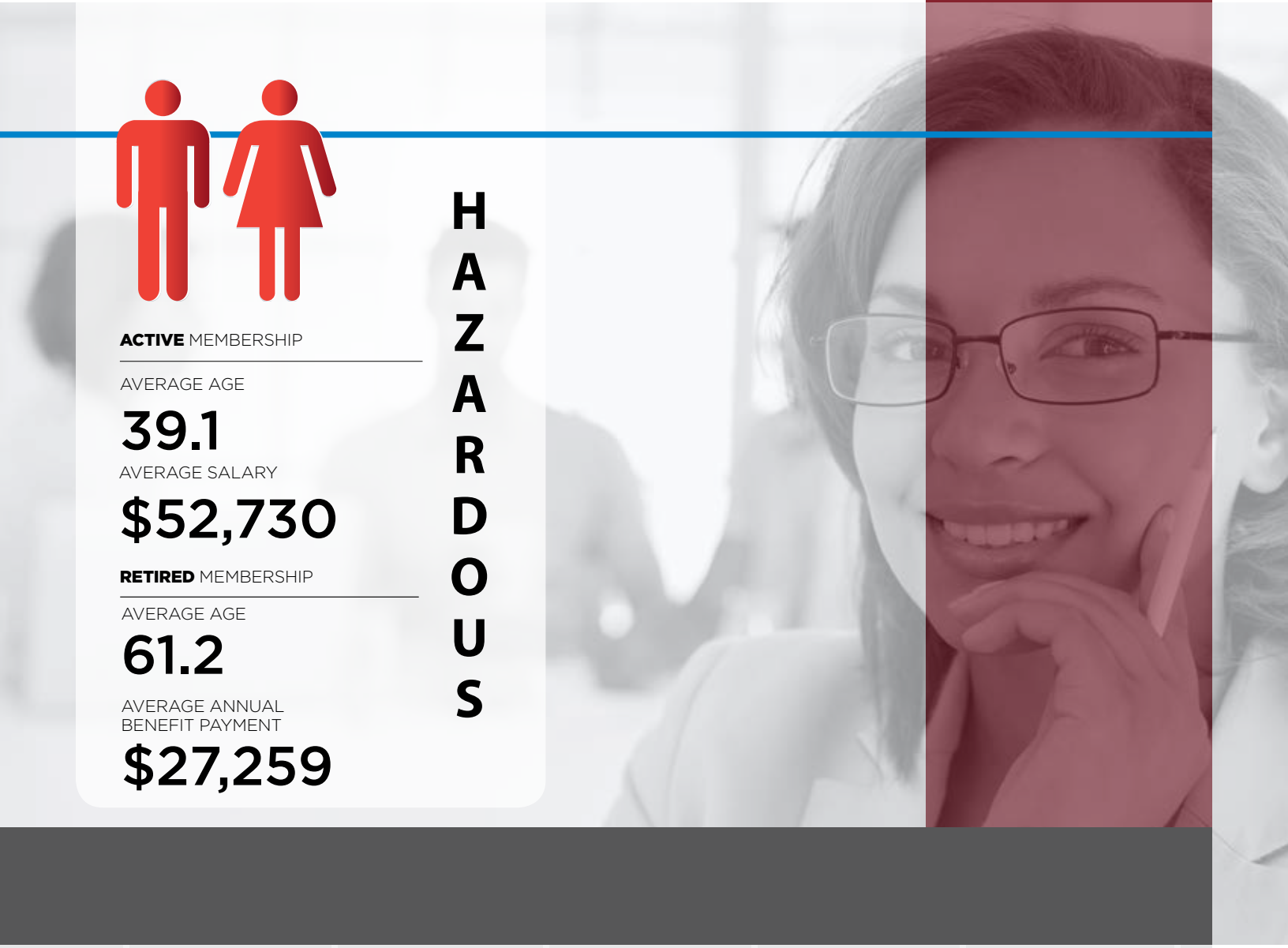
County Employees Retirement System (CERS)
was established July 1, 1958 by the state legislature.



	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	48,985	54,921	48,503	152,409
Tier 2	22,844	16,151	12	39,007
Tier 3	11,140	1,893	0	13,033
TOTAL	82,969	72,965	48,515	204,449

Plan Net Position (in Thousands)

Fund	2010	2011	2012	2013	2014	2015
Pension	$4,820,490	$5,583,451	$5,381,602	$5,795,568	$6,528,146	$6,440,800
Insurance	$1,094,821	$1,446,998	$1,428,821	$1,618,960	$1,878,711	$1,920,946
Total	**$5,915,311**	**$7,030,449**	**$6,810,423**	**$7,414,528**	**$8,406,857**	**$8,361,746**



HAZARDOUS

ACTIVE MEMBERSHIP

AVERAGE AGE

39.1

AVERAGE SALARY

$52,730

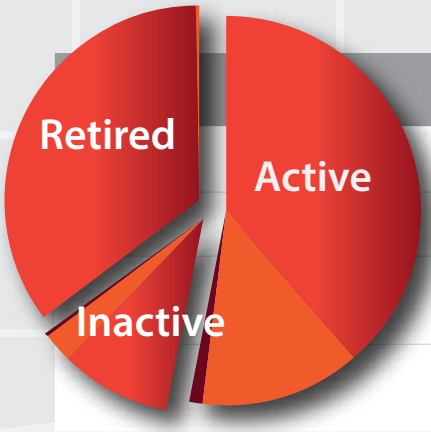
RETIRED MEMBERSHIP

AVERAGE AGE

61.2

AVERAGE ANNUAL BENEFIT PAYMENT

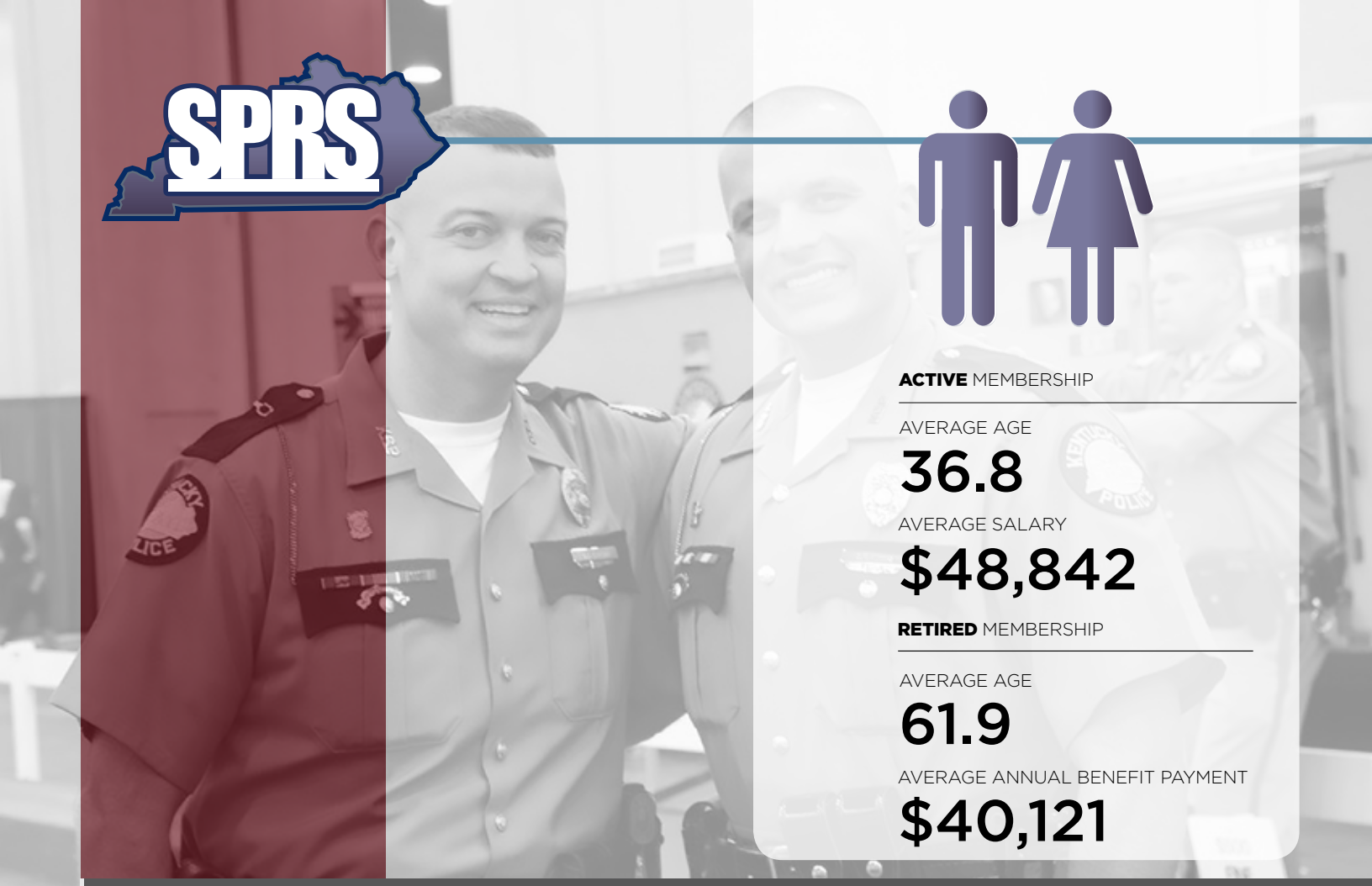
$27,259



	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	6,280	1,601	6,388	14,269
Tier 2	2,167	485	1	2,653
Tier 3	741	56	0	797
TOTAL	9,188	2,142	6,389	17,719

Plan Net Position (in Thousands)

Fund	2010	2011	2012	2013	2014	2015
Pension	$1,506,894	$1,761,858	$1,672,970	$1,833,571	$2,087,002	$2,078,202
Insurance	$586,617	$773,139	$785,874	$891,320	$1,030,303	$1,056,480
Total	**$2,093,511**	**$2,534,997**	**$2,458,844**	**$2,724,891**	**$3,117,305**	**$3,134,682**



ACTIVE MEMBERSHIP

AVERAGE AGE

36.8

AVERAGE SALARY

$48,842

RETIRED MEMBERSHIP

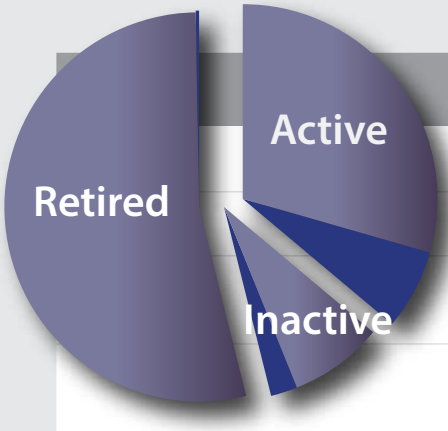
AVERAGE AGE

61.9

AVERAGE ANNUAL BENEFIT PAYMENT

$40,121

State Police Retirement System (SPRS) was established July 1, 1958 by the state legislature.



	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	658	180	1,323	2,161
Tier 2	180	55	1	236
Tier 3	102	22	0	124
TOTAL	940	257	1,324	2,521

Plan Net Position (in Thousands)

Fund	2010	2011	2012	2013	2014	2015
Pension	$264,949	$279,927	$250,476	$248,698	$260,974	$247,229
Insurance	$104,511	$127,319	$125,398	$142,691	$164,958	$164,714
Total	**$369,460**	**$407,246**	**$375,874**	**$391,389**	**$425,932**	**$411,943**

YOUR RESOURCES

Our Website

https://kyret.ky.gov

- **Links to Member Education Videos**
- **Member Forms and Directions**
- **News & Updates**
- **Publications** *(Recent and Archive)*
- **Contacting Us**

Self Service

MyRetirement.ky.gov

- **Update your personal information**
- **Calculate your benefits**
- **Get your retirement information**

Member Education

Videos located at youtube.com/user/KentuckyRetire

- **Video Library**
  How-to Videos
  How to Retire
  How to fill out form 6000
  How to Calculate Your Benefit
  ...and more!
- **Webinars**
  (interact and ask questions)
- **Town Hall**
  (the latest information and what it means to you)
- **On-location Outreach**

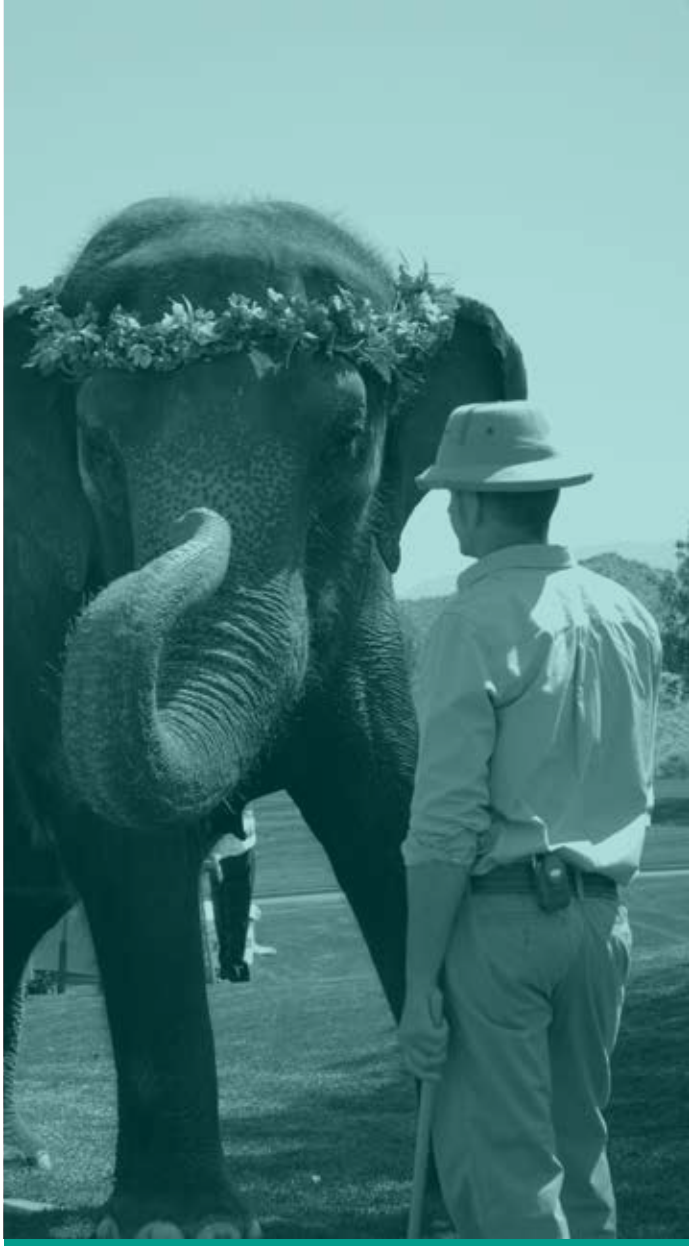
Member Communications

www.Facebook.com/kyretirement
Twitter - @KYretire

- **Up-to-date information as it happens**
- **New releases of videos & publications**
- **Instant notification of Webinars**

Retirement Counselors

- **Call Center**
  Monday - Friday 8:00am - 4:30pm
  1-502-696-8800 or 1-800-928-4646
- **On-site Counselors**
  Perimeter Park West
  1260 Louisville Road
  Frankfort, KY 40601
- **Email**
  krs.mail@kyret.ky.gov
  General Questions only (unsecure)



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FINANCIAL
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NCIAL

DEAN DORTON
DEAN DORTON ALLEN FORD, PLLC

Report of
Independent Auditors

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

Report on the Financial Statements

We have audited the accompanying combining financial statements of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ended June 30, 2015, and the related notes to the combining financial statements, which collectively comprise the Kentucky Retirement Systems' basic combining financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these combining financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of combining financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these combining financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combining financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combining financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements of the combing financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the combining financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the combining financial statements.

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the combining financial statements referred to above present fairly, in all material respects, the respective combining plan net position of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2015, and the respective combining changes in plan net position for the fiscal year then ended, in accordance with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

We have previously audited Kentucky Retirement Systems 2014 combining financial statements of the pension funds and Insurance fund and we expressed an unmodified audit opinion on those audited Combining Financial Statement in our report dated December 4, 2014. In our opinion the summarize comparative information presented herein as of and for fiscal year ended June 30, 2014, is consistent, in all material respects with the audited combining financial statements from which it has been derived.

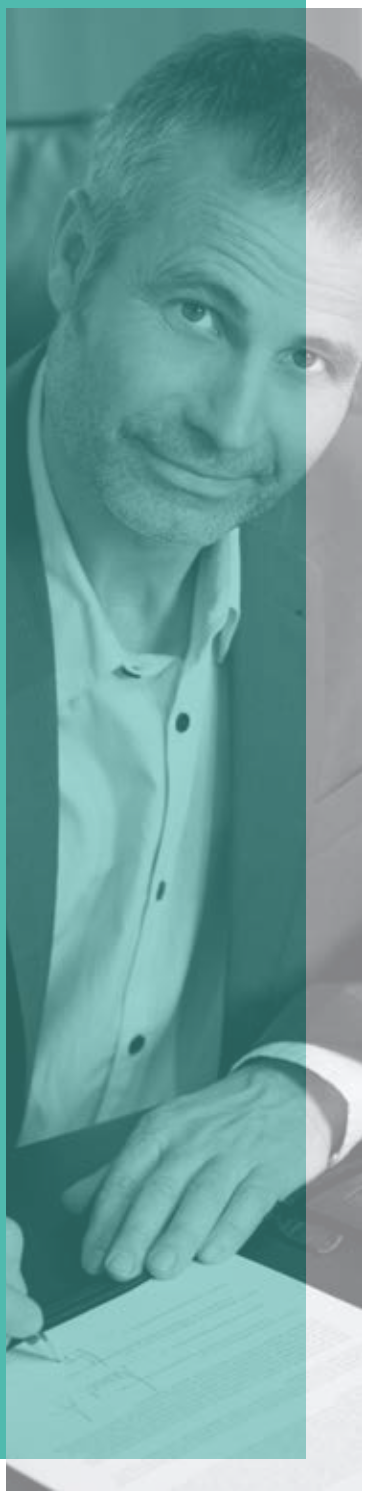
Emphasis of Matter

As discussed in Note W to the combing financial statement, Kentucky Retirement Systems has elected to change its method of accounting for investment fees in the fiscal year ended June 30, 2015. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (pages 27 through 28) and the Schedules of Changes in the Net Pension Liability, Schedules of the Net Pension Liability, Schedules of Employer Contributions, Schedules of Funding Progress, and Schedules of Contributions from Employers and Other Contributing Entities (pages 75 through 86) be presented to supplement the basic combining financial statements. Such information, although not a part of the basic combining financial statements, is required by the Governmental Accounting Standards



Board who considers it to be an essential part of the financial reporting for placing the basic combining financial statements in an appropriate operational, economical, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic combining financial statements, and other knowledge we obtained during our audit of the basic combining financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures did not provide us with sufficient evidence to express an opinion or provide any assurance.

Additional Supporting Schedules

Our audit was conducted for the purpose of forming an opinion on the combining financial statements that collectively comprise the Kentucky Retirement Systems' basic combining financial statements. The additional supporting schedules (pages 85 through 88) are presented for purposes of additional analysis and are not a required part of the basic combining financial statements. The additional supporting schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic combining financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic combining financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supporting schedules are fairly stated, in all material respects, in relation to the basic combining financial statements as a whole. The Introductory, Actuarial, Investment, and Statistical sections are presented for purposes for additional analysis and are not a required part of the combining financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the combining financial statements and accordingly, we offer no opinion on them.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated December 03, 2015 on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Kentucky Retirement Systems' internal control over financial reporting and compliance.

Dean Dorton Allen Ford, PLLC

December 3, 2015
Lexington, Kentucky

Management's DISCUSSION & ANALYSIS
(Unaudited)

This discussion and analysis of Kentucky Retirement Systems' financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2015. Please read it in conjunction with the combining financial statements, which begin on page 34.

Pension Funds

The following highlights are explained in more detail later in this discussion.

» The combined net position of all pension funds administered by Kentucky Retirement Systems (KRS) decreased by $369.4 million during fiscal 2015. While all systems ended with a net decrease in net position, the Kentucky Employees Retirement System (KERS) Nonhazardous plan had the largest decline of $250.5 million. Although net investment returns were 2.38% for KERS Nonhazardous, they only partially offset the net benefits outflow of $291.3 million.

» Total contributions reported for fiscal 2015, totaled $1,322.9 million compared to $1,055.7 million in fiscal 2014. This increase is due to a rise in the employer contribution rates, the collection of additional health insurance contributions, and the proceeds of the Bank of America settlement of $23.0 million. KERS Nonhazardous , KERS Hazardous and the State Police Retirement System (SPRS) experienced an increase of $267.3 million in contributions over the prior year as a result of increased employer contribution rates and an $8 million increase in service purchases of refunded service related to Senate Bill 2 which no longer allowed a retroactive participation date when refunded service is purchased.

» The member health insurance contribution totaled $12.6 million, for the fiscal year ended June 30, 2015, compared to $12.4 million in the prior fiscal year.

» The investment portfolio reported a net of expense return of 2.01% for the fiscal year, trailing fiscal 2014 net of expense returns of 15.55%. KRS faced a difficult challenge in meeting the 7.75% benchmark for the fiscal year due to the downturn in the market for equities and real return asset classes. Earnings in the fiscal year were found in real estate, private equity and large cap public equity asset classes which KRS holds a small allocation, representing less than 30% of total investments.

» The net depreciation in the fair value of investments was $14.8 million for the fiscal year ended June 30, 2015 compared to net appreciation of $1,361.9 million for the prior fiscal year. This $1.4 billion decreased was due to unfavorable market conditions. Unrealized losses were the primary cause of the decrease, as KRS moved from an unrealized gain in fiscal 2014 of $489 million to an unrealized loss in fiscal 2015 of $557 million. Realized gains decreased to $542 million, slightly below prior year's realized gains of $873 million.

» Interest, dividend and net securities lending income for fiscal 2015 was $300.7 million compared to $327.5 million in fiscal 2014. The decrease was related to less private equity dividend capitalization and a reduced asset base.

» On August 11, 2014, and May 1, 2015, KRS issued a promissory note to CM Growth Capital Partners, LLP. The amount of the promissory note applicable to the pension funds totaled $1.3 million. The total accrued interest as of June 30, 2015, totaled $253,927. See Note E for further detail.

» Investment expenses appear to be higher than prior year due to an accounting reporting change regarding fees associated primarily with private equity investments. KRS adopted a new reporting method in an effort to provide more transparency with investment fees incurred which provides a greater level of transparency. It is important to note that fees have not suddenly and significantly increased, and that net investment performance has not been affected by the reporting change. See Note W for further detail.

» Pension benefits paid to retirees and beneficiaries for fiscal 2015 totaled $1,832.8 million compared to $1,769.8 million in fiscal 2014. Refund of contributions paid to former members upon termination of employment for fiscal 2015 totaled $32.9 million compared to $33.6 million in fiscal 2014.

» 2015 administrative expense totaled $33.2 million (Pension $31.0 million; Insurance $2.2 million) compared to $34.2 million (Pension $32.6 million; Insurance $1.6 million) for the prior year.

Insurance Fund

The following highlights are explained in more detail later in this discussion.

» The combined net position of the insurance fund administered by KRS increased by $92.5 million during fiscal 2015. Total combined net position for the fiscal year was $4.25 billion. All but one system ended with a net increase in net position. SPRS ended the fiscal year with a net decrease of $244,000.

» The investment portfolio reported a net expense return of 1.86% for the fiscal year, trailing fiscal 2014 net of expense returns of 14.89%, and was less than the 7.75% benchmark for the fiscal year.

» The self-funded plan was one in which KRS assumed the financial risk for providing healthcare benefits to its retirees. The funded-plan paid for claims out-of-pocket as they were presented instead of paying a pre-determined premium to an insurance carrier for a fully-insured plan. Premiums received from retirees who participated in the Medicare eligible self-funded plan totaled $0.9 million, compared to $2.4 million in fiscal 2014. The decrease is a result of Centers for Medicare and Medicaid Services (CMS) paying a portion of the retiree's premium. In addition, the decrease is attributable to the cessation of the self-funded plan.

» Employer contributions of $343.6 million were received in fiscal 2015 compared to $397.4 million in fiscal 2014. Total contributions declined 12.9% primarily due to a decrease in employer contribution rates across all systems. A decrease in insurance premiums and the Medicare drug reimbursement added to the decline as well, which is a result of less retirees covered under the self-insured program.

» The reimbursement of retired-reemployed health insurance for fiscal 2015 totaled $8.8 million compared to $5.6 million in the prior fiscal year. This is due to an upward trend of retirees returning to the workforce.

» The Employer Group Waiver Plan receipts from CMS subsidies for fiscal 2015 totaled $0 compared to $14,295 in fiscal 2014. This decrease is due to the cessation of the self-funded plan.

» Interest, dividend and net securities lending income for fiscal 2015 was $100.5 million compared to $97.1 million in fiscal 2014.

» The net appreciation in the fair value of investments for fiscal 2015 was $3.9 million compared to net appreciation of $445.7 million for the prior fiscal year, due to unfavorable market conditions. Overall investment income decreased by $450.7 million. Unrealized losses were the primary cause of the decrease as KRS moved from an unrealized gain in the prior fiscal year of $288 million to an unrealized loss in fiscal 2015 of $126 million. Realized gains decreased to $130 million, slightly below prior fiscal year's realized gains of $158 million.

» Investment expenses appear to be higher than prior year due to an accounting reporting change regarding fees associated primarily with private equity investments. KRS adopted a new reporting method in an effort to provide more transparency with investment fees incurred which provides a greater level of transparency. It is important to note that fees have not suddenly and significantly increased, and that net investment performance has not been affected by the reporting change. See Note W for further detail.

» On August 11, 2014, and May 1, 2015, KRS issued a promissory note to CM Growth Capital Partners, LLP. The amount of the promissory note applicable to the insurance fund totaled $105,208. The total accrued interest as of June 30, 2015, totaled $28,215. See Note E for further details.

» The total of insurance premiums paid plus self-funded reimbursements was $335 million for fiscal 2015. Premiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled $328.9 million. Payments for the self-funded healthcare reimbursements (over age 65) totaled $6.1 million. Insurance premiums paid plus self-funded healthcare reimbursements for the prior fiscal year totaled $298.4 million.

Using This Financial Report

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the combining financial statements alone cannot provide sufficient information to properly reflect the plans' ongoing plan perspective. This financial report consists of two combining financial statements and two required schedules of historical trend information. All plans within KRS are included in the aforementioned combining financial statements. The Combining Statement of Plan Net Position for the Pension Funds on page 34, and the Combining Statement of Plan Net Position for the Insurance Fund on page 36, provides a snapshot of the financial position of each of the three systems at June 30, 2015. The Combining Statement of Changes in Plan Net Position for the Pension Funds and the Combining Statement of Changes in Plan Net Position for the Insurance Fund summarizes the additions and deductions that occurred for each of the three systems during fiscal 2015.

The Schedules of the Net Pension Liability, the Schedules of Changes in the Net Pension Liability, and the Schedules of Funding Progress beginning on pages 76 include current and historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of Employer Contributions and the Schedules of Contributions from Employers and Other Contributing Entities, present current and historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

Kentucky Retirement Systems Combined

KRS' combined net position decreased $276.9 million, during the fiscal year ended June 30, 2015. Net position for the prior fiscal year increased by $1,495.3 million. The decrease in net position for the plan year ended June 30, 2015 is primarily attributable to a decrease in net investment income. The analysis below focuses on net position (Table 1) and changes in net position (Table 2) of KRS' Pension and Insurance Funds.

Financial data presented in this report is abbreviated ***"in thousands"*** or ***"in millions."***

FUND ACTIVITIES

Pension Fund Activities

Net position of the pension funds decreased by $369.4 million ($11,646.5 million compared to $12,015.9 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. Net position of the insurance fund increased by $92.5 million ($4,246.9 million compared to $4,154.4 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance.

Table 1. Plan Net Position (in Millions)

	Pension Funds			Insurance Fund			Total		
Assets	**2015**	**2014**	**2013**	**2015**	**2014**	**2013**	**2015**	**2014**	**2013**
Cash & Investments	$12,217.5	$12,758.2	$12,431.7	$4,451.2	$4,392.4	$3,992.1	$16,668.7	$17,150.6	$16,423.8
Receivables	459.2	750.2	136.1	148.1	289.3	49.1	607.3	1,039.5	185.2
Equip/Int Assets, net of dep/amort.	9.9	10.5	16.1	-	-	-	9.9	10.5	16.1
Total Assets	**12,686.6**	**13,518.9**	**12,583.9**	**4,599.3**	**4,681.7**	**4,041.2**	**17,285.9**	**18,200.6**	**16,625.1**
Total Liabilities	**(1,040.1)**	**(1,503.0)**	**(1,430.8)**	**(352.4)**	**(527.3)**	**(519.3)**	**(1,392.5)**	**(2,030.3)**	**(1,950.1)**
Plan Net Position	**$11,646.5**	**$12,015.9**	**$11,153.1**	**$4,246.9**	**$4,154.4**	**$3,521.9**	**$15,893.4**	**$16,170.3**	**$14,675.0**

Table 2. Changes in Plan Net Position (in Millions)

	Pension Funds			Insurance Fund			Total		
Additions	**2015**	**2014**	**2013**	**2015**	**2014**	**2013**	**2015**	**2014**	**2013**
Member Cont.	$298.5	$275.0	$276.3	-	-	-	$298.5	$275.0	$276.3
Employer Cont.	985.9	768.3	741.8	$343.6	$397.4	$447.3	1,329.5	1,165.7	1,189.1
Health Ins. Cont.	12.6	12.4	9.1	-	-	-	12.6	12.4	9.1
Pension Spiking Cont.	2.9	-	-	-	-	-	2.9	-	-
BOA Settlement	23.0	-	-	-	-	-	23.0	-	-
Premiums Rec'd	-	-	-	0.9	2.4	26.3	0.9	2.4	26.3
Retired Remp Ins.	-	-	-	8.8	5.6	5.8	8.8	5.6	5.8
Medicare Subsidy	-	-	-	-	-	11.2	-	-	11.2
Invest. Inc. (net)	204.4	1,643.0	1,140.8	76.4	527.1	313.6	280.8	2,170.1	1,454.4
Total Additions	1,527.3	2,698.7	2,168.0	429.7	932.5	804.2	1,957.0	3,631.2	2,972.2
Deductions									
Benefit Payments	1,832.8	1,769.7	1,706.2	-	-	-	1,832.8	1,769.7	1,706.2
Refunds	32.9	33.6	32.2	-	-	-	32.9	33.6	32.2
Administrative Ex.	31.0	32.6	30.5	2.2	1.6	9.8	33.2	34.2	40.3
Healthcare Costs	-	-	-	335.0	298.4	361.9	335.0	298.4	361.9
Total Deductions	1,896.7	1,835.9	1,768.9	337.2	300	371.7	2,233.9	2,135.9	2,140.6
Increase (Decrease) in Plan Net Position	**($369.4)**	**$862.8**	**$399.1**	**$92.5**	**$632.5**	**$432.5**	**($276.9)**	**$1,495.3**	**$831.6**

Pension Fund Activities

Member contributions increased by $23.5 million. This is partially due to an increase in service purchases due to the passage of Senate Bill 2. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Nonhazardous members pay pension contributions of 5% of creditable compensation and hazardous members contribute 8% of creditable compensation. Employer contributions increased by $217.6 million due to the rise in employer contribution rate applied to covered payroll.

Total pension fund deductions increased by $60.8 million caused by an increase in benefit payments which were $63.1 million higher than fiscal year 2014.

Net investment income decreased by $1,439 million. This is illustrated in Table 3. The pension funds experienced a decrease in income due to the decrease in the fair value of investments.

Table 3. Investment Income (Loss) for Pension Funds (in Millions)

Asset	2015	2014	2013
Increase (Decrease) in fair value of investments	(557)	$489	$426
Investment income net of investment expense	219	281	250
Gain on sale of investments	542	873	465
Net Investment Income	**$204**	**$1,643**	**$1,141**

Insurance Fund Activities

Employer contributions paid into the insurance fund decreased by $53.8 million over the prior fiscal year. This decrease is a result of the reduction in the employer contribution rate applied to CERS Non-hazardous and Hazardous covered payrolls.

Insurance fund deductions increased by $37.2 million, as compared to prior year, due to an increase in healthcare costs.

Net investment income decreased $451 million. This decrease in net investment income is due primarily to the decrease in the fair value of investments. This is illustrated in Table 4 as follows:

Table 4. Investment Income (Loss) for Insurance Fund (in Millions)

Asset	2015	2014	2013
Increase (Decrease) in fair value of investments	(126)	$288	$125
Investment income net of investment expense	72	81	81
Gain on sale of investments	130	158	108
Net Investment Income	**$76**	**$527**	**$314**

Historical Trends

Accounting standards require that the Statement of Net Position state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the Schedules of Net Pension Liability (page 84) and the Schedules of Funding Progress on page 76. The asset value stated in the Schedules of Funding Progress is the actuarial value of assets. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by KRS' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is defined as the unfunded actuarial accrued liability.

The unfunded actuarial accrued liability in the pension plans increased by $1,785.1 million for a total unfunded amount of $16,615.2 million as of June 30, 2015, compared to an unfunded amount of $14,830.1 million as of June 30, 2014. In recent years, funding levels for the pension funds have fallen significantly due to investment returns less than the actuarially assumed rate and higher than anticipated retirement rates. In addition, KERS Nonhazardous, KERS Hazardous, and SPRS were funded less than the actuarially determined rate in prior years.

The insurance plan's unfunded actuarial accrued liability as of June 30, 2015, increased to $3,055.8 million from $2,943.6 million as of June 30, 2014. This is a increase in the unfunded actuarial accrued liability of $112.2 million.

Annual required contributions of the employers as actuarially determined and actual contributions made by employers and other contributing entities in relation to the required contributions are provided in the Schedules of Employer Contributions and in the Schedules of Contributions from Employers (pages 82-83) and Other Contributing Entities (pages 79-81). The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS funds is attributable to the fact that the employer contribution rate set by the Kentucky General Assembly was less than the rate recommended by the KRS Actuary in prior years and adopted by the KRS Board of Trustees.

Combining Statement of Plan Net Position for Pension Funds *(in Thousands)*

as of June 30, 2015 with Comparative Totals as of June 30, 2014

Assets						2015	2014
	KERS Haz	KERS Non Haz	CERS Haz	CERS Non Haz	SPRS	KRS Total	KRS Total
Cash & Short-Term Investments							
Cash	$162	$1,739	$583	$1,556	$215	$4,255	$3,744
Short-Term Investments	21,560	97,852	71,675	196,485	7,796	395,368	440,983
Total Cash and Short-Short Term Investments	**21,722**	**99,591**	**72,258**	**198,041**	**8,011**	**399,623**	**444,727**
Receivables							
Contributions	5,198	67,084	14,634	52,928	9,785	149,629	108,050
Investment Income	14,378	61,259	54,591	171,855	6,219	308,302	642,101
Note Receivable	58	458	170	549	30	1,265	-
Total Receivables	**19,634**	**128,801**	**69,395**	**225,332**	**16,034**	**459,196**	**750,151**
Investments at Fair Value							
Corporate & Government Bonds	124,249	548,573	477,677	1,478,774	51,150	2,680,423	3,051,302
Absolute Return	59,463	266,392	223,749	705,647	26,915	1,282,166	1,303,197
Private Equities	62,498	343,612	212,363	640,199	26,900	1,285,572	1,287,466
Derivatives	286	1,241	1,095	3,406	128	6,156	4,051
Corporate Stocks	248,062	881,432	961,710	2,999,507	110,381	5,201,092	5,358,280
Real Estate	31,745	113,324	112,134	348,220	13,754	619,177	427,106
Total Investments at Fair Value	**526,303**	**2,154,574**	**1,988,728**	**6,175,753**	**229,228**	**11,074,586**	**11,431,402**
Securities Lending Collateral Invested	35,156	145,667	133,570	413,476	15,392	743,261	882,097
Equipment (net of accumulated depreciation)	6	58	10	110	1	185	221
Intangible Assets (net of accumulated amortization)	286	3,305	465	5,634	49	9,739	10,318
Total Assets	**603,107**	**2,531,996**	**2,264,426**	**7,018,346**	**268,715**	**12,686,590**	**13,518,916**
Liabilities							
Accounts Payable	2,129	2,846	1,346	5,403	315	12,039	8,936
Investment Accounts Payable	13,354	55,701	51,308	158,667	5,779	284,809	611,986
Securities Lending Collateral Obligations	35,156	145,667	133,570	413,476	15,392	743,261	882,097
Total Liabilities	**50,639**	**204,214**	**186,224**	**577,546**	**21,486**	**1,040,109**	**1,503,019**
Total Net Position for Pension Benefits	**$552,468**	**$2,327,782**	**$2,078,202**	**$6,440,800**	**$247,229**	**$11,646,481**	**$12,015,987**

See accompanying notes to the combining financial statements.

Combining Statement of Changes in Plan Net Position for Pension Funds *(in Thousands)*

for the fiscal year ended June 30, 2015 with Comparative Totals for the fiscal year ended June 30, 2014

Additions						**2015**	**2014**
	KERS Haz	**KERS Non Haz**	**CERS Haz**	**CERS Non Haz**	**SPRS**	**KRS Total**	**KRS Total**
Members' Contributions	$12,670	$100,424	$46,609	$133,637	$5,150	$298,490	$275,032
Employers' Contributions	28,374	520,949	107,515	297,714	31,444	985,996	768,257
Pension Spiking Contributions	162	743	557	850	546	2,858	-
Health Insurance Contributions (HB1)	537	4,181	1,084	6,674	94	12,570	12,367
Bank of America Settlement	767	8,442	2,865	10,280	646	23,000	-
Total Contributions	**42,510**	**634,739**	**158,630**	**449,155**	**37,880**	**1,322,914**	**1,055,656**
Investment Income							
From Investing Activities							
↘ Net Appreciation in FV (depreciation)	(1,263)	(4,791)	(256)	(7,218)	(1,303)	(14,831)	1,361,940
↘ Interest/Dividends	13,898	65,596	51,237	160,824	6,380	297,935	323,627
↘ Total Investing Activities Income	12,635	60,805	50,981	153,606	5,077	283,104	1,685,567
↘ Investment Expense	4,063	16,711	14,387	44,636	1,708	81,505	46,350
Net Income from Investing Activities	8,572	44,094	36,594	108,970	3,369	201,599	1,639,217
From Securities Lending Activities							
↘ Securities Lending Income	140	592	550	1,713	61	3,056	4,066
From Securities Lending Expense							
↘ Security Borrower (Income) Rebates	(10)	41	(42)	(143)	(5)	(159)	(433)
↘ Security Lending Agent Fees	21	76	82	257	8	444	675
Net Income from Securities Lending Activities	129	475	510	1,599	58	2,771	3,824
Total Net Investment Income	**8,701**	**44,569**	**37,104**	**110,569**	**3,427**	**204,370**	**1,643,041**
Total Additions	**51,211**	**679,308**	**195,734**	**559,724**	**41,307**	**1,527,284**	**2,698,697**
Deductions							
Benefit Payments	56,774	905,790	200,134	615,335	54,766	1,832,799	1,769,768
Refunds	2,609	13,552	3,111	13,524	85	32,881	33,621
Administrative Expenses	844	10,474	1,289	18,212	201	31,020	32,593
Total Deductions	**60,227**	**929,816**	**204,534**	**647,071**	**55,052**	**1,896,700**	**1,835,982**
Net (Decrease) Increase in Plan Net Position	(9,016)	(250,508)	(8,800)	(87,347)	(13,745)	(369,416)	862,715
Total Net Position for Pension Benefits							
Beginning of Year	561,484	2,578,290	2,087,002	6,528,147	260,974	12,015,897	11,153,182
End of Year	**$552,468**	**$2,327,782**	**$2,078,202**	**$6,440.800**	**$247,229**	**$11,646,481**	**$12,015,897**

See accompanying notes to the combining financial statements.

Combining Statement of Plan Net Position for Insurance Fund (in Thousands)

as of June 30, 2015 with Comparative Totals as of June 30, 2014

Assets	KERS Haz	KERS Non Haz	CERS Haz	CERS Non Haz	SPRS	2015 KRS Total	2014 KRS Total
Cash and Short-Term Investments							
Cash	$30	$286	$25	$541	$12	$894	$354
Short-Term Investments	9,936	20,560	24,256	39,657	4,743	99,152	138,689
Medicare Drug Deposit	-	-	-	-	-	-	100
Total Cash and Short Term Investments	**9,966**	**20,846**	**24,281**	**40,198**	**4,755**	**100,046**	**139,143**
Receivables							
Contributions	1,352	12,310	5,754	14,342	909	34,667	36,668
Investment Income	11,808	17,621	28,223	51,257	4,401	113,310	252,677
Note Receivable	15	32	30	57	7	141	
Total Receivables	**13,175**	**29,963**	**34,007**	**65,656**	**5,317**	**148,118**	**289,345**
Investments at Fair Value							
Corporate & Government Bonds	140,537	208,527	340,965	616,376	52,090	1,358,495	1,445,430
Derivatives	239	352	566	1,033	89	2,279	868
Private Equities	33,597	40,462	92,946	166,834	15,076	348,915	270,841
Absolute Return	48,446	71,872	116,561	208,349	18,258	463,486	430,009
Corporate Stocks	179,954	276,927	417,493	768,440	64,168	1,706,982	1,661,739
Real Estate	25,554	36,346	58,404	106,604	9,535	236,443	151,005
Total Investments at Fair Value	428,327	634,486	1,026,935	1,867,636	159,216	4,116,600	3,959,892
Securities Lending Collateral Invested	24,376	36,359	58,472	106,186	9,116	234,509	293,370
Total Assets	**475,844**	**721,654**	**1,143,695**	**2,079,676**	**178,404**	**4,599,273**	**4,681,750**
Liabilities							
Accounts Payable	101	900	342	801	64	2,208	47
Investment Accounts Payable	12,254	18,756	28,401	51,743	4,510	115,664	233,931
Securities Lending Collateral Obligations	24,376	36,359	58,472	106,186	9,116	234,509	293,370
Total Liabilities	**36,731**	**56,015**	**87,215**	**158,730**	**13,690**	**352,381**	**527,348**
Total Plan Net Position for Insurance Benefits	**$439,113**	**$665,639**	**$1,056,480**	**$1,920,946**	**$164,714**	**$4,246,892**	**$4,154,402**

See accompanying notes to the combining financial statements.

"The displayed market values include investable assets held by each System, and its associated contributions, payables, and equipment and intangible assets; unlike those found in the Investment Section (pages 105-107), which include only those investable assets held by each System."

Combining Statement of Changes in Plan Net Position for Insurance Fund (in Thousands)

for the fiscal year ended June 30, 2015 with Comparative Totals for the fiscal year ended June 30, 2014

Additions	KERS Haz	KERS Non Haz	CERS Haz	CERS Non Haz	SPRS	2015 KRS Total	2014 KRS Total
Employers' Contributions	$14,173	$132,208	$71,008	$115,836	$10,379	$343,604	$397,435
Employer Group Waiver Plan	-	-	-	-	-	-	14
Premiums Received from Retirees	14	272	10	582	1	879	2,447
Retired Reemployed Healthcare (HBI)	709	3,732	770	3,608	3	8,822	5,611
Total Contributions	**14,896**	**136,212**	**71,788**	**120,026**	**10,383**	**353,305**	**405,507**
Investment Income							
From Investing Activities							
↘ Net Appreciation in FV (depreciation)	(24)	(3,723)	2,828	4,701	108	3,890	445,660
↘ Interest/Dividends	10,473	15,914	24,364	44,627	3,960	99,338	95,813
↘ Total Investing Activities Income	10,449	12,191	27,192	49,328	4,068	103,228	541,473
↘ Investment Expense	2,778	3,682	7,202	13,131	1,191	27,984	15,661
Net Income from Investing Activities	7,671	8,509	19,990	36,197	2,877	75,244	525,812
From Securities Lending Activities							
↘ Securities Lending Income	103	152	250	451	37	993	1,365
From Securities Lending Expense							
↘ Security Borrower Income	(35)	(53)	(82)	(153)	(13)	(336)	(112)
↘ Security Lending Agent Fees	16	24	39	70	6	155	222
Net Income from Securities Lending Activities	122	181	293	534	44	1,174	1,255
Total Net Investment Income	**7,793**	**8,690**	**20,283**	**36,731**	**2,921**	**76,418**	**527,067**
Total Additions	**22,689**	**144,902**	**92,071**	**156,757**	**13,304**	**429,723**	**932,574**
Deductions							
Healthcare Premiums Subsidies	16,900	123,127	65,403	110,032	13,461	328,923	292,242
Administrative Fees	101	893	339	782	65	2,180	1,614
Excise Tax	-	3	-	6	-	9	40
Self Funding Insurance Costs	100	2,145	152	3,702	22	6,121	6,170
Total Deductions	**17,101**	**126,168**	**65,894**	**114,522**	**13,548**	**337,233**	**300,066**
Net Increase (Decrease) in Plan Net Position	5,588	18,734	26,177	42,235	(244)	92,490	632,508
Total Plan Net Position for Insurance Benefits							
Beginning of Year	433,525	646,905	1,030,303	1,878,711	164,958	4,154,402	3,521,894
End of Year	**$439,113**	**$665,639**	**$1,056,480**	**$1,920,946**	**$164,714**	**$4,246,892**	**$4,154,402**

See accompanying notes to the combining financial statements.

NOTE A. Summary of Significant Accounting Policies

This summary of significant accounting policies of the Kentucky Retirement Systems (KRS) is presented to assist in understanding KRS' combining financial statements. The combining financial statements and notes are representations of KRS' management, which is responsible for their integrity and objectivity. These accounting policies conform to accounting principles generally accepted in the United States of America and have been consistently applied in the preparation of the combining financial statements.

This summary of significant accounting policies of the Kentucky Retirement Systems (KRS) is presented to assist in understanding KRS' combining financial statements. The combining financial statements and notes are representations of KRS' management, which is responsible for their integrity and objectivity. These accounting policies conform to accounting principles generally accepted in the United States of America (GAAP) and have been consistently applied in the preparation of the combining financial statements.

Organization

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees (the Board) of KRS administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the systems are invested as a whole, each system's assets are used only for the payment of benefits to the members of that plan, and a pro rata share of administrative costs, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

The Board consists of: Thomas K. Elliott, Chair, Governor Appointee; Daniel Bauer, PhD, Vice Chair, Governor Appointee; Mike Cherry, Governor Appointee; Edwin Davis, elected by CERS; J.T. Fulkerson, Governor Appointee; Joseph Hardesty, Governor Appointee; Vince Lang, elected by KERS; Dinah Bevington, Personnel Secretary; Keith Peercy, elected by SPRS; Mary Helen Peter, elected by KERS; David Rich, elected by CERS; Randy K. Stevens, Governor Appointee; and William Summers, elected by CERS.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of KRS administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by KRS: (1) KERS; (2) CERS; and (3) SPRS. The assets of the insurance fund are invested as a whole. The following notes apply to the various funds administered by KRS.

Basis of Accounting

KRS' combining financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and investment expenses are recognized when incurred.

Method Used to Value Investments

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Short-term investments are reported at cost, which approximates fair value. See Note D for further discussion of fair value measurements. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the accrual basis as of the ex-dividend date. Gain (loss) on investments includes KRS' gains and losses on investments bought and sold as well held during the fiscal year.

Estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment

Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged to expense as incurred. The capitalization threshold used in fiscal years 2015 and 2014 was $3,000 (see Note K for further information).

Intangible Assets

Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is ten years. The capitalization threshold used in fiscal years 2015 and 2014 was $3,000 (see Note L for further information).

Contributions Receivable

Contributions receivable consist of amounts due from employers. The management of KRS considers contributions receivable to be fully collectible; accordingly, no allowance for doubtful accounts is considered necessary. If amounts become uncollectible, they will be charged to operations when that determination is made. If amounts previously written off are collected, they will be credited to income when received.

Investment Income/Receivable/Payable

Due to the timing of receiving partnership financial information, the fair values of the investments in certain limited partnerships have been estimated using the net asset value of the ownership interest in partners' capital as of March 31 of each fiscal year. KRS management will monitor differences in the fair values of these investments between March 31 and June 30, of each fiscal year, and will disclose any and all material differences.

The Investment Receivable and Payable accounts consist of all buys and sells of securities, as well as all investment related accruals.

KRS changed the reporting of private equity investment fees from a net basis to a gross basis. KRS made this decision to enhance transparency of the investment fees. Prior to 2015, the majority of KRS' private equity investment fees were netted against investment activity which is the standard used within the private equity sector. KRS' net investment income has always included these fees regardless of the reporting method used. See Note W for further detail.

Payment of Benefits

Benefits are recorded when paid.

Expense Allocation

Administrative expenses of KRS are allocated in proportion to the number of total members participating in each plan and direct investment manager expenses are allocated in proportion to the percentage of investment assets held by each plan.

Component Unit

KRS is a component unit of the Commonwealth of Kentucky (the Commonwealth) for financial reporting purposes.

KERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. CERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. SPRS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Board of KRS without further legislative review. The methods used to determine the employer rates for KRS are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

Recent Accounting Pronouncements

In February 2015, the Governmental Accounting Standards Board (GASB) issued Statement No. 72, *Fair Value Measurement and Application*. The objective of this Statement is to enhance comparability of financial statements among governments by requiring measurement of certain assets and liabilities at fair value using a consistent and more detailed definition of fair value and accepted valuation techniques. This Statement will also enhance fair value application guidance and related disclosures in order to provide information to financial statement users about the impact of fair value measurements on a government's financial position. The Statement becomes effective for the fiscal year beginning July 1, 2015. KRS is evaluating the requirements of this Statement.

In June 2015, the GASB issued Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. The objective of this Statement is to extend the approach to accounting and financial reporting established in Statement 68 to all pensions, with modifications as necessary to reflect that for accounting and financial reporting purposes, any assets accumulated for pensions that are provided through pension plans that are not administered through trusts that meet the criteria

specified in Statement 68 should not be considered pension plan assets. It also requires that information similar to that required by Statement 68 be included in notes to financial statements and required supplementary information by all similarly situated employers and nonemployer contributing entities. This Statement becomes effective for the fiscal year beginning July 1, 2015. KRS is evaluating the requirements of this Statement.

In June 2015, the GASB issued Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*. The objective of this Statement is to improve the usefulness of information about postemployment benefits other than pensions (other postemployment benefits or OPEB) included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and assessing accountability. This Statement replaces Statements No. 43, *Financial Reporting for Postemployment Benefit Plans other than Pension Plans*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*. It also includes requirements for defined contribution OPEB plans that replace the requirements for those OPEB plans in Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, as amended, Statement 43, and Statement No. 50, *Pension Disclosures*. This Statement becomes effective for the fiscal year beginning July 1, 2016. KRS is evaluating the requirements of this Statement.

In June 2015, the GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The objective of this Statement is to address accounting and financial reporting for OPEB that is provided to the employees of state and local governmental employers. This Statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. For defined benefit OPEB, this Statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information requirements about defined benefit OPEB also are addressed. This Statement becomes effective for the fiscal year beginning July 1, 2017. KRS is evaluating the requirements of this Statement.

In June 2015, the GASB issued Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. The objective of this Statement is to identify (in the context of the current governmental financial reporting environment) the hierarchy of GAAP. The GAAP hierarchy consists of the sources of accounting principles used to prepare financial statements of state and local governmental entities in conformity with GAAP and the framework for selecting those principles. This Statement reduces the GAAP hierarchy to two categories of authoritative GAAP and addresses the use of authoritative and nonauthoritative literature in the event that the accounting treatment for a transaction or other event is not specified within a source of authoritative GAAP. This Statement becomes effective for the fiscal year beginning July 1, 2015. KRS is evaluating the requirements of this Statement.

Note B. Plan Descriptions & Contribution Information

Membership Information *

KERS Employees

	2015			2014		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	38,827	2,575	41,402	38,022	2,467	40,489
Inactive Memberships	42,479	3,761	46,240	41,213	3,318	44,531
Active Plan Members	39,289	3,932	43,221	40,500	4,094	44,594
Total	**120,595**	**10,268**	**130,863**	**119,735**	**9,879**	**129,614**
Number of Participating Employers			354			354

CERS Employees

	2015			2014		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	48,515	6,389	54,904	46,112	6,066	52,178
Inactive Memberships	72,965	2,142	75,107	70,231	2,038	72,269
Active Plan Members	82,969	9,188	92,157	82,494	9,189	91,683
Total	**204,449**	**17,719**	**222,168**	**198,837**	**17,293**	**216,130**
Number of Participating Employers			1,136			1,137

SPRS Employees

Members	**2015**	**2014**
Retirees and Beneficiaries Receiving Benefits	1,324	1,279
Inactive Memberships	257	239
Active Plan Members	940	861
Total	**2,521**	**2,379**
Number of Participating Employers	1	1

** Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Nonhazardous, then KERS Nonhazardous.*

2015 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non Haz	9,251	714	452	1,303	18,577
KERS Haz	656	448	110	62	1,177
CERS Non Haz	8,098	473	242	2,531	21,520
CERS Haz	1,500	2,255	456	107	2,697
SPRS	265	441	81	16	777
Total	**19,770**	**4,331**	**1,341**	**4,019**	**44,748**

2014 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non Haz	9,491	797	506	1,370	17,738
KERS Haz	647	448	110	56	1,104
CERS Non Haz	7,843	546	278	2,583	20,200
CERS Haz	1,447	2,184	432	89	2,510
SPRS	263	444	78	20	712
Total	**19,691**	**4,419**	**1,404**	**4,118**	**42,264**

Pension Plan Descriptions

KERS - (Kentucky Employees Retirement System) This system consists of two plans - ***Nonhazardous and Hazardous***. Each plan is a cost-sharing multiple-employer defined benefit pension plan that covers all regular full-time members employed positions of any state department, board, or agency directed by Executive Order to participate in KERS.

CERS - (County Employees Retirement System) This system consists of two plans - ***Nonhazardous and Hazardous***. Each plan is a cost-sharing multiple-employer defined benefit pension plan that covers all regular full-time members employed in nonhazardous positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate in CERS.

SPRS - (State Police Retirement System) This system is a single-employer defined benefit pension plan that covers all full-time state troopers employed position by the Kentucky State Police.

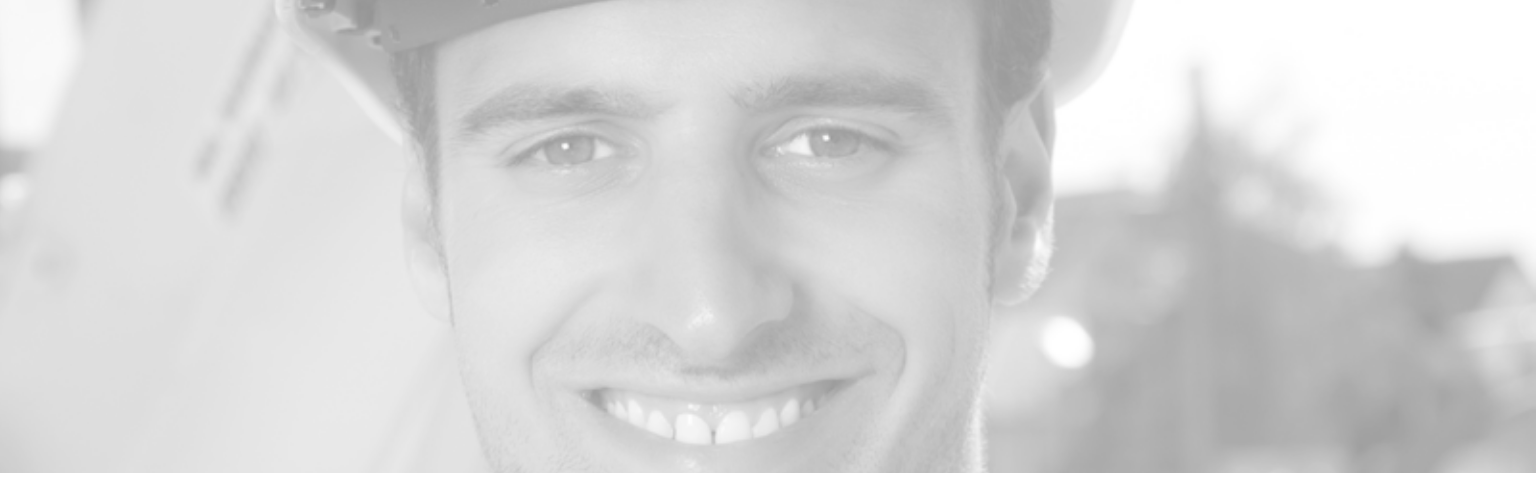
These systems provide for retirement, disability, and death benefits to system members. Retirement benefits may be extended to beneficiaries of members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year.

Cost of Living Adjustment (COLA)

Effective July 1, 2009, and on July 1 of each year thereafter through June 30, 2014, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least 12 months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than 12 months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the 12 months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce the COLA if, in its judgment, the welfare of the Commonwealth so demands. No COLA has been granted since July 1, 2011.

Contributions For the fiscal years ended June 30, 2015 and 2014, plan members who began participating prior to September 1, 2008, were required to contribute 5% nonhazardous and 8% hazardous of their annual creditable compensation. These members were classified in the Tier 1 structure of benefits. The Commonwealth was required to contribute at an actuarially determined rate for KERS and SPRS pensions. Participating employers were required to contribute at an actuarially determined rate for CERS pensions. Per Kentucky Revised Statute Sections {KERS 61.565(3); CERS 78.545(33); SPRS 16.645(18)}, normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget for KERS and SPRS.

For the fiscal year ended June 30, 2015 participating employers contributed a percentage of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years was a percentage of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions



and investment earnings. See Chart below for the 2015 and 2014 fiscal year percentages.

Plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% for nonhazardous and 9% for hazardous of their annual creditable compensation. While the 1% was deposited to an account created for the payment of health insurance benefits under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). These members were classified in the Tier 2 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% for nonhazardous and 8% for hazardous of their annual creditable compensation.

Plan members who began participating on, or after, January 1, 2014, were required to contribute to the Cash Balance Plan. These members were classified in the Tier 3 structure of benefits. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. Members in the plan contribute a set percentage of their salary each month to their own account. Members contribute 5% (nonhazardous) and 8% (hazardous) of their annual creditable compensation and 1% to the health insurance fund which is not credited to the member's account and is not refundable. The employer contribution rate is set annually by the Board based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A member's account is credited with a 4% (nonhazardous) and 7.5% (hazardous) employer pay credit. The employer pay credit represents a portion of the employer contribution.

	PENSION				INSURANCE				COMBINED TOTAL			
	Employer Contribution Rates		Actuarially Recommended Rates		Employer Contribution Rates		Actuarially Recommended Rates		Employer Contribution Rates		Actuarially Recommended Rates	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
KERS Nonhazardous	30.84%	17.29%	30.84%	32.57%	7.93%	9.50%	7.93%	12.71%	38.77%	26.79%	38.77%	45.28%
KERS Hazardous	16.37%	14.89%	16.37%	17.00%	9.97%	17.32%	9.97%	11.84%	26.34%	32.21%	26.34%	28.84%
CERS Nonhazardous	12.75%	13.74%	12.75%	13.74%	4.92%	5.15%	4.92%	5.84%	17.67%	18.89%	17.67%	18.89%
CERS Hazardous	20.73%	21.77%	20.73%	21.77%	13.58%	13.93%	13.58%	16.02%	34.31%	35.7%	34.31%	35.7%
SPRS	53.90%	39.50%	53.90%	53.35%	21.86%	31.65%	21.86%	43.17%	75.76%	71.15%	75.76%	96.52%

Insurance Plan Description

The Kentucky Retirement Systems Insurance Fund (Insurance Fund) was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The Insurance Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2015, insurance premiums withheld from benefit payments for members of the systems were $21.2 million and $1.1 million for KERS non-hazardous and hazardous, respectively; $22.6 million and $1.7 million for CERS non-hazardous and hazardous, respectively; and, $135,018 for SPRS. For fiscal year 2014, insurance premiums withheld from benefit payments for members of KERS were $24.0 million and $1.1 million for KERS non-hazardous and KERS hazardous, respectively; $24.2 million and $1.9 million for CERS non-hazardous and CERS hazardous, respectively; and, $177,804 for SPRS. The Insurance Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2015, the Insurance Fund had 108,952 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Insurance Fund is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are shown in the chart on the previous page.

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after, July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on, or after, July 1, 2003 earn $10 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn $15 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives $10 per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree COLA, which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within 20 years.

On August 6, 2012, the Board voted to cease self-funding of healthcare benefits for most KRS Medicare eligible retirees. The Board elected to contract with Humana Insurance Company to provide healthcare benefits to KRS' retirees through a fully-insured Medicare Advantage Plan. The Humana Medicare Advantage Plan became effective January 1, 2013.

Portion Paid by Insurance Fund

Years of Service	Paid by Insurance Fund (%)
20+ years	100%
15-19 years	75%
10-14 years	50%
4-9 years	25%
Less than 4 years	0%

Note C. Cash, Short-Term Investments & Securities Lending Collateral

The provisions of GASB Statement No. 28, Accounting and Financial Reporting for Securities Lending Transactions require that cash received as collateral on securities lending transactions, and investments made with that cash, be reported as assets on the financial statements. In accordance with GASB No. 28, KRS classifies certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following at June 30:

Cash, Short-Term Investments, & Securities Lending Collateral

KERS

Assets	2015	2014
Cash	$1,900,500	$1,525,039
Short-Term Investments	119,412,200	131,130,977
Securities Lending Collateral Invested	180,822,466	225,552,963
KERS Total	**$302,135,166**	**$358,208,979**

CERS

Assets	2015	2014
Cash	$2,138,933	$1,945,877
Short-Term Investments	268,159,676	298,872,570
Securities Lending Collateral Invested	547,046,264	637,584,374
CERS Total	**$817,344,873**	**$938,402,821**

SPRS

Assets	2015	2014
Cash	$215,325	$273,391
Short-Term Investments	7,795,849	10,979,712
Securities Lending Collateral Invested	15,392,066	18,959,641
SPRS Total	**$23,403,240**	**$30,212,744**

KRS Insurance Fund

Assets	2015	2014
Cash	$894,438	$354,145
Short-Term Investments	99,151,683	138,688,699
Medicare Drug Deposit	-	100,039
Securities Lending Collateral Invested	234,509,400	293,369,587
Insurance Fund Total	**$334,555,251**	**$432,512,470**

Each plan's assets are used only for the payment of benefits to the members of that plan and pro rata share of administrative cost in accordance with the provisions of Kentucky Revised Statute sections 16.555, 61.570, and 78.630.

Note D. Investments

Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of KRS. The Board has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the "Prudent Person Rule" (set forth in Kentucky Revised Statute 61.650) and manage those funds consistent with the long-term nature of the systems. The Investment Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS. The Statement of Investment Policy contains the specific guidelines for the investment of pension and insurance assets. Additionally, the Investment Committee establishes specific investment guidelines that are summarized below and are included in the Investment Management Agreement for each investment management firm.

PRUDENT PERSON RULE -
A legal maxim restricting the discretion in a client's account to investments that a prudent person seeking reasonable income and preservation of capital might buy for his or her own portfolio.

Equity Investments

Investments may be made in common stock, securities convertible into common stock, preferred stock of publicly traded companies on stock markets, asset class relevant Exchange Traded Funds' (ETF's) or any other type of security contained in a manager's benchmark. Each individual equity account has a comprehensive set of investment guidelines prepared, which contains a listing of permissible investments, portfolio restrictions and standards of performance.

Fixed Income Investments

The fixed income accounts may include, but are not limited to, the following fixed income securities: US Government and Agency bonds; investment grade US corporate credit; investment grade non-US corporate credit; non-investment grade US corporate credit including both bonds and bank loans; non-investment grade non-US corporate credit including bonds and bank loans; municipal bonds; non-US sovereign debt; mortgages, including residential mortgage backed securities; commercial mortgage backed securities, and whole loans; asset-backed securities and emerging market debt (EMD), including both sovereign EMD and corporate EMD; and, asset class relevant ETF's.

Mortgages

Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments.

Private Equity/Equity Real Estate/Real Return/Absolute Return Investments - Subject to the specific approval of the Investment Committee of the Board, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, but not limited to and without limitation, venture capital, private equity, private placements, real assets and absolute return investments which the Investment Committee believes has excellent potential to generate income and which may have a higher degree of risk.

In accordance with GASB Statement No. 53, Accounting and Financial Reporting for Derivative Instruments, KRS provides this additional disclosure regarding its derivatives. As of June 30, 2015, KRS has the following derivative instruments outstanding:

Derivative Instruments							
Item	Type	Objective	Cost	Notional Cost	Market Value	Terms	Notional Market Value
PENSION:							
A	Foreign Exchange Contracts	Hedge against swings in foreign currencies	$93,564	-	$4,809,999	Various	-
B	US Equity Index Futures	Hedge against drop in the equity markets or to equitize cash	-	$3,279,048	(28,008)	Various	$3,251,040
C	Fixed Income Securities	Hedge against sudden or dramatic shifts in interest rates	19,143,338	-	19,151,344	Various	-
D	Treasury Notes	Hedge against sudden or dramatic shifts in interest rates	-	(5,007,676)	(1,152)	Various	(5,008,828)
INSURANCE:							
E	US Equity Index Futures	Hedge against risk that interest rates will move in an adverse direction	-	1,891,947	(16,347)	Various	1,875,600
F	Foreign Exchange Contracts	Hedge against swings in foreign currencies	36,935	-	1,867,191	Various	-
G	Fixed Income Securities	Hedge against sudden or dramatic shifts in interest rates	3,630,134	-	3,631,622	Various	-
H	Treasury Notes	Hedge against sudden or dramatic shifts in interest rates	-	(2,146,098)	(543)	Various	(2,146,641)

Cash Equivalent Securities

The following short-term investment vehicles are considered acceptable:

Publicly traded investment grade corporate bonds, variable rate demand notes, government and agency bonds, mortgages, municipal bonds, and collective Short Term Investment Fund's (STIF), money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements, relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the instrument has a split rating, the lower of the two ratings shall prevail.

All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time left until the next interest rate reset occurs, but in no case will any security have a stated final maturity of more than three years.

KRS' fixed income managers, who utilize cash equivalent securities as an integral part of their investment strategy, are exempt from the permissible investments contained in the preceding paragraph. Permissible short-term investments for fixed income managers shall be included in the investment manager's investment guidelines.

For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combining Statement of Plan Net Position for both Pension and Insurance funds.

Investment Expenses

In accordance with GASB Statement No. 25, *Financial Reporting for Defined Pension Benefit Plans and Note Disclosures for Defined Contribution Plans*, KRS has exercised professional judgment to report investment expenses. It is not cost-beneficial to separate certain investment expenses from either the related investment income or the general administrative expenses.

Derivatives

Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position.

All derivative instruments have various effective dates and maturity dates.

It is the policy of KRS that investment managers may invest in derivative securities, or strategies which make use of derivative investments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Examples of such derivatives include, but are not limited to, foreign currency forward contracts, collateralized mortgage obligations, treasury inflation protected securities, futures, options and swaps.

Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flows, such as interest only, principal only, inverse floater, or structured note securities are permitted only to the extent authorized in a contract or an alternative investment offering memorandum or agreement.

Investments in securities such as collateralized mortgage obligations and planned amortization class issues are allowed if, in the judgment of the investment manager, they are not expected to be subject to large or unanticipated changes in duration or cash flows. Investment managers may make use of derivative securities for defensive or hedging purposes. Any derivative security shall be sufficiently liquid that it can be expected to be sold at, or near, its most recently quoted market price.

For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combining Statement of Plan Net Position for both Pension and Insurance Funds.

RISKS

Basis Risk:

Derivative instruments B and E expose KRS to basis risk in that the value of the underlying equity index future may decrease in fair value relative to the cash market.

Interest Rate Risk:

Derivative instruments A, C, D, F, G, and H expose KRS to interest rate risk in that changes in interest rates will adversely affect the fair values of KRS' financial instruments.

In June 2011, the GASB issued Statement No. 64, *Derivative Instruments: Application of Hedge Accounting Termination Provisions, an Amendment of GASB Statement No. 53.* The objective of this Statement is to clarify whether an effective hedging relationship continues and hedge accounting should continue to be applied. Upon the termination of a hedging derivative instrument, hedge accounting should cease and investment income should immediately recognize deferred outflows of resources or deferred inflows of resources. KRS maintains its derivative instruments as investment derivative instruments for all accounting and financial reporting purposes. Therefore, hedge accounting and the related effectiveness testing is not performed.

Custodial Credit Risk for Deposits

Custodial credit risk for deposits is the risk that in the event of a financial institution failure, KRS' deposits may not be returned. All non-investment related bank balances are held by JP Morgan Chase. All non-investment related bank balances are held in KRS' name and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). In 2010, the US Congress passed the Financial Crisis Bill and permanently increased the FDIC deposit insurance coverage to $250,000. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount.

As of June 30, 2015 and 2014, deposits for KRS pension funds were $7.9 million and $4 million, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

As of June 30, 2015 and 2014, deposits for KRS insurance fund were $892,995 and $1.4 million, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments

Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. KRS does not have an explicit policy with regards to Custodial Credit Risk for investments. As of June 30, 2015 and 2014, the following currencies were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name. These funds are cash held by KRS' Global Managers and consist of various currencies.

Custodial Credit Risk

Pension Fund	2015	2014
Foreign Currency	$8,137,762	$9,692,881
Insurance Fund		
Foreign Currency	$2,248,967	$3,145,400

Pension Funds Investment Summary As of June 30

Type	2015	2014
Fixed Income Securities	$2,680,423,440	$3,051,301,974
Short-Term Investments	395,367,724	440,983,259
Equity Securities	5,201,092,389	5,358,280,375
Private Equity Limited Partnerships	1,285,572,446	1,287,466,227
Real Estate	619,177,193	427,105,738
Derivatives	6,156,232	4,050,284
Absolute Return	1,282,165,506	1,303,197,181
Total	**$11,469,954,930**	**$11,872,385,038**

Insurance Fund Investment Summary As of June 30

Type	2015	2014
Fixed Income Securities	$1,358,494,646	$1,445,430,202
Short-Term Investments	99,151,683	138,688,699
Equity Securities	1,706,981,715	1,661,738,753
Private Equity Limited Partnerships	348,915,161	270,841,221
Real Estate	236,443,112	151,004,974
Derivatives	2,278,887	868,135
Absolute Return	463,486,065	430,008,984
Total	**$4,215,751,269**	**$4,098,580,968**

The following tables present the KRS's pension funds and insurance fund debt ratings as of June 30, 2015 and 2014:

Pension Funds Debt Securities at Fair Value as of June 30

Quality Rating	2015	2014
AAA	$32,799,444	$40,306,583
AA+	220,525,397	62,002,369
AA	19,544,218	21,388,493
AA-	29,318,050	27,797,954
A-1+	546,266	-
A+	16,624,270	34,695,288
A	30,690,688	99,344,507
A-	54,108,960	117,151,936
BBB+	65,256,861	84,269,097
BBB	69,164,919	64,675,676
BBB-	125,695,004	89,120,107
BB+	147,737,994	87,235,873
BB	124,243,472	93,648,993
BB-	101,087,356	83,840,452
B+	147,998,684	75,094,584
B	120,008,446	84,811,455
B-	91,895,479	61,972,436
CCC+	45,867,312	42,517,725
CCC	10,687,090	11,865,038
CCC-	3,151,024	4,487,098
CC	2,560,088	1,925,471
D	3,881,933	6,999,911
NR	778,261,251	659,751,771
Total Credit Risk Debt Securities	**$2,241,654,206**	**$1,854,902,817**
Government Agencies	2,310,824	5,222,397
Government Mortgage-Backed Securities (GNMA)	234,372,835	179,134,299
Government Issued Commercial Mortgage Backed	4,504,823	4,479,667
Government Bonds	146,629,121	385,836,479
Indexed Linked Bonds	50,951,631	621,726,315
Total Debt Securities	**$2,680,423,440**	**$3,051,301,974**

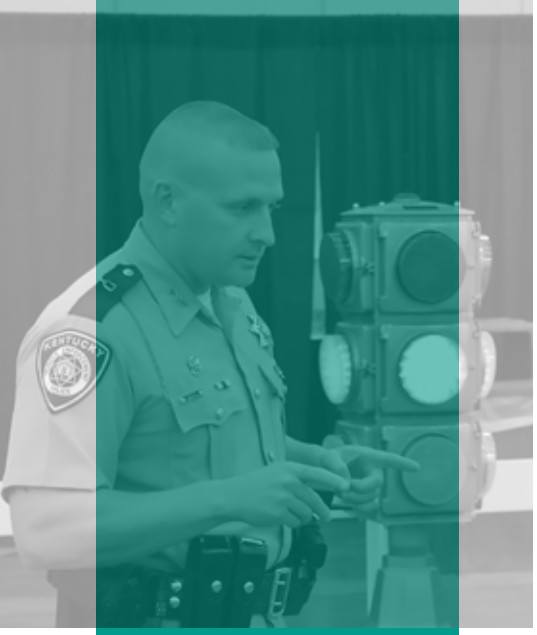
Insurance Fund Debt Securities at Fair Value as of June 30

Quality Rating	2015	2014
AAA	$36,199,356	$12,231,453
AA+	30,949,483	18,736,341
AA	5,594,558	6,724,487
AA-	9,538,154	7,319,989
A+	15,158,170	16,055,561
A-1+	202,350	-
A	30,746,413	29,080,777
A-	30,022,792	38,388,115
BBB+	32,416,543	28,031,588
BBB	27,473,957	24,786,892
BBB-	34,131,541	28,672,541
BB+	34,246,856	29,313,139
BB	27,533,223	30,971,226
BB-	26,031,520	28,542,731
B+	30,210,910	27,461,463
B	28,480,371	30,109,234
B-	15,454,963	20,447,164
CC	572,136	623,198
CCC	941,558	2,695,453
CCC+	10,077,032	12,603,007
CCC-	221,552	1,145,250
D	753,803	2,556,978
NR	570,268,422	586,985,099
Total Credit Risk Debt Securities	**$997,225,663**	**$983,481,686**
Government Agencies	3,248,856	1,511,319
Government Mortgage-Backed Securities (GNMA)	113,157,827	65,071,852
Government Issued Commercial Mortgage Backed	2,633,272	1,497,608
Government Bonds	121,740,145	142,080,994
Indexed Linked Bonds	120,488,883	251,786,743
Total Debt Securities	**$1,358,494,646**	**$1,445,430,202**

The government agencies in which KRS is invested are Fannie Mae and the Federal Home Loan Bank.

Pension Fund Securities At both June 30, 2015 and 2014, the weighted average quality rating of the pension fund debt securities portfolio was AA+. As of June 30, 2015 and 2014, the KRS pension portfolio had $1,577,380,129 and $1,214,150,807, respectively, in debt securities rated below BBB-.

Insurance Fund Securities As a result of the most recently approved Asset/Liability Modeling Study, the investment staff began to diversify the insurance fixed income allocation to mirror that of the pension funds. As part of this process, the TIPS allocation (previously the only fixed income expense within the insurance portfolio) was moved to the newly created Real Return Asset Class.



Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the board of KRS. The Board has established an investment committee which is specifically charged with the oversight and investment of plan assets.

Concentration of Credit Risk Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension and insurance funds debt securities portfolios are managed using the following guidelines adopted by the Board of KRS:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.

- Fixed income investments will be similar in type to those securities found in the KRS fixed income benchmarks and the characteristics of the KRS fixed income portfolio will be similar to the KRS fixed income benchmarks.

- The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income by more than 25%.

- The duration of the Treasury Inflation Protected Securities (TIPS) portfolio shall not deviate from the KRS Fixed Income Index by more than 10%.

- The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS' assets.

- No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short-term instrument, with the exception of US Government issued, guaranteed or agency obligations.

- The amount invested in SEC Rule 144a securities shall not exceed 7.5% of the market value of the aggregate market value of KRS' core fixed income investments.

Concentration of Credit Risk Debt Securities

Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

The total debt securities portfolio is managed using the following general guidelines adopted by the Board of KRS:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.

- Debt obligations of any single US Corporation shall be limited to a maximum of 5% of the total portfolio at market value.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration measures the sensitivity of the market prices of fixed income securities to changes in the yield curve. Duration is measured using two methodologies: effective and modified duration. Effective duration uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price and makes adjustments for any bond features that would retire the bonds prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve, but does not assume the securities will be called prior to maturity.

The KRS pension fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. As of June 30, 2015 and 2014, the modified duration of the KRS pension fund fixed income benchmark was 5.75 and 5.37, respectively. At the same points in time, the modified duration of the KRS pension fund fixed income securities portfolio was 4.26 and 5.37, respectively.

The KRS insurance fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. As of June 30, 2015 and 2014, the modified duration of the KRS insurance fund fixed income benchmark was 5.74 and 5.37, respectively. At the same points in time, the modified duration of the KRS insurance fund fixed income securities portfolio was 3.38 and 3.99, respectively.

KRS Pension Funds Interest Rate Risk As of June 30, 2015 and 2014:

Pension Funds Interest Rate Risk

Type	2015	Weighted Average Modified Duration	2014	Weighted Average Modified Duration
Asset Backed Securities	$80,682,959	6.00	$86,379,081	9.12
Bank Loans	333,921,080	5.39	327,431,127	4.19
Collateralized Bonds	23,939,151	4.33	23,113,753	3.62
Commercial Mortgage Backed Securities	51,075,672	2.77	77,841,331	2.10
Corporate Bonds - Industrial	577,639,674	6.23	390,494,755	5.67
Corporate Bonds - Utilities	135,127,865	6.94	40,955,705	6.27
Government Agencies	71,507,431	6.32	65,501,546	4.75
Government Bonds	87,724,008	6.90	125,600,774	6.10
Government Mortgage Backed Securities	387,421,860	3.63	178,480,106	5.21
Covered Bonds	-	-	878,873	1.80
Municipal Bonds	20,440,231	8.63	79,048,655	10.31
Supranational Bonds	2,125,860	1.77	6,341,105	1.82
Treasuries	524,545,015	3.26	1,207,419,080	7.04
Swaps	37,213,933	0.01	4,298,025	0.58
Mutual Funds	329,645,324	-	396,848,860	-
Other	17,413,377	0.27	40,669,198	3.96
Total	**$2,680,423,440**	**4.26**	**$3,051,301,974**	**5.37**

KRS Insurance Fund Interest Rate Risk As of June 30, 2015 and 2014

Insurance Fund Interest Rate Risk

Type	2015	Weighted Average Modified Duration	2014	Weighted Average Modified Duration
Asset Backed Securities	$46,009,988	5.33	$32,726,218	8.67
Bank Loans	122,994,721	5.33	125,099,366	4.38
Collateralized Bonds	8,661,856	2.86	3,750,470	3.99
Commercial Mortgage Backed Securities	23,913,669	1.82	24,807,988	2.16
Corporate Bonds - Industrial	165,550,838	6.10	140,705,415	5.56
Corporate Bonds - Utilities	33,246,797	7.45	16,095,997	6.26
Government Agencies	15,280,118	6.50	15,681,837	4.90
Government Bonds	7,042,551	10.18	16,254,026	4.00
Government Mortgage Backed Securities	113,157,827	5.20	65,071,852	5.52
Covered Bonds	-	-	1,171,830	1.80
Municipal/Provincial Bonds	15,864,191	5.65	17,791,073	9.00
Supranational Bonds	5,272,325	3.38	2,166,067	2.04
Treasuries	276,548,407	5.32	464,396,484	7.01
Swaps	407,197,975	0.01	391,233,379	-
Mutual Funds	107,920,082	-	121,882,992	-
Other	9,833,301	2.79	6,595,211	6.98
Total	**$1,358,494,646**	**3.38**	**$1,445,430,202**	**3.99**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the value of a non-US dollar based investment or deposit with the KRS portfolio.

Foreign Currency Risk Foreign currency risk is the risk that changes in exchange rates will adversely affect the value of a non-US dollar based investment or deposit within the KRS portfolio. KRS' currency risk exposure, or exchange rate risk, primarily resides with KRS' international equity holdings, but also affects other asset classes. KRS does not have a formal policy to limit foreign currency risk; however, some individual managers are given the latitude to hedge some currency exposures.

All foreign currency transactions are classified as Short-Term Investments.

All gains and losses associated with these transactions are recorded in the *Net Appreciation (Depreciation) in the Fair Value of Investments* on the combining financial statements.

The following tables present KRS' exposure to foreign currency risk as of June 30, 2015 and 2014:

Pension Funds Investments at Fair Value as of June 30, 2015 & 2014		
Foreign Equities	**2015**	**2014**
Australian Dollar	$45,524,360	$63,542,348
Brazilian Real	10,038,834	28,173,468
British Pound Sterling	230,990,599	225,259,654
Canadian Dollar	31,007,486	41,437,776
Chilean Peso	1,615,419	4,818,876
Chinese Yuan	-	4,109,501
Columbian Peso	70,063	4,865,113
Czech Koruna	-	1,662,246
Danish Krone	30,880,488	27,618,618
Egyptian Pound	1,265,953	-
Euro	276,713,338	325,339,051
German Mark	209,275	-
Hong Kong Dollar	50,442,004	45,368,576
Hungarian Forint	2,043,077	730,125
Indian Rupee	4,715,132	23,379,225
Indonesian Rupiah	20,221,999	12,326,348
Israeli Shekel	5,856,040	4,250,242
Japanese Yen	165,124,397	186,247,197
Malaysian Ringgit	-	6,116,803
Mexican Peso	13,703,693	27,518,975
New Zealand Dollar	8,083,459	13,863,381
Norwegian Krone	22,454,960	14,222,852
Peruvian Nuevo Sol	-	469,626
Philippine Peso	11,219,442	6,423,771
Polish Zloty	12,073	4,131,804
Russian Ruble	-	13,292,845
Singapore Dollar	21,281,454	15,472,920
South African Rand	3,784,217	9,392,321
South Korean Won	20,624,933	36,562,132
Swedish Krona	30,324,551	36,459,940
Swiss Franc	75,604,802	73,390,790
Taiwan Dollar	5,988,056	24,529,304
Thai Bhat	14,259,536	8,824,588
Turkish Lira	3,517,813	6,681,457
Total Securities Subject to Foreign Currency Risk	**$1,107,577,453**	**$1,266,367,170**
US Dollars	10,362,377,477	10,606,017,868
Total Investment Securities	**$11,469,954,930**	**$11,872,385,038**

Insurance Fund Investments at Fair Value as of June 30, 2015 & 2014

Foreign Equities	2015	2014
Australian Dollar	$16,529,875	$21,159,098
Brazilian Real	3,478,125	9,868,083
British Pound Sterling	85,519,211	78,588,743
Canadian Dollar	11,027,509	15,048,631
Chilean Peso	562,254	1,575,128
Chinese Yuan	-	1,636,081
Columbian Peso	-	807,218
Czech Koruna	-	588,014
Danish Krone	11,219,733	9,378,996
Egyptian Pound	438,824	-
Euro	101,969,846	99,813,747
Hong Kong Dollar	18,617,003	15,678,888
Hungarian Forint	690,197	286,753
Indian Rupee	1,767,719	8,677,608
Indonesian Rupiah	7,140,659	3,629,915
Israeli Shekel	2,247,542	1,372,593
Japanese Yen	59,941,785	67,029,052
Malaysian Ringgit	-	2,079,289
Mexican Peso	4,647,950	8,877,951
New Taiwan Dollar	2,323,811	8,240.119
New Zealand Dollar	3,039,386	5,220,476
Norwegian Krone	8,182,370	4,809,239
Philippine Peso	4,068,766	2,341,661
Polish Zloty	5,570	1,674,073
Russian Ruble	-	5,374,587
Singapore Dollar	7,674,464	5,421,756
South African Rand	1,380,066	3,143,309
South Korean Won	7,532,005	13,915,662
Swedish Krona	11,203,658	12,354,751
Swiss Franc	27,719,374	24,820,751
Thai Bhat	5,246,060	3,288,977
Turkish Lira	1,216,790	2,494,686
Total Securities Subject to Foreign Currency Risk	**$405,390,552**	**$439,185,835**
US Dollars	3,810,360,717	3,659,395,133
Total Investment Securities	**$4,215, 751,269**	**$4,098,580,968**

In accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans,* KRS provides this additional disclosure regarding its money-weighted rate of return for the pension funds. The money-weighted rate of return is a method of calculating period-by-period returns on pension plan investments that adjusts for the changing amounts actually invested. For purposes of this Statement, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense, adjusted for the changing amounts actually invested.

See below for the money-weighted rates of return as of June 30, 2015 and 2014, as calculated by the custodial bank, BNY-Mellon:

Pension Funds					
	KERS	KHAZ	CERZ	CHAZ	SPRS
2015	1.89	1.69	1.65	1.88	1.71
2014	15.50	15.65	15.56	15.50	15.66

Insurance Fund					
	KERS	KHAZ	CERZ	CHAZ	SPRS
2015	1.44	1.82	1.96	1.97	1.89
2014	14.28	15.14	15.02	15.00	15.03

The money-weighted rate of return declined due to unfavorable conditions in the capital market.

The money weighted rate of return is a method of calculating period-by-period returns on pension plan investments that adjusts for the changing amounts actually invested. For purposes of this Statement, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.

Note E.
CM Growth Capital Partners, LLP

On August 11, 2014, and May 1, 2015, KRS issued two promissory notes to CM Growth Capital Partners, LLP, (CM) in the amounts of $1,300,000 and $105,208, respectively. These transactions were approved by the Investment Committee. These notes were issued to provide working capital to CM (formally Camelot). The interest rate assigned to the notes was 17.5%, compounded quarterly. The maturity date of the two notes was January 24, 2016; on August 17, 2015, the two notes were paid in full along with accrued interest. The principal amount at June 30, 2015, was $1,405,208 and the accrued interest due was $282,142, which totaled $1,687,350. The note receivable and accrued interest has been allocated among the plans.

Note F. Securities Lending Transactions

Kentucky Revised Statutes Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with an initial fair value of 102% or 105% of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. The types of securities lent include US Treasuries, US Agencies, US Corporate Bonds, US Equities, Global Fixed Income Securities, and Global Equities Securities. The Statement of Investment Policy does not address any restrictions on the amount of loans that can be made. At June 30, 2015, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction. Deutsche Bank invests cash collateral as permitted by state statute and Board policy. The agent of the Funds cannot pledge or sell collateral securities received unless the borrower defaults. KRS maintains a conservative approach to investing the cash collateral with Deutsche Bank, emphasizing capital preservation, liquidity, and credit quality.

Note G. Risk of Loss

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board of Claims.

Claims against the Board of KRS, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a self-insured retention of $250,000 for each claim. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy. The aggragate limit for all loss is $5,000,000 and the HYPPA and PPACA fines and penalties a sub-limit is $1,500,000.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for

TORT-
The area of law that covers the majority of all civil lawsuits. Essentially, every claim that arises in civil court with the exception of contractual disputes falls under tort law. The concept of tort law is to redress a wrong done to a person, usually by awarding them monetary damages as compensation.

all medical expenses related to the illness or injury and up to 66.67% of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll. Settlements did not exceed insurance coverage in any of the past three fiscal years. Thus, no secondary insurance had to be utilized. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

Note H. Contingencies

In the normal course of business, KRS is involved in litigation concerning the right of participants, or their beneficiaries, to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

Note I. Income Tax Status

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, generally, not subject to tax. KRS is subject to income tax on any unrelated business income; however, KRS had no unrelated business income in fiscal years 2015 and 2014.

Note J. Defined Benefit Pension Plan

All eligible employees of KRS participate in KERS (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Plan members who began participating prior to September 1, 2008, contributed 5% of creditable compensation for the periods ended June 30, 2015, 2014, and 2013. Plan members who began participating on, or after, September 1, 2008, contributed 6% of creditable compensation for the periods ended June 30, 2015, 2014, and 2013. Plan members who began participating on, or after, January 1, 2014, contributed 6% of creditable compensation for the periods ended June 30, 2015 and 2014. KRS contributed 38.77%, 26.79%, and 23.61%, of covered payroll for the periods ended June 30, 2015, 2014, and 2013, respectively.

The chart below includes the covered payroll and contribution amounts for KRS for the three periods ended June 30 included in this discussion.

Payroll & Contributions

	2015	2014	2013
Covered Payroll	$14,137,788	$ 13,916,055	$ 13,925,712
Required Employer Contributions	$5,481,221	$3,722,937	$3,271,165
Employer Percentage Contributed	100%	100%	100%

COVERED PAYROLL-
The employee payroll that is subject to Pension Contributions Withholding.

INTANGIBLE ASSET-
An asset that is not physical in nature. Corporate intellectual property (items such as patents, trademarks, copyrights, business methodologies), goodwill and brand recognition are all common intangible assets in today's marketplace.

Note K. Equipment

Equipment Expenses *(as of June 30)*		
Expense	**2015**	**2014**
Equipment At-Cost	2,577,051	$ 2,569,251
Less Accumulated Depreciation	(2,391,644)	(2,348,055)
Total	**$185,407**	**$221,196**

Depreciation expense for the fiscal years ended June 30, 2015 and 2014 amounted to $43,589 and $44,714, respectively.

Note L. Intangible Assets

The provisions of GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets* require that intangible assets be recognized in the Combining Statement of Plan Net Position only if they are considered identifiable. In accordance with GASB No. 51, KRS has capitalized software costs as indicated below for the Strategic Technology Advancements for the Retirement of Tomorrow (START) project.

Software Expenses *(as of June 30)*		
Expense	**2015**	**2014**
Software At-Cost	17,300,826	$16,254,290
Less Accumulated Amortization	(7,561,348)	(5,935,919)
Total	**$9,739,478**	**$10,318,371**

Amortization expense for the fiscal years ended June 30, 2015 and 2014 amounted to $1.6 million and $1.9 million, respectively.

Note M. Actuarial Valuation

The following details significant actuarial information and assumptions utilized in determining the unfunded actuarial accrued liabilities for the Insurance Funds:

Insurance Fund Valuation [1]	*(Valuation Date June 30, 2015)*	
	Non-Haz	**Haz**
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	28 Years	28 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	7.5-5.0%	7.5-5.0%
Medical Trend Assumption (Post-Medicare)	5.5-5.0%	5.5-5.0%
Year of Ultimate Trend	2020	2020
Dollar Contribution Trend	1.5%	1.5%
Actuarial Assumptions		
Investment Rate of Return	7.5%	7.5%
↘ Includes Price Inflation at	3.25%	3.25%

[1]The actuarial valuation for the Insurance Fund involves estimates of the value of reported amounts and assumptions about the probability of future events. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations are based on the benefits provided under the terms of the insurance plan in effect at the time of each valuation and on the pattern of sharing costs between the employer and plan members as of the valuation date. Actuarial calculations of the insurance plan reflect a long-term perspective.

ACTUARIAL VALUATION - A type of appraisal which requires making economic and demographic assumptions in order to estimate future liabilities. The assumptions are typically based on a mix of statistical studies and experienced judgment.

Unfunded Actuarial Accrued Liability

KRS Pension and Insurance Funds had the following Unfunded Actuarial Accrued Liabilities as of June 30:

Pension Funds - *Unfunded Actuarial Accrued Liabilities as of June 30*		
System	2015	2014
KERS Non Haz	$10,008,682,909	$9,126,153,508
KERS Haz	338,745,630	288,952,802
CERS Non Haz	4,265,476,908	3,655,388,924
CERS Haz	1,516,524,591	1,321,185,726
SPRS	485,768,500	438,376,677
Total Pension Funds	**$16,615,198,538**	**$14,830,057,627**

Insurance Fund - *Unfunded Actuarial Accrued Liabilities as of June 30*		
System	2015	2014
KERS Non Haz	$1,718,686,990	$1,605,523,279
KERS Haz	(76,609,957)	(22,409,047)
CERS Non Haz	910,370,977	785,715,135
CERS Haz	416,308,115	496,131,142
SPRS	87,063,770	78,676,367
Total Insurance Fund	**$3,055,819,895**	**$2,943,636,876**
Total Unfunded Actuarial Accrued Liability	**$19,671,018,433**	**$17,773,694,503**

Pension Funds Schedule of Funding Progress

System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non Haz	$2,350,989,940	12,359,672,849	19%	$1,544,234,409	648.1%
KERS Haz	556,687,757	895,433,387	62.2%	126,680,130	263.2%
CERS Non Haz	6,474,848,513	10,740,325,421	60.3%	2,296,715,957	185.7%
CERS Haz	2,096,782,956	3,613,307,547	58%	483,640,601	313.6%
SPRS	248,387,946	734,156,446	33.8%	45,764,515	1,061.5%
Total Pension Funds	**11,727,697,112**	**28,342,895,650**	**41.4%**	**$4,497,035,612**	**369.5%**

Insurance Fund Schedule of Funding Progress

System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non Haz	$695,018,262	$2,413,705,252	28.8%	$1,544,234,409	111.3%
KERS Haz	451,514,191	374,904,234	120.4%	126,680,130	(59.5%)
CERS Non Haz	1,997,456,463	2,907,827,440	68.7%	2,296,715,957	39.6%
CERS Haz	1,087,707,118	1,504,015,233	72.3%	483,640,601	86.1%
SPRS	167,774,940	254,838,710	65.8%	45,764,515	190.2%
Total Insurance Fund	**$4,399,470,974**	**$7,455,290,869**	**59%**	**$4,499,035,612**	**67.9%**
Totals	**$16,127,168,086**	**$35,798,186,519**	**45.1%**	**$8,996,071,224**	**218.7%**

The provisions of GASB Statement No. 67, *Financial Reporting for Pension Plans,* were issued in June 2012. This Statement replaces the requirements of Statements No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans,* and No. 50, *Pension Disclosures*, as they relate to pension plans that are administered through trusts or equivalent arrangements that meet that criteria.

The total pension liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement:

- *Inflation 3.25 percent*
- *Salary increases 4.0 percent, average, including inflation;*
- *Investment rate of return 7.5 percent, net of pension plan investment expense, including inflation.*

The Mortality Table used for active members is RP-200 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (setback one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (setback four years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

The actuarial assumptions used in the June 30, 2015 valuation were based on the results of an actuarial experience study for the period July 1, 2008 – June 30, 2013. The discount rate used to measure the total pension liability was 7.5%.

Table Note A: Net Pension Liability

	KERS		CERS		SPRS
	Non Haz	HAZ	Non Haz	HAZ	HAZ
Total Pension Liability	$12,359,673	$895,433	$10,740,325	$3,613,308	$734,157
Fiduciary Net Position	2,327,782	552,468	6,440,800	2,078,202	247,229
Net Pension Liability	10,031,891	342,965	4,299,525	1,535,106	486,928
Ratio of Fiduciary Net Position to Total Pension Liability	18.83%	61.70%	59.97%	57.52%	33.68%
Inflation	3.25%	3.25%	3.25%	3.25%	3.25%
Salary Increases (average including inflation)	4.0%	4.0%	4.0%	4.0%	4.0%
Investment Rate of Return (Net of Pension Plan Investment Expense including Inflation)	7.5%	7.5%	7.5%	7.5%	7.5%

The Total Pension Liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement.

The Net Pension Liability is equal to the Total Pension Liability minus the Fiduciary Net Position. That result as of June 30, 2015, for the plan is presented in the table above ($ thousands). The Total Pension Liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement.

The objective of GASB 67 was to improve financial reporting by state and local governmental pension plans. The statement required defined benefit pension plans to present two financial statements, a statement of fiduciary net position and a statement of changes in fiduciary net position. In addition, the statement required that notes to the financial statements include descriptive information, such as the types of benefits provided, the classes of plan members covered, and the composition of the pension plans board, among other detailed requirements.

The projection of cash flows used to determine the discount rate assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 28 year amortization period of the unfunded actuarial accrued liability.

The long-term expected return on plan assets is reviewed as part of the regular experience studies prepared every five years for the Systems. The most recent analysis, performed for the period covering fiscal years 2008 through 2013, is outlined in a report dated April 30, 2014. Several factors are considered in evaluating the long-term rate of return assumption including long-term historical data, estimates inherent in current market data, and a log –normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed by the investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions developed by the investment consultant are intended for use over a 10-year horizon and may not be useful in setting the long-term rate of return for funding pension plans which covers a longer timeframe. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The discount rate determination does not use a municipal bond rate. Projected future benefit payments for all current plan members were projected through 2117. The target asset allocation and best estimates of arithmetic nominal rates of return for each major asset class are summarized in Table Note B.

***The actuarial valuation for the Insurance Fund involves estimates of the value of reported amounts and assumptions about the probability of future events. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations are based on the benefits provided under the terms of the insurance plan in effect at the time of each valuation and on the pattern of sharing costs between the employer and plan members as of the valuation date. Actuarial calculations of the insurance plan reflect a long-term perspective.

Table Note B: Target Asset Allocation

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Combined Equity	44%	5.4%
Combined Fixed Income	19%	1.5%
Real Return (Diversified Inflation Strategies)	10%	3.5%
Real Estate	5%	4.5%
Absolute Return (Diversified Hedge Funds)	10%	4.25%
Private Equity	10%	8.5%
Cash Equivalent	2%	-0.25%
Total	**100%**	

Net Pension Liability - Decrease/Increase

KERS	1% Decrease	Current Discount Rate	1% Increase
Nonhazardous	(6.5%)	(7.5%)	(8.5%)
	$11,300,073	**$10,031,891**	**$8,959,055**
Hazardous	(6.5%)	(7.5%)	(8.5%)
	441,198	**342,965**	**260,552**
CERS			
Nonhazardous	(6.5%)	(7.5%)	(8.5%)
	$5,488,878	**$4,299,525**	**$3,280,950**
Hazardous	(6.5%)	(7.5%)	(8.5%)
	1,964,987	**1,535,106**	**1,178,939**
SPRS			
Hazardous	(6.5%)	(7.5%)	(8.5%)
	$563,792	**$486,928**	**$422,248**

Note N. Pension Reform

Employee contributions for non-hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 6% of all their creditable compensation to KRS. These members were classified in the Tier 2 structure of benefits. Five percent of this contribution was deposited to the individual employee's account, while the other 1% was deposited to an account created under 26 USC Section 401(h) in the KRS Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E) for the payment of health insurance benefits. Hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 9% of all their creditable compensation, with 8% credited to the member's account, and 1% deposited to the KRS Pension Fund 401(h) account for the payment of health insurance benefits. Interest paid each June on these members' accounts is set at a rate of 2.5%. If a member terminates his/her employment and applies to take a refund, the member is entitled to a full refund of contributions and interest in his/her account; however, the 1% contributed to the 401(h) account in the KRS Pension Fund is non-refundable and is forfeited.

The Employer contribution rates were established as follows (effective July 1, 2014) for fiscal year 2015:

Employer Contribution Rates	
KERS Nonhazardous	38.77%
KERS Hazardous	26.34%
CERS Nonhazardous	17.67%
CERS Hazardous	34.31%
SPRS	75.76%

Although the majority of changes enacted in House Bill 1 only impacted new hires on, or after, September 1, 2008, there were some changes that affected all members and retirees of KRS:

Cost of Living Adjustment (COLA): Beginning July 1, 2009, COLA for retirees are set by statute at 1.5% each July 1. The Kentucky General Assembly may increase this percentage at any time, but only if appropriate funding is allocated. The General Assembly may also reduce or suspend the annual COLA.

Service Purchase Costs: The actuarial factors used to determine the cost to purchase service must assume the earliest date a member can retire with an unreduced benefit, and must also assume a 1.5% COLA will be enacted. This change results in an increased service purchase cost for any purchase calculated on, or after, September 1, 2008. This change also affects the cost billed to employers for sick leave when an employee retires.

Payment Options: The Partial Lump Sum Payment Option was made available only to those employees who retired on, or before, January 1, 2009.

Kentucky Revised Statute 61.637 was modified significantly by House Bill 1. A retired member who was reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.

House Bill 300

House Bill 300 was signed by the Governor on April 11, 2012. The Bill makes changes/additions to information and definitions regarding placement agents, audits to be performed on KRS by the Kentucky Auditor of Public Accounts, terms of service of Trustees of the Board, terms of service of Board officers (Chair and Vice Chair), among other changes.

Senate Bill 2

Senate Bill 2 was signed by the Governor on April 4, 2013. It contained a number of changes to the pension system that KRS implemented, effective January 1, 2014. The Bill created the hybrid cash balance plan for members who began participation on, or after, January 1, 2014. These members were classified in the Tier 3 structure of benefits. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan.

The plan resembles a defined contribution plan because it determines the value of benefits for each participant based on individual accounts. However, the assets of the plan remain in a single investment pool like a traditional defined benefit plan. The plan is a defined benefit plan since it uses a specific formula to determine benefits.

All regular full time employees who began participation with KRS on, or after, January 1, 2014 contribute to the hybrid cash balance plan. Participation in the plan is mandatory unless the employee is employed in a non-participating position. Employment classifications that are non-participating include part-time, seasonal, temporary, probationary (CERS only), interim, emergency, and independent contractors.

Members and employers contribute a specified amount into the member's account. The account earns a guaranteed amount of interest at the end of each fiscal year. If the member has participated in the plan during the fiscal year, there may be an additional interest credit added to the member's account depending on KRS' investment returns. All interest is paid on the preceding year's balance.

When a member is eligible to retire, the benefit is calculated based on the member's accumulated account balance. A member earns service credit for each month he contributes to the plan. Once a member obtains 60 months of service credit, thay are considered vested. Vesting may change the level of benefits to which the member is entitled.

Members in the hybrid cash balance plan contribute a set percentage of their salary each month to their own account as required by Kentucky law:

» non-hazardous members – 5% of creditable compensation

» hazardous members – 8% of creditable compensation

» all members – 1% to the health insurance fund which is not credited to the member's account and is not refundable

The employer contribution rate is based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A non-hazardous member account is credited with a 4% employer pay credit. A hazardous member account is credited with a 7.5% employer pay credit. The employer pay credit represents a portion of the employer contribution.

In addition, Senate Bill 2 implemented provisions requiring employers to pay the actuarial cost of increases in an employee's salary in the last five years prior to retirement, which result in increases to the employee's pension, commonly known as pension spiking. All salary increases greater than 10% from one fiscal year to the next are presumed pension spikes. The law specifically excludes three situations from being considered a pension spike: 1. bona fide promotions; 2. career advancements; and 3. lump sum compensatory time paid at termination. For all members who retire on, or after, January 1, 2014, KRS will analyze the last five years of wages used in the retirement calculation to determine if a pension spike has occurred. If a pension spike has occurred, KRS will notify the last employer. Regardless of when the pension spike occurred, the last participating employer shall be required to pay for any additional actuarial costs resulting from annual increases in employee

salary greater than ten percent (10%), which do not qualify under one of the three exceptions.

If there were multiple last employers, the cost is divided equally among them. The employer is permitted a 12 month period to remit the amount due.

As part of the Cash Balance Plan group of benefits, an additional interest credit may be applied which is referred to as upside sharing interest. The upside sharing interest is not guaranteed, and the following conditions must be met before it is credited to a member's account:

» The System's geometric average net investment return (GANIR) for the last five years must exceed 4%.

» The member must have been active and participating in the fiscal year.

If a system's GANIR for the previous five years exceeds 4%, then the member's account will be credited with 75% of the amount over 4%. This credit will be applied to the account balance as of June 30 of the previous year.

Upside Sharing Interest

Upside sharing interest is credited to both the member contribution balance and Employer Pay Credit balance. Upside sharing interest is an additional interest credit. Member accounts automatically earn 4% interest annually. The GANIR is calculated on an individual system basis. It is possible that one system may get an upside sharing percentage, and another system would not.

The chart below shows the interest calculated on the members' balances as of June 30,2014, and credited to each member account on June 30, 2015.

(A-B) X 75% = C then C+B=D

System	A 5 Year Geometric Average Return	B Guarantee Rate	C Upside Sharing Interest	D Interest Rate Earned	Total Interest Credited To Members' Accounts
KERS Nonhazardous	9.04%	4.00%	3.78%	7.78%	$60,343
KERS Hazardous	9.10%	4.00%	3.83%	7.83%	19,655
CERS Nonhazardous	9.03%	4.00%	3.77%	7.77%	101,587
CERS Hazardous	9.12%	4.00%	3.84%	7.84%	19,870
SPRS	9.12%	4.00%	3.84%	7.84%	*

* No members in the SPRS received interest as of June 30,2015 due to the timing of Tier 3 members participation dates.

House Bill 62

Enacted during the 2015 session of the Kentucky General Assembly, creates a path for certain participating agencies to voluntarily cease their participation in KERS or CERS by paying their portion of the unfunded liability. Additionally, it authorizes KRS to involuntarily remove certain participating agencies from KERS or CERS. KRS is currently in the process of creating an administrative regulation to further define the pension withdrawal process.

Tier 3 Plan

interest is paid into the member's account. The account is guaranteed 4% interest credit on the member's account balance as of June 30 of the previous year. The member's account may be credited with additional interest if the System's five-year average investment returns exceed 4%. If the member was actively employed and participating in the fiscal year, and if the System's average geometric investment return for the previous five years exceeds 4%, then the member's account will be credited with 75% of the amount of the returns over 4% on the account balance as of June 30 of the previous year. It is possible that one system in KRS may get an upside sharing percentage, while one may not.

Note O. Medicare Prescription Drug Plan

In fiscal year 2009, KRS submitted an application to the Centers for Medicare & Medicaid Services, of the Department of Health & Human Services, to enter into a contract to offer a Medicare Prescription Drug Plan (PDP), as described in the Medicare Prescription Drug Benefit Final Rule published in the Federal Register on January 28, 2005 (70 Fed. Reg. 4194). As part of the application process, KRS was required to establish a segregated Insolvency Account in the amount of $100,000; this account must retain a minimum balance of $100,000. The account consists of cash and/or cash equivalents and is invested on a daily basis. On February 19, 2009, KRS established the KRS Insurance Prescription Drug Fund. As of June 30, 2015 and 2014, the Insolvency Account amounted to $0 and $100,039, respectively. As of June 30, 2015, this account was closed due to the cessation of the self-funding plan.

Note P. Reimbursement Of Retired–Reemployed Health Insurance

As a result of the passage of House Bill 1 on September 1, 2008, if a retiree is reemployed in a regular full time position and has chosen health insurance coverage through KRS, the employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate. As of June 30, 2015 and 2014, the reimbursement totaled $12.6 million and $12.4 million, respectively.

Medical Insurance coverage is provided based on the member's initial participation date and length of service. Members receive either a percentage or dollar amount for insurance coverage.

Note Q. Reciprocity Agreement

KRS has a reciprocity agreement with Kentucky Teachers' Retirement System (KTRS) for the payment of insurance benefits for those members who have creditable service in both systems.

Note R. Custodial Bank

As a result of a thorough Request for Proposal (RFP) process, and effective July 1, 2013, Bank of New York-Mellon became responsible for providing KRS all required global custodial services. Bank of New York-Mellon took these duties over from Northern Trust, the former custodial bank.

Note S. Related Party

Perimeter Park West, Inc. (PPW) is a legally separate, tax-exempt Kentucky corporation established in 1998 to own the land and buildings on which KRS is located. PPW leases the buildings to KRS (the lease is renewed periodically) and provides maintenance for the buildings and land. PPW is considered a related party to KRS and has its own separate financial audit. The following presents the amounts recorded between KRS and PPW for the fiscal year ended June 30, 2015:

Lease payments to PPW from KRS:	$686,270
Dividends to KRS from PPW:	-

Note T. City Of Fort Wright

In June 2014, the City of Fort Wright (the City), a participating employer in CERS, filed a lawsuit against KRS alleging that the Board invested CERS funds in investments that were prohibited by both statutory and common law. In addition, the City alleged that the Board paid substantial asset management fees, which the suit alleges were improper. Although the exact nature and source of the relief sought is unclear, it appears that the City is seeking a declaration of rights, an injunction barring the placement of CERS assets in certain types of investments, an accounting of CERS assets, restitution of management fees to CERS, and attorney fees. As noted above, the exact nature and scope of the relief sought in this suit is unclear; therefore, no provision has been made in the combining financial statements.

RE-EMPLOYED-
A retired member who was reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.

All regular full-time employees who began participation with KRS on, or after, January 1, 2014 contribute to the hybrid cash balance plan. Participation in the plan is mandatory unless the employee is employed in a non-participating position.

Note U. Seven Counties Services, Inc.

Seven Counties Services, Inc., a participating employer in KERS, filed for Chapter 11 Bankruptcy on April 4, 2013, in part to terminate its employees' continued participation in KERS and its obligation to remit monthly contributions to KRS. Following the filing of the bankruptcy petition, Seven Counties Services ceased making retirement contributions on approximately 900 of its approximately 1,200 employees. On May 30, 2014, the United States Bankruptcy Court for the Western District of Kentucky issued a Memorandum Opinion that held that Seven Counties Services was entitled to seek Chapter 11 relief and reject what the Court considered to be an executory contract with KERS. Following the May 30, 2014 Opinion, Seven Counties Services ceased making contributions on behalf of all its employees.

Note V. City of Hillview

The City of Hillview, a participating employer in the CERS, filed a petition for Chapter 9 Bankruptcy on August 20, 2015, following a multi-million dollar civil judgment. Although KRS is listed as a debtor in this action, the impact, if any, on CERS is unclear. Consequently, no provision has been made in the combining financial statements as a result of this litigation.

Note W. Investment Fees

In fiscal year 2015, KRS changed from the Equity Method to the Proportionate Share Method for reporting of private equity investment fees. KRS made this decision in order to provide more transparency with regards to the investment fees incurred. In prior years, private equity investment fees were netted against investment activity. This means that each expense was not recorded as a line item in and of itself, but rather was part of a net cash flow. However, net investment income has always included these fees regardless of the reporting method used. Under the new method, the majority of these fees were reported as investment expenses as opposed to being netted against investment activity; fees have not suddenly and significantly increased. Fees have remained relatively stable. The only difference is that KRS has changed the method utilized to capture and report those fees. This change does not affect the net investment performance of the program.

The expense detail illustrated below is related to the accounting reporting changes. Fiscal 2015 total fees have been adjusted for performance fees, those management fees previously netted against market value, and consulting fees to produce a more comparability of fees incurred. Fees incurred under the Equity Method (previously used accounting) are favorable in comparison to current year.

	FYE 2015	FYE 2014
PENSION FUNDS:		
Investment Expense (excludes Security Lending)	$81,505,195	$46,349,967
Adjustment for Accounting Methodology Change		
Performance Fees *	25,626,953	-
Investment Fees **	16,317,561	-
Consulting ***	1,258,360	-
Total Adjustments	43,202,874	-
Fee Comparison Under Previous Accounting Methodology	$ 38,302,321	$ 46,349,967
INSURANCE FUND:		
Investment Expense (excludes Security Lending)	$27,984,259	$15,660,653
Adjustment for Accounting Methodology Change		
Performance Fees *	8,200,379	-
Investment Fees **	6,332,965	-
Consulting ***	447,901	-
Total Adjustments	14,981,245	-
Fee Comparison Under Previous Accounting Methodology	$13,003,014	$15,660,653

**Prior to FYE 2015, performance fees were not reported to KRS.*
***Amount represents fees captured in FYE 2015, previously "netted" against market value.*
**** These fees are paid by the Trust instead of the Administrative Budget to calculate Tier 3 GANIR benefits as required under Senate Bill 2.*

Note X. Write Off Of Receivable

With the implementation of START, employers reported June wages earned in the following month of July (next fiscal year) and the new Annual Required Contribution (ARC) rate was applied. The Commonwealth approved budget guidelines that paid contributions at the fiscal year ARC rate in effect when wages were earned. It is unlikely that KRS will receive payments at the new ARC rate for that period; therefore, contribution receivables have been reduced as follows as of June 30, 2015 and 2014:

	2015	2014
KERS Hazardous	$5,981,880	$5,216,615
CERS	-	102,823
CERS H	-	91,305
SPRS	91,618	571,336
Total	**$6,073,498**	**$5,982,079**

Note Y. Bank of America Settlement

In August 2014, Bank of America reached a $16.65 billion settlement with US regulators to settle charges that it misled investors into buying troubled mortgage-backed securities. The settlement called for the bank to pay a $9.65 billion cash penalty and provide $7 billion of consumer relief to homeowners and communities. Bank of America admitted having sold billions of dollars of risky mortgage-backed securities while concealing key facts about the quality of the underlying loans. It also admitted to having made misrepresentations to Fannie Mae and Freddie Mac about the quality of loans sold to those government-controlled mortgage companies. KRS' share of this settlement amounted to $23,000,000, and was received on October 24, 2014. The amount was allocated among the plans as follows:

KERS	$8,442,347
KERS H	767,141
CERS	10,280,391
CERS H	2,865,365
SPRS	644,756
Total	**$23,000,000**

Note Z. Subsequent Events

Management has evaluated the period June 30, 2015, to December 3, 2015, (the date the combining financial statements were available to be issued) for items requiring recognition or disclosure in the combining financial statements. Except as described in Notes E and V, there were no events occurring during the evaluation provided that require recognition or disclosure in the accompanying financial statements.

REQUIRED
SUPPLEMENTARY INFORMATION

Schedules of Funding Progress for KERS Insurance Fund

Year Ended	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll** (c)	UAAL as % of Covered Payroll [(b-a)/c]
Nonhazardous						
June 30, 2006	$611,350,765	$7,815,480,774	$7,204,130,009	7.8%	$1,702,230,777	423.2%
June 30, 2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
June 30, 2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
June 30, 2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
June 30, 2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
June 30, 2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
June 30, 2012	446,080,511	3,125,330,157	2,679,249,646	14.3	1,644,896,681	162.9
June 30, 2013	497,584,327	2,128,754,134	1,631,169,807	23.4	1,644,408,698	99.2
June 30, 2014	621,236,646	2,226,759,925	1,605,523,279	27.9	1,577,496,447	101.8
June 30, 2015	695,018,262	2,413,705,252	1,718,686,990	28.8	1,544,234,409	111.3
Hazardous						
June 30, 2006	$212,833,318	$621,237,856	$408,404,538	34.3%	$138,747,320	294.4%
June 30, 2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
June 30, 2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
June 30, 2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
June 30, 2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
June 30, 2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
June 30, 2012	345,573,948	384,592,406	39,018,458	89.9	131,976,754	29.6
June 30, 2013	370,774,403	385,517,675	14,743,272	96.2	132,015,368	11.2
June 30, 2014	419,395,867	396,986,820	(22,409,047)	105.6	129,076,038	(17.4)
June 30, 2015	451,514,191	374,904,234	(76,609,957)	120.4	128,680,130	(59.5)
Total						
June 30, 2006	$824,184,083	$8,436,718,630	$7,612,534,547	9.8%	$1,840,978,097	413.5%
June 30, 2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
June 30, 2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
June 30, 2009	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0
June 30, 2010	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1
June 30, 2011	781,582,057	4,787,148,400	4,005,566,343	16.3	1,864,686,540	214.8
June 30, 2012	791,654,459	3,509,922,563	2,718,268,104	22.6	1,776,873,435	153.0
June 30, 2013	868,358,730	2,514,271,809	1,645,913,079	34.5	1,776,424,066	92.7
June 30, 2014	1,040,632,513	2,623,746,745	1,583,114,232	39.7	1,706,572,485	92.8
June 30, 2015	1,146,532,453	2,788,609,486	1,642,077,033	41.1	1,672,914,539	98.2

See Independent Auditors' Report. ** *Covered payroll was actuarially computed*

Schedules of Funding Progress for CERS Insurance Fund

Year Ended	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll** (c)	UAAL as % of Covered Payroll [(b-a)/c]
Nonhazardous						
June 30, 2006	$777,726,590	$4,607,223,639	$3,829,497,049	16.9%	$1,982,437,473	193.2%
June 30, 2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
June 30, 2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
June 30, 2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
June 30, 2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
June 30, 2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
June 30, 2012	1,512,853,851	2,370,771,288	857,917,437	63.8	2,236,546,345	38.4
June 30, 2013	1,628,244,197	2,443,894,100	815,649,903	66.6	2,236,277,489	36.5
June 30, 2014	1,831,199,465	2,616,914,600	785,715,135	70.0	2,272,270,287	34.6
June 30, 2015	1,997,456,463	2,907,827,440	910,370,977	68.7	2,296,715,957	39.6
Hazardous						
June 30, 2006	$422,785,042	$1,928,481,371	$1,505,696,329	21.9%	$426,927,550	352.7%
June 30, 2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
June 30, 2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
June 30, 2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
June 30, 2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
June 30, 2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
June 30, 2012	829,040,842	1,364,843,057	535,802,215	60.7	464,228,923	115.4
June 30, 2013	892,774,391	1,437,332,817	544,558,426	62.1	461,672,567	118.0
June 30, 2014	997,733,237	1,493,864,379	496,131,142	66.8	479,164,016	103.5
June 30, 2015	1,087,707,118	1,504,015,233	416,308,115	72.3	483,640,601	86.1
Total						
June 30, 2006	$1,200,511,632	$6,535,705,010	$5,335,193,378	18.4%	$2,409,365,023	221.4%
June 30, 2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
June 30, 2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
June 30, 2009	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4
June 30, 2010	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3
June 30, 2011	2,204,241,067	4,721,675,960	2,517,434,893	46.7	2,743,559,808	91.8
June 30, 2012	2,341,894,693	3,735,614,345	1,393,719,652	62.7	2,700,775,268	51.6
June 30, 2013	2,521,018,588	3,881,226,917	1,360,208,329	65.0	2,697,950,056	50.4
June 30, 2014	2,828,932,702	4,110,778,979	1,281,846,277	68.8	2,751,434,303	46.6
June 30, 2015	3,085,163,581	4,411,842,673	1,326,679,092	69.9	2,780,356,558	47.7

See Independent Auditors' Report. ** *Covered payroll was actuarially computed*

Schedules of Funding Progress for SPRS Insurance Fund

Year Ended	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll** (c)	UAAL as % of Covered Payroll [(b-a)/c]
June 30, 2006	$105,580,269	$582,580,867	$477,000,598	18.1%	$47,743,865	999.1%
June 30, 2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
June 30, 2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
June 30, 2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
June 30, 2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2
June 30, 2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4
June 30, 2012	124,372,072	333,903,782	209,531,710	37.2	48,372,506	433.2
June 30, 2013	136,321,060	222,326,743	86,005,683	61.3	45,256,202	190.0
June 30, 2014	155,594,760	234,271,127	78,676,367	66.4	44,615,885	176.3
June 30, 2015	167,774,940	254,838,710	87,063,770	65.8	45,764,515	190.2

See Independent Auditors' Report. ** *Covered payroll was actuarially computed*

Schedules of Contributions from Employers & Other Contributing Entities

KERS Nonhazardous - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
June 30, 2006	$202,498,302	$47,634,639	-	23.5%
June 30, 2007	219,768,964	64,014,332	$10,744,049	34.0
June 30, 2008	558,745,820	56,744,942	6,633,538	11.3
June 30, 2009	362,707,378	74,542,932	8,167,982	22.8
June 30, 2010	376,556,187	93,976,917	8,550,914	27.2
June 30, 2011	294,897,813	129,335,552	-	43.9
June 30, 2012	297,904,224	156,057,216	-	52.4
June 30, 2013	286,143,134	165,330,557	-	57.8
June 30, 2014	208,880,813	166,609,592	-	79.8
June 30, 2015	130,455,026	135,940,337	-	104.2

See Independent Auditors' Report.

KERS Hazardous - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
June 30, 2006	$28,517,563	$17,011,745	-	59.7%
June 30, 2007	31,304,778	19,534,819	$104,669	62.7
June 30, 2008	51,214,929	21,997,341	73,891	43.1
June 30, 2009	34,670,467	20,807,204	186,081	60.6
June 30, 2010	35,045,278	21,921,535	319,059	63.5
June 30, 2011	29,585,257	19,952,580	-	67.4
June 30, 2012	28,326,206	24,538,087	-	86.6
June 30, 2013	26,252,911	25,682,403	-	97.8
June 30, 2014	15,627,018	23,873,967	-	152.8
June 30, 2015	13,151,938	14,882,343	-	113.2

See Independent Auditors' Report.

Schedules of Contributions from Employers & Other Contributing Entities

CERS Nonhazardous - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
June 30, 2006	$272,942,757	$128,867,817	-	47.2%
June 30, 2007	285,600,490	147,608,801	$9,623,431	55.1
June 30, 2008	406,541,729	196,110,111	6,003,181	49.7
June 30, 2009	264,733,532	123,852,611	7,623,628	49.7
June 30, 2010	266,331,326	166,607,097	9,156,991	66.0
June 30, 2011	213,429,424	186,885,576	-	87.6
June 30, 2012	214,421,008	171,924,836	-	80.2
June 30, 2013	195,560,870	159,992,643	-	81.8
June 30, 2014	130,651,800	123,278,028	-	94.4
June 30, 2015	119,510,589	119,443,608	-	99.9

See Independent Auditors' Report.

CERS Hazardous - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
June 30, 2006	$98,297,535	$64,853,778	-	66.0%
June 30, 2007	115,938,899	70,072,785	$656,523	61.0
June 30, 2008	168,723,639	90,113,200	419,774	53.7
June 30, 2009	126,757,348	70,785,241	627,938	56.3
June 30, 2010	129,227,449	83,042,875	1,493,440	65.4
June 30, 2011	109,226,667	98,592,286	-	90.3
June 30, 2012	110,762,577	92,563,664	-	83.6
June 30, 2013	102,010,672	85,319,393	-	83.6
June 30, 2014	74,360,438	74,791,619	-	100.6
June 30, 2015	69,102,811	71,778,130	-	103.9

See Independent Auditors' Report.

Schedules of Contributions from Employers & Other Contributing Entities

SPRS - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
June 30, 2006	$12,554,648	$6,880,517	-	54.8%
June 30, 2007	15,233,320	6,488,600	$361,942	45.0
June 30, 2008	43,469,735	7,329,229	183,564	17.3
June 30, 2009	29,324,666	7,413,552	229,240	26.1
June 30, 2010	30,302,151	8,369,428	273,684	28.5
June 30, 2011	25,772,574	11,050,964	-	42.9
June 30, 2012	28,246,786	11,960,468	-	42.3
June 30, 2013	27,234,229	16,828,681	-	61.8
June 30, 2014	20,879,022	14,493,242	-	69.4
June 30, 2015	9,889,797	10,381,881	-	105.0

See Independent Auditors' Report.

Actuary Assumption Changes

There were no changes of benefit terms. However, the following changes in assumptions were adopted by the Board of Trustees and reflected in the valuation performed as of June 30, 2015:

» The assumed investment rate of return was decreased from 7.75% to 7.5%.

» The assumed rate of inflation was reduced from 3.5% to 3.25%.

» The assumed rate of wage inflation was reduced from 1% to .75%.

» Payroll growth assumption was reduced from 4.5% to 4%.

» The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).

» For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (setback one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back four years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

» Assumed rates of retirement, withdrawal, and disability were updated to more accurately reflect experience.

The actuarially determined contribution rates are determined on a biennial basis beginning with the fiscal years ended 2016 and 2017, determined as of June 30, 2015. The amortization period of the unfunded liability has been reset as of July 1, 2013 to a closed 30-year period. The following actuarial methods and assumptions were used to determine contribution rates reported for all systems:

Actuarial Cost Method	Entry Age
Amortization Method	Level of Percentage of Payroll, closed
Remaining Amortization Period	28 years
Asset Valuation Method	5 year Smoothed Market
Inflation	3.25%
Salary Increase	4.0%, average, including Inflation
Investment Rate of Return	7.5%, for both Non Hazardous and Hazardous, Net of Pension Plan Investment Expense, including Inflation

Schedule of Employer Contributions - Pension Funds

KERS Nonhazardous	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially Determined Employer Contribution	$520,948	$520,765	$485,396	$441,094	$381,915	$348,495	$294,495	$264,743	$176,774	$129,126
Actual Employer Contributions	521,691	296,836	280,874	214,786	193,754	144,051	112,383	104,655	88,249	60,681
Annual Contribution Deficiency (Excess)	(743)	223,929	204,522	226,308	188,161	204,444	182,112	160,088	88,525	68,445
Covered Employee Payroll	1,544,234	1,577,496	1,644,409	1,644,897	1,731,633	1,815,146	1,754,413	1,837,873	1,780,223	1,702,231
Actual Contributions as a Percentage of Covered Employee Payroll	33.78%	18.82%	17.08%	13.06%	11.19%	7.94%	6.41%	5.69%	4.96%	3.56%

Schedule of Employer Contributions- Pension Funds

KERS Hazardous	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially Determined Employer Contribution	$28,374	$13,570	$21,502	$20,265	$20,605	$17,815	$15,708	$14,147	$12,220	$10,787
Actual Employer Contributions	28,536	11,670	27,334	20,809	19,141	17,658	15,843	15,257	13,237	10,803
Annual Contribution Deficiency (Excess)	(162)	1,900	(5,832)	(544)	1,464	157	(135)	(1,110)	(1,017)	(16)
Covered Employee Payroll	128,680	129,076	132,015	131,977	133,054	143,558	146,044	148,710	144,838	138,747
Actual Contributions as a Percentage of Covered Employee Payroll	22.18%	9.04%	20.7%	15.77%	14.39%	12.3%	10.85%	10.26%	9.14%	7.79%

Schedule of Employer Contributions- Pension Funds

CERS Nonhazardous	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially Determined Employer Contribution	$297,715	$324,231	$294,914	$261,764	$218,985	$186,724	$161,097	$138,311	$112,508	$83,124
Actual Employer Contributions	298,566	324,231	294,914	275,736	248,519	207,076	179,285	150,925	124,261	90,834
Annual Contribution Deficiency (Excess)	(851)	-	-	(13,972)	(29,534)	(20,352)	(18,188)	12,614	(11,753)	(7,710)
Covered Employee Payroll	2,296,716	2,272,270	2,236,277	2,236,546	2,276,596	2,236,855	2,183,612	2,166,613	2,076,848	1,982,437
Actual Contributions as a Percentage of Covered Employee Payroll	13%	14.27%	13.19%	12.33%	10.92%	9.26%	8.21%	6.97%	5.98%	4.58%

Schedule of Employer Contributions- Pension Funds

CERS Hazardous	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially Determined Employer Contribution	$107,514	$115,240	$120,140	$83,589	$78,796	$76,391	$69,056	$64,082	$53,890	$44,059
Actual Employer Contributions	108,071	115,240	120,140	89,329	85,078	82,887	78,152	72,155	61,553	49,979
Annual Contribution Deficiency (Excess)	(557)	-	-	(5,740)	(6,282)	(6,496)	(9,096)	(8,073)	(7,663)	(5,917)
Covered Employee Payroll	483,641	479,164	461,673	464,229	466,964	466,549	469,315	474,241	458,999	429,928
Actual Contributions as a Percentage of Covered Employee Payroll	22.35%	24.05%	26.02%	19.24%	18.22%	17.77%	16.65%	15.21%	13.41%	11.71%

Schedule of Employer Contributions- Pension Funds

SPRS	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially Determined Employer Contribution	$31,444	$25,808	$23,117	$20,498	$18,463	$18,765	$15,952	$13,823	$9,024	$6,353
Actual Employer Contributions	31,990	20,279	18,501	15,362	12,657	9,489	8,186	7,443	6,142	4,244
Annual Contribution Deficiency (Excess)	(546)	5,529	4,616	5,136	5,806	9,276	7,766	6,380	2,882	2,109
Covered Employee Payroll	45,765	44,616	45,256	48,373	48,693	51,507	51,660	53,269	49,248	47,744
Actual Contributions as a Percentage of Covered Employee Payroll	69.9%	45.45%	40.88%	31.76%	25.99%	18.42%	15.85%	13.97%	12.47%	8.89%

Schedule of Changes in the Net Pension Liability *(in Thousands)*

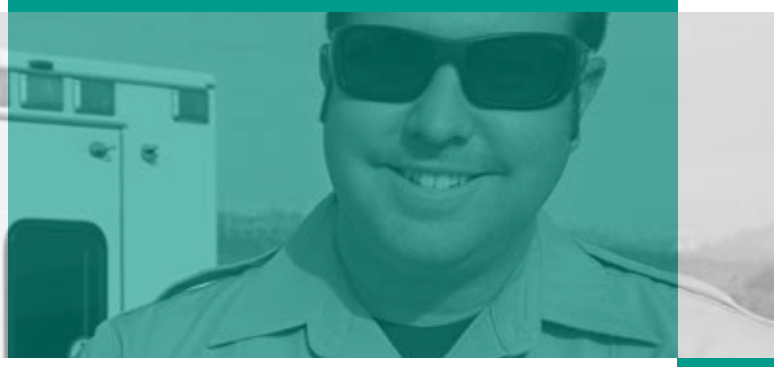
	KERS Nonhazardous		KERS Hazardous		CERS Nonhazardous		CERS Hazardous		SPRS Hazardous	
Total Pension Liability (TPL)	**2015**	**2014**	**2015**	**2014**	**2015**	**2014**	**2015**	**2014**	**2015**	**2014**
Service Cost	$143,847	$133,361	$18,729	$16,880	$207,399	$192,482	$71,935	$66,762	$7,696	$7,142
Interest	859,509	853,652	61,005	59,594	733,003	710,527	247,008	238,665	50,660	50,391
Benefit Changes	-	-	-	-	-	-	-	-	-	-
Difference between Expected and Actual Experience	30,958	-	6,066	-	49,966	-	41,935	-	9,331	-
Changes of Assumptions	694,591	-	52,166	-	606,293	-	166,849	-	40,202	-
Benefit Payments	(905,790)	(889,936)	(56,774)	(54,321)	(615,335)	(582,850)	(200,134)	(189,635)	(54,766)	(53,026)
Refunds of Contributions	(13,552)	(13,627)	(2,609)	(2,830)	(13,524)	(14,286)	(3,111)	(2,664)	(85)	(213)
Net Change in TPL	809,563	83,450	78,583	19,323	967,802	305,873	324,482	113,127	53,038	4,294
TPL - Beginning	11,550,110	11,466,660	816,850	797,527	9,772,523	9,466,650	3,288,826	3,175,699	681,119	676,825
TPL - Ending (a)	**$12,359,673**	**$11,550,110**	**$895,433**	**$816,850**	**$10,740,325**	**$9,772,523**	**$3,613,308**	**$3,288,826**	**$734,157**	**$681,119**
Plan Net Position										
Contributions - Employers	$521,692	$296,836	$28,536	$11,671	$298,565	$324,231	$108,072	$115,240	31,990	$20,279
Contributions-Members	104,605	97,487	13,207	12,546	140,311	128,568	47,693	43,722	5,244	5,076
Net Investment Income	44,569	337,922	8,701	80,724	110,569	895,531	37,104	288,490	3,427	40,374
Benefit Payments	(905,790)	(889,936)	(56,774)	(54,321)	(615,335)	(582,850)	(200,134)	(189,635)	(54,766)	(53,026)
Administrative Expense	(10,474)	(11,145)	(844)	(898)	(18,212)	(18,615)	(1,289)	(1,721)	(201)	(215)
Refunds of Contributions	(13,552)	(13,627)	(2,609)	(2,830)	(13,524)	(14,286)	(3,111)	(2,665)	(85)	(213)
Other	8,442	-	767	-	10,280	-	2,865	-	646	-
Net Change in Plan Position	(250,508)	(182,463)	(9,016)	46,892	(87,346)	732,579	(8,800)	253,431	(13,745)	12,276
Plan Net Position-Beginning	2,578,290	2,760,753	561,484	514,592	6,528,146	5,795,568	2,087,002	1,833,571	260,974	248,698
Plan Net Position-Ending (b)	**$2,327,782**	**$2,578,290**	**$552,468**	**$561,484**	**$6,440,800**	**$6,528,147**	**$2,078,202**	**$2,087,002**	**$247,229**	**$260,974**
Net Pension Liability - Ending (a-b)	**$10,031,891**	**$8,971,820**	**$342,965**	**$255,366**	**$4,299,525**	**$3,244,376**	**$1,535,106**	**$1,201,824**	**$486,928**	**$420,145**
Ratio of Plan Net Position to TPL	18.83%	22.32%	61.7%	68.74%	59.97%	66.80%	57.52%	63.46%	33.68%	38.32%
Covered Employee Payroll	$1,544,234	$1,577,496	$128,680	$129,076	$2,296,716	$2,272,270	$483,641	$479,164	$45,765	$44,616
Net Pension Liability as a percentage of Covered Employee Payroll	649.64%	568.74%	266.53%	197.84%	187.2%	142.78%	317.41%	250.82%	1,063.97%	941.69%

Additional Supporting Schedules

Schedule of Administrative Expenses
(in Thousands) for the fiscal years ended June 30

Expense	2015	2014
Personnel		
Salaries and Per Diem	$14,292	$13,869
Fringe Benefits	8,687	6,899
Tuition Assistance	34	33
Total Personnel	**$23,013**	**$20,801**
Contractual Services		
Actuarial	337	521
Audit	108	76
Healthcare	3	257
Legal Counsel	722	1,787
Medical	315	258
Miscellaneous	269	312
Total Contractual Services	**$1,754**	**$3,211**
Communication		
Printing	81	359
Telephone	105	123
Postage	300	545
Travel	116	159
Total Communication	**$602**	**$1,186**
Rentals		
Office Space	718	706
Equipment	76	84
Total Rentals	**$794**	**$790**
Internal Audit		
Travel/Conferences	$4	$4
Dues/Subscriptions	1	1
Miscellaneous	1	-
Total Internal Audit	**$6**	**$5**
Investments - Pension Fund		
Travel/Conferences	37	61
Dues/Subscriptions	8	34
Computer	21	169
Contractual*	225	1,490
Miscellaneous	7	7
Legal	126	449
Total Investments	**$424**	**$2,210**
Miscellaneous		
Utilities	223	225
Software	1,746	2,268
Supplies	116	122
Insurance	82	67
Dues & Subscriptions	47	47
Maintenance	4	6
Other	20	21
Total Miscellaneous	**$2,238**	**$2,756**
Depreciation/Amortization	2,189	1,634
Total Pension Fund Administrative Expenses	**$31,020**	**$32,593**
Healthcare Fees	2,180	1,614
Total Insurance Fund Administrative Expenses	**$2,180**	**$1,614**
Total Administrative Expenses	**$33,200**	**$34,207**

** These fees are paid by the Trust instead of the Administrative Budget to calculate Tier 3 GANIR benefits as required under Senate Bill 2.*



Schedule of Direct Investment Expenses *(in Thousands)* for the fiscal years ended June 30

Pension Funds	2015	2014
Security Lending Fees		
↘ Broker (Income) Rebates	$(159)	$(433)
↘ Lending Agent Fees	444	675
Total Security Lending	**285**	**242**
Contractual Services		
↘ Investment Management	53,411	42,867
↘ Security Custody	1,010	2,763
↘ Investment Consultant	1,258	-
↘ Private Equity Performance Fees	25,627	-
↘ Investment Related Travel	34	54
↘ Software	21	169
↘ Dues & Subscriptions	8	34
↘ Conferences	3	7
↘ Miscellaneous	7	7
↘ Legal Counsel	126	449
Total Contractual Services	**$81,505**	**$46,350**
Insurance Funds		
Security Lending Fees		
↘ Broker (income) Rebates	(336)	(112)
↘ Lending Agent Fees	155	222
Total Security Lending	**(181)**	**110**
Contractual Services		
↘ Investment Management	18,661	14,896
↘ Security Custody	675	765
↘ Investment Consultant	448	-
↘ Private Equity Performance Fees	8,200	-
Total Contractual Services	**27,984**	**15,661**
Total Investment Expenses	**$109,593**	**$62,363**

Schedule of Professional Consultant Fees *(in Thousands)* for the fiscal years ended June 30

Fees	2015	2014
Actuarial Services	$337	$521
Medical Review Services	315	258
Audit Services	108	76
Legal Counsel	722	1,787
Healthcare	3	257
Miscellaneous	269	312
Total	**$1,754**	**$3,211**

REPORT ON
INTERNAL CONTROL

over financial reporting and on compliance and other matters based on an audit of financial statements performed in accordance with government auditing standards

DEANDORTON
DEAN DORTON ALLEN FORD, PLLC

REPORT OF INDEPENDENT AUDITORS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the combining financial statements of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems (KRS) as of and for the fiscal year ended June 30, 2015, and the related notes to the combining financial statements, which collectively comprise KRS' basic combining financial statements, and have issued our report thereon dated December 3, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the combining financial statements, we considered KRS' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the combining financial statements, but not for the purpose of expressing an opinion on the effectiveness of KRS' internal control. Accordingly, we do not express an opinion on the effectiveness of KRS' internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

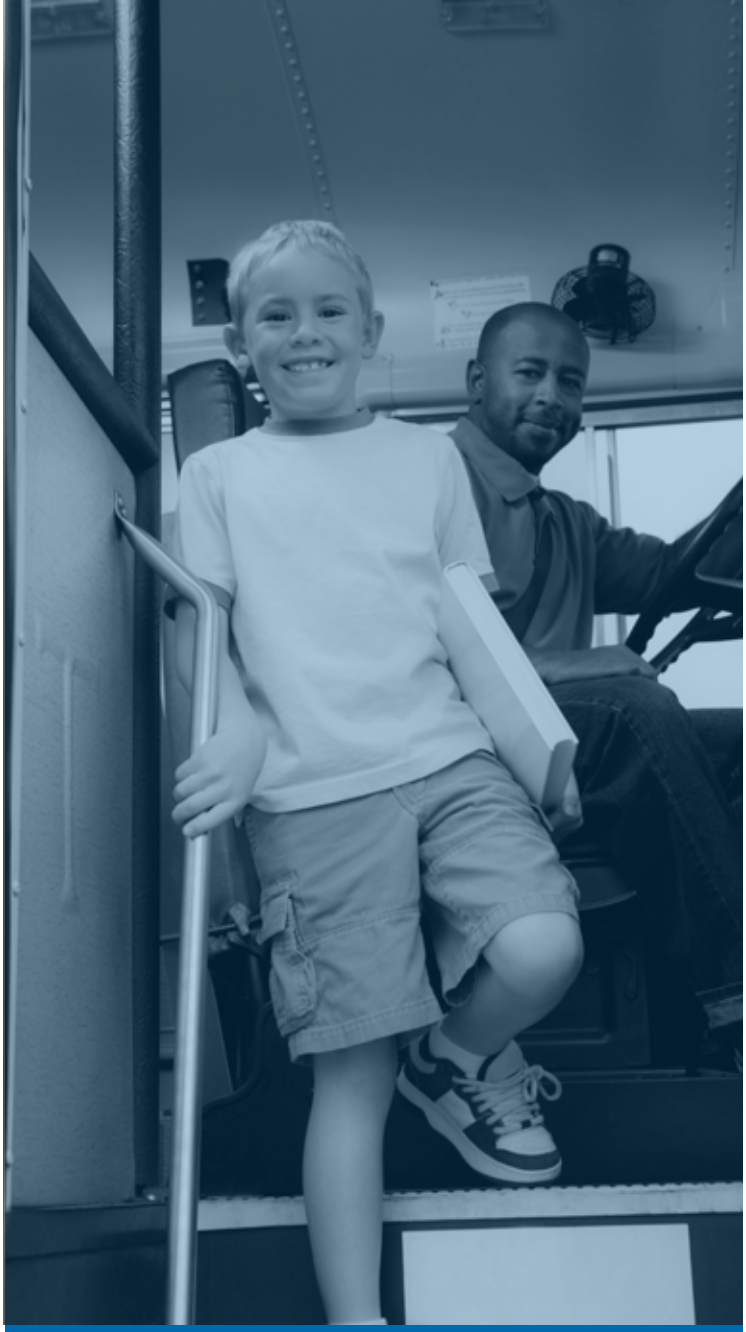
As part of obtaining reasonable assurance about whether KRS' combining financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of combining financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Governmental Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Dean Dorton Allen Ford, PLLC

December 3, 2015
Lexington, Kentucky



INVE

INVESTMENT

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STMENT

Fed
Federal Reserve

MBS
Mortgage Backed Securities

GDP
Gross Domestic Product

U.S. Economy Getting Stronger

...will it be dragged down by economic weakness worldwide?

In a world starved for economic growth, the United States continues to be one of the few bright spots. As such, investors continue to look favorably upon U.S. private and public equity markets as well as real estate. The U.S. stock market provided a solid return for the fiscal year, evidenced by the Russell 3000 Index return of 7.29%; however, this was a drop off from the prior two fiscal years. For the second year in a row, a colder and snowier than normal winter took its toll on economic growth as GDP growth for the first quarter of 2015 was measured at a modest 0.80% annualized pace. The other three quarters of the fiscal year fared much better providing annualized growth rates ranging from 2.02% to 4.47%. Job creation during the fiscal year was promising with all but two months adding over 200,000 jobs to the no-farm payrolls; March and April were the dissenters, perhaps influenced by winter. Along with an improved economy comes an improved U.S. housing market to match an already performing commercial real estate segment. Private equity investors continue to take advantage of the liquidity in the capital markets and the strong U.S public equity markets to exit deals and harvest gains.

During the fiscal year, several geopolitical and macro events occurred pointing to a struggling global economy. One of the few bright spots outside of the U.S. was found in the European economy which is no longer shrinking, but experiencing modest growth (2.0%). Stock prices in Europe have improved on the backs of an improving economy and continued support in the form of quantitative easing by the EU Central Bank; however, a decreasing Euro versus the USD has offset any local gains for U.S. investors, a phenomenon that has echoed across the global landscape. Greece continued to affect the world stock markets as it worked through its debt problems and fears of contagion persisted. In an attempt to fight its way out of a twenty-five year deflationary environment, Japan's central bank pumped an unprecedented amount of liquidity into its economy. There is some hope that this act will be successful as some early signs that it is working emerge. The first and last quarters of the fiscal year had slightly negative GDP growth; however, the quarter ending March 2015, was extremely robust evidence by an annualized GDP growth rate of 4.47%. Japan continues to have other problems to overcome such as an aging population, and the effects of such on the economy.

During the fiscal year, China reported strong positive annualized GDP growth that fell from 7.5% during the first quarter of FY15 to 5.0% for the quarter ending March 2015. While this is still fantastic growth, world markets has become accustomed to China growing at 7% to 10% instead of 5% to 7%. Some debate exists as to whether China is experiencing a property bubble, and if so, to what extent and affects, if any, it may have on the overall economy. Additionally, as it relates to property values in China; there is some speculation that their banking system, specifically those like the U.S. community and regional banks, may be under stress associated with overbuilding. Last year China's A-shares (stocks traded on the Shanghai Stock Exchange versus H-shares traded on the Hong Kong exchange) dropped by 50% in value after the stock market had been

artificially pushed up by day traders and extreme levels of leverage, not too different than an environment best describe as the U.S. stock market pre-1929 and pre dot-com bust rolled into one. China has an extremely difficult task of stimulating growth without further fueling these bubbles that have developed.

As China's economy transitions from one of an infrastructure build-out to one more consumer driven, its consumption (ie. demand) for commodities of all types has slowed, and as a major consumer of such has led to a significant decline in commodity values. Further pressuring commodity prices, the Federal Reserve completed the quantitative easing program, which led to a drop in inflation expectations and a drop in inflation sensitive assets. This added pressure to the already strengthening U.S. Dollar, which when combined with falling commodity prices, has really stressed emerging market economies; as a result, emerging market equities were the worst performing asset class in the 2015 fiscal year, followed by real return strategies (i.e. inflation sensitive assets). Because many emerging economies are so dependent on the commodity and agricultural markets continued headwinds are forecasted until global demand recovers. While the emerging nations are expected to struggle in the near-term, developed nations are showing signs of recovery and modest growth.

Global Fixed Income was not a meaningful contributor to performance this year. The fiscal year started poorly for credit sensitive fixed income due to the sell-off in oil, which led to a decrease in the price of bonds issued by any energy related company. Energy companies made up approximately 20% of high yield indices, heavily influencing their performance for the year. Credit sensitive fixed income recovered in the second half of the fiscal year, but not enough so to push the sector into positive territory for the year. U.S. interest rate sensitive fixed income securities started the year strong as interest rates decreased during the first half of the fiscal year, but as rates began to increase during the second part of the year, the environment became more challenging and ultimately dampening the return of the Barclays Aggregate (1.86%). As other developed nations pursue efforts to recover, quantitative easing has the effect of lowering local interest rates (Eurozone / Japan), which is positive for prices, but decreases the value of currencies. As foreign currencies decline in value versus the USD, it becomes less attractive for U.S. investors outside of their home country, as investments lose "real" value due to currency translation. After factoring in a stronger dollar versus other currencies it was not positive to be invested outside the U.S. for the year. Finally, Emerging Market Debt had another tough year, making this the third year in a row, for all the same reasons mentioned above for Emerging Market Equities.

To sum up, the U.S. has been in recovery for some time now. Europe continues to struggle to get a foothold witnessed by modest growth, while emerging countries are left wanting. A global economy starved for growth is turning to the U.S. as its safe haven to pull the rest of the world along. It remains to be seen who will influence whom.

INVESTMENT SUMMARY

The Board of Trustees is charged with the responsibility of investing the Systems' assets to provide for the benefits of the members of the Systems. To achieve that goal, the Board follows a policy of thoughtfully growing our asset base while protecting against undue risk and losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the Systems. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policies, objectives and strategies for both the pension and insurance portfolios.

Investment Policy The KRS Board of Trustees approved a new target asset allocation beginning July 1, 2011. As of June 30, 2015, the KRS Pension fund's policy allocation invests 20.5% of the assets in U.S. equities, 20.0% in broad market international equities, 2.9% in emerging market equities, 9.6% in core fixed income, 4.8% in high yield fixed income, 4.9% in global fixed income, 10.0% in private equity, 10.0% in real return strategies, 10.0% in absolute return strategies, 4.5% in real estate, and 2.8% in cash or short-term securities. As of June 30, 2015, the KRS Insurance fund's policy allocation invests 20.0% of the assets in U.S. equities, 20.0% in broad market international equities, 4.0% in emerging market equities, 10.0% in core fixed income, 5.0% in high yield fixed income, 5.0% in global fixed income, 10.0% in private equity, 10.0% in real return strategies, 10.0% in absolute return strategies, 5.0% in real estate, and 1.0% in cash or short-term securities.

Diversification

KRS portfolios are diversified on several levels. Portfolios are diversified through the use of multiple asset classes. Asset allocations are revisited on a periodic basis and represent an efficient allocation to achieve overall return and risk characteristics. The individual asset classes are diversified through the use of multiple portfolios that are managed both by the Investment Division Staff and by external investment advisors. Finally, portfolios within each of the asset classes are diversified through both investment styles and the selection of individual securities. Each portfolio advisor is afforded discretion to diversify its portfolio(s) within the parameters established by the Board of Trustees.

Rebalancing

Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with KRS' Statement of Investment Policy target levels. Such rebalancing is necessary to reflect sizeable cash flows and performance imbalances among asset classes and investment advisors. KRS' rebalancing policies call for an immediate rebalancing to within its allocation ranges, if an asset class exceeds or falls below its target allocation by an appropriate percentage defined in the investment Policy Statement. As the following charts depict, the Pension and Insurance portfolios were operating within the ranges established by the investment policies.

Investments Performance Review Procedures

At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. The Investment Committee also reviews a report created and presented by the KRS Compliance Officer, who is part of the independent Internal Audit Department. The Compliance Officer performs tests daily, monthly, and quarterly to assure compliance with the restrictions imposed by the Investment Policy.

Investment Consulting

The Board employs industry leading external consultants to assist in determining and reviewing the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from each consulting firm utilized follows this introduction and discusses current allocations, performance, and significant changes during the fiscal year.

Investment Policies
Visit https://kyret.ky.gov/investments to read our Statement of Investment policy. Other policies include Brokerage, Securities Trading, Placement Agents, Proxy Voting and more.

Investing in Kentucky
In keeping with the Board of Trustees' fiduciary responsibility, where all else equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

INVESTMENT **OBJECTIVES**

The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

Shorter-Term *(5 years and less):* The returns of the particular asset classes of the managed funds of the Systems, measured on a year-to-year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices.

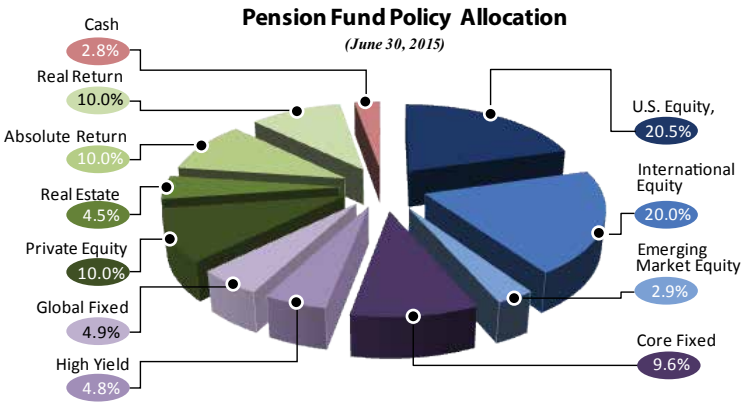
Medium-Term *(5 to 30 years):* The returns of the particular asset classes of the managed funds of the Systems, measured on a rolling year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices and perform above median in an appropriate peer universe, if there is one.

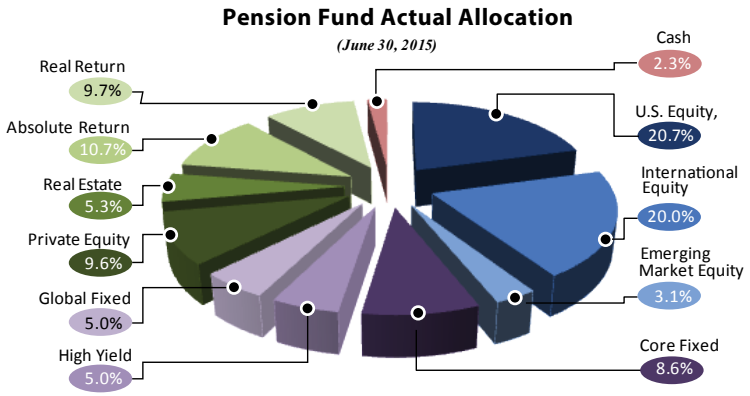
Longer-Term: The total assets of the Systems should achieve a return measured over 30 to 40 years which exceeds the actuarially required rate of return of 7.75% while also exceeding the return achieved by its total fund benchmark. (Note: The actuarially required rate of return has been lowered to 7.5% effective July 1, 2015.)

In keeping with the Board of Trustees' fiduciary responsibility, where all else equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

Asset Allocation Board Policy vs. Actual (Rebalanced)

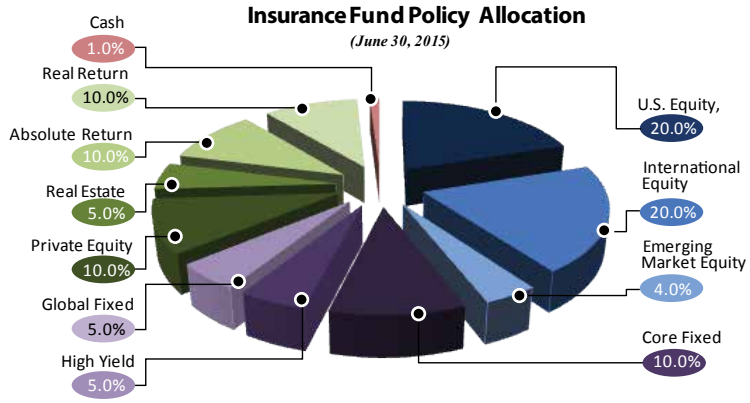
Asset	Policy's Pension Asset Allocation	Actual Pension Asset Allocation
U.S. Equity	20.5%	20.7%
International Equity	20.0%	20.0%
Emerging Market Equity	2.9%	3.1%
Core Fixed	9.6%	8.6%
High Yield	4.8%	5.0%
Global Fixed	4.9%	5.0%
Private Equity	10.0%	9.6%
Real Estate	4.5%	5.3%
Absolute Return	10.0%	10.7%
Real Return	10.0%	9.7%
Cash	2.8%	2.3%

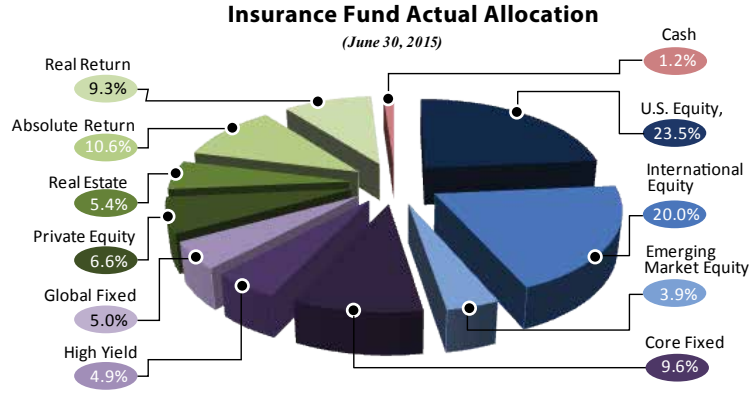




Asset Allocation Board Policy vs. Actual (Rebalanced)

Asset	Policy's Insurance Asset Allocation	Actual Insurance Asset Allocation
U.S. Equity	20.0%	23.5%
International Equity	20.0%	20.0%
Emerging Market Equity	4.0%	3.9%
Core Fixed	10.0%	9.6%
High Yield	5.0%	4.9%
Global Fixed	5.0%	5.0%
Private Equity	10.0%	6.6%
Real Estate	5.0%	5.4%
Absolute Return	10.0%	10.6%
Real Return	10.0%	9.3%
Cash	1.0%	1.2%



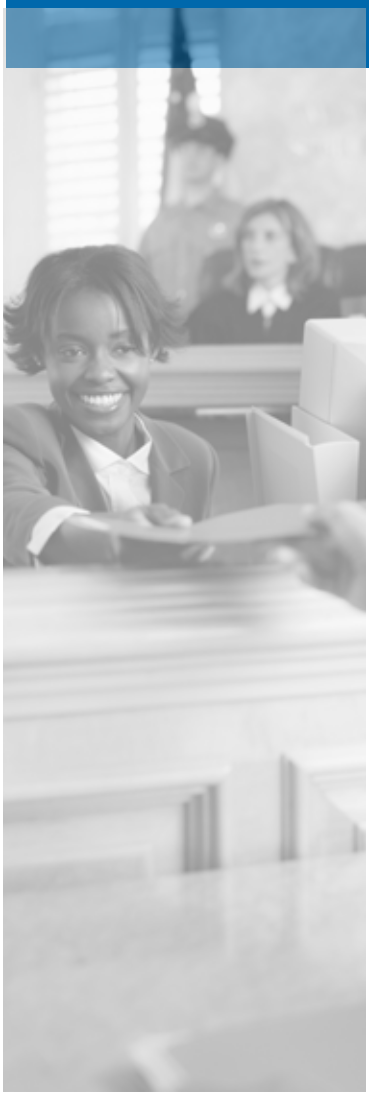


Investment Results

Returns reported by KRS are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

Fiscal Year 2015 Results For the fiscal year ended June 30, 2015, the KRS pension fund produced a net return of 2.01%, underperforming its benchmark return of 3.13%, as well as the actuarially required rate of return of 7.75%. It should be noted that the actuarially required rate is an annualized return that may not be met, or possibly greatly surpassed in any given year; this objective has been met over the long-term.

The underperformance of the pension fund can primarily be attributed to relative weak performance in the U.S. and Emerging Market spaces, combined with relative underperformance within several asset classes. Both the overweight to credit versus interest rate sensitive securities within the Fixed Income portfolio and overweight to debt within the Real Estate portfolio hampered performance. The solid absolute returns provided by the Private Equity allocation, combined with the downside protection offered by the Non-US Equity portfolio bolstered returns for the period.



The KRS insurance fund gained 1.86% net of expenses for the fiscal year ending June 30, 2015, compared to the benchmark's 3.79% return and the actuarially required rate of 7.75%. The insurance fund suffered from the same root causes of underperformance as the pension fund. The slight relative underperformance of the insurance fund versus the pension fund was due primarily to a greater allocation to emerging market equities, a weaker performing asset class, and a lower allocation to private equity, one of the better performing asset classes during the period.

INVESTMENT RESULTS TABLE

Pension Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Pension Fund	Apr-84	2.01%	9.32%	9.18%	6.05%	9.35%
Performance Benchmark[2]	-	3.13%	9.64%	9.85%	6.30%	9.49%

Insurance Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Insurance Fund	Apr-87	1.86%	8.82%	9.33%	5.52%	7.47%
Performance Benchmark[3]	-	3.79%	9.86%	11.09%	6.02%	7.91%

[1]The Performance Calculations presented above were prepared by the Systems' custodial bank using a time-weighted rate of return methodology based upon the market value of assets.
[2]Current Policy Benchmark is comprised of 20.5% Russell 3000, 20.0% MSCI ACWI ex-US GD, 2.9% MSCI EM GD, 19.3% BC Universal, 10.0% Russell 3000 Quarter Lagged + 400bps, 10.0% HFR FOF: Diversified Lagged, 10.0% CPI + 300bps, 4.5% NCREIF Open-End Diversified Core GR, and 2.8% CG 3-Month US Treasury Bill.
[3]Current Policy Benchmark is comprised of 20.0% Russell 3000, 20.0% MSCI ACWI ex-US GD, 4.0% MSCI EM GD, 20.0% BC Universal, 10.0% Russell 3000 Quarter Lagged + 400bps, 10.0% HFR FOF: Diversified Lagged, 10.0% CPI + 300bps, 5.0% NCREIF Open-End Diversified Core GR, and 1.0% CG 3-Month US Treasury Bill.

Note: KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

BENCHMARKS

Benchmarks utilized to measure The Kentucky Retirement Systems' Pension and Insurance Funds are a weighted average composite of the various asset class indexes consisting within each KRS' investment portfolio. The Total Fund Benchmarks are shown below:

Total Fund Benchmarks

Index	Pension Fund	Insurance Fund
Russell 3000	20.5%	20.0%
MSCI ACWI ex US GD	20.0%	20.0%
MSCI Emerging Markets GD	2.9%	4.0%
Barclays Capital US Universal	19.3%	20.0%
Russell 3000 Quarter Lagged + 400 bps	10.0%	10.0%
HFR FOF: Diversified Lagged	10.0%	10.0%
CPI + 300 bps	10.0%	10.0%
NCREIF Open-End Diversified Core GR	4.5%	5.0%
CG 3-Mo U.S. Treasury Bill	2.8%	1.0%

These benchmarks are intended to be objective, measurable, investable, replicable, and representative of the investment mandates. The benchmarks are developed from publicly available information, and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate and status. KRS' Investment Staff and Consultant recommend the indexes and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the Board of Trustees. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total Benchmarks will evolve to reflect these exposures.

LONG-TERM RESULTS

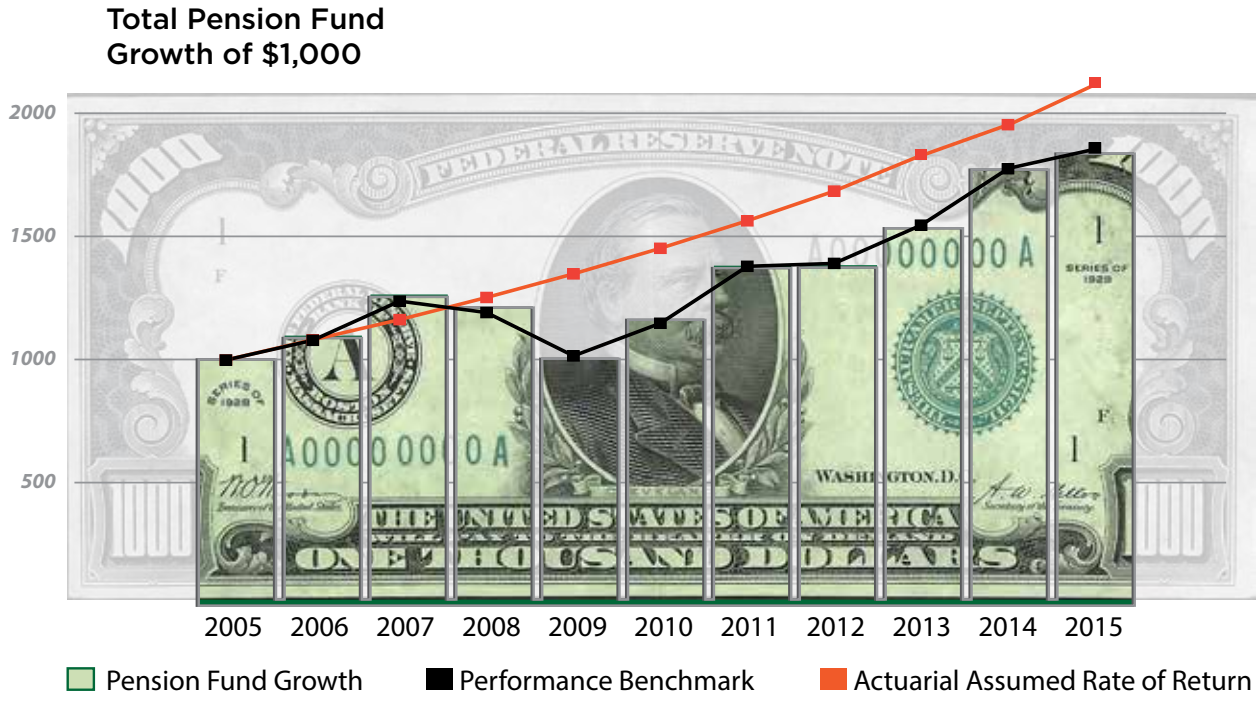
Long-Term Results:

For the 10-years ending June 30, 2015, the KRS pension fund portfolio earned an annualized total net return of 6.05% versus the benchmark annualized return of 6.30%. Performance is illustrated below in a growth of dollars chart. The graph demonstrates the performance of $1,000 invested in the KRS pension portfolio, its policy benchmark portfolio, and its actuarial objective over the past 10 years.

As of June 30, 2015, the chart indicates that $1,000 would have grown to $1,807, while the same $1,000 invested in the benchmark or in the actuarial objective would have grown to $1,842 and $2,119, respectively.

Total Pension Fund Growth of $1,000

Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pension Fund Growth	$1,000	$1,097	$1,264	$1,211	$1,003	$1,161	$1,381	$1,383	$1,533	$1,771	$1,807
Performance Benchmark	1,000	1,081	1,242	1,195	1,017	1,151	1,385	1,397	1,554	1,786	1,842
Actuarial Assumed Rate of Return	1,000	1,083	1,166	1,257	1,354	1,459	1,572	1,694	1,825	1,967	2,119

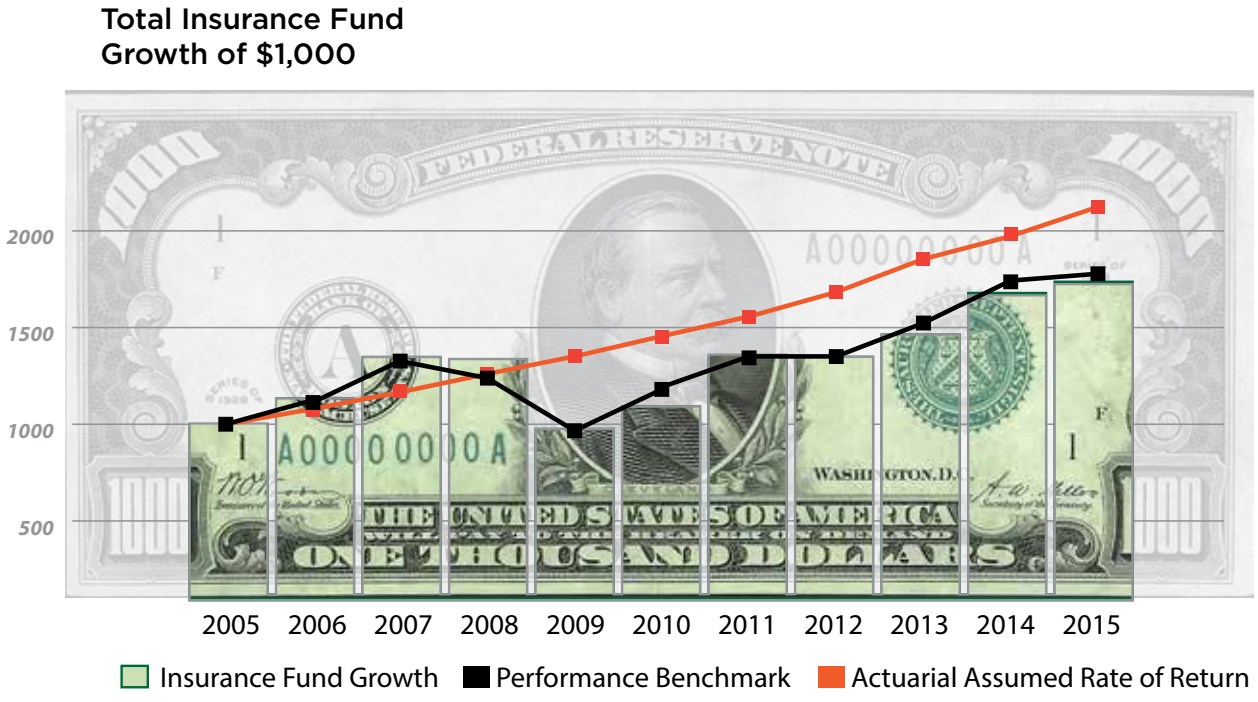


The KRS insurance fund has underperformed its benchmark for the 10-year period ending June 30, 2015, earning 5.52% versus 6.02%. Performance is illustrated by the growth of dollars chart below. The graph highlights the performance of $1,000 invested in the KRS insurance portfolio ($1,714), benchmark ($1,793), and actuarial objective ($2,119) over the past 10 years.

As the results show in the accompanying insurance charts and table above, the KRS insurance fund has struggled during all measured standard return ranges.

Total Insurance Fund Growth of $1,000

Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Insurance Fund Growth	$1,000	$1,124	$1,341	$1,236	$949	$1,096	$1,353	$1,330	$1,464	$1,682	$1,714
Performance Benchmark	1,000	1,112	1,325	1,219	937	1,060	1,345	1,353	1,502	1,728	1,793
Actuarial Assumed Rate of Return	1,000	1,083	1,166	1,257	1,354	1,459	1,572	1,694	1,825	1,967	2,119



U.S. Equity

For the fiscal year ended June 30, 2015, the KRS pension fund's U.S. equity portfolio posted a return of 6.04%, versus the benchmark return of 7.29%. The KRS insurance U.S. equity portfolio posted a return of 6.28%, compared to the benchmark return of 7.29%.

Since inception performance remains sound; the pension's equity portfolio has generated an annualized return of 11.39% throughout its duration, while the benchmark posted an annualized annual return of 11.37%. The insurance fund has returned 9.53% since inception, while the benchmark returned 9.36%.

The relative performance is best illustrated again by the growth of a dollar chart on page 103. For the 10-year period ending June 30, 2015, the pension fund's chart indicates that $1,000 would have resulted in $2,197 while the same $1,000 invested in the benchmark would result in $2,187. For the KRS insurance fund, ending June 30, 2015, a $1,000 investment would be valued at $2,129, compared to $2,180 in the benchmark.

Note: Returns reported by KRS are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

Return on U.S. Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	6.04%	17.15%	16.90%	8.18%	11.39%
↘ Performance Benchmark[1]	-	7.29%	17.73%	17.52%	8.27%	11.37%
Insurance Fund	Jul-92	6.28%	17.07%	16.72%	7.84%	9.53%
↘ Performance Benchmark[1]	-	7.29%	17.73%	17.42%	8.11%	9.36%
Market Indices						
Russell 1000 (Large Cap)	-	7.37%	17.73%	17.58%	8.13%	-
Russell 2000 (Small Cap)	-	6.49%	17.87%	17.08%	8.40%	-
Russell 3000 (Total Equity)	-	7.29%	17.73%	17.54%	8.15%	-

[1] Pension and Insurance benchmark is the Russell 3000; effective July 1, 2011.

Top 10 U.S. Equity Holdings Pension Fund

Company	Shares	Market Value
APPLE INC COM STK	528,667	$66,308,058
MICROSOFT CORP COM	728,616	32,168,396
JP MORGAN CHASE & CO.	386,103	26,162,339
EXXON MOBIL CORP COM	293,517	24,420,614
JOHNSON & JOHNSON	217,109	21,159,443
WELLS FARGO & CO	363,661	20,452,295
PFIZER INC COM	596,584	20,003,462
COMCAST	326,729	19,649,482
BERKSHIRE HATHAWAY INC	143,057	19,471,488
CITIGROUP	351,406	19,411,667
Total	**3,935,449**	**$269, 207,244**

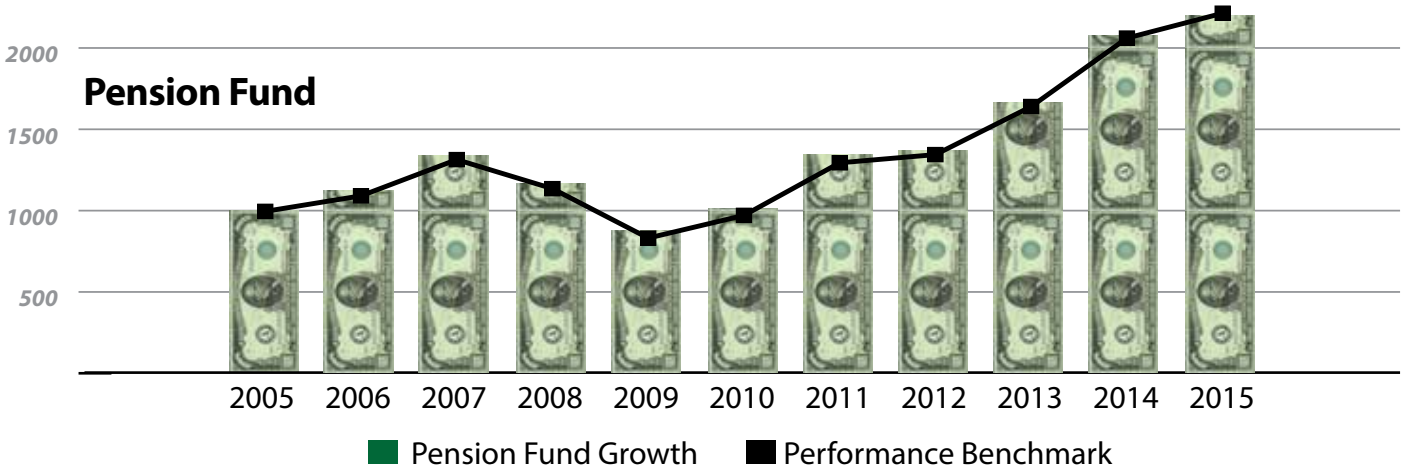
Top 10 U.S. Equity Holdings Insurance Fund

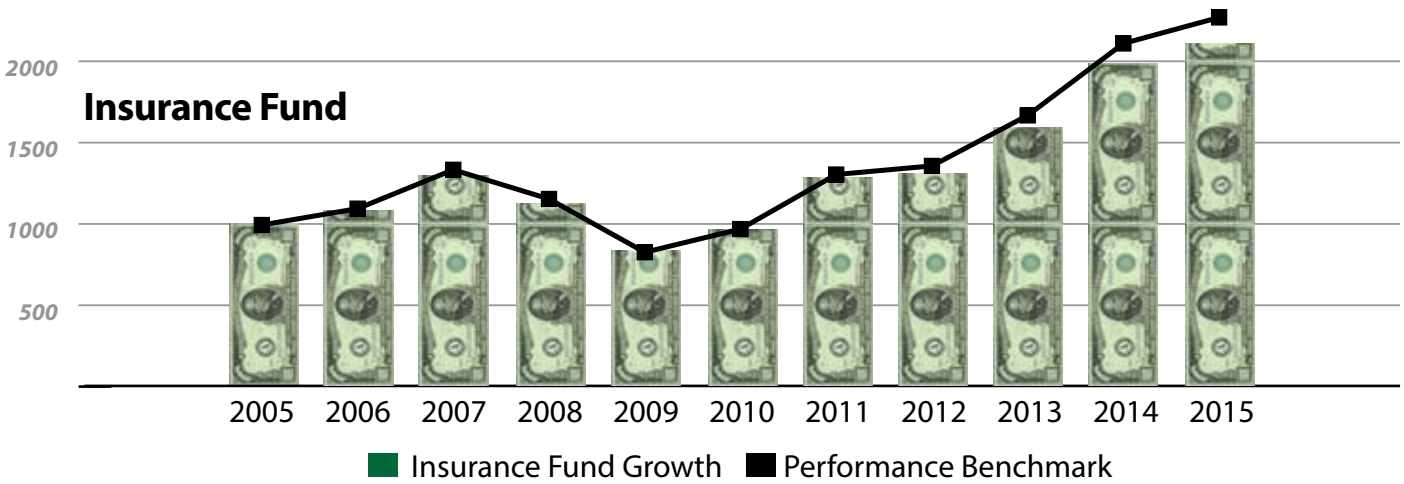
Company	Shares	Market Value
APPLE INC COM STK	214,619	$26,918,588
MICROSOFT CORP COM	272,446	12,028,491
EXXON MOBIL CORP COM	136,391	11,347,731
JOHNSON & JOHNSON	102,559	9,995,400
WELLS FARGO & CO	172,889	9,723,277
JPMORGAN CHASE & CO	140,409	9,514,114
GENERAL ELECTRIC CO	328,685	8,733,160
BERKSHIRE HATHAWAY INC	59,493	8,097,592
FACEBOOK INC	80,915	6,939,675
PROCTOR & GAMBLE CO/THE	88,500	6,924,240
Total	**1,596,906**	**$110,222,268**

GROWTH OF $1,000 - U.S. Equity

U.S. Equity Portfolio Growth of $1,000

Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pension Fund Growth	$1,000	$1,119	$1,335	$1,163	$875	$1,006	$1,338	$1,367	$1,660	$2,072	$2,197
↘ Performance Benchmark	1,000	1,093	1,310	1,136	840	976	1,291	1,340	1,628	2,038	2,187
Insurance Fund Growth	1,000	1,098	1,315	1,144	857	982	1,301	1,327	1,610	2,003	2,129
↘ Performance Benchmark	1,000	1,093	1,314	1,148	845	977	1,287	1,336	1,623	2,032	2,180





International Equity

For the fiscal year ended June 30, 2015, the KRS pension fund's international equity portfolio fell -3.99%, compared to its benchmark of -4.85%, providing 86 basis points of downside protection. The KRS insurance international equity portfolio returned -4.17% versus its benchmark of -4.85% during the same twelve month period. As the accompanying table indicates, though international equities experienced negative absolute returns during the fiscal year, both funds experience positive relative outperformance.

International equity investors have experienced a volatile period of returns over the past several years, resulting in a chart that resembles a roller coaster (below). Over the past five years both funds have underperformed their respective benchmarks. The KRS Pension and Insurance funds have posted annualized returns for the period of 6.85% and 6.32% respectively, compared to respective benchmark returns of 8.35% and 8.29%. The Systems began their international equity program in 2000. Since inception, the pension international equity portfolio has underperformed the benchmark, while the insurance international equity portfolio has outperformed the benchmark.

Return on International Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-00	-3.99%	10.62%	6.85%	5.35%	2.56%
↘ Performance Benchmark[1]	-	-4.85%	9.92%	8.35%	5.46%	3.13%
Insurance Fund	Apr-00	-4.17%	10.38%	6.32%	5.40%	2.57%
↘ Performance Benchmark[1]	-	-4.85%	9.92%	8.29%	5.10%	2.12%
Market Indices						
MSCI ACWI Ex US	-	-4.85%	9.92%	8.23%	6.01%	-
MSCI Emerging Markets	-	-4.77%	4.08%	4.03%	8.46%	-

[1]Pension and Insurance benchmark is the MSCI ACWI ex-US; effective July 1, 2011.

Top 10 International Equity Holdings Pension Fund

Company	Shares	Market Value
ROCHE HLDGS AG	84,599	$23,717,231
SYMRISE AG	300,671	18,649,875
SHIRE PLC	203,823	16,332,146
RECKITT BENCKISER	181,064	15,627,593
WHITEBREAD PLC	190,394	14,809,939
ADECCO S/A	168,213	13,661,513
VALEO SA	80,221	12,634,179
KEYENCE CORP	23,300	12,578,743
TOTAL SA	256,011	12,428,232
PANDORA A/S	114,788	12,326,942
Total	**1,603,084**	**$152,766,393**

Top 10 International Equity Holdings Insurance Fund

Company	Shares	Market Value
ROCHE HLDGS AG	32,400	$9,083,302
SYMRISE AG NPV	110,913	6,879,658
SHIRE PLC	75,733	6,068,414
RECKITT BENCKISER	67,284	5,807,267
WHITEBREAD PLC	69,001	5,367,293
ADECCO S/A	63,205	5,133,2299
KEYENCE CORP	8,700	4,696,784
VALEO SA	29,704	4,678,147
ACCOR SA	92,203	4,650,704
PANDORA A/S	42,964	4,613,851
Total	**592,107**	**$56,978,649**

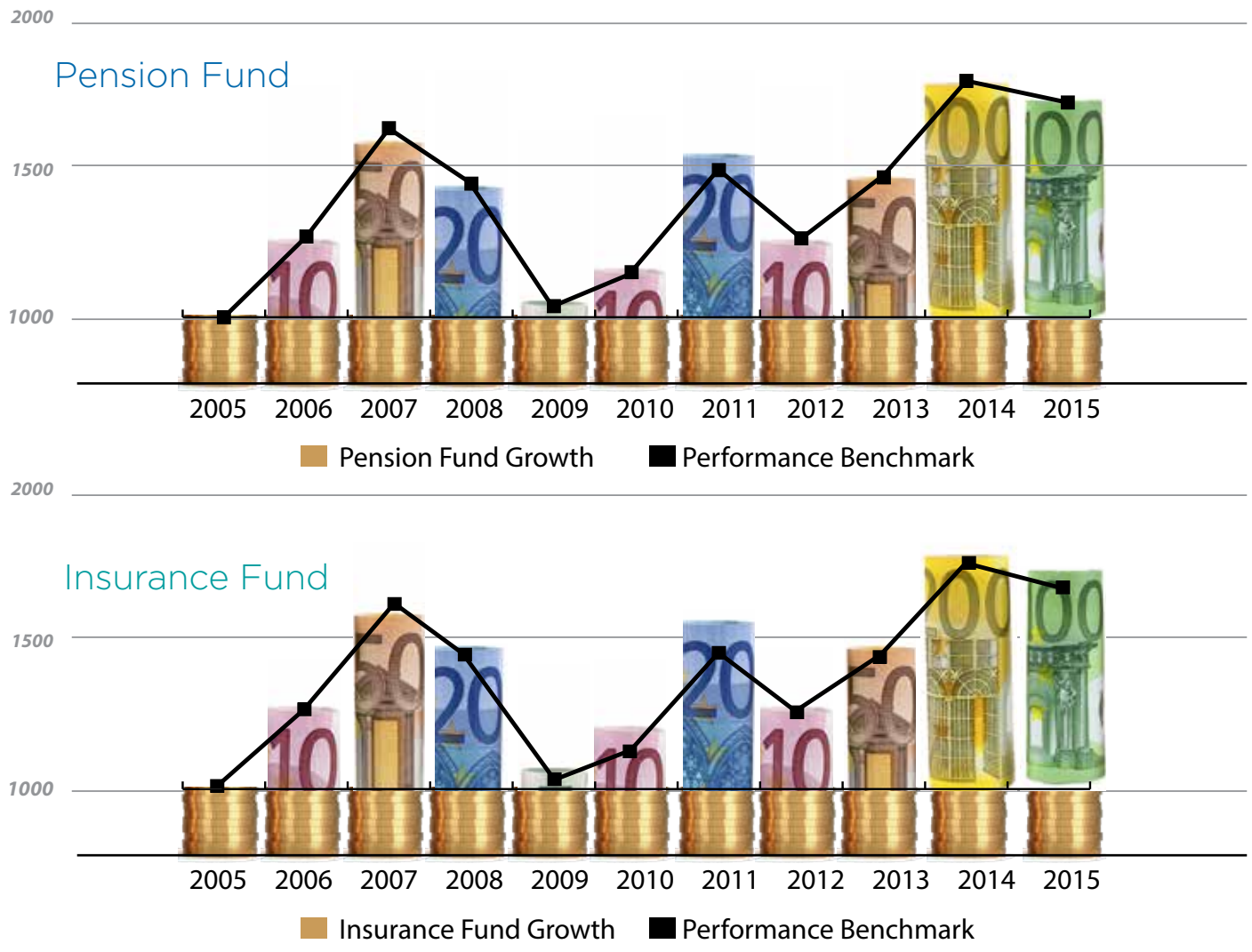
GROWTH OF $1,000 - Non U.S. Equity

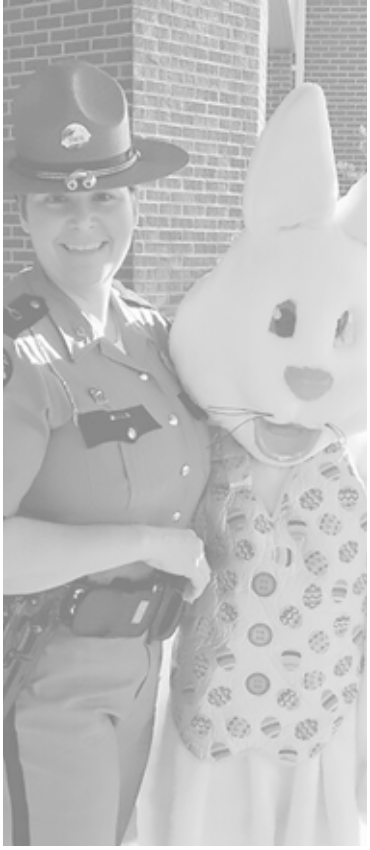
The following chart depicts the growth of $1,000 invested in the KRS international equity portfolios and the blended benchmarks since the beginning of the 2005 fiscal year. For the KRS pension fund, ending June 30, 2015, $1,000 would have resulted in $1,705, while the same amount invested in the benchmark would have resulted in $1,702. For the KRS insurance fund, ending June 30, 2015, $1,000 would have grown to $1,711, while an investment in the index would have been valued at $1,674.

International Equity Portfolio
Growth of $1,000

Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pension Fund Growth	$1,000	$1,265	$1,574	$1,423	$1,052	$1,179	$1,522	$1,259	$1,467	$1,776	$1,705
↘ Performance Benchmark	1,000	1,271	1,621	1,454	1,027	1,140	1,493	1,282	1,463	1,789	1,702
Insurance Fund Growth	1,000	1,275	1,583	1,484	1,087	1,205	1,546	1,273	1,476	1,786	1,711
↘ Performance Benchmark	1,000	1,271	1,621	1,454	1,027	1,124	1,468	1,260	1,439	1,759	1,674

a The non-U.S. equity portfolio included emerging market equity exposure from 03/31/08 through 06/30/11. In addition, the non-U.S. equity portfolio growth chart includes the currency overlay for the 2012 fiscal year; in prior years the currency overlay program was only included at the total fund level. The Systems no longer employ a currency overlay mandate.





Fixed Income

For the fiscal year ended June 30, 2015, the KRS pension fund's fixed income portfolio returned 1.44%, opposed to the benchmark return of 1.61%. As the accompanying table indicates, both of the broad market indices, the Barclays Aggregate Index and the Barclays US Universal Index, posted moderate returns for the twelve month period ending June 30, 2015, while the Barclays High Yield Index provided slightly negative returns. The KRS insurance fixed income portfolio posted a 0.16% rate of return, which underperformed the index by 145 basis points.

Over the five year period, the pension fund has outpaced the benchmark by 117 basis points, while the insurance fund has added 35 basis points annually over its index. Over the ten year period, the pension fund has edged the benchmark by 28 basis points, while the insurance fund has outperformed its benchmark by 27 basis points.

The chart on the following page shows the growth of $1,000 invested in KRS fixed income portfolio over the past ten years. For the KRS pension fund, ending June 30, 2015, $1,000 would have grown to $1,606, while the same $1,000 invested in the benchmark would have grown to $1,569. For the KRS insurance fund, ending June 30, 2015, $1,000 would have grown to $1,701, more than the $1,653 of the benchmark.

Return on Fixed Income

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	1.44%	3.70%	5.02%	4.88%	7.82%
↘ Performance Benchmark[1]	-	1.61%	2.33%	3.85%	4.60%	7.54%
Insurance Fund	Jul-92	0.16%	3.01%	4.65%	4.91%	6.62%
↘ Performance Benchmark[1]	-	1.61%	2.33%	4.30%	4.64%	6.46%
Market Indices						
BC Aggregate	-	1.86%	1.83%	3.35%	4.44%	-
BC Corporate High Yield	-	-0.40%	6.81%	8.61%	7.89%	-
BC U.S. Universal	-	1.61%	2.33%	3.81%	4.68%	-

[1]*Pension and Insurance benchmark is the Barclays US Universal; effective July 1, 2011.*

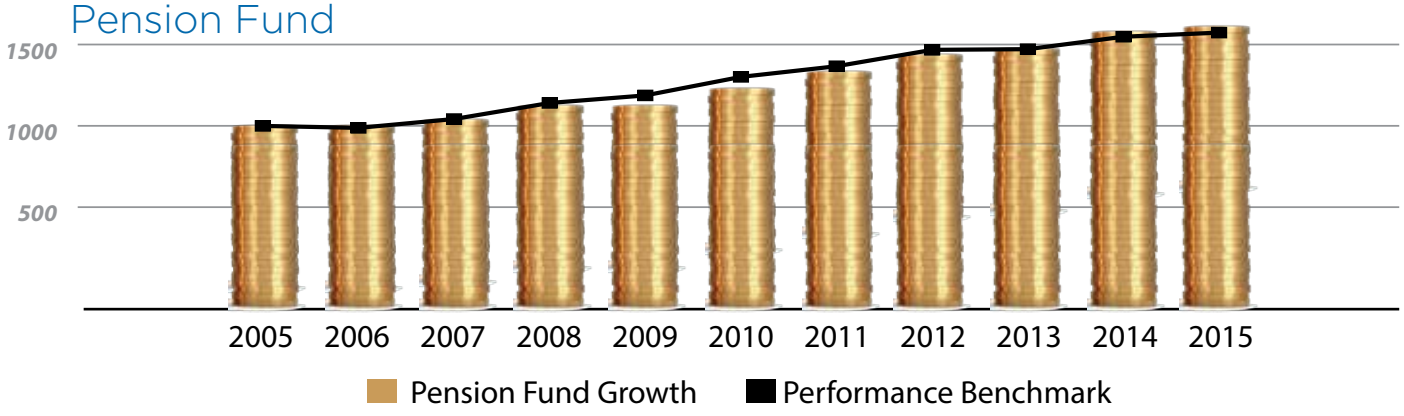
GROWTH OF $1,000 - Fixed Income

Fixed Income Portfolio Growth of $1,000

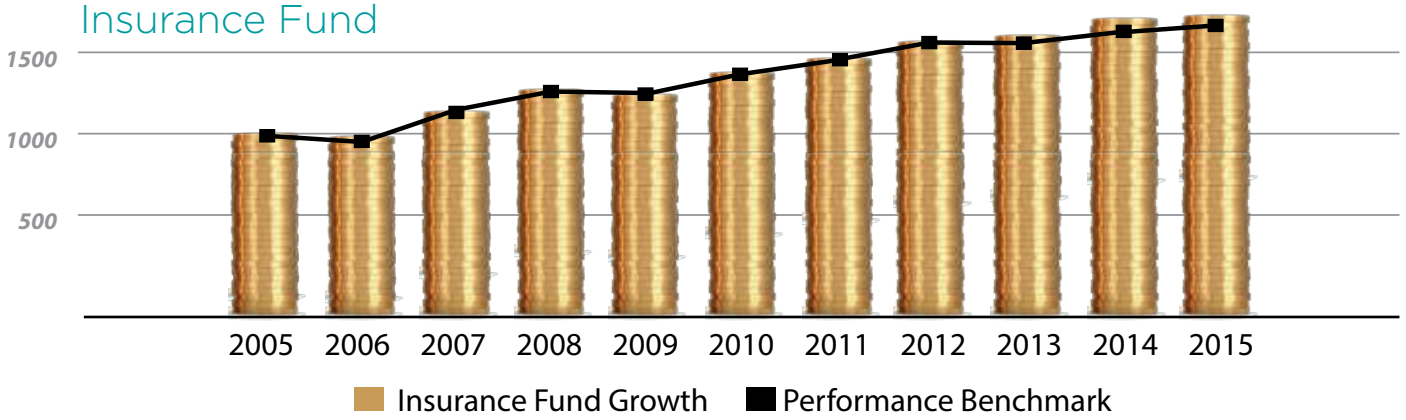
Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pension Fund Growth	$1,000	$988	$1,045	$1,129	$1,123	1,256$	$1,333	$1,441	$1,479	$1,584	$1,606
↘ Performance Benchmark	1,000	988	1,042	1,140	1,186	1,299	1,364	1,464	1,468	1,544	1,569
Insurance Fund Growth	1,000	985	1,136	1,245	1,232	1,349	1,439	1,556	1,595	1,698	1,701
↘ Performance Benchmark	1,000	984	1,132	1,240	1,226	1,343	1,437	1,543	1,546	1,627	1,653

a The fixed income portfolio included US TIPS exposure prior to the 2012 fiscal year; the exposure was moved to the real return asset class as part of the new asset allocation rebalance that took place effective 07/01/12. A separate growth of a dollar chart for the real return asset class will be produced once the Systems have experienced a sufficient history (5 years) within the space.

Pension Fund



Insurance Fund



Top 10 Fixed Income Holdings Pension Fund

Company	Par Value	Market Value
EB TEMP IVN FD VAR RT 12/31/49 FEE CL 12	$46,772,039	$79,201,891
CERBERUS KRS LEVERED LOAN OPP	66,949,843	66,949,843
U S TREASURY NOTE 3.250% 12/31/2016 DD 12/31/09	19,150,000	19,941,431
U S TREASURY NOTE 1.500% 10/31/2019 DD 10/31/14	18,490,000	18,500,114
U S TREASURY NOTE 1.625% 12/31/2019 DD 12/31/14	15,330,000	15,393,482
U S TREASURY NOTE 0.875% 12/31/2016 DD 12/31/11	15,040,000	15,128,119
LOOMIS SAYLES FULL DISCRETION INSTITUTIONAL SECURITIZED FUND	1,279,044	14,581,098
U S TREASURY NOTE 1.500% 01/31/2022 DD 01/31/15	14,300,000	13,844,188
FHLMC POOL #G0-8620 3.500% 12/01/2044 DD 12/01/14	13,265,561	13,662,334
U S TREASURY NOTE 1.250% 10/31/2019 DD 10/31/12	12,590,000	12,476,891
Total	**$223,166,487**	**$269,679,391**

Top 10 Fixed Income Holdings Insurance Fund

Company	Par Value	Market Value
STONE HARBOR EM MKT DEBT-INS	$4,280,481	$44,003,345
CERBERUS KRS LEVERED LOAN OPP	28,692,790	28,692,790
EB TEMP IVN FD VAR RT 12/31/49 FEE CL 12	6,952,792	22,660,392
U S TREASURY NOTE 0.875% 12/31/2016 DD 12/31/11	9,445,000	9,510,397
U S TREASURY NOTE 1.625% 12/31/2019 DD 12/31/14	8,375,000	8,409,681
U S TREASURY NOTE 0.500% 02/28/2017 DD 02/28/15	7,835,000	7,830,103
U S TREASURY NOTE 1.500% 01/31/2022 DD 01/31/15	6,915,000	6,694,584
FHLMC POOL #G0-8620 3.500% 12/01/2044 DD 12/01/14	6,417,920	6,609,880
U S TREASURY NOTE 1.375% 03/31/2020 DD 03/31/15	6,215,000	6,153,820
U S TREASURY NOTE 1.500% 10/31/2019 DD 10/31/14	6,060,000	6,063,315
Total	**$91,188,983**	**$146,628,307**

Equity Emerging Markets

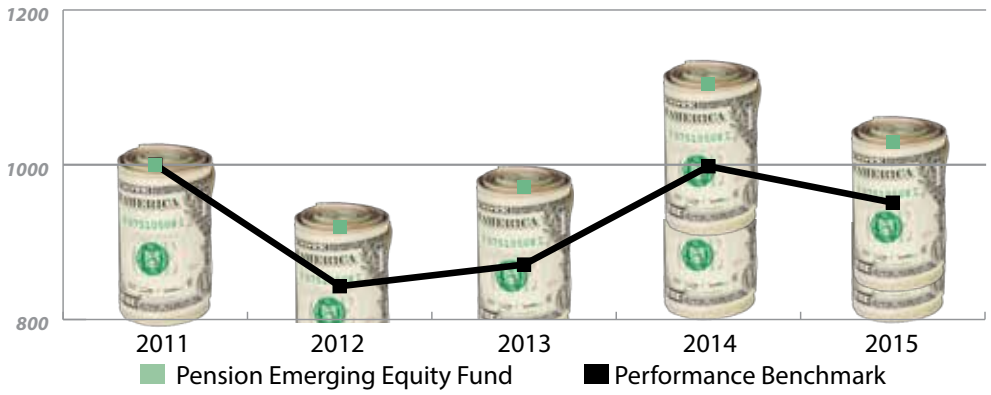
For the fiscal year ended June 30, 2015, the KRS pension fund's equity emerging market portfolio had a return of -6.66%, versus the benchmark return of -4.77%. The KRS insurance equity emerging market portfolio posted a -6.74% rate of return, while the benchmark rate of return was -4.77%.

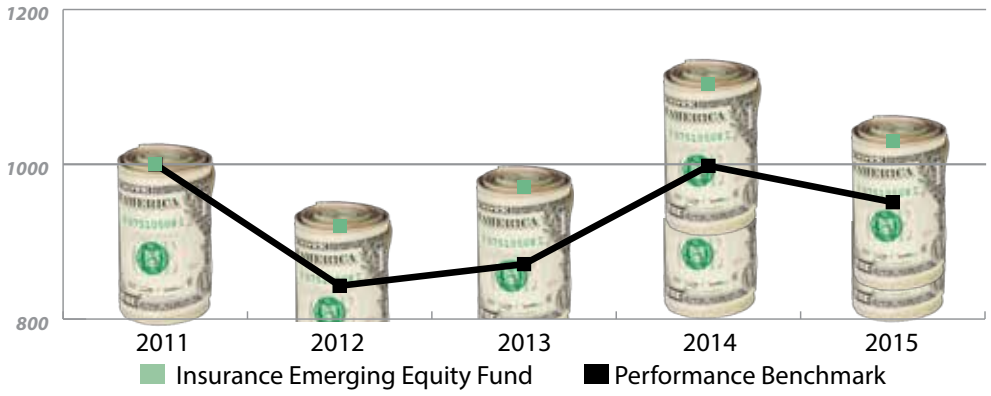
Since inception performance has been strong; the pension and insurance funds' emerging market equity portfolios have generated respective annualized returns of 0.37% and 0.39%, while the benchmark fell -1.26%.

Emerging Markets Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-11	-6.66%	3.58%	-	-	0.37%
↘ Performance Benchmark[1]	-	-4.77%	4.08%	-	-	-1.26%
Insurance Fund	Jul-11	-6.74%	3.59%	-	-	0.39%
↘ Performance Benchmark[1]	-	-4.77%	4.08%	-	-	-1.26%

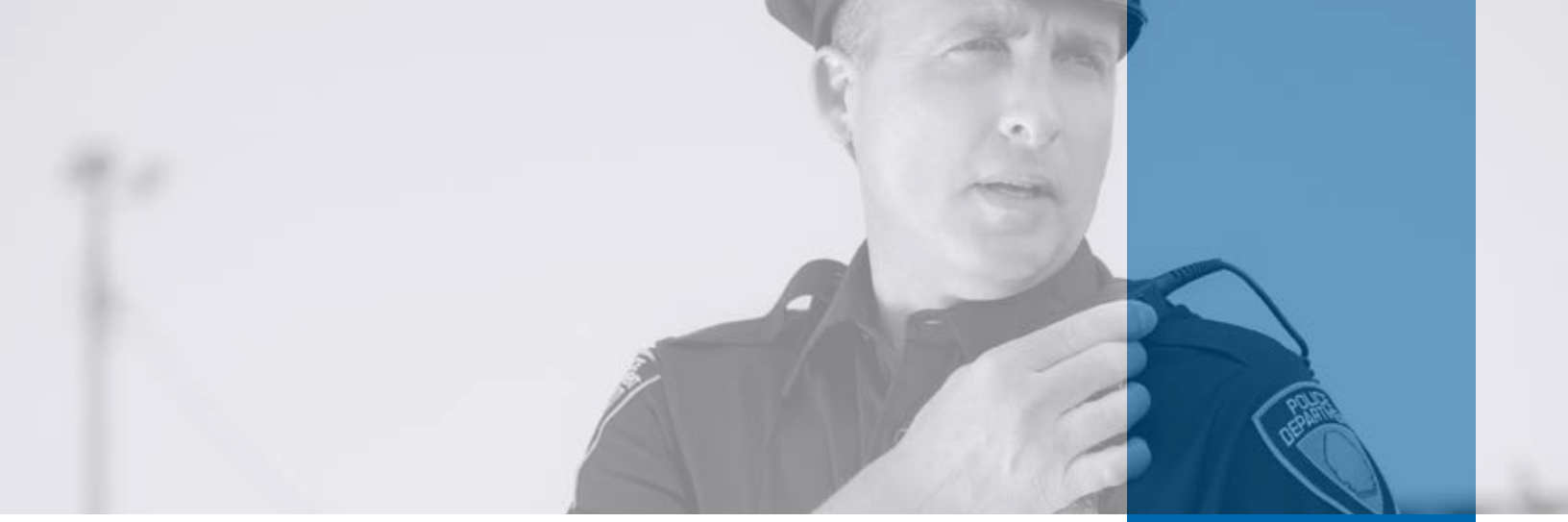
[1]Pension and Insurance benchmark is the MSCI Emerging Markets; effective July 1, 2011.





Equity Emerging Markets Portfolio Growth of $1,000

Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pension Fund Growth							$1,000	$919	$970	$1,103	$1,029
↘ Performance Benchmark							1,000	843	871	998	951
Insurance Fund Growth							1,000	920	971	1,104	1,030
↘ Performance Benchmark							1,000	843	871	998	951



Private Equity

For the fiscal year ended June 30, 2015, the KRS pension fund's private equity portfolio posted a return of 9.61%; the portfolio consists primarily of investments within private equity limited partnerships. The insurance private equity portfolio returned 14.56%. During the prior fiscal year it was decided that the short-term benchmark (1-, 3-, & 5-year) would match the actual performance experienced by the portfolios; due to the difficulty in assessing short term returns. Performance is typically based on appraisals of a business' value, and managers are often slow to mark valuations up or down, which can distort relative performance against a public market benchmark when that index moves dramatically. A better indication of the health of the program would be the mid- to longer-term time periods. This is because businesses have likely been sold and transacted at a true price (rather than estimate of value), thus providing a better performance measurement.

For the five years ending June 30, 2015, the pension and insurance funds' private equity portfolios returned 13.83% and 15.66%, respectively. For the ten year period, the pension fund trailed its benchmark by -1.99%, while the insurance fund also underperformed by -1.03%. Since its inception in October 1990, the pension portfolio has outpaced its benchmark by an annualized 38 basis points per year, while the insurance portfolio has underperformed its benchmark by an annualized 72 basis points since its July 2001 inception.

Return on Private Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Oct-90	9.61%	14.33%	13.83%	8.74%	11.25%
↘ Performance Benchmark[1]		9.61%	14.33%	13.83%	10.73%	10.87%
Insurance Fund	Jul-01	14.56%	15.85%	15.66%	9.14%	9.44%
↘ Performance Benchmark[1]		14.56%	15.85%	15.66%	10.17%	10.16%

[1]Pension and Insurance benchmark 5 years and beyond is the Russell 3000 Quarter Lagged + 400bps. For shorter-term periods, the benchmark matches actual performance experienced.

Real Estate

For the fiscal year ended June 30, 2015, the KRS pension fund's real estate portfolio gained 7.85%, trailing its benchmark return of 12.40%. The KRS insurance real estate portfolio also fell short of the benchmark, returning 7.79% compared to 12.40%. For the five years ending June 30, 2015, both the pension and insurance fund portfolios underperformed the benchmark's return by 202 basis points and 168 basis points, respectively.

Return on Real Estate[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-84	7.85%	9.30%	11.42%	6.03%	5.73%
↘ Performance Benchmark[1]		12.40%	11.60%	13.44%	6.00%	6.21%
Insurance Fund	May-09	7.79%	8.42%	11.76%	--	8.64%
↘ Performance Benchmark[1]		12.40%	11.60%	13.44%	--	4.53%

[1]Pension and Insurance benchmark is the NCREIF Open-End Diversified Core Gross Non Lagged.

Absolute Return

For the fiscal year, ending June 30, 2015, the KRS pension fund's absolute return portfolio gained 5.49% versus its benchmark which earned 6.08%. The KRS insurance absolute return portfolio returned 5.55%, while the benchmark gained 6.08% for the period. For the five years ending June 30, 2015 the pension and insurance portfolios outperformed their respective benchmarks each by an annualized 2.39%. Since inception, the portfolio has provided steady returns; the pension portfolio has returned 5.75%, and the insurance portfolio has provided 5.64%. The portfolio is comprised of three fund of funds, and eight direct relationships.

Return on Absolute Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-10	5.49%	8.71%	6.59%	--	5.75%
↘ Performance Benchmark[1]		6.07%	6.43%	4.15%	--	3.96%
Insurance Fund	Apr-10	5.55%	8.67%	6.59%	--	5.64%
↘ Performance Benchmark[1]		6.08%	6.43%	4.15%	--	3.97%

[1]Pension and Insurance benchmark is the HFR FOF: Diversified Lagged.

Real Return

For the fiscal year ended June 30, 2015, the KRS pension fund's real return portfolio returned -3.98% versus its benchmark return of -2.86%. The KRS insurance real return portfolio posted a return of -3.90%, while the benchmark returned -2.77% for the period. Over the past three years, the pension and insurance real return portfolios have underperformed their respective benchmarks by 103 and 150 basis points.

Return on Real Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-11	-3.98%	1.29%	--	--	3.86%
↘ Performance Benchmark[1]		-2.86%	2.32%	--	--	2.91%
Insurance Fund	Jul-11	-3.90%	0.85%	--	--	3.51%
↘ Performance Benchmark[1]		-2.77%	2.35%	--	--	2.93%

[1]*Pension and Insurance benchmark is CPI + 300bps*

Top 10 Alternatives Asset Holdings Pension Fund

Company	SUB ASSET	Market Value
BLACKSTONE ALTERNATIVE ASSET MANAGEMENT	ABS RET	$375,660,992
PRISMA CAPITAL	ABS RET	368,994,340
PACIFIC ALTERNATIVE ASSET MANAGEMENT COMPANY	ABS RET	363,619,117
INTERNAL TIPS	REAL RET	333,786,923
PACIFIC INVESTMENT MANAGEMENT COMPANY ALL ASSET	REAL RET	329,645,324
NUVEEN REAL ASSET	REAL RET	213,293,350
HARRISON STREET	REAL RET	102,922,877
H/2 CREDIT PARTNERS	REAL RET	102,132,538
DAG VENTURES	PRIVATE EQ	94,656,364
TORTOISE CAPITAL	REAL EST	87,524,208
Total		**$2,372,236,034**

Top 10 Alternatives Asset Holdings Insurance Fund

Company	Par Value	Market Value
BLACKSTONE ALTERNATIVE ASSET MANAGEMENT	ABS RET	$139,376,896
PRISMA CAPITAL	ABS RET	139,009,282
PACIFIC ALTERNATIVE ASSET MANAGEMENT COMPANY	ABS RET	127,570,292
INTERNAL TIPS	REAL RET	122,705,175
PACIFIC INVESTMENT MANAGEMENT COMPANY ALL ASSET	REAL RET	107,920,082
NUVEEN REAL ASSET	REAL RET	87,217,787
HARRISON STREET	REAL EST	36,963,852
H/2 CREDIT PARTNERS	REAL RET	29,064,969
STOCKBRIDGE	REAL EST	28,217,307
MESA WEST CORE LEND	REAL EST	27,888,718
Total		**$845,934,360**

Cash

For the fiscal year ended June 30, 2015, the KRS pension fund's cash portfolio returned 0.16%, outpacing its benchmark, the Citi Group 3-month Treasury by 0.14%. The KRS insurance cash portfolio also outperformed the index, posting a return of 0.21% during the same twelve month period.

As the accompanying table indicates, the longer term results from the cash portfolios have also been excellent with comparison to their benchmark. For the five years ending June 30, 2015, the pension fund portfolio has outperformed its custom benchmark by 0.29% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.45% per year. The insurance portfolio has also done very well, exceeding its benchmark return over the five-year and since inception periods by 0.22% and 0.13%, respectively.

Return on Cash

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jan-88	0.16%	0.36%	0.35%	1.91%	3.87%
↘ Performance Benchmark[1]		0.02%	0.05%	0.06%	1.34%	3.42%
Insurance Fund	Jul-92	0.21%	0.31%	0.28%	1.74%	2.88%
↘ Performance Benchmark[1]		0.02%	0.05%	0.06%	1.34%	2.75%

[1]*Pension and Insurance Cash benchmark is the Citi Group 3-month Treasury.*

Additional Schedules & Required Supplemental Information

Following are additional schedules which indicate the Investment Advisors employed along with the assets each of the firms manages for the Systems, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems as of year ended June 30, 2015.

External Investment Advisors & Assets Under Management *(in Thousands)*

Advisor	Assets Under Management
Aberdeen Asset Management, Aberdeen, Scotland	$169,832
American Century Investments, Kansas City, Kansas	468,946
AMERRA AG Fund II, New York, New York	52,872
Arbor Investments II, Chicago, Illinois	4,565
Arcano Capital, New York, New York	23,656
ARES SSF IV	9,918
Avenue Capital V, New York, New York	33
Bay Hills Emerging Partners I, II, III, San Francisco, California	142,390
BDCM Oppt. Fund IV	4,499
BlackRock Global Investors, San Francisco, California	1,539,908
Blackstone Alternative Asset Management, New York, New York	515,038
Blackstone Capital Partners V & VI, New York, New York	113,030
BTG Pactual	6,896
Cerberus KRS LP	95,643
CM Growth I	14,962
Coatue Qual Ptrns	20,000
Columbia Asset Management, Minneapolis, Minnesota	633,295
Columbia Capital IV, Alexandria, Virginia	34,966
Crestview Partners II, III, New York, New York	70,031
CVC Capital Partners VI, London, England	2,552
DAG Ventures II, III, IV, V QP	167,978
DB Private Equity	12,212
DCM VI LP	17,717
DivcoWest IV, San Francisco, California	45,571
Essex Woodland VIII, Palo Alto, California	26,012
FHA MORTGAGES	1,393
Franklin Templeton, New York, New York	409,223
Greenfield Acquisition Partners VI, Westport, Connecticut	535,038
GTCR Golder Rauner IX, Chicago, Illinois	27,401
H/2 Core Real Estate Debt, Stamford, Connecticut	21,428
Harrison Street, Chicago, Illinois	20,489
Harvest Partners V & VI, New York, New York	51,429
HBK II, Dallas, Texas	131,198
Hellman & Friedman VI, New York, New York	8,747

External Investment Advisors & Assets Under Management *(continued)*

Advisor	Assets Under Management
H.I.G BIO Venture II, Miami, Florida	$7,002
H.I.G. Capital Partners V, Miami, Florida	3,211
H.I.G. Venture Partners II, Miami, Florida	7,722
Horsley Bridge International V LLC, San Fransico, California	38,697
Institutional Venture Partners XI & XII, Menlo Park, California	14,101
Invesco, Atlanta, Georgia	305,362
Jana Partners	20,488
JW Childs Equity III, Boston, Massachusetts	53
Keyhaven Capital Partners, London, England	11,128
Knighthead Capital, New York, New York	20,489
Lazard Asset Management, New York, New York	409,223
Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California	142,722
Levine Leichtman V, Los Angeles, California	23,382
LibreMax Capital	21,042
Loomis, Sayles & Company, Boston, Massachusetts	180,852
LSV Asset Management, Chicago, Illinois	200,592
LUBERT-ADLER VII	11,540
Luxor Capital, New York, New York	18,579
Magnetar Capital MTP, Evanston, Illinois	107,763
Manulife Financial, Boston, Massachusetts	633,295
Matlin Patterson Global Opportunities I, II, III, New York, New York	36,573
Merit Capital Partners IV, Chicago, Illinois	12,184
Mesa West, Los Angeles, California	12,634
Mesa West Core Lending, Los Angeles, California	84,824
MHR Insitituional Advisors III, New York, New York	2,449
Mill Road Capital, Greenwich, Connecticut	25,141
New Mountain Partners II & III, New York, New York	38,620
NISA Investment Advisors, St. Louis, Missouri	1,398,442
Northern Trust Global Investors, Chicago, Illinois	473,886
Nuveen Real Asset	300,511
Oak Hill Partners II & III, New York, New York	43,450
Oberland Capital	3,780
OCM OPPS FD VIIB	951
Pacific Alternative Asset Management Company, Irvine, California	491,189
PIMCO, New Port Beach, California	393
PIMCO ALL-ASSET	437,565
Pine River Capital, Minntonka, MN	21,569
Prima Mortgage, New York, New York	77,779
Prisma Capital Partners, New York, New York	508,004
PROLOGIS TUSL	71,231

External Investment Advisors & Assets Under Management *(continued)*

Advisor	Assets Under Management
Pyramis Global Advisors, Boston, Massachusetts*	$3,954
River Road Asset Management, Louisville, Kentucky	38,768
Riverside Capital VI, NewYork, New York	19,223
Rubenstein PF II, Oakland, California	7,529
Sasco Capital, Fairfield, Connecticut	64,044
Scopia PX LLC	21,296
Shenkman Capital, Stamford, Connecticut	150,003
Stockbridge, San Francisco, California	100,636
Stone Harbor Investments, New York, New York	152,880
Sun Capital Partners IV, Boca Raton, Florida	1,433
Systematic Financial Management, Teaneck, New Jersey	280,659
Taurus Mine Finance	13,787
Technology Crossover Ventures VI, Palo Alto, California	719
Tenaska Power Fund II, Omaha, Nebraska	10,303
The Boston Company, Boston, Massachusetts	200,795
Tortoise Capital, Leawodd, Kansas	113,970
Triton Fund IV, Frankfurt, Germany	17,193
Vantagepoint Venture IV, San Bruno, California	21,067
Vista Equity Partners III & IV, San Francisco, California	70,570
Walton Street Real Estate Fund VI & VII, Chicago, Illinois	73,749
Warburg Pincus IX & X, New York, New York	48,272
Waterfall Investment, New York, New York	172,048
Wayzata Investment Partners I, II, III, Wayzata, Minnesota	52,284
Weaver Barksdale & Associates, Brentwood, Tennessee	-
Wellington Management Company, Boston, Massachusetts	178,772
Westfield Capital, Boston, Massachusetts	159,299
Westwood Management, Dallas, Texas	134,643
Total	**$13,725,182**

CONSULTANTS

Master Custodian & Performance Measurement

Bank of New York Mellon, New York, New York

Investment Consultants

ORG Real Property, Cleveland, Ohio
R.V. Kuhns & Associates, Portland, Oregon
Pension Consulting Alliance, Portland, Oregon
Albourne America, LLC, San Francisco, California

Schedule of Commissions Paid

Asset	Total Shares	Commissions Paid	Price per Share
U.S. Equities	61,537,088	$1,725,089	$0.028
	Total Value of Trades	**Commissions Paid**	**As a % of Trade**
Non-U.S. Equities	$1,631,272,032	$1,692,477	0.104%
Total Commissions Paid		**$3,417,566**	

External Investment Expenses *(in Thousands)*

Pension Fund	Fees Paid	Share of Assets
Portfolio Management Expense	$80,733	0.7024%
Custody Expense	772	0.0067%
Consultant	-	-
Total Pension Expense	81,505	0.7092%
Insurance Fund		
Portfolio Management Expense	27,432	0.6507%
Custody Expense	552	0.0131%
Total Insurance Expense	27,984	0.6638%
Total Expenses	**$109,489**	**0.6970%**

External Investment Expense - Asset Class/Type Breakdown

Pension Fund

	U.S. Public	Non U.S. Equity	Emerging Market	Fixed Income	Real Return	Private Equity	Real estate	Absolute Return	Cash	Total
Fee for Long Balance	-	1,000	--	1,016	--	--	--	--	--	**2,016**
Lending Fee Rebate	(466,790)	(318,545)	--	10,139	422,786	--	--	--	--	**(352,410)**
Investment Advisory Fees	2,932,485	5,251,890	2,147,466	8,293,179	3,907,941	38,500,875	4,100,787	5,581,543	-	**70,716,166**
TMPG Charges	--	--	--	277	--	--	--	--	--	**277**
TMPG Failes Charge	--	--	--	(2,775)	1,710	--	--	--	--	**(1,065)**
Stock Loan Fees	194,243	73,521	--	93,534	133,831	--	--	--	--	**495,129**
Miscellaneous	-	--	--	16	--	--	7,265	--	--	**7,281**
Taxes & Insurance	--	864,377	--	--	--	--	--	--	--	**864,377**
Interest Expense	--	--	--	--	--	--	--	--	--	**--**
Other	1,323	30,308	-	-	645,416	4,207,556	2,731,072	-	-	**7,615,674**
Commission on Future Contracts	1,197	--	--	27,612	325	--	--	--	--	**29,134**
Commission on Swaps Contracts	--	--	--	5,910	--	--	--	--	--	**5,910**
Miscellaneous Tax	--	--	--	--	--	--	--	--	--	**--**
Consultant Fees	--	--	--	--	--	--	--	--	1,258,000	**1,258,000**
Custodial Fees	--	--	--	--	--	--	--	--	722,000	**722,000**
	$2,662,458	**$5,902,551**	**$2,147,466**	**$8,428,908**	**$5,112,010**	**$42,708,431**	**$6,839,124**	**$5,581,543**	**$2,030,000**	**$81,412,489**
								Financial Statement Reported Expenses		$81, 505,195
									Difference	($92,706)

Insurance Fund

	U.S. Public	Non U.S. Equity	Emerging Market	Fixed Income	Real Return	Private Equity	Real estate	Absolute Return	Cash	Total
Fee for Long Balance	--	75	--	475	--	--	--	--	--	**550**
Lending Fee Rebate	(180,832)	(207,299)	--	13,920	168,599	--	--	--	--	**(205,612)**
Investment Advisory Fees	914,810	1,704,205	949,049	2,716,616	1,559,151	12,302,670	1,696,759	1,944,631	--	**21,842,260**
TMPG Charges	--	--	--	(692)	--	--	--	--	--	**(692)**
TMPG Failes Charge	--	--	--	--	541	--	--	--	--	**541**
Stock Loan Fees	62,457	40,888	--	24,791	47,781	--	--	--	--	**175,917**
Miscellaneous	--	--	--	--	--	--	--	--	--	**--**
Taxes & Insurance	--	334,798	--	--	--	--	--	--	--	**334,798**
Interest Expense	--	--	--	(1,612)	--	--	--	--	--	**(1,612)**
Other	431.65	11,483	-	-	271,267.99	1,208,735.43	1,154,242	1,944,631	-	**4,590,790**
Commission on Future Contracts	501	--	--	10,944	130	--	--	--	--	**11,575**
Commission on Swaps Contracts	--	--	--	2,822	--	--	--	--	--	**2,822**
Consultant Fees	--	--	--	--	--	--	--	--	448,000	**448,000**
Custodial Fees	--	--	--	--	--	--	--	--	552,000	**552,000**
	$796,367	**$1,884,150**	**$949,049**	**$2,767,264**	**$2,047,470**	**$13,511,405**	**$2,851,000**	**$1,944,631**	**$1,000,000**	**$27,751,337**
									Financial Statement Reported Expenses	27,984,259
									Difference	232,922

The Governmental Accounting Standards Board recognizes that it may not be possible or cost-beneficial to separate certain investments expenses from either the related investment income or the general administrative expenses of the plan. KRS has displayed all investment related fees and expenses identifiable and captured by our custodial bank, BNY Mellon and KRS staff.

MARKET VALUES BY PLAN

Pension

	KERS Nonhazardous		KERS Hazardous	
Category	**Market Value**	**%**	**Market Value**	**%**
Public Equity	$845,065,661	37.4%	$240,242,104	43.8%
US Equity	386,143,193	17.1%	111,976,501	20.4%
Non-US Equity	458,922,468	20.3%	106,832,248	19.5%
Emerging Markets	-	-	21,433,355	3.9%
Fixed Income	436,782,804	19.3%	99,501,855	18.0%
Core	207,819,396	9.2%	45,195,541	8.2%
Global	113,442,922	5.0%	27,149,307	4.9%
High Yield	115,520,486	5.1%	27,157,007	4.9%
Real Return	223,053,975	9.9%	52,231,779	9.5%
Private Equity	321,942,952	14.3%	52,911,672	9.6%
Real Estate	104,330,163	4.6%	30,807,147	5.6%
Absolute Return	254,933,428	11.3%	56,978,709	10.4%
Cash	67,720,838	3.0%	14,444,150	2.6%
Miscellaneous	4,045,981	0.2%	1,708,589	0.5%
TOTAL PORTFOLIO	**$2,257,875,802**		**$548,826,005**	

Insurance

Public Equity	$322,748,706	49.4%	$210,334,878	48.0%
US Equity	165,884,879	25.4%	104,931,512	24.0%
Non-US Equity	131,089,504	20.1%	88,140,589	20.1%
Emerging Markets	25,774,323	3.9%	17,262,777	3.9%
Fixed Income	126,549,977	19.3%	85,398,671	19.5%
Core	62,373,746	9.5%	42,177,891	9.6%
Global	32,661,659	5.0%	21,917,323	5.0%
High Yield	31,514,572	4.8%	21,303,457	4.9%
Real Return	57,589,189	8.8%	39,835,384	9.1%
Private Equity	29,848,332	4.6%	26,017,540	5.9%
Real Estate	34,007,633	5.2%	24,790,137	5.7%
Absolute Return	70,527,011	10.8%	46,801,787	10.7%
Cash	12,430,749	1.8%	4,494,824	1.0%
Miscellaneous	(28,498)	0.1%	(19,099)	0.1%
TOTAL PORTFOLIO	**$653,673,099**		**$437,654,122**	

Market values vary from those reported in the financial section due to pending transactions, accrual adjustments, and classification of investments (e.g. derivatives) as required by GAAP.

Market values vary from those reported in the financial section due to pending transactions, accrual adjustments, and classification of investments (e.g. derivatives) as required by GAAP.

MARKET VALUES BY PLAN

Pension

	CERS Nonhazardous		CERS Hazardous	
Category	**Market Value**	**%**	**Market Value**	**%**
Public Equity	$2,907,533,961	45.5%	$932,303,685	45.2%
US Equity	1,387,073,961	21.7%	443,038,212	21.5%
Non-US Equity	1,271,260,853	19.9%	409,400,310	19.8%
Emerging Markets	249,199,147	3.9%	79,865,163	3.9%
Fixed Income	1,183,934,459	18.5%	383,801,231	18.6%
Core	545,718,798	8.5%	177,775,024	8.6%
Global	319,550,331	5.0%	103,226,523	5.0%
High Yield	318,665,330	5.0%	102,799,684	5.0%
Real Return	615,683,945	9.6%	194,441,160	9.4%
Private Equity	529,815,482	8.3%	177,250,275	8.6%
Real Estate	352,720,105	5.5%	114,271,411	5.5%
Absolute Return	679,127,210	10.6%	215,202,271	10.4%
Cash	110,537,291	1.7%	44,035,876	2.1%
Miscellaneous	5,216,194	0.3%	2,099,279	0.2%
TOTAL PORTFOLIO	**$6,384,568,647**		**$2,063,405,188**	

Insurance

Public Equity	$899,069,195	47.2%	$488,667,596	46.6%
US Equity	442,793,318	23.2%	241,126,487	23.0%
Non-US Equity	380,685,194	20.0%	207,892,781	19.8%
Emerging Markets	75,590,683	4.0%	39,648,328	3.8%
Fixed Income	374,448,597	19.6%	206,223,316	19.7%
Core	183,829,170	9.6%	101,441,428	9.7%
Global	95,226,934	5.0%	52,424,625	5.0%
High Yield	95,392,493	5.0%	52,357,263	5.0%
Real Return	179,622,845	9.4%	101,159,421	9.6%
Private Equity	133,687,742	7.0%	74,726,222	7.1%
Real Estate	103,262,879	5.4%	56,497,364	5.4%
Absolute Return	200,178,823	10.5%	112,123,336	10.5%
Cash	15,914,876	0.8%	11,275,550	1.1%
Miscellaneous	(83,080)	0.1%	(45,742)	0.0%
TOTAL PORTFOLIO	**$1,906,101,877**		**$1,050,627,063**	

MARKET VALUES BY PLAN

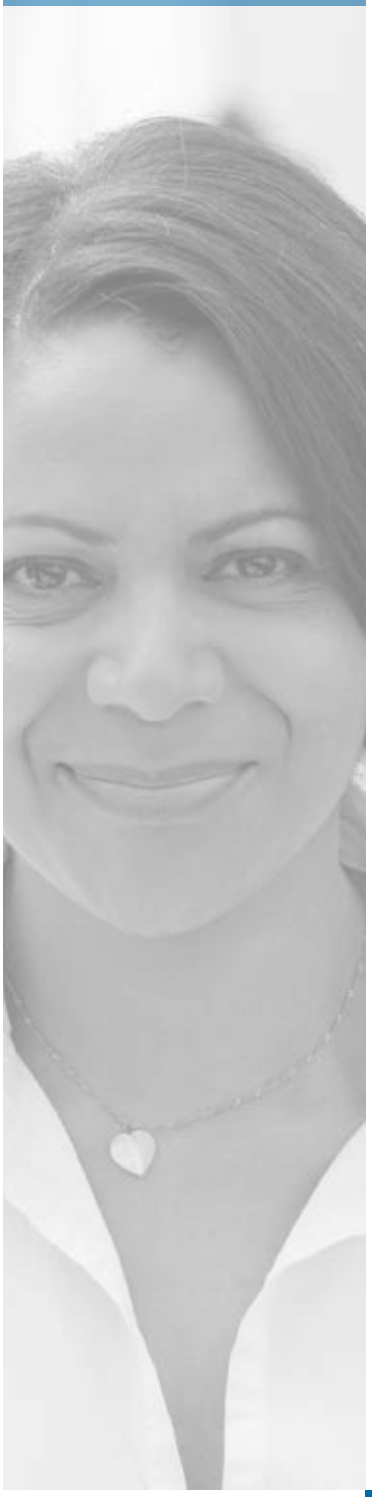
Pension

	SPRS Hazardous	
Category	**Market Value**	**%**
Public Equity	$107,072,576	45.1%
US Equity	48,544,848	20.4%
Non-US Equity	48,422,710	20.4%
Emerging Markets	10,105,018	4.3%
Fixed Income	40,655,806	17.1%
Core	16,549,790	7.0%
Global	11,924,879	5.0%
High Yield	12,181,137	5.1%
Real Return	22,657,641	9.5%
Private Equity	22,661,726	9.5%
Real Estate	13,470,942	5.7%
Absolute Return	25,701,594	10.8%
Cash	4,807,970	2.0%
Miscellaneous	411,203	0.3%
TOTAL PORTFOLIO	**$237,439,458**	

Insurance

Public Equity	$75,601,628	46.2%
US Equity	36,622,721	22.4%
Non-US Equity	32,972,005	20.1%
Emerging Markets	6,006,902	3.7%
Fixed Income	31,530,049	19.2%
Core	15,617,241	9.5%
Global	8,213,165	5.0%
High Yield	7,699,643	4.7%
Real Return	14,850,345	9.1%
Private Equity	12,265,440	7.5%
Real Estate	9,204,299	5.6%
Absolute Return	17,548,434	10.7%
Cash	2,799,206	1.7%
Miscellaneous	(7,150)	0.0%
TOTAL PORTFOLIO	**$163,792,251**	

Market values vary from those reported in the financial section due to pending transactions, accrual adjustments, and classification of investments (e.g. derivatives) as required by GAAP.



Letters from Investment Consultants

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Dear Board of Trustees,

Economic Review

The fiscal year began July 1 with most U.S. economic data indicating the U.S. would experience continued economic expansion at a moderate rate. The International Monetary Fund (IMF) increased its U.S. Gross Domestic Product (GDP) growth forecast to 2.2% from a prior forecast of 1.7%, and projected 3.1% growth for 2015. The Federal Reserve (the Fed) maintained its commitment to end quantitative easing, while also signaling a slight bias toward maintaining an accommodative interest rate policy for the near-term. The unemployment rate fell to 5.9% in September with monthly job growth on pace to be the fastest annual job growth rate since 1999.

In the Eurozone, the economic data indicated continued challenges for the member countries, which led the European Central Bank (ECB) to announce additional measures to stimulate the economy. In Japan, investors blamed a devalued Yen and new consumption tax for weaker than expected industrial and retail sales. During this time, developed nations imposed sanctions on Russia's role in the Crimea crisis. Russia responded with import bans and a fifty-point interest rate increase in an effort to stabilize the currency and stem capital flight.

During the second fiscal quarter (CY4Q14), the U.S. economy continued to show stable growth compared to foreign regions. Economic data released during the quarter suggested that the recovery was unfettered by the Fed's reduction of quantitative easing, as proven by strong expansion in the manufacturing sector and continued decline of the unemployment rate to a calendar year-ending 5.6%. Despite the progress on the employment front, the Fed remained keenly aware of other indicators, including muted wage growth, which suggested pockets of weakness in economy. Core inflation, excluding food and energy prices, remained close to the Fed's stated 2% target, triggering views the Fed would raise interest rate by mid-2015 unless there were signs of disinflation.

Economic developments in Europe and emerging economies were less impressive. European monetary policy proven successful in recapitalizing the banking system, but weak loan demand from the private sector muted the flow of capital in the economy. In an effort to spur growth and make lending more attractive, the ECB announced quantitative easing plans, which included the purchase of up to €500 billion of investment grade securities. Within emerging economies, falling oil prices (caused by an oversupply in the market) and a rising U.S. dollar led to renewed concerns over possible balance of payments issues and capital flight. Russia's prospects deteriorated as the ruble declined 32% against the dollar, even as the Russian Central Bank increased rates from 6.5% to 17%.

In a reversal from the first half of the fiscal year, the U.S. experienced slower economic growth in the third fiscal quarter (CY1Q15), as the release of several key indicators were below expectations. While the unemployment rate remained steady at 5.5% in March, additional nonfarm payroll jobs came in well below expectations followed by downward revisions of the January and February figures. In the manufacturing sector, which showed growth through the first six months, fell throughout the third fiscal quarter. Despite softer-than-expected economic data, minutes from the March Federal Open Market Committee meeting indicated that while some members favored a potential June 2015 rate hike, Fed Chair Janet Yellen and others seemed more willing to wait for stronger wage inflation before considering an increase in the Federal Funds rate.

Globally, much attention was focused on oil prices, as OPEC producers refused to yield to pressure to cut production. Generally, non-OPEC producers also declined to curtail production despite lower prices due to the need to generate sufficient cash flow to service existing debt. In addition to price pressure from oversupply, weaker-than-expected global demand magnified downward pressure on oil prices. In Europe, Greece's Syriza leadership reached an agreement with the Troika to maintain the country's funding for several months while working toward an acceptable package of reforms. The second half of the fiscal year also saw the continued efforts of the European Central Bank and Bank of Japan to maintain their aggressive monetary easing policies. The impact of these policies on current and expected interest rates led to a strengthening of the U.S. dollar, which raised concerns regarding U.S. exports and the dollar value of earnings generated in foreign currencies.
Several events occurred during fourth quarter of the fiscal year (CY2Q15) that keep markets in turmoil. First, the U.S. dollar strength dissipated to a degree. Second, developed market interest rates, which had been trending lower and were negative in some markets, reversed sharply.

Lastly, oil prices, in part helped by weakness in the U.S. dollar, bounced off the early 2015 lows and finished the fiscal year higher. Relatively benign equity volatility in April and May gave way to heightened volatility in the second half of June, with investors fixated on Greece's debt situation and government intervention in China.

In the U.S., the Fed took no action having observed economic data that showed below target inflation, softer GDP growth, and lower labor productivity. In Europe, Greece's problems deteriorated significantly after bailout talks failed, and the Syrizaled government missed a $1.7 billion payment due to the IMF in June. In China, the government's desire to rotate investment from its real estate sector to the equity markets hit a snag, as the Shanghai Composite fell 20% in the final 10 trading days of June. In response, the People's Bank of China cut its benchmark interest rate by 0.25% before the end of June.

The following page displays key domestic economic indicators as of June 30, 2015.

Domestic Economic Indicators
As of June 30, 2015

	June 2015	June 2014	Yr/ Yr	10 Year	20 Year
Capacity Utilization	77.82	78.17	▼	76.82	78.42
Unemployment Rate	5.30%	6.10%	▼	7.00%	6.00%
PMI - Manufacturing	53.50	55.70	▼	52.40	52.00
Baltic Dry Index - Shipping	800	934	▼	2,847	2,357
Real GDP YoY	2.30%	2.60%	▼	1.60%	2.40%
Consumer Confidence (Conf. Bd.)	99.76	86.37	▲	75.28	93.34
Breakeven Inflation - 10 Year*	1.89	2.24	▼	2.14	N/A
CPI YoY (Headline)**	0.10%	2.10%	▼	2.10%	2.30%
CPI YoY (Core)**	1.80%	1.90%	▼	1.90%	2.10%
PPI YoY	-2.60%	2.80%	▼	2.70%	2.30%
M2 YoY	5.80%	6.50%	▼	6.20%	6.20%
Federal Funds Rate (%)	0.08%	0.09%	▼	1.46%	2.74%
US Dollar Total Weighted Index	89.94	75.73	▲	77.43	86.43
WTI Crude Oil per Barrel	$59	$105	▼	$82	$54
Gold Spot per Oz***	$1,172	$1,327	▼	$1,112	$723

*Breakeven Inflation does not have 20 years of history; therefore, its 20-year average is show n as N/A.
**CPI figures are cyclically adjusted. ***10- and 20-year average Gold spot prices are adjusted for inflation.

Capital Markets Review

Global Equity

U.S. equity markets outperformed international markets for the fiscal year, as evidenced by the Russell 3000 returning 7.3%, compared to -3.8% for the MSCI EAFE and -4.8% for the MSCI Emerging Market Index (in U.S. dollar terms).

The U.S. stock market began the fiscal year relatively flat, but rallied significantly during the second fiscal quarter (CY4Q14) on a strengthening U.S. dollar, rapidly falling oil prices, and a positive revision to CYQ314 GDP growth. Investor risk appetite remained low due to geopolitical concerns and looming interest rate increases; however, consumer spending and M&A activity supported U.S. equity returns. During a volatile third fiscal quarter (CY1Q15), the Russell 3000 Index generating negative returns in January and March, but a positive 1.8% return for the quarter due to a strong February rally. The U.S. equity markets ended the fiscal year relatively flat as market turmoil overseas impacted domestic markets and erased otherwise positive April and May performance. A strong U.S. dollar served as a hindrance to companies that derive significant earnings from non-U.S. regions.

International markets performed the inverse to U.S. markets, with sharp negative performance the first half of the fiscal year, and a partial recovery the second half. Developed international markets experienced a strong downturn during the start of the fiscal year (CY3Q14), led by Europe, which was the worst performing region in the MSCI EAFE Index. Emerging economies with greater dependency on commodity exports were hurt by deflationary headwinds resulting from an oversupply of oil and weaker than expected demand in developed economies.

Throughout most of the second half of the fiscal year (CY2H15), developed international markets significantly outperformed the U.S. market. Although deflation concerns regarding the potential exit of Greece from the EU continued to weigh on European markets, performance remained positive despite these concerns. Greece's debt crisis dominated the headlines yet its equity markets actually saw positive performance for the quarter. China had a strong positive quarter, partially fueled by government intervention. However, volatility followed by a sharp downturn in local markets resulted from an increased use of margin debt that was called as the stock market fell.

Global Fixed Income

For the fiscal year, the Barclay US Aggregate Index returned 1.9%, significantly outperforming the Barclays Global Aggregate Index which fell -7.1% because of an overall strengthening of the U.S. dollar.

U.S. fixed income performed modestly well as the treasury yield curve flattened over the first half of the fiscal year. Fixed income markets were volatile entering 2015, but treasury yields and credit spreads were only slightly changed by the end the March compared to the previous quarter-end. As rates fell in January, the Barclays Aggregate returned 2.1% for the month, the strongest one-month return since December 2008. However, a rebound in rates in February detracted from performance. This extended into the last fiscal quarter (CY2Q15) as rates continued to rise and credit spreads widened, resulting in the quarter being the first 3-month negative run since 2008. Reduced liquidity in fixed income markets led to higher market price volatility and increased trading costs.

As the U.S. dollar strengthened, exposure to foreign currency impacted returns. Excluding currency effects, the government bonds of other developed countries performed similarly to U.S. Treasuries. However, emerging markets debt (EMD) underperformed due to the recent market bias toward quality.

Alternatives

Hedge funds contributed to performance, primarily from strong performance the second half of the fiscal year. In general, most hedge funds were flat to slightly negative during in the first fiscal quarter, with the exception of macro strategies which were characterized by improved performance. Event-oriented and credit hedge funds struggled in FY2Q14, but long/short equity funds and systematic macro funds mitigated the losses.

During the second half of the fiscal year, multi-strategy funds and Funds of Hedge Funds outperformed both global 60/40 portfolios as well as the S&P 500 Index for the first time since the fourth quarter of 2012. Most hedge fund strategies generated positive returns in the second half of the fiscal year.

Real Return

The performance for real return strategies were mixed during the fiscal year. Although REITs were a positive performing sector, US TIPS declined slightly and Commodities declined significantly, creating a challenging environment for broadly diversified real return strategies.

Given the low inflationary market environment, assets typically most sensitive to changes in inflation, including Commodities and natural resource equities, yielded some of the worst results compared to other asset classes.

While the first half of the fiscal year was particularly challenging, inflation indicators and performance among managers both varied widely during the second half of the year. Managers that allocated heavily to REITs, TIPS, and floating rate bonds outperformed those that favored natural resource equities. Further, market expectations for short-term inflation decreased while longer-term expectations increased, as measured by a steepening of the TIPS breakeven curve, resulting in performance dispersion among active managers.

Real Estate

Core U.S. Real Estate experienced strong returns during the fiscal year. The U.S. commercial real estate market experienced favorable drops in vacancy rates in the office, industrial, and retail sectors. Transaction activity in the U.S. commercial real estate market remained robust as evidenced by the 34% year-over-year increase in transaction volume, as of CY4Q14.

As property values rose, cap rates in certain property sectors approached pre-recession lows and in some cases surpassed it in sectors such as central business districts and apartments.

While real estate deal activity remained strong in the U.S., transaction volumes were down 8% and 7% in the Asia-Pacific and Euro regions, respectively. On a global level, transaction volume for FY4Q15 totaled $161 billion, resulting in nearly the same level of activity on a year-over-year basis.

The following table summarizes the returns earned by the major markets for the trailing one-year period ending June 30, 2015.

One-Year Trailing Asset Class Performance
As of June 30, 2015

Index	Description	Return
S&P 500	Large Cap U.S. Equity	7.42
R Mid Cap	Mid Cap U.S. Equity	6.63
R 2000	Small Cap U.S. Equity	6.49
MSCI EAFE (Gross)	Large Cap Intl Equity	-3.82
MSCI EAFE SC (Gross)	Small Cap Intl Equity	-0.45
MSCI Emg Mkts (Gross)	Emerging Mkts Equity	-4.77
Barclays US Agg Bond	U.S. Invmt Grade Bonds	1.86
Barclays US Trsy	U.S. Treasury Bonds	2.31
Barclays US Trsy: US TIPS	U.S. TIPS	-1.73
Barclays US Corp: Hi Yld	U.S. High Yield Bonds	-0.40
Wilshire US REIT	U.S. Real Estate Inv Trusts	5.21
NCREIF ODCE (Gross)	U.S. Open End Core Real Estate	14.43
HFRI FOF Diversified	Absolute Return	3.85
BofA ML 3 Mo US T-Bill	U.S. Cash Equivalents	0.02

Asset Allocation Review

As is customary, the Board reviewed the asset allocation for each of the pension and insurance plans and concluded that any consideration for changes should originate from an asset liability study. As such, an asset liability study was presented to the Board during the last quarter of the fiscal year. Subsequent to the asset liability study, further discussions regarding any needed changes to asset allocation are anticipated to occur during fiscal year 2015-2016.

Pension Plan Review

The combined market value of the Kentucky Retirement System ("System") Pension Plan assets (collectively called hereafter, "the Pension Fund") decreased from $11.9 billion on June 30, 2014 to $11.5 billion on June 30, 2015. The Pension Fund's investments collectively returned 2.0%, net of fees1, for the fiscal year. Compared to the 3.1% return earned by its target allocation benchmark, the Pension Fund underperformed by 1.1%. The Pension Fund's three and five-year annualized returns of 9.3% and 9.2%, respectively, closely matched the target allocation benchmark returns of 9.6% and 9.9%, respectively, over the same time periods. The Board adopted an actuarial assumed rate of return is 7.5% during the fiscal year, revised down from the previous long-term target of 7.75%. Over the longer term, the Pension Fund has exceeded the blended funding target.

[1] All plan returns are net of fees as provided by the custodian bank, BNYMellon.

The System's current Pension Fund investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The System also invests in real return strategies, real estate, absolute return strategies, and private equity. The Board aggressively negotiates fees on all investments. The table below shows aggregate actual and individual pension plan target allocations as of June 30, 2015.

Kentucky Retirement Systems
Pension Plan
Asset Allocation vs. Target Allocation

	Market Value ($)	Allocation (%)	KERS Target (%)	KERS - H Target (%)	CERS Target (%)	CERS - H Target (%)	SPRS Target (%)
U.S. Equity	2,376,879,958	20.7	22.0	20.0	20.0	20.0	20.0
Non-U.S. Equity	2,296,206,066	20.0	20.0	20.0	20.0	20.0	20.0
Emerging Markets Equity	360,473,633	3.1	0.0	4.0	4.0	4.0	4.0
Fixed Income	2,145,359,836	18.7	20.0	19.0	19.0	19.0	18.0
Real Return	1,110,466,815	9.7	10.0	10.0	10.0	10.0	10.0
Real Estate	613,519,285	5.3	3.0	5.0	5.0	5.0	5.0
Absolute Return	1,231,943,209	10.7	10.0	10.0	10.0	10.0	10.0
Private Equity	1,104,582,104	9.6	10.0	10.0	10.0	10.0	10.0
Cash Equivalent	241,546,125	2.1	5.0	2.0	2.0	2.0	3.0
Other	7,029,197	0.1	-	-	-	-	-
Total	**11,488,006,228**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

The current deviations of each plan are within an allowable and acceptable range. The allocations across plans differ based on plan-specific liquidity requirements.

Insurance Plan Review

The combined market value of the Kentucky Retirement System Insurance Plan assets (collectively called hereafter, "the Insurance Fund") increased from $4.1 billion on June 30, 2014 to $4.2 billion on June 30, 2015. The Insurance Fund's investments returned 1.9% for the fiscal year, underperforming the target allocation benchmark of 3.8% by 1.9%. The Insurance Fund's three-year annualized return of 8.8% trailed the target allocation benchmark of 9.9%, and the five-year annualized return of 9.3% fell short of its benchmark's return of 11.1% by -1.8%. The Insurance Fund also currently targets an actuarial assumed rate of return is 7.5%, which the Board revised down from 7.75% during the fiscal year. Over the longer term, the Insurance Fund has exceeded this important funding target.

The System's current insurance plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The System also invests in real return strategies, real estate, absolute return strategies, and private equity. The Board aggressively negotiates fees on all investments. The table below shows aggregate actual and target allocations as of June 30, 2015.

Kentucky Retirement Systems
Insurance Plan
Asset Allocation vs. Target Allocation

	Market Value ($)	Allocation (%)	Insurance Target (%)
U.S. Equity	991,843,452	23.5	20.0
Non-U.S. Equity	841,612,520	20.0	20.0
Emerging Markets Equity	164,200,235	3.9	4.0
Fixed Income	824,479,859	19.6	20.0
Real Return	393,471,657	9.3	10.0
Real Estate	227,444,903	5.4	5.0
Absolute Return	447,179,389	10.6	10.0
Private Equity	276,545,277	6.6	10.0
Cash Equivalent	46,915,205	1.1	1.0
Total	**4,213,508,928**	**100.0**	**100.0**

The current deviations of the actual allocation from the target allocation are within an allowable and acceptable range. For less liquid asset classes (private equity), it may take years before the current allocation is in line with the target allocation.

Investment Portfolio Review

Pension Plan

The U.S. equity composite returned 6.0%, underperforming the Russell 3000 Index by 1.25%. Active management was most challenged in mid cap equity, while manager selection in small cap equity mitigated a portion of the losses. Geneva Capital Management was removed from the portfolio during the fiscal year. Additional analysis will be conducted in the next fiscal year to enhance the domestic equity portfolio, which will consider reducing the number of manager holdings as well as resizing existing mandates.

The non-U.S. composite was restructured at the end of last fiscal year to include diversified" core" strategies and concentrated "satellite" strategies to complement core exposures. During this fiscal year, Pyramis International Growth was removed from the portfolio based on organizational changes and ongoing performance concerns. The next fiscal year will begin the analysis to consider combining the non-U.S. and dedicated emerging market

[1] All plan returns are net of fees as provided by the custodian bank, BNYMellon

composite into a single international composite, potentially reducing the number of manager holdings and focusing on flexible, global mandates. For the fiscal year, the non-U.S. equity composite declined approximately 4.0%, but outperformed the MSCI ACWI Ex U.S. Index by 86 basis points based on favorable positioning by fundamental managers.

The dedicated emerging market portfolio trailed the benchmark return of the MSCI Emerging Markets Index by 1.9% (-6.7% versus -4.8%). There were no changes to the portfolio during the fiscal year, but analysis will be conducted during the next fiscal year the current structure of the portfolio as noted above.

The fixed income portfolio slightly underperformed the Barclays Universal Bond Index, returning 1.4% versus 1.6%. The majority of managers outperformed their respective benchmarks, but exposures to emerging market debt and high yield negatively impacted returns. During the fiscal year, PIMCO Core Fixed Income was removed from the portfolio and Cerebrus Levered Loan Opportunities was added. During the next fiscal year, there are plans to potentially further diversify the fixed income portfolio by introducing global credit exposure.

The real return portfolio consisted of a reduction to Treasury Inflation Protected Securities (TIPS), and a greater emphasis on a diversified real return fund that includes agricultural and timberland funds and energy-related investments. Having hired a dedicated consultant focused on real assets, the plan is to continue building a portfolio diversified across several strategies that, when combined, offers inflation protection and capital appreciation. As such, a diversified real asset income fund and a mining fund were both added over the last twelve months. During the fiscal year, the real return portfolio declined approximately 4.0%, which underperformed its custom benchmark that incorporates the various strategies by 1.1%.

The real estate portfolio continually evolves as new deals are sourced and funded in a prudent manner. While the real estate portfolio's fiscal year return lagged the benchmark, the NCREIF ODCE Index (7.9% versus 12.4%), because many of the real estate funds are closed-end funds with the ability to exit after several years, it is more appropriate to measure the returns over periods longer than a 12-month period.

The absolute return portfolio was originally developed with fund-of-hedge funds to gain immediate exposure to the space. During the fiscal year, the fund-of-hedge funds have served as sources of capital to continue funding prudently selected and well negotiated direct hedge fund investments. The migration to direct strategies should continue into the future as opportunities best suited for the Fund become available. During the fiscal year, the absolute return portfolio earned a 5.5% return, which slightly lagged the HFRI Fund of Funds Diversified Index return of 6.1%.

The private equity portfolio continually evolves as new deals are sourced and funded in a prudent manner. Because the private equity funds are closed-end funds with the ability to exit after several years, it is more appropriate to measure the returns over periods longer than a 12- month period. There are two benchmarks used to measure the success of the private equity portfolio. The first is a shorter-term custom benchmark, which matches the return of private equity portfolio (9.6%) over the fiscal year. Over a five-year period, the private equity portfolio earned a strong absolute return of 13.8%, but lagged its second benchmark, the Russell 3000 Index + 4%, by 5.6%.

The cash and equivalents held in the portfolio is not expected to add significant value to the portfolio. Rather, it is expected to maintain the market value of the assets held in cash with a return that keeps pace with 3-month Treasury Bills. For the fiscal year, the cash equivalents portfolio earned 0.2% relative to the "cash" benchmark of 3-month Treasury Bills Index's return of 0.0%.

Insurance Plan

The Insurance Plan invests in all of the same portfolios as the Pension Plan with the exception of a few certain investments across the portfolio. Although the insurance plan returns slightly differ from the returns earned in the pension plan because of investment restrictions, the relative under/outperformance was similar for the fiscal year.

Board Initiatives

As previously mentioned, the Board continues to review the effectiveness of the currently approved asset allocation to meet the assumed rates of returns for the pension and insurance plans. To better align the liabilities and net cash flows of the pension and insurance plans with the investment asset allocation, the Board requested that the general consultant RVK, Inc. complete an asset liability study for all plans. RVK reviewed the study with the Board at the end of the fiscal year, and as such, the Board is considering any needed changes to the asset allocation based on the cash flow demands of each portfolio within each plan. Particular attention will be paid to the projected payout ratios of certain plans that are severely underfunded, which severely challenges their ability to invest in the illiquid assets needed to structure a portfolio targeting a return of 7.5%.

Within each asset class, the Board continues to review underlying structure and investments. There is consideration to restructure the U.S. equity portfolio by introducing an alternative indexing mandate in an effort to reduce the level of portfolio volatility tied to the equity markets at a cost less than active management. Within non-U.S. equities, the Board is focusing on global mandates and reducing fees where possible. Lastly, within global fixed income, the Board is considering adding global credit exposure to further diversify the portfolio.

Oversight

The System's investment policies, goals, and objectives, as well as the performance of its assets are regularly monitored by KRS staff, the Board, and RVK, Inc. These evaluations include reviews of the investment management firms and the custodial bank that serve the System.

Market values and investment performance returns referenced above are based upon financial statements prepared by Bank of New York Mellon (previously prepared by Northern Trust) in their capacity as the custodian bank. We rely on their data and have not independently audited those statements. However, their financial statements are, to the best of our knowledge, believed to be reliable.

Summary

Global equity markets have experienced tremendous gains and moderated volatility since the financial crisis in 2008. Recent uncertainty in capital markets and the unpredictability of future markets demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the System's employees and retirees. Patient, rational investors with long-term discipline and a commitment to rebalancing when necessary to maintain their long-term strategy have been rewarded in the past and may benefit from opportunities created by market turmoil.

We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the System to meet its long-term goals and objectives.

Sincerely,

Rebecca Gratsinger
Chief Executive Officer, Principal
RVK, Inc.

RVK

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Real Return - Fiscal Year Market Commentary

Global economic conditions took a step backwards as a number of political and macro events postponed the improving conditions for real assets from 2013. The lack of meaningful growth outside of the US has failed to stabilize commodity markets and continues to weigh heavily on a majority of indices; particularly the metals and energy subsectors. Metals and energy are dependent on global growth as opposed to the regional influences that impact timber, agriculture, and infrastructure. Continued instability in the Ukraine and the Middle East has placed additional pressure on the European economy which is still struggling to stabilize from the impact of the Greek crisis. Energy prices continue to trend downward, largely driven by increased US production and the continued maintenance of production by OPEC producers. With additional production potentially coming online from Iran and the opening of the Mexican energy market, inventories are likely to remain high for the foreseeable future. The mining sector continues to see pressure with excess capacity and high inventories persisting while low economic growth continues in China, one of the world's largest consumers of most materials. The global influence of monetary inflation continues to be negligible over the short term due to low growth rates in economic activity and global instability, as mentioned above. Most indicators report a prolonged low interest rate environment with relatively low upward pressure on both asset and monetary inflation over the medium-term. Agricultural assets are showing signs of moderate valuation adjustments in regions such as the US Midwest and other locations that had previously witnessed strong valuation increases. Timber assets have experienced performance profiles in line with a combination of biological and local inflationary influences. Infrastructure assets continue to improve as strategic and institutional investors bid aggressively for assets, particularly in core infrastructure, driving down yields to moderate levels. The strengthening US dollar has had a dramatic impact on commodity valuations and also on non-domestic lower volatility real asset strategies in emerging economies. Typically, the high volatility impact of foreign exchange reverts over longer cycles. Thus international assets have performed well in local dollar terms but have been overwhelmed by the currency effect.

Real Return - Discussion

The KRS Real Return portfolio has historically focused on more conservative, income oriented strategies balanced with opportunistic funds designed to take advantage of inflation participation during periods of economic growth. This has resulted in a low volatility portfolio that has not witnessed the draw downs associated with broader generic indices. The process of portfolio construction has involved in depth analysis by staff, in conjunction with Albourne, and extensive due diligence including onsite visits with a wide array of managers. By focusing on income generating strategies, the portfolio has successfully navigated the most recent prolonged downward pressure on two of the primary real asset sectors mentioned above. Reallocation to existing successful strategies has been the primary theme of the previous year. Strategies that can enhance diversification or take advantage of currency dislocations have been and should continue to be added, if appropriate. Liquidity considerations will continue to be emphasized over the short term and we will continue to source opportunities that focus on inflation linked income characteristics and inflation protection through participation. Reallocation strategies will be considered based on their relative attractiveness to other opportunities.

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Absolute Return – Fiscal Year Market Commentary

The fiscal year started off on a choppy note in July 2014, triggered by increased geopolitical tensions in Russia/ Ukraine and the Middle East. Quantitative strategies navigated these difficult events better than most other strategies, materially outperforming discretionary equity long/short strategies. This trend reversed in August when US and European equity markets made significant gains. CTA performance was particularly strong during the month, making gains in a number of asset classes including bonds, equities, and FX (particularly USD strength, and Euro weakness).

September saw the majority of risk assets suffer after an initial rally. Both equity and credit markets sold off while the dollar continued to strengthen. Macro and CTA strategies continued to perform well, capitalizing on many of the same themes from the prior month.

The AbbVie / Shire deal break occurred in October 2014 which, combined with a surprising court ruling on GSE preferred securities, set a negative tone for the month. Many hedge funds were hurt by both trades. Equity volatility rose and credit spreads widened out. Markets in October did rebound however, but some hedge funds that were unable or unwilling to hold onto trades did not participate in the rally and therefore showed poorer results. Quantitative and volatility-oriented strategies led in October.

While volatility was more subdued in November, it returned in December with oil prices declining sharply. Greek Eurozone exit risk remained at the forefront of investor's minds and high yielding credit suffered significantly. Distressed credit declined on the back of this volatility, while CTAs turned in strong results.
The Swiss National Bank surprised markets in January 2015 by abandoning the CHF-EUR peg, however only a small number of hedge funds were adversely impacted. Trends that emerged early on in the year included USD strength, falling bond yields in the US, UK, and Germany, and oil continuing to decline. Due to these trends, CTA's performed strongly during January as did European L/S.

It was a good month for risk assets broadly in February as fears of a Greek exit from the Eurozone were eased as the new government reached a deal with international lenders. Additionally, geopolitical tensions fell slightly as Russia and Ukraine agreed a tentative ceasefire. Oil recovered slightly and the USD strengthened into month end while gold fell. Hedge funds also performed well during the month, led by the higher beta strategies.

It was a mixed month for risk assets in March, with strong European performance on the back of the €60bn a month QE program but concerns over Greek reforms continuing to weigh locally. Equity markets were split with Europe, Japan and China gaining while the US, the UK and MSCI EM suffered. Higher yielding credit suffered as spreads widened out. Oil prices also fell on the back of increased IEA storage estimates while the USD continued to strengthen despite the Fed meeting carrying a dovish tone. Hedge funds had a good month led by global macro while relative value lagged marginally.

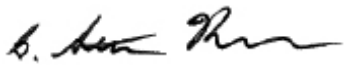
Early in the spring of 2015 a number of price reversals occurred, most notably a reversal of USD strength, gains in crude pricing, and a back up in rates across developed markets. April was a challenging month for US L/S managers with quite a degree of dispersion. Underperformance in health care and a rise in energy

hurt a lot of portfolios. Quantitative strategies struggled due to the aforementioned reversals during the month. After a relatively strong month of May, escalating concerns regarding Greece's bailout negotiations resulted in a defaulted €1.6bn payment to the IMF and drove volatility in equities and bonds through June. Chinese markets, especially, corrected severely during the month after previously strong performance YTD. Quantitative strategies were hurt the most during the month of June; however most hedge fund strategies ended the month negative as well.

Absolute Return - Discussion

During the fiscal year, KRS investment staff have presented several managers for the Investment Committee's consideration and approval for implementation in the Absolute Return Portfolio. This process involved in-depth analysis by staff, research and analysis by Albourne, site visits, triangulating the research with the portfolio's existing fund-of-funds managers, general consultants, and other professional resources. A broad and diverse field of fund candidates was evaluated before narrowing the group to the final presentations.

We will continue to steadily grow the portfolio's number of direct manager strategies and, consequently, its diversification and return potential.



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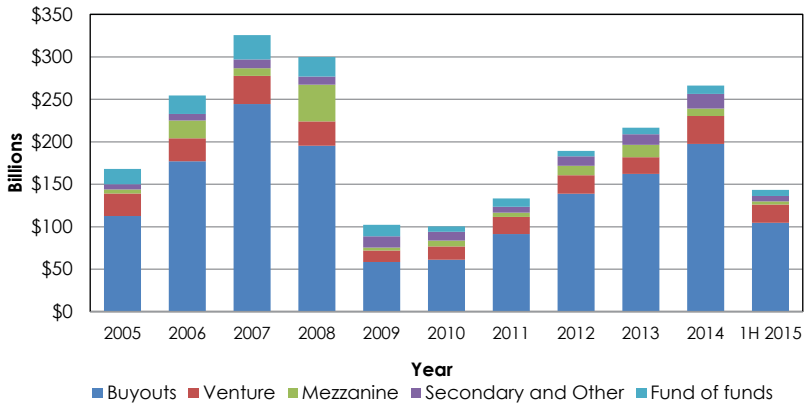
September 25, 2015

Pension Consulting Alliance, LLC. (PCA) was hired in April 2014 to advise the KRS Board of Trustees and Staff in its private equity investment activities. This is PCA's second annual review of the KRS private equity investment Program.

Private Equity Industry Trends:

• Fundraising activities continue to exhibit increases from lows seen early in the financial crisis. Approximately $143 billion of commitments were raised domestically in the first half of 2015, with buyouts continuing to represent the largest proportion of capital raised. This pace is on track to exceed the full calendar year 2014 commitment amount of $266 billion and continue the year-over-year increases since 2010.

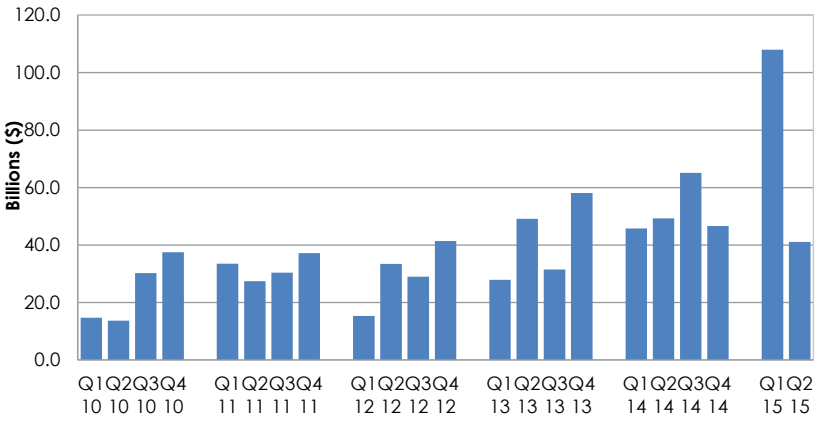
Commitments to U.S. Private Equity Partnerships



Source: *Private Equity Analyst* through June 2015

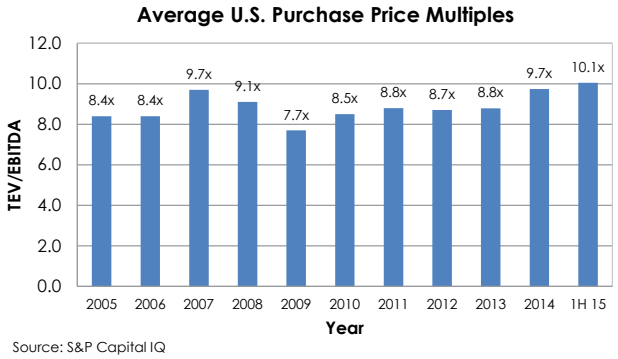
Announced U.S. buyout deal volume exhibited volatility in the first half of 2015 with volume on pace to exceed 2014 levels. Total announced U.S. buyout deal volume was $149.1 billion in 1H 2015, up from $95.1 billion in 1H 2014 and $206.83 billion for the full 2014 calendar year (the highest annual level over the past seven years).

Announced and Disclosed U.S. Quarterly LBO Deal Value*

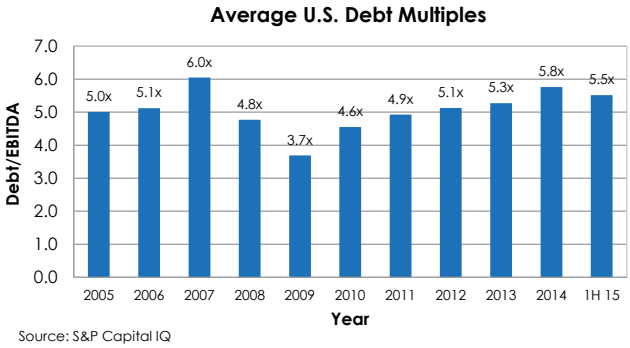


* Total deal size (both equity and debt).
Source: *Thomson Reuters Buyouts*

• Risk metrics in the leveraged buyout market were mixed during the first half of 2015 as purchase price multiples increased while debt multiples decreased. The average purchase price multiple in the first half of 2015, at 10.1x, increased from 9.7x in 2014 and was well above the ten-year average of 8.8x. Debt multiples for the first half of 2015 were at 5.5x, below the 5.8x level for the 2014 calendar year but still above the ten-year average of 5.0x.

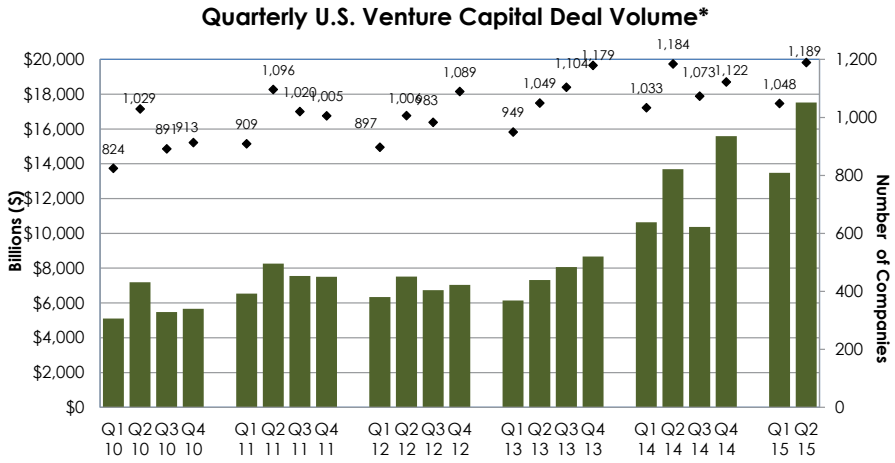


Source: S&P Capital IQ



Source: S&P Capital IQ

• Venture capital investment activity continued to increase in the first half of 2015. Approximately $31.0 billion was invested across 2,237 companies during the first half of 2015 which exceeded the $24.3 billion invested across 2,217 companies in the first half of 2014. In the 2014 calendar year, $50.3 billion was invested across approximately 4,400 companies.



* Only includes equity portion of deal value.
Source: Thomson Reuters

• Exit activity for venture capital investments declined in the first half of 2015. The number of merger and acquisition (M&A) transactions decreased in the first half of 2015 from one-year prior, and annualized, is on pace to trail 2014 levels. The initial public offering (IPO) market also exhibited decreases in the first half of 2015 and is also on pace to slightly trail 2014 levels.

Performance:

Performance of the broader private equity industry has been strong over the past several years, but has lagged the very strong performance posted by the domestic public equity markets. Over longer time-periods (i.e. ten-years or greater), the private equity markets have outperformed the public equity markets.

Public Market Performance Comparison, as of March 31, 2015

Index	1 Yr	3 Yr	5 Yr	10 Yr	20 Yr
All Private Equity*	9.3%	12.7%	13.5%	10.9%	12.9%
Russell 3000	12.4%	16.4%	14.7%	8.4%	9.6%
MSCI EAFE	-0.5%	9.5%	6.6%	5.4%	5.6%

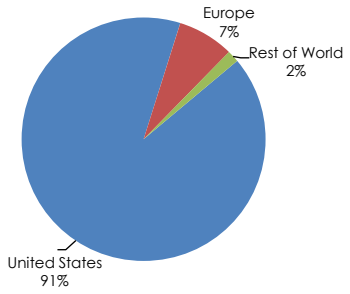
*Thomson ONE, Cambridge Associates all Asset Class/Strategies

KRS Private Equity Portfolio:

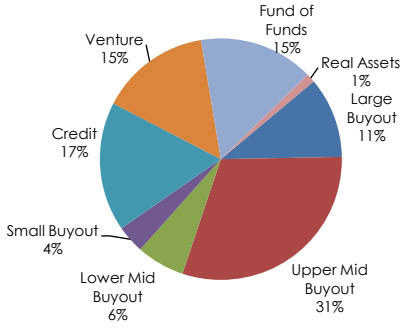
As of June 30, 2015, KRS had $3.0 billion of commitments across 41 managers (64 partnerships) gaining exposure across the spectrum of private equity strategies including buyout, venture/growth, and credit-oriented strategies. Approximately $2.7 billion has been drawn down while $2.5 billion of capital has been returned. During the first six months of 2015, $105.9 million has been drawn down to fund investments and $211.7 million of distributions have been returned.

The Pension Plan had $2.28 billion of active commitments and the Insurance Plan had $676 million of active commitments as of mid-year 2015. The portfolio is well diversified across target investment strategies.

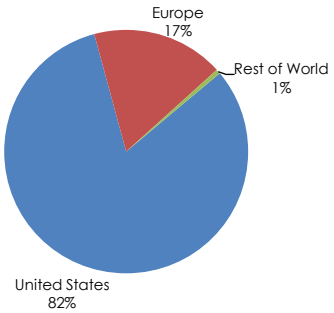
Pension Geographic Exposure: by commitment



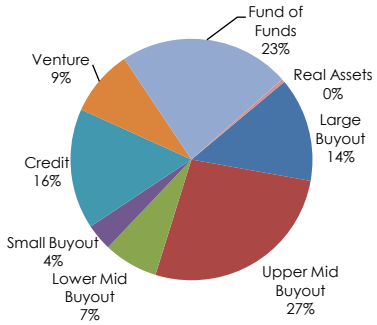
Pension Sector Exposure: by commitment



Insurance Geographic Exposure: by commitment



Insurance Sector Exposure: by commitment



KRS Commitments:

Over the past twelve months ending June 30, 2015, KRS has committed approximately $300.0 million across five partnerships.

KRS Commitment Activity , last twelve months

Fund Investment	Approval Date	Commitment Amount (M)
Crestview Partners III	Aug -201 4	$60.0
Secondary Opportunities III	Aug -201 4	$100 .0
Ares Special Situations Fund IV	Nov -2014	$40.0
Black Diamond Capital Management Opportunity Fund IV	Nov -2014	$60.0
Keyhaven Capital Partners IV	May -2015	€40.0

As of 6/30/201 5

Program Development:

In dialogue with KRS Staff, PCA has identified the following areas of focus for further development of the portfolio:

» Continue a disciplined approach to annual commitment pacing and partnership commitment sizing, making larger commitments to fewer managers in order to maintain a manageable number of relationships while progressing towards target allocations.

» Consider additional global exposure, committing to direct partnerships where appropriate while utilizing fund of funds where access to a unique segment of the market warrants.

» Explore cost-effective approaches to deploying capital, such as co-investing, to maximize returns while minimizing expenses.

Please feel free to contact me regarding any of the information above.

Sincerely

Tad Fergusson, CFA
Managing Director
Pension Consulting Alliance, Inc.

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September 30, 2015

ORG Portfolio Management LLC ("ORG") serves as the Real Estate Investment Consultant for Kentucky Retirement Systems ("KRS"). It is ORG's responsibility to present potential investment opportunities to the Investment Staff and Board and to make recommendations related to KRS' real estate portfolio. It is ORG' s commitment to assist KRS in building a successful long term real estate investment portfolio for the KRS pension fund members.

U.S. Market Overview

The U.S. economy has continued to increase at a persistent pace. The growth estimate for second quarter 2015 was 2.6% compared to 0.2% for the first quarter 2015. The stronger dollar has led to an increase in domestic consumption and a possible increase in interest rates in the near future. Business borrowing as well as optimism has helped to push the labor market to add over 220,000 new jobs in the second quarter 2015 and reducing the unemployment rate to 5.1%. The improved job growth started a cycle of wage growth, allowed increased spending, leading to rising business revenues and additional job opportunities.

The U.S. commercial real estate market continued to see improvement in 2015. The capitalization rates as of June 30, 2015 for all sectors have declined from the prior year ending June 30, 2014.

Capitalization Rates	2nd Qtr. 2014	2nd Qtr. 2013	Basis Point Change
Total	4.81%	5.18%	-0.37
Apartments	4.67%	4.84%	-0.18
Retail	4.97%	5.42%	-0.45
Office	4.69%	5.11%	-0.42
Industrial/Warehouse	5.20%	5.60%	-0.40

Source: NCREIF – Current Value Weighted Capitalization Rates as of 6/30/2015.

Industrial Sector: The Industrial sector remains a stand out as vacancies continue to fall and are lower than any point during the entire previous economic cycle. The second quarter 2015 was the third strongest since the beginning of the recovery in late 2009. While supply is slow to be delivered, the industrial pipeline is expanding quickly with Chicago, California's Inland Empire, Dallas, Kansas City, Phoenix and Atlanta leading the way. Larger spaces, usually super-regional distribution markets, are in demand in Dallas, Chicago, California's Inland Empire and Atlanta. Rent growth continues to be strong. The last four quarters ending June 30, 2015 annualized growth was 6.1%.

Apartment Sector: Despite the growing supply of new apartment buildings across most markets, the vacancy rate declined to 3.7% from 4.1% during the second quarter 2015. The increase in demand for apartments has allowed the rental rate growth to remain strong at 3.9% with another increase possible. Between 2012 and 2014 over 400,000 new units became available in the 54 largest U.S. markets with an expected delivery of an additional 400,000 new units in 2015 and 2016. The net absorption over the last four quarters ending June 30, 2015 was approximately 214,000 units compared to approximately 204,000 units of new supply. The future of rental growth changes from market to market. West Coast metro markets such as San Francisco, San Jose and the East Bay should continue to see strong results while Austin and Denver should slow down as new buildings are being delivered to the market.

Office Sector: Office fundamentals continue to improve as the absorption level increases due to the improved U.S. job growth rate over the past 5 years. During the first half of 2014, the employment rate moved over the pre-crisis peaks driven by energy, high tech and health care industries. Over the last 4 quarters ending June 30, 2015, national rents rose 4% and net absorption grew by 26%. The quarterly vacancy rate also decreased for the second quarter 2015 to 11.2% from 11.8% the previous quarter. This trend is spreading from the Central Business Districts to the suburbs. Office completions were 25% higher during the second quarter 2015 than they were for the same time period in 2014. Active supply pipelines in Houston and New York City have reached 13 million square feet each. The Houston market oversupply may become a concern as energy prices continue to fall causing employment growth to slow. The vacancy rate in Houston has grown to 12.6% over the past year ending June 30, 2015.

Retail Sector: The Retail sector produced twelve consecutive quarters of declining vacancies. The vacancy rate of 6.1% is only 0.1% above the best performance of the last economic cycle. Almost every market has seen positive demand despite new supply as a result of the Sears and Kmart closures. Boston, New York, and Denver have already reached pre-recession lows. Tenants are not following the lower rents in the new suburban centers as in past cycles; rather they are paying higher rent for more exposure in the urban areas where there is greater competition. Notwithstanding, there does seem to be some increase in demand in the existing strip and neighborhood centers where vacancies have fallen below 10% for the first time since 2009.

ORG's View

Real estate markets in the U.S. have largely recovered from the 2008 financial crisis and the investment returns continue to increase. The real estate returns increased over the 2014 levels based upon the National Council of Real Estate Investment Fiduciaries ("NCREIF") Property Index ("NPI") which had a 13.0% return for the period ending June 30, 2015 vs. the 11.2% return for the one year period ending June 30, 2014.

ORG has noted that the one-year income return as of June 30, 2015 for core open end funds gross of fees as reported by the NCREIF Open-End Diversified Core Equity ("ODCE") Index is 4.9%. This low income return will require substantial rental rate growth or appreciation growth in order for the funds to generate the projected 8-9% rate of return expected for core. The long-term Since Inception appreciation return for the ODCE is 1.2%. ORG is concerned that the strategies targeting gateway core markets will underperform expectations for core real estate. These core gateway markets (San Francisco, New York) are 'priced to perfection' with the income returns at an all-time low.

In Europe, outside a few gateway cities (London and Paris), the real estate fundamentals and capital markets have not recovered as fast as in the U.S.

As an alternative, ORG continues to recommend that investors focus on investment strategies where going in income returns are higher in certain overlooked strategies. The supply/demand fundamentals are favorable for the office market, although there are a few markets with cause for concern (Houston, Austin, Seattle). Millennials (27% of the U.S. population) preference to living in apartments and working in creative office space will continue to drive demand in these sectors.

ORG recommends that a focus should be on sustainable and defensive cash flows by making investments with managers that target investments with existing cash flows or the creation of cash flows through value added investments. In addition, opportunities in real estate can be found in Western Europe, especially the United Kingdom in non-prime assets.

ORG also recommends strategies in opportunistic funds where investors can capitalize on the continual de-leveraging of real estate that continues as debt originated during 2005-2007 continues to mature over the next several years. These opportunities to recapitalize high quality properties that have often been neglected could generate attractive risk adjusted returns over the next several years.

Kentucky Retirement Systems Real Estate Investments

All data below reflects activity through September 2015.

2008-2010 Investment Activity: In December 2008, Kentucky Retirement Systems made $40 million commitments each to 1) Mesa West Real Estate Income Fund II, L.P., 2) PRIMA Mortgage Investment Trust and 3) Walton Street Real Estate Fund VI, L.P. In July 2013, an additional $48.0 million was committed to PRIMA Mortgage Investment Trust increasing the total KRS commitment to $82.0 million. In April 2015, $15.5 million was withdrawn from PRIMA bring the total commitment down to $66.5 million.

» Mesa West Real Estate Income Fund II – YTD through September 2015, Mesa West II made no capital calls and returned $6.8 million in capital and preferred return distributions. Since inception, $33.4 million has been funded. Mesa West has indicated that they currently do not plan to call the additional $6.6 million.

» • PRIMA Mortgage Investment Trust – YTD through September 2015, PRIMA distributed $2.3 million in income distributions and paid a $15.5 million withdrawal. The investment is fully funded. Since inception, PRIMA has distributed $19.9 million in income distributions and returned capital of $15.5 million.

» • Walton Street Real Estate Fund VI – YTD through September 2015 made no capital calls and returned $10.7 million in capital and gain distributions. Since inception, $31.9 million has been funded with $8.1 million remaining capital to be called.

2011 Investment Activity: Kentucky Retirement Systems made 1) a $100 million commitment to H/2 Credit Partners, L.P. in April with an additional $3 million commitment in October 2012. In 2013, $3.3 million was withdrawn from the fund for a total commitment of $99.7 million; and 2) a $101.9 million commitment to Harrison Street Core Property Fund, L.P. in December with an additional $3.8 million commitment in October 2012 and $17.9 million commitment in June 2013 for a total commitment of $123.6 million.

» H/2 Credit Partners – YTD through September 2015, H/2 Credit Partners made no distributions. This investment is fully funded.

» Harrison Street Core Property Fund – YTD through September 2015, Harrison Street returned $5.7 million of income distributions and of that $1.6 million was reinvested for the Insurance Fund. This investment is fully funded.

2012 Investment Activity: Kentucky Retirement Systems made 1) a $52.5 million commitment toWalton Street Real Estate Fund VII, L.P. in August with an additional $2.4 million commitment in October for a total commitment of $54.9 million; 2) a $54.9 million commitment to Greenfield Acquisition Partners VI, L.P. in December; and 3) an $83 million commitment to Mesa West Core Lending Fund, L.P. in December 2012.

» Walton Street Real Estate Fund VII – YTD through September 2015, Walton VI made four capital calls totaling $16.0 million and returned $2,606 of income distributions. Since inception, $40.3 million has been funded with $14.6 million remaining capital to be called.

» Greenfield Acquisition Partners VI – YTD through September 2015, Greenfield VI made no capital calls and returned $22.3 million of capital, income and gain distributions. Since inception, $52.7 million has been funded with $2.2 million remaining capital to be called.

» Mesa West Core Lending Fund – YTD though September 2015, Mesa West Core made one capital call totaling $0.6 million and returned $4.1 million of income distributions of which $1.5 million was reinvested into the Insurance Fund. This investment is fully funded.

2013 Investment Activity: Kentucky Retirement Systems made 1) a $30 million commitment to Rubenstein Properties II, L.P. in July; 2) a $30 million to H/2 Core Debt Fund, L.P. in August; 3) a $70 million commitment to Prologis Targeted U.S. Logistics Holdings, L.P. in October; and 4) a $95 million commitment in Stockbridge Smart Markets, L.P. in December.

» Rubenstein Properties II – YTD through September 2015, Rubenstein II made two capital calls totaling $8.1 million and returned $5.3 million of capital and income distributions. Since inception, $12.5 million has been funded with $17.5 million remaining capital to be called.

» H/2 Core Debt Fund – YTD through September 2015, H/2 Core returned $1.1 million of income distributions. This investment is fully funded.

» Prologis Targeted U.S. Logistics Holdings – YTD through September 2015, Prologis made one capital call for $51.8 million and distributed $1.4 million of which $0.4 was reinvested into the Insurance Fund. This investment is fully funded.

» Stockbridge Smart Markets – YTD through September, Stockbridge Smart Markets distributed $2.9 million of which $0.5 million was reinvested into the Insurance Fund. This investment is fully funded.

2014 Investment Activity: Kentucky Retirement Systems made 1) a $40 million commitment to Lubert-Adler Real Estate Fund VII, L.P. in March with an additional commitment of $10 million in November; 2) a $30 million commitment to Divco West IV, L.P. in April; and 3) $40 million commitment to Greenfield Acquisition Partners VII, L.P. in July.

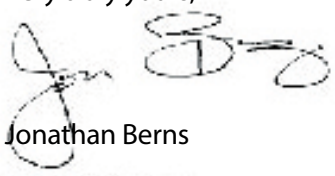
» Lubert-Adler Real Estate Fund VII – YTD through September 2015, Lubert-Adler VII made two capital calls totaling $10.0 million and returned $0.1 million of fee rebate distributions. Since inception, $15.0 million has been funded with $35.0 million remaining to be called.

» Divco West IV – YTD through September 2015, Divco West IV made five capital calls totaling $9.7 million and returned $3.7 in capital, income and gain distributions. Since inception, $22.5 million has been funded with $7.5 million remaining to be called.

» Greenfield Acquisition Partners VII – YTD through September 2015, Greenfield VII made one capital call totaling $1.6 million and returned $5.7 million in capital, income and gain distributions. Since inception, $21.1 million has been funded with $18.9 million remaining capital to be called.

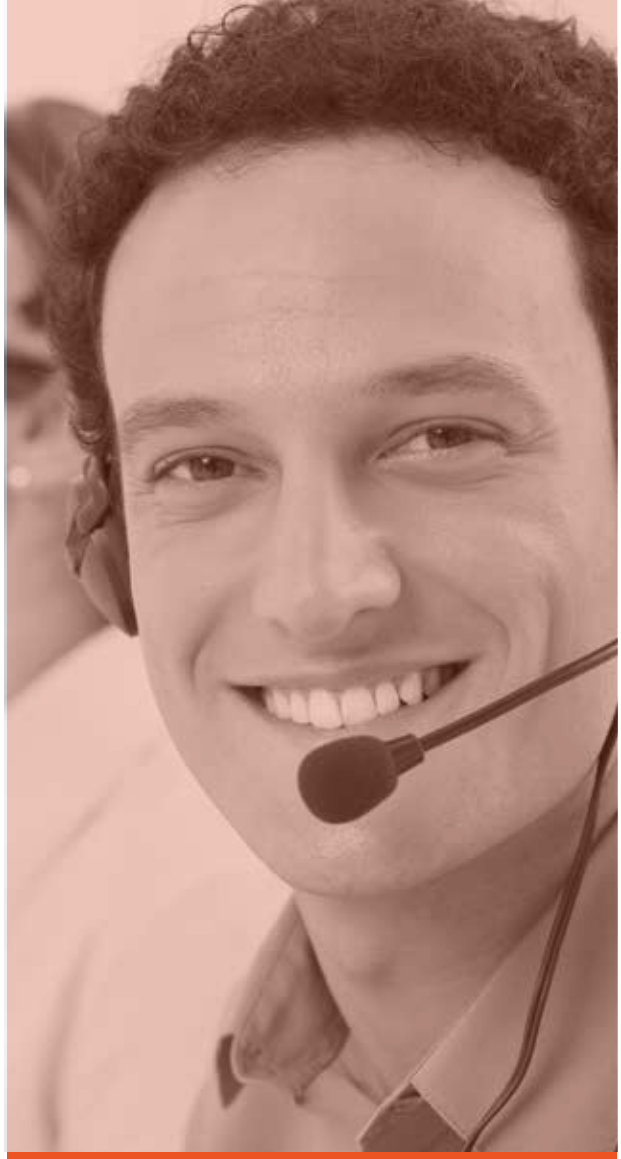
2015 Investment Activity: Kentucky Retirement Systems made no additional commitments to the Real Estate Portfolio through September 30, 2015. Withdrawal requests were sent to the managers for the following investments: PRIMA – complete withdrawal of $66.5 million; Harrison Street Core Property Fund – withdrawal of $23.550 million; and H/2 Capital - $29.7 million. Payment of these withdrawal requests are expected to begin in during the fourth quarter 2015 and continue into 2016.

Please feel free to contact me regarding any of the information above.
Very truly yours,



Jonathan Berns

ACT



ACTUARIAL

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UARIAL

Certification of Actuarial Results

The fifty-seventh annual actuarial valuation of the Kentucky Employees Retirement System (KERS), the fifty-fourth annual actuarial valuation of the County Employees Retirement System(CERS), and the fifty-fifth annual actuarial valuation of the State Police Retirement System(SPRS) have been completed and the reports prepared.

The fifty-ninth annual actuarial valuation of the Kentucky Employees Retirement System (KERS), the fifty-sixth annual actuarial valuation of the County Employees Retirement System (CERS), and the fifty-seventh annual actuarial valuation of the State Police Retirement System (SPRS) have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rates. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. The June 30, 2015 actuarial valuation will be used by the Board of Trustees to certify the CERS employer contribution rates for the fiscal year beginning July 1, 2016 and ending June 30, 2017. The June 30, 2015 actuarial valuation will be used by the Board of Trustees to certify the KERS and SPRS employer contribution rates for the fiscal years beginning July 1, 2016 and ending June 30, 2018.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by SB2, the amortization period was reestablished as a closed 30-year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL. The assumptions and methods meet the requirements of GASB Statement No. 43. The UAL is amortized over a closed 30-year period beginning June 30, 2013.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain relatively stable as a percentage of payroll over future years.

KERS, CERS and SPRS have three benefit tiers. Members hired prior to or on August 31, 2008 are in Tier 1. HB1 passed into law in 2008 which introduced Tier 2 for members hired after August 31, 2008 and prior to January 1, 2014. Tier 2 reduced the contribution rates in relationship to Tier 1. SB2 was passed into law in 2013 which introduced Tier 3 for those hired on or after January 1, 2014. Tier 3 is a Cash Balance Plan for pension benefits. The cash balance plan limits the employers' exposure to increased contribution rates due to less than anticipated investment experience.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, relative to both the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, assumption changes and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, prior employer contribution rate reductions enacted by the State Legislature severely limited the plans ability to correct the declining funding levels. SB2 requires the state to contribute the full actuarially determined employer contribution rates compared to the HB1 phase-in rates which would not have required the full actuarially determined employer contribution rate for many years. As of June 30, 2015 the funding levels for the pension funds are as follows:

Funding Level of Pension Fund

System	Pension Fund	Insurance Fund
KERS Nonhazardous	19.0%	28.8%
KERS Hazardous	62.2%	120.4%
CERS Nonhazardous	60.3%	68.7%
CERS Hazardous	58.0%	72.3%
SPRS	33.8%	65.8%

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities.

Data

In completing the valuation of these systems, we have relied on data and financial information provided by the Kentucky Retirement Systems. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. At least once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on December 4, 2014 and based on the experience investigation report dated April 30, 2014, meet the parameters set for disclosure under GASB Statement 43 and by Actuarial Standards of Practice. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is scheduled to be completed in early 2019 and any adjustments are expected to be reflected in the June 30, 2019 actuarial valuation.

Closing

The long-term financial health of the three retirement Systems, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. The System has recently been strengthened due to two reasons. They are: recent legislative action that provides 100% funding of the actuarially determined contribution and the elimination of unfunded ad hoc cost-of-living adjustments for retirees. The cost for providing cost-of-living adjustments for retires must be prefunded in advance.

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

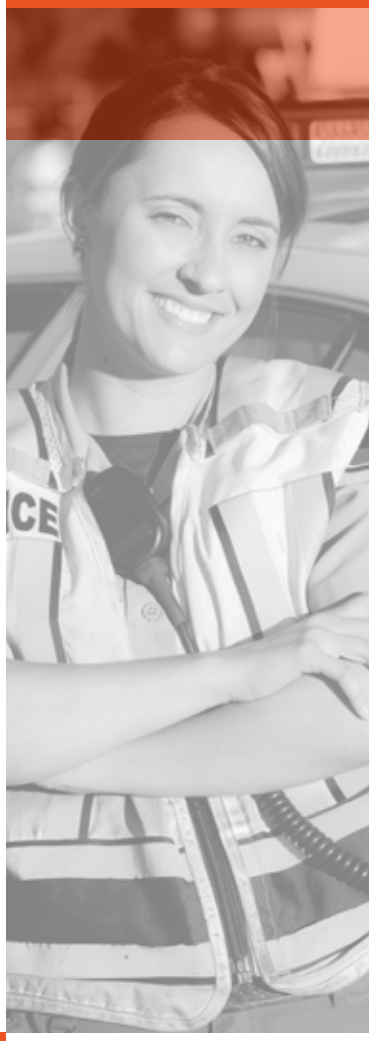
The funding of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System has been determined based on the requirements of the Kentucky Revised Statutes and the current funding policies of the Board on the basis that all the actuarial assumptions are met. The funding rates established by the Board are appropriate for this purpose. However, it is up to the state legislature to follow through with the required funding. As noted above, SB2 calls for KERS and SPRS contributions at the actuarially determined rates beginning with fiscal year 2015. It should also be noted that the Retirement Fund of the KERS Non-Hazardous Retirement System and the SPRS Pension Fund are both in critical condition.

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Summary of Actuarial Assumptions

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study.



The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study. The most recent study was completed in April 2014 and reviewed plan experience for the period from July 1, 2008 through June 30, 2013. All assumptions, with the exception of health care trend rates, used in the June 30, 2015 actuarial valuation were based on the most recent experience study performed in 2014 and in accordance with the actuary's recommendations. The most recent experience study was adopted by the Board on December 4, 2014.

1. Actuarial Cost Method: The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL).

2.UAL Amortization Method: The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by SB2, the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

3. Asset Valuation Method: The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value.

4. Retiree Insurance Funding Policy: The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. As with the pension Fund, the amortization period was reestablished as a closed 30-year period beginning with the June 30, 2013 actuarial valuation.

5. Investment Return Assumption: The future investment earnings of plan assets are assumed to accumulate at a rate of 7.50% per annum. This rate consists of a 3.25% inflationary component and a 4.25% real rate of return component.

6. Salary Increase Assumptions: Active member salaries are assumed to increase at the rates provided in Table 1 on the following page. The rates include a 4.0% percent inflationary component and an additional increase due to promotion based upon plan experience. These assumptions were adopted in 2014.

Table 1. Salary Increase Assumptions

Service	KERS NonHaz	KERS Haz	CERS NonHaz	CERS Haz	SPRS
0-1	16.50%	20.50%	12.50%	19.50%	16.50%
1-2	8.50%	8.50%	9.00%	10.00%	11.50%
2-3	6.00%	6.50%	5.50%	6.00%	9.50%
3-4	5.50%	6.00%	5.50%	5.25%	8.50%
4-5	5.50%	5.50%	5.00%	5.00%	7.50%
5-6	5.50%	5.00%	5.00%	4.50%	6.50%
6-7	5.00%	4.50%	4.75%	4.00%	6.00%
7-8	5.00%	4.50%	4.75%	4.00%	6.00%
8-9	5.00%	4.50%	4.50%	4.00%	5.00%
9-10	4.50%	4.50%	4.50%	4.00%	4.50%
10+	4.50%	4.50%	4.25%	4.00%	4.00%

7. Payroll Growth Assumption: Active member payroll is assumed to increase at a rate of 4.0% per annum. This assumption was adopted in 2014.

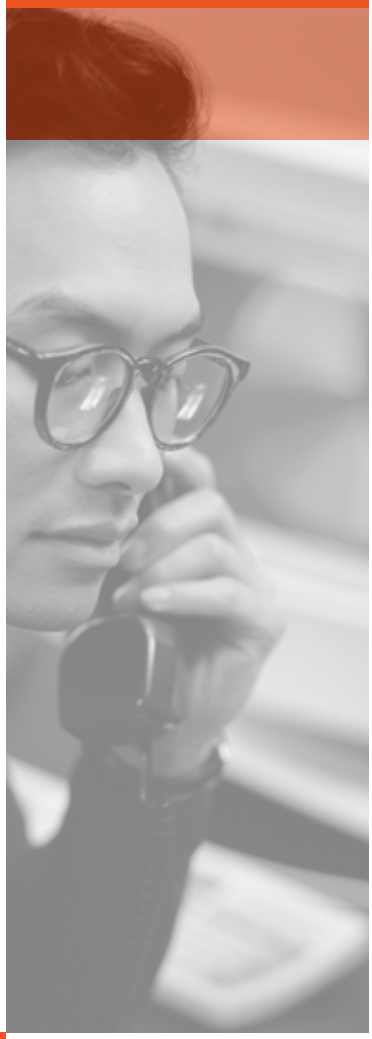
8. Retiree Cost of Living Adjustments (COLA): SB2 only allows the Cost of Living Adjustments (COLAs) to be awarded on a biennial basis if the State Legislature so authorizes and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

9. Medical Inflation Rate Assumption: The costs for retiree medical premiums are assumed to increase each according to the assumptions provided in Table 2 below:

Table 2. Cost of Retiree Medical Premiums

	Trend		
Fiscal Year Ended	Under Age 65	Age 65 and Over	Dollar Contribution
2016	7.50%	5.50%	1.50%
2017	6.75%	5.25%	1.50%
2018	6.25%	5.00%	1.50%
2019	5.75%	5.00%	1.50%
2020	5.25%	5.00%	1.50%
2021 and beyond	5.00%	5.00%	1.50%

** Applies to members participating on or after July 1, 2003*



10. Retirement Rate Assumptions: The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 3. These assumptions were adopted in 2014.

Table 3. Retirement Rate Assumptions

	Non-Hazardous				Hazardous					
Age	KERS[1]	KERS[2]	CERS[3]	Service	KERS[4]	KERS[5]	CERS[6]	CERS[7]	SPRS[8]	SPRS[9]
55	8.0%		5.0%	20	40.0%		22.5%		22.0%	
56	8.0%		6.0%	21	40.0%		22.5%		22.0%	
57	8.0%		7.0%	22	40.0%		22.5%		22.0%	
58	8.0%		8.0%	23	40.0%		22.5%		28.0%	
59	8.0%		8.0%	24	40.0%		30.0%		28.0%	
60	10.0%	10.0%	9.0%	25	47.0%	40.0%	33.0%	22.5%	28.0%	22.0%
61	20.0%	20.0%	15.0%	26	47.0%	40.0%	33.0%	22.5%	28.0%	22.0%
62	20.0%	20.0%	18.0%	27	47.0%	40.0%	36.0%	22.5%	28.0%	22.0%
63	20.0%	20.0%	18.0%	28	47.0%	40.0%	39.0%	22.5%	44.0%	28.0%
64	20.0%	20.0%	18.0%	29	47.0%	40.0%	55.0%	30.0%	44.0%	28.0%
65	20.0%	25.0%	18.0%	30	47.0%	47.0%	33.0%	33.0%	44.0%	28.0%
66	20.0%	25.0%	18.0%	31	47.0%	47.0%	33.0%	33.0%	58.0%	28.0%
67	20.0%	25.0%	18.0%	32	50.0%	47.0%	50.0%	36.0%	58.0%	28.0%
68	20.0%	25.0%	18.0%	33	50.0%	47.0%	40.0%	39.0%	58.0%	44.0%
69	20.0%	25.0%	18.0%	34	50.0%	47.0%	40.0%	55.0%	58.0%	44.0%
70	20.0%	25.0%	18.0%	35	60.0%	47.0%	40.0%	33.0%	58.0%	44.0%
71	20.0%	25.0%	18.0%	36	60.0%	47.0%	40.0%	33.0%	58.0%	58.0%
72	20.0%	25.0%	18.0%	37	60.0%	50.0%	40.0%	50.0%	58.0%	58.0%
73	20.0%	25.0%	18.0%	38	60.0%	50.0%	40.0%	40.0%	58.0%	58.0%
74	20.0%	25.0%	18.0%	39	60.0%	50.0%	40.0%	40.0%	58.0%	58.0%
75+	100.0%	100.0%	100.0%	40+	60.0%	60.0%	40.0%	40.0%	58.0%	58.0%

1 For members participating before 9/1/2008. If service is at least 27 years, the rate is 35%.
2 For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 35%.
3 If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.
4 For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.
5 For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.
6 For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.
7 For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.
8 For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.
9 For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.

Mortality Assumptions: The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

Table 4. Sample Annual Rates of Mortality

	Active Member Mortality		Retired Member Mortality*		Disabled Member Mortality*	
Age	Males	Females	Males	Females	Males	Females
Under 20	0.02%	0.01%	0.03%	0.02%	-	-
22	0.02%	0.01%	0.04%	0.02%	-	-
32	0.03%	0.01%	0.05%	0.03%	-	-
42	0.06%	0.02%	0.12%	0.07%	2.17%	0.72%
52	0.13%	0.06%	0.26%	0.18%	2.54%	1.29%
62	0.39%	0.17%	0.78%	0.50%	3.50%	2.06%
72	1.12%	0.53%	2.24%	1.59%	4.68%	3.66%

** For members retiring on or after July 1, 2006.*

Withdrawal Rates The probability, or likelihood, of active members terminating employment prior to retirement is provided in Table 5 on the following page. The withdrawal rate is a function of service. These assumptions were adopted in 2014.

Table 5. Selected Rates of Termination Prior to Retirement

	KERS Non-Hazardous	KERS Hazardous		CERS Hazardous	CERS Hazardous		SPRS
Years of Service			Years of Service			Years of Service	
0-1	22.50%	25.00%	0-1	28.00%	20.50%	0-1	20.00%
1-2	15.50%	10.50%	1-2	16.00%	13.00%	1-2	7.00%
2-3	12.50%	7.50%	2-3	12.00%	10.50%	2-9	3.00%
3-4	10.50%	6.50%	3-4	10.00%	9.00%	9 & Over	2.50%
4-5	9.00%	5.50%	4-5	8.00%	8.00%		
5-6	6.50%	4.50%	5-6	6.00%	7.00%		
6-7	5.50%	3.00%	6-7	5.00%	7.00%		
7-8	5.00%	3.00%	7-8	5.00%	6.00%		
8-9	4.50%	3.00%	8-13	4.00%	6.00%		
9-10	4.50%	2.50%	13 & Over	3.00%	6.00%		
10-11	4.00%	2.50%					
11-13	4.00%	2.00%					
13-15	3.50%	2.00%					
15 & Over	3.00%	2.00%					

Rates of Disablement: KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. These assumptions were adopted in 2014.

This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels.

Rate of Disablement

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Nearest Age	Probability	Probability	Probability	Probability	Probability
20	0.02%	0.03%	0.02%	0.05%	0.05%
30	0.03%	0.05%	0.03%	0.09%	0.09%
40	0.07%	0.10%	0.07%	0.20%	0.20%
50	0.19%	0.28%	0.19%	0.56%	0.56%
60	0.49%	0.73%	0.49%	1.46%	1.46%

Summary of Actuarial Valuation Results

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Recommended Rate Fiscal 2015-2016					
Pension Fund Contribution	38.93%	21.08%	13.95%	21.71%	66.47%
Insurance Fund Contribution	8.35%	2.74%	4.93%	9.79%	18.87%
Recommended Employer Contribution	47.28%	23.82%	18.88%	31.50%	85.34%
Funded Status as of Valuation Date					
PENSION FUND					
↘ Actuarial Liability	$12,359,672,849	$895,433,387	$10,740,325,421	$3,613,307,547	$734,156,446
↘ Actuarial Value of Assets	$2,350,989,940	$556,687,757	$6,474,848,513	$2,096,782,956	$248,387,946
↘ Unfunded Liability on Actuarial Value of Assets	$10,008,682,909	$338,745,630	$4,265,476,908	$1,516,524,591	$485,768,500
↘ Funding Ratio on Actuarial Value of Assets	19.02%	62.17%	60.29%	58.03%	33.83%
↘ Market Value of Assets	$2,307,858,072	$550,120,310	$6,416,853,506	$2,073,397,045	$246,968,144
↘ Unfunded Liability on Market Value of Assets	$10,051,814,777	$345,313,077	$4,323,471,915	$1,539,910,502	$487,188,302
↘ Funding Ratio on Market Value of Assets	18.67%	61.44%	59.75%	57.38%	33.64%
INSURANCE FUND					
↘ Actuarial Liability	$2,413,705,252	$374,904,234	$2,907,827,440	$1,504,015,233	$254,838,710
↘ Actuarial Value of Assets	$695,018,262	$451,514,191	$1,997,456,463	$1,087,707,118	$167,774,940
↘ Unfunded Liability on Actuarial Value of Assets	$1,718,686,990	($76,609,957)	$910,370,977	$416,308,115	$87,063,770
↘ Funding Ratio on Actuarial Value of Assets	28.79%	120.43%	68.69%	72.32%	65.84%
↘ Market Value of Assets	$687,684,080	$441,626,285	$1,948,454,097	$1,061,560,788	$165,018,209
↘ Unfunded Liability on Market Value of Assets	$1,726,021,172	($66,722,051)	$959,373,343	$442,454,445	$89,820,501
↘ Funding Ratio on Market Value of Assets	28.49%	117.80%	67.01%	70.58%	64.75%
MEMBER DATA					
Number of Active Members	30,056	3,886	80,852	9,172	937
Total Annual Payroll (Active Members)[1]	$1,544,234,409	$128,680,130	$2,296,715,957	$483,640,601	$45,764,515
Average Annual Pay (Active Members)	$39,539	$33,114	$28,406	$52,730	$48,842
Number of Retired Members & Beneficiaries	42,269	3,758	52,651	8,034	1,460
Average Annual Retirement Allowance	$20,904	$15,016	$11,306	$25,162	$37,624
Number of Vested Inactive Members	9,806	460	13,649	708	63
Number of Inactive Members Due a Refund	38,454	4,094	66,530	1,948	362

1 Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30,2015.

Recommended Employer Contribution Rates as of June 30, 2015

KERS Nonhazardous

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/10	2011-2012	4.23%	20.07%	24.30%	16.41%	40.71%
6/30/11	2012-2013	4.38%	23.65%	28.03%	16.52%	44.55%
6/30/12	2013-2014	4.26%	28.31%	32.57%	12.71%	45.28%
6/30/13	2014-2015	4.13%	26.71%	30.84%	7.93%	38.77%
6/30/14	2015-2016	4.10%	29.47%	33.57%	7.74%	41.31%
6/30/15	2016-2017	3.60%	35.33%	38.93%	8.35%	47.28%

KERS Hazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/10	2011-2012	7.19%	6.92%	14.11%	19.73%	33.84%
6/30/11	2012-2013	7.47%	8.69%	16.16%	19.73%	35.89%
6/30/12	2013-2014	6.09%	10.91%	17.00%	11.84%	28.84%
6/30/13	2014-2015	5.79%	10.58%	16.37%	9.97%	26.34%
6/30/14	2015-2016	5.69%	11.40%	17.09%	7.12%	24.21%
6/30/15	2016-2017	6.93%	14.15%	21.08%	2.74%	23.82%

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statue called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

KERS Funds

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the tables above are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, the actual employer contribution rates have been less than those shown above for the years prior to 2014-2015. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation and employers began contributing the full funding rate rate in the 2014-2015 fiscal year.

CERS Funds

The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the tables above are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date as a result of the passage of HB 1 by the Kentucky General Assembly. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2014-2015 is 4.92% and the employer contribution rate is 17.67%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2014-2015 is 13.58% and the employer contribution rate is 34.31%.

Recommended Employer Contribution Rates as of June 30, 2015

CERS Nonhazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/10	2011-2012	4.72%	6.98%	11.70%	9.59%	21.29%
6/30/11	2012-2013	4.68%	7.94%	12.62%	8.59%	21.21%
6/30/12	2013-2014	4.68%	9.06%	13.74%	5.84%	19.58%
6/30/13	2014-2015	4.35%	8.40%	12.75%	5.35%	18.10%
6/30/14	2015-2016	4.23%	8.19%	12.42%	4.88%	17.30%
6/30/15	2016-2017	3.80%	10.15%	13.95%	4.93%	18.88%

CERS Hazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/10	2011-2012	7.31%	10.60%	17.91%	23.74%	41.65%
6/30/11	2012-2013	7.40%	12.70%	20.10%	21.84%	41.94%
6/30/12	2013-2014	6.44%	15.33%	21.77%	16.02%	37.79%
6/30/13	2014-2015	6.35%	14.38%	20.73%	14.97%	35.70%
6/30/14	2015-2016	6.21%	14.05%	20.26%	13.42%	33.68%
6/30/15	2016-2017	4.52%	17.19%	21.71%	9.79%	31.50%

The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2016-2017 is 4.73% and the employer contribution rate is 18.68%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2016-2017 is 9.35% and the employer contribution rate is 31.06%.

Recommended Employer Contribution Rates as of June 30, 2015

SPRS

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/10	2011-2012	7.75%	32.05%	39.80%	54.83%	94.63%
6/30/11	2012-2013	8.12%	39.36%	47.48%	55.93%	103.41%
6/30/12	2013-2014	8.14%	45.21%	53.35%	43.17%	96.52%
6/30/13	2014-2015	8.46%	45.44%	53.90%	21.86%	75.76%
6/30/14	2015-2016	8.39%	50.05%	58.44%	19.17%	77.61%
6/30/15	2016-2017	8.77%	57.70%	66.47%	18.87%	85.34%

The contribution rates for SPRS shown in the above tables are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statue called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

SPRS Funds

The contribution rates for SPRS shown in the tables above are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, the actual employer contribution rates have been less than those shown above for the years prior to 2014-2015. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2018 for SPRS. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

Summary of Actuarially Unfunded Liabilities as of June 30, 2015

KERS Non-Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	$11,004,795,089	$4,210,215,585	$3,503,007,035	$6,794,579,504	$7,501,788,054	38.3%	31.8%
6/30/11	$11,182,142,032	$3,276,986,087	$3,538,878,093	$7,455,155,945	$7,643,263,939	33.3%	31.7%
6/30/12	$11,361,048,136	$3,101,316,738	$2,980,401,603	$8,259,731,398	$8,380,646,533	27.3%	26.2%
6/30/13	$11,386,602,159	$2,636,122,852	$2,747,428,086	$8,750,479,307	$8,639,174,073	23.2%	24.1%
6/30/14	$11,550,110,224	$2,423,956,716	$2,560,419,519	$9,126,153,508	$8,989,690,705	21.0%	22.2%
6/30/15	$12,359,672,849	$2,350,989,940	$2,307,858,072	$10,008,682,909	$10,051,814,777	19.0%	18.7%

KERS Non-Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	$4,466,136,041	$471,341,628	$371,002,484	$3,994,794,413	$4,095,133,557	10.6%	8.3%
6/30/11	$4,280,089,633	$451,620,442	$433,305,243	$3,828,469,191	$3,846,784,390	10.6%	10.1%
6/30/12	$3,125,330,157	$446,080,511	$430,805,726	$2,679,249,646	$2,694,524,431	14.3%	13.8%
6/30/13	$2,128,754,134	$497,584,327	$509,364,080	$1,631,169,807	$1,619,390,054	23.4%	23.9%
6/30/14	$2,226,759,925	$621,236,646	$664,775,708	$1,605,523,279	$1,561,984,217	27.9%	29.9%
6/30/15	$2,413,705,252	$695,018,262	$687,684,080	$1,718,686,990	$1,726,051,172	28.8%	28.5%

KERS Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	$688,149,451	$502,729,009	$443,511,663	$185,420,442	$244,637,788	73.1%	64.5%
6/30/11	$721,293,444	$510,748,505	$510,628,492	$210,544,939	$210,664,952	70.8%	70.8%
6/30/12	$752,699,457	$497,226,296	$478,103,794	$255,473,161	$274,595,663	66.1%	63.5%
6/30/13	$783,980,594	$505,656,808	$513,162,166	$278,323,786	$270,818,428	64.5%	65.5%
6/30/14	$816,850,063	$527,897,261	$559,504,340	$288,952,802	$257,345,723	64.6%	68.5%
6/30/15	$895,433,387	$556,687,757	$550,120,310	$338,745,630	$345,313,077	62.2%	61.4%

KERS Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	$493,297,529	$314,427,296	$271,395,843	$178,870,233	$221,901,686	63.7%	55.0%
6/30/11	$507,058,767	$329,961,615	$321,071,515	$177,097,152	$185,987,252	65.1%	63.3%
6/30/12	$384,592,406	$345,573,948	$333,298,119	$39,018,458	$51,294,287	89.9%	86.7%
6/30/13	$ 385,517,675	$370,774,403	$ 374,309,576	$14,743,272	$11,208,099	96.2%	97.1%
6/30/14	$396,986,820	$419,395,867	$435,503,976	($22,409,047)	($38,517,156)	105.6%	109.7%
6/30/15	$374,904,234	$451,514,191	$441,626,285	($76,609,957)	($66,72,051)	120.4%	117.8%

Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2015

CERS Non-Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	$8,459,022,280	$5,546,857,291	$4,819,933,717	$2,912,164,989	$3,639,088,563	65.6%	57.0%
6/30/11	$8,918,085,025	$5,629,611,183	$5,577,252,295	$3,288,473,842	$3,340,832,730	63.1%	62.5%
6/30/12	$9,139,567,695	$5,547,235,599	$5,372,769,813	$3,592,332,096	$3,766,797,882	60.7%	58.8%
6/30/13	$9,378,876,114	$5,637,094,483	5,780,830,355	$3,741,781,631	$3,598,045,759	60.1%	61.6%
6/30/14	$9,772,522,616	$6,117,133,692	$6,507,300,157	$3,655,388,924	$3,265,222,459	62.6%	66.6%
6/30/15	$10,740,325,421	$6,474,848,513	$6,416,853,506	$4,265,476,908	$4,323,471,915	60.3%	59.8%

CERS Non-Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	$3,158,340,174	$1,293,038,593	$1,096,581,872	$1,865,301,581	$2,061,758,302	40.9%	34.7%
6/30/11	$3,073,973,205	$1,433,450,793	$1,451,984,026	$1,640,522,412	$1,621,989,179	46.6%	47.2%
6/30/12	$2,370,771,288	$1,512,853,851	$1,439,226,170	$857,917,437	$931,545,118	63.8%	60.7%
6/30/13	$2,443,894,100	$1,628,244,197	$1,633,696,661	$815,649,903	$810,197,439	66.6%	66.9%
6/30/14	$2,616,914,600	$1,831,199,465	$1,899,557,376	$785,715,135	$717,357,224	70.0%	72.6%
6/30/15	$2,907,827,440	$1,997,456,463	$1,948,454,097	$910,370,977	$959,373,343	68.7%	67.0%

CERS Haz Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	$2,672,151,907	$1,749,464,388	$1,506,787,429	$922,687,519	$1,165,364,478	65.5%	56.4%
6/30/11	$2,859,041,052	$1,779,545,393	$1,760,602,934	$1,079,495,659	$1,098,438,118	62.2%	61.6%
6/30/12	$3,009,992,047	$1,747,379,297	$1,677,940,479	$1,262,612,750	$1,332,051,568	58.1%	55.8%
6/30/13	$3,124,205,593	$1,801,691,410	$1,830,657,969	$1,322,514,183	$1,293,547,624	56.7%	58.6%
6/30/14	$3,288,825,753	$1,967,640,027	$2,082,998,414	$1,321,185,726	$1,205,827,339	59.8%	63.3%
6/30/15	$3,613,307,547	$2,096,782,956	$2,073,397,045	$1,516,524,591	$1,539,910,502	58.0%	57.4%

CERS Haz Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	$1,674,703,216	$692,769,770	$586,826,965	$981,933,446	$1,087,876,251	41.4%	35.0%
6/30/11	$1,647,702,755	$770,790,274	$774,509,101	$876,912,481	$873,193,654	46.8%	47.0%
6/30/12	$1,364,843,057	$829,040,842	$788,070,813	$535,802,215	$576,772,244	60.7%	57.7%
6/30/13	$1,437,332,817	$892,774,391	$894,232,297	$544,558,426	$543,100,520	62.1%	62.2%
6/30/14	$1,493,864,379	$997,733,237	$1,034,307,636	$496,131,142	$459,556,743	66.8%	69.2%
6/30/15	1,504,015,233	$1,087,707,118	$1,061,560,788	$416,308,115	$442,454,445	72.3%	70.6%

Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2015

SPRS Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	$612,444,806	$304,577,292	$264,944,089	$307,867,514	$347,500,717	49.7%	43.3%
6/30/11	$634,379,401	$285,580,631	$279,934,443	$348,798,770	$354,444,958	45.0%	44.1%
6/30/12	$647,688,665	$259,791,575	$252,896,868	$387,897,090	$394,791,797	40.1%	39.1%
6/30/13	$651,580,654	$241,800,328	$248,559,040	$409,780,326	$403,021,614	37.1%	38.2%
6/30/14	$681,118,402	$242,741,735	$260,763,486	$438,376,667	$420,354,916	35.6%	38.3%
6/30/15	$734,156,446	$248,387,946	$246,968,144	$485,768,500	$487,188,302	33.8%	33.6%

SPRS Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	$434,960,495	$121,175,083	$104,526,550	$313,785,412	$330,433,945	27.9%	24.0%
6/30/11	$438,427,763	$123,687,289	$127,367,947	$314,740,474	$311,059,816	28.2%	29.1%
6/30/12	$333,903,782	$124,372,072	$125,567,846	$209,531,710	$208,335,936	37.3%	37.6%
6/30/13	$222,326,743	$136,321,060	$142,830,916	$86,005,683	$79,495,827	61.3%	64.2%
6/30/14	$234,271,127	$155,594,760	$165,167,805	$78,676,367	$69,103,322	66.4%	70.5%
6/30/15	$254,838,710	$167,774,940	$165,018,209	$87,063,770	$89,820,501	65.8%	64.8%

Valuation Balance Sheets give the basis for determining the percentage rates for contributions to be made by employers.

Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience *(in Millions)* as of June 30, 2015

Type of Activity	Retirement Gain	Insurance Gain
KERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(115.6)	(35.8)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(9.3)	0.9
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.4)	(1.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	62.8	(5.7)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	51.2	112.3
New Members. Additional unfunded accrued liability will produce a loss.	(7.6)	(3.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	56.5	10.9
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(8.5)	19.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(23.3)	6.0
Gain (or Loss) During Year From Financial Experience	**5.9**	**102.4**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(694.6)	(179.9)
Composite Gain (or Loss) During Year	**(688.7)**	**(77.5)**
KERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(16.9)	(8.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.7)	0.4
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	15.8	2.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	2.0	19.8
New Members. Additional unfunded accrued liability will produce a loss.	(3.1)	(2.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	7.4	1.3
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	1.9	5.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(6.8)	5.2
Gain (or Loss) During Year From Financial Experience	**(0.3)**	**23.7**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(52.1)	29.9
Composite Gain (or Loss) During Year	**(52.4)**	**5.36**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience *(in Millions)* as of June 30, 2015

Type of Activity	Retirement Gain	Insurance Gain
CERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(86.6)	(20.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(17.1)	2.6
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.1)	(2.5)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	43.5	(15.3)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	46.5	133.8
New Members. Additional unfunded accrued liability will produce a loss.	(16.9)	(5.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	103.0	11.7
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(6.2)	26.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(41.8)	(50.0)
Gain (or Loss) During Year From Financial Experience	**23.4**	**80.1**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(606.3)	(187.3)
Composite Gain (or Loss) During Year	**(582.9)**	**(107.2)**
CERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(70.9)	(8.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(2.7)	0.6
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	32.1	3.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	12.8	72.3
New Members. Additional unfunded accrued liability will produce a loss.	(23.8)	(4.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	28.1	5.4
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	28.9	11.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(22.7)	(10.2)
Gain (or Loss) During Year From Financial Experience	**(18.1)**	**68.3**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(166.8)	22.6
Composite Gain (or Loss) During Year	**(184.9)**	**90.9**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience *(in Millions)* as of June 30, 2015

Type of Activity	Retirement Gain	Insurance Gain
SPRS		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(6.5)	(13.0)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.0	0.1
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(0.7)	(0.2)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	2.2	12.1
New Members. Additional unfunded accrued liability will produce a loss.	(0.4)	(0.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	5.2	3.3
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(1.7)	1.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(2.9)	(1.6)
Gain (or Loss) During Year From Financial Experience	**(4.8)**	**2.0**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(40.2)	(8.6)
Composite Gain (or Loss) During Year	**(45.0)**	**(6.6)**

Solvency Test *per Funds* as of June 30, 2015

KERS Non-Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	$869,484,042	$8,329,757,802	$1,805,553,245	$4,210,215,585	100.0%	40.1%	--
6/30/11	$916,568,932	$8,482,714,356	$1,782,858,744	$3,726,986,087	100.0%	33.1%	--
6/30/12	$885,137,183	$8,708,536,338	$1,767,374,615	$3,101,316,738	100.0%	25.4%	--
6/30/13	$922,928,027	$8,709,323,622	$1,754,350,510	$2,636,122,852	100.0%	19.7%	--
6/30/14	$928,557,540	$8,870,692,596	$1,750,860,088	$2,423,956,716	100.0%	16.9%	--
6/30/15	$925,933,970	$9,437,467,771	$1,996,271,108	$2,350,989,940	100.0%	15.1%	--

KERS Non-Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	-	$2,744,534,054	$1,721,601,987	$471,341,628	100.0%	17.2%	--
6/30/11	-	$2,568,002,978	$1,712,086,655	$451,620,442	100.0%	17.6%	--
6/30/12	-	$1,924,068,623	$1,201,261,534	$446,080,511	100.0%	23.2%	--
6/30/13	-	$1,338,772,860	$789,981,274	$497,584,327	100.0%	37.2%	--
6/30/14	-	$1,425,604,569	$801,155,356	$621,236,646	100.0%	43.6%	--
6/30/15	-	$1,428,349,857	$985,355,395	$695,018,262	100.0%	48.7%	--

KERS Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	$88,511,283	$441,657,241	$157,980,927	$502,729,009	100.0%	93.8%	--
6/30/11	$86,614,205	$490,395,078	$144,284,161	$510,748,505	100.0%	86.5%	--
6/30/12	$82,100,877	$521,688,803	$148,909,777	$497,226,296	100.0%	79.6%	--
6/30/13	$82,145,602	$545,596,534	$156,238,458	$505,656,808	100.0%	77.6%	--
6/30/14	$83,663,535	$581,231,300	$151,955,228	$527,897,261	100.0%	76.4%	--
6/30/15	$83,606,204	$633,189,198	$178,637,885	$556,687,757	100.0%	74.7%	--

KERS Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	-	$268,510,709	$224,786,820	$314,427,296	100.0%	100.0%	20.4%
6/30/11	-	$285,539,861	$221,518,906	$329,961,615	100.0%	100.0%	20.1%
6/30/12	-	$196,578,935	$188,013,471	$345,573,948	100.0%	100.0%	79.2%
6/30/13	-	$202,031,515	$183,486,160	$370,774,403	100.0%	100.0%	92.0%
6/30/14	-	$206,477,405	$190,509,415	$419,395,867	100.0%	100.0%	100%
6/30/15	-	$221,114,995	$153,789,239	$451,514,191	100.0%	100.0%	100.0%

Continued. Solvency Test as of June 30, 2015

CERS Non-Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	$1,063,746,826	$4,890,659,077	$2,504,616,377	$5,546,857,291	100.0%	91.7%	--
6/30/11	$1,110,967,160	$5,209,783,924	$2,597,333,941	$5,629,611,183	100.0%	86.7%	--
6/30/12	$1,117,549,337	$5,416,932,995	$2,605,085,363	$5,547,235,599	100.0%	81.8%	--
6/30/13	$1,149,610,832	$5,638,370,836	$2,590,894,446	$5,637,094,483	100.0%	79.6%	--
6/30/14	$1,204,383,085	$5,873,279,494	$2,694,860,037	$6,117,133,692	100.0%	83.6%	--
6/30/15	$1,216,584,592	$6,489,862,734	$3,033,878,095	$6,474,848,513	100.0%	81.0%	--

CERS Non-Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	-	$1,526,533,372	$1,631,806,802	$1,293,038,593	100.0%	84.7%	--
6/30/11	-	$1,460,808,255	$1,613,164,950	$1,433,450,793	100.0%	98.1%	--
6/30/12	-	$1,146,907,750	$1,223,863,538	$1,512,853,851	100.0%	100.0%	29.9%
6/30/13	-	$1,205,599,287	$1,238,294,813	$1,628,244,197	100.0%	100.0%	34.1%
6/30/14	-	$1,318,182,882	$1,298,731,718	$1,831,199,465	100.0%	100.0%	39.5%
6/30/15	-	$1,372,596,636	$1,535,230,804	$1,997,456,463	100.0%	100.0%	40.7%

CERS Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	$369,612,720	$1,622,684,455	$679,854,732	$1,749,464,388	100.0%	85.0%	--
6/30/11	$382,072,055	$1,768,511,545	$708,457,452	$1,779,545,393	100.0%	79.0%	--
6/30/12	$381,672,428	$1,889,884,303	$738,435,316	$1,747,379,297	100.0%	72.3%	--
6/30/13	$390,471,059	$1,988,029,963	$745,704,571	$1,801,691,410	100.0%	71.0%	--
6/30/14	$415,069,629	$2,077,516,709	$796,239,415	$1,967,640,027	100.0%	74.7%	--
6/30/15	$422,358,688	$2,297,703,167	$893,245,692	$2,096,782,956	100.0%	72.9%	--

CERS Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	-	$814,300,256	$860,402,960	$692,769,770	100.0%	85.1%	--
6/30/11	-	$771,631,287	$876,071,468	$770,790,274	100.0%	99.9%	--
6/30/12	-	$575,099,089	$789,743,968	$829,040,842	100.0%	100.0%	32.2%
6/30/13	-	$660,955,331	$776,377,486	$892,774,391	100.0%	100.0%	29.9%
6/30/14	-	$700,311,599	$793,552,780	$997,733,237	100.0%	100.0%	37.5%
6/30/15	-	$790,713,766	$713,301,467	$1,087,707,118	100.0%	100.0%	41.6%

Continued. Solvency Test as of June 30,2015

SPRS Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	$42,011,523	$475,892,659	$94,540,624	$304,577,292	100.0%	55.2%	--
6/30/11	$43,574,097	$499,194,229	$91,611,075	$285,580,631	100.0%	48.5%	--
6/30/12	$41,139,306	$523,016,647	$83,532,712	$259,791,575	100.0%	41.8%	--
6/30/13	$39,788,421	$535,720,195	$76,072,038	$241,800,328	100.0%	37.7%	--
6/30/14	$41,831,465	$563,011,026	$76,275,911	$242,741,735	100.0%	35.7%	--
6/30/15	$41,567,127	$605,854,905	$86,734,414	$248,387,946	100.0%	34.1%	--

SPRS Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	-	$253,580,827	$181,379,668	$121,175,083	100.0%	47.8%	--
6/30/11	-	$252,439,726	$185,988,037	$123,687,289	100.0%	49.0%	--
6/30/12	-	$190,258,729	$143,645,053	$124,372,072	100.0%	65.4%	--
6/30/13	-	$139,508,590	$82,818,153	$136,321,060	100.0%	97.7%	--
6/30/14	-	$143,402,126	$90,869,001	$155,594,760	100.0%	100.0%	13.4%
6/30/15	-	$170,447,207	$84,391,503	$167,774,940	100.0%	98.4%	--

Active Member Valuation

Methodology The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

Summary of Active Member Valuation Data

KERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	334	47,090	$1,815,146,388	$38,546	1.2%	43.4	9.0
6/30/11	427	46,617	$1,731,632,748	$37,146	(3.6)%	43.8	9.4
6/30/12	286	42,196	$1,644,896,681	$38,982	4.9%	44.3	9.8
6/30/13	285	42,226	$1,644,408,698	$38,943	(0.1)%	44.5	10.1
6/30/14	353	40,365	$1,577,496,447	$39,081	0.4%	44.8	10.5
6/30/15	348	39,056	$1,544,234,409	$39,539	1.2%	45.0	10.6

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2015.*

KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	18	4,291	$143,557,944	$33,456	(0.7)%	41.4	7.0
6/30/11	16	4,291	$133,053,792	$31,008	(7.3)%	41.3	6.9
6/30/12	14	4,086	$131,976,754	$32,300	4.2%	41.1	7.3
6/30/13	14	4,127	$132,015,368	$31,988	(1.0)%	40.6	7.2
6/30/14	18	4,024	$129,076,038	$32,077	0.3%	40.6	7.4
6/30/15	17	3,886	$128,680,160	$33,114	3.2%	40.7	7.5

CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	1,102	84,681	$2,236,855,380	$26,415	1.3%	46.6	8.8
6/30/11	1,102	85,285	$2,276,595,948	$26,694	1.1%	46.8	9.0
6/30/12	1,080	83,052	$2,236,546,345	$26,929	0.9%	47.5	9.1
6/30/13	1,081	81,815	$2,236,277,489	$27,333	1.5%	47.8	9.3
6/30/14	1,101	81,115	$2,272,270,287	$28,013	2.5%	48.1	9.6
6/30/15	1,092	80,852	$2,296,715,957	$28,406	1.4%	48.0	9.5

CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	282	9,562	$466,548,660	$48,792	1.4%	38.8	9.2
6/30/11	281	9,407	$466,963,860	$49,640	1.7%	39.1	9.5
6/30/12	254	9,130	$464,228,923	$50,847	2.4%	39.3	10.3
6/30/13	248	9,123	$461,672,567	$50,605	(0.5)%	39.1	10.3
6/30/14	254	9,194	$479,164,016	$52,117	3.0%	39.2	10.6
6/30/15	246	9,172	$483,640,601	$52,730	1.2%	39.1	10.6

SPRS

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	1	961	$51,506,712	$53,597	(1.9)%	37.2	10.6
6/30/11	1	965	$48,692,616	$50,459	(5.9)%	37.7	10.6
6/30/12	1	907	$48,372,506	$53,332	5.7%	37.3	10.4
6/30/13	1	902	$45,256,202	$50,173	(5.9)%	37.0	10.0
6/30/14	1	855	$44,615,885	$52,182	4.0%	37.8	10.9
6/30/15	1	937	$45,764,515	$48,842	(6.4%)	36.8	9.8

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2015.*

Retired Member Valuation

Summary of Retired Member Valuation Data

KERS Non-Haz

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/10	1,162	1,100	37,945	$801,881,911	(1.31%)	$21,133
6/30/11	1,592	940	38,597	$821,197,278	2.41%	$21,276
6/30/12	1,707	1,078	39,226	$844,880,945	2.88%	$21,539
6/30/13	1,982	1,014	40,194	$872,139,782	3.23%	$21,698
6/30/14	2,067	1,038	41,223	$888,430,310	1.87%	$21,552
6/30/15	2,140	1,094	42,269	$905,961,226	1.97%	$21,433

KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	282	95	2,835	$41,114,800	6.25%	$14,503
6/30/11	288	59	3,064	$45,609,229	10.93%	$14,886
6/30/12	243	54	3,253	$49,231,205	7.94%	$15,134
6/30/13	229	52	3,430	$51,122,456	3.84%	$14,905
6/30/14	256	66	3,620	$54,271,718	6.16%	$14,992
6/30/15	203	65	3,758	$56,431,099	3.98%	$15,016

CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	2,565	1,283	41,038	$452,613,550	2.85%	$11,029
6/30/11	3,250	1,077	43,211	$483,594,068	6.84%	$11,191
6/30/12	3,300	1,207	45,304	$515,008,362	6.50%	$11,368
6/30/13	3,570	1,198	47,676	$557,979,192	8.34%	$11,704
6/30/14	3,480	1,221	49,935	$582,957,825	4.48%	$11,674
6/30/15	4,020	1,304	52,651	$617,550,928	5.93%	$11,729

CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	423	163	6,068	$146,916,812	5.03%	$24,212
6/30/11	502	102	6,468	$160,259,395	9.08%	$24,777
6/30/12	483	73	6,878	$173,221,483	8.09%	$25,185
6/30/13	519	104	7,293	$182,634,895	5.43%	$25,042
6/30/14	469	116	7,646	$191,007,832	4.58%	$24,981
6/30/15	526	138	8,034	$202,153,338	5.84%	$25,162

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section

SPRS						
Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/10	54	15	1,223	$45,515,797	2.80%	$37,217
6/30/11	52	12	1,263	$47,467,404	4.29%	$37,583
6/30/12	52	16	1,299	$49,887,093	5.10%	$38,404
6/30/13	63	16	1,346	$50,905,789	2.04%	$37,820
6/30/14	95	28	1,413	$53,432,446	4.96%	$37,815
6/30/15	62	15	1,460	$54,930,421	2.80%	$37,624

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section

Summary of Benefit Provisions
KERS & CERS Non-Hazardous Plans

Plan Funding

State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS rates are subject to state budget approval.

Membership Eligibility

For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility for Members Whose Participation Began Before 9/1/08		
Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
Any	25	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.

Retirement Eligibility for Members Whose Participation Began On or After 9/1/08 but before 1/1/2014		
Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None
60	10	6.5% per year for first five years, and 4.5% for next five years before age 65 or Rule of 87 (age plus years of service).

Retirement Eligibility for Members Whose Participation Began On or After 1/1/2014		
Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None

Benefit Formula for Tiers 1 & 2

Final Compensation	x	Benefit Factor		x	Years of Service
Average of the five highest if participation began before 9/1/2008.		KERS 1.97% if:	Member does not have 13 months credit for 1/1/1998-1/1/1999.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if:	Member has 13 months credit from 1/1/1998-1/1/1999.		
		KERS 2.20% if:	Member has 20 or more years of service, including 13 months from 1/1/1998-1/1/1999 and retires by 1/1/2009.		
		CERS 2.20% if:	Member begins participating prior to 8/1/2004.		
		CERS 2.00% if:	Member begins participating on or after 8/1/2004 and before 9/1/2008.		
Average of the last complete five if participation began on or after 9/1/2008 but before 1/1/2014.		KERS & CERS increasing percent based on service at retirement* plus 2.00% for each year of service over 30 if:	Member begins participating on or after 8/1/2004 but before 1/1/2014.		

* ***Service*** *(and Benefit Factor):* ***10 years or less*** *(1.10%);* ***10 - 20 years*** *(1.30%);* ***20 - 26 years*** *(1.50%);* ***26 - 30 years*** *(1.75%)*

Tier 3 Benefit Information

Tier 3 member begins participating on or after 1/1/2014: Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 5.00% and 4.00% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Summary of Benefit Provisions

KERS & CERS Non Hazardous Plans

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits

Members participating before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after 8/1/2004 but before 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to increase, suspend or reduce Cost of Living Adjustments. HB 265 of 2012 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees. SB2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at

retirement. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1981 (per Mary Satterly); 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees participating prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees participating on or after September 1, 2008 but before January 1, 2014, interest will be credited at a rate of 2.5%. For employees participating on or after January 1, 2014, interest will be credited at a minimum rate of 4.0%.

Summary of Benefit Provisions

KERS Hazardous, CERS Hazardous & SPRS Systems

Plan Funding

State statute requires active members to contribute 8% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS & SPRS rates are subject to state budget approval.

Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required for health insurance.

Retirement Eligibility - Participation Began Before 9/1/08

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 55 or 20 years of service.

Retirement Eligibility - Participation began on/after 9/1/2008 & before 1/1/2014

Age	Years of Service	Allowance Reduction
60	5	None
Any	25	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 60 or 25 years of service.

Retirement Eligibility - Participation began on/after 1/1/2014

Age	Years of Service	Allowance Reduction
60	5	
Any	25	

Service* (with Benefit Factor): **10 years or less (1.30%); **10 - 20 years** (1.50%); **20 - 25 years** (2.25%) **25 + years** (2.50%)*

Benefit Formula

Final Compensation	x	Benefit Factor		x	Years of Service
Average of the three highest if participation began before 9/1/2008.		KERS 2.49%, CERS 2.50%, SPRS 2.50%, if:	Member begins participating before 9/1/2008.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
Average of the three highest complete years if participation began on or after 9/1/2008.		KERS, CERS and SPRS increasing percent based on service at retirement* if:	Member begins participating on or after 9/1/2008 but before 1/1/2014.		

* **Service** (with Benefit Factor): **10 years or less** (1.30%); **10 - 20 years** (1.50%); **20 - 25 years** (2.25%) **25 + years** (2.50%)

Member begins participating on or after 1/1/2014: Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Disability Benefits

Members hired before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members hired on or after 8/1/2004 but before 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to increase, suspend or reduce Cost of Living Adjustments. HB 265 of 2012 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees. SB2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1981 (per Mary Satterly); 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees participating prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees participating on or after September 1, 2008 but before January 1, 2014, interest will be credited at a rate of 2.5%. For employees participating on or after January 1, 2014, interest will be credited at a minimum rate of 4.0%.

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ISTICAL

FUND Statistics

Definitions

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

The data reflects the number of accounts in each system. A single member may have multiple accounts, which contribute to one pension. Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in the retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-Hazardous, then KERS Non-Hazardous. This table does not include individuals receiving payments under dependent child accounts, Qualified Domestic Relations Orders or multiple beneficiary accounts.

Kentucky Retirement Systems
Membership Totals

Fiscal Year	Active	Inactive	Retired	Total
2010	144,837	92,379	81,765	318,981
2011	144,894	95,025	84,680	324,599
2012	139,352	107,353	87,472	334,177
2013	137,368	112,462	90,796	340,626
2014	137,138	117,039	93,946	348,123
2015	**136,318**	**121,604**	**97,630**	**355,552**

KERS Non-Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2010	46,710	32,461	35,733	114,904
2011	46,044	33,350	36,239	115,633
2012	41,743	39,338	36,508	117,589
2013	40,710	40,375	37,240	118,325
2014	40,500	41,213	38,022	119,735
2015	39,289	42,479	38,827	120,595

KERS Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2010	4,049	2,285	1,900	8,234
2011	4,045	2,351	2,090	8,486
2012	4,007	2,597	2,180	8,784
2013	4,057	2,882	2,312	9,251
2014	4,094	3,318	2,467	9,879
2015	3,932	3,761	2,575	10,268

CERS Non-Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2010	84,010	55,423	38,261	177,694
2011	84,837	57,073	40,174	182,084
2012	83,658	63,280	42,068	189,006
2013	82,631	67,013	44,164	193,808
2014	82,494	70,231	46,112	198,837
2015	82,969	72,965	48,515	204,449

CERS Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2010	9,120	2,009	4,867	15,996
2011	9,019	2,047	5,158	16,224
2012	9,040	1,914	5,513	16,467
2013	9,069	1,956	5,840	16,865
2014	9,189	2,038	6,066	17,293
2015	9,188	2,142	6,389	17,719

SPRS

Fiscal Year	Active	Inactive	Retired	Total
2010	948	201	1,004	2,153
2011	949	204	1,019	2,172
2012	904	224	1,203	2,331
2013	901	236	1,240	2,377
2014	861	239	1,279	2,379
2015	940	257	1,324	2,521

Principal Participating Employers in KERS

Participating Employer	Rank	Covered Employees	% of Total System
Department For Community Based Services	1	4,427	10.01%
Department Of Highways	2	3,965	8.96%
Department Of Corrections	3	3,787	8.56%
Judicial Department Administrative Office Of The Courts	4	1,371	3.10%
Department Of Juvenile Justice	5	1,308	2.96%
Bluegrass ORG	6	1,044	2.36%
Department for Behavioral Health Developmental Intellectual Disabilities	7	950	2.15%
Eastern Kentucky University	8	938	2.12%
Kentucky State Police	9	938	2.12%
Department Of Revenue	10	903	2.04%
All Others		24,601	55.62%
Total		**44,232**	**100%**

Schedule of Participating Employers in KERS

Agency Classification	Number of Agencies	Number of Employees
County Attorneys	62	329
Health Departments	60	2,727
Master Commissioner	33	78
Non-P1 State Agencies	39	1,356
Other Retirement Systems	2	290
P1 State Agencies	139	31,972
Regional Mental Health Units	12	3,087
Universities	7	4,393
Total	**354**	**44,232**
By Tier Levels:		
Tier 1		**28,455**
Tier 2		**10,803**
Tier 3		**4,974**

Principal Participating Employers in CERS

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board Of Education	1	6,614	7.08%
Louisville Jefferson County Metro Government	2	5,217	5.59%
Fayette County Board Of Education	3	1,916	2.05%
Judicial Department Administrative Office Of The Courts	4	1,637	1.75%
Lexington Fayette Urban County Government	5	1,582	1.69%
Pike County Board Of Education	6	1,144	1.23%
Boone County Board Of Education	7	1,134	1.21%
Hardin County Board Of Education	8	1,022	1.09%
Bullitt County Board Of Education	9	981	1.05%
Warren County Board Of Education	10	896	0.96%
All Others		71,235	76.29%
Total		**93,378**	**100%**

Schedule of Participating Employers in CERS

Agency Classification	Number of Agencies	Number of Employees
Airport Boards	5	526
Ambulance Services	20	416
Area Development Districts	14	723
Boards of Education	173	48,385
Cities	220	10,072
Community Action Agencies	21	2,675
Conservation Districts	47	58
County Attorneys	75	626
County Clerks	16	596
Development Authorities	6	11
Fire Departments	38	783
Fiscal Courts	118	11,049
Health Departments	1	318
Housing Authorities	42	434
Jailers	2	31
Libraries	86	1,230
Other Retirement Systems	2	3
P1 State Agencies	4	1,637
Parks and Recreation	7	66
Planning Commissions	16	222
Police Departments	2	16
Riverport Authorities	5	73
Sanitation Districts	9	351
Sheriff Departments	12	778
Special Districts & Boards	50	1,424
Tourist Commissions	23	171
Urban Government Agencies	2	6,799
Utility Boards	120	3,886
Total	**1,136**	**93,359**
By Tier Levels:		
Tier 1		**56,416**
Tier 2		**25,049**
Tier 3		**11,894**

Schedule of Participating Employers in SPRS

Kentucky State Police - Uniformed Officers	**1**	**948**
By Tier Levels:		
Tier 1		**660**
Tier 2		**183**
Tier 3		**105**

Average Monthly Benefit by Length of Service in KERS

	KERS Non-Hazardous		KERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	5,212	$172	691	$198
5 or more but less than 10	5,525	$416	751	$569
10 or more but less than 15	4,895	$696	662	$1,019
15 or more but less than 20	4,176	$1,022	596	$1,536
20 or more but less than 25	4,595	$1,368	843	$2,011
25 or more but less than 30	11,337	$2,294	152	$2,778
30 or more but less than 35	6,263	$3,238	58	$3,607
35 or more	2,512	$4,573	8	$4,087
Total	**44,515**	**$1,683**	**3,761**	**$1,200**

Average Monthly Benefit by Length of Service in CERS

	CERS Non-Hazardous		CERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	6,967	$158	920	$347
5 or more but less than 10	10,181	$333	964	$667
10 or more but less than 15	9,621	$522	793	$1,208
15 or more but less than 20	7,703	$774	712	$1,736
20 or more but less than 25	8,160	$991	2,970	$2,434
25 or more but less than 30	9,812	$1,902	1,216	$3,404
30 or more but less than 35	2,428	$2,684	385	$4,179
35 or more	638	$3,665	91	$5,063
Total	**55,510**	**$920**	**8,051**	**$2,061**

Average Monthly Benefit by Length of Service in SPRS

Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	112	$537
5 or more but less than 10	47	$905
10 or more but less than 15	51	$1,340
15 or more but less than 20	85	$2,008
20 or more but less than 25	437	$2,640
25 or more but less than 30	442	$3,664
30 or more but less than 35	226	$4,801
35 or more	61	$5,818
Total	**1,461**	**$3,118**

This table reflects the Average Monthly Pension Benefit. A single member may have multiple accounts, which contribute to one pension. This table does not reflect dependent child accounts, Qualified Domestic Relations Order (QDRO) accounts or multiple beneficiary accounts.

Plan Net Position *(in Thousands)*

KERS

	Non-Hazardous			Hazardous		
Fiscal Year	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2010	$3,504,501	$368,799	$3,873,300	$443,606	$271,240	$714,846
June 30, 2011	3,544,242	428,659	3,972,901	511,085	320,673	831,758
June 30, 2012	2,977,935	418,490	3,396,425	476,589	330,730	807,319
June 30, 2013	2,760,753	496,040	3,256,793	514,592	372,883	887,475
June 30, 2014	2,578,290	646,905	3,225,195	561,484	433,525	995,009
June 30, 2015	2,327,782	665,639	2,993.421	552,468	439,113	991,581

CERS

June 30 2010	$4,820,490	$1,094,821	$5,915,311	$1,506,894	$586,614	$2,093,508
June 30, 2011	5,583,451	1,446,998	7,030,449	1,761,858	773,139	2,534,997
June 30, 2012	5,381,602	1,428,821	6,810,423	1,672,970	785,874	2,458,844
June 30, 2013	5,795,568	1,618,960	7,414,528	1,833,571	891,320	2,724,891
June 30, 2014	6,528,147	1,878,711	8,406,858	2,087,002	1,030,303	3,117,305
June 30, 2015	6,440,800	1,920,946	8,361,746	2,078,202	1,056,480	3,134,682

SPRS

Fiscal Year	Pension	Insurance	Total
June 30 2010	$264,949	$104,511	$369,460
June 30, 2011	279,927	127,319	407,246
June 30, 2012	250,476	125,398	375,874
June 30, 2013	248,698	142,691	391,389
June 30, 2014	260,974	164,958	425,932
June 30, 2015	247,229	164,714	411,943

Kentucky Retirement Systems Total

Fiscal Year	Pension	Insurance	Total
June 30 2010	$10,540,440	$2,425,987	$12,966,427
June 30, 2011	11,680,563	3,096,788	14,777,351
June 30, 2012	10,758,706	3,089,313	13,848,019
June 30, 2013	11,153,182	3,521,894	14,675,076
June 30, 2014	12,015,897	4,154,402	16,170,299
June 30, 2015	11,646,481	4,246,892	15,893,373

Changes in Plan Net Position *(in Thousands)*

KERS Non-Haz Pension Fund

Additions	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Members' Contributions	$90,780	$109,879	$96,418	$96,744	$92,941	$100,424
Employers' Contributions	144,051	185,558	211,071	280,874	296,836	520,949
Health Insurance Contributions (HB1)	1,799	2,441	5,337	3,344	4,546	4,181
Net Investment Income	526,209	599,790	9,789	303,011	337,174	44,094
Bank of America Settlement	-	-	-	-	-	8,442
Pension Spiking	-	-	-	-	-	743
Total Additions	762,839	$897,668	322,615	683,973	732,246	679,308
Deductions						
Benefit Payments	825,627	838,372	858,151	873,906	889,937	905,790
Refunds	8,887	10,931	12,004	12,907	13,627	13,552
Administrative Expenses	8,424	8,558	8,776	10,719	11,145	10,474
Capital Project Expenses	-	67	8	-	-	-
Total Deductions	842,938	857,928	878,939	897,532	914,709	929,816
Net Increase (Decrease) in Plan Net Position	**($80,099)**	**$39,740**	**($556,324)**	**($213,559)**	**($182,463)**	**($250,508)**

KERS Non-Haz Insurance Fund

Additions	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Employers' Contributions	$92,679	$123,256	$146,844	$162,191	$164,176	$132,208
Net Investment Income	50,765	77,225	(4,803)	40,661	96,578	8,690
Retired Re-employed (HB1)	-	-	-	-	-	3,732
Member Drug Reimbursement	8,551	10,025	7,865	4,846	8	-
Premiums Rec'd from Retirees	13,588	15,826	15,666	14,294	918	272
Total Additions	165,583	$226,332	$165,563	221,992	264,273	144,902
Deductions						
Benefit Payments	157,819	161,804	163,841	140,157	112,671	125,272
Administrative Expenses	4,333	4,667	5,203	4,285	736	893
Total Deductions	162,152	166,471	169,044	144,442	113,407	126,168
Net Increase (Decrease) in Plan Net Position	**$3,431**	**$59,861**	**$169,044**	**$77,550**	**$150,865**	**$18,734**

Changes in Plan Net Position *(in Thousands)*

KERS Haz Pension Fund

Additions	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Member Contributions	$11,110	$12,959	$11,602	$11,467	$11,995	$12,670
Employer Contributions	17,658	18,085	17,367	27,334	11,670	28,374
Health Insurance Contribution (HB1)	118	241	629	402	551	537
Net Investment Income	65,588	83,492	(10,286)	51,497	80,549	8,572
Bank of America Settlement	-	-	-	-	-	767
Pension Spiking	-	-	-	-	-	162
Total Additions	94,474	$114,777	19,312	90,700	104,941	51,211
Deductions						
Benefit Payments	37,796	44,509	48,424	48,855	54,320	56,774
Refunds	1,286	2,062	2,543	2,762	2,830	2,609
Administrative Expenses	737	721	877	733	897	844
Capital Project Expenses	-	6	-	-	-	-
Total Deductions	39,819	47,298	51,844	52,350	58,048	60,277
Net Increase (Decrease) in Plan Net Position	**$54,655**	**$67,479**	**$(32,532)**	**$38,350**	**$46,892**	**($9,016)**

KERS Haz Insurance Fund

Additions	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Employers' Contributions	$21,835	$18,826	$23,984	$25,144	$23,336	$14,173
Net Investment Income	42,406	45,205	60	32,887	52,082	7,793
Retired Re-employed (HB1)	-	-	-	-	-	709
Member Drug Reimbursement	319	365	351	243	-	-
Premiums Rec'd from Retirees	835	588	876	895	37	14
Total Additions	65,395	64,984	25,271	59,169	76,126	22,689
Deductions						
Benefit Payments	13,456	15,327	13,941	16,837	15,405	17,000
Administrative Expenses	200	223	335	179	78	101
Total Deductions	13,656	15,550	14,276	17,016	15,482	17,101
Net Increase (Decrease) in Plan Net Position	**$51,739**	**$49,434**	**$10,995**	**$42,153**	**$60,642**	**$5,588**

Changes in Plan Net Position *(in Thousands)*

CERS Non-Haz Pension Fund

Additions	2010	2011	2012	2013	2014	2015
Members' Contributions	$106,558	$144,861	$119,123	$120,777	$122,459	$133,637
Employers' Contributions	207,076	247,968	270,664	294,914	324,231	297,714
Health Insurance Contribution (HB1)	1,345	3,216	5,101	4,659	6,109	6,674
Net Investment Income	669,072	887,514	(3,349)	579,161	893,386	110,569
Bank of America Settlement	-	-	-	-	-	10,280
Pension Spiking	-	-	-	-	-	850
Total Additions	984,051	$1,283,559	$391,539	$999,511	1,348,330	559,724
Deductions						
Benefit Payments	470,249	494,344	524,385	553,204	582,850	615,335
Refunds	10,001	11,816	12.765	13,306	14,286	13,524
Administrative Expenses	14,323	14,324	16,740	17,743	18,615	18,212
Capital Project Expenses	-	112	9	-	-	-
Total Deductions	494,571	520,596	553,899	584,253	615,751	647,071
Net Increase (Decrease) in Plan Net Position	**$489,478**	**$762,963**	**$(162,360)**	**$415,258**	**$732,579**	**($87,347)**

CERS Non-Haz Insurance Fund

Additions	2010	2011	2012	2013	2014	2015
Employer Contributions	$166,032	$185,639	$164,297	$158,212	$121,161	$115,836
Net Investment Income	136,528	274,743	(32,992)	147,194	231,743	36,731
Retired Re-employed (HB1)	-	-	-	-	-	3,608
Member Drug Reimbursement	9,157	10,449	8,443	5,360	6	-
Premiums Rec'd from Retirees	16,216	18,053	17,493	16,293	1,449	582
Total Additions	327,933	$488,884	$157,241	327,059	357,064	156,757
Deductions						
Benefit Payments	123,133	131,945	141,694	132,489	96,804	113,734
Administrative Expenses	4,469	4,763	5,545	4,431	508	782
Total Deductions	127,602	136,708	147,239	136,920	97,312	114,522
Net Increase (Decrease) in Plan Net Position	**$200,331**	**$352,176**	**$10,002**	**$190,139**	**$259,751**	**$42,235**

Changes in Plan Net Position *(in Thousands)*

CERS Haz Pension Fund

Additions	2010	2011	2012	2013	2014	2015
Members' Contributions	$37,200	$53,918	$41,797	$42,863	$42,631	$46,609
Employers' Contributions	82,887	84,595	77,311	120,140	115,240	107,515
Health Insurance Contribution (HB1)	174	1,157	811	734	1,091	1,084
Net Investment Income	206,073	286,688	(24,724)	181,171	287,816	37,104
Bank of America Settlement	-	-	-	-	-	2,865
Pension Spiking	-	-	-	-	-	557
Total Additions	326,334	$426,358	95,195	344,908	447,452	195,734
Deductions						
Benefit Payments	136,810	167,540	169,352	179,696	189,635	200,134
Refunds	1,956	2,654	3,516	3,158	2,664	3,111
Administrative Expenses	1,234	1,191	1,319	1,202	1,721	1,289
Capital Project Expenses	-	9	-	-	-	-
Total Deductions	140,000	171,394	174,187	184,056	194,020	204,534
Net Increase (Decrease) in Plan Net Position	**$186,334**	**$254,964**	**($79,992)**	**$160,852**	**$253,431**	**($8,800)**

CERS Haz Insurance Fund

Additions	2010	2011	2012	2013	2014	2015
Employers' Contributions	$82,970	$98,203	$90,204	$84,962	$74,265	$71,008
Net Investment Income	67,288	139,242	(16,127)	79,885	124,952	20,283
Retired Re-employed (HB1)	-	-	-	-	-	770
Member Drug Reimbursement	1,493	972	871	562	-	-
Premiums Rec'd from Retirees	508	516	695	657	32	10
Total Additions	152,259	$238,933	$75,643	$166,066	200,101	92,071
Deductions						
Benefit Payments	48,321	51,831	50,155	59,941	60,843	65,553
Administrative Expenses	554	580	688	679	275	339
Total Deductions	48,875	52,411	50,843	60,620	61,117	65,894
Net Increase (Decrease) in Plan Net Position	**$103,384**	**$186,522**	**$24,800**	**$105,446**	**$138,983**	**$26,177**

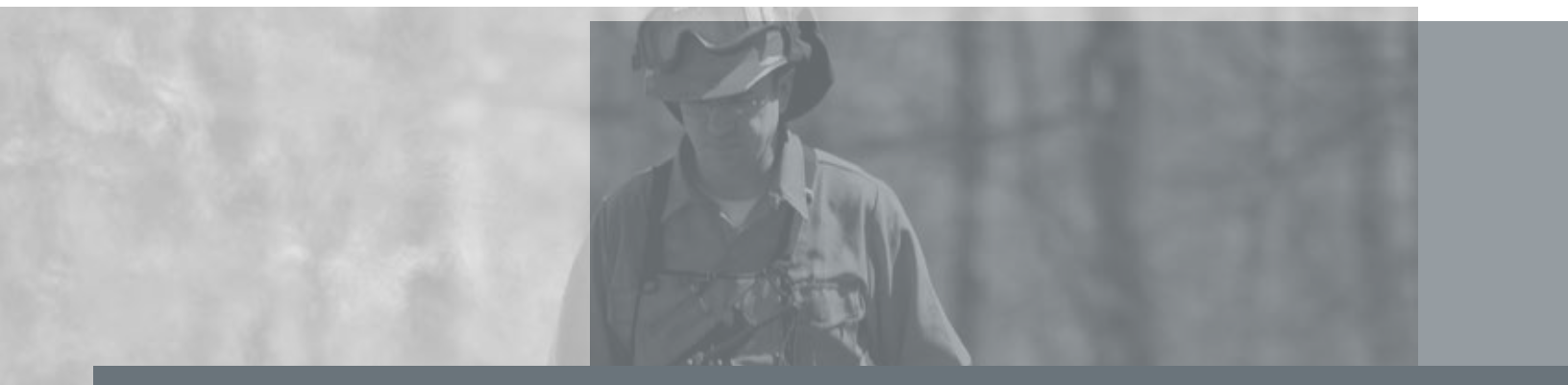
Changes in Plan Net Position *(in Thousands)*

SPRS Pension Fund

Additions	2010	2011	2012	2013	2014	2015
Members' Contributions	$4,127	$5,225	$5,154	$4,495	$5,005	$5,150
Employers' Contributions	9,489	11,920	15,040	18,501	20,279	31,444
Health Insurance Contribution (HB1)	12	31	46	48	70	94
Net Investment Income	40,602	44,739	43	25,954	40,291	3,427
Bank of America Settlement	-	-	-	-	-	646
Pension Spiking	-	-	-	-	-	546
Total Additions	54,230	61,915	20,283	48,998	65,729	41,307
Deductions						
Benefit Payments	45,582	46,754	48,867	50,559	53,026	54,766
Refunds	144	58	149	31	214	85
Administrative Expenses	130	124	73	184	215	201
Capital Project Expenses	-	1	-	-	-	-
Total Deductions	45,856	46,937	49,089	50,774	53,454	55,052
Net Increase (Decrease) in Plan Net Position	**$8,374**	**$14,978**	**($28,806)**	**($1,776)**	**$12,276**	**($13,745)**

SPRS Insurance Fund

Additions	2010	2011	2012	2013	2014	2015
Employer Contributions	$8,369	$10,051	$10,810	$16,829	$14,498	$10,379
Net Investment Income	13,085	24,773	(1,458)	12,993	20,458	2,921
Retired Re-employed (HB1)	-	-	-	-	-	3
Member Drug Reimbursement	274	318	279	178	-	-
Premiums Rec'd from Retirees	16	18	20	23	11	1
Total Additions	$21,744	$35,160	$9,651	$30,023	$35,012	$13,304
Deductions						
Benefit Payments	10,769	12,172	10,791	12,546	12,688	13,483
Administrative Expenses	147	179	201	184	58	65
Total Deductions	10,916	12,351	10,992	12,730	12,745	13,548
Net Increase (Decrease) in Plan Net Position	**$10,828**	**$22,809**	**($1,341)**	**$17,293**	**$22,267**	**($244)**



Schedule of Benefit Expenses

KERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2009-10				
Average Benefit	$1,009	$1,912	$936	$963
Number of Accounts	5,991	30,303	2,625	813
Total Monthly Benefits	$6,046,047	$57,939,304	$2,457,461	$782,980
% of Total Monthly Benefits	9.00%	86.20%	3.60%	1.20%
FY 2010-11				
Average Benefit	$1,008	$1,920	$974	$1,071
Number of Accounts	6,118	30,900	2,629	835
Total Monthly Benefits	$6,166,372	$59,318,561	$2,561,377	$894,077
% of Total Monthly Benefits	8.94%	86.04%	3.72%	1.30%
FY 2011-12				
Average Benefit	$1,008	$1,927	$1,029	$925
Number of Accounts	6,218	31,580	2,626	959
Total Monthly Benefits	$6,269,576	$60,879,802	$2,702,410	$887,236
% of Total Monthly Benefits	8.86%	86.06%	3.82%	1.25%
FY 2012-13				
Average Benefit	$1,003	$1,915	$1,020	$889
Number of Accounts	6,441	32,310	2,687	962
Total Monthly Benefits	$6,459,840	$61,882,399	$2,740,491	$855,033
% of Total Monthly Benefits	8.98%	86.02%	3.81%	1.19%
FY 2013-14				
Average Benefit	$992	$1,911	$987	$886
Number of Accounts	6,678	33,106	2,706	954
Total Monthly Benefits	$6,624,472	$63,255,779	$2,671,749	$845,468
% of Total Monthly Benefits	9.03%	86.18%	3.64%	1.15%
FY 2014-15				
Average Benefit	$992	$1,901	$996	$909
Number of Accounts	6,896	33,940	2,696	983
Total Monthly Benefits	$6,843,193	$64,503,048	$2,684,720	$893,407
% of Total Monthly Benefits	9.13%	86.09%	3.58%	1.19%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

KERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2009-10				
Average Benefit	$933	$1,489	$593	$843
Number of Accounts	1,446	1,146	157	75
Total Monthly Benefits	$1,348,511	$1,706,876	$93,064	$63,194
% of Total Monthly Benefits	42.00%	53.10%	2.90%	2.00%
FY 2010-11				
Average Benefit	$957	$1,526	$600	$814
Number of Accounts	1,571	1,240	158	79
Total Monthly Benefits	$1,503,160	$1,892,300	$94,766	$64,299
% of Total Monthly Benefits	42.29%	53.24%	2.66%	1.81%
FY 2011-12				
Average Benefit	$976.67	$1,541.49	$581	$721
Number of Accounts	1,657	1,339	180	92
Total Monthly Benefits	$1,618,343	$2,064,050	$104,644	$66,409
% of Total Monthly Benefits	42.00%	53.56%	2.72%	1.72%
FY 2012-13				
Average Benefit	$961	$1,543	$662	$725
Number of Accounts	1,751	1,417	190	93
Total Monthly Benefits	$1,682,541	$2,186,334	$125,704	$67,440
% of Total Monthly Benefits	41.42%	53.82%	3.10%	1.66%
FY 2013-14				
Average Benefit	$971	$1,560	$649	$749
Number of Accounts	1,851	1,497	191	89
Total Monthly Benefits	$1,797,900	$2,335,190	$123,867	$66,679
% of Total Monthly Benefits	41.58%	54.01%	2.86%	1.54%
FY 2014-15				
Average Benefit	$986	$1,556	$661	$714
Number of Accounts	1,912	1,566	193	90
Total Monthly Benefits	$1,884,477	$2,436,923	$127,477	$64,250
% of Total Monthly Benefits				

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

CERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2009-10				
Average Benefit	$570	$1,022	$835	$623
Number of Accounts	9,418	28,747	3,951	836
Total Monthly Benefits	$5,372,501	$29,377,417	$3,298,478	$520,995
% of Total Monthly Benefits	13.90%	76.20%	8.60%	1.30%
FY 2010-11				
Average Benefit	$577	$1,031	$847	$651
Number of Accounts	10,054	30,224	4,095	873
Total Monthly Benefits	$5,802,568	$31,149,398	$3,469,974	$568,188
% of Total Monthly Benefits	14.16%	75.99%	8.47%	1.38%
FY 2011-12				
Average Benefit	$587	$1,039	$870	$636
Number of Accounts	10,620	31,797	4,280	1,052
Total Monthly Benefits	$6,237,369	$33,041,035	$3,724,859	$669,377
% of Total Monthly Benefits	14.28%	75.66%	8.53%	1.53%
FY 2012-13				
Average Benefit	$591	$1,042	$878	$625
Number of Accounts	11,266	33,393	4,537	1,075
Total Monthly Benefits	$6,661,524	$34,797,169	$3,982,213	$672,310
% of Total Monthly Benefits	14.45%	75.46%	8.64%	1.45%
FY 2012-13				
Average Benefit	$596	$1,042	$856	$613
Number of Accounts	11,885	34,911	4,729	1,110
Total Monthly Benefits	$7,081,048	$36,375,607	$4,047,035	$680,784
% of Total Monthly Benefits	14.70%	75.49%	8.40%	1.41%
FY 2014-15				
Average Benefit	$612	$1,044	$862	$616
Number of Accounts	12,749	36,746	4,854	1,161
Total Monthly Benefits	$7,801,662	$38,375,001	$4,186,130	$715,032
% of Total Monthly Benefits	15.27%	75.13%	8.20%	1.40%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

CERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2009-10				
Average Benefit	$1,427	$2,362	$1,261	$1,130
Number of Accounts	1,495	3,856	468	89
Total Monthly Benefits	$2,133,697	$9,106,888	$590,020	$100,562
% of Total Monthly Benefits	17.90%	76.30%	5.00%	0.80%
FY 2010-11				
Average Benefit	$1,432	$2,410	$1,362	$1,153
Number of Accounts	1,643	4,082	487	90
Total Monthly Benefits	$2,352,710	$9,838,311	$663,455	$103,808
% of Total Monthly Benefits	18.16%	75.92%	5.12%	0.80%
FY 2011-12				
Average Benefit	$1,430	$2,422	$1,300	$1,046
Number of Accounts	1,766	4,407	662	110
Total Monthly Benefits	$2,526,722	$10,673,928	$861,223	$115,107
% of Total Monthly Benefits	17.82%	75.29%	6.07%	0.81%
FY 2012-13				
Average Benefit	$1,433	$2,429	$1,121	$1,073
Number of Accounts	1,883	4,683	681	119
Total Monthly Benefits	$2,699,176	$11,374,811	$763,700	$127,689
% of Total Monthly Benefits	18.04%	76.01%	5.10%	0.85%
FY 2013-14				
Average Benefit	$1,467	$2,437	$1,125	$1,008
Number of Accounts	1,974	4,873	695	119
Total Monthly Benefits	$2,895,353	$11,876,578	$781,685	$119,935
% of Total Monthly Benefits	18.47%	75.77%	4.99,%	0.77%
FY 2014-15				
Average Benefit	$1,480	$2,448	$1,145	$954
Number of Accounts	2,097	5,139	688	127
Total Monthly Benefits	$3,103,613	$12,581,191	$787,549	$121,103
% of Total Monthly Benefits	18.70%	75.82%	4.75%	0.73%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

SPRS

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2009-10				
Average Benefit	$3,492	$3,066	$1,467	$2,130
Number of Accounts	147	1,004	50	26
Total Monthly Benefits	$513,322	$3,078,221	$73,354	$55,379
% of Total Monthly Benefits	13.80%	82.70%	2.00%	1.50%
FY 2010-11				
Average Benefit	$3,529	$3,112	$1,494	$2,162
Number of Accounts	146	1,037	55	26
Total Monthly Benefits	$515,270	$3,226,744	$82,184	$56,210
% of Total Monthly Benefits	13.28%	83.15%	2.12%	1.45%
FY 2011-12				
Average Benefit	$3,560	$3,135	$1,372	$2,136
Number of Accounts	150	1,083	66	25
Total Monthly Benefits	$534,132	$3,396,203	$90,562	$53,404
% of Total Monthly Benefits	13.11%	83.36%	2.22%	1.31%
FY 2012-13				
Average Benefit	$3,601	$3,130	$1,320	$2,198
Number of Accounts	149	1,126	74	23
Total Monthly Benefits	$536,481	$3,524,248	$97,681	$50,563
% of Total Monthly Benefits	12.75%	83.73%	2.32%	1.20%
FY 2013-14				
Average Benefit	$3,621	$3,197	$1,346	$2,196
Number of Accounts	146	1,172	75	23
Total Monthly Benefits	$528,611	$3,747,012	$100,974	$49,197
% of Total Monthly Benefits	11.94%	84.66%	2.28%	1.11%
FY 2014-15				
Average Benefit	$3,578	$3,189	$1,347	$2,153
Number of Accounts	150	1,213	75	23
Total Monthly Benefits	$536,649	$3,867,971	$101,018	$49,524
% of Total Monthly Benefits	11.78%	84.91%	2.22%	1.09%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Analysis of Initial Retirees

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
FY 2009-10					
Number of Accounts	1,007	212	2,252	329	54
Average Service Credit (months)	153	194	186	224	276
Average Final Compensation	$41,811	$45,499	$30,203	$56,408	$70,704
Average Monthly Benefit	$802	$1,494	$760	$2,127	$3,323
Average System Payment for Health Insurance	$202	$572	$239	$766	$894
FY 2010-11					
Number of Accounts	1,486	247	3,045	415	46
Average Service Credit (months)	174	184	182	204	260
Average Final Compensation	$44,341	$44,821	$32,359	$58,814	$71,501
Average Monthly Benefit	$1,047	$1,379	$824	$2,114	$3,296
Average System Payment for Health Insurance	$264	$516	$284	$777	$874
FY 2011-12					
Number of Accounts	1,641	206	3,160	410	47
Average Service Credit (months)	190	169	185	210	276
Average Final Compensation	$45,528	$45,815	$32,709	$57,756	$71,298
Average Monthly Benefit	$1,162	$1,312	$872	$2,149	$3,556
Average System Payment for Health Insurance	$291	$496	$271	$826	$981
FY 2012-13					
Number of Accounts	1,810	205	3,303	443	59
Average Service Credit (months)	199	157	189	202	234
Average Final Compensation	$47,168	$46,456	$34,292	$58,516	$69,325
Average Monthly Benefit	$1,275	$1,250	$938	$2,196	$2,893
Average System Payment for Health Insurance	$303	$433	$259	$853	$994
FY 2013-14					
Number of Accounts	2,037	245	3,529	430	77
Average Service Credit (months)	202	165	182	194	260
Average Final Compensation	$46,480	$46,595	$33,816	$57,718	$70,009
Average Monthly Benefit	$1,278	$1,296	$879	$2,021	$3,322
Average System Payment for Health Insurance	$534	$937	$486	$1,279	$1,378
FY 2014-15					
Number of Accounts	2,078	191	4,084	496	55
Average Service Credit (months)	204	164	188	204	251
Average Final Compensation	$47,187	$47,148	$34,561	$59,589	$67,862
Average Monthly Benefit	$1,308	$1,280	$913	$2,178	$3,009
Average System Payment for Health Insurance	$549	$906	$489	$1,254	$1,376

This table represents all individuals who had an initial retirement date within the fiscal year.

Payment Options Selected by Retired Members

	Basic	Lump Sum	Other	Period Certain	Pop Up	Social Security Adjustment	Survivorship
KERS Non-Haz							
Number of Accounts	15,019	2,174	14	5,626	8,528	3,285	9,869
Monthly Benefits	$23,118,838	$2,521,815	$12,770	$8,818,120	$17,864,054	$5,726,160	$16,863,609
KERS Haz							
Number of Accounts	968	254	4	410	1,031	279	815
Monthly Benefits	$1,067,984	$258,738	$2,414	$458,466	$1,450,112	$334,312	$941,101
CERS Non-Haz							
Number of Accounts	22,391	3,301	17	7,925	8,783	1,997	11,096
Monthly Benefits	$17,636,032	$2,207,160	$7,441	$6,657,493	$10,777,346	$2,620,079	$11,172,274
CERS Haz							
Number of Accounts	1,325	474	23	670	3,155	522	1,882
Monthly Benefits	$2,473,018	$753,458	$12,108	$1,186,588	$7,584,234	$828,502	$3,755,547
SPRS							
Number of Accounts	153	22	1	107	582	199	397
Monthly Benefits	$450,930	$51,466	$893	$316,014	$2,049,126	$410,471	$1,276,261
KRS Total							
Number of Accounts	39,856	6,225	59	14,738	22,079	6,282	24,059
Monthly Benefits	$44,746,802	$5,792,637	$34,626	$17,436,681	$39,724,872	$9,919,524	$34,008,792

The information in this table represents accounts administered by KRS.
A single member may have multiple accounts, which contribute to one pension.

EMPLOYER Contribution Rates

In KERS, CERS, and SPRS both the employee and the employer contribute a percentage of creditable compensation to the Systems.

The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employees hired on or after September 1, 2008 contribute an additional 1% to health insurance.

Under Kentucky Revised Statutes 61.565, KERS and SPRS employer contribution rates are set by the KRS Board of Trustees based on an annual actuarial valuation. However, KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. In recent years, the Kentucky General Assembly has routinely suspended Kentucky Revised Statutes 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the Board's consulting actuary. The table in the Actuarial Section shows the KERS and SPRS employer contribution rates that were actuarially recommended in the annual valuation without any adjustments (Recommended Rate) and the rate specified by the Executive Branch budget bill for each fiscal year (Budgeted Rate).

The CERS employer contribution rates are also set by the Systems' Board under Kentucky Revised Statutes 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. The CERS employer contribution rates for fiscal year 2008-2009 were reduced from the actuarially recommended rate as a result of the passage of House Bill (HB) 1 during the 2008 Extraordinary Session of the Kentucky General Assembly. Also, during its 2009 Regular Session, the Kentucky General Assembly enacted HB 117, which mandated an extension of the phase-in of insurance contribution rates that had been previously approved by the KRS Board in 2006 from five years to ten years to further mitigate the impact of the application of Governmental Accounting Standards Board Statements 43 and 45 on CERS employer contribution rates for health insurance. The "Recommended Rate" shown for CERS non-hazardous and hazardous plans are the actuarially recommended rates as set forth in the annual valuation. The "Budgeted Rate" shown for the two plans is the rate required by the ten year phase-in mandated in KRS 61.565(6).

Employer Contribution Rates

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
KERS Non-Haz						
Budgeted Rate	11.61	16.98	19.82	23.61	26.79	38.77
Recommended Rate	39.45	38.58	40.71	44.55	45.28	38.77
KERS Haz						
Budgeted Rate	24.69	26.12	28.98	29.79	32.21	26.34
Recommended Rate	35.54	34.37	33.84	35.89	28.84	26.34
CERS Non-Haz						
Budgeted Rate	16.16	16.93	18.96	19.55	18.89	17.67
Recommended Rate	20.91	19.81	21.29	21.21	19.58	17.67
CERS Haz						
Budgeted Rate	32.97	33.25	35.76	37.60	35.70	34.31
Recommended Rate	43.36	40.06	41.65	41.94	37.79	34.31
SPRS						
Budgeted Rate	33.08	45.54	52.13	63.67	71.15	75.76
Recommended Rate	92.12	85.63	94.63	103.41	96.52	75.76

Retired **REEMPLOYED**

From August 1, 1998 through August 31, 2008, state law allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service was observed. The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Reemployed Retirees in Full-Time Positions Covered by Same System & Contributing to a New Account

	KERS			CERS			SPRS
Reemployed Retirees in KRS	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**	**Total**
Total Active Employees	39,289	3,932	43,221	82,969	9,188	92,157	940
Total Retirees	38,827	2,575	41,402	48,515	6,389	54,904	1,324
Reemployed Retirees	451	34	485	521	429	950	85
% of Reemployed Retirees to Total Actives	1.15%	0.86%	1.12%	0.63%	4.67%	1.03%	9.04%
% of Reemployed Retirees to Total Retirees	1.18%	1.32%	1.17%	1.07%	6.71%	1.73%	6.42%
Average Age at Initial Retirement	49	48	49	51	46	49	46
Months of Service Credit at Initial Retirement	351	299	347	318	286	303.55	329
Final Compensation At Initial Retirement	$44,437	$37,269	$43,935	$43,233	$53,083	$47,681	$52,207
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2014-2015 (Second Retirement Account)	$44,583	$36,448	$81,031	$43,185	$53,048	$96,233	$52,360
Retirees Returning to Work for the Same Employer	137	6	143	329	46	375	1

Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.

INSURANCE Contracts

The Systems provides medical insurance and other managed care coverage for eligible retired members.

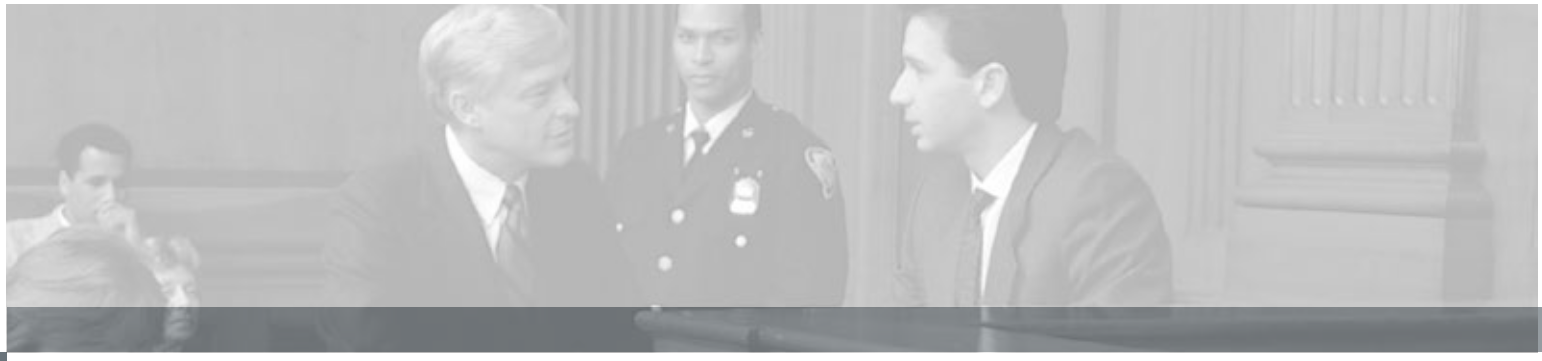
Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems.

Insurance Benefits Paid to Retirees & Beneficiaries Participating in a KRS Health Insurance Plan

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Number	30,297	2,453	32,864	7,015	1,580
Average Service Credit (Months)	311	266	259	281	326
Avg Monthly System Payment for Health Insurance	$378	$713	$321	$972	$924
Avg Monthly Member Payment for Health Insurance	$64	$45	$66	$24	$9
Total Monthly Payment for Health Insurance	$12,441,180	$1,541,375	$11,820,512	$5,752,110	$1,147,990

Insurance Contracts by Type

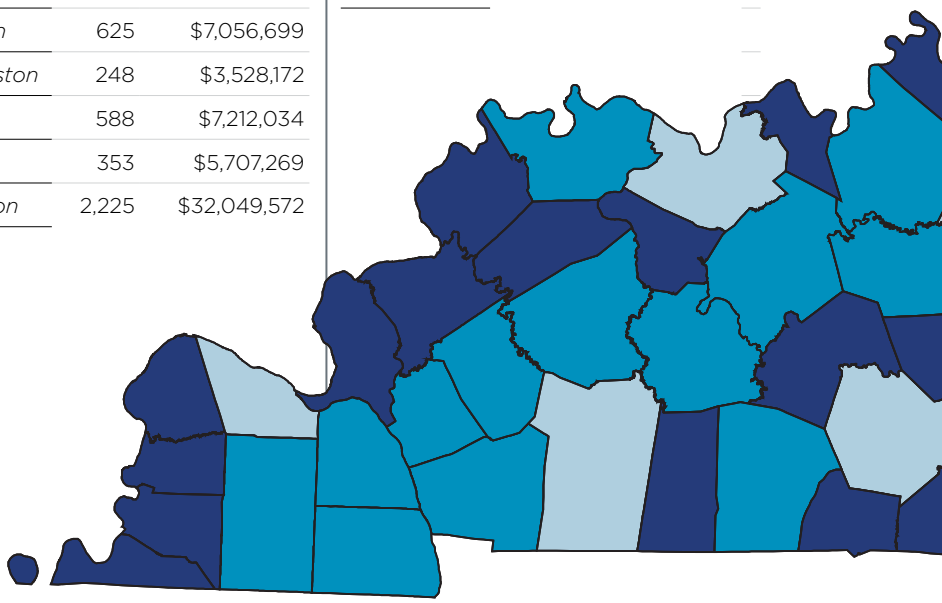
KERS Non-Haz	2010	2011	2012	2013	2014	2015
KEHP Parent Plus	722	732	734	618	506	452
KEHP Couple/Family	1,971	2,155	1,917	1,276	797	714
KEHP Single	10,420	10,321	9,764	9,364	9,491	9,251
Medicare without Prescription	1,831	1,821	1,721	1,474	1,370	1,303
Medicare with Prescription	13,765	13,988	15,015	16,834	17,738	18,577
KERS Haz						
KEHP Parent Plus	66	75	93	106	110	110
KEHP Couple/Family	453	521	517	451	448	448
KEHP Single	599	615	645	625	647	656
Medicare without Prescription	63	60	67	60	56	62
Medicare with Prescription	525	570	751	985	1,104	1,177



Insurance Contracts by Type						
CERS Non-Haz	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
KEHP Parent Plus	342	351	383	340	278	242
KEHP Couple/Family	1,369	1,552	1,317	857	546	473
KEHP Single	7,692	8,013	7,972	7,652	7,843	8,098
Medicare without Prescription	3,106	3,167	3,119	2,707	2,583	2,531
Medicare with Prescription	14,477	15,100	16,355	18,824	20,200	21,520
CERS Haz						
KEHP Parent Plus	239	253	310	400	432	456
KEHP Couple/Family	2,062	2,156	2,237	2,155	2,184	2,255
KEHP Single	1,274	1,310	1,385	1,425	1,447	1,500
Medicare without Prescription	58	58	73	79	89	107
Medicare with Prescription	1,438	1,527	1,853	2,324	2,510	2,697
SPRS						
KEHP Parent Plus	47	52	62	76	78	81
KEHP Couple/Family	462	474	444	421	444	441
KEHP Single	264	278	291	283	263	265
Medicare without Prescription	12	14	15	20	20	16
Medicare with Prescription	467	499	581	682	712	777
KRS Total						
KEHP Parent Plus	1,416	1,463	1,582	1,540	1,404	1,341
KEHP Couple/Family	6,317	6,858	6,432	5,160	4,419	4,331
KEHP Single	20,249	20,537	20,057	19,349	19,691	19,770
Medicare without Prescription	5,070	5,120	4,995	4,340	4,118	4,019
Medicare with Prescription	30,672	31,684	34,555	39,649	42,264	44,748

2015 Total Fiscal Year Pension Benefits by County

County	Payees	Total
Adair	453	$6,818,083
Allen	376	$4,233,210
Anderson	1,341	$28,904,473
Ballard	218	$2,733,932
Barren	978	$13,715,527
Bath	358	$4,709,768
Bell	678	$9,275,416
Boone	1,548	$27,442,725
Bourbon	525	$7,455,532
Boyd	954	$14,462,362
Boyle	864	$13,729,020
Bracken	209	$2,390,361
Breathitt	456	$6,200,032
Breckinridge	417	$5,387,553
Bullitt	1,301	$20,514,875
Butler	324	$3,784,399
Caldwell	527	$6,856,190
Calloway	1,030	$12,554,359
Campbell	1,382	$23,327,970
Carlisle	120	$1,447,274
Carroll	326	$4,366,567
Carter	768	$8,671,213
Casey	350	$4,037,577
Christian	1,552	$23,745,309
Clark	772	$11,617,466
Clay	556	$6,906,647
Clinton	244	$2,638,704
Crittenden	215	$2,445,240
Cumberland	184	$2,357,988
Daviess	2,389	$37,641,584
Edmonson	208	$2,641,356
Elliott	179	$2,075,741
Estill	369	$4,529,742
Fayette	5,253	$102,784,270
Fleming	438	$6,917,015
Floyd	840	$12,129,904
Franklin	6,901	$184,449,385
Fulton	170	$1,690,280
Gallatin	117	$1,856,356
Garrard	416	$5,648,687
Grant	585	$9,529,135
Graves	815	$11,286,977
Grayson	668	$8,741,993
Green	258	$3,419,585
Greenup	578	$7,101,949
Hancock	217	$2,563,065
Hardin	1,924	$28,048,716
Harlan	577	$8,206,856
Harrison	442	$5,694,874
Hart	308	$4,020,863
Henderson	981	$14,898,060
Henry	923	$17,746,278
Hickman	117	$1,676,036
Hopkins	1,141	$15,452,670
Jackson	292	$3,554,513
Jefferson	16,022	$301,842,155
Jessamine	930	$14,618,467
Johnson	587	$8,283,949
Kenton	2,117	$38,921,692
Knott	406	$5,573,354
Knox	548	$7,643,196
Larue	338	$4,668,322
Laurel	1,177	$17,307,170
Lawrence	311	$3,498,761
Lee	235	$3,005,469
Leslie	232	$2,999,267
Letcher	565	$6,819,724
Lewis	308	$3,262,626
Lincoln	625	$7,056,699
Livingston	248	$3,528,172
Logan	588	$7,212,034
Lyon	353	$5,707,269
Madison	2,225	$32,049,572
Magoffin	338	$4,260,996
Marion	527	$6,440,781
Marshall	819	$10,583,945
Martin	247	$2,366,236
Mason	382	$5,700,535
Mccracken	1,498	$24,636,317
Mccreary	372	$3,575,215
Mclean	296	$3,649,843
Meade	395	$4,936,187
Menifee	223	$2,730,494
Mercer	720	$11,482,694
Metcalfe	308	$3,260,128
Monroe	234	$2,447,822
Montgomery	598	$8,108,931
Morgan	579	$8,622,037
Muhlenberg	649	$6,921,478
Nelson	919	$14,124,267
Nicholas	204	$2,381,781
Ohio	597	$5,723,139
Oldham	1,270	$22,808,005
Owen	758	$10,905,196
Owsley	214	$2,731,635
Pendleton	325	$4,856,724
Perry	720	$9,675,774
Pike	1,157	$15,706,890
Powell	363	$4,180,458
Pulaski	2,102	$32,376,756
Robertson	146	$967,683



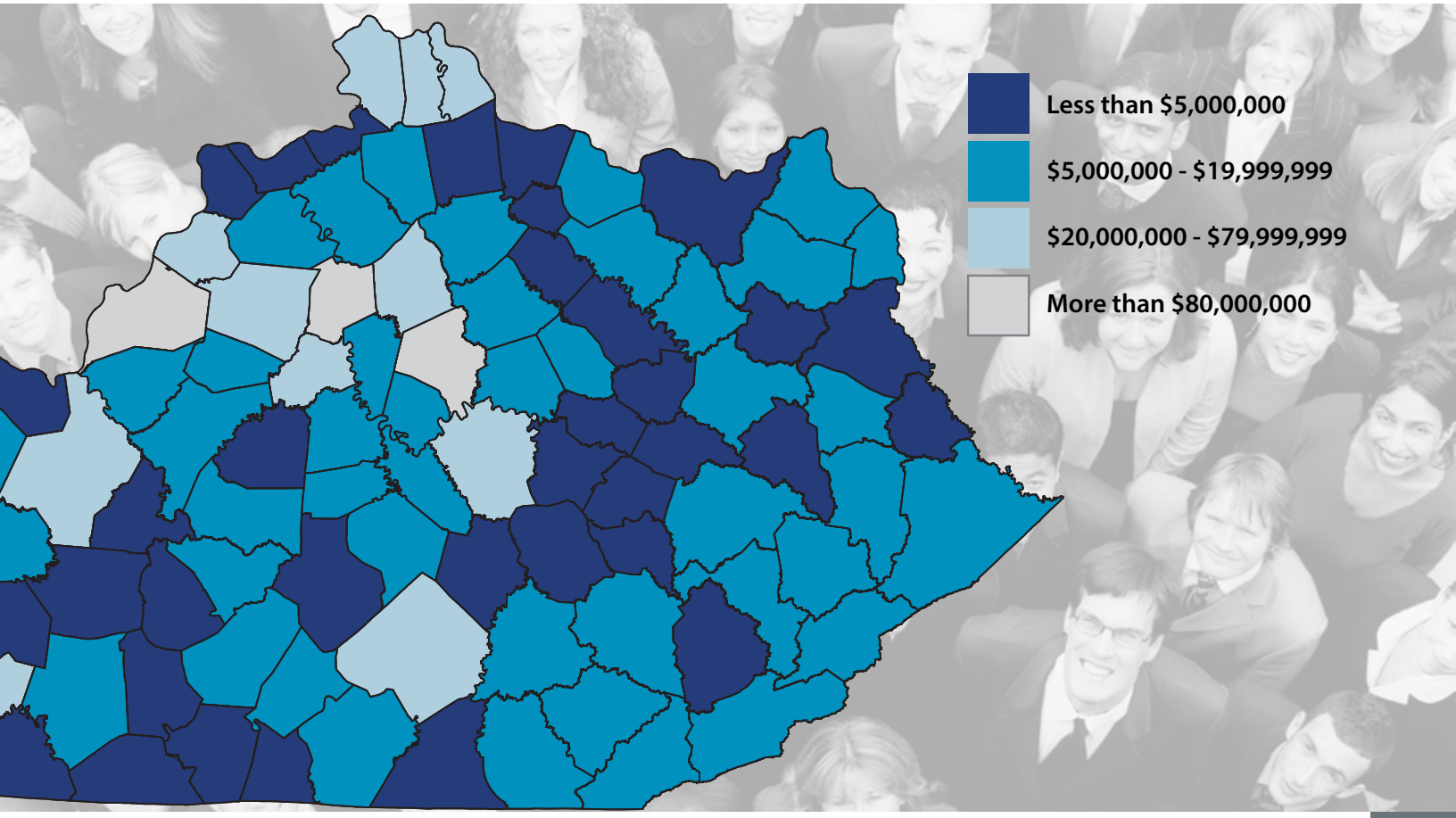
County	Payees	Total
Rockcastle	366	$4,492,577
Rowan	889	$13,049,379
Russell	549	$6,680,470
Scott	1,122	$20,117,069
Shelby	1,619	$34,358,575
Simpson	297	$2,662,275
Spencer	445	$7,991,484
Taylor	600	$7,692,621
Todd	261	$3,082,913
Trigg	508	$7,140,935
Trimble	269	$3,404,528
Union	332	$3,416,218
Warren	2,635	$40,914,197
Washington	365	$4,498,264
Wayne	503	$6,342,507
Webster	330	$3,737,181
Whitley	965	$12,825,801
Wolfe	340	$4,493,958
Woodford	947	$20,631,450

Pension Benefits paid to retirees and beneficiaries of Kentucky Retirement Systems have a wide ranging impact on the state's economic health. In fiscal year 2015, KRS paid ***more than $1.8 billion*** *to its recipients. More than 94 percent of these recipients live in Kentucky. Not only do these dollars impact those receiving a benefit, but according to the National Institute of Retirement Security (NIRS),* ***each $1.00 paid out in pension benefits supported $1.67 in total economic activity in Kentucky****. As you can see in the chart, each county in the Commonwealth is impacted by pension benefits, and in an unsteady economy, the consistent addition of pension funds into the economy is a stabilizing element.*

Total Fiscal Year Retirement Payments

	Payees	%	Payments
Kentucky Total	104,249	94.25%	$1,704,727,909
Out of State	7,035	5.75%	$104,309,612
Grand Total	**111,284**	**100.00%**	**$1,809,037,521**

* This table represents all payees receiving a monthly payment during the fiscal year.



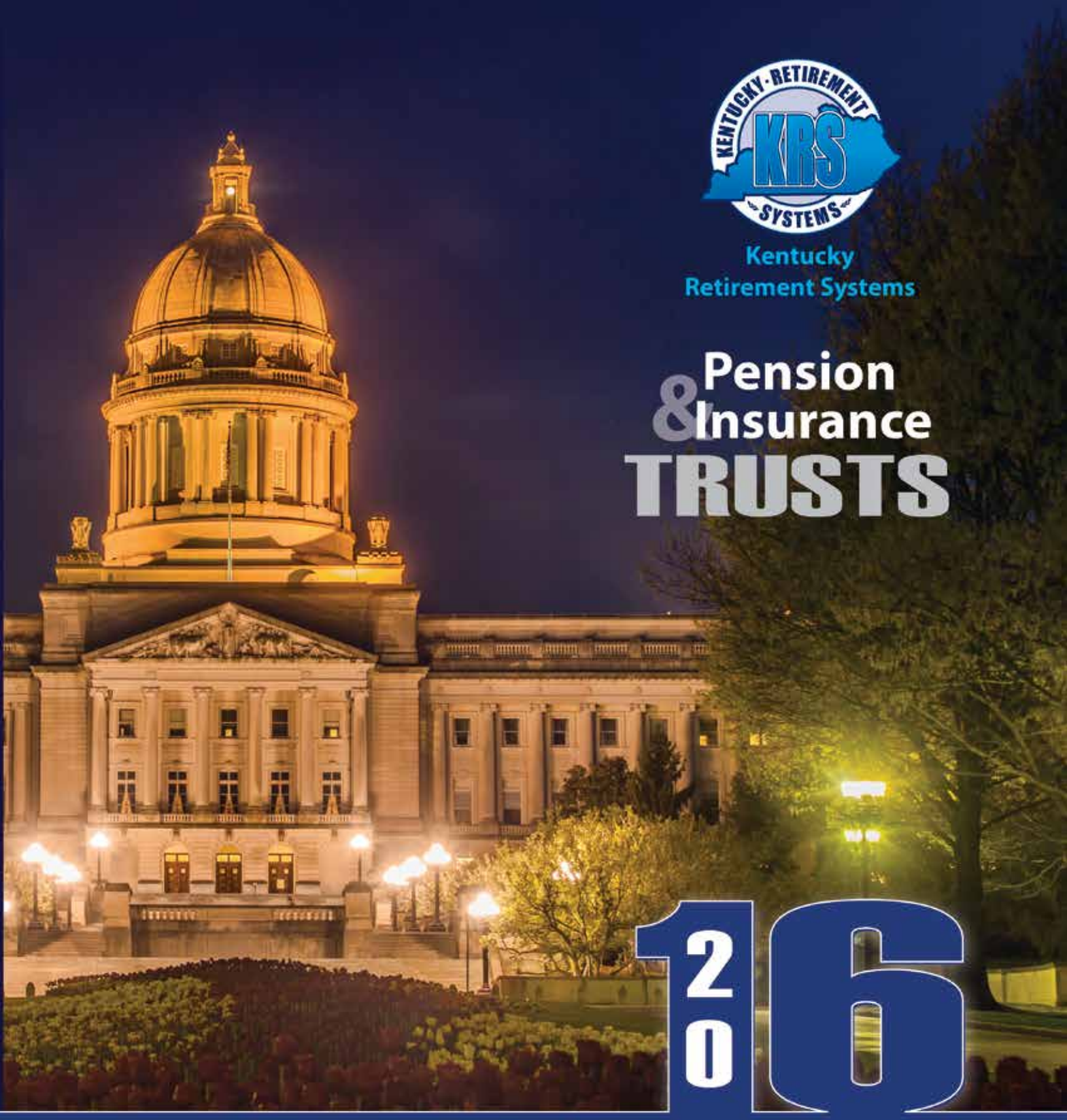
Our Mission

The mission of Kentucky Retirement Systems (KRS) is to build the strength of the trust funds to ensure that adequate resources are available to meet all obligations, while helping members and beneficiaries achieve financial security in retirement. KRS is committed to efficiently and effectively administering the benefit programs established by the General Assembly. Members are current and former government employees or retirees, who either contribute money into our trust funds, or who are receiving pension benefits, or who will receive benefits or a refund of contributions in the future.

Kentucky Retirement Systems
1260 Louisville Rd, Frankfort, KY 40601
(502) 696-8800 or (800) 928-4646 •Fax: (502) 696-8822

Hours of Operation:
8:00 AM - 4:30 PM Monday-Friday

Document Prepared By KRS Communications Division



Kentucky Retirement Systems

Pension & Insurance TRUSTS

2016

Comprehensive Annual Financial Report

A component unit of the Commonwealth of Kentucky
For the Fiscal Year Ended June 30, 2016

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

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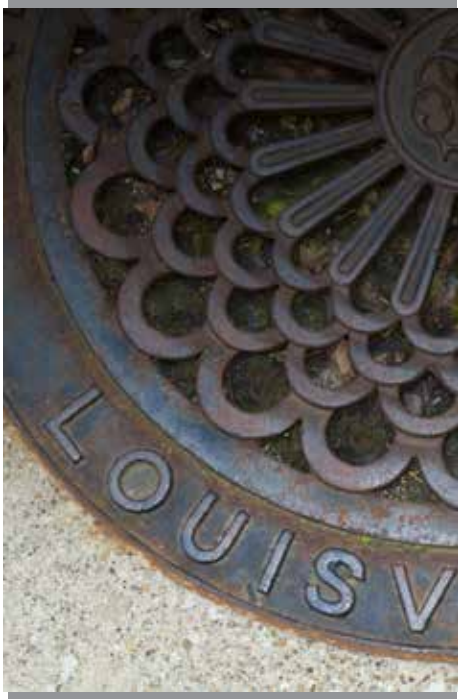

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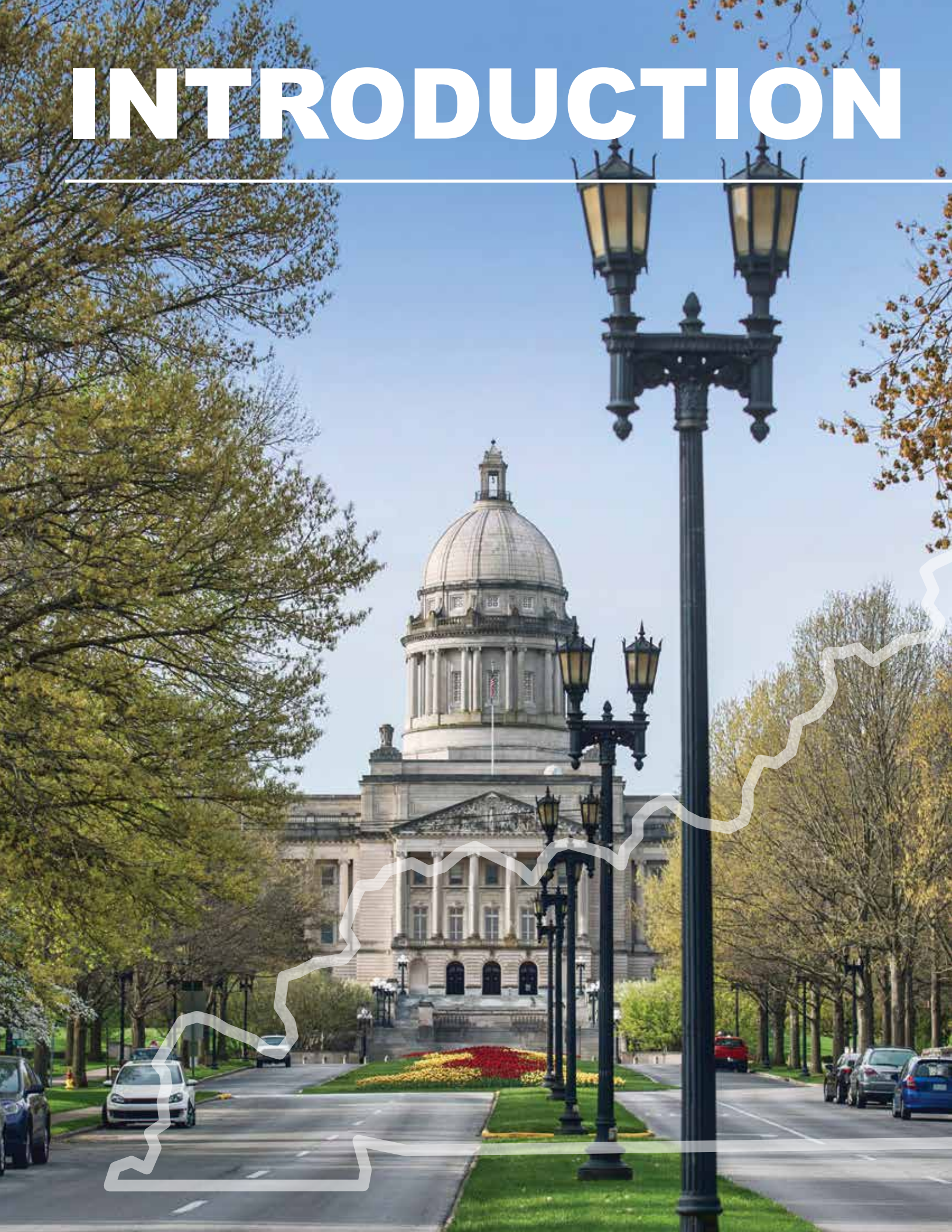
2016

2016 Comprehensive Annual Financial Report
For The Fiscal Year Ended June 30, 2016
Document Prepared By KRS Communications Division

INTRODUCTION



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Total Systems

See comparative totals and more detailed information on page 179.

RETIRED MEMBERS

102,725

ACTIVE MEMBERS

135,617

INACTIVE MEMBERS

126,468

Management's Responsibility for Financial Reporting

Management has prepared the combining financial statements of Kentucky Retirement Systems and is ***responsible for the integrity and fairness*** *of the information presented.*

December 1, 2016 Management has prepared the combining financial statements of Kentucky Retirement Systems and is responsible for the integrity and fairness of the information presented. Some amounts included in the combining financial statements may be based upon estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these combining financial statements conform to US Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the combining financial statements.

Responsibility Ultimate responsibility for the combining financial statements and annual report rests with the Board of Directors. The Executive Director and KRS' staff assist the Board in its responsibilities. Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training employees, the establishment of an organizational structure, and the communications of policies and guidelines throughout the organization. The cost of a control should not exceed the benefits to be derived; the objective is to provide reasonable, rather than absolute assurance, that the combining financial statements are free of any material misstatements. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and Board of Directors.

Kentucky Retirement Systems' external auditors, Dean Dorton Allen Ford, PLLC, have conducted an independent audit of the combining financial statements in accordance with US Generally Accepted Government Auditing Standards. This audit is described in their Independent Auditors' Report on page two of the Financial Section. Management has provided the external auditors with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of combining financial statements.

David L. Eager
Interim Executive Director

Karen D. Roggenkamp
Executive Director Office of Operations

Todd E. Coleman, CPA
Director of Accounting

To the Directors & Membership

Dear Members, Retirees, Beneficiaries, and Employers:

On behalf of the Kentucky Retirement System (KRS), Board Chair, Board of Directors, management and staff, it is our pleasure to present the Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2016. This report covers the 10 plans that form the Kentucky Retirement Systems (KRS).Those plans include the Kentucky Employees Retirement System (KERS Hazardous and Non-Hazardous), the County Employees Retirement Systems (CERS Hazardous and Non-Hazardous), and the State Police Retirement System (SPRS) for both pensions and retiree healthcare. These 10 plans include more than 364,000 members. These are your family members, co-workers, and neighbors. They include firefighters, police, bus drivers, janitorial staff at local schools, and many who work directly for Kentucky state government. In other words, they are us!

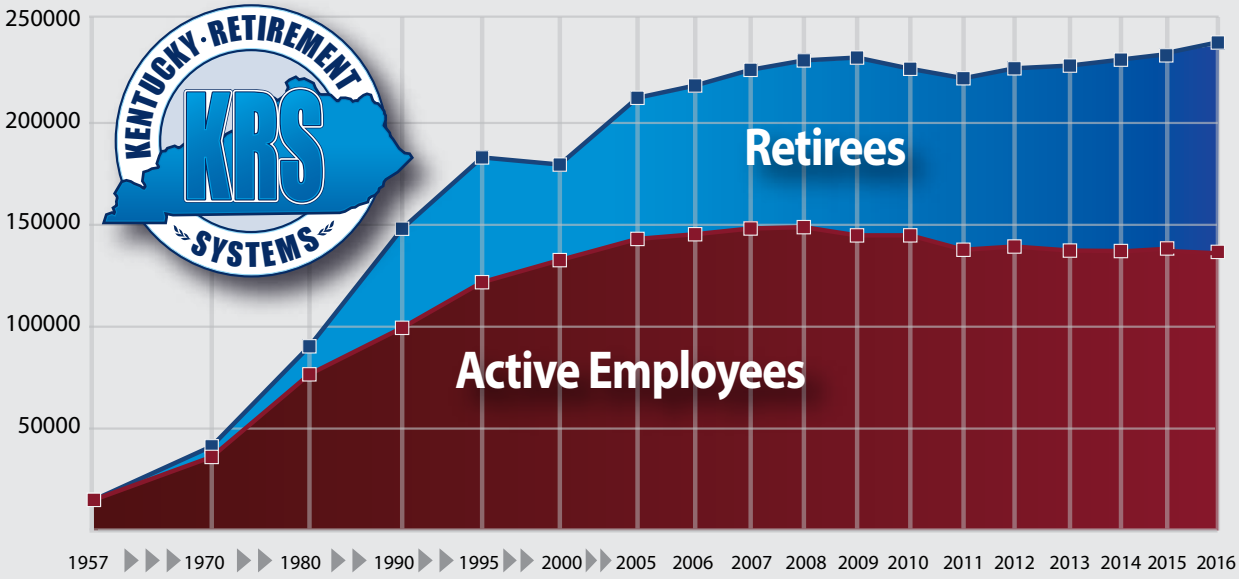
Responsibility for the accuracy of the data, as well as the completeness and fairness of the presentation, rests with the management of the Kentucky Retirement Systems. We present this information to assist the Board of Directors, members of KERS, CERS and SPRS (collectively referred to as KRS), State executive and legislative branch officials, and the general public in understanding KRS' financial and actuarial status. This CAFR conforms to the principles of governmental accounting and reporting standards set forth by the Governmental Accounting Standards Board and the Government Finance Officer's Association. KRS' financial transactions are reported on the accrual basis of accounting. Additionally, internal accounting controls provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

At the end of fiscal 2016, we found ourselves in a unique position – one of transition to new management, improved communications, a heightened focus on our investments, a higher level of funding, and a commitment to improve member services.

Management

A number of management changes took place during the fiscal year and subsequently. William Thielen retired on August 31. We wish to thank him for his years of service including serving as the Executive Director for six years and four years as Chief Operations Officer.

John Farris and David Eager were appointed to the Board of Trustees in April.



In June, Governor Matt Bevin, by way of Executive Order, disbanded the 13 person KRS Board of Trustees and replaced it with a 17 person Board of Directors which included those 13 members and four new Board Members: David Harris, Neil Ramsey, William Cook, and Mark Lattis. All four new members were chosen for their investment management skills and backgrounds in the investment management industry. All were also appointed to the Investment Committee.

In July, the Attorney General filed suit to block the Executive Order. As of this date, the issue remains in the Franklin County Court awaiting a ruling.

At the August Board Meeting, the Directors elected Mr. Eager to be Interim Executive Director effective September 1, 2016. Mr. Eager resigned from the Board and his place was subsequently taken by appointee David Adams.

In September 2016, the Executive Branch retained Public Finance Management (PFM) to conduct an extensive review of all of the Commonwealth's retirement systems. The review is very comprehensive and is expected to result in recommendations across the board to help each system achieve their goals of providing retirement benefits to their members in the most secure and effective manner. PFM's report is due by December 31, 2016.

Communications and Transparency

Several initiatives have been completed or are underway. The KRS website is being revamped to make it easier to navigate and provide more and better information. Our telephone system has been enhanced to make incoming calls more easily completed for both members and the public.

We continue to have regular meetings with the Public Pension Oversight Board (PPOB) and the (Legislative) Committee on Appropriations and Revenue. We are also taking the initiative to meet with legislators, particularly ones who have direct involvement in legislation affecting KRS.

Organizations that use KRS as their retirement fund are encouraged to make use of our open door policy. We want to understand their needs and also for them to learn what we are doing to improve KRS. In that same regard we have established or strengthened our relationship with media contacts both within Kentucky as well as those that have national coverage. To assist in our communications needs, in June KRS hired Dick Brown, a communications professional with extensive experience, to become director of our communications division.

Investments

Fiscal year 2016 was unquestionably the most difficult year for investors since 2008. The KRS Pension fund performance was -0.52% (net of fees) trailing its benchmark return of - 0.19%. The KRS Insurance fund returned -0.09% versus its benchmark return of 0.03% (net of fees). Many factors contributed to these unfavorable conditions, including: weak overseas economics putting pressure on our own economy; our GDP slowed to 1.2% in 2016; interest rates remained low despite the U.S. Federal Reserve raising short-term rates; the labor force participation rate was near historic lows at 62.7% as of June 2016; inflation remained low with the Core Consumer Price Index growth at 1.0% year-over-year; lastly, the United Kingdom voted to leave the Eurozone, commonly referred to as "Brexit" caused a downturn in the markets at the end of the fiscal year before recovering in the beginning of fiscal 2017. The negative investment performance caused a decline in net assets across all plans.

With a renewed focus on investment performance and risk management, the Investment Committee was re-constituted with several stated objectives:

- More closely align each plan's assets to its cash flow needs and risk tolerance
- Simplify the funds' overall structures and reduce the number of managers
- Reduce management and other fees, and
- Continue to improve transparency

The 10 plans have individual characteristics with regards to benefits, funded status, cash flow requirements, risk tolerance, and the appropriate allocation of investments. As such, as one of its first initiatives, in October 2016, the Investment Committee, along with David Peden and his staff, took steps to re-allocate assets that have been invested in hedge funds in order to reduce managerial fees, improve liquidity, simplify investment portfolios and more effectively manage risks.

Funding

The severe underfunding in the KERS Non-Hazardous pension plan continued as a very significant issue for KRS. At its December 2015 meeting, the KRS Board made changes in the actuarial assumptions used to produce the 2016 annual valuation and to develop recommended employer contribution rates for each plan. The most important changes were to reduce the assumed rate of return on investments from 7.5% to 6.75% for the KERS Non-Hazardous and SPRS pension plans. These changes, although causing a further decline in the unfunded ratio, were necessary to increase the Annual Required Contribution (ARC) for KERS and SPRS for FY 2017 and FY 2018 to be included in the biennial state budget. The CERS pension plans and all insurance plan rates were unchanged at 7.5%. You can find the funding level of all plans as of June 30, 2016 on page 145 in the actuarial section.

The decline in funding levels has, and rightly so, caused a great deal of concern for our members and to many others in the Commonwealth. Gov. Bevin and the General Assembly approved fully funding the ARC for KERS and SPRS for FY 2017 and FY 2018. Also, House Bill 303 provided supplemental General Fund pension contributions in excess of the ARC as follows:

- $58.2 million in FY 2017/$67.6 million in FY 2018 for KERS Non-Hazardous.
- $15.0 million in FY 2017/$10.0 million in FY 2018 for KERS Hazardous.
- $25.0 million in FY 2017/$10.0 million in FY 2018 to SPRS.

Additionally, the Kentucky Permanent Pension Fund was established from General Surplus funds that should be available.

We greatly appreciate the increase in the future funding and realize how hard it is to do so in light of the Commonwealth's many needs. The Governor and the Legislature should be commended.

The variety of potential solutions to the KRS funding problems are easily identified: increase funding, reduce benefits for future employees, improve investment returns, and reduce expenses. To enact these solutions is problematic and a significant challenge for all parties – KRS itself, the Executive Branch, the General Assembly, our members, and everyone across our great Commonwealth.

Membership Focus

With changes in the management structure, KRS remained focused on our mission of serving our diverse membership needs. KRS paid almost $1.9 billion in benefit payments to over 103,000 recipients - a significant economic benefit to Kentucky. We provided insurance to over 86,000 members and families through the end of fiscal year 2016. Our call center answered over 250,000 phone inquiries.

To better assess our administrative capabilities, KRS utilized the services of CEM Benchmarking to compare practices and expenses to 12 comparable peers. The results of their study (presented in May 2016 to the PPOB) concluded that our benefits structure was far more complex compared to our peers, and yet pension services were delivered at $77 per active member and annuitant ($35 below our peer median).

The study also recommended areas of service improvements. We needed to reduce call wait times and provide timelier pension estimates. KRS has implemented several changes including call back assist (when this option is selected, it allows the caller to retain his or her place in queue without having to remain on the phone). We urge our members to use this feature as well as the self-service portal on our website https://myretirement.ky.gov/ to view annual statements and other member information.

Looking Forward

We have confidence that meeting our challenges is within our power, albeit the road to recovery is a long one. All of us at KRS, along with Governor Bevin, the Legislature and legislative leadership, have begun to address the important issues we are facing. We are committed to once again seeing KRS in a healthy position.

David L. Eager // Interim Executive Director

As of this publication date, the Board of Directors is comprised of 17 voting members and one non-voting member. Two are elected by KERS members, three are elected by CERS members, and one is elected by SPRS. The remaining 10 members are appointed by the Governor of Kentucky. Three of those six are selected from lists of nominees provided by the Kentucky Association of Counties, the Kentucky League of Cities, and the Kentucky School Boards Association. The Secretary of the Kentucky Personnel Cabinet serves as an ex-officio member.*

**The makeup of the KRS Board of Directors is currently in litigation.*

Certificate of Achievement

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2015. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports and is valid for a period of one year. This was the 17th consecutive award earned by KRS. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized document. The report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe our 2016 CAFR will continue to meet the Certificate of Achievement Program's requirements, and we will be submitting it to the GFOA for their consideration.

2016 Board of Directors

as of December 1, 2016

John R. Farris, *Chair*
Governor Appointee
Term ends 6/17/19

David J. Adams
Governor Appointee
Term ends 6/17/19

John E. Chilton
Governor Appointee
Term ends 6/17/18

William S. Cook
Governor Appointee
Term ends 6/17/19

Thomas K. Elliott
Governor Appointee
Term ends 3/31/19
Non-voting

Edwin Davis
Elected by CERS
Term ends 3/31/17

J.T. Fulkerson
Governor Appointee
Term ends 7/1/17

David L. Harris
Governor Appointee
Term ends 6/17/18

Joseph Hardesty
Governor Appointee
Term ends 7/1/17

Vince Lang
Elected by KERS
Term ends 3/31/18

Mark Lattis
Governor Appointee
Term ends 6/17/19

Keith Peercy
Elected by SPRS
Term ends 3/31/19

Neil P. Ramsey
Governor Appointee
Term ends 6/17/18

David Rich
Elected by CERS
Term ends 10/31/17

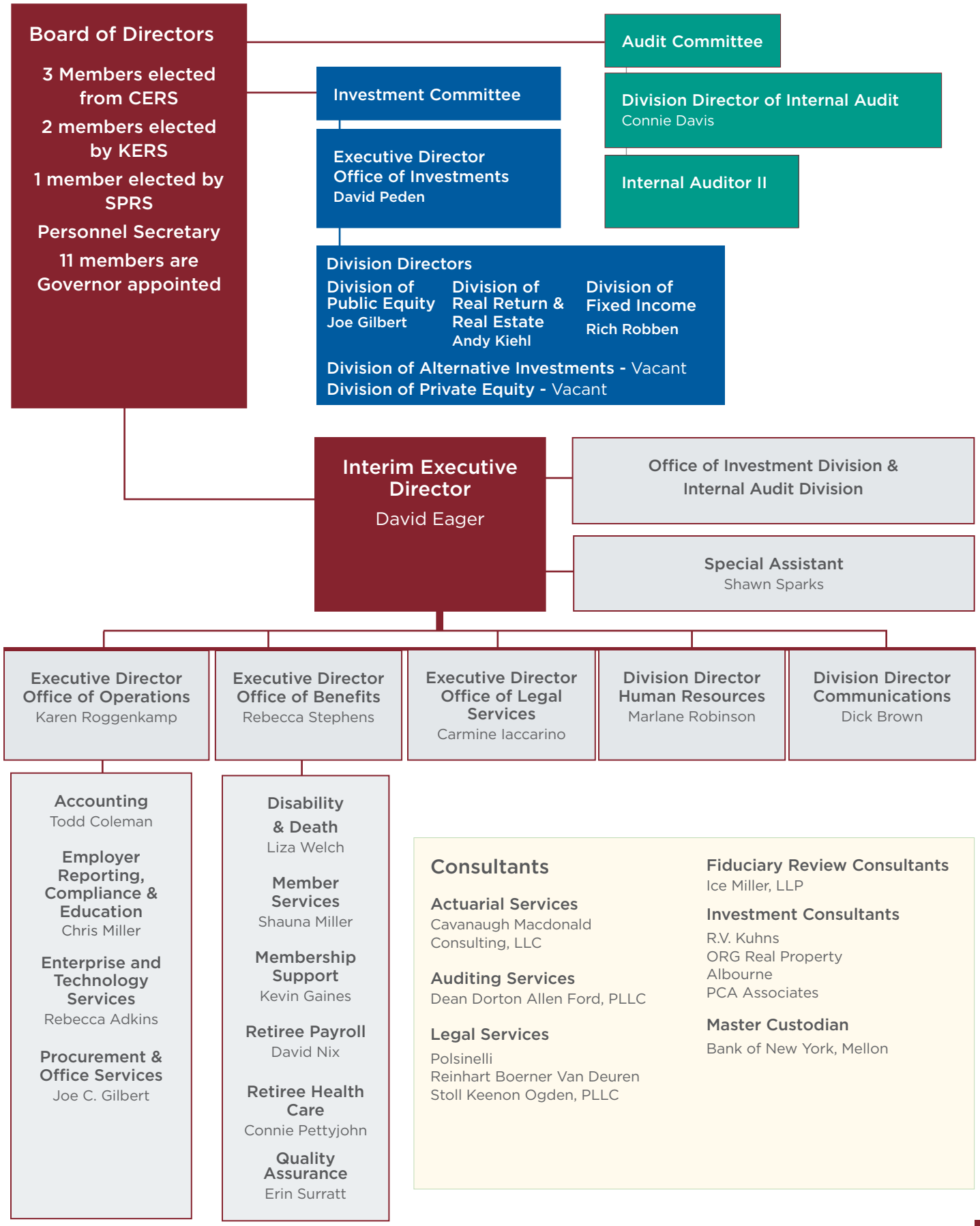
Mary Helen Peter
Elected by KERS
Term ends 3/31/18

Thomas B. Stephens
Personnel Secretary
Ex-Officio

Randy Stevens
Governor Appointee
Term ends 7/1/17

William Summers
Elected by CERS
Term ends 3/31/17

Agency Structure as of December 1, 2016



Consultants

Actuarial Services
Cavanaugh Macdonald Consulting, LLC

Auditing Services
Dean Dorton Allen Ford, PLLC

Legal Services
Polsinelli
Reinhart Boerner Van Deuren
Stoll Keenon Ogden, PLLC

Fiduciary Review Consultants
Ice Miller, LLP

Investment Consultants
R.V. Kuhns
ORG Real Property
Albourne
PCA Associates

Master Custodian
Bank of New York, Mellon

BENEFIT TIERS

KRS currently administers three different pension benefit tiers within our defined benefit plans. The Hybrid Cash Balance plan was established as a part of Senate Bill 2, which enacted by the Kentucky General Assembly during 2013 Regular Session.

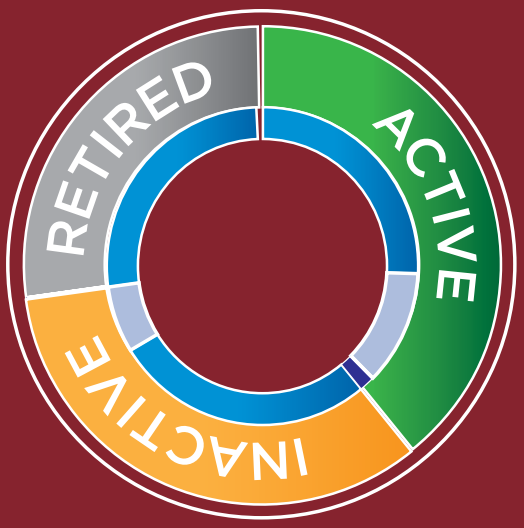
Members participating before September 1, 2008

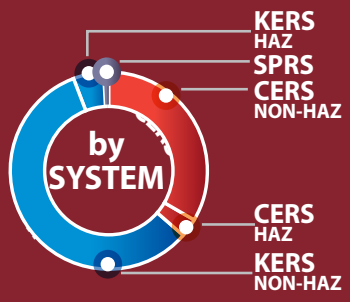
Members participating on or after September 1, 2008 through December 31, 2013

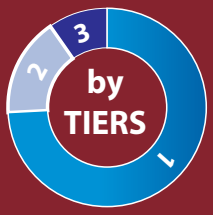
Members participating on or after January 1, 2014

Total Systems

See comparative totals and more detailed information on page 179.







	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	76,827	91,586	102,649	271,062
Tier 2	31,763	26,499	76	58,338
Tier 3	26,927	8,383	0	35,310
TOTAL	**135,517**	**126,468**	**102,725**	**364,710**

Plan Net Position (in Thousands)

Fund	2011	2012	2013	2014	2015	2016
Pension	$11,680,563	$10,758,706	$11,153,182	$12,015,897	$11,646,481	$10,877,752
Insurance	$3,096,788	$3,089,313	$3,521,894	$4,154,401	$4,246,892	$4,231,309
Total	**$14,777,351**	**$13,848,019**	**$14,675,076**	**$16,170,298**	**$15,893,373**	**$15,109,061**

KERS

TOTAL 132,939 MEMBERS

NON-HAZARDOUS
122,146 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 23,409 | Tier 2 8,441 | Tier 3 6,271

AVERAGE AGE
45.1

AVERAGE SALARY
$40,479

RETIRED MEMBERSHIP

Tier 1 40,075 | Tier 2 24 | Tier 3 0

AVERAGE AGE
68.6

AVERAGE ANNUAL BENEFIT PAYMENT
$20,633

HAZARDOUS
10,793 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 1,864 | Tier 2 1,046 | Tier 3 1,077

AVERAGE AGE
40.4

AVERAGE SALARY
$37,273

RETIRED MEMBERSHIP

Tier 1 2,736 | Tier 2 3 | Tier 3 0

AVERAGE AGE
63.9

AVERAGE ANNUAL BENEFIT PAYMENT
$14,869

CERS

TOTAL 229,205 MEMBERS

NON-HAZARDOUS
210,923 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 45,134 | Tier 2 20,017 | Tier 3 18,195

AVERAGE AGE
47.9

AVERAGE SALARY
$29,167

RETIRED MEMBERSHIP

Tier 1 51,628 | Tier 2 45 | Tier 3 0

AVERAGE AGE
69.4

AVERAGE ANNUAL BENEFIT PAYMENT
$11,264

HAZARDOUS
18,282 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 5,814 | Tier 2 2,076 | Tier 3 1,249

AVERAGE AGE
39.1

AVERAGE SALARY
$54,255

RETIRED MEMBERSHIP

Tier 1 6,831 | Tier 2 3 | Tier 3 0

AVERAGE AGE
60.6

AVERAGE ANNUAL BENEFIT PAYMENT
$25,143

SPRS

TOTAL 2,565 MEMBERS

SPRS
2,565 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 606 | Tier 2 183 | Tier 3 135

AVERAGE AGE
37.0

AVERAGE SALARY
$50,167

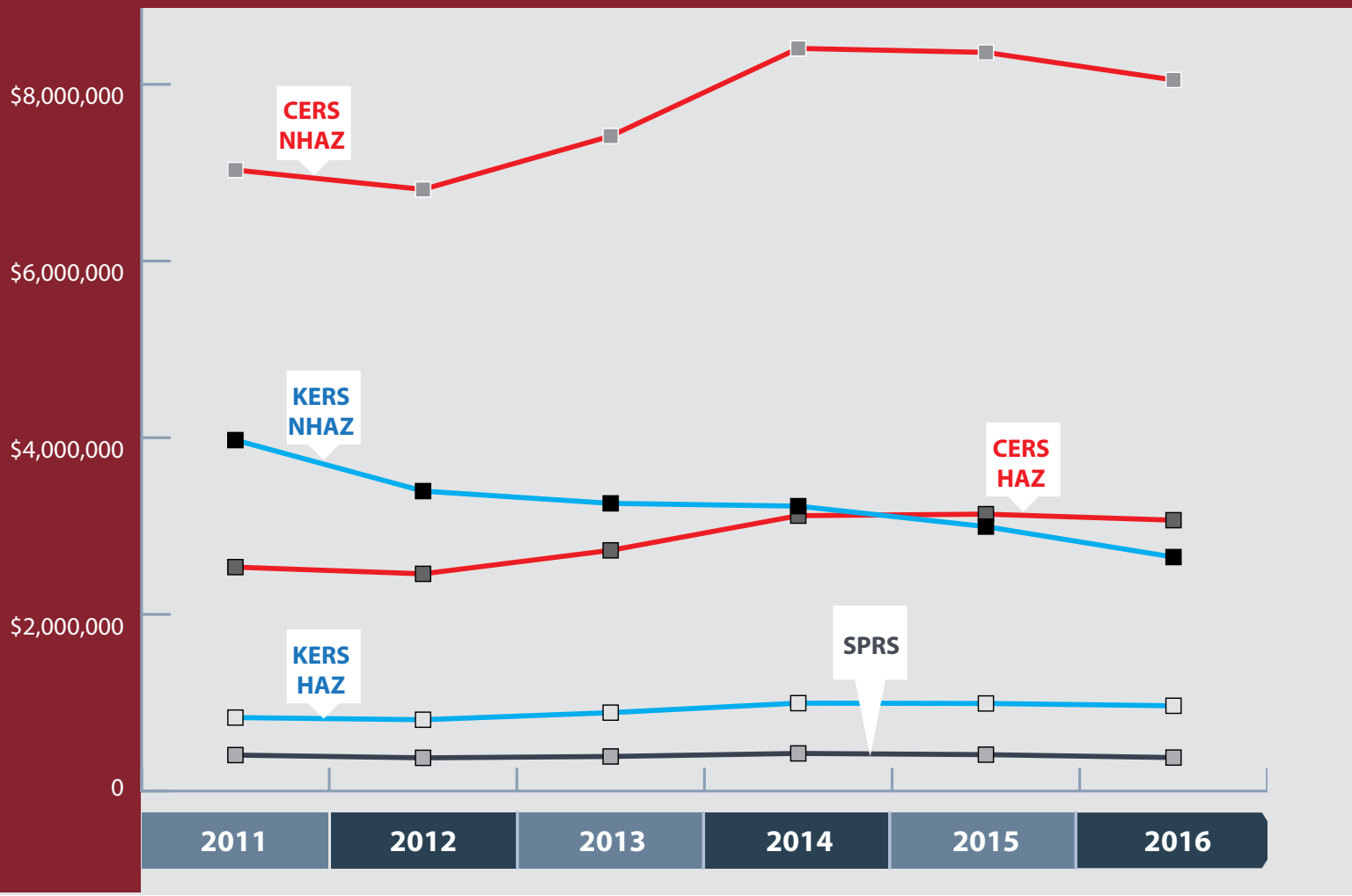
RETIRED MEMBERSHIP

Tier 1 1,378 | Tier 2 1 | Tier 3 0

AVERAGE AGE
62.4

AVERAGE ANNUAL BENEFIT PAYMENT
$37,393

Plan Net Position



Kentucky Employees Retirement System (KERS)
was established July 1, 1956 by the state legislature.

KERS NONHAZARDOUS Plan Net Position (in Thousands)						
Fund	2011	2012	2013	2014	2015	2016
Pension	$3,544,242	$2,977,069	$2,760,753	$2,578,291	$2,327,782	$1,980,292
Insurance	$428,659	$418,490	$496,040	$646,904	$665,639	$668,318
Total	**$3,972,901**	**$3,395,559**	**$3,256,793**	**$3,225,195**	**$2,993,421**	**$2,648,610**

KERS HAZARDOUS Plan Net Position (in Thousands)						
Fund	2011	2012	2013	2014	2015	2016
Pension	$511,085	$476,589	$514,592	$561,484	$552,468	$527,880
Insurance	$320,673	$330,730	$372,883	$433,525	$439,113	$437,397
Total	**$831,758**	**$807,319**	**$887,475**	**$995,009**	**$991,581**	**$965,277**

County Employees Retirement System (CERS) *was established July 1, 1958 by the state legislature.*

CERS NONHAZARDOUS Plan Net Position (in Thousands)						
Fund	2011	2012	2013	2014	2015	2016
Pension	$5,583,451	$5,381,602	$5,795,568	$6,528,146	$6,440,800	$6,141,396
Insurance	$1,446,998	$1,428,821	$1,618,960	$1,878,711	$1,920,946	$1,908,550
Total	**$7,030,449**	**$6,810,423**	**$7,414,528**	**$8,406,857**	**$8,361,746**	**$8,049,946**

CERS HAZARDOUS Plan Net Position (in Thousands)						
Fund	2011	2012	2013	2014	2015	2016
Pension	$1,761,858	$1,672,970	$1,833,571	$2,087,002	$2,078,202	$2,010,177
Insurance	$773,139	$785,874	$891,320	$1,030,303	$1,056,480	$1,056,097
Total	**$2,534,997**	**$2,458,844**	**$2,724,891**	**$3,117,305**	**$3,134,682**	**$3,066,274**

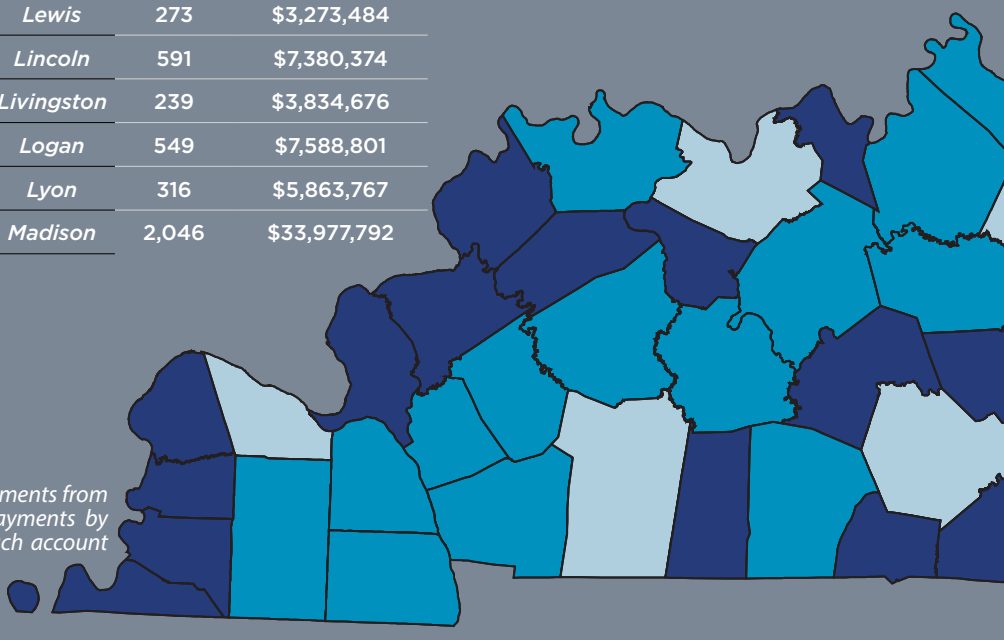
State Police Retirement System (SPRS) *was established July 1, 1958 by the state legislature.*

Plan Net Position (in Thousands)						
Fund	2011	2012	2013	2014	2015	2016
Pension	$279,927	$250,476	$248,698	$260,974	$247,229	$218,013
Insurance	$127,319	$125,398	$142,691	$164,958	$164,714	$160,949
Total	**$407,246**	**$375,874**	**$391,389**	**$425,932**	**$411,943**	**$378,962**

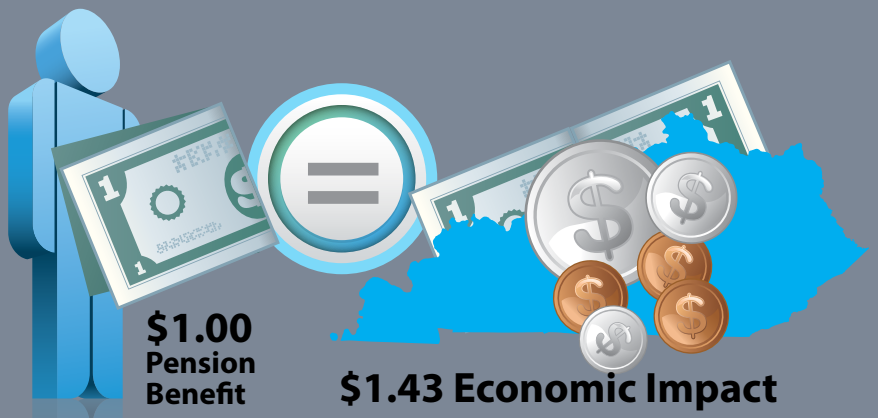
2016 Total Fiscal Year KRS Pension Benefits Paid by County

County	Payees	Total	County	Payees*	Total	County	Payees*	Total
Adair	420	$7,055,963	Garrard	402	$5,866,393.23	Magoffin	310	$4,363,296
Allen	350	$4,445,423	Grant	519	$9,577,318	Marion	498	$6,721,894
Anderson	1,217	$30,314,980	Graves	771	$11,518,101	Marshall	751	$11,160,826
Ballard	207	$2,956,117	Grayson	621	$9,140,769	Martin	243	$2,544,456
Barren	924	$14,522,393	Green	256	$3,559,711	Mason	359	$5,908,768
Bath	336	$5,089,048	Greenup	575	$7,465,289	Mccracken	1,425	$25,169,074
Bell	601	$9,424,564	Hancock	207	$2,616,884	Mccreary	362	$3,692,839
Boone	1,480	$29,203,783	Hardin	1,845	$30,554,660	Mclean	278	$3,849,002
Bourbon	492	$7,902,644	Harlan	553	$8,512,763	Meade	368	$5,085,796
Boyd	941	$15,265,568	Harrison	394	$5,932,086	Menifee	203	$2,784,937
Boyle	802	$13,845,871	Hart	292	$3,998,524	Mercer	681	$11,908,979
Bracken	197	$2,466,888	Henderson	948	$15,332,045	Metcalfe	291	$3,478,861
Breathitt	426	$6,473,674	Henry	845	$18,399,529	Monroe	219	$2,459,093
Breckinridge	386	$5,568,379	Hickman	96	$1,765,050	Montgomery	558	$8,610,821
Bullitt	1,249	$21,615,494	Hopkins	1,106	$16,491,519	Morgan	534	$8,925,700
Butler	297	$3,940,525	Jackson	282	$3,746,044	Muhlenberg	649	$7,720,209
Caldwell	483	$7,162,489	Jefferson	14,927	$313,961,221	Nelson	856	$14,573,745
Calloway	975	$13,096,501	Jessamine	890	$15,264,374	Nicholas	195	$2,523,747
Campbell	1,308	$24,267,396	Johnson	571	$8,764,518	Ohio	567	$6,113,482
Carlisle	113	$1,466,426	Kenton	2,023	$41,381,876	Oldham	1,165	$23,860,842
Carroll	291	$4,716,924	Knott	382	$5,869,302	Owen	491	$11,146,780
Carter	714	$8,968,225	Knox	535	$8,368,406	Owsley	189	$2,846,895
Casey	317	$4,107,400	Larue	310	$4,739,477	Pendleton	317	$5,066,086
Christian	1,432	$24,450,399	Laurel	1,098	$18,017,275	Perry	678	$9,904,742
Clark	722	$12,088,809	Lawrence	296	$3,495,374	Pike	1,096	$16,425,204
Clay	518	$7,303,866	Lee	213	$3,041,176	Powell	324	$4,152,574
Clinton	220	$2,791,544	Leslie	212	$3,087,979	Pulaski	1,988	$33,401,772
Crittenden	195	$2,554,136	Letcher	528	$6,845,361	Robertson	71	$967,698
Cumberland	168	$2,721,814	Lewis	273	$3,273,484			
Daviess	2,302	$39,779,283	Lincoln	591	$7,380,374			
Edmonson	197	$2,814,776	Livingston	239	$3,834,676			
Elliott	156	$2,136,239	Logan	549	$7,588,801			
Estill	330	$4,788,178	Lyon	316	$5,863,767			
Fayette	4,886	$105,248,797	Madison	2,046	$33,977,792			
Fleming	421	$7,131,212.02						
Floyd	803	$12,376,914.86						
Franklin	6,030	$186,771,091.67						
Fulton	154	$1,738,530.30						
Gallatin	105	$1,881,476.51						

NOTE: Beginning in 2016, members receiving payments from multiple accounts will be represented in the Payments by County table as one payee. In previous years each account was represented separately.



County	Payees*	Total
Rockcastle	366	$4,492,577
Rowan	889	$13,049,379
Russell	549	$6,680,470
Scott	1,122	$20,117,069
Shelby	1,619	$34,358,575
Simpson	297	$2,662,275
Spencer	445	$7,991,484
Taylor	600	$7,692,621
Todd	261	$3,082,913
Trigg	508	$7,140,935
Trimble	269	$3,404,528
Union	332	$3,416,218
Warren	2,635	$40,914,197
Washington	365	$4,498,264
Wayne	503	$6,342,507
Webster	330	$3,737,181
Whitley	965	$12,825,801
Wolfe	340	$4,493,958
Woodford	947	$20,631,450

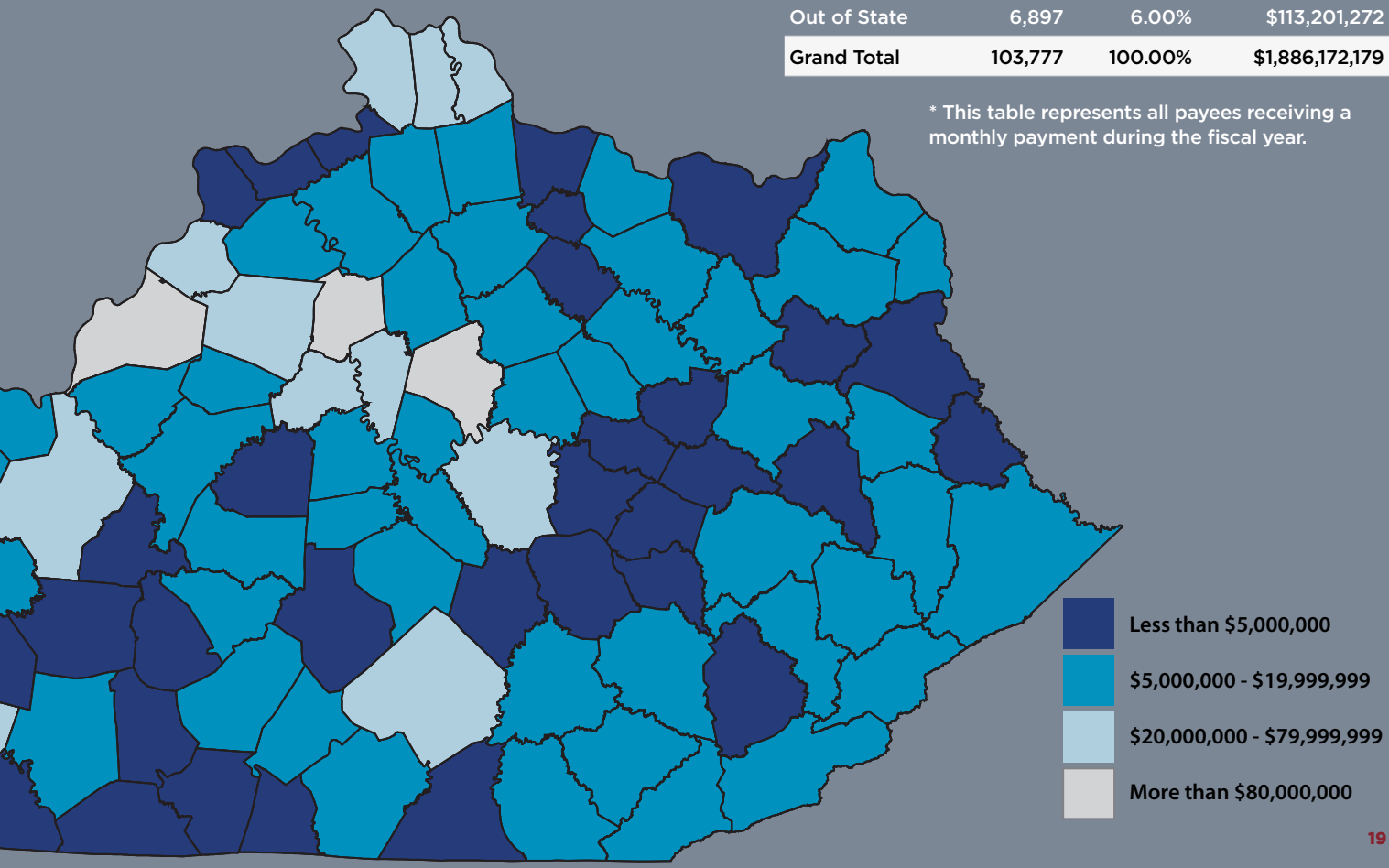


Pension Benefits paid to retirees and beneficiaries of Kentucky Retirement Systems have a wide-ranging impact on the state's economic health. In fiscal year 2016, KRS paid ***almost $1.9 billion*** to its recipients. More than 94 percent of these recipients live in Kentucky. Not only do these dollars impact those receiving a benefit, but according to the National Institute of Retirement Security (NIRS), ***each $1.00 paid out in pension benefits supported $1.43 in total economic activity in Kentucky.*** As you can see in the chart, each county in the Commonwealth is impacted by pension benefits, and in an unsteady economy, the consistent addition of pension funds into the economy is a stabilizing element.

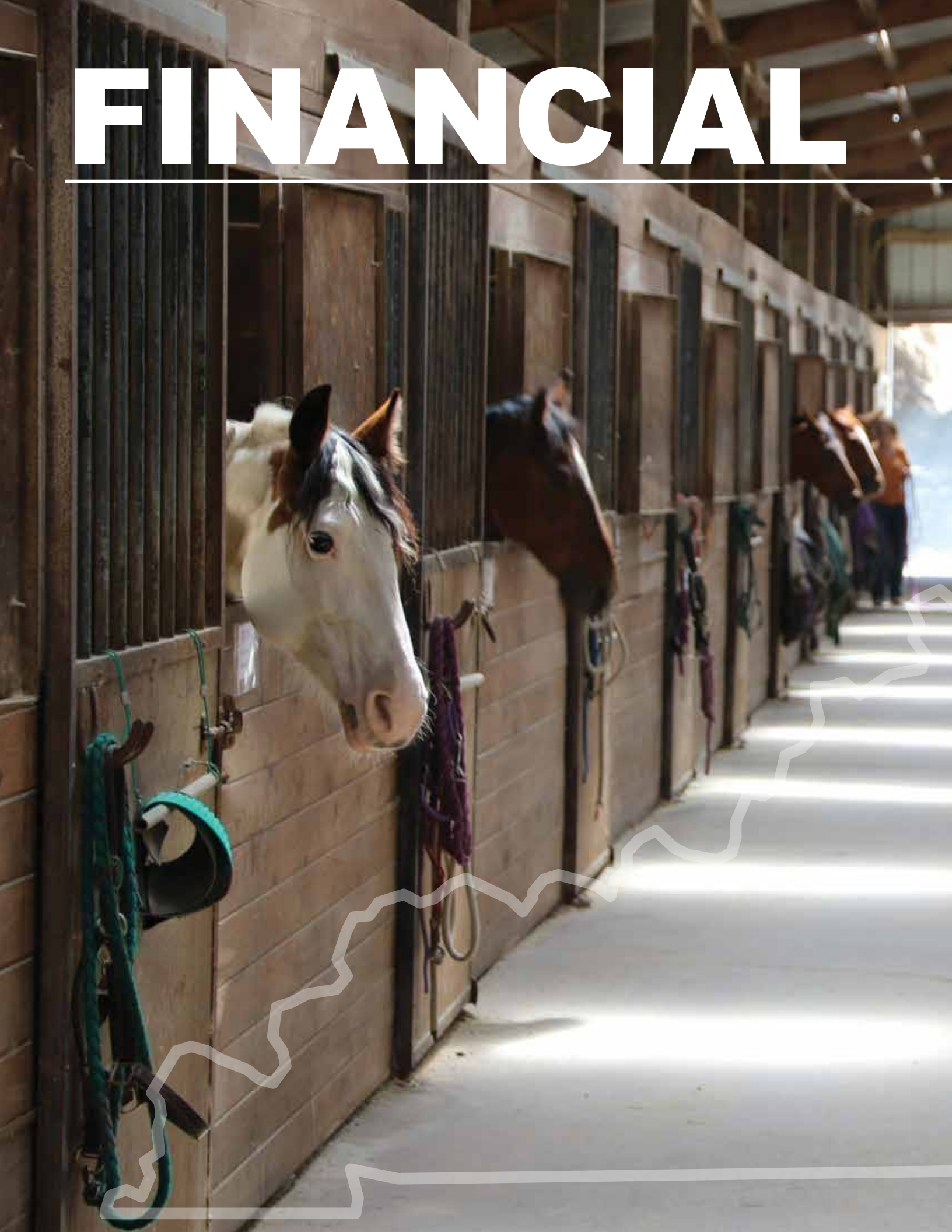
Total Fiscal Year Retirement Payments

	Payees	%	Payments
Kentucky Total	96,880	94.00%	$1,772,970,907
Out of State	6,897	6.00%	$113,201,272
Grand Total	103,777	100.00%	$1,886,172,179

* This table represents all payees receiving a monthly payment during the fiscal year.



FINANCIAL



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FINANCIAL

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Report of
Independent Auditors

Board of Directors
Kentucky Retirement Systems
Frankfort, Kentucky

Report on the Financial Statements

We have audited the accompanying combining financial statements of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ended June 30, 2016, and the related notes to the combining financial statements, which collectively comprise the Kentucky Retirement Systems' basic combining financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these combining financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of combining financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these combining financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combining financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combining financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements of the combining financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the combining financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the combining financial statements.

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the combining financial statements referred to above present fairly, in all material respects, the respective combining plan net position of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2016, and the respective combining changes in plan net position for the fiscal year then ended, in accordance with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

We have previously audited Kentucky Retirement Systems' 2015 combining financial statements of the Pension Funds and Insurance Fund, and we expressed an unmodified audit opinion on those audited combining financial statements in our report dated December 3, 2015. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended June 30, 2015, is consistent, in all material respects, with the audited combining financial statements from which it has been derived.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (pages 25-31) and the Schedules of Changes in the Net Pension Liability, Schedules of the Net Pension Liability, Schedules of Employer Contributions, Schedules of Funding Progress, and Schedules of Contributions from Employers and Other Contributing Entities (pages 73-82) be presented to supplement the basic combining financial statements. Such information, although not a part of the basic combining financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic combining financial statements in an appropriate operational, economical, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic combining financial statements, and other knowledge we obtained during our audit of the basic combining financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures did not provide us with sufficient evidence to express an opinion or provide any assurance.

Additional Supporting Schedules

Our audit was conducted for the purpose of forming an opinion on the combining financial statements that collectively comprise the Kentucky Retirement Systems' basic combining financial statements. The additional supporting schedules (pages 83-84) are presented for purposes of additional analysis and are not a required part of the basic combining financial statements. The additional supporting schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic combining financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic combining financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supporting schedules are fairly stated, in all material respects, in relation to the basic combining financial statements as a whole.

The Introductory, Actuarial, Investment, and Statistical sections are presented for purposes of additional analysis and are not a required part of the combining financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the combining financial statements and accordingly, we offer no opinion on them.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated December 1, 2016 on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Kentucky Retirement Systems' internal control over financial reporting and compliance.

Dean Dorton Allen Ford, PLLC

December 1, 2016
Lexington, Kentucky

Management's DISCUSSION & ANALYSIS (Unaudited)

This discussion and analysis of Kentucky Retirement Systems' (KRS) financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2016. Please read it in conjunction with the combining financial statements, which begin on page 32.

Pension Funds

The following highlights are explained in more detail later in this discussion.

Total Pension Net Position was $11.6 billion at the beginning of the fiscal year and decreased by 6.6% to $10.9 billion at June 30, 2016. The $768.7 million decline is primarily attributable to negative cash flow experienced by all plans as benefit payments continued to rise and contributions declined. KERS Non-Hazardous experienced the largest net position change at $347.5 million (14.9% decline).

CONTRIBUTIONS

» Total contributions reported for fiscal 2016, were $1,274.6 million compared to $1,322.9 million in fiscal 2015. This change was caused by employer contribution rate decreases for CERS non-hazardous and CERS hazardous plans. KERS Non-Hazardous, KERS Hazardous and SPRS experienced a decrease of $25.0 million in contributions over the prior year due to lower payroll in fiscal 2016. Additionally, the Bank of America investment one-time settlement of $23.0 million collected in fiscal 2015 attributed to the decrease in fiscal 2016.

» The member health insurance contributions totaled $14.7 million for the fiscal year ended June 30, 2016, compared to $12.6 million in the prior fiscal year.

INVESTMENTS

» The investment portfolio reported a net of expense return of -0.52% for the fiscal year, trailing fiscal 2015 net of expense returns of 2.01%. The investment portfolio experienced unrealized losses in the Non U.S. and Emerging Market asset classes of Public Equity and Absolute Returns. These losses were slightly offset with gains in the U.S. Public, Private Equity and Real Estate asset classes. The Emerging Market asset class was discontinued during fiscal 2016.

» The net depreciation in the fair value of investments was $201.8 million for the fiscal year ended June 30, 2016 compared to net depreciation of $14.8 million for the prior fiscal year. This $187 million decrease was due to unfavorable market conditions.

» Interest, dividend and net securities lending income for fiscal 2016 was $213.9 million compared to $300.7 million in fiscal 2015.

» Investment expenses totaled $88.0 million for fiscal 2016 compared to $81.5 million in prior year.

DEDUCTIONS

» Pension benefits paid to retirees and beneficiaries for fiscal 2016 totaled $1,903.6 million compared to $1,832.8 million in fiscal 2015 (3.9% increase). Refund of contributions paid to former members upon termination of employment for fiscal 2016 totaled $31.0 million compared to $32.9 million in fiscal 2015.

» KRS' 2016 pension administrative expense totaled $32.3 million compared to $31.0 million in the prior year.

ACTUARIAL

» The actuarial value of the total pension liability was determined as of June 30, 2016, using standard roll forward techniques starting with the total liability as of June 30, 2015. The roll forward calculation adds the annual cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year then applies the expected investment rate of return for the year.

» For the valuations as of June 30, 2016, the discount rate and assumed investment rate of return used to measure the total pension liability were reduced to 6.75% for KERS Non-Hazardous and SPRS. The discount rate and assumed investment rate of return for CERS Non-Hazardous, CERS Hazardous and KERS Hazardous remained at 7.5%. The long-term assumed investment rate of return and discount rate were based upon an analysis adopted by the Board of Trustees on December 3, 2015.

» The FY 2016 pension funded ratios by plan were:

  » KERS Non-Hazardous: 16.0%, a decline of 3.0%

  » KERS Hazardous: 59.7%, a decline of 2.5%

  » CERS Non-Hazardous: 59.0%, a decline of 1.3%

  » CERS Hazardous: 57.7%, a decline of 0.3%

  » SPRS: 30.3%, a decline of 3.5%

Insurance Fund

The following highlights are explained in more detail later in this discussion.

The combined net position of the insurance fund administered by KRS decreased by $15.6 million during fiscal 2016. Total combined net position for the fiscal year was $4.2 billion. All but one system ended with a net decrease in net position. KERS Non-Hazardous ended the fiscal year with a net increase of $2.7 million.

CONTRIBUTIONS

» Employer contributions of $333.1 million were received in fiscal 2016 compared to $343.6 million in fiscal 2015. Total contributions declined 3.1% primarily due to lower contribution rates across all systems. Contributions also decreased as most retirees have moved from KRS self-insured plans to vendor provided Medicare Advantage plans.

» The reimbursement of retired/re-employed health insurance for fiscal 2016 totaled $9.2 million compared to $8.8 million in the prior fiscal year. Employer contributions are required for all retirees returning to work, but employee contributions are waived.

INVESTMENTS

» Interest, dividend and net securities lending income for fiscal 2016 was $80.5 million compared to $100.5 million in fiscal 2015. The primary driver of this decline was due to unrealized losses in the Non U.S. and Emerging Market asset classes of Public Equity and Absolute Returns. These losses were slightly offset with gains in the US Public, Private Equity, and Real Estate asset classes. The Emerging Market asset class was discontinued during fiscal 2016.

» The investment portfolio reported a net expense return of -0.09% for the fiscal year, trailing fiscal 2015 net of expense returns of 1.86%, and was below the 7.5% assumed rate of return fiscal 2016 target.

» The net depreciation in the fair value of investments for fiscal 2016 was $51.5 million compared to net appreciation of $3.9 million for the prior fiscal year. This $55.4 million decrease was due to unfavorable market conditions.

» Investment expenses totaled $34.1 million for fiscal 2016 compared to $28.0 million in prior year.

DEDUCTIONS

» The total of insurance premiums paid plus self-funded reimbursements was $351.4 million for fiscal 2016. Insurance premiums paid plus self-funded healthcare reimbursements for the prior fiscal year totaled $335 million. Premiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled $344.9 million. Payments for the self-funded healthcare reimbursements (over age 65) totaled $6.4 million.

» KRS' 2016 insurance administrative expense totaled $2.0 million compared to $2.2 million in the prior year.

ACTUARIAL

» The actuarial value of the total insurance liability was determined as of June 30, 2016, using standard roll forward techniques starting with the total liability as of June 30, 2015. The roll forward calculation adds the annual cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year then applies the expected investment rate of return for the year.

» For the valuations as of June 30, 2016, the discount rate and assumed investment rate of return used to measure the total insurance liability was 7.50% for all plans as adopted by the Board of Trustees on December 3, 2015.

» The FY 2016 insurance funded ratios by plan were:

  » KERS Non-Hazardous: 30.3%, an increase of 1.5%

  » KERS Hazardous: 125.3%, an increase of 4.9%

  » CERS Non-Hazardous: 69.6%, an increase of 0.9%

  » CERS Hazardous: 72.9%, an increase of 0.6%

  » SPRS: 67.1%, an increase of 1.4%

Using This Financial Report

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the combining financial statements alone cannot provide sufficient information to properly reflect the plans' ongoing plan perspective. This financial report consists of two combining financial statements and two required schedules of historical trend information. All plans within KRS are included in the aforementioned combining financial statements. The Combining Statement of Plan Net Position for the Pension Funds on page 32, and the Combining Statement of Plan Net Position for the Insurance Fund on page 34, provides a snapshot of the financial position of each of the three systems at June 30, 2016. The Combining Statement of Changes in Plan Net Position for the Pension Funds on page 33, and the Combining Statement of Changes in Plan Net Position for the Insurance Fund on page 35, summarizes the additions and deductions that occurred for each of the three systems during fiscal 2016.

The Schedules of the Net Pension Liability on page 65, the Schedules of Changes in the Net Pension Liability on pages 80-81, and the Schedules of Funding Progress on pages 73-75, include current and historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of Employer Contributions on pages 78-79, and the Schedules of Contributions from Employers and Other Contributing Entities on pages 75-76 present current and historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

Kentucky Retirement Systems Combined

KRS' combined net position decreased $784.3 million, during the fiscal year ended June 30, 2016. Net position for the prior fiscal year decreased by $276.9 million. The decrease in net position for the plan year ended June 30, 2016, is primarily attributable to a decrease in net investment income. The analysis focuses on net position (Table 1) and changes in net position (Table 2) of KRS' Pension and Insurance Funds.

FUND ACTIVITIES

Pension Fund Activities

Net position of the pension funds decreased by $768.7 million ($10,877.8 million compared to $11,646.5 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. Net position of the insurance fund decreased by $15.6 million ($4,231.3 million compared to $4,246.9 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance.

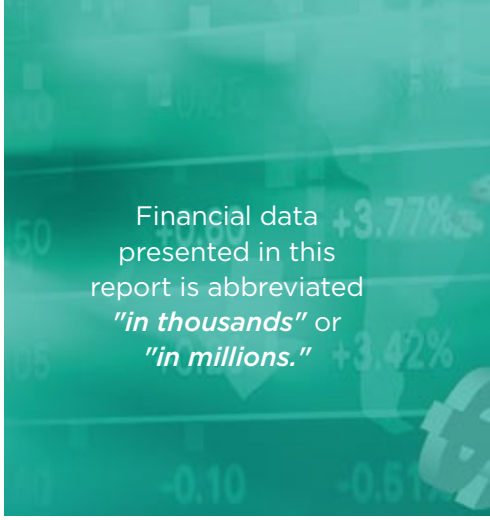


Table 1. Plan Net Position (in Millions)

	Pension Funds			Insurance Fund			Total		
Assets	**2016**	**2015**	**2014**	**2016**	**2015**	**2014**	**2016**	**2015**	**2014**
Cash & Investments	$11,410.5	$12,217.5	$12,758.2	$4,401.2	$4,451.2	$4,392.4	$15,811.7	$16,668.7	$17,150.6
Receivables	442.5	459.2	750.2	171.0	148.1	289.3	613.5	607.3	1,039.5
Equip/Int Assets, net of dep/amort.	8.2	9.9	10.5	-	-	-	8.2	9.9	10.5
Total Assets	**11,861.2**	**12,686.6**	**13,518.9**	**4,572.2**	**4,599.3**	**4,681.7**	**16,433.4**	**17,285.9**	**18,200.6**
Total Liabilities	**(983.4)**	**(1,040.1)**	**(1,503.0)**	**(340.9)**	**(352.4)**	**(527.3)**	**(1,324.3)**	**(1,392.5)**	**(2,030.3)**
Plan Net Position	**$10,877.8**	**$11,646.5**	**$12,015.9**	**$4,231.3**	**$4,246.9**	**$4,154.4**	**$15,109.1**	**$15,893.4**	**$16,170.3**

Table 2. Changes in Plan Net Position (in Millions)

	Pension Funds			Insurance Fund			Total		
Additions	**2016**	**2015**	**2014**	**2016**	**2015**	**2014**	**2016**	**2015**	**2014**
Member Cont.	$307.4	$298.5	$275.0	$-	$-	$-	$307.4	$298.5	$275.0
Employer Cont.	949.8	985.9	768.3	333.1	$343.6	$397.4	1,282.9	1,329.5	1,165.7
Health Ins. Cont.	14.7	12.6	12.4	-	-	-	14.7	12.6	12.4
Pension Spiking Cont.	2.7	2.9	-	-	-	-	2.7	2.9	-
BOA Settlement	-	23.0	-	-	-	-	-	23.0	-
Premiums Rec'd	-	-	-	0.7	0.9	2.4	0.7	0.9	2.4
Retired Remp Ins.	-	-	-	9.2	8.8	5.6	9.2	8.8	5.6
Medicare Subsidy	-	-	-	-	-	-	-	-	-
Invest. Inc. (net)	(75.9)	204.4	1,643.0	(5.2)	76.4	527.1	(81.1)	280.8	2,170.1
Total Additions	1,198.7	1,527.3	2,698.7	337.8	429.7	932.5	1,536.5	1,957.0	3,631.2
Deductions									
Benefit Payments	1,903.6	1,832.8	1,769.7	-	-	-	1,903.6	1,832.8	1,769.7
Refunds	31.0	32.9	33.6	-	-	-	31.0	32.9	33.6
Administrative Ex.	32.3	31.0	32.6	2.0	2.2	1.6	34.3	33.2	34.2
Healthcare Costs	-	-	-	351.4	335.0	298.4	351.4	335.0	298.4
Capital Projects Exp.	0.5	-	-	-	-	-	0.5	-	-
Total Deductions	**1,967.4**	**1,896.7**	**1,835.9**	**353.4**	**337.2**	**300.0**	**2,320.8**	**2,233.9**	**2,135.9**
Increase (Decrease) in Plan Net Position	**($768.7)**	**($369.4)**	**$862.8**	**($15.6)**	**$92.5**	**$632.5**	**($784.3)**	**($276.9)**	**$1,495.3**

Pension Fund Activities

Member contributions increased by $8.9 million. This is partially due to an increase in service purchases following the passage of Senate Bill 2 in 2015. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Non-Hazardous members pay pension contributions of 5% of creditable compensation and Hazardous members contribute 8% of creditable compensation.

Employer contributions decreased by $36.1 million as a result of the reduction in the employer contribution rate applied to CERS Non-Hazardous and Hazardous covered payrolls.

Total pension fund deductions increased by $70.7 million caused by an increase in benefit payments, which were $70.8 million higher than fiscal 2015.

Net investment income decreased by $280.3 million. This is illustrated in Table 3. The pension funds experienced a decrease in income primarily due to the decrease in the fair value of investments.

Table 3. Investment Income (Loss) for Pension Funds (in Millions)

Asset	2016	2015	2014
Increase (Decrease) in fair value of investments	$(276)	$(557)	$489
Investment income net of investment expense	125	219	281
Gain on sale of investments	75	542	873
Net Investment Income (Loss)	**$(76)**	**$204**	**$1,643**

Insurance Fund Activities

Employer contributions paid into the insurance fund decreased by $10.5 million over the prior fiscal year. This decrease is a result of the reduction in the employer contribution rate applied to CERS Non-Hazardous and Hazardous covered payrolls.

Net investment income decreased $81.6 million. This decrease in net investment income is due primarily to the decrease in the fair value of investments. This is illustrated in Table 4 as follows:

Table 4. Investment Income (Loss) for Insurance Fund (in Millions)

Asset	2016	2015	2014
Increase (Decrease) in fair value of investments	$(46)	$(126)	$288
Investment income net of investment expense	47	72	81
Gain on sale of investments (Loss)	(6)	130	158
Net Investment Income (Loss)	**$(5)**	**$76**	**$527**

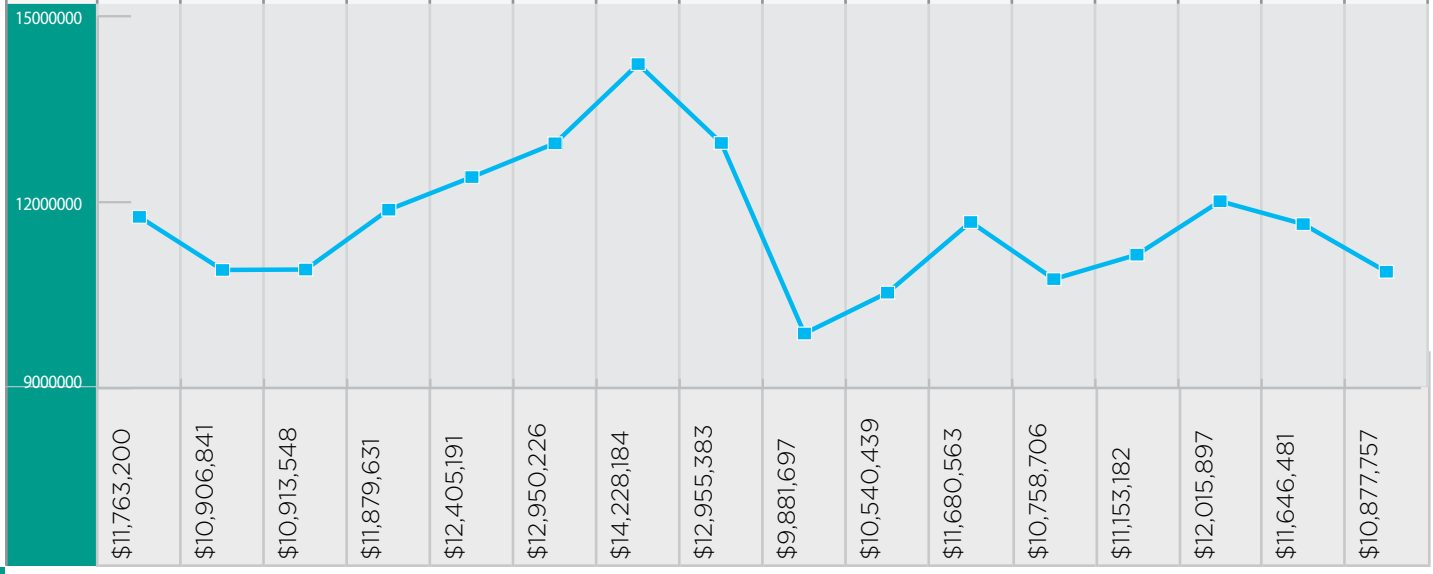
Historical Trends

Accounting standards require that the Statement of Net Position state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the Schedules of the Net Pension Liability on page 65 and the Schedules of Funding Progress on pages 73-75. The asset value stated in the Schedules of Funding Progress is the actuarial value of assets. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by KRS' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is defined as the unfunded actuarial accrued liability.

The graphs below illustrate the decline of contributions and increase in benefits paid.

The unfunded actuarial accrued liability in the pension plans increased by $1,521.4 million for a total unfunded amount of $18,136.6 million as of June 30, 2016, compared to an unfunded amount of $16,615.2 million as of June 30, 2015. In recent years, funding levels for the pension funds have fallen significantly due to investment

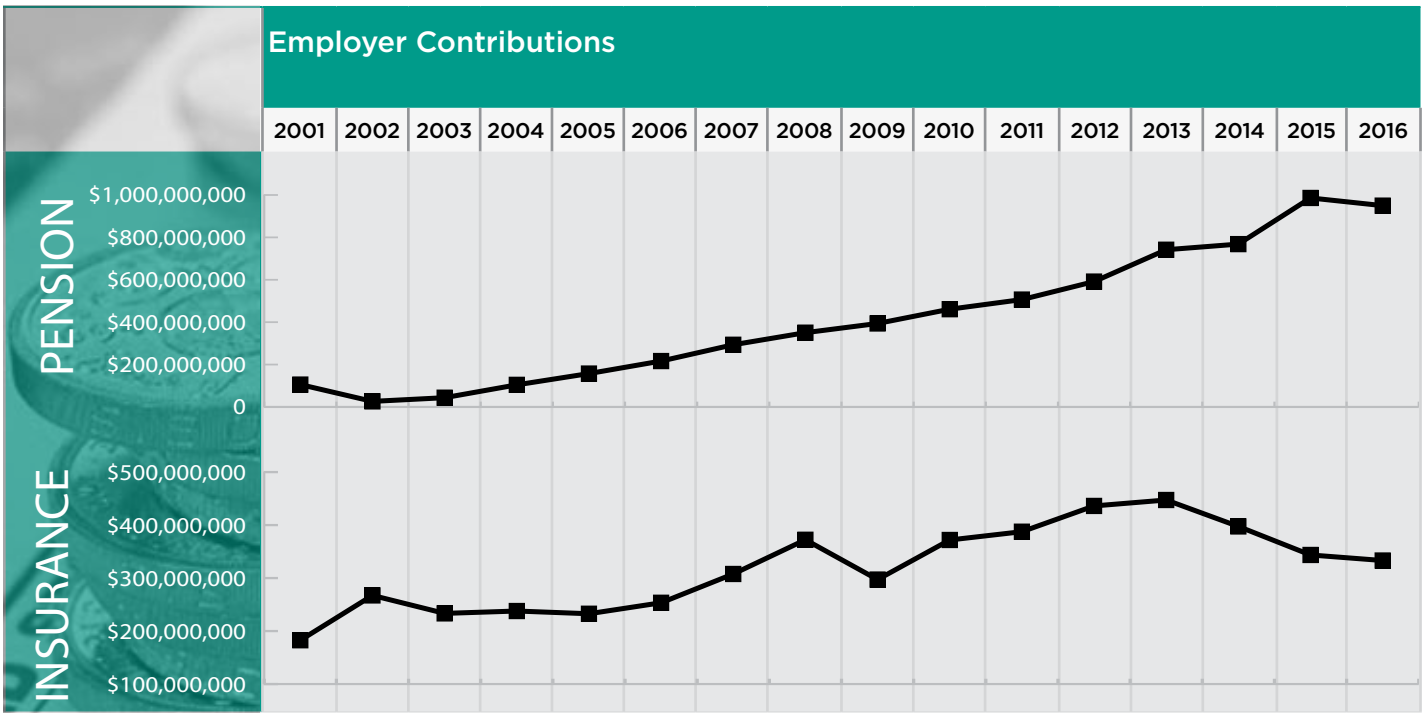
Combining Statement of Plan Net Position for Pension Funds *(in Thousands)*
as of June 30

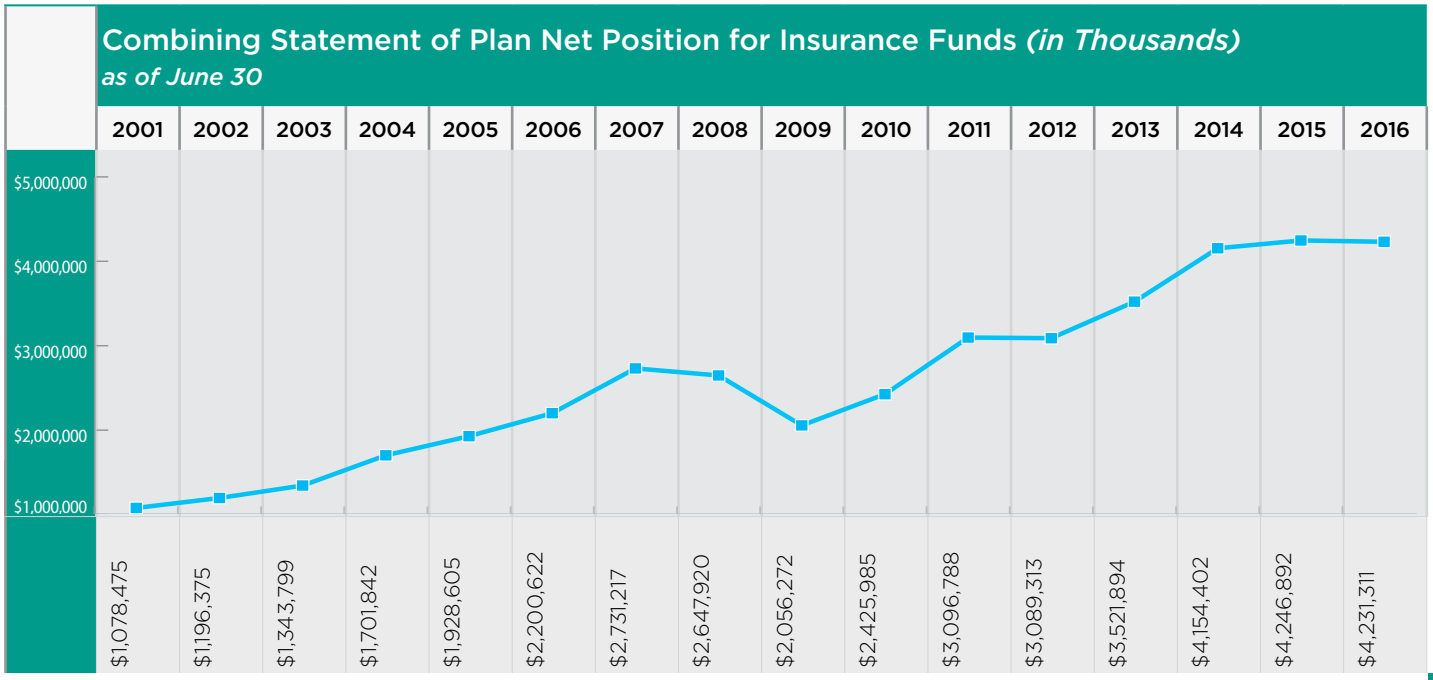


returns that were less than the actuarially assumed rate and higher than anticipated retirement rates. In addition, KERS Non-Hazardous, KERS Hazardous, and SPRS were funded less than the actuarially determined rate in prior years.

The insurance plan's unfunded actuarial accrued liability as of June 30, 2016, increased to $3,033.8 million from $3,055.8 million as of June 30, 2015. This is an increase in the unfunded actuarial accrued liability of $22 million.

Annual required contributions of the employers as actuarially determined and actual contributions made by employers and other contributing entities in relation to the required contributions are provided in the Schedules of Employer Contributions on pages 78-79, and in the Schedules of Contributions from Employers and Other Contributing Entities on pages 75-76. The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS funds is attributable to the fact that the employer contribution rate set by the Kentucky General Assembly was less than the rate recommended by the KRS Actuary in prior years and adopted by the KRS Board of Trustees.





Combining Statement of Plan Net Position for Pension Funds *(in Thousands)*

as of June 30, 2016 with Comparative Totals as of June 30, 2015

Assets	KERS Non Haz	KERS Haz	CERS Non Haz	CERS Haz	SPRS	2016 KRS Total	2015 KRS Total
Cash & Short-Term Investments							
Cash	$386	$65	$483	$139	$49	$1,122	$4,255
Short-Term Investments	85,979	15,248	143,880	55,234	5,903	306,244	395,368
Total Cash and Short-Short Term Investments	**86,365**	**15,313**	**144,363**	**55,373**	**5,952**	**307,366**	**399,623**
Receivables							
Contributions	57,461	3,674	40,414	14,307	10,582	126,438	149,629
Investment Income	60,891	16,083	176,388	56,297	6,367	316,026	308,302
Note Receivable	-	-	-	-	-	-	1,265
Total Receivables	**118,352**	**19,757**	**216,802**	**70,604**	**16,949**	**442,464**	**459,196**
Investments at Fair Value							
Corporate & Government Bonds	311,226	47,855	559,524	183,583	28,408	1,130,596	2,680,423
Absolute Return	201,820	52,775	629,018	199,324	21,259	1,104,196	1,282,166
Private Equities	356,583	65,016	685,717	232,592	27,547	1,367,455	1,285,572
Derivatives	1,791	619	7,262	2,384	212	12,268	6,156
Corporate Stocks	728,375	272,136	3,260,514	1,059,962	95,419	5,416,406	5,201,092
Real Return	160,678	43,930	512,690	167,379	17,600	902,277	-
Real Estate	75,469	28,444	303,771	97,147	11,437	516,268	619,177
Total Investments at Fair Value	**1,835,942**	**510,775**	**5,958,496**	**1,942,371**	**201,882**	**10,449,466**	**11,074,586**
Securities Lending Collateral Invested	118,742	31,861	369,572	120,755	12,754	653,684	743,261
Equipment (net of accumulated depreciation)	124	12	221	20	2	379	185
Intangible Assets (net of accumulated amortization)	2,666	231	4,548	373	35	7,853	9,739
Total Assets	**2,162,191**	**577,949**	**6,694,002**	**2,189,496**	**237,574**	**11,861,212**	**12,686,590**
Liabilities							
Accounts Payable	3,015	1,986	5,612	1,502	384	12,499	12,039
Investment Accounts Payable	60,142	16,222	177,422	57,062	6,423	317,271	284,809
Securities Lending Collateral Obligations	118,742	31,861	369,572	120,755	12,754	653,684	743,261
Total Liabilities	**181,899**	**50,069**	**552,606**	**179,319**	**19,561**	**983,454**	**1,040,109**
Total Net Position for Pension Benefits	**$1,980,292**	**$527,880**	**$6,141,396**	**$2,010,177**	**$218,013**	**$10,877,758**	**$11,646,481**

See accompanying notes to the combining financial statements.

Combining Statement of Changes in Plan Net Position for Pension Funds *(in Thousands)*

for the fiscal year ended June 30, 2016 with Comparative Totals for the fiscal year ended June 30, 2015

Additions	KERS Non Haz	KERS Haz	CERS Non Haz	CERS Haz	SPRS	2016 KRS Total	2015 KRS Total
Members' Contributions	$101,677	$15,055	$133,987	$51,554	$5,149	$307,422	$298,490
Employers' Contributions	512,670	23,690	282,767	104,952	25,723	949,802	985,996
Pension Spiking Contributions	414	70	1,339	762	99	2,684	2,858
Health Insurance Contributions (HB1)	4,817	684	7,687	1,418	113	14,719	12,570
Bank of America Settlement	-	-	-	-	-	-	23,000
Total Contributions	**619,578**	**39,499**	**425,780**	**158,686**	**31,084**	**1,274,627**	**1,322,914**
Investment Income							
From Investing Activities							
↘ Net Depreciation in FV	(45,200)	(7,502)	(111,343)	(31,313)	(6,487)	(201,845)	(14,831)
↘ Interest/Dividends	40,149	10,079	117,432	38,076	4,276	210,012	297,935
↘ Total Investing Activities Income (Loss)	(5,051)	2,577	6,089	6,763	(2,211)	8,167	283,104
↘ Investment Expense	16,270	4,413	49,107	16,501	1,707	87,998	81,505
Net Income from Investing Activities	(21,321)	(1,836)	(43,018)	(9,738)	(3,918)	(79,831)	201,599
From Securities Lending Activities							
↘ Securities Lending Income	865	216	2,620	845	90	4,636	3,056
From Securities Lending Expense							
↘ Security Borrower Rebates (Income)	90	-	9	1	-	100	(159)
↘ Security Lending Agent Fees	116	32	392	127	13	680	444
Net Income from Securities Lending Activities	659	184	2,219	717	77	3,856	2,771
Total Net Investment Income (Loss)	**(20,662)**	**(1,652)**	**(40,799)**	**(9,021)**	**(3,841)**	**(75,975)**	**204,370**
Total Additions	**598,916**	**37,847**	**384,981**	**149,665**	**27,243**	**1,198,652**	**1,527,284**
Deductions							
Benefit Payments	923,288	59,306	651,247	213,448	56,268	1,903,557	1,832,799
Refunds	12,130	2,211	13,754	2,879	11	30,985	32,881
Capital Project Expenses	181	15	307	26	4	533	--
Administrative Expenses	10,807	903	19,078	1,337	176	32,300	31,020
Total Deductions	**946,406**	**62,435**	**684,385**	**217,690**	**56,459**	**1,967,375**	**1,896,700**
Net Decrease in Plan Net Position	(347,490)	(24,588)	(299,404)	(68,025)	(29,216)	(768,723)	(369,416)
Total Net Position for Pension Benefits							
Beginning of Year	2,327,782	552,468	6,440,800	2,078,202	247,229	11,646,481	12,015,897
End of Year	**$1,980,292**	**$527,880**	**$6,141,396**	**$2,010,177**	**$218,013**	**$10,877,758**	**$11,646,481**

See accompanying notes to the combining financial statements.

Combining Statement of Plan Net Position for Insurance Fund (in Thousands)

as of June 30, 2016 with Comparative Totals as of June 30, 2015

Assets	KERS Non Haz	KERS Haz	CERS Non Haz	CERS Haz	SPRS	2016 KRS Total	2015 KRS Total
Cash and Short-Term Investments							
Cash	$57	$24	$55	$11	$5	$152	$894
Short-Term Investments	24,155	14,571	49,840	30,256	4,579	123,401	99,152
Total Cash and Short Term Investments	**24,212**	**14,595**	**49,895**	**30,267**	**4,584**	**123,553**	**100,046**
Receivables							
Contributions	12,440	1,574	10,960	5,733	852	31,559	34,667
Investment Income	21,631	14,518	63,134	34,850	5,341	139,473	113,310
Note Receivable	-	-	-	-	-	-	141
Total Receivables	**34,071**	**16,092**	**74,094**	**40,583**	**6,193**	**171,033**	**148,118**
Investments at Fair Value							
Corporate & Government Bonds	57,822	38,411	167,370	92,619	13,980	370,202	1,358,495
Derivatives	728	482	2,105	1,169	176	4,660	2,279
Private Equities	44,584	42,718	223,840	125,025	19,228	455,395	348,915
Absolute Return	65,279	43,319	185,283	103,780	16,243	413,904	463,486
Corporate Stocks	380,170	238,515	1,017,071	558,663	84,447	2,278,866	1,706,982
Real Return	54,252	35,905	157,216	86,894	13,124	347,391	
Real Estate	29,424	22,176	96,158	52,708	8,439	208,905	236,443
Total Investments at Fair Value	**632,259**	**421,526**	**1,849,043**	**1,020,858**	**155,637**	**4,079,323**	**4,116,600**
Securities Lending Collateral Invested	31,468	20,908	88,990	49,470	7,443	198,279	234,509
Total Assets	**722,010**	**473,121**	**2,062,022**	**1,141,178**	**173,857**	**4,572,188**	**4,599,273**
Liabilities							
Accounts Payable	141	16	122	64	11	354	2,208
Investment Accounts Payable	22,083	14,800	64,360	35,547	5,454	142,244	115,664
Securities Lending Collateral Obligations	31,468	20,908	88,990	49,470	7,443	198,279	234,509
Total Liabilities	**53,692**	**35,724**	**153,472**	**85,081**	**12,908**	**340,877**	**352,381**
Total Plan Net Position for Insurance Benefits	**$668,318**	**$437,397**	**$1,908,550**	**$1,056,097**	**$160,949**	**$4,231,311**	**$4,246,892**

See accompanying notes to the combining financial statements.

"The displayed market values include investable assets held by each System, and its associated contributions, payables, and equipment and intangible assets; unlike those found in the Investment Section (pages 116-119), which include only those investable assets held by each System."

Combining Statement of Changes in Plan Net Position for Insurance Fund (in Thousands)

for the fiscal year ended June 30, 2016 with Comparative Totals for the fiscal year ended June 30, 2015

Additions	KERS Non Haz	KERS Haz	CERS Non Haz	CERS Haz	SPRS	2016 KRS Total	2015 KRS Total
Employers' Contributions	$131,935	$15,929	$108,269	$66,757	$10,228	$333,118	$343,604
Premiums Received from Retirees	240	(13)	629	(106)	(29)	721	879
Retired Reemployed Healthcare (HBI)	3,880	837	3,567	862	9	9,155	8,822
Total Contributions	**136,055**	**16,753**	**112,465**	**67,513**	**10,208**	**342,994**	**353,305**
Investment Income							
From Investing Activities							
↘ Net Depreciation in FV (Appreciation)	(12,720)	(5,911)	(21,498)	(9,667)	(1,747)	(51,543)	3,890
↘ Interest/Dividends	12,142	8,187	36,102	19,746	3,043	79,220	99,338
↘ Total Investing Activities Income (Loss)	(578)	2,276	14,604	10,079	1,296	27,677	103,228
↘ Investment Expense	3,528	3,290	16,592	9,287	1,392	34,089	27,984
Net Income from Investing Activities	(4,106)	(1,014)	(1,988)	792	(96)	(6,412)	75,244
From Securities Lending Activities							
↘ Securities Lending Income	248	164	702	384	58	1,556	993
From Securities Lending Expense							
↘ Security Borrower Rebates (Income)	10	9	36	19	2	76	(336)
↘ Security Lending Agent Fees	36	23	100	55	8	222	155
Net Income from Securities Lending Activities	202	132	566	310	48	1,258	1,174
Total Net Investment Income (Loss)	**(3,904)**	**(882)**	**(1,422)**	**1,102**	**(48)**	**(5,154)**	**76,418**
Total Additions	**132,151**	**15,871**	**111,043**	**68,615**	**10,160**	**337,840**	**429,723**
Deductions							
Healthcare Premiums Subsidies	126,550	17,439	118,603	68,518	13,836	344,946	328,923
Administrative Fees	821	97	715	343	62	2,038	2,180
Excise Tax	6	-	11	-	-	17	9
Self Funding Insurance Costs	2,095	51	4,110	137	27	6,420	6,121
Total Deductions	**129,472**	**17,587**	**123,439**	**68,998**	**13,925**	**353,421**	**337,233**
Net Increase (Decrease) in Plan Net Position	2,679	(1,716)	(12,396)	(383)	(3,765)	(15,581)	92,490
Total Plan Net Position for Insurance Benefits							
Beginning of Year	665,639	439,113	1,920,946	1,056,480	164,714	4,246,892	4,154,402
End of Year	**$668,318**	**$437,397**	**$1,908,550**	**$1,056,097**	**$160,949**	**$4,231,311**	**$4,246,892**

See accompanying notes to the combining financial statements.

NOTE A. Summary of Significant Accounting Policies

This summary of significant accounting policies of the Kentucky Retirement Systems (KRS) is presented to assist in understanding KRS' combining financial statements. The combining financial statements and notes are representations of KRS' management, which is responsible for their integrity and objectivity. These accounting policies conform to accounting principles generally accepted in the United States of America (GAAP) and have been consistently applied in the preparation of the combining financial statements.

Organization

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees (the Board) of KRS administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the systems are invested as a whole, each system's assets are used only for the payment of benefits to the members of that plan, and a pro rata share of administrative costs, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

On June 17, 2016, the board was changed by Executive Order to include ten governor appointees and seven elected member. See Note V. for further detail regarding the governing reorganization.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of KRS administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by KRS: (1) KERS; (2) CERS; and (3) SPRS. The assets of the insurance fund are invested as a whole. The following notes apply to the various funds administered by KRS.

Basis of Accounting

KRS' combining financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and investment expenses are recognized when incurred.

Method Used to Value Investments

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Short-term investments are reported at cost, which approximates fair value. See Note D for further

discussion of fair value measurements. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the dividend date. Gain (loss) on investments includes KRS' gains and losses on investments bought and sold as well held during the fiscal year.

Estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment

Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to 10 years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged to expense as incurred. The capitalization threshold used in fiscal years 2016 and 2015 was $3,000 (see Note K for further information).

Intangible Assets

Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is 10 years. The capitalization threshold used in fiscal years 2016 and 2015 was $3,000 (see Note L for further information).

Contributions Receivable

Contributions receivable consist of amounts due from employers. The management of KRS considers contributions receivable to be fully collectible; accordingly, no allowance for doubtful accounts is considered necessary. If amounts become uncollectible, they will be charged to operations when that determination is made. If amounts previously written off are collected, they will be credited to income when received.

Investment Income Receivable and Investment Accounts Payable

Due to the timing of receiving partnership financial information, the fair values of the investments in certain limited partnerships have been estimated using the net asset value of the ownership interest in partners' capital as of March 31 of each fiscal year.

KRS management will monitor differences in the fair values of these investments between March 31 and June 30 of each fiscal year, and will disclose any and all material differences.

The Investment Income Receivable and Investment Accounts Payable consist of all buys and sells of securities, as well as all investment related accruals.

In fiscal year 2015, KRS changed the reporting of private equity investment fees from a net basis to a gross basis. KRS made this decision to enhance transparency of the investment fees. Prior to 2015, the majority of KRS' private equity investment fees were netted against investment activity which is the standard used within the private equity sector. KRS' net investment income has always included these fees regardless of the reporting method used.

Payment of Benefits

Benefits are recorded when paid.

Expense Allocation

Administrative expenses of KRS are allocated in proportion to the number of total members participating in each plan and direct investment manager expenses are allocated in proportion to the percentage of investment assets held by each plan.

Component Unit

KRS is a component unit of the Commonwealth of Kentucky (the Commonwealth) for financial reporting purposes.

KERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. CERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. SPRS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Board of KRS without further legislative review. The methods used to determine the employer rates for KRS are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

Recent Accounting Pronouncements

In June 2015, the Governmental Accounting Standards Board (GASB) issued Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. The objective of this Statement is to improve the usefulness of information about postemployment benefits other than pensions (other postemployment benefits or OPEB) included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and assessing accountability. This Statement replaces Statements No. 43, Financial Reporting for Postemployment Benefit Plans other than Pension Plans, as amended, and No. 57, OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans. It also includes requirements for defined contribution OPEB plans that replace the requirements for those OPEB plans in Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans, as amended, Statement 43, and Statement No. 50, Pension Disclosures. This Statement becomes effective for the fiscal year beginning July 1, 2016. KRS is evaluating the requirements of this Statement.

In June 2015, the GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. The objective of this Statement is to address accounting and financial reporting for OPEB that is provided to the employees of state and local governmental employers. This Statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. For defined benefit OPEB, this Statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information requirements about defined benefit OPEB also are addressed. This Statement becomes effective for the fiscal year beginning July 1, 2017. KRS is evaluating the requirements of this Statement.

Note B. Plan Descriptions & Contribution Information

Membership in each retirement plan consists of the following as of June 30, 2016 and 2015.
Membership Information*

KERS Employees

	2016			2015		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	40,099	2,739	42,838	38,827	2,575	41,402
Inactive Memberships	43,929	4,067	47,996	42,479	3,761	46,240
Active Plan Members	38,121	3,987	42,108	39,289	3,932	43,221
Total	**122,149**	**10,793**	**132,942**	**120,595**	**10,268**	**130,863**
Number of Participating Employers			358			354

CERS Employees

	2016			2015		
Members	**Non-Haz**	**Haz**	**Total**	**Non-Haz**	**Haz**	**Total**
Retirees and Beneficiaries Receiving Benefits	51,673	6,834	58,507	48,515	6,389	54,904
Inactive Memberships	75,904	2,309	78,213	72,965	2,142	75,107
Active Plan Members	83,346	9,139	92,485	82,969	9,188	92,157
Total	**210,923**	**18,282**	**229,205**	**204,449**	**17,719**	**222,168**
Number of Participating Employers			1,140			1,136

SPRS Employees

Members	**2016**	**2015**
Retirees and Beneficiaries Receiving Benefits	1,379	1,324
Inactive Memberships	262	257
Active Plan Members	924	940
Total	**2,565**	**2,521**
Number of Participating Employers	1	1

** Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-Hazardous, then KERS Non-Hazardous.*

Hospital & Medical Contracts consisted of the following as of June 30, 2016. Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Hazardous	8,876	656	441	1,286	19,447
KERS Hazardous	663	439	97	66	1,302
CERS Non-Hazardous	8,164	465	235	2,499	23,007
CERS Hazardous	1,595	2,321	378	114	2,969
SPRS	246	447	77	18	850
Total	**19,544**	**4,328**	**1,228**	**3,983**	**47,575**

Hospital & Medical Contracts consisted of the following as of June 30, 2015. Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Hazardous	9,251	714	452	1,303	18,577
KERS Hazardous	656	448	110	62	1,177
CERS Non-Hazardous	8,098	473	242	2,531	21,520
CERS Hazardous	1,500	2,255	456	107	2,697
SPRS	265	441	81	16	777
Total	**19,770**	**4,331**	**1,341**	**4,019**	**44,748**

Medical Insurance coverage is provided based on the member's initial participation date and length of service. Members receive either a percentage or dollar amount for insurance coverage.

Pension Plan Descriptions

KERS - (Kentucky Employees Retirement System) This system consists of two plans - ***Non-Hazardous and Hazardous***. Each plan is a cost-sharing multiple-employer defined benefit pension plan that covers all regular full-time members employed in positions of any state department, board, or agency directed by Executive Order to participate in KERS.

CERS - (County Employees Retirement System) This system consists of two plans - ***Non-Hazardous and Hazardous***. Each plan is a cost-sharing multiple-employer defined benefit pension plan that covers all regular full-time members employed in non-hazardous positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate in CERS.

SPRS - (State Police Retirement System) This system is a single-employer defined benefit pension plan that covers all full-time state troopers employed in positions by the Kentucky State Police.

These systems provide for retirement, disability, and death benefits to system members. Retirement benefits may be extended to beneficiaries of members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year.

Cost of Living Adjustment (COLA)

Effective July 1, 2009, and on July 1 of each year thereafter through June 30, 2014, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least 12 months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than 12 months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the 12 months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce the COLA if, in its judgment, the welfare of the Commonwealth so demands. No COLA has been granted since July 1, 2011.

Contributions

TIER 1:

For the fiscal years ended June 30, 2016 and 2015, Tier 1 plan members who began participating prior to September 1, 2008, were required to contribute 5% Non-Hazardous and 8% Hazardous of their annual creditable compensation. These members were classified in the Tier 1 structure of benefits. The Commonwealth was required to contribute at an actuarially determined rate for KERS and SPRS pensions. Participating employers were required to contribute at an actuarially determined rate for CERS pensions. Per Kentucky Revised Statute Sections {KERS 61.565(3); CERS 78.545(33); SPRS 16.645(18)}, normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution

rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget for KERS and SPRS.

For the fiscal year ended June 30, 2016, participating employers contributed a percentage of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years was a percentage of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings. See chart below for the 2015 and 2016 fiscal year percentages.

TIER 2:

Tier 2 members were required to contribute a total of 6% for Non-Hazardous and 9% for Hazardous of their annual creditable compensation, while 1% was deposited to an account created for the payment of health insurance benefits under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). These members were classified in the Tier 2 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% for Non-Hazardous and 8% for Hazardous of their annual creditable compensation.

TIER 3:

Tier 3 members who began participating on, or after, January 1, 2014, were required to contribute to the Cash Balance Plan. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. Members in the plan contribute a set percentage of their salary each month to their own account. Members contribute 5% (Non-Hazardous) and 8% (Hazardous) of their annual creditable compensation, and 1% to the health insurance fund which is not credited to the member's account and is not refundable. The employer contribution rate is set annually by the Board based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A member's account is credited with a 4% (Non-Hazardous) and 7.5% (Hazardous) employer pay credit. The employer pay credit represents a portion of the employer contribution.

	PENSION				INSURANCE				COMBINED TOTAL			
	Employer Contribution Rates		Actuarially Recommended Rates		Employer Contribution Rates		Actuarially Recommended Rates		Employer Contribution Rates		Actuarially Recommended Rates	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
KERS Non-Hazardous	30.84%	30.84%	30.84%	30.84%	7.93%	7.93%	7.93%	7.93%	38.77%	38.77%	38.77%	38.77%
KERS Hazardous	16.37%	16.37%	16.37%	16.37%	9.97%	9.97%	9.97%	9.97%	26.34%	26.34%	26.34%	26.34%
CERS Non-Hazardous	12.42%	12.75%	12.42%	12.75%	4.64%	4.92%	4.64%	4.92%	17.06%	17.67%	17.06%	17.67%
CERS Hazardous	20.26%	20.73%	20.26%	20.73%	12.69%	13.58%	12.69%	13.58%	32.95%	34.31%	32.95%	34.31%
SPRS	53.90%	53.90%	53.90%	53.90%	21.86%	21.86%	21.86%	21.86%	75.76%	75.76%	75.76%	75.76%

Tier 3 Plan

Interest is paid into the member's account. The account currently earns 4% interest credit on the member's account balance as of June 30 of the previous year. The member's account may be credited with additional interest if the System's five-year average investment returns exceed 4%. If the member was actively employed and participating in the fiscal year, and if the System's average geometric investment return for the previous five years exceeds 4%, then the member's account will be credited with 75% of the amount of the returns over 4% on the account balance as of June 30 of the previous year. It is possible that one system in KRS may get an upside sharing percentage, while one may not.

Upside Sharing Interest

Upside sharing interest is credited to both the member contribution balance and Employer Pay Credit balance. Upside sharing interest is an additional interest credit. Member accounts automatically earn 4% interest annually. The GANIR is calculated on an individual system basis. It is possible that one system may get an upside sharing percentage, and another system would not.

The chart below shows the interest calculated on the members' balances as of June 30,2015, and credited to each member account on June 30, 2016.

(A-B) = C X 75%=D then B+D=Interest

System	A 5 Year Geometric Average Return	B 2016 Rate	C Upside Sharing Interest	D Interest Rate Earned	Interest Rate Earned (4% + Upside)	Total Interest Credited To Members' Accounts
KERS Non-Hazardous	5.10%	4.00%	1.10%	0.83%	**4.83%**	$380,458
KERS Hazardous	5.32%	4.00%	1.32%	0.99%	**4.99%**	$110,239
CERS Non-Hazardous	5.16%	4.00%	1.16%	0.87%	**4.87%**	$672,783
CERS Hazardous	5.34%	4.00%	1.34%	1.01%	**5.01%**	$147,772
SPRS	5.10%	4.00%	1.10%	0.83%	**4.83%**	$13,511

This interest was calculated on the members' balances as of June 30, 2015, and credited to each member account on June 30, 2016.

Insurance Plan Description

The Kentucky Retirement Systems Insurance Fund (Insurance Fund) was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The Insurance Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2016, insurance premiums withheld from benefit payments for members of the Systems were $20.6 million and $1.2 million for KERS Non-Hazardous and Hazardous, respectively; $22.6 million and $2.2 million for CERS Non-Hazardous and Hazardous, respectively; and, $241,535 for SPRS. For fiscal year 2015, insurance premiums withheld from benefit payments for members of the Systems were $21.2 million and $1.1 million for KERS Non-Hazardous and KERS Hazardous, respectively; $22.6 million and $1.7 million for CERS Non-Hazardous and CERS Hazardous, respectively, and $135,018 for SPRS. The Insurance Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2016, the Insurance Fund had 113,280 retirees and beneficiaries for whom benefits were available.

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after, July 1, 2003. Once members reach a minimum vesting period of 10 years, non-hazardous employees whose participation began on, or after, July 1, 2003, earn $10 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn $15 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives $10 per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually, which is currently 1.5%, based upon Kentucky Revised Statutes. **See chart for current values for Dollar Contribution.** This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

On August 6, 2012, the Board voted to cease self-funding of healthcare benefits for most KRS Medicare eligible retirees. The Board elected to contract with Humana Insurance Company to provide healthcare benefits to KRS' retirees through a fully-insured Medicare Advantage Plan. The Humana Medicare Advantage Plan became effective January 1, 2013.

The amount of contribution paid by the Insurance Fund is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows:

Portion Paid by Insurance Fund

Years of Service	Paid by Insurance Fund (%)
20+ years	100%
15-19 years	75%
10-14 years	50%
4-9 years	25%
Less than 4 years	0%

Dollar Contribution for Fiscal Year 2016

For Member participation date began on or after July 1, 2003

System	
KERS Non-Hazardous	$12.99
KERS Hazardous	$19.48
CERS Non-Hazardous	$12.99
CERS Hazardous	$19.48
SPRS	$19.48

Note C. Cash, Short-Term Investments & Securities Lending Collateral

The provisions of GASB Statement No. 28, Accounting and Financial Reporting for Securities Lending Transactions require that cash received as collateral on securities lending transactions, and investments made with that cash, be reported as assets on the financial statements. In accordance with GASB No. 28, KRS classifies certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following at June 30:

Cash, Short-Term Investments, & Securities Lending Collateral		
KERS		
Assets	**2016**	**2015**
Cash	$451,041	$1,900,500
Short-Term Investments	101,227,210	119,412,200
Securities Lending Collateral Invested	150,602,925	180,822,466
KERS Total	**$252,281,176**	**$302,135,166**
CERS		
Assets	**2016**	**2015**
Cash	$621,299	$2,138,933
Short-Term Investments	199,113,359	268,159,676
Securities Lending Collateral Invested	490,326,943	547,046,264
CERS Total	**$690,061,601**	**$817,344,873**
SPRS		
Assets	**2016**	**2015**
Cash	$49,175	$215,325
Short-Term Investments	5,902,617	7,795,849
Securities Lending Collateral Invested	12,753,573	15,392,066
SPRS Total	**$18,705,365**	**$23,403,240**
KRS Insurance Fund		
Assets	**2016**	**2015**
Cash	$152,362	$894,438
Short-Term Investments	123,400,027	99,151,683
Medicare Drug Deposit	-	-
Securities Lending Collateral Invested	198,278,633	234,509,400
Insurance Fund Total	**$321,831,022**	**$334,555,251**

Each plan's assets are used only for the payment of benefits to the members of that plan and pro rata share of administrative cost in accordance with the provisions of Kentucky Revised Statute sections 16.555, 61.570, and 78.630.

Note D. Investments/GASB

PRUDENT PERSON RULE -
A legal maxim restricting the discretion in a client's account to investments that a prudent person seeking reasonable income and preservation of capital might buy for his or her own portfolio.

Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of KRS. The Board has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the "Prudent Person Rule" (set forth in Kentucky Revised Statute 61.650) and manage those funds consistent with the long-term nature of the systems. The Investment Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS. The Statement of Investment Policy contains the specific guidelines for the investment of pension and insurance assets. Additionally, the Investment Committee establishes specific investment guidelines that are summarized below and are included in the Investment Management Agreement for each investment management firm.

Equity Investments

Investments may be made in common stock, securities convertible into common stock, preferred stock of publicly traded companies on stock markets, asset class relevant Exchange Traded Funds' (ETF's) or any other type of security contained in a manager's benchmark. Each individual equity account has a comprehensive set of investment guidelines prepared, which contains a listing of permissible investments, portfolio restrictions and standards of performance.

Fixed Income Investments

The fixed income accounts may include, but are not limited to, the following fixed income securities: U.S. Government and Agency bonds; investment grade U.S. corporate credit; investment grade non-U.S. corporate credit; non-investment grade U.S. corporate credit including both bonds and bank loans; non-investment grade non-U.S. corporate credit including bonds and bank loans; municipal bonds; non-U.S. sovereign debt; mortgages, including residential mortgage backed securities; commercial mortgage backed securities, and whole loans; asset-backed securities and emerging market debt (EMD), including both sovereign EMD and corporate EMD; and, asset class relevant ETF's.

Mortgages

Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments.

Private Equity/Equity Real Estate/Real Return/Absolute Return Investments

- Subject to the specific approval of the Investment Committee of the Board, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, but not limited to and without limitation, venture capital, private equity, private placements, real assets and absolute return investments which the Investment Committee believes has excellent potential to generate income and which may have a higher degree of risk.

Cash Equivalent Securities

The following short-term investment vehicles are considered acceptable:

Publicly traded investment grade corporate bonds, variable rate demand notes, government and agency bonds, mortgages, municipal bonds, and collective Short Term Investment Fund's (STIF), money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements, relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the instrument has a split rating, the lower of the two ratings shall prevail.

All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time left until the next interest rate reset occurs, but in no case will any security have a stated final maturity of more than three years.

KRS' fixed income managers, who utilize cash equivalent securities as an integral part of their investment strategy, are exempt from the permissible investments contained in the preceding paragraph. Permissible short-term investments for fixed income managers shall be included in the investment manager's investment guidelines.

In accordance with GASB Statement No. 53, Accounting and Financial Reporting for Derivative Instruments, KRS provides this additional disclosure regarding its derivatives. As of June 30, 2016, KRS has the following derivative instruments outstanding:

Derivative Instruments

Item	Type	Objective	Cost	Notional Cost	Market Value	Terms	Notional Market Value
PENSION:							
A	US Equity Index Futures	Hedge against the drop in equity markets or to equitize cash	N/A	$6,105,855	$10,974,393,837	9/16/2016	N/A
B	Fixed Income Securities	Hedge against the sudden or dramatic shifts in interest rates	N/A	($8,498,411)	$10,974,393,837	12/30/2016	N/A
INSURANCE:							
C	US Equity Index Futures	Hedge against risk that interest rates will move in an adverse direction	N/A	$2,819,233	$4,317,978,535	9/16/2016	N/A
D	Fixed Income Securities	Hedge against the sudden or dramatic shifts in interest rates	N/A	($3,156,723)	$4,317,978,535	12/30/2016	N/A

Investment Expenses

In accordance with GASB Statement No. 25, Financial Reporting for Defined Pension Benefit Plans and Note Disclosures for Defined Contribution Plans, KRS has exercised professional judgment to report investment expenses. It is not cost-beneficial to separate certain investment expenses from either the related investment income or the general administrative expenses. In fiscal year 2015, KRS changed the reporting of private equity investment fees from a net basis to a gross basis. KRS made this decision to enhance transparency of the investment fees. Prior to 2015, the majority of KRS' private equity investment fees were netted against investment activity which is the standard used within the private equity sector. KRS' net investment income has always included these fees regardless of the reporting method used.

Derivatives

Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position.

All derivative instruments have various effective dates and maturity dates.

It is the policy of KRS that investment managers may invest in derivative securities, or strategies which make use of derivative investments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Examples of such derivatives include, but are not limited to, foreign currency forward contracts, collateralized mortgage obligations, treasury inflation protected securities, futures, options and swaps.

Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flows, such as interest only, principal only, inverse floater, or structured note securities are permitted only to the extent authorized in a contract or an alternative investment offering memorandum or agreement.

Investments in securities such as collateralized mortgage obligations and planned amortization class issues are allowed if, in the judgment of the investment manager, they are not expected to be subject to large or unanticipated changes in duration or cash flows. Investment managers may make use of derivative securities for defensive or hedging purposes. Any derivative security shall be sufficiently liquid that it can be expected to be sold at, or near, its most recently quoted market price.

For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combining Statement of Plan Net Position for both Pension and Insurance Funds.

RISKS

Basis Risk:

Derivative instruments A and C expose KRS to basis risk in that the value of the underlying equity index future may decrease in fair value relative to the cash market.

Interest Rate Risk:

Derivative instruments B and D expose KRS to interest rate risk in that changes in interest rates will adversely affect the fair values of KRS' financial instruments.

In June 2011, the GASB issued Statement No. 64, Derivative Instruments: Application of Hedge Accounting Termination Provisions, an Amendment of GASB Statement No. 53. The objective of this Statement is to clarify whether an effective hedging relationship continues and hedge accounting should continue to be applied. Upon the termination of a hedging derivative instrument, hedge accounting should cease and investment income should immediately recognize deferred outflows of resources or deferred inflows of resources. KRS maintains its derivative instruments as investment derivative instruments for all accounting and financial reporting purposes. Therefore, hedge accounting and the related effectiveness testing is not performed.

For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combining Statement of Plan Net Position for both Pension and Insurance funds.

Custodial Credit Risk for Deposits

Custodial credit risk for deposits is the risk that in the event of a financial institution failure, KRS' deposits may not be returned. All non-investment related bank balances are held by JP Morgan Chase. All non-investment related bank balances are held in KRS' name and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). In 2010, Congress passed the Financial Crisis Bill and permanently increased the FDIC deposit insurance coverage to $250,000. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount.

As of June 30, 2016 and 2015, deposits for KRS pension funds were $5.7 million and $7.9 million, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

As of June 30, 2016 and 2015, deposits for KRS insurance fund were $162,409 and $892,995, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments

Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. KRS does not have an explicit policy with regards to Custodial Credit Risk for investments. As of June 30, 2016 and 2015, the following currencies were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name. These funds are cash held by KRS' Global Managers and consist of various currencies.

Custodial Credit Risk

Pension Fund	2016	2015
Foreign Currency	$1,286,190,462	$1,107,035,125
Insurance Fund		
Foreign Currency	$513,059,219	$405,226,690

Pension Funds Investment Summary As of June 30

Type	2016	2015
Fixed Income Securities	$1,130,595,132	$2,680,423,440
Short-Term Investments	306,243,184	395,367,724
Equity Securities	5,416,405,517	5,201,092,389
Private Equity Limited Partnerships	1,367,455,984	1,285,572,446
Real Estate	516,267,596	619,177,193
Real Return	902,277,351	-
Derivatives	12,267,866	6,156,232
Absolute Return	1,104,194,904	1,282,165,506
Total	**$10,755,707,534**	**$11,469,954,930**

Insurance Fund Investment Summary As of June 30

Type	2016	2015
Fixed Income Securities	$370,201,984	$1,358,494,646
Short-Term Investments	123,400,027	99,151,683
Equity Securities	2,278,866,187	1,706,981,715
Private Equity Limited Partnerships	455,394,737	348,915,161
Real Estate	208,905,457	236,443,112
Real Return	347,390,860	-
Derivatives	4,659,129	2,278,887
Absolute Return	413,903,171	463,486,065
Total	**$4,202,721,552**	**$4,215,751,269**

The following table presents the KRS pension funds debt ratings as of June 30, 2016 and 2015:

Pension Funds Debt Securities at Fair Value as of June 30

Quality Rating	2016	2015
AAA	$86,006,920	$32,799,444
AA+	52,605,953	220,525,397
AA	11,482,914	19,544,218
AA-	21,615,482	29,318,050
A-1+	-	546,266
A+	19,591,386	16,624,270
A	33,957,742	30,690,688
A-	25,109,303	54,108,960
BBB+	46,520,336	65,256,861
BBB	50,102,866	69,164,919
BBB-	60,336,036	125,695,004
BB+	64,643,931	147,737,994
BB	65,913,438	124,243,472
BB-	63,249,470	101,087,356
B+	73,861,004	147,998,684
B	54,209,825	120,008,446
B-	36,620,111	91,895,479
CCC+	19,077,470	45,867,312
CCC	4,594,360	10,687,090
CCC-	1,596,538	3,151,024
CC	2,109,047	2,560,088
D	5,403,526	3,881,933
NR	130,560,323	778,261,251
Total Credit Risk Debt Securities	**$929,167,981**	**$2,241,654,206**
Government Agencies	3,454,645	2,310,824
Government Mortgage-Backed Securities (GNMA)	84,497,645	234,372,835
Government Issued Commercial Mortgage Backed	7,692,825	4,504,823
Government Bonds	105,782,036	146,629,121
Indexed Linked Bonds	-	50,951,631
Total Debt Securities	**$1,130,595,132**	**$2,680,423,440**

Insurance Fund Debt Securities at Fair Value as of June 30

Quality Rating	2016	2015
AAA	$31,289,627	$36,199,356
AA+	19,649,877	30,949,483
AA	4,081,442	5,594,558
AA-	7,649,085	9,538,154
A+	7,553,833	15,158,170
A-1+	-	202,350
A	11,668,832	30,746,413
A-	8,752,068	30,022,792
BBB+	16,229,373	32,416,543
BBB	17,770,749	27,473,957
BBB-	18,634,688	34,131,541
BB+	19,898,753	34,246,856
BB	18,098,149	27,533,223
BB-	18,819,867	26,031,520
B+	20,603,493	30,210,910
B	17,158,409	28,480,371
B-	9,418,206	15,454,963
CC	748,501	572,136
CCC	1,199,449	941,558
CCC+	5,524,662	10,077,032
CCC-	65,000	221,552
D	2,034,383	753,803
NR	45,390,901	570,268,422
Total Credit Risk Debt Securities	**$302,239,347**	**$997,225,663**
Government Agencies	1,184,725	3,248,856
Government Mortgage-Backed Securities (GNMA)	28,514,083	113,157,827
Government Issued Commercial Mortgage Backed	2,461,840	2,633,272
Government Bonds	35,801,989	121,740,145
Indexed Linked Bonds	-	120,488,883
Total Debt Securities	**$370,201,984**	**$1,358,494,646**

Pension Fund Securities At both June 30, 2016 and 2015, the weighted average quality rating of the pension fund debt securities portfolio was AA+. As of June 30, 2016 and 2015, the KRS pension portfolio had $521,839,042 and $1,577,380,129, respectively, in debt securities rated below BBB-. The government agencies in which KRS is invested are Fannie Mae and the Federal Home Loan Bank, whose credit ratings are AA+.

Insurance Fund Securities As a result of the most recently approved Asset/Liability Modeling Study, the investment staff began to diversify the insurance fixed income allocation to mirror that of the pension funds. As part of this process, the Treasury Inflation Protected Securities (TIPS) allocation (previously the only fixed income expense within the insurance portfolio) was moved to the newly created Real Return Asset Class. The government agencies in which KRS is invested are Fannie Mae and the Federal Home Loan Bank, whose credit ratings are AA+.

Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the board of KRS. The Board has established an investment committee which is specifically charged with the oversight and investment of plan assets.

Credit Risk Debt Securities

Credit Risk of Debt Securities - Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension and insurance funds debt securities portfolios are managed using the following guidelines adopted by the Board of KRS:

» Bonds, notes or other obligations issued or guaranteed by the U.S. Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.

» Fixed income investments will be similar in type to those securities found in the KRS fixed income benchmarks and the characteristics of the KRS fixed income portfolio will be similar to the KRS fixed income benchmarks.

» The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income by more than 25%.

» The duration of the TIPS portfolio shall not deviate from the KRS Fixed Income Index by more than 10%.

» The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS' assets.

» No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short-term instrument, with the exception of U.S. Government issued, guaranteed or agency obligations.

» The amount invested in SEC Rule 144a securities shall not exceed 7.5% of the market value of the aggregate market value of KRS' core fixed income investments.

Concentration of Credit Risk Debt Securities

Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

The total debt securities portfolio is managed using the following general guidelines adopted by the Board of KRS:

» Bonds, notes or other obligations issued or guaranteed by the U.S. Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.

» Debt obligations of any single U.S. Corporation shall be limited to a maximum of 5% of the total portfolio at market value.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration measures the sensitivity of the market prices of fixed income securities to changes in the yield curve. Duration is measured using two methodologies: effective and modified duration. Effective duration uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price and makes adjustments for any bond features that would retire the bonds prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve, but does not assume the securities will be called prior to maturity.

The KRS pension fund benchmarks its fixed income securities portfolio to a 50/50 blend of the Barclays U.S. Universal Index and the Barclays U.S. High Yield Index. As of June 30, 2016 and 2015, the modified duration of the KRS pension fund fixed income benchmark was 4.71 and 5.75, respectively. At the same points in time, the modified duration of the KRS pension fund fixed income securities portfolio was 5.61 and 4.26, respectively.

The KRS insurance fund benchmarks its fixed income securities portfolio to a 50/50 blend of the Barclays U.S. Universal Index and the Barclays U.S. High Yield Index. As of June 30, 2016 and 2015, the modified duration of the KRS insurance fund fixed income benchmark was 4.71 and 5.74, respectively. At the same points in time, the modified duration of the KRS insurance fund fixed income securities portfolio was 5.51 and 3.38, respectively.

KRS Pension Funds Interest Rate Risk As of June 30, 2016 and 2015:

Pension Funds Interest Rate Risk

Type	2016	Weighted Average Modified Duration	2015	Weighted Average Modified Duration
Asset Backed Securities	$85,826,862	5.72	$80,682,959	6.00
Bank Loans	130,653,480	6.89	333,921,080	5.39
Collateralized Bonds	18,041,017	3.58	23,939,151	4.33
Commercial Mortgage Backed Securities	64,195,499	3.07	51,075,672	2.77
Corporate Bonds - Industrial	434,383,557	5.92	577,639,674	6.23
Corporate Bonds - Utilities	32,233,991	6.94	135,127,865	6.94
Government Agencies	14,953,503	3.92	71,507,431	6.32
Government Bonds	10,159,793	10.58	87,724,008	6.90
Government Mortgage Backed Securities	86,491,191	3.25	387,421,860	3.63
Municipal Bonds	49,941,575	6.45	20,440,231	8.63
Supranational Bonds	14,676,180	3.13	2,125,860	1.77
Treasuries	173,967,110	5.42	524,545,015	3.26
Swaps	-	-	37,213,933	0.01
Mutual Funds	-	-	329,645,324	-
Other	15,071,374	8.86	17,413,377	0.27
Total	**$1,130,595,132**	**5.61**	**$2,680,423,440**	**4.26**

KRS Insurance Fund Interest Rate Risk As of June 30, 2016 and 2015:

Insurance Fund Interest Rate Risk				
Type	**2016**	**Weighted Average Modified Duration**	**2015**	**Weighted Average Modified Duration**
Asset Backed Securities	28,848,599	5.02	$46,009,988	5.33
Bank Loans	47,825,672	7.38	122,994,721	5.33
Collateralized Bonds	6,181,112	3.74	8,661,856	2.86
Commercial Mortgage Backed Securities	23,688,347	2.68	23,913,669	1.82
Corporate Bonds - Industrial	124,326,615	5.95	165,550,838	6.10
Corporate Bonds - Utilities	10,221,840	7.18	33,246,797	7.45
Government Agencies	4,991,646	4.16	15,280,118	6.50
Government Bonds	3,893,414	10.42	7,042,551	10.18
Government Mortgage Backed Securities	29,228,940	3.17	113,157,827	5.20
Municipal/Provincial Bonds	19,211,704	6.18	15,864,191	5.65
Supranational Bonds	5,657,243	3.08	5,272,325	3.38
Treasuries	61,156,679	5.29	276,548,407	5.32
Swaps	-	-	407,197,975	0.01
Mutual Funds	-	-	107,920,082	-
Other	4,970,173	5.89	9,833,301	2.79
Total	**$370,201,984**	**5.51**	**$1,358,494,646**	**3.38**

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the value of a non-U.S. dollar based investment or deposit within the KRS portfolio. KRS' currency risk exposure, or exchange rate risk, primarily resides with KRS' international equity holdings, but also affects other asset classes. KRS does not have a formal policy to limit foreign currency risk; however, some individual managers are given the latitude to hedge some currency exposures.

All foreign currency transactions are classified as Short-Term Investments.

All gains and losses associated with these transactions are recorded in the *Net Appreciation (Depreciation) in the Fair Value of Investments* on the combining financial statements.

The following tables present KRS' exposure to foreign currency risk as of June 30, 2016 and 2015:

Pension Funds Investments at Fair Value as of June 30, 2016 & 2015		
Foreign Equities	**2016**	**2015**
Australian Dollar	$78,593,286	$45,524,360
Brazilian Real	4,760,264	10,038,834
British Pound Sterling	280,518,178	230,990,599
Canadian Dollar	61,297,521	31,007,486
Chilean Peso	5,195,087	1,615,419
Columbian Peso	-	70,063
Danish Krone	33,033,338	30,880,488
Egyptian Pound	977,744	1,265,953
Euro	341,558,953	276,713,338
German Mark	-	209,275
Hong Kong Dollar	60,936,946	50,442,004
Hungarian Forint	-	2,043,077
Indian Rupee	6,604,336	4,715,132
Indonesian Rupiah	20,838,490	20,221,999
Israeli Shekel	7,193,594	5,856,040
Japanese Yen	202,208,317	165,124,397
Malaysian Ringgit	6,341,219	-
Mexican Peso	23,129,878	13,703,693
New Zealand Dollar	46,924,432	8,083,459
Norwegian Krone	30,363,379	22,454,960
Philippine Peso	9,651,420	11,219,442
Polish Zloty	826	12,073
Singapore Dollar	32,414,224	21,281,454
South African Rand	4,163,057	3,784,217
South Korean Won	34,652,485	20,624,933
Swedish Krona	36,933,026	30,324,551
Swiss Franc	48,606,745	75,604,802
Taiwan Dollar	12,983,328	5,988,056
Thai Bhat	8,390,986	14,259,536
Turkish Lira	9,982,390	3,517,813
Total Securities Subject to Foreign Currency Risk	**$1,408,253,449**	**$1,107,577,453**
US Dollars	9,347,454,085	10,362,377,477
Total Investment Securities	**$10,755,707,534**	**$11,469,954,930**

Insurance Fund Investments at Fair Value as of June 30, 2016 & 2015

Foreign Equities	**2016**	**2015**
Australian Dollar	$29,491,913	$16,529,875
Brazilian Real	1,739,994	3,478,125
British Pound Sterling	115,192,745	85,519,211
Canadian Dollar	25,186,673	11,027,509
Chilean Peso	2,512,823	562,254
Danish Krone	12,353,869	11,219,733
Egyptian Pound	338,920	438,824
Euro	138,440,564	101,969,846
Hong Kong Dollar	23,281,445	18,617,003
Hungarian Forint	8	690,197
Indian Rupee	2,763,003	1,767,719
Indonesian Rupiah	8,253,105	7,140,659
Israeli Shekel	3,139,611	2,247,542
Japanese Yen	79,845,758	59,941,785
Malaysian Ringgit	2,249,962	-
Mexican Peso	8,929,122	4,647,950
New Taiwan Dollar	5,732,370	2,323,811
New Zealand Dollar	17,584,209	3,039,386
Norwegian Krone	11,478,621	8,182,370
Philippine Peso	3,689,967	4,068,766
Polish Zloty	435	5,570
Singapore Dollar	13,069,717	7,674,464
South African Rand	-	1,380,066
South Korean Won	15,212,664	7,532,005
Swedish Krona	14,230,187	11,203,658
Swiss Franc	18,618,020	27,719,374
Thai Bhat	3,559,025	5,246,060
Turkish Lira	4,427,570	1,216,790
Total Securities Subject to Foreign Currency Risk	**$561,322,300**	**$405,390,552**
US Dollars	3,641,399,252	3,810,360,717
Total Investment Securities	**$4,202,721,552**	**$4,215, 751,269**

GASB 72

In accordance with GASB Statement No. 72, Fair Value Measurement and Application, KRS provides this additional disclosure regarding the fair value of its pension and insurance investments. KRS categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles.

KRS had the following recurring Pension Funds' Fair Value measurements as of June 30, 2016:

Investments and Derivatives Measured at Fair Value ($ in millions)	Value as of June 30, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and Cash Equivalents	$300,578,203	$758,936	$191,624,753	$108,194,514
Convertible Securities	24,621,656	14,426,398	10,195,258	-
Equity	5,583,565,055	4,321,524,205	-	1,262,040,850
Fixed Income Securities	1,300,762,010	242,628,527	974,953,469	83,180,014
Futures Contracts	(17,268)	(17,268)	-	-
Other	317,862,013	317,862,013	-	-
Preferred Securities	77,499,123	13,896,325	63,602,798	-
Alternative Investment	402,247,618	-	-	402,247,618
Natural Resources	12,827,886	-	-	12,827,886
Private Equity	2,219,493,642	-	-	2,219,493,642
Real Estate	516,267,596	-	-	516,267,596
Totals	**$10,755,707,534**	**$4,911,079,136**	**$1,240,376,278**	**$4,604,252,120**
KRS had the following recurring Insurance Fund's Fair Value measurements as of June 30, 2016:				
Cash and Cash Equivalents	$124,634,718	$274,615	$78,579,998	$45,780,105
Convertible Securities	9,843,774	5,859,651	3,984,123	-
Equity	1,863,358,777	1,805,230,510	-	58,128,267
Fixed Income Securities	928,819,057	107,506,185	310,552,640	510,760,232
Futures Contracts	(14,704)	(14,704)	-	-
Other	104,062,433	104,062,433	-	-
Preferred Securities	30,857,897	5,611,497	25,246,400	-
Alternative Investment	132,377,484	-	-	132,377,484
Natural Resources	5,699,154	-	-	5,699,154
Private Equity	794,177,505	-	-	794,177,505
Real Estate	208,905,457	-	-	208,905,457
Totals	**4,202,721,552**	**2,028,530,187**	**418,363,161**	**1,755,828,204**

KRS defined the Fair Value Hierarchy and Levels as follows:

Level 1 – Quoted prices (unadjusted) in an active market for identical assets or liabilities that KRS has the ability to access at the measurement date (e.g., prices derived from NYSE, NASDAQ, Chicago Board of Trade, and Pink Sheets).

Level 2 – Inputs other than quoted market prices included in Level 1 that are directly or indirectly observable for the asset or liability (e.g., matrix pricing, market corroborated pricing and inputs such as yield curves and indices).

Level 3 – Unobservable inputs for the asset or liability used to measure to fair value that rely on KRS' own assumptions about the market participant's assumptions that may be used in pricing the asset or liability (e.g., investment manager pricing for private placements, private equities, hedge funds, etc.).

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using quoted prices (unadjusted) in an active market for identical assets or liabilities that KRS has the ability to access at the measurement date. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Commercial and residential mortgage backed securities, private equity, and real estate classified in Level 3 are valued on KRS' own assumptions about the market participant's assumptions that may be used in pricing the asset or liability.

Note E.
CM Growth Capital Partners, LLP

On August 11, 2014, and May 1, 2015, KRS issued two promissory notes to CM Growth Capital Partners, LLP, (CM) in the amounts of $1,300,000 and $105,208, respectively. These transactions were approved by the Investment Committee. These notes were issued to provide working capital to CM (formerly Camelot). The interest rate assigned to the notes was 17.5% compounded quarterly. The maturity date of the two notes was January 24, 2016; on August 17, 2015, the two notes were paid in full along with accrued interest. The principal amount at June 30, 2015, was $1,405,208 and the accrued interest due was $282,142, which totaled $1,687,350. The note receivable and accrued interest has been allocated among the plans.

Note F. Securities Lending Transactions

Kentucky Revised Statutes Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with an initial fair value of 102% or 105% of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. The types of securities lent include U.S. Treasuries, U.S. Agencies, U.S. Corporate Bonds, U.S. Equities, Global Fixed Income Securities, and Global Equities Securities.

The Statement of Investment Policy does not address any restrictions on the amount of loans that can be made. At June 30, 2015, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction. Deutsche Bank invests cash collateral as permitted by state statute and Board policy. The agent of the Funds cannot pledge or sell collateral securities received unless the borrower defaults. KRS maintains a conservative approach to investing the cash collateral with Deutsche Bank, emphasizing capital preservation, liquidity, and credit quality.

As of June 30, 2016, the fair value of the pension funds' and insurance fund's securities lending capital invested/obligations totaled $653.7 million and $198.3 million, respectively.

Note G. Risk of Loss

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board of Claims.

Claims against the Board of KRS, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a self-insured retention of $250,000 for each claim. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy. The aggregate limit for all loss is $5,000,000, and the HIPPA and PPACA fines and penalties sub-limit is $1,500,000.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program

COVERED PAYROLL-
The employee payroll that is subject to Pension Contributions Withholding.

are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to 66.67% of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll. Settlements did not exceed insurance coverage in any of the past three fiscal years. Thus, no secondary insurance had to be utilized. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

Note H. Contingencies

In the normal course of business, KRS is involved in litigation concerning the right of participants, or their beneficiaries, to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

Note I. Income Tax Status

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, generally, not subject to tax. KRS is subject to income tax on any unrelated business income; however, KRS had no unrelated business income in fiscal years 2016 and 2015.

Note J. Defined Benefit Pension Plan

All eligible employees of KRS participate in KERS (Non-Hazardous), a cost-sharing, multiple-employer defined pension plan that covers all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Tier 1 and Tier 3 Plan members contributed 5% of creditable compensation for the periods ended June 30, 2016, 2015, and 2014. Tier 2 Plan members contributed 6% of creditable compensation for the periods ended June 30, 2016, 2015, and 2014.

The chart below includes the covered payroll and contribution amounts for KRS for the three periods ended June 30 included in this discussion.

Payroll & Contributions

	2016	2015	2014
Covered Payroll	$ 14,579,042	$14,137,788	$ 13,916,055
Required Employer Contributions	5,652,295	$5,481,221	$3,722,937
Employer Percentage Contributed	100%	100%	100%

Note K. Equipment

Equipment Expenses *(as of June 30)*		
Expense	**2016**	**2015**
Equipment At-Cost	2,819,040	2,577,051
Less Accumulated Depreciation	(2,441,324))	(2,391,644)
Total	**377,716**	**$185,407**

Depreciation expense for the fiscal years ended June 30, 2016 and 2015 was $49,680 and $43,589, respectively.

Note L. Intangible Assets

The provisions of GASB Statement No. 51, Accounting and Financial Reporting for Intangible Assets, require that intangible assets be recognized in the Combining Statement of Plan Net Position only if they are considered identifiable. In accordance with GASB No. 51, KRS has capitalized software costs as indicated below for the Strategic Technology Advancements for the Retirement of Tomorrow (START) project.

Software Expenses *(as of June 30)*		
Expense	**2016**	**2015**
Software At-Cost	17,300,826	17,300,826
Less Accumulated Amortization	(9,448,411)	(7,561,348)
Total	**$ 7,852,415**	**$9,739,478**

Amortization expense for the fiscal years ended June 30, 2016 and 2015 was $1.9 million and $1.6 million, respectively.

INTANGIBLE ASSET-
An asset that is not physical in nature. Corporate intellectual property, items such as patents, trademarks, copyrights, business methodologies, goodwill and brand recognition, are all common intangible assets in today's marketplace.

ACTUARIAL VALUATION -
A type of appraisal which requires making economic and demographic assumptions in order to estimate future liabilities. The assumptions are typically based on a mix of statistical studies and experienced judgment.

Note M. Actuarial Valuation

The following details significant actuarial information and assumptions utilized in determining the unfunded (overfunded) actuarial accrued liabilities for both Pension and Insurance Funds:

Unfunded (Overfunded) Actuarial Accrued Liability

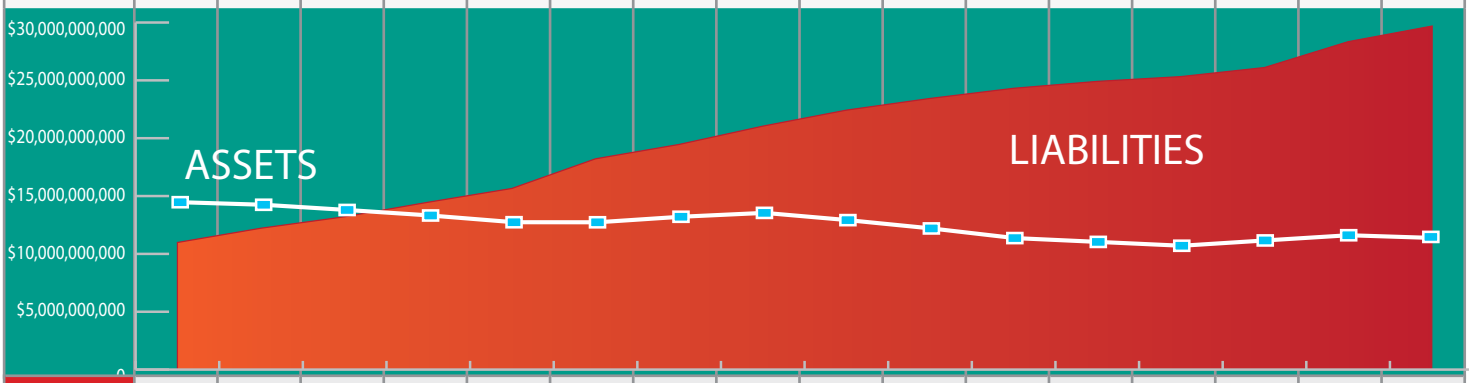
KRS Pension and Insurance Funds had the following Unfunded (Overfunded) Actuarial Accrued Liabilities as of June 30:

Actuarial Accrued Liabilities as of June 30	Pension Funds - *Unfunded*		Insurance Fund - *Unfunded (Overfunded)*	
System	2016	2015	2016	2015
KERS Non-Hazardous	$11,112,411,929	$10,008,682,909	$1,713,407,904	$1,718,686,990
KERS Hazardous	377,218,942	338,745,630	(95,414,943)	(76,609,957)
CERS Non-Hazardous	4,541,084,447	4,265,476,908	908,310,062	910,370,977
CERS Hazardous	1,565,337,050	1,516,524,591	423,033,984	416,308,115
SPRS	540,592,758	485,768,500	84,493,568	87,063,770
Total Funds	**$18,136,645,126**	**$16,615,198,538**	**$3,033,830,575**	**$3,055,819,895**

Insurance Fund Schedule of Funding Progress

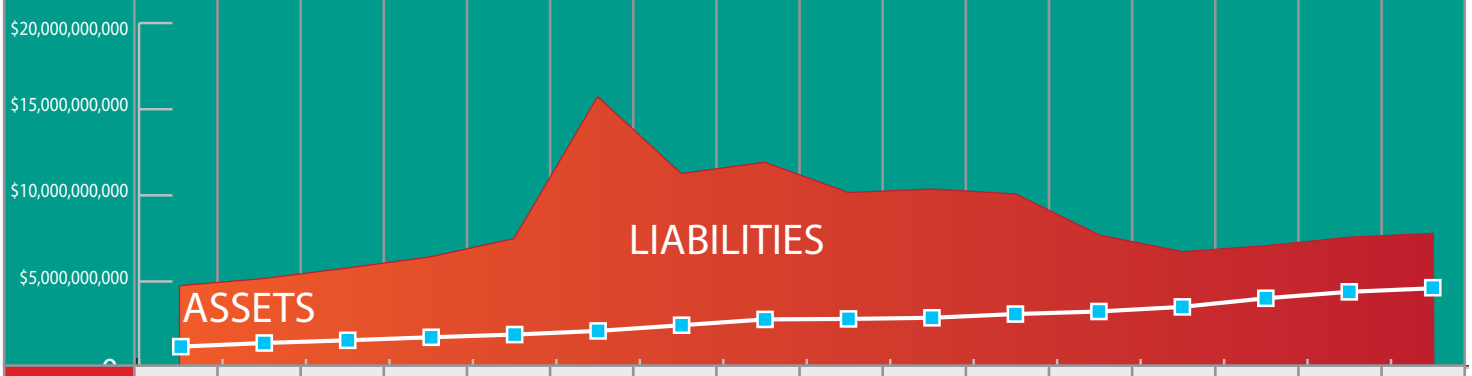
System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non-Hazardous	$743,270,060	$2,456,677,964	30.3%	1,529,248,873	112.0%
KERS Hazardous	473,160,173	377,745,230	125.3%	147,563,457	(64.7%)
CERS Non-Hazardous	2,079,811,055	2,988,121,117	69.6%	2,352,761,794	38.6%
CERS Hazardous	1,135,784,220	1,558,818,204	72.9%	492,850,521	85.8%
SPRS	172,703,691	257,197,259	67.1%	45,551,469	185.5%
Total Insurance Fund	**$4,604,729,199**	**$7,638,559,774**	**60.3%**	**$4,567,976,114**	**66.4%**

KRS 15 Year History of Unfunded Liabilities: PENSIONS *(as of June 30 of corresponding year)*



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
LIABILITIES	$10,985,583,569	$12,221,600,696	$13,209,450,364	$14,467,963,240	$15,657,436,697	$18,219,676,485	$19,461,069,197	$21,042,169,855	$22,426,648,293	$23,436,563,533	$24,314,940,954	$24,910,996,000	$25,325,245,114	$26,109,427,058	$28,342,895,650	$29,717,477,864
ASSETS	$14,573,081,436	$14,352,722,913	$13,903,893,033	$13,428,267,273	$12,849,047,740	$12,844,055,865	$13,319,990,180	$13,654,186,369	$13,029,359,172	$12,313,843,565	$11,482,471,799	$11,152,949,505	$10,822,365,881	$11,279,369,431	$11,727,697,112	$11,580,834,738

KRS 15 Year History of Unfunded Liabilities: INSURANCE *(as of June 30 of corresponding year)*



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
LIABILITIES	$4,657,611,459	$5,068,710,355	$5,673,503,782	$6,321,432,402	$7,373,617,139	$15,555,004,507	$11,119,397,346	$11,771,240,390	$10,026,423,163	$10,227,437,455	$9,947,252,123	$7,579,440,690	$6,617,825,469	$6,968,496,851	$7,455,290,869	$7,638,559,774
ASSETS	$1,218,500,801	$1,429,173,613	$1,585,342,734	$1,762,345,982	$1,918,345,457	$2,130,275,984	$2,461,136,775	$2,797,730,206	$2,827,096,370	$2,892,752,370	$3,109,510,413	$3,257,921,224	$3,525,698,378	$4,025,159,975	$4,399,470,974	$4,604,729,199

The objective of GASB 67 was to improve financial reporting by state and local governmental pension plans. The statement required defined benefit pension plans to present two financial statements, a statement of fiduciary net position and a statement of changes in fiduciary net position. In addition, the statement required that notes to the financial statements include descriptive information, such as the types of benefits provided, the classes of plan members covered, and the composition of the pension plans board, among other detailed requirements.

The provisions of GASB Statement No. 67, Financial Reporting for Pension Plans, were issued in June 2012. This Statement replaces the requirements of Statements No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans, and No. 50, Pension Disclosures, as they relate to pension plans that are administered through trusts or equivalent arrangements that meet that criteria. The provisions of that Statement are presented in the table below:

The total pension liability was determined by an actuarial valuation as of June 30, 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

- *Inflation 3.25%*
- *Salary increases 4.0%, average, including inflation;*
- *Investment rate of return for KERS Non-Hazardous and SPRS was 6.75%; KERS Hazardous, CERS Non-Hazardous, CERS Hazardous the rate remained at 7.5%, net of pension plan investment expense, including inflation.*

The assumed rate of return decreases for KERS and SPRS were adopted by Board of Trustees on December 3, 2015. The actuarial valuation date upon which the total pension liability was based is June 30, 2015. An expected total pension liability is determined as of June 30, 2016, using standard roll forward techniques. The roll forward calculation adds the annual cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year then applies the expected investment rate of return for the year. The procedure was used to determine the total pension liability as of June 30, 2016.

The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back four years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of an actuarial experience study for the period July 1, 2008 – June 30, 2013. The discount rate used to measure the total pension liability for KERS Non-Hazardous and SPRS was 6.75%. KERS Hazardous, CERS Non-Hazardous, CERS Hazardous the rate remained 7.5%. The long-term assumed rate of returned and discount rate were based upon an analysis adopted by the Board of Trustees on December 3, 2015.

The projection of cash flows used to determine the discount rate assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 27 year amortization period of the unfunded actuarial accrued liability.

The long-term expected return on plan assets is reviewed as part of the regular experience studies prepared every five years for the Systems. The most recent

analysis, performed for the period covering fiscal years 2008 through 2013, is outlined in a report dated December 3, 2015. Several factors are considered in evaluating the long-term rate of return assumption including long-term historical data, estimates inherent in current market data, and a log–normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed by the investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The discount rate determination does not use a municipal bond rate. Projected future benefit payments for all current plan members were projected through 2117.

Table Note A: Net Pension Liability

	KERS		CERS		SPRS
	Non-Hazardous	Hazardous	Non-Hazardous	Hazardous	
Total Pension Liability	$13,379,781,165	$919,517,466	$11,065,012,656	$3,726,115,488	$795,421,298
Fiduciary Net Position	1,980,292,118	527,879,431	6,141,394,419	2,010,174,047	218,012,479
Net Pension Liability	11,399,489,047	391,638,035	4,923,618,237	1,715,941,441	577,408,819
Ratio of Fiduciary Net Position to Total Pension Liability	14.87%	57.41%	55.50%	53.95%	27.41%
Inflation	3.25%	3.25%	3.25%	3.25%	3.25%
Salary Increases (average including inflation)	4.0%	4.0%	4.0%	4.0%	4.0%
Investment Rate of Return (Net of Pension Plan Investment Expense including Inflation)	6.75%	7.5%	7.5%	7.5%	6.75%

The Total Pension Liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement.

The Net Pension Liability is equal to the Total Pension Liability minus the Fiduciary Net Position. That result as of June 30, 2015, for the plan is presented in the table above ($ thousands). The Total Pension Liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement.

Insurance Fund

The actuarial valuation for the Insurance Fund involves estimates of the value of reported amounts and assumptions about the probability of future events. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations are based on the benefits provided under the terms of the insurance plan in effect at the time of each valuation and on the pattern of sharing costs between the employer and plan members as of the valuation date. Actuarial calculations of the insurance plan reflect a long-term perspective.

The target asset allocation and best estimates of arithmetic nominal rates of return for each major asset class are summarized:

Table Note B: Target Asset Allocation

	KERS Non-Hazardous		KERS Hazardous	
Asset Class	**Target Allocation**	**Cash Equivalent Long Term Expected Real Rate of Return**	**Target Allocation**	**Cash Equivalent Long Term Expected Real Rate of Return**
Combined Equity	50%	5.30%	44%	5.4%
Intermediate Duration Fixed Income	11%	1.00%	-	1.5%
Combined Fixed Income	-	-	19%	-
Custom KRS Fixed Income	11%	3.33%	-	3.5%
Real Return (Diversified Inflation Strategies)	-	-	10%	-
Core Real Estate	5%	4.25%	5%	4.5%
Diversified Hedge Funds	10%	4.00%	-	4.25%
Absolute Return (Diversified Hedge Funds)	-	-	10%	-
Private Equity	2%	8.00%	10%	8.5%
Diversified Inflation Strategy	8%	3.15%	-	-
Cash Equivalent	3%	-0.25%	2%	-0.25%
Total	**100%**		**100%**	

	CERS Non-Hazardous		CERS Hazardous	
Asset Class	**Target Allocation**	**Cash Equivalent Long Term Expected Real Rate of Return**	**Target Allocation**	**Cash Equivalent Long Term Expected Real Rate of Return**
Combined Equity	44%	5.4%	44%	5.4%
Combined Fixed Income	19%	1.5%	19%	1.5%
Real Return (Diversified Inflation Strategies)	10%	3.5%	10%	3.5%
Real Estate	5%	4.5%	5%	4.5%
Absolute Return (Diversified Hedge Funds)	10%	4.25%	10%	4.25%
Private Equity	10%	8.5%	10%	8.5%
Cash Equivalent	2%	-0.25%	2%	-0.25%
Total	**100%**		**100%**	

	SPRS	
Asset Class	**Target Allocation**	**Cash Equivalent Long Term Expected Real Rate of Return**
Global Equity	54%	5.30%
Intermediate Duration Fixed Income	9%	1.00%
Custom KRS Fixed Income	9%	3.33%
Core Real Estate	5%	4.25%
Diversified Hedge Funds	10%	4.00%
Private Equity	2%	8.00%
Diversified Inflation Strategy	8%	3.15%
Cash Equivalent	3%	-0.25%
Total	**100%**	

The projection of cash flows used to determine the discount rate assumed that the employer would contribute the actuarially determined contribution rate of projected compensation. The remaining amortization period of the unfunded actuarial accrued liability is 27 years. Once the unfunded actuarial accrued liability is fully amortized, the employer will only contribute the normal cost rate and the administrative expense rate on the closed payroll for existing members.

The actuarial valuation date upon which the total pension liability was based is June 30, 2015. An expected total pension liability is determined as of June 30, 2016, using standard roll forward techniques. The roll forward calculation adds the annual cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year then applies the expected investment rate of return for the year. The procedure was used to determine the total pension liability as of June 30, 2016.

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of an actuarial experience study for the period July 1, 2008 – June 30, 2013. The long term assumed rate of return is based upon an analysis adopted by the Board of Trustees on December 3, 2015. The discount rate used to measure the total pension liability for KERS Non-Hazardous and SPRS was 6.75%. However, for KERS Hazardous, CERS Non-Hazardous, and Hazardous, the discount rate remained at 7.50%.

Net Pension Liability (NPL) - Decrease/Increase

	1% Decrease	Current Discount Rate	1% Increase
KERS Non-Hazardous	(5.75%)	(6.75%)	(7.75%)
NPL	**$12,842,328,478**	**$11,399,489,047**	**$10,186,892,118**
KERS Hazardous	(6.5%)	(7.5%)	(8.5%)
NPL	**492,060,681**	**391,638,035**	**307,344,933**
CERS Non-Hazardous	(6.5%)	(7.5%)	(8.5%)
NPL	**6,135,625,606**	**4,923,618,237**	**3,884,686,628**
CERS Hazardous	(6.5%)	(7.5%)	(8.5%)
NPL	**2,155,722,903**	**1,715,941,441**	**1,353,197,862**
SPRS	(5.75%)	(6.75%)	(7.75%)
NPL	**665,253,333**	**577,408,819**	**503,953,106**

Insurance Fund Valuation [1]

(Valuation Date June 30, 2016)

	Non-Haz	Haz
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	27 Years	27 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	7.5-5.0%	7.5-5.0%
Medical Trend Assumption (Post-Medicare)	5.5-5.0%	5.5-5.0%
Year of Ultimate Trend	2021	2021
Dollar Contribution Trend	1.50%	1.50%
Actuarial Assumptions		
Investment Rate of Return	7.50%	7.50%
↘ Includes Price Inflation at	3.25%	3.25%
Salary Increase	4.0%, average, including Inflation	

[1]The actuarial valuation for the Insurance Fund involves estimates of the value of reported amounts and assumptions about the probability of future events. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations are based on the benefits provided under the terms of the insurance plan in effect at the time of each valuation and on the pattern of sharing costs between the employer and plan members as of the valuation date. Actuarial calculations of the insurance plan reflect a long-term perspective.

Note N. Pension Legislation

House Bill 62

During its 2015 regular session, the Kentucky General Assembly enacted House Bill 62, which created Kentucky Revised Statute 61.522. Kentucky Revised Statute 61.522 established a path for participating agencies to voluntarily cease their participation in KERS or CERS by paying their portion of the unfunded liability. Additionally, it authorizes KRS to involuntarily remove certain participating agencies from KERS or CERS. In December 2015 and again in June 2016, KRS published 105 KAR 1:145, an administrative regulation that defined the pension withdrawal process.

Pursuant to Kentucky Revised Statute 61.522 and 105 KAR 1:145, two employers that participate in KERS have sought to end their participation. As of July 1, 2016, the Kentucky Employers Mutual Insurance company (KEMI) and Commonwealth Credit Union (CCU) ceased reporting approximately 500 full-time employees. Once KRS' 2016 annual valuation is complete, KRS' actuary will calculate KEMI's and CCU's portion of KRS' actuarial unfunded liability. KEMI and CCU will then have to determine if they wish to continue to participate in KRS or withdraw from KRS by paying their portion of the KERS unfunded liability. Final determination regarding the status of KEMI's and CCU's participation in KERS is expected to occur during the 3rd quarter of fiscal 2017. Consequently, no provision has been made in the combining financial statements.

Note O. Reimbursement Of Retired – Re-employed Health Insurance

As a result of the passage of House Bill 1 on September 1, 2008, if a retiree is re-employed in a regular full time position and has chosen health insurance coverage through KRS, the employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate. As of June 30, 2016 and 2015, the reimbursement totaled $14.7 million and $12.6 million, respectively.

Note P. Reciprocity Agreement

KRS has a reciprocity agreement with Kentucky Teachers' Retirement System (KTRS) for the payment of insurance benefits for those members who have creditable service in both systems.

Note Q. Related Party

Perimeter Park West, Inc. (PPW) is a legally separate, tax-exempt Kentucky corporation established in 1998 to own the land and buildings on which KRS is located. PPW leases the buildings to KRS (the lease is renewed periodically) and provides maintenance for the buildings and land. PPW is considered a related party to KRS and has its own separate financial audit. The following presents the amounts recorded between KRS and PPW for the fiscal year ended June 30, 2016:

Lease payments to PPW from KRS:	$698,220
Dividends to KRS from PPW:	-

Note R. City Of Fort Wright

In June 2014, the City of Fort Wright, a participating employer in CERS, filed a lawsuit against KRS alleging that the Board invested CERS funds in investments that were prohibited by both statutory and common law. In addition, the City of Fort Wright alleged that the Board paid substantial asset management fees, which the suit alleges were improper. Although the exact nature and source of the relief sought is unclear, it appears that the City of Fort Wright is seeking a declaration of rights, an injunction barring the placement of CERS assets in certain types of investments, an accounting of CERS assets, restitution of management fees to CERS, and attorney fees. As noted above, the exact nature and scope of the relief sought in this suit is unclear; therefore, no provision has been made in the combining financial statements. In September 2016 the Kentucky Court of Appeals issued an Opinion regarding the appeal of the Trial Court's ruling upon dispositive motions. A Motion for Discretionary Review of the Court of Appeals ruling was filed at the Kentucky Supreme Court on October 21, 2016 .

On September 2, 2015, a CERS member filed a complaint that is substantially similar in terms of allegation and ambiguous requests for relief to that of the City of Fort Wright. The exact nature and scope of the relief sought is unclear; therefore, no provision has been made in the combining financial statements. The member's complaint is currently being held in abeyance pending the outcome of the City of Fort Wright's appeal.

Note S. City of Hillview

The City of Hillview, a participating employer in CERS, filed a petition for Chapter 9 Bankruptcy protection on August 20, 2015, following a multi-million dollar civil judgment. Although KRS is listed as a debtor in this action, the impact, if any, on CERS is unclear. Consequently, no provision has been made in the combining financial statements as a result of this litigation. An Order Dismissing the Chapter 9 case was issued on May 9, 2016, without impact on CERS.

RE-EMPLOYED-
A retired member who was reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is re-employed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of re-employment. These contributions are used to reduce the unfunded actuarial liability.

All regular full-time employees who began participation with KRS on, or after, January 1, 2014 contribute to the hybrid cash balance plan. Participation in the plan is mandatory unless the employee is employed in a non-participating position.

Note T. Reduction of Receivable

Employers reported June 2015 wages earned in the following month of July 2015 (next fiscal year) and the new Annual Required Contribution (ARC) rate was applied. The Commonwealth's approved budget guidelines paid contributions at the fiscal year 2015 ARC rate in effect when the wages were earned. It is unlikely that KRS will receive payments at the new ARC rate for that period; therefore, contribution receivables have been reduced as of June 30, 2015, as noted in the chart.

For fiscal 2016, no reduction was necessary since the ARC remained the same as fiscal 2015.

	2016	2015
KERS Hazardous	-	$5,981,880
SPRS	-	91,618
Total	**-**	**$6,073,498**

Note U. Bank of America Settlement

In August 2014, Bank of America reached a $16.65 billion settlement with U.S. regulators to settle charges that it misled investors into buying troubled mortgage-backed securities. The settlement called for the bank to pay a $9.65 billion cash penalty and provide $7 billion of consumer relief to homeowners and communities. Bank of America admitted having sold billions of dollars of risky mortgage-backed securities while concealing key facts about the quality of the underlying loans. It also admitted to having made misrepresentations to Fannie Mae and Freddie Mac about the quality of loans sold to those government-controlled mortgage companies. KRS' share of this settlement amounted to $23,000,000, and was received on October 24, 2014. The amount was allocated among the plans in the fiscal 2015 combining financial statements as detailed in the chart.

KERS Non-Hazardous	$8,442,347
KERS Hazardous	767,141
CERS Non-Hazardous	10,280,391
CERS Hazardous	2,865,365
SPRS	644,756
Total	**$23,000,000**

Note V. Governance Reorganization

The Governor of Kentucky issued a series of Executive Orders (EO) that impacted the governance of the Kentucky Retirement Systems. EO 2016-211, issued on April 20, 2016, removed one of the trustees from the Board of Trustees before his term had expired. The Governor then issued EO 2016-214, on April 21, 2016, appointing another person as trustee in place of the trustee removed under EO 2016-211. After that person declined the appointment, the Governor issued EO 2016-273 on May 18, 2016, appointing another person as trustee in place of the trustee removed under EO 2016-211. The Attorney General of Kentucky issued an opinion on May 17, 2016, that the Governor did not have the authority to remove a board member prior to the expiration of his term.

On June 17, 2016, the Governor issued EO 2016-340, in which the Board of Trustees established under KRS 61.645 was abolished and a new Board of Directors was created. The EO changed other provisions of KRS 61.645 including adding four (4) additional board members, giving the Governor the authority to appoint the Chair and Vice-Chair of the Board of Directors, requiring that the Governor approve the Executive Director appointed by the Board of Directors, and transferring KRS employees from the personnel system established in KRS 61.645 and 105 KAR 1:370 to the Commonwealth's personnel system under KRS Chapter 18A. The Governor cited his authority to reorganize executive branch agencies under KRS 12.028. The Board of Directors established in EO 2016-340 is currently managing the assets and administrative duties of KRS.

The Board of Directors, as of December 1, 2016, is comprised of the following: John Farris, Chair, Governor Appointee; John E. Chilton, Vice Chair, Governor Appointee; David J. Adams, Governor Appointee; William S. Cook, Governor Appointee; Edwin Davis, elected by CERS; Thomas Elliott, Governor Appointee; Governor Appointee; J.T. Fulkerson, Joseph Hardesty, Governor Appointee; David L. Harris, Governor Appointee; Vince Lang, elected by KERS; Mark Lattis, Governor Appointee; Keith Peercy, elected by SPRS; Mary Helen Peter, elected by KERS; Neil P. Ramsey, Governor Appointee; David Rich, elected by CERS; Randy K. Stevens, Governor Appointee; Thomas B. Stephens, Personnel Secretary; and William Summers, elected by CERS.

Two KRS Board members and the Attorney General of the Commonwealth have challenged the Governor's authority to remove a Trustee prior to the end of that Trustee's term of office and his authority to suspend statutory provisions in order to reorganize KRS. (EOs 2016-211, 214, 273, and 340). KRS expects an opinion to be issued on the merits of the suits prior to January 1, 2017. As it is unclear as to any financial impact these issues may cause, no provision has been made in the combining financial statements as a result of the Executive Orders or the litigation.

Note W. Subsequent Events

Management has evaluated the period June 30, 2016, to December 1, 2016, (the date the combining financial statements were available to be issued) for items requiring recognition or disclosure in the combining financial statements. In September 2016, the Commonwealth contracted with the Public Financial Management Group, LLC to perform a comprehensive Pension Performance and Best Practices Analysis of all the state's retirement systems, including KRS. Their report will include their analysis of operations, investments, plan structure, etc. and is expected no sooner than December 31, 2016. In addition, KRS is in the process of reviewing its asset allocation with special focus on the 10% allocation to Absolute Return. A number of external money managers in the Absolute Return allocation will be eliminated over the course of the following 24 months.

On Nov 17, 2016, Western Kentucky University (WKU) a participating employer, filed a petition for declaration of rights in the Franklin Circuit Court in Frankfort, KY. The petition involved a dispute as to whether WKU can terminate a group of its employees which participated in KERS and reutilize those same employees through a privatization process excusing WKU from its obligations to pay contributions to the KERS Fund. The exact nature and scope of the relief sought is unclear; therefore, no provision has been made in the Combined Financial Statements.

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Schedules of Funding Progress for KERS Insurance Fund

Year Ended	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll** (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
June 30, 2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
June 30, 2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
June 30, 2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
June 30, 2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
June 30, 2012	446,080,511	3,125,330,157	2,679,249,646	14.3	1,644,896,681	162.9
June 30, 2013	497,584,327	2,128,754,134	1,631,169,807	23.4	1,644,408,698	99.2
June 30, 2014	621,236,646	2,226,759,925	1,605,523,279	27.9	1,577,496,447	101.8
June 30, 2015	695,018,262	2,413,705,252	1,718,686,990	28.8	1,544,234,409	111.3
June 30, 2016	743,270,060	2,456,677,964	1,713,407,904	30.3	1,529,248,873	112.0
Hazardous						
June 30, 2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
June 30, 2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
June 30, 2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
June 30, 2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
June 30, 2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
June 30, 2012	345,573,948	384,592,406	39,018,458	89.9	131,976,754	29.6
June 30, 2013	370,774,403	385,517,675	14,743,272	96.2	132,015,368	11.2
June 30, 2014	419,395,867	396,986,820	(22,409,047)	105.6	129,076,038	(17.4)
June 30, 2015	451,514,191	374,904,234	(76,609,957)	120.4	128,680,130	(59.5)
June 30, 2016	473,160,173	377,745,230	(95,414,943)	125.3	147,563,457	(64.7)
Total						
June 30, 2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
June 30, 2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
June 30, 2009	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0
June 30, 2010	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1
June 30, 2011	781,582,057	4,787,148,400	4,005,566,343	16.3	1,864,686,540	214.8
June 30, 2012	791,654,459	3,509,922,563	2,718,268,104	22.6	1,776,873,435	153.0
June 30, 2013	868,358,730	2,514,271,809	1,645,913,079	34.5	1,776,424,066	92.7
June 30, 2014	1,040,632,513	2,623,746,745	1,583,114,232	39.7	1,706,572,485	92.8
June 30, 2015	1,146,532,453	2,788,609,486	1,642,077,033	41.1	1,672,914,539	98.2
June 30, 2016	1,216,430,233	2,834,423,194	1,617,992,961	42.9	1,676,812,330	96.5

See Independent Auditors' Report. ** *Covered payroll was actuarially computed*

Schedules of Funding Progress for CERS Insurance Fund

Year Ended	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll** (c)	UAAL as % of Covered Payroll [(b-a)/c]
Non-Hazardous						
June 30, 2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
June 30, 2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
June 30, 2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
June 30, 2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
June 30, 2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
June 30, 2012	1,512,853,851	2,370,771,288	857,917,437	63.8	2,236,546,345	38.4
June 30, 2013	1,628,244,197	2,443,894,100	815,649,903	66.6	2,236,277,489	36.5
June 30, 2014	1,831,199,465	2,616,914,600	785,715,135	70.0	2,272,270,287	34.6
June 30, 2015	1,997,456,463	2,907,827,440	910,370,977	68.7	2,296,715,957	39.6
June 30, 2016	2,079,811,055	2,988,121,117	908,310,062	69.6	2,352,761,794	38.6
Hazardous						
June 30, 2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
June 30, 2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
June 30, 2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
June 30, 2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
June 30, 2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
June 30, 2012	829,040,842	1,364,843,057	535,802,215	60.7	464,228,923	115.4
June 30, 2013	892,774,391	1,437,332,817	544,558,426	62.1	461,672,567	118.0
June 30, 2014	997,733,237	1,493,864,379	496,131,142	66.8	479,164,016	103.5
June 30, 2015	1,087,707,118	1,504,015,233	416,308,115	72.3	483,640,601	86.1
June 30, 2016	1,135,784,220	1,558,818,204	423,033,984	72.9	492,850,521	85.8
Total						
June 30, 2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
June 30, 2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
June 30, 2009	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4
June 30, 2010	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3
June 30, 2011	2,204,241,067	4,721,675,960	2,517,434,893	46.7	2,743,559,808	91.8
June 30, 2012	2,341,894,693	3,735,614,345	1,393,719,652	62.7	2,700,775,268	51.6
June 30, 2013	2,521,018,588	3,881,226,917	1,360,208,329	65.0	2,697,950,056	50.4
June 30, 2014	2,828,932,702	4,110,778,979	1,281,846,277	68.8	2,751,434,303	46.6
June 30, 2015	3,085,163,581	4,411,842,673	1,326,679,092	69.9	2,780,356,558	47.7
June 30, 2016	3,215,595,275	4,546,939,321	1,331,344,046	70.7	2,845,612,315	46.8

See Independent Auditors' Report. ** *Covered payroll was actuarially computed*

Schedules of Funding Progress for SPRS Insurance Fund

Year Ended	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll** (c)	UAAL as % of Covered Payroll [(b-a)/c]
June 30, 2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
June 30, 2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
June 30, 2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
June 30, 2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2
June 30, 2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4
June 30, 2012	124,372,072	333,903,782	209,531,710	37.2	48,372,506	433.2
June 30, 2013	136,321,060	222,326,743	86,005,683	61.3	45,256,202	190.0
June 30, 2014	155,594,760	234,271,127	78,676,367	66.4	44,615,885	176.3
June 30, 2015	167,774,940	254,838,710	87,063,770	65.8	45,764,515	190.2
June 30, 2016	172,703,691	257,197,259	84,493,568	67.1	45,551,469	185.5

See Independent Auditors' Report. ** *Covered payroll was actuarially computed*

Schedules of Contributions from Employers & Other Contributing Entities

KERS - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Non-Hazardous				
June 30, 2007	219,768,964	64,014,332	$10,744,049	34.0
June 30, 2008	558,745,820	56,744,942	6,633,538	11.3
June 30, 2009	362,707,378	74,542,932	8,167,982	22.8
June 30, 2010	376,556,187	93,976,917	8,550,914	27.2
June 30, 2011	294,897,813	129,335,552	-	43.9
June 30, 2012	297,904,224	156,057,216	-	52.4
June 30, 2013	286,143,134	165,330,557	-	57.8
June 30, 2014	208,880,813	166,609,592	-	79.8
June 30, 2015	130,455,026	135,940,337	-	104.2
June 30, 2016	121,898,903	135,815,817	-	111.4
Hazardous				
June 30, 2007	31,304,778	19,534,819	$104,669	62.7
June 30, 2008	51,214,929	21,997,341	73,891	43.1
June 30, 2009	34,670,467	20,807,204	186,081	60.6
June 30, 2010	35,045,278	21,921,535	319,059	63.5
June 30, 2011	29,585,257	19,952,580	-	67.4
June 30, 2012	28,326,206	24,538,087	-	86.6
June 30, 2013	26,252,911	25,682,403	-	97.8
June 30, 2014	15,627,018	23,873,967	-	152.8
June 30, 2015	13,151,938	14,882,343	-	113.2
June 30, 2016	9,185,866	16,765,530	-	182.5

See Independent Auditors' Report.

Schedules of Contributions from Employers & Other Contributing Entities

CERS - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Non-Hazardous				
June 30, 2007	285,600,490	147,608,801	$9,623,431	55.1
June 30, 2008	406,541,729	196,110,111	6,003,181	49.7
June 30, 2009	264,733,532	123,852,611	7,623,628	49.7
June 30, 2010	266,331,326	166,607,097	9,156,991	66.0
June 30, 2011	213,429,424	186,885,576	-	87.6
June 30, 2012	214,421,008	171,924,836	-	80.2
June 30, 2013	195,560,870	159,992,643	-	81.8
June 30, 2014	130,651,800	123,278,028	-	94.4
June 30, 2015	119,510,589	119,443,608	-	99.9
June 30, 2016	110,987,287	111,836,358	-	100.8
Hazardous				
June 30, 2007	115,938,899	70,072,785	$656,523	61.0
June 30, 2008	168,723,639	90,113,200	419,774	53.7
June 30, 2009	126,757,348	70,785,241	627,938	56.3
June 30, 2010	129,227,449	83,042,875	1,493,440	65.4
June 30, 2011	109,226,667	98,592,286	-	90.3
June 30, 2012	110,762,577	92,563,664	-	83.6
June 30, 2013	102,010,672	85,319,393	-	83.6
June 30, 2014	74,360,438	74,791,619	-	100.6
June 30, 2015	69,102,811	71,778,130	-	103.9
June 30, 2016	64,253,032	67,619,149	-	105.2

See Independent Auditors' Report.

SPRS - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
June 30, 2007	15,233,320	6,488,600	$361,942	45.0
June 30, 2008	43,469,735	7,329,229	183,564	17.3
June 30, 2009	29,324,666	7,413,552	229,240	26.1
June 30, 2010	30,302,151	8,369,428	273,684	28.5
June 30, 2011	25,772,574	11,050,964	-	42.9
June 30, 2012	28,246,786	11,960,468	-	42.3
June 30, 2013	27,234,229	16,828,681	-	61.8
June 30, 2014	20,879,022	14,493,242	-	69.4
June 30, 2015	9,889,797	10,381,881	-	105.0
June 30, 2016	8,552,633	10,237,021	-	119.7

See Independent Auditors' Report.

Actuary Assumption Changes

For the valuations as of June 30, 2016, the discount rate used to measure the total pension liability was reduced to 6.75% for KERS Non-Hazardous and SPRS. The discount rate for CERS Non-Hazardous, CERS Hazardous and KERS Hazardous remained at 7.5%. The long term assessed rate of return was based upon an analysis adopted by the Board of Trustees on December 3, 2015.

The actuarially determined contribution rates are determined on a biennial basis beginning with the fiscal years ended 2016 and 2017, determined as of June 30, 2015. The amortization period of the unfunded liability was reset as of July 1, 2013, to a closed 30-year period. The following actuarial methods and assumptions were used to determine contribution rates reported for all systems:

	2016	2015
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level of Percentage of Payroll, closed	Level of Percentage of Payroll, closed
Remaining Amortization Period	27 years	28 years
Asset Valuation Method	5 year Smoothed Market	5 year Smoothed Market
Inflation	3.25%	3.25%
Salary Increase	4.0%, average, including Inflation	4.0%, average, including Inflation
Investment Rate of Return	6.75%, for KERS Non-Hazardous and SPRS; CERS Non-Hazardous and Hazardous, and KERS Hazardous is 7.5%. Net of Pension Plan Investment Expense, including Inflation	7.5% for both Non-Hazardous and Hazardous, Net of Pension Plan Investment Expense, excluding Inflation.

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Schedule of Employer Contributions - Pension Funds *(in thousands)*										
KERS Non-Hazardous	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**	**2007**
Actuarially Determined Employer Contribution	$512,670	$520,948	$520,765	$485,396	$441,094	$381,915	$348,495	$294,495	$264,743	$176,774
Actual Employer Contributions	513,084	521,691	296,836	280,874	214,786	193,754	144,051	112,383	104,655	88,249
Annual Contribution Deficiency (Excess)	(414)	(743)	223,929	204,522	226,308	188,161	204,444	182,112	160,088	88,525
Covered Employee Payroll	1,631,025	1,544,234	1,577,496	1,644,409	1,644,897	1,731,633	1,815,146	1,754,413	1,837,873	1,780,223
Actual Contributions as a Percentage of Covered Employee Payroll	31.46%	33.78%	18.82%	17.08%	13.06%	11.19%	7.94%	6.41%	5.69%	4.96%

Schedule of Employer Contributions - Pension Funds *(in thousands)*										
KERS Hazardous	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**	**2007**
Actuarially Determined Employer Contribution	$23,690	$28,374	$13,570	$21,502	$20,265	$20,605	$17,815	$15,708	$14,147	$12,220
Actual Employer Contributions	23,759	28,536	11,670	27,334	20,809	19,141	17,658	15,843	15,257	13,237
Annual Contribution Deficiency (Excess)	(69)	(162)	1,900	(5,832)	(544)	1,464	157	(135)	(1,110)	(1,017)
Covered Employee Payroll	158,828	128,680	129,076	132,015	131,977	133,054	143,558	146,044	148,710	144,838
Actual Contributions as a Percentage of Covered Employee Payroll	14.96%	22.18%	9.04%	20.71%	15.77%	14.39%	12.3%	10.85%	10.26%	9.14%

Schedule of Employer Contributions - Pension Funds *(in thousands)*

CERS Non-Hazardous	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Actuarially Determined Employer Contribution	$282,767	$297,715	$324,231	$294,914	$261,764	$218,985	$186,724	$161,097	$138,311	$112,508
Actual Employer Contributions	284,106	298,566	324,231	294,914	275,736	248,519	207,076	179,285	150,925	124,261
Annual Contribution Deficiency (Excess)	(1,339)	(851)	-	-	(13,972)	(29,534)	(20,352)	(18,188)	12,614	(11,753)
Covered Employee Payroll	2,417,187	2,296,716	2,272,270	2,236,277	2,236,546	2,276,596	2,236,855	2,183,612	2,166,613	2,076,848
Actual Contributions as a Percentage of Covered Employee Payroll	11.75%	13%	14.27%	13.19%	12.33%	10.92%	9.26%	8.21%	6.97%	5.98%

Schedule of Employer Contributions - Pension Funds *(in thousands)*

CERS Hazardous	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Actuarially Determined Employer Contribution	$104,952	$107,514	$115,240	$120,140	$83,589	$78,796	$76,391	$69,056	$64,082	$53,890
Actual Employer Contributions	105,713	108,071	115,240	120,140	89,329	85,078	82,887	78,152	72,155	61,553
Annual Contribution Deficiency (Excess)	(761)	(557)	-	-	(5,740)	(6,282)	(6,496)	(9,096)	(8,073)	(7,663)
Covered Employee Payroll	526,334	483,641	479,164	461,673	464,229	466,964	466,549	469,315	474,241	458,999
Actual Contributions as a Percentage of Covered Employee Payroll	20.08%	22.35%	24.05%	26.02%	19.24%	18.22%	17.77%	16.65%	15.21%	13.41%

Schedule of Employer Contributions - Pension Funds *(in thousands)*

SPRS	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Actuarially Determined Employer Contribution	$25,723	$31,444	$25,808	$23,117	$20,498	$18,463	$18,765	$15,952	$13,823	$9,024
Actual Employer Contributions	25,822	31,990	20,279	18,501	15,362	12,657	9,489	8,186	7,443	6,142
Annual Contribution Deficiency (Excess)	(99)	(546)	5,529	4,616	5,136	5,806	9,276	7,766	6,380	2,882
Covered Employee Payroll	46,685	45,765	44,616	45,256	48,373	48,693	51,507	51,660	53,269	49,248
Actual Contributions as a Percentage of Covered Employee Payroll	55.31%	69.9%	45.45%	40.88%	31.76%	25.99%	18.42%	15.85%	13.97%	12.47%

These tables are intended to show information for ten years; additional years' information will be displayed as it becomes available.

Schedule of Changes in the Net Pension Liability *(in Thousands)*

	KERS Non-Hazardous			KERS Hazardous		
Total Pension Liability (TPL)	**2016**	**2015**	**2014**	**2016**	**2015**	**2014**
Service Cost	$139,631	$143,847	$133,361	$20,751	$18,729	$16,880
Interest	891,897	859,509	853,652	64,851	61,005	59,594
Benefit Changes	-	-	-		-	-
Difference between Expected and Actual Experience	-	30,958	-		6,066	-
Changes of Assumptions	923,999	694,591	-		52,166	-
Benefit Payments	(923,288)	(905,790)	(889,936)	(59,306)	(56,774)	(54,321)
Refunds of Contributions	(12,130)	(13,552)	(13,627)	(2,211)	(2,609)	(2,830)
Net Change in TPL	1,020,109	809,563	83,450	24,085	78,583	19,323
TPL - Beginning	12,359,673	11,550,110	11,466,660	895,433	816,850	797,527
TPL - Ending (a)	**$13,379,782**	**$12,359,673**	**$11,550,110**	**$919,518**	**$895,433**	**$816,850**
Plan Net Position						
Contributions - Employers	$513,084	$521,692	$296,836	$23,760	$28,536	$11,671
Contributions-Members	106,494	104,605	97,487	15,739	13,207	12,546
Net Investment Income	(20,662)	44,569	337,922	(1,652)	8,701	80,724
Benefit Payments	(923,288)	(905,790)	(889,936)	(59,306)	(56,774)	(54,321)
Administrative Expense	(10,988)	(10,474)	(11,145)	(918)	(844)	(898)
Refunds of Contributions	(12,130)	(13,552)	(13,627)	(2,211)	(2,609)	(2,830)
Other	-	8,442	-	-	767	-
Net Change in Plan Position	(347,490)	(250,508)	(182,463)	(24,588)	(9,016)	46,892
Plan Net Position-Beginning	2,327,782	2,578,290	2,760,753	552,468	561,484	514,592
Plan Net Position-Ending (b)	**$1,980,292**	**$2,327,782**	**$2,578,290**	**$527,880**	**$552,468**	**$561,484**
Net Pension Liability - Ending (a-b)	**$ 11,399,490**	**$10,031,891**	**$8,971,820**	**$391,638**	**$342,965**	**$255,366**
Ratio of Plan Net Position to TPL	14.8%	18.83%	22.32%	57.41%	61.7%	68.74%
Covered Employee Payroll	1,631,025	$1,544,234	$1,577,496	158,828	$128,680	$129,076
Net Pension Liability as a percentage of Covered Employee Payroll	698,92%	649.64%	568.74%	246.58%	266.53%	197.84%

Schedule of Changes in the Net Pension Liability *(in Thousands)*

	CERS Non-Hazardous			CERS Hazardous			SPRS Hazardous		
Total Pension Liability (TPL)	**2016**	**2015**	**2014**	**2016**	**2015**	**2014**	**2016**	**2015**	**2014**
Service Cost	$209,100	$207,399	$192,482	$66,249	$71,935	$66,762	$8,402	$7,696	$7,142
Interest	780,587	733,003	710,527	262,886	247,008	238,665	52,951	50,660	50,391
Benefit Changes	-	-	-	-	-	-	-	-	-
Difference between Expected and Actual Experience	-	49,966	-	-	41,935	-	-	9,331	-
Changes of Assumptions	-	606,293	-	-	166,849	-	56,191	40,202	-
Benefit Payments	(651,247)	(615,335)	(582,850)	(213,448)	(200,134)	(189,635)	(56,268)	(54,766)	(53,026)
Refunds of Contributions	(13,754)	(13,524)	(14,286)	(2,879)	(3,111)	(2,664)	(11)	(85)	(213)
Net Change in TPL	324,686	967,802	305,873	112,808	324,482	113,127	61,265	53,038	4,294
TPL - Beginning	10,740,325	9,772,523	9,466,650	3,613,308	3,288,826	3,175,699	734,157	681,119	676,825
TPL - Ending (a)	**$11,065,011**	**$10,740,325**	**$9,772,523**	**$3,726,116**	**$3,613,308**	**$3,288,826**	**$795,422**	**$734,157**	**$681,119**
Plan Net Position									
Contributions - Employers	$284,106	$298,565	$324,231	$105,714	$108,072	$115,240	$25,822	31,990	$20,279
Contributions-Members	141,674	140,311	128,568	52,972	47,693	43,722	5,262	5,244	5,076
Net Investment Income	(40,799)	110,569	895,531	(9,021)	37,104	288,490	(3,841)	3,427	40,374
Benefit Payments	(651,247)	(615,335)	(582,850)	(213,448)	(200,134)	(189,635)	(56,268)	(54,766)	(53,026)
Administrative Expense	(19,384)	(18,212)	(18,615)	(1,363)	(1,289)	(1,721)	(180)	(201)	(215)
Refunds of Contributions	(13,754)	(13,524)	(14,286)	(2,879)	(3,111)	(2,665)	(11)	(85)	(213)
Other	-	10,280	-	-	2,865	-	-	646	-
Net Change in Plan Position	(299,404)	(87,346)	732,579	(68,025)	(8,800)	253,431	(29,216)	(13,745)	12,276
Plan Net Position-Beginning	6,440,800	6,528,146	5,795,568	2,078,202	2,087,002	1,833,571	247,229	260,974	248,698
Plan Net Position-Ending (b)	**$6,141,396**	**$6,440,800**	**$6,528,147**	**$2,010,177**	**$2,078,202**	**$2,087,002**	**$218,013**	**$247,229**	**$260,974**
Net Pension Liability - Ending (a-b)	**$4,923,615**	**$4,299,525**	**$3,244,376**	**$1,715,939**	**$1,535,106**	**$1,201,824**	**$577,409**	**$486,928**	**$420,145**
Ratio of Plan Net Position to TPL	55.5%	59.97%	66.80%	53.95%	57.52%	63.46%	27.41%	33.68%	38.32%
Covered Employee Payroll	2,417,187	$2,296,716	$2,272,270	526,334	$483,641	$479,164	46,685	$45,765	$44,616
Net Pension Liability as a percentage of Covered Employee Payroll	203.69%	187.2%	142.78%	326.02%	317.41%	250.82%	1236.82%	1,063.97%	941.69%

Money-Weighted Rates Of Return

In accordance with GASB Statement No. 67, Financial Reporting for Pension Plans, KRS provides this additional disclosure regarding its money-weighted rate of return for the pension funds. The money-weighted rate of return is a method of calculating period-by-period returns on pension plan investments that adjusts for the changing amounts actually invested. For purposes of this Statement, money weighted-rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense, adjusted for the changing amounts actually invested.

See below for the money-weighted rates of return as of June 30, 2016, 2015, and 2014, as calculated by the custodial bank, BNY-Mellon:

Pension Funds

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
2016	-0.97%	-0.33%	-0.62%	-0.46%	-1.76%
2015	1.89%	1.69%	1.65%	1.88%	1.71%
2014	15.50%	15.65%	15.56%	15.50%	15.66%

The money-weighted rates of return declined due to unfavorable conditions in the capital markets. This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Additional Supporting Schedules

Schedule of Administrative Expenses
(in Thousands) for the fiscal years ended June 30

Expense	2016	2015
Personnel		
Salaries and Per Diem	14,685	$14,292
Fringe Benefits	8,947	8,687
Tuition Assistance	27	34
Unemployment Compensation	13	-
Total Personnel	**$23,672**	**$23,013**
Contractual Services		
Actuarial	450	337
Audit	99	108
Healthcare	15	3
Legal Counsel	415	722
Medical	339	315
Miscellaneous	112	269
Total Contractual Services	**$1,430**	**$1,754**
Communication		
Printing	172	81
Telephone	201	105
Postage	276	300
Travel	113	116
Total Communication	**$762**	**$602**
Rentals		
Office Space	731	718
Equipment	69	76
Total Rentals	**$800**	**$794**
Internal Audit		
Travel/Conferences	4	$4
Dues/Subscriptions	1	1
Miscellaneous	1	1
Total Internal Audit	**$6**	**$6**
Investments - Pension Fund		
Travel/Conferences	29	37
Dues/Subscriptions	6	8
Computer	-	21
Contractual	189	225
Miscellaneous	5	7
Legal	153	126
Tuition	6	-
Total Investments	**$388**	**$424**
Information Technology		
Software	456	434
Hardware	1,006	642
Services	1,237	669
Total Information Technology	**$2,699**	**$1,746**
Miscellaneous		
Utilities	217	223
Supplies	75	116
Insurance	255	82
Dues & Subscriptions	38	47
Maintenance	4	4
Other	17	20
Total Miscellaneous	**$606**	**$492**
Depreciation/Amortization	1,937	2,189
Total Pension Fund Administrative Expenses	**$32,300**	**$31,020**
Healthcare Fees	2,038	2,180
Total Insurance Fund Administrative Expenses	**$2,038**	**$2,180**
Total Administrative Expenses	**$34,338**	**$33,200**

Schedule of Direct Investment Expenses *(in Thousands)* for the fiscal years ended June 30

Pension Funds	2016	2015
Security Lending Fees		
Borrower (Income) Rebates	$100	$(159)
Lending Agent Fees	680	444
Total Security Lending	**$780**	**$285**
Contractual Services		
Investment Management	51,711	53,411
Security Custody	945	1,010
Investment Consultant	1,141	1,258
Private Equity Performance Fees	34,201	25,627
Total Contractual Services	**$87,998**	**$81,505**
Insurance Funds		
Security Lending Fees		
Borrower (income) Rebates	76	(336)
Lending Agent Fees	222	155
Total Security Lending	**$298**	**($181)**
Contractual Services		
Investment Management	19,508	18,661
Security Custody	600	675
Investment Consultant	428	448
Private Equity Performance Fees	13,553	8,200
Total Contractual Services	**$34,089**	**$27,984**
Total Investment Expenses	**$123,165**	**$109,593**

Schedule of Professional Consultant Fees *(in Thousands)* for the fiscal years ended June 30

Fees	2016	2015
Actuarial Services	$450	$337
Medical Review Services	339	315
Audit Services	99	108
Legal Counsel	415	722
Healthcare	15	3
Miscellaneous	112	269
Total	**$1,430**	**$1,754**

REPORT ON
INTERNAL CONTROL

over financial reporting and on compliance and other matters based on an audit of financial statements performed in accordance with *GOVERNMENT AUDITING STANDARDS*

DEANDORTON
DEAN DORTON ALLEN FORD, PLLC

REPORT OF INDEPENDENT AUDITORS

Board of Directors
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the combining financial statements of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems (KRS) as of and for the fiscal year ended June 30, 2016, and the related notes to the combining financial statements, which collectively comprise KRS' basic combining financial statements, and have issued our report thereon dated December 1, 2016.

Internal Control Over Financial Reporting

In planning and performing our audit of the combining financial statements, we considered KRS' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the combining financial statements, but not for the purpose of expressing an opinion on the effectiveness of KRS' internal control. Accordingly, we do not express an opinion on the effectiveness of KRS' internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether KRS' combining financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of combining financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

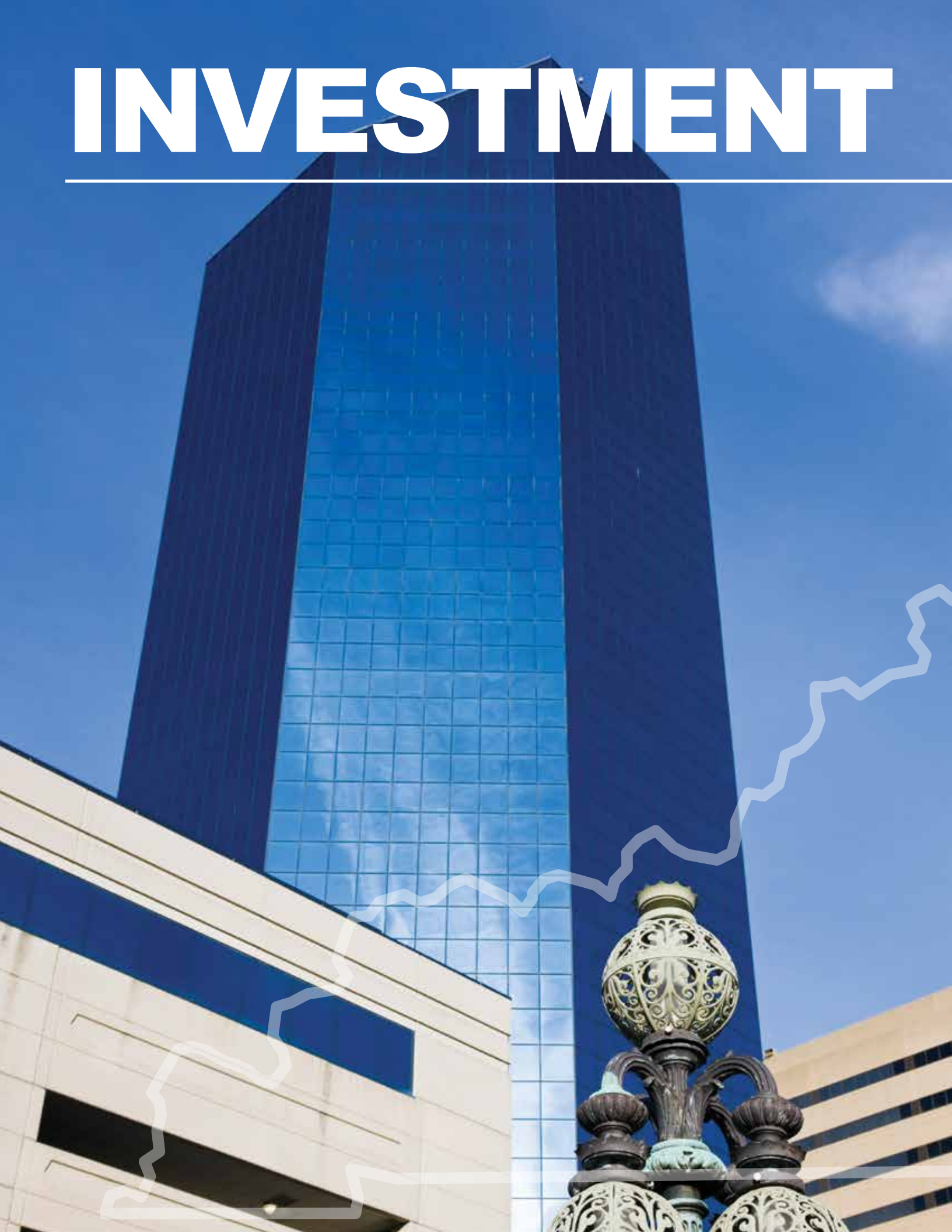
Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with Governmental Auditing Standards in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Dean Dorton Allen Ford, PLLC

December 1, 2016
Lexington, Kentucky

INVESTMENT



INVESTMENT

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Fed
Federal Reserve

MBS
Mortgage Backed Securities

GDP
Gross Domestic Product

U.S. Economy Feeling the Effects of Global Slowdown

Will the U.S. be dragged into the negative interest rate club?

Fiscal year 2016 was unquestionably, the most difficult year for investors since 2008. Many factors contributed to these unfavorable market conditions, including:

- Weak overseas economics putting pressure on our own economy; our GDP slowed to 1.2% in 2016.
- Interest rates remained low despite the U.S. Federal Reserve raising short-term rates.
- The labor force participation rate is near historic lows at 62.7% as of June 2016.
- Inflation remained low with the Core Consumer Price Index at 1% year-over-year.

The previous fiscal year saw the U.S. economy finally begin to feel the pressure of worldwide economic weakness coupled with ultra-low interest rates. The U.S. Yield Curve continued to flatten, even as the U.S. Federal Reserve raised short-term rates for the first time since the Great Financial Crisis. GDP slowed

to 1.1% as the U.S. began to feel the effects of the global economic slowdown being experienced by the other developed markets around the globe. While employment remains strong, with the unemployment rate dropping to 4.9%, the labor force participation rate remains near historic lows at 62.7%. Inflation remained stubbornly low, with Core CPI at 1% year over year, and Core PCE hovering around the Fed's 2% target. In December, the Federal Reserve provided the much awaited initial increase in the Fed Funds rate, raising the rate ¼ point to a range of 0.25% to 0.5%. Chairwoman Janet Yellen was quick to caution the market that any further increases in the funds rate would be gradual, measured, and data dependent.

Global financial markets were dominated by several themes over the past year. First, the decline in energy prices, which began in late 2014, continued to take its toll on oil and gas based investments. WTI crude oil prices fell below $27.00 per barrel in February, its lowest level in almost 13 years. The prolonged period of low prices has begun to force some smaller, more levered players into default, and the dramatic drop in prices over the first six weeks of the year caused a large sell-off in U.S. High Yield bond markets and equities around the globe. Investors flocked to the safety of U.S. Treasuries and pushed the yield on the U.S. 10 year notes down from 2.27% at the beginning of the year to just 1.66% in February. However, just when it looked like markets were heading for disaster, crude oil stabilized, and investor's fear turned into greed as risk assets across the board posted large gains well into the summer. The S&P 500, which was down over 10% YTD in mid-February, gained almost 16.00% over the next 3 months, and U.S. High Yield bonds, which had posted a YTD return of -4.6% as of mid-February, rallied 12.7% through the end of May.

Secondly, negative interest rates spread across Europe, as the ECB joined Japan in the zero interest rate club and expanded its quantitative easing via its bond purchased program. As of June, over $13 trillion dollars of government debt globally was trading at negative rates of interest. Non-U.S. investors have flocked to the safety and relatively high yields provided by U.S. Treasuries, providing further catalyst for rates to remain lower for longer. Equity investors in Europe, faced with slowing growth and little to no inflation, saw the UK FTSE 100 index post a return of -1.58% over the fiscal year. Germany, where 10 year bonds reached a record low in yield of -0.13% in June, saw the DAX post a loss of over 13% (in Euros) for the period.

Lastly, geopolitics reared its head in June when the citizens of the United Kingdom voted to leave the Eurozone. This referendum, commonly referred to as the "Brexit," caught the markets completely off guard, and investors around the globe sought the safe harbor of government bonds over stocks. It is hard to overstate the degree of surprise the markets experienced as it became apparent that the "leave" vote would win. UK Prime Minister Cameron announced his resignation early the next morning, stating that while he campaigned hard for the UK to remain part of the EU "the British people made a different decision to take a different path. As such I think the country requires fresh leadership to take it in this direction." Treasury bonds rallied around the world as the turmoil unfolded, and stocks sold off 2% to 4% depending on the market. The Euro dipped below 1.10 intra-day before recovering. Ultimately, once the initial shock wore off, markets stabilized as participants began to work out various scenarios for a UK exit that will likely not occur until 2018 or beyond.

INVESTMENT SUMMARY

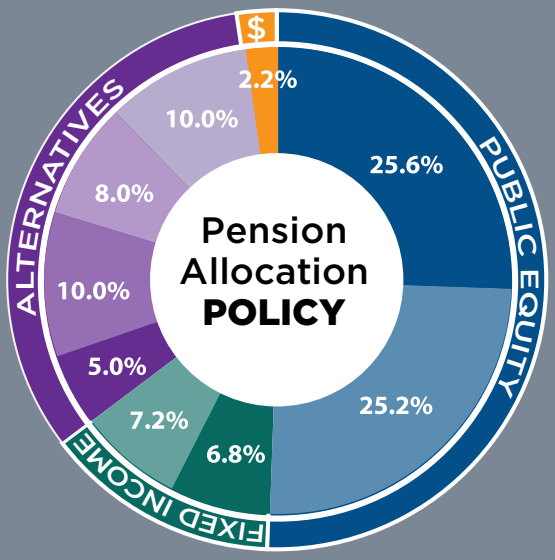
The KRS Board is charged with the responsibility of investing the Systems' assets to provide for the benefits of the members of the Systems. To achieve that goal, the Board follows a policy of thoughtfully growing our asset base while protecting against undue risk and losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the Systems. In carrying out their fiduciary duties, the Board has set forth clearly defined investment policies, objectives and strategies for both the pension and insurance portfolios.

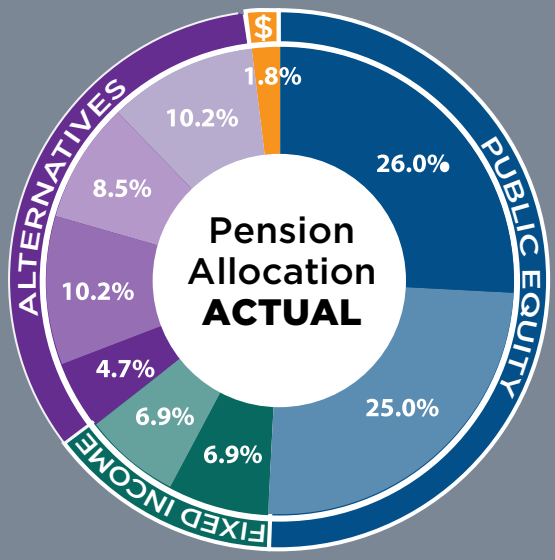
Investment Policy The KRS Board approved a new target asset allocation beginning January 1, 2016. As of June 30, 2016, the KRS Pension fund's policy allocation invested 25.65% of the assets in U.S. equities, 25.2% in broad market international equities, 6.8% in global fixed income, 7.2% in credit fixed income, 10.0% in private equity, 8% in real return strategies, 10% in absolute return strategies, 5% in real estate, and 2.2% in cash or short-term securities. As of June 30, 2016, the KRS Insurance fund's policy allocation invested 26.5% of the assets in U.S. equities, 26.5% in broad market international equities, 6% in global fixed income, 6% in credit fixed income, 10% in private equity, 8% in real return strategies, 10% in absolute return strategies, 5% in real estate, and 2% in cash or short-term securities. While most systems adhere to the same targets as the overall fund, KERS and SPRS Pension Systems have target allocations with a slightly higher allocation to Fixed Income offset by lower allocations to Public Equities due to the funding level of the two systems.

The following charts graphically depict the Board's investment policy.

PENSION: Asset Allocation Board Policy vs. Actual as of June 30, 2016

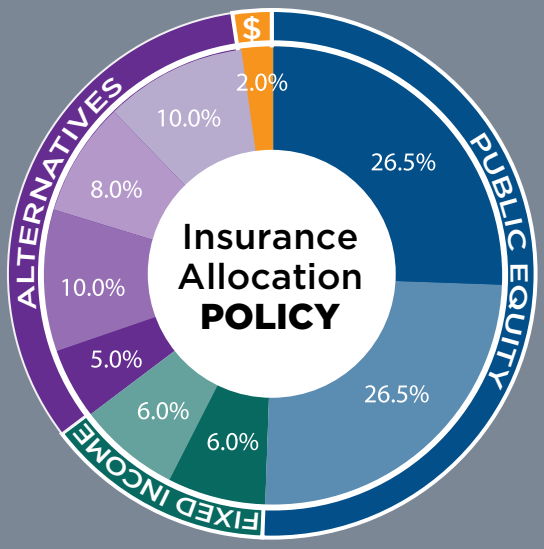
Asset	U.S. Equity	International Equity	Global Fixed	Credit Fixed	Real Estate	Absolute Return	Real Return	Private Equity	Cash
Policy's Pension Asset Allocation	25.6%	25.2%	6.8%	7.2%	5.0%	10.0%	8.0%	10.0%	2.2%
Actual Pension Asset Allocation	26.0%	25.0%	6.9%	6.9%	4.7%	10.2%	8.5%	10.2%	1.8%

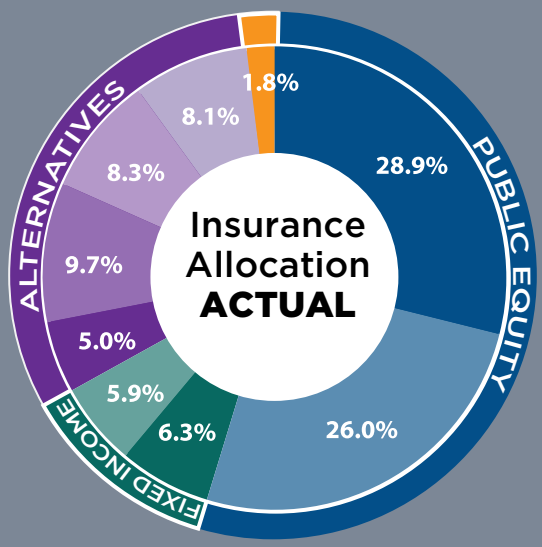




INSURANCE: Asset Allocation Board Policy vs. Actual as of June 30, 2016

Asset	U.S. Equity	International Equity	Global Fixed	Credit Fixed	Real Estate	Absolute Return	Real Return	Private Equity	Cash
Policy's Insurance Asset Allocation	26.5%	26.5%	6.0%	6.0%	5.0%	10.0%	8.0%	10.0%	2.0%
Actual Insurance Asset Allocation	28.9%	26.0%	6.3%	5.9%	5.0%	9.7%	8.3%	8.1%	1.8%





INVESTMENT **STRATEGIES**

Investment Policies
Visit https://kyret.ky.gov/investments to read our Statement of Investment policy. Other policies include Brokerage, Securities Trading, Placement Agents, Proxy Voting and more.

Diversification

KRS portfolios are diversified on several levels. Portfolios are diversified through the use of multiple asset classes. Asset allocations are revisited on a periodic basis and represent an efficient allocation to achieve overall return and risk characteristics. The individual asset classes are diversified through the use of multiple portfolios that are managed both by the Investment Division Staff and by external investment advisors. Finally, portfolios within each of the asset classes are diversified through both investment styles and the selection of individual securities. Each portfolio advisor is afforded discretion to diversify its portfolio(s) within the parameters established by the KRS Board.

Rebalancing

Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with KRS' Statement of Investment Policy target levels. Such rebalancing is necessary to reflect sizeable cash flows and performance imbalances among asset classes and investment advisors. KRS' rebalancing policies call for an immediate rebalancing to within its allocation ranges if an asset class exceeds or falls below its target allocation by an appropriate percentage defined in the Investment Policy Statement. As the following charts depict, the Pension and Insurance portfolios were operating within the ranges established by the Investment Policies.

Investments Performance Review Procedures

At least once each quarter, the Investment Committee, on behalf of the KRS Board, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. The Investment Committee also reviews a report created and presented by the KRS Compliance Officer who is part of the independent Internal Audit Department. The Compliance Officer performs tests daily, monthly, and quarterly to assure compliance with the restrictions imposed by the Investment Policy.

Investment Consulting

The Board employs industry leading external consultants to assist in determining and reviewing the asset allocation guidelines. Consultants also provide performance of both the internally managed and externally managed assets. A letter from each consulting firm utilized follows this introduction and discusses current allocations, performance, and significant changes during the fiscal year.

INVESTMENT **OBJECTIVES**

The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

• **Shorter-Term** *(5 years and less):* The returns of the particular asset classes of the managed funds of the Systems, measured on a year-to-year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices.

• **Medium-Term** *(5 to 30 years):* The returns of the particular asset classes of the managed funds of the Systems, measured on a rolling year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices and perform above median in an appropriate peer universe, if there is one.

• **Longer-Term:** The total assets of the Systems should achieve a return measured over 30 to 40 years which exceeds the actuarially required rate of return of 7.5% while also exceeding the return achieved by its total fund benchmark. During the early part of 2016, the KRS Board elected to lower the actuarial required rate of return for KERS and SPRS to 6.75%.

In keeping with the KRS Board' fiduciary responsibility, where all else is equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

Investing in Kentucky
In keeping with the KRS Board' fiduciary responsibility, where all else equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

Investment Results

Returns reported by KRS are "net." For the purposes of this report, total fund return information is net of fees with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

Note: Returns reported by KRS are "net." For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

Fiscal Year 2016 Results

For the fiscal year ended June 30, 2016, the KRS pension fund produced a net return of -0.52%, underperforming its benchmark return of -0.19%, as well as the actuarially required rate of return of 7.5% for all plans except the KERS and SPRS systems in the Pension Fund which use a 6.75% rate. It should be noted that the actuarially required rate is an annualized return that may not be met, or possibly greatly surpassed in any given year; this objective has been met over the long-term.

The underperformance of the pension fund can primarily be attributed to relative weak performance in the non-U.S. Equity and Absolute Return / Hedge Fund spaces, combined with relative underperformance within several asset classes. Our Real Estate, Fixed Income, and Private Equity investments were all positive contributors to portfolio returns during the fiscal year.

The KRS insurance fund performance was –0.09% net of expenses for the fiscal year ending June 30, 2016, compared to the benchmark's 0.03% return and the actuarially required rate of 7.5%. The insurance fund suffered from the same root causes of underperformance as the pension fund: primarily the underperformance of its investments in the Absolute Return and Non-U.S. Equity sectors.

INVESTMENT RESULTS TABLE

Pension Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Pension Fund	Apr-84	-0.52%	5.45%	5.38%	5.02%	9.03%
Performance Benchmark[2]	-	-0.19%	5.61%	5.74%	5.41%	9.17%

Insurance Fund Total Return[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Insurance Fund	Apr-87	-0.09%	5.35%	4.79%	4.28%	7.21%
Performance Benchmark[3]	-	0.03%	5.88%	5.80%	4.83%	7.61%

[1]The Performance Calculations presented above were prepared by the Systems' custodial bank using a time-weighted rate of return methodology based upon the Fair Value of assets.
[2]Current Policy Benchmark is comprised of 26.5% Russell 3000, 26.5% MSCI ACWI ex-U.S. IMI, 6.0% BC Universal, 6.0% BC U.S. High Yield, 5.0% NCREIF ODCE, 10.0% HFRI Diversified FOF, 8.0% Custom – Allocation Specific, 10.0% Actual Performance, and 2.0% CG 3-Month U.S. Treasury Bill.
[3]Current Policy Benchmark is comprised of 26.5% Russell 3000, 25.2% MSCI ACWI ex-U.S. IMI, 6.8% BC Universal, 7.2% BC U.S. High Yield, 5.0% NCREIF ODCE, 10.0% HFRI Diversified FOF, 8.0% Custom – Allocation Specific, 10.0% Actual Performance, and 2.2% CG 3-Month U.S. Treasury Bill.

Net Returns By System - Pension Fund *(in Millions)*

Plan	Market Value	% of Total	1 Year		3 Years		5 Years		GANIR	10 Years		Inception	
			KRS	Index	KRS	Index	KRS	Index		KRS	Index	KRS	Index
KERS Non-Hazardous	$1,921.52	17.9%	-0.68	0.71	5.51	5.75	5.41	5.82	5.10	5.04	5.45	9.03	9.18
KERS Hazardous	525.79	4.9%	-0.24	-0.61	5.53	5.35	5.43	5.58	5.32	5.05	5.33	9.03	9.14
CERS Non-Hazardous	6,099.38	56.7%	-0.53	-0.66	5.42	5.32	5.36	5.56	5.16	5.01	5.32	9.02	9.14
CERS Hazardous	1,996.67	18.6%	-0.38	-0.66	5.47	5.33	5.39	5.57	5.34	5.03	5.32	9.03	9.14
SPRS	207.73	1.9%	-1.49	-0.31	5.09	5.43	5.16	5.63	5.10	4.91	5.35	8.99	9.15
Total	$10,751.09	100.0%	-0.52	-0.19	5.45	5.61	5.38	5.74		5.02	5.41	9.03	9.17

Net Returns By System - Insurance Fund *(in Millions)*

Plan	Market Value	% of Total	1 Year		3 Years		5 Years		10 Years		Inception	
	(Millions)		KRS	Index	KRS	Index	KRS	Index	KRS	Index	KRS	Index
KERS Non-Hazardous	$655.96	15.6%	-0.50	-0.56	4.90	5.40	4.52	5.51	4.15	4.69	7.16	7.56
KERS Hazardous	435.81	10.4%	-0.25	-0.38	5.36	5.51	4.80	5.58	4.29	4.72	7.21	7.57
CERS Non-Hazardous	1,897.66	45.2%	-0.04	-0.25	5.44	5.59	4.85	5.62	4.31	4.75	7.22	7.58
CERS Hazardous	1,050.42	25.0%	0.09	-0.24	5.48	5.59	4.87	5.63	4.32	4.75	7.22	7.58
SPRS	160.10	3.8%	0.01	-0.22	5.44	5.61	4.85	5.64	4.31	4.75	7.22	7.58
Total	$4,199.95	100.0%	-0.09	0.03	5.35	5.88	4.79	5.80	4.28	4.83	7.21	7.61

BENCHMARKS

Benchmarks utilized to measure the Kentucky Retirement Systems' Pension and Insurance Funds are a weighted average composite of the various asset class indexes consisting within each KRS' investment portfolio. The Total Fund Benchmarks are shown below:

Total Fund Benchmarks

Index	Pension Fund	Insurance Fund
Russell 3000	26.6 %	26.5%
MSCI ACWI ex US IMI	26.2%	25.5%
Barclays Capital U.S. Universal	6.8%	6.0%
Barclays Capital U.S. High Yield	7.2%	6.0%
NCREIF Open-End Diversified Core GR	5.0%	5.0%
HFR FOF: Diversified	10.0%	10.0%
Custom – Allocation Specific	8.0%	8.0%
Russell 3000 Quarter Lagged + 400 bps	10.0%	10.0%
CG 3-Mo U.S. Treasury Bill	2.2%	2.0%

These benchmarks are intended to be objective, measurable, investable/replicable, and representative of the investment mandates. The benchmarks are developed from publicly available information, and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate and status. KRS' Investment Staff and Consultant recommend the indexes and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the KRS Board. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total Benchmarks will evolve to reflect these exposures.

Note: KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

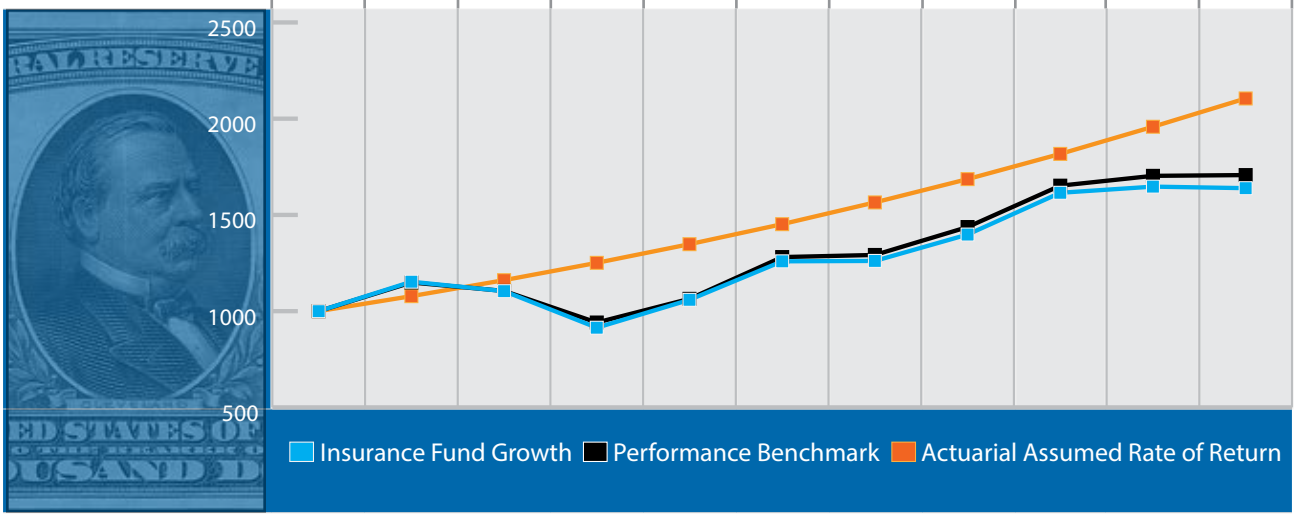
Long-Term Results:

As of June 30, 2016, the KRS pension fund portfolio earned an annualized total net return of -0.52% versus the benchmark annualized return of -0.19%. Performance over the long-term can best be illustrated using a growth of dollar chart. The graph below demonstrates the performance of $1,000 invested in the KRS pension portfolio, its policy benchmark portfolio, and its actuarial objective over the past 10 years.

As of June 30, 2016, the chart indicates that $1,000 would have grown to $1,639, while the same $1,000 invested in the benchmark or in the actuarial objective would have grown to $1,707 and $2,105, respectively.

Total Pension Fund Growth of $1,000

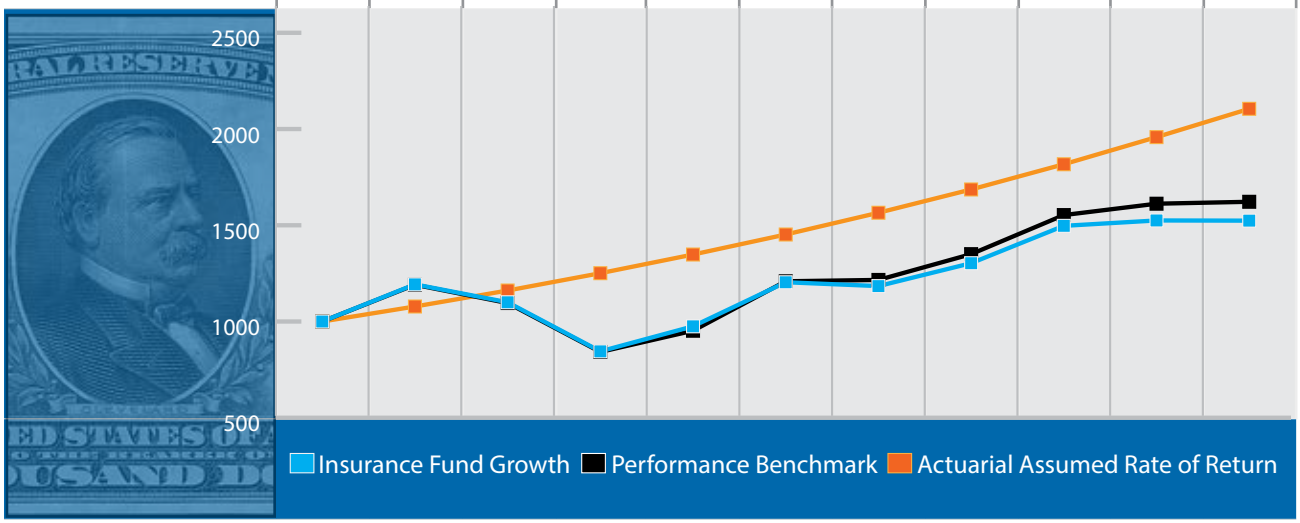
Portfolio	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Pension Fund Growth	1,000	1,153	1,104	914	1,059	1,259	1,261	1,398	1,615	1,647	1,639
Performance Benchmark	1,000	1,149	1,105	941	1,064	1,281	1,292	1,437	1,652	1,703	1,671
Actuarial Assumed Rate of Return	1,000	1,078	1,161	1,251	1,348	1,452	1,565	1,686	1,817	1,958	2,105



As of June 30, 2016, the KRS insurance fund portfolio earned an annualized total net return of -0.09% versus the benchmark annualized return of 0.03%. Performance over the long-term can best be illustrated using a growth of dollar chart. The graph below demonstrates the performance of $1,000 invested in the KRS pension portfolio of $1,524, its policy benchmark portfolio of $1,622, and its actuarial objective of $2,105 over the past 10 years.

Total Insurance Fund Growth of $1,000

Portfolio	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Insurance Fund Growth	1,000	1,193	1,100	845	975	1,204	1,184	1,303	1,497	1,525	1,524
Performance Benchmark	1,000	1,191	1,096	842	952	1,209	1,216	1,350	1,553	1,612	1,613
Actuarial Assumed Rate of Return	1,000	1,078	1,161	1,251	1,348	1,452	1,565	1,686	1,817	1,958	2,105



U.S. Equity

For the fiscal year ending June 30, 2016, the KRS pension fund's U.S. equity portfolio posted a return of 1.44%, versus the benchmark return of 2.14%. The KRS insurance U.S. equity portfolio posted a return of 2.31%, compared to the benchmark return of 2.14%.

Since inception, performance remains sound; the pension's equity portfolio has generated an annualized return of 11.07% throughout its duration, while the benchmark posted an annualized annual return of 11.07%. The insurance fund has returned 9.22% since inception, while the benchmark returned 9.05%.

Return on U.S. Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	1.44%	10.34%	10.73%	7.13%	11.07%
↘ Performance Benchmark[1]	-	2.14%	11.13%	11.60%	7.42%	11.07%
Insurance Fund	Jul-92	2.31%	10.61%	10.85%	7.09%	9.22%
↘ Performance Benchmark[1]	-	2.14%	11.13%	11.60%	7.38%	9.05%
Market Indices						
Russell 1000 (Large Cap)	-	.56%	10.80%	10.90%	8.07%	13.26%
Russell 2000 (Small Cap)	-	-6.73%	7.09%	8.35%	6.20%	11.30%
Russell 3000 (Total Equity)	-	2.14%	11.13%	11.60%	7.40%	11.63%

[1] Pension and Insurance benchmark is the Russell 3000; effective July 1, 2011.

Top 10 U.S. Equity Holdings Pension Fund

Company	Shares	Fair Value
APPLE INC	571,597	54,644,673
MICROSOFT CORP	864,831	44,253,402
JOHNSON & JOHNSON	314,209	38,113,552
EXXON MOBIL CORP	382,634	35,868,111
FACEBOOK INC	271,086	30,979,708
VERIZON COMMUNICATIONS INC	531,000	29,651,040
BERKSHIRE HATHAWAY INC	198,485	28,738,643
AT&T INC	636,093	27,485,579
AMAZON.COM INC	36,518	26,133,011
GENERAL ELECTRIC CO	812,179	25,567,395
Total	**4,618,632**	**$341,435,114**

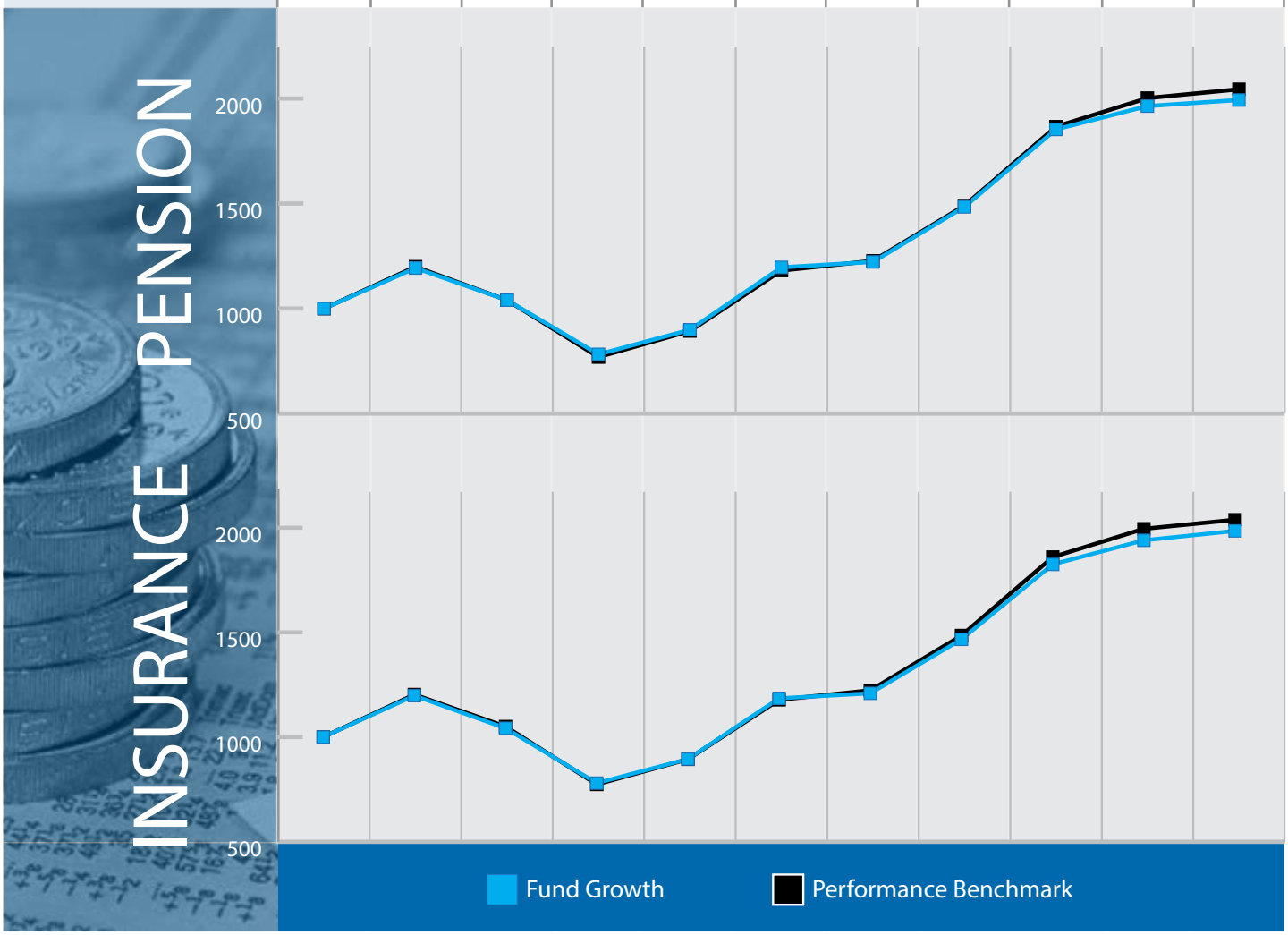
Top 10 U.S. Equity Holdings Insurance Fund

Company	Shares	Fair Value
APPLE INC	246,293	23,545,611
MICROSOFT CORP	375,849	19,232,193
EXXON MOBIL CORP	176,263	16,522,894
JOHNSON & JOHNSON	122,163	14,818,372
AMAZON.COM INC	17,068	12,214,202
BERKSHIRE HATHAWAY INC	84,333	12,210,575
FACEBOOK INC	104,066	11,892,662
GENERAL ELECTRIC CO	371,292	11,688,272
WELLS FARGO & CO	244,749	11,583,970
VERIZON COMMUNICATIONS INC	204,245	11,405,041
Total	**1,946,321**	**$145,113,792**

The relative performance is best illustrated again by the growth of a dollar chart. For the 10-year period ending June 30, 2016, the pension fund's chart indicates that $1,000 would have resulted in $1,993 while the same $1,000 invested in the benchmark would result in $2,044. For the KRS insurance fund, ending June 30, 2015, a $1,000 investment would be valued at $1,985, compared to $2,038 in the benchmark.

Growth of $1,000 - U.S. Equity Portfolio

Portfolio	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Pension Fund Growth	$1,000	$1,193	$1,040	$782	$899	$1,196	$1,222	$1,484	$1,853	$1,964	$1,993
↘ Performance Benchmark	$1,000	$1,199	$1,040	$769	$893	$1,181	$1,227	$1,490	$1,866	$2,002	$2,044
Insurance Fund Growth	$1,000	$1,198	$1,042	$780	$895	$1,185	$1,209	$1,467	$1,825	$1,940	$1,985
↘ Performance Benchmark	$1,000	$1,203	$1,050	$774	$894	$1,178	$1,223	$1,485	$1,860	$1,995	$2,038



International Equity

For the fiscal year, ending June 30, 2016, the KRS pension fund's international equity portfolio fell -8.47%, compared to its benchmark of -9.72%, providing 125 basis points of downside protection. The KRS insurance international equity portfolio returned -8.63% versus its benchmark of -9.72% during the same twelve month period. Though international equities experienced negative absolute returns during the fiscal year, both funds experience positive relative outperformance as the accompanying table indicates.

International equity investors have experienced a volatile period of returns over the past several years, as a result of geopolitical issues, the collapse of commodity prices, and the currency exchange rate. Over the past five years both funds have underperformed their respective benchmarks. The KRS Pension and Insurance funds have posted annualized returns for the period of 0.45% and 0.27% respectively, compared to the benchmark's return of 0.58%. The Systems began their international equity program in 2000. Since inception, the pension international equity portfolio has underperformed the benchmark, while the insurance international equity portfolio has outperformed the benchmark.

Return on International Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-00	-8.47%	2.09%	0.45%	1.99%	1.83%
↘ Performance Benchmark[1]	-	-9.72%	1.65%	0.58%	1.92%	2.28%
Insurance Fund	Apr-00	-8.63%	1.95%	0.27%	1.95%	1.84%
↘ Performance Benchmark[1]	-	-9.72%	1.65%	0.58%	1.57%	1.35%
Market Indices						
MSCI ACWI Ex US	-	-11.71%	-1.21%	-3.44%	3.88%	10.56%
MSCI Emerging Markets	-	-9.80%	1.62%	.56%	2.33%	5.58%

[1]Pension and Insurance benchmark is the MSCI ACWI ex-US; effective July 1, 2011.

Top 10 International Equity Holdings Pension Fund

Company	Shares	Fair Value
SHIRE PLC	354,656	$22,003,173
SYMRISE AG	304,430	20,681,328
WORLDPAY GROUP PLC	5,675,854	20,615,188
TOTA SA	414,489	19,975,473
RECKITT BENCKISER GRP PLC	196,784	19,703,258
ROCHE HOLDING AG	73,250	19,256,133
WOLSELEY PLC	305,260	15,792,370
DAIWA HOUSE INDUSTRY CO LTD	471,000	13,690,633
LONDON STOCK EXCHANGE GROUP PL	387,808	13,121,254
AIA GROUP LTD	2,152,200	12,858,354
Total	**10,335,731**	**$177,697,164**

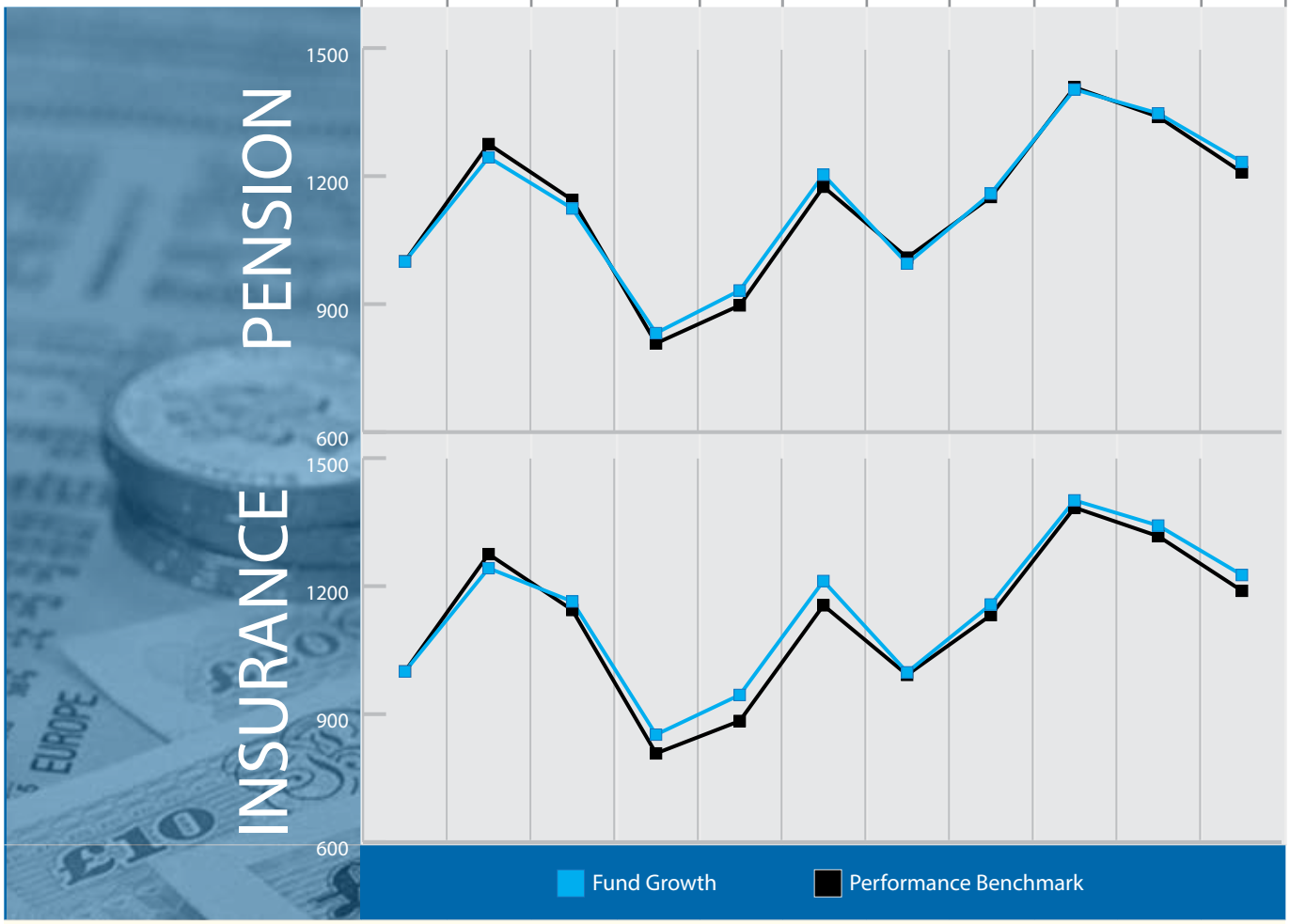
Top 10 International Equity Holdings Insurance Fund

Company	Shares	Fair Value
TOTAL SA	185,494	$8,939,514
SHIRE PLC	134,142	8,322,289
WORLDPAY GROUP PLC	2,197,481	7,981,435
SYMRISE AG	115,575	7,851,541
ROCHE HOLDING AG	29,360	7,718,226
RECKITT BENCKISER GRP PLC	76,569	7,666,572
WOLSELEY PLC	120,350	6,226,206
AIA GROUP LTD	879,400	5,253,990
LONDON STOCK EXCHANGE GROUP PL	148,329	5,018,624
DAIWA HOUSE INDUSTRY CO LTD	168,600	4,900,723
Total	**4,055,300**	**$69,879,121**

The following chart depicts the growth of $1,000 invested in the KRS international equity portfolios and the blended benchmarks since the beginning of the 2006 fiscal year. For the KRS pension fund ending June 30, 2016, $1,000 would have resulted in $1,233, while the same amount invested in the benchmark would have resulted in $1,209. For the KRS insurance fund, ending June 30, 2016, $1,000 would have grown to $1,226, while an investment in the index would have been valued at $1,189.

Growth of $1,000 - International Equity Portfolio (Non-U.S.)

Portfolio	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Pension Fund Growth	$1,000	$1,244	$1,124	$832	$932	$1,203	$995	$1,159	$1,403	$1,347	$1,233
↘ Performance Benchmark	$1,000	$1,275	$1,144	$808	$897	$1,175	$1,009	$1,151	$1,408	$1,339	$1,209
Insurance Fund Growth	$1,000	$1,242	$1,164	$852	$945	$1,212	$998	$1,157	$1,401	$1,342	$1,226
↘ Performance Benchmark	$1,000	$1,275	$1,144	$808	$884	$1,155	$992	$1,132	$1,384	$1,317	$1,189



The non-U.S. equity portfolio included emerging market equity exposure from 03/31/08 through 06/30/11; a separate growth of a dollar chart for the emerging market equity asset class will be produced once the Systems have experienced a sufficient history within the space. In addition, the non-U.S. equity portfolio growth chart includes the currency overlay for the 2012 fiscal year; in prior years the impact of the currency overlay program was rolled up into the aggregate return of the funds. The Systems no longer employ a currency overlay mandate.

Fixed Income

For the fiscal year ending June 30, 2016, the KRS pension fund's fixed income portfolio returned 4.76% versus to the benchmark return of 7.53%. As the accompanying table indicates, both of the broad market indices, the Barclays Aggregate Index and the Barclays U.S. Universal Index, posted 6.0% and 8.62% respectively for the twelve month period ending June 30, 2016, while the Barclays High Yield Index provided lower returns. The KRS insurance fixed income portfolio posted a 5.11% rate of return, which underperformed the index by 242 basis points.

Over the five year period, the pension fund and the insurance fund slightly outpaced the benchmark. Over the ten year period, the pension fund and insurance funds have both essentially equaled the benchmark return.

Return on Fixed Income

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	4.76%	4.39%	4.74%	5.49%	7.72%
↘ Performance Benchmark[1]	-	7.53%	4.76%	4.35%	5.50%	7.54%
Insurance Fund	Jul-92	5.11%	3.90%	4.41%	5.60%	6.55%
↘ Performance Benchmark[1]	-	7.53%	4.76%	4.35%	5.58%	6.50%
Market Indices						
BC Aggregate	-	6.00%	4.06%	3.76%	5.13%	7.71%
BC Corporate High Yield	-	1.62%	4.18%	5.84%	7.56%	8.94%
BC U.S. Universal	-	8.62%	2.82%	1.89%	4.50%	4.59%

[1]*Pension and Insurance benchmark is the Barclays US Universe and the Barclays US High Yield; this became effective July 1, 2016.*

Top 10 Fixed Income Holdings Pension Fund

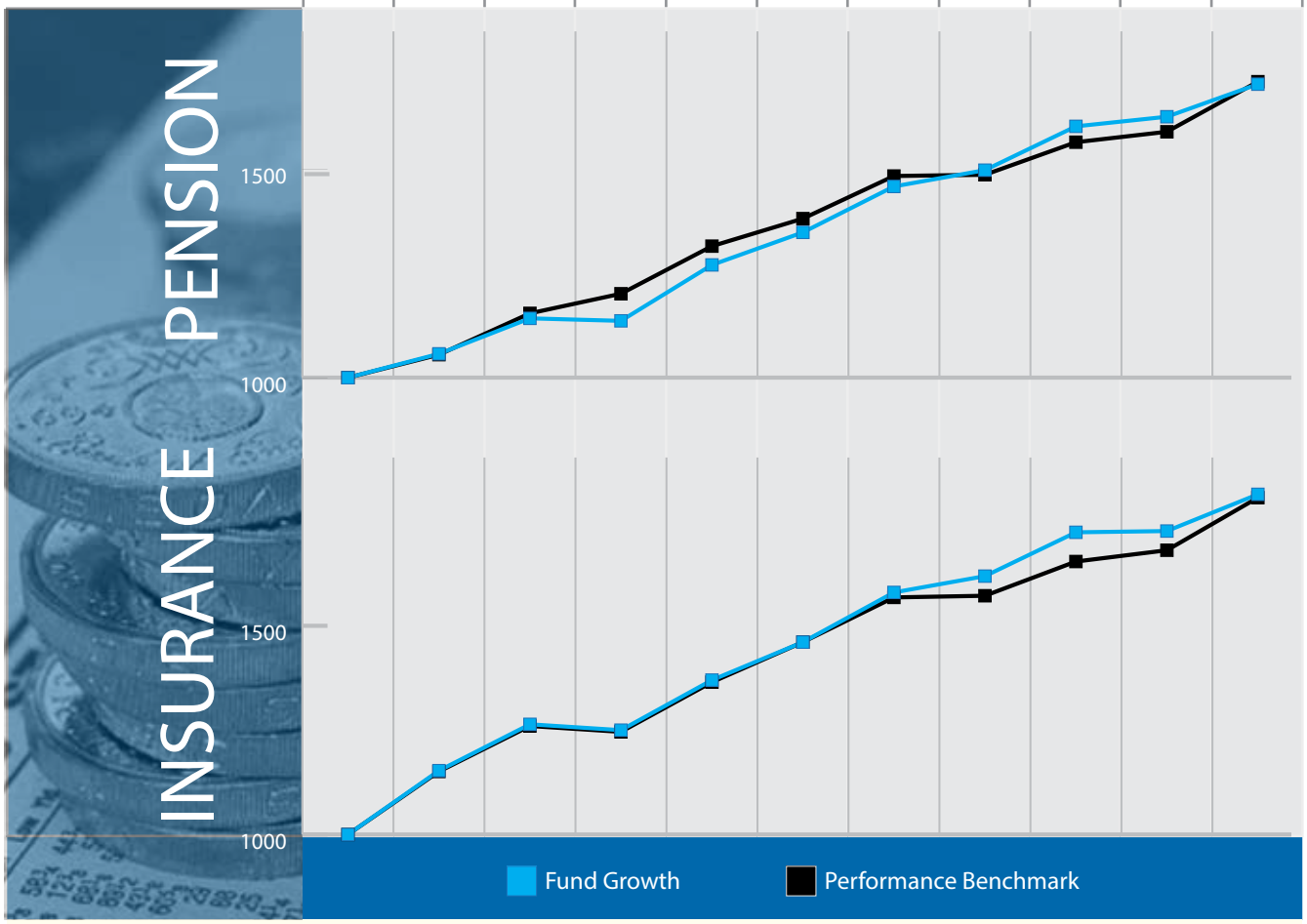
Company	Par Value	Fair Value
MARATHON BLUEGRASS LP	189,233,986	189,233,986
CERBERUS KRS LEVERED LOAN OPP	87,445,902	87,445,902
EB TEMP IVN FD VAR RT 12/31/49 FEE CL 12	12,455,807	12,455,807
U S TREASURY NOTE 1.375% 10/31/2020 DD 10/31/15	8,115,000	8,261,768
U S TREASURY NOTE 1.625% 07/31/2020 DD 07/31/15	7,485,000	7,696,975
EB TEMP IVN FD VAR RT 12/31/49 FEE CL 12	7,207,333	7,207,333
GOVERNMENT OF CANADA 1.500% 01-FEB-2017 SER B600	8,320,000	6,442,346
U S TREASURY NOTE 0.875% 07/15/2018 DD 07/15/15	6,245,000	6,278,667
PHILIPPINE GOVERNMENT BOND 8.000% 07/19/2031	192,600,000	6,129,267
SINGAPORE GOVERNMENT BOND 3.250% 09/01/2020	7,605,000	6,084,452
Total	**$526,713,028**	**$337,236,503**

Top 10 Fixed Income Holdings Insurance Fund

Company	Par Value	Fair Value
MARATHON BLUEGRASS LP	77,482,777	77,482,777
CERBERUS KRS LEVERED LOAN OPP	37,476,815	37,476,815
EB TEMP IVN FD VAR RT 12/31/49 FEE CL 12	6,415,726	6,415,726
EB TEMP IVN FD VAR RT 12/31/49 FEE CL 12	2,569,795	2,569,795
PHILIPPINE GOVERNMENT BOND 8.000% 07/19/2031	75,640,000	2,407,154
GOVERNMENT OF CANADA 1.500% 01-FEB-2017 SER B600	3,060,000	2,369,421
VENTURE IX CDO LTD 9A E 144A VAR RT 10/12/2021 DD 09/27/07	2,297,000	2,233,235
U S TREASURY NOTE 1.625% 07/31/2020 DD 07/31/15	2,095,000	2,154,330
SINGAPORE GOVERNMENT BOND 3.250% 09/01/2020	2,645,000	2,116,157
SINGAPORE GOVERNMENT BOND 2.375% 04/01/2017	2,775,000	2,086,619
Total	**$212,457,113**	**$137,312,029**

Growth of $1,000 - Fixed Income Portfolio

Portfolio	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Pension Fund Growth	$1,000	$1,057	$1,142	$1,136	$1,270	$1,348	$1,458	$1,497	$1,602	$1,625	$1,703
↘ Performance Benchmark	$1,000	$1,055	$1,154	$1,201	$1,315	$1,381	$1,483	$1,486	$1,564	$1,589	$1,709
Insurance Fund Growth	$1,000	$1,153	$1,264	$1,250	$1,370	$1,461	$1,580	$1,619	$1,724	$1,727	$1,815
↘ Performance Benchmark	$1,000	$1,151	$1,260	$1,246	$1,365	$1,461	$1,568	$1,572	$1,654	$1,681	$1,807



a The fixed income portfolio included US TIPS exposure prior to the 2012 fiscal year; the exposure was moved to the real return asset class as part of the new asset allocation rebalance that took place effective 07/01/12. A separate growth of a dollar chart for the real return asset class will be produced once the Systems have experienced a sufficient history within the space.

Private Equity

For the fiscal year ending June 30, 2016, the KRS pension fund's private equity portfolio posted a return of 5.46%; the portfolio consists primarily of investments within private equity limited partnerships. The insurance private equity portfolio returned 10.59%. During the prior fiscal year it was decided that the short-term benchmark (1-, 3-, & 5-year) would match the actual performance experienced by the portfolios due to the difficulty in assessing short term returns. Performance is typically based on appraisals of a business' value, and managers are often slow to mark valuations up or down, which can distort relative performance against a public market benchmark when that index moves dramatically. A better indication of the health of the program would be the mid- to longer-term time periods. This is because businesses have likely been sold and transacted at a true price (rather than estimate of value), thus providing a better performance measurement.

For the five years ending June 30, 2016, the pension and insurance funds' private equity portfolios returned 12.36% and 15.65%, respectively. For the ten year period, the pension fund trailed its benchmark by 264 base points, while the insurance fund also underperformed by 26 basis points. Since its inception in October 1990, the pension portfolio has outpaced its benchmark by an annualized 57 basis points per year, while the insurance portfolio has slightly underperformed its benchmark since its July 2001 inception.

Return on Private Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Oct-90	5.46%	12.36%	12.20%	7.59%	10.83%
↘ Performance Benchmark[1]		5.46%	12.36%	12.20%	10.23%	10.26%
Insurance Fund	Jul-01	10.59%	15.65%	13.78%	9.32%	9.53%
↘ Performance Benchmark[1]		10.59%	15.65%	13.78%	9.58%	9.61%

[1]*Pension and Insurance benchmark 5 years and beyond is the Russell 3000 Quarter Lagged + 400bps. For shorter-term periods, the benchmark matches actual performance experienced.*

Real Estate

For the fiscal year ending June 30, 2016, the KRS pension fund's real estate portfolio gained 9.20%, trailing its benchmark return of 12.62%. The KRS insurance real estate portfolio also fell short of the benchmark, returning 9.75% compared to 12.62%. For the five years ending June 30, 2016, both the pension and insurance fund portfolios underperformed the benchmark's return by 329 basis points and 369 basis points, respectively.

Return on Real Estate[1]

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-84	9.20%	8.37%	8.91%	6.35%	5.83%
↘ Performance Benchmark[1]		12.62%	12.59%	12.20%	5.38%	6.41%
Insurance Fund	May-09	9.75%	8.20%	8.51%	--	8.79%
↘ Performance Benchmark[1]		12.62%	12.59%	12.20%	--	5.63%

[1]Pension and Insurance benchmark is the NCREIF Open-End Diversified Core Gross Non Lagged.

Absolute Return

For the fiscal year, ending June 30, 2016, the KRS pension fund's absolute return portfolio was -6.26% versus its benchmark which was -5.52%. The KRS insurance absolute return portfolio returned -6.17%, while the benchmark was -5.52% for the period. For the five years ending June 30, 2016 the pension and insurance portfolios outperformed their respective benchmarks. Since inception, the Pension and Insurance Portfolio has outperformed the benchmark by 135 basis points and 128 basis points respectively. The portfolio is comprised of three fund of funds, and 18 direct relationships.

Return on Absolute Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-10	-6.26%	2.36%	3.93%	--	3.73%
↘ Performance Benchmark[1]		-5.52%	1.73%	1.66%	--	2.38%
Insurance Fund	Apr-10	-6.17%	2.38%	3.91%	--	3.66%
↘ Performance Benchmark[1]		-5.52%	1.73%	1.66%	--	2.38%

[1]Pension and Insurance benchmark is the HFR FOF: Diversified Lagged.

Real Return

For the fiscal year ending June 30, 2016, the KRS pension fund's real return portfolio returned 1.13% versus its benchmark return of 2.10%. The KRS insurance real return portfolio posted a return of 1.52%, while the benchmark returned 2.57% for the period. Over the past three years, the pension and insurance real return portfolios have outperformed their respective benchmarks by 49 and 31 basis points.

Return on Real Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-11	1.13%	1.91%	3.31%	--	3.31%
↘ Performance Benchmark[1]		2.10%	1.42%	2.65%	--	2.65%
Insurance Fund	Jul-11	1.52%	1.93%	3.11%	--	3.11%
↘ Performance Benchmark[1]		2.57%	1.62%	2.78%	--	2.78%

[1]*Pension and Insurance benchmark is CPI + 300 base points*

Top 10 Alternatives Asset Holdings Pension Fund

Company	SUB ASSET	Fair Value
DANIEL BOONE LLC	ABS RET	329,947,373
PIMCO ALL ASSET FUND-INST	REAL RET	317,862,013
BLACKSTONE HENRY CLAY FUND LLC	ABS RET	308,340,871
NEWPORT COLONELS LLC	ABS RET	143,807,851
DAG VENTURES IV LP	PVT EQ	90,485,657
BAY HILLS EMERGING PARTNERS II LP	PVT EQ	84,151,688
STOCKBRIDGE FUND LP	REAL EST	78,096,435
HARRISON STREET CORE PROPERTY FUND LP	REAL EST	73,124,850
H/2 CREDIT PARTNERS LP	REAL EST	72,997,928
MAGNETAR MTP	REAL RET	69,566,438
Total		**$1,568,381,104**

Top 10 Alternatives Asset Holdings Insurance Fund

Company	SUB ASSET	Fair Value
DANIEL BOONE LLC	ABS RET	130,875,420
BLACKSTONE HENRY CLAY FUND LLC	ABS RET	121,503,696
PIMCO ALL ASSET FUND-INST	REAL RET	104,062,433
NEWPORT COLONELS LLC	ABS RET	54,157,786
BLACKSTONE CAPITAL PARTNERS VI	PVT EQ	37,757,933
STOCKBRIDGE FUND LP	REAL EST	31,581,045
MESA WEST CORE LENDING FUND LP	REAL EST	30,077,154
HARRISON STREET CORE PROPERTY FUND LP	REAL EST	28,798,042
VISTA EQUITY PARTNERS FUND IV LP	PVT EQ	28,616,458
H/2 CREDIT PARTNERS LP	REAL EST	28,388,083
Total		**$595,818,051**

Cash

For the fiscal year, ending June 30, 2016, the KRS pension fund's cash portfolio returned 0.47%, outpacing its benchmark, the Citi Group 3-month Treasury, by 0.14%. The KRS insurance cash portfolio also outperformed the index, posting a return of 0.31% during the same 12 month period.

As the accompanying table indicates, the longer term results from the cash portfolios have also been excellent with compared to their benchmark. For the five years ending June 30, 2016, the pension fund portfolio has outperformed its custom benchmark by 0.30% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.45% per year. The insurance portfolio has also done very well, exceeding its benchmark return over the five-year and since inception periods by 0.22% and 0.13%, respectively.

Return on Cash

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jan-88	0.47%	0.41%	0.36%	1.54%	3.75%
↘ Performance Benchmark[1]		0.14%	0.07%	0.06%	0.96%	3.30%
Insurance Fund	Jul-92	0.31%	0.25%	0.28%	1.28%	2.77%
↘ Performance Benchmark[1]		0.14%	0.07%	0.06%	0.96%	2.64%

[1]*Pension and Insurance benchmark is the Citi Group 3-month Treasury*

Additional Schedules & Required Supplemental Information

Following are additional schedules which indicate the Investment Advisors employed along with the assets each of the firms manages for the Systems, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems as of year ended June 30, 2016.

Investment Advisors & Assets Under Management *(in Thousands)*

Advisor	Assets Under Management
American Century Investments, Kansas City, Kansas	460,321
AMERRA AG Fund II, New York, New York	46,804
Amerra-AGRI Holding	48,249
Anchorage Capital	20,000
Arbor Investments II, Chicago, Illinois	3,475
Arcano Capital, New York, New York	28,678
ARES SSF IV	6,644
Avenue Capital V, New York, New York	37
BAAM	421,020
Bay Hills Emerging Partners I, II, III, San Francisco, California	168,767
BDCM Oppt. Fund IV	17,845
BlackRock Global Investors, San Francisco, California	1,631,915
Blackrock GAO Fund	30,000
Blackstone Alternative Asset Management, New York, New York	-
Blackstone Capital Partners V & VI, New York, New York	117,500
Boston Company	1,689
BTG Pactual	7,027
Cerberus KRS LP	124,923
CM Growth I	13,890
Coatue Qual Ptrns	21,221
Columbia Asset Management, Minneapolis, Minnesota	291,271
Columbia Capital IV, Alexandria, Virginia	19,679
Crestview Partners II, III, New York, New York	64,765
CVC Capital Partners VI, London, England	12,795
DAG Ventures II, III, IV, V QP,	170,135
Davidson-Kempner LP	41,098
DB Private Equity	25,550
DCM VI LP	16,940
DivcoWest IV, San Francisco, California	30,888
DSAM Fund LP	19,979
Essex Woodland VIII, Palo Alto, California	24,414
Finisterre Global Op	25,000
Franklin Templeton, New York, New York	310,084
Glenview Institution	17,091

Investment Advisors & Assets Under Management *(in Thousands)*

Advisor	Assets Under Management
Greenfield Acquisition Partners VI, Westport, Connecticut	57,866
GTCR Golder Rauner IX, Chicago, Illinois	6,686
H/2 Core Real Estate Debt, Stamford, Connecticut	25,690
H/2 Credit Partners, Stamford, Connecticut	101,386
Harrison Street, Chicago, Illinois	101,923
Harvest Partners V & VI, New York, New York	52,593
HBK II, Dallas, Texas	41,399
Hellman & Friedman VI, New York, New York	6,395
H.I.G BIO Venture II, Miami, Florida	7,771
H.I.G. Capital Partners V, Miami, Florida	3,824
H.I.G. Venture Partners II, Miami, Florida	9,866
Horsley Bridge International V LLC, San Francisco, California	55,877
Institutional Venture Partners XI & XII, Menlo Park, California	11,954
Internal TIPS	208,431
Internal U.S. Mid Cap	422,971
Invesco, Atlanta, Georgia	190,732
JANA Partners – New York, NY	17,669
JW Childs Equity III, Boston, Massachusetts	-
Keyhaven Capital Partners, London, England	22,362
Knighthead Capital, New York, New York	18,684
KRS Internal Equity	21
Lazard Asset Management, New York, New York	640,752
Leonard Green & Partners, L.P.,IV, V & VI, Los Angeles, California	119,697
Levine Leichtman V, Los Angeles, California	53,249
LibreMax Capital – New York, NY	20,135
Liquidalts H2O Force – Dublin, Ireland	14,497
Loomis, Sayles & Company, Boston, Massachusetts	142
LSV Asset Management, Chicago, Illinois	567,431
Lubert-Adler VII – Philadelphia, PA	28,871
Luxor Capital, New York, New York	13,486
Magnetar Capital MTP, Evanston, Illinois	107,363
Manulife Financial, Boston, Massachusetts	586,633
Marathon Bluegrass Credit Fund – New York, NY	268,664
Matlin Patterson Global Opportunities I, II, III, New York, New York	33,333
Merit Capital Partners IV, Chicago, Illinois	13,308
Mesa West Core Lending, Los Angeles, California	87,677
MHR Institutional Advisors III, New York, New York	1,696
Mill Road Capital, Greenwich, Connecticut	25,039
Myriad Opportunities – Dublin, Ireland	35,518
New Mountain Partners II & III, New York, New York	65,049
NISA Investment Advisors, St. Louis, Missouri	407,097
Non-U.S. Transition	2,498

Investment Advisors & Assets Under Management *(in Thousands)*

Advisor	Assets Under Management
Northern Trust Global Investors, Chicago, Illinois	446,692
Nuveen Real Asset – Chicago, IL	302,921
Oak Hill Partners II & III, New York, New York	34,679
Oberland Capital – New York, NY	5,687
OCM OPPS FD VIIB – Los Angelos, CA	678
Pacific Alternative Asset Management Company, Irvine, California	197,243
PIMCO, New Port Beach, California	388
PIMCO All-Asset – New York, NY	421,924
Pine River Capital, Minnetonka, MN	19,322
Prima Mortgage, New York, New York	-
Prisma Capital Partners, New York, New York	454,073
Prologis TUSL – San Fransciso, CA	79,126
Pyramis Global Advisors, Boston, Massachusetts*	3,793
QMS Diversidifed Global – Durham, NC	20,359
River Road Asset Management, Louisville, Kentucky	192,547
Riverside Capital VI, New York, New York	33,689
Rubenstein PF II, Oakland, California	25,230
Internal S&P 500	2,302,684
Sasco Capital, Fairfield, Connecticut	61,974
Scopia PX LLC – New York, NY	18,955
Shenkman Capital, Stamford, Connecticut	123,898
Stockbridge, San Francisco, California	109,677
Stone Harbor Investments, New York, New York	-
Sun Capital Partners IV, Boca Raton, Florida	1,152
Systematic Financial Management, Teaneck, New Jersey	265,479
Taurus Mine Finance – Sydney Australia	11,500
Technology Crossover Ventures VI, Palo Alto, California	645
Tenaska Power Fund II, Omaha, Nebraska	1,448
Tortoise Capital, Leawodd, Kansas	96,618
Tourbillon Global – New York, NY	33,887
Transition Account	21
Triton Fund IV, Frankfurt, Germany	14,621
Vantagepoint Venture IV, San Bruno, California	17,396
Vista Equity Partners III & IV, San Francisco, California	90,816
Walton Street Real Estate Fund VI & VII, Chicago, Illinois	69,539
Warburg Pincus IX & X, New York, New York	29,554
Waterfall Investment, New York, New York	176,116
Wayzata Investment Partners I, II, III, Wayzata, Minnesota	34,956
Westfield Capital, Boston, Massachusetts	149,292
Westwood Management, Dallas, Texas	133,776
Total	**$14,678,286**

Master Custodian & Performance Measurement

Bank of New York Mellon, New York, New York

Investment Consultants

ORG Real Property, Cleveland, Ohio
R.V. Kuhns & Associates, Portland, Oregon
Pension Consulting Alliance, Portland, Oregon
Albourne America, LLC, San Francisco, California

Schedule of Commissions Paid *(in Whole Dollars)*

Asset	Total Shares	Commissions Paid	Price per Share
U.S. Equities	61,789,417	$1,572,365	$0.025
	Total Value of Trades	**Commissions Paid**	**As a % of Trade**
Non-U.S. Equities	$1,110,740,037	$1,608,397	0.001%
Total Commissions Paid		**$3,180,761**	

External Investment Expenses *(in Thousands)*

Pension Fund	Fees Paid	Share of Assets
Portfolio Management Expense	$86,695	0.7970%
Custody Expense	944	0.0087%
Consultant	1,141	0.0105%
Total Pension Expense	88,780	0.8162%
Insurance Fund		
Portfolio Management Expense	33,358	0.7884%
Custody Expense	600	0.0142%
Consultant	428	0.0101%
Total Insurance Expense	$34,386	0.8127%
Total Expenses	**$123,167**	**0.8152%**

External Investment Expense - Asset Class/Type Breakdown

Pension Fund

	US Public	Non US Equity	Emerging Mkt	Fixed Income	Real Return	Private Equity	Real Estate	Absolute Return	Cash	Total
Fee for Long Balance	--	1,557	--	--	8	174	--	--	--	**1,739**
Lending Fee Rebate	229,271	(823,364)	--	295,634	399,601	--	--	--	--	**101,142**
Investment Advisory Fees	2,791,275	6,725,327	278,525	5,915,318	5,296,758	9,876,980	5,230,172	6,670,492	--	**42,784,847**
Performance/ Incentive Fees	--	--		1,807,435	1,065,339	27,585,542	3,393,482	349,675	--	**34,201,473**
TMPG Charges	--	(2,697)	--	(5,158)	--	--	--	--	--	**(7,855)**
TMPG Failes Charge	--	--	--	932	--	--	--	--	--	**932**
Stock Loan Fees	278,850	166,946	-	127,155	107,107	-	-	-	-	**680,059**
Miscellaneous	-	--	--	186	--	--	4,980	--	--	**5,166**
Taxes & Insurance	--	--	--	5,599	--	(11,233)	--	--	--	**(5,634)**
Interest Expense	--	--	--	--	--	--	--	--	--	**--**
Other	934	16,450	-	1,123	1,059,306	5,224,880	2,210,149	215,373	200,225	**8,928,440**
Commission on Future Contracts	1,443	-	-	1,384	665	-	-	-	-	**3,492**
Commission on Swaps Contracts	--	--	--	750	--	--	--	--	--	**750**
Miscellaneous Tax	--	--	--	--	--	--	--	--	--	**--**
Consultant Fees	--	--	--	--	--	--	--	--	1,140,465	**$1,140,465**
Custodial Fees	--	--	--	--	--	--	--	--	944,521	**$944,521**
	$3,301,774	**$6,084,219**	**$278,525**	**$8,150,358**	**$7,928,784**	**$42,676,343**	**$10,838,786**	**$7,235,541**	**$2,285,211**	**$88,779,536**
								Financial	Statement Reported Expenses	**$88,779,536**
									Difference	**-**

External Investment Expense - Asset Class/Type Breakdown

Insurance Fund

	U.S. Public	Non U.S. Equity	Emerging Market	Fixed Income	Real Return	Private Equity	Real estate	Absolute Return	Cash	Total
Fee for Long Balance	--	579	--	--	--	80	--	--	--	**659**
Lending Fee Rebate	135,680	(336,376)	--	101,060	175,138	--	--	--	--	**75,502**
Investment Advisory Fees	1,055,403	2,521,226	112,223	2,165,064	2,094,960	4,085,089	2,144,622	2,463,000	--	**16,641,587**
Performance/ Incentive Fees	--	--	--	892,535	445,265	10,700,407	1,382,092	132,195	--	**13,552,494**
TMPG Charges	--	--	--	--	--	--	--	--	--	**--**
TMPG Failes Charge	--	--	--	--	--	--	--	--	--	**--**
Stock Loan Fees	86,348	65,889	--	34,279	35,574	--	--	--	--	**222,090**
Miscellaneous	--	--	--	210	--	--	--	--	--	**210**
Taxes & Insurance	--	--	--	1,936	--	(2,319)	--	--	--	**(383)**
Interest Expense	--	--	--	--	--	--	--	--	--	**--**
Other	381	7,154	--	317	464,810	1,683,944	548,909	84,328	74,863	**2,864,706**
Commission on Future Contracts	649	--	--	480	277	--	--	--	--	**1,406**
Commission on Swaps Contracts	--	--	--	2,822	--	--	--	--	--	2,822
Consultant Fees	--	--	--	--	--	--	--	--	427,986	**427,986**
Custodial Fees	--	--	--	--	--	--	--	--	600,326	**600,326**
	1,278,462	**2,258,472**	**112,223**	**3,195,878**	**3,216,023**	**16,467,203**	**4,075,623**	**2,679,523**	**1,103,176**	**34,386,583**
								Financial Statement Reported Expenses		**$34,386,583**
									Difference	**-**

The Governmental Accounting Standards Board recognizes that it may not be possible or cost-beneficial to separate certain investment expenses from either the related investment income or the general administrative expenses of the plan. KRS has displayed all investment related fees and expenses identifiable and captured by our custodial bank, BNY Mellon and KRS staff.

FAIR VALUES BY PLAN

Pension

	KERS Nonhazardous		KERS Hazardous	
Category	**Fair Value**	**%**	**Fair Value**	**%**
Public Equity	$735,221,184	38.3%	275,313,755	52.4%
US Equity	347,910,679	18.1%	138,819,049	26.4%
Non-US Equity	387,310,505	20.2%	136,494,706	26.0%
Fixed Income	408,326,735	21.3%	62,111,844	11.8%
Global	190,254,683	9.9%	31,665,453	6.0%
Credit	218,072,052	11.4%	30,446,391	5.8%
Real Return	161,920,144	8.4%	44,211,281	8.4%
Private Equity	276,870,464	14.4%	53,860,591	10.2%
Real Estate	73,589,209	3.8%	26,903,744	5.1%
Absolute Return	199,524,353	10.4%	52,174,217	9.9%
Cash	64,235,984	3.3%	9,682,175	1.8%
Miscellaneous	1,832,188	0.1%	1,527,920	0.3%
TOTAL PORTFOLIO	**$1,921,520,261**		**$525,785,527**	

Insurance

Public Equity	$384,488,060	58.6%	$241,096,836	55.4%
US Equity	214,175,982	32.7%	128,245,136	29.5%
Non-US Equity	170,312,078	26.0%	112,851,700	25.9%
Fixed Income	79,833,258	12.2%	52,940,242	12.2%
Global	41,044,496	6.3%	27,431,574	6.3%
Credit	38,788,763	5.9%	25,508,668	5.9%
Real Return	54,616,310	8.3%	36,146,986	8.3%
Private Equity	26,791,442	4.1%	30,966,991	7.1%
Real Estate	29,424,374	4.5%	22,176,146	5.1%
Absolute Return	64,506,056	9.8%	42,806,276	9.8%
Cash	16,328,499	2.5%	9,698,195	2.2%
Miscellaneous	(25,842)	0.0%	(17,170)	0.0%
TOTAL PORTFOLIO	**$655,962,157**		**$435,814,503**	

FAIR VALUES BY PLAN

Pension

	CERS Nonhazardous		CERS Hazardous	
Category	**Fair Value**	**%**	**Fair Value**	**%**
Public Equity	$3,300,615,847	54.1%	$1,073,220,675	53.8%
US Equity	1,706,502,583	28.0%	551,552,310	27.6%
Non-US Equity	1,594,113,264	26.1%	521,668,365	26.1%
Fixed Income	724,228,958	11.9%	237,345,221	11.9%
Global	368,780,491	6.0%	121,014,491	6.1%
Credit	355,448,467	5.8%	116,330,730	5.9%
Real Return	515,961,497	8.5%	168,442,914	8.4%
Private Equity	554,908,918	9.1%	189,743,049	9.5%
Real Estate	302,088,274	5.0%	95,314,882	4.8%
Absolute Return	621,862,634	10.2%	197,056,235	9.9%
Cash	78,184,606	1.3%	33,766,025	1.7%
Miscellaneous	1,533,945	0.0%	1,783,175	0.1%
TOTAL PORTFOLIO	**$6,099,384,678**		**$1,996,672,176**	

Insurance

Public Equity	$1,028,135,363	54.2%	$488,667,596	53.8%
US Equity	534,769,607	28.2%	291,535,805	27.8%
Non-US Equity	493,365,756	26.0%	273,229,931	26.0%
Fixed Income	230,800,934	12.2%	19,340,372	12.1%
Global	119,318,484	6.3%	9,918,825	6.2%
Credit	111,482,450	5.9%	9,421,547	5.9%
Real Return	158,268,667	8.3%	13,212,329	8.3%
Private Equity	172,400,958	9.1%	96,598,459	9.2%
Real Estate	96,158,160	5.1%	52,708,229	5.0%
Absolute Return	183,089,376	9.7%	102,551,266	9.8%
Cash	28,877,022	1.5%	18,698,615	1.8%
Miscellaneous	(74,823)	0.0%	(41,401)	0.0%
TOTAL PORTFOLIO	**$1,897,655,657**		**$867,833,604**	

FAIR VALUES BY PLAN

Pension

	SPRS	
Category	**Fair Value**	**%**
Public Equity	$ 96,459,764	46.4%
US Equity	49,257,415	23.7%
Non-US Equity	47,202,349	22.7%
Fixed Income	36,545,185	17.6%
Global	18,619,785	9.0%
Credit	17,925,400	8.6%
Real Return	17,715,758	8.5%
Private Equity	20,961,331	10.1%
Real Estate	11,071,486	5.3%
Absolute Return	21,017,156	10.1%
Cash	3,573,370	1.7%
Miscellaneous	360,088	0.2%
TOTAL PORTFOLIO	**$207,704,138**	

Insurance

Public Equity	$85,353,190	53.3%
US Equity	43,821,923	27.4%
Non-US Equity	41,531,267	25.9%
Fixed Income	19,340,372	12.1%
Global	9,918,825	6.2%
Credit	9,421,547	5.9%
Real Return	13,212,329	8.3%
Private Equity	14,897,656	9.3%
Real Estate	8,438,549	5.3%
Absolute Return	16,050,308	10.0%
Cash	2,815,999	1.8%
Miscellaneous	(6,334)	0.0%
TOTAL PORTFOLIO	**$160,102,070**	

FAIR VALUES - Total KRS

Pension

Category	Fair Value	%
Public Equity	$5,480,831,225	51.0%
US Equity	2,794,042,036	26.0%
Non-US Equity	2,686,789,189	25.0%
Fixed Income	1,468,557,943	13.7%
Global	730,334,903	6.8%
Credit	738,223,040	6.9%
Real Return	908,251,594	8.4%
Private Equity	1,096,344,353	10.2%
Real Estate	508,967,595	4.7%
Absolute Return	1,091,634,595	10.2%
Cash	189,442,160	1.8%
Miscellaneous	7,037,316	0.1%
TOTAL PORTFOLIO	**$10,751,066,780**	

Insurance

Public Equity	$2,227,741,045	55.5%
US Equity	1,212,548,453	30.2%
Non-US Equity	1,091,290,732	27.2%
Fixed Income	402,255,178	10.0%
Global	207,632,203	5.2%
Credit	194,622,975	4.8%
Real Return	275,456,620	6.9%
Private Equity	341,655,507	8.5%
Real Estate	208,905,457	5.2%
Absolute Return	409,003,282	10.2%
Cash	76,418,331	1.9%
Miscellaneous	(165,570)	0.0%
TOTAL PORTFOLIO	**$4,017,367,991**	

Letters from Investment Consultants

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Dear KRS Board,

Economic Review

Leading into the fiscal year, risk assets experienced volatile trading days as global markets reacted to currency movements and default risk in Greece. The unrest continued beyond July 1 (the start of FY 2015-2016). In August of 2015, the People's Bank of China (PBOC) stunned investors by devaluing the Yuan against the U.S. dollar. Global equity markets responded with a greater than 8% decline within the eight days following the surprise move. Fixed income markets provided a modest buffer for investors, as a flight to quality pushed interest rates lower in developed markets.

While most global nations struggled to spark economic growth, the U.S. economy proved resilient enough for the Federal Reserve Open Market Committee (FOMC) to raise the Federal Funds rate by 0.25% in December of 2015. This marked the first major Central Bank to diverge from the far more common monetary easing policies employed by most developed countries. After raising the key rate, FOMC communicated a more dovish policy stance throughout 2016 that kept the rate unchanged. In general, FOMC factored in weakening non-U.S. financial conditions in its expectations for domestic growth and inflation to a greater degree than it had previously.

Contrary to the U.S., the European Central Bank (ECB) expanded monetary stimulus measures, extending the quantitative easing program by six months and lowering the deposit rate to -0.3%. A negative interest rate meant the ECB would charge banks when they deposited money at the central bank as part of their regular banking operations. The "fee" is akin to a penalty for banks and is designed to encourage them to lend to businesses and consumers in order to increase capital flow and fuel economic activity. The same held true for the Bank of Japan (BoJ), which also announced additional monetary stimulus and enacted a negative interest rate policy on marginal new reserves. Despite these actions, results of these efforts were disappointing with the Yen and Euro strengthening relative to the U.S. Dollar. Data showed 36% of outstanding global developed market government debt yielded less than 0% at June 30, 2016. Toward the end of June, uncertainty around the Brexit vote dominated the news flow and catalyzed a flight to safety across risk assets following the surprising outcome that U.K. citizens voted to exit the European Union.

Measures of market-based inflation expectations in the U.S. remained below the Fed's target 2.0% during the fiscal year. The 10-year break-even inflation rate fell from a July 1, 2015 level of 1.9% to 1.4% by fiscal year-end. The Purchasing Managers Index rose above the 50.0 mark, indicating expansion in the U.S., and the ISM Purchasing Managers Index (PMI), which measures the health of the manufacturing sector, sank to a reading of 48.2, a post-recession low, before rising to growth-oriented 53.2 by fiscal year-end. The unemployment rate fell just below 5.0% to 4.9% by June 30 even as more workers entered the labor force.

Capital markets experienced a mix of headwinds and tailwinds that prevented scores of public and private institutional investors from achieving high target returns for the year ending June 30, 2016. Headwinds included substantial U.S. dollar strengthening, diverging central bank monetary policies, commodity market dislocations, and emerging market asset volatility. World equity, bond, and commodity markets each ended calendar year 2015 in negative territory, with commodities and emerging market equities suffering the largest declines. The S&P 500 barely bucked the trend, finishing the calendar year with marginal gains.

The second half of the fiscal year began with sharp declines in equity and commodity markets that subsequently reversed due to renewed optimism and a weaker U.S. Dollar. Global fixed income appreciated as concern over disinflationary pressure and weak global growth led several developed market central banks to intensify accommodative monetary policies and lower interest rates to negative territory. In the U.S., investors reacted

positively to the Fed's initial shift toward a less aggressive monetary policy. The U.S. Dollar reacted accordingly, reversing a prolonged strengthening trend. The weakening Dollar provided price support to dollar-based commodities and served as a tailwind for emerging market equity and debt assets. Despite the U.S. Dollar tailwind for emerging markets, the surprise Brexit vote led to sharp initial declines in developed market equities, though markets quickly recovered in July 2016 following a series of dovish statements from central banks.

The table below displays key domestic economic indicators as of June 30, 2016.

Domestic Economic Indicators
As of June 30, 2016

	June 2016	June 2015	Yr/ Yr	10 Year	20 Year
Capacity Utilization	75.37%	77.82%	▼	76.32%	78.02%
Unemployment Rate	4.90%	5.30%	▼	7.00%	6.00%
PMI - Manufacturing	53.20%	53.50%	▼	51.90%	52.20%
Baltic Dry Index - Shipping	660	800	▼	2,654	2,308
Real GDP YoY	1.20%	2.30%	▼	1.40%	2.40%
Consumer Confidence (Conf. Bd.)	97.40	99.76	▼	74.73	93.21
Breakeven Inflation - 10 Year*	1.44%	1.89%	▼	2.05%	N/A
CPI YoY (Headline)**	1.00%	0.10%	▲	1.80%	2.20%
CPI YoY (Core)**	2.30%	1.80%	▲	1.90%	2.00%
PPI YoY	-2.00%	-2.60%	▲	2.00%	2.00%
M2 YoY	7.00%	5.80%	▲	6.40%	6.30%
Federal Funds Rate (%)	0.30%	0.08%	▲	1.07%	2.47%
US Dollar Total Weighted Index	90.64	89.94	▲	78.17	86.76
WTI Crude Oil per Barrel	$48	$59	▼	$80	$55
Gold Spot per Oz***	$1,322	$1,172	▲	$1,176	$762

*Breakeven Inflation does not have 20 years of history; therefore, its 20-year average is shown as N/A.
**CPI figures are cyclically adjusted. ***10- and 20-year average Gold spot prices are adjusted for inflation.

Capital Markets Review

Global Equity

U.S. equity markets outperformed international markets for the fiscal year, as evidenced by the Russell 3000 Index returning 2.1%, compared to -10.2% for the MSCI EAFE and -12.1% for the MSCI Emerging Market indices (in U.S. dollar terms).

U.S. equity markets ended the first fiscal quarter (CY3Q15) in negative territory in response to the global sell-off in August and September. However, the increased volatility benefited active management over passive management during the quarter. The Russell 2000 and Microcap indices suffered the largest losses, finishing the quarter at -11.9% and -13.8%, respectively, due in large part to losses in biotechnology stocks. Large-cap stocks fared the best, but still ended the quarter in negative territory with the Russell 1000 Index returning -6.8%.

The U.S. equity market recovered during the second fiscal quarter (CY4Q15), erasing losses incurred during the global sell-off in August. Despite poor performance mid-quarter, the Russell 3000 Index finished the quarter up 6.3%. Growth leadership persisted across the market cap spectrum and large-cap stocks continued to outpace small-cap stocks.

Despite a sharp uptick in volatility, the U.S. equity market began 2016 in positive territory, as strong March gains erased heavy losses incurred during a January market sell-off. The Russell 3000 Index returned 1.0%, and was led

by defensive sectors, which benefitted from expectations of a continued low interest rate environment and general economic uncertainty. These market conditions proved difficult to navigate for active management, especially for managers who favored exposure to cyclical and growth-oriented sectors.

U.S. equity markets finished the fourth fiscal quarter (CY2Q16) in positive territory across all market capitalization ranges and styles, with the Russell 3000 Index rising 2.6%. Historically stable sectors such as utilities, consumer staples, and telecom continued to post strong gains as market volatility persisted and notably rallied in the final week of the quarter amidst the uncertainty created by the UK's European Union (EU) referendum.

In contrast to domestic equity markets, developed international markets finished the fiscal year with only one quarter of positive returns (CY4Q15). While the dispersion between international growth and value reversed temporarily in the second fiscal quarter, the MSCI EAFE Growth finished the first half of the fiscal year with a return of -4.8% versus -15.4% for the MSCI EAFE Value. Developed international small cap stocks finished the first half nearly flat, but the start of 2016 proved more difficult and culminated with the UK's EU referendum. The vote caused a sharp increase in market volatility, particularly in developed Europe. Over the fiscal year, MSCI EAFE Small Cap Index returned -3.7% and the MSCI EAFE Index declined 10.2%.

Global Fixed Income

Fixed income markets, both domestic and international performed well over the fiscal year. The Barclays U.S. Aggregate Index returned 6.0% while the Barclays Global Aggregate Index rose 8.9%.

U.S. fixed income fell during the second fiscal quarter (CY4Q15), posting a -0.6% return, but rebounded sharply during the final two quarters of the fiscal year as the Barclays U.S. Aggregate Index returned 3.0% and 2.2%, respectively. Strong performance in early 2016 can be attributed to the Fed's shift toward a more accommodative monetary policy, a rebound in energy prices, and a stabilization of volatility in the markets. U.S. high yield suffered losses in the first half of the fiscal year (CY2H15) due to depressed oil and commodity prices but reversed course in 2016 with the Barclays U.S. Corp High Yield Index gaining 9.1% over the final two quarters and finishing the fiscal year with a return of 1.6%.

Emerging market debt (EMD) faced strong headwinds in the second half of 2015 as a strengthening U.S. Dollar hurt local currency bonds. However, both local and hard currency emerging market bonds posted strong returns during the first two quarters of 2016.

Real Return

Real return strategies had mixed results over the fiscal year. REITs performed well in every quarter while U.S. TIPS struggled in the first half of the fiscal year before rebounding in the second half. Commodities finished the fiscal year with a strong quarter but had large losses overall due to a continued reduction of inflation expectations caused by a strengthening U.S. Dollar and sharp declines in commodity prices. A large drop in crude oil prices was perhaps the most obvious source of deflationary pressure in the fourth quarter of 2015.

Although the market's expectation for future inflation did not increase over the first quarter of 2016, inflation-sensitive asset classes benefited from a rising CPI. Most real return strategies provided strong performance during the final quarter of the fiscal year with relatively narrow divergence, although commodities exposure and energy allocations performed the strongest. In a quarter of robust performance among most inflation-sensitive assets, managers with larger TIPS allocations tended to lag the group despite still outperforming several major equity market indices.

Real Estate

Core U.S. Real Estate performed consistently well during the fiscal year, which concluded with the NCREIF-ODCE Index recording its 25th consecutive positive quarterly return. Capital continued to flow into U.S. real estate as investors sought shelter from global uncertainty. Even as valuations surpass pre-crisis peaks in certain sectors, the U.S. real estate market fundamentals remained strong with low vacancy rates and consistent rent growth.

Absolute Return

Hedge funds posted mixed results on a quarterly basis, but were negative overall with the HFRI Fund of Fund Diversified Index posting a -4.9% for the fiscal year. August and September were particularly difficult as the market sell-off negatively affected most fundamental strategies. Distressed strategies faced headwinds in the first half of the fiscal year as credit spreads widened. Macro strategies, which performed relatively well in the first fiscal quarter, had a difficult second quarter due to unexpected trends in European currency and bond markets following a weaker than expected easing announcement from the ECB in December.

The hedge fund industry continued to perform poorly during the first quarter of 2016. Long/Short Equity managers with over-weights to heavily trafficked sectors like healthcare, technology, and financials had a difficult quarter to start the year. However, merger-arbitrage strategies advanced based on wide deal spreads and continued robust M&A activity. Hedge funds performed better in the final quarter of the fiscal year, especially those with diversified strategies and higher exposures to merger arbitrage.

The following table summarizes the returns earned by the major markets for the trailing one-year period ending June 30, 2016.

One-Year Trailing Asset Class Performance
As of June 30, 2016

Index	Description	Return
S&P 500	Large Cap U.S. Equity	3.99
R Mid Cap	Mid Cap U.S. Equity	0.56
R 2000	Small Cap U.S. Equity	-6.73
MSCI EAFE (Gross)	Large Cap Intl Equity	-9.72
MSCI EAFE SC (Gross)	Small Cap Intl Equity	-3.32
MSCI Emg Mkts (Gross)	Emerging Mkts Equity	-11.71
Barclays US Agg Bond	U.S. Invmt Grade Bonds	6.00
Barclays US Trsy	U.S. Treasury Bonds	6.22
Barclays US Trsy: US TIPS	U.S. TIPS	4.35
Barclays US Corp: Hi Yld	U.S. High Yield Bonds	1.62
Wilshire US REIT	U.S. Real Estate Inv Trusts	22.82
NCREIF ODCE (Gross)	U.S. Open End Core Real Estate	11.82
HFRI FOF Diversified	Absolute Return	-4.86
BofA ML 3 Mo US T-Bill	U.S. Cash Equivalents	0.19

The Investment Policy Statement requires the Board to conduct and asset-liability study every five years.

Asset Allocation Review

The Board formally reviewed the asset allocation for each of the pension and insurance plans during the fiscal year. This year's review took into account the 2015 asset liability study RVK presented to the Board during the end of the prior fiscal year . The study is a valuable tool that informs the Board on how to structure the investments of each plan based on projected liabilities and forecasted net cash flows using certain actuarial assumptions.

Results of the asset liability study indicated that some of the pension plans (CERS Non Hazardous, CERS Hazardous, and KERS Hazardous) and all of the insurance plans allow for a growth-oriented portfolio invested in a diverse mix of liquid and alternative investments that target a 7.5% actuarial return. These plans exhibited a healthy and improving set of market funded ratios and payout ratios over the next 20 years. Given these results and the steady decrease in capital market assumptions over the past several years, the Board approved new asset allocation targets for the CERS Non Hazardous, CERS Hazardous, and KERS Hazardous pension plans and all five of the insurance plans. The new targets increased the allocation to global equity and decreased the allocation to fixed income in order to improve the probability of achieving a 7.5% long-term return goal. While this may increase the risk of the plans, they are projected to be healthy enough to withstand the potential volatility as tested through stress test analyses.

Regarding the KERS Non Hazardous and State Police pension plans, results of the asset liability study indicated that these plans are severely underfunded (having funded ratios of less than 40%) and they should maintain higher levels of liquidity and change allocations to mitigate downside volatility. To achieve these goals, primarily mitigating downside capital losses, the plans need to target a return below the 7.5% actuarial return targeted for the healthier plans. The Investment Committee and the Board discussed winding down the private equity allocation (i.e., no new investments) in order to increase liquidity levels of the distressed pension plans, but deferred making a decision until there is clarity on the Legislature's commitment to making the actuarially required contribution payment to the KRS plans. The target allocations for the KERS Non Hazardous plan was modestly changed, with a decrease in real return and cash, and an increase in fixed income and real estate. The State Police Pension plan modestly decreased its real return target allocation in favor of an increase to its U.S. equity target allocation.

Pension Plan Review

The combined market value of the Kentucky Retirement System (System) Pension Plan assets (collectively called hereafter, "the Pension Fund") decreased from $11.5 billion on June 30, 2015 to $10.7 billion on June 30, 2016. The Pension Fund's investments collectively declined 0.5%, net of fees , for the fiscal year. Compared to the 0.3% return earned by its target allocation benchmark, the Pension Fund underperformed by approximately 80 basis points. The Pension Fund's three- and five-year annualized net returns of 5.5% and 5.4%, respectively, underperformed the target allocation benchmark returns by approximately 90 basis points and 120 basis points, respectively. During the prior fiscal year (2014-2015), the Board approved a downward revision of the actuarial assumed rate of return, from 7.75% to 7.5% for some of the pension plans (CERS Non Hazardous, CERS Hazardous, and KERS Hazardous) and all of the insurance plans. During the 2015-2016 fiscal year, the Board approved the actuarial rate for the poorly funded pension plans (KERS Non Hazardous and State Police Pension) to be revised to 6.75%. Since the Pension Fund's inception (April-1984), it has generated an annual return of 9.0%, exceeding the Fund's actuarial assumed rate of return.

The System's current Pension Fund investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The System also invests in

All plan returns are net of fees as provided by the custodian bank, BNYMellon.

real return strategies, real estate, absolute return strategies, and private equity. The Board aggressively negotiates fees on all investments.

The table below shows the aggregate pension plan asset allocation as of June 30, 2016, relative to the individual target allocations.

Kentucky Retirement Systems
Pension Plan
Asset Allocation vs. Target Allocation

	Market Value ($)	Allocation (%)	KERS Target (%)	KERS - H Target (%)	CERS Target (%)	CERS - H Target (%)	SPRS Target (%)
U.S. Equity	2,794,042,039	26.0	22.0	26.5	26.5	26.5	23.0
Non-U.S. Equity	2,686,789,184	25.0	20.0	26.5	26.5	26.5	23.0
Fixed Income	1,468,557,940	13.7	22.0	12.0	12.0	12.0	18.0
Real Return	908,251,593	8.4	8.0	8.0	8.0	8.0	8.0
Real Estate	508,967,596	4.7	5.0	5.0	5.0	5.0	5.0
Absolute Return	1,091,634,599	10.2	10.0	10.0	10.0	10.0	10.0
Private Equity	1,096,344,352	10.2	10.0	10.0	10.0	10.0	10.0
Cash Equivalent	189,442,160	1.8	3.0	2.0	2.0	2.0	3.0
Other	7,037,315	0.1	-	-	-	-	-
Total	**10,751,066,778**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

2016, relative to the individual target allocations.

The current deviations of each plan are within an allowable and acceptable range. The allocations across plans differ based on plan-specific liquidity requirements.

Insurance Plan Review

The combined market value of the Kentucky Retirement System Insurance Plan assets (collectively called hereafter, "the Insurance Fund") stayed mostly unchanged at $4.2 billion as of June 30, 2016, from the prior fiscal year end. The Insurance Fund's investments returned -0.1% (net of fees) for the fiscal year, trailing the target allocation benchmark of 0.7% by approximately 80 basis points. The Insurance Fund's three-year annualized return of 5.4% underperformed the target allocation benchmark of 6.3%, and the five-year annualized return of 4.8% fell short of its benchmark's return of 6.0% by approximately 120 basis points. The Insurance Fund also currently targets an actuarial assumed rate of return of 7.5%. Since its inception of April-1987, the Insurance Fund has modestly underperformed its funding target by 30 basis points on an annual basis.

The Insurance Fund investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The System also invests in real return strategies, real estate, absolute return strategies, and private equity. The Board aggressively negotiates fees on all investments.

[1] All plan returns are net of fees as provided by the custodian bank, BNYMellon

Kentucky Retirement Systems
Insurance Plan
Asset Allocation vs. Target Allocation

	Market Value ($)	Allocation (%)	Insurance Target (%)
U.S. Equity	1,212,548,453	28.9	26.5
Non-U.S. Equity	1,091,290,733	26.0	26.5
Fixed Income	510,574,141	12.2	12.0
Real Return	349,720,954	8.3	8.0
Real Estate	208,905,457	5.0	5.0
Absolute Return	409,003,284	9.7	10.0
Private Equity	341,655,508	8.1	10.0
Cash Equivalent	76,418,331	1.8	2.0
Total	**4,199,951,291**	**100.0**	**100.0**

The table below shows aggregate actual and target allocations as of June 30, 2016.

The current deviations of the actual allocation from the target allocation are within an allowable and acceptable range. For less liquid asset classes (private equity), it may take years before the current allocation is in line with the target allocation.

Investment Portfolio Review – Pension Plan

Global Equities

The U.S. equity composite returned 1.4% for the year. Active management among all cap mandates were most challenged, while manager selection in small cap equity added value. In concert with the increased allocation to global equities, the U.S. equity portfolio was restructured to include an internally managed alternative index mandate based on the Scientific Beta U.S. Multi-Beta Diversified Multi-Strategy Index. This mandate will eventually replace the internally managed S&P 500 Index as the core holdings for the KRS Pension and Insurance U.S. equity portfolios, serving as a cost effective, additional source of alpha with a reduced level of risk compared to the traditional cap-weighted index.

During the next fiscal year, additional analysis and restructuring will be conducted within the U.S. equity portfolio to reset the core/satellite structure. The focus will be on reallocating assets between the passive index portfolio and the high conviction, concentrated "satellite" investments, reducing the number of active managers in the composite, and controlling total fees.

The non-U.S. equity composite returned -8.5% for the fiscal year. While currency issues, political unrest, and the Brexit vote challenged international equity markets throughout the fiscal year, the majority of the active managers in the composite generated alpha relative to their individual benchmark. The completion and implementation of an optimization study on the international composite has yielded positive results and mitigated downside losses during a difficult year. The study led to increasing allocations to high conviction managers while carefully balancing

the expected higher alpha against the portfolio's total cost and tracking error. In particular, the dedicated emerging market equity mandates merged into larger, broader global-ex U.S. mandates to allow skilled investment managers to determine the dynamic allocations between developed and developing markets. The consolidation also served to lower fees.

Global Fixed Income

The fixed income composite returned 4.8%, supported by the majority of the fixed income mandates outperforming their respective benchmarks. At the start of the second half of the fiscal year, the benchmark for the composite changed to 50% Barclays U.S. Universal Bond Index (a global fixed income benchmark) + 50% U.S. High Yield Index. The portfolio continues to transition toward better matching the new blended benchmark into the next fiscal year. However, it is expected that meaningful performance discrepancies may continue between the actual portfolio and the benchmark within periods one year or less. Part of that longer-term view results from the addition of a multi-sector/opportunistic fixed income mandate intended to provide greater investment flexibility in an anticipated challenging environment for global fixed income. The strategy has a 2-3 year investment horizon. In addition, the composite's allocation to dedicated high yield mandates was reduced and the dedicated emerging market debt mandate was eliminated. The negative outlook for the emerging market debt sector led to the decision to invest in that segment on an opportunistic basis rather than maintain a strategic target allocation.

The cash and equivalents held in the portfolio are not expected to add significant value to the portfolio. Instead, the goal is to hold cash close to the target allocation to meet outflow obligation while earning a return in line with 3-month Treasury Bills. For the fiscal year, the cash equivalents portfolio earned 0.5%.

Alternatives

The real return composite continuously invests and harvests investments according to a long-term pacing model. The composite continued to reallocate investments from the Treasury Inflation Protected Securities (TIPS) portfolio into diversified, inflation-sensitive strategies, like agricultural, timberland, and energy-related investments. With the guidance of a dedicated consultant, there is a plan to continue building a multi-strategy portfolio that collectively offers inflation protection with capital appreciation. Some of the new, less-liquid investments will take time to mature before benefiting the total plan. For the fiscal year, the real return composite generated a 1.1% return.

The real estate composite continually evolves as new deals are sourced, funded, and harvested in a prudent manner. Like many of the real asset investments, the private real estate funds are more appropriately measured over longer periods as they mature. Over the fiscal year, the real estate portfolio posted a 9.2% return. One area of focus during the fiscal year was on real estate related investments with higher income generating potential and shorter lock up periods.

The absolute return portfolio was originally developed with fund-of-hedge funds to gain immediate exposure to the space. During the fiscal year and into the next, the fund-of-hedge funds will continue to wind down and serve as sources of capital to fund other direct, less expensive strategies that will mitigate market risk but produce positive returns over time. During the fiscal year, the absolute return portfolio declined 6.3% return amid macroeconomic events that have adversely affected several hedging strategies.

The private equity portfolio continually evolves as new deals are sourced and funded in a prudent manner. Because the private equity funds are closed-end funds with the ability to exit after ten plus years, it is more appropriate to measure the returns over periods much longer than a 12-month period. The private equity portfolio generated a fiscal year rate of return of 5.5%.

Investment Portfolio Review – Insurance Plan

The Insurance Plan invests in a similar manner as the Pension Plan, with the exception of a few certain investments across the portfolio. Although the insurance plan returns slightly differ from the returns earned in the pension plan due to investment restrictions, the relative under/outperformance of the asset class composites were similar for the fiscal year.

Board Initiatives

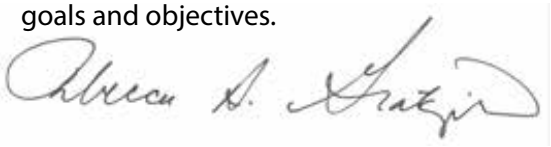
As previously mentioned, the Board approved changes to the Plans' target asset allocation based on results from the recent asset liability study that better align the liabilities and net cash flows of the pension and insurance plans with the investment asset allocation. The Board will continue to monitor target allocations and will consider making additional asset allocation changes if significant changes to the Plans occur, including the Legislature's future commitment to making contributions to the Plans. Within each asset class, the Board continues to review opportunities to maximize risk-adjusted returns that positively contribute to the long-term returns of the Plans as well as manage the costs borne by the Plans.

Oversight

The KRS Board, Investment Committee, and staff regularly monitor the System's investment policies, goals, objectives, and performance of its assets with the assistance of RVK and their specialist consultants. These evaluations include reviews of the investment management firms and the custodial bank that serve the System. Market values and investment performance returns referenced above are based upon financial statements prepared by Bank of New York Mellon (previously prepared by Northern Trust) in their capacity as the custodian bank. We rely on their data and have not independently audited those statements. However, their financial statements are, to the best of our knowledge, believed to be reliable.

Summary

The years following the great financial crisis in 2008 have been quite volatile across all markets with winners and losers switching places year after year. The unpredictability of market forces affecting investment strategies in different ways over the years has required investor patience and heightened stewardship by the Board as it executes its duty of care over the obligations owed to the System's employees and retirees. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the System to meet its long-term goals and objectives.



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Real Return - Fiscal Year Market Commentary

Global economic conditions remained timid for the last fiscal year with modest improvements in the US economy offset by continued weakness in Europe and elsewhere. Real asset highlights included a continued softening of the US agriculture land values, compression of returns in infrastructure, and stabilization of oil prices in the mid-$40USD range. The lack of meaningful growth outside of the US has failed to stabilize commodity markets and continues to weigh heavily on a majority of indices; particularly the metals and energy subsectors. Metals and energy are dependent on global growth as opposed to the regional influences that impact timber, agriculture, and infrastructure. Gold rose modestly from the $1100 range to $1300 - $1400, an indication of modest concern for inflation by traders. The US Federal Reserve remained on hold, but concern about inflation was enough to posture for a rate increase as labor conditions in the US continued to tighten. Most indicators project a prolonged low interest rate environment with moderate upward pressure on both asset and monetary inflation over the medium-term. The net impact for Real Asset sub strategies was mixed. Core infrastructure return profiles continued to compress as capital flowed into the space and competition for transactions increased with institutional investors showing no sign of slowing in the current low rate environment. Value-added and mid-market infrastructure continued to perform well as operational mangers and sector specific strategies fared well.

Agricultural assets continue to show signs of moderate valuation adjustments in regions such as the US Midwest and other locations that had previously witnessed strong valuation increases. Timber assets have experienced performance profiles in line with a combination of biological and local inflationary influences. Energy prices may have found bottom in January but volatility continued as oil traded from $27.50 - $50.20 throughout the year but most recently in the mid $40s. This has provided a level of stability for liquid managers such as MLPs and opens up opportunities for private markets in distress as a number of funds have been forced into recapitalization. This has had a positive impact on the portfolio which has been conservatively positioned.

Real Return - Discussion

The KRS Real Return portfolio has historically focused on more conservative, income-oriented strategies balanced with opportunistic funds designed to take advantage of inflation participation during periods of economic growth. This has resulted in a low volatility portfolio that has not witnessed the drawdowns associated with broader generic indices. The process of portfolio construction has involved in-depth analysis by staff, in conjunction with Albourne, and extensive due diligence including onsite visits with a wide array of managers. By focusing on income generating strategies, the portfolio continues to rely heavily on the cash flow characteristics of the underlying strategies.
The past year has been relatively quiet with respect to allocations and capital return is beginning to accelerate. International investments have been slow to draw down due to continued instability in emerging markets as managers chose to hold back and continue to be selective in allocations to new projects. Liquidity considerations will continue to be emphasized over the short term and we will continue to source opportunities that focus on inflation linked income characteristics and inflation protection through participation. Reallocation strategies will be considered based on their relative attractiveness to other opportunities and liquidity will be closely monitored.

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Absolute Return – Fiscal Year Market Commentary

The fiscal year started off on a mixed note in July 2015, with markets rebounding after concerns over the future of Greece in the EU. There was also significant volatility in Chinese markets as regulators looked to stem capital outflows. Sovereign credit spreads tightened during the month, particularly for peripheral European issuers, and the US dollar strengthened as FOMC statements kept a 2015 rate rise on the table. July was mixed in the hedge fund space with flat performance overall. Momentum helped certain strategies, including global macro and CTAs, but most other strategies were slightly down for the month.

August saw a pickup in volatility as concerns around China drove a large and broad sell-off in risk assets. Equity markets bore the brunt of the selling with most major markets down over 10% at some point during the month. Credit and commodities also suffered. Hedge funds struggled in August with higher beta equity and event driven strategies suffering the most. Relative value strategies were broadly flat and CTAs lost significant ground as markets bounced towards the end of the month, reversing the previous trend.

Investors remained concerned about the slowdown in China and lack of clarity regarding future central bank policy, causing the risk off environment to continue through September. Against this backdrop, higher beta hedge fund strategies continued to suffer while macro and relative value strategies generally performed well.

Equity, credit and commodity markets bounced back in October. There was substantial dispersion within the hedge fund space during the month, creating the widest spread in performance between the four super strategies since mid-2012. Equity long/short and event driven strategies performed well while relative value and macro strategies were down modestly.

November was a quieter month, although there was continued sector and regional dispersion. Investors in developed markets were buoyed by central bank expectations but global equities finished in negative territory. The US dollar strengthened during the month and the broad based commodity sell-off resumed after a strong October. It was a mixed month for hedge funds, though on average we saw positive performance. CTAs were up the most, benefitting from commodity weakness. Most other strategies were flat to slightly down for the month.

December proved to be another interesting month for markets, ending a challenging 2015. Almost all equity markets were down on the month and there was disruption in the high yield credit space as well, with reports of select funds suffering severe redemption pressure. Given this substantial market turmoil, most hedge fund strategies ended December in negative territory.

In January, concerns over global growth stemming from China continued to cause unease as the markets opened for 2016. Oil price declines extended the trend from 2015. In the US, there was talk from the Fed of a potential slowing of future rate rises while in Japan, interest rates were cut to negative at month end. Much of the month's volatility was captured in equity markets with all major markets down. Higher beta hedge fund strategies struggled in January while more defensive strategies helped to provide diversification.

The concerns that hurt markets through January continued into the first weeks of February. More specifically, talks of a global slowdown moved towards talks of a recession as potential systemic concerns came to the fore. Most major equity markets were down slightly at month end, but these numbers mask the full volatility experienced during the month. At their trough, US equities were down mid-single digits and European equities were down double digits mid-January. Hedge funds were down modestly for the month while CTAs and macro managers provided a diversification benefit.

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The reversal in markets and shift to a risk-on stance that started in mid-February continued through March. Markets that had been out of favor earlier in the year, including value, rebounded significantly during the month. All major equity markets were up significantly. Many hedge fund strategies which suffered year to date rebounded while CTAs and macro managers tended to give back profits due to the reversal.

In April, risk assets broadly moved higher supported by a recovery in commodities. However, the Bank of Japan decision to leave interest rates unchanged and continued caution from the Fed over future US rate rises still grabbed headlines. The month was slightly better for hedge fund managers with most strategies positive. Event driven managers benefited from the rally in credit though macro lagged other strategies modestly.

US economic data was strong in May and inflation was at its highest level in three years, supporting a decline in volatility and an increase in risk assets. Developed equity markets were positive on the month while the strength of the US dollar hurt emerging markets, driving them down significantly. Brazil was particularly hard hit as corruption re-entered the headlines. Hedge funds were broadly positive for the month, led by distressed credit and equity long/short managers.

Coming into June, markets traded on the back of opinion polls regarding the UK referendum vote, with negative performance occurring first as the 'Leave' outcome moved ahead and then positive performance just ahead of the vote as the 'Remain' camp looked more likely to win. In the end, the UK voted to leave the EU, which precipitated significant market volatility. US equities were roughly flat while European equities were down substantially. Credit indices were less impacted and distressed credit continued to be positive. Most hedge funds sidestepped Brexit exposure due to the level of uncertainty surrounding the poling. CTAs profited through the month while most other strategies were flat.

Absolute Return - Discussion

During the fiscal year, KRS investment staff have presented several managers for the Investment Committee's consideration and approval for implementation in the Absolute Return Portfolio. This process involved in-depth analysis by staff, research and analysis by Albourne, site visits, triangulating the research with the portfolio's existing fund-of-funds managers, general consultants, and other professional resources. A broad and diverse field of fund candidates was evaluated before narrowing the group to the final presentations. We will continue to steadily grow the portfolio's number of direct manager strategies and, consequently, its diversification and return potential.

As the portfolio's manager mix nears completion, we have begun to re-size its constituents as the fund- of-funds allocation declines. As always, we look to maximize the portfolio's diversification and return potential.

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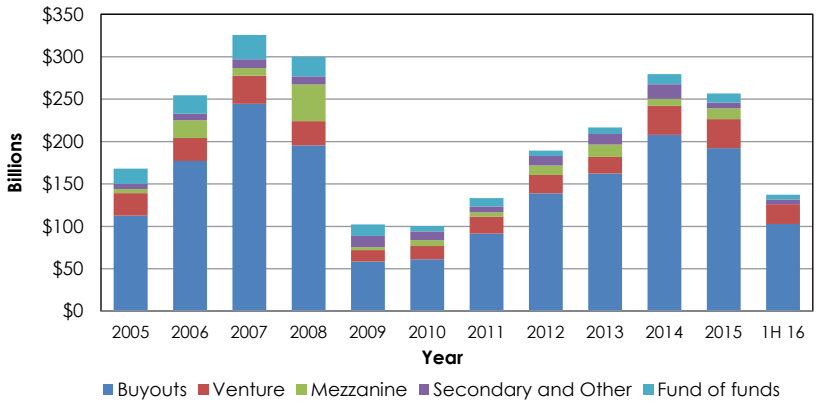
September 15, 2016

Pension Consulting Alliance, LLC (PCA) was hired in April 2014 to advise the KRS KRS Board and Staff on its private equity investment activities. This is PCA's third annual review of the KRS private equity investment Program.

Private Equity Industry Trends:

• Fundraising activities are on pace to exhibit a slight increase from last year's level, in-line with 2014 levels. Approximately $140 billion of commitments were raised domestically in the first half of 2016, with buyouts continuing to represent the largest proportion of capital raised, while secondaries and fund of funds have waned over the past two years.

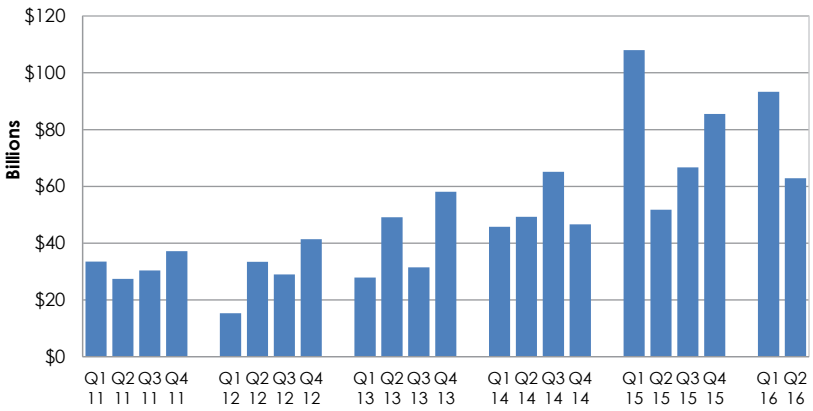
Commitments to U.S. Private Equity Partnerships



Source: *Private Equity Analyst* through June 2016

•Announced U.S. buyout deal volume in the first half of 2016 is on pace to match 2015 levels. Total announced U.S. buyout deal volume was $156.2 billion in 1H 2016, down from $160.0 billion in 1H 2015, which exhibited volatility, but in-line to match the full calendar year activity of $312.0 billion (the highest annual level over the past eight years).

Announced and Disclosed U.S. Quarterly LBO Deal Value*



* Total deal size (both equity and debt).
Source: *Thomson Reuters Buyouts*

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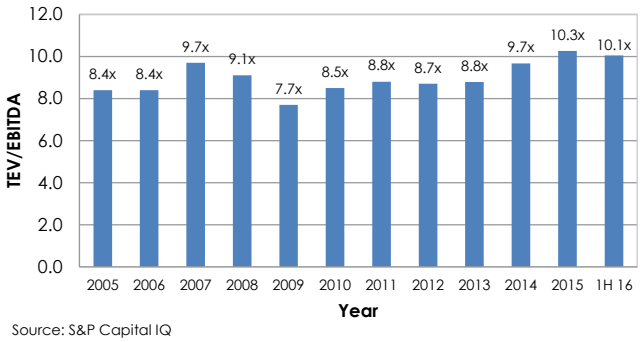
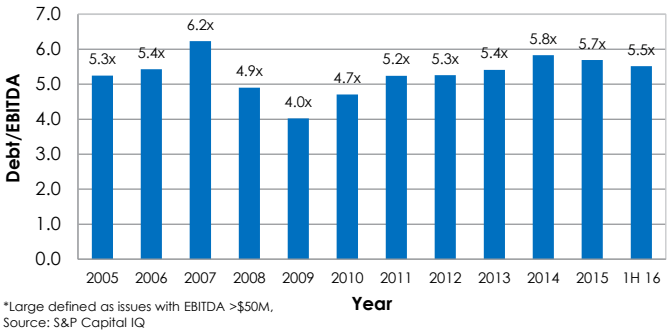
• Risk metrics in the leveraged buyout market were down slightly during the first half of 2016 as purchase price multiples and debt multiples decreased. The average purchase price multiple in the first half of 2016, at 10.1x, decreased from 10.3x in 2015 but was still well above the ten-year average of 9.0x. Debt multiples for the first half of 2016 were at 5.5x, below the 5.7x level for the 2015 calendar year but still above the ten-year average of 5.3x.

Average U.S. Purchase Price Multiples



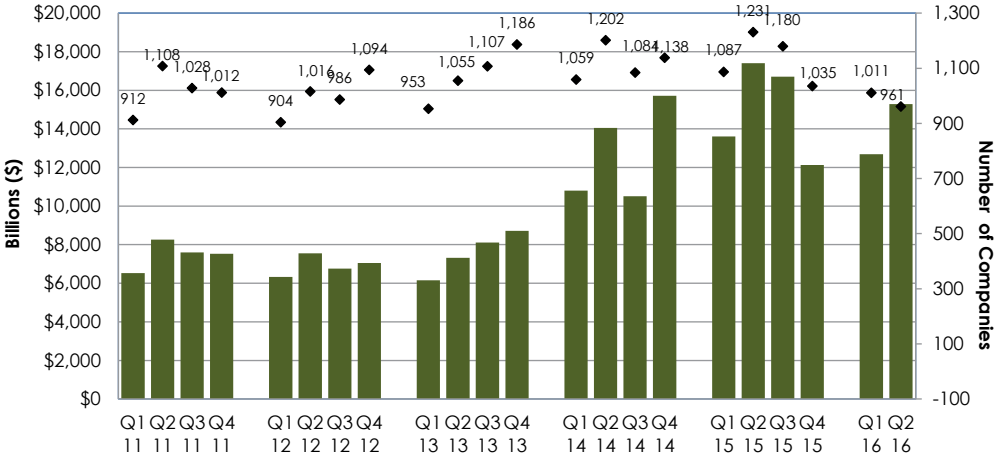
Source: S&P Capital IQ

Average U.S. Large LBO Debt Multiples



*Large defined as issues with EBITDA >$50M,
Source: S&P Capital IQ

• Venture capital investment activity moderated slightly in the first half of 2016. Approximately $28.0 billion was invested across 1,972 companies during the first half of 2016 which trailed the $31.0 billion invested across 2,318 companies in the first half of 2015. In the 2015 calendar year, $59.9 billion was invested across approximately 4,533 companies.



* Only includes equity portion of deal value.
Source: Thomson Reuters

• Exit activity for venture capital investments was mixed in the first half of 2016. The number of merger and acquisition (M&A) transactions increased in the first half of 2016 from one-year prior, and annualized, is on pace to exceed 2015 levels. However, the initial public offering (IPO) market exhibited decreases in the first half of 2016 and is on pace to be well below 2015 levels.

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Performance:

Over longer time-periods (i.e. ten-years or greater), the private equity markets have outperformed the public equity markets. Performance of the broader private equity market underperformed domestic public equity over the latest five-year period, as domestic public equity markets posted strong absolute results coming out of the financial crisis that were above long-term expectations. Over the latest one-year and three-year periods, private equity has outperformed public equity.

Public Market Performance Comparison, as of March 31, 2016*

Index	1 Yr	3 Yr	5 Yr	10 Yr	20 Yr
All Private Equity*	6.4%	11.7%	10.5%	9.3%	12.0%
Russell 3000	-0.3%	11.2%	11.0%	6.9%	8.0%
MSCI EAFE	-7.9%	2.7%	2.8%	2.3%	4.5%

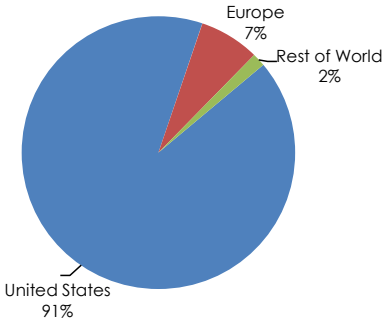
*Thomson ONE, Cambridge Associates all Asset Class/Strategies

KRS Private Equity Portfolio:

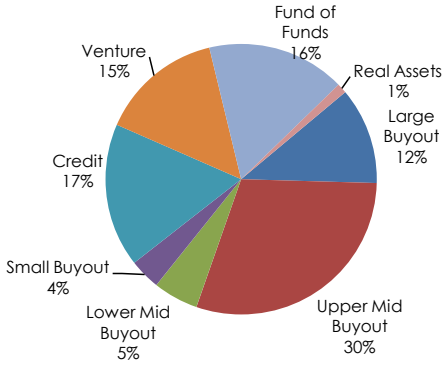
As of June 30, 2016, KRS had $3.0 billion of commitments across 42 managers (66 partnerships) gaining exposure across the spectrum of private equity strategies including: buyout, venture/growth, and credit-oriented strategies. Since inception, approximately $3.0 billion has been drawn down while $2.8 billion of capital has been returned. During the first six months of 2016, $99.0 million has been drawn down to fund investments and $129.9 million of distributions have been returned.

The Pension Plan had $2.3 billion of active commitments and the Insurance Plan had $703 million of active commitments as of mid-year 2016. The portfolio, with a domestic orientation, is well diversified across target investment strategies.

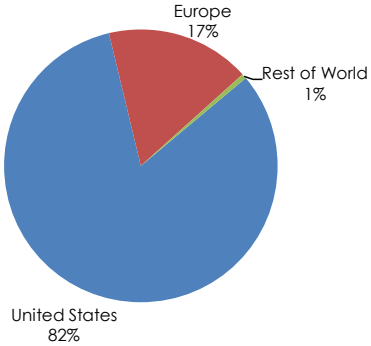
Pension Geographic Exposure: by commitment



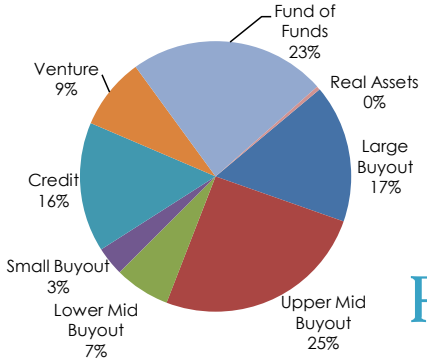
Pension Sector Exposure: by commitment



Insurance Geographic Exposure: by commitment



Insurance Sector Exposure: by commitment



PCA PENSION CONSULTING ALLIANCE

KRS Commitments:

Over the past twelve months ending June 30, 2016, KRS has committed approximately $150.0 million across three new partnerships.

KRS New Commitment Activity, last twelve months

Fund Investment	Approval Date	Commitment Amount (M)
Harvest Partners VII	Nov-2015	$50.0
Green Equity Investors VII	Feb-2016	$50.0
Vista Equity Partners VI	Feb-2016	$50.0

As of 6/30/2016

Program Development:

In dialogue with KRS Staff, PCA has identified the following areas of focus for further development of the portfolio:

- Continue a disciplined approach to annual commitment pacing and partnership commitment sizing, making larger commitments to fewer managers in order to maintain a manageable number of relationships while progressing towards target allocations.
- Consider opportunistic commitments to take advantage of transactions arising out of market dislocations and/or undercapitalized segments of the market.
- Explore cost-effective approaches to deploying capital, such as co-investing, to maximize returns while minimizing expenses.

Please feel free to contact me regarding any of the information above.
Sincerely,

Tad Fergusson, CFA
Managing Director
Pension Consulting Alliance, Inc.

PCA PENSION CONSULTING ALLIANCE

3733 Park East Drive • Cleveland, OH 44122-4334 • tel: 216.468.0055 • fax: 216.468.0054

September 30, 2016
ORG Portfolio Management LLC ("ORG") serves as the Real Estate Investment Consultant for Kentucky Retirement Systems ("KRS"). It is ORG's responsibility to present potential investment opportunities to the Investment Staff and Board and to make recommendations related to KRS' real estate portfolio. It is ORG' s commitment to assist KRS in building a successful long term real estate investment portfolio for the KRS pension fund members.

U.S. Market Overview

According to Green Street, year over year real estate fair value has continued to stretch further relative to other assets; 5% higher than Investment Grade Bonds, 10% higher than High-Yield Bonds and 6% higher than REITs. However, this performance has slowed on an absolute basis. The NCREIF NPI capital appreciation for the one year period ending Q2 2016 was 5.6% as compared to 6.7% for the one year period ending Q1 2016. Going forward there is optimism, but one has to find it somewhere between the near-consensus sentiment that we are later in the cycle, softening fundamentals in New York City, San Francisco and Miami, and shrinking contribution queues in most core open ended funds.

The supply story so far this year is really a tale of two (types of) cities. Although overall completions as a percentage of existing stock in 2016 is expected to be below the 1990 average of 1.3% annually, some markets are seeing some supply concerns in certain property types. Office supply is high in markets such as the San Francisco Bay Area and New York City. Lodging supply in Manhattan is very concentrated and hotel fundamentals continue to decelerate. Pipelines are growing in industrial however, we've seen the market absorb industrial very quickly and lift up rents.

Capital markets remain cooperative, although risk retention where loan originators have to retain portion of loan pools is right around the corner and there is roughly $200 billion of CMBS maturing in 2016 and 2017. As of June 2016, Citibank shows that secondary trading volume for Private-Label CMBS has decreased to below $650 billion compared to over $1 billion from one year ago

The U.S. economy has continued to increase at a persistent pace. The growth estimate for the second quarter 2016 was 1.4% compared to 0.8% for the first quarter 2016. The stronger dollar has led to an increase in domestic consumption and a possible increase in interest rates in the near future. According to the Bureau of Labor Statistics, the current unemployment rate is 4.9% which is down from 5.1% in the second quarter 2015. The improved job growth started a cycle of wage growth, allowed increased spending, leading to rising business revenues and additional job opportunities.

The U.S. commercial real estate market continued to see improvement in 2016. The capitalization rates as of June 30, 2016 for all sectors have declined from the prior year ending June 30, 2015.

Capitalization Rates	2nd Qtr. 2016	2nd Qtr. 2015	Basis Point Change
Total	4.60%	4.81%	-0.21
Apartments	4.53%	4.66%	-0.13
Retail	4.61%	4.97%	-0.36
Office	4.48%	4.69%	-0.21
Industrial/Warehouse	5.03%	5.20%	-0.17

Source: NCREIF – Current Value Weighted Capitalization Rates as of 6/30/2016.

Industrial Sector: Industrial as a sector has been an outperformer with all fundamentals trending positively. In 2015 the market achieved net absorption of 250 million sf with only 155 million of new supply delivered. Rents have increased approximately 5% since 2Q 2015 and national rents are 23% above 2007 peak levels for new warehouses according to CBRE. Rents have increased so quickly that, according to Prologis, in-place rents are about 15% lower than market rents. Recently in Q3, there were two industrial deals that transacted at a sub 4% cap rate, as pricing continues to increase. Supply is still reasonable as replacement costs have risen drastically, with shell costs up 7-10% over the past year and land costs up 10-15% in the last year.

Apartment Sector: Apartment supply is certainly a cause for concern. The 2016-2018 projection for new deliveries according to Deutsch Asset Management is 234,000 units per year. This is well above (75%) the long term average of 137,000 units according to NCREIF. The supply is also concentrating in CBDs, especially the higher-end product. Many coastal markets have started to show decelerating rent growth. Vacancy ticked up to 4.4% from 4.3% a year earlier. With vacancy increasing, rent growth slowing and the historically high amounts of new supply, the Multifamily story seems to present limited upside from here.

Office Sector: Office markets continue to show modest improvement due to healthy job gains by office using sectors. As of July 2016, according to CBRE effective, rents increased 3.8% which represents a slightly smaller increase than in 2014. Over the next two to three years it is expected that nearly 180 million sf will be delivered which represents less than 1% of the existing stock compared to the 15 year average of 1.6% of new office stock. CBD markets continue to outperform suburban markets, however CBD absorption of 1.3% of stock in 2015 was down from 1.7% in 2014. The Bay Area was once again a strong performer. Oakland recorded the highest rent growth at 14.7% and San Jose achieved the highest total return at 16.7% (Source: CBRE, as of July 2016).

Retail Sector: Retail supply remains muted. Since 2009 annual supply increase has averaged 0.5% compared to the 2.0% average annual increase in the 15 years preceding 2009. Rents grew 1.6% in the past year in what amounts to a modest recovery. However, there have been various retailers, such as Sports Authority, who have file for bankruptcy recently. Other traditional brick and mortar retail shops are looking to close stores (Macy's has stated they will close approximately 100 stores). The clothing store Aeropostale, that targets 14 to 17 year olds, also walked the edge of bankruptcy until Simon Properties, GGP and others stepped in to purchase the company. Power Centers and B-malls, both which sell goods readily available online are currently out of favor, contrasted with more insulated retail such as grocery-anchored centers or higher end retailers.

ORG's View

Real estate markets in the U.S. have largely recovered from the 2008 financial crisis and the investment returns continue to increase. The real estate returns decreased over the 2015 levels based upon the National Council of Real Estate Investment Fiduciaries ("NCREIF") Property Index ("NPI") which had a 10.6% return for the period ending June 30, 2016 vs. the 13.0% return for the one year period ending June 30, 2015.

ORG has noted that the one-year income return as of June 30, 2016 for core open end funds gross of fees as reported by the NCREIF Open-End Diversified Core Equity ("ODCE") Index is 4.6% vs. 4.9% for the one year period ending June 30, 2015. This low income return will require substantial rental rate growth or appreciation growth in order for the funds to generate the projected 8-9% rate of return expected for core. The long-term Since Inception appreciation return for the ODCE is 1.3%. ORG is concerned that the strategies targeting gateway core markets will underperform expectations for core real estate. These core gateway markets (San Francisco, New York) are 'priced to perfection' with the income returns at an all-time low.

In Europe, outside a few gateway cities (London and Paris), the real estate fundamentals and capital markets have not recovered as fast as in the U.S.

As an alternative, ORG continues to recommend that investors focus on investment strategies where going in income returns are higher in certain overlooked strategies. The supply/demand fundamentals are favorable for the office market, although there are a few markets with cause for concern (Houston, Austin, Seattle). Millennials (27% of the U.S. population) preference to living in apartments and working in creative office space will continue to drive demand in these sectors.

ORG recommends that a focus should be on sustainable and defensive cash flows by making investments with managers that target investments with existing cash flows or the creation of cash flows through value added investments. In addition, opportunities in real estate can be found in Western Europe, especially the United Kingdom in non-prime assets.

ORG also recommends strategies in opportunistic funds where investors can capitalize on the continual de-leveraging of real estate that continues as debt originated during 2005-2007 continues to mature over the next several years. These opportunities to recapitalize high quality properties that have often been neglected could generate attractive risk adjusted returns over the next several years.

Kentucky Retirement Systems Real Estate Investments

All data below reflects activity through June 30, 2016.

2008-2010 Investment Activity: In December 2008, Kentucky Retirement Systems made $40 million commitments each to the following funds:

1) Mesa West Real Estate Income Fund II, L.P.
2) PRIMA Mortgage Investment Trust.
3) Walton Street Real Estate Fund VI, L.P.

In July 2013, an additional $48.0 million was committed to PRIMA Mortgage Investment Trust increasing the total KRS commitment to $82.0 million. In April 2015, $15.5 million was withdrawn from PRIMA bring the total commitment down to $66.5 million and in January 2016, the entire remaining position was liquidated and the funds returned to KRS.

» Mesa West Real Estate Income Fund II – In December 2015, Mesa West completed the fund's liquidation. Since inception, $33.4 million was funded and Mesa West returned $46.5 million for an overall net IRR of 13.0% with a 1.4x equity multiple.

» PRIMA Mortgage Investment Trust – For the fiscal year ending June 30, 2016, KRS withdrew its entire remaining investment in PRIMA of $76.1 million. Since inception, $82 million was funded and PRIMA returned $112.3 million for an overall net IRR of 8.6% with a 1.4x equity multiple.

» Walton Street Real Estate Fund VI – For the fiscal year ending June 30, 2016, Walton Street VI made no capital calls and returned $8.8 million in capital and gain distributions. Since inception, $33.2 million has been funded with $6.8 million remaining capital to be called.

»

2011 Investment Activity: Kentucky Retirement Systems made the following commitments:
1) $100 million to H/2 Credit Partners, L.P. in April with an additional $3 million commitment in October 2012. In 2013, $3.3 million was withdrawn from the fund for a total commitment of $99.7 million. In the 1st quarter 2016, KRS withdrew $28.5 million, which reduced the commitment to $71.2 million.

2) $101.9 million to Harrison Street Core Property Fund, L.P. in December with an additional $3.8 million commitment in October 2012 and $17.9 million commitment in June 2013 for a total commitment of $123.6 million. In the 1st quarter, KRS withdrew $46.7 million which reduced the commitment to $76.8 million.

» H/2 Credit Partners – For the fiscal year ending June 30, 2016, H/2 Credit Partners made no distributions. This investment is fully funded. In the 1st quarter 2016, KRS withdrew $28.5 million.

» Harrison Street Core Property Fund – For the fiscal year ending June 30, 2016, Harrison Street returned $7.0 million of income distributions and of that $2.7 million was reinvested for the Insurance Fund. This investment is fully funded. In the 1st quarter 2016, KRS withdrew $46.7 million.

2012 Investment Activity: Kentucky Retirement Systems made the following commitments:
1) $52.5 million to Walton Street Real Estate Fund VII, L.P. in August with an additional $2.4 million commitment in October for a total commitment of $54.9 million.
2) $54.9 million to Greenfield Acquisition Partners VI, L.P. in December.
3) $83 million to Mesa West Core Lending Fund, L.P. in December 2012.

» Walton Street Real Estate Fund VII – For the fiscal year ending June 30, 2016, Walton VII made five capital calls totaling $5.4 million and returned $11.2 million of capital, income and gain distributions. Since inception, $35.2 million has been funded with $19.7 million remaining capital to be called.

» Greenfield Acquisition Partners VI – For the fiscal year ending June 30, 2016, Greenfield VI made no capital calls and returned $28.1 million of capital, income and gain distributions. Since inception, $52.7 million has been funded with $2.2 million remaining capital to be called.

» Mesa West Core Lending Fund – For the fiscal year ending June 30, 2016, Mesa West Core returned $5.6 million of income distributions of which $2.5 million was reinvested into the Insurance Fund. This investment is fully funded.

2013 Investment Activity: Kentucky Retirement Systems made the following commitments:
1) $30 million to Rubenstein Properties II, L.P. in July.
2) $30 million to H/2 Core Debt Fund, L.P. in August.
3) $70 million to Prologis Targeted U.S. Logistics Holdings, L.P. in October.
4) $95 million to Stockbridge Smart Markets, L.P. in December.

» Rubenstein Properties II – For the fiscal year ending June 30, 2016, Rubenstein II made three capital calls totaling $17.3 million. Since inception, $25.2 million has been funded with $4.8 million remaining capital to be called.

» H/2 Core Debt Fund – For the fiscal year ending June 30, 2016, H/2 Core returned $6.6 million of income distributions. This investment is fully funded.

» Prologis Targeted U.S. Logistics Holdings – For the fiscal year ending June 30, 2016, Prologis distributed $3.1 million of which $0.8 was reinvested into the Insurance Fund. This investment is fully funded.

» Stockbridge Smart Markets – For the fiscal year ending June 30, 2016, Stockbridge Smart Markets distributed $4.1 million of which $1.2 million was reinvested into the Insurance Fund. This investment is fully funded.

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PORTFOLIO MANAGEMENT

2014 Investment Activity: Kentucky Retirement Systems made the following commitments:

1) $40 million to Lubert-Adler Real Estate Fund VII, L.P. in March with an additional commitment of $10 million in November.
2) $30 million to Divco West IV, L.P. in April.
3) $40 million to Greenfield Acquisition Partners VII, L.P. in July.

» Lubert-Adler Real Estate Fund VII – For the fiscal year ending June 30, 2016, Lubert- Adler VII made four capital calls totaling $17.5 million and returned $0.1 million of fee rebate distributions. Since inception, $30.0 million has been funded with $20.0 million remaining to be called.

» Divco West IV – For the fiscal year ending June 30, 2016, Divco West IV made three capital calls totaling $4.6 million and returned $6.0 million in capital, income and gain distributions. Since inception, $26.7 million has been funded with $3.3 million remaining to be called.

» Greenfield Acquisition Partners VII – For the fiscal year ending June 30, 2016, Greenfield VII made two capital calls totaling $1.8 million and had no distributions. Since inception, $22.9 million has been funded with $17.1 million remaining capital to be called.

2015 Investment Activity: Kentucky Retirement Systems made no additional commitments to the Real Estate Portfolio in 2015. Withdrawal requests were sent to managers for the following investments: PRIMA – complete withdrawal of $76.1 million; Harrison Street Core Property Fund – withdrawal of $47.6 million; and H/2 Credit Partners - $28.5 million. These withdrawal requests were paid during the fourth quarter 2015 and continued into 2016 as noted above with each fund.

2016 Investment Activity: Through June 30, 2016, Kentucky Retirement Systems made the following commitment:

1) €50 million (approximately $55.7 million) to Patron Capital, LP V in June.

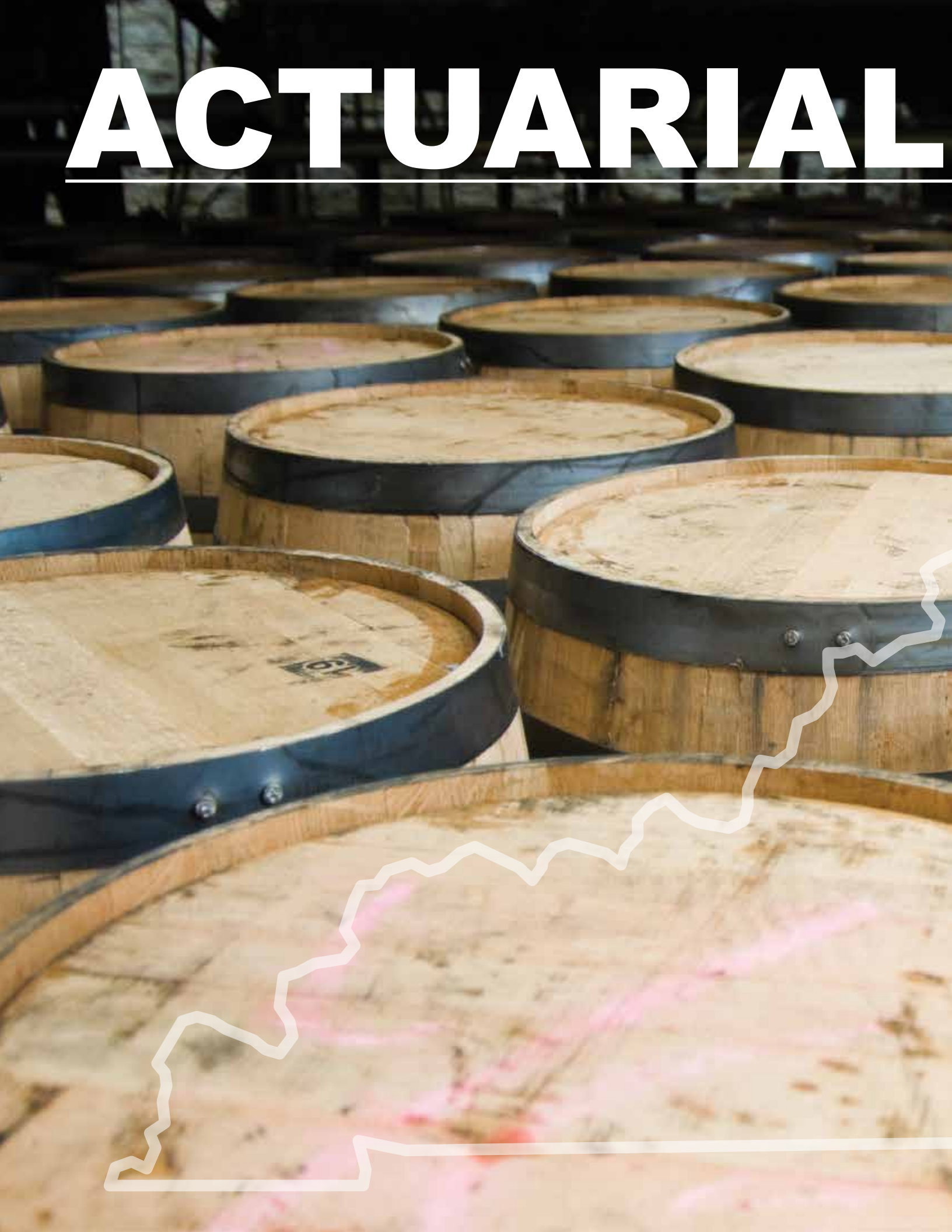
» Patron Capital V – For the fiscal year ending June 30, 2016, Patron V made no capital calls.

Please feel free to contact me regarding any of the information above.
Very truly yours,

Jonathan Berns
Principal

Edward Schwartz
Principal

ACTUARIAL



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ACTUARIAL

Certification of Actuarial Results

The 60th annual actuarial valuation of the Kentucky Employees Retirement System (KERS), the fifty-seventh annual actuarial valuation of the County Employees Retirement System (CERS), and the fifty-eighth annual actuarial valuation of the State Police Retirement System (SPRS) have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Directors must approve the employer contribution rates. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. The June 30, 2016, actuarial valuation will be used by the Board of Directors to certify the CERS employer contribution rates for the fiscal year beginning July 1, 2017, and ending June 30, 2018. The June 30, 2016, actuarial valuations for the KERS and SPRS will be used by the Board of Directors for informational purposes only. The KERS and SPRS employer contribution rates for the fiscal years beginning July 1, 2016, and ending June 30, 2018, were certified in the June 30, 2015, actuarial valuations.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by Senate Bill 2, the amortization period was reestablished as a closed 30-year period beginning with the June 30, 2013, actuarial valuation. The amortization period will decrease by one each year in the future.

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL As with the pension fund, going forward, the UAL will be amortized over a 30-year period beginning June 30, 2013. The amortization period will decrease by one each year going forward.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain relatively stable as a percentage of payroll over future years.

KERS, CERS and SPRS have three benefit tiers. Members hired prior to, or on, August 31, 2008, are in Tier 1. House Bill 1 passed into law in 2008 which introduced Tier 2 for members hired after August 31, 2008, and prior to January 1, 2014. Tier 2 reduced the contribution rates in relationship to Tier 1. Senate Bill 2 was passed into law in 2013 which introduced Tier 3 for those hired on, or after, January 1, 2014. Tier 3 is a Cash Balance Plan for pension benefits. The cash balance plan limits the employers' exposure to increased contribution rates due to less than anticipated investment experience.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, relative to both the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, assumption changes and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, prior employer contribution rate reductions enacted by the State Legislature severely limited the plans ability to correct the declining funding levels. Senate Bill 2 requires the state to contribute the full actuarially determined employer contribution rates compared to the House Bill 1 phase-in rates which would not have required the full actuarially determined employer contribution rate for many years. As of June 30, 2016 and 2015, the funding levels for the pension and insurance funds are as follows:

Funding Level				
	2016		2015	
System	Pension Fund	Insurance Fund	Pension Fund	Insurance Fund
KERS Non-Hazardous	16.0%	30.3%	19.0%	28.8%
KERS Hazardous	59.7%	125.3%	62.2%	120.4%
CERS Non-Hazardous	59.0%	69.6%	60.3%	68.7%
CERS Hazardous	57.7%	72.9%	58.0%	72.3%
SPRS	30.3%	67.2%	33.8%	65.8%

Data

In completing the valuation of these systems, we have relied on data and financial information provided by the Kentucky Retirement Systems. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

The following schedules, included in this section, were prepared by us:
Summary of Actuarial Assumptions
Summary of Actuarial Valuation Results
Recommended Employer Contribution Rates
Summary of Actuarially Unfunded Liabilities
Analysis of Financial Experience
Solvency Test
Active Member Valuation
Retired Member Valuation
Summary of Benefit Provisions

Assumptions & Methods

The Board of Directors, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. At least once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation were adopted by the Board on December 4, 2014, and based on the experience investigation report dated April 30, 2014. Since the previous valuation, the assumed rate of return for the KERS Non-Hazardous Retirement System and the State Police Retirement System has been reduced from 7.50% to 6.75%. These assumptions have been adopted by the Board of Directors of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is scheduled to be completed in early 2019 and any adjustments are expected to be reflected in the June 30, 2019, actuarial valuation.

Closing

The long-term financial health of the three retirement Systems, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. The System has recently been strengthened due to two reasons. They are: recent legislative action that provides 100% funding of the actuarially determined contribution and the elimination of unfunded ad hoc cost-of-living adjustments for retirees. The cost for providing cost-of-living adjustments for retires must be prefunded in advance.

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

The funding of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System has been determined based on the requirements of the Kentucky Revised Statutes and the current funding policies of the Board on the basis that all the actuarial assumptions are met. The funding rates established by the Board are appropriate for this purpose. However, it is up to the state legislature to follow through with the required funding. As noted above, Senate Bill 2 calls for KERS and SPRS contributions at the actuarially determined rates beginning with fiscal year 2015. It should also be noted that the Retirement Fund of the KERS Non-Hazardous Retirement System and the SPRS Pension Fund are both in critical condition.

Todd B. Green ASA, FCA, MAAA
Principal and Consulting Actuary

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Summary of Actuarial Assumptions

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study.

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study. The most recent study was completed in April 2014 and reviewed plan experience for the period from July 1, 2008 through June 30, 2013. All assumptions, with the exception of health care trend rates, used in the June 30, 2016 actuarial valuation were based on the most recent experience study performed in 2014 and in accordance with the actuary's recommendations. The most recent experience study was adopted by the Board on December 4, 2014.

1. Actuarial Cost Method: The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL).

2.UAL Amortization Method: The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by SB2, the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

3. Asset Valuation Method: The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value.

4. Retiree Insurance Funding Policy: The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. As with the pension Fund, the amortization period was reestablished as a closed 30-year period beginning with the June 30, 2013 actuarial valuation.

5. Investment Return Assumption: The future investment earnings of plan assets are assumed to accumulate at a rate of 7.5% per annum for the CERS Non-Hazardous Retirement System, the CERS Hazardous Retirement System, the KERS Hazardous Retirement System, and all Insurance Systems. This rate consists of a 3.25% inflationary component and a 4.25% real rate of return component. The assumed rate of return for the KERS Non-Hazardous Retirement System and the State Police Retirement System has been reduced from 7.5% to 6.75%. This rate consists of a 3.25% inflationary component and a 3.5% real rate of return component.

6. Salary Increase Assumptions: Active member salaries are assumed to increase at the rates provided in Table 1 on the following page. The rates include a 4% percent inflationary component and an additional increase due to promotion based upon plan experience. These assumptions were adopted in 2014.

Table 1. Salary Increase Assumptions

Service	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
0-1	16.50%	20.50%	12.50%	19.50%	16.50%
1-2	8.50%	8.50%	9.00%	10.00%	11.50%
2-3	6.00%	6.50%	5.50%	6.00%	9.50%
3-4	5.50%	6.00%	5.50%	5.25%	8.50%
4-5	5.50%	5.50%	5.00%	5.00%	7.50%
5-6	5.50%	5.00%	5.00%	4.50%	6.50%
6-7	5.00%	4.50%	4.75%	4.00%	6.00%
7-8	5.00%	4.50%	4.75%	4.00%	6.00%
8-9	5.00%	4.50%	4.50%	4.00%	5.00%
9-10	4.50%	4.50%	4.50%	4.00%	4.50%
10+	4.50%	4.50%	4.25%	4.00%	4.00%

7. Payroll Growth Assumption: Active member payroll is assumed to increase at a rate of 4.0% per annum. This assumption was adopted in 2014.

8. Retiree Cost of Living Adjustments (COLA): SB2 (Senate Bill 2) only allows the Cost of Living Adjustments (COLAs) to be awarded on a biennial basis if the State Legislature so authorizes and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

9. Medical Inflation Rate Assumption: The costs for retiree medical premiums are assumed to increase each according to the assumptions provided in Table 2 below:

Table 2. Cost of Retiree Medical Premiums

	Trend		
Fiscal Year Ended	Under Age 65	Age 65 and Over	Dollar Contribution
2017	7.50%	5.50%	1.50%
2018	6.75%	5.25%	1.50%
2019	6.25%	5.00%	1.50%
2020	5.75%	5.00%	1.50%
2021	5.25%	5.00%	1.50%
2022 and beyond	5.00%	5.00%	1.50%

** Applies to members participating on or after July 1, 2003*

10. Retirement Rate Assumptions: The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 3. These assumptions were adopted in 2014.

Table 3. Retirement Rate Assumptions

	Non-Hazardous				Hazardous					
Age	KERS[1]	KERS[2]	CERS[3]	Service	KERS[4]	KERS[5]	CERS[6]	CERS[7]	SPRS[8]	SPRS[9]
55	8.0%		5.0%	20	40.0%		22.5%		22.0%	
56	8.0%		6.0%	21	40.0%		22.5%		22.0%	
57	8.0%		7.0%	22	40.0%		22.5%		22.0%	
58	8.0%		7.0%	23	40.0%		22.5%		28.0%	
59	8.0%		8.0%	24	40.0%		30.0%		28.0%	
60	10.0%	10.0%	9.0%	25	47.0%	40.0%	33.0%	22.5%	28.0%	22.0%
61	20.0%	20.0%	15.0%	26	47.0%	40.0%	33.0%	22.5%	28.0%	22.0%
62	20.0%	20.0%	18.0%	27	47.0%	40.0%	36.0%	22.5%	28.0%	22.0%
63	20.0%	20.0%	18.0%	28	47.0%	40.0%	39.0%	22.5%	44.0%	28.0%
64	20.0%	20.0%	18.0%	29	47.0%	40.0%	55.0%	30.0%	44.0%	28.0%
65	20.0%	25.0%	18.0%	30	47.0%	47.0%	33.0%	33.0%	44.0%	28.0%
66	20.0%	25.0%	18.0%	31	47.0%	47.0%	33.0%	33.0%	58.0%	28.0%
67	20.0%	25.0%	18.0%	32	50.0%	47.0%	50.0%	36.0%	58.0%	28.0%
68	20.0%	25.0%	18.0%	33	50.0%	47.0%	40.0%	39.0%	58.0%	44.0%
69	20.0%	25.0%	18.0%	34	50.0%	47.0%	40.0%	55.0%	58.0%	44.0%
70	20.0%	25.0%	18.0%	35	60.0%	47.0%	40.0%	33.0%	58.0%	44.0%
71	20.0%	25.0%	18.0%	36	60.0%	47.0%	40.0%	33.0%	58.0%	58.0%
72	20.0%	25.0%	18.0%	37	60.0%	50.0%	40.0%	50.0%	58.0%	58.0%
73	20.0%	25.0%	18.0%	38	60.0%	50.0%	40.0%	40.0%	58.0%	58.0%
74	20.0%	25.0%	18.0%	39	60.0%	50.0%	40.0%	40.0%	58.0%	58.0%
75+	100.0%	100.0%	100.0%	40+	60.0%	60.0%	40.0%	40.0%	58.0%	58.0%

1 For members participating before 9/1/2008. If service is at least 27 years, the rate is 35%.
2 For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 35%.
3 If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.
4 For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.
5 For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.
6 For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.
7 For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.
8 For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.
9 For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.

Mortality Assumptions: The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

Table 4. Sample Annual Rates of Mortality

	Active Member Mortality		Retired Member Mortality*		Disabled Member Mortality*	
Age	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**
Under 20	0.02%	0.01%	0.03%	0.02%	-	-
22	0.02%	0.01%	0.04%	0.02%	-	-
32	0.03%	0.01%	0.05%	0.03%	-	-
42	0.06%	0.02%	0.12%	0.07%	2.17%	0.72%
52	0.13%	0.06%	0.26%	0.18%	2.54%	1.29%
62	0.39%	0.17%	0.78%	0.50%	3.50%	2.06%
72	1.12%	0.53%	2.24%	1.59%	4.68%	3.66%

** For members retiring on or after July 1, 2006.*

Withdrawal Rates The probability, or likelihood, of active members terminating employment prior to retirement is provided in Table 5 on the following page. The withdrawal rate is a function of service. These assumptions were adopted in 2014.

Table 5. Selected Rates of Termination Prior to Retirement

	KERS Non-Hazardous	KERS Hazardous		CERS Non-Hazardous	CERS Hazardous		SPRS
Years of Service			Years of Service			Years of Service	
0-1	22.50%	25.00%	0-1	28.00%	20.50%	0-1	20.00%
1-2	15.50%	10.50%	1-2	16.00%	13.00%	1-2	7.00%
2-3	12.50%	7.50%	2-3	12.00%	10.50%	2-9	3.00%
3-4	10.50%	6.50%	3-4	10.00%	9.00%	9 & Over	2.50%
4-5	9.00%	5.50%	4-5	8.00%	8.00%		
5-6	6.50%	4.50%	5-6	6.00%	7.00%		
6-7	5.50%	3.00%	6-7	5.00%	7.00%		
7-8	5.00%	3.00%	7-8	5.00%	6.00%		
8-9	4.50%	3.00%	8-13	4.00%	6.00%		
9-10	4.50%	2.50%	13 & Over	3.00%	6.00%		
10-11	4.00%	2.50%					
11-13	4.00%	2.00%					
13-15	3.50%	2.00%					
15 & Over	3.00%	2.00%					

Rates of Disablement: KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. These assumptions were adopted in 2014.

This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels.

Rate of Disablement

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Nearest Age	Probability	Probability	Probability	Probability	Probability
20	0.02%	0.03%	0.02%	0.05%	0.05%
30	0.03%	0.05%	0.03%	0.09%	0.09%
40	0.07%	0.10%	0.07%	0.20%	0.20%
50	0.19%	0.28%	0.19%	0.56%	0.56%
60	0.49%	0.73%	0.49%	1.46%	1.46%

Summary of Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Rate Fiscal 2015-2016					
Pension Fund Contribution	41.98%	20.48%	14.48%	22.20%	71.57%
Insurance Fund Contribution	8.41%	1.34%	4.70%	9.35%	18.10%
Recommended Employer Contribution	50.39%	21.82%	19.18%	31.55%	89.67%
Funded Status as of Valuation Date					
PENSION FUND					
↘ Actuarial Liability	$13,224,698,427	$936,706,126	$11,076,456,794	$3,704,456,223	$775,160,294
↘ Actuarial Value of Assets	$2,112,286,498	$559,487,184	$6,535,372,347	$2,139,119,173	$234,567,536
↘ Unfunded Liability on Actuarial Value of Assets	$11,112,411,929	$377,218,942	$4,541,084,447	$1,565,337,050	$540,592,758
↘ Funding Ratio on Actuarial Value of Assets	15.97%	59.73%	59.00%	57.74%	30.26%
↘ Market Value of Assets	$1,953,422,354	$524,678,968	$6,106,186,908	$2,003,669,273	$217,594,068
↘ Unfunded Liability on Market Value of Assets	$11,271,276,073	$412,027,158	$4,970,269,886	$1,700,786,950	$557,566,226
↘ Funding Ratio on Market Value of Assets	14.77%	56.01%	55.13%	54.09%	28.07%
INSURANCE FUND					
↘ Actuarial Liability	$2,456,677,964	$377,745,230	$2,988,121,117	$1,558,818,204	$257,197,259
↘ Actuarial Value of Assets	$743,270,060	$473,160,173	$2,079,811,055	$1,135,784,220	$172,703,691
↘ Unfunded Liability on Actuarial Value of Assets	$1,713,407,904	(95,414,943)	$908,310,062	$423,033,984	$84,493,568
↘ Funding Ratio on Actuarial Value of Assets	30.26%	125.26%	69.60%	72.86%	67.15%
↘ Market Value of Assets	$695,188,649	$440,596,305	$1,943,756,727	$1,062,602,089	$161,366,312
↘ Unfunded Liability on Market Value of Assets	$1,761,489,315	(62,851,075)	$1,044,364,390	$496,216,115	$95,830,947
↘ Funding Ratio on Market Value of Assets	28.30%	116.64%	65.05%	68.17%	62.74%
MEMBER DATA					
Number of Active Members	37,779	3,959	80,664	9,084	908
Total Annual Payroll (Active Members)[1]	$1,529,248,873	$147,563,457	$2,352,761,794	$492,850,521	$45,551,469
Average Annual Pay (Active Members)	$40,479	$37,273	$29,167	$54,255	$50,167
Number of Retired Members & Beneficiaries	44,004	3,966	56,339	8,563	1,515
Average Annual Retirement Allowance	$20,633	$14,877	$11,264	$25,143	$37,393
Number of Vested Inactive Members	10,399	481	14,357	775	65
Number of Inactive Members Due a Refund	38,641	4,444	67,935	2,055	390

1 Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2016..

Recommended Employer Contribution Rates *as of June 30, 2016*

KERS Non-Hazardous

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/11	2012-2013	4.38%	23.65%	28.03%	16.52%	44.55%
6/30/12	2013-2014	4.26%	28.31%	32.57%	12.71%	45.28%
6/30/13	2014-2015	4.13%	26.71%	30.84%	7.93%	38.77%
6/30/14	2015-2016	4.10%	29.47%	33.57%	7.74%	41.31%
6/30/15	2016-2017	3.60%	35.33%	38.93%	8.35%	47.28%
6/30/16	2017-2018	4.93%	37.05%	41.98%	8.41%	50.39%

KERS Hazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/11	2012-2013	7.47%	8.69%	16.16%	19.73%	35.89%
6/30/12	2013-2014	6.09%	10.91%	17.00%	11.84%	28.84%
6/30/13	2014-2015	5.79%	10.58%	16.37%	9.97%	26.34%
6/30/14	2015-2016	5.69%	11.40%	17.09%	7.12%	24.21%
6/30/15	2016-2017	6.93%	14.15%	21.08%	2.74%	23.82%
6/30/16	2017-2018	6.44%	14.04%	20.48%	1.34%	21.82%

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2011 through 2016 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statue called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

KERS Funds

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2011 through 2016 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statue called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

CERS Funds

The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2011 through 2016 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date.

SPRS Funds

The contribution rates for SPRS shown in the above tables are the full funding rates presented by the actuary in the 2011 through 2016 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statue called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

Recommended Employer Contribution Rates *as of June 30, 2016*

CERS Non=Hazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/11	2012-2013	4.68%	7.94%	12.62%	8.59%	21.21%
6/30/12	2013-2014	4.68%	9.06%	13.74%	5.84%	19.58%
6/30/13	2014-2015	4.35%	8.40%	12.75%	5.35%	18.10%
6/30/14	2015-2016	4.23%	8.19%	12.42%	4.88%	17.30%
6/30/15	2016-2017	3.80%	10.15%	13.95%	4.93%	18.88%
6/30/16	2017-2018	3.70%	10.78%	14.48%	4.70%	19.18%

CERS Hazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/11	2012-2013	7.40%	12.70%	20.10%	21.84%	41.94%
6/30/12	2013-2014	6.44%	15.33%	21.77%	16.02%	37.79%
6/30/13	2014-2015	6.35%	14.38%	20.73%	14.97%	35.70%
6/30/14	2015-2016	6.21%	14.05%	20.26%	13.42%	33.68%
6/30/15	2016-2017	4.52%	17.19%	21.71%	9.79%	31.50%
6/30/16	2017-2018	4.40%	17.80%	22.20%	9.35%	31.55%

The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2011 through 2016 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date.

Recommended Employer Contribution Rates *as of June 30, 2016*

SPRS

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/10	2011-2012	7.75%	32.05%	39.80%	54.83%	94.63%
6/30/11	2012-2013	8.12%	39.36%	47.48%	55.93%	103.41%
6/30/12	2013-2014	8.14%	45.21%	53.35%	43.17%	96.52%
6/30/13	2014-2015	8.46%	45.44%	53.90%	21.86%	75.76%
6/30/14	2015-2016	8.39%	50.05%	58.44%	19.17%	77.61%
6/30/15	2016-2017	8.77%	57.70%	66.47%	18.87%	85.34%
6/30/16	2017-2018	11.16%	60.41%	71.57%	18.10%	89.67%

The contribution rates for SPRS shown in the above tables are the full funding rates presented by the actuary in the 2011 through 2016 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statue called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

Summary of Actuarially Unfunded (Overfunded) Liabilities *as of June 30, 2016*

KERS Non-Hazardous Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/11	$11,182,142,032	$3,276,986,087	$3,538,878,093	$7,455,155,945	$7,643,263,939	33.3%	31.7%
6/30/12	$11,361,048,136	$3,101,316,738	$2,980,401,603	$8,259,731,398	$8,380,646,533	27.3%	26.2%
6/30/13	$11,386,602,159	$2,636,122,852	$2,747,428,086	$8,750,479,307	$8,639,174,073	23.2%	24.1%
6/30/14	$11,550,110,224	$2,423,956,716	$2,560,419,519	$9,126,153,508	$8,989,690,705	21.0%	22.2%
6/30/15	$12,359,672,849	$2,350,989,940	$2,307,858,072	$10,008,682,909	$10,051,814,777	19.0%	18.7%
6/30/16	$13,224,698,427	$2,112,286,498	$1,953,422,354	$11,112,411,929	$11,271,276,073	16.0%	14.8%

KERS Non-Hazardous Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/11	$4,280,089,633	$451,620,442	$433,305,243	$3,828,469,191	$3,846,784,390	10.6%	10.1%
6/30/12	$3,125,330,157	$446,080,511	$430,805,726	$2,679,249,646	$2,694,524,431	14.3%	13.8%
6/30/13	$2,128,754,134	$497,584,327	$509,364,080	$1,631,169,807	$1,619,390,054	23.4%	23.9%
6/30/14	$2,226,759,925	$621,236,646	$664,775,708	$1,605,523,279	$1,561,984,217	27.9%	29.9%
6/30/15	$2,413,705,252	$695,018,262	$687,684,080	$1,718,686,990	$1,726,051,172	28.8%	28.5%
6/30/16	$2,456,677,964	$743,270,060	$695,188,649	$1,713,407,904	$1,761,489,315	30.3%	28.3%

KERS Hazardous Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/11	$721,293,444	$510,748,505	$510,628,492	$210,544,939	$210,664,952	70.8%	70.8%
6/30/12	$752,699,457	$497,226,296	$478,103,794	$255,473,161	$274,595,663	66.1%	63.5%
6/30/13	$783,980,594	$505,656,808	$513,162,166	$278,323,786	$270,818,428	64.5%	65.5%
6/30/14	$816,850,063	$527,897,261	$559,504,340	$288,952,802	$257,345,723	64.6%	68.5%
6/30/15	$895,433,387	$556,687,757	$550,120,310	$338,745,630	$345,313,077	62.2%	61.4%
6/30/16	$936,706,126	$559,487,184	$524,678,968	$377,218,942	$412,027,158	59.7%	56.0%

KERS Hazardous Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/11	$507,058,767	$329,961,615	$321,071,515	$177,097,152	$185,987,252	65.1%	63.3%
6/30/12	$384,592,406	$345,573,948	$333,298,119	$39,018,458	$51,294,287	89.9%	86.7%
6/30/13	$ 385,517,675	$370,774,403	$ 374,309,576	$14,743,272	$11,208,099	96.2%	97.1%
6/30/14	$396,986,820	$419,395,867	$435,503,976	($22,409,047)	($38,517,156)	105.6%	109.7%
6/30/15	$374,904,234	$451,514,191	$441,626,285	($76,609,957)	($66,72,051)	120.4%	117.8%
6/30/16	$377,745,230	$473,160,173	$440,596,305	($95,414,943)	($62,851,075)	125.3%	116.6%

Continued. Summary of Actuarially Unfunded Liabilities *as of June 30, 2016*

CERS Non-Hazardous Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/11	$8,918,085,025	$5,629,611,183	$5,577,252,295	$3,288,473,842	$3,340,832,730	63.1%	62.5%
6/30/12	$9,139,567,695	$5,547,235,599	$5,372,769,813	$3,592,332,096	$3,766,797,882	60.7%	58.8%
6/30/13	$9,378,876,114	$5,637,094,483	5,780,830,355	$3,741,781,631	$3,598,045,759	60.1%	61.6%
6/30/14	$9,772,522,616	$6,117,133,692	$6,507,300,157	$3,655,388,924	$3,265,222,459	62.6%	66.6%
6/30/15	$10,740,325,421	$6,474,848,513	$6,416,853,506	$4,265,476,908	$4,323,471,915	60.3%	59.8%
6/30/16	$11,076,456,794	$6,535,372,347	$6,106,186,908	$4,541,084,447	$4,970,269,886	59.0%	55.1%

CERS Non-Hazardous Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/11	$3,073,973,205	$1,433,450,793	$1,451,984,026	$1,640,522,412	$1,621,989,179	46.6%	47.2%
6/30/12	$2,370,771,288	$1,512,853,851	$1,439,226,170	$857,917,437	$931,545,118	63.8%	60.7%
6/30/13	$2,443,894,100	$1,628,244,197	$1,633,696,661	$815,649,903	$810,197,439	66.6%	66.9%
6/30/14	$2,616,914,600	$1,831,199,465	$1,899,557,376	$785,715,135	$717,357,224	70.0%	72.6%
6/30/15	$2,907,827,440	$1,997,456,463	$1,948,454,097	$910,370,977	$959,373,343	68.7%	67.0%
6/30/16	$2,988,121,117	$2,079,811,055	$1,943,756,727	$908,310,062	$1,044,364,390	69.6%	65.0%

CERS Hazardous Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/11	$2,859,041,052	$1,779,545,393	$1,760,602,934	$1,079,495,659	$1,098,438,118	62.2%	61.6%
6/30/12	$3,009,992,047	$1,747,379,297	$1,677,940,479	$1,262,612,750	$1,332,051,568	58.1%	55.8%
6/30/13	$3,124,205,593	$1,801,691,410	$1,830,657,969	$1,322,514,183	$1,293,547,624	56.7%	58.6%
6/30/14	$3,288,825,753	$1,967,640,027	$2,082,998,414	$1,321,185,726	$1,205,827,339	59.8%	63.3%
6/30/15	$3,613,307,547	$2,096,782,956	$2,073,397,045	$1,516,524,591	$1,539,910,502	58.0%	57.4%
6/30/16	$3,704,456,223	$2,139,119,173	$2,003,669,273	$1,565,337,050	$1,700,786,950	57.7%	54.1%

CERS Hazardous Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/11	$1,647,702,755	$770,790,274	$774,509,101	$876,912,481	$873,193,654	46.8%	47.0%
6/30/12	$1,364,843,057	$829,040,842	$788,070,813	$535,802,215	$576,772,244	60.7%	57.7%
6/30/13	$1,437,332,817	$892,774,391	$894,232,297	$544,558,426	$543,100,520	62.1%	62.2%
6/30/14	$1,493,864,379	$997,733,237	$1,034,307,636	$496,131,142	$459,556,743	66.8%	69.2%
6/30/15	1,504,015,233	$1,087,707,118	$1,061,560,788	$416,308,115	$442,454,445	72.3%	70.6%
6/30/16	$1,558,818,204	$1,135,784,220	$1,062,602,089	$423,033,984	$496,216,115	72.9%	68.2%

Continued. Summary of Actuarially Unfunded Liabilities *as of June 30, 2016*

SPRS Pension Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/11	$634,379,401	$285,580,631	$279,934,443	$348,798,770	$354,444,958	45.0%	44.1%
6/30/12	$647,688,665	$259,791,575	$252,896,868	$387,897,090	$394,791,797	40.1%	39.1%
6/30/13	$651,580,654	$241,800,328	$248,559,040	$409,780,326	$403,021,614	37.1%	38.2%
6/30/14	$681,118,402	$242,741,735	$260,763,486	$438,376,667	$420,354,916	35.6%	38.3%
6/30/15	$734,156,446	$248,387,946	$246,968,144	$485,768,500	$487,188,302	33.8%	33.6%
6/30/16	$775,160,294	$234,567,536	$217,594,068	$540,592,758	$557,566,226	30.3%	28.1%

SPRS Insurance Fund

		Value of Assets		Unfunded Liability		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/11	$438,427,763	$123,687,289	$127,367,947	$314,740,474	$311,059,816	28.2%	29.1%
6/30/12	$333,903,782	$124,372,072	$125,567,846	$209,531,710	$208,335,936	37.3%	37.6%
6/30/13	$222,326,743	$136,321,060	$142,830,916	$86,005,683	$79,495,827	61.3%	64.2%
6/30/14	$234,271,127	$155,594,760	$165,167,805	$78,676,367	$69,103,322	66.4%	70.5%
6/30/15	$254,838,710	$167,774,940	$165,018,209	$87,063,770	$89,820,501	65.8%	64.8%
6/30/16	$257,197,259	$172,703,691	$161,366,312	$84,493,568	$95,830,947	67.2%	62.7%

Valuation Balance Sheets give the basis for determining the percentage rates for contributions to be made by employers.

Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience *(in Millions)* ***as of June 30, 2016***

Type of Activity	Retirement Gain	Insurance Gain
KERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(34.0)	5.4
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(4.0)	(0.3)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.1)	(1.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	91.9	12.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	34.2	75.6
New Members. Additional unfunded accrued liability will produce a loss.	(10.2)	(26.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(70.9)	(15.7)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	43.3	27.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	1.5	(43.3)
Gain (or Loss) During Year From Financial Experience	**51.7**	**34.7**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(903.0)	0.0
Composite Gain (or Loss) During Year	**(851.3)**	**34.7**
KERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(15.6)	(0.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.0	0.1
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.4)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	14.3	3.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(20.3)	14.0
New Members. Additional unfunded accrued liability will produce a loss.	(6.1)	(3.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(14.4)	(12.1)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	7.4	6.0
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	2.1	10.4
Gain (or Loss) During Year From Financial Experience	**(32.6)**	**17.5**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**(32.6)**	**17.5**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience *(in Millions)* ***as of June 30, 2016***

Type of Activity	Retirement Gain	Insurance Gain
CERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(81.2)	7.1
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(30.3)	(1.5)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.3)	(2.0)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	75.9	26.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	23.5	83.8
New Members. Additional unfunded accrued liability will produce a loss.	(18.6)	(20.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(148.8)	(64.0)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	1.2	33.6
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(0.8)	(45.8)
Gain (or Loss) During Year From Financial Experience	**(180.4)**	**17.6**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**(180.4)**	**17.6**
CERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(233.5)	(5.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(9.2)	0.9
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.9)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	19.2	(0.1)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	(3.8)	63.1
New Members. Additional unfunded accrued liability will produce a loss.	(7.9)	(3.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(52.2)	(33.4)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	255.6	18.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(0.3)	(37.9)
Gain (or Loss) During Year From Financial Experience	**(32.0)**	**0.4**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	**(32.0)**	**0.4**

Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience *(in Millions) as of June 30, 2016*

Type of Activity	Retirement Gain	Insurance Gain
SPRS		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(11.2)	(1.0)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.0	0.0
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(1.3)	(0.8)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	2.0	10.3
New Members. Additional unfunded accrued liability will produce a loss.	0.0	(0.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(6.2)	(3.9)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	26.8	1.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	1.2	(1.7)
Gain (or Loss) During Year From Financial Experience	**11.3**	**4.0**
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(53.4)	0.0
Composite Gain (or Loss) During Year	**(42.1)**	**4.0**

Solvency Test *per Funds as of June 30, 2016*

KERS Non-Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/11	$916,568,932	$8,482,714,356	$1,782,858,744	$3,726,986,087	100.0%	33.1%	--
6/30/12	$885,137,183	$8,708,536,338	$1,767,374,615	$3,101,316,738	100.0%	25.4%	--
6/30/13	$922,928,027	$8,709,323,622	$1,754,350,510	$2,636,122,852	100.0%	19.7%	--
6/30/14	$928,557,540	$8,870,692,596	$1,750,860,088	$2,423,956,716	100.0%	16.9%	--
6/30/15	$925,933,970	$9,437,467,771	$1,996,271,108	$2,350,989,940	100.0%	15.1%	--
6/30/16	$ 920,120,230	$10,010,168,246	$ 2,294,409,951	$2,112,286,498	100.0%	11.9%	--

KERS Non-Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/11	-	$2,568,002,978	$1,712,086,655	$451,620,442	100.0%	17.6%	--
6/30/12	-	$1,924,068,623	$1,201,261,534	$446,080,511	100.0%	23.2%	--
6/30/13	-	$1,338,772,860	$789,981,274	$497,584,327	100.0%	37.2%	--
6/30/14	-	$1,425,604,569	$801,155,356	$621,236,646	100.0%	43.6%	--
6/30/15	-	$1,428,349,857	$985,355,395	$695,018,262	100.0%	48.7%	--
6/30/16	-	$1,483,635,611	$973,042,353	$743,270,060	100.0%	50.1%	--

KERS Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/11	$86,614,205	$490,395,078	$144,284,161	$510,748,505	100.0%	86.5%	--
6/30/12	$82,100,877	$521,688,803	$148,909,777	$497,226,296	100.0%	79.6%	--
6/30/13	$82,145,602	$545,596,534	$156,238,458	$505,656,808	100.0%	77.6%	--
6/30/14	$83,663,535	$581,231,300	$151,955,228	$527,897,261	100.0%	76.4%	--
6/30/15	$83,606,204	$633,189,198	$178,637,885	$556,687,757	100.0%	74.7%	--
6/30/16	$86,705,297	$648,482,097	$201,518,732	$559,487,184	100.0%	72.9%	--

KERS Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/11	-	$285,539,861	$221,518,906	$329,961,615	100.0%	100.0%	20.1%
6/30/12	-	$196,578,935	$188,013,471	$345,573,948	100.0%	100.0%	79.2%
6/30/13	-	$202,031,515	$183,486,160	$370,774,403	100.0%	100.0%	92.0%
6/30/14	-	$206,477,405	$190,509,415	$419,395,867	100.0%	100.0%	100%
6/30/15	-	$221,114,995	$153,789,239	$451,514,191	100.0%	100.0%	100.0%
6/30/16		$228,361,311	$149,383,919	$473,160,173	100.0%	100.0%	100.0%

Continued. Solvency Test *as of June 30, 2016*

CERS Non-Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/11	$1,110,967,160	$5,209,783,924	$2,597,333,941	$5,629,611,183	100.0%	86.7%	--
6/30/12	$1,117,549,337	$5,416,932,995	$2,605,085,363	$5,547,235,599	100.0%	81.8%	--
6/30/13	$1,149,610,832	$5,638,370,836	$2,590,894,446	$5,637,094,483	100.0%	79.6%	--
6/30/14	$1,204,383,085	$5,873,279,494	$2,694,860,037	$6,117,133,692	100.0%	83.6%	--
6/30/15	$1,216,584,592	$6,489,862,734	$3,033,878,095	$6,474,848,513	100.0%	81.0%	--
6/30/16	$1,231,027,269	$6,785,529,719	$3,059,899,806	$ 6,535,372,347	100.0%	78.2%	--

CERS Non-Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/11	-	$1,460,808,255	$1,613,164,950	$1,433,450,793	100.0%	98.1%	--
6/30/12	-	$1,146,907,750	$1,223,863,538	$1,512,853,851	100.0%	100.0%	29.9%
6/30/13	-	$1,205,599,287	$1,238,294,813	$1,628,244,197	100.0%	100.0%	34.1%
6/30/14	-	$1,318,182,882	$1,298,731,718	$1,831,199,465	100.0%	100.0%	39.5%
6/30/15	-	$1,372,596,636	$1,535,230,804	$1,997,456,463	100.0%	100.0%	40.7%
6/30/16	-	$1,484,936,848	$ 1,503,184,269	$2,079,811,055	100.0%	100.0%	39.6%

CERS Hazardous Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/11	$382,072,055	$1,768,511,545	$708,457,452	$1,779,545,393	100.0%	79.0%	--
6/30/12	$381,672,428	$1,889,884,303	$738,435,316	$1,747,379,297	100.0%	72.3%	--
6/30/13	$390,471,059	$1,988,029,963	$745,704,571	$1,801,691,410	100.0%	71.0%	--
6/30/14	$415,069,629	$2,077,516,709	$796,239,415	$1,967,640,027	100.0%	74.7%	--
6/30/15	$422,358,688	$2,297,703,167	$893,245,692	$2,096,782,956	100.0%	72.9%	--
6/30/16	$428,713,398	$2,388,711,595	$887,031,230	$2,139,119,173	100.0%	71.6%	--

CERS Hazardous Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/11	-	$771,631,287	$876,071,468	$770,790,274	100.0%	99.9%	--
6/30/12	-	$575,099,089	$789,743,968	$829,040,842	100.0%	100.0%	32.2%
6/30/13	-	$660,955,331	$776,377,486	$892,774,391	100.0%	100.0%	29.9%
6/30/14	-	$700,311,599	$793,552,780	$997,733,237	100.0%	100.0%	37.5%
6/30/15	-	$790,713,766	$713,301,467	$1,087,707,118	100.0%	100.0%	41.6%
6/30/16	-	$879,360,070	$679,458,134	$1,135,784,220	100.0%	100.0%	37.7%

Continued. Solvency Test *as of June 30,2016*

SPRS Pension Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/11	$43,574,097	$499,194,229	$91,611,075	$285,580,631	100.0%	48.5%	--
6/30/12	$41,139,306	$523,016,647	$83,532,712	$259,791,575	100.0%	41.8%	--
6/30/13	$39,788,421	$535,720,195	$76,072,038	$241,800,328	100.0%	37.7%	--
6/30/14	$41,831,465	$563,011,026	$76,275,911	$242,741,735	100.0%	35.7%	--
6/30/15	$41,567,127	$605,854,905	$86,734,414	$248,387,946	100.0%	34.1%	--
6/30/16	$41,870,846	$636,498,907	$96,790,541	$234,567,536	100.0%	30.3%	--

SPRS Insurance Fund

	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/11	-	$252,439,726	$185,988,037	$123,687,289	100.0%	49.0%	--
6/30/12	-	$190,258,729	$143,645,053	$124,372,072	100.0%	65.4%	--
6/30/13	-	$139,508,590	$82,818,153	$136,321,060	100.0%	97.7%	--
6/30/14	-	$143,402,126	$90,869,001	$155,594,760	100.0%	100.0%	13.4%
6/30/15	-	$170,447,207	$84,391,503	$167,774,940	100.0%	98.4%	--
6/30/16		$177,094,075	$80,103,184	$172,703,691	100.0%	97.5%	--

Active Member Valuation

Methodology The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

Summary of Active Member Valuation Data

KERS Non-Hazardous

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/11	427	46,617	$1,731,632,748	$37,146	(3.6)%	43.8	9.4
6/30/12	286	42,196	$1,644,896,681	$38,982	4.9%	44.3	9.8
6/30/13	285	42,226	$1,644,408,698	$38,943	(0.1)%	44.5	10.1
6/30/14	353	40,365	$1,577,496,447	$39,081	0.4%	44.8	10.5
6/30/15	348	39,056	$1,544,234,409	$39,539	1.2%	45.0	10.6
6/30/16	349	37,779	$1,529,248,873	$40,479	2.4%	45.1	10.7

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2016.*

KERS Hazardous

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/11	16	4,291	$133,053,792	$31,008	(7.3)%	41.3	6.9
6/30/12	14	4,086	$131,976,754	$32,300	4.2%	41.1	7.3
6/30/13	14	4,127	$132,015,368	$31,988	(1.0)%	40.6	7.2
6/30/14	18	4,024	$129,076,038	$32,077	0.3%	40.6	7.4
6/30/15	17	3,886	$128,680,160	$33,114	3.2%	40.7	7.5
6/30/16	17	3,959	$147,563,457	$37,273	12.6%	40.4	7.5

CERS Non-Hazardous

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/11	1,102	85,285	$2,276,595,948	$26,694	1.1%	46.8	9.0
6/30/12	1,080	83,052	$2,236,546,345	$26,929	0.9%	47.5	9.1
6/30/13	1,081	81,815	$2,236,277,489	$27,333	1.5%	47.8	9.3
6/30/14	1,101	81,115	$2,272,270,287	$28,013	2.5%	48.1	9.6
6/30/15	1,092	80,852	$2,296,715,957	$28,406	1.4%	48.0	9.5
6/30/16	1,095	80,664	$2,352,761,794	$29,167	2.7%	47.9	9.4

CERS Hazardous

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/11	281	9,407	$466,963,860	$49,640	1.7%	39.1	9.5
6/30/12	254	9,130	$464,228,923	$50,847	2.4%	39.3	10.3
6/30/13	248	9,123	$461,672,567	$50,605	(0.5)%	39.1	10.3
6/30/14	254	9,194	$479,164,016	$52,117	3.0%	39.2	10.6
6/30/15	246	9,172	$483,640,601	$52,730	1.2%	39.1	10.6
6/30/16	246	9,084	$492,850,521	$54,255	2.9%	39.1	10.6

SPRS

Valuation Date	Number of Employers	Total Active Members	Annual Payroll[1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/11	1	965	$48,692,616	$50,459	(5.9)%	37.7	10.6
6/30/12	1	907	$48,372,506	$53,332	5.7%	37.3	10.4
6/30/13	1	902	$45,256,202	$50,173	(5.9)%	37.0	10.0
6/30/14	1	855	$44,615,885	$52,182	4.0%	37.8	10.9
6/30/15	1	937	$45,764,515	$48,842	(6.4%)	36.8	9.8
6/30/16	1	908	$45,551,469	$50,167	2.7	37.0	10.0

[1]*Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2016.*

Retired Member Valuation

Summary of Retired Member Valuation Data

KERS Non-Hazardous

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/11	1,592	940	38,597	$821,197,278	2.41%	$21,276
6/30/12	1,707	1,078	39,226	$844,880,945	2.88%	$21,539
6/30/13	1,982	1,014	40,194	$872,139,782	3.23%	$21,698
6/30/14	2,067	1,038	41,223	$888,430,310	1.87%	$21,552
6/30/15	2,140	1,094	42,269	$905,961,226	1.97%	$21,433
6/30/16	2,441	706	44,004	$934,929,767	5.81%	$21,246

KERS Hazardous

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/11	288	59	3,064	$45,609,229	10.93%	$14,886
6/30/12	243	54	3,253	$49,231,205	7.94%	$15,134
6/30/13	229	52	3,430	$51,122,456	3.84%	$14,905
6/30/14	256	66	3,620	$54,271,718	6.16%	$14,992
6/30/15	203	65	3,758	$56,431,099	3.98%	$15,016
6/30/16	237	29	3,966	$59,000,949	4.55%	$14,877

CERS Non-Hazardous

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/11	3,250	1,077	43,211	$483,594,068	6.84%	$11,191
6/30/12	3,300	1,207	45,304	$515,008,362	6.50%	$11,368
6/30/13	3,570	1,198	47,676	$557,979,192	8.34%	$11,704
6/30/14	3,480	1,221	49,935	$582,957,825	4.48%	$11,674
6/30/15	4,020	1,304	52,651	$617,550,928	5.93%	$11,729
6/30/16	4,409	721	56,339	$661,216,570	7.07%	$11,736

CERS Hazardous

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/11	502	102	6,468	$160,259,395	9.08%	$24,777
6/30/12	483	73	6,878	$173,221,483	8.09%	$25,185
6/30/13	519	104	7,293	$182,634,895	5.43%	$25,042
6/30/14	469	116	7,646	$191,007,832	4.58%	$24,981
6/30/15	526	138	8,034	$202,153,338	5.84%	$25,162
6/30/16	604	75	8,563	$215,302,101	6.50%	$25,143

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section

SPRS						
Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/11	52	12	1,263	$47,467,404	4.29%	$37,583
6/30/12	52	16	1,299	$49,887,093	5.10%	$38,404
6/30/13	63	16	1,346	$50,905,789	2.04%	$37,820
6/30/14	95	28	1,413	$53,432,446	4.96%	$37,815
6/30/15	62	15	1,460	$54,930,421	2.80%	$37,624
6/30/16	65	10	1,515	$56,649,918	3.13%	$37,393

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

Summary of Benefit Provisions

KERS & CERS Non-Hazardous Plans

Plan Funding

State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS rates are subject to state budget approval.

Membership Eligibility

For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility for Non-Hazardous			
	Age	Years of Service	Allowance Reduction
TIER 1	**Members Whose Participation Began Before 9/1/2008**		
	65	4	None
	Any	27	None
	55	5	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
	Any	25	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
TIER 2	**Members Whose Participation Began On or After 9/1/2008 but before 1/1/2014**		
	65	5	None
	57	Rule of 87	None
	60	10	6.5% per year for first five years, and 4.5% for next five years before age 65 or Rule of 87 (age plus years of service).
TIER 3	**Members Whose Participation Began On or After 1/1/2014**		
	65	5	None
	57	Rule of 87	None

Benefit Formula for Tiers 1 for Non-Hazardous

Final Compensation	x	Benefit Factor		x	Years of Service
Average of the five highest if participation began before 9/1/2008.		KERS 1.97% if:	Member does not have 13 months credit for 1/1/1998-1/1/1999.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if:	Member has 13 months credit from 1/1/1998-1/1/1999.		
		KERS 2.20% if:	Member has 20 or more years of service, including 13 months from 1/1/1998-1/1/1999 and retires by 1/1/2009.		
		CERS 2.20% if:	Member begins participating prior to 8/1/2004.		

Benefit Formula for Tiers 2 for Non-Hazardous

Average of the last complete five if participation began on or after 9/1/2008 but before 1/1/2014.		CERS 2.00% if:	Member begins participating on or after 8/1/2004 and before 9/1/2008.		
		KERS & CERS increasing percent based on service at retirement* plus 2.00% for each year of service over 30 if:	Member begins participating on or after 8/1/2008 but before 1/1/2014.		

***Service** (and Benefit Factor): **10 years or less** (1.10%); **10 - 20 years** (1.30%); **20 - 26 years** (1.50%); **26 - 30 years** (1.75%)*

Benefit Formula for Tiers 3 for Non-Hazardous & Hazardous

(A-B) = C X 75%=D then B+D=Interest

System	A 5 Year Geometric Average Return	B 2016 Rate	C Upside Sharing Interest	D Interest Rate Earned	Interest Rate Earned (4% + Upside)	Total Interest Credited To Members' Accounts
KERS Non-Hazardous	5.10%	4.00%	1.10%	0.83%	**4.83%**	$380,458
KERS Hazardous	5.32%	4.00%	1.32%	0.92%	**4.92%**	$110,239
CERS Non-Hazardous	5.16%	4.00%	1.16%	0.87%	**4.87%**	$672,783
CERS Hazardous	5.34%	4.00%	1.34%	1.01%	**5.01%**	$147,772
SPRS	5.10%	4.00%	1.10%	0.83%	**4.83%**	$13,511

This interest was calculated on the members' balances as of June 30, 2015, and credited to each member account on June 30, 2016.

Summary of Benefit Provisions

KERS & CERS Non-Hazardous Plans

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits

Members participating before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after 8/1/2004 but before 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. The account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment

The Kentucky General Assembly has the authority to increase, suspend or reduce Cost of Living Adjustments. Senate Bill 2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (1) the system is over 100% funded or (2) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

For Tier 1 employees participating prior to September 1, 2008, the interest paid is set by the Board of Directors and will not be less than 2%, for Tier 2 employees participating on, or after, September 1, 2008, but before January 1, 2014, interest will be credited at a rate of 2.5%. For Tier 3 employees participating on, or after, January 1, 2014, interest will be credited at a minimum rate of 4%.

Summary of Benefit Provisions

KERS Hazardous, CERS Hazardous & SPRS Systems

Plan Funding

State statute requires active members to contribute 8% of creditable compensation. For Tier 2 members participating on, or after, September 1, 2008, an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS & SPRS rates are subject to state budget approval.

Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

State statute requires active members to contribute 5% of creditable compensation. For Tier 2 members, an additional 1% of creditable compensation is required for health insurance.

Retirement Eligibility for Hazardous

	Age	Years of Service	Allowance Reduction
TIER 1	**Members Whose Participation Began Before 9/1/2008**		
	55	5	None
	Any	20	None
	50	15	6.5% per year for first five years, and 4.5% for next five years before age 55 or 20 years of service.
	Any	25	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
TIER 2	**Members Whose Participation Began On or After 9/1/2008 but before 1/1/2014**		
	60	5	None
	Any	25	None
	50	15	6.5% per year for first five years, and 4.5% for next five years before age 60 or 25 years of service.
TIER 3	**Members Whose Participation Began On or After 1/1/2014**		
	60	5	None
	Any	25	None

Benefit Formula for Hazardous for Tier 1 and Tier 2 *(Tier 3 see page 168)*

Final Compensation	x	Benefit Factor		x	Years of Service
Average of the three highest if participation began before 9/1/2008.		KERS 2.49%, CERS 2.50%, SPRS 2.50%, if:	Member begins participating before 9/1/2008.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
Average of the three highest complete years if participation began on or after 9/1/2008.		KERS, CERS and SPRS increasing percent based on service at retirement* if:	Member begins participating on or after 9/1/2008 but before 1/1/2014.		

* ***Service*** *(with Benefit Factor):* ***10 years or less*** *(1.30%);* ***10 - 20 years*** *(1.50%);* ***20 - 25 years*** *(2.25%)* ***25 + years*** *(2.50%)*

Tier 3

Member begins participating on or after 1/1/2014: Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8% and 7.5% of creditable compensation respectively into a current account. This current account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the current account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Disability Benefits

Members hired before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members hired on or after 8/1/2004 but before 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. The account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment

The Kentucky General Assembly has the authority to increase, suspend or reduce Cost of Living Adjustments. Senate Bill 2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (1) the system is over 100% funded or (2) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15.00 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

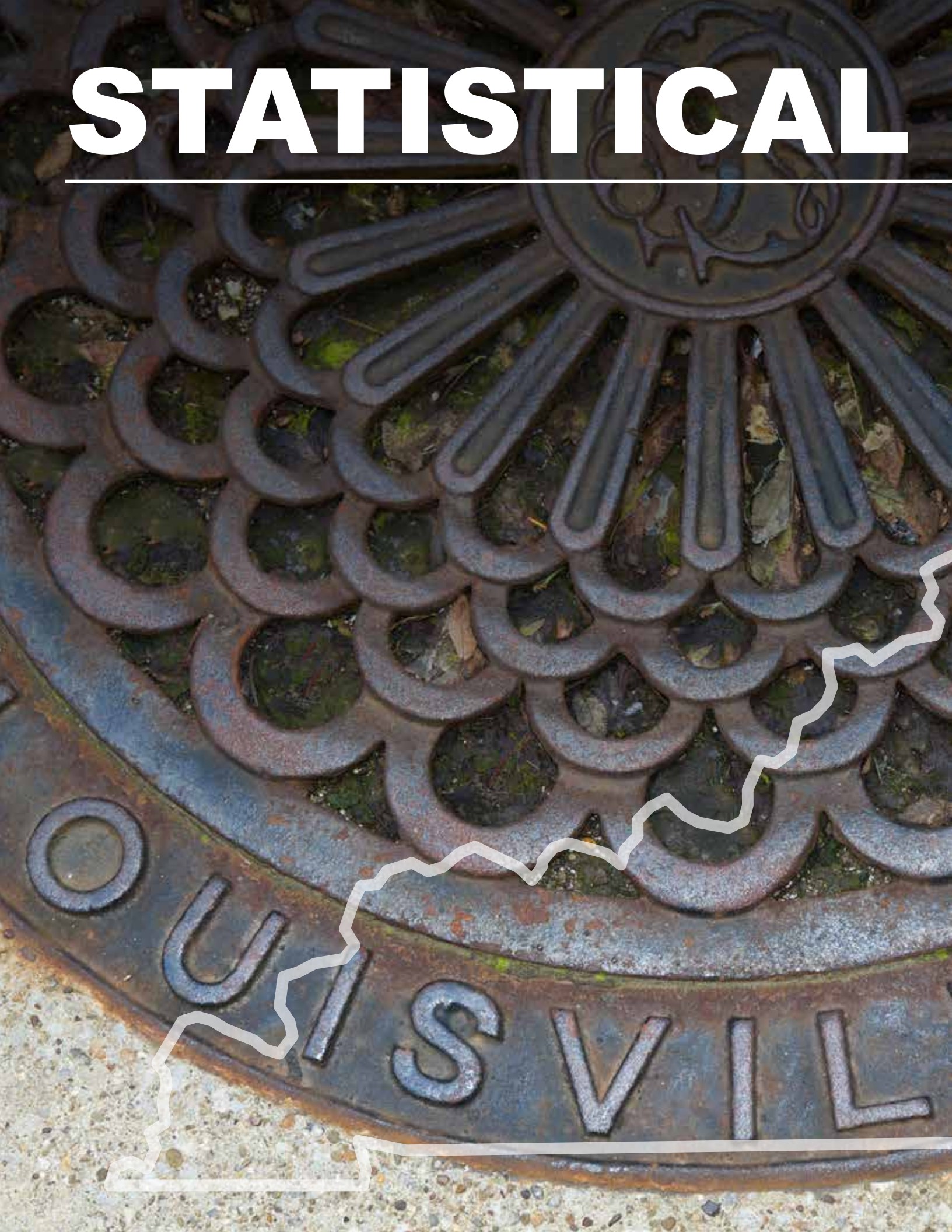
Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

For Tier 1 employees participating prior to September 1, 2008, the interest paid is set by the Board of Directors and will not be less than 2%, for Tier 2 employees participating on, or after, September 1, 2008, but before January 1, 2014, interest will be credited at a rate of 2.5%. For Tier 3 employees participating on, or after, January 1, 2014, interest will be credited at a minimum rate of 4%.

STATISTICAL



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STATISTICAL

Kentucky Retirement Systems

Membership Totals

Fiscal Year	Active	Inactive	Retired	Total
2011	144,894	95,025	84,680	324,599
2012	139,352	107,353	87,472	334,177
2013	137,368	112,462	90,796	340,626
2014	137,138	117,039	93,946	348,123
2015	136,318	121,604	97,630	355,552
2016	135,517	126,468	102,725	364,710

FUND Statistics

DEFINITIONS

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. ***Inactive*** members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. ***Retired*** members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

The data reflects the number of accounts in each system. A single member may have multiple accounts, which contribute to one pension. Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in the retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-Hazardous, then KERS Non-Hazardous. This table does not include individuals receiving payments under dependent child accounts, Qualified Domestic Relations Orders or multiple beneficiary accounts.

KERS Non-Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2011	46,044	33,350	36,239	115,633
2012	41,743	39,338	36,508	117,589
2013	40,710	40,375	37,240	118,325
2014	40,500	41,213	38,022	119,735
2015	39,289	42,479	38,827	120,595
2016	38,121	43,926	40,099	122,146

KERS Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2011	4,045	2,351	2,090	8,486
2012	4,007	2,597	2,180	8,784
2013	4,057	2,882	2,312	9,251
2014	4,094	3,318	2,467	9,879
2015	3,932	3,761	2,575	10,268
2016	3,987	4,067	2,739	10,793

CERS Non-Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2011	84,837	57,073	40,174	182,084
2012	83,658	63,280	42,068	189,006
2013	82,631	67,013	44,164	193,808
2014	82,494	70,231	46,112	198,837
2015	82,969	72,965	48,515	204,449
2016	83,346	75,904	51,673	210,923

CERS Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2011	9,019	2,047	5,158	16,224
2012	9,040	1,914	5,513	16,467
2013	9,069	1,956	5,840	16,865
2014	9,189	2,038	6,066	17,293
2015	9,188	2,142	6,389	17,719
2016	9,139	2,309	6,834	18,282

SPRS

Fiscal Year	Active	Inactive	Retired	Total
2011	949	204	1,019	2,172
2012	904	224	1,203	2,331
2013	901	236	1,240	2,377
2014	861	239	1,279	2,379
2015	940	257	1,324	2,521
2016	924	262	1,379	2,565

Principal Participating Employers in KERS

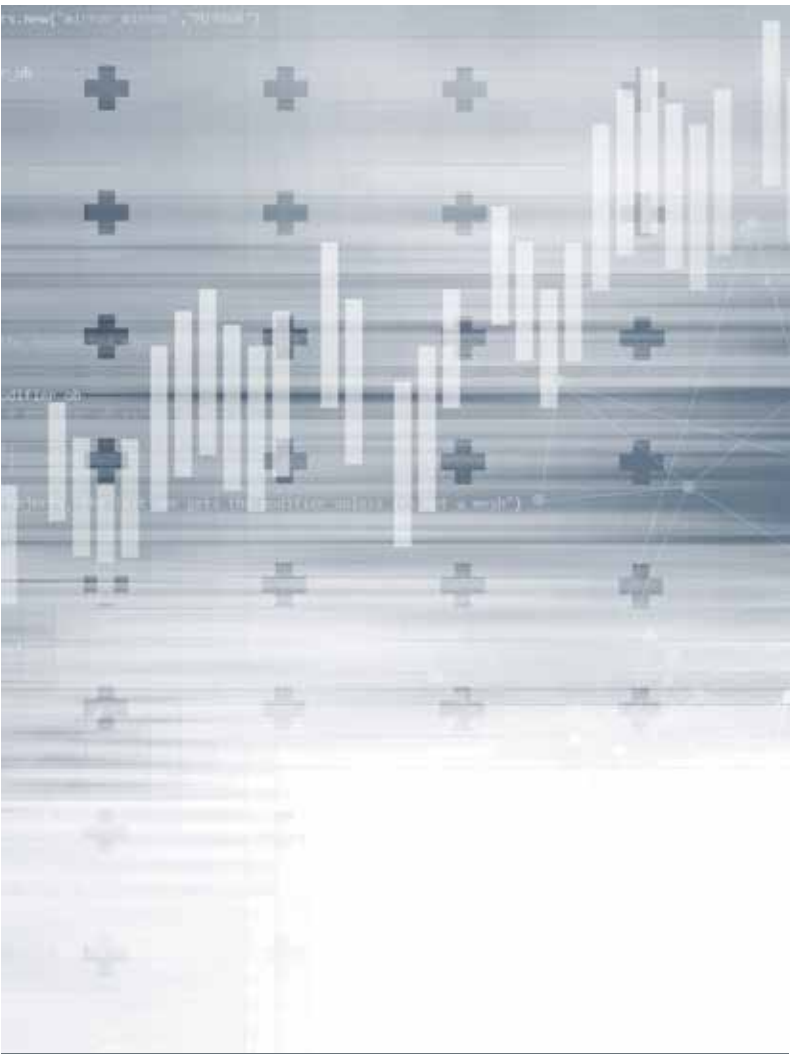
Participating Employer	Rank	Covered Employees	% of Total System
Department For Community Based Services	1	4,378	10.18%
Department Of Highways	2	3,927	9.13%
Department Of Corrections	3	3,821	8.89%
Judicial Department Administrative Office Of The Courts	4	1,356	3.15%
Department Of Juvenile Justice	5	1,277	2.97%
Bluegrass.org	6	959	2.23%
Kentucky State Police	7	951	2.21%
Eastern Kentucky University	8	939	2.18%
Department Of Revenue	9	890	2.07%
Dept For Behavioral Health Developmental Intellectual Disabilities	10	889	2.07%
All Others		23,611	54.91%
Total		**42,998**	**100.00%**

Schedule of Participating Employers in KERS

Agency Classification	Number of Agencies	Number of Employees
County Attorneys	61	331
Health Departments	61	2,672
Master Commissioner	36	76
Non-P1 State Agencies	39	1,345
Other Retirement Systems	2	287
P1 State Agencies	140	31,370
Regional Mental Health Units	12	2,839
Universities	7	4,075
Total	**358**	**42,995**
Total Employees By Tier Levels:		
Tier 1		**26,014**
Tier 2		**9,586**
Tier 3		**7,395**

Principal Participating Employers in CERS

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board Of Education	1	6,458	6.90%
Louisville Jefferson County Metro Government	2	5,133	5.49%
Fayette County Board Of Education	3	1,885	2.02%
Judicial Department Administrative Office Of The Courts	4	1,633	1.75%
Lexington Fayette Urban County Government	5	1,588	1.70%
Pike County Board Of Education	6	1,203	1.29%
Boone County Board Of Education	7	1,120	1.20%
Bullitt County Board Of Education	8	1,065	1.14%
Hardin County Board Of Education	9	1,014	1.08%
Warren County Board Of Education	10	913	0.98%
All Others		71,527	76.47%
Total		**93,539**	**100.00%**



Schedule of Participating Employers in CERS

Agency Classification	Number of Agencies	Number of Employees
Airport Boards	5	514
Ambulance Services	20	401
Area Development Districts	14	721
Boards of Education	173	48,396
Cities	220	10,148
Community Action Agencies	21	2,797
Conservation Districts	49	62
County Attorneys	77	670
County Clerks	16	590
Development Authorities	6	11
Fire Departments	38	814
Fiscal Courts	118	10,931
Health Departments	1	342
Housing Authorities	42	444
Jailers	2	63
Libraries	86	1,241
Other Retirement Systems	2	3
P1 State Agencies	4	1,633
Parks and Recreation	7	66
Planning Commissions	16	229
Police Departments	2	16
Riverport Authorities	5	80
Sanitation Districts	9	350
Sheriff Departments	12	773
Special Districts & Boards	49	1,441
Tourist Commissions	23	174
Urban Government Agencies	2	6,721
Utility Boards	120	3,906
Total	**1,140**	**93,537**
Total Employees By Tier Levels:		
Tier 1		**51,941**
Tier 2		**22,123**
Tier 3		**19,473**

Schedule of Participating Employers in SPRS

Kentucky State Police - Uniformed Officers	**1**	**934**
Total Employees By Tier Levels:		
Tier 1		**607**
Tier 2		**186**
Tier 3		**141**

Average Monthly Benefit by Length of Service in KERS

	KERS Non-Hazardous		KERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	5,516	$173	727	$200
5 or more but less than 10	5,782	$420	793	$566
10 or more but less than 15	5,164	$702	708	$1,008
15 or more but less than 20	4,365	$1,029	625	$1,532
20 or more but less than 25	4,805	$1,373	905	$1,994
25 or more but less than 30	11,768	$2,288	165	$2,751
30 or more but less than 35	6,429	$3,233	60	$3,487
35 or more	2,537	$4,567	9	$3,633
Total	**46,366**	**$1,669**	**3,992**	**$1,194**

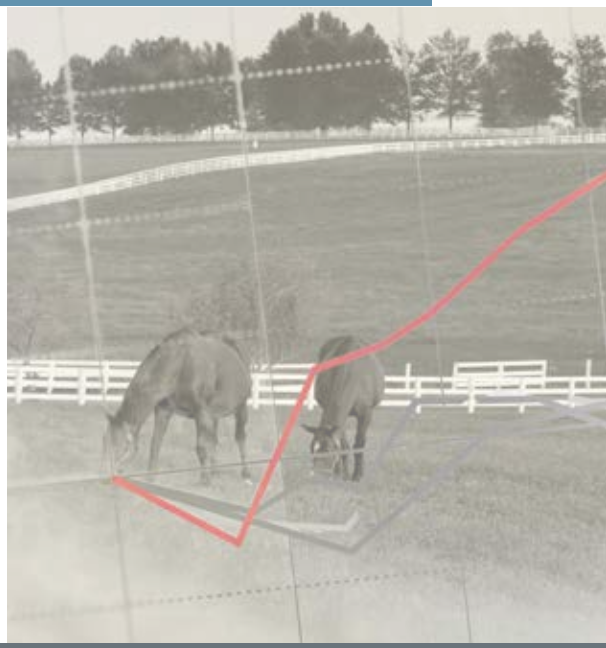
Average Monthly Benefit by Length of Service in CERS

	CERS Non-Hazardous		CERS Hazardous	
Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	7,555	$160	987	$353
5 or more but less than 10	10,717	$335	1,000	$672
10 or more but less than 15	10,273	$526	867	$1,211
15 or more but less than 20	8,290	$773	786	$1,736
20 or more but less than 25	8,907	$991	3,221	$2,440
25 or more but less than 30	10,476	$1,907	1,283	$3,414
30 or more but less than 35	2,563	$2,683	400	$4,155
35 or more	685	$3,690	91	$5,128
Total	**59,466**	**$922**	**8,639**	**$2,063**

Average Monthly Benefit by Length of Service in SPRS

Service Credit Range	**Number of Accounts**	**Average Monthly Benefit**
Under 5 Years	124	$530
5 or more but less than 10	52	$943
10 or more but less than 15	51	$1,333
15 or more but less than 20	93	$2,005
20 or more but less than 25	462	$2,613
25 or more but less than 30	460	$3,612
30 or more but less than 35	234	$4,719
35 or more	63	$5,867
Total	**1,539**	**$3,062**

This table reflects the Average Monthly Pension Benefit. A single member may have multiple accounts, which contribute to one pension. This table does not reflect dependent child accounts, Qualified Domestic Relations Order (QDRO) accounts or multiple beneficiary accounts.



Plan Net Position *(in Thousands)*

KERS

	Non-Hazardous			Hazardous		
Fiscal Year	Pension	Insurance	Total	Pension	Insurance	Total
June 30, 2011	3,544,242	428,659	3,972,901	511,085	320,673	831,758
June 30, 2012	2,977,935	418,490	3,396,425	476,589	330,730	807,319
June 30, 2013	2,760,753	496,040	3,256,793	514,592	372,883	887,475
June 30, 2014	2,578,290	646,905	3,225,195	561,484	433,525	995,009
June 30, 2015	2,327,782	665,639	2,993.421	552,468	439,113	991,581
June 30, 2016	1,980,292	668,318	2,648,610	527,880	437,880	965,277

CERS

June 30, 2011	5,583,451	1,446,998	7,030,449	1,761,858	773,139	2,534,997
June 30, 2012	5,381,602	1,428,821	6,810,423	1,672,970	785,874	2,458,844
June 30, 2013	5,795,568	1,618,960	7,414,528	1,833,571	891,320	2,724,891
June 30, 2014	6,528,147	1,878,711	8,406,858	2,087,002	1,030,303	3,117,305
June 30, 2015	6,440,800	1,920,946	8,361,746	2,078,202	1,056,480	3,134,682
June 30, 2016	6,141,396	1,908,550	8,049,946	2,010,177	1,056,097	3,066,274

For additional historical data for all charts presented, please visit our website for previous annual reports at https://kyret.ky.gov/about/Publications/Pages/default.aspx

SPRS

Fiscal Year	Pension	Insurance	Total
June 30, 2011	279,927	127,319	407,246
June 30, 2012	250,476	125,398	375,874
June 30, 2013	248,698	142,691	391,389
June 30, 2014	260,974	164,958	425,932
June 30, 2015	247,229	164,714	411,943
June 30, 2016	218,013	160,949	378,962

Kentucky Retirement Systems Total

Fiscal Year	Pension	Insurance	Total
June 30, 2011	11,680,563	3,096,788	14,777,351
June 30, 2012	10,758,706	3,089,313	13,848,019
June 30, 2013	11,153,182	3,521,894	14,675,076
June 30, 2014	12,015,897	4,154,402	16,170,299
June 30, 2015	11,646,481	4,246,892	15,893,373
June 30, 2016	10,877,757	4,231,311	15,109,068

Changes in Plan Net Position *(in Thousands)*

KERS Non-Hazardous Pension Fund

Additions	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Members' Contributions	$109,879	$96,418	$96,744	$92,941	$100,424	$101,677
Employers' Contributions	185,558	211,071	280,874	296,836	520,949	512,670
Health Insurance Contributions (HB1)	2,441	5,337	3,344	4,546	4,181	4,817
Net Investment Income (Loss)	599,790	9,789	303,011	337,174	44,094	(20,662)
Bank of America Settlement	-	-	-	-	8,442	-
Pension Spiking	-	-	-	-	743	414
Total Additions	$897,668	322,615	683,973	732,246	679,308	598,916
Deductions						
Benefit Payments	838,372	858,151	873,906	889,937	905,790	923,288
Refunds	10,931	12,004	12,907	13,627	13,552	12,130
Administrative Expenses	8,558	8,776	10,719	11,145	10,474	10,807
Capital Project Expenses	67	8	-	-	-	181
Total Deductions	857,928	878,939	897,532	914,709	929,816	946,406
Net Increase (Decrease) in Plan Net Position	**$39,740**	**($556,324)**	**($213,559)**	**($182,463)**	**($250,508)**	**($347,490)**

KERS Non-Hazardous Insurance Fund

Additions	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Employers' Contributions	$123,256	$146,844	$162,191	$164,176	$132,208	$131,935
Net Investment Income (Loss)	77,225	(4,803)	40,661	96,578	8,690	(3,904)
Retired Re-employed (HB1)	-	-	-	-	3,732	3,880
Member Drug Reimbursement	10,025	7,865	4,846	8	-	-
Premiums Rec'd from Retirees	15,826	15,666	14,294	918	272	240
Total Additions	$226,332	$165,563	221,992	264,273	144,902	132,151
Deductions						
Benefit Payments	161,804	163,841	140,157	112,671	125,272	126,550
Administrative Expenses	4,667	5,203	4,285	736	893	818
Total Deductions	166,471	169,044	144,442	113,407	126,168	129,469
Net Increase (Decrease) in Plan Net Position	**$59,861**	**$169,044**	**$77,550**	**$150,865**	**$18,734**	**$2,679**

Changes in Plan Net Position *(in Thousands)*

KERS Hazardous Pension Fund

Additions	2011	2012	2013	2014	2015	2016
Member Contributions	$12,959	$11,602	$11,467	$11,995	$12,670	$15,055
Employer Contributions	18,085	17,367	27,334	11,670	28,374	23,690
Health Insurance Contribution (HB1)	241	629	402	551	537	684
Net Investment Income (Loss)	83,492	(10,286)	51,497	80,549	8,572	(1,652)
Bank of America Settlement	-	-	-	-	767	-
Pension Spiking	-	-	-	-	162	70
Total Additions	$114,777	19,312	90,700	104,941	51,211	37,847
Deductions						
Benefit Payments	44,509	48,424	48,855	54,320	56,774	59,306
Refunds	2,062	2,543	2,762	2,830	2,609	2,211
Administrative Expenses	721	877	733	897	844	903
Capital Project Expenses	6	-	-	-	-	15
Total Deductions	47,298	51,844	52,350	58,048	60,277	62,435
Net Increase (Decrease) in Plan Net Position	**$67,479**	**$(32,532)**	**$38,350**	**$46,892**	**($9,016)**	**($24,588)**

KERS Hazardous Insurance Fund

Additions	2011	2012	2013	2014	2015	2016
Employers' Contributions	$18,826	$23,984	$25,144	$23,336	$14,173	$15,929
Net Investment Income (Loss)	45,205	60	32,887	52,082	7,793	(882)
Retired Re-employed (HB1)	-	-	-	-	709	837
Member Drug Reimbursement	365	351	243	-	-	-
Premiums Rec'd from Retirees	588	876	895	37	14	(13)
Total Additions	64,984	25,271	59,169	76,126	22,689	15,871
Deductions						
Benefit Payments	15,327	13,941	16,837	15,405	17,000	17,490
Administrative Expenses	223	335	179	78	101	97
Total Deductions	15,550	14,276	17,016	15,482	17,101	17,587
Net Increase (Decrease) in Plan Net Position	**$49,434**	**$10,995**	**$42,153**	**$60,642**	**$5,588**	**($1,716)**

Changes in Plan Net Position *(in Thousands)*

CERS Non-Hazardous Pension Fund

Additions	2011	2012	2013	2014	2015	2016
Members' Contributions	$144,861	$119,123	$120,777	$122,459	$133,637	$133,987
Employers' Contributions	247,968	270,664	294,914	324,231	297,714	282,767
Health Insurance Contribution (HB1)	3,216	5,101	4,659	6,109	6,674	7,687
Net Investment Income (Loss)	887,514	(3,349)	579,161	893,386	110,569	(40,799)
Bank of America Settlement	-	-	-	-	10,280	-
Pension Spiking	-	-	-	-	850	1,339
Total Additions	$1,283,559	$391,539	$999,511	1,348,330	559,724	384,981
Deductions						
Benefit Payments	494,344	524,385	553,204	582,850	615,335	651,247
Refunds	11,816	12.765	13,306	14,286	13,524	13,754
Administrative Expenses	14,324	16,740	17,743	18,615	18,212	19,078
Capital Project Expenses	112	9	-	-	-	307
Total Deductions	520,596	553,899	584,253	615,751	647,071	684,385
Net Increase (Decrease) in Plan Net Position	**$762,963**	**$(162,360)**	**$415,258**	**$732,579**	**($87,347)**	**($299,404)**

CERS Non-Hazardous Insurance Fund

Additions	2011	2012	2013	2014	2015	2016
Employer Contributions	$185,639	$164,297	$158,212	$121,161	$115,836	$108,269
Net Investment Income (Loss)	274,743	(32,992)	147,194	231,743	36,731	(1,422)
Retired Re-employed (HB1)	-	-	-	-	3,608	3,567
Member Drug Reimbursement	10,449	8,443	5,360	6	-	-
Premiums Rec'd from Retirees	18,053	17,493	16,293	1,449	582	629
Total Additions	$488,884	$157,241	327,059	357,064	156,757	111,043
Deductions						-
Benefit Payments	131,945	141,694	132,489	96,804	113,734	122,713
Administrative Expenses	4,763	5,545	4,431	508	782	726
Total Deductions	136,708	147,239	136,920	97,312	114,522	123,439
Net Increase (Decrease) in Plan Net Position	**$352,176**	**$10,002**	**$190,139**	**$259,751**	**$42,235**	**($12,396)**

Changes in Plan Net Position *(in Thousands)*

CERS Hazardous Pension Fund

Additions	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Members' Contributions	$53,918	$41,797	$42,863	$42,631	$46,609	$51,554
Employers' Contributions	84,595	77,311	120,140	115,240	107,515	104,952
Health Insurance Contribution (HB1)	1,157	811	734	1,091	1,084	1,418
Net Investment Income (Loss)	286,688	(24,724)	181,171	287,816	37,104	(9,021)
Bank of America Settlement	-	-	-	-	2,865	-
Pension Spiking	-	-	-	-	557	762
Total Additions	$426,358	95,195	344,908	447,452	195,734	149,665
Deductions						
Benefit Payments	167,540	169,352	179,696	189,635	200,134	213,448
Refunds	2,654	3,516	3,158	2,664	3,111	2,879
Administrative Expenses	1,191	1,319	1,202	1,721	1,289	1,337
Capital Project Expenses	9	-	-	-	-	26
Total Deductions	171,394	174,187	184,056	194,020	204,534	217,690
Net Increase (Decrease) in Plan Net Position	**$254,964**	**($79,992)**	**$160,852**	**$253,431**	**($8,800)**	**($68,025)**

CERS Hazardous Insurance Fund

Additions	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Employers' Contributions	$98,203	$90,204	$84,962	$74,265	$71,008	$66,575
Net Investment Income (Loss)	139,242	(16,127)	79,885	124,952	20,283	1,102
Retired Re-employed (HB1)	-	-	-	-	770	862
Member Drug Reimbursement	972	871	562	-	-	-
Premiums Rec'd from Retirees	516	695	657	32	10	(106)
Total Additions	$238,933	$75,643	$166,066	200,101	92,071	68,615
Deductions						
Benefit Payments	51,831	50,155	59,941	60,843	65,553	68,518
Administrative Expenses	580	688	679	275	339	480
Total Deductions	52,411	50,843	60,620	61,117	65,894	68,998
Net Increase (Decrease) in Plan Net Position	**$186,522**	**$24,800**	**$105,446**	**$138,983**	**$26,177**	**($383)**

Changes in Plan Net Position *(in Thousands)*

SPRS Pension Fund

Additions	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Members' Contributions	$5,225	$5,154	$4,495	$5,005	$5,150	$5,149
Employers' Contributions	11,920	15,040	18,501	20,279	31,444	25,723
Health Insurance Contribution (HB1)	31	46	48	70	94	113
Net Investment Income (Loss)	44,739	43	25,954	40,291	3,427	(3,841)
Bank of America Settlement	-	-	-	-	646	-
Pension Spiking	-	-	-	-	546	99
Total Additions	61,915	20,283	48,998	65,729	41,307	27,243
Deductions						
Benefit Payments	46,754	48,867	50,559	53,026	54,766	56,268
Refunds	58	149	31	214	85	11
Administrative Expenses	124	73	184	215	201	176
Capital Project Expenses	1	-	-	-	-	4
Total Deductions	46,937	49,089	50,774	53,454	55,052	56,459
Net Increase (Decrease) in Plan Net Position	**$14,978**	**($28,806)**	**($1,776)**	**$12,276**	**($13,745)**	**($29,216)**

SPRS Insurance Fund

Additions	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Employer Contributions	$10,051	$10,810	$16,829	$14,498	$10,379	$10,228
Net Investment Income (Loss)	24,773	(1,458)	12,993	20,458	2,921	(48)
Retired Re-employed (HB1)	-	-	-	-	3	9
Member Drug Reimbursement	318	279	178	-	-	-
Premiums Rec'd from Retirees	18	20	23	11	1	(29)
Total Additions	$35,160	$9,651	$30,023	$35,012	$13,304	10,160
Deductions						
Benefit Payments	12,172	10,791	12,546	12,688	13,483	13,836
Administrative Expenses	179	201	184	58	65	89
Total Deductions	12,351	10,992	12,730	12,745	13,548	13,925
Net Increase (Decrease) in Plan Net Position	**$22,809**	**($1,341)**	**$17,293**	**$22,267**	**($244)**	**($3,765)**

Schedule of Benefit Expenses

KERS Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2010-11				
Average Benefit	$1,008	$1,920	$974	$1,071
Number of Accounts	6,118	30,900	2,629	835
Total Monthly Benefits	$6,166,372	$59,318,561	$2,561,377	$894,077
% of Total Monthly Benefits	8.94%	86.04%	3.72%	1.30%
FY 2011-12				
Average Benefit	$1,008	$1,927	$1,029	$925
Number of Accounts	6,218	31,580	2,626	959
Total Monthly Benefits	$6,269,576	$60,879,802	$2,702,410	$887,236
% of Total Monthly Benefits	8.86%	86.06%	3.82%	1.25%
FY 2012-13				
Average Benefit	$1,003	$1,915	$1,020	$889
Number of Accounts	6,441	32,310	2,687	962
Total Monthly Benefits	$6,459,840	$61,882,399	$2,740,491	$855,033
% of Total Monthly Benefits	8.98%	86.02%	3.81%	1.19%
FY 2013-14				
Average Benefit	$992	$1,911	$987	$886
Number of Accounts	6,678	33,106	2,706	954
Total Monthly Benefits	$6,624,472	$63,255,779	$2,671,749	$845,468
% of Total Monthly Benefits	9.03%	86.18%	3.64%	1.15%
FY 2014-15				
Average Benefit	$992	$1,901	$996	$909
Number of Accounts	6,896	33,940	2,696	983
Total Monthly Benefits	$6,843,193	$64,503,048	$2,684,720	$893,407
% of Total Monthly Benefits	9.13%	86.09%	3.58%	1.19%
FY 2015-16				
Average Benefit	$989	$1,886	$1,005	$902
Number of Accounts	7,390	35,192	2,770	1,014
Total Monthly Benefits	$7,312,293	$66,383,638	$2,784,928	$914,804
% of Total Monthly Benefits	9.45%	85.77%	3.60%	1.18%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

KERS Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2010-11				
Average Benefit	$957	$1,526	$600	$814
Number of Accounts	1,571	1,240	158	79
Total Monthly Benefits	$1,503,160	$1,892,300	$94,766	$64,299
% of Total Monthly Benefits	42.29%	53.24%	2.66%	1.81%
FY 2011-12				
Average Benefit	$976.67	$1,541.49	$581	$721
Number of Accounts	1,657	1,339	180	92
Total Monthly Benefits	$1,618,343	$2,064,050	$104,644	$66,409
% of Total Monthly Benefits	42.00%	53.56%	2.72%	1.72%
FY 2012-13				
Average Benefit	$961	$1,543	$662	$725
Number of Accounts	1,751	1,417	190	93
Total Monthly Benefits	$1,682,541	$2,186,334	$125,704	$67,440
% of Total Monthly Benefits	41.42%	53.82%	3.10%	1.66%
FY 2013-14				
Average Benefit	$971	$1,560	$649	$749
Number of Accounts	1,851	1,497	191	89
Total Monthly Benefits	$1,797,900	$2,335,190	$123,867	$66,679
% of Total Monthly Benefits	41.58%	54.01%	2.86%	1.54%
FY 2014-15				
Average Benefit	$986	$1,556	$661	$714
Number of Accounts	1,912	1,566	193	90
Total Monthly Benefits	$1,884,477	$2,436,923	$127,477	$64,250
% of Total Monthly Benefits				
FY 2015-16				
Average Benefit	$983.95	$1,542.29	$663.21	$729.84
Number of Accounts	2,046	1,658	194	94
Total Monthly Benefits	$2,011,530	$2,557,114	$128,663	$68,605
% of Total Monthly Benefits	42.21%	53.65%	2.70%	1.44%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

CERS Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2010-11				
Average Benefit	$577	$1,031	$847	$651
Number of Accounts	10,054	30,224	4,095	873
Total Monthly Benefits	$5,802,568	$31,149,398	$3,469,974	$568,188
% of Total Monthly Benefits	14.16%	75.99%	8.47%	1.38%
FY 2011-12				
Average Benefit	$587	$1,039	$870	$636
Number of Accounts	10,620	31,797	4,280	1,052
Total Monthly Benefits	$6,237,369	$33,041,035	$3,724,859	$669,377
% of Total Monthly Benefits	14.28%	75.66%	8.53%	1.53%
FY 2012-13				
Average Benefit	$591	$1,042	$878	$625
Number of Accounts	11,266	33,393	4,537	1,075
Total Monthly Benefits	$6,661,524	$34,797,169	$3,982,213	$672,310
% of Total Monthly Benefits	14.45%	75.46%	8.64%	1.45%
FY 2012-13				
Average Benefit	$596	$1,042	$856	$613
Number of Accounts	11,885	34,911	4,729	1,110
Total Monthly Benefits	$7,081,048	$36,375,607	$4,047,035	$680,784
% of Total Monthly Benefits	14.70%	75.49%	8.40%	1.41%
FY 2014-15				
Average Benefit	$612	$1,044	$862	$616
Number of Accounts	12,749	36,746	4,854	1,161
Total Monthly Benefits	$7,801,662	$38,375,001	$4,186,130	$715,032
% of Total Monthly Benefits	15.27%	75.13%	8.20%	1.40%
FY 2015-16				
Average Benefit	$623	$1,045	$874	$626
Number of Accounts	14,014	39,066	5,118	1,268
Total Monthly Benefits	$8,724,563	$40,823,334	$4,472,723	$793,726
% of Total Monthly Benefits	15.92%	74.48%	8.16%	1.45%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

CERS Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2010-11				
Average Benefit	$1,432	$2,410	$1,362	$1,153
Number of Accounts	1,643	4,082	487	90
Total Monthly Benefits	$2,352,710	$9,838,311	$663,455	$103,808
% of Total Monthly Benefits	18.16%	75.92%	5.12%	0.80%
FY 2011-12				
Average Benefit	$1,430	$2,422	$1,300	$1,046
Number of Accounts	1,766	4,407	662	110
Total Monthly Benefits	$2,526,722	$10,673,928	$861,223	$115,107
% of Total Monthly Benefits	17.82%	75.29%	6.07%	0.81%
FY 2012-13				
Average Benefit	$1,433	$2,429	$1,121	$1,073
Number of Accounts	1,883	4,683	681	119
Total Monthly Benefits	$2,699,176	$11,374,811	$763,700	$127,689
% of Total Monthly Benefits	18.04%	76.01%	5.10%	0.85%
FY 2013-14				
Average Benefit	$1,467	$2,437	$1,125	$1,008
Number of Accounts	1,974	4,873	695	119
Total Monthly Benefits	$2,895,353	$11,876,578	$781,685	$119,935
% of Total Monthly Benefits	18.47%	75.77%	4.99,%	0.77%
FY 2014-15				
Average Benefit	$1,480	$2,448	$1,145	$954
Number of Accounts	2,097	5,139	688	127
Total Monthly Benefits	$3,103,613	$12,581,191	$787,549	$121,103
% of Total Monthly Benefits	18.70%	75.82%	4.75%	0.73%
FY 2015-16				
Average Benefit	$1,494	$2,453	$1,137	$975
Number of Accounts	2,269	5,485	742	143
Total Monthly Benefits	$3,388,890	$13,452,235	$843,463	$139,353
% of Total Monthly Benefits	19.01%	75.47%	4.73%	0.78%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

SPRS

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2010-11				
Average Benefit	$3,529	$3,112	$1,494	$2,162
Number of Accounts	146	1,037	55	26
Total Monthly Benefits	$515,270	$3,226,744	$82,184	$56,210
% of Total Monthly Benefits	13.28%	83.15%	2.12%	1.45%
FY 2011-12				
Average Benefit	$3,560	$3,135	$1,372	$2,136
Number of Accounts	150	1,083	66	25
Total Monthly Benefits	$534,132	$3,396,203	$90,562	$53,404
% of Total Monthly Benefits	13.11%	83.36%	2.22%	1.31%
FY 2012-13				
Average Benefit	$3,601	$3,130	$1,320	$2,198
Number of Accounts	149	1,126	74	23
Total Monthly Benefits	$536,481	$3,524,248	$97,681	$50,563
% of Total Monthly Benefits	12.75%	83.73%	2.32%	1.20%
FY 2013-14				
Average Benefit	$3,621	$3,197	$1,346	$2,196
Number of Accounts	146	1,172	75	23
Total Monthly Benefits	$528,611	$3,747,012	$100,974	$49,197
% of Total Monthly Benefits	11.94%	84.66%	2.28%	1.11%
FY 2014-15				
Average Benefit	$3,578	$3,189	$1,347	$2,153
Number of Accounts	150	1,213	75	23
Total Monthly Benefits	$536,649	$3,867,971	$101,018	$49,524
% of Total Monthly Benefits	11.78%	84.91%	2.22%	1.09%
FY 2015-16				
Average Benefit	$3,579	$3,135	$1,269	$2,008
Number of Accounts	155	1,277	82	25
Total Monthly Benefits	$554,743	$4,002,993	$104,056	$50,196
% of Total Monthly Benefits	11.77%	84.95%	2.21%	1.07%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Analysis of Initial Retirees

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS	KRS
FY 2010-11						
Number of Accounts	1,486	247	3,045	415	46	
Average Service Credit (months)	174	184	182	204	260	
Average Final Compensation	$44,341	$44,821	$32,359	$58,814	$71,501	
Average Monthly Benefit	$1,047	$1,379	$824	$2,114	$3,296	
Average System Payment for Health Insurance	$264	$516	$284	$777	$874	
FY 2011-12						
Number of Accounts	1,641	206	3,160	410	47	
Average Service Credit (months)	190	169	185	210	276	
Average Final Compensation	$45,528	$45,815	$32,709	$57,756	$71,298	
Average Monthly Benefit	$1,162	$1,312	$872	$2,149	$3,556	
Average System Payment for Health Insurance	$291	$496	$271	$826	$981	
FY 2012-13						
Number of Accounts	1,810	205	3,303	443	59	
Average Service Credit (months)	199	157	189	202	234	
Average Final Compensation	$47,168	$46,456	$34,292	$58,516	$69,325	
Average Monthly Benefit	$1,275	$1,250	$938	$2,196	$2,893	
Average System Payment for Health Insurance	$303	$433	$259	$853	$994	
FY 2013-14						
Number of Accounts	2,037	245	3,529	430	77	
Average Service Credit (months)	202	165	182	194	260	
Average Final Compensation	$46,480	$46,595	$33,816	$57,718	$70,009	
Average Monthly Benefit	$1,278	$1,296	$879	$2,021	$3,322	
Average System Payment for Health Insurance	$534	$937	$486	$1,279	$1,378	
FY 2014-15						
Number of Accounts	2,078	191	4,084	496	55	
Average Service Credit (months)	204	164	188	204	251	
Average Final Compensation	$47,187	$47,148	$34,561	$59,589	$67,862	
Average Monthly Benefit	$1,308	$1,280	$913	$2,178	$3,009	
Average System Payment for Health Insurance	$549	$906	$489	$1,254	$1,376	
FY 2015-16						
Number of Accounts	2,043	205	4,151	522	57	6,739
Average Service Credit (months)	207	160	190	212	234	196
Average Final Compensation	$47,429	$44,494	$34,632	$58,977	$65,535	$38,758
Average Monthly Benefit	$1,351	$1,225	$932	$2,303	$2,953	$1,182
Average System Payment for Health Insurance	$558	$870	$501	$1,277	$1,425	$354

This table represents all individuals who had an initial retirement date within the fiscal year.

Payment Options Selected by Retired Members

	Basic	Lump Sum	Other	Period Certain	Pop Up	Social Security Adjustment	Survivorship
KERS Non-Hazardous							
Number of Accounts	15,777	2,173	14	5,881	8,841	3,342	10,338
Monthly Benefits	$24,087,264	$2,526,003	$11,770	$9,107,041	$18,399,204	$5,798,457	$17,465,924
KERS Hazardous							
Number of Accounts	1,041	255	4	458	1,082	285	867
Monthly Benefits	$1,145,084	$259,539	$2,414	$501,183	$1,524,159	$330,925	$1,002,609
CERS Non-Hazardous							
Number of Accounts	24,127	3,305	16	8,564	9,391	2,070	11,993
Monthly Benefits	$19,114,794	$2,210,212	$7,340	$7,214,895	$11,491,970	$2,706,968	$12,068,165
CERS Hazardous							
Number of Accounts	1,413	472	28	784	3,371	540	2,031
Monthly Benefits	$2,647,204	$751,353	$15,125	$1,299,506	$8,158,275	$847,285	$4,105,201
SPRS							
Number of Accounts	163	22	1	131	612	199	410
Monthly Benefits	$477,067	$51,466	$893	$321,156	$2,135,476	$406,553	$1,319,379
KRS Total							
Number of Accounts	42,522	6,227	63	15,818	23,297	6,436	25,639
Monthly Benefits	$47,471,413	$5,798,573	$37,542	$18,443,781	$41,709,084	$10,090,188	$35,961,278

The information in this table represents accounts administered by KRS.
A single member may have multiple accounts, which contribute to one pension.

EMPLOYER Contribution Rates

In KERS, CERS, and SPRS both the employee and the employer contribute a percentage of creditable compensation to the Systems.

The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employees hired on or after September 1, 2008, contribute an additional 1% to health insurance.

Under Kentucky Revised Statutes 61.565, KERS and SPRS employer contribution rates are set by the KRS Board of Trustees based on an annual actuarial valuation. However, KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. In recent years, the Kentucky General Assembly has routinely suspended Kentucky Revised Statute 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the Board's consulting actuary. The table in the Actuarial Section shows the KERS and SPRS employer contribution rates that were actuarially recommended in the annual valuation without any adjustments (Recommended Rate) and the rate specified by the Executive Branch budget bill for each fiscal year (Budgeted Rate).

The CERS employer contribution rates are also set by the Systems' Board under Kentucky Revised Statute 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. The CERS employer contribution rates for fiscal year 2008-2009 were reduced from the actuarially recommended rate as a result of the passage of House Bill (HB) 1 during the 2008 Extraordinary Session of the Kentucky General Assembly. Also, during its 2009 Regular Session, the Kentucky General Assembly enacted HB 117, which mandated an extension of the phase-in of insurance contribution rates that had been previously approved by the KRS Board in 2006 from five years to 10 years to further mitigate the impact of the application of Governmental Accounting Standards Board Statements 43 and 45 on CERS employer contribution rates for health insurance. The "Recommended Rate" shown for CERS non-hazardous and hazardous plans are the actuarially recommended rates as set forth in the annual valuation. The "Budgeted Rate" shown for the two plans is the rate required by the 10 year phase-in mandated in KRS 61.565(6).

Employer Contribution Rates (percentages)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
KERS Non-Hazardous						
Budgeted Rate	16.98	19.82	23.61	26.79	38.77	38.77
Recommended Rate	38.58	40.71	44.55	45.28	38.77	38.77
KERS Hazardous						
Budgeted Rate	26.12	28.98	29.79	32.21	26.34	26.34
Recommended Rate	34.37	33.84	35.89	28.84	26.34	26.34
CERS Non-Hazardous						
Budgeted Rate	16.93	18.96	19.55	18.89	17.67	17.06%
Recommended Rate	19.81	21.29	21.21	19.58	17.67	17.06%
CERS Hazardous						
Budgeted Rate	33.25	35.76	37.60	35.70	34.31	32.95%
Recommended Rate	40.06	41.65	41.94	37.79	34.31	32.95%
SPRS						
Budgeted Rate	45.54	52.13	63.67	71.15	75.76	75.76
Recommended Rate	85.63	94.63	103.41	96.52	75.76	75.76

Retired **RE-EMPLOYED**

From August 1, 1998 through August 31, 2008, state law allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service was observed. The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

Reemployed Retirees in Full-Time Positions Covered by Same System & Contributing to a New Account

	KERS			CERS			SPRS
Reemployed Retirees in KRS	**Non-Hazardous**	**Hazardous**	**TOTAL**	**Non-Hazardous**	**Hazardous**	**TOTAL**	**TOTAL**
Total Active Employees	38,121	3,987	42,108	83,346	9,139	92,485	924
Total Retirees	40,099	4,067	44,166	51,673	6,834	58,507	1,379
Reemployed Retirees	373	30	403	458	394	852	82
% of Reemployed Retirees to Total Actives	0.98%	0.75%	0.96%	0.55%	4.31%	0.92%	8.87%
% of Reemployed Retirees to Total Retirees	0.93%	0.73%	0.91%	0.89%	5.77%	1.46%	5.95%
Average Age at Initial Retirement	49	47	49	51	46	49	46
Months of Service Credit at Initial Retirement	349	310	346	321	287	305	327
Final Compensation At Initial Retirement	$53,206	$45,724	$52,649	$41,082	$55,094	$47,562	$57,725
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2015-2016 (Second Retirement Account)	$44,374	$38,222	$43,916	$45,036	$54,581	$49,450	$53,247
Retirees Returning to Work for the Same Employer	116	6	122	297	44	341	3

Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.

INSURANCE Contracts

The Systems provides medical insurance and other managed care coverage for eligible retired members.

Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems.

Insurance Benefits Paid to Retirees & Beneficiaries Participating in a KRS Health Insurance Plan

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Number	30,706	2,567	34,370	7,359	1,638
Average Service Credit (Months)	312	265	260	281	326
Avg Monthly System Payment for Health Insurance	$373	$689	$319	$954	$902
Avg Monthly Member Payment for Health Insurance	$60	$48	$62	$32	$18
Total Monthly Payment for Health Insurance	$12,395,933	$1,562,499	$12,267,565	$5,968,957	$1,168,108

Insurance Contracts by Type

KERS Non-Hazardous	2011	2012	2013	2014	2015	2016
KEHP Parent Plus	732	734	618	506	452	441
KEHP Couple/Family	2,155	1,917	1,276	797	714	656
KEHP Single	10,321	9,764	9,364	9,491	9,251	8,876
Medicare without Prescription	1,821	1,721	1,474	1,370	1,303	19,447
Medicare with Prescription	13,988	15,015	16,834	17,738	18,577	1,286
KERS Hazardous						
KEHP Parent Plus	75	93	106	110	110	97
KEHP Couple/Family	521	517	451	448	448	439
KEHP Single	615	645	625	647	656	663
Medicare without Prescription	60	67	60	56	62	1,302
Medicare with Prescription	570	751	985	1,104	1,177	66

Insurance Contracts by Type						
CERS Non-Hazardous	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
KEHP Parent Plus	351	383	340	278	242	235
KEHP Couple/Family	1,552	1,317	857	546	473	465
KEHP Single	8,013	7,972	7,652	7,843	8,098	8,164
Medicare without Prescription	3,167	3,119	2,707	2,583	2,531	23,007
Medicare with Prescription	15,100	16,355	18,824	20,200	21,520	2,499
CERS Hazardous						
KEHP Parent Plus	253	310	400	432	456	378
KEHP Couple/Family	2,156	2,237	2,155	2,184	2,255	2,321
KEHP Single	1,310	1,385	1,425	1,447	1,500	1,595
Medicare without Prescription	58	73	79	89	107	2,969
Medicare with Prescription	1,527	1,853	2,324	2,510	2,697	114
SPRS						
KEHP Parent Plus	52	62	76	78	81	77
KEHP Couple/Family	474	444	421	444	441	355
KEHP Single	278	291	283	263	265	246
Medicare without Prescription	14	15	20	20	16	850
Medicare with Prescription	499	581	682	712	777	18
KRS Total						
KEHP Parent Plus	1,463	1,582	1,540	1,404	1,341	1,228
KEHP Couple/Family	6,858	6,432	5,160	4,419	4,331	4,328
KEHP Single	20,537	20,057	19,349	19,691	19,770	19,544
Medicare without Prescription	5,120	4,995	4,340	4,118	4,019	47,575
Medicare with Prescription	31,684	34,555	39,649	42,264	44,748	3,983

Our Mission

The mission of Kentucky Retirement Systems (KRS) is to build the strength of the trust funds to ensure that adequate resources are available to meet all obligations, while helping members and beneficiaries achieve financial security in retirement. KRS is committed to efficiently and effectively administering the benefit programs established by the General Assembly. Members are current and former government employees or retirees, who either contribute money into our trust funds, or who are receiving pension benefits, or who will receive benefits or a refund of contributions in the future.

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Facebook: kyretirement

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Kentucky Retirement Systems

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Hours of Operation:

8:00 AM - 4:30PM (EST) Monday-Friday

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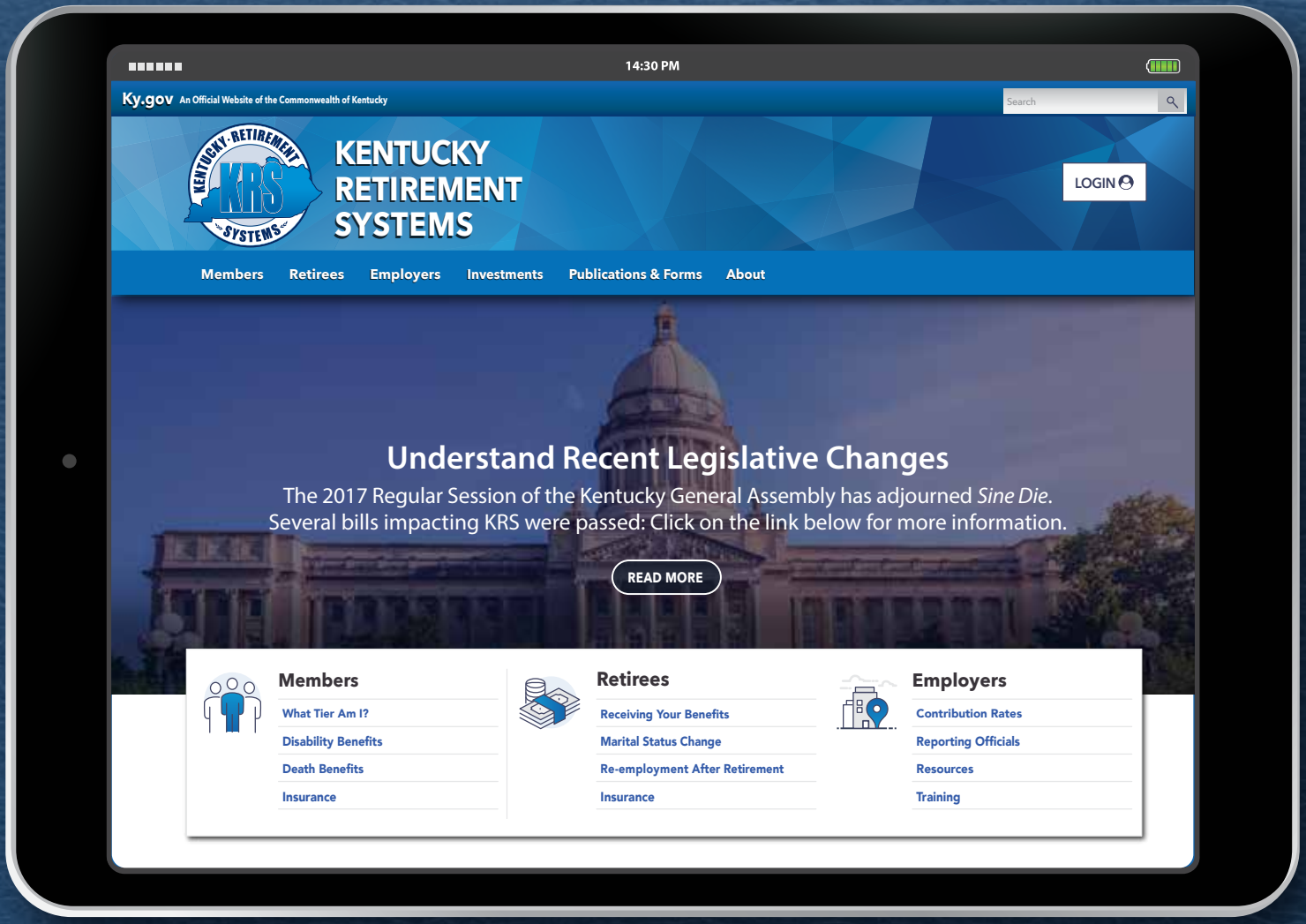

COMPREHENSIVE ANNUAL FINANCIAL REPORT

Kentucky Retirement Systems
A component of the Commonwealth of Kentucky

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

2017

For Fiscal Year Ending June 30, 2017

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2017 Comprehensive Annual Financial Report
For The Fiscal Year Ended June 30, 2017

2017

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Management's Responsibility for Financial Reporting

Management has prepared the combining financial statements of Kentucky Retirement Systems and is responsible for the integrity and fairness of the information presented.

December 7, 2017 Management has prepared the combining financial statements of Kentucky Retirement Systems and is responsible for the integrity and fairness of the information presented. Some amounts included in the combining financial statements may be based upon estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these combining financial statements conform to U.S. Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the combining financial statements.

Responsibility Ultimate responsibility for the combining financial statements and annual report rests with the Board of Trustees. The Executive Director and KRS staff assist the Board in its responsibilities.

Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training employees, the establishment of an organizational structure, and the communications of policies and guidelines throughout the organization. The cost of a control should not exceed the benefits to be derived; the objective is to provide reasonable, rather than absolute, assurance that the combining financial statements are free of any material misstatements. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and Board of Trustees.

Kentucky Retirement Systems' external auditors, Dean Dorton Allen Ford, PLLC, have conducted an independent audit of the combining financial statements in accordance with U.S. Generally Accepted Government Auditing Standards. This audit is described in their Independent Auditors' Report on pages 19 and 20 in the Financial Section. Management has provided the external auditors with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of combining financial statements.

David L. Eager
Interim Executive Director

Karen D. Roggenkamp
Executive Director Office of Operations

Connie A. Davis, CIA, CGAP, CRMA
Director of Accounting

Letter to the Board of Trustees & Membership

To the Trustees, Members of KRS, and Citizens of the Commonwealth:

On behalf of the Kentucky Retirement Systems (KRS), Board Chair, Board of Trustees, management and staff, it is my pleasure to present the Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2017. This report covers the ten (10) plans that form the Kentucky Retirement Systems (KRS). These plans include the Kentucky Employees Retirement System (KERS Hazardous and Non-Hazardous), the County Employees Retirement System (CERS Hazardous and Non-Hazardous), and the State Police Retirement System (SPRS) for both pensions and retiree healthcare. These ten plans include more than 372,000 members. These are your family members, co-workers, and neighbors. They include firefighters, police officers, bus drivers, janitorial staff at local schools, and many who work directly for Kentucky state government.

Responsibility for the accuracy of the data, as well as the completeness and fairness of the presentation, rests with the management of the Kentucky Retirement Systems. We present this information to assist the Board of Trustees, members of KERS, CERS and SPRS (collectively referred to as KRS), state executive and legislative branch officials, and the general public in understanding KRS' financial and actuarial status. This CAFR conforms to the principles of governmental accounting and reporting standards set forth by the Governmental Accounting Standards Board and the Government Finance Officers Association. KRS' financial transactions are reported on the accrual basis of accounting. Additionally, internal accounting controls provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

Fiscal 2017 was an eventful and improved year for KRS. We:

» Received PFM recommendations intended to improve the state's retirement systems

» Prepared for the proposed Special Session and pension reform legislation

» Changed our economic actuarial assumptions to be more realistic of the future outlook

» Benefited from improved funding

» Modified our investment policies, asset allocations and manager/consultant lineup, lowered our fees and improved our returns

» Worked with the Legislative and the Executive Branches to improve the effectiveness of General Assembly pension legislation

» Became more outwardly focused on all of our constituents (members, the media, etc.)

» Conducted a Request for Proposal (RFP) process for nearly every area of outsourced services

» Rebuilt our website

PFM Recommendations

The Governor retained consulting firm PFM to evaluate the State's retirement systems and make "best practice" recommendations regarding governance, investments, actuarial assumptions, funding methodology, and importantly our benefits. Their final report was presented to the Legislature on August 29, 2017. Links to all three PFM reports can be found on the KRS website.

Special Legislative Session and Pension Reform

The Governor has announced his intention to create pension reform legislation to deal with the State's "pension crisis". Further, he intends to call a Special Session of the General Assembly to act on that legislation. As of this writing the Special Session has yet to be called.

Actuarial Assumption Changes

At the Board's May and July, 2017 meetings, major changes to the economic actuarial assumptions (inflation, interest rate, and payroll growth) used to calculate the Systems' liabilities and contribution rates were approved. The Board believed the previous assumptions no longer represented a reasonable outlook, were too aggressive, and resulted in understating the existing liabilities and the contributions required to properly fund the Systems.

The assumptions were changed as follows:

	PENSION: KERS Non-Hazardous SPRS	PENSION: CERS Non-Hazardous KERS Hazardous CERS Hazardous All Insurance Funds
PREVIOUS		
Inflation	3.25%	3.25%
Interest Rate	6.75%	7.50%
Payroll Growth	4.00%	4.00%
NEW		
Inflation	2.30%	2.30%
Interest Rate	5.25%	6.25%
Payroll Growth	0.00%	2.00%

As a result, the Systems' estimated unfunded liabilities increased by approximately $5 Billion to $27 Billion, reflecting more accurately the true unfunded position. At the same time, the contribution rates will rise significantly in Fiscal Years 2019 and 2020. Funding from the State and CERS employers will rise in the area of 50% +/- over the next few years. More information regarding the actuarial assumption changes can be found on pages 58, 135, and 137-141. A summary of the Actuarial Unfunded Liabilities can be found on pages 146-149.

Improved Funding

Beginning with Senate Bill 2 (SB 2) in 2013 (effective in Fiscal Year 2015), the Legislature must now approve funding the KERS and SPRS plans at least at the full actuarially required contribution (ARC). For Fiscal Years 2016 and 2017 the Legislature approved an additional $186 million contribution over and above the ARC.

Investment Policy, Asset Allocation and Manager/Consultant Changes

In June, 2016, the five new members of the Investment Committee began a process that resulted in more conservative investment policies and asset allocations for each plan, better aligning each plan's assets to its liquidity needs and risk tolerance, and reducing the number of managers and fees, thereby saving millions of dollars.

Later, the 2017 version of the SB 2 expanded the Committee to nine members with six of them requiring investment experience. The bill also required a new procurement policy and expanded transparency requirements.

The combined KRS investment return for 2017 was 13.47% vs. minus .52% the prior year and 12.4% for the median public pension fund.

Detailed information regarding the KRS investments, the management of those investments, and our investment performance can be found on pages 95-116.

General Assembly

Several bills that passed during the 2017 General Assembly affected KRS. Most notably:

Senate Bill 2- This bill, known as the Pension Accountability and Transparency Bill, requires KRS to be fully transparent with regard to fees, relationships, investment contracts and all aspects of the System. It also requires KRS to comply with the State's Model Procurement Procedures, under Chapter 45A of State law.

Finally, the bill codified much of what was in the Governor's June, 2016 Executive Order regarding KRS Governance.

Senate Bill 104- This bill is often called the Spiking Bill because it limited the abusive practice of members "spiking" their final compensation in order to boost their monthly retirement payments.

House Bill 351- This bill established a new valuation method for employers who wish to leave KRS. In 2015, House Bill 62 (HB 62) established the process an employer

could follow to exit KRS and the valuation method to be used. KRS believed the valuation method in HB 62 would frequently undervalue the employer's liability and therefore let the employer leave without paying their fair share of the existing liability to KRS.

Outward Focus

One of KRS management's Six Mandates is to communicate effectively with all constituents. In Fiscal Year 2017, we began having regular contact with and conducting educational sessions for legislators, members of the administration, LRC staff, the media, employers, and retiree groups. Our objective is to help people better understand the nature of defined benefit plans and the particular issues for KRS.

We sent out a satisfaction survey to our 1,500 employers. Humana surveyed nearly 500 of our retirees regarding how well they are being served. Results from both surveys indicate high levels of overall satisfaction, while identifying those areas needing improvement.

RFP Process

Requests for Proposals (RFPs) were issued for nearly every major area for which we use outside service providers. Committees were formed to review each RFP and interview finalist candidates. Our objective was to improve the quality of services and reduce fees.

Five providers will continue to be retained, while we also added seven new firms and terminated five other firms.

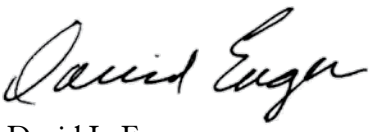
KRS Website

Our website was significantly upgraded in July, 2017. Immediately, we got a significant boost in traffic. An effective website is critically important in order to be able to provide, in a very cost-effective way, the wide variety of information we need to make available. The website also allows members to use our Self Service function for their convenience and reduce the demand on our benefit staff's time.

Going Forward

For the first time in 15 years we can say things are improving in almost every aspect of KRS. Funding has improved dramatically. Our focus on investments has increased. Service to members has improved. We have expanded communications with the Executive and the Legislative Branches. Our Board is committed and has the expertise required to oversee this complex organization and its demands.

While our funded status problem is significant, fiscal year 2017 showed net improvements in many financial areas. We remain dedicated to manage our way through these challenges and return Kentucky Retirement Systems to a sound financial footing.



David L. Eager

Interim Executive Director

2018 BOARD MEETINGS SCHEDULE

Quarterly

February 15
May 17
September 13
November 8
December 6

Annual

April 19

*Dates subject to change. Please visit our website for updates. Meetings begin at 10 am Eastern; All other committee meetings begin at 9:00 am Eastern unless otherwise noted.

COMMITTEE MEETINGS SCHEDULE

AUDIT

February 1
May 3
August 23
November 1

INVESTMENT

February 6
May 1
August 28
November 7

RETIREE HEALTH PLAN

February 13
May 8
September 6
November 13

ADMINISTRATIVE & DISABILITY APPEALS

Check website for dates and times.

2017 Board of Trustees

as of December 1, 2017

Appointed Members:

John R. Farris, *Chair*
Governor Appointee
Term ends 6/17/19

W. Joe Brothers
Governor Appointee
Term ends 7/1/21

John E. Chilton
Governor Appointee
Term ends 6/17/18

William S. Cook
Governor Appointee
Term ends 6/17/19

Kelly Downard
Governor Appointee
Term ends 6/17/19

Thomas K. Elliott
Governor Appointee
Term ends 3/31/19
Non-voting

J.T. Fulkerson
Governor Appointee
Term ends 7/1/21

David M. Gallagher
Governor Appointee
Term ends 7/1/21

David L. Harris
Governor Appointee
Term ends 6/17/18

Matthew Monteiro
Governor Appointee
Term ends 6/17/19

Neil P. Ramsey
Governor Appointee
Term ends 6/17/18

Thomas B. Stephens
Personnel Secretary
Ex-Officio

Elected Members:

Vince Lang
Elected by KERS
Term ends 3/31/18

Keith Peercy
Elected by SPRS
Term ends 3/31/19

Betty Pendergrass
Elected by CERS
Term ends 3/31/21

Mary Helen Peter
Elected by KERS
Term ends 3/31/18

Jerry W. Powell
Elected by CERS
Term ends 3/31/21

David Rich
Elected by CERS
Term ends 3/31/21

Agency Structure *as of December 1,2017*

Board of Trustees

3 Members elected by CERS

2 Members elected by KERS

1 Member elected by SPRS

Personnel Secretary

10 Members appointed by the Governor

1 Non-Voting Member

Audit Committee

Division Director of Internal Audit - Vacant

Investment Committee

Interim Executive Director
Office of Investments
Rich Robben

Division Directors
Division of Public Equity - Joe Gilbert
Division of Real Return & Real Estate - Andy Kiehl
Division of Alternative Investments - Vacant
Division of Fixed Income - Rich Robben
Division of Private Equity - Vacant

Interim Executive Director
David Eager

Office of Investments Division

Internal Audit Division

Executive Director Office of Operations
Karen Roggenkamp

- Accounting — Connie Davis
- Employer Reporting, Compliance & Education — D'Juan Surratt
- Enterprise and Technology Services — Rebecca Adkins
- Procurement & Office Services — Joe C. Gilbert

Executive Director Office of Benefits
Erin Surratt

- Disability & Death — Liza Welch
- Member Services — Shauna Miller
- Membership Support — Kevin Gaines
- Retiree Payroll — David Nix
- Retiree Health Care — Connie Pettyjohn
- Quality Assurance — Wes Crosthwaite

Executive Director Office of Legal Services
Vacant

- Non-Advocacy — Joe Bowman
- Advocacy — Kathy Rupinen
- Executive Advisor — Mark Blackwell

Division Director Human Resources
Marlane Robinson

Division Director Communications
Shawn Sparks

CONSULTANTS

Actuarial Services
Gabriel, Roeder, Smith & Co.

Auditing Services
Dean Dorton Allen Ford, PLLC

Legal Services
Polsinelli Shughart, LLC
Reinhart Boerner Van Deuren, SC
Stoll Keenon Ogden, PLLC
Frost Brown Todd, LLC
Dinsmore & Schohl, LCP
McBrayer, McGinnis, Leslie & Kirkland, PLLC

Fiduciary Review Consultants
Ice Miller, LLP

Investment Consultants
ORG Real Property
Wilshire

Master Custodian
Bank of New York, Mellon

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Kentucky Retirement Systems

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2016

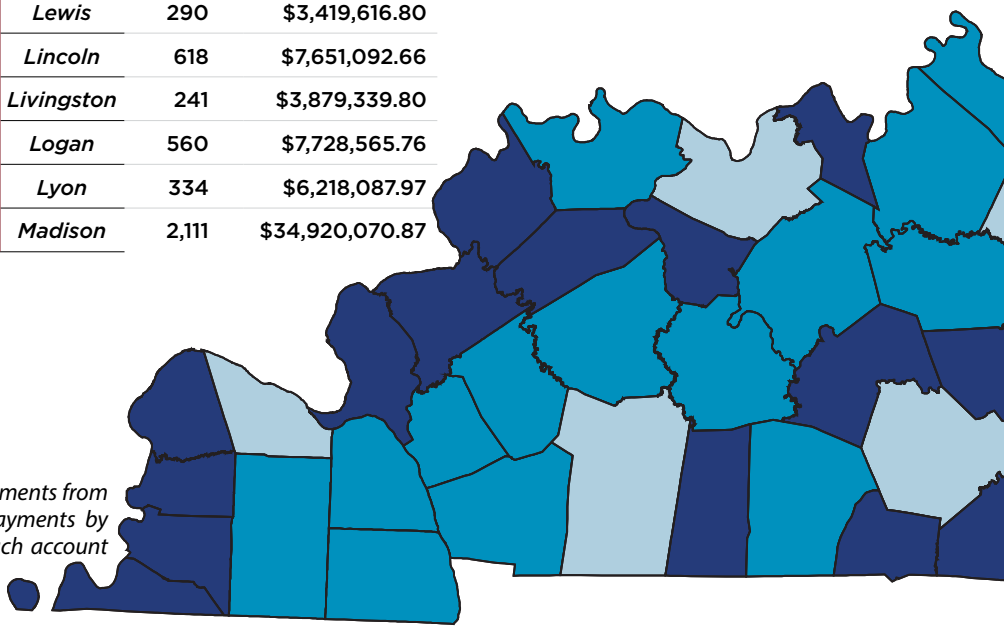
Executive Director/CEO

Certificate of Achievement

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2016. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports and is valid for a period of one year. This was the 18th consecutive award earned by KRS. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized document. The report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe our 2017 CAFR will continue to meet the Certificate of Achievement Program's requirements, and we will be submitting it to the GFOA for their consideration.

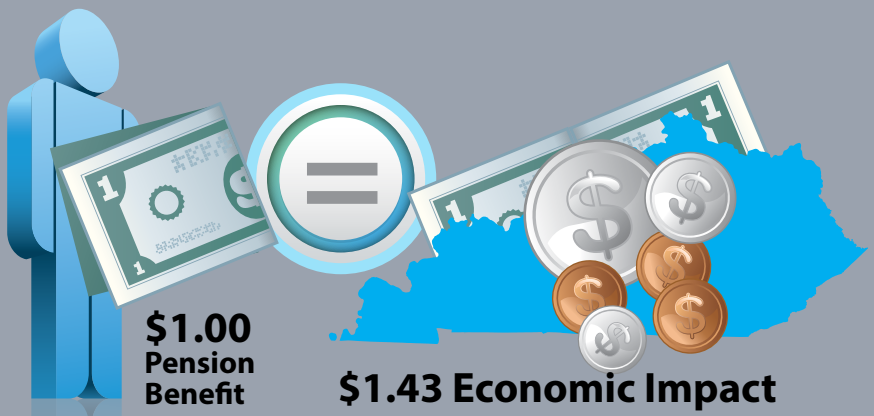
2017 Total Fiscal Year KRS Pension Benefits Paid by County

County	Payees	Total	County	Payees*	Total	County	Payees*	Total
Adair	440	$7,318,804.53	Garrard	411	$6,068,886.00	Magoffin	320	$4,452,060.36
Allen	370	$4,772,602.57	Grant	541	$9,930,433.93	Marion	511	$6,994,625.97
Anderson	1,273	$31,002,832.61	Graves	804	$12,181,400.35	Marshall	787	$11,446,220.33
Ballard	208	$3,007,006.89	Grayson	652	$9,794,275.99	Martin	252	$2,731,521.26
Barren	965	$15,068,110.27	Green	263	$3,694,662.74	Mason	376	$6,052,299.02
Bath	350	$5,181,757.88	Greenup	595	$7,883,006.04	Mccracken	1,453	$25,884,598.50
Bell	603	$9,392,742.64	Hancock	216	$2,702,617.06	Mccreary	377	$3,849,805.28
Boone	1,581	$31,227,964.76	Hardin	1,952	$32,157,981.88	Mclean	279	$3,951,747.52
Bourbon	506	$8,218,097.22	Harlan	586	$9,033,014.33	Meade	396	$5,554,848.75
Boyd	966	$15,680,983.88	Harrison	421	$6,249,249.52	Menifee	202	$2,763,961.49
Boyle	818	$14,140,919.91	Hart	288	$4,040,330.69	Mercer	716	$12,653,136.47
Bracken	199	$2,462,237.04	Henderson	979	$16,174,544.92	Metcalfe	296	$3,606,721.82
Breathitt	448	$6,821,135.09	Henry	860	$18,962,708.09	Monroe	229	$2,589,621.70
Breckinridge	402	$5,738,076.42	Hickman	91	$1,714,044.73	Montgomery	579	$8,930,379.27
Bullitt	1,351	$23,752,396.23	Hopkins	1,154	$17,325,607.50	Morgan	548	$9,177,746.02
Butler	299	$4,099,697.20	Jackson	308	$3,961,270.39	Muhlenberg	693	$8,389,213.27
Caldwell	488	$7,202,606.00	Jefferson	15,310	$325,794,270.78	Nelson	895	$15,080,949.16
Calloway	999	$13,925,387.13	Jessamine	924	$15,865,049.21	Nicholas	199	$2,578,888.86
Campbell	1,401	$25,795,030.61	Johnson	587	$9,103,210.69	Ohio	587	$6,277,088.00
Carlisle	117	$1,532,019.71	Kenton	2,084	$42,899,813.73	Oldham	1,204	$24,592,220.51
Carroll	299	$4,569,358.54	Knott	393	$6,004,471.17	Owen	503	$11,500,522.89
Carter	726	$9,368,724.44	Knox	558	$8,648,791.48	Owsley	198	$2,935,138.57
Casey	328	$4,251,222.57	Larue	317	$4,966,500.58	Pendleton	337	$5,350,325.97
Christian	1,457	$24,938,261.86	Laurel	1,139	$18,818,630.71	Perry	705	$10,096,361.90
Clark	747	$12,461,679.04	Lawrence	299	$3,740,499.85	Pike	1,130	$16,803,539.36
Clay	543	$7,533,406.25	Lee	220	$3,169,387.38	Powell	313	$4,110,623.80
Clinton	228	$2,904,964.35	Leslie	223	$3,263,560.12	Pulaski	2,052	$34,260,247.53
Crittenden	199	$2,621,265.40	Letcher	550	$7,278,511.04	Robertson	65	$1,043,951.85
Cumberland	172	$2,458,014.02	Lewis	290	$3,419,616.80			
Daviess	2,401	$41,681,263.36	Lincoln	618	$7,651,092.66			
Edmonson	206	$2,966,286.69	Livingston	241	$3,879,339.80			
Elliott	161	$2,210,912.83	Logan	560	$7,728,565.76			
Estill	354	$4,998,273.20	Lyon	334	$6,218,087.97			
Fayette	5,057	$109,435,668.53	Madison	2,111	$34,920,070.87			
Fleming	426	$7,185,152.62						
Floyd	818	$12,510,377.34						
Franklin	6,093	$189,377,621.13						
Fulton	158	$1,807,458.02						
Gallatin	111	$1,892,724.76						



NOTE: Beginning in 2016, members receiving payments from multiple accounts will be represented in the Payments by County table as one payee. In previous years each account was represented separately.

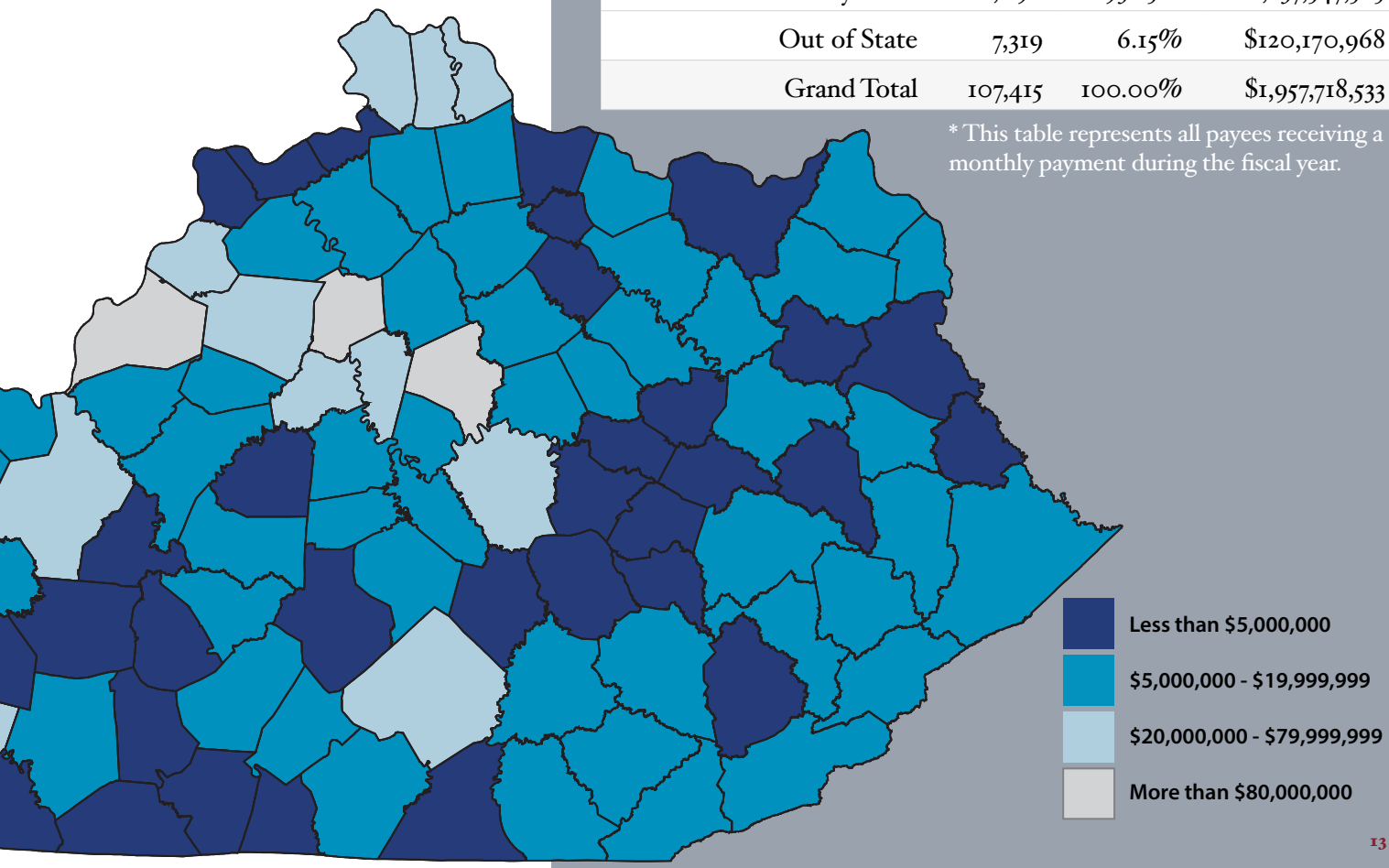
County	Payees*	Total
Rockcastle	361	$4,801,684.93
Rowan	822	$13,714,162.87
Russell	517	$7,482,896.71
Scott	1,124	$23,205,393.74
Shelby	1,505	$37,159,552.92
Simpson	261	$2,888,999.61
Spencer	447	$9,228,659.56
Taylor	564	$8,167,471.74
Todd	240	$3,284,896.98
Trigg	490	$7,725,121.52
Trimble	243	$3,706,544.27
Union	328	$3,673,938.20
Warren	2,556	$44,724,535.62
Washington	294	$4,704,961.93
Wayne	485	$6,886,928.79
Webster	322	$4,160,204.72
Whitley	950	$13,596,343.87
Wolfe	303	$4,925,727.13
Woodford	935	$23,094,625.88



Pension Benefits paid to retirees and beneficiaries of Kentucky Retirement Systems have a wide ranging impact on the state's economic health. In fiscal year 2017, KRS paid over $1.9 billion to its recipients. The majority, 93.85%, of these recipients live in Kentucky. Not only do these dollars impact those receiving a benefit, but according to the National Institute of Retirement Security (NIRS), ***each $1.00 paid out in pension benefits supported $1.43 in total economic activity in Kentucky.*** Each county in the Commonwealth receives at least $1 million annually from KRS, providing a stabilizing element for all local economies.

Total Fiscal Year Retirement Payments			
	Payees	%	Payments
Kentucky Total	100,096	93.85%	$1,837,547,565
Out of State	7,319	6.15%	$120,170,968
Grand Total	107,415	100.00%	$1,957,718,533

* This table represents all payees receiving a monthly payment during the fiscal year.



BENEFIT TIERS

KRS currently administers three different pension benefit tiers within our defined benefit plans. The Hybrid Cash Balance plan was established as a part of Senate Bill 2, which was enacted by the Kentucky General Assembly during the 2013 Regular Session.

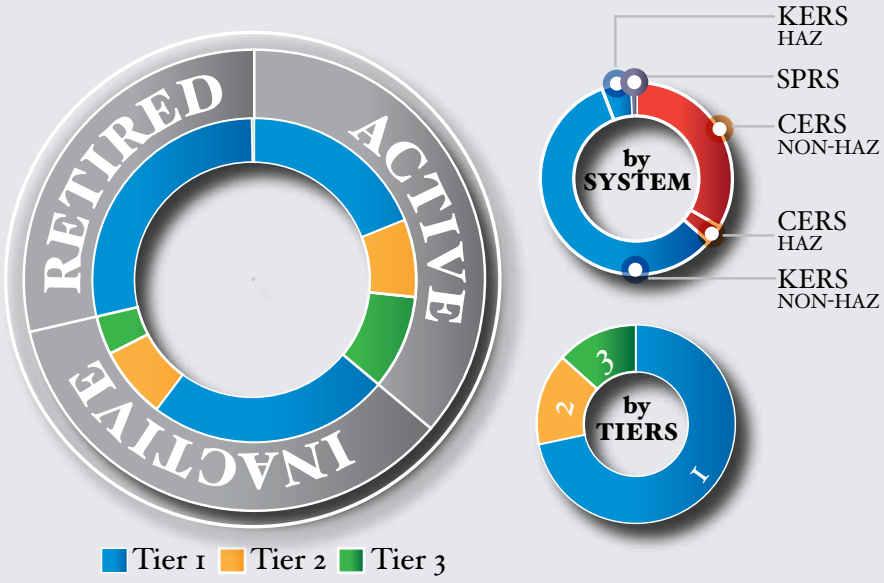
Members participating before September 1, 2008

Members participating on or after September 1, 2008 through December 31, 2013

Members participating on or after January 1, 2014

Total Systems

See comparative totals and more detailed information on in the Statistical Section beginning on page 166.



	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	70,542	90,058	106,058	266,658
Tier 2	28,997	27,072	176	56,245
Tier 3	35,879	13,741	0	49,620
TOTAL	**135,418**	**130,871**	**106,234**	**372,523**

Plan Net Position *($ In Thousands)*

Fund	2012	2013	2014	2015	2016	2017
Pension	$10,758,706	$11,153,182	$12,015,897	$11,646,481	$10,877,758	$11,921,906
Insurance	$3,089,313	$3,521,894	$4,154,401	$4,246,892	$4,231,311	$4,783,905
Total	**$13,848,019**	**$14,675,076**	**$16,170,298**	**$15,893,373**	**$15,109,069**	**$16,705,811**

KERS

133,635 MEMBERS

NON-HAZARDOUS

122,386 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 **21,229** | Tier 2 **7,555** | Tier 3 **7,941**

AVERAGE AGE	AVERAGE ANNUAL SALARY
45.4	$41,133

RETIRED MEMBERSHIP

Tier 1 **40,762** | Tier 2 **51** | Tier 3 **0**

AVERAGE AGE	AVERAGE ANNUAL BENEFIT PAYMENT
68.8	$21,699

HAZARDOUS

11,247 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 **1,730** | Tier 2 **946** | Tier 3 **1,385**

AVERAGE AGE	AVERAGE ANNUAL SALARY
40.3	$40,133

RETIRED MEMBERSHIP

Tier 1 **2,817** | Tier 2 **6** | Tier 3 **0**

AVERAGE AGE	AVERAGE ANNUAL BENEFIT PAYMENT
64.5	$15,306

CERS

236,308 MEMBERS

NON-HAZARDOUS

217,359 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 **41,611** | Tier 2 **18,271** | Tier 3 **24,519**

AVERAGE AGE	AVERAGE ANNUAL SALARY
47.9	$29,835

RETIRED MEMBERSHIP

Tier 1 **53,907** | Tier 2 **111** | Tier 3 **0**

AVERAGE AGE	AVERAGE ANNUAL BENEFIT PAYMENT
70.2	$11,583

HAZARDOUS

18,949 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 **5,394** | Tier 2 **2,018** | Tier 3 **1,909**

AVERAGE AGE	AVERAGE ANNUAL SALARY
39.2	$57,044

RETIRED MEMBERSHIP

Tier 1 **7,179** | Tier 2 **7** | Tier 3 **0**

AVERAGE AGE	AVERAGE ANNUAL BENEFIT PAYMENT
61.8	$27,326

SPRS

2,581 MEMBERS

HAZARDOUS

2,581 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 **578** | Tier 2 **207** | Tier 3 **125**

AVERAGE AGE	AVERAGE ANNUAL SALARY
37.5	$53,819

RETIRED MEMBERSHIP

Tier 1 **1,392** | Tier 2 **1** | Tier 3 **0**

AVERAGE AGE	AVERAGE ANNUAL BENEFIT PAYMENT
62.7	$39,774

ACTIVE MEMBERS
135,418

INACTIVE MEMBERS
130,871

RETIRED MEMBERS
106,234

Kentucky Employees Retirement System (KERS)

was established July 1, 1956 by the state legislature.

KERS Non-Hazardous - Plan Net Position *($ In Thousands)*						
Fund	2012	2013	2014	2015	2016	2017
Pension	$2,977,069	$2,760,753	$2,578,291	$2,327,782	$1,980,292	$2,092,781
Insurance	$418,490	$496,040	$646,904	$665,639	$668,318	$781,406
Total	$3,395,559	$3,256,793	$3,225,195	$2,993,421	$2,648,610	$2,874,187

KERS Hazardous - Plan Net Position *($ In Thousands)*						
Fund	2012	2013	2014	2015	2016	2017
Pension	$476,589	$514,592	$561,484	$552,468	$527,880	$605,921
Insurance	$330,730	$372,883	$433,525	$439,113	$437,397	$484,442
Total	$807,319	$887,475	$995,009	$991,581	$965,277	$1,090,363

County Employees Retirement System (CERS)

was established July 1, 1958 by the state legislature.

CERS Non-Hazardous - Plan Net Position *($ In Thousands)*						
Fund	2012	2013	2014	2015	2016	2017
Pension	$5,381,602	$5,795,568	$6,528,146	$6,440,800	$6,141,396	$6,739,142
Insurance	$1,428,821	$1,618,960	$1,878,711	$1,920,946	$1,908,550	$2,160,553
Total	$6,810,423	$7,414,528	$8,406,857	$8,361,746	$8,049,946	$8,899,695

CERS Hazardous - Plan Net Position *($ In Thousands)*						
Fund	2012	2013	2014	2015	2016	2017
Pension	$1,672,970	$1,833,571	$2,087,002	$2,078,202	$2,010,177	$2,227,679
Insurance	$785,874	$891,320	$1,030,303	$1,056,480	$1,056,097	$1,179,313
Total	$2,458,844	$2,724,891	$3,117,305	$3,134,682	$3,066,274	$3,406,992

State Police Retirement System (SPRS)

was established July 1, 1958 by the state legislature.

SPRS - Plan Net Position *($ In Thousands)*						
Fund	2012	2013	2014	2015	2016	2017
Pension	$250,476	$248,698	$260,974	$247,229	$218,013	$256,383
Insurance	$125,398	$142,691	$164,958	$164,714	$160,949	$178,191
Total	$375,874	$391,389	$425,932	$411,943	$378,962	$434,574

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DEANDORTON
DEAN DORTON ALLEN FORD, PLLC

Report of
Independent Auditors

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Report on the Combining Financial Statements

We have audited the accompanying combining financial statements of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ending June 30, 2017, and the related notes to the combining financial statements, which collectively comprise the Kentucky Retirement Systems' basic combining financial statements as listed in the table of contents.

Management's Responsibility for the Combining Financial Statements

Management is responsible for the preparation and fair presentation of these combining financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of combining financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these combining financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combining financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combining financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements of the combining financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the combining financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the combining financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the combining financial statements referred to above present fairly, in all material respects, the respective combining plan net position of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2017, and the respective combining changes in plan net position for the fiscal year then ended, in accordance with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

We have previously audited the Kentucky Retirement Systems' 2016 combining financial statements of the Pension Funds and Insurance Fund, and we expressed an unmodified audit opinion on those audited combining financial statements in our report dated December 1, 2016. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended June 30, 2016, is consistent, in all material respects, with the audited combining financial statements from which it has been derived.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (pages 21-28) and the Schedules of Changes in Employers' Total Pension Liability (TPL) (pages 66-70), Schedules of Employers' Net Pension Liability (pages 71-72), Schedules of Employers' Contributions, (pages 73-75), Schedule of Changes in Employers' Net OPEB Liability (page 78), Schedule of the Employers' Net OPEB Liability (page 79), Schedule of Employers' OPEB Contributions (pages 82-84), be presented to supplement the basic combining financial statements. Such information, although not a part of the basic combining financial statements, is required by the *Governmental Accounting Standards Board* who considers it to be an essential part of the financial reporting for placing the basic combining financial statements in an appropriate operational, economical, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic combining financial statements, and other knowledge we obtained during our audit of the basic combining financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures did not provide us with sufficient evidence to express an opinion or provide any assurance.

Additional Supporting Schedules

Our audit was conducted for the purpose of forming an opinion on the combining financial statements that collectively comprise the Pension Funds and the Insurance Fund of the Kentucky Retirement Systems' basic combining financial statements. The additional supporting schedules (pages 86-87) are presented for purposes of additional analysis and are not a required part of the basic combining financial statements. The additional supporting schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic combining financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic combining financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the additional supporting schedules are fairly stated, in all material respects, in relation to the basic combining financial statements as a whole.

The Introductory, Actuarial, Investment, and Statistical sections are presented for purposes of additional analysis and are not a required part of the combining financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the combining financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 7, 2017 on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Kentucky Retirement Systems' internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Kentucky Retirement Systems' internal control over financial reporting and compliance.

Dean Dorton Allen Ford, PLLC

December 7, 2017
Lexington, Kentucky

Management's DISCUSSION & ANALYSIS (Unaudited)

This discussion and analysis of Kentucky Retirement Systems' (KRS) financial performance provides an overview of the Pension and Insurance Funds financial activities for the fiscal year ending June 30, 2017. Please read it in conjunction with the combining financial statements, which begin on page 29.

Pension Funds

The following highlights are explained in more detail later in this report.

Total Pension Net Position was $10.9 billion at the beginning of the fiscal year and increased by 9.6% to $11.9 billion at June 30, 2017. The $1.0 billion increase is primarily attributable to positive investment income, higher contributions, and additional General Fund appropriations of $98.2 million.

CONTRIBUTIONS

» Total contributions reported for fiscal year 2017, were $1,674.0 million compared to $1,274.6 million in fiscal year 2016. This change was caused by employer contribution rate increases for all plans except for CERS Hazardous and KERS Hazardous plans; the General Fund appropriations of $98.2 million for KERS and SPRS plans; and, the Employer Cessation Contributions of $53.2 million for KERS Non-Hazardous plan. CERS Hazardous and KERS Hazardous plans contributions are lower due to the improved funding status.

» The member health insurance (401h) contributions totaled $17.0 million for the fiscal year ended June 30, 2017, compared to $14.7 million in the prior fiscal year. This increase was mainly due to new employees in Tier 3.

INVESTMENTS

» The investment portfolio for the Pension Plan reported a net return of 13.47% for fiscal year 2017, compared to the -0.52% return for fiscal year 2016. The investment portfolio experienced realized and unrealized gains across all of the portfolios.

» The net appreciation in the fair value of investments for fiscal 2017 was $1,164.1 million compared to net depreciation of $212.9 million for the prior fiscal year. This $1,377.0 million increase was due to favorable market conditions.

» Interest, dividend, and net securities lending income for fiscal 2017 was $336.6 million compared to $198.6 million in fiscal 2016. The primary driver of this increase was due to favorable market conditions resulting in increased income and dividends across all portfolios.

» Investment expenses totaled $85.5 million for fiscal 2017 compared to $61.7 million (reclassified) in the prior year. A prior year correction was made for June 30, 2016, which resulted in a reclassification between Management Fees and Net Appreciation in Fair Value of Investments. The correction did not impact the overall value of the assets or net position.

DEDUCTIONS

» Pension benefits paid to retirees and beneficiaries for fiscal year 2017 totaled $1,981.1 million compared to $1,903.6 million in fiscal year 2016 (4% increase). The increase was due to a 16% increase in the number of retirees to 118,922. Refund of contributions paid to former members upon termination of employment for fiscal year 2017 totaled $30.7 million compared to $31.0 million in fiscal year 2016, a 1% decrease, due to less members taking a refund when employment terminated.

» KRS' 2017 Pension administrative expense totaled $33.1 million compared to $32.3 million in the prior year. The increase was mainly due to the higher employer contribution made to KERS Non-Hazardous retirement plan for KRS staff.

ACTUARIAL

» The actuarial value of the total pension liability was determined as of June 30, 2017. The discount rate and assumed rate of return used to measure the total pension liability was 5.25% for the KERS Non-Hazardous and SPRS Pension plans. The rate of 6.25% was used for the KERS Hazardous and CERS Pension plans. The payroll growth assumptions for the KERS and SPRS Pension Plans were 0.00% and 2.00% for the CERS Pension Plan. The assumed inflation factor was 2.30% for all plans. The changes in economic assumptions increased the KRS unfunded liability by $5.0 billion.

Insurance Fund

The following highlights are explained in more detail later in this report.

The combined net position of the insurance fund administered by KRS increased by $552.6 million during fiscal 2017. Total combined net position for the fiscal year was $4,783.9 million. Total contributions and net investment income of $914.2 million offset deductions of $361.6 million which resulted in the net position increase.

CONTRIBUTIONS

» Employer contributions of $315.0 million were received in fiscal 2017 compared to $333.1 million in fiscal 2016. Total contributions declined 5.4% primarily due to lower contribution rates for the KERS Hazardous, the CERS Hazardous and the SPRS systems.

» The reimbursement of retired/re-employed health insurance for fiscal 2017 totaled $8.9 million compared to $9.2 million in the prior fiscal year. Employer contributions are required for all retirees returning to work, but employee contributions are waived.

INVESTMENTS

» Interest, dividend and net securities lending income for fiscal 2017 was $128.1 million compared to $78.2 million in fiscal 2016. The primary driver of this increase was due to favorable market conditions resulting in increased income and dividends across all portfolios.

» The investment portfolio reported a net return of 13.72% for the fiscal year, outperforming 2016 net of expense returns of -0.09%, and the 6.25% assumed rate of return for fiscal 2017 target.

» The net appreciation in the fair value of investments for fiscal 2017 was $480.3 million compared to net depreciation of $54.5 million for the prior fiscal year. This $534.8 million increase was due to favorable market conditions.

» Investment expenses totaled $34.2 million for fiscal 2017 compared to $28.8 million (reclassified) in the prior year. A prior year correction was made for June 30, 2016, which resulted in a reclassification between Management Fees and Net Appreciation in Fair Value of Investments. The correction did not impact the overall value of the assets or net position.

DEDUCTIONS

» The total of insurance premiums paid plus self-funded reimbursements was $359.4 million for fiscal 2017. Insurance premiums paid plus self-funded healthcare reimbursements for the prior fiscal year totaled $351.4 million. Premiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled $353.6 million. Payments for the self-funded healthcare reimbursements (over age 65) totaled $5.8 million.

» KRS' 2017 insurance administrative expense increased slightly in 2017 ($2.2 million) compared to 2016 ($2.0 million).

ACTUARIAL

» The actuarial value of the total insurance liability was determined as of June 30, 2017. The discount rate and assumed investment rate of return used to measure the total insurance liability was 6.25% for all plans. Payroll Growth and Inflation for KERS Non-Hazardous, KERS Hazardous and SPRS was 0% and 2.30% respectively. Payroll Growth and Inflation for CERS Non-Hazardous and CERS Hazardous was 2.00% and 2.30% respectively. The changes in economic assumptions increased the unfunded insurance liability from $3.03 billion to $3.61 billion.

Using This Financial Report

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the combining financial statements alone cannot provide sufficient information to properly reflect the plans' ongoing plan perspective. This financial report consists of two combining financial statements and two required schedules of historical trend information. All plans within KRS are included in the aforementioned combining financial statements. The Combining Statement of Plan Net Position for the Pension Funds on page 29, and the Combining Statement of Plan Net Position for the Insurance Fund on page 31, provides a snapshot of the financial position of each of the three systems at June 30, 2017. The Combining Statement of Changes in Plan Net Position for the Pension Funds on page 30, and the Combining Statement of Changes in Plan Net Position for the Insurance Fund on page 32, summarizes the additions and deductions that occurred for each of the three systems during fiscal 2017.

The Economic Assumptions for the Pension and Insurance Plans as of June 30 on page 58, the Schedules of Changes in Employers' Net Pension Liability on page 66-70, the Schedules of the Employer Net Pension Liability on pages 71-72, the Schedule of Changes in Employers' Net OPEB Liability on page 78, the Schedule of the Employers' Net OPEB Liability on page 79, include current and historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of the Employers Contributions – Pensions on pages 73-75, and the Schedule of the Employers Contributions – OPEB pages 82-84 present current and historical trend information about the annual required contributions and the contributions made in relation to the requirement. These Schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

Kentucky Retirement Systems Combined

KRS' combined net position increased $1,596.7 million, during the fiscal year ended June 30, 2017, compared to net position for the prior fiscal year. The increase in net position for the plan year ended June 30, 2017, is primarily attributable to an increase in net investment incomes, higher contributions; and, General Fund appropriations. The analysis focuses on net position (Table 1) and changes in net position (Table 3) of KRS' Pension and Insurance Funds.

FUND ACTIVITIES

Net position of the pension funds increased by $1,044.1 million ($11,921.9 million compared to $ 10,877.8 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. Net position of the insurance fund increased by $552.6 million ($4,783.9 million compared to $4,231.3 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance.

Financial data presented in this report is abbreviated "in thousands" or "in millions."

Table 1: Plan Net Position *($ In Thousands)*

	Pension Funds			Insurance Funds			Total		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
Cash & Invest.	$12,168,664	$11,410,516	$12,217,470	$4,936,437	$4,401,155	$4,451,155	$17,105,101	$15,811,671	$16,668,625
Receivables	347,625	442,464	459,196	103,747	171,033	148,118	451,372	613,497	607,314
Equip/Int Assets, net of dep/amort.	6,311	8,232	9,924	-	-	-	6,311	8,232	9,924
Total Assets	12,522,600	11,861,212	12,686,590	5,040,184	4,572,188	4,599,273	17,562,784	16,433,400	17,285,863
Total Liabilities	(600,694)	(983,454)	(1,040,109)	(256,279)	(340,877)	(352,381)	(856,973)	(1,324,331)	(1,392,490)
Plan Net Position	$11,921,906	$10,877,758	$11,646,481	$4,783,905	$4,231,311	$4,246,892	$16,705,811	$15,109,069	$15,893,373

Pension Fund Activities

Member contributions increased by $26.8 million. This is primarily due to an increase in covered payroll in CERS Non-Hazardous and CERS Hazardous. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Non-Hazardous members pay pension contributions of 5% of creditable compensation and Hazardous members contribute 8% of creditable compensation.

Employer contributions increased by $216.5 million as a result of the increase in the contribution rates for KERS Non-Hazardous, CERS Non-Hazardous, and SPRS.

Total pension fund deductions increased by $77.7 million. The 4% increase was primarily driven by CERS Non-Hazardous and CERS Hazardous retirement benefit payments.

Net investment income increased by $1,491.1 million. This is illustrated in Table 2. The pension funds experienced an increase in income primarily due to the increase in the fair value of investments.

Table 2. Investment Income (Loss) for Pension Funds *($ In Thousands)*

Investment Income (Loss) - Pension	2017	2016	2015
Increase (decrease) in fair value of investments	$603,703	$(270,041)	$(556,979)
Investment income net of investment expense	251,064	136,917	219,201
Gain on sale of investments	560,380	57,149	542,148
Net investment income (loss)	$1,415,147	$(75,975)	$204,370

Table 3: Changes in Plan Net Position *($ In Thousands)*

	Pension Funds			Insurance Fund			Total		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
Additions:									
Member Cont.	$334,232	$307,422	$298,490	$-	$-	$-	$334,232	$307,422	$298,490
Employer Cont.	1,166,269	949,802	985,996	314,987	333,118	343,604	1,481,256	1,282,920	1,329,600
Heath Ins. Cont.	16,964	14,719	12,570	-	-	-	16,964	14,719	12,570
Pension Spiking Cont.	5,156	2,684	2,858	-	-	-	5,156	2,684	2,858
BoA Settlement	-	-	23,000	-	-	-	-	-	23,000
General Fund Appro.	98,193	-	-	-	-	-	98,193	-	-
Employer Cessation Cont.	53,215	-	-	15,567	-	-	68,782	-	-
Premiums Rec'd	-	-	-	548	721	879	548	721	879
Retired Remp Ins.	-	-	-	8,893	9,155	8,822	8,893	9,155	8,822
Medicare Subsidy	-	-	-	2	-	-	2	-	-
Invest. Inc. (Loss)	1,415,147	(75,975)	204,370	574,187	(5,154)	76,418	1,989,334	(81,129)	280,788
Total Additions	3,089,176	1,198,652	1,527,284	914,184	337,840	429,723	4,003,360	1,536,492	1,957,007
Deductions:									
Benefit payments	1,981,100	1,903,557	1,832,799	-	-	-	1,981,100	1,903,557	1,832,799
Refunds	30,696	30,985	32,881	-	-	-	30,696	30,985	32,881
Administrative Exp.	33,109	32,300	31,020	2,202	2,038	2,180	35,311	34,338	33,200
Healthcare Costs	-	-	-	359,388	351,383	335,053	359,388	351,383	335,053
Capital Projects Exp.	123	533	-	-	-	-	123	533	-
Total Deductions	2,045,028	1,967,375	1,896,700	361,590	353,421	337,233	2,406,618	2,320,796	2,233,933
Inc. (Decrease) in Plan Net Position	$1,044,148	$(768,723)	$(369,416)	$552,594	$(15,581)	$92,490	$1,596,742	$(784,304)	$(276,926)

Insurance Fund Activities

Employer contributions paid into the Insurance Fund decreased by $18.1 million over the prior fiscal year. This decrease is a result of the reduction in the employer contribution rate applied to CERS Non-Hazardous, Hazardous, and SPRS covered payrolls.

Net investment income increased $579.3 million. This increase in net investment income is due primarily to the increase in the fair value of investments. This is illustrated in Table 4 as follows:

Table 4. Investment Income (Loss) for Insurance Fund *($ In Thousands)*

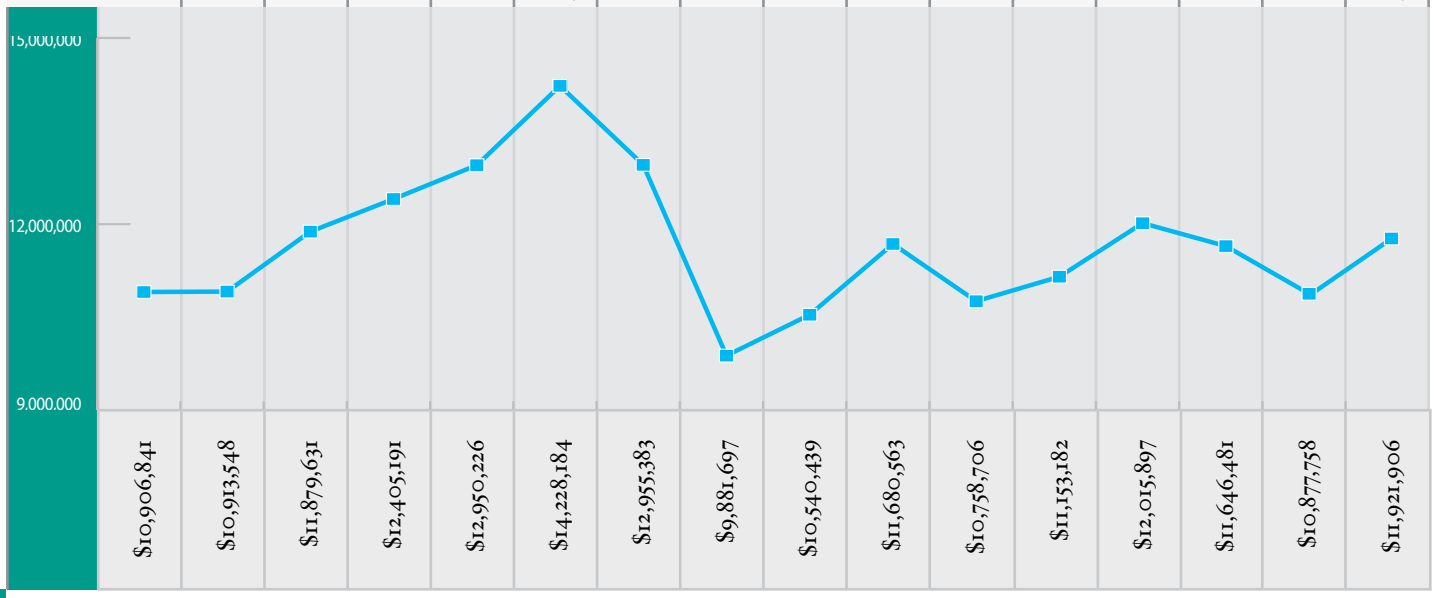
Investment Income (Loss) - Insurance	2017	2016	2015
Increase (decrease) in fair value of investments	$256,937	$(46,852)	$(126,416)
Investment income net of investment expense	93,902	49,380	72,528
Gain (loss) on sale of investments	223,348	(7,682)	130,306
Net investment income (loss)	$574,187	$(5,154)	$76,418

Historical **Trends**

Accounting standards require that the Combining Statement of Net Position state asset value at fair value and include only benefits and refunds due plan members and beneficiaries; accrued investment income (Loss); and, administrative expense, as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the schedules of Net Pension Liability on pages 71-72, and Net OPEB Liability on page 79. The asset value stated in the Schedules of Changes in Employers' Total Pension Liability on pages 66-70 and Net OPEB Liability on page 78 is the actuarial value of assets. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by KRS' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is defined as the unfunded actuarial accrued liability.

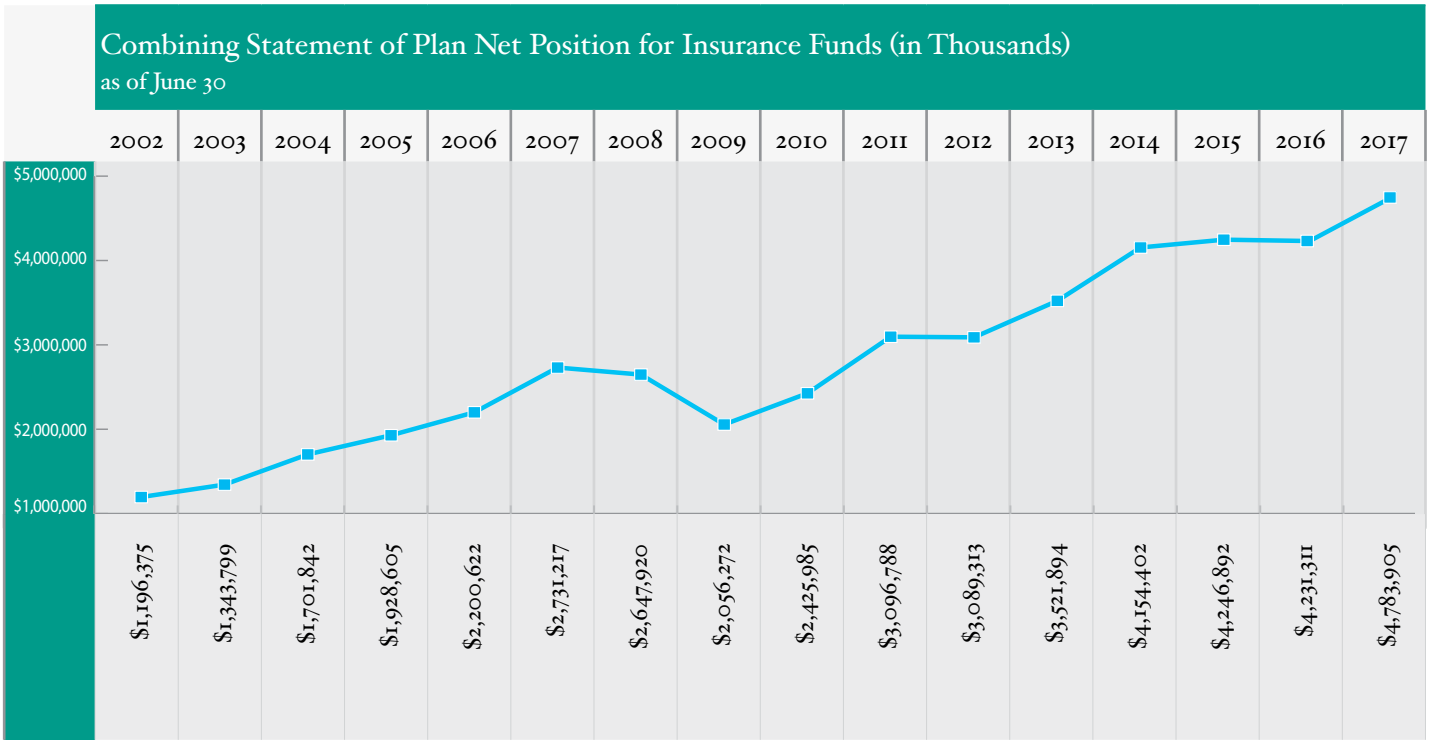
The unfunded actuarial accrued liability in the Pension Plans increased by $5,000.9 million for a total unfunded amount of $23,137.5 million as of June 30, 2017, compared to an unfunded amount of $18,136.6 million as of June 30, 2016. In recent years, funding levels for the Pension Funds have decreased significantly due to a number of factors including: the change in assumptions for the 2017 valuations, investment returns that were less than the actuarially assumed rates, lower payroll growth, and higher than anticipated retirement rates. In addition, KERS Non-Hazardous, KERS Hazardous, and SPRS were funded less than the actuarially determined rate until fiscal year 2015.

Combining Statement of Plan Net Position for Pension Funds *($ In Thousands)* as of June 30

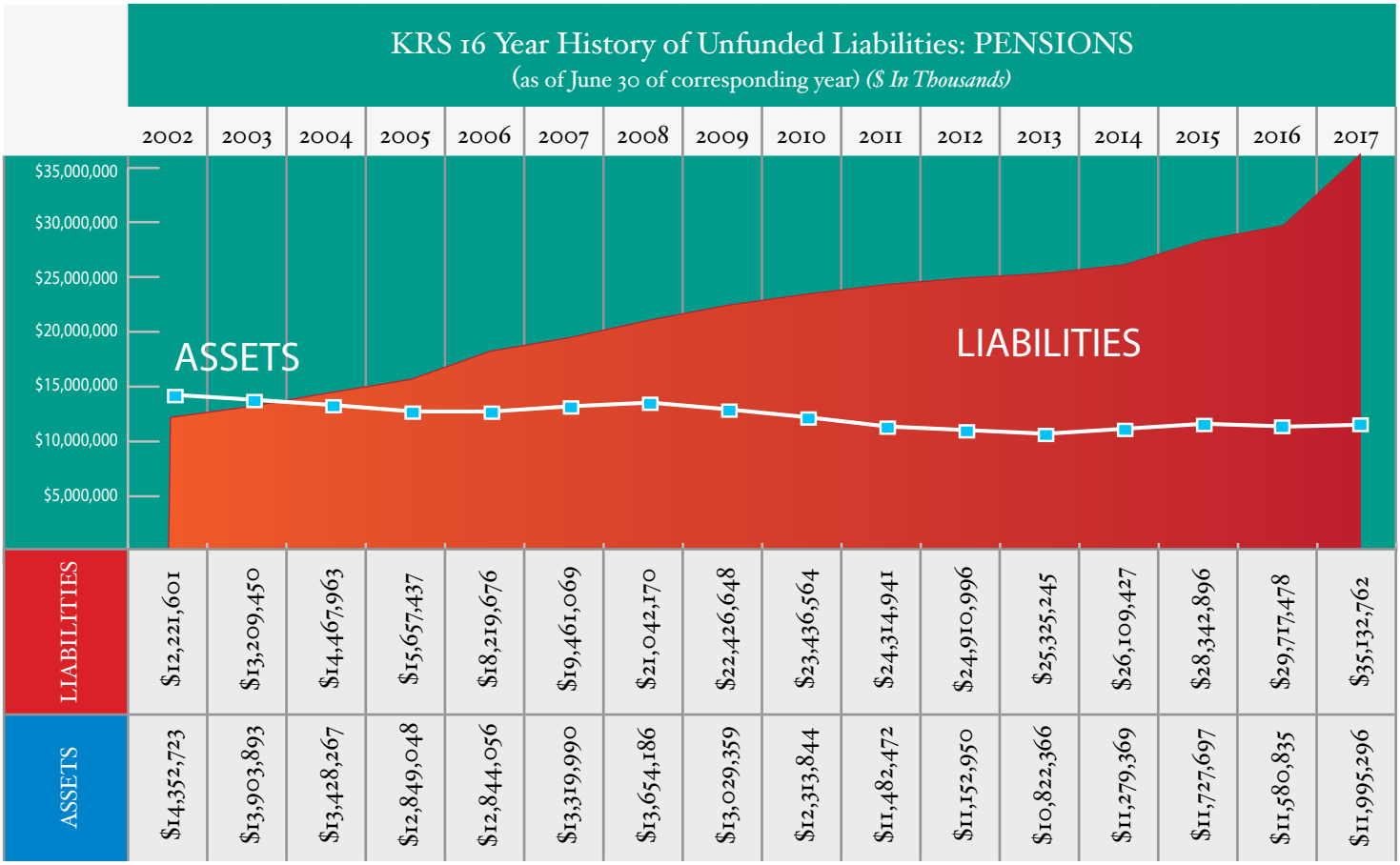


The Insurance Plan's unfunded actuarial accrued liability as of June 30, 2017, was $3,601.1 million compared to $3,033.8 million as of June 30, 2016. This is an increase in the unfunded actuarial accrued liability of $567.3 million (primarily due to 2017 economic valuation assumptions).

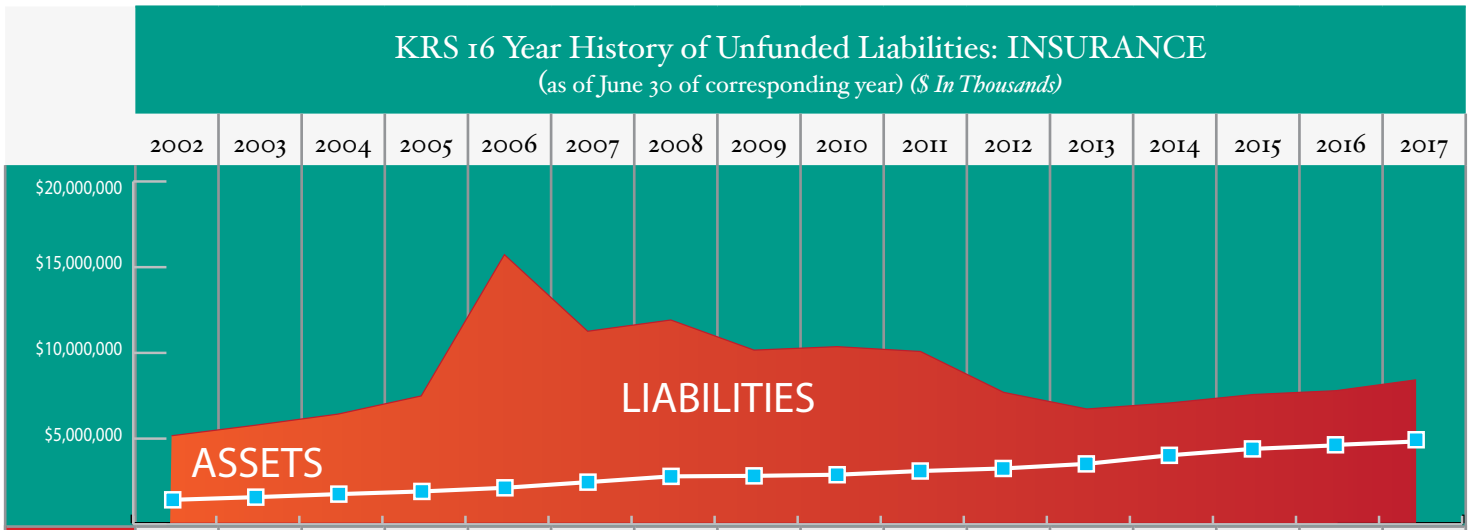
Annual required contributions of the employers as actuarially determined and actual contributions made by employers and other contributing entities in relation to the required contributions are provided in the Schedules of Employer Contributions - Pension on pages 73-75, and in the Schedules of Contributions - OPEB on pages 82-84. The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS funds is attributable to the fact that the employer contribution rate set by the Kentucky General Assembly was less than the rate recommended by the KRS Actuary in prior years and adopted by the KRS Board of Trustees.



The following two charts show the unfunded liability trends for the Pension Funds and Insurance Fund:



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LIABILITIES	$12,221,601	$13,209,450	$14,467,963	$15,657,437	$18,219,676	$19,461,069	$21,042,170	$22,426,648	$23,436,564	$24,314,941	$24,910,996	$25,325,245	$26,109,427	$28,342,896	$29,717,478	$35,132,762
ASSETS	$14,352,723	$13,903,893	$13,428,267	$12,849,048	$12,844,056	$13,319,990	$13,654,186	$13,029,359	$12,313,844	$11,482,472	$11,152,950	$10,822,366	$11,279,369	$11,727,697	$11,580,835	$11,995,296



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LIABILITIES	$5,068,710	$5,673,504	$6,321,432	$7,373,617	$15,555,005	$11,119,397	$11,771,240	$10,026,423	$10,227,437	$9,947,252	$7,579,441	$6,617,825	$6,968,497	$7,455,291	$7,638,560	$8,523,161
ASSETS	$1,429,174	$1,585,343	$1,762,346	$1,918,345	$2,130,276	$2,461,137	$2,797,730	$2,827,096	$2,892,752	$3,109,510	$3,257,921	$3,525,698	$4,025,160	$4,399,471	$4,604,729	$4,922,021

Combining Statements of Net Position - PENSION FUNDS

As of June 30, 2017 with Comparative Totals as of June 30, 2016 ($ In Thousands)

ASSETS	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS	KRS Total 2017	KRS Total 2016
CASH AND SHORT-TERM INVESTMENTS							
Cash Deposits	$1,295	$202	$1,377	$398	$94	$3,366	$1,122
Short-Term Investments	114,474	24,158	241,690	94,636	11,973	486,931	306,244
Total Cash and Short-Term Investments	115,769	24,360	243,067	95,034	12,067	490,297	307,366
RECEIVABLES							
Accounts Receivable	72,979	7,290	45,293	11,530	13,039	150,131	126,336
Accounts Receivable - Investments	37,131	10,038	111,339	34,893	3,999	197,400	316,026
Accounts - Alternate Participation	-	-	-	94	-	94	102
Total Receivables	110,110	17,328	156,632	46,517	17,038	347,625	442,464
INVESTMENTS, AT FAIR VALUE							
Fixed Income	298,401	49,289	569,194	186,885	29,401	1,133,170	1,130,596
Public Equities	817,021	325,287	3,667,140	1,205,590	122,230	6,137,268	5,416,406
Private Equities	375,366	76,247	815,918	275,179	31,352	1,574,062	1,367,455
Derivatives	3,224	1,237	13,947	4,604	441	23,453	12,268
Absolute Return	163,325	44,427	529,213	167,588	17,204	921,757	1,104,196
Real Return	164,692	52,187	557,469	188,078	19,891	982,317	902,277
Real Estate	80,535	27,693	295,613	94,522	11,164	509,527	516,268
Total Investments, at Fair Value	1,902,564	576,367	6,448,494	2,122,446	231,683	11,281,554	10,449,466
Security Lending Collateral Invested	62,354	19,995	230,954	75,707	7,803	396,813	653,684
FIXED/INTANGIBLE ASSETS							
Fixed Assets	929	91	1,701	153	11	2,885	2,819
Intangible Assets	5,920	494	9,961	827	100	17,302	17,302
Accumulated Depreciation	(816)	(81)	(1,498)	(135)	(9)	(2,539)	(2,440)
Accumulated Amortization	(3,894)	(318)	(6,500)	(547)	(78)	(11,337)	(9,449)
Total Fixed Assets	2,139	186	3,664	298	24	6,311	8,232
Total Assets	2,192,936	638,236	7,082,811	2,340,002	268,615	12,522,600	11,861,212
LIABILITIES							
Accounts Payable	3,137	2,404	5,181	1,803	443	12,968	12,499
Investment Accounts Payable	34,664	9,916	107,534	34,813	3,986	190,913	317,271
Securities Lending Collateral	62,354	19,995	230,954	75,707	7,803	396,813	653,684
Total Liabilities	100,155	32,315	343,669	112,323	12,232	600,694	983,454
Total Plan Net Position	$2,092,781	$605,921	$6,739,142	$2,227,679	$256,383	$11,921,906	$10,877,758

See accompanying notes to the combining financial statements.
"The displayed market values include investable assets held by each System, and its associated contributions, payables, and equipment and intangible assets; unlike those found in the Investment Section (pages 116-119), which include only those investable assets held by each System."

Combining Statements of Changes In Plan Net Position - PENSION FUNDS

for the Fiscal Year ending June 30, 2017 with Comparative Totals for the fiscal year ending June 30, 2016 ($ In Thousands)

ADDITIONS	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS	KRS Total 2017	KRS Total 2016
Member Contributions	$100,544	$17,523	$150,714	$60,102	$5,349	$334,232	$307,422
Employer Contributions	644,803	37,630	331,493	114,315	38,028	1,166,269	949,802
General Fund Appropriations	58,193	15,000	-	-	25,000	98,193	-
Pension Spiking Contributions	909	344	2,061	1,632	210	5,156	2,684
Health Insurance Contributions (HB1)	5,156	811	9,158	1,708	131	16,964	14,719
Employer Cessation Contribution	53,215	-	-	-	-	53,215	-
Total Contributions	862,820	71,308	493,426	177,757	68,718	1,674,029	1,274,627
INVESTMENT INCOME							
From Investing Activities							
Net Appreciation (Depreciation) in FV	170,057	58,939	688,184	225,648	21,255	1,164,083	(212,892)
Interest/Dividends	66,216	16,221	184,728	60,211	7,223	334,599	194,788
Total Investing Activities Income (Loss)	236,273	75,160	872,912	285,859	28,478	1,498,682	(18,104)
Investment Expense	15,600	4,267	48,166	15,765	1,722	85,520	61,727
Net Income (Loss) from Investing Activities	220,673	70,893	824,746	270,094	26,756	1,413,162	(79,831)
From Securities Lending Activities							
Securities Lending Income	477	155	1,791	587	60	3,070	4,636
Securities Lending Expense							
Securities Lending Borrower Rebates	110	37	432	141	14	734	100
Securities Lending Agent Fees	55	18	204	67	7	351	680
Net Income from Securities Lending	312	100	1,155	379	39	1,985	3,856
Total Net Investment Income (Loss)	220,985	70,993	825,901	270,473	26,795	1,415,147	(75,975)
Total Additions	1,083,805	142,301	1,319,327	448,230	95,513	3,089,176	1,198,652
DEDUCTIONS							
Benefit Payments	948,489	61,231	687,460	226,985	56,935	1,981,100	1,903,557
Refunds	11,819	2,106	14,430	2,315	26	30,696	30,985
Administrative Expenses	10,974	919	19,614	1,421	181	33,109	32,300
Capital Project Expenses	34	4	77	7	1	123	533
Total Deductions	971,316	64,260	721,581	230,728	57,143	2,045,028	1,967,375
Net Increase (Decrease) in Plan Net Position	112,489	78,041	597,746	217,502	38,370	1,044,148	(768,723)
Total Plan Net Position - PENSION							
Beginning of Period	1,980,292	527,880	6,141,396	2,010,177	218,013	10,877,758	11,646,481
End of Period	$2,092,781	$605,921	$6,739,142	$2,227,679	$256,383	$11,921,906	$10,877,758

See accompanying notes to the combining financial statements.

Combining Statement of Plan Net Position - INSURANCE FUND

As of June 30, 2017 (with Comparative Totals as of June 30, 2016) ($ In Thousands)

ASSETS	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS	KRS Total 2017	KRS Total 2016
CASH AND SHORT-TERM INVESTMENTS							
Cash Deposits	$82	$30	$58	$49	$24	$243	$152
Short-Term Investments	45,548	16,254	76,039	40,364	6,653	184,858	123,401
Total Cash and Short-Term Investments	45,630	16,284	76,097	40,413	6,677	185,101	123,553
RECEIVABLES							
Accounts Receivable	12,762	565	11,576	2,579	767	28,249	31,559
Accounts Receivable - Investments	12,099	7,780	34,092	18,693	2,834	75,498	139,474
Total Receivables	24,861	8,345	45,668	21,272	3,601	103,747	171,033
INVESTMENTS, AT FAIR VALUE							
Fixed Income	60,360	38,873	166,223	91,875	13,881	371,212	370,202
Public Equities	441,668	270,111	1,165,790	640,408	96,165	2,614,142	2,278,866
Private Equities	61,318	55,669	283,439	157,861	24,058	582,345	455,395
Derivatives	1,578	976	4,301	2,363	357	9,575	4,660
Absolute Return	61,933	40,824	172,897	97,353	15,346	388,353	413,904
Real Return	66,711	38,825	183,912	93,457	12,462	395,367	347,391
Real Estate	29,809	22,479	97,495	53,457	8,555	211,795	208,905
Total Investments, at Fair Value	723,377	467,757	2,074,057	1,136,774	170,824	4,572,789	4,079,323
Security Lending Collateral Invested	29,676	18,450	80,042	43,848	6,531	178,547	198,279
Total Assets	823,544	510,836	2,275,864	1,242,307	187,633	5,040,184	4,572,188
LIABILITIES							
Accounts Payable	241	22	624	114	12	1,013	354
Investment Accounts Payable	12,221	7,922	34,645	19,032	2,899	76,719	142,244
Securities Lending Collateral	29,676	18,450	80,042	43,848	6,531	178,547	198,279
Total Liabilities	42,138	26,394	115,311	62,994	9,442	256,279	340,877
Total Plan Net Position	$781,406	$484,442	$2,160,553	$1,179,313	$178,191	$4,783,905	$4,231,311

See accompanying notes to the combining financial statements.

Combining Statements of Changes in Plan Net Position - INSURANCE FUND

for the fiscal year ending June 30, 2017 (with Comparative Totals for the fiscal year ending June 30, 2016) ($ In Thousands)

	KERS	KERS	CERS	CERS	SPRS	KRS Total	KRS Total
ADDITIONS	Non-Hazardous	Hazardous	Non-Hazardous	Hazardous		2017	2016
Employer Contributions	$133,024	$4,688	$117,310	$50,743	$9,222	$314,987	$333,118
Medicare Drug Reimbursement	1	-	1	-	-	2	-
Insurance Premiums	248	(51)	707	(301)	(55)	548	721
Retired Reemployed Healthcare	3,765	932	3,402	794	-	8,893	9,155
Employer Cessation Contributions	15,567	-	-	-	-	15,567	-
Total Contributions	152,605	5,569	121,420	51,236	9,167	339,997	342,994
INVESTMENT INCOME							
From Investing Activities							
Net Appreciation (Depreciation) in FV	75,308	49,400	217,622	119,919	18,036	480,285	(54,534)
Interest/Dividends	19,709	13,113	57,871	31,817	4,869	127,379	76,939
Total Investing Activities Income	95,017	62,513	275,493	151,736	22,905	607,664	22,405
Investment Expense	4,227	3,402	16,245	8,992	1,362	34,228	28,817
Net Income (Loss) from Investing Activities	90,790	59,111	259,248	142,744	21,543	573,436	(6,412)
From Securities Lending Activities							
Securities Lending Income	178	111	480	263	39	1,071	1,556
Securities Lending Expense							
Security Lending Borrower Rebates	31	20	83	46	7	187	76
Security Lending Agent Fees	22	14	59	33	5	133	222
Net Income from Securities Lending	125	77	338	184	27	751	1,258
Total Net Investment Income (Loss)	90,915	59,188	259,586	142,928	21,570	574,187	(5,154)
Total Additions	243,520	64,757	381,006	194,164	30,737	914,184	337,840
DEDUCTIONS							
Healthcare Premiums Subsidies	127,648	17,562	124,573	70,407	13,405	353,595	344,946
Administrative Expense	861	105	789	381	66	2,202	2,038
Self Funded Healthcare Costs	1,920	45	3,635	160	24	5,784	6,420
Excise Tax Insurance	3	-	6	-	-	9	17
Total Deductions	130,432	17,712	129,003	70,948	13,495	361,590	353,421
Net Increase (Decrease) in Plan Net Position	113,088	47,045	252,003	123,216	17,242	552,594	(15,581)
Total Plan Net Position - Insurance							
Beginning of Period	668,318	437,397	1,908,550	1,056,097	160,949	4,231,311	4,246,892
End of Period	$781,406	$484,442	$2,160,553	$1,179,313	$178,191	$4,783,905	$4,231,311

See accompanying notes to the combining financial statements.

NOTE A. Summary of Significant Accounting Policies

This summary of significant accounting policies of KRS is presented to assist in understanding KRS' combining financial statements. The combining financial statements and notes are representations of KRS' management, which is responsible for their integrity and objectivity. These accounting policies conform to GAAP and have been consistently applied in the preparation of the combining financial statements.

Organization

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees (the Board) of KRS administers the KERS, CERS, and SPRS, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630. The assets of the systems are segregated by plan, where each system's assets are used only for the payment of benefits to the members of that plan, and a pro rata share of administrative costs.

Under the provisions of Kentucky Revised Statute Section 61.701, the KRS Board administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by KRS: (1) KERS; (2) CERS; and (3) SPRS. The assets of the Insurance Fund are also segregated by plan. The following notes apply to the various funds administered by KRS.

Basis of Accounting

KRS' combining financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and investment expenses are recognized when incurred.

Method Used to Value Investments

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Short-term investments are reported at cost, which approximates fair value. See Note D for further discussion of fair value measurements. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the dividend date. Gain (loss) on investments includes KRS' gains and losses on investments bought and sold as well held during the fiscal year.

A prior year correction was made for June 30, 2016, which resulted in a reclassification between Management Fees and Net Appreciation in Fair Value of Investments. The correction did not impact the overall value of the assets or the net decrease in plan net position.

Investment returns are recorded in all plans net of investment fees.

Estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment

Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged to expense as incurred. The capitalization threshold used in fiscal years 2017 and 2016 was $3,000 (see Note J for further information).

Intangible Assets

Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is 10 years. The capitalization threshold used in fiscal years 2017 and 2016 was $3,000 (see Note K for further information).

Contributions Receivable

Contributions receivable consists of amounts due from employers. The KRS management considers contributions receivable to be fully collectible; accordingly, no allowance for doubtful accounts is considered necessary. If amounts become uncollectible, they will be charged to operations when that determination is made. If amounts previously written off are collected, they will be credited to income when received.

Investment Income Receivable and Investment Accounts Payable

Due to the timing of receiving partnership financial information, the fair values of the investments in certain limited partnerships have been estimated using the net asset value of the ownership interest in partners' capital as of March 31 of each fiscal year. KRS management will monitor differences in the fair values of these investments between March 31 and June 30 of each fiscal year and will disclose any and all material differences.

The Investment Income Receivable and Investment Accounts Payable consist of all buys and sells of securities which have not closed, as well as all investment related accruals.

Payment of Benefits

Benefits are recorded when paid.

Expense Allocation

KRS administrative expenses are allocated in proportion to the number of total members participating in each plan and direct investment manager expenses are allocated in proportion to the percentage of investment assets held by each plan.

Component Unit

KRS is a component unit of the Commonwealth of Kentucky (the Commonwealth) for financial reporting purposes.

KERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. CERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. SPRS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Board of KRS without further legislative review. The methods used to determine the employer rates for KRS are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

Recent Accounting Pronouncements

In June 2015, the GASB issued Statement No. 75, Accounting and Financial Reporting for Post-employment Benefits Other Than Pensions. The objective of this Statement is to address accounting and financial reporting for Other Post-employment Benefits (OPEB) that are provided to the employees of state and local governmental employers. This Statement establishes standards for recognizing and measuring liabilities; deferred outflows of resources; deferred inflows of resources; and, expense/ expenditures. For defined benefit OPEB, this Statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information requirements about defined benefit OPEB also are addressed. This Statement became effective for the fiscal year beginning July 1, 2017. KRS will provide the agencies their proportionate share in the OPEB unfunded liability, calculated by Gabriel, Roeder, Smith & Co. (GRS), to be used in their financial reports for fiscal year end June 30, 2018.

In June 2017, the GASB issued Statement No. 87, Leases. The objective of this Statement is to address government lessees recognition of lease liabilities, intangible assets, and report amortization expense for using the lease, interest expense on the lease liability, and note disclosures about the lease. Another objective of this Statement is to address government lessors recognition of a lease receivable, deferred inflow, and report lease revenue, interest income, and note disclosures about the lease. This Statement becomes effective for the fiscal year beginning July 1, 2020. KRS is evaluating the impact of this Statement to the financial report.

GASB Statement 84, Fiduciary Activities, establishes criteria for identifying fiduciary activities of all state and local governments and clarifies whether and how business type activities should report their fiduciary activities. This Statement becomes effective for the fiscal year beginning July 1, 2018. KRS is evaluating the impact of this Statement to the financial report.

GASB Statement 82, Pension Issues, was designed to improve consistency in the application of the pension standards by clarifying or amending related areas of existing guidance. Specifically, the practice issues raised by stakeholders during implementation related to GASB 67, 68, and 73. This Statement became effective for the fiscal year beginning July 1, 2017. KRS is evaluating the impact of this Statement to the financial report.

Note B. Plan Descriptions & Contribution Information

Membership in each retirement plan consists of the following as of June 30, 2017 and 2016.
Membership Information.*

KERS

	2017			2016		
Members	Non-Hazardous	Hazardous	Total	Non-Hazardous	Hazardous	Total
Retirees and Beneficiaries Receiving Benefits	40,813	2,823	43,636	40,099	2,739	42,838
Inactive Memberships	44,848	4,363	49,211	43,929	4,067	47,996
Active Plan Members	36,725	4,061	40,786	38,121	3,987	42,108
Total	122,386	11,247	133,633	122,149	10,793	132,942
Number of Participating Employers			354			358

CERS

	2017			2016		
Members	Non-Hazardous	Hazardous	Total	Non-Hazardous	Hazardous	Total
Retirees and Beneficiaries Receiving Benefits	54,018	7,186	61,204	51,673	6,834	58,507
Inactive Memberships	78,940	2,442	81,382	75,904	2,309	78,213
Active Plan Members	84,401	9,321	93,722	83,346	9,139	92,485
Total	217,359	18,949	236,308	210,923	18,282	229,205
Number of Participating Employers			1,138			1,140

SPRS

Members	2017	2016
Retirees and Beneficiaries Receiving Benefits	1,393	1,379
Inactive Memberships	278	262
Active Plan Members	910	924
Total	2,581	2,565
Number of Participating Employers	1	1

**Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-Hazardous, then KERS Non-Hazardous.*

Hospital & Medical Contracts consisted of the following as of June 30, 2017

	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Hazardous	8,627	663	411	1,229	20,215
KERS Hazardous	667	432	88	72	1,401
CERS Non-Hazardous	8,313	462	222	2,462	24,247
CERS Hazardous	1,645	2,387	395	125	3,205
SPRS	251	420	79	17	897
Totals	19,503	4,364	1,195	3,905	49,965

Hospital & Medical Contracts consisted of the following as of June 30, 2016

	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Hazardous	8,876	656	441	1,286	19,447
KERS Hazardous	663	439	97	66	1,302
CERS Non-Hazardous	8,164	465	235	2,499	23,007
CERS Hazardous	1,595	2,321	378	114	2,969
SPRS	246	447	77	18	850
Totals	19,544	4,328	1,228	3,983	47,575

Medical Insurance coverage is provided based on the member's initial participation date and length of service. Members receive either a percentage or dollar amount for insurance coverage.

Pension Plan Descriptions

These systems provide for retirement, disability, and death benefits to system members. Retirement benefits may be extended to beneficiaries of members under certain circumstances.

Kentucky Employees Retirement System

This system consists of two plans - Non-Hazardous and Hazardous. Each plan is a cost-sharing, multiple-employer defined benefit pension plan that covers all regular full-time members employed in positions of any state department, board, or agency directed by Executive Order to participate in KERS. See Note M (6) for pension legislation allowing agencies to voluntarily apply to cease participation in the system.

County Employees Retirement System

This system consists of two plans - Non-Hazardous and Hazardous. Each plan is a cost-sharing, multiple-employer defined benefit pension plan that covers all regular full-time members employed in positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate in CERS.

State Police Retirement System

This system is a single-employer defined benefit pension plan that covers all full-time state troopers employed in positions by the Kentucky State Police.

Cost of Living Adjustment (COLA)

Prior to July 1, 2009, COLAs were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. After July 1, 2009, the COLAs were limited to 1.50%. No COLA has been granted since July 1, 2011.

Contributions

The Commonwealth is required to contribute at an actuarially determined rate for KERS and SPRS pensions. Participating employers are required to contribute at an actuarially determined rate for CERS pensions. Per Kentucky Revised Statute Sections {KERS 61.565(3); CERS 78.545(33); SPRS 16.645(18)}, normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget for KERS and SPRS.

For the fiscal year ended June 30, 2017, participating employers contributed a percentage of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal year is a percentage of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings. See chart below for the 2017 and 2016 fiscal year employer contribution rates, including the actuarially recommended rates.

TIER 1:

Tier 1 plan members who began participating prior to September 1, 2008, are required to contribute 5% (Non-Hazardous) and 8% (Hazardous) of their annual creditable compensation. These members are classified in the Tier 1 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest.

TIER 2:

Tier 2 plan members, who began participating on, or after, September 1, 2008, and before January 1, 2014, are required to contribute 6% (Non-Hazardous) and 9% (Hazardous) of their annual creditable compensation, while 1% of these contributions are deposited to an account created for the payment of health insurance benefits under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). These members are classified in the Tier 2 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited.

TIER 3:

Tier 3 plan members, who began participating on, or after, January 1, 2014, are required to contribute to the Cash Balance Plan. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. Members in the plan contribute a set percentage of their salary each month to their own account. Members contribute 5% (Non-Hazardous) and 8% (Hazardous) of their annual creditable compensation, and an additional 1% to the health insurance fund (401(h) account) which is not credited to the member's account and is not refundable. The employer contribution rate is set annually by the Board based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A member's account is credited with a 4% (Non-Hazardous) and 7.5% (Hazardous) employer pay credit. The employer pay credit represents a portion of the employer contribution.

Contribution Rate Breakdown by System as of June 30, 2017

	Pension				Insurance				Combined Total			
	Employer Contribution Rates		Actuarially Recommended Rates		Employer Contribution Rates		Actuarially Recommended Rates		Employer Contribution Rates		Actuarially Recommended Rates	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
KERS Non-Hazardous	40.24%	30.84%	38.93%	30.84%	8.35%	7.93%	8.35%	7.93%	48.59%	38.77%	47.28%	38.77%
KERS Hazardous	21.08%	16.37%	21.08%	16.37%	2.74%	9.97%	2.74%	9.97%	23.82%	26.34%	23.82%	26.34%
CERS Non-Hazardous	13.95%	12.42%	13.95%	12.42%	4.73%	4.64%	4.93%	4.64%	18.68%	17.06%	18.88%	17.06%
CERS Hazardous	21.71%	20.26%	21.71%	20.26%	9.35%	12.69%	9.79%	12.69%	31.06%	32.95%	31.50%	32.95%
SPRS	70.34%	53.90%	66.47%	53.90%	18.87%	21.86%	18.87%	21.86%	89.21%	75.76%	85.34%	75.76%

Tier 3 Plan

Interest is paid into the Tier 3 member's account. The account currently earns 4% interest credit on the member's account balance as of June 30 of the previous year. The member's account may be credited with additional interest if the system's five-year Geometric Average Net Investment Return (GANIR) exceeded 4%. If the member was actively employed and participating in the fiscal year, and if the systems' GANIR for the previous five years exceeds 4%, then the member's account will be credited with 75% of the amount of the returns over 4% on the account balance as of June 30 of the previous year (Upside Sharing Interest). It is possible that one system in KRS may get an Upside Sharing Interest, while one may not.

Upside Sharing Interest

Upside Sharing Interest is credited to both the member contribution balance and Employer Pay Credit balance. Upside Sharing Interest is an additional interest credit. Member accounts automatically earn 4% interest annually. The GANIR is calculated on an individual system basis. It is possible that one system may get an Upside Sharing Interest, and another system would not.

The chart below shows the interest calculated on the members' balances as of June 30, 2016, and credited to each member account on June 30, 2017.

(A-B) = C x 75%= D then B+D = Interest *($ In Thousands)*

	A	B	C	D		
System	5 Year Geometric Average Return	Less Guarantee Rate of 4%	Upside Sharing Interest	Upside Sharing Interest X 75% = Upside Gain	Interest Rate Earned (4%+Upside)	Total Interest Credited to Member Accounts
KERS Non-Hazardous	7.41%	4.00%	3.41%	2.56%	6.56%	$1,366
KERS Hazardous	7.98%	4.00%	3.98%	2.99%	6.99%	$410
CERS Non-Hazardous	7.85%	4.00%	3.85%	2.89%	6.89%	$2,565
CERS Hazardous	8.07%	4.00%	4.07%	3.05%	7.05%	$616
SPRS	7.59%	4.00%	3.59%	2.69%	6.69%	$53

Insurance Plan Description

The Kentucky Retirement Systems' Insurance Fund (Insurance Fund) was established to provide hospital and medical insurance for eligible members receiving benefits from KERS, CERS, and SPRS. The eligible non-Medicare retirees are covered by the Department of Employee Insurance (DEI) plans. KRS submits the premium payments to DEI. The Board contracts with Humana to provide health care benefits to the eligible Medicare retirees through a Medicare Advantage Plan. The Insurance Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2017, insurance premiums withheld from benefit payments for members of the Systems were $20.3 million and $1.3 million for KERS Non-Hazardous and Hazardous, respectively; $22.9 million and $2.7 million for CERS Non-Hazardous and Hazardous, respectively; and, $290,387 for SPRS. For fiscal year 2016, insurance premiums withheld from benefit payments for members of the Systems were $20.6 million and $1.2 million for KERS Non-Hazardous and KERS Hazardous, respectively; $22.6 million and $2.2 million for CERS Non-Hazardous and CERS Hazardous, respectively, and $241,535 for SPRS. The Insurance Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty.

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after, July 1, 2003. Once members reach a minimum vesting period of 10 years, non-hazardous employees whose participation began on, or after, July 1, 2003, earn $10 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn $15 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives $10 per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually, which is currently 1.5%, based upon Kentucky Revised Statutes. See chart for current values for Dollar Contribution. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

The amount of contribution paid by the Insurance Fund is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows:

The amount of contribution paid by the Insurance Fund is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows:

Portion Paid by Insurance Fund

Years of Service	Paid by Insurance Fund (%)
20+ years	100.00%
15-19 years	75.00%
10-14 years	50.00%
4-9 years	25.00%
Less than 4 years	0.00%

Dollar Contribution for Fiscal Year 2017

For Member participation date on or after July 1, 2003

System	*(in Whole Dollars)*
KERS Non-Hazardous	$13.18
KERS Hazardous	$19.77
CERS Non-Hazardous	$13.18
CERS Hazardous	$19.77
SPRS	$19.77

Note C. Cash, Short-Term Investments & Securities Lending Collateral

The provisions of GASB Statement No. 28, Accounting and Financial Reporting for Securities Lending Transactions, require that cash received as collateral on securities lending transactions, and investments made with that cash, be reported as assets on the financial statements. In accordance with GASB No. 28, KRS classifies certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following as of June 30, 2017.

Cash, Short-Term Investments, & Securities Lending Collateral		
KERS *($ In Thousands)*		
	2017	2016
Cash	$1,497	$451
Short-Term Investments	138,632	101,227
Securities Lending Collateral Invested	82,349	150,603
Total	$222,478	$252,281
CERS *($ In Thousands)*		
	2017	2016
Cash	$1,775	$622
Short-Term Investments	336,326	199,114
Securities Lending Collateral Invested	306,661	490,327
Total	$644,762	$690,063
SPRS *($ In Thousands)*		
	2017	2016
Cash	$94	$49
Short-Term Investments	11,973	5,903
Securities Lending Collateral Invested	7,803	12,754
Total	$19,870	$18,706
KRS - Insurance Fund *($ In Thousands)*		
	2017	2016
Cash	$243	$152
Short-Term Investments	184,858	123,401
Securities Lending Collateral Invested	178,547	198,279
Total	$363,648	$321,832

Note D. Investments

Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the KRS Board. The Board has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the "Prudent Person Rule" (set forth in Kentucky Revised Statute 61.650) and manage those funds consistent with the long-term nature of the systems. The Investment Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS. The Statement of Investment Policy contains the specific guidelines for the investment of Pension and Insurance assets. Additionally, the Investment Committee establishes specific investment guidelines that are summarized below and are included in the Investment Management Agreement for each investment management firm.

PRUDENT PERSON RULE - A legal maxim restricting the discretion in a client's account to investments that a prudent person seeking reasonable income and preservation of capital might buy for his or her own portfolio.

Equity Investments

Investments may be made in common stock; securities convertible into common stock; preferred stock of publicly traded companies on stock markets; asset class relevant Exchange Traded Funds (ETF); or any other type of security contained in a manager's benchmark. Each individual equity account has a comprehensive set of investment guidelines prepared, which contains a listing of permissible investments, portfolio restrictions and standards of performance.

Fixed Income Investments

The fixed income accounts may include, but are not limited to, the following fixed income securities: U.S. Government and Agency bonds; investment grade U.S. corporate credit; investment grade non-U.S. corporate credit; non-investment grade U.S. corporate credit including both bonds and bank loans; non-investment grade non-U.S. corporate credit including bonds and bank loans; municipal bonds; non-U.S. sovereign debt; mortgages, including residential mortgage backed securities; commercial mortgage backed securities and whole loans; asset-backed securities and emerging market debt (EMD), including both sovereign EMD and corporate EMD; and, asset class relevant ETF's.

Mortgages

Investments may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments.

Private Equity/Equity Real Estate/Real Return/Absolute Return Investments

Subject to the specific approval of the Investment Committee, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, but not limited to and without limitation: venture capital, private equity, real assets, and absolute return investments. The Investment Committee believes absolute returns have the potential to generate substantial income, but may have a higher degree of risk. It is important to note that the KERS (Non-Hazardous) and SPRS have not made any new investments in Private Equity since 2010 and 2016, respectively, due to the inability to invest in long-term investments as a result of cash flow constraints. During fiscal year 2017, the Board made the decision to begin reducing KRS' exposure to absolute returns and dissolve any fund of funds relationships.

Cash Equivalent Securities

The following short-term investment vehicles are considered acceptable: publicly traded investment grade corporate bonds; variable rate demand notes; government and agency bonds; mortgages; municipal bonds; Short Term Investment Funds (STIF); money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper); and repurchase agreements relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the instrument has a split rating, the lower of the two ratings is used.

All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time left until the next interest rate reset occurs, but in no case will any security have a stated final maturity of more than three years.

KRS' fixed income managers, who utilize cash equivalent securities as an integral part of their investment strategy, are exempt from the permissible investments contained in the preceding paragraph. Permissible short-term investments for fixed income managers shall be included in the investment manager's investment guidelines.

Investment Expenses

In accordance with GASB Statement No. 67 and 74, Financial Reporting for Defined Pension Benefit Plans and Note Disclosures for Defined Contribution Plans, KRS has exercised professional judgment to report investment expenses. It is not cost-beneficial to separate certain investment expenses from either the related investment income or the general administrative expenses. In fiscal year 2015, KRS changed private equity investment fees from a net basis to a gross basis. KRS made this decision to enhance transparency reporting. Prior to 2015, the majority of KRS' private equity investment fees were netted against investment activity which is the standard used within the private equity sector. KRS' net investment income has always included these fees regardless of the reporting method used. During the 2017 Regular Session of the Kentucky General Assembly, the Legislators passed SB2 which requires the reporting of all investment fees and expenses. KRS staff continues to work with managers to enhance fees and expenses reporting.

Derivatives

Derivative instruments are financial contracts that have various effective dates and maturity dates and whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities are subject to large or unanticipated changes in duration or cash flows, and can be interest only, principal only, inverse floater, or structured note securities. These are permitted only to the extent that they are authorized in a contract or an alternative investment offering memorandum or agreement.

Investments in securities such as collateralized mortgage obligations and planned amortization class issues are allowed if, in the judgment of the investment manager, they are not expected to be subject to large or unanticipated changes in duration or cash flows. Investment managers may make use of derivative securities for defensive or hedging purposes. Any derivative security shall be sufficiently liquid so that it can be expected to be sold at, or near, its most recently quoted market price.

It is the KRS policy that investment managers may invest in derivative securities, or strategies which make use of derivative investments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Examples of such derivatives include, but are not limited to, foreign currency forward contracts, collateralized mortgage obligations, treasury inflation protected securities, futures, options, and swaps.

For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combining Statement of Plan Net Position for both the Pension and Insurance Funds.

In accordance with GASB Statement No. 53, Accounting and Financial Reporting for Derivative Instruments, KRS provides additional disclosure regarding its derivatives. In the following graphic, derivative instruments A, C, D, and F represent those underlying investments that may decrease in fair value relative to the cash market. Similarly, derivative instruments B and E may expose KRS to interest rate risk in that changes in interest rates will adversely affect the fair values of KRS' financial instruments.

As of June 30, 2017, KRS had the following derivative instruments outstanding:

Derivative Instruments *($ In Thousands)*

Pension

Item	Type	Objective	Term	Market Value[1]	Notional Value	Risk Exposure (%)
A	U.S. Equity Index Futures	Hedge against the drop in equity markets or to equalize cash	9/15/2017	$11,774,972	$11,253	0.10%
B	Fixed Income Securities	Hedge against sudden or dramatic shifts in interest rates	9/29/2017	$11,774,972	$97,983	0.83%
C	Forwards	Hedge against the volatility of an asset's price	9/20/2017	$11,774,972	$3,233	0.03%

Insurance

Item	Type	Objective	Term	Market Value[1]	Notional Value	Risk Exposure (%)
D	U.S. Equity Index Futures	Hedge against the drop in equity markets or to equalize cash	9/15/2017	$4,756,432	$4,060	0.09%
E	Fixed Income Securities	Hedge against sudden or dramatic shifts in interest rates	9/29/2017	$4,756,432	$36,319	0.76%
F	Forwards	Hedge against the volatility of an asset's price	9/20/2017	$4,756,432	$1,446	0.03%

[1]Market Value is total market value of all plans.

RISKS

Custodial Credit Risk for Deposits

Custodial credit risk for deposits is the risk that may occur as a result of a financial institution's failure, whereby KRS' deposits may not be returned. All non-investment related bank balances are held by JP Morgan Chase and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). In 2010, Congress passed the Financial Crisis Bill and permanently increased the FDIC deposit insurance coverage to $250,000. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount.

As of June 30, 2017, and 2016, deposits for KRS Pension Funds were $4.7 million and $5.7 million, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

As of June 30, 2017, and 2016, deposits for KRS Insurance Fund were $251,825 and $162,409, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of an investment or collateral securities that are in the possession of an outside party. As of June 30, 2017, and 2016, the currencies in the chart below were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name. These funds are cash held by KRS' Global Managers and consist of various currencies.

Custodial Credit Risk *($ In Thousands)*			
		2017	2016
Pension Fund			
	Foreign Currency	$ 1,408,163	$1,568,880
Insurance Fund			
	Foreign Currency	$557,016	$646,194

Pension Fund Securities

As of June 30, 2017, and 2016, the KRS Pension portfolio had $539.2 million and $521.8 million respectively, in debt securities rated below BBB-. The government agencies in which KRS invested are Fannie Mae and the Federal Home Loan Bank, whose credit ratings are AA+.

Insurance Fund Securities

As of June 30, 2017, and 2016, the KRS Insurance portfolio had $165.9 million and $159.0 million respectively, in debt securities rated below BBB-. The government agencies in which KRS invested are Fannie Mae and the Federal Home Loan Bank, whose credit ratings are AA+.

Pension Funds Investment Summary

($ In Thousands)

Type	2017	2016
Fixed Income	$1,133,170	$1,130,595
Public Equities	6,137,268	5,416,406
Private Equities	1,574,062	1,367,456
Derivatives	23,453	12,268
Absolute Return	921,757	1,104,195
Real Return	982,317	902,277
Real Estate	509,527	516,268
Short-Term Investments	486,931	306,243
Accounts Receivable/ Payable	6,487	(1,245)
Total	$11,774,972	$10,754,462

Note: Differences due to rounding.

Insurance Fund Investment Summary

($ In Thousands)

Type	2017	2016
Fixed Income	$371,213	$370,202
Public Equities	2,614,142	2,278,866
Private Equities	582,345	455,395
Derivatives	9,574	4,659
Absolute Return	388,353	413,903
Real Return	395,368	347,391
Real Estate	211,795	208,905
Short-Term Investments	184,860	123,400
Accounts Receivable/ Payable	(1,220)	(2,770)
Total	$4,756,432	$4,199,951

Note: Differences due to rounding.

Credit Risk Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the Pension and Insurance Funds' debt securities portfolios are managed using the following guidelines adopted by the Board:

» Bonds, notes, or other obligations issued or guaranteed by the U.S. Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.

» Fixed income investments will be similar in type to those securities found in the KRS fixed income benchmarks and the characteristics of the KRS fixed income portfolio will be similar to the KRS fixed income benchmarks.

» The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income by more than 25%.

» The duration of the TIPS portfolio shall not deviate from the KRS Fixed Income Index by more than 10%.

» The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS' assets.

» No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short-term instrument, with the exception of U.S. Government issued, guaranteed or agency obligations.

The table presents the KRS Pension Funds debt ratings as of June 30, 2017, and 2016:

Pension Funds Debt Securities

at Fair Value as of June 30 ($ In Thousands)

Rating	2017	2016
AAA	$88,072	$86,007
AA+	40,496	52,606
AA	6,378	11,483
AA-	13,342	21,615
A+	15,739	19,591
A	35,514	33,958
A-	27,005	25,109
BBB+	56,193	46,520
BBB	63,483	50,103
BBB-	73,754	60,336
BB+	73,429	64,644
BB	68,279	65,913
BB-	78,218	63,249
B+	75,043	73,861
B	70,787	54,210
B-	40,369	36,620
CCC+	14,997	19,077
CCC	13,999	4,594
CCC-	5,432	1,597
CC	9,009	2,109
D	18,596	5,404
NR	71,094	130,560
Total Credit Risk Debt Securities	$959,227	$929,168
Government Agencies	901	3,455
Government Mortgage-Backed Securities	82,149	84,498
Government Issued Commercial Mortgage Backed	19,808	7,693
Government Bonds	71,084	105,782
Total	$1,133,169	$1,130,596

Note: These ratings are based on Standard & Poor's (S&P) Global Ratings. Where S&P ratings are unavailable, equivalent Fitch and Moody's Ratings are used as proxies.

The table presents the KRS Insurance Fund debt ratings as of June 30, 2017, and 2016:

Insurance Fund Debt Securities

at Fair Value as of June 30 ($ In Thousands)

Rating	2017	2016
AAA	$26,700	$31,290
AA+	15,518	19,650
AA	2,275	4,081
AA-	4,337	7,649
A+	5,813	7,554
A	12,369	11,669
A-	9,554	8,752
BBB+	20,081	16,229
BBB	22,688	17,771
BBB-	26,914	18,635
BB+	22,620	19,899
BB	19,733	18,098
BB-	21,762	18,820
B+	20,999	20,603
B	19,232	17,158
B-	12,468	9,418
CCC+	3,545	5,525
CCC	3,394	1,199
CCC-	1,161	65
CC	2,282	749
D	4,479	2,034
NR	34,176	45,391
Total Credit Risk Debt Securities	$312,102	$302,239
Government Agencies	322	1,185
Government Mortgage-Backed Securities	27,723	28,514
Government Issued Commercial Mortgage Backed	6,978	2,462
Government Bonds	24,088	35,802
Total	$371,213	$370,202

Note: These ratings are based on Standard & Poor's (S&P) Global Ratings. Where S&P ratings are unavailable, equivalent Fitch and Moody's Ratings are used as proxies.

Concentration of Credit Risk Debt Securities

Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

The total debt securities portfolio is managed using the following general guidelines adopted by the Board of KRS:

» Bonds, notes, or other obligations issued or guaranteed by the U.S. Government, its agencies, or instrumentalities are permissible investments and may be held without restrictions.

» Debt obligations of any single U.S. Corporation shall be limited to a maximum of 5% of the total portfolio at market value.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration measures the sensitivity of the market prices of fixed income securities to changes in the yield curve. Duration is measured using two methodologies: effective and modified duration. Effective duration uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price and makes adjustments for any bond features that would retire the bonds prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve, but does not assume the securities will be called prior to maturity.

The KRS Pension Funds benchmarks its fixed income securities portfolio to a 50/50 blend of the Barclays U.S. Universal Index and the Barclays U.S. High Yield Index. As of June 30, 2017, and 2016, the modified duration of the KRS Pension Funds' fixed income benchmark was 4.71 and 5.75, respectively. At the same points in time, the modified duration of the KRS Pension Funds' fixed income securities portfolio was 5.06 and 5.61, respectively.

KRS Pension Funds Interest Rate Risk as of June 30, 2017, and 2016:

Pension Funds GASB 40 - Interest Rate Risk - *Modified Duration For the Fiscal Year Ended June 30, 2017 ($ In Thousands)*

TYPE	2017	Weighted Avg Modified Duration	2016	Weighted Avg Modified Duration
Asset Backed Securities	$74,249	5.97	$85,827	5.72
Financial Institutions	195,269	4.48	130,653	6.89
Collateralized Mortgage Obligations	14,937	2.93	18,041	3.58
Commercial Mortgage Backed Securities	90,171	2.97	64,195	3.07
Corporate Bonds - Industrial	434,421	5.54	434,384	5.92
Corporate Bonds - Utilities	31,381	5.99	32,234	6.94
Agencies	15,968	3.93	14,954	3.92
Government Bonds - Sovereign Debt	4,533	8.42	10,160	10.58
Mortgage Back Securities Passthrough - Not CMO's	82,975	5.05	86,491	3.25
Local Authorities - Municipal Bonds	22,644	3.11	49,942	6.45
Supranational - Multi-National Bonds	18,672	2.78	14,676	3.13
Treasuries	131,953	6.16	173,967	5.42
Other	15,996	3.59	15,071	8.86
Total	$1,133,169	5.06	$1,130,595	5.61

The KRS Insurance Fund benchmarks its fixed income securities portfolio to a 50/50 blend of the Barclays U.S. Universal Index and the Barclays U.S. High Yield Index. As of June 30, 2017, and 2016, the modified duration of the KRS Insurance Fund fixed income benchmark was 4.85 and 4.71, respectively. At the same points in time, the modified duration of the KRS Insurance Fund fixed income securities portfolio was 4.85 and 3.38, respectively.

KRS Insurance Fund Interest Rate Risk as of June 30, 2017, and 2016:

Insurance Fund: GASB 40 - Interest Rate Risk - Modified Duration For the Fiscal Year Ended June 30, 2017 *($ In Thousands)*

TYPE	2017	Weighted Avg Modified Duration	2016	Weighted Avg Modified Duration
Asset Backed Securities	$20,244	5.35	$28,849	5.02
Financial Institutions	73,800	4.18	47,826	7.38
Collateralized Mortgage Obligations	5,462	3.25	6,181	3.74
Commercial Mortgage Backed Securities	33,521	3.13	23,688	2.68
Corporate Bonds - Industrial	123,030	5.47	124,327	5.95
Corporate Bonds - Utilities	10,482	5.92	10,222	7.18
Agencies	6,025	3.80	4,992	4.16
Government Bonds - Sovereign Debt	1,738	8.19	3,893	10.42
Mortgage Back Securities Passthrough	27,568	5.09	29,229	3.17
Local Authorities - Municipal Bonds	8,750	3.06	19,212	6.18
Supranational - Multi-National Bonds	7,211	2.72	5,657	3.08
Treasuries	46,853	6.00	61,157	5.29
Other	6,529	3.38	4,970	5.89
Total	$371,213	4.85	$370,202	3.38

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the value of a non-U.S. dollar based investment or deposit within the KRS portfolio. KRS' currency risk exposure, or exchange rate risk, primarily resides with KRS' international equity holdings, but also affects other asset classes. KRS does not have a formal policy to limit foreign currency risk; however, some individual managers are given the latitude to hedge some currency exposures.

All foreign currency transactions are classified as Short-Term Investments.

All gains and losses associated with these transactions are recorded in the Net Appreciation (Depreciation) in the Fair Value of Investments on the combining financial statements.

Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the board of KRS. The Board has established an investment committee which is specifically charged with the oversight and investment of plan assets.

The following table present KRS' exposure to foreign currency risk as of June 30, 2017, and 2016:

Pension Funds - GASB 40 - Foreign Currency Risk

For the Year Ended June 30, 2016-2017 ($ In Thousands)

	2017	2016
Australian Dollar	$38,506	$38,927
Brazilian Real	18,032	4,670
British Pound Sterling	270,742	278,268
Canadian Dollar	75,198	61,249
Chilean Peso	777	5,195
Columbian Peso	1,001	-
Czech Koruna	375	-
Danish Krone	36,732	33,033
Egyptian Pound	949	978
Euro	445,443	341,559
Hong Kong Dollar	61,886	60,937
Indian Rupee	17,037	6,604
Indonesian Rupiah	28,606	20,838
Israeli Shekel	16,932	7,194
Japanese Yen	228,164	202,208
Malaysian Ringgit	6,284	6,341
Mexican Peso	13,729	13,810
New Zealand Dollar	17,149	17,054
Norwegian Krone	21,189	21,709
Philippine Peso	6,488	9,706
Polish Zloty	1	1
Singapore Dollar	10,519	8,935
South African Rand	7,574	4,163
South Korean Won	34,465	34,652
Swedish Krona	26,267	28,442
Swiss Franc	55,668	48,607
Taiwan Dollar	27,215	12,983
Thai Bhat	9,779	8,391
Turkish Lira	10,719	9,982
Total Securities Subject to Foreign Currency Risk	1,487,424	1,408,163
U.S. Dollar	10,287,547	9,468,026
Total Investment Securities	$11,774,972	$10,754,462

Note: Differences due to rounding and exchange rates. 2016 totals have been updated to reflect accruals.

The following table present KRS' exposure to foreign currency risk as of June 30, 2017, and 2016:

GASB 40 - Foreign Currency Risk Insurance Fund

For the Year Ended June 30, 2016-2017 ($ In Thousands)

	2017	2016
Australian Dollar	$15,723	$14,357
Brazilian Real	7,660	1,740
British Pound Sterling	109,861	110,092
Canadian Dollar	30,632	25,187
Chilean Peso	312	2,513
Columbian Peso	378	-
Czech Koruna	153	-
Danish Krone	15,048	12,354
Egyptian Pound	329	339
Euro	186,582	138,441
Hong Kong Dollar	25,891	23,281
Indian Rupee	7,206	2,763
Indonesian Rupiah	11,865	8,253
Israeli Shekel	6,949	3,140
Japanese Yen	94,145	79,846
Malaysian Ringgit	2,238	2,250
Mexican Peso	5,157	5,472
New Zealand Dollar	6,546	6,288
Norwegian Krone	8,460	8,215
Philippine Peso	2,429	3,704
Singapore Dollar	4,985	4,225
South African Rand	3,590	2,065
South Korean Won	15,685	15,213
Swedish Krona	9,968	11,090
Swiss Franc	23,446	18,618
Taiwan Dollar	11,427	5,732
Thai Bhat	4,164	3,559
Turkish Lira	4,660	4,428
Total Securities Subject to Foreign Currency Risk	615,488	513,145
U.S. Dollar	4,140,943	3,686,806
Total Investment Securities	$4,756,432	$4,199,951

Note: Differences due to rounding and exchange rates. 2016 totals have been updated to reflect accruals.

GASB 72

In accordance with GASB Statement No. 72, Fair Value Measurement and Application, KRS provides this additional disclosure regarding the fair value of its Pension and Insurance investments. KRS categorizes its fair value measurements within the fair value hierarchy established by GAAP.

KRS defined the Fair Value Hierarchy and Levels as follows:

Level 1 –

Quoted prices (unadjusted) in an active market for identical assets or liabilities that KRS has the ability to access at the measurement date (e.g., prices derived from NYSE, NASDAQ, Chicago Board of Trade, and Pink Sheets).

Level 2 –

Inputs other than quoted market prices included in Level 1 that are directly or indirectly observable for the asset or liability (e.g., matrix pricing, market corroborated pricing, and inputs such as yield curves and indices).

Level 3 –

Unobservable inputs for the asset or liability used to measure fair value that rely on KRS' own assumptions about the market participant's assumptions that may be used in pricing the asset or liability (e.g., investment manager pricing for private placements, private equities, hedge funds, etc.).

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using quoted prices (unadjusted) in an active market for identical assets or liabilities that KRS has the ability to access at the measurement date. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Commercial and residential mortgage backed securities, private equity, and real estate classified in Level 3 are valued on KRS' own assumptions about the market participant's assumptions that may be used in pricing the asset or liability.

KRS had the following recurring Fair Value measurements as of June 30, 2017:

FY 2017 GASB 72 Pension Funds *($ In Thousands)*

Asset Type	Market value	Level		
		1	2	3
Alternative Investments	$529,066	$-	$-	$529,066
Cash & Cash Equivalents	303,488	6,229	180,519	116,740
Convertible Or Exchangeable Securities	28,347	19,442	8,905	-
Equity	6,300,098	4,536,206	-	1,763,892
Fixed Income Securities	1,353,140	255,668	967,737	129,735
Futures Contracts	56	56	-	-
Natural Resources	49,810	-	-	49,810
Other	339,129	339,129	-	-
Preferred Securities	82,060	24,071	57,989	-
Private Equity	2,085,499	-	-	2,085,499
Real Estate	509,528	-	-	509,528
Total	$11,580,221	$5,180,803	$1,215,150	$5,184,268

Note: The fair value hierarchies do not reflect cash and accruals thus totals differ from the Investment Summaries.

FY 2017 GASB 72 Insurance Fund *($ In Thousands)*

Asset Type	Market value	Level		
		1	2	3
Alternative Investments	$201,817	$-	$-	$201,817
Cash & Cash Equivalents	109,394	1,766	59,341	48,287
Convertible Or Exchangeable Securities	11,635	7,988	3,647	-
Equity	1,979,725	1,915,089	-	64,636
Fixed Income Securities	1,186,094	130,675	307,960	747,460
Futures Contracts	11	11	-	-
Natural Resources	37,796	-	-	37,796
Other	111,025	111,025	-	-
Preferred Securities	32,743	9,838	22,904	-
Private Equity	798,404	-	-	798,404
Real Estate	211,796	-	-	211,796
Total	$4,680,440	$2,176,392	$393,852	$2,110,196

Note: The fair value hierarchies do not reflect cash and accruals thus totals differ from the Investment Summaries.

Note E. Securities Lending Transactions

Kentucky Revised Statutes Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with an initial fair value of 102% or 105% of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. The types of securities lent include U.S. Treasuries, U.S. Agencies, U.S. Corporate Bonds, U.S. Equities, Global Fixed Income Securities, and Global Equities Securities.

The Statement of Investment Policy does not address any restrictions on the amount of loans that can be made. As of June 30, 2017, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction. Deutsche Bank invests cash collateral as permitted by state statute and Board policy. The agent of the Funds cannot pledge or sell collateral securities received unless the borrower defaults. KRS maintains a conservative approach to investing the cash collateral with BNY Mellon, emphasizing capital preservation, liquidity, and credit quality.

As of June 30, 2017, the cash collateral received for the securities on loan for the Pension and Insurance Funds was $396.8 million and $178.5 million, respectively compared to the Fair Value of the underlying securities of $387.2 million and $174.2 million, respectively.

Note F. Risk of Loss

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Claims Commission is vested with full power and authority to investigate, hear proof, and compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $200,000 for a single claim and $350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Kentucky Claims Commission are paid from the fund of the agency having a claim or claims before the Kentucky Claims Commission.

Claims against the KRS Board, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with two commercial insurance policies. Hallmark Specialty provides coverage of up to $2.5 million and ANV Global Services provides coverage up to $2.5 million for a total coverage of $5 million, with a self-insured retention of $250,000 for each claim. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policies. The aggregate limit for all loss is $5 million, and the HIPAA and PPACA fines and penalties sub-limit is $1.5 million.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to 66.67% of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll. Settlements did not exceed insurance coverage in any of the past three fiscal years. Thus, no secondary insurance had to be utilized. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

Note G. Contingencies

In the normal course of business, KRS is involved in litigation concerning the right of participants, or their beneficiaries, to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

Note H. Defined Benefit Pension Plan

COVERED PAYROLL- The employee payroll that is subject to Pension Contributions Withholding.

All eligible employees of KRS participate in KERS (Non-Hazardous), a cost-sharing, multiple-employer defined pension plan that covers all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by EO to participate in the system. The plan provides for retirement, disability, and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Tier 1 Plan members contributed 5% of creditable compensation for the fiscal years ended June 30, 2017, 2016, and 2015. Tier 2 and Tier 3 Plan members contributed 6% of creditable compensation for the fiscal years ended June 30, 2017, 2016, and 2015.

The chart below includes the covered payroll and contribution amounts for KRS for the three periods ended June 30 included in this discussion.

Payroll and Contributions as of June 30 *($ In Thousands)*

	2017	2016	2015
Covered Payroll	$13,945	$14,579	$14,138
Required Employer Contributions	$6,776	$5,652	$5,481
Employer Percentage Contributed	100%	100%	100%

Note I. Income Tax Status

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, generally, not subject to tax. KRS is subject to income tax on any unrelated business income; however, KRS had no unrelated business income in fiscal years 2017 and 2016.

Note J. Equipment

Equipment Expenses as of June 30 *($ In Thousands)*		
	2017	2016
Equipment, cost	$2,885	$2,819
Less Accumulated Depreciation	(2,539)	(2,440)
Equipment, net	$346	$379

Depreciation expenses rose to $2,539 in fiscal year 2017, an increase $101 thousand over fiscal year 2016.

Note K. Intangible Assets

The provisions of GASB Statement No. 51, Accounting and Financial Reporting for Intangible Assets, requires that intangible assets be recognized in the Combining Statement of Plan Net Position only if they are considered identifiable. In accordance with GASB No. 51, KRS has capitalized software costs as indicated below for the Strategic Technology Advancements for the Retirement of Tomorrow (START) project.

Software Expenses as of June 30 *($ In Thousands)*		
	2017	2016
Software, Cost	$17,302	$17,302
Less Accumulated Amortization	(11,337)	(9,449)
Intangible Assets, Net	$5,965	$7,853

Amortization expense rose to $11,337 in fiscal year 2017, an increase of $1.9 million over fiscal year 2016.

INTANGIBLE ASSET-
An asset that is not physical in nature. Corporate intellectual property, items such as patents, trademarks, copyrights, business methodologies, goodwill and brand recognition, are all common intangible assets in today's marketplace.

Note L. Actuarial Valuation

Working with actuary GRS, completed an actuarial valuation of the Pension and Insurance plans for the period ending June 30, 2017. The 2017 actuarial calculations by Plan included economic actuarial changes from the prior year assumptions, as approved by Board of Trustees in their July 12, 2017, meeting. The Board began with the most recent actuarial experience study for the period of July 1, 2008 through June 30, 2013. The Board contracted with Milliman to complete a review of Investment Return Assumptions and Funding Methodology. The Board also reviewed economic assumption recommendations from GRS, RVK (KRS general investment consultants), and other capital market industry leaders. The following two charts show the sensitivity to the economic assumptions for the Pension Funds and Insurance Fund.

Economic Assumptions - Pension as of June 30

	KERS Non-Hazardous		KERS Hazardous		CERS Non-Hazardous		CERS Hazardous		SPRS	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Assumed Investment Return	5.25%	6.75%	6.25%	7.50%	6.25%	7.50%	6.25%	7.50%	5.25%	6.75%
Inflation Factor	2.30%	3.25%	2.30%	3.25%	2.30%	3.25%	2.30%	3.25%	2.30%	3.25%
Payroll Growth	0.00%	4.00%	0.00%	4.00%	2.00%	4.00%	2.00%	4.00%	0.00%	4.00%

Economic Assumptions - Insurance as of June 30

	KERS Non-Hazardous		KERS Hazardous		CERS Non-Hazardous		CERS Hazardous		SPRS	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Assumed Investment Return	6.25%	7.50%	6.25%	7.50%	6.25%	7.50%	6.25%	7.50%	6.25%	7.50%
Inflation Factor	2.30%	3.25%	2.30%	3.25%	2.30%	3.25%	2.30%	3.25%	2.30%	3.25%
Payroll Growth	0.00%	4.00%	0.00%	4.00%	2.00%	4.00%	2.00%	4.00%	0.00%	4.00%

GASB 67

GRS completed reports by Plan in compliance with the GASB Statement No. 67 "Financial Reporting for Pension Plans." The total pension liability, net pension liability, and sensitivity information shown in these reports are based on an actuarial valuation date of June 30, 2016, using generally accepted actuarial principles. GRS did not conduct the June 30, 2016, actuarial valuation; however, GRS did replicate the prior actuary's (Cavanaugh Macdonald Consulting, LLC) results on the same assumption, methods, and data. The roll-forward is based on the results of this replication. The actuarial methods, assumptions, results, and sensitivity analysis are in the Required Supplementary Information, pages 64-87.

GASB 74

GRS completed reports by plan in compliance with the GASB Statement No. 74, "Financial Reporting for Postemployment Benefit Plans Other than Pension Plans" (OPEB) for the fiscal year ending June 30, 2017. The total OPEB liability, net OPEB liability, and sensitivity information shown in these reports were based on an actuarial valuation date of June 30, 2016. The total OPEB liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2017, using generally accepted actuarial principles. GRS did not conduct the June 30, 2016 actuarial valuation; however, GRS did replicate the prior actuary's (Cavanaugh Macdonald Consulting, LLC) valuation results on the same assumptions, methods, and data, as of that date. The roll- forward was based on the results of this replication. The actuarial methods, assumptions, results, and sensitivity analysis are in the Required Supplementary Information, pages 64-87.

Note M. Pension Legislation

During the 2017 Regular Session of the Kentucky General Assembly, the following six bills passed that have an impact on KRS:

1. Senate Bill 2 made several changes to the internal governance and operational structure of KRS. Two major changes placed KRS employees under Kentucky Revised Statutes 18A, the Personnel Cabinet, for hiring, firing, promotions, pay grades, status, and evaluations. The second major change placed KRS under the Model Procurement Code for all purchases, except Investment Contracts. The bill also included a section that confirmed much of the Governor's Executive Order from June 2016, including the composition of the Board of Trustees.

2. Senate Bill 3 required the retirement information for any member of the General Assembly, past or present, to be available to the public upon request. Unless a KRS member is a current or former member of the Kentucky General Assembly their retirement benefit information is still confidential.

3. Senate Bill 104 contained changes to how pension "spikes" are determined. A "pension spike" is when a person who is nearing retirement has their salary increase by more than 10% over the previous year's salary.

Senate Bill 104 also has language that would allow Tier 1 and 2 active members to "opt out," or withdraw, from one of those Tiers and join Tier 3, which is the hybrid cash balance plan. The opt-out provision would not take effect unless KRS receives a favorable Private Letter Ruling from the Internal Revenue Service (IRS). Until then, KRS is unable to process any member requests related to this provision.

4. Senate Bill 126 amends the definition of "final compensation" for Tier 2 participants (members who began participating in KRS between September 1, 2008, and January 1, 2014) to allow state and county employees to use partial fiscal years to reach a final compensation calculation that is at least 60 months for Non-Hazardous employees and at least 36 months for Hazardous employees.

5. House Bill 173, the KRS "housekeeping" bill, makes various changes to allow KRS statutes to conform to federal law requirements and generally help KRS become more operationally efficient. This is the first KRS housekeeping bill to pass the General Assembly since 2010.

6. House Bill 62/House Bill 351. During its 2015 regular session, the Kentucky General Assembly enacted House Bill 62, which created Kentucky Revised Statute 61.522. Kentucky Revised Statute 61.522 established a path for participating agencies to voluntarily cease their participation in KERS or CERS by paying their portion of the unfunded liability. Additionally, it authorizes KRS to involuntarily remove certain participating agencies from KERS or CERS. In December 2015 and again in June 2016, KRS published 105 KAR 1:145, an administrative regulation that defined the pension withdrawal process.

Pursuant to Kentucky Revised Statute 61.522 and 105 KAR 1:145, two employers that participate in KERS have sought to end their participation. As of June 30, 2017, the Kentucky Employers Mutual Insurance company (KEMI) and Commonwealth Credit Union (CCU) ceased participation in KRS. KEMI and CCU paid their actuarial determined proportionate share of KRS' actuarial unfunded liability. The total amount for both KEMI's and CCU's cessation has been reported in the combining financial statements.

State legislation passed during the 2015 Session created new statutes that allowed participating agencies to voluntarily cease participation in the Systems. In order to cease participation, one requirement is that the agency has to pay the full actuarial cost of their obligation to the KRS. Until the 2017 Session, agencies were allowed to pay in a lump sum, or through installments over a time period that could be as long as 20 years.

House Bill 351 removes the installment payment option and specifies the formula for determining the assumed rate of return shall be the lesser of the assumed rate of return in the KRS' most recent actuarial valuation or the yield on a thirty (30) year United States Treasury Bond as of the employer's effective cessation date, but shall in no case be lower than the assumed rate of return utilized in the KRS' most recent actuarial valuation minus three and one-half percent (3.5%). The new formula will help ensure that the full actuarial cost for an agency to leave KRS will be paid by that agency.

Note N. City Of Fort Wright

In June 2014, the City of Fort Wright, a participating employer in CERS, filed a lawsuit against KRS alleging that the Board invested CERS funds in investments that were prohibited by both statutory and common law. In addition, the City of Fort Wright alleged that the Board paid substantial asset management fees, which the suit alleges were improper. Although the exact nature and source of the relief sought is unclear, it appears that the City of Fort Wright is seeking a declaration of rights, an injunction barring the placement of CERS assets in certain types of investments, an accounting of CERS assets, restitution of management fees to CERS, and attorney fees. As noted above, the exact nature and scope of the relief sought in this suit is unclear; therefore, no provision has been made in the combining financial statements. In September 2016, the Kentucky Court of Appeals issued an Opinion regarding the appeal of the Trial Court's ruling upon dispositive motions. A Motion for Discretionary Review of the Court of Appeals ruling was filed at the Kentucky Supreme Court on October 21, 2016, which was denied. The case is now proceeding at the Franklin Circuit Court on the merits of the claim made. The City of Fort Wright filed a Renewed Motion for Declaratory Judgement on May 1, 2017. KRS will file its reply to this Renewed Motion upon the resolution of a pending discovery issue.

On September 2, 2015, a CERS member filed a complaint that is substantially similar in terms of allegation and ambiguous requests for relief to that of the City of Fort Wright. The exact nature and scope of the relief sought is unclear; therefore, no provision has been made in the combining financial statements. The member's complaint is currently being held in abeyance pending the outcome of the City of Fort Wright's appeal. No new action has been taken in this matter to date.

Note O. Reciprocity Agreement

KRS has a reciprocity agreement with Kentucky Teachers' Retirement System (KTRS) for the payment of insurance benefits for those members who have creditable service in both systems.

Note P. Reimbursement of Retired Re-employed Health Insurance

As a result of the passage of House Bill 1 on September 1, 2008, if a retiree is re-employed in a regular full time position and has chosen health insurance coverage through KRS, the employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate. For the fiscal years ended June 30, 2017, and 2016, the reimbursement totaled $17.0 million and $14.7 million, respectively.

Note Q. Related Party

Perimeter Park West, Inc. (PPW) is a legally separate, tax-exempt Kentucky corporation established in 1998 to own the land and buildings on which KRS is located. PPW leases the buildings to KRS (the lease is renewed periodically) and provides maintenance for the buildings and land. PPW is considered a related party to KRS and has its own separate financial audit. The following presents the amounts recorded between KRS and PPW for the fiscal year ended June 30, 2017:

($ In Thousands)	
Lease payments to PPW from KRS:	$710
Dividends to KRS from PPW:	-

Note R. Reduction of Receivable

Employers reported wages that were earned in June 2016 in July 2016 (fiscal year 2017) and the new Annual Required Contribution (ARC) rate was applied. The Commonwealth's approved budget guidelines paid contributions at the fiscal year 2016 ARC rate in effect when the wages were earned. It is unlikely that KRS will receive payments at the new ARC rate for that period; therefore, contribution receivables have been reduced as of June 30, 2017, as noted in the chart.

For fiscal year 2016, no reduction was necessary since the ARC remained the same as fiscal year 2015. For fiscal year 2017, the ARC had changed from fiscal year 2016, therefore a reduction was necessary.

Reduction Receivable *($ In Thousands)*	2017	2016
KERS Non-Hazardous	$4,645	-
SPRS	261	-
TOTAL	$4,906	-

Note S. Governance Reorganization

On June 17, 2016, Governor Matt Bevin issued Executive Order (EO) 2016-340 which abolished the Board of Trustees that had been established under Kentucky Revised Statute 61.645 and created a new Board of Directors. The EO also altered Kentucky Revised Statute 61.645 in the following ways:

- it added four additional board members;
- it gave the Governor the authority to appoint the Chair and Vice-Chair of the Board of Directors;
- it required that the Governor approve the Executive Director appointed by the Board of Directors; and,
- it transferred KRS employees from the personnel system established in Kentucky Revised Statute 61.645 and 105 KAR 1:370 to the Commonwealth's personnel system under Kentucky Revised Statute Chapter 18A.

The Governor cited his authority to reorganize executive branch agencies under Kentucky Revised Statute 12.028.

EO 2016-340 was largely unchanged by SB 2, but it notably reverted the Board of Directors back to a Board of Trustees. SB 2 made additional changes which include, but are not limited to, the following requirements:

- KRS must follow the Model Procurement Code for purchases and contracts;
- KRS has to disclose net investment fees, investment returns, and commissions on its website and upon an open records request;
- The Chair and Vice Chair of the Board are to be elected by the members of the Board of Trustees;
- Investment experience is a prerequisite for six members of the Board;
- The Kentucky Senate must confirm gubernatorial board appointees; and,
- Board, staff, and investment consultants should abide by the Chartered Financial Analyst code of conduct.

Board member information is provided in the introduction of this document.

It should be noted that two Board members and the Attorney General of the Commonwealth have challenged the Governor's authority to remove a Trustee prior to the end of that Trustee's term in office and his authority to suspend statutory provisions in order to reorganize KRS. (EOs 2016-211, 214, 273, and 340). There is no financial impact these issues may cause, therefore, no provision has been made in the combining financial statements as a result of the EO, SB 2, or the litigation.

Note T. PFM Study

In September 2016, the Commonwealth contracted with PFM, LLC, to perform a comprehensive Pension Performance and Best Practices Analysis of all the state's retirement systems, including KRS. Their report included their analysis of operations, investments, plan structure, etc. and was presented on August 29, 2017.

Note U. Western Kentucky University

On November 17, 2016, Western Kentucky University (WKU) a participating employer, filed a petition for declaration of rights in the Franklin Circuit Court in Frankfort, KY. The petition involved a dispute as to whether WKU can terminate a group of its employees which participated in KERS and reutilize those same employees through a privatization process excusing WKU from its obligations to pay contributions to the KERS Fund. This matter is currently still in litigation. No substantive decisions have been issued on the merits of the case. The exact nature and scope of the relief sought is still unclear; therefore, no provision has been made in the combined financial statements.

Note V. Subsequent Events

Management has evaluated the period June 30, 2017, to December 7, 2017, (the date the combining financial statements were available to be issued) for items requiring recognition or disclosure in the combining financial statements.

REQUIRED
SUPPLEMENTARY INFORMATION

Actuary Assumption Changes - Pension

Schedule of Changes in Employers' TPL
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- KERS Hazardous
- CERS Non-Hazardous
- CERS Hazardous
- SPRS

Schedule of Employer NPL
- KERS Non-Hazardous
- KERS Hazardous
- CERS Non-Hazardous
- CERS Hazardous
- SPRS

Schedule of Employers' Contributions Pension
- KERS Non-Hazardous
- KERS Hazardous
- CERS Non-Hazardous
- CERS Hazardous
- SPRS

Sensitivity to the NPL to Changes in the Discount Rate
Notes to Schedule of Employers' Contributions

Actuary Assumption Changes – Insurance

Schedule of Changes in Employers' Net OPEB Liability
Schedule of the Employers' Net OPEB Liability
Sensitivity of the Net OPEB Liability to Changes in the Discount Rate and Healthcare Trend Rate
Notes to Schedule of Employers' OPEB Contribution
Development of Single Discount Rate
Schedule of Employers' OPEB Contributions
- KERS Non-Hazardous
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- CERS Non-Hazardous
- CERS Hazardous
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Money Weighted Rates of Return

Additional Supporting Schedules

- Schedule of Administrative Expenses
- Schedule of Direct Investment Expenses
- Schedule of Professional Consultant Fees

GASB 67 Reporting – Actuarial Information

This supplementary information is provided in connection with GASB Statement No. 67, "Financial Reporting for Pension Plans" for the fiscal year ending June 30, 2017, and is included for KERS, CERS, and SPRS pension plans, administered by KRS.

The liability calculations presented were performed for the purpose of satisfying the requirements of GASB No. 67 and are not applicable for other purposes, such as determining the plans' funding requirements. The plans' liability for other purposes may produce significantly different results.

The total pension liability, net pension liability, and sensitivity information shown in the supplementary schedules are based on an actuarial valuation date of June 30, 2016. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2017, using generally accepted actuarial principles. GRS did not conduct the June 30, 2016, actuarial valuation; however, GRS did replicate the prior actuary's valuations results on the same assumption, methods, and data, as of that date. The roll-forward is based on the results of their replication. Information disclosed for years prior to June 30, 2017, was prepared by KRS's prior actuary, Cavanaugh Macdonald Consulting, LLC.

There was no legislation enacted during the 2017 legislative session that had a material change in benefit provisions for any of the plans. However, subsequent to the actuarial valuation date, but prior to the measurement date, the Board adopted updated actuarial assumptions which were used in performing the actuarial valuation as of June 30, 2017. Specifically, Total Pension Liability as of June 30, 2017, is determined using a 2.30% price inflation assumption for all the plans, and the assumed rate of return was 5.25% for the KERS Non-Hazardous system and SPRS. For the KERS Hazardous and CERS plans, a 6.25% assumed rate of return was used. This single discount rate was based on the expected rate of return on pension plan investments for each plan. Based on the stated assumptions and the projection of cash flows as of each fiscal year ending, the Pension Plans' fiduciary net position and future contributions were projected to be sufficient to finance all the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on Pension Plan investments was applied to all periods of the projected benefit payments to determine the total pension liability for each system. The projection of cash flows used to determine the single discount rate assumes that the KERS, SPRS, and CERS employers contribute the actuarially determined contributions.

GASB No. 74

Financial Reporting for Post-employment Benefit Plans Other Than Pension Plans, is a new accounting standard for OPEB plans which is effective for plans with fiscal years ending after June 15, 2017. Based on guidance issued by GASB in connection with this new accounting standard, the 1% of member contributions for Tier 2 and Tier 3 members to a 401(h) subaccount is considered as an OPEB asset. As a result, the reported fiduciary net position as of June 30, 2017, is net of the 401(h) asset balance.

These tables are intended to show information for ten years; additional years' information will be displayed as it becomes available. Also, schedules provided by the Actuary were prepared for individual plan and have been rounded to the nearest thousand and percentages to two decimal points. This may result in small rounding variances between schedules.

Schedule of Changes in Employers' TPL - KERS Non-Hazardous				
($ In Thousands)				
	2017	2016	2015	2014
Service Cost	$143,858	$139,631	$143,847	$133,361
Interest	870,725	891,897	859,509	853,653
Benefit Changes	-	-	-	-
Difference between Expected and Actual Experience	(134,379)	-	30,958	-
Changes of Assumptions	2,145,530	923,999	694,592	-
Benefit Payments	(960,309)	(935,419)	(919,343)	(903,564)
Net Change in TPL	2,065,425	1,020,108	809,563	83,450
TPL – Beginning	13,379,781	12,359,673	11,550,110	11,466,660
TPL – Ending (a)	15,445,206	13,379,781	12,359,673	11,550,110
Plan Net Position				
Contributions – Employer	757,121	513,084	521,691	296,836
Contributions – Member	100,543	106,495	104,606	97,487
Net Investment Income (Loss)	220,985	(20,663)	44,570	337,923
Benefit Payments	(948,490)	(923,288)	(905,791)	(889,937)
Administrative Expense	(10,957)	(10,989)	(10,474)	(11,145)
Refunds of Contributions	(11,819)	(12,130)	(13,552)	(13,627)
Other	[1] (30,805)	-	8,442	-
Net Change in Plan Net Position	76,578	(347,491)	(250,508)	(182,463)
Plan Net Position – Beginning	[2] 1,980,292	2,327,783	2,578,291	2,760,754
Plan Net Position – Ending (b)	2,056,870	1,980,292	2,327,783	2,578,291
Net Pension Liability – Ending (a) – (b)	$13,388,336	$11,399,489	$10,031,890	$8,971,819
Plan Fiduciary Net Position as a Percentage	13.00%	15.00%	19.00%	22.00%
Covered Employee Payroll	[3] $1,602,396	$1,631,025	$1,544,234	$1,577,496
Net Pension Liability as a Percentage of Covered Employee Payroll	835.50%	698.90%	649.60%	568.70%

1. 401(h) plan asset balance (less 401(h) contribution during 2017) that is considered an OPEB asset under GASB 74 for FYE 2017.
2. Plan fiduciary net position at June 30, 2016 is equal to the amount in the prior year's financials and include 401(h) plan assets.
3. Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Schedule of Changes in Employers' TPL - KERS Hazardous

($ In Thousands)

	2017	2016	2015	2014
Total Pension Liability (TPL)				
Service Cost	$21,081	$20,751	$18,729	$16,880
Interest	66,589	64,851	61,005	59,594
Benefit Changes	-	-	-	-
Difference between Expected and Actual Experience	26,902	-	6,067	-
Changes of Assumptions	127,878	-	52,165	-
Benefit Payments	(63,338)	(61,518)	(59,383)	(57,151)
Net Change in TPL	179,112	24,084	78,583	19,323
TPL – Beginning	919,518	895,433	816,850	797,527
TPL – Ending (a)	1,098,630	919,517	895,433	816,850
Plan Net Position				
Contributions – Employer	52,974	23,759	28,536	11,670
Contributions - Member	17,524	15,739	13,207	12,546
Net Investment Income (Loss)	70,994	(1,653)	8,701	80,724
Benefit Payments	(61,231)	(59,306)	(56,773)	(54,320)
Administrative Expense	(919)	(916)	(844)	(897)
Refunds of Contributions	(2,106)	(2,211)	(2,610)	(2,830)
Other	[1] (3,586)	-	767	-
Net Change in Plan Net Position	73,650	(24,588)	(9,016)	46,893
Plan Net Position – Beginning	[2] 527,879	552,467	561,484	514,591
Plan Net Position – Ending (b)	601,529	527,879	552,468	561,484
Net Pension Liability – Ending (a) – (b)	$497,101	$391,638	$342,965	$255,366
Plan Fiduciary Net Position as a Percentage	55.00%	57.00%	62.00%	69.00%
Covered Employee Payroll	[3] $178,511	$158,828	$128,680	$129,076
Net Pension Liability as a Percentage of Covered Employee Payroll	279.50%	246.60%	266.50%	197.80%

1. 401(h) plan asset balance (less 401(h) contribution during 2017) that is considered an OPEB asset under GASB 74 for FYE 2017.
2. Plan fiduciary net position at June 30, 2016 is equal to the amount in the prior year's financials and include 401(h) plan assets.
3. Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Schedule of Changes in Employers' TPL - CERS Non-Hazardous				
($ In Thousands)				
	2017	2016	2015	2014
Service Cost	$193,082	$209,101	$207,400	$192,482
Interest	803,555	780,587	733,002	710,526
Benefit Changes	-	-	-	-
Difference between Expected and Actual Experience	(208,015)	-	49,966	-
Changes of Assumptions	1,388,800	-	606,293	-
Benefit Payments	(701,891)	(665,000)	(628,858)	(597,136)
Net Change in TPL	1,475,532	324,687	967,803	305,872
TPL – Beginning	11,065,013	10,740,325	9,772,522	9,466,650
TPL – Ending (a)	$12,540,544	$11,065,013	$10,740,325	$9,772,522
Plan Net Position				
Contributions – Employer	$333,554	$284,105	$298,565	$324,231
Contributions – Member	150,715	141,674	140,311	128,568
Net Investment Income (Loss)	825,900	(40,800)	110,568	895,530
Benefit Payments	(687,461)	(651,246)	(615,335)	(582,850)
Administrative Expense	(19,609)	(19,385)	(18,212)	(18,615)
Refunds of Contributions	(14,430)	(13,753)	(13,523)	(14,286)
Other	[1] (42,827)	-	10,280	-
Net Change in Plan Net Position	545,843	(299,405)	(87,346)	732,578
Plan Net Position - Beginning	[2] $6,141,394	6,440,800	6,528,146	5,795,568
Plan Net Position – Ending (b)	$6,687,237	$6,141,395	$6,440,800	$6,528,146
Net Pension Liability – Ending (a) – (b)	$5,853,307	$4,923,618	$4,299,525	$3,244,376
Plan Fiduciary Net Position as a Percentage	53%	56%	60%	67%
Covered Employee Payroll	[3] $2,376,290	$2,417,187	$2,296,716	$2,272,270
Net Pension Liability as a Percentage of Covered Employee Payroll	246.30%	203.70%	187.20%	142.80%

1. 401(h) plan asset balance (less 401(h) contribution during 2017) that is considered an OPEB asset under GASB 74 for FYE 2017.
2. Plan fiduciary net position at June 30, 2016 is equal to the amount in the prior year's financials and include 401(h) plan assets.
3. Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Schedule of Changes in Employers' TPL - CERS Hazardous

($ In Thousands)

	2017	2016	2015	2014
Service Cost	$58,343	$66,249	$71,934	$66,761
Interest	270,860	262,886	247,008	238,665
Benefit Changes	-	-	-	-
Difference between Expected and Actual Experience	92,588	-	41,935	-
Changes of Assumptions	536,667	-	166,849	-
Benefit Payments	(229,299)	(216,327)	(203,244)	(192,299)
Net Change in TPL	729,159	112,807	324,482	113,127
TPL – Beginning	3,726,115	3,613,308	3,288,825	3,175,699
TPL – Ending (a)	4,455,274	3,726,115	3,613,307	3,288,826
Plan Net Position				
Contributions – Employer	115,947	105,713	108,071	115,240
Contributions – Member	60,101	52,972	47,692	43,722
Net Investment Income (Loss)	270,473	(9,020)	37,104	288,490
Benefit Payments	(226,984)	(213,448)	(200,134)	(189,635)
Administrative Expense	(1,421)	(1,366)	(1,288)	(1,721)
Refunds of Contributions	(2,315)	(2,879)	(3,111)	(2,664)
Other	[1] (7,979)	-	2,865	-
Net Change in Plan Net Position	207,822	(68,028)	(8,801)	253,432
Plan Net Position – Beginning	[2] 2,010,174	2,078,202	2,087,002	1,833,570
Plan Net Position – Ending (b)	2,217,996	2,010,174	2,078,202	2,087,002
Net Pension Liability – Ending (a) – (b)	$2,237,278	$1,715,941	$1,535,106	$1,201,824
Plan Fiduciary Net Position as a Percentage	50%	54%	58%	64%
Covered Employee Payroll	[3] $526,559	$526,334	$483,641	$479,164
Net Pension Liability as a Percentage of Covered Employee Payroll	424.90%	326.00%	317.40%	250.80%

1. 401(h) plan asset balance (less 401(h) contribution during 2017) that is considered an OPEB asset under GASB 74 for FYE 2017.
2. Plan fiduciary net position at June 30, 2016 is equal to the amount in the prior year's financials and include 401(h) plan assets.
3. Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Schedule of Changes in Employer's TPL - SPRS

($ In Thousands)

	2017	2016	2015	2014
Service Cost	$8,297	$8,402	$7,695	$7,142
Interest	51,768	52,951	50,661	50,391
Benefit Changes	-	-	-	-
Difference between Expected and Actual Experience	8,143	-	9,331	-
Changes of Assumptions	136,602	56,191	40,201	-
Benefit Payments	(56,960)	(56,279)	(54,850)	(53,239)
Net Change in TPL	147,850	61,265	53,038	4,294
TPL - Beginning	795,421	734,156	681,118	676,824
TPL – Ending (a)	943,271	795,421	734,156	681,118
Plan Net Position				
Contributions – Employer	63,239	25,822	31,990	20,279
Contributions - Member	5,348	5,263	5,244	5,075
Net Investment Income (Loss)	26,795	(3,843)	3,426	40,374
Benefit Payments	(56,934)	(56,268)	(54,765)	(53,026)
Administrative Expense	(181)	(178)	(201)	(215)
Refunds of Contributions	(26)	(11)	(85)	(213)
Other	[1] (517)	-	645	-
Net Change in Plan Net Position	37,724	(29,215)	(13,746)	12,274
Plan Net Position - Beginning	[2] 218,012	247,227	260,974	248,700
Plan Net Position – Ending (b)	255,736	218,012	247,228	260,974
Net Pension Liability – Ending (a) – (b)	$687,535	$577,409	$486,928	$420,144
Plan Fiduciary Net Position as a Percentage	27%	27%	34%	38%
Covered Employee Payroll	[3] $54,065	$46,685	$45,765	$44,616
Net Pension Liability as a Percentage of Covered Employee Payroll	1271.70%	1236.80%	1064.00%	941.70%

1. 401(h) plan asset balance (less 401(h) contribution during 2017) that is considered an OPEB asset under GASB 74 for FYE 2017.
2. Plan fiduciary net position at June 30, 2016 is equal to the amount in the prior year's financials and include 401(h) plan assets.
3. Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Schedule of Employer NPL - KERS Non-Hazardous

($ In Thousands)

	2017	2016	2015	2014
Total Pension Liability (TPL)	$15,445,206	$13,379,782	$12,359,673	$11,550,110
Plan Net Position	2,056,870	1,980,292	2,327,782	2,578,291
Net Pension Liability	$13,388,337	$11,399,490	$10,031,891	8,971,819
Ratio of Plan Net Position to TPL	13.30%	14.80%	18.83%	22.30%
Covered Employee Payroll[1]	$1,602,396	$1,631,025	$1,544,234	1,577,496
Net Pension Liability as a Percentage of Covered Employee Payroll	835.50%	698.92%	649.64%	568.70%

Schedule of Employer NPL - KERS Hazardous

($ In Thousands)

	2017	2016	2015	2014
Total Pension Liability (TPL)	$1,098,630	$919,518	$895,433	$816,850
Plan Net Position	601,529	527,880	552,468	561,484
Net Pension Liability	$497,101	$391,638	$342,965	255,366
Ratio of Plan Net Position to TPL	54.80%	57.41%	61.70%	68.70%
Covered Employee Payroll[1]	$178,511	$158,828	$128,680	129,076
Net Pension Liability as a Percentage of Covered Employee Payroll	278.50%	246.58%	266.53%	197.80%

Schedule of Employer NPL - CERS Non-Hazardous

($ In Thousands)

	2017	2016	2015	2014
Total Pension Liability (TPL)	$12,540,545	$11,065,011	$10,740,325	$9,772,523
Plan Net Position	6,687,237	6,141,396	6,440,800	6,528,146
Net Pension Liability	$5,853,307	$4,923,615	$4,299,525	3,244,376
Ratio of Plan Net Position to TPL	53.30%	55.50%	59.97%	66.80%
Covered Employee Payroll[1]	$2,376,290	$2,417,187	$2,297,716	$2,272,270
Net Pension Liability as a Percentage of Covered Employee Payroll	246.30%	203.69%	187.20%	142.80%

Schedule of Employer NPL - CERS Hazardous

($ In Thousands)

	2017	2016	2015	2014
Total Pension Liability (TPL)	$4,455,275	$3,726,116	$3,613,308	$3,288,826
Plan Net Position	2,217,996	2,010,177	2,078,202	2,087,002
Net Pension Liability	$2,237,279	$1,715,939	$1,535,106	$1,201,823
Ratio of Plan Net Position to TPL	49.80%	53.95%	57.52%	63.50%
Covered Employee Payroll[1]	$526,559	$526,334	$483,641	$479,164
Net Pension Liability as a Percentage of Covered Employee Payroll	424.90%	326.02%	317.41%	250.80%

Schedule of Employer NPL - SPRS

($ In Thousands)

	2017	2016	2015	2014
Total Pension Liability (TPL)	$943,271	$795,421	$734,156	$681,118
Plan Net Position	255,736	218,012	247,228	260,974
Net Pension Liability	$687,535	$577,409	$486,928	$420,144
Ratio of Plan Net Position to TPL	27.10%	27.41%	33.70%	38.30%
Covered Employee Payroll[1]	$54,065	$46,685	$45,765	$44,616
Net Pension Liability as a Percentage of Covered Employee Payroll	1,236.80%	1,236.82%	1,064.00%	941.70%

1 Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Schedule of Employers' Contributions Pension - KERS Non-Hazardous

($ In Thousands)

Fiscal Year Ending	Actuarially Determined Contribution(1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll (2)	Actual Contributions as a Percentage of Covered Payroll
2017	$623,813	$757,121	$(133,308)	$1,602,396	47.25%
2016	512,670	513,084	(414)	1,631,025	31.46%
2015	520,948	521,691	(743)	1,544,234	33.78%
2014	520,765	296,836	223,929	1,577,496	18.82%
2013	485,396	280,874	204,522	1,644,409	17.08%
2012	441,094	214,786	226,308	1,644,897	13.06%
2011	381,915	193,754	188,161	1,731,633	11.19%
2010	348,495	144,051	204,444	1,815,146	7.94%
2009	294,495	112,383	182,112	1,754,413	6.41%
2008	$264,743	$104,655	$160,088	$1,837,873	5.69%

Notes: 1. Actuarially determined contribution rate for fiscal year ending 2017 is based on the contribution rate calculated with the June 30, 2015, actuarial valuation. 2. Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Schedule of Employers' Contributions Pension - KERS Hazardous

($ In Thousands)

Fiscal Year Ending	Actuarially Determined Contribution(1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll (2)	Actual Contributions as a Percentage of Covered Payroll
2017	$37,630	$52,974	$(15,344)	$178,511	29.68%
2016	23,690	23,759	(69)	158,828	14.96%
2015	28,374	28,536	(162)	128,680	22.18%
2014	13,570	11,670	1,900	129,076	9.04%
2013	21,502	27,334	(5,832)	131,015	20.86%
2012	20,265	20,809	(544)	131,977	15.77%
2011	20,605	19,141	1,464	133,054	14.39%
2010	17,815	17,658	157	143,558	12.30%
2009	15,708	15,843	(135)	146,044	10.85%
2008	$14,147	$15,257	$(1,110)	$148,710	10.26%

Notes: 1. Actuarially determined contribution rate for fiscal year ending 2017 is based on the contribution rate calculated with the June 30, 2015, actuarial valuation. 2. Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Schedule of Employers' Contributions Pension - CERS Non-Hazardous

($ In Thousands)

Fiscal Year Ending	Actuarially Determined Contribution(1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll (2)	Actual Contributions as a Percentage of Covered Payroll
2017	$331,492	$333,554	$(2,062)	$2,376,290	14.04%
2016	282,767	284,106	(1,339)	2,417,187	11.75%
2015	297,715	298,566	(851)	2,296,716	13.00%
2014	324,231	324,231	-	2,272,270	14.27%
2013	294,914	294,914	-	2,236,277	13.19%
2012	261,764	275,736	(13,972)	2,236,546	12.33%
2011	218,985	248,519	(29,534)	2,276,596	10.92%
2010	186,724	207,076	(20,352)	2,236,855	9.26%
2009	161,097	179,285	(18,188)	2,183,612	8.21%
2008	$138,311	$150,925	$(12,614)	$2,166,613	6.97%

Notes: 1. Actuarially determined contribution rate for fiscal year ending 2017 is based on the contribution rate calculated with the June 30, 2015, actuarial valuation. 2. Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Schedule of Employers' Contributions Pension - CERS Hazardous

($ In Thousands)

Fiscal Year Ending	Actuarially Determined Contribution(1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll (2)	Actual Contributions as a Percentage of Covered Payroll
2017	$114,316	$115,947	$(1,631)	$526,559	22.02%
2016	104,952	105,713	(761)	526,334	20.08%
2015	107,514	108,071	(557)	483,641	22.35%
2014	115,240	115,240	-	479,164	24.05%
2013	120,140	120,140	-	461,673	26.02%
2012	83,589	89,329	(5,740)	464,229	19.24%
2011	78,796	85,078	(6,282)	466,964	18.22%
2010	76,391	82,887	(6,496)	466,549	17.77%
2009	69,056	78,152	(9,096)	469,315	16.65%
2008	$64,082	$72,155	$(8,073)	$474,241	15.21%

Notes: 1. Actuarially determined contribution rate for fiscal year ending 2017 is based on the contribution rate calculated with the June 30, 2015, actuarial valuation. 2. Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Schedule of Employer's Contributions Pension - SPRS

($ In Thousands)

Fiscal Year Ending	Actuarially Determined Contribution(1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll (2)	Actual Contributions as a Percentage of Covered Payroll
2017	$35,937	$63,240	$(27,303)	$54,065	116.97%
2016	25,723	25,822	(99)	46,685	55.31%
2015	31,444	31,990	(546)	45,765	69.90%
2014	25,808	20,279	5,529	44,616	45.45%
2013	23,117	18,501	4,616	45,256	40.88%
2012	20,498	15,362	5,136	48,373	31.76%
2011	18,463	12,657	5,806	48,693	25.99%
2010	18,765	9,489	9,276	51,507	18.42%
2009	15,952	8,186	7,766	51,660	15.85%
2008	$13,823	$7,443	$6,380	$53,269	13.97%

Notes: 1. Actuarially determined contribution rate for fiscal year ending 2017 is based on the contribution rate calculated with the June 30, 2015, actuarial valuation. 2. Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Sensitivity to the NPL to Changes in the Discount Rate

($ In Thousands)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
1% Decrease	$15,286,445	$632,314	$7,382,286	$2,812,972	$806,575
Current Discount Rate	$13,388,337	$497,101	$5,853,307	$2,237,279	$687,535
1% Increase	$11,810,153	$384,902	$4,574,329	$1,761,839	$589,650

The actuarially determined contribution rates effective for fiscal year ending 2017 that are documented in the schedule on the previous pages are calculated as of June 30, 2015. Based on the June 30, 2015 actuarial valuation report (produced by the prior actuary), the actuarial methods and assumptions used to calculate these contribution rates are below:

Notes to Schedule of Employers' Contributions

	KERS	KERS	CERS	CERS	SPRS
Item	Non-Hazardous	Hazardous	Non-Hazardous	Hazardous	
Actuarial Cost Method:	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal
Asset Valuation Method:	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Amortization Method:	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay
Amortization Period:	28 years, closed	28 years, closed	28 years, closed	28 years, closed	28 years, closed
Investment Return:	7.50%	7.50%	7.50%	7.50%	7.50%
Inflation:	3.25%	3.25%	3.25%	3.25%	3.25%
Salary Increase:	4.00%, average	4.00%, average	4.00%, average	4.00%, average	4.00%, average
Mortality:	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)

GASB 74 Reporting – Actuarial Information

The supplementary reports contain information for the KERS, CERS, and SPRS plans in connection with the GASB Statement No. 74, Financial Reporting for Post-employment Benefit Plans Other than Pension Plans (OPEB) for the fiscal year ending June 30, 2017.

The liability calculations presented were performed for the purpose of satisfying the requirements of GASB No. 74 and are not applicable for other purposes, such as determining the plans' funding requirements. The plans' liability for other purposes may produce significantly different results.

The total OPEB liability, net OPEB liability, and sensitivity information shown in the supplemental information are based on an actuarial valuation date of June 30, 2016. The total OPEB liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2017, using generally accepted actuarial principles. GRS did not conduct the June 30, 2016, actuarial valuation; however, GRS did replicate the prior actuary's (Cavanaugh Macdonald Consulting, LLC) valuation results on the same assumptions, methods, and data, as of that date. The roll-forward is based on the results of our replication.

There was no legislation enacted during the 2017 legislative session that had a material change in benefit provisions for any of the systems. However, subsequent to the actuarial valuation date, but prior to the measurement date, the Board adopted updated actuarial assumptions which will be used in performing the actuarial valuations as of June 30, 2017. Specifically, the total OPEB liability as of June 30, 2017, was determined using a 2.30% price inflation assumption and an assumed rate of return of 6.25%.

The fully-insured premiums KRS pays for the KERS, CERS, and SPRS Health Insurance Plans are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit employer subsidy for the non-Medicare eligible retirees. GASB 74 requires that the liability associated with this implicit subsidy be included in the calculation of the total OPEB liability.

The discount rates used to measure the total OPEB liability as of June 30, 2017, are represented on page 81. For both Hazardous and Non-Hazardous groups, the single discount rate is based on the expected rate of return on OPEB plan investments of 6.25% and a municipal bond rate of 3.56%, as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2017. Future contributions are projected in accordance with the Board's current funding policy, which includes the requirement that each participating employer in the system contribute the actuarially determined contribution rate, which is determined using a closed funding period (26 years as of June 30, 2017) and the actuarial assumptions and methods adopted by the Board. Current assets, future contributions, and investment earnings are projected to be sufficient to pay the projected benefit payments from the retirement system. However, the cost associated with the implicit employer subsidy is not currently being included in the calculation of the system's actuarial determined contributions, and it is GRS' understanding that any cost associated with the implicit subsidy will not be paid out of the system's trust. Therefore, the municipal bond rate was applied to future expected benefit payments associated with the implicit subsidy.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and, changes in plan provisions or applicable law.

Based on guidance issued by GASB in connection with this new accounting standard, the 1% of member contributions for Tier 2 and Tier 3 members to a 401(h) subaccount is considered as an OPEB asset. As a result, the reported fiduciary net position as of June 30, 2016, and as of June 30, 2017, includes these 401(h) assets. Additionally, these member contributions and associated investment income are included in the reconciliation of the fiduciary net position.

Schedules provided by the Actuary were prepared by individual plan and have been rounded to the nearest thousand and percentages are two decimal points. This may result in small rounding variances between schedules.

Schedule of Changes in Employers' Net OPEB Liability

($ In Thousands)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Total OPEB Liability					
Service Cost	$46,992	$8,002	$85,468	$20,493	$4,147
Interest	192,911	27,591	240,854	113,166	17,993
Benefit Changes	-	-	-	-	-
Difference between Expected and Actual Experience	(3,921)	(1,029)	(6,641)	(2,471)	(572)
Changes of Assumptions	414,835	89,401	520,286	391,061	57,312
Benefit Payments[1]	(139,601)	(16,618)	(140,121)	(63,656)	(12,123)
Net Change in Total OPEB Liability	511,216	107,347	699,846	458,593	66,757
Total OPEB Liability - Beginning	$2,842,116	$387,522	$3,523,031	$1,557,079	$246,477
Total OPEB Liability - Ending (a)	$3,353,332	$494,869	$4,222,877	$2,015,672	$313,234
Plan Fiduciary Net Position					
Contributions – Employer[2]	162,636	4,579	133,326	44,325	7,862
Contributions – Member	5,156	811	9,158	1,708	131
Benefit Payments[1]	(139,601)	(16,618)	(140,120)	(63,656)	(12,123)
OPEB Plan Net Investment Income	94,239	59,614	264,782	143,892	21,627
OPEB Plan Administrative Expense	(861)	(105)	(789)	(381)	(66)
Net Change in Plan Fiduciary Net Position	121,569	48,281	266,356	125,888	17,431
Plan Fiduciary Net Position – Beginning	695,801	440,557	1,946,179	1,063,113	161,407
Plan Fiduciary Net Position – Ending (b)	817,370	488,838	2,212,535	1,189,001	178,838
Net OPEB Liability – Ending (a) – (b)	$2,535,962	$6,031	$2,010,342	$826,671	$134,396
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	24.40%	98.80%	52.40%	59.00%	57.10%
Covered Employee Payroll[3]	$1,593,097	$171,087	$2,480,130	$542,710	$48,873
Net OPEB Liability as a Percentage of Covered Employee Payroll	159.20%	3.50%	81.10%	152.30%	275.00%

1. Includes expected benefits due to the implicit subsidy for members under age 65. Benefit payments are offset by insurance premiums received from retirees and by Medicare Drug Reimbursements.
2. Includes expected benefits due to the implicit subsidy for members under age 65. 3. Based on derived compensation for fiscal year ending 2017 using the provided employer insurance contribution information.

Schedule of the Employers' Net OPEB Liability

As of June 30, 2017 ($ In Thousands)

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/ (Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Employee Payroll	Net OPEB Liability as a Percentage of Covered Employee Payroll
KERS Non-Hazardous	$3,353,332	$817,370	$2,535,962	24.40%	$1,593,097	159.20%
KERS Hazardous	494,869	488,838	6,031	98.80%	171,087	3.50%
CERS Non-Hazardous	4,222,878	2,212,536	2,010,342	52.40%	2,480,130	81.10%
CERS Hazardous	2,015,673	1,889,001	826,672	59.00%	542,710	152.30%
SPRS	$313,234	$178,838	$134,396	57.10%	$48,873	275.00%

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate and Healthcare Trend Rate

($ In Thousands)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Sensitivity of the Net OPEB Liability to Changes it the Discount Rate					
1% Decrease	$2,964,846	$73,452	$2,558,049	$1,107,853	$176,059
Current Discount Rate	2,535,962	6,031	2,010,342	826,672	134,396
1% Increase	2,179,533	(49,209)	1,554,564	596,619	100,088
Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate					
1% Decrease	2,154,747	(49,729)	1,542,036	585,188	96,881
Current Healthcare Cost Trend Rate	2,535,962	6,031	2,010,342	826,672	134,396
1% Increase	$3,014,646	$75,248	$2,619,113	$1,125,544	$180,781

The actuarially determined contribution rates effective for fiscal year ending 2017, that are documented in the schedule on the previous pages are calculated as of June 30, 2015. Based on the June 30, 2015, actuarial valuation report (produced by the prior actuary), the actuarial methods and assumptions used to calculate these contribution rates are below:

Notes to Schedule of Employers' OPEB Contribution

Item	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Actuarial Cost Method:	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal
Asset Valuation Method:	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized
Amortization Method:	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay
Amortization Period:	28 Years, Closed	28 Years, Closed	28 Years, Closed	28 Years, Closed	28 Years, Closed
Payroll Growth Rate:	4.00%	4.00%	4.00%	4.00%	4.00%
Investment Return:	7.50%	7.50%	7.50%	7.50%	7.50%
Inflation:	3.25%	3.25%	3.25%	3.25%	3.25%
Salary Increase:	4.00%, average	4.00%, average	4.00%, average	4.00%, average	4.00%, average
Mortality:	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)
Healthcare Trend Rates:					
Pre-65	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.
Post-65	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.

Development of Single Discount Rate

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
As of June 30, 2017					
Single Discount Rate	5.83%	5.87%	5.84%	5.96%	6.01%
Long-Term Expected Rate of Return	6.25%	6.25%	6.25%	6.25%	6.25%
Long-Term Municipal Bond Rate (1)	3.56%	3.56%	3.56%	3.56%	3.56%
As of June 30, 2016					
Single Discount Rate	6.90%	7.20%	6.89%	7.37%	7.42%
Long-Term Expected Rate of Return	7.50%	7.50%	7.50%	7.50%	7.50%
Long-Term Municipal Bond Rate (1)	2.92%	2.92%	2.92%	2.92%	2.92%

Notes: 1 Fixed -income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20 - Year Municipal GO AA Index" as of June 30, 2017 (or as of June 30, 2016).

Schedule of Employers' OPEB Contributions - KERS Non-Hazardous *($ In Thousands)*

	1	2	3	4	
Fiscal Year Ending June 30	Actuarially Determined Contribution	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Actual Contributions as a Percentage of Covered Payroll
2017	$133,024	$152,356	$(19,332)	$1,593,097	9.56%
2016	121,899	135,816	(13,917)	1,529,249	8.88%
2015	130,455	135,940	(5,485)	1,544,234	8.80%
2014	208,881	166,610	42,271	1,577,496	10.56%
2013	286,143	165,331	120,812	1,644,409	10.05%
2012	297,904	156,057	141,847	1,644,897	9.49%
2011	294,898	129,336	165,562	1,731,633	7.47%
2010	376,556	102,528	274,028	1,815,146	5.65%
2009	362,707	82,711	279,996	1,754,413	4.71%
2008	$558,746	$63,378	$495,368	$1,837,873	3.45%

Notes: 1. Data for years prior to 2017 are based on contribution data provided in the 2016 CAFR, based on calculations provided by the prior actuary. 2. Actuarially determined contribution for fiscal year ending 2017 is based on the contribution rate calculated with the June 30, 2015, actuarial valuation. 3. Employer contributions do not include the expected implicit subsidy. 4. Based on derived compensation for fiscal year ending 2017 using the provided employer insurance contribution information.

Schedule of Employers' OPEB Contributions - KERS Hazardous *($ In Thousands)*

	1	2	3	4	
Fiscal Year Ending June 30	Actuarially Determined Contribution	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Actual Contributions as a Percentage of Covered Payroll
2017	$4,688	$5,620	$(932)	$171,087	3.28%
2016	9,186	16,766	(7,580)	147,563	11.36%
2015	13,152	14,882	(1,730)	128,680	11.57%
2014	15,627	23,874	(8,247)	129,076	18.50%
2013	26,253	25,682	571	132,015	19.45%
2012	28,326	24,538	3,788	131,977	18.59%
2011	29,585	19,953	9,632	133,054	15.00%
2010	35,045	22,241	12,804	143,558	15.49%
2009	34,670	20,993	13,677	146,044	14.37%
2008	$51,215	$22,071	$29,144	$148,710	14.84%

Notes: 1. Data for years prior to 2017 are based on contribution data provided in the 2016 CAFR, based on calculations provided by the prior actuary. 2. Actuarially determined contribution for fiscal year ending 2017 is based on the contribution rate calculated with the June 30, 2015, actuarial valuation. 3. Employer contributions do not include the expected implicit subsidy. 4. Based on derived compensation for fiscal year ending 2017 using the provided employer insurance contribution information.

Schedule of Employers' OPEB Contributions - CERS Non-Hazardous *($ In Thousands)*

	1	2	3	4	
Fiscal Year Ending June 30	Actuarially Determined Contribution	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Actual Contributions as a Percentage of Covered Payroll
2017	$122,270	$120,712	$1,558	$2,480,130	4.87%
2016	110,987	111,836	(849)	2,352,762	4.75%
2015	119,511	119,444	67	2,296,716	5.20%
2014	130,652	123,278	7,374	2,272,270	5.43%
2013	195,561	159,993	35,568	2,236,277	7.15%
2012	214,421	171,925	42,496	2,236,546	7.69%
2011	213,429	186,886	26,543	2,276,596	8.21%
2010	266,331	175,764	90,567	2,236,855	7.86%
2009	264,734	131,476	133,258	2,183,612	6.02%
2008	$406,542	$202,113	$204,429	$2,166,613	9.33%

Notes: 1. Data for years prior to 2017 are based on contribution data provided in the 2016 CAFR, based on calculations provided by the prior actuary. 2. Actuarially determined contribution for fiscal year ending 2017 is based on the contribution rate calculated with the June 30, 2015, actuarial valuation. 3. Employer contributions do not include the expected implicit subsidy. 4. Based on derived compensation for fiscal year ending 2017 using the provided employer insurance contribution information.

Schedule of Employers' OPEB Contributions - CERS Hazardous *($ In Thousands)*

	1	2	3	4	
Fiscal Year Ending June 30	Actuarially Determined Contribution	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Actual Contributions as a Percentage of Covered Payroll
2017	$53,131	$51,537	$1,594	$542,710	9.50%
2016	64,253	67,619	(3,366)	492,851	13.72%
2015	69,103	71,778	(2,675)	483,641	14.84%
2014	74,360	74,792	(432)	479,164	15.61%
2013	102,011	85,319	16,692	461,673	18.48%
2012	110,763	92,564	18,199	464,229	19.94%
2011	109,227	98,592	10,635	466,964	21.11%
2010	129,227	84,536	44,691	466,549	18.12%
2009	126,757	71,413	55,344	469,315	15.22%
2008	$168,724	$90,533	$78,191	$474,241	19.09%

Notes: 1. Data for years prior to 2017 are based on contribution data provided in the 2016 CAFR, based on calculations provided by the prior actuary. 2. Actuarially determined contribution for fiscal year ending 2017 is based on the contribution rate calculated with the June 30, 2015, actuarial valuation. 3. Employer contributions do not include the expected implicit subsidy. 4. Based on derived compensation for fiscal year ending 2017 using the provided employer insurance contribution information.

Schedule of Employer's OPEB Contributions - SPRS *($ In Thousands)*

	1	2	3	4	
Fiscal Year Ending June 30	Actuarially Determined Contribution	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Actual Contributions as a Percentage of Covered Payroll
2017	$9,222	$9,222	$-	$48,873	18.87%
2016	8,553	10,237	(1,684)	45,551	22.47%
2015	9,890	10,382	(492)	45,765	22.69%
2014	20,879	14,493	6,386	44,616	32.48%
2013	27,234	16,829	10,405	45,256	37.19%
2012	28,247	11,960	16,287	48,373	24.72%
2011	25,773	11,051	14,722	48,693	22.70%
2010	30,302	8,643	21,659	51,507	16.78%
2009	29,325	7,643	21,682	51,660	14.79%
2008	$43,470	$7,513	$35,957	$53,269	14.10%

Notes: 1. Data for years prior to 2017 are based on contribution data provided in the 2016 CAFR, based on calculations provided by the prior actuary. 2. Actuarially determined contribution for fiscal year ending 2017 is based on the contribution rate calculated with the June 30, 2015, actuarial valuation. 3. Employer contributions do not include the expected implicit subsidy. 4. Based on derived compensation for fiscal year ending 2017 using the provided employer insurance contribution information.

Money-Weighted Rates of Return

In accordance with GASB Statement No. 67, Financial Reporting for Pension Plans, and GASB Statement No. 74, *Financial Reporting for Post Employment Benefit Plans Other than Pension Plan*, KRS provides this additional disclosure regarding its money-weighted rate of return for the Pension Funds. The money-weighted rate of return is a method of calculating period-by-period returns on pension plan investments that adjusts for the changing amounts actually invested. For purposes of this Statement, money weighted-rate of return is calculated as the internal rate of return on Pension Plan investments, net of Pension Plan investment expense, adjusted for the changing amounts actually invested.

See below for the money-weighted rates of return as of June 30, 2017, 2016, 2015, and 2014, as calculated by the custodial bank, BNY-Mellon:

Money - Weighted Rates of Return					
	KERS	KERS	CERS	CERS	SPRS
	Non-Hazardous	Hazardous	Non-Hazardous	Hazardous	
Pension Funds					
2017	12.08%	13.45%	13.80%	13.72%	12.50%
2016	-0.97%	-0.33%	-0.62%	-0.46%	-1.76%
2015	1.89%	1.69%	1.65%	1.88%	1.71%
2014	15.50%	15.65%	15.56%	15.50%	15.66%
Insurance Fund					
2017	13.77%	13.75%	13.67%	13.69%	13.69%

The money-weighted rates of return increased due to favorable conditions in the capital markets. This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Additional Reporting Schedules

Schedule of Administrative Expenses For the Fiscal Years Ended June 30 *($ In Thousands)*

	2017	2016
Personnel		
Salaries and Per Diem	$13,999	$14,685
Pension, Insurance Related Benefits	10,014	8,947
Unemployment Compensation	-	13
Tuition Assistance	18	27
Total Personnel	24,031	23,672
Contractual		
Actuarial Services	334	450
Audit Services	152	99
Healthcare	10	15
Legal Counsel	571	415
Medical Review Services	420	339
Miscellaneous	57	112
Total Contractual	1,544	1,430
Communication		
Printing	206	172
Telephone	191	201
Postage	471	276
Travel	61	113
Total Communication	929	762
Internal Audit		
Travel/Conferences	1	4
Dues/Subscriptions	1	1
Miscellaneous	2	1
Total Internal Audit	4	6
Investments-Pension Fund		
Travel/Conferences	34	29
Dues/Subscriptions	12	6
Contractual	-	189
Miscellaneous	1	5
Tuition	2	6
Legal	380	153
Total Investments	429	388
Rentals		
Office Space	743	731
Equipment	85	69
Total Rentals	828	800
Information Technology		
Software	320	456
Hardware	878	1,006
Services	1,594	1,237
Total Information Technology	2,792	2,699
Miscellaneous		
Utilities	211	217
Supplies	119	75
Insurance	235	255
Dues & Subscriptions	46	38
Maintenance	4	4
Other	17	17
Total Miscellaneous	632	606
Depreciation/Amortization	1,920	1,937
Total Pension Fund Administrative Expense	33,109	32,300
Healthcare Fees	2,202	2,038
Total Insurance Fund Administrative Expense	2,202	2,038
Total Administrative Expenses	$35,311	$34,338

Schedule of Direct Investment Expenses For the Fiscal Years Ended June 30

($ In Thousands)

	2017	2016
PENSION FUNDS		
Security Lending Fees		
Borrower (Income) Rebates	$734	$100
Lending Agent Fees	351	680
Total Security Lending	$1,085	$780
Contractual Services		
Investment Management	53,780	51,711
Security Custody	29,651	945
Investment Consultant	1,084	1,141
Private Equity Performance Fees	1,005	7,930
Total Contractual Services	$85,520	$61,727
INSURANCE FUND		
Security Lending Fees		
Borrower (Income) Rebates	187	76
Lending Agent Fees	133	222
Total Security Lending	$320	$298
Contractual Services		
Investment Management	23,094	19,508
Security Custody	10,007	600
Investment Consultant	718	428
Private Equity Performance Fees	409	5,272
Total Contractual Services	$34,228	$34,089
Total Investment Expenses	$121,153	$91,622

Schedule of Professional Consultant Fees For the Fiscal Years Ended June 30

($ In Thousands)

	2017	2016
Actuarial Services	$344	$450
Medical Review Services	420	339
Audit Services	152	99
Legal Counsel	951	568
Healthcare	10	15
Miscellaneous	57	112
Total	$1,934	$1,583

REPORT ON INTERNAL CONTROL
over financial reporting and on compliance and other matters based on an audit of financial statements performed in accordance with
GOVERNMENT AUDITING STANDARDS

REPORT OF INDEPENDENT AUDITORS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the combining financial statements of the Pension Funds and Insurance Fund of Kentucky Retirement Systems (KRS) as of and for the fiscal year ended June 30, 2017, and the related notes to the combining financial statements, which collectively comprise KRS' basic combining financial statements, and have issued our report thereon dated December 7, 2017.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered KRS' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the combining financial statements, but not for the purpose of expressing an opinion on the effectiveness of KRS' internal control. Accordingly, we do not express an opinion on the effectiveness of KRS' internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be material weaknesses or significant deficiencies and therefore, material weaknesses or

significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified. We did identify a deficiency in internal control, described in the accompanying schedule of finding and response that we consider to be a significant deficiency as item 2017-001.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether KRS' combining financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

We noted certain matters that we have reported to management of KRS in a separate letter dated December 7, 2017.

KRS' Response to Finding

KRS' response to the finding identified in our audit is described in the accompanying schedule of finding and response. KRS' response was not subjected to the auditing procedures applied in the audit of the combining financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Dean Dorton Allen Ford, PLLC

December 7, 2017
Lexington, Kentucky

SCHEDULE OF FINDING AND RESPONSE

FOR THE FISCAL YEAR ENDED JUNE 30, 2017

2017-01: Member and Employer Contribution Accruals

Criteria or specific requirement

The calculation of member and employer contributions to be accrued as of June 30, 2017 should reflect the actual contributions received related to the current fiscal year, but received subsequent to the end of the fiscal year.

Condition, Context and Cause

During our audit, we noted that the accrual calculation performed at year end for member and employer contributions was calculated using an estimate based upon the contributions received in the last month of the fiscal year. Due to staffing turnover during the year, some employees have transitioned to new positions, and this resulted in an estimate for the accrual being used instead of using actual information from the month subsequent to the fiscal year end. The primary cause of the understatement of the accrual was due to several employer contribution corrections related prior months being processed in June 2017, thus reducing the employer contributions in June 2017, causing the estimate to be understated.

Effect

Since the employer contributions in June 2017 were reduced by the corrections related to prior months, it resulted in an understatement of contributions receivable and contributions by approximately $17.1 million and $4.9 million for Pension Funds and Insurance Fund, respectively.

Recommendation

We recommend that management prepare written instructions to be included as part of the KRS's accounting policies and procedures manual and implement additional training for staff regarding the calculation and review of accruals and closing processes, to ensure that estimates made at the fiscal year end are consistent with actual amounts in the subsequent period. In addition, we recommend that management more closely monitor accrual accounts throughout the financial reporting process.

Management Response and Corrective Action Plan

Management consulted with their actuarial firm regarding the under accrual and concluded the understatement noted above was not material to the combining financial statements, as it resulted in the net position for the Pension Funds to be understated by 1.64% and total assets to be understated by 0.14%. The impact on the Insurance Fund was an understatement of 0.88% for the net position and 0.10% for total assets. Accounting management has updated their procedures to review employer contribution history and more accurately validate the final year-end accrual.

INVESTMENT

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Market Environment

Fiscal year 2017 was a good year for investors. Developed economies worldwide enjoyed a slow, but steady, rise in Gross Domestic Product (GDP) and investors saw positive returns from holding risk assets. In a reversal of recent trends, international stock indices outperformed the U.S., as the MSCI EAFE and MSCI Emerging Markets Index (in U.S. dollar terms) returned 20.3% and 23.7%, respectively, versus 18.5% for the Russell 3000 Index. The out-performance by international markets may continue in FY 2018 as central banks outside of the U.S. have maintained their accommodative stance even as the U.S. Federal Reserve has begun the process of removing policy stimulus.

The U.S. economy contributed to favorable markets as economic growth remained slow but steady. According to the Bureau of Labor Statistics, the unemployment rate in the U.S. dropped to 4.4% in June. Despite tight labor markets, U.S. inflation remained tame and headline inflation measured 1.6% year-over-year by June 30, 2017, up from 1.0% in the previous year. Feeling confident that the U.S. economy was on sound footing, the Federal Reserve raised short-term interest rates three times over the fiscal year and announced its intention to roll back nearly 10 years of economic stimulus by ending their policy of reinvesting both principal and interest payments generated by maturities from their balance sheet.

In Europe, Mario Draghi, President of the European Central Bank (ECB), cited a long list of positive data points that drove the economy. These included strong euro-zone business surveys, unemployment rates at a seven year low, and inflation measures that were consistent with the ECB's 2% target. Though monetary policy remained unchanged, President Draghi acknowledged the ECB would not likely authorize new supplements to the Quantitative Easing (QE) program. In Asia, the Bank of Japan held a similar monetary policy, but did not provide an indication of a tightening on the horizon as the country's core Consumer Price Index (CPI) was barely positive at +0.1%.

Global markets remained resilient in the face of increasing geopolitical risks, but interest rates moved higher as developed economies experienced slight increases to growth. In the U.S., the Federal Funds rate ended the period at a range of 1.00% to 1.25%, while the yield on the U.S. 10-year Treasury rose .86% to 2.3% by June 30, 2017. In Germany, the yield on the 10-year bonds turned positive and ended at .45% in June, 2017. Interest rate volatility is expected to remain high across the globe during the coming fiscal year as markets look to see how high the U.S. Federal Reserve will be able to raise short-term rates. Markets will also attempt to gauge if other central banks may follow the Reserve's actions and begin to remove accommodative policy measures.

Investment Committee Initiatives

New Members

In June, 2016, Governor Matt Bevin, by way of Executive Order (EO), restructured the KRS Board of Trustees to be a Board of Directors and added four new members. These new Board Members were appointed by the Governor based on their investment experience.

Monthly Meetings

In order to accomplish several major initiatives, the Investment Committee decided to meet on a monthly basis for a period of time. The more frequent meetings allowed committee members to have a greater degree of interaction with staff and to be more involved in the projects detailed below.

Review of Absolute Return Portfolio

The Committee began a review of the managers, fund strategies, allocations, fees, and overall purpose of KRS' absolute return investments. The goal of the review was to ensure that each investment was expected to provide the desired returns in a cost-appropriate manner. Any investment that no longer provided a diversified return profile or that was not expected to produce enough return relative to the fees being charged was targeted for liquidation. The review resulted in substantial reductions in allocations to hedge fund managers in KRS' portfolio. Further, the investment team was able to renegotiate investment contracts with many of the remaining funds in the portfolio.

Asset Allocation

In January, the Investment Committee Chair appointed a special subcommittee to review the asset allocation for each individual system to determine the appropriate level of risk based on liquidity and cash flow need. The subcommittee worked for six months in conjunction with the Systems' consultants and actuaries and, in July, 2017, the Board approved new asset allocations for each system. This new asset allocation, at its highest level, allocates 45.0% of system assets to equity risk, 30.0% to credit risk, and 25.0% to diversifying strategies (real return, real estate, private equity, and absolute return). These new allocations should reduce the public equity exposure in each system by roughly 16.0% in favor of fixed income. The Investment Committee has asked staff to implement this new asset allocation over the course of the next fiscal year by reducing public equity exposure by approximately 4.0% per quarter and reinvesting those dollars in fixed income assets. Within these asset allocation guidelines, both the KERS Non-Hazardous and the SPRS portfolios will have less risk and greater liquidity due to their severe underfunding and extreme cash flow needs.

Assumed Rates of Return

The Investment Committee also made recommendations to the Board to lower the assumed rates of return for each of the systems. The committee reviewed capital market assumptions from eight leading investment and/or consulting firms, e.g., JP Morgan, PIMCO, RVK, Goldman Sachs, and Blackrock. The assumptions from these firms were compared to each system's asset allocation where the resulting portfolio returns were averaged to produce an estimated return for each system. As a result of this work, the Committee recommended lowering the assumed rate

of return from 6.75% to 5.25% for the KERS Non-Hazardous and SPRS pension plans to more realistically reflect those systems' need to reduce volatility and increase the liquidity of the investments. For all other plans the committee recommended a reduction from 7.5% to 6.25%. These recommendations were approved by the Board in July, 2017.

Review of Investment Consultants

In May, 2017, the Investment Committee asked staff to issue a Request for Proposal (RFP) for new investment consulting services. The Investment Committee felt that KRS might be able to increase service levels and reduce consulting fees by switching to a single consultant to work across all asset classes except real estate. An RFP was issued in June, 2017, and eight of the largest investment consulting firms in the U.S. responded. The responses were scored by an internal review committee and four finalists were selected for in-person interviews with the selection committee. The committee recommended that Wilshire Associates be hired as the new investment consultant for all asset classes except for real estate; the committee continued to retain the incumbent real estate manager, ORG Portfolio Management, for this asset class. This recommendation was approved by the Investment Committee in August, 2017.

Other Accomplishments

In March, 2017, the Kentucky Legislature passed a new set of pension system transparency requirements, collectively known as Senate Bill 2 (SB 2). This new legislation required:

- Posting all investment contracts to the KRS website;
- Investment managers working for the systems to adhere to the CFA Asset Manager Code of Conduct and the CFA Standards of Professional Conduct;
- All KRS Trustees to adhere to the CFA Code of Conduct for Pension Scheme Governing Bodies; and,
- KRS to develop a procurement policy for all investment services and to have that policy approved by the Finance and Administration Cabinet as being representative of industry best practice.

Staff from both the Investments and Legal departments have worked diligently to implement these new requirements. A new Procurement Policy was developed with the Finance and Administration Cabinet and approved by the Board in September, 2017. The Investment staff has begun to contact each of our managers to inform them of the new requirements and to request minimally redacted copies of investment management contracts. The KRS Communications staff created a section on our website to host these contracts and we continue to collect and post these as they become available.

INVESTMENT SUMMARY

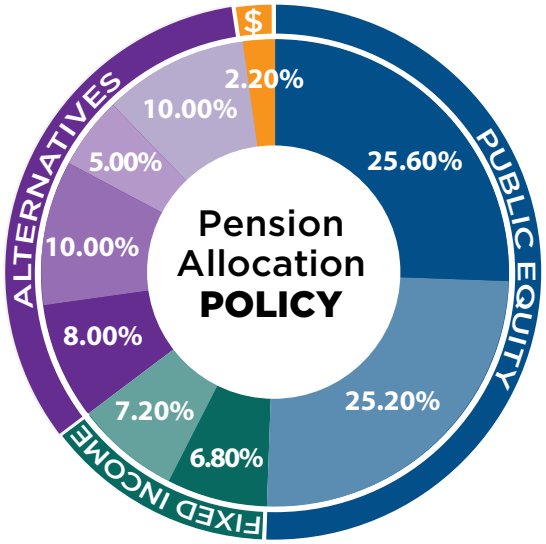
The KRS Board is charged with the responsibility of investing the Systems' assets to provide benefits to the members of the Systems. To achieve this goal, the Board follows an investment policy that thoughtfully grows our asset base while at the same time protects against undue risks and losses in all investment areas. The Board recognizes its fiduciary duty not only to invest the funds in compliance with the Prudent Person Rule, but to also manage the funds while recognizing the long-term nature of the Systems' investments. In order to carry out their fiduciary duties, the Board has created clearly defined investment policies, objectives, and strategies for both the Pension and Insurance portfolios.

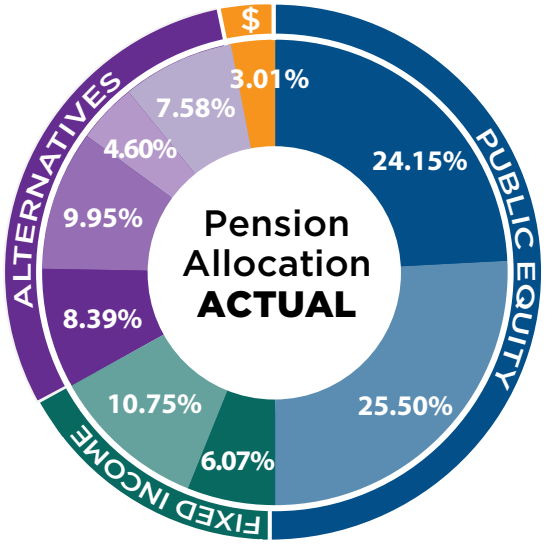
Investment Policy

As of June 30, 2017, the KRS Pension Fund's allocation aimed for the following percentages: 25.6% of the assets in U.S. equities; 25.2% in broad market international equities; 6.8% in global fixed income; 7.2% in credit fixed income; 10.0% in private equity; 8.0% in real return; 10.0% in absolute return; 5.0% in real estate; and, 2.2% in cash or short-term securities. As of June 30, 2017, the KRS Insurance Fund's allocation policy set investment goals of: 26.5% of the assets in U.S. equities; 26.5% in broad market international equities; 6.0% in global fixed income; 6.0% in credit fixed income; 10.0% in private equity; 8.0% in real return; 10.0% in absolute return; 5.0% in real estate; and, 2.0% in cash or short-term securities.

PENSION: Asset Allocation Board Policy vs. Actual as of June 30, 2017

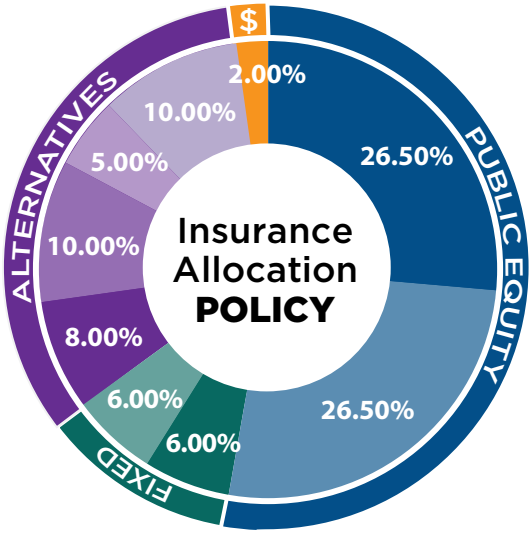
Asset	U.S. Equity	International Equity	Global Fixed	Credit Fixed	Real Return	Private Equity	Real Estate	Absolute Return	Cash
Policy's Pension Asset Allocation	25.60%	25.20%	6.80%	7.20%	8.00%	10.00%	5.00%	10.00%	2.20%
Actual Pension Asset Allocation	24.15%	25.50%	6.07%	10.75%	8.39%	9.95%	4.60%	7.58%	3.01%

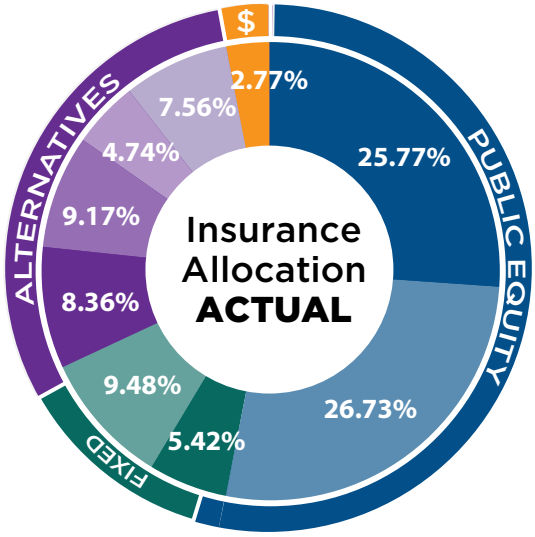




INSURANCE: Asset Allocation Board Policy vs. Actual as of June 30, 2017

Asset	U.S. Equity	International Equity	Global Fixed	Credit Fixed	Real Return	Private Equity	Real Estate	Absolute Return	Cash
Policy's Insurance Asset Allocation	26.50%	26.50%	6.00%	6.00%	8.00%	10.00%	5.00%	10.00%	2.00%
Actual Insurance Asset Allocation	25.77%	26.73%	5.42%	9.48%	8.36%	9.17%	4.74%	7.56%	2.77%





Investment Strategies

Diversification

KRS portfolios are diversified on several levels, primarily through the use of the aforementioned multiple asset classes. Asset allocations are revisited on a periodic basis and represent an efficient allocation to maximize returns and minimize risks. The individual asset classes are diversified through the use of multiple portfolios that are managed by both the Investment Division Staff and external investment advisors. Finally, portfolios within each of the asset classes are diversified through both investment styles and the selection of individual securities. Each portfolio advisor is afforded discretion to diversify its portfolio(s) within the parameters established by the KRS Board.

Rebalancing

Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with KRS' Statement of Investment Policy target levels. Such rebalancing is necessary to reflect sizable cash flows and performance imbalances among asset classes and investment advisors. KRS' rebalancing policies call for an immediate rebalancing to within its allocation ranges if an asset class exceeds or falls outside its allowable range as defined in the Investment Policy Statement. As the previous charts depict, the Pension and Insurance portfolios were operating within the ranges established by the Investment Policies.

Investment Policies
Visit https://kyret.ky.gov/investments to read our Statement of Investment policy. Other policies include Brokerage, Securities Trading, Placement Agents, Proxy Voting and more.

Investments Performance Review Procedures

At least once each quarter, the Investment Committee, on behalf of the KRS Board, reviews the performance of the portfolio to determine compliance with the Statement of Investment Policy. The Investment Committee also reviews a report created and presented by the KRS Compliance Officer who is part of the independent Internal Audit Department. The Compliance Officer performs tests daily, monthly, and quarterly to assure compliance with the restrictions imposed by the Investment Policy.

Investment Consulting

The Board employs industry leading external consultants to assist in determining and reviewing the asset allocation guidelines. Consultants also provide performance reports for both the internally managed and externally managed assets. A letter from each consulting firm utilized follows this section and each provides a discussion of current allocations, performance, and significant changes during the fiscal year.

Investment Objectives

The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

• **Shorter-Term** (5 years and less): The returns of the particular asset classes of the managed funds of the Systems, measured on an annual basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices.

• **Medium-Term** (5 to 30 years): The returns of the particular asset classes of the managed funds of the Systems, measured on a rolling year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices and perform above the median of an appropriate peer universe, if there is one.

• **Longer-Term:** The total assets of the Systems should achieve a return of 5.25% for KERS Non-Hazardous and SPRS pensions and 6.25% for all other pension and insurance plans. This is measured over 30 to 40 years which exceeds the actuarially required rate of return while also exceeding the return achieved by its total fund benchmark.

In keeping with the KRS Board's fiduciary responsibility, where all else is equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

Investing in Kentucky
In keeping with the KRS Board's fiduciary responsibility, where all else equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

Investment Results

Note: Returns reported by KRS are "net." For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011 and gross of fees for prior historical data.

For the purposes of this report, total fund return information is net of investment manager fees with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011 and gross of fees for prior historical data.

Fiscal Year 2017 Results

For the fiscal year ending on June 30, 2017, the KRS Pension Funds earned a net return of 13.47%, outpacing its benchmark return of 13.28%. The KRS Insurance Fund return for that period earned a net return of 13.72% compared to the 13.55% for the benchmark.

Net Returns By System - Pension Funds *(%) (Net of Fees) As of June 30, 2017*

Plan	Market Value (MV)	% of Total MV	1 Year		3 Years		5 Years		5 Year	10 Years		Inception	
	($ In Thousands)		KRS	Index	KRS	Index	KRS	Index	GANIR	KRS	Index	KRS	Index
KERS Non-Hazardous	$2,016,475	17.14	12.09	11.92	4.46	4.81	7.84	8.04	2.56	4.75	5.17	9.12	9.26
KERS Hazardous	600,384	5.10	13.44	13.58	4.86	4.81	8.12	8.11	2.99	4.81	5.20	9.14	9.27
CERS Non-Hazardous	6,688,758	56.85	13.81	13.64	4.89	4.80	8.12	8.11	2.89	4.88	5.20	9.16	9.27
CERS Hazardous	2,216,700	18.84	13.73	13.61	4.93	4.80	8.14	8.10	3.05	4.89	5.20	9.17	9.27
SPRS	243,605	2.07	12.50	12.61	4.12	4.61	7.67	7.97	2.69	4.66	5.14	9.09	9.25
Total	$11,765,922	100.00	13.47	13.28	4.81	5.13	8.08	8.22	--	4.86	5.26	9.16	9.29

Note: GANIR = (5 Year Return - 4.0%) x .75 and is calculated net of fees and expenses. See the Financial Section for more information. Applies to Tier 3 only.

Net Returns By System - Insurance Fund *(%) (Net of Fees) As of June 30, 2017*

Plan	Market Value (MV)	% of Total MV	1 Year		3 Years		5 Years		10 Years		Inception	
	($ In Thousands)		KRS	Index	KRS	Index	KRS	Index	KRS	Index	KRS	Index
KERS Non-Hazardous	$768,806	16.16	13.78	13.89	4.72	4.97	7.65	8.17	3.65	4.22	7.37	7.77
KERS Hazardous	483,868	10.17	13.76	13.73	4.93	5.02	7.93	8.21	3.79	4.24	7.42	7.77
CERS Non-Hazardous	2,149,544	45.19	13.67	13.62	5.03	5.06	7.97	8.23	3.81	4.25	7.42	7.78
CERS Hazardous	1,176,799	24.74	13.70	13.61	5.08	5.06	8.00	8.24	3.82	4.25	7.43	7.78
SPRS	177,414	3.73	13.70	13.61	5.03	5.08	7.98	8.25	3.81	4.26	7.42	7.78
Total	$4,756,432	100.00	13.72	13.55	4.99	5.45	7.92	8.40	3.78	4.33	7.42	7.80

BENCHMARKS

The Kentucky Retirement Systems Pension and Insurance Funds' benchmarks are weighted averages that are composites of the various asset class indices that exist within each of KRS' investment portfolios. The Total Fund benchmarks are shown below:

Asset Class Benchmarks
As of June 30, 2017

Index	Pension Fund	Insurance Fund
Russell 3000	25.60%	26.50%
MSCI ACWI Ex-US IMI	25.20%	26.50%
Barclays Universal Index	6.80%	6.00%
Barclays U.S. High Yield	7.20%	6.00%
NCREIF ODCE	5.00%	5.00%
HFRI Diversified FOF	10.00%	10.00%
Custom-Allocation Specific	8.00%	8.00%
Actual Performance	10.00%	10.00%
Russell 3000 Quarter Lagged + 300 bps		
Cit Grp 3-mos Treasury Bill	2.20%	2.00%

Note: KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

These benchmarks are intended to be objective, measurable, investable/replicable, and representative of the investment mandates. The benchmarks are developed from publicly available information, and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate and status. KRS' Investment Staff and Consultants recommend the indices and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the KRS Board. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total benchmarks will evolve to reflect these exposures.

Long-Term Results

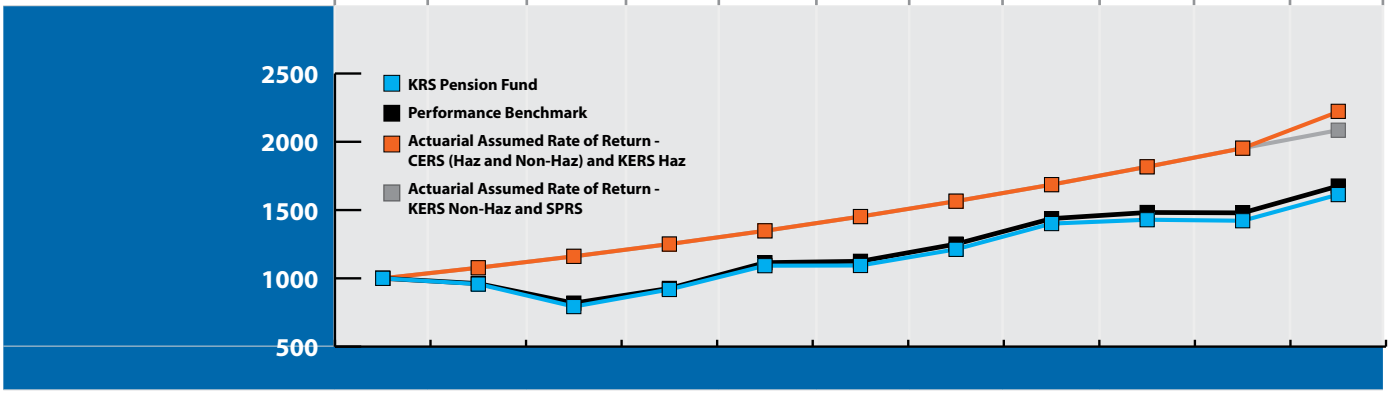
The schedule below details annual returns since June 30, 2017, where returns range from a minimum of -17.21% in 2009 to a maximum of 18.96% in 2011. For year ending June 30, 2017, the KRS total Pension Fund portfolio earned the then current annualized net returns.

As previously noted, beginning with the 2017 valuation, the Board lowered the actuarial required rate of return for KERS and SPRS to 6.75% while the rate of return for CERS Non-Hazardous, CERS Hazardous, and KERS Hazardous remained at 7.50%. The growth of a dollar chart below displays the differences between $1,000 invested in 2007 at an assumed rate of return of 6.75% for KRS and SPRS and 7.50% for CERS Non-Hazardous, CERS Hazardous, and KERS Hazardous, where an investment of $1,000 would have earned $2,085 for KERS Non-Hazardous and SPRS and $2,100 for CERS Non-Hazardous, CERS Hazardous, and KERS Hazardous. Further, the chart indicates that the total Pension Fund would have earned $1,613 per $1,000, while the benchmark would have earned $1,676 per $1,000.

Pension Fund Growth of $1,000

As of June 30, 2017

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Fund Return	15.27%	-4.21%	-17.21%	15.81%	18.96%	0.14%	10.82%	15.55%	2.01%	-0.52%	13.47%
Performance Benchmark	14.90%	-3.83%	-14.88%	13.16%	20.34%	0.90%	11.21%	14.91%	3.13%	-0.19%	13.28%
Actuarial Assumed ROR CERS, CERS-H, and KERS-H	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.50%	7.50%
Actuarial Assumed ROR KERS and SPRS	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.50%	6.75%
KRS Pension Fund	$1,000	$958	$793	$918	$1,093	$1,094	$1,212	$1,401	$1,429	$1,422	$1,613
Performance Benchmark	1,000	962	819	926	1,115	1,125	1,251	1,437	1,482	1,480	1,676
Actuarial Assumed ROR CERS, CERS-H, and KERS-H	1,000	1,078	1,161	1,251	1,348	1,452	1,565	1,686	1,817	1,953	2,100
Actuarial Assumed ROR KERS and SPRS	$1,000	$1,078	$1,161	$1,251	$1,348	$1,452	$1,565	$1,686	$1,817	$1,953	$2,085

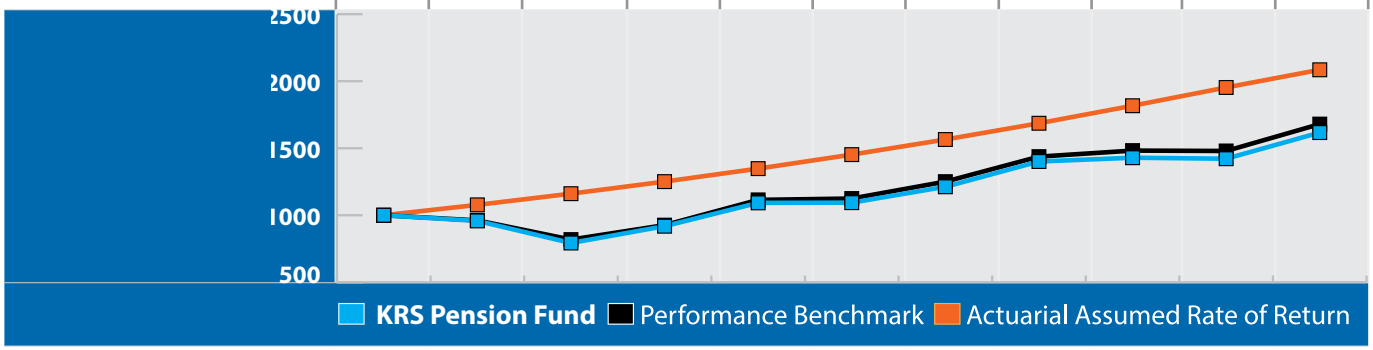


The chart below shows annual returns for the Insurance Fund since June 30, 2007, where returns range from a minimum of -23.18% in 2009 to a maximum of 23.47% in 2011. As of June 30, 2017, the Insurance Fund portfolios earned an annualized total net return of 13.72% versus the benchmark annualized return of 13.55%. The chart below indicates that the performance of $1,000 invested in the Insurance portfolios would grow to $1,452, the policy benchmark to $1,537, and the actuarial assumption to $2,100 over the 11 year period.

Insurance Fund Growth of $1,000

As of June 30, 2017

PORTFOLIO	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Fund Return	19.32%	-7.85%	-23.18%	15.46%	23.47%	-1.71%	10.11%	14.89%	1.86%	-0.09%	13.72%
Performance Benchmark	19.12%	-7.98%	-23.15%	13.07%	26.93%	0.58%	11.05%	15.03%	3.79%	0.03%	13.55%
Actuarial Assumed ROR	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.50%	7.50%
KRS Insurance Fund	$1,000	$922	$708	$817	$1,009	$992	$1,092	$1,255	$1,278	$1,277	$1,452
Performance Benchmark	1,000	920	707	800	1,015	1,021	1,134	1,304	1,353	1,354	1,537
Actuarial Assumed ROR	$1,000	$1,078	$1,161	$1,251	$1,348	$1,452	$1,565	$1,686	$1,817	$1,953	$2,100



U.S. Equity

For the fiscal year ending June 30, 2017, the KRS Pension Funds' U.S. equity portfolio posted a return of 17.99%, versus the benchmark return of 18.51%. The KRS Insurance U.S. equity portfolio posted a return of 18.09%, compared to the benchmark return of 18.51%.

Since inception, performance remains sound; the Pension's equity portfolio has generated an annualized return of 11.27% throughout its duration, while the benchmark posted an annualized annual return of 11.29%. The Insurance Fund has returned 9.56% since inception, while the benchmark returned 9.41%.

Return on U.S. Equity
As of June 30, 2017

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Funds	Apr-84	17.99%	8.27%	13.99%	7.01%	11.27%
↘ Performance Benchmark[1]		18.51%	9.10%	14.59%	7.29%	11.29%
Insurance Fund	Jul-92	18.09%	8.69%	14.15%	6.93%	9.56%
↘ Performance Benchmark[1]		18.51%	9.10%	14.59%	7.22%	9.41%
Market Indices						
S&P 500 (Large Cap)		17.90%	9.61%	14.65%	7.41%	
Russell Midcap		16.48%	7.69%	14.72%	7.67%	
Russell 2000 (Small Cap)		24.60%	7.36%	13.70%	6.92%	
Russell 3000 (Total Equity)		18.51%	9.10%	14.59%	7.26%	

[1] Pension and Insurance benchmark is the Russell 3000 effective July 1, 2013.

Top 10 U.S. Equity Holdings
Pension Fund *($ In Thousands) As of June 30, 2017*

Company	Shares	Fair Value
APPLE INC	393,382	$56,655
MICROSOFT CORP	588,211	40,545
AMAZON.COM INC	31,015	30,023
BERKSHIRE HATHAWAY INC	175,516	29,727
FACEBOOK INC	184,673	27,882
EXXON MOBIL CORP	293,214	23,671
JOHNSON & JOHNSON	175,334	23,195
JPMORGAN CHASE & CO	243,055	22,215
ALPHABET INC-CL C	24,265	22,050
ALPHABET INC-CL A	23,176	21,546
Total		$297,510

Top 10 U.S. Equity Holdings
Insurance Fund *($ In Thousands) As of June 30, 2017*

Company	Shares	Fair Value
APPLE INC	166,988	$24,050
MICROSOFT CORP	249,807	17,219
BERKSHIRE HATHAWAY INC	75,619	12,808
AMAZON.COM INC	13,155	12,734
FACEBOOK INC	78,311	11,823
EXXON MOBIL CORP	125,264	10,113
JOHNSON & JOHNSON	74,924	9,912
JPMORGAN CHASE & CO	103,937	9,500
ALPHABET INC-CL C	10,269	9,331
WELLS FARGO & CO	166,516	9,227
Total		$126,716

A complete list of holdings is located at https://kyret.ky.gov/Investments/Investments-Library/Pages/Investments-Holdings.aspx

International Equity

For the fiscal year ending June 30, 2017, the KRS Pension Funds' international equity portfolio returned 20.23%, compared to its benchmark of 20.97%. The KRS Insurance international equity portfolio returned 20.40% versus its benchmark of 20.97% during the same twelve month period.

International equity investors have experienced a volatile period of returns over the past several years as a result of geopolitical issues, commodity price swings, and currency valuation moves. Even so, over the past five years both funds have outperformed their respective benchmarks. The KRS Pension and Insurance Funds posted annualized returns for the period of 8.30% and 8.15% respectively, compared to the benchmark's return of 7.72%. The Systems began their international equity program in 2000. Since inception, the Pension international equity portfolio has underperformed the benchmark, while the Insurance international equity portfolio has outperformed the benchmark.

Return on International Equity
As of June 30, 2017

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Funds	Jul-00	20.23%	1.85%	8.30%	1.65%	2.83%
↘ Performance Benchmark[1]		20.97%	1.29%	7.72%	1.38%	3.29%
Insurance Fund	Apr-00	20.40%	1.77%	8.15%	1.64%	2.84%
↘ Performance Benchmark[1]		20.97%	1.29%	7.72%	1.04%	2.40%
Market Indices						
MSCI ACWI Ex US GD		20.97%	0.80%	7.22%	1.16%	

[1]Pension and Insurance benchmark is the MSCI ACWI ex-US effective July 1, 2011.

Top 10 International Equity Holdings Pension Fund *($ In Thousands) As of June 30, 2017*

Company	Shares	Fair Value
ROCHE HOLDING AG	88,320	$22,522
LONDON STOCK EXCHANGE GROUP	421,849	19,979
DAIWA HOUSE INDUSTRY CO LTD	498,500	17,028
KBC GROUP NV	214,230	16,227
WORLDPAY GROUP PLC	3,861,886	15,792
PRUDENTIAL PLC	678,339	15,517
CSL LTD	144,960	15,348
TOTAL SA	301,479	14,884
HDFC BANK LTD	169,780	14,766
TENCENT HOLDINGS LTD	412,800	14,764
Total		$166,824

Top 10 International Equity Holdings Insurance Fund *($ In Thousands) As of June 30, 2017*

Company	Shares	Fair Value
ROCHE HOLDING AG	38,510	$9,820
LONDON STOCK EXCHANGE GROUP	168,603	7,985
KBC GROUP NV	88,790	6,725
TOTAL SA	135,884	6,708
CSL LTD	60,540	6,410
HDFC BANK LTD	72,780	6,330
WORLDPAY GROUP PLC	1,536,247	6,282
DAIWA HOUSE INDUSTRY CO LTD	183,200	6,258
TENCENT HOLDINGS LTD	173,800	6,216
DSV A/S	99,900	6,130
Total		$68,864

A complete list of holdings is located at https://kyret.ky.gov/Investments/Investments-Library/Pages/Investments-Holdings.aspx

Fixed Income

For the fiscal year ending June 30, 2017, the KRS Pension Funds' fixed income portfolio returned 6.54% versus to the benchmark return of 6.66%. As the accompanying table indicates, both of the broad market indices, the Barclays Aggregate Index and the Barclays Universal Index, posted returns of -0.31% and 0.91% respectively for the twelve month period ending June 30, 2017, while the Barclays High Yield Index provided returns of 12.70%. The KRS Insurance fixed income portfolio posted a 5.90% rate of return, which underperformed the index by 0.76%.

Over the five year period, the Pension Funds outperformed the benchmark while the Insurance Fund lagged behind benchmark of 4.21%. Over the ten year period, the Pension and Insurance Funds have trailed the benchmark by 0.04% and 0.07%, respectfully.

Return on Fixed Income
As of June 30, 2017

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Funds	Apr-84	6.54%	4.23%	4.47%	5.57%	7.69%
↘ Performance Benchmark[1]		6.66%	5.24%	4.21%	5.61%	7.51%
Insurance Fund	Jul-92	5.90%	3.69%	4.00%	5.78%	6.53%
↘ Performance Benchmark[1]		6.66%	5.24%	4.21%	5.85%	6.51%
Market Indices						
BC Aggregate		-0.31%	2.48%	2.21%		
BC Corporate High Yield		12.70%	4.48%	6.89%		
BC Universal		0.91%	2.76%	2.73%		

[1]Pension and Insurance benchmark is Barclays Universal Index (Global) and Barclays U.S. High Yield (High Yield).

Top 10 Fixed Income Holdings Pension Fund *($ In Thousands) As of June 30, 2017*

Company	Par Value	Fair Value
MARATHON BLUEGRASS	$311,160	$311,160
CERBERUS	90,773	90,773
U S TREASURY NOTE	47,143	47,143
U S TREASURY BOND	23,942	23,942
NEW ZEALAND GOVT BOND	17,456	12,781
MEXICAN BONOS	200,963	11,103
SINGAPORE GOVERNMENT BOND	12,429	9,027
HCA INC	8,503	8,503
INDONESIA TREASURY BOND	112,356,767	8,430
INTERNATIONAL BANK	78,635	6,952
Total		$529,814

Top 10 Fixed Income Holdings Insurance Fund *($ In Thousands) As of June 30, 2017*

Company	Par Value	Fair Value
MARATHON BLUEGRASS	$122,731	$122,731
CERBERUS	38,903	38,903
U S TREASURY NOTE	16,063	16,063
U S TREASURY BOND	8,025	8,025
NEW ZEALAND GOVT BOND	6,574	4,814
MEXICAN BONOS	74,067	4,092
SINGAPORE GOVERNMENT BOND	4,555	3,309
INDONESIA TREASURY BOND	42,422,990	3,183
INTERNATIONAL BANK	29,893	2,695
APPLE INC	2,281	2,281
Total		$206,096

Note: Par value is the market value in local currency denominations. *A complete list of holdings is located at https://kyret.ky.gov/Investments/Investments-Library/Pages/Investments-Holdings.aspx*

Private Equity

For the fiscal year ending June 30, 2017, the KRS Pension Funds' private equity portfolio posted a return of 12.76%; the portfolio consists primarily of investments within private equity limited partnerships. The Insurance private equity portfolio also returned 12.76%. In a prior fiscal year, it was decided that the short-term benchmark (1-, 3-, & 5-year) would match the actual performance experienced by the portfolios due to the difficulty in assessing short-term returns. Performance is typically based on appraisals of a business's value, so managers are often slow to mark valuations up or down. This can distort relative performance against a public market benchmark when that index moves dramatically. A better indication of the performance of the program would be the mid- to longer-term time periods because businesses have likely been sold and transacted at a true price (rather than estimate of value), which provides a better performance measurement.

For the five years ending June 30, 2017, the Pension and Insurance Funds' private equity portfolios returned 12.19% and 14.16%, respectively. For the ten year period, the Pension Fund trailed its benchmark by 3.31%; the Insurance Fund underperformed by 0.87%. Since its inception in October 1990, the Pension portfolio has matched its benchmark, while the Insurance portfolio has underperformed its benchmark since its July 2001 inception by 0.60%.

Return on Private Equity
As of June 30, 2017

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Funds	Oct-90	12.76%	9.23%	12.19%	7.32%	10.95%
↘ Performance Benchmark[1]		12.76%	9.23%	12.19%	10.63%	10.95%
Insurance Fund	Jul-01	12.76%	12.63%	14.16%	8.94%	9.74%
↘ Performance Benchmark[1]		12.76%	12.63%	14.16%	9.81%	10.34%

[1]Pension and Insurance Benchmark beyond 5 years is the Russell 3000 Lagged + 300bps effective January 1, 2016. For shorter term periods, the benchmark matches actual performance experienced.

Real Estate

For the fiscal year ending June 30, 2017, the KRS Pension Funds' real estate portfolio gained 9.87%, exceeding its benchmark return of 7.36%. The KRS Insurance real estate portfolio also surpassed the benchmark, returning 10.44% compared to 7.36%. For the five years ending June 30, 2017, both the Pension and Insurance Fund portfolios underperformed the benchmark's return by 1.55% and 1.85%, respectively.

Return on Real Estate[1]
As of June 30, 2017

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Funds	Jul-84	9.87%	8.97%	9.39%	7.23%	5.95%
↘ Performance Benchmark[1]		7.36%	10.77%	10.94%	4.62%	6.44%
Insurance Fund	May-09	10.44%	9.32%	9.09%		8.99%
↘ Performance Benchmark[1]		7.36%	10.77%	10.94%		5.84%

[1]Pension and Insurance benchmark is the NCREIF Open-End Diversified Core Gross effective June 30, 2011.

Real Return

For the fiscal year ending June 30, 2017, the KRS Pension Funds' real return portfolio returned 7.52% versus its benchmark return of 3.12%. The KRS Insurance real return portfolio posted a return of 6.60%, while the benchmark returned 2.96% for the period. Over the past three years, the Pension and Insurance real return portfolios have outperformed their respective benchmarks by 0.83% and 0.55%.

Return on Real Return
As of June 30, 2017

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Funds	Jul-11	7.52%	1.44%	2.47%		4.00%
↘ Performance Benchmark[1]		3.12%	0.61%	2.34%		2.73%
Insurance Fund	Jul-11	6.60%	1.32%	2.11%		3.68%
↘ Performance Benchmark[1]		2.96%	0.77%	2.43%		2.81%

[1]Pension and Insurance benchmark is Custom-Allocations Specific.

Absolute Return

For the fiscal year ending June 30, 2017, the KRS Pension Funds' absolute return portfolio was 5.41% versus its benchmark which was 5.05%. The KRS Insurance absolute return portfolio returned 5.32%, while the benchmark was 5.05% for the period. For the five years ending June 30, 2017, the Pension and Insurance portfolios outperformed their respective benchmarks. Since inception, the Pension and Insurance Portfolio has outperformed the benchmark by 1.21% and 1.14%, respectively. The portfolio was comprised of three fund of funds and 26 direct investments. However, over the past few fiscal years the fund of funds have been transitioned into direct relationships. As of June 30, 2017, the portfolios consist of only direct relationships.

Return on Absolute Return
As of June 30, 2017

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Funds	Apr-10	5.41%	1.39%	4.89%		3.96%
↘ Performance Benchmark[1]		5.05%	1.72%	3.65%		2.75%
Insurance Fund	Apr-10	5.32%	1.41%	4.87%		3.89%
↘ Performance Benchmark[1]		5.05%	1.72%	3.65%		2.75%

[1]Pension and Insurance benchmark is the HFR FOF: Diversified.

Top 10 Alternatives Asset Holdings Pension Fund *($ In Thousands) As of June 30, 2017*

Company	SUB ASSET	Fair Value
DANIEL BOONE LLC	ABS RET	$409,014
BAY HILLS EMERGING PARTNERS II	PVT EQ	99,300
H/2 CREDIT PARTNERS	REAL EST	82,269
STOCKBRIDGE FUND	REAL EST	81,826
HARRISON STREET CORE PROPERTY	REAL EST	76,041
DAG VENTURES IV	PVT EQ	73,291
PROLOGIS TARGETED US LOGISTICS	REAL EST	63,977
CRESTVIEW CAPITAL PARTNERS II	PVT EQ	63,195
MESA WEST CORE LENDING FUND	REAL EST	58,381
MAGNETAR MTP	REAL RET	57,916
Total		$1,065,211

Top 10 Alternatives Asset Holdings Insurance Fund *($ In Thousands) As of June 30, 2017*

Company	SUB ASSET	Fair Value
DANIEL BOONE LLC	ABS RET	$169,897
SECONDARY OPP FUND III	PVT EQ	37,612
BAY HILLS EMERGING PARTNERS III	PVT EQ	36,318
BLACKSTONE CAPITAL PARTNERS VI	ABS RET	35,935
STOCKBRIDGE FUND	REAL EST	34,361
MESA WEST CORE LENDING FUND	REAL EST	32,576
H/2 CREDIT PARTNERS	REAL EST	31,994
HARRISON STREET CORE PROPERTY	REAL EST	31,556
GREEN EQUITY INVESTORS VI	PVT EQ	28,600
PROLOGIS TARGETED US LOGISTICS	REAL EST	25,320
Total		$438,849

A complete list of holdings is located at https://kyret.ky.gov/Investments/Investments-Library/Pages/Investments-Holdings.aspx

Cash

For the fiscal year ending June 30, 2017, the KRS Pension Funds' cash portfolio returned 0.99%, outpacing its benchmark, the Citi Group 3-month Treasury, by 0.53%. The KRS Insurance cash portfolio also outperformed the index, posting a return of 0.62% during the same 12 month period.

As the accompanying table indicates, the longer-term results from the cash portfolios have performed well compared to their benchmark. For the five years ending June 30, 2017, the Pension Funds portfolio has outperformed its custom benchmark by 0.36% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.45% per year. The Insurance portfolio has also done very well, exceeding its benchmark return over the five-year and since inception periods by 0.22% and 0.14%, respectively.

Return on Cash
As of June 30, 2017

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Funds	Jan-88	0.99%	0.54%	0.51%	1.06%	3.65%
↘ Performance Benchmark[1]		0.46%	0.20%	0.15%	0.51%	3.20%
Insurance Fund	Jul-92	0.62%	0.38%	0.37%	0.76%	2.69%
↘ Performance Benchmark[1]		0.46%	0.20%	0.15%	0.51%	2.55%

[1]Pension and Insurance benchmark is the Citi Group 3-month Treasury

Additional Schedules & Required Supplemental Information

In the following are additional schedules which include the assets under management for each firm the Systems employs, external investment-related expenses, commissions paid , and portfolio summaries for each of the five pension and insurance plans as of the fiscal year ending June 30, 2017. This section is followed by letter from KRS' investment consultants.

Investment Advisors & Assets Under Management *($ In Thousands)*

As of June 30, 2017

Advisor	Assets Under Management
American Century Investments	$479,615
AMERRA Capital Management	100,548
Anchorage Capital	36,804
Arbor Investments	8,177
Arcano Capital	32,091
ARES Capital	12,205
Avenue Capital Group	9
Blackstone Alternative Asset Management	44,661
Bay Hills Emerging Partners	195,098
Black Diamond Capital Management	31,926
BlackRock ACWI Ex-US	1,858,674
Blackrock	39,702
Blackstone Capital Partners	97,438
BTG Pactual	13,723
BNY Mellon Accruals	(901)
Cash Accounts	487,282
Cerberus	129,676
CM Growth Capital Partners	13,322
Coatue	25,921
Columbia Asset Management	310,172
Columbia Capital	6,432
Credit Suisse	40,989
Crestview Partners	88,412
CVC Capital Partners	24,186
DAG Ventures	147,507
Davidson-Kempner	65,859
DB Secondary Opportunities	50,150
DCM	14,768
DivcoWest	11,545
DSAM Capital Partners	820
Essex Woodland	22,395
Finisterre Capital	25,418

Investment Advisors & Assets Under Management *($ In Thousands)*

As of June 30, 2017

Advisor	Assets Under Management
Franklin Templeton	339,482
Fundamental Partners	36,790
Glenview Institution	531
Gotham Neutral Strategies	18,692
Governor's Lane	31,222
Green Equity Investors	132,345
Greenfield Acquisition Partners	49,631
GTCR Golder Rauner	6,037
H/2 Credit Partners	114,263
Harrison Street	107,597
Harvest Partners	62,630
HBK Capital Management	62,387
Hellman & Friedman	6,037
H.I.G Capital	23,657
Horsley Bridge International	63,043
IG Credit FI Unit	512,656
Institutional Venture Partners	14,828
Internal US Mid Cap	446,843
Internal TIPS	285,895
JW Childs Equity	3
Karya	22,049
Kayne Anderson	56,347
KCP Capital	5,145
Keyhaven Capital Partners	26,107
Knighthead Capital	13,844
Lazard Asset Management	730,967
Levine Leichtman	58,404
LibreMax Capital	266
Liquidalts H20 Force	22,695
Loomis, Sayles & Company	125
LSV Asset Management	705,474
Lubert-Adler	49,007
Luxor Capital	18,010
Magnetar Capital	100,134
Manulife Financial	574,872
Marathon Bluegrass	430,290
Matlin Patterson	32,331
Merit Capital Partners	6,419
Mesa West	97,593

Investment Advisors & Assets Under Management *($ In Thousands)*

As of June 30, 2017

Advisor	Assets Under Management
MHR Institutional Advisors	1,753
Mill Road Capital	24,053
Myriad Opportunities	45,113
New Mountain Partners	72,101
NISA Investment Advisors	396,918
Non-US Transition	7,988
Northern Trust Global Investments	482,915
Nuveen Real Asset	309,584
Oak Hill Partners	32,960
Oberland Capital	5,017
Oaktree Capital Management	542
Pacific Alternative Asset Management Company	1,314
Patron Capital	5,929
Perimeter Park	7,300
PIMCO	450,553
Pine River Capital	10,030
Prisma	578,911
Prologis	89,297
Prudential	22,399
QMS Diversified Global	22,237
River Road Asset Management	255,148
Riverside Capital	44,384
Rubenstein Capital	22,738
Internal S& P 500	1,905,325
Internal Scientific Beta	479,723
Scopia PX	10,371
Senator PX	29,032
Shenkman Capital	128,750
Stockbridge	116,187
Sun Capital Partners	642
Systematic Financial Management	426,968
Systematica Bluematrix	16,548
Taurus Mine Finance	17,536
Technology Crossover Ventures VI, Palo Alto, California	649
Tenaska Power	1,098
Tide Point Partners	22,178
Tortoise Capital	100,990
Tourbillon Global	23,408
US Transition KRS Internal Account	56
Triton Fund	22,784

Investment Advisors & Assets Under Management *($ In Thousands)*

As of June 30, 2017

Advisor		Assets Under Management
VantagePoint Capital Partners		16,582
Vista Equity Partners		92,067
Walton Street		58,720
Warburg Pincus		31,963
Waterfall Investment		204,238
Wayzata Investment Partners		28,553
Westfield Capital		219,529
	Total	$16,522,353

Note: Totals reflect external manager assets under management, therefore totals will differ from Total Fair Values.

External Investment Expense - Asset Class/Type Breakdown *(in Whole Dollars)*

As of June 30, 2017

Pension Fund

	US Public	Non US Equity	Fixed Income	Real Return	Private Equity	Real Estate	Absolute Return	Cash	Total
Fee for Long Balance	$-	$1,738	$-	$90	$95	$-	$-	$-	$1,924
Lending Fee Rebate	877,241	(172,578)	41,496	(11,971)	-	-	-	-	734,189
Investment Advisory Fees	3,228,813	7,336,695	7,417,187	5,861,154	9,434,943	4,130,692	8,729,463	-	46,138,947
Performance/ Incentive Fees	-	-	6,547,646	280,569	16,343,440	2,150,716	4,328,360	-	29,650,731
Stock Loan Fees	152,830	94,179	54,812	48,419	-	-	-	-	350,239
Taxes and Insurance	-	-		-	(594)	-	-	-	(594)
Miscellaneous	36,098	15,774	(80)	1,066,279	4,411,381	1,843,738	50	250,158	7,623,398
Commission on Future Contracts	2,374	-	14,468	1,281	-	-	-	-	18,123
Consultant Fees	-	-	-	-	-	-	-	1,004,974	1,004,974
Custodial Fees	-	-	-	-	-	-	-	1,084,156	1,084,156
	$4,297,356	$7,275,808	$14,075,528	$7,245,822	$30,189,265	$8,125,146	$13,057,873	$2,339,288	$86,606,086
							Financial Statement Reported Expenses		$86,606,086

Insurance Fund

Fee for Long Balance	$-	$523	$-	$-	$12	$-	$-	$-	$535
Lending Fee Rebate	355,240	(154,450)	6,319	(20,980)	-	-	-	-	186,130
Investment Advisory Fees	1,344,096	2,998,140	2,751,799	2,367,262	4,955,373	1,732,144	3,415,809		19,564,623
Performance/ Incentive Fees	-		2,704,213	127,855	4,828,465	899,182	1,447,378		10,007,093
Stock Loan Fees	53,470	45,543	12,963	20,602					132,578
Miscellaneous	29,932	6,601	70	510,826		986,465	50	87,373	1,621,317
Taxes and Insurance	-	-	-	-	2,730				2,730
Commission on Future Contracts	917	-	5,447	529	1,897,368				1,904,261
Consultant Fees	-	-	-	-	-	-	-	409,159	409,159
Custodial Fees	-	-	-	-	-	-	-	718,410	718,410
	$1,783,656	$2,896,357	$5,480,811	$3,006,094	$11,683,948	$3,617,791	$4,863,237	$1,214,942	$34,546,836
							Financial Statement Reported Expenses		$34,546,836

The Governmental Accounting Standards Board recognizes that it may not be possible or cost-beneficial to separate certain investment expenses from either the related investment income or the general administrative expenses of the plan. KRS has displayed all investment related fees and expenses identifiable and captured by our custodial bank, BNY Mellon and KRS staff.

Schedule of Commissions Paid *(in Whole Dollars)*
As of June 30, 2017

Asset	Total Shares	Commissions Paid	Price per Share
U.S. Equities	96,487,250	$ 1,496,980	$0.0155
Non U.S. Equities	970,885,712	$1,462,533	$0.0015
Total Commissions Paid		$2,959,513	

External Investment Expenses *($ In Thousands)*
As of June 30, 2017

Expense	Fees Paid	Share of Assets
Portfolio Management		
Pension Funds	$84,517	0.72%
Insurance Funds	33,419	0.70%
Custody		
Pension Funds	1,084	0.01%
Insurance Funds	718	0.02%
Consultant		
Pension Funds	1,005	0.01%
Insurance Funds	409	0.01%
Total Pension Funds	$86,606	0.71%
Total Insurance Funds	$34,547	0.66%
Total Expenses	$121,153	0.70%

MARKET VALUES BY PLAN

($ In Thousands)

As of June 30, 2017

Pension

Category	KERS Non-Hazardous Market Value (MV)	KERS Non-Hazardous % of Total MV	KERS Hazardous Market Value (MV)	KERS Hazardous % of Total MV	CERS Non-Hazardous Market Value (MV)	CERS Non-Hazardous % of Total MV	CERS Hazardous Market Value (MV)	CERS Hazardous % of Total MV
Public Equity	$793,469	39.35%	$308,124	51.32%	$3,479,118	52.01%	$1,148,881	51.83%
US Equity	379,261	18.81%	150,166	25.01%	1,696,693	25.37%	560,114	25.27%
Non-US Equity	414,207	20.54%	157,958	26.31%	1,782,425	26.65%	588,767	26.56%
Fixed Income	454,995	22.56%	91,594	15.26%	1,042,869	15.59%	337,385	15.22%
Global	185,495	9.20%	30,934	5.15%	360,051	5.38%	118,129	5.33%
Credit	269,500	13.36%	60,660	10.10%	682,818	10.21%	219,256	9.89%
Real Return	164,794	8.17%	52,473	8.74%	560,657	8.38%	189,133	8.53%
Private Equity	263,191	13.05%	58,643	9.77%	617,305	9.23%	209,926	9.47%
Real Estate	86,238	4.28%	29,329	4.89%	313,689	4.69%	100,234	4.52%
Absolute Return	163,021	8.08%	42,629	7.10%	508,091	7.60%	161,004	7.26%
Cash	90,767	4.50%	17,592	2.93%	167,029	2.50%	70,107	3.16%
TOTAL PORTFOLIO	$2,016,475		$600,384		$6,688,758		$2,216,670	

Insurance

Public Equity	$405,856	52.79%	$254,053	52.50%	$1,125,764	52.37%	$618,268	52.54%
US Equity	200,209	26.04%	124,584	25.75%	552,164	25.69%	303,148	25.76%
Non-US Equity	205,647	26.75%	129,469	26.76%	573,600	26.68%	315,120	26.78%
Fixed Income	134,146	17.45%	78,189	16.16%	303,874	14.14%	167,776	14.26%
Global	40,132	5.22%	26,827	5.54%	116,683	5.43%	64,608	5.49%
Credit	94,014	12.23%	51,362	10.61%	187,191	8.71%	103,168	8.77%
Real Return	67,088	8.73%	39,051	8.07%	184,939	8.60%	93,995	7.99%
Private Equity	36,377	4.73%	40,289	8.33%	218,167	10.15%	122,542	10.41%
Real Estate	31,721	4.13%	23,909	4.94%	103,679	4.82%	56,848	4.83%
Absolute Return	56,698	7.37%	37,625	7.78%	160,927	7.49%	90,138	7.66%
Cash	36,919	4.80%	10,753	2.22%	52,194	2.43%	27,232	2.31%
TOTAL PORTFOLIO	$768,805		$483,869		$2,149,544		$1,176,799	

FAIR VALUES BY PLAN

($ In Thousands)
As of June 30, 2017

Pension

	SPRS		TOTAL SYSTEMS	
Category	Market Value (MV)	% of Total MV	Market Value (MV)	% of Total MV
Public Equity	$111,968	45.96%	$5,841,560	49.65%
US Equity	55,084	22.61%	2,841,319	24.15%
Non-US Equity	56,883	23.35%	3,000,241	25.50%
Fixed Income	52,228	21.44%	1,979,071	16.82%
Global	19,628	8.06%	714,237	6.07%
Credit	32,600	13.38%	1,264,834	10.75%
Real Return	20,008	8.21%	987,065	8.39%
Private Equity	21,284	8.74%	1,170,349	9.95%
Real Estate	11,851	4.86%	541,341	4.60%
Absolute Return	17,172	7.05%	891,917	7.58%
Cash	9,094	3.73%	354,589	3.01%
TOTAL PORTFOLIO	$243,605		$11,765,892	

Insurance

Public Equity	$93,207	52.54%	$2,497,147	52.50%
US Equity	45,667	25.74%	1,225,771	25.77%
Non-US Equity	47,540	26.80%	1,271,376	26.73%
Fixed Income	25,039	14.11%	709,025	14.91%
Global	9,702	5.47%	257,953	5.42%
Credit	15,337	8.64%	451,072	9.48%
Real Return	12,540	7.07%	397,614	8.36%
Private Equity	18,759	10.57%	436,133	9.17%
Real Estate	9,102	5.13%	225,258	4.74%
Absolute Return	14,107	7.95%	359,495	7.56%
Cash	4,661	2.63%	131,760	2.77%
TOTAL PORTFOLIO	$177,415		$4,756,432	

Industry-leading
External
Consultants

BNY MELLON

Letters from Investment Consultants

CONSULTANTS

Investment Consultants

R.V. Kuhns & Associates, Portland, Oregon
ORG Real Property, Cleveland, Ohio

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Regarding: 2016-17 Fiscal Year Investment Portfolio CAFR Letter

Economic Review

The fiscal year 2016-2017 began with the surprise vote by the citizens of the United Kingdom to exit the European Union. Risk-oriented markets initially fell following the news, but supportive comments from global central banks reversed falling markets to generate a positive quarter.

In the United States, the Federal Reserve held interest rates steady despite dissenting views by several Federal Reserve Open Market Committee ("FOMC") members. The flow of U.S. economic data during the first fiscal year quarter continued to indicate moderate expansion. GDP growth for the second quarter (calendar year) was revised up to 1.4% with higher expectation for the third quarter (calendar year). Similarly, ISM PMI data pointed to expansion of economic activity in both the manufacturing and non-manufacturing sectors. However, the Fed kept rates unchanged based on their preferred measure of inflation (core PCE), which was below the target of 2.0%, and evidence that slack remained in labor markets. Market participants discounted a rate hike leading into the U.S. presidential election, but the implied probability of an increase during the December meeting hovered above 50%.

In the U.K., the Bank of England ("BOE") announced an interest rate cut of 0.25% and an expansion of the Bank's quantitative easing program by 70 billion pounds as preemptive measures to counteract the perceived negative effects of the Brexit vote. For the rest of Europe, the response to Brexit was more measured with European Central Bank ("ECB") President Mario Draghi maintaining the existing policy. One of the more interesting developments came from the Bank of Japan, as it announced further measures to stimulate its economy and bring about inflation by targeting a 0.00% interest rate on the 10-year government bond.

The surprise U.S. election results during the fourth quarter (2QFY17) quickly led to a renewed optimism for risk assets as markets began to analyze the Trump team's policy goals – tax repatriation, lower corporate and income tax rates, a significant infrastructure spending bill, and deregulation in the financial sector. Market based measures of inflation expectations increased as well, with the 5-year breakeven spread rising from 1.61% on Election Day to 1.86% at calendar year-end 2016.

As expected, the FMOC to raise the benchmark federal funds rate by 25 basis points during its December meeting. The move was supported by a growth in non-farm payroll consistent with a firming of labor market conditions. The calendar year proved to be the best year for private sector wage growth since 2009, with the monthly compound annual rate averaging 2.9% according to the Bureau of Labor Statistics.

A number of noteworthy events also took place internationally during the quarter. OPEC announced a deal to cut oil production by 1.2 million barrels per day, sending the price of oil up nearly 10% the day of the announcement. This marked the first such production cut for the cartel since 2008. In Europe, the ECB announced a reduction in asset purchases from €80 billion per month to €60 billion, but extended the duration of the purchase program. Lastly, in India, Prime Minister Narendra Modi continued an effort to reduce corruption in the country by declaring that all 500 and 1,000 rupee notes would be invalid, forcing holders of these notes to exchange the old notes for a new series.

Global risk assets performed well over the first quarter of 2017 (3QFY17), driven largely by continued positive expectations for U.S. fiscal policy, as well as continued improvements in global economic growth and inflation more broadly. These fundamental improvements in economic conditions seem to have overshadowed an environment characterized by the rising tide of populism and a heightened level of global geopolitical risk.

In the U.S., markets received few details of the Trump administration's proposed pro-growth policies touted in the prior quarter, yet equity market valuations climbed higher. U.S. economic fundamentals remained strong during the quarter, with data releases such as retail sales, ISM PMI, Personal Consumption Expenditures, and Non-Farm Payroll growth all consistent with economic expansion. The continued improvement in U.S. economic fundamentals prompted the FOMC to raise policy rates at its March 2017 meeting. The Committee cited strengthened labor market conditions and progress toward its inflation objectives as factors driving their decision, and further guided the markets toward possibly two additional rate hikes in 2017. The potential for a more hawkish Federal Reserve did lead to interest rate volatility.

In Europe, Mario Draghi and the ECB turned more positive on Euro-zone economic fundamentals, citing a long list of recent positive data points including strong Euro-zone business surveys, unemployment rates at a 7-year low, and inflation measures consistent with the ECB's 2% target. Though monetary policy remained unchanged, President Draghi acknowledged the ECB would not likely authorize new supplements to the Quantitative Easing ("QE") program. The Bank of Japan similarly held monetary policy steady, but did not provide indication of a tightening on the horizon as the country's core CPI is barely positive at +0.1%. Oil markets had a challenging quarter as increased U.S. shale production meaningfully offset the production cuts announced by OPEC in November 2016.

Global risk assets continued to perform well during the second quarter of 2017 (4QFY17), with gains broadly supported by strengthening economic data related to global inflation, job growth, and corporate fundamentals. In contrast to prior run-ups in risk assets, the last quarter of the fiscal year was marked by high levels of sector and market factor dispersion. This created significant opportunities for skilled active managers and generated tailwinds for strategies with heavy growth and cyclical biases.

Gains across most risk assets occurred despite persistent political divisiveness in the U.S., heightened geopolitical risks (most notably in North Korea), and a range of other international issues. U.S. interest rates experienced heightened volatility during the quarter before abruptly rising in the last week of the fiscal year. Given expectations that central banks may remove accommodative policy measures over the near term, volatility of global rates may remain high, which could lead to headwinds for longer-duration strategies into the next fiscal year.

The table below displays key domestic economic indicators as of June 30, 2017.

Domestic Economic Indicators
As of June 30, 2017

	June 2017	June 2016	Yr/ Yr	10 Year	20 Year
Capacity Utilization	76.57%	75.83%	▲	76.06%	77.73%
Unemployment Rate	4.40%	4.90%	▼	7.00%	5.90%
PMI - Manufacturing	57.80	52.80	▲	52.20	52.30
Baltic Dry Index - Shipping	901	660	▲	2,287	2,289
Real GDP YoY	2.10%	1.20%	▲	1.40%	2.40%
Consumer Confidence (Conf. Bd.)	117.30	97.40	▲	75.14	93.08
Breakeven Inflation - 10 Year*	1.74%	1.44%	▲	1.99%	N/A
CPI YoY (Headline)**	1.60%	1.00%	▲	1.80%	2.10%
CPI YoY (Core)**	1.70%	2.20%	▼	1.80%	2.00%
PPI YoY	2.20%	-2.00%	▲	1.90%	2.00%
M2 YoY	5.50%	7.00%	▼	6.50%	6.40%
Federal Funds Rate (%)	1.06%	0.30%	▲	0.61%	2.23%
US Dollar Total Weighted Index	90.54	90.65	▼	79.3	86.89
WTI Crude Oil per Barrel	$46	$48	▼	$78	$57
Gold Spot per Oz***	$1,242	$1,322	▼	$1,238	$806

*Breakeven Inflation does not have 20 years of history; therefore, its 20-year average is shown as N/A.
**CPI figures are cyclically adjusted. ***10- and 20-year average Gold spot prices are adjusted for inflation.

Capital Markets Review

Global Equity

International equity markets outperformed U.S. markets for the fiscal year, with the MSCI EAFE and MSCI Emerging Markets Index (in U.S. dollar terms) returning 20.3% and 23.7%, respectively, versus 18.5% for the Russell 3000 Index.

U.S. markets experienced a slight decline due to uncertainty surrounding the November presidential election but rallied soon after as investors expected the new administration to enact fiscal stimulus, deregulation, and tax reform. Both growth and value stocks contributed to the strong U.S. equity market performance for the fiscal year, but growth outperformed value. The Russell 3000 Growth Index earned 20.7% and the Russell 3000 Value Index earned 16.2%. The pro-national sentiment following the presidential election led small cap stocks to outperform large cap stocks. The Russell 2000 Index posted a 24.6% return versus the Russell 1000 Index's fiscal year return of 18.0%. The S&P 500 Index, the most notable index representing the U.S. large cap market, earned 17.9%.

In a reversal from the prior fiscal year, international and emerging equity market returns were positive and outperformed the broad U.S. equity markets. Economic fundamentals improved across most non-U.S. regions, including the U.K., which faced headwinds associated with its intention to exit as a member of the European Union. Unlike U.S. equity, where growth outperformed value, the MSCI EAFE Value returned 25.0% for the fiscal year, compared with 15.7% for the MSCI EAFE Growth. However, similar to U.S. markets, small cap outperformed large cap as the EAFE Small Cap returned 23.2% for the fiscal year versus 20.0% for its large cap counterpart.

Global Fixed Income

Positive U.S. and global fixed income performance during the first, third, and final quarter of the fiscal year were not enough to offset large losses during the second fiscal year quarter (2016Q4). During the last calendar quarter of 2016, the Bloomberg U.S. Aggregate Bond Index posted a return of -3.0% while the Global Aggregate Bond Index returned -7.0%. The two indices returned -0.3% and -2.2%, respectively, for the fiscal year.

The FOMC moved to raise Federal Funds rate by 0.25% in each of the final three quarters of the fiscal year. Long duration government bonds, which are particularly sensitive to interest rate hikes, fell 11.5% during the second fiscal year quarter and returned -7.2% for the fiscal year.

While the broad fixed income markets had a challenging fiscal year, U.S. high yield performed well as U.S. economic strength continued to compress credit spreads. The Bloomberg U.S. Corporate High Yield Index returned 12.7% for the 1-year period ending June 30, 2017.

Emerging markets debt, both hard and local currency, fell following the U.S. election as the dollar strengthened but posted positive returns for the fiscal year. The JPMorgan Emerging Market Bond Index (hard currency) gained 5.5%, while the JPMorgan Global Bond Index-Emerging Market Global Diversified Index (local currency) returned 6.4% for the one-year period ending June 30, 2017.

Real Return

Most inflation-sensitive assets posted a negative return for the fiscal year with the exception of global infrastructure and global natural resources, which returned 11.7% and 15.3%, respectively. OPEC agreed to its first oil production cut in eight years toward the end of 2016, the only quarter in which the Bloomberg Commodity Index posted a positive return. The index returned -6.5% for the fiscal year.

The Alerian MLP Index started the fiscal year with three quarters of positive returns before losing 6.4% in last quarter of the fiscal year (2QCY17) as the price of oil declined 9.8%. The MLP index returned 0.4% for the fiscal year. Positive returns for the Bloomberg U.S. Treasury: US TIPS Index in the first and third quarters of the fiscal year were not enough to offset the -2.4% return during second fiscal year quarter. Year-over-year headline CPI declined from 2.4% to 1.9% in the last quarter of the fiscal year and 5- and 10-year Treasury break-evens ended the fiscal year with an inflation expectation of 1.7%, below the FMOC's target of 2.0%.

Real Estate

Core real estate continued its trend of providing consistently positive returns. The NCREIF-ODCE Index returned between 1.5% and 1.9% for each of the four quarters with a fiscal year return of 6.9%. Income and appreciation made up nearly equal shares of the returns in the first two quarters before income began to account for a majority of the returns during the last two quarters of the fiscal years. While valuations continued to climb throughout the fiscal year and remain at elevated levels, fundamentals like rent and vacancy rates continued to be strong.

Hedge Funds

Returns for various hedge fund strategies varied widely over the fiscal year but were generally positive. The HFRI Equity Hedge Index (long/short equity) gained 12.1% for the year, while HFRI merger arbitrage and equity market neutral indices posted returns of 7.1% and 2.9%, respectively. The HFRI Fund of Funds Diversified Index returned 5.2% for the one-year period ending June 30, 2017.

Credit strategies fared relatively well and long/short equity hedge fund managers were able to add value on both the long and short sides of their portfolios. Long/short equity experienced its best quarter in the third fiscal year quarter (2QCY17) since 2010. While most hedge fund strategies experienced gains, macro strategies faced a challenging environment as the HFRI Macro Index posted a -2.4% for the fiscal year.

The following table summarizes the returns earned by the major markets for the trailing one-year period ending June 30, 2017.

One-Year Trailing Asset Class Performance
As of June 30, 2017

Index	Description	Return
S&P 500	Large Cap U.S. Equity	17.90
R Mid Cap	Mid Cap U.S. Equity	16.48
R 2000	Small Cap U.S. Equity	24.60
MSCI EAFE (Gross)	Large Cap Intl Equity	20.83
MSCI EAFE SC (Gross)	Small Cap Intl Equity	23.64
MSCI Emg Mkts (Gross)	Emerging Mkts Equity	24.17
Bloomberg US Agg Bond	U.S. Invmt Grade Bonds	-0.31
Bloomberg US Trsy	U.S. Treasury Bonds	-2.32
Bloomberg US Trsy: US TIPS	U.S. TIPS	-0.63
Bloomberg US Corp: Hi Yld	U.S. High Yield Bonds	12.70
Wilshire US REIT	U.S. Real Estate Inv Trusts	-1.71
NCREIF ODCE (Gross)	U.S. Open End Core Real Estate	7.87
HFRI FOF Diversified	Absolute Return	5.23
BofA ML 3 Mo US T-Bill	U.S. Cash Equivalents	0.49

Asset Allocation Review

The Board reviewed the asset allocation for each of the pension and insurance plans during the fiscal year as directed by the Investment Committee and in collaboration with RVK. The Investment Committee analyzed the plans from a risk perspective, grouping investments into equity, credit, and diversifying risks. The asset allocation review further took into account the 2015 asset liability study RVK previously presented to KRS, as well as scenario analysis on asset liability results allowing for changes in salary growth, investment returns (over a 10-year period), and head count growth.

Based on the asset allocation analysis and recommendation from the Investment Committee, the Board approved allocation targets of 45% equity risk, 30% credit risk, and 25% diversifying risk for each of the System's plans. Target asset class allocations under each risk category vary by the funded status/financial stability of each plan. The asset liability study results indicated the pension plans (CERS Non Hazardous, CERS Hazardous, and KERS Hazardous) and all of the insurance plans exhibited a healthy and improving set of market value based funded ratios and payout ratios over the next 20 years. As a result, the Investment Committee may consider higher allocations to higher returning (and possibly more risky) and less-liquid sub-asset classes within each risk category. Conversely, results of the asset liability study indicated the KERS Non-Hazardous and the State Police pension plans are severely underfunded (having funded ratios of less than 40%). The results lead to maintaining greater liquidity and reduced volatility.

The new asset allocation targets align with the revised actuarial assumed rate of returns the Board approved at the end of the fiscal year. The pension plans (CERS Non Hazardous, CERS Hazardous, and KERS Hazardous) and all of the insurance plans have an actuarial assumed rate of 6.25%, a downward revision from the previous long-term target of 7.5%. While the KERS Non Hazardous and the State Police pension have an actuarial assumed rate of 5.25%, down from the prior assumed rate of 6.75%.

Pension Plan Review

The combined market values of the Kentucky Retirement System ("System") Pension Plans (collectively called hereafter, "the Pension Fund") increased from $10.7 billion on June 30, 2016, to $11.8 billion on June 30, 2017. The Pension Fund's investments returned 13.5%, net of fees , for the fiscal year, outperforming the target allocation benchmark by approximately 15 basis points. The Pension Fund's three- and five-year annualized net returns of 4.8% and 8.1%, respectively, underperformed the target allocation benchmark returns by approximately 55 basis points and 30 basis points, respectively. Since the inception of tracking the returns for the Pension Fund (April-1984), the Fund generated an annual return of 9.2%, exceeding the Fund's average actuarial assumed rate of return over that period.

The System's current Pension Fund investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The System also invests in real return strategies, real estate, absolute return strategies, and private equity. The Board aggressively negotiates fees on all investments. The table below shows the aggregate pension plan asset allocation as of June 30, 2017, relative to the individual target allocations.

All plan returns are net of fees as provided by the custodian bank, BNYMellon.

Kentucky Retirement Systems
Pension Plan
Asset Allocation vs. Target Allocation

	Market Value ($)	Allocation (%)	KERS Target (%)	KERS - H Target (%)	CERS Target (%)	CERS - H Target (%)	SPRS Target (%)
U.S. Equity	2,841,318,569	24.1	22.0	26.5	26.5	26.5	23.0
Non-U.S. Equity	3,000,241,205	25.5	20.0	26.5	26.5	26.5	23.0
Fixed Income	1,979,070,427	16.8	22.0	12.0	12.0	12.0	18.0
Real Return	987,065,409	8.4	8.0	8.0	8.0	8.0	8.0
Real Estate	534,041,148	4.5	5.0	5.0	5.0	5.0	5.0
Absolute Return	891,916,328	7.6	10.0	10.0	10.0	10.0	10.0
Private Equity	1,170,348,379	9.9	10.0	10.0	10.0	10.0	10.0
Cash Equivalent	355,162,424	3.0	3.0	2.0	2.0	2.0	3.0
Other	6,757,908	0.1	-	-	-	-	-
Total	**11,765,921,798**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Allocations shown may not sum up to 100% due to rounding. Other Composite consists of Perimeter Park and BNY fee accruals.

The current deviations of each plan are within an allowable and acceptable range. The allocations across plans differ based on plan-specific liquidity requirements.

Insurance Plan Review

The combined market value of the Kentucky Retirement System Insurance Plan assets (collectively called hereafter, "the Insurance Fund") increased from $4.2 billion on June 30, 2016, to $4.8 billion on June 30, 2017. The Insurance Fund's investments returned 13.7% (net of fees) for the fiscal year, approximating the return of the target allocation benchmark. The Insurance Fund's three-year annualized return of 5.0% underperformed the target allocation benchmark of 5.9%, and the five-year annualized return of 7.9% fell short of its benchmark's return of 8.7% by approximately 74 basis points. The Insurance Fund also currently targets an actuarial assumed rate of return is 6.25%. Since its inception of April-1987, the Insurance Fund has returned 7.4% annually, exceeding its new funding target.

The System's insurance plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The System also invests in real return strategies, real estate, absolute return strategies, and private equity. The Board aggressively negotiates fees on all investments.

The table below shows aggregate actual and target allocations as of June 30, 2017.

Kentucky Retirement Systems
Insurance Plan
Asset Allocation vs. Target Allocation

	Market Value ($)	Allocation (%)	Insurance Target (%)
U.S. Equity	1,225,771,491	25.8	26.5
Non-U.S. Equity	1,271,375,678	26.7	26.5
Fixed Income	709,024,663	14.9	12.0
Real Return	397,613,501	8.4	8.0
Real Estate	225,257,998	4.7	5.0
Absolute Return	359,494,838	7.6	10.0
Private Equity	436,133,044	9.2	10.0
Cash Equivalent	132,119,151	2.8	2.0
Total	**4,756,431,530**	**100.0**	**100.0**

Allocations shown may not sum up to 100% due to rounding and the exclusion of the Other Composite from this page. Other Composite includes BNY fee accruals.

The current deviations of the actual allocation from the target allocation are within an allowable and acceptable range. For less liquid asset classes (private equity), it may take years before the current allocation is in line with the target allocation.

Investment Portfolio Review – Pension Plan

Global Equities

The U.S. equity composite returned 18.0% for the year, underperforming the broad market benchmark by 52 basis points. Below-benchmark results were mostly attributed to underperformance from the Scientific Beta strategy and the Northern Trust Small Cap portfolio, which are positioned to partially protect the portfolio in the event of a correction in the U.S. equity markets. The all cap equity composite rebounded from the prior year, outperforming its benchmark, as active managers benefited from improving market conditions during the second half of the fiscal year. Staff and RVK initiated a U.S. Small Cap search at the beginning of the fiscal year to include an additional source of alpha in the in the core-satellite portfolio structure. The search was put on hold until after the asset allocation review was finalized which occurred towards the end of the fiscal year.

During the next fiscal year, additional analysis and review of potential restructuring will be conducted within the U.S. equity portfolio to reset the core/satellite structure, potentially revisit U.S. Small Cap, and account for the change in asset allocation targets. The focus will be on reallocating assets between the passive index portfolio and the high conviction, concentrated "satellite" investments, and controlling total fees.

The non-U.S. equity composite returned 20.2% for the fiscal year. The majority of active managers provided alpha during this period amid improving economic data, generally favorable corporate earnings, reduced political risk, and a weaker U.S. dollar. The current portfolio is positioned as a core-satellite portfolio with the broad international index fund serving as the core position and relatively concentrated active portfolios serving as alpha sources. The active managers have proven to be complementary since the portfolio was restructured during the prior fiscal year.

Global Fixed Income

The fixed income composite returned 6.5% as the majority of the fixed income mandates outperformed their respective benchmarks. Given the sustained low rate environment, securities lending mandates were considered as a potential addition to provide further diversifying sources of yield in the portfolio. As of fiscal year end, Staff and RVK were in the process of conducting a direct lending manager search, with funding of the mandate to come from reducing allocations to dedicated high yield strategies. Upon the funding of the approved slate of direct lending managers, further analysis on weightings of the portfolio will be completed given the new asset allocation targets.

The cash and equivalents held in the portfolio are not expected to add significant value to the portfolio. Instead, the goal is to hold cash close to the target allocation to meet outflow obligation while earning a return in line with 3-month Treasury Bills. For the fiscal year, the cash equivalents portfolio earned 1.0%.

Alternatives

The real return composite continuously harvests and reinvests proceeds according to a long-term pacing model. The composite includes diversified, inflation-sensitive strategies, such as agricultural, timberland, and energy-related investments, which are advised by a dedicated consultant. Some of the newer approved, less-liquid investments will take time to mature before benefiting the total plan. Given the new portfolio policy targets reduce the allocation to real return, the portfolio will be reevaluated to decrease allocations to liquid real return strategies. The real return composite generated a return of 7.5% compared to its benchmark return of 3.1% for the fiscal year. The portfolio's investments in dedicated timberland, mining, and power funds proved most beneficial.

The real estate composite continually evolves as new deals are sourced, funded, and harvested in a prudent manner. Like many of the real asset investments, the private real estate funds are more appropriately measured over longer periods as they mature. Over the fiscal year, the real estate portfolio returned 9.9%, outperforming its benchmark by 250 basis points. The area of focus for the next fiscal year will be increasing real estate exposure for the CERS Non Hazardous, CERS Hazardous, and KERS Hazardous pension plans (and all of the insurance plans) through existing funds and new mandates, in line with the increased real estate target allocation.

During the fiscal year, the absolute return portfolio gained 5.4%, rebounding from losses experienced in the prior fiscal year. The portfolio continued to wind down its fund-of-hedge funds exposure in favor of direct, less expensive strategies expected to mitigate market risk but produce positive returns over time.

The private equity portfolio continually evolves as new deals are sourced and funded in a prudent manner. Because the private equity funds are closed-end funds with terms of ten or more years, it is more appropriate to measure the returns over periods much longer than a 12-month period. The private equity portfolio generated a fiscal year rate of return of 12.8%.

Investment Portfolio Review – Insurance Plan

The Insurance Plan invests in a similar manner as the Pension Plan, with the exception of a few certain investments across the portfolio. Although the insurance plan returns slightly differ from the returns earned in the pension plan due to investment restrictions, the relative under/outperformance of the asset class composites were similar for the fiscal year.

Board Initiatives

As previously mentioned, the Board approved changes to the Plans' target asset allocation, which align with the reduced actuarial assumed rate of return approved at the end of the fiscal year. The Board will continue to monitor target allocations and will consider making additional asset allocation changes if significant changes to the Plans occur. Within each asset class, the Board continues to review opportunities to maximize risk-adjusted returns that positively contribute to the long-term returns of the Plans as well as manage the costs borne by the Plan.

Oversight

The KRS Board, Investment Committee, and staff regularly monitor the System's investment policies, goals, objectives, and performance of its assets with the assistance of RVK and their specialist consultants. These evaluations include reviews of the investment management firms and the custodial bank that serve the System.

Market values and investment performance returns referenced above are based upon financial statements prepared by Bank of New York Mellon (previously prepared by Northern Trust) in their capacity as the custodian bank. We rely on their data and have not independently audited those statements. However, to the best of our knowledge, we believed the custodian's financial statements are reliable.

Summary

The years following the great financial crisis in 2008 have been quite volatile across all markets with winners and losers switching places year after year. The unpredictability of market forces affecting investment strategies in different ways over the years has required investor patience and heightened stewardship by the Board as it executes its duty of care over the obligations owed to the System's employees and retirees. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the System to meet its long-term goals and objectives.

Sincerely,

Rebecca Gratsinger
Chief Executive Officer, Principal
RVK, Inc.

RVK

ORG Portfolio Management LLC ("ORG") serves as the Real Estate Investment Consultant for Kentucky Retirement Systems ("KRS"). It is ORG's responsibility to present potential investment opportunities to the Investment Staff and Board and to make recommendations related to KRS' real estate portfolio. It is ORG' s commitment to assist KRS in building a successful long term real estate investment portfolio for the KRS pension fund members.

U.S. Market Overview

U.S. real estate fundamentals have continued to remain positive, however transaction volumes continue to fall, down 13.0% from the same period a year ago, as the market bid-ask spread seems to be widening. ORG believes this may be symptomatic of a broad softening of the markets where many would-be sellers are not achieving their target pricing and therefore electing to not transact.

The debt markets have stabilized, financing is generally available, and a significant amount of capital has been raised for debt strategies. However, certain types of financings are difficult to obtain, which includes speculative development or highly leveraged development. In addition, the increasing regulatory environment will continue to deter banks from increasing their real estate lending capacity.

The U.S. commercial real estate market continued to see improvement in 2017. The capitalization rates as of June 30, 2017 for all sectors have declined from the prior year ending June 30, 2017.

Capitalization Rates	2nd Qtr. 2017	2nd Qtr. 2016	Basis Point Change
Total	4.47%	4.60%	-0.13
Apartments	4.35%	4.53%	-0.18
Retail	4.45%	4.61%	-0.16
Office	4.42%	4.48%	-0.06
Industrial/Warehouse	4.86%	5.03%	-0.17

Source: NCREIF – Current Value Weighted Capitalization Rates as of 6/30/2017.

Industrial Sector:

Investor demand for industrial properties has continued to grow, making industrial the only major real estate sector to post year-over-year sales growth in Q2 2017. More than $30.1 billion in industrial assets were purchased in the first half of 2017, 10.0% higher than in the first half of 2016.

With tighter market conditions across the U.S., rent should start to reach record levels and the cap rate compression should start to moderate. Many e-commerce players are focusing on timeliness of delivery which has generated an increased demand for smaller, in-fill, last touch fulfillment real estate. While fundamentals for big-box facilities (those larger than 200,000 square feet) remain strong, the last touch facilities have a smaller footprint, around 50,000 square feet, and are located in population dense locations. Today, e-commerce accounts for 22.5% of all big-box transactions, compared with 3PLs (third-party logistics), at 15.2%, consumer non-durables, at 12.1%, and traditional retail, at 10.4%. E-commerce was 16.1% of big-box activity three years ago. As e-commerce continues to grow, ORG believes there will continue to be an increased demand for build-to-suit developments.

During the second quarter, 70.0% of all space under-construction is being built speculatively. Oversupply is not yet a concern for markets like Los Angeles and Inland Empire, where demand continues to be strong and vacancy is under 5.0%

Apartment Sector:

Completions for the year ending in Q2 totaled approximately 259,400 units, while net absorption totaled approximately 220,300 units, which has led to a slight increase in vacancy rates and has kept rent growth to a minimum in most markets. Freddie Mac is predicting that originations will increase and set another record this year but will be lower than originally forecasted. Higher interest rates and market uncertainty has kept more investors on the sidelines during the first quarter but as interest rates stabilize and economic growth continues investors have become more active. Today, multifamily properties have benefited from the shift away from home ownership to rentals. This trend has been driven by many factors including demographic changes, relative housing affordability, and credit availability (difficulty saving up for the down payment). In addition, housing supply has trailed demand in recent years and is projected to remain below demand as the pace of household formation is projected to increase. The increase in rental households has been driven largely by the cost of homeownership versus the cost to rent today. Gateway markets such as San Francisco, New York and Los Angeles all have prohibitively high costs to own as urban supply constraints, foreign demand and a strong housing market have driven prices up. Lastly, the U.S. student loan balance has continued its tremendous growth as cost of education continues to outpace inflation. Monthly payments on student loans affect young professionals in their ability to save for the 20% required (typically) down payment to access the mortgage market.

Office Sector:

Office demand is slowing for both cyclical and secular reasons. Vacancy rates are down 10 basis points over the past 12 months, but they are rising in most major tech markets including San Francisco, San Jose, Seattle, Austin and Denver. Deliveries are expected to peak for the cycle in 2017 with a more than 50% increase over 2016 by year's end. Net absorption and constructed were 7.1 million square feet and 11.1 million square feet, respectively.

Completions totaled 22.8 million square feet in the first half of 2017 – the highest first half-year total since 2009 – and have exceeded net absorption in three of the past four quarters.

As of June 30, 2017, the NCREIF NPI's office component consisted of approximately 59% central business district ("CBD") office and 41% suburban office by market value. This varies within region as well, as the East region is almost 80% CBD office and only 20% suburban office by market value, but the West region is 36% CBD office and 64% suburban office by value. Within the traditional office space, ORG sees a growing trend of space being converted into creative office use as well as development of creative office. In addition, creative office attracts a different tenant mix, which the industry has called "TAMI" (Technology, Advertising, Media and Information) versus the traditional office tenants known as "FIRE" (Financial Services, Insurance and Real Estate).

Office transactions have historically been the largest component of total commercial real estate transaction volumes, however this is a decreasing trend. In the quarters leading up to the Global Financial Crisis in 2007, office properties saw a huge increase in transaction volume as office properties were large and more efficient for real estate investors looking to deploy capital. Many of these transactions were financed with CMBS, resulting in a dramatic slowdown in office liquidity immediately coming out of the crisis.

Lastly, ORG has noticed an increased number of foreign buyers, mostly Asian or Middle Eastern, acquire or develop trophy offices assets in gateway U.S. markets (predominantly Manhattan). This has tapered in recent quarters.

Retail Sector:

Retail real estate performance continues to be affected by rapid technological change. E-commerce now represents 10.5% of total U.S. retail sales, excluding auto and gas. There continues to be an increase of importance on well-located brick-and-mortar locations. Both Lowe's and Home Depot report in-store pickup rates for online orders exceeding 40%. JC Penney calculated that 40% of in-store pickups or returns for online orders resulted in an in-store purchase. Dick's Sporting Goods has announced that its increasing store count is in part, an effort to accelerate its e-commerce growth rate.

Grocers have been under intense price pressure for decades. Walmart, the largest seller of groceries in the country, has been continually reducing prices on groceries in an effort to drive traffic and gain scale. On top of this, warehouse clubs, dollar stores, drug stores and even gas stations are selling groceries as well. It is unknown whether Amazon, with its limited market share, will make this already extreme price pressure any worse.

A+ and A++ (high-end) malls represent just 13% of mall square footage, but account for roughly 40% of value. With average sales per square foot hovering around $1,000 or more, these properties dominate their trade areas. These assets are often the first choice of tenants who are looking to consolidate their footprint and tenants are also typically willing to pay more for the exposure to these highly trafficked locations.

ORG's View

Real estate markets in the U.S. have largely recovered from the 2008 financial crisis however we are seeing signs of lower returns. The real estate returns decreased over the 2016 levels based upon the National Council of Real Estate Investment Fiduciaries ("NCREIF") Property Index ("NPI") which had a 7.0% return for the period ending June 30, 2017 vs. the 10.6% return for the one-year period ending June 30, 2016.

ORG has noted that the one-year income return as of June 30, 2017 for core open end funds gross of fees as reported by the NCREIF Open-End Diversified Core Equity ("ODCE") Index is 4.4% vs. 4.6% for the one-year period ending June 30, 2016. This low income return will require substantial rental rate growth or appreciation growth in order for the funds to generate the projected 8-9% rate of return expected for core. The long-term Since Inception appreciation return for the ODCE is 1.4%. ORG is concerned that the strategies targeting gateway core markets will underperform expectations for core real estate. These core gateway markets (San Francisco, New York) are 'priced to perfection' with the income returns at an all-time low. ORG has also noted the impacts on e-commerce on the industrial and retail sectors and is keeping watch on the Amazon entry into the grocery area as noted above in the Retail Sector report.

In Europe, outside a few gateway cities (London and Paris), the real estate fundamentals and capital markets continue to recover slower than the U.S.

As an alternative, ORG continues to recommend that investors focus on investment strategies where going in income returns are higher in certain overlooked strategies. The supply/demand fundamentals are favorable for the office market, although there are a few markets with cause for concern (Houston, Austin, Seattle).

ORG recommendations remain largely unchanged from prior period. ORG recommends that a focus should be on sustainable and defensive cash flows by making investments with managers that target investments with existing cash flows or the creation of cash flows through value added investments. In addition, opportunities in real estate can be found in Western Europe, especially the United Kingdom in non-prime assets.

ORG also recommends strategies in opportunistic funds where investors can capitalize on the continual de-leveraging of real estate that continues as debt originated during 2005-2007 continues to mature over the next several years. These opportunities to recapitalize high quality properties that have often been neglected could generate attractive risk adjusted returns over the next several years.

Kentucky Retirement Systems Real Estate Investments

All data below reflects activity through June 30, 2017.

2008-2010 Investment Activity: In December 2008, Kentucky Retirement Systems made $40 million commitments each to the following funds:

1) Mesa West Real Estate Income Fund II, L.P.

2) PRIMA Mortgage Investment Trust.

3) Walton Street Real Estate Fund VI, L.P. In July 2013, an additional $48.0 million was committed to PRIMA Mortgage Investment Trust increasing the total KRS commitment to $82.0 million. In April 2015, $15.5 million was withdrawn from PRIMA bring the total commitment down to $66.5 million and in January 2016, the entire remaining position was liquidated and the funds returned to KRS.

• Mesa West Real Estate Income Fund II – In December 2015, Mesa West completed the fund's liquidation. Since inception, $33.4 million was funded and Mesa West returned $46.5 million for an overall net IRR of 13.0% with a 1.4x equity multiple.

• PRIMA Mortgage Investment Trust – In the 1st quarter 2016, KRS withdrew its entire remaining investment in PRIMA of $76.1 million. Since inception, $82 million was funded and PRIMA returned $112.3 million for an overall net IRR of 8.6% with a 1.4x equity multiple.

• Walton Street Real Estate Fund VI – For the fiscal year ending June 30, 2017, Walton Street VI made no capital calls and returned $3.0 million in capital and gain distributions. Since inception, $35.4 million has been funded with $4.6 million remaining capital to be called.

2011 Investment Activity: Kentucky Retirement Systems made the following commitments:

1) $100 million to H/2 Credit Partners, L.P. in April with an additional $3 million commitment in October 2012. In 2013, $3.3 million was withdrawn from the fund for a total commitment of $99.7 million. In the 1st quarter 2016, KRS withdrew $28.5 million, which reduced the commitment to $71.2 million.

2) $101.9 million to Harrison Street Core Property Fund, L.P. in December with an additional $3.8 million commitment in October 2012 and $17.9 million commitment in June 2013 for a total commitment of $123.6 million. In the 1st quarter 2016, KRS withdrew $46.7 million which reduced the commitment to $76.8 million.

• H/2 Credit Partners – For the fiscal year ending June 30, 2017, H/2 Credit Partners made no distributions. This investment is fully funded.

• Harrison Street Core Property Fund – For the fiscal year ending June 30, 2017, Harrison Street returned $5.8 million of income distributions and of that $1.4 million was reinvested for the Insurance Fund. This investment is fully funded.

2012 Investment Activity: Kentucky Retirement Systems made the following commitments:

1) $52.5 million to Walton Street Real Estate Fund VII, L.P. in August with an additional $2.4 million commitment in October for a total commitment of $54.9 million.

2) $54.9 million to Greenfield Acquisition Partners VI, L.P. in December.

3) $83 million to Mesa West Core Lending Fund, L.P. in December 2012.

• Walton Street Real Estate Fund VII – For the fiscal year ending June 30, 2017, Walton VII made no capital calls and returned $11.9 million of capital, income and gain distributions. Since inception, $23.8 million has been funded with $31.0 million remaining capital to be called.

• Greenfield Acquisition Partners VI – For the fiscal year ending June 30, 2017, Greenfield VI made no capital calls and returned $15.4 million of capital, income and gain distributions. Since inception, $52.7 million has been funded with $2.2 million remaining capital to be called.

• Mesa West Core Lending Fund – For the fiscal year ending June 30, 2017, Mesa West Core returned $6.1 million of income distributions of which $2.1 million was reinvested into the Insurance Fund.

2013 Investment Activity: Kentucky Retirement Systems made the following commitments:

1) $30 million to Rubenstein Properties II, L.P. in July.

2) $30 million to H/2 Core Debt Fund, L.P. in August.

3) $70 million to Prologis Targeted U.S. Logistics Holdings, L.P. in October.

4) $95 million to Stockbridge Smart Markets, L.P. in December 2013.

• Rubenstein Properties II – For the fiscal year ending June 30, 2017, Rubenstein II made one capital call totaling $3.5 million. Since inception, $24.5 million has been funded with $5.5 million remaining capital to be called.

• H/2 Core Debt Fund – For the fiscal year ending June 30, 2017, H/2 Core returned $0.5 million of income distributions. This investment is fully funded. In the 4th quarter 2016, KRS withdrew $26.3 million and the investment was liquidated.

• Prologis Targeted U.S. Logistics Holdings – For the fiscal year ending June 30, 2017, Prologis distributed $3.3 million of which $0.4 was reinvested into the Insurance Fund. This investment is fully funded.

• Stockbridge Smart Markets – For the fiscal year ending June 30, 2017, Stockbridge Smart Markets distributed $4.4 million of which $1.3 million was reinvested into the Insurance Fund. This investment is fully funded.

2014 Investment Activity: Kentucky Retirement Systems made the following commitments:

1) $40 million to Lubert-Adler Real Estate Fund VII, L.P. in March with an additional commitment of $10 million in November.

2) $30 million to Divco West IV, L.P. in April.

3) $40 million to Greenfield Acquisition Partners VII, L.P. in July.

• Lubert-Adler Real Estate Fund VII – For the fiscal year ending June 30, 2017, Lubert-Adler VII made three capital calls totaling $17.5 million and returned $0.03 million of fee rebate distributions. Since inception, $47.5 million has been funded with $2.5 million remaining to be called.

• Divco West IV – For the fiscal year ending June 30, 2017, Divco West IV made no capital calls and returned $25.7 million in capital, income and gain distributions. Since inception, $26.7 million has been funded with $3.3 million remaining to be called.

• Greenfield Acquisition Partners VII – For the fiscal year ending June 30, 2017, Greenfield VII made two capital calls totaling $6.5 million and had no distributions. Since inception, $26.4 million has been funded with $13.6 million remaining capital to be called.

2015 Investment Activity: Kentucky Retirement Systems made no additional commitments to the Real Estate Portfolio in 2015.

Withdrawal requests were sent to managers for the following investments: PRIMA – complete withdrawal of $76.1 million; Harrison Street Core Property Fund – withdrawal of $47.6 million; and H/2 Credit Partners - $28.5 million. Withdrawal requests were honored by the managers as noted in the individual fund write-up noted by year above.

2016 Investment Activity: Kentucky Retirement Systems made the following commitment:

1) €50 million (approximately $55.7 million) to Patron Capital, LP V in June.

2) $50 million to Mesa West Real Estate Income Fund IV, L.P in June.

• Patron Capital V – For the fiscal year ending June 30, 2017, Patron V made two capital calls totaling $7.6 million and had no distributions. Since inception, $7.1 million has been funded with $57.2 million remaining capital to be called.

• Mesa West Real Estate Income IV - For the fiscal year ending June 30, 2017, Mesa West IV made one capital call totaling $6.9 million and had no distributions. Since inception, $6.9 million has been funded with $43.1 million remaining capital to be called.

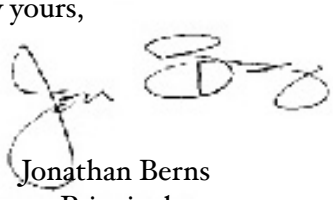
2017 Investment Activity: Through June 30, 2017, Kentucky Retirement Systems made the following commitments:

1) $100 million to Fundamental Partners III, L.P. in March.

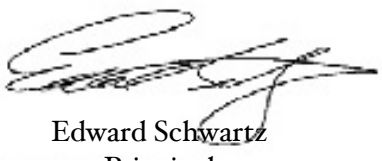
• Fundamental Partners III - For the fiscal year ending June 30, 2017, Fundamental III made two capital calls totaling $42.0 million and returned $9.5 million in capital, income and gain distributions. Since inception, $34.7 million has been funded with $65.3 million remaining capital to be called.

Please feel free to contact us regarding any of the information above.

Very truly yours,



Jonathan Berns
Principal



Edward Schwartz
Principal

ACTUARIAL
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Certification of Actuarial Results

Re: Certification for the Actuarial Results as of June 30, 2017

Dear Board of Trustees:

Actuarial valuations are prepared annually as of June 30, for the Kentucky Employees Retirement System (KERS), the County Employees Retirement System (CERS), and the State Police Retirement System (SPRS). These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS) and document the calculated employer contribution rates as well as the changes in the financial condition since the prior actuarial valuation.

Under state statute, the Board of Trustees must approve the employer contribution rates determined by each actuarial valuation. The contribution rates are determined actuarially based upon the membership, plan assets, assumptions, and funding policies adopted by the KRS Board. The June 30, 2016 actuarial valuation will be used by the Board of Trustees to certify the KERS and SPRS employer contribution rates for the biennial period beginning July 1, 2018 and ending June 30, 2020. The Board of Trustees uses this actuarial valuation to certify the employer contribution rates for CERS for the fiscal year beginning July 1, 2018 and ending June 30, 2019.

FINANCING OBJECTIVES AND FUNDING POLICY

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree health insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

The contribution rate for each fund consists of a normal cost rate (which pays the current year's cost) and an amortization rate to finance the existing unfunded actuarial accrued liability (UAAL). In accordance with state statute, the amortization period is a closed 30-year funding period beginning with the June 30, 2013 actuarial valuation, which results in the use of a closed 26-year funding period for use in the calculation of the contribution rates for the June 30, 2017 actuarial valuation. Absent changes in benefits, assumptions, or material liability or investment gains or losses, the total contribution rate for the funds are expected to remain stable, as a percentage of payroll, in future years.
If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board may adjust the calculated rates before certifying them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

PROGRESS TOWARD REALIZATION OF FINANCING OBJECTIVES

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. In the absence of benefit improvements, assumption changes, or actuarial losses, it should increase over time, until it reaches at least 100%. As of June 30, 2017, the funded ratio for the pension and health insurance funds are as follows:

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Funding Level				
	2017		2016	
System	Pension Fund	Insurance Fund	Pension Fund	Insurance Fund
KERS Non-Hazardous	13.6%	30.7%	16.0%	30.3%
KERS Hazardous	54.1%	117.6%	59.7%	125.3%
CERS Non-Hazardous	52.8%	66.4%	59.0%	69.6%
CERS Hazardous	48.1%	66.9%	57.7%	72.9%
SPRS	27.0%	65.2%	30.3%	67.2%

ASSUMPTIONS AND METHODS

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the actuarial valuation. At any time, the Board may adopt updated assumptions for use in an actuarial valuation. Since the prior actuarial valuation, the Board of Trustees adopted the following assumption changes:

» Decrease the price inflation assumption to 2.30% (all Systems Pension and Health Insurance);

» Decrease the assumed rate of return to 5.25% for the pension funds for the KERS Non-Hazardous and SPRS Retirement Systems and to 6.25% for the KERS Hazardous and CERS (Non-Hazardous and Hazardous) pension funds;

» Decrease the assumed rate of return to 6.25% for the health insurance funds for all systems (KERS, CERS, and SPRS);

» Decrease the payroll growth assumption to 0.00% for the KERS and SPRS Systems and to 2.00% for the CERS System.

All the assumptions and methods adopted by the Board Trustees satisfy the requirements in the Actuarial Standards of Practice that are applicable for actuarial valuations of public retirement systems. The Board plans to have the next experience study conducted using the plan's experience for the five-year period ending June 30, 2018. The actuarial assumptions that result from that experience study will be first used to prepare the June 30, 2019 actuarial valuation.

It is our opinion that the actuarial assumptions used to perform this valuation are internally consistent and reasonably reflect the anticipated future experience of the System. The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

The benefit structure is outlined in this section of the annual report. GRS prepared the following schedules in the actuarial section: Summary of Actuarial Valuation Results, Recommended Employer Contribution

Rates, Summary of Actuarial Unfunded Liabilities, and the Solvency Test. GRS also prepared the, Schedule of Retirants Added to and Removed from Rolls, and the Schedule of Funding Progress, Summary of the Assumptions and Methods, and the Summary of the Benefit Provisions.

In addition, GRS prepared the following schedules in the financial section in accordance with GASB Statement No. 67: Net Pension Liability Schedule, Discount Rate Sensitivity Analysis, Schedule of Changes in the Employers' Net Pension Liability, Schedule of Employers' Net Pension Liability, and the Schedule of Employers' Contributions.

DATA

Member data for retired, active and inactive members was supplied as of July 30, 2017, by the KRS staff. The staff also supplied asset information as of June 30, 2017. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by the Systems.

CERTIFICATION

We certify that the information presented herein is accurate and fairly portrays the actuarial position of the Retirement Systems as of June 30, 2017. All of our work conforms with generally accepted actuarial principles and practices, and in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All are experienced in performing valuations for large public retirement systems.
Sincerely,

Gabriel, Roeder, Smith & Co.

Joseph P. Newton, FSA, MAAA, EA
Senior Consultant

Janie Shaw, ASA, MAAA
Consultant

Daniel J. White, FSA, MAAA, EA
Senior Consultant

Summary of **Actuarial Assumptions**

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study. In general, the assumptions and methods used in the June 30, 2017 valuation are based on the most recent actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014. The investment return, price inflation, and payroll growth assumption were adopted by the Board in May and July 2017, for use with the June 30, 2017, valuation in order to reflect future economic expectations.

1. Actuarial Cost Method: The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service is called the actuarial accrued liability. The unfunded actuarial accrued liability represents the difference between the actuarial accrued liability and the actuarial value of assets as of the valuation date. Relative to the Pension Fund and the Insurance Fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial accrued liability (UAAL).

2. UAL Amortization Method: Effective for the June 30, 2017 valuation, the amortization of any unfunded actuarial accrued liability for KERS and SPRS is established using a level dollar amortization method. The previous valuation used a level percent of pay amortization method and a 4.00% payroll growth assumption. The amortization of any unfunded actuarial accrued liability for CERS is established using a level percent of pay amortization method and a 2.00% payroll growth assumption. The previous valuation used a 4.00% payroll growth assumption. The amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013, actuarial valuation. The amortization period will decrease by one each year in the future.

3. Asset Valuation Method: The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value.

4. Retiree Insurance Funding Policy: Effective for the June 30, 2017, valuation, the amortization of any unfunded actuarial accrued liability for the KERS and SPRS Insurance Systems is established using a level dollar amortization method. The previous valuation used a level percent of pay amortization method and a 4.00% payroll growth assumption. The amortization of any unfunded actuarial accrued liability for the CERS Insurance System is established using a level percent of pay amortization method and a 2.00% payroll growth assumption. The previous valuation used a 4.00% payroll growth assumption. The amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013, actuarial valuation. The amortization period will decrease by one each year in the future.

5. Investment Return Assumption: The future investment earnings of plan assets are assumed to accumulate at a rate of 6.25% per annum for CERS Non-Hazardous, CERS Hazardous, KERS Hazardous, and all Insurance Systems. This rate consists

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study.

of a 2.30% price inflation component and a 3.95% real rate of return component. The previous valuation used an assumed rate of return of 7.50%. The assumed rate of return for KERS Non-Hazardous and State Police has been reduced from 6.75% to 5.25%, effective for the June 30, 2017 valuation. This rate consists of a 2.30% inflationary component and a 2.95% real rate of return component.

6. Salary Increase Assumptions: Active member salaries are assumed to increase at the rates provided in Table 1. The rates include a 3.05% price inflation and productivity component, and an additional increase due to promotion based upon plan experience. The assumptions for additional increases due to promotion were adopted in 2014. The assumption for price inflation and productivity was reduced from 4.00% to 3.05% in 2017.

Table 1. Salary Increase Assumptions

Service	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
0-1	15.55%	19.55%	11.55%	18.55%	15.55%
1-2	7.55%	7.55%	8.05%	9.05%	10.55%
2-3	5.05%	5.55%	4.55%	5.05%	8.55%
3-4	4.55%	5.05%	4.55%	4.30%	7.55%
4-5	4.55%	4.55%	4.05%	4.05%	6.55%
5-6	4.55%	4.05%	4.05%	3.55%	5.55%
6-7	4.05%	3.55%	3.80%	3.05%	5.05%
7-8	4.05%	3.55%	3.80%	3.05%	5.05%
8-9	4.05%	3.55%	3.55%	3.05%	4.05%
9-10	3.55%	3.55%	3.55%	3.05%	3.55%
10+	3.55%	3.55%	3.30%	3.05%	3.05%

7. Medical Inflation Rate Assumption: The costs for retiree medical premiums are assumed to increase according to the assumptions provided in Table 2. This assumption was adopted in 2017.

Table 2: Medical Inflation Rate Assumption[1]

January 1	Non-Medicare Plans	Medicare Plans	Dollar Contribution2	January 1	Non-Medicare Plans	Medicare Plans	Dollar Contribution[2]
2019	7.25%	5.10%	1.50%	2026	5.50%	4.40%	1.50%
2020	7.00%	5.00%	1.50%	2027	5.25%	4.30%	1.50%
2021	6.75%	4.90%	1.50%	2028	5.00%	4.20%	1.50%
2022	6.50%	4.80%	1.50%	2029	4.75%	4.10%	1.50%
2023	6.25%	4.70%	1.50%	2030	4.50%	4.05%	1.50%
2024	6.00%	4.60%	1.50%	2031	4.25%	4.05%	1.50%
2025	5.75%	4.50%	1.50%	2032+	4.05%	4.05%	1.50%

1 All increases are assumed to occur on January 1. The 2018 premiums were known at of the time of the June 30, 2017 valuation and were incorporated into the liability measurement using a trend of 1.232% for Non-Medicare plans and a trend of 0.00% for Medicare plans for 2017.
2 Applies to members participating on or after July 1, 2003

8. Payroll Growth Assumption: Active member payroll is assumed to increase at a rate of 2.30% per annum. This assumption was adopted in 2017.

9. Retiree Cost of Living Adjustments (COLA): SB2 only allows the COLAs to be awarded on a biennial basis if the State Legislature so authorizes and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

10. Retirement Rate Assumptions: The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 3. These assumptions were adopted in 2014.

Table 3. Retirement Rate Assumptions

	Non-Hazardous				Hazardous					
Age	KERS1	KERS2	CERS3	Service	KERS4	KERS5	CERS6	CERS7	SPRS8	SPRS9
55	8.0%		5.0%	20	40.0%		22.5%		22.0%	
56	8.0%		6.0%	21	40.0%		22.5%		22.0%	
57	8.0%		7.0%	22	40.0%		22.5%		22.0%	
58	8.0%		7.0%	23	40.0%		22.5%		28.0%	
59	8.0%		8.0%	24	40.0%		30.0%		28.0%	
60	10.0%	10.0%	9.0%	25	47.0%	40.0%	33.0%	22.5%	28.0%	22.0%
61	20.0%	20.0%	15.0%	26	47.0%	40.0%	33.0%	22.5%	28.0%	22.0%
62	20.0%	20.0%	18.0%	27	47.0%	40.0%	36.0%	22.5%	28.0%	22.0%
63	20.0%	20.0%	18.0%	28	47.0%	40.0%	39.0%	22.5%	44.0%	28.0%
64	20.0%	20.0%	18.0%	29	47.0%	40.0%	55.0%	30.0%	44.0%	28.0%
65	20.0%	25.0%	18.0%	30	47.0%	47.0%	33.0%	33.0%	44.0%	28.0%
66	20.0%	25.0%	18.0%	31	47.0%	47.0%	33.0%	33.0%	58.0%	28.0%
67	20.0%	25.0%	18.0%	32	50.0%	47.0%	50.0%	36.0%	58.0%	28.0%
68	20.0%	25.0%	18.0%	33	50.0%	47.0%	40.0%	39.0%	58.0%	44.0%
69	20.0%	25.0%	18.0%	34	50.0%	47.0%	40.0%	55.0%	58.0%	44.0%
70	20.0%	25.0%	18.0%	35	60.0%	47.0%	40.0%	33.0%	58.0%	44.0%
71	20.0%	25.0%	18.0%	36	60.0%	47.0%	40.0%	33.0%	58.0%	58.0%
72	20.0%	25.0%	18.0%	37	60.0%	50.0%	40.0%	50.0%	58.0%	58.0%
73	20.0%	25.0%	18.0%	38	60.0%	50.0%	40.0%	40.0%	58.0%	58.0%
74	20.0%	25.0%	18.0%	39	60.0%	50.0%	40.0%	40.0%	58.0%	58.0%
75+	100.0%	100.0%	100.0%	40+	60.0%	60.0%	40.0%	40.0%	58.0%	58.0%

1 For members participating before 9/1/2008. If service is at least 27 years, the rate is 35%.
2 For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 35%.
3 If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.
4 For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.
5 For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.
6 For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.
7 For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.
8 For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 55.
9 For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.

11. Mortality Assumptions: The mortality for active members is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%). The mortality table for healthy retired members and beneficiaries is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (female mortality rates are set back one year). The mortality table for disabled members is the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (male mortality rates are set back four years). At the time of the last experience study, performed as of June 30, 2013, this mortality assumption provided 37% and 19% margin for future improvement for males and females, respectively. This will be reviewed again when the next experience investigation is conducted.

Table 4. Sample Annual Rates of Mortality

	Active Member Mortality		Retired Member Mortality*		Disabled Member Mortality*	
Age	Males	Females	Males	Females	Males	Females
Under 20	0.02%	0.01%	0.03%	0.02%	-	-
22	0.02%	0.01%	0.04%	0.02%	-	-
32	0.03%	0.01%	0.05%	0.03%	-	-
42	0.06%	0.02%	0.12%	0.07%	2.17%	0.72%
52	0.13%	0.06%	0.26%	0.18%	2.54%	1.29%
62	0.39%	0.17%	0.78%	0.50%	3.50%	2.06%
72	1.12%	0.53%	2.24%	1.59%	4.68%	3.66%

** For members retiring on or after July 1, 2006.*

12. Withdrawal Rates: The probability, or likelihood, of active members terminating employment prior to retirement is provided in Table 5. These assumptions were adopted in 2014.

Table 5. Selected Rates of Termination Prior to Retirement

KERS Non-Hazardous		KERS Hazardous		CERS Non-Hazardous		CERS Hazardous		SPRS	
Years of Service			Years of Service				Years of Service		
0	22.50%	25.00%	0	28.00%	20.50%		0	20.00%	
1	15.50%	10.50%	1	16.00%	13.00%		1	7.00%	
2	12.50%	7.50%	2	12.00%	10.50%		2-8	3.00%	
3	10.50%	6.50%	3	10.00%	9.00%		9+	2.50%	
4	9.00%	5.50%	4	8.00%	8.00%				
5	6.50%	4.50%	5	6.00%	7.00%				
6	5.50%	3.00%	6	5.00%	7.00%				
7	5.00%	3.00%	7	5.00%	6.00%				
8	4.50%	3.00%	8-13	4.00%	6.00%				
9	4.50%	2.50%	14+	3.00%	6.00%				
10	4.00%	2.50%							
11-12	4.00%	2.00%							
13-14	3.50%	2.00%							
15+	3.00%	2.00%							

13. Rates of Disablement: KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. These assumptions were adopted in 2014. .

This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels.

Table 6: Rates of Disablement

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Nearest Age	Probability	Probability	Probability	Probability	Probability
20	0.02%	0.03%	0.02%	0.05%	0.05%
30	0.03%	0.05%	0.03%	0.09%	0.09%
40	0.07%	0.10%	0.07%	0.20%	0.20%
50	0.19%	0.28%	0.19%	0.56%	0.56%
60	0.49%	0.73%	0.49%	1.46%	1.46%

Summary of Actuarial Valuation Results *(As of June 30,2017)*

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2018-2019)					
Pension Fund Contribution	71.03%	34.39%	21.84%	35.69%	119.05%
Insurance Fund Contribution	12.40%	2.46%	6.21%	12.17%	27.23%
Recommended Employer Contribution	83.43%	36.85%	28.05%	47.86%	146.28%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	$15,591,641,083	$1,121,419,836	$12,803,509,449	$4,649,046,764	$967,144,667
Actuarial Value of Assets	$2,123,623,157	$607,158,871	$6,764,873,113	$2,238,320,330	$261,320,225
Unfunded Liability on Actuarial Value of Assets	$13,468,017,926	$514,260,965	$6,038,636,336	$2,410,726,434	$705,824,442
Funding Ratio on Actuarial Value of Assets	13.62%	54.14%	52.84%	48.15%	27.02%
Market Value of Assets	$2,056,869,899	$601,528,922	$6,687,237,095	$2,217,996,136	$255,736,583
Unfunded Liability on Market Value of Assets	$13,534,771,184	$519,890,914	$6,116,272,354	$2,431,050,628	$711,408,084
Funding Ratio on Market Value of Assets	13.19%	53.64%	52.23%	47.71%	26.44%
Insurance Fund					
Actuarial Liability	$2,683,496,055	$419,439,652	$3,355,151,286	$1,788,432,768	$276,641,361
Actuarial Value of Assets	$823,917,560	$493,458,367	$2,227,401,268	$1,196,779,877	$180,463,820
Unfunded Liability on Actuarial Value of Assets	$1,859,578,495	($74,018,715)	$1,127,750,018	$591,652,891	$96,177,541
Funding Ratio on Actuarial Value of Assets	30.70%	117.65%	66.39%	66.92%	65.23%
Market Value of Assets	$817,369,841	$488,838,463	$2,212,535,662	$1,189,001,387	$178,838,260
Unfunded Liability on Market Value of Assets	$1,866,126,214	($69,398,811)	$1,142,615,624	$599,431,381	$97,803,101
Funding Ratio on Market Value of Assets	30.46%	116.55%	65.94%	66.48%	64.65%
Member Data *(See Footnotes 1 and 2)*					
Number of Active Members	37,234	4,047	82,198	9,495	903
Total Annual Payroll (Active Members)1	$1,531,534,820	$162,418,070	$2,452,407,113	$541,632,946	$48,598,296
Average Annual Pay (Active Members)	$41,133	$40,133	$29,835	$57,044	$53,819
Number of Retired Members & Beneficiaries	44,916	4,093	59,013	8,998	1,536
Average Annual Retirement Allowance	$20,512	$14,454	$11,311	$25,192	$37,274
Number of Vested Inactive Members	10,794	505	14,563	795	86
Number of Inactive Members Due a Refund	38,864	4,793	70,468	2,403	394

1 Member data in actuarial section will differ from reported data in other CAFR sections. For this section, the data is reported by account instead of by person (ex: a member could have vested service in KERS, but is currently active in a CERS plan and is reported in two membership categories).
2 Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members recorded for each month of the fiscal year ending June 30, 2017.

KERS Funds

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the tables below are the full funding rates presented by the actuary in the 2008 through 2017 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008, the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation and requires full funding starting in Fiscal Year 2015.

Recommended Employer Contribution Rates *(As of June 30,2017)*

KERS Non-Hazardous Employers

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/08	2009-2010	3.97%	14.99%	18.96%	20.49%	39.45%
6/30/09	2010-2011	4.26%	17.51%	21.77%	16.81%	38.58%
6/30/10	2011-2012	4.23%	20.07%	24.30%	16.41%	40.71%
6/30/11	2012-2013	4.38%	23.65%	28.03%	16.52%	44.55%
6/30/12	2013-2014	4.26%	28.31%	32.57%	12.71%	45.28%
6/30/13	2014-2015	4.13%	26.71%	30.84%	7.93%	38.77%
6/30/14	2015-2016	4.10%	29.47%	33.57%	7.74%	41.31%
6/30/15	2016-2017	3.60%	35.33%	38.93%	8.35%	47.28%
6/30/16	2017-2018	4.93%	37.05%	41.98%	8.41%	50.39%
6/30/17	2018-2019	8.17%	62.86%	71.03%	12.40%	83.43%

KERS Hazardous Employers

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/08	2009-2010	4.46%	4.16%	11.98%	23.56%	35.54%
6/30/09	2010-2011	7.94%	6.17%	14.11%	20.26%	34.37%
6/30/10	2011-2012	7.19%	6.92%	14.11%	19.73%	33.84%
6/30/11	2012-2013	7.47%	8.69%	16.16%	19.73%	35.89%
6/30/12	2013-2014	6.09%	10.91%	17.00%	11.84%	28.84%
6/30/13	2014-2015	5.79%	10.58%	16.37%	9.97%	26.34%
6/30/14	2015-2016	5.69%	11.40%	17.09%	7.12%	24.21%
6/30/15	2016-2017	6.93%	14.15%	21.08%	2.74%	23.82%
6/30/16	2017-2018	6.44%	14.04%	20.48%	1.34%	21.82%
6/30/17	2018-2019	9.67%	24.72%	34.39%	2.46%	36.85%

CERS Funds

The Insurance Fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the tables below are the full funding rates presented by the actuary in the 2008 through 2017 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date.

Recommended Employer Contribution Rates *(As of June 30,2017)*

CERS Non-Hazardous Employers

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/08	2009-2010	4.46%	4.16%	8.62%	12.29%	20.91%
6/30/09	2010-2011	4.60%	5.43%	10.03%	9.78%	19.81%
6/30/10	2011-2012	4.72%	6.98%	11.70%	9.59%	21.29%
6/30/11	2012-2013	4.68%	7.94%	12.62%	8.59%	21.21%
6/30/12	2013-2014	4.68%	9.06%	13.74%	5.84%	19.58%
6/30/13	2014-2015	4.35%	8.40%	12.75%	5.35%	18.10%
6/30/14	2015-2016	4.23%	8.19%	12.42%	4.88%	17.30%
6/30/15	2016-2017	3.80%	10.15%	13.95%	4.93%	18.88%
6/30/16	2017-2018	3.70%	10.78%	14.48%	4.70%	19.18%
6/30/17	2018-2019	5.85%	15.99%	21.84%	6.21%	28.05%

CERS Hazardous Employers

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/08	2009-2010	8.23%	7.88%	16.11%	27.25%	43.36%
6/30/09	2010-2011	7.56%	9.23%	16.79%	23.27%	40.06%
6/30/10	2011-2012	7.31%	10.60%	17.91%	23.74%	41.65%
6/30/11	2012-2013	7.40%	12.70%	20.10%	21.84%	41.94%
6/30/12	2013-2014	6.44%	15.33%	21.77%	16.02%	37.79%
6/30/13	2014-2015	6.35%	14.38%	20.73%	14.97%	35.70%
6/30/14	2015-2016	6.21%	14.05%	20.26%	13.42%	33.68%
6/30/15	2016-2017	4.52%	17.19%	21.71%	9.79%	31.50%
6/30/16	2017-2018	4.40%	17.80%	22.20%	9.35%	31.55%
6/30/17	2018-2019	6.78%	28.91%	35.69%	12.17%	47.86%

SPRS Funds

The contribution rates for SPRS shown in the tables below are the full funding rates presented by the actuary in the 2008 through 2017 annual valuations. However, the actual employer contribution rates have been less than those shown below. As a result of HB 1 passed in 2008, the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation and requires full funding starting in Fiscal Year 2015.

SPRS Employers

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/08	2009-2010	9.83%	25.40%	35.23%	56.89%	92.12%
6/30/09	2010-2011	8.12%	27.62%	35.74%	49.89%	85.63%
6/30/10	2011-2012	7.75%	32.05%	39.80%	54.83%	94.63%
6/30/11	2012-2013	8.12%	39.36%	47.48%	55.93%	103.41%
6/30/12	2013-2014	8.14%	45.21%	53.35%	43.17%	96.52%
6/30/13	2014-2015	8.46%	45.44%	53.90%	21.86%	75.76%
6/30/14	2015-2016	8.39%	50.05%	58.44%	19.17%	77.61%
6/30/15	2016-2017	8.77%	57.70%	66.47%	18.87%	85.34%
6/30/16	2017-2018	11.16%	60.41%	71.57%	18.10%	89.67%
6/30/17	2018-2019	16.21%	102.84%	119.05%	27.23%	146.28%

Summary of Actuarial Unfunded Liabilities *(As of June 30,2017)*

KERS Non-Hazardous Pension Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$10,129,689,985	$5,318,792,893	$5,056,867,294	$4,810,897,092	$5,072,822,691	52.51%	49.92%
6/30/09	10,658,549,532	4,794,611,365	3,584,196,429	5,863,938,167	7,074,353,103	44.98%	33.63%
6/30/10	11,004,795,089	4,210,215,585	3,503,007,035	6,794,579,504	6,794,579,504	38.26%	31.83%
6/30/11	11,182,142,032	3,726,986,087	3,538,878,093	7,455,155,945	7,643,263,939	33.33%	31.70%
6/30/12	11,361,048,136	3,101,316,738	2,980,401,603	8,259,731,398	8,380,646,533	27.30%	26.20%
6/30/13	11,386,602,159	2,636,122,852	2,747,428,086	8,750,479,307	8,639,174,073	23.15%	24.10%
6/30/14	11,550,110,224	2,423,956,716	2,560,419,519	9,126,153,508	8,989,690,705	20.99%	22.20%
6/30/15	12,359,672,849	2,350,989,940	2,307,858,072	10,008,682,909	10,051,814,777	19.02%	18.70%
6/30/16	13,224,698,427	2,112,286,498	1,953,422,354	11,112,411,929	11,271,276,073	15.97%	14.80%
6/30/17	$15,591,641,083	$2,123,623,157	$2,056,869,899	$13,468,017,926	$13,534,771,184	13.62%	13.20%

KERS Non-Hazardous Insurance Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$5,431,499,285	$603,197,761	$574,480,809	$4,828,301,524	$4,857,018,476	11.11%	10.58%
6/30/09	4,507,325,571	534,172,580	365,771,088	3,973,152,991	4,141,554,483	11.85%	8.12%
6/30/10	4,466,136,041	471,341,628	371,002,484	3,994,794,413	4,095,133,557	10.55%	8.31%
6/30/11	4,280,089,633	451,620,442	433,305,243	3,828,469,191	3,846,784,390	10.55%	10.12%
6/30/12	3,125,330,157	446,080,511	430,805,726	2,679,249,646	2,694,524,431	14.27%	13.78%
6/30/13	2,128,754,134	497,584,327	509,364,080	1,631,169,807	1,619,390,054	23.37%	23.93%
6/30/14	2,226,759,925	621,236,646	664,775,708	1,605,523,279	1,561,984,217	27.90%	29.85%
6/30/15	2,413,705,252	695,018,262	687,684,080	1,718,686,990	1,726,021,172	28.79%	28.49%
6/30/16	2,456,677,964	743,270,060	695,188,649	1,713,407,904	1,761,489,315	30.26%	28.30%
6/30/17	$2,683,496,055	$823,917,560	$817,369,841	$1,859,578,495	$1,866,126,214	30.70%	30.46%

KERS Hazardous Pension Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$618,010,827	$502,132,214	$484,440,015	$115,878,613	$133,570,812	81.25%	78.39%
6/30/09	674,411,781	502,503,287	388,913,374	171,908,494	285,498,407	74.51%	57.67%
6/30/10	688,149,451	502,729,009	443,511,663	185,420,442	244,637,788	73.06%	64.45%
6/30/11	721,293,444	510,748,505	510,628,492	210,544,939	210,664,952	70.81%	70.79%
6/30/12	752,699,457	497,226,296	478,103,794	255,473,161	274,595,663	66.06%	63.52%
6/30/13	783,980,594	505,656,808	513,162,166	278,323,786	270,818,428	64.50%	65.46%
6/30/14	816,850,063	527,897,261	559,504,340	288,952,802	257,345,723	64.63%	68.50%
6/30/15	895,433,387	556,687,757	550,120,310	338,745,630	345,313,077	62.17%	61.44%
6/30/16	936,706,126	559,487,184	524,678,968	377,218,942	412,027,158	59.73%	56.01%
6/30/17	$1,121,419,836	$607,158,871	$601,528,922	$514,260,965	$519,890,914	54.14%	53.64%

KERS Hazardous Insurance Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$541,657,214	$288,161,759	$269,299,859	$253,495,455	$272,357,355	53.20%	49.72%
6/30/09	491,132,170	301,634,592	219,537,255	189,497,578	271,594,915	61.42%	44.70%
6/30/10	493,297,529	314,427,296	271,395,843	178,870,233	221,901,686	63.74%	55.02%
6/30/11	507,058,767	329,961,615	321,071,515	177,097,152	185,987,252	65.07%	63.32%
6/30/12	384,592,406	345,573,948	333,298,119	39,018,458	51,294,287	89.85%	86.66%
6/30/13	385,517,675	370,774,403	374,309,576	14,743,272	11,208,099	96.18%	97.09%
6/30/14	396,986,820	419,395,867	435,503,976	(22,409,047)	(38,517,156)	105.64%	109.70%
6/30/15	374,904,234	451,514,191	441,626,285	(76,609,957)	(66,722,051)	120.43%	117.80%
6/30/16	377,745,230	473,160,173	440,596,305	(95,414,943)	(62,851,075)	125.26%	116.64%
6/30/17	$419,439,652	$493,458,367	$488,838,463	($74,018,715)	($69,398,811)	117.65%	116.55%

Summary of Actuarial Unfunded Liabilities *(As of June 30, 2017)*

CERS Non-Hazardous Pension Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$7,304,217,691	$5,731,502,438	$5,431,735,605	$1,572,715,253	$1,872,482,086	78.47%	74.36%
6/30/09	7,912,913,512	5,650,789,991	4,330,593,934	2,262,123,521	3,582,319,578	71.41%	54.73%
6/30/10	8,459,022,280	5,546,857,291	4,819,933,717	2,912,164,989	3,639,088,563	65.57%	56.98%
6/30/11	8,918,085,025	5,629,611,183	5,577,252,295	3,288,473,842	3,340,832,730	63.13%	62.54%
6/30/12	9,139,567,695	5,547,235,599	5,372,769,813	3,592,332,096	3,766,797,882	60.69%	58.79%
6/30/13	9,378,876,114	5,637,094,483	5,780,830,355	3,741,781,631	3,598,045,759	60.10%	61.64%
6/30/14	9,772,522,616	6,117,133,692	6,507,300,157	3,655,388,924	3,265,222,459	62.60%	66.59%
6/30/15	10,740,325,421	6,474,848,513	6,416,853,506	4,265,476,908	4,323,471,915	60.29%	59.75%
6/30/16	11,076,456,794	6,535,372,347	6,106,186,908	4,541,084,447	4,970,269,886	59.00%	55.13%
6/30/17	$12,803,509,449	$6,764,873,113	$6,687,237,095	$6,038,636,336	$6,116,272,354	52.84%	52.23%

CERS Non-Hazardous Insurance Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$3,583,193,466	$1,168,883,170	$1,105,944,178	$2,414,310,296	$2,477,249,288	32.62%	30.86%
6/30/09	3,070,386,018	1,216,631,769	894,905,841	1,853,754,249	2,175,480,177	39.62%	29.15%
6/30/10	3,158,340,174	1,293,038,593	1,096,581,872	1,865,301,581	2,061,758,302	40.94%	34.72%
6/30/11	3,073,973,205	1,433,450,793	1,451,984,026	1,640,522,412	1,621,989,179	46.63%	47.23%
6/30/12	2,370,771,288	1,512,853,851	1,439,226,170	857,917,437	931,545,118	63.81%	60.71%
6/30/13	2,443,894,100	1,628,244,197	1,633,696,661	815,649,903	810,197,439	66.62%	66.85%
6/30/14	2,616,914,600	1,831,199,465	1,899,557,376	785,715,135	717,357,224	69.98%	72.59%
6/30/15	2,907,827,440	1,997,456,463	1,948,454,097	910,370,977	959,373,343	68.69%	67.01%
6/30/16	2,988,121,117	2,079,811,055	1,943,756,727	908,310,062	1,044,364,390	69.60%	65.05%
6/30/17	$3,355,151,286	$2,227,401,268	$2,212,535,662	$1,127,750,018	$1,142,615,624	66.39%	65.94%

CERS Hazardous Pension Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$2,403,122,095	$1,750,867,373	$1,644,983,243	$652,254,722	$758,138,852	72.86%	68.45%
6/30/09	2,578,444,600	1,751,487,540	1,320,522,868	826,957,060	1,257,921,732	67.93%	51.21%
6/30/10	2,672,151,907	1,749,464,388	1,506,787,429	922,687,519	1,165,364,478	65.47%	56.39%
6/30/11	2,859,041,052	1,779,545,393	1,760,602,934	1,079,495,659	1,098,438,118	62.24%	61.58%
6/30/12	3,009,992,047	1,747,379,297	1,677,940,479	1,262,612,750	1,332,051,568	58.05%	55.75%
6/30/13	3,124,205,593	1,801,691,410	1,830,657,969	1,322,514,183	1,293,547,624	57.67%	58.60%
6/30/14	3,288,825,753	1,967,640,027	2,082,998,414	1,321,185,726	1,205,827,339	59.83%	63.34%
6/30/15	3,613,307,547	2,096,782,956	2,073,397,045	1,516,524,591	1,539,910,502	58.03%	57.38%
6/30/16	3,704,456,223	2,139,119,173	2,003,669,273	1,565,337,050	1,700,786,950	57.74%	54.09%
6/30/17	$4,649,046,764	$2,238,320,330	$2,217,996,136	$2,410,726,434	$2,431,050,628	48.15%	47.71%

CERS Hazardous Insurance Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$1,769,782,957	$613,526,319	$576,414,457	$1,156,256,638	$1,193,368,500	34.67%	32.57%
6/30/09	1,593,548,263	651,130,782	483,269,862	942,417,481	1,110,278,401	40.86%	30.33%
6/30/10	1,674,703,216	692,769,770	586,826,965	981,933,446	1,087,876,251	41.37%	35.04%
6/30/11	1,647,702,755	770,790,274	774,509,101	876,912,481	873,193,654	46.78%	47.01%
6/30/12	1,364,843,057	829,040,842	788,070,813	535,802,215	576,772,244	60.74%	57.74%
6/30/13	1,437,332,817	892,774,391	894,232,297	544,558,426	543,100,520	62.11%	62.21%
6/30/14	1,493,864,379	997,733,237	1,034,307,636	496,131,142	459,556,743	66.79%	69.24%
6/30/15	1,504,015,233	1,087,707,118	1,061,560,788	416,308,115	442,454,445	72.32%	70.58%
6/30/16	1,558,818,204	1,135,784,220	1,062,602,089	423,033,984	496,216,115	72.86%	68.17%
6/30/17	$1,788,432,768	$1,196,779,877	$1,189,001,387	$591,652,891	$599,431,381	66.92%	66.48%

Summary of Actuarial Unfunded Liabilities (As of June 30, 2017)

SPRS Pension

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$587,129,257	$350,891,451	$337,358,918	$236,237,806	$249,770,339	59.76%	57.46%
6/30/09	602,328,868	329,966,989	256,571,073	272,361,879	345,757,795	54.78%	42.60%
6/30/10	612,444,806	304,577,292	264,944,089	307,867,514	347,500,717	49.73%	43.26%
6/30/11	634,379,401	285,580,631	279,934,443	348,798,770	354,444,958	45.02%	44.13%
6/30/12	647,688,665	259,791,575	252,896,868	387,897,090	394,791,797	40.11%	39.05%
6/30/13	651,580,654	241,800,328	248,559,040	409,780,326	403,021,614	37.11%	38.15%
6/30/14	681,118,402	242,741,735	260,763,486	438,376,667	420,354,916	35.64%	38.28%
6/30/15	734,156,446	248,387,946	246,968,144	485,768,500	487,188,302	33.83%	33.64%
6/30/16	775,160,294	234,567,536	217,594,068	540,592,758	557,566,226	30.26%	28.07%
6/30/17	$967,144,667	$261,320,225	$255,736,583	$705,824,442	$711,408,084	27.02%	26.44%

SPRS Insurance

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	$445,107,468	$123,961,197	$121,781,967	$321,146,271	$323,325,501	27.85%	27.36%
6/30/09	364,031,141	123,526,647	93,686,940	240,504,494	270,344,201	33.93%	25.74%
6/30/10	434,960,495	121,175,083	104,526,550	313,785,412	330,433,945	27.86%	24.03%
6/30/11	438,427,763	123,687,289	127,367,947	314,740,474	311,059,816	28.21%	29.05%
6/30/12	333,903,782	124,372,072	125,567,846	209,531,710	208,335,936	37.25%	37.61%
6/30/13	222,326,743	136,321,060	142,830,916	86,005,683	79,495,827	61.32%	64.24%
6/30/14	234,271,127	155,594,760	165,167,805	78,676,367	69,103,322	66.42%	70.50%
6/30/15	254,838,710	167,774,940	165,018,209	87,063,770	89,820,501	65.84%	64.75%
6/30/16	257,197,259	172,703,691	161,366,312	84,493,568	95,830,947	67.15%	62.74%
6/30/17	$276,641,361	$180,463,820	$178,838,260	$96,177,541	$97,803,101	65.23%	64.65%

Valuation Balance Sheets give the basis for determining the percentage rates for contributions to be made by employers.

Solvency Test (As of June 30, 2017)

KERS Non-Hazardous Pension Fund

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets (1)	(2)	(3)
6/30/08	$875,178,068	$7,162,496,700	$2,092,015,217	$5,318,792,893	100.00%	62.00%	0.00%
6/30/09	793,574,765	8,205,155,691	1,659,819,076	4,794,611,365	100.00%	48.80%	0.00%
6/30/10	869,484,042	8,329,757,802	1,805,553,245	4,210,215,585	100.00%	40.10%	0.00%
6/30/11	916,568,932	8,482,714,356	1,782,858,744	3,726,986,087	100.00%	33.10%	0.00%
6/30/12	885,137,183	8,708,536,338	1,767,374,615	3,101,316,738	100.00%	25.40%	0.00%
6/30/13	922,928,027	8,709,323,622	1,754,350,510	2,636,122,852	100.00%	19.70%	0.00%
6/30/14	928,557,540	8,870,692,596	1,750,860,088	2,423,956,716	100.00%	16.90%	0.00%
6/30/15	925,933,970	9,437,467,771	1,996,271,108	2,350,989,940	100.00%	15.10%	0.00%
6/30/16	920,120,230	10,010,168,246	2,294,409,951	2,112,286,498	100.00%	11.90%	0.00%
6/30/17	$934,559,307	$11,608,345,816	$3,048,735,960	$2,123,623,157	100.00%	10.20%	0.00%

KERS Non-Hazardous Insurance Fund

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets (1)	(2)	(3)
6/30/08	$-	$2,788,189,754	$2,643,309,531	$603,197,761	100.00%	21.60%	0.00%
6/30/09	-	2,861,867,088	1,645,458,483	534,172,580	100.00%	18.70%	0.00%
6/30/10	-	2,744,534,054	1,721,601,987	471,341,628	100.00%	17.20%	0.00%
6/30/11	-	2,568,002,978	1,712,086,655	451,620,442	100.00%	17.60%	0.00%
6/30/12	-	1,924,068,623	1,201,261,534	446,080,511	100.00%	23.20%	0.00%
6/30/13	-	1,338,772,860	789,981,274	497,584,327	100.00%	37.20%	0.00%
6/30/14	-	1,425,604,569	801,155,356	621,236,646	100.00%	43.60%	0.00%
6/30/15	-	1,428,349,857	985,355,395	695,018,262	100.00%	48.70%	0.00%
6/30/16	-	1,483,635,611	973,042,353	743,270,060	100.00%	50.10%	0.00%
6/30/17	$-	$1,575,293,835	$1,108,202,220	$823,917,560	100.00%	52.30%	0.00%

Solvency Test (As of June 30, 2017)

KERS Hazardous Pension Fund

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets (1)	(2)	(3)
6/30/08	$89,590,638	$355,771,877	$172,648,312	$502,132,214	100.00%	100.00%	32.90%
6/30/09	87,779,938	413,972,356	172,659,487	502,503,287	100.00%	100.00%	0.40%
6/30/10	88,511,283	441,657,241	157,980,927	502,729,009	100.00%	93.80%	0.00%
6/30/11	86,614,205	490,395,078	144,284,161	510,748,505	100.00%	86.50%	0.00%
6/30/12	82,100,877	521,688,803	148,909,777	497,226,296	100.00%	79.60%	0.00%
6/30/13	82,145,602	545,596,534	156,238,458	505,656,808	100.00%	77.60%	0.00%
6/30/14	83,663,535	581,231,300	151,955,228	527,897,261	100.00%	76.40%	0.00%
6/30/15	83,606,204	633,189,298	178,637,885	556,687,757	100.00%	74.70%	0.00%
6/30/16	86,705,297	648,482,097	201,518,732	559,487,184	100.00%	72.90%	0.00%
6/30/17	$93,350,292	$746,349,844	$281,719,700	$607,158,871	100.00%	68.80%	0.00%

KERS Hazardous Insurance Fund

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets (1)	(2)	(3)
6/30/08	$-	$228,834,940	$312,822,274	$288,161,759	100.00%	100.00%	19.00%
6/30/09	-	242,123,365	249,008,805	301,634,592	100.00%	100.00%	23.90%
6/30/10	-	268,510,709	224,786,820	314,427,296	100.00%	100.00%	20.40%
6/30/11	-	285,539,861	221,518,906	329,961,615	100.00%	100.00%	20.10%
6/30/12	-	196,578,935	188,013,471	345,573,948	100.00%	100.00%	79.20%
6/30/13	-	202,031,515	183,486,160	370,774,403	100.00%	100.00%	92.00%
6/30/14	-	206,477,405	190,509,415	419,395,867	100.00%	100.00%	100.00%
6/30/15	-	221,114,995	153,789,239	451,514,191	100.00%	100.00%	100.00%
6/30/16	-	228,361,311	149,383,919	473,160,173	100.00%	100.00%	100.00%
6/30/17	$-	$243,816,173	$175,623,479	$493,458,367	100.00%	100.00%	100.00%

Solvency Test (As of June 30, 2017)

CERS Non-Hazardous Pension Fund

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets (1)	(2)	(3)
6/30/08	$963,213,677	$4,058,767,419	$2,282,236,595	$5,731,502,438	100.00%	100.00%	31.10%
6/30/09	991,628,551	4,542,483,102	2,378,801,859	5,650,789,991	100.00%	100.00%	4.90%
6/30/10	1,063,746,826	4,890,659,077	2,504,616,377	5,546,857,291	100.00%	91.70%	0.00%
6/30/11	1,110,967,160	5,209,783,924	2,597,333,941	5,629,611,183	100.00%	86.70%	0.00%
6/30/12	1,117,549,337	5,416,932,995	2,605,085,363	5,547,235,599	100.00%	81.80%	0.00%
6/30/13	1,149,610,832	5,638,370,836	2,590,894,446	5,637,094,483	100.00%	79.60%	0.00%
6/30/14	1,204,383,085	5,873,279,494	2,694,860,037	6,117,133,692	100.00%	83.60%	0.00%
6/30/15	1,216,584,592	6,489,862,734	3,033,878,095	6,474,848,513	100.00%	81.00%	0.00%
6/30/16	1,231,027,269	6,785,529,719	3,059,899,806	6,535,372,347	100.00%	78.20%	0.00%
6/30/17	$1,277,431,672	$7,731,681,600	$3,794,396,177	$6,764,873,113	100.00%	71.00%	0.00%

CERS Non-Hazardous Insurance Fund

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets (1)	(2)	(3)
6/30/08	$-	$1,521,450,274	$2,061,743,192	$1,168,883,170	100.0%	76.80%	0.00%
6/30/09	-	1,478,782,753	1,591,603,265	1,216,631,769	100.0%	82.30%	0.00%
6/30/10		1,526,533,372	1,631,806,802	1,293,038,593	100.0%	84.70%	0.00%
6/30/11	-	1,460,808,255	1,613,164,950	1,433,450,793	100.0%	98.10%	0.00%
6/30/12	-	1,146,907,750	1,223,863,538	1,512,853,851	100.0%	100.00%	29.90%
6/30/13	-	1,205,599,287	1,238,294,813	1,628,244,197	100.0%	100.00%	34.10%
6/30/14	-	1,318,182,882	1,298,731,718	1,831,199,465	100.0%	100.00%	39.50%
6/30/15	-	1,372,596,636	1,535,230,804	1,997,456,463	100.0%	100.00%	40.70%
6/30/16	-	1,484,936,848	1,503,184,269	2,079,811,055	100.0%	100.00%	39.60%
6/30/17	$-	$1,603,438,137	$1,751,713,149	$2,227,401,268	100.0%	100.00%	35.60%

Solvency Test (As of June 30, 2017)

CERS Hazardous Pension Fund

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets (1)	(2)	(3)
6/30/08	$338,324,362	$1,406,982,409	$657,815,324	$1,750,867,373	100.0%	100.00%	0.80%
6/30/09	350,308,879	1,540,262,587	687,873,134	1,751,487,540	100.0%	91.00%	0.00%
6/30/10	369,612,720	1,622,684,455	679,854,732	1,749,464,388	100.0%	85.00%	0.00%
6/30/11	382,072,055	1,768,511,545	708,457,452	1,779,545,393	100.0%	79.00%	0.00%
6/30/12	381,672,428	1,889,884,303	738,435,316	1,747,379,297	100.0%	72.30%	0.00%
6/30/13	390,471,059	1,988,029,963	745,704,571	1,801,691,410	100.0%	71.00%	0.00%
6/30/14	415,069,629	2,077,516,709	796,239,415	1,967,640,027	100.0%	74.70%	0.00%
6/30/15	422,358,688	2,297,703,167	893,245,692	2,096,782,956	100.0%	72.90%	0.00%
6/30/16	428,713,398	2,388,711,595	887,031,230	2,139,119,173	100.0%	71.60%	0.00%
6/30/17	$458,808,121	$2,910,600,850	$1,279,637,793	$2,238,320,330	100.0%	61.10%	0.00%

CERS Hazardous Insurance Fund

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets (1)	(2)	(3)
6/30/08	$-	$722,435,184	$1,047,347,773	$613,526,319	100.0%	84.90%	0.00%
6/30/09	-	725,899,836	867,648,427	651,130,782	100.0%	89.70%	0.00%
6/30/10	-	814,300,256	860,402,960	692,769,770	100.0%	85.10%	0.00%
6/30/11	-	771,631,287	876,071,468	770,790,274	100.0%	99.90%	0.00%
6/30/12	-	575,099,089	789,743,968	829,040,842	100.0%	100.00%	32.20%
6/30/13	-	660,955,331	776,377,486	892,774,391	100.0%	100.00%	29.90%
6/30/14	-	700,311,599	793,552,780	997,733,237	100.0%	100.00%	37.50%
6/30/15	-	790,713,766	713,301,467	1,087,707,118	100.0%	100.00%	41.60%
6/30/16	-	879,360,070	679,458,134	1,135,784,220	100.0%	100.00%	37.70%
6/30/17	$-	$994,764,010	$793,668,758	$1,196,779,877	100.0%	100.00%	25.50%

Solvency Test (As of June 30, 2017)

SPRS Pension Fund

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets (1)	(2)	(3)
6/30/08	$41,391,416	$426,311,368	$119,079,046	$350,891,451	100.0%	72.60%	0.00%
6/30/09	41,664,469	459,585,353	101,079,046	329,966,989	100.0%	62.70%	0.00%
6/30/10	42,011,523	475,892,659	94,540,624	304,577,292	100.0%	55.20%	0.00%
6/30/11	43,574,097	499,194,229	91,611,075	285,580,631	100.0%	48.50%	0.00%
6/30/12	41,139,306	523,016,647	83,532,712	259,791,575	100.0%	41.80%	0.00%
6/30/13	39,788,421	535,720,195	76,072,038	241,800,328	100.0%	37.70%	0.00%
6/30/14	41,831,465	563,011,026	76,275,911	242,741,735	100.0%	35.70%	0.00%
6/30/15	41,567,127	605,854,905	86,734,414	248,387,946	100.0%	34.10%	0.00%
6/30/16	41,870,846	636,498,907	96,790,541	234,567,536	100.0%	30.30%	0.00%
6/30/17	$44,797,517	$773,982,141	$148,365,009	$261,320,225	100.0%	28.00%	0.00%

SPRS Insurance Fund

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets (1)	(2)	(3)
6/30/08	$-	$178,655,245	$266,452,223	$123,961,197	100.00%	69.40%	0.00%
6/30/09	-	167,091,453	196,939,688	123,526,647	100.00%	73.90%	0.00%
6/30/10	-	253,439,726	181,379,668	121,175,083	100.00%	47.80%	0.00%
6/30/11	-	252,439,726	185,988,037	123,687,289	100.00%	49.00%	0.00%
6/30/12	-	190,258,729	143,645,053	124,372,072	100.00%	65.40%	0.00%
6/30/13	-	139,508,590	82,818,153	136,321,060	100.00%	97.70%	0.00%
6/30/14	-	143,402,126	90,869,001	155,594,760	100.00%	100.00%	13.40%
6/30/15	-	170,447,207	84,391,503	167,774,940	100.00%	98.40%	0.00%
6/30/16	-	177,094,075	80,103,184	172,703,691	100.00%	97.50%	0.00%
6/30/17	$-	$186,390,016	$90,251,345	$180,463,820	100.00%	96.80%	0.00%

Active Member Valuation

Methodology The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

Summary of Active Member Valuation Data (As of June 30, 2017)

KERS Non-Hazardous - Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members[1]	Annual Payroll[2]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	414	48,085	$1,837,873,488	$38,221	2.90%	43.20	9.10
6/30/09	334	46,060	1,754,412,912	38,090	-0.30%	43.00	8.70
6/30/10	334	47,090	1,815,146,388	38,546	1.20%	43.40	9.00
6/30/11	427	46,617	1,731,632,748	37,146	-3.60%	43.80	9.40
6/30/12	286	42,196	1,644,896,681	38,982	4.90%	44.30	9.80
6/30/13	285	42,226	1,644,408,698	38,943	-0.10%	44.50	10.10
6/30/14	353	40,365	1,577,496,447	39,081	0.40%	44.80	10.50
6/30/15	348	39,056	1,544,234,409	39,539	1.20%	45.00	10.60
6/30/16	349	37,779	1,529,248,873	40,479	2.40%	45.10	10.70
6/30/17	342	37,234	$1,531,534,820	$41,133	1.62%	45.40	10.90

KERS Hazardous - Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members[1]	Annual Payroll[2]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	16	4,393	$148,710,060	$33,852	1.60%	41.40	6.90
6/30/09	20	4,334	146,043,576	33,697	-0.50%	41.40	7.00
6/30/10	18	4,291	143,557,944	33,456	-0.70%	41.40	7.00
6/30/11	16	4,291	133,053,792	31,008	-7.30%	41.30	6.90
6/30/12	14	4,086	131,976,754	32,300	4.20%	41.10	7.30
6/30/13	14	4,127	132,015,368	31,988	-1.00%	40.60	7.20
6/30/14	18	4,024	129,076,038	32,077	0.30%	40.60	7.40
6/30/15	17	3,886	128,680,130	33,114	3.20%	40.70	7.50
6/30/16	17	3,959	147,563,457	37,273	12.60%	40.40	7.50
6/30/17	18	4,047	$162,418,070	$40,133	7.67%	40.30	7.60

CERS Non-Hazardous - Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members[1]	Annual Payroll[2]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	1,110	85,221	$2,166,612,648	$25,423	3.90%	45.9	8.3
6/30/09	1,108	83,724	2,183,611,848	26,081	2.60%	46.2	8.6
6/30/10	1,102	84,681	2,236,855,380	26,415	1.30%	46.6	8.8
6/30/11	1,102	85,285	2,276,595,948	26,694	1.10%	46.8	9.0
6/30/12	1,080	83,052	2,236,546,345	26,929	0.90%	47.5	9.1
6/30/13	1,081	81,815	2,236,277,489	27,333	1.50%	47.8	9.3
6/30/14	1,101	81,115	2,272,270,287	28,013	2.50%	48.1	9.6
6/30/15	1,092	80,852	2,296,715,957	28,406	1.40%	48.0	9.5
6/30/16	1,095	80,664	2,352,761,794	29,167	2.70%	47.9	9.4
6/30/17	1,096	82,198	$2,452,407,113	$29,835	2.29%	47.9	9.4

CERS Hazardous - Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members[1]	Annual Payroll[2]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	299	10,173	$474,241,332	$46,618	2.20%	38.7	8.3
6/30/09	290	9,757	469,315,464	48,100	3.20%	38.4	8.8
6/30/10	282	9,562	466,548,660	48,792	1.40%	38.8	9.2
6/30/11	281	9,407	466,963,860	49,640	1.70%	39.1	9.5
6/30/12	254	9,130	464,228,923	50,847	2.40%	39.3	10.3
6/30/13	248	9,123	461,672,567	50,605	-0.50%	39.1	10.3
6/30/14	254	9,194	479,164,016	52,117	3.00%	39.2	10.6
6/30/15	246	9,172	483,640,601	52,730	1.20%	39.1	10.6
6/30/16	246	9,084	492,850,521	54,255	2.90%	39.1	10.6
6/30/17	250	9,495	$541,632,946	$57,044	5.14%	39.2	10.5

SPRS - Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members[1]	Annual Payroll[2]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	1	993	$53,269,080	$53,645	4.20%	36.90	10.80
6/30/09	1	946	51,660,396	54,609	1.80%	37.30	11.00
6/30/10	1	961	51,506,712	53,597	-1.90%	37.2	10.6
6/30/11	1	965	48,692,616	50,459	-5.90%	37.70	10.60
6/30/12	1	907	48,372,506	53,332	5.70%	37.30	10.40
6/30/13	1	902	45,256,202	50,173	-5.90%	37.00	10.00
6/30/14	1	855	44,615,885	52,182	4.00%	37.80	10.90
6/30/15	1	937	45,764,515	48,842	-6.40%	36.80	9.80
6/30/16	1	908	45,551,469	50,167	2.71%	37.00	10.00
6/30/17	1	903	$48,598,296	$53,819	7.28%	37.50	10.60

1 Member data in actuarial section will differ from reported data in other CAFR sections. For this section, the data is reported by account instead of by person (ex: a member could have vested service in KERS, but is currently active in a CERS plan and is reported in two membership categories).
2 Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members recorded for each month of the fiscal year ending June 30, 2017.

Summary of Retired Member Valuation Data (As of June 30, 2017)

KERS Non-Hazardous

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances[1]	% Increase In Allowances	Average Annual Allowance
6/30/08	2,573	1,115	35,307	$710,505,270	13.60%	$20,124
6/30/09	3,465	889	37,883	812,559,070	14.36%	21,449
6/30/10	1,162	1,100	37,945	801,881,911	-1.31%	21,133
6/30/11	1,592	940	38,597	821,197,278	2.41%	21,276
6/30/12	1,707	1,078	39,226	844,880,945	2.88%	21,539
6/30/13	1,982	1,014	40,194	872,139,782	3.23%	21,698
6/30/14	2,067	1,038	41,223	866,046,656	-0.70%	21,009
6/30/15	2,140	1,094	42,269	883,577,572	2.02%	20,904
6/30/16	2,441	706	44,004	934,929,767	5.81%	21,246
6/30/17	2,181	1,269	44,916	$921,301,933	-1.46%	$20,512

KERS Hazardous

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances[1]	% Increase In Allowances	Average Annual Allowance
6/30/08	261	59	2,404	$33,588,993	22.01%	$13,972
6/30/09	339	95	2,648	38,695,501	15.20%	14,613
6/30/10	282	95	2,835	41,114,800	6.25%	14,503
6/30/11	288	59	3,064	45,609,229	10.93%	14,886
6/30/12	243	54	3,253	49,231,205	7.94%	15,134
6/30/13	229	52	3,430	51,122,456	3.84%	14,905
6/30/14	256	66	3,620	54,271,718	6.16%	14,992
6/30/15	203	65	3,758	56,431,099	3.98%	15,016
6/30/16	237	29	3,966	59,000,949	4.55%	14,877
6/30/17	206	79	4,093	$59,162,282	0.27%	$14,455

CERS Non-Hazardous

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances[1]	% Increase In Allowances	Average Annual Allowance
6/30/08	3,366	1,351	37,579	$393,757,510	12.92%	$10,478
6/30/09	3,060	883	39,756	440,061,418	11.76%	11,069
6/30/10	2,565	1,283	41,038	452,613,550	2.85%	11,029
6/30/11	3,250	1,077	43,211	483,594,068	6.84%	11,191
6/30/12	3,300	1,207	45,304	515,008,361	6.50%	11,368
6/30/13	3,570	1,198	47,676	557,979,192	8.34%	11,704
6/30/14	3,480	1,221	49,935	582,957,825	4.48%	11,674
6/30/15	4,020	1,304	52,651	617,550,927	5.93%	11,729
6/30/16	4,409	721	56,339	661,216,570	7.07%	11,736
6/30/17	4,141	1,467	59,013	$667,467,736	0.95%	$11,311

CERS Hazardous

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances[1]	% Increase In Allowances	Average Annual Allowance
6/30/08	469	206	5,422	$127,477,109	12.08%	23511
6/30/09	650	264	5,808	139,886,751	9.73%	24085
6/30/10	423	163	6,068	146,916,812	5.03%	24212
6/30/11	502	102	6,468	160,259,395	9.08%	$24,777
6/30/12	483	73	6,878	173,221,483	8.09%	$25,185
6/30/13	519	104	7,293	182,634,895	5.43%	$25,042
6/30/14	469	116	7,646	191,007,832	4.58%	$24,981
6/30/15	526	138	8,034	202,153,338	5.84%	$25,162
6/30/16	604	75	8,563	215,302,101	6.50%	$25,143
6/30/17	576	141	8,998	$226,680,023	5.28%	$25,192

SPRS

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances[1]	% Increase In Allowances	Average Annual Allowance
6/30/08	42	12	1,135	$41,293,017	10.98%	$36,382
6/30/09	75	26	1,184	44,273,937	7.22%	37,394
6/30/10	54	15	1,223	45,515,797	2.80%	37,217
6/30/11	52	12	1,263	47,467,404	4.29%	37,583
6/30/12	52	16	1,299	49,887,093	5.10%	38,404
6/30/13	63	16	1,346	50,905,789	2.04%	37,820
6/30/14	95	28	1,413	53,432,446	4.96%	37,815
6/30/15	62	15	1,460	54,930,421	2.80%	37,624
6/30/16	65	10	1,515	56,649,918	3.13%	37,393
6/30/17	30	9	1,536	$57,253,136	1.06%	$37,274

[1]The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

Summary of Benefit Provisions
KERS & CERS Non-Hazardous Plans

Plan Funding
State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS rates are subject to state budget approval.

Membership Eligibility
For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility for Non-Hazardous Employees

Age	Years of Service	Allowance Reduction
TIER 1 — Members Whose Participation Began Before 9/1/2008		
65	4	None
Any	27	None
55	5	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
Any	25	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
TIER 2 — Members Whose Participation Began On or After 9/1/2008 but before 1/1/2014		
65	5	None
57	Rule of 87	None
60	10	6.5% per year for first five years, and 4.5% for next five years before age 65 or Rule of 87 (age plus years of service).
TIER 3 — Members Whose Participation Began On or After 1/1/2014		
65	5	None
57	Rule of 87	None

TIER 1 Benefit Formula for Tiers 1 for Non-Hazardous

Final Compensation	x	Benefit Factor		x	Years of Service
Average of the five highest if participation began before 9/1/2008.		KERS 1.97% if:	Member does not have 13 months credit for 1/1/1998-1/1/1999.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
		KERS 2.00% if:	Member has 13 months credit from 1/1/1998-1/1/1999.		
		KERS 2.20% if:	Member has 20 or more years of service, including 13 months from 1/1/1998-1/1/1999 and retires by 1/1/2009.		
		CERS 2.20% if:	Member begins participating prior to 8/1/2004.		

TIER 2 Benefit Formula for Tiers 2 for Non-Hazardous

Average of the last complete five if participation began on or after 9/1/2008 but before 1/1/2014.	CERS 2.00% if:	Member begins participating on or after 8/1/2004 and before 9/1/2008.
	KERS & CERS increasing percent based on service at retirement* plus 2.00% for each year of service over 30 if:	Member begins participating on or after 8/1/2008 but before 1/1/2014.

***Service** (and Benefit Factor): **10 years or less** (1.10%); **10 - 20 years** (1.30%); **20 - 26 years** (1.50%); **26 - 30 years** (1.75%)*

TIER 3

(A-B) = C x 75%= D then B+D = Interest *($ In Thousands)*

System	A 5 Year Geometric Average Return	B Less Guarantee Rate of 4%	C Upside Sharing Interest	D Upside Sharing Interest X 75% = Upside Gain	Interest Rate Earned (4%+Upside)	Total Interest Credited to Member Accounts
KERS Non-Hazardous	7.41%	4.00%	3.41%	2.56%	6.56%	$1,366
KERS Hazardous	7.98%	4.00%	3.98%	2.99%	6.99%	$410
CERS Non-Hazardous	7.85%	4.00%	3.85%	2.89%	6.89%	$2,565
CERS Hazardous	8.07%	4.00%	4.07%	3.05%	7.05%	$616
SPRS	7.59%	4.00%	3.59%	2.69%	6.69%	$53

Summary of Benefit Provisions
KERS & CERS Non-Hazardous Plans

Post-Retirement Death Benefits
If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits
Members participating before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after 8/1/2004 but before 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. The account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits
The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment
The Kentucky General Assembly has the authority to increase, suspend or reduce COLAs. Senate Bill 2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (1) the system is over 100% funded or (2) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

Insurance Benefits
For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003, and before September 1, 2008, are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

Refunds
Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts
For Tier 1 employees participating prior to September 1, 2008, the interest paid is set by the Board of Directors and will not be less than 2%, for Tier 2 employees participating on, or after, September 1, 2008, but before January 1, 2014, interest will be credited at a rate of 2.5%. For Tier 3 employees participating on, or after, January 1, 2014, interest will be credited at a minimum rate of 4%.

Summary of Benefit Provisions
KERS Hazardous, CERS Hazardous & SPRS Systems

Plan Funding

State statute requires active members to contribute 8% of creditable compensation. For Tier 2 members participating on, or after, September 1, 2008, an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS & SPRS rates are subject to state budget approval.

Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

State statute requires active members to contribute 5% of creditable compensation. For Tier 2 members, an additional 1% of creditable compensation is required for health insurance.

Retirement Eligibility for Hazardous

	Age	Years of Service	Allowance Reduction
Members Whose Participation Began Before 9/1/2008			
	55	5	None
	Any	20	None
	50	15	6.5% per year for first five years, and 4.5% for next five years before age 55 or 20 years of service.
	Any	25	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
Members Whose Participation Began On or After 9/1/2008 but before 1/1/2014			
	60	5	None
	Any	25	None
	50	15	6.5% per year for first five years, and 4.5% for next five years before age 60 or 25 years of service.
Members Whose Participation Began On or After 1/1/2014			
	60	5	None
	Any	25	None

Benefit Formula for Hazardous for Tier 1 and Tier 2 only

Final Compensation	x	Benefit Factor		x	Years of Service
Average of the three highest if participation began before 9/1/2008.		KERS 2.49%, CERS 2.50%, SPRS 2.50%, if:	Member begins participating before 9/1/2008.		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
Average of the three highest complete years if participation began on or after 9/1/2008.		KERS, CERS and SPRS increasing percent based on service at retirement* if:	Member begins participating on or after 9/1/2008 but before 1/1/2014.		

* ***Service*** *(with Benefit Factor):* ***10 years or less*** *(1.30%);* ***10 - 20 years*** *(1.50%);* ***20 - 25 years*** *(2.25%)* ***25 + years*** *(2.50%)*

Tier 3

Member begins participating on or after January 1, 2014: Each year that a member is an active, contributing member to the System, the member and the member's employer will contribute 8% and 7.5% of creditable compensation respectively into a current account. This current account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's GANIR for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the current account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions, and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

Disability Benefits

Members hired before August 1, 2004, may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members hired on or after August 1, 2004, but before 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after January 1, 2014, may retire on account of disability provided the member has at least 60 months of service credit. The account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or, (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Cost of Living Adjustment

The Kentucky General Assembly has the authority to increase, suspend or reduce COLAs. Senate Bill 2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (1) the system is over 100% funded or (2) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003, and before September 1, 2008, are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008, are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15.00 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

For Tier 1 employees participating prior to September 1, 2008, the interest paid is set by the Board of Directors and will not be less than 2%, for Tier 2 employees participating on, or after, September 1, 2008, but before January 1, 2014, interest will be credited at a rate of 2.5%. For Tier 3 employees participating on, or after, January 1, 2014, interest will be credited at a minimum rate of 4%.

STATISTICAL

STATISTICAL
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KERS Non-Hazardous Membership

Fiscal Year	Active	Inactive	Retired	Total
2012	41,743	39,338	36,508	117,589
2013	40,710	40,375	37,240	118,325
2014	40,500	41,213	38,022	119,735
2015	39,289	42,479	38,827	120,595
2016	38,121	43,926	40,099	122,146
2017	36,725	44,848	40,813	122,386

KERS Hazardous Membership

Fiscal Year	Active	Inactive	Retired	Total
2012	4,007	2,597	2,180	8,784
2013	4,057	2,882	2,312	9,251
2014	4,094	3,318	2,467	9,879
2015	3,932	3,761	2,575	10,268
2016	3,987	4,067	2,739	10,793
2017	4,061	4,363	2,823	11,247

CERS Non-Hazardous Membership

Fiscal Year	Active	Inactive	Retired	Total
2012	83,658	63,280	42,068	189,006
2013	82,631	67,013	44,164	193,808
2014	82,494	70,231	46,112	198,837
2015	82,969	72,965	48,515	204,449
2016	83,346	75,904	51,673	210,923
2017	84,401	78,940	54,018	217,359

CERS Hazardous Membership

Fiscal Year	Active	Inactive	Retired	Total
2012	9,040	1,914	5,513	16,467
2013	9,069	1,956	5,840	16,865
2014	9,189	2,038	6,066	17,293
2015	9,188	2,142	6,389	17,719
2016	9,139	2,309	6,834	18,282
2017	9,321	2,442	7,186	18,949

SPRS Membership

Fiscal Year	Active	Inactive	Retired	Total
2012	904	224	1,203	2,331
2013	901	236	1,240	2,377
2014	861	239	1,279	2,379
2015	940	257	1,324	2,521
2016	924	262	1,379	2,565
2017	910	278	1,393	2,581

FUND Statistics

DEFINITIONS

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment.

Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions.

Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

The data reflects the number of accounts in each system. A single member may have multiple accounts, which contribute to one pension. Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in the retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-Hazardous, then KERS Non-Hazardous. These tables do not include individuals receiving payments under dependent child accounts, Qualified Domestic Relations Orders, or multiple beneficiary accounts.

Kentucky Retirement Systems
Membership Totals

Fiscal Year	Active	Inactive	Retired	Total
2012	139,352	107,353	87,472	334,177
2013	137,368	112,462	90,796	340,626
2014	137,138	117,039	93,946	348,123
2015	136,318	121,604	97,630	355,552
2016	135,517	126,468	102,725	364,710
2017	135,418	130,871	106,234	372,523

Principal Participating Employers in KERS

Participating Employer	Rank	Covered Employees	% of Total System
Department For Community Based Services	1	4,441	10.67%
Department Of Highways	2	3,919	9.41%
Department Of Corrections	3	3,878	9.32%
Judicial Department Administrative Office Of The Courts	4	1,392	3.34%
Department Of Juvenile Justice	5	1,218	2.93%
Kentucky State Police	6	952	2.29%
Bluegrass.org	7	920	2.21%
Eastern Kentucky University	8	889	2.14%
Unified Prosecutorial System	9	882	2.12%
Department Of Revenue	10	867	2.08%
All Others		22,271	53.50%
Total		41,629	100.00%

Schedule of Participating Employers in KERS

Agency Classification	Number of Agencies	Number of Employees
County Attorneys	61	316
Health Departments	60	2,601
Master Commissioner	37	76
Non-P1 State Agencies	37	909
Other Retirement Systems	2	28
P1 State Agencies	138	31,270
Regional Mental Health Units	12	2,634
Universities	7	3,795
Total	354	41,629
Total Employees By Tier Levels:		
Tier 1		23,605
Tier 2		8,606
Tier 3		9,418

Principal Participating Employers in CERS

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board Of Education	1	6,420	6.78%
Louisville Jefferson County Metro Government	2	5,169	5.46%
Fayette County Board Of Education	3	1,806	1.91%
Lexington Fayette Urban County Government	4	1,768	1.87%
Judicial Department Administrative Office Of The Courts	5	1,660	1.75%
Boone County Board Of Education	6	1,143	1.21%
Pike County Board Of Education	7	1,134	1.20%
Bullitt County Board Of Education	8	1,124	1.19%
Hardin County Board Of Education	9	1,070	1.13%
Warren County Board Of Education	10	931	0.98%
All Others		72,470	76.53%
Total		94,687	100.00%

Schedule of Participating Employers in SPRS

Kentucky State Police - Uniformed Officers	1	934
Total Employees By Tier Levels:		
Tier 1		579
Tier 2		220
Tier 3		135

Schedule of Participating Employers in CERS

Agency Classification	Number of Agencies	Number of Employees
Airport Boards	5	525
Ambulance Services	19	415
Area Development Districts	14	691
Boards of Education	173	48,812
Cities	221	10,234
Community Action Agencies	21	2,857
Conservation Districts	49	62
County Attorneys	77	652
County Clerks	16	588
Development Authorities	6	11
Fire Departments	38	800
Fiscal Courts	118	11,168
Health Departments	1	339
Housing Authorities	42	449
Jailers	2	64
Libraries	85	1,281
Other Retirement Systems	2	3
P1 State Agencies	4	1,660
Parks and Recreation	7	62
Planning Commissions	16	228
Police Departments	2	16
Riverport Authorities	5	76
Sanitation Districts	9	355
Sheriff Departments	12	758
Special Districts & Boards	49	1,478
Tourist Commissions	22	177
Urban Government Agencies	2	6,937
Utility Boards	121	3,989
Total	1,138	94,687
Total Employees By Tier Levels:		
Tier 1		47,859
Tier 2		20,343
Tier 3		26,485

Average Monthly Benefit by Length of Service in KERS

	KERS Non-Hazardous		KERS Hazardous	
Service Credit Range	Number of Accounts	Average Monthly Benefit	Number of Accounts	Average Monthly Benefit
Under 5 Years	5,723	$174.37	760	$201.14
5 or more but less than 10	5,867	$424.63	809	$570.35
10 or more but less than 15	5,268	$710.99	723	$1,010.57
15 or more but less than 20	4,475	$1,040.99	644	$1,534.95
20 or more but less than 25	4,875	$1,384.39	950	$1,996.18
25 or more but less than 30	12,078	$2,288.35	168	$2,801.54
30 or more but less than 35	6,496	$3,239.42	58	$3,571.51
35 or more	2,536	$4,570.58	9	$3,632.52
Total	47,318	$1,667.76	4,121	$1,198.81

Average Monthly Benefit by Length of Service in CERS

	CERS Non-Hazardous		CERS Hazardous	
Service Credit Range	Number of Accounts	Average Monthly Benefit	Number of Accounts	Average Monthly Benefit
Under 5 Years	8,078	$161.47	1,033	$363.82
5 or more but less than 10	10,973	$335.76	1,040	$680.57
10 or more but less than 15	10,592	$530.14	925	$1,218.94
15 or more but less than 20	8,669	$781.06	862	$1,736.64
20 or more but less than 25	9,491	$991.02	3,396	$2,466.43
25 or more but less than 30	11,045	$1,907.05	1,340	$3,450.29
30 or more but less than 35	2,686	$2,689.62	406	$4,182.68
35 or more	729	$3,692.42	99	$5,187.03
Total	62,263	$927.68	9,101	$2,078.80

Average Monthly Benefit by Length of Service in SPRS

Service Credit Range	Number of Accounts	Average Monthly Benefit
Under 5 Years	126	$524.72
5 or more but less than 10	52	$945.52
10 or more but less than 15	54	$1,348.01
15 or more but less than 20	97	$2,005.43
20 or more but less than 25	471	$2,635.72
25 or more but less than 30	466	$3,626.71
30 or more but less than 35	233	$4,754.91
35 or more	60	$5,930.34
Total	1,559	$3,064.65

This table reflects the Average Monthly Pension Benefit. A single member may have multiple accounts, which contribute to one pension. These tables do not reflect dependent child accounts, Qualified Domestic Relations Order (QDRO) accounts or multiple beneficiary accounts.

Plan Net Position *($ in Thousands)*

KERS

	Non-Hazardous			Hazardous		
Fiscal Year	Pension	Insurance	Total	Pension	Insurance	Total
2011	$3,544,242	$428,659	$3,972,901	$511,085	$320,673	$831,758
2012	2,977,935	418,490	3,396,425	476,589	330,730	807,319
2013	2,760,753	496,040	3,256,793	514,592	372,883	887,475
2014	2,578,290	646,905	3,225,195	561,484	433,525	995,009
2015	2,327,782	665,639	2,993.421	552,468	439,113	991,581
2016	1,980,292	668,318	2,648,610	527,880	437,880	965,277
2017	2,092,781	781,406	2,874,187	605,921	484,442	1,090,363

CERS

2011	$5,583,451	$1,446,998	$7,030,449	$1,761,858	$773,139	$2,534,997
2012	5,381,602	1,428,821	6,810,423	1,672,970	785,874	2,458,844
2013	5,795,568	1,618,960	7,414,528	1,833,571	891,320	2,724,891
2014	6,528,147	1,878,711	8,406,858	2,087,002	1,030,303	3,117,305
2015	6,440,800	1,920,946	8,361,746	2,078,202	1,056,480	3,134,682
2016	6,141,396	1,908,550	8,049,946	2,010,177	1,056,097	3,066,274
2017	6,739,142	2,160,553	8,899,695	2,227,679	1,179,313	3,406,992

SPRS

Fiscal Year	Pension	Insurance	Total
2011	$279,927	$127,319	$407,246
2012	250,476	125,398	375,874
2013	248,698	142,691	391,389
2014	260,974	164,958	425,932
2015	247,229	164,714	411,943
2016	218,013	160,949	378,962
2017	256,383	178,191	434,574

Kentucky Retirement Systems Total

Fiscal Year	Pension	Insurance	Total
2011	$11,680,563	$3,096,788	$14,777,351
2012	10,758,706	3,089,313	13,848,019
2013	11,153,182	3,521,894	14,675,076
2014	12,015,897	4,154,402	16,170,299
2015	11,646,481	4,246,892	15,893,373
2016	10,877,757	4,231,311	15,109,068
2017	$11,921,906	$4,783,905	$16,705,811

For additional historical data for all charts presented, please visit our website for previous annual reports at https://kyret.ky.gov/Publications/Pages/Comprehensive-Annual-Financial-Reports.aspx

Changes in Plan Net Position *($ in Thousands)*

KERS Non-Hazardous Pension Fund

Additions	2012	2013	2014	2015	2016	2017
Members' Contributions	$96,418	$96,744	$92,941	$100,424	$101,677	$100,544
Employers' Contributions	211,071	280,874	296,836	520,949	512,670	644,803
General Fund Appropriations						58,193
Health Insurance Contributions (HB1)	5,337	3,344	4,546	4,181	4,817	5,156
Employer Cessation						53,215
Net Investment Income (Loss)	9,789	303,011	337,174	44,094	(20,662)	220,985
Bank of America Settlement	-	-	-	8,442	-	-
Pension Spiking	-	-	-	743	414	909
Total Additions	322,615	683,973	732,246	679,308	598,916	1,083,805
Deductions						
Benefit Payments	858,151	873,906	889,937	905,790	923,288	948,489
Refunds	12,004	12,907	13,627	13,552	12,130	11,819
Administrative Expenses	8,776	10,719	11,145	10,474	10,807	10,974
Capital Project Expenses	8	-	-	-	181	34
Total Deductions	878,939	897,532	914,709	929,816	946,406	971,316
Net Increase (Decrease) in Plan Net Position	(556,324)	(213,559)	(182,463)	(250,508)	(347,490)	112,489

KERS Non-Hazardous Insurance Fund

Additions	2012	2013	2014	2015	2016	2017
Employers' Contributions	$146,844	$162,191	$164,176	$132,208	$131,935	$133,024
Net Investment Income (Loss)	(4,803)	40,661	96,578	8,690	(3,904)	90,915
Retired Re-employed (HB1)	-	-	-	3,732	3,880	3,765
Member Drug Reimbursement	7,865	4,846	8	-	-	1
Premiums Received from Retirees	15,666	14,294	918	272	240	248
Employer Cessations	-	-	-	-	-	15,567
Total Additions	165,563	221,992	264,273	144,902	132,151	243,520
Deductions						
Health Insurance Premiums	163,841	140,157	112,671	125,272	126,550	127,648
Administrative Expenses	5,203	4,285	736	893	818	861
Self Funded Healthcare Costs	-	-	-	-	-	1,920
Excise Tax Insurance	-	-	-	-	-	3
Total Deductions	169,044	144,442	113,407	126,168	129,469	130,432
Net Increase (Decrease) in Plan Net Position	$169,044	$77,550	$150,865	$18,734	$2,679	$113,088

Changes in Plan Net Position *($ in Thousands)*

KERS Hazardous Pension Fund

Additions	2012	2013	2014	2015	2016	2017
Member Contributions	$11,602	$11,467	$11,995	$12,670	$15,055	$17,523
Employer Contributions	17,367	27,334	11,670	28,374	23,690	37,630
General Fund Appropriations	-	-	-	-	-	15,000
Health Insurance Contributions (HB1)	629	402	551	537	684	811
Net Investment Income (Loss)	(10,286)	51,497	80,549	8,572	(1,652)	70,893
Bank of America Settlement	-	-	-	767	-	-
Pension Spiking	-	-	-	162	70	344
Total Additions	19,312	90,700	104,941	51,211	37,847	142,301
Deductions						
Benefit Payments	48,424	48,855	54,320	56,774	59,306	61,231
Refunds	2,543	2,762	2,830	2,609	2,211	2,106
Administrative Expenses	877	733	897	844	903	919
Capital Project Expenses	-	-	-	-	15	4
Total Deductions	51,844	52,350	58,048	60,277	62,435	64,260
Net Increase (Decrease) in Plan Net Position	$(32,532)	$38,350	$46,892	($9,016)	($24,588)	$78,041

KERS Hazardous Insurance Fund

Additions	2012	2013	2014	2015	2016	2017
Employers' Contributions	$23,984	$25,144	$23,336	$14,173	$15,929	$4,688
Net Investment Income (Loss)	60	32,887	52,082	7,793	(882)	59,188
Retired Re-employed (HB1)	-	-	-	709	837	932
Member Drug Reimbursement	351	243	-	-	-	-
Premiums Received from Retirees	876	895	37	14	(13)	(51)
Total Additions	25,271	59,169	76,126	22,689	15,871	64,757
Deductions						
Health Insurance Premiums	13,941	16,837	15,405	17,000	17,490	17,562
Administrative Expenses	335	179	78	101	97	105
Self Funded Healthcare Costs	-	-	-	-	-	45
Excise Tax Insurance	-	-	-	-	-	-
Total Deductions	14,276	17,016	15,482	17,101	17,587	17,712
Net Increase (Decrease) in Plan Net Position	$10,995	$42,153	$60,642	$5,588	($1,716)	$47,045

Changes in Plan Net Position *($ in Thousands)*

CERS Non-Hazardous Pension Fund

Additions	2012	2013	2014	2015	2016	2017
Members' Contributions	$119,123	$120,777	$122,459	$133,637	$133,987	$150,714
Employers' Contributions	270,664	294,914	324,231	297,714	282,767	331,493
Health Insurance Contribution (HB1)	5,101	4,659	6,109	6,674	7,687	9,158
Net Investment Income (Loss)	(3,349)	579,161	893,386	110,569	(40,799)	825,901
Bank of America Settlement	-	-	-	10,280	-	-
Pension Spiking	-	-	-	850	1,339	2,061
Total Additions	391,539	999,511	1,348,330	559,724	384,981	1,319,327
Deductions						
Benefit Payments	524,385	553,204	582,850	615,335	651,247	687,460
Refunds	12.765	13,306	14,286	13,524	13,754	14,430
Administrative Expenses	16,740	17,743	18,615	18,212	19,078	19,614
Capital Project Expenses	9	-	-	-	307	77
Total Deductions	553,899	584,253	615,751	647,071	684,385	721,581
Net Increase (Decrease) in Plan Net Position	$(162,360)	$415,258	$732,579	($87,347)	($299,404)	$597,746

CERS Non-Hazardous Insurance Fund

Additions	2012	2013	2014	2015	2016	2017
Employer Contributions	$164,297	$158,212	$121,161	$115,836	$108,269	$117,310
Net Investment Income (Loss)	(32,992)	147,194	231,743	36,731	(1,422)	259,586
Retired Re-employed (HB1)	-	-	-	3,608	3,567	3,402
Member Drug Reimbursement	8,443	5,360	6	-	-	1
Premiums Received from Retirees	17,493	16,293	1,449	582	629	707
Total Additions	157,241	327,059	357,064	156,757	111,043	121,420
Deductions				-		
Health Insurance Premiums	141,694	132,489	96,804	113,734	122,713	124,573
Administrative Expenses	5,545	4,431	508	782	726	789
Self Funded Healthcare Costs	-	-	-	-	-	3,635
Excise Tax Insurance	-	-	-	-	-	6
Total Deductions	147,239	136,920	97,312	114,522	123,439	129,003
Net Increase (Decrease) in Plan Net Position	$10,002	$190,139	$259,751	$42,235	($12,396)	$252,003

Changes in Plan Net Position *($ in Thousands)*

CERS Hazardous Pension Fund

Additions	2012	2013	2014	2015	2016	2017
Members' Contributions	$41,797	$42,863	$42,631	$46,609	$51,554	$60,102
Employers' Contributions	77,311	120,140	115,240	107,515	104,952	114,315
Health Insurance Contribution (HB1)	811	734	1,091	1,084	1,418	1,708
Net Investment Income (Loss)	(24,724)	181,171	287,816	37,104	(9,021)	270,473
Bank of America Settlement	-	-	-	2,865	-	-
Pension Spiking	-	-	-	557	762	1,632
Total Additions	95,195	344,908	447,452	195,734	149,665	177,757
Deductions						
Benefit Payments	169,352	179,696	189,635	200,134	213,448	226,985
Refunds	3,516	3,158	2,664	3,111	2,879	2,315
Administrative Expenses	1,319	1,202	1,721	1,289	1,337	1,421
Capital Project Expenses	-	-	-	-	26	7
Total Deductions	174,187	184,056	194,020	204,534	217,690	230,728
Net Increase (Decrease) in Plan Net Position	($79,992)	$160,852	$253,431	($8,800)	($68,025)	$217,502

CERS Hazardous Insurance Fund

Additions	2012	2013	2014	2015	2016	2017
Employers' Contributions	$90,204	$84,962	$74,265	$71,008	$66,575	$50,743
Net Investment Income (Loss)	(16,127)	79,885	124,952	20,283	1,102	142,744
Retired Re-employed (HB1)	-	-	-	770	862	794
Member Drug Reimbursement	871	562	-	-	-	-
Premiums Received from Retirees	695	657	32	10	(106)	(301)
Total Additions	75,643	166,066	200,101	92,071	68,615	51,236
Deductions						
Health Insurance Premiums	50,155	59,941	60,843	65,553	68,518	70,407
Administrative Expenses	688	679	275	339	480	381
Self Funded Healthcare Costs	-	-	-	-	-	160
Excise Tax Insurance	-	-	-	-	-	-
Total Deductions	50,843	60,620	61,117	65,894	68,998	70,948
Net Increase (Decrease) in Plan Net Position	$24,800	$105,446	$138,983	$26,177	($383)	$123,216

Changes in Plan Net Position *($ in Thousands)*

SPRS Pension Fund

Additions	2012	2013	2014	2015	2016	2017
Members' Contributions	$5,154	$4,495	$5,005	$5,150	$5,149	$5,349
Employers' Contributions	15,040	18,501	20,279	31,444	25,723	38,028
Health Insurance Contribution (HB1)	46	48	70	94	113	131
Net Investment Income (Loss)	43	25,954	40,291	3,427	(3,841)	26,756
Bank of America Settlement	-	-	-	646	-	-
Pension Spiking	-	-	-	546	99	210
Total Additions	20,283	48,998	65,729	41,307	27,243	68,718
Deductions						
Benefit Payments	48,867	50,559	53,026	54,766	56,268	56,935
Refunds	149	31	214	85	11	26
Administrative Expenses	73	184	215	201	176	181
Capital Project Expenses	-	-	-	-	4	1
Total Deductions	49,089	50,774	53,454	55,052	56,459	57,143
Net Increase (Decrease) in Plan Net Position	($28,806)	($1,776)	$12,276	($13,745)	($29,216)	$38,370

SPRS Insurance Fund

Additions	2012	2013	2014	2015	2016	2017
Employer Contributions	$10,810	$16,829	$14,498	$10,379	$10,228	$9,222
Net Investment Income (Loss)	(1,458)	12,993	20,458	2,921	(48)	21,570
Retired Re-employed (HB1)	-	-	-	3	9	-
Member Drug Reimbursement	279	178	-	-	-	-
Premiums Received from Retirees	20	23	11	1	(29)	(55)
Total Additions	9,651	30,023	35,012	13,304	10,160	9,167
Deductions						
Health Insurance Premiums	10,791	12,546	12,688	13,483	13,836	13,405
Administrative Expenses	201	184	58	65	89	66
Self Funded Healthcare Costs	-	-	-	-	-	24
Excise Tax Insurance	-	-	-	-	-	-
Total Deductions	10,992	12,730	12,745	13,548	13,925	13,495
Net Increase (Decrease) in Plan Net Position	($1,341)	$17,293	$22,267	($244)	($3,765)	$17,242

Schedule of Benefit Expenses

KERS Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2011-12				
Average Benefit	$1,008	$1,927	$1,029	$925
Number of Accounts	6,218	31,580	2,626	959
Total Monthly Benefits	$6,269,576	$60,879,802	$2,702,410	$887,236
% of Total Monthly Benefits	8.86%	86.06%	3.82%	1.25%
FY 2012-13				
Average Benefit	$1,003	$1,915	$1,020	$889
Number of Accounts	6,441	32,310	2,687	962
Total Monthly Benefits	$6,459,840	$61,882,399	$2,740,491	$855,033
% of Total Monthly Benefits	8.98%	86.02%	3.81%	1.19%
FY 2013-14				
Average Benefit	$992	$1,911	$987	$886
Number of Accounts	6,678	33,106	2,706	954
Total Monthly Benefits	$6,624,472	$63,255,779	$2,671,749	$845,468
% of Total Monthly Benefits	9.03%	86.18%	3.64%	1.15%
FY 2014-15				
Average Benefit	$992	$1,901	$996	$909
Number of Accounts	6,896	33,940	2,696	983
Total Monthly Benefits	$6,843,193	$64,503,048	$2,684,720	$893,407
% of Total Monthly Benefits	9.13%	86.09%	3.58%	1.19%
FY 2015-16				
Average Benefit	$989	$1,886	$1,005	$902
Number of Accounts	7,390	35,192	2,770	1,014
Total Monthly Benefits	$7,312,293	$66,383,638	$2,784,928	$914,804
% of Total Monthly Benefits	9.45%	85.77%	3.60%	1.18%
FY 2016-17				
Average Benefit	$991.85	$1,883.28	$1,012.96	$924.43
Number of Accounts	7,628	35,890	2,772	1,028
Total Monthly Benefits	$7,566	$67,591	$2,808	$950
% of Total Monthly Benefits	9.59%	85.65%	3.56%	1.20%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order (QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

KERS Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2011-12				
Average Benefit	$976.67	$1,541.49	$581	$721
Number of Accounts	1,657	1,339	180	92
Total Monthly Benefits	$1,618,343	$2,064,050	$104,644	$66,409
% of Total Monthly Benefits	42.00%	53.56%	2.72%	1.72%
FY 2012-13				
Average Benefit	$961	$1,543	$662	$725
Number of Accounts	1,751	1,417	190	93
Total Monthly Benefits	$1,682,541	$2,186,334	$125,704	$67,440
% of Total Monthly Benefits	41.42%	53.82%	3.10%	1.66%
FY 2013-14				
Average Benefit	$971	$1,560	$649	$749
Number of Accounts	1,851	1,497	191	89
Total Monthly Benefits	$1,797,900	$2,335,190	$123,867	$66,679
% of Total Monthly Benefits	41.58%	54.01%	2.86%	1.54%
FY 2014-15				
Average Benefit	$986	$1,556	$661	$714
Number of Accounts	1,912	1,566	193	90
Total Monthly Benefits	$1,884,477	$2,436,923	$127,477	$64,250
% of Total Monthly Benefits				
FY 2015-16				
Average Benefit	$983.95	$1,542.29	$663.21	$729.84
Number of Accounts	2,046	1,658	194	94
Total Monthly Benefits	$2,011,530	$2,557,114	$128,663	$68,605
% of Total Monthly Benefits	42.21%	53.65%	2.70%	1.44%
FY 2016-17				
Average Benefit	$993.21	$1,540.83	$661.59	$721.41
Number of Accounts	2,101	1,719	205	96
Total Monthly Benefits	$2,087	$2,649	$135	$69
% of Total Monthly Benefits	42.24%	53.61%	2.75%	1.40%

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Schedule of Benefit Expenses

CERS Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2011-12				
Average Benefit	$587	$1,039	$870	$636
Number of Accounts	10,620	31,797	4,280	1,052
Total Monthly Benefits	$6,237,369	$33,041,035	$3,724,859	$669,377
% of Total Monthly Benefits	14.28%	75.66%	8.53%	1.53%
FY 2012-13				
Average Benefit	$591	$1,042	$878	$625
Number of Accounts	11,266	33,393	4,537	1,075
Total Monthly Benefits	$6,661,524	$34,797,169	$3,982,213	$672,310
% of Total Monthly Benefits	14.45%	75.46%	8.64%	1.45%
FY 2013-14				
Average Benefit	$596	$1,042	$856	$613
Number of Accounts	11,885	34,911	4,729	1,110
Total Monthly Benefits	$7,081,048	$36,375,607	$4,047,035	$680,784
% of Total Monthly Benefits	14.70%	75.49%	8.40%	1.41%
FY 2014-15				
Average Benefit	$612	$1,044	$862	$616
Number of Accounts	12,749	36,746	4,854	1,161
Total Monthly Benefits	$7,801,662	$38,375,001	$4,186,130	$715,032
% of Total Monthly Benefits	15.27%	75.13%	8.20%	1.40%
FY 2015-16				
Average Benefit	$623	$1,045	$874	$626
Number of Accounts	14,014	39,066	5,118	1,268
Total Monthly Benefits	$8,724,563	$40,823,334	$4,472,723	$793,726
% of Total Monthly Benefits	15.92%	74.48%	8.16%	1.45%
FY 2015-16				
Average Benefit	$633.76	$1,049.90	$882.84	$615.74
Number of Accounts	14,792	40,873	5,280	1,318
Total Monthly Benefits	$9,375	$42,913	$4,661	$812
% of Total Monthly Benefits	16.23%	74.29%	8.07%	1.41%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

CERS Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2011-12				
Average Benefit	$1,430	$2,422	$1,300	$1,046
Number of Accounts	1,766	4,407	662	110
Total Monthly Benefits	$2,526,722	$10,673,928	$861,223	$115,107
% of Total Monthly Benefits	17.82%	75.29%	6.07%	0.81%
FY 2012-13				
Average Benefit	$1,433	$2,429	$1,121	$1,073
Number of Accounts	1,883	4,683	681	119
Total Monthly Benefits	$2,699,176	$11,374,811	$763,700	$127,689
% of Total Monthly Benefits	18.04%	76.01%	5.10%	0.85%
FY 2013-14				
Average Benefit	$1,467	$2,437	$1,125	$1,008
Number of Accounts	1,974	4,873	695	119
Total Monthly Benefits	$2,895,353	$11,876,578	$781,685	$119,935
% of Total Monthly Benefits	18.47%	75.77%	4.99,%	0.77%
FY 2014-15				
Average Benefit	$1,480	$2,448	$1,145	$954
Number of Accounts	2,097	5,139	688	127
Total Monthly Benefits	$3,103,613	$12,581,191	$787,549	$121,103
% of Total Monthly Benefits	18.70%	75.82%	4.75%	0.73%
FY 2015-16				
Average Benefit	$1,494	$2,453	$1,137	$975
Number of Accounts	2,269	5,485	742	143
Total Monthly Benefits	$3,388,890	$13,452,235	$843,463	$139,353
% of Total Monthly Benefits	19.01%	75.47%	4.73%	0.78%
FY 2016-17				
Average Benefit	$1,508.81	$2,473.17	$1,137.58	$996.74
Number of Accounts	2,394	5,764	794	149
Total Monthly Benefits	$3,612	$14,255	$903	$149
% of Total Monthly Benefits	19.09%	75.35%	4.77%	0.78%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order (QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses

SPRS

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
FY 2011-12				
Average Benefit	$3,560	$3,135	$1,372	$2,136
Number of Accounts	150	1,083	66	25
Total Monthly Benefits	$534,132	$3,396,203	$90,562	$53,404
% of Total Monthly Benefits	13.11%	83.36%	2.22%	1.31%
FY 2012-13				
Average Benefit	$3,601	$3,130	$1,320	$2,198
Number of Accounts	149	1,126	74	23
Total Monthly Benefits	$536,481	$3,524,248	$97,681	$50,563
% of Total Monthly Benefits	12.75%	83.73%	2.32%	1.20%
FY 2013-14				
Average Benefit	$3,621	$3,197	$1,346	$2,196
Number of Accounts	146	1,172	75	23
Total Monthly Benefits	$528,611	$3,747,012	$100,974	$49,197
% of Total Monthly Benefits	11.94%	84.66%	2.28%	1.11%
FY 2014-15				
Average Benefit	$3,578	$3,189	$1,347	$2,153
Number of Accounts	150	1,213	75	23
Total Monthly Benefits	$536,649	$3,867,971	$101,018	$49,524
% of Total Monthly Benefits	11.78%	84.91%	2.22%	1.09%
FY 2015-16				
Average Benefit	$3,579	$3,135	$1,269	$2,008
Number of Accounts	155	1,277	82	25
Total Monthly Benefits	$554,743	$4,002,993	$104,056	$50,196
% of Total Monthly Benefits	11.77%	84.95%	2.21%	1.07%
FY 2016-17				
Average Benefit	$3,610.95	$3,134.90	$1,277.91	$2,007.83
Number of Accounts	149	1,303	82	25
Total Monthly Benefits	$538	$4,084	$105	$50
% of Total Monthly Benefits	11.26%	85.50%	2.19%	1.05%

These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Analysis of Initial Retirees

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
FY 2011-12					
Number of Accounts	1,641	206	3,160	410	47
Average Service Credit (months)	190	169	185	210	276
Average Final Compensation	$45,528	$45,815	$32,709	$57,756	$71,298
Average Monthly Benefit	$1,162	$1,312	$872	$2,149	$3,556
Average System Payment for Health Insurance	$291	$496	$271	$826	$981
FY 2012-13					
Number of Accounts	1,810	205	3,303	443	59
Average Service Credit (months)	199	157	189	202	234
Average Final Compensation	$47,168	$46,456	$34,292	$58,516	$69,325
Average Monthly Benefit	$1,275	$1,250	$938	$2,196	$2,893
Average System Payment for Health Insurance	$303	$433	$259	$853	$994
FY 2013-14					
Number of Accounts	2,037	245	3,529	430	77
Average Service Credit (months)	202	165	182	194	260
Average Final Compensation	$46,480	$46,595	$33,816	$57,718	$70,009
Average Monthly Benefit	$1,278	$1,296	$879	$2,021	$3,322
Average System Payment for Health Insurance	$534	$937	$486	$1,279	$1,378
FY 2014-15					
Number of Accounts	2,078	191	4,084	496	55
Average Service Credit (months)	204	164	188	204	251
Average Final Compensation	$47,187	$47,148	$34,561	$59,589	$67,862
Average Monthly Benefit	$1,308	$1,280	$913	$2,178	$3,009
Average System Payment for Health Insurance	$549	$906	$489	$1,254	$1,376
FY 2015-16					
Number of Accounts	2,043	205	4,151	522	57
Average Service Credit (months)	207	160	190	212	234
Average Final Compensation	$47,429	$44,494	$34,632	$58,977	$65,535
Average Monthly Benefit	$1,351	$1,225	$932	$2,303	$2,953
Average System Payment for Health Insurance	$558	$870	$501	$1,277	$1,425
FY 2016-17					
Number of Accounts	2,094	191	4,151	544	30
Average Service Credit (months)	208	146	191	203	241
Average Final Compensation	$47	$48	$35	$58	$68
Average Monthly Benefit	$1,338.96	$1,150.10	$939.73	$2,236.10	$2,934.73
Average System Payment for Health Insurance	$557.91	$872.08	$510.09	$1,247.26	$1,191.75

This table represents all individuals who had an initial retirement date within the fiscal year.

Payment Options Selected by Retired Members

	Basic	Lump Sum	Other	Period Certain	Pop Up	Social Security Adjustment	Survivorship
KERS Non-Hazardous							
Number of Accounts	16,230	2,133	13	5,972	9,094	3,332	10,544
Monthly Benefits	$24,732,694	$2,491,174	$11,745	$9,281,460	$18,796,125	$5,768,856	$17,833,006
KERS Hazardous							
Number of Accounts	1,084	250	4	473	1,122	282	906
Monthly Benefits	$1,190,931	$257,111	$2,414	$526,183	$1,589,815	$330,954	$1,042,889
CERS Non-Hazardous							
Number of Accounts	25,392	3,241	16	8,906	9,884	2,117	12,707
Monthly Benefits	$20,313,654	$2,177,293	$7,741	$7,529,539	$12,115,540	$2,757,069	$12,859,268
CERS Hazardous							
Number of Accounts	1,476	469	28	820	3,561	542	2,205
Monthly Benefits	$2,779,098	$743,949	$15,125	$1,386,693	$8,654,668	$836,687	$4,502,981
SPRS							
Number of Accounts	169	22	1	129	629	196	413
Monthly Benefits	$487,676	$51,466	$893	$326,156	$2,190,851	$400,130	$1,320,615
KRS Total							
Number of Accounts	44,351	6,115	62	16,300	24,290	6,469	26,775
Monthly Benefits	$49,504,053	$5,720,993	$37,918	$19,050,031	$43,346,999	$10,093,696	$37,558,759

The information in this table represents accounts administered by KRS.
A single member may have multiple accounts, which contribute to one pension.

Employer Contribution Rates

In KERS, CERS, and SPRS both the employee and the employer contribute a percentage of creditable compensation to KRS.

The employee contribution rate is set by state statute. Non-Hazardous employees contribute 5% while Hazardous duty members contribute 8%. Employees hired on or after September 1, 2008, contribute an additional 1% to health insurance.

Under Kentucky Revised Statute 61.565, KERS and SPRS employer contribution rates are set by the KRS Board of Trustees based on an annual actuarial valuation. However, KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. In recent years, the Kentucky General Assembly has routinely suspended Kentucky Revised Statute 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the Board's consulting actuary. The table in the Actuarial Section shows the KERS and SPRS employer contribution rates that were actuarially recommended in the annual valuation without any adjustments (Recommended Rate) and the rate specified by the Executive Branch budget bill for each fiscal year (Budgeted Rate).

The CERS employer contribution rates are also set by the KRS Board under Kentucky Revised Statute 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. The CERS employer contribution rates for fiscal year 2008 through 2009 were reduced from the actuarially recommended rate as a result of the passage of House Bill (HB) 1 during the 2008 Extraordinary Session of the Kentucky General Assembly. Also, during its 2009 Regular Session, the Kentucky General Assembly enacted HB 117, which mandated an extension of the phase-in of insurance contribution rates that had been previously approved by the KRS Board in 2006 from five years to 10 years to further mitigate the impact of the application of GASB Statements 43 and 45 on CERS employer contribution rates for health insurance. The "Recommended Rate" shown for CERS Non-Hazardous and Hazardous plans are the actuarially recommended rates as set forth in the annual valuation. The "Budgeted Rate" shown for the two plans is the rate required by the 10 year phase-in mandated in KRS 61.565(6).

Employer Contribution Rates (%)						
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
KERS Non-Hazardous						
Budgeted Rate	19.82	23.61	26.79	38.77	38.77	48.59%
Recommended Rate	40.71	44.55	45.28	38.77	38.77	47.28%
KERS Hazardous						
Budgeted Rate	28.98	29.79	32.21	26.34	26.34	23.82%
Recommended Rate	33.84	35.89	28.84	26.34	26.34	23.82%
CERS Non-Hazardous						
Budgeted Rate	18.96	19.55	18.89	17.67	17.06%	18.68%
Recommended Rate	21.29	21.21	19.58	17.67	17.06%	18.88%
CERS Hazardous						
Budgeted Rate	35.76	37.60	35.70	34.31	32.95%	31.06%
Recommended Rate	41.65	41.94	37.79	34.31	32.95%	31.50%
SPRS						
Budgeted Rate	52.13	63.67	71.15	75.76	75.76	89.21%
Recommended Rate	94.63	103.41	96.52	75.76	75.76	85.34%

Insurance CONTRACTS

KRS provides medical insurance and other managed care coverage for eligible retired members.

Participation in the insurance program is optional and requires the completion of the proper Forms at the time of retirement in order to obtain the insurance coverage. KRS provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by KRS. A retired member's spouse and/or dependents may also be covered on health insurance through KRS.

Insurance Benefits Paid to Retirees & Beneficiaries Participating in a KRS Health Insurance Plan

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Number	31,146	2,660	35,707	7,758	1,666
Average Service Credit (Months)	311	264	261	280	325
Average Monthly System Payment for Health Insurance	$372	$674	$322	$946	$885
Average Monthly Member Payment for Health Insurance	$59	$47	$61	$33	$17
Total Monthly Payment for Health Insurance	$12,522,372	$1,578,292	$12,824,040	$6,209,200	$1,153,001

Insurance Contracts by Type

KERS Non-Hazardous	2012	2013	2014	2015	2016	2017
KEHP Parent Plus	734	618	506	452	441	411
KEHP Couple/Family	1,917	1,276	797	714	656	663
KEHP Single	9,764	9,364	9,491	9,251	8,876	8,627
Medicare without Prescription	1,721	1,474	1,370	1,303	19,447	1,229
Medicare with Prescription	15,015	16,834	17,738	18,577	1,286	20,215
KERS Hazardous						
KEHP Parent Plus	93	106	110	110	97	88
KEHP Couple/Family	517	451	448	448	439	432
KEHP Single	645	625	647	656	663	667
Medicare without Prescription	67	60	56	62	1,302	72
Medicare with Prescription	751	985	1,104	1,177	66	1,401

Insurance Contracts by Type						
CERS Non-Hazardous	2012	2013	2014	2015	2016	2017
KEHP Parent Plus	383	340	278	242	235	222
KEHP Couple/Family	1,317	857	546	473	465	462
KEHP Single	7,972	7,652	7,843	8,098	8,164	8,313
Medicare without Prescription	3,119	2,707	2,583	2,531	23,007	2,462
Medicare with Prescription	16,355	18,824	20,200	21,520	2,499	24,247
CERS Hazardous						
KEHP Parent Plus	310	400	432	456	378	395
KEHP Couple/Family	2,237	2,155	2,184	2,255	2,321	2,387
KEHP Single	1,385	1,425	1,447	1,500	1,595	1,645
Medicare without Prescription	73	79	89	107	2,969	125
Medicare with Prescription	1,853	2,324	2,510	2,697	114	3,205
SPRS						
KEHP Parent Plus	62	76	78	81	77	79
KEHP Couple/Family	444	421	444	441	355	420
KEHP Single	291	283	263	265	246	251
Medicare without Prescription	15	20	20	16	850	17
Medicare with Prescription	581	682	712	777	18	897
KRS Total						
KEHP Parent Plus	1,582	1,540	1,404	1,341	1,228	1,195
KEHP Couple/Family	6,432	5,160	4,419	4,331	4,328	4,364
KEHP Single	20,057	19,349	19,691	19,770	19,544	19,503
Medicare without Prescription	4,995	4,340	4,118	4,019	47,575	3,905
Medicare with Prescription	34,555	39,649	42,264	44,748	3,983	49,965

OUR SIX MANDATES

1. Strive for appropriate funding for all plans.

2. Provide members with efficient access to information and helpful counseling to meet their individual needs.

3. Manage the assets in accordance with each plan's needs while adding value to a passive portfolio.

4. Communicate effectively with all constituents, while ensuring appropriate transparency.

5. Maintain a work environment that promotes employee effectiveness, morale, and retention.

6. Insist on a culture of continuous enhancement to everything we do.

(502) 696-8800 or (800) 928-4646
Fax: (502) 696-8822
Website: https://kyret.ky.gov
Facebook: kyretirement
www.youtube.com/user/KentuckyRetire
Twitter.com/Kyretire
MyRetirement Portal - https://myretirement.ky.gov

Kentucky Retirement Systems
1260 Louisville Rd., Frankfort, KY 40601

Hours of Operation:
8:00 AM - 4:30PM (EST) Monday-Friday

COMPREHENSIVE ANNUAL
FINANCIAL REPORT

Prepared by the Accounting, Investment and Communications Divisions

2018

For the Fiscal Year Ended June 30, 2018

Kentucky Retirement Systems
A component unit of the Commonwealth of Kentucky

David L. Eager, Executive Director
Karen D. Roggenkamp, Deputy Executive Director

Kentucky Employees Retirement System (KERS)
County Employees Retirement System (CERS)
State Police Retirement System (SPRS)

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Management's Responsibility for Financial Reporting

Management has prepared the combining financial statements of Kentucky Retirement Systems and is responsible for the integrity and fairness of the information presented.

November 29, 2018 Management has prepared the combining financial statements of Kentucky Retirement Systems (KRS) and is responsible for the integrity and fairness of the information presented. Some amounts included in the combining financial statements may be based upon estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these combining financial statements conform to U.S. Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the combining financial statements.

Responsibility Ultimate responsibility for the combining financial statements and annual report rests with the Board of Trustees. The Executive Director and KRS staff assist the Board in its responsibilities.

Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training employees, the establishment of an organizational structure, and the communications of policies and guidelines throughout the organization. The cost of a control should not exceed the benefits to be derived; the objective is to provide reasonable, rather than absolute, assurance that the combining financial statements are free of any material misstatements. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and Board of Trustees.

The Kentucky Auditor of Public Accounts (APA) has conducted an independent audit of the combining financial statements in accordance with U.S. Generally Accepted Government Auditing Standards. This audit is described in theAPA's Report on pages 17, 18, and 19 in the Financial Section. Management has provided the APA with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of combining financial statements.

David L. Eager
Executive Director

Karen D. Roggenkamp
Deputy Executive Director

Connie A. Davis, CIA, CGAP, CRMA
Director of Accounting

Letter of Transmittal

November 29, 2018

Dear Kentucky Retirement Systems Members, Beneficiaries, and Employers:

On behalf of the Board of Trustees, Management, and Staff of Kentucky Retirement Systems (KRS), it is my honor to present the KRS' Comprehensive Annual Financial Report (CAFR) for the Fiscal Year Ending June 30, 2018. This annual report is provided as a resource for understanding the structure and financial status of the Systems.

Fiscal Year 2018 was one for the record books. KRS experienced a 17.5% increase in retirements this year over Fiscal Year 2017, our investments earned more than $1.4 billion, and our Board of Trustees continued to take actions designed to improve the transparency, governance, and stability of the Systems. Through it all, KRS staff rose to the occasion and successfully managed the workload while continuing to provide the exceptional customer service that our members and retirees have come to expect. I am proud of their dedication and professionalism, and am very pleased with the progress our agency is making.

Here are a few highlights of this rather eventful Fiscal Year:

Legislation

The 2018 General Assembly produced several pieces of significant KRS-related legislation:

House Bill 185 (HB 185) made changes regarding death in the line of duty benefits for KRS participants.

House Bill 200 (HB 200), the State Executive Branch Budget Bill, established the KERS and SPRS plans' actuarially determined contribution rates for the next two years. Significantly, contribution rates for Fiscal 2019 will increase by approximately 50%. We owe a debt of gratitude to the legislators and the Governor for providing KRS with this much needed increase in funding.

House Bill 265 (HB 265) froze the employer contribution rate for the Quasi State Agencies at 49.47% for one year. In FY 2020, their contribution will increase to the same 83.43% rate as other KERS Non-Hazardous employers currently pay.

House Bill 362 (HB 362) provides a phase-in of the higher contribution rates for the CERS employers. Rates can only rise by 12% until reaching the actuarially determined rate of 27.28% for CERS Non-Hazardous and 46.50% for CERS Hazardous. For Fiscal 2018, the pension contribution rates were 19.18% and 31.55% respectively.

This bill originally provided Quasi State agencies (like County Health Departments) an opportunity to leave KRS and pay for their unfunded liability with an (up to) 40 year interest-free loan. That provision was struck because the added cost to the remaining agencies was estimated to be about $2 Billion. The General Assembly asked KRS to present an alternative plan to the existing "opt out" provisions in state law by December 2018 for possible consideration during the 2019 Regular Session.

Finally, **Senate Bill 151 (SB 151),** the pension reform bill, has three major components:

First, it establishes a 401(a) Tier 4 plan which acts much like the private sector's 401(k) plans. All new employees will continue to go into Tier 3, but may roll into Tier 4 after a 90 day waiting period. All current employees also have the irreversible right to go into Tier 4 for all future contributions.

Second, member earnings in Tier 3 will change from a guaranteed 4% plus 75% their system's five year geometric average rate of return, to no guarantee and 85% of their system's 10 year geometric average rate of return, but in no event will the earnings be less than 0.0%.

Importantly, the bill also changes the method of funding the unfunded liability from a percent of payroll basis to a level dollar method.

The Attorney General of Kentucky filed a suit barring the implementation of SB 151. The suit has been heard in the Kentucky Supreme Court, but no ruling has been issued.

If the Attorney General's suit prevails, KRS will seek support of the level dollar funding through other legislation. That funding method is critical for the longer-term financial health of the pension systems, particularly KERS Non-Hazardous.

Letter of Transmittal

Funding

The funded ratios increased modestly in three of the five pension plans, and meaningfully in all five insurance plans. The two exceptions were the KERS Non-Hazardous and CERS Non-Hazardous pension funds. The KERS Non-Hazardous funded ratio declined from 13.6% as of June 30, 2017 to 12.9% as of June 30, 2018, while the CERS Non-Hazardous funded ratio declined slightly from 52.8% as of June 30, 2017 to 52.7% as of June 30, 2018.

Funding for the five Retiree Health Insurance Plans improved dramatically, with increases in funded statuses averaging 8.5%. With over $5 billion in assets and nearly $8 billion in liabilities, these insurance systems are a meaningful part of the KRS responsibility to provide members with their benefits.

Barring any major decline in asset values, the funded status for the KERS and SPRS pensions and all of the insurance plans is expected to go up in Fiscal 2019 as a result of the higher contribution rates. The improvement in the CERS pension plans will be less certain until the higher contribution rates are fully enacted.

Governance

Several Board of Trustees actions and statutory changes strengthened KRS' Governance:

- Increased the size of our Investment Committee from five to nine per the requirements of Senate Bill 2 (2017 Regular Session). SB 2 now requires six investment professionals, up from four previously;
- Formed a seven-member Actuarial Subcommittee;
- Began Facebook live-streaming Board and Committee meetings and posting them to our website;
- Established a new Trustee Education Policy and education compliance reporting system;
- Elected a new Chair of the Board, Dave Harris and Vice Chair, Keith Peercy;
- Made the Interim Executive Director, David Eager, the Executive Director;
- Re-wrote the Bylaws; and
- Began an audit by the Auditor of Public Accounts.

KRS plans to seek legislation in the 2019 General Assembly to consolidate the dates of the CERS elections with the CERS Fall election every fourth year, being consistent with the Spring election, thereby saving approximately $100,000 every election. We will also propose providing for electronic balloting to each of the four elections over the election cycle to improve participation rates and reduce expenses.

Technology

KRS continued to invest in applications and infrastructure to improve member services and increase staff productivity. During FY 2018 our technology team accomplished the following:

- Disaster Recovery-successfully tested our functionality and replication;
- Information Security-expanded all software monitoring applications and improved internal staff awareness of threats;
- Successfully implemented software modifications to administer pension spiking statutory changes;
- Expanded use of business intelligence software to facilitate reporting and better correct employer reporting errors; and
- Improved process and documentation of IT procurement as we transition to the State Model Procurement Code.

Letter of Transmittal

Investments

Investment returns were favorable again this fiscal year, with each plan's returns exceeding its interest rate assumption. Four out of five pension and four out of five insurance plan's returns exceeded their market benchmarks.

During the year we adjusted our target asset allocations. The new policy targets are as follows:

Target Asset Allocations		
	KERS Non-Hazardous and SPRS	**CERS Non-Hazardous, CERS Hazardous, KERS Hazardous and all five insurance plans**
Domestic and Foreign Equities	31.5%	37.5%
Fixed Income	35.5%	28.5%
Real Estate	5.0%	5.0%
Alt. (Real Return, AB Return, RE)	10.0%	13.0%
Cash	3.0%	1.0%
Other (Real Return, TIPS, etc.)	15.0%	15.0%
TOTAL	100.0%	100.0%

Litigation

KRS has been involved in a number of important legal actions this fiscal year. Further descriptions and details of legal matters are included in our Financial Notes.

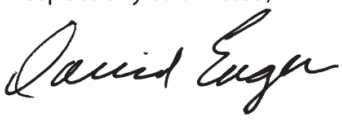
Looking Forward

Greatly improved funding (up nearly 70% for KERS Non-Hazardous and SPRS) and about 50% for the other three pension funds after a four year phase-in will greatly strengthen the financial health of all of the plans. Projections show that it will take upwards of 25 years or more before all of our funds are fully funded. But, Fiscal 2019 should prove to be the year that all of the pension funds finally began to improve financially, provided the present level of funding continues and barring a major (i.e. 20% or more) market decline. The insurance plans should also continue their positive trend which began in FY 2006.

Acknowledgments

The preparation of this report has been a collaborative effort of Executive Management and the Accounting, Investments, and Communications Divisions. KRS takes responsibility for all of the information contained in the report and confidently presents it as a basis for making management decisions that promote the responsible stewardship of the assets of the Systems.

Respectfully submitted,



David L. Eager

Executive Director

2019 BOARD MEETING SCHEDULE

Regular
February 21
May 16
September 12
November 14
December 5
Annual
April 18
*Dates subject to change.
Please visit our website for updates.
Board meetings and Audit Committee meetings begin at 10 am Eastern;
all other Committee meetings begin at 9 am Eastern unless otherwise noted.

COMMITTEE MEETING SCHEDULE

AUDIT
February 7
May 2
August 22
November 7

INVESTMENT
February 5
May 7
August 27
November 6

RETIREE HEALTH PLAN
February 12
May 14
September 5
November 12

ADMINISTRATIVE & DISABILITY APPEALS
Check website for dates and times.

Board of Trustees as of November 29, 2018

Appointed Members:

David L. Harris, Chair
Governor Appointee
Term ends 6/17/22

W. Joe Brothers
Governor Appointee
Term ends 7/1/21

John E. Chilton
Governor Appointee
Term ends 6/17/22

William S. Cook
Governor Appointee
Term ends 6/17/19

Kelly Downard
Governor Appointee
Term ends 6/17/19

John R. Farris
Governor Appointee
Term ends 6/17/19

J.T. Fulkerson
Governor Appointee
Term ends 7/1/21

David M. Gallagher
Governor Appointee
Term ends 7/1/21

Matthew Monteiro
Governor Appointee
Term ends 6/17/19

Neil P. Ramsey
Governor Appointee
Pending Replacement

Thomas B. Stephens
Personnel Secretary
Ex-Officio

Elected Members:

Raymond Campbell Connell
Elected by KERS
Term ends 3/31/22

Sherry Lynn Kremer
Elected by KERS
Term ends 3/31/22

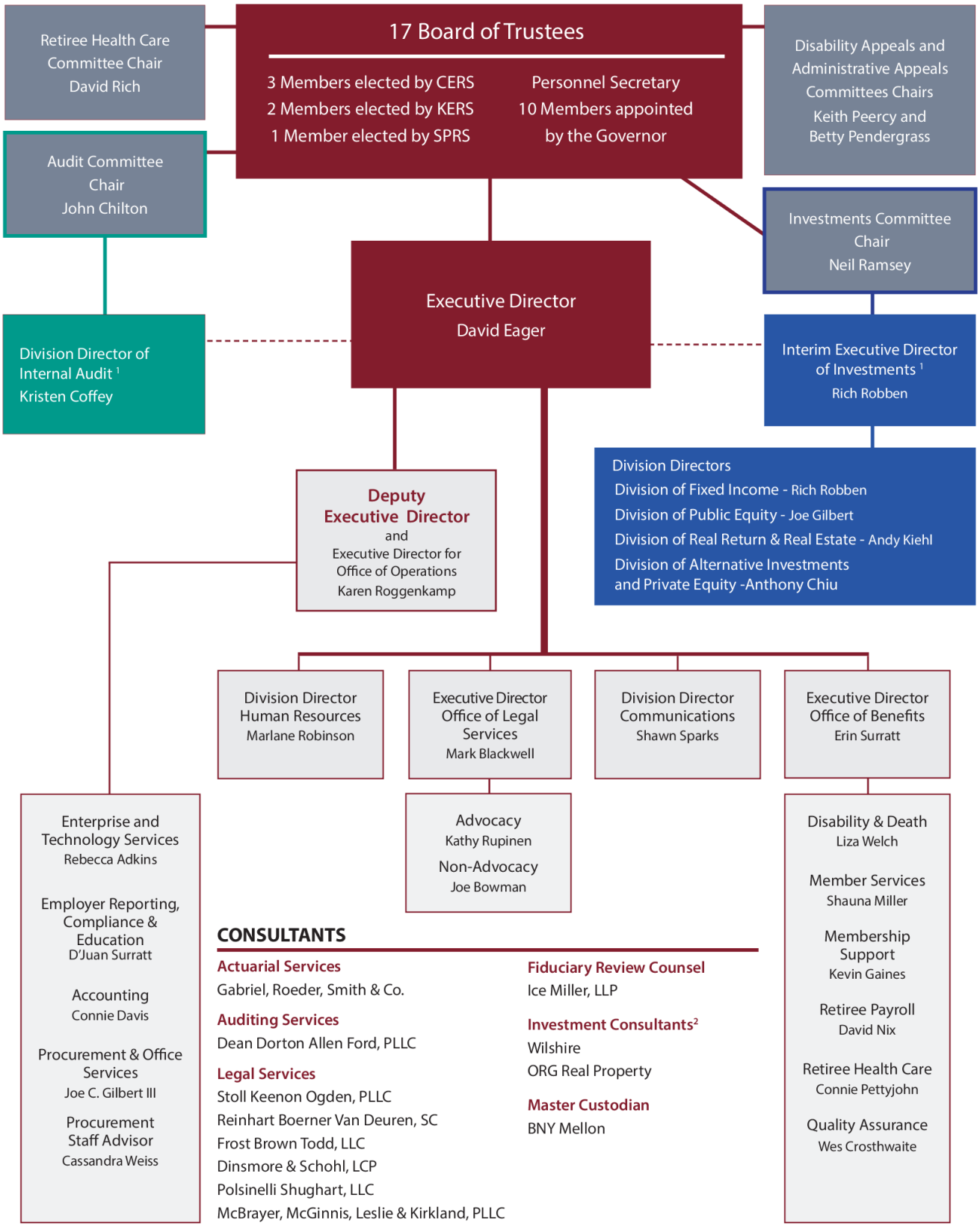
Keith Peercy, Vice Chair
Elected by SPRS
Term ends 3/31/19

Betty Pendergrass
Elected by CERS
Term ends 3/31/21

Jerry W. Powell
Elected by CERS
Term ends 3/31/21

David Rich
Elected by CERS
Term ends 10/31/21

Agency Structure *as of November 29, 2018*



CONSULTANTS

Actuarial Services
Gabriel, Roeder, Smith & Co.

Auditing Services
Dean Dorton Allen Ford, PLLC

Legal Services
Stoll Keenon Ogden, PLLC
Reinhart Boerner Van Deuren, SC
Frost Brown Todd, LLC
Dinsmore & Schohl, LCP
Polsinelli Shughart, LLC
McBrayer, McGinnis, Leslie & Kirkland, PLLC

Fiduciary Review Counsel
Ice Miller, LLP

Investment Consultants[2]
Wilshire
ORG Real Property

Master Custodian
BNY Mellon

[1] *The Executive Director of Investments and the Division Director of Internal Audit report to the Executive Director for administrative purposes.*
[2] *See pages 127-138 for additional information regarding investment professionals and the Schedules of Fees and Commissions.*

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Kentucky Retirement Systems

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2017

Christopher P. Morrill

Executive Director/CEO

Certificate of Achievement

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2017. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports and is valid for a period of one year. This was the 19th consecutive award earned by KRS. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized document. The report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe our 2018 CAFR will continue to meet the Certificate of Achievement Program's requirements, and we will be submitting it to the GFOA for their consideration.

2018 Total Fiscal Year KRS Pension Benefits Paid by County								
County	Payees*	Total	County	Payees*	Total	County	Payees*	Total
Adair	462	$7,449,889	*Grant*	556	$10,128,969	*McLean*	295	$4,273,372
Allen	394	5,200,626	*Graves*	827	12,460,068	*Meade*	426	5,862,580
Anderson	1,322	32,840,147	*Grayson*	690	10,357,850	*Menifee*	205	2,807,645
Ballard	229	3,107,680	*Green*	273	3,710,635	*Mercer*	729	12,944,716
Barren	997	15,508,389	*Greenup*	617	8,235,626	*Metcalfe*	294	3,784,137
Bath	357	5,323,067	*Hancock*	220	2,727,382	*Monroe*	250	2,834,843
Bell	641	10,010,261	*Hardin*	2,041	33,450,921	*Montgomery*	613	9,521,154
Boone	1,665	33,492,701	*Harlan*	606	9,441,452	*Morgan*	589	10,053,121
Bourbon	523	8,592,168	*Harrison*	444	6,577,160	*Muhlenberg*	748	9,125,335
Boyd	1,013	16,478,032	*Hart*	295	4,303,266	*Nelson*	967	16,116,364
Boyle	844	14,720,633	*Henderson*	1,010	16,682,005	*Nicholas*	205	2,701,531
Bracken	216	2,710,239	*Henry*	897	19,761,701	*Ohio*	614	6,437,838
Breathitt	468	7,116,755	*Hickman*	91	1,711,184	*Oldham*	1,246	25,684,018
Breckinridge	437	6,272,755	*Hopkins*	1,187	18,108,152	*Owen*	515	11,716,512
Bullitt	1,440	25,594,316	*Jackson*	303	3,999,850	*Owsley*	205	3,033,893
Butler	309	4,202,494	*Jefferson*	15,860	338,380,910	*Pendleton*	338	5,512,127
Caldwell	506	7,586,347	*Jessamine*	1,006	17,048,293	*Perry*	743	10,873,665
Calloway	1,028	14,267,469	*Johnson*	604	8,959,881	*Pike*	1,196	17,400,119
Campbell	1,464	26,934,689	*Kenton*	2,163	44,736,168	*Powell*	331	4,271,386
Carlisle	112	1,522,938	*Knott*	417	6,382,919	*Pulaski*	2,126	35,481,447
Carroll	304	4,745,742	*Knox*	572	9,024,149	*Robertson*	67	1,049,939
Carter	764	9,779,908	*LaRue*	335	5,232,274	*Rockcastle*	375	4,963,320
Casey	345	4,386,774	*Laurel*	1,174	19,112,743	*Rowan*	831	14,070,484
Christian	1,492	25,544,533	*Lawrence*	308	3,792,499	*Russell*	544	8,203,026
Clark	783	13,160,609	*Lee*	227	3,221,756	*Scott*	1,175	23,922,577
Clay	567	8,093,547	*Leslie*	236	3,430,612	*Shelby*	1,607	39,755,858
Clinton	240	3,059,773	*Letcher*	567	7,562,681	*Simpson*	267	3,023,742
Crittenden	200	2,606,436	*Lewis*	310	3,727,447	*Spencer*	450	9,672,121
Cumberland	179	2,609,053	*Lincoln*	640	7,951,228	*Taylor*	600	8,560,151
Daviess	2,502	43,628,048	*Livingston*	243	4,123,938	*Todd*	250	3,370,725
Edmonson	222	3,054,788	*Logan*	580	7,983,274	*Trigg*	499	7,914,916
Elliott	171	2,450,620	*Lyon*	344	6,477,082	*Trimble*	258	3,862,495
Estill	375	5,176,148	*Madison*	2,233	36,881,757	*Union*	346	3,882,159
Fayette	5,293	113,602,031	*Magoffin*	328	4,619,282	*Warren*	2,656	46,603,933
Fleming	441	7,521,043	*Marion*	520	7,096,484	*Washington*	311	4,868,012
Floyd	844	12,961,273	*Marshall*	844	12,259,504	*Wayne*	506	7,201,731
Franklin	6,297	194,114,984	*Martin*	261	2,802,998	*Webster*	336	4,337,558
Fulton	166	2,164,135	*Mason*	393	6,368,023	*Whitley*	995	14,257,539
Gallatin	108	1,872,994	*McCracken*	1,506	27,017,840	*Wolfe*	308	5,039,314
Garrard	433	6,287,475	*McCreary*	393	3,931,857	*Woodford*	978	24,141,926

Pension Benefits paid to retirees and beneficiaries of Kentucky Retirement Systems have a wide ranging impact on the state's economic health. In fiscal year 2018, KRS paid over $2 billion to its recipients. The majority, 93.73%, of these payments are issued to Kentucky residents. Each county in the Commonwealth receives at least $1 million annually from KRS, providing a stabilizing element for all local economies.

Total Retirement Payments As of June 30, 2018 (In Whole $)			
	Payees*	**%**	**Payments**
Kentucky	104,268	93.73%	$1,914,670,658
Out of State	7,786	6.27%	128,003,036
Grand Total	**112,054**	**100.00%**	**$2,042,673,694**
**This table represents all payees receiving a monthly payment during the fiscal year.*			

BENEFIT TIERS

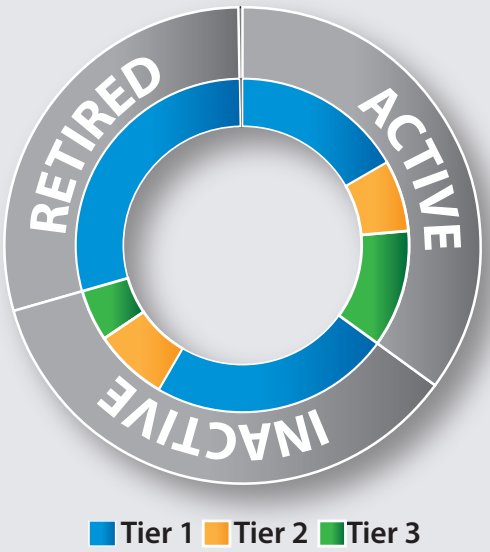
KRS currently administers three different pension benefit tiers within our defined benefit plans. The Hybrid Cash Balance plan was established as a part of Senate Bill 2, which was enacted by the Kentucky General Assembly during the 2013 Regular Session.

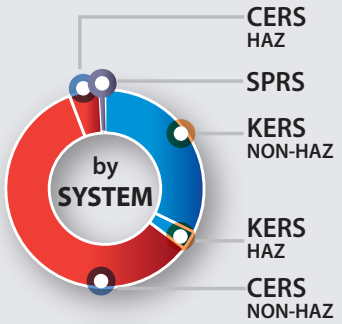
Members participating before September 1, 2008

Members participating on or after September 1, 2008 through December 31, 2013

Members participating on or after January 1, 2014

Totals for All Systems





	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	63,547	88,274	110,553	262,374
Tier 2	26,589	27,297	352	54,238
Tier 3	43,283	19,392	1	62,676
Total	**133,419**	**134,963**	**110,906**	**379,288**

See comparative totals and more detailed information in the Statistical Section beginning on page 185.

Fiduciary Net Position ($ in Thousands)							
Fund	2012	2013	2014	2015	2016	2017	2018
Pension	$10,758,706	$11,153,182	$12,015,897	$11,646,481	$10,877,758	$11,921,906	$12,415,856
Insurance	3,089,313	3,521,894	4,154,401	4,246,892	4,231,311	4,783,905	5,165,179
Total	**$13,848,019**	**$14,675,076**	**$16,170,298**	**$15,893,373**	**$15,109,069**	**$16,705,811**	**$17,581,035**

KERS

134,477 MEMBERS

NON-HAZARDOUS

122,788 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 **18,800** | Tier 2 **6,821** | Tier 3 **9,224**

AVERAGE AGE	AVERAGE ANNUAL SALARY
45.2	$41,876

RETIRED MEMBERSHIP

Tier 1 **42,092** | Tier 2 **83** | Tier 3 **0**

AVERAGE AGE	AVERAGE ANNUAL BENEFIT PAYMENT
69.0	$21,587

HAZARDOUS

11,689 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 **1,463** | Tier 2 **847** | Tier 3 **1,653**

AVERAGE AGE	AVERAGE ANNUAL SALARY
39.8	$40,268

RETIRED MEMBERSHIP

Tier 1 **2,996** | Tier 2 **14** | Tier 3 **0**

AVERAGE AGE	AVERAGE ANNUAL BENEFIT PAYMENT
64.5	$15,467

CERS

242,185 MEMBERS

NON-HAZARDOUS

222,672 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 **37,920** | Tier 2 **16,712** | Tier 3 **29,803**

AVERAGE AGE	AVERAGE ANNUAL SALARY
47.7	$30,150

RETIRED MEMBERSHIP

Tier 1 **56,384** | Tier 2 **245** | Tier 3 **0**

AVERAGE AGE	AVERAGE ANNUAL BENEFIT PAYMENT
70.3	$11,739

HAZARDOUS

19,513 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 **4,843** | Tier 2 **2,004** | Tier 3 **2,438**

AVERAGE AGE	AVERAGE ANNUAL SALARY
38.5	$57,607

RETIRED MEMBERSHIP

Tier 1 **7,637** | Tier 2 **9** | Tier 3 **1**

AVERAGE AGE	AVERAGE ANNUAL BENEFIT PAYMENT
61.8	$27,771

SPRS

2,626 MEMBERS

HAZARDOUS

2,626 MEMBERS

ACTIVE MEMBERSHIP

Tier 1 **521** | Tier 2 **205** | Tier 3 **165**

AVERAGE AGE	AVERAGE ANNUAL SALARY
37.3	$55,088

RETIRED MEMBERSHIP

Tier 1 **1,444** | Tier 2 **1** | Tier 3 **0**

AVERAGE AGE	AVERAGE ANNUAL BENEFIT PAYMENT
62.8	$39,686

ACTIVE MEMBERS
133,419

INACTIVE MEMBERS
134,963

RETIRED MEMBERS
110,906

KERS was established on July 1, 1956 by the State Legislature.

KERS Non-Hazardous - Fiduciary Net Position* ($ in Thousands)							
Fund	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Pension	$2,977,069	$2,760,753	$2,578,291	$2,327,782	$1,980,292	$2,092,781	$2,048,890
Insurance	418,490	496,040	646,904	665,639	668,318	781,406	846,762
Total	**$3,395,559**	**$3,256,793**	**$3,225,195**	**$2,993,421**	**$2,648,610**	**$2,874,187**	**$2,895,652**

KERS Hazardous - Fiduciary Net Position* ($ in Thousands)							
Fund	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Pension	$476,589	$514,592	$561,484	$552,468	$527,880	$605,921	$651,173
Insurance	330,730	372,883	433,525	439,113	437,397	484,442	513,384
Total	**$807,319**	**$887,475**	**$995,009**	**$991,581**	**$965,277**	**$1,090,363**	**$1,164,557**

CERS was established on July 1, 1958 by the State Legislature.

CERS Non-Hazardous - Fiduciary Net Position* ($ in Thousands)							
Fund	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Pension	$5,381,602	$5,795,568	$6,528,146	$6,440,800	$6,141,396	$6,739,142	$7,086,322
Insurance	1,428,821	1,618,960	1,878,711	1,920,946	1,908,550	2,160,553	2,346,767
Total	**$6,810,423**	**$7,414,528**	**$8,406,857**	**$8,361,746**	**$8,049,946**	**$8,899,695**	**$9,433,089**

CERS Hazardous - Fiduciary Net Position* ($ in Thousands)							
Fund	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Pension	$1,672,970	$1,833,571	$2,087,002	$2,078,202	$2,010,177	$2,227,679	$2,361,047
Insurance	785,874	891,320	1,030,303	1,056,480	1,056,097	1,179,313	1,268,272
Total	**$2,458,844**	**$2,724,891**	**$3,117,305**	**$3,134,682**	**$3,066,274**	**$3,406,992**	**$3,629,319**

SPRS was established on July 1, 1958 by the State Legislature.

SPRS - Fiduciary Net Position* ($ in Thousands)							
Fund	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Pension	$250,476	$248,698	$260,974	$247,229	$218,013	$256,383	$268,425
Insurance	125,398	142,691	164,958	164,714	160,949	178,191	189,994
Total	$375,874	$391,389	$425,932	$411,943	$378,962	$434,574	$458,419

* The Fiduciary Net Positions are the resources accumulated and held in trust to pay benefits.

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MIKE HARMON
AUDITOR OF PUBLIC ACCOUNTS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

Independent Auditor's Report

Report on the Combining Financial Statements

We have audited the accompanying combining financial statements of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems (KRS), a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the KRS' basic combining financial statements as listed in the table of contents.

Management's Responsibility for the Combining Financial Statements

The KRS's management is responsible for the preparation and fair presentation of these combining financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of combining financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these combining financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combining financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combining financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements of the combining financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the combining financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the combining financial statements.

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the combining financial statements referred to above present fairly, in all material respects, the combining fiduciary net position of the Pension Funds and Insurance Fund of KRS, a component unit of the Commonwealth of Kentucky, as of June 30, 2018, and the respective combining changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis-of-Matter

Unusual Subsequent Event - Pension Legislation

With the passage of Senate Bill 151, significant structural changes were made to KRS. This legislation was challenged and the case is currently before the Kentucky Supreme Court. Information regarding this litigation is included in Note N in the combining financial statements. As of the date of this report, no judgment has been rendered. Our opinion is not modified with respect to this matter.

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AN EQUAL OPPORTUNITY EMPLOYER M/F/D

Board of Trustees
Kentucky Retirement Systems
(Continued)

Reporting Entity

As discussed in Note A, the combining financial statements present only the KRS, and are not intended to present fairly the financial position of the Commonwealth of Kentucky, or the results of its operations in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Report on Summarized Comparative Information

The combining financial statements of Kentucky Retirement Systems for the year ended June 30, 2017 were audited by other auditors whose report dated December 7, 2017, stated that the plan net position as of June 30, 2017 and changes in plan net position for the year then ended were in conformity with accounting principles generally accepted in the United States of America. The combining financial statements for the year then ended (not presented herein), were audited by other auditors whose report, dated December 7, 2017, expressed an unmodified opinion on those statements.

Other Matter

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 20 through 26 and the Schedule of Changes in Employers' Total Pension Liability (TPL) (pages 83-87), Schedule of Employer Net Pension Liability (NPL) (page 82), Schedule of Employer Contributions (pages 89-91), Schedule of Changes in Employers' Net OPEB Liability (pages 94-98), Schedule of Employers' Net OPEB Liability (pages 92-93), Schedule of Employers' OPEB Contributions (pages 100-102), and Schedule of Money Weighted Rate of Return (page 103) be presented to supplement the basic combining financial statements. Such information, although not a part of the basic combining financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic combining financial statements in an appropriate operational, economical, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquires of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquires, the basic combining financial statements, and other knowledge we obtained during our audit of the basic combining financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures did not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the combining financial statements that collectively comprise the Pension Funds and Insurance Fund of the KRS' basic combining financial statements. The additional supporting schedules (pages 104 through 106) are presented for purposes of additional analysis and are not a required part of the basic combining financial statements. Such information is the responsibility of management and was derived from and relate directly to the underlying accounting and other records used to prepare the basic combining financial statements. This information has been subjected to the auditing procedures applied in the audit of the basic combining financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the basic combining financial statements as a whole.

Other Information

The Introductory, Actuarial, Investment, and Statistical sections are presented for purposes of additional analysis and are not a required part of the combining financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the combining financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Board of Trustees
Kentucky Retirement Systems
(Continued)

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated, November 29, 2018, on our consideration of the KRS's internal control over financial reporting and on our test of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the KRS's internal control over financial reporting and compliance.

Respectfully submitted,

Mike Harmon
Auditor of Public Accounts

November 29, 2018

Management's DISCUSSION & ANALYSIS

Pension Funds

The following highlights are explained in more detail later in this report.

Total Pension Fiduciary Net Position was $11.9 billion at the beginning of the fiscal year and increased by 4.14% to $12.4 billion as of June 30, 2018. The $0.5 billion increase is primarily attributable to positive investment income and higher contributions. The pension funds received $87.6 million in General Fund in fiscal year 2018 appropriations compared to $98.2 million in fiscal year 2017.

CONTRIBUTIONS

- Total contributions reported for fiscal year 2018 were $1,635.9 million compared to $1,674.0 million in fiscal year 2017. Employer contributions, member contributions, pension spiking contributions, and health insurance contributions increased for the fiscal year. General Fund appropriations of $87.6 million for the KERS and SPRS plan, and the employer cessation contributions of $17 thousand were less than fiscal year 2017 resulting in lower total contributions for fiscal year 2018, partially offset by $1 million from a legal settlement with Northern Trust.
- The member health insurance 401(h) contributions totaled $19.8 million for fiscal year 2018 compared to $17.0 million in the prior fiscal year. This increase was mainly due to new active employees in Tier 3.

INVESTMENTS

- The investment portfolio for the Pension Plans reported a net return of 8.57% for fiscal year 2018 compared to the 13.47% return for fiscal year 2017. The investment portfolio experienced realized gains across all of the portfolios.
- The net appreciation in the fair value of investments for fiscal year 2018 was $806.2 million compared to net appreciation of $1,164.1 million for the prior fiscal year.
- Interest, dividends, and net securities lending income for fiscal year 2018 was $274.9 million compared to $336.6 million in fiscal year 2017. The primary driver of this decrease was due to positive, but less favorable 2018 market conditions which resulted in decreased income and dividends across all portfolios.
- All investment returns are reported net of fees, including carried interest. Investment expenses totaled $92.6 million for fiscal year 2018 compared to $85.5 million in the prior fiscal year.

DEDUCTIONS

- Pension benefits paid to retirees and beneficiaries for fiscal year 2018 totaled $2,062.5 million compared to $1,981.1 million in fiscal year 2017 (a 4.11% increase). The increase was due to a 4.58% increase in the number of retirees to 124,369. Refund of contributions paid to former members upon termination of employment for fiscal year 2018 totaled $34.9 million compared to $30.7 million in fiscal year 2017, a 13.85% increase, as more members elected a refund at employment termination.
- KRS 2018 Pension administrative expense totaled $33.0 million compared to $33.1 million in the prior year. The decrease was mainly due to lower technology expenditures and salary expense related to vacant positions.

ACTUARIAL

The actuarial value of the total pension liability was determined as of June 30, 2018. The discount rate and assumed rate of return used to measure the total pension liability was 5.25% for the KERS Non-Hazardous and SPRS Pension plans. The rate of 6.25% was used for the KERS Hazardous and CERS Pension plans. The payroll growth assumptions for the KERS and SPRS Pension plans was 0.00% and 2.00% for the CERS Pension plans. The assumed inflation factor was 2.30% for all plans. The assumed real rate of return was 3.95% for the CERS systems, KERS Hazardous, and all Insurance plans, and 2.95% for KERS Non-Hazardous and State SPRS pension plans.

Management's DISCUSSION & ANALYSIS

Insurance Fund

The following highlights are explained in more detail later in this report.

The combined fiduciary net position of the Insurance Fund increased by $381.3 million during fiscal year 2018. Total combined net position for the fiscal year was $5,165.2 million. Total contributions and net investment income of $759.3 million offset deductions of $378.0 million which resulted in the net position increase.

CONTRIBUTIONS

- Employer contributions of $321.9 million were received in fiscal year 2018 compared to $315.0 million in fiscal year 2017. Total contributions increased 2.19% primarily due to the increased contribution rate for the KERS Non-hazardous plan and increased employer payroll for the CERS plans.
- The reimbursement of retired/re-employed health insurance for fiscal year 2018 totaled $9.8 million compared to $8.9 million in the prior fiscal year. The increase is due to an increase in retired/re-employed members for whom employers are paying health insurance reimbursements.

INVESTMENTS

- Interest, dividends, and net securities lending income for fiscal year 2018 was $106.6 million compared to $128.1 million in fiscal year 2017. The primary driver of this decrease was due to market conditions resulting in decreased income and dividends across all portfolios.
- The investment portfolio reported a net return of 9.05% for the fiscal year, lower than fiscal year 2017 net of expense returns of 13.72%. The investment returns exceeded the 6.25% assumed rate of return.
- The net appreciation in the fair value of investments for fiscal year 2018 was $366.2 million compared to net appreciation of $480.3 million for the prior fiscal year. This $114.1 million decrease in fiscal year 2018 was due to lower market returns compared to fiscal year 2017 and portfolio rebalancing to reduce equity risk.
- Investment expenses totaled $45.9 million for fiscal year 2018 compared to $34.2 million in the prior fiscal year due to asset growth.

DEDUCTIONS

- Total insurance premiums paid plus self-funded reimbursements was $375.9 million for fiscal year 2018. Although fiscal year 2018 insurance premiums were comparable to fiscal year 2017 rates, the number of covered lives increased by approximately 5% year-over-year.
- KRS' insurance administrative expenses for retirees under age 65, decreased from $2.2 million in fiscal year 2017 to $2.1 million in fiscal year 2018.

ACTUARIAL

The actuarial value of the total insurance liability was determined as of June 30, 2018. The discount rate and assumed investment rate of return used to measure the total insurance liability was 6.25% for all plans. Assumed payroll growth and inflation was 0% and 2.30% respectively for KERS Non-Hazardous, KERS Hazardous and SPRS. Assumed payroll growth and inflation for CERS Non-Hazardous and CERS Hazardous was 2.00% and 2.30% respectively. The assumed real rate of return was 3.95% for KERS Non-Hazardous, KERS Hazardous, and SPRS pension plans, 1.95% for the CERS systems.

Management's DISCUSSION & ANALYSIS

Using This Financial Report

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the combining financial statements alone cannot provide sufficient information to properly reflect the plans' ongoing plan perspective. This financial report consists of two combining financial statements and two required schedules of historical trend information. All plans within KRS are included in the aforementioned combining financial statements. The Combining Statement of Fiduciary Net Position for the Pension Funds on page 27 and the Combining Statement of Fiduciary Net Position for the Insurance Fund on page 29 provide a snapshot of the financial position of each of the three systems as of fiscal year 2018. The Combining Statement of Changes in Fiduciary Net Position for the Pension Funds on page 28, and the Combining Statement of Changes in Fiduciary Net Position for the Insurance Fund on page 28, summarizes the additions and deductions that occurred for each of the three systems during fiscal year 2018.

The economic assumptions for the Pension and Insurance Plans for fiscal year 2018 are on page 61, the Schedules of Changes in Employers' Net Pension Liability on pages 83-87, the Schedules of the Employer Net Pension Liability on pages 82; the Schedule of Changes in Employers' Net OPEB Liability are on pages 94-98; and, the Schedule of the Employers' Net OPEB Liabilities are on page 72-73. These schedules include current and historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of the Employers' Contributions – Pensions are on pages 89-91, and the Schedule of the Employers' Contributions – OPEB are on pages 100-102. These schedules present current and historical trend information about the annual required contributions and the contributions made in relation to the requirement. These Schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

Kentucky Retirement Systems Combined

KRS' combined fiduciary net position increased $875.2 million in fiscal year 2018, compared to the fiduciary net position for the prior fiscal year. The increase in fiduciary net position for the fiscal year 2018 is primarily attributable to an increase in net investment incomes, higher contributions, and General Fund appropriations. The analysis focuses on net position table and changes in fiduciary net position table for KRS' Pension and Insurance Funds.

Management's DISCUSSION & ANALYSIS

FUND ACTIVITIES

The net position of the Pension Funds increased by $494.0 million to $12,415.9 million in fiscal year 2018 compared to $11,921.9 million in fiscal year 2017. All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the Pension Funds as employees and on behalf of their beneficiaries. The net position of the Insurance Fund increased by $381.3 million to $5,165.2 million in fiscal year 2018 compared to $4,783.9 million in fiscal year 2017. All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the Pension Funds who receive a monthly retirement allowance.

Financial data presented in this report is abbreviated "in thousands" or "in millions."

Fiduciary Net Position as of June 30, 2018 ($ in Thousands)

	Pension Funds			Insurance Fund			Total		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Cash & Invest.	$12,859,431	$12,168,664	$11,410,516	$5,367,071	$4,936,439	$4,401,155	$18,226,502	$17,105,103	$15,811,671
Receivables	349,172	347,620	442,464	148,883	103,747	171,033	498,055	451,367	613,497
Equip/Int Assets, net of dep/amort.	4,437	6,311	8,232	-	-	-	4,437	6,311	8,232
Total Assets	13,213,040	12,522,595	11,861,212	5,515,954	5,040,186	4,572,188	18,728,994	17,562,781	16,433,400
Total Liabilities	(797,184)	(600,694)	(983,454)	(350,775)	(256,279)	(340,877)	(1,147,959)	(856,973)	(1,324,331)
Fiduciary Net Position	**$12,415,856**	**$11,921,901**	**$10,877,758**	**$5,165,179**	**$4,783,907**	**$4,231,311**	**$17,581,035**	**$16,705,808**	**$15,109,069**

Pension Fund Activities

Member contributions increased by $15.6 million. This is primarily due to an increase in covered payroll in CERS Non-Hazardous and CERS Hazardous. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Non-Hazardous members pay pension contributions of 5.00% of creditable compensation and Hazardous members contribute 8.00% of creditable compensation.

Employer contributions increased by $3.4 million as a result of the increase in the contribution rates for all funds.

Total Pension Funds deductions increased by $85.4 million. The 4.17% increase was primarily driven by higher retirements across all plans.

Net investment income decreased by $426.7 million. This is illustrated in the Investment Income Pension table on the next page. The pension funds experienced a decrease in income when compared to fiscal year 2017, due to less favorable market conditions. KRS outperformed the benchmark in fiscal year 2018 and the plans' actuarial assumed rates of return. KRS also has transitioned into new asset allocations with a higher cash allocation at fiscal year-end, resulting in a lower yielding portfolio.

Management's DISCUSSION & ANALYSIS

Investment Income (Loss) - Pension
As of June 30, 2018 ($ in Thousands)

Investment Income (Loss) - Pension	2018	2017	2016
Increase (decrease) in fair value of investments	$ (142,280)	$603,703	$(270,041)
Investment income net of investment expense	182,299	251,064	136,917
Gain on sale of investments	948,444	560,380	57,149
Net investment income (loss)	**$ 988,463**	**$1,415,147**	**$(75,975)**

Changes in Fiduciary Net Position
As of June 30, 2018 ($ in Thousands)

	Pension Funds			Insurance Fund			Total		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Additions:									
Member Cont.	$349,844	$334,232	$307,422	$-	$-	$-	$349,844	$334,232	$307,422
Employer Cont.	1,169,690	1,166,269	949,802	321,888	314,987	333,118	1,491,578	1,481,256	1,282,920
Heath Ins. Cont.	19,849	16,964	14,719	-	-	-	19,849	16,964	14,719
Pension Spiking Cont.	8,078	5,156	2,684	-	-	-	8,078	5,156	2,684
Northern Trust Settlement	827	-	-	173	-	-	1,000	-	-
General Fund Appro.	87,574	98,193	-	-	-	-	87,574	98,193	-
Employer Cessation Cont.	17	53,215	-	-	15,567	-	17	68,782	-
Premiums Rec'd	-	-	-	497	548	721	497	548	721
Retired Re-emp Ins.	-	-	-	9,837	8,893	9,155	9,837	8,893	9,155
Medicare Subsidy	-	-	-	16	2	-	16	2	-
Invest. Inc. (net)	988,463	1,415,147	(75,975)	426,842	574,187	(5,154)	1,415,305	1,989,334	(81,129)
Total Additions	2,624,342	3,089,176	1,198,652	759,253	914,184	337,840	3,383,595	4,003,360	1,536,492
Deductions:									
Benefit payments	2,062,482	1,981,100	1,903,557	-	-	-	2,062,482	1,981,100	1,903,557
Refunds	34,948	30,696	30,985	-	-	-	34,948	30,696	30,985
Administrative Exp.	32,957	33,109	32,300	2,063	2,202	2,038	35,020	35,311	34,338
Healthcare Costs	-	-	-	375,918	359,388	351,383	375,918	359,388	351,383
Capital Projects Exp.	-	123	533	-	-	-	-	123	533
Total Deductions	2,130,387	2,045,028	1,967,375	377,981	361,590	353,421	2,508,368	2,406,618	2,320,796
Inc. (Decrease) in Fiduciary Net Position	**$493,955**	**$1,044,148**	**$(768,723)**	**$381,272**	**$552,594**	**$(15,581)**	**$875,227**	**$1,596,742**	**$(784,304)**

Insurance Fund Activities

Employer contributions paid into the Insurance Fund increased by $6.9 million in fiscal year 2018 over the prior fiscal year. This increase was a result of an increase in the employer covered payroll for CERS Non-Hazardous and Hazardous plans.

Net investment income decreased $147.3 million in fiscal year 2018 compared to fiscal year 2017. Although KRS outperformed the benchmark in fiscal year 2018, market conditions were less favorable, and KRS rebalanced the portfolios resulted in a lower yielding portfolio. This is illustrated in the Investment Income Insurance table as follows:

Investment Income (Loss) - Insurance
As of June 30, 2018 ($ in Thousands)

Investment Income (Loss) - Insurance	2018	2017	2016
Increase (decrease) in fair value of investments	$25,516	$256,937	$(46,852)
Investment income net of investment expense	60,688	93,902	49,380
Gain (loss) on sale of investments	340,638	223,348	(7,682)
Net investment income (loss)	**$426,842**	**$574,187**	**$(5,154)**

Management's DISCUSSION & ANALYSIS

Historical Trends

Accounting standards require that the Combining Statement of Fiduciary Net Position state asset value at fair value and include only benefits and refunds due plan members and beneficiaries; accrued investment income (loss); and, administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the schedules of Net Pension Liability on page 82 and Net OPEB Liability on pages 72-73. The asset value stated in the Schedules of Changes in Employers' Total Pension Liability on pages 83-87 and Net OPEB Liability on pages 72-98 is the actuarial value of assets. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by KRS' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is defined as the unfunded actuarial accrued liability.

The unfunded actuarial accrued liability from the June 30, 2018 actuarial valuation in the Pension Plans increased by $464.5 million for a total unfunded amount of $23,602.0 million in fiscal year 2018, compared to an unfunded amount of $23,137.5 million in fiscal year 2017. In recent years, funding levels for the Pension Funds have decreased significantly due to a number of factors including: the change in assumptions for the 2017 valuations; investment returns that were less than the actuarially assumed rates; lower payroll growth; and, higher than anticipated retirement rates. In addition, KERS Non-Hazardous, KERS Hazardous, and SPRS were funded less than the actuarially determined rate until fiscal year 2015.

The Insurance Plan's unfunded actuarial accrued liability from the June 30, 2018, actuarial valuation for fiscal year 2018, was $2,653.9 million compared to $3,601.1 million for fiscal year 2017. This is a decrease in the unfunded actuarial accrued liability of $947.2 million. The deduction is primarily due to reduction in insurance premiums across all plans.

Annual required contributions of the employers, as actuarially determined, and actual contributions made by employers and other contributing entities in relation to the required contributions, are provided in the Schedules of Employer Contributions - Pension on pages 89-91, and in the Schedules of Contributions - OPEB on pages 100 -102. The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS funds is attributable to the fact that the employer contribution rate set by the Kentucky General Assembly was less than the rate recommended by the KRS Actuary in prior years and adopted by the KRS Board of Trustees.

Combining Statements of Fiduciary Net Position - Pension Funds

As of June 30, 2018 with Comparative Totals as of June 30, 2017 ($ in Thousands)

ASSETS	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS	KRS Total 2018	KRS Total 2017
CASH AND SHORT-TERM INVESTMENT							
Cash Deposits	$316	$81	$228	$101	$64	$790	$3,366
Short-term Investments	141,771	34,498	371,543	131,077	18,762	697,651	486,931
Total Cash and Short-term Investments	**142,087**	**34,579**	**371,771**	**131,178**	**18,826**	**698,441**	**490,297**
RECEIVABLES							
Accounts Receivable	42,926	5,438	55,791	16,465	11,803	132,423	150,126
Accounts Receivable - Investments	34,713	11,358	124,294	41,796	4,501	216,662	197,400
Accounts Receivable - Alternate Participation	-	-	-	87	-	87	94
Total Receivables	**77,639**	**16,796**	**180,085**	**58,348**	**16,304**	**349,172**	**347,620**
INVESTMENTS, AT FAIR VALUE							
Fixed Income	562,011	159,064	1,677,481	558,405	74,090	3,031,051	1,133,170
Public Equities	718,779	280,833	3,060,414	1,016,604	100,025	5,176,655	6,137,268
Private Equities	248,583	64,986	698,607	237,979	21,752	1,271,907	1,574,062
Derivatives	(150)	(41)	(463)	(154)	(18)	(826)	23,453
Absolute Return	126,277	33,774	401,782	127,449	13,302	702,584	921,757
Real Return	160,458	55,093	608,868	207,728	21,949	1,054,096	982,317
Real Estate	67,441	24,040	253,849	81,436	9,833	436,599	509,527
Total Investments, at Fair Value	**1,883,399**	**617,749**	**6,700,538**	**2,229,447**	**240,933**	**11,672,066**	**11,281,554**
Securities Lending Collateral Invested	74,233	25,766	284,587	94,439	9,899	488,924	396,813
CAPITAL/INTANGIBLE ASSETS							
Capital Assets	929	91	1,701	153	11	2,885	2,885
Intangible Assets	5,920	494	9,961	827	100	17,302	17,302
Accumulated Depreciation	(852)	(84)	(1,561)	(141)	(10)	(2,648)	(2,539)
Accumulated Amortization	(4,474)	(371)	(7,531)	(636)	(90)	(13,102)	(11,337)
Total Capital Assets	**1,523**	**130**	**2,570**	**203**	**11**	**4,437**	**6,311**
Total Assets	**2,178,881**	**695,020**	**7,539,551**	**2,513,615**	**285,973**	**13,213,040**	**12,522,595**
LIABILITIES							
Accounts Payable	2,877	2,394	5,921	1,744	419	13,355	12,968
Investment Accounts Payable	52,882	15,687	162,721	56,385	7,230	294,905	190,913
Securities Lending Collateral	74,233	25,766	284,587	94,439	9,899	488,924	396,813
Total Liabilities	**129,992**	**43,847**	**453,229**	**152,568**	**17,548**	**797,184**	**600,694**
Total Fiduciary Net Position Restricted for Pensions	**$2,048,889**	**$651,173**	**$7,086,322**	**$2,361,047**	**$268,425**	**$12,415,856**	**$11,921,901**

See accompanying notes which are an integral part of these combining financial statements.

The displayed fair values include investable assets held by each System and its associated contributions, payables, and equipment and intangible assets; unlike those found in the Investment Section (pages 116-119), which include only those investable assets held by each System.

Combining Statements of Changes In Fiduciary Net Position - Pension Funds

for the fiscal year ending June 30, 2018 with Comparative Totals for the fiscal year ending June 30, 2017 ($ in Thousands)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS	KRS Total 2018	KRS Total 2017
ADDITIONS							
Member Contributions	$104,972	$17,891	$160,370	$61,089	$5,522	$349,844	$334,232
Employer Contributions	619,988	32,790	355,473	124,953	36,486	1,169,690	1,166,269
General Fund Appropriations	67,574	10,000	-	-	10,000	87,574	98,193
Pension Spiking Contributions	1,564	871	2,544	2,707	392	8,078	5,156
Northern Trust Settlement	301	33	361	111	21	827	
Health Insurance Contributions (HB1)	5,786	909	10,826	2,173	155	19,849	16,964
Employer Cessation Contributions	17	-	-	-	-	17	53,215
Total Contributions	**800,202**	**62,494**	**529,574**	**191,033**	**52,576**	**1,635,879**	**1,674,029**
INVESTMENT INCOME							
From Investing Activities							
Net Appreciation in FV of Investments	112,993	42,668	477,218	158,788	14,497	806,164	1,164,083
Interest/Dividends	46,969	13,800	154,008	50,956	5,605	271,338	334,599
Total Investing Activities Income	159,962	56,468	631,226	209,744	20,102	1,077,502	1,498,682
Investment Expense	6,487	2,852	32,464	10,624	1,070	53,497	85,520
Performance Fees	6,670	1,981	22,254	7,572	623	39,100	-
Net Income from Investing Activities	146,805	51,635	576,508	191,548	18,409	984,905	1,413,162
From Securities Lending Activities							
Securities Lending Income	1,624	478	4,823	1,607	183	8,715	3,070
Securities Lending Expense							
Securities Lending Borrower Rebates	779	242	2,699	896	96	4,712	734
Securities Lending Agent Fees	73	23	255	85	9	445	351
Net Income from Securities Lending	772	213	1,869	626	78	3,558	1,985
Total Investment Income	**147,577**	**51,848**	**578,377**	**192,174**	**18,487**	**988,463**	**1,415,147**
Total Additions	**947,779**	**114,342**	**1,107,951**	**383,207**	**71,063**	**2,624,342**	**3,089,176**
DEDUCTIONS							
Benefit Payments	967,374	65,616	726,568	244,119	58,805	2,062,482	1,981,100
Refunds	13,603	2,501	14,608	4,214	22	34,948	30,696
Administrative Expenses	10,692	975	19,592	1,504	194	32,957	33,109
Capital Project Expenses	-	-	-	-	-	-	123
Total Deductions	**991,669**	**69,092**	**760,768**	**249,837**	**59,021**	**2,130,387**	**2,045,028**
Net Increase(Decrease) in Fiduciary Net Position	(43,890)	45,250	347,183	133,370	12,042	493,955	1,044,148
FIDUCIARY NET POSITION HELD IN TRUST FOR PENSION BENEFITS							
Beginning of Period	**2,092,779**	**605,923**	**6,739,139**	**2,227,677**	**256,383**	**11,921,901**	**10,877,753**
End of Period	**$2,048,889**	**$651,173**	**$7,086,322**	**$2,361,047**	**$268,425**	**$12,415,856**	**$11,921,901**

See accompanying notes which are an integral part of these combining financial statements.

Combining Statements of Fiduciary Net Position - Insurance Fund

As of June 30, 2018 with Comparative Totals as of June 30, 2017 ($ In Thousands)

ASSETS	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS	KRS Total 2018	KRS Total 2017
CASH AND SHORT-TERM INVESTMENT							
Cash Deposits	$78	$33	$51	$45	$33	$240	$243
Short-term Investments	45,856	26,665	118,284	63,000	7,607	261,412	184,860
Total Cash and Short-term Investments	**45,934**	**26,698**	**118,335**	**63,045**	**7,640**	**261,652**	**185,103**
RECEIVABLES							
Accounts Receivable	12,396	657	14,016	4,236	885	32,190	28,249
Investment Accounts Receivable	20,229	11,178	52,013	28,790	4,483	116,693	75,498
Total Receivables	**32,625**	**11,835**	**66,029**	**33,026**	**5,368**	**148,883**	**103,747**
INVESTMENTS, AT FAIR VALUE							
Fixed Income	199,166	118,026	513,963	276,976	42,541	1,150,672	371,212
Public Equities	399,932	225,391	1,014,654	548,164	82,690	2,270,831	2,614,142
Private Equities	49,763	52,224	276,522	155,455	23,585	557,549	582,345
Derivatives	(57)	(34)	(153)	(83)	(12)	(339)	9,575
Absolute Return	45,185	29,938	128,204	71,761	11,221	286,309	388,353
Real Return	72,701	42,936	206,376	107,249	14,839	444,101	395,367
Real Estate	25,727	18,847	81,828	44,780	7,189	178,371	211,795
Total Investments, at Fair Value	**792,417**	**487,328**	**2,221,394**	**1,204,302**	**182,053**	**4,887,494**	**4,572,789**
Securities Lending Collateral Invested	36,100	22,759	97,332	53,693	8,041	217,925	178,547
Total Assets	**907,076**	**548,620**	**2,503,090**	**1,354,066**	**203,102**	**5,515,954**	**5,040,186**
LIABILITIES							
Accounts Payable	98	3	674	36	0	811	1,013
Investment Accounts Payable	24,116	12,474	58,317	32,065	5,067	132,039	76,719
Securities Lending Collateral	36,100	22,759	97,332	53,693	8,041	217,925	178,547
Total Liabilities	**60,314**	**35,236**	**156,323**	**85,794**	**13,108**	**350,775**	**256,279**
Total Fiduciary Net Position Restricted for Insurance	**$846,762**	**$513,384**	**$2,346,767**	**$1,268,272**	**$189,994**	**$5,165,179**	**$4,783,907**

See accompanying notes which are an integral part of these combining financial statements.

Combining Statements of Changes In Fiduciary Net Position - Insurance Fund for the fiscal year ending June 30, 2018 with Comparative Totals for the fiscal year ended June 30, 2017 ($ in Thousands)							
	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS	KRS Total 2018	KRS Total 2017
ADDITIONS							
Employer Contributions	$132,364	$4,302	$120,798	$55,027	$9,397	$321,888	$314,987
Medicare Drug Reimbursement	5	-	11	-	-	16	2
Insurance Premiums	216	(50)	637	(265)	(41)	497	548
Retired Re-employed Healthcare	4,055	986	3,821	975	-	9,837	8,893
Northern Trust Settlement	32	18	75	40	8	173	
Employer Cessation Contributions	-	-	-	-	-	-	15,567
Total Contributions	**136,672**	**5,256**	**125,342**	**55,777**	**9,364**	**332,411**	**339,997**
INVESTMENT INCOME							
From Investing Activities							
Net Appreciation in FV of Investments	49,902	36,484	170,708	94,771	14,289	366,154	480,285
Interest/Dividends	16,700	10,420	48,144	26,083	3,922	105,269	127,379
Total Investing Activities Income	66,602	46,904	218,852	120,854	18,211	471,423	607,664
Investment Expense	3,959	2,784	12,923	7,087	1,086	27,839	34,228
Performance Fees	1,542	1,695	9,001	5,085	755	18,078	-
Net Income from Investing Activities	61,101	42,425	196,928	108,682	16,370	425,506	573,436
From Securities Lending Activities							
Securities Lending Income	574	344	1,493	814	125	3,350	1,071
Securities Lending Expense							
Securities Lending Borrower Rebates	310	182	810	443	68	1,813	187
Securities Lending Agent Fees	34	20	91	49	7	201	133
Net Income from Securities Lending	230	142	592	322	50	1,336	751
Total Investment Income	**61,331**	**42,567**	**197,520**	**109,004**	**16,420**	**426,842**	**574,187**
Total Additions	**198,003**	**47,823**	**322,862**	**164,781**	**25,784**	**759,253**	**914,184**
DEDUCTIONS							
Healthcare Premiums Subsidies	130,069	18,697	131,631	74,844	13,881	369,122	353,595
Administrative Expenses	760	104	761	376	62	2,063	2,202
Self-Funded Healthcare Costs	1,819	79	4,248	603	38	6,787	5,784
Excise Tax Insurance	3	-	6	-	-	9	9
Total Deductions	**132,651**	**18,880**	**136,646**	**75,823**	**13,981**	**377,981**	**361,590**
Net Increase(Decrease) in Fiduciary Net Position	65,352	28,943	186,216	88,958	11,803	381,272	552,594
FIDUCIARY NET POSITION HELD IN TRUST FOR INSURANCE BENEFITS							
Beginning of Period	**781,410**	**484,441**	**2,160,551**	**1,179,314**	**178,191**	**4,783,907**	**4,231,313**
End of Period	**$846,762**	**$513,384**	**$2,346,767**	**$1,268,272**	**$189,994**	**$5,165,179**	**$4,783,907**

See accompanying notes which are an integral part of these combining financial statements.

NOTE A. Summary of Significant Accounting Policies

This summary of KRS' significant accounting policies is presented to assist in understanding KRS' combining financial statements. The combining financial statements and notes are representations of KRS' management, which is responsible for their integrity and objectivity. These accounting policies conform to GAAP and have been consistently applied in the preparation of the combining financial statements.

Organization

Under the provisions of Kentucky Revised Statute Section 61.645, the KRS Board administers the KERS, CERS, and SPRS in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630. The KRS' assets are segregated by plan, where each system's assets are used only for the payment of benefits to the members of that plan and a pro rata share of administrative costs.

Under the provisions of Kentucky Revised Statute Section 61.701, the KRS Board administers the KRS Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by KRS: (1) KERS; (2) CERS; and (3) SPRS. The assets of the Insurance Fund are also segregated by plan. The following notes apply to the various funds administered by KRS.

Basis of Accounting

KRS' combining financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and investment expenses are recognized when incurred. The net position represents the funds KRS has accumulated thus far to pay pension benefits for retirees, active and inactive members, and health care premiums for current and future employees.

Method Used to Value Investments

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Short-term investments are reported at cost, which approximates fair value. See Investments Note D for further discussion of fair value measurements. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the dividend date. Gain (loss) on investments includes KRS' gains and losses on investments bought and sold as well as held during the fiscal year. Investment returns are recorded in all plans net of investment fees.

Estimates

The preparation of financial statements in accordance with Generally Accepted Accounting Principles (GAAP) requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Equipment

Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged as an expense when incurred. The capitalization threshold used in fiscal years 2018 and 2017 was $3,000 (see Equipment Note J for further information).

Intangible Assets

Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is 10 years. The capitalization threshold used in fiscal years 2018 and 2017 was $3,000 (see Intangible Assets Note K for further information).

Contributions Receivable

Contributions receivable consist of amounts due from employers. KRS management considers contributions receivable to be fully collectible; accordingly, no allowance for doubtful accounts is considered necessary. If amounts become uncollectible, they will be charged to operations when that determination is made. If amounts previously written off are collected, they will be credited to income when received.

The Investment Accounts Receivable and Investment Accounts Payable consist of all buys and sells of securities which have not closed, as well as all investment related accruals.

Payment of Benefits

Benefits are recorded when paid.

Expense Allocation

KRS administrative expenses are allocated in proportion to the number of total members participating in each plan and direct investment manager expenses are allocated in proportion to the percentage of investment assets held by each plan.

Component Unit

KRS is a component unit of the Commonwealth of Kentucky (Commonwealth) for financial reporting purposes.

KERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. CERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. SPRS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Board of KRS without further legislative review. The methods used to determine the employer rates for KRS are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

Recent Accounting Pronouncements

In June 2015, the Governmental Accounting Standards Board (GASB) issued Statement No. 75, Accounting and Financial Reporting for Post-employment Benefits Other Than Pensions. The objective of this Statement is to address accounting and financial reporting for Other Post-employment Benefits (OPEB) that are provided to the employees of state and local governmental employers. This Statement establishes standards for recognizing and measuring liabilities; deferred outflows of resources; deferred inflows of resources; and, expense/expenditures. For defined benefit OPEB, this Statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information requirements about defined benefit OPEB are also addressed. This Statement became effective for the fiscal year beginning July 1, 2017. KRS provided the agencies their proportionate share in the OPEB unfunded liability, calculated by Gabriel, Roeder, Smith & Co. (GRS), to be used in their financial reports for fiscal year ending June 30, 2018.

In June 2017, the GASB issued Statement No. 87, Leases. The objective of this Statement is to address government lessee's recognition of lease liabilities, intangible assets, and report amortization expense for using the lease, interest expense on the lease liability, and note disclosures about the lease. Another objective of this Statement is to address government lessor's recognition of a lease receivable, deferred inflow, and report lease revenue, interest income, and note disclosures about the lease. This Statement becomes effective for the fiscal year beginning July 1, 2020. KRS is evaluating the impact of this Statement to the financial report.

GASB Statement 84, Fiduciary Activities, establishes criteria for identifying fiduciary activities of all state and local governments and clarifies whether and how business type activities should report their fiduciary activities. This Statement becomes effective for the fiscal year beginning July 1, 2019. KRS meets the criteria as a fiduciary activity. KRS reports the plan's assets, deferred outflows of resources, liabilities, deferred inflows of resources, and fiduciary net position in accordance with Statement 67 and Statement 74, as applicable.

GASB Statement 82, Pension Issues, was designed to improve consistency in the application of the pension standards by clarifying or amending related areas of existing guidance. Specifically, the practice issues raised by stakeholders during implementation related to GASB 67, 68, and 73. This Statement became effective for the fiscal year beginning July 1, 2017. KRS has implemented GASB Statement 82. GASB 67 & 68 require the presentation of covered payroll as defined as the payroll on which contributions to a pension plan are based. There is no deviation from the guidance in an Actuarial Standard of Practice for financial reporting purposes with the requirements of Statement 67, 68, or 73. The member and contributions disclosed in GASB 67 & 68 reports are in conformity with plan member contributions classified as plan member contributions for purposes of Statement 67, and as employee contributions for purposes of Statement 68.

Note B. Plan Descriptions & Contribution Information

KERS Membership Combined As of June 30, 2018						
	2018			2017		
Members	**Non-Haz**	**Hazardous**	**Total**	**Non-Haz**	**Hazardous**	**Total**
Retirees and Beneficiaries Receiving Benefits	42,175	3,010	45,185	40,813	2,823	43,636
Inactive Memberships	45,768	4,716	50,484	44,848	4,363	49,211
Active Plan Members	34,845	3,963	38,808	36,725	4,061	40,786
Total	122,788	11,689	134,477	122,386	11,247	133,633
Number of Participating Employers			348			354

CERS Membership Combined As of June 30, 2018						
	2018			2017		
Members	**Non-Haz**	**Hazardous**	**Total**	**Non-Haz**	**Hazardous**	**Total**
Retirees and Beneficiaries Receiving Benefits	56,629	7,647	64,276	54,018	7,186	61,204
Inactive Memberships	81,608	2,581	84,189	78,940	2,442	81,382
Active Plan Members	84,435	9,285	93,720	84,401	9,321	93,722
Total	222,672	19,513	242,185	217,359	18,949	236,308
Number of Participating Employers			1,139			1,138

SPRS As of June 30, 2018		
Members	**2018**	**2017**
Retirees and Beneficiaries Receiving Benefits	1,445	1,393
Inactive Memberships	290	278
Active Plan Members	891	910
Total	2,626	2,581
Number of Participating Employers	1	1

Note: Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-Hazardous, then KERS Non-Hazardous.

Number of Hospital & Medical Contracts
As of June 30, 2018

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Hazardous	8,638	696	460	1,179	21,117
KERS Hazardous	686	478	96	73	1,495
CERS Non-Hazardous	8,802	510	231	2,389	25,476
CERS Hazardous	1,712	2,571	422	119	3,388
SPRS	253	426	74	21	941
Totals	**20,091**	**4,681**	**1,283**	**3,781**	**52,417**

Number of Hospital & Medical Contracts
As of June 30, 2017

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Hazardous	8,627	663	411	1,229	20,215
KERS Hazardous	667	432	88	72	1,401
CERS Non-Hazardous	8,313	462	222	2,462	24,247
CERS Hazardous	1,645	2,387	395	125	3,205
SPRS	251	420	79	17	897
Totals	**19,503**	**4,364**	**1,195**	**3,905**	**49,965**

Medical Insurance coverage is provided based on the member's initial participation date and length of service. Members receive either a percentage or dollar amount for insurance coverage.

Pension Plan Descriptions

These systems provide for retirement, disability, and death benefits to system members. Retirement benefits may be extended to beneficiaries of members under certain circumstances.

KERS - Kentucky Employees Retirement System

This system consists of two plans - Non-Hazardous and Hazardous. Each plan is a cost-sharing, multiple-employer defined benefit pension plan that covers all regular full-time members employed in positions of any state department, board, or agency directed by Executive Order to participate in KERS.

CERS - County Employees Retirement System

This system consists of two plans - Non-Hazardous and Hazardous. Each plan is a cost-sharing, multiple-employer defined benefit pension plan that covers all regular full-time members employed in positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate in CERS.

SPRS - State Police Retirement System

This system is a single-employer defined benefit pension plan that covers all full-time state troopers employed in positions by the Kentucky State Police.

Cost of Living Adjustment (COLA)

Prior to July 1, 2009, COLAs were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. After July 1, 2009, the COLAs were limited to 1.50%. No COLA has been granted since July 1, 2011.

Contributions

The Commonwealth is required to contribute at an actuarially determined rate for KERS and SPRS pensions. Participating employers are required to contribute at an actuarially determined rate for CERS pensions. Per Kentucky Revised Statute Sections {KERS 61.565(3); CERS 78.545(33); SPRS 16.645(18)}, normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget for KERS and SPRS.

For the fiscal year ended June 30, 2018, participating employers contributed a percentage of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal year is a percentage of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings. See the chart on the following page for the 2018 and 2017 fiscal year employer contribution rates, including the actuarially recommended rates.

TIER 1:

Tier 1 plan members who began participating prior to September 1, 2008, are required to contribute 5% (Non-Hazardous) or 8% (Hazardous) of their annual creditable compensation. These members are classified in the Tier 1 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest.

TIER 2:

Tier 2 plan members, who began participating on, or after, September 1, 2008, and before January 1, 2014, are required to contribute 6% (Non-Hazardous) or 9% (Hazardous) of their annual creditable compensation, while 1% of these contributions are deposited to an account created for the payment of health insurance benefits under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420 Employer's administrative duties). These members are classified in the Tier 2 structure of benefits. Interest is paid each June 30th on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited.

TIER 3:

Tier 3 plan members, who began participating on, or after, January 1, 2014, are required to contribute to the Cash Balance Plan. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. Members in the plan contribute a set percentage of their salary each month to their own account. Members contribute 5% (Non-Hazardous) or 8% (Hazardous) of their annual creditable compensation, and an additional 1% to the health insurance fund (401(h) account), which is not credited to the member's account and is not refundable. The employer contribution rate is set annually by the Board based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A member's account is credited with a 4% (Non-Hazardous) or 7.5% (Hazardous) employer pay credit. The employer pay credit represents a portion of the employer contribution.

Contribution Rate Breakdown by System
As of June 30, 2018

	Pension				Insurance				Combined Total			
	Employer Contribution Rates		Actuarially Recommended Rates		Employer Contribution Rates		Actuarially Recommended Rates		Employer Contribution Rates		Actuarially Recommended Rates	
System	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
KERS Non-Hazardous	41.06%	40.24%	41.06%	38.93%	8.41%	8.35%	8.41%	8.35%	49.47%	48.59%	49.47%	47.28%
KERS Hazardous	21.44%	21.08%	21.44%	21.08%	2.26%	2.74%	2.26%	2.74%	23.70%	23.82%	23.70%	23.82%
CERS Non-Hazardous	14.48%	13.95%	14.48%	13.95%	4.70%	4.73%	4.70%	4.93%	19.18%	18.68%	19.18%	18.88%
CERS Hazardous	22.20%	21.71%	22.20%	21.71%	9.35%	9.35%	9.35%	9.79%	31.55%	31.06%	31.55%	31.50%
SPRS	72.47%	70.34%	72.47%	66.47%	18.77%	18.87%	18.77%	18.87%	91.24%	89.21%	91.24%	85.34%

Tier 3 Plan

Interest is paid into the Tier 3 member's account. The account currently earns 4% interest credit on the member's account balance as of June 30th of the previous year. The member's account may be credited with additional interest if the system's five-year Geometric Average Net Investment Return (GANIR) exceeded 4%. If the member was actively employed and participating in the fiscal year, and if the systems' GANIR for the previous five years exceeds 4%, then the member's account will be credited with 75% of the amount of the returns over 4% on the account balance as of June 30th of the previous year (Upside Sharing Interest). It is possible that one system in KRS may get an Upside Sharing Interest, while one may not.

Upside Sharing Interest

Upside Sharing Interest is credited to both the member contribution balance and Employer Pay Credit balance. Upside Sharing Interest is an additional interest credit. Member accounts automatically earn 4% interest annually. The GANIR is calculated on an individual system basis.

The chart below shows the interest calculated on the members' balances as of June 30, 2017, and credited to each member account on June 30, 2018.

(A-B) = C x 75% = D then B + D = Interest ($ in Thousands)						
	A	B	C	D		
System	5 Year Geometric Average Return	Less Guarantee Rate of 4%	Upside Sharing Interest	Upside Sharing Interest X 75% = Upside Gain	Interest Rate Earned (4% + Upside)	Total Interest Credited to Member Accounts
KERS Non-Hazardous	6.66%	4.00%	2.66%	2.00%	6.00%	$2,379
KERS Hazardous	7.53%	4.00%	3.53%	2.65%	6.65%	771
CERS Non-Hazardous	7.39%	4.00%	3.39%	2.54%	6.54%	4,786
CERS Hazardous	7.66%	4.00%	3.66%	2.75%	6.75%	1,284
SPRS	6.95%	4.00%	2.95%	2.21%	6.21%	$92

Insurance Plan Description

The Kentucky Retirement Systems' Insurance Fund was established to provide hospital and medical insurance for eligible members receiving benefits from KERS, CERS, and SPRS. The eligible non-Medicare retirees are covered by the Department of Employee Insurance (DEI) plans. KRS submits the premium payments to DEI. The Board contracts with Humana to provide health care benefits to the eligible Medicare retirees through a Medicare Advantage Plan. The Insurance Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2018, insurance premiums withheld from benefit payments for members of the Systems were $20.8 million and $1.3 million for KERS Non-Hazardous and Hazardous, respectively; $23.8 million and $2.8 million for CERS Non-Hazardous and Hazardous, respectively; and, $329,330 for SPRS. For fiscal year 2017, insurance premiums withheld from benefit payments for members of the Systems were $20.3 million and $1.3 million for KERS Non-Hazardous and KERS Hazardous, respectively; $22.9 million and $2.7 million for CERS Non-Hazardous and CERS Hazardous, respectively, and $290,387 for SPRS. The Insurance Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty.

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after, July 1, 2003. Once members reach a minimum vesting period of 10 years, non-hazardous employees whose participation began on, or after, July 1, 2003, earn $10 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn $15 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives $10 per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually, which is currently 1.5%, based upon Kentucky Revised Statutes. See chart for current values for Dollar Contribution. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

The amount of contribution paid by the Insurance Fund is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows:

Portion Paid by Insurance Fund
As of June 30, 2018

Years of Service	Paid by Insurance Fund (%)
20+ years	100.00%
15-19 years	75.00%
10-14 years	50.00%
4-9 years	25.00%
Less than 4 years	0.00%

The amount of contribution paid by the Insurance Fund is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows:

Dollar Contribution for Fiscal Year 2018 For Member participation date on or after July 1, 2003

System	(in Whole $)
KERS Non-Hazardous	$13.38
KERS Hazardous	$20.07
CERS Non-Hazardous	$13.38
CERS Hazardous	$20.07
SPRS	$20.07

Note C. Cash, Short-Term Investments & Securities Lending Collateral

The provisions of GASB Statement No. 28, Accounting and Financial Reporting for Securities Lending Transactions, require that cash received as collateral on securities lending transactions, and investments made with that cash, be reported as assets on the financial statements. In accordance with GASB No. 28, KRS classifies certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following as of June 30, 2018.

Cash, Short-Term Investments, & Securities Lending Collateral
As of June 30, 2018 ($ in Thousands)

KERS - Pension

	2018	2017
Cash	$397	$1,497
Short-Term Investments	176,269	138,632
Securities Lending Collateral Invested	99,999	82,349
Total	**$276,665**	**$222,478**

CERS - Pension

	2018	2017
Cash	$329	$1,775
Short-Term Investments	502,620	336,326
Securities Lending Collateral Invested	379,026	306,661
Total	**$881,975**	**$644,762**

SPRS - Pension

	2018	2017
Cash	$64	$94
Short-Term Investments	18,762	11,973
Securities Lending Collateral Invested	9,899	7,803
Total	**$28,725**	**$19,870**

KRS - Insurance Fund

	2018	2017
Cash	$240	$243
Short-Term Investments	261,412	184,858
Securities Lending Collateral Invested	217,925	178,547
Total	**$479,577**	**$363,648**

Note D. Investments

Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the KRS Board. The Board has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the "Prudent Person Rule" (set forth in Kentucky Revised Statute 61.650) and manage those funds consistent with the long-term nature of the systems. The Investment Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS. The Statement of Investment Policy contains the specific guidelines for the investment of Pension and Insurance assets. Additionally, the Investment Committee establishes specific investment guidelines that are summarized below and are included in the Investment Management Agreement for each investment management firm.

Equity Investments

Investments may be made in common stock; securities convertible into common stock; preferred stock of publicly traded companies on stock markets; asset class relevant Exchange Traded Funds (ETF); or any other type of security contained in a manager's benchmark. Each individual equity account has a comprehensive set of investment guidelines prepared, which contains a listing of permissible investments, portfolio restrictions and standards of performance.

Fixed Income Investments

The fixed income accounts may include, but are not limited to, the following fixed income securities: U.S. Government and Agency bonds; investment grade U.S. corporate credit; investment grade non-U.S. corporate credit; non-investment grade U.S. corporate credit including both bonds and bank loans; non-investment grade non-U.S. corporate credit including bonds and bank loans; municipal bonds; non-U.S. sovereign debt; mortgages, including residential mortgage backed securities; commercial mortgage backed securities and whole loans; asset-backed securities and emerging market debt (EMD), including both sovereign EMD and corporate EMD; and, asset class relevant ETFs.

Private Equity/Equity Real Estate/Real Return/Absolute Return Investments

Subject to the specific approval of the Investment Committee, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, but not limited to and without limitation: venture capital, private equity, real assets, and absolute return investments. The Investment Committee believes absolute returns have the potential to generate substantial income, but may have a higher degree of risk. It is important to note that KERS (Non-Hazardous) and SPRS have not made any new investments in Private Equity since 2010 and 2016, respectively, due to the inability to invest in long-term investments as a result of cash flow constraints. Investments may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments.

Cash Equivalent Securities

The following short-term investment vehicles are considered acceptable: publicly traded investment grade corporate bonds; variable rate demand notes; government and agency bonds; mortgages; municipal bonds; Short Term Investment Funds (STIFs); money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper); and repurchase agreements relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the instrument has a split rating, the lower of the two ratings is used.

All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time left until the next interest rate reset occurs, but in no case will any security have a stated final maturity of more than three years.

KRS' fixed income managers, who utilize cash equivalent securities as an integral part of their investment strategy, are exempt from the permissible investments contained in the preceding paragraph. Permissible short-term investments for fixed income managers shall be included in the investment manager's investment guidelines.

Investment Expenses

In accordance with GASB Statement Nos. 67 and 74, Financial Reporting for Pension Plans and Postemployment Benefit Plans Other Than Pension Plans, KRS has exercised professional judgment to report investment expenses. It is not cost-beneficial to separate certain investment expenses from either the related investment income or the general administrative expenses. In fiscal year 2015, KRS changed private equity investment fees from a gross basis to a net basis. KRS made this decision to enhance transparency reporting. Prior to 2015, the majority of KRS' private equity investment fees were netted against investment activity which is the standard used within the private equity sector. KRS' net investment income has always included these fees regardless of the reporting method used. During the 2017 Regular Session of the Kentucky General Assembly, legislators passed SB2 which requires the reporting of all investment fees and expenses. KRS staff continues to work with managers to enhance fees and expenses reporting.

Derivatives

Derivative instruments are financial contracts that have various effective dates and maturity dates and whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Investments in derivative securities are subject to large or unanticipated changes in duration or cash flows, and can be interest only, principal only, inverse floater, or structured note securities. These are permitted only to the extent that they are authorized in a contract or an alternative investment offering memorandum of agreement.

Investments in securities such as collateralized mortgage obligations and planned amortization class issues are allowed if, in the judgment of the investment manager, they are not expected to be subject to large or unanticipated changes in duration or cash flows. Investment managers may make use of derivative securities for defensive or hedging purposes. Any derivative security shall be sufficiently liquid so that it can be expected to be sold at, or near, its most recently quoted market price.

It is the KRS policy that investment managers may invest in derivative securities, or strategies which make use of derivative investments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Examples of such derivatives include, but are not limited to, foreign currency forward contracts, collateralized mortgage obligations, treasury inflation protected securities, futures, options, and swaps.

For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combining Statement of Fiduciary Net Position for both the Pension and Insurance Funds.

In accordance with GASB Statement No. 53, Accounting and Financial Reporting for Derivative Instruments, KRS provides additional disclosure regarding its derivatives. The following chart represents the derivatives by types as of June 30, 2018. The chart shows the change in fair value of each of the derivatives types as well as the current fair value and notional value. The notional value is the reference amount of the underlying asset times its current spot price. KRS holds investments in options, commitments, futures, and forward foreign exchange contracts. KRS is exposed to counterparty risk with the foreign exchange contracts that are held. As of June 30, 2018, the aggregate fair value of investment derivatives subject to counterparty credit risk was $1.8 million for the Pension Fund and $0.6 million for the Insurance Fund.

Derivative Instruments
As of June 30, 2018 ($ in Thousands)

Pension

Derivatives (by Type)	Net Appreciation (Depreciation) in Fair Value for the Fiscal year Ended June 30, 2018		Fair Value	Notional Value
Futures	$(826)	Investment	$(826)	$(112,271)
FX Spots and Forwards	966	Investment	1,791	(825)
Commits and Options	-	Investment	74	(84,469)

Insurance

Derivatives (by Type)	Net Appreciation (Depreciation) in Fair Value for the Fiscal year Ended June 30, 2018		Fair Value	Notional Value
Futures	(339)	Investment	(339)	(36,639)
FX Spots and Forwards	378	Investment	550	(172)
Commits and Options	$-	Investment	$13	$(11,106)

Note: Commits and Options are recorded on the Financial Statements within the Fixed Income asset class as they are Government Loan Commitments.

Derivatives foreign currency risk is comprised of the above FX Spots and Forwards. The risk associated is due to the potential decline in exchange rates.

FX Spots and Forwards are recorded on the Financial Statements as Payable/Receivables because they represent the foreign exchange for the purchase/sales of securities.

Derivative Instruments Subject to Counterparty Credit Risk		
Pension		
Counterparty	**Percentage of Net Exposure**	**S & P Ratings**
Derivative Instruments - Pension Fund		
Australia & New Zealand Banking Group Ltd	63.65%	AA-
Bank of America NA	-0.02%	A+
Bank of New York Mellon Corp/London	1.20%	AA-
Citibank NA	-4.47%	A+
Credit Suisse AG	0.00%	A
HSBC Bank USA NA/New York NY	2.72%	AA-
JPMorgan Chase Bank NA	0.38%	A+
Morgan Stanley Capital Services LLC	46.10%	A+
Royal Bank of Canada	-0.07%	AA-
State Street Corp	-9.87%	A
UBS AG/Stamford CT	0.05%	A+
Westpac Banking Corp	0.33%	AA-
TOTAL	**100.00%**	

Derivative Instruments Subject to Counterparty Credit Risk		
Insurance		
Counterparty	**Percentage of Net Exposure**	**S & P Ratings**
Australia & New Zealand Banking Group Ltd	79.92%	AA-
Bank of America NA	-0.02%	A+
Bank of New York Mellon Corp/London	1.73%	AA-
Citibank NA	-5.70%	A+
Credit Suisse AG	0.00%	A
HSBC Bank USA NA/New York NY	3.35%	AA-
JPMorgan Chase Bank NA	0.49%	A+
Morgan Stanley Capital Services LLC	31.39%	A+
Royal Bank of Canada	-0.10%	AA-
State Street Corp	-11.15%	A
UBS AG/Stamford CT	0.05%	A+
Westpac Banking Corp	0.04%	AA-
TOTAL	**100.00%**	

RISKS

Custodial Credit Risk for Deposits

Custodial credit risk for deposits is the risk that may occur as a result of a financial institution's failure, whereby KRS' deposits may not be returned. All non-investment related bank balances are held by JP Morgan Chase and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount.

As of June 30, 2018, and 2017, deposits for KRS Pension Funds were $2.7 million and $4.7 million, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

As of June 30, 2018, and 2017, deposits for KRS Insurance Fund were $247,384 and $251,825, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

As of June 30, 2018 and 2017, deposits for the Clearing account, were ($1,277,139) and $523,643, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

As of June 30, 2018, and 2017, deposits for the Excess Benefit account, were $4,789 and $4,789, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Investments

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of an investment or collateral securities that are in the possession of an outside party. As of June 30, 2018, the currencies in the chart below were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name. These funds are cash held by KRS' Global Managers and consist of various currencies.

Custodial Credit Risk As of June 30, 2018 ($ in Thousands)		
	2018	**2017**
Pension Fund Foreign Currency	$1,518,359	$1,408,163
Insurance Fund Foreign Currency	$654,401	$557,016

Pension Fund Securities

Pension Funds Investment Summary As of June 30, 2018 ($ in Thousands)		
Type	**2018**	**2017**
Fixed Income	$3,031,051	$1,133,170
Public Equities	5,176,655	6,137,268
Private Equities	1,271,907	1,574,062
Derivatives	(826)	23,453
Absolute Return	702,584	921,757
Real Return	1,054,096	982,317
Real Estate	436,599	509,527
Short-Term Investments	697,651	486,931
Accounts Receivable (Payable), Net	(78,243)	6,487
Total	**$12,291,474**	**$11,774,972**
Note: Differences due to rounding.		

Insurance Fund Securities

Insurance Fund Investment Summary As of June 30, 2018 ($ in Thousands)		
Type	**2018**	**2017**
Fixed Income	$1,150,672	$371,213
Public Equities	2,270,831	2,614,142
Private Equities	557,549	582,345
Derivatives	(339)	9,574
Absolute Return	286,309	388,353
Real Return	444,101	395,369
Real Estate	178,371	211,796
Short-Term Investments	261,412	184,860
Accounts Receivable (Payable), Net	(15,346)	(1,220)
Total	**$5,133,560**	**$4,756,432**
Note: Differences due to rounding.		

Credit Risk Debt Securities

Credit risk is when the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the Pension and Insurance Funds' debt securities portfolios are managed using the following guidelines adopted by the Board:

- Bonds, notes, or other obligations issued or guaranteed by the U.S. Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Fixed income investments will be similar in type to those securities found in the KRS fixed income benchmarks and the characteristics of the KRS Fixed Income portfolio will be similar to the KRS fixed income benchmarks. The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income by more than 25%.
- The duration of the TIPS portfolio shall not deviate from the KRS Fixed Income Index by more than 10%.
- The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS' assets.
- No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short-term instrument, with the exception of U.S. Government issued, guaranteed or agency obligations.

As of June 30, 2018, the KRS Pension portfolio had $2,161.9 million and $539.2 million respectively, in debt securities rated below BBB-. The government agencies in which KRS invested have credit ratings of AA+ or above.

Pension Funds Debt Securities As of June 30, 2018 ($ in Thousands)		
Rating	**2018**	**2017**
AAA	$67,216	$88,072
AA+	8,477	40,496
AA	6,237	6,378
AA-	5,719	13,342
A+	29,667	15,739
A	14,087	35,514
A-	43,933	27,005
BBB+	46,075	56,193
BBB	93,300	63,483
BBB-	74,459	73,754
BB+	88,775	73,429
BB	79,681	68,279
BB-	123,451	78,218
B+	86,570	75,043
B	109,938	70,787
B-	53,235	40,369
CCC+	13,104	14,997
CCC	6,430	13,999
CCC-	1,760	5,432
CC	4,349	9,009
C	2,389	
D	5,073	18,596
NR	1,587,144	71,095
Total Credit Risk Debt Securities	**2,551,069**	**959,229**
Government Agencies	24,109	901
Government Mortgage-Backed Securities	163,641	82,149
Government Issued Commercial Mortgage Backed	23,560	19,808
Government Bonds	268,672	71,083
Total	**$3,031,051**	**$1,133,170**
Note: These ratings are based on Standard & Poor's (S&P) Global Ratings. Where S&P ratings are unavailable, equivalent Fitch and Moody's Ratings are used as proxies.		
Note: Differences due to rounding.		
Note: Government Agencies, Government Mortgage-Backed Securities, Government Issued Commercial Mortgage Backed Securities, and Government Bonds are aggregates, therefore, credit ratings are not listed.		
Note: The increase in NR Debt Securities is because of the updated investment buckets created during FY2018 which reclassified several of our managers to different asset classes due to the underlying securities held by the managers. Our bond portfolio includes high yield bonds which are not rated. For example, in FY17 Cerberus was classified as Private Equity, but in FY18 they are classified as Specialty Credit which is part of Fixed Income.		

As of June 30, 2018, the KRS Insurance portfolio had $824.0 million and $165.9 million respectively, in debt securities rated below BBB-. The government agencies in which KRS invested have credit ratings of AA+ or above.

Insurance Fund Debt Securities As of June 30, 2018 ($ in Thousands)		
Rating	**2018**	**2017**
AAA	$33,225	$26,700
AA+	7,997	15,518
AA	2,339	2,275
AA-	1,966	4,337
A+	11,564	5,813
A	4,859	12,369
A-	17,084	9,554
BBB+	18,302	20,081
BBB	36,025	22,688
BBB-	27,886	26,914
BB+	29,025	22,620
BB	24,614	19,733
BB-	41,302	21,762
B+	27,240	20,999
B	47,382	19,232
B-	17,479	12,468
CCC+	3,395	3,545
CCC	2,227	3,394
CCC-	229	1,161
CC	1,209	2,282
C	367	0
D	2,198	4,479
NR	627,488	34,178
Total Credit Risk Debt	**985,402**	**312,102**
Government Agencies	9,385	322
Government Mortgage-Backed Securities	37,949	27,723
Government Issued Commercial Mortgage Backed	8,403	6,978
Government Bonds	109,533	24,088
Total	**$1,150,672**	**$371,213**
Note: These ratings are based on Standard & Poor's (S&P) Global Ratings. Where S&P ratings are unavailable, equivalent Fitch and Moody's Ratings are used as proxies.		
Note: Differences due to rounding.		
Note: Note: Government Agencies, Government Mortgage-Backed Securities, Government Issued Commercial Mortgage Backed Securities, and Government Bonds are aggregates, therefore, credit ratings are not listed.		
Note: The increase in NR Debt Securities is because of the updated investment buckets created during FY2018 which reclassified several of our managers to different asset classes due to the underlying securities held by the managers. For example, in FY17 Cerberus was classified as Private Equity, but in FY18 they are classified as Specialty Credit which is part of Fixed Income.		

Concentration of Credit Risk Debt Securities

Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

The total debt securities portfolio is managed using the following general guidelines adopted by the KRS Board:

bonds, notes, or other obligations issued or guaranteed by the U.S. Government, its agencies, or instrumentalities are permissible investments and may be held without restrictions. Debt obligations of any single U.S. corporation is limited to a maximum of 5% of the total portfolio at market value.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration measures the sensitivity of the market prices of fixed income securities to changes in the yield curve and can be measured using two methodologies: effective or modified duration. Effective duration uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price, and makes adjustments for any bond features that would retire the bonds prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve, but does not assume the securities will be called prior to maturity.

The KRS Pension Funds benchmarks its fixed income securities portfolio to a 50/50 blend of the Barclays U.S. Universal Index and the Barclays U.S. High Yield Index. As of June 30, 2018, and 2017, the modified duration of the KRS Pension Funds' fixed income benchmark was 4.81 and 4.71, respectively. At the same points in time, the modified duration of the KRS Pension Funds' fixed income securities portfolio was 4.04 and 5.06, respectively.

GASB 40 - Interest Rate Risk - Modified Duration for the Pension Funds As of June 30, 2018 ($ in Thousands)

TYPE	2018	Weighted Avg Modified Duration	TYPE	2017	Weighted Avg Modified Duration
Asset Backed Securities	$78,908	4.75	Asset Backed Securities	$74,249	5.97
Financial Institutions	286,701	1.89	Financial Institutions	195,269	4.48
Collateralized Mortgage Obligations	18,420	3.37	Collateralized Mortgage Obligations	14,937	2.93
Commercial Mortgage Backed Securities	89,317	4.77	Commercial Mortgage Backed Securities	90,171	2.97
Corporate Bonds - Industrial	432,634	5.24	Corporate Bonds - Industrial	434,421	5.54
Corporate Bonds - Utilities	34,929	5.47	Corporate Bonds - Utilities	31,381	5.99
Agencies	24,109	4.57	Agencies	15,968	3.93
Government Bonds - Sovereign Debt	14,549	4.57	Government Bonds - Sovereign Debt	4,533	8.42
Mortgage Back Securities Pass-through - Not CMO's	165,805	6.49	Mortgage Back Securities Pass-through - Not CMO's	82,975	5.05
Local Authorities - Municipal Bonds	17,693	3.59	Local Authorities - Municipal Bonds	22,644	3.11
Supranational - Multi-National Bonds	25,395	2.78	Supranational - Multi-National Bonds	18,672	2.78
Treasuries	362,778	6.29	Treasuries	131,953	6.16
Other	1,479,813	3.19	Other	15,996	3.59
Total	**$3,031,051**	**4.04**	**Total**	**$1,131,169**	**5.06**

The KRS Insurance Fund benchmarks its fixed income securities portfolio to a 50/50 blend of the Barclays U.S. Universal Index and the Barclays U.S. High Yield Index. As of June 30, 2018, the modified duration of the KRS Insurance Fund fixed income benchmark was 4.81 and 4.85, respectively. At the same points in time, the modified duration of the KRS Insurance Fund fixed income securities portfolio was 3.84 and 4.85, respectively.

KRS Insurance Fund Interest Rate Risk as of June 30, 2018:

GASB 40 - Interest Rate Risk - Modified Duration for the Insurance Fund As of June 30, 2018 ($ in Thousands)

TYPE	2018	Weighted Avg Modified Duration	TYPE	2017	Weighted Avg Modified Duration
Asset Backed Securities	$26,124	5.15	Asset Backed Securities	$20,244	5.35
Financial Institutions	117,895	1.61	Financial Institutions	73,800	4.18
Collateralized Mortgage Obligations	6,665	2.90	Collateralized Mortgage Obligations	5,462	3.25
Commercial Mortgage Backed Securities	32,780	4.61	Commercial Mortgage Backed Securities	33,521	3.13
Corporate Bonds - Industrial	132,033	5.08	Corporate Bonds - Industrial	123,030	5.47
Corporate Bonds - Utilities	11,249	5.25	Corporate Bonds - Utilities	10,482	5.92
Agencies	9,385	4.48	Agencies	6,025	3.80
Government Bonds - Sovereign Debt	5,620	4.62	Government Bonds - Sovereign Debt	1,738	8.19
Mortgage Back Securities Pass-through - Not CMO's	38,757	6.35	Mortgage Back Securities Pass-through - Not CMO's	27,568	5.09
Local Authorities - Municipal Bonds	7,032	3.64	Local Authorities - Municipal Bonds	8,750	3.06
Supranational - Multi-National Bonds	9,637	2.77	Supranational - Multi-National Bonds	7,211	2.72
Treasuries	147,277	6.29	Treasuries	46,853	6.00
Other	606,218	3.13	Other	6,529	3.38
Total	**$1,150,672**	**3.84**	**Total**	**$371,213**	**4.85**

Foreign Currency Risk

Foreign currency risk is the risk that occurs if exchange rates adversely affect the value of a non-U.S. dollar based investment or deposit within the KRS portfolio. KRS' currency risk exposure, or exchange rate risk, primarily resides with KRS' international equity holdings, but also affects other asset classes. KRS does not have a formal policy to limit foreign currency risk; however, some individual managers are given the latitude to hedge some currency exposures. All foreign currency transactions are classified as Short-Term Investments. All gains and losses associated with these transactions are recorded in the Net Appreciation (Depreciation) in the Fair Value of Investments on the combining financial statements.

GASB 40: Foreign Currency Risk for the Pension Funds
As of June 30, 2018 ($ in Thousands)

	2018	2017
Australian Dollar	$63,425	$38,506
Brazilian Real	28,320	18,032
Canadian Dollar	101,784	75,198
Chilean Peso	663	777
Columbian Peso	2,406	1,001
Czech Koruna	1	375
Danish Krone	28,129	36,732
Egyptian Pound	1,000	949
Euro	476,752	445,443
Hong Kong Dollar	71,857	61,886
Indian Rupee	13,994	17,037
Indonesian Rupiah	30,087	28,606
Israeli Shekel	12,757	16,932
Japanese Yen	203,521	228,164
Malaysian Ringgit	14,463	6,284
Mexican Peso	13,717	13,729
New Zealand Dollar	13,067	17,149
Norwegian Krone	19,887	21,189
Philippine Peso	7,619	6,488
Polish Zloty	1	1
Pound Sterling	237,829	270,742
Singapore Dollar	29,116	10,519
South African Rand	8,535	7,574
South Korean Won	32,527	34,465
Swedish Krona	30,716	26,267
Swiss Franc	41,116	55,668
Taiwan Dollar	18,946	27,215
Thai Bhat	9,444	9,779
Turkish Lira	6,680	10,719
Total Foreign Investment Securities	**1,518,359**	**1,487,426**
U.S. Dollar	10,773,115	10,287,547
Total Investment Securities	**$12,291,474**	**$11,774,973**

Note: Differences due to rounding.

GASB 40: Foreign Currency Risk for the Insurance Fund
As of June 30, 2018 ($ in Thousands)

	2018	2017
Australian Dollar	$26,537	$15,723
Brazilian Real	12,392	7,660
Canadian Dollar	44,232	30,632
Chilean Peso	263	312
Columbian Peso	1,055	378
Czech Koruna	0	153
Danish Krone	12,202	15,048
Egyptian Pound	347	329
Euro	205,646	186,582
Hong Kong Dollar	30,268	25,891
Indian Rupee	5,911	7,206
Indonesian Rupiah	12,578	11,865
Israeli Shekel	5,461	6,949
Japanese Yen	90,076	94,145
Malaysian Ringgit	6,012	2,238
Mexican Peso	5,803	5,157
New Zealand Dollar	5,475	6,546
Norwegian Krone	8,188	8,460
Philippine Peso	2,962	2,429
Pound Sterling	102,368	109,861
Singapore Dollar	12,212	4,985
South African Rand	4,193	3,590
South Korean Won	14,173	15,685
Swedish Krona	13,716	9,968
Swiss Franc	17,715	23,446
Taiwan Dollar	8,115	11,427
Thai Bhat	3,795	4,164
Turkish Lira	2,707	4,660
Total Foreign Investment Securities	**654,402**	**615,489**
U.S. Dollar	4,479,158	4,140,943
Total Investment Securities	**$5,133,560**	**$4,756,432**
Note: Differences due to rounding		

GASB 72

In accordance with GASB Statement No. 72, Fair Value Measurement and Application, KRS provides this additional disclosure regarding the fair value of its Pension and Insurance investments. KRS categorizes its fair value measurements within the fair value hierarchy established by GAAP.

KRS defined the Fair Value Hierarchy and Levels as follows:

Level 1

Quoted prices (unadjusted) in an active market for identical assets or liabilities that KRS has the ability to access at the measurement date (e.g., prices derived from NYSE, NASDAQ, Chicago Board of Trade, and Pink Sheets). Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using quoted prices (unadjusted) in an active market for identical assets or liabilities that KRS has the ability to access at the measurement date.

Level 2

Inputs (other than quoted prices included within Level 1) that are observable for an asset or liability, either directly or indirectly. These inputs can include quoted prices for similar assets or liabilities in active or inactive markets, or market-corroborated inputs.

Level 3

Unobservable inputs for an asset or liability, which generally results in a government using the best information available and may include the government's own data.

Net Asset Value (NAV)

The remaining investments not categorized under the fair value hierarchy are shown as net asset value (NAV). These are investments in non-governmental entities for which a readily determinable fair value is not available, such as member units or an ownership interest in partners' capital to which a proportionate share of net assets is attributed.

GASB 72 Pension Funds
As of June 30, 2018 ($ in Thousands)

Asset Type	Fair Value	Level 1	Level 2	Level 3
Public Equity				
US Equity	$2,106,013	$2,106,012	$0	$1
Non-US Equity	2,544,124	1,433,527	1,663	1,108,935
Total Public Equity	**4,650,138**	**3,539,539**	**1,663**	**1,108,936**
Fixed Income				
Agencies	845		845	
Asset-Backed	82,212		82,207	5
Bank & Finance	70,613		53,235	17,378
Cash & Cash Equivalent	693,566	21,074	448,945	223,547
Collateralized Mortgage	6,879		6,879	
Commercial Mortgage	10,182		10,182	
Healthcare	34,884		34,884	
Insurance	8,392		8,392	
Mortgage-Backed	68,585		68,585	
Municipals	40,518		40,518	
Sovereign Debt	164,307	5,942	158,365	
US Corporate	686,042	19,308	422,054	244,680
US Government	658,186	486,319	171,867	
Total Fixed Income	**2,525,212**	**532,643**	**1,506,958**	**485,610**
Derivatives				
Futures	$ (826)	$ (826)		
Total Derivatives	**(826)**	**(826)**		
Other				
Investment Grade Credit	1,375,364			1,375,364
Private Equity	1,631	1,631		
Real Assets	702,533	595,392	103,854	3,287
Real Estate	12,987		12,987	
Total Other	**2,092,515**	**597,023**	**116,841**	**1,378,651**
Investments Measured at NAV				
Fixed Income	457,996			
Absolute Return	702,584			
Real Assets	123,173			
Real Estate	591,715			
Private Equity	1,212,833			
Total Investments Measured at NAV	**$3,088,301**			

Note: The fair value hierarchies do not reflect cash and accruals thus totals differ from the Investment Summaries.

Note: Cash Equivalents include publicly traded investment grade corporate bonds; variable rate demand notes; government and agency bonds; mortgages; municipal bonds; Short Term Investment Funds (STIF); money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper); and repurchase agreements.

GASB 72 Insurance
As of June 30, 2018 ($ in Thousands)

Asset Type	Fair Value	Level 1	Level 2	Level 3
Public Equity				
US Equity	$934,946	$929,999	$0	$4,947
Non-US Equity	1,112,002	627,771	585	483,646
Total Public Equity	**2,046,948**	**1,557,770**	**585**	**488,593**
Fixed Income				
Agencies	302		302	
Asset-Backed	26,946		26,943	3
Bank & Finance	22,854		16,962	5,892
Cash & Cash Equivalent	249,912	9,862	139,041	101,009
Collateralized Mortgage	2,518		2,518	
Commercial Mortgage	4,052		4,052	
Healthcare	11,604		11,604	
Insurance	3,011		3,011	
Mortgage-Backed	24,763		24,763	
Municipals	11,704		11,704	
Sovereign Debt	64,717	2,099	62,618	
US Corporate	246,821	6,041	130,020	110,760
US Government	264,354	223,311	41,043	
Total Fixed Income	**933,558**	**241,313**	**474,581**	**217,664**
Derivatives				
Futures	$ (339)	$ (339)		
Total Derivatives	**(339)**	**(339)**		
Other				
Investment Grade Credit	573,472			573,472
Private Equity	181	181		
Real Estate	3,237		3,237	
Real Assets	274,892	229,448	43,221	2,223
Total Other	**851,782**	**229,629**	**46,458**	**575,695**
Investments Measured at NAV				
Fixed Income	224,333			
Absolute Return	286,309			
Real Assets	55,558			
Real Estate	215,924			
Private Equity	528,012			
Total Investments Measured at NAV	**$1,310,136**			

Note: The fair value hierarchies do not reflect cash and accruals thus totals differ from the Investment Summaries.

Note: Cash Equivalents include publicly traded investment grade corporate bonds; variable rate demand notes; government and agency bonds; mortgages; municipal bonds; Short Term Investment Funds (STIF); money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper); and repurchase agreements.

Money-Weighted Rates of Return

In accordance with GASB Statement No. 67, Financial Reporting for Pension Plans, and GASB Statement No. 74, *Financial Reporting for Post-Employment Benefit Plans Other than Pension Plan*, KRS provides this additional disclosure regarding its money-weighted rate of return for the Pension Funds and Insurance Fund for the periods, June 30, 2018, and June 30, 2017. The money-weighted rate of return is a method of calculating period-by-period returns on Pension Funds and Insurance Fund investments that adjusts for the changing amounts actually invested. For purposes of this Statement, money weighted-rate of return is calculated as the internal rate of return on Pension Funds and Insurance Fund investments, net of Pension Funds and Insurance Fund investment expense, adjusted for the changing amounts actually invested.

Money - Weighted Rates of Return As of June 30,					
	KERS	KERS	CERS	CERS	SPRS
	Non-Hazardous	Hazardous	Non-Hazardous	Hazardous	
Pension Funds					
2018	7.63%	8.69%	8.82%	8.82%	7.68%
2017	12.08%	13.45%	13.80%	13.72%	12.50%

	KERS	KERS	CERS	CERS	SPRS
	Non-Hazardous	Hazardous	Non-Hazardous	Hazardous	
Insurance Fund					
2018	7.95%	8.93%	9.22%	9.35%	9.39%
2017	13.77%	13.75%	13.67%	13.69%	13.69%

Note: The money-weighted rates of return decreased due to unfavorable conditions in the capital markets. This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Note E. Securities Lending Transactions

Kentucky Revised Statutes Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with an initial fair value of 102% or 105% of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. The types of securities lent include U.S. Treasuries, U.S. Agencies, U.S. Corporate Bonds, U.S. Equities, Global Fixed Income Securities, and Global Equities Securities.

The Statement of Investment Policy does not address any restrictions on the amount of loans that can be made. As of June 30, 2018, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction. BNY Mellon invests cash collateral as permitted by state statute and Board policy. The agent of the Funds cannot pledge or sell collateral securities received unless the borrower defaults. KRS maintains a conservative approach to investing the cash collateral with BNY Mellon, emphasizing capital preservation, liquidity, and credit quality.

As of June 30, 2018, the cash collateral received for the securities on loan for the Pension and Insurance Funds was $488.9 million and $217.9 million, respectively compared to the Fair Value of the underlying securities of $396.8 million and $178.5million, respectively.

Note F. Risk of Loss

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Claims Commission is vested with full power and authority to investigate, hear proof, and compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $250,000 for a single claim and $400,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Kentucky Claims Commission are paid from the fund of the agency having a claim or claims before the Kentucky Claims Commission.

Claims against the KRS Board, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with two commercial insurance policies. Hallmark Specialty provides coverage of up to $2.5 million and ANV Global Services provides coverage up to $2.5 million for a total coverage of $5 million, with a deductible/retention of $250,000 for each claim (the retention increases to $500,000 from $250,000 for any claims arising out of the (1) KERS plans and (2) any investment in any alternative investment - including any private equity funds or hedge funds for all plans). Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policies. The aggregate limit for all loss is $5 million. The Voluntary Compliance Program (cyber privacy violations) sub-limit is $200,000, and the Health Insurance Portability and Accountability Act (HIPAA) and Patient Protection and Affordable Care Act (PPACA) fines and penalties sub-limit is $1.5 million.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for all medical expenses related to the illness or injury and up to 66.67% of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll. Settlements did not exceed insurance coverage in any of the past three fiscal years. Thus, no secondary insurance had to be utilized. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

Note G. Contingencies

In the normal course of business, KRS is involved in litigation concerning the right of participants, or their beneficiaries, to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

Note H. Defined Benefit Pension Plan

All eligible employees of KRS participate in KERS Non-Hazardous, a cost-sharing, multiple-employer defined pension plan that covers all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order (EO) to participate in the system. The plan provides for retirement, disability, and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Tier 1 Plan members contributed 5% of creditable compensation for the fiscal years ended June 30, 2018, 2017, and 2016. Tier 2 and Tier 3 Plan members contributed 6% of creditable compensation for the fiscal years ended June 30, 2018, 2017, and 2016.

The chart below includes the covered payroll and contribution amounts for KRS for the three periods ended June 30 included in this discussion.

Payroll and Contributions as of June 30, 2018 ($ in Thousands)

	2018	2017	2016
Covered Payroll	$13,287	$13,945	$14,579
Required Employer Contributions	6,570	6,776	5,652
Employer Percentage Contributed	100%	100%	100%

Note I. Income Tax Status

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, generally, not subject to tax. KRS is subject to income tax on any unrelated business income; however, KRS had no unrelated business income in fiscal years 2018 and 2017.

Note J. Equipment Expenses

Equipment Expenses as of June 30, 2018 ($ in Thousands)		
	2018	2017
Equipment, cost	$2,885	$2,885
Less Accumulated Depreciation	(2,648)	(2,540)
Equipment, net	$237	$345

Depreciation expenses rose to $2.6 million in fiscal year 2018, an increase of $108 thousand over fiscal year 2017.

Note K. Intangible Assets

The provisions of GASB Statement No. 51, Accounting and Financial Reporting for Intangible Assets, requires that intangible assets be recognized in the Combining Statement of Plan Net Position only if they are considered identifiable. In accordance with GASB No. 51, KRS has capitalized software costs as indicated below for the Strategic Technology Advancements for the Retirement of Tomorrow (START) project.

Software Expenses as of June 30, 2018 ($ in Thousands)		
	2018	2017
Software, Cost	$17,302	$17,301
Less Accumulated Amortization	(13,102)	(11,336)
Intangible Assets, Net	$4,200	$5,965

Amortization expense rose to $13.1 million in fiscal year 2018, an increase of $1.8 million over fiscal year 2017.

Note L. Actuarial Valuation

The actuary, GRS, completed an actuarial valuation of the Pension and Insurance plans for the period ending June 30, 2018. There have been no changes in actuarial assumptions since June 30, 2017. However, during the 2018 legislative session, HB 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouse of deceased members have increased and benefits paid to surviving dependent children, if the member doesn't have a surviving spouse, also increased. The total Pension liability as of June 30, 2018, is determined using the updated benefit provisions. The following two charts show the economic assumptions and target asset allocations for the Pension Funds and Insurance Fund.

Economic Assumptions-Pension as of June 30, 2018

	KERS Non-Hazardous		KERS Hazardous		CERS Non-Hazardous		CERS Hazardous		SPRS	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Assumed Investment Return	5.25%	5.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	5.25%	5.25%
Inflation Factor	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%
Payroll Growth	0.00%	0.00%	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	0.00%	0.00%

Economic Assumptions-Insurance as of June 30, 2018

	KERS Non-Hazardous		KERS Hazardous		CERS Non-Hazardous		CERS Hazardous		SPRS	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Assumed Investment Return	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%
Inflation Factor	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%
Payroll Growth	0.00%	0.00%	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	0.00%	0.00%

Target Asset Allocation

The long-term expected rate of return was determined by using a building-block method in which best-estimate ranges of expected future real rate of returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage. The target allocation and best estimates of arithmetic real rate of return for each major asset class are summarized in the tables below.

Target Asset Allocation - Pension
As of June 30, 2018

Allocations Apply Only to KERS and SPRS in Pension Funds

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
US Equity	**17.50%**	
US Large Cap	8.50%	4.50%
US Mid Cap	5.00%	4.50%
US Small Cap	4.00%	5.50%
Non US Equity	**17.50%**	
International Developed	12.50%	6.50%
Emerging Markets	5.00%	7.25%
Global Bonds	10.00%	3.00%
Credit Fixed	**17.00%**	
Global IG Credit	10.00%	3.75%
High Yield	3.00%	5.50%
EMD	4.00%	6.00%
Private Equity	10.00%	6.50%
Real Estate	5.00%	7.00%
Absolute Return	10.00%	5.00%
Real Return	10.00%	5.00%
Cash	3.00%	1.50%
Total	**100.00%**	**5.13%**

Target Asset Allocation - Pension and Insurance
As of June 30, 2018

Allocations Apply to CERS, CERS-Haz, and KERS-Haz in Pension Funds and All Plans are included in the Insurance Fund

US Equity	**17.50%**	
US Large Cap	5.00%	4.50%
US Mid Cap	6.00%	4.50%
US Small Cap	6.50%	5.50%
Non US Equity	**17.50%**	
International Developed	12.50%	6.50%
Emerging Markets	5.00%	7.25%
Global Bonds	4.00%	3.00%
Credit Fixed	**24.00%**	
Global IG Credit	2.00%	3.75%
High Yield	7.00%	5.50%
EMD	5.00%	6.00%
Illiquid Private	10.00%	8.50%
Private Equity	10.00%	6.50%
Real Estate	5.00%	9.00%
Absolute Return	10.00%	5.00%
Real Return	10.00%	7.00%
Cash	2.00%	1.50%
Total	**100.00%**	**6.09%**

Note M. GASB 67 and GASB 74 Valuations

GASB 67

GRS completed reports by Plan in compliance with the GASB Statement No. 67 “Financial Reporting for Pension Plans.” The total pension liability, net pension liability, and sensitivity information shown in these reports are based on an actuarial valuation date of June 30, 2017. The total pension liability was rolled-forward from the valuation date to the plan’s fiscal year ending June 30, 2018, using generally accepted actuarial principles. Information disclosed for years prior to June 30, 2017, were prepared by KRS’ prior actuary. A single discount rate of 5.25% was used for the Non-Hazardous KERS system and the SPRS system and a single discount rate of 6.25% was used for the Hazardous KERS system, the non-Hazardous CERS system and the Hazardous CERS system to measure the total pension liability for the fiscal year ending June 30, 2018. These single discount rates are based on the expected rate of return on pension plan investments for each system. Certain benefit assumptions (see Actuarial Section) including the mortality assumptions (also see page 88 Required Supplementary Information) are from the 2013 experience study. A new experience study will be completed based on the 2018 actuarial valuation in 2019. GASB 67 pension liabilities are used to prepare GASB 68 – Accounting and Financial Reporting for Pension Liabilities for KRS employers.

GASB 74

GRS completed reports by plan in compliance with the GASB Statement No. 74, “Financial Reporting for Postemployment Benefit Plans Other than Pension Plans” (OPEB) for the fiscal year ending June 30, 2018. The total OPEB liability, net OPEB liability, and sensitivity information shown in these reports were based on an actuarial valuation date of June 30, 2017. The total OPEB liability was rolled-forward from the valuation date to the plan’s fiscal year ending June 30, 2018, using generally accepted actuarial principles. The single discount rates used in the reports are based on the expected rate of return on OPEB plan investments of 6.25% and a municipal bond rate of 3.62%, as reported in Fidelity Index’s “20-Year Municipal GO AA Index” as of June 30, 2018. Certain benefit assumptions (see Actuarial Section) including the mortality assumptions (also see page 99 Required Supplementary Information) are from the 2013 experience study. A new experience study will be completed based on the 2018 actuarial valuation in 2019. GASB 74 OPEB liabilities are used to prepare GASB 75 - Accounting and Financial Reporting for Postemployment Benefits Plans Other than Pension for KRS employers.

Sensitivity to the NPL to Changes in the Discount Rate Fiscal Year 2018
As of June 30, 2018 ($ in Thousands)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
	Current 5.25%	Current 6.25%	Current 6.25%	Current 6.25%	Current 5.25%
1% Decrease	$15,497,813	$646,326	$7,667,063	$3,030,168	$823,796
Current Discount Rate	13,603,775	505,125	6,090,305	2,418,457	702,050
1% Increase	$12,026,279	$387,876	$4,769,258	$1,912,763	$601,850

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate and Healthcare Trend Rate
As of June 30, 2018 ($ in Thousands)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
	Single 5.86%	Single 5.88%	Single 5.85%	Single 5.97%	Single 6.02%
Sensitivity of the Net OPEB Liability to Changes in the Discount Rate					
1% Decrease	$2,781,765	$33,379	$2,306,064	$991,049	$149,812
Single Discount Rate	2,370,912	(33,168)	1,775,480	712,959	110,165
1% Increase	$2,028,977	$(86,528)	$1,323,520	$490,342	$77,519
Sensitivity of the Net OPEB Liability to Changes in the Current Healthcare Cost Trend Rate of 3.62%					
1% Decrease	$2,015,770	$(85,174)	$1,321,863	$485,560	$75,342
Current Healthcare Cost Trend Rate	2,370,912	(33,168)	1,775,480	712,959	110,165
1% Increase	$2,798,022	$31,172	$2,310,165	$994,603	$152,264

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November 15, 2018

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Re: GASB 67 Reporting – Actuarial Information

Dear Members of the Board:

The reports provided herein contain certain information for the Kentucky Employees Retirement System (KERS), the County Employees Retirement System (CERS), and the State Police Retirement System (SPRS) in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67, "Financial Reporting for Pension Plans" for the fiscal year ending June 30, 2018. Separate reports will be provided at a later date with additional accounting information determined in accordance with GASB Statement No. 68, "Accounting and Financial Reporting for Pensions".

Basis of Calculations

The liability calculations presented in the reports were performed for the purpose of satisfying the requirements of GASB No. 67 and are not applicable for other purposes, such as determining the plans' funding requirements. The plan's liability for other purposes may produce significantly different results.

The total pension liability, net pension liability, and sensitivity information are based on an actuarial valuation date of June 30, 2017. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2018 using generally accepted actuarial principles.

Assumptions

There have been no changes in actuarial assumptions since June 30, 2017.

Plan Provisions

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members have been increased from 25% of the member's final rate of pay to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children. The Total Pension liability as of June 30, 2018 is determined using these updated benefit provisions.

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Discount Rates

A single discount rate of 5.25% was used for the non-hazardous KERS system and the SPRS system and a single discount rate of 6.25% was used for the hazardous KERS system, the non-hazardous CERS system and the hazardous CERS system to measure the total pension liability for the fiscal year ending June 30, 2018. These single discount rates are based on the expected rate of return on pension plan investments for each system. Based on the stated assumptions and the projection of cash flows as of each fiscal year ending, the pension plan's fiduciary net position and future contributions were projected to be sufficient to finance all the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability for each system. The projection of cash flows used to determine the single discount rate assumes that the State contributes the actuarially determined contribution rate in all future years (determined without regard to enactment of SB 151 in 2018, which is currently being reviewed by the State Supreme Court).

401(h) Subaccount

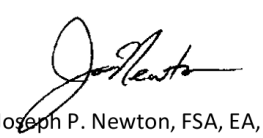
Based on guidance issued by GASB in connection with GASB Statement No. 74, the 1% of pay member contributions for Tier 2 and Tier 3 members to a 401(h) subaccount is considered as an OPEB asset. As a result, the reported fiduciary net positions as of June 30, 2017 and later are net of the 401(h) asset balance.

Additional Disclosures

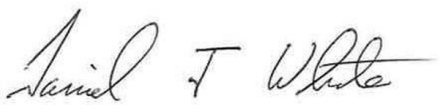
The reports are based upon information, furnished to us by the Retirement System, which includes benefit provisions, membership information, and financial data. We did not audit this data and information, but we did apply a number of tests and concluded that it was reasonable and consistent. GRS is not responsible for the accuracy or completeness of the information provided by the Retirement System. Please see the "Actuarial Valuation Report as of June 30, 2017" for additional discussion of the nature of actuarial calculation and more information related to participant data, economic and demographic assumptions, and benefit provisions. These reports should be considered together as a complete report for KRS's fiscal year ending June 30, 2018.

To the best of our knowledge, the reports are complete and accurate and are in accordance with generally recognized actuarial practices and methods. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are independent actuaries and consultants and members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. They are also experienced in performing valuations for large public retirement system. This communication shall not be construed to provide tax advice, legal advice or investment advice.

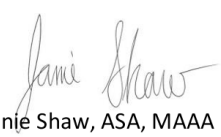
Sincerely,



Joseph P. Newton, FSA, EA, MAAA
Pension Market Leader and Actuary



Daniel J. White, FSA, EA, MAAA
Senior Consultant and Actuary



Janie Shaw, ASA, MAAA
Consultant and Actuary

GRS Retirement Consulting

Schedule of Employer NPL - KERS Non-Hazardous
As of June 30, 2018 ($ in Thousands)

	2018	2017
Total Pension Liability (TPL)	$15,608,221	$15,445,206
Plan Net Position	2,004,446	2,056,870
Net Pension Liability	$13,603,775	$13,388,336
Ratio of Plan Net Position to TPL	12.84%	13.32%
Covered Employee Payroll	$1,509,955	$1,602,396
Net Pension Liability as a Percentage of Covered Employee Payroll	900.94%	835.52%

Schedule of Employer NPL - KERS Hazardous
As of June 30, 2018 ($ in Thousands)

	2018	2017
Total Pension Liability (TPL)	$1,150,610	$1,098,630
Plan Net Position	645,485	601,529
Net Pension Liability	$505,125	$497,101
Ratio of Plan Net Position to TPL	56.10%	54.75%
Covered Employee Payroll	$152,936	$178,511
Net Pension Liability as a Percentage of Covered Employee Payroll	330.29%	278.47%

Schedule of Employers NPL - CERS Non-Hazardous
As of June 30, 2018 ($ in Thousands)

	2018	2017
Total Pension Liability (TPL)	$13,109,268	$12,540,545
Plan Net Position	7,018,963	6,687,237
Net Pension Liability	$6,090,305	$5,853,308
Ratio of Plan Net Position to TPL	53.54%	53.32%
Covered Employee Payroll	$2,454,927	$2,376,290
Net Pension Liability as a Percentage of Covered Employee Payroll	248.08%	246.32%

Total Pension Liability (NPL) - CERS Hazardous
As of June 30, 2018 ($ in Thousands)

	2018	2017
Total Pension Liability (TPL)	$4,766,794	$4,455,275
Plan Net Position	2,348,337	2,217,996
Net Pension Liability	$2,418,457	$2,237,279
Ratio of Plan Net Position to TPL	49.26%	49.78%
Covered Employee Payroll	$562,853	$526,559
Net Pension Liability as a Percentage of Covered Employee Payroll	429.68%	424.89%

Schedule of Employer (NPL) - SPRS
As of June 30, 2018 ($ in Thousands)

	2018	2017
Total Pension Liability (TPL)	$969,622	$943,271
Plan Net Position	267,572	255,737
Net Pension Liability	$702,050	$687,534
Ratio of Plan Net Position to TPL	27.60%	27.11%
Covered Employee Payroll	$50,346	$54,065
Net Pension Liability as a Percentage of Covered Employee Payroll	1394.45%	1271.68%

1 Based on derived compensation for fiscal years ending 2018 and 2017 using the provided employer contribution information.

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November 15, 2018

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Re: GASB 74 Reporting – Actuarial Information

Dear Members of the Board:

The reports provided herein contain certain information for the Kentucky Employees Retirement System (KERS), the County Employees Retirement System (CERS), and the State Police Retirement System (SPRS) in connection with the Governmental Accounting Standards Board (GASB) Statement No. 74, "Financial Reporting for Postemployment Benefit Plans Other than Pension Plans" for the fiscal year ending June 30, 2018. Separate reports will be provided at a later date with additional accounting information determined in accordance with GASB Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions".

Basis of Calculations

The liability calculations presented in the reports were performed for the purpose of satisfying the requirements of GASB No. 74 and are not applicable for other purposes, such as determining the plans' funding requirements. The plan's liability for other purposes may produce significantly different results.

The total OPEB liability, net OPEB liability, and sensitivity information are based on an actuarial valuation date of June 30, 2017. The total OPEB liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2018 using generally accepted actuarial principles.

Assumptions

There have been no changes in actuarial assumptions since June 30, 2017.

Plan Provisions

During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. The system shall now pay 100% of the insurance premium for spouses and children of all active members who die in the line of duty. The Total OPEB liability as of June 30, 2018 is determined using these updated benefit provisions.

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Implicit Employer Subsidy for non-Medicare retirees

The fully-insured premiums KRS pays for the Kentucky Employees' Health Plan are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit employer subsidy for the non-Medicare eligible retirees. GASB 74 requires that the liability associated with this implicit subsidy be included in the calculation of the Total OPEB Liability.

Discount Rates

The following single discount rates were used to measure the total OPEB liability as of June 30, 2017.

KERS Non-Hazardous	5.86%
KERS Hazardous	5.88%
CERS Non-Hazardous	5.85%
CERS Hazardous	5.97%
SPRS	6.02%

The single discount rates are based on the expected rate of return on OPEB plan investments of 6.25% and a municipal bond rate of 3.62%, as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2018. Future contributions are projected in accordance with the Board's current funding policy, which includes the requirement that each participating employer in the System contribute the actuarially determined contribution rate, which is determined using a closed funding period (25 years as of June 30, 2018) and the actuarial assumptions and methods adopted by the Board of Trustees. These projected contributions are determined without regard to the enactment of SB 151 in 2018, which is currently being reviewed by the State Supreme Court. Current assets, future contributions, and investment earnings are projected to be sufficient to pay the projected benefit payments from the retirement system. However, the cost associated with the implicit employer subsidy is not currently being included in the calculation of the System's actuarial determined contributions, and it is our understanding that any cost associated with the implicit subsidy will not be paid out of the System's trust. Therefore, the municipal bond rate was applied to future expected benefit payments associated with the implicit subsidy.

401(h) Subaccount

Based on guidance issued by GASB in connection with GASB Statement No. 74, the 1% of pay member contributions for Tier 2 and Tier 3 members to a 401(h) subaccount is considered as an OPEB asset. As a result, the reported fiduciary net position includes these 401(h) assets. Additionally, these member contributions and associated investment income are included in the reconciliation of the fiduciary net position.

Additional Disclosures

The reports are based upon information, furnished to us by the Retirement System, which includes benefit provisions, membership information, and financial data. We did not audit this data and information, but we did apply a number of tests and concluded that it was reasonable and consistent. GRS is not responsible for the accuracy or completeness of the information provided by the Retirement System. Please see the "Actuarial Valuation Report as of June 30, 2017" for additional discussion of the nature of actuarial calculation and more information related to participant data, economic and demographic assumptions, and benefit provisions. These reports should be considered together as a complete report for KRS's fiscal year ending June 30, 2018.

To the best of our knowledge, the reports are complete and accurate and are in accordance with generally recognized actuarial practices and methods. Mr. Newton, Mr. Riazi, and Mr. White are Enrolled Actuaries. All of the undersigned are independent actuaries and consultants and members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. They are also experienced in performing valuations for large public retirement system. This communication shall not be construed to provide tax advice, legal advice or investment advice.

Sincerely,

Joseph P. Newton, FSA, EA, MAAA
Pension Market Leader and Actuary

Daniel J. White, FSA, EA, MAAA
Senior Consultant and Actuary

Janie Shaw, ASA, MAAA
Consultant and Actuary

Mehdi Riazi, FSA, EA, MAAA
Consultant and Actuary

GRS Retirement Consulting

Development of Single Discount Rate
As of June 30, 2018

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
2018					
Single Discount Rate	5.86%	5.88%	5.85%	5.97%	6.02%
Long-Term Expected Rate of Return	6.25%	6.25%	6.25%	6.25%	6.25%
Long-Term Municipal Bond Rate	3.62%	3.62%	3.62%	3.62%	3.62%
2017					
Single Discount Rate	5.83%	5.87%	5.84%	5.96%	6.01%
Long-Term Expected Rate of Return	6.25%	6.25%	6.25%	6.25%	6.25%
Long-Term Municipal Bond Rate	3.56%	3.56%	3.56%	3.56%	3.56%

Note: Fixed -income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20 - Year Municipal GO AA Index" as of June 30, 2018 (or as of June 30, 2017).

Schedule of the Employers' Net OPEB Liability - KERS Non-Hazardous Plan
As of June 30, 2018 ($ in Thousands)

Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Employee Payroll (1)	Net OPEB Liability as a Percentage of Covered Employee Payroll
2018	$3,262,117	$891,205	$2,370,912	27.32%	$1,573,898	150.64%
2017	$3,353,332	$817,370	$2,535,962	24.37%	$1,593,097	159.18%

(1) Based on derived compensation using the provided employer contribution information.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of the Employers' Net OPEB Liability - KERS Hazardous Plan
As of June 30, 2018 ($ in Thousands)

Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Employee Payroll (1)	Net OPEB Liability as a Percentage of Covered Employee Payroll
2018	$485,904	$519,072	$(33,168)	106.83%	$190,317	-17.43%
2017	$494,869	$488,838	$6,031	98.78%	$171,087	3.53%

(1) Based on derived compensation using the provided employer contribution information.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of the Employers' Net OPEB Liability - CERS Non-Hazardous Plan
As of June 30, 2018 ($ in Thousands)

Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Employee Payroll (1)	Net OPEB Liability as a Percentage of Covered Employee Payroll
2018	$4,189,606	$2,414,126	$1,775,480	57.62%	$2,570,156	69.08%
2017	$4,222,878	$2,212,536	$2,010,342	52.39%	$2,480,130	81.06%

(1) Based on derived compensation using the provided employer contribution information.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of the Employers' Net OPEB Liability - CERS Hazardous Plan
As of June 30, 2018 ($ in Thousands)

Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Employee Payroll (1)	Net OPEB Liability as a Percentage of Covered Employee Payroll
2018	$1,993,941	$1,280,982	$712,959	64.24%	$588,526	121.14%
2017	$2,015,673	$1,189,001	$826,672	58.99%	$542,710	152.32%

(1) Based on derived compensation using the provided employer contribution information.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of the Employers' Net OPEB Liability-SPRS Plan
As of June 30, 2018 ($ in Thousands)

Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Employee Payroll (1)	Net OPEB Liability as a Percentage of Covered Employee Payroll
2018	$301,012	$190,847	$110,165	63.40%	$50,064	220.05%
2017	$313,234	$178,838	$134,396	57.10%	$48,873	275.00%

(1) Based on derived compensation using the provided employer contribution information.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Note N. Pension Legislation

Background

During the 2018 Regular Session of the General Assembly, Senate Bill 151 was passed changing retirement eligibility and benefits with various effective dates for active, inactive, and future members of the KRS. Other legislation enacted into law during the 2018 legislative session of importance to KRS members is summarized below.

The Attorney General, the Kentucky Education Association and the Kentucky State Fraternal Order of Police filed a lawsuit regarding Senate Bill 151 asking the court to declare the new law unconstitutional and unenforceable. On June 20, 2018, Franklin Circuit Judge Shepherd ruled that Senate Bill 151 is unenforceable because the legislative process violated certain provisions of the Kentucky Constitution. This ruling has been appealed to the Kentucky Supreme Court. KRS staff is monitoring the lawsuit closely and will provide updates on pertinent developments while continuing to work diligently to meet the deadlines imposed by Senate Bill 151.

Timeline of Legislative Changes

The following legislative changes became law as of the effective date.

Effective January 1, 2018 (Tax Year 2018)

House Bill 366 reduced the pension income exclusion from $41,110 to $31,110 for taxable years beginning on or after January 1, 2018.

Effective April 13, 2018 (Fiscal Year 2018)

House Bill 185 made changes to death in the line of duty benefits for a surviving spouse and dependent children.

Effective April 14, 2018 (Fiscal Year 2018)

House Bill 366 added re-employment exceptions for county police departments and school resource officers. Effective April 14, 2018, the following exemptions apply to county police departments and participating agencies employing school resource officers: The employer is not required to reimburse KRS for the health insurance contribution paid on behalf of the retiree. The employer is not required to pay employer contributions on behalf of the retiree.

Effective April 14, 2018 (Fiscal Year 2019)

House Bill 362 caps CERS employer contribution rate increases up to 12% per year over the prior fiscal year for the period of July 1, 2018, to June 30, 2028.

Effective April 27, 2018 (Fiscal Year 2019)

House Bill 265 reduced the employer contribution rate for Regional Mental Health/Mental Retardation Boards, Local and District Health Departments, State Universities, Community Colleges and any other agency eligible to voluntarily cease participating in KERS. These agencies will continue to pay the same employer contribution rate that was paid in fiscal year 2018 in fiscal year 2019.

Timeline of Senate Bill 151 Changes

An explanation and timeline of changes included in Senate Bill 151 are provided below. As noted above, Senate Bill 151 cannot be implemented at this time due to court proceedings.

Effective August 1, 2018 (Fiscal Year 2019)

Tier 2 members retiring on or after August 1, 2018, cannot use sick leave service credit to reduce actuarial penalties for early retirement benefits.

KERS and CERS agencies not participating in a KRS sick leave program cannot opt-in after this date.

Effective January 1, 2019 (Fiscal Year 2019)

There are changes to retired re-employed rules, employer contributions and employer health insurance reimbursement costs for members retiring on or after January 1, 2019, who later re-employ.

Tier 1 members with a participation date on or after July 1, 2003, but before September 1, 2008, will begin paying a non-refundable 1% health insurance contribution.

Tier 1 members retiring on or after January 1, 2019, must use the highest complete fiscal year-salaries (i.e. each fiscal year must have 12 months of service credit) to calculate the retirement benefit. Partial years will not be considered unless three or five complete fiscal years do not exist.

Members who first began participating in a retirement system administered by KRS on or after January 1, 2014, are no longer eligible for the $5,000 death benefit.

Uniform, equipment, and other expense allowances paid on or after January 1, 2019, are excluded from creditable compensation.

Effective June 30, 2019 (Fiscal Year 2019)

Tier 3 interest payment calculation changes for KERS non-hazardous and CERS non-hazardous members for fiscal year 2019.

Effective July 1, 2019 (Fiscal Year 2020)

Start date for optional Tier 4 defined contribution 401(a) Money Purchase Plan.

Effective July 1, 2020 (Fiscal Year 2021)

The employer contribution calculation changes so that employers will begin paying the normal cost as a percentage of payroll plus fixed dollar amount each year towards the unfunded liability.

Effective July 1, 2023 (Fiscal Year 2024)

Tier 1 members retiring on or after July 1, 2023, cannot use sick leave service credit for retirement eligibility service requirements or to reduce actuarial penalties for early retirement benefits. Sick leave credit will be used in the benefit calculation but is not considered for retirement eligibility.

Effective August 1, 2023 (Fiscal Year 2024)

Compensatory payouts at terminations for Tier 1 non-hazardous members retiring after July 1, 2023, will no longer be considered creditable compensation.

Note O. Litigation

City of Fort Wright

In June 2014, the City of Fort Wright, a participating employer in CERS, filed a lawsuit against KRS alleging that the Board invested CERS funds in investments that were prohibited by both statutory and common law. In addition, the City of Fort Wright alleged that the Board paid substantial asset management fees, which the suit alleges were improper. On September 20, 2018, Franklin Circuit Court issued an Opinion and Order denying the City of Fort Wright's Motion for Declaratory Judgment and granting the Kentucky Retirement Systems' Cross-Motion for Declaratory Judgment. The Court stated in relevant part, "There is nothing in the record or in the City's pleadings to this Court that persuades this Court that the Board did not follow the law or did not appropriately apply the facts to the law." The City of Fort Wright filed its Notice of Appeal in this action on October 15, 2018.

On September 2, 2015, a CERS member filed a complaint that is substantially similar in terms of allegation and ambiguous requests for relief to that of the City of Fort Wright. The exact nature and scope of the relief sought is unclear; therefore, no provision has been made in the combining financial statements. The member's complaint is currently being held in abeyance pending the outcome of the City of Fort Wright's appeal. No new action has been taken in this matter to date.

Seven Counties

Seven Counties Services, Inc. ("Seven Counties") filed for Chapter 11 bankruptcy in the United States Bankruptcy Court for the Western District of Kentucky (the "Bankruptcy Court") in April 2013. Seven Counties provides mental health services for the Cabinet for Health and Family Services for the greater Louisville, Kentucky area and surrounding counties. Seven Counties participated in the Kentucky Employees Retirement System ("KERS") for approximately twenty-five years. Seven Counties identified KERS as a creditor with a primary objective of discharging its continuing obligation to remit retirement contributions for approximately 1,300 employees and to terminate its participation in KERS. If Seven Counties is successful in discharging its obligations to KERS, the estimated member pension and insurance actuarial accrued liability is in the range of $145 to $150 million.

KERS opposed Seven Counties' attempt to discharge its obligations and terminate its participation. KERS asserted that Seven Counties is a Governmental Unit properly participating in KERS by Executive Order issued in 1978 and thus ineligible for Chapter 11 relief. Consequently, Seven Counties would remain statutorily obligated to continue participation and remit contributions. On May 30, 2014, the Bankruptcy Court held that Seven Counties was not a Governmental Unit and could move forward with its Chapter 11 bankruptcy case. The Bankruptcy Court further held that Seven Counties' statutory obligation to continue to participate in and remit contributions to KERS was a "contract" eligible for rejection. KRS appealed this decision.

On August 24, 2018, the U.S. Court of Appeals for the Sixth Circuit ("the Sixth Circuit") issued a two to one Opinion affirming the decision that Seven Counties is eligible to file under Chapter 11. However, the Sixth Circuit went on to state, "lacking state court precedent characterizing the nature of the relationship between Seven Counties and KERS, we CERTIFY that question to the Kentucky Supreme Court." KERS filed a petition to have the Opinion Reheard En Banc by the entire Sixth Circuit. On October 5, 2018, the Sixth Circuit issued an order holding the petition in abeyance pending a response from the Kentucky Supreme Court on the certified question of law. On November 1, 2018, the Supreme Court of Kentucky issued an Order granting certification of the law. At the time of this note, the certified question of law is being briefed by the parties and will subsequently be set for oral arguments before the Supreme Court of Kentucky.

Mayberry

In December 2017, Members and beneficiaries of the Kentucky Employee Retirement System (KERS) filed a derivative action suit in Franklin Circuit Court naming Kentucky Retirement Systems (KRS) as a nominal defendant. The suit alleges that investment managers actively pursued KRS while it was under the control of Trustees acting adversely to its interests, and recommended risky investments in alternative investment strategies, resulting in billions of dollars in losses to KRS. The Amended Complaint alleges numerous claims against KRS Trustees and Officers, hedge fund sellers, actuarial, fiduciary, and investment advisors, and an annual report certifier for breach of statutory, fiduciary, and other duties; claims against all defendants for civil conspiracy; claims against Officers, and hedge fund sellers, actuarial, fiduciary, and investment advisors, and an annual report certifier for aiding and abetting breaches of statutory, fiduciary, and other duties. Plaintiffs seek compensatory and punitive damages, as well as equitable relief. More specifically, Plaintiffs seek compensatory damages against defendants for the violations of statutory,

fiduciary, and other duties; while also seeking punitive damages against hedge fund sellers, investment, actuarial, and fiduciary advisors and each of their principals/officers named as defendants. Further, Plaintiffs request several forms of equitable relief, which include directing a complete accounting of fees associated with fund of hedge funds, and other absolute return strategies.

On April 19, 2018, KRS and Plaintiffs filed a Joint Notice to the Court and Parties notifying the parties that (1) KRS will not pursue the claims asserted by Plaintiffs; and (2) KRS would not have been in a position to pursue those claims had they been brought prior to the filing of the Complaint. Currently, defendants' motions to dismiss are pending before the Court. While this suit does not seek any direct damages from KRS, and KRS has limited financial exposure, it is still named as a nominal defendant. Moreover, while this litigation was initiated a year ago, very limited discovery has taken place and motions to dismiss are still pending.

Northern Trust Settlement

In 2014, KRS filed litigation against Northern Trust disputing fees charged by Northern Trust to KRS when Northern Trust was acting as KRS' securities lending agent from September 2007 until approximately December 2011. KRS alleged Northern Trust overcharged them by approximately $3.5 million. In December 2017, KRS reached a settlement agreement with Northern Trust where in Northern Trust agreed to pay KRS a lump sum payment of $1,000,000. In addition, Northern Trust agreed to waive asset management fees for asset management services for KRS at a rate of $125,000 per quarter, not to exceed $1,000,000.00 in total fee waivers. In exchange, KRS agreed to dismiss this action with prejudice. Both parties also agreed to release all claims arising from this action.

Western Kentucky University

On November 17, 2016, Western Kentucky University (WKU), a participating employer, filed a petition for declaration of rights in the Franklin Circuit Court in Frankfort, KY. The petition involved a dispute as to whether WKU can terminate a group of its employees which participated in KERS and reutilize those same employees through a privatization process excusing WKU from its obligations to pay contributions to the KERS Fund. This matter is currently still in litigation. No substantive decisions have been issued on the merits of the case. The exact nature and scope of the relief sought is still unclear; therefore, no provision has been made in the combined financial statements.

Note P. Reciprocity Agreement

KRS has a reciprocity agreement with Kentucky Teachers' Retirement System (KTRS) for the payment of insurance benefits for those members who have creditable service in both systems.

Note Q. Reimbursement of Retired Re-Employed and Active Member Health Insurance

As a result of the passage of House Bill 1 on September 1, 2008, if a retiree is re-employed in a regular full time position and has chosen health insurance coverage through KRS, the employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate. For the fiscal years ended June 30, 2018, and 2017, the reimbursement totaled $9.8 million and $8.9 million respectively. Also, for new plan participants after August 31, 2008, House Bill 1 required an active member contribution of 1% in addition to the member pension contribution. This 1% is applicable to all non-hazardous and hazardous plans. For the fiscal years ended June 30, 2018, and 2017, the contribution totaled $19.8 million and $17.0 million, respectively.

Note R. Related Party

Perimeter Park West, Inc. (PPW) was established in 1998 as a 501(c) 25 corporation located at 1260 and 1270 Louisville Road, Frankfort, Kentucky. As such, the Corporation can only acquire and hold title to real property; it cannot have any employees. The only source of revenue for the Corporation is rent paid from Kentucky Retirement Systems (KRS). When excess cash is on hand at PPW, the money is paid back to its shareholders (Kentucky Employees Retirement System, County Employees Retirement System, and State Police Retirement System) in the form of dividends. The expenses of the Corporation are for the maintenance of the property. Title to the property is held in the name of PPW and no mortgage is on the property. KRS does not have title to the property, however, KRS maintains the Corporation as an investment on its books and its pension plans are the sole shareholders. The asset value as of June 30, 2018 was $5.4 million. PPW is audited annually and submits IRS Form 990 as required for this entity.

The sole purpose of PPW is to protect the Pension and Insurance Trusts of KRS should someone become injured on the property. If this occurred and a lawsuit was filed against the property, the suit would be filed against PPW instead of the Pension and Insurance Trusts.

The current lease between PPW and KRS was entered into as of May 16, 2013, and expires June 30, 2023. The premises, consisting of 85,357 square feet, are rented for the fiscal year period of July 1 to June 30. The contractual lease payments through June 30, 2023, are:

FY 2018 - $722,776

FY 2019 - $735,425

FY 2020 - $748,295

FY 2021 - $761,390

FY 2022 - $774,714

FY 2023 - $788,272

Note S. Reduction of Receivables

Employers in the KERS plans reported two weeks of June 2017 wages at the beginning of the 2018 fiscal year. Based on START programming, these wages had the 2018 increased Annual Required Contribution (ARC) rate applied. The Commonwealth's approved budget guidelines paid contributions at the fiscal year 2017 ARC rate in effect when the wages were earned. It is unlikely that KRS will receive payments at the new ARC rate for that period; therefore, contribution receivables have been reduced as of June 30, 2018, as noted in the chart. This adjustment was also made in previous years and will be required if KERS ARC rates increase annually.

Reduction of Receivables
As of June 30, 2018 ($ in Thousands)

	2018	2017
KERS Non-Hazardous	$428	$4,645
SPRS	43	261
TOTAL	**$471**	**$4,906**

Note T. Governance Reorganization

SB2 passed in the 2017 legislative session codified Executive Order 2016-340 issued by Governor Matt Bevin on June 17, 2016, and made other changes.

- Expanded the Board of Trustees to seventeen members from thirteen;
- Investment experience is a prerequisite for six members of the Board;
- The Kentucky Senate must confirm gubernatorial board appointees;
- Requires that the Governor approve the Executive Director appointed by the Board of Directors;
- KRS employees were transferred to the Commonwealth's personnel system under Kentucky Revised Statute Chapter 18A;
- KRS must follow the Model Procurement Code for purchases and contracts;
- KRS must disclose net investment fees, investment returns, and commissions on its website and upon an open records request;
- The Chair and Vice Chair of the Board are to be elected by the members of the Board of Trustees; and,
- Board, staff, and investment consultants should abide by the Chartered Financial Analyst code of conduct.

The Board of Trustees consists of ten members appointed by the Governor, six members elected by the membership, two from KERS; three from CERS; and one from SPRS; and, the Personnel Secretary Ex-Officio. All members have four-year term limits with various start dates. The Board of Trustees has established several committees; Audit; Investment; Retiree Health Plan; Administrative & Disability Appeal; and, the Actuarial Subcommittee to govern the affairs of the trusts.

The Executive Director reports to the Board of Trustees. The Chief Investment Officer reports functionally to the Investment Committee and administratively to the Executive Director. The Director of Internal Audit reports functionally to the Audit Committee and administratively to the Executive Director. The Deputy Executive Director, the Executive Director Office of Benefits, Executive Director Office of Legal Services, Division Director Human Resources, and Division Director Communications report to the Executive Director.

Detailed Board member information and an organizational chart is provided in the introduction of this document.

Note U. Subsequent Events

Management has evaluated the period June 30, 2018, to November 29, 2018, (the date the combining financial statements were available to be issued) for items requiring recognition or disclosure in the combining financial statements.

REQUIRED
SUPPLEMENTARY INFORMATION
INCLUDING GASB 67 AND 74

Schedule of Employer NPL
- KERS Non-Hazardous
- KERS Hazardous
- CERS Non-Hazardous
- CERS Hazardous
- SPRS

Schedule of Changes in Employers' TPL
- KERS Non-Hazardous
- KERS Hazardous
- CERS Non-Hazardous
- CERS Hazardous
- SPRS

Notes to Schedule of Employers' Contributions

Schedule of Employers' Contributions Pension
- KERS Non-Hazardous
- KERS Hazardous
- CERS Non-Hazardous
- CERS Hazardous
- SPRS

Schedule of Employers' NOL
- KERS Non-Hazardous
- KERS Hazardous
- CERS Non-Hazardous
- CERS Hazardous
- SPRS

Schedule of Changes in Employers' Net OPEB Liability
- KERS Non-Hazardous
- KERS Hazardous
- CERS Non-Hazardous
- CERS Hazardous
- SPRS

Notes to Schedule of Employers' OPEB Contribution

Schedule of Employers' OPEB Contributions
- KERS Non-Hazardous
- KERS Hazardous
- CERS Non-Hazardous
- CERS Hazardous
- SPRS

Money Weighted Rates of Return

Additional Supporting Schedules

Schedule of Administrative Expenses
Schedule of Direct Investment Expenses
Schedule of Professional Consultant Fees

Report on Internal Control

Schedule of Employer NPL - KERS Non-Hazardous Pension Funds
As of June 30, 2018 ($ in Thousands)

	2018	2017	2016	2015	2014
Total Pension Liability (TPL)	$15,608,221	$15,445,206	$13,379,781	$12,359,673	$11,550,110
Fiduciary Net Position	2,004,446	2,056,870	1,980,292	2,327,783	2,578,291
Net Pension Liability	$13,603,775	$13,388,336	$11,399,489	$10,031,890	$8,971,819
Ratio of Plan Net Position to TPL	12.84%	13.32%	14.80%	18.83%	22.32%
Covered Employee Payroll (1)	$1,509,955	$1,602,396	$1,631,025	$1,544,234	$1,577,496
Net Pension Liability as a Percentage of Covered Employee Payroll	900.94%	835.52%	698.92%	649.64%	568.74%

Schedule of Employer NPL - KERS Hazardous Pension Funds
As of June 30, 2018 ($ in Thousands)

	2018	2017	2016	2015	2014
Total Pension Liability (TPL)	$1,150,610	$1,098,630	$919,517	$895,433	$816,850
Fiduciary Net Position	645,485	601,529	527,879	552,468	561,484
Net Pension Liability	$505,125	$497,101	$391,638	$342,965	$255,366
Ratio of Plan Net Position to TPL	56.10%	54.75%	57.41%	61.70%	68.74%
Covered Employee Payroll (1)	$152,936	$178,511	$158,828	$128,680	$129,076
Net Pension Liability as a Percentage of Covered Employee Payroll	330.29%	278.47%	246.58%	266.53%	197.84%

Schedule of Employer NPL - CERS Non-Hazardous Pension Funds
As of June 30, 2018 ($ in Thousands)

	2018	2017	2016	2015	2014
Total Pension Liability (TPL)	$13,109,268	$12,540,545	$11,065,013	$10,740,325	$9,772,522
Fiduciary Net Position	7,018,963	6,687,237	6,141,395	6,440,800	6,528,146
Net Pension Liability	$6,090,305	$5,853,308	$4,923,618	$4,299,525	$3,244,376
Ratio of Plan Net Position to TPL	53.54%	53.32%	55.50%	59.97%	66.80%
Covered Employee Payroll (1)	$2,454,927	$2,376,290	$2,417,187	$2,296,716	$2,272,270
Net Pension Liability as a Percentage of Covered Employee Payroll	248.08%	246.32%	203.69%	187.20%	142.78%

Schedule of Employer NPL - CERS Hazardous Pension Funds
As of June 30, 2018 ($ in Thousands)

	2018	2017	2016	2015	2014
Total Pension Liability (TPL)	$4,766,794	$4,455,275	$3,726,116	$3,613,308	$3,288,826
Fiduciary Net Position	2,348,337	2,217,996	2,010,177	2,078,202	2,087,002
Net Pension Liability	$2,418,457	$2,237,279	$1,715,941	$1,535,106	$1,201,824
Ratio of Plan Net Position to TPL	49.26%	49.78%	53.95%	57.52%	63.46%
Covered Employee Payroll (1)	$562,853	$526,559	$526,334	$483,641	$479,164
Net Pension Liability as a Percentage of Covered Employee Payroll	429.68%	424.89%	326.02%	317.41%	250.82%

Schedule of Employer NPL - SPRS Pension Funds
As of June 30, 2018 ($ in Thousands)

	2018	2017	2016	2015	2014
Total Pension Liability (TPL)	$969,622	$943,271	$795,421	$734,156	$681,118
Fiduciary Net Position	267,572	255,737	218,012	247,228	260,974
Net Pension Liability	$702,050	$687,534	$577,409	$486,928	$420,144
Ratio of Plan Net Position to TPL	27.60%	27.11%	27.41%	33.68%	38.32%
Covered Employee Payroll (1)	$50,346	$54,065	$46,685	$45,765	$44,616
Net Pension Liability as a Percentage of Covered Employee Payroll	1394.45%	1271.68%	1236.82%	1063.97%	941.69%

(1) Based on derived compensation using the provided employer contribution information for fiscal years 2018 and later.

These tables are intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Changes in Employers' TPL - KERS Non-Hazardous
As of June 30, 2018 ($ in Thousands)

Total Pension Liability (TPL)	2018	2017	2016	2015	2014
Service Cost	$195,681	$143,858	$139,631	$143,847	$133,361
Interest	785,123	870,725	891,897	859,509	853,653
Benefit Changes	9,624	-	-	-	-
Difference between Expected and Actual Experience	153,565	(134,379)	-	30,958	-
Changes of Assumptions	-	2,145,530	923,999	694,592	-
Benefit Payments	(980,978)	(960,309)	(935,419)	(919,343)	(903,564)
Net Change in TPL	**163,015**	**2,065,425**	**1,020,108**	**809,563**	**83,450**
TPL – Beginning	**15,445,206**	**13,379,781**	**12,359,673**	**11,550,110**	**11,466,660**
TPL – Ending (a)	**$15,608,221**	**$15,445,206**	**$13,379,782**	**$12,359,673**	**$11,550,110**
Fiduciary Net Position (1)					
Contributions – Employer	689,143	757,121	513,084	521,691	296,836
Contributions – Member (2)	104,972	100,543	106,494	104,606	97,487
Net Investment Income (2)	144,881	220,985	(20,663)	44,570	337,922
Retirement Benefit	(967,375)	(948,490)	(923,288)	(905,791)	(889,937)
Administrative Expense	(10,692)	(10,957)	(10,989)	(10,474)	(11,145)
Refunds of Contributions	(13,603)	(11,819)	(12,130)	(13,552)	(13,627)
Other (4)	301	(30,805)	-	8,442	-
Net Change in Fiduciary Net Position	(52,373)	76,578	(347,491)	(250,508)	(182,463)
Fiduciary Net Position – Beginning	$2,056,870	$1,980,292	$2,327,783	$2,578,291	$2,760,754
Prior Year Adjustment	(51)	-	-	-	-
Fiduciary Net Position – Ending (b)	$2,004,446	$2,056,870	$1,980,292	$2,327,783	$2,578,291
Net Pension Liability – Ending (a) – (b)	**$13,603,775**	**$13,388,336**	**$11,399,489**	**$10,031,890**	**$8,971,819**
Plan Fiduciary Net Position as a					
Percentage	12.84%	13.32%	14.80%	18.83%	22.32%
Covered Employee Payroll (3)	$1,509,955	$1,602,396	$1,631,025	$1,544,234	$1,577,496
Net Pension Liability as a Percentage of Covered Employee Payroll	**900.94%**	**835.52%**	**698.92%**	**649.64%**	**568.74%**

(1) Does not include 401(h) assets for fiscal years 2017 and later.

(2) Does not include 401(h) contributions and investment income on 401(h) contributions for fiscal years 2017 and later.

(3) Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

(4) Northern Trust Settlement for fiscal year 2018.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Changes in Employers' TPL - KERS Hazardous
As of June 30, 2018 ($ in Thousands)

Total Pension Liability (TPL)	2018	2017	2016	2015	2014
Service Cost	$28,641	$21,081	$20,751	$18,729	$16,880
Interest	66,536	66,589	64,851	61,005	59,594
Benefit Changes	705	-	-	-	-
Difference between Expected and Actual Experience	24,215	26,902	-	6,067	-
Changes of Assumptions	-	127,878	-	52,165	-
Benefit Payments	(68,117)	(63,338)	(61,518)	(59,383)	(57,151)
Net Change in TPL	**$51,980**	**$179,112**	**$24,084**	**$78,583**	**$19,323**
TPL – Beginning	**1,098,630**	**919,517**	**895,433**	**816,850**	**797,527**
TPL – Ending (a)	**$1,150,610**	**$1,098,630**	**$919,517**	**$895,433**	**$816,850**
Fiduciary Net Position (1)					
Contributions – Employer	$43,661	$52,974	$23,759	$28,536	$11,670
Contributions - Member (2)	17,891	17,524	15,739	13,207	12,546
Net Investment Income	51,467	70,994	(1,653)	8,701	80,724
Retirement Benefit	(65,616)	(61,231)	(59,306)	(56,773)	(54,320)
Administrative Expense	(975)	(919)	(916)	(844)	(897)
Refunds of Contributions	(2,501)	(2,106)	(2,211)	(2,610)	(2,830)
Other (4)	33	(3,586)	-	767	-
Net Change in Fiduciary Net Position	43,960	73,650	(24,588)	(9,016)	46,893
Fiduciary Net Position – Beginning	$601,529	$527,879	$552,468	$561,484	$514,591
Prior Year Adjustment	$(4)	-	-	-	-
Fiduciary Net Position – Ending (b)	$645,485	$601,529	$527,879	$552,468	$561,484
Net Pension Liability – Ending (a) – (b)	**$505,125**	**$497,101**	**$391,638**	**$342,965**	**$255,366**
Plan Fiduciary Net Position as a Percentage	56.10%	54.75%	57.41%	61.70%	68.74%
Covered Employee Payroll (3)	$152,936	$178,511	$158,828	$128,680	$129,076
Net Pension Liability as a Percentage of Covered Employee Payroll	**330.29%**	**278.47%**	**246.58%**	**266.53%**	**197.84%**

(1) Does not include 401(h) assets for fiscal years 2017 and later.

(2) Does not include 401(h) contributions and investment income on 401(h) contributions for fiscal years 2017 and later.

(3) Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

(4) Northern Trust Settlement for fiscal year 2018.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Changes in Employers' TPL - CERS Non-Hazardous
As of June 30, 2018 ($ in Thousands)

Total Pension Liability (TPL)	2018	2017	2016	2015	2014
Service Cost	$254,169	$193,082	$209,101	$207,400	$192,482
Interest	760,622	803,555	780,587	733,002	710,526
Benefit Changes	15,708	-	-	-	-
Difference between Expected and Actual Experience	279,401	(208,015)	-	49,966	-
Changes of Assumptions	-	1,388,800	-	606,293	-
Benefit Payments	(741,177)	(701,891)	(665,000)	(628,858)	(597,136)
Net Change in TPL	**568,723**	**1,475,532**	**324,687**	**967,803**	**305,872**
TPL – Beginning	**12,540,545**	**11,065,013**	**10,740,325**	**9,772,522**	**9,466,650**
TPL – Ending (a)	**$13,109,268**	**$12,540,545**	**$11,065,013**	**$10,740,325**	**$9,772,522**
Fiduciary Net Position (1)					
Contributions – Employer	$358,017	$333,554	$284,105	$298,565	$324,231
Contributions – Member (2)	160,370	150,715	141,674	140,311	128,568
Net Investment Income (2)	573,829	825,900	(40,800)	110,568	895,530
Retirement Benefit	(726,569)	(687,461)	(651,246)	(615,335)	(582,850)
Administrative Expense	(19,592)	(19,609)	(19,385)	(18,212)	(18,615)
Refunds of Contributions	(14,608)	(14,430)	(13,753)	(13,523)	(14,286)
Other (4)	361	(42,827)	-	10,280	-
Net Change in Fiduciary Net Position	331,808	545,843	(299,405)	(87,346)	732,578
Fiduciary Net Position - Beginning	$6,687,237	$6,141,395	$6,440,800	$6,528,146	$5,795,568
Prior Year Adjustment	(82)	-	-	-	-
Fiduciary Net Position – Ending (b)	$7,018,963	$6,687,237	$6,141,395	$6,440,800	$6,528,146
Net Pension Liability – Ending (a) – (b)	**$6,090,305**	**$5,853,308**	**$4,923,618**	**$4,299,525**	**$3,244,376**
Plan Fiduciary Net Position as a Percentage	53.54%	53.32%	55.50%	59.97%	66.80%
Covered Employee Payroll (3)	$2,454,927	$2,376,290	$2,417,187	$2,296,716	$2,272,270
Net Pension Liability as a Percentage of Covered Employee Payroll	**248.08%**	**246.32%**	**203.69%**	**187.20%**	**142.78%**

(1) Does not include 401(h) assets for fiscal years 2017 and later.

(2) Does not include 401(h) contributions and investment income on 401(h) contributions for fiscal years 2017 and later.

(3) Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

(4) Northern Trust Settlement for fiscal year 2018.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Changes in Employers' TPL - CERS Hazardous
As of June 30, 2018 ($ in Thousands)

Total Pension Liability (TPL)	2018	2017	2016	2015	2014
Service Cost	$81,103	$58,343	$66,249	$71,934	$66,761
Interest	270,694	270,860	262,886	247,008	238,665
Benefit Changes	2,172	-	-	-	-
Difference between Expected and Actual Experience	205,882	92,588	-	41,935	-
Changes of Assumptions	-	536,667	-	166,849	-
Benefit Payments	(248,332)	(229,299)	(216,327)	(203,244)	(192,299)
Net Change in TPL	**311,519**	**729,159**	**112,807**	**324,482**	**113,127**
TPL – Beginning	**4,455,275**	**3,726,115**	**3,613,308**	**3,288,826**	**3,175,699**
TPL – Ending (a)	**4,766,794**	**4,455,275**	**3,726,115**	**3,613,308**	**3,288,826**
Fiduciary Net Position (1)					
Contributions – Employer	$127,660	$115,947	$105,713	$108,071	$115,240
Contributions – Member (2)	61,089	60,101	52,972	47,692	43,722
Net Investment Income (2)	191,324	270,473	(9,020)	37,104	288,490
Retirement Benefit	(244,118)	(226,984)	(213,448)	(200,134)	(189,635)
Administrative Expense	(1,504)	(1,421)	(1,366)	(1,288)	(1,721)
Refunds of Contributions	(4,214)	(2,315)	(2,879)	(3,111)	(2,664)
Other (4)	111	(7,979)	-	2,865	-
Net Change in Fiduciary Net Position	130,348	207,822	(68,028)	(8,801)	253,432
Fiduciary Net Position – Beginning	$2,217,996	$2,010,174	$2,078,202	$2,087,002	$1,833,570
Prior Year Adjustment	(7)	-	-	-	-
Fiduciary Net Position – Ending (b)	$2,348,337	$2,217,996	$2,010,174	$2,078,202	$2,087,002
Net Pension Liability – Ending (a) – (b)	$2,418,457	$2,237,279	$1,715,941	$1,535,106	$1,201,824
Plan Fiduciary Net Position as a Percentage	49.26%	49.78%	53.95%	57.52%	63.46%
Covered Employee Payroll (3)	$562,853	$526,559	$526,334	$483,641	$479,164
Net Pension Liability as a Percentage of Covered Employee Payroll	**429.68%**	**424.89%**	**326.02%**	**317.41%**	**250.82%**

(1) Does not include 401(h) assets for fiscal years 2017 and later.

(2) Does not include 401(h) contributions and investment income on 401(h) contributions for fiscal years 2017 and later.

(3) Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

(4) Northern Trust Settlement for fiscal year 2018.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Total Pension Liability (TPL) - SPRS
As of June 30, 2018 ($ in Thousands)

Total Pension Liability (TPL)	2018	2017	2016	2015	2014
Service Cost	$11,890	$8,297	$8,402	$7,695	$7,142
Interest	47,978	51,769	52,951	50,661	50,391
Benefit Changes	184	-	-	-	-
Difference between Expected and Actual Experience	25,126	8,143	-	9,331	-
Changes of Assumptions	-	136,602	56,191	40,201	-
Benefit Payments	(58,827)	(56,960)	(56,279)	(54,850)	(53,239)
Net Change in TPL	**26,351**	**147,850**	**61,265**	**53,038**	**4,294**
TPL - Beginning	**943,271**	**795,421**	**734,156**	**681,118**	**676,824**
TPL – Ending (a)	**$969,622**	**$943,271**	**$795,421**	**$734,156**	**$681,118**
Fiduciary Net Position (1)					
Contributions – Employer	$46,877	$63,239	$25,822	$31,990	$20,279
Contributions - Member (2)	5,522	5,348	5,263	5,244	5,075
Net Investment Income (2)	18,437	26,795	(3,843)	3,426	40,374
Retirement Benefit	(58,805)	(56,934)	(56,268)	(54,765)	(53,026)
Administrative Expense	(194)	(181)	(178)	(201)	(215)
Refunds of Contributions	(22)	(26)	(11)	(85)	(213)
Other (4)	21	(517)	-	645	-
Net Change in Fiduciary Net Position	11,836	37,724	(29,215)	(13,746)	12,274
Plan Net Position - Beginning	$255,737	$218,012	$247,228	$260,974	$248,700
Prior Year Adjustment	(1)	-	-	-	-
Fiduciary Net Position – Ending (b)	$267,572	$255,737	$218,012	$247,228	$260,974
Net Pension Liability – Ending (a) – (b)	**$702,050**	**$687,534**	**$577,409**	**$486,928**	**$420,144**
Plan Fiduciary Net Position as a Percentage	27.60%	27.11%	27.41%	33.68%	38.32%
Covered Employee Payroll (3)	$50,346	$54,065	$46,685	$45,765	$44,616
Net Pension Liability as a Percentage of Covered Employee Payroll	**1394.45%**	**1271.68%**	**1236.82%**	**1063.97%**	**941.69%**

(1) Does not include 401(h) assets for fiscal years 2017 and later.

(2) Does not include 401(h) contributions and investment income on 401(h) contributions for fiscal years 2017 and later.

(3) Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

(4) Northern Trust Settlement for fiscal year 2018.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

The actuarially determined contribution rates effective for fiscal year ending 2018 that are documented in the schedule on the previous pages are calculated as of June 30, 2017. Based on the June 30, 2017, actuarial valuation report, the actuarial methods and assumptions used to calculate these contribution rates are below:

Notes to Schedule of Employer's Contribution					
Item	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Determined by the Actuarial Valuation as of:	June 30, 2016	June 30, 2016	June 30, 2016	June 30, 2016	June 30, 2016
Actuarial Cost Method:	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal
Asset Valuation Method:	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized
Amortization Method:	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay
Amortization Period:	27 Years, Closed	27 Years, Closed	27 Years, Closed	27 Years, Closed	27 Years, Closed
Investment Return:	6.75%	7.50%	7.50%	7.50%	6.75%
Inflation:	3.25%	3.25%	3.25%	3.25%	3.25%
Salary Increase:	4.00%, average	4.00%, average	4.00%, average	4.00%, average	4.00%, average
Mortality:	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)

Schedule of Employer Contribution Pension - KERS Non-Hazardous

As of June 30, 2018 ($ in Thousands)

Fiscal Year Ending	Actuarially Determined Contribution (1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll (2)	Actual Contributions as a Percentage of Covered Payroll
2018	$633,879	$689,143	$(55,264)	$1,509,955	45.64%
2017	623,813	757,121	(133,308)	1,602,396	47.25%
2016	512,670	513,084	(414)	1,631,025	31.46%
2015	520,948	521,691	(743)	1,544,234	33.78%
2014	520,765	296,836	223,929	1,577,496	18.82%
2013	485,396	280,874	204,522	1,644,409	17.08%
2012	441,094	214,786	226,308	1,644,897	13.06%
2011	381,915	193,754	188,161	1,731,633	11.19%
2010	348,495	144,051	204,444	1,815,146	7.94%
2009	$294,495	$112,383	$182,112	$1,754,413	6.41%

(1) Actuarially determined contribution rate for fiscal year ending 2018 is based on the contribution rate calculated with the June 30, 2016, actuarial valuation.

(2) Based on derived compensation using the provided employer contribution information for fiscal year ending 2017 and later.

Schedule of Employer Contribution Pension - KERS Hazardous

As of June 30, 2018 ($ in Thousands)

Fiscal Year Ending	Actuarially Determined Contribution (1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll (2)	Actual Contributions as a Percentage of Covered Payroll
2018	$31,321	$43,661	$(12,340)	$152,936	28.55%
2017	37,630	52,974	(15,344)	178,511	29.68%
2016	23,690	23,759	(69)	158,828	14.96%
2015	28,374	28,536	(162)	128,680	22.18%
2014	13,570	11,670	1,900	129,076	9.04%
2013	21,502	27,334	(5,832)	131,015	20.86%
2012	20,265	20,809	(544)	131,977	15.77%
2011	20,605	19,141	1,464	133,054	14.39%
2010	17,815	17,658	157	143,558	12.30%
2009	$15,708	$15,843	$(135)	$146,044	10.85%

(1) Actuarially determined contribution rate for fiscal year ending 2018 is based on the contribution rate calculated with the June 30, 2016, actuarial valuation.

(2) Based on derived compensation using the provided employer contribution information for fiscal year ending 2017 and later.

Schedule of Employer Contribution Pension - CERS Non-Hazardous
As of June 30, 2018 ($ in Thousands)

Fiscal Year Ending	Actuarially Determined Contribution (1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll (2)	Actual Contributions as a Percentage of Covered Payroll
2018	$355,473	$358,017	$(2,544)	$2,454,927	14.58%
2017	331,492	333,554	(2,062)	2,376,290	14.04%
2016	282,767	284,106	(1,339)	2,417,187	11.75%
2015	297,715	298,566	(851)	2,296,716	13.00%
2014	324,231	324,231	-	2,272,270	14.27%
2013	294,914	294,914	-	2,236,277	13.19%
2012	261,764	275,736	(13,972)	2,236,546	12.33%
2011	218,985	248,519	(29,534)	2,276,596	10.92%
2010	186,724	207,076	(20,352)	2,236,855	9.26%
2009	$161,097	$179,285	$(18,188)	$2,183,612	8.21%

(1) Actuarially determined contribution rate for fiscal year ending 2018 is based on the contribution rate calculated with the June 30, 2016, actuarial valuation.

(2) Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

Schedule of Employer Contribution Pension - CERS Hazardous
As of June 30, 2018 ($ in Thousands)

Fiscal Year Ending	Actuarially Determined Contribution (1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll (2)	Actual Contributions as a Percentage of Covered Payroll
2018	$124,953	$127,660	$(2,707)	$562,853	22.68%
2017	114,316	115,947	(1,631)	526,559	22.02%
2016	104,952	105,713	(761)	526,334	20.08%
2015	107,514	108,071	(557)	483,641	22.35%
2014	115,240	115,240	-	479,164	24.05%
2013	120,140	120,140	-	461,673	26.02%
2012	83,589	89,329	(5,740)	464,229	19.24%
2011	78,796	85,078	(6,282)	466,964	18.22%
2010	76,391	82,887	(6,496)	466,549	17.77%
2009	$69,056	$78,152	$(9,096)	$469,315	16.65%

(1) Actuarially determined contribution rate for fiscal year ending 2018 is based on the contribution rate calculated with the June 30, 2016, actuarial valuation.

(2) Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

Schedule of Employer Contribution Pension - SPRS
As of June 30, 2018 ($ in Thousands)

Fiscal Year Ending	Actuarially Determined Contribution (1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll (2)	Actual Contributions as a Percentage of Covered Payroll
2018	$36,033	$46,877	$(10,844)	$50,346	93.11%
2017	35,937	63,240	(27,303)	54,065	116.97%
2016	25,723	25,822	(99)	46,685	55.31%
2015	31,444	31,990	(546)	45,765	69.90%
2014	25,808	20,279	5,529	44,616	45.45%
2013	23,117	18,501	4,616	45,256	40.88%
2012	20,498	15,362	5,136	48,373	31.76%
2011	18,463	12,657	5,806	48,693	25.99%
2010	18,765	9,489	9,276	51,507	18.42%
2009	$15,952	$8,186	$7,766	$51,660	15.85%

(1) Actuarially determined contribution rate for fiscal year ending 2018 is based on the contribution rate calculated with the June 30, 2016, actuarial valuation.

(2) Based on derived compensation for fiscal year ending 2017 using the provided employer contribution information.

Schedule of the Employers' Net OPEB Liability - KERS Non-Hazardous Plan
As of June 30, 2018 ($ in Thousands)

Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Employee Payroll (1)	Net OPEB Liability as a Percentage of Covered Employee Payroll
2018	$3,262,117	$891,205	$2,370,912	27.32%	$1,573,898	150.64%
2017	$3,353,332	$817,370	$2,535,962	24.37%	$1,593,097	159.18%

(1) Based on derived compensation using the provided employer contribution information.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of the Employers' Net OPEB Liability - KERS Hazardous Plan
As of June 30, 2018 ($ in Thousands)

Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Employee Payroll (1)	Net OPEB Liability as a Percentage of Covered Employee Payroll
2018	$485,904	$519,072	$(33,168)	106.83%	$190,317	(17.43)%
2017	$494,869	$488,838	$6,031	98.78%	$171,087	3.53%

(1) Based on derived compensation using the provided employer contribution information.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of the Employers' Net OPEB Liability - CERS Non-Hazardous Plan
As of June 30, 2018 ($ in Thousands)

Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Employee Payroll (1)	Net OPEB Liability as a Percentage of Covered Employee Payroll
2018	$4,189,606	$2,414,126	$1,775,480	57.62%	$2,570,156	69.08%
2017	$4,222,878	$2,212,536	$2,010,342	52.39%	$2,480,130	81.06%

(1) Based on derived compensation using the provided employer contribution information.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of the Employers' Net OPEB Liability - CERS Hazardous Plan
As of June 30, 2018 ($ in Thousands)

Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Employee Payroll (1)	Net OPEB Liability as a Percentage of Covered Employee Payroll
2018	$1,993,941	$1,280,982	$712,959	64.24%	$588,526	121.14%
2017	$2,015,673	$1,189,001	$826,672	58.99%	$542,710	152.32%

(1) Based on derived compensation using the provided employer contribution information.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of the Employer's Net OPEB Liability-SPRS Plan
As of June 30, 2018 ($ in Thousands)

Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Employee Payroll (1)	Net OPEB Liability as a Percentage of Covered Employee Payroll
2018	$301,012	$190,847	$110,165	63.40%	$50,064	220.05%
2017	$313,234	$178,838	$134,396	57.10%	$48,873	275.00%

(1) Based on derived compensation using the provided employer contribution information.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Changes in Employers' Net OPEB Liability - KERS Non-Hazardous Plan
As of June 30, 2018 ($ in Thousands)

	2018	2017
Total OPEB Liability		
Service Cost	$66,360	$46,992
Interest	191,178	192,911
Benefit Changes	1,865	-
Difference between Expected and Actual Experience	(191,147)	(3,921)
Changes of Assumptions	(11,235)	414,835
Benefit Payments (1)	(148,236)	(139,601)
Net Change in Total OPEB Liability	**(91,215)**	**511,216**
Total OPEB Liability - Beginning	**3,353,332**	**2,842,116**
Total OPEB Liability - Ending (a)	**$3,262,117**	**$3,353,332**
Plan Fiduciary Net Position		
Contributions – Employer (2)	$152,985	$162,636
Contributions – Member	5,786	5,156
Benefit Payments (1)	(148,236)	(139,601)
OPEB Plan Net Investment Income	64,028	94,239
OPEB Plan Administrative Expense	(760)	(861)
Other (4)	32	-
Net Change in Plan Fiduciary Net Position	73,835	121,569
Plan Fiduciary Net Position – Beginning	817,370	695,801
Plan Fiduciary Net Position – Ending (b)	891,205	817,370
Net OPEB Liability – Ending (a) – (b)	**$2,370,912**	**$2,535,962**
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	27.32%	24.37%
Covered Employee Payroll (3)	$1,573,898	$1,593,097
Net OPEB Liability as a Percentage of Covered Employee Payroll	**150.64%**	**159.18%**

(1) Includes expected benefits due to the implicit subsidy for members under age 65.

(1) Benefit payments are also offset by insurance premiums received from retirees and by Medicare Drug Reimbursements.

(2) Includes expected benefits due to the implicit subsidy for members under age 65.

(3) Based on derived compensation using the provided employer contribution information.

(4) Northern Trust Settlement for fiscal year 2018.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Changes in Employers' Net OPEB Liability - KERS Hazardous Plan
As of June 30, 2018 ($ in Thousands)

	2018	2017
Total OPEB Liability		
Service Cost	$12,893	$8,002
Interest on Total OPEB liability	28,500	27,591
Benefit Changes	167	-
Difference between Expected and Actual Experience	(31,240)	(1,029)
Assumption Changes	(581)	89,401
Benefit Payments (1)	(18,704)	(16,618)
Net Change in Total OPEB Liability	**(8,965)**	**107,347**
Total OPEB Liability - Beginning	**494,869**	**387,522**
Total OPEB Liability - Ending (a)	**$485,904**	**$494,869**
Plan Fiduciary Net Position		**-**
Contributions – Employer (2)	5,165	4,579
Contributions – Member	909	811
Benefit Payments (1)	(18,704)	(16,618)
OPEB Plan Net Investment Income	42,950	59,614
OPEB Plan Administrative Expense	(104)	(105)
Other (4)	18	-
Net Change in Plan Fiduciary Net Position	30,234	48,281
Plan Fiduciary Net Position – Beginning	488,838	440,557
Plan Fiduciary Net Position – Ending (b)	519,072	488,838
Net OPEB Liability – Ending (a) – (b)	**$(33,168)**	**$6,031**
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	106.83%	98.78%
Covered Employee Payroll (3)	$190,317	$171,087
Net OPEB Liability as a Percentage of Covered Employee Payroll	**(17.43)%**	**3.53%**

(1) Includes expected benefits due to the implicit subsidy for members under age 65.

(1) Benefit payments are also offset by insurance premiums received from retirees and by Medicare Drug Reimbursements.

(2) Includes expected benefits due to the implicit subsidy for members under age 65.

(3) Based on derived compensation using the provided employer contribution information.

(4) Northern Trust Settlement for fiscal year 2018.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Changes in Employers' Net OPEB Liability - CERS Non-Hazardous Plan
As of June 30, 2018 ($ in Thousands)

	2018	2017
Total OPEB Liability		
Service Cost	$122,244	$85,468
Interest on Total OPEB liability	242,048	240,854
Benefit Changes	4,306	-
Difference between Expected and Actual Experience	(240,568)	(6,641)
Assumption Changes	(4,876)	520,286
Benefit Payments (1)	(156,426)	(140,120)
Net Change in Total OPEB Liability	**(33,272)**	**699,847**
Total OPEB Liability - Beginning	**4,222,878**	**3,523,031**
Total OPEB Liability - Ending (a)	**$4,189,606**	**$4,222,878**
Plan Fiduciary Net Position		
Contributions – Employer (2)	145,809	133,326
Contributions – Member	10,825	9,158
Benefit Payments (1)	(156,426)	(140,120)
OPEB Plan Net Investment Income	202,068	264,782
OPEB Plan Administrative Expense	(761)	(789)
Other (4)	75	-
Net Change in Plan Fiduciary Net Position	201,590	266,357
Plan Fiduciary Net Position – Beginning	2,212,536	1,946,179
Plan Fiduciary Net Position – Ending (b)	2,414,126	2,212,536
Net OPEB Liability – Ending (a) – (b)	**$1,775,480**	**$2,010,342**
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	57.62%	52.39%
Covered Employee Payroll (3)	$2,570,156	$2,480,130
Net OPEB Liability as a Percentage of Covered Employee Payroll	**69.08%**	**81.06%**

(1) Includes expected benefits due to the implicit subsidy for members under age 65.

(1) Benefit payments are also offset by insurance premiums received from retirees and by Medicare Drug Reimbursements.

(2) Includes expected benefits due to the implicit subsidy for members under age 65.

(3) Based on derived compensation using the provided employer contribution information.

(4) Northern Trust Settlement for fiscal year 2018.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Changes in Employers' Net OPEB Liability - CERS Hazardous Plan
As of June 30, 2018 ($ in Thousands)

	2018	2017
Total OPEB Liability		
Service Cost	$33,948	$20,493
Interest on Total OPEB liability	118,009	113,166
Benefit Changes	484	-
Difference between Expected and Actual Experience	(100,348)	(2,470)
Assumption Changes	(2,500)	391,061
Benefit Payments (1)	(71,325)	(63,656)
Net Change in Total OPEB Liability	**(21,732)**	**458,594**
Total OPEB Liability - Beginning	**2,015,673**	**1,557,079**
Total OPEB Liability - Ending (a)	**1,993,941**	**2,015,673**
Plan Fiduciary Net Position		
Contributions – Employer (2)	51,615	44,325
Contributions – Member	2,173	1,708
Benefit Payments (1)	(71,325)	(63,656)
OPEB Plan Net Investment Income	109,854	143,892
OPEB Plan Administrative Expense	(376)	(381)
Other (4)	40	-
Net Change in Plan Fiduciary Net Position	91,981	125,888
Plan Fiduciary Net Position – Beginning	1,189,001	1,063,113
Plan Fiduciary Net Position – Ending (b)	1,280,982	1,189,001
Net OPEB Liability – Ending (a) – (b)	**$712,959**	**$826,672**
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	64.24%	58.99%
Covered Employee Payroll (3)	$588,526	$542,710
Net OPEB Liability as a Percentage of Covered Employee Payroll	**121.14%**	**152.32%**

(1) Includes expected benefits due to the implicit subsidy for members under age 65.

(1) Benefit payments are also offset by insurance premiums received from retirees and by Medicare Drug Reimbursements.

(2) Includes expected benefits due to the implicit subsidy for members under age 65.

(3) Based on derived compensation using the provided employer contribution information.

(4) Northern Trust Settlement for fiscal year 2018.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Changes in Employer's Net OPEB Liability - SPRS Plan
As of June 30, 2018 ($ in Thousands)

	2018	2017
Total OBEP Liability		
Service Cost	$6,087	$4,147
Interest on Total OPEB liability	18,432	17,993
Benefit Changes	34	-
Difference between Expected and Actual Experience	(23,320)	(573)
Assumption Changes	(358)	57,312
Benefit Payments (1)	(13,097)	(12,123)
Net Change in Total OPEB Liability	**(12,222)**	**66,756**
Total OPEB Liability - Beginning	**313,234**	**246,478**
Total OPEB Liability - Ending (a)	**$301,012**	**$313,234**
Plan Fiduciary Net Position		
Contributions – Employer (2)	$8,535	$7,862
Contributions – Member	155	131
Benefit Payments (1)	(13,097)	(12,123)
OPEB Plan Net Investment Income	16,470	21,627
OPEB Plan Administrative Expense	(62)	(66)
Other (4)	8	-
Net Change in Plan Fiduciary Net Position	12,009	17,431
Plan Fiduciary Net Position – Beginning	178,838	161,407
Plan Fiduciary Net Position – Ending (b)	190,847	178,838
Net OPEB Liability – Ending (a) – (b)	**$110,165**	**$134,396**
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	63.40%	57.09%
Covered Employee Payroll (3)	$50,064	$48,873
Net OPEB Liability as a Percentage of Covered Employee Payroll	**220.05%**	**274.99%**

(1) Includes expected benefits due to the implicit subsidy for members under age 65.

(1) Benefit payments are also offset by insurance premiums received from retirees and by Medicare Drug Reimbursements.

(2) Includes expected benefits due to the implicit subsidy for members under age 65.

(3) Based on derived compensation using the provided employer contribution information.

(4) Northern Trust Settlement for fiscal year 2018.

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

The actuarially determined contributions rates effective for fiscal year ending 2018, that are documented in the schedule, Sensitivity of the Net OPEB Liability to Changes in the Discount Rate and Healthcare Trend Rate, in Note L of the financial statements, are calculated as of June 30, 2017. Based on the June 30, 2017, actuarial valuation report, the actuarial methods and assumptions used to calculate these contributions are below:

Notes to Schedule of Employers' OPEB Contributions					
	KERS	KERS	CERS	CERS	SPRS
Item	Non-Hazardous	Hazardous	Non-Hazardous	Hazardous	
Determined by the Actuarial Valuation as of:	June 30, 2016	June 30, 2016	June 30, 2016	June 30, 2016	June 30, 2016
Actuarial Cost Method:	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal
Asset Valuation Method:	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized	20 % of the difference between the market value of assets and the expected actuarial value of assets is recognized
Amortization Method:	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay
Amortization Period:	27 Years, Closed	27 Years, Closed	27 Years, Closed	27 Years, Closed	27 Years, Closed
Payroll Growth Rate:	4.00%	4.00%	4.00%	4.00%	4.00%
Investment Return:	7.50%	7.50%	7.50%	7.50%	7.50%
Inflation:	3.25%	3.25%	3.25%	3.25%	3.25%
Salary Increase:	4.00%, average	4.00%, average	4.00%, average	4.00%, average	4.00%, average
Mortality:	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)
Healthcare Trend Rates:					
Pre-65	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.
Post-65	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.

Schedule of Employers' OPEB Contributions - KERS Non-Hazardous
As of June 30, 2018 ($ in Thousands)

1	2	3		4	
Fiscal Year Ending	Actuarially Determined Contribution	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Actual Contributions as a Percentage of Covered Payroll
2018	$132,365	$136,419	(4,054)	$1,573,898	8.67%
2017	133,024	152,356	(19,332)	1,593,097	9.56%
2016	121,899	135,816	(13,917)	1,529,249	8.88%
2015	130,455	135,940	(5,485)	1,544,234	8.80%
2014	208,881	166,610	42,271	1,577,496	10.56%
2013	286,143	165,331	120,812	1,644,409	10.05%
2012	297,904	156,057	141,847	1,644,897	9.49%
2011	294,898	129,336	165,562	1,731,633	7.47%
2010	376,556	102,528	274,028	1,815,146	5.65%
2009	$362,707	$82,711	$279,996	$1,754,413	4.71%

(1) Data for years prior to 2018 are based on contribution data provided in the 2017 CAFR, based on calculations provided by the prior actuary.

(2) Actuarially determined contribution for fiscal year ending 2018 is based on the contribution rate calculated with the June 30, 2016, actuarial valuation.

(3) Employer contributions do not include the expected implicit subsidy.

(4) Based on derived compensation using the provided employer contribution information.

Schedule of Employers' OPEB Contributions - KERS Hazardous
As of June 30, 2018 ($ in Thousands)

1	2	3		4	
Fiscal Year Ending	Actuarially Determined Contribution	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Actual Contributions as a Percentage of Covered Payroll
2018	$2,550	$5,288	(2,738)	$190,317	2.78%
2017	4,688	5,620	(932)	171,087	3.28%
2016	9,186	16,766	(7,580)	147,563	11.36%
2015	13,152	14,882	(1,730)	128,680	11.57%
2014	15,627	23,874	(8,247)	129,076	18.50%
2013	26,253	25,682	571	132,015	19.45%
2012	28,326	24,538	3,788	131,977	18.59%
2011	29,585	19,953	9,632	133,054	15.00%
2010	35,045	22,241	12,804	143,558	15.49%
2009	$34,670	$20,993	$13,677	$146,044	14.37%

(1) Data for years prior to 2018 are based on contribution data provided in the 2017 CAFR, based on calculations provided by the prior actuary.

(2) Actuarially determined contribution for fiscal year ending 2018 is based on the contribution rate calculated with the June 30, 2016, actuarial valuation.

(3) Employer contributions do not include the expected implicit subsidy.

(4) Based on derived compensation using the provided employer contribution information.

Schedule of Employers' OPEB Contributions - CERS Non-Hazardous
As of June 30, 2018 ($ in Thousands)

1	2	3		4	
Fiscal Year Ending	Actuarially Determined Contribution	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Actual Contributions as a Percentage of Covered Payroll
2018	$120,797	$124,619	$(3,822)	$2,570,156	4.85%
2017	122,270	120,712	1,558	2,480,130	4.87%
2016	110,987	111,836	(849)	2,352,762	4.75%
2015	119,511	119,444	67	2,296,716	5.20%
2014	130,652	123,278	7,374	2,272,270	5.43%
2013	195,561	159,993	35,568	2,236,277	7.15%
2012	214,421	171,925	42,496	2,236,546	7.69%
2011	213,429	186,886	26,543	2,276,596	8.21%
2010	266,331	175,764	90,567	2,236,855	7.86%
2009	$264,734	$131,476	$133,258	$2,183,612	6.02%

(1) Data for years prior to 2018 are based on contribution data provided in the 2017 CAFR, based on calculations provided by the prior actuary.

(2) Actuarially determined contribution for fiscal year ending 2018 is based on the contribution rate calculated with the June 30, 2016, actuarial valuation.

(3) Employer contributions do not include the expected implicit subsidy.

(4) Based on derived compensation using the provided employer contribution information.

Schedule of Employers' OPEB Contributions - CERS Hazardous
As of June 30, 2018 ($ in Thousands)

1	2	3		4	
Fiscal Year Ending	Actuarially Determined Contribution	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Actual Contributions as a Percentage of Covered Payroll
2018	$55,027	$56,002	$(975)	$588,526	9.52%
2017	53,131	51,537	1,594	542,710	9.50%
2016	64,253	67,619	(3,366)	492,851	13.72%
2015	69,103	71,778	(2,675)	483,641	14.84%
2014	74,360	74,792	(432)	479,164	15.61%
2013	102,011	85,319	16,692	461,673	18.48%
2012	110,763	92,564	18,199	464,229	19.94%
2011	109,227	98,592	10,635	466,964	21.11%
2010	129,227	84,536	44,691	466,549	18.12%
2009	$126,757	$71,413	$55,344	$469,315	15.22%

(1) Data for years prior to 2018 are based on contribution data provided in the 2017 CAFR, based on calculations provided by the prior actuary.

(2) Actuarially determined contribution for fiscal year ending 2018 is based on the contribution rate calculated with the June 30, 2016, actuarial valuation.

(3) Employer contributions do not include the expected implicit subsidy.

(4) Based on derived compensation using the provided employer contribution information.

Schedule of Employer's OPEB Contributions - SPRS
As of June 30, 2018 ($ in Thousands)

1	2	3		4	
Fiscal Year Ending	Actuarially Determined Contribution	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Actual Contributions as a Percentage of Covered Payroll
2018	$9,062	$9,397	$(335)	$50,064	18.77%
2017	9,222	9,222	0	48,873	18.87%
2016	8,553	10,237	(1,684)	45,551	22.47%
2015	9,890	10,382	(492)	45,765	22.69%
2014	20,879	14,493	6,386	44,616	32.48%
2013	27,234	16,829	10,405	45,256	37.19%
2012	28,247	11,960	16,287	48,373	24.72%
2011	25,773	11,051	14,722	48,693	22.70%
2010	30,302	8,643	21,659	51,507	16.78%
2009	$29,325	$7,643	$21,682	$51,660	14.79%

(1) Data for years prior to 2018 are based on contribution data provided in the 2017 CAFR, based on calculations provided by the prior actuary.

(2) Actuarially determined contribution for fiscal year ending 2018 is based on the contribution rate calculated with the June 30, 2016, actuarial valuation.

(3) Employer contributions do not include the expected implicit subsidy.

(4) Based on derived compensation using the provided employer contribution information

Money-Weighted Rates of Return

In accordance with GASB, KRS provides this additional disclosure regarding its money-weighted rate of return for the Pension Funds and Insurance Fund. The money-weighted rate of return is a method of calculating period-by-period returns on Pension Funds and Insurance Fund investments that adjusts for the changing amounts actually invested. For purposes of this Statement, money weighted-rate of return is calculated as the internal rate of return on Pension Funds and Insurance Fund investments, net of Pension Funds and Insurance Fund investment expense, adjusted for the changing amounts actually invested.

See below for the money-weighted rates of return for multiple periods including fiscal year June 30, 2018, as calculated by the custodian bank, BNY Mellon:

Money - Weighted Rates of Return As of June 30, 2018					
	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Pension Funds					
2018	7.63%	8.69%	8.82%	8.82%	7.68%
2017	12.08%	13.45%	13.80%	13.72%	12.50%
2016	-0.97%	-0.33%	-0.62%	-0.46%	-1.76%
2015	1.89%	1.69%	1.65%	1.88%	1.71%
2014	15.50%	15.65%	15.56%	15.50%	15.66%
Insurance Fund					
	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
2018	7.95%	8.93%	9.22%	9.35%	9.39%
2017	13.77%	13.75%	13.67%	13.69%	13.69%

Note: This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Administrative Expenses
As of June 30, 2018 ($ in Thousands)

	2018	2017
Personnel		
Salaries and Per Diem	$13,926	$13,999
Pension, Insurance Related Benefits	9,744	10,014
Unemployment Compensation	-	-
Tuition Assistance	16	18
Total Personnel	**23,686**	**24,031**
Contractual		
Actuarial Services	453	334
Audit Services	168	152
Healthcare	963	10
Legal Counsel	1,107	571
Medical Review Services	279	420
Miscellaneous	69	57
Total Contractual	**3,039**	**1,544**
Communication		
Printing	309	206
Telephone	121	191
Postage	257	471
Travel	59	61
Total Communication	**746**	**929**
Internal Audit		
Travel/Conferences	1	1
Dues/Subscriptions	-	1
Miscellaneous	-	2
Total Internal Audit	**1**	**4**
Investments-Pension Fund		
Travel/Conferences	21	34
Dues/Subscriptions	9	12
Contractual	-	-
Miscellaneous	-	1
Tuition	-	2
Legal	157	380
Total Investments	**$187**	**$429**

Schedule of Administrative Expenses (cont...)

	2018	2017
Rentals		
Office Space	$754	$743
Equipment	70	85
Total Rentals	**824**	**828**
Information Technology		
Software	1,932	320
Hardware	-	878
Services	-	1,594
Total Information Technology	**1,932**	**2,792**
Miscellaneous		
Utilities	204	211
Supplies	81	119
Insurance	345	235
Dues & Subscriptions	31	46
Maintenance	1	4
Other	6	17
Total Miscellaneous	**668**	**632**
Depreciation/Amortization	1,874	1,920
Total Pension Fund Administrative Expense	**32,957**	**33,109**
Healthcare Fees	2,063	2,202
Total Insurance Fund Administrative Expense	**2,063**	**2,202**
Total Administrative Expenses	**$35,020**	**$35,311**

Schedule of Direct Investment Expenses
As of June 30, 2018 ($ in Thousands)

	2018	2017
PENSION FUNDS		
Security Lending Fees		
Borrower (Income) Rebates	$4,712	$734
Lending Agent Fees	445	351
Total Security Lending	**5,157**	**1,085**
Contractual Services		
Investment Management	50,813	53,780
Security Custody	1,299	29,651
Investment Consultant	1,385	1,084
Private Equity Performance Fees	39,100	1,005
Total Contractual Services	**92,597**	**85,520**
INSURANCE FUNDS		
Security Lending Fees		
Borrower (Income) Rebates	1,813	187
Lending Agent Fees	201	133
Total Security Lending	**2,014**	**320**
Contractual Services		
Investment Management	26,425	23,094
Security Custody	846	718
Investment Consultant	568	409
Private Equity Performance Fees	18,078	10,007
Total Contractual Services	**45,917**	**34,228**
Total Investment Expenses	**$145,685**	**$121,153**

Schedule of Professional Consultant Fees
As of June 30, 2018 ($ in Thousands)

	2018	2017
Actuarial Services	$453	$344
Medical Review Services	279	420
Audit Services	168	152
Legal Counsel	1,264	951
Healthcare	963	10
Miscellaneous	69	57
Total	**$3,196**	**$1,934**

REPORT ON INTERNAL CONTROL

over financial reporting and on compliance and other matters based on an audit of financial statements performed in accordance with

GOVERNMENT AUDITING STANDARDS

MIKE HARMON
AUDITOR OF PUBLIC ACCOUNTS

Report On Internal Control Over Financial Reporting And On Compliance And Other Matters Based On An Audit Of Financial Statements Performed In Accordance With *Government Auditing Standards*

Independent Auditor's Report

Kentucky Retirement Systems
Board of Directors

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of KRS as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise KRS' basic financial statements, and have issued our report thereon dated November 29, 2018.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered KRS' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of KRS' internal control. Accordingly, we do not express an opinion on the effectiveness of KRS' internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

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REPORT ON INTERNAL CONTROL

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GOVERNMENT AUDITING STANDARDS

Report On Internal Control Over Financial Reporting And
On Compliance And Other Matters Based On An Audit Of Financial
Statements Performed In Accordance With *Government Auditing Standards*
(Continued)

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified. We did identify certain deficiencies in internal control, described in the accompanying schedule of financial statement findings, that we consider to be significant deficiencies identified as 2018-01, 2018-02, and 2018-03.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether KRS' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

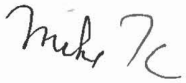
KRS' Responses to the Findings

The KRS' responses to the findings identified in our audit are described in the accompanying schedule of financial statement findings. The KRS' response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Respectfully Submitted,



Mike Harmon
Auditor of Public Accounts

November 29, 2018

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF FINANCIAL STATEMENT FINDINGS
For the Year Ended June 30, 2018

FINDING 2018-01: The Kentucky Retirement Systems Does Not Have Adequate Procedures To Ensure Financial Statements Are Prepared In Accordance With Generally Accepted Accounting Principles

During the FY 18 audit of the Kentucky Retirement Systems (KRS), the KRS financial statement preparation process did not identify instances of departure from Generally Accepted Accounting Principles (GAAP) in the notes to the financial statements. The Governmental Accounting Standards Board (GASB) issues accounting and financial reporting standards that defines GAAP for governmental entities. The departures from GAAP included:

1. Disclosures related to derivatives omitted certain information required by GASB, such as clearly defining investments as held for investment or hedging purposes and did not include the change in fair value or accurate market values. After KRS was notified of the omissions, KRS revised the note to be in compliance with the statement; however, the revised note totals did not agree to the Statement of Fiduciary Net Position. Further investigation by KRS determined investments were improperly classified by the custodial bank. As a result, the financial statements had to be adjusted to decrease derivatives for pension and insurance by $26.4 million and $11.6 million, respectively. Other investment accounts were increased as a result of this reclassification.
2. The GASB requires specific disclosures related to leases. KRS disclosed a relationship involving office space lease; however, the note did not include the required information for leases, such as the lease term or future payments associated with the lease.
3. The notes did not disclose the money weighted average rate of return of investments, as required by GASB.
4. Upon review of the prior audit, it was noted that KRS included certain investments in the notes classified in a fair value hierarchy rather than at net asset value as required by GASB. This was discussed with KRS and a correction was made for FY18.

In addition to the GASB disclosure issues, many revisions were necessary after auditing the financial statement notes and RSI. While KRS reviewed and adjusted the notes and RSI for accuracy and to comply with GAAP, the issues and errors were not identified in the financial statement preparation process.

KRS personnel did not detect the errors or GAAP departures during the preparation or review process. Ineffective internal controls over financial statement preparation could lead to misstatements and departures from GAAP.

Management must ensure proper internal controls over financial statement preparation are present and operating effectively. This includes having procedures in place to identify errors and omissions of financial statement amounts and disclosures.

Recommendation

We recommend KRS evaluate the financial statement preparation process to ensure sufficient controls are in place to promote financial reporting that adheres to GAAP. The supporting information used to prepare notes and RSI should be evaluated for accuracy.

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF FINANCIAL STATEMENT FINDINGS
For the Year Ended June 30, 2018

FINDING 2018-01: The Kentucky Retirement Systems Does Not Have Adequate Procedures To Ensure Financial Statements Are Prepared In Accordance With Generally Accepted Accounting Principles (Continued)

Management's Response and Planned Corrective Action

Management concurs with the findings and recommendations. The process that the APA uses differs from a more consultant approach from KRS' external auditor. During external audit period and during the preparation of the annual CAFR, we collaborate with the external auditor to review and incorporate new GASB requirements and other required CAFR revisions from the prior year based on their recommendations. For the 2018 CAFR, we have automated many of the tables and supporting schedules. Management will continue review and improve the financial statement preparation processes to ensure sufficient controls are in place to prepare the annual GASB 67 and GAB 74 reports and the CAFR.

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF FINANCIAL STATEMENT FINDINGS
For the Year Ended June 30, 2018

FINDING 2018-02: The Kentucky Retirement Systems Did Not Have Written Policies For Waiving Penalties

During fiscal year 2018, Kentucky Retirement Systems (KRS), waived penalties over delinquent monthly employer contribution invoices. Currently, three members of management approve waivers of penalties for employers submitting late reports or making late payments, although no written policies or procedures exist regarding the practice. Employers are charged with a penalty when payments or reports for the monthly contributions are not paid or submitted on or before the 10th of each month. Kentucky Revised Statutes do not specifically address the waiving of these penalties, and therefore, it does not appear that KRS has the statutory authority to waive penalties. Additionally, auditors did not see justification noted for the reason individual waivers were determined to be warranted.

KRS produced a report indicating 95 delinquent monthly employer contribution penalties were waived, totaling $104,245 for fiscal year 2018.

Management used their judgment when waiving these penalties. Penalties and related waivers are not reported to the KRS Board. KRS management indicated that it had discussed penalties with the KRS Audit Committee in the past, and that the general feeling was that penalties were an administrative function.

The absence of clear authority to waive a penalty required by statute increases the risk of inconsistent treatment of employers because there are no defined boundaries on how management should assess each situation. Additionally, without written guidance on evaluating each situation, management risks allowing personal, structural, or external pressures to influence their judgment. By not enforcing statutorily mandated penalties, incentives for compliance by employers are reduced. When penalties are waived, KRS loses potential funds that could have been invested and earned interest.

The assessment of penalties is addressed by the Kentucky Revised Statutes; however, the statutes do not address the waiving of penalties.

Per Kentucky Revised Statute 78.625:

> If the agency reporting official fails to file at the retirement office all contributions and reports on or before the tenth day of the month following the period being reported, interest on the delinquent contributions at the actuarial rate adopted by the board compounded annually, but not less than one thousand ($1000), shall be added to the amount due the system.

Written policies and procedures provide guidance to management on the waiver of penalties and allow the process to be consistent and transparent among the various employers.

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF FINANCIAL STATEMENT FINDINGS
For the Year Ended June 30, 2018

FINDING 2018-02: The Kentucky Retirement Systems Did Not Have Written Policies For Waiving Penalties (Continued)

Recommendation

We recommend:

- KRS should determine the legality of waiving statutorily mandated penalties. If the waiving of penalties is not permissible, KRS should cease this practice.
- If the agency's authority for applying penalty waivers is determined to be allowable, KRS should adopt formal written policies and procedures on waiving penalties. These policies and procedures should be approved by the Board of Trustees. KRS management should provide the Board of Trustees with a regular report of any penalties waived under this policy.

Management's Response and Planned Corrective Action

Management has reviewed the statutes and KRS is provided language to administer employer reporting errors or omissions. There is statutory authority in KRS 61.685 to correct contribution errors, stating in relevant part, "(1) Notwithstanding the provisions of KRS Chapter 413, upon discovery of any error or omission in the system records, the system shall correct all records including, but not limited to, membership in the system, service credit, member and employer contributions, and benefits paid and payable..." This KERS records law in Chapter 761 is also incorporated in CERS by way of the "matters not specified" statute in KRES 78.545(25) = "correction of errors in records, as provided for by KRS 61.685" and also in SPRS vis KRS 16.645(15) – "correction of errors in records, as provided for by KRS 61.685"

If KRS doesn't have the administrative flexibility in reporting errors or omissions, then an increase in Accounts Receivable would result, due to employers unable to pay penalty invoices caused by error or omission.

Management will request more defined language in a housekeeping bill to be approved by the legislature in the upcoming 2019 session.

Management will adopt formal written policies and procedures on waiving penalties. The KRS Audit Committee will approve these policies and procedures.

Auditor's Reply

We appreciate that management is accepting our recommendation to adopt formal written policies for waiving penalties in an effort to improve documentation, transparency, and consistency. During the audit, KRS indicated to the auditor that the penalties were waived for reasons other than error correction. This is the reason we recommend determining the legality of waiving penalties.

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF FINANCIAL STATEMENT FINDINGS
For the Year Ended June 30, 2018

FINDING 2018-03: The Kentucky Retirement Systems Did Not Adequately Monitor Outstanding Invoices

Kentucky Retirement Systems' (KRS) financial statements included balances from invoices over multiple years. KRS sends invoices to employers when funds are due to KRS or when overpayments occur. Procedures for collecting overdue invoices are documented in a PowerPoint presentation. Several issues were noted regarding the invoicing process:

- The list of outstanding invoices provided by KRS included $626,089 in credits due to employers from 2012, $1,229,677 from 2013, and $514,448 from 2014, for a total of $2,370,214. As of the end of FY18, employers had not taken these credits when submitting monthly reports and payments.

- Employers are made aware of all outstanding invoices through the computer system each month when payments are due to KRS, however, the aggregate accounts receivable balance consists of $19,230, $43,026, and $921,764 still due to KRS from employers from 2012, 2013, and 2014 respectively.

In summary, the process for monitoring and resolving outstanding invoices is not operating effectively.

The employer credits on invoices are mostly due to overpaid employer and member contributions. According to KRS, employers may not be taking the refunds since they may not have a good mechanism to repay the employees who overpaid.

In situations where amounts due to employers are the result of employee overpayments, employees in the pension plan are not receiving refunds for overpayments. Employees may be unaware they are owed funds from employers, especially if employment has been terminated. By not collecting balances due, KRS does not have the opportunity to invest and earn a return on these funds.

Proper internal controls over financial reporting dictate that adequate procedures should be in place to prevent, detect, and correct potential misstatements or errors related to outstanding invoices. Effective operational controls allow for the recording, monitoring, and collection on overdue invoices.

Recommendation

We recommend KRS, for those invoices with aged credit or debit balances, work with employers to resolve individual issues in a timely manner.

KENTUCKY RETIREMENT SYSTEMS
SCHEDULE OF FINANCIAL STATEMENT FINDINGS
For the Year Ended June 30, 2018

FINDING 2018-03: The Kentucky Retirement Systems Did Not Adequately Monitor Outstanding Invoices (Continued)

Management's Response and Planned Corrective Action

Management concurs that aged invoices are problematic and we have changed internal processes to further address outstanding balances. However, KRS is challenged by several factors:

- *The majority of employer credits are due to member overpayments. After working with the employer to identify the member, KRS cannot remit the over contributions directly to the member. The correction must be processed through the employer's payroll for proper W-2 reporting. Additionally, KRS cannot directly remit overpayment of employer contributions. The employer must process the credits.*
- *KRS agencies (especially State Police and Department of Corrections) are dependent on general fund appropriations to pay sick leave invoices and employer pension spiking. These appropriations are subject to the State's bi-annum budget process. Although KRS works with the budget office to provide balance amounts, rarely have the full appropriations been made.*
- *Regardless of the outstanding invoice amount, KRS is statutorily required to pay the retiree benefits and has limited options to collect past due amounts.*

While working with these limitations, KRS during 2018 improved employer reporting officials training to include outstanding invoices, invoice aging, and expanding efforts to refresh/assist collection project on the invoice payment process of paying and taking credit invoices. Additionally, as employer-reporting errors have decreased during the fiscal year, more KRS resources have been allocated to invoice collection. Improved internal processes include escalation to our legal department after 120 days and expanding notification to agency management.

INVESTMENTS
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Market Environment

The 2018 fiscal year proved to be another positive year for investors as a result of continued global growth, low inflation, and continued demand for risk assets. In the U.S., the S&P 500 returned 14.3% over the period, while the Dow Jones Industrial Average (DJIA) and Nasdaq Composite Index (NASDAQ) posted similar returns of 16.3% and 23.6%, respectively. Overall the U.S. economy continued its robust performance. The unemployment rate hit 3.8% in May, the lowest figure in 18 years[1], and U.S. Gross Domestic Product (GDP) posted an annualized 4.1% growth rate in the fourth quarter of 2018.[2]

Some of the key market indicators that influenced fiscal year 2018 performance were:

Real Gross Domestic Product (GDP) grew by 2.0% in the second quarter, but was offset by weak consumer spending; however, business investment during the same period increased by 10.4% which contributed to 2.8% year over year growth.[3] The labor market added an average of 196,000 jobs per month over the fiscal year. [4]

- Modest median wage growth of around 3.2%[5], however, real average hourly earnings remained stagnant from June 2017 through June 2018.[6]
- The Tax Cuts and Jobs Act (TCJA) that was implemented in January 2018, lowered individual and business tax burdens. For example, an individual in 2017 was assessed a 25% marginal income tax rate on income over $37,950[7], whereas in 2018, the individual will pay a 22% marginal tax rate on income over $38,700.[8] If we consider an individual making $40,000 (excluding exemptions), annual savings would be around $999.35.
- The lower individual tax burden has been correlated to increased consumer confidence and, therefore, increased near-term spending. Likewise, business investment growth, estimated to be around 6%, has been attributed to a reduced tax burden.[9]
- The housing market saw decreases in the supply of single-family homes for sale in 2017 causing an increase in prices. Nonetheless, the rate of homeowners increased for the first time since 2004. It should be noted that increasing interest rates and student debt could lead to greater uncertainty in the housing market. [10]

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[1]Wells, Peter. "US Unemployment Rate Hits 18-Year Low of 3.8%." *FinancialTimes*, June 2018, **https://www.ft.com/content/bbf85c42-6594-11e8-90c2-9563a0613e56**.

[2]"An Update to the Economic Outlook: 2018 to 2018." *Congressional Budget Office*. August 13, 2018, **https://www.cbo.gov/publication/54318**.

[3]Bahuguna, Anwiti. "Trade Wars or Strong U.S. Growth?" *Columbia Threadneedle Investments*, July 31, 2018, **https://seekingalpha.com/article/4192318-trade-wars-strong-u-s-growth**.

[4]"Databases, Tables & Calculators by Subject." *Bureau of Labor Statistics*, July 2017 through June 2018, **https://data.bls.gov/timeseries/CES0000000001?output_view=net_1mth**.

[5]"Wage Growth Tracker." *Federal Reserve Bank of Atlanta: Center for Human Capital Studies*, July 2017 through June 2018, **https://www.frbatlanta.org/chcs/wage-growth-tracker.aspx?panel=1**.

[6]"TED: The Economics Daily." *Bureau of Labor Statistics*, **https://www.bls.gov/opub/ted/2018/real-average-hourly-earnings-unchanged-from-june-2017-to-june-2018.htm**.

[7]Pomerleau, Kyle. "2017 Tax Brackets." *Tax Foundation*, November 2016, **https://files.taxfoundation.org/20170123140911/TaxFoundation-FF534.pdf**.

[8]El-Sibaie, Amir. "2018 Tax Brackets (Updated))." *Tax Foundation*, January 2018, **https://files.taxfoundation.org/20170123140911/TaxFoundation-FF534.pdf**.

[9]Bahuguna, Anwiti. "Trade Wars or Strong U.S. Growth?" *Columbia Threadneedle Investments*, July 31, 2018, **https://seekingalpha.com/article/4192318-trade-wars-strong-u-s-growth**.

[10]"The State of the Nation's Housing 2018." Joint Center for Housing Studies of Harvard University, **http://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_State_of_the_Nations_Housing_2018.pdf**.

- The administration issued several tariffs that impacted the market, and, therefore, performance. The first tariffs imposed on January 22, 2017, were on solar panels ($8.5 billion) and washing machines ($1.8 billion). On March 1, 2018, the president announced a 25% tariff on steel and a 10% tariff on aluminum that would apply to many countries that included those within the European Union (EU) and Canada. Those tariffs went into effect on March 23, 2018, with exemptions for Canada, Mexico, the EU, South Korea, Brazil, Argentina, and Australia. On that day the DJIA fell by 462 points. The majority of the tariffs have been aimed at China, which has retaliated with its own tariffs on American goods, and has created volatility in the markets. This tariff "war" has not abated and will likely continue to affect performance.[11]

Anwiti Bahuguna, Senior Portfolio Manager for Columbia Threadneedle Investments, writes, "Growth may slow down a bit in the second half of the year, but the economy is still poised to grow almost to 3% in 2018. After years of not reaching the Fed's target, inflation is firming and core personal consumption expenditure (PCE) is expected to be around 2% this year."[12] The Fed continued their methodical increases of interest rates and raised the interest rate three times from a range of 1.00% to 1.25% at the start of the period to 1.75% to 2.00% by June 30, 2018. However, interest rates are still low by historical standards.[13] In the face of rising rates and a flattening yield curve, bond investors took a hit as the Bloomberg Barclay's US Aggregate Index returned -.40% for the fiscal year. Investors who favored Credit over interest rates fared better, with the Bloomberg Barclay's US High Yield Index returning 2.62%, and the S&P Leveraged Loan Index returning 4.37%.

Asset Allocation Changes

The Investment Committee, upon recommendation from KRS' general consultant, Wilshire Associates, approved a new asset allocation policy for each of the plans in June that decreased the allocation in public equities in favor of fixed income holdings. The general reduction in equities was a theme for the plans over the past fiscal year, as KRS reduced its exposure to stocks from 49.6% to 40.3% by the end of the period. The Committee felt it was prudent to sell into a strong equity market to reduce the exposure in what has proven to be the longest bull market for stocks in history. The Investment Staff continued to reduce hedge funds by paring down exposure from 7.6% to 5.6% by the end of the fiscal year.

Performance

The Pension Fund returned 8.57%, net of fees, for the fiscal year versus 7.91% for the Allocation Index Benchmark. Individual plan net of fees returns ranged from 7.50% for the KERS Non-Hazardous plan to 8.77% for the CERS Hazardous Plan. The Insurance Fund returned 9.05% net of fees for the period versus 8.48% for the Allocation Index Benchmark. In both funds, equities led the way with Private Equity returning 14.52% and Public Equity returning 12.43% for the year. Real Estate also performed very well, posting a return of 11.22% versus 7.11% for the Real Estate benchmark. Absolute Return posted a return of 5.52%, beating its benchmark of 5.39%. For the year, all asset classes had positive absolute performance, with only U.S. Public Equity trailing the benchmark by 26 basis points. Most importantly, all plans produced performance well above their respective assumed rates of return. While the Investment Staff and the Investment Committee of the Board are pleased with the performance of the assets over the fiscal year, it is important to remain focused on the long road ahead to achieve a healthy funded status for each plan. Investment returns are only one part of this process, but KRS looks forward to continuing the momentum they have created over the last 2 years.

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[11]Brown, Chad P, and Kolb, Melina. "Trump's Trade War Timeline: An Up-to-Date Guideline."Peterson Institute for International Economics, August 23, 2018, h**ttps://piie.com/system/files/documents/trump-trade-war-timeline.pdf.**

[12]Bahuguna, Anwiti. "Trade Wars or Strong U.S. Growth?" *Columbia Threadneedle Investments*, July 31, 2018, **https://seekingalpha.com/article/4192318-trade-wars-strong-u-s-growth**.

[13]Tankersly, Jim & Irwin, Neil. "Fed Raises Interest Rates and Signals 2 More Increases Are Coming." The New York Times, June 13, 2018, **https://www.nytimes.com/2018/06/13/us/politics/federal-reserve-raises-interest-rates.html**.

Investment Committee Initiatives

New Members

Sherry Lynn Kremer was elected to serve as one of two KRS Board of Trustees representatives from the Kentucky Employees Retirement System (KERS) in March 2018, and was appointed to the Investment Committee by the Board.

Continued Restructuring of Absolute Return Investments

Staff continued their work to review and restructure the Absolute Return portfolio. In late 2016, the Investment Committee started a detailed review of the entire Absolute Return portfolio. In March 2017, KRS began to redeem some investments and started to transfer several investments previously held in fund-of-funds vehicles to direct ownership by KRS. In October 2017, new general investment consultant, Wilshire Associates, began their review of the Absolute Return portfolio and provided recommendations to staff in early 2018. In April, staff issued redemption notices to two more funds and on May 7, 2018 KRS issued a full redemption notice to Prisma indicating the desire to fully liquidate the last fund-of-funds investment. Prisma provided KRS a schedule of liquidations on May 18th. They estimate that KRS will receive $265,300,000 (48.7% of the total) in October 2018, $159,000,000 in January 2019 (29.2%), $68,600,000 (12.6%) in July 2019, $44,100,000 (8.1%) in July 2020, and the remainder in early 2021. Overall hedge fund investments at KRS have been reduced from a high of $1,646,000,000 in January 2016 down to $965,325,000 as of May 2018. Of that total, roughly $600,000,000 is currently in the redemption que.

Asset Allocation

At the May 1, 2018, Investment Committee meeting the new general consultant, Wilshire Associates, presented their first asset liability study which contained a proposal for new asset allocations for all systems. While this proposal contained a recommendation to increase equity exposure in CERS, KERS Hazardous, and all Insurance plans, it also suggested a substantial reduction to the equity positions in the KERS and SPRS plans because of their severe underfunded status. No action was taken at the meeting because the committee wanted more time to study the recommendations, and asked Wilshire to rerun their analysis' for the KERS and SPRS plans to reflect the increased funding recently provided by the legislature. Wilshire was also asked to focus on increasing the probability of the KERS and SPRS plans hitting the assumed rate of return of 5.25% over a 10-year period, while decreasing the annual volatility that those plans are expected to experience. On June 7th, Wilshire presented a new Asset Allocation for those plans, and the recommended allocations for all 10 plans were approved by the Committee.

Assumed Rates of Return

The Investment Committee also made recommendations to the Board to lower the assumed rates of return for each of the systems. The committee reviewed capital market assumptions from eight leading investment and/or consulting firms, e.g., JP Morgan, PIMCO, RVK, Goldman Sachs, and Blackrock. The assumptions from these firms were compared to each system's asset allocation where the resulting portfolio returns were averaged to produce an estimated return for each system. As a result of this work, the Committee recommended lowering the assumed rates of return from 6.75% to 5.25% for the KERS Non-Hazardous and SPRS pension plans to more realistically reflect those systems' need to reduce volatility and increase the liquidity of the investments. For all other plans, the committee recommended a reduction from 7.5% to 6.25%. These recommendations were approved by the Board at their May and July 2017 meetings.

Investment Consultant

In May 2017 the Investment Committee asked staff to issue a Request for Proposal (RFP) for new investment consulting services. The Investment Committee felt that KRS might be able to increase service levels and reduce consulting fees by switching to a single consultant to work across all asset classes except Real Estate. An RFP was issued in June 2017, and eight out of nine of the largest investment consulting firms in the U.S. responded. The responses were scored by an internal review committee and four finalists were selected for in-person interviews with the selection committee. The committee recommended that Wilshire Associates be hired as the new investment consultant for all asset classes except for Real Estate; the committee continued to retain the incumbent Real Estate manager, ORG Portfolio Management, for this asset class. This recommendation was approved by the Investment Committee in August 2017 and the Board at its September 2017 meeting.

Senate Bill 2

In March 2017, the Kentucky Legislature passed a new set of pension system transparency requirements, collectively known as Senate Bill 2 (SB 2). This new legislation required:

- Posting all investment contracts to the KRS website;
- Investment managers working for the systems to adhere to the CFA Asset Manager Code of Conduct and the CFA Standards of Professional Conduct;
- All KRS Trustees to adhere to the CFA Institute Code of Conduct for Pension Scheme Governing Bodies; and,
- KRS to develop a procurement policy for all investment services and to have that policy approved by the Finance and Administration Cabinet as being representative of industry best practice.

Staff from both the Investments and Legal departments have worked diligently to implement these new requirements. A new Procurement Policy was developed with the Finance and Administration Cabinet and approved by the Board in September 2017. The Investment staff has begun to contact each of manager to inform them of the new requirements and to request minimally redacted copies of investment management contracts. The KRS Communications staff created a section on KRS' website to host these contracts and continue to collect and post them as they become available.

Investment Activity

- New State Capital Partners Fund II (Private Equity): The Investment Committee approved a $25 million investment in the Fund at the February 6, 2018, meeting; however, due to the requirements of 2017 SB2, New State declined to accept our investment.
- Davidson Kempner (DK) LP (Absolute Return): In March 2018, KRS received notice from DK requesting KRS to withdraw the ~$70 million investment in the fund, citing the SB2 requirements and recent litigation involving KRS as the reason.
- Equity Reduction (Public Equities): At the beginning of April 2018, staff conducted another equity reduction trade, removing roughly $365 million of exposure (Pension $250 million, Insurance $115 million).
- Manulife Global Fixed Income (Core Fixed Income): In April 2018, KRS sent an additional deposit of $135 million to the existing Manulife Global Bond portfolio. These funds were the result of a reduction to the Public Equity exposure at the beginning of the month.
- BNY Mellon Intermediate Credit Index CTF (Core Fixed Income)– On April 18, 2018, KRS made an additional deposit of $288 million to the BNY Int Credit Index Fund. These funds were the result of a reduction to the Public Equity exposure at the beginning of the month.
- Shenkman Capital (US Bank Loans) – On May 22, 2018, staff made an additional deposit of $40 million to Shenkman.

Investment Summary

The KRS Board is charged with the responsibility of investing the Kentucky Retirement Systems (Systems) assets to provide benefits to the members of the Systems. To achieve this goal, the Board follows an investment policy that thoughtfully grows the asset base while at the same time protects against undue risks and losses in all investment areas. The Board recognizes its fiduciary duty not only to invest the funds in compliance with the Prudent Person Rule, but to also manage the funds while recognizing the long-term nature of the Systems' investments. In order to carry out their fiduciary duties the Board has created clearly defined investment policies, objectives, and strategies for both the Pension and Insurance portfolios.

Investment Policy

As of June 30, 2018, the KRS Pension Funds aimed for the following asset allocations for each system: 17.5% of the assets in U.S. Equities; 17.5% in broad market International Equities; 4.0% (10.0% for KERS Non-Hazardous and SPRS) in Global Fixed Income; 24.0%(17.0% for KERS Non-Hazardous and SPRS) in Credit Fixed Income; 10.0% in Private Equity; 10.0% in Real Return; 10.0% in Absolute Return; 5.0% in Real Estate; and, 2.0%(3.0% for KERS Non-Hazardous and SPRS) in Cash or Short-Term Securities. As of June 30, 2018, the KRS Insurance Fund's allocation policy set investment goals of: 17.5% of the assets in U.S. Equities; 17.5% in broad market International Equities; 4.0% in Global Fixed Income; 24.0% in Credit Fixed Income; 10.0% in Private Equity; 10.0% in Real Return;

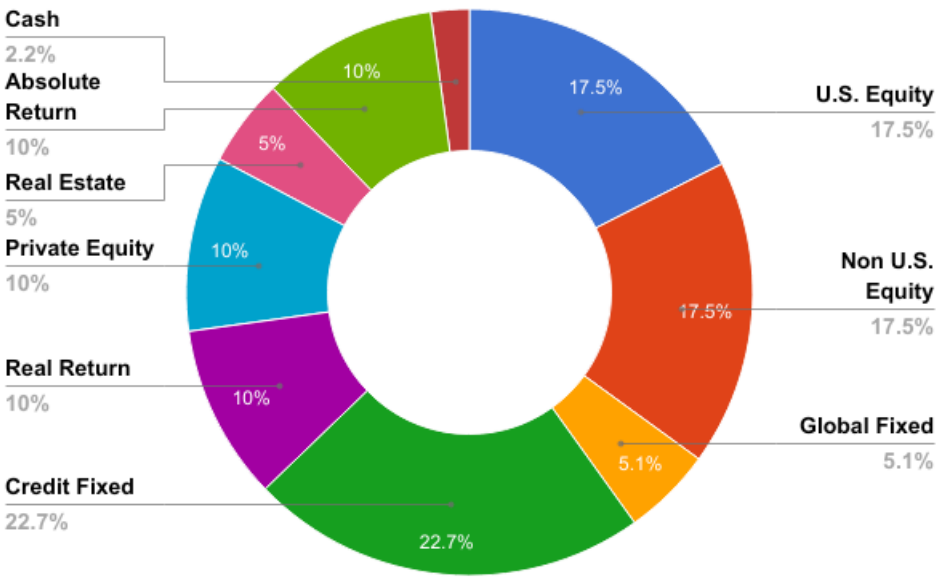
10.0% in Absolute Return; 5.0% in Real Estate; and, 2.0% in Cash or Short-Term Securities.

The following charts represent the composites for the total Pension and Insurance funds (dollar weighted by plan).

Pension Board Policy vs. Actual Asset Allocation
As of June 30, 2018 ($ in Thousands)

	Total Plan	U.S. Equity	Non U.S. Equity	Global Fixed	Credit Fixed	Real Return	Private Equity	Real Estate	Absolute Return	Cash
Policy's Pension Asset Allocation	100.00%	17.50%	17.50%	5.10%	22.70%	10.00%	10.00%	5.00%	10.00%	2.20%
Actual Pension Asset Allocation	100.00%	17.27%	21.08%	19.95%	10.27%	8.60%	9.88%	3.55%	5.71%	3.69%

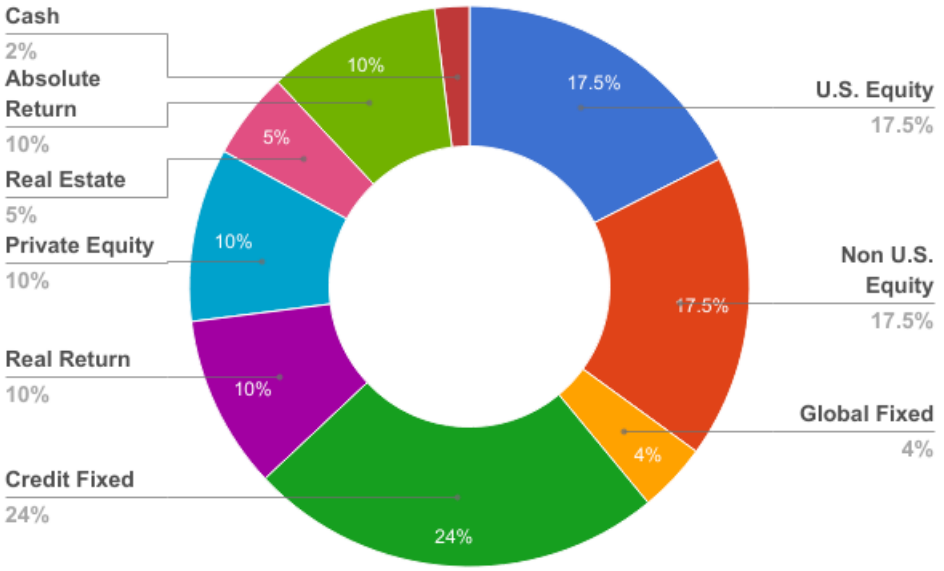
Assets Allocation Policy - Pension



Insurance Board Policy vs. Actual Asset Allocation
As of June 30, 2018 ($ in Thousands)

	Total Plan	U.S. Equity	Non U.S. Equity	Global Fixed	Credit Fixed	Real Return	Private Equity	Real Estate	Absolute Return	Cash
Policy's Insurance Asset Allocation	100.00%	17.50%	17.50%	4.00%	24.00%	10.00%	10.00%	5.00%	10.00%	2.00%
Actual Insurance Asset Allocation	100.00%	18.31%	22.02%	19.44%	9.46%	8.68%	10.29%	3.47%	5.57%	2.76%

Asset Allocation Policy - Insurance



Investment Strategies

Diversification

KRS portfolios are diversified on several levels, primarily through the use of the aforementioned multiple asset classes. Asset allocations are revisited on a periodic basis and represent an efficient allocation to maximize returns and minimize risks at a level appropriate for each system. The individual asset classes are diversified through the use of multiple portfolios that are managed by both the Investment Division Staff and external Investment Advisors. Finally, portfolios within each of the asset classes are diversified through both investment styles and the selection of individual securities. Each portfolio advisor is afforded discretion to diversify its portfolio(s) within the parameters established by the KRS Board.

Rebalancing

Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with KRS' Investment Policy Statement (IPS) target levels. Such rebalancing is necessary to reflect sizable cash flows and performance imbalances among asset classes and investment advisors. KRS' rebalancing policies call for an immediate rebalancing to within its allocation ranges if an asset class exceeds or falls outside its allowable range as defined in the IPS. As the previous charts depict, there were several asset classes that were significantly out of range; however, this was a result of rebalancing, e.g. this fiscal year the Investment Committee instructed staff to focus funding on Fixed Income rather than Absolute Returns.

Investments Performance Review Procedures

At least once each quarter, the Investment Committee, on behalf of the KRS Board, reviews the performance of the portfolio to determine compliance with the Statement of Investment Policy. The Investment Committee also reviews a report created and presented by the KRS Compliance Officer who is part of the independent Internal Audit Division. The Compliance Officer performs tests daily, monthly, and quarterly to assure compliance with the restrictions imposed by the ISP.

Investment Consulting

The Board employs industry leading external consultants to assist in determining and reviewing the asset allocation guidelines. Consultants also provide performance reports for both the internally managed and externally managed assets. A letter from each consulting firm utilized follows this section and each provides a discussion of current allocations, performance, and significant changes during the fiscal year.

Investment Objectives

The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

- **Shorter-Term** (5 years and less): The returns of the particular asset classes of the managed funds of the Systems, measured on an annual basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices.

- **Medium-Term** (5 to 20 years): The returns of the particular asset classes of the managed funds of the Systems, measured on a rolling year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices and perform above the median of an appropriate peer universe, if there is one.

- **Longer-Term:** The total assets of the Systems should achieve a return of 5.25% for KERS Non-Hazardous and SPRS pensions and 6.25% for all other Pension and Insurance plans. This is measured for 20 years and beyond and should exceed the actuarially required rate of return as well as the return achieved by its total fund benchmark.

In keeping with the KRS Board's fiduciary responsibility, where all else is equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.

This section was prepared by the KRS Interim Chief Investment Officer and Investment staff members with support from the KRS' Investment Committee. Information reported in the respective schedules and supplemental information was provided by our investment consultants and custodial bank.

Investment Results

For the purposes of this report, total fund return information is net of investment manager fees with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning in July 2011 and gross of fees are used for prior historical data. All rates of return are calculated using time-weighted rates of return.

Fiscal Year 2018 Results

For the fiscal year ending on June 30, 2018, the KRS Pension Funds earned a net return of 8.57%, outpacing its benchmark return of 7.91%. The KRS Insurance Funds return for that period earned a return net of fees of 9.1% compared to the 8.48% benchmark.

Net Returns By System: Pension Fund As of June 30, 2018 ($ in Thousands)

Plan	Market Value	% of Total	1 Year		3 Years		5 Years			10 Years		Inception	
			KRS	Index	KRS	Index	KRS	Index	GANIR	KRS	Index	KRS	Index
KERS	$2,007,002	16.33%	7.50	7.15	6.17	6.50	7.19	7.24	2.00	5.96	6.31	9.07	9.20
KERS HAZ	647,918	5.27%	8.68	8.22	7.14	6.91	7.70	7.52	2.65	6.21	6.45	9.15	9.24
CERS	7,033,654	57.22%	8.75	8.22	7.18	6.91	7.71	7.52	2.54	6.22	6.45	9.15	9.24
CERS HAZ	2,345,934	19.09%	8.77	8.22	7.21	6.90	7.73	7.52	2.75	6.23	6.45	9.15	9.24
SPRS	256,966	2.09%	7.65	7.68	6.06	6.54	7.04	7.28	2.21	5.89	6.34	9.05	9.20
Total	**$12,291,474**	**100.00%**	**8.57**	**7.91**	**7.01**	**6.86**	**7.63**	**7.57**		**6.18**	**6.48**	**9.14**	**9.25**

Net Returns By System: Insurance Fund As of June 30, 2018 ($ in Thousands)

Plan	Market Value	% of Total	1 Year		3 Years		5 Years		10 Years		Inception	
			KRS	Index	KRS	Index	KRS	Index	KRS	Index	KRS	Index
KERS	$834,386	16.25%	7.96	8.43	6.92	7.09	7.23	7.66	5.31	5.95	7.39	7.79
KERS HAZ	512,697	9.99%	8.88	8.60	7.31	7.16	7.69	7.73	5.54	5.98	7.46	7.80
CERS	2,333,374	45.45%	9.21	8.60	7.46	7.18	7.79	7.76	5.59	5.99	7.48	7.80
CERS HAZ	1,264,027	24.62%	9.32	8.60	7.55	7.18	7.84	7.76	5.61	5.99	7.49	7.80
SPRS	189,075	3.68%	9.34	8.60	7.53	7.19	7.82	7.77	5.60	6.00	7.49	7.80
Total	**$5,133,559**	**100.00%**	**9.05**	**8.48**	**7.40**	**7.22**	**7.71**	**7.90**	**5.55**	**6.06**	**7.47**	**7.83**

Benchmarks

The Kentucky Retirement Systems Pension and Insurance Funds' benchmarks are weighted averages that are composites of the various asset class indices that exist within each of KRS' investment portfolios. KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time weighted cash flow. The various asset class benchmarks are shown below:

Benchmarks
As of June 30, 2018 ($ in Thousands)

Index		Pension	Insurance
Russell 3000	U.S. Equity	17.50%	17.50%
MSCI ACWI Ex-US IMI	Non U.S. Equity	17.50%	17.50%
Barclays Universal Index	Global Fixed Income	5.10%	4.00%
Barclays U.S. High Yield	Credit Fixed Income	22.70%	24.00%
NCREIF ODCE	Real Estate	5.00%	5.00%
HFRI Diversified FOF	Absolute Return	10.00%	10.00%
Custom-Allocation Specific	Real Return	10.00%	10.00%
Actual Performance	Private Equity < 5 years	10.00%	10.00%
Russell 3000 Quarter Lagged + 300 bps	Private Equity > 5 years	10.00%	10.00%
Cit Grp 3-mos Treasury Bill	Cash	2.20%	2.00%

Note: These benchmarks are intended to be objective, measurable, investable/replicable, and representative of the investment mandates. The benchmarks are developed from publicly available information and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate and status. KRS' Investment Staff and Consultants recommend the indices and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the KRS Board. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total benchmarks will evolve to reflect these exposures.

Long-Term Results

The schedule below details annual returns over the last ten years. Returns range from a minimum of -17.21% in 2009 to a maximum of 18.96% in 2011. For the year ending June 30, 2018, the KRS total Pension Fund portfolio earned the then current annualized net returns. As previously noted, beginning with the 2017 valuation, the Board lowered the actuarial required rates of return for KERS and SPRS to 5.25% and 6.25% return for CERS Non-Hazardous, CERS Hazardous, and KERS Hazardous. The growth of a dollar chart below displays the differences between $1,000 invested in 2009 at an assumed rate of return of 5.25% for KRS and SPRS and 6.25% for CERS Non-Hazardous, CERS Hazardous, and KERS Hazardous, where an investment of $1,000 would have earned $1,890 for KERS Non-Hazardous and SPRS and $1,922 for CERS Non-Hazardous, CERS Hazardous, and KERS Hazardous. Further, the Pension Fund Growth chart indicates that the total Pension Fund would have earned $2,209 per $1,000.

Pension Fund Growth
As of June 30, 2018 (in Whole $)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Fund Return	-17.21%	15.81%	18.96%	0.14%	10.82%	15.55%	2.01%	-0.52%	13.47%	8.57%
Performance BM	-14.88%	13.16%	20.34%	0.90%	11.21%	14.91%	3.13%	-0.19%	13.28%	7.91%
Actuarial Assumed ROR CERS, CERS-H, and KERS-H	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.50%	7.50%	6.25%
Actuarial Assumed ROR KERS and SPRS	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.50%	6.75%	5.25%
KRS Pension Fund	$1,000	$1,158	$1,378	$1,380	$1,529	$1,767	$1,802	$1,793	$2,034	$2,209
Performance Benchmark	1,000	1,132	1,362	1,374	1,528	1,756	1,811	1,807	2,047	2,209
Actuarial Assumed ROR CERS, CERS-H, and KERS-H	1,000	1,078	1,161	1,251	1,348	1,452	1,565	1,682	1,809	1,922
Actuarial Assumed ROR KERS and SPRS	$1,000	$1,078	$1,161	$1,251	$1,348	$1,452	$1,565	$1,682	$1,796	$1,890

The chart below shows annual returns for the Insurance Fund since June 30, 2009, where returns range from a minimum of -23.18% in 2009 to a maximum of 23.47% in 2011. As of June 30, 2018, the Insurance Fund portfolios earned an annualized total net return of 9.05% versus the benchmark annualized return of 8.48%. The chart below indicates that the performance of $1,000 invested in the Insurance portfolios would grow to $2,237, the policy benchmark to $2,358, and the actuarial assumption to $1,922 over the 10 year period.

Insurance Fund
As of June 30, 2018 (in Whole $)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Fund Return	-23.18%	15.46%	23.47%	-1.71%	10.11%	14.89%	1.86%	-0.09%	13.72%	9.05%
Performance BM	-23.15%	13.07%	26.93%	0.58%	11.05%	15.03%	3.79%	0.03%	13.55%	8.48%
Actuarial Assumed ROR	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.50%	7.50%	6.25%
KRS Insurance Fund	$1,000	$1,155	$1,426	$1,401	$1,543	$1,773	$1,806	$1,804	$2,051	$2,237
Performance Benchmark	1,000	1,131	1,435	1,444	1,603	1,844	1,914	1,914	2,174	2,358
Actuarial Assumed ROR	$1,000	$1,078	$1,161	$1,251	$1,348	$1,452	$1,565	$1,682	$1,809	$1,922

U.S. Equity

For the fiscal year ending June 30, 2018, the KRS Pension Funds' U.S. Equity portfolio posted a return of 14.52% versus the benchmark return of 14.78%. The KRS Insurance U.S. Equity portfolio posted a return of 14.42% compared to the benchmark return of 14.78%. Since inception, performance has remained sound. The Pension Fund's Public Equity portfolio has generated an annualized return of 11.36% throughout its duration against a benchmark with an annualized return of 11.39%. The Insurance Fund has returned 9.74% since inception, while the benchmark returned 9.61%.

Return on U.S. Equity
As of June 30, 2018

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Apr-84	14.52%	11.08%	12.66%	9.97%	11.36%
Performance Benchmark		14.78%	11.58%	13.29%	10.34%	11.39%
KRS Insurance	Jul-92	14.42%	11.40%	12.83%	9.91%	9.74%
Performance Benchmark		14.78%	11.58%	13.29%	10.19%	9.61%

Note: Pension and Insurance benchmark is the Russell 3000.

2018 Top 10 U.S. Equity Holdings
Pension Funds
As of June 30, 2018 ($ in Thousands)

Company	Shares	Market Value
APPLE INC	251,326	$46,523
MICROSOFT CORP	387,902	38,251
AMAZON.COM INC	21,243	36,109
FACEBOOK INC	132,506	25,749
BERKSHIRE HATHAWAY INC	130,213	24,304
ALPHABET INC-CL C	16,642	18,567
ALPHABET INC-CL A	16,173	18,262
JPMORGAN CHASE & CO	160,595	16,734
EXXON MOBIL CORP	195,232	16,152
VISA INC	120,062	15,902
Total	**1,431,894**	**$256,553**

2018 Top 10 U.S. Equity Holdings
Insurance Fund
As of June 30, 2018 ($ in Thousands)

Company	Shares	Market Value
APPLE INC	111,549	$20,649
MICROSOFT CORP	172,141	16,975
AMAZON.COM INC	9,428	16,026
FACEBOOK INC	58,820	11,430
BERKSHIRE HATHAWAY INC	58,116	10,847
ALPHABET INC-CL C	7,388	8,242
ALPHABET INC-CL A	7,180	8,108
JPMORGAN CHASE & CO	71,215	7,421
EXXON MOBIL CORP	86,586	7,163
VISA INC	53,313	7,061
Total	**635,736**	**$113,922**

A complete list of holdings is located at https://kyret.ky.gov/Investments/Investments-Library/Pages/Investments-Holdings.aspx.

Non-U.S. Equity

For the fiscal year ending June 30, 2018, the KRS Pension Funds' Non-U.S. Equity portfolio returned 10.86%, compared to its benchmark of 7.84%. The KRS Insurance Non-U.S. Equity portfolio returned 10.63% versus its benchmark of 7.84% during the same twelve-month period. Non-U.S. Equity investors have experienced a volatile period of returns over the past several years as a result of geopolitical issues, commodity price swings, and currency valuation moves. Even so, over the past five years both funds have outperformed their respective benchmarks. The KRS Pension and Insurance Funds posted annualized returns for the period of 7.24% and 7.13% respectively, compared to the benchmark's return of 6.50%. The Systems began their Non-U.S. Equity program in 2000. Since inception, the Pension Non-U.S. Equity portfolio has underperformed the benchmark, while the Insurance Non-U.S. Equity portfolio has outperformed the benchmark.

Return on Non-U.S. Equity
As of June 30, 2018

	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Jul-00	10.86%	6.85%	7.24%	3.74%	3.28%
Performance Benchmark		7.84%	5.60%	6.50%	3.26%	3.54%
KRS Insurance	Apr-00	10.63%	6.77%	7.13%	3.34%	3.25%
Performance Benchmark		7.84%	5.60%	6.50%	2.91%	2.69%

Note: Pension and Insurance benchmark is the MSCI ACWI ex-US IMI.

2018 Top 10 Non-U.S. Equity Holdings
Pension Funds
As of June 30, 2018 ($ in Thousands)

Company	Shares	Market Value
CSL LTD	148,170	$21,087
DIAGEO PLC	520,235	18,696
DON QUIJOTE HOLDINGS CO LTD	366,600	17,608
HDFC BANK LTD	159,750	16,777
UMICORE SA	291,260	16,714
SYMRISE AG	190,140	16,672
KBC GROUP NV	211,080	16,295
BOMBARDIER INC	3,918,990	15,492
FERGUSON PLC	186,099	15,110
START TODAY CO LTD	411,700	14,923
Total	**6,404,024**	**$169,374**

2018 Top 10 Non U.S. Equity Holdings
Insurance Fund
As of June 30, 2018 ($ in Thousands)

Company	Shares	Market Value
CSL LTD	64,290	$9,150
DIAGEO PLC	228,243	8,202
DON QUIJOTE HOLDINGS CO LTD	160,600	7,714
UMICORE SA	127,450	7,314
KBC GROUP NV	92,700	7,156
HDFC BANK LTD	67,520	7,091
SYMRISE AG	80,530	7,061
BOMBARDIER INC	1,721,890	6,807
FERGUSON PLC	81,810	6,643
UBISOFT ENTERTAINMENT SA	59,513	6,530
Total	**2,684,546**	**$73,668**

A complete list of holdings is located at https://kyret.ky.gov/Investments/Investments-Library/Pages/Investments-Holdings.aspx.

Fixed Income

For the fiscal year ending June 30, 2018, the KRS Pension Funds' Fixed Income portfolio returned 1.41% versus the benchmark return of 1.17%. The KRS Insurance Fixed Income portfolio posted a 1.34% rate of return, which outperformed the index by 0.17%. Over the five-year period, the Pension Funds underperformed the benchmark while the Insurance Fund lagged behind the benchmark of 4.40%. Over the ten-year period, the Pension Funds outperformed the benchmark by 0.11% while the Insurance Fund has trailed the benchmark by 0.07%.

Return on Fixed Income
As of June 30, 2018

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	April-84	1.41%	4.22%	4.21%	4.90%	7.50%
Performance Benchmark	December-99	1.17%	5.08%	4.40%	4.79%	7.32%
KRS Insurance	July-92	1.34%	4.10%	3.78%	4.42%	6.32%
Performance Benchmark	December-99	1.17%	5.08%	4.40%	4.49%	6.30%

Note: Pension and Insurance benchmark is Barclays Universal Index (Global) and Barclays U.S. High Yield (High Yield).

2018 Top 10 Fixed Income Holdings
Pension Funds
As of June 30, 2018 ($ in Thousands)

Issuer	Par Value/ Shares	Base Market Value
EB DV INT CRED BOND IDX FD	2,409	$881,383
INTERMEDIATE TERMCREDT BD INDX	9,156	493,981
MARATHON BLUEGRASS LP	313,254	313,254
U S TREASURY NOTE	215,210	212,215
EB TEMP IVN FD	170,533	170,533
CERBERUS KRS LEVERED LOAN OPP	85,666	85,666
H/2 CREDIT PARTNERS LP	85,337	85,337
MESA WEST CORE LENDING FUND LP	58,547	58,547
U S TREASURY BOND	54,630	56,457
COMMIT TO PUR FNMA SF MTG	42,177	39,968
Total	**1,036,919**	**$2,397,341**

2018 Top 10 Fixed Income Holdings
Insurance Fund
As of June 30, 2018 ($ in Thousands)

Issuer	Par Value/ Shares	Base Market Value
MARATHON BLUEGRASS LP	436,642	$436,642
EB DV INT CRED BOND IDX FD	971	355,255
U S TREASURY NOTE	302,985	298,772
INT TERM CREDIT BOND INDEX NL	5,945	218,217
EB TEMP IVN FD	185,343	185,343
U S TREASURY BOND	76,820	79,433
COMMIT TO PUR FNMA SF MTG	47,865	39,968
CERBERUS KRS LEVERED LOAN OPP	36,714	36,714
COMMIT TO PUR GNMA II JUMBOS	43,134	35,831
MESA WEST CORE LENDING FUND LP	34,694	34,694
Total	**1,171,113**	**$1,720,869**

Note: A complete list of holdings is located at https://kyret.ky.gov/Investments/Investments-Library/Pages/Investments-Holdings.aspx.

Private Equity

For the fiscal year ending June 30, 2018, the KRS Pension Funds' Private Equity portfolio posted a return of 14.5%. The portfolio consists primarily of investments within Private Equity limited partnerships. The Insurance Private Equity portfolio returned 18.3%. The Investment Committee determined that the short-term benchmark (1-, 3-, & 5-year) should match actual performance experienced by the portfolios because of the difficulty in assessing short-term returns. Performance is typically based on appraisals of a business's value, so managers are often slow to mark valuations up or down. This can distort relative performance against a public market benchmark when that index moves dramatically. A better indication of the performance of the program would be the mid- to longer-term time periods because businesses have likely been sold and transacted at a true price (rather than estimate of value), which provides a better performance measurement.

For the five years ending June 30, 2018, the Pension and Insurance Funds' Private Equity portfolios returned 12.9% and 15.59%, respectively. For the ten-year period, the Pension Fund trailed its benchmark by 4.6%; the Insurance Fund underperformed by 1.8%. Since its inception in October 1990, the Pension portfolio has underperformed compared its benchmark by 0.14%, while the Insurance portfolio has underperformed compared to its benchmark since its July 2001 inception by 0.5%.

Return on Private Equity
As of June 30, 2018

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Oct-90	14.52%	10.84%	12.87%	8.80%	11.17%
Performance Benchmark		14.52%	10.84%	12.87%	13.38%	11.31%
KRS Insurance	Jul-01	18.34%	13.85%	15.59%	11.02%	10.26%
Performance Benchmark		18.34%	13.85%	15.59%	12.80%	10.73%

Note: Pension and Insurance Benchmark 5 years and beyond is the Russell 3000 Lagged + 300bps. For shorter term periods, the benchmark matches actual performance experienced.

Real Estate

For the fiscal year ending June 30, 2018, the KRS Pension Funds' Real Estate portfolio saw returns of 11.22%, exceeding its benchmark return of 7.11%. The KRS Insurance Real Estate portfolio also surpassed the benchmark, returning 11.14% compared to 7.11%. For the five years ending June 30, 2018, both the Pension and Insurance Fund portfolios underperformed the benchmarks return by 1.19%, respectively.

Return on Real Estate
As of June 30, 2018

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Jul-84	11.22%	10.09%	9.23%	8.34%	6.10%
Performance Benchmark		7.11%	9.00%	10.42%	4.16%	6.46%
KRS Insurance	May-09	11.14%	10.44%	9.23%		9.22%
Performance Benchmark		7.11%	9.00%	10.42%		5.98%

Note: Pension and Insurance benchmark is NCREIF ODCE

Real Return

For the fiscal year ending June 30, 2018, the KRS Pension Funds' Real Return portfolio returned 1.96% versus its benchmark return of 1.23%. The KRS Insurance Real Return portfolio posted a return of 1.87%, while the benchmark returned 1.33% for the period. Over the past three years, the Pension and Insurance Real Return portfolios have outperformed their respective benchmarks by 1.35% and 1.03%.

Return on Real Return
As of June 30, 2018 ($ in Thousands)

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Jul-11	1.96%	3.49%	3.01%		3.70%
Performance Benchmark		1.23%	2.40%	1.72%		2.52%
KRS Insurance	Jul-11	1.87%	3.31%	2.84%		3.42%
Performance Benchmark		1.33%	2.28%	1.83%		2.60%

Note: Pension and Insurance benchmark is Custom - Allocation Specific.

Absolute Return and Alternative Assets

For the fiscal year ending June 30, 2018, the KRS Pension Funds' Absolute Return portfolio was 5.52% versus its benchmark which was 5.39%. The KRS Insurance Absolute Return portfolio returned 5.54%, while the benchmark was 5.39% for the period. For the five years ending June 30, 2018, the Pension and Insurance portfolios outperformed their respective benchmarks. Since inception, the Pension and Insurance portfolio has outperformed the benchmark by 1.06% and .99%, respectively. The portfolio was comprised of three fund-of-funds and 26 direct investments. However, over the past few fiscal years the fund-of-funds have been transitioned into direct relationships. As of June 30, 2018, the portfolios consist of only direct relationships.

Return on Absolute Return
As of June 30, 2018 ($ in Thousands)

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Apr-10	5.52%	1.40%	3.59%		4.15%
Performance Benchmark		5.39%	1.58%	3.15%		3.09%
KRS Insurance	Apr-10	5.54%	1.41%	3.59%		4.08%
Performance Benchmark		5.39%	1.58%	3.15%		3.09%

Note: Pension and Insurance benchmark is the HFRI Diversified FOF.

2018 Top 10 Alternative Assets Holdings
Pension Funds
As of June 30, 2018 ($ in Thousands)

Issuer	Sub Asset Class	Market Value
PRISMA CAPITAL	ABS RET	$383,946
PIMCO ALL ASSET FUND-INST	REAL RET	346,428
US TREAS-CPI INFLAT	REAL RET	218,095
BAY HILLS EMERGING PARTNERS	PVT EQ	108,890
STOCKBRIDGE FUND LP	REAL EST	85,523
HARRISON STREET CORE PROPERTY	REAL EST	79,865
PROLOGIS TARGETED US LOGISTICS	REAL EST	74,227
HORSLEY BRIDGE INTERNATIONAL V	PVT EQ	64,094
BLACKSTONE CAPITAL PARTNERS VI	PVT EQ	59,307
BAY HILLS EMERGING PTNRS II-B	PVT EQ	55,855
Total		**$1,476,230**

2018 Top 10 Alternative Assets Holdings
Insurance Fund
As of June 30, 2018 ($ in Thousands)

Issuer	Sub Asset Class	Market Value
PRISMA CAPITAL	ABS RET	$159,485
PIMCO ALL ASSET FUND-INST	REAL RET	141,217
US TREAS-CPI INFLAT	REAL RET	113,899
SECONDARY OPP FUND III LP	PVT EQ	53,757
BAY HILLS EMERGING PARTNERS	PVT EQ	44,279
KAYNE ANDERSON ENER FD VII LP	PVT EQ	42,664
BLACKSTONE CAPITAL PARTNERS VI	PVT EQ	39,538
STOCKBRIDGE FUND LP	REAL EST	36,950
HARRISON STREET CORE PROPERTY	REAL EST	34,664
PROLOGIS TARGETED US LOGISTICS	REAL EST	29,396
Total		**$695,849**

A complete list of holdings is located at https://kyret.ky.gov/Investments/Investments-Library/Pages/Investments-Holdings.aspx.

Cash

For the fiscal year ending June 30, 2018, the KRS Pension Funds' Cash portfolio returned 1.90%, outpacing its benchmark, the Citi-Group 3-month Treasury, by 0.57%. The KRS Insurance Cash portfolio also outperformed the index, posting a return of 1.57% during the same 12-month period.

As the accompanying table indicates, the longer-term results from the Cash portfolios have performed well compared to their benchmark. For the five years ending June 30, 2018, the Pension Fund's portfolio has outperformed its custom benchmark by 0.57% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.45% per year. The Insurance portfolio has also done very well, exceeding its benchmark return over the five-year and since inception periods by 0.20% and 0.13%, respectively.

Return on Cash
As of June 30, 2018

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Pension	Jan-88	1.90%	1.12%	0.82%	0.77%	3.59%
Performance Benchmark		1.33%	0.64%	0.39%	0.31%	3.14%
KRS Insurance	Jul-92	1.57%	0.83%	0.59%	0.49%	2.64%
Performance Benchmark		1.33%	0.64%	0.39%	0.31%	2.51%

Note: Pension and Insurance benchmark is the Citi Group 3-month Treasury.

Additional Schedules

In the following pages are additional schedules which include the assets under management for each firm the Systems employs, external investment-related expenses, commissions paid, and portfolio summaries for each of the five Pension and Insurance plans for the fiscal year ending June 30, 2018. This section is followed by a letter from KRS' investment consultants.

Investment Advisors & Assets Under Management
As of June 30, 2018 ($ in Thousands)

Advisor	Assets Under Management
American Century Investments	$507,417
AMERRA Capital Management	101,506
Anchorage Capital	39,045
Arbor Investments	4,711
Arcano Capital	35,501
ARES Capital	19,819
Arrowmark	17,600
Bay Hills Emerging Partners	240,493
Black Diamond Capital Management	45,513
BlackRock ACWI Ex-US	1,509,949
Blackstone Capital Partners	114,946
Boston Company	888
BNY IG Credit Unit	1,236,638
BNY Mellon Accruals	(544)
BSP Private Credit	44,425
BTG Pactual	25,111
Cash Accounts	595,341
Cerberus	122,380
CM Growth Capital Partners	11,780
Coatue	30,140
Columbia Asset Management	295,336
Columbia Capital	4,542
Credit Suisse	43,899
Crestview Partners	78,708
CVC Capital Partners	34,624
DAG Ventures	127,917
Davidson-Kempner	68,380
DB Secondary Opportunities	71,676
DCM	14,731
DivcoWest	6,166
DSAM Capital Partners	410
Essex Woodland	15,722
Franklin Templeton	382,730
Fundamental Partners	48,056
Gotham Neutral Strategies	19,013

Investment Advisors & Assets Under Management
As of June 30, 2018 ($ in Thousands)

Advisor	Assets Under Management
Governor's Lane	30,641
Green Equity Investors	136,524
Greenfield Acquisition Partners	53,719
GTCR Golder Rauner	7,283
H&F Spock	4,469
H/2 Credit Partners	118,524
Harrison Street	114,529
Harvest Partners	57,625
Hellman & Friedman	2,208
H.I.G Capital	41,540
Horsley Bridge International	72,068
IG Credit FI Unit	712,198
Institutional Venture Partners	11,405
Internal TIPS	340,669
Internal US Mid Cap	191,358
Invesco	1
JW Childs Equity	2
Kayne Anderson	85,329
KCP Capital	11,431
Keyhaven Capital Partners	41,087
Knighthead Capital	4,720
Lazard Asset Management	665,779
Levine Leichtman	80,171
Liquidalts H20 Force	22,828
Loomis, Sayles & Company	100
LSV Asset Management	567,872
Lubert-Adler	66,960
Luxor Capital	2,714
Magnetar Capital	25,642
Manulife Financial	679,986
Marathon Bluegrass	436,642
Matlin Patterson	22,102
Merit Capital Partners	7,450
Mesa West	108,841
MHR Insitituional Advisors	1,789
Mill Road Capital	20,300
Myriad Opportunities	68,430
New Mountain Partners	73,228
NISA Investment Advisors	822,305
Non-US Transition	1,487
Northern Trust Global Investments	357,910
Nuveen Real Asset	298,549
Oak Hill Partners	26,234

Investment Advisors & Assets Under Management
As of June 30, 2018 ($ in Thousands)

Advisor	Assets Under Management
Oaktree Capital Management	448
Pacific Alternative Asset Management Company	1,080
Patron Capital	20,379
Perimeter Park	7,300
PIMCO	487,856
Pine River Capital	808
Prisma Capital	543,431
Prologis	103,623
Prudential	23,059
Pyramis	2,910
River Road Asset Management	208,150
Riverside Capital	43,785
Rubenstein Capital	24,312
S&P 500	1,418,085
Scientific Beta	416,536
Senator PX	14,392
Shenkman Capital	352,257
SRS Partners	11,291
Stockbridge	121,664
Strategic Value Special Fund	5,124
Sun Capital Partners	527
Systematic Financial Management	355,924
Systematica Bluematrix	17,803
Taurus Mine Finance	25,713
Technology Crossover Ventures	582
Tenaska Power	760
Tide Point Partners	1,634
Tortoise Capital	196,765
Tourbillon Global	10,411
Transition KRS Internal Account	57
Tricadia Select	5,805
Triton Fund	31,052
VantagePoint Capital Partners	10,514
Vista Equity Partners	93,338
Walton Street	47,450
Warburg Pincus	26,699
Waterfall Investment	224,935
Wayzata Investment Partners	17,833
Westfield Capital	197,336
White Oak	44,187
Total	**$17,425,033**

Note: Totals reflect external manager assets under management, therefore totals will differ from Total Fair Values.

External Investment Expense - Pension Funds Asset Class/Type Breakdown
As of June 30, 2018 ($ in Thousands)

	US Public	Non US Equity	Fixed Income	Real Return	Private Equity	Real Estate	Absolute Return	Cash	Total
Fee for Long Balance	$-	$11	$1	$0	$1	$0	$-	$-	$13
Lending Fee Rebate	3,484	147	1,126	(45)	0	0	0	0	4,712
Investment Advisory Fees	2,604	7,843	13,677	5,511	8,785	5,211	6,646	0	50,277
Performance/Incentive Fees	0	0	0	662	22,328	2,618	6,442	0	32,050
Stock Loan Fees	174	94	72	105	0	0	0	0	445
Taxes and Insurance	0	32	7	12	119	0	0	0	170
Administration	195	0	105	0	0	0	0	702	1,002
Miscellaneous	10	15	30	700	3,900	1,724	0	0	6,379
Commission on Future Contracts	2	0	19	1	0	0	0	0	22
Consultant Fees	0	0	0	0	0	0	0	1,385	1,385
Custodial Fees	0	0	0	0	0	0	0	1,299	1,299
	$6,469	**$8,143**	**$15,037**	**$6,946**	**$35,133**	**$9,553**	**$13,088**	**$3,386**	**$97,754**

External Investment Expense - Insurance Fund Asset Class/Type Breakdown
As of June 30, 2018 ($ in Thousands)

	US Public	Non US Equity	Fixed Income	Real Return	Private Equity	Real Estate	Absolute Return	Cash	Total
Fee for Long Balance	$-	$3	$-	$0	$0	$0	$-	$-	$3
Lending Fee Rebate	1,528	45	292	(52)	0	0	0	0	1,813
Investment Advisory Fees	1,149	3,395	4,571	1,692	5,034	2,194	2,642	0	20,677
Performance/Incentive Fees	0	0	524	924	13,259	1,074	2,727	0	18,508
Stock Loan Fees	75	53	21	51	0	0	0	0	200
Administration	85	0	45	0	0	0	0	251	381
Miscellaneous	4	3	15	319	1,766	2,739	0	0	4,846
Taxes and Insurance	0	20	3	4	53	0	0	0	80
Commission on Future Contracts	1	0	7	1	0	0	0	0	9
Consultant Fees	0	0	0	0	0	0	0	569	569
Custodial Fees	0	0	0	0	0	0	0	846	846
	$2,842	**$3,519**	**$5,477**	**$2,939**	**$20,112**	**$6,007**	**$5,369**	**$1,666**	**$47,931**

The Governmental Accounting Standards Board recognizes that it may not be possible or cost-beneficial to separate certain investment expenses from either the related investment income or the general administrative expenses of the plan. KRS has displayed all investment related fees and expenses identifiable and captured by our custodial bank, BNY Mellon and KRS staff.

Schedule of Commissions Paid (Whole $)
As of June 30, 2018

Assets	Total Shares	Commissions Paid	Price per Share
U.S. Equities	62,071,136	$1,073,139	0.02
Non U.S. Equities	154,664,005	1,422,368	0.01
Total Commissions Paid	**216,735,141**	**$2,495,507**	**0.01**

External Investment Expenses
As of June 30, 2018 ($ in Thousands)

Expense	Fees Paid	Share of Assets
Portfolio Management		
Pension Funds	$95,071	65.26%
Insurance Fund	46,517	31.93%
Custody		
Pension Funds	1,299	0.89%
Insurance Fund	846	0.58%
Consultant		
Pension Funds	1,384	0.95%
Insurance Fund	568	0.39%
Total Pension Funds	**97,754**	**67.10%**
Total Insurance Fund	**47,931**	**32.90%**
Total Expenses	**$145,685**	**100.00%**

Fair Values By Plan - Pension
As of June 30, 2018 ($ in Thousands)

	KERS Non-Hazardous		KERS-Hazardous		CERS Non-Hazardous		CERS-Hazardous	
	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV
Assets								
Public Equity	**$662,793**	**33.02%**	**$255,197**	**39.39%**	**$2,779,070**	**39.51%**	**$928,262**	**39.57%**
US Equity	291,301	14.51%	115,515	17.83%	1,256,887	17.87%	419,500	17.88%
Non-US Equity	371,492	18.51%	139,682	21.56%	1,522,183	21.64%	508,762	21.69%
Fixed Income	**657,491**	**32.76%**	**196,561**	**30.34%**	**2,082,039**	**29.60%**	**688,636**	**29.35%**
Global	388,611	19.36%	131,051	20.23%	1,404,015	19.96%	465,903	19.86%
Credit	268,880	13.40%	65,510	10.11%	678,024	9.64%	222,733	9.49%
Real Return	160,946	8.02%	55,243	8.53%	610,523	8.68%	208,298	8.88%
Private Equity	238,186	11.87%	62,097	9.58%	666,110	9.47%	227,250	9.69%
Real Estate	67,252	3.35%	24,002	3.70%	253,421	3.60%	81,299	3.47%
Absolute Return	126,119	6.28%	33,733	5.21%	401,279	5.71%	127,289	5.43%
Cash	94,215	4.69%	21,085	3.25%	241,212	3.43%	84,900	3.62%
TOTAL PORTFOLIO	**$2,007,002**	**100.00%**	**$647,918**	**100.00%**	**$7,033,654**	**100.00%**	**$2,345,934**	**100.00%**

Insurance

	KERS Non-Hazardous		KERS-Hazardous		CERS Non-Hazardous		CERS-Hazardous	
	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV
Assets								
Public Equity	**$370,754**	**44.43%**	**$202,614**	**39.52%**	**$921,576**	**39.50%**	**$499,380**	**39.51%**
US Equity	170,728	20.46%	91,675	17.88%	417,048	17.87%	225,953	17.88%
Non-US Equity	200,026	23.97%	110,939	21.64%	504,528	21.62%	273,427	21.63%
Fixed Income	**253,315**	**30.36%**	**153,483**	**29.94%**	**665,283**	**28.51%**	**357,662**	**28.30%**
Global	155,662	18.66%	104,229	20.33%	455,325	19.51%	246,995	19.54%
Credit	97,653	11.70%	49,254	9.61%	209,958	9.00%	110,667	8.76%
Real Return	72,913	8.74%	43,055	8.40%	206,949	8.87%	107,545	8.51%
Private Equity	44,753	5.36%	49,164	9.59%	263,477	11.29%	148,301	11.73%
Real Estate	25,726	3.08%	18,847	3.68%	81,827	3.51%	44,780	3.54%
Absolute Return	45,137	5.41%	29,906	5.83%	128,067	5.49%	71,684	5.67%
Cash	21,787	2.61%	15,628	3.05%	66,195	2.84%	34,676	2.74%
TOTAL PORTFOLIO	**$834,385**	**100.00%**	**$512,697**	**100.00%**	**$2,333,374**	**100.00%**	**$1,264,028**	**100.00%**

Fair Values By Plan - Pension
As of June 30, 2018 ($ in Thousands)

	SPRS		Total	
	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV
Assets				
Public Equity	**$88,989**	**34.63%**	**$4,714,311**	**38.35%**
US Equity	39,919	15.53%	2,123,122	17.27%
Non-US Equity	49,070	19.10%	2,591,189	21.08%
Fixed Income	**89,941**	**35.00%**	**3,714,668**	**30.22%**
Global	62,565	24.35%	2,452,145	19.95%
Credit	27,376	10.65%	1,262,523	10.27%
Real Return	22,007	8.56%	1,057,017	8.60%
Private Equity	20,821	8.10%	1,214,464	9.88%
Real Estate	9,815	3.82%	435,789	3.55%
Absolute Return	13,285	5.17%	701,705	5.71%
Cash	12,108	4.71%	453,520	3.69%
TOTAL PORTFOLIO	**$256,966**	**100.00%**	**$12,291,474**	**100.00%**

Insurance

	SPRS INS		Total	
	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV
Assets				
Public Equity	**$75,755**	**40.07%**	**$2,070,079**	**40.32%**
US Equity	34,490	18.24%	$939,894	18.31%
Non-US Equity	41,265	21.82%	$1,130,185	22.01%
Fixed Income	**54,553**	**28.85%**	**$1,484,296**	**28.91%**
Global	37,081	19.61%	$999,292	19.46%
Credit	17,472	9.24%	$485,004	9.44%
Real Return	14,880	7.87%	$445,342	8.68%
Private Equity	22,499	11.90%	$528,194	10.29%
Real Estate	7,189	3.80%	$178,369	3.47%
Absolute Return	11,209	5.93%	$286,003	5.57%
Cash	2,990	1.58%	$141,276	2.76%
TOTAL PORTFOLIO	**$189,075**	**100.00%**	**$5,133,559**	**100.00%**

Industry-leading External Consultants

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Letters from Investment Consultants

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Bank of New York Mellon, New York, New York

Investment Consultants

ORG Real Property, Cleveland, Ohio
Wilshire Consultants, Pittsburgh, Pennsylvania

MEMORANDUM

To: Kentucky Retirement Systems

From: Wilshire Associates

Subject: 2017-18 Fiscal Year Investment Portfolio CAFR Letter

Date: September 14, 2018

Economic Review

In September 2017 the Federal Reserve confirmed that they would begin their balance sheet normalization program in the fourth quarter. The market reaction was muted, however, given the steady and telegraphed actions that the Fed has undertaken since the global financial crisis. The program is expected to reduce their holdings by $10B per month initially, increasing quarterly until reaching $50B per month in both Treasury and mortgage-backed securities. This slow but steady pace would mirror the Fed's approach to post-2008 conditions.

The third quarter of 2017 was the second consecutive quarter of real GDP growth in excess of 3%, annualized. Businesses seemed to be gaining confidence in the global economy and increased spending on equipment while growing inventories during the quarter, contributing more than three-quarters of a percent to real GDP growth. Real GDP growth clocked in at 2.9%, annualized, for the fourth quarter. The main contributor for the quarter was personal consumption expenditures, adding 2.8%. Growth in consumer spending was the strongest it had been in three years. However, the trade deficit widened considerably, detracting from domestic growth, as imports aided in satisfying consumer demand.

In the first quarter of calendar year 2018, strong jobs reports and wage growth had investors rethinking their inflation expectations and led to concerns that the Federal Reserve might accelerate increases in their short-term rate. While consumer spending is highly interest rate sensitive, the increases in short-term rates that the Federal Reserve had a muted affect to this point. Consumer sentiment remained strong, and low unemployment, rising wage growth and borrowing by households are all positive signals. Real GDP growth slowed during the first quarter of 2018, at 2.2% annualized, but rebounded to 4.2% in Q2 (as of the second estimate on August 29th, 2018) which would be the highest quarterly rate since the third quarter of 2014.

A common measurement of the slope of the yield curve, the 10-year minus 2-year (constant maturity) Treasuries spread, has been on the decline since late 2013 and ended FY2018 at 0.33%, below the 20-year average of 1.31. It should be noted that the last three times that the spread went negative (1989, 2000 and 2007) the U.S. economy entered a recession not long afterwards. Continued economic growth without upward movement in long rates could be an indication that market participants are expecting a slowdown on the horizon. On the other hand, in this era of unprecedented central bank intervention the signal may have lost its predictive power, especially if the Fed proceeds to push the curve into inversion by continuing to raise short-term rates.

Capital Markets Review

U.S. Equity

The U.S. stock market, as measured by the Wilshire 5000 Index, was up 4.6% for the third quarter of 2017 and gained a further 6.4% for the fourth quarter of 2017. The second half of 2017 continued the trend of low volatility, with the largest drawdown for the year being -2.75% and only 4 trading days where the market was down 1% or more. Several factors contributed to this success including a rebound in global economic growth and continued strength domestically.

Volatility returned in the first quarter of 2018, and the Wilshire 5000 Index was down -0.76% for the quarter. While the market had not experienced a daily loss of 2% or more in 2017, there were five such down days during the first quarter of 2018. The downturn was short lived, as the Wilshire 5000 Index was up 3.83% for the second quarter of 2018, rebounding from only the second negative quarter in nearly six years. Equity market volatility returned in the first half of 2018, but is approximately in line with long-term historical figures. Although there were more up days than down during the first half of 2018, the daily losses were more substantial. The average daily loss was approximately 34% greater than the average daily gain, a spread not seen in more than a decade. Strong gains in personal income and consumer spending during the second quarter left room for optimism.

Non-U.S. Equity

Equity markets outside of the U.S. produced very strong returns during the second half of 2017 in both developed and emerging markets. Gains were broad based across Europe with all of the major foreign markets in positive territory. Japan was one of the strongest developed markets during the quarter due to stimulative policies by both the Bank of Japan and the national government. Emerging Markets led all global equities during 2017 and produced their second consecutive positive annual gain.

Equity markets outside of the U.S. produced mixed results during the first half of 2018 while currency had a major effect on U.S.-based investors. As global growth slowed and the Federal Reserve adopted a more aggressive stance on interest rates, the U.S. dollar was up approximately 5% versus a basket of currencies in Q2 2018. The European Union faces a fresh challenge with political developments in Italy, already being rattled by the Greek financial crisis and Brexit in past years.

Fixed Income

The U.S. Treasury yield curve continued to flatten during the second half of 2017, with short to intermediate term rates rising and long-term yields relatively stable. The bellwether 10-year Treasury yield ended the year at 2.40%. Credit spreads tightened over this same period.

The U.S. Treasury yield curve rose in a parallel fashion during Q1 2018, with most maturities up 35 basis points, on average. The bellwether 10-year Treasury yield ended the quarter at 2.74%. The Federal Open Market Committee decided to increase its overnight rate by 25 basis points in March to a range of 1.50% to 1.75%. Credit spreads widened during the quarter but remain narrow relative to historical observations.

The U.S. Treasury yield curve rose but returned to a flattening trend during the 2nd quarter of 2018. The Federal Open Market Committee decided to increase its overnight rate by 25 basis points in June to a range

of 1.75% to 2.00%. Credit spreads widened during the quarter within investment grade credit but were little changed for the high yield market.

Real Assets

Real estate securities were up in the U.S. during the third and fourth quarters, with a stronger return globally due in part to a weakening dollar. Real estate declined in the U.S. during the first quarter of 2018, although March brought a strong rebound that continued into Q2 as real estate securities gained during the quarter on solid economic fundamentals.

Commodities were up for the second half of 2017 as crude oil rose 12.2% in Q3 and a further 16.9% in Q4. Commodity performance was mixed for the first quarter but crude oil continued to gain, rising 7.5%. Commodities were up big for the second quarter as crude oil rose 14.2%.

MLP returns were negative during the second half of 2017, and accelerated their decline in Q1 2018 after the Federal Energy Regulatory Commission (FERC) ruling in March moved to prevent interstate oil and natural gas pipelines from recovering the income tax allowance on cost of service rates. MLP returns bounced back in the second quarter of 2018, gaining +11.8%.

Asset Allocation Review

The Board approved changes to the Plans' target asset allocation at the June 7th, 2018 meeting, which maintain the probability of achieving the assumed rates of return while improving the liquidity profile of the portfolios. In addition, the new asset allocation policy for the significantly underfunded KERS Non-Hazardous and SPRS plans also decreases expected volatility and sensitivity to economic growth cycles. The new asset allocation targets align with the actuarial assumed rate of returns previously approved by the Board approved: 6.25% for the pension plans (CERS Non Hazardous, CERS Hazardous, and KERS Hazardous) and all of the insurance plans, and 5.25% for the KERS Non Hazardous and the State Police pension.

Assets are divided between three distinct buckets: growth, liquidity, and diversifying. This represents a slight change from previous asset allocations, which grouped by asset type (equity vs. fixed income) instead of risk type (growth oriented vs. safety oriented). This new distinction lead to high yield/credit-oriented fixed income to be counted with public and private equity allocations. Subsequently, the growth allocation target was reduced for all plans, with a corresponding increase to core fixed income to bolster the safety/liquidity bucket.

Pension Review

The KRS Pension Plan Composite ("Pension Plan") ended the fiscal year with assets of $12.3 billion as of June 30, 2018, up from $11.8 billion on June 30, 2017. The Pension Plan returned 8.56% net of fees for the year, outperforming the KRS Allocation Index (7.94%) and KRS IPS Benchmark (6.99%) in that time. The plan ranked in the 26th percentile of the TUCS Public Plan Total Return Universe, gross of fees, for the fiscal year. In addition, all of the plans outperformed their assumed rates of return for the year ended 6/30/2018.

Insurance Review

The KRS Insurance Plan Composite ("Insurance Plan") ended the fiscal year with assets of $5.1 billion as of June 30, 2018, up from $4.8 billion on June 30, 2017. The Insurance Plan returned 9.04% net of fees for the year, outperforming the KRS Allocation Index (8.51%) and KRS IPS Benchmark (7.41%) in that time. The plan ranked in the 17th percentile of the TUCS Public Plan Total Return Universe, gross of fees, for the fiscal year. In addition, all of the plans outperformed their assumed rates of return for the year ended 6/30/2018.

ORG Portfolio Management, LLC 3733 park east drive | cleveland, oh 44122-4334 | tel: 216.468.0055 | fax: 216.468.0054

August 28, 2018

ORG Portfolio Management LLC ("ORG") serves as the Real Estate Investment Consultant for Kentucky Retirement Systems ("KRS"). It is ORG's responsibility to present potential investment opportunities to the Investment Staff and Board and to make recommendations related to KRS' real estate portfolio. It is ORG' s commitment to assist KRS in building a successful long term real estate investment portfolio for the KRS pension fund members.

U.S. Market Overview

U.S. real estate fundamentals have continued to remain positive, however transaction volumes continue to fall, down 0.4% over the trailing 12 months (as of 2Q 2018) from the same period a year ago, as the market bid-ask spread seems to be widening. ORG believes this may be symptomatic of a broad softening of the markets where many would-be sellers are not achieving their target pricing and therefore electing to not transact.

For closed end real estate funds, the capital available to invest, or dry powder, has continued to increase year-over-year and has reached an all-time high of $278 billion. The debt markets have stabilized, financing is generally available, and a significant amount of capital has been raised for debt strategies. However, certain types of financing are difficult to obtain, which includes speculative development or highly leveraged transactions. ORG believes that interest rates will continue to rise, which should also cause capitalization rates to rise.

As of second quarter 2018, the capitalization rates for office and retail have increased and decreased for apartments and industrial over the previous second quarter in 2017.

Capitalization Rates	2nd Qtr. 2018	2nd Qtr. 2017	Basis Point Change
Total	4.46%	4.47%	-0.01
Apartments	4.16%	4.35%	-0.19
Retail	4.52%	4.45%	+0.07
Office	4.52%	4.42%	+0.10
Industrial/Warehouse	4.69%	4.86%	-0.17

Source: NCREIF – Current Value Weighted Capitalization Rates as of 6/30/2018.

Industrial Sector: The U.S. industrial sector has started to show signs of slowing down with rent growth decreasing 30 basis points from the first quarter to 1.3%. But, rents increased 5.6% year-over-year, exceeding the average annual growth rate of 5.0% since 2012, according to CoStar. Although rent growth moderated, the vacancy rate decreased and the supply increased over the previous quarter.

The square footage under construction in the U.S. expanded by 2.3% from the previous quarter at 253.5 million square feet. (Source: CoStar). As the supply continues to increase, the strong pre-leasing activity has helped keep the vacancy levels low at 4.9%. According to JLL, pre-leasing rates of new industrial product increased by 410 basis points from the first quarter reported at 48.9%.

ORG believes we are seeing several favorable trends benefiting the industrial sector. Most significantly, the impact of e-commerce on U.S. shopping habits and consumer expectations.

Apartment Sector: Transaction volumes totaled $34.5 billion for the quarter, a decrease of 6.9% from the same period in 2017, according to Real Capital Analytics. According to JLL, new supply has primarily been concentrated in urban submarkets where over the past five years, average annual completions as a percentage of existing inventory are nearly double those of suburban submarkets, at 2.2% and 1.2% respectively. As a result of this increasing urban supply, suburban apartments have attracted an estimated 64.4% ($90.0 billion) of apartment investment. ORG believes, the suburban apartment units are more affordable to a larger range of renters while still offering favorable amenities and are located in high demand areas.

For the second quarter, the U.S. Census Bureau stated that the homeownership rate was approximately 64.3%, which is slightly higher than the second quarter 2017 rate of 63.7%. While lower than the average homeownership rate of 65.3% (since 1965) the homeownership rate has been steadily increasing from previous lows of 62.9% in the second quarter of 2016. This lower than average homeownership rate is evidence of increased demand for apartment rentals.

ORG believes that this increased demand for apartments will continue for the foreseeable future due to a number of reasons, which include increasing interest rates, home prices, cost of construction and other factors. For example, according to the Federal Reserve Bank, student loan average balances now exceed $32,000 per borrower, which can severely encumber college graduates from saving for a home down payment. Also, according to the National Association of Home Builders, the cost of framing lumber costs over the past two years has increased approximately 63.6%.

Office Sector: Office demand is slowing for both cyclical and secular reasons. U.S. office transactions for the last four quarters is down 13.6% year-over-year. Vacancy rates have continued to stay flat in the second quarter of 2018. Supply is expected to outpace demand over the next couple of years. According to CoStar, the 12 month rent growth, for the second quarter, has decreased approximately 40 basis points from 2.2% in the second quarter of 2017.
Within the traditional office space, ORG sees a growing trend of space being converted into creative office use as well as development of creative office. In addition, office space per employee continues to decrease as tenants seek to occupy office space more efficiently with

creative work spaces. According to CoStar, the amount of square footage required per employee has dropped from 226 square feet to 215 square feet from 2Q13 to 2Q18.

In the U.S., 230,000 jobs have been added on average for the second quarter – driven by growth from the technology, advertising, media and information ("TAMI") and financial insurance and real estate ("FIRE") industries.

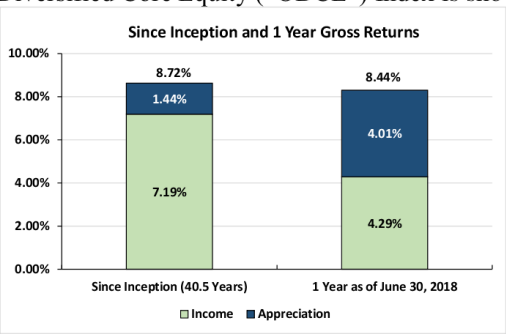
Retail Sector: Retail real estate performance continues to be affected by rapid technological change. During the first half of 2018, many retailers such as Toys "R" Us, Bon-Ton, Sears, Kmart, Sam's Club, Macy's and Winn-Dixie announced store closings. The most notable was Toys "R" Us which has announced over 40 million square feet in closures. According to CoStar, as of August 2018, an approximate 111 million square feet of retail space has been announced for closure. This highlights the growing threat that e-commerce poses to the consumer goods retail sector. E-commerce now represents 9.6% of total U.S. retail sales, which represents a 15.2% increase in from the previous year, according to the U.S. Census Bureau.

There continues to be an increase of importance on well-located brick-and-mortar locations. This is evident in the vacancies for Class A Malls (1-2%) and Class C Malls (8-9%), according to Costar. Additionally, CoStar indicated that the top 25% of U.S. malls accounted for 40% of total leasing volume over the past three years, despite having little availability.

According to Costar, only 6.2 million square feet was absorbed in the second quarter of 2018, down 32.7% from the same period in 2017. With new supply coming online as well as increased supply from store closures, ORG believes that there will continue to be stress on many retail properties.

ORG's View

Real estate markets in the U.S. have largely recovered from the 2008 financial crisis however we are still seeing signs of lower income returns compared to the historical income returns. The total returns gross of fees as reported by the National Council of Real Estate Investment Fiduciaries ("NCREIF") Open-End Diversified Core Equity ("ODCE") Index is shown below.



Source: NCREIF

The long-term Since Inception appreciation return for the ODCE is 1.44%. The current lower income return will require substantial rental rate growth in order for the ODCE funds to generate the projected 8-9% rate of return expected for Core over the long term. ORG continues to be concerned that the strategies targeting gateway core markets will underperform expectations for core real estate. These core gateway markets (San Francisco, Los Angeles, New York, Boston) are 'priced to perfection' with the income returns at an all-time low. ORG has also noted the impacts on e-commerce on the industrial and retail sectors and will continue to monitor the changes closely.

In Europe, outside a few gateway cities (London and Paris), the real estate fundamentals and capital markets continue to recover slower than the U.S.

As an alternative, ORG continues to recommend that investors focus on investment strategies where going in income returns are higher in certain overlooked strategies. The supply/demand fundamentals are favorable for the office market, although there are a few markets with cause for concern (Houston, Austin, Seattle).

ORG recommendations remain largely unchanged from prior periods. ORG recommends that a focus should be on sustainable and defensive cash flows by making investments with managers that target investments with existing cash flows or the creation of cash flows through value added investments. In addition, opportunities in real estate can be found in Western Europe, especially the United Kingdom outside of the primary asset types of office, retail, industrial and apartments.

ORG also recommends strategies in opportunistic funds where investors can capitalize on the continual de-leveraging of real estate that continues as debt originated during 2005-2007 continues to mature over the next several years. These opportunities to recapitalize high quality properties that have often been neglected could generate attractive risk adjusted returns over the next several years.

Kentucky Retirement Systems Real Estate Investments

All data below reflects activity through June 30, 2018.

2008-2010 Investment Activity: In December 2008, Kentucky Retirement Systems made $40 million commitments each to the following funds:

1) Mesa West Real Estate Income Fund II, L.P.
2) PRIMA Mortgage Investment Trust.
3) Walton Street Real Estate Fund VI, L.P. In July 2013, an additional $48.0 million was committed to PRIMA Mortgage Investment Trust increasing the total KRS commitment to $82.0 million. In April 2015, $15.5 million was withdrawn from PRIMA bring the total commitment down to $66.5 million and in January 2016, the entire remaining position was liquidated and the funds returned to KRS.

- Mesa West Real Estate Income Fund II – In December 2015, Mesa West completed the fund's liquidation. Since inception, $33.4 million was funded and Mesa West returned $46.5 million for an overall net IRR of 13.0% with a 1.4x equity multiple.

- PRIMA Mortgage Investment Trust – In the 1st quarter 2016, KRS withdrew its entire remaining investment in PRIMA of $76.1 million. Since inception, $82 million was funded and PRIMA returned $112.3 million for an overall net IRR of 8.6% with a 1.4x equity multiple.

- Walton Street Real Estate Fund VI – For the fiscal year ending June 30, 2018, Walton Street VI made no capital calls and returned $3.1 million in capital and gain distributions. Since inception, $31.9 million has been funded with $8.1 million remaining capital to be called.

2011 Investment Activity: Kentucky Retirement Systems made the following commitments:

1) $100 million to H/2 Credit Partners, L.P. in April with an additional $3 million commitment in October 2012. In 2013, $3.3 million was withdrawn from the fund for a total commitment of $99.7 million. In the 1st quarter 2016, KRS withdrew $28.5 million, which reduced the commitment to $71.2 million.
2) $101.9 million to Harrison Street Core Property Fund, L.P. in December with an additional $3.8 million commitment in October 2012 and $17.9 million commitment in June 2013 for a total commitment of $123.6 million. In the 1st quarter 2016, KRS withdrew $46.7 million which reduced the commitment to $76.8 million.

- H/2 Credit Partners – For the fiscal year ending June 30, 2018, H/2 Credit Partners made no distributions. This investment is fully funded.

- Harrison Street Core Property Fund – For the fiscal year ending June 30, 2018, Harrison Street returned $4.9 million of income distributions and of that $1.5 million was reinvested for the Insurance Fund. This investment is fully funded.

2012 Investment Activity: Kentucky Retirement Systems made the following commitments:

1) $52.5 million to Walton Street Real Estate Fund VII, L.P. in August with an additional $2.4 million commitment in October for a total commitment of $54.9 million.
2) $54.9 million to Greenfield Acquisition Partners VI, L.P. in December.
3) $83 million to Mesa West Core Lending Fund, L.P. in December 2012.

- Walton Street Real Estate Fund VII – For the fiscal year ending June 30, 2018, Walton VII made no capital calls and returned $14.2 million of capital, income and gain distributions. Since inception, $24.0 million has been funded with $30.9 million remaining capital to be called.

- Greenfield Acquisition Partners VI – For the fiscal year ending June 30, 2018, Greenfield VI made no capital calls and returned $4.4 million of capital, income and gain distributions. Since inception, $52.6 million has been funded with $2.3 million remaining capital to be called.

- Mesa West Core Lending Fund – For the fiscal year ending June 30, 2018, Mesa West Core returned $3.8 million of income distributions of which $2.1 million was reinvested into the Insurance Fund.

2013 Investment Activity: Kentucky Retirement Systems made the following commitments:

1) $30 million to Rubenstein Properties II, L.P. in July.
2) $30 million to H/2 Core Debt Fund, L.P. in August.
3) $70 million to Prologis Targeted U.S. Logistics Holdings, L.P. in October.
4) $95 million to Stockbridge Smart Markets, L.P. in December 2013.

- Rubenstein Properties II – For the fiscal year ending June 30, 2018, Rubenstein II made one capital call totaling $3.3 million and returned $3.1 million in capital and gain distributions. Since inception, $27.7 million has been funded with $2.3 million remaining capital to be called.

- H/2 Core Debt Fund –In the 4th quarter 2016, KRS withdrew $26.3 million and the investment was liquidated. Since inception, $47.2 million was funded and H/2 returned $127.5 million for an overall net IRR of 5.6% with a 1.1x equity multiple.

- Prologis Targeted U.S. Logistics Holdings – For the fiscal year ending June 30, 2018, Prologis distributed $3.5 million of income distributions. This investment is fully funded.

- Stockbridge Smart Markets – For the fiscal year ending June 30, 2018, Stockbridge Smart Markets distributed $3.2 million of which $1.4 million was reinvested into the Insurance Fund. This investment is fully funded.

2014 Investment Activity: Kentucky Retirement Systems made the following commitments:

1) $40 million to Lubert-Adler Real Estate Fund VII, L.P. in March with an additional commitment of $10 million in November.
2) $30 million to Divco West IV, L.P. in April.
3) $40 million to Greenfield Acquisition Partners VII, L.P. in July.

- Lubert-Adler Real Estate Fund VII – For the fiscal year ending June 30, 2018, Lubert-Adler VII made no capital calls and returned $9.0 million in capital, income and gain distributions. Since inception, $45.9 million has been funded with $4.1 million remaining to be called.

- Divco West IV – For the fiscal year ending June 30, 2018, Divco West IV made no capital calls and returned $6.3 million in capital, income and gain distributions. Since inception, $27.5 million has been funded with $2.5 million remaining to be called.

- Greenfield Acquisition Partners VII – For the fiscal year ending June 30, 2018, Greenfield VII made five capital calls totaling $8.8 million and returned $5.2 million in capital, income and gain distributions. Since inception, $30.0 million has been funded with $10.0 million remaining capital to be called.

2015 Investment Activity: Kentucky Retirement Systems made no additional commitments to the Real Estate Portfolio in 2015.

Withdrawal requests were sent to managers for the following investments: PRIMA – complete withdrawal of $76.1 million; Harrison Street Core Property Fund – withdrawal of $47.6 million; and H/2 Credit Partners - $28.5 million. Withdrawal requests were honored by the managers as noted in the individual fund write-up noted by year above.

2016 Investment Activity: Kentucky Retirement Systems made the following commitment:

1) €50 million (approximately $55.7 million) to Patron Capital, LP V in June.
2) $50 million to Mesa West Real Estate Income Fund IV, L.P in June.

- Patron Capital V – For the fiscal year ending June 30, 2018, Patron V made three capital calls totaling $11.8 million and had returned $1.7 million in capital distributions. Since inception, $18.9 million has been funded with approximately $36.8 million remaining capital to be called.

- Mesa West Real Estate Income IV - For the fiscal year ending June 30, 2018, Mesa West IV made two capital calls totaling $8.6 million and returned $0.8 million of income distributions. Since inception, $15.6 million has been funded with $34.4 million remaining capital to be called.

2017 Investment Activity: Kentucky Retirement Systems made the following commitments:

1) $100 million to Fundamental Partners III, L.P. in March.
2) $22.8 million to Lubert-Adler Real Estate Fund VII-B, L.P. in March with additional commitments of $7.8 million in August and $21.9 million in December 2017.

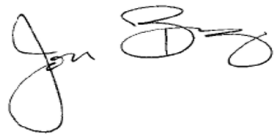
- Fundamental Partners III - For the fiscal year ending June 30, 2018, Fundamental III made two capital calls totaling $15.1 million and returned $5.3 million in income and gain distributions. Since inception, $49.7 million has been funded with $50.3 million remaining capital to be called.

- Lubert-Adler Real Estate Fund VII-B - For the fiscal year ending June 30, 2018, Lubert-Adler VII-B made three capital calls totaling $22.3 million and returned $0.9 million in income distributions. Since inception, $22.3 million has been funded with $30.2 million remaining capital to be called.

2018 Investment Activity: Kentucky Retirement Systems made no new commitments.

Please feel free to contact us regarding any of the information above.

Very truly yours,



Jonathan Berns
Principal

Edward Schwartz
Principal

ACTUARIAL

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Certification of Actuarial Results

Re: Certification for the Actuarial Results as of June 30, 2018.

Dear Board of Trustees:

Actuarial valuations are prepared annually as of June 30, for the Kentucky Employees Retirement System (KERS), the County Employees Retirement System (CERS), and the State Police Retirement System (SPRS). These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS) and document the calculated employer contribution rates as well as the changes in the financial condition since the prior actuarial valuation.

Under state statute, the Board of Trustees must approve the employer contribution rates determined by each actuarial valuation. The contribution rates are determined actuarially based upon the membership, plan assets, assumptions, and funding policies adopted by the KRS Board. The June 30, 2017 actuarial valuation was used by the Board of Trustees to certify the KERS and SPRS employer contribution rates for the biennial period beginning July 1, 2018 and ending June 30, 2020. The Board of Trustees uses this actuarial valuation (as of June 30, 2018) to certify the employer contribution rates for CERS for the fiscal year beginning July 1, 2019 and ending June 30, 2020.

FINANCING OBJECTIVES AND FUNDING POLICY

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree health insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

The contribution rate for each fund consists of a normal cost rate (which pays the current year's cost) and an amortization rate to finance the existing unfunded actuarial accrued liability (UAAL). In accordance with state statute, the amortization period is a closed 30-year funding period beginning with the June 30, 2013 actuarial valuation, which results in the use of a closed 25-year funding period for use in the calculation of the contribution rates for the June 30, 2018 actuarial valuation. Absent changes in benefits, assumptions, or material liability or investment gains or losses, the total contribution rate for the funds are expected to remain stable, as a percentage of payroll, in future years.

If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board may adjust the calculated rates before certifying them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

PROGRESS TOWARD REALIZATION OF FINANCING OBJECTIVES

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. In the absence of benefit improvements, assumption changes, or actuarial losses, it should increase over time, until it reaches at least 100%. As of June 30, 2018, the funded ratios for the pension and health insurance funds are as follows:

Funding Level

	2018		2017		2016	
System	Pension Fund	Insurance Fund	Pension Fund	Insurance Fund	Pension Fund	Insurance Fund
KERS Non-Hazardous	12.9%	36.4%	13.6%	30.7%	16.0%	30.3%
KERS Hazardous	55.5%	130.0%	54.1%	117.6%	59.7%	125.3%
CERS Non-Hazardous	52.7%	76.7%	52.8%	66.4%	59.0%	69.6%
CERS Hazardous	48.4%	74.6%	48.1%	66.9%	57.7%	72.9%
SPRS	27.1%	71.6%	27.0%	65.2%	30.3%	67.2%

ASSUMPTIONS AND METHODS

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the actuarial valuation. At any time, the Board may adopt updated assumptions for use in an actuarial valuation. There has been no change in assumptions since the prior actuarial valuation.

In our opinion, all the assumptions and methods adopted by the Board Trustees satisfy the requirements in the Actuarial Standards of Practice that are applicable for actuarial valuations of public retirement systems. The Board plans to have the next experience study conducted using the plan's experience for the five-year period ending June 30, 2018. The actuarial assumptions that result from that experience study will be first used to prepare the June 30, 2019 actuarial valuation.

It is our opinion that the actuarial assumptions used to perform this valuation are internally consistent and reasonably reflect the anticipated future experience of the System. The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

The benefit structure is outlined in this section of the annual report. GRS prepared the following schedules in the actuarial section: *Summary of Actuarial Valuation Results*, *Recommended Employer Contribution Rates, Summary of Actuarial Unfunded Liabilities, the Solvency Test, the Summary of Active Member Valuation Data, the Summary of Retired Member Valuation Data, Summary of the Assumptions and Methods, and the Summary of the Benefit Provisions*.

In addition, GRS prepared the following schedules in the financial section in accordance with GASB Statement No. 67: *Net Pension Liability Schedule*, *Discount Rate Sensitivity Analysis*, *Schedule of Changes in the Employers' Net Pension Liability*, *Schedule of Employers' Net Pension Liability*, and the *Schedule of Employers' Contributions*.

DATA

Member data for retired, active and inactive members was supplied as of June 30, 2018, by the KRS staff. The staff also supplied asset information as of June 30, 2018. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by the Systems.

CERTIFICATION

We certify that the information presented herein is accurate and fairly portrays the actuarial position of the Retirement Systems as of June 30, 2018. All of our work conforms with generally accepted actuarial principles and practices, and in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

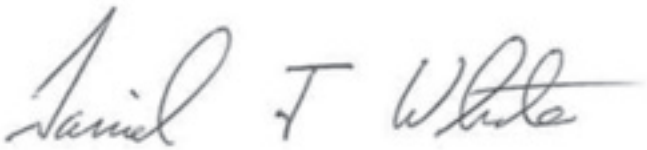
The undersigned are independent actuaries and consultants. Mr. Newton and Mr. White are Enrolled Actuaries. All three of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries. All are experienced in performing valuations for large public retirement systems.

Sincerely,

Sincerely,

Gabriel, Roeder, Smith & Co.

Joseph P. Newton, FSA, MAAA, EA
Senior Consultant



Daniel J. White, FSA, MAAA, EA
Senior Consultant

Janie Shaw, ASA, MAAA
Consultant

Summary of Actuarial Assumptions

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study. In general, the assumptions and methods used in the June 30, 2018 valuation are based on the most recent actuarial experience study for the five-year period ending June 30, 2013, submitted April 30, 2014, and adopted by the Board on December 4, 2014. The investment return, price inflation, and payroll growth assumption were adopted by the Board in May and July 2017 for use with the June 30, 2017 valuation in order to reflect future economic expectations.

1. Actuarial Cost Method: The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service is called the actuarial accrued liability. The unfunded actuarial accrued liability represents the difference between the actuarial accrued liability and the actuarial value of assets as of the valuation date. Relative to the Pension funds and the Insurance Fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial accrued liability (UAAL).

2. UAAL Amortization Method: Effective for the June 30, 2017 valuation, the amortization of any unfunded actuarial accrued liability is established using a level percent of pay amortization method and a 0.00% payroll growth assumption for the KERS and SPRS Retirement Systems and a 2.00% payroll growth assumption for the CERS Retirement System. The amortization period was reestablished as a closed 30-year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future and there are 25 years remaining as of June 30, 2018.

3. Asset Valuation Method: The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value.

4. Retiree Insurance Funding Policy: Effective for the June 30, 2017 valuation, the amortization of any unfunded actuarial accrued liability is established using a level percent of pay amortization method and a 0.00% payroll growth assumption for the KERS and SPRS Retirement Systems and a 2.00% payroll growth assumption for the CERS Retirement System. The amortization period was reestablished as a closed 30-year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future and there are 25 years remaining as of June 30, 2018.

5. Investment Return Assumption: The future investment earnings of plan assets are assumed to accumulate at a rate of 6.25% per annum for the CERS Non-Hazardous Retirement System, the CERS Hazardous Retirement System, the KERS Hazardous Retirement System, and all Insurance Systems. This rate consists of a 2.30% price inflation component and a 3.95% real rate of return component. The assumed rate of return for the KERS Non-Hazardous Retirement System and the State Police Retirement System is 5.25% and consists of a 2.30% inflationary component and a 2.95% real rate of return component.

6. Salary Increase Assumptions: Active member salaries are assumed to increase at the rates provided in Table 1. The rates include a 3.05% price inflation and productivity component, and an additional increase due to promotion based upon plan experience. The assumptions for additional increases due to promotion were adopted in 2014.

Table 1. Salary Increase Assumptions					
Service	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
0	15.50%	19.55%	11.55%	18.55%	15.55%
1	7.55%	7.55%	8.05%	9.05%	10.55%
2	5.05%	5.55%	4.55%	5.05%	8.55%
3	4.55%	5.05%	4.55%	4.30%	7.55%
4	4.55%	4.55%	4.05%	4.05%	6.55%
5	4.55%	4.05%	4.05%	3.55%	5.55%
6	4.05%	3.55%	3.80%	3.05%	5.05%
7	4.05%	3.55%	3.80%	3.05%	5.05%
8	4.05%	3.55%	3.55%	3.05%	4.05%
9	3.55%	3.55%	3.55%	3.05%	3.55%
10 & over	3.55%	3.55%	3.30%	3.05%	3.05%

7. Medical Inflation Rate Assumption: The costs for retiree medical premiums are assumed to increase according to the assumptions provided in Table 2. This assumption was adopted in 2017.

Table 2: Medical Inflation Rate Assumption (See footnotes 1 and 2)							
January 1	Non-Medicare Plans	Medicare Plans	Dollar Contribution 2	January 1	Non-Medicare Plans	Medicare Plans	Dollar Contribution 2
2020	7.00%	5.00%	1.50%	2027	5.25%	4.30%	1.50%
2021	6.75%	4.90%	1.50%	2028	5.00%	4.20%	1.50%
2022	6.50%	4.80%	1.50%	2029	4.75%	4.10%	1.50%
2023	6.25%	4.70%	1.50%	2030	4.50%	4.05%	1.50%
2024	6.00%	4.60%	1.50%	2031	4.25%	4.05%	1.50%
2025	5.75%	4.50%	1.50%	2032 & Over	4.05%	4.05%	1.50%
2026	5.50%	4.40%	1.50%				

1. All increases are assumed to occur on January 1. The 2019 premiums were known at the time of the valuation and were incorporated into the liability measurement.

2. Applies to members participating on or after July 1, 2003

8. Payroll Growth Assumption: For purposes of determining the amortization rate to finance the unfunded actuarial accrued liability, the active member payroll in KERS (Non-hazardous and Hazardous) and SPRS is assumed to increase at a rate of 0.00% per year and the active member payroll in CERS (Non-hazardous and Hazardous) is assumed to increase at the rate of 2.00% per annum. This assumption was adopted in 2017.

9. Retiree Cost of Living Adjustments (COLA): SB2 only allows the Cost of Living Adjustments (COLAs) to be awarded on a biennial basis if the State Legislature so authorizes and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

10. Retirement Rate Assumptions: The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 3. These assumptions were adopted in 2014.

Table 3: Retirement Rate Assumptions (See footnotes 1 - 9)

	Non-Hazardous				Hazardous					
Age	KERS 1	KERS 2	CERS 3	Service	KERS 4	KERS 5	CERS 6	CERS 7	SPRS 8	SPRS 9
55	8.00%		5.00%	20	40.00%		22.50%		22.00%	
56	8.00%		6.00%	21	40.00%		22.50%		22.00%	
57	8.00%		7.00%	22	40.00%		22.50%		22.00%	
58	8.00%		7.00%	23	40.00%		22.50%		28.00%	
59	8.00%		8.00%	24	40.00%		30.00%		28.00%	
60	10.00%	10.00%	9.00%	25	47.00%	40.00%	33.00%	22.50%	28.00%	22.00%
61	20.00%	20.00%	15.00%	26	47.00%	40.00%	33.00%	22.50%	28.00%	22.00%
62	20.00%	20.00%	18.00%	27	47.00%	40.00%	36.00%	22.50%	28.00%	22.00%
63	20.00%	20.00%	18.00%	28	47.00%	40.00%	39.00%	22.50%	44.00%	28.00%
64	20.00%	20.00%	18.00%	29	47.00%	40.00%	55.00%	30.00%	44.00%	28.00%
65	20.00%	25.00%	18.00%	30	47.00%	47.00%	33.00%	33.00%	44.00%	28.00%
66	20.00%	25.00%	18.00%	31	47.00%	47.00%	33.00%	33.00%	58.00%	28.00%
67	20.00%	25.00%	18.00%	32	50.00%	47.00%	50.00%	36.00%	58.00%	28.00%
68	20.00%	25.00%	18.00%	33	50.00%	47.00%	40.00%	39.00%	58.00%	44.00%
69	20.00%	25.00%	18.00%	34	50.00%	47.00%	40.00%	55.00%	58.00%	44.00%
70	20.00%	25.00%	18.00%	35	60.00%	47.00%	40.00%	33.00%	58.00%	44.00%
71	20.00%	25.00%	18.00%	36	60.00%	47.00%	40.00%	33.00%	58.00%	58.00%
72	20.00%	25.00%	18.00%	37	60.00%	50.00%	40.00%	50.00%	58.00%	58.00%
73	20.00%	25.00%	18.00%	38	60.00%	50.00%	40.00%	40.00%	58.00%	58.00%
74	20.00%	25.00%	18.00%	39	60.00%	50.00%	40.00%	40.00%	58.00%	58.00%
75+	100.00%	100.00%	100.00%	40	60.00%	60.00%	40.00%	40.00%	58.00%	58.00%

(1) For members participating before 9/1/2008. If service is at least 27 years, the rate is 35%.

(2) For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 35%.

(3) If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.

(4) For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.

(5) For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.

(6) For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.

(7) For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.

(8) For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 55.

(9) For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.

11. Mortality Assumptions: The mortality for active members is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%). The mortality table for healthy retired members and beneficiaries is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (female mortality rates are set back one year). The mortality table for disabled members is the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (male mortality rates are set back four years). At the time of the last experience study, performed as of June 30, 2013, this mortality assumption provided 37% and 19% margin for future improvement for males and females, respectively. This will be reviewed again when the next experience investigation is conducted during the 2018/2019 plan year.

Table 4: Sample Annual Rate of Mortality

	Active Member Mortality		Retired Member Mortality		Disabled Member Mortality	
Age	Males	Females	Males	Females	Males	Females
20	0.02%	0.01%	0.03%	0.02%		
22	0.02%	0.01%	0.04%	0.02%		
32	0.03%	0.01%	0.05%	0.03%		
42	0.06%	0.02%	0.12%	0.07%	2.17%	0.72%
52	0.13%	0.06%	0.26%	0.18%	2.54%	1.29%
62	0.39%	0.17%	0.78%	0.50%	3.50%	2.06%
72	1.12%	0.53%	2.24%	1.59%	4.68%	3.66%

12. Withdrawal Rates: The probability, or likelihood, of active members terminating employment prior to retirement is provided in Table 5. These assumptions were adopted in 2014.

Table 5: Selected Rates of Termination Prior to Retirement

	KERS Non-Hazardous	KERS Hazardous		CERS Non-Hazardous	CERS Hazardous		SPRS
Years of Service			Years of Service			Years of Service	
0	22.50%	25.00%	0	28.00%	20.50%	0	20.00%
1	15.50%	10.50%	1	16.00%	13.00%	1	7.00%
2	12.50%	7.50%	2	12.00%	10.50%	2-8	3.00%
3	10.50%	6.50%	3	10.00%	9.00%	9 & Over	2.50%
4	9.00%	5.50%	4	8.00%	8.00%		
5	6.50%	4.50%	5	6.00%	7.00%		
6	5.50%	3.00%	6	5.00%	7.00%		
7	5.00%	3.00%	7	5.00%	6.00%		
8	4.50%	3.00%	8-13	4.00%	6.00%		
9	4.50%	2.50%	14 & Over	3.00%	6.00%		
10	4.00%	2.50%					
11-12	4.00%	2.00%					
13-14	3.50%	2.00%					
15 & Over	3.00%	2.00%					

13. Assumption Changes Since Prior Valuation: None.

14. Rates of Disablement: KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. These assumptions were adopted in 2014.

Table 6: Sample Rates of Disablement

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Nearest Age	Probability	Probability	Probability	Probability	Probability
20	0.02%	0.03%	0.02%	0.05%	0.05%
30	0.03%	0.05%	0.03%	0.09%	0.09%
40	0.07%	0.10%	0.07%	0.20%	0.20%
50	0.19%	0.28%	0.19%	0.56%	0.56%
60	0.49%	0.73%	0.49%	1.46%	1.46%

Summary of Actuarial Valuation Results (in Whole $)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2018-2019)					
Pension Fund Contribution	74.54%	34.42%	22.52%	36.98%	120.54%
Insurance Fund Contribution	10.65%	0.00%	4.76%	9.52%	19.50%
Recommended Employer Contribution	85.19%	34.42%	27.28%	46.50%	140.04%

Funded Status as of Valuation Date As of June 30, 2018 ($ in Thousands)

Pension Fund					
Actuarial Liability	$15,675,232	$1,151,923	$13,191,505	$4,792,548	$989,528
Actuarial Value of Assets	2,019,278	639,262	6,950,225	2,321,721	268,259
Unfunded Liability on Actuarial Value of Assets	13,655,954	512,661	6,241,280	2,470,827	721,269
Funding Ratio on Actuarial Value of Assets	12.88%	55.50%	52.69%	48.44%	27.11%
Market Value of Assets	2,004,446	645,485	7,018,963	2,348,337	267,572
Unfunded Liability on Market Value of Assets	$13,670,786	$506,438	$6,172,542	$2,444,211	$721,956
Funding Ratio on Market Value of Assets	12.79%	56.04%	53.21%	49.00%	27.04%
Insurance Fund					
Actuarial Liability	$2,435,506	$393,481	$3,092,623	$1,684,028	$262,088
Actuarial Value of Assets	887,121	511,441	2,371,430	1,256,306	187,535
Unfunded Liability on Actuarial Value of Assets	1,548,385	(117,961)	721,193	427,722	74,553
Funding Ratio on Actuarial Value of Assets	36.42%	129.98%	76.68%	74.60%	71.55%
Market Value of Assets	891,205	519,072	2,414,126	1,280,982	190,847
Unfunded Liability on Market Value of Assets	$1,544,301	$(125,592)	$678,497	$403,046	$71,242
Funding Ratio on Market Value of Assets	36.59%	131.92%	78.06%	76.07%	72.82%
Member Data (See Footnotes 1 and 2)					
Number of Active Members	35,139	3,929	81,818	9,263	886
Total Annual Payroll (Active Members)1	$1,471,477	$158,213	$2,466,801	$533,618	$48,808
Average Annual Pay (Active Members)2	$41,876	$40,268	$30,150	$57,607	$55,088
Number of Retired Members & Beneficiaries	46,526	4,370	61,938	9,587	1,600
Average Annual Retirement Allowance2	$20,482	$14,657	$11,469	$25,626	$37,266
Number of Vested Inactive Members	13,230	886	17,621	954	176
Number of Inactive Members Due a Refund	37,205	4,841	69,539	2,113	323

(1) Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2018.

(2) Member data in actuarial section will differ from reported data in other CAFR sections. For this section, the data is reported by account instead of by person (ex: a member could have vested service in KERS, but is currently active in a CERS and is reported in two membership categories).

KERS Funds

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the tables below are the full funding rates presented by the actuary for 2009 through 2018 annual valuations. However, the actual employer contribution was less than the recommended rates for years 2009 through 2014. SB2 required full funding starting in Fiscal Year 2015.

Recommended Employer Contribution Rates
As of June 30, 2018

KERS (Non-Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2009	2010-2011	4.26%	17.51%	21.77%	16.81%	38.58%
6/30/2010	2011-2012	4.23%	20.07%	24.30%	16.41%	40.71%
6/30/2011	2012-2013	4.38%	23.65%	28.03%	16.52%	44.55%
6/30/2012	2013-2014	4.26%	28.31%	32.57%	12.71%	45.28%
6/30/2013	2014-2015	4.13%	26.71%	30.84%	7.93%	38.77%
6/30/2014	2015-2016	4.10%	29.47%	33.57%	7.74%	41.31%
6/30/2015	2016-2017	3.60%	35.33%	38.93%	8.35%	47.28%
6/30/2016	2017-2018	4.93%	37.05%	41.98%	8.41%	50.39%
6/30/2017	2018-2019	8.17%	62.86%	71.03%	12.40%	83.43%
6/30/2018	2019-2020	7.98%	66.56%	74.54%	10.65%	85.19%

KERS (Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2009	2010-2011	7.94%	6.17%	14.11%	20.26%	34.37%
6/30/2010	2011-2012	7.19%	6.92%	14.11%	19.73%	33.84%
6/30/2011	2012-2013	7.47%	8.69%	16.16%	19.73%	35.89%
6/30/2012	2013-2014	6.09%	10.91%	17.00%	11.84%	28.84%
6/30/2013	2014-2015	5.79%	10.58%	16.37%	9.97%	26.34%
6/30/2014	2015-2016	5.69%	11.40%	17.09%	7.12%	24.21%
6/30/2015	2016-2017	6.93%	14.15%	21.08%	2.74%	23.82%
6/30/2016	2017-2018	6.44%	14.04%	20.48%	1.34%	21.82%
6/30/2017	2018-2019	9.67%	24.72%	34.39%	2.46%	36.85%
6/30/2018	2019-2020	9.24%	25.18%	34.42%	0.00%	34.42%

(1) The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2011 through 2017 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008, the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation. House Bill 265 passed during the 2018 legislative session which reduced the FY 2019 employer contribution rate to 49.47% for Regional Mental Health/Mental Retardation Boards, Local District Health Departments, State Universities, Community Colleges and any other agencies eligible for voluntarily cease participating in the KERS non-hazardous fund.

CERS Funds

The Insurance Fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the tables below are the full funding rates presented by the actuary in the 2009 through 2018 annual valuations.

House Bill 362 was enacted during the 2018 legislative session that limits the annual increase in the CERS employer contribution rate over the prior fiscal year to 12% per year for the period of July 1, 2018 to June 30, 2028, or until the full actuarial required contribution is met.

Recommended Employer Contribution Rates
As of June 30, 2018

County Employees Retirement System

CERS (Non-Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2009	2010-2011	4.60%	5.43%	10.03%	9.78%	19.81%
6/30/2010	2011-2012	4.72%	6.98%	11.70%	9.59%	21.29%
6/30/2011	2012-2013	4.68%	7.94%	12.62%	8.59%	21.21%
6/30/2012	2013-2014	4.68%	9.06%	13.74%	5.84%	19.58%
6/30/2013	2014-2015	4.35%	8.40%	12.75%	5.35%	18.10%
6/30/2014	2015-2016	4.23%	8.19%	12.42%	4.88%	17.30%
6/30/2015	2016-2017	3.80%	10.15%	13.95%	4.93%	18.88%
6/30/2016	2017-2018	3.70%	10.78%	14.48%	4.70%	19.18%
6/30/2017	2018-2019	5.85%	15.99%	21.84%	6.21%	28.05%
6/30/2018	2019-2020	5.80%	16.72%	22.52%	4.76%	27.28%

CERS (Hazardous Employers)

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2009	2010-2011	7.56%	9.23%	16.79%	23.27%	40.06%
6/30/2010	2011-2012	7.31%	10.60%	17.91%	23.74%	41.65%
6/30/2011	2012-2013	7.40%	12.70%	20.10%	21.84%	41.94%
6/30/2012	2013-2014	6.44%	15.33%	21.77%	16.02%	37.79%
6/30/2013	2014-2015	6.35%	14.38%	20.73%	14.97%	35.70%
6/30/2014	2015-2016	6.21%	14.05%	20.26%	13.42%	33.68%
6/30/2015	2016-2017	4.52%	17.19%	21.71%	9.79%	31.50%
6/30/2016	2017-2018	4.40%	17.80%	22.20%	9.35%	31.55%
6/30/2017	2018-2019	6.78%	28.91%	35.69%	12.17%	47.86%
6/30/2018	2019-2020	6.35%	30.63%	36.98%	9.52%	46.50%

The Insurance Fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2011 through 2017 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance fund. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date. House Bill 362 passed during the 2018 legislative session which limited the CERS employer contribution rate increase to 12% per year over the prior fiscal year for the period of July 1, 2018 to June 30, 2028.

SPRS Funds

The contribution rates for SPRS shown in the below tables are the full funding rates presented by the actuary in the 2011 through 2017 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

Recommended Employer Contribution Rates
As of June 30, 2018

SPRS Employers

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
6/30/2009	2010-2011	8.12%	27.62%	35.74%	49.89%	85.63%
6/30/2010	2011-2012	7.75%	32.05%	39.80%	54.83%	94.63%
6/30/2011	2012-2013	8.12%	39.36%	47.48%	55.93%	103.41%
6/30/2012	2013-2014	8.14%	45.21%	53.35%	43.17%	96.52%
6/30/2013	2014-2015	8.46%	45.44%	53.90%	21.86%	75.76%
6/30/2014	2015-2016	8.39%	50.05%	58.44%	19.17%	77.61%
6/30/2015	2016-2017	8.77%	57.70%	66.47%	18.87%	85.34%
6/30/2016	2017-2018	11.16%	60.41%	71.57%	18.10%	89.67%
6/30/2017	2018-2019	16.21%	102.84%	119.05%	27.23%	146.28%
6/30/2018	2019-2020	15.81%	104.73%	120.54%	19.50%	140.04%

(1) The contribution rates for SPRS shown in the above table are the full funding rates presented by the actuary in the 2011 through 2017 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates. SB2 eliminate this phase-in beginning with the June 30, 2013 actuarial valuation.

Summary of Actuarial Unfunded Liabilities
As of June 30, 2018 ($ in Thousands)

KERS (Non-Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/2009	$10,658,550	$4,794,611	$3,584,196	$5,863,938	$7,074,353	44.98%	33.63%
6/30/2010	11,004,795	4,210,216	3,503,007	6,794,580	6,794,580	38.26%	31.83%
6/30/2011	11,182,142	3,726,986	3,538,878	7,455,156	7,643,264	33.33%	31.70%
6/30/2012	11,361,048	3,101,317	2,980,402	8,259,731	8,380,647	27.30%	26.20%
6/30/2013	11,386,602	2,636,123	2,747,428	8,750,479	8,639,174	23.15%	24.10%
6/30/2014	11,550,110	2,423,957	2,560,420	9,126,154	8,989,691	20.99%	22.20%
6/30/2015	12,359,673	2,350,990	2,307,858	10,008,683	10,051,815	19.02%	18.70%
6/30/2016	13,224,698	2,112,286	1,953,422	11,112,412	11,271,276	15.97%	14.80%
6/30/2017	15,591,641	2,123,623	2,056,870	13,468,018	13,534,771	13.62%	13.20%
6/30/2018	$15,675,232	$2,019,278	$2,004,446	$13,655,954	$13,670,786	12.88%	12.79%

KERS (Non-Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liabilities		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/2009	$4,507,326	$34,173	$365,771	$3,973,153	$4,141,554	11.11%	10.58%
6/30/2010	4,466,136	471,342	371,002	3,994,794	4,095,134	10.55%	8.31%
6/30/2011	4,280,090	451,620	433,305	3,828,469	3,846,784	10.55%	10.12%
6/30/2012	3,125,330	446,081	430,806	2,679,250	2,694,524	14.27%	13.78%
6/30/2013	2,128,754	497,584	509,364	1,631,170	1,619,390	23.37%	23.93%
6/30/2014	2,226,760	621,237	664,776	1,605,523	1,561,984	27.90%	29.85%
6/30/2015	2,413,705	695,018	687,684	1,718,687	1,726,021	28.79%	28.49%
6/30/2016	2,456,678	743,270	695,189	1,713,408	1,761,489	30.26%	28.30%
6/30/2017	2,683,496	823,918	817,370	1,859,578	1,866,126	30.70%	30.46%
6/30/2018	2,435,506	887,121	891,205	1,548,385	1,544,301	36.42%	36.59%

KERS (Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/2009	$674,412	$502,503	$388,913	$171,908	$285,498	74.51%	57.67%
6/30/2010	688,149	502,729	443,512	185,420	244,638	73.06%	64.45%
6/30/2011	721,293	510,749	510,628	210,545	210,665	70.81%	70.79%
6/30/2012	752,699	497,226	478,104	255,473	274,596	66.06%	63.52%
6/30/2013	783,981	505,657	513,162	278,324	270,818	64.50%	65.46%
6/30/2014	816,850	527,897	559,504	288,953	257,346	64.63%	68.50%
6/30/2015	895,433	556,688	550,120	338,746	345,313	62.17%	61.44%
6/30/2016	936,706	559,487	524,679	377,219	412,027	59.73%	56.01%
6/30/2017	1,121,420	607,159	601,529	514,261	519,891	54.14%	53.64%
6/30/2018	$1,151,923	$639,262	$645,485	$512,661	$506,438	55.50%	56.04%

KERS (Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/2009	$491,132	$301,635	$219,537	$189,498	$271,595	61.42%	44.70%
6/30/2010	493,298	314,427	271,396	178,870	221,902	63.74%	55.02%
6/30/2011	507,059	329,962	321,072	177,097	185,987	65.07%	63.32%
6/30/2012	384,592	345,574	333,298	39,018	51,294	89.85%	86.66%
6/30/2013	385,518	370,774	374,310	14,743	11,208	96.18%	97.09%
6/30/2014	396,987	419,396	435,504	(22,409)	(38,517)	105.64%	109.70%
6/30/2015	374,904	451,514	441,626	(76,610)	(66,722)	120.43%	117.80%
6/30/2016	377,745	473,160	440,596	(95,415)	(62,851)	125.26%	116.64%
6/30/2017	419,440	493,458	488,838	(74,019)	(69,399)	117.65%	116.55%
6/30/2018	$393,481	$511,441	$519,072	(117,960.70)	(125,591.72)	129.98%	131.92%

Summary of Actuarial Unfunded Liabilities
As of June 30, 2018 ($ in Thousands)

CERS (Non-Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/2009	$7,912,914	$5,650,790	$4,330,594	$2,262,124	$3,582,320	71.41%	54.73%
6/30/2010	8,459,022	5,546,857	4,819,934	2,912,165	3,639,089	65.57%	56.98%
6/30/2011	8,918,085	5,629,611	5,577,252	3,288,474	3,340,833	63.13%	62.54%
6/30/2012	9,139,568	5,547,236	5,372,770	3,592,332	3,766,798	60.69%	58.79%
6/30/2013	9,378,876	5,637,094	5,780,830	3,741,782	3,598,046	60.10%	61.64%
6/30/2014	9,772,523	6,117,134	6,507,300	3,655,389	3,265,222	62.60%	66.59%
6/30/2015	10,740,325	6,474,849	6,416,854	4,265,477	4,323,472	60.29%	59.75%
6/30/2016	11,076,457	6,535,372	6,106,187	4,541,084	4,970,270	59.00%	55.13%
6/30/2017	12,803,509	6,764,873	6,687,237	6,038,636	6,116,272	52.84%	52.23%
6/30/2018	$13,191,505	$6,950,225	$7,018,963	$6,241,280	$6,172,542	52.69%	53.21%

CERS (Non-Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/2009	$3,070,386	$1,216,632	$894,906	$1,853,754	$2,175,480	39.62%	29.15%
6/30/2010	3,158,340	1,293,039	1,096,582	1,865,302	2,061,758	40.94%	34.72%
6/30/2011	3,073,973	1,433,451	1,451,984	1,640,522	1,621,989	46.63%	47.23%
6/30/2012	2,370,771	1,512,854	1,439,226	857,917	931,545	63.81%	60.71%
6/30/2013	2,443,894	1,628,244	1,633,697	815,650	810,197	66.62%	66.85%
6/30/2014	2,616,915	1,831,199	1,899,557	785,715	717,357	69.98%	72.59%
6/30/2015	2,907,827	1,997,456	1,948,454	910,371	959,373	68.69%	67.01%
6/30/2016	2,988,121	2,079,811	1,943,757	908,310	1,044,364	69.60%	65.05%
6/30/2017	3,355,151	2,227,401	2,212,536	1,127,750	1,142,616	66.39%	65.94%
6/30/2018	$3,092,623	$2,371,430	$2,414,126	$721,193	$678,497	76.68%	78.06%

CERS (Hazardous Pension Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/2009	$2,578,445	$1,751,488	$1,320,523	$826,957	$1,257,922	67.93%	51.21%
6/30/2010	2,672,152	1,749,464	1,506,787	922,688	1,165,364	65.47%	56.39%
6/30/2011	2,859,041	1,779,545	1,760,603	1,079,496	1,098,438	62.24%	61.58%
6/30/2012	3,009,992	1,747,379	1,677,940	1,262,613	1,332,052	58.05%	55.75%
6/30/2013	3,124,206	1,801,691	1,830,658	1,322,514	1,293,548	57.67%	58.60%
6/30/2014	3,288,826	1,967,640	2,082,998	1,321,186	1,205,827	59.83%	63.34%
6/30/2015	3,613,308	2,096,783	2,073,397	1,516,525	1,539,911	58.03%	57.38%
6/30/2016	3,704,456	2,139,119	2,003,669	1,565,337	1,700,787	57.74%	54.09%
6/30/2017	4,649,047	2,238,320	2,217,996	2,410,726	2,431,051	48.15%	47.71%
6/30/2018	$4,792,548	$2,321,721	$2,348,337	$2,470,827	$2,444,211	48.44%	49.00%

CERS (Hazardous Insurance Fund)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/2009	$1,593,548	$651,131	$483,270	$942,417	$1,110,278	40.86%	30.33%
6/30/2010	1,674,703	692,770	586,827	981,933	1,087,876	41.37%	35.04%
6/30/2011	1,647,703	770,790	774,509	876,912	873,194	46.78%	47.01%
6/30/2012	1,364,843	829,041	788,071	535,802	576,772	60.74%	57.74%
6/30/2013	1,437,333	892,774	894,232	544,558	543,101	62.11%	62.21%
6/30/2014	1,493,864	997,733	1,034,308	496,131	459,557	66.79%	69.24%
6/30/2015	1,504,015	1,087,707	1,061,561	416,308	442,454	72.32%	70.58%
6/30/2016	1,558,818	1,135,784	1,062,602	423,034	496,216	72.86%	68.17%
6/30/2017	1,788,433	1,196,780	1,189,001	591,653	599,431	66.92%	66.48%
6/30/2018	$1,684,028	$1,256,306	$1,280,982	$427,722	$403,046	74.60%	79.07%

Summary of Actuarial Unfunded Liabilities
As of June 30, 2018 ($ in Thousands)

SPRS (Pension)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/2009	$602,329	$329,967	$256,571	$272,362	$345,758	54.78%	42.60%
6/30/2010	612,445	304,577	264,944	307,868	347,501	49.73%	43.26%
6/30/2011	634,379	285,581	279,934	348,799	354,445	45.02%	44.13%
6/30/2012	647,689	259,792	252,897	387,897	394,792	40.11%	39.05%
6/30/2013	651,581	241,800	248,559	409,780	403,022	37.11%	38.15%
6/30/2014	681,118	242,742	260,763	438,377	420,355	35.64%	38.28%
6/30/2015	734,156	248,388	246,968	485,769	487,188	33.83%	33.64%
6/30/2016	775,160	234,568	217,594	540,593	557,566	30.26%	28.07%
6/30/2017	967,145	261,320	255,737	705,824	711,408	27.02%	26.44%
6/30/2018	$989,528	$268,259	$267,572	$721,269	$721,956	27.11%	27.04%

SPRS (Insurance)

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/2009	$364,031	$123,527	$93,687	$240,504	$270,344	33.93%	25.74%
6/30/2010	434,960	121,175	104,527	313,785	330,434	27.86%	24.03%
6/30/2011	438,428	123,687	127,368	314,740	311,060	28.21%	29.05%
6/30/2012	333,904	124,372	125,568	209,532	208,336	37.25%	37.61%
6/30/2013	222,327	136,321	142,831	86,006	79,496	61.32%	64.24%
6/30/2014	234,271	155,595	165,168	78,676	69,103	66.42%	70.50%
6/30/2015	254,839	167,775	165,018	87,064	89,821	65.84%	64.75%
6/30/2016	257,197	172,704	161,366	84,494	95,831	67.15%	62.74%
6/30/2017	276,641	180,464	178,838	96,178	97,803	65.23%	64.65%
6/30/2018	$262,088	$187,535	$190,847	$74,553	$71,242	71.55%	72.82%

(1) Valuation Balance Sheets give the basis for determining the percentage rates for contributions to be made by employers.

Solvency Test
As of June 30, 2018 ($ in Thousands)

KERS (Non-Hazardous Pension Fund)

	Actuarial Liabilities						
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
					(1)	(2)	(3)
6/30/2009	$793,575	$8,205,156	$1,659,819	$4,794,611	100.00%	48.80%	0.00%
6/30/2010	869,484	8,329,758	1,805,553	4,210,216	100.00%	40.10%	0.00%
6/30/2011	916,569	8,482,714	1,782,859	3,726,986	100.00%	33.10%	0.00%
6/30/2012	885,137	8,708,536	1,767,375	3,101,317	100.00%	25.40%	0.00%
6/30/2013	922,928	8,709,324	1,754,351	2,636,123	100.00%	19.70%	0.00%
6/30/2014	928,558	8,870,693	1,750,860	2,423,957	100.00%	16.90%	0.00%
6/30/2015	925,934	9,437,468	1,996,271	2,350,990	100.00%	15.10%	0.00%
6/30/2016	920,120	10,010,168	2,294,410	2,112,286	100.00%	11.90%	0.00%
6/30/2017	934,559	11,608,346	3,048,736	2,123,623	100.00%	10.20%	0.00%
6/30/2018	$892,033	$11,929,018	$2,854,180	$2,019,278	100.00%	9.40%	0.00%

KERS (Non-Hazardous Insurance Fund)

	Actuarial Liabilities						
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
					(1)	(2)	(3)
6/30/2009	$-	$2,861,867	$1,645,458	$534,173	100.00%	18.70%	0.00%
6/30/2010	-	2,744,534	1,721,602	471,342	100.00%	17.20%	0.00%
6/30/2011	-	2,568,003	1,712,087	451,620	100.00%	17.60%	0.00%
6/30/2012	-	1,924,069	1,201,262	446,081	100.00%	23.20%	0.00%
6/30/2013	-	1,338,773	789,981	497,584	100.00%	37.20%	0.00%
6/30/2014	-	1,425,605	801,155	621,237	100.00%	43.60%	0.00%
6/30/2015	-	1,428,350	985,355	695,018	100.00%	48.70%	0.00%
6/30/2016	-	1,483,636	973,042	743,270	100.00%	50.10%	0.00%
6/30/2017	-	1,575,294	1,108,202	823,918	100.00%	52.30%	0.00%
6/30/2018	$-	$1,475,954	$959,552	$887,121	100.00%	60.10%	0.00%

KERS (Hazardous Pension Fund)

	Actuarial Liabilities						
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
					(1)	(2)	(3)
6/30/2009	$87,780	$413,972	$172,659	$502,503	100.00%	100.00%	0.40%
6/30/2010	88,511	441,657	157,981	502,729	100.00%	93.80%	0.00%
6/30/2011	86,614	490,395	144,284	510,749	100.00%	86.50%	0.00%
6/30/2012	82,101	521,689	148,910	497,226	100.00%	79.60%	0.00%
6/30/2013	82,146	545,597	156,238	505,657	100.00%	77.60%	0.00%
6/30/2014	83,664	581,231	151,955	527,897	100.00%	76.40%	0.00%
6/30/2015	83,606	633,189	178,638	556,688	100.00%	74.70%	0.00%
6/30/2016	86,705	648,482	201,519	559,487	100.00%	72.90%	0.00%
6/30/2017	93,350	746,350	281,720	607,159	100.00%	68.80%	0.00%
6/30/2018	$89,106	$810,311	$252,506	$639,262	100.00%	67.90%	0.00%

KERS (Hazardous Insurance Fund)

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/2009	$-	$242,123	$249,009	$301,635	100.00%	100.00%	23.90%
6/30/2010	-	268,511	224,787	314,427	100.00%	100.00%	20.40%
6/30/2011	-	285,540	221,519	329,962	100.00%	100.00%	20.10%
6/30/2012	-	196,579	188,013	345,574	100.00%	100.00%	79.20%
6/30/2013	-	202,032	183,486	370,774	100.00%	100.00%	92.00%
6/30/2014	-	206,477	190,509	419,396	100.00%	100.00%	100.00%
6/30/2015	-	221,115	153,789	451,514	100.00%	100.00%	100.00%
6/30/2016	-	228,361	149,384	473,160	100.00%	100.00%	100.00%
6/30/2017	-	243,816	175,623	493,458	100.00%	100.00%	100.00%
6/30/2018	$-	$248,775	$144,706	$511,441	100.00%	100.00%	100.00%

Solvency Test
As of June 30, 2018 ($ in Thousands)

CERS (Non-Hazardous Pension Fund)

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/2009	$991,629	$4,542,483	$2,378,802	$5,650,790	100.00%	100.00%	4.90%
6/30/2010	1,063,747	4,890,659	2,504,616	5,546,857	100.00%	91.70%	0.00%
6/30/2011	1,110,967	5,209,784	2,597,334	5,629,611	100.00%	86.70%	0.00%
6/30/2012	1,117,549	5,416,933	2,605,085	5,547,236	100.00%	81.80%	0.00%
6/30/2013	1,149,611	5,638,371	2,590,894	5,637,094	100.00%	79.60%	0.00%
6/30/2014	1,204,383	5,873,279	2,694,860	6,117,134	100.00%	83.60%	0.00%
6/30/2015	1,216,585	6,489,863	3,033,878	6,474,849	100.00%	81.00%	0.00%
6/30/2016	1,231,027	6,785,530	3,059,900	6,535,372	100.00%	78.20%	0.00%
6/30/2017	1,277,432	7,731,682	3,794,396	6,764,873	100.00%	71.00%	0.00%
6/30/2018	$1,269,287	$8,196,719	$3,725,500	$6,950,225	100.00%	69.30%	0.00%

CERS (Non-Hazardous Insurance Fund)

Valuation Date	Actuarial Liabilities (1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for (1)	(2)	(3)
6/30/2009	$-	$1,478,783	$1,591,603	$1,216,632	100.00%	82.30%	0.00%
6/30/2010		1,526,533	1,631,807	1,293,039	100.00%	84.70%	0.00%
6/30/2011	-	1,460,808	1,613,165	1,433,451	100.00%	98.10%	0.00%
6/30/2012	-	1,146,908	1,223,864	1,512,854	100.00%	100.00%	29.90%
6/30/2013	-	1,205,599	1,238,295	1,628,244	100.00%	100.00%	34.10%
6/30/2014	-	1,318,183	1,298,732	1,831,199	100.00%	100.00%	39.50%
6/30/2015	-	1,372,597	1,535,231	1,997,456	100.00%	100.00%	40.70%
6/30/2016	-	1,484,937	1,503,184	2,079,811	100.00%	100.00%	39.60%
6/30/2017	-	1,603,438	1,751,713	2,227,401	100.00%	100.00%	35.60%
6/30/2018	$-	$1,525,322	$1,567,301	$2,371,430	100.00%	100.00%	54.00%

CERS (Hazardous Pension Fund)

	Actuarial Liabilities						
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
					(1)	(2)	(3)
6/30/2009	$350,309	$1,540,263	$687,873	$1,751,488	100.00%	91.00%	0.00%
6/30/2010	369,613	1,622,684	679,855	1,749,464	100.00%	85.00%	0.00%
6/30/2011	382,072	1,768,512	708,457	1,779,545	100.00%	79.00%	0.00%
6/30/2012	381,672	1,889,884	738,435	1,747,379	100.00%	72.30%	0.00%
6/30/2013	390,471	1,988,030	745,705	1,801,691	100.00%	71.00%	0.00%
6/30/2014	415,070	2,077,517	796,239	1,967,640	100.00%	74.70%	0.00%
6/30/2015	422,359	2,297,703	893,246	2,096,783	100.00%	72.90%	0.00%
6/30/2016	428,713	2,388,712	887,031	2,139,119	100.00%	71.60%	0.00%
6/30/2017	458,808	2,910,601	1,279,638	2,238,320	100.00%	61.10%	0.00%
6/30/2018	$442,637	$3,151,057	$1,198,853	$2,321,721	100.00%	59.60%	0.00%

CERS (Hazardous Insurance Fund)

	Actuarial Liabilities						
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
					(1)	(2)	(3)
6/30/2009	$-	$725,900	$867,648	$651,131	100.00%	89.70%	0.00%
6/30/2010	-	814,300	860,403	692,770	100.00%	85.10%	0.00%
6/30/2011	-	771,631	876,071	770,790	100.00%	99.90%	0.00%
6/30/2012	-	575,099	789,744	829,041	100.00%	100.00%	32.20%
6/30/2013	-	660,955	776,377	892,774	100.00%	100.00%	29.90%
6/30/2014	-	700,312	793,553	997,733	100.00%	100.00%	37.50%
6/30/2015	-	790,714	713,301	1,087,707	100.00%	100.00%	41.60%
6/30/2016	-	879,360	679,458	1,135,784	100.00%	100.00%	37.70%
6/30/2017	-	994,764	793,669	1,196,780	100.00%	100.00%	25.50%
6/30/2018	$-	$1,001,717	$682,311	$1,256,306	100.00%	100.00%	37.30%

Solvency Test
As of June 30, 2018 ($ in Thousands)

SPRS (Pension Fund)

	Actuarial Liabilities						
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
					(1)	(2)	(3)
6/30/2009	$41,664	$459,585	$101,079	$329,967	100.00%	62.70%	0.00%
6/30/2010	42,012	475,893	94,541	304,577	100.00%	55.20%	0.00%
6/30/2011	43,574	499,194	91,611	285,581	100.00%	48.50%	0.00%
6/30/2012	41,139	523,017	83,533	259,792	100.00%	41.80%	0.00%
6/30/2013	39,788	535,720	76,072	241,800	100.00%	37.70%	0.00%
6/30/2014	41,831	563,011	76,276	242,742	100.00%	35.70%	0.00%
6/30/2015	41,567	605,855	86,734	248,388	100.00%	34.10%	0.00%
6/30/2016	41,871	636,499	96,791	234,568	100.00%	30.30%	0.00%
6/30/2017	44,798	773,982	148,365	261,320	100.00%	28.00%	0.00%
6/30/2018	$43,835	$800,788	$144,905	$268,259	100.00%	28.00%	0.00%

SPRS (Insurance Fund)

	Actuarial Liabilities						
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuarial Liabilities Covered by Actuarial Assets for		
					(1)	(2)	(3)
6/30/2009	$-	$167,091	$196,940	$123,527	100.00%	73.90%	0.00%
6/30/2010	-	253,440	181,380	121,175	100.00%	47.80%	0.00%
6/30/2011	-	252,440	185,988	123,687	100.00%	49.00%	0.00%
6/30/2012	-	190,259	143,645	124,372	100.00%	65.40%	0.00%
6/30/2013	-	139,509	82,818	136,321	100.00%	97.70%	0.00%
6/30/2014	-	143,402	90,869	155,595	100.00%	100.00%	13.40%
6/30/2015	-	170,447	84,392	167,775	100.00%	98.40%	0.00%
6/30/2016	-	177,094	80,103	172,704	100.00%	97.50%	0.00%
6/30/2017	-	186,390	90,251	180,464	100.00%	96.80%	0.00%
6/30/2018	$-	$183,151	$78,937	$187,535	100.00%	100.00%	5.60%

Active Member Valuation

Methodology The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

Summary of Active Member Valuation Data
As of June 30, 2018 (in Whole $)

KERS Non-Hazardous Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Covered Payroll [1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/2009	334	46,060	$1,754,413	$38,090	(0.30)%	43.00	8.70
6/30/2010	334	47,090	1,815,146	38,546	1.20%	43.40	9.00
6/30/2011	427	46,617	1,731,633	37,146	(3.60)%	43.80	9.40
6/30/2012	286	42,196	1,644,897	38,982	4.90%	44.30	9.80
6/30/2013	285	42,226	1,644,409	38,943	(0.10)%	44.50	10.10
6/30/2014	353	40,365	1,577,496	39,081	0.40%	44.80	10.50
6/30/2015	348	39,056	1,544,234	39,539	1.20%	45.00	10.60
6/30/2016	349	37,779	1,529,249	40,479	2.40%	45.10	10.70
6/30/2017	342	37,234	1,531,535	41,133	1.62%	45.40	10.90
6/30/2018	338	35,139	$1,471,477	$41,876	1.81%	45.20	10.80

KERS Hazardous Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Covered Payroll [1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/2009	20	4,334	$146,044	$33,697	(0.50)%	41.40	7.00
6/30/2010	18	4,291	143,558	33,456	(0.70)%	41.40	7.00
6/30/2011	16	4,291	133,054	31,008	(7.30)%	41.30	6.90
6/30/2012	14	4,086	131,977	32,300	4.20%	41.10	7.30
6/30/2013	14	4,127	132,015	31,988	(1.00)%	40.60	7.20
6/30/2014	18	4,024	129,076	32,077	0.30%	40.60	7.40
6/30/2015	17	3,886	128,680	33,114	3.20%	40.70	7.50
6/30/2016	17	3,959	147,563	37,273	12.60%	40.40	7.50
6/30/2017	18	4,047	162,418	40,133	7.67%	40.30	7.60
6/30/2018	18	3,929	$158,213	$40,268	0.34%	39.80	7.30

(1) The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

Member data in actuarial section will differ from reported data in other CAFR sections. For this section, the data is reported by account instead of by person (ex: a member could have vested service in KERS, but is currently active in a CERS and is reported in two membership categories).

CERS Non-Hazardous Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Covered Payroll [1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/2009	1,108	83,724	$2,183,612	$26,081	2.60%	46.20	8.60
6/30/2010	1,102	84,681	2,236,855	26,415	1.30%	46.60	8.80
6/30/2011	1,102	85,285	2,276,596	26,694	1.10%	46.80	9.00
6/30/2012	1,080	83,052	2,236,546	26,929	0.90%	47.50	9.10
6/30/2013	1,081	81,815	2,236,277	27,333	1.50%	47.80	9.30
6/30/2014	1,101	81,115	2,272,270	28,013	2.50%	48.10	9.60
6/30/2015	1,092	80,852	2,296,716	28,406	1.40%	48.00	9.50
6/30/2016	1,095	80,664	2,352,762	29,167	2.70%	47.90	9.40
6/30/2017	1,096	82,198	2,452,407	29,835	2.29%	47.90	9.40
6/30/2018	1,092	81,818	$2,466,801	$30,150	1.06%	47.70	9.20

CERS Hazardous Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Covered Payroll [1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/2009	290	9,757	$469,315	$48,100	3.20%	38.40	8.80
6/30/2010	282	9,562	466,549	48,792	1.40%	38.80	9.20
6/30/2011	281	9,407	466,964	49,640	1.70%	39.10	9.50
6/30/2012	254	9,130	464,229	50,847	2.40%	39.30	10.30
6/30/2013	248	9,123	461,673	50,605	(0.50)%	39.10	10.30
6/30/2014	254	9,194	479,164	52,117	3.00%	39.20	10.60
6/30/2015	246	9,172	483,641	52,730	1.20%	39.10	10.60
6/30/2016	246	9,084	492,851	54,255	2.90%	39.10	10.60
6/30/2017	250	9,495	541,633	57,044	5.14%	39.20	10.50
6/30/2018	247	9,263	$533,618	$57,607	0.99%	38.50	10.20

SPRS Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Covered Payroll [1]	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/2009	1	946	$51,660	$54,609	1.80%	37.30	11.00
6/30/2010	1	961	51,507	53,597	(1.90)%	37.20	10.60
6/30/2011	1	965	48,693	50,459	(5.90)%	37.70	10.60
6/30/2012	1	907	48,373	53,332	5.70%	37.30	10.40
6/30/2013	1	902	45,256	50,173	(5.90)%	37.00	10.00
6/30/2014	1	855	44,616	52,182	4.00%	37.80	10.90
6/30/2015	1	937	45,765	48,842	(6.40)%	36.80	9.80
6/30/2016	1	908	45,551	50,167	2.71%	37.00	10.00
6/30/2017	1	903	48,598	53,819	7.28%	37.50	10.60
6/30/2018	1	886	$48,808	$55,088	2.36%	37.30	10.50

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Summary of Retired Member Valuation Data
As of June 30, 2018 (in Whole $)

KERS (Non-Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances [1]	% Increase In Allowances	Average Annual Allowance
6/30/2009	3,465	889	37,883	$812,559	14.36%	$21,449
6/30/2010	1,162	1,100	37,945	801,882	(1.31)%	21,133
6/30/2011	1,592	940	38,597	821,197	2.41%	21,276
6/30/2012	1,707	1,078	39,226	844,881	2.88%	21,539
6/30/2013	1,982	1,014	40,194	872,140	3.23%	21,698
6/30/2014	2,067	1,038	41,223	866,047	(0.70)%	21,009
6/30/2015	2,140	1,094	42,269	883,578	2.02%	20,904
6/30/2016	2,441	706	44,004	934,930	5.81%	21,246
6/30/2017	2,181	1,269	44,916	921,302	(1.46)%	20,512
6/30/2018	2,853	1,243	46,526	$952,951	3.44%	$20,482

KERS (Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances [1]	% Increase In Allowances	Average Annual Allowance
6/30/2009	339	95	2,648	$38,696	15.20%	$14,613
6/30/2010	282	95	2,835	41,115	6.25%	14,503
6/30/2011	288	59	3,064	45,609	10.93%	14,886
6/30/2012	243	54	3,253	49,231	7.94%	15,134
6/30/2013	229	52	3,430	51,122	3.84%	14,905
6/30/2014	256	66	3,620	54,272	6.16%	14,992
6/30/2015	203	65	3,758	56,431	3.98%	15,016
6/30/2016	237	29	3,966	59,001	4.55%	14,877
6/30/2017	206	79	4,093	59,162	0.27%	14,455
6/30/2018	321	44	4,370	$64,050	8.26%	$14,657

(1) The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

(2) Member data in actuarial section will differ from reported data in other CAFR sections. For this section, the data is reported by account instead of by person (ex: a member could have vested service in KERS, but is currently active in a CERS and is reported in two membership categories).

CERS (Non-Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances [1]	% Increase In Allowances	Average Annual Allowance
6/30/2009	3,060	883	39,756	$440,061	11.76%	$11,069
6/30/2010	2,565	1,283	41,038	452,614	2.85%	11,029
6/30/2011	3,250	1,077	43,211	483,594	6.84%	11,191
6/30/2012	3,300	1,207	45,304	515,008	6.50%	11,368
6/30/2013	3,570	1,198	47,676	557,979	8.34%	11,704
6/30/2014	3,480	1,221	49,935	582,958	4.48%	11,674
6/30/2015	4,020	1,304	52,651	617,551	5.93%	11,729
6/30/2016	4,409	721	56,339	661,217	7.07%	11,736
6/30/2017	4,141	1,467	59,013	667,468	0.95%	11,311
6/30/2018	4,650	1,725	61,938	$710,374	6.43%	$11,469

CERS (Hazardous)

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances [1]	% Increase In Allowances	Average Annual Allowance
6/30/2009	650	264	5,808	$139,887	9.73%	$24,085
6/30/2010	423	163	6,068	146,917	5.03%	24,212
6/30/2011	502	102	6,468	160,259	9.08%	24,777
6/30/2012	483	73	6,878	173,221	8.09%	25,185
6/30/2013	519	104	7,293	182,635	5.43%	25,042
6/30/2014	469	116	7,646	191,008	4.58%	24,981
6/30/2015	526	138	8,034	202,153	5.84%	25,162
6/30/2016	604	75	8,563	215,302	6.50%	25,143
6/30/2017	576	141	8,998	226,680	5.28%	$25,192
6/30/2018	779	190	9,587	$245,675	8.38%	$25,626

SPRS State Police Retirement System

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances [1]	% Increase In Allowances	Average Annual Allowance
6/30/2009	75	26	1,184	$44,274	7.22%	$37,394
6/30/2010	54	15	1,223	45,516	2.80%	37,217
6/30/2011	52	12	1,263	47,467	4.29%	37,583
6/30/2012	52	16	1,299	49,887	5.10%	38,404
6/30/2013	63	16	1,346	50,906	2.04%	37,820
6/30/2014	95	28	1,413	53,432	4.96%	37,815
6/30/2015	62	15	1,460	54,930	2.80%	37,624
6/30/2016	65	10	1,515	56,650	3.13%	37,393
6/30/2017	30	9	1,536	57,253	1.06%	37,274
6/30/2018	81	17	1,600	$59,626	4.14%	$37,266

(1) The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section.

(2) Member data in actuarial section will differ from reported data in other CAFR sections. For this section, the data is reported by account instead of by person (ex: a member could have vested service in KERS, but is currently active in a CERS and is reported in two membership categories).

Summary of Benefit Provisions KERS & CERS Non-Hazardous Plans

Plan Funding

State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008, an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.702. KERS rates are subject to state budget approval.

Membership Eligibility

For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

Retirement Eligibility for Non-Hazardous Employees		
Age	Years of Service	Allowance Reduction
Tier 1 Members Whose Participation Began Before 9/1/2008		
65	1 month	None
Any	27	None
55	5	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
Any	25	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
Tier 2 Members Whose Participation Began On or After 9/1/2008 but before 1/1/2014		
65	5	None
57	Rule of 87	None
60	10	6.5% per year for first five years, and 4.5% for next five years before age 65 or Rule of 87 (age plus years of service)
Tier 3 Members Whose Participation Began On or After 1/1/2014		
65	5	None
57	Rule of 87	None

Benefit Formula

Tier 1: Members whose participation began before 9/1/2008

Final Compensation	Benefit Factor		Years of Service
Average of the five highest years of compensation.	KERS 1.97% if:	Member does not have 13 months of service credit for 1/1/1998-1/1/1999.	Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
	KERS 2.00% if:	Member has 13 months of service credit from 1/1/1998-1/1/1999.	
	KERS 2.20% if:	Member has 20 or more years of service, including 13 months from 1/1/1998-1/1/1999 and retires by 1/1/2009.	
	CERS 2.20% if:	Member begins participating prior to 8/1/2004.	
	CERS 2.00% if:	Member begins participating on or after 8/1/2004 but before 9/1/2008.	

If a member retires with less than four years of service credit, the member's benefit is equal to the actuarially equivalent of two times their member contribution balance with interest.

Tier 2: Members whose participation began on or after 9/1/2008 but before 1/1/2014

Average of the last five years of compensation	KERS & CERS increasing percent based on service at retirement up to 30 years* plus 2.00% for each year of service over 30 years		Member begins participating on or after 9/1/2008 but before 1/1/2014.	Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program)
	*Service	Multiplier		
	10 years or less	1.10%		
	10-20 years	1.30%		
	20-26 years	1.50%		
	26-30 years	1.75%		

Tier 3: Members whose participation began on or after 1/1/2014

(A - B) = C X 75% = D then B + D = Interest ($ in Thousands)

	A	B	C	D		
	5 Year Geometric Average	Less Guarantee Rate of 4%	Upside Sharing Interest	Upside Sharing Interest X 75% = Upside Gain	Interest Rate Earned (4% + Upside)	Total Interest Credited to Member
System	Return					Accounts
KERS Non-Hazardous	6.66%	4.00%	2.66%	2.00%	6.00%	$2,379
KERS Hazardous	7.53%	4.00%	3.53%	2.65%	6.65%	771
CERS Non-Hazardous	7.39%	4.00%	3.39%	2.54%	6.54%	4,786
CERS Hazardous	7.66%	4.00%	3.66%	2.75%	6.75%	1,284
SPRS	6.95%	4.00%	2.95%	2.21%	6.21%	$92

Summary of Benefit Provisions KERS & CERS Non-Hazardous Plan

Post-Retirement Death Benefits

The choice of payment option selected by the member at the time of retirement will determine the monthly benefits provided to the beneficiary upon the retired member's death.

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits

Members participating before August 1, 2004, may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after August 1, 2004, but before January 1, 2014, may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the greater of 20% of member's monthly final rate of pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after January 1, 2014, may retire on account of disability provided the member has at least 60 months of service credit. The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the greater of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member is eligible for a monthly benefit if the member died while in the line of duty. The beneficiary of a deceased active member who did not die in the line of duty is eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump-sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment

SB2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003, and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008, are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $10 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

For employees participating prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees participating on or after September 1, 2008, but before January 1, 2014, interest will be credited at a rate of 2.5%. For employees participating on or after January 1, 2014, interest will be credited at a minimum rate of 4.0%.

Benefit Changes since the Prior Valuation

During the 2018 legislative session, House Bill 185 was enacted, which provided increased pension and insurance benefits for the beneficiaries of active members who die in the line of duty.

Summary of Benefit Provisions KERS Hazardous, CERS Hazardous & SPRS Plans

Plan Funding

State statute requires active members to contribute 8% of creditable compensation. For members participating on or after September 1, 2008, an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.702. KERS rates are subject to state budget approval.

Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

Retirement Eligibility for Hazardous		
Age	Years of Service	Allowance Reduction
Tier 1 Members Whose Participation Began Before 9/1/2008		
55	1 month	None
Any	20	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 55 or 20 years of service.
Tier 2 Members Whose Participation Began On or After 9/1/2008 but before 1/1/2014		
60	5	None
Any	25	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 60 or 25 years of service.
Tier 3 Members Whose Participation Began On or After 1/1/2014		
60	5	None
Any	25	None

Benefit Formula for Hazardous for Tier 1: Members whose participation began before 9/1/2008

Final Compensation	Benefit Factor		Years of Service
Average of the three highest years of compensation.	KERS 2.49% if: CERS 2.50% if: SPRS 2.50% if:	Member begins participating before 9/1/2008.	Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program.

If a member retires with less than four years of service, the member's benefit is equal to the actuarially equivalent of two times their member contribution balance with interest.

Benefit Formula for Hazardous for Tier 2: Members whose participation began on or after 9/1/2008 but before 1/1/2014

Final Compensation	Benefit Factor		Years of Service
Average of the three highest complete years of compensation.	KERS & CERS & SPRS increasing percent based on service at retirement* *Service / Multiplier 10 years or less / 1.30% 10-20 years / 1.50% 20-25 years / 2.25% 25+ years / 2.50%	Member begins participating on or after 9/1/2008 but before 1/1/2014.	Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).

Benefit Formula for Hazardous for Tier 3: Members whose participation began on or after 1/1/2014

No benefit factor for Tier 3. A life annuity can be calculated in accordance with actuarial assumptions and methods adopted by the board based on the member's accumulated account balance in the hybrid cash balance plan.

Summary of Benefit Provisions KERS Hazardous, CERS Hazardous & SPRS Plans

Post-Retirement Death Benefits

The choice of payment option selected by the member at the time of retirement will determine the monthly benefits provided to the beneficiary upon the retired member's death.

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a $5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

Disability Benefits

Members participating before August 1, 2004, may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after August 1, 2004, but before January 1, 2014, may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the greater of 25% of the member's monthly final rate of pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after January 1, 2014, may retire on account of disability provided the member has at least 60 months of service credit. The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the greater of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

Pre-Retirement Death Benefits

The beneficiary of a deceased active member is eligible for a monthly benefit if the member died while in the line of duty. The beneficiary of a deceased active member who did not die in the line of duty is eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

Cost of Living Adjustment

SB2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Members participating on or after July 1, 2003, and before September 1, 2008, are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be $15 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

Refunds

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

Interest on Accounts

For employees participating prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees participating on or after September 1, 2008, but before January 1, 2014, interest will be credited at a rate of 2.5%. For employees participating on or after January 1, 2014, interest will be credited at a minimum rate of 4.0%.

Benefit Changes since the Prior Valuation

During the 2018 legislative session, House Bill 185 was enacted, which provided increased pension and insurance benefits for active members who die in the line of duty.

Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

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DEFINITIONS

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment.

Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions.

Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

A single member may have multiple accounts, which contribute to one pension. Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in the retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-Hazardous, then KERS Non-Hazardous. These tables do not include individuals receiving payments under dependent child accounts, Qualified Domestic Relations Orders, or multiple beneficiary accounts.

KERS Non-Hazardous Membership As of June 30, 2018

Fiscal Year	Active	Inactive	Retired	Total
2013	40,710	40,375	37,240	118,325
2014	40,500	41,213	38,022	119,735
2015	39,289	42,479	38,827	120,595
2016	38,121	43,926	40,099	122,146
2017	36,725	44,848	40,813	122,386
2018	34,845	45,768	42,175	122,788

KERS Hazardous Membership As of June 30, 2018

Fiscal Year	Active	Inactive	Retired	Total
2013	4,057	2,882	2,312	9,251
2014	4,094	3,318	2,467	9,879
2015	3,932	3,761	2,575	10,268
2016	3,987	4,067	2,739	10,793
2017	4,061	4,363	2,823	11,247
2018	3,963	4,716	3,010	11,689

CERS Non-Hazardous Membership As of June 30, 2018

Fiscal Year	Active	Inactive	Retired	Total
2013	82,631	67,013	44,164	193,808
2014	82,494	70,231	46,112	198,837
2015	82,969	72,965	48,515	204,449
2016	83,346	75,904	51,673	210,923
2017	84,401	78,940	54,018	217,359
2018	84,435	81,608	56,629	222,672

CERS Hazardous Membership As of June 30, 2018

Fiscal Year	Active	Inactive	Retired	Total
2013	**9,069**	**1,956**	**5,840**	**16,865**
2014	9,189	2,038	6,066	17,293
2015	9,188	2,142	6,389	17,719
2016	9,139	2,309	6,834	18,282
2017	9,321	2,442	7,186	18,949
2018	9,285	2,581	7,647	19,513

SPRS Membership As of June 30, 2018

Fiscal Year	Active	Inactive	Retired	Total
2013	901	236	1,240	2,377
2014	861	239	1,279	2,379
2015	940	257	1,324	2,521
2016	924	262	1,379	2,565
2017	910	278	1,393	2,581
2018	891	290	1,445	2,626

Kentucky Retirement Systems Membership Totals As of June 30, 2018

Fiscal Year	Active	Inactive	Retired	Total
2013	137,368	112,462	90,796	340,626
2014	137,138	117,039	93,946	348,123
2015	136,318	121,604	97,630	355,552
2016	135,517	126,468	102,725	364,710
2017	135,418	130,871	106,234	372,523
2018	133,419	134,963	110,906	379,288

Principal Participating Employers in KERS As of June 30, 2018

Participating Employer	Rank	Covered Employees	% of Total System
Department for Community Based Services	1	4,572	11.54%
Department of Corrections	2	3,798	9.59%
Department of Highways	3	3,710	9.37%
Judicial Department Administrative Office of the Courts	4	1,393	3.52%
Department of Juvenile Justice	5	1,195	3.02%
Bluegrass.org	6	940	2.37%
Kentucky State Police	7	904	2.28%
Unified Prosecutorial System	8	862	2.18%
Department of Veterans Affairs	9	847	2.14%
Department of Revenue	10	809	2.04%
All Others		20,577	51.95%
Total		**39,607**	**100.00%**

Schedule of Participating Employers in KERS As of June 30, 2018

Agency Classification	Number of Agencies	Number of Employees
County Attorneys	61	297
Health Departments	60	2,474
Master Commissioner	34	72
Non-P1 State Agencies	36	896
Other Retirement Systems	1	27
P1 State Agencies	137	30,136
Regional Mental Health Units	12	2,371
Universities	7	3,334
Total	**348**	**39,607**

Total Employees By Tier Levels

Tier 1	**20,811**
Tier 2	**7,791**
Tier 3	**11,005**

Principal Participating Employers in CERS As of June 30, 2018

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board of Education	1	6,447	6.82%
Louisville Jefferson County Metro Government	2	5,098	5.39%
Fayette County Board of Education	3	1,918	2.03%
Lexington Fayette Urban County Government	4	1,728	1.83%
Judicial Department Administrative Office of the Courts	5	1,658	1.75%
Boone County Board of Education	6	1,155	1.22%
Bullitt County Board of Education	7	1,137	1.20%
Hardin County Board of Education	8	1,105	1.17%
Pike County Board of Education	9	974	1.03%
Warren County Board of Education	10	958	1.01%
All Others		72,407	76.55%
Total		**94,585**	**100.00%**

Schedule of Participating Employers in CERS As of June 30, 2018

Agency Classification	Number of Agencies	Number of Employees
Airport Boards	5	524
Ambulance Services	19	408
Area Development Districts	14	666
Boards of Education	173	48,739
Cities	221	10,343
Community Action Agencies	21	2,884
Conservation Districts	49	58
County Attorneys	77	645
County Clerks	16	598
Development Authorities	6	9
Fire Departments	38	817
Fiscal Courts	118	11,133
Health Departments	1	353
Housing Authorities	42	430
Jailers	2	78
Libraries	85	1,280
Other Retirement Systems	2	3
P1 State Agencies	4	1,658
Parks and Recreation	7	65
Planning Commissions	16	213
Police Departments	2	15
Riverport Authorities	5	72
Sanitation Districts	9	336
Sheriff Departments	12	755
Special Districts & Boards	49	1,462
Tourist Commissions	23	190
Urban Government Agencies	2	6,826
Utility Boards	120	4,025
Total	**1,138**	**94,585**

Total Employees By Tier Levels

Tier 1	**43,496**
Tier 2	**18,766**
Tier 3	**32,323**

Schedule of Participating Employers in SPRS As of June 30, 2018

Kentucky State Police - Uniformed Police Officers	**1**	**917**

Total Employees By Tier Levels

Tier 1	**524**
Tier 2	**215**
Tier 3	**178**

Average Monthly Benefit by Length of Service in KERS As of June 30, 2018 (in Whole $)

	KERS Non-Hazardous		KERS Hazardous	
Service Credit Range	Number of Accounts	Average Monthly Benefit	Number of Accounts	Average Monthly Benefit
Under 5 years	5,990	$175	811	$200
5 or more but less than 10	6,020	430	841	571
10 or more but less than 15	5,476	716	761	1,016
15 or more but less than 20	4,648	1,049	675	1,532
20 or more but less than 25	5,018	1,396	1,053	2,012
25 or more but less than 30	12,587	2,291	189	2,821
30 or more but less than 35	6,685	3,236	61	3,564
35 or more	2,561	4,563	6	4,231
Total	**48,985**	**$1,666**	**4,397**	**$1,215**

Average Monthly Benefit by Length of Service in CERS As of June 30, 2018 (in Whole $)

	CERS Non-Hazardous		CERS Hazardous	
Service Credit Range	Number of Accounts	Average Monthly Benefit	Number of Accounts	Average Monthly Benefit
Under 5 years	8,707	$163	1,102	$380
5 or more but less than 10	11,171	339	1,077	694
10 or more but less than 15	10,975	535	976	1,235
15 or more but less than 20	9,051	795	951	1,769
20 or more but less than 25	10,129	999	3,658	2,517
25 or more but less than 30	11,777	1,918	1,419	3,511
30 or more but less than 35	2,851	2,696	421	4,232
35 or more	754	3,675	94	5,269
Total	**65,415**	**$939**	**9,698**	**$2,116**

Average Monthly Benefit by Length of Service in SPRS As of June 30, 2018 (in Whole $)

Service Credit Range	Number of Accounts	Average Monthly Benefit
Under 5 years	135	$546
5 or more but less than 10	55	929
10 or more but less than 15	58	1,367
15 or more but less than 20	109	2,020
20 or more but less than 25	481	2,671
25 or more but less than 30	485	3,634
30 or more but less than 35	239	4,750
35 or more	61	6,053
Total	**1,623**	**$3,066**

Note: These tables reflect the Average Monthly Pension Benefit. A single member may have multiple accounts, which contribute to one pension. These tables do not reflect dependent child accounts, Qualified Domestic Relations Order (QDRO) accounts or multiple beneficiary accounts.

Fiduciary Net Position - KERS
As of June 30, 2018 ($ in Thousands)

	Non-Hazardous			Hazardous		
Fiscal Year	Pension	Insurance	Total	Pension	Insurance	Total
2012	$2,977,935	$418,490	$3,396,425	$476,589	$330,730	$807,319
2013	2,760,753	496,040	3,256,793	514,592	372,883	887,475
2014	2,578,290	646,905	3,225,195	561,484	433,525	995,009
2015	2,327,782	665,639	2,993,421	552,468	439,113	991,581
2016	1,980,292	668,318	2,648,610	527,880	437,880	965,277
2017	2,092,781	781,406	2,874,187	605,921	484,442	1,090,363
2018	$2,048,890	$846,762	$2,895,652	$651,173	$513,384	$1,164,557

Fiduciary Net Position - CERS
As of June 30, 2018 ($ in Thousands)

	Non-Hazardous			Hazardous		
Fiscal Year	Pension	Insurance	Total	Pension	Insurance	Total
2012	$5,381,602	$1,428,821	$6,810,423	$1,672,970	$785,874	$2,458,844
2013	5,795,568	1,618,960	7,414,528	1,833,571	891,320	2,724,891
2014	6,528,147	1,878,711	8,406,858	2,087,002	1,030,303	3,117,305
2015	6,440,800	1,920,946	8,361,746	2,078,202	1,056,480	3,134,682
2016	6,141,396	1,908,550	8,049,946	2,010,177	1,056,097	3,066,274
2017	6,739,142	2,160,553	8,899,695	2,227,679	1,179,313	3,406,992
2018	$7,086,322	$2,346,767	$9,433,089	$2,361,047	$1,268,272	$3,629,319

Fiduciary Net Position - SPRS
As of June 30, 2018 ($ in Thousands)

Fiscal Year	Pension	Insurance	Total
2012	$250,476	$125,398	$375,874
2013	248,698	142,691	391,389
2014	260,974	164,958	425,932
2015	247,229	164,714	411,943
2016	218,013	160,949	378,962
2017	256,383	178,191	434,574
2018	$268,425	$189,994	$458,419

For additional historical data for all charts presented, please visit our website for previous annual reports at https://kyret.ky.gov/Publications/ Pages/Comprehensive-Annual-Financial- Reports.aspx

Fiduciary Net Position - KRS
As of June 30, 2018 ($ in Thousands)

Fiscal Year	Pension	Insurance	Total
2012	$10,758,706	$3,089,313	$13,848,019
2013	11,153,182	3,521,894	14,675,076
2014	12,015,897	4,154,402	16,170,299
2015	11,646,481	4,246,892	15,893,373
2016	10,877,757	4,231,311	15,109,068
2017	11,921,906	4,783,905	16,705,811
2018	$12,415,857	$5,165,179	$17,581,036

Note: For additional historical data for all charts presented, please visit our website for previous annual reports at https://kyret.ky.gov/ Publications/ Pages/Comprehensive-Annual-Financial- Reports.aspx

Changes in Fiduciary Net Position - KERS Non-Hazardous Pension Fund

As of June 30, 2018 ($ in Thousands)

Additions	2012	2013	2014	2015	2016	2017	2018
Members' Contributions	$96,418	$96,744	$92,941	$100,424	$101,677	$100,544	$104,972
Employers' Contributions	211,071	280,874	296,836	520,949	512,670	644,803	619,988
General Fund Appropriations						58,193	67,574
Health Insurance Contributions (HB1)	5,337	3,344	4,546	4,181	4,817	5,156	5,786
Employer Cessation						53,215	17
Net Investment Income (Loss)	9,789	303,011	337,174	44,094	(20,662)	220,985	147,577
Bank of America Settlement				8,442			-
Northern Trust Settlement							301
Pension Spiking				743	414	909	1,564
Total Additions	322,615	683,973	732,246	679,308	598,916	1,083,805	947,779
Deductions							
Benefit Payments	858,151	873,906	889,937	905,790	923,288	948,489	967,374
Refunds	12,004	12,907	13,627	13,552	12,130	11,819	13,603
Administrative Expenses	8,776	10,719	11,145	10,474	10,807	10,974	10,692
Capital Project Expenses	8				181	34	-
Total Deductions	878,939	897,532	914,709	929,816	946,406	971,316	991,669
Net Increase (Decrease in Plan Net Position	**$(556,324)**	**$(213,559)**	**$(182,463)**	**$(250,508)**	**$(347,490)**	**$112,489**	**$(43,890)**

KERS Non-Hazardous Insurance Fund

Additions	2012	2013	2014	2015	2016	2017	2018
Employers' Contributions	$146,844	$162,191	$164,176	$132,208	$131,935	$133,024	$132,364
Net Investment Income (Loss)	(4,803)	40,661	96,578	8,690	(3,904)	90,915	61,331
Retired Re-employed (HB1)				3,732	3,880	3,765	4,055
Member Drug Reimbursement	7,865	4,846	8			1	5
Premiums Received from Retirees	15,666	14,294	918	272	240	248	216
Employer Cessations						15,567	-
Northern Trust Settlement							32
Total Additions	165,563	221,992	264,273	144,902	132,151	243,520	198,003
Deductions							
Health Insurance Premiums	163,841	140,157	112,671	125,272	126,550	127,648	130,069
Administrative Expenses	5,203	4,285	736	893	818	861	760
Self-Funded Healthcare Costs						1,920	1,819
Excise Tax Insurance						3	3
Total Deductions	169,044	144,442	113,407	126,168	129,469	130,432	132,651
Net Increase (Decrease) in Plan Net Position	**$169,044**	**$77,550**	**$150,865**	**$18,734**	**$2,679**	**$113,088**	**$65,352**

Changes in Fiduciary Net Position - KERS Hazardous Pension Fund

As of June 30, 2018 ($ in Thousands)

Additions	2012	2013	2014	2015	2016	2017	2018
Members' Contributions	$11,602	$11,467	$11,995	$12,670	$15,055	$17,523	$17,891
Employers' Contributions	17,367	27,334	11,670	28,374	23,690	37,630	32,790
General Fund Appropriations						15,000	10,000
Health Insurance Contributions (HB1)	629	402	551	537	684	811	909
Net Investment Income (Loss)	(10,286)	51,497	80,549	8,572	(1,652)	70,893	51,848
Bank of America Settlement				767			-
Northern Trust Settlement							33
Pension Spiking				162	70	344	871
Total Additions	19,312	90,700	104,941	51,211	37,847	142,301	114,342
Deductions							
Benefit Payments	48,424	48,855	54,320	56,774	59,306	61,231	65,616
Refunds	2,543	2,762	2,830	2,609	2,211	2,106	2,501
Administrative Expenses	877	733	897	844	903	919	975
Capital Project Expenses					15	4	-
Total Deductions	51,844	52,350	58,048	60,277	62,435	64,260	69,092
Net Increase (Decrease) in Plan Net Position	**$(32,532)**	**$38,350**	**$46,892**	**$(9,016)**	**$(24,588)**	**$78,041**	**$45,250**

KERS Hazardous Insurance Fund

Additions	2012	2013	2014	2015	2016	2017	2018
Employers' Contributions	$23,984	$25,144	$23,336	$14,173	$15,929	$4,688	$4,302
Net Investment Income (Loss)	60	32,887	52,082	7,793	(882)	59,188	42,567
Retired Re-employed (HB1)	-	-	-	709	837	932	986
Member Drug Reimbursement	351	243	-	-	-	-	-
Premiums Received from Retirees	876	895	37	14	(13)	(51)	(50)
Northern Trust Settlement							18
Total Additions	25,271	59,169	76,126	22,689	15,871	64,757	47,823
Deductions							
Health Insurance Premiums	13,941	16,837	15,405	17,000	17,490	17,562	18,697
Administrative Expenses	335	179	78	101	97	105	104
Self-Funded Healthcare Costs						45	79
Excise Tax Insurance							-
Total Deductions	14,276	17,016	15,482	17,101	17,587	17,712	18,880
Net Increase (Decrease) in Plan Net Position	**$10,995**	**$42,153**	**$60,642**	**$5,588**	**$(1,716)**	**$47,045**	**$28,943**

Changes in Fiduciary Net Position - CERS Non-Hazardous Pension Fund

As of June 30, 2018 ($ in Thousands)

Additions	2012	2013	2014	2015	2016	2017	2018
Members' Contributions	$119,123	$120,777	$122,459	$133,637	$133,987	$150,714	$160,370
Employers' Contributions	270,664	294,914	324,231	297,714	282,767	331,493	355,473
Health Insurance Contributions (HB1)	5,101	4,659	6,109	6,674	7,687	9,158	10,826
Net Investment Income (Loss)	(3,349)	579,161	893,386	110,569	(40,799)	825,901	578,377
Bank of America Settlement				10,280			-
Northern Trust Settlement							361
Pension Spiking				850	1,339	2,061	2,544
Total Additions	391,539	999,511	1,348,330	559,724	384,981	1,319,327	1,107,951
Deductions							
Benefit Payments	524,385	553,204	582,850	615,335	651,247	687,460	726,568
Refunds	-	13,306	14,286	13,524	13,754	14,430	14,608
Administrative Expenses	16,740	17,743	18,615	18,212	19,078	19,614	19,592
Capital Project Expenses	9				307	77	-
Total Deductions	553,899	584,253	615,751	647,071	684,385	721,581	760,768
Net Increase (Decrease) in Plan Net Position	**$(162,360)**	**$415,258**	**$732,579**	**$(87,347)**	**$(299,404)**	**$597,746**	**$347,183**

CERS Non-Hazardous Insurance Fund

Additions	2012	2013	2014	2015	2016	2017	2018
Employers' Contributions	$164,297	$158,212	$121,161	$115,836	$108,269	$117,310	$120,798
Net Investment Income (Loss)	(32,992)	147,194	231,743	36,731	(1,422)	259,586	197,520
Retired Re-employed (HB1)				3,608	3,567	3,402	3,821
Member Drug Reimbursement	8,443	5,360	6			1	11
Northern Trust Settlement							75
Premiums Received from Retirees	17,493	16,293	1,449	582	629	707	637
Total Additions	157,241	327,059	357,064	156,757	111,043	121,420	322,862
Deductions							
Health Insurance Premiums	141,694	132,489	96,804	113,734	122,713	124,573	131,631
Administrative Expenses	5,545	4,431	508	782	726	789	761
Self-Funded Healthcare Costs						3,635	4,248
Excise Tax Insurance						6	6
Total Deductions	147,239	136,920	97,312	114,522	123,439	129,003	136,646
Net Increase (Decrease) in Plan Net Position	**$10,002**	**$190,139**	**$259,751**	**$42,235**	**$(12,396)**	**$252,003**	**$186,216**

Changes in Fiduciary Net Position - CERS Hazardous Pension Fund

As of June 30, 2018 ($ in Thousands)

Additions	2012	2013	2014	2015	2016	2017	2018
Members' Contributions	$41,797	$42,863	$42,631	$46,609	$51,554	$60,102	$61,089
Employers' Contributions	77,311	120,140	115,240	107,515	104,952	114,315	124,953
Health Insurance Contributions (HB1)	811	734	1,091	1,084	1,418	1,708	2,173
Net Investment Income (Loss)	(24,724)	181,171	287,816	37,104	(9,021)	270,473	192,174
Bank of America Settlement				2,865			-
Northern Trust Settlement							111
Pension Spiking				557	762	1,632	2,707
Total Additions	95,195	344,908	447,452	195,734	149,665	177,757	383,207
Deductions							
Benefit Payments	169,352	179,696	189,635	200,134	213,448	226,985	244,119
Refunds	3,516	3,158	2,664	3,111	2,879	2,315	4,214
Administrative Expenses	1,319	1,202	1,721	1,289	1,337	1,421	1,504
Capital Project Expenses	-				26	7	-
Total Deductions	174,187	184,056	194,020	204,534	217,690	230,728	249,837
Net Increase (Decrease) in Plan Net Position	**$(79,992)**	**$160,852**	**$253,431**	**$(8,800)**	**$(68,025)**	**$217,502**	**$133,370**

CERS Hazardous Insurance Fund

Additions	2012	2013	2014	2015	2016	2017	2018
Employers' Contributions	$90,204	$84,962	$74,265	$71,008	$66,575	$50,743	$55,027
Net Investment Income (Loss)	(16,127)	79,885	124,952	20,283	1,102	142,744	109,004
Retired Re-employed (HB1)				770	862	794	975
Member Drug Reimbursement	871	562					-
Northern Trust Settlement							40
Premiums Received from Retirees	695	657	32	10	(106)	(301)	(265)
Total Additions	75,643	166,066	200,101	92,071	68,615	51,236	164,781
Deductions							
Health Insurance Premiums	50,155	59,941	60,843	65,553	68,518	70,407	74,844
Administrative Expenses	688	679	275	339	480	381	376
Self-Funded Healthcare Costs						160	603
Excise Tax Insurance							-
Total Deductions	50,843	60,620	61,117	65,894	68,998	70,948	75,823
Net Increase (Decrease) in Plan Net Position	**$24,800**	**$105,446**	**$138,983**	**$26,177**	**$(383)**	**$123,216**	**$88,958**

Changes in Fiduciary Net Position - SPRS Pension Fund
As of June 30, 2018 ($ in Thousands)

Additions	2012	2013	2014	2015	2016	2017	2018
Members' Contributions	$5,154	$4,495	$5,005	$5,150	$5,149	$5,349	$5,522
Employers' Contributions	15,040	18,501	20,279	31,444	25,723	38,028	36,486
General Fund Appropriations							10,000
Health Insurance Contributions (HB1)	46	48	70	94	113	131	155
Net Investment Income (Loss)	43	25,954	40,291	3,427	(3,841)	26,756	18,487
Bank of America Settlement				646			-
Northern Trust Settlement							21
Pension Spiking				546	99	210	392
Total Additions	20,283	48,998	65,729	41,307	27,243	68,718	71,063
Deductions							
Benefit Payments	48,867	50,559	53,026	54,766	56,268	56,935	58,805
Refunds	149	31	214	85	11	26	22
Administrative Expenses	73	184	215	201	176	181	194
Capital Project Expenses					4	1	-
Total Deductions	49,089	50,774	53,454	55,052	56,459	57,143	59,021
Net Increase (Decrease in Plan Net Position	**$(28,806)**	**$(1,776)**	**$12,276**	**$(13,745)**	**$(29,216)**	**$38,370**	**$12,042**

SPRS Insurance Fund

Additions	2012	2013	2014	2015	2016	2017	2018
Employers' Contributions	$10,810	$16,829	$14,498	$10,379	$10,228	$9,222	$9,397
Net Investment Income (Loss)	(1,458)	12,993	20,458	2,921	(48)	21,570	16,420
Retired Re-employed (HB1)				3	9		-
Member Drug Reimbursement	279	178					-
Northern Trust Settlement							8
Premiums Received from Retirees	20	23	11	1	(29)	(55)	(41)
Total Additions	9,651	30,023	35,012	13,304	10,160	9,167	25,784
Deductions							
Health Insurance Premiums	10,791	12,546	12,688	13,483	13,836	13,405	13,881
Administrative Expenses	201	184	58	65	89	66	62
Self-Funded Healthcare Costs						24	38
Excise Tax Insurance							-
Total Deductions	10,992	12,730	12,745	13,548	13,925	13,495	13,981
Net Increase (Decrease) in Plan Net Position	**$(1,341)**	**$17,293**	**$22,267**	**$(244)**	**$(3,765)**	**$17,242**	**$11,803**

Schedule of Benefit Expenses As of June 30, 2018 (in Whole $)

KERS Non-Hazardous

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
Fiscal Year 2013				
Average Benefit	$1,003	$1,915	$1,020	$889
Number of Accounts	6,441	32,310	2,687	962
Total Monthly Benefits	$6,459,840	$61,882,399	$2,740,491	$855,033
% of Total Monthly Benefits	8.98%	86.02%	3.81%	1.19%
Fiscal Year 2014				
Average Benefit	$992	$1,911	$987	$886
Number of Accounts	6,678	33,106	2,706	954
Total Monthly Benefits	$6,624,472	$63,255,779	$2,671,749	$845,468
% of Total Monthly Benefits	9.03%	86.18%	3.64%	1.15%
Fiscal Year 2015				
Average Benefit	$992	$1,901	$996	$909
Number of Accounts	6,896	33,940	2,696	983
Total Monthly Benefits	$6,843,193	$64,503,048	$2,684,720	$893,407
% of Total Monthly Benefits	9.13%	86.09%	3.58%	1.19%
Fiscal Year 2016				
Average Benefit	$989	$1,886	$1,005	$902
Number of Accounts	7,390	35,192	2,770	1,014
Total Monthly Benefits	$7,312,293	$66,383,638	$2,784,928	$914,804
% of Total Monthly Benefits	9.45%	85.77%	3.60%	1.18%
Fiscal Year 2017				
Average Benefit	$992	$1,883	$1,013	$924
Number of Accounts	7,628	35,890	2,772	1,028
Total Monthly Benefits	$7,565,780	$67,591,003	$2,807,938	$950,318
% of Total Monthly Benefits	9.59%	85.65%	3.56%	1.20%
Fiscal Year 2018				
Average Benefit	$998	$1,879	$1,019	$940
Number of Accounts	8,070	37,141	2,767	1,007
Total Monthly Benefits	$8,049,794	$69,780,011	$2,818,593	$946,466
% of Total Monthly Benefits	9.87%	85.52%	3.45%	1.16%

Note: This table includes individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order (QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses - KERS Hazardous

As of June 30, 2018 (in Whole $)

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
Fiscal Year 2013				
Average Benefit	$961	$1,543	$662	$725
Number of Accounts	1,751	1,417	190	93
Total Monthly Benefits	$1,682,541	$2,186,334	$125,704	$67,440
% of Total Monthly Benefits	41.42%	53.82%	3.10%	1.66%
Fiscal Year 2014				
Average Benefit	$971	$1,560	$649	$749
Number of Accounts	1,851	1,497	191	89
Total Monthly Benefits	$1,797,900	$2,335,190	$123,867	$66,679
% of Total Monthly Benefits	41.58%	54.01%	2.86%	1.54%
Fiscal Year 2015				
Average Benefit	$986	$1,556	$661	$714
Number of Accounts	1,912	1,566	193	90
Total Monthly Benefits	$1,884,477	$2,436,923	$127,477	$64,250
% of Total Monthly Benefits	41.76%	54.00%	2.82%	1.42%
Fiscal Year 2016				
Average Benefit	$984	$1,542	$663	$730
Number of Accounts	2,046	1,658	194	94
Total Monthly Benefits	$2,011,530	$2,557,114	$128,663	$68,605
% of Total Monthly Benefits	42.21%	53.65%	2.70%	1.44%
Fiscal Year 2017				
Average Benefit	$993	$1,541	$662	$721
Number of Accounts	2,101	1,719	205	96
Total Monthly Benefits	$2,086,732	$2,648,685	$135,625	$69,255
% of Total Monthly Benefits	42.24%	53.61%	2.75%	1.40%
Fiscal Year 2018				
Average Benefit	$1,002	$1,551	$684	$737
Number of Accounts	2,215	1,877	205	100
Total Monthly Benefits	$2,218,520	$2,911,409	$140,174	$73,704
% of Total Monthly Benefits	41.52%	54.48%	2.62%	1.38%

This table includes individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order (QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses CERS Non-Hazardous
As of June 30, 2018 (in Whole $)

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
Fiscal Year 2013				
Average Benefit	$591	$1,042	$878	$625
Number of Accounts	11,266	33,393	4,537	1,075
Total Monthly Benefits	$6,661,524	$34,797,169	$3,982,213	$672,310
% of Total Monthly Benefits	14.45%	75.46%	8.64%	1.45%
Fiscal Year 2014				
Average Benefit	$596	$1,042	$856	$613
Number of Accounts	11,885	34,911	4,729	1,110
Total Monthly Benefits	$7,081,048	$36,375,607	$4,047,035	$680,784
% of Total Monthly Benefits	14.70%	75.49%	8.40%	1.41%
Fiscal Year 2015				
Average Benefit	$612	$1,044	$862	$616
Number of Accounts	12,749	36,746	4,854	1,161
Total Monthly Benefits	$7,801,662	$38,375,001	$4,186,130	$715,032
% of Total Monthly Benefits	15.27%	75.13%	8.20%	1.40%
Fiscal Year 2016				
Average Benefit	$623	$1,045	$874	$626
Number of Accounts	14,014	39,066	5,118	1,268
Total Monthly Benefits	$8,724,563	$40,823,334	$4,472,723	$793,726
% of Total Monthly Benefits	15.92%	74.48%	8.16%	1.45%
Fiscal Year 2017				
Average Benefit	$634	$1,050	$883	$616
Number of Accounts	14,792	40,873	5,280	1,318
Total Monthly Benefits	$9,374,583	$42,912,604	$4,661,375	$811,542
% of Total Monthly Benefits	16.23%	74.29%	8.07%	1.41%
Fiscal Year 2018				
Average Benefit	$647	$1,062	$892	$645
Number of Accounts	15,713	42,918	5,425	1,359
Total Monthly Benefits	$10,169,605	$45,560,863	$4,838,284	$875,980
% of Total Monthly Benefits	16.55%	74.15%	7.87%	1.43%

Note: This table includes individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses - CERS
Hazardous As of June 30, 2018 (in Whole $)

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
Fiscal Year 2013				
Average Benefit	$1,433	$2,429	$1,121	$1,073
Number of Accounts	1,883	4,683	681	119
Total Monthly Benefits	$2,699,176	$11,374,811	$763,700	$127,689
% of Total Monthly Benefits	18.04%	76.01%	5.10%	0.85%
Fiscal Year 2014				
Average Benefit	$1,467	$2,437	$1,125	$1,008
Number of Accounts	1,974	4,873	695	119
Total Monthly Benefits	$2,895,353	$11,876,578	$781,685	$119,935
% of Total Monthly Benefits	18.47%	75.77%	4.99%	0.77%
Fiscal Year 2015				
Average Benefit	$1,480	$2,448	$1,145	$954
Number of Accounts	2,097	5,139	688	127
Total Monthly Benefits	$3,103,613	$12,581,191	$787,549	$121,103
% of Total Monthly Benefits	18.70%	75.82%	4.75%	0.73%
Fiscal Year 2016				
Average Benefit	$1,494	$2,453	$1,137	$975
Number of Accounts	2,269	5,485	742	143
Total Monthly Benefits	$3,388,890	$13,452,235	$843,463	$139,353
% of Total Monthly Benefits	19.01%	75.47%	4.73%	0.78%
Fiscal Year 2017				
Average Benefit	$1,509	$2,473	$1,138	$997
Number of Accounts	2,394	5,764	794	149
Total Monthly Benefits	$3,612,099	$14,255,349	$903,238	$148,515
% of Total Monthly Benefits	19.09%	75.35%	4.77%	0.78%
Fiscal Year 2018				
Average Benefit	$1,542	$2,505	$1,141	$1,110
Number of Accounts	2,540	6,189	811	158
Total Monthly Benefits	$3,917,668	$15,503,185	$925,221	$175,316
% of Total Monthly Benefits	19.09%	75.55%	4.51%	0.85%

Note: This table includes individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order (QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Schedule of Benefit Expenses - SPRS
As of June 30, 2018 (in Whole $)

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
Fiscal Year 2013				
Average Benefit	$3,601	$3,130	$1,320	$2,198
Number of Accounts	149	1,126	74	23
Total Monthly Benefits	$536,481	$3,524,248	$97,681	$50,563
% of Total Monthly Benefits	12.75%	83.73%	2.32%	1.20%
Fiscal Year 2014				
Average Benefit	$3,621	$3,197	$1,346	$2,196
Number of Accounts	146	1,172	75	23
Total Monthly Benefits	$528,611	$3,747,012	$100,974	$49,197
% of Total Monthly Benefits	11.94%	84.66%	2.28%	1.11%
Fiscal Year 2015				
Average Benefit	$3,578	$3,189	$1,347	$2,153
Number of Accounts	150	1,213	75	23
Total Monthly Benefits	$536,649	$3,867,971	$101,018	$49,524
% of Total Monthly Benefits	11.78%	84.91%	2.22%	1.09%
Fiscal Year 2016				
Average Benefit	$3,579	$3,135	$1,269	$2,008
Number of Accounts	155	1,277	82	25
Total Monthly Benefits	$554,743	$4,002,993	$104,056	$50,196
% of Total Monthly Benefits	11.77%	84.95%	2.21%	1.07%
Fiscal Year 2017				
Average Benefit	$3,611	$3,135	$1,278	$2,008
Number of Accounts	149	1,303	82	25
Total Monthly Benefits	$538,032	$4,084,771	$104,788	$50,196
% of Total Monthly Benefits	11.26%	85.50%	2.19%	1.05%
Fiscal Year 2018				
Average Benefit	$3,642	$3,128	$1,289	$2,082
Number of Accounts	153	1,361	83	26
Total Monthly Benefits	$557,249	$4,257,579	$107,019	$54,127
% of Total Monthly Benefits	11.20%	85.56%	2.15%	1.09%

Note: This table includes individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order (QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

Analysis of Initial Retirees As of June 30, 2018 (in Whole $)

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Fiscal Year 2013					
Number of Accounts	1,810	205	3,303	443	59
Average Service Credit (months)	199	157	189	202	234
Average Final Compensation	$47,168	$46,456	$34,292	$58,516	$69,325
Average Monthly Benefit	$1,275	$1,250	$938	$2,196	$2,893
Average System Payment for Health Insurance	$303	$433	$259	$853	$994
Fiscal Year 2014					
Number of Accounts	2,037	245	3,529	430	77
Average Service Credit (months)	202	165	182	194	260
Average Final Compensation	$46,480	$46,595	$33,816	$57,718	$70,009
Average Monthly Benefit	$1,278	$1,296	$879	$2,021	$3,322
Average System Payment for Health Insurance	$534	$937	$486	$1,279	$1,378
Fiscal Year 2015					
Number of Accounts	2,078	191	4,084	496	55
Average Service Credit (months)	204	164	188	204	251
Average Final Compensation	$47,187	$47,148	$34,561	$59,589	$67,862
Average Monthly Benefit	$1,308	$1,280	$913	$2,178	$3,009
Average System Payment for Health Insurance	$549	$906	$489	$1,254	$1,376
Fiscal Year 2016					
Number of Accounts	2,043	205	4,151	522	57
Average Service Credit (months)	207	160	190	212	234
Average Final Compensation	$47,429	$44,494	$34,632	$58,977	$65,535
Average Monthly Benefit	$1,351	$1,225	$932	$2,303	$2,953
Average System Payment for Health Insurance	$558	$870	$501	$1,277	$1,425
Fiscal Year 2017					
Number of Accounts	2,094	191	4,151	544	30
Average Service Credit (months)	208	146	191	203	241
Average Final Compensation	$46,753	$47,604	$34,779	$58,384	$68,401
Average Monthly Benefit	$1,339	$1,150	$940	$2,236	$2,935
Average System Payment for Health Insurance	$558	$872	$510	$1,247	$1,192
Fiscal Year 2018					
Number of Accounts	2,682	328	4,570	696	68
Average Service Credit (months)	223	167	195	211	241
Average Final Compensation	$48,552	$51,219	$37,683	$65,407	$71,132
Average Monthly Benefit	$1,481	$1,392	$1,027	$2,528	$3,035
Average System Payment for Health Insurance	$578	$1,033	$531	$1,300	$1,365

Note: This table represents all individuals who had an initial retirement date within the fiscal year.

Payment Options Selected by Retired Members As of June 30, 2018 (in Whole $)

	Basic	Lump Sum	Other	Period Certain	Pop Up	Social Security Adjustment	Survivorship
KERS Non-Hazardous							
Number of Accounts	17,025	2,107	13	6,127	9,448	3,350	10,915
Monthly Benefits	$25,948,003	$2,472,354	$24,758	$9,541,939	$19,398,243	$5,780,252	$18,429,314
KERS Hazardous							
Number of Accounts	1,165	247	3	489	1,212	286	995
Monthly Benefits	$1,295,079	$253,014	$3,428	$549,810	$1,760,450	$331,748	$1,150,278
CERS Non-Hazardous							
Number of Accounts	26,818	3,172	16	9,241	10,470	2,135	13,563
Monthly Benefits	$21,780,547	$2,135,202	$19,096	$7,957,221	$12,901,637	$2,787,153	$13,863,875
CERS Hazardous							
Number of Accounts	1,566	460	33	865	3,837	548	2,389
Monthly Benefits	$3,009,980	$739,847	$40,565	$1,501,148	$9,430,349	$852,169	$4,947,331
SPRS							
Number of Accounts	176	22	1	132	666	199	427
Monthly Benefits	$496,824	$51,466	$3,084	$350,336	$2,306,780	$406,571	$1,360,913
KRS Total							
Number of Accounts	46,750	6,008	66	16,854	25,633	6,518	28,289
Monthly Benefits	$52,530,433	$5,651,883	$90,931	$19,900,454	$45,797,459	$10,157,893	$39,751,711

The information in this table represents accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

EMPLOYER CONTRIBUTION RATES

In KERS, CERS, and SPRS both the employee and the employer contribute a percentage of creditable compensation to KRS.

The employee contribution rate is set by state statute. Non-Hazardous employees contribute 5% while Hazardous duty members contribute 8%. Employees hired on or after September 1, 2008, contribute an additional 1% to health insurance.

Under Kentucky Revised Statute 61.565, KERS and SPRS employer contribution rates are set by the KRS Board of Trustees based on an annual actuarial valuation. However, KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. For fiscal years 2003 through 2014, the Kentucky General Assembly suspended Kentucky Revised Statute 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the Board's consulting actuary. The table in the Actuarial Section shows the KERS and SPRS employer contribution rates that were actuarially recommended in the annual valuation without any adjustments.

The CERS employer contribution rates are also set by the KRS Board under Kentucky Revised Statute 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. The CERS employer contribution rates for fiscal year 2008 through 2009 were reduced from the actuarially recommended rate as a result of the passage of House Bill (HB) 1 during the 2008 Extraordinary Session of the Kentucky General Assembly. Also, during its 2009 Regular Session, the Kentucky General Assembly enacted HB 117, which mandated an extension of the phase-in of insurance contribution rates that had been previously approved by the KRS Board in 2006 from five years to 10 years to further mitigate the impact of the application of GASB Statements 43 and 45 on CERS employer contribution rates for health insurance. The actual pension and insurance employer contribution rates that were paid are shown below.

Employer Contribution Rates (%) As of June 30, 2018						
	2013	2014	2015	2016	2017	2018
KERS Non-Hazardous						
Actual Rate	23.61%	26.79%	38.77%	38.77%	48.59%	49.47%
KERS Hazardous						
Actual Rate	29.79%	32.21%	26.34%	26.34%	23.82%	23.70%
CERS Non-Hazardous						
Actual Rate	19.55%	18.89%	17.67%	17.06%	18.68%	19.18%
CERS Hazardous						
Actual Rate	37.60%	35.70%	34.31%	32.95%	31.06%	31.55%
SPRS						
Actual Rate	63.67%	71.15%	75.76%	75.76%	89.21%	91.24%

INSURANCE CONTRACTS

KRS provides medical insurance and other managed care coverage for eligible retired members.

Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. KRS provides access to health insurance coverage through the Kentucky Employees' Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by KRS. A retired member's spouse and/or dependents may also be covered on health insurance through KRS.

Insurance Benefits Paid to Retirees & Beneficiaries Participating in a KRS Health Insurance Plan As of June 30, 2018 (in Whole $)

	KERS Non - Hazardous	KERS Hazardous	CERS Non - Hazardous	CERS Hazardous	SPRS
Number	32,090	2,828	37,408	8,212	1,715
Average Service Credit (Months)	311	264	262	280	324
Average Monthly System Payment for Health Insurance	$371	$690	$326	$962	$880
Average Monthly Member Payment for Health Insurance	$61	$46	$61	$34	$20
Total Monthly Payment for Health Insurance	**$12,917,792**	**$1,716,464**	**$13,612,464**	**$6,700,951**	**$1,187,168**

Insurance Contracts by Type As of June 30, 2018						
KERS Non-Hazardous	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
KEHP Parent Plus	618	506	452	441	411	460
KEHP Couple/Family	1,276	797	714	656	663	696
KEHP Single	9,364	9,491	9,251	8,876	8,627	8,638
Medicare without Prescription	1,474	1,370	1,303	19,447	1,229	1,179
Medicare with Prescription	16,834	17,738	18,577	1,286	20,215	21,117
KERS Hazardous	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
KEHP Parent Plus	106	110	110	97	88	96
KEHP Couple/Family	451	448	448	439	432	478
KEHP Single	625	647	656	663	667	686
Medicare without Prescription	60	56	62	1,302	72	73
Medicare with Prescription	985	1,104	1,177	66	1,401	1,495
CERS Non-Hazardous	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
KEHP Parent Plus	340	278	242	235	222	231
KEHP Couple/Family	857	546	473	465	462	510
KEHP Single	7,652	7,843	8,098	8,164	8,313	8,802
Medicare without Prescription	2,707	2,583	2,531	23,007	2,462	2,389
Medicare with Prescription	18,824	20,200	21,520	2,499	24,247	25,476
CERS Hazardous	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
KEHP Parent Plus	400	432	456	378	395	422
KEHP Couple/Family	2,155	2,184	2,255	2,321	2,387	2,571
KEHP Single	1,425	1,447	1,500	1,595	1,645	1,712
Medicare without Prescription	79	89	107	2,969	125	119
Medicare with Prescription	2,324	2,510	2,697	114	3,205	3,388
SPRS	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
KEHP Parent Plus	76	78	81	77	79	74
KEHP Couple/Family	421	444	441	355	420	426
KEHP Single	283	263	265	246	251	253
Medicare without Prescription	20	20	16	850	17	21
Medicare with Prescription	682	712	777	18	897	941
KRS Total	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
KEHP Parent Plus	1,540	1,404	1,341	1,228	1,195	1,283
KEHP Couple/Family	5,160	4,419	4,331	4,328	4,364	4,681
KEHP Single	19,349	19,691	19,770	19,544	19,503	20,091
Medicare without Prescription	4,340	4,118	4,019	3,983	3,905	3,781
Medicare with Prescription	39,649	42,264	44,748	47,575	49,965	52,417

Kentucky Retirement Systems
1260 Louisville Rd, Frankfort, KY 40601

Hours of Operation:
8:00 AM - 4:30PM (EST) Monday-Friday

(502) 696-8800 or (800) 928-4646
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Website: https://kyret.ky.gov
Facebook: kyretirement
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December 12, 2005

Mr. Gary L. Harbin
Executive Secretary
Teachers' Retirement System
Commonwealth of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Dear Gary:

Enclosed are 20 bound copies and one unbound copy of the "Teachers' Retirement System of the State of Kentucky Report of Actuary on the Valuation Prepared as of June 30, 2005".

Sincerely yours,

Edward A. Macdonald, ASA, FCA, MAAA
President

EAM:sh

Enclosure

S:\Kentucky Teachers\2005 Valuation\val 2005.doc

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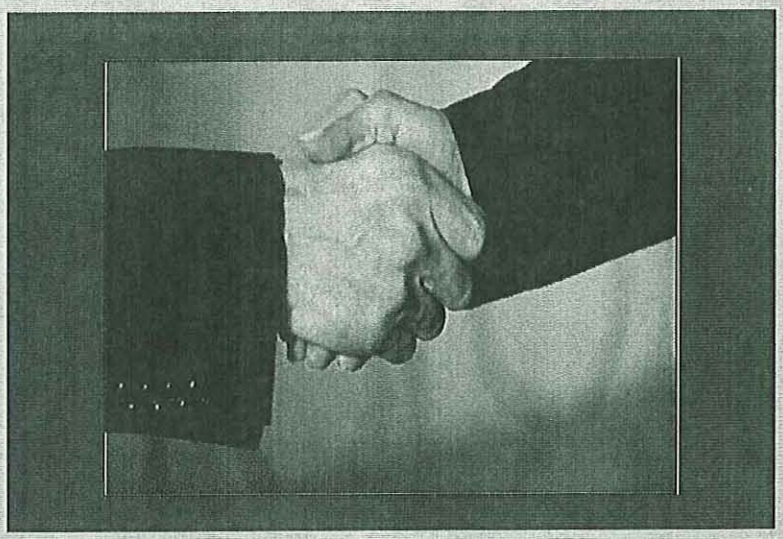

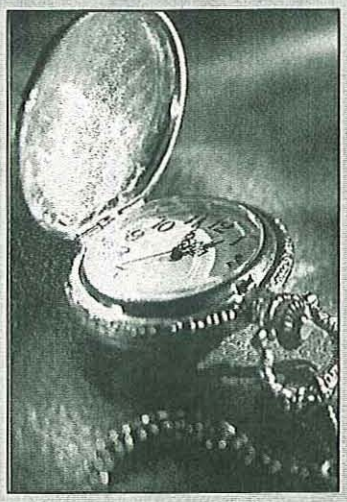

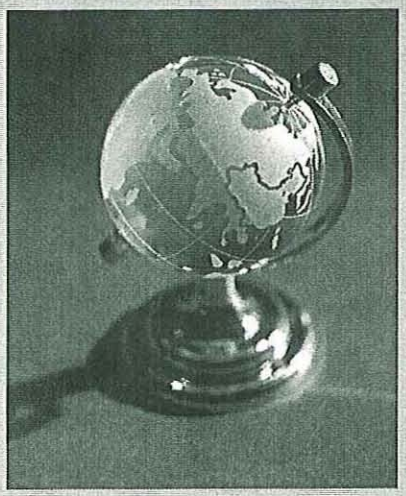

Teachers' Retirement System of the State of Kentucky Report of Actuary on the Valuation

Prepared as of June 30, 2005

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December 12, 2005

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2005. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that combined member and state contributions for the fiscal year ending June 30, 2008 at the rate of 23.82% of university members' salaries and 26.78% of non-university members' salaries are required to support the benefits of the System. This represents an increase since the previous valuation in the required employer contribution rate of 1.45% of payroll. There has been a net increase in the state special appropriation from 3.93% to 4.17%, or 0.24% of payroll. Therefore, for the 2007/2008 fiscal year, in addition to the state statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 1.32%; 1.21% from this valuation and 0.11% from the previous valuation. The contribution to the Life Insurance Fund and the Medical Insurance Fund would remain constant at 0.17% and 1.50% respectively.

The valuation takes into account the effect of amendments to the System enacted through the 2005 Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

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This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

In our opinion the System is operating on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

EAM:sh

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2005

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2005		June 30, 2004*	
Number of active members	72,281		71,950	
Annual salaries	$ 2,703,430		$ 2,641,533	
Number of annuitants and beneficiaries	37,402		35,803	
Annual allowances	$ 994,745		$ 914,879	
Assets:				
Market value	$ 13,456,026		$ 12,858,540	
Actuarial value	$ 14,598,843		$ 14,255,131	
Unfunded actuarial accrued liability	$ 4,536,027		$ 3,362,495	
Amortization period (years)	30		30	
	Univ.	**Non-Univ.**	**Univ.**	**Non-Univ.**
Pension Plan:				
Normal	14.39%	17.84%	14.19%	18.02%
Accrued liability	9.43	8.94	8.18	7.31
Total	23.82%	26.78%	22.37%	25.33%
Member	7.625%	9.105%	7.625%	9.105%
State (ARC)	16.195	17.675	14.745	16.225
Total	23.82%	26.78%	22.37%	25.33%
Life Insurance Fund:				
State	0.17%	0.17%	0.17%	0.17%
Medical Insurance Fund:				
Member	0.75%	0.75%	0.75%	0.75%
State Match	0.75	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	1.50%	1.50%	1.50%	1.50%
Total Contributions	25.49%	28.45%	24.04%	27.00%
Contribution rates for fiscal year ending:	**June 30, 2008**		**June 30, 2007**	
Member Statutory	8.375%	9.855%	8.375%	9.855%
State Statutory	11.625	13.105	11.625	13.105
Required Increase	1.32	1.32	0.11	0.11
State Special	4.17	4.17	3.93	3.93
Total	25.49%	28.45%	24.04%	27.00%

*Reported by prior actuarial firm.

2. The valuation indicates that combined member and State contributions at the rate of 23.82% of salaries for university members and at 26.78% for non-university members are sufficient to support the current benefits of the System. We also recommend that 0.17% be contributed by the state to the Life Insurance Fund and 1.50% combined member and state contributions be made to the Medical Insurance Fund. Comments on the valuation results as of June 30, 2005 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

3. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation.

4. The valuation takes into account the effect of amendments to the System enacted through the 2005 Session of the Legislature. There have been no changes since the previous valuation.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2005 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
Males	17,665	$ 737,455
Females	54,616	1,965,975
Total	72,281	$ 2,703,430

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2005

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	32,567	$ 908,542
Disability Retirements	1,982	45,492
Beneficiaries of Deceased Members	2,853	40,711
Total	37,402	$ 994,745

[1]Includes cost-of-living adjustments effective through July 1, 2005.

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2005 the market value of Pension Plan assets for valuation purposes held by the System amounted to $13,456,025,741. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.
2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2005 was $14,598,842,537. Schedule B shows the development of the actuarial value of assets as of June 30, 2005.
3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan, Medical Insurance Fund and the Life Insurance Fund.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation (amounts are $1,000's). The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $7,764,477 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $11,199,130 of which $967,426 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $171,263. The total actuarial accrued liability of the System amounts to $19,134,870. Against these liabilities, the System has present assets for valuation purposes of $14,598,843. When this amount is deducted from the actuarial accrued liability of $19,134,870, there remains $4,536,027 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 14.39% of payroll for university members and 17.84% for non-university members.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member will contribute 8.375% of annual salary to the System and each non-university member will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. For the 2007/2008 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.

3. Therefore, 10.875% of active university members' salaries and 12.355% of active non-university members' salaries is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of this amount, 0.17% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 1.32% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of $112,865,500, or 4.17% of total payroll will be made by the State. The total required employer contribution rate to the Pension Plan is, therefore, 16.195% for university members and 17.675% for non-university members. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

	UNIVERSITY	NON-UNIVERSITY
Member		
Statutory Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Contribution to Pension Plan	7.625%	9.105%
Employer		
Statutory Matching Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	12.355%
Life Insurance	(0.17)%	(0.17)%
Additional to Maintain 30-Year Amortization	1.32	1.32
Special Appropriation	4.17	4.17
Contribution to Pension Plan	16.195%	17.675%
Total Contribution to Pension Plan	23.82%	26.78%

4. The valuation indicates that normal contributions at the rate of 14.39% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.84%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 9.43% for university members and 8.94% for non-university members. These rates include special appropriations of $112,865,500 or 4.17% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES	
	UNIVERSITY	NON-UNIVERSITY
Normal	14.39%	17.84%
Accrued liability*	9.43	8.94
Total	23.82%	26.78%

* Includes special appropriations of $112,865,500 or 4.17% of payroll to be made by the State.

5. The unfunded actuarial accrued liability amounts to $4,536,027,000 as of the valuation date. Accrued liability contributions at the rate of 9.43% of active university members' payroll and 8.94% of non-university members' payroll are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. The benefit percentage for non-university members is 2.0% for service accrued through July 1, 1983 and 2.5% for service up to 30 years accrued after that date. However, for members who join the System on or after July 1, 2002 and retire with less than 10 years of service, the benefit percentage is 2.0%. For members who joined the System on or after July 1, 2002, who retire with 10 or more years of service, the benefit percentage is 2.5% for all years of service up to 30 years. For all members who retire on or after July 1, 2004, the benefit percentage for service earned in excess of 30 years is 3.0%. The total net contribution rate is 26.78% of payroll for non-university members. For university members the benefit percentage is 2.0% for all service and the contribution rate is 23.82%. Our calculations indicate that these contribution rates will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 1.32%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. The System has been operating on an actuarially sound basis. However, there are no excess assets or contributions available to provide additional benefits, and there is an increase in the required employer contribution of 1.32% of payroll for the fiscal year ending June 30, 2008. In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,173,532,000 in the unfunded accrued liability from $3,362,495,000 to $4,536,027,000 during the year ending June 30, 2005.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 252,187
Accrued liability contribution	(153,746)
Experience:	
Valuation asset growth	372,991
Pensioners' mortality	47,482
Turnover and retirements	40,017
New entrants	48,552
Salary increases	32,385
Amendments	0
Assumption and method changes*	533,664
Total	$ 1,173,532

*Includes impact of change in actuarial software.

SECTION VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2005

GROUP	NUMBER
Retirees and beneficiaries currently Receiving benefits	37,402
Terminated employees entitled to Benefits but not yet receiving benefits	4,033
Active plan members	72,281
Total	113,716

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2000*	$12,759,636	$13,330,418	$ 570,782	95.7%	$2,133,743	26.8%
6/30/2001**	13,299,161	14,642,129	1,342,968	90.8	2,213,772	60.7
6/30/2002	13,588,847	15,695,574	2,106,726	86.6	2,313,663	91.1
6/30/2003	13,863,786	16,594,781	2,730,995	83.5	2,497,731	109.3
6/30/2004	14,255,131	17,617,626	3,362,495	80.9	2,641,533	127.3
6/30/2005	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8

* Reflects change in asset valuation method and System amendments.
** Reflects change in decremental assumptions.

All figures prior to 6/30/2005 were reported by prior actuarial firm.

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2005. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2005
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of Return*	7.50%
Projected salary Increases*	4.00 - 8.10%
Cost-of-living adjustments	1.50% Annually
*Includes inflation at	4.00%

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2003	$322,046,968	100%	$0
June 30, 2004	364,351,412	100	0
June 30, 2005	383,776,826	100	0

SCHEDULE A

RESULTS OF THE VALUATION
PREPARED AS OF JUNE 30, 2005
($1,000's)

1.	**ACTUARIAL ACCRUED LIABILITY**		
	Present value of prospective benefits payable in respect of:		
	(a) Present active members:		
	- Service retirement benefits	$ 7,210,009	
	- Disability retirement benefits	338,112	
	- Death and survivor benefits	56,079	
	- Refunds of member contributions	160,277	
	Total		$ 7,764,477
	(b) Present inactive members and members entitled to deferred vested benefits:		171,263
	(c) Present annuitants and beneficiaries:		
	- Service retirement benefits	$10,358,244	
	- Disability retirement benefits	443,592	
	- Death and survivor benefits	397,294	
	Total		$ 11,199,130
	(d) Total actuarial accrued liability		$ 19,134,870
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**		$ 14,598,843
3.	**UNFUNDED ACTUARIAL ACCRUED LIABILITY [(1) minus (2)]**		$ 4,536,027

4.	**NORMAL CONTRIBUTION RATE**	**UNIVERSITY**	**NON-UNIVERSITY**
	(a) Actuarial present value of benefits accruing annually	$ 23,438	$ 453,257
	(b) Annual payroll of active members	$ 162,858	$ 2,540,572
	(c) Normal contribution rate [4(a) divided by 4(b)]	14.39%	17.84%

SCHEDULE A

(continued)

SOLVENCY TEST
(in millions of dollars)

Fiscal Year	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
2000	$2,128.4	$7,183.4	$4,018.6	$12,759.6	100%	100%	86%
2001	2,215.5	8,037.0	4,389.6	13,299.2	100	100	69
2002	2,302.3	8,816.9	4,576.4	13,588.8	100	100	54
2003	2,413.9	9,329.3	4,851.6	13,863.8	100	100	44
2004	2,546.1	9,906.2	5,165.3	14,255.1	100	100	35
2005	2,621.3	11,370.4	5,143.2	14,598.8	100	100	12

All figures prior to 6/30/2005 were reported by prior actuarial firm.

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
AS OF JUNE 30, 2005

(1)	Actuarial Value Beginning of Year		$ 14,255,130,659
(2)	Market Value End of Year		$ 13,456,025,741
(3)	Market Value Beginning of Year		$ 12,858,540,479
(4)	Cash Flow		
	a.	Contributions	$ 630,801,344
	b.	Benefit Payments	(970,494,680)
	c.	Net	$ (339,693,336)
(5)	Investment Income		
	a.	Market total: (2) – (3) – (4)c	$ 937,178,598
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition [(1) x (5)b] + [(4)c * (5)b * 0.5]	$ 1,056,396,299
	d.	Amount for Phased-In Recognition (5)a – (5)c	$ (119,217,701)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20*(5)d	$ (23,843,540)
	b.	First Prior Year	(349,147,545)
	c.	Second Prior Year	0
	d.	Third Prior Year	0
	e.	Fourth Prior Year	0
	f.	Total Recognized Investment Gain	$ (372,991,085)
(7)	Actuarial Value End of Year: (1) + (4)c + (5)c + (6)f		$ 14,598,842,537
(8)	Difference Between Market & Actuarial Values (2) – (7)		$ (1,142,816,796)

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2005	June 30, 2004
Receipts for the Year		
Contributions		
Members	$ 247,024,518	$ 238,922,086
Employers	383,776,826	364,351,412
Total	$ 630,801,344	$ 603,273,498
Net Investment Income	943,831,270	1,156,237,635
TOTAL	$ 1,574,632,614	$ 1,759,511,133
Disbursements for the Year		
Benefit Payments	$ 959,518,739	$ 881,270,288
Refunds to Members	10,975,941	10,477,435
Medical Insurance Payments	0	0
Miscellaneous, including expenses	6,652,672	6,572,592
TOTAL	$ 977,147,352	$ 898,320,315
Excess of Receipts over Disbursements	$ 597,485,262	$ 861,190,818
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 12,858,540,479	$ 11,997,349,661
Excess of Receipts over Disbursements	597,485,262	861,190,818
Asset Balance as of the End of the Year	$ 13,456,025,741	$ 12,858,540,479
Rate of Return on Market Value	7.44%	9.76%

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE C

MEDICAL INSURANCE FUND
SUMMARY OF RECEIPTS AND DISBURSEMENTS
(Market Value)

	For the Year Ending	
	June 30, 2005	June 30, 2004
Receipts for the Year		
Contributions		
Members	$ 51,576,031	$ 53,903,551
Employers	79,022,562	53,346,747
Total	$ 130,598,593	$ 107,250,298
Net Investment Income	6,507,538	7,127,109
TOTAL	$ 137,106,131	$ 114,377,407
Disbursements for the Year		
Benefit Payments	$ 0	$ 0
Refunds to Members	9,072	12,150
Medical Insurance Payments	142,349,436	119,297,357
Miscellaneous, including expenses	4,070,892	3,970,311
TOTAL	$ 146,429,400	$ 123,279,818
Excess of Receipts over Disbursements	$ (9,323,269)	$ (8,902,411)
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 156,634,164	$ 165,536,575
Excess of Receipts over Disbursements	(9,323,269)	(8,902,411)
Asset Balance as of the End of the Year	$ 147,310,895	$ 156,634,164

SCHEDULE C

LIFE INSURANCE FUND
SUMMARY OF RECEIPTS AND DISBURSEMENTS
(Market Value)

	For the Year Ending	
	June 30, 2005	June 30, 2004
Receipts for the Year		
Contributions		
Members	$ 0	$ 0
Employers	4,569,612	17,928,687
Total	$ 4,569,612	$ 17,928,687
Net Investment Income	2,239,285	1,945,052
TOTAL	$ 6,808,897	$ 19,873,739
Disbursements for the Year		
Benefit Payments	$ 3,852,800	$ 4,015,800
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	0	0
TOTAL	$ 3,852,800	$ 4,015,800
Excess of Receipts over Disbursements	$ 2,956,097	$ 15,857,939
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 61,016,107	$ 45,158,168
Excess of Receipts over Disbursements	2,956,097	15,857,939
Asset Balance as of the End of the Year	$ 63,972,204	$ 61,016,107

SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the Actuary based on the actuarial experience investigation as of June 30, 2000 and adopted by the Board of Trustees on December 17, 2001.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.70
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of				
Age	Death	Disability	Withdrawal	Service Retirement*	Early Retirement
20	.003%	.01%	8.65%		
25	.010	.01	8.95		
30	.016	.02	6.46		
35	.032	.04	4.49		
40	.048	.08	3.21		
45	.064	.18	2.12	15.00%	
50	.104	.33	2.33	15.00	
55	.216	.55	3.00	25.00	4.00%
60	.375	.87		20.00	
62	.438	1.03		28.00	
65	.566			40.00	
70				100.00	

*It is also assumed that an additional 20% will retire in the first year eligible for unreduced benefits if before age 60.

Females

Age	Annual Rate of				
	Death	Disability	Withdrawal	Service Retirement*	Early Retirement
20	.002%	.03%	7.16%		
25	.007	.03	8.34		
30	.014	.04	6.30		
35	.026	.07	4.08		
40	.044	.14	2.61		
45	.055	.26	1.92		
50	.066	.42	2.02	15.00%	
55	.085	.64	2.50	30.00	5.00%
60	.122	.91		25.00	
62	.137	1.05		25.00	
65	.159			35.00	
70				100.00	

*It is also assumed that an additional 25% will retire in the first year eligible for unreduced benefits if before age 60.

DEATHS AFTER RETIREMENT: Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Age	Annual Rate of Death After			
	Service Retirement		Disability Retirement	
	Male	Female	Male	Female
45	.2%	.1%	5.1%	4.5%
50	.3	.2	5.1	4.5
55	.5	.2	5.1	4.5
60	.9	.4	5.1	4.5
65	1.7	.7	5.1	4.5
70	2.8	1.4	5.1	4.5
75	4.2	2.6	5.1	4.5
80	6.5	4.4	7.8	6.1
85	10.1	7.5	12.3	10.5
90	15.5	12.8	19.1	17.6
95	21.9	21.1	29.2	28.8

ACTUARIAL METHOD: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS:

Unused sick leave: 1% of active liability

SCHEDULE E

SUMMARY OF MAIN SYSTEM PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2005. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to: (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus (b) 2.5% of final average salary multiplied by service after July 1, 1983. (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by actuarial equivalent factors from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 19 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

SCHEDULE F

TABLE 1

AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2005 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	≥ 35	Total
24 & under	2,944								2,944
Total Pay	35,679,848								35,679,848
Avg. Pay	12,120								12,120
25 to 29	7,109	1,145							8,254
Total Pay	180,290,643	43,836,055							224,126,698
Avg. Pay	25,361	38,285							27,154
30 to 34	3,787	4,515	749						9,051
Total Pay	95,377,213	180,632,810	34,517,489						310,527,512
Avg. Pay	25,185	40,007	46,085						34,309
35 to 39	2,826	2,465	3,034	752					9,077
Total Pay	65,247,778	101,717,938	145,827,229	38,728,625					351,521,570
Avg. Pay	23,088	41,265	48,064	51,501					38,727
40 to 44	3,988	1,496	1,591	2,224	675				9,974
Total Pay	64,719,282	63,591,229	78,520,983	116,679,277	36,507,247				360,018,018
Avg. Pay	16,229	42,508	49,353	52,464	54,085				36,096
45 to 49	2,083	1,300	1,356	1,458	2,015	865	1		9,078
Total Pay	46,938,869	57,121,592	67,580,240	78,917,276	113,040,831	49,021,756	75,669		412,696,233
Avg. Pay	22,534	43,940	49,838	54,127	56,100	56,673	75,669		45,461
50 to 54	2,225	1,103	1,303	1,424	1,227	2,283	746		10,311
Total Pay	45,536,093	50,367,045	68,267,837	77,560,448	70,802,922	135,207,271	46,388,697		494,130,313
Avg. Pay	20,466	45,664	52,393	54,467	57,704	59,224	62,183		47,923
55 to 59	3,079	713	833	1,059	808	855	764	121	8,232
Total Pay	52,041,255	34,151,525	44,942,999	59,627,241	47,173,238	54,155,283	52,882,850	8,986,406	353,960,797
Avg. Pay	16,902	47,898	53,953	56,305	58,383	63,340	69,218	74,268	42,998
60 to 64	1,828	218	227	349	282	257	116	114	3,391
Total Pay	25,760,125	11,465,856	12,625,420	20,034,315	17,129,896	16,502,711	8,812,751	9,439,648	121,770,722
Avg. Pay	14,092	52,596	55,619	57,405	60,744	64,213	75,972	82,804	35,910
65 & over	1,561	68	54	73	56`3,226,802	49	38	70	1,969
Total Pay	13,484,871	3,765,409	3,300,803	4,286,750	57,621	3,232,675	2,461,994	5,238,590	38,997,894
Avg. Pay	8,639	55,374	61,126	58,723		65,973	64,789	74,837	19,806
Total	31,430	13,023	9,147	7,339	5,063	4,309	1,665	305	72,281
Total Pay	625,075,977	546,649,459	455,583,000	395,833,932	287,880,936	258,119,696	110,621,961	23,664,644	2,703,429,605
Avg. Pay	19,888	41,976	49,807	53,936	56,860	59,902	66,440	77,589	37,402

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES
AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
49 & Under	859	$ 9,892,507	$ 11,516
50 – 54	2,580	78,018,056	30,240
55 – 59	7,704	246,951,914	32,055
60 – 64	7,125	216,610,571	30,401
65 – 69	5,688	158,181,170	27,810
70 – 74	4,389	110,577,421	25,194
75 – 79	3,532	78,936,569	22,349
80 & Over	5,525	95,576,747	17,299
Total	37,402	$ 994,744,955	$ 26,596

December 5, 2006

Mr. Gary L. Harbin
Executive Secretary
Teachers' Retirement System
Commonwealth of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Dear Gary:

Enclosed are 25 bound copies and one unbound copy of the "Teachers' Retirement System of the State of

Kentucky Report of Actuary on the Valuation Prepared as of June 30, 2006".

Sincerely yours,

Edward A. Macdonald, ASA, FCA, MAAA
President

EAM:sh

Enclosure

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Teachers' Retirement System of the State of Kentucky
Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2006

December 5, 2006

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2006. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that combined member and state contributions for the fiscal year ending June 30, 2009 at the rate of 24.46% of university members' salaries and 27.42% of non-university members' salaries are required to support the benefits of the System. This represents an increase since the previous valuation in the required employer contribution rate of 0.64% of payroll. There has been a net increase in the state special appropriation from 4.17% to 4.25%, or 0.08% of payroll. Therefore, for the 2008/2009 fiscal year, in addition to the state statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 1.88%; 0.56% from this valuation and 1.32% from the previous valuation. The contribution to the Life Insurance Fund and the Medical Insurance Fund would remain constant at 0.17% and 1.50% respectively.

The valuation takes into account the effect of amendments to the System enacted through the 2006 Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

In our opinion the System is operating on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, ACA, MAAA
Senior Actuary

EAM/EJK:sh

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2006

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	**June 30, 2006**		**June 30, 2005**	
Number of active members	73,740		72,281	
Annual salaries	$ 2,859,477		$ 2,703,430	
Number of annuitants and beneficiaries	38,497		37,402	
Annual allowances	$ 1,074,159		$ 994,745	
Assets:				
Market value	$ 13,783,830		$ 13,456,026	
Actuarial value	$ 14,857,641		$ 14,598,843	
Unfunded actuarial accrued liability	$ 5,467,140		$ 4,536,027	
Amortization period (years)	30		30	
	Univ.	**Non-Univ.**	**Univ.**	**Non-Univ.**
Pension Plan:				
Normal	13.91%	17.22%	14.39%	17.84%
Accrued liability	10.55	10.20	9.43	8.94
Total	24.46%	27.42%	23.82%	26.78%
Member	7.625%	9.105%	7.625%	9.105%
State (ARC)	16.835	18.315	16.195	17.675
Total	24.46%	27.42%	23.82%	26.78%
Life Insurance Fund:				
State	0.17%	0.17%	0.17%	0.17%
Medical Insurance Fund:				
Member	0.75%	0.75%	0.75%	0.75%
State Match	0.75	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	1.50%	1.50%	1.50%	1.50%
Total Contributions	26.13%	29.09%	25.49%	28.45%
Contribution rates for fiscal year ending:	**June 30, 2009**		**June 30, 2008**	
Member Statutory	8.375%	9.855%	8.375%	9.855%
State Statutory	11.625	13.105	11.625	13.105
Required Increase	1.88	1.88	1.32	1.32
State Special	4.25	4.25	4.17	4.17
Total	26.13%	29.09%	25.49%	28.45%

2. The valuation indicates that combined member and State contributions at the rate of 24.46% of salaries for university members and at 27.42% for non-university members are sufficient to support the current benefits of the System. We also recommend that 0.17% be contributed by the state to the Life Insurance Fund and 1.50% combined member and state contributions be made to the Medical Insurance Fund. Comments on the valuation results as of June 30, 2006 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

3. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. Since the previous valuation, the assumed rates of withdrawal, disability, retirement and mortality have been revised to reflect the results of the experience investigation for the five year period ending June 30, 2005. These revised assumptions were adopted by the Board of Trustees on September 18, 2006.

4. The valuation takes into account the effect of amendments to the System enacted through the 2006 Session of the Legislature. Since the previous valuation, the System has been amended to grant a one-time 0.8% cost-of-living increase effective July 1, 2006, and a one-time 0.6% cost-of-living increase effective July 1, 2007.

5. All amounts shown prior to the 2004/2005 fiscal year were developed and/or reported by the prior actuarial firm.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2006 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
Males	17,938	$ 776,490
Females	55,802	2,082,987
Total	73,740	$ 2,859,477

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2006

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	33,684	$ 984,911
Disability Retirements	2,038	48,026
Beneficiaries of Deceased Members	2,775	41,222
Total	38,497	$ 1,074,159

[1] Includes cost-of-living adjustments effective through July 1, 2007.

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2006 the market value of Pension Plan assets for valuation purposes held by the System amounted to $13,783,830,173. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.
2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2006 was $14,857,641,238. Schedule B shows the development of the actuarial value of assets as of June 30, 2006.
3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan and the Life Insurance Fund.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation (amounts are $1,000's). The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.
2. The valuation shows that the System has an actuarial accrued liability of $8,108,193 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $12,033,112 of which $1,059,382 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $183,475. The total actuarial accrued liability of the System amounts to $20,324,781. Against these liabilities, the System has present assets for valuation purposes of $14,857,641. When this amount is deducted from the actuarial accrued liability of $20,324,781, there remains $5,467,140 as the unfunded actuarial accrued liability.
3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 13.91% of payroll for university members and 17.22% for non-university members.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member will contribute 8.375% of annual salary to the System and each non-university member will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. For the 2008/2009 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.

3. Therefore, 10.875% of active university members' salaries and 12.355% of active non-university members' salaries is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of this amount, 0.17% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 1.88% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 4.25% of total payroll will be made by the State. The total required employer contribution rate to the Pension Plan is, therefore, 16.835% for university members and 18.315% for non-university members. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

	UNIVERSITY	NON-UNIVERSITY
Member		
Statutory Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Contribution to Pension Plan	7.625%	9.105%
Employer		
Statutory Matching Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	12.355%
Life Insurance	(0.17)%	(0.17)%
Additional to Maintain 30-Year Amortization	1.88	1.88
Special Appropriation	4.25	4.25
Contribution to Pension Plan	16.835%	18.315%
Total Contribution to Pension Plan	24.46%	27.42%

4. The valuation indicates that normal contributions at the rate of 13.91% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.22%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 10.55% for university members and 10.20% for non-university members. These rates include special appropriations of 4.25% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES	
	UNIVERSITY	**NON-UNIVERSITY**
Normal	13.91%	17.22%
Accrued liability*	10.55	10.20
Total	24.46%	27.42%

* Includes special appropriations of 4.25% of payroll to be made by the State.

5. The unfunded actuarial accrued liability amounts to $5,467,140,000 as of the valuation date. Accrued liability contributions at the rate of 10.55% of active university members' payroll and 10.20% of non-university members' payroll are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. The benefit percentage for non-university members is 2.0% for service accrued through July 1, 1983 and 2.5% for service up to 30 years accrued after that date. However, for members who join the System on or after July 1, 2002 and retire with less than 10 years of service, the benefit percentage is 2.0%. For members who joined the System on or after July 1, 2002, who retire with 10 or more years of service, the benefit percentage is 2.5% for all years of service up to 30 years. For all members who retire on or after July 1, 2004, the benefit percentage for service earned in excess of 30 years is 3.0%. The total net contribution rate is 27.42% of payroll for non-university members. For university members the benefit percentage is 2.0% for all service and the contribution rate is 24.46%. Our calculations indicate that these contribution rates will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 1.88%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. The System has been operating on an actuarially sound basis. However, there are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 1.88% of payroll for the fiscal year ending June 30, 2009, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $931,113,000 in the unfunded accrued liability from $4,536,027,000 to $5,467,140,000 during the year ending June 30, 2006.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 340,202
Accrued liability contribution	(168,343)
Experience:	
Valuation asset growth	448,987
Pensioners' mortality	(5,966)
Turnover and retirements	(17,637)
New entrants	66,856
Salary increases	104,671
Amendments	161,952
Assumption and method changes	391
Total	$ 931,113

SECTION VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2006

GROUP	NUMBER
Retirees and beneficiaries currently Receiving benefits	38,497
Terminated employees entitled to Benefits but not yet receiving benefits	4,275
Active plan members	73,740
Total	116,512

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2001*	$13,299,161	$14,642,129	$ 1,342,968	90.8%	$2,213,772	60.7%
6/30/2002	13,588,847	15,695,574	2,106,727	86.6	2,313,663	91.1
6/30/2003	13,863,786	16,594,781	2,730,995	83.5	2,497,731	109.3
6/30/2004	14,255,131	17,617,626	3,362,495	80.9	2,641,533	127.3
6/30/2005	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8
6/30/2006*	14,857,641	20,324,781	5,467,140	73.1	2,859,477	191.2

* Reflects change in decremental assumptions.

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2006. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2006
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of Return*	7.50%
Projected salary Increases*	4.00 - 8.20%
Cost-of-living adjustments	1.50% Annually
*Includes inflation at	4.00%

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2004	$364,351,412	100%	$0
June 30, 2005	383,776,826	100	0
June 30, 2006	406,107,266	100	0

The required employer contribution increase of 0.11% is scheduled for the current 2007 fiscal year budget and the increase of 1.32% is scheduled for the 2008 fiscal year budget. However, a portion of the pension contribution stream was contributed to the Medical Stabilization Fund. Therefore, there will be an NPO for the fiscal year ending June 30, 2007.

SCHEDULE A

RESULTS OF THE VALUATION
PREPARED AS OF JUNE 30, 2006
($1,000's)

1.	**ACTUARIAL ACCRUED LIABILITY**		
	Present value of prospective benefits payable in respect of:		
	(a) Present active members:		
	- Service retirement benefits	$ 7,580,014	
	- Disability retirement benefits	331,190	
	- Death and survivor benefits	63,063	
	- Refunds of member contributions	133,926	
	Total		$ 8,108,193
	(b) Present inactive members and members entitled to deferred vested benefits:		183,475
	(c) Present annuitants and beneficiaries:		
	- Service retirement benefits	$11,265,660	
	- Disability retirement benefits	381,567	
	- Death and survivor benefits	385,886	
	Total		$ 12,033,112
	(d) Total actuarial accrued liability		$ 20,324,781
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**		$ 14,857,641
3.	**UNFUNDED ACTUARIAL ACCRUED LIABILITY [(1) minus (2)]**		$ 5,467,140

4. NORMAL CONTRIBUTION RATE

		UNIVERSITY	**NON-UNIVERSITY**
(a)	Actuarial present value of benefits accruing annually	$ 24,509	$ 462,089
(b)	Annual payroll of active members	$ 176,135	$ 2,683,342
(c)	Normal contribution rate [4(a) divided by 4(b)]	13.91%	17.22%

SCHEDULE A

(continued)

SOLVENCY TEST
(in millions of dollars)

Fiscal Year Ending	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets		
					(1)	(2)	(3)
6/30/2001	$2,215.5	$8,037.0	$4,389.6	$13,299.2	100%	100%	69%
6/30/2002	2,302.3	8,816.9	4,576.4	13,588.8	100	100	54
6/30/2003	2,413.9	9,329.3	4,851.6	13,863.8	100	100	44
6/30/2004	2,546.1	9,906.2	5,165.3	14,255.1	100	100	35
6/30/2005	2,621.3	11,370.4	5,143.2	14,598.8	100	100	12
6/30/2006	2,615.8	12,216.6	5,492.4	14,857.6	100	100	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS AS OF JUNE 30, 2006

(1)	Actuarial Value Beginning of Year		$ 14,598,842,537
(2)	Market Value End of Year		$ 13,783,830,173
(3)	Market Value Beginning of Year		$ 13,456,025,741
(4)	Cash Flow		
	a.	Contributions	$ 664,572,122
	b.	Benefit Payments	1,037,706,643
	c.	Net	$ (373,134,521)
(5)	Investment Income		
	a.	Market total: (2) – (3) – (4)c	$ 700,938,953
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(1) x (5)b] + [(4)c * (5)b * 0.5]	$ 1,080,920,646
	d.	Amount for Phased-In Recognition: (5)a – (5)c	$ (379,981,693)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20*(5)d	$ (75,996,339)
	b.	First Prior Year	(23,843,540)
	c.	Second Prior Year	(349,147,545)
	d.	Third Prior Year	0
	e.	Fourth Prior Year	0
	f.	Total Recognized Investment Gain	$ (448,987,424)
(7)	Actuarial Value End of Year:		
	(1) + (4)c + (5)c + (6)f		$ 14,857,641,238
(8)	Difference Between Market & Actuarial Values: (2) – (7)		$ (1,073,811,065)

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2006	**June 30, 2005**
Receipts for the Year		
Contributions		
Members	$ 258,464,856	$ 247,024,518
Employers	406,107,266	383,776,826
Total	$ 664,572,122	$ 630,801,344
Net Investment Income	707,778,812	943,831,270
TOTAL	$ 1,372,350,934	$ 1,574,632,614
Disbursements for the Year		
Benefit Payments	$ 1,024,872,421	$ 959,518,739
Refunds to Members	12,834,222	10,975,941
Medical Insurance Payments	0	0
Miscellaneous, including expenses	6,839,859	6,652,672
TOTAL	$ 1,044,546,502	$ 977,147,352
Excess of Receipts over Disbursements	$ 327,804,432	$ 597,485,262
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 13,456,025,741	$ 12,858,540,479
Excess of Receipts over Disbursements	327,804,432	597,485,262
Asset Balance as of the End of the Year	$ 13,783,830,173	$ 13,456,025,741

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE C

LIFE INSURANCE FUND*
SUMMARY OF RECEIPTS AND DISBURSEMENTS
(Market Value)

	For the Year Ending	
	June 30, 2006	**June 30, 2005**
Receipts for the Year		
Contributions		
Members	$ 0	$ 0
Employers	4,813,703	4,569,612
Total	$ 4,813,703	$ 4,569,612
Net Investment Income	2,689,330	2,239,285
TOTAL	$ 7,503,033	$ 6,808,897
Disbursements for the Year		
Benefit Payments	$ 3,894,000	$ 3,852,800
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	0	0
TOTAL	$ 3,894,000	$ 3,852,800
Excess of Receipts over Disbursements	$ 3,609,033	$ 2,956,097
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 63,972,204	$ 61,016,107
Excess of Receipts over Disbursements	3,609,033	2,956,097
Asset Balance as of the End of the Year	$ 67,581,237	$ 63,972,204

* The retiree portion of the Life Insurance Fund when allocated will be moved to the GASB 43 and 45 report next year.

SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the Actuary based on the actuarial experience investigation as of June 30, 2005 and adopted by the Board of Trustees on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.70
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before	After
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	27 Years of Service	27 Years of Service*
20	0.003%	0.01%	9.00%				
25	0.010%	0.01%	9.00%	1.50%			
30	0.016%	0.02%	9.00%	3.00%	3.00%		
35	0.032%	0.05%	10.00%	3.25%	1.50%		
40	0.048%	0.08%	10.00%	3.75%	1.50%		
45	0.064%	0.22%	9.50%	2.50%	1.50%		25.0%
50	0.104%	0.42%	10.00%	4.00%	3.00%		20.0%
55	0.216%	0.60%	11.00%	3.00%	2.70%	6.0%	35.0%
60	0.375%	0.79%	11.00%	3.00%	2.70%	14.0%	25.0%
62	0.438%	0.83%	11.00%	3.00%	2.70%	14.0%	23.0%
65	0.566%	0.90%	11.00%	3.00%	2.70%	22.5%	35.0%
70	0.905%	0.00%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.002%	0.03%	6.00%				
25	0.007%	0.03%	8.50%	3.00%			
30	0.014%	0.04%	9.00%	4.00%	1.50%		
35	0.026%	0.11%	8.50%	4.00%	2.00%		
40	0.044%	0.22%	8.50%	2.50%	1.50%		
45	0.055%	0.38%	7.00%	2.50%	1.50%		25.0%
50	0.066%	0.44%	8.50%	3.00%	2.25%		20.0%
55	0.085%	0.56%	10.00%	3.50%	2.50%	7.5%	35.0%
60	0.122%	0.85%	11.00%	3.50%	2.50%	16.5%	30.0%
62	0.137%	0.85%	11.00%	3.50%	2.50%	12.5%	25.0%
65	0.159%	0.85%	11.00%	3.50%	2.50%	26.0%	30.0%
70	0.195%	0.00%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

ACTUARIAL METHOD: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 1% of active liability

SCHEDULE E

SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2006. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to: (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus (b) 2.5% of final average salary multiplied by service after July 1, 1983. (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by actuarial equivalent factors from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Disability Retirement Allowance

Condition for Allowance

Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance

The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

SCHEDULE F

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2006 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	3,774								3,774
Total Pay	60,389,869								60,389,869
Avg. Pay	16,002								16,002
25 to 29	7,118	1,633							8,751
Total Pay	194,189,082	65,241,872							259,430,954
Avg. Pay	27,281	39,952							29,646
30 to 34	3,680	4,529	985						9,194
Total Pay	94,607,831	190,740,360	48,202,943						333,551,134
Avg. Pay	25,709	42,115	48,937						36,279
35 to 39	2,853	2,476	3,170	978					9,477
Total Pay	68,608,471	106,025,790	159,096,913	52,577,426					386,308,600
Avg. Pay	24,048	42,821	50,188	53,760					40,763
40 to 44	3,951	1,551	1,501	2,230	882	1			10,116
Total Pay	68,396,238	68,315,719	77,502,792	122,077,709	49,705,633	53,224			386,051,316
Avg. Pay	17,311	44,046	51,634	54,743	56,356	53,224			38,162
45 to 49	1,985	1,301	1,332	1,375	2,019	924	1		8,937
Total Pay	46,208,148	59,078,648	68,948,637	77,450,400	118,195,694	54,566,564	52,243		424,500,334
Avg. Pay	23,279	45,410	51,763	56,328	58,542	59,055	52,243		47,499
50 to 54	2,142	1,158	1,211	1,410	1,261	1,948	936		10,066
Total Pay	42,845,353	54,861,889	65,660,366	79,915,597	75,928,400	120,001,875	59,857,562		499,071,040
Avg. Pay	20,002	47,376	54,220	56,678	60,213	61,603	63,950		49,580
55 to 59	3,267	703	822	1,045	925	722	579	129	8,192
Total Pay	56,582,366	34,925,376	45,169,933	61,308,005	56,224,799	48,104,030	42,591,233	9,813,503	354,719,245
Avg. Pay	17,319	49,680	54,951	58,668	60,784	66,626	73,560	76,074	43,301
60 to 64	1,872	222	220	293	273	215	91	109	3,295
Total Pay	25,685,786	12,091,806	12,610,103	17,568,435	17,099,306	14,356,070	7,001,252	9,755,688	116,168,448
Avg. Pay	13,721	54,468	57,319	59,961	62,635	66,772	76,937	89,502	35,256
65 & over	1,564	54	60	57	63	40	40	60	1,938
Total Pay	14,604,019	3,239,212	3,737,249	3,564,902	3,931,252	2,698,748	2,895,727	4,615,377	39,286,485
Avg. Pay	9,338	59,985	62,287	62,542	62,401	67,469	72,393	76,923	20,272
Total	32,206	13,627	9,301	7,388	5,423	3,850	1,647	298	73,740
Total Pay	672,117,163	594,520,672	480,928,936	414,462,474	321,085,083	239,780,512	112,398,016	24,184,568	2,859,477,425
Avg. Pay	20,869	43,628	51,707	56,099	59,208	62,281	68,244	81,156	38,778

Average Age: 43.1 Average Service: 11.0

SCHEDULE F

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
49 & Under	895	$ 11,550,750	$ 12,906
50 – 54	2,568	81,077,608	31,572
55 – 59	8,432	280,345,305	33,248
60 – 64	7,486	235,909,250	31,513
65 – 69	5,953	172,551,739	28,986
70 – 74	4,407	115,722,408	26,259
75 – 79	3,515	81,881,428	23,295
80 & Over	5,241	95,120,739	18,149
Total	38,497	$1,074,159,227	$ 27,902

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December 3, 2007

Mr. Gary L. Harbin
Executive Secretary
Teachers' Retirement System
Commonwealth of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Dear Gary:

Enclosed are 25 bound copies and one unbound copy of the "Teachers' Retirement System of the State of Kentucky Report of Actuary on the Valuation Prepared as of June 30, 2007".

Sincerely yours,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Senior Actuary

EAM/EJK:kc

Enclosure

S:\Kentucky Teachers\Valuations\2007\KTRS Report.doc

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144
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Teachers' Retirement System of the State of Kentucky
Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2007

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 3, 2007

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2007. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that combined member and state contributions for the fiscal year ending June 30, 2010 at the rate of 25.07% of university members' salaries and 28.03% of non-university members' salaries are required to support the benefits of the System. This represents an increase since the previous valuation in the required employer contribution rate of 0.61% of payroll for the 2009/2010 fiscal year. There has been a net increase in the expected state special appropriation from 4.25% to 4.28%, or 0.03% of payroll.

Therefore, for the 2009/2010 fiscal year, in addition to the state statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 2.46%; 0.58% from this valuation and 1.88% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The valuation takes into account the effect of amendments to the System enacted through the 2007 Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time. Therefore, there is a Net Pension Obligation (NPO) under GASB 27 for the fiscal year ending June 30, 2007.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144
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This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

In our opinion the System is operating on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Senior Actuary

EAM/EJK:kc

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2007

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2007		June 30, 2006	
Number of active members	75,144		73,740	
Annual salaries	$ 2,975,289		$ 2,859,477	
Number of annuitants and beneficiaries	39,506		38,497	
Annual allowances	$ 1,135,635		$ 1,074,159	
Assets:				
Market value	$ 15,421,092		$ 13,783,830	
Actuarial value	$ 15,284,955		$ 14,857,641	
Unfunded actuarial accrued liability	$ 5,970,019		$ 5,467,140	
Amortization Period (years)	30		30	
	Univ.	**Non-Univ.**	**Univ.**	**Non-Univ.**
Pension Plan:				
Normal	13.82%	17.34%	13.91%	17.22%
Accrued liability	11.25	10.69	10.55	10.20
Total	25.07%	28.03%	24.46%	27.42%
Member	7.625%	9.105%	7.625%	9.105%
State (ARC)	17.445	18.925	16.835	18.315
Total	25.07%	28.03%	24.46%	27.42%
Life Insurance Fund:				
State	0.17%	0.17%	0.17%	0.17%
Medical Insurance Fund:				
Member	0.75%	0.75%	0.75%	0.75%
State Match	0.75	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	1.50%	1.50%	1.50%	1.50%
Total Contributions	26.74%	29.70%	26.13%	29.09%
Contribution rates for fiscal year ending:	**June 30, 2010**		**June 30, 2009**	
Member Statutory	8.375%	9.855%	8.375%	9.855%
State Statutory	11.625	13.105	11.625	13.105
Required Increase	2.46	2.46	1.88	1.88
State Special	4.28	4.28	4.25	4.25
Total	26.74%	29.70%	26.13%	29.09%

2. The valuation indicates that combined member and State contributions at the rate of 25.07% of salaries for university members and at 28.03% for non-university members are sufficient to support the current benefits of the System. Comments on the valuation results as of June 30, 2007 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

3. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

4. The valuation takes into account the effect of amendments to the System enacted through the 2007 Session of the Legislature.

5. All amounts shown prior to the 2004/2005 fiscal year were developed and/or reported by the prior actuarial firm.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2007 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
Full Time	57,192	$ 2,856,193
Part Time	17,952	119,096
Total	75,144	$ 2,975,289

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2007

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	34,530	$ 1,040,212
Disability Retirements	2,086	50,322
Beneficiaries of Deceased Members	2,890	45,101
Total	39,506	$ 1,135,635

[1] Includes cost-of-living adjustments effective through July 1, 2007.

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2007 the market value of Pension Plan assets for valuation purposes held by the System amounted to $15,421,092,446. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2007 was $15,284,954,542. Schedule B shows the development of the actuarial value of assets as of June 30, 2007.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan and the Life Insurance Fund.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $8,411,311,840 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $12,653,329,966 of which $1,095,890,755 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $190,332,009. The total actuarial accrued liability of the System amounts to $21,254,973,815. Against these liabilities, the System has present assets for valuation purposes of $15,284,954,542. When this amount is deducted from the actuarial accrued liability of $21,254,973,815, there remains $5,970,019,273 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 13.82% of payroll for university members and 17.34% for non-university members.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member will contribute 8.375% of annual salary to the System and each non-university member will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2009/2010 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**

3. Therefore, 10.875% of active university members' salaries and 12.355% of active non-university members' salaries is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of this amount, 0.17% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 2.46% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 4.28% of total payroll will be made by the State. The total required employer contribution rate to the Pension Plan is, therefore, 17.445% for university members and 18.925% for non-university members. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

	UNIVERSITY	NON-UNIVERSITY
Member		
Statutory Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Contribution to Pension Plan	7.625%	9.105%
Employer		
Statutory Matching Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	12.355%
Life Insurance	(0.17)%	(0.17)%
Additional to Maintain 30-Year Amortization	2.46	2.46
Special Appropriation	4.28	4.28
Contribution to Pension Plan	17.445%	18.925%
Total Contribution to Pension Plan	25.07%	28.03%

4. The valuation indicates that normal contributions at the rate of 13.82% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.34%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 11.25% for university members and 10.69% for non-university members. These rates include special appropriations of 4.28% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES	
	UNIVERSITY	NON-UNIVERSITY
Normal	13.82%	17.34%
Accrued liability*	11.25	10.69
Total	25.07%	28.03%

* Includes special appropriations of 4.28% of payroll to be made by the State.

5. The unfunded actuarial accrued liability amounts to $5,970,019,273 as of the valuation date. Accrued liability contributions at the rate of 11.25% of active university members' payroll and 10.69% of non-university members' payroll are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. The benefit percentage for non-university members is 2.0% for service accrued through July 1, 1983 and 2.5% for service up to 30 years accrued after that date. However, for members who join the System on or after July 1, 2002 and retire with less than 10 years of service, the benefit percentage is 2.0%. For members who joined the System on or after July 1, 2002, who retire with 10 or more years of service, the benefit percentage is 2.5% for all years of service up to 30 years. For all members who retire on or after July 1, 2004, the benefit percentage for service earned in excess of 30 years is 3.0%. The total net contribution rate is 28.03% of payroll for non-university members. For university members the benefit percentage is 2.0% for all service and the contribution rate is 25.07%. Our calculations indicate that these contribution rates will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 2.46%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. Since the 2005 fiscal year, a portion of the contributions required for the pension fund have been allocated as loans to the Medical Insurance Fund for Stabilization Funding. Payments are being made to repay these loans, but the borrowing is expected to continue in the future. The following table shows the amounts borrowed, annual payments and remaining balances as of July 1, 2007:

MEDICAL INSURANCE FUND
STABILIZATION FUNDING

	Loan Amount	Annual Payment	Balances as of July 1, 2007
2004/2005	$29,169,700	$4,249,600	$24,891,315
2005/2006	62,294,800	9,075,500	57,891,410
2006/2007	73,000,000	14,133,200 *	73,000,000
Total	$164,464,500	$27,458,300	$155,782,725

* Amount shown is the first year payment. The payments will be $10,158,232 annually beginning July 1, 2008.

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 2.46% of payroll for the fiscal year ending June 30, 2010, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $502,879,205 in the unfunded accrued liability from $5,467,140,068 to $5,970,019,273 during the year ending June 30, 2007.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 410,036
Expected Accrued liability contribution	(242,414)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2006/2007 fiscal year with interest	75,601
Repayment of prior year's MIF Stabilization Funding	(13,824)
Experience:	
Valuation asset growth	258,747
Pensioners' mortality	(8,309)
Turnover and retirements	(87,616)
New entrants	91,109
Salary increases	19,549
Amendments	0
Assumption and method changes	0
Total	$ 502,879

SECTION VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2007

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	39,506
Terminated employees entitled to benefits but not yet receiving benefits	4,498
Active plan members	75,144
Total	119,148

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2002	$13,588,847	$15,695,574	$2,106,727	86.6%	$2,313,663	91.1%
6/30/2003	13,863,786	16,594,781	2,730,995	83.5	2,497,731	109.3
6/30/2004	14,255,131	17,617,626	3,362,495	80.9	2,641,533	127.3
6/30/2005	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8
6/30/2006 *	14,857,641	20,324,781	5,467,140	73.1	2,859,477	191.2
6/30/2007	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7

* Reflects change in decremental assumptions.

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2007. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2007
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of Return*	7.50%
Projected salary Increases*	4.00 - 8.20%
Cost-of-living adjustments	1.50% Annually
*Includes inflation at	4.00%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ended June 30	Annual Required Contributions	Percentage Contributed
2002	$284,794,710	100%
2003	322,046,968	100
2004	364,351,412	100
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2007:

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2007

(a)	Employer annual required contribution	$ 494,565,369
(b)	Interest on net pension obligation	0
(c)	Adjustment to annual required contribution	18,021,094
(d)	Annual pension cost: (a) + (b) - (c)	$ 476,544,275
(e)	Employer contributions made for fiscal year ending July 30, 2007	421,565,369
(f)	Increase (decrease) in net pension obligation: (d) - (e)	$ 54,978,906
(g)	Net pension obligation beginning of fiscal year	0
(h)	Adjustment to reflect prior shortfall in contributions*	94,431,495
(i)	Net pension obligation end of fiscal year: (f) + (g) + (h)	$ 149,410,401

* Formerly treated as short-term differences

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2005	$383,776,826	100%	$0
June 30, 2006	406,107,266	100	0
June 30, 2007	476,544,275	88	149,410,401

SCHEDULE A

RESULTS OF THE VALUATION
PREPARED AS OF JUNE 30, 2007
($1,000's)

1.	**ACTUARIAL ACCRUED LIABILITY**		
	Present value of prospective benefits payable in respect of:		
	(a) Present active members		
	- Service retirement benefits	$ 7,849,642	
	- Disability retirement benefits	352,261	
	- Death and survivor benefits	67,540	
	- Refunds of member contributions	141,869	
	Total		$ 8,411,312
	(b) Present inactive members and members entitled to deferred vested benefits:		190,332
	(c) Present annuitants and benficiaries:		
	- Service retirement benefits	$ 11,837,408	
	- Disability retirement benefits	402,125	
	- Death and survivor benefits	413,797	
	Total		$ 12,653,330
	(d) Total actuarial accrued liability		$ 21,254,974
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**		$ 15,284,955
3.	**UNFUNDED ACTUARIAL ACCRUED LIABILITY [1(d) - 2]**		$ 5,970,019
4.	**NORMAL CONTRIBUTION RATE**	**UNIVERSITY**	**NON-UNIVERSITY**
	(a) Actuarial present value of benefits accruing annually	$ 25,486	$ 483,858
	(b) Annual payroll of active members	$ 184,399	$ 2,790,890
	(c) Normal contribution rate [(4(a) / 4(b)]	13.82%	17.34%

SCHEDULE A

(continued)

SOLVENCY TEST
(in millions of dollars)

Fiscal Year Ending	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2002	$2,302.3	$8,816.9	$4,576.4	$13,588.8	100%	100%	54%
6/30/2003	2,413.9	9,329.3	4,851.6	13,863.8	100	100	44
6/30/2004	2,546.1	9,906.2	5,165.3	14,255.1	100	100	35
6/30/2005	2,621.3	11,370.4	5,143.2	14,598.8	100	100	12
6/30/2006	2,615.8	12,216.6	5,492.4	14,857.6	100	100	0
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0	100	97	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
AS OF JUNE 30, 2007

(1)	Actuarial Value of Assets	$	14,857,641,238
(2)	Market Value End of Year	$	15,421,092,446
(3)	Market Value Beginning of Year	$	13,783,830,173
(4)	Cash Flow		
	a. Contributions	$	704,578,332
	b. Benefit Payments		1,117,361,706
	c. Net	$	(412,783,374)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)c	$	2,050,045,647
	b. Assumed Rate		7.50%
	c. Amount for Immediate Recognition:		
	[(1) x (5)b] + [(4)c x (5)b x 0.5]	$	1,098,843,716
	d. Amount for Phased-In Recognition: (5)a - (5)c	$	951,201,931
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	$	190,240,386
	b. First Prior Year		(75,996,339)
	c. Second Prior Year		(23,843,540)
	d. Third Prior Year		(349,147,545)
	e. Fouth Prior Year		0
	f. Total Recognized Investment Gain	$	(258,747,038)
(7)	Actuarial Value End of Year:		
	(1) + (4)c + (5)c + (6)f	$	15,284,954,542
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	136,137,904

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2007	June 30, 2006
Receipts for the Year		
Contributions		
Members	$ 269,687,864	$ 258,464,856
Employers	434,890,468	406,107,266
Total	$ 704,578,332	$ 664,572,122
Net Investment Income	2,057,397,493	707,778,812
TOTAL	$ 2,761,975,825	$ 1,372,350,934
Disbursements for the Year		
Benefit Payments	$ 1,102,538,879	$ 1,024,872,421
Refunds to Members	14,822,827	12,834,222
Medical Insurance Payments	0	0
Miscellaneous, including expenses	7,351,846	6,839,859
TOTAL	$ 1,124,713,552	$ 1,044,546,502
Excess of Receipts over Disbursements	$ 1,637,262,273	$ 327,804,432
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 13,783,830,173	$ 13,456,025,741
Excess of Receipts over Disbursements	1,637,262,273	327,804,432
Asset Balances as of the End of the Year	$ 15,421,092,446	$ 13,783,830,173

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE C

LIFE INSURANCE FUND*
SUMMARY OF RECEIPTS AND DISBURSEMENTS
(Market Value)

	For the Year Ending	
	June 30, 2007	June 30, 2006
Receipts for the Year		
Contributions		
Members	$ 0	$ 0
Employers	5,022,137	4,813,703
Total	$ 5,022,137	$ 4,813,703
Net Investment Income	3,067,738	2,689,330
TOTAL	$ 8,089,875	$ 7,503,033
Disbursements for the Year		
Benefit Payments	$ 4,245,000	$ 3,894,000
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	0	0
TOTAL	$ 4,245,000	$ 3,894,000
Excess of Receipts over Disbursements	$ 3,844,875	$ 3,609,033
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 67,581,237	$ 63,972,204
Excess of Receipts over Disbursements	3,844,875	3,609,033
Asset Balances as of the End of the Year	$ 71,426,112	$ 67,581,237

* The retiree portion of the Life Insurance Fund when allocated will be moved to the GASB 43 and 45 report.

SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2005, submitted to and adopted by the Board on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.70
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before	After
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	27 Years of Service	27 Years of Service*
20	0.003%	0.01%	9.00%				
25	0.010%	0.01%	9.00%	1.50%			
30	0.016%	0.02%	9.00%	3.00%	3.00%		
35	0.032%	0.05%	10.00%	3.25%	1.50%		
40	0.048%	0.08%	10.00%	3.75%	1.50%		
45	0.064%	0.22%	9.50%	2.50%	1.50%		25.0%
50	0.104%	0.42%	10.00%	4.00%	3.00%		20.0%
55	0.216%	0.60%	11.00%	3.00%	2.70%	6.0%	35.0%
60	0.375%	0.79%	11.00%	3.00%	2.70%	14.0%	25.0%
62	0.438%	0.83%	11.00%	3.00%	2.70%	14.0%	23.0%
65	0.566%	0.90%	11.00%	3.00%	2.70%	22.5%	35.0%
70	0.905%	0.00%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.002%	0.03%	6.00%				
25	0.007%	0.03%	8.50%	3.00%			
30	0.014%	0.04%	9.00%	4.00%	1.50%		
35	0.026%	0.11%	8.50%	4.00%	2.00%		
40	0.044%	0.22%	8.50%	2.50%	1.50%		
45	0.055%	0.38%	7.00%	2.50%	1.50%		25.0%
50	0.066%	0.44%	8.50%	3.00%	2.25%		20.0%
55	0.085%	0.56%	10.00%	3.50%	2.50%	7.5%	35.0%
60	0.122%	0.85%	11.00%	3.50%	2.50%	16.5%	30.0%
62	0.137%	0.85%	11.00%	3.50%	2.50%	12.5%	25.0%
65	0.159%	0.85%	11.00%	3.50%	2.50%	26.0%	30.0%
70	0.195%	0.00%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

ACTUARIAL METHOD: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 1% of active liability

SCHEDULE E

SUMMARY OF MAIN SYSTEM PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2007. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Condition for Allowance

Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by actuarial equivalent factors from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Disability Retirement Allowance

Condition for Allowance

Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance

The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

SCHEDULE F

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2007 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	2,821								2,821
Total Pay	37,881,158								37,881,158
Avg. Pay	13,428								13,428
25 to 29	7,736	1,135							8,871
Total Pay	212,184,917	46,286,547							258,471,464
Avg. Pay	27,428	40,781							29,137
30 to 34	3,757	4,677	690						9,124
Total Pay	99,780,264	200,662,245	34,266,103						334,708,612
Avg. Pay	26,558	42,904	49,661						36,684
35 to 39	3,051	2,724	3,507	688					9,970
Total Pay	76,394,428	119,063,818	180,530,110	38,499,908					414,488,264
Avg. Pay	25,039	43,709	51,477	55,959					41,574
40 to 44	3,901	1,606	1,669	2,450	669				10,295
Total Pay	69,723,415	73,018,718	87,312,581	138,614,664	38,430,706				407,100,084
Avg. Pay	17,873	45,466	52,314	56,577	57,445				39,543
45 to 49	2,000	1,317	1,264	1,428	2,155	642			8,806
Total Pay	46,213,240	60,982,687	67,093,636	82,350,801	128,534,667	39,144,191			424,319,222
Avg. Pay	23,107	46,304	53,080	57,669	59,645	60,972			48,185
50 to 54	2,063	1,160	1,218	1,348	1,306	1,802	698		9,595
Total Pay	41,837,544	54,961,510	66,446,577	78,504,768	79,902,265	113,101,890	44,744,973		479,499,527
Avg. Pay	20,280	47,381	54,554	58,238	61,181	62,765	64,105		49,974
55 to 59	3,198	784	865	1,117	1,031	810	838	128	8,771
Total Pay	54,535,742	39,031,819	48,964,356	67,215,317	64,711,997	54,122,413	59,542,660	9,819,062	397,943,366
Avg. Pay	17,053	49,785	56,606	60,175	62,766	66,818	71,053	76,711	45,370
60 to 64	2,414	323	329	443	428	269	130	117	4,453
Total Pay	35,483,359	17,444,491	19,388,944	27,089,223	27,718,527	18,586,065	9,820,212	10,172,309	165,703,130
Avg. Pay	14,699	54,008	58,933	61,149	64,763	69,093	75,540	86,943	37,212
65 & over	1,903	79	78	94	102	63	41	78	2,438
Total Pay	19,140,974	4,646,839	5,076,976	5,982,409	6,585,013	4,398,573	3,193,328	6,150,095	55,174,207
Avg. Pay	10,058	58,821	65,089	63,643	64,559	69,819	77,886	78,847	22,631
Total	32,844	13,805	9,620	7,568	5,691	3,586	1,707	323	75,144
Total Pay	693,175,041	616,098,674	509,079,283	438,257,090	345,883,175	229,353,132	117,301,173	26,141,466	2,975,289,034
Avg. Pay	21,105	44,629	52,919	57,909	60,777	63,958	68,718	80,933	39,594

Average Age: 43.3

Average Service: 10.3

SCHEDULE F

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	776	$ 8,831,387	$ 11,381
50 - 54	1,831	57,413,524	31,356
55 - 59	7,389	252,766,794	34,209
60 - 64	8,628	280,978,319	32,566
65 - 69	6,718	203,284,359	30,260
70 - 74	4,806	133,985,527	27,879
75 - 79	3,681	90,030,600	24,458
80 & Over	5,677	108,344,711	19,085
Total	39,506	$ 1,135,635,221	$ 28,746

SCHEDULE F

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Year Ended	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
1998	2,500	$66.7	1,040	$13.4	27,744	$494.1	12.1%	$17,809
1999	2,415	73.9	998	13.9	29,161	554.0	12.1	19,000
2000	2,462	79.2	1,008	14.1	30,615	619.2	11.8	20,226
2001	2,410	77.0	1,128	16.5	31,897	679.8	9.8	21,311
2002	2,577	86.2	1,063	16.8	33,408	749.2	10.2	22,425
2003	2,252	86.7	1,015	16.9	34,645	819.0	9.3	23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7	28,746

Cavanaugh Macdonald
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The experience and dedication you deserve

December 5, 2008

Mr. Gary L. Harbin
Executive Secretary
Teachers' Retirement System
Commonwealth of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Dear Gary:

Enclosed are 25 bound copies and one unbound copy of the "Teachers' Retirement System of the State of Kentucky Report of Actuary on the Valuation Prepared as of June 30, 2008".

Sincerely yours,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Senior Actuary

EAM/EJK:kc

Enclosure

S:\Kentucky Teachers\Pension\Valuations\2008\KTRS Report.doc

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Teachers' Retirement System of the State of Kentucky
Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2008

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 5, 2008

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2008. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that combined member and state contributions for the fiscal year ending June 30, 2011 at the rate of 26.07% of university members' salaries and 29.03% of non-university members' salaries are required to support the benefits of the System. This represents an increase since the previous valuation in the required employer contribution rate of 1.00% of payroll for the 2010/2011 fiscal year. There has been a net decrease in the expected state special appropriation from 4.28% to 4.15%, or -0.13% of payroll.

Therefore, for the 2010/2011 fiscal year, in addition to the state statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 3.59%; 1.13% from this valuation and 2.46% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The valuation takes into account the effect of amendments to the System enacted through the 2008 Session of the Legislature. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes will be reflected in the June 30, 2009 valuation.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time. Therefore, there is a Net Pension Obligation (NPO) under GASB 27 for the fiscal year ending June 30, 2008.

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This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, since a portion of the annual contributions required to fund the pension benefits have been allocated to the Medical Insurance Fund by the employer, the retirement fund is not funded by the employer on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Senior Actuary

EAM/EJK:kc

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2008

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2008		June 30, 2007	
Number of active members	75,539		75,144	
Annual salaries	$ 3,190,332		$ 2,975,289	
Number of annuitants and beneficiaries	40,739		39,506	
Annual allowances	$ 1,206,812		$ 1,135,635	
Assets:				
Market value	$ 14,076,692		$ 15,421,092	
Actuarial value	$ 15,321,325		$ 15,284,955	
Unfunded actuarial accrued liability	$ 7,138,979		$ 5,970,019	
Amortization Period (years)	30		30	
	Univ.	**Non-Univ.**	**Univ.**	**Non-Univ.**
Pension Plan:				
Normal	13.45%	17.11%	13.82%	17.34%
Accrued liability	12.62	11.92	11.25	10.69
Total	26.07%	29.03%	25.07%	28.03%
Member	7.625%	9.105%	7.625%	9.105%
State (ARC)	18.445	19.925	17.445	18.925
Total	26.07%	29.03%	25.07%	28.03%
Life Insurance Fund:				
State	0.17%	0.17%	0.17%	0.17%
Medical Insurance Fund:				
Member	0.75%	0.75%	0.75%	0.75%
State Match	0.75	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	1.50%	1.50%	1.50%	1.50%
Total Contributions	27.74%	30.70%	26.74%	29.70%
Contribution rates for fiscal year ending:	**June 30, 2011**		**June 30, 2010**	
Member Statutory	8.375%	9.855%	8.375%	9.855%
State Statutory	11.625	13.105	11.625	13.105
Required Increase	3.59	3.59	2.46	2.46
State Special	4.15	4.15	4.28	4.28
Total	27.74%	30.70%	26.74%	29.70%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. The valuation indicates that combined member and State contributions at the rate of 26.07% of salaries for university members and at 29.03% for non-university members are sufficient to support the current benefits of the System. Comments on the valuation results as of June 30, 2008 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

5. Provisions of the System, as summarized in Schedule E, were taken into account in the current valuation. The valuation takes into account the effect of amendments to the System enacted through the 2008 Session of the Legislature. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes will be reflected in the June 30, 2009 valuation.

6. All amounts shown prior to the 2004/2005 fiscal year were developed and/or reported by the prior actuarial firm.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2008 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
Full Time	57,439	$ 3,069,016
Part Time	18,100	121,316
Total	75,539	$ 3,190,332

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2008

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	35,623	$ 1,106,145
Disability Retirements	2,155	52,960
Beneficiaries of Deceased Members	2,961	47,707
Total	40,739	$ 1,206,812

[1] Includes cost-of-living adjustments effective through July 1, 2008.

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2008 the market value of Pension Plan assets for valuation purposes held by the System amounted to $14,076,692,181. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2008 was $15,321,325,033. Schedule B shows the development of the actuarial value of assets as of June 30, 2008.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $8,874,483,618 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $13,385,235,262 of which $1,040,362,185 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $200,584,896. The total actuarial accrued liability of the System amounts to $22,460,303,776. Against these liabilities, the System has present assets for valuation purposes of $15,321,325,033. When this amount is deducted from the actuarial accrued liability of $22,460,303,776, there remains $7,138,978,743 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 13.45% of payroll for university members and 17.11% for non-university members.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member will contribute 8.375% of annual salary to the System and each non-university member will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2010/2011 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**

3. Therefore, 10.875% of active university members' salaries and 12.355% of active non-university members' salaries is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of this amount, 0.17% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 3.59% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 4.15% of total payroll will be made by the State. The total required employer contribution rate to the Pension Plan is, therefore, 18.445% for university members and 19.925% for non-university members. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

	UNIVERSITY	NON-UNIVERSITY
Member		
Statutory Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Contribution to Pension Plan	7.625%	9.105%
Employer		
Statutory Matching Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	12.355%
Life Insurance	(0.17)%	(0.17)%
Additional to Maintain 30-Year Amortization	3.59	3.59
Special Appropriation	4.15	4.15
Contribution to Pension Plan	18.445%	19.925%
Total Contribution to Pension Plan	26.07%	29.03%

4. The valuation indicates that normal contributions at the rate of 13.45% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.11%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 12.62% for university members and 11.92% for non-university members. These rates include special appropriations of 4.15% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES	
	UNIVERSITY	NON-UNIVERSITY
Normal	13.45%	17.11%
Accrued liability*	12.62	11.92
Total	26.07%	29.03%

* Includes special appropriations of 4.15% of payroll to be made by the State.

5. The unfunded actuarial accrued liability amounts to $7,138,978,743 as of the valuation date. Accrued liability contributions at the rate of 12.62% of active university members' payroll and 11.92% of non-university members' payroll are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. The benefit percentage for non-university members is 2.0% for service accrued through July 1, 1983 and 2.5% for service up to 30 years accrued after that date. However, for members who join the System on or after July 1, 2002 and retire with less than 10 years of service, the benefit percentage is 2.0%. For members who joined the System on or after July 1, 2002, who retire with 10 or more years of service, the benefit percentage is 2.5% for all years of service up to 30 years. For all members who retire on or after July 1, 2004, the benefit percentage for service earned in excess of 30 years is 3.0%. The total net contribution rate is 29.03% of payroll for non-university members. For university members the benefit percentage is 2.0% for all service and the contribution rate is 26.07%. Our calculations indicate that these contribution rates will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes will be reflected in the June 30, 2009 valuation.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 3.59%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. Since the 2005 fiscal year, a portion of the contributions required for the pension fund have been allocated as loans to the Medical Insurance Fund for Stabilization Funding. Payments are being made to repay these loans, but the borrowing is expected to continue in the future. The following table shows the amounts borrowed, annual payments and remaining balances as of June 30, 2008:

MEDICAL INSURANCE FUND
STABILIZATION FUNDING

	Loan Amount	Annual Payment	Balances as of July 1, 2008
2004/2005	$29,169,700	$4,249,600	$22,508,563
2005/2006	62,294,800	9,075,500	53,157,766
2006/2007	73,000,000	10,207,400	64,341,800
2007/2008	125,000,000	18,280,000	125,000,000
Total	$289,464,500	$41,812,500	$265,008,129

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 3.59% of payroll for the fiscal year ending June 30, 2011, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46
June 30, 2008	June 30, 2011	1.13	3.59

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,168,959,470 in the unfunded accrued liability from $5,970,019,273 to $7,138,978,743 during the year ending June 30, 2008.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 447,751
Expected Accrued liability contribution	(299,751)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2006/2007 fiscal year with interest	129,398
Repayment of prior year's MIF Stabilization Funding with interest	(28,488)
Experience:	
Valuation asset growth	668,626
Pensioners' mortality	9,428
Turnover and retirements	(26,001)
New entrants	57,003
Salary increases	210,993
Amendments	0
Assumption and method changes	0
Total	$ 1,168,959

SECTION VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2008

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	40,739
Terminated employees entitled to benefits but not yet receiving benefits	4,861
Active plan members	75,539
Total	121,139

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2003	$13,863,786	$16,594,781	$2,730,995	83.5%	$2,497,731	109.3%
6/30/2004	14,255,131	17,617,626	3,362,495	80.9	2,641,533	127.3
6/30/2005	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8
6/30/2006 *	14,857,641	20,324,781	5,467,140	73.1	2,859,477	191.2
6/30/2007	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8

* Reflects change in decremental assumptions.

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2008. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2008
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of Return*	7.50%
Projected salary Increases*	4.00 - 8.20%
Cost-of-living adjustments	1.50% Annually
*Includes inflation at	4.00%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ended June 30	Annual Required Contributions	Percentage Contributed
2003	$322,046,968	100%
2004	364,351,412	100
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85
2008	563,789,483	78

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2008:

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2008

(a)	Employer annual required contribution	$ 563,789,483
(b)	Interest on net pension obligation	11,205,780
(c)	Adjustment to annual required contribution	35,445,598
(d)	Annual pension cost: (a) + (b) - (c)	$ 539,549,665
(e)	Employer contributions made for fiscal year ending June 30, 2008	438,789,483
(f)	Increase (decrease) in net pension obligation: (d) - (e)	$ 100,760,182
(g)	Net pension obligation beginning of fiscal year	149,410,401
(h)	Net pension obligation end of fiscal year: (f) + (g)	$ 250,170,583

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2006	$406,107,266	100%	$0
June 30, 2007	476,544,275	88	149,410,401
June 30, 2008	539,549,665	81	250,170,583

SCHEDULE A

RESULTS OF THE VALUATION
PREPARED AS OF JUNE 30, 2008
($1,000's)

1.	**ACTUARIAL ACCRUED LIABILITY**		
	Present value of prospective benefits payable in respect of:		
	(a) Present active members		
	- Service retirement benefits	$ 8,281,186	
	- Disability retirement benefits	374,926	
	- Death and survivor benefits	68,878	
	- Refunds of member contributions	149,494	
	Total		$ 8,874,484
	(b) Present inactive members and members entitled to deferred vested benefits:		200,585
	(c) Present annuitants and benficiaries:		
	- Service retirement benefits	$ 12,525,471	
	- Disability retirement benefits	426,776	
	- Death and survivor benefits	432,988	
	Total		$ 13,385,235
	(d) Total actuarial accrued liability		$ 22,460,304
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**		$ 15,321,325
3.	**UNFUNDED ACTUARIAL ACCRUED LIABILITY [1(d) - 2]**		$ 7,138,979

4.	**NORMAL CONTRIBUTION RATE**	**UNIVERSITY**	**NON-UNIVERSITY**
	(a) Actuarial present value of benefits accruing annually	$ 25,967	$ 512,772
	(b) Annual payroll of active members	$ 193,007	$ 2,997,325
	(c) Normal contribution rate [(4(a) / 4(b)]	13.45%	17.11%

SCHEDULE A

(continued)

SOLVENCY TEST
(in millions of dollars)

Fiscal Year Ending	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2003	$2,413.9	$9,329.3	$4,851.6	$13,863.8	100%	100%	44%
6/30/2004	2,546.1	9,906.2	5,165.3	14,255.1	100	100	35
6/30/2005	2,621.3	11,370.4	5,143.2	14,598.8	100	100	12
6/30/2006	2,615.8	12,216.6	5,492.4	14,857.6	100	100	0
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0	100	97	0
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3	100	91	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS AS OF JUNE 30, 2008

(1)	Actuarial Value of Assets Beginning of Year	$	15,286,452,192 *
(2)	Market Value of Assets End of Year	$	14,076,692,181
(3)	Market Value of Assets Beginning of Year	$	15,422,590,096 *
(4)	Cash Flow		
	a. Contributions	$	757,671,730
	b. Benefit Payments		1,186,934,184
	c. Administrative Expense		7,551,936
	d. Net: (4)a - (4)b - (4)c	$	(436,814,390)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)d	$	(909,083,525)
	b. Assumed Rate		7.50%
	c. Amount for Immediate Recognition:		
	[(3) x (5)b] + [(4)d x (5)b x 0.5]	$	1,140,313,718
	d. Amount for Phased-In Recognition: (5)a - (5)c	$	(2,049,397,243)
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	$	(409,879,449)
	b. First Prior Year		190,240,386
	c. Second Prior Year		(75,996,339)
	d. Third Prior Year		(23,843,540)
	e. Fouth Prior Year		(349,147,545)
	f. Total Recognized Investment Gain	$	(668,626,487)
(7)	Actuarial Value of Assets End of Year:		
	(1) + (4)d + (5)c + (6)f	$	15,321,325,033
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	(1,244,632,852)

* Adjusted since previous valuation.

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2008	June 30, 2007
Receipts for the Year		
Contributions		
Members	$ 291,423,948	$ 269,687,864
Employers	466,247,782	434,890,468
Total	$ 757,671,730	$ 704,578,332
Net Investment Income	(909,083,525)	2,057,397,493
TOTAL	$ (151,411,795)	$ 2,761,975,825
Disbursements for the Year		
Benefit Payments	$ 1,170,969,101	$ 1,102,538,879
Refunds to Members	15,965,083	14,822,827
Medical Insurance Payments	0	0
Miscellaneous, including expenses	7,551,936	7,351,846
TOTAL	$ 1,194,486,120	$ 1,124,713,552
Excess of Receipts over Disbursements	$ (1,345,897,915)	$ 1,637,262,273
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 15,422,590,096 **	$ 13,783,830,173
Excess of Receipts over Disbursements	(1,345,897,915)	1,637,262,273
Asset Balances as of the End of the Year	$ 14,076,692,181	$ 15,421,092,446

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

** Adjusted since previous valuation.

SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2005, submitted to and adopted by the Board on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.70
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before	After
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	27 Years of Service	27 Years of Service*
20	0.003%	0.01%	9.00%				
25	0.010%	0.01%	9.00%	1.50%			
30	0.016%	0.02%	9.00%	3.00%	3.00%		
35	0.032%	0.05%	10.00%	3.25%	1.50%		
40	0.048%	0.08%	10.00%	3.75%	1.50%		
45	0.064%	0.22%	9.50%	2.50%	1.50%		25.0%
50	0.104%	0.42%	10.00%	4.00%	3.00%		20.0%
55	0.216%	0.60%	11.00%	3.00%	2.70%	6.0%	35.0%
60	0.375%	0.79%	11.00%	3.00%	2.70%	14.0%	25.0%
62	0.438%	0.83%	11.00%	3.00%	2.70%	14.0%	23.0%
65	0.566%	0.90%	11.00%	3.00%	2.70%	22.5%	35.0%
70	0.905%	0.00%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.002%	0.03%	6.00%				
25	0.007%	0.03%	8.50%	3.00%			
30	0.014%	0.04%	9.00%	4.00%	1.50%		
35	0.026%	0.11%	8.50%	4.00%	2.00%		
40	0.044%	0.22%	8.50%	2.50%	1.50%		
45	0.055%	0.38%	7.00%	2.50%	1.50%		25.0%
50	0.066%	0.44%	8.50%	3.00%	2.25%		20.0%
55	0.085%	0.56%	10.00%	3.50%	2.50%	7.5%	35.0%
60	0.122%	0.85%	11.00%	3.50%	2.50%	16.5%	30.0%
62	0.137%	0.85%	11.00%	3.50%	2.50%	12.5%	25.0%
65	0.159%	0.85%	11.00%	3.50%	2.50%	26.0%	30.0%
70	0.195%	0.00%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

ACTUARIAL METHOD: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 1% of active liability

SCHEDULE E

SUMMARY OF MAIN SYSTEM PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2008. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes will be reflected in the June 30, 2009 valuation. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by actuarial equivalent factors from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Disability Retirement Allowance

Condition for Allowance

Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance

The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

SCHEDULE F

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2008 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	2,733								2,733
Total Pay	40,156,278								40,156,278
Avg. Pay	14,693								14,693
25 to 29	7,737	1,244							8,981
Total Pay	226,985,257	55,162,946							282,148,203
Avg. Pay	29,338	44,343							31,416
30 to 34	3,824	4,651	716						9,191
Total Pay	109,014,464	215,186,990	38,055,186						362,256,640
Avg. Pay	28,508	46,267	53,150						39,414
35 to 39	3,127	2,701	3,741	696					10,265
Total Pay	82,804,226	126,588,449	206,390,005	41,204,804					456,987,484
Avg. Pay	26,480	46,867	55,170	59,202					44,519
40 to 44	3,884	1,592	1,836	2,585	626				10,523
Total Pay	76,518,540	76,734,470	101,966,614	155,651,263	38,970,337				449,841,224
Avg. Pay	19,701	48,200	55,537	60,213	62,253				42,748
45 to 49	1,942	1,311	1,290	1,398	2,226	583			8,750
Total Pay	48,048,107	64,439,406	72,824,251	85,020,118	140,513,875	38,127,851			448,973,608
Avg. Pay	24,742	49,153	56,453	60,816	63,124	65,399			51,311
50 to 54	1,808	1,107	1,179	1,318	1,388	1,643	639		9,082
Total Pay	37,799,289	55,399,696	67,881,950	80,824,830	90,155,860	109,389,413	43,184,738		484,635,776
Avg. Pay	20,907	50,045	57,576	61,324	64,954	66,579	67,582		53,362
55 to 59	2,991	775	918	1,086	1,107	762	826	124	8,589
Total Pay	52,396,113	40,966,577	53,795,878	68,408,653	72,964,249	53,284,559	62,979,695	10,384,836	415,180,560
Avg. Pay	17,518	52,860	58,601	62,991	65,912	69,927	76,247	83,749	48,339
60 to 64	2,539	380	368	459	505	278	129	133	4,791
Total Pay	37,225,994	20,763,246	23,223,662	29,893,634	34,749,706	20,422,141	10,455,098	11,722,331	188,455,812
Avg. Pay	14,662	54,640	63,108	65,128	68,811	73,461	81,047	88,138	39,335
65 & over	2,022	102	86	97	126	67	54	80	2,634
Total Pay	19,805,734	5,623,767	5,460,182	6,432,333	8,488,526	4,896,583	4,198,098	6,791,435	61,696,658
Avg. Pay	9,795	55,135	63,490	66,313	67,369	73,083	77,743	84,893	23,423
Total	32,607	13,863	10,133	7,639	5,978	3,333	1,649	337	75,539
Total Pay	730,754,002	660,865,547	569,597,728	467,435,635	385,842,553	226,120,547	120,817,629	28,898,602	3,190,332,243
Avg. Pay	22,411	47,671	56,212	61,191	64,544	67,843	73,267	85,753	42,234

Average Age: 43.3 Average Service: 10.4

SCHEDULE F

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	770	$ 8,775,677	$ 11,397
50 - 54	1,588	50,193,641	31,608
55 - 59	6,907	243,164,138	35,205
60 - 64	9,456	315,956,441	33,413
65 - 69	7,319	229,752,845	31,391
70 - 74	5,032	143,385,189	28,495
75 - 79	3,849	99,163,829	25,764
80 & Over	5,818	116,420,533	20,010
Total	40,739	$ 1,206,812,293	$ 29,623

SCHEDULE F

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Year Ended	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
1999	2,415	$73.9	998	$13.9	29,161	$554.0	12.1%	$19,000
2000	2,462	79.2	1,008	14.1	30,615	619.2	11.8	20,226
2001	2,410	77.0	1,128	16.5	31,897	679.8	9.8	21,311
2002	2,577	86.2	1,063	16.8	33,408	749.2	10.2	22,425
2003	2,252	86.7	1,015	16.9	34,645	819.0	9.3	23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3	29,623

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December 14, 2009

Mr. Gary L. Harbin
Executive Secretary
Teachers' Retirement System
Commonwealth of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Dear Gary:

Enclosed are 25 bound copies and one unbound copy of the "Teachers' Retirement System of the State of Kentucky Report of Actuary on the Valuation Prepared as of June 30, 2009".

Sincerely yours,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Senior Actuary

EAM/EJK:kc

Enclosure

S:\Kentucky Teachers\Pension\Valuations\2009\KTRS Report.doc

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Teachers' Retirement System of the State of Kentucky
Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2009

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 14, 2009

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2009. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2012 shown in the following table are required to support the benefits of the System.

Members Hired:	UNIVERSITY	NON-UNIVERSITY
Before 7/1/2008	28.14%	31.10%
On and After 7/1/2008	29.14%	32.10%

These rates represent an increase since the previous valuation in the required employer contribution rate of 2.07% of payroll for the 2011/2012 fiscal year. There has been a net decrease in the expected state special appropriation from 4.15% to 3.88%, or -0.27% of payroll. Therefore, for the 2011/2012 fiscal year, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 5.93%; 2.34% from this valuation and 3.59% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature. Effective July 1, 2008, the System was amended to change the benefit and contribution structure for members hired on or after that date. These plan changes are reflected in the June 30, 2009 valuation.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, since a portion of the annual contributions required to fund the pension benefits have been allocated to the Medical Insurance Fund by the employer, the retirement fund is not funded by the employer on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Senior Actuary

EAM/EJK:kc

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2009

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2009	June 30, 2008
Number of active members	75,937	75,539
Annual salaries	$ 3,253,077	$ 3,190,332
Number of annuitants and beneficiaries	42,050	40,739
Annual allowances	$ 1,280,316	$ 1,206,812
Assets:		
Market value	$ 11,515,884	$ 14,076,692
Actuarial value	$ 14,885,981	$ 15,321,325
Unfunded actuarial accrued liability	$ 8,514,445	$ 7,138,979
Funded Ratio	63.6%	68.2%
Amortization Period (years)	30	30

Contribution rates are shown separately for university and non-university members on the following pages.

CONTRIBUTION RATES FOR UNIVERSITY MEMBERS

Valuation Date	June 30, 2009		June 30, 2008
	Members hired before 7/1/2008	Members on and after 7/1/2008	
Pension Plan:			
Normal	13.41%	13.41%	13.45%
Accrued liability	14.73	15.73	12.62
Total	28.14%	29.14%	26.07%
Member	7.625%	7.625%	7.625%
State (ARC)	20.515	21.515	18.445
Total	28.14%	29.14%	26.07%
Life Insurance Fund:			
State	0.17%	0.17%	0.17%
Medical Insurance Fund:			
Member	0.75%	1.75%	0.75%
State Match	0.75	0.75	0.75
State Additional	0.00	0.00	0.00
Total	1.50%	2.50%	1.50%
Total Contributions	29.81%	31.81%	27.74%
For fiscal year ending:	**June 30, 2012**		
Member Statutory	8.375%	9.375%	8.375%
State Statutory	11.625	12.625	11.625
Required Increase	5.93	5.93	3.59
State Special	3.88	3.88	4.15
Total	29.81%	31.81%	27.74%

CONTRIBUTION RATES FOR NON-UNIVERSITY MEMBERS

Valuation Date	June 30, 2009		June 30, 2008
	Members hired before 7/1/2008	Members on or after 7/1/2008	
Pension Plan:			
Normal	17.19%	17.19%	17.11%
Accrued liability	13.91	14.91	11.92
Total	31.10%	32.10%	29.03%
Member	9.105%	9.105%	9.105%
State (ARC)	21.995	22.995	19.925
Total	31.10%	32.10%	29.03%
Life Insurance Fund:			
State	0.17%	0.17%	0.17%
Medical Insurance Fund:			
Member	0.75%	1.75%	0.75%
State Match	0.75	0.75	0.75
State Additional	0.00	0.00	0.00
Total	1.50%	2.50%	1.50%
Total Contributions	32.77%	34.77%	30.70%
For fiscal year ending:	**June 30, 2012**		
Member Statutory	9.855%	10.855%	9.855%
State Statutory	13.105	14.105	13.105
Required Increase	5.93	5.93	3.59
State Special	3.88	3.88	4.15
Total	32.77%	34.77%	30.70%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2009 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

5. Provisions of the System, as summarized in Schedule E, were taken into account in the current valuation. The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature. Effective July 1, 2008, the System was amended to change the benefit and contribution structure for members hired on or after that date. These plan changes are reflected in the June 30, 2009 valuation.

6. All amounts shown prior to the 2004/2005 fiscal year were developed and/or reported by the prior actuarial firm.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2009 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
Full Time	58,409	$ 3,148,452
Part Time	17,528	104,624
Total	75,937	$ 3,253,076

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2009

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	36,749	$ 1,172,261
Disability Retirements	2,209	55,456
Beneficiaries of Deceased Members	3,092	52,599
Total	42,050	$ 1,280,316

[1] Includes cost-of-living adjustments effective through July 1, 2009.

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2009 the market value of Pension Plan assets for valuation purposes held by the System amounted to $11,515,883,575. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2009 was $14,885,981,251. Schedule B shows the development of the actuarial value of assets as of June 30, 2009.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $9,090,560,396 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $14,100,130,163 of which $1,082,729,326 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $209,735,890. The total actuarial accrued liability of the System amounts to $23,400,426,449. Against these liabilities, the System has present assets for valuation purposes of $14,885,981,251. When this amount is deducted from the actuarial accrued liability of $23,400,426,449, there remains $8,514,445,198 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is

determined to be 13.41% of payroll for university members and 17.19% for non-university members.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member who becomes a member before July 1, 2008 will contribute 8.375% of annual salary to the System and each non-university member who becomes a member before July 1, 2008 will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

2. Section 161.540 also provides that each university member who becomes a member on or after July 1, 2008 will contribute 9.375% of annual salary to the System and each non-university member who becomes a member on or after July 1, 2008 will contribute 10.855% of annual salary. Of this amount, 1.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

3. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2011/2012 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**

4. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.17% of payroll will be allocated to the

Life Insurance Fund. Based on the results of the valuation, an additional 5.93% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 3.88% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 20.515% for university members who become members before July 1, 2008 and 21.515% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 21.995% for non-university members who become members before July 1, 2008 and 22.995% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	8.375%	9.375%
Statutory Medical Insurance Fund	(0.75)	(1.75)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	8.375%	9.375%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	11.875%
Life Insurance	(0.17)%	(0.17)%
Additional to Maintain 30-Year Amortization	5.93	5.93
Special Appropriation	3.88	3.88
Contribution to Pension Plan	20.515%	21.515%
Total Contribution to Pension Plan	28.14%	29.14%

NON-UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	9.855%	10.855%
Statutory Medical Insurance Fund	(0.75)	(1.75)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	9.855%	10.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	12.355%	13.355%
Life Insurance	(0.17)%	(0.17)%
Additional to Maintain 30-Year Amortization	5.93	5.93
Special Appropriation	3.88	3.88
Contribution to Pension Plan	21.995%	22.995%
Total Contribution to Pension Plan	31.10%	32.10%

4. The valuation indicates that normal contributions at the rate of 13.41% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.19%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 14.73% for university members hired before July 1, 2008, 15.73% for university members hired on and after July 1, 2008, 13.91% for non-university members hired before July 1, 2008, and 14.91% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.88% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	13.41%	13.41%	17.19%	17.19%
Accrued Liability*	14.73	15.73	13.91	14.91
Total	28.14%	29.14%	31.10%	32.10%

* Includes special appropriations of 3.88% of payroll to be made by the State.

5. The unfunded actuarial accrued liability amounts to $8,514,445,198 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 5.93%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. Since the 2005 fiscal year, a portion of the contributions required for the pension fund have been allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, additional contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans, but the borrowing is expected to continue in the future. The following table shows the amounts borrowed, annual payments and remaining balances as of June 30, 2009:

MEDICAL INSURANCE FUND
STABILIZATION FUNDING

	Loan Amount	Annual Payment	Balances as of July 1, 2009
2004/2005	$29,169,700	$4,249,600	$19,947,105
2005/2006	62,294,800	9,075,500	48,069,098
2006/2007	73,000,000	10,207,400	58,968,035
2007/2008	125,000,000	18,280,000	116,095,000
2008/2009*	133,400,000	19,434,500	133,400,000
Total	$422,864,500	$61,247,000	$376,479,238

*Includes $125,000,000 for Stabilization Funding and $8,400,000 for non-single subsidy funding.

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 5.93% of payroll for the fiscal year ending June 30, 2012, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46
June 30, 2008	June 30, 2011	1.13	3.59
June 30, 2009	June 30, 2012	2.34	5.93

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,375,466,455 in the unfunded accrued liability from $7,138,978,743 to $8,514,445,198 during the year ending June 30, 2009.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 535,423
Expected Accrued liability contribution	(290,426)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2008/2009 fiscal year with interest	144,612
Repayment of prior year's MIF Stabilization Funding with interest	(43,380)
Experience:	
Valuation asset growth	1,024,062
Pensioners' mortality	9,699
Turnover and retirements	29,587
New entrants	60,121
Salary increases	(94,232)
Amendments	0
Assumption and method changes	0
Total	$ 1,375,466

SECTION VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2009

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	42,050
Terminated employees entitled to benefits but not yet receiving benefits	5,245
Active plan members	75,937
Total	123,232

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2004	$14,255,131	$17,617,626	$3,362,495	80.9%	$2,641,533	127.3%
6/30/2005	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8
6/30/2006 *	14,857,641	20,324,781	5,467,140	73.1	2,859,477	191.2
6/30/2007	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7

* Reflects change in decremental assumptions.

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2009. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2009
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of Return*	7.50%
Projected salary Increases*	4.00 - 8.20%
Cost-of-living adjustments	1.50% Annually
*Includes inflation at	4.00%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ended June 30	Annual Required Contributions	Percentage Contributed
2004	$364,351,412	100%
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85
2008	563,789,483	78
2009	600,282,735	67

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2009. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2009

(a)	Employer annual required contribution	$ 600,282,735
(b)	Interest on net pension obligation	18,762,794
(c)	Adjustment to annual required contribution	55,186,315
(d)	Annual pension cost: (a) + (b) - (c)	$ 563,859,214
(e)	Employer contributions made for fiscal year ending June 30, 2009	400,737,435
(f)	Increase (decrease) in net pension obligation: (d) - (e)	$ 163,121,779
(g)	Net pension obligation beginning of fiscal year	250,170,583
(h)	Net pension obligation end of fiscal year: (f) + (g)	$ 413,292,362

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2007	$476,544,275	88%	$149,410,401
June 30, 2008	539,549,665	81	250,170,583
June 30, 2009	563,859,214	71	413,292,362

SCHEDULE A

RESULTS OF THE VALUATION
PREPARED AS OF JUNE 30, 2009
($1,000's)

1.	**ACTUARIAL ACCRUED LIABILITY**		
	Present value of prospective benefits payable in respect of:		
	(a) Present active members		
	- Service retirement benefits	$ 8,479,308	
	- Disability retirement benefits	384,813	
	- Death and survivor benefits	70,527	
	- Refunds of member contributions	155,912	
	Total		$ 9,090,560
	(b) Present inactive members and members entitled to deferred vested benefits:		209,736
	(c) Present annuitants and benficiaries:		
	- Service retirement benefits	$ 13,190,941	
	- Disability retirement benefits	440,627	
	- Death and survivor benefits	468,562	
	Total		$ 14,100,130
	(d) Total actuarial accrued liability		$ 23,400,426
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**		$ 14,885,981
3.	**UNFUNDED ACTUARIAL ACCRUED LIABILITY [1(d) - 2]**		$ 8,514,445

4.	**NORMAL CONTRIBUTION RATE**	**UNIVERSITY**	**NON-UNIVERSITY**
	(a) Actuarial present value of benefits accruing annually	$ 27,018	$ 524,653
	(b) Annual payroll of active members	$ 201,440	$ 3,051,637
	(c) Normal contribution rate [(4(a) / 4(b)]	13.41%	17.19%

SCHEDULE A

(continued)

SOLVENCY TEST
(in millions of dollars)

Fiscal Year Ending	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2004	$2,546.1	$9,906.2	$5,165.3	$14,255.1	100%	100%	35%
6/30/2005	2,621.3	11,370.4	5,143.2	14,598.8	100	100	12
6/30/2006	2,615.8	12,216.6	5,492.4	14,857.6	100	100	0
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0	100	97	0
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3	100	91	0
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
AS OF JUNE 30, 2009

(1)	Actuarial Value of Assets Beginning of Year	$	15,321,325,033
(2)	Market Value of Assets End of Year	$	11,515,883,575
(3)	Market Value of Assets Beginning of Year	$	14,076,692,181
(4)	Cash Flow		
	a. Contributions	$	736,228,499
	b. Benefit Payments		1,268,188,826
	c. Administrative Expense		8,165,757
	d. Net: (4)a - (4)b - (4)c	$	(540,126,084)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)d	$	(2,020,682,522)
	b. Assumed Rate		7.50%
	c. Amount for Immediate Recognition:		
	[(3) x (5)b] + [(4)d x (5)b x 0.5]	$	1,035,497,185
	d. Amount for Phased-In Recognition: (5)a - (5)c	$	(3,056,179,707)
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	$	(611,235,941)
	b. First Prior Year		(409,879,449)
	c. Second Prior Year		190,240,386
	d. Third Prior Year		(75,996,339)
	e. Fouth Prior Year		(23,843,540)
	f. Total Recognized Investment Gain	$	(930,714,883)
(7)	Actuarial Value of Assets End of Year:		
	(1) + (4)d + (5)c + (6)f	$	14,885,981,251
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	(3,370,097,676)

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2009	June 30, 2008
Receipts for the Year		
Contributions		
Members	$ 293,678,564	$ 291,423,948
Employers	442,549,935	466,247,782
Total	$ 736,228,499	$ 757,671,730
Net Investment Income	(2,020,682,522)	(909,083,525)
TOTAL	$ (1,284,454,023)	$ (151,411,795)
Disbursements for the Year		
Benefit Payments	$ 1,252,980,407	$ 1,170,969,101
Refunds to Members	15,208,419	15,965,083
Medical Insurance Payments	0	0
Miscellaneous, including expenses	8,165,757	7,551,936
TOTAL	$ 1,276,354,583	$ 1,194,486,120
Excess of Receipts over Disbursements	$ (2,560,808,606)	$ (1,345,897,915)
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 14,076,692,181	$ 15,422,590,096
Excess of Receipts over Disbursements	(2,560,808,606)	(1,345,897,915)
Asset Balances as of the End of the Year	$ 11,515,883,575	$ 14,076,692,181

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2005, submitted to and adopted by the Board on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.70
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before	After
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	27 Years of Service	27 Years of Service*
20	0.003%	0.01%	9.00%				
25	0.010%	0.01%	9.00%	1.50%			
30	0.016%	0.02%	9.00%	3.00%	3.00%		
35	0.032%	0.05%	10.00%	3.25%	1.50%		
40	0.048%	0.08%	10.00%	3.75%	1.50%		
45	0.064%	0.22%	9.50%	2.50%	1.50%		25.0%
50	0.104%	0.42%	10.00%	4.00%	3.00%		20.0%
55	0.216%	0.60%	11.00%	3.00%	2.70%	6.0%	35.0%
60	0.375%	0.79%	11.00%	3.00%	2.70%	14.0%	25.0%
62	0.438%	0.83%	11.00%	3.00%	2.70%	14.0%	23.0%
65	0.566%	0.90%	11.00%	3.00%	2.70%	22.5%	35.0%
70	0.905%	0.00%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.002%	0.03%	6.00%				
25	0.007%	0.03%	8.50%	3.00%			
30	0.014%	0.04%	9.00%	4.00%	1.50%		
35	0.026%	0.11%	8.50%	4.00%	2.00%		
40	0.044%	0.22%	8.50%	2.50%	1.50%		
45	0.055%	0.38%	7.00%	2.50%	1.50%		25.0%
50	0.066%	0.44%	8.50%	3.00%	2.25%		20.0%
55	0.085%	0.56%	10.00%	3.50%	2.50%	7.5%	35.0%
60	0.122%	0.85%	11.00%	3.50%	2.50%	16.5%	30.0%
62	0.137%	0.85%	11.00%	3.50%	2.50%	12.5%	25.0%
65	0.159%	0.85%	11.00%	3.50%	2.50%	26.0%	30.0%
70	0.195%	0.00%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

ACTUARIAL METHOD: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 1% of active liability

SCHEDULE E

SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2009. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes are reflected in the June 30, 2009 valuation. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to: (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus (b) 2.5% of final average salary multiplied by service after July 1, 1983. (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or

more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.

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For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

Members Before 7/1/2008

University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

Members on and after 7/1/2008

University members contribute 9.375% of salary of which 7.625% is contributed to the Retirement System and 1.75% is contributed to the Medical Insurance Fund. Non-university members contribute 10.855% of salary of which 9.105% is contributed to the Retirement System and 1.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

SCHEDULE F

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2009 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	2,595								2,595
Total Pay	39,745,490								39,745,490
Avg. Pay	15,316								15,316
25 to 29	7,615	1,290							8,905
Total Pay	227,008,336	57,380,853							284,389,189
Avg. Pay	29,811	44,481							31,936
30 to 34	3,882	4,670	830						9,382
Total Pay	113,269,413	218,043,692	44,291,642						375,604,747
Avg. Pay	29,178	46,690	53,363						40,035
35 to 39	3,010	2,545	3,984	662					10,201
Total Pay	79,647,918	121,131,930	221,265,021	39,293,353					461,338,222
Avg. Pay	26,461	47,596	55,538	59,356					45,225
40 to 44	3,840	1,648	2,095	2,717	664				10,964
Total Pay	79,186,648	79,487,856	116,421,557	166,421,024	41,840,206				483,357,291
Avg. Pay	20,622	48,233	55,571	61,252	63,012				44,086
45 to 49	1,939	1,291	1,361	1,452	2,172	600			8,815
Total Pay	48,445,446	63,598,288	77,417,070	89,497,680	138,769,270	39,410,174			457,137,928
Avg. Pay	24,985	49,263	56,882	61,638	63,890	65,684			51,859
50 to 54	1,697	1,024	1,183	1,249	1,374	1,625	538		8,690
Total Pay	33,728,120	51,433,269	67,764,908	76,847,143	90,516,215	109,873,901	36,696,325		466,859,881
Avg. Pay	19,875	50,228	57,282	61,527	65,878	67,615	68,209		53,724
55 to 59	2,797	762	946	1,088	1,174	785	780	117	8,449
Total Pay	45,773,868	40,581,777	56,268,484	69,862,760	78,212,871	54,852,877	58,587,128	9,522,788	413,662,553
Avg. Pay	16,365	53,257	59,480	64,212	66,621	69,876	75,112	81,391	48,960
60 to 64	2,712	425	428	526	532	306	156	124	5,209
Total Pay	37,994,285	22,697,514	26,730,945	33,975,145	36,953,135	22,058,924	13,278,778	11,209,862	204,898,588
Avg. Pay	14,010	53,406	62,455	64,592	69,461	72,088	85,120	90,402	39,335
65 & over	2,055	128	108	105	127	59	53	92	2,727
Total Pay	19,405,654	6,689,343	6,997,460	7,054,833	8,858,222	4,351,813	4,221,793	8,503,592	66,082,710
Avg. Pay	9,443	52,260	64,791	67,189	69,750	73,760	79,656	92,430	24,233
Total	32,142	13,783	10,935	7,799	6,043	3,375	1,527	333	75,937
Total Pay	724,205,178	661,044,522	617,157,087	482,951,938	395,149,919	230,547,689	112,784,024	29,236,242	3,253,076,599
Avg. Pay	22,531	47,961	56,439	61,925	65,390	68,310	73,860	87,797	42,839

Average Age: 43.4

Average Service: 10.6

SCHEDULE F

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	758	$ 8,751,336	$ 11,545
50 - 54	1,341	42,889,619	31,983
55 - 59	6,461	232,264,595	35,949
60 - 64	10,276	352,699,647	34,323
65 - 69	7,866	252,891,651	32,150
70 - 74	5,382	159,572,080	29,649
75 - 79	3,972	105,566,338	26,578
80 & Over	5,994	125,680,717	20,968
Total	42,050	$ 1,280,315,983	$ 30,447

SCHEDULE F

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Year Ended	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2000	2,462	$79.2	1,008	$14.1	30,615	$619.2	11.8%	$20,226
2001	2,410	77.0	1,128	16.5	31,897	679.8	9.8	21,311
2002	2,577	86.2	1,063	16.8	33,408	749.2	10.2	22,425
2003	2,252	86.7	1,015	16.9	34,645	819.0	9.3	23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1	30,447

Teachers' Retirement System of the State of Kentucky Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2010

December 10, 2010

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2010. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2013 required to support the benefits of the System are 29.41% of payroll for university members hired before July 1, 2008, 30.41% of payroll for university members hired on and after July 1, 2008, 32.37% of payroll for non-university members hired before July 1, 2008, and 33.37% of payroll for non-university members hired on and after July 1, 2008.

These rates represent an increase since the previous valuation in the required employer contribution rate of 1.27% of payroll for the 2012/2013 fiscal year. There has been a net decrease in the expected state special appropriation from 3.88% to 3.69%, or -0.19% of payroll. Therefore, for the 2012/2013 fiscal year, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 7.27%; 1.46% from this valuation and 5.81% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, since a portion of the annual contributions required to fund the pension benefits have been allocated to the Medical Insurance Fund by the employer, the retirement fund is not funded by the employer on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Senior Actuary

EAM/EJK:kc

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2010

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2010	June 30, 2009
Number of active members	76,387	75,937
Annual salaries	$ 3,321,614	$ 3,253,077
Number of annuitants and beneficiaries	43,134	42,050
Annual allowances	$ 1,352,158	$ 1,280,316
Assets:		
Market value	$ 12,456,619	$ 11,515,884
Actuarial value	$ 14,851,330	$ 14,885,981
Unfunded actuarial accrued liability	$ 9,492,986	$ 8,514,445
Funded Ratio	61.0%	63.6%
Amortization Period (years)	30	30

Contribution rates are shown separately for university and non-university members on the following pages.

CONTRIBUTION RATES FOR UNIVERSITY MEMBERS

Valuation Date	June 30, 2010		June 30, 2009	
For fiscal year ending:	**June 30, 2013**		**June 30, 2012**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	13.31%	13.31%	13.41%	13.41%
Accrued liability	16.10	17.10	14.73	15.73
Total	29.41%	30.41%	28.14%	29.14%
Member	7.625%	7.625%	7.625%	7.625%
State (ARC)	21.785	22.785	20.515	21.515
Total	29.41%	30.41%	28.14%	29.14%
Life Insurance Fund:				
State *	0.05%	0.05%	0.05%	0.05%
Medical Insurance Fund:				
Member	1.43%	1.75%	0.75%	1.75%
State Match	1.43	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	2.86%	2.50%	1.50%	2.50%
Total Contributions	32.32%	32.96%	29.69%	31.69%
Member Statutory	9.055%	9.375%	8.375%	9.375%
State Statutory	12.305	12.625	11.625	12.625
Required Increase *	7.27	7.27	5.81	5.81
State Special	3.69	3.69	3.88	3.88
Total	32.32%	32.96%	29.69%	31.69%

* The 2009 Valuation Results were revised from last year due to a reduction in the Life Insurance Fund State Contribution Rate from 0.17% to 0.05%. This in turn lowered the required increase for the 2012 fiscal year from 5.93% to 5.81%.

CONTRIBUTION RATES FOR NON-UNIVERSITY MEMBERS

Valuation Date	June 30, 2010		June 30, 2009	
For fiscal year ending:	June 30, 2013		June 30, 2012	
	Members hired before 7/1/2008	Members on or after 7/1/2008	Members hired before 7/1/2008	Members on or after 7/1/2008
Pension Plan:				
Normal	17.21%	17.21%	17.19%	17.19%
Accrued liability	15.16	16.16	13.91	14.91
Total	32.37%	33.37%	31.10%	32.10%
Member	9.105%	9.105%	9.105%	9.105%
State (ARC)	23.265	24.265	21.995	22.995
Total	32.37%	33.37%	31.10%	32.10%
Life Insurance Fund:				
State *	0.05%	0.05%	0.05%	0.05%
Medical Insurance Fund:				
Member	1.75%	1.75%	0.75%	1.75%
State Match	1.75	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	3.50%	2.50%	1.50%	2.50%
Total Contributions	35.92%	35.92%	32.65%	34.65%
Member Statutory	10.855%	10.855%	9.855%	10.855%
State Statutory	14.105	14.105	13.105	14.105
Required Increase *	7.27	7.27	5.81	5.81
State Special	3.69	3.69	3.88	3.88
Total	35.92%	35.92%	32.65%	34.65%

* The 2009 Valuation Results were revised from last year due to a reduction in the Life Insurance Fund State Contribution Rate from 0.17% to 0.05%. This in turn lowered the required increase for the 2012 fiscal year from 5.93% to 5.81%.

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2010 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

5. Provisions of the System, as summarized in Schedule E, were taken into account in the current valuation. The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2010 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
Full Time	58,983	$ 3,211,563
Part Time	17,404	110,051
Total	76,387	$ 3,321,614

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2010

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	37,667	$ 1,237,529
Disability Retirements	2,284	58,736
Beneficiaries of Deceased Members	3,183	55,893
Total	43,134	$ 1,352,158

[1] Includes cost-of-living adjustments effective through July 1, 2010.

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2010 the market value of Pension Plan assets for valuation purposes held by the System amounted to $12,456,619,082. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2010 was $14,851,329,749. This amount includes a Pension Obligation Bond of $465,000,000 contributed on August 26, 2010. Schedule B shows the development of the actuarial value of assets as of June 30, 2010.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $9,333,934,383 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $14,790,872,620 of which $990,508,323 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $219,508,635. The total actuarial accrued liability of the System amounts to $24,344,315,638. Against these liabilities, the System has present assets for valuation purposes of $14,851,329,749. When this amount is deducted from the actuarial accrued liability of $24,344,315,638, there remains $9,492,985,889 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is

determined to be 13.31% of payroll for university members and 17.21% for non-university members.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member who becomes a member before July 1, 2008 will contribute 9.055% of annual salary to the System and each non-university member who becomes a member before July 1, 2008 will contribute 10.855% of annual salary. Of this amount, for each university member, 1.43% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 1.75% if paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.
2. Section 161.540 also provides that each university member who becomes a member on or after July 1, 2008 will contribute 9.375% of annual salary to the System and each non-university member who becomes a member on or after July 1, 2008 will contribute 10.855% of annual salary. Of this amount, 1.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.
3. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2012/2013 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**
4. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the

Pension Plan and Life Insurance Fund. Of these amounts, 0.05% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 7.27% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 3.69% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 21.785% for university members who become members before July 1, 2008 and 22.785% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 23.265% for non-university members who become members before July 1, 2008 and 24.265% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	9.055%	9.375%
Statutory Medical Insurance Fund	(1.43)	(1.75)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	9.055%	9.375%
Statutory Medical Insurance Fund	(1.43)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	11.875%
Life Insurance	(0.05)%	(0.05)%
Additional to Maintain 30-Year Amortization	7.27	7.27
Special Appropriation	3.69	3.69
Contribution to Pension Plan	21.785%	22.785%
Total Contribution to Pension Plan	29.41%	30.41%

NON-UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	10.855%	10.855%
Statutory Medical Insurance Fund	(1.75)	(1.75)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	10.855%	10.855%
Statutory Medical Insurance Fund	(1.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	12.355%	13.355%
Life Insurance	(0.05)%	(0.05)%
Additional to Maintain 30-Year Amortization	7.27	7.27
Special Appropriation	3.69	3.69
Contribution to Pension Plan	23.265%	24.265%
Total Contribution to Pension Plan	32.37%	33.37%

4. The valuation indicates that normal contributions at the rate of 13.31% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.21%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 16.10% for university members hired before July 1, 2008, 17.10% for university members hired on and after July 1, 2008, 15.16% for non-university members hired before July 1, 2008, and 16.16% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.69% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	13.31%	13.31%	17.21%	17.21%
Accrued Liability*	16.10	17.10	15.16	16.16
Total	29.41%	30.41%	32.37%	33.37%

* Includes special appropriations of 3.69% of payroll to be made by the State.

5. The unfunded actuarial accrued liability amounts to $9,492,985,889 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 7.27%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. Since the 2005 fiscal year, a portion of the contributions required for the pension fund have been allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, additional contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. It is our understanding that beginning with the 2011 fiscal year, there will be no further loans for stabilization funding. The following table shows the amounts borrowed, annual payments and remaining balances as of June 30, 2010:

MEDICAL INSURANCE FUND
STABILIZATION FUNDING

	Loan Amount	Annual Payment	Balances as of June 30, 2010
2004/2005	$29,169,700	$4,249,600	$17,193,538
2005/2006	62,294,800	9,075,500	42,598,781
2006/2007	73,000,000	10,207,400	53,174,638
2007/2008	125,000,000	18,280,000	106,522,125
2008/2009*	133,400,000	19,516,900	123,970,500
2009/2010**	134,200,000	19,611,300	134,200,000
Total	$557,064,500	$80,940,700	$477,659,582

* Includes $125,000,000 for Stabilization Funding and $8,400,000 for non-single subsidy funding.
** Includes $125,000,000 for Stabilization Funding and $9,200,000 for non-single subsidy funding.

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 7.27% of payroll for the fiscal year ending June 30, 2013, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46
June 30, 2008	June 30, 2011	1.13	3.59
June 30, 2009	June 30, 2012	2.22 *	5.81 *
June 30, 2010	June 30, 2013	1.46	7.27

* The 2009 Valuation Results were revised from last year due to a reduction in the Life Insurance Fund State Contribution Rate from 0.17% to 0.05%. This in turn lowered the required increase for the 2012 fiscal year from 5.93% to 5.81%.

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $978,540,691 in the unfunded accrued liability from $8,514,445,198 to $9,492,985,889 during the year ending June 30, 2010.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 638,583
Expected Accrued liability contribution	(294,071)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2009/2010 fiscal year with interest	139,233
Repayment of prior year's MIF Stabilization Funding with interest	(63,544)
Pension Obligation Bond contribution made in August 2010	(465,000)
Experience:	
Valuation asset growth	1,026,250
Pensioners' mortality	20,027
Turnover and retirements	18,096
New entrants	56,140
Salary increases	(97,173)
Amendments	0
Assumption and method changes	0
Total	$ 978,541

SECTION VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2010

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	43,134
Terminated employees entitled to benefits but not yet receiving benefits	5,637
Active plan members	76,387
Total	125,158

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2005	$14,598,843	$19,134,870	$4,536,027	76.3%	$2,703,430	167.8%
6/30/2006 *	14,857,641	20,324,781	5,467,140	73.1	2,859,477	191.2
6/30/2007	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8

* Reflects change in decremental assumptions.

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2010. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2010
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of Return*	7.50%
Projected salary Increases*	4.00 - 8.20%
Cost-of-living adjustments	1.50% Annually
*Includes inflation at	4.00%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ended June 30	Annual Required Contributions	Percentage Contributed
2005	$412,946,526	93%
2006	464,152,466	87
2007	494,565,369	88
2008	563,789,483	83
2009	600,282,735	74
2010	633,938,088	76

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2010. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2010

(a)	Employer annual required contribution	$ 633,938,088
(b)	Interest on net pension obligation	30,996,927
(c)	Adjustment to annual required contribution	22,094,107
(d)	Annual pension cost: (a) + (b) - (c)	$ 642,840,908
(e)	Employer contributions made for fiscal year ending June 30, 2010	479,805,088
(f)	Increase (decrease) in net pension obligation: (d) - (e)	$ 163,035,820
(g)	Net pension obligation beginning of fiscal year	413,292,362
(h)	Net pension obligation end of fiscal year: (f) + (g)	$ 576,328,182

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2008	$567,007,965	82%	$250,170,583
June 30, 2009	605,671,714	73	413,292,362
June 30, 2010	642,840,908	75	576,328,182

SCHEDULE A

RESULTS OF THE VALUATION
PREPARED AS OF JUNE 30, 2010
($1,000's)

1.	**ACTUARIAL ACCRUED LIABILITY**		
	Present value of prospective benefits payable in respect of:		
	(a) Present active members		
	- Service retirement benefits	$ 8,706,018	
	- Disability retirement benefits	393,535	
	- Death and survivor benefits	72,141	
	- Refunds of member contributions	162,240	
	Total		$ 9,333,934
	(b) Present inactive members and members entitled to deferred vested benefits:		219,509
	(c) Present annuitants and benficiaries:		
	- Service retirement benefits	$ 13,828,755	
	- Disability retirement benefits	467,724	
	- Death and survivor benefits	494,394	
	Total		$ 14,790,873
	(d) Total actuarial accrued liability		$ 24,344,316
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**		$ 14,851,330
3.	**UNFUNDED ACTUARIAL ACCRUED LIABILITY [1(d) - 2]**		$ 9,492,986

4.	**NORMAL CONTRIBUTION RATE**	**UNIVERSITY**	**NON-UNIVERSITY**
	(a) Actuarial present value of benefits accruing annually	$ 27,520	$ 536,038
	(b) Annual payroll of active members	$ 206,823	$ 3,114,792
	(c) Normal contribution rate [(4(a) / 4(b)]	13.31%	17.21%

SCHEDULE A

(continued)

SOLVENCY TEST
(in millions of dollars)

Fiscal Year Ending	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2005	$2,621.3	$11,370.4	$5,143.2	$14,598.8	100%	100%	12%
6/30/2006	2,615.8	12,216.6	5,492.4	14,857.6	100	100	0
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0	100	97	0
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3	100	91	0
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
AS OF JUNE 30, 2010

(1)	Actuarial Value of Assets Beginning of Year	$	14,885,981,251
(2)	Market Value of Assets End of Year	$	12,456,619,082
(3)	Market Value of Assets Beginning of Year	$	11,515,883,575
(4)	Cash Flow		
	a. Contributions	$	777,419,053
	b. Benefit Payments		1,337,119,450
	c. Administrative Expense		8,830,054
	d. Net: (4)a - (4)b - (4)c	$	(568,530,451)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)d	$	1,509,265,958
	b. Assumed Rate		7.50%
	c. Amount for Immediate Recognition:		
	[(3) x (5)b] + [(4)d x (5)b x 0.5]	$	842,371,376
	d. Amount for Phased-In Recognition: (5)a - (5)c	$	666,894,582
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	$	133,378,916
	b. First Prior Year		(611,235,941)
	c. Second Prior Year		(409,879,449)
	d. Third Prior Year		190,240,386
	e. Fouth Prior Year		(75,996,339)
	f. Total Recognized Investment Gain	$	(773,492,427)
(7)	Actuarial Value of Assets End of Year:		
	(1) + (4)d + (5)c + (6)f	$	14,386,329,749
(8)	Additional Contribution from Pension Obligation Bond	$	465,000,000
(9)	Final Actuarial Value of Assets End of Year: (7) + (8)	$	14,851,329,749
(10)	Difference Between Market & Actuarial Values: (2) - (7) (prior to Pension Obligation Bond)	$	(1,929,710,667)

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2010	**June 30, 2009**
Receipts for the Year		
Contributions		
Members	$ 297,613,965	$ 293,678,564
Employers	479,805,088	442,549,935
Total	$ 777,419,053	$ 736,228,499
Net Investment Income	1,509,265,958	(2,020,682,522)
TOTAL	$ 2,286,685,011	$ (1,284,454,023)
Disbursements for the Year		
Benefit Payments	$ 1,321,808,770	$ 1,252,980,407
Refunds to Members	15,310,680	15,208,419
Medical Insurance Payments	0	0
Miscellaneous, including expenses	8,830,054	8,165,757
TOTAL	$ 1,345,949,504	$ 1,276,354,583
Excess of Receipts over Disbursements	$ 940,735,507	$ (2,560,808,606)
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 11,515,883,575	$ 14,076,692,181
Excess of Receipts over Disbursements	940,735,507	(2,560,808,606)
Asset Balances as of the End of the Year	$ 12,456,619,082	$ 11,515,883,575
Rate of Return	13.44%	-14.64%

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2005, submitted to and adopted by the Board on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.70
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
						RETIREMENT	
			WITHDRAWAL			Before	After
			Service			27 Years	27 Years
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	of Service	of Service*
20	0.003%	0.01%	9.00%				
25	0.010%	0.01%	9.00%	1.50%			
30	0.016%	0.02%	9.00%	3.00%	3.00%		
35	0.032%	0.05%	10.00%	3.25%	1.50%		
40	0.048%	0.08%	10.00%	3.75%	1.50%		
45	0.064%	0.22%	9.50%	2.50%	1.50%		25.0%
50	0.104%	0.42%	10.00%	4.00%	3.00%		20.0%
55	0.216%	0.60%	11.00%	3.00%	2.70%	6.0%	35.0%
60	0.375%	0.79%	11.00%	3.00%	2.70%	14.0%	25.0%
62	0.438%	0.83%	11.00%	3.00%	2.70%	14.0%	23.0%
65	0.566%	0.90%	11.00%	3.00%	2.70%	22.5%	35.0%
70	0.905%	0.00%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.002%	0.03%	6.00%				
25	0.007%	0.03%	8.50%	3.00%			
30	0.014%	0.04%	9.00%	4.00%	1.50%		
35	0.026%	0.11%	8.50%	4.00%	2.00%		
40	0.044%	0.22%	8.50%	2.50%	1.50%		
45	0.055%	0.38%	7.00%	2.50%	1.50%		25.0%
50	0.066%	0.44%	8.50%	3.00%	2.25%		20.0%
55	0.085%	0.56%	10.00%	3.50%	2.50%	7.5%	35.0%
60	0.122%	0.85%	11.00%	3.50%	2.50%	16.5%	30.0%
62	0.137%	0.85%	11.00%	3.50%	2.50%	12.5%	25.0%
65	0.159%	0.85%	11.00%	3.50%	2.50%	26.0%	30.0%
70	0.195%	0.00%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

ACTUARIAL METHOD: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 1% of active liability

SCHEDULE E

SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2010. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes are reflected in the June 30, 2009 valuation. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or

more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.
.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

Members Before 7/1/2008

University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

Members on and after 7/1/2008

University members contribute 9.375% of salary of which 7.625% is contributed to the Retirement System and 1.75% is contributed to the Medical Insurance Fund. Non-university members contribute 10.855% of salary of which 9.105% is contributed to the Retirement System and 1.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

SCHEDULE F

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2010 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	2,552								2,552
Total Pay	41,410,302								41,410,302
Avg. Pay	16,227								16,227
25 to 29	7,342	1,401							8,743
Total Pay	217,949,175	63,246,757							281,195,932
Avg. Pay	29,685	45,144							32,162
30 to 34	3,818	4,865	937						9,620
Total Pay	111,452,897	227,947,351	49,974,032						389,374,280
Avg. Pay	29,191	46,855	53,334						40,475
35 to 39	2,817	2,509	4,012	706					10,044
Total Pay	74,313,656	120,604,468	225,193,125	42,603,634					462,714,883
Avg. Pay	26,380	48,069	56,130	60,345					46,069
40 to 44	3,879	1,808	2,277	2,904	723				11,591
Total Pay	79,944,872	88,446,267	128,003,793	178,515,920	46,125,557				521,036,409
Avg. Pay	20,610	48,919	56,216	61,472	63,797				44,952
45 to 49	1,814	1,269	1,334	1,528	2,155	639			8,739
Total Pay	44,689,939	62,904,777	75,802,300	95,801,767	138,579,018	42,056,954			459,834,755
Avg. Pay	24,636	49,570	56,823	62,697	64,306	65,817			52,619
50 to 54	1,657	1,023	1,173	1,232	1,377	1,645	476		8,583
Total Pay	34,303,799	50,798,111	67,243,927	77,191,072	90,754,269	113,263,204	32,669,109		466,223,491
Avg. Pay	20,702	49,656	57,326	62,655	65,907	68,853	68,633		54,319
55 to 59	2,510	755	944	1,083	1,158	823	707	103	8,083
Total Pay	39,542,880	39,660,051	56,148,619	70,541,207	77,380,607	59,083,162	54,593,179	8,806,679	405,756,384
Avg. Pay	15,754	52,530	59,479	65,135	66,823	71,790	77,218	85,502	50,199
60 to 64	2,844	431	487	573	583	372	165	122	5,577
Total Pay	39,563,979	23,085,640	30,037,551	37,299,758	40,586,147	27,094,465	13,907,160	11,098,734	222,673,434
Avg. Pay	13,911	53,563	61,679	65,096	69,616	72,835	84,286	90,973	39,927
65 & over	2,096	148	134	119	129	98	47	84	2,855
Total Pay	19,263,491	7,200,683	8,811,446	8,107,359	9,067,291	7,442,506	3,632,962	7,868,617	71,394,355
Avg. Pay	9,191	48,653	65,757	68,129	70,289	75,944	77,297	93,674	25,007
Total	31,329	14,209	11,298	8,145	6,125	3,577	1,395	309	76,387
Total Pay	702,434,990	683,894,105	641,214,793	510,060,717	402,492,889	248,940,291	104,802,410	27,774,030	3,321,614,225
Avg. Pay	22,421	48,131	56,755	62,623	65,713	69,595	75,127	89,884	43,484

Average Age: 43.5 Average Service: 10.8

SCHEDULE F

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE AS OF JUNE 30, 2010

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	761	$ 8,716,500	$ 11,454
50 - 54	1,166	38,144,970	32,714
55 - 59	6,003	221,760,971	36,942
60 - 64	10,935	386,467,941	35,342
65 - 69	8,197	271,854,309	33,165
70 - 74	5,781	176,024,375	30,449
75 - 79	4,103	113,668,963	27,704
80 & Over	6,188	135,519,537	21,900
Total	43,134	$ 1,352,157,566	$ 31,348

SCHEDULE F

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Year Ended	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2001	2,410	$77.0	1,128	$16.5	31,897	$679.8	9.8%	$21,311
2002	2,577	86.2	1,063	16.8	33,408	749.2	10.2	22,425
2003	2,252	86.7	1,015	16.9	34,645	819.0	9.3	23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6	31,348

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The experience and dedication you deserve

Teachers' Retirement System of the State of Kentucky
Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2011

www.CavMacConsulting.com

December 14, 2011

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2011. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2014 required to support the benefits of the System are 29.99% of payroll for university members hired before July 1, 2008, 30.99% of payroll for university members hired on and after July 1, 2008, 32.95% of payroll for non-university members hired before July 1, 2008, and 33.95% of payroll for non-university members hired on and after July 1, 2008.

These rates represent an increase since the previous valuation in the Pension required employer contribution rate of 0.58% of payroll for the 2013/2014 fiscal year. In addition, there has been a net decrease in the expected state special appropriation from 3.69% to 3.50%, or 0.19% of payroll and a decrease in the amount required for life insurance benefits from 0.05% to 0.03%, or -0.02%. Therefore, the net impact on the required increase in the total employer contribution rate is 0.75% of payroll.

For the 2013/2014 fiscal year, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 8.02%; 0.75% from this valuation and 7.27% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

Since the previous valuation, various assumptions and methods have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2010. These revised changes were adopted by the Board on September 19, 2011 and are discussed in depth on pages 4 and 5 of the report. The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

EAM/EJK:kc

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2011

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2011	June 30, 2010
Number of active members	76,349	76,387
Annual salaries	$ 3,451,756	$ 3,321,614
Number of annuitants and beneficiaries	44,419	43,134
Annual allowances	$ 1,433,386	$ 1,352,158
Assets:		
Market value	$ 15,130,606	$ 12,456,619
Actuarial value	$ 14,908,138	$ 14,851,330
Unfunded actuarial accrued liability	$ 11,060,554	$ 9,492,986
Funded Ratio	57.4%	61.0%
Amortization period (years)	30	30

Contribution rates are shown separately for university and non-university members on the following pages.

CONTRIBUTION RATES FOR UNIVERSITY MEMBERS

Valuation Date	June 30, 2011		June 30, 2010	
For fiscal year ending:	**June 30, 2014**		**June 30, 2013**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	11.77%	11.77%	13.31%	13.31%
Accrued liability	18.22	19.22	16.10	17.10
Total	29.99%	30.99%	29.41%	30.41%
Member	7.625%	7.625%	7.625%	7.625%
State (ARC)	22.365	23.365	21.785	22.785
Total	29.99%	30.99%	29.41%	30.41%
Life Insurance Fund:				
State	0.03%	0.03%	0.05%	0.05%
Medical Insurance Fund:				
Member	1.75%	1.75%	1.43%	1.75%
State Match	1.75	0.75	1.43	0.75
State Additional	0.00	0.00	0.00	0.00
Total	3.50%	2.50%	2.86%	2.50%
Total Contributions	33.52%	33.52%	32.32%	32.96%
Member Statutory	9.375%	9.375%	9.055%	9.375%
State Statutory	12.625	12.625	12.305	12.625
Required Increase	8.02	8.02	7.27	7.27
State Special	3.50	3.50	3.69	3.69
Total	33.52%	33.52%	32.32%	32.96%

CONTRIBUTION RATES FOR NON-UNIVERSITY MEMBERS

Valuation Date	June 30, 2011		June 30, 2010	
For fiscal year ending:	**June 30, 2014**		**June 30, 2013**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	15.05%	15.05%	17.21%	17.21%
Accrued liability	17.90	18.90	15.16	16.16
Total	32.95%	33.95%	32.37%	33.37%
Member	9.105%	9.105%	9.105%	9.105%
State (ARC)	23.845	24.845	23.265	24.265
Total	32.95%	33.95%	32.37%	33.37%
Life Insurance Fund:				
State	0.03%	0.03%	0.05%	0.05%
Medical Insurance Fund:				
Member	2.25%	2.25%	1.75%	1.75%
State Match	2.25	1.25	1.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	4.50%	3.50%	3.50%	2.50%
Total Contributions	37.48%	37.48%	35.92%	35.92%
Member Statutory	11.355%	11.355%	10.855%	10.855%
State Statutory	14.605	14.605	14.105	14.105
Required Increase	8.02	8.02	7.27	7.27
State Special	3.50	3.50	3.69	3.69
Total	37.48%	37.48%	35.92%	35.92%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2011 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Since the previous valuation, various assumptions and methods have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2010. The changes adopted by the Board on September 19, 2011, include various revised demographic and economic assumptions, a valuation interest smoothing methodology and a change in the actuarial cost method from Projected Unit Credit to the Entry Age Normal. Schedule D of this report shows the development of the smoothed interest rate and Schedule F shows a brief description of the actuarial cost method. The following chart summarizes all the changes adopted by the Board that are reflected in the valuation.

Summary of Assumptions and Methods	
Economic Assumptions	
Price Inflation	Changed assumed rate from 4.00% to 3.50%
Ultimate Investment Rate of Return *	No change to current assumption
Wage Inflation	No change to current assumption
Demographic Assumptions	
Withdrawal	Changed rates to more closely reflect experience
Pre-Retirement Mortality	Changed to prescribed table that matches Post-Retirement Mortality
Disability	Lowered rates for most ages
Service Retirement	Changed rates to more closely reflect experience
Post-Retirement Mortality	Changed to RP2000 Combined Mortality Table
Salary Scale	No change to current assumption
Other Assumptions and Methods Changes	
Actuarial Cost Method	Change from Projected Unit Credit (PUC) to Entry Age Normal (EAN) Cost Method
Unused Sick Leave	Increase Load Assumption from 1% to 2%
Asset Smoothing	No change to current method
Interest Smoothing*	Change to interest smoothing methodology

* The Board adopted a Smoothed Interest Rate Methodology whereby the investment rate of return expected to be earned during a 25 year look forward period beginning on the valuation date and the actual returns earned during the 5 year look back period will result in an average rate of return over the combined 30 year period equivalent to the Ultimate Investment Rate of Return of 7.50%. A corridor of 0.50% around the ultimate investment rate of return will be applied in determining the smoothed interest rate.

5. Schedule B shows the development of the actuarial value of assets. Schedule E of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

6. Provisions of the System, as summarized in Schedule G, were taken into account in the current valuation. The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2011 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
Full Time	59,089	$ 3,337,547
Part Time	17,260	114,209
Total	76,349	$ 3,451,756

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2011

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	38,755	$ 1,310,584
Disability Retirements	2,379	62,730
Beneficiaries of Deceased Members	3,285	60,072
Total	44,419	$ 1,433,386

[1] Includes cost-of-living adjustments effective through July 1, 2011.

3. Table 1 of Schedule H shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2011 the market value of Pension Plan assets for valuation purposes held by the System amounted to $15,130,606,279. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.
2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2011 was $14,908,138,356. Schedule B shows the development of the actuarial value of assets as of June 30, 2011.
3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2011. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule E and Schedule F.
2. The valuation balance sheet shows that the System has total prospective liabilities of $15,233,865,216 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $15,330,710,085 of which $965,191,446 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $227,185,346. The total prospective liabilities of the System amounts to $30,791,760,647. Against these liabilities, the System has present assets for valuation purposes of $14,908,138,356. When this amount is deducted from the total liabilities of $30,791,760,647, there remains $15,883,622,291 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 11.77% of payroll for University and 15.05% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,823,068,059. When this amount is subtracted from $15,883,622,291, which is the present value of the total future contributions to be made by the employer, there remains $11,060,554,232 as the amount of future unfunded accrued liability contributions.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member who becomes a member before July 1, 2008 will contribute 9.375% of annual salary to the System and each non-university member who becomes a member before July 1, 2008 will contribute 11.355% of annual salary. Of this amount, for each university member, 1.75% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 2.25% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.540 also provides that each university member who becomes a member on or after July 1, 2008 will contribute 9.375% of annual salary to the System and each non-university member who becomes a member on or after July 1, 2008 will contribute 11.355% of annual salary. Of this amount, 1.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

3. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2013/2014 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**

4. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.03% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 8.02% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 3.50% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 22.365% for university members who become members before July 1, 2008 and 23.365% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 23.845% for non-university members who become members before July 1, 2008 and 24.845% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	9.375%	9.375%
Statutory Medical Insurance Fund	(1.75)	(1.75)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	9.375%	9.375%
Statutory Medical Insurance Fund	(1.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	11.875%
Life Insurance	(0.03)%	(0.03)%
Additional to Maintain 30-Year Amortization	8.02	8.02
Special Appropriation	3.50	3.50
Contribution to Pension Plan	22.365%	23.365%
Total Contribution to Pension Plan	29.99%	30.99%

NON-UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	11.355%	11.355%
Statutory Medical Insurance Fund	(2.25)	(2.25)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	11.355%	11.355%
Statutory Medical Insurance Fund	(2.25)	(1.25)
Supplemental Funding	3.25	3.25
Subtotal	12.355%	13.355%
Life Insurance	(0.03)%	(0.03)%
Additional to Maintain 30-Year Amortization	8.02	8.02
Special Appropriation	3.50	3.50
Contribution to Pension Plan	23.845%	24.845%
Total Contribution to Pension Plan	32.95%	33.95%

4. The valuation indicates that normal contributions at the rate of 11.77% of active university members' salaries and 15.05% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 18.22% for university members hired before July 1, 2008, 19.22% for university members hired on and after July 1, 2008, 17.90% for non-university members hired before July 1, 2008, and 18.90% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.50% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	11.77%	11.77%	15.05%	15.05%
Accrued liability*	18.22	19.22	17.90	18.90
Total	29.99%	30.99%	32.95%	33.95%

* Includes special appropriations of 3.50% of payroll to be made by the State.

5. The unfunded actuarial accrued liability amounts to $11,060,554,232 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 8.02%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, additional contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2010, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. In addition, it is our understanding that beginning with the 2011 fiscal year, there will be no further loans for Stabilization Funding. The following table shows the amounts borrowed, annual payments and remaining balances as of June 30, 2011:

MEDICAL INSURANCE FUND STABILIZATION FUNDING

	Loan Amount	Annual Payment	Balances as of June 30, 2011
2004/2005	$29,169,700	$0	$0
2005/2006	62,294,800	0	0
2006/2007	73,000,000	0	0
2007/2008	125,000,000	0	0
2008/2009*	133,400,000	1,228,900	7,343,046
2009/2010**	134,200,000	1,345,200	8,746,642
2010/2011***	10,700,000	1,405,600	10,700,000
Total	$567,764,500	$3,979,700	$26,789,688

* Includes $125,000,000 for Stabilization Funding and $8,400,000 for non-single subsidy funding.
** Includes $125,000,000 for Stabilization Funding and $9,200,000 for non-single subsidy funding.
*** For non-single subsidy funding.

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 8.02% of payroll for the fiscal year ending June 30, 2014, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21%	1.32%
June 30, 2006	June 30, 2009	0.56%	1.88%
June 30, 2007	June 30, 2010	0.58%	2.46%
June 30, 2008	June 30, 2011	1.13%	3.59%
June 30, 2009	June 30, 2012	2.22%	5.81%
June 30, 2010	June 30, 2013	1.46%	7.27%
June 30, 2011	June 30, 2014	0.75%	8.02%

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,567,568,343 in the unfunded accrued liability from $9,492,985,889 to $11,060,554,232 during the year ending June 30, 2011.

ANALYSIS OF FINANCIAL EXPERIENCE

(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 711,974
Expected Accrued liability contribution	(331,360)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2010/2011 fiscal year with interest	11,101
Repayment of prior year's MIF Stabilization Funding with interest	(2,671)
Experience:	
Valuation asset growth	521,208
Pensioners' mortality	11,676
Turnover and retirements	13,570
New entrants	53,011
Salary increases	(164,032)
Amendments	0
Assumption changes	750,720
Method changes	(7,629)
Total	$ 1,567,568

SECTION VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2011

GROUP	NUMBER
Retirees and beneficiaries currently Receiving benefits	44,419
Terminated employees entitled to Benefits but not yet receiving benefits	6,135
Active plan members	76,349
Total	126,903

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2006**	$14,857,641	$20,324,781	$ 5,467,140	73.1%	$2,859,477	191.2%
6/30/2007	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8
6/30/2011***	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4

* Funding method Projected Unit Credit prior to 6/30/2011
Funding method Entry Age Normal 6/30/2011 and after
** Reflects change in decremental assumptions
*** Reflects change in assumptions and methods

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2011. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2011
Actuarial cost method	Entry Age
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Ultimate Investment Rate of Return*	7.50%
Projected salary Increases**	4.00 - 8.20%
Cost-of-living adjustments	1.50% Annually
*Includes price inflation at	3.50%
**Includes wage inflation at	4.00%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Annual Required Contributions	Percentage Contributed
2006	$464,152,466	87%
2007	494,565,369	88
2008	563,789,483	83
2009	600,282,735	74
2010	633,938,088	76
2011	678,741,428	153

5. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2011. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2011

(a) Employer annual required contribution	$ 678,741,428
(b) Interest on net pension obligation	43,224,614
(c) Adjustment to annual required contribution	30,809,803
(d) Annual pension cost: (a) + (b) – (c)	$ 691,156,239
(e) Employer contributions made for fiscal year ending June 30, 2011	1,037,935,993
(f) Increase (decrease) in net pension obligation: (d) – (e)	$(346,779,754)
(g) Net pension obligation beginning of fiscal year	576,328,182
(h) Net pension obligation end of fiscal year: (f) + (g)	$ 229,548,428

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2009	$605,671,714	73%	$413,292,362
June 30, 2010	642,840,908	75	576,328,182
June 30, 2011	691,156,239	150	229,548,428

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2011
(Dollar amounts in thousands)

ACTUARIAL LIABILITIES			
(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 14,178,955	
	- Disability retirement benefits	697,309	
	- Death and survivor benefits	138,465	
	- Refunds of member contributions	219,136	
	Total		$ 15,233,865
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits		
	- Service retirement benefits	$ 14,224,794	
	- Disability retirement benefits	585,781	
	- Death and survivor benefits	520,135	
	Total		$ 15,330,710
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 227,186
(4)	TOTAL ACTUARIAL LIABILITIES		$ 30,791,761
PRESENT AND PROSPECTIVE ASSETS			
(5)	Actuarial value of assets		$ 14,908,138
(6)	Present value of total future contributions = (4)-(5)	$ 15,883,623	
(7)	Present value of future member contributions and employer normal contributions		4,823,069
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		11,060,554
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 30,791,761

SCHEDULE A
(continued)

SOLVENCY TEST
(in millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2006	$2,615.8	$12,216.6	$5,492.4	$14,857.6	100%	100%	0%
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0	100	97	0
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3	100	91	0
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
AS OF JUNE 30, 2011

(1)	Actuarial Value of Assets Beginning of Year		
	(exclusive of Pension Obligation Bond)		$ 14,386,329,749
(2)	Market Value of Assets End of Year		$ 15,130,606,279
(3)	Market Value of Assets Beginning of Year		$ 12,456,619,082
(4)	Cash Flow		
	a.	Contributions (exclusive of Pension Obligation Bond)	$ 874,814,647
	b.	Benefit Payments	1,419,861,100
	c.	Administrative Expense	7,322,739
	d.	Net: (4)a – (4)b – (4)c	$ (552,369,192)
	e.	Pension Obligation Bond	$ 465,384,165
(5)	Investment Income		
	a.	Market total: (2) – (3) – (4)d – (4)e	$ 2,760,972,224
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5] + [(4)e x (5)b x 10/12]	$ 942,619,097
	d.	Amount for Phased-In Recognition: (5)a – (5)c	$ 1,818,353,127
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	$ 363,670,625
	b.	First Prior Year	133,378,916
	c.	Second Prior Year	(611,235,941)
	d.	Third Prior Year	(409,879,449)
	e.	Fourth Prior Year	190,240,386
	f.	Total Recognized Investment Gain	$ (333,825,463)
(7)	Actuarial Value of Assets End of Year:		
	(1) + (4)d + (4)e + (5)c + (6)f		$ 14,908,138,356
(8)	Difference Between Market & Actuarial Values: (2) – (7)		$ 222,467,923

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2011	June 30, 2010
Receipts for the Year		
Contributions		
Members	$ 302,262,819	$ 297,613,965
Employers	1,037,935,993	479,805,088
Total	$ 1,340,198,812	$ 777,419,053
Net Investment Income	2,760,972,224	1,509,265,958
TOTAL	$ 4,101,171,036	$ 2,286,685,011
Disbursements for the Year		
Benefit Payments	$ 1,402,535,713	$ 1,321,808,770
Refunds to Members	17,325,387	15,310,680
Miscellaneous, including expenses	7,322,739	8,830,054
TOTAL	$ 1,427,183,839	$ 1,345,949,504
Excess of Receipts over Disbursements	$ 2,673,987,197	$ 940,735,507
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 12,456,619,082	$ 11,515,883,575
Excess of Receipts over Disbursements	2,673,987,197	940,735,507
Asset Balance as of the End of the Year	$ 15,130,606,279	$ 12,456,619,082
Rate of Return	21.60%	13.44%

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE D

SMOOTHED INTEREST RATE

Actual Rate of Return for 5 Year Look Back Period

Fiscal Year Ending 6/30	Actual Rate of Return for Fiscal Year
2007	14.56 %
2008	-6.46
2009	-14.64
2010	13.44
2011	21.60

SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period beginning on the valuation date. This is the investment rate of return expected to be earned during this period based on the actual rates earned during the five year look back period shown above such that the average rate of return over the combined 30 year period is equivalent to the ultimate investment rate of return (currently 7.50%). On this basis, for the June 30, 2011 valuation, the smoothed interest rate during the 25 year look forward period has been determined to be 8.06%.

ULTIMATE INVESTMENT RATE OF RETURN (DISCOUNT RATE): The assumed investment rate of return used in determining the smoothed interest rate described above. This is also the assumed investment rate of return after the 25 year look forward period and is currently 7.50%.

CORRIDOR AROUND SMOOTHED INTEREST RATE: A corridor of 0.50% around the ultimate investment rate of return is applied in determining the smoothed interest rate.

LIMITED SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period as limited based on the application of the corridor above and used for valuation purposes. Since the smoothed interest rate above 8.06% the assumed rate for the first 25 years after the valuation date is limited to 8.00% by the corridor.

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011.

ULTIMATE INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.60
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
						RETIREMENT	
			WITHDRAWAL			Before	After
			Service			27 Years	27 Years
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	of Service	of Service*
20	0.012%	0.01%	9.00%				
25	0.015%	0.01%	9.00%	3.00%			
30	0.020%	0.02%	9.00%	3.00%	3.00%		
35	0.035%	0.05%	10.00%	3.25%	1.75%		
40	0.046%	0.09%	10.00%	4.00%	1.40%		
45	0.058%	0.18%	11.00%	4.00%	1.50%		17.0%
50	0.074%	0.33%	9.00%	4.00%	2.00%		17.0%
55	0.124%	0.55%	12.00%	3.50%	2.50%	5.5%	35.0%
60	0.244%	0.70%	12.00%	3.50%	2.50%	13.0%	24.0%
62	0.324%	0.70%	12.00%	3.50%	2.50%	15.0%	25.0%
65	0.480%	0.70%	12.00%	3.50%	2.50%	21.0%	26.0%
70	0.821%	0.70%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008%	0.02%	8.50%	4.00%			
30	0.010%	0.04%	9.00%	4.00%	1.65%		
35	0.017%	0.08%	9.00%	3.75%	1.85%		
40	0.024%	0.14%	8.50%	3.25%	1.50%		
45	0.037%	0.32%	7.50%	3.25%	1.25%		15.0%
50	0.055%	0.42%	9.50%	3.50%	1.75%		15.0%
55	0.103%	0.56%	11.00%	4.00%	2.00%	6.0%	35.0%
60	0.201%	0.85%	11.00%	4.00%	2.00%	14.0%	30.0%
62	0.263%	0.85%	11.00%	4.00%	2.00%	12.5%	25.0%
65	0.390%	0.85%	11.00%	4.00%	2.00%	22.0%	30.0%
70	0.672%	0.85%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set back five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

VALUATION INTEREST RATE SMOOTHING: The valuation liabilities are calculated using a smoothed interest rate method. The interest rate assumed during the look forward period (currently 25 years from the valuation date) is the investment rate of return expected to be earned during the look forward period based on the actual rate of return earned during the look back period (currently 5 years) such that the average assumed rate of return over the combined 30 year period is equivalent to the assumed ultimate investment rate of return (currently 7.50%). The interest rate after the 25 year look forward period is the ultimate investment rate of return of 7.50%.

CORRIDOR LIMIT ON INTEREST RATE SMOOTHING: The smoothed interest rate used during the 25 year look forward period is limited to a corridor of 0.50% around the ultimate investment rate of return.

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (see Schedules C and E for a description of the interest rate used), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE G

SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2011. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to: (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus (b) 2.5% of final average salary multiplied by service after July 1, 1983. (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.
.
For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE H

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2011 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	2,461	1							2,462
Total Pay	41,168,000	43,000							41,211,000
Avg. Pay	16,728	43,000							16,739
25 to 29	7,124	1,405							8,529
Total Pay	222,544,000	66,018,000							288,562,000
Avg. Pay	31,239	46,988							33,833
30 to 34	3,770	5,093	967						9,830
Total Pay	111,427,000	250,802,000	53,648,000						415,877,000
Avg. Pay	29,556	49,244	55,479						42,307
35 to 39	2,716	2,470	4,124	628					9,938
Total Pay	73,577,000	122,975,000	240,200,000	39,874,000					476,626,000
Avg. Pay	27,090	49,787	58,244	63,494					47,960
40 to 44	3,698	1,903	2,459	3,164	713				11,937
Total Pay	78,560,000	95,796,000	142,806,000	202,764,000	47,075,000				567,001,000
Avg. Pay	21,244	50,339	58,075	64,085	66,024				47,499
45 to 49	1,742	1,259	1,391	1,511	2,273	631			8,807
Total Pay	40,970,000	64,667,000	81,094,000	98,367,000	151,467,000	42,699,000			479,264,000
Avg. Pay	23,519	51,364	58,299	65,101	66,637	67,669			54,419
50 to 54	1,511	973	1,194	1,211	1,320	1,739	381		8,329
Total Pay	31,062,000	49,208,000	70,429,000	78,534,000	90,131,000	123,612,000	26,959,000		469,935,000
Avg. Pay	20,557	50,573	58,986	64,851	68,281	71,082	70,759		56,422
55 to 59	2,245	724	982	1,035	1,125	821	597	82	7,611
Total Pay	33,132,000	37,292,000	59,798,000	68,831,000	77,411,000	61,016,000	46,788,000	7,134,000	391,402,000
Avg. Pay	14,758	51,508	60,894	66,503	68,810	74,319	78,372	87,000	51,426
60 to 64	2,842	519	494	627	638	439	151	115	5,825
Total Pay	38,464,000	26,979,000	31,260,000	41,981,000	46,193,000	33,463,000	13,713,000	10,452,000	242,505,000
Avg. Pay	13,534	51,983	63,279	66,955	72,403	76,226	90,815	90,887	41,632
65 & over	2,164	246	155	144	145	112	40	75	3,081
Total Pay	20,190,000	10,359,000	9,870,000	9,807,000	10,342,000	8,439,000	3,365,000	7,001,000	79,373,000
Avg. Pay	9,330	42,110	63,677	68,104	71,324	75,348	84,125	93,347	25,762
Total	30,273	14,593	11,766	8,320	6,214	3,742	1,169	272	76,349
Total Pay	691,094,000	724,139,000	689,105,000	540,158,000	422,619,000	269,229,000	90,825,000	24,587,000	3,451,756,000
Avg. Pay	22,829	49,622	58,567	64,923	68,011	71,948	77,695	90,393	45,210

Average Age: 43.6

Average Service: 10.9

SCHEDULE H

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE AS OF JUNE 30, 2011

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	771	$ 9,250,517	$ 11,998
50 - 54	1,067	35,560,948	33,328
55 - 59	5,446	207,980,428	38,190
60 - 64	11,248	407,961,327	36,270
65 - 69	8,963	305,262,297	34,058
70 - 74	6,252	197,772,903	31,634
75 - 79	4,295	123,861,204	28,838
80 & Over	6,377	145,736,271	22,853
Total	44,419	$ 1,433,385,895	$ 32,270

SCHEDULE H

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Fiscal Year Ending June 30	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase In Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2002	2,577	$86.2	1,063	$16.8	33,408	$749.2	10.2%	$22,425
2003	2,252	86.7	1,015	16.9	34,645	819.0	9.3%	23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3%	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7%	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4%	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7%	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3%	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1%	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6%	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0%	32,270

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December 11, 2012

Mr. Gary L. Harbin
Executive Secretary
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Dear Gary:

Enclosed are 25 bound copies and one unbound copy of the "Teachers' Retirement System of the State of Kentucky Report of Actuary on the Valuation Prepared as of June 30, 2012".

Sincerely yours,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

EAM/EJK:kc

Enclosure

S:\Kentucky Teachers\Pension\Valuations\2012\KTRS Report.doc

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Teachers' Retirement System of the State of Kentucky
Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2012

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December 11, 2012

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2012. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2015 required to support the benefits of the System are 31.89% of payroll for university members hired before July 1, 2008, 32.89% of payroll for university members hired on and after July 1, 2008, 34.85% of payroll for non-university members hired before July 1, 2008, and 35.85% of payroll for non-university members hired on and after July 1, 2008.

These rates represent an increase since the previous valuation in the Pension required employer contribution rate of 1.90% of payroll for the 2014/2015 fiscal year. In addition, there has been a net decrease in the expected state special appropriation from 3.50% to 3.00%, or 0.50% of payroll and no change in the amount required for life insurance benefits. Therefore, the net impact on the required increase in the total employer contribution rate is 2.40% of payroll.

For the 2014/2015 fiscal year, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 10.42%; 2.40% from this valuation and 8.02% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

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We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2011 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, the System is not being funded on an actuarially sound basis since the actuarially required contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

EAM/EJK:kc

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2012

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2012	June 30, 2011
Number of active members	75,951	76,349
Annual salaries	$ 3,479,567	$ 3,451,756
Number of annuitants and beneficiaries	46,094	44,419
Annual allowances	$ 1,525,184	$ 1,433,386
Assets:		
Market value	$ 14,797,121	$ 15,130,606
Actuarial value	14,691,371	14,908,138
Unfunded actuarial accrued liability	$ 12,282,483	$ 11,060,554
Funded Ratio	54.5%	57.4%
Amortization period (years)	30	30

Contribution rates are shown separately for university and non-university members on the following pages.

CONTRIBUTION RATES FOR UNIVERSITY MEMBERS

Valuation Date	June 30, 2012		June 30, 2011	
For fiscal year ending:	**June 30, 2015**		**June 30, 2014**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	11.790%	11.790%	11.770%	11.770%
Accrued liability	20.100	21.100	18.220	19.220
Total	31.890%	32.890%	29.990%	30.990%
Member	7.625%	7.625%	7.625%	7.625%
State (ARC)	24.265	25.265	22.365	23.365
Total	31.890%	32.890%	29.990%	30.990%
Life Insurance Fund:				
State	0.030%	0.030%	0.030%	0.030%
Medical Insurance Fund:				
Member	2.270%	2.270%	1.750%	1.750%
State Match	2.270	1.270	1.750	0.750
Total	4.540%	3.540%	3.500%	2.500%
Total Contributions	36.460%	36.460%	33.520%	33.520%
Member Statutory	9.895%	9.895%	9.375%	9.375%
State Statutory	13.145	13.145	12.625	12.625
Required Increase	10.420	10.420	8.020	8.020
State Special	3.000	3.000	3.500	3.500
Total	36.460%	36.460%	33.520%	33.520%

CONTRIBUTION RATES FOR NON-UNIVERSITY MEMBERS

Valuation Date	June 30, 2012		June 30, 2011	
For fiscal year ending:	**June 30, 2015**		**June 30, 2014**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	15.150%	15.150%	15.050%	15.050%
Accrued liability	19.700	20.700	17.900	18.900
Total	34.850%	35.850%	32.950%	33.950%
Member	9.105%	9.105%	9.105%	9.105%
State (ARC)	25.745	26.745	23.845	24.845
Total	34.850%	35.850%	32.950%	33.950%
Life Insurance Fund:				
State	0.030%	0.030%	0.030%	0.030%
Medical Insurance Fund:				
Member	3.000%	3.000%	2.250%	2.250%
State Match	3.000	2.000	2.250	1.250
Total	6.000%	5.000%	4.500%	3.500%
Total Contributions	40.880%	40.880%	37.480%	37.480%
Member Statutory	12.105%	12.105%	11.355%	11.355%
State Statutory	15.355	15.355	14.605	14.605
Required Increase	10.420	10.420	8.020	8.020
State Special	3.000	3.000	3.500	3.500
Total	40.880%	40.880%	37.480%	37.480%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2012 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule E of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation.

5. The System currently uses a smoothed interest rate methodology to determine liabilities. The development of the smoothed interest rate used in the June 30, 2012 valuation is shown in Schedule D.

6. Provisions of the System, as summarized in Schedule G, were taken into account in the current valuation. There have been no changes since the previous valuation.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2012 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
Full Time	58,874	$ 3,361,793
Part Time	17,077	117,774
Total	75,951	$ 3,479,567

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2012

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	40,152	$ 1,392,874
Disability Retirements	2,477	67,006
Beneficiaries of Deceased Members	3,465	65,304
Total	46,094	$ 1,525,184

[1] Includes cost-of-living adjustments effective through July 1, 2012.

3. Table 1 of Schedule H shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2012 the market value of Pension Plan assets for valuation purposes held by the System amounted to $14,797,120,889. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.
2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2012 was $14,691,371,043. Schedule B shows the development of the actuarial value of assets as of June 30, 2012.
3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2012. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule E and Schedule F.
2. The valuation balance sheet shows that the System has total prospective liabilities of $15,391,786,788 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $16,229,256,850 of which $832,505,614 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $242,964,774. The total prospective liabilities of the System amounts to $31,864,008,412. Against these liabilities, the System has present assets for valuation purposes of $14,691,371,043. When this amount is deducted from the total liabilities of $31,864,008,412, there remains $17,172,637,369 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 11.79% of payroll for University and 15.15% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,890,154,454. When this amount is subtracted from $17,172,637,369, which is the present value of the total future contributions to be made by the employer, there remains $12,282,482,915 as the amount of future unfunded accrued liability contributions.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 9.895% of annual salary to the System and each non-university member contribute 12.105% of annual salary. Of this amount, for each university member, 2.27% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.00% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.03% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 10.42% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded

liability of the Pension Plan within a 30-year period. An additional special appropriation of 3.00% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 24.265% for university members who become members before July 1, 2008 and 25.265% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 25.745% for non-university members who become members before July 1, 2008 and 26.745% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	9.895%	9.895%
Statutory Medical Insurance Fund	(2.270)	(2.270)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	9.895%	9.895%
Statutory Medical Insurance Fund	(2.270)	(1.270)
Supplemental Funding	3.250	3.250
Subtotal	10.875%	11.875%
Life Insurance	(0.030)%	(0.030)%
Additional to Maintain 30-Year Amortization	10.420	10.420
Special Appropriation	3.000	3.000
Contribution to Pension Plan	24.265%	25.265%
Total Contribution to Pension Plan	31.890%	32.890%

NON-UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	12.105%	12.105%
Statutory Medical Insurance Fund	(3.000)	(3.000)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	12.105%	12.105%
Statutory Medical Insurance Fund	(3.000)	(2.000)
Supplemental Funding	3.250	3.250
Subtotal	12.355%	13.355%
Life Insurance	(0.030)%	(0.030)%
Additional to Maintain 30-Year Amortization	10.420	10.420
Special Appropriation	3.000	3.000
Contribution to Pension Plan	25.745%	26.745%
Total Contribution to Pension Plan	34.850%	35.850%

4. The valuation indicates that normal contributions at the rate of 11.79% of active university members' salaries and 15.15% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 20.10% for university members hired before July 1, 2008, 21.10% for university members hired on and after July 1, 2008, 19.70% for non-university members hired before July 1, 2008, and 20.70% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.00% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	11.79%	11.79%	15.15%	15.15%
Accrued liability*	20.10	21.10	19.70	20.70
Total	31.89%	32.89%	34.85%	35.85%

* Includes special appropriations of 3.00% of payroll to be made by the State.

5. The unfunded actuarial accrued liability amounts to $12,282,482,915 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 10.42%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2011, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. In addition, it is our understanding that beginning with the 2011 fiscal year, there will be no further loans for Stabilization Funding. The following table shows the amounts borrowed, annual payments and remaining balances for the non-single subsidy funding as of June 30, 2012:

MEDICAL INSURANCE FUND STABILIZATION FUNDING

	Loan Amount	Annual Payment	Balances as of June 30, 2012
2008/2009*	$ 8,400,000	$ 1,228,900	$ 6,645,514
2009/2010*	9,200,000	1,345,200	8,037,793
2010/2011*	10,700,000	1,564,500	10,172,724
2011/2012	12,300,000	1,798,700	12,300,000
Total	$ 40,600,000	$ 5,937,300	$ 37,156,031

* For non-single subsidy funding.

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 10.42% of payroll for the fiscal year ending June 30, 2015, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46
June 30, 2008	June 30, 2011	1.13	3.59
June 30, 2009	June 30, 2012	2.22	5.81
June 30, 2010	June 30, 2013	1.46	7.27
June 30, 2011	June 30, 2014	0.75	8.02
June 30, 2012	June 30, 2015	2.40	10.42

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,221,928,683 in the unfunded accrued liability from $11,060,554,232 to $12,282,482,915 during the year ending June 30, 2012.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (8.00%) added to previous unfunded accrued liability	$ 884,844
Expected Accrued liability contribution	(377,897)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2011/2012 fiscal year with interest	12,792
Repayment of prior year's MIF Stabilization Funding with interest	(4,304)
Experience:	
Valuation asset growth	740,509
Pensioners' mortality	15,768
Turnover and retirements	34,857
New entrants	53,409
Salary increases	(108,489)
Amendments	0
Assumption changes*	(29,560)
Method changes	0
Total	$ 1,221,929

* Change occurs due to interest smoothing methodology.

SECTION VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2012

GROUP	NUMBER
Retirees and beneficiaries currently Receiving benefits	46,094
Terminated employees entitled to Benefits but not yet receiving benefits	6,668
Active plan members	75,951
Total	128,713

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2007	$15,284,955	$21,254,974	$ 5,970,019	71.9%	$2,975,289	200.7%
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8
6/30/2011**	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4
6/30/2012	14,691,371	26,973,854	12,282,483	54.5	3,479,567	353.0

* Funding method Projected Unit Credit prior to 6/30/2011
Funding method Entry Age Normal 6/30/2011 and after
** Reflects change in assumptions and methods

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2012. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2012
Actuarial cost method	Entry Age
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Ultimate Investment Rate of Return*	7.50%
Projected salary Increases**	4.00 - 8.20%
Cost-of-living adjustments	1.50% Annually
*Includes price inflation at	3.50%
**Includes wage inflation at	4.00%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Annual Required Contributions	Actual Employer Contributions	Percentage Contributed
2007	$ 494,565,369	$ 434,890,469	88%
2008	563,789,483	466,247,783	83
2009	600,282,735	442,549,935	74
2010	633,938,088	479,805,088	76
2011	678,741,428	1,037,935,993*	153
2012	757,822,190	557,339,552	74

* Includes Pension Obligation Bond proceeds of $465,384,165

5. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2012. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2012

(a) Employer annual required contribution	$ 757,822,190
(b) Interest on net pension obligation	18,363,874
(c) Adjustment to annual required contribution	12,271,380
(d) Annual pension cost: (a) + (b) – (c)	$ 763,914,684
(e) Employer contributions made for fiscal year ending June 30, 2012	557,339,552
(f) Increase (decrease) in net pension obligation: (d) – (e)	$ 206,575,132
(g) Net pension obligation beginning of fiscal year	229,548,428
(h) Net pension obligation end of fiscal year: (f) + (g)	$ 436,123,560

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2010	$642,840,908	75%	$576,328,182
June 30, 2011	691,156,239	150	229,548,428
June 30, 2012	763,914,684	73	436,123,560

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2012
(Dollar amounts in thousands)

ACTUARIAL LIABILITIES			
(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 14,341,125	
	- Disability retirement benefits	706,593	
	- Death and survivor benefits	131,049	
	- Refunds of member contributions	213,019	
	Total		$ 15,391,786
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits		
	- Service retirement benefits	$ 15,035,616	
	- Disability retirement benefits	622,588	
	- Death and survivor benefits	571,053	
	Total		$ 16,229,257
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 242,965
(4)	TOTAL ACTUARIAL LIABILITIES		$ 31,864,008
PRESENT AND PROSPECTIVE ASSETS			
(5)	Actuarial value of assets		$ 14,691,371
(6)	Present value of total future contributions = (4)-(5)	$ 17,172,637	
(7)	Present value of future member contributions and employer normal contributions		4,890,154
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		12,282,483
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 31,864,008

SCHEDULE A
(continued)

SOLVENCY TEST
(in millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2007	$2,762.8	$12,843.7	$5,648.5	$15,285.0	100%	97%	0%
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3	100	91	0
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0
6/30/2012	3,415.2	16,472.2	7,086.4	14,691.4	100	68	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
AS OF JUNE 30, 2012

(1)	Actuarial Value of Assets Beginning of Year		$ 14,908,138,356
(2)	Market Value of Assets End of Year		14,797,120,889
(3)	Market Value of Assets Beginning of Year		15,130,606,279
(4)	Cash Flow		
	a.	Contributions	867,069,476
	b.	Benefit Payments	1,502,488,238
	c.	Administrative Expense	7,762,880
	d.	Net: (4)a – (4)b – (4)c	(643,181,642)
(5)	Investment Income		
	a.	Market total: (2) – (3) – (4)d	309,696,252
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,110,676,159
	d.	Amount for Phased-In Recognition: (5)a – (5)c	(800,979,907)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	(160,195,981)
	b.	First Prior Year	363,670,625
	c.	Second Prior Year	133,378,916
	d.	Third Prior Year	(611,235,941)
	e.	Fourth Prior Year	(409,879,449)
	f.	Total Recognized Investment Gain	(684,261,830)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 14,691,371,043
(8)	Difference Between Market & Actuarial Values: (2) – (7)		$ 105,749,846
(9)	Rate of Return on Actuarial Value:		2.92%

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2012	June 30, 2011
Receipts for the Year		
Contributions		
Members	$ 309,729,924	$ 302,262,819
Employers	557,339,552	1,037,935,993
Total	867,069,476	1,340,198,812
Net Investment Income	309,696,252	2,760,972,224
TOTAL	$ 1,176,765,728	$ 4,101,171,036
Disbursements for the Year		
Benefit Payments	$ 1,482,939,165	$ 1,402,535,713
Refunds to Members	19,549,073	17,325,387
Miscellaneous, including expenses	7,762,880	7,322,739
TOTAL	$ 1,510,251,118	$ 1,427,183,839
Excess of Receipts over Disbursements	$ (333,485,390)	$ 2,673,987,197
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 15,130,606,279	$ 12,456,619,082
Excess of Receipts over Disbursements	(333,485,390)	2,673,987,197
Asset Balance as of the End of the Year	$ 14,797,120,889	$ 15,130,606,279
Rate of Return	2.4%	21.6%

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE D

SMOOTHED INTEREST RATE

Actual Rate of Return for 5 Year Look Back Period

Fiscal Year Ending 6/30	Actual Rate of Return for Fiscal Year
2008	-5.7%
2009	-14.3
2010	13.1
2011	21.6
2012	2.4

SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period beginning on the valuation date. This is the investment rate of return expected to be earned during this period based on the actual rates earned during the five year look back period shown above such that the average rate of return over the combined 30 year period is equivalent to the ultimate investment rate of return (currently 7.50%). On this basis, for the June 30, 2012 valuation, the smoothed interest rate during the 25 year look forward period has been determined to be 8.50%.

ULTIMATE INVESTMENT RATE OF RETURN (DISCOUNT RATE): The assumed investment rate of return used in determining the smoothed interest rate described above. This is also the assumed investment rate of return after the 25 year look forward period and is currently 7.50%.

CORRIDOR AROUND SMOOTHED INTEREST RATE: A corridor of 0.50% around the ultimate investment rate of return is applied in determining the smoothed interest rate.

LIMITED SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period as limited based on the application of the corridor above and used for valuation purposes. Since the smoothed interest rate above is 8.50% the assumed rate for the first 25 years after the valuation date is limited to 8.00% by the corridor.

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011.

ULTIMATE INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.60
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
						RETIREMENT	
			WITHDRAWAL			Before	After
			Service			27 Years	27 Years
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	of Service	of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

VALUATION INTEREST RATE SMOOTHING: The valuation liabilities are calculated using a smoothed interest rate method. The interest rate assumed during the look forward period (currently 25 years from the valuation date) is the investment rate of return expected to be earned during the look forward period based on the actual rate of return earned during the look back period (currently 5 years) such that the average assumed rate of return over the combined 30 year period is equivalent to the assumed ultimate investment rate of return (currently 7.50%). The interest rate after the 25 year look forward period is the ultimate investment rate of return of 7.50%.

CORRIDOR LIMIT ON INTEREST RATE SMOOTHING: The smoothed interest rate used during the 25 year look forward period is limited to a corridor of 0.50% around the ultimate investment rate of return.

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (see Schedules C and E for a description of the interest rate used), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE G

SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2012. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to: (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus (b) 2.5% of final average salary multiplied by service after July 1, 1983. (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.
.
For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE H

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2012 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	2,365	1							2,366
Total Pay	40,846,000	45,000							40,891,000
Avg. Pay	17,271	45,000							17,283
25 to 29	7,069	1,365							8,434
Total Pay	222,006,000	64,597,000							286,603,000
Avg. Pay	31,406	47,324							33,982
30 to 34	3,713	5,255	908						9,876
Total Pay	109,834,000	260,683,000	50,523,000						421,040,000
Avg. Pay	29,581	49,607	55,642						42,633
35 to 39	2,605	2,485	4,229	628					9,947
Total Pay	70,984,000	124,123,000	248,149,000	40,344,000					483,600,000
Avg. Pay	27,249	49,949	58,678	64,242					48,618
40 to 44	3,521	1,920	2,490	3,371	673	1			11,976
Total Pay	77,925,000	98,559,000	146,062,000	217,339,000	45,705,000	205,000			585,795,000
Avg. Pay	22,131	51,333	58,659	64,473	67,912	205,000			48,914
45 to 49	1,722	1,231	1,454	1,576	2,373	651			9,007
Total Pay	40,472,000	63,140,000	85,800,000	102,363,000	160,069,000	44,672,000			496,516,000
Avg. Pay	23,503	51,292	59,010	64,951	67,454	68,621			55,126
50 to 54	1,483	956	1,148	1,173	1,332	1,704	336		8,132
Total Pay	30,482,000	48,757,000	67,472,000	76,713,000	91,714,000	122,232,000	24,752,000		462,122,000
Avg. Pay	20,554	51,001	58,774	65,399	68,854	71,732	73,667		56,828
55 to 59	2,153	667	955	1,048	1,068	792	444	74	7,201
Total Pay	33,635,000	33,944,000	57,464,000	69,754,000	74,916,000	59,806,000	35,896,000	6,522,000	371,937,000
Avg. Pay	15,622	50,891	60,172	66,559	70,146	75,513	80,847	88,135	51,651
60 to 64	2,643	533	520	596	625	418	114	113	5,562
Total Pay	36,178,000	25,746,000	32,732,000	41,293,000	45,923,000	33,164,000	10,223,000	11,375,000	236,634,000
Avg. Pay	13,688	48,304	62,946	69,284	73,477	79,340	89,675	100,664	42,545
65 & over	2,276	359	181	176	177	155	43	83	3,450
Total Pay	20,242,000	12,464,000	11,931,000	12,303,000	13,673,000	12,141,000	3,921,000	7,754,000	94,429,000
Avg. Pay	8,894	34,719	65,917	69,903	77,249	78,329	91,186	93,422	27,371
Total	29,550	14,772	11,885	8,568	6,248	3,721	937	270	75,951
Total Pay	682,604,000	732,058,000	700,133,000	560,109,000	432,000,000	272,220,000	74,792,000	25,651,000	3,479,567,000
Avg. Pay	23,100	49,557	58,909	65,372	69,142	73,158	79,821	95,004	45,813

Average Age: 43.6 Average Service: 11.0

SCHEDULE H

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE AS OF JUNE 30, 2012

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	823	$ 9,726,856	$ 11,819
50 - 54	1,148	40,343,440	35,142
55 - 59	5,076	198,687,289	39,142
60 - 64	10,970	408,588,247	37,246
65 - 69	10,087	350,225,048	34,720
70 - 74	6,879	224,196,637	32,591
75 - 79	4,544	136,335,293	30,003
80 & Over	6,567	157,080,688	23,920
Total	46,094	$ 1,525,183,498	$ 33,089

SCHEDULE H

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Fiscal Year Ending June 30	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase In Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2003	2,252	$86.7	1,015	$16.9	34,645	$819.0	9.3%	$23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3%	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7%	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4%	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7%	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3%	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1%	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6%	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0%	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4%	33,089

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Teachers' Retirement System of the State of Kentucky
Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2013

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December 6, 2013

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2013. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2016 required to support the benefits of the System are as follows:

Group	Combined Member and State Contribution Requirement
University members hired before July 1, 2008	34.34%
University members hired on or after July 1, 2008	35.34%
Non-University members hired before July 1, 2008	37.30%
Non-University members hired on or after July 1, 2008	38.30%

These rates represent an increase since the previous valuation in the Pension required employer contribution rate of 2.45% of payroll for the fiscal year ending June 30, 2016. In addition, there has been a net decrease in the expected state special appropriation from 3.00% to 2.90%, or 0.10% of payroll and no change in the amount required for life insurance benefits. Therefore, the net impact on the required increase in the total employer contribution rate is 2.55% of payroll.

For the fiscal year ending June 30, 2016, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 12.97%; 2.55% from this valuation and 10.42% from the previous valuation.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund from 2005 to 2010 were allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund. No additional contributions were allocated during the 2013 fiscal year.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, the System is not being funded on an actuarially sound basis since the actuarially required contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

EAM/EJK:kc

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2013

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2013	June 30, 2012
Number of active members	74,831	75,951
Annual salaries	$ 3,480,066	$ 3,479,567
Number of annuitants and beneficiaries	47,406	46,094
Annual allowances	$ 1,608,659	$ 1,525,184
Assets:		
Market value	$ 16,108,808	$ 14,797,121
Actuarial value	14,962,758	14,691,371
Unfunded actuarial accrued liability	$ 13,854,474	$ 12,282,483
Funded Ratio	51.9%	54.5%
Amortization period (years)	30	30

Contribution rates are shown separately for university and non-university members on the following pages.

CONTRIBUTION RATES FOR UNIVERSITY MEMBERS

Valuation Date	June 30, 2013		June 30, 2012	
For fiscal year ending:	**June 30, 2016**		**June 30, 2015**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	12.290%	12.290%	11.790%	11.790%
Accrued liability	22.050	23.050	20.100	21.100
Total	34.340%	35.340%	31.890%	32.890%
Member	7.625%	7.625%	7.625%	7.625%
State (ARC)	26.715	27.715	24.265	25.265
Total	34.340%	35.340%	31.890%	32.890%
Life Insurance Fund:				
State	0.030%	0.030%	0.030%	0.030%
Medical Insurance Fund:				
Member	2.775%	2.775%	2.270%	2.270%
State Match	2.775	1.775	2.270	1.270
Total	5.550%	4.550%	4.540%	3.540%
Total Contributions	39.920%	39.920%	36.460%	36.460%
Member Statutory	10.400%	10.400%	9.895%	9.895%
State Statutory	13.650	13.650	13.145	13.145
Required Increase	12.970	12.970	10.420	10.420
State Special	2.900	2.900	3.000	3.000
Total	39.920%	39.920%	36.460%	36.460%

CONTRIBUTION RATES FOR NON-UNIVERSITY MEMBERS

Valuation Date	June 30, 2013		June 30, 2012	
For fiscal year ending:	**June 30, 2016**		**June 30, 2015**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	15.810%	15.810%	15.150%	15.150%
Accrued liability	21.490	22.490	19.700	20.700
Total	37.300%	38.300%	34.850%	35.850%
Member	9.105%	9.105%	9.105%	9.105%
State (ARC)	28.195	29.195	25.745	26.745
Total	37.300%	38.300%	34.850%	35.850%
Life Insurance Fund:				
State	0.030%	0.030%	0.030%	0.030%
Medical Insurance Fund:				
Member	3.750%	3.750%	3.000%	3.000%
State Match	3.750	2.750	3.000	2.000
Total	7.500%	6.500%	6.000%	5.000%
Total Contributions	44.830%	44.830%	40.880%	40.880%
Member Statutory	12.855%	12.855%	12.105%	12.105%
State Statutory	16.105	16.105	15.355	15.355
Required Increase	12.970	12.970	10.420	10.420
State Special	2.900	2.900	3.000	3.000
Total	44.830%	44.830%	40.880%	40.880%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2013 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule E of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation.

5. The System currently uses a smoothed interest rate methodology to determine liabilities. The development of the smoothed interest rate used in the June 30, 2013 valuation is shown in Schedule D.

6. Provisions of the System, as summarized in Schedule G, were taken into account in the current valuation. There have been no changes since the previous valuation.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2013 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
University Full Time	3,420	$216,260
University Part Time	170	3,753
Non-University Full Time	54,970	3,149,837
Non-University Part Time	16,271	110,216
Total	74,831	$ 3,480,066

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2013

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	41,299	$ 1,467,843
Disability Retirements	2,582	71,414
Beneficiaries of Deceased Members	3,525	69,402
Total	47,406	$ 1,608,659

[1] Includes cost-of-living adjustments effective through July 1, 2013.

3. Table 1 of Schedule H shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2013 the market value of Pension Plan assets for valuation purposes held by the System amounted to $16,108,808,305. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.
2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2013 was $14,962,758,316. Schedule B shows the development of the actuarial value of assets as of June 30, 2013.
3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2013. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule E and Schedule F.
2. The valuation balance sheet shows that the System has total prospective liabilities of $16,338,399,389 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $17,449,169,220 of which $866,151,523 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $267,223,294. The total prospective liabilities of the System amounts to $34,054,791,903. Against these liabilities, the System has present assets for valuation purposes of $14,962,758,316. When this amount is deducted from the total liabilities of $34,054,791,903, there remains $19,092,033,587 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 12.29% of payroll for University and 15.81% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $5,237,559,515. When this amount is subtracted from $19,092,033,587, which is the present value of the total future contributions to be made by the employer, there remains $13,854,474,072 as the amount of future unfunded accrued liability contributions.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 10.400% of annual salary to the System and each non-university member contribute 12.855% of annual salary. Of this amount, for each university member, 2.775% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.75% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.03% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 12.97% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded

liability of the Pension Plan within a 30-year period. An additional special appropriation of 2.90% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 26.715% for university members who become members before July 1, 2008 and 27.715% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 28.195% for non-university members who become members before July 1, 2008 and 29.195% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(2.775)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(1.775)
Supplemental Funding	3.250	3.250
Subtotal	10.875%	11.875%
Life Insurance	(0.030)%	(0.030)%
Additional to Maintain 30-Year Amortization	12.970	12.970
Special Appropriation	2.900	2.900
Contribution to Pension Plan	26.715%	27.715%
Total Contribution to Pension Plan	34.340%	35.340%

NON-UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(3.750)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(2.750)
Supplemental Funding	3.250	3.250
Subtotal	12.355%	13.355%
Life Insurance	(0.030)%	(0.030)%
Additional to Maintain 30-Year Amortization	12.970	12.970
Special Appropriation	2.900	2.900
Contribution to Pension Plan	28.195%	29.195%
Total Contribution to Pension Plan	37.300%	38.300%

4. The valuation indicates that normal contributions at the rate of 12.29% of active university members' salaries and 15.81% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 22.05% for university members hired before July 1, 2008, 23.05% for university members hired on and after July 1, 2008, 21.49% for non-university members hired before July 1, 2008, and 22.49% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 2.90% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	12.29%	12.29%	15.81%	15.81%
Accrued liability*	22.05	23.05	21.49	22.49
Total	34.34%	35.34%	37.30%	38.30%

* Includes special appropriations of 2.90% of payroll to be made by the State.

5. The unfunded actuarial accrued liability amounts to $13,854,474,072 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 12.97%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2010, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. Beginning with the 2011 fiscal year, there have been no further loans for Stabilization Funding. In addition, there were no loans for single-subsidy funding for fiscal year 2013. The table on the following page shows the amounts borrowed, annual payments and remaining balances for the non-single subsidy funding as of June 30, 2013:

MEDICAL INSURANCE FUND STABILIZATION FUNDING

	Loan Amount	Annual Payment	Balances as of June 30, 2013
2008/2009	$ 8,400,000	$ 1,228,900	$ 5,894,178
2009/2010	9,200,000	1,345,200	7,274,266
2010/2011	10,700,000	1,564,500	9,348,301
2011/2012	12,300,000	1,798,700	11,695,480
Total	$ 40,600,000	$ 5,937,300	$ 34,212,225

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 12.97% of payroll for the fiscal year ending June 30, 2016, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase	Amount
June 30, 2004	June 30, 2007	0.11%	0.11%	$ 3,174,600
June 30, 2005	June 30, 2008	1.21	1.32	38,965,900
June 30, 2006	June 30, 2009	0.56	1.88	60,499,800
June 30, 2007	June 30, 2010	0.58	2.46	82,331,200
June 30, 2008	June 30, 2011	1.13	3.59	121,457,000
June 30, 2009	June 30, 2012	2.22	5.81	208,649,000
June 30, 2010	June 30, 2013	1.46	7.27	260,980,000
June 30, 2011	June 30, 2014	0.75	8.02	299,420,000
June 30, 2012	June 30, 2015	2.40	10.42	386,400,000
June 30, 2013	June 30, 2016	2.55	12.97	487,400,000

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,571,991,157 in the unfunded accrued liability from $12,282,482,915 to $13,854,474,072 during the year ending June 30, 2013.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (8.00%) added to previous unfunded accrued liability	$ 982,599
Expected Accrued liability contribution	(361,788)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2012/2013 fiscal year with interest	0
Repayment of prior year's MIF Stabilization Funding with interest	(6,175)
Experience:	
Valuation asset growth	146,608
Pensioners' mortality	14,889
Turnover and retirements	(27,490)
New entrants	54,236
Salary increases	(151,629)
Amendments	0
Assumption changes*	920,741
Method changes	0
Total	$ 1,571,991

* Change occurs due to interest smoothing methodology.

SECTION VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2013

GROUP	NUMBER
Retirees and beneficiaries currently Receiving benefits	47,406
Terminated employees entitled to Benefits but not yet receiving benefits	7,194
Active plan members	74,831
Total	129,431

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2008	$15,321,325	$22,460,304	$ 7,138,979	68.2%	$3,190,332	223.8%
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8
6/30/2011**	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4
6/30/2012	14,691,371	26,973,854	12,282,483	54.5	3,479,567	353.0
6/30/2013	14,962,758	28,817,232	13,854,474	51.9	3,480,066	398.1

* Funding method Projected Unit Credit prior to 6/30/2011
Funding method Entry Age Normal 6/30/2011 and after
** Reflects change in assumptions and methods

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2013. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2013
Actuarial cost method	Entry Age
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Ultimate Investment Rate of Return*	7.50%
Projected salary Increases**	4.00 - 8.20%
Cost-of-living adjustments	1.50% Annually
*Includes price inflation at	3.50%
**Includes wage inflation at	4.00%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Annual Required Contributions	Actual Employer Contributions	Percentage Contributed
2008	$ 563,789,483	$ 466,247,783	83%
2009	600,282,735	442,549,935	74
2010	633,938,088	479,805,088	76
2011	678,741,428	1,037,935,993*	153
2012	757,822,190	557,339,552	74
2013	802,984,644	568,233,446	71

* Includes Pension Obligation Bond proceeds of $465,384,165

5. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2013. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2013

(a) Employer annual required contribution	$ 802,984,644
(b) Interest on net pension obligation	34,889,885
(c) Adjustment to annual required contribution	23,314,635
(d) Annual pension cost: (a) + (b) – (c)	$ 814,559,894
(e) Employer contributions made for fiscal year ending June 30, 2013	568,233,446
(f) Increase (decrease) in net pension obligation: (d) – (e)	$ 246,326,448
(g) Net pension obligation beginning of fiscal year	436,123,560
(h) Net pension obligation end of fiscal year: (f) + (g)	$ 682,450,008

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2011	$691,156,239	150%	$229,548,428
June 30, 2012	763,914,684	73	436,123,560
June 30, 2013	814,559,894	70	682,450,008

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2013
(Dollar amounts in thousands)

ACTUARIAL LIABILITIES			
(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 15,237,753	
	- Disability retirement benefits	742,425	
	- Death and survivor benefits	137,682	
	- Refunds of member contributions	220,539	
	Total		$ 16,338,399
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits		
	- Service retirement benefits	$ 16,155,563	
	- Disability retirement benefits	677,887	
	- Death and survivor benefits	615,720	
	Total		$ 17,449,170
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 267,223
(4)	TOTAL ACTUARIAL LIABILITIES		$ 34,054,792
PRESENT AND PROSPECTIVE ASSETS			
(5)	Actuarial value of assets		$ 14,962,758
(6)	Present value of total future contributions = (4)-(5)	$ 19,092,034	
(7)	Present value of future member contributions and employer normal contributions		5,237,560
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		13,854,474
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 34,054,792

SCHEDULE A
(continued)

SOLVENCY TEST
(in millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2008	$2,899.0	$13,585.8	$5,975.5	$15,321.3	100%	91%	0%
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0
6/30/2012	3,415.2	16,472.2	7,086.4	14,691.4	100	68	0
6/30/2013	3,514.4	17,716.4	7,586.4	14,962.8	100	65	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
AS OF JUNE 30, 2013

(1)	Actuarial Value of Assets Beginning of Year		$ 14,691,371,043
(2)	Market Value of Assets End of Year		16,108,808,305
(3)	Market Value of Assets Beginning of Year		14,797,120,889
(4)	Cash Flow		
	a.	Contributions	872,972,174
	b.	Benefit Payments	1,592,782,018
	c.	Administrative Expense	8,377,003
	d.	Net: (4)a – (4)b – (4)c	(728,186,847)
(5)	Investment Income		
	a.	Market total: (2) – (3) – (4)d	2,039,874,263
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,082,477,060
	d.	Amount for Phased-In Recognition: (5)a – (5)c	957,397,203
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	191,479,441
	b.	First Prior Year	(160,195,981)
	c.	Second Prior Year	363,670,625
	d.	Third Prior Year	133,378,916
	e.	Fourth Prior Year	(611,235,941)
	f.	Total Recognized Investment Gain	(82,902,940)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 14,962,758,316
(8)	Difference Between Market & Actuarial Values: (2) – (7)		$ 1,146,049,989
(9)	Rate of Return on Actuarial Value:		6.98%

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2013	June 30, 2012
Receipts for the Year		
Contributions		
Members	$ 304,738,728	$ 309,729,924
Employers	568,233,446	557,339,552
Total	872,972,174	867,069,476
Net Investment Income	2,039,874,263	309,696,252
TOTAL	$ 2,912,846,437	$ 1,176,765,728
Disbursements for the Year		
Benefit Payments	$ 1,570,722,924	$ 1,482,939,165
Refunds to Members	22,059,094	19,549,073
Miscellaneous, including expenses	8,377,003	7,762,880
TOTAL	$ 1,601,159,021	$ 1,510,251,118
Excess of Receipts over Disbursements	$ 1,311,687,416	$ (333,485,390)
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 14,797,120,889	$ 15,130,606,279
Excess of Receipts over Disbursements	1,311,687,416	(333,485,390)
Asset Balance as of the End of the Year	$ 16,108,808,305	$ 14,797,120,889
Rate of Return	14.1%	2.4%

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE D

SMOOTHED INTEREST RATE

Actual Rate of Return for 5 Year Look Back Period

Fiscal Year Ending 6/30	Actual Rate of Return for Fiscal Year
2009	-14.3%
2010	13.1
2011	21.6
2012	2.4
2013	14.1

SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period beginning on the valuation date. This is the investment rate of return expected to be earned during this period based on the actual rates earned during the five year look back period shown above such that the average rate of return over the combined 30 year period is equivalent to the ultimate investment rate of return (currently 7.50%). On this basis, for the June 30, 2013 valuation, the smoothed interest rate during the 25 year look forward period has been determined to be 7.68%.

ULTIMATE INVESTMENT RATE OF RETURN (DISCOUNT RATE): The assumed investment rate of return used in determining the smoothed interest rate described above. This is also the assumed investment rate of return after the 25 year look forward period and is currently 7.50%.

CORRIDOR AROUND SMOOTHED INTEREST RATE: A corridor of 0.50% around the ultimate investment rate of return is applied in determining the smoothed interest rate.

LIMITED SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period as limited based on the application of the corridor above and used for valuation purposes. Since the smoothed interest rate above is 7.68% which is between the corridor, the smoothed rate has not been limited and is, therefore, 7.68%.

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011.

ULTIMATE INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.60
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
						RETIREMENT	
			WITHDRAWAL			Before	After
			Service			27 Years	27 Years
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	of Service	of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

VALUATION INTEREST RATE SMOOTHING: The valuation liabilities are calculated using a smoothed interest rate method. The interest rate assumed during the look forward period (currently 25 years from the valuation date) is the investment rate of return expected to be earned during the look forward period based on the actual rate of return earned during the look back period (currently 5 years) such that the average assumed rate of return over the combined 30 year period is equivalent to the assumed ultimate investment rate of return (currently 7.50%). The interest rate after the 25 year look forward period is the ultimate investment rate of return of 7.50%.

CORRIDOR LIMIT ON INTEREST RATE SMOOTHING: The smoothed interest rate used during the 25 year look forward period is limited to a corridor of 0.50% around the ultimate investment rate of return.

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (see Schedules C and E for a description of the interest rate used), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE G

SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2013. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.
.
For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE H

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2013 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	2,217								2,217
Total Pay	38,794,764								38,794,764
Avg. Pay	17,499								17,499
25 to 29	6,792	1,343							8,135
Total Pay	215,924,099	64,179,614							280,103,713
Avg. Pay	31,791	47,788							34,432
30 to 34	3,657	5,211	1,031						9,899
Total Pay	111,425,382	260,737,984	57,355,777						429,519,143
Avg. Pay	30,469	50,036	55,631						43,390
35 to 39	2,552	2,504	4,182	662					9,900
Total Pay	71,285,307	125,543,255	246,666,064	42,971,906					486,466,532
Avg. Pay	27,933	50,137	58,983	64,912					49,138
40 to 44	3,067	1,800	2,474	3,563	680				11,584
Total Pay	67,191,849	92,622,129	145,446,626	230,950,606	45,969,397				582,180,607
Avg. Pay	21,908	51,457	58,790	64,819	67,602				50,257
45 to 49	1,735	1,298	1,417	1,746	2,491	602			9,289
Total Pay	41,056,264	67,430,234	83,499,390	112,838,960	169,887,231	42,236,173			516,948,252
Avg. Pay	23,664	51,949	58,927	64,627	68,200	70,160			55,652
50 to 54	1,458	912	1,144	1,178	1,310	1,710	294		8,006
Total Pay	31,190,824	47,134,890	67,514,047	77,392,738	90,545,146	122,933,736	22,391,365		459,102,746
Avg. Pay	21,393	51,683	59,016	65,698	69,118	71,891	76,161		57,345
55 to 59	1,949	613	902	1,024	1,065	853	357	75	6,838
Total Pay	30,418,848	30,325,677	54,329,445	67,848,589	74,246,893	64,804,957	29,589,505	6,415,761	357,979,675
Avg. Pay	15,607	49,471	60,232	66,258	69,715	75,973	82,884	85,543	52,352
60 to 64	2,495	496	513	605	572	463	99	92	5,335
Total Pay	32,455,630	23,100,794	32,725,511	41,206,400	42,376,896	36,941,095	8,709,800	8,983,816	226,499,942
Avg. Pay	13,008	46,574	63,792	68,110	74,085	79,786	87,978	97,650	42,455
65 & over	2,287	446	197	200	193	173	51	81	3,628
Total Pay	19,301,100	14,575,089	12,694,895	14,471,923	15,031,034	14,072,640	4,570,695	7,753,657	102,471,033
Avg. Pay	8,439	32,680	64,441	72,360	77,881	81,345	89,621	95,724	28,244
Total	28,209	14,623	11,860	8,978	6,311	3,801	801	248	74,831
Total Pay	659,044,067	725,649,666	700,231,755	587,681,122	438,056,597	280,988,601	65,261,365	23,153,234	3,480,066,407
Avg. Pay	23,363	49,624	59,041	65,458	69,412	73,925	81,475	93,360	46,506

Average Age: 43.6 Average Service: 11.2

SCHEDULE H

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE AS OF JUNE 30, 2013

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	818	$ 10,083,578	$ 12,327
50 - 54	1,212	43,556,202	35,937
55 - 59	4,628	186,227,130	40,239
60 - 64	10,575	402,754,864	38,086
65 - 69	11,108	395,207,502	35,579
70 - 74	7,520	253,144,670	33,663
75 - 79	4,782	147,664,869	30,879
80 & Over	6,763	170,020,277	25,140
Total	47,406	$ 1,608,659,092	$ 33,934

SCHEDULE H

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Fiscal Year Ending June 30	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase In Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2004	2,126	$85.4	1,033	$17.5	35,738	$887.0	8.3%	$24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7%	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4%	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7%	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3%	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1%	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6%	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0%	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4%	33,089
2013	2,303	105.7	991	22.2	47,406	1,608.7	5.5%	33,934

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December 12, 2014

Mr. Gary L. Harbin
Executive Secretary
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Dear Gary:

Enclosed are 25 bound copies and one unbound copy of the "Teachers' Retirement System of the State of Kentucky Report of Actuary on the Valuation Prepared as of June 30, 2014".

Sincerely yours,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

EAM/EJK:kc

Enclosure

S:\Kentucky Teachers\Pension\Valuations\2014\KTRS Report.doc

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Teachers' Retirement System of the State of Kentucky
Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2014

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December 12, 2014

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2014. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2017 required to support the benefits of the System are as follows:

Group	Combined Member and State Contribution Requirement
University members hired before July 1, 2008	34.97%
University members hired on or after July 1, 2008	35.97%
Non-University members hired before July 1, 2008	37.93%
Non-University members hired on or after July 1, 2008	38.93%

These rates represent an increase since the previous valuation in the Pension required employer contribution rate of 0.63% of payroll for the fiscal year ending June 30, 2017. In addition, there has been a net decrease in the expected state special appropriation from 2.90% to 2.70%, or 0.20% of payroll and no change in the amount required for life insurance benefits. Therefore, the net impact on the required increase in the total employer contribution rate is 0.83% of payroll.

For the fiscal year ending June 30, 2017, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 13.80%; 0.83% from this valuation and 12.97% from the previous valuation.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund from 2005 to 2010 were allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund. No additional contributions were allocated during the 2014 fiscal year.

Since the previous valuation, the Board has adopted a funding policy, which is shown in Schedule H of the Report. In addition, the valuation interest smoothing methodology which was utilized in the previous valuation will no longer be used to determine the discount rate. The assumed discount rate will be 7.50%, which was the ultimate investment rate of return in the previous valuation.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, the System is not being funded on an actuarially sound basis since the actuarially required contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

EAM/EJK:kc

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2014

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2014	June 30, 2013
Number of active members	73,407	74,831
Annual salaries	$ 3,486,327	$ 3,480,066
Number of annuitants and beneficiaries	48,576	47,406
Annual allowances	$ 1,684,852	$ 1,608,659
Assets:		
Market value	$ 18,092,571	$ 16,108,808
Actuarial value	16,174,199	14,962,758
Unfunded actuarial accrued liability	$ 14,010,205	$ 13,854,474
Funded Ratio	53.6%	51.9%
Amortization period (years)	30	30

Contribution rates are shown separately for university and non-university members on the following pages.

CONTRIBUTION RATES FOR UNIVERSITY MEMBERS

Valuation Date	June 30, 2014		June 30, 2013	
For fiscal year ending:	**June 30, 2017**		**June 30, 2016**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	12.270%	12.270%	12.290%	12.290%
Accrued liability	22.700	23.700	22.050	23.050
Total	34.970%	35.970%	34.340%	35.340%
Member	7.625%	7.625%	7.625%	7.625%
State (ARC)	27.345	28.345	26.715	27.715
Total	34.970%	35.970%	34.340%	35.340%
Life Insurance Fund:				
State	0.030%	0.030%	0.030%	0.030%
Medical Insurance Fund:				
Member	2.775%	2.775%	2.775%	2.775%
State Match	2.775	1.775	2.775	1.775
Total	5.550%	4.550%	5.550%	4.550%
Total Contributions	40.550%	40.550%	39.920%	39.920%
Member Statutory	10.400%	10.400%	10.400%	10.400%
State Statutory	13.650	13.650	13.650	13.650
Required Increase	13.800	13.800	12.970	12.970
State Special	2.700	2.700	2.900	2.900
Total	40.550%	40.550%	39.920%	39.920%

CONTRIBUTION RATES FOR NON-UNIVERSITY MEMBERS

Valuation Date	June 30, 2014		June 30, 2013	
For fiscal year ending:	**June 30, 2017**		**June 30, 2016**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	16.720%	16.720%	15.810%	15.810%
Accrued liability	21.210	22.210	21.490	22.490
Total	37.930%	38.930%	37.300%	38.300%
Member	9.105%	9.105%	9.105%	9.105%
State (ARC)	28.825	29.825	28.195	29.195
Total	37.930%	38.930%	37.300%	38.300%
Life Insurance Fund:				
State	0.030%	0.030%	0.030%	0.030%
Medical Insurance Fund:				
Member	3.750%	3.750%	3.750%	3.750%
State Match	3.750	2.750	3.750	2.750
Total	7.500%	6.500%	7.500%	6.500%
Total Contributions	45.460%	45.460%	44.830%	44.830%
Member Statutory	12.855%	12.855%	12.855%	12.855%
State Statutory	16.105	16.105	16.105	16.105
Required Increase	13.800	13.800	12.970	12.970
State Special	2.700	2.700	2.900	2.900
Total	45.460%	45.460%	44.830%	44.830%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2014 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. Since the previous valuation, the Board has adopted a funding policy, which is shown in Schedule H of the Report. In addition, the valuation interest smoothing methodology which was utilized in the previous valuation will no longer be used to determine the discount rate. The assumed discount rate will be 7.50%, which was the ultimate investment rate of return in the previous valuation.

5. Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. There have been no changes since the previous valuation.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2014 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
University Full Time hired before 7/1/2008	2,235	$ 158,132
University Full Time hired after 7/1/2008	1,172	57,918
University Part Time hired before 7/1/2008	31	1,452
University Part Time hired after 7/1/2008	66	1,667
Non-University Full Time hired before 7/1/2008	43,827	2,653,054
Non-University Full Time hired after 7/1/2008	12,562	537,383
Non-University Part Time hired before 7/1/2008	6,911	51,444
Non-University Part Time hired after 7/1/2008	6,603	25,277
Total	73,407	$ 3,486,327

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2014

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	42,308	$ 1,536,273
Disability Retirements	2,641	74,947
Beneficiaries of Deceased Members	3,627	73,632
Total	48,576	$ 1,684,852

[1] Includes cost-of-living adjustments effective through July 1, 2014.

3. Table 1 of Schedule G shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2014 the market value of Pension Plan assets for valuation purposes held by the System amounted to $18,092,570,615. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.
2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2014 was $16,174,199,191. Schedule B shows the development of the actuarial value of assets as of June 30, 2014.
3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2014. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.
2. The valuation balance sheet shows that the System has total prospective liabilities of $16,977,257,916 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $18,389,363,616 of which $801,066,667 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $286,908,616. The total prospective liabilities of the System amounts to $35,653,530,148. Against these liabilities, the System has present assets for valuation purposes of $16,174,199,191. When this amount is deducted from the total liabilities of $35,653,530,148, there remains $19,479,330,957 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 12.27% of payroll for University and 16.72% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $5,469,126,099. When this amount is subtracted from $19,479,330,957, which is the present value of the total future contributions to be made by the employer, there remains $14,010,204,858 as the amount of future unfunded accrued liability contributions.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 10.400% of annual salary to the System and each non-university member contribute 12.855% of annual salary. Of this amount, for each university member, 2.775% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.75% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.03% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 13.80% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded

liability of the Pension Plan within a 30-year period. An additional special appropriation of 2.70% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 27.345% for university members who become members before July 1, 2008 and 28.345% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 28.825% for non-university members who become members before July 1, 2008 and 29.825% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(2.775)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(1.775)
Supplemental Funding	3.250	3.250
Subtotal	10.875%	11.875%
Life Insurance	(0.030)%	(0.030)%
Additional to Maintain 30-Year Amortization	13.800	13.800
Special Appropriation	2.700	2.700
Contribution to Pension Plan	27.345%	28.345%
Total Contribution to Pension Plan	34.970%	35.970%

NON-UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(3.750)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(2.750)
Supplemental Funding	3.250	3.250
Subtotal	12.355%	13.355%
Life Insurance	(0.030)%	(0.030)%
Additional to Maintain 30-Year Amortization	13.800	13.800
Special Appropriation	2.700	2.700
Contribution to Pension Plan	28.825%	29.825%
Total Contribution to Pension Plan	37.930%	38.930%

4. The valuation indicates that normal contributions at the rate of 12.27% of active university members' salaries and 16.72% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 22.70% for university members hired before July 1, 2008, 23.70% for university members hired on and after July 1, 2008, 21.21% for non-university members hired before July 1, 2008, and 22.21% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 2.70% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	12.27%	12.27%	16.72%	16.72%
Accrued liability*	22.70	23.70	21.21	22.21
Total	34.97%	35.97%	37.93%	38.93%

* Includes special appropriations of 2.70% of payroll to be made by the State.

5. Since the previous valuation, the Board adopted a funding policy, shown in Schedule H of this report. This policy states that the unfunded liability determined as of this valuation, known as the "legacy unfunded liability" will be amortized over a closed 30 year period. New sources of unfunded liability each year after June 30, 2014 will be amortized over closed 20 year periods. The unfunded actuarial accrued liability (legacy unfunded liability) amounts to $14,010,204,858 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 13.80%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2010, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. Beginning with the 2011 fiscal year, there have been no further loans for Stabilization Funding. In addition, there were no loans for single-subsidy funding for fiscal years 2013 or 2014. The table on the following page shows the amounts borrowed, annual payments and remaining balances for the non-single subsidy funding as of June 30, 2014:

MEDICAL INSURANCE FUND STABILIZATION FUNDING

	Loan Amount	Annual Payment	Balances as of June 30, 2014
2008/2009	$ 8,400,000	$ 1,228,900	$ 5,084,887
2009/2010	9,200,000	1,345,200	6,451,844
2010/2011	10,700,000	1,564,500	8,460,286
2011/2012	12,300,000	1,798,700	10,747,650
Total	$ 40,600,000	$ 5,937,300	$ 30,744,667

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 13.80% of payroll for the fiscal year ending June 30, 2017, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase	Amount
June 30, 2004	June 30, 2007	0.11%	0.11%	$ 3,174,600
June 30, 2005	June 30, 2008	1.21	1.32	38,965,900
June 30, 2006	June 30, 2009	0.56	1.88	60,499,800
June 30, 2007	June 30, 2010	0.58	2.46	82,331,200
June 30, 2008	June 30, 2011	1.13	3.59	121,457,000
June 30, 2009	June 30, 2012	2.22	5.81	208,649,000
June 30, 2010	June 30, 2013	1.46	7.27	260,980,000
June 30, 2011	June 30, 2014	0.75	8.02	299,420,000
June 30, 2012	June 30, 2015	2.40	10.42	386,400,000
June 30, 2013	June 30, 2016	2.55	12.97	487,400,000
June 30, 2014	June 30, 2017	0.83	13.80	520,372,000

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the legacy unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $155,730,786 in the unfunded accrued liability from $13,854,474,072 to $14,010,204,858 during the year ending June 30, 2014.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.68%) added to previous unfunded accrued liability	$ 1,064,024
Expected Accrued liability contribution	(332,765)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2013/2014 fiscal year with interest	0
Repayment of prior year's MIF Stabilization Funding with interest	(6,165)
Experience:	
Valuation asset growth	(913,255)
Pensioners' mortality	42,234
Turnover and retirements	(177,990)
New entrants	49,210
Salary increases	(190,240)
Amendments	0
Assumption changes*	620,678
Method changes	0
Total	$ 155,731

* Change from interest smoothing methodology to 7.50% annual assumed rate of return.

SECTION VIII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board (GASB) has issued Statement No. 67 which replaces Statement 25 for plan years beginning after June 15, 2013. The information required under GASB 67 was issued in a separate report. The following information is provided for informational purposes and for disclosure in the financial statements of the employer under GASB 27.

1. The following is a distribution of the number of employees by type of membership.

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2014

GROUP	NUMBER
Retirees and beneficiaries currently Receiving benefits	48,576
Terminated vested employees entitled to Benefits but not yet receiving benefits	7,762
Inactive non-vested members	27,689
Active plan members	73,407
Total	157,434

2. The schedule of funding progress is shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2009	$14,885,981	$23,400,426	$ 8,514,445	63.6%	$3,253,077	261.7%
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8
6/30/2011**	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4
6/30/2012	14,691,371	26,973,854	12,282,483	54.5	3,479,567	353.0
6/30/2013	14,962,758	28,817,232	13,854,474	51.9	3,480,066	398.1
6/30/2014***	16,174,199	30,184,404	14,010,205	53.6	3,486,327	401.9

* Funding method Projected Unit Credit prior to 6/30/2011
Funding method Entry Age Normal 6/30/2011 and after
** Reflects change in assumptions and methods
*** Reflects change in assumption

3. The information presented above was determined as part of the actuarial valuation at June 30, 2014. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2014
Actuarial cost method	Entry Age
Amortization method	Level percent of pay, closed
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment Rate of Return*	7.50%
Projected salary Increases**	4.00 - 8.20%
Cost-of-living adjustments	1.50% Annually
*Includes price inflation at	3.50%
**Includes wage inflation at	4.00%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Annual Required Contributions	Actual Employer Contributions	Percentage Contributed
2009	$ 600,282,735	$ 442,549,935	74%
2010	633,938,088	479,805,088	76
2011	678,741,428	1,037,935,993*	153
2012	757,822,190	557,339,552	74
2013	802,984,644	568,233,446	71
2014	823,446,156	563,326,249	68

* Includes Pension Obligation Bond proceeds of $465,384,165

5. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2014. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2014

(a) Employer annual required contribution	$ 823,446,156
(b) Interest on net pension obligation	52,412,161
(c) Adjustment to annual required contribution	38,367,910
(d) Annual pension cost: (a) + (b) – (c)	$ 837,490,407
(e) Employer contributions made for fiscal year ending June 30, 2014	563,326,249
(f) Increase (decrease) in net pension obligation: (d) – (e)	$ 274,164,158
(g) Net pension obligation beginning of fiscal year	682,450,008
(h) Net pension obligation end of fiscal year: (f) + (g)	$ 956,614,166

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2012	$763,914,684	73%	$436,123,560
June 30, 2013	814,559,894	70	682,450,008
June 30, 2014	837,490,407	67	956,614,166

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2014
(Dollar amounts in thousands)

ACTUARIAL LIABILITIES			
(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 15,860,700	
	- Disability retirement benefits	744,709	
	- Death and survivor benefits	138,806	
	- Refunds of member contributions	233,043	
	Total		$ 16,977,258
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits		
	- Service retirement benefits	$ 17,017,825	
	- Disability retirement benefits	716,654	
	- Death and survivor benefits	654,885	
	Total		$ 18,389,364
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 286,908
(4)	TOTAL ACTUARIAL LIABILITIES		$ 35,653,530
PRESENT AND PROSPECTIVE ASSETS			
(5)	Actuarial value of assets		$ 16,174,199
(6)	Present value of total future contributions = (4)-(5)	$ 19,479,331	
(7)	Present value of future member contributions and employer normal contributions		5,469,126
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		14,010,205
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 35,653,530

SCHEDULE A
(continued)

SOLVENCY TEST
(in millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2009	$3,042.3	$14,309.9	$6,048.2	$14,886.0	100%	83%	0%
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0
6/30/2012	3,415.2	16,472.2	7,086.4	14,691.4	100	68	0
6/30/2013	3,514.4	17,716.4	7,586.4	14,962.8	100	65	0
6/30/2014	3,629.7	18,676.3	7,878.4	16,174.2	100	67	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
AS OF JUNE 30, 2014

(1)	Actuarial Value of Assets Beginning of Year		$ 14,962,758,316
(2)	Market Value of Assets End of Year		18,092,570,615
(3)	Market Value of Assets Beginning of Year		16,108,808,305
(4)	Cash Flow		
	a.	Contributions	868,307,869
	b.	Benefit Payments	1,679,837,543
	c.	Administrative Expense	7,955,972
	d.	Net: (4)a – (4)b – (4)c	(819,485,646)
(5)	Investment Income		
	a.	Market total: (2) – (3) – (4)d	2,803,247,956
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,177,429,911
	d.	Amount for Phased-In Recognition: (5)a – (5)c	1,625,818,045
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	325,163,609
	b.	First Prior Year	191,479,441
	c.	Second Prior Year	(160,195,981)
	d.	Third Prior Year	363,670,625
	e.	Fourth Prior Year	133,378,916
	f.	Total Recognized Investment Gain	853,496,610
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 16,174,199,191
(8)	Difference Between Market & Actuarial Values: (2) – (7)		$ 1,918,371,424
(9)	Rate of Return on Actuarial Value:		13.96%

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2014	June 30, 2013
Receipts for the Year		
Contributions		
Members	$ 304,981,620	$ 304,738,728
Employers	563,326,249	568,233,446
Total	868,307,869	872,972,174
Net Investment Income	2,803,247,956	2,039,874,263
TOTAL	$ 3,671,555,825	$ 2,912,846,437
Disbursements for the Year		
Benefit Payments	$ 1,654,375,700	$ 1,570,722,924
Refunds to Members	25,461,843	22,059,094
Miscellaneous, including expenses	7,955,972	8,377,003
TOTAL	$ 1,687,793,515	$ 1,601,159,021
Excess of Receipts over Disbursements	$ 1,983,762,310	$ 1,311,687,416
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 16,108,808,305	$ 14,797,120,889
Excess of Receipts over Disbursements	1,983,762,310	1,311,687,416
Asset Balance as of the End of the Year	$ 18,092,570,615	$ 16,108,808,305
Rate of Return on Market Value	18.1%	14.1%

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.60
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before	After
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	27 Years of Service	27 Years of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Service Retirement Female	Disability Retirement Male	Disability Retirement Female
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

SCHEDULE E

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently at 7.50%), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE F

SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2014. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to: (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus (b) 2.5% of final average salary multiplied by service after July 1, 1983. (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.
.
For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE G

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2014 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	1,204								1,204
Total Pay	30,306,197								30,306,197
Avg. Pay	25,171								25,171
25 to 29	5,580	1,434							7,014
Total Pay	193,970,612	67,358,025							261,328,637
Avg. Pay	34,762	46,972							37,258
30 to 34	2,781	5,186	1,217						9,184
Total Pay	92,513,906	256,970,385	66,796,986						416,281,277
Avg. Pay	33,266	49,551	54,887						45,327
35 to 39	1,898	2,496	4,429	863	1				9,687
Total Pay	56,555,071	124,293,536	256,631,937	54,675,650	53,340				492,209,534
Avg. Pay	29,797	49,797	57,944	63,355	53,340				50,811
40 to 44	5,052	1,716	2,366	4,050	747	16			13,947
Total Pay	80,379,772	83,794,962	135,195,300	259,149,673	49,078,966	163,529			607,762,202
Avg. Pay	15,910	48,832	57,141	63,988	65,701	10,221			43,577
45 to 49	1,458	1,205	1,432	1,995	2,861	691	7		9,649
Total Pay	33,919,137	60,198,868	82,097,312	126,497,133	194,503,113	48,070,745	176,601		545,462,909
Avg. Pay	23,264	49,958	57,331	63,407	67,984	69,567	25,229		56,531
50 to 54	1,071	794	1,103	1,293	1,454	1,789	327	3	7,834
Total Pay	23,600,498	40,049,425	63,071,897	81,900,405	99,886,590	128,070,681	23,619,195	138,015	460,336,706
Avg. Pay	22,036	50,440	57,182	63,341	68,698	71,588	72,230	46,005	58,761
55 to 59	1,476	467	746	1,030	1,109	919	451	66	6,264
Total Pay	23,836,597	22,197,101	43,680,065	66,568,849	75,368,014	69,124,953	36,616,202	4,867,334	342,259,115
Avg. Pay	16,149	47,531	58,552	64,630	67,960	75,218	81,189	73,747	54,639
60 to 64	1,996	463	446	655	626	534	138	116	4,974
Total Pay	26,390,926	18,546,024	26,950,845	42,661,444	45,836,673	41,747,171	10,565,625	10,334,994	223,033,702
Avg. Pay	13,222	40,056	60,428	65,132	73,222	78,178	76,563	89,095	44,840
65 & over	2,062	532	213	254	220	203	69	97	3,650
Total Pay	18,463,630	14,329,380	11,856,787	16,552,947	16,366,985	15,093,672	6,003,364	8,679,755	107,346,520
Avg. Pay	8,954	26,935	55,666	65,169	74,395	74,353	87,005	89,482	29,410
Total	24,578	14,293	11,952	10,140	7,018	4,152	992	282	73,407
Total Pay	579,936,346	687,737,706	686,281,129	648,006,101	481,093,681	302,270,751	76,980,987	24,020,098	3,486,326,799
Avg. Pay	23,596	48,117	57,420	63,906	68,551	72,801	77,602	85,178	47,493

Average Age: 44.1 Average Service: 10.7

SCHEDULE G

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE AS OF JUNE 30, 2014

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	829	$ 10,522,724	$ 12,693
50 - 54	1,217	44,794,025	36,807
55 - 59	4,222	173,283,069	41,043
60 - 64	10,080	391,957,441	38,885
65 - 69	12,149	441,374,364	36,330
70 - 74	8,076	279,210,994	34,573
75 - 79	5,073	162,581,658	32,048
80 - 84	3,409	97,645,359	28,643
85 - 89	2,174	55,087,542	25,339
90 & Over	1,347	28,394,502	21,080
Total	48,576	$ 1,684,851,678	$ 34,685

Average Current Age: 68.7

Average Age at Retirement: 55.7

SCHEDULE G

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Fiscal Year Ending June 30	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase In Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2005	2,644	$105.1	1,036	$18.9	37,346	$973.1	9.7%	$26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4%	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7%	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3%	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1%	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6%	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0%	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4%	33,089
2013	2,303	105.7	991	22.2	47,406	1,608.7	5.5%	33,934
2014	2,146	99.6	976	23.4	48,576	1,684.9	4.7%	34,685

SCHEDULE H

BOARD FUNDING POLICY

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("KTRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background:

State law provides that the retirement benefits promised to members of KTRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in KTRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state—as plan guarantor—is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $487 million (Fiscal Year 2016). The following schedule details the growth of the annual retirement appropriations payable by the state:

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000

(Source: KTRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2013).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which—if paid—will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based

upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

- Use the Entry Age Normal actuarial cost method;
- Use a five-year asset smoothing method;
- Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
- Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
- Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and KTRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

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December 7, 2015

Mr. Gary L. Harbin
Executive Secretary
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Dear Gary:

Enclosed are 25 bound copies and one unbound copy of the "Teachers' Retirement System of the State of Kentucky Report of Actuary on the Valuation Prepared as of June 30, 2015".

Sincerely yours,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Eric H. Gary, FSA, FCA, MAAA
Chief Health Actuary

Cathy Turcot
Principal and Managing Director

Enclosure

S:\Kentucky Teachers\Pension\Valuations\2015\KTRS Report.doc

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Teachers' Retirement System of the State of Kentucky
Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2015

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December 7, 2015

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2015. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contribution rates as a percentage of payroll for the fiscal year ending June 30, 2018 required to support the total benefits of the System are as follows:

Group	Combined Member and State Contribution Requirement
University members hired before July 1, 2008	34.90%
University members hired on or after July 1, 2008	35.90%
Non-University members hired before July 1, 2008	37.86%
Non-University members hired on or after July 1, 2008	38.86%

These rates represent a decrease since the previous valuation in the Pension actuarially determined employer contribution rate of 0.07% of payroll for the fiscal year ending June 30, 2018. In addition, there has been a net increase in the expected state special appropriation from 2.70% to 2.94%, or 0.24% of payroll and no change in the amount required for life insurance benefits.

For the fiscal year ending June 30, 2018, in addition to the State statutory contribution rates and the state special appropriation, there is an additional employer contribution rate of 13.49% of payroll required in order to amortize the unfunded accrued liability according to the funding policy adopted by the Board. This is 0.31% less than the 13.80% determined in the previous valuation.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the total unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll in accordance with the funding policy adopted by the Board, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund from 2005 to 2010 were allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund. No additional contributions were allocated during the 2015 fiscal year.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, the System is not being funded on an actuarially sound basis since the full actuarially determined contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Eric H. Gary, FSA, FCA, MAAA
Chief Health Actuary

Cathy Turcot
Principal and Managing Director

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2015

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2015	June 30, 2014
Number of active members	72,246	73,407
Annual salaries	$ 3,515,113	$ 3,486,327
Number of annuitants and beneficiaries	49,822	48,576
Annual allowances	$ 1,767,637	$ 1,684,852
Assets:		
Market value	$ 18,049,131	$ 18,092,571
Actuarial value	17,219,520	16,174,199
Unfunded accrued liability	$ 13,930,442	$ 14,010,205
Funded Ratio	55.3%	53.6%
Amortization period (years)	29.3	30.0

Contribution rates are shown separately for university and non-university members on the following pages.

CONTRIBUTION RATES FOR UNIVERSITY MEMBERS

Valuation Date	June 30, 2015		June 30, 2014	
For fiscal year ending:	**June 30, 2018**		**June 30, 2017**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	12.340%	12.340%	12.270%	12.270%
Accrued liability	22.560	23.560	22.700	23.700
Total	34.900%	35.900%	34.970%	35.970%
Member	7.625%	7.625%	7.625%	7.625%
State (ARC)	27.275	28.275	27.345	28.345
Total	34.900%	35.900%	34.970%	35.970%
Life Insurance Fund:				
State	0.030%	0.030%	0.030%	0.030%
Medical Insurance Fund:				
Member	2.775%	2.775%	2.775%	2.775%
State Match	2.775	1.775	2.775	1.775
Total	5.550%	4.550%	5.550%	4.550%
Total Contributions	40.480%	40.480%	40.550%	40.550%
Member Statutory	10.400%	10.400%	10.400%	10.400%
State Statutory	13.650	13.650	13.650	13.650
Required Increase	13.490	13.490	13.800	13.800
State Special	2.940	2.940	2.700	2.700
Total	40.480%	40.480%	40.550%	40.550%

CONTRIBUTION RATES FOR NON-UNIVERSITY MEMBERS

Valuation Date	June 30, 2015		June 30, 2014	
For fiscal year ending:	**June 30, 2018**		**June 30, 2017**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	16.720%	16.720%	16.720%	16.720%
Accrued liability	21.140	22.140	21.210	22.210
Total	37.860%	38.860%	37.930%	38.930%
Member	9.105%	9.105%	9.105%	9.105%
State (ARC)	28.755	29.755	28.825	29.825
Total	37.860%	38.860%	37.930%	38.930%
Life Insurance Fund:				
State	0.030%	0.030%	0.030%	0.030%
Medical Insurance Fund:				
Member	3.750%	3.750%	3.750%	3.750%
State Match	3.750	2.750	3.750	2.750
Total	7.500%	6.500%	7.500%	6.500%
Total Contributions	45.390%	45.390%	45.460%	45.460%
Member Statutory	12.855%	12.855%	12.855%	12.855%
State Statutory	16.105	16.105	16.105	16.105
Required Increase	13.490	13.490	13.800	13.800
State Special	2.940	2.940	2.700	2.700
Total	45.390%	45.390%	45.460%	45.460%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2015 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. The assumed investment rate of return is 7.50%. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation. The funding policy is shown in Schedule H of the Report.

5. Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. There have been no changes since the previous valuation.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2015 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
University hired before 7/1/2008	2,055	$ 147,256
University hired after 7/1/2008	1,360	67,694
Non-University Full Time hired before 7/1/2008	40,402	2,517,108
Non-University Full Time hired after 7/1/2008	16,764	708,842
Non-University Part Time hired before 7/1/2008	3,317	28,801
Non-University Part Time hired after 7/1/2008	8,348	45,412
Total	72,246	$ 3,515,113

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2015

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	43,349	$ 1,609,950
Disability Retirements	2,651	76,399
Beneficiaries of Deceased Members	3,822	81,288
Total	49,822	$ 1,767,637

[1] Includes cost-of-living adjustments effective through July 1, 2015.

3. Table 1 of Schedule G shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2015 the market value of Pension Plan assets for valuation purposes held by the System amounted to $18,049,130,737. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes. The estimated market investment return for the plan year was 5.1%. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2015 was $17,219,519,677. The estimated investment return for the plan year ending June 30, 2015 on an actuarial value of assets basis was 12.41%, compared to the assumed investment rate of return for the period of 7.50%. Schedule B shows the development of the actuarial value of assets as of June 30, 2015.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2015. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.

2. The valuation balance sheet shows that the System has total prospective liabilities of $17,169,625,916 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $19,176,764,815 of which $851,860,475 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $345,742,284. The total prospective liabilities of the System amounts to $36,692,133,015. Against these liabilities, the System has present assets for valuation purposes of $17,219,519,677. When

this amount is deducted from the total liabilities of $36,692,133,015, there remains $19,472,613,338 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 12.34% of payroll for University and 16.72% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $5,542,171,361. When this amount is subtracted from $19,472,613,338, which is the present value of the total future contributions to be made by the employer, there remains $13,930,441,977 as the amount of future unfunded accrued liability contributions.

5. The unfunded accrued liability decreased by approximately $80 million for the plan year ending June 30, 2015 and the funding ratio increased from 53.6% to 55.3%. The decrease in the unfunded accrued liability was primarily due to the investment return on an actuarial value basis for the year being more than expected. In addition, salary increases were less than assumed which resulted in a gain. Offsetting these gains was a loss due to contribution shortfall for the plan year and a small net demographic loss due to turnover, retirement and mortality. See Section VII for a complete breakdown of the experience of the System.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 10.400% of annual salary to the System and each non-university member contribute 12.855% of annual salary. Of this amount, for each university member, 2.775% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.75% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.03% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 13.49% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan based on the funding policy adopted by the Board. An additional special appropriation of 2.94% of total payroll will be made by the State. Therefore, the total actuarially determined employer contribution rate to the Pension Plan is 27.275% for university members who become members before July 1, 2008 and 28.275% for university members who become members on or after July 1, 2008. The total actuarially determined employer contribution rate to the Pension Plan is 28.755% for non-university members who become members before July 1, 2008 and 29.755% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(2.775)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(1.775)
Supplemental Funding	3.250	3.250
Subtotal	10.875%	11.875%
Life Insurance	(0.030)%	(0.030)%
Additional to Comply with Board Funding Policy	13.490	13.490
Special Appropriation	2.940	2.940
Contribution to Pension Plan	27.275%	28.275%
Total Contribution to Pension Plan	34.900%	35.900%

NON-UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(3.750)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(2.750)
Supplemental Funding	3.250	3.250
Subtotal	12.355%	13.355%
Life Insurance	(0.030)%	(0.030)%
Additional to Comply with Board Funding Policy	13.490	13.490
Special Appropriation	2.940	2.940
Contribution to Pension Plan	28.755%	29.755%
Total Contribution to Pension Plan	37.860%	38.860%

4. The valuation indicates that normal contributions at the rate of 12.34% of active university members' salaries and 16.72% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded accrued liability. This accrued liability rate is 22.56% for university members hired before July 1, 2008, 23.56% for university members hired on and after July 1, 2008, 21.14% for non-university members hired before July 1, 2008, and 22.14% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 2.94% of payroll to be made by the State. These rates are shown in the following table:

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	12.34%	12.34%	16.72%	16.72%
Accrued liability*	22.56	23.56	21.14	22.14
Total	34.90%	35.90%	37.86%	38.86%

* Includes special appropriations of 2.94% of payroll to be made by the State.

5. The funding policy shown in Schedule H of this report, states that the unfunded accrued liability determined in the June 30, 2014 valuation, known as the "legacy unfunded liability" will be amortized over a closed 30 year period. New sources of unfunded liability each year after June 30, 2014 will be amortized over closed 20 year periods. The legacy unfunded liability determined as of June 30, 2014 was $14,010,204,858. The remaining balance of the legacy unfunded liability as of June 30, 2015 of $14,282,051,575 was determined by adding interest at 7.5% and subtracting the expected amortization payment of $778,918,647. The new source of unfunded liability of $(351,609,598) as of June 30, 2015, is determined by subtracting the remaining balance of the legacy unfunded liability from the total unfunded actuarial accrued liability of $13,930,441,977 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to

amortize the unfunded actuarial accrued liability in accordance with the Board funding policy, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.
2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 13.49%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded accrued liability in accordance with the Board funding policy. However, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll.
3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2010, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. Beginning with the 2011 fiscal year, there have been no further loans for Stabilization Funding. In addition, there were no loans for single-subsidy funding for fiscal years 2013 or 2014. The table on the following page shows the amounts borrowed, annual payments and remaining balances for the non-single subsidy funding as of June 30, 2015:

MEDICAL INSURANCE FUND STABILIZATION FUNDING

	Loan Amount	Annual Payment	Balances as of June 30, 2015
2008/2009	$ 8,400,000	$ 1,228,900	$ 4,213,170
2009/2010	9,200,000	1,345,200	5,565,983
2010/2011	10,700,000	1,564,500	7,503,774
2011/2012	12,300,000	1,798,700	9,726,708
Total	$ 40,600,000	$ 5,937,300	$ 27,009,635

3. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 13.49% of payroll for the fiscal year ending June 30, 2018, as shown in the following table:

Valuation Date	Fiscal Year	Increase/ (Decrease)	Cumulative Increase	Amount
June 30, 2004	June 30, 2007	0.11%	0.11%	$ 3,174,600
June 30, 2005	June 30, 2008	1.21	1.32	38,965,900
June 30, 2006	June 30, 2009	0.56	1.88	60,499,800
June 30, 2007	June 30, 2010	0.58	2.46	82,331,200
June 30, 2008	June 30, 2011	1.13	3.59	121,457,000
June 30, 2009	June 30, 2012	2.22	5.81	208,649,000
June 30, 2010	June 30, 2013	1.46	7.27	260,980,000
June 30, 2011	June 30, 2014	0.75	8.02	299,420,000
June 30, 2012	June 30, 2015	2.40	10.42	386,400,000
June 30, 2013	June 30, 2016	2.55	12.97	487,400,000
June 30, 2014	June 30, 2017	0.83	13.80	520,372,000
June 30, 2015	June 30, 2018	(0.31)	13.49	512,883,000

In addition, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll, in order to amortize the unfunded actuarial accrued liability in accordance with the Board funding policy. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an decrease of $79,762,881 in the unfunded accrued liability from $14,010,204,858 to $13,930,441,977 during the year ending June 30, 2015.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 1,050,765
Expected Accrued liability contribution	(778,918)
Loss due to Contribution Shortfall and Timing	472,439
Experience:	
Valuation asset growth	(771,835)
Pensioners' mortality	(70,335)
Turnover and retirements	119,009
New entrants	38,561
Salary increases	(139,449)
Amendments	0
Assumption changes	
Method changes	0
Total	$ (79,763)

SECTION VIII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board (GASB) has issued Statements No. 67 and 68 which replace Statement No. 25 and 27. The information required under the new GASB Statements will be issued in separate reports. The following information is provided for informational purposes only.

1. The following is a distribution of the number of employees by type of membership.

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2015

GROUP	NUMBER
Retirees and beneficiaries currently Receiving benefits	49,822
Terminated vested employees entitled to Benefits but not yet receiving benefits	8,051
Inactive non-vested members	19,720
Active plan members	72,246
Total	149,839

2. The schedule of funding progress is shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2010	$14,851,330	$24,344,316	$ 9,492,986	61.0%	$3,321,614	285.8%
6/30/2011**	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4
6/30/2012	14,691,371	26,973,854	12,282,483	54.5	3,479,567	353.0
6/30/2013	14,962,758	28,817,232	13,854,474	51.9	3,480,066	398.1
6/30/2014***	16,174,199	30,184,404	14,010,205	53.6	3,486,327	401.9
6/30/2015	17,219,520	31,149,962	13,930,442	55.3	3,515,113	396.3

* Funding method Projected Unit Credit prior to 6/30/2011
Funding method Entry Age Normal 6/30/2011 and after
** Reflects change in assumptions and methods
*** Reflects change in assumption

3. The information presented above was determined as part of the actuarial valuation at June 30, 2015. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2015
Actuarial cost method	Entry Age
Amortization method	Level percent of pay, closed
Remaining amortization period	29.3 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment Rate of Return*	7.50%
Projected salary Increases**	4.00 - 8.20%
Cost-of-living adjustments	1.50% Annually
*Includes price inflation at	3.50%
**Includes wage inflation at	4.00%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Actuarially Determined Employer Contributions	Actual Employer Contributions	Percentage Contributed
2010	$ 633,938,088	$ 479,805,088	76%
2011	678,741,428	1,037,935,993*	153
2012	757,822,190	557,339,552	74
2013	802,984,644	568,233,446	71
2014	823,446,156	563,326,249	68
2015	913,653,854	559,579,290	61

* Includes Pension Obligation Bond proceeds of $465,384,165

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2015
(Dollar amounts in thousands)

ACTUARIAL LIABILITIES			
(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 16,040,486	
	- Disability retirement benefits	749,304	
	- Death and survivor benefits	138,675	
	- Refunds of member contributions	241,160	
	Total		$ 17,169,626
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits		
	- Service retirement benefits	$ 17,727,682	
	- Disability retirement benefits	728,940	
	- Death and survivor benefits	720,142	
	Total		$ 19,176,765
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 345,742
(4)	TOTAL ACTUARIAL LIABILITIES		$ 36,692,133
PRESENT AND PROSPECTIVE ASSETS			
(5)	Actuarial value of assets		$ 17,219,520
(6)	Present value of total future contributions = (4)-(5)	$ 19,472,613	
(7)	Present value of future member contributions and employer normal contributions		5,542,171
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		13,930,442
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 36,692,133

SCHEDULE A
(continued)

SOLVENCY TEST
(in millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2010	$3,196.3	$15,010.4	$6,137.6	$14,851.3	100%	78%	0%
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0
6/30/2012	3,415.2	16,472.2	7,086.4	14,691.4	100	68	0
6/30/2013	3,514.4	17,716.4	7,586.4	14,962.8	100	65	0
6/30/2014	3,629.7	18,676.3	7,878.4	16,174.2	100	67	0
6/30/2015	3,700.6	19,522.5	7,926.9	17,219.5	100	69	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
AS OF JUNE 30, 2015

(1)	Actuarial Value of Assets Beginning of Year		$ 16,174,199,191
(2)	Market Value of Assets End of Year		18,049,130,737
(3)	Market Value of Assets Beginning of Year		18,092,570,615
(4)	Cash Flow		
	a.	Contributions	867,739,053
	b.	Benefit Payments	1,764,488,719
	c.	Administrative Expense	8,868,971
	d.	Net: (4)a – (4)b – (4)c	(905,618,637)
(5)	Investment Income		
	a.	Market total: (2) – (3) – (4)d	862,178,759
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,322,982,097
	d.	Amount for Phased-In Recognition: (5)a – (5)c	(460,803,338)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	(92,160,668)
	b.	First Prior Year	325,163,609
	c.	Second Prior Year	191,479,441
	d.	Third Prior Year	(160,195,981)
	e.	Fourth Prior Year	363,670,625
	f.	Total Recognized Investment Gain	627,957,026
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 17,219,519,677
(8)	Difference Between Market & Actuarial Values: (2) – (7)		$ 829,611,060
(9)	Rate of Return on Actuarial Value:		12.41%

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2015	June 30, 2014
Receipts for the Year		
Contributions		
Members	$ 308,159,763	$ 304,981,620
Employers	559,579,290	563,326,249
Total	867,739,053	868,307,869
Net Investment Income	862,178,759	2,803,247,956
TOTAL	$ 1,729,917,812	$ 3,671,555,825
Disbursements for the Year		
Benefit Payments	$ 1,741,456,095	$ 1,654,375,700
Refunds to Members	23,032,624	25,461,843
Miscellaneous, including expenses	8,868,971	7,955,972
TOTAL	$ 1,773,357,690	$ 1,687,793,515
Excess of Receipts over Disbursements	$ (43,439,878)	$ 1,983,762,310
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 18,092,570,615	$ 16,108,808,305
Excess of Receipts over Disbursements	(43,439,878)	1,983,762,310
Asset Balance as of the End of the Year	$ 18,049,130,737	$ 18,092,570,615
Rate of Return on Market Value	5.1%	18.1%

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.60
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
						RETIREMENT	
			WITHDRAWAL			Before	After
			Service			27 Years	27 Years
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	of Service	of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

SCHEDULE E

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently at 7.50%), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE F

SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2015. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to: (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus (b) 2.5% of final average salary multiplied by service after July 1, 1983. (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.
.
For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE G

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2015 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 35	Over 35	Total
24 & Under	2,213	2							2,215
Total Pay	41,947,049	43,502							41,990,551
Avg. Pay	18,955	21,751							18,957
25 to 29	6,199	1,397	1						7,597
Total Pay	204,011,920	66,904,762	43,050						270,959,732
Avg. Pay	32,910	47,892	43,050						35,667
30 to 34	3,056	4,991	1,307	3					9,357
Total Pay	95,321,748	249,144,319	73,460,486	153,055					418,079,608
Avg. Pay	31,192	49,919	56,205	51,018					44,681
35 to 39	2,213	2,424	4,578	962	4				10,181
Total Pay	62,011,160	121,552,831	267,069,504	61,448,344	254,485				512,336,324
Avg. Pay	28,021	50,146	58,338	63,876	63,621				50,323
40 to 44	1,926	1,566	2,269	4,007	797	1			10,566
Total Pay	48,076,172	78,903,638	133,000,641	260,740,328	54,050,935	64,650			574,836,364
Avg. Pay	24,962	50,385	58,616	65,071	67,818	64,650			54,404
45 to 49	1,436	1,228	1,510	2,120	3,065	762	3		10,124
Total Pay	35,812,710	60,907,248	87,807,089	136,589,683	209,991,357	53,758,353	291,877		585,158,317
Avg. Pay	24,939	49,599	58,150	64,429	68,513	70,549	97,292		57,799
50 to 54	1,197	750	1,085	1,254	1,534	1,754	320	1	7,895
Total Pay	26,138,213	37,365,255	62,125,573	80,091,516	106,724,424	126,744,365	24,411,479	51,329	463,652,154
Avg. Pay	21,836	49,820	57,259	63,869	69,573	72,260	76,286	51,329	58,727
55 to 59	1,417	464	754	984	1,095	865	395	33	6,007
Total Pay	25,813,988	21,457,280	44,157,300	63,512,149	76,152,402	66,191,587	33,976,083	2,927,726	334,188,515
Avg. Pay	18,217	46,244	58,564	64,545	69,546	76,522	86,015	88,719	55,633
60 to 64	1,965	372	400	624	611	451	120	92	4,635
Total Pay	26,415,228	15,272,685	24,733,514	41,330,777	44,908,769	35,340,649	10,764,337	8,630,293	207,396,252
Avg. Pay	13,443	41,056	61,834	66,235	73,500	78,361	89,703	93,808	44,746
65 & Over	2,198	484	191	237	220	197	58	84	3,669
Total Pay	19,925,732	12,980,171	11,414,848	16,368,292	16,473,814	15,983,130	4,964,889	8,404,433	106,515,309
Avg. Pay	9,065	26,819	59,764	69,065	74,881	81,133	85,602	100,053	29,031
Total	23,820	13,678	12,095	10,191	7,326	4,030	896	210	72,246
Total Pay	585,473,920	664,531,691	703,812,005	660,234,144	508,556,186	298,082,734	74,408,665	20,013,781	3,515,113,126
Avg. Pay	24,579	48,584	58,190	64,786	69,418	73,966	83,045	95,304	48,655

Average Age: 43.5 Average Service: 10.8

SCHEDULE G

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE AS OF JUNE 30, 2015

Attained Age	Number of Members	Total Annual Payment	Average Annual Benefits
49 & Under	851	$ 10,886,660	$ 12,793
50 – 54	1,234	46,495,372	37,679
55 – 59	4,148	173,846,860	41,911
60 – 64	9,601	382,583,341	39,848
65 – 69	13,081	485,814,525	37,139
70 – 74	8,460	299,153,859	35,361
75 – 79	5,417	177,327,235	32,735
80 – 84	3,509	104,398,591	29,752
85 – 89	2,221	58,575,369	26,373
90 & Over	1,300	28,554,726	21,965
Total	49,822	$ 1,767,636,538	$ 35,479

Average Current Age: 68.9

Average Age at Retirement: 55.8

SCHEDULE G

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Fiscal Year Ending June 30	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase In Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2006	2,266	$121.1	1,115	$20.0	38,497	$1,074.2	10.4%	$27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7%	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3%	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1%	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6%	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0%	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4%	33,089
2013	2,303	105.7	991	22.2	47,406	1,608.7	5.5%	33,934
2014	2,146	99.6	976	23.4	48,576	1,684.9	4.7%	34,685
2015	2,917	119.1	1,671	36.3	49,822	1,767.6	4.9%	35,479

SCHEDULE H

BOARD FUNDING POLICY

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("KTRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background:

State law provides that the retirement benefits promised to members of KTRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in KTRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state—as plan guarantor—is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $487 million (Fiscal Year 2016). The following schedule details the growth of the annual retirement appropriations payable by the state:

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000

(Source: KTRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2013).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which—if paid—will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based

upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

- Use the Entry Age Normal actuarial cost method;
- Use a five-year asset smoothing method;
- Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
- Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
- Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and KTRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

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The experience and dedication you deserve

November 21, 2016

Mr. Gary L. Harbin
Executive Secretary
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Dear Gary:

Enclosed are 25 bound copies and one unbound copy of the "Teachers' Retirement System of the State of Kentucky Report of Actuary on the Valuation Prepared as of June 30, 2016".

Sincerely yours,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Eric H. Gary, FSA, FCA, MAAA
Principal and Chief Health Actuary

Cathy Turcot
Principal and Managing Director

Enclosure

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Teachers' Retirement System of the State of Kentucky
Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2016

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November 21, 2016

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2016. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contribution rates as a percentage of payroll for the fiscal year ending June 30, 2019 required to support the total benefits of the System are as follows:

Group	Combined Member and State Contribution Requirement
University members hired before July 1, 2008	35.90%
University members hired on or after July 1, 2008	36.90%
Non-University members hired before July 1, 2008	38.86%
Non-University members hired on or after July 1, 2008	39.86%

These rates represent an increase since the previous valuation in the Pension actuarially determined employer contribution rate of 1.00% of payroll for the fiscal year ending June 30, 2019. In addition, there has been a net decrease in the expected state special appropriation from 2.94% to 2.83%, or 0.11% of payroll and an increase of 0.01% in the amount required for life insurance benefits.

For the fiscal year ending June 30, 2019, in addition to the State statutory contribution rates and the state special appropriation, there is an additional employer contribution rate of 14.61% of payroll required in order to amortize the unfunded accrued liability according to the funding policy adopted by the Board. This is 1.12% greater than the 13.49% determined in the previous valuation.

Since the previous valuation, various economic and demographic assumptions have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2015. These revised changes were adopted by the Board on September 19, 2016 and are discussed on pages 4 and 5 of the report. The valuation takes into account the effect of membership to the System enacted through the most recent Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the total unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll in accordance with the funding policy adopted by the Board, on the assumption that payroll will increase by 3.5% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund from 2005 to 2010 were allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund. No additional contributions were allocated during the 2016 fiscal year.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This actuarial valuation was performed to determine the recommended funding amount for the System. The asset values used to determine unfunded liabilities and funded ratios are not market values but less volatile market related values. A smoothing technique is applied to market values to determine the market related values. The unfunded liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return of assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

In our opinion, the System has not been funded on an actuarially sound basis since the full actuarially determined contributions were not made by the employer. If contributions by the employer to the System in subsequent fiscal years are less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated. It is our understanding that the State budget includes additional appropriations of $973 million to fund the required contribution for the 2016-2018 biennium.

Respectfully submitted,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Eric H. Gary, FSA, FCA, MAAA
Principal and Chief Health Actuary

Cathy Turcot
Principal and Managing Director

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2016

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2016	June 30, 2015
Number of active members	71,848	72,246
Annual salaries	$ 3,537,226	$ 3,515,113
Number of annuitants and beneficiaries	51,563	49,822
Annual allowances	$ 1,868,875	$ 1,767,637
Assets:		
Market value	$ 16,812,832	$ 18,049,131
Actuarial value	17,496,894	17,219,520
Unfunded accrued liability	$ 14,531,333	$ 13,930,442
Funded Ratio	54.6%	55.3%
Amortization period (years)	28.1	29.3

Contribution rates are shown separately for university and non-university members on the following pages.

CONTRIBUTION RATES FOR UNIVERSITY MEMBERS

Valuation Date	June 30, 2016		June 30, 2015	
For fiscal year ending:	**June 30, 2019**		**June 30, 2018**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	11.030%	11.030%	12.340%	12.340%
Accrued liability	24.870	25.870	22.560	23.560
Total	35.900%	36.900%	34.900%	35.900%
Member	7.625%	7.625%	7.625%	7.625%
State (ARC)	28.275	29.275	27.275	28.275
Total	35.900%	36.900%	34.900%	35.900%
Life Insurance Fund:				
State	0.040%	0.040%	0.030%	0.030%
Medical Insurance Fund:				
Member	2.775%	2.775%	2.775%	2.775%
State Match	2.775	1.775	2.775	1.775
Total	5.550%	4.550%	5.550%	4.550%
Total Contributions	41.490%	41.490%	40.480%	40.480%
Member Statutory	10.400%	10.400%	10.400%	10.400%
State Statutory	13.650	13.650	13.650	13.650
Required Increase	14.610	14.610	13.490	13.490
State Special	2.830	2.830	2.940	2.940
Total	41.490%	41.490%	40.480%	40.480%

CONTRIBUTION RATES FOR NON-UNIVERSITY MEMBERS

Valuation Date	June 30, 2016		June 30, 2015	
For fiscal year ending:	**June 30, 2019**		**June 30, 2018**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	14.940%	14.940%	16.720%	16.720%
Accrued liability	23.920	24.920	21.140	22.140
Total	38.860%	39.860%	37.860%	38.860%
Member	9.105%	9.105%	9.105%	9.105%
State (ARC)	29.755	30.755	28.755	29.755
Total	38.860%	39.860%	37.860%	38.860%
Life Insurance Fund:				
State	0.040%	0.040%	0.030%	0.030%
Medical Insurance Fund:				
Member	3.750%	3.750%	3.750%	3.750%
State Match	3.750	2.750	3.750	2.750
Total	7.500%	6.500%	7.500%	6.500%
Total Contributions	46.400%	46.400%	45.390%	45.390%
Member Statutory	12.855%	12.855%	12.855%	12.855%
State Statutory	16.105	16.105	16.105	16.105
Required Increase	14.610	14.610	13.490	13.490
State Special	2.830	2.830	2.940	2.940
Total	46.400%	46.400%	45.390%	45.390%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2016 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Since the previous valuation, various economic and demographic assumptions have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2015. The changes adopted by the Board on September 19, 2016, include various demographic and economic assumptions summarized below:

    - Price Inflation changed assumed rate from 3.50% to 3.00%,
    - Wage Inflation changed assumed rate from 4.00% to 3.50%,
    - Assumed Salary Scale adjusted to reflect a decrease of 0.25% in merit & promotion for all ages, and
    - Assumed rates of Withdrawal, Disability, Retirement, and Mortality have been adjusted to more closely reflect experience.

5. Schedule B shows the development of the actuarial value of assets. The assumed investment rate of return is 7.50%. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

6. The funding policy is shown in Schedule H of the Report.

7. Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. There have been no changes since the previous valuation.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2016 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
University hired before 7/1/2008	1,883	$ 137,213
University hired after 7/1/2008	1,453	72,056
Non-University Full Time hired before 7/1/2008	38,065	2,429,982
Non-University Full Time hired after 7/1/2008	18,846	826,256
Non-University Part Time hired before 7/1/2008	2,797	24,219
Non-University Part Time hired after 7/1/2008	8,804	47,500
Total	71,848	$ 3,537,226

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2016

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	44,970	$ 1,704,041
Disability Retirements	2,751	80,652
Beneficiaries of Deceased Members	3,842	84,182
Total	51,563	$ 1,868,875

[1] Includes cost-of-living adjustments effective through July 1, 2016.

3. Table 1 of Schedule G shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2016 the market value of Pension Plan assets for valuation purposes held by the System amounted to $16,812,831,883. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes. The estimated market investment return for the plan year was (1.0)%. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2016 was $17,496,894,437. The estimated investment return for the plan year ending June 30, 2016 on an actuarial value of assets basis was 7.58%, compared to the assumed investment rate of return for the period of 7.50%. Schedule B shows the development of the actuarial value of assets as of June 30, 2016.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2016. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.

2. The valuation balance sheet shows that the System has total prospective liabilities of $16,231,288,904 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $20,002,749,810 of which $781,756,333 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $413,616,742. The total prospective liabilities of the System amounts to $36,647,655,456. Against these liabilities, the System has present assets for valuation purposes of $17,496,894,437. When

this amount is deducted from the total liabilities of $36,647,655,456, there remains $19,150,761,019 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 11.03% of payroll for University and 14.94% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,619,427,935. When this amount is subtracted from $19,150,761,019, which is the present value of the total future contributions to be made by the employer, there remains $14,531,333,084 as the amount of future unfunded accrued liability contributions.

5. The unfunded accrued liability increased by approximately $601 million for the plan year ending June 30, 2016 and the funding ratio decreased from 55.3% to 54.6%. The increase in the unfunded accrued liability was primarily due to the contribution shortfall for the plan year and demographic losses due to turnover, retirement and mortality. Offsetting these losses were a gain due to the assumption changes from the experience study and small gains for the investment return on an actuarial value basis that was greater than expected and salary increases that were less than assumed. See Section VII for a complete breakdown of the experience of the System.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 10.400% of annual salary to the System and each non-university member contribute 12.855% of annual salary. Of this amount, for each university member, 2.775% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.75% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.04% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 14.61% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan based on the funding policy adopted by the Board. An additional special appropriation of 2.83% of total payroll will be made by the State. Therefore, the total actuarially determined employer contribution rate to the Pension Plan is 28.275% for university members who become members before July 1, 2008 and 29.275% for university members who become members on or after July 1, 2008. The total actuarially determined employer contribution rate to the Pension Plan is 29.755% for non-university members who become members before July 1, 2008 and 30.755% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(2.775)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(1.775)
Supplemental Funding	3.250	3.250
Subtotal	10.875%	11.875%
Life Insurance	(0.040)%	(0.040)%
Additional to Comply with Board Funding Policy	14.610	14.610
Special Appropriation	2.830	2.830
Contribution to Pension Plan	28.275%	29.275%
Total Contribution to Pension Plan	35.900%	36.900%

NON-UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(3.750)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(2.750)
Supplemental Funding	3.250	3.250
Subtotal	12.355%	13.355%
Life Insurance	(0.040)%	(0.040)%
Additional to Comply with Board Funding Policy	14.610	14.610
Special Appropriation	2.830	2.830
Contribution to Pension Plan	29.755%	30.755%
Total Contribution to Pension Plan	38.860%	39.860%

4. The valuation indicates that normal contributions at the rate of 11.03% of active university members' salaries and 14.94% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded accrued liability. This accrued liability rate is 24.87% for university members hired before July 1, 2008, 25.87% for university members hired on and after July 1, 2008, 23.92% for non-university members hired before July 1, 2008, and 24.92% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 2.83% of payroll to be made by the State. These rates are shown in the following table:

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	11.03%	11.03%	14.94%	14.94%
Accrued liability*	24.87	25.87	23.92	24.92
Total	35.90%	36.90%	38.86%	39.86%

* Includes special appropriations of 2.83% of payroll to be made by the State.

5. The following table shows the components of the total UAAL and the derivation of the UAAL contribution rate in accordance with the funding policy:

TOTAL UAAL AND UAAL CONTRIBUTION RATE
(Dollar amounts in thousands)

	UAAL	REMAINING AMORTIZATION PERIOD (YEARS)	AMORTIZATION PAYMENT
Legacy	$14,543,130	28	$859,217
New Incremental 6/30/2015	(352,563)	19	(26,536)
New Incremental 6/30/2016	340,766	20	24,775
Total UAAL	$14,531,333		$857,456
Blended amortization period (years)			28.1

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 14.61%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded accrued liability in accordance with the Board funding policy. However, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2010, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. Beginning with the 2011 fiscal year, there have been no further loans for Stabilization Funding. In addition, there were no loans for single-subsidy funding for fiscal years 2013 through 2015. The table on the following page shows the amounts borrowed, annual payments and remaining balances for the non-single subsidy funding as of June 30, 2016:

MEDICAL INSURANCE FUND STABILIZATION FUNDING

	Loan Amount	Annual Payment	Balances as of June 30, 2016
2008/2009	$ 8,400,000	$ 1,228,900	$ 3,274,213
2009/2010	9,200,000	1,345,200	4,611,791
2010/2011	10,700,000	1,564,500	6,473,479
2011/2012	12,300,000	1,798,700	8,627,015
Total	$ 40,600,000	$ 5,937,300	$ 22,986,498

3. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 14.61% of payroll for the fiscal year ending June 30, 2019, as shown in the following table:

Valuation Date	Fiscal Year	Increase/ (Decrease)	Cumulative Increase	Amount
June 30, 2004	June 30, 2007	0.11%	0.11%	$ 3,174,600
June 30, 2005	June 30, 2008	1.21	1.32	38,965,900
June 30, 2006	June 30, 2009	0.56	1.88	60,499,800
June 30, 2007	June 30, 2010	0.58	2.46	82,331,200
June 30, 2008	June 30, 2011	1.13	3.59	121,457,000
June 30, 2009	June 30, 2012	2.22	5.81	208,649,000
June 30, 2010	June 30, 2013	1.46	7.27	260,980,000
June 30, 2011	June 30, 2014	0.75	8.02	299,420,000
June 30, 2012	June 30, 2015	2.40	10.42	386,400,000
June 30, 2013	June 30, 2016	2.55	12.97	487,400,000
June 30, 2014	June 30, 2017	0.83	13.80	520,372,000
June 30, 2015	June 30, 2018	(0.31)	13.49	512,883,000
June 30, 2016	June 30, 2019	1.12	14.61	553,597,000

In addition, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll, in order to amortize the unfunded actuarial accrued liability in accordance with the Board funding policy. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $600,891,107 in the unfunded accrued liability from $13,930,441,977 to $14,531,333,084 during the year ending June 30, 2016.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 1,044,783
Expected accrued liability contribution	(784,659)
Loss due to Contribution Shortfall and Timing	472,425
Experience:	
Valuation asset growth	(14,160)
Pensioners' mortality	71,058
Turnover and retirements	135,219
New entrants	37,907
Salary increases	(64,476)
Amendments	0
Assumption changes	(297,206)
Method changes	0
Total	$ 600,891

SECTION VIII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board (GASB) has issued Statements No. 67 and 68 which replace Statement No. 25 and 27. The information required under the new GASB Statements will be issued in separate reports. The following information is provided for informational purposes only.

1. The following is a distribution of the number of employees by type of membership.

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2016

GROUP	NUMBER
Retirees and beneficiaries currently Receiving benefits	51,563
Terminated vested employees entitled to Benefits but not yet receiving benefits	9,240
Inactive non-vested members	46,055
Active plan members	71,848
Total	178,706

2. The schedule of funding progress is shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2011*	$14,908,138	$25,968,693	$ 11,060,554	57.4%	$3,451,756	320.4%
6/30/2012	14,691,371	26,973,853	12,282,483	54.5	3,479,567	353.0
6/30/2013	14,962,758	28,817,232	13,854,474	51.9	3,480,066	398.1
6/30/2014**	16,174,199	30,184,404	14,010,205	53.6	3,486,327	401.9
6/30/2015	17,219,520	31,149,962	13,930,442	55.3	3,515,113	396.3
6/30/2016**	17,496,894	32,028,227	14,531,333	54.6	3,537,226	410.8

* Reflects change in assumptions and methods
** Reflects change in assumptions

3. The information presented above was determined as part of the actuarial valuation at June 30, 2016. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2016
Actuarial cost method	Entry Age
Amortization method	Level percent of pay, closed
Remaining amortization period	28.1 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment Rate of Return*	7.50%
Projected salary Increases**	3.50 - 7.30%
Cost-of-living adjustments	1.50% Annually
*Includes price inflation at	3.00%
**Includes wage inflation at	3.50%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Actuarially Determined Employer Contributions	Actual Employer Contributions	Percentage Contributed
2011	$ 678,741,428	$ 1,037,935,993*	153%
2012	757,822,190	557,339,552	74
2013	802,984,644	568,233,446	71
2014	823,446,156	563,326,249	68
2015	913,653,854	559,579,290	61
2016	999,270,174	565,454,590	57

* Includes Pension Obligation Bond proceeds of $465,384,165

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2016
(Dollar amounts in thousands)

	ACTUARIAL LIABILITIES		
(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 15,144,582	
	- Disability retirement benefits	711,697	
	- Death and survivor benefits	127,458	
	- Refunds of member contributions	247,552	
	Total		$ 16,231,289
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits		
	- Service retirement benefits	$ 18,488,211	
	- Disability retirement benefits	787,689	
	- Death and survivor benefits	726,850	
	Total		$ 20,002,750
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 413,616
(4)	TOTAL ACTUARIAL LIABILITIES		$ 36,647,655
	PRESENT AND PROSPECTIVE ASSETS		
(5)	Actuarial value of assets		$ 17,496,894
(6)	Present value of total future contributions = (4)-(5)	$ 19,150,761	
(7)	Present value of future member contributions and employer normal contributions		4,619,428
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		14,531,333
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 36,647,655

SCHEDULE A
(continued)

SOLVENCY TEST
(in millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2011	$3,325.7	$15,557.9	$7,085.1	$14,908.1	100%	74%	0%
6/30/2012	3,415.2	16,472.2	7,086.4	14,691.4	100	68	0
6/30/2013	3,514.4	17,716.4	7,586.5	14,962.8	100	65	0
6/30/2014	3,629.7	18,676.3	7,878.3	16,174.2	100	67	0
6/30/2015	3,700.6	19,522.5	7,926.8	17,219.5	100	69	0
6/30/2016	3,756.0	20,416.4	7,855.8	17,496.9	100	67	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
AS OF JUNE 30, 2016

(1)	Actuarial Value of Assets Beginning of Year		$ 17,219,519,677
(2)	Market Value of Assets End of Year		16,812,831,883
(3)	Market Value of Assets Beginning of Year		18,049,130,737
(4)	Cash Flow		
	a.	Contributions	878,498,816
	b.	Benefit Payments	1,860,946,372
	c.	Administrative Expense	8,636,438
	d.	Net: (4)a – (4)b – (4)c	(991,083,994)
(5)	Investment Income		
	a.	Market total: (2) – (3) – (4)d	(245,214,860)
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,316,519,156
	d.	Amount for Phased-In Recognition: (5)a – (5)c	(1,561,734,016)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	(312,346,803)
	b.	First Prior Year	(92,160,668)
	c.	Second Prior Year	325,163,609
	d.	Third Prior Year	191,479,441
	e.	Fourth Prior Year	(160,195,981)
	f.	Total Recognized Investment Gain	(48,060,402)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 17,496,894,437
(8)	Difference Between Market & Actuarial Values: (2) – (7)		$ (684,062,554)
(9)	Rate of Return on Actuarial Value:		7.58%

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2016	**June 30, 2015**
Receipts for the Year		
Contributions		
Members	$ 313,044,226	$ 308,159,763
Employers	565,454,590	559,579,290
Total	878,498,816	867,739,053
Net Investment Income	(245,214,860)	862,178,759
TOTAL	$ 633,283,956	$ 1,729,917,812
Disbursements for the Year		
Benefit Payments	$ 1,833,198,630	$ 1,741,456,095
Refunds to Members	27,747,742	23,032,624
Miscellaneous, including expenses	8,636,438	8,868,971
TOTAL	$ 1,869,582,810	$ 1,773,357,690
Excess of Receipts over Disbursements	$ (1,236,298,854)	$ (43,439,878)
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 18,049,130,737	$ 18,092,570,615
Excess of Receipts over Disbursements	(1,236,298,854)	(43,439,878)
Asset Balance as of the End of the Year	$ 16,812,831,883	$ 18,049,130,737
Rate of Return on Market Value	(1.0)%	5.1%

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually, including price inflation at 3.00% per annum.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.50% per annum:

Age	Annual Rate
20	7.20%
25	6.40
30	5.40
35	4.70
40	4.20
45	3.80
50	3.70
55	3.50
60	3.50
65	3.50

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
						RETIREMENT	
			WITHDRAWAL			Before	After
			Service			27 Years	27 Years
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	of Service	of Service*
20	0.019%	0.01%	11.00%				
25	0.021	0.01	11.00	3.00%			
30	0.025	0.01	11.00	3.00	3.00%		
35	0.043	0.04	12.00	3.50	1.40		
40	0.060	0.09	12.00	4.50	1.40		
45	0.084	0.20	12.00	4.50	1.30		17.0%
50	0.119	0.30	14.00	4.50	1.90		17.0
55	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	1.556	0.75	20.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	9.00%				
25	0.008	0.01	9.00	4.00%			
30	0.010	0.03	12.00	4.00	1.65%		
35	0.018	0.06	12.00	4.00	1.50		
40	0.026	0.12	12.00	4.00	1.30		
45	0.042	0.25	13.00	4.00	1.20		15.0%
50	0.062	0.44	13.00	5.00	1.50		18.0
55	0.096	0.65	15.00	5.00	2.00	5.5%	50.0
60	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	0.831	0.85	15.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Service Retirement Female	Disability Retirement Male	Disability Retirement Female
45	0.1609%	0.1135%	2.3306%	1.2482%
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

SCHEDULE E

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently at 7.50%), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE F

SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2016. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to: (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus (b) 2.5% of final average salary multiplied by service after July 1, 1983. (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.

.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased TRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE G

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2016 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 35	Over 35	Total
24 & Under	2,355								2,355
Total Pay	45,330,040								45,330,040
Avg. Pay	19,248								19,248
25 to 29	5,983	1,390	6						7,379
Total Pay	203,433,582	67,448,815	290,024						271,172,421
Avg. Pay	34,002	48,524	48,337						36,749
30 to 34	3,012	4,867	1,237	5					9,121
Total Pay	95,202,602	245,417,243	70,031,584	254,892					410,906,321
Avg. Pay	31,608	50,425	56,614	50,978					45,051
35 to 39	2,269	2,377	4,756	984	4				10,390
Total Pay	63,198,818	122,108,596	281,358,005	63,149,812	239,758				530,054,989
Avg. Pay	27,853	51,371	59,159	64,177	59,940				51,016
40 to 44	1,785	1,520	2,196	4,060	746	1			10,308
Total Pay	45,830,416	77,450,441	131,391,508	267,885,302	52,046,889	53,664			574,658,220
Avg. Pay	25,675	50,954	59,832	65,982	69,768	53,664			55,749
45 to 49	1,483	1,177	1,593	2,266	3,343	750	3		10,615
Total Pay	39,361,503	60,147,545	93,765,291	147,455,842	233,185,542	54,299,673	169,293		628,384,689
Avg. Pay	26,542	51,102	58,861	65,073	69,753	72,400	56,431		59,198
50 to 54	1,196	717	1,039	1,272	1,534	1,826	286	2	7,872
Total Pay	25,260,952	36,290,570	61,397,451	82,245,956	106,693,617	134,430,589	21,213,845	131,648	467,664,628
Avg. Pay	21,121	50,614	59,093	64,659	69,553	73,620	74,174	65,824	59,409
55 to 59	1,345	467	678	996	1,069	818	352	19	5,744
Total Pay	21,138,039	21,468,016	39,649,701	64,095,061	75,667,783	62,721,524	30,314,021	1,529,398	316,583,543
Avg. Pay	15,716	45,970	58,480	64,352	70,784	76,677	86,119	80,495	55,116
60 to 64	1,837	341	387	608	577	412	102	65	4,329
Total Pay	23,796,325	13,577,768	22,772,409	40,965,044	42,005,811	32,467,970	9,324,712	5,479,043	190,389,082
Avg. Pay	12,954	39,818	58,843	67,377	72,800	78,806	91,419	84,293	43,980
65 & Over	2,291	524	181	227	214	169	65	64	3,735
Total Pay	20,398,952	12,356,675	11,463,858	15,532,839	16,369,811	14,008,597	5,681,398	6,270,288	102,082,418
Avg. Pay	8,904	23,581	63,336	68,427	76,494	82,891	87,406	97,973	27,331
Total	23,556	13,380	12,073	10,418	7,487	3,976	808	150	71,848
Total Pay	582,951,229	656,265,669	712,119,831	681,584,748	526,209,211	297,982,017	66,703,269	13,410,377	3,537,226,351
Avg. Pay	24,747	49,048	58,984	65,424	70,283	74,945	82,554	89,403	49,232

Average Age: 43.5 Average Service: 10.8

SCHEDULE G

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE AS OF JUNE 30, 2016

Attained Age	Number of Members	Total Annual Payment	Average Annual Benefits
49 & Under	848	$ 11,407,720	$ 13,453
50 – 54	1,322	51,147,401	38,689
55 – 59	4,074	174,702,723	42,882
60 – 64	8,959	364,324,086	40,666
65 – 69	13,703	520,359,554	37,974
70 – 74	9,332	336,374,000	36,045
75 – 79	5,933	201,434,460	33,952
80 – 84	3,715	114,780,225	30,896
85 – 89	2,315	62,949,170	27,192
90 & Over	1,362	31,395,212	23,051
Total	51,563	$ 1,868,874,551	$ 36,244

Average Current Age: 69.2 Average Age at Retirement: 55.9

SCHEDULE G

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Fiscal Year Ending June 30	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase In Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2007	2,050	$82.1	1,041	$20.7	39,506	$1,135.6	5.7%	$28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3%	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1%	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6%	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0%	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4%	33,089
2013	2,303	105.7	991	22.2	47,406	1,608.7	5.5%	33,934
2014	2,146	99.6	976	23.4	48,576	1,684.9	4.7%	34,685
2015	2,917	119.1	1,671	36.3	49,822	1,767.6	4.9%	35,479
2016	2,753	128.2	1,012	26.9	51,563	1,868.9	5.7%	36,244

SCHEDULE H

BOARD FUNDING POLICY

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("TRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background:

State law provides that the retirement benefits promised to members of TRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in TRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state—as plan guarantor—is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $487 million (Fiscal Year 2016). The following schedule details the growth of the annual retirement appropriations payable by the state:

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2013).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which—if paid—will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based

upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

- Use the Entry Age Normal actuarial cost method;
- Use a five-year asset smoothing method;
- Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
- Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
- Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and TRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

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November 14, 2017

Mr. Gary L. Harbin
Executive Secretary
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Dear Gary:

Enclosed are 25 bound copies and one unbound copy of the "Teachers' Retirement System of the State of Kentucky Report of Actuary on the Valuation Prepared as of June 30, 2017".

Sincerely yours,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Cathy Turcot
Principal and Managing Director

Enclosure

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TEACHERS' Retirement System
TRS
KENTUCKY

Teachers' Retirement System of the State of Kentucky
Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2017

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November 14, 2017

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2017. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contribution rates as a percentage of payroll for the fiscal year ending June 30, 2020 required to support the total benefits of the System are as follows:

Group	Combined Member and State Contribution Requirement
University members hired before July 1, 2008	35.55%
University members hired on or after July 1, 2008	36.55%
Non-University members hired before July 1, 2008	38.51%
Non-University members hired on or after July 1, 2008	39.51%

These rates represent a decrease since the previous valuation in the total Pension actuarially determined employer contribution rates (ADEC) of 0.35% of payroll for the fiscal year ending June 30, 2020.

A breakdown of the changes in the components of the ADEC are as follows:

- an increase in the expected state special appropriation from 2.83% to 3.00%, or 0.17% of payroll
- an increase in the amount required for life insurance benefits from 0.04% to 0.05%, or 0.01% of payroll
- a reduction in the additional required increase of 0.51%, from 14.61% to 14.10%

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the total unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll in accordance with the funding policy adopted by the Board, on the assumption that payroll will increase by 3.5% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund from 2005 to 2010 were allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund. No additional contributions were allocated during the 2017 fiscal year.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This actuarial valuation was performed to determine the recommended funding amount for the System. The asset values used to determine unfunded liabilities and funded ratios are not market values but less volatile market related values. A smoothing technique is applied to market values to determine the market related values. The unfunded liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return of assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

In our opinion, the System has not been funded on an actuarially sound basis since historically the full actuarially determined contributions were not made by the employer. However, an additional appropriation of $498.5 million was made during fiscal year 2017 and an additional appropriation of $474.7 million is expected to be made during fiscal year 2018. If contributions by the employer to the System in subsequent fiscal years are less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Cathy Turcot
Principal and Managing Director

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Section I – Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2017	June 30, 2016
Number of active members	72,130	71,848
Annual salaries	$ 3,563,584	$ 3,537,226
Number of annuitants and beneficiaries	52,966	51,563
Annual allowances	$ 1,953,464	$ 1,868,875
Assets:		
Market value	$ 18,707,699	$ 16,812,832
Actuarial value	18,514,638	17,496,894
Unfunded accrued liability	$ 14,305,248	$ 14,531,333
Funded Ratio based on Actuarial Value of Assets	56.4%	54.6%
Amortization period (years)	27.4	28.1

Contribution rates are shown separately for university and non-university members on the following pages.

Section I – Summary of Principal Results

CONTRIBUTION RATES FOR UNIVERSITY MEMBERS

Valuation Date	June 30, 2017		June 30, 2016	
For fiscal year ending:	**June 30, 2020**		**June 30, 2019**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	10.800%	10.800%	11.030%	11.030%
Accrued liability	24.750	25.750	24.870	25.870
Total	35.550%	36.550%	35.900%	36.900%
Member	7.625%	7.625%	7.625%	7.625%
State (ARC)	27.925	28.925	28.275	29.275
Total	35.550%	36.550%	35.900%	36.900%
Life Insurance Fund:				
State	0.050%	0.050%	0.040%	0.040%
Medical Insurance Fund:				
Member	2.775%	2.775%	2.775%	2.775%
State Match	2.775	1.775	2.775	1.775
Total	5.550%	4.550%	5.550%	4.550%
Total Contributions	41.150%	41.150%	41.490%	41.490%
Member Statutory	10.400%	10.400%	10.400%	10.400%
State Statutory	13.650	13.650	13.650	13.650
Required Increase	14.100	14.100	14.610	14.610
State Special	3.000	3.000	2.830	2.830
Total	41.150%	41.150%	41.490%	41.490%

Section I – Summary of Principal Results

CONTRIBUTION RATES FOR NON-UNIVERSITY MEMBERS

Valuation Date	June 30, 2017		June 30, 2016	
For fiscal year ending:	**June 30, 2020**		**June 30, 2019**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	14.840%	14.840%	14.940%	14.940%
Accrued liability	23.670	24.670	23.920	24.920
Total	38.510%	39.510%	38.860%	39.860%
Member	9.105%	9.105%	9.105%	9.105%
State (ARC)	29.405	30.405	29.755	30.755
Total	38.510%	39.510%	38.860%	39.860%
Life Insurance Fund:				
State	0.050%	0.050%	0.040%	0.040%
Medical Insurance Fund:				
Member	3.750%	3.750%	3.750%	3.750%
State Match	3.750	2.750	3.750	2.750
Total	7.500%	6.500%	7.500%	6.500%
Total Contributions	46.060%	46.060%	46.400%	46.400%
Member Statutory	12.855%	12.855%	12.855%	12.855%
State Statutory	16.105	16.105	16.105	16.105
Required Increase	14.100	14.100	14.610	14.610
State Special	3.000	3.000	2.830	2.830
Total	46.060%	46.060%	46.400%	46.400%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2017 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. The assumed investment rate of return is 7.50%. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation.

5. The current funding policy is shown in Schedule H of the Report. The funding policy has been revised since the previous valuation, but has not yet been adopted by the Board.

6. Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. There have been no changes since the previous valuation.

7. The funded ratio shown in the Summary of Principal Results, is the ratio of actuarial value of assets to the actuarial accrued liability. The funded status would be different based on the market value of assets. The funding ratio is an indication of progress in funding the promised benefits. Since the ratio is less than 100%, there is a need for additional contributions toward the payment of the unfunded accrued liability. In addition, this funding ratio does not have any relationship to measuring the sufficiency if the plan had to settle its liabilities.

Section II – Membership Data

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2017 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
University hired before 7/1/2008	1,724	$ 127,690
University hired after 7/1/2008	1,493	77,914
Non-University Full Time hired before 7/1/2008	36,025	2,339,663
Non-University Full Time hired after 7/1/2008	20,897	947,285
Non-University Part Time hired before 7/1/2008	2,438	20,770
Non-University Part Time hired after 7/1/2008	9,553	50,262
Total	72,130	$ 3,563,584

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2017

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	46,222	$ 1,780,450
Disability Retirements	2,778	82,585
Beneficiaries of Deceased Members	3,966	90,429
Total	52,966	$ 1,953,464

[1] Includes cost-of-living adjustments effective through July 1, 2017.

3. Table 1 of Schedule G shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III – Assets

1. As of June 30, 2017, the market value of Pension Plan assets for valuation purposes held by the System amounted to $18,707,699,025. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes. The estimated market investment return for the plan year was 15.02%. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2017 was $18,514,638,263. The estimated investment return for the plan year ending June 30, 2017 on an actuarial value of assets basis was 9.29%, compared to the assumed investment rate of return for the period of 7.50%. Schedule B shows the development of the actuarial value of assets as of June 30, 2017.

Section IV – Comments on Valuation

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2017. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.

2. The valuation balance sheet shows that the System has total prospective liabilities of $16,320,896,707 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $20,726,391,156 of which $798,963,061 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $381,559,301. The total prospective liabilities of the System amounts to $37,428,847,164. Against these liabilities, the System has present assets for valuation purposes of $18,514,638,263. When this amount is deducted from the total liabilities of $37,428,847,164, there remains $18,914,208,901 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 10.80% of payroll for University and 14.84% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,608,960,570. When this amount is subtracted from $18,914,208,901, which is the present value of the total future contributions to be made by the employer, there remains $14,305,248,331 as the amount of future unfunded accrued liability contributions.

5. The unfunded accrued liability decreased by approximately $226 million for the plan year ending June 30, 2017 and the funding ratio increased from 54.6% to 56.4%. See Section VII for a complete breakdown of the experience of the System.

Section V – Contributions Payable Under the System

1. Section 161.540 of the retirement law provides that each university member contribute 10.400% of annual salary to the System and each non-university member contribute 12.855% of annual salary. Of this amount, for each university member, 2.775% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.75% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.05% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 14.10% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan based on the funding policy adopted by the Board. An additional special appropriation of 3.00% of total payroll will be made by the State. Therefore, the total actuarially determined employer contribution rate to the Pension Plan is 27.925% for university members who become members before July 1, 2008 and 28.925% for university members who become members on or after July 1, 2008. The total actuarially determined employer contribution rate to the Pension Plan is 29.405% for non-university members who become members before July 1, 2008 and 30.405% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following tables.

Section V – Contributions Payable Under the System

CONTRIBUTION RATES BY SOURCE

UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(2.775)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(1.775)
Supplemental Funding	3.250	3.250
Subtotal	10.875%	11.875%
Life Insurance	(0.050)%	(0.050)%
Additional to Comply with Board Funding Policy	14.100	14.100
Special Appropriation	3.000	3.000
Contribution to Pension Plan	27.925%	28.925%
Total Contribution to Pension Plan	35.550%	36.550%

Section V – Contributions Payable Under the System

NON-UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(3.750)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(2.750)
Supplemental Funding	3.250	3.250
Subtotal	12.355%	13.355%
Life Insurance	(0.050)%	(0.050)%
Additional to Comply with Board Funding Policy	14.100	14.100
Special Appropriation	3.000	3.000
Contribution to Pension Plan	29.405%	30.405%
Total Contribution to Pension Plan	38.510%	39.510%

4. The valuation indicates that normal contributions at the rate of 10.80% of active university members' salaries and 14.84% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded accrued liability. This accrued liability rate is 24.75% for university members hired before July 1, 2008, 25.75% for university members hired on and after July 1, 2008, 23.67% for non-university members hired before July 1, 2008, and 24.67% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.00% of payroll to be made by the State. These rates are shown in the following table:

Section V – Contributions Payable Under the System

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	10.80%	10.80%	14.84%	14.84%
Accrued liability*	24.75	25.75	23.67	24.67
Total	35.55%	36.55%	38.51%	39.51%

* Includes special appropriations of 3.00% of payroll to be made by the State.

5. The following table shows the components of the total UAAL and the derivation of the UAAL contribution rate in accordance with the funding policy:

TOTAL UAAL AND UAAL CONTRIBUTION RATE
(Dollar amounts in thousands)

	UAAL	REMAINING AMORTIZATION PERIOD (YEARS)	AMORTIZATION PAYMENT
Legacy	$14,744,575	27	$889,290
New Incremental 6/30/2015	(351,541)	18	(27,465)
New Incremental 6/30/2016	340,682	19	25,642
New Incremental 6/30/2017	(428,468)	20	(31,151)
Total UAAL	$14,305,248		$856,316
Blended amortization period (years)			27.4

Section VI – Comments on Level of Funding

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 14.10%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded accrued liability in accordance with the Board funding policy. However, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll.

Section VI – Comments on Level of Funding

3. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 14.10% of payroll for the fiscal year ending June 30, 2020, as shown in the following table:

Valuation Date	Fiscal Year	Increase/ (Decrease)	Cumulative Increase	Amount
June 30, 2004	June 30, 2007	0.11%	0.11%	$ 3,174,600
June 30, 2005	June 30, 2008	1.21	1.32	38,965,900
June 30, 2006	June 30, 2009	0.56	1.88	60,499,800
June 30, 2007	June 30, 2010	0.58	2.46	82,331,200
June 30, 2008	June 30, 2011	1.13	3.59	121,457,000
June 30, 2009	June 30, 2012	2.22	5.81	208,649,000
June 30, 2010	June 30, 2013	1.46	7.27	260,980,000
June 30, 2011	June 30, 2014	0.75	8.02	299,420,000
June 30, 2012	June 30, 2015	2.40	10.42	386,400,000
June 30, 2013	June 30, 2016	2.55	12.97	487,400,000
June 30, 2014	June 30, 2017	0.83	13.80	520,372,000
June 30, 2015	June 30, 2018	(0.31)	13.49	512,883,000
June 30, 2016	June 30, 2019	1.12	14.61	553,597,000
June 30, 2017	June 30, 2020	(0.51)	14.10	538,253,000

In addition, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll, in order to amortize the unfunded actuarial accrued liability in accordance with the Board funding policy. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII – Analysis of Financial Experience

The following table shows the estimated gain or loss from various factors that resulted in a decrease of $226,084,753 in the unfunded accrued liability from $14,531,333,084 to $14,305,248,331 during the year ending June 30, 2017. The decrease in the unfunded accrued liability was primarily due to gains for the investment return on an actuarial value basis that was greater than expected and salary increases that were less than assumed. In addition to these gains were small demographic gains and losses due to turnover, retirement and mortality.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 1,089,850
Expected accrued liability contribution	(887,467)
Loss due to Contribution Shortfall and Timing	704
Experience:	
Valuation asset growth	(308,146)
Pensioners' mortality	11,181
Turnover and retirements	(11,667)
New entrants	39,218
Salary increases	(159,758)
Amendments	0
Assumption changes	0
Method changes	0
Total	$ (226,085)

Section VIII – Accounting Information

Governmental Accounting Standards Board (GASB) has issued Statements No. 67 and 68 which replace Statement No. 25 and 27. The information required under the new GASB Statements will be issued in separate reports. The following information is provided for informational purposes only.

1. The following is a distribution of the number of employees by type of membership.

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2017

GROUP	NUMBER
Retirees and beneficiaries currently Receiving benefits	52,966
Terminated vested employees entitled to Benefits but not yet receiving benefits	8,624
Inactive non-vested members	42,798
Active plan members	72,130
Total	176,518

2. The schedule of funding progress is shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2012	$14,691,371	$26,973,853	$ 12,282,483	54.5%	$3,479,567	353.0%
6/30/2013	14,962,758	28,817,232	13,854,474	51.9	3,480,066	398.1
6/30/2014*	16,174,199	30,184,404	14,010,205	53.6	3,486,327	401.9
6/30/2015	17,219,520	31,149,962	13,930,442	55.3	3,515,113	396.3
6/30/2016*	17,496,894	32,028,227	14,531,333	54.6	3,537,226	410.8
6/30/2017	18,514,638	32,819,887	14,305,248	56.4	3,563,584	401.4

* Reflects change in assumptions

3. The information presented above was determined as part of the actuarial valuation at June 30, 2017. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2017
Actuarial cost method	Entry Age
Amortization method	Level percent of pay, closed
Remaining amortization period	27.4 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment Rate of Return*	7.50%
Projected salary Increases**	3.50 - 7.30%
Cost-of-living adjustments	1.50% Annually
*Includes price inflation at	3.00%
**Includes wage inflation at	3.50%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Actuarially Determined Employer Contributions	Actual Employer Contributions	Percentage Contributed
2012	$ 757,822,190	$ 557,339,552	74%
2013	802,984,644	568,233,446	71
2014	823,446,156	563,326,249	68
2015	913,653,854	559,579,290	61
2016	999,270,174	565,454,590	57
2017	1,076,617,093	1,060,719,993	99

Schedule A – Valuation Balance Sheet and Solvency Test

SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2017
(Dollar amounts in thousands)

	ACTUARIAL LIABILITIES		
(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 15,308,828	
	- Disability retirement benefits	631,781	
	- Death and survivor benefits	127,145	
	- Refunds of member contributions	253,143	
	Total		$ 16,320,897
(2)	Present value of prospective benefits payable on account of present retired and disabled members, and beneficiaries of deceased members		
	- Service retirement benefits	$ 19,152,047	
	- Disability retirement benefits	802,232	
	- Death and survivor benefits	772,112	
	Total		$ 20,726,391
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 381,559
(4)	TOTAL ACTUARIAL LIABILITIES		$ 37,428,847
	PRESENT AND PROSPECTIVE ASSETS		
(5)	Actuarial value of assets		$ 18,514,638
(6)	Present value of total future contributions = (4)-(5)	$ 18,914,209	
(7)	Present value of future member contributions and employer normal contributions		4,608,961
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		14,305,248
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 37,428,847

Schedule A – Valuation Balance Sheet and Solvency Test

SOLVENCY TEST
(in millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2012	$3,415.2	$16,472.2	$7,086.4	$14,691.4	100%	68%	0%
6/30/2013	3,514.4	17,716.4	7,586.5	14,962.8	100	65	0
6/30/2014	3,629.7	18,676.3	7,878.3	16,174.2	100	67	0
6/30/2015	3,700.6	19,522.5	7,926.8	17,219.5	100	69	0
6/30/2016	3,756.0	20,416.4	7,855.8	17,496.9	100	67	0
6/30/2017	3,849.9	21,108.0	7,862.1	18,514.6	100	69	0

Schedule B – Development of the Actuarial Value of Assets

AS OF JUNE 30, 2017

(1)	Actuarial Value of Assets Beginning of Year		$ 17,496,894,437
(2)	Net Position at Market Value at End of Year		18,707,699,025
(3)	Net Position at Market Value at Beginning of Year		16,812,831,883
(4)	Cash Flow		
	a.	Contributions	1,374,345,427
	b.	Benefit Payments	1,944,917,368
	c.	Administrative Expense	10,313,715
	d.	Net: (4)a – (4)b – (4)c	(580,885,656)
(5)	Investment Income		
	a.	Market total: (2) – (3) – (4)d	2,475,752,798
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,239,179,179
	d.	Amount for Phased-In Recognition: (5)a – (5)c	1,236,573,619
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	247,314,724
	b.	First Prior Year	(312,346,803)
	c.	Second Prior Year	(92,160,668)
	d.	Third Prior Year	325,163,609
	e.	Fourth Prior Year	191,479,441
	f.	Total Recognized Investment Gain	359,450,303
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 18,514,638,263
(8)	Difference Between Market & Actuarial Values: (2) – (7)		$ 193,060,762
(9)	Net Investment Rate of Return on Actuarial Value:		9.29%

Schedule C – Summary of Receipts and Disbursements

SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2017	June 30, 2016
Receipts for the Year		
Contributions		
Members	$ 313,625,434	$ 313,044,226
Employers	1,060,719,993	565,454,590
Total	1,374,345,427	878,498,816
Net Investment Income	2,475,752,798	(245,214,860)
TOTAL	$ 3,850,098,225	$ 633,283,956
Disbursements for the Year		
Benefit Payments	$ 1,918,612,128	$ 1,833,198,630
Refunds to Members	26,305,240	27,747,742
Miscellaneous, including expenses	10,313,715	8,636,438
TOTAL	$ 1,955,231,083	$ 1,869,582,810
Excess of Receipts over Disbursements	$ 1,894,867,142	$ (1,236,298,854)
Reconciliation of Net Position		
Net Position as of the Beginning of the Year	$ 16,812,831,883	$ 18,049,130,737
Excess of Receipts over Disbursements	1,894,867,142	(1,236,298,854)
Net Position as of the End of the Year	$ 18,707,699,025	$ 16,812,831,883
Net Investment Rate of Return on Market Value	15.0%	(1.0)%

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

Schedule D – Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually, including price inflation at 3.00% per annum.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.50% per annum:

Age	Annual Rate
20	7.20%
25	6.40
30	5.40
35	4.70
40	4.20
45	3.80
50	3.70
55	3.50
60	3.50
65	3.50

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before	After
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	27 Years of Service	27 Years of Service*
20	0.019%	0.01%	11.00%				
25	0.021	0.01	11.00	3.00%			
30	0.025	0.01	11.00	3.00	3.00%		
35	0.043	0.04	12.00	3.50	1.40		
40	0.060	0.09	12.00	4.50	1.40		
45	0.084	0.20	12.00	4.50	1.30		17.0%
50	0.119	0.30	14.00	4.50	1.90		17.0
55	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	1.556	0.75	20.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.

Schedule D – Outline of Actuarial Assumptions and Methods

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	9.00%				
25	0.008	0.01	9.00	4.00%			
30	0.010	0.03	12.00	4.00	1.65%		
35	0.018	0.06	12.00	4.00	1.50		
40	0.026	0.12	12.00	4.00	1.30		
45	0.042	0.25	13.00	4.00	1.20		15.0%
50	0.062	0.44	13.00	5.00	1.50		18.0
55	0.096	0.65	15.00	5.00	2.00	5.5%	50.0
60	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	0.831	0.85	15.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Service Retirement Female	Disability Retirement Male	Disability Retirement Female
45	0.1609%	0.1135%	2.3306%	1.2482%
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074

Schedule D – Outline of Actuarial Assumptions and Methods

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

Schedule E – Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently at 7.50%), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

Schedule F – Summary of Main System Provisions

AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2017. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to: (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus (b) 2.5% of final average salary multiplied by service after July 1, 1983. (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.

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For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Schedule F – Summary of Main System Provisions

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under 27 years of service but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased TRS active and retired members.

Schedule F – Summary of Main System Provisions

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

Schedule G – Tables of Employee Data

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2017 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	3,124	1							3,125
Total Pay	68,700,220	36,417							68,736,637
Avg. Pay	21,991	36,417							21,996
25 to 29	5,751	1,743	7						7,501
Total Pay	198,454,302	85,098,224	334,900						283,887,426
Avg. Pay	34,508	48,823	47,843						37,847
30 to 34	2,848	4,611	1,634	4					9,097
Total Pay	90,403,505	233,923,522	94,411,429	227,633					418,966,089
Avg. Pay	31,743	50,732	57,779	56,908					46,055
35 to 39	2,295	2,148	4,704	1,350	5				10,502
Total Pay	65,212,518	109,964,711	281,588,809	86,949,175	337,006				544,052,219
Avg. Pay	28,415	51,194	59,862	64,407	67,401				51,805
40 to 44	1,760	1,437	2,082	4,055	1,030	3			10,367
Total Pay	46,610,992	74,259,161	124,959,603	269,604,678	72,709,546	214,424			588,358,404
Avg. Pay	26,484	51,677	60,019	66,487	70,592	71,475			56,753
45 to 49	1,436	1,141	1,563	2,184	3,465	995	1		10,785
Total Pay	36,545,406	58,561,919	92,906,582	141,902,471	242,973,570	73,378,613	87,283		646,355,844
Avg. Pay	25,449	51,325	59,441	64,974	70,122	73,747	87,283		59,931
50 to 54	1,218	666	987	1,260	1,491	1,787	368	2	7,779
Total Pay	25,538,756	33,551,742	59,055,800	81,571,155	103,905,594	133,441,307	27,737,810	137,175	464,939,339
Avg. Pay	20,968	50,378	59,834	64,739	69,689	74,673	75,374	68,588	59,769
55 to 59	1,510	441	637	905	1,009	761	252	30	5,545
Total Pay	22,703,041	19,579,701	37,444,127	57,909,611	71,553,184	59,400,531	22,546,672	2,780,424	293,917,291
Avg. Pay	15,035	44,398	58,782	63,989	70,915	78,056	89,471	92,681	53,006
60 to 64	1,801	339	319	535	513	341	88	48	3,984
Total Pay	22,241,812	13,685,508	19,054,170	35,872,033	37,662,676	26,514,686	8,020,781	4,303,664	167,355,330
Avg. Pay	12,350	40,370	59,731	67,051	73,417	77,756	91,145	89,660	42,007
65 & over	2,176	505	146	186	175	137	68	52	3,445
Total Pay	18,334,805	11,267,510	8,493,619	12,919,583	12,962,784	11,860,877	6,223,797	4,952,788	87,015,763
Avg. Pay	8,426	22,312	58,175	69,460	74,073	86,576	91,526	95,246	25,259
Total	23,919	13,032	12,079	10,478	7,689	4,024	777	132	72,130
Total Pay	594,745,357	639,928,415	718,249,039	686,956,339	542,104,360	304,810,438	64,616,343	12,174,051	3,563,584,342
Avg. Pay	24,865	49,104	59,463	65,562	70,504	75,748	83,161	92,228	49,405

Average Age: 43.5 Average Service: 10.8

Schedule G – Tables of Employee Data

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES
AND THEIR BENEFITS BY AGE
AS OF JUNE 30, 2017

Attained Age	Number of Members	Total Annual Payment	Average Annual Benefits
49 & Under	839	$ 11,271,278	$ 13,434
50 – 54	1,355	53,461,765	39,455
55 – 59	4,100	177,488,529	43,290
60 – 64	8,441	346,499,640	41,050
65 – 69	13,307	516,625,458	38,824
70 – 74	10,572	389,151,744	36,810
75 – 79	6,570	229,669,782	34,957
80 – 84	3,969	127,197,393	32,048
85 – 89	2,373	67,342,576	28,379
90 & Over	1,440	34,755,811	24,136
Total	52,966	$ 1,953,463,976	$ 36,881

Average Current Age: 69.5 Average Age at Retirement: 56.0

Schedule G – Tables of Employee Data

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Fiscal Year Ending June 30	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase In Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2008	2,183	$90.6	950	$19.4	40,739	$1,206.8	6.3%	$29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1%	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6%	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0%	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4%	33,089
2013	2,303	105.7	991	22.2	47,406	1,608.7	5.5%	33,934
2014	2,146	99.6	976	23.4	48,576	1,684.9	4.7%	34,685
2015	2,917	119.1	1,671	36.3	49,822	1,767.6	4.9%	35,479
2016	2,753	128.2	1,012	26.9	51,563	1,868.9	5.7%	36,244
2017	2,638	119.8	1,235	35.2	52,966	1,953.5	4.5%	36,881

Schedule G – Tables of Employee Data

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("TRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background:

State law provides that the retirement benefits promised to members of TRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in TRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state—as plan guarantor—is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $520 million (Fiscal Year 2017). The following schedule details the growth of the annual retirement appropriations payable by the state:

Schedule G – Tables of Employee Data

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	520,372,000

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2014).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

Schedule G – Tables of Employee Data

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which—if paid—will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

- Use the Entry Age Normal actuarial cost method;
- Use a five-year asset smoothing method;
- Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
- Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
- Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and TRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

INTRODUCTORY SECTION

for Fiscal Year ending June 30, 2005

Chairperson's Letter

Teachers' Retirement System of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

BOARD OF TRUSTEES

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OF EDUCATION

EX OFFICIO
JONATHAN MILLER
STATE TREASURER

December 16, 2005

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2005, the 65th year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

KTRS closed the 2004-2005 fiscal year with $13.6 billion net assets. The active membership totaled 72,281 and the retired membership was 37,402 with an annual payroll of $963 million.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. The retirement system is justly proud of the funding level that the system has achieved. Every effort will be made to insure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Arthur W. Green
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 16, 2005

Honorable Ernie Fletcher, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky 40601-3800

Dear Governor Fletcher:

It is my pleasure to submit the 65th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a Component Unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2005.

State law provides the legal requirement for the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system are also required.

Kentucky Teachers' Retirement System (KTRS) has produced an annual report that will provide you, the General Assembly, and the general public, with information necessary to gain a better understanding of the Teachers' Retirement System.

This Report Consists of Five Sections:

❖ The Introductory Section contains the Board Chairperson's letter, this letter of transmittal, Board of Trustees information, a list of consultants used by the System, and the organizational chart.

❖ The Financial Section contains the report of the independent auditors, management's discussion and analysis (MD&A), financial statements and required supplementary schedules. Charles T. Mitchell, LLP conducted the 2005 independent audit.

❖ The Investment Section presents investment and portfolio performance. This includes the policies, summary, and profile of the System's holdings.

❖ The Actuarial Section contains the certification from Cavanaugh Macdonald Consulting, LLC (the consulting actuary service) as well as the results of the System's actuarial valuation.

❖ The Statistical Section contains various information on the System's membership, both active and retired. A listing of all participating KTRS employers is also presented in this section.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of the System for the year ended June 30, 2005. Discussion and analysis of net assets and related additions and deductions is presented in the MD&A beginning on page 15.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are accurately executed and financial statements are fairly presented. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Director.

Profile of KTRS

Kentucky Teachers' Retirement System was established on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement benefits to the educators and some public employees of the state. KTRS is a blended component unit of the Commonwealth of

Kentucky. The plan is described in the notes to the basic financial statements on page 21. Also, the summary of the plan provisions starting on page 76 is useful in understanding benefit and contribution provisions. The population of our membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the pension fund. The budget is approved by the Board of Trustees and then submitted to the Kentucky General Assembly for legal adoption. The KTRS investment earnings fund the budget appropriations.

Economic Condition

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 46 contains detailed analysis of investments. This section includes asset allocations, rates of return, discussion of the current year market environment and 10 year historical trend schedules.

The investment portfolio experienced significant growth during the 2004-2005 fiscal year. The portfolio's par value increased from $12,742,427,524 to $12,899,431,557. The growth of the portfolio was due to investment income that included realized capital gains. Employer and employee contributions also provided significant income to the portfolio.

Investment earnings, including appreciation of asset values, net of investment expenses for the 2004-2005 fiscal year were $952,589,572. The majority of earnings from the System's investment portfolio were the result of net appreciation in fair value of investments in the amount of $512,314,384. The second largest earnings component, $249,085,516 was the result of interest income. Other income of $213,314,936 was generated from dividends, rent and securities lending.

According to KRS 161.430 the KTRS Board of Trustees has the authority to invest the assets of the System. The Board of Trustees, generally, delegates investment authority to an Investment Committee that is comprised of two Trustees and the System's Executive Secretary. The Investment Committee works closely with experienced investment counselors, who are contracted by the Board of Trustees, and the System's professional staff in evaluating and selecting investments.

On the state level, KTRS annuities have a bolstering impact on the state's economy, since around 93% of retired teachers reside in Kentucky. Total benefits (retirement, medical…etc.) paid last year were over $1.1 billion.

Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes the levels of contribution by statute that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

The latest actuarial valuation was for the period ending June 30, 2005. This report reflects the System's assets, based on modified market value; totaled $14.6 billion and the liabilities totaled $19.1 billion. The actuary determined that the existing levels of contribution by members and employers would be sufficient to fund all of the System's liabilities within a reasonable period of time. The report concludes that the System is operating on an actuarially sound basis. Assuming that employer contributions continue in the future at rates recommended on the basis of the successive actuarial valuations, the actuary states that the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

KTRS Medical Insurance Plan

KTRS health care costs keep escalating at a much faster clip than revenue growth in the Medical Insurance Plan. Last year, basic doctor/ hospital costs and the cost of medications (prescription drugs) rose about 6.4%. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2005 indicated that the fund has an unfunded liability of $3

billion for 2005. The KTRS 2004-2006 biennial budget requested additional funding from the Commonwealth, but due to difficult economic times, these funds were not available.

Effective January 1, 1999 KTRS retirees and dependents under the age of 65 have their health insurance provided by plans managed by the Kentucky Department for Employee Insurance. Under this arrangement, KTRS provides a monthly supplement to assist the retiree and their dependents in purchasing their health insurance. Retirees 65 and over remain in the plan administered by KTRS. These retirees also receive a supplement for the cost of their coverage.

The System realizes that these means alone will not solve the medical insurance funding crisis. Additional steps must be taken through legislation on both the state and national levels in order for true cost control to result. Meanwhile, KTRS will address the problem by taking measures to contain costs and by increasing revenues to the insurance fund, adjusting coverage to meet existing revenues, or a combination of the two.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the KTRS. A certification from the certified public accountant and actuary are enclosed in this report. The system's consultants who are appointed by the Board are listed on pages 8 and 47 of this report.

Our Gratitude

Miss Virginia Murrell of Somerset left the Board of Trustees effective June 30, 2005. Miss Murrell represented retired members on the KTRS Board beginning in July 1988 and served as Board Chair from July 1991-June 2005.

Ms. Murrell was a most dedicated member of the Board of Trustees. During her tenure, policies were adopted that greatly improved benefits for Kentucky's retired educators, including the calculation of the retirement benefit on the three highest salary years of employment upon reaching age 55 and 27 years of service, the addition of the 3.0 percent multiplier for educators retiring with more than 30 years of service, and the addition of part-time teachers and substitute teachers to the KTRS field of membership.

On behalf of Kentucky's educators, KTRS staff extends thanks to Miss Murrell for her commitment and dedicated service to the Kentucky Teachers' Retirement System and wishes her the greatest happiness in the future.

Julian M. Carroll of Frankfort resigned from the Board of Trustees due to his election to the State Senate. Senator Carroll served as a lay trustee from July 1, 2003 until December 31, 2004.

During Senator Carroll's tenure as governor of Kentucky, he signed into law a bill providing that 3.25 percent of an educator's pay be added to the funding of retirement benefits through a supplemental contribution from the state budget. This supplemental funding has been key to bringing the KTRS funded level from 22 percent funded to the actuarially sound funded level of 83 percent, and these continuing contributions will allow the balance of unfunded benefits to be amortized in an actuarially sound fashion through annual allocations from the state budget.

We thank Senator Carroll for his service to the Kentucky Teachers' Retirement System and wish him well as he continues his dedication to public service in the State Senate.

National Recognition

The System was honored by two National professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2004. The Certificate of Achievement is a

prestigious national award-recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement a government unit must publish an easily readable and efficiently organized comprehensive annual financial report whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The KTRS has received the Certificate of Achievement for the last seventeen consecutive years (fiscal years ended 1988-2004). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2005 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

The PPCC is a coalition of the four major public pension organizations in the nation. These include the National Association of State Retirement Administrators, The National Council on Teacher Retirement, the National Conference on Public Employees Retirement Systems, and the Government Finance Officers Association.

NCTR Executive Committee

Gary L. Harbin was recently selected to serve on the Executive Committee of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 77 state, territorial, local and university pension systems with combined assets in excess of 1.4 trillion, serving more than 16 million active and retired teachers, non-teaching personnel and other public employees.

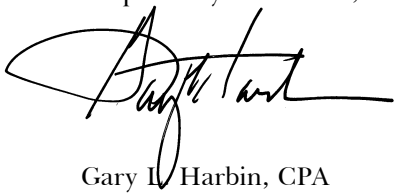
Acknowledgments

The preparation of this report reflects the combined efforts of the KTRS staff under the leadership of the Board of Trustees. It is intended to provide complete and reliable information. This information serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship for the assets contributed by the members and their employers.

This report is being mailed to all employer members of the System who form the link between KTRS and its members. Their cooperation continues to contribute significantly to the success of KTRS. Hopefully, the employers and their employees will find this report both informative and helpful. This report is also located at our web address www.ktrs.ky.gov.

KTRS is totally committed to the continued operation of an actuarially sound retirement system. The support that you have demonstrated in the past is an essential part of this commitment, and we look forward to continuing this good relationship in the future.

Respectfully submitted,



Gary L. Harbin, CPA
Executive Secretary

BOARD OF TRUSTEES

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Dept. of Education

Jonathan Miller
Ex Officio Trustee
State Treasurer

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

GARY L. HARBIN, CPA
Executive Secretary

C. JOE HUTCHISON, MBA, CPA
Deputy Executive Secretary

PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

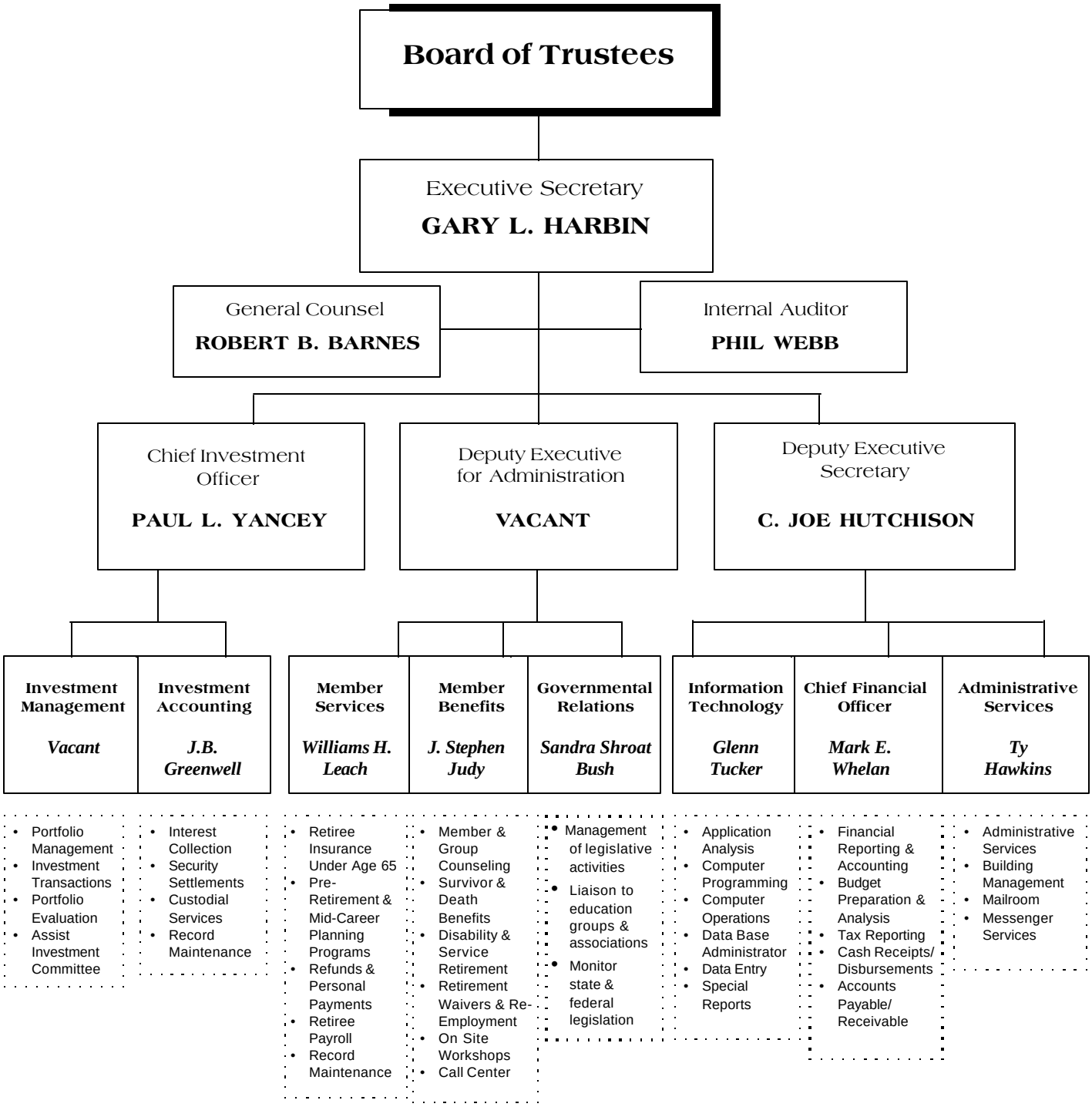
Cavanaugh Macdonald Consulting, LLC
665 Molly Lane, Suite 150
Woodstock, Georgia 30189

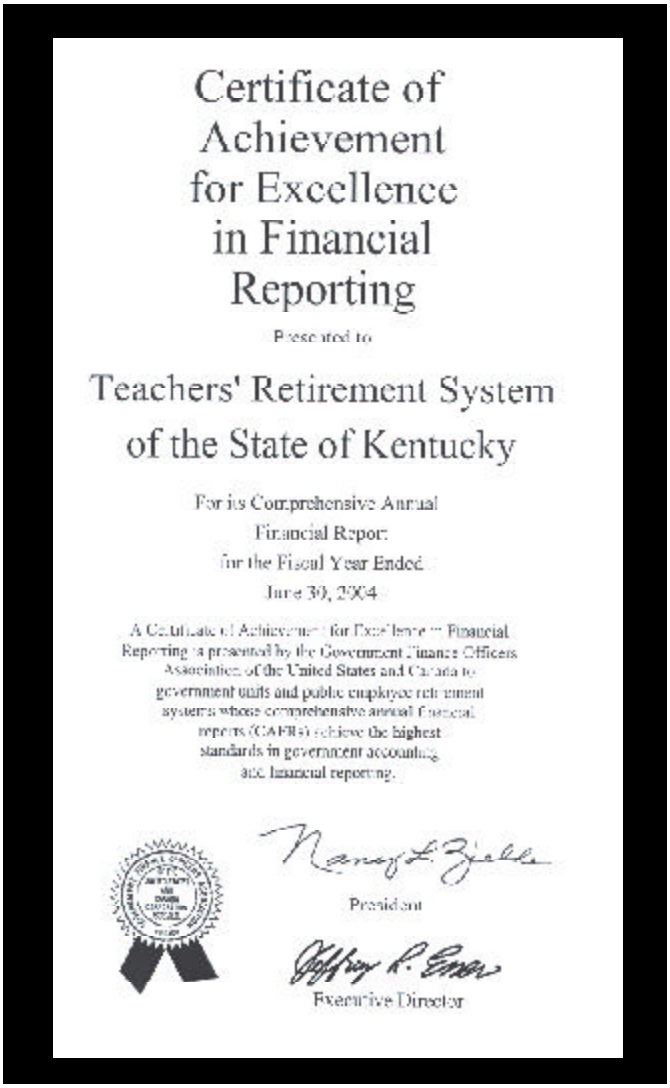
AUDITOR

Charles T. Mitchell, LLP
201 West Main Street
P.O. Box 698
Frankfort, Kentucky 40601

** See page 47 of the Investment Section for investment consultants.*

Kentucky Teachers' Retirement System
Organizational Chart





Certificate of Achievement for Excellence in Financial Reporting

Presented to

Teachers' Retirement System of the State of Kentucky

For its Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2004

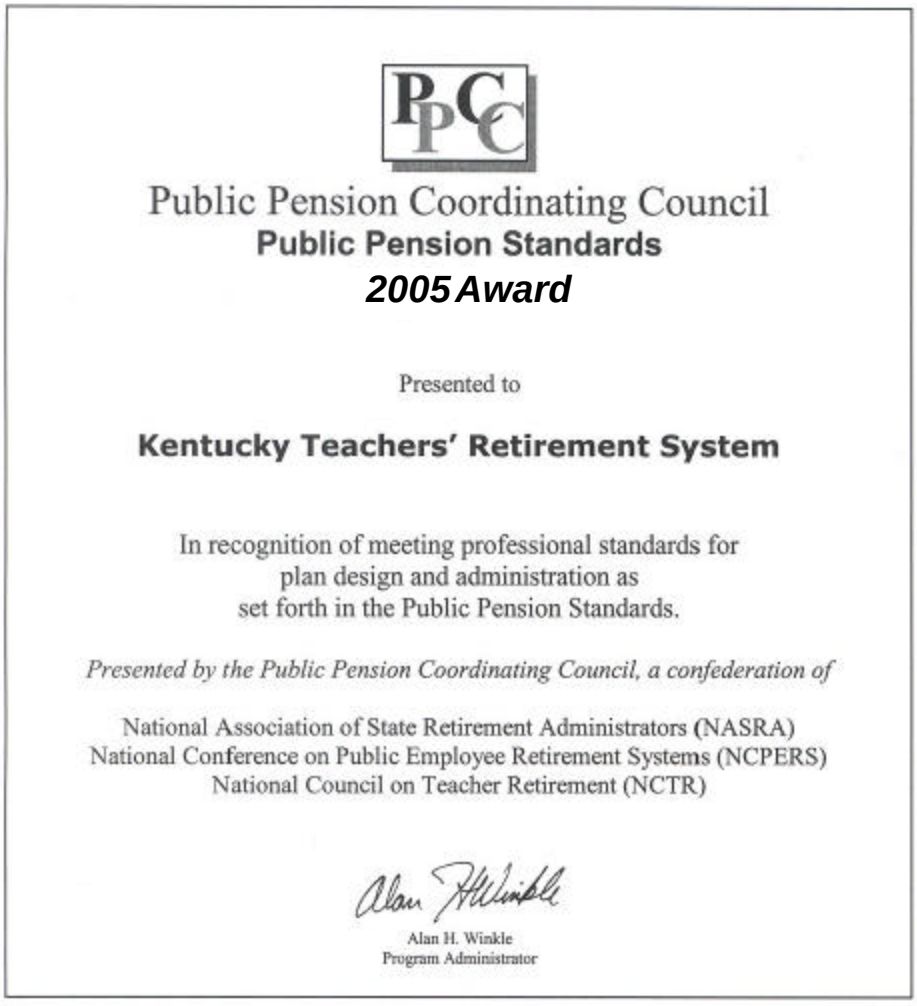
A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

President

Executive Director

GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last seventeen consecutive years (fiscal years ended 1988-2004).



Public Pension Coordinating Council
Public Pension Standards
2005 Award

Presented to

Kentucky Teachers' Retirement System

In recognition of meeting professional standards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

PUBLIC PENSION COORDINATING COUNCIL PUBLIC PENSION STANDARDS

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2005 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

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FINANCIAL SECTION

for Fiscal Year ending June 30, 2005

Charles T. Mitchell Company, LLP
Certified Public Accountants
WILLIAM G. JOHNSON, JR., C.P.A.
JAMES CLOUSE, C.P.A.
BERNADETTE SMITH, C.P.A.
KIM FIELD, C.P.A.
GREG MIKLAVCIC, C.P.A.

Consultants
CHARLES T. MITCHELL, C.P.A.
DON C. GILES, CPA

CTM
201 WEST MAIN, P.O. BOX 698
FRANKFORT, KENTUCKY 40602-0698
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INDEPENDENT AUDITOR'S REPORT

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the accompanying statements of plan net assets of the Teachers' Retirement System of the State of Kentucky as of June 30, 2005 and 2004 and the related statements of changes in plan net assets for the years then ended. These component unit financial statements are the responsibility of the Teachers' Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the plan net assets of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, at June 30, 2005 and 2004 and the changes in its plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated December 16, 2005 on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.
The Management's Discussion and Analysis on pages 15-18 are not a required part of the basic financial statements but is supplemental information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplemental information. However, we did not audit the information and express no opinion on it.

The financial section supporting schedules listed in the table-of-contents are presented for the purpose of additional analysis and are not a required part of the basic financial statements. These schedules are the responsibility of the System's management. Such schedules as of and for the year ended June 30, 2005 have been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

We did not audit the data included in the Introductory and Statistical sections of the report and therefore experss no opinion on them.

Charles T. Mitchell Co.

December 16, 2005

MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of Kentucky Teachers' Retirement System's financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2005. Please read it in conjunction with the respective financial statements, which begin on page 19.

USING THIS FINANCIAL REPORT

Because of the long-term nature of a defined benefit pension plan and medical insurance plan, financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. The Statement of Plan Net Assets and Statement of Changes in Plan Net Assets (on pages 19-20) provide information about the activities of the defined benefit plan, medical insurance plan, and the tax-sheltered annuity plan as a whole. The Kentucky Teachers' Retirement System is the fiduciary of funds held in trust for its members.

The Schedule of Funding Progress (on page 37) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (on page 38) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2005, Kentucky Teachers' Retirement System's combined plan net assets increased by $591.1 million – from $13,076.7 million to $13,667.8 million. The following summaries focus on plan net assets and changes in plan net assets of Kentucky Teachers' Retirement System's defined benefit plan, medical insurance plan, and the tax-sheltered annuity plan.

Summary of
Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan 2005	2004	2003	Medical Insurance Plan 2005	2004	2003	TOTAL* 2005	2004	2003
Cash & Investments	$14,144.4	$13,486.8	$12,705.8	$153.3	$159.7	$170.4	$14,297.7	$13,646.5	$12,876.2
Receivables	110.0	162.9	113.8	2.3	2.7	3.1	112.3	165.6	116.9
Capital Assets	3.3	3.4	3.6				3.3	3.4	3.6
Total Assets	$14,257.7	$13,653.1	$12,823.2	$155.6	$162.4	$173.5	$14,413.3	$13,815.5	$12,996.7
Total Liabilities	(737.7)	(733.5)	(780.7)	(8.3)	(5.8)	(8.0)	(746.0)	(739.3)	(788.7)
Plan Net Assets	$13,520.0	$12,919.6	$12,042.5	$147.3	$156.6	$165.5	$13,667.3	$13,076.2	$12,208.0

**For the 403(b) Tax Shelter Plan cash and investments were approximately .5 million for the years ended 2005 and .6 million for years 2004 and 2003.*

Summary of
Changes In Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan 2005	2004	2003	Medical Insurance Plan 2005	2004	2003	TOTAL 2005	2004	2003
ADDITIONS									
Member Contributions	$247.0	$238.9	$233.4	$51.6	$52.1	$50.7	$298.6	$291.0	$284.1
Employer Contributions	388.3	382.3	341.1	79.0	53.3	77.2	467.3	435.6	418.3
Investment Income (net)	946.1	1,158.2	538.6	6.5	7.1	7.4	952.6	1,165.3	546.0
TOTAL ADDITIONS	$1,581.4	$1,779.4	$1,113.1	$137.1	$112.5	$135.3	$1,718.5	$1,891.9	$1,248.4
DEDUCTIONS									
Benefit Payments	$963.4	$885.3	$817.1				$963.4	$885.3	$817.1
Refunds	11.0	10.5	9.9				11.0	10.5	9.9
Administrative Expense	6.6	6.6	6.4	4.1	3.9	3.7	10.7	10.5	10.1
Insurance Expenses				142.3	117.5	112.2	142.3	117.5	112.2
TOTAL DEDUCTIONS	$981.0	$902.4	$833.4	$146.4	$121.4	$115.9	$1,127.4	$1,023.8	$949.3
Increase (Decrease) in Plan Net Assets	$600.4	$877.0	$279.7	($9.3)	($8.9)	$19.4	$591.1	$868.1	$299.1

Plan net assets of the defined benefit plan increased by 4.65% ($13,520 million compared to $12,919.6 million). The increase is primarily due to continued favorable market conditions which resulted in a net investment gain of $946.1 million. These assets are restricted to providing monthly retirement allowances to members and their beneficiaries.

Plan net assets of the medical insurance plan decreased by 5.95% ($147.3 million compared to $156.6 million) primarily due to insurance expense increases. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

DEFINED BENEFIT PLAN ACTIVITIES

Member contributions increased $8.1 million. Retirement contributions are calculated by applying a percentage factor to salary and are paid in monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions totaled $388.3 million; a net increase of $6 million over fiscal year 2003-2004 contributions.

The System experienced another gain in net investment, although the gain was less than the previous year ($946.1 million gain at June 30, 2005 as compared to a $1,158.2 million gain at June 30, 2004). The increase in fair value of investments is mainly due to continued favorable market conditions for the year ended June 30, 2005, yet in comparison the market was not as strong as the year ended June 30, 2004. This can be illustrated as follows:

(In Millions)	2005	2004	2003
Appreciation (depreciation) in fair value of investments – June 30, prior year	$ 171.0	$ (361.6)	$ (479.3)
Appreciation in fair value of investments – June 30, end of year	575.3	171.0	(361.6)
Change in net appreciation (depreciation) in fair value of investments	404.3	532.6	117.7
Net income (net of investment expenses)	433.8	395.0	396.1
Net gain on sale of investments	108.0	230.5	24.8
Investment Income (net) – June 30, end of year	$ 946.1	$1,158.1	$ 538.6

Program deductions in 2004-2005 increased $78.6 million. The increase was caused principally by an increase of $78.1 million in benefit payments. Members who were drawing benefits as of June 2004 received an increase of 2.3% to their retirement allowances in July 2004. Also, there was an increase of 1,608 members and beneficiaries on the retired payroll as of June 30, 2005.

MEDICAL INSURANCE PLAN ACTIVITIES

During the 2004-2005 fiscal year, member contributions decreased $.5 million and employer contributions increased by $25.7 million over fiscal year 2003-2004. The employer contributions increased primarily because $29.2 million in transition funding was placed in the medical insurance fund from the pension fund at the recommendation of the System's actuary. The amount will be repaid over a ten-year period per KRS 161.553. The employer contribution was based on a 1.77% allocation of employer contributions as compared to 2.05% for fiscal year 2003-2004.

Program deductions increased $24.9 million due to an increase in insurance expenses of $24.8 million. The monthly premiums for retirees under age 65 increased 42% and monthly premiums for retirees age 65 and over increased 9%. The increases in monthly insurance premiums for retirees under age 65 were $13.7 million. The increases in medical claims for retirees age 65 and older were $11.8 million.

Net investment income decreased $.6 million from $7.1 million in 2003-2004 to $6.5 million in 2004-2005. This is due to the recognition of interest income since all investments for the Medical Insurance Plan are short term in nature and the recognition of appreciation in fair value is not feasible. This can be illustrated as follows:

(In Millions)	2005	2004	2003
Appreciation in fair value of investments – June 30, prior year	$ 0	$ 0	$ 0
Appreciation in fair value of investments – June 30 end of year	0	0	0
Net appreciation in fair value of investments	0	0	0
Net income (net of investment expense)	6.5	7.1	7.4
Net gain on sale of investments	0	0	0
Investment Income (net) – June 30	$ 6.5	$ 7.1	$ 7.4

HISTORICAL TRENDS

Accounting standards require that the statement of plan net assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information regarding the actuarial funding status of the defined benefit plan and the medical insurance plan is provided in the Schedule of Funding Progress (beginning on page 37). The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the projected unit credit cost method.

In the past, the defined benefit plan has experienced improvement year to year in its funding position with more than adequate assets to meet pension obligations. The 2004-2005 fiscal year reveals a decline in funding position due to declining financial markets and an increase in actuarial liability.

The medical insurance plan is not as vulnerable to adverse market conditions since its assets are all short term in nature and less likely to experience huge fluctuations. Although, the plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding.

Annual required contributions of the employers and contributions made by the employees in relation to the required contributions are provided in the Schedule of Employer Contributions (on page 38). This schedule indicates that employers are generally meeting their responsibilities to provide resources to the plans.

Statement of Plan Net Assets
As of June 30, 2005 and 2004

	Defined Benefit Plan		Medical Insurance Plan		403(b) Tax Shelter		TOTAL	
	2005	2004	2005	2004	2005	2004	2005	2004
ASSETS								
Cash	$ 10,007,055	$ 3,825,270					$ 10,007,055	$ 3,825,270
Prepaid expenses	111,389	208,394					111,389	208,394
Receivables								
Contributions	25,496,774	28,142,243	$ 2,267,944	$ 2,739,138			27,764,718	30,881,381
State of Kentucky	19,217,940	22,933,239					19,217,940	22,933,239
Investment income	59,206,811	61,238,746			$ 46	$ 19	59,206,857	61,238,765
Investment sales receivable	5,150,651	49,294,598					5,150,651	49,294,598
Installment account receivable	946,715	1,278,604					946,715	1,278,604
Other receivables	23,165						23,165	
Total receivables	110,042,056	162,887,430	2,267,944	2,739,138	46	19	112,310,046	165,626,587
Investments, at fair value (See Note 4)								
Short term investments	1,133,906,547	842,038,540	153,361,225	159,700,807	532,228	560,653	1,287,800,000	1,002,300,000
Bonds and mortgages	4,269,791,312	4,376,987,369					4,269,791,312	4,376,987,369
Common stock	7,612,197,454	7,215,138,496					7,612,197,454	7,215,138,496
Real estate	386,004,453	365,389,453					386,004,453	365,389,453
Total investments	13,401,899,766	12,799,553,858	153,361,225	159,700,807	532,228	560,653	13,555,793,219	12,959,815,318
Invested security lending collateral	732,378,811	683,199,087					732,378,811	683,199,087
Capital assets, at cost net of accumulated depreciation of $1,694,231 (See Note 2)	3,283,385	3,450,696					3,283,385	3,450,696
Total assets	14,257,722,462	13,653,124,735	155,629,169	162,439,945	532,274	560,672	14,413,883,905	13,816,125,352
LIABILITIES								
Liabilities								
Accounts payable	1,229,294	1,139,729					1,229,294	1,139,729
Treasurer's unredeemed checks	11,809	8,933					11,809	8,933
Insurance claims payable			8,312,899	5,798,772			8,312,899	5,798,772
Compensated absences payable	604,988	616,176					604,988	616,176
Revenues collected in advance			5,376	7,009			5,376	7,009
Investment purchases payable	3,499,614	48,604,223					3,499,614	48,604,223
Obligations under securities lending	732,378,811	683,199,087					732,378,811	683,199,087
Total liabilities	737,724,516	733,568,148	8,318,275	5,805,781			746,042,791	739,373,929
Net assets held in trust for pension & post-employment healthcare benefits:	$ 13,519,997,946	$ 12,919,556,587	$ 147,310,894	$ 156,634,164	$ 532,274	$ 560,672	$ 13,667,841,114	$ 13,076,751,423

(See Required Supplemental Schedule 1 for a schedule of funding progress.)

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
For the Years Ended June 30, 2005 and 2004

	Defined Benefit Plan		Medical Insurance Plan		403(b) Tax Shelter		TOTAL	
	2005	2004	2005	2004	2005	2004	2005	2004
ADDITIONS								
Contributions								
Employer	$ 388,346,438	$ 382,280,099	$ 79,022,562	$ 53,346,747			$ 467,369,000	$ 435,626,846
Member	247,024,518	238,922,086	51,576,031	52,122,379			298,600,549	291,044,465
Total contributions	635,370,956	621,202,185	130,598,593	105,469,126	0	0	765,969,549	726,671,311
Investment Income								
Net appreciation (depreciation) in fair value of Investments	512,314,384	763,180,625			$	$ (5,781)	512,314,384	763,174,844
Interest	242,566,500	249,055,825	6,507,537	7,127,109	11,479	10,826	249,085,516	256,193,760
Dividends	162,040,978	118,486,962					162,040,978	118,486,962
Rental income, net	33,121,604	31,532,501					33,121,604	31,532,501
Securities lending, gross earnings	18,152,354	5,988,422					18,152,354	5,988,422
Gross investment income	968,195,820	1,168,244,335	6,507,537	7,127,109	11,479	5,045	974,714,836	1,175,376,489
Less investment expense	(4,670,256)	(4,616,663)					(4,670,256)	(4,616,663)
Less securities lending expense	(17,455,008)	(5,444,984)					(17,455,008)	(5,444,984)
Net investment income	946,070,556	1,158,182,688	6,507,537	7,127,109	11,479	5,045	952,589,572	1,165,314,842
Total additions	1,581,441,512	1,779,384,873	137,106,130	112,596,235	11,479	5,045	1,718,559,121	1,891,986,153
DEDUCTIONS								
Benefits	963,371,539	885,286,089			39,877	41,484	963,411,416	885,327,573
Refunds of contributions	10,975,941	10,471,607	9,072	12,150			10,985,013	10,483,757
Insurance expenses			142,349,436	117,516,186			142,349,436	117,516,186
Administrative expense	6,652,673	6,578,420	4,070,892	3,970,310			10,723,565	10,548,730
Total deductions	981,000,153	902,336,116	146,429,400	121,498,646	39,877	41,484	1,127,469,430	1,023,876,246
Net increase (decrease)	600,441,359	877,048,757	(9,323,270)	(8,902,411)	(28,398)	(36,439)	591,089,691	868,109,907
Net assets held in trust for pension & post employment healthcare benefits								
Beginning of year	12,919,556,587	12,042,507,830	156,634,164	165,536,575	560,672	597,111	13,076,751,423	12,208,641,516
Ending of year	$ 13,519,997,946	$ 12,919,556,587	$ 147,310,894	$ 156,634,164	$ 532,274	$ 560,672	$ 13,667,841,114	$13,076,751,423

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements
Years Ended June 30, 2005 and 2004

Note 1: Description of Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan established to provide pension benefit plan coverage for local school districts and other public educational agencies in the state.

B. PARTICIPANTS

As of June 30, 2005 a total of 198 employers participated in the plan. Employers are comprised of 176 local school districts, 16 Department of Education Agencies and other educational organizations, 5 universities and also the Kentucky Community and Technical College System.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

Active contributing members:	2005	2004
Vested	40,799	40,446
Non-vested	31,482	31,504
Inactive members, vested	4,033	3,003
Retirees and beneficiaries currently receiving benefits	37,402	35,803
Total members, retirees and beneficiaries	**113,716**	**110,756**

C. BENEFIT PROVISIONS

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete 27 years of Kentucky service.

Note 1: Description of Plan continued . . .

Participants that retire before age 60 with less than 27 years of service receive reduced retirement benefits. Non-university members receive monthly payments equal to two (2) percent (service prior to July 1, 1983) and two and one-half (2.5) percent (service after July 1, 1983) of their final average salaries for each year of credited service. University employees receive monthly benefits equal to two (2) percent of their final average salary for each year of credited service. The final average salary is the member's five (5) highest annual salaries except members at least 55 with 27 or more years of service may use their (3) three highest annual salaries. New members (including second retirement accounts started) after July 1, 2002 will receive monthly benefits equal to 2% of their final average salary for each year of service if, upon retirement, their total service is less than ten years. New members after July 1, 2002 who retire with ten or more years of total service will receive monthly benefits equal to 2.5% of their final average salary for each year of service, including the first ten years. In addition, members who retire July 1, 2004 and later with more than 30 years of service will have their multiplier increased for all years over 30 from 2.5% to 3.0% to be used in their benefit calculation.

The system also provides disability benefits for vested members at the rate of sixty (60) percent of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half (1.5) percent annually. Additional ad hoc increases, and any other benefit amendments, must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

KTRS has three cash accounts. At June 30, 2005, the pension cash account totaled $7,701,159; the administrative expense fund cash account was $1,800,897; and the life insurance cash account totaled $504,999; therefore, the carrying value of cash was $10,007,055 and the corresponding bank balance was $11,276,620. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2005.

C. CAPITAL ASSETS

Fixed assets are recorded at historical cost less straight-line accumulated depreciation. The classes of fixed assets are furniture and equipment, the KTRS office buildings and land. Furniture and equipment are depreciated over an average useful life of five to seven years. The office buildings are depreciated over forty years.

Note 2: Summary of Significant Accounting Policies continued . . .

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in plan net assets.

Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by the System's employees are recorded when earned. Upon termination or retirement, employees of the system are paid for accumulated vacation time limited to 450 hours and accumulated compensatory time limited to 200 hours. As of June 30, 2005 and 2004 accrued compensated absences were $604,988 and $616,176.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries, and court challenges to administrative policy are among the various risks to which the system is exposed. In order to cover such risks the system carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation, and equipment insurance.

G. OTHER RECEIVABLES

KTRS now allows qualified purchases of service credit to be made by installment payments not to exceed a five-year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2005 and 2004 installment contract receivables were $946,714 and $1,278,604.

H. USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Note 2: Summary of Significant Accounting Policies continued . . .

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The system's management believes that it has operated the plans within the constraints imposed by federal tax law.

J. ACCOUNTING CHANGES

The System implemented GASB Statement No. 40, *Deposit and Investment Risk Disclosures*, as required. This pronouncement has no impact on the System's net assets, but required additional disclosure, which is presented in Note 4.

The System opted for early implementation of GASB No. 44, *Economic Condition Reporting: The Statistical Section*. See the statistical section for these disclosures.

Note 3: Contributions and Reserves

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Members are required to contribute 9.855% of their salaries to the System. University members are required to contribute 8.375% of their salaries. KRS 161.580 allows each university to reduce the contribution of its members by 2.215%; therefore, university members contribute 6.16% of their salary to KTRS.

The Commonwealth of Kentucky is required to contribute 13.105% of salaries for its non-university members and 13.84% of salaries for university members.

The member and employer contributions consist of pension contributions and post-retirement contributions. The post-retirement contribution .75% finances KTRS' retiree medical insurance plan. In addition to the .75% contribution, employers and the Commonwealth contribute 1.30% for a total of 2.05% to the medical insurance plan.

If an employee leaves covered employment before accumulating five (5) years of credited service, accumulated employee contributions plus interest are refunded to the employee upon the member's request.

B. RESERVES

Member Reserve

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes

interest authorized by the Board of Trustees from Unallocated Reserves. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Benefit Reserves, the fund from which retirement benefits are paid.

Employer Reserve

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky. While fiscal year 2004 resulted in a receivable (under-appropriation) from the state, the analysis of fiscal year 2005 has resulted in an over-appropriation. The net effect is a receivable from the state.

Benefit Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

Unallocated Reserve

This fund was established by KRS 161.420(6) as the Guarantee Fund to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of the System, and deficiencies not covered by the other funds.

Administrative Expense Reserve

This fund was established by KRS 161.420(1) as the Expense Fund. Monies transferred to this fund from Unallocated Reserves are used to pay the administrative expenses of the System.

Life Insurance Reserve

This fund was established pursuant to the provisions of KRS 161.655 to provide a life insurance benefit to retired and active members of the Kentucky Teachers' Retirement System. This benefit is financed by KTRS employer contributions that are actuarially determined.

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of KTRS' financial statements assess the risks KTRS takes in investing public funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers defined in KRS 161.430. The parameters as outlined in Title 102, Chapter 1.175, Section 2 of the Kentucky Administrative Regulations are as follows:

- There shall be no limit on the amount of investments owned by the System that are guaranteed by the U.S. Government.
- Not more than thirty-five percent (35%) of the assets of the System at book value shall be invested in corporate debt obligations.
- Not more than sixty percent (60%) of the assets of the System at book value shall be invested in common stocks or preferred stocks. Not more than twenty-five percent (25%) of the assets of the System at book value shall be invested in a stock portfolio designed to replicate a general, United States stock index.
- Not more than ten percent (10%) of the assets of the System at book value shall be invested in real estate. This would include real estate equity, real estate lease agreements, mortgages on real estate that are not guaranteed by the U.S. Government, and shares in real estate investment trusts.
- Not more than one percent (1%) of the assets of the System at book value shall be invested in venture capital investments, providing at least seventy-five percent (75%) of such investments must be in-state.
- Not more than ten percent (10%) of the assets of the System book value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments. Within this parameter, to further diversify the portfolio, the Board approved provisions that permit the limited ownership of both foreign equities and timberland.

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the retirement system's deposits may not be returned to the system. The System's total bank balance at June 30, 2005 was $11,276,620, of which $6,087,534 represents deposited amounts due the System for which actual funds are in transit to and waiting to be received by the custodial bank; therefore, these funds were unavailable for investment. The remaining bank balance amount of $5,189,086 was the amount invested in cash equivalents.

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Cash equivalents are created through the daily sweeps of available excess cash by the System's custodial bank into bank sponsored short-term investment funds. These funds are custodial bank sponsored commingled funds which are invested in short-term securities backed by the U.S. Government and its agencies. The actual cash deposits held in bank accounts are insured up to $100,000 as covered by federal depository insurance and uncollateralized until being invested in cash equivalents.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,

b. collateralized with securities held by the pledging financial institution, or

c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2005 the System's cash equivalents in the amount of $5,189,086 were not exposed to custodial credit risk since this amount was invested by the custodial bank and collateralized at 102% with the collateral pledged to the Treasurer of the Commonwealth of Kentucky.

C. INVESTMENTS

All of the System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity securities, and real estate. These assets are reported at fair market value.

Investments are governed by the Board of Trustees' policy while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

The following chart represents the fair market values of the investments of the Kentucky Teachers' Retirement System for June 30, 2005.

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments

	June 30, 2005	June 30, 2004
Short Term Investments		
Repurchase Agreements	$ 1,287,800,000	$ 1,002,300,000
Total Short Term Investments	$ 1,287,800,000	$ 1,002,300,000
Bonds and Mortgages		
U.S. Government Obligations		
Treasury Notes & Bonds	$ 1,224,201,754	$ 1,106,798,881
Agencies	1,150,974,690	1,101,943,172
GNMA (Single Family)	39,496,335	56,075,979
Other Miscellaneous	130,140,221	163,517,120
Total U.S. Government Obligations	$ 2,544,813,000	$ 2,428,335,152
Corporate Bonds		
Industrial	$ 591,007,453	$ 655,562,791
Finance	886,000,915	1,001,883,461
Utility Bonds (Except Telephone)	112,350,505	128,647,999
Telephone Bonds	80,660,662	109,896,206
Total Corporate Bonds	$ 1,670,019,535	$ 1,895,990,457
Other Fixed Income Investments		
FHA and VA Single Family Mortgages	$ 6,526	$ 34,182
Project Mortgages (FHA & GNMA)	18,317,771	26,760,755
State and Local Government Issues	36,634,480	25,866,823
Total Other Investments	$ 54,958,777	$ 52,661,760
Total Bonds and Mortgages	$ 4,269,791,312	$ 4,376,987,369
Stocks	$ 7,612,197,454	$ 7,215,138,496
Real Estate	386,004,453	365,389,453
Total Investments	$ 13,555,793,219	$ 12,959,815,318

This schedule does not include $732,378,811 securities lending collateral.

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of a counterparty, the pension trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system, and are held by either:

a. the counterparty or
b. the counterparty's trust department or agent, but not in the System's name.

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The cash reserve of the System is maintained in high quality short-term investments. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, banker's acceptances, and repurchase agreements are all permissible investments. The System utilized investment instruments it regards as the most secure and having the best returns and does not use short-term investments that finance foreign businesses unless they are issued and guaranteed by the United States Government.

Individual repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers under terms dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS's nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a market value of at least 102% of the value of the repurchase agreements.

In addition to the System's $13.5 billion in investments at June 30, 2005, cash collateral reinvestment securities acquired through securities lending by the System's custodian, whom is also the lending agent/counterparty amounted to $732,378,811. This is consistent with the System's securities lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Interest Rate Risk

Interest Rate Risk on investments is the possibility that changes in interest rates will reduce the fair value of the retirement System's investments. In general, the longer the period until an investment matures, the greater the negative impact that changes in interest rates can have on fair value.

As of June 30, 2005 KTRS had the following investments and weighted average maturities:

Investment Type		Fair Value	Average Maturity (Yrs)
U.S. Treasuries	$	1,328,668,758	10.6
Agencies		1,150,974,690	7.8
Corporate Bonds		1,670,019,535	7.7
Mortgage Pass-Throughs		57,820,633	23.0
State & Local Govt Issues		36,634,481	15.2
Collateralized Mortgage Obligations		25,673,217	14.2
Totals	$	4,269,791,314	8.9

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

In addition to the above securities, Repurchase Agreements (short-term investments) had a total fair value of $1,287,800,000 with an average maturity of 6.6 days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage pass-throughs and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

The System does not have a formal investment policy that limits investment maturities as a means of managing its exposure to potential fair value losses arising from future changes in interest rates. Market or interest rate risk is the greatest risk faced by an investor in the debt securities market. The price of a debt security typically moves in the opposite direction of the change in interest rates. Mortgages held by the System are fixed interest rate mortgages.

Collateralized mortgage obligations (CMOs) are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a CMO's established payment order. The System held $25.7 million in CMOs as of June 30, 2005.

Asset-backed securities (ABS) are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other credit providers. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. ABSs have been structured as pass-throughs and as structures with multiple bond classes. The ABSs held by the system and reported in the corporate bond category above are moderately sensitive to changes in interest rates.

Credit Risk

Credit risk is the risk than an issuer or counterparty to an investment will not fulfill its obligations. The following schedule lists KTRS's investments according to credit ratings as of June 30, 2005:

Rating	Fair Value
Repurchase Agreements	$ 1,287,800,000
Agency	1,223,268,858
AAA	361,306,848
AA	540,470,393
A	703,107,607
BBB	99,122,448
BB	4,180,000
B	1,486,875
CCC	8,179,525
Total	$ 4,228,922,554

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Total market value of the short-term and the fixed income portfolio was $5,557,591,312 on June 30, 2005. In addition to the above investments, there were securities owned totaling $1,328,668,758 in U.S. Treasury Issues, which are obligations of the U.S. Government. The rating system used in the chart is the nationally recognized Standard and Poor's rating system. The credit risk associated with repurchase agreements and Agency investments is very minimal as the general rating of these securities is higher than AAA. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

The System's policy on credit rating as stated in 102 KAR 1:175 is that:

"A fixed income investment shall be rated at the time of purchase within the three (3) highest credit classifications identified by one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. Notwithstanding the foregoing, the fixed income investment portfolio as a whole shall maintain an average rating equal to at least the second highest credit classification."

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the System is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or one (1) of its agencies, the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the system at book value."

"The System's position in a single stock shall not exceed two (2) percent of the System's assets at book value. The System's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program approved by the Board of Trustees or the Investment Committee."

KTRS has not invested greater than five percent (5%) of the System's assets at book value in any single issuer and is in compliance with the System's policies as stated here.

Foreign Currency Risk

As of June 30, 2005, KTRS had no exposure to foreign currencies.

Any stocks held associated with foreign interest are American Depository Receipt (ADR) investments which are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. ADRs are denominated in U.S. currency.

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The System's policy regarding foreign equities is that "Not more than 10% of the assets of the System at book value shall be invested in any additional category or categories of investments …. Within this parameter, to further diversify the portfolio, the Board approved provisions that permit the limited ownership of both foreign equities and timberland."

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the System. The System operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and selected domestic stocks and bonds are the types of securities that are lent. The System's sub-custodian, The Bank of New York, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the System.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. The following section details the net income earned from securities lending for the fiscal year ended June 30, 2005:

Item		Earnings
Gross Earnings (Interest and fees)		$ 18,152,354
Less:	Gross Borrower Rebates	17,156,131
	Bank Fees	298,815
	Other	62
Net Earnings		$ 697,346

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York) also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. As of June 30, 2005 the loan maturity was one day and the weighted average maturity of cash collateral investments was one day.

At fiscal year end, the System has no credit risk exposure to borrowers, since the amounts the System owes the borrowers exceeds the amounts the borrowers owe the System and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The System minimizes interest rate risk by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2005:

Type of Security Lent	Fair Value	Cash Collateral Received Non-cash Collateral Value*
U.S. Government and Agencies	$ 709,418,771	$ 723,250,887
U.S. Equities	8,916,322	9,127,924
Total	$ 718,335,093	$ 732,378,811

**Represents value of cash collateral only. Loan or margin collateral requirements met via the use of non-cash collateral (e.g. Government securities or Letters of Credit) are excluded from these values.*

Note 5: Medical Insurance Plan & Post-Employment Benefits

A. PLAN DESCRIPTION

In addition to the required pension benefits described in Note 1, Kentucky Revised Statute 161.675 allows KTRS to provide post-retirement healthcare benefits to members and dependents. To be eligible for medical benefits, the member must have retired either for service or disability, attain age 55 with 5 years of Kentucky service or had 27 years of Kentucky service.

The KTRS self-insured plan is limited to KTRS members and spouses at least the age of 65. All KTRS members under the age of 65 are offered commercial insurance through a state insurance purchasing pool administered by the Kentucky Personnel Cabinet. The Personnel Cabinet's primary function is to negotiate contracts with health plans to obtain the best price for persons covered. KTRS members were given a supplement to be used for payment of their health insurance premium. The amount of the member's supplement was based on the member's service credit and age. Premiums over the monthly supplement are paid by the member. The system bears no risk for excess claims expenses under the commercial insurance coverage.

KTRS members and spouses at least age 65 in the KTRS self-insured plan are also given a supplement based on service credit. Members with 20 or more years of service received the highest supplement.

At June 30, 2005, KTRS insurance covered 29,611 retirees and 6,493 dependents.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Medical Insurance Plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

C. CONTRIBUTIONS

The post-retirement healthcare provided by KTRS is financed on a pay-as-you-go basis. In order to fund the post-retirement healthcare benefit, one and five tenths percent (1.5%) of the gross annual payroll of all active members is contributed. One-half (1/2) of this amount is

Note 5: Medical Insurance Plan & Post-Employment Benefits continued . . .

derived from member contributions and one-half (1/2) from state appropriation. Also, the premiums collected from retirees as described in the plan description help meet the medical expenses of the plan.

Since medical expenses have skyrocketed in the last decade, it has become increasingly difficult to meet the expenses of the retiree health insurance program. To fund the plan, the state legislature has approved additional funding of 1.02% of payroll from the employer matching contribution to the Medical Insurance Plan.

D. INCURRED BUT NOT REPORTED CLAIMS LIABILITIES

July 1, 1991 KTRS became self-insured assuming all liability for post-retirement healthcare costs. Effective January 1, 1997, insurance plan participants under age 65 were offered insurance through a state purchasing pool. KTRS recognizes estimates of liabilities for self-insured unpaid claims that have incurred (both reported and unreported) using the development method. This method uses past observed patterns of time between the date the claim is incurred and the date the claim is paid to estimate incurred claims from available paid claim information. The following schedule shows the change in the claims and liability and the claims activity for the years ended June 30, 2005 and 2004.

	Fiscal Year 2005	Fiscal Year 2004
Beginning Unpaid Claims Liability	$ 5,798,772	$ 7,664,801
Claims Incurred		
Current Year	140,105,734	121,341,666
Increase (Decrease) in Prior Years	2,243,702	(2,044,308)
Total Incurred Claims	$ 142,349,436	$ 119,297,358
Claims Paid		
Current Year	$ 133,632,780	$ 116,547,744
Prior Years	6,202,530	4,615,643
Total Payments	$ 139,835,310	$ 121,163,387
Ending Unpaid Claims Liability	$ 8,312,898	$ 5,798,772

E. ADMINISTRATIVE EXPENSES

The total administrative expenses of $4,070,892 are processing fees paid to third party administrators.

Note 6: 403(b) Tax-Sheltered Annuity Plan

A. PLAN DESCRIPTION

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by the System's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2005, the thirty-six members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan, therefore, there are no receivables to be recognized.

Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

Note 7: Pension Plan for Employees of the System

Full-time employees of Kentucky Teachers' Retirement System (KTRS) participate in either KTRS or Kentucky Employees Retirement System. Both plans are multiple-employer cost sharing defined benefit pension plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the system. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements of this KTRS CAFR.

The System's annual required contributions for KTRS employee members years ended June 30, 2005 and June 30, 2004 were $355,095 and $359,370 respectively.

All other KTRS employees are covered under the Kentucky Employee Retirement System (KERS) in the Non-Hazardous Employees Pension Plan. The plan provides for retirement,

Note 7: Pension Plan for Employees of the System continued ...

disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. The System's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS were required to contribute 5% of their annual creditable compensation for both years ending June 30, 2005 and June 30, 2004. As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation. The actuarial rate for both years ended June 30, 2005 and June 30, 2004 was 5.89%; and the System's annual required contributions to KERS were $268,975 and $123,483.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Required Supplementary Schedules

Required Supplemental Schedule
Defined Benefit Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	b	(b-a)	(a/b)	c	[(b-a)/c]
2000	$ 12,759.6	$ 13,330.4	$ 570.8	95.7%	$ 2,133.7	26.8%
2001	13,299.2	14,642.1	1,342.9	90.8	2,213.8	60.7
2002	13,588.8	15,695.6	2,106.8	86.6	2,313.7	91.1
2003	13,863.8	16,594.8	2,731.0	83.5	2,497.7	109.3
2004	14,255.1	17,617.6	3,362.5	80.9	2,641.5	127.3
2005	14,598.8	19,134.8	4,536.0	76.3	2,703.4	167.8

The amounts reported in this schedule of funding progress do not include assets or liabilities for post-employment healthcare benefits, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Required Supplemental Schedule
Defined Benefit Plan
Schedule of Employer Contributions
(dollar amounts in millions)

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS	PERCENTAGE CONTRIBUTED
2000	$ 311.3	100 %
2001	262.8	100
2002	284.8	100
2003	322.0	100
2004	364.4	100
2005	383.8	100

Required Supplemental Schedule
Medical Insurance Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2000	$ 54.0	$ 2,202.0	$ 2,148.0	2.5%	$ 2,133.7	100.7%
2001	103.4	2,531.0	2,427.6	4.1	2,213.8	109.7
2002	146.0	2,806.0	2,660.0	5.2	2,313.7	115.0
2003	165.5	2,886.0	2,720.5	5.7	2,497.7	108.9
2004	158.9	3,166.6	3,007.7	5.0	2,641.5	113.9
2005	147.3	4,763.9	4,616.6	3.1	2,703.4	170.8

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit plan, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Required Supplemental Schedule
Medical Insurance Plan
Schedule of Employer Contributions
(dollar amounts in millions)

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS	PERCENTAGE CONTRIBUTED
2000	$ 48.9	100%
2001	92.4	100
2002	95.3	100
2003	77.2	100
2004	53.3	100
2005	79.0	100

Notes to Required Supplementary Information

Note 1: Description of Schedule of Funding Progress

Defined Benefit Plan

The schedule of Funding Progress summarizes the actuarial value of the System's assets and actuarial accrued liability as of June 30, 2005, and each of the preceding five years. The data presented in the schedule were obtained from the System's independent actuary's annual valuation report for each year presented.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the system is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the retirement system. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the retirement system.

Medical Insurance Plan

The schedule of Funding Progress summarizes the actuarial value of the System's assets and actuarial accrued liability as of June 30, 2005 and each of the preceding five years. The data presented in the schedule were obtained from the System's independent actuary's annual valuation report for each year presented.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the system is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the plan. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the plan.

Note 2: Actuarial Methodologies and Assumptions

DEFINED BENEFIT PLAN

A. Methodologies

The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the unit credit actuarial cost method with projected benefits. The actuarial value of assets was determined using the method illustrated in the Actuarial Value of Assets table. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period using an open amortization approach. The five (5) year smoothed market approach is used for asset valuation.

Actuarial Value of Assets

(1)	Actuarial Value of Assets on June 30, 2004		$ 14,255,130,659
(2)	Market Value End of Year June 30, 2005		13,456,025,741
(3)	Market Value Beginning of Year June 30, 2004		12,858,540,479
(4)	Cash Flow		
	a.	Contributions	630,801,344
	b.	Benefit Payments	(970,494,680)
	c.	Net	(339,693,336)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)c	937,178,598
	b.	Assumed rate	7.50%
	c.	Amount for Immediate Recognition [(1) x (5)b] + [(4)c*(5)b*0.5]	1,056,396,299
	d.	Amount for Phased-in Recognition (5)a - (5)c	(119,217,701)
(6)	Phased-in Recoginition of Investment Income		
	a.	Current Year: 0.20*(5)d	(23,843,540)
	b.	First Prior Year	(349,147,545)
	c.	Second Prior Year	0
	d.	Third Prior Year	0
	e.	Fourth Prior Year	0
	f.	Total Recognized Investment Gain	(372,991,085)
(7)	Actuarial Value End of Year June 30, 2005 (1) + (4)c + (5)c + (6)f		14,598,842,537
(8)	Difference Between market & Actuarial Values (2) - (7)		(1,142,816,796)

B. Assumptions

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2005, the most recent updated actuarial information include:

* Assumed inflation rate	4.0%
* Assumed investment rate	7.5%
* Assumed projected salary increases	4.0% - 8.1%
* Assumed post retirement benefit increase	1.5%

Note 2: Actuarial Methodologies and Assumptions continued . . .

MEDICAL INSURANCE PLAN

A. Methodologies

The actuarial value of assets is determined by using the market value as provided by KTRS. Compliance with applicable current or future accounting standards may require use of different actuarial methods or assumptions. For purposes of estimating the amortization, a 4.0% salary scale is used.

B. Assumptions

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2005, the most recent updated actuarial information include:

*	Assumed Discount Rate	7.5%
*	Assumed Plan Asset Return Rate	7.5%
*	Assumed Pre-Medicare Benefit Cost Trend Rate	12.5%
*	Assumed Post-Medicare Benefit Cost Trend Rate	12.4%
*	Assumed Ultimate Cost Trend Rate	5.0%
*	Assumed Ultimate Cost Trend Rate Achieved:	
	- Pre-Medicare	2013
	- Post-Medicare	2013

Supporting Schedule 1

Schedule of Administrative Expenses
Year Ended June 30, 2005

ADMINISTRATIVE EXPENSES	YEAR ENDED JUNE 30, 2005
Salaries	$ 4,872,656
Other Personnel Costs	360,852
Professional Services & Contracts	182,715
Utilities	56,662
Rentals	14,383
Maintenance	91,216
Postage & Related Services	359,445
Printing	155,516
Insurance	79,923
Miscellaneous Services	106,265
Telecommunications	28,999
Computer Services	47,491
Supplies	44,350
Depreciation	167,311
Travel	18,729
Dues & Subscriptions	32,500
Miscellaneous Commodities	9,048
Furniture, Fixtures, & Equipment not Capitalized	35,800
Compensated Absences	(11,188)
TOTAL ADMINISTRATIVE EXPENSES	$ 6,652,673

Supporting Schedule 2

Schedule of Contracted Investment Management Expenses
Year Ended June 30, 2005

FIXED INCOME MANAGERS		
Invesco-National Asset Management Corporation	$ 341,848	
Todd Investment Advisors	355,032	
Total Fixed Income Managers		$ 696,880
EQUITY MANAGERS		
UBS Global Asset Management Corporation	$ 880,000	
Invesco-National Asset Management Corporation	750,000	
Todd Investment Advisors	519,967	
Wellington Management Company	1,345,128	
Total Equity Managers		$ 3,495,095
CUSTODIAN		
Farmers Bank		$ 433,281
CONSULTANT		
Becker, Burke Associates		$ 45,000
TOTAL CONTRACTED INVESTMENT MANAGEMENT EXPENSES		$ **4,670,256**

Supporting Schedule 3

Schedule of Professional Fees for Year Ended June 30, 2005

PROFESSIONAL	NATURE OF SERVICE	YEAR ENDED JUNE 30, 2005
Charles T. Mitchell Company, LLP	Auditing Services	$ 28,000
Mellon Contsulting	Actuarial Services	119,564
Reed, Weitkamp, Schell &Vice, PLLC	Attorney Services	6,711
Farmers Bank	Banking Services	23,900
International Claim Specialist	Investigative Services	4,540
	TOTAL	$ 182,715

Charles T. Mitchell Company, LLP
Certified Public Accountants
WILLIAM G. JOHNSON, JR., C.P.A.
JAMES CLOUSE, C.P.A.
BERNADETTE SMITH, C.P.A.
KIM FIELD, C.P.A.
GREG MIKLAVCIC, C.P.A.

Consultants
CHARLES T. MITCHELL, C.P.A.
DON C. GILES, CPA

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REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL REPORTING BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the general purpose financial statements of Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2005, and have issued our report thereon dated December 16, 2005. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting
In planning and performing our audit, we considered Teachers' Retirement System of the State of Kentucky's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statement and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a reportable condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving internal control over financial reporting and its operation that we consider to be material weaknesses.

Compliance
As part of obtaining reasonable assurance about whether Teachers' Retirement System of the State of Kentucky's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and accordingly, we do no express such an opinion. The results of our test disclosed no instances on noncompliance that are required to be reported under Government Auditing Standards.

This report is intended for the information of the audit committee, management, and federal awarding agencies and pass-through entities. However, this report is a matter of public record and its distribution is not limited.

Charles T. Mitchell Co.

December 16, 2005

INVESTMENT SECTION

for Fiscal Year ending June 30, 2005

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Kentucky Teachers' Retirement System.

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Mr. Benny Greenwell, CPA
Director of Investment Accounting

OVERVIEW

The Board of Trustees of the Teachers' Retirement System annually appoints an Investment Committee consisting of two Board members and the Executive Secretary. This Committee acts on behalf of the Board, subject to its approval, in all matters concerning investments. In compliance with the Kentucky Revised Statutes, the Board of Trustees has adopted an "Investment Policy" which it reviews periodically. The investment objectives of the Board of Trustees are as follows:

1. The funds of the Teachers' Retirement System of the State of Kentucky shall be invested solely in the interest of its members and their beneficiaries. Investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries and making payment of reasonable expenses in administering the Plan and its Trust Funds.

2. The specific objective of the investment program shall be the investment of the Fund's assets in securities which shall provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. When investments are acquired, current income together with prospects for capital appreciation shall be weighed in regard to the long range needs of providing benefits to members and their beneficiaries. Short term fluctuations in the market value of the Fund's assets shall be considered as secondary to the long-term objectives and needs of the System.

Within the Kentucky Revised Statutes and pertinent policies, the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent man rule", as identified in KRS 161.430 (2)(b). Investment activities shall be conducted, "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims". The responsibility for investing the assets of the System is clearly assigned to the Board of Trustees.

INVESTMENT COMMITTEE

MR. ARTHUR W. GREEN
Chairman

MR. ROBERT M. CONLEY
Vice-Chairman

MR. GARY L. HARBIN, CPA
Ex-Officio Member, Executive Secretary

EXECUTIVE INVESTMENT STAFF

MR. GARY L. HARBIN, CPA
Executive Secretary

MR. PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

Investment Advisors

Fixed Income and Equity Managers
Todd Investment Advisors
101 South Fifth Street
National City Towers, Suite 3160
Louisville, Kentucky 40202

Invesco-National Asset Management
400 West Market Street
Suite 2500
Louisville, Kentucky 40202

Equity Managers
UBS Global Asset Management
UBS Tower
One North Wacker Drive
Chicago, Illinois 60606

Wellington Management Company
75 State Street
Boston, Massachusetts 02109

Investment Consultant
Becker, Burke Associates, Inc.
Suite 1000
221 North LaSalle Street
Chicago, Illinois 60601

Investment Custodian/Subcustodian
Farmers Bank & Capital Trust Co.
Farmers Bank Plaza
Frankfort, Kentucky 40601

The Bank of New York
One Wall Street
New York, New York 10286

INVESTMENT CONSULTANT'S STATEMENT

Becker, Burke Associates served as Investment Consultant to the Kentucky Teachers' Retirement System during the 2004-05 fiscal year as it has in several previous years. Becker, Burke Associates is familiar with the operation of the System's investment program as well as its performance. The investment program of the Retirement System is operated in a prudent manner that reflects a desire to preserve capital while maximizing returns. The assets of the Retirement System are assigned to various portfolios in order to diversify the System's investments and take advantage of opportunities in various asset classes and sectors. The System gravitates toward relatively conservative holdings in each asset class. The overall effect of diversification is to minimize risk. The manner in which the Retirement System operates and its investment results are commensurate with other risk-averse institutional investors in similar regulatory environments.

Edmund M. Burke
President
Becker, Burke Associates
September 6, 2005

ASSET ALLOCATION

The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers defined in KRS 161.430. The asset allocation limits complement the investment principles used by the Board and Committee regarding security, diversification, high return, and liquidity. The asset allocation policy is adopted by the Board of Trustees and approved in the form of administrative regulation. The asset allocation parameters are structured in order to maximize return while at the same time provide a prudent diversification of assets and preserve the capital of the Teachers' Retirement System. The Board is interested in assuming secure investments that will provide long term growth to the fund. The Board does not arbitrarily compromise security in order to enhance the prospects of return. The Investment Committee and the Board are mindful of the fund's liquidity and its capability at meeting both short and long term obligations. Asset allocation parameters follow:

1. There will be no limit on the amount of investments owned by the System that are guaranteed by the U.S. Government.
2. Not more than 35% of the assets of the System at book value shall be invested in corporate debt obligations.
3. Not more than 60% of the assets of the System at book value shall be invested in common stocks or preferred stocks. No more than 25% of the assets of the System at book value shall be invested in a stock portfolio designed to replicate a general, U.S. stock index.
4. Not more than 10% of the assets of the System at book value shall be invested in real estate. This would include real estate equity, real estate lease agreements, mortgages on real estate that are not guaranteed by the U.S. Government, and shares in real estate investment trusts.
5. Not more than 1% of the assets of the System at book value shall be invested in venture capital investments providing at least 75% of such investments must be in-state.
6. Not more than 10% of the assets of the System at book value shall be invested in any additional category or categories of investments. The Board shall approve by resolution such additional category or categories of investments. Within this parameter, to further diversify the portfolio, the Board approved provisions that permit the limited ownership of both foreign equities and timberland.

The asset allocation of investments at market value was somewhat different at the beginning of the fiscal year than it was on June 30, 2005. In addition, the market value allocation of assets through the dynamics of the securities markets is different than the book value allocations. During the 2004-05 fiscal year, the market value of the stock position remained the same as the previous year at 56% of assets. The portion of the portfolio in Government securities remained the same at 19%. The cash position increased slightly during the year to 9.5% of assets. The real estate equity position remained a relatively small portion of the System's portfolio at approximately 3%.

The Kentucky Revised Statutes require the Board of Trustees to employ experienced investment counselors to advise it on investment related matters. Todd Investment Advisors was employed during 2004-05 as the System's principal investment counselor, providing assistance in the management of $2.5 billion of stocks and bonds. Invesco-National Asset Management, UBS Global Asset Management, and Wellington Management Company also were retained during the 2004-05 fiscal year to provide investment counseling services. Invesco-National Asset

Management assisted in the management of approximately $937 million in bonds, as well as managing about $940 million in equity investments. UBS Global Asset Management, formerly Brinson Partners, was responsible for managing approximately $1.1 billion in equities, and Wellington Management Company managed about $798 million in equities. In addition to monitoring the investment counselors, the in-house investment staff managed about $7.3 billion of fixed income and equity assets. All of the investment firms, while specializing in particular asset classes or sectors, are required to work within the same broad objectives, portfolio constraints, and administrative guidelines. Four investment counselors plus an in-house staff provide the Board of Trustees with a diversification of management that is appropriate for a $13.6 billion fund. The Farmers Bank & Capital Trust Company, located in Frankfort, Kentucky, was retained in 2004-05 as the Custodian of Securities with the Bank of New York serving as a sub-custodian.

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by Federal, state, and local laws.

FINANCIAL ENVIRONMENT

After booming in the previous fiscal year, equity returns generally cooled in the fiscal year ended June 30, 2005 as economic growth moderated, short-term interest rates rose and oil prices continued to climb. Returns were widely variable by sector, however, with the energy and utility components of the S & P 500 Index returning 39.3% and 39.1%, respectively, while the information technology sector returned -3.5%. Overall, the S & P 500 returned 6.3% for the fiscal year. The narrower thirty-stock Dow Jones Industrial Average returned only 0.7%. In a continuing trend, smaller company stocks outperformed those of the largest companies. The S & P 400 Mid Cap Index returned 14.0% for the fiscal year while the Russell 2000 Small Cap Index returned 9.5%.

As the economic recovery matured, growth rates, while remaining healthy, slowed to a more sustainable pace. Gross domestic product, adjusted for inflation, grew 3.6% over the fiscal year, down from 4.6% in the previous twelve months. Industrial production rose 3.9%, down from 4.7% in the previous year. The labor market continued to gradually improve, with the unemployment rate falling from 5.6% to 5.0% over the fiscal year. With the economy on an expansionary track, the Federal Reserve moved methodically to remove its accommodative monetary policy, raising the federal funds rate over the fiscal year from 1.25% to 3.25%. With the exception of energy, inflation remained relatively well-contained. The Consumer Price Index, excluding food and energy, rose 2.0% over the fiscal year, up from 1.9% over the previous fiscal year. Oil prices were the big story, rising over fifty percent from about $37 per barrel on June 30, 2004 to $56.50 by June 30, 2005. The combination of moderating economic growth, which slowed profit growth, rising short-term interest rates, and concerns about the future impact of higher energy prices generally had a restraining influence on equity valuations over the year.

Bond market returns were surprisingly strong in the fiscal year ended June 30, 2005. While the Federal Reserve spent the fiscal year steadily raising short-term interest rates, yields on long-term bonds fell, causing prices to rise. This unexpected development -- called a "conundrum"

by Federal Reserve Chairman Greenspan at one point -- seems to have been the result of long-term expectations for low inflation and a global liquidity surplus, with savings exceeding productive investment. The short-term federal funds rate rose from 1.25% on June 30, 2004 to 3.25% on June 30, 2005, while the yield on the thirty-year Treasury bond declined from 5.29% to 4.19%. The most important determinant of a bond's total return over the year was its maturity, with long-term bonds rallying in price while returns on short-term obligations were weak. The Lehman Government/Credit Index returned 7.3% for the fiscal year. Corporate bonds, especially those of lower credit quality, outperformed government bonds. The Citi High Yield Index returned 10.4%. The Lehman Mortgage-Backed Index returned 6.1%.

PORTFOLIO CHARACTERISTICS

At year's end, the System's entire stock portfolios, exclusive of the stock index fund, could be characterized as high quality and diversified. The KTRS portfolio, as measured by beta, was approximately as risky as the Standard & Poor's 500 Index. Beta is a measure of the volatility in price of a particular stock or portfolio compared to the volatility of the index. The beta of the KTRS portfolio at the end of the fiscal year was 1.02. The KTRS portfolio registered a price-earnings multiple that was lower than the index. The price-earnings ratio for the portfolio at the end of the fiscal year was 18.5, compared to 19.0 for the index. Two factors attesting to the high quality of the portfolio were the high rate of growth in both earnings per share and dividends per share. The average earnings growth rate over the past five years for the KTRS stock portfolio was 11.9%. The average dividend growth rate for the past five years of the KTRS portfolio was 8.9%. At the end of the 2004-05 fiscal year, the yield level for the KTRS portfolio stood at 1.9%, which was the same as the index yield.

The stock position, apart from the stock index fund, began the 2004-05 fiscal year by being 31.2% of assets at market value, and by year-end, it constituted 39.8% of assets. In dollars, the value of the stock position increased from approximately $4.0 billion to about $4.3 billion in 2004-05. The two stock index funds represented another $3.4 billion that was invested in stocks at year end. Stock selections during 2004-05 affected a variety of market sectors. At the end of 2004-05, the sector weightings in the KTRS stock portfolio were similar to those of the Standard & Poor's 500 Index. The greatest differences were underweightings by KTRS in the consumer staples and health care sectors and overweightings in the financials, industrials, and materials sectors.

On June 30, 2005, the System's entire bond portfolio had a duration of 5.4 years. The coupon rate for the holdings was 5.6%. As of June 30, 2005, the average maturity of the fixed income portfolio was 8.1 years. The maturities of fixed income investments will generate cash for the fund in future years. Approximately 81% of the fixed income investments, including short term cash equivalents, will mature by the end of 2017, about 12 years. This will assist the System in meeting retirement fund obligations as well as permit it to assume new investments.

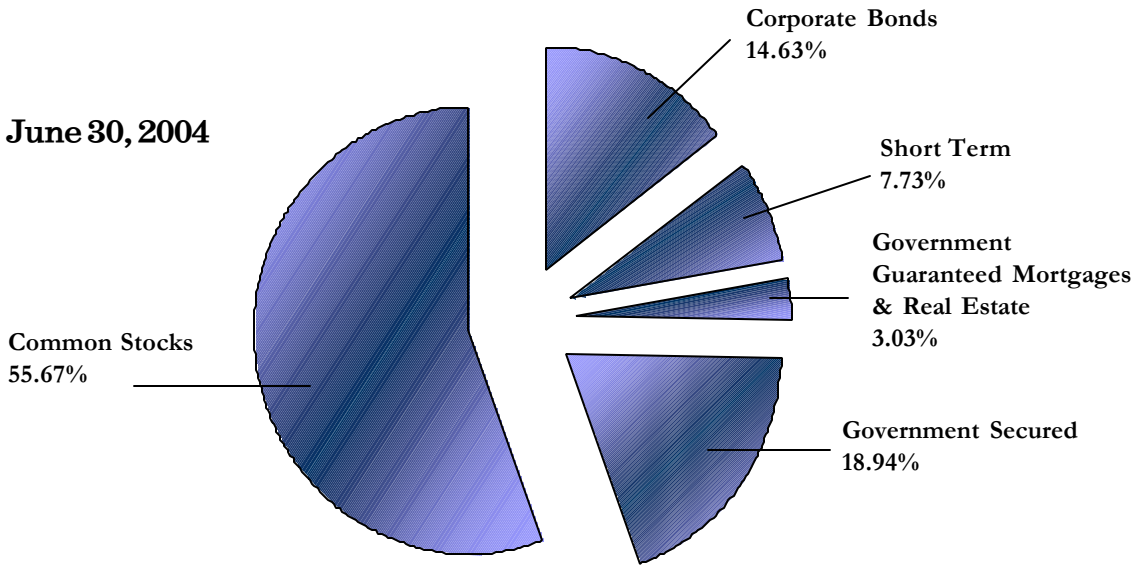
PORTFOLIO RETURNS

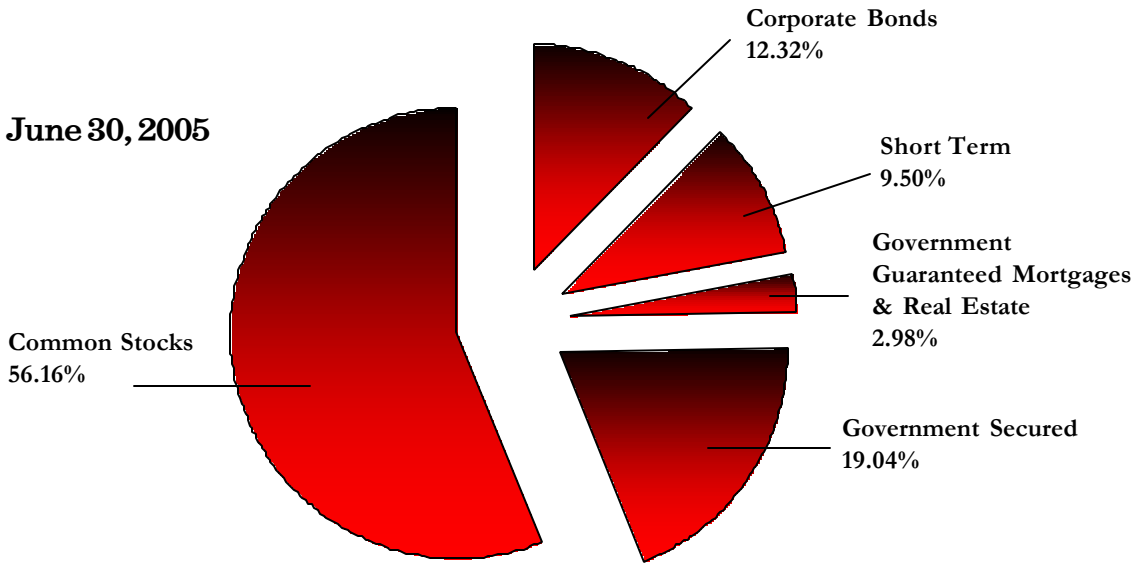
The investment portfolio experienced growth in book values and its market value during the 2004-05 year. The market value of the portfolio increased $596.0 million to a total of $13.6 billion at year-end. The book value of the fund increased $157.0 million during the year. The System accumulated in excess of $520 million of investment income during 2004-05; this investment income total excludes monies earned but not received by the end of the fiscal year. The income resulted from interest, dividends, rental income, lending income, and gains.

For the 2004-05 fiscal year, the total return earned by the System's stock position is higher than the return generated by the Standard & Poor's 500 Stock Index. The KTRS stock position earned a total return of 7.9% in 2004-05, while the stock index earned 6.3%. The ten year annualized return for the years 1995 through 2005 was 10.4% for the System's stock position and 9.9% for the stock index. The System's bond position earned a ten year annualized total return of 6.9%. This is slightly higher than the 6.8% return earned by the Lehman Government/Credit, High Quality, Index. In 2004-05, the System's bonds earned a total return of 7.6%, while the Lehman Index earned 7.0%. The entire portfolio earned a total return of 7.5% in 2004-05. The portfolio's ten year annualized rate of total return was 8.3%. The total return of the portfolio over ten years more than kept up with the rate of inflation and provided real growth. In 2004-05, the Consumer Price Index registered an inflation rate of 2.5%. The ten year annualized rate is 2.5%. The System conforms to "AIMR Performance Presentation Standards" in calculating portfolio returns.

The charts that follow this narrative graphically display the growth that is discussed in the preceding paragraphs. Following the charts is a summary description of investments held at June 30, 2005. The System annually produces a detailed investment report that is available on request.

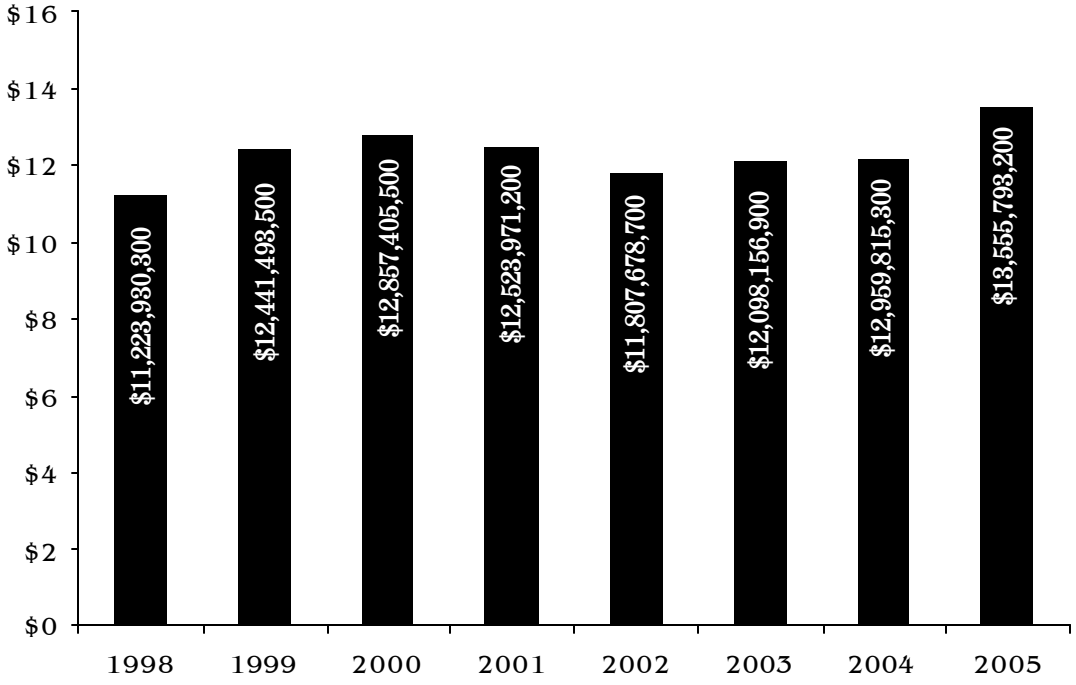
Distribution of Investments
Market Values





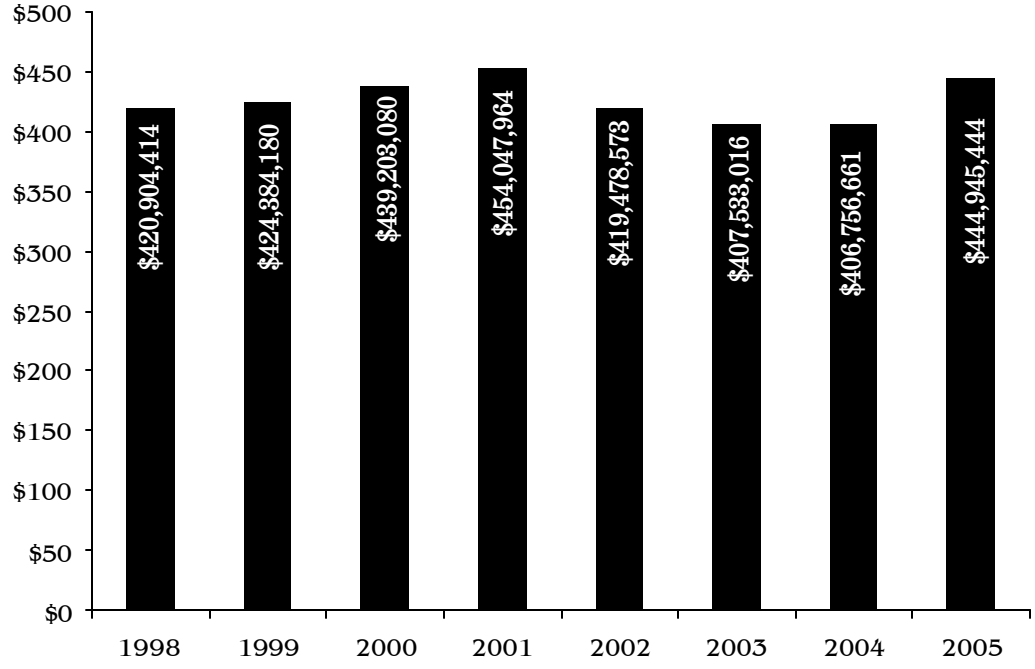
Investment Portfolio Growth

Market Values



Investment Income Growth

Excludes Amortization
Excludes Net Gains



Total Return on KTRS Investments*
Percentages

Fiscal Year	Standard & Poor's 500 Index	KTRS Stocks	Lehman Govt./Credit High Quality Index	KTRS Bonds	Consumer Price Index	KTRS Cash Collection Fund	KTRS Real Estate	KTRS Total Portfolio
1995-96	26.0	25.3	4.6	4.3	2.8	6.0	11.6	13.5
1996-97	34.7	33.1	7.6	7.8	2.3	5.8	8.8	19.6
1997-98	30.2	29.2	11.3	11.6	1.7	6.1	9.7	19.4
1998-99	22.8	22.0	2.7	2.3	2.0	5.3	9.7	11.5
1999-00	7.3	3.6	4.6	4.9	3.7	5.8	9.9	4.1
2000-01	(14.8)	(8.9)	11.0	10.9	3.3	6.0	9.5	(0.7)
2001-02	(18.0)	(14.5)	8.6	9.5	1.1	2.5	6.0	4.1
2002-03	0.3	(1.1)	12.3	12.4	2.1	1.5	9.3	4.8
2003-04	19.1	19.2	(1.2)	(0.7)	3.2	1.0	9.7	9.7
2004-05	6.3	7.9	7.0	7.6	2.5	2.3	9.6	7.5
Three Year Annualized Rate	8.3	8.4	5.9	6.3	2.6	1.6	9.5	7.3
Five Year Annualized Rate	(2.4)	0.0	7.4	7.8	2.4	2.6	8.8	3.3
Eight Year Annualized Rate	5.4	6.2	7.0	7.1	2.4	3.8	9.2	6.3
Ten Year Annualized Rate	9.9	10.4	6.8	6.9	2.5	4.2	9.4	8.3
Fifteen Year Annualized Rate	10.7	11.3	7.7	7.9	2.7	4.7	8.7	8.9
Twenty Year Annualized Rate	12.3	12.6	6.1	8.6	3.0	---	---	9.6

** Teachers' Retirement System of the State of Kentucky has prepared and presented this report in compliance with the Performance Presentation Standards of the Association for Investment Management and Research (AIMR-PPS). AIMR has not been involved with the preparation or review of this report.*

Investment Summary
Fair Market Value
06/30/2005

Type of Investment	Fair Value 07/01/04	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/05
Short Term	1,002,300,000	38,868,504,700	65,300	38,583,070,000	1,287,800,000
Fixed Income	4,376,987,400	1,053,032,300	103,294,300	1,263,522,700	4,269,791,300
Equities	7,580,527,900	1,288,859,800	408,954,800	1,280,140,600	7,998,201,900
TOTAL	12,959,815,300	41,210,396,800	512,314,400	41,126,733,300	13,555,793,200

Contracted Investment Management Expenses
($ Thousands) as of 06/30/2005

	Assets Under Management	Expenses	Basis Points *
INVESTMENT MANAGER FEES			
Fixed Income Managers	$ 936,743	$ 342	3.6
Equity Managers	2,789,585	2,975	10.7
Balanced Manager	2,543,025	875	3.4
TOTALS	$ 6,269,353	$ 4,192	6.7
OTHER INVESTMENT SERVICES			
Custodian Services	$ 13,555,793	$ 433	0.3
Investment Consultant		45	
TOTAL		$ 478	
GRAND TOTAL		$ 4,670	3.4

* One basis point is one-hundreth of one percent or the equivalent of .0001.

Transaction Commissions

06/30/2005

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
A G EDWARDS	861,200	$34,448.00	0.0400
ADAMS HARKNESS & HILL INC	37,700	1,748.00	0.0464
ADVEST INC	1,539,030	61,561.20	0.0400
AVONDALE PARTNERS	7,800	312.00	0.0400
B TRADE SERVICES	68,385	683.85	0.0100
BANC OF AMERICA SECURITIES	3,073,850	$155,009.50	0.0504
BASS TRADING LLC	9,700	427.00	0.0440
BEAR STEARNS & CO	266,500	12,214.00	0.0458
BNY BROKERAGE	5,700	228.00	0.0400
BOENNING & SCATTERGOOD	19,400	$582.00	0.0300
BRANDT ROBERT	5,800	$174.00	0.0300
CANTOR FITZGERALD	61,100	$2,444.00	0.0400
CHAPDELAINE PENSION	13,700	$548.00	0.0400
CIBC OPPENHEIMER WORLDMARKET	2,000	80.00	0.0400
CITIGROUP	3,879,690	167,416.50	0.0432
COWEN & CO	108,059	4,201.27	0.0389
CS FIRST BOSTON	2,893,660	$137,670.40	0.0476
D A DAVIDSON & CO	1,800	1,738.80	0.9660
DEUTSCHE BANK SECURITIES	252,300	$5,492.00	0.0218
E-TRADE CAPITAL MARK	2,400	96.00	0.0400
EURO BROKERS	32,600	915.00	0.0281
FIDELITY CAPITAL MARKETS	11,900	357.00	0.0300
FREIDMAN BILLINGS	59,700	15,542.00	0.2603
FULCRUM GLOBAL PARTNERS	7,000	$280.00	0.0400
G G E T LLC	8,200	403.00	0.0491
GOLDMAN SACHS & CO	4,241,116	$192,896.09	0.0455
HARBORSIDE SECURITIES	27,700	554.00	0.0200
HARRIS NESBITT GERAR	49,900	$2,495.00	0.0500
HELFANT INC	2,300	57.50	0.0250
HOWE BARNES INVESTMENT	32,700	$1,635.00	0.0500
INSTINET	200	2.00	0.0100
INVESTMENT TECHNOLOGY	13,406,938	$249,473.97	0.0186
ISI GROUP	1,293,500	51,740.00	0.0400
J J B HILLIARD W L LYONS	1,239,300	$49,572.00	0.0400
JEFFERIES & CO	3,846,110	$173,944.83	0.0452
JEROME P DUNLEVY	900	$36.00	0.0400
JOHNSON, RICE & CO	4,000	3,200.00	0.8000
JONES & ASSOCIATES	5,400	$234.00	0.0433
JP MORGAN CHASE	425,720	22,895.00	0.0538
KEEFE BRUYETTE & WOODS	66,200	$2,879.00	0.0435
KNIGHT SECURITIES	71,100	2,792.00	0.0393
KV EXECUTION SERVICES	155,800	3,895.00	0.0250
LAZARD FRERES & CO	3,208,700	$129,598.00	0.0404
LEERINK SWANN & CO	75,600	2,921.00	0.0386
LEGG MASON WOOD WALKER	1,368,498	54,739.92	0.0400
LEHMAN BROTHERS	5,147,734	$240,075.76	0.0466

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
LEXINGTON INVESTMENT CO	933,800	37,352.00	0.0400
LYNCH JONES & RYAN INC	2,200	88.00	0.0400
MERRILL LYNCH	7,512,062	$279,136.36	0.0372
MOORS & CABOT	5,500	220.00	0.0400
MORGAN KEEGAN & CO	1,323,420	54,579.20	0.0412
MORGAN STANLEY/DEAN WITTER	5,374,821	251,216.93	0.0467
NYFIX TRANSACTION SERVICES	98,500	$955.00	0.0097
OTA LIMITED PARTNERS	58,000	$2,320.00	0.0400
PIPELINE TRADING	12,900	193.50	0.0150
PRUDENTIAL SECURITIES	660,100	26,423.00	0.0400
RAYMOND JAMES & ASSOCIATES	2,631,500	105,260.00	0.0400
RBC DAIN RAUSCHER INC	15,500	$620.00	0.0400
ROSS SINCLAIRE & ASSOCIATES INC	1,177,100	47,084.00	0.0400
SANDLER O'NEILL	21,200	848.00	0.0400
SCHWAB SOUNDVIEW CORP	106,800	$2,136.00	0.0200
SPEAR LEEDS & KELLOGG	55,587	$555.87	0.0100
STANDARD & POOR'S	1,952,560	78,102.40	0.0400
STATE STREET BROKERAGE	3,700	111.00	0.0300
THOMAS WEISEL PARTNERS	7,200	288.00	0.0400
U S BANCORP PIPER JAFFRAY	40,500	$3,395.00	0.0838
UBS/PAINE WEBBER INC	4,927,190	$197,087.60	0.0400
WACHOVIA SECURITIES	1,685,156	71,056.24	0.0422
WEDBUSH MORGAN SECURITIES	88,300	3,532.00	0.0400
WEEDEN & CO	2,948,012	117,920.48	0.0400
TOTAL	**79,540,198**	**3,070,688.17**	**0.0386**

The over-the-counter commission rate on medium to large capitalization stocks is assumed to be $0.05 per share. The acquisition of initial public offerings (IPOs) represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate; however, the security issuers and not the investors pay the commissions. In 2004-05, the System bought small capitalization IPOs that generated $67,787.00 in commissions. Although these commissions were not paid by the Retirement System, they resulted from the System's investment activities and are included in the total commissions of $3,070,688.17. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.04 per share. Investment companies usually provide investment research for brokerage clients. On occasion, investment companies direct third party research to active clients. The Retirement System received third party research through BNY Brokerage, Merrill Lynch and Lehman Brothers. Trading commissions of $527,808.56 were associated with third party research obligations. The primary research providers were: Bloomberg, Interactive Data, CRA/Rogers Casey, QED Information Systems, and Vestek.

Ten Largest Stock Holdings Ranked by Market Value 06/30/05

Rank	Name	Shares	Market Value
1	Microsoft	8,864,500	220,194,180.00
2	Citigroup Inc	4,643,895	214,687,265.85
3	General Electric Co	6,028,690	208,894,108.50
4	Exxon Mobile Corp	3,190,200	183,340,794.00
5	Pfizer Inc	4,921,487	135,734,611.46
6	Johnson & Johnson	2,057,454	133,734,510.00
7	Bank of America Corp	2,899,756	132,257,871.16
8	Wells Fargo & Co.	1,825,175	112,394,276.50
9	ConocoPhillips	1,709,214	98,262,712.86
10	Target Corp	1,783,050	97,015,750.50

Top Ten Fixed Income Holdings 06/30/05

Rank	Description	Maturity	Coupon	Par	Market Value
1	US Treasury Bonds	08/15/2023	6.250%	86,500,000.00	107,797,251.50
2	US Treasury Notes	05/15/2007	4.375%	77,000,000.00	78,025,640.00
3	US Treasury Bonds	08/15/2029	6.125%	59,325,000.00	75,748,295.70
4	US Treasury Bonds	02/15/2021	7.875%	46,500,000.00	65,821,122.00
5	FNMA Notes	02/15/2006	5.500%	49,525,000.00	50,066,704.45
6	US Treasury Notes	08/31/2005	2.000%	50,000,000.00	49,900,400.00
7	US Treasury Bonds	05/15/2016	7.250%	35,500,000.00	45,458,034.00
8	US Treasury Bonds	02/15/2026	6.000%	36,300,000.00	44,725,556.70
9	US Treasury Bonds	08/15/2021	8.125%	29,815,000.00	43,283,001.99
10	US Treasury Notes	08/15/2013	4.250%	40,000,000.00	41,000,000.00

Schedule of Investments as of June 30, 2005

Investment	Par Value* or Remaining Principal Balance	Market Value	Percentage of Market Value
Repurchase Agreements	1,287,800,000.00	1,287,800,000.00	9.50
Total Short Term	1,287,800,000.00	1,287,800,000.00	9.50
Treasury Notes and Bonds	1,051,300,000.00	1,224,204,753.63	9.03
Agencies	1,101,154,310.14	1,150,974,689.76	8.49
GNMA (Single Family)	37,496,184.14	39,496,334.78	0.29
Collateralized Mortgage Obligations	25,329,919.72	25,673,217.26	0.19
Treasury Strip Bonds	118,000,000.00	104,467,004.00	0.77
Total U.S. Government Obligations	2,333,280,414.00	2,544,812,999.43	18.77
Industrials	544,875,601.63	591,007,452.66	4.36
Finance	868,483,827.42	886,000,915.33	6.54
Utility Bonds (Except Telephone)	106,400,000.00	112,350,505.20	0.83
Telephone Bonds	73,946,000.00	80,660,661.60	0.59
Total Corporate Bonds	1,593,705,429.05	1,670,019,534.79	12.32
FHA & VA Single Family Mortgages	5,911.86	6,526.22	0.00
Project Mortgages (FHA & GNMA)	14,773,587.79	18,317,771.51	0.14
State and Local Government Issues	31,875,000.00	36,634,480.58	0.27
Total Other Fixed Income	46,654,499.65	54,958,778.31	0.41
Subtotal (Fixed Income)	5,261,440,342.70	5,557,591,312.53	41.00
Real Estate Equity	390,128,505.33	386,004,452.80	2.85
Total Real Estate Equity	390,128,505.33	386,004,452.80	2.85
Common Stocks 102,223,145 Shares	3,856,005,125.14	4,071,603,297.04	30.03
Small Cap Stocks 8,873,870 Shares	159,159,528.38	181,116,280.90	1.34
600 Stock Index 5,957,145 Shares	140,353,045.65	171,913,744.49	1.27
500 Stock Index 89,930,505 Shares	3,092,345,009.72	3,187,564,131.15	23.51
Total Stocks 206,984,665 Shares	7,247,862,708.89	7,612,197,453.58	56.15
Subtotal (Equity)	7,637,991,214.22	7,998,201,906.38	59.00
Total Investments	12,899,431,556.92	13,555,793,218.91	100.00

* In this asset display, par value represents the redemption value of bonds and the cost value of equities. Market value is a volatile measure that changes daily and represents the approximate transaction value of an investment on a particular day--in this case June 30, 2005. Detailed information concerning these values along with book values and cost values of all KTRS investments is available on request.

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ACTUARIAL SECTION

for Fiscal Year ending June 30, 2005

Cavanaugh Macdonald
CONSULTING, LLC

December 12, 2005

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2005. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that combined member and state contributions for the fiscal year ending June 30, 2008 at the rate of 23.82% of university members' salaries and 26.78% of non-university members' salaries are required to support the benefits of the System. This represents an increase since the previous valuation in the required employer contribution rate of 1.45% of payroll. There has been a net increase in the state special appropriation from 3.93% to 4.17%, or 0.24% of payroll. Therefore, for the 2007/2008 fiscal year, in addition to the state statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 1.32%; 1.21% from this valuation and 0.11% from the previous valuation. The contribution to the Life Insurance Fund and the Medical Insurance Fund would remain constant at 0.17% and 1.50% respectively.

The valuation takes into account the effect of amendments to the System enacted through the 2005 Session of the Legislature.

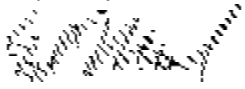
The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

In our opinion the System is operating on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,



Edward A. Macdonald, ASA, FCA, MAAA
President

665 Molly Lane, Suite 150, Woodstock, GA 30189

Report of Actuary on the Valuation
Prepared as of June 30, 2005
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2005		June 30, 2004*	
Number of active members	72,281		71,950	
Annual salaries	$ 2,703,430		$ 2,641,533	
Number of annuitants and beneficiaries	37,402		35,803	
Annual allowances	$ 994,745		$ 914,879	
Assets				
Market value	$ 13,456,026		$ 12,858,540	
Actuarial value	$ 14,598,843		$ 14,255,131	
Unfunded actuarial accrued liability	$ 4,536,027		$ 3,362,495	
Amortization period (years)	30		30	
	University	**Non-University**	**University**	**Non-University**
Pension Plan:				
Normal	14.39 %	17.84 %	14.19 %	18.02 %
Accrued liability	9.43	8.94	8.18	7.31
Total	23.82 %	26.78 %	22.37 %	25.33 %
Member	7.625 %	9.105 %	7.625 %	9.105 %
State (ARC)	16.195	17.675	14.745	16.225
Total	23.82 %	26.78 %	22.37 %	25.33 %
Life Insurance Fund:				
State	0.17 %	0.17 %	0.17 %	0.17 %
Medical Insurance Fund:				
Member	0.75 %	0.75 %	0.75 %	0.75 %
State Match	0.75	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	1.50 %	1.50 %	1.50 %	1.50 %
Total Contributions:	25.49	28.45	24.04	27.00
Contribution rates for fiscal year ending:	**June 30, 2008**		**June 30, 2007**	
Member Statutory	8.375 %	9.855 %	8.375 %	9.855 %
State Statutory	11.625	13.105	11.625	13.105
Required Increase	1.32	1.32	0.11	0.11
State Special	4.17	4.17	3.93	3.93
Total	25.49 %	28.45 %	24.04 %	27.00 %

*Reported by prior actuarial firm.

2. The valuation indicates that combined member and State contributions at the rate of 23.82% of salaries for university members and at 26.78% for non-university members are sufficient to support the current benefits of the System. We also recommend that 0.17% be contributed by the state to the Life Insurance Fund and 1.50% combined member and state contributions be made to the Medical Insurance Fund. Comments on the valuation results as of June 30, 2005 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

3. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation.

4. The valuation takes into account the effect of amendments to the System enacted through the 2005 Session of the Legislature. There have been no changes since the previous valuation.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2005 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000)
Men	17,665	$ 737,455
Women	54,616	1,965,975
Total	72,281	2,703,430

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2005

Group	Number	Annual Retirement Allowances[1] ($1,000)
Service Retirements	32,567	$ 908,542
Disability Retirements	1,982	45,492
Beneficiaries of Deceased Members	2,853	40,711
Total	37,402	$ 994,745

[1] *Includes cost-of-living adjustments effective through July 1, 2005.*

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2005 the market value of Pension Plan assets for valuation purposes held by the System amounted to $13,456,025,741. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2005 was $14,598,842,537. Schedule B shows the development of the actuarial value of assets as of June 30, 2005.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan, Medical Insurance Fund and the Life Insurance Fund.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation (amounts are $1,000's). The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $7,764,477 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $11,199,130 of which $967,426 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $171,263. The total actuarial accrued liability of the System amounts to $19,134,870. Against these liabilities, the System has present assets for valuation purposes of $14,598,843. When this amount is deducted from the actuarial accrued liability of $19,134,870, there remains $4,536,027 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 14.39% of payroll for university members and 17.84% for non-university members.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member will contribute 8.375% of annual salary to the System and each non-university member will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. For the 2007/2008 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.

3. Therefore, 10.875% of active university members' salaries and 12.355% of active non-university members' salaries is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of this amount, 0.17% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 1.32% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of $112,865,500, or 4.17% of total payroll will be made by the State. The total required employer contribution rate to the Pension Plan is, therefore, 16.195% for university members and 17.675% for non-university members. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source

	UNIVERSITY	NON-UNIVERSITY
Member		
Statutory Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Contribution to Pension Plan	7.625%	9.105%
Employer		
Statutory Matching Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	12.355%
Life Insurance	(0.17) %	(0.17) %
Additional to Maintain 30-Year Amortization	0.32	1.32
Special Appropriation	4.17	4.17
Contribution to Pension Plan	16.195%	17.675%
Total Contribution to Pension Plan	23.82 %	26.78 %

4. The valuation indicates that normal contributions at the rate of 14.39% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.84%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 9.43% for university members and 8.94% for non-university members. These rates include special appropriations of $112,865,500 or 4.17% of payroll to be made by the State. These rates are shown in the following table:

ACTUARIALLY DETERMINED CONTRIBUTION RATES

	PERCENTAGE OF ACTIVE MEMBERS' SALARIES	
Rate	**University**	**Non-University**
Normal	14.39%	17.84 %
Accrued Liability*	9.43	8.94
Total	23.82%	26.78 %

* Includes special appropriations of $112,865,500 or 4.17% of payroll to be made by the State.

5. The unfunded actuarial accrued liability amounts to $4,536,027,000 as of the valuation date. Accrued liability contributions at the rate of 9.43% of active university members' payroll and 8.94% of non-university members' payroll are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. The benefit percentage for non-university members is 2.0% for service accrued through July 1, 1983 and 2.5% for service up to 30 years accrued after that date. However, for members who join the System on or after July 1, 2002 and retire with less than 10 years of service, the benefit percentage is 2.0%. For members who joined the System on or after July 1, 2002, who retire with 10 or more years of service, the benefit percentage is 2.5% for all years of service up to 30 years. For all members who retire on or after July 1, 2004, the benefit percentage for service earned in excess of 30 years is 3.0%. The total net contribution rate is 26.78% of payroll for non-university members. For university members the benefit percentage is 2.0% for all service and the contribution rate is 23.82%. Our calculations indicate that these contribution rates will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 1.32%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. The System has been operating on an actuarially sound basis. However, there are no excess assets or contributions available to provide additional benefits, and there is an increase in the required employer contribution of 1.32% of payroll for the fiscal year ending June 30, 2008. In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,173,532,000 in the unfunded accrued liability from $3,362,495,000 to $4,536,027,000 during the year ending June 30, 2005.

(Dollar amounts in thousands)	ITEM	Amount of Increase/ (Decrease)
	Interest (7.50%) added to previous unfunded accrued liability	$ 252,187
	Accrued liability contribution	(153,746)
	Experience:	
	Valuation asset growth	372,991
	Pensioners' mortality	47,482
**Includes impact of change in actuarial software.*	Turnover and retirements	40,017
	New entrants	48,552
	Salary increases	32,385
	Amendments	0
	Assumption and method changes*	533,664
	TOTAL	$ 1,173,532

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Members as of June 30, 2005

GROUP	NUMBER
Retirees and Beneficiaries currently receiving benefits	37,402
Terminated employees entitled to benefits but not yet receiving benefits	4,033
Active Plan Members	72,281
TOTAL	**113,716**

2. Another such item is the schedule of funding progress as shown below.

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	(UAAL as a Percentage of Covered Payroll ((b-a) /c)
06/30/00 *	$ 12,759,636	$ 13,330,418	$ 570,782	95.7%	$ 2,133,743	26.8%
06/30/01 **	13,299,161	14,642,129	1,342,968	90.8	2,213,772	60.7
06/30/02	13,588,847	15,695,574	2,106,726	86.6	2,313,663	91.1
06/30/03	13,863,786	16,594,781	2,730,995	83.5	2,497,731	109.3
06/30/04	14,255,131	17,617,626	3,362,495	80.9	2,641,533	127.3
06/30/05	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8

* *Reflects change in asset valuation method and System amendments.*
** *Reflects change in decremental assumptions.*

All figures prior to 06/30/2005 were reported by prior actuarial firm.

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2005. Additional information as of the latest actuarial valuation follows.

Valuation Date	06/30/2005
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial Assumptions:	
Investment Rate of Return*	7.50%
Projected Salary Increases*	4.00 - 8.10%
Cost-of-Living Adjustment	1.50% Annually
*Includes Inflation at	4.00%

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2003	$ 322,046,968	100%	$0
June 30, 2004	364,351,412	100%	$0
June 30, 2005	383,776,826	100%	$0

SCHEDULE A
Results of the Valuation
Prepared as of June 30, 2005
($1,000)

1.	**ACTUARIAL ACCRUED LIABILITY**			
	Present value of prospective benefits payable in respect of:			
	(a) Present active members:			
	• Service retirement benefits		$ 7,210,009	
	• Disability retirement benefits		338,112	
	• Death and survivor benefits		56,079	
	• Refunds of member contributions		160,277	
	Total			$ 7,764,477
	(b) Present inactive members and members entitled to deferred vested benefits:			171,263
	(c) Present annuitants and beneficiaries:			
	• Service retirement benefits		$10,358,244	
	• Disability retirement benefits		443,592	
	• Death and survivor benefits		397,294	
	Total			11,199,130
	(d) Total actuarial accrued liability			$ 19,134,870
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**			14,598,843
3.	**Unfunded Actuarial Accrued Liability** [(1) MINUS (2)]			$ 4,536,027
4.	**NORMAL CONTRIBUTION RATE**	**UNIVERSITY**	**NON-UNIVERSITY**	
	(a) Actuarial present value of benefits accruing annually	$ 23,438	$ 453,257	
	(b) Annual payroll of active members	$ 162,858	$ 2,540,572	
	(c) Normal contribution rate [4(a) divided by 4(b)]	14.39%	17.84%	

Solvency Test
(in millions of dollars)

Fiscal Year	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets
2000	$ 2,128.4	$ 7,183.4	$ 4,018.6	$ 12,759.6
2001	2,215.5	8,037.0	4,389.6	13,299.2
2002	2,302.3	8,816.9	4,576.4	13,588.8
2003	2,413.9	9,329.3	4,851.6	13,863.8
2004	2,546.1	9,906.2	5,165.3	14,255.1
2005	2,621.3	11,370.4	5,143.2	14,598.8

	Fiscal Year	(1)	(2)	(3)
Portion of Accrued Liabilities Covered by Assets	2000	100%	100%	86%
	2001	100	100	69
	2002	100	100	54
	2003	100	100	44
	2004	100	100	35
	2005	100	100	12

SCHEDULE B
Development of Actuarial Value of Assets
as of June 30, 2005

(1)	Actuarial Value Beginning of Year	$ 14,255,130,659
(2)	Market Value End of Year	13,456,025,741
(3)	Market Value Beginning of Year	12,858,540,479
(4)	Cash Flow	
	a. Contributions	630,801,344
	b. Benefit Payments	(970,494,680)
	c. Net	(339,693,336)
(5)	Investment Income	
	a. Market total: (2) - (3) - (4)c	937,178,598
	b. Assumed Rate	7.50%
	c. Amount for Immediate Recognition [(1) x (5)b] + [(4)c * (5)b * 0.5]	1,056,396,299
	d. Amount for Phased-In Recognition (5)a - (5)c	(119,217,701)
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20*(5)d	(23,843,540)
	b. First Prior Year	(349,147,545)
	c. Second Prior Year	0
	d. Third Prior Year	0
	e. Fourth Prior Year	0
	f. Total Recognized Investment Gain	(372,991,085)
(7)	Actuarial Value End of Year: (1) + (4)c + (5)c + (6)f	14,598,842,537
(8)	Difference Between Market & Actuarial Values (2) - (7)	(1,142,816,796)

SCHEDULE C
PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2005	For the Year Ending June 30, 2004
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 247,024,518	$ 238,922,086
Employers	383,776,826	364,351,412
Total	$ 630,801,344	$ 603,273,498
Net Investment Income	943,831,270	1,156,237,635
TOTAL	$ 1,574,632,614	$ 1,759,511,133
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	959,518,739	$ 881,270,288
Refunds to Members	10,975,941	10,477,435
Medical Insurance Premium	0	0
Miscellaneous, including expenses	6,652,672	6,572,592
TOTAL	$ 977,147,352	$ 898,320,315
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ 597,485,262	$ 861,190,818
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 12,858,540,479	$ 11,997,349,661
Excess of Receipts over Disbursements	597,485,262	861,190,818
Asset Balance as of End of the Year	$ 13,456,025,741	$ 12,858,540,479
Rate of Return of Market Value	7.44%	9.76%

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE C
MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2005	For the Year Ending June 30, 2004
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 51,576,031	$ 53,903,551
Employers	79,022,562	53,346,747
Total	$ 130,598,593	$ 107,250,298
Net Investment Income	6,507,538	7,127,109
TOTAL	$ 137,106,131	$ 114,377,407
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	$ 0	$ 0
Refunds to Members	9,072	12,150
Medical Insurance Premium	142,349,436	119,297,357
Miscellaneous, including expenses	4,070,892	3,970,311
TOTAL	$ 146,429,400	$ 123,279,818
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ (9,323,269)	$ (8,902,411)
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 156,634,164	$ 165,536,575
Excess of Receipts over Disbursements	(9,323,269)	(8,902,411)
Asset Balance as of End of the Year	$ 147,310,895	$ 156,634,164

SCHEDULE C
LIFE INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2005	For the Year Ending June 30, 2004
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 0	$ 0
Employers	4,569,612	17,928,687
Total	$ 4,569,612	$ 17,928,687
Net Investment Income	2,239,285	1,945,052
TOTAL	$ 6,808,897	$ 19,873,739
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	$ 3,852,800	$ 4,015,800
Refunds to Members	0	0
Medical Insurance Premium	0	0
Miscellaneous, including expenses	0	0
TOTAL	$ 3,852,800	$ 4,015,800
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ 2,956,097	$ 15,857,939
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 61,016,107	$ 45,158,168
Excess of Receipts over Disbursements	2,956,097	15,857,939
Asset Balance as of End of the Year	$ 63,972,204	$ 61,016,107

SCHEDULE D

Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected by the Actuary based on the actuarial experience investigation as of June 30, 2000 and adopted by the Board of Trustees on December 17, 2001.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.70%	4.50%	4.30%	4.20%	4.00%

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL	SERVICE RETIREMENT*	EARLY RETIREMENT
20	.003%	.01%	8.65%		
25	.010	.01	8.95		
30	.016	.02	6.46		
35	.032	.04	4.49		
40	.048	.08	3.21		
45	.064	.18	2.12	15.00%	
50	.104	.33	2.33	15.00	
55	.216	.55	3.00	25.00	4.00%
60	.375	.87		20.00	
62	.438	1.03		28.00	
65	.566			40.00	
70				100.00	

** It is also assumed that an additional 20% will retire in the first year eligible for unreduced benefits if before age 60.*

FEMALES: Annual Rate of . . .					
AGE	DEATH	DISABILITY	WITHDRAWAL	SERVICE RETIREMENT*	EARLY RETIREMENT
20	.002 %	.03%	7.16 %		
25	.007	.03	8.34		
30	.014	.04	6.30		
35	.026	.07	4.08		
40	.044	.14	2.61		
45	.055	.26	1.92		
50	.066	.42	2.02	15.00%	
55	.085	.64	2.50	30.00	5.00 %
60	.122	.91		25.00	
62	.137	1.05		25.00	
65	.159			35.00	
70				100.00	

** It is also assumed that an additional 25% of women will retire in their first year of eligibility if before age 60.*

Deaths After Retirement: Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	.2%	.1%	5.1%	4.5%
50	.3	.2	5.1	4.5
55	.5	.2	5.1	4.5
60	.9	.4	5.1	4.5
65	1.7	.7	5.1	4.5
70	2.8	1.4	5.1	4.5
75	4.2	2.6	5.1	4.5
80	6.5	4.4	7.8	6.1
85	10.0	7.5	12.3	10.5
90	15.5	12.8	19.1	17.6
95	21.9	21.1	29.2	28.8

Actuarial Method: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

Assets: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

Expense Load: None.

Percent Married: 100%, with females 3 years younger than males.

Loads: Unused Sick Leave: 1% of active liability

SCHEDULE E

Summary of Main System Provisions As Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2005. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

BENEFITS

Service Retirement Allowance

Condition for Allowance: Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
(b) 2.5% of final average salary multiplied by service after July 1, 1983.
(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by actuarial equivalent factors from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Disability Retirement Allowance

Condition for Allowance: Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance: The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 19 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options:

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

CONTRIBUTIONS

Member Contributions

University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

Schedule of Active Member Valuation Data

Fiscal Year	(1) Number of Active Members	(2) Total Annual Payroll	(3) Average Annual Pay	(4) % Increase (Decrease) in Average Pay
2000	53,002	$ 2,133,743,000	$ 40,258	2.5%
2001	53,570	2,213,772,000	41,325	2.7
2002	54,175	2,313,663,000	42,707	3.3
2003	71,097	2,497,731,000	35,131	(17.7)
2004	71,950	2,641,533,000	36,713	4.5
2005	72,281	2,703,430,000	37,402	1.9

Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

Fiscal Year	Add to Rolls: Number	Add to Rolls: Annual Allowances (Millions)	Remove from Rolls: Number	Remove from Rolls: Annual Allowances (Millions)	Rolls End-of-Year: Number	Rolls End-of-Year: Annual Allowances (Millions)
2000	2,462	$ 79.2	1,008	$ 14.1	30,615	$ 619.2
2001	2,410	77.0	1,128	16.5	31,897	679.8
2002	2,577	86.2	1,063	16.8	33,408	749.2
2003	2,252	86.7	1,015	16.9	34,645	819.0
2004	2,126	85.4	1,033	17.5	35,738	887.0
2005	2,644	105.1	1,036	18.9	37,346	973.1

Fiscal Year	% Increase in Annual Allowances	Average Annual Allowances
2000	11.8	$ 20,226
2001	9.8	21,311
2002	10.2	22,425
2003	9.3	23,641
2004	8.3	24,819
2005	9.7	26,058

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STATISTICAL SECTION

for Fiscal Year ending June 30, 2005

This section of the Kentucky Teachers' Retirement System Comprehensive Annual Financial Report (KTRS CAFR) presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

Contents

Financial Trends ..... page 83

These schedules contain trend information to help the reader understand how KTRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 85

These schedules offer demographic and economic indicators to help the reader understand the System's environment within which KTRS's financial activities take place.

Operating Information ..... page 93

These schedules contain benefits service and employer contribution data to help the reader understand how KTRS's financial report relates to KTRS's services and activities.

Defined Benefit Plan

Past Nine Fiscal Years*

Additions by Source

YEAR	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Assets
2005	$ 388,346,438	$ 247,024,518	$ 946,070,556	$ 1,581,441,512
2004	382,280,099	238,922,086	1,158,182,688	1,779,384,873
2003	341,132,900	233,429,797	538,552,074	1,113,114,771
2002	303,521,106	224,361,453	(520,214,494)	7,668,065
2001	280,108,701	208,702,802	(104,903,741)	383,907,762
2000	311,286,811	203,149,281	454,251,324	968,687,416
1999	288,543,990	194,747,429	1,274,764,370	1,758,055,789
1998	294,323,253	185,010,298	1,832,126,412	2,311,459,963
1997	293,733,987	182,182,151	1,543,100,319	2,019,016,457

Deductions by Type

(Including Benefits by Type)

YEAR	Service Retirants	Disability Retirants	Survivors	Life Insurance	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Assets
2005	$ 902,863,420	$ 44,070,071	$ 12,585,248	$ 3,852,800	$ 963,371,539	$ 10,975,941	$ 6,652,673	$ 981,000,153
2004	827,731,523	41,491,490	12,047,275	4,015,801	885,286,089	10,471,607	6,578,420	902,336,116
2003	763,099,082	38,744,454	11,259,332	3,961,800	817,064,668	9,951,410	6,388,183	833,404,261
2002	688,754,130	35,947,786	10,532,466	4,210,800	739,445,182	9,146,820	6,677,819	755,269,821
2001	627,637,879	32,233,070	10,005,656	4,110,400	673,987,005	10,673,981	5,950,036	690,611,022
2000	568,538,294	29,148,420	9,322,582	2,350,600	609,359,896	11,304,485	4,859,623	625,524,004
1999	509,787,784	26,464,287	8,718,626	2,329,800	547,300,497	9,083,461	4,522,908	560,906,866
1998	456,373,587	24,305,495	8,375,394	2,293,906	491,348,382	9,389,791	3,997,314	504,735,487
1997	399,402,290	21,775,003	8,204,891	2,123,959	431,506,143	8,032,371	3,487,717	443,026,231

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2005	$ 1,581,441,512	$ 981,000,153	$ 600,441,359
2004	1,779,384,873	902,336,116	877,048,757
2003	1,113,114,771	833,404,261	279,710,510
2002	7,668,065	755,269,821	(747,601,756)
2001	383,907,762	690,611,022	(306,703,260)
2000	968,687,416	625,524,004	343,163,412
1999	1,758,055,789	560,906,866	1,197,148,923
1998	2,311,459,963	504,735,487	1,806,724,476
1997	2,019,016,457	443,026,231	1,575,990,226

** Note: KTRS implemented GASB 25 starting the Fiscal Year 1997. Therefore, only nine years of comparisons are reported.*

Medical Insurance Plan

Past Nine Fiscal Years*

Additions by Source

YEAR	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Assets
2005	$79,022,562	$ 51,576,031	$ 6,507,537	$ 137,106,130
2004	53,346,747	53,903,551	7,127,109	114,377,407
2003	77,235,407	50,718,084	7,391,671	135,345,162
2002	95,261,407	46,184,010	6,142,817	147,588,234
2001	92,429,167	40,017,682	5,286,426	137,733,275
2000	48,946,646	36,392,846	3,710,881	89,050,373
1999	46,168,014	34,579,816	2,306,711	83,054,541
1998	35,169,982	33,136,955	1,649,075	69,956,012
1997	34,873,431	29,486,665	1,950,799	66,310,895

Deductions by Type

(Including Benefits by Type)

	Insurance Benefit Expense						
YEAR	Ynder Age 65	Age 65 & Over	All Ages**	Total Insurance Benefits Expense	Refunds	Administrative Expense	Total Deductions to Plan Net Assets
2005	$ 81,442,102	$ 60,907,334	$ 0	$ 142,349,436	$ 9,072	$ 4,070,892	$ 146,429,400
2004	68,395,333	50,902,025		119,297,358	12,150	3,970,310	123,279,818
2003	62,788,746	49,384,916		112,173,662	7,808	3,672,425	115,853,895
2002	53,794,743	47,692,523		101,487,266	6,066	3,491,649	104,984,981
2001	46,544,264	38,389,936		84,934,200	5,155	3,221,712	88,161,067
2000	38,553,599	38,786,138		77,339,737	2,246	3,023,755	80,365,738
1999	34,389,038	33,236,136		67,625,174	3,145	2,728,897	70,357,216
1998	38,391,637	21,592,245		59,983,882	2,726	2,602,538	62,589,146
1997	0	0	64,966,674	64,966,674	1,703	2,996,094	67,964,471

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2005	$ 137,106,130	$ 146,429,400	$ (9,323,270)
2004	114,377,407	123,279,818	(8,902,411)
2003	135,345,162	115,853,895	19,491,267
2002	147,588,234	104,984,981	42,603,253
2001	137,733,275	88,161,067	49,572,208
2000	89,050,373	80,365,738	8,684,635
1999	83,054,541	70,357,216	12,697,325
1998	69,956,012	62,589,146	7,366,866
1997	66,310,895	67,964,471	(1,653,576)

** Note: KTRS implemented GASB 25 starting the Fiscal Year 1997. Therefore, only nine years of comparisons are reported.*

*** Note: Prior to Jan, 1 1997 KTRS medical benefits were totally self-insured. After Jan 1, 1997 under 65 were covered under the state medical insurance pool. Over 65 remained KTRS self-insured.*

Distribution of Active Contributing Members as of June 30, 2005

By Age

Age	Male	Female
20-24	1,089	3,325
25-29	2,398	7,087
30-34	2,286	6,985
35-39	2,023	6,726
40-44	1,976	6,425
45-49	2,056	6,849
50-54	2,550	7,560
55-59	2,204	5,439
60-64	1,105	2,262
65-69	385	820
Over 70	239	492
TOTAL	18,311	53,970

By Service

Years of Service	Male	Female
Less than 1	5,377	14,186
1-4	4,081	12,436
5-9	3,014	9,388
10-14	1,987	6,141
15-19	1,466	4,800
20-24	976	3,259
25-29	877	2,672
30-34	423	946
35 or more	110	142
TOTAL	18,311	53,970

Principal Participating Employers
Current Year and Nine Years Ago

	2005			1996		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	9,646	1	13.06%	6,709	1	12.72%
Fayette County Public Schools	3,889	2	5.26%	2,549	2	4.83%
Boone County Schools	1,470	3	1.99%	730	8	1.38%
Hardin County Schools	1,270	4	1.72%	952	4	1.81%
Kenton County Schools	1,126	5	1.52%	782	7	1.48%
Pike County Schools	1,117	6	1.51%	896	6	1.70%
Madison County Schools	1,061	7	1.44%	599	17	1.14%
Daviess County Schools	1,054	8	1.43%	692	10	1.31%
Warren County Schools	1,054	9	1.43%	714	9	1.35%
Bullitt County Schools	1,031	10	1.40%	656	11	1.24%
All Other *	51,160		69.25%	37,450		71.02%
Total (198 Employers)	73,878		100.00%	52,729		100.00%

KTRS Schedule of Participating Employers

School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Harrodsburg
30. Hazard
31. Jackson
32. Jenkins
33. Ludlow
34. Mayfield
35. Middlesboro
36. Monticello
37. Murray
38. Newport
39. Owensboro
40. Paducah
41. Paintsville
42. Paris
43. Pikeville
44. Pineville
45. Providence
46. Raceland
47. Russell
48. Russellville
49. Science Hill
50. Silver Grove
51. Somerset
52. Southgate
53. Walton-Verona
54. West Point
55. Williamsburg
56. Williamstown

KTRS Schedule of Participating Employers (continued)

Universities & Community/Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/Other Organizations

State of Kentucky

1. Education and Humanities Cabinet
2. Legislative Research Commission*
3. Workforce Development Cabinet
4. Cabinet for Familes and Children*

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association President
3. Kentucky Academic Association
4. Kentucky Educationals Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative

***** *According to Kentucky Revised Statute 161.607 (1), any member of the Kentucky Teachers' Retirement System who entered employment covered by the Kentucky Employees Retirement System, the State Police Retirement System, or the County Employees Retirement System prior to July 1, 1976, may retain membership in the Teachers' Retirement System instead of joining the new system. These organizations have members who are in this category. Once these members retire, the organization will no longer be considered a KTRS participating employer.*

95	Alabama	4	New Hampshire
3	Alaska	10	New Jersey
59	Arizona	13	New Mexico
22	Arkansas	32	New York
84	California	159	North Carolina
41	Colorado	6	North Dakota
11	Connecticut	424	Ohio
6	Delaware	19	Oklahoma
2	District of Columbia	19	Oregon
851	Florida	22	Pennsylvania
168	Georgia	1	Rhode Island
6	Hawaii	95	South Carolina
4	Idaho	4	South Dakota
63	Illinois	593	Tennessee
446	Indiana	135	Texas
10	Iowa	16	Utah
23	Kansas	1	Vermont
33	Louisianna	113	Virginia
8	Maine	27	Washington
20	Maryland	56	West Virginia
11	Massachusetts	20	Wisconsin
27	Michigan	3	Wyoming
15	Minnesota		
49	Mississippi		
54	Missouri		
5	Montana		
4	Nebraska		
14	Nevada		

Distribution of Retirement Payments Worldwide

As of June 30, 2005

Additional Distribution Outside USA

1	AUSTRALIA	1	PHILIPPINES
5	CANADA	1	SWITZERLAND
1	MEXICO	1	SYRIA

TOTAL: Number of Out of State Payments 3,916
TOTAL: Out of State Payments .....$ 71,711,700
TOTAL: Number of Payments 38,485
GRAND TOTAL: Amount of Payments .....$ 959,492,763

Distribution of Retirement Payments Statewide

as of June 30, 2005

County Name	Total Payments	Number of Recipients
Adair	$ 3,953,613	169
Allen	3,395,029	141
Anderson	3,597,560	152
Ballard	2,040,981	78
Barren	8,454,683	335
Bath	2,610,164	112
Bell	8,064,255	345
Boone	15,961,833	579
Bourbon	3,853,476	154
Boyd	11,519,369	445
Boyle	7,700,293	309
Bracken	1,499,457	63
Breathitt	5,203,512	223
Breckinridge	3,811,934	143
Bullitt	8,630,096	307
Butler	1,986,691	83
Caldwell	3,382,874	139
Calloway	13,489,697	517
Campbell	14,183,990	509
Carlisle	999,230	41
Carroll	1,510,308	64
Carter	6,845,632	286
Casey	3,002,418	139
Christian	11,040,078	430
Clark	6,766,088	272
Clay	5,765,323	234
Clinton	2,832,660	114
Crittenden	1,355,721	59
Cumberland	1,806,756	69
Daviess	21,185,748	832
Edmonson	1,748,876	71
Elliott	1,109,764	58
Estill	2,652,920	107
Fayette	54,897,556	2,131
Fleming	3,027,954	123
Floyd	12,223,056	521
Franklin	15,466,807	717
Fulton	1,500,453	61
Gallatin	426,709	17
Garrard	3,172,333	124
Grant	3,289,948	122
Graves	7,699,877	291

Distribution of Retirement Payments Statewide

as of June 30, 2005 continued . . .

County Name	Total Payments	Number of Recipients
Grayson	5,180,656	211
Green	2,571,433	106
Greenup	7,821,349	300
Hancock	1,587,473	61
Hardin	15,925,282	616
Harlan	8,838,933	361
Harrison	4,328,096	166
Hart	3,256,725	129
Henderson	7,702,950	308
Henry	3,249,354	135
Hickman	830,926	32
Hopkins	9,630,563	389
Jackson	2,563,976	116
Jefferson	149,522,060	5,148
Jessamine	5,614,029	229
Johnson	7,423,708	298
Kenton	16,347,858	625
Knott	4,797,801	207
Knox	5,493,348	231
Larue	3,523,633	122
Laurel	11,029,082	457
Lawrence	2,873,759	119
Lee	1,342,893	73
Leslie	3,098,833	134
Letcher	7,651,221	309
Lewis	3,857,525	158
Lincoln	5,890,796	234
Livingston	1,721,318	77
Logan	5,417,558	228
Lyon	2,037,718	80
Madison	27,281,753	983
Magoffin	3,307,549	141
Marion	3,265,586	129
Marshall	7,307,658	273
Martin	2,470,114	109
Mason	3,930,245	154
McCracken	14,262,341	555
McCreary	4,392,843	182
McLean	2,207,055	88
Meade	3,369,293	119
Menifee	1,131,229	55
Mercer	4,850,975	215

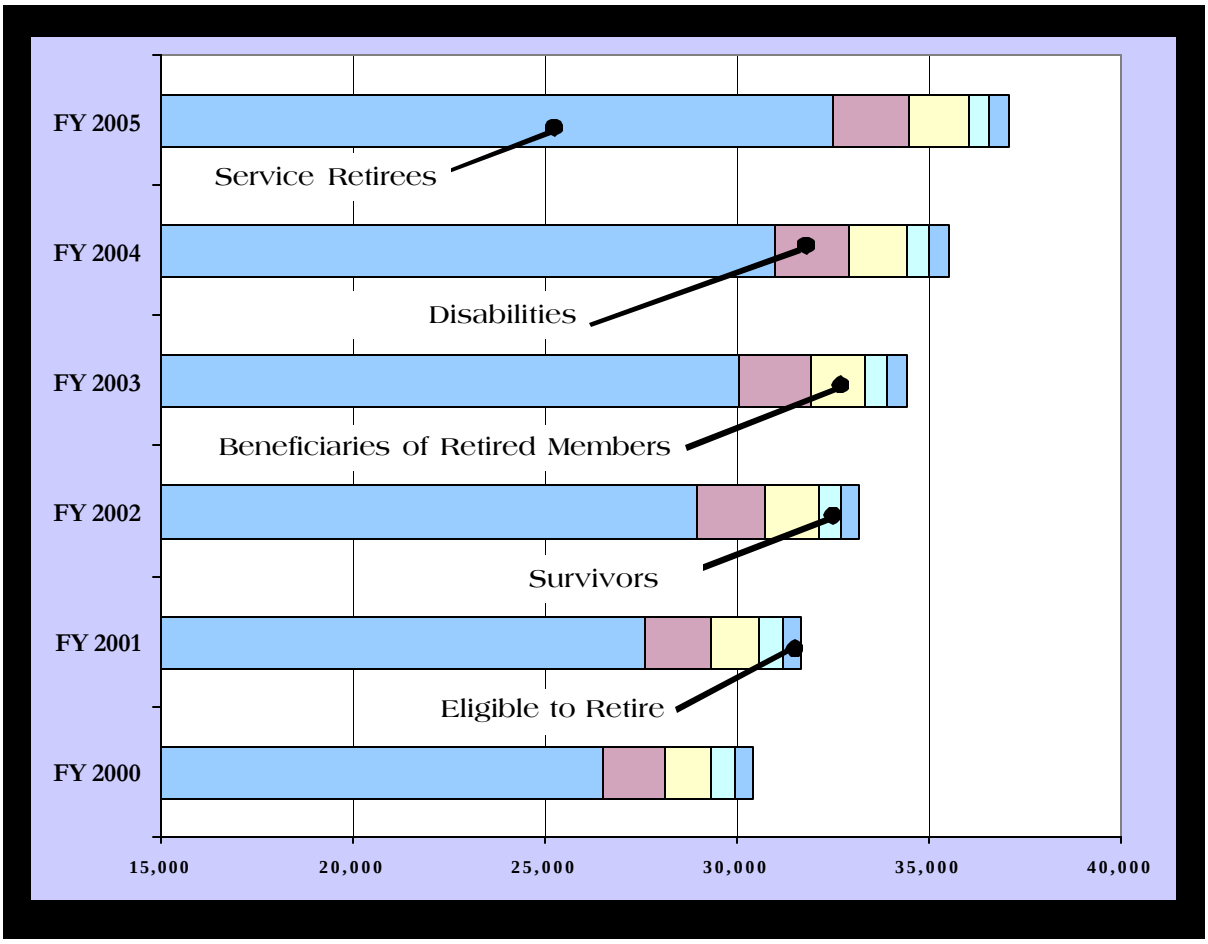
Distribution of Retirement Payments Statewide

as of June 30, 2005 continued . . .

County Name	Total Payments	Number of Recipients
Metcalfe	2,441,749	95
Monroe	3,555,140	148
Montgomery	5,182,808	201
Morgan	3,187,372	137
Muhlenberg	6,296,386	243
Nelson	7,425,980	272
Nicholas	1,392,146	56
Ohio	4,068,555	170
Oldham	8,939,895	321
Owen	1,590,917	72
Owsley	2,415,072	99
Pendleton	2,770,795	111
Perry	7,838,355	335
Pike	18,718,407	759
Powell	2,220,982	86
Pulaski	13,591,136	568
Robertson	452,048	20
Rockcastle	3,558,358	157
Rowan	10,200,801	395
Russell	4,095,477	164
Scott	6,552,124	252
Shelby	7,457,719	291
Simpson	2,997,153	125
Spencer	2,465,170	83
Taylor	5,481,820	223
Todd	1,955,179	85
Trigg	3,483,212	140
Trimble	1,330,695	40
Union	2,534,105	107
Warren	31,331,367	1,234
Washington	2,295,895	100
Wayne	5,022,158	206
Webster	2,727,491	121
Whitley	11,745,575	493
Wolfe	2,620,271	109
Woodford	5,265,531	203
Total in Kentucky	**$ 887,781,063**	**34,569**

Growth in Annuitants

as of June 30, 2005



Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Survivors	Eligible to Retire
FY 2000	26,516	1,608	1,204	622	446
FY 2001	27,619	1,713	1,265	617	464
FY 2002	28,936	1,812	1,367	584	482
FY 2003	30,064	1,859	1,416	570	502
FY 2004	31,003	1,934	1,505	536	518
FY 2005	32,506	1,987	1,566	507	525

Schedule of Annuitants by Type of Benefit as of June 30, 2005

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Retirement*				
		1	2	3	4	5
1 - 500	2,973	2,026	21	462	209	255
501 - 1,000	2,801	2,047	234	5	515	0
1,001 - 1,500	4,444	3,546	352	0	546	0
1,501 - 2,000	5,182	4,370	501	5	306	0
2,001 - 2,500	8,288	7,475	553	17	243	0
2,501 - 3,000	6,497	6,143	209	11	134	0
3,001 - 3,500	3,422	3,272	84	2	64	0
3,501 - 4,000	1,780	1,714	26	4	36	0
4,001 - 4,500	922	896	5	0	21	0
4,501 - 5,000	498	487	1	1	9	0
5,001 & OVER	539	530	1	0	8	0
Total	37,346	32,506	1,987	507	2,091	255

***Type of Retirement**

1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Survivor Payment - Active Member*
4-*Beneficiary Payment - Retired Member*
5-*Disabled Adult Child*

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,360	368	238	60	9	341	131	466
501 - 1,000	1,470	327	229	156	11	268	252	88
1,001 - 1,500	2,440	581	389	194	13	416	314	97
1,501 - 2,000	2,677	559	449	176	6	657	446	212
2,001 - 2,500	3,947	794	665	271	10	1,369	900	332
2,501 - 3,000	3,393	685	483	208	9	910	714	95
3,001 - 3,500	1,728	374	341	128	6	453	365	27
3,501 - 4,000	831	182	196	81	6	262	213	9
4,001 - 4,500	410	119	101	56	6	114	116	0
4,501 - 5,000	229	45	75	32	1	44	71	1
5,001 & OVER	253	45	61	38	7	59	76	0
Total	18,738	4,079	3,227	1,400	84	4,893	3,598	1,327

***Option selected:**

1 - Staight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/1995 TO 06/30/1996								
Average monthly benefit	$103	$378	$601	$1,092	$1,513	$2,031	$2,510	
Average final average salary	$2,668	$2,694	$2,606	$3,142	$3,305	$3,496	$3,686	
Number of retired members	24	44	45	64	103	653	531	1,464
07/01/1996 TO 06/30/1997								
Average monthly benefit	$108	$370	$782	$1,035	$1,541	$2,084	$2,535	
Average final average salary	$3,279	$2,582	$3,052	$2,994	$3,317	$3,509	$3,724	
Number of retired members	28	58	54	68	139	975	626	1,948
07/01/1997 TO 06/30/1998								
Average monthly benefit	$148	$415	$732	$1,108	$1,597	$2,175	$2,762	
Average final average salary	$3,807	$2,922	$2,843	$3,153	$3,450	$3,652	$4,071	
Number of retired members	25	73	69	85	154	1,135	524	2,065
07/01/1998 TO 06/30/1999								
Average monthly benefit	$117	$420	$735	$1,075	$1,723	$2,303	$2,907	
Average final average salary	$2,995	$3,042	$2,953	$3,087	$3,630	$3,805	$4,248	
Number of retired members	31	71	80	81	115	1,133	497	2,008
07/01/1999 TO 06/30/2000								
Average monthly benefit	$195	$444	$840	$1,232	$1,721	$2,414	$3,052	
Average final average salary	$3,764	$3,183	$3,198	$3,390	$3,573	$3,958	$4,461	
Number of retired members	54	82	74	82	95	1,180	473	2,040
07/01/2000 TO 06/30/2001								
Average monthly benefit	$145	$402	$881	$1,283	$1,779	$2,472	$3,246	
Average final average salary	$3,695	$2,842	$3,444	$3,550	$3,807	$4,024	$4,707	
Number of retired members	48	73	86	85	143	1,008	486	1,929
07/01/2001 TO 06/30/2002								
Average monthly benefit	$204	$408	$790	$1,296	$1,898	$2,552	$3,407	
Average final average salary	$4,143	$2,950	$3,312	$3,613	$3,920	$4,115	$4,884	
Number of retired members	65	128	82	116	107	1,019	574	2,091
07/01/2002 TO 06/30/2003								
Average monthly benefit	$205	$480	$940	$1,344	$1,940	$2,715	$3,592	
Average final average salary	$4,301	$3,380	$3,714	$3,798	$4,078	$4,378	$5,121	
Number of retired members	58	83	98	103	155	837	508	1,842
07/01/2003 TO 06/30/2004								
Average monthly benefit	$220	$474	$839	$1,444	$1,978	$2,758	$3,486	
Average final average salary	$5,243	$3,357	$3,349	$3,936	$4,182	$4,425	$5,062	
Number of retired members	43	84	98	96	145	818	405	1,689
07/01/2004 TO 06/30/2005								
Average monthly benefit	$187	$528	$906	$1,488	$2,037	$2,892	$3,860	
Average final average salary	$4,353	$3,511	$3,647	$4,055	$4,317	$4,602	$5,275	
Number of retired members	55	98	107	106	145	811	875	2,197

Medical Insurance Plan

Average Insurance Premium Supplements for the Last Five Years

	Years of Service Credit				
	00-9.99	10-14.99	15-19.99	20>=	TOTAL
Retirement Effective Dates					
07/01/2000 TO 06/30/2001					
Average monthly supplement	$179.71	$165.08	$201.72	$233.51	
Number of retired members	42	69	96	1,634	1,841
07/01/2001 TO 06/30/2002					
Average monthly supplement	$128.78	$167.74	$201.48	$252.15	
Number of retired members	59	62	99	1,694	1,914
07/01/2002 TO 06/30/2003					
Average monthly supplement	$106.62	$142.57	$212.81	$277.64	
Number of retired members	34	59	91	1,457	1,641
07/01/2003 TO 06/30/2004					
Average monthly supplement	$100.50	$148.85	$219.41	$289.98	
Number of retired members	30	59	82	1,365	1,536
07/01/2004 TO 06/30/2005					
Average monthly supplement	$138.29	$214.32	$305.39	$394.92	
Number of retired members	36	70	93	1,768	1,967

Summary of Fiscal Year 2004-2005 Retiree Sick Leave Payments

ACTUARIAL RATE

Grand Total Members Retiring	1,953
Total members receiving sick leave payments	1,438
Total amount of sick leave payments @ 9.855% contribution rate	$ 16,649,130.99
Average payment per retiree	$ 11,577.98
Total increase in final average salary base	$ 4,758,678.84
Average increase in FAS	$ 3,309.23
Total service credit of retirees	39,308.72
Average service credit of retirees	27.34
AVERAGE YEARLY ANNUITY	$ 2,173.50
AVERAGE MONTHLY ANNUITY	$ 181.12
ANTICIPATED LIFETIME PAYOUT OF ADDITIONAL ANNUITY	$ 38,233,673.40

Funding of Additional Payments

Member contributions 9.855% x Sick Leave Payment	$ $1,640,771.86
State Contributions 13.105% x Sick Leave Payment	2,181,868.62
TOTAL Member-State Contributions	3,822,640.48
DEFICIT	
Anticipated additional payout	38,233,673.40
Less total member & state contributions	3,822,640.48
Subtotal unfunded debt	34,411,032.92
Less current year appropriations	3,669,700.00
TOTAL DEFICIT	$ 30,741,332.92 *

* NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. Sick leave deficits are amortized over 20 year periods.

Summary of State Match and Supplemental Appropriations for Member Contributions to Teachers' Retirement System

Fiscal Year	Total Member Contributions	Employer/ Federal Payments	Required State Match Contributions	Required Supplemental Appropriation	Required Sick Leave Payments	Total State Appropriation	(Deficit) Surplus State Funding
1944-48	3,184,178		3,184,178			3,039,017	(145,160)
1948-52	4,951,458		4,951,458			5,090,848	(139,390)
1952-56	7,267,163		7,267,163			6,494,102	(773,062)
1956-60	14,970,961		14,970,961			14,963,272	(7,689)
1960-64	25,945,897		25,945,897			25,938,763	(7,134)
1964-68	49,957,299	2,042,014	47,915,285			45,317,694	(2,597,591)
1968-72	82,922,869	6,044,865	76,878,005			80,091,951	3,213,946
1972-76	120,349,350	8,019,216	112,330,134			111,665,685	(664,449)
1976-80	189,072,371	12,044,186	177,028,185	75,010,028		256,784,030	4,745,817
1980-84	272,744,772	16,334,937	256,409,836	109,622,111	5,197,234	378,667,011	7,437,831
1984-88	413,932,416	21,417,604	392,514,811	141,251,827	13,341,243	515,932,177	(31,175,706)
1988-92	602,399,432	119,352,211(2)	483,347,221	133,545,987	28,978,117	634,358,200	(11,537,557)
1992-96	756,817,769	154,296,351	602,521,418	213,030,177	53,308,591	854,138,311	(14,751,875)
1996-00	863,954,020	171,037,889	692,916,131	245,400,594	43,209,004 see (1)	990,501,344	8,975,615
2000-01	232,984,317	43,818,800	189,165,517	67,154,519		255,140,180	(1,179,856)
2001-02	248,592,121	46,687,129	201,904,992	71,913,789		262,236,026	(11,582,756)
2002-03	255,424,091	53,100,647	202,323,444	74,046,940		268,670,655	(7,699,729)
2003-04	262,075,713	56,435,086	206,541,936	76,324,073		279,215,255	(3,650,754)
2004-05	274,249,089	63,618,098	210,630,991	79,018,035		293,364,324	3,715,298

(**1**) The state appropriations for the sick leave deficit started being amortized over 15 years in the year ended June 1999 through the year ended June 2002. Starting the fiscal year 2003 the sick leave deficits were amortized over 20 years.

(**2**) Beginning with the 1988-89 fiscal year, the Department of Education and the state universities were responsible for matching their members' contributions with the state reimbursing the respective agencies in their normal budget appropriation.

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Teachers' Retirement System of the State of Kentucky

The 66th Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Year Ended June 30, 2006

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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INTRODUCTORY SECTION

for Fiscal Year ending June 30, 2006

Chairperson's Letter

Teachers' Retirement System of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

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OF EDUCATION

EX OFFICIO
JONATHAN MILLER
STATE TREASURER

December 5, 2006

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2006, the 66th year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

KTRS closed the 2005-2006 fiscal year with $13.9 billion net assets. The active membership totaled 73,740 and the retired membership was 38,497 with an annual payroll of $1.035 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. The retirement system is justly proud of the funding level that the system has achieved. Every effort will be made to insure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Zella Wells

Zella F. Wells
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 5, 2006

Honorable Ernie Fletcher, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky 40601-3800

Dear Governor Fletcher:

It is my pleasure to submit the 66th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a Component Unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2006.

State law provides the legal requirement for the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system are also required.

Kentucky Teachers' Retirement System (KTRS) has produced an annual report that will provide you, the General Assembly, and the general public, with information necessary to gain a better understanding of the Teachers' Retirement System.

This Report Consists of Five Sections:

❖ The Introductory Section contains the Board Chairperson's letter, this letter of transmittal, Board of Trustees information, a list of consultants used by the System, and the organizational chart.

❖ The Financial Section contains the report of the independent auditors, management's discussion and analysis (MD&A), financial statements and required supplementary schedules. Charles T. Mitchell, LLP conducted the 2006 independent audit.

❖ The Investment Section presents investment and portfolio performance. This includes the policies, summary, and profile of the System's holdings.

❖ The Actuarial Section contains the certification from Cavanaugh MacDonald Consulting, LLC (the consulting actuary service) as well as the results of the System's actuarial valuation.

❖ The Statistical Section contains various information on the System's membership, both active and retired. A listing of all participating KTRS employers is also presented in this section.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of the System for the year ended June 30, 2006. Discussion and analysis of net assets and related additions and deductions is presented in the MD&A beginning on page 15.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are accurately executed and financial statements are fairly presented. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Secretary.

Profile of KTRS

Kentucky Teachers' Retirement System was established on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement benefits to the educators and some public employees of the state. KTRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 21. Also, the summary of the plan provisions starting on page 76 is useful in understanding benefit and

contribution provisions. The population of our membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the pension fund. The budget is approved by the Board of Trustees and then submitted to the Kentucky General Assembly for legal adoption. The KTRS investment earnings fund the budget appropriations.

Economic Condition

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 46 contains detailed analysis of investments. This section includes asset allocations, rates of return, discussion of the current year market environment and 10 year historical trend schedules.

The investment portfolio experienced significant growth during the 2005-2006 fiscal year. The portfolio's par value increased from $12,899,431,557 to $13,161,470,370. The growth of the portfolio was due to investment income that included realized capital gains. Employer and employee contributions also provided significant income to the portfolio.

Investment earnings, including appreciation of asset values, net of investment expenses for the 2005-2006 fiscal year were $724,133,742. The majority of earnings from the System's investment portfolio were the result of net appreciation in fair value of investments in the amount of $282,572,648. The second largest earnings component, $262,392,472 was the result of interest income. Other income of $179,168,622 was generated from dividends, rent and securities lending.

According to KRS 161.430 the KTRS Board of Trustees has the authority to invest the assets of the System. The Board of Trustees, generally, delegates investment authority to an Investment Committee that is comprised of two Trustees and the System's Executive Secretary. The Investment Committee works closely with experienced investment counselors, who are contracted by the Board of Trustees, and the System's professional staff in evaluating and selecting investments.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries while making payment of reasonable expenses in administering the Plan and its Trust Funds. Also, the investment program shall provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. The entire portfolio earned a total return of 5.4% in 2005-06 and the portfolio's ten year annualized rate of return was 7.5%. During 2005-06, more than 72% of the fixed income investments were rated at least "AAA" in terms of credit quality.

On the state level, KTRS annuities have a bolstering impact on the state's economy, since around 93% of retired teachers reside in Kentucky. Total benefits (retirement, medical…etc.) paid last year were over $1.195 billion.

Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes the levels of contribution by statute that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

The latest actuarial valuation was for the period ending June 30, 2006. This report reflects the System's assets, based on modified market value; totaled $14.5 billion and the liabilities totaled $19.1 billion. The actuary determined that the existing levels of contribution by members and employers would be sufficient to fund all of the System's liabilities within a reasonable period of time. The report concludes that the System is operating on an actuarially sound basis. Assuming that employer contributions continue in the future at rates recommended on the basis of the successive actuarial valuations, the actuary states that the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

KTRS Medical Insurance Plan

KTRS health care costs keep escalating at a much faster clip than revenue growth in the Medical Insurance Plan. Last year, basic doctor/ hospital costs and the cost of medications (prescription drugs) rose about 6.4%. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2006 indicated that the fund has an unfunded liability of $4.2 billion for 2006. The KTRS 2004-2006 biennial budget requested additional funding from the Commonwealth, but due to difficult economic times, these funds were not available.

Effective January 1, 1999 KTRS retirees and dependents under the age of 65 have their health insurance provided by plans managed by the Kentucky Department for Employee Insurance. Under this arrangement, KTRS provides a monthly supplement to assist the retiree and their dependents in purchasing their health insurance. Retirees 65 and over remain in the plan administered by KTRS. These retirees also receive a supplement for the cost of their coverage.

The System realizes that these means alone will not solve the medical insurance funding crisis. Additional steps must be taken through legislation on both the state and national levels in order for true cost control to result. Meanwhile, KTRS will address the problem by taking measures to contain costs and by increasing revenues to the insurance fund, adjusting coverage to meet existing revenues, or a combination of the two.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the KTRS. A certification from the certified public accountant and actuary are enclosed in this report. The system's consultants who are appointed by the Board are listed on pages 8 and 47 of this report.

Our Gratitude

Arthur W. Green, of Elkton, resigned from the Board of Trustees effective June 30, 2006. Mr. Green was elected to the Board in October 1997. Along with his service on various Board committees, he also served as Chairman of the Investment Committee, Board Vice-Chairman and finally, Board Chairman from July 1, 2005 until June 30, 2006.

During Mr. Green's tenure on the Board, policies were adopted that have greatly improved benefits for Kentucky's retired educators, including the calculation of the retirement benefit on the three highest salary years of employment upon reaching age 55, the addition of the 3.0 percent multiplier for educators retiring with more than 30 years of service, and the addition of part-time teachers and substitute teachers to the field of membership.

On behalf of Kentucky's educators, KTRS staff extends thanks to Mr. Green for his dedicated service to the Kentucky Teachers' Retirement System and wishes him many happy and productive years.

National Recognition

The System was honored by two National professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2005. The Certificate of Achievement is a prestigious national award-recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The KTRS has received the Certificate of Achievement for the last

eighteen consecutive years (fiscal years ended 1988-2005). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2006 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

The PPCC is a coalition of the four major public pension organizations in the nation. These include the National Association of State Retirement Administrators, The National Council on Teacher Retirement, the National Conference on Public Employees Retirement Systems, and the Government Finance Officers Association.

NCTR Executive Committee

Gary L. Harbin continues to serve on the Executive Committee of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 77 state, territorial, local and university pension systems with combined assets in excess of 1.4 trillion, serving more than 16 million active and retired teachers, non-teaching personnel and other public employees.

Public Sector HealthCare Roundtable

Mr. Harbin also serves on the Board of Directors and as Vice President of the Public Sector HealthCare Roundtable. The Roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector are properly represented during the formulation and debate of federal health care reform initiatives. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

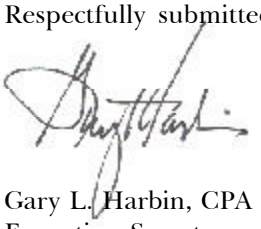
Acknowledgments

The preparation of this report reflects the combined efforts of the KTRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship of the assets contributed by KTRS members and their employers.

This report is located at the KTRS web address www.ktrs.ky.gov, and is being mailed to all employer members of the System whose cooperation continues to contribute significantly to our success, and who form the vital link between KTRS and its active members.

KTRS management and staff are committed to the continued operation of an actuarially sound retirement system. The support that you have demonstrated in the past is an essential part of this commitment, and we look forward to continuing this positive relationship.

Respectfully submitted,



Gary L. Harbin, CPA
Executive Secretary

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Teacher Trustee
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Retired Teacher Trustee
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Laura Zimmerman
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Commissioner,
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Jonathan Miller
Ex Officio Trustee
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Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

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GARY L. HARBIN, CPA
Executive Secretary

C. JOE HUTCHISON, MBA, CPA
Deputy Executive Secretary

PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

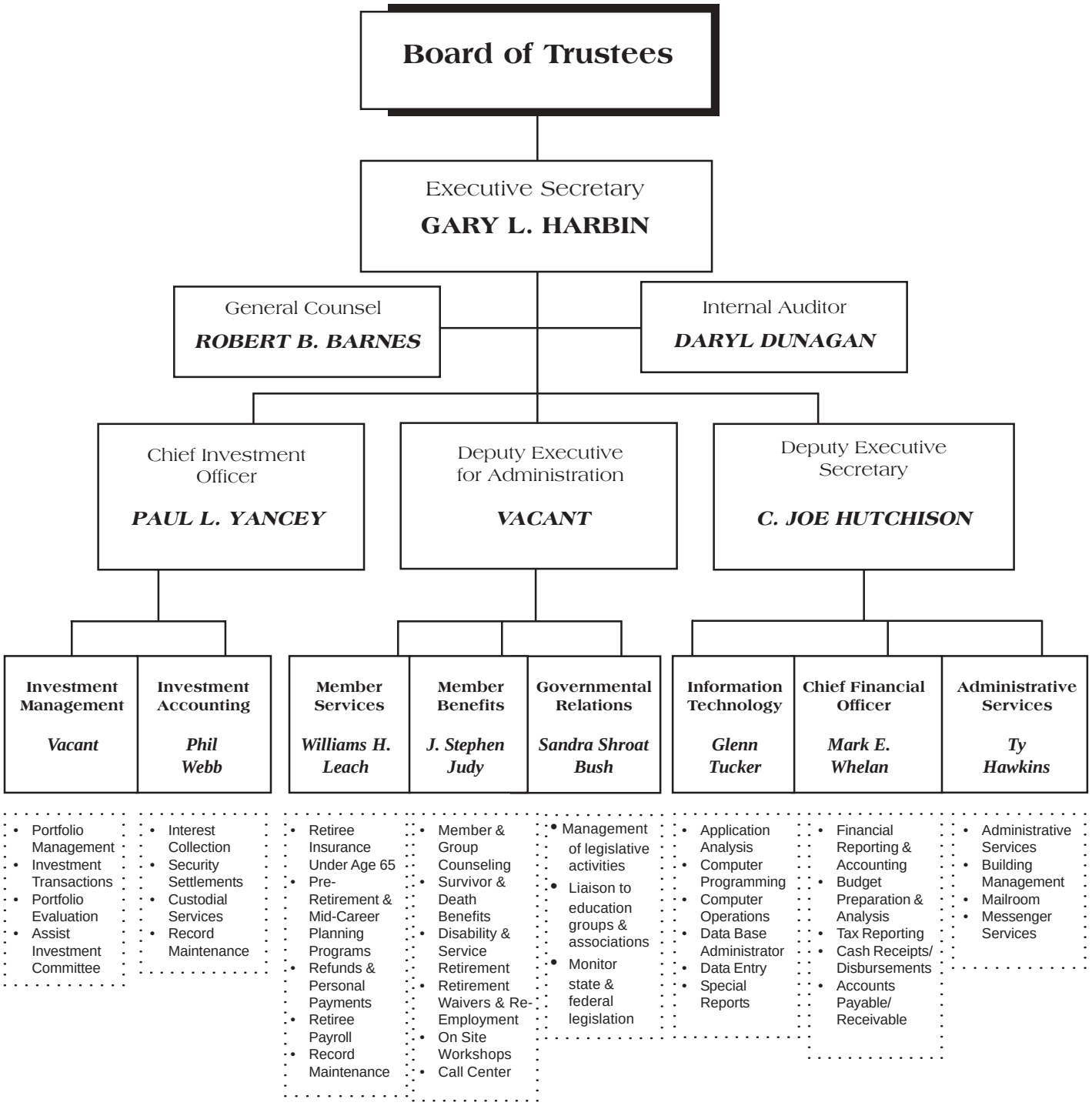
Cavanaugh Macdonald Consulting, LLC
665 Molly Lane, Suite 150
Woodstock, Georgia 30189

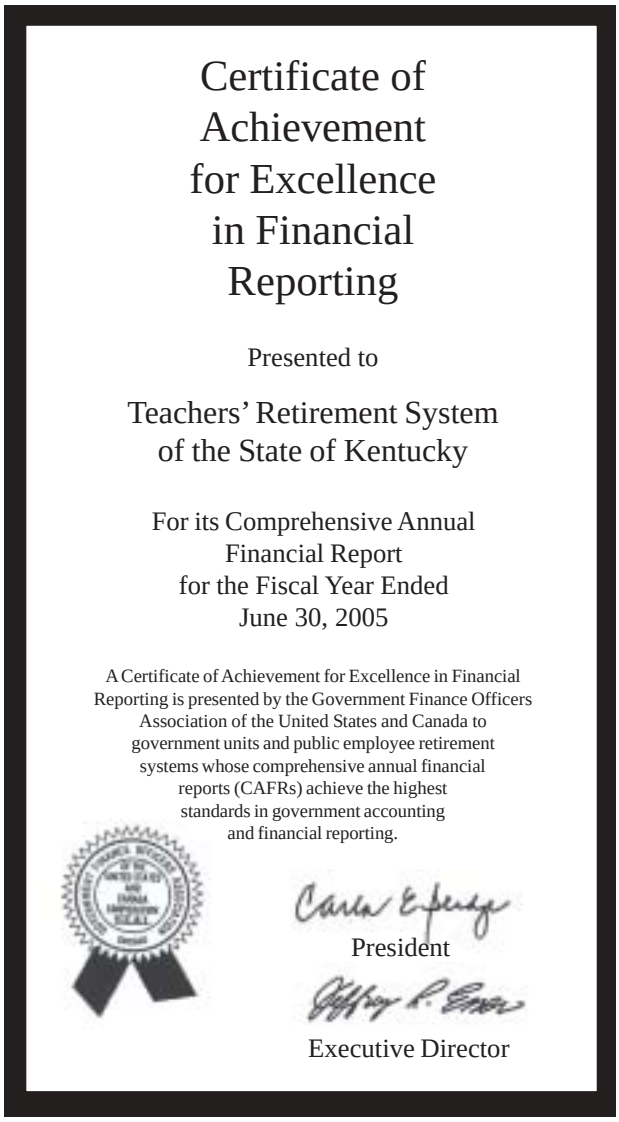
AUDITOR

Charles T. Mitchell, LLP
201 West Main Street
P.O. Box 698
Frankfort, Kentucky 40601

** See page 47 of the Investment Section for investment consultants.*

Kentucky Teachers' Retirement System
Organizational Chart





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for Excellence
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Presented to

Teachers' Retirement System
of the State of Kentucky

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended
June 30, 2005

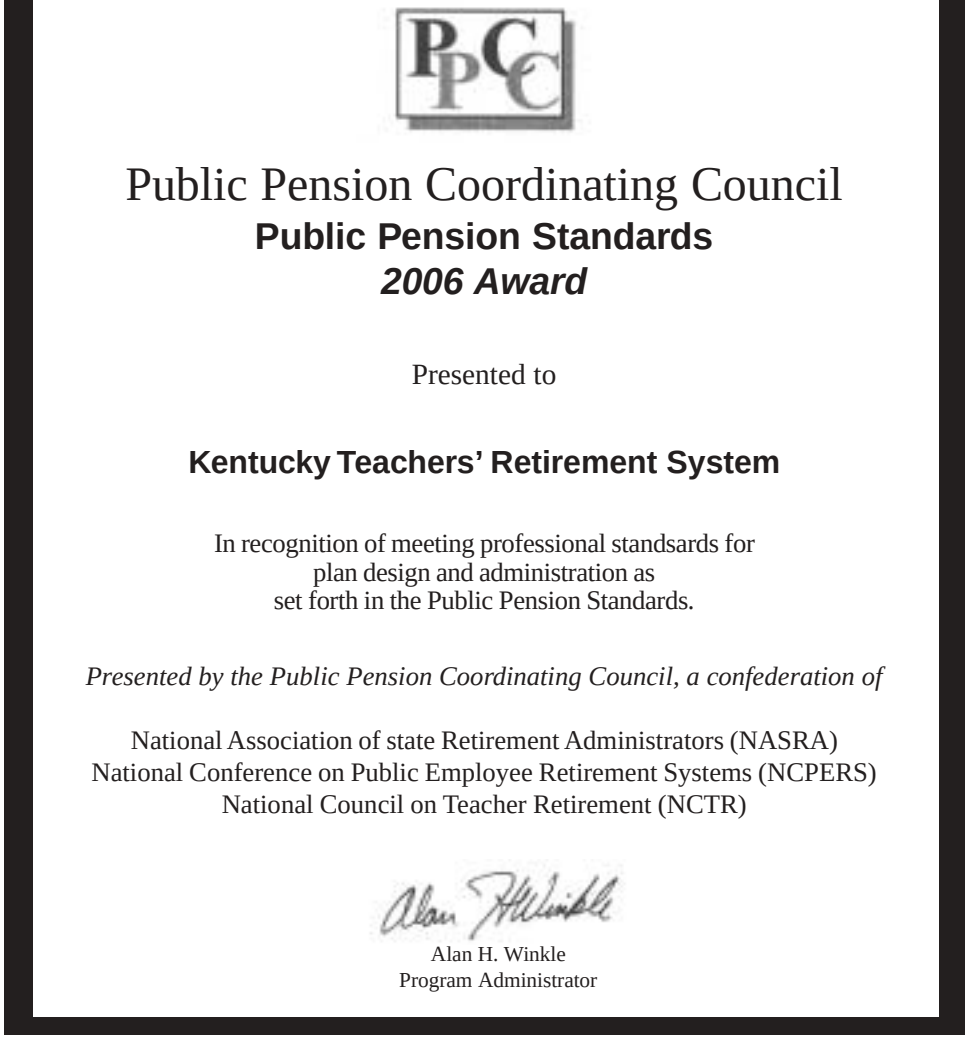
A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

President

Executive Director

GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last seventeen consecutive years (fiscal years ended 1988-2005).



Public Pension Coordinating Council
Public Pension Standards
2006 Award

Presented to

Kentucky Teachers' Retirement System

In recognition of meeting professional standsards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of state Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2006 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

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FINANCIAL SECTION

for Fiscal Year ending June 30, 2006

Charles T. Mitchell Company, LLP

Certified Public Accountants

WILLIAM G. JOHNSON, JR., C.P.A.
JAMES CLOUSE, C.P.A.
BERNADETTE SMITH, C.P.A.
KIM FIELD, C.P.A.
GREG MIKLAVCIC, C.P.A

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INDEPENDENT AUDITOR'S REPORT

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the accompanying statements of plan net assets of the Teachers' Retirement System of the State of Kentucky as of June 30, 2006 and 2005 and the related statements of changes in plan net assets for the years then ended. These component unit financial statements are the responsibility of the Teachers' Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the plan net assets of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, at June 30, 2006 and 2005 and the changes in its plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated December 5, 2006 on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

The Management's Discussion and Analysis on pages 15-18 are not a required part of the basic financial statements but is supplemental information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplemental information. However, we did not audit the information and express no opinion on it.

The financial section supporting schedules listed in the table-of-contents are presented for the purpose of additional analysis and are not a required part of the basic financial statements. These schedules are the responsibility of the System's management. Such schedules as of and for the year ended June 30, 2006 have been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

We did not audit the data included in the Introductory and Statistical sections of the report and therefore express no opinion on them.

Charles T. Mitchell Co.

December 5, 2006

MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of Kentucky Teachers' Retirement System's financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2006. Please read it in conjunction with the respective financial statements, which begin on page 19.

USING THIS FINANCIAL REPORT

Because of the long-term nature of a defined benefit pension plan and medical insurance plan, financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. The Statement of Plan Net Assets and Statement of Changes in Plan Net Assets (on pages 19-20) provide information about the activities of the defined benefit plan, medical insurance plan, and the tax-sheltered annuity plan as a whole. The Kentucky Teachers' Retirement System is the fiduciary of funds held in trust for its members.

The Schedule of Funding Progress (on pages 37-38) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (on pages 38-39) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2006, Kentucky Teachers' Retirement System's combined plan net assets increased by $315.7 million - from $13,667.8 million to $13,983.5 million. The following summaries focus on plan net assets and changes in plan net assets of Kentucky Teachers' Retirement System's defined benefit plan, medical insurance plan, and the tax-sheltered annuity plan.

Summary of
Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			TOTAL*		
	2006	2005	2004	2006	2005	2004	2006	2005	2004
Cash & Investments	$14,632.5	$14,144.4	$13,486.8	$132.1	$153.3	$159.7	$14,764.6	$14,297.7	$13,646.5
Receivables	94.7	110.0	162.9	7.1	2.3	2.7	101.8	112.3	165.6
Capital Assets	3.2	3.3	3.4				3.2	3.3	3.4
Total Assets	$14,730.4	$14,257.7	$13,653.1	$139.2	$155.6	$162.4	$14,869.6	$14,413.3	$13,815.5
Total Liabilities	(879.0)	(737.7)	(733.5)	(7.6)	(8.3)	(5.8)	(886.6)	(746.0)	(739.3)
Plan Net Assets	$13,851.4	$13,520.0	$12,919.6	$131.6	$147.3	$156.6	$13,983.0	$13,667.3	$13,076.2

*For the 403(b) Tax Shelter Plan cash and investments were approximately $.5 million for the years ended 2006 and 2005; and $.6 million for year 2004.

Summary of
Changes In Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			TOTAL		
	2006	2005	2004	2006	2005	2004	2006	2005	2004
ADDITIONS									
Member Contributions	$258.5	$247.0	$238.9	$51.7	$51.6	$52.1	$310.2	$298.6	$291.0
Employer Contributions	410.9	388.3	382.3	89.3	79.0	53.3	500.2	467.3	435.6
Investment Income (net)	717.3	946.1	1,158.2	6.8	6.5	7.1	724.1	952.6	1,165.3
Other Income				6.1			6.1		
TOTAL ADDITIONS	$1,386.7	$1,581.4	$1,779.4	$153.9	$137.1	$112.5	$1,540.6	$1,718.5	$1,891.9
DEDUCTIONS									
Benefit Payments	$1,035.6	$963.4	$885.3				$1,035.6	$963.4	$885.3
Refunds	12.9	11.0	10.5				12.9	11.0	10.5
Administrative Expense	6.8	6.6	6.6	4.6	4.1	3.9	11.4	10.7	10.5
Insurance Expenses				165.0	142.3	117.5	165.0	142.3	117.5
TOTAL DEDUCTIONS	$1,055.3	$981.0	$902.4	$169.6	$146.4	$121.4	$1,224.9	$1,127.4	$1,023.8
Increase (Decrease) in Plan Net Assets	$331.4	$600.4	$877.0	($15.7)	($9.3)	($8.9)	$315.7	$591.1	$868.1

Plan net assets of the defined benefit plan increased by 2.45% ($13,851.4 million compared to $13,520 million). The increase is primarily due to continued favorable market conditions which resulted in a net investment gain of $717.3 million. These assets are restricted to providing monthly retirement allowances to members and their beneficiaries.

Plan net assets of the medical insurance plan decreased by 10.7% ($131.6 million compared to $147.3 million) primarily due to insurance expense increases. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

DEFINED BENEFIT PLAN ACTIVITIES

Member contributions increased $11.5 million. Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions totaled $410.9 million, a net increase of $22.6 million over the 2005 fiscal year.

The System experienced another gain in net investment, although the gain was less than the previous year ($717.3 million gain at June 30, 2006 as compared to a $946.1 million gain at June 30, 2005). The increase in the fair value of investments is mainly due to continued favorable market conditions for the year ended June 30, 2006, yet in comparison the market was not as strong as the year ended June 30, 2005. This can be illustrated as follows:

(In Millions)	2006	2005	2004
Appreciation (depreciation) in fair value of investments – June 30, prior year	$ 610.4	$ 171.4	$ (361.6)
Appreciation (depreciation) in fair value of investments – June 30, end of year	690.4	610.4	171.4
Change in net appreciation (depreciation) in fair value of investments	80.0	439.0	533.0
Net income (net of investment expense)	434.8	433.8	395.0
Net gain on sale of investments	202.5	73.3	230.2
Investment Income (net) – June 30, end of year	$ 717.3	$ 946.1	$1,158.2

Program deductions in 2006 increased $74.3 million. The increase was caused principally by an increase of $72.2 million in benefit payments. Members who were drawing benefits as of June 2005 received an increase of 2.2% to their retirement allowances in July 2005. Also, there was an increase of 1,095 members and beneficiaries on the retired payroll as of June 30, 2006.

MEDICAL INSURANCE PLAN ACTIVITIES

During the 2006 fiscal year, member contributions increased $.1 million and employer contributions increased by $10.3 million over fiscal year 2005. The employer contributions increased primarily because $62.3 million in stabilization funding was placed in the medical insurance fund from the pension fund at the recommendation of the system's actuary. The amount will be repaid over a ten-year period per KRS 161.553. The employer contribution was based on a .75% allocation of employer contributions as compared to 1.77% for fiscal year 2005.

Program deductions increased $23.2 million due to an increase of insurance expenses of $22.7 million. The monthly premium subsidy for retirees under age 65 increased 19.3% effective January 1, 2006 with a decrease of 11.6% mandated by the legislature to become effective July 1, 2006. The monthly premium subsidy for retirees age 65 and over increased 9.4%. The increases in monthly insurance premiums for retirees under age 65 were $20.7 million. The increases in medical claims for retirees age 65 and older were $1.9 million.

Net investment income increased $.3 million from $6.5 million in 2005 to $6.8 million in 2006. This is due to the recognition of interest income since all investments for the Medical Insurance Plan are short term in nature and the recognition of appreciation in fair value is not feasible. This can be illustrated as follows:

(In Millions)	2006	2005	2004
Appreciation in fair value of investments – June 30, prior year	$ 0	$ 0	$ 0
Appreciation in fair value of investments – June 30 end of year	0	0	0
Net appreciation in fair value of investments	0	0	0
Net income (net of investment expense)	6.8	6.5	7.1
Net gain on sale of investments	0	0	0
Investment Income (net) – June 30	$ 6.8	$ 6.5	$ 7.1

HISTORICAL TRENDS

Accounting standards require that the statement of plan net assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information regarding the actuarial funding status of the defined benefit plan and the medical insurance plan is provided in the Schedule of Funding Progress (beginning on page 37). The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the projected unit credit cost method.

The 2006 fiscal year reveals a decline in funding position due to declining financial markets and an increase in actuarial liability. Even under these adverse conditions, the defined benefit plan continues to be well funded.

The medical insurance plan is not as vulnerable to adverse market conditions since its assets are all short term in nature and less likely to experience huge fluctuations. Although, the plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding.

Annual required contributions of the employers in relation to the required contributions are provided in the Schedule of Employer Contributions (on page 38). This schedule indicates that employers are generally meeting their responsibilities to provide resources to the plans.

Statement of Plan Net Assets
As of June 30, 2006 and 2005

	Defined Benefit Plan		Medical Insurance Plan		403(b) Tax Shelter		TOTAL	
	2006	2005	2006	2005	2006	2005	2006	2005
ASSETS								
Cash	$9,629,298	$10,007,055					$9,629,298	$10,007,055
Prepaid expenses	96,544	111,389					96,544	111,389
Receivables								
Contributions	29,953,514	25,496,774	$1,118,926	$2,267,944			31,072,440	27,764,718
State of Kentucky	5,673,887	19,217,940					5,673,887	19,217,940
Investment income	58,321,829	59,206,811			$ 71	$ 46	58,321,900	59,206,857
Investment sales receivable	0	5,150,651					0	5,150,651
Installment account receivable	734,673	946,715					734,673	946,715
Medicare D receivables			5,999,560				5,999,560	
Other receivables	59,932	23,165					59,932	23,165
Total receivables	94,743,835	110,042,056	7,118,486	2,267,944	71	46	101,862,392	112,310,046
Investments, at fair value (See Note 4)								
Short term investments	661,700,340	1,133,906,547	132,083,928	153,361,225	515,732	532,228	794,300,000	1,287,800,000
Bonds and mortgages	4,185,201,899	4,269,791,312					4,185,201,899	4,269,791,312
Common stock	8,531,993,656	7,612,197,454					8,531,993,656	7,612,197,454
Real estate	387,193,796	386,004,453					387,193,796	386,004,453
Total investments	13,766,089,691	13,401,899,766	132,083,928	153,361,225	515,732	532,228	13,898,689,351	13,555,793,219
Invested security lending collateral	856,631,934	732,378,811					856,631,934	732,378,811
Capital assets, at cost net of accumulated depreciation of $1,764,597 (See Note 2)	3,180,032	3,283,385					3,180,032	3,283,385
Total assets	14,730,371,334	14,257,722,462	139,202,414	155,629,169	515,803	532,274	14,870,089,551	14,413,883,905
LIABILITIES								
Liabilities								
Accounts payable	1,713,031	1,229,294					1,713,031	1,229,294
Treasurer's unredeemed checks	13,823	11,809					13,823	11,809
Insurance claims payable			7,580,738	8,312,899			7,580,738	8,312,899
Compensated absences payable	601,135	604,988					601,135	604,988
Revenues collected in advance			7,391	5,376			7,391	5,376
Investment purchases payable	20,000,000	3,499,614					20,000,000	3,499,614
Obligations under securities lending	856,631,934	732,378,811					856,631,934	732,378,811
Total liabilities	878,959,923	737,724,516	7,588,129	8,318,275	0	0	886,548,052	746,042,791
Net assets held in trust for pension & post-employment healthcare benefits: (See Required Supplemental Schedule 1 for a schedule of funding progress.)	$13,851,411,411	$13,519,997,946	$131,614,285	$147,310,894	$515,803	$532,274	$13,983,541,499	$13,667,841,114

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
For the Years Ended June 30, 2006 and 2005

	Defined Benefit Plan		Medical Insurance Plan		403(b) Tax Shelter		TOTAL	
	2006	2005	2006	2005	2006	2005	2006	2005
ADDITIONS								
Contributions								
Employer	$410,920,969	$388,346,438	$89,319,498	$79,022,562			$500,240,467	$467,369,000
Member	258,464,856	247,024,518	51,697,167	51,576,031			310,162,023	298,600,549
Total contributions	669,385,825	635,370,956	141,016,665	130,598,593	0	0	810,402,490	765,969,549
Other Contributions								
Recovery income			118,419				118,419	
Medicare D receipts			5,999,560				5,999,560	
Total other contributions			6,117,979				6,117,979	
Investment Income								
Net Appreciation/(Depreciation) in FV of Investments	282,572,648	512,314,384					282,572,648	512,314,384
Interest	255,566,732	242,566,500	6,804,286	6,507,537	$ 21,454	$ 11,479	262,392,472	249,085,516
Dividends	153,566,960	162,040,978					153,566,960	162,040,978
Rental Income, Net	30,949,900	33,121,604					30,949,900	33,121,604
Securities Lending, Gross Earnings	28,464,668	18,152,354					28,464,668	18,152,354
Gross Investment Income	751,120,908	968,195,820	6,804,286	6,507,537	21,454	11,479	757,946,648	974,714,836
Less Investment Expense	(6,156,584)	(4,670,256)					(6,156,584)	(4,670,256)
Less Securities Lending Expense	(27,656,322)	(17,455,008)					(27,656,322)	(17,455,008)
Net Investment Income	717,308,002	946,070,556	6,804,286	6,507,537	21,454	11,479	724,133,742	952,589,572
Total additions	1,386,693,827	1,581,441,512	153,938,930	137,106,130	21,454	11,479	1,540,654,211	1,718,559,121
DEDUCTIONS								
Benefits	1,035,606,281	963,371,539			37,925	39,877	1,035,644,206	963,411,416
Refunds of contributions	12,834,222	10,975,941	5,143	9,072			12,839,365	10,985,013
Insurance expenses			165,006,322	142,349,436			165,006,322	142,349,436
Administrative expense	6,839,859	6,652,673	4,624,074	4,070,892			11,463,933	10,723,565
Total deductions	1,055,280,362	981,000,153	169,635,539	146,429,400	37,925	39,877	1,224,953,826	1,127,469,430
Net increase (decrease)	331,413,465	600,441,359	(15,696,609)	(9,323,270)	(16,471)	(28,398)	315,700,385	591,089,691
Net assets held in trust for pension & post employment healthcare benefits								
Beginning of year	13,519,997,946	12,919,556,587	147,310,894	156,634,164	532,274	560,672	13,667,841,114	13,076,751,423
Ending of year	$13,851,411,411	$13,519,997,946	$131,614,285	$147,310,894	$515,803	$532,274	$13,983,541,499	$13,667,841,114

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements
Years Ended June 30, 2006 and 2005

Note 1: Description of Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan established to provide pension benefit plan coverage for local school districts and other public educational agencies in the state.

B. PARTICIPANTS

As of June 30, 2006 a total of 199 employers participated in the plan. Employers are comprised of 176 local school districts, 17 Department of Education Agencies and other educational organizations, 5 universities and also the Kentucky Community and Technical College System.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

Active contributing members:	2006	2005
Vested	41,656	40,799
Non-vested	32,084	31,482
Inactive members, vested	4,275	4,033
Retirees and beneficiaries currently receiving benefits	38,497	37,402
Total members, retirees, and beneficiaries	**116,512**	**113,716**

C. BENEFIT PROVISIONS

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete 27 years of Kentucky service.

Note 1: Description of Plan continued . . .

Participants that retire before age 60 with less than 27 years of service receive reduced retirement benefits. Non-university members receive monthly payments equal to two (2) percent (service prior to July 1, 1983) and two and one-half (2.5) percent (service after July 1, 1983) of their final average salaries for each year of credited service. University employees receive monthly benefits equal to two (2) percent of their final average salary for each year of credited service. The final average salary is the member's five (5) highest annual salaries except members at least 55 with 27 or more years of service may use their (3) three highest annual salaries. New members (including second retirement accounts started) after July 1, 2002 will receive monthly benefits equal to 2% of their final average salary for each year of service if, upon retirement, their total service is less than ten years. New members after July 1, 2002 who retire with ten or more years of total service will receive monthly benefits equal to 2.5% of their final average salary for each year of service, including the first ten years. In addition, members who retire July 1, 2004 and later with more than 30 years of service will have their multiplier increased for all years over 30 from 2.5% to 3.0% to be used in their benefit calculation.

The system also provides disability benefits for vested members at the rate of sixty (60) percent of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half (1.5) percent annually. Additional ad hoc increases, and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

KTRS has three cash accounts. At June 30, 2006, the pension cash account totaled $7,406,251; the administrative expense fund cash account was $1,902,091; and the life insurance cash account totaled $320,956; therefore, the carrying value of cash was $9,629,298 and the corresponding bank balance was $12,307,142. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2006.

C. CAPITAL ASSETS

Fixed assets are recorded at historical cost less straight-line accumulated depreciation. The classes of fixed assets are furniture and equipment, the KTRS office buildings and land. Furniture and equipment are depreciated over an average useful life of five to seven years. The office buildings are depreciated over forty years.

Note 2: Summary of Significant Accounting Policies continued . . .

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in plan net assets.

Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by the System's employees are recorded when earned. Upon termination or retirement, employees of the system are paid for accumulated vacation time limited to 450 hours and accumulated compensatory time limited to 200 hours. As of June 30, 2006 and 2005 accrued compensated absences were $601,135 and $604,988.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which the system is exposed. In order to cover such risks the system carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

G. OTHER RECEIVABLES

KTRS now allows qualified purchases of service credit to be made by installment payments not to exceed a five-year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2006 and 2005 installment contract receivables were $734,673 and $946,714.

H. USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The system's management believes that it has operated the plans within the constraints imposed by federal tax law.

Note 2: Summary of Significant Accounting Policies continued . . .

J. ACCOUNTING CHANGES

The system opted for early implementation of GASB #44 Economic Condition Reporting: The Statistical Section as of June 30, 2005. See the statistical section for these disclosures.

Note 3: Contributions and Reserves

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Members are required to contribute 9.855% of their salaries to the System. University members are required to contribute 8.375% of their salaries. KRS 161.580 allows each university to reduce the contribution of its members by 2.215%; therefore, university members contribute 6.16% of their salary to KTRS.

The Commonwealth of Kentucky is required to contribute 13.105% of salaries for its non-university members and 13.84% of salaries for university members.

The member and employer contributions consist of pension contributions and post-retirement contributions. The post-retirement contribution .75% finances KTRS' retiree medical insurance plan.

If an employee leaves covered employment before accumulating five (5) years of credited service, accumulated employee contributions plus interest are refunded to the employee upon the member's request.

B. RESERVES

Member Reserve

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from Unallocated Reserves. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Benefit Reserves, the fund from which retirement benefits are paid.

Employer Reserve

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal

to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky. While fiscal years 2006 and 2005 resulted in over-appropriations from the state a receivable is still due from the state because prior years under-appropriations have not been paid.

Benefit Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

Unallocated Reserve

This fund was established by KRS 161.420(6) as the Guarantee Fund to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of the System, and deficiencies not covered by the other funds.

Administrative Expense Reserve

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from Unallocated Reserves is used to pay the administrative expenses of the System.

Life Insurance Reserve

This fund was established pursuant to the provisions of KRS 161.655 to provide a life insurance benefit to retired and active members of the Kentucky Teachers' Retirement System. This benefit is financed by KTRS employer contributions that are actuarially determined.

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of KTRS' financial statements assess the risks KTRS takes in investing public funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers defined in KRS 161.430. The parameters as outlined in Title 102, Chapter 1.175, Section 2 of the Kentucky Administrative Regulations are as follows:

- There shall be no limit on the amount of investments owned by the System that are guaranteed by the U.S. Government.
- Not more than thirty-five percent (35%) of the assets of the System at book value shall be invested in corporate debt obligations.
- Not more than sixty percent (60%) of the assets of the System at book value shall be invested in common stocks or preferred stocks. Not more than twenty-five percent (25%) of the assets of the System at book value shall be invested in a stock portfolio designed to replicate a general, United States stock index.
- Not more than ten percent (10%) of the assets of the System at book value shall be invested in real estate. This would include real estate equity, real estate lease agreements, mortgages on real estate that are not guaranteed by the U.S. Government, and shares in real estate investment trusts.
- Not more than one percent (1%) of the assets of the System at book value shall be invested in venture capital investments, providing at least seventy-five percent (75%) of such investments must be in-state.
- Not more than ten percent (10%) of the assets of the System book value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments. Within this parameter, to further diversify the portfolio, the Board approved provisions that permit the limited ownership of both foreign equities and timberland.

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the retirement system's deposits may not be returned to the system. The System's total bank balance at June 30, 2006 was $12,307,142, of which $3,945,250 primarily represents deposited amounts due the System for which actual funds are in transit to and waiting to be received by the custodial bank; therefore, these funds were unavailable for investment. An additional amount of $1,902,091 represents funds held in the bank but their

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

investment is controlled by the Commonwealth of Kentucky. The remaining bank balance amount of $6,459,802 was the amount invested in cash equivalents. Cash equivalents are created through the daily sweeps of available excess cash by the System's custodial bank into bank sponsored short-term investment funds. These funds are custodial bank sponsored commingled funds which are invested in short-term securities backed by the U.S. Government and its agencies. The actual cash deposits held in bank accounts are insured up to $100,000 as covered by federal depository insurance and uncollateralized until being invested in cash equivalents.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,

b. collateralized with securities held by the pledging financial institution, or

c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2006 the System's cash equivalents in the amount of $6,459,802 were not exposed to custodial credit risk since this amount was invested by the custodial bank and collateralized at 102% with the collateral pledged to the Treasurer of the Commonwealth of Kentucky.

C. INVESTMENTS

All of the System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity securities, and real estate. These assets are reported at fair market value.

Investments are governed by the Board of Trustees' policy while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

The following chart represents the fair market values of the investments of the Kentucky Teachers' Retirement System for June 30, 2006.

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments

		June 30, 2006		June 30, 2005
Short Term Investments				
Repurchase Agreements	$	794,300,000	$	1,287,800,000
Total Short Term Investments	$	794,300,000	$	1,287,800,000
Bonds and Mortgages				
U.S. Government Obligations				
Treasury Notes & Bonds	$	1,032,439,779	$	1,224,201,754
Agencies		1,039,092,693		1,150,974,690
GNMA (Single Family)		18,781,578		39,496,335
Other Miscellaneous		168,353,243		130,140,221
Total U.S. Government Obligations	$	2,258,667,293	$	2,544,813,000
Corporate Bonds				
Industrial	$	542,410,465	$	591,007,453
Finance		1,023,985,966		886,000,915
Utility Bonds (Except Telephone)		119,160,317		112,350,505
Telephone Bonds		46,512,518		80,660,662
Total Corporate Bonds	$	1,732,069,266	$	1,670,019,535
Other Fixed Income Investments				
FHA and VA Single Family Mortgages	$	1,904	$	6,526
Project Mortgages (FHA & GNMA)		13,687,213		18,317,771
State and Local Government Issues		180,776,223		36,634,480
Total Other Investments	$	194,465,340	$	54,958,777
Total Bonds and Mortgages	$	4,185,201,899	$	4,269,791,312
Stocks	$	8,531,993,656	$	7,612,197,454
Real Estate		387,193,796		386,004,453
Total Investments	$	13,898,689,351	$	13,555,793,219

This Schedule does not include $856,631,934 securities lending collateral.

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the pension trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system, and are held by either:

a. the counterparty or
b. the counterparty's trust department or agent, but not in the System's name.

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The cash reserve of the System is maintained in high quality short-term investments. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, banker's acceptances, and repurchase agreements are all permissible investments. The System utilized investment instruments it regards as the most secure and having the best returns and does not use short-term investments that finance foreign businesses unless they are issued and guaranteed by the United States Government.

Individual repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers under terms dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS's nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a market value of at least 102% of the value of the repurchase agreements.

In addition to the System's $13.9 billion in investments at June 30, 2006, cash collateral reinvestment securities acquired through securities lending by the System's custodian, whom is also the lending agent/counterparty amounted to $856,631,934. This is consistent with the System's securities lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Interest Rate Risk

Interest Rate Risk on investments is the possibility that changes in interest rates will reduce the fair value of the retirement System's investments. In general, the longer the period until an investment matures, the greater the negative impact that changes in interest rates can have on fair value.

As of June 30, 2006 KTRS had the following investments and weighted average maturities:

Investment Type		Fair Value	Average Maturity (years)
U.S. Treasuries	$	1,065,908,866	10.6
Agencies		1,039,092,693	10.0
Corporate Bonds		1,732,069,266	8.3
Mortgage Pass-Throughs		32,470,695	21.9
State & Local Govt Issues		180,776,223	13.4
Collateralized Mortgage Obligations		134,884,156	21.6
Totals	$	4,185,201,899	10.1

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

In addition to the above securities, Repurchase Agreements (short-term investments) had a total fair value of $794,300,000 average maturity of 5.8 days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage pass-throughs and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk, significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The preceding schedule reflects only the legal maturity of all such bonds.

The System does not have a formal investment policy that limits investment maturities as a means of managing its exposure to potential fair value losses arising from future changes in interest rates. Market or interest rate risk is the greatest risk faced by an investor in the debt securities market. The price of a debt security typically moves in the opposite direction of the change in interest rates. Mortgages held by the System are fixed interest rate mortgages.

Collateralized mortgage obligations (CMOs) are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a CMO's established payment order. The System held $134.9 million in CMOs as of June 30, 2006.

Asset-backed securities (ABS) are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other credit providers. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. ABSs have been structured as pass-throughs and as structures with multiple bond classes. The ABSs held by the system and reported in the corporate bond category above are moderately sensitive to changes in interest rates.

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedule lists KTRS's investments according to credit ratings as of June 30, 2006:

RATING	FAIR VALUE
Repurchase Agreements	$ 794,300,000
Agency	1,207,379,658
AAA	556,659,829
AA	506,148,069
A	697,167,296
BBB	139,535,548
BB	24,175,953
Total	$ 3,925,366,353

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Total market value of the fixed income portfolio was $4,979,501,899 on June 30, 2006. In addition to the above investments, there were securities owned totaling $1,054,135,546 in U.S. Treasury Issues, which are obligations of the U.S. Government. The rating system used in the chart is the nationally recognized Standard and Poor's rating system. The credit risk associated with repurchase agreements and Agency investments is very minimal as the general rating of these securities is higher than AAA. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

The System's policy on credit rating as stated in 102 KAR 1:175 is that:

"A fixed income investment shall be rated at the time of purchase within the four (4) highest credit classifications identified by one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. Notwithstanding the foregoing, the fixed income investment portfolio as a whole shall maintain an average rating equal to at least the second highest credit classification."

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the System is subject to the following policies regarding single issuers of fixed income and equity securities:

> "Unless the issuer is the United States Government or one (1) of its agencies, the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the system at book value."
>
> "The System's position in a single stock shall not exceed two (2) percent of the System's assets at book value. The system's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program approved by the Board of Trustees or the Investment Committee."

KTRS has not invested greater than five percents (5%) of the System's assets at book value in any single issuer and is in compliance with the System's policies as stated here.

Foreign Currency Risk

As of June 30, 2006, KTRS had no exposure to foreign currencies.

Any stocks held associated with foreign interest are American Depositary Receipt (ADR) investments which are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. ADRs are denominated in U.S. currency.

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The System's policy regarding foreign equities is that "Not more than 10% of the assets of the System at book value shall be invested in any additional category or categories of investments….Within this parameter, to further diversify the portfolio, the Board approved provisions that permit the limited ownership of both foreign equities and timberland."

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the System. The System operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and selected domestic stocks and bonds are the types of securities that are lent. The System's sub-custodian, The Bank of New York, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the System.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. The following section details the net income earned from securities lending for the fiscal year ended June 30, 2006:

ITEM	EARNINGS
Gross Earnings (Interest and fees)	$ 28,464,668
Less: Gross Borrower Rebates	27,315,764
Bank Fees	340,558
Other	0
Net Earnings	$ 808,346

Note 4: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York) also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. As of June 30, 2006 the loan maturity was one day and the weighted average maturity of cash collateral investments was one day.

At fiscal year end, the System has no credit risk exposure to borrowers, since the amounts the System owes the borrowers exceeds the amounts the borrowers owe the System and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The System minimizes interest rate risk by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2006:

Type of Security Lent	Fair Value	Cash Collateral Received Non-Cash Collateral Value*
U.S. Government and Agencies	$ 548,168,691	$ 556,988,665
U.S. Equities	294,729,093	299,643,269
TOTAL	$ 842,897,784	$ 856,631,934

**Represents value of cash collateral only. Loan or margin collateral requirements met via the use of non-cash collateral (e.g. Government securities or Letters of Credit) are excluded from these values.*

Note 5: Medical Insurance Plan & Post-Employment Benefits

A. PLAN DESCRIPTION

In addition to the required pension benefits described in Note 1, Kentucky Revised Statute 161.675 allows KTRS to provide post-retirement healthcare benefits to members and dependents. To be eligible for medical benefits, the member must have retired either for service or disability, attain age 55 with 5 years of Kentucky service or had 27 years of Kentucky service.

The KTRS self-insured plan is limited to KTRS members and spouses at least the age of 65. All KTRS members under the age of 65 are offered commercial insurance through a state insurance purchasing pool administered by the Kentucky Personnel Cabinet. The Personnel Cabinet's primary function is to negotiate contracts with health plans to obtain the best price for persons covered. KTRS members were given a supplement to be used for payment of their health insurance premium. The amount of the member's supplement was based on the member's service credit and age. Premiums over the monthly supplement are paid by the member. The system bears no risk for excess claims expenses under the commercial insurance coverage.

KTRS members and spouses at least age 65 in the KTRS self-insured plan are also given a supplement based on service credit. Members with 20 or more years of service received the highest supplement.

At June 30, 2006, KTRS insurance covered 30,601 retirees and 6,520 dependents.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Medical Insurance Plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

C. CONTRIBUTIONS

The post-retirement healthcare provided by KTRS is financed on a pay-as-you-go basis. In order to fund the post-retirement healthcare benefit, one and five tenths percent (1.5%) of the gross annual payroll of all active members is contributed. One-half (1/2) of this amount is

Note 5: Medical Insurance Plan & Post-Employment Benefits continued . . .

derived from member contributions and one-half (1/2) from state appropriation. Also, the premiums collected from retirees as described in the plan description help meet the medical expenses of the plan.

Since medical expenses have skyrocketed in the last decade, it has become increasingly difficult to meet the expenses of the retiree health insurance program. To fund the plan, the state legislature has directed Medical Insurance Stabilization Funding of $62,294,800 and $29,169,700 for fiscal years 2006 and 2005 respectively. These amounts are to be repaid to the System's guarantee fund from the State's general fund over a 10 year period per KRS 161.553.

D. INCURRED BUT NOT REPORTED CLAIMS LIABILITIES

July 1, 1991 KTRS became self-insured assuming all liability for post-retirement healthcare costs. Effective January 1, 1997, insurance plan participants under age 65 were offered insurance through a state purchasing pool. KTRS recognizes estimates of liabilities for self-insured unpaid claims that have incurred (both reported and unreported) using the development method. This method uses past observed patterns of time between the date the claim is incurred and the date the claim is paid to estimate incurred claims from available paid claim information. The following schedule shows the change in the claims and liability and the claims activity for the years ended June 30, 2006 and 2005.

	Fiscal Year 2006	Fiscal Year 2005
Beginning Unpaid Claims Liability	$ 8,312,898	$ 5,798,772
Claims Incurred		
Current Year	166,148,844	140,105,734
Increase (Decrease) in Prior Years	(1,142,811)	2,243,702
Total Incurred Claims	$ 165,006,034	$ 142,349,436
Claims Paid		
Current Year	$ 160,549,717	$ 133,632,780
Prior Years	5,188,476	6,202,530
Total Payments	$ 165,738,193	$ 139,835,310
Ending Unpaid Claims Liability	$ 7,580,738	$ 8,312,898

E. ADMINISTRATIVE EXPENSES

The total administrative expenses of $4,624,074 are processing fees paid to third party administrators.

Note 6: 403(b) Tax-Sheltered Annuity Plan

A. PLAN DESCRIPTION

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by the System's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2006, the thirty-two members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan, therefore, there are no receivables to be recognized.

Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

Note 7: Pension Plan for Employees of the System

Full-time employees of Kentucky Teachers' Retirement System (KTRS) participate in either KTRS or Kentucky Employees Retirement System. Both plans are multiple-employer cost sharing defined benefit pension plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the system. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for KTRS employee members for the fiscal years 2006, 2005, and 2004 were $368,662, $355,095, and $359,370 respectively. KTRS contributed 100% of the required contribution each year.

All other KTRS employees are covered under the Kentucky Employee Retirement System (KERS) in the Non-Hazardous Employees Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to

Note 7: Pension Plan for Employees of the System continued ...

beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. The System's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS were required to contribute 5% of their annual creditable compensation for the fiscal years 2006, 2005, and 2004. As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation. The actuarial rate for the fiscal years 2006, 2005, and 2004 was 5.89%; and the System's annual required contributions to KERS were $103,137, and $268,975, and $123,483 respectively. KTRS contributed 100% of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Required Supplementary Schedules

Required Supplemental Schedule
Defined Benefit Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2001	$ 13,299.2	$ 14,642.1	$ 1,342.9	90.8%	$ 2,213.8	60.7%
2002	13,588.8	15,695.6	2,106.8	86.6	2,313.7	91.1
2003	13,863.8	16,594.8	2,731.0	83.5	2,497.7	109.3
2004	14,255.1	17,617.6	3,362.5	80.9	2,641.5	127.3
2005	14,598.8	19,134.8	4,536.0	76.3	2,703.4	167.8
2006	14,857.6	20,324.7	5,467.1	73.1	2,859.5	191.2

The amounts reported in this schedule of funding progress do not include assets or liabilities for post-employment healthcare benefits, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Required Supplemental Schedule
Defined Benefit Plan
Schedule of Employer Contributions
(dollar amounts in millions)

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS	PERCENTAGE CONTRIBUTED
2001	$ 262.8	100 %
2002	284.8	100
2003	322.0	100
2004	364.4	100
2005	383.8	100
2006	406.1	100

Required Supplemental Schedule
Medical Insurance Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2001	$ 103.4	$ 2,531.0	$ 2,427.6	4.1%	$ 2,213.8	109.7%
2002	146.0	2,806.0	2,660.0	5.2	2,313.7	115.0
2003	165.5	2,886.0	2,720.5	5.7	2,497.7	108.9
2004	158.9	3,166.6	3,007.7	5.0	2,641.5	113.9
2005	147.3	4,763.9	4,616.6	3.1	2,703.4	170.8
2006	131.6	4,341.9	4,210.3	3.0	2,859.5	147.2

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit plan, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Required Supplemental Schedule
Medical Insurance Plan
Schedule of Employer Contributions
(dollar amounts in millions)

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS	PERCENTAGE CONTRIBUTED
2001	$ 92.4	100%
2002	95.3	100
2003	77.2	100
2004	53.3	100
2005	79.0	100
2006	89.3	100

Notes to Required Supplementary Information

Note 1: Description of Schedule of Funding Progress

Defined Benefit Plan

The schedule of Funding Progress summarizes the actuarial value of the System's assets and actuarial accrued liability as of June 30, 2006, and each of the preceding five years. The data presented in the schedule were obtained from the System's independent actuary's annual valuation report for each year presented.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the system is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the retirement system. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the retirement system.

Medical Insurance Plan

The schedule of Funding Progress summarizes the actuarial value of the System's assets and actuarial accrued liability as of June 30, 2006 and each of the preceding five years. The data presented in the schedule were obtained from the System's independent actuary's annual valuation report for each year presented.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the system is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the plan. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the plan.

Note 2: Actuarial Methodologies and Assumptions

DEFINED BENEFIT PLAN

A. Methodologies

The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the unit credit actuarial cost method with projected benefits. The actuarial value of assets was determined using the method illustrated in the Actuarial Value of Assets table. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period using an open amortization approach. The five (5) year smoothed market approach is used for asset valuation.

Actuarial Value of Assets

(1)	Actuarial Value of Assets on June 30, 2005	$	14,598,842,537
(2)	Market Value End of Year June 30, 2006		13,783,830,173
(3)	Market Value Beginning of Year June 30, 2005		13,456,025,741
(4)	Cash Flow		
	a. Contributions		664,572,122
	b. Benefit Payments		1,037,706,643
	c. Net		(373,134,521)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)c		700,938,953
	b. Assumed rate		7.5%
	c. Amount for Immediate Recognition [(1) x (5)b] + [(4)c*(5)b*0.5]		1,080,920,646
	d. Amount for Phased-in Recognition (5)a - (5)c		(379,981,693)
(6)	Phased-in Recoginition of Investment Income		
	a. Current Year: 0.20*(5)d		(75,996,339)
	b. First Prior Year		(23,843,540)
	c. Second Prior Year		(349,147,545)
	d. Third Prior Year		0
	e. Fourth Prior Year		0
	f. Total Recognized Investment Gain		(448,987,424)
(7)	Actuarial Value End of Year June 30, 2006 (1) + (4)c + (5)c + (6)f		14,857,641,238
(8)	Difference Between market & Actuarial Values (2) - (7)		(1,073,811,065)

B. Assumptions

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2006, the most recent updated actuarial information include:

* Assumed inflation rate	4.0%
* Assumed investment rate	7.5%
* Assumed projected salary increases	4.0% - 8.2%
* Assumed post retirement benefit increase	1.5%

Note 2: Actuarial Methodologies and Assumptions continued . . .

MEDICAL INSURANCE PLAN

A. Methodologies

The actuarial value of assets is determined by using the market value as provided by KTRS. Compliance with applicable current or future accounting standards may require use of different actuarial methods or assumptions. For purposes of estimating the amortization, a 4.0% salary scale is used.

B. Assumptions

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2006, the most recent updated actuarial information include:

Investment Rate of Return*	7.50%
Healthcare cost trend rate*	
Initial Pre-Medicare trend rate	11.50%
Initial Post-Medicare trend rate	11.30%
Ultimate Pre-Medicare trend rate	5.00%
Year of Ultimate Pre-Medicare trend rate	2013
Ultimate Post-Medicare trend rate	5.00%
Year of Ultimate Post-Medicare trend rate	2012
**Includes inflation at*	4.00%

Supporting Schedule 1

Schedule of Administrative Expenses
Year Ended June 30, 2006

ADMINISTRATIVE EXPENSES	YEAR ENDED JUNE 30, 2006
Salaries	$ 4,890,745
Other Personnel Costs	446,613
Professional Services & Contracts	229,853
Utilities	66,842
Rentals	17,143
Maintenance	74,460
Postage & Related Services	351,646
Printing	151,241
Insurance	77,020
Miscellaneous Services	98,899
Telecommunications	27,493
Computer Services	47,975
Supplies	49,906
Depreciation	141,629
Travel	41,871
Dues & Subscriptions	26,128
Miscellaneous Commodities	7,187
Furniture, Fixtures, & Equipment not Capitalized	97,061
Compensated Absences	(3,853)
TOTAL ADMINISTRATIVE EXPENSES	$ 6,839,859

Supporting Schedule 2

Schedule of Contracted Investment Management Expenses
Year Ended June 30, 2006

BALANCED MANAGER		
Todd Investment Advisors		**$** 1,125,000
FIXED INCOME MANAGERS		
Galliard Capital Management		313,207
EQUITY MANAGERS		
GE Asset Management Inc.	**$** 647,328	
UBS Global Asset Management Corporation	970,000	
Wellington Management Company, LLP	2,501,832	
Total Equity Managers		4,119,160
CUSTODIAN		
Farmers Bank		492,668
CONSULTANT		
Becker, Burke Associates		65,000
TOTAL CONTRACTED INVESTMENT MANAGEMENT EXPENSES		**$** 6,115,035

Supporting Schedule 3

Schedule of Professional Fees for Year Ended June 30, 2006

PROFESSIONAL	NATURE OF SERVICE	YEAR ENDED JUNE 30, 2006
Charles T. Mitchell Company, LLP	Auditing Services	$ 28,000
Cavanaugh Macdonald Consulting	Actuarial Services	172,860
Reed, Weitkamp, Schell &Vice,PLLC	Attorney Services	3,080
Farmers Bank	Banking Services	15,755
International Claim Specialist	Investigative Services	10,158
	TOTAL	$ 229,853

Charles T. Mitchell Company, LLP

Certified Public Accountants

WILLIAM G. JOHNSON, JR., C.P.A.
JAMES CLOUSE, C.P.A.
BERNADETTE SMITH, C.P.A.
KIM FIELD, C.P.A.
GREG MIKLAVCIC, C.P.A

Consultants

CHARLES T. MITCHELL, C.P.A.
DON C. GILES, CPA

CTM

201 WEST MAIN, P.O. BOX 698
FRANKFORT, KENTUCKY 40602-0698
TELEPHONE (502) 227-7395
TELECOPIER (502) 227-8005
HTTP://WWW.CTMCPA.COM

REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL REPORTING BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the general purpose financial statements of Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2006, and have issued our report thereon dated December 5, 2006. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Teachers' Retirement System of the State of Kentucky's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statement and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a reportable condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving internal control over financial reporting and its operation that we consider to be material weaknesses.

Compliance

As part of obtaining reasonable assurance about whether Teachers' Retirement System of the State of Kentucky's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and accordingly, we do no express such an opinion. The results of our test disclosed no instances on noncompliance that are required to be reported under Government Auditing Standards.

This report is intended for the information of the audit committee, management, and federal awarding agencies and pass-through entities. However, this report is a matter of public record and its distribution is not limited.

Charles T. Mitchell Co.

December 5, 2006

Investment Section

for Fiscal Year ending June 30, 2006

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Kentucky Teachers' Retirement System.

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

OVERVIEW

The Board of Trustees of the Teachers' Retirement System annually appoints an Investment Committee consisting of two Board members and the Executive Secretary. This Committee acts on behalf of the Board, subject to its approval, in all matters concerning investments. In compliance with the Kentucky Revised Statutes, the Board of Trustees has adopted an "Investment Policy" which it reviews periodically. The investment objectives of the Board of Trustees are as follows:

1. The funds of the Teachers' Retirement System of the State of Kentucky shall be invested solely in the interest of its members and their beneficiaries. Investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries and making payment of reasonable expenses in administering the Plan and its Trust Funds.

2. The specific objective of the investment program shall be the investment of the Fund's assets in securities which shall provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. When investments are acquired, current income together with prospects for capital appreciation shall be weighed in regard to the long range needs of providing benefits to members and their beneficiaries. Short term fluctuations in the market value of the Fund's assets shall be considered as secondary to the long-term objectives and needs of the System.

Within the Kentucky Revised Statutes and pertinent policies, the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent man rule", as identified in KRS 161.430 (2)(b). Investment activities shall be conducted, "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims". The responsibility for investing the assets of the System is clearly assigned to the Board of Trustees.

INVESTMENT COMMITTEE

MR. ARTHUR W. GREEN
Chairman

MR. ROBERT M. CONLEY
Vice-Chairman

MR. GARY L. HARBIN, CPA
Ex-Officio Member, Executive Secretary

EXECUTIVE INVESTMENT STAFF

MR. GARY L. HARBIN, CPA
Executive Secretary

MR. PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

Investment Advisors

Fixed Income and Equity Managers
Todd Investment Advisors
101 South Fifth Street
National City Towers, Suite 3160
Louisville, Kentucky 40202

Fixed Income Manager
Galliard Capital Management
800 LaSalle Avenue
Suite 2060
Minneapolis, Minnesota 55502

Equity Managers
UBS Global Asset Management
UBS Tower
One North Wacker Drive
Chicago, Illinois 60606

Wellington Management Company
75 State Street
Boston, Massachusetts 02109

GE Asset Management
3001 Summer Street
Stamford, Connecticut 06904

Investment Consultant
Becker, Burke Associates, Inc.
Suite 1000
221 North LaSalle Street
Chicago, Illinois 60601

Investment Consultant/Subcustodian
Farmers Bank and Capital Trust Co.
Farmers Bank Plaza
Frankfort, Kentucky 40601

The Bank of New York
One Wall Street
New York, New York 10286

INVESTMENT CONSULTANT'S STATEMENT

Becker, Burke Associates served as Investment Consultant to the Kentucky Teachers' Retirement System during the 2005-06 fiscal year as it has in several previous years. Becker, Burke Associates is familiar with the operation of the System's investment program as well as its performance. The investment program of the Retirement System is operated in a prudent manner that reflects a desire to preserve capital while maximizing returns. The assets of the Retirement System are assigned to various portfolios in order to diversify the System's investments and take advantage of opportunities in various asset classes and sectors. The System gravitates toward relatively conservative holdings in each asset class. The overall effect of diversification is to minimize risk. The manner in which the Retirement System operates and its investment results are commensurate with other risk-averse institutional investors in similar regulatory environments.

Edmund M. Burke
President
Becker, Burke Associates
September 22, 2006

ASSET ALLOCATION

The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers defined in KRS 161.430. The asset allocation limits complement the investment principles used by the Board and Committee regarding security, diversification, high return, and liquidity. The asset allocation policy is adopted by the Board of Trustees and approved in the form of administrative regulation. The asset allocation parameters are structured in order to maximize return while at the same time provide a prudent diversification of assets and preserve the capital of the Teachers' Retirement System. The Board is interested in assuming secure investments that will provide long term growth to the fund. The Board does not arbitrarily compromise security in order to enhance the prospects of return. The Investment Committee and the Board are mindful of the fund's liquidity and its capability of meeting both short and long term obligations. Asset allocation parameters follow:

1. There will be no limit on the amount of investments owned by the System that are guaranteed by the U.S. Government.
2. Not more than 35% of the assets of the System at book value shall be invested in corporate debt obligations.
3. Not more than 60% of the assets of the System at book value shall be invested in common stocks or preferred stocks. No more than 25% of the assets of the System at book value shall be invested in a stock portfolio designed to replicate a general, U.S. stock index.
4. Not more than 10% of the assets of the System at book value shall be invested in real estate. This would include real estate equity, real estate lease agreements, mortgages on real estate that are not guaranteed by the U.S. Government, and shares in real estate investment trusts.
5. Not more than 10% of the assets of the System at book value shall be invested in any additional category or categories of investments. The Board shall approve by resolution such additional category or categories of investments. Within this parameter, to further diversify the portfolio, the Board approved provisions that permit the limited ownership of foreign equities, timberland, and private equity.

The asset allocation of investments at market value was somewhat different at the beginning of the fiscal year than it was on June 30, 2006. In addition, the market value allocation of assets through the dynamics of the securities markets is different than the book value allocations. During the 2005-06 fiscal year, the market value of the stock position increased from 56% of assets the previous year to 61% of assets. The portion of the portfolio in Government securities decreased from 19% to 16%. The cash position decreased during the year to 5.7% of assets. The real estate equity position remained a relatively small portion of the System's portfolio at approximately 3%.

The Kentucky Revised Statutes require the Board of Trustees to employ experienced investment counselors to advise it on investment related matters. Todd Investment Advisors was employed during 2005-06 as the System's principal investment counselor, providing assistance in the management of $2.9 billion of stocks and bonds. UBS Global Asset Management, Wellington Management Company, Galliard Capital Management, and GE Asset Management also were retained during the 2005-06 fiscal year to provide investment counseling services. Galliard Capital Management assisted in the management of approximately $878 million in bonds. GE Asset Management managed about $599 million in equity investments. UBS Global Asset

Management was responsible for managing approximately $1.1 billion in equities, and Wellington Management Company managed about $1.1 billion in equities. In addition to monitoring the investment counselors, the in-house investment staff managed about $7.2 billion of fixed income and equity assets. All of the investment firms, while specializing in particular asset classes or sectors, are required to work within the same broad objectives, portfolio constraints, and administrative guidelines. Five investment counselors plus an in-house staff provide the Board of Trustees with a diversification of management that is appropriate for a $13.9 billion fund. The Farmers Bank & Capital Trust Company, located in Frankfort, Kentucky, was retained in 2005-06 as the Custodian of Securities with the Bank of New York serving as a sub-custodian.

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by Federal, state, and local laws.

FINANCIAL ENVIRONMENT

In the fiscal year ended June 30, 2006, economic growth and corporate profits remained healthy and equities generally produced respectable, if unspectacular, returns. Clearly, the market was battling the headwinds of rising interest rates and energy prices. The market admirably absorbed the blow of Hurricane Katrina in late summer 2005 and a spike in natural gas prices into the following fall and winter. Steadily rising short-term interest rates and oil prices were a more persistent problem, however. Overall, the S&P 500 Index returned 8.6% for the fiscal year, with those returns a bit concentrated in the energy sector, which returned 12.8%.

Over the fiscal year, gross domestic product, adjusted for inflation, grew at a healthy 3.5% pace. Industrial production rose 4.5%. Jobs continued to be created at a relatively strong pace, with the unemployment rate falling from 5.0% to 4.6%. This underlying economic strength supported the market through most of the fiscal year. Countervailing trends restraining the economy and equity prices grew as the year went on, however.

Chief among these restraining influences was the price of energy. The initial blow of Hurricane Katrina and other storms in late August and September, 2005, crippled the Gulf Coast energy infrastructure. Oil prices surged from $56.50 per barrel on June 30, 2005 to about $70 at the time of Hurricane Katrina, before falling back below $60 later in the fall. Natural gas futures spiked from under $8 per contract at the beginning of the fiscal year to a high of $15.38 in December before falling back below $8 by late winter. While the natural gas spike was sharp, but temporary, oil prices resumed their climb, finishing the fiscal year at $73.93 per barrel. Oil prices were up 31% for the fiscal year.

The other key restraining influence on the economy and equity market was rising interest rates. The Federal Reserve raised the short -term federal funds rate methodically in eight quarter-point increments, from 3.25% to 5.25%. The Federal Reserve's goal was to control inflationary pressures. The Consumer Price Index was up 4.3% over the fiscal year, or 2.6% excluding food and energy. Over the previous twelve months the Consumer Price Index had risen 2.5%, or 2.0% excluding food and energy.

In this environment, the strongest industry sector within the S&P 500 over the fiscal year was energy (+12.8%). Also doing well were telecommunications (+11.8%) and industrials (+6.0%). The weakest sector was information technology (-6.2%), followed by health care (-4.6%).

Smaller companies generally outperformed the largest companies, with the S&P 400 Mid Cap Index returning 13.0% and the S&P 600 Small Cap Index returning 13.9% versus 8.6% for the Large Cap S&P 500 Index . By quarter, the S&P 500 returned 3.6% in the first quarter of the fiscal year, 2.1% in the second quarter, 4.2% in the third quarter, and -1.4% in the final quarter, ended June 30, 2006. In typical fashion, smaller companies generally outperformed during rising markets and underperformed in falling markets. By early 2006, small and mid cap stocks had outperformed large cap stocks for over six years. That is an extended period for such a trend, indicating that a shift in favor of large caps may be due.

Value stocks generally outperformed growth stocks, particularly among large cap stocks. In the large cap arena, the Russell 1000 Value Index was up 12.1% for the fiscal year versus 6.1% for the Russell 1000 Growth Index. In mid caps, the Russell Mid Cap Value Index returned 14.3% versus 13.0% for the Russell Mid Cap Growth Index. Among small caps the differential disappeared, with both the Russell 2000 Value Index and Russell 2000 Growth Index returning 14.6%. The value/growth performance differential was clearly correlated with industry sector performance. The energy, telecommunications, and industrial sectors, which are considered low growth or value sectors, performed well. The growth industries of information technology and health care performed poorly.

By the final quarter of the fiscal year, it was becoming clear that the cumulative effect of sustained high energy prices and rising interest rates was taking a toll on the economy. Adjusted for inflation, retail sales in June, 2006 were up only 1.6% over a year earlier. Housing starts in June were 11% below a year earlier. Employment growth had clearly slowed, from a monthly average growth of 179,000 in the quarter ended December, 2005 to a monthy average of 112,000 in the quarter ended June, 2006. The equity market responded with a weak quarter. The S&P 500 was down 1.4% for the quarter, while the Mid Cap 400 was down 3.1% and the Small Cap 600 was down 4.6%.

At the end of the fiscal year the economy continued to grow, albeit at a slowing pace. After its interest rate hike in late June, the Federal Reserve acknowledged the incipient slowdown in its statement and indicated that future policy would depend upon future economic developments. Key issues facing the equity market going forward were whether the Federal Reserve had successfully engineered a slowdown to a sustainable, non-inflationary growth rate, and whether oil prices would continue to rise.

FIXED INCOME MARKET

Going into the fiscal year, the prospects were not bright for returns in the fixed income market. In the U.S. Treasury market, yields ranged from about 3.1% on the shortest instruments to 4.2% on thirty-year bonds. The economy was strong, inflationary pressures were rising, largely due to surging oil prices, and the Federal Reserve was steadily raising short-term interest rates with no near-term end in sight. By the end of the fiscal year, yields were at or above 5% across the Treasury maturity spectrum. Yields steadily rose through the year and prices of existing fixed rate bonds fell. The Lehman Government/Credit Index produced a total return of -1.52% for the fiscal year.

The Federal Reserve raised the federal funds rate in eight quarter-point increments--at each regularly scheduled meeting--from 3.25% at the beginning of the fiscal year to 5.25% in late June, 2006. The cumulative effect of this was to cause a further "flattening" of the yield curve, with short-term rates rising more than long-term rates. While short-term rates rose two full percentage points over the year, the yield on the thirty-year Treasury bond rose only one percentage point, from 4.2% to 5.2%. By the end of the fiscal year, the yield curve was slightly "inverted", with some short-

term rates higher than longer-term rates. Such an inversion is often a harbinger of economic weakness in the foreseeable future. Right on cue, in its statement raising the federal funds rate to 5.25%--above longer-term rates--the Federal Reserve recognized developing economic weakness and indicated that future policy would depend upon developments. Two years of automatic increases were over.

As yields rose and the term structure flattened, the only real refuge in the investment grade bond market was shorter maturities. Though yields rose less on long-term bonds, they still posted worse returns due to their greater price sensitivity to yield increases. Within the Lehman Government/Credit Index, one-to-three year bonds returned +1.93% while bonds longer than ten years returned -6.47% . Across maturities, investment grade corporate bonds returned -2.22% compared to -1.68% for U.S. Treasury bonds. Fixed rate mortgage securities held up relatively well in the rising rate environment, with a total return of 0.39%. Below investment grade bonds were the best performing sector in the fiscal year, with the Lehman High Yield Index returning 4.8%.

By the summer of 2006, it was becoming increasingly clear that the relatively strong economic growth of the past twelve months was softening. Notably, the housing market was weakening. Existing home sales in June were 8.2% below a year earlier and a rising inventory of unsold homes was putting downward pressure on values. Retail sales were weakening, with a heavily indebted consumer sector under increasing pressure from rising gasoline prices. Employment growth showed clear signs of weakening. Though inflationary pressures stoked by increases in oil and other commodities had yet to abate, inflation typically starts to decline only several months after the economy begins to weaken. The overall environment appeared to be one in which interest rates were unlikely to rise much further in the near term.

At the end of the fiscal year, the outlook for fixed income was better than a year earlier, but mixed. Yield levels were above 5% in the Treasury market and above 6% in lower quality investment grade corporate bonds and mortgages. The Federal Reserve appeared to be at or near the end of its campaign of short-term interest rate hikes. On the other hand, the markets continued to provide historically thin levels of yield compensation for credit risk and a slowing economy threatened to cause credit deterioration down the road. In addition, leveraged buyouts of public companies by private equity investors were bringing about sudden credit deterioration in corporate bonds with increasing frequency. By all indications, this trend would only increase. If one could avoid potential credit landmines in the future, the prospects were improving for a return to more normal inflation-adjusted bond returns.

PORTFOLIO CHARACTERISTICS

At year's end, the System's entire stock portfolios, exclusive of the stock index fund and the international portfolio, could be characterized as high quality and diversified. The KTRS portfolio, as measured by beta, was approximately as risky as the Standard & Poor's 500 Index. Beta is a measure of the volatility in price of a particular stock or portfolio compared to the volatility of the index. The beta of the KTRS portfolio at the end of the fiscal year was 1.03. The KTRS portfolio registered a price-earnings multiple that was higher than the index. The price-earnings ratio for the portfolio at the end of the fiscal year was 17.0, compared to 16.84 for the index. Two factors attesting to the high quality of the portfolio were the high rate of growth in both earnings per share and dividends per share. The average earnings growth rate over the past five years for the KTRS stock portfolio was 18.4%. The average dividend growth rate for the past five years of the KTRS portfolio was 15.2%. At the end of the 2005-06 fiscal year, the yield level for the KTRS portfolio stood at 1.89%, which was slightly higher than the index's yield of 1.85%.

The stock position, apart from the stock index fund and the international portfolio, began the 2005-06 fiscal year by being 31.4% of assets at market value, and by year-end, it constituted 31.9% of assets. In dollars, the value of the stock position increased from approximately $4.3 billion to about $4.4 billion in 2005-06. The three stock index funds represented another $3.8 billion that was invested in stocks at year end, while $320 million was invested in an international portfolio. At the end of 2005-06, the sector weightings in the KTRS stock portfolio were similar to those of the Standard & Poor's 500 Index. The greatest differences were underweightings by KTRS in the consumer staples and energy sectors and overweightings in the consumer discretionary, health care, and information technology sectors.

On June 30, 2006, the System's entire bond portfolio had a duration of 5.1 years. The average coupon rate for the holdings was 5.5%. As of June 30, 2006, the average maturity of the fixed income portfolio was 7.7 years. The maturities of fixed income investments will generate cash for the fund in future years. Approximately 74% of the fixed income investments, including short term cash equivalents, will mature by the end of 2018, about 12 years. This will assist the System in meeting retirement fund obligations as well as permit it to assume new investments.

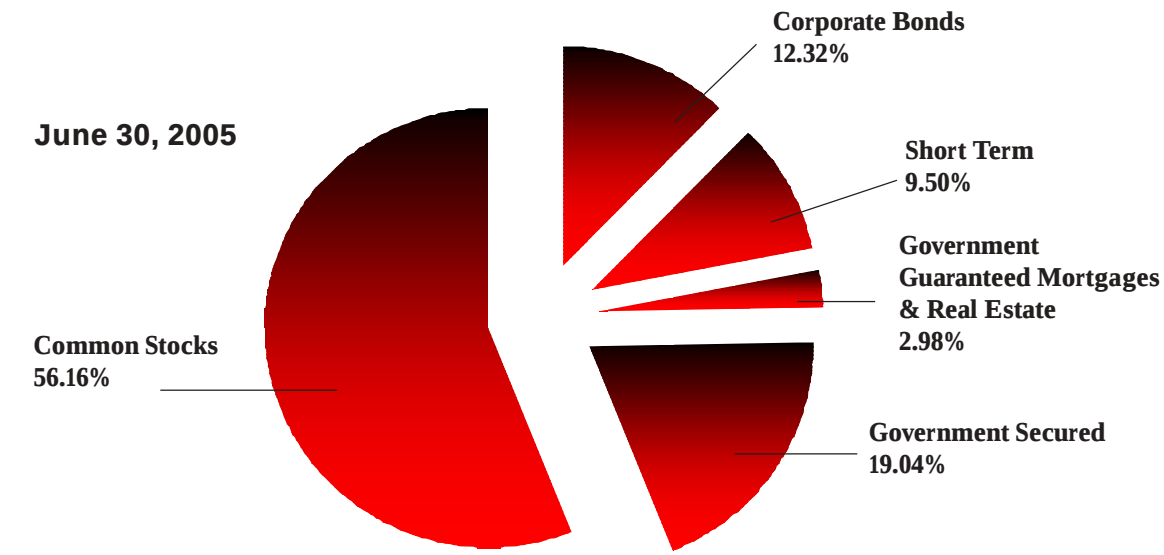
PORTFOLIO RETURNS

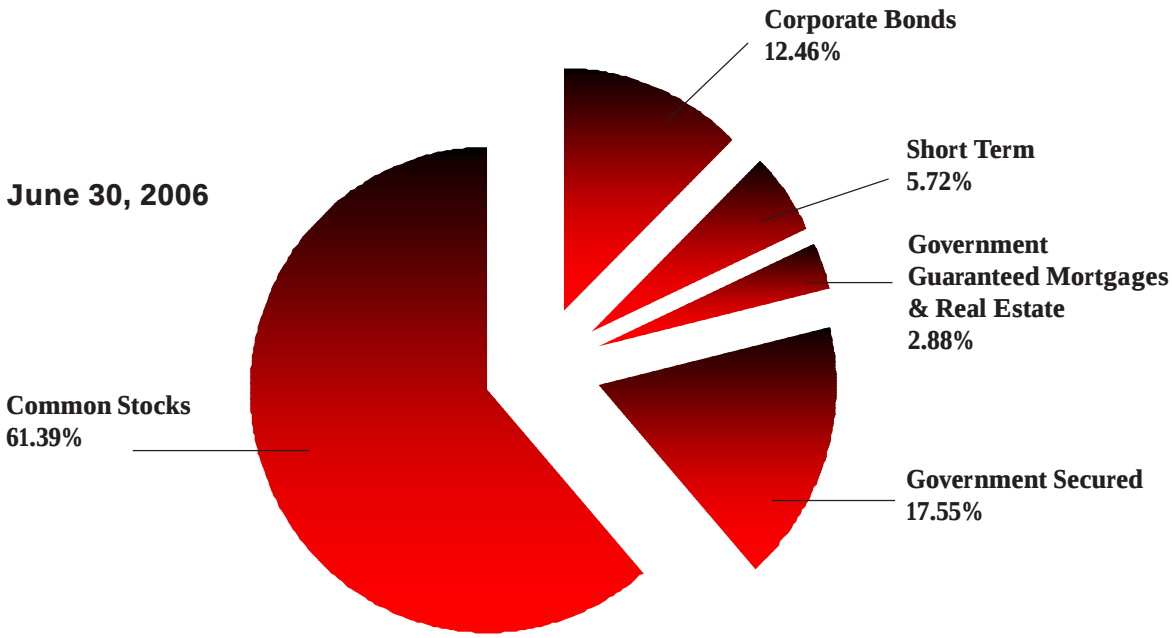
The investment portfolio experienced growth in book values and its market value during the 2005-06 year. The market value of the portfolio increased $342.9 million to a total of $13.9 billion at year-end. The book value of the fund increased $262.9 million during the year. The System accumulated in excess of $651 million of investment income during 2005-06; this investment income total excludes monies earned but not received by the end of the fiscal year. The income resulted from interest, dividends, rental income, lending income, and gains.

For the 2005-06 fiscal year, the total return earned by the System's stock position is higher than the return generated by the Standard & Poor's 500 Stock Index. The KTRS stock position earned a total return of 9.0% in 2005-06, while the stock index earned 8.6%. The ten year annualized return for the years 1997 through 2006 was 8.9% for the System's stock position and 8.3% for the stock index. The System's bond position earned a ten year annualized total return of 6.4%. This is slightly higher than the 6.2% return earned by the Lehman Government/Credit High Quality Index. In 2005-06, the System's bonds earned a total return of (1.2)%, while the Lehman High Quality Index earned (1.4)%. The entire portfolio earned a total return of 5.4% in 2005-06. The portfolio's ten year annualized rate of total return was 7.5%. The total return of the portfolio over ten years more than kept up with the rate of inflation and provided real growth. In 2005-06, the Consumer Price Index registered an inflation rate of 4.3%. The ten year annualized rate is 2.6%. The System's returns were generated by the CRA Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

The charts that follow this narrative graphically display the growth that is discussed in the preceding paragraphs. Following the charts is a summary description of investments held at June 30, 2006. The System annually produces a detailed investment report that is available on request.

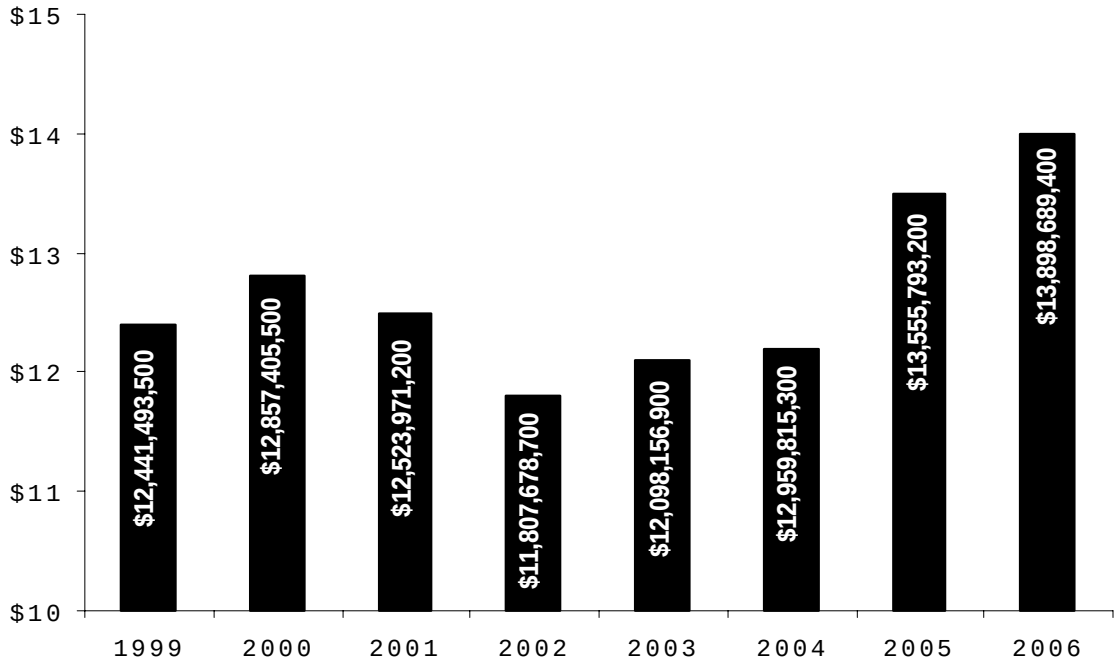
Distribution of Investments
Market Values





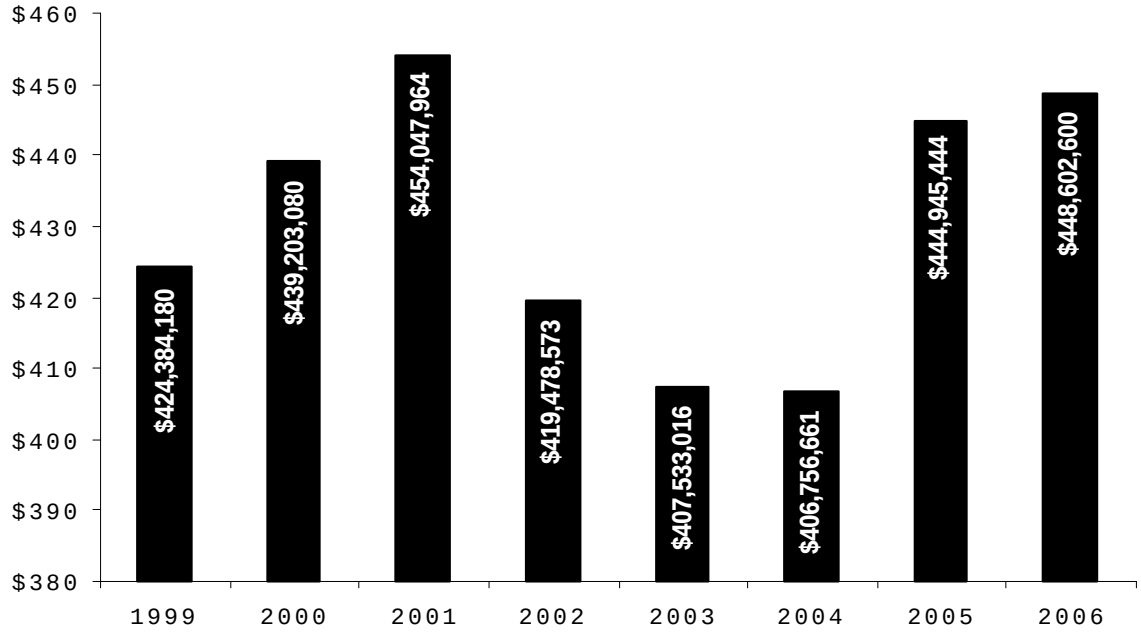
Investment Portfolio Growth

Market Values



Investment Income Growth

Excludes Amortization
Excludes Net Gains



Total Return on KTRS Investments*
Percentages

Fiscal Year	Standard & Poor's 500 Index	KTRS Stocks	Lehman Govt./Credit High Quality Index	KTRS Bonds	Consumer Price Index	KTRS Cash Collection Fund	KTRS Real Estate	KTRS Total Portfolio
1996-97	34.7	33.1	7.6	7.8	2.3	5.8	8.8	19.6
1997-98	30.2	29.2	11.3	11.6	1.7	6.1	9.7	19.4
1998-99	22.8	22.0	2.7	2.3	2.0	5.3	9.7	11.5
1999-00	7.3	3.6	4.6	4.9	3.7	5.8	9.9	4.1
2000-01	(14.8)	(8.9)	11.0	10.9	3.3	6.0	9.5	(0.7)
2001-02	(18.0)	(14.5)	8.6	9.5	1.1	2.5	6.0	4.1
2002-03	0.3	(1.1)	12.3	12.4	2.1	1.5	9.3	4.8
2003-04	19.1	19.2	(1.2)	(0.7)	3.2	1.0	9.7	9.7
2004-05	6.3	7.9	7.0	7.6	2.5	2.3	9.6	7.5
2005-06	8.6	9.0	(1.4)	(1.2)	4.3	5.0	11.3	5.4
Three Year Annualized Rate	11.2	11.8	1.4	1.8	3.3	2.8	10.2	7.5
Five Year Annualized Rate	2.5	3.5	4.9	5.4	2.6	2.4	9.2	4.6
Eight Year Annualized Rate	3.0	4.0	5.3	5.6	2.8	3.7	9.4	4.7
Ten Year Annualized Rate	8.3	8.9	6.2	6.4	2.6	4.1	9.3	7.5
Fifteen Year Annualized Rate	10.7	11.1	6.9	7.1	2.7	4.3	9.2	8.6
Twenty Year Annualized Rate	11.0	11.1	6.0	7.5	3.1	---	---	8.8

** The performance calculations presented above were generated by the CRA Rogers Casey Performance reporting system using a time-weighted rate of return calculation based upon the Dietz methodology.*

Investment Summary
Fair Market Value
06/30/2006

Type of Investment	Fair Value 07/01/05	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/06
Short Term	1,287,800,000	45,489,990,100	1,350,900	45,984,841,000	794,300,000
Fixed Income	4,269,791,300	2,047,313,100	(274,273,400)	1,857,629,100	4,185,201,900
Equities	7,998,201,900	2,537,319,200	555,495,200	2,171,828,800	8,919,187,500
TOTAL	13,555,793,200	50,074,622,400	282,572,700	50,014,298,900	13,898,689,400

Contracted Investment Management Expenses
($ Thousands) as of 06/30/2006

	Assets Under Management	Expenses	Basis Points *
INVESTMENT MANAGER FEES			
Fixed Income Managers	$ 878,422	$ 313	3.6
Equity Managers	2,869,234	4,119	14.4
Balanced Manager	2,912,421	1,125	3.9
TOTALS	$ 6,660,077	$ 5,557	8.3
OTHER INVESTMENT SERVICES			
Custodian Services	$ 13,898,689	$ 493	0.4
Investment Consultant		65	
TOTAL		$ 558	
GRAND TOTAL		$ 6,115	4.4

* One basis point is one-hundreth of one percent or the equivalent of .0001.

Transaction Commissions

06/30/2006

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
ADVEST INC	664,600	26,584.00	0.0400
B TRADE SERVICES	91,445	457.23	0.0050
BANC OF AMERICA	8,202,731	397,811.81	0.0485
BASS TRADING	19,000	760.00	0.0400
BEAR STEARNS	727,880	30,612.70	0.0421
BENCHMARK COMPANY	1,600	64.00	0.0400
BLAIR, WILLIAM & CO (IPO)	1,100	1,210.00	1.1000
BNY BROKERAGE	1,369,498	56,257.92	0.0411
BOENNING & SCATTERGOOD	197,430	4,505.17	0.0228
C E UNTERBERG TOWBIN	36,400	15,396.44	0.4230
C S FIRST BOSTON (IPO)	2,300	2,311.20	1.0049
CANACCORD ADAMS	15,400	659.00	0.0428
CANTOR FITZGERALD & CO	117,100	5,195.00	0.0444
CHAPDELAINE PENSION	37,700	1,508.00	0.0400
CIBC OPPENHEIMER WORLDMARKET	372,200	13,196.00	0.0355
CITIGROUP	4,761,556	191,780.44	0.0403
COLLINS STEWART INC	7,000	280.00	0.0400
COWAN & CO	224,675	14,962.60	0.0666
CREDIT SUISSE SEC LLC	2,981,874	120,214.86	0.0403
CROWELL WEEDON & CO	73,170	2,926.80	0.0400
CUTTONE & COMPANY	6,200	155.00	0.0250
DEUTSCHE BANK SECURITIES	1,102,360	52,897.60	0.0480
DOWLING & PARTNERS	35,800	1,432.00	0.0400
E-TRADE CAPITAL MARK	47,600	1,904.00	0.0400
EURO BROKERS	14,200	426.00	0.0300
FIDELITY CAPITAL MARKETS	17,000	510.00	0.0300
FIRST KY SEC	1,120,600	44,824.00	0.0400
FOX PITT KELTON INC	99,900	3,996.00	0.0400
FREIDMAN BILLINGS	86,800	3,365.00	0.0388
FTN FINANCIAL CAPITAL	92,800	3,712.00	0.0400
FULCRUM GLOBAL PARTNERS	18,000	720.00	0.0400
GOLDMAN SACHS & CO	4,250,828	173,001.99	0.0407
HARRIS NESBITT GERAR	31,300	1,410.00	0.0450
HEFLIN & CO	146,400	5,856.00	0.0400
HOWE BARNES INVESTMENT	70,400	2,816.00	0.0400
HSBC SECURITIES	13,600	648.00	0.0476
INSTINET	86,200	918.25	0.0107
INVESTMENT TECHNOLOGY GROUP	22,396,109	364,789.12	0.0163
ITG TRANSITIONS TRADE	30,782,552	230,869.24	0.0075
ISI GROUP	1,783,600	71,344.00	0.0400
J J B HILLIARD W L LYONS	2,148,174	85,926.96	0.0400
JEFFERIES & CO	2,891,616	112,850.06	0.0390
JMP SECURITIES	5,900	236.00	0.0400
JONES & ASSOCIATES	155,800	6,232.00	0.0400
JP MORGAN & CHASE	391,000	17,519.00	0.0448
KEEFE BRUYETTE & WOODS	42,300	3,039.80	0.0719
KEYBANC CAPITAL MARKETS	27,800	2,174.00	0.0782
KNIGHT EQUITY MARKETS	321,400	11,210.00	0.0349
KOENIG SECURITIES	1,000	25.00	0.0250
KV EXECUTION SERVICES	163,330	3,114.25	0.0191
LAZARD FRERES & CO	3,716,308	148,652.32	0.0400

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
LEERINK SWANN & CO	32,900	1,328.50	0.0404
LEGG MASON WOOD WALKER	1,082,586	43,303.44	0.0400
LEHMAN BROTHERS	5,215,639	127,989.55	0.0245
LEXINGTON INVESTMENT CO	1,413,095	56,523.80	0.0400
LIQUIDNET INC	1,683,590	33,671.80	0.0200
MERRILL LYNCH	9,895,008	356,333.69	0.0360
MOORS & CABOT	12,400	496.00	0.0400
MORGAN KEEGAN	1,873,696	74,947.84	0.0400
MORGAN STANLEY/DEAN WITTER	5,661,596	186,521.51	0.0329
MURPHY & DURIEU	110,000	2,599.25	0.0236
NEEDHAM & CO INC	200	8.00	0.0400
NYFIX TRANSACTION SERVICES	107,100	535.50	0.0050
OPPENHEIMER & CO	55,200	2,208.00	0.0400
OTA LIMITED PARTNERS	43,110	1,724.40	0.0400
PIPELINE TRADING	142,500	2,137.50	0.0150
PRUDENTIAL SECURITIES	249,510	10,733.20	0.0430
PULSE TRADING	41,000	922.50	0.0225
R W BAIRD	31,200	1,248.00	0.0400
RAYMOND JAMES & ASSOCIATES	3,954,762	158,190.48	0.0400
RBC CAPITAL MARKETS	6,500	293.00	0.0451
RBC DAIN RAUSCHER INC	15,800	632.00	0.0400
ROBBINS & HENDERSON	9,600	240.00	0.0250
ROBERT BRANDT	1,500	45.00	0.0300
ROSS SINCLAIRE & ASSOCIATES INC	976,989	39,079.56	0.0400
SANDLER O'NEILL	166,600	6,664.00	0.0400
SANFORD C BERNSTEIN	74,200	1,222.50	0.0165
SOLEIL SECURITIES CO	7,600	304.00	0.0400
STATE STREET BROKERAGE	115,000	3,450.00	0.0300
STEPHENS INC	300	12.00	0.0400
STIFEL NICOLAUS & CO INC	525,996	21,039.84	0.0400
SUNTRUST ROBINSON	13,200	660.00	0.0500
SUSQUEHANNA BROKERAGE	83,100	2,097.00	0.0252
THINK EQUITY PARTNERS	23,100	924.00	0.0400
THOMAS WEISEL PARTNERS	278,920	11,493.80	0.0412
U S BANCORP PIPER JAFFRAY	92,900	4,864.40	0.0524
UBS PAINE WEBBER INC	5,231,187	211,354.98	0.0404
WACHOVIA SECURITIES	2,209,030	110,715.20	0.0501
WEDBUSH MORGAN SEC	8,600	344.00	0.0400
WEEDEN & CO	3,227,900	114,562.00	0.0355
TOTAL	**136,644,650**	**3,834,687.00**	**0.0281**

The over-the-counter commission rate on medium to large capitalization stocks is assumed to be $.04 per share. The acquisition of initial public offerings (IPOs) represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate. However, the security issuers and not the investors pay the commissions. In 2005-06, the System bought small capitalization IPOs that generated $113,025.16 in commissions. Although these commissions were not paid by the Retirement System, they resulted from the System's investment activities and are included in the total commissions of $3,834,687.00. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.04 per share or less. Investment companies usually provide investment research for brokerage clients. On occasion, investment companies direct third party research to active clients. The Retirement System received third party research through Lynch Jones Ryan, Merrill Lynch and Lehman Brothers. Trading commissions of $120,487.85 were associated with third party research obligations. The primary research providers were: Bloomberg, Interactive Data, CRA/Rogers Casey, CMS Bondedge, ISS, QED Information Systems, and Vestek.

Ten Largest Stock Holdings Ranked* by Market Value 06/30/06

Rank	Name	Shares	Market Value
1	Microsoft	8,614,999	200,729,476.70
2	Citigroup Inc	4,006,612	193,278,962.88
3	General Electric Co	5,449,310	179,609,257.60
4	Exxon Mobil Corp	2,293,500	140,706,225.00
5	Bank of America Corp	2,826,700	135,964,270.00
6	Wells Fargo & Co.	1,836,175	123,170,619.00
7	Johnson & Johnson	2,041,859	122,348,191.28
8	Pfizer Inc	4,463,349	104,754,801.03
9	Chevron Corp	1,653,267	102,601,750.02
10	ConocoPhillips	1,466,842	96,122,156.26

Top Ten Fixed Income Holdings* 06/30/06

Rank	Description	Maturity	Coupon	Par	Market Value
1	US Treasury Bonds	8/15/2023	6.250	114,500,000.00	126,281,019.50
2	US Treasury Bonds	2/15/2021	7.875	46,500,000.00	58,510,066.50
3	US Treasury Notes	5/15/2015	4.125	59,500,000.00	55,249,022.50
4	US Treasury Bonds	8/15/2029	6.125	47,325,000.00	52,619,484.38
5	US Treasury Bonds	5/15/2016	7.250	35,500,000.00	41,105,130.50
6	US Treasury Bonds	8/15/2021	8.125	29,815,000.00	38,435,738.92
7	US Treasury Notes	2/15/2008	3.000	35,000,000.00	33,817,385.00
8	US Treasury Bonds	11/15/2026	6.500	29,000,000.00	33,268,452.00
9	Bank of America Sub Notes	1/15/2011	7.400	30,000,000.00	31,920,510.00
10	US Treasury Notes	5/15/2007	4.375	32,000,000.00	31,755,008.00

***** *Detailed information concerning these values along with book values and cost values of all KTRS investments is available upon request.*

Schedule of Investments as of June 30, 2006

Investment			Par Value* or Remaining Principal Balance	Market Value	Percentage of Market Value
Repurchase Agreements			794,300,000.00	794,300,000.00	5.71
Total Short Term			794,300,000.00	794,300,000.00	5.71
Treasury Notes and Bonds			970,750,000.00	1,032,439,778.74	7.43
Agencies			1,055,464,545.25	1,039,092,693.14	7.48
GNMA (Single Family)			18,549,099.92	18,781,577.80	0.14
Collateralized Mortgage Obligations			138,811,507.63	134,884,155.61	0.97
Treasury Strip Bonds			37,000,000.00	33,469,087.00	0.24
Total U.S. Government Obligations			2,220,575,152.80	2,258,667,292.29	16.25
Industrials			541,310,000.00	542,410,465.00	3.90
Finance			1,056,458,513.23	1,023,985,966.07	7.37
Utility Bonds (Except Telephone)			120,191,660.00	119,160,317.26	0.86
Telephone Bonds			45,393,600.00	46,512,517.69	0.33
Total Corporate Bonds			1,763,353,773.23	1,732,069,266.02	12.46
FHA & VA Single Family Mortgages			1,840.02	1,903.59	0.00
Project Mortgages (FHA & GNMA)			12,848,706.95	13,687,213.56	0.10
State and Local Government Issues			181,945,000.00	180,776,223.05	1.30
Total Other Fixed Income			194,795,546.97	194,465,340.20	1.40
Subtotal (Fixed Income)			4,973,024,473.00	4,979,501,898.51	35.83
Real Estate Equity			382,353,090.33	387,193,796.00	2.78
Total Real Estate Equity			382,353,090.33	387,193,796.00	2.78
Common Stocks	103,704,198.00	Shares	3,899,332,683.44	4,219,558,752.73	30.36
Small Cap Stocks	7,691,148.00	Shares	152,625,600.54	172,213,413.46	1.24
Stock Index	89,971,582.00	Shares	3,095,524,345.32	3,410,494,171.14	24.54
600 Stock Index	8,532,072.00	Shares	200,089,712.48	245,502,370.18	1.77
400 Stock Index	3,531,176.00	Shares	114,152,330.20	116,844,696.06	0.84
Todd Alpha	1,496,413.00	Shares	49,756,260.17	47,681,449.70	0.34
International	10,610,521.00	Shares	294,611,874.11	319,698,802.78	2.30
Total Stocks	225,537,110.00	Shares	7,806,092,806.26	8,531,993,656.05	61.39
Subtotal (Equity)			8,188,445,896.59	8,919,187,452.05	64.17
Total Investments			**13,161,470,369.59**	**13,898,689,350.56**	**100.00**

*** In this asset display, par value represents the redemption value of bonds and the cost value of equities. Market value is a volatile measure that changes daily and represents the approximate transaction value of an investment on a particular day--in this case June 30, 2006. Detailed information concerning these values along with book values and cost values of all KTRS investments is available on request.**

ACTUARIAL SECTION

for Fiscal Year ending June 30, 2006

Cavanaugh Macdonald
CONSULTING, LLC

December 5, 2006

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2006. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that combined member and state contributions for the fiscal year ending June 30, 2009 at the rate of 24.46% of university members' salaries and 27.42% of non-university members' salaries are required to support the benefits of the System. This represents an increase since the previous valuation in the required employer contribution rate of 0.64% of payroll. There has been a net increase in the state special appropriation from 4.17% to 4.25%, or 0.08% of payroll. Therefore, for the 2008/2009 fiscal year, in addition to the state statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 1.88%; 0.56% from this valuation and 1.32% from the previous valuation. The contribution to the Life Insurance Fund and the Medical Insurance Fund would remain constant at 0.17% and 1.50% respectively.

The valuation takes into account the effect of amendments to the System enacted through the 2006 Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

In our opinion the System is operating on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

665 Molly Lane, Suite 150, Woodstock, GA 30189

Report of Actuary on the Valuation
Prepared as of June 30, 2006
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	**June 30, 2006**		**June 30, 2005**	
Number of active members	73,740		72,281	
Annual salaries	$ 2,859,477		$ 2,703,430	
Number of annuitants and beneficiaries	38,497		37,402	
Annual allowances	$ 1,074,159		$ 994,745	
Assets				
Market value	$ 13,783,830		$ 13,456,026	
Actuarial value	$ 14,857,641		$ 14,598,843	
Unfunded actuarial accrued liability	$ 5,467,140		$ 4,536,027	
Amortization period (years)	30		30	
	University	**Non-University**	**University**	**Non-University**
Pension Plan:				
Normal	13.91 %	17.22 %	14.39 %	17.84 %
Accrued liability	10.55	10.20	9.43	8.94
Total	24.46 %	27.42 %	23.82 %	26.78 %
Member	7.625 %	9.105 %	7.625 %	9.105 %
State (ARC)	16.835	18.315	16.195	17.675
Total	24.46 %	27.42 %	23.82 %	26.78 %
Life Insurance Fund:				
State	0.17 %	0.17 %	0.17 %	0.17 %
Medical Insurance Fund:				
Member	0.75 %	0.75 %	0.75 %	0.75 %
State Match	0.75	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	1.50 %	1.50 %	1.50 %	1.50 %
Total Contributions:	26.13 %	29.09 %	25.49 %	28.45 %
Contribution rates for fiscal year ending:	**June 30, 2009**		**June 30, 2008**	
Member Statutory	8.375 %	9.855 %	8.375 %	9.855 %
State Statutory	11.625	13.105	11.625	13.105
Required Increase	1.88	1.88	1.32	1.32
State Special	4.25	4.25	4.17	4.17
Total	26.13 %	29.09 %	25.49 %	28.45 %

2. The valuation indicates that combined member and State contributions at the rate of 24.46% of salaries for university members and at 27.42% for non-university members are sufficient to support the current benefits of the System. We also recommend that 0.17% be contributed by the state to the Life Insurance Fund and 1.50% combined member and state contributions be made to the Medical Insurance Fund. Comments on the valuation results as of June 30, 2006 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.
3. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. Since the previous valuation, the assumed rates of withdrawal, disability, retirement and mortality have been revised to reflect the results of the experience investigation for the five year period ending June 30, 2005. These revised assumptions were adopted by the Board of Trustees on September 18, 2006.
4. The valuation takes into account the effect of amendments to the System enacted through the 2006 Session of the Legislature. Since the previous valuation, the System has been amended to grant a one-time 0.8% cost-of-living increase effective July 1, 2006, and a one-time 0.6% cost-of-living increase effective July 1, 2007.
5. All amounts shown prior to the 2004/2005 fiscal year were developed and/or reported by the prior actuarial firm.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2006 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000)
Males	17,938	$ 776,490
Females	55,802	2,082,987
Total	73,740	$ 2,859,477

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2006

Group	Number	Annual Retirement Allowances[1] ($1,000)
Service Retirements	33,684	$ 984,911
Disability Retirements	2,038	48,026
Beneficiaries of Deceased Members	2,775	41,222
Total	38,497	$ 1,074,159

[1] *Includes cost-of-living adjustments effective through July 1, 2007.*

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2006 the market value of Pension Plan assets for valuation purposes held by the System amounted to $13,783,830,173. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2006 was $14,857,641,238. Schedule B shows the development of the actuarial value of assets as of June 30, 2006.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan and the Life Insurance Fund.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation (amounts are $1,000's). The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $8,108,193 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $12,033,112 of which $1,059,382 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to he paid to inactive members and to members entitled to deferred vested benefits is $183,475. The total actuarial accrued liability of the System amounts to $20,324,781. Against these liabilities, the System has present assets for valuation purposes of $14,857,641. When this amount is deducted from the actuarial accrued liability of $20,324,781, there remains $5,467,140 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 13.91% of payroll for university members and 17.22% for non-university members.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member will contribute 8.375% of annual salary to the System and each non-university member will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. For the 2008/2009 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.

3. Therefore, 10.875% of active university members' salaries and 12.355% of active non-university members' salaries is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of this amount, 0.17% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 1.88% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 4.25% of total payroll will be made by the State. The total required employer contribution rate to the Pension Plan is, therefore, 16.835% for university members and 18.315% for non-university members. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source

	UNIVERSITY	NON-UNIVERSITY
Member		
Statutory Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Contribution to Pension Plan	7.625%	9.105%
Employer		
Statutory Matching Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	12.355%
Life Insurance	(0.17) %	(0.17) %
Additional to Maintain 30-Year Amortization	1.88	1.88
Special Appropriation	4.25	4.25
Contribution to Pension Plan	16.835%	18.315%
Total Contribution to Pension Plan	24.46 %	27.42 %

4. The valuation indicates that normal contributions at the rate of 13.91% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.22%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 10.55% for university members and 10.20% for non-university members. These rates include special appropriations of 4.25% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

	PERCENTAGE OF ACTIVE MEMBERS' SALARIES	
Rate	**University**	**Non-University**
Normal	13.91 %	17.22 %
Accrued Liability*	10.55	10.20
Total	24.46 %	27.42 %

** Includes special appropriations of 4.25% of payroll to be made by the State.*

5. The unfunded actuarial accrued liability amounts to $5,467,1400,00 as of the valuation date. Accrued liability contributions at the rate of 10.55% of active university members' payroll and 10.20% of non-university members' payroll are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. The benefit percentage for non-university members is 2.0% for service accrued through July 1, 1983 and 2.5% for service up to 30 years accrued after that date. However, for members who join the System on or after July 1, 2002 and retire with less than 10 years of service, the benefit percentage is 2.0%. For members who joined the System on or after July 1, 2002, who retire with 10 or more years of service, the benefit percentage is 2.5% for all years of service up to 30 years. For all members who retire on or after July 1, 2004, the benefit percentage for service earned in excess of 30 years is 3.0%. The total net contribution rate is 27.42% of payroll for non-university members. For university members the benefit percentage is 2.0% for all service and the contribution rate is 24.46%. Our calculations indicate that these contribution rates will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 1.88%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. The System has been operating on an actuarially sound basis. However, there are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 1.88% of payroll for the fiscal year ending June 30, 2009, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June, 30, 2009	0.56	1.88

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $931,113,000 in the unfunded accrued liability from $4,536,027,000 to $5,467,140,000 during the year ending June 30, 2006.

(Dollar amounts in thousands) ITEM	Amount of Increase/ (Decrease)
Interest (7.50%) added to previous unfunded accrued liability	$ 340,202
Accrued liability contribution	(168,343)
Experience:	
Valuation asset growth	448,987
Pensioners' mortality	(5,966)
Turnover and retirements	(17,637)
New entrants	66,856
Salary increases	104,671
Amendments	161,952
Assumption and method changes	391
TOTAL	$ 931,113

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Members as of June 30, 2006

GROUP	NUMBER
Retirees and Beneficiaries currently receiving benefits	38,497
Terminated employees entitled to benefits but not yet receiving benefits	4,275
Active Plan Members	73,740
TOTAL	**116,512**

2. Another such item is the schedule of funding progress as shown below.

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	(UAAL as a Percentage of Covered Payroll ((b-a) /c)
06/30/01*	$ 13,299,161	$ 14,642,129	$ 1,342,968	90.8 %	$ 2,213,772	60.7 %
06/30/02	13,588,847	15,695,574	2,106,726	86.6	2,313,663	91.1
06/30/03	13,863,786	16,594,781	2,730,995	83.5	2,497,731	109.3
06/30/04	14,255,131	17,617,626	3,362,495	80.9	2,641,533	127.3
06/30/05	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8
06/30/06*	14,857,641	20,324,781	5,467,140	73.1	2,859,477	191.2

** Reflects change in decremental assumptions.*

All figures prior to 06/30/2005 were reported by prior actuarial firm.

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2006. Additional information as of the latest actuarial valuation follows.

Valuation Date	06/30/2006
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market

Actuarial Assumptions:

Investment Rate of Return*
7.50%

Projected Salary Increases*
4.00 - 8.20%

Cost-of-Living Adjustment
1.50% Annually

**Includes Inflation at 4.00%*

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2004	$ 364,351,412	100%	$ 0
June 30, 2005	383,776,826	100%	0
June 30, 2006	406,107,266	100%	0

The required employer contribution increase of 0.11% is scheduled for the current 2007 fiscal year budget and the increase of 1.32% is scheduled for the 2008 fiscal year budget. However, a portion of the pension contribution stream was contributed to the Medical Stabilization Fund. Therefore, there will be an NPO for the fiscal year ending June 30, 2007.

SCHEDULE A
Results of the Valuation
Prepared as of June 30, 2006
($1,000's)

1.	**ACTUARIAL ACCRUED LIABILITY**			
	Present value of prospective benefits payable in respect of:			
	(a) Present active members:			
	• Service retirement benefits		$ 7,580,014	
	• Disability retirement benefits		331,190	
	• Death and survivor benefits		63,063	
	• Refunds of member contributions		133,926	
	Total			$ 8,108,193
	(b) Present inactive members and members entitled to deferred vested benefits:			183,475
	(c) Present annuitants and beneficiaries:			
	• Service retirement benefits		$ 11,265,660	
	• Disability retirement benefits		381,567	
	• Death and survivor benefits		385,886	
	Total			12,033,112
	(d) Total actuarial accrued liability			$ 20,324,781
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**			14,857,641
3.	**Unfunded Actuarial Accrued Liability** [(1) MINUS (2)]			$ 5,467,140
4.	**NORMAL CONTRIBUTION RATE**	**UNIVERSITY**	**NON-UNIVERSITY**	
	(a) Actuarial present value of benefits accruing annually	$ 24,509	$ 462,089	
	(b) Annual payroll of active members	$ 176,135	$ 2,683,342	
	(c) Normal contribution rate [4(a) divided by 4(b)]	13.91%	17.22%	

Solvency Test
(in millions of dollars)

Fiscal Year	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets
2001	$ 2,215.5	$ 8,037.0	$ 4,389.6	$ 13,299.2
2002	2,302.3	8,816.9	4,576.4	13,588.8
2003	2,413.9	9,329.3	4,851.6	13,863.8
2004	2,546.1	9,906.2	5,165.3	14,255.1
2005	2,621.3	11,370.4	5,143.2	14,598.8
2006	2,615.8	12,216.6	5,492.4	14,857.6

	Fiscal Year	(1)	(2)	(3)
Portion of Accrued Liabilities Covered by Assets	2001	100 %	100 %	69 %
	2002	100	100	54
	2003	100	100	44
	2004	100	100	35
	2005	100	100	12
	2006	100	100	0

SCHEDULE B
Development of Actuarial Value of Assets as of June 30, 2006

(1)	Actuarial Value Beginning of Year	$ 14,598,842,537
(2)	Market Value End of Year	$ 13,783,830,173
(3)	Market Value Beginning of Year	$ 13,456,025,741
(4)	Cash Flow	
	a. Contributions	$ 664,572,122
	b. Benefit Payments	1,037,706,643
	c. Net	$ (373,134,521)
(5)	Investment Income	
	a. Market total: (2) - (3) - (4)c	$ 700,938,953
	b. Assumed Rate	7.50%
	c. Amount for Immediate Recognition [(1) x (5)b] + [(4)c * (5)b * 0.5]	$ 1,080,920,646
	d. Amount for Phased-In Recognition (5)a - (5)c	$ (379,981,693)
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20*(5)d	$ (75,996,339)
	b. First Prior Year	(23,843,540)
	c. Second Prior Year	(349,147,545)
	d. Third Prior Year	0
	e. Fourth Prior Year	0
	f. Total Recognized Investment Gain	$ (448,987,424)
(7)	Actuarial Value End of Year: (1) + (4)c + (5)c + (6)f	$ 14,857,641,238
(8)	Difference Between Market & Actuarial Values (2) - (7)	$ (1,073,811,065)

SCHEDULE C
PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2006	For the Year Ending June 30, 2005
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 258,464,856	$ 247,024,518
Employers	406,107,266	383,776,826
Total	$ 664,572,122	$ 630,801,344
Net Investment Income	707,778,812	943,831,270
TOTAL	$ 1,372,350,934	$ 1,574,632,614
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	$ 1,024,872,421	$ 959,518,739
Refunds to Members	12,834,222	10,975,941
Medical Insurance Premium	0	0
Miscellaneous, including expenses	6,839,859	6,652,672
TOTAL	$ 1,044,546,502	$ 977,147,352
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ 327,804,432	$ 597,485,262
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 13,456,025,741	$ 12,858,540,479
Excess of Receipts over Disbursements	327,804,432	597,485,262
Asset Balance as of End of the Year	$ 13,783,830,173	$ 13,456,025,741

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE C
MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2006	For the Year Ending June 30, 2005
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 51,697,167	$ 51,576,031
Employers	89,319,498	79,022,562
Total	$ 141,016,665	$ 130,598,593
Recovery Income	118,419	0
Medicare D Receipts	5,999,560	0
Net Investment Income	6,804,286	6,507,538
TOTAL	$ 153,938,930	$ 137,106,131
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	$ 0	$ 0
Refunds to Members	5,143	9,072
Medical Insurance Premium	165,006,322	142,349,436
Miscellaneous, including expenses	4,624,074	4,070,892
TOTAL	$ 169,635,539	$ 146,429,400
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ (15,696,609)	$ (9,323,269)
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 147,310,894	$ 156,634,164
Excess of Receipts over Disbursements	(15,696,609)	(9,323,269)
Asset Balance as of End of the Year	$ 131,814,285	$ 147,310,895

SCHEDULE C
LIFE INSURANCE FUND*
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2006	For the Year Ending June 30, 2005
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 0	$ 0
Employers	4,813,703	4,569,612
Total	$ 4,813,703	$ 4,569,612
Net Investment Income	2,689,330	2,239,285
TOTAL	$ 7,503,033	$ 6,808,897
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	$ 3,894,000	$ 3,852,800
Refunds to Members	0	0
Medical Insurance Premium	0	0
Miscellaneous, including expenses	0	0
TOTAL	$ 3,894,000	$ 3,852,800
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ 3,609,033	$ 2,956,097
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 63,972,204	$ 61,016,107
Excess of Receipts over Disbursements	3,609,033	2,956,097
Asset Balance as of End of the Year	$ 67,581,237	$ 63,972,204

* *The retiree portion of tie Life Insurance Fund when allocated will be moved to the GASB 43 and 45 report next year.*

SCHEDULE D

Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected by the Actuary based on the actuarial experience investigation as of June 30, 2005 and adopted by the Board of Trustees on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.70%	4.50%	4.30%	4.20%	4.00%

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.003%	0.01%	9.00%				
25	0.010	0.01	9.00	1.50%			
30	0.016	0.02	9.00	3.00	3.00%		
35	0.032	0.05	10.00	3.25	1.50		
40	0.048	0.08	10.00	3.75	1.50		
45	0.064	0.22	9.50	2.50	1.50		25.0%
50	0.104	0.42	10.00	4.00	3.00		20.0
55	0.216	0.60	11.00	3.00	2.70	6.0%	35.0
60	0.375	0.79	11.00	3.00	2.70	14.0	25.0
62	0.438	0.83	11.00	3.00	2.70	14.0	23.0
65	0.566	0.90	11.00	3.00	2.70	22.5	35.0
70	0.905	0.00	0.00	0.00	0.00	100.0	100.0

** Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

%

FEMALES: Annual Rate of . . .							
AGE	DEATH	DISABILITY	WITHDRAWAL 0 - 4	5 - 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.002%	0.03%	6.00%				
25	0.007	0.03	8.50	3.00%			
30	0.014	0.04	9.00	4.00	1.50%		
35	0.026	0.11	8.50	4.00	2.00		
40	0.044	0.22	8.50	2.50	1.50		
45	0.055	0.38	7.00	2.50	1.50		25.0%
50	0.066	0.44	8.50	3.00	2.25		20.0
55	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	0.195	0.00	0.00	0.00	0.00	100.0	100.0

** Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

Actuarial Method: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

Assets: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

Expense Load: None.

Percent Married: 100%, with females 3 years younger than males.

Loads: Unused Sick Leave: 1% of active liability

SCHEDULE E

Summary of Main System Provisions As Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2006. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1. DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2. BENEFITS

Service Retirement Allowance

Condition for Allowance: Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
(b) 2.5% of final average salary multiplied by service after July 1, 1983.
(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by actuarial equivalent factors from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Disability Retirement Allowance

Condition for Allowance: Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance: The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000, to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options:

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3. CONTRIBUTIONS

Member Contributions

University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

Fiscal Year	Add to Rolls: Number	Add to Rolls: Annual Allowances (Millions)	Remove from Rolls: Number	Remove from Rolls: Annual Allowances (Millions)	Rolls End-of-Year: Number	Rolls End-of-Year: Annual Allowances (Millions)
2001	2,410	$ 77.0	1,128	$ 16.5	31,897	$ 679.8
2002	2,577	86.2	1,063	16.8	33,408	749.2
2003	2,252	86.7	1,015	16.9	34,645	819.0
2004	2,126	85.4	1,033	17.5	35,738	887.0
2005	2,644	105.1	1,036	18.9	37,346	973.1
2006	2,266	121.1	1,115	20.0	38,497	1,074.2

Fiscal Year	% Increase in Annual Allowances	Average Annual Allowances
2001	9.8	$ 21,311
2002	10.2	22,425
2003	9.3	23,641
2004	8.3	24,819
2005	9.7	26,058
2006	10.4	27,902

Schedule of Active Member Valuation Data

	Fiscal Year	(1) Number of Active Members	(2) Total Annual Payroll	(3) Average Annual Pay	(4) % Increase (Decrease) in Average Pay
F	2001	53,570	$ 2,213,772,000	41,325	2.7%
F	2002	54,175	2,313,663,000	42,707	3.3
F	2003	54,048	2,394,436,000	44,302	3.7
P		17,049	103,295,000	6,059	N/A
F	2004	54,869	2,541,238,000	46,315	4.5
P		17,081	100,295,000	5,872	-3.1
F	2005	55,003	2,597,795,000	47,230	2.0
P		17,278	105,665,000	6,115	4.2
F	2006	56,115	2,745,474,000	48,926	3.6
P		17,625	114,003,000	6,468	5.8

** Effective July 1, 2002, substitute and part-time teachers joined the field of membership.*

F: Full-time P: Part-time

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Teachers' Retirement System of the State of Kentucky

The 67th Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Year Ended June 30, 2007

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN, C.P.A.
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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INTRODUCTORY SECTION

for Fiscal Year ending June 30, 2007

Chairperson's Letter

Teachers' Retirement System of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

BOARD OF TRUSTEES

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OF EDUCATION

EX OFFICIO
TODD HOLLENBACH
STATE TREASURER

December 11, 2007

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2007, the 67th year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

KTRS closed the 2006-2007 fiscal year with $15.6 billion net assets. The active membership totaled 75,144 and the retired membership was 39,506 with an annual payroll of $1.1 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. The retirement system is justly proud of the funding level that the system has achieved. Every effort will be made to insure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Zella Wells

Zella F. Wells
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 11, 2007

Honorable Steven L. Beshear, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky 40601-3800

Dear Governor Beshear :

It is my pleasure to submit the 67th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a Component Unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2007.

State law provides the legal requirement for the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system are also required.

Kentucky Teachers' Retirement System (KTRS) has produced an annual report that will provide you, the General Assembly, and the general public, with information necessary to gain a better understanding of the Teachers' Retirement System.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of the System for the year ended June 30, 2007. Discussion and analysis of net assets and related additions and deductions is presented in Management's Discussion and Analysis beginning on page 15.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are accurately executed and financial statements are fairly presented. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Secretary.

Profile of KTRS

Kentucky Teachers' Retirement System was established on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement benefits to the educators and some public employees of the state. KTRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 21. Also, the summary of the plan provisions starting on page 76 is useful in understanding benefit and contribution provisions. The population of KTRS membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the pension fund. The budget is approved by the Board of Trustees and submitted to the Kentucky General Assembly for legal adoption. The KTRS investment earnings fund the budget appropriations.

Major Initiatives

The System continually seeks opportunities to better communicate with and serve its membership and several areas were enhanced during the year. The KTRS staff worked with a regional technology center to devise a pilot web conferencing project to deliver mid-career and pre-retirement seminar information. This technology is expected to expand the reach of KTRS seminars to its members. The Annual Statement of Member's Account was redesigned to assist the members in reviewing their account by emphasizing the importance of the accuracy of the information in determining the retirement benefit. Also, the KTRS web site was redesigned to give members and employers easier navigation to areas of interest.

Cost containment is always a consideration of the System, particularly in regards to the Medical Insurance Fund. In January, KTRS introduced a Medicare Advantage Private Fee-for-service Plan for membership age 65 and above. The Plan is projected to save $11 million annually in the KTRS Medical Insurance Fund.

Securing adequate funding for retiree health care provided by KTRS remains a major initiative of the System. The Board and Executive staff continue to educate the General Assembly on the negative impacts of borrowing from the pension fund to keep the health care fund solvent. KTRS will pursue legislation that will provide security to retiree health care benefits in the 2008 session of the General Assembly.

Economic Condition

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 46 contains detailed analysis of investments. This section includes asset allocations, rates of return, discussion of the current year market environment and 10 year historical trend schedules.

The investment portfolio experienced significant growth during the 2006-2007 fiscal year. The portfolio's market value increased from $13,898,689,351 to $15,538,052,869. The growth of the portfolio was due to investment income that included realized capital gains. Employer and employee contributions also provided significant income to the portfolio.

Investment earnings, including appreciation of asset values, net of investment expenses, for the 2006-2007 fiscal year were $2,067,216,229. The majority of earnings from the System's investment portfolio were the result of net appreciation in fair value of investments in the amount of $1,617,337,060. The second largest earnings component, $261,676,904 was the result of interest income. Other income of $188,202,265 was generated from dividends, rent and securities lending.

According to KRS 161.430 the KTRS Board of Trustees has the responsibility to invest the assets of the System. The Board of Trustees, generally, delegates investment authority to an Investment Committee that is comprised of two Trustees and the System's Executive Secretary. The Investment Committee works closely with experienced investment counselors, who are contracted by the Board of Trustees, and the System's professional staff in evaluating and selecting investments.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the Plan and its Trust Funds. Also, the investment program shall provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. The entire portfolio earned a total return of 15.3% in 2006-07 and the portfolio's ten-year annualized rate of return is 7.1% and the twenty-year annualized rate of return is 9.1%. During 2006-07, more than 74.7% of the fixed income investments were rated at least "AAA" in terms of credit quality.

On the state level, KTRS annuities have a bolstering impact on the state's economy, since around 93% of retired teachers reside in Kentucky. Total benefits (retirement, medical…etc.) paid last year were more than $1.2 billion.

Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes by statute the levels of contribution that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

The latest actuarial valuation was for the period ending June 30, 2007. This report reflects the System's assets, based on modified market value; totaled $15.3 billion and the liabilities totaled $21.3 billion. The actuary determined that the existing levels of

contribution by members and employers would be sufficient to fund all of the System's liabilities within a reasonable period of time. The report concludes that the System is operating on an actuarially sound basis. Assuming that employer contributions continue in the future at rates recommended on the basis of the successive actuarial valuations, the actuary states that the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Annual required contributions of the employers are provided in the Schedule of Employer Contributions (on page 40). The 2007 employer shortfall of contributions created a net pension obligation of $149,410,401 (as detailed on page 71).

KTRS Medical Insurance Plan

KTRS health care costs keep escalating at a much faster clip than revenue growth in the Medical Insurance Plan. Last year, basic doctor/ hospital costs and the cost of medications (prescription drugs) rose about 5%. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2007 indicated that the fund has an unfunded liability of $5.8 billion for 2007. The KTRS 2006-2008 biennial budget requested additional funding from the Commonwealth, but sufficient funds were not available. The budget bill directs KTRS to allocate a portion of the state employer contribution in a sufficient amount to the Medical Insurance Fund instead of the Pension Fund to fund the Medical Insurance Fund Stabilization Contribution. The budget bill also includes a General Fund appropriation of $14.1 million in fiscal year 2007-2008 to amortize the cost of the State Medical Insurance Fund Stabilization Contribution with the remainder to be amortized under a schedule set forth by statute.

Effective January 1, 1999 KTRS eligible retirees and eligible dependents under the age of 65 have their health insurance provided by plans managed by the Kentucky Department for Employee Insurance. Under this arrangement, KTRS provides a monthly supplement to assist the eligible retiree in purchasing health insurance. Retirees 65 and over remain in the Medicare eligible health plan administered by KTRS. These retirees also receive a supplement for the cost of their coverage.

The System realizes that the medical insurance fund is in crisis. To realize true cost containment, additional steps must be taken through legislation on both the state and national levels. Meanwhile, KTRS will address the problem by continuing to take measures to contain costs and by increasing revenues to the insurance fund, adjusting coverage to meet existing revenues, or a combination of the two.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the KTRS. A certification from the certified public accountant and actuary are enclosed in this report. The System's consultants who are appointed by the Board are listed on pages 8 and 47 of this report.

National Recognition

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2006. The Certificate of Achievement is a prestigious national award-recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The KTRS has received the Certificate of Achievement for the last nineteen consecutive years (fiscal years ended 1988-2006). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement of the State of Kentucky for 2007 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure, and are widely acknowledged to be marks of excellence in the public pension industry.

The PPCC is a coalition of the four major public pension organizations in the nation. These include the National Association of State Retirement Administrators, The National Council on Teacher Retirement, the National Conference on Public Employees Retirement Systems, and the Government Finance Officers Association.

NCTR Executive Committee

Gary L. Harbin serves as Secretary-Treasurer on the Executive Committee of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 77 state, territorial, local and university pension systems with combined assets in excess of 1.4 trillion, serving more than 16 million active and retired teachers, non-teaching personnel and other public employees.

Public Sector HealthCare Roundtable

Mr. Harbin also serves on the Board of Directors and as Vice President of the Public Sector HealthCare Roundtable. The Roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector are properly represented during the formulation and debate of federal health care reform initiatives. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

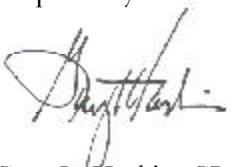
Acknowledgments

The preparation of this report reflects the combined efforts of the KTRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship of the assets contributed by KTRS members and their employers.

This report is located at the KTRS web address www.ktrs.ky.gov, and is being mailed to all employer members of the System whose cooperation continues to contribute significantly to our success, and who form the vital link between KTRS and its active members.

KTRS management and staff are committed to the continued operation of an actuarially sound retirement system. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



Gary L. Harbin, CPA
Executive Secretary

BOARD OF TRUSTEES

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Teacher Trustee
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Vice Chairperson
Retired Teacher Trustee
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Lay Trustee
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Lay Trustee
Hodgenville

Ruth Ann Sweazy
Teacher Trustee
Taylorsville

Laura Zimmerman
Teacher Trustee
Lexington

Kevin Noland
Ex Officio Trustee
Commissioner,
Dept. of Education

Jonathan Miller
Ex Officio Trustee
State Treasurer

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

GARY L. HARBIN, CPA
Executive Secretary

C. JOE HUTCHISON, MBA, CPA
Deputy Executive Secretary
Finance & Administration

ROBERT B. BARNES, JD
Deputy Executive Secretary
Operations

PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

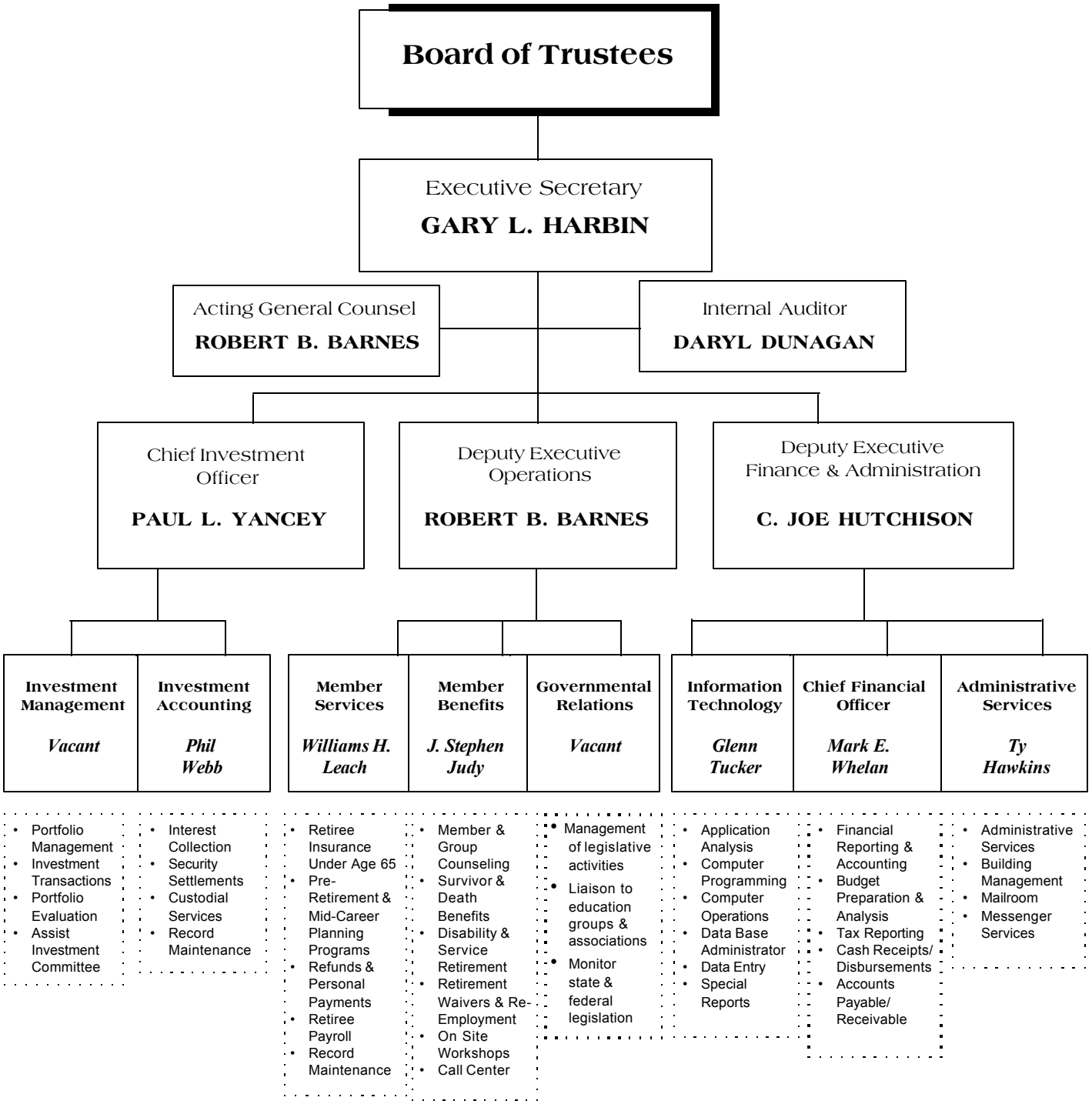
Cavanaugh Macdonald Consulting, LLC
3550 Busbee Parkway, Suite 250
Kennesaw, GA 30144

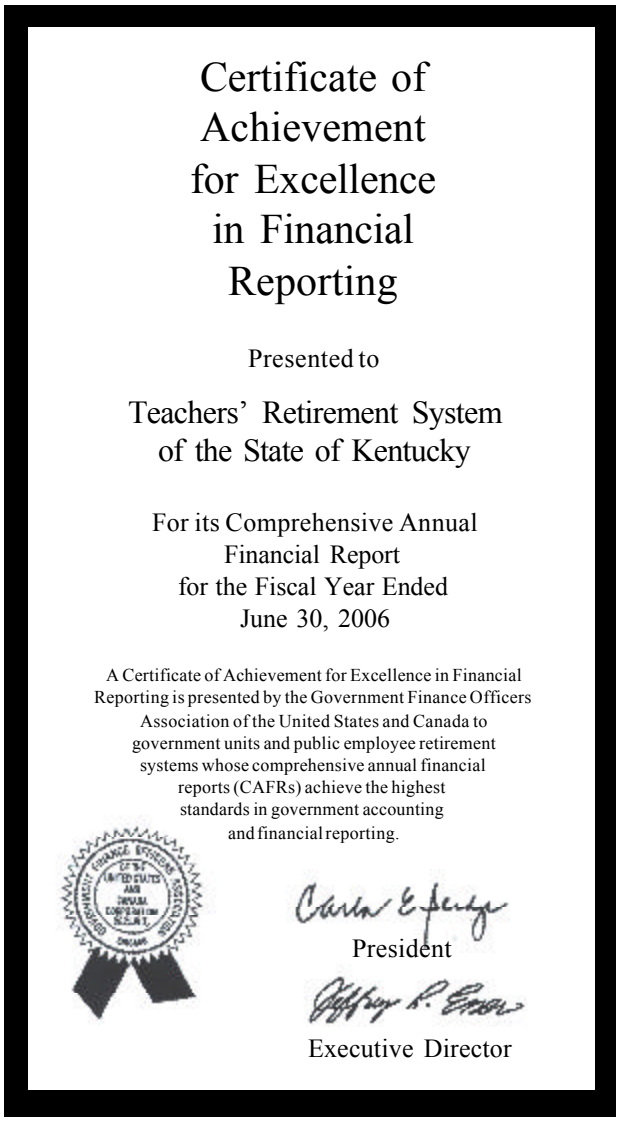
AUDITOR

Charles T. Mitchell, LLP
201 West Main Street
P.O. Box 698
Frankfort, Kentucky 40601

** See page 47 of the Investment Section for investment consultants.*

Kentucky Teachers' Retirement System
Organizational Chart





Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

Teachers' Retirement System
of the State of Kentucky

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended
June 30, 2006

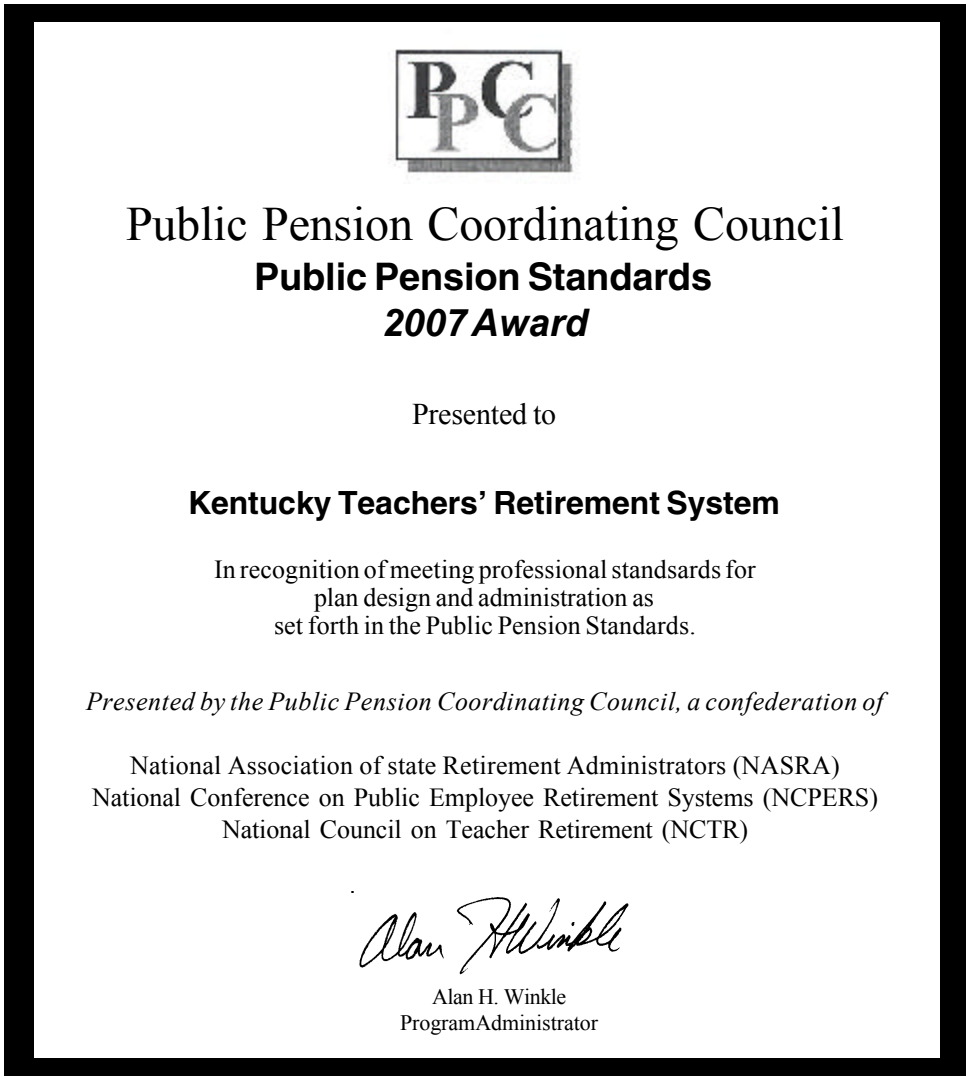
A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

President

Executive Director

GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last nineteen consecutive years (fiscal years ended 1988-2006).



Public Pension Coordinating Council
Public Pension Standards
2007 Award

Presented to

Kentucky Teachers' Retirement System

In recognition of meeting professional standsards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of state Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
ProgramAdministrator

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2007 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

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FINANCIAL SECTION

for Fiscal Year ending June 30, 2007

Charles T. Mitchell Co. LLP
Certified Public Accountants

William G. Johnson , Jr., C.P.A
James Clouse,C.P.A
Bernadette Smith, C.P.A
Kim Field, C.P.A
Greg Miklavcic, C.P.A
Don C. Giles, C.P.A, Consulaant

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the accompanying statements of plan net assets of the Teachers' Retirement System of the State of Kentucky as of June 30, 2007 and 2006 and the related statements of changes in plan net assets for the years then ended. These component unit financial statements are the responsibility of the Teachers' Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the plan net assets of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, at June 30, 2007 and 2006 and the changes in its plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated December 5, 2007 on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

The Management's Discussion and Analysis on pages 15-18 are not a required part of the basic financial statements but is supplemental information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplemental information. However, we did not audit the information and express no opinion on it.

The financial section supporting schedules listed in the table-of-contents are presented for the purpose of additional analysis and are not a required part of the basic financial statements. These schedules are the responsibility of the System's management. Such schedules as of and for the year ended June 30, 2007 have been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

We did not audit the data included in the Introductory and Statistical sections of the report and therefore express no opinion on them.

Charles T. Mitchell Co.

Frankfort, Kentucky
December 5, 2007

201 West Main Street, Frankfort, Kentucky 40601 | P.O. Box 698, Frankfort, Kentucky 40602-0698
(502) 227-7395 | Fax (502) 227-8005 | www.ctmcpa.com

MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of Kentucky Teachers' Retirement System's financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2007. Please read it in conjunction with the respective financial statements, which begin on page 19.

USING THIS FINANCIAL REPORT

Because of the long-term nature of a defined benefit pension plan and medical insurance plan, financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. The Statement of Plan Net Assets and Statement of Changes in Plan Net Assets (on pages 19-20) provide information about the activities of the defined benefit plan, medical insurance plan, and the tax-sheltered annuity plan as a whole. The Kentucky Teachers' Retirement System is the fiduciary of funds held in trust for its members.

The Schedules of Funding Progress (beginning on page 40) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of Employer Contributions (beginning on page 40) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2007, Kentucky Teachers' Retirement System's combined plan net assets increased by $1,650.3 million - from $13,983.5 million to $15,633.8 million. The following summaries focus on plan net assets and changes in plan net assets of Kentucky Teachers' Retirement System's defined benefit plan, medical insurance plan, and the tax-sheltered annuity plan.

Summary of
Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan 2007	2006	2005	Medical Insurance Plan 2007	2006	2005	TOTAL* 2007	2006	2005
Cash & Investments	$16,273.6	$14,632.5	$14,144.4	$137.0	$132.1	$153.3	$16,410.6	$14,764.6	$14,297.7
Receivables	96.6	94.7	110.0	5.7	7.1	2.3	102.3	101.8	112.3
Capital Assets	3.1	3.2	3.3				3.1	3.2	3.3
Total Assets	$16,373.3	$14,730.4	$14,257.7	$142.7	$139.2	$155.6	$16,516.0	$14,869.6	$14,413.3
Total Liabilities	(880.8)	(879.0)	(737.7)	(1.9)	(7.6)	(8.3)	(882.7)	(886.6)	(746.0)
Plan Net Assets	$15,492.5	$13,851.4	$13,520.0	$140.8	$131.6	$147.3	$15,633.3	$13,983.0	$13,667.3

*For the 403(b) Tax Shelter Plan cash and investments were approximately $.5 million for the years ended 2007 and 2006 and 2005.

Summary of
Changes In Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan 2007	2006	2005	Medical Insurance Plan 2007	2006	2005	TOTAL 2007	2006	2005
ADDITIONS									
Member Contributions	$269.7	$258.5	$247.0	$53.1	$51.7	$51.6	$322.8	$310.2	$298.6
Employer Contributions	439.9	410.9	388.3	113.2	89.3	79.0	553.1	500.2	467.3
Investment Income (net)	2,060.5	717.3	946.1	6.7	6.8	6.5	2,067.2	724.1	952.6
Other Income				10.4	6.1		10.4	6.1	
TOTAL ADDITIONS	$2,770.1	$1,386.7	$1,581.4	$183.4	$153.9	$137.1	$2,953.5	$1,540.6	$1,718.5
DEDUCTIONS									
Benefit Payments	$1,106.8	$1,035.6	$963.4				$1,106.8	$1,035.6	$963.4
Refunds	14.8	12.9	11.0				14.8	12.9	11.0
Administrative Expense	7.4	6.8	6.6	4.6	4.6	4.1	12.0	11.4	10.7
Insurance Expenses				169.6	165.0	142.3	169.6	165.0	142.3
TOTAL DEDUCTIONS	$1,129.0	$1,055.3	$981.0	$174.2	$169.6	$146.4	$1,303.2	$1,224.9	$1,127.4
Increase (Decrease) in Plan Net Assets	$1,641.1	$331.4	$600.4	$9.2	($15.7)	($9.3)	$1,650.3	$315.7	$591.1

Plan net assets of the defined benefit plan increased by 11.85% ($15,492.5 million compared to $13,851.4 million). The increase is primarily due to continued favorable market conditions which resulted in a net investment gain of $2,060.5 million. These assets are restricted to providing monthly retirement allowances to members and their beneficiaries.

Plan net assets of the medical insurance plan increased by 7% ($140.8 million compared to $131.6 million) primarily due to state allocations to fund the plan. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

DEFINED BENEFIT PLAN ACTIVITIES

Member contributions increased $11.2 million. Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions totaled $439.9 million, a net increase of $29 million over the 2006 fiscal year.

The System experienced strong returns in net investment, as the gain was greater than the previous year ($2,060.5 million gain at June 30, 2007 as compared to a $717.3 million gain at June 30, 2006). The increase in the fair value of investments is mainly due to continued favorable market conditions for the year ended June 30, 2007. This can be illustrated as follows:

(In Millions)	2007	2006	2005
Appreciation (depreciation) in fair value of investments – June 30, prior year	$ 690.4	$ 610.4	$ 171.4
Appreciation (depreciation) in fair value of investments – June 30, end of year	1,904.0	690.4	610.4
Change in net appreciation (depreciation) in fair value of investments	1,213.6	80.0	439.0
Net income (net of investment expense)	443.1	434.8	433.8
Net gain on sale of investments	403.8	202.5	73.3
Investment Income (net) – June 30, end of year	$2,060.5	$ 717.3	$ 946.1

Program deductions in 2007 increased $73.7 million. The increase was caused principally by an increase of $71.2 million in benefit payments. Members who were drawing benefits as of June 2006 received an increase of 2.3% (based on the amount of their retirement allowances) in July 2006. Also, there was an increase of 1,009 members and beneficiaries on the retired payroll as of June 30, 2007.

MEDICAL INSURANCE PLAN ACTIVITIES

During the 2007 fiscal year, member contributions increased $1.4 million and employer contributions increased by $23.9 million over fiscal year 2006. The employer contributions increased primarily because $73 million in stabilization funding was placed in the medical insurance fund from the pension fund as required by the 2006-2008 budget bill. The amount will be repaid over a ten-year period per KRS 161.553.

Program deductions increased $4.6 million, which represents only a 2.7% increase. The downward trend is a result of two federal programs, Medicare Part D and Medicare Advantage, which have reduced costs for our Medicare eligible population. The monthly premium subsidy for retirees under age 65 increased 6% effective January 1, 2007. The monthly premium subsidy for retirees age 65 and over decreased 11%.

Net investment income decreased $.1 million from $6.8 million in 2006 to $6.7 million in 2007. This is due to the recognition of interest income since all investments for the Medical Insurance Plan are short term in nature and the recognition of appreciation in fair value is not feasible. This can be illustrated as follows:

(In Millions)	2007	2006	2005
Appreciation in fair value of investments – June 30, prior year	$ 0	$ 0	$ 0
Appreciation in fair value of investments – June 30 end of year	0	0	0
Net appreciation in fair value of investments	0	0	0
Net income (net of investment expense)	6.7	6.8	6.5
Net gain on sale of investments	0	0	0
Investment Income (net) – June 30	$ 6.7	$ 6.8	$ 6.5

HISTORICAL TRENDS

Accounting standards require that the statement of plan net assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information regarding the actuarial funding status of the defined benefit plan and the medical insurance plan is provided in the Schedule of Funding Progress (beginning on page 40). The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the projected unit credit cost method.

The 2007 fiscal year reveals a decline in funding position of the pension plan due to an increase in the actuarial liability.

The medical insurance plan is not as vulnerable to adverse market conditions since its assets are all short term in nature and less likely to experience huge fluctuations. Although, the plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding.

Annual required contributions of the employers are provided in the Schedule of Employer Contributions (on page 40). The 2007 employer shortfall of contributions created a net pension obligation of $149,410,401.

Statement of Plan Net Assets
As of June 30, 2007 and 2006

	Defined Benefit Plan		Medical Insurance Plan		403(b) Tax Shelter		TOTAL	
	2007	2006	2007	2006	2007	2006	2007	2006
ASSETS								
Cash	$ 5,387,902	$ 9,629,298					$ 5,387,902	$ 9,629,298
Prepaid expenses	86,043	96,544	$ 121,000				207,043	96,544
Receivables								
Contributions	29,275,912	29,953,514	2,240,981	$ 1,118,926			31,516,893	31,072,440
State of Kentucky	956,905	5,673,887					956,905	5,673,887
Investment income	65,559,291	58,321,829			$ 2,233	$ 71	65,561,524	58,321,900
Installment account receivable	777,938	734,673					777,938	734,673
Medicare D receivables			3,487,197	5,999,560			3,487,197	5,999,560
Other receivables		59,932					0	59,932
Total receivables	96,570,046	94,743,835	5,728,178	7,118,486	2,233	71	102,300,457	101,862,392
Investments, at fair value (See Note 4)								
Short term investments	429,051,771	661,700,340	136,896,316	132,083,928	509,798	515,732	566,457,885	794,300,000
Bonds and mortgages	4,470,207,027	4,185,201,899					4,470,207,027	4,185,201,899
Common stock	10,114,620,014	8,531,993,656					10,114,620,014	8,531,993,656
Private equity	5,074,147						5,074,147	
Real estate	381,693,796	387,193,796					381,693,796	387,193,796
Total investments	15,400,646,755	13,766,089,691	136,896,316	132,083,928	509,798	515,732	15,538,052,869	13,898,689,351
Invested security lending collateral	867,562,185	856,631,934					867,562,185	856,631,934
Capital assets, at cost net of accumulated depreciation of $1,871,494 (See Note 2)	3,085,129	3,180,032					3,085,129	3,180,032
Total assets	16,373,338,060	14,730,371,334	142,745,494	139,202,414	512,031	515,803	16,516,595,585	14,870,089,551
LIABILITIES								
Liabilities								
Accounts payable	2,819,398	1,713,031					2,819,398	1,713,031
Treasurer's unredeemed checks	2,217	13,823					2,217	13,823
Insurance claims payable			1,966,148	7,580,738			1,966,148	7,580,738
Compensated absences payable	636,201	601,135					636,201	601,135
Revenues collected in advance	9,799,500		7,112	7,391			9,806,612	7,391
Investment purchases payable		20,000,000					0	20,000,000
Obligations under securities lending	867,562,185	856,631,934					867,562,185	856,631,934
Total liabilities	880,819,501	878,959,923	1,973,260	7,588,129	0	0	882,792,761	886,548,052
Net assets held in trust for pension & post-employment healthcare benefits: (See Required Supplemental Schedule 1 for a schedule of funding progress.)	$15,492,518,559	$13,851,411,411	$140,772,234	$131,614,285	$512,031	$515,803	$15,633,802,824	$13,983,541,499

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
For the Years Ended June 30, 2007 and 2006

	Defined Benefit Plan		Medical Insurance Plan		403(b) Tax Shelter		TOTAL	
	2007	2006	2007	2006	2007	2006	2007	2006
ADDITIONS								
Contributions								
Employer	$ 439,912,606	$ 410,920,969	$ 113,233,784	$ 89,319,498			$ 553,146,390	$ 500,240,467
Member	269,687,864	258,464,856	53,099,678	51,697,167			322,787,542	310,162,023
Total contributions	709,600,470	669,385,825	166,333,462	141,016,665	0	0	875,933,932	810,402,490
Other Contributions								
Recovery income			24,977	118,419			24,977	118,419
Medicare D receipts			10,312,361	5,999,560			10,312,361	5,999,560
Total other contributions			10,337,338	6,117,979			10,337,338	6,117,979
Investment Income								
Net Appreciation/(Depreciation) in FV of Investments	1,617,337,060	282,572,648					1,617,337,060	282,572,648
Interest	254,925,905	255,566,732	6,722,080	6,804,286	$ 28,919	$ 21,454	261,676,904	262,392,472
Dividends	165,183,866	153,566,960					165,183,866	153,566,960
Rental Income, Net	30,344,247	30,949,900					30,344,247	30,949,900
Securities Lending, Gross Earnings	52,672,196	28,464,668					52,672,196	28,464,668
Gross Investment Income	2,120,463,274	751,120,908	6,722,080	6,804,286	28,919	21,454	2,127,214,273	757,946,648
Less Investment Expense	(8,667,669)	(6,156,584)					(8,667,669)	(6,156,584)
Less Securities Lending Expense	(51,330,375)	(27,656,322)					(51,330,375)	(27,656,322)
Net Investment Income	2,060,465,230	717,308,002	6,722,080	6,804,286	28,919	21,454	2,067,216,229	724,133,742
Total additions	2,770,065,700	1,386,693,827	183,392,880	153,938,930	28,919	21,454	2,953,487,499	1,540,654,211
DEDUCTIONS								
Benefits	1,106,783,879	1,035,606,281			32,691	37,925	1,106,816,570	1,035,644,206
Refunds of contributions	14,822,827	12,834,222	5,834	5,143			14,828,661	12,839,365
Insurance expenses			169,577,773	165,006,322			169,577,773	165,006,322
Administrative expense	7,351,846	6,839,859					7,351,846	6,839,859
Medical administrative expense			4,651,324	4,624,074			4,651,324	4,624,074
Total deductions	1,128,958,552	1,055,280,362	174,234,931	169,635,539	32,691	37,925	1,303,226,174	1,224,953,826
Net increase (decrease)	1,641,107,148	331,413,465	9,157,949	(15,696,609)	(3,772)	(16,471)	1,650,261,325	315,700,385
Net assets held in trust for pension & post employment healthcare benefits								
Beginning of year	13,851,411,411	13,519,997,946	131,614,285	147,310,894	515,803	532,274	13,983,541,499	13,667,841,114
Ending of year	$15,492,518,559	$13,851,411,411	$140,772,234	$131,614,285	$512,031	$515,803	$15,633,802,824	$13,983,541,499

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements
Years Ended June 30, 2007 and 2006

Note 1: Description of Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan established to provide pension benefit plan coverage for local school districts and other public educational agencies in the state.

B. PARTICIPANTS

As of June 30, 2007 a total of 198 employers participated in the plan. Employers are comprised of 175 local school districts, 17 Department of Education Agencies and other educational organizations, 5 universities and also the Kentucky Community and Technical College System.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

Active contributing members:	2007	2006
Vested	42,300	41,656
Non-vested	32,844	32,084
Inactive members, vested	4,498	4,275
Retirees and beneficiaries currently receiving benefits	39,506	38,497
Total members, retirees, and beneficiaries	119,148	116,512

C. BENEFIT PROVISIONS

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete 27 years of Kentucky service.

Note 1: Description of Plan continued . . .

Participants that retire before age 60 with less than 27 years of service receive reduced retirement benefits. Non-university members receive monthly payments equal to two (2) percent (service prior to July 1, 1983) and two and one-half (2.5) percent (service after July 1, 1983) of their final average salaries for each year of credited service. University employees receive monthly benefits equal to two (2) percent of their final average salary for each year of credited service. The final average salary is the member's five (5) highest annual salaries except members at least 55 with 27 or more years of service may use their (3) three highest annual salaries. New members (including second retirement accounts started) after July 1, 2002 will receive monthly benefits equal to 2% of their final average salary for each year of service if, upon retirement, their total service is less than ten years. New members after July 1, 2002 who retire with ten or more years of total service will receive monthly benefits equal to 2.5% of their final average salary for each year of service, including the first ten years. In addition, members who retire July 1, 2004 and later with more than 30 years of service will have their multiplier increased for all years over 30 from 2.5% to 3.0% to be used in their benefit calculation

The system also provides disability benefits for vested members at the rate of sixty (60) percent of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half (1.5) percent annually. Additional ad hoc increases, and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

KTRS has three cash accounts. At June 30, 2007, the pension cash account totaled $2,385,015 the administrative expense fund cash account was $2,247,837 and the life insurance cash account totaled $755,050 therefore, the carrying value of cash was $5,387,902 and the corresponding bank balance was $8,383,923. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2007.

C. CAPITAL ASSETS

Fixed assets are recorded at historical cost less straight-line accumulated depreciation. The classes of fixed assets are furniture and equipment, the KTRS office buildings and land. Furniture and equipment are depreciated over an average useful life of five to seven years. The office buildings are depreciated over forty years.

Note 2: Summary of Significant Accounting Policies continued . . .

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in plan net assets.

Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by the System's employees are recorded when earned. Upon termination or retirement, employees of the system are paid for accumulated vacation time limited to 450 hours and accumulated compensatory time limited to 200 hours. As of June 30, 2007 and 2006 accrued compensated absences were $636,201 and $601,135.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which the system is exposed. In order to cover such risks the system carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

G. OTHER RECEIVABLES

KTRS now allows qualified purchases of service credit to be made by installment payments not to exceed a five-year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2007 and 2006 installment contract receivables were $777,938 and $734,673.

H. USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The system's management believes that it has operated the plans within the constraints imposed by federal tax law.

Note 2: Summary of Significant Accounting Policies continued . . .

J. ACCOUNTING CHANGES

As required, the System has implemented GASB # 43 Financial Reporting for Post-employment Benefit Plans Other Than Pension Plans. Also, the System has early implemented GASB #50 Pension Disclosures.

Note 3: Contributions and Reserves

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Members are required to contribute 9.855% of their salaries to the System. University members are required to contribute 8.375% of their salaries. KRS 161.580 allows each university to reduce the contribution of its members by 2.215%; therefore, university members contribute 6.16% of their salary to KTRS.

The Commonwealth of Kentucky is required to contribute 13.105% of salaries for its non-university members and 13.84% of salaries for university members.

The member and employer contributions consist of pension contributions and post-retirement contributions to the medical insurance fund. The post-retirement contribution of .75% from employee and employer contribution rates help finance KTRS' retiree medical insurance plan.

If an employee leaves covered employment before accumulating five (5) years of credited service, accumulated employee contributions plus interest are refunded to the employee upon the member's request.

B. RESERVES

Member Reserve

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from Unallocated Reserves. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Benefit Reserves, the fund from which retirement benefits are paid.

Employer Reserve

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of

members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky. While fiscal years 2007 and 2006 resulted in over-appropriations from the state, a receivable is still due from the state because prior years under-appropriations have not been paid to KTRS.

Benefit Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

Unallocated Reserve

This fund was established by KRS 161.420(6) as the Guarantee Fund to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of the System, and deficiencies not covered by the other funds.

Administrative Expense Reserve

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from Unallocated Reserves is used to pay the administrative expenses of the System.

Life Insurance Reserve

This fund was established pursuant to the provisions of KRS 161.655 to provide a life insurance benefit to retired and active members of the Kentucky Teachers' Retirement System. This benefit is financed by KTRS employer contributions that are actuarially determined.

Note 4: Funded Status and Funding Progress

A. Description of Funding Progress

The funded status of the Defined Benefit Plan as of the most recent actuarial valuation date is as follows (dollar amount in 1000's):

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accured Liabilities (uaal)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2007	$15,284,955	$21,254,974	$5,970,019	71.9%	$2,975,289	200.7%

Note 4: Funded Status and Funding Progress continued . . .

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear funding trend information as obtained from the System's independent actuary's annual valuation report.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the system is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the retirement system. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the retirement system.

The accompanying schedule of employer contributions, presented as required supplementary information following the notes to the financial statements, presents trend information about the amounts contributed to the plan by employers in comparison to the Annual Required Contribution (ARC). The ARC is actuarially determined in accordance with the parameters of GASB Statement 50. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

B. Methodologies

The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the projected unit credit actuarial cost method. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period using an open amortization approach. The five (5) year smoothed market approach is used for asset valuation.

Note 4: Funded Status and Funding Progress continued . . .

Actuarial Value Assets

(1)	Actuarial Value of Assets on June 30, 2006	$	14,857,641,238
(2)	Market Value End of Year June 30, 2007	$	15,421,092,446
(3)	Market Value Beginning of Year June 30, 2006	$	13,783,830,173
(4)	Cash Flow		
	a. Contributions	$	704,578,332
	b. Benefit Payments		1,117,361,706
	c. Net	$	(412,783,374)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)c	$	2,050,045,647
	b. Assumed Rate		7.5%
	c. Amount for Immediate Recognition: [(1) x (5)b] + [(4)c * (5)b * 0.5]	$	1,098,843,716
	d. Amount for Phased-In Recognition: (5)a - (5)c	$	951,201,931
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20*(5)d	$	190,240,386
	b. First Prior Year		(75,996,339)
	c. Second Prior Year		(23,843,540)
	d. Third Prior Year		(349,147,545)
	e. Fourth Prior Year		0
	f. Total Recognized Investment Gain	$	(258,747,038)
(7)	Actuarial Value End of Year (1) + (4)c + (5)c + (6)f	$	15,284,954,542
(8)	Difference Between Market & Actuarial Values (2) - (7)	$	136,137,904

C. Assumptions

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2007, the most recent updated actuarial information include:

* Assumed inflation rate 4%
* Assumed investment rate 7.5%
* Assumed projected salary increases 4.0% - 8.20
* Assumed post retirement benefit increase 1.5%

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of KTRS' financial statements assess the risks KTRS takes in investing public funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430. The parameters as outlined in Title 102, Chapter 1.175, Section 2 of the Kentucky Administrative Regulations are as follows:

- There shall be no limit on the amount of investments owned by the System that are guaranteed by the U.S. Government.
- Not more than thirty-five percent (35%) of the assets of the System at book value shall be invested in corporate debt obligations.
- Not more than sixty percent (60%) of the assets of the System at book value shall be invested in common stocks or preferred stocks. Not more than twenty-five percent (25%) of the assets of the System at book value shall be invested in a stock portfolio designed to replicate a general, United States stock index.
- Not more than ten percent (10%) of the assets of the System at book value shall be invested in real estate. This would include real estate equity, real estate lease agreements, mortgages on real estate that are not guaranteed by the U.S. Government, and shares in real estate investment trusts.
- Not more than one percent (1%) of the assets of the System at book value shall be invested in venture capital investments, providing at least seventy-five percent (75%) of such investments must be in-state.
- Not more than ten percent (10%) of the assets of the System at book value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments. Within this parameter, to further diversify the portfolio, the Board approved provisions that permit the limited ownership of foreign equities, timberland and private equity.

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the retirement system's deposits may not be returned to the system. The bank's total balance at June 30, 2007 was $8,383,923 of which $3,751,150 primarily represents deposited amounts due the System for which actual funds are in transit to and waiting to be received by the custodial bank; therefore, these funds were unavailable for investment. An additional amount of $2,247,837 represents funds held in the bank but their

investment is controlled by the Commonwealth of Kentucky. The remaining bank balance amount of $2,384,936 was the amount invested in cash equivalents. Cash equivalents are created through the daily sweeps of available excess cash by the System's custodial bank into bank sponsored short-term investment funds. These funds are custodial bank sponsored commingled funds which are invested in short-term securities backed by the U.S. Government and its agencies. The actual cash deposits held in bank accounts are insured up to $100,000 as covered by federal depository insurance and uncollateralized until being invested in cash equivalents.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,

b. collateralized with securities held by the pledging financial institution, or

c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2007, the System's cash equivalents in the amount of $2,384,936 were not exposed to custodial credit risk since this amount was invested by the custodial bank and collateralized at 102% with the collateral pledged to the Treasurer of the Commonwealth of Kentucky.

C. INVESTMENTS

All of the System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, and real estate. These assets are reported at fair market value.

Investments are governed by the Board of Trustees' policy while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

The following chart represents the fair market values of the investments of the Kentucky Teachers' Retirement System for June 30, 2007.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments

	June 30, 2007	June 30, 2006
Short Term Investments		
Repurchase Agreements	$ 566,457,885	$ 794,300,000
Total Short Term Investments	$ 566,457,885	$ 794,300,000
Bonds and Mortgages		
U.S. Government Obligations		
Treasury Notes & Bonds	$ 1,051,762,064	$ 1,032,439,779
Agencies	1,286,289,341	1,039,092,693
GNMA (Single Family)	26,143,119	18,781,578
Other Miscellaneous	162,647,870	168,353,243
Total U.S. Government Obligations	$ 2,526,842,394	$ 2,258,667,293
Corporate Bonds		
Industrial	$ 474,857,147	$ 542,410,465
Finance	1,034,761,668	1,023,985,966
Utility Bonds (Except Telephone)	130,574,788	119,160,317
Telephone Bonds	40,739,639	46,512,518
Total Corporate Bonds	$ 1,680,933,242	$ 1,732,069,266
Other Fixed Income Investments		
FHA and VA Single Family Mortgages	$ 0	$ 1,904
Project Mortgages (FHA & GNMA)	10,094,638	13,687,213
State and Local Government Issues	252,336,753	180,776,223
Total Other Investments	$ 262,431,391	$ 194,465,340
Total Bonds and Mortgages	$ 4,470,207,027	$ 4,185,201,899
Stocks	$ 10,114,620,014	$ 8,531,993,656
Private Equity	5,074,147	0
Real Estate	381,693,796	387,193,796
TOTAL INVESTMENTS	**$ 15,538,052,869**	**$ 13,898,689,351**

This Schedule does not include $867,562,185 securities lending collateral.

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the pension trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system, and are held by either:

a. the counterparty or

b. the counterparty's trust department or agent, but not in the System's name.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The cash reserve of the System is maintained in high quality short term investments. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, banker's acceptances, and repurchase agreements are all permissible investments. The System utilized investment instruments it regards as the most secure and having the best returns and does not use short term investments that finance foreign businesses unless they are issued and guaranteed by the United States Government.

Individual repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers under terms dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS' nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a market value of at least 102% of the value of the repurchase agreements.

In addition to the System's $15.5 billion in investments at June 30, 2007, cash collateral reinvestment securities acquired through securities lending by the System's custodian, whom is also the lending agent/counterparty amounted to $867,562,185. This is consistent with the System's securities lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the retirement System's investments. In general, the longer the period until an investment matures, the greater the negative impact that changes in interest rates can have on fair value.

As of June 30, 2007 KTRS had the following investments and weighted average maturities:

Investment Type		Fair Value	Average Maturity (years)
U.S. Treasuries	$	1,072,697,874	10.3
Agencies		1,286,289,341	9.6
Corporate Bonds		1,680,933,243	9.9
Mortgage Pass-Throughs		36,237,757	23.3
State & Local Govt Issues		252,336,753	15.4
Collateralized Mortgage Obligations		141,712,059	21.2
Totals		**4,470,207,027**	**10.7**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

In addition to the above securities, Repurchase Agreements (short-term investments) had a total fair value of $566,457,885 with an average maturity of 2 days and other short-term notes/bonds had an average maturity of 26 days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage pass-throughs and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk, significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

The System does not have a formal investment policy that limits investment maturities as a means of managing its exposure to potential fair value losses arising from future changes in interest rates. Market or interest rate risk is the greatest risk faced by an investor in the debt securities market. The price of a debt security typically moves in the opposite direction of the change in interest rates. Mortgages held by the System are fixed interest rate mortgages.

Collateralized mortgage obligations (CMOs) are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a CMO's established payment order. The System held $141.7 million in CMOs as of June 30, 2007.

Asset-backed securities (ABS) are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other credit providers. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. ABSs have been structured as pass-throughs and as structures with multiple bond classes. The ABSs held by the system and reported in the corporate bond category above are moderately sensitive to changes in interest rates.

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedule lists KTRS's investments according to credit ratings as of June 30, 2007:

RATING	FAIR VALUE
Repurchase Agreements	$ 264,900,000
Treasury	1,072,697,874
Agency	1,765,797,042
AAA	659,775,773
AA	478,234,066
A	632,478,238
BAA	152,286,779
BA	2,700,000
B	7,795,140
Total	$ 5,036,664,912

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Total market value of the short-term and the fixed income portfolio was $5,036,664,912 on June 30, 2007. The rating system used in the chart is the nationally recognized Moody's Investors Service rating system. The credit risk associated with repurchase agreements and Agency investments is very minimal as the general rating of these securities is higher than AAA. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

The System's policy on credit rating as stated in 102 KAR 1:175 is that:

"A fixed income investment shall be rated at the time of purchase within the four (4) highest credit classifications identified by one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. Notwithstanding the foregoing, the fixed income investment portfolio as a whole shall maintain an average rating equal to at least the second highest credit classification."

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the System is subject to the following policies regarding single issuers of fixed income and equity securities:

> "Unless the issuer is the United States Government or one (1) of its agencies, the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the system at book value.
>
> "The System's position in a single stock shall not exceed two (2) percent of the System's assets at book value. The system's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program approved by the Board of Trustees or the Investment Committee."

KTRS has not invested greater than five percent (5%) of the System's assets at book value in any single issuer and is in compliance with the System's policies as stated here.

Foreign Currency Risk

As of June 30, 2007, KTRS exposure to foreign currency risk consisted of $522,413,573 of foreign equity investments through a commingled fund managed by UBS Global Asset Management. This amount represented the portion of market value of the total fund attributed to cash investments contributed to the Fund by KTRS.

In addition to the commingled fund allocation, stocks held associated with foreign interests were American Depositary Receipt (ADR) investments which are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. ADRs are denominated in U.S. currency.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The System's policy regarding foreign equities is that "Not more than 10% of the assets of the System at book value shall be invested in any additional category or categories of investments….. Within this parameter, to further diversify the portfolio, the Board approved provisions that permit the limited ownership of foreign equities, timberland and private equity."

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the System. The System operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and selected domestic stocks and bonds are the types of securities that are lent. The System's sub-custodian, The Bank of New York, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the System.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. The following section details the net income earned from securities lending for the fiscal year ended June 30, 2007:

ITEM	EARNINGS
Gross Earnings (Interest and fees)	$ 52,672,196
Less: Gross Borrower Rebates	50,753,953
Bank Fees	565,230
Other	11,192
Net Earnings	$ 1,341,821

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York) also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. As of June 30, 2007 the loan average days to maturity was one day and the weighted average maturity of cash collateral investments was two days.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

At fiscal year end, the System has no credit risk exposure to borrowers, since the amounts the System owes the borrowers exceeds the amounts the borrowers owe the System and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The System minimizes interest rate risk by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2007:

Type of Security Lent	Fair Value	Cash Collateral Received Non-Cash Collateral Value*
U.S. Government and Agencies	$ 733,349,697	$ 744,180,424
U.S. Equities	119,825,017	123,381,761
TOTAL	$ 853,174,714	$ 867,562,185

**Represents value of cash collateral only. Loan or margin collateral requirements met via the use of non-cash collateral (e.g. Government securities or Letters of Credit) are excluded from these values.*

Note 6: Pension Plan for Employees of the System

Full-time employees of Kentucky Teachers' Retirement System (KTRS) participate in either KTRS or Kentucky Employees Retirement System. Both plans are multiple-employer cost sharing defined benefit pension plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the system. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for KTRS employee members for the fiscal years 2007, 2006 and 2005 were $388,973, $368,662, and $355,095 respectively. KTRS contributed 100% of the required contribution each year.

All other KTRS employees are covered under the Kentucky Employee Retirement System (KERS) in the Non-Hazardous Employees Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to

Note 6: Pension Plan for Employees of the System continued . . .

beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. The System's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS were required to contribute 5% of their annual creditable compensation for the fiscal years 2007, 2006, and 2005. As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2007, 2006 and 2005 were 7.75%, 5.89% and 5.89%; and the System's annual required contributions to KERS were $114,711, $103,137 and $268,975 respectively. KTRS contributed 100% of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: 403(b) Tax-Sheltered Annuity Plan

A. PLAN DESCRIPTION

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by the System's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2007, the twenty-nine members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan, therefore, there are no receivables to be recognized.

Note 6: 403(b) Tax-Sheltered Annuity Plan continued . . .

Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

Note 8: Medical Insurance Plan & Post-Employment Benefits

A. PLAN DESCRIPTION

In addition to pension benefits described in Note 1, Kentucky Revised Statute 161.675 requires KTRS to provide post-retirement healthcare benefits to eligible members and dependents. The KTRS Medical Insurance benefit is a cost-sharing multiple employer defined benefit plan. Changes made to the medical plan may be made by the KTRS Board of Trustees, the Kentucky Department of Employee Insurance and the General Assembly.

To be eligible for medical benefits, the member must have retired either for service or disability. The KTRS Medical Insurance Fund offers coverage to members under the age of 65 through the Kentucky Employees Health Plan administered by the Kentucky Department of Employee Insurance. KTRS retired members are given a supplement to be used for payment of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the KTRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The Commonwealth of Kentucky bears no risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the KTRS Medicare Eligible Health Plan. KTRS bears the risk for actual drug claims cost in the Medicare Eligible Health Plan.

At June 30, 2007, KTRS insurance covered 31,642 retirees and 6,674 dependents. There are 198 participating employers and 75,144 active members contributing to the Medical Insurance Fund.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Medical Insurance Plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

C. CONTRIBUTIONS

The post-retirement healthcare provided by KTRS is financed on a pay-as-you-go basis. In order to fund the post-retirement healthcare benefit, one and five tenths percent (1.5%) of the gross annual payroll of all active members is contributed. One-half (1/2) of this amount is derived from member contributions and one-half (1/2) from state appropriation. Also, the premiums collected from retirees as described in the plan description and investment interest help meet the medical expenses of the plan.

Skyrocketing medical expenses have made it increasingly difficult to meet the expenses of the retiree health insurance program. To further fund the plan, the state legislature has directed a portion of the state employer contribution in a sufficient amount to be allocated to the Medical Insurance Fund instead of the pension fund. The system actuary calculated those amounts to be $85,000,000 and $125,000,000 for fiscal years 2007 and 2008 respectively. Funds allocated to KTRS from the general fund for the fiscal year ended June 30, 2007 reduced the $85 million allocation to $73 million. The remaining balances are to be amortized over a period of 10 years. The Legislature appropriated $14,133,200 in the fiscal year 2007-2008 to apply to amortization of the balances.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Medical Insurance Plan as of the most recent actuarial valuation date is as follows (dollar amount in 1000's):

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accured Liabilities (uaal)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2007	$140,772	$5,928,761	$5,787,989	2.4%	$2,975,289	194.5%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedule of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the ARC, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methodologies and assumptions employed as of the June 30, 2007 valuation date include the following:

Actuarial cost method	Projected unit credit
Actuarial value of assets	Market value of assets
Assumed inflation rate	4.0%
Investment rate of return	4.5%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Healthcare trend rate	12.00%
Ultimate trend rate	5.00%
Year of Ultimate Pre-Medicare trend rate	2015

E. INCURRED BUT NOT REPORTED CLAIMS LIABILITIES

KTRS recognizes estimates of liabilities for self-insured unpaid claims that have incurred (both reported and unreported) using the development method. This method uses past observed patterns of time between the date the claim is incurred and the date the claim is paid to estimate incurred claims from available paid claim information. The following schedule shows the change in the claims and liability and the claims activity for the years ended June 30, 2007 and 2006.

	Fiscal Year 2007	Fiscal Year 2006
Beginning Unpaid Claims Liability	$ 7,580,738	$ 8,312,898
Claims Incurred	174,350,593	166,148,844
Current Year	(4,847,798)	(1,142,811)
Increase (Decrease) in Prior Years		
Total Incurred Claims	$ 169,502,794	$ 165,006,034
Claims Paid		
Current Year	$ 169,765,533	$ 160,549,717
Prior Years	5,351,852	5,188,476
Total Payments	$ 175,117,385	$ 165,738,193
Ending Unpaid Claims Liability	$ 1,966,148	$ 7,580,738

Required Supplementary Schedules

Required Supplemental Schedule
Defined Benefit Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	b	(b-a)	(a/b)	c	[(b-a)/c]
2002	$13,588.8	$ 15,695.6	$ 2,106.8	86.6%	$2,313.7	91.1%
2003	13,863.8	16,594.8	2,731.0	83.5	2,497.7	109.3
2004	14,255.1	17,617.6	3,362.5	80.8	2,641.5	127.3
2005	14,598.8	19,134.8	4,536.0	76.3	2,703.4	167.8
2006	14,857.6	20,324.7	5,467.1	73.1	2,859.5	191.2
2007	15,285.0	21,255.0	5,970.0	71.9	2,975.3	200.7

The amounts reported in this schedule of funding progress do not include assets or liabilities for post-employment healthcare benefits, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Required Supplemental Schedule
Defined Benefit Plan
Schedule of Employer Contributions
(dollar amounts in millions)

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS	PERCENTAGE CONTRIBUTED
2002	$ 284,794,710	100 %
2003	322,046,968	100
2004	364,351,412	100
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85

Required Supplemental Schedule
Medical Insurance Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2005	$ 147.3	$ 4,763.9	$ 4,616.6	3.1 %	$ 2,703.4	170.8%
2006	131.6	4,341.9	4,210.3	3.0	2,859.5	147.2
2007	140.8	5,928.8	5,788.0	2.4	2,975.3	194.5

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit plan, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Required Supplemental Schedule
Medical Insurance Plan
Schedule of Contributions from Employers and Other Contributing Entities

Fiscal Year Ending Date	Annual Required Contribution (ARC) (a)	Actual Employer Contribution (b)	Retiree Drug Subsidy Contribution (c)	Total Contribution (b) + (c)	Percentage of ARC Contributed (b) + (c)
6/30/2007	$231,473,321	$113,258,761	$10,312,361	$123,571,122	53.40%

Only one year of actuarial calculations of annual required contributions is available.

Supporting Schedule 1

Schedule of Administrative Expenses
Year Ended June 30, 2007

Salaries	$ 5,185,438
Other Personnel Costs	490,087
Professional Services & Contracts	289,581
Utilities	71,728
Rentals	13,564
Maintenance	64,315
Postage & Related Services	345,574
Printing	149,473
Insurance	93,732
Miscellaneous Services	94,097
Telecommunications	27,239
Computer Services	34,953
Computer & Software Maintenance	113,320
Supplies	53,604
Depreciation	106,897
Travel	42,966
Dues & Subscriptions	33,318
Miscellaneous Commodities	10,208
Furniture, Fixtures, & Equipment not Capitalized	96,686
Compensated Absences	35,066
TOTAL ADMINISTRATIVE EXPENSES	$ 7,351,846

Supporting Schedule 2

Schedule of Investment Expenses
(Contracted and Non-Contracted)
Year Ended June 30, 2007

BALANCED MANAGER		
Todd Investment Advisors		$ 1,285,000
FIXED INCOME MANAGERS		
Galliard Capital Management		288,002
EQUITY MANAGERS		
GE Asset Management Inc.	$ 800,000	
UBS Global Asset Management Corporation	2,655,658	
Wellington Management Company,LLP	2,730,000	
Total Equity Managers		6,185,658
CUSTODIAN		
Farmers Bank		517,199
PRIVATE EQUITY		
Kolberg Kravis Roberts Company		317,566
CONSULTANT		
Becker, Burke Associates		65,000
TOTAL CONTRACTED INVESTMENT MANAGEMENT EXPENSES		8,658,425
OTHER		
Misc Investment Expenses (noncontracted)		9,244
TOTAL INVESTMENT EXPENSES		$ 8,667,669

Supporting Schedule 3

Schedule of Professional Fees for Year Ended June 30, 2007

PROFESSIONAL	NATURE OF SERVICE	YEAR ENDED JUNE 30, 2007
Charles T. Mitchell Company, LLP	Auditing Services	$ 28,000
Cavanaugh Macdonald Consulting	Actuarial Services	232,380
Reed, Weitkamp, Schell &Vice,PLLC	Attorney Services	3,431
Office of Kentucky Attorney General	Attorney Services	1,669
Farmers Bank	Banking Services	15,820
International Claim Specialist	Investigative Services	8,281
	TOTAL	$ 289,581

Charles T. Mitchell Co. LLP
Certified Public Accountants

William G. Johnson , Jr., C.P.A
James Clouse,C.P.A
Bernadette Smith, C.P.A
Kim Field, C.P.A
Greg Miklavcic, C.P.A
Don C. Giles, C.P.A, Consulaant

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the general purpose financial statements of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2007, and have issued our report thereon dated December 5, 2007. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Teachers' Retirement System of the State of Kentucky's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the entity's ability to initiate, authorize, record, process, or report financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of the entity's financial statements that is more than inconsequential will not be prevented or detected by the entity's internal control.

A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the financial statements will not be prevented or detected by the entity's internal control.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Teachers' Retirement System of the State of Kentucky's financial statements are free of material misstatements, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information and use of management and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

Charles T. Mitchell Co.

Frankfort, Kentucky
December 5, 2007

201 West Main Street, Frankfort, Kentucky 40601 | P.O. Box 698, Frankfort, Kentucky 40602-0698
(502) 227-7395 | Fax (502) 227-8005 | www.ctmcpa.com

INVESTMENT SECTION

for Fiscal Year ending June 30, 2007

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Kentucky Teachers' Retirement System.

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

OVERVIEW

The Board of Trustees of the Teachers' Retirement System annually appoints an Investment Committee consisting of two Board members and the Executive Secretary. This Committee acts on behalf of the Board, subject to its approval, in all matters concerning investments. In compliance with the Kentucky Revised Statutes, the Board of Trustees has adopted an "Investment Policy" which it reviews periodically. The investment objectives of the Board of Trustees are as follows:

1. The funds of the Teachers' Retirement System of the State of Kentucky shall be invested solely in the interest of its members and their beneficiaries. Investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries and making payment of reasonable expenses in administering the Plan and its Trust Funds.

2. The specific objective of the investment program shall be the investment of the Fund's assets in securities which shall provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. When investments are acquired, current income together with prospects for capital appreciation shall be weighed in regard to the long range needs of providing benefits to members and their beneficiaries. Short term fluctuations in the market value of the Fund's assets shall be considered as secondary to the long-term objectives and needs of the System.

Within the Kentucky Revised Statutes and pertinent policies, the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). Investment activities shall be conducted, "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims". The responsibility for investing the assets of the System is clearly assigned to the Board of Trustees.

INVESTMENT COMMITTEE

MR. ROBERT M. CONLEY
Chairman

MR. RONALD L. SANDERS
Vice-Chairman

MR. GARY L. HARBIN, CPA
Ex-Officio Member, Executive Secretary

EXECUTIVE INVESTMENT STAFF

MR. GARY L. HARBIN, CPA
Executive Secretary

MR. PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

Investment Advisors

Fixed Income and Equity Managers
Todd Investment Advisors
101 South Fifth Street
National City Towers, Suite 3160
Louisville, Kentucky 40202

Fixed Income Manager
Galliard Capital Management
800 LaSalle Avenue
Suite 2060
Minneapolis, Minnesota 55502

Equity Managers
UBS Global Asset Management
UBS Tower
One North Wacker Drive
Chicago, Illinois 60606

Wellington Management Company
75 State Street
Boston, Massachusetts 02109

GE Asset Management
3001 Summer Street
Stamford, Connecticut 06904

Investment Consultant
Becker, Burke Associates, Inc.
Suite 1000
221 North LaSalle Street
Chicago, Illinois 60601

Investment Custodian/Subcustodian
Farmers Bank and Capital Trust Co.
Farmers Bank Plaza
Frankfort, Kentucky 40601

The Bank of New York Mellon
One Wall Street
New York, New York 10286

INVESTMENT CONSULTANT'S STATEMENT

Becker, Burke Associates served as Investment Consultant to the Kentucky Teachers' Retirement System during the 2006-07 fiscal year as it has in several previous years. Becker, Burke Associates is familiar with the operation of the System's investment program as well as its performance. The investment program of the Retirement System is operated in a prudent manner that reflects a desire to preserve capital while maximizing returns. The assets of the Retirement System are assigned to various portfolios in order to diversify the System's investments and take advantage of opportunities in various asset classes and sectors. The System gravitates toward relatively conservative holdings in each asset class. The overall effect of diversification is to minimize risk. The manner in which the Retirement System operates and its investment results are commensurate with other risk-averse institutional investors in similar regulatory environments.

Edmund M. Burke
President
Becker, Burke Associates
October 16, 2007

ASSET ALLOCATION

The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers defined in KRS 161.430. The asset allocation limits complement the investment principles used by the Board and Committee regarding security, diversification, high return, and liquidity. The asset allocation policy is adopted by the Board of Trustees and approved in the form of administrative regulation. The asset allocation parameters are structured in order to maximize return while at the same time provide a prudent diversification of assets and preserve the capital of the Teachers' Retirement System. The Board is interested in assuming secure investments that will provide long term growth to the fund. The Board does not arbitrarily compromise security in order to enhance the prospects of return. The Investment Committee and the Board are mindful of the fund's liquidity and its capability of meeting both short and long term obligations. Asset allocation parameters follow:

1. There will be no limit on the amount of investments owned by the System that are guaranteed by the U.S. Government.
2. Not more than 35% of the assets of the System at book value shall be invested in corporate debt obligations.
3. Not more than 60% of the assets of the System at book value shall be invested in common stocks or preferred stocks. No more than 25% of the assets of the System at book value shall be invested in a stock portfolio designed to replicate a general, U.S. stock index.
4. Not more than 10% of the assets of the System at book value shall be invested in real estate. This would include real estate equity, real estate lease agreements, mortgages on real estate that are not guaranteed by the U.S. Government, and shares in real estate investment trusts.
5. Not more than 10% of the assets of the System at book value shall be invested in any additional category or categories of investments. The Board shall approve by resolution such additional category or categories of investments. Within this parameter, to further diversify the portfolio, the Board approved provisions that permit the limited ownership of foreign equities, timberland, and private equity.

The asset allocation of investments at market value was somewhat different at the beginning of the fiscal year than it was on June 30, 2007. In addition, the market value allocation of assets through the dynamics of the securities markets is different than the book value allocations. During the 2006-07 fiscal year, the market value of the stock position increased from 61% of assets the previous year to 65% of assets. The portion of the portfolio in Government securities increased from 16% to 18%. The cash position decreased during the year to 3.6% of assets. The real estate equity position remained a relatively small portion of the System's portfolio at approximately 2.5%.

The Kentucky Revised Statutes require the Board of Trustees to employ experienced investment counselors to advise it on investment related matters. Todd Investment Advisors was employed during 2006-07 as the System's principal investment counselor, providing assistance in the management of $3.3 billion of stocks and bonds. UBS Global Asset Management, Wellington Management Company, Galliard Capital Management, and GE Asset Management also were retained during the 2006-07 fiscal year to provide investment counseling services. Galliard Capital Management assisted in the management of approximately $851 million in bonds. GE Asset Management managed about $699 million in equity investments. UBS Global Asset

Management was responsible for managing approximately $1.9 billion in equities, and Wellington Management Company managed about $1.2 billion in equities. In addition to monitoring the investment counselors, the in-house investment staff managed about $7.6 billion of fixed income and equity assets. All of the investment firms, while specializing in particular asset classes or sectors, are required to work within the same broad objectives, portfolio constraints, and administrative guidelines. Five investment counselors plus an in-house staff provide the Board of Trustees with a diversification of management that is appropriate for a $15.5 billion fund. The Farmers Bank & Capital Trust Company, located in Frankfort, Kentucky, was retained in 2006-07 as the Custodian of Securities with the Bank of New York Mellon serving as a sub-custodian.

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by Federal, state, and local laws.

FINANCIAL ENVIRONMENT

Equity Market

Stocks produced strong returns in the fiscal year ended June 30, 2007, well above historical averages. The S&P 500, dominated by large cap U.S. stocks, returned 20.6%. The S&P 400 Midcap Index returned 18.5% and the S&P 600 Smallcap Index returned 16.0%. International equities were strong as well, with the EAFE Index returning 27.5%. The march upward in prices was notable for its steadiness, or unusually low volatility, interrupted only by a minor correction in late February and increasing volatility in June, 2007.

The markets flourished in an environment that was decidedly shareholder-friendly. After several years of healthy economic growth, most companies were flush with cash and had strong balance sheets. Companies' focus turned to raising dividends, buying back shares, and releveraging in other ways to boost return on equity. The period also saw the peak of a boom in leveraged buyouts by private equity firms. Fueled by an abundance of cheap credit with permissive terms, private equity firms acquired numerous publicly traded companies at substantial premiums to their pre-announcement public market prices. This trend only began to abate in the summer of 2007 as credit availability suddenly became much more restrictive.

This ebullient market environment played out against the backdrop of U.S. economic growth that was clearly moderating due to gradually weakening consumer spending and a severely slumping housing sector. Global growth remained strong, supporting the manufacturing sector. Gross domestic product, adjusted for inflation, grew 1.8% over the fiscal year, down from 3.2% growth over the previous twelve months. Year-over-year retail sales growth was 3.5% in June, 2007, down from 5.4% a year earlier. Adjusting for inflation, real retail sales growth was only 0.8%, down from 1.1% in June, 2006. Industrial production declined from 4.3% year-over-year growth to 1.5%. Inflation, as measured by the consumer price index, declined from 4.3% to 2.7%. Employment growth held up, with the unemployment rate falling from 4.6% to 4.5%. Housing was a major drag on the economy, with existing home sales in June, 2007 down 12.1% from a year earlier and the inventory of unsold homes at an 8.7 month supply, up from 6.8 months a year ago.

The strongest industry sectors over the fiscal year were telecommunications (+34.3%), materials

(+26.5%), and energy (+26.0%). The telecommunications sector was driven by a strong return by AT&T in the wake of its acquisition of Bellsouth. The materials sector benefited from a boom in commodity prices due to strong global demand from China and other emerging markets. Energy benefited from sustained high oil prices. Even the weakest relative sectors produced solid returns: financials (+11.8%), consumer staples (+12.2%), and industrials (+15.0%).

After several years of strong outperformance by mid cap and small cap stocks, large cap stocks outperformed modestly for the fiscal year. Lower relative valuations on large cap stocks augured well for continued outperformance. Among large cap and mid cap stocks, the "value" style of investing outperformed the "growth" style due to the strong performance of telecommunications, materials, and energy, which are considered value sectors. The large cap Russell 1000 Value Index returned 21.9% for the fiscal year versus 19.0% for the Russell 1000 Growth Index. Among small cap stocks the story was slightly different, with the Russell 2000 Growth Index returning 16.8% versus 16.1% for the Russell 2000 Value Index.

As the fiscal year came to an end, problems in the subprime mortgage market were causing widening financial market turmoil. A few years of excessively lax lending standards were coming to fruition with rising default rates on lower quality mortgages. There were failures among heavily leveraged hedge funds that had invested in such mortgages. A number of mortgage originators were forced out of business. A general increase in risk aversion tightened credit and raised interest rate risk spreads throughout the credit markets. The stock market responded with a sharp upsurge in volatility. The S&P 500 suffered a 10%correction in the summer of 2007. Tighter lending standards threatened to extend the housing slump indefinitely. The important question was how much the market turmoil and housing market slump would impact the wider economy going forward.

Fixed Income Market

Bonds generated relatively good inflation-adjusted returns in the fiscal year ended June 30, 2007. The Lehman Government/Credit Index returned 6.0% versus consumer price index inflation of 2.7% for a 3.3% real return. The Federal Reserve completed a tightening cycle in late June, 2006, leaving the short-term federal funds rate steady at 5.25% throughout the fiscal year. Longer-term rates fluctuated, but remained below short-term rates for most of the fiscal year. With default rates very low and balance sheets generally strong, yield spreads over safe government bonds remained historically thin over most of the period. This began to change in June, 2007, as contagion from the subprime mortgage market caused a general increase in risk aversion.

Long maturity bonds and lower credit quality bonds outperformed for the fiscal year as a whole. The Lehman 20+ year Treasury Bond Index returned 5.93%. Three-month Treasury bills, with no credit risk or price volatility, returned 5.24%. The Lehman Long Corporate Index returned 7.87% and the Lehman U.S. Corporate High Yield Index returned 11.55%. The Lehman Index of Fixed Rate Mortgage-Backed Securities returned a respectable 6.39%.

The Federal Reserve ended its tightening campaign in late June, 2006, acknowledging a softening economy. The market immediately began anticipating cuts in short-term rates in the foreseeable future. Yields across the Treasury maturity spectrum generally declined in the second half of 2006. The yield on the ten-year Treasury declined from 5.14% on June 30, 2006 to a low point of 4.43% on December 4. Despite below-trend economic growth and a worsening housing downturn, the Federal Reserve continued to signal that its primary concern was combating inflationary pressures and gave no hint of near-term easing. Yields settled into a trading range.

Yields then had a significant revaluation upward in May and June, 2007 due to a change in short-term and long-term sentiment. With regard to short-term sentiment, the market finally threw in the towel on the prospect of Federal Reserve easing in the near future. With regard to long-term sentiment, there was a wave of articles in the press suggesting that the global inflow of funds which had been depressing U.S. Treasury yields was in danger of abating. The focus shifted to concerns that strong global growth and tight capacity were causing global inflationary pressures. The yield on the ten-year Treasury moved up from 4.63% on April 30 to 5.30% on June 12.

The climate changed again suddenly in the summer of 2007 as widening effects of the subprime mortgage crisis caused the most serious credit market disruption since 1998. A "flight to quality" caused prices to rise and yields to drop sharply on U.S. Treasury securities. Yield spreads over Treasury bonds widened dramatically in all fixed income sectors and lending terms became more restrictive. Availability of short-term credit in the money markets was even threatened until the Federal Reserve stepped in to stabilize the situation by supplying credit to financial institutions through its discount window. A strong possibility of the Federal Reserve lowering the federal funds rate from 5.25% in the near future was back on the table. The timing and extent of any such monetary policy easing would depend upon the impact of the continued housing slump and the financial market turmoil on the broader economy. Hopefully, wider yield premiums for risky assets represented a healthy repricing of risk after years of excessively cheap and easy credit. A more pessimistic view would interpret the shift as a harbinger of economic weakness, rising default rates, and increased volatility in the credit markets.

PORTFOLIO CHARACTERISTICS

At year's end, the System's entire stock portfolios, exclusive of the stock index fund and the international portfolio, could be characterized as high quality and diversified. The KTRS portfolio, as measured by beta, was approximately as risky as the Standard & Poor's 500 Index. Beta is a measure of the volatility in price of a particular stock or portfolio compared to the volatility of the index. The beta of the KTRS portfolio at the end of the fiscal year was 1.03. The KTRS portfolio registered a price-earnings multiple that was slightly lower than the index. The price-earnings ratio for the portfolio at the end of the fiscal year was 17.03, compared to 17.46 for the index. Two factors attesting to the high quality of the portfolio were the high rate of growth in both earnings per share and dividends per share. The average earnings growth rate over the past five years for the KTRS stock portfolio was 22.19%. The average dividend growth rate for the past five years of the KTRS portfolio was 14.20%. At the end of the 2006-07 fiscal year, the yield level for the KTRS portfolio stood at 1.63%, which was lower than the index's yield of 1.81%.

The stock position, apart from the stock index fund and the international portfolio, began the 2006-07 fiscal year by being 31.9% of assets at market value, and by year-end, it constituted 32.9% of assets. In dollars, the value of the stock position increased from approximately $4.4 billion to about $5.1 billion in 2006-07. The three stock index funds represented another $4.0 billion that was invested in stocks at year end, while $1.0 billion was invested in international portfolios. At the end of 2006-07, the sector weightings in the KTRS stock portfolio were similar to those of the Standard & Poor's 500 Index. The greatest differences were underweightings by KTRS in the consumer staples, financials, and material sectors and overweightings in the consumer discretionary, health care, and information technology sectors.

On June 30, 2007, the System's entire bond portfolio had a duration of 5.3 years. The average coupon rate for the holdings was 5.5%. As of June 30, 2007, the average maturity of the fixed

income portfolio was 7.9 years. The maturities of fixed income investments will generate cash for the fund in future years. Approximately 71% of the fixed income investments, including short term cash equivalents, will mature by the end of 2019, about 12 years. This will assist the System in meeting retirement fund obligations as well as permit it to assume new investments.

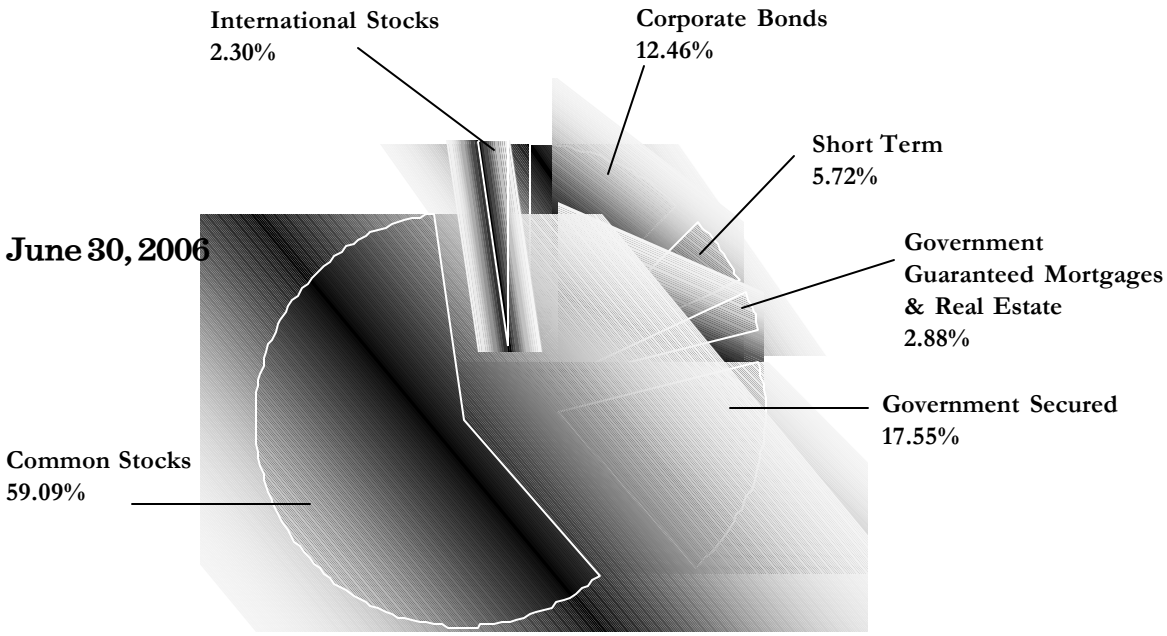
PORTFOLIO RETURNS

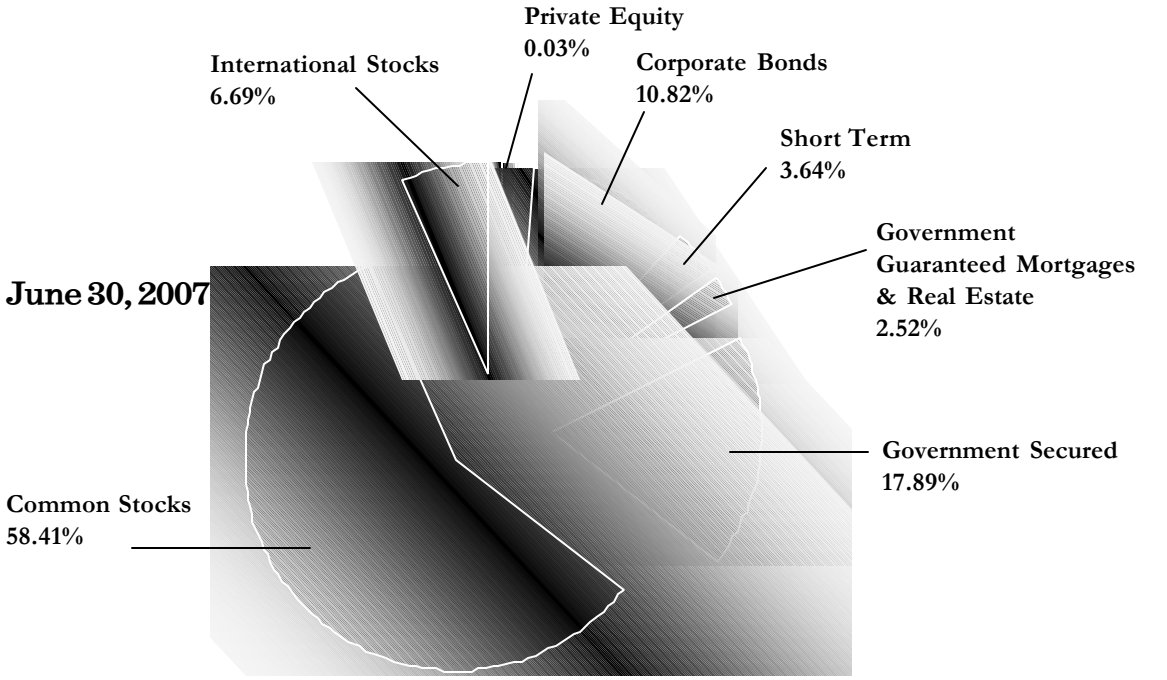
The investment portfolio experienced growth in book values and its market value during the 2006-07 year. The market value of the portfolio increased over $1.6 billion to a total of $15.5 billion at year-end. The book value of the fund increased $425.9 million during the year. The System accumulated in excess of $855 million of investment income during 2006-07; this investment income total excludes monies earned but not received by the end of the fiscal year. The income resulted from interest, dividends, rental income, lending income, and gains.

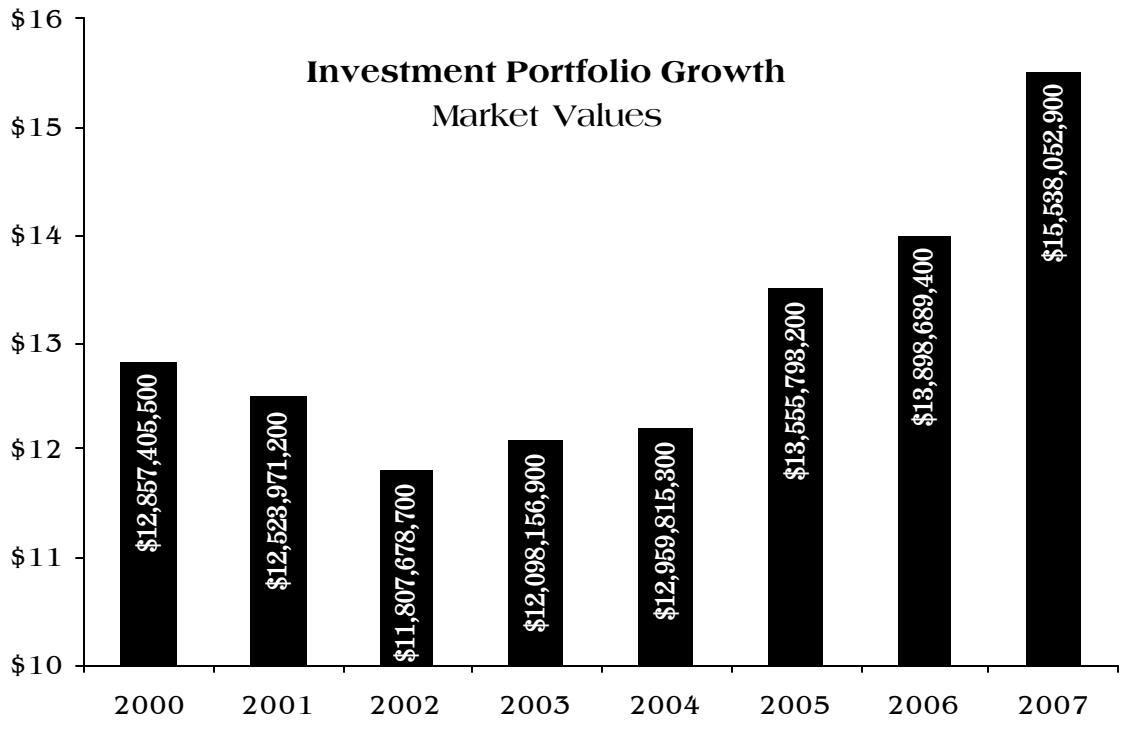
For the 2006-07 fiscal year, the total return earned by the System's stock position is equal to the return generated by the Standard & Poor's 500 Stock Index. The KTRS stock position and the stock index earned a total return of 20.6% in 2006-07. The ten year annualized return for the years 1998 through 2007 was 7.8% for the System's stock position and 7.1% for the stock index. The System's bond position earned a ten year annualized total return of 6.2%. This is slightly higher than the 6.0% return earned by the Lehman Government/Credit High Quality Index. In 2006-07, the System's bonds earned a total return of 6.3%, while the Lehman High Quality Index earned 5.7%. The entire portfolio earned a total return of 15.3% in 2006-07. The portfolio's ten year annualized rate of total return was 7.1%. The total return of the portfolio over ten years more than kept up with the rate of inflation and provided real growth. In 2006-07, the Consumer Price Index registered an inflation rate of 2.7%. The ten year annualized rate is 2.7%. The System's returns were generated by the Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

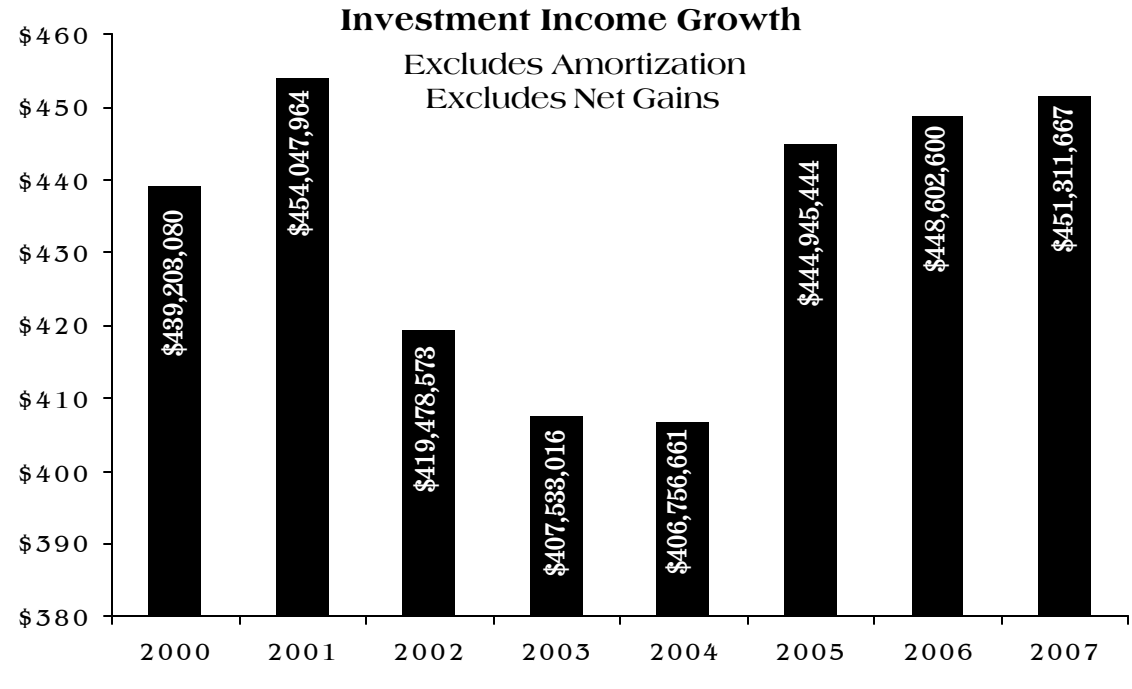
The charts that follow this narrative graphically display the growth that is discussed in the preceding paragraphs. Following the charts is a summary description of investments held at June 30, 2007. The System annually produces a detailed investment report that is available on request.

Distribution of Investments
Market Values






Investment Portfolio Growth
Market Values
$16
$15
$14
$13
$12
$11
$10
$12,857,405,500
$12,523,971,200
$11,807,678,700
$12,098,156,900
$12,959,815,300
$13,555,793,200
$13,898,689,400
$15,538,052,900
2000
2001
2002
2003
2004
2005
2006
2007


Investment Income Growth
Excludes Amortization
Excludes Net Gains
$460
$450
$440
$430
$420
$410
$400
$390
$380
$439,203,080
$454,047,964
$419,478,573
$407,533,016
$406,756,661
$444,945,444
$448,602,600
$451,311,667
2000
2001
2002
2003
2004
2005
2006
2007

Total Return on KTRS Investments*
Percentages

Fiscal Year	Standard & Poor's 500 Index	KTRS Stocks	Lehman Govt./Credit High Quality Index	KTRS Bonds	Consumer Price Index	KTRS Cash Collection Fund	KTRS Real Estate	KTRS Total Portfolio
1997-98	30.2	29.2	11.3	11.6	1.7	6.1	9.7	19.4
1998-99	22.8	22.0	2.7	2.3	2.0	5.3	9.7	11.5
1999-00	7.3	3.6	4.6	4.9	3.7	5.8	9.9	4.1
2000-01	(14.8)	(8.9)	11.0	10.9	3.3	6.0	9.5	(0.7)
2001-02	(18.0)	(14.5)	8.6	9.5	1.1	2.5	6.0	(4.1)
2002-03	0.3	(1.1)	12.3	12.4	2.1	1.5	9.3	4.8
2003-04	19.1	19.2	(1.2)	(0.7)	3.2	1.0	9.7	9.7
2004-05	6.3	7.9	7.0	7.6	2.5	2.3	9.6	7.5
2005-06	8.6	9.0	(1.4)	(1.2)	4.3	5.0	11.3	5.4
2006-07	20.6	20.6	5.7	6.3	2.7	7.2	8.2	15.3
Three Year Annualized Rate	11.7	12.1	3.7	4.2	3.2	4.8	9.7	9.3
Five Year Annualized Rate	10.7	10.7	4.4	4.7	3.0	3.4	9.6	8.5
Eight Year Annualized Rate	2.8	3.8	5.7	6.1	2.9	3.9	9.2	5.1
Ten Year Annualized Rate	7.1	7.8	6.0	6.2	2.7	4.2	9.3	7.1
Fifteen Year Annualized Rate	11.2	11.5	6.3	6.6	2.7	4.5	9.3	8.8
Twenty Year Annualized Rate	10.8	11.2	--	7.5	3.1	5.4	9.0	9.1

** The performance calcuations presented above were generated by the Rogers Casey Performance reporting system using a time-weighted rate of return calculation based upon the Dietz methodology.*

Investment Summary
Fair Market Value
06/30/2007

Type of Investment	Fair Value 07/01/06	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/07
Short Term	794,300,000	41,636,178,100	11,320,700	41,875,340,900	566,457,900
Fixed Income	4,185,201,900	1,936,149,600	28,178,800	1,679,323,300	4,470,207,000
Equities	8,919,187,500	3,189,246,800	1,577,837,400	3,189,957,900	10,496,313,800
Alternative	-	5,666,000	100	591,900	5,074,200
TOTAL	**13,898,689,400**	**46,767,240,500**	**1,617,337,000**	**46,745,214,000**	**15,538,052,900**

Contracted Investment Management Expenses
($ Thousands) as of 06/30/2007

	Assets Under Management	Expenses	Basis Points (1)
INVESTMENT MANAGER FEES			
Fixed Income Managers	$ 850,880	$ 382	4.5
Equity Managers	3,833,887	6,186	16.1
Balanced Manager	3,273,551	1,285	3.9
			9.9
TOTALS	$ 7,958,318	$ 7,853	
OTHER INVESTMENT SERVICES			
Custodian Services	$ 15,538,053	$ 517	0.3
Private Equity Fees (2)	5,074	317	624.8
Investment Consultant		65	
TOTAL		$ 899	
GRAND TOTAL		$ 8,752	5.6

1 - One basis point is one hundredth of one percent or the equivalent of .0001.
2 - Private equity fees apply to Calendar Year 2007.

Transaction Commissions

06/30/2007

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
A.G. Edwards	19,600	784.00	0.0400
B Trade Services	16,023	80.12	0.0050
Bank of America	2,748,459	68,634.40	0.0250
Bass Trading	10,000	400.00	0.0400
BB & T Capital Markets	42,400	1,696.00	0.0400
Bear Stearns & Co., Inc.	494,225	29,475.50	0.0596
BMO Capital Markets	18,400	1,840.00	0.1000
BNY Brokerage	1,571,567	62,862.68	0.0400
Boenning & Scattergood	127,020	2,857.95	0.0225
Cantor Fitzgerald & Co	50,000	2,000.00	0.0400
CIBC Oppenheimer Worldmarket	72,000	2,560.00	0.0356
Citigroup Global	2,129,820	125,907.08	0.0591
Citigroup-Huntington	3,047,800	121,912.00	0.0400
Citigroup-Louisville	2,830,600	113,224.00	0.0400
Cowen & Co	32,600	1,304.00	0.0400
Credit Suisse Sec. LLC	3,769,800	176,693.40	0.0469
Deutsche Bank	4,413,849	215,832.75	0.0489
First Kentucky Securities Corp	2,231,325	89,253.00	0.0400
Fox Pitt Kelton Inc	12,100	484.00	0.0400
Freidman Billings	154,300	5,858.00	0.0380
Goldman Sachs	4,789,175	208,864.08	0.0436
Heflin & Co	173,600	6,944.00	0.0400
Howe Barnes Investment	18,800	752.00	0.0400
Instinet	27,100	274.75	0.0101
Investment Tech Grp Transition	25,353,182	134,675.02	0.0053
Investment Technology Grp	28,655,518	456,882.44	0.0159
ISI Group	2,779,203	111,168.12	0.0400
J.J.B. Hilliard, W.L. Lyons	2,942,500	117,700.00	0.0400
Jefferies & Co.	2,647,700	96,195.15	0.0363
JMP Securities	14,000	560.00	0.0400
Jones & Associates	49,700	1,988.00	0.0400
JP Morgan & Chase	25,100	1,227.00	0.0489
Keefe Bruyette & Woods	17,500	700.00	0.0400
Knight Equity Markets	124,079	4,782.53	0.0385
Lazard Freres & Co.	4,630,300	185,212.00	0.0400
Leerink Swann & Co.	6,900	276.00	0.0400
Lehman Brothers	3,095,640	100,448.50	0.0324
Lexington Investment Co.	1,690,900	67,636.00	0.0400
Liquidnet Inc	2,356,437	47,128.74	0.0200
Merrill Lynch	19,122,937	402,172.81	0.0210
MKM Partners	63,000	2,520.00	0.0400
Morgan Keegan	2,257,300	90,292.00	0.0400
Morgan Stanley	7,115,677	265,959.27	0.0374
Murphy & Durieu	27,400	616.50	0.0225

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
NYFIX Transaction Service	300	1.50	0.0050
Pipeline Trading	10,500	157.50	0.0150
Piper Jaffray	30,800	4,080.00	0.1325
Prudential Sec	34,000	1,571.00	0.0462
Pulse Trading	63,930	1,438.43	0.0225
R W Baird	13,500	540.00	0.0400
Raymond James & Assoc	4,936,461	197,458.44	0.0400
RBC Capital Markets	23,400	1,035.00	0.0442
Ross Sinclaire & Assoc	1,642,600	65,704.00	0.0400
Sandler O'Neill	35,600	1,424.00	0.0400
Sanford C Bernstein	85,900	429.50	0.0050
State Street Global	51,000	1,530.00	0.0300
Stifel, Nicolaus & Co	2,162,900	86,516.00	0.0400
Suntrust Robinson	2,400	85.00	0.0354
Susquehanna Brokerage	58,300	1,695.75	0.0291
Thomas Weisel Partners	16,831	1,642.69	0.0976
UBS/Paine Webber Securities	1,818,652	85,923.12	0.0472
UBS/Paine Webber-Louisville	5,288,600	211,544.00	0.0400
Wachovia / First Clearing Corp	2,990,850	119,594.00	0.0400
Weeden & Co	3,207,340	128,426.10	0.0400
TOTAL	**154,249,400**	**4,239,429.82**	**0.0275**

The over-the-counter commission rate on medium to large capitalization stocks is assumed to be $.04 per share. The acquisition of initial public offerings (IPOs) represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate. However, the security issuers and not the investors pay the commissions. In 2006-07, the System bought small capitalization IPOs that generated $67,324.93 in commissions. Although these commissions were not paid by the Retirement System, they resulted from the System's investment activities and are included in the total commissions of $4,239,429.82. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.04 per share or less. Investment companies usually provide investment research for brokerage clients. On occasion, investment companies direct third party research to active clients. The Retirement System received third party research through Lynch Jones Ryan, Merrill Lynch and Lehman Brothers. Trading commissions of $62,799.00 were associated with third party research obligations. The primary research providers were: Bloomberg, Interactive Data, Rogers Casey, CMS Bondedge, ISS, QED Information Systems, and Vestek.

Ten Largest Stock Holdings Ranked* by Market Value 06/30/07

Rank	Name	Shares	Market Value
1	General Electric	5,002,074	191,479,393
2	Microsoft	6,420,997	189,226,782
3	Citigroup Inc	3,425,912	175,715,026
4	Exxon Mobil Corp	1,871,500	156,981,420
5	A T & T Inc	3,557,201	147,623,842
6	Bank of America	2,535,700	123,970,373
7	Cisco Systems Inc	4,229,546	117,792,856
8	Morgan Stanley	1,384,522	116,133,705
9	Wells Fargo & Co	3,269,350	114,983,040
10	Chevron Corp	1,358,167	114,411,988

Top Ten Fixed Income Holdings* 06/30/07

Rank	Description	Maturity	Coupon	Par	Market Value
1	US Treasury Bonds	8/15/2023	6.250	110,500,000.00	122,698,095.00
2	US Treasury Bonds	2/15/2021	7.875	46,500,000.00	58,513,740.00
3	US Treasury Notes	5/15/2015	4.125	59,500,000.00	56,073,990.00
4	US Treasury Bonds	8/15/2029	6.125	47,325,000.00	53,085,399.00
5	FHLB	9/4/2007	5.200	50,000,000.00	49,984,500.00
6	FHLB	4/3/2008	5.250	50,000,000.00	49,937,500.00
7	FHLB	4/9/2008	5.200	50,000,000.00	49,937,500.00
8	FHLB	2/4/2008	5.150	50,000,000.00	49,906,500.00
9	US Treasury Bonds	8/15/2021	8.125	29,815,000.00	38,426,466.45
10	Federal Home Loan Bank Bonds	10/16/2007	5.200	38,000,000.00	37,976,440.00

***** *Detailed information concerning these values along with book values and cost values of all KTRS investments is available upon request.*

Schedule of Investments as of June 30, 2007

Investment			Par Value* or Remaining Principal Balance	Market Value	Percentage of Market Value
Cash Equivalents			567,500,000.00	566,457,884.77	3.65
Total Short Term			567,500,000.00	566,457,884.77	3.65
Treasury Notes and Bonds			992,170,000.00	1,051,762,064.23	6.77
Agencies			1,299,414,235.71	1,286,289,341.11	8.28
GNMA (Single Family)			26,130,984.38	26,143,119.20	0.17
Collateralized Mortgage Obligations			144,824,550.75	141,712,059.24	0.91
Treasury Strip Bonds			25,000,000.00	20,935,810.00	0.13
Total U.S. Government Obligations			2,487,539,770.84	2,526,842,393.78	16.26
Industrials			470,292,581.00	474,857,147.60	3.06
Finance			1,045,027,447.18	1,034,761,668.06	6.66
Utility Bonds (Except Telephone)			130,983,320.00	130,574,787.92	0.84
Telephone Bonds			39,287,200.00	40,739,638.80	0.26
Total Corporate Bonds			1,685,590,548.18	1,680,933,242.38	10.82
Project Mortgages (FHA & GNMA)			9,445,982.30	10,094,637.90	0.06
State and Local Government Issues			255,076,106.93	252,336,752.90	1.63
Total Other Fixed Income			264,522,089.23	262,431,390.80	1.69
Subtotal (Fixed Income)			5,005,152,408.25	5,036,664,911.73	32.42
Real Estate Equity			377,513,923.33	381,693,796.00	2.45
Total Real Estate Equity			377,513,923.33	381,693,796.00	2.45
Crysalis Venture			2,600,000.00	2,600,000.00	0.02
KKR Private Equity			2,474,147.00	2,474,147.00	0.01
Total Private Equity			5,074,147.00	5,074,147.00	0.03
UBS Alpha	9,310,640.20	Units	100,000,000.00	124,666,679.09	0.80
UBS Intl Collective	800,269.69	Units	450,000,000.00	522,413,572.80	3.36
International	15,041,017.00	Shares	431,139,807.64	517,002,575.06	3.33
Common Stocks	88,605,347.00	Shares	3,227,228,989.43	3,961,339,456.05	25.50
Small Cap Stocks	7,289,282.00	Shares	138,751,022.40	164,687,425.92	1.06
Wellington Large	14,239,728.00	Shares	675,580,846.91	744,880,496.31	4.79
600 Stock Index	9,887,648.00	Shares	233,961,647.73	295,565,411.05	1.90
400 Stock Index	7,244,437.00	Shares	233,707,710.24	252,238,791.87	1.62
Todd Alpha	1,209,400.00	Shares	50,711,464.28	55,166,653.00	0.36
Stock Index	78,818,635.00	Shares	2,664,900,111.67	3,476,658,952.60	22.38
Total Stocks	232,446,403.89	Shares	8,205,981,600.30	10,114,620,013.75	65.10
Subtotal (Equity)			8,588,569,670.63	10,501,387,956.75	67.58
Total Investments			**13,593,722,078.88**	**15,538,052,868.48**	**100.00**

* *In this asset display, par value represents the redemption value of bonds and the cost value of equities. Market value is a volatile measure that changes daily and represents the approximate transaction value of an investment on a particular day--in this case June 30, 2007. Detailed information concerning these values along with book value and cost values of all KTRS investments is available on request.*

ACTUARIAL SECTION

Report of the Actuary on the Annual Valuation

for Fiscal Year ending June 30, 2007

Cavanaugh Macdonald
CONSULTING, LLC

December 3, 2007

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2007. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that combined member and state contributions for the fiscal year ending June 30, 2010 at the rate of 25.07% of university members' salaries and 28.03% of non-university members' salaries are required to support the benefits of the System. This represents an increase since the previous valuation in the required employer contribution rate of 0.61% of payroll for the 2009/2010 fiscal year. There has been a net increase in the expected state special appropriation from 4.25% to 4.28%, or 0.03% of payroll.

Therefore, for the 2009/2010 fiscal year, in addition to the state statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 2.46%; 0.58% from this valuation and 1.88% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The valuation takes into account the effect of amendments to the System enacted through the 2007 Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time. Therefore, there is a Net Pension Obligation (NPO) under GASB 27 for the fiscal year ending June 30, 2007.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

In our opinion the System is operating on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Senior Actuary

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Report of Actuary on the Valuation
Prepared as of June 30, 2007
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2007		June 30, 2006	
Number of active members	75,144		73,740	
Annual salaries	$ 2,975,289		$ 2,859,477	
Number of annuitants and beneficiaries	39,506		38,497	
Annual allowances	$ 1,135,635		$ 1,074,159	
Assets				
Market value	$ 15,421,092		$ 13,783,830	
Actuarial value	$ 15,284,955		$ 14,857,641	
Unfunded actuarial accrued liability	$ 5,970,019		$ 5,467,140	
Amortization period (years)	30		30	
	University	Non-University	University	Non-University
Pension Plan:				
Normal	13.82 %	17.34 %	13.91 %	17.22 %
Accrued liability	11.25	10.69	10.55	10.20
Total	25.07 %	28.03 %	24.46 %	27.42 %
Member	7.625 %	9.105 %	7.625 %	9.105 %
State (ARC)	17.445	18.925	16.835	18.315
Total	25.07 %	28.03 %	24.46 %	27.42 %
Life Insurance Fund:				
State	0.17 %	0.17 %	0.17 %	0.17 %
Medical Insurance Fund:				
Member	0.75 %	0.75 %	0.75 %	0.75 %
State Match	0.75	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	1.50 %	1.50 %	1.50 %	1.50 %
Total Contributions:	26.74 %	29.70 %	26.13 %	29.09 %
Contribution rates for fiscal year ending:	**June 30, 2010**		**June 30, 2009**	
Member Statutory	8.375 %	9.855 %	8.375 %	9.855 %
State Statutory	11.625	13.105	11.625	13.105
Required Increase	2.46	2.46	1.88	1.88
State Special	4.28	4.28	4.25	4.25
Total	26.74 %	29.70 %	26.13 %	29.09 %

2. The valuation indicates that combined member and State contributions at the rate of 25.07% of salaries for university members and at 28.03% for non-university members are sufficient to support the current benefits of the System. Comments on the valuation results as of June 30, 2007 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.
3. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.
4. The valuation takes into account the effect of amendments to the System enacted through the 2007 Session of the Legislature.
5. All amounts shown prior to the 2004/2005 fiscal year were developed and/or reported by the prior actuarial firm.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2007 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000)
Full Time	57,192	$ 2,856,193
Part Time	17,952	119,096
Total	75,144	$ 2,975,289

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2007

Group	Number	Annual Retirement Allowances[1] ($1,000)
Service Retirements	34,530	$ 1,040,212
Disability Retirements	2,086	50,322
Beneficiaries of Deceased Members	2,890	45,101
Total	39,506	$ 1,135,635

[1] *Includes cost-of-living adjustments effective through July 1, 2007.*

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2007 the market value of Pension Plan assets for valuation purposes held by the System amounted to $15,421,092,446. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2007 was $15,284,954,542. Schedule B shows the development of the actuarial value of assets as of June 30, 2007.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan and the Life Insurance Fund.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $8,411,311,840 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $12,653,329,966 of which $1,095,890,755 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $190,332,009. The total actuarial accrued liability of the System amounts to $21,254,973,815. Against these liabilities, the System has present assets for valuation purposes of $15,284,954,542. When this amount is deducted from the actuarial accrued liability of $21,254,973,815, there remains $5,970,019,273 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 13.82% of payroll for university members and 17.34% for non-university members.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member will contribute 8.375% of annual salary to the System and each non-university member will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2009/2010 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**

3. Therefore, 10.875% of active university members' salaries and 12.355% of active non-university members' salaries is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of this amount, 0.17% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 2.46% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 4.28% of total payroll will be made by the State. The total required employer contribution rate to the Pension Plan is, therefore, 17.445% for university members and 18.925% for non-university members. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source

	UNIVERSITY	NON-UNIVERSITY
Member		
Statutory Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Contribution to Pension Plan	7.625%	9.105%
Employer		
Statutory Matching Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	12.355%
Life Insurance	(0.17) %	(0.17) %
Additional to Maintain 30-Year Amortization	2.46	2.46
Special Appropriation	4.28	4.28
Contribution to Pension Plan	17.445%	18.925%
Total Contribution to Pension Plan	25.07 %	28.03 %

4. The valuation indicates that normal contributions at the rate of 13.82% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.34%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 11.25% for university members and 10.69% for non-university members. These rates include special appropriations of 4.28% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

	PERCENTAGE OF ACTIVE MEMBERS' SALARIES	
Rate	**University**	**Non-University**
Normal	13.82%	17.34 %
Accrued Liability*	11.25	10.69
Total	25.07%	28.03 %

** Includes special appropriations of 4.28% of payroll to be made by the State.*

5. The unfunded actuarial accrued liability amounts to $5,970,019,273 as of the valuation date. Accrued liability contributions at the rate of 11.25% of active university members' payroll and 10.69% of non-university members' payroll are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. The benefit percentage for non-university members is 2.0% for service accrued through July 1, 1983 and 2.5% for service up to 30 years accrued after that date. However, for members who join the System on or after July 1, 2002 and retire with less than 10 years of service, the benefit percentage is 2.0%. For members who joined the System on or after July 1, 2002, who retire with 10 or more years of service, the benefit percentage is 2.5% for all years of service up to 30 years. For all members who retire on or after July 1, 2004, the benefit percentage for service earned in excess of 30 years is 3.0%. The total net contribution rate is 28.03% of payroll for non-university members. For university members the benefit percentage is 2.0% for all service and the contribution rate is 25.07%. Our calculations indicate that these contribution rates will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 2.46%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. Since the 2005 fiscal year, a portion of the contributions required for the pension fund have been allocated as loans to the Medical Insurance Fund for Stabilization Funding. Payments are being made to repay these loans, but the borrowing is expected to continue in the future. The following table shows the amounts borrowed, annual payments and remaining balances as of July 1, 2007:

Medical Insurance Fund - Stabilization Funding

	Loan Amount	Annual Payment	Balances as of July 1, 2007
2004/2005	$ 29,169,700	$ 4,249,600	$ 24,891,315
2005/2006	62,294,800	9,075,500	57,891,410
2006/2007	73,000,000	14,133,200*	73,000,000
TOTAL	$ 164,464,500	$ 27,458,300	$ 155,782,725

** Amount shown is the first year payment. The payments will be $10,158,232 annually beginning July 1, 2008.*

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 2.46% of payroll for the fiscal year ending June 30, 2010, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June, 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $502,879,205 in the unfunded accrued liability from $5,467,140,068 to $5,970,019,273 during the year ending June 30, 2007.

(Dollar amounts in thousands) ITEM	Amount of Increase/(Decrease)
Interest (7.50%) added to previous unfunded accrued liability	$ 410,036
Expected accrued liability contribution	(242,414)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2006/2007 fiscal year with interest	75,601
Repayment of prior year's MIF Stabilization Funding	(13,824)
Experience:	
Valuation asset growth	258,747
Pensioners' mortality	(8,309)
Turnover and retirements	(87,616)
New entrants	91,109
Salary increases	19,549
Amendments	0
Assumption and method changes	0
TOTAL	**$ 502,879**

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Members as of June 30, 2007

GROUP	NUMBER
Retirees and Beneficiaries currently receiving benefits	39,506
Terminated employees entitled to benefits but not yet receiving benefits	4,498
Active Plan Members	75,144
TOTAL	**119,148**

2. Another such item is the schedule of funding progress as shown below.

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
06/30/02	$ 13,588,847	$ 15,695,574	$ 2,106,727	86.6 %	$ 2,313,663	91.1%
06/30/03	13,863,786	16,594,781	2,730,995	83.5	2,497,731	109.3
06/30/04	14,255,131	17,617,626	3,362,495	80.9	2,641,533	127.3
06/30/05	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8
06/30/06*	14,857,641	20,324,781	5,467,140	73.1	2,859,477	191.2
06/30/07	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7

** Reflects change in decremental assumptions.*

All figures prior to 06/30/2005 were reported by prior actuarial firm.

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2007. Additional information as of the latest actuarial valuation follows.

Valuation Date 06/30/2007

Actuarial cost method ..... Projected unit credit

Amortization method ..... Level percent of pay, open

Remaining amortization period ..... 30 years

Asset valuation method ..... 5-year smoothed market

Actuarial Assumptions:

Investment Rate of Return*
7.50%

Projected Salary Increases*
4.00 - 8.20%

Cost-of-Living Adjustments
1.50% Annually

**Includes Inflation at 4.00%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Annual Required Contributions	Increase
2002	$ 284,794,710	100 %
2003	322,046,968	100
2004	364,351,412	100
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2007:

Annual Pension Cost and Net Obligation for Fiscal Year Ending June 30, 2007

(a) Employer annual required contribution	$	494,565,369
(b) Interest on net pension obligation		0
(c) Adjustment to annual required contribution		18,021,094
(d) Annual pension cost: (a) + (b) - (c)		476,544,275
(e) Employer contributions made for fiscal year ending July 30, 2007		421,565,369
(f) Increase (decrease) in net pension obligation: (d) - (e)		54,978,906
(g) Net pension obligation beginning of fiscal year		0
(h) Adjustment to reflect prior shortfall in contributions*		94,431,495
(i) Net pension obligation end of fiscal year: (f) + (g) + (h)	$	149,410,401

* Formerly treated as short-term differences

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2005	$ 383,776,826	100 %	$ 0
June 30, 2006	406,107,266	100	0
June 30, 2007	476,544,275	88	149,410,401

SCHEDULE A
Results of the Valuation
Prepared as of June 30, 2007
($1,000's)

1.	**ACTUARIAL ACCRUED LIABILITY**			
	Present value of prospective benefits payable in respect of:			
	(a) Present active members:			
	• Service retirement benefits		$ 7,849,642	
	• Disability retirement benefits		352,261	
	• Death and survivor benefits		67,540	
	• Refunds of member contributions		141,869	
	Total			$ 8,411,312
	(b) Present inactive members and members entitled to deferred vested benefits:			190,332
	(c) Present annuitants and beneficiaries:			
	• Service retirement benefits		$ 11,837,408	
	• Disability retirement benefits		402,125	
	• Death and survivor benefits		413,797	
	Total			$ 12,653,330
	(d) Total actuarial accrued liability			$ 21,254,974
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**			$ 15,284,955
3.	**Unfunded Actuarial Accrued Liability** [(1) MINUS (2)]			$ 5,970,019
4.	**NORMAL CONTRIBUTION RATE**	**UNIVERSITY**	**NON-UNIVERSITY**	
	(a) Actuarial present value of benefits accruing annually	$ 25,486	$ 483,858	
	(b) Annual payroll of active members	$ 184,399	$ 2,790,890	
	(c) Normal contribution rate [4(a) divided by 4(b)]	13.82%	17.34%	

Solvency Test
(in millions of dollars)

Fiscal Year	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets
6/30/2002	$ 2,302.3	$ 8,816.9	$ 4,576.4	$ 13,588.8
6/30/2003	2,413.9	9,329.3	4,851.6	13,863.8
6/30/2004	2,546.1	9,906.2	5,165.3	14,255.1
6/30/2005	2,621.3	11,370.4	5,143.2	14,598.8
6/30/2006	2,615.8	12,216.6	5,492.4	14,857.6
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0

	Fiscal Year	(1)	(2)	(3)
Portion of Accrued Liabilities Covered by Assets	6/30/2002	100 %	100 %	54 %
	6/30/2003	100	100	44
	6/30/2004	100	100	35
	6/30/2005	100	100	12
	6/30/2006	100	100	0
	6/30/2007	100	97	0

SCHEDULE B
Development of Actuarial Value of Assets
as of June 30, 2007

(1)	Actuarial Value Beginning of Year		$ 14,857,641,238
(2)	Market Value End of Year		$ 15,421,092,446
(3)	Market Value Beginning of Year		$ 13,783,830,173
(4)	Cash Flow		
	a.	Contributions	$ 704,578,332
	b.	Benefit Payments	1,117,361,706
	c.	Net	$ (412,783,374)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)c	$ 2,050,045,647
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition [(1) x (5)b] + [(4)c x (5)bx 0.5]	$ 1,098,843,716
	d.	Amount for Phased-In Recognition (5)a - (5)c	$ 951,201,931
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	$ 190,240,386
	b.	First Prior Year	(75,996,339)
	c.	Second Prior Year	(23,843,540)
	d.	Third Prior Year	(349,147,545)
	e.	Fourth Prior Year	0
	f.	Total Recognized Investment Gain	$ $(258,747,038)
(7)	Actuarial Value End of Year: (1) + (4)c + (5)c + (6)f		$ 15,284,954,542
(8)	Difference Between Market & Actuarial Values (2) - (7)		$ 136,137,904

SCHEDULE C
PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2007	For the Year Ending June 30, 2006
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 269,687,864	$ 258,464,856
Employers	434,890,468	406,107,266
Total	$ 704,578,332	$ 664,572,122
Net Investment Income	2,057,397,493	707,778,812
TOTAL	$ 2,761,975,825	$ 1,372,350,934
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	$ 1,102,538,879	$ 1,024,872,421
Refunds to Members	14,822,827	12,834,222
Medical Insurance Payments	0	0
Miscellaneous, including expenses	7,351,846	6,839,859
TOTAL	$ 1,124,713,552	$ 1,044,546,502
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ 1,637,262,273	$ 327,804,432
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 13,783,830,173	$ 13,456,025,741
Excess of Receipts over Disbursements	1,637,262,273	327,804,432
Asset Balance as of End of the Year	$ 15,421,092,446	$ 13,783,830,173

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE C
LIFE INSURANCE FUND*
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2007	For the Year Ending June 30, 2006
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 0	$ 0
Employers	5,022,137	4,813,703
Total	$ 5,022,137	$ 4,813,703
Net Investment Income	3,067,738	2,689,330
TOTAL	$ 8,089,875	$ 7,503,033
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	$ 4,245,000	$ 3,894,000
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	0	0
TOTAL	$ 4,245,000	$ 3,894,000
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ 3,844,875	$ 3,609,033
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 67,581,237	$ 63,972,204
Excess of Receipts over Disbursements	3,844,875	3,609,033
Asset Balance as of End of the Year	$ 71,426,112	$ 67,581,237

* *The retiree portion of the Life Insurance Fund when allocated will be moved to the GASB 43 and 45 report next year.*

SCHEDULE D

Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected by the Actuary based on the actuarial experience investigation as of June 30, 2005 and adopted by the Board of Trustees on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.70%	4.50%	4.30%	4.20%	4.00%

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.003 %	0.01%	9.00%				
25	0.010	0.01	9.00	1.50%			
30	0.016	0.02	9.00	3.00	3.00%		
35	0.032	0.05	10.00	3.25	1.50		
40	0.048	0.08	10.00	3.75	1.50		
45	0.064	0.22	9.50	2.50	1.50		25.0%
50	0.104	0.42	10.00	4.00	3.00		20.0
55	0.216	0.60	11.00	3.00	2.70	6.0%	35.0
60	0.375	0.79	11.00	3.00	2.70	14.0	25.0
62	0.438	0.83	11.00	3.00	2.70	14.0	23.0
65	0.566	0.90	11.00	3.00	2.70	22.5	35.0
70	0.905	0.00	0.00	0.00	0.00	100.0	100.0

** Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.002 %	0.03 %	6.00%				
25	0.007	0.03	8.50	3.00%			
30	0.014	0.04	9.00	4.00	1.50%		
35	0.026	0.11	8.50	4.00	2.00		
40	0.044	0.22	8.50	2.50	1.50		
45	0.055	0.38	7.00	2.50	1.50		25.0%
50	0.066	0.44	8.50	3.00	2.25		20.0
55	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	0.195	0.00	0.00	0.00	0.00	100.0	100.0

** Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

	Service Retirement		Disability Retirement	
Annual Rate of Death After . . . Age	MALE	FEMALE	MALE	FEMALE
45	0.1578 %	0.0973 %	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

Actuarial Method: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

Assets: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

Expense Load: None.
Percent Married: 100%, with females 3 years younger than males.
Loads: Unused Sick Leave: 1% of active liability

SCHEDULE E

Summary of Main System Provisions As Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2007. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1. DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2. BENEFITS

Service Retirement Allowance

Condition for Allowance: Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
(b) 2.5% of final average salary multiplied by service after July 1, 1983.
(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by actuarial equivalent factors from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Disability Retirement Allowance

Condition for Allowance: Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance: The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options:

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3. CONTRIBUTIONS

Member Contributions

University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

Fiscal Year	Add to Rolls Number	Add to Rolls Annual Allowances (Millions)	Remove from Rolls Number	Remove from Rolls Annual Allowances (Millions)	Rolls End-of-Year Number	Rolls End-of-Year Annual Allowances (Millions)
1998	2,500	$ 66.7	1,040	$13.4	27,744	$ 494.1
1999	2,415	73.9	998	13.9	29,161	554.0
2000	2,462	79.2	1,008	14.1	30,615	619.2
2001	2,410	77.0	1,128	16.5	31,897	679.8
2002	2,577	86.2	1,063	16.8	33,408	749.2
2003	2,252	86.7	1,015	16.9	34,645	819.0
2004	2,126	85.4	1,033	17.5	35,738	887.0
2005	2,644	105.1	1,036	18.9	37,346	973.1
2006	2,266	121.1	1,115	20.0	38,497	1,074.2
2007	2,050	82.1	1,041	20.7	39,506	1,135.6

Fiscal Year	% Increase in Annual Allowances	Average Annual Allowances
1998	12.1%	$ 17,809
1999	12.1	19,000
2000	11.8	20,226
2001	9.8	21,311
2002	10.2	22,425
2003	9.3	23,641
2004	8.3	24,819
2005	9.7	26,058
2006	10.4	27,902
2007	5.7	28,746

Schedule of Active Member Valuation Data

	Fiscal Year	(1) Number of Active Members	(2) Total Annual Payroll	(3) Average Annual Pay	(4) % Increase (Decrease) in Average Pay
F	2002	54,175	$ 2,313,663,000	42,707	3.3
F	2003	54,048	2,394,436,000	44,302	3.7
P		17,049	103,295,000	6,059	N/A
F	2004	54,869	2,541,238,000	46,315	4.5
P		17,081	100,295,000	5,872	-3.1
F	2005	55,003	2,597,795,000	47,230	2.0
P		17,278	105,665,000	6,115	4.2
F	2006	56,115	2,745,474,000	48,926	3.6
P		17,625	114,003,000	6,468	5.8
F	2007	57,217	2,856,193,000	49,919	2.0
P		17,927	119,096,000	6,643	2.7

** Effective July 1, 2002, substitute and part-time teachers joined the field of membership.*

F: Full-time P: Part-time

ACTUARIAL SECTION

Report of the Actuary on the Retiree Medical Valuation

for Fiscal Year ending June 30, 2007

Cavanaugh Macdonald
CONSULTING, LLC

November 27, 2007

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require actuarial valuations of retiree medical and other post employment benefit plans. This report covers the Medical Insurance Fund only and does not incorporate any OPEB liabilities related to the Life Insurance Fund. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2007. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that a total annual required contribution of 14.48% of active member payroll payable for the fiscal year ending June 30, 2010 is required to support the benefits of the Kentucky Employees Health Plan and the Medicare Eligible Health Plan ("Plans"). Of this amount, 0.75% of payroll is paid by the members leaving 13.73% as the State contribution. This required State contribution reflects the assets currently held in the Medical Insurance Fund ("Fund"). Since the State contributions are less than the required levels, the discount rate for valuing liabilities has been lowered to 4.5%. The impact of this change is shown on Schedule A. Since the full amount of the Annual Required Contribution (ARC) is not being contributed to the Fund each year, there will be a Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2008.

The valuation takes into account the effect of amendments to the Plans enacted through the 2007 Session of the Legislature. The actuarial accrued liability increased from $4.3 billion in 2006 to $5.9 billion in 2007. This increase is primarily due to the change in discount rate from 7.5% in 2006 to 4.5% in 2007.

The promised benefits of the Plans are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. Market value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plans and to reasonable expectations of anticipated experience under the Plans and meet the parameters for the disclosures under GASB 43 and 45.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A and Schedule C shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the medical plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plans.

In our opinion, if the State contributions are increased to the required levels, the Plans will begin to operate in an actuarially sound basis. Assuming that required contributions to the Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Fund to provide the benefits called for under the Plans will improve.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Alisa Bennett, ASA, EA, FCA, MAAA
Senior Actuary

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Report of Actuary on the Retiree Medical Valuation
Prepared as of June 30, 2007
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2007	June 30, 2006
Number of active members	75,144	73,740
Annual salaries	$ 2,975,289	$ 2,859,477
Number of annuitants	31,642	30,977
Number of spouses and beneficiaries*	6,674	6,606
Total	38,316	37,583
Assets		
Market value	$ 140,772	$ 131,614
Unfunded actuarial accrued liability	$ 5,787,989	$ 4,210,349
Amortization period (years)	30	30
Discount rate	4.5%	7.5%

Contribution for fiscal year ending	June 30, 2010	June 30, 2009
Normal	7.53 %	3.69 %
Accrued liability	6.95	7.62
Total	14.48 %	11.31 %
Member	0.75 %	0.75 %
State (ARC)	13.73	10.56
Total	14.48 %	11.31 %

* Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution.

2. The valuation indicates that combined member and State contributions of 14.48% of active member payroll would be sufficient to support the current benefits of the Plans. Comments on the valuation results as of June 30, 2007 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.
3. Schedule C of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. Since the previous valuation, the discount rate has been lowered from 7.5% to 4.5% because the full amount of the ARC is not being contributed to the Fund each year. Also since the previous valuation, the medical trend assumption, the spouse participation assumption and the age adjustment methodology have been revised. As a result, the accrued liability increased by $1,730,574,828 and the Annual Required Contribution increased by $103,361,336 or 3.48% of payroll.
4. The valuation takes into account the effect of amendments to the Plans enacted through the 2007 Session of the Legislature. The decrease in monthly premium equivalent for Medicare-eligible retirees from $283 in calendar year 2007 to $278 in calendar year 2008 as a result of implementing a Fully Insured Medicare-Advantage Plan was recognized in this valuation.
5. All amounts shown prior to the 2005 valuation year were developed and/or reported by the prior actuarial firm.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the Plans for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2007 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000)
Full Time	57,192	$ 2,856,193
Part Time	17,952	119,096
Total	75,144	$ 2,975,289

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

Section III - ASSETS

1. As of June 30, 2007 the market value of Medical Insurance Fund assets for valuation purposes held by the Plans amounted to $140,772,234.

2. Schedule B shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Medical Insurance Fund.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation and illustrates the benefits of pre-funding the liability. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule C.

2. The valuation shows that the Plans have an actuarial accrued liability of $3,112,495,249 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to retirees and covered spouses amounts to $2,816,265,797. The total actuarial accrued liability of the Plans amounts to $5,928,761,046. Against these liabilities, the Plans have present assets for valuation purposes of $140,772,234. When this amount is deducted from the actuarial accrued liability of $5,928,761,046 there remains $5,787,988,812 as the unfunded actuarial accrued liability.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution is determined to be $223,929,121, or 7.53% of payroll.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.420(5) of the Kentucky Revised Statutes provides that members and the State will each contribute 0.75% of salary to the Medical Insurance Fund. We recommend that the State contribution increase to the required amount of 13.73% of payroll.

Required Contribution Rates
For Fiscal Year Ending June 30, 2010

Normal	7.53 %	Member	0.75 %
Accrued liability	6.95	State (ARC)	13.73
Total	14.48 %	Total	14.48 %

2. The valuation indicates that a total normal contribution of 7.53% of payroll is required to meet the cost of benefits currently accruing. The difference between the total contribution and the normal remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 6.95% of payroll.

3. The unfunded actuarial accrued liability amounts to $5,787,988,812 as of the valuation date. An accrued liability contribution of 6.95% of payroll is sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. The monthly contribution for retirees to opt into the medical plan is based on years of service at retirement, and can also vary by plan election, Medicare eligibility and tobacco use. Contributions for spouses of retirees is targeted to be 100% of the cost of expected claims. Historically, this target has been achieved for both Medicare and non-Medicare eligible spouses. Current employer contributions have been determined to be insufficient to fund the cost of the benefits to be provided. Benefits and contributions for university and non-university members are identical.

2. The valuation indicates that a significant increase in the employer contribution rate is required to fund the plans in an actuarially sound manner and to ensure the future solvency of the Medical Insurance Fund. A member contribution of 0.75% of payroll together with a state contribution of 13.73% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.

Section VII - ACCOUNTING INFORMATION

1. 1. Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the Plans and the employer.

Number of Active and Retired Members as of June 30, 2007

GROUP	NUMBER
Retirees currently receiving health benefits	31,642
Spouses of retirees currently receiving health benefits	6,674
Active plan members	75,144
Total	**113,460**

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2002	$ 146,045	$ 2,806,000	$ 2,659,955	5.2 %	$ 2,313,663	115.0%
6/30/2003	165,537	2,886,000	2,720,463	5.7	2,497,731	108.9
6/30/2004	158,862	3,166,568	3,007,706	5.0	2,641,533	113.9
6/30/2005	147,311	4,763,947	4,616,636	3.1	2,703,430	170.8
6/30/2006*	131,614	4,341,963	4,210,349	3.0	2,859,477	147.2
6/30/2007**	140,772	5,928,761	5,787,989	2.4	2,975,289	194.5

*Reflects change in decremental assumptions and plan design.
**Reflects change in discount rate to 4.5% and updating medical trend.

All figures prior to 06/30/2005 were reported by prior actuarial firm.

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2007. Additional information as of the latest actuarial valuation follows.

Valuation Date	06/30/2007
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	Market Value of Assets

Actuarial Assumptions:

Investment Rate of Return*
4.50%

Healthcare Trend Rate*
12.00%

Ultimate Trend Rate
5.00%

Year of Ultimate Trend Rate
2015

**Includes Inflation at 4.00%*

Schedule of Employer Contributions

Fiscal Year Ending	Annual Required Contribution (ARC) (a)	Actual Employer Contribution (b)	Retiree Drug Subsidy Contribution (c)	Total Contribution (b) + (c)	Percentage of ARC Contributed [(b) + (c)]/(a)
6/30/2007	$ 231,473,321	$ 113,258,761	$ 10,312,361	$123,571,122	53.4%

3. The full amount of the Annual Required Contribution (ARC) is not being contributed to the Medical Insurance Fund each year. Therefore, the Annual OPEB Cost (AOC) will be greater than the ARC and there will be a Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2008.

SCHEDULE A
Benefits of Pre-Funding
(1,000's)

	Not Pre-Funding Discount Rate 4.50%	Pre-Funding Discount Rate 7.50%
PAYROLL	$ 2,975,289	$ 2,975,289
ACTUARIAL ACCRUED LIABILITY		
Present value of prospective benefits payable in respect of:		
(a) Present active members:	$ 3,112,495	$ 1,649,403
(b) Present retired members and covered spouses:	2,816,266	2,005,591
(c) Total actuarial accrued liability	$ 5,928,761	$ 3,654,994
PRESENT ASSETS FOR VALUATION PURPOSES	$ 140,772	$ 140,772
UNFUNDED ACTUARIAL ACCRUED LIABILITY	$ 5,787,989	$ 3,514,222
CONTRIBUTIONS FOR FISCAL YEAR ENDING JUNE 30, 2010:		
Normal	7.53%	3.55%
Accrued Liability	6.95	6.11
Total	14.48%	9.66%
Member	0.75%	0.75%
State (ARC)	13.73	8.91
Total	14.48%	9.66%

SCHEDULE B
MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2007	June 30, 2006
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 22,398,679	
Payment by Retired Members	30,700,999	
Total Members	$ 53,099,678	$ 51,697,167
State Statutory Contributions	$ 22,273,784	
State Special	5,960,000	
General Fund Surplus (6/2006)	12,000,000	
Allotment from Pension Fund	73,000,000	
Total Employer	$ 113,233,784	$ 89,319,498
Grand Total	$ 166,333,462	$ 141,016,665
Recovery Income	24,977	118,419
Medicare D Receipts	10,312,361	5,999,560
Net Investment Income	6,722,080	6,804,286
TOTAL	$ 183,392,880	$ 153,938,930
Disbursements for the Year		
Refunds to Members	$ 5,834	$ 5,143
Medical Insurance Payments	69,577,773	165,006,322
Miscellaneous, including expenses	4,651,324	4,624,074
TOTAL	$ 174,234,931	$ 169,635,539
Excess of Receipts over Disbursements	$ 9,157,949	$ (15,696,609)
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 131,614,285	$ 147,310,894
Excess of Receipts over Disbursements	9,157,949	(15,696,609)
Asset Balance as of the End of the Year	$ 140,772,234	$ 131,614,285

SCHEDULE C
Outline of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, and termination used in the valuation were selected by the Actuary based on the actuarial experience investigation as of June 30, 2005 and adopted by the Board of Trustees on September 18, 2006. The discount rate, rates of future participation, health care cost trend rates, and expected plan costs were determined by the actuary based on plan experience.

Valuation Date: June 30, 2007

Discount Rate: 4.5% per annum, compounded annually.

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

Fiscal Year	Trend
2008	12.0%
2009	11.0
2010	10.0
2011	9.0
2012	8.0
2013	7.0
2014	6.0
2015 & beyond	5.0

Age Related Morbidity: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.2 %
70-74	2.4
75-79	1.8
80-84	1.3
85 & over	0.0

Anticipated Plan Participation: Representative values of the assumed annual rates of plan participation are as follows:

			Post-65 Hired 6/30/02 and earlier	
Years of Service	Pre-65	Hired 7/1/02 and later	Age 65 on 12/31/ 04 and earlier	Age 65 on 1/1/05 and later
5-9.99	25%	10%	70%	25%
10-14.99	50%	25%	80%	50%
15-19.99	75%	45%	90%	75%
20-24.99	98%	65%	98%	98%
25-25.99	98%	90%	98%	98%
26-26.99	98%	95%	98%	98%
27 or more	98%	98%	98%	98%

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.003%	0.01%	9.00				
25	0.010	0.01	9.00	1.50%			
30	0.016	0.02	9.00	3.00	3.00%		
35	0.032	0.05	10.00	3.25	1.50		
40	0.048	0.08	10.00	3.75	1.50		
45	0.064	0.22	9.50	2.50	1.50		25.0%
50	0.104	0.42	10.00	4.00	3.00		20.0
55	0.216	0.60	11.00	3.00	2.70	6.0%	35.0
60	0.375	0.79	11.00	3.00	2.70	14.0	25.0
62	0.438	0.83	11.00	3.00	2.70	14.0	23.0
65	0.566	0.90	11.00	3.00	2.70	22.5	35.0
70	0.905					100.0	100.0

** Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.002%	0.03%	6.00%				
25	0.007	0.03	8.50	3.00%			
30	0.014	0.04	9.00	4.00	1.50%		
35	0.026	0.11	8.50	4.00	2.00		
40	0.044	0.22	8.50	2.50	1.50		
45	0.055	0.38	7.00	2.50	1.50		25.0%
50	0.066	0.44	8.50	3.00	2.25		20.0
55	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	0.195					100.0	100.0

** Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

Actuarial Method: Costs were determined using the Projected Unit Credit Actuarial Cost Method. The annual service cost is the present value of the portion of the projected benefit attributable to participation service during the upcoming year, and the accumulated postretirement benefit obligation (APBO) is equal to the present value of the portion of the projected benefit attributable to service before the valuation date. Service from hire date through the date of full retirement eligibility was used in allocating costs.

Assets: Market Value as provided by KTRS. Return on assets assumed to be 4.50%.

Spouse Coverage: Use actual census data and current plan elections for spouses of current retirees. For spouses of future retirees, assumed 20% of future retirees will cover spouses, with females 3 years younger than males.

Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following is a chart detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that KTRS pays as the full contribution amount. For Post-65 retirees, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

	Average Monthly KTRS Full Costs & Contributions	
Years of Service	Pre-65	Post-65
CY 2004	$376	$274
CY 2005	$410	$288
CY 2006	$476	$304
CY 2007	$458	$283
CY 2008	$484	$278

SCHEDULE D

Summary of Main Plan Provisions as Interpreted for Valuation Purposes

ELIGIBILITY: Retiree medical eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. Disabled employees, who are totally and permanently incapable of being employed as a teacher and under age 60, but after completing 5 years of service, are eligible for subsidized retiree medical coverage that is based on the number of years of service credit accrued at disability retirement. At the expiration of the disability entitlement period, the subsidy is recalculated based upon the number of years of service credit that would have accrued had the member remained active. Spouses of those actives who die while eligible to retire are eligible for retiree medical coverage when the death occurred prior to July 1, 2002.

100 Day Program: The 100 Day Program expired June 30, 2007.

CONTRIBUTIONS: The full contribution is provided to retirees with 27 or more years of service. The full contribution is determined by KTRS; the full cost is projected based on historical claims data. For retirees with less than 27 years of service, the following percentages of these full contributions are provided:

	Percentage of Full Contribution Provided to Post-65 Retirees		
Years of Service	Hired Before 07/01/2002 (Age 65 by 1/1/05)	Hired Before 07/01/2002 (Age 65 after 1/1/05)	Hired After 07/01/2002
27 or more	100 %	100 %	100 %
26 - 26.99	100	100	95
25 - 25.99	100	100	90
20 - 24.99	100	100	65
15 - 19.99	90	75	45
10 - 14.99	80	50	25
5 - 9.99	70	25	10

Effective 1/1/2008, benefits provided to pre-65 retirees and spouses who were hired before 7/1/2002 require the following monthly contributions:

Monthly Member Contributions for Single Coverage*

Years of Service	Essential Plan	Enhanced Plan	Premier Plan
20 or more	Not offered	$0	$20.40
15 -9.99	Not offered	$121.06	$141.46
10 -4.99	Not offered	$242.12	$262.52
5 - 9.99	Not offered	$363.18	$383.58

*Additional $16.80 monthly contribution required for smokers.

Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. For spouses of active members who died while eligible to retire, prior to July 1, 2002, KTRS provides the same subsidy they would have provided to the retiree for the lifetime of the spouse, or until remarriage. For spouses of active members who die while eligible to retire July 1, 2002, or later, spouses pay 100% of the full contribution.

Retirees Receiving Health Benefits as of June 30, 2007

	Under 65	Over 65	Total
Number	14,705	16,937	31,642
Average Age	58.9	75.0	67.5

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STATISTICAL SECTION

for Fiscal Year ending June 30, 2007

This section of the Kentucky Teachers' Retirement System Comprehensive Annual Financial Report (KTRS CAFR) presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

Contents

Financial Trends ..... page 97

These schedules contain trend information to help the reader understand how KTRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 99

These schedules offer demographic and economic indicators to help the reader understand the System's environment within which KTRS's financial activities take place.

Operating Information ..... page 107

These schedules contain benefits service and employer contribution data to help the reader understand how KTRS's financial report relates to KTRS's services and activities.

Defined Benefit Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Assets
2007	$ 439,912,606	$ 269,687,864	$ 2,060,465,230	$ 2,770,065,700
2006	410,920,969	258,464,856	717,308,002	1,386,693,827
2005	388,346,438	247,024,518	946,070,556	1,581,441,512
2004	382,280,099	238,922,086	1,158,182,688	1,779,384,873
2003	341,132,900	233,429,797	538,552,074	1,113,114,771
2002	303,521,106	224,361,453	(520,214,494)	7,668,065
2001	280,108,701	208,702,802	(104,903,741)	383,907,762
2000	311,286,811	203,149,281	454,251,324	968,687,416
1999	288,543,990	194,747,429	1,274,764,370	1,758,055,789
1998	294,323,253	185,010,298	1,832,126,412	2,311,459,963

Deductions by Type
(Including Benefits by Type)

YEAR	Service Retirants	Disability Retirants	Survivors	Life Insurance	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Assets
2007	$ 1,040,003,417	$ 48,863,876	$ 13,671,586	$ 4,245,000	$ 1,106,783,879	$ 14,822,827	$ 7,351,846	$ 1,128,958,552
2006	972,018,057	46,750,585	12,943,639	3,894,000	1,035,606,281	12,834,222	6,839,859	1,055,280,362
2005	902,863,420	44,070,071	12,585,248	3,852,800	963,371,539	10,975,941	6,652,673	981,000,153
2004	827,731,523	41,491,490	12,047,275	4,015,801	885,286,089	10,471,607	6,578,420	902,336,116
2003	763,099,082	38,744,454	11,259,332	3,961,800	817,064,668	9,951,410	6,388,183	833,404,261
2002	688,754,130	35,947,786	10,532,466	4,210,800	739,445,182	9,146,820	6,677,819	755,269,821
2001	627,637,879	32,233,070	10,005,656	4,110,400	673,987,005	10,673,981	5,950,036	690,611,022
2000	568,538,294	29,148,420	9,322,582	2,350,600	609,359,896	11,304,485	4,859,623	625,524,004
1999	509,787,784	26,464,287	8,718,626	2,329,800	547,300,497	9,083,461	4,522,908	560,906,866
1998	456,373,587	24,305,495	8,375,394	2,293,906	491,348,382	9,389,791	3,997,314	504,735,487

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2007	$ 2,770,065,700	$ 1,128,958,552	$ 1,641,107,148
2006	1,386,693,827	1,055,280,362	331,413,465
2005	1,581,441,512	981,000,153	600,441,359
2004	1,779,384,873	902,336,116	877,048,757
2003	1,113,114,771	833,404,261	279,710,510
2002	7,668,065	755,269,821	(747,601,756)
2001	383,907,762	690,611,022	(306,703,260)
2000	968,687,416	625,524,004	343,163,412
1999	1,758,055,789	560,906,866	1,197,148,923
1998	2,311,459,963	504,735,487	1,806,724,476

Medical Insurance Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Recovery Income	Net Investment Income	Total Additions to Plan Net Assets
2007	$ 113,233,784	$ 53,099,678	$ 10,337,338	$ 6,722,080	$ 183,392,880
2006	89,319,498	51,697,167	6,117,979	6,804,286	153,938,930
2005	79,022,562	51,576,031		6,507,537	137,106,130
2004	53,346,747	53,903,551		7,127,109	114,377,407
2003	77,235,407	50,718,084		7,391,671	135,345,162
2002	95,261,407	46,184,010		6,142,817	147,588,234
2001	92,429,167	40,017,682		5,286,426	137,733,275
2000	48,946,646	36,392,846		3,710,881	89,050,373
1999	46,168,014	34,579,816		2,306,711	83,054,541
1998	35,169,982	33,136,955		1,649,075	69,956,012

Deductions by Type
(Including Benefits by Type)

	Insurance Benefit Expense					
YEAR	Under Age 65	Age 65 & Over	Total Insurance Benefits Expense	Refunds	Administrative Expense	Total Deductions to Plan Net Assets
2007	$ 104,102,194	$ 65,475,579	$ 169,577,773	$ 5,834	$ 4,651,324	$ 174,234,931
2006	102,159,471	62,846,851	165,006,322	5,143	4,624,074	169,635,539
2005	81,442,102	60,907,334	142,349,436	9,072	4,070,892	146,429,400
2004	68,395,333	50,902,025	119,297,358	12,150	3,970,310	123,279,818
2003	62,788,746	49,384,916	112,173,662	7,808	3,672,425	115,853,895
2002	53,794,743	47,692,523	101,487,266	6,066	3,491,649	104,984,981
2001	46,544,264	38,389,936	84,934,200	5,155	3,221,712	88,161,067
2000	38,553,599	38,786,138	77,339,737	2,246	3,023,755	80,365,738
1999	34,389,038	33,236,136	67,625,174	3,145	2,728,897	70,357,216
1998	38,391,637	21,592,245	59,983,882	2,726	2,602,538	62,589,146

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2007	$ 183,392,880	$ 174,234,931	$ 9,157,949
2006	153,938,930	169,635,539	(15,696,609)
2005	137,106,130	146,429,400	(9,323,270)
2004	114,377,407	123,279,818	(8,902,411)
2003	135,345,162	115,853,895	19,491,267
2002	147,588,234	104,984,981	42,603,253
2001	137,733,275	88,161,067	49,572,208
2000	89,050,373	80,365,738	8,684,635
1999	83,054,541	70,357,216	12,697,325
1998	69,956,012	62,589,146	7,366,866

Distribution of Active Contributing Members as of June 30, 2007

By Age

Age	Male	Female
20-24	925	3,084
25-29	2,836	8,078
30-34	2,444	7,109
35-39	2,336	7,552
40-44	2,067	6,449
45-49	1,950	6,533
50-54	2,247	6,890
55-59	2,236	5,854
60-64	1,288	2,743
65-69	529	1,089
Over 70	283	622
TOTAL	19,141	56,003

By Service

Years of Service	Male	Female
Less than 1	6,295	16,309
1-4	4,397	13,520
5-9	2,967	9,345
10-14	2,002	5,969
15-19	1,457	4,550
20-24	1,009	3,381
25-29	600	1,963
30-34	326	832
35 or more	88	134
TOTAL	19,141	56,003

Principal Participating Employers
Current Year and Nine Years Ago

	2007			1998		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	9,822	1	12.90%	6,792	1	13.00%
Fayette County Public Schools	4,039	2	5.30%	2,655	2	5.08%
Boone County Schools	1,619	3	2.13%	820	6	1.57%
Hardin County Schools	1,368	4	1.80%	1,000	4	1.91%
Kenton County Schools	1,251	5	1.64%	765	8	1.46%
Bullitt County Schools	1,155	6	1.52%	689	11	1.32%
Madison County Schools	1,138	7	1.49%	610	13	1.17%
Warren County Schools	1,130	8	1.48%	734	9	1.41%
Daviess County Schools	1,128	9	1.48%	704	10	1.35%
Oldham County Schools	1,103	10	1.45%	557	15	1.07%
All Other *	52,408		68.81%	36,902		70.66%
Total (198 Employers)	76,161		100.00%	52,228		100.00%

KTRS Schedule of Participating Employers

School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Monticello
36. Murray
37. Newport
38. Owensboro
39. Paducah
40. Paintsville
41. Paris
42. Pikeville
43. Pineville
44. Providence
45. Raceland
46. Russell
47. Russellville
48. Science Hill
49. Silver Grove
50. Somerset
51. Southgate
52. Walton-Verona
53. West Point
54. Williamsburg
55. Williamstown

KTRS Schedule of Participating Employers (continued)

Universities & Community/Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/Other Organizations

State of Kentucky

1. Education and Humanities Cabinet
2. Legislative Research Commission*
3. Workforce Investment Cabinet
4. Cabinet for Familes and Children*
5. Finance and Administration Cabinet

Other Organizations

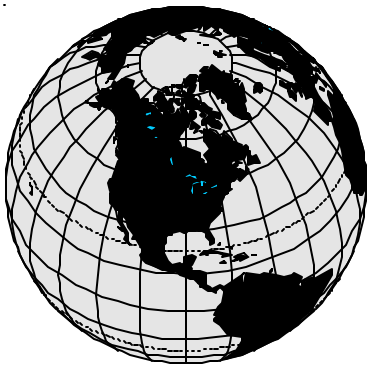
1. Education Professional Standards Board
2. Kentucky Education Association President
3. Kentucky Academic Association
4. Kentucky Educationals Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative

***** *According to Kentucky Revised Statute 161.607 (1), any member of the Kentucky Teachers' Retirement System who entered employment covered by the Kentucky Employees Retirement System, the State Police Retirement System, or the County Employees Retirement System prior to July 1, 1976, may retain membership in the Teachers' Retirement System instead of joining the new system. These organizations have members who are in this category. Once these members retire, the organization will no longer be considered a KTRS participating employer.*

100	Alabama
1	Alaska
61	Arizona
24	Arkansas
93	California
49	Colorado
13	Connecticut
6	Delaware
4	District of Columbia
843	Florida
195	Georgia
7	Hawaii
4	Idaho
73	Illinois
485	Indiana
13	Iowa
29	Kansas
22	Louisianna
8	Maine
21	Maryland
14	Massachusetts
29	Michigan
19	Minnesota
57	Mississippi
54	Missouri
6	Montana
4	Nebraska
18	Nevada
3	New Hampshire
6	New Jersey
13	New Mexico
40	New York
187	North Carolina
4	North Dakota
459	Ohio
23	Oklahoma
21	Oregon
27	Pennsylvania
1	Rhode Island
117	South Carolina
7	South Dakota
649	Tennessee
146	Texas
12	Utah
2	Vermont
118	Virginia
28	Washington
65	West Virginia
21	Wisconsin
4	Wyoming

Distribution of Retirement Payments Worldwide

As of June 30, 2007



Additional Distribution Outside USA

1	AUSTRALIA
4	CANADA
1	MILITARY APO
1	PHILIPPINES
1	SWITZERLAND

TOTAL: Number of Out of State Payments 4,213
TOTAL: Out of State Payments .....$ 83,480,608
TOTAL: Number of Payments 40,749
GRAND TOTAL: Amount of Payments $1,102,448,662

Distribution of Retirement Payments Statewide

as of June 30, 2007

County Name	Total Payments	Number of Recipients
Adair	$ 4,431,730	169
Allen	3,740,091	144
Anderson	4,283,903	164
Ballard	2,638,449	94
Barren	10,022,838	360
Bath	2,924,373	118
Bell	8,965,483	353
Boone	18,841,664	632
Bourbon	4,326,008	165
Boyd	12,991,164	457
Boyle	9,050,615	327
Bracken	1,924,557	73
Breathitt	5,637,332	231
Breckinridge	4,534,115	159
Bullitt	10,116,990	330
Butler	2,049,394	81
Caldwell	4,235,867	154
Calloway	15,580,712	557
Campbell	15,616,272	534
Carlisle	1,126,992	43
Carroll	1,745,148	71
Carter	8,060,981	300
Casey	3,519,803	148
Christian	12,312,173	437
Clark	7,984,101	292
Clay	6,376,062	240
Clinton	3,034,210	114
Crittenden	1,525,881	61
Cumberland	2,043,737	71
Daviess	23,904,175	852
Edmonson	2,041,794	75
Elliott	1,410,715	63
Estill	3,090,112	115
Fayette	63,777,027	2,262
Fleming	3,634,793	143
Floyd	13,221,400	529
Franklin	17,864,778	778
Fulton	1,767,308	65
Gallatin	451,497	19
Garrard	3,897,748	138
Grant	3,796,567	132

Distribution of Retirement Payments Statewide

as of June 30, 2007 continued . . .

County Name	Total Payments	Number of Recipients
Graves	8,870,611	316
Grayson	5,880,485	225
Green	2,924,954	108
Greenup	9,267,959	332
Hancock	1,727,841	64
Hardin	18,589,064	654
Harlan	10,090,820	380
Harrison	4,853,370	177
Hart	3,868,415	137
Henderson	9,054,004	333
Henry	3,896,030	145
Hickman	818,427	31
Hopkins	11,323,937	410
Jackson	2,903,439	122
Jefferson	173,105,658	5,457
Jessamine	6,374,095	246
Johnson	7,996,596	304
Kenton	19,327,103	672
Knott	5,285,546	218
Knox	5,904,234	227
Larue	3,824,927	127
Laurel	12,527,572	484
Lawrence	3,282,891	131
Lee	1,519,811	70
Leslie	3,407,703	132
Letcher	8,260,058	319
Lewis	4,416,568	160
Lincoln	6,861,045	251
Livingston	1,984,827	85
Logan	6,087,611	240
Lyon	2,333,574	91
Madison	31,296,428	1,065
Magoffin	3,588,172	145
Marion	3,719,513	139
Marshall	8,492,947	296
Martin	3,051,813	120
Mason	4,337,778	153
McCracken	16,844,734	599
McCreary	4,578,412	179
McLean	2,339,430	86
Meade	4,225,250	134

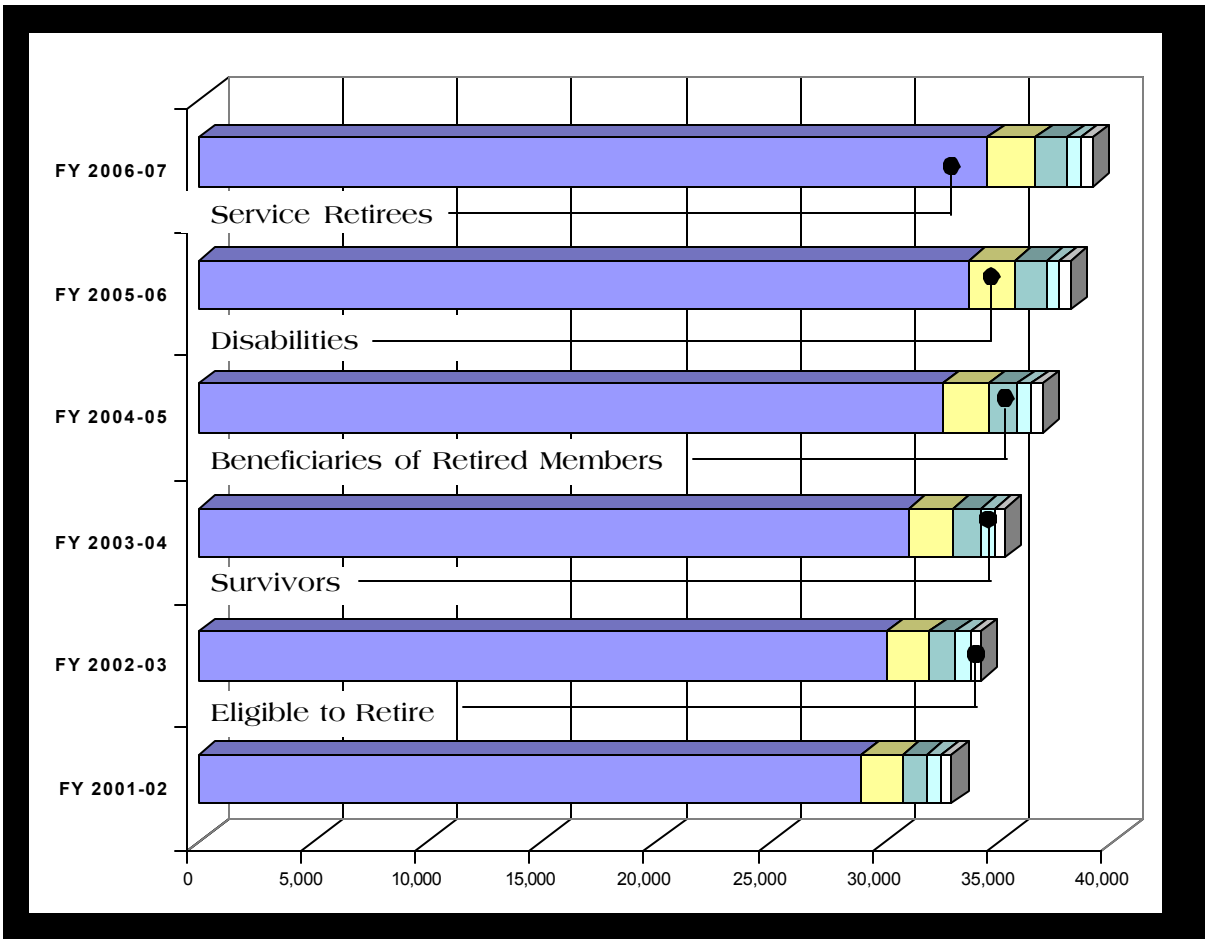
Distribution of Retirement Payments Statewide

as of June 30, 2007 continued . . .

County Name	Total Payments	Number of Recipients
Menifee	1,122,573	52
Mercer	5,284,946	216
Metcalfe	2,836,385	103
Monroe	3,903,187	154
Montgomery	6,384,946	227
Morgan	3,956,686	149
Muhlenberg	7,146,727	254
Nelson	8,244,555	285
Nicholas	1,512,669	57
Ohio	4,692,336	182
Oldham	10,203,121	331
Owen	1,963,374	76
Owsley	2,730,152	104
Pendleton	3,199,935	111
Perry	8,847,566	334
Pike	20,120,553	759
Powell	2,504,456	94
Pulaski	15,256,695	584
Robertson	559,798	22
Rockcastle	4,166,041	166
Rowan	11,360,496	414
Russell	4,798,110	180
Scott	8,049,018	283
Shelby	9,846,440	334
Simpson	3,538,109	135
Spencer	2,998,536	95
Taylor	6,320,814	238
Todd	2,146,775	87
Trigg	3,913,258	146
Trimble	1,394,812	39
Union	2,763,934	105
Warren	36,329,078	1,321
Washington	2,630,778	105
Wayne	5,342,363	206
Webster	3,004,405	117
Whitley	13,432,445	522
Wolfe	2,681,594	104
Woodford	6,238,177	231
Total in Kentucky	**$ 1,018,968,054**	**36,536**

Growth in Annuitants

as of June 30, 2007



Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Survivors	Eligible to Retire
FY 2001-02	28,936	1,812	1,367	584	482
FY 2002-03	30,064	1,859	1,416	570	502
FY 2003-04	31,003	1,934	1,505	536	518
FY 2004-05	32,506	1,987	1,566	507	525
FY 2005-06	33,618	2,039	1,631	495	531
FY 2006-07	34,462	2,086	1,722	466	549

Schedule of Annuitants by Type of Benefit as of June 30, 2007

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Retirement*				
		1	2	3	4	5
1 - 500	2,966	2,061	14	421	203	267
501 - 1,000	2,742	2,047	212	3	480	0
1,001 - 1,500	3,908	2,981	344	0	583	0
1,501 - 2,000	4,649	3,837	459	3	350	0
2,001 - 2,500	7,692	6,766	621	19	286	0
2,501 - 3,000	7,594	7,134	261	12	187	0
3,001 - 3,500	4,477	4,280	114	3	80	0
3,501 - 4,000	2,482	2,383	46	3	50	0
4,001 - 4,500	1,323	1,286	10	1	26	0
4,501 - 5,000	753	735	3	1	14	0
5,001 & OVER	966	952	2	0	12	0
Total	39,552	34,462	2,086	466	2,271	267

***Type of Retirement**

1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Survivor Payment - Active Member*
4-*Beneficiary Payment - Retired Member*
5-*Disabled Adult Child*

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,401	359	242	59	9	350	118	428
501 - 1,000	1,448	336	218	145	10	284	226	75
1,001 - 1,500	2,085	488	356	183	14	377	296	109
1,501 - 2,000	2,481	518	407	169	5	557	366	146
2,001 - 2,500	3,570	740	623	258	10	1,330	835	326
2,501 - 3,000	3,951	802	601	236	8	1,088	807	101
3,001 - 3,500	2,322	466	387	154	8	615	484	41
3,501 - 4,000	1,192	271	254	99	6	356	297	7
4,001 - 4,500	650	137	126	75	9	172	151	3
4,501 - 5,000	357	76	102	41	3	88	85	1
5,001 & OVER	470	82	115	62	9	92	135	1
Total	19,927	4,275	3,431	1,481	91	5,309	3,800	1,238

***Option selected:**

1 - Staight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/1997 TO 06/30/1998								
Average monthly benefit	$148	$415	$732	$1,108	$1,597	$2,175	$2,762	
Average final average salary	$3,807	$2,922	$2,843	$3,153	$3,450	$3,652	$4,071	
Number of retired members	25	73	69	85	154	1135	524	2,065
07/01/1998 TO 06/30/1999								
Average monthly benefit	$117	$420	$735	$1,075	$1,723	$2,303	$2,907	
Average final average salary	$2,995	$3,042	$2,953	$3,087	$3,630	$3,805	$4,248	
Number of retired members	31	71	80	81	115	1133	497	2,008
07/01/1999 TO 06/30/2000								
Average monthly benefit	$195	$444	$840	$1,232	$1,721	$2,414	$3,052	
Average final average salary	$3,764	$3,183	$3,198	$3,390	$3,573	$3,958	$4,461	
Number of retired members	54	82	74	82	95	1180	473	2,040
07/01/2000 TO 06/30/2001								
Average monthly benefit	$145	$402	$881	$1,283	$1,779	$2,472	$3,246	
Average final average salary	$3,695	$2,842	$3,444	$3,550	$3,807	$4,024	$4,707	
Number of retired members	48	73	86	85	143	1008	486	1,929
07/01/2001 TO 06/30/2002								
Average monthly benefit	$204	$408	$790	$1,296	$1,898	$2,552	$3,407	
Average final average salary	$4,143	$2,950	$3,312	$3,613	$3,920	$4,115	$4,884	
Number of retired members	65	128	82	116	107	1019	574	2,091
07/01/2002 TO 06/30/2003								
Average monthly benefit	$205	$480	$940	$1,344	$1,940	$2,715	$3,592	
Average final average salary	$4,301	$3,380	$3,714	$3,798	$4,078	$4,378	$5,121	
Number of retired members	58	83	98	103	155	837	508	1,842
07/01/2003 TO 06/30/2004								
Average monthly benefit	$220	$474	$839	$1,444	$1,978	$2,758	$3,486	
Average final average salary	$5,243	$3,357	$3,349	$3,936	$4,182	$4,425	$5,062	
Number of retired members	43	84	98	96	145	818	405	1,689
07/01/2004 TO 06/30/2005								
Average monthly benefit	$187	$528	$906	$1,488	$2,037	$2,892	$3,860	
Average final average salary	$4,353	$3,511	$3,647	$4,055	$4,317	$4,602	$5,275	
Number of retired members	55	98	107	106	145	811	875	2,197
07/01/2005 TO 06/30/2006								
Average monthly benefit	$202	$473	$1,019	$1,493	$2,136	$2,998	$4,063	
Average final average salary	$4,106	$3,253	$4,052	$4,117	$4,537	$4,721	$5,490	
Number of retired members	44	105	106	132	193	689	604	1,873
07/01/2006 TO 06/30/2007								
Average monthly benefit	$178	$514	$930	$1,559	$2,276	$3,140	$4,263	
Average final average salary	$4,102	$3,346	$3,590	$4,228	$4,612	$4,970	$5,758	
Number of retired members	48	113	90	109	169	534	514	1,577

Medical Insurance Plan

Average Insurance Premium Supplements for the Last Seven Years

	Years of Service Credit				
	00-9.99	10-14.99	15-19.99	20>=	TOTAL
Retirement Effective Dates					
07/01/2000 TO 06/30/2001					
Average monthly supplement	$ 107.71	$ 165.08	$ 201.72	$ 233.51	
Number of retired members	42	69	96	1,634	1,841
07/01/2001 TO 06/30/2002					
Average monthly supplement	$ 128.78	$ 167.74	$ 201.48	$ 252.15	
Number of retired members	59	62	99	1,694	1,914
07/01/2002 TO 06/30/2003					
Average monthly supplement	$ 106.62	$ 142.57	$ 212.81	$ 277.64	
Number of retired members	34	59	91	1,457	1,641
07/01/2003 TO 06/30/2004					
Average monthly supplement	$ 100.50	$ 148.85	$ 219.41	$ 289.98	
Number of retired members	30	59	82	1,365	1,536
07/01/2004 TO 06/30/2005					
Average monthly supplement	$ 138.29	$ 214.32	$ 305.39	$ 394.92	
Number of retired members	36	70	93	1,768	1,967
07/01/2005 TO 06/30/2006					
Average monthly supplement	$ 161.03	$ 241.76	$ 362.31	$ 487.23	
Number of retired members	28	49	106	1,440	1,623
07/01/2006 TO 06/30/2007					
Average monthly supplement	$ 146.24	$ 260.95	$ 363.45	$ 489.73	
Number of retired members	29	53	80	949	1,111

Summary of Fiscal Year 2006-2007 Retiree Sick Leave Payments

ACTUARIAL RATE

Grand Total Members Retiring	1,711
Total members receiving sick leave payments	1,226
Total amount of sick leave payments @ 9.855% contribution rate	$ 14,577,007.25
Average payment per retiree	$ 11,889.89
Total increase in final 3/5 average salary base	$ 4,191,521.25
Average increase in FAS	$ 3,418.86
Total service credit of 1,226 retirees	32,511.58
Average service credit of 1,226 retirees	26.52

Additional Average Monthly Annuity payment per Retirement Formula

3,418.86 x 2.52 x 2.00% =	$ 172.31
3,418.86 x 24.00 x 2.50% =	$ 2,051.32
Total	$ 2,223.63
2,223.63/ 12 months =	$ 185.30

Anticipated Lifetime Payout of Additional Annuity

185.30 X 146.7982 X 1226 new factor	$ 33,349,292.12

Funding of Additional Payments

Member contributions 9.855% x $14,577,007.25	$ 1,436,564.06
State Contributions 13.105% x $14,577,007.25	$ 1,910,316.80
TOTAL Member-State Contributions	$ 3,346,880.86

DEFICIT

Anticipated additional payout	$ 33,349,292.12
Less total member & state contributions	3,346,880.86
Subtotal unfunded debt	$ 30,002,411.26
Less current year appropriations	$ 4,293,800.00
TOTAL DEFICIT (overpayment)*	$ 25,708,611.26 *

* *This amount will be amortized over a twenty year period.*

* NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. Sick leave deficits are amortized over 20 year periods.

Summary of State Match and Supplemental Appropriations for Member Contributions to Teachers' Retirement System

for Fiscal Year Ended June 30, 2007

Fiscal Year	Total Member Contributions	Employer/ Federal Payments	Required State Match Contributions	Required Supplemental Appropriation	Required Sick Leave Payments	Total State Appropriation	(Deficit) Surplus State Funding
1944-48	3,184,178		3,184,178			3,039,017	(145,160)
1948-52	4,951,458		4,951,458			5,090,848	(139,390)
1952-56	7,267,163		7,267,163			6,494,102	(773,062)
1956-60	14,970,961		14,970,961			14,963,272	(7,689)
1960-64	25,945,897		25,945,897			25,938,763	(7,134)
1964-68	49,957,299	2,042,014	47,915,285			45,317,694	(2,597,591)
1968-72	82,922,869	6,044,865	76,878,005			80,091,951	3,213,946
1972-76	120,349,350	8,019,216	112,330,134			111,665,685	(664,449)
1976-80	189,072,371	12,044,186	177,028,185	75,010,028		256,784,030	4,745,817
1980-84	272,744,772	16,334,937	256,409,836	109,622,111	5,197,234	378,667,011	7,437,831
1984-88	413,932,416	21,417,604	392,514,811	141,251,827	13,341,243	515,932,177	(31,175,706)
1988-92	602,399,432	119,352,211	483,347,221	133,545,987	28,978,117	634,358,200	(11,537,557)
1992-96	756,817,769	154,296,351[2]	602,521,418	213,030,177	53,308,591	854,138,311	(14,751,875)
1996-00	863,954,020	171,037,889	692,916,131	245,400,594	43,209,004	990,501,344	8,975,615
2000-04	999,971,551	200,041,662	799,935,889	289,439,321	see (1)	1,065,262,116	(24,113,095)
2004-05	274,249,089	63,618,098	210,630,991	79,018,035		293,364,324	3,715,298
2005-06	289,063,930	66,462,471	222,601,459	83,319,537		310,182,549	4,261,553
2006-07	301,522,044	68,333,669	233,188,375	86,819,875		321,074,432	1,066,182

(1) The state appropriations for the sick leave deficit started being amortized over 15 years in the year ended June 1999 through the year ended June 2002. Starting the fiscal year 2003 the sick leave deficits were amortized over 20 years.

(2) Beginning with the 1988-89 fiscal year, the Department of Education and the state universities were responsible for matching their members' contributions with the state reimbursing the respective agencies in their normal budget appropriation.

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Teachers' Retirement System
of the State of Kentucky

The 68th Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Year Ended June 30, 2008

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN, CPA
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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INTRODUCTORY SECTION

for Fiscal Year ending June 30, 2008

Chairperson's Letter

Teachers' Retirement System of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

BOARD OF TRUSTEES

BARBARA G. STERRETT
CHAIRPERSON
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EXOFFICIO
JON E. DRAUD
COMMISSIONER
DEPARTMENT
OF EDUCATION

EXOFFICIO
TODD HOLLENBACH
STATE TREASURER

December 29, 2008

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2008, the 68th year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the System.

KTRS closed the 2007-2008 fiscal year with $14.3 billion net assets. The active membership totaled 75,539 and the retired membership was 40,739 with an annual payroll of $1.3 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. The retirement system is justly proud of the funding level that the System has achieved. Every effort will be made to insure that the System continues to operate in a fiscally sound manner. Present and future members of the System deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the System to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Barbara G. Sterrett
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 29, 2008

Honorable Steven L. Beshear, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky 40601-3800

Dear Governor Beshear:

It is my pleasure to submit the 68th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a Component Unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2008.

State law provides the legal requirement for the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system are also required.

Kentucky Teachers' Retirement System (KTRS) has produced an annual report that will provide you, the General Assembly, and the general public, with information necessary to gain a better understanding of the Teachers' Retirement System.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of the System for the year ended June 30, 2008. Discussion and analysis of net assets and related additions and deductions is presented in Management's Discussion and Analysis beginning on page 15.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are accurately executed and financial statements are fairly presented. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Secretary.

Profile of KTRS

Kentucky Teachers' Retirement System was established on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement benefits to the educators and some public employees of the state. KTRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 24. Also, the summary of the plan provisions starting on page 90 is useful in understanding benefit and contribution provisions. The population of KTRS membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the pension fund. The budget is approved by the Board of Trustees and submitted to the Kentucky General Assembly for legal adoption. The KTRS investment earnings fund the budget appropriations.

Major Initiatives

The System continually seeks opportunities to better serve its membership. During the past year, KTRS has undertaken several new major initiatives concerning information technology, new legislation, and the investment program.

KTRS staff is currently working on the design phase of a new information technology system known as the "Pathway Project." The objective of the Pathway Project is to streamline retirement processes, and improve staff efficiency in providing services to retirees and active members. During this project, the current legacy KTRS Pension Management System will be replaced with a new system of databases and applications,

which will accomplish these goals. The new system will allow KTRS to redesign and improve office processes and ultimately apply new technologies to these processes. This will increase staff productivity, provide seamless member account management, and simplify future system modifications.

The KTRS staff has continued to work to develop a web conferencing project to deliver mid-career and pre-retirement seminar information. When completed, the web conferencing project is expected to expand the reach of KTRS seminars to its members. The KTRS staff has also continued work on the KTRS web site to give members and employers easier navigation to areas of interest.

In June 2008, the Kentucky General Assembly enacted pension reform legislation known as House Bill 1. The KTRS staff took action to implement the new legislation, including updating technology platforms and developing training materials for new members affected by the legislation. Securing adequate funding for retiree health care provided by KTRS remains a major initiative of the System. The Board and Executive Staff continue to educate the General Assembly on the negative impacts of borrowing from the pension fund to keep the health care fund solvent.

The System is currently involved in a multi-year program of broadening the portfolio's diversification into international stocks and nontraditional investments, such as timberland, alternative investments, and private equity. Better diversification should lead to improved returns with less volatility for the overall portfolio. KTRS has also hired an investment consultant to assist with a review of the KTRS investment program and efforts at diversification. These ongoing efforts are simply a continuation of a disciplined investment process and long-term focus. This focus has generated exceptionally stable returns through the System's history and we have every confidence that it will do so in the future.

Economic Condition

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 52 contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules among others.

The investment portfolio experienced a decline in value during the 2007-08 fiscal year as the portfolio's market value decreased from $15,538,052,869 to $14,233,808,958. The decline in value of the portfolio and of the overall market was due to turmoil in the national credit markets and a tightening of credit availability. This decline was partially offset with investment income that included realized capital gains. Employer and employee contributions also provided significant income to the portfolio.

Investment income, including depreciation of asset values, net of investment expenses, for the 2007-2008 fiscal year was negative $894,616,458. The major cause of the negative return from the System's investment portfolio was the net depreciation in fair value of investments in the amount of $1,333,118,227. The largest earnings component, $252,326,244 was the result of interest income. Other income, net of expenses, of $186,175,525 was generated from dividends, rent and securities lending.

According to the KRS 161.430 the KTRS Board of Trustees has the responsibility to invest the assets of the System. The Board of Trustees delegates investment authority to an Investment Committee. The Investment Committee works closely with experienced investment counselors, who are contracted by the Board of Trustees, and the System's professional staff in evaluating and selecting investment allocations.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the Plan and its Trust Funds. Also, the investment program shall provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. The entire portfolio earned a total return of negative 5.7% in 2007-08 and the portfolio's ten-year annualized rate of return is 4.6% and the twenty-year annualized rate of return is 8.6%. During

2007-08, 64% of the fixed income investments were rated at least "AAA" in terms of credit quality.

On the state level, KTRS annuities have a bolstering impact on the state's economy, since around 93% of retired teachers reside in Kentucky. Total benefits (retirement, medical...etc.) paid the fiscal year were more than $1.3 billion.

Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes by statute the levels of contribution that are to be made by members and employers to fund the liabilities of the System. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

The latest actuarial valuation was for the period ending June 30, 2008. This report reflects the System's assets, based on modified market value; totaled $15.3 billion and the liabilities totaled $22.5 billion. The report concludes that since a portion of the annual contributions required to fund the pension benefits have been allocated to the Medical Insurance Fund by the employer, the retirement fund is not funded by the employer on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions (on page 45). The 2008 employer shortfall of contributions created a net pension obligation of $250,170,583 (as detailed on page 85). Annual required employer contributions for the Medical Insurance Fund are provided in the schedule of employer contributions (on page 46). The 2008 employer shortfall of contributions created a net OPEB obligation of $234,415,955 (as detailed on page 105).

KTRS Medical Insurance Plan

KTRS health care costs are escalating at a much faster rate than revenue growth in the Medical Insurance Plan. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2008 indicated that the fund has an unfunded liability of $6.2 billion for 2008. The KTRS 2008-2010 biennial budget requested additional funding from the Commonwealth, but sufficient funds were not allocated by the state. The budget bill directs KTRS to allocate a portion of the state employer contribution in a sufficient amount to the Medical Insurance Fund instead of the Pension Fund to fund the Medical Insurance Fund Stabilization Contribution.

Effective January 1, 1999 KTRS eligible retirees and eligible dependents under the age of 65 have their health insurance provided by plans managed by the Kentucky Department for Employee Insurance. Under this arrangement, KTRS provides a monthly supplement to assist the eligible retiree in purchasing health insurance. Retirees 65 and over remain in the Medicare eligible health plan administered by KTRS. These retirees also receive a supplement for the cost of their coverage.

The System realizes that the medical insurance fund is in crisis. Additional steps must be taken by the state to fund retiree health care and on a national level to aid with making health care more affordable. Meanwhile, KTRS will address the problem by continuing to take measures to contain costs and by increasing revenues to the insurance fund, adjusting coverage to meet existing revenues, or a combination of the two.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the KTRS. A certification from the certified public accountant and actuary are enclosed in this report. The System's consultants who are appointed by the Board are listed on pages 9 and 73 of this report.

National Recognition

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2007. The Certificate of Achievement is a prestigious national award-recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The KTRS has received the Certificate of Achievement for the last twenty consecutive years (fiscal years ended 1988-2007). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement of the State of Kentucky for 2008 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure, and are widely acknowledged to be marks of excellence in the public pension industry.

The PPCC is a coalition of the four major public pension organizations in the nation. These include the National Association of State Retirement Administrators, The National Council on Teacher Retirement, the National Conference on Public Employees Retirement Systems, and the Government Finance Officers Association.

NCTR Executive Committee

Gary L. Harbin serves as the President-Elect on the Executive Committee of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 73 state, territorial, local and university pension systems with combined assets in excess of 1.4 trillion, serving more than 19 million active and retired teachers, nonteaching personnel and other public employees.

Public Sector HealthCare Roundtable

Mr. Harbin also serves on the Board of Directors and as President of the Public Sector HealthCare Roundtable. The Roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector are properly represented during the formulation and debate of federal health care reform initiatives. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

Our Gratitude

KTRS Board of Trustees' Chair, Dr. Zella F. Wells, who had served as a member of the Board of Trustees since July 2004, retired effective July 1, 2008.

We wish to thank Dr. Wells for her commitment to education and for her numerous contributions to the successful operation of the Teachers' Retirement System. We also express appreciation for her service to the public school teachers of the Commonwealth of Kentucky.

Following more than 24 years of dedicated and exemplary public service to the Commonwealth of Kentucky, Mr. C. Joe Hutchison elected to retire effective October 1, 2008. Mr. Hutchison served as the Deputy Executive Secretary of KTRS since January 1, 2001. The KTRS Board and staff wish Mr. Hutchison many years of enjoyable retirement.

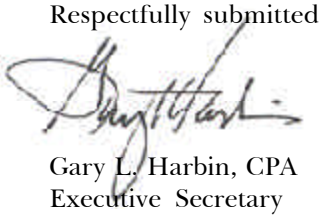
Acknowledgments

The preparation of this report reflects the combined efforts of the KTRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship of the assets contributed by KTRS members and their employers.

This report is located at the KTRS web address www.ktrs.ky.gov, and is being mailed to all employer members of the System whose cooperation continues to contribute significantly to our success, and who form the vital link between KTRS and its active members.

KTRS management and staff are committed to the continued effective operation of the retirement system within the parameters of contributions by the employer. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



Gary L. Harbin, CPA
Executive Secretary

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Teacher Trustee
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Vice Chairperson
Retired Teacher Trustee
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Teacher Trustee
Murray

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Lay Trustee
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Teacher Trustee
Taylorsville

Laura Zimmerman
Teacher Trustee
Lexington

Jon Draud
Ex Officio Trustee
Commissioner,
Dept. of Education

Todd Hollenbach
Ex Officio Trustee
State Treasurer

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

GARY L. HARBIN, CPA
Executive Secretary

C. JOE HUTCHISON, MBA, CPA
Deputy Executive Secretary
Finance & Administration

ROBERT B. BARNES, JD
Deputy Executive Secretary
Operations

PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

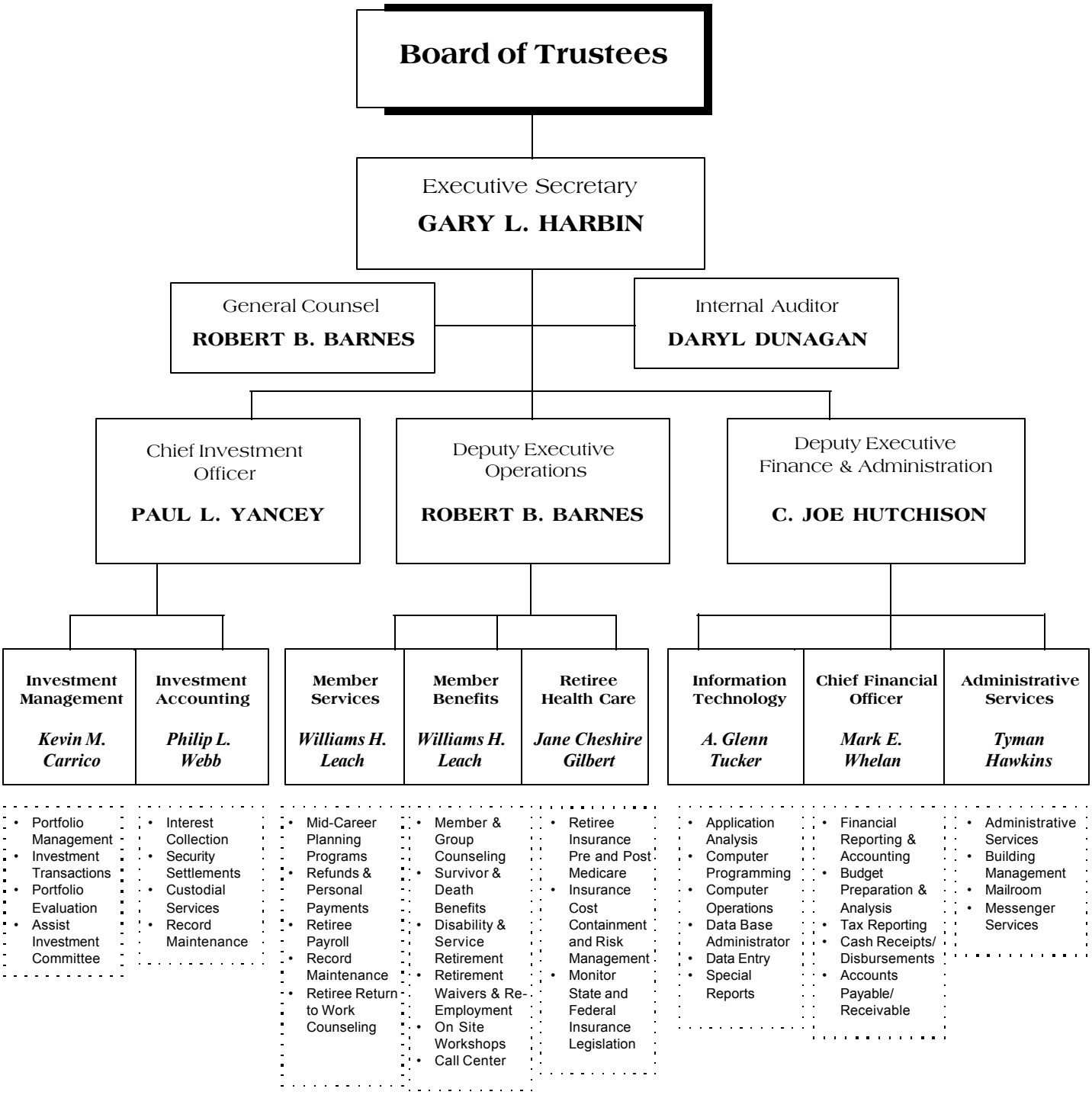
Cavanaugh Macdonald Consulting, LLC
3550 Busbee Parkway, Suite 250
Kennesaw, GA 30144

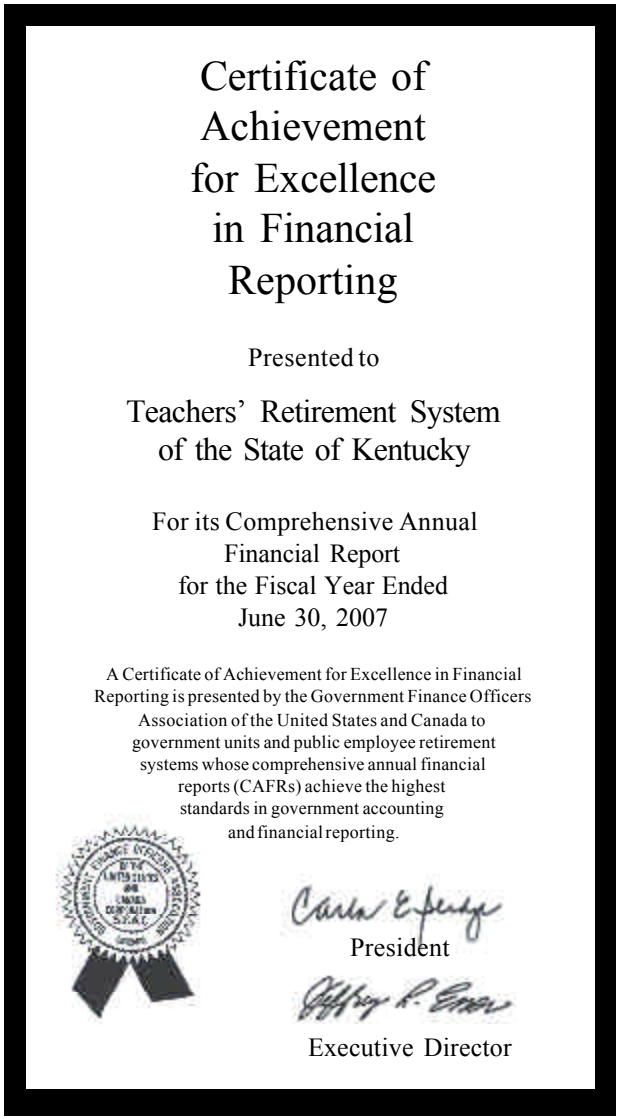
AUDITOR

Charles T. Mitchell, LLP
201 West Main Street
P.O. Box 698
Frankfort, Kentucky 40601

** See page 73 of the Investment Section for investment consultants.*

Kentucky Teachers' Retirement System
Organizational Chart





Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

Teachers' Retirement System
of the State of Kentucky

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended
June 30, 2007

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

President

Executive Director

GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last twenty consecutive years (fiscal years ended 1988-2007).

Public Pension Coordinating Council
Public Pension Standards
2008 Award

Presented to

Kentucky Teachers' Retirement System

In recognition of meeting professional standards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of state Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
ProgramAdministrator

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2008 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

FINANCIAL SECTION

for Fiscal Year ending June 30, 2008

Charles T. Mitchell Co. LLP
Certified Public Accountants

William G. Johnson , Jr., C.P.A
James Clouse,C.P.A
Bernadette Smith, C.P.A
Kim Field, C.P.A
Greg Miklavcic, C.P.A
Don C. Giles, C.P.A, Consultant

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the accompanying statements of plan net assets of the Teachers' Retirement System of the State of Kentucky as of June 30, 2008 and 2007 and the related statements of changes in plan net assets for the years then ended. These component unit financial statements are the responsibility of the Teachers' Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the plan net assets of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, at June 30, 2008 and 2007 and the changes in its plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated December 11, 2008 on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

The Management's Discussion and Analysis on pages 15-19 are not a required part of the basic financial statements but is supplemental information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplemental information. However, we did not audit the information and express no opinion on it.

The financial section supporting schedules listed in the table-of-contents are presented for the purpose of additional analysis and are not a required part of the basic financial statements. These schedules are the responsibility of the System's management. Such schedules as of and for the year ended June 30, 2008 have been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

We did not audit the data included in the Introductory and Statistical sections of the report and therefore express no opinion on them.

Charles T. Mitchell Co.

Frankfort, Kentucky
December 11, 2008

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MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of Kentucky Teachers' Retirement System's financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2008. Please read it in conjunction with the respective financial statements, which begin on page 20.

USING THIS FINANCIAL REPORT

Because of the long-term nature of a defined benefit pension plan, and the medical and life insurance plans, financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. The Statement of Plan Net Assets and Statement of Changes in Plan Net Assets (on pages 20-23) provide information about the activities of the defined benefit plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Kentucky Teachers' Retirement System is the fiduciary of funds held in trust for its members.

The Schedule of Funding Progress (on pages 45-46) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (on pages 45-47) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2008, Kentucky Teachers' Retirement System's combined plan net assets decreased by $1,293.1 million – from $15,633.8 million to $14,340.7 million. The following summaries focus on plan net assets and changes in plan net assets of Kentucky Teachers' Retirement System's defined benefit plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan.

Summary of
Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan 2008	2007	2006	Medical Insurance Plan 2008	2007	2006	Life Insurance Fund** 2008	2007
Cash & Investments	$14,224.0	$16,204.5	$14,632.5	$182.0	$137.0	$132.1	$76.8	$69.1
Receivables	93.6	95.8	94.7	6.2	5.7	7.1	.8	.8
Capital Assets	3.0	3.1	3.2					
Total Assets	14,320.6	16,303.4	14,730.4	188.2	142.7	139.2	77.6	69.9
Total Liabilities	(243.9)	(880.8)	(879.0)	(2.3)	(1.9)	(7.6)		
Plan Net Assets	$14,076.7	$15,422.6	$13,851.4	$185.9	$140.8	$131.6	$77.6	$69.9

*TOTALS	2008	2007	2006
Cash & Investments	$14,482.8	$16,410.6	$14,764.6
Receivables	100.6	102.3	101.8
Capital Assets	3.0	3.1	3.2
Total Assets	14,586.4	16,516.0	14,869.6
Total Liabilities	(246.2)	(882.7)	(886.6)
Plan Net Assets	$14,340.2	$15,633.3	$13,983.0

* *The 403(b) Tax Shelter Plan cash and investments were approximately $.5 million for the years ended 2008 and 2007 and 2006.*

** *Separate amounts for the 2006 Life Insurance Fund are unavailable.*

Plan net assets of the defined benefit plan decreased by 8.72% ($14,076.7 million compared to $15,422.6 million). The decrease is primarily due to unfavorable market conditions which resulted in a net investment decrease of $909.1 million. The defined benefit plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries.

Plan net assets of the medical insurance plan increased by 32% ($185.9 million compared to $140.8 million) primarily due to state allocations from redirecting contributions from the retirement fund to the medical plan. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

Summary of Changes in Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan 2008	Defined Benefit Plan 2007	Defined Benefit Plan 2006	Medical Insurance Plan 2008	Medical Insurance Plan 2007	Medical Insurance Plan 2006	Life Insurance Plan* 2008	Life Insurance Plan* 2007
ADDITIONS								
Member Contributions	$ 291.4	$ 269.7	$ 258.5	$ 55.4	$ 53.1	$ 51.7	$	$
Employer Contributions	466.2	434.9	410.9	148.9	113.2	89.3	5.4	5.0
Net Investment Income	(909.1)	2,063.9	717.3	8.1	6.7	6.8	6.3	(3.4)
Other Income				11.9	10.4	6.1		
TOTAL ADDITIONS	$ (151.5)	$ 2,768.5	$ 1,386.7	$ 224.3	$183.4	$153.9	$ 11.7	$ 1.6
DEDUCTIONS								
Benefit Payments	$ 1,170.9	$ 1,102.6	$ 1,035.6	$	$	$	$ 4.0	$ 4.2
Refunds	15.9	14.8	12.9					
Administrative Expense	7.6	7.4	6.8					
Insurance Expenses				179.2	174.2	169.6		
TOTAL DEDUCTIONS	1,194.4	1,124.8	1,055.3	179.2	174.2	169.6	4.0	4.2
Increase (Decrease) in Plan Net Assets	$ **(1,345.9)**	$ **1,643.7**	$ **331.4**	$ **45.1**	$ **9.2**	$ **(15.7)**	$ **7.7**	$ **(2.6)**

TOTALS	2008	2007	2006
ADDITIONS			
Member Contributions	$ 346.8	$ 322.8	$ 310.2
Employer Contributions	620.5	553.1	500.2
Net Investment Income	(894.7)	2,067.2	724.1
Other Income	11.9	10.4	6.1
TOTAL ADDITIONS	$ 84.5	$ 2,953.5	$ 1,540.6
DEDUCTIONS			
Benefit Payments	$ 1,174.9	$ 1,106.8	$ 1,035.6
Refunds	15.9	14.8	12.9
Administrative Expense	7.6	7.4	6.8
Insurance Expenses	179.2	174.2	169.6
TOTAL DEDUCTIONS	1,377.6	1,303.2	1,224.9
Increase (Decrease) in Plan Net Assets	$ **(1,293.1)**	$ **1,650.3**	$ **315.7**

* *Separate amounts for the 2006 Life Insurance Fund are unavailable.*

DEFINED BENEFIT PLAN ACTIVITIES

Member contributions increased $21.7 million. Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions totaled $466.2 million, a net increase of $26.3 million over the 2007 fiscal year.

The System experienced a decrease in net investment income compared to the increase of the previous year (negative $909.1 million at June 30, 2008 as compared to a $2,060.5 million increase at June 30, 2007). The decrease in the fair value of investments is mainly due to unfavorable market conditions for the year ended June 30, 2008. This can be illustrated as follows:

(In Millions)	2008	2007	2006
Appreciation (depreciation) in fair value of investments – June 30, prior year	$ 1,904.0	$ 690.4	$ 610.4
Appreciation (depreciation) in fair value of investments – June 30, end of year	385.4	1,904.0	690.4
Change in net appreciation (depreciation) in fair value of investments	(1,518.6)	1,213.6	80.0
Net income (net of investment expense)	426.9	443.1	434.8
Net gain on sale of investments	182.6	403.8	202.5
Investment Income (net) – June 30, end of year	$ (909.1)	$ 2,060.5	$ 717.3

Program deductions in 2008 increased $65.5 million. The increase was caused principally by an increase of $64.2 million in benefit payments. Members who were drawing benefits as of June 2008 received an increase of 2.1% to their retirement allowances in July 2007. Also, there was an increase of 1,233 members and beneficiaries on the retired payroll as of June 30, 2008.

OTHER POST EMPLOYMENT BENEFIT ACTIVITIES

During the 2008 fiscal year, member contributions increased $2.3 million and employer contributions increased by $35.7 million over fiscal year 2007. The employer contributions increased primarily because $125 million in stabilization funding was placed in the medical insurance fund from the pension fund at the recommendation of the System's actuary. The amount will be repaid over a ten-year period per KRS 161.553.

Program deductions increased $5.1 million due to an increase of insurance expenses of $5.1 million. The monthly premium subsidy for retirees under age 65 increased 5.80% from fiscal year 2007 to fiscal year 2008. A 17.56% increase is slated for calendar year 2009. The

monthly premium subsidy for retirees age 65 and over decreased by 1.80% from fiscal year 2007 to fiscal year 2008.

Net investment income increased $1.4 million from $6.7 million in 2007 to $8.1 million in 2008. This is due to the recognition of interest income since all investments for the Medical Insurance Plan are short term in nature and the recognition of appreciation in fair value is not feasible. This can be illustrated as follows:

(In Millions)	2008	2007	2006
Appreciation in fair value of investments – June 30, prior year	$ 0	$ 0	$ 0
Appreciation in fair value of investments – June 30 end of year	0	0	0
Net appreciation in fair value of investments	0	0	0
Net income (net of investment expense)	8.1	6.7	6.8
Net gain on sale of investments	0	0	0
Investment Income (net) – June 30	$ 8.1	$ 6.7	$ 6.8

Starting this year, the life insurance plan is being displayed separately due to the actuary conducting a valuation independently from the defined benefit plan. The 2007 financial statements have been restated for comparative purposes. Total life insurance benefits paid for 2008 and 2007 were $4.0 and $4.2 million respectively.

HISTORICAL TRENDS

Accounting standards require that the Statement of Plan Net Assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information regarding the actuarial funding status of the defined benefit plan, the medical insurance plan, and the life insurance plan is provided in the Schedule of Funding Progress (beginning on page 45). The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the projected unit credit cost method.

The 2008 fiscal year reveals a decline in funding position of the pension plan due to an increase in the actuarial liability.

Annual required employer contributions of the defined benefit plan are provided in the Schedule of Employer Contributions (on page 45). This schedule indicates that for year 2008 employer shortfall of contributions created a net pension obligation of $250,170,583.

The medical insurance plan is not as vulnerable to adverse market conditions since its assets are all short term in nature and less likely to experience huge fluctuations. Although the plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding.

Annual required contributions of the Medical Insurance Plan are provided in the Schedule of Employer Contributions (on page 46). This schedule indicates that for year 2008 employer shortfall of contributions created a net OPEB obligation of $234,415,955.

Statement of Plan Net Assets
As of June 30, 2008

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2008 TOTAL
ASSETS					
Cash	$ 8,083,548	$	$	$ 587,853	$ 8,671,401
Prepaid Expenses	146,008		121,000		267,008
Receivables					
Contributions	29,761,242		2,273,890	60,048	32,095,180
State of Kentucky	500,956				500,956
Investment Income	62,223,633	29		736,866	62,960,528
Installment Account Receivable	661,499				661,499
Medicare D Receivables			3,901,214		3,901,214
Other Receivables	423,332				423,332
Total Receivables	93,570,662	29	6,175,104	796,914	100,542,709
Investments at Fair Value (See Note 5)					
Short Term Investments	201,290,978	498,892	181,882,630	5,100,000	388,772,500
Bonds and Mortgages	4,208,000,818			71,173,450	4,279,174,268
Equities	9,029,380,841				9,029,380,841
Alternative Investments	104,787,575				104,787,575
Real Estate	431,693,774				431,693,774
Total Investments	13,975,153,986	498,892	181,882,630	76,273,450	14,233,808,958
Invested Security Lending Collateral	240,638,736				240,638,736
Capital Assets, at cost net of accumulated depreciation of $1,978,998 (See Note 2)	3,018,126				3,018,126
Total Assets	14,320,611,066	498,921	188,178,734	77,658,217	14,586,946,938
LIABILITIES					
Liabilities					
Accounts Payable	2,618,197				2,618,197
Treasurer's Unredeemed Checks	3,518			14	3,532
Insurance Claims Payable			2,289,841		2,289,841
Compensated Absences Payable	658,434				658,434
Revenues Collected in Advance			5,670		5,670
Obligations under Securities Lending	240,638,736				240,638,736
Total Liabilities	243,918,885	0	2,295,511	14	246,214,410
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POST EMPLOYMENT BENEFITS: (See Required Supplemental Schedule 1 for a schedule of funding progress)	$ 14,076,692,181	$ 498,921	$ 185,883,223	$ 77,658,203	$ 14,340,732,528

The accompanying notes are an integral part of these financial statements.

Statement of Plan Net Assets
As of June 30, 2007

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2007 TOTAL
ASSETS					
Cash	$ 4,658,755	$	$	$ 729,147	$ 5,387,902
Prepaid Expenses	86,043		121,000		207,043
Receivables					
Contributions	29,217,090		2,240,981	58,822	31,516,893
State of Kentucky	956,905				956,905
Investment Income	64,796,686	2,233		762,605	65,561,524
Installment Account Receivable	777,938				777,938
Medicare D Receivables			3,487,197		3,487,197
Other Receivables					
Total Receivables	95,748,619	2,233	5,728,178	821,427	102,300,457
Investments at Fair Value (See Note 5)					
Short Term Investments	422,060,871	509,798	136,896,316	6,990,900	566,457,885
Bonds and Mortgages	4,408,820,024			61,387,003	4,470,207,027
Common Stock	10,114,620,014				10,114,620,014
Private Equity	5,074,147				5,074,147
Real Estate	381,693,796				381,693,796
Total Investments	15,332,268,852	509,798	136,896,316	68,377,903	15,538,052,869
Invested Security Lending Collateral	867,562,185				867,562,185
Capital Assets, at cost net of accumulated depreciation of $1,871,494 (See Note 2)	3,085,129				3,085,129
Total Assets	16,303,409,583	512,031	142,745,494	69,928,477	16,516,595,585
LIABILITIES					
Accounts Payable	2,819,398				2,819,398
Treasurer's Unredeemed Checks	2,203			14	2,217
Insurance Claims Payable			1,966,148		1,966,148
Compensated Absences Payable	636,201				636,201
Revenues Collected in Advance	9,799,500		7,112		9,806,612
Obligations under Securities Lending	867,562,185				867,562,185
Total Liabilities	880,819,487	0	1,973,260	14	882,792,761
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:	$15,422,590,096	$ 512,031	$ 140,772,234	$ 69,928,463	$ 15,633,802,824

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
As of June 30, 2008

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2008 TOTAL
ADDITIONS					
Contributions					
Employer	$ 466,247,782	$	$ 148,929,322	$ 5,411,249	$ 620,588,353
Member	291,423,948		55,402,830		346,826,778
Total Contribution	757,671,730		204,332,152	5,411,249	967,415,131
Other Income					
Recovery Income			25,322		25,322
Medicare D Receipts			11,911,565		11,911,565
Total Other Income			11,936,887		11,936,887
Investment Income					
Net Appreciation/(Depreciation) in Fair Value of Investments	(1,335,940,216)			2,821,989	(1,333,118,227)
Interest	240,681,166	17,397	8,128,179	3,499,502	252,326,244
Dividends	165,542,769				165,542,769
Rental Income, Net	28,660,581				28,660,581
Securities Lending, Gross Earnings	21,398,859				21,398,859
Gross Investment Income	(879,656,841)	17,397	8,128,179	6,321,491	(865,189,774)
Less Investment Expense	(9,499,832)				(9,499,832)
Less Securities Lending Expense	(19,926,852)				(19,926,852)
Net Investment Income	(909,083,525)	17,397	8,128,179	6,321,491	(894,616,458)
Total Additions	(151,411,795)	17,397	224,397,218	11,732,740	84,735,560
DEDUCTIONS					
Benefits	1,170,969,101	30,507		4,003,000	1,175,002,608
Refunds of Contributions	15,965,083		10,014		15,975,097
Insurance Expenses			179,276,215		179,276,215
Administrative Expense	7,551,936				7,551,936
Total Deductions	1,194,486,120	30,507	179,286,229	4,003,000	1,377,805,856
Net Increase (Decrease)	(1,345,897,915)	(13,110)	45,110,989	7,729,740	(1,293,070,296)
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:					
Beginning of year	15,422,590,096	512,031	140,772,234	69,928,463	15,633,802,824
Ending of year	$ 14,076,692,181	$ 498,921	$ 185,883,223	$ 77,658,203	$ 14,340,732,528

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
As of June 30, 2007

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2007 TOTAL
ADDITIONS					
Contributions					
Employer	$ 434,890,469	$	$ 113,233,784	$ 5,022,137	$ 553,146,390
Member	269,687,864		53,099,678		322,787,542
Total Contribution	704,578,333		166,333,462	5,022,137	875,933,932
Other Income					
Recovery Income			24,977		24,977
Medicare D Receipts			10,312,361		10,312,361
Total Other Income			10,337,338		10,337,338
Investment Income					
Net Appreciation/(Depreciation) in Fair Value of Investments	1,623,818,334			(6,481,274)	1,617,337,060
Interest	251,858,168	28,919	6,722,080	3,067,737	261,676,904
Dividends	165,183,866				165,183,866
Rental Income, Net	30,344,247				30,344,247
Securities Lending, Gross Earnings	52,672,196				52,672,196
Gross Investment Income	2,123,876,811	28,919	6,722,080	(3,413,537)	2,127,214,273
Less Investment Expense	(8,667,669)				(8,667,669)
Less Securities Lending Expense	(51,330,375)				(51,330,375)
Net Investment Income	2,063,878,767	28,919	6,722,080	(3,413,537)	2,067,216,229
Total Additions	2,768,457,100	28,919	183,392,880	1,608,600	2,953,487,499
DEDUCTIONS					
Benefits	1,102,538,879	32,691		4,245,000	1,106,816,570
Refunds of Contributions	14,822,827		5,834		14,828,661
Insurance Expenses			174,229,097		174,229,097
Administrative Expense	7,351,846				7,351,846
Total Deductions	1,124,713,552	32,691	174,234,931	4,245,000	1,303,226,174
Net Increase (Decrease)	1,643,743,548	(3,772)	9,157,949	(2,636,400)	1,650,261,325
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:					
Beginning of year	13,778,846,548	515,803	131,614,285	72,564,863	13,983,541,499
Ending of year	$ 15,422,590,096	$ 512,031	$ 140,772,234	$ 69,928,463	$ 15,633,802,824

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements
Years Ended June 30, 2008 and 2007

Note 1: Description of Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan established to provide pension benefit plan coverage for local school districts and other public educational agencies in the state.

B. PARTICIPANTS

As of June 30, 2008 a total of 199 employers participated in the plan. Employers are comprised of 175 local school districts, 18 Department of Education Agencies and other educational organizations, 5 universities and also the Kentucky Community and Technical College System.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

	2008	2007
Active contributing members:		
Vested	42,932	42,300
Non-vested	32,607	32,844
Inactive members, vested	4,861	4,498
Retirees and beneficiaries currently receiving benefits	40,739	39,506
Total members, retirees, and beneficiaries	**121,139**	**119,148**

C. BENEFIT PROVISIONS

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete 27 years of Kentucky service.

Note 1: Description of Plan continued . . .

Participants that retire before age 60 with less than 27 years of service receive reduced retirement benefits. Non-university members receive monthly payments equal to two (2) percent (service prior to July 1, 1983) and two and one-half (2.5) percent (service after July 1, 1983) of their final average salaries for each year of credited service. University employees receive monthly benefits equal to two (2) percent of their final average salary for each year of credited service. The final average salary is the member's five (5) highest annual salaries except members at least 55 with 27 or more years of service may use their (3) three highest annual salaries. New members (including second retirement accounts started) after July 1, 2002 will receive monthly benefits equal to 2% of their final average salary for each year of service if, upon retirement, their total service is less than ten years. New members after July 1, 2002 who retire with ten or more years of total service will receive monthly benefits equal to 2.5% of their final average salary for each year of service, including the first ten years. In addition, non-university members who retire July 1, 2004 and later with more than 30 years of service will have their multiplier increased for all years over 30 from 2.5% to 3.0% to be used in their benefit calculation

The System also provides disability benefits for vested members at the rate of sixty (60) percent of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half (1.5) percent annually. Additional ad hoc increases, and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

KTRS has three cash accounts. At June 30, 2008, the pension cash account totaled $5,210,327, the administrative expense fund cash account was $2,873,221, and the life insurance cash account totaled $587,853, therefore, the carrying value of cash was $8,671,401 and the corresponding bank balance was $11,695,507. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2008.

C. CAPITAL ASSETS

Fixed assets are recorded at historical cost less straight-line accumulated depreciation. The classes of fixed assets are furniture and equipment, the KTRS office buildings and land. Furniture and equipment are depreciated over an average useful life of five to seven years. The office buildings are depreciated over forty years.

Note 2: Summary of Significant Accounting Policies continued . . .

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in plan net assets.

Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by the System's employees are recorded when earned. Upon termination or retirement, employees of the System are paid for accumulated vacation time limited to 450 hours and accumulated compensatory time limited to 200 hours. As of June 30, 2008 and 2007 accrued compensated absences were $658,434 and $636,201.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which the System is exposed. In order to cover such risks the System carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

G. OTHER RECEIVABLES

KTRS allows qualified purchases of service credit to be made by installment payments not to exceed a five-year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2008 and 2007 installment contract receivables were $661,499 and $777,938.

H. USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The System's management believes that it has operated the plans within the constraints imposed by federal tax law.

Note 2: Summary of Significant Accounting Policies continued . . .

J. ACCOUNTING CHANGES

The System early implemented GASB #50 Pension Disclosures last year.

K. RECLASSIFICATIONS

Certain 2007 amounts have been reclassified in conformity with the 2008 presentation.

Note 3: Contributions and Reserves

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Members are required to contribute 9.855% of their salaries to the System. University members are required to contribute 8.375% of their salaries. KRS 161.580 allows each university to reduce the contribution of its members by 2.215%; therefore, university members contribute 6.16% of their salary to KTRS.

The Commonwealth of Kentucky is required to contribute 13.105% of salaries for its non-university members and 13.84% of salaries for university members.

The member and employer contributions consist of pension contributions and post-retirement contributions to the medical insurance fund. The post-retirement contribution of .75% from employee and employer contribution rates help finance KTRS' retiree medical insurance plan.

If an employee leaves covered employment before accumulating five (5) years of credited service, accumulated employee contributions plus interest are refunded to the employee upon the member's request.

B. RESERVES

Member Reserve

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from Unallocated Reserves. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Benefit Reserves, the fund from which retirement benefits are paid.

Employer Reserve

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of

Note 3: Contributions and Reserves continued . . .

members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky. While fiscal years 2008 and 2007 resulted in over-appropriations from the state, a receivable is still due from the state because prior years under-appropriations have not been paid to KTRS.

Benefit Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

Unallocated Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

Administrative Expense Reserve

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from Unallocated Reserves is used to pay the administrative expenses of the System.

Note 4: Funded Status and Funding Progress

A. Description of Funding Progress

The funded status of the Defined Benefit Plan as of the most recent actuarial valuation date is as follows:

(Dollar amount in 1000's)

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (uaal)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2008	$ 15,321,325	$ 22,460,304	$ 7,138,979	68.2%	$ 3,190,332	223.8%

Note 4: Funded Status and Funding Progress continued . . .

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear funding trend information as obtained from the System's independent actuary's annual valuation report.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the System is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the retirement system. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the retirement system.

The accompanying schedule of employer contributions, presented as required supplementary information following the notes to the financial statements, presents trend information about the amounts contributed to the plan by employers in comparison to the Annual Required Contribution (ARC). The ARC is actuarially determined in accordance with the parameters of GASB Statement 50. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

B. Methodologies

The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the projected unit credit actuarial cost method. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period using an open amortization approach. The five (5) year smoothed market approach is used for asset valuation.

Note 4: Funded Status and Funding Progress continued . . .

Actuarial Value Assets

(1)	Actuarial Value of Assets on June 30, 2007	$ 15,286,452,192
(2)	Market Value End of Year June 30, 2008	14,076,692,181
(3)	Market Value Beginning of Year June 30, 2007	15,422,590,096
(4)	Cash Flow	
	a. Contributions	757,671,730
	b. Benefit Payments	1,186,934,184
	c. Administrative Expenses	7,551,936
	d. Net	(436,814,390)
(5)	Investment Income	
	a. Market total: (2) - (3) - (4)c	(909,083,525)
	b. Assumed Rate	7.5%
	c. Amount for Immediate Recognition: [(1) x (5)b] + [(4)c * (5)b * 0.5]	1,140,313,718
	d. Amount for Phased-In Recognition: (5)a - (5)c	(2,049,397,243)
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20*(5)d	(409,879,449)
	b. First Prior Year	190,240,386
	c. Second Prior Year	(75,996,339)
	d. Third Prior Year	(23,843,540)
	e. Fourth Prior Year	(349,147,545)
	f. Total Recognized Investment Gain	(668,626,487)
(7)	Actuarial Value End of Year (1) + (4)c + (5)c + (6)f	15,321,325,033
(8)	Difference Between Market & Actuarial Values (2) - (7)	$ **(1,244,632,852)**

C. Assumptions

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2008, the most recent updated actuarial information include:

*	Assumed inflation rate	4%
*	Assumed investment rate	7.5%
*	Assumed projected salary increases	4.0% - 8.20%
*	Assumed post retirement benefit increase	1.5%

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of KTRS' financial statements assess the risks KTRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430. The parameters as outlined in Title 102, Chapter 1.175, Section 2 of the Kentucky Administrative Regulations are as follows:

- There shall be no limit on the amount of investments owned by the System if the investments are guaranteed by the U.S. Government.
- Not more than thirty-five percent (35%) of the assets of the System at market value shall be invested in corporate debt obligations.
- Not more than sixty-five percent (65%) of the assets of the System at market value shall be invested in common stocks or preferred stocks. Not more than twenty-five percent (25%) of the assets of the System at market value shall be invested in a stock portfolio designed to replicate a general stock index. Not more than fifteen percent (15%) of the assets of the System at market value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks.
- Not more than ten percent (10%) of the assets of the System at market value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.
- Not more than ten percent (10%) of the assets of the System at market value shall be invested in alternative investments. This would include private equity, venture capital, timberland, and infrastructure investments.
- Not more than ten percent (10%) of the assets of the System at market value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the retirement system's deposits may not be returned to the System. The bank's total balance at June 30, 2008 was $11,695,507 of which $6,237,715 primarily represents deposited amounts due the System for which actual funds are in transit to and waiting to be received by the custodial bank; therefore, these funds were unavailable for

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

investment. An additional amount of $2,873,221 represents funds held in the bank but their investment is controlled by the Commonwealth of Kentucky. There were various outstanding checks and vouchers totaling a $3,023,982 balance reduction while the amount of $2,584,571 was the amount invested in cash equivalents. Cash equivalents are created through the daily sweeps of available excess cash by the System's custodial bank into bank sponsored short-term investment funds. These funds are custodial bank sponsored commingled funds which are invested in short-term securities backed by the U.S. Government and its agencies. The actual cash deposits held in bank accounts were insured up to $100,000 (currently $250,000) as covered by federal depository insurance and uncollateralized until being invested in cash equivalents.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,
b. collateralized with securities held by the pledging financial institution, or
c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2008, the System's cash equivalents in the amount of $2,584,571 were not exposed to custodial credit risk since this amount was invested by the custodial bank and collateralized at 102% with the collateral pledged to the Treasurer of the Commonwealth of Kentucky.

C. INVESTMENTS

All of the System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate and alternative investments. These assets are reported at fair market value.

Investments are governed by the Board of Trustees' policy while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

The following chart represents the fair market values of the investments of the Kentucky Teachers' Retirement System for June 30, 2008.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments

	Market Value June 30, 2008	Market Value June 30, 2007
Short Term Investments		
Repurchase Agreements	$ 338,900,000	$ 264,900,000
Agency & Other (Short Term)	49,872,500	301,557,885
Total Short Term Investments	**388,772,500**	**566,457,885**
Bonds and Mortgages		
U. S. Government	924,161,362	1,072,697,874
Agency Bonds	495,014,012	704,207,195
Mortgage-Backed Securities	500,140,653	432,477,395
Collateralized Mortgage Obligations	160,154,576	141,712,059
Asset Backed Securities	155,645,158	180,985,677
Commercial Mortgage-Backed Securities	205,815,754	185,842,508
Municipal Bonds	329,621,169	252,336,753
Corporate Bonds	1,508,621,584	1,499,947,566
Total Bonds and Mortgages	**4,279,174,268**	**4,470,207,027**
Equities		
International Equity	1,328,489,089	1,039,416,148
U. S. Equity	7,700,891,752	9,075,203,866
Total Equities	**9,029,380,841**	**10,114,620,014**
Real Estate		
Real Estate Equity	431,693,774	381,693,796
Total Real Estate Equity	**431,693,774**	**381,693,796**
Alternative Investments		
Private Equity	28,791,613	5,074,147
Timberland	75,995,962	0
Total Alternative Investments	**104,787,575**	**5,074,147**
TOTAL INVESTMENTS	**$ 14,233,808,958**	**$ 15,538,052,869**

This schedule does not include $240,638,736 securities lending collateral.

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the pension trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system, and are held by either:

a. the counterparty or

b. the counterparty's trust department or agent, but not in the System's name.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The cash reserve of the System is maintained in high quality short term investments. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, banker's acceptances, and repurchase agreements are all permissible investments. The System utilized investment instruments it regards as the most secure and having the best returns and does not use short term investments that finance foreign businesses unless they are issued and guaranteed by the United States Government.

Individual repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers under terms dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS' nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a market value of at least 102% of the value of the repurchase agreements.

In addition to the System's $14.2 billion in investments at June 30, 2008, cash collateral reinvestment securities acquired through securities lending by the System's custodian, who is also the lending agent/counterparty, amounted to $240,638,736. This is consistent with the System's securities lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the retirement System's investments. In general, the longer the period until an investment matures, the greater the negative impact that changes in interest rates can have on fair value.

As of June 30, 2008 KTRS had the following investments and weighted average maturities:

Investment Type	Fair Value	Average Maturity (years)
U.S. Government	$ 924,161,362	10.4
Agency	495,014,012	9.2
MBS	500,140,653	17.8
CMO	160,154,576	21.0
ABS	155,645,158	8.9
CMBS	205,815,754	29.6
Muni	329,621,169	12.9
Corporate	1,508,621,584	8.6
Totals	**$ 4,279,174,268**	**12.0**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

In addition to the above securities, Repurchase Agreements (short-term investments) had a total fair value of $388,772,500 of which Repurchase Agreements had a weighted average maturity of 2 days and other Short-term notes/bonds (Discount Notes) had an average maturity of 42 days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology. It is widely used in the management of fixed income portfolios by quantifying the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of change in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the System manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by the System were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed securities depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The System held $500.1 million in mortgage-backed securities as of June 30, 2008.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The System held $160.2 million in collateralized mortgage obligations as of June 30, 2008.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other credit providers. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The asset-backed securities in the amount of $155.6 million held by the System are moderately sensitive to changes in interest rates.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The System's commercial mortgage-backed securities investments

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

consist of highly rated relatively senior tranches. The average maturity of the System's commercial mortgage-backed securities holdings in the schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The System held $205.8 million in commercial mortgage-backed securities investments as of June 30, 2008.

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedule lists KTRS's fixed income investments (net of cash equivalents) according to credit ratings as of June 30, 2008:

RATING	FAIR VALUE	%
U.S. Government	$ 924,161,362	21.6
Agency	495,014,012	11.6
AAA	1,296,983,511	30.3
AA	515,293,078	12.0
A	667,521,214	15.6
BBB	370,644,571	8.7
BB	6,116,520	0.1
B	3,440,000	0.1
Total	$ 4,279,174,268	100.0

Total market value of the fixed income portfolio was $4,279,174,268 on June 30, 2008. The rating system used in the chart is the nationally recognized Standard & Poor's rating system.

In addition to the above categories, the System held $388,772,500 in Cash Equivalents or short term investments such as Repurchase Agreements and Agency Discount Note securities. The credit risk associated with Repurchase Agreements and Agency Discount investments is very minimal as the general rating of these securities is higher than AAA. In addition, investments in US Government and Agency securities are also highly rated securities since they are backed by the US Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

The System's policy on credit rating as stated in 102 KAR 1:175 is that:

"A fixed income investment shall be rated at the time of purchase within the four (4) highest credit classifications identified by one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. Notwithstanding the foregoing, the fixed income investment portfolio as a whole shall maintain an average rating equal to at least the second highest credit classification."

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the System is subject to the following policies regarding single issuers of fixed income and equity securities:

> "Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the System.
>
> "The System's position in a single stock shall not exceed two and one-half (2.5) percent of the System's assets. The System's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program."

KTRS has not invested greater than five percent (5%) of the System's assets at book value in any single issuer and is in compliance with the System's policies as stated here.

Foreign Currency Risk

As of June 30, 2008, KTRS exposure to foreign currency risk consisted of $770,959,026 of foreign equity investments through commingled funds managed by UBS Global Asset Management, Baring Asset Management, and Baillie Gifford as follows:

UBS Global Asset Management	$ 488,863,416
Baring Asset Management	143,997,345
Baillie Gifford	138,098,265
Total	$ 770,959,026

These amounts represent the market values of equities held by the Fund as a result of cash contributions to each Fund by KTRS.

In addition to the commingled funds investing in foreign securities, KTRS held $557,530,063 associated with foreign interests in American Depositary Receipt (ADR) investments. These ADRs are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. ADRs are denominated in U.S. currency.

The System's policy regarding foreign equities is that not more than fifteen percent (15%) of the assets of the System at market value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the System. The System operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international (ADR) stocks are the types of securities that are lent. The System's sub-custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the System.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. The following section details the net income earned from securities lending for the fiscal year ended June 30, 2008:

Item	Earnings
Gross Earnings (Interest and fees)	$ 21,398,858
Less: Gross Borrower Rebates	19,301,308
Bank Fees	625,544
Net Earnings	$ 1,472,006

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. As of June 30, 2008 the loan average days to maturity was one (1) day and the weighted average investment maturity of cash collateral investments was one (1) day.

At fiscal year end, the System has no credit risk exposure to borrowers, since the amounts the System owes the borrowers exceeds the amounts the borrowers owe the System and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The System minimizes interest rate risk by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2008:

Type of Security Lent	Fair Value	Cash Collateral Received Non-cash Collateral Value*
U.S. Government and Agencies	$ 22,871,899	$ 23,269,578
U.S. Equities	209,961,719	217,369,158
Total	$ 232,833,618	$ 240,638,736

* *Represents value of cash collateral only. Loan or margin collateral requirements met via the use of non-cash collateral (e.g. Government securities or Letters of Credit) are excluded from these values.*

Note 6: Pension Plan for Employees of the System

Full-time employees of Kentucky Teachers' Retirement System (KTRS) participate in either KTRS or Kentucky Employees Retirement System. Both plans are multiple-employer cost sharing defined benefit pension plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for KTRS employee members for the fiscal years 2008, 2007 and 2006 were $413,492, $388,973, and $368,662 respectively. KTRS contributed 100% of the required contribution each year.

All other KTRS employees are covered under the Kentucky Employee Retirement System (KERS) in the Non-Hazardous Employees Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. The System's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS were required to contribute 5% of their annual creditable compensation for the fiscal years 2008, 2007, and 2006. As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2008, 2007 and 2006 were 8.5%, 7.75% and 5.89%; and the System's annual required contributions to KERS were $542,848, $114,711 and $103,137 respectively. KTRS contributed 100% of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: 403(b) Tax-Sheltered Annuity Plan

A. PLAN DESCRIPTION

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by

Note 7: 403(b) Tax-Sheltered Annuity Plan continued . . .

the System's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2008, the twenty-seven members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan, therefore, there are no receivables to be recognized.

Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

Note 8: Medical Insurance Plan & Post-Employment Benefits

A. PLAN DESCRIPTION

In addition to pension benefits described in Note 1, Kentucky Revised Statute 161.675 requires KTRS to provide post-retirement healthcare benefits to eligible members and dependents. The KTRS Medical Insurance benefit is a cost-sharing multiple employer defined benefit plan. Changes made to the medical plan may be made by the KTRS Board of Trustees, the Kentucky Department of Employee Insurance and the General Assembly.

To be eligible for medical benefits, the member must have retired either for service or disability. The KTRS Medical Insurance Fund offers coverage to members under the age of 65 through the Kentucky Employees Health Plan administered by the Kentucky Department of Employee Insurance. KTRS retired members are given a supplement to be used for payment of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the KTRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The Commonwealth of Kentucky bears no risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the KTRS Medicare Eligible Health Plan. KTRS bears the risk for actual drug claims cost in the Medicare Eligible Health Plan.

At June 30, 2008, KTRS insurance covered 32,164 retirees and 6,585 dependents. There are 199 participating employers and 75,539 active members contributing to the Medical Insurance Fund.

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Medical Insurance Plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due.

Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

C. CONTRIBUTIONS

The post-retirement healthcare provided by KTRS is financed on a pay-as-you-go basis. In order to fund the post-retirement healthcare benefit, one and five tenths percent (1.5%) of the gross annual payroll of all active members is contributed. One-half (1/2) of this amount is derived from member contributions and one-half (1/2) from state appropriation. Also, the premiums collected from retirees as described in the plan description and investment interest help meet the medical expenses of the plan.

Escalating medical expenses have made it increasingly difficult to meet the expenses of the retiree health insurance program. To further fund the plan, the state legislature has directed a portion of the state employer contribution in a sufficient amount to be allocated to the Medical Insurance Fund instead of the pension fund. The System actuary calculated those amounts to be $85,000,000 and $125,000,000 for fiscal years 2007 and 2008 respectively. Funds allocated to KTRS from the state general fund surplus for the fiscal year ended June 30, 2006 reduced the $85 million allocation to $73 million. The remaining balances are to be amortized over a period of 10 years. The Legislature appropriated $14,133,200 in fiscal year 2007-2008 and $28,487,400 in 2008-2009 to apply to amortization of the balances.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Medical Insurance Plan as of the most recent actuarial valuation date is as follows:

(Dollar amount in 1000's):

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (uaal)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2008	$ 185,883	$ 6,434,522	$ 6,248,639	2.9%	$ 3,190,332	195.9%

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedule of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the ARC, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methodologies and assumptions employed as of the June 30, 2008 valuation date include the following:

Actuarial cost method	Projected unit credit
Actuarial value of assets	Market value of assets
Assumed inflation rate	4.0%
Investment rate of return	4.5%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Healthcare trend rate	11.00%
Ultimate trend rate	5.00%
Year of Ultimate Pre-Medicare trend rate	2015

E. INCURRED BUT NOT REPORTED CLAIMS LIABILITIES

KTRS recognizes estimates of liabilities for self-insured unpaid claims that have incurred (both reported and unreported) using the development method. This method uses past observed patterns of time between the date the claim is incurred and the date the claim is paid

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

to estimate incurred claims from available paid claim information. The following schedule shows the change in the claims and liability and the claims activity for the years ended June 30, 2008 and 2007.

	Fiscal Year 2008	Fiscal Year 2007
Beginning Unpaid Claims Liability	$ 1,966,148	$ 7,580,738
Current Year Claims and Changes in Estimates	175,915,477	169,502,794
Claims Payments	(175,591,784)	(175,117,384)
Ending Unpaid Claims Liability	$ 2,289,841	$ 1,966,148

Note 9: Life Insurance Plan

A. PLAN DESCRIPTION

The System administers the Life Insurance Plan as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 199 participating employers. The benefit is $5,000 for members who are retired for service or disability, and $2,000 for active contributing members.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Life Insurance Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized in the fiscal year due.

Method Used to Value Investments

Life Insurance Plan investments are reported at fair value. The short-term securities are carried at cost, which approximates fair value. Fixed income is generally valued based on published market prices and quotations from national security exchanges and securities pricing services.

Note 9: Life Insurance Plan continued . . .

C. CONTRIBUTIONS

To finance the life insurance benefit a portion of the employer contribution rate is directed to the plan as recommended by the System's actuary. For fiscal years 2007 and 2008, this rate has been .17% of active members' payroll.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Life Insurance Plan as of the most recent actuarial valuation date is as follows:

(Dollar amounts in thousands)

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (uaal)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2008	$ 77,658	$ 84,265	$ 6,607	92.2%	$ 3,190,332	.21%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The required supplementary schedules following the notes to the financial section contain more actuarial information.

Significant actuarial methodologies and assumptions employed as of the June 30, 2008 valuation date include the following:

Actuarial cost method	Projected unit credit
Actuarial value of assets	Market value of assets
Assumed inflation rate	4.0%
Investment rate of return	7.5%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years

Note 10: Subsequent Event

Subsequent to the June 30 fiscal year end, the financial markets experienced an unprecedented decline in value. The markets are so dynamic and fluid any judgment of the financial statements must be based on current information rather than fiscal year end. To pick a point in time, as of September 30, the investment portfolio had declined $1.1 billion in value to $13.1 billion, excluding securities lending collateral.

Since June 30, 2008, the financial markets have continued to falter as a result of the

Note 10: Subsequent Event continued . . .

general lack of availability of credit. While the market value of KTRS' investments has been negatively affected by current perceptions of global economic conditions, it is management's view that our long-term time horizon, the diversification of our holdings, and present opportunities to acquire securities at discounts to intrinsic value, position the fund to recover when the economy turns around.

Required Supplementary Schedules

Defined Benefit Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2003	$ 13,863.8	$ 16,594.8	$ 2,731.0	83.5%	$ 2,497.7	109.3%
2004	14,255.1	17,617.6	3,362.5	80.8	2,641.5	127.3
2005	14,598.8	19,134.8	4,536.0	76.3	2,703.4	167.8
2006	14,857.6	20,324.7	5,467.1	73.1	2,859.5	191.2
2007	15,285.0	21,255.0	5,970.0	71.9	2,975.3	200.7
2008	15,321.3	22,460.3	7,139.0	68.2	3,190.3	223.8

The amounts reported in this schedule of funding progress do not include assets or liabilities for postemployment benefits, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Required Supplemental Schedule
Defined Benefit Plan
Schedule of Employer Contributions

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS	PERCENTAGE CONTRIBUTED
2003	$ 322,046,968	100 %
2004	364,351,412	100
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85
2008	563,789,483	78

Medical Insurance Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2003	$ 165.5	$ 2,886.0	$ 2,720.5	5.7%	$ 2,497.7	108.9%
2004	158.9	3,166.6	3,007.7	5.0	2,641.5	113.9
2005	147.3	4,763.9	4,616.6	3.1	2,703.4	170.8
2006	131.6	4,341.9	4,210.3	3.0	2,859.5	147.2
2007	140.8	5,928.8	5,788.0	2.4	2,975.3	194.5
2008	185.9	6,434.5	6,248.6	2.9	3,190.3	195.9

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Medical Insurance Plan
Schedule of Employers Contributions

Fiscal Year Ending Date	Annual Required Contribution (ARC) (a)	Actual Employer Contribution (b)	Retiree Drug Subsidy Contribution (c)	Total Contribution (b) + (c)	Percentage of ARC Contributed (b) + (c)
6/30/2007	$231,473,321	$113,258,761	$ 10,312,361	$123,571,122	53.40%
6/30/2008	395,282,164	148,954,644	11,911,565	160,866,209	40.70

Only two years of actuarial calculations of annual required contributions is available.

Life Insurance Plan
Schedule of Funding Progress
(dollar amounts in thousands)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2007	$ 71,426	$ 82,722	$ 11,296	86.3%	$ 2,975,289	0.38%
2008	77,658	84,265	6,607	92.2	3,190,332	0.21

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or medical insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Life Insurance Plan
Schedule of Employer Contributions

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS (ARC)	ACTUAL EMPLOYER CONTRIBUTIONS	PERCENTAGE OF ARC CONTRIBUTED
2007	$ 1,785,173	$ 5,022,137	281.3 %
2008	1,914,199	5,411,249	282.7

Required Supporting Schedules

Supporting Schedule 1

Schedule of Administrative Expenses
Year Ended June 30, 2008

Salaries	$ 5,455,683
Other Personnel Costs	546,347
Professional Services & Contracts	233,841
Utilities	79,592
Rentals	14,852
Maintenance	124,020
Postage & Related Services	311,616
Printing	143,783
Insurance	99,643
Miscellaneous Services	99,936
Telecommunications	27,685
Computer Services	49,344
Computer & Software Maintenance	65,671
Supplies	52,159
Depreciation	107,504
Travel	51,334
Dues & Subscriptions	31,833
Miscellaneous Commodities	11,903
Furniture, Fixtures, & Equipment not Capitalized	22,958
Compensated Absences	22,232
TOTAL ADMINISTRATIVE EXPENSES	**$ 7,551,936**

Schedule of Contracted Investment Management Expenses and Miscellaneous Expenses Year Ended June 30, 2008

BALANCED MANAGER		
Ft. Washington/Todd Investment Advisors		$ 1,375,000
FIXED INCOME MANAGERS		
Galliard Capital Management		478,847
EQUITY MANAGERS		
Baring Focused International	$ 138,412	
GE Asset Management Inc.	800,000	
UBS Global Asset Management Corporation	3,123,278	
Wellington Management Company, LLP	2,598,200	
Total Equity Managers		6,659,890
CUSTODIAN		
Farmers Bank		548,405
CONSULTANT		
Becker, Burke Associates		65,000
OTHER		
Private Equity		330,537
Misc Investment Expenses (noncontracted)		42,153
TOTAL CONTRACTED INVESTMENT MANAGEMENT EXPENSES		$ 9,499,832

Schedule of Professional Fees for Year Ended June 30, 2008

PROFESSIONAL	NATURE OF SERVICE	
Cavanaugh Macdonald Consulting	Actuarial Services	$ 180,835
Charles T. Mitchell Company	Auditing Services	29,600
Farmers Bank	Banking Services	14,314
International Claim Specialist	Investigative Services	3,252
Klausner & Kaufman	Attorney Services	3,050
Reed, Weitkamp, Schell & Vice	Attorney Services	2,790
	TOTAL	$ **233,841**

Charles T. Mitchell Co. LLP
Certified Public Accountants

William G. Johnson , Jr., C.P.A
James Clouse,C.P.A
Bernadette Smith, C.P.A
Kim Field, C.P.A
Greg Miklavcic, C.P.A
Don C. Giles, C.P.A, Consultant

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the financial statements of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2008, and have issued our report thereon dated December 11, 2008. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Teachers' Retirement System of the State of Kentucky's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the entity's ability to initiate, authorize, record, process, or report financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of the entity's financial statements that is more than inconsequential will not be prevented or detected by the entity's internal control.

A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the financial statements will not be prevented or detected by the entity's internal control.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Teachers' Retirement System of the State of Kentucky's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information and use of management and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

Charles T. Mitchell Co.

Frankfort, Kentucky
December 11, 2008

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Investment Section

for Fiscal Year ending June 30, 2008

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Kentucky Teachers' Retirement System.

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

INVESTMENT COMMITTEE

Mr. Robert M. Conley
Chairman

Mr. Ronald L. Sanders
Vice-Chairman

Mr. Gary L. Harbin, CPA
Member

EXECUTIVE INVESTMENT STAFF

Mr. Gary L. Harbin, CPA
Executive Secretary

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Becker, Burke Associates
Incorporated

Suite 1000
221 North LaSalle Street
Chicago, Illinois 60601
312/782-5665
fax 312/782-6904

October 10, 2008

Mr. Paul Yancey
Chief Investment Officer
Kentucky Teachers' Retirement System
477 Versailles Road
Frankfort, KY 40601

Dear Mr. Yancey:

Becker, Burke Associates served as Investment Consultant to the Kentucky Teachers' Retirement System during the 2007-08 fiscal year, as it has in several previous years. Becker, Burke Associates is familiar with the operation of the System's investment program as well as its performance. The investment program of the Retirement System is operated in a prudent manner that reflects a desire to preserve capital while optimizing the reward/risk characteristics. The assets of the Retirement System are assigned to various investment managers in order to diversify the System's investments and take advantage of opportunities in numerous asset classes and sectors.

During the fiscal year, the System continued to make progress toward its goal of further diversifying the assets in order to enhance the expected reward/risk characteristics of the Plan. The System increased its exposure to international equity, small and mid-cap equity, real estate, and alternative investments. Going forward, the shift in asset allocation will continue to progress in a consistent and prudent manner. This will ensure that sound decisions are being made and will limit the risk of poor timing.

Very truly yours,

Howard H. Pohl
President, Becker, Burke Associates

INVESTMENT POLICY SUMMARY

The KTRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principals that guide investment-related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the System. This broad summary is a reference point for management of System assets and outlines KTRS' investment philosophy and practice.

INVESTMENT OBJECTIVES

KTRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn, this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them.

Generally, the System's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, KTRS holdings can withstand some short-term volatility. The System's long-term investment objective is to achieve an annualized rate of return of 7.5%. For the twenty year period ended June 30, 2008, the System's annualized return was 8.6%, well ahead of the long-term investment objective.

RISK CONTROLS

The KTRS investment program faces numerous risks; however, the primary risk to KTRS is that the assets will not support liabilities over long periods of time. In order to control this risk and numerous other risks, the board has taken the following steps, on an ongoing basis, to help control risk:

- Actuarial valuations are performed each year to evaluate the funding objectives of the System. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the System.
- Asset/liability studies are conducted, at a minimum, every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the System.
- The KTRS investment committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

ASSET ALLOCATION

The System undertakes asset/liability studies every five years. In addition, the System's investment consultant, on an annual basis, presents to the Investment Committee target percentages and ranges for the System's various asset classes. Annually approved asset allocation parameters serve to balance the System's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The System's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the System's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as fixed employer contributions, the non-participation of members in Social Security, liability requirements, level of funding, and statutory investment restrictions are important considerations within the context of the asset allocation decision making process. Consequently, asset allocation comparisons between various pension plans may be quite different.

The following information reflects the System's asset allocation by market value as of June 30, 2008, and June 30, 2007, as well as the target and strategic range for each asset class for Fiscal Year 2008.

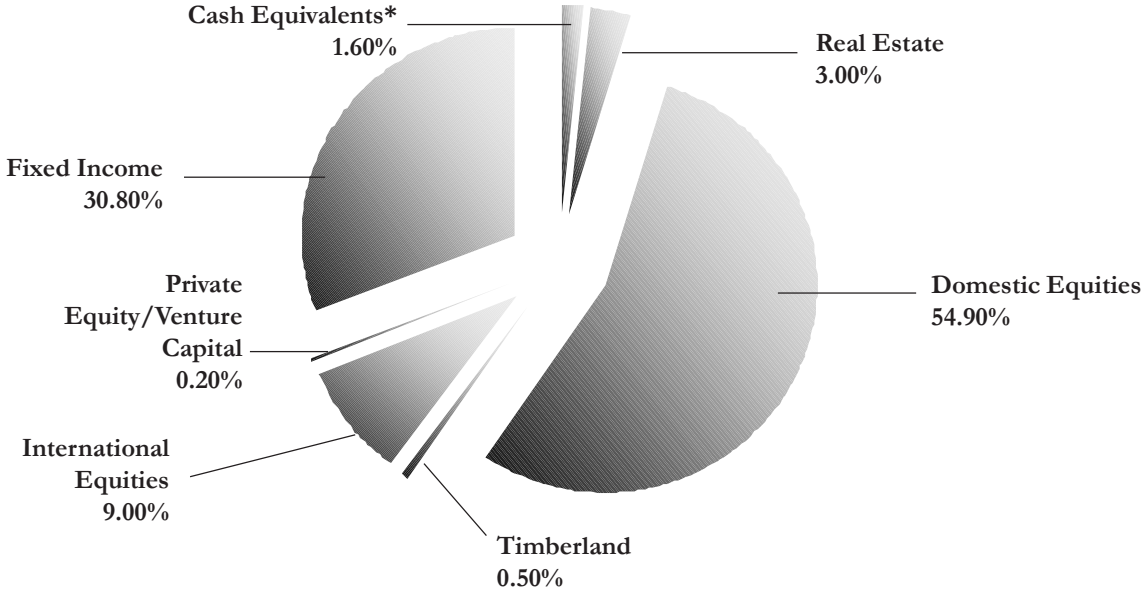
	6-30-2008	%	6-30-2007	%
Cash Equivalents *	$ 221,260,264	1.6	$ 454,641,986	2.9
Fixed Income **	4,381,342,566	30.8	4,523,620,912	29.1
Domestic Equities	7,815,837,500	54.9	9,133,172,818	58.8
International Equities	1,278,613,411	9.0	1,039,849,210	6.7
Real Estate	431,693,774	3.0	381,693,796	2.5
Private Equity	28,791,613	0.2	5,074,147	0.0
Timberland	75,995,962	0.5	-0-	0.0
Totals	$ 14,233,535,090	100.0	$ 15,538,052,869	100.0

* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

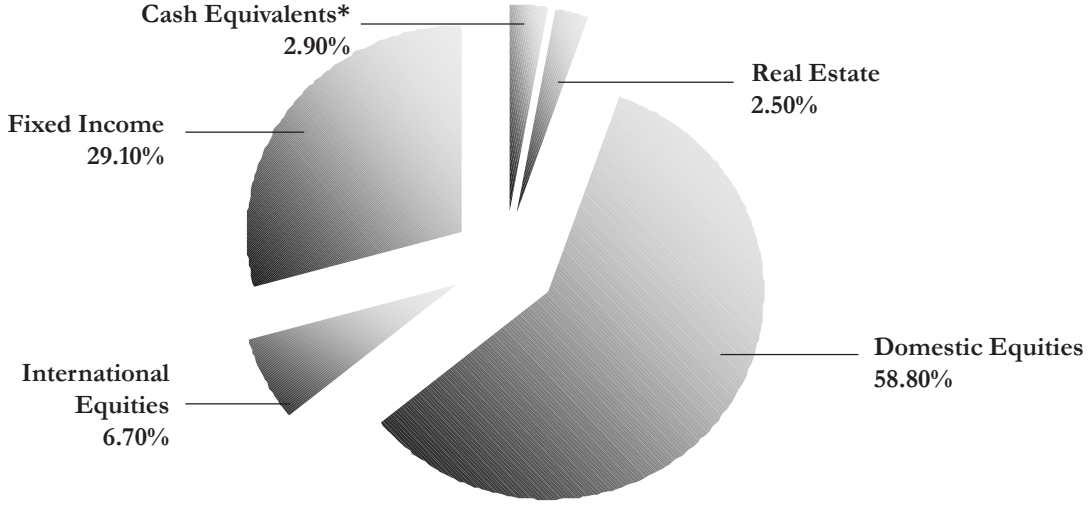
** Excludes purchased interest of $273,868 as of June 30, 2008.

Distribution of Investments
Market Values

June 30, 2008



June 30, 2007



* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2008 (Mkt)
Cash		1-4%	1.0%	1.6%
Fixed Income		25-32	28.0	30.8
Government/Agency/Other	Unlimited			17.6
Corporate	35%			13.2
Equity	65%	50 - 65	65.0	63.9
Domestic Large Cap		40 - 50	49.0	48.1
Domestic Mid/Small Cap		5 - 10	7.0	6.8
International		5 - 10	9.0	9.0
Real Estate	10%	2 - 5	4.0	3.0
Alternative Investments*	10%	0 - 2	2.0	0.7
Additional Categories	10%		0.0	0.0
TOTAL			**100.0%**	**100.0%**

This weighting reflects cash with manager in the manager's asset class.

* Alternative Investments includes Private Equity, Timberland, Venture Capital and Infrastructure investments.

PORTFOLIO RETURNS

The System's portfolio generated a total return of -5.7% for the fiscal year ended June 30, 2008 in a difficult and volatile period in the financial markets. Domestic equities returned -12.5% versus -12.7% for the Standard & Poor's (S&P) 1500, while fixed income returns matched those of the Lehman Government/Credit Index at 7.2%. International equities returned -11.3% versus -10.2% for the MSCI EAFE Index. For one, five, ten, and twenty year periods ended June 30, 2008, the portfolio's domestic equity and fixed income components have matched or exceeded their benchmarks. For the twenty-year period ended June 30, 2008, the total fund's annualized return was 8.6%, well ahead of the actuarial assumed rate of return of 7.5%. The System's returns were generated by the Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology. The table below outlines historical performance for the total fund and its component asset classes.

	1 Yr	3 Yr	5 Yr	10 Yr	20 Yr
KTRS Total Fund	-5.7	4.7	6.2	4.6	8.6
Allocation Index*	-5.9	4.8	6.0	4.8	8.2
Total Domestic Equity	-12.5	4.5	8.0	3.6	11.1
S&P Blended Index **	-12.7	4.6	7.7	2.9	10.5
Total International Equity	-11.3	—.-	—.-	—.-	—.-
MSCI EAFE	-10.2	—.-	—.-	—.-	—.-
Total Fixed Income	7.2	4.0	3.8	5.8	7.5
Lehman Government/ Credit Index	7.2	3.8	3.6	5.7	7.4
Real Estate Equity	7.8	9.1	9.3	9.1	8.6
CPI plus 2%	6.9	5.9	5.5	5.0	5.2
Short Term Investments	4.1	5.4	3.9	4.0	5.1
90 day Treasury Bill	3.6	4.2	3.1	3.6	4.4

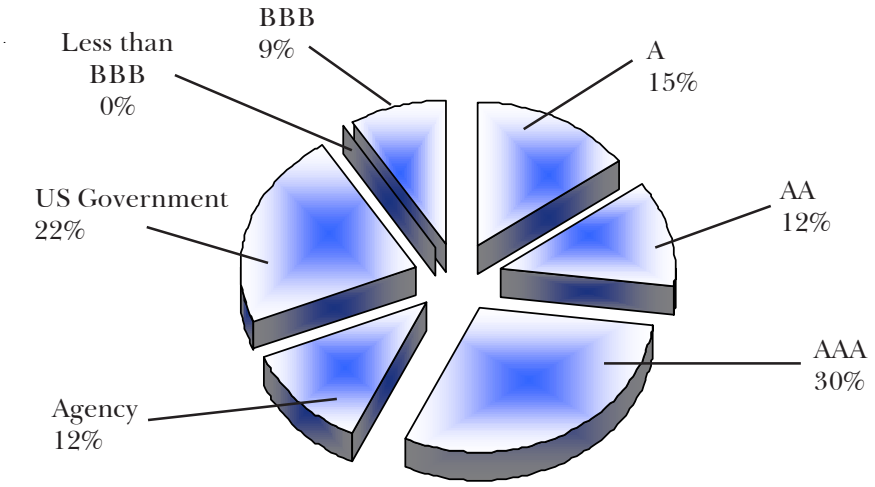
* The Allocation Index is based on the System's asset class breakdown for each of the last 20 years.
All stock allocations are benchmarked to the S&P 500.
All fixed income allocations are benchmarked to the Lehman Government/Credit Index.
All Short Term allocations are benchmarked to the 90 day Treasury Bill.
All Real Estate allocations are benchmarked to the CPI plus 2%.

** Total Domestic Equity through the fiscal year ending 6/30/07 was benchmarked to the S&P 500. As of 7/01/08 the domestic stock mix is most comparable to the S&P 1500 index. The S&P Blended Index is made up of S&P 500 returns through fiscal year ending 6/30/07 and the S&P 1500 returns for the last fiscal year.

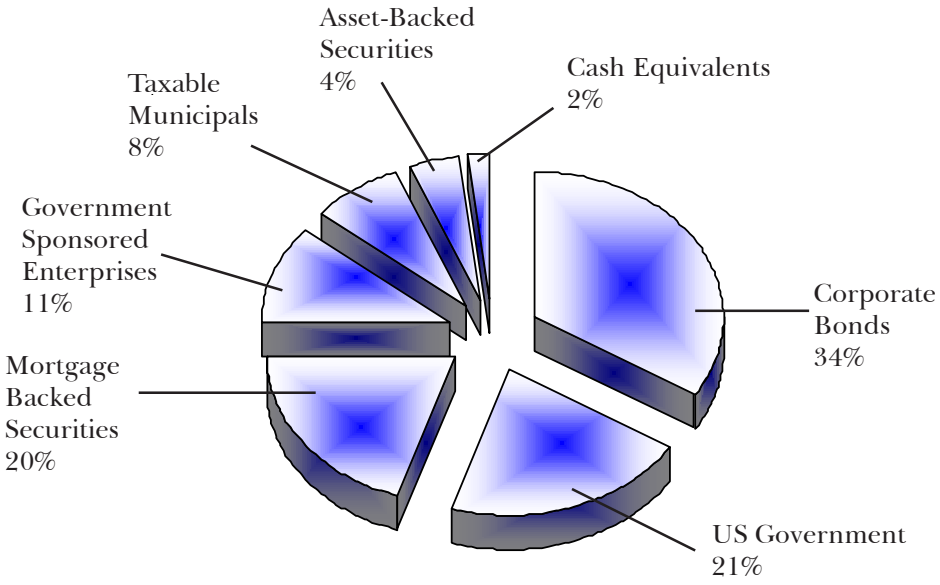
FIXED INCOME INVESTMENTS

As of June 30, 2008, the System had approximately $4.4 billion in fixed income assets, or 30.8% of total assets. Over $2.5 billion was managed internally with the remainder, or about $1.84 billion, managed by two external managers. The System's investment policy established by administrative regulation requires that all fixed income investments be rated investment grade at the time of purchase by one of the major rating agencies. The regulation further requires that the fixed income portfolio as a whole maintain an average rating equal to at least "AA" by one of the major rating agencies.

FIXED INCOME QUALITY DISTRIBUTION



FIXED INCOME SECTOR DISTRIBUTION



FIXED INCOME MARKET OVERVIEW

The credit markets remained in turmoil throughout the fiscal year. A collapse in the subprime mortgage market and related investment vehicles led to massive writedowns and a crisis of confidence throughout the financial system beginning in the summer of 2007, which threatened the vital flow of liquidity. Interbank lending rates rose dramatically as did yields on all but U.S. government debt, as liquidity threatened to grind to a halt.

The Federal Reserve responded aggressively, taking various unconventional actions to restore liquidity and confidence, including opening its discount window lending facility to nonbank financial institutions. The Fed also made seven progressive moves, lowering the federal funds rate from 5.25% in September, 2007 to 2.00% on April 30, 2008. Despite all this, investment bank Bear Stearns suffered a liquidity crisis in March, 2008 and was forced into a Fed-assisted takeover by J.P. Morgan.

Through the middle of 2008, the credit crisis showed no signs of abating. The underlying housing downturn persisted. As of June, 2008, home prices nationally had declined 18% from their peak in June 2006, according to the S&P/Case-Shiller Index. Delinquencies and foreclosures were soaring even on prime mortgages. An alarming inventory of unsold homes portended further declines in prices.

The problems went beyond housing, however, as the tightness of credit itself was exacerbating underlying economic weakness and threatening a more generalized downward spiral of credit deterioration. Non-farm payrolls steadily declined through the first half of 2008 and the unemployment rate crept up to 5.5% in June, 2008 from a low of 4.4% in March, 2007. Oil prices rose from about $70 per barrel at the end of June, 2007 to $140 on June 30, 2008, putting further stress on the consumer.

This environment led to an extraordinary surge in volatility in the fixed income markets as well as extreme divergences in the relative performance of various sectors. In general, there was a flight to the safety of U.S. Treasuries, producing higher prices and lower yields. The reverse was true in many other sectors, however, as risk aversion was the driving force. Broad indices which carry heavy weightings of U.S. Treasury securities produced solid returns. The Lehman Government/ Credit Index returned 7.24% for the fiscal year. Below the surface, the divergences were remarkable. U.S. Treasuries returned 10.33% while investment grade corporate bonds overall returned only 2.95%. Investment grade financial institution bonds returned only 0.65%. Asset-backed securities returned -2.08%, below investment grade corporates overall returned -2.26%, and below investment grade financial institutions returned -17.10%. Agency-backed mortgages performed relatively well, returning 7.92%

As the fiscal year came to an end, the credit markets and financial system overall remained under stress. Economic conditions were weak both domestically and globally. The Fed appeared unlikely to raise short term rates in the foreseeable future. Inflation concerns, driven primarily by energy and other commodity prices, appeared to be receding. The good news was that the turmoil had driven yield premiums over safe Treasury securities quite high, even for high quality fixed income securities. There were opportunities for patient investors. Caution remained in order, however, as market turmoil and continued credit deterioration remained a concern.

EQUITY INVESTMENTS

The System's public equity investments had a market value of $9.1 billion as of June 30, 2008, representing 63.9% of total assets. Public equities remained close to the 65% target throughout the fiscal year. The System divides its public equity investments into two broad categories: domestic and international.

The domestic portfolio had a market value of $7.8 billion as of June 30, representing 54.9% of total assets. The domestic portfolio is benchmarked to the S&P 1500 Index. The S&P 1500 is composed of three well-known component indices based upon capitalization: the large cap S&P 500, the mid cap S&P 400, and the small cap S&P 600. The System's domestic equity holdings are divided into eleven portfolios. Three are internally managed index funds benchmarked to the S&P 500, S&P 400, and S&P 600, respectively. Eight other portfolios are externally managed, with each representing a specific capitalization universe and style or strategy; each is compared to an appropriate benchmark. The collective array of portfolios provides diversification by capitalization, manager, style, and strategy.

International equity holdings had a market value of $1.3 billion as of June 30, representing 9.0% of total assets. International equities are benchmarked against the Morgan Stanley Capital International (MSCI) EAFE (Europe, Australasia, Far East) Index, which represents the markets of twenty-one developed countries. The System's international equity holdings are managed by four external managers. Through much of the fiscal year, the percentage of total assets invested in international equity was 7.5%. In early May, two new international managers, Baillie Gifford and Baring Asset Management, were hired, bringing the international exposure up to the 9.0% level. It is expected that the level of investment in international equity will continue to increase during the coming fiscal year. While international equity holdings are benchmarked against the EAFE Index, which includes only developed country equities, the individual managers are allowed strategic exposure to emerging markets on a limited basis.

EQUITY MARKET OVERVIEW

The fiscal year was a difficult one for equity investors. Equity markets all over the world suffered as the MSCI World Index declined -10.2%. The domestic market fared a bit worse, as the S&P 1500 fell -12.7%. International developed markets, as measured by the MSCI EAFE Index, had a decline of -10.2%. Emerging markets, however, bucked the trend as the MSCI Emerging Markets Index rose 4.9%. This marked the fifth straight fiscal year that international equity returns, as measured by the EAFE Index, have exceeded domestic S&P 1500 returns.

Domestic stocks suffered their first decline in several years as the fallout from a weak housing market and associated mortgages forced large financial institutions to take huge writedowns related to mortgage securities. This led to the stunning collapse of Bear Stearns and its acquisition by J.P. Morgan in March. The damage was not limited to domestic financial institutions as many large international institutions also held securitized securities backed by assets in the U.S. Rising energy prices were largely attributed to increased incremental demand from China and India coupled with OPEC's inability to increase supply. Demand from India and China was also blamed for generally higher commodity prices, especially metal prices. The Commodities Research Bureau (CRB) Index, a broad measure of commodities prices, rose 47% over the fiscal year. The combination of falling home prices and rising energy costs led to a drop in consumer confidence and pressured consumer spending. The University of Michigan's Consumer Sentiment Index fell to its lowest level in almost thirty years. Toward the end of the fiscal year, many investors worried

about inflation as commodity prices continued to remain high, the dollar reached new lows, and the Federal Reserve had aggressively cut rates to bolster the financial system.

Within the capitalization segments of the S&P 1500, the mid cap S&P 400 was the best performer with a decline of -7.3% compared with the large cap S&P 500 return of -13.1% and the small cap S&P 600 at -14.7%. For the past five years, the returns of small and mid cap domestic stocks have exceeded those of the larger cap stocks in the S&P 500. This past year, growth stocks within the S&P 500 outperformed value stocks by over 10%. This marked the first time in the last five years that growth stocks have registered better returns than those of value stocks. Sector allocation was a far more important determinant of the relative performance of various indices and portfolios over the fiscal year than capitalization or style. Within the S&P 1500, the energy sector had a positive return of 27.6%, while the financial sector had a decline of -41.0%.

The domestic market peaked in October, 2007, and began a five month decline into the following March as the combination of higher energy prices and credit market woes continued to plague the market. The market reached a climactic bottom in March when Bear Stearns collapsed. After the Bear Stearns collapse, the market rallied into mid-May as investors believed that the worst of the financial institutions' problems were past. The S&P 1500 suffered a 10% drop from the middle of May to the end of June as oil prices rose and financial institutions continued to write down assets and raise capital.

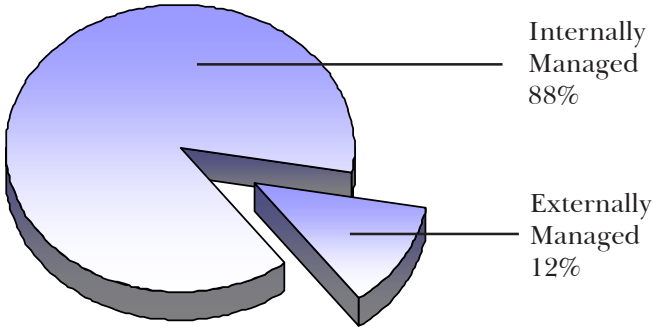
The international equity markets were affected by several of the same factors affecting the domestic markets, namely higher energy prices and asset writedowns at large financial institutions. The pattern of returns for the EAFE Index closely mirrored that of the domestic market. The course was somewhat different, however, for emerging markets. The MSCI Emerging Markets Index, made up of twenty-five less developed countries, returned 4.9% for the fiscal year. Over the past five years, the emerging markets have produced an annualized return of 30.2% versus 17.2% for the developed markets EAFE Index. The emerging markets offer additional diversification benefits, as they are not as correlated with the domestic equity market as the EAFE, but they are more volatile due to less developed economies and are subject to more political instability.

REAL ESTATE

The System's real estate investments had a market value of $431.7 million as of June 30, 2008, representing 3.0% of total assets. The System's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow, and provide diversification, thereby reducing the volatility of the overall investment portfolio.

The System's real estate exposure is currently provided through two portfolios. The System maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high credit quality tenants. The System is also invested in a commingled real estate fund (PRISA Fund), which is managed by Prudential Real Estate Investors. This Fund is a core real estate equity fund which invests primarily in existing income-producing properties with strong cash flow and the potential for capital appreciation. The Fund is diversified across several property types including office, retail, industrial, apartment, self-storage, and hotel.

Real Estate Investments
June 30, 2008
$431.7 Million Market Value



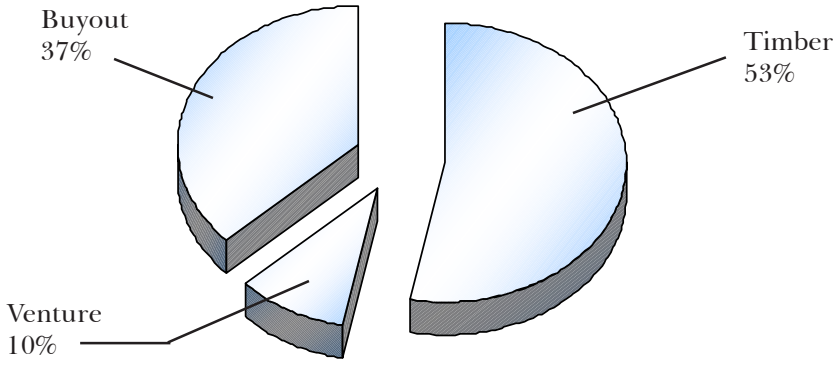
REAL ESTATE OVERVIEW

During the fiscal year, the softening economy and turbulence in the broader capital markets took a toll on commercial real estate markets nationally. Generally, most markets experienced slower leasing activity, declining occupancy levels, and downward pressure on rents. Many economists are predicting continued weakness in the real estate market going into 2009. This slowdown in the real estate market may well provide an opportunity for investors as property prices come down from the historic highs of recent years. The System will look for opportunities to strategically increase commercial real estate exposure over the next 12 to 24 months.

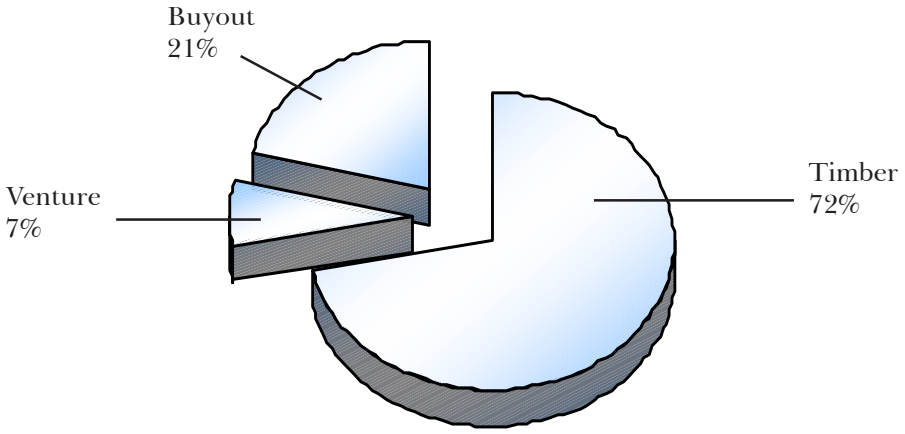
ALTERNATIVE ASSETS

As of June 30, 2008, the System had committed $375 million to alternative investments and had funded $106 million of those commitments. The percentage of the System's portfolio in alternative assets was 0.7%. The System's current alternative assets portfolio consists of private equity investments (both venture capital and buyout) and timberland.

Alternative Assets Committed
$375 Million as of June 30, 2008



Alternative Assets Funded
$106 Million as of June 30, 2008



PRIVATE EQUITY

The System has gained exposure to both venture capital and buyouts via direct participation in limited partnerships as well as investment in a fund of funds. The System is in the initial stages of its private equity investment program, which it intends to grow with a disciplined plan of commitments over the next several years. The System looks to diversify its private equity portfolio by firm, country, strategy, and vintage year. The System will achieve vintage year diversification by building out the portfolio with disciplined levels of commitment over time. The System's commitment to any given partnership shall not exceed 20% of that partnership's total commitments.

The Board and the staff understand that private equity (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with other publicly traded assets, this asset class can help to diversify and reduce risk for the System's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence.

PRIVATE EQUITY MARKET OVERVIEW

The boom in private equity buyouts evaporated beginning in the summer of 2007 as financing for deals dried up with the onslaught of the credit crunch. By the summer of 2008, the credit crisis had only intensified and the drought of deal-making continued. Venture firms, meanwhile, were more focused on keeping their businesses afloat as economic growth stagnated, particularly in the industrialized world. However, the most nimble private equity firms were finding opportunities in this environment as many institutions were raising capital through the liquidation of assets at significantly reduced prices. As financial conditions around the world begin to recover, the expectation would be to see more private equity transactions, although with less leverage than in the past.

TIMBERLAND

In addition to private equity, the System has invested in timberland in the alternative asset classification. As of June 30, 2008, the System owned approximately 68,000 acres of timberland. Timberland is, by nature, a long term investment as our anticipated time horizon in this asset category is generally a minimum of ten to fifteen years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the System's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long-term.

The System diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are primarily derived from net cash flow generated from the sale of trees (referred to as stumpage sales) and capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of forest commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland and from the conversion of timberland into higher and better uses, such as vacation property sales.

TIMBER MARKET OVERVIEW

Increases in the US population, income, and economic activity have been strong forces in the growth of demand for timber products. Recently however, the deteriorating US housing market and overall weak US economy have served to dampen demand, putting downward pressure on timber prices. Over the next five to ten years, a shrinking supply of timber from the southern US due to suburbanization, increased demand due to a recovering housing sector, and the growth of wood as an energy source are expected to put upward pressure on timber prices.

PORTFOLIOS
MARKET VALUES **
June 30, 2008

Internally Managed

Cash Equivalents	
Cash Collections Fund	$ 221,260,264
Fixed Income *	
Broad Market Bond Fund	1,115,677,243
Long Term Bond Fund	635,645,904
Intermediate Bond Fund	490,318,668
Internal Bond Fund	220,257,298
Life Insurance Trust (Retired)	74,411,759
Life Insurance Trust (Active)	1,849,400
Tax Shelter Fund	499,048
Scholarship Fund	487,255
Equity	
S&P 500 Index Fund (Large Cap)	2,931,555,579
S&P 400 Index Fund (Mid Cap)	335,002,746
S&P 600 Index Fund (Small Cap)	236,929,479
Real Estate	
Internally Managed Fund	381,693,775
Subtotal	**6,645,588,418**

Externally Managed

Fixed Income	
Galliard Capital Management	864,895,117
Ft. Washington Broad Market	748,040,818
Ft. Washington Bond Index Plus	229,260,056
Domestic Equity:	
Todd Investment Advisors (Large Cap Core)	1,517,820,961
UBS (Large Cap Value)	1,049,211,913
GE Asset Mgmt. (Large Cap Growth)	645,725,658
Wellington (Large Cap Core)	557,192,302
Wellington (Mid Cap Core)	261,154,364
Wellington (Small Cap Core)	132,405,825
UBS (130/30)	102,998,957
Todd Opportunity Fund	45,839,716
International Equity:	
Todd International	507,654,384
UBS International	488,863,416
Baring Focused International Equity	143,997,345
Baillie Gifford EAFE Alpha	138,098,265

contintued ...

PORTFOLIOS
(CONTINUED)
JUNE 30, 2008

Real Estate:		
Prudential PRISA Fund	$	50,000,000
Alternative Investments		
Molpus Woodlands Group		
Lake Superior Timberlands LLC		75,995,962
KKR 2006 Fund		17,950,175
Chrysalis Venture Fund III		5,197,590
Fort Washington Private Equity Fund V		3,399,859
KKR European Fund III		2,243,989
Subtotal		**7,587,946,672**
Total Assets		**$ 14,233,535,090**

* *Excludes purchased interest of $273,868 as of June 30, 2008.*
** *Detailed information concerning these market values of all KTRS investments is available upon request.*

Investment Summary
Fair Market Value
06/30/2008

Type of Investment	Fair Value 07/01/07	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/08
Cash Equivalents	$ 566,457,900	$ 34,570,107,000	$ 8,107,600	$ 34,755,900,000	$ 388,772,500
Fixed Income	4,470,207,000	1,714,491,300	91,998,500	1,997,522,600	4,279,174,200
Equities	10,114,620,000	2,886,215,100	(1,431,996,400)	2,539,457,900	9,029,380,800
Real Estate	381,693,800	50,000,000	0	0	431,693,800
Alternative	5,074,200	102,207,500	(1,227,900)	1,266,200	104,787,600
TOTAL	**$ 15,538,052,900**	**$ 39,323,020,900**	**$ (1,333,118,200)**	**$ 39,294,146,700**	**$ 14,233,808,900**

Contracted Investment Management Expenses
Fiscal Year 2007-08
(in thousands of dollars)

Investment Manager Fees	Assets Under Management	Expense	Basis Points (1)
Fixed Income Manager(s)	$ 864,895	$ 384	
Equity Manager(s)	3,519,648	6,801	
Balanced Manager	3,048,616	1,375	
Private Equity Fees (2)	104,788	1,084	
Total	$ 7,537,947	$ 9,644	12.8
Other Investment Services			
Custodian Services	$ 14,233,535	$ 548	0.4
Investment Consultant		65	
Legal & Research Fees		37	
Total		650	
Grand Total		$ **10,294**	**7.2**

1 – One basis point is one hundredth of one percent or the equivalent of .0001.
2 – Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms. This schedule includes fees withheld from fund operations.

Transaction Commissions

Fiscal Year 2007-08

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
AG Edwards	5,000	200.00	0.0400
B Trade Services	6,900	34.50	0.0050
Bank of America	275,430	11,526.70	0.0418
Bass Trading	33,400	774.00	0.0232
Bear Stearns & Co Inc	182,560	7,629.50	0.0418
Blair William & Co	2,000	80.00	0.0400
BMO Capital Markets	2,500	125.00	0.0500
BNY Brokerage / LJR	2,442,300	97,692.00	0.0400
Boenning & Scattergood	159,000	3,577.50	0.0225
Canacord Adams	50,400	2,016.00	0.0400
Cantor Fitzgerald & Co	97,600	3,859.00	0.0395
CIBC Oppenheimer Worldmarket	30,570	4,260.80	0.1394
Citigroup Global	1,510,116	70,038.56	0.0464
Citigroup-Huntington	4,047,700	161,908.00	0.0400
Citigroup-Louisville	4,080,455	163,218.20	0.0400
Cowen & Co	71,200	2,848.00	0.0400
Credit Suisse Sec LLC	2,801,901	111,050.42	0.0396
Crowell Weedon & Co	52,011	2,080.44	0.0400
Deutsche Bank	100,700	7,254.40	0.0720
Fidelity Capital Markets	9,800	286.50	0.0292
First Kentucky Securities Corp	3,249,729	129,989.16	0.0400
Fox Pitt Kelton Inc	16,000	640.00	0.0400
Freidman Billings	126,645	3,563.80	0.0281
FTN Financial	5,500	220.00	0.0400
Goldman Sachs	5,367,884	180,430.71	0.0336
Heflin & Co	60,600	2,279.00	0.0376
Howe Barnes Investment	12,475	499.00	0.0400
Imperial Capital	21,000	840.00	0.0400
Instinet	51,800	1,056.75	0.0204
Investment Tech Grp Transition	3,178,000	23,835.03	0.0075
Investment Technology Grp	33,409,132	587,764.05	0.0176
ISI Group	4,075,700	163,028.00	0.0400
Jefferies & Co	3,763,359	148,399.61	0.0394
JJB Hilliard WL Lyons	3,965,100	158,604.00	0.0400
JMP Securities	33,800	1,047.00	0.0310
Jones & Associates	38,210	1,528.40	0.0400
JP Morgan & Chase	126,600	13,969.62	0.1103
Keefe Bruyette & Woods	14,488	624.52	0.0431
Knight Equity Markets	159,369	5,166.06	0.0324
Lazard Freres & Co	5,727,900	229,116.00	0.0400
Lehman Brothers	5,214,076	227,438.16	0.0436
Lexington Investment Co	1,569,012	62,760.48	0.0400
Liquidnet Inc	1,962,143	38,147.86	0.0194
Merrill Lynch	8,233,638	198,511.85	0.0241

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
Morgan Keegan	3,173,800	126,952.00	0.0400
Morgan Stanley	6,546,293	242,841.69	0.0371
Murphy & Durieu	30,400	684.00	0.0225
Needham	8,700	348.00	0.0400
OTA Limited Partners	1,800	72.00	0.0400
Pipeline Trading	1,100	16.50	0.0150
Piper Jaffray	31,400	2,330.00	0.0742
Pulse Trading	33,950	763.88	0.0225
R W Baird	84,375	3,375.00	0.0400
Raymond James & Assoc	6,528,850	261,191.25	0.0400
RBC Capital Markets	11,600	464.00	0.0400
Robbins & Henderson	4,300	96.75	0.0225
Ross Sinclaire & Assoc	2,422,200	96,888.00	0.0400
Sandler O'Neill	44,600	1,784.00	0.0400
Sanford C Bernstein	22,300	367.00	0.0165
SG Cowen	3,900	156.00	0.0400
Source Trading	26,500	596.25	0.0225
State Street Global	93,300	2,799.00	0.0300
Sterne Agee & Leach	5,300	212.00	0.0400
Stifel Nicolaus & Co	3,151,200	126,048.00	0.0400
Suntrust Robinson	4,000	160.00	0.0400
Thomas Weisel Partners	17,000	703.00	0.0414
UBS/Paine Webber Securities	5,721,857	104,092.33	0.0182
UBS/Paine Webber-Louisville	7,186,800	287,472.00	0.0400
Wachovia / First Clearing Corp	193,835	7,753.40	0.0400
Wedbush Morgan Securities	2,200	88.00	0.0400
Weeden & Co	4,068,716	162,748.64	0.0400
Grand Total	**135,763,979**	**4,260,921.27**	**0.0314**

The over-the-counter commission rate on medium to large capitalization stocks is assumed to be $.04 per share. The acquisition of initial public offerings (IPOs) represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate. However, the security issuers and not the investors pay the commissions. In 2007-08, the System bought small capitalization IPOs that generated $122,317.53 in commissions. Although these commissions were not paid by the Retirement System, they resulted from the System's investment activities and are included in the total commissions of $4,260,921.27. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.03 per share or less. Investment companies usually provide investment research for brokerage clients. On occasion, investment companies direct third party research to active clients. The Retirement System received third party research through Lynch Jones Ryan, Merrill Lynch and Lehman Brothers. Trading commissions of $97,692.00 were associated with third party research obligations. The primary research providers were: Bloomberg, Interactive Data, Rogers Casey, RiskMetrics Group, QED Financial Systems, and Thomson Financial.

Ten Largest Stock Holdings Ranked (1) (2)
by Market Value
06/30/08

Rank	Name	Market Value	Percentage of Equities
1	Microsoft	168,279,825	2.062
2	Exxon Mobil Corp	148,957,326	1.825
3	General Electric	127,243,881	1.559
4	Chevron Corp	121,034,459	1.483
5	A T & T	108,320,122	1.327
6	ConocoPhillips	103,125,039	1.263
7	Intel Corp	99,282,708	1.216
8	Cisco Systems Inc	95,772,655	1.173
9	Qualcomm Inc	94,839,544	1.162
10	AFLAC Inc	87,262,672	1.069

Top Ten Fixed Income Holdings (2)
by Market Value
06/30/08

Rank	Description	Maturity	Coupon	Par	Market Value	Percent of Fixed Income
1	U S Treasury Bonds	08/15/23	6.250	102,000,000.00	121,356,540.00	2.836
2	U S Treasury Notes	04/30/12	4.500	75,555,000.00	79,202,795.40	1.851
3	U S Treasury Notes	05/15/15	4.125	53,000,000.00	54,768,080.00	1.280
4	FNMA Notes	11/15/21	5.625	54,000,000.00	54,759,240.00	1.280
5	U S Treasury Bonds	02/15/21	7.875	33,500,000.00	44,664,880.00	1.044
6	U S Treasury Bonds	08/15/21	8.125	29,815,000.00	40,732,358.55	0.952
7	U S Treasury Bonds	08/15/29	6.125	30,000,000.00	36,185,100.00	0.846
8	U S Treasury Bonds	11/15/26	6.500	29,000,000.00	35,848,930.00	0.838
9	U S Treasury Bonds	05/15/16	7.250	27,500,000.00	33,788,425.00	0.790
10	FNMA Notes	01/15/30	7.125	25,000,000.00	31,172,000.00	0.729

(1) Includes only actively managed separate accounts
(2) Detailed information concerning these values along with book values and cost values of all KTRS investments is available upon request.

PROXY VOTING AND CORPORATE BEHAVIOR

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The Board has adopted the following position on corporate behavior:

The Board's stated fiduciary duty is to obtain the highest return for the Fund commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the Fund as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the Fund has invested.

The Board expects the managements of the companies whose equity securities are held in the Fund's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the Board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the Board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission, and others which are covered by the laws of the United States Government or the State of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the System's holdings in the company, if the sale is consistent with sound investment policy.

SECURITY LENDING

The System operates a security lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and selected domestic stocks and bonds are the types of securities lent. The System's sub-custodian, The Bank of New York Mellon, acts as ending agent in exchanging securities for collateral. The collateral, at the time of the loan, has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral consists of cash, marketable U.S. Government securities, and selected marketable U.S. Government agency securities approved by the System.

Cash collateral is invested in short term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities unless the borrower defaults. The lending agent also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. The weighted average maturity of cash collateral investments is typically two days. The System has no credit risk exposure to borrowers, since the amounts the System owes borrowers exceeds the amounts the borrowers owe the System.

Security lending programs can entail considerable interest rate risk and credit risk. The System has structured its program to minimize these two main categories of risk. The interest rate risk is managed, as mentioned above, by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the creditworthiness of lent securities.

KENTUCKY INVESTMENTS

The System is ever mindful of its impact on the Commonwealth's economy. For the fiscal year ended June 30, 2008, approximately $1.3 billion in defined benefit pension payments were distributed to annuitants living in Kentucky. Approximately $330 million of the System's investments directly impact the Commonwealth. These investments include: pools of single-family mortgages in Kentucky; financing for multi-family housing; bonds issued by public agencies of the Commonwealth and those of local municipalities; direct ownership of commercial real estate, and; investments in the bonds of Kentucky-based corporations. This excludes hundreds of millions in equity investments in companies which have an impact on the Commonwealth's economy but receive earnings from world-wide operations. Fiduciary duty requires that investments be made solely for the benefit of the System's members and annuitants. Investments which benefit the Commonwealth's economy are made only when fully consistent with this fiduciary duty.

PROFESSIONAL SERVICE PROVIDERS

Investment Consultants
Becker, Burke Associates, Inc.
Ennis Knupp + Associates

Investment Custodian/Subcustodian
Farmers Bank and Capital Trust Co.
The Bank of New York Mellon

Fixed Income Managers
Galliard Capital Management
Ft. Washington Investment Advisors

Domestic Equity Managers
Todd Investment Advisors
UBS Global Asset Management
Wellington Management Company
GE Asset Management

International Equity Managers
Todd Investment Advisors
UBS Global Asset Management
Baring Asset Management, Inc.
Baillie Gifford

Real Estate Managers
Prudential Real Estate Investors

Private Equity/Venture Capital Managers
Kohlberg Kravis Roberts & Co.
Chrysalis Ventures
Fort Washington Private Equity Investors

Timberland Managers
Molpus Woodlands Group
Hancock Natural Resources Group

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ACTUARIAL SECTION

Report of the Actuary on the Annual Valuation

for Fiscal Year ending June 30, 2008

Cavanaugh Macdonald
CONSULTING, LLC

December 5, 2008

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2008. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that combined member and state contributions for the fiscal year ending June 30, 2011 at the rate of 26.07% of university members' salaries and 29.03% of non-university members' salaries are required to support the benefits of the System. This represents an increase since the previous valuation in the required employer contribution rate of 1.00% of payroll for the 2010/2011 fiscal year. There has been a net decrease in the expected state special appropriation from 4.28% to 4.15%, or -0.13% of payroll.

Therefore, for the 2010/2011 fiscal year, in addition to the state statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 3.59%; 1.13% from this valuation and 2.46% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The valuation takes into account the effect of amendments to the System enacted through the 2008 Session of the Legislature. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes will be reflected in the June 30, 2009 valuation.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time. Therefore, there is a Net Pension Obligation (NPO) under GASB 27 for the fiscal year ending June 30, 2008.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, since a portion of the annual contributions required to fund the pension benefits have been allocated to the Medical Insurance Fund by the employer, the retirement fund is not funded by the employer on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Senior Actuary

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Report of Actuary on the Valuation
Prepared as of June 30, 2008
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	**June 30, 2008**		**June 30, 2007**	
Number of active members	75,539		75,144	
Annual salaries	$ 3,190,332		$ 2,945,289	
Number of annuitants and beneficiaries	40,739		39,506	
Annual allowances	$ 1,206,812		$ 1,135,635	
Assets				
Market value	$14,076,692		$15,421,092	
Actuarial value	$15,321,325		$15,284,955	
Unfunded actuarial accrued liability	$ 7,138,979		$ 5,970,019	
Amortization period (years)	30		30	
	University	**Non-University**	**University**	**Non-University**
Pension Plan:				
Normal	13.450%	17.110%	13.820%	17.340%
Accrued liability	12.620	11.920	11.250	10.690
Total	26.070%	29.030%	25.070%	28.030%
Member	7.625%	9.105%	7.625%	9.105%
State (ARC)	18.445	19.925	17.445	18.925
Total	26.070%	29.030%	25.070%	28.030%
Life Insurance Fund:				
State	0.170%	0.170%	0.170%	0.170%
Medical Insurance Fund:				
Member	0.750%	0.750%	0.750%	0.750%
State Match	0.750	0.750	0.750	0.750
State Additional	0.000	0.000	0.000	0.000
Total	1.500%	1.500%	1.500%	1.500%
Total Contributions:	27.740%	30.700%	26.740%	29.700%
Contribution rates for fiscal year ending:	**June 30, 2011**		**June 30, 2010**	
Member Statutory	8.375%	9.855%	8.375%	9.855%
State Statutory	11.625	13.105	11.625	13.105
Required Increase	3.590	3.590	2.460	2.460
State Special	4.150	4.150	4.280	4.280
Total	27.740%	30.700%	26.740%	29.700%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. The valuation indicates that combined member and State contributions at the rate of 26.07% of salaries for university members and at 29.03% for non-university members are sufficient to support the current benefits of the System. Comments on the valuation results as of June 30, 2008 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

5. Provisions of the System, as summarized in Schedule E, were taken into account in the current valuation. The valuation takes into account the effect of amendments to the System enacted through the 2008 Session of the Legislature. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes will be reflected in the June 30, 2009 valuation.

6. All amounts shown prior to the 2004/2005 fiscal year were developed and/or reported by the prior actuarial firm.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2008 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000)
Full Time	57,439	$ 3,069,016
Part Time	18,100	121,316
Total	75,539	$ 3,190,332

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2008

Group	Number	Annual Retirement Allowances[1] ($1,000)
Service Retirements	35,623	$ 1,106,145
Disability Retirements	2,155	52,960
Beneficiaries of Deceased Members	2,961	47,707
Total	40,739	$ 1,206,812

[1] *Includes cost-of-living adjustments effective through July 1, 2008.*

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2008 the market value of Pension Plan assets for valuation purposes held by the System amounted to $14,076,692,181. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2008 was $15,321,325,033. Schedule B shows the development of the actuarial value of assets as of June 30, 2008.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $8,874,483,618 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $13,385,235,262 of which $1,040,362,185 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $200,584,896. The total actuarial accrued liability of the System amounts to $22,460,303,776. Against these liabilities, the System has present assets for valuation purposes of $15,321,325,033. When this amount is deducted from the actuarial accrued liability of $22,460,303,776, there remains $7,138,978,743 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 13.45% of payroll for university members and 17.11% for non-university members.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member will contribute 8.375% of annual salary to the System and each non-university member will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2010/2011 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**

3. Therefore, 10.875% of active university members' salaries and 12.355% of active non-university members' salaries is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of this amount, 0.17% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 3.59% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 4.15% of total payroll will be made by the State. The total required employer contribution rate to the Pension Plan is, therefore, 18.445% for university members and 19.925% for non-university members. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source

	UNIVERSITY	NON-UNIVERSITY
Member		
Statutory Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.750)	(0.750)
Contribution to Pension Plan	7.625%	9.105%
Employer		
Statutory Matching Total	8.375	9.855
Statutory Medical Insurance Fund	(0.750)	(0.750)
Supplemental Funding	3.250	3.250
Subtotal	10.875%	12.355%
Life Insurance	(0.170)	(0.170)
Additional to Maintain 30-Year Amortization	3.590	3.590
Special Appropriation	4.150	4.150
Contribution to Pension Plan	18.445%	19.925%
Total Contribution to Pension Plan	26.070%	29.030%

4. The valuation indicates that normal contributions at the rate of 13.45% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.11%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 12.62% for university members and 11.92% for non-university members. These rates include special appropriations of 4.15% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

	PERCENTAGE OF ACTIVE MEMBERS' SALARIES	
Rate	**University**	**Non-University**
Normal	13.82%	17.34%
Accrued Liability*	11.25	10.69
Total	25.07%	28.03%

* *Includes special appropriations of 4.28% of payroll to be made by the State.*

5. The unfunded actuarial accrued liability amounts to $7,138,978,743 as of the valuation date. Accrued liability contributions at the rate of 12.62% of active university members' payroll and 11.92% of non-university members' payroll are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. The benefit percentage for non-university members is 2.0% for service accrued through July 1, 1983 and 2.5% for service up to 30 years accrued after that date. However, for members who join the System on or after July 1, 2002 and retire with less than 10 years of service, the benefit percentage is 2.0%. For members who joined the System on or after July 1, 2002, who retire with 10 or more years of service, the benefit percentage is 2.5% for all years of service up to 30 years. For all members who retire on or after July 1, 2004, the benefit percentage for service earned in excess of 30 years is 3.0%. The total net contribution rate is 29.03% of payroll for non-university members. For university members the benefit percentage is 2.0% for all service and the contribution rate is 26.07%. Our calculations indicate that these contribution rates will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes will be reflected in the June 30, 2009 valuation.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 3.59%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. Since the 2005 fiscal year, a portion of the contributions required for the pension fund have been allocated as loans to the Medical Insurance Fund for Stabilization Funding. Payments are being made to repay these loans, but the borrowing is expected to continue in the future. The following table shows the amounts borrowed, annual payments and remaining balances as of June 30, 2008:

	Medical Insurance Fund - Stabilization Funding		
	Loan Amount	Annual Payment	Balances as of July 1, 2008
2004/2005	$ 29,169,700	$ 4,249,600	$ 22,508,563
2005/2006	62,294,800	9,075,500	53,157,766
2006/2007	73,000,000	10,207,400	64,341,800
2007/2008	125,000,000	18,280,000	125,000,000
Total	$ 289,464,500	$ 41,812,500	$265,008,129

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 3.59% of payroll for the fiscal year ending June 30, 2011, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46
June 30, 2008	June 30, 2011	1.13	3.59

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,168,959,470 in the unfunded accrued liability from $5,970,019,273 to $7,138,978,743 during the year ending June 30, 2008.

(Dollar amounts in thousands) ITEM	Amount of Increase/(Decrease)
Interest (7.50%) added to previous unfunded accrued liability	$ 447,751
Expected accrued liability contribution	(299,751)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2006/2007 fiscal year with interest	129,398
Repayment of prior year's MIF Stabilization Funding	(28,488)
Experience:	
Valuation asset growth	668,626
Pensioners' mortality	9,428
Turnover and retirements	(26,001)
New entrants	57,003
Salary increases	210,993
Amendments	0
Assumption and method changes	0
TOTAL	$ 1,168,959

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Members as of June 30, 2008

GROUP	NUMBER
Retirees and Beneficiaries currently receiving benefits	40,739
Terminated employees entitled to benefits but not yet receiving benefits	4,861
Active Plan Members	75,539
TOTAL	**121,139**

2. Another such item is the schedule of funding progress as shown below.

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2003	$ 13,863,786	$ 16,594,781	$ 2,730,995	83.5%	$ 2,497,731	109.3%
6/30/2004	14,255,131	17,617,626	3,362,495	80.9	2,641,533	127.3
6/30/2005	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8
6/30/2006*	14,857,641	20,324,781	5,467,140	73.1	2,859,477	191.2
6/30/2007	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8

** Reflects change in decremental assumptions.*

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2008. Additional information as of the latest actuarial valuation follows.

Valuation Date	06/30/2008
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market

Actuarial Assumptions:

Investment Rate of Return*
7.50%

Projected Salary Increases*
4.00 - 8.20%

Cost-of-Living Adjustments
1.50% Annually

**Includes Inflation at 4.00%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Annual Required Contributions	Increase
2003	$ 322,046,968	100%
2004	364,351,412	100
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85
2008	563,789,483	78

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2008:

Annual Pension Cost and Net Obligation for Fiscal Year Ending June 30, 2008

(a)	Employer annual required contribution	$ 563,789,483
(b)	Interest on net pension obligation	11,205,780
(c)	Adjustment to annual required contribution	35,445,598
(d)	Annual pension cost: (a) + (b) - (c)	539,549,665
(e)	Employer contributions made for fiscal year ending June 30, 2008	438,789,483
(f)	Increase (decrease) in net pension obligation: (d) - (e)	100,760,182
(g)	Net pension obligation beginning of fiscal year	149,410,401
(h)	Net pension obligation end of fiscal year: (f) + (g)	$ 250,170,583

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2006	$ 406,107,266	100%	$ 0
June 30, 2007	476,544,275	100	149,410,401
June 30, 2008	539,549,665	88	250,170,583

SCHEDULE A

Results of the Valuation
Prepared as of June 30, 2008
($1,000's)

1.	**ACTUARIAL ACCRUED LIABILITY**			
	Present value of prospective benefits payable in respect of:			
(a)	Present active members:			
	• Service retirement benefits		$ 8,281,186	
	• Disability retirement benefits		374,926	
	• Death and survivor benefits		68,878	
	• Refunds of member contributions		149,494	
	Total			$ 8,874,484
(b)	Present inactive members and members entitled to deferred vested benefits:			200,585
(c)	Present annuitants and beneficiaries:			
	• Service retirement benefits		12,525,471	
	• Disability retirement benefits		426,776	
	• Death and survivor benefits		432,988	
	Total			13,385,235
(d)	Total actuarial accrued liability			22,460,304
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**			15,321,325
3.	**Unfunded Actuarial Accrued Liability** [1(d) - 2]			$ 7,138,979
4.	**NORMAL CONTRIBUTION RATE**		**UNIVERSITY**	**NON-UNIVERSITY**
(a)	Actuarial present value of benefits accruing annually		$ 25,967	512,772
(b)	Annual payroll of active members		$ 193,007	2,997,325
(c)	Normal contribution rate [4(a) divided by 4(b)]		13.45%	17.11%

Solvency Test

(in millions of dollars)

Fiscal Year	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets
6/30/2003	$ 2,413.9	$ 9,329.3	$ 4,851.6	$ 13,863.8
6/30/2004	2,546.1	9,906.2	5,165.3	14,255.1
6/30/2005	2,621.3	11,370.4	5,143.2	14,598.8
6/30/2006	2,615.8	12,216.6	5,492.4	14,857.6
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3

	Fiscal Year	(1)	(2)	(3)
Portion of Accrued Liabilities Covered by Assets	6/30/2003	100%	100%	44%
	6/30/2004	100	100	35
	6/30/2005	100	100	12
	6/30/2006	100	100	0
	6/30/2007	100	97	0
	6/30/2008	100	91	0

SCHEDULE B
Development of Actuarial Value of Assets
as of June 30, 2008

(1)	Actuarial Value of Assets Beginning of Year		$ 15,286,452,192*
(2)	Market Value of Assets End of Year		14,076,692,181
(3)	Market Value of Assets Beginning of Year		15,422,590,096*
(4)	Cash Flow		
	a.	Contributions	757,671,730
	b.	Benefit Payments	1,186,934,184
	c.	Administrative Expense	7,551,936
	d.	Net: (4)a - (4)b - (4)c	(436,814,390)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	(909,083,525)
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,140,313,718
	d.	Amount for Phased-In Recognition: (5)a - (5)c	(2,049,397,243)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	(409,879,449)
	b.	First Prior Year	190,240,386
	c.	Second Prior Year	(75,996,339)
	d.	Third Prior Year	(23,843,540)
	e.	Fouth Prior Year	(349,147,545)
	f.	Total Recognized Investment Gain	(668,626,487)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		15,321,325,033
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ (1,244,632,852)

SCHEDULE C
PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2008	For the Year Ending June 30, 2007
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 291,423,948	$ 269,687,864
Employers	466,247,782	434,890,468
Total	757,671,730	704,578,332
Net Investment Income	(909,083,525)	2,057,397,493
TOTAL	(151,411,795)	2,761,975,825
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	1,170,969,101	1,102,538,879
Refunds to Members	15,965,083	14,822,827
Medical Insurance Payments	0	0
Miscellaneous, including expenses	7,551,936	7,351,846
TOTAL	1,194,486,120	1,124,713,552
EXCESS OF RECEIPTS OVER DISBURSEMENTS	(1,345,897,915)	1,637,262,273
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	15,422,590,096 **	13,783,830,173
Excess of Receipts over Disbursements	(1,345,897,915)	1,637,262,273
Asset Balance as of End of the Year	$ 14,076,692,181	$ 15,421,092,446

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*
** *Adjusted since previous valuation.*

SCHEDULE D

Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2005, submitted to and adopted by the Board on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.70%	4.50%	4.30%	4.20%	4.00%

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.003%	0.01%	9.00%				
25	0.010	0.01	9.00	1.50%			
30	0.016	0.02	9.00	3.00	3.00%		
35	0.032	0.05	10.00	3.25	1.50		
40	0.048	0.08	10.00	3.75	1.50		25.0%
45	0.064	0.22	9.50	2.50	1.50		20.0
50	0.104	0.42	10.00	4.00	3.00		35.0
55	0.216	0.60	11.00	3.00	2.70	6.0%	25.0
60	0.375	0.79	11.00	3.00	2.70	14.0	23.0
62	0.438	0.83	11.00	3.00	2.70	14.0	35.0
65	0.566	0.90	11.00	3.00	2.70	22.5	100.0
70	0.905	0.00	0.00	0.00	0.00	100.0	

**Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .							
			WITHDRAWAL			RETIREMENT	
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.002%	0.03%	6.00%				
25	0.007	0.03	8.50	3.00%			
30	0.014	0.04	9.00	4.00	1.50%		
35	0.026	0.11	8.50	4.00	2.00		
40	0.044	0.22	8.50	2.50	1.50		
45	0.055	0.38	7.00	2.50	1.50		25.0%
50	0.066	0.44	8.50	3.00	2.25		20.0
55	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	0.195	0.00	0.00	0.00	0.00	100.0	100.0

**Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

DEATHS AFTER RETIREMENT: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

Annual Rate of Death After . . .

Actuarial Method: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

Assets: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

Expense Load: None.

Percent Married: 100%, with females 3 years younger than males.

Loads: Unused Sick Leave: 1% of active liability

SCHEDULE E

Summary of Main System Provisions As Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2008. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes will be reflected in the June 30, 2009 valuation. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1. DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2. BENEFITS

Service Retirement Allowance

Condition for Allowance: Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by actuarial equivalent factors from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Disability Retirement Allowance

Condition for Allowance: Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance: The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability

allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options:

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3. CONTRIBUTIONS

Member Contributions

University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

SCHEDULE F
Table 1
Age - Service Table

Distribution of Active Members as of June 30, 2008 by Age and Service Groups

Attatined Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,733								2,733
Total Pay	40,156,278								40,156,278
Avg. Pay	14,693								14,693
25 to 29	7,737	1,244							8,981
Total Pay	226,985,257	55,162,946							282,148,203
Avg. Pay	29,338	44,343							31,416
30 to 34	3,824	4,651	716						9,191
Total Pay	109,014,464	215,186,990	38,055,186						362,256,640
Avg. Pay	28,508	46,267	53,150						39,414
35 to 39	3,127	2,701	3,741	696					10,265
Total Pay	82,804,226	126,588,449	206,390,005	41,204,804					456,987,484
Avg. Pay	26,480	46,867	55,170	59,202					44,519
40 to 44	3,884	1,592	1,836	2,585	626				10,523
Total Pay	76,518,540	76,734,470	101,966,614	155,651,263	38,970,337				449,841,224
Avg. Pay	19,701	48,200	55,537	60,213	62,253				42,748
45 to 49	1,942	1,311	1,290	1,398	2,226	583			8,750
Total Pay	48,048,107	64,439,406	72,824,251	85,020,118	140,513,875	38,127,851			448,973,608
Avg. Pay	24,742	49,153	56,453	60,816	63,124	65,399			51,311
50 to 54	1,808	1,107	1,179	1,318	1,388	1,643	639		9,082
Total Pay	37,799,289	55,399,696	67,881,950	80,824,830	90,155,860	109,389,413	43,184,738		484,635,776
Avg. Pay	20,907	50,045	57,576	61,324	64,954	66,579	67,582		53,362
55 to 59	2,991	775	918	1,086	1,107	762	826	124	8,589
Total Pay	52,396,113	40,966,577	53,795,878	68,408,653	72,964,249	53,284,559	62,979,695	10,384,836	415,180,560
Avg. Pay	17,518	52,860	58,601	62,991	65,912	69,927	76,247	83,749	48,339
60 to 64	2,539	380	368	459	505	278	129	133	4,791
Total Pay	37,225,994	20,763,246	23,223,662	29,893,634	34,749,706	20,422,141	10,455,098	11,722,331	188,455,812
Avg. Pay	14,662	54,640	63,108	65,128	68,811	73,461	81,047	88,138	39,335
65 & over	2,022	102	86	97	126	67	54	80	2,634
Total Pay	19,805,734	5,623,767	5,460,182	6,432,333	8,488,526	4,896,583	4,198,098	6,791,435	61,696,658
Avg. Pay	9,795	55,135	63,490	66,313	67,369	73,083	77,743	84,893	23,423
Total	32,607	13,863	10,133	7,639	5,978	3,333	1,649	337	75,539
Total Pay	730,754,002	660,865,547	569,597,728	467,435,635	385,842,553	226,120,547	120,817,629	28,898,602	3,190,332,243
Avg. Pay	22,411	47,671	56,212	61,191	64,544	67,843	73,267	85,753	42,234

Average Age: 43.3 **Average Service 10.4**

SCHEDULE F

Table 2

Number of Retired Members and Beneficiaries and their Benefits by Age

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	770	$ 8,775,677	$ 11,397
50 - 54	1,588	50,193,641	31,608
55 - 59	6,907	243,164,138	35,205
60 - 64	9,456	315,956,441	33,413
65 - 69	7,319	229,752,845	31,391
70 - 74	5,032	143,385,189	28,495
75 - 79	3,849	99,163,829	25,764
80 & Over	5,818	116,420,533	20,010
Total	40,739	$1,206,812,293	$ 29,623

Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

Fiscal Year	Add to Rolls		Remove from Rolls		Rolls End-of-Year	
	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)
1999	2,415	$ 73.9	998	$ 13.9	29,161	$ 554.0
2000	2,462	79.2	1,008	14.1	30,615	619.2
2001	2,410	77.0	1,128	16.5	31,897	679.8
2002	2,577	86.2	1,063	16.8	33,408	749.2
2003	2,252	86.7	1,015	16.9	34,645	819.0
2004	2,126	85.4	1,033	17.5	35,738	887.0
2005	2,644	105.1	1,036	18.9	37,346	973.1
2006	2,266	121.1	1,115	20.0	38,497	1,074.2
2007	2,050	82.1	1,041	20.7	39,506	1,135.6
2008	2,183	90.6	950	19.4	40,739	1,206.8

Fiscal Year	% Increase in Annual Allowances	Average Annual Allowances
1999	12.1%	$ 19,000
2000	11.8	20,226
2001	9.8	21,311
2002	10.2	22,425
2003	9.3	23,641
2004	8.3	24,819
2005	9.7	26,058
2006	10.4	27,902
2007	5.7	28,746
2008	6.3	29,623

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ACTUARIAL SECTION

Report of the Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans

for Fiscal Year ending June 30, 2008

Cavanaugh Macdonald

CONSULTING, LLC

December 5, 2008

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require actuarial valuations of retiree medical and other post employment benefit plans. This report covers the Medical Insurance Fund and OPEB liabilities related to the Life Insurance Fund. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2008. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates that a total annual required contribution of 14.59% of active member payroll for the Medical Insurance Fund payable for the fiscal year ending June 30, 2011 is required to support the benefits of the Kentucky Employees Health Plan and the Medicare Eligible Health Plan. Of this amount, 0.75% of payroll is paid by the members leaving 13.84% as the State contribution. This required State contribution reflects the assets currently held in the Medical Insurance Fund. Since the State contributions are less than the required levels, the discount rate for valuing liabilities is 4.5%. Schedule A shows the decrease in liabilities of the medical plans if the required contributions were made each year and the funded discount rate of 7.5% could be utilized. Since the full amount of the Annual Required Contribution (ARC) is not being contributed to the Medical Insurance Fund each year, there will be a Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2008, as shown in Section VII.

The Medical Insurance Fund valuation takes into account the effect of amendments to the medical plans enacted through the 2008 Session of the Legislature. The actuarial accrued liability increased from $5.9 billion in 2007 to $6.4 billion in 2008.

The Life Insurance Fund valuation indicates that a total annual required contribution of 0.05% of active member payroll payable for the fiscal year ending June 30, 2011 is required to support the benefits of the Life Insurance Plan. The current contribution rate of 0.17% of active member payroll payable for the fiscal year ending June 30, 2011 exceeds the amount sufficient to support the benefits of the Life Insurance Fund. With the State contributions to the Life Insurance Funds exceeding the required levels, the discount rate for valuing liabilities is 7.5%. Additionally, as an amount exceeding the Annual Required Contribution (ARC) is being contributed to the Life Insurance Fund each year, the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2008 is less than zero.

The promised benefits of the medical and life insurance plans are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. The market value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the medical and life insurance plans and to reasonable expectations of anticipated experience under the medical and life insurance plans and meet the parameters for the disclosures under GASB 43 and 45.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A and Schedule C shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the medical and life insurance plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, if the State contributions to the medical Insurance Fund are increased to the required levels, the medical Plans will begin to operate in an actuarially sound basis. Assuming that required contributions to the Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Fund to provide the benefits called for under the Plans will improve.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Alisa Bennett, ASA, EA, FCA, MAAA
Senior Actuary

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Report of Actuary on the on the Annual Valuation
of the Retiree Medical and Life Insurance Plans
Prepared as of June 30, 2008

Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

~ Medical Insurance Fund ~

Valuation Date	**June 30, 2008**	**June 30, 2007**
Number of active members	75,539	75,144
Annual salaries	$ 3,190,332	$ 2,975,289
Number of annuitants in medical plans	32,591	31,642
Number of spouses and beneficiaries in medical plans*	6,678	6,674
Total	39,269	38,316
Assets:		
Market value	$ 185,883	$ 140,772
Unfunded actuarial accrued liability	$ 6,248,639	$ 5,787,989
Amortization period (years)	30	30
Discount rate	4.50%	4.50%
Contribution for fiscal year ending:	**June 30, 2011**	**June 30, 2010**
Normal	7.60%	7.53%
Accrued liability	6.99%	6.95%
Total	14.59%	14.48%
Member	0.75%	0.75%
State (ARC)	13.84%	13.73%
Total	14.59%	14.48%

* *Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution.*

~ Life Insurance Fund ~

Valuation Date	**June 30, 2008**	**June 30, 2007**
Number of active members	75,539	75,144
Annual salaries	$ 3,190,332	$ 2,975,289
Number retirees in Life Insurance Plan	37,778	36,616
Assets:		
Market value	$ 77,658	$ 71,426
Unfunded actuarial accrued liability*	$ 6,607	$ 11,296
Amortization period (years)	30	30
Discount rate	7.50%	7.50%
Contribution for fiscal year ending:	**June 30, 2011**	**June 30, 2010**
Normal	0.04%	0.04%
Accrued liability	0.01%	0.02%
Total	0.05%	0.06%

* *Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for pre and post employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45.*

2. The valuation indicates that combined member and State contributions of 14.59% of active member payroll would be sufficient to support the current benefits of the medical plans and combined member and State contributions of 0.05% of active member payroll would be sufficient to support the current benefits of the life insurance plan. Comments on the valuation results as of June 30, 2008 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

3. Schedule C of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation.

4. The valuation takes into account the effect of amendments to the medical plans enacted through the 2008 Session of the Legislature.

5. All amounts shown prior to the 2005 valuation year were developed and/or reported by the prior actuarial firm.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the medical and life insurance plans for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2008 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000)
Full Time	57,439	$ 3,069,016
Part Time	18,100	121,316
Total	75,539	$ 3,190,332

Section III - ASSETS

1. As of June 30, 2008 the market value of Medical Insurance Fund assets for valuation purposes held by the medical plans amounted to $185,883,223 and the market value of Life Insurance Fund assets for valuation purposes held by the life insurance plans amounted to $77,658,203.

2. Schedule B shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Medical Insurance Fund and the Life Insurance Fund.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation and illustrates the benefits of pre-funding the liability for the medical plans. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule C.

2. The valuation shows that the medical plans have an actuarial accrued liability of $3,350,166,476 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to retirees and covered spouses amounts to $3,084,356,138. The total actuarial accrued liability of the medical plans amounts to $6,434,522,614. Against these liabilities, the medical plans have present assets for valuation purposes of $185,883,223. When this amount is deducted from the actuarial accrued liability of $6,434,522,614 there remains $6,248,639,391 as the unfunded actuarial accrued liability for the medical plans.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the medical plans is determined to be $242,335,245, or 7.60% of payroll.

4. The valuation shows that the life insurance plan has an actuarial accrued liability of $17,395,022 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to retirees and covered spouses amounts to $66,870,544. The total actuarial accrued liability of the life insurance plan amounts to $84,265,566. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for pre and post employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45. Against these liabilities, the life insurance plan has present assets for valuation purposes of $77,658,203. When this amount is deducted from the actuarial accrued liability of $84,265,566 there remains $6,607,363 as the unfunded actuarial accrued liability for the life insurance plan.

5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $1,152,310, or 0.04% of payroll.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.420(5) of the Kentucky Revised Statutes provides that members and the State will each contribute 0.75% of salary to the Medical Insurance Fund. We recommend that the State contribution increase to the required amount of 13.84% of payroll. The State is currently contributing 0.17% of salary to the Life Insurance Fund. Our valuation indicates a contribution of 0.05% is required to sufficiently support the benefits of the life insurance plan.

Required Contribution Rates
For Fiscal Year Ending June 30, 2011

	Medical Insurance Fund	Life Insurance Fund
Normal	7.60%	0.04%
Accrued liability	6.99%	0.01%
Total	14.59%	0.05%
Member	0.75%	0.00%
State (ARC)	13.84%	0.05%
Total	14.59%	0.05%

2. The valuation indicates that a total normal contribution of 7.60% of payroll is required to meet the cost of benefits currently accruing under the medical plans and 0.04% of payroll is required to meet the cost of benefits currently accruing under the life insurance plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 6.99% of payroll for the medical plans and 0.01% of payroll for the life insurance plan.

3. The unfunded actuarial accrued liability amounts to $6,248,639,391 for the medical plans and $6,607,363 for the life insurance plan as of the valuation date. An accrued liability contribution of 6.99% of payroll for the medical plans and 0.01% of payroll for the life insurance plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. The monthly contribution for retirees to opt into the medical plan is based on years of service at retirement, and can also vary by plan election, Medicare eligibility and tobacco use. Contributions for spouses of retirees are targeted to be 100% of the cost of expected claims. Historically, this target has been achieved for both Medicare and non-Medicare eligible spouses. Current employer contributions have been determined to be insufficient to fund the cost of the benefits to be provided. Benefits and contributions for university and non-university members are identical.

2. The valuation indicates that a significant increase in the employer contribution rate is required to fund the medical plans in an actuarially sound manner and to ensure the future solvency of the Medical Insurance Fund. A member contribution of 0.75% of payroll together with a state contribution of 13.84% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.

Section VII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the medical and life insurance plans and the employer. the employer.

Number of Active and Retired Members in Medical Plan as of June 30, 2008

GROUP	NUMBER
Retirees currently receiving health benefits	32,591
Spouses of retirees currently receiving health benefits	6,678
Active plan members	75,539
Total	**114,808**

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2008

GROUP	NUMBER
Retirees	37,778
Active plan members	75,539
Total	**113,317**

Schedule of Funding Progress
Medical Insurance Fund
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2003	$165,537	$2,886,000	$2,720,463	5.7%	$2,497,731	108.9%
6/30/2004	158,862	3,166,568	3,007,706	5.0	2,641,533	113.9
6/30/2005	147,311	4,763,947	4,616,636	3.1	2,703,430	170.8
6/30/2006*	131,614	4,341,963	4,210,349	3.0	2,859,477	147.2
6/30/2007**	140,772	5,928,761	5,787,989	2.4	2,975,289	194.5
6/30/2008	185,883	6,434,522	6,248,639	2.9	3,190,332	195.9

* Reflects change in decremental assumptions and plan design.
** Reflects change in discount rate to 4.5% and updating medical trend

Schedule of Funding Progress
Life Insurance Fund
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2007	$71,426	$82,722	$11,296	86.3%	$2,975,289	0.38%
6/30/2008	77,658	84,265	6,607	92.2	3,190,332	0.21

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2008. Additional information as of the latest actuarial valuation follows.

Valuation Date 06/30/2008

Actuarial cost method ..... Projected unit credit

Amortization method ..... Level percent of pay, open

Remaining amortization period ..... 30 years

Asset valuation method ..... Market Value of Assets

Actuarial Assumptions:

Investment Rate of Return*
4.50%for Medical &
7.50% for Life Insurance

Healthcare Trend Rate*
11.00%

Ultimate Trend Rate
5.00%

Year of Ultimate Trend Rate
2015

**Includes Inflation at 4.00%*

Schedule of Employer Contributions
Medical Insurance Fund

Fiscal Year Ending	Annual Required Contribution (ARC) (a)	Actual Employer Contribution (b)	Retiree Drug Subsidy Contribution (c)	Total Contribution (b) + (c)	Percentage of ARC Contributed [(b) + (c)] / (a)
6/30/2007	$ 231,473,321	$113,258,761	$10,312,361	$123,571,122	53.4%
6/30/2008	395,282,164	148,954,644	11,911,565	160,866,209	40.7

Schedule of Employer Contributions
Life Insurance Fund

Fiscal Year Ending	Annual Required Contribution (ARC) (a)	Actual Employer Contribution (b)	Percentage of ARC Contributed (b) / (a)
6/30/2007	$ 1,785,173	$5,022,137	281.3%
6/30/2008	1,914,199	5,411,249	282.7

3. The full amount of the Annual Required Contribution (ARC) is not being contributed to the Medical Insurance Fund each year. Therefore, the Annual OPEB Cost (AOC) will be greater than the ARC and there will be a Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2008, as shown in the following table.

Annual OPEB Cost and Net OPEB Obligation
for the Medical Insurance Fund for Fiscal Year Ending June 30, 2008

(a) Employer Annual Required Contribution	$ 395,282,164
(b) Interest on Net OPEB Obligation	0
(c) Adjustment to Annual Required Contribution	0
(d) Annual OPEB Cost: (a) + (b) - (c)	395,282,164
(e) Employer contributions for Fiscal Year 2008	160,866,209
(f) Increase in Net OPEB Obligation: (d) - (e)	234,415,955
(g) Net OPEB Obligation at beginning of Fiscal Year	0
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ 234,415,955

Trend Information for the Medical Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$ 395,282,164	40.7%	$234,415,955

Annual OPEB Cost and Net OPEB Obligation for the Life Insurance Fund for Fiscal year Ending June 30, 2008

(a) Employer Annual Required Contribution	$ 1,914,199
(b) Interest on Net OPEB Obligation	0
(c) Adjustment to Annual Required Contribution	0
(d) Annual OPEB Cost: (a) + (b) - (c)	1,914,199
(e) Employer contributions for Fiscal Year 2008	5,411,249
(f) Increase in Net OPEB Obligation: (d) - (e)	(3,497,050)
(g) Net OPEB Obligation at beginning of Fiscal Year	0
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ (3,497,050)

Trend Information for the Life Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$1,914,199	282.7%	($3,497,050)

SCHEDULE A
Benefits of Pre-Funding Medical Plan
(1,000's)

	Not Pre-Funding Discount Rate 4.50%	Pre-Funding Discount Rate 7.50%
PAYROLL	$ 3,190,332	$ 3,190,332
ACTUARIAL ACCRUED LIABILITY		
Present value of prospective benefits payable in respect of:		
(a) Present active members:	$ 3,350,166	$ 1,765,322
(b) Present retired members and covered spouses:	3,084,356	2,202,885
(c) Total actuarial accrued liability	6,434,522	3,968,207
PRESENT ASSETS FOR VALUATION PURPOSES	185,883	185,883
UNFUNDED ACTUARIAL ACCRUED LIABILITY	$ 6,248,639	3,782,324
CONTRIBUTIONS FOR FISCAL YEAR ENDING JUNE 30, 2011:		
Normal	7.60 %	3.57 %
Accrued Liability	6.99	6.13
Total	14.59 %	9.70 %
Member	0.75 %	0.75 %
State (ARC)	13.84	8.95
Total	14.59 %	9.70 %

SCHEDULE B
MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2008	June 30, 2007
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 24,125,800	$ 22,398,679
Payment by Retired Members	31,277,030	30,700,999
Total Members	55,402,830	53,099,678
State Statutory Contributions	23,929,322	22,273,784
State Special	0	5,960,000
General Fund Surplus (6/2006)	0	12,000,000
Allotment from Pension Fund	125,000,000	73,000,000
Total Employer	148,929,322	113,233,784
Grand Total	204,332,152	166,333,462
Recovery Income	25,322	24,977
Medicare D Receipts	11,911,565	10,312,361
Net Investment Income	8,128,179	6,722,080
TOTAL	224,397,218	183,392,880
Disbursements for the Year		
Refunds to Members	10,015	5,834
Medical Insurance Expense	179,276,215	174,229,097
TOTAL	179,286,230	174,234,931
Excess of Receipts over Disbursements	45,110,988	9,157,949
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	140,772,235	131,614,285
Excess of Receipts over Disbursements	45,110,988	9,157,949
Asset Balance as of the End of the Year	$ 185,883,223	$ 140,772,234

Schedule B
LIFE INSURANCE FUND*
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2008	For the Year Ending June 30, 2007
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 0	$ 0
Employers	5,411,249	5,022,137
Total	5,411,249	5,022,137
Net Investment Income	6,321,491	3,067,738
TOTAL	11,732,740	8,089,875
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	4,003,000	4,245,000
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	0	0
TOTAL	4,003,000	4,245,000
EXCESS OF RECEIPTS OVER DISBURSEMENTS	7,729,740	3,844,875
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	69,928,463	67,581,237
Excess of Receipts over Disbursements	7,729,740	3,844,875
Asset Balance as of End of the Year	$ 77,658,203	$ 71,426,112

**Adjusted since previous valuation*

Schedule C
Outline of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, and termination used in the valuation were selected by the Actuary based on the actuarial experience investigation as of June 30, 2005 and adopted by the Board of Trustees on September 18, 2006. The discount rate, rates of future participation, health care cost trend rates, and expected plan costs were determined by the actuary based on plan experience.

Valuation Date: June 30, 2008

Discount Rate: 4.5% per annum, compounded annually for medical plans
7.5% per annum, compounded annually for life insurance plans

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

Fiscal Year	Trend
2009	11.0 %
2010	10.0
2011	9.0
2012	8.0
2013	7.0
2014	6.0
2015 & beyond	5.0

Age Related Morbidity: Per capita costs are adjusted to reflect expected medical cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.2 %
70-74	2.4
75-79	1.8
80-84	1.3
85 & over	0.0

Anticipated Plan Participation: Representative values of the assumed annual rates of medical plan participation are as follows:

Years of Service	Pre-65	Hired 7/1/02 and later	Years of Service	Post-65 Hired 6/30/02 and earlier: Age 65 on 12/31/04 and earlier	Post-65 Hired 6/30/02 and earlier: Age 65 on 1/1/05 and later
5-9.99	25%	10%	5-9.99	70%	25%
10-14.99	50%	25%	10-14.99	80%	50%
15-19.99	75%	45%	15-19.99	90%	75%
20-24.99	98%	65%	20-24.99	98%	98%
25-25.99	98%	90%	25-25.99	98%	98%
26-26.99	98%	95%	26-26.99	98%	98%
27 or more	98%	98%	27 or more	98%	98%

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.003%	0.01%	9.00%				
25	0.010	0.01	9.00	1.50%			
30	0.016	0.02	9.00	3.00	3.00%		
35	0.032	0.05	10.00	3.25	1.50		
40	0.048	0.08	10.00	3.75	1.50		
45	0.064	0.22	9.50	2.50	1.50		25.0%
50	0.104	0.42	10.00	4.00	3.00		20.0
55	0.216	0.60	11.00	3.00	2.70	6.0%	35.0
60	0.375	0.79	11.00	3.00	2.70	14.0	25.0
62	0.438	0.83	11.00	3.00	2.70	14.0	23.0
65	0.566	0.90	11.00	3.00	2.70	22.5	35.0
70	0.905					100.0	100.0

** Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.002%	0.03%	6.00%				
25	0.007	0.03	8.50	3.00%			
30	0.014	0.04	9.00	4.00	1.50%		
35	0.026	0.11	8.50	4.00	2.00		
40	0.044	0.22	8.50	2.50	1.50		
45	0.055	0.38	7.00	2.50	1.50		25.0%
50	0.066	0.44	8.50	3.00	2.25		20.0
55	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	0.195					100.0	100.0

** Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: According to the 1994 Group Annuity Mortality table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

Actuarial Method: Costs were determined using the Projected Unit Credit Actuarial Cost Method. The annual service cost is the present value of the portion of the projected benefit attributable to participation service during the upcoming year, and the accumulated postretirement benefit obligation (APBO) is equal to the present value of the portion of the projected benefit attributable to service before the valuation date. Service from hire date through the date of full retirement eligibility was used in allocating costs.

Assets: Market Value as provided by KTRS. Return on assets assumed to be 4.50% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

Spouse Coverage: Use actual census data and current plan elections for spouses of current retirees. For spouses of future retirees, assumed 20% of future retirees will cover spouses, with females 3 years younger than males.

Medical Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following is a chart detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that KTRS pays as the full contribution amount. For Post-65 retirees, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

	Average Monthly KTRS Full Costs & Contributions		
Years of Service	**Pre-65 Full Cost and Contributions**	**Post-65 Full Costs**	**Post-65 Full Contributions**
CY 2004	$376	$274	$274
CY 2005	$410	$288	$288
CY 2006	$476	$304	$304
CY 2007	$458	$283	$283
CY 2008	$484	$278	$278
CY 2009	$545	$301*	$285

** Under GASB 43 and 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy cannot be taken into account in the gross cost calculations.*

SCHEDULE D
Summary of Main Plan Provisions as Interpreted for Valuation Purposes

RETIREE MEDICAL ELIGIBILITY: Retiree medical eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. Disabled employees, who are totally and permanently incapable of being employed as a teacher and under age 60, but after completing 5 years of service, are eligible for subsidized retiree medical coverage that is based on the number of years of service credit accrued at disability retirement. At the expiration of the disability entitlement period, the subsidy is recalculated based upon the number of years of service credit that would have accrued had the member remained active. Spouses of those actives who die while eligible to retire are eligible for retiree medical coverage when the death occurred prior to July 1, 2002.

MEDICAL PLAN CONTRIBUTIONS: The full contribution is provided to retirees with 27 or more years of service. The full contribution is determined by KTRS; the full cost is projected based on historical claims data. For retirees with less than 27 years of service, the following percentages of these full contributions are provided:

	Percentage of Full Contribution Provided to Post-65 Retirees		
Years of Service	**Hired Before 07/01/2002 (Age 65 by 1/1/05)**	**Hired Before 07/01/2002 (Age 65 after 1/1/05)**	**Hired After 07/01/2002**
27 or more	100 %	100 %	100 %
26 - 26.99	100	100	95
25 - 25.99	100	100	90
20 - 24.99	100	100	65
15 - 19.99	90	75	45
10 - 14.99	80	50	25
5 - 9.99	70	25	10

Effective 1/1/2009, contributions towards pre-65 retirees and spouses healthcare are based upon the Commonwealth Capital Choice Plan which has a total rate of $545.08 per month for Single Coverage. An additional $21.00 per month contribution is required for smokers.

Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. For spouses of active members who died while eligible to retire, prior to July 1, 2002, KTRS provides the same subsidy they would have provided to the retiree for the lifetime of the spouse, or until remarriage. For spouses of active members who die while eligible to retire July 1, 2002, or later, spouses pay 100% of the full contribution.

Life Insurance Benefit

(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Qualified members working 45 days per year will be eligible for survivor benefits and a life insurance benefit for the balance of the fiscal year and disability benefits under certain conditions. For substitute and part-time members, the survivor benefits and life insurance benefit are provided during the first 44 days if death occurs as the result of a physical injury on the job. The disability benefit is available as a direct result of a physical injury on the job during the five-year vesting period. After vesting, the disability benefit is available upon working 45 days for the balance of that fiscal year in accordance with the regular KTRS disability program.

SCHEDULE E
Active Age and Service Table as of June 30, 2008

Attatined Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,733								2,733
Total Pay	40,156,278								40,156,278
Avg. Pay	14,693								14,693
25 to 29	7,737	1,244							8,981
Total Pay	226,985,257	55,162,946							282,148,203
Avg. Pay	29,338	44,343							31,416
30 to 34	3,824	4,651	716						9,191
Total Pay	109,014,464	215,186,990	38,055,186						362,256,640
Avg. Pay	28,508	46,267	53,150						39,414
35 to 39	3,127	2,701	3,741	696					10,265
Total Pay	82,804,226	126,588,449	206,390,005	41,204,804					456,987,484
Avg. Pay	26,480	46,867	55,170	59,202					44,519
40 to 44	3,884	1,592	1,836	2,585	626				10,523
Total Pay	76,518,540	76,734,470	101,966,614	155,651,263	38,970,337				449,841,224
Avg. Pay	19,701	48,200	55,537	60,213	62,253				42,748
45 to 49	1,942	1,311	1,290	1,398	2,226	583			8,750
Total Pay	48,048,107	64,439,406	72,824,251	85,020,118	140,513,875	38,127,851			448,973,608
Avg. Pay	24,742	49,153	56,453	60,816	63,124	65,399			51,311
50 to 54	1,808	1,107	1,179	1,318	1,388	1,643	639		9,082
Total Pay	37,799,289	55,399,696	67,881,950	80,824,830	90,155,860	109,389,413	43,184,738		484,635,776
Avg. Pay	20,907	50,045	57,576	61,324	64,954	66,579	67,582		53,362
55 to 59	2,991	775	918	1,086	1,107	762	826	124	8,589
Total Pay	52,396,113	40,966,577	53,795,878	68,408,653	72,964,249	53,284,559	62,979,695	10,384,836	415,180,560
Avg. Pay	17,518	52,860	58,601	62,991	65,912	69,927	76,247	83,749	48,339
60 to 64	2,539	380	368	459	505	278	129	133	4,791
Total Pay	37,225,994	20,763,246	23,223,662	29,893,634	34,749,706	20,422,141	10,455,098	11,722,331	188,455,812
Avg. Pay	14,662	54,640	63,108	65,128	68,811	73,461	81,047	88,138	39,335
65 & over	2,022	102	86	97	126	67	54	80	2,634
Total Pay	19,805,734	5,623,767	5,460,182	6,432,333	8,488,526	4,896,583	4,198,098	6,791,435	61,696,658
Avg. Pay	9,795	55,135	63,490	66,313	67,369	73,083	77,743	84,893	23,423
Total	32,607	13,863	10,133	7,639	5,978	3,333	1,649	337	75,539
Total Pay	730,754,002	660,865,547	569,597,728	467,435,635	385,842,553	226,120,547	120,817,629	28,898,602	3,190,332,243
Avg. Pay	22,411	47,671	56,212	61,191	64,544	67,843	73,267	85,753	42,234

Retirees Receiving Health Benefits as of June 30, 2008

	Under 65	Over 65	Total
Number	15,525	17,066	32,591
Average Age	59.4	75.1	67.6

STATISTICAL SECTION

for Fiscal Year ending June 30, 2008

This section of the Kentucky Teachers' Retirement System Comprehensive Annual Financial Report (KTRS CAFR) presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

Contents

Financial Trends ..... page 117

These schedules contain trend information to help the reader understand how KTRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 119

These schedules offer demographic and economic indicators to help the reader understand the System's environment within which KTRS's financial activities take place.

Operating Information ..... page 127

These schedules contain benefits, service, and employer contribution data to help the reader understand how KTRS's financial report relates to KTRS's services and activities.

Defined Benefit Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Assets
2008	$ 466,247,782	$ 291,423,948	$ (909,083,525)	$ (151,411,795)
2007	434,890,469	269,687,864	2,063,878,767	2,768,457,100
2006	410,920,969	258,464,856	717,308,002	1,386,693,827
2005	388,346,438	247,024,518	946,070,556	1,581,441,512
2004	382,280,099	238,922,086	1,158,182,688	1,779,384,873
2003	341,132,900	233,429,797	538,552,074	1,113,114,771
2002	303,521,106	224,361,453	(520,214,494)	7,668,065
2001	280,108,701	208,702,802	(104,903,741)	383,907,762
2000	311,286,811	203,149,281	454,251,324	968,687,416
1999	288,543,990	194,747,429	1,274,764,370	1,758,055,789

Deductions by Type

(Including Benefits by Type)

YEAR	Service Retirants	Disability Retirants	Survivors	Life Insurance*	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Assets
2008	$ 1,105,078,345	$ 51,842,271	$14,048,485	$	$ 1,170,969,101	$ 15,965,083	$ 7,551,936	$ 1,194,486,120
2007	1,040,003,417	48,863,876	13,671,586		1,102,538,879	14,822,827	7,351,846	1,124,713,552
2006	972,018,057	46,750,585	12,943,639	3,894,000	1,035,606,281	12,834,222	6,839,859	1,055,280,362
2005	902,863,420	44,070,071	12,585,248	3,852,800	963,371,539	10,975,941	6,652,673	981,000,153
2004	827,731,523	41,491,490	12,047,275	4,015,801	885,286,089	10,471,607	6,578,420	902,336,116
2003	763,099,082	38,744,454	11,259,332	3,961,800	817,064,668	9,951,410	6,388,183	833,404,261
2002	688,754,130	35,947,786	10,532,466	4,210,800	739,445,182	9,146,820	6,677,819	755,269,821
2001	627,637,879	32,233,070	10,005,656	4,110,400	673,987,005	10,673,981	5,950,036	690,611,022
2000	568,538,294	29,148,420	9,322,582	2,350,600	609,359,896	11,304,485	4,859,623	625,524,004
1999	509,787,784	26,464,287	8,718,626	2,329,800	547,300,497	9,083,461	4,522,908	560,906,866

* *Life Insurance Plan valued separately-- see page 119.*

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2008	$ (151,411,795)	$ 1,194,486,120	$ (1,345,897,915)
2007	2,768,457,100	1,124,713,552	1,643,743,548
2006	1,386,693,827	1,055,280,362	331,413,465
2005	1,581,441,512	981,000,153	600,441,359
2004	1,779,384,873	902,336,116	877,048,757
2003	1,113,114,771	833,404,261	279,710,510
2002	7,668,065	755,269,821	(747,601,756)
2001	383,907,762	690,611,022	(306,703,260)
2000	968,687,416	625,524,004	343,163,412
1999	1,758,055,789	560,906,866	1,197,148,923

Medical Insurance Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Recovery Income	Net Investment Income	Total Additions to Plan Net Assets
2008	$ 148,929,322	$ 55,402,830	$ 11,936,887	$ 8,128,179	$ 224,397,218
2007	113,233,784	53,099,678	10,337,338	6,722,080	183,392,880
2006	89,319,498	51,697,167	6,117,979	6,804,286	153,938,930
2005	79,022,562	51,576,031		6,507,537	137,106,130
2004	53,346,747	53,903,551		7,127,109	114,377,407
2003	77,235,407	50,718,084		7,391,671	135,345,162
2002	95,261,407	46,184,010		6,142,817	147,588,234
2001	92,429,167	40,017,682		5,286,426	137,733,275
2000	48,946,646	36,392,846		3,710,881	89,050,373
1999	46,168,014	34,579,816		2,306,711	83,054,541

Deductions by Type

(Including Benefits by Type)

	Insurance Benefit Expense					
YEAR	Under Age 65	Age 65 & Over	Third Party Service Fee	Total Insurance Benefits Expense	Refunds	Total Deductions to Plan Net Assets
2008	$ 107,437,450	$ 71,838,765	$	$179,276,215	$ 10,014	$ 179,286,229
2007	104,828,254	69,400,843		174,229,097	5,834	174,234,931
2006	102,970,290	66,660,106		169,630,396	5,143	169,635,539
2005	82,186,847	64,233,482		146,420,329	9,072	146,429,401
2004	69,139,458	54,128,210		123,267,668	12,150	123,279,818
2003	63,546,028	52,300,059		115,846,087	7,808	115,853,895
2002	54,412,278	50,566,637		104,978,915	6,066	104,984,981
2001	46,544,264	38,389,936	3,221,712	88,155,912	5,155	88,161,067
2000	38,553,599	38,786,138	3,023,755	80,363,492	2,246	80,365,738
1999	34,389,038	33,236,136	2,728,897	70,354,071	3,145	70,357,216

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2008	$ 224,397,218	$ 179,286,229	$ 45,110,989
2007	183,392,880	174,234,931	9,157,949
2006	153,938,930	169,635,539	(15,696,609)
2005	137,106,130	146,429,401	(9,323,271)
2004	114,377,407	123,279,818	(8,902,411)
2003	135,345,162	115,853,895	19,491,267
2002	147,588,234	104,984,981	42,603,253
2001	137,733,275	88,161,067	49,572,208
2000	89,050,373	80,365,738	8,684,635
1999	83,054,541	70,357,216	12,697,325

Life Insurance Plan
Past Two Fiscal Years

Additions by Source

YEAR	Employer Contributions	Net Investment Income	Total Additions to Plan Net Assets
2008	$ 5,411,249	$ 6,321,491	$ 11,732,740
2007	5,022,137	(3,413,537)	1,608,600

Deductions by Type (Including Benefits by Type)

Changes in Net Assets

YEAR	Life Insurance	Total Deductions to Plan Net Assets	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2008	$ 4,003,000	$ 4,003,000	$ 11,732,740	$ 4,003,000	$ 7,729,740
2007	4,245,000	4,245,000	1,608,600	4,245,000	(2,636,400)

Distribution of Active Contributing Members as of June 30, 2008

By Age

Age	Male	Female
20-24	944	3,135
25-29	2,740	7,992
30-34	2,449	7,095
35-39	2,381	7,805
40-44	2,083	6,768
45-49	1,954	6,520
50-54	2,162	6,689
55-59	2,120	5,773
60-64	1,352	2,968
65-69	557	1,144
Over 70	279	629
TOTAL	19,021	56,518

By Service

Years of Service	Male	Female
Less than 1	5,784	15,301
1-4	4,472	13,972
5-9	3,035	9,721
10-14	2,177	6,446
15-19	1,517	4,708
20-24	1,101	3,610
25-29	565	1,839
30-34	281	792
35 or more	89	129
TOTAL	19,021	56,518

Principal Participating Employers
Current Year and Nine Years Ago

	2008			1999		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	9,950	1	12.96%	6,849	1	12.85%
Fayette County Public Schools	4,102	2	5.34	2,793	2	5.24
Boone County Schools	1,671	3	2.18	888	5	1.67
Hardin County Schools	1,359	4	1.77	1,008	3	1.89
Kenton County Schools	1,308	5	1.70	783	9	1.47
Bullitt County Schools	1,230	6	1.60	709	12	1.33
Warren County Schools	1,186	7	1.54	755	10	1.42
Oldham County Schools	1,167	8	1.52	602	15	1.13
Daviess County Schools	1,156	9	1.51	738	11	1.38
Madison County Schools	1,136	10	1.48	637	14	1.19
All Other *	52,512		68.40%	37,553		70.44%
Total (211 Employers)	76,777		100.00%	53,315		100.00%

KTRS Schedule of Participating Employers
School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

KTRS Schedule of Participating Employers *(continued)*

School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Monticello
36. Murray
37. Newport
38. Owensboro
39. Paducah
40. Paintsville
41. Paris
42. Pikeville
43. Pineville
44. Providence
45. Raceland
46. Russell
47. Russellville
48. Science Hill
49. Silver Grove
50. Somerset
51. Southgate
52. Walton-Verona
53. West Point
54. Williamsburg
55. Williamstown

Universities & Community/ Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/ Other Organizations

State of Kentucky

1. Education and Humanities Cabinet
2. Legislative Research Commission
3. Workforce Investment Cabinet
4. Cabinet for Families and Children
5. Finance and Administration Cabinet

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association President
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative
13. Jefferson County Teacher's Association

104	Alabama
1	Alaska
67	Arizona
22	Arkansas
101	California
45	Colorado
13	Connecticut
6	Delaware
3	District of Columbia
858	Florida
206	Georgia
7	Hawaii
4	Idaho
72	Illinois
505	Indiana
13	Iowa
31	Kansas
26	Louisiana
8	Maine
24	Maryland
15	Massachusetts
34	Michigan
19	Minnesota
61	Mississippi
59	Missouri
7	Montana
4	Nebraska
16	Nevada
1	New Hampshire
9	New Jersey
12	New Mexico
37	New York
203	North Carolina
4	North Dakota
472	Ohio
20	Oklahoma
23	Oregon
31	Pennsylvania
1	Rhode Island
134	South Carolina
8	South Dakota
668	Tennessee
154	Texas
11	Utah
2	Vermont
117	Virginia
29	Washington
70	West Virginia
21	Wisconsin
3	Wyoming

Distribution of Retirement Payments Worldwide

As of June 30, 2008

Additional Distribution Outside USA

1	AUSTRALIA
4	CANADA
1	MILITARY APO
1	PHILIPPINES
1	SWITZERLAND

TOTAL: Number of Out of State Payments 4,369
TOTAL: Out of State Payments ..... $ 90,181,688
TOTAL: Number of Payments 41,917
GRAND TOTAL: Amount of Payments ..... $ 1,170,782,677

Distribution of Retirement Payments Statewide

as of June 30, 2008

County Name	Total Payments	Number of Recipients
Adair	$ 4,523,498	172
Allen	4,128,862	145
Anderson	4,867,161	174
Ballard	2,899,535	98
Barren	10,158,867	354
Bath	3,150,267	126
Bell	9,424,463	353
Boone	20,214,905	663
Bourbon	4,497,147	167
Boyd	13,963,057	474
Boyle	10,186,494	349
Bracken	2,058,617	76
Breathitt	5,679,721	231
Breckinridge	4,614,083	152
Bullitt	10,977,251	342
Butler	2,056,213	75
Caldwell	4,372,148	154
Calloway	16,527,818	576
Campbell	16,728,050	554
Carlisle	1,172,244	45
Carroll	1,955,303	75
Carter	8,441,895	310
Casey	3,813,815	154
Christian	13,046,889	445
Clark	8,359,379	301
Clay	6,657,223	250
Clinton	3,068,304	113
Crittenden	1,607,324	63
Cumberland	2,102,657	75
Daviess	25,374,926	884
Edmonson	2,156,885	79
Elliott	1,410,596	60
Estill	3,348,036	121
Fayette	67,805,911	2,371
Fleming	3,959,488	149
Floyd	13,858,260	535
Franklin	19,258,143	815
Fulton	1,826,253	67
Gallatin	495,056	18
Garrard	4,055,603	136
Grant	4,010,376	133
Graves	9,640,363	333
Grayson	6,589,493	237
Green	2,984,235	105
Greenup	9,518,703	334

Distribution of Retirement Payments Statewide

as of June 30, 2008 continued . . .

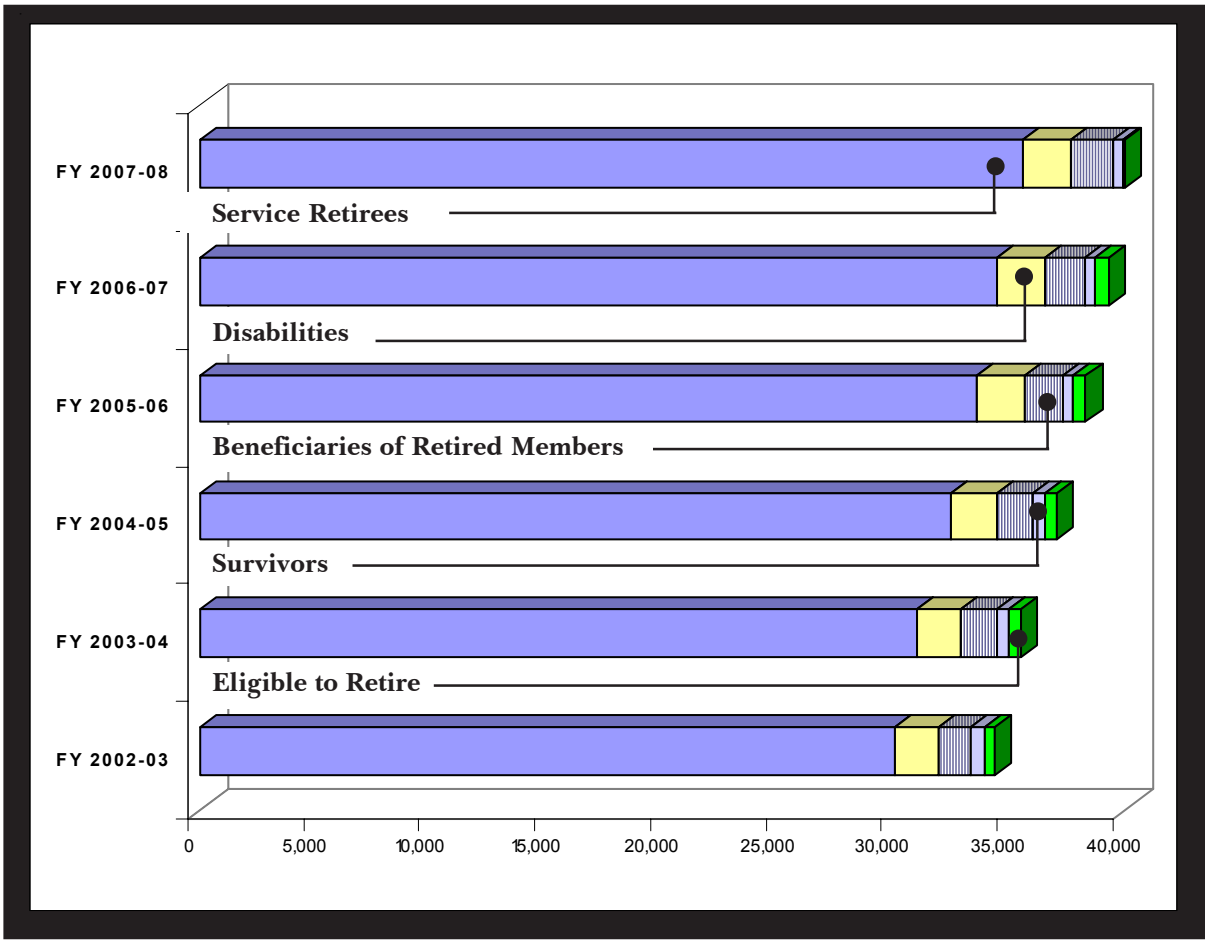
County Name	Total Payments	Number of Recipients
Hancock	1,817,797	63
Hardin	20,081,443	681
Harlan	10,469,020	387
Harrison	5,004,875	179
Hart	4,012,080	136
Henderson	9,698,621	349
Henry	4,134,673	153
Hickman	899,572	32
Hopkins	11,632,791	405
Jackson	2,935,745	119
Jefferson	184,703,096	5,583
Jessamine	7,273,252	269
Johnson	8,167,331	294
Kenton	20,485,021	706
Knott	5,677,068	225
Knox	6,116,583	230
Larue	4,046,218	131
Laurel	13,156,635	501
Lawrence	3,427,241	131
Lee	1,555,749	68
Leslie	3,512,660	135
Letcher	8,390,066	311
Lewis	4,600,401	161
Lincoln	7,001,818	251
Livingston	2,043,820	82
Logan	6,124,544	234
Lyon	2,332,269	86
Madison	33,459,596	1,096
Magoffin	3,778,419	147
Marion	3,891,041	148
Marshall	8,992,446	299
Martin	3,276,375	122
Mason	4,535,760	159
McCracken	17,466,990	607
McCreary	4,928,962	186
McLean	2,467,285	89
Meade	4,454,374	135
Menifee	1,261,283	55
Mercer	5,615,219	220
Metcalfe	2,881,780	100
Monroe	4,089,613	153
Montgomery	6,700,216	238
Morgan	4,353,077	159
Muhlenberg	7,442,505	261
Nelson	9,046,295	307

Distribution of Retirement Payments Statewide

as of June 30, 2008 continued . . .

County Name	Total Payments	Number of Recipients
Nicholas	1,607,139	57
Ohio	4,940,139	189
Oldham	11,420,538	364
Owen	2,021,054	79
Owsley	2,948,632	106
Pendleton	3,353,679	113
Perry	9,482,880	341
Pike	20,683,132	756
Powell	2,635,768	93
Pulaski	15,840,248	592
Robertson	570,016	23
Rockcastle	4,336,728	166
Rowan	12,116,302	443
Russell	5,223,120	189
Scott	8,915,797	302
Shelby	10,675,125	351
Simpson	3,819,936	139
Spencer	3,237,579	99
Taylor	6,833,902	249
Todd	2,218,608	85
Trigg	4,087,137	152
Trimble	1,445,277	45
Union	2,816,038	108
Warren	38,689,628	1,371
Washington	2,806,918	107
Wayne	5,701,180	207
Webster	3,185,461	119
Whitley	14,042,511	531
Wolfe	2,875,413	108
Woodford	6,583,962	238
Total in Kentucky	**$ 1,080,600,989**	**37,548**

Growth in Annuitants
as of June 30, 2008



Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Survivors	Eligible to Retire
FY 2002-03	30,064	1,859	1,416	570	502
FY 2003-04	31,003	1,934	1,505	536	518
FY 2004-05	32,506	1,987	1,566	507	525
FY 2005-06	33,618	2,039	1,631	495	531
FY 2006-07	34,462	2,086	1,722	466	549
FY 2007-08	35,550	2,155	1,778	468	554

Schedule of Annuitants by Type of Benefit as of June 30, 2008

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Retirement*				
		1	2	3	4	5
1 - 500	3032	2115	18	423	205	271
501 - 1,000	2678	2003	213	3	459	0
1,001 - 1,500	3667	2753	332	0	582	0
1,501 - 2,000	4472	3655	450	2	365	0
2,001 - 2,500	7230	6277	634	17	302	0
2,501 - 3,000	8087	7572	300	15	200	0
3,001 - 3,500	4984	4751	132	3	98	0
3,501 - 4,000	2890	2775	54	2	59	0
4,001 - 4,500	1611	1563	16	2	30	0
4,501 - 5,000	912	889	4	1	18	0
5,001 & OVER	1213	1197	2	0	14	0
Total	40,776	35,550	2,155	468	2,332	271

***Type of Retirement**

1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Survivor Payment - Active Member*
4-*Beneficiary Payment - Retired Member*
5-*Disabled Adult Child*

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,449	354	241	65	9	365	116	433
501 - 1,000	1,390	332	216	144	11	293	217	75
1,001 - 1,500	1,940	445	346	178	14	353	286	105
1,501 - 2,000	2,392	509	386	169	5	534	340	137
2,001 - 2,500	3,353	698	588	250	11	1,254	764	312
2,501 - 3,000	4,190	839	619	243	7	1,200	872	117
3,001 - 3,500	2,587	542	434	163	8	687	522	41
3,501 - 4,000	1,431	296	267	111	6	413	356	10
4,001 - 4,500	809	176	154	74	10	211	172	5
4,501 - 5,000	445	86	114	47	4	110	104	2
5,001 & OVER	602	108	139	80	11	116	156	1
Total	20,588	4,385	3,504	1,524	96	5,536	3,905	1,238

***Option selected:**

1 - Straight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/1998 TO 06/30/1999								
Average monthly benefit	$117	$420	$735	$1,075	$1,723	$2,303	$2,907	
Average final average salary	$2,995	$3,042	$2,953	$3,087	$3,630	$3,805	$4,248	
Number of retired members	31	71	80	81	115	1133	497	2,008
07/01/1999 TO 06/30/2000								
Average monthly benefit	$195	$444	$840	$1,232	$1,721	$2,414	$3,052	
Average final average salary	$3,764	$3,183	$3,198	$3,390	$3,573	$3,958	$4,461	
Number of retired members	54	82	74	82	95	1180	473	2,040
07/01/2000 TO 06/30/2001								
Average monthly benefit	$145	$402	$881	$1,283	$1,779	$2,472	$3,246	
Average final average salary	$3,695	$2,842	$3,444	$3,550	$3,807	$4,024	$4,707	
Number of retired members	48	73	86	85	143	1008	486	1,929
07/01/2001 TO 06/30/2002								
Average monthly benefit	$204	$408	$790	$1,296	$1,898	$2,552	$3,407	
Average final average salary	$4,143	$2,950	$3,312	$3,613	$3,920	$4,115	$4,884	
Number of retired members	65	128	82	116	107	1019	574	2,091
07/01/2002 TO 06/30/2003								
Average monthly benefit	$205	$480	$940	$1,344	$1,940	$2,715	$3,592	
Average final average salary	$4,301	$3,380	$3,714	$3,798	$4,078	$4,378	$5,121	
Number of retired members	58	83	98	103	155	837	508	1,842
07/01/2003 TO 06/30/2004								
Average monthly benefit	$220	$474	$839	$1,444	$1,978	$2,758	$3,486	
Average final average salary	$5,243	$3,357	$3,349	$3,936	$4,182	$4,425	$5,062	
Number of retired members	43	84	98	96	145	818	405	1,689
07/01/2004 TO 06/30/2005								
Average monthly benefit	$187	$528	$906	$1,488	$2,037	$2,892	$3,860	
Average final average salary	$4,353	$3,511	$3,647	$4,055	$4,317	$4,602	$5,275	
Number of retired members	55	98	107	106	145	811	875	2,197
07/01/2005 TO 06/30/2006								
Average monthly benefit	$202	$473	$1,019	$1,493	$2,136	$2,998	$4,063	
Average final average salary	$4,106	$3,253	$4,052	$4,117	$4,537	$4,721	$5,490	
Number of retired members	44	105	106	132	193	689	604	1,873
07/01/2006 TO 06/30/2007								
Average monthly benefit	$178	$514	$930	$1,559	$2,276	$3,140	$4,263	
Average final average salary	$4,102	$3,346	$3,590	$4,228	$4,612	$4,970	$5,758	
Number of retired members	48	113	90	109	169	534	514	1,577
07/01/2007 TO 06/30/2008								
Average monthly benefit	$199	$524	$1,117	$1,658	$2,436	$3,279	$4,319	
Average final average salary	$3,816	$3,066	$4,215	$4,412	$4,983	$5,067	$5,786	
Number of retired members	50	130	112	150	217	557	615	1,831

Medical Insurance Plan

Average Insurance Premium Supplements for the Last Eight Years

	Years of Service Credit				
	00-9.99	**10-14.99**	**15-19.99**	**20>=**	**TOTAL**
Retirement Effective Dates					
07/01/2000 TO 06/30/2001					
Average monthly supplement	$ 107.71	$ 165.08	$ 201.72	$ 233.51	
Number of retired members	42	69	96	1634	1,841
07/01/2001 TO 06/30/2002					
Average monthly supplement	$ 128.78	$ 167.74	$ 201.48	$ 252.15	
Number of retired members	59	62	99	1694	1,914
07/01/2002 TO 06/30/2003					
Average monthly supplement	$ 106.62	$ 142.57	$ 212.81	$ 277.64	
Number of retired members	34	59	91	1457	1,641
07/01/2003 TO 06/30/2004					
Average monthly supplement	$ 100.50	$ 148.85	$ 219.41	$ 289.98	
Number of retired members	30	59	82	1365	1,536
07/01/2004 TO 06/30/2005					
Average monthly supplement	$ 138.29	$ 214.32	$ 305.39	$ 394.92	
Number of retired members	36	70	93	1768	1,967
07/01/2005 TO 06/30/2006					
Average monthly supplement	$ 161.03	$ 241.76	$ 362.31	$ 487.23	
Number of retired members	28	49	106	1440	1,623
07/01/2006 TO 06/30/2007					
Average monthly supplement	$ 146.24	$ 260.95	$ 363.45	$ 489.73	
Number of retired members	29	53	80	949	1,111
07/01/2007 TO 06/30/2008					
Average monthly supplement	$ 162.54	$ 260.71	$ 378.28	$ 512.29	
Number of retired members	36	61	104	952	1,153

Summary of Fiscal Year 2007-2008
Retiree Sick Leave Payments

ACTUARIAL RATE

Grand Total Members Retiring	2,145
Total members receiving sick leave payments	1,564
Total amount of sick leave payments @ 9.855% contribution rate	$ 20,073,811.87
Average payment per retiree	$ 12,834,92
Total increase in final 3/5 average salary base	$ 5,894,407.37
Average increase in final average salary	$ 3,768.80
Total service credit of 1,564 retirees	42,468.02
Average service credit of 1,564 retirees	27.15
Additional Average Monthly Annuity payment per Retirement Formula	
3,768.80 x 2.15 x 2.00% =	$ 162.06
3,768.80 x 25.00 x 2.50% =	2,355.50
Total	$ 2,517.56
2,517.56/ 12 months =	$ 209.80
Anticipated Lifetime Payout of Additional Annuity	
209.80 X 144.5250 X 1,564 new factor	$ 47,422,583.58

Funding of Additional Payments

Member Contributions 9.855% x $20,073,811.87 =	$ 1,978,274.16
State Contributions 13.105% x $20,073,811.87 =	2,630,673.05
Total Member-State Contributions	$ **4,608,947.21**
DEFICIT:	
Anticipated additional payout	$ 47,422,583.58
Less total Member & State Contributions	4,608,947.21
Subtotal unfunded debt	42,813,636.37
Less current year appropriation	4,917,200.00
TOTAL DEFICIT (overpayment) *	$ **37,896,436.37** *

* NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. Sick leave deficits are amortized over 20 year periods.

Summary of State Match and Supplemental Appropriations for Member Contributions to Teachers' Retirement System

for Fiscal Year Ended June 30, 2008

Fiscal Year	Total Member Contributions	Employer/ Federal Payments	Required State Match Contributions	Required Supplemental Appropria-tion	Required Sick Leave Payments	Total State Appropria-tion	(Deficit) Surplus State Funding
1944-48	3,184,178		3,184,178			3,039,017	(145,160)
1948-52	4,951,458		4,951,458			5,090,848	(139,390)
1952-56	7,267,163		7,267,163			6,494,102	(773,062)
1956-60	14,970,961		14,970,961			14,963,272	(7,689)
1960-64	25,945,897		25,945,897			25,938,763	(7,134)
1964-68	49,957,299	2,042,014	47,915,285			45,317,694	(2,597,591)
1968-72	82,922,869	6,044,865	76,878,005			80,091,951	3,213,946
1972-76	120,349,350	8,019,216	112,330,134			111,665,685	(664,449)
1976-80	189,072,371	12,044,186	177,028,185	75,010,028		256,784,030	4,745,817
1980-84	272,744,772	16,334,937	256,409,836	109,622,111	5,197,234	378,667,011	7,437,831
1984-88	413,932,416	21,417,604	392,514,811	141,251,827	13,341,243	515,932,177	(31,175,706)
1988-92	602,399,432	119,352,211	483,347,221	133,545,987	28,978,117	634,358,200	(11,537,557)
1992-96	756,817,769	154,296,351(2)	602,521,418	213,030,177	53,308,591	854,138,311	(14,751,875)
1996-00	863,954,020	171,037,889	692,916,131	245,400,594	43,209,004(1)	990,501,344	8,975,615
2000-04	999,971,551	200,041,662	799,935,889	289,439,321		1,065,262,116	(24,113,095)
2004-05	274,249,089	63,618,098	210,630,991	79,018,035		293,364,324	3,715,298
2005-06	289,063,930	66,462,471	222,601,459	83,319,537		310,182,549	4,261,553
2006-07	301,522,044	68,333,669	233,188,375	86,819,875		321,074,432	1,066,182
2007-08	324,168,175	70,454,529	253,713,646	93,903,116		348,072,711	455,949

(1) The state appropriations for the sick leave deficit started being amortized over 15 years in the year ended June 1999 through the year ended June 2002. Starting the fiscal year 2003 the sick leave deficits were amortized over 20 years.

(2) Beginning with the 1988-89 fiscal year, the Department of Education and the state universities were responsible for matching their members' contributions with the state reimbursing the respective agencies in their normal budget appropriation.

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Introductory Section

for Fiscal Year ending June 30, 2009

PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

John Means School, 1908
Boyd County, Ashland, Kentucky

Chairperson's Letter

Teachers' Retirement System of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

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COMMISSIONER
DEPARTMENT
OF EDUCATION

EX OFFICIO
TODD HOLLENBACH
STATE TREASURER

December 30, 2009

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2009, the 69th year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

KTRS closed the 2008-2009 fiscal year with $11.8 billion net assets. The active membership totaled 75,937 and the retired membership was 42,050 with an annual payroll of $1.3 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. Every effort will be made to insure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Barbara G. Sterrett
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 30, 2009

Honorable Steven L. Beshear, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky

Dear Governor Beshear:

It is my pleasure to submit the 69th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a Component Unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2009. State law provides the legal requirement for the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system are also required. Kentucky Teachers' Retirement System (KTRS) has produced an annual report that will provide you, the General Assembly, and the general public, with information necessary to gain a better understanding of the Teachers' Retirement System.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of the System for the year ended June 30, 2009. Discussion and analysis of net assets and related additions and deductions is presented in Management's Discussion and Analysis beginning on page 15.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are accurately executed and financial statements are fairly presented. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Secretary and the Governance and Audit Committee of the Board of Trustees.

Profile of KTRS

Kentucky Teachers' Retirement System was established on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement benefits to the educators and some public employees of the state. KTRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 24. Also, the summary of the plan provisions starting on page 89 is useful in understanding benefit and contribution provisions. The population of KTRS membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the pension fund. The budget is approved by the Board of Trustees and submitted to the Kentucky General Assembly for legal adoption. The KTRS investment earnings fund the administrative budget appropriations.

Major Initiatives

The System continually seeks opportunities to better serve its membership. During the past year, KTRS has undertaken several new major initiatives concerning the investment program, information technology, and funding for retiree health care.

The past year included the most significant global financial turmoil since the Great Depression. However, despite the crisis, KTRS's investment program performed remarkably well. In fact, because of KTRS's focus on fundamental value and risk control, it was able to continue a multiyear program of broadening the portfolio's

diversification even at the height of the financial crisis. KTRS has also hired an investment consultant to assist with efforts at diversification. These ongoing efforts are simply a continuation of a disciplined investment process and long-term focus on retirement security. This focus has generated exceptionally stable returns through the System's history and we have every confidence that it will do so in the future.

During the year, an independent investment consultant performed an operational and governance review of the KTRS investment program. The report confirmed that KTRS has a sound and cost effective investment program. In almost all functional areas of the investment program, KTRS currently utilizes "best practices" or "prevalent practices." In terms of governance structure, trustee education, and cost effectiveness, the report confirms that KTRS is a "cutting edge" leader in the public pension community. The report highlighted the action to include two nationally recognized experts on the membership of the investment committee and the use of innovative web based training programs for members of the investment committee.

In commissioning the review, the Board is again on the leading edge of best governance practices for the public pension community. Undertaking an operational and governance review of investment programs is a developing trend. The Board should be commended for its foresight in commissioning this report. The report included several recommendations to improve the investment program and we look forward to evaluating and continuing to implement the recommendations in the report.

KTRS staff has continued working on the design phase of a new information technology system known as the "Pathway Project." The objective of the Pathway Project is to streamline retirement processes, and improve staff efficiency in providing services to retirees and active members. During this project, the current legacy KTRS Pension Management System will be replaced with a new system of databases and applications, which will accomplish these goals. The new system will allow KTRS to redesign and improve office processes and ultimately apply new technologies to these processes. This will increase staff productivity, provide seamless member account management, and simplify future system modifications.

In addition to continuing work on design, the first application of the Pathway Project was developed, tested, and successfully implemented to allow retirees to apply for health benefits through a web based enrollment. As KTRS continues to implement changes to the information technology system under the Pathway Project, we expect that the new technology will help the System better serve its membership.

Securing adequate funding for retiree health care provided by KTRS remains a major initiative of the System. The Board and Executive staff have continued to meet with members of the General Assembly and various interest groups to achieve the goal of moving away from the short-term, unsustainable solution of funding retiree medical insurance that allocates a portion of pension contributions to the medical insurance fund and move instead toward a long-term, sustainable funding solution to keep the health care fund solvent. The Board of Trustees commissioned its actuary to perform detailed work on this issue and authorized staff to continue to work with all interested parties to facilitate a legislative plan for prefunding retiree health benefits.

Economic Condition

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 49 contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules among others.

The investment portfolio experienced a decline in value during the 2008-2009 fiscal year as the portfolio's market value decreased from $14,233,808,958 to $11,732,059,913. The decline in value of the portfolio and of the overall market was due to turmoil in the financial markets and a tightening of credit availability. This decline was partially offset with investment income that included interest income and dividends. Employer and employee contributions also provided significant income to the portfolio.

Investment income, including depreciation of

asset values, net of investment expenses, for the 2008-2009 fiscal year was negative $2,004,100,112. The major cause of the negative return from the System's investment portfolio was the net depreciation in fair value of investments in the amount of $2,391,936,312. The largest earnings component, $221,389,695 was the result of interest income. Other income, net of expenses, of $166,446,505 was generated from dividends, rent and securities lending.

According to the KRS 161.430 the KTRS Board of Trustees has the responsibility to invest the assets of the System. The Board of Trustees delegates investment authority to the Investment Committee. The Investment Committee works closely with experienced investment counselors and the System's professional staff in evaluating and selecting investment allocations.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the Plan and its Trust Funds. The investment program shall also provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. While the entire portfolio earned a total return of negative 14.3% in 2008-09, the portfolio's ten-year annualized rate of return is 1.9% and the twenty-year annualized rate of return is 7.1%. During 2008-09, 54% of the fixed income investments were rated at least "AAA" in terms of credit quality.

KTRS annuities have a bolstering impact on the Commonwealth of Kentucky's economy, as approximately 92% of retired teachers reside within the state. Total benefits (retirement, medical...etc.) paid during the fiscal year were approximately $1.5 billion.

Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes by statute the levels of contribution that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

The latest actuarial valuation was for the period ending June 30, 2009. This report reflects the actuarial value of the System's assets of $14.9 billion and the actuarial accrued liabilities totaled $23.4 billion. The actuary determined that the existing levels of contribution by members and employers would be sufficient to fund all of the System's liabilities within a reasonable period of time. The report concludes that the System is not operating on an actuarially sound basis since a portion of the annual contributions required to fund pension benefits have been allocated to the Medical Insurance Fund. Assuming that employer contributions continue in the future at rates recommended on the basis of the successive actuarial valuations, the actuary states that the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions (on page 44). The 2009 employer shortfall of contributions created a net pension obligation of $413,292,362 (as detailed on page 83). Annual required employer contributions for the Medical Insurance Fund are provided in the schedule of employer contributions (on page 44). The 2009 employer shortfall of contributions created a net OPEB obligation of $525,816,306 (as detailed on page 104).

KTRS Medical Insurance Plan

KTRS health care costs keep escalating at a much faster clip than revenue growth in the Medical Insurance Plan. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2009 indicated that the fund has an unfunded liability of $6.2 billion for 2009. The KTRS 2008-2010 biennial budget requested additional funding from the Commonwealth, but sufficient funds were not allocated by the state. The budget bill directs KTRS to allocate a portion of the state employer contribution in a sufficient amount to the Medical Insurance Fund instead of

the Pension Fund to fund the Medical Insurance Fund Stabilization Contribution. This is the third consecutive budget that has funded current retiree medical insurance costs in this manner. The Commonwealth has agreed to return to the Pension Fund the portion of the state employer contribution that has been allocated to the Medical Insurance Fund over the last three biennia, to be paid in installments with interest over ten-year periods. Thus far, the Commonwealth has returned to the Pension Fund approximately $70 million of the approximately $557 million that will have been allocated for current medical insurance costs by the current fiscal year end, June 30, 2010.

Effective January 1, 1999, KTRS eligible retirees and eligible dependents under the age of 65 have their health insurance provided by plans managed by the Kentucky Department for Employee Insurance. Under this arrangement, KTRS provides a monthly supplement to assist the eligible retiree in purchasing health insurance. Retirees 65 and over remain in the Medicare eligible health plan administered by KTRS. These retirees also receive a supplement for the cost of their coverage.

The System realizes that the medical insurance fund is in crisis. To realize true cost containment, additional steps must be taken through legislation on both the state and national levels. Meanwhile, KTRS will address the problem by continuing to take measures to contain costs and by increasing revenues to the insurance fund, adjusting coverage to meet existing revenues, or a combination of the two.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the KTRS. A certification from the certified public accountant and actuary are enclosed in this report. The System's consultants who are appointed by the Board are listed on pages 46, 47 and 70 of this report.

National Recognition

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2008. The Certificate of Achievement is a prestigious national award-recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The KTRS has received the Certificate of Achievement for the last twenty-one consecutive years (fiscal years ended 1988-2008). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement of the State of Kentucky for 2009 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure, and are widely acknowledged to be marks of excellence in the public pension industry.

The PPCC is a coalition of the four major public pension organizations in the nation. These include the National Association of State Retirement Administrators, The National Council on Teacher Retirement, the National Conference on Public Employees Retirement Systems, and the Government Finance Officers Association.

NCTR Executive Committee

Gary L. Harbin serves as the President on the Executive Committee of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 69 state, territorial, local and university pension systems with combined assets in excess of 2 trillion, serving more than 18 million active and retired teachers, non-teaching personnel and other public employees.

Public Sector HealthCare Roundtable

Mr. Harbin also serves on the Board of Directors and as President of the Public Sector HealthCare Roundtable. The Roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector are properly represented during the formulation and debate of federal health care reform initiatives. Membership in the Roundtable is open to any statewide, regional, or local governmental unit that provides health care coverage for public employees and retirees.

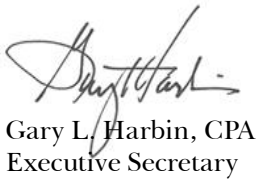
Acknowledgments

The preparation of this report reflects the combined efforts of the KTRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship of the assets contributed by KTRS members and their employers.

This report is located at the KTRS web address www.ktrs.ky.gov, and is being mailed to all employer members of the System whose cooperation continues to contribute significantly to our success, and who form the vital link between KTRS and its active members.

KTRS management and staff are committed to the continued operation of an actuarially sound retirement system. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



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Executive Secretary

Board of Trustees

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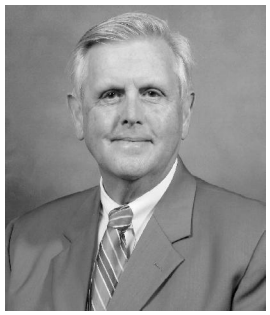
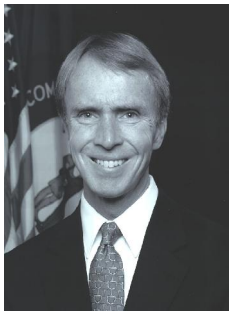


Dr. Terry Holliday
Ex Officio Trustee
Commissioner,
Dept. of Education



Todd Hollenbach
Ex Officio Trustee
State Treasurer

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

GARY L. HARBIN, CPA
Executive Secretary

ROBERT B. BARNES, JD
General Counsel and
Deputy Executive Secretary
Operations

J. ERIC WAMPLER, JD
Deputy Executive Secretary
Finance & Administration

PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

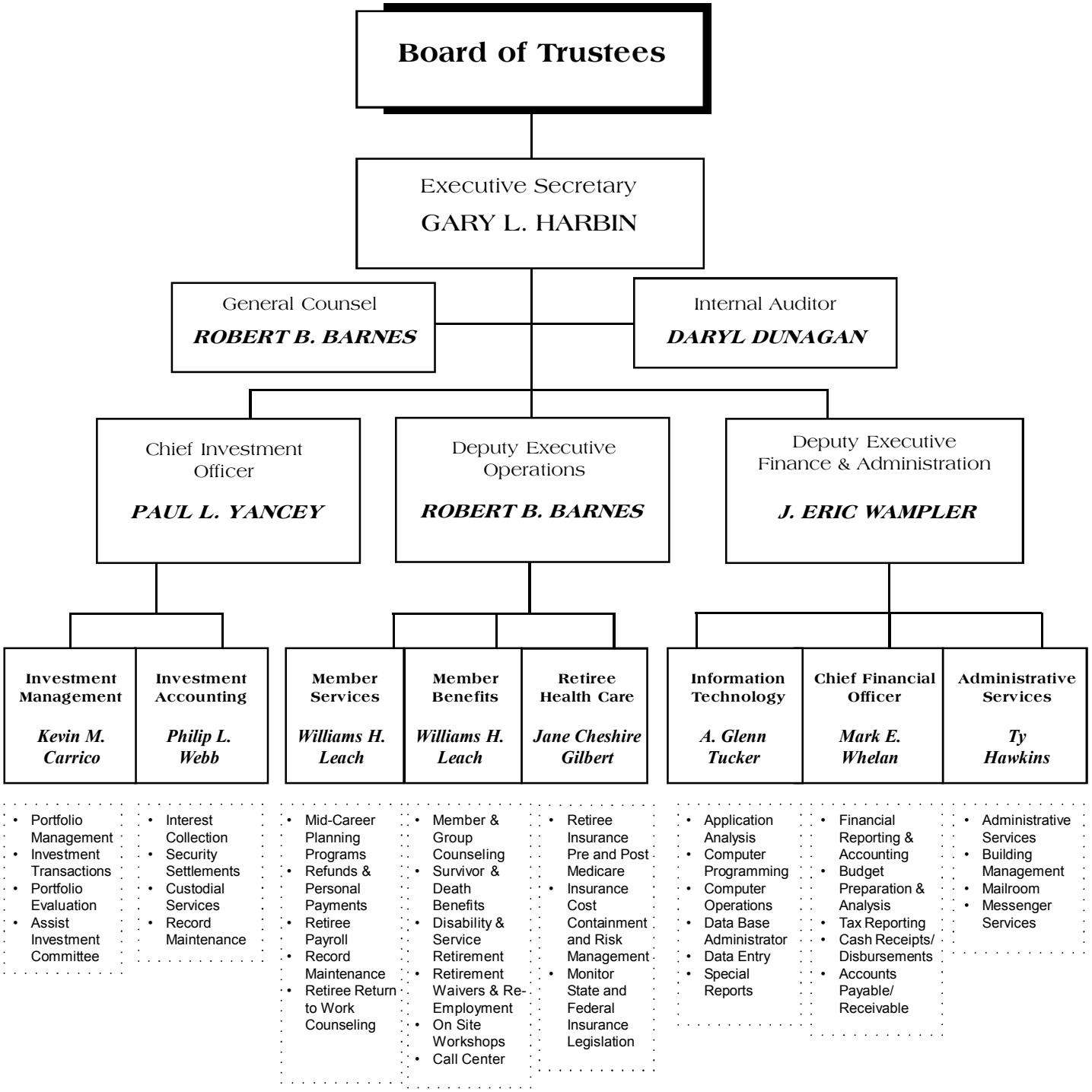
Cavanaugh Macdonald Consulting, LLC
3550 Busbee Parkway, Suite 250
Kennesaw, GA 30144

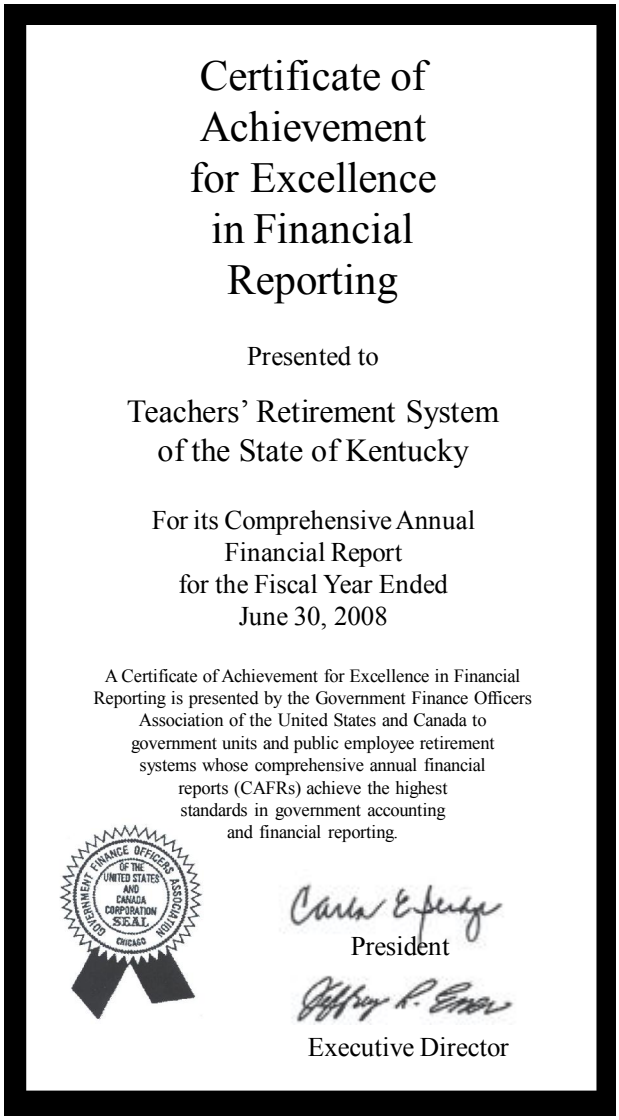
AUDITOR

Charles T. Mitchell, LLP
201 West Main Street
P.O. Box 698
Frankfort, Kentucky 40601

** See page 70 of the Investment Section for investment consultants.*

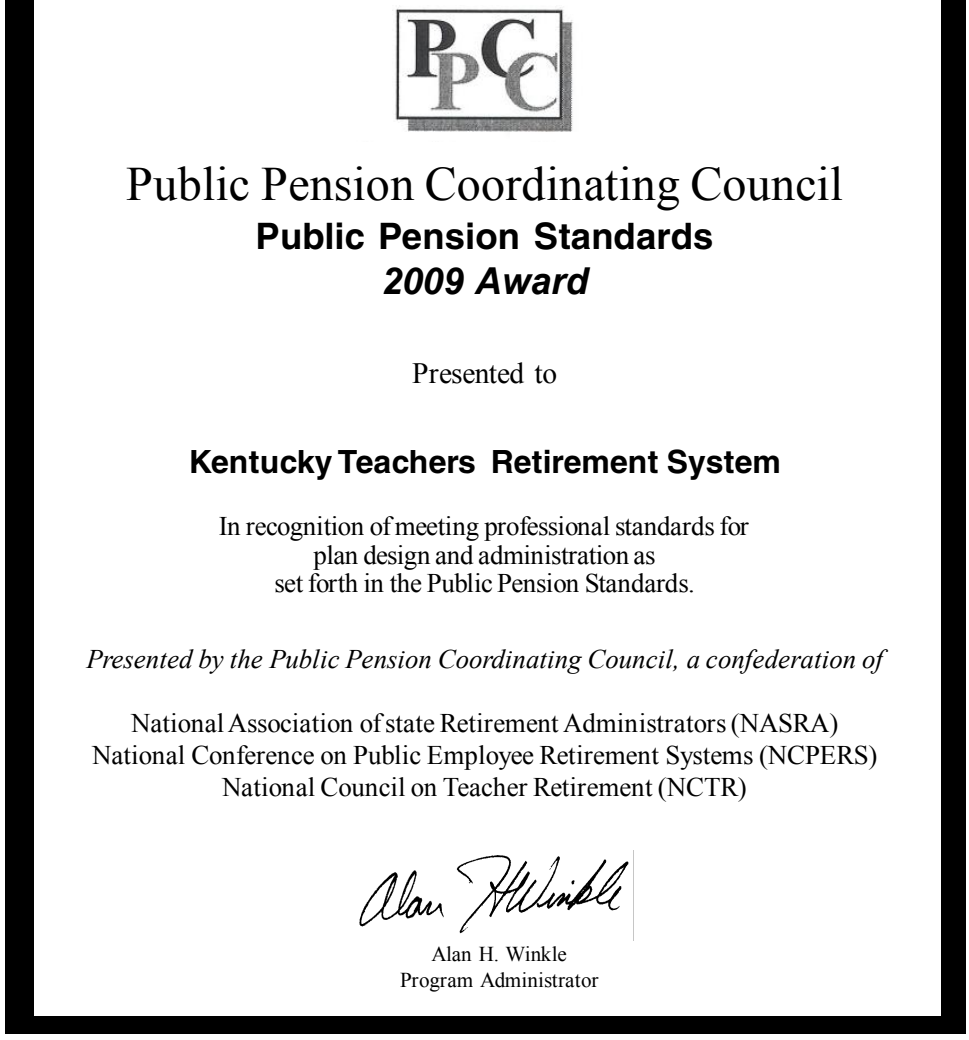
Kentucky Teachers' Retirement System
Organizational Chart





GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last twenty-one consecutive years (fiscal years ended 1988-2008).



Public Pension Coordinating Council
Public Pension Standards
2009 Award

Presented to

Kentucky Teachers Retirement System

In recognition of meeting professional standards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of state Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2009 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

Financial Section

for Fiscal Year ending June 30, 2009

PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

Augusta High School, around 1905
Bracken County
Augusta, Kentucky

Charles T. Mitchell Co. LLP
Certified Public Accountants

William G. Johnson , Jr., C.P.A
James Clouse,C.P.A
Bernadette Smith, C.P.A
Kim Field, C.P.A
Greg Miklavcic, C.P.A
Don C. Giles, C.P.A, Consultant

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the accompanying statements of plan net assets of the Teachers' Retirement System of the State of Kentucky as of June 30, 2009 and 2008 and the related statements of changes in plan net assets for the years then ended. These component unit financial statements are the responsibility of the Teachers' Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the plan net assets of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, at June 30, 2009 and 2008 and the changes in its plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated December 18, 2009 on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

The Management's Discussion and Analysis on pages 15-19 are not a required part of the basic financial statements but is supplemental information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplemental information. However, we did not audit the information and express no opinion on it.

The financial section supporting schedules listed in the table-of-contents are presented for the purpose of additional analysis and are not a required part of the basic financial statements. These schedules are the responsibility of the System's management. Such schedules as of and for the year ended June 30, 2009 have been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

We did not audit the data included in the Introductory and Statistical sections of the report and therefore express no opinion on them.

Charles T. Mitchell Co.

Frankfort, Kentucky
December 18, 2009

201 West Main Street, Frankfort, Kentucky 40601 | P.O. Box 698, Frankfort, Kentucky 40602-0698
(502) 227-7395 | Fax (502) 227-8005 | www.ctmcpa.com

MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of Kentucky Teachers' Retirement System's financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2009. Please read it in conjunction with the respective financial statements, which begin on page 20.

USING THIS FINANCIAL REPORT

Because of the long-term nature of a defined benefit pension plan, and the medical and life insurance plans, financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. The Statement of Plan Net Assets and Statement of Changes in Plan Net Assets (on pages 20-23) provide information about the activities of the defined benefit plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Kentucky Teachers' Retirement System is the fiduciary of funds held in trust for its members.

The Schedule of Funding Progress (on pages 43-45) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (on pages 44-45) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2009, Kentucky Teachers' Retirement System's combined plan net assets decreased by $2,510.5 million – from $14,340.7 million to $11,830.2 million. The following summaries focus on plan net assets and changes in plan net assets of Kentucky Teachers' Retirement System's defined benefit plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan.

Summary of
Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2009	2008	2007	2009	2008	2007	2009	2008	2007
Cash & Investments	$ 11,592.4	$ 14,224.0	$ 16,204.5	$ 225.0	$ 182.0	$ 137.0	$ 89.0	$ 76.8	$ 69.1
Receivables	94.3	93.6	95.8	7.1	6.2	5.7	.7	.8	.8
Capital Assets	3.2	3.0	3.1						
Total Assets	11,689.9	14,320.6	16,303.4	232.1	188.2	142.7	89.7	77.6	69.9
Total Liabilities	(174.0)	(243.9)	(880.8)	(3.0)	(2.3)	(1.9)	(5.0)		
Plan Net Assets	$ 11,515.9	$ 14,076.7	$ 15,422.6	$ 229.1	$ 185.9	$ 140.8	$ 84.7	$ 77.6	$ 69.9

*TOTALS	2009	2008	2007
Cash & Investments	$ 11,906.4	$ 14,482.8	$ 16,410.6
Receivables	102.1	100.6	102.3
Capital Assets	3.2	3.0	3.1
Total Assets	12,011.7	14,586.4	16,516.0
Total Liabilities	(182.0)	(246.2)	(882.7)
Plan Net Assets	$ 11,829.7	$ 14,340.2	$ 15,633.3

* *The 403(b) Tax Shelter Plan cash and investments were approximately $.5 million for the years ended 2009 and 2008 and 2007.*

Plan net assets of the defined benefit plan decreased by 18.2% ($11,515.9 million compared to $14,076.7 million). The decrease is primarily due to unfavorable market conditions which resulted in a net investment income decrease of $2 billion. The defined benefit plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries.

Plan net assets of the medical insurance plan increased by 23.2% ($229.1 million compared to $185.9 million) primarily due to state allocations from redirecting contributions from the retirement fund to the medical plan. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

Summary of
Changes in Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan 2009	Defined Benefit Plan 2008	Defined Benefit Plan 2007	Medical Insurance Plan 2009	Medical Insurance Plan 2008	Medical Insurance Plan 2007	Life Insurance Fund 2009	Life Insurance Fund 2008	Life Insurance Fund 2007
ADDITIONS									
Member Contributions	$ 293.7	$ 291.4	$ 269.7	$ 58.7	$ 55.4	$ 53.1	$	$	$
Employer Contributions	442.6	466.2	434.9	164.4	148.9	113.2	5.4	5.4	5.0
Net Investment Income	(2,020.7)	(909.1)	2,063.9	11.3	8.1	6.7	5.3	6.3	(3.4)
Other Income				13.7	11.9	10.4			
TOTAL ADDITIONS	$ (1,284.4)	$ (151.5)	$ 2,768.5	$ 248.1	$ 224.3	$183.4	$ 10.7	$ 11.7	$ 1.6
DEDUCTIONS									
Benefit Payments	$ 1,253.0	$ 1,170.9	$ 1,102.6	$	$	$	$ 3.7	$ 4.0	$ 4.2
Refunds	15.2	15.9	14.8						
Administrative Expense	8.2	7.6	7.4						
Insurance Expenses				204.8	179.2	174.2			
TOTAL DEDUCTIONS	1,276.4	1,194.4	1,124.8	204.8	179.2	174.2	3.7	4.0	4.2
Increase (Decrease) in Plan Net Assets	$ **(2,560.8)**	$ **(1,345.9)**	$ **1,643.7**	$ **43.3**	$ **45.1**	$ **9.2**	$ **7.0**	$ **7.7**	$ **(2.6)**

TOTALS	2009	2008	2007
ADDITIONS			
Member Contributions	$ 352.4	$ 346.8	$ 322.8
Employer Contributions	612.4	620.5	553.1
Net Investment Income	(2,004.1)	(894.7)	2,067.2
Other Income	13.7	11.9	10.4
TOTAL ADDITIONS	$ (1,025.6)	$ 84.5	$ 2,953.5
DEDUCTIONS			
Benefit Payments	$ 1,256.7	$ 1,174.9	$ 1,106.8
Refunds	15.2	15.9	14.8
Administrative Expense	8.2	7.6	7.4
Insurance Expenses	204.8	179.2	174.2
TOTAL DEDUCTIONS	1,484.9	1,377.6	1,303.2
Increase (Decrease) in Plan Net Assets	$ **(2,510.5)**	$ **(1,293.1)**	$ **1,650.3**

DEFINED BENEFIT PLAN ACTIVITIES

Member contributions increased $2.3 million. Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions totaled $442.6 million, a net decrease of $23.6 million over the 2008 fiscal year.

The System experienced a greater decrease in net investment income compared to the previous year (negative $2,020.7 million at June 30, 2009 as compared to a $909.1 million decrease at June 30, 2008). The decrease in the fair value of investments is mainly due to unfavorable market conditions for the year ended June 30, 2009. This can be illustrated as follows:

(In Millions)	2009	2008	2007
Appreciation (depreciation) in fair value of investments – June 30, prior year	$ 385.4	$ 1,904.0	$ 690.4
Appreciation (depreciation) in fair value of investments – June 30, end of year	(1,336.2)	385.4	1,904.0
Change in net appreciation (depreciation) in fair value of investments	(1,721.6)	(1,518.6)	1,213.6
Net income (net of investment expense)	373.1	426.9	443.1
Net gain on sale of investments	(672.2)	182.6	403.8
Investment Income (net) – June 30, end of year	$(2,020.7)	$ (909.1)	$2,060.5

Program deductions in 2009 increased $82 million. The increase was caused principally by an increase of $82.1 million in benefit payments. Members who were drawing benefits as of June 2008 received an increase of 1.5% to their retirement allowances in July 2008. Also, there was an increase of 1,311 members and beneficiaries on the retired payroll as of June 30, 2009.

OTHER POST EMPLOYMENT BENEFIT ACTIVITIES

During the 2009 fiscal year, the medical insurance plan member contributions increased $3.3 million and employer contributions increased by $15.5 million over fiscal year 2008. The employer contributions increased primarily because $139.4 million in stabilization funding was placed in the medical insurance fund from the pension fund at the recommendation of the System's actuary. The amount will be repaid over a ten-year period per KRS 161.553.

Program deductions increased $25.6 million due to an increase of insurance expenses. The monthly premium subsidy for retirees under age 65 increased 12.56% from fiscal year 2008 to fiscal year 2009. A 8.19% increase is expected for calendar year 2010. The monthly premium subsidy for retirees age 65 and over increased by 2.50% from fiscal year 2008 to fiscal year 2009. A 20% increase is expected for calendar year 2010 due to federal reimbursement changes with the Medicare Advantage Program.

Net investment income increased $3.2 million from $8.1 million in 2008 to $11.3 million in 2009. This is due to the recognition of interest income since all investments for the Medical Insurance Plan are short term in nature and the recognition of appreciation in fair value is not feasible. This can be illustrated as follows:

(In Millions)	2009	2008	2007
Appreciation in fair value of investments – June 30, prior year	$ 0	$ 0	$ 0
Appreciation in fair value of investments – June 30 end of year	0	0	0
Net appreciation in fair value of investments	0	0	0
Net income (net of investment expense)	11.3	8.1	6.7
Net gain on sale of investments	0	0	0
Investment Income (net) – June 30	$ 11.3	$ 8.1	$ 6.7

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2009, 2008, and 2007 were $3.7, $4.0, and $4.2 million respectively.

HISTORICAL TRENDS

Accounting standards require that the Statement of Plan Net Assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information regarding the actuarial funding status of the defined benefit plan, the medical insurance plan, and the life insurance plan is provided in the Schedule of Funding Progress (beginning on page 43). The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the projected unit credit cost method.

The 2009 fiscal year reveals a decline in funding position of the pension plan due to an increase in the actuarial liability.

Annual required employer contributions of the defined benefit plan are provided in the Schedule of Employer Contributions (on page 44). The 2009 employer shortfall of contributions created a net pension obligation of $413,292,362 (as detailed on page 83).

The medical insurance plan is not as vulnerable to adverse market conditions since its assets are all short term in nature and less likely to experience huge fluctuations. Although the plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding.

Annual required contributions of the Medical Insurance Plan are provided in the Schedule of Employer Contributions (on page 44). The 2009 employer shortfall of contributions created a net OPEB obligation of $525,816,306 (as detailed on page 104).

Statement of Plan Net Assets
As of June 30, 2009

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2009 TOTAL
ASSETS					
Cash	$ 4,927,062	$	$	$ 1,736,300	$ 6,663,362
Prepaid Expenses	148,786		121,000		269,786
Receivables					
Contributions	34,794,627		2,762,036	77,453	37,634,116
State of Kentucky	2,966,717				2,966,717
Investment Income	55,886,305			674,184	56,560,489
Installment Account Receivable	605,511				605,511
Medicare D Receivables			4,328,805		4,328,805
Other Receivables					
Total Receivables	94,253,160		7,090,841	751,637	102,095,638
Investments at Fair Value (See Note 5)					
Short Term Investments	19,159,158	474,361	224,866,481	12,400,000	256,900,000
Bonds and Mortgages	3,710,946,462			74,889,911	3,785,836,373
Equities	7,086,247,046				7,086,247,046
Alternative Invetments	177,330,444				177,330,444
Real Estate	425,746,050				425,746,050
Total Investments	11,419,429,160	474,361	224,866,481	87,289,911	11,732,059,913
Invested Security Lending Collateral	167,874,202				167,874,202
Capital Assets, at Cost Net Of Accumulated Depeciation of $2,087,345 (See Note 2)	3,219,786				3,219,786
Total Assets	11,689,852,156	474,361	232,078,322	89,777,848	12,012,182,687
LIABILITIES					
Accounts Payable	1,028,771			78,339	1,107,110
Insurance Claims Payable			2,975,307		2,975,307
Investment Purchases Payable	5,065,608			4,996,875	10,062,483
Obligations Under Security Lending	167,874,202				167,874,202
Total Liabilities	173,968,581		2,975,307	5,075,214	182,019,102
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POST EMPLOYMENT BENEFITS	$ 11,515,883,575	$ 474,361	$ 229,103,015	$ 84,702,634	$ 11,830,163,585

The accompanying notes are an integral part of these financial statements.

Statement of Plan Net Assets
As of June 30, 2008

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2008 TOTAL
ASSETS					
Cash	$ 8,083,548	$	$	$ 587,853	$ 8,671,401
Prepaid Expenses	146,008		121,000		267,008
Receivables					
Contributions	29,761,242		2,273,890	60,048	32,095,180
State of Kentucky	500,956				500,956
Investment Income	62,223,633	29		736,866	62,960,528
Installment Account Receivable	661,499				661,499
Medicare D Receivables			3,901,214		3,901,214
Other Receivables	423,332				423,332
Total Receivables	93,570,662	29	6,175,104	796,914	100,542,709
Investments at Fair Value (See Note 5)					
Short Term Investments	201,290,978	498,892	181,882,630	5,100,000	388,772,500
Bonds and Mortgages	4,208,000,818			71,173,450	4,279,174,268
Equities	9,029,380,841				9,029,380,841
Alternative Invetments	104,787,575				104,787,575
Real Estate	431,693,774				431,693,774
Total Investments	13,975,153,986	498,892	181,882,630	76,273,450	14,233,808,958
Invested Security Lending Collateral	240,638,736				240,638,736
Capital Assets, at Cost Net Of Accumulated Depeciation of $1,978,998 (See Note 2)	3,018,126				3,018,126
Total Assets	14,320,611,066	498,921	188,178,734	77,658,217	14,586,946,938
LIABILITIES					
Accounts Payable	3,280,149			14	3,280,163
Insurance Claims Payable			2,295,511		2,295,511
Obligations Under Security Lending	240,638,736				240,638,736
Total Liabilities	243,918,885	0	2,295,511	14	246,214,410
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POST EMPLOYMENT BENEFITS	$ 14,076,692,181	$ 498,921	$ 185,883,223	$ 77,658,203	$ 14,340,732,528

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
For the Year Ended June 30, 2009

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2009 TOTAL
ADDITIONS					
Contributions					
Employer	$ 442,549,935	$	$ 164,408,037	$ 5,455,473	$ 612,413,445
Member	293,678,564		58,688,767		352,367,331
Total Contributions	736,228,499		223,096,804	5,455,473	964,780,776
Other Income					
Recovery Income			72,082		72,082
Medicare D Receipts			13,611,748		13,611,748
Total Other Income			13,683,830		13,683,830
Investment Income					
Net Appreciation/(Depreciation) in Fair Value of Investments	(2,393,824,926)			1,888,614	(2,391,936,312)
Interest	206,695,899	3,172	11,296,280	3,394,344	221,389,695
Dividends	150,828,141				150,828,141
Rental Income, Net	29,794,103				29,794,103
Securities Lending, Gross Earnings	3,053,121				3,053,121
Gross Invesment Income	(2,003,453,662)	3,172	11,296,280	5,282,958	(1,986,871,252)
Less: Investment Expense	(16,321,910)				(16,321,910)
Less: Securities Lending Expense	(906,950)				(906,950)
Net Investment Income	(2,020,682,522)	3,172	11,296,280	5,282,958	(2,004,100,112)
Total Additions	(1,284,454,023)	3,172	248,076,914	10,738,431	(1,025,635,506)
DEDUCTIONS					
Benefits	1,252,980,407	27,732		3,694,000	1,256,702,139
Refunds of Contributions	15,208,419				15,208,419
Insurance Expenses			204,857,122		204,857,122
Administrative Expense	8,165,757				8,165,757
Total Deductions	1,276,354,583	27,732	204,857,122	3,694,000	1,484,933,437
Net Increase(Decrease)	(2,560,808,606)	(24,560)	43,219,792	7,044,431	(2,510,568,943)
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS					
Beginning of Year	14,076,692,181	498,921	185,883,223	77,658,203	14,340,732,528
End of Year	$ 11,515,883,575	$ 474,361	$ 229,103,015	$ 84,702,634	$11,830,163,585

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
For the Year Ended June 30, 2008

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2008 TOTAL
ADDITIONS					
Contributions					
Employer	$ 466,247,782	$	$ 148,929,322	$ 5,411,249	$ 620,588,353
Member	291,423,948		55,402,830		346,826,778
Total Contributions	757,671,730		204,332,152	5,411,249	967,415,131
Other Income					
Recovery Income			25,322		25,322
Medicare D Receipts			11,911,565		11,911,565
Total Other Income			11,936,887		11,936,887
Investment Income					
Net Appreciation/(Depreciation) in Fair Value of Investments	(1,335,940,216)			2,821,989	(1,333,118,227)
Interest	240,681,166	17,397	8,128,179	3,499,502	252,326,244
Dividends	165,542,769				165,542,769
Rental Income, Net	28,660,581				28,660,581
Securities Lending, Gross Earnings	21,398,859				21,398,859
Gross Invesment Income	(879,656,841)	17,397	8,128,179	6,321,491	(865,189,774)
Less: Investment Expense	(9,499,832)				(9,499,832)
Less: Securities Lending Expense	(19,926,852)				(19,926,852)
Net Investment Income	(909,083,525)	17,397	8,128,179	6,321,491	(894,616,458)
Total Additions	(151,411,795)	17,397	224,397,218	11,732,740	84,735,560
DEDUCTIONS					
Benefits	1,170,969,101	30,507		4,003,000	1,175,002,608
Refunds of Contributions	15,965,083		10,014		15,975,097
Insurance Expenses			179,276,215		179,276,215
Administrative Expense	7,551,936				7,551,936
Total Deductions	1,194,486,120	30,507	179,286,229	4,003,000	1,377,805,856
Net Increase(Decrease)	(1,345,897,915)	(13,110)	45,110,989	7,729,740	(1,293,070,296)
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS					
Beginning of Year	15,422,590,096	512,031	140,772,234	69,928,463	15,633,802,824
End of Year	$14,076,692,181	$ 498,921	$ 185,883,223	$ 77,658,203	$ 14,340,732,528

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements
Years Ended June 30, 2009 and 2008

Note 1: Description of Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan established to provide pension benefit plan coverage for local school districts and other public educational agencies in the state.

B. PARTICIPANTS

As of June 30, 2009, a total of 197 employers participated in the plan. Employers are comprised of 174 local school districts, 17 Department of Education Agencies and other educational organizations, 5 universities, and also the Kentucky Community and Technical College System.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

	2009	2008
Active contributing members:		
Vested	45,843	42,932
Non-vested	30,094	32,607
Inactive members, vested	5,245	4,861
Retirees and beneficiaries currently receiving benefits	42,050	40,739
Total members, retirees, and beneficiaries	**123,232**	**121,139**

C. BENEFIT PROVISIONS

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete 27 years of Kentucky service.

Participants that retire before age 60 with less than 27 years of service receive reduced retirement benefits. Non-university members receive monthly payments equal to two (2) percent (service prior to July 1, 1983) and two and one-half (2.5) percent (service after July 1, 1983) of their final average salaries for each year of credited service. University employees receive monthly benefits equal to two (2) percent

Note 1: Description of Plan continued . . .

of their final average salary for each year of credited service. The final average salary is the member's five (5) highest annual salaries except members at least 55 with 27 or more years of service may use their (3) three highest annual salaries. New members (including second retirement accounts started) after July 1, 2002 will receive monthly benefits equal to 2% of their final average salary for each year of service if, upon retirement, their total service is less than ten years. New members after July 1, 2002 who retire with ten or more years of total service will receive monthly benefits equal to 2.5% of their final average salary for each year of service, including the first ten years. In addition, non-university members who retire July 1, 2004 and later with more than 30 years of service will have their multiplier increased for all years over 30 from 2.5% to 3.0% to be used in their benefit calculation.

The System also provides disability benefits for vested members at the rate of sixty (60) percent of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half (1.5) percent annually. Additional ad hoc increases, and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

KTRS has three cash accounts. At June 30, 2009, the pension cash account totaled $2,587,489. The administrative expense fund cash account was $2,339,572 and the life insurance cash account totaled $1,736,300. Therefore, the carrying value of cash was $6,663,361 and the corresponding bank balance was $10,712,930. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2009.

C. CAPITAL ASSETS

Fixed assets are recorded at historical cost less straight-line accumulated depreciation. The classes of fixed assets are furniture and equipment, the KTRS office buildings and land. Furniture and equipment are depreciated over an average useful life of five to seven years. The office buildings are depreciated over forty years. Internally created software for the Pathway capital project is capitalized and amortized over five years. The Pathway project will update technological record keeping abilities and improve timeliness and accuracy of responses to member inquiries.

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and

Note 2: Summary of Significant Accounting Policies continued . . .

preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in plan net assets.

Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by the System's employees are recorded when earned. Upon termination or retirement, employees of the System are paid for accumulated vacation time limited to 60 days and accumulated compensatory time limited to 200 hours. As of June 30, 2009 and 2008 accrued compensated absences were $733,610 and $658,434.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries, and court challenges to administrative policy are among the various risks to which the System is exposed. In order to cover such risks, the System carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation, and equipment insurance.

G. OTHER RECEIVABLES

KTRS allows qualified purchases of service credit to be made by installment payments not to exceed a five-year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2009 and 2008 installment contract receivables were $605,511 and $661,499.

H. USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The System's management believes that it has operated the plans within the constraints imposed by federal tax law.

J. ACCOUNTING CHANGES

The System implemented GASB #51 Accounting and Financial Reporting for Intangible Assets.

K. RECLASSIFICATIONS

Certain 2008 amounts have been reclassified in conformity with the 2009 presentation.

Note 3: Contributions and Reserves

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Pre July 2008 members are required to contribute 9.855% of their salaries to the System; university members are required to contribute 8.375% of their salaries. KRS 161.580 allows each university to reduce the contribution of its members by 2.215%; therefore, university members contribute 6.16% of their salary to KTRS. Post July 2008 members are required to contribute an additional 1% to the medical insurance fund.

Participating employers are required to contribute the percentage contributed by members plus an additional 3.25% of members' gross salaries. The Commonwealth of Kentucky contributes the required percentages for the local school district employers except for those members who are employed in federally funded positions, in which case the federal program pays the required percentages.

The member and employer contributions consist of pension contributions and post-retirement contributions to the medical insurance fund. The post-retirement contribution from employee (.75% for members prior to July 1, 2008 or 1.75% for members who joined after July 1, 2008) and the employer contribution rate of .75% of members' gross salaries help finance KTRS's retiree medical insurance plan.

If an employee leaves covered employment before accumulating five (5) years of credited service, accumulated employee contributions plus interest are refunded to the employee upon the member's request.

B. RESERVES

Member Reserve

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from Unallocated Reserves. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Benefit Reserves, the fund from which retirement benefits are paid.

Employer Reserve

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky.

Benefit Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

Note 3: Contributions and Reserves continued . . .

Unallocated Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

Administrative Expense Reserve

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from Unallocated Reserves is used to pay the administrative expenses of the System.

Note 4: Funded Status and Funding Progress

A. DESCRIPTION OF FUNDING PROGRESS

The funded status of the Defined Benefit Plan as of the most recent actuarial valuation date is as follows:

(Dollar amount in 1,000's)

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (uaal)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2009	$ 14,885,981	$ 23,400,426	$ 8,514,445	63.6%	$ 3,253,077	261.7%

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear funding trend information as obtained from the System's independent actuary's annual valuation report.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the System is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the retirement system. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the retirement system.

The accompanying schedule of employer contributions, presented as required supplementary information following the notes to the financial statements, presents trend information about the amounts contributed to the plan by employers in comparison to the Annual Required Contribution (ARC). The ARC is actuarially determined in accordance with the parameters of GASB Statement 50. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each

Note 4: Funded Status and Funding Progress continued . . .

year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

B. METHODOLOGIES

The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the projected unit credit actuarial cost method. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period using an open amortization approach. The five (5) year smoothed market approach is used for asset valuation.

Actuarial Value Assets

(1)	Actuarial Value of Assets on June 30, 2008	$ 15,321,325,033
(2)	Market Value End of Year June 30, 2009	11,515,883,575
(3)	Market Value Beginning of Year June 30, 2008	14,076,692,181
(4)	Cash Flow	
	a. Contributions	736,228,499
	b. Benefit Payments	1,268,188,826
	c. Administrative Expenses	8,165,757
	d. Net: (4)a - (4)b - (4)c	(540,126,084)
(5)	Investment Income	
	a. Market total: (2) - (3) - (4)d	(2,020,682,522)
	b. Assumed Rate	7.5%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,035,497,185
	d. Amount for Phased-In Recognition: (5)a - (5)c	(3,056,179,707)
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20 x (5)d	(611,235,941)
	b. First Prior Year	(409,879,449)
	c. Second Prior Year	190,240,386
	d. Third Prior Year	(75,996,339)
	e. Fourth Prior Year	(23,843,540)
	f. Total Recognized Investment Gain	(930,714,883)
(7)	Actuarial Value End of Year (1) + (4)d + (5)c + (6)f	14,885,981,251
(8)	Difference Between Market & Actuarial Values (2) - (7)	$ (3,370,097,676)

Note 4: Funded Status and Funding Progress continued . . .

C. ASSUMPTIONS

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2009, the most recent updated actuarial information include:

*	Assumed inflation rate	4%
*	Assumed investment rate	7.5%
*	Assumed projected salary increases	4.0% - 8.20%
*	Assumed post retirement benefit increase	1.5%

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of KTRS's financial statements assess the risks KTRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430. The parameters as outlined in Title 102, Chapter 1.175, Section 2 of the Kentucky Administrative Regulations are as follows:

- There shall be no limit on the amount of investments owned by the System if the investments are guaranteed by the U.S. Government.
- Not more than thirty-five percent (35%) of the assets of the System at market value shall be invested in corporate debt obligations.
- Not more than sixty-five percent (65%) of the assets of the System at market value shall be invested in common stocks or preferred stocks. Not more than twenty-five percent (25%) of the assets of the System at market value shall be invested in a stock portfolio designed to replicate a general stock index. Not more than fifteen percent (15%) of the assets of the System at market value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks.
- Not more than ten percent (10%) of the assets of the System at market value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.
- Not more than ten percent (10%) of the assets of the System at market value shall be invested in alternative investments. This would include private equity, venture capital, timberland, and infrastructure investments.
- Not more than ten percent (10%) of the assets of the System at market value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the retirement system's deposits may not be returned to the System. The bank's total balance at June 30, 2009 was $10,712,930 of which $4,642,173 primarily represents deposited amounts due the System for which actual funds are in transit to and waiting to be received by the custodial bank; therefore, these funds were unavailable for investment. An additional amount of $2,339,572 represents funds held in the bank but their investment is controlled by the Commonwealth of Kentucky. There were various outstanding checks and vouchers totaling a $4,046,953 balance reduction while the amount of $3,728,569 was the amount invested in cash equivalents. Cash equivalents are created through the daily sweeps of available excess cash by the System's custodial bank into bank sponsored short-term investment funds. These funds are custodial bank sponsored commingled funds which are invested in short-term securities backed by the U.S. Government and its agencies. The actual cash deposits held in bank accounts are currently insured up to $250,000 as covered by federal depository insurance and uncollateralized until being invested in cash equivalents.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,
b. collateralized with securities held by the pledging financial institution, or
c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2009, the System's cash equivalents in the amount of $3,728,569 were not exposed to custodial credit risk since this amount was invested by the custodial bank and collateralized at 102% with the collateral pledged to the Treasurer of the Commonwealth of Kentucky.

C. INVESTMENTS

All of the System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, and alternative investments. These assets are reported at fair market value.

Investments are governed by the Board of Trustees' policy while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following chart represents the fair market values of the investments of the Kentucky Teachers' Retirement System for June 30, 2009.

Schedule of Investments

	Market Value June 30, 2009	Market Value June 30, 2008
Short Term Investments		
Repurchase Agreements	$ 256,900,000	$ 338,900,000
Agency & Other (Short Term)	0	49,872,500
Total Short Term Investments	**256,900,000**	**388,772,500**
Bonds and Mortgages		
U. S. Government	579,447,437	924,161,362
Agency Bonds	393,391,786	495,014,012
Mortgage-Backed Securities	385,320,648	500,140,653
Collateralized Mortgage Obligations	125,751,715	160,154,576
Asset Backed Securities	67,889,109	155,645,158
Commercial Mortgage-Backed Securities	203,469,640	205,815,754
Municipal Bonds	393,237,899	329,621,169
Corporate Bonds	1,637,328,139	1,508,621,584
Total Bonds and Mortgages	**3,785,836,373**	**4,279,174,268**
Equities		
International Equity	1,355,549,565	1,328,489,089
U. S. Equity	5,730,697,481	7,700,891,752
Total Equities	**7,086,247,046**	**9,029,380,841**
Real Estate		
Real Estate Equity	425,746,050	431,693,774
Total Real Estate Equity	**425,746,050**	**431,693,774**
Alternative Investments		
Private Equity	60,731,073	28,791,613
Timberland	116,599,371	75,995,962
Total Alternative Investments	**177,330,444**	**104,787,575**
TOTAL INVESTMENTS	**$ 11,732,059,913**	**$ 14,233,808,958**

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the pension trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system, and are held by either:

a. the counterparty or

b. the counterparty's trust department or agent, but not in the System's name.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The cash reserve of the System is maintained in high quality short term investments. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, banker's acceptances, and repurchase agreements are all permissible investments. The System utilized investment instruments it regards as the most secure and having the best returns and does not use short term investments that finance foreign businesses unless they are issued and guaranteed by the United States Government.

Individual repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers under terms dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS's nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a market value of at least 102% of the value of the repurchase agreements.

As of June 30, 2009, cash collateral reinvestment securities acquired through securities lending by the System's custodian, who is also the lending agent/counterparty, amounted to $167,874,202 related to $161,861,685 securities lent. This is consistent with the System's securities lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the retirement System's investments. In general, the longer the period until an investment matures, the greater the negative impact that changes in interest rates can have on fair value.

As of June 30, 2009 KTRS had the following investments and weighted average maturities:

Investment Type	Fair Value	Average Maturity (years)
U.S. Government	$ 579,447,437	9.4
Agency	393,391,786	9.7
MBS	385,320,648	15.9
CMO	125,751,715	21.1
ABS	67,889,109	13.5
CMBS	203,469,640	28.7
Muni	393,237,899	13.8
Corporate	1,637,328,139	8.3
Totals	**$ 3,785,836,373**	**11.6**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

In addition to the above securities, Repurchase Agreements (short-term investments) had a total fair value of $256,900,000 and had a weighted average maturity of two days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology. It is widely used in the management of fixed income portfolios by quantifying the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of change in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the System manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by the System were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The System held $385.3 million in mortgage-backed securities as of June 30, 2009.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The System held $125.8 million in collateralized mortgage obligations as of June 30, 2009.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other credit providers. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The asset-backed securities in the amount of $67.9 million held by the System as of June 30, 2009 are moderately sensitive to changes in interest rates.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The System's commercial mortgage-backed securities investments consist of highly rated relatively senior tranches. The average maturity of the System's commercial mortgage-backed securities holdings in the schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The System held $203.5 million in commercial mortgage-backed securities investments as of June 30, 2009.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedule lists KTRS's fixed income investments (net of cash equivalents) according to credit ratings as of June 30, 2009:

RATING	FAIR VALUE	%
U.S. Government	$ 579,447,437	15.3
Agency	393,391,786	10.4
AAA	1,055,435,764	27.9
AA	345,570,041	9.1
A	887,207,814	23.4
BBB	518,902,281	13.7
BB	2,441,250	0.1
B	3,440,000	0.1
Total	**$ 3,785,836,373**	**100.0**

Total market value of the fixed income portfolio was $3,785,836,373 on June 30, 2009. The rating system used in the chart is the nationally recognized Standard & Poor's rating system.

In addition to the above categories, the System held $256,900,000 in Cash Equivalents or short term investments such as Repurchase Agreements. The credit risk associated with Repurchase Agreements and Agency Discount investments is very minimal as the general rating of these securities is higher than AAA. In addition, investments in U.S. Government and Agency securities are also highly rated securities since they are backed by the U.S. Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

The System's policy on credit rating as stated in 102 KAR 1:175 is that:

"A fixed income investment shall be rated at the time of purchase within the four (4) highest credit classifications identified by one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. Notwithstanding the foregoing, the fixed income investment portfolio as a whole shall maintain an average rating equal to at least the second highest credit classification."

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the System is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the System.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

"The System's position in a single stock shall not exceed two and one-half (2.5) percent of the System's assets. The System's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program."

KTRS has not invested greater than five percent (5%) of the System's assets at book value in any single issuer and is in compliance with the System's policies as stated here.

Foreign Currency Risk

As of June 30, 2009, KTRS exposure to foreign currency risk consisted of $934,821,801 of foreign equity investments through commingled funds managed by UBS Global Asset Management, Baring Asset Management, and Baillie Gifford as follows:

UBS International Collective	$ 429,263,724
Baring Asset Management	245,698,127
Baillie Gifford	259,859,950
Total	$ **934,821,801**

These amounts represent the market values of equities held by the Fund as a result of cash contributions to each Fund by KTRS.

In addition to the commingled funds investing in foreign securities, KTRS held $420,727,764 associated with foreign interests in American Depositary Receipt investments. These American Depositary Receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. American Depositary Receipts are denominated in U.S. currency.

The System's policy regarding foreign equities is that not more than fifteen percent (15%) of the assets of the System at market value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the System. The System operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international stocks are the types of securities that are lent. The System's sub-custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the System.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. The following section details the net income earned from securities lending for the fiscal year ended June 30, 2009:

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Item	Earnings
Gross Earnings (Interest and fees)	$ 1,348,381
Plus: Gross Borrower Rebates	1,704,740
Less: Bank Fees	(906,950)
Net Earnings	$ **2,146,171**

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. As of June 30, 2009, the loan average days to maturity was one (1) day and the weighted average investment maturity of cash collateral investments was one (1) day.

At fiscal year end, the System has no credit risk exposure to borrowers, since the amounts the System owes the borrowers exceeds the amounts the borrowers owe the System and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The System minimizes interest rate risk by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2009:

		Cash Collateral Received
Type of Security Lent	**Fair Value**	**Non-cash Collateral Value***
U.S. Government and Agencies	$ 12,181,403	$ 12,441,565
U.S. Equities	149,680,282	155,432,637
Total	$ 161,861,685	$ 167,874,202

* *Represents value of cash collateral only. Loan or margin collateral requirements met via the use of non-cash collateral (e.g. Government securities or Letters of Credit) are excluded from these values.*

Note 6: Pension Plan for Employees of the System

Full-time employees of Kentucky Teachers' Retirement System (KTRS) participate in either KTRS or Kentucky Employees Retirement System. Both plans are multiple-employer cost sharing defined benefit pension plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for KTRS employee members for the fiscal years 2009, 2008 and 2007 were $456,258, $413,492, and $388,973 respectively. KTRS contributed 100% of the required contribution each year.

All other KTRS employees are covered under the Kentucky Employee Retirement System (KERS) in the Non-Hazardous Employees Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. The System's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS were required to contribute 5% of their annual creditable compensation for the fiscal years 2009, 2008, and 2007. As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2009, 2008 and 2007 were 10.01%, 8.5% and 7.75%; and the System's annual required contributions to KERS were $182,399, $129,356 and $114,711 respectively. KTRS contributed 100% of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: 403(b) Tax-Sheltered Annuity Plan

A. PLAN DESCRIPTION

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by the System's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2009, the twenty-four members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

Note 7: 403(b) Tax-Sheltered Annuity Plan continued . . .

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan, therefore, there are no receivables to be recognized.

Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

Note 8: Medical Insurance Plan & Post-Employment Benefits

A. PLAN DESCRIPTION

In addition to pension benefits described in Note 1, Kentucky Revised Statute 161.675 requires KTRS to provide access to post-retirement healthcare benefits for eligible members and dependents. The KTRS Medical Insurance benefit is funded by employer and employee contributions. Changes made to the medical plan may be made by the KTRS Board of Trustees, the Kentucky Department of Employee Insurance, and the General Assembly.

To be eligible for medical benefits, the member must have retired either for service or disability. The KTRS Medical Insurance Fund offers coverage to members under the age of 65 through the Kentucky Employees Health Plan administered by the Kentucky Department of Employee Insurance. KTRS retired members are given a supplement to be used for payment of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the KTRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The Commonwealth of Kentucky bears no risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the KTRS Medicare Eligible Health Plan. KTRS bears the risk for actual drug claims cost in the Medicare Eligible Health Plan.

At June 30, 2009, KTRS insurance covered 33,489 retirees and 6,822 dependents. There are 197 participating employers and 75,937 active members contributing to the Medical Insurance Fund.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Medical Insurance Plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due.

Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

C. CONTRIBUTIONS

The post-retirement healthcare provided by KTRS is financed on a pay-as-you-go basis. In order to fund the post-retirement healthcare benefit, active member contributions are matched by the state at .75% of members' gross salaries. Those who became members before July 1, 2008 contribute 0.75% of gross payroll to the plan. Member contributions are 1.75% of gross payroll for those who became members of the System after July 1, 2008. Also, the premiums collected from retirees as described in the plan description and investment interest help meet the medical expenses of the plan.

Escalating medical expenses have made it increasingly difficult to meet the expenses of the retiree health insurance program. To further fund the plan, the state legislature has directed a portion of the state employer contribution in a sufficient amount to be allocated to the Medical Insurance Fund instead of the pension fund. The System actuary calculated those amounts to be $125,000,000 and $125,000,000 for fiscal years 2008 and 2009 respectively. The balances are to be amortized over a period of 10 years. The Legislature appropriated $18,280,000 in fiscal year 2008-2009 and $36,490,700 in 2009-2010 to apply to amortization of the balances.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Medical Insurance Plan as of the most recent actuarial valuation date is as follows:

(Dollar amount in 1,000's):

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (uaal)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2009	$ 229,103	$ 6,454,733	$ 6,225,630	3.5%	$ 3,253,077	191.4%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedule of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the ARC, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methodologies and assumptions employed as of the June 30, 2009 valuation date include the following:

Actuarial cost method	Projected unit credit
Actuarial value of assets	Market value of assets
Assumed inflation rate	4.0%
Investment rate of return	4.5%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Healthcare trend rate	10.50%
Ultimate trend rate	5.00%
Year of Ultimate Pre-Medicare trend rate	2017

E. INCURRED BUT NOT REPORTED CLAIMS LIABILITIES

KTRS recognizes estimates of liabilities for self-insured unpaid claims that have incurred (both reported and unreported) using the development method. This method uses past observed patterns of time between the date the claim is incurred and the date the claim is paid to estimate incurred claims from available paid claim information. The following schedule shows the change in the claims and liability and the claims activity for the years ended June 30, 2009 and 2008.

	Fiscal Year 2009	Fiscal Year 2008
Beginning Unpaid Claims Liability	$ 2,289,841	$ 1,966,148
Current Year Claims and Changes in Estimates	201,400,693	175,915,477
Claims Payments	(200,720,780)	(175,591,784)
Ending Unpaid Claims Liability	$ 2,969,754	$ 2,289,841

Note 9: Life Insurance Plan

A. PLAN DESCRIPTON

The System administers the Life Insurance Plan as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 197 participating employers. The benefit is $5,000 for members who are retired for service or disability, and $2,000 for active contributing members.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Life Insurance Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized in the fiscal year due.

Method Used to Value Investments

Life Insurance Plan investments are reported at fair value. The short-term securities are carried at cost, which approximates fair value. Fixed income is generally valued based on published market prices and quotations from national security exchanges and securities pricing services.

C. CONTRIBUTIONS

To finance the life insurance benefit, a portion of the employer contribution rate is directed to the plan as recommended by the System's actuary. For fiscal years 2009 and 2008, this rate has been .17% of active members' payroll.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Life Insurance Plan as of the most recent actuarial valuation date is as follows:

(Dollar amounts in 1,000's)

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (uaal)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2009	$ 84,703	$ 90,334	$ 5,631	93.8%	$ 3,253,077	.17%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The required supplementary schedules following the notes to the financial section contain more actuarial information.

Note 9: Life Insurance Plan continued . . .

Significant actuarial methodologies and assumptions employed as of the June 30, 2009 valuation date include the following:

Actuarial cost method	Projected unit credit
Actuarial value of assets	Market value of assets
Assumed inflation rate	4.0%
Investment rate of return	7.5%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years

Required Supplementary Schedules

Defined Benefit Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2004	$ 14,255.1	$ 17,617.6	$ 3,362.5	80.9%	$ 2,641.5	127.3%
2005	14,598.8	19,134.8	4,536.0	76.3	2,703.4	167.8
2006	14,857.6	20,324.7	5,467.1	73.1	2,859.5	191.2
2007	15,285.0	21,255.0	5,970.0	71.9	2,975.3	200.7
2008	15,321.3	22,460.3	7,139.0	68.2	3,190.3	223.8
2009	14,885.9	23,400.3	8,514.4	63.6	3,253.1	261.7

The amounts reported in this schedule of funding progress do not include assets or liabilities for postemployment benefits, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Required Supplemental Schedules continued . . .

Defined Benefit Plan
Schedule of Employer Contributions

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS	PERCENTAGE CONTRIBUTED
2004	$ 364,351,412	100 %
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85
2008	563,789,483	78
2009	600,282,735	67

Medical Insurance Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2004	$ 158.9	$ 3,166.6	$ 3,007.7	5.0%	$ 2,641.5	113.9%
2005	147.3	4,763.9	4,616.6	3.1	2,703.4	170.8
2006	131.6	4,341.9	4,210.3	3.0	2,859.5	147.2
2007	140.8	5,928.8	5,788.0	2.4	2,975.3	194.5
2008	185.9	6,434.5	6,248.6	2.9	3,190.3	195.9
2009	229.1	6,454.7	6,225.6	3.5	3,253.1	191.4

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Medical Insurance Plan
Schedule of Employers Contributions

Fiscal Year Ending Date	Annual Required Contribution (ARC) (a)	Actual Employer Contribution (b)	Retiree Drug Subsidy Contribution (c)	Total Contribution (b) + (c)	Percentage of ARC Contributed [(b) + (c)/(a)]
6/30/2007	$ 231,473,321	$ 113,258,761	$ 10,312,361	$ 123,571,122	53.40%
6/30/2008	395,282,164	148,954,644	11,911,565	160,866,209	40.70
6/30/2009	467,312,904	164,480,119	13,611,748	178,091,867	38.10

Only three years of actuarial calculations of annual required contributions is available.

Required Supplemental Schedules continued . . .

Life Insurance Plan
Schedule of Funding Progress
(dollar amounts in thousands)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2007	$ 71,426	$ 82,722	$ 11,296	86.3%	$ 2,975,289	0.38%
2008	77,658	84,265	6,607	92.2	3,190,332	0.21
2009	84,703	90,334	5,631	93.8	3,253,077	0.17

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or medical insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Life Insurance Plan
Schedule of Employer Contributions

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS (ARC)	ACTUAL EMPLOYER CONTRIBUTIONS	PERCENTAGE OF ARC CONTRIBUTED
2007	$ 1,785,173	$ 5,022,137	281.3 %
2008	1,914,199	5,411,249	282.7
2009	1,498,076	5,455,473	364.2

Required Supporting Schedules

Supporting Schedule 1
Schedule of Administrative Expenses
Year Ended June 30, 2009

Salaries	$ 5,865,661
Other Personnel Costs	562,890
Professional Services & Contracts	324,181
Utilities	78,952
Rentals	16,172
Maintenance	132,703
Postage & Related Services	352,550
Printing	79,592
Insurance	109,741
Miscellaneous Services	107,331
Telecommunications	28,446
Computer Services	55,728
Supplies	49,493
Depreciation	108,347
Travel	50,781
Dues & Subscriptions	38,817
Miscellaneous Commodities	11,494
Furniture, Fixtures, & Equipment not Capitalized	117,702
Compensated Absences	75,176
TOTAL ADMINISTRATIVE EXPENSES	**$ 8,165,757**

Supporting Schedule 2
Schedule of Professional Fees for Year Ended June 30, 2009

PROFESSIONAL	NATURE OF SERVICE	
Cavanaugh Macdonald Consulting	Actuarial Services	$ 249,959
Charles T. Mitchell Company	Auditing Services	29,600
Farmers Bank	Banking Services	16,967
International Claim Specialist	Investigative Services	2,840
Attorney General	Attorney Services	2,719
Klausner & Kaufman	Attorney Services	6,980
Reed, Weitkamp, Schell & Vice	Attorney Services	6,388
Stoll Keenon Ogden	Attorney Services	8,728
	TOTAL	**$ 324,181**

Required Supporting Schedules continued . . .

Supporting Schedule 3
Schedule of Contracted Investment Management Expenses and Miscellaneous Expenses
Year Ended June 30, 2009

BALANCED MANAGER		
Todd-Veredus Asset Management, LLC		$ 1,233,072
EQUITY MANAGERS		
Baring Focused International	$ 842,795	
Baillie Gifford International	178,330	
GE Asset Management Inc.	676,376	
UBS Global Asset Management Corporation	2,559,270	
Wellington Management Company, LLP	2,225,042	
Total Equity Managers		6,481,813
FIXED INCOME MANAGERS		
Galliard Capital Management		353,340
REAL ESTATE		
Prudential PRISA Real Estate		300,776
ALTERNATIVE INVESTMENTS		
Private Equity		6,785,554
CUSTODIAN		
Farmers Bank		468,079
CONSULTANT		
Becker, Burke Associates	125,000	
Enis Knupp	235,930	
Total Consultant		360,930
LEGAL & RESEARCH		
Stoll, Keenon, Ogden, PLLC	11,164	
Schottenstein, Zox & Dunn	32,335	
Total Legal & Research		43,499
OTHER		
Subscription/Services		294,847
TOTAL CONTRACTED INVESTMENT MANAGEMENT EXPENSES		**$ 16,321,910**

Charles T. Mitchell Co. LLP
Certified Public Accountants

William G. Johnson , Jr., C.P.A
James Clouse,C.P.A
Bernadette Smith, C.P.A
Kim Field, C.P.A
Greg Miklavcic, C.P.A
Don C. Giles, C.P.A, Consultant

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the financial statements of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2009, and have issued our report thereon dated December 18, 2009. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Teachers' Retirement System of the State of Kentucky's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the entity's ability to initiate, authorize, record, process, or report financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of the entity's financial statements that is more than inconsequential will not be prevented or detected by the entity's internal control.

A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the financial statements will not be prevented or detected by the entity's internal control.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Teachers' Retirement System of the State of Kentucky's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information and use of management and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

Charles T. Mitchell Co.

Frankfort, Kentucky
December 18, 2009

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Investment Section

for Fiscal Year ending June 30, 2009

PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

Old One Room Schoool House
Salem, Kentucky

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the
Kentucky Teachers' Retirement System.

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

INVESTMENT COMMITTEE

Mr. Robert M. Conley
Chairman

Mr. Ronald L. Sanders
Vice-Chairman

Ms. Barbara G. Sterrett
Member

Dr. Jay Morgan
Member

Mr. Tom Shelton
Member

EXECUTIVE INVESTMENT STAFF

Mr. Gary L. Harbin, CPA
Executive Secretary

Mr. Paul L. Yancey, CFA
Chief Investment Officer

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December 1, 2009

To the members of the Board of Trustees and participants of the Teachers' Retirement System of Kentucky:

The fiscal year ended June 30, 2009 saw the greatest crisis our financial system has experienced since the 1930s. An overleveraged system nearly collapsed in the fall of 2008 as real estate prices continued to decline, exposing a plethora of unsound lending and financial engineering practices, as well as inadequate risk control and regulation. Economic activity, already weak, plummeted in late 2008 and early 2009. An unprecedented array of government initiatives appeared to be stabilizing the markets and the economy by mid-2009.

While negative returns were unavoidable, the System's portfolio held up remarkably well in what we hope to be a once-in-a-lifetime event. The total portfolio returned -14.3% for the fiscal year versus -16.0% for its Policy Index. Domestic equities returned -25.5% versus -26.3% for the S&P 1500. International equities returned -27.5% versus -31.0% for the MSCI EAFE Index. Fixed income returned 7.2% versus 5.3% for the Barclays Government/Credit Index.

Just as importantly, the System's multi-year process of optimizing its asset allocation was not disrupted by the market turmoil. Over the fiscal year, international equities rose from 9.0% to 11.3% of assets. In late 2008, near stock market lows, over $500 million was rebalanced out of high quality bonds, with the funds going primarily into international and domestic stocks. The system made $165 million in private equity commitments over the fiscal year while other institutions, suffering liquidity crises, were considering selling commitments at deep discounts. At fiscal year-end, plans were in the pipeline to continue prudently adding alternative assets on an opportunistic basis.

The System underwent a best practices study to compare and contrast the operations, management and governance of the System to other leading public pension plans. In general, the study found that the System was either currently utilizing best practices or in the process of taking measures to do so. The report recommended eliminating the requirement for Board investment policies to be set forth in administrative regulations in order to facilitate and modernize the management of the System's investments as well as eliminating the diversion of pension contributions to fund the Medical Insurance Fund.

Over the course of the fiscal year, the Investment Committee was expanded to include five trustees plus two outside members with investment expertise. We expect this enhanced Investment Committee structure to be a tremendous benefit to the System's investment program in the years ahead. An asset-liability modeling study, which will help chart the asset allocation course for the next several years, is scheduled to be completed in early 2010.

The System's investment program, grounded in fundamental value and risk control, has shown exceptional resilience through the financial crisis. Looking forward, the System is well positioned to take advantage of market opportunities due to disciplined management prior to and during the market crisis. We believe the ongoing initiatives to broaden and expand the asset classes in which the System invests will better equip it to achieve the long-term goals.

It is a privilege to have been selected as investment consultant for the System and we look forward to our continued work with its exceptional investment staff, Investment Committee, and Board of Trustees.

Respectfully,

Patrick J. Kelly, CFA
Principal

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INVESTMENT POLICY SUMMARY

The KTRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principles that guide investment-related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the System. This broad summary is a reference point for management of System assets and outlines KTRS's investment philosophy and practice.

INVESTMENT OBJECTIVES

KTRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them. Generally, the System's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, KTRS holdings can withstand some short-term volatility. The System's long-term investment objective is to achieve an annualized rate of return of 7.5%.

RISK CONTROLS

The KTRS investment program faces various risks; however, the primary risk to KTRS is that the assets will not support liabilities over long periods of time. In order to control this risk and any other risks, the board has taken the following steps, on an ongoing basis:

- Actuarial valuations are performed each year to evaluate the funding objectives of the System. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the System.
- Asset/liability studies are conducted, at a minimum, every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the System.
- The KTRS investment committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

ASSET ALLOCATION

Operating within relevant regulatory limitations, the System's investment consultant, on an annual basis, presents to the Investment Committee for approval target percentages and ranges for the System's various asset classes. Annually approved asset allocation parameters serve to balance the System's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The System's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the System's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as liability requirements, the level of funding, and statutory investment restrictions are important considerations within the context of the asset allocation decision making process. Consequently, asset allocation comparisons between various pension plans may be quite different.

Rebalancing as necessary is normally strictly observed to remain within the approved ranges for the various asset classes. In this fiscal year, however, the Investment Committee suspended strict adherence to the approved ranges due to extraordinary market conditions.

The information below shows the System's asset allocation by market value as of June 30, 2009, and June 30, 2008, as well as the target and strategic range for each asset class for fiscal year 2009.

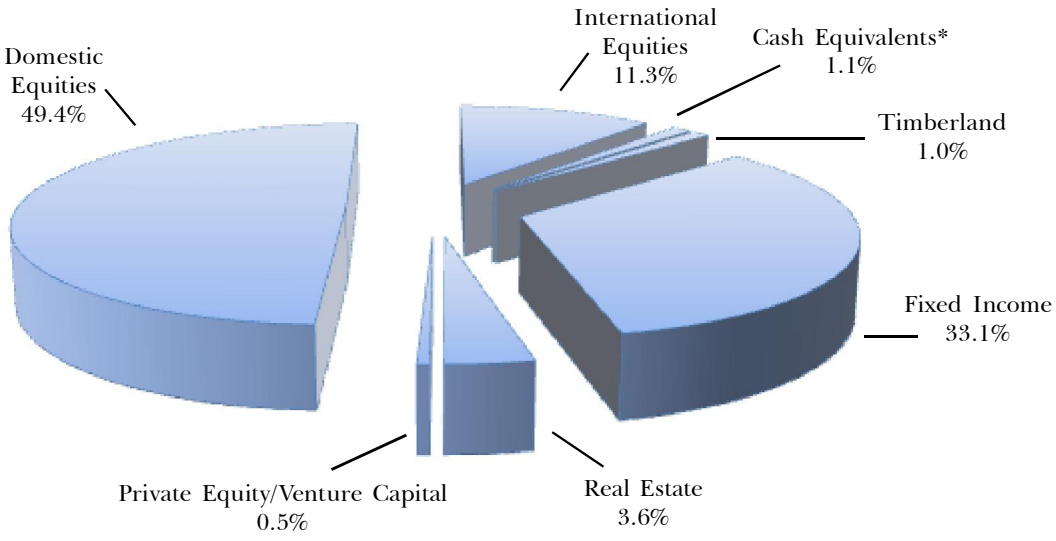
	June 30, 2009	%	June 30, 2008	%
Cash Equivalents *	$ 134,219,594	1.1	$ 221,260,264	1.6
Fixed Income **	3,865,135,688	33.1	4,381,342,566	30.8
Domestic Equities	5,784,174,002	49.4	7,815,837,500	54.9
International Equities	1,344,393,598	11.3	1,278,613,411	9.0
Real Estate	425,746,050	3.6	431,693,774	3.0
Private Equity	60,731,073	0.5	28,791,613	0.2
Timberland	116,599,371	1.0	75,995,962	0.5
Totals	$11,730,999,376	100.0	$ 14,233,535,090	100.0

* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

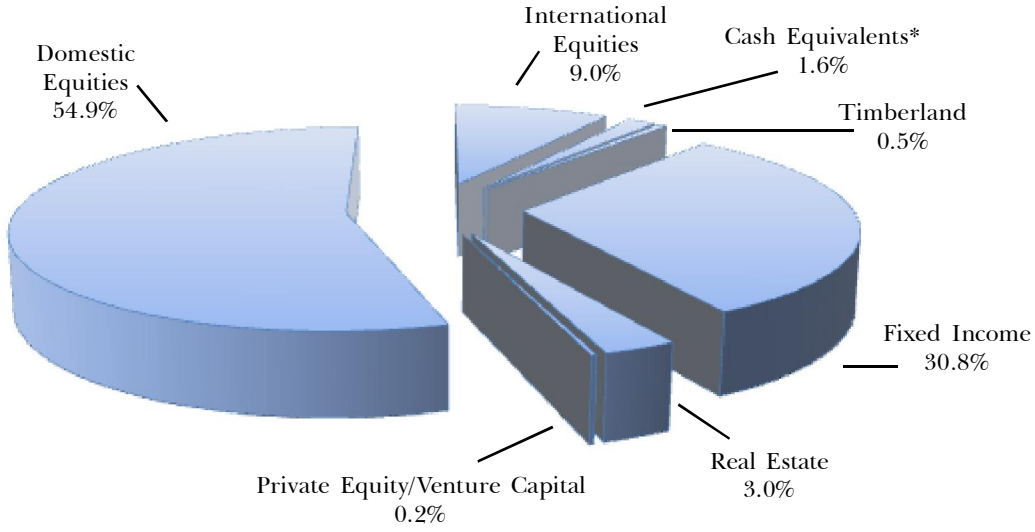
** Excludes purchased interest of $1,060,537 as of June 30, 2009 and $273,868 as of June 30, 2008.

Distribution of Investments
Market Values

June 30, 2009



June 30, 2008



* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2009 (Mkt)
Cash		2 - 4%	2.0%	1.1%
Fixed Income		25 - 32	28.0	33.1
Government/Agency/Other	Unlimited			18.6
Corporate	35%			14.5
Equity	65%	57 - 65	64.0	60.7
Domestic Large Cap		42 - 50	45.0	42.6
Domestic Mid Cap		3 - 6	5.0	4.1
Domestic Small Cap		2 - 4	3.0	2.7
International	15%	8 - 13	11.0	11.3
Real Estate	10%	3 - 5	4.0	3.6
Alternative Investments*	10%	0 - 2	2.0	1.5
Additional Categories	10%		0.0	0.0
TOTAL			**100.0%**	**100.0%**

This weighting reflects cash with manager in the manager's asset class.

* Alternative Investments includes Private Equity, Timberland, Venture Capital and Infrastructure investments.

PORTFOLIO RETURNS

In a twelve-month period which saw the climax of the most serious financial market crisis in decades, the System's portfolio generated a total return of -14.3% versus -16.0% for the benchmark Policy Index. Domestic equities returned -25.5% versus -26.3% for the Standard & Poor's 1500 Index, while international equities returned -27.5% versus -31.0% for the MSCI EAFE Index. Fixed income investments also outperformed, returning 7.2% versus 5.3% for the Barclays Government/Credit Index.

The table below outlines historical performance for the total fund and its component asset classes for the period ended June 30, 2009. The System's domestic equity and fixed income components, which have historically comprised a large majority of System assets, have exceeded the returns of their benchmarks with regularity over long periods of time. The System's returns were generated by the Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

	1 Yr.[2]	3 Yr.[2]	5 Yr.[2]	10 Yr.[2]	20 Yr.[2]
Total Fund					
KTRS	-14.3	-2.3	1.1	1.9	7.1
Policy Index[1]	-16.0	-	-	-	-
Equities					
Domestic Equities	-25.5	-7.9	-1.7	-1.3	8.4
S & P Blended Index[3]	-26.3	-8.2	-2.2	-2.2	7.8
International Equities	-27.5	-6.2	-	-	-
MSCI EAFE	-31.0	-7.5	-	-	-
Total Equities	-25.4	-7.6	-1.5	-1.2	8.5
Fixed Income					
Total Fixed Income	7.2	6.9	5.4	6.3	7.3
Barclays Govt/Credit Index	5.3	6.2	4.8	5.9	7.1
Real Estate					
Real Estate Equity	-30.4	-	-	-	-
NCREIF ODCE	-30.5	-	-	-	-
Triple Net Lease Real Estate	9.7	8.6	9.3	9.1	8.7
CPI plus 2%	0.8	4.1	4.6	4.6	4.8
Alternative Investments					
Private Equity[4]	-5.5	-	-	-	-
Timberland	6.3	-	-	-	-
NCREIF Timberland Index	3.3	-	-	-	-
Cash					
Cash (Unallocated)	1.1	4.1	3.9	3.6	4.7

(1) Prior to July 1, 2008, KTRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.

(2) Annualized

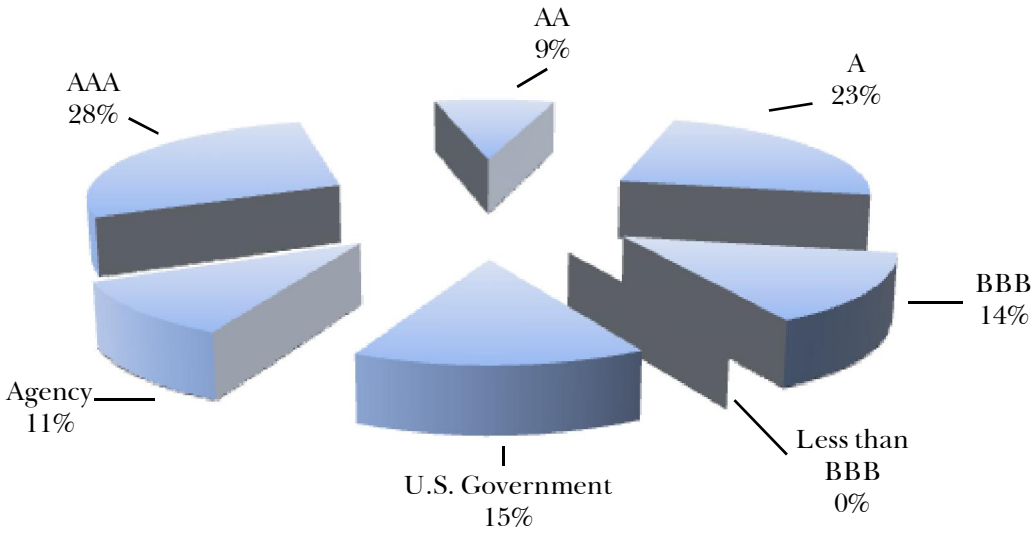
(3) Total Domestic Equity is benchmarked to a S & P Blended Index. Total domestic equity was benchmarked to the S & P 500 through the fiscal year ending 6/30/2007. As of 7/1/2007, domestic equity is benchmarked to the S & P 1500 Index since the System's domestic stock mix is most comparable to this index.

(4) For a period of five years private equity will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the commitment date, investments in this class shall be benchmarked versus the S & P 500 plus 3%, which is the System's long-term expected return for this asset class.

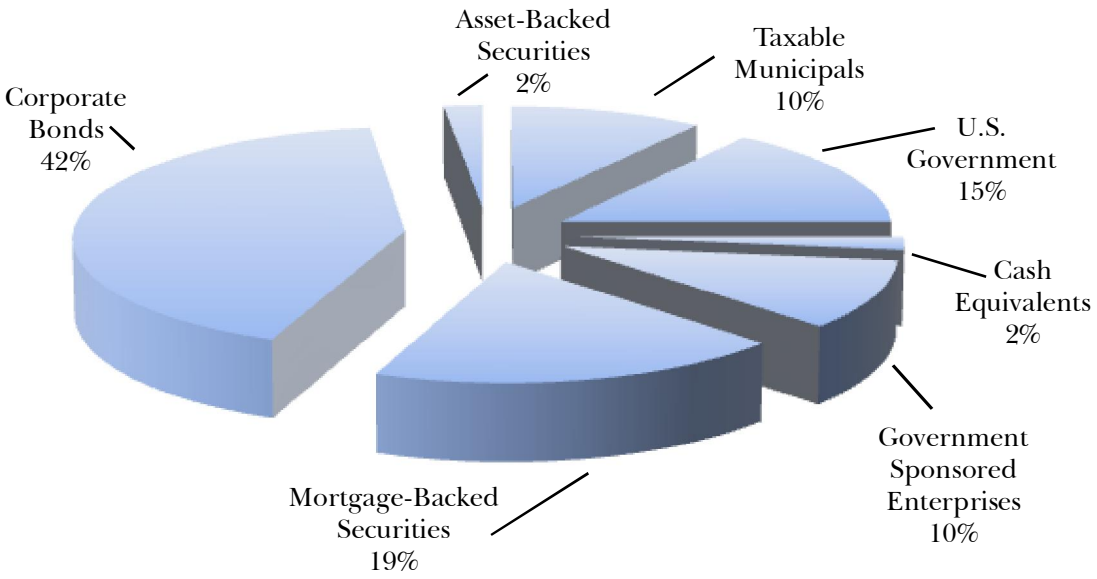
FIXED INCOME INVESTMENTS

As of June 30, 2009, the System had approximately $3.87 billion in fixed income assets, or 33.1% of total assets. Over $2.29 billion was managed internally with the remainder, or about $1.58 billion, managed by two external managers. The System's investment policy established by administrative regulation requires that all fixed income investments be rated investment grade at the time of purchase by one of the major rating agencies. The regulation further requires that the fixed income portfolio as a whole maintain an average rating equal to at least "AA" by one of the major rating agencies.

FIXED INCOME QUALITY DISTRIBUTION



FIXED INCOME SECTOR DISTRIBUTION



FIXED INCOME MARKET OVERVIEW

The credit market crisis which began in the summer of 2007 didn't peak until the fall of 2008. The federal takeover of Fannie Mae and Freddie Mac, the bailout of AIG, and the bankruptcy of Lehman Brothers all occurred within a couple of weeks in early to mid-September, 2008. A scenario of cascading financial institution failures and a full-scale collapse of the financial system was an imminent danger.

Fortunately, the response by the Federal Reserve and the federal government was robust and sustained. The Federal Reserve made clear that it would take any actions necessary to keep the financial system functioning. The federal government injected capital from its Troubled Asset Relief Program into the largest financial institutions to stem the panic. No more systemically important institutions would be allowed to fail. By December 16, the Federal Reserve had cut the target for the federal funds rate to a range of zero to 0.25%. An unprecedented array of spending, lending, and guarantee programs were initiated by the U.S. Treasury and the Federal Reserve, all in an effort to restore credit markets to normal functioning.

Despite the official resolve, credit markets remained severely impaired into early 2009. U.S. Treasury prices rose and yields plummeted in a panic-driven flight to quality. The securitization process came to a standstill, contributing to a collapse in bank lending. Interbank lending rates remained at crisis levels for months. Risk premiums on corporate bonds, especially in financials and below investment grade bonds, reached unprecedented levels by late 2008.

By the early spring of 2009, the U.S. economy and housing market were showing initial tentative signs of stabilization. This led to a sustained rally in risky assets in the spring and summer. By the end of the fiscal year, pricing in the credit markets generally reflected that the threat to the financial system had passed. Significant indigestion remained in areas such as commercial and non-agency residential mortgage-backed securities; the U.S. Treasury's Public Private Investment Program was in the works to help ease these dislocations.

For the fiscal year as a whole, the Barclays Government/Credit Index returned 5.26%. On the positive side, agency-backed fixed rate mortgage securities returned 9.52%. U. S. Treasury securities returned 6.47% and investment grade corporate bonds returned 3.84%. Faring worse, investment grade financial institution bonds returned -1.52%. High yield, or below investment grade, bonds returned -2.40%. Commercial mortgage-backed securities returned -10.13% and home equity asset-backed securities returned -26.52%. Even these figures fail to convey the volatility and illiquidity over the period as all but the safest sectors plunged in value in late 2008, only to rebound strongly in the spring and summer of 2009.

The System's fixed income portfolio went into the financial crisis with a very high quality profile. As dislocations developed in the markets, assets were gradually moved into sectors where investors were being overcompensated for risk. From June 30, 2008 to June 30, 2009, the System's exposure to U.S. government bonds declined from 21% of fixed income assets to 15%, while exposure to corporate bonds rose from 34% to 42%. Exposure to BBB-rated securities, the lowest investment grade rating, rose from 9% to 14% over the same period. The focus continues to be on prudently taking advantage of the opportunities that persist as a result of the financial crisis, while acknowledging the paramount importance of risk control and the economic uncertainty going forward.

EQUITY INVESTMENTS

As of June 30, 2009 the System's public equity investments had a market value of $7.1 billion, representing 60.7% of total assets. The global decline in equities caused the percentage of equities to remain below their 64% target allocation throughout the year. The System divides its public equity investments into two broad categories: domestic and international.

The domestic portfolio had a market value of $5.8 billion as of June 30, representing 49.4% of total

assets. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of 3 well known component indices based upon capitalization: the S&P 500 large cap, S&P 400 mid cap, and the small cap S&P 600. The System's domestic equity holdings are comprised of eleven portfolios. Three of the portfolios are internal passively managed portfolios benchmarked to the S&P 500, S&P 400, and S&P 600. The other eight portfolios are managed externally with each representing a specific strategy and measured against an appropriate benchmark. The collective array of portfolios provides diversification by capitalization, manager, style, and strategy.

The market value of international equity holdings as of June 30, 2009 was $1.3 billion representing 11.3% of total assets. The benchmark for international equities during the fiscal year was the Morgan Stanley Capital International (MSCI) EAFE (Europe, Australasia, Far East) Index, which represents the markets of 22 developed countries. Four external managers manage the System's international equities. During the fiscal year international equities increased as a percent of total assets despite the decline in international markets as the System continued to increase its exposure to international equities. Subsequent to fiscal year-end, the benchmark for international equities was changed to the MSCI All-Country World Ex-US (ACWI -Ex US) Index, which represents the markets of 23 developed and 21 emerging market countries. The change better reflects the portfolio's growing diversification and exposure to emerging markets. The System plans to continue increasing the international equity exposure during the coming fiscal year.

EQUITY MARKET OVERVIEW

For the second straight year equity markets the world over suffered steep declines. The Morgan Stanley Capital International (MSCI) World Index declined -29.0%. Returns of domestic stocks as measured by the Standard & Poors' 1500 Index were -26.3%. The MSCI EAFE which measures the returns of international developed markets had a decline of -31.0%. Emerging market returns were similar to those of developed markets as the MSCI Emerging Markets Index declined -27.8%. This was the first time in six years that domestic equity returns outperformed those of the EAFE.

Domestic stocks continued to suffer from problems that originated in the sub-prime mortgage market in 2007 and spread throughout the financial sector and into the broad economy. It became apparent early in the year that the housing market decline was far from over and that the decline in debt obligations backed by mortgages was wreaking havoc throughout the entire financial system. Many prominent financial institutions failed or were acquired to prevent them from failing. Among them were Lehman Brothers, Merrill Lynch, Fannie Mae, Freddie Mac, Wachovia, Washington Mutual, and American International Group. Fearing a collapse of the entire financial system, the Federal Reserve, Treasury, and Congress moved aggressively to restore confidence and provide liquidity.

The distress in the financial system spread to other parts of the economy leading to a loss of consumer confidence and higher unemployment. The US had been in recession since December 2007. For the fourth quarter of 2008 and the first quarter of 2009, Gross Domestic Product contracted more than 5% for two quarters in a row for the first time since the Great Depression. Unemployment rose steadily from 5.6% in June 2008 to 9.5% in June 2009. These factors fueled further declines in stock prices into March 2009. As the market reached a bottom on March 9, 2009, the S&P 1500 had suffered a decline of -46.5%. From this point of maximum pessimism, the S&P 1500 rebounded almost 38% by June 30. Although welcome, this rebound was largely a bounce in lower quality stocks which had suffered the worst during the crisis. Higher quality stocks participated less in the market's recovery.

For the year, domestic stock returns were equally dismal across capitalization sectors and style categories. The large cap S&P 500 Index was down -26.2%, the mid cap S&P 400 declined -28.0%, and the small cap S&P 600 was down -25.3%. The Energy sector which was the top performing sector last year was the worst performing sector this year as crude prices fell sharply from last year's highs. The S&P Energy sector declined -43% for the year.

The fiscal year was one of extreme turmoil in the markets, leading to an extraordinary level of government intervention. The government "bailed out" a number of financial institutions, arranged for the acquisition of troubled companies, and provided enormous monetary and fiscal stimulus. This has led to an intense debate over the appropriate role of government in the financial system. Hot topics include regulation of systemic risk, executive pay schemes, and heretofore unregulated financial products. Comprehensive reform of financial system regulation is on the political agenda.

The international equity markets were affected by the same factors as the U.S. market. European banks, particularly, took massive write-downs on mortgage-related securities. The crisis in the credit markets and the resulting economic downturn were truly global, affecting markets everywhere. Emerging markets, as usual, were more volatile, but outperformed developed markets for the fiscal year. Over the five-year period ended June 30, 2009, the MSCI Emerging Markets Index generated an annualized return of 15.1% versus 2.8% for the developed markets MSCI EAFE Index.

Although China is still considered an emerging market country, it ranks as the world's third largest economy. While many countries saw their economic growth slow or turn negative, China's economy grew almost 10%. The global downturn would have been worse had it not been for China. China and its markets and economy will continue to be a focus for investors.

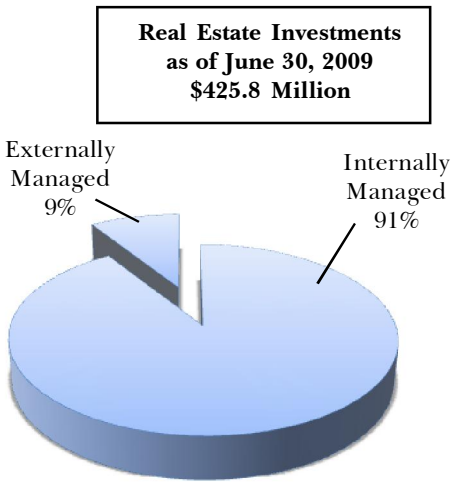
REAL ESTATE

The System's real estate investments had a market value of $425.8 million as of June 30, 2009, representing 3.6% of total assets. The System's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow, and provide diversification, thereby reducing the volatility of the overall investment portfolio.

The System's real estate exposure is currently provided through two portfolios. The System maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high credit quality tenants. The System is also invested in a commingled real estate fund (PRISA FUND), which is managed by Prudential Real Estate Investors. This fund is a core real estate equity fund which invests primarily in existing income-producing properties with strong cash flow and the potential for capital appreciation. The fund is diversified across several property types including office, retail, industrial, apartment, self-storage, and hotel.

REAL ESTATE OVERVIEW

The commercial real estate market remains under pressure from excessive use of leverage and falling occupancy rates. Continued heavy job losses are taking a toll on market fundamentals in all property types, causing vacancies to rise and rents to fall. Debt is scarce and expensive, and equity investors remain on the sidelines waiting for greater clarity on asset values. We expect 2009 to be a year of continued dislocation and volatility in the real estate industry. We are in the midst of a great unwind, where market participants of all types and sizes are seeking to get their capital out of the leveraged structures of the past and flee to relative safety to ride out this market cycle. Weaker fund managers may not survive the market turmoil and uncertainty and, as in cycles past, new players will arise to take their place. Established fund managers that were

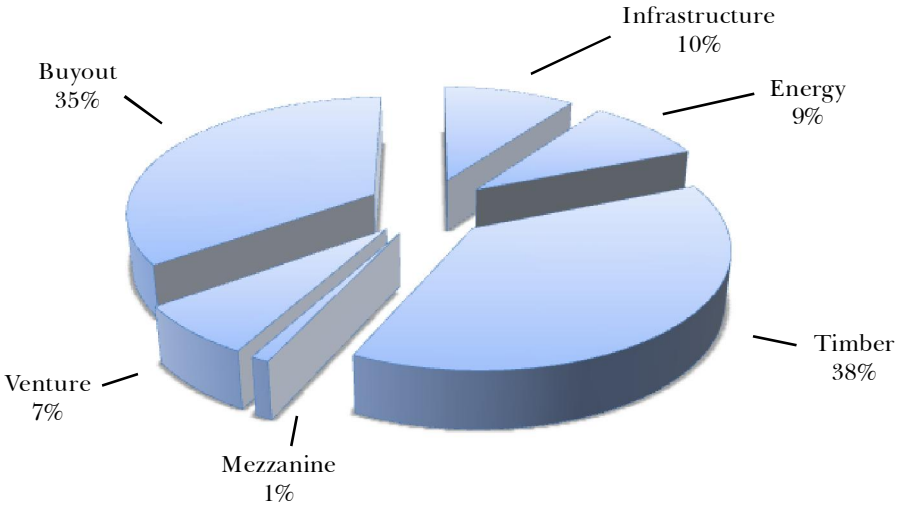


prudently financed and well diversified will have the wherewithal to absorb their losses and the savvy to take advantage of the buying opportunities available in a depressed market.

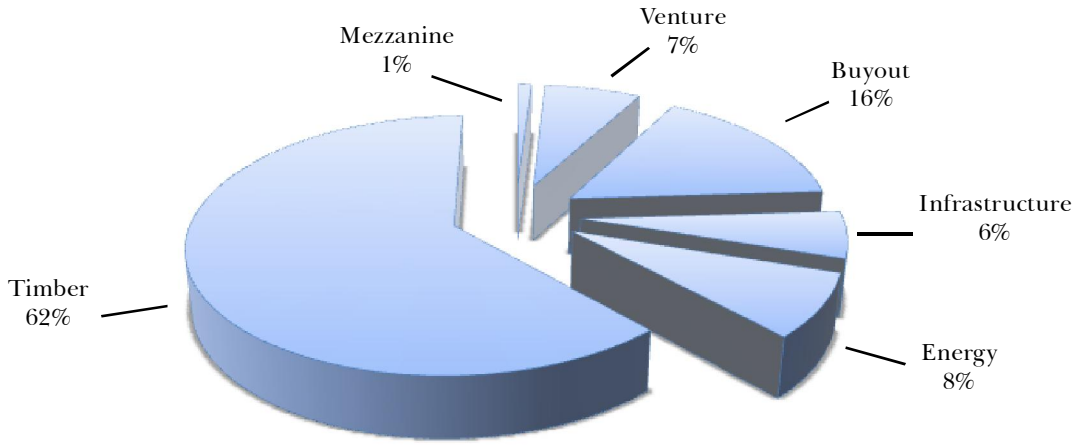
ALTERNATIVE ASSETS

As of June 30, 2009, the System had committed $530 million to alternative investments and had funded $177 million of those commitments. The percentage of the System's portfolio in alternative assets was 1.5%. The System's current alternative asset portfolio consists of private equity investments and timberland.

Alternative Assets Committed as of June 30, 2009 $530 Million



Alternative Assets Funded as of June 30, 2009 $177 Million



PRIVATE EQUITY

The System has exposure to venture, buyout, infrastructure, energy, and mezzanine via participation in limited partnerships as well as investments in funds of funds. The System is in the early stages of its private equity investment program, which it intends to grow with a disciplined plan of commitments over the next several years. The System looks to diversify its private equity portfolio by firm, country, strategy, and vintage year. The System will achieve vintage year diversification by building out the portfolio with disciplined levels of commitments over time. The System's commitment to any given partnership shall not exceed 20% of the partnership's total commitments.

The Board and staff understand that private equity (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with other publicly traded assets, this asset class can help to diversify and reduce risk for the System's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence.

PRIVATE EQUITY MARKET OVERVIEW

The private equity market is still reeling from the credit crisis and the lack of financing available to both established and new funds. Additionally, as the flow of distributions has slowed, with the IPO market all but shut down, many limited partners are quite content to see that the capital calls have slowed down as well. As the markets begin to heal we should expect to see capital calls pick up, although distributions will probably remain subdued for the next twelve to eighteen months. There has already been some improvement in the middle market space where deals do not rely on as much leverage as in the large buyout space. As the global economy improves and the ability of general partners to secure financing returns, we should see the number of deals steadily increase although with less leverage than in the past.

TIMBERLAND

In addition to private equity, the System has invested in timberland in the alternative asset class. As of June 30, 2009, the System owns approximately 73,000 acres of timberland outright and has a 7.15% interest in a commingled fund that holds 97,938 acres of timberland. Timberland is, by nature, a long term investment as our anticipated time horizon in this asset category is generally a minimum of ten to fifteen years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the System's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long-term.

The System diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are primarily driven from net cash flow generated from the sale of trees (referred to as stumpage sales) and capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of the forest commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland from the conversion of timberland into higher and better uses, such as vacation property sales.

TIMBER MARKET OVERVIEW

The downturn in the general economy and the poor housing market continue to negatively affect both global and national timber markets. Pulp markets are currently rallying, but improvements are being propelled by Chinese demand and the foundations of the rally are tenuous. The upside is that the U.S. housing market has seen a reduction in excess supply during this period. Furthermore, low interest rates and attractive home prices have helped spur this improvement. As the global economy recovers, we should see a more sustainable recovery in the timber markets going forward.

PORTFOLIOS
MARKET VALUES **
June 30, 2009

	Internally Managed
Cash Equivalents	
Cash Collections Fund	$ 134,219,595
Fixed Income*	
Broad Market Bond Fund	1,003,917,492
Long Term Bond Fund	568,648,185
Intermediate Bond Fund	426,220,823
Internal Bond Fund	198,847,360
Life Insurance Trust	87,289,911
Scholarship Fund	495,865
Tax Shelter Fund	474,361
Equity	
S&P 500 Index Fund (Large Cap)	2,166,825,934
S&P 400 Index Fund (Mid Cap)	285,929,450
S&P 600 Index Fund (Small Cap)	217,036,883
Real Estate	
Internally Managed Fund	389,472,533
Subtotal	**5,479,378,392**

	Externally Managed
Fixed Income*	
Galliard Capital Management	737,677,688
Ft. Washington Broad Market	640,817,049
Ft. Washington Bond Index Plus	200,746,953
Domestic Equity	
Todd-Veredus (Large Cap Core)	1,144,375,526
UBS (Large Cap Value)	699,321,563
GE Asset Mgmt. (Large Cap Growth)	512,100,470
Wellington (Large Cap Core)	357,996,378
Wellington (Mid Cap Core)	196,803,445
Wellington (Small Cap Core)	92,845,858
UBS (130/30)	76,046,516
Todd-Veredus Opportunity Fund	34,891,979
International Equity	
UBS International	429,263,724
Todd-Veredus International	409,571,797
Baillie Gifford EAFE Alpha	259,859,950
Baring Focused International Equity	245,698,127
Real Estate	
Prudential PRISA Fund	36,273,517

continued ...

PORTFOLIOS continued ...
JUNE 30, 2009

Alternative Investments	
Molpus Woodlands Group	
Lake Superior Timberlands LLC	91,625,796
Hancock Natural Resources Group	
Bluegrass LLC	24,973,575
Riverstone Group Fund IV	14,697,743
KKR 2006 Fund	13,297,106
Alinda Infrastructure Fund II	11,108,850
Chrysalis Venture Fund III	7,374,352
Ft. Washington Private Equity Fund VI	6,022,197
Ft. Washington Private Equity Fund V	4,989,322
CapitalSouth Fund III	2,000,000
KKR European Fund III	1,241,503
Subtotal	6,251,620,984
Total Assets	**$ 11,730,999,376**

* The aggregate value of fixed income portfolios excludes purchased interest of $1,060,537 as of June 30, 2009.

** Detailed information concerning these market values of all KTRS investments is available upon request.

Investment Summary
Fair Market Value
June 30, 2009

Type of Investment	Fair Value 07/01/08	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/09
Cash Equivalents	$ 388,772,500	$ 36,018,598,600	$ 1,331,900	$ 36,151,803,000	$ 256,900,000
Fixed Income	4,279,174,200	899,655,200	50,208,400	1,443,201,400	3,785,836,400
Equities	9,029,380,800	2,546,472,200	(2,435,392,000)	2,054,214,000	7,086,247,000
Real Estate	431,693,800	6,758,300	(9,736,100)	2,970,000	425,746,000
Alternative	104,787,600	76,647,400	1,651,500	5,756,000	177,330,500
TOTAL	**$ 14,233,808,900**	**$ 39,548,131,700**	**$ (2,391,936,300)**	**$ 39,657,944,400**	**$ 11,732,059,900**

Contracted Investment Management Expenses
Fiscal Year 2008-09
(in thousands of dollars)

Investment Manager Fees	Assets Under Management	Expense	Basis Points (1)
Balanced Manager	$ 2,430,403	$ 1,233	
Equity Manager(s)	2,869,936	6,482	
Fixed Income Manager	737,678	353	
Real Estate	36,274	301	
Private Equity Fees (2)	177,330	6,786	
Total	$ 6,251,621	$ 15,155	24.2
Other Investment Services			
Custodian Services	$ 11,730,999	$ 468	0.4
Consultant Fees		361	
Legal & Research Fees		43	
Subscriptions/Services		295	
Total		1,167	
Grand Total		$ **16,322**	**13.9**

1 – One basis point is one hundredth of one percent or the equivalent of .0001.
2 – Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.

Transaction Commissions
Fiscal Year 2008-09

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
Allen & Co	300	252.00	0.8400
Avondale Partners, LLC	5,100	204.00	0.0400
BNY ConvergEx Group	1,482,100	55,301.47	0.0373
Bank of America	680,885	16,350.35	0.0240
Barclays	4,181,153	87,999.06	0.0210
Bass / Baypoint Trading	146,910	4,539.30	0.0309
Blair, William & Co	14,300	572.00	0.0400
Boenning & Scattergood	226,846	5,000.54	0.0220
CIBC Oppenheimer Worldmarket	64,900	2,596.00	0.0400
Cantor Fitzgerald & Co	74,400	1,876.00	0.0252
Citigroup Global	13,213,592	198,122.64	0.0150
Citigroup-Huntington	3,658,100	135,514.50	0.0370
Citigroup-Louisville	3,687,600	134,905.50	0.0366
Cowen & Co	76,750	2,195.00	0.0286
Credit Suisse Sec. LLC	3,878,934	126,433.92	0.0326
Crowell Weedon & Co	90,370	3,422.10	0.0379
D A Davidson & Co	25,700	1,028.00	0.0400
Dahlman Rose & Co LLC	23,220	928.80	0.0400
Deutsche Bank	116,800	4,672.00	0.0400
First Kentucky Securities Corp	2,940,900	107,074.50	0.0364
Fox Pitt Kelton Inc	122,000	4,880.00	0.0400
Freidman Billings	156,100	5,821.76	0.0373
Goldman Sachs	5,554,498	148,809.47	0.0268
Green Street Advisors	18,300	732.00	0.0400
Heflin & Co	67,300	2,692.00	0.0400
Hudson Securities	55,200	1,208.00	0.0219
ICAP Corporates LLC	166,360	6,654.40	0.0400
ING Financial Mkts LLC	20,300	3,045.00	0.1500
ISI Group	3,667,300	134,023.00	0.0365
Instinet	119,180	2,553.80	0.0214
Investment Technology Grp	42,068,307	604,746.85	0.0144
J.J.B. Hilliard, W.L. Lyons	3,625,200	133,259.50	0.0368
JMP Securities	56,400	1,128.00	0.0200
JP Morgan & Chase	499,756	64,147.06	0.1284
Jefferies & Co.	1,866,500	72,795.70	0.0390
Keefe Bruyette & Woods	78,200	5,943.50	0.0760
Kellogg Partners Inst Svs	38,300	861.75	0.0225
Keybanc Capital	60,100	1,202.00	0.0200
Knight Equity Markets	147,540	4,335.20	0.0294
Lazard Freres & Co.	5,272,311	188,325.88	0.0357
Leerink Swann & Co.	12,700	508.00	0.0400
Lehman Brothers	69,250	1,070.50	0.0155
Lexington Investment Co.	1,463,152	54,410.82	0.0372
Liquidnet Inc	5,423,944	80,701.55	0.0149
MacQuarie Securities Inc	22,500	900.00	0.0400
Merrill Lynch	13,940,621	348,302.92	0.0250
Miller Tabak & Co. LLC	149,960	5,314.40	0.0354
Morgan Keegan	2,989,100	109,285.00	0.0366
Morgan Stanley	11,810,089	243,551.75	0.0206

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
Murphy & Durieu	162,200	3,571.25	0.0220
Needham	61,864	2,474.56	0.0400
Pipeline Trading	15,200	210.50	0.0138
Piper Jaffray	142,400	5,696.00	0.0400
Pulse Trading	253,540	5,616.34	0.0222
R W Baird	33,200	1,328.00	0.0400
RBC Capital Markets	99,900	3,094.00	0.0310
Raymond James & Assoc	5,915,400	215,239.50	0.0364
Ross Sinclaire & Assoc	1,503,400	54,070.50	0.0360
Sandler O'Neill	80,100	7,692.50	0.0960
Sanford C Bernstein	539,540	7,180.40	0.0133
Simmons & Co	25,900	1,036.00	0.0400
State Street Global	85,700	2,571.00	0.0300
Sterne, Agee & Leach	20,100	804.00	0.0400
Stifel, Nicolaus & Co	2,982,700	109,021.50	0.0366
Stifel, Nicolaus & Co-Louisville	476,700	16,684.50	0.0350
Susquehanna Brokerage	50,600	1,037.50	0.0205
Thomas Weisel Partners	241,280	5,232.20	0.0217
UBS/Paine Webber Securities	7,827,522	82,488.31	0.0105
UBS/Paine Webber-Louisville	6,736,963	240,416.21	0.0357
Wachovia / First Clearing Corp	11,300	1,145.50	0.1014
Weeden & Co	3,836,400	139,810.00	0.0364
GRAND TOTAL	**165,231,237**	**4,026,617.76**	**0.0244**

The over-the-counter commission rate on medium to large capitalization stocks is assumed to be $.035 per share. The acquisition of initial public offerings (IPOs) represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate. However, the security issuers and not the investors pay the commissions. In 2008-09, the System bought small capitalization IPOs that generated $140,411 in commissions. Although these commissions were not paid by the Retirement System, they resulted from the System's investment activities and are included in the total commissions of $4,026,618. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.03 per share or less. Investment companies usually provide investment research for brokerage clients. On occasion, investment companies direct third party research to active clients. The Retirement System received third party research through BNY ConvergEx, Merrill Lynch (Citation Group) and Barclays Capital. Trading commissions of $43,454 were associated with third party research obligations. The primary research providers were: Bloomberg, Interactive Data, Rogers Casey, RiskMetrics Group, QED Financial Systems, Standard & Poor's, and Thomson Financial.

Ten Largest Stock Holdings Ranked (1) (2)
by Market Value
June 30, 2009

Rank	Name	Market Value	Percentage of Equities
1	Microsoft	134,937,797	2.221
2	Exxon Mobil Corp	108,947,744	1.793
3	A T & T Inc	90,405,205	1.488
4	Chevron Corp	87,487,564	1.440
5	PepsiCo Inc	83,848,625	1.380
6	J P Morgan Chase & Co	81,600,125	1.343
7	Qualcomm Inc	81,209,258	1.336
8	Cisco Systems Inc	77,873,411	1.281
9	Johnson & Johnson	72,014,107	1.185
10	Wells Fargo & Co	71,311,469	1.173

Top Ten Fixed Income Holdings (2)
by Market Value
June 30, 2009

Rank	Description	Maturity	Coupon	Par	Market Value	Percent of Fixed Income
1	U S Treasury Notes	01/15/14	2.000	75,000,000.00	88,521,137.25	2.339
2	U S Treasury Bonds	08/15/23	6.250	66,000,000.00	80,396,580.00	2.124
3	FNMA Notes	11/15/21	5.625	54,000,000.00	56,514,240.00	1.493
4	U S Treasury Bonds	02/15/19	2.750	39,000,000.00	36,525,840.00	0.965
5	FNMA Notes	01/15/30	7.125	25,000,000.00	32,242,250.00	0.852
6	U S Treasury Notes	11/15/13	4.250	29,000,000.00	31,338,270.00	0.828
7	U S Treasury Notes	08/15/09	6.000	28,000,000.00	28,199,080.00	0.745
8	U S Treasury Bonds	08/15/29	6.125	22,000,000.00	27,396,820.00	0.724
9	John Deere Cap Corp	09/09/13	4.900	25,000,000.00	25,893,250.00	0.684
10	CMO FHR 3095 JE	07/15/31	5.500	23,604,000.00	24,379,901.25	0.644

(1) Includes only actively managed separate accounts.
(2) Detailed information concerning these values along with book values and cost values of all KTRS investments is available upon request.

PROXY VOTING AND CORPORATE BEHAVIOR

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The Board has adopted the following position on corporate behavior:

The Board's stated fiduciary duty is to obtain the highest return for the Fund commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the Fund as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the Fund has invested.

The Board expects the managements of the companies whose equity securities are held in the Fund's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the Board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the Board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission, and others which are covered by the laws of the United States Government or the State of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the System's holdings in the company, if the sale is consistent with sound investment policy.

SECURITY LENDING

The System operates a security lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and select stocks and bonds are the types of securities loaned. The System's sub-custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral, at the time of the loan, has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral consists of cash, marketable U.S. Government securities, and selected marketable U.S. Government agency securities approved by the System.

Cash collateral is invested in short term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities unless the borrower defaults. The lending agent also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. The weighted average maturity of cash collateral investments is typically two days. The System has no credit risk exposure to borrowers, since the amounts the System owes borrowers exceeds the amounts the borrowers owe the System.

Security lending programs can entail considerable interest rate risk and credit risk. The System has structured its program to minimize these two main categories of risk. The interest rate risk is

managed, as mentioned above, by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the creditworthiness of lent securities.

KENTUCKY INVESTMENTS

The System is ever mindful of its impact on the Commonwealth's economy. For the fiscal year ended June 30, 2009, approximately $1.2 billion in defined benefit pension payments were distributed to annuitants living in Kentucky. Approximately $329 million of the System's investments directly impact the Commonwealth. These investments include: pools of single-family mortgages in Kentucky; financing for multi-family housing; bonds issued by public agencies of the Commonwealth and those of local municipalities; direct ownership of commercial real estate, and investments in the bonds of Kentucky-based corporations. This excludes hundreds of millions in equity investments in companies which have an impact on the Commonwealth's economy but receive earnings from world-wide operations. Fiduciary duty requires that investments be made solely for the benefit of the System's members and annuitants. Investments which benefit the Commonwealth's economy are made only when fully consistent with this fiduciary duty.

PROFESSIONAL SERVICE PROVIDERS

Investment Consultants
Becker, Burke Associates, Inc.
Ennis Knupp + Associates

Investment Custodian/Subcustodian
Farmers Bank and Capital Trust Co.
The Bank of New York Mellon

Fixed Income Managers
Galliard Capital Management
Ft. Washington Investment Advisors

Domestic Equity Managers
Todd-Veredus Asset Management LLC
UBS Global Asset Management
Wellington Management Company
GE Asset Management

International Equity Managers
Todd-Veredus Asset Management LLC
UBS Global Asset Management
Baring Asset Management, Inc.
Baillie Gifford

Real Estate Managers
Prudential Real Estate Investors

Alternative Investment Managers
Molpus Woodlands Group
Hancock Natural Resources Group
Kohlberg Kravis Roberts & Co.
Chrysalis Ventures
Ft. Washington Private Equity Investors
Alinda Capital Partners LLC
Riverstone Holdings LLC
CapitalSouth Partners

Actuarial Section

Report of the Actuary on the Annual Valuation

for Fiscal Year ending June 30, 2009

PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

Old One Room Schoool House
Area of Breathitt County
Jackson, Kentucky

Cavanaugh Macdonald
CONSULTING, LLC

December 14, 2009

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2009. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2012 shown in the following table are required to support the benefits of the System.

Members Hired:	UNIVERSITY	NON-UNIVERSITY
Before 7/1/2008	28.14%	31.10%
On and After 7/1/2008	29.14%	32.10%

These rates represent an increase since the previous valuation in the required employer contribution rate of 2.07% of payroll for the 2011/2012 fiscal year. There has been a net decrease in the expected state special appropriation from 4.15% to 3.88%, or -0.27% of payroll. Therefore, for the 2011/2012 fiscal year, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 5.93%; 2.34% from this valuation and 3.59% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature. Effective July 1, 2008, the System was amended to change the benefit and contribution structure for members hired on or after that date. These plan changes are reflected in the June 30, 2009 valuation.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and

to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress and the Schedule of Employer Contributions in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, since a portion of the annual contributions required to fund the pension benefits have been allocated to the Medical Insurance Fund by the employer, the retirement fund is not funded by the employer on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Senior Actuary

Report of Actuary on the Valuation
Prepared as of June 30, 2009
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2009	June 30, 2008
Number of active members	75,937	75,539
Annual salaries	$ 3,253,077	$ 3,190,332
Number of annuitants and beneficiaries	42,050	40,739
Annual allowances	$ 1,280,316	$ 1,206,812
Assets		
Market value	$11,515,884	$14,076,692
Actuarial value	$14,885,981	$15,321,325
Unfunded actuarial accrued liability	$ 8,514,445	$ 7,138,979
Funded Ratio	63.6%	68.2%
Amortization period (years)	30	30

Valuation Date	Contribution Rates for University Members		
	June 30, 2009		June 30, 2008
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	
Pension Plan:			
Normal	13.41 %	13.41 %	13.45 %
Accrued liability	14.73	15.73	12.62
Total	28.14 %	29.14 %	26.07 %
Member	7.625%	7.625%	7.625%
State (ARC)	20.515	21.515	18.445
Total	28.14 %	29.14 %	26.07 %
Life Insurance Fund:			
State	0.17 %	0.17 %	0.17 %
Medical Insurance Fund:			
Member	0.75 %	1.75 %	0.75 %
State Match	0.75	0.75	0.75
State Additional	0.00	0.00	0.00
Total	1.50 %	2.50 %	1.50 %
Total Contributions:	29.81 %	31.81 %	27.74 %
Contribution rates for fiscal year ending:	**June 30, 2012**		
Member Statutory	8.375 %	9.375 %	8.375 %
State Statutory	11.625	12.625	11.625
Required Increase	5.93	5.93	3.590
State Special	3.88	3.88	4.150
Total	29.81 %	31.81 %	27.740 %

Contribution Rates for Non-University Members

Valuation Date	June 30, 2009		June 30, 2008
	Members hired before 7/1/2008	Members on or after 7/1/2008	
Pension Plan:			
Normal	17.19%	17.19%	17.11%
Accrued liability	13.91	14.91	11.92
Total	31.10%	32.10%	29.03%
Member	9.105%	9.105%	9.105%
State (ARC)	21.995	22.995	19.925
Total	31.10%	32.10%	29.03%
Life Insurance Fund:			
State	0.17%	0.17%	0.17%
Medical Insurance Fund:			
Member	0.75%	1.75%	0.75%
State Match	0.75	0.75	0.75
State Additional	0.00	0.00	0.00
Total	1.50%	2.50%	1.50%
Total Contributions	32.77%	34.77%	30.70%
For fiscal year ending:	**June 30, 2012**		
Member Statutory	9.855%	10.855%	9.855%
State Statutory	13.105	14.105	13.105
Required Increase	5.93	5.93	3.59
State Special	3.88	3.88	4.15
Total	32.77%	34.77%	30.70%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2009 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

5. Provisions of the System, as summarized in Schedule E, were taken into account in the current valuation. The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature. Effective July 1, 2008, the System was amended to change the benefit and contribution structure for members hired on or after that date. These plan changes are reflected in the June 30, 2009 valuation.

6. All amounts shown prior to the 2004/2005 fiscal year were developed and/or reported by the prior actuarial firm.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2009 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
Full Time	58,409	$ 3,148,452
Part Time	17,528	104,624
Total	75,937	$ 3,253,076

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2009

Group	Number	Annual Retirement Allowances[1] ($1,000's)
Service Retirements	36,749	$ 1,172,261
Disability Retirements	2,209	55,456
Beneficiaries of Deceased Members	3,092	52,599
Total	42,050	$ 1,280,316

[1] *Includes cost-of-living adjustments effective through July 1, 2009.*

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2009 the market value of Pension Plan assets for valuation purposes held by the System amounted to $11,515,883,575. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2009 was $14,885,981,251. Schedule B shows the development of the actuarial value of assets as of June 30, 2009.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $9,090,560,396 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $14,100,130,163 of which $1,082,729,326 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $209,735,890. The total actuarial accrued liability of the System amounts to $23,400,426,449. Against these liabilities, the System has present assets for valuation purposes of $14,885,981,251. When this amount is deducted from the actuarial accrued liability of $23,400,426,449, there remains $8,514,445,198 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 13.41% of payroll for university members and 17.19% for non-university members.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member who becomes a member before July 1, 2008 will contribute 8.375% of annual salary to the System and each non-university member who becomes a member before July 1, 2008 will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

2. Section 161.540 also provides that each university member who becomes a member on or after July 1, 2008 will contribute 9.375% of annual salary to the System and each non-university member who becomes a member on or after July 1, 2008 will contribute 10.855% of annual salary. Of this amount, 1.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university for

university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

3. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2011/2012 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**

4. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.17% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 5.93% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 3.88% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 20.515% for university members who become members before July 1, 2008 and 21.515% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 21.995% for non-university members who become members before July 1, 2008 and 22.995% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source
University

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	8.375%	9.375%
Statutory Medical Insurance Fund	(0.75)	(1.75)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	8.375%	9.375%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	11.875%
Life Insurance	(0.17)%	(0.17)%
Additional to Maintain 30-Year Amortization	5.93	5.93
Special Appropriation	3.88	3.88
Contribution to Pension Plan	20.515%	21.515%
Total Contribution to Pension Plan	28.14%	29.14%

Contribution Rates by Source
Non-University

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	9.855%	10.855%
Statutory Medical Insurance Fund	(0.75)	(1.75)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	9.855%	10.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	12.355%	13.355%
Life Insurance	(0.17)%	(0.17)%
Additional to Maintain 30-Year Amortization	5.93	5.93
Special Appropriation	3.88	3.88
Contribution to Pension Plan	21.995%	22.995%
Total Contribution to Pension Plan	31.10%	32.10%

4. The valuation indicates that normal contributions at the rate of 13.41% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.19%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 14.73% for university members hired before July 1, 2008, 15.73% for university members hired on and after July 1, 2008, 13.91% for non-university members hired before July 1, 2008, and 14.91% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.88% of payroll to be made by the State. These rates are shown in the following table.

Actuarially Determined Contribution Rates

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	13.41%	13.41%	17.19%	17.19%
Accrued Liability*	14.73	15.73	13.91	14.91
Total	28.14%	29.14%	31.10%	32.10%

* *Includes special appropriations of 3.88% of payroll to be made by the State.*

5. The unfunded actuarial accrued liability amounts to $8,514,445,198 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 5.93%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. Since the 2005 fiscal year, a portion of the contributions required for the pension fund have been allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, additional contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans, but the borrowing is expected to continue in the future. The following table shows the amounts borrowed, annual payments and remaining balances as of June 30, 2009:

Medical Insurance Fund
Stabilization Funding

	Loan Amount	Annual Payment	Balances as of July 1, 2009
2004/2005	$29,169,700	$4,249,600	$19,947,105
2005/2006	62,294,800	9,075,500	48,069,098
2006/2007	73,000,000	10,207,400	58,968,035
2007/2008	125,000,000	18,280,000	116,095,000
2008/2009*	133,400,000	19,434,500	133,400,000
Total	$422,864,500	$61,247,000	$376,479,238

**Includes $125,000,000 for Stabilization Funding and $8,400,000 for non-single subsidy funding.*

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 5.93% of payroll for the fiscal year ending June 30, 2012, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46
June 30, 2008	June 30, 2011	1.13	3.59
June 30, 2009	June 30, 2012	2.34	5.93

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,375,466,455 in the unfunded accrued liability from $7,138,978,743 to $8,514,445,198 during the year ending June 30, 2009.

Analysis of Financial Experience
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 535,423
Expected Accrued liability contribution	(290,426)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2008/2009 fiscal year with interest	144,612
Repayment of prior year's MIF Stabilization Funding with interest	(43,380)
Experience:	
Valuation asset growth	1,024,062
Pensioners' mortality	9,699
Turnover and retirements	29,587
New entrants	60,121
Salary increases	(94,232)
Amendments	0
Assumption and method changes	0
Total	$ 1,375,466

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Members as of June 30, 2009

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	42,050
Terminated employees entitled to benefits but not yet receiving benefits	5,245
Active plan members	75,937
Total	123,232

2. Another such item is the schedule of funding progress as shown below.

Schedule of Funding Progress (Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2004	$ 14,255,131	$ 17,617,626	$ 3,362,495	80.9%	$ 2,641,533	127.3%
6/30/2005	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8
6/30/2006*	14,857,641	20,324,781	5,467,140	73.1	2,859,477	191.2
6/30/2007	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7

** Reflects change in decremental assumptions.*

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2009. Additional information as of the latest actuarial valuation follows.

Valuation Date	06/30/2009
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market

Actuarial Assumptions:

Investment Rate of Return*
7.50%

Projected Salary Increases*
4.00 - 8.20%

Cost-of-Living Adjustments
1.50% Annually

**Includes Inflation at 4.00%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Annual Required Contributions	Percentage Contributed
2004	$364,351,412	100%
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85
2008	563,789,483	78
2009	600,282,735	67

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2009. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Obligation for Fiscal Year Ending June 30, 2009

(a)	Employer annual required contribution	$ 600,282,735
(b)	Interest on net pension obligation	18,762,794
(c)	Adjustment to annual required contribution	55,186,315
(d)	Annual pension cost: (a) + (b) - (c)	563,859,214
(e)	Employer contributions made for fiscal year ending June 30, 2009	400,737,435
(f)	Increase (decrease) in net pension obligation: (d) - (e)	163,121,779
(g)	Net pension obligation beginning of fiscal year	250,170,583
(h)	Net pension obligation end of fiscal year: (f) + (g)	$ 413,292,362

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2007	$476,544,275	88%	$149,410,401
June 30, 2008	539,549,665	81	250,170,583
June 30, 2009	563,859,214	71	413,292,362

SCHEDULE A
Results of the Valuation
Prepared as of June 30, 2009
($1,000's)

1.	**ACTUARIAL ACCRUED LIABILITY**		
	Present value of prospective benefits payable in respect of:		
	(a) Present active members		
	- Service retirement benefits	$ 8,479,308	
	- Disability retirement benefits	384,813	
	- Death and survivor benefits	70,527	
	- Refunds of member contributions	155,912	
	Total		$ 9,090,560
	(b) Present inactive members and members entitled to deferred vested benefits:		209,736
	(c) Present annuitants and benficiaries:		
	- Service retirement benefits	13,190,941	
	- Disability retirement benefits	440,627	
	- Death and survivor benefits	468,562	
	Total		14,100,130
	(d) Total actuarial accrued liability		23,400,426
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**		14,885,981
3.	**UNFUNDED ACTUARIAL ACCRUED LIABILITY [1(d) - 2]**		$ 8,514,445

4.	**NORMAL CONTRIBUTION RATE**	**UNIVERSITY**	**NON-UNIVERSITY**
	(a) Actuarial present value of benefits accruing annually	$ 27,018	$ 524,653
	(b) Annual payroll of active members	$ 201,440	$ 3,051,637
	(c) Normal contribution rate [(4(a) / 4(b)]	13.41%	17.19%

Solvency Test

(in millions of dollars)

Fiscal Year Ending	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2004	$2,546.1	$9,906.2	$5,165.3	$14,255.1	100%	100%	35%
6/30/2005	2,621.3	11,370.4	5,143.2	14,598.8	100	100	12
6/30/2006	2,615.8	12,216.6	5,492.4	14,857.6	100	100	0
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0	100	97	0
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3	100	91	0
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0

SCHEDULE B
Development of Actuarial Value of Assets as of June 30, 2009

(1)	Actuarial Value of Assets Beginning of Year	$ 15,321,325,033
(2)	Market Value of Assets End of Year	11,515,883,575
(3)	Market Value of Assets Beginning of Year	14,076,692,181
(4)	Cash Flow	
	a. Contributions	736,228,499
	b. Benefit Payments	1,268,188,826
	c. Administrative Expense	8,165,757
	d. Net: (4)a - (4)b - (4)c	(540,126,084)
(5)	Investment Income	
	a. Market total: (2) - (3) - (4)d	(2,020,682,522)
	b. Assumed Rate	7.50%
	c. Amount for Immediate Recognition:	
	[(3) x (5)b] + [(4)d x (5)b x 0.5]	1,035,497,185
	d. Amount for Phased-In Recognition: (5)a - (5)c	(3,056,179,707)
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20 x (5)d	(611,235,941)
	b. First Prior Year	(409,879,449)
	c. Second Prior Year	190,240,386
	d. Third Prior Year	(75,996,339)
	e. Fouth Prior Year	(23,843,540)
	f. Total Recognized Investment Gain	(930,714,883)
(7)	Actuarial Value of Assets End of Year:	
	(1) + (4)d + (5)c + (6)f	14,885,981,251
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$ (3,370,097,676)

SCHEDULE C
PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending	
	June 30, 2009	June 30, 2008
Receipts for the Year		
Contributions		
Members	$ 293,678,564	$ 291,423,948
Employers	442,549,935	466,247,782
Total	$ 736,228,499	$ 757,671,730
Net Investment Income	(2,020,682,522)	(909,083,525)
TOTAL	$ (1,284,454,023)	$ (151,411,795)
Disbursements for the Year		
Benefit Payments	$ 1,252,980,407	$ 1,170,969,101
Refunds to Members	15,208,419	15,965,083
Medical Insurance Payments	0	0
Miscellaneous, including expenses	8,165,757	7,551,936
TOTAL	$ 1,276,354,583	$ 1,194,486,120
Excess of Receipts over Disbursements	$ (2,560,808,606)	$ (1,345,897,915)
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 14,076,692,181	$ 15,422,590,096
Excess of Receipts over Disbursements	(2,560,808,606)	(1,345,897,915)
Asset Balances as of the End of the Year	$ 11,515,883,575	$ 14,076,692,181

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE D

Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2005, submitted to and adopted by the Board on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.70%	4.50%	4.30%	4.20%	4.00%

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.003%	0.01%	9.00%				
25	0.010	0.01	9.00	1.50%			
30	0.016	0.02	9.00	3.00	3.00%		
35	0.032	0.05	10.00	3.25	1.50		
40	0.048	0.08	10.00	3.75	1.50		
45	0.064	0.22	9.50	2.50	1.50		25.0%
50	0.104	0.42	10.00	4.00	3.00		20.0
55	0.216	0.60	11.00	3.00	2.70	6.0%	35.0
60	0.375	0.79	11.00	3.00	2.70	14.0	25.0
62	0.438	0.83	11.00	3.00	2.70	14.0	23.0
65	0.566	0.90	11.00	3.00	2.70	22.5	35.0
70	0.905	0.00	0.00	0.00	0.00	100.0	100.0

**Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .							
			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.002%	0.03%	6.00%				
25	0.007	0.03	8.50	3.00%			
30	0.014	0.04	9.00	4.00	1.50%		
35	0.026	0.11	8.50	4.00	2.00		
40	0.044	0.22	8.50	2.50	1.50		
45	0.055	0.38	7.00	2.50	1.50		25.0%
50	0.066	0.44	8.50	3.00	2.25		20.0
55	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	0.195	0.00	0.00	0.00	0.00	100.0	100.0

**Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

DEATHS AFTER RETIREMENT: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

Actuarial Method: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

Assets: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

Expense Load: None.

Percent Married: 100%, with females 3 years younger than males.

Loads: Unused Sick Leave: 1% of active liability

SCHEDULE E

Summary of Main System Provisions
As Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2009. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes are reflected in the June 30, 2009 valuation. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1. DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution, or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2. BENEFITS

Service Retirement Allowance: Members Before 7/1/2008

Condition for Allowance: Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance: Members On or After 7/1/2008

Condition for Retirement: Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 1.7% of final average salary if service is 10 years or less.

(b) 2.0% of final average salary if service is greater than 10 years and no more than 20 years.

(c) 2.3% of final average salary if service is greater than 20 years but no more than 26 years.

(d) 2.5% of final average salary if service is greater than 26 years but no more than 30 years.

(e) 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

(a) 1.5% of final average salary if service is 10 years or less.

(b) 1.7% of final average salary if service is greater than 10 years and no more than 20 years.

(c) 1.85% of final average salary if service is greater than 20 years but less than 27 years.

(d) 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance: Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance: The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000, to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	1	2	3	4
Annual Allowance	$ 2,400	$ 4,080	$ 4,800	$ 5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.
If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options:

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3. CONTRIBUTIONS

Member Contributions

Members Before 7/1/2008: University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

Members on and after 7/1/2008: University members contribute 9.375% of salary of which 7.625% is contributed to the Retirement System and 1.75% is contributed to the Medical Insurance Fund. Non-university members contribute 10.855% of salary of which 9.105% is contributed to the Retirement System and 1.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

SCHEDULE F
Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2009
by Age and Service Groups

Attatined Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,595								2,595
Total Pay	39,745,490								39,745,490
Avg. Pay	15,316								15,316
25 to 29	7,615	1,290							8,905
Total Pay	227,008,336	57,380,853							284,389,189
Avg. Pay	29,811	44,481							31,936
30 to 34	3,882	4,670	830						9,382
Total Pay	113,269,413	218,043,692	44,291,642						375,604,747
Avg. Pay	29,178	46,690	53,363						40,035
35 to 39	3,010	2,545	3,984	662					10,201
Total Pay	79,647,918	121,131,930	221,265,021	39,293,353					461,338,222
Avg. Pay	26,461	47,596	55,538	59,356					45,225
40 to 44	3,840	1,648	2,095	2,717	664				10,964
Total Pay	79,186,648	79,487,856	116,421,557	166,421,024	41,840,206				483,357,291
Avg. Pay	20,622	48,233	55,571	61,252	63,012				44,086
45 to 49	1,939	1,291	1,361	1,452	2,172	600			8,815
Total Pay	48,445,446	63,598,288	77,417,070	89,497,680	138,769,270	39,410,174			457,137,928
Avg. Pay	24,985	49,263	56,882	61,638	63,890	65,684			51,859
50 to 54	1,697	1,024	1,183	1,249	1,374	1,625	538		8,690
Total Pay	33,728,120	51,433,269	67,764,908	76,847,143	90,516,215	109,873,901	36,696,325		466,859,881
Avg. Pay	19,875	50,228	57,282	61,527	65,878	67,615	68,209		53,724
55 to 59	2,797	762	946	1,088	1,174	785	780	117	8,449
Total Pay	45,773,868	40,581,777	56,268,484	69,862,760	78,212,871	54,852,877	58,587,128	9,522,788	413,662,553
Avg. Pay	16,365	53,257	59,480	64,212	66,621	69,876	75,112	81,391	48,960
60 to 64	2,712	425	428	526	532	306	156	124	5,209
Total Pay	37,994,285	22,697,514	26,730,945	33,975,145	36,953,135	22,058,924	13,278,778	11,209,862	204,898,588
Avg. Pay	14,010	53,406	62,455	64,592	69,461	72,088	85,120	90,402	39,335
65 & over	2,055	128	108	105	127	59	53	92	2,727
Total Pay	19,405,654	6,689,343	6,997,460	7,054,833	8,858,222	4,351,813	4,221,793	8,503,592	66,082,710
Avg. Pay	9,443	52,260	64,791	67,189	69,750	73,760	79,656	92,430	24,233
Total	32,142	13,783	10,935	7,799	6,043	3,375	1,527	333	75,937
Total Pay	724,205,178	661,044,522	617,157,087	482,951,938	395,149,919	230,547,689	112,784,024	29,236,242	3,253,076,599
Avg. Pay	22,531	47,961	56,439	61,925	65,390	68,310	73,860	87,797	42,839

Average Age: 43.4

Average Service: 10.6

SCHEDULE F

Table 2

Number of Retired Members and Beneficiaries and their Benefits by Age

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	758	$ 8,751,336	$ 11,545
50 - 54	1,341	42,889,619	31,983
55 - 59	6,461	232,264,595	35,949
60 - 64	10,276	352,699,647	34,323
65 - 69	7,866	252,891,651	32,150
70 - 74	5,382	159,572,080	29,649
75 - 79	3,972	105,566,338	26,578
80 & Over	5,994	125,680,717	20,968
Total	42,050	$ 1,280,315,983	$ 30,447

SCHEDULE F

Table 3

Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

Year Ended	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2000	2,462	$79.2	1,008	$14.1	30,615	$619.2	11.8%	$20,226
2001	2,410	77.0	1,128	16.5	31,897	679.8	9.8	21,311
2002	2,577	86.2	1,063	16.8	33,408	749.2	10.2	22,425
2003	2,252	86.7	1,015	16.9	34,645	819.0	9.3	23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1	30,447

Actuarial Section

Report of the Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans

for Fiscal Year ending June 30, 2009

PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

Clifty School, 1910
Warren County, Kentucky

Cavanaugh Macdonald
CONSULTING, LLC

December 14, 2009

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require the Teachers' Retirement System of the State of Kentucky (the System) to conduct actuarial valuations of the System's retiree medical and other post employment benefit plans. This report covers the Medical Insurance Fund and OPEB liabilities related to the Life Insurance Fund. Cavanaugh Macdonald Consulting, LLC (CMC) has submitted the results of the annual actuarial valuation prepared as of June 30, 2009. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total annual required contribution of 14.36% of active member payroll for the Medical Insurance Fund payable for the fiscal year ending June 30, 2012 is required to support the benefits of the Kentucky Employees Health Plan and the Medicare Eligible Health Plan. Of this amount, 0.75% of payroll is paid by those members entering the system prior to July 1, 2008 and 1.75% of payroll is paid by those members entering the System on or after July 1, 2008, leaving 13.61% and 12.61% respectively, as the State contribution. This required State contribution reflects the assets currently held in the Medical Insurance Fund. As the State contributions are less than the required levels, the discount rate for valuing liabilities is 4.5%. Schedule A shows the decrease in liabilities of the medical plans if the required contributions were made each year and the funded discount rates of 7.5% or 8.0% could be utilized.

The Medical Insurance Fund valuation takes into account the effect of amendments to the medical plans enacted through the most recent session of the Legislature. Several changes were made to the assumptions and methods used to determine the liability. The results of this valuation include a reduction in future payments estimated to be made by the System by providing prescription drug benefits to Medicare eligible retirees under a fully insured Prescription Drug Plan (PDP) where, under GASB 43 and 45, subsidies may be recognized. Additionally, changes were made to the expected rates of participation, starting per capita claims costs, dependent coverage subsidies, the assumed rate of health care inflation, and the relationship of cost between ages. The actuarial accrued liability increased from $6.4 billion in 2008 to $6.5 billion in 2009.

The Life Insurance Fund valuation indicates a total annual required contribution of 0.05% of active member payroll payable for the fiscal year ending June 30, 2012 is required to support the benefits of the Life Insurance Fund. The current contribution rate of 0.17% of active member payroll payable for the fiscal year ending June 30, 2012 exceeds the amount sufficient to support the benefits of the Life Insurance Fund. With the State contributions to the Life Insurance Funds exceeding the required levels, the discount rate for valuing liabilities is 7.5%.

The promised benefits of the medical and life insurance plans are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. The market value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in aggregate reasonably related to the experience under the medical and life insurance plans and to reasonable expectations of anticipated experience under the medical and life insurance plans and meet the parameters for the disclosures under GASB 43 and 45.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Board of Trustees
December 14, 2009
Page 2

CMC has prepared the trend information shown in the Schedule of Funding Progress and the Schedule of Employer Contributions in the Financial Section of the Annual Report and Schedule A and Schedule C shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the medical and life insurance plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, if the State contributions to the Medical Insurance Fund are increased to the required levels, the medical plans will begin to operate in an actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the medical plans will improve.

Respectfully submitted,

Eric Gary, FSA, FCA, MAAA
Senior Actuary

Alisa Bennett, ASA, EA, FCA, MAAA
Principal and Senior Actuary

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Report of Actuary on the on the Annual Valuation
of the Retiree Medical and Life Insurance Plans
Prepared as of June 30, 2009

Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

~ Medical Insurance Fund ~

Valuation Date	June 30, 2009	June 30, 2008
Number of active members	75,937	75,539
Annual salaries	$ 3,253,077	$ 3,190,332
Number of annuitants in medical plans	33,481	32,591
Number of spouses and beneficiaries in medical plans*	6,808	6,678
Total	40,289	39,269
Assets:		
Market value	$ 229,103	$ 185,883
Unfunded actuarial accrued liability	$ 6,225,630	$ 6,248,639
Amortization period (years)	30	30
Discount rate	4.50%	4.50%

Contribution for fiscal year ending:	June 30, 2012		June 30, 2011
	Hired prior to 7/1/08	Hired on or after 7/1/08	
Normal	7.53%	7.53%	7.60%
Accrued liability	6.83%	6.83%	6.99%
Total	14.36%	14.36%	14.59%
Member	0.75%	1.75%	0.75%
State (ARC)	13.61%	12.61%	13.84%
Total	14.36%	14.36%	14.59%

* *Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. 100% of the full contribution for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.*

~ Life Insurance Fund ~

Valuation Date	June 30, 2009	June 30, 2008
Number of active members	75,937	75,539
Annual salaries	$ 3,253,077	$ 3,190,332
Number retirees in Life Insurance Plan	38,958	37,778
Assets:		
Market value	$ 84,703	$ 77,658
Unfunded actuarial accrued liability*	$ 5,631	$ 6,607
Amortization period (years)	30	30
Discount rate	7.50%	7.50%

Contribution for fiscal year ending:	June 30, 2012	June 30, 2011
Normal	0.04%	0.04%
Accrued liability	0.01%	0.01%
Total	0.05%	0.05%

* *Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45.*

2. The valuation indicates combined member and State contributions of 14.36% of active member payroll would be sufficient to support the current benefits of the medical plans and State contributions of 0.05% of active member payroll would be sufficient to support the current benefits of the life insurance plan. Comments on the valuation results as of June 30, 2009 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

3. Schedule C of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been several changes made to the assumptions and methods used to determine the liability since the previous valuation. The results of this valuation include a reduction in future payments estimated to be made by the System by providing prescription drug benefits to Medicare eligible retirees under a fully insured Prescription Drug Plan, changes made to the expected rates of participation, starting per capita claims costs, dependent coverage subsidies, the assumed rate of health care inflation, and the relationship of cost between ages.

4. The valuation takes into account the effect of amendments to the medical plans enacted through the most recent session of the Legislature.

5. All amounts shown prior to the 2005 valuation year were developed and/or reported by the prior actuarial firm.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the medical and life insurance plans for use as a basis of the valuation were furnished by the System office. The following table shows the number of active members and their annual salaries as of June 30, 2009 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
Full Time	56,219	$ 3,026,198
Part Time	19,718	226,879
Total	75,937	$ 3,253,077

Section III - ASSETS

1. As of June 30, 2009 the market value of Medical Insurance Fund assets for valuation purposes held by the medical plans amounted to $229,103,015 and the market value of Life Insurance Fund assets for valuation purposes held by the life insurance plan amounted to $84,702,634.

2. Schedule B shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Medical Insurance Fund and the Life Insurance Fund.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation and illustrates the benefits of pre-funding the liability for the medical and life insurance plans. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule C.

2. The valuation shows that the medical plans have an actuarial accrued liability of $3,250,990,231 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to retirees and covered spouses amounts to $3,203,742,794. The total actuarial accrued liability of the medical plans amounts to $6,454,733,025. Against these liabilities, the medical plans have present assets for valuation purposes of $229,103,015. When this amount is deducted from the actuarial accrued liability of $6,454,733,025 there remains $6,225,630,010 as the unfunded actuarial accrued liability for the medical plans.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the medical plans is determined to be $245,037,866, or 7.53% of payroll.

4. The valuation shows that the life insurance plan has an actuarial accrued liability of $18,352,634 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to retirees and covered spouses amounts to $71,981,484. The total actuarial accrued liability of the life insurance plan amounts to $90,334,118. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for active and post employment purposes. As this could be administratively burdensome and, as death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45. Against these liabilities, the life insurance plan has present assets for valuation purposes of $84,702,634. When this amount is deducted from the actuarial accrued liability of $90,334,118 there remains $5,631,484 as the unfunded actuarial accrued liability for the life insurance plan.

5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $1,206,829, or 0.04% of payroll.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.420(5) of the Kentucky Revised Statutes provides that the State will contribute 0.75% of salary to the Medical Insurance Fund. Member contributions will be 1.75% for those who became members of the System on or after July 1, 2008 and 0.75% for all other members. CMC recommends the State contribution increase to the required amount of 13.61% of payroll for those employees hired prior to 7/1/2008 and 12.61% of payroll for those hired on or after 7/1/2008. The State is currently contributing 0.17% of salary to the Life Insurance Fund. CMC's valuation indicates a contribution of 0.05% is required to sufficiently support the benefits of the life insurance plan.

Required Contribution Rates
For Fiscal Year Ending June 30, 2012

	Medical Insurance Fund		Life Insurance Fund
Normal	7.53%		0.04%
Accrued liability	6.83%		0.01%
Total	14.36%		0.05%
	Hired prior to 7/1/08	**Hired on or after 7/1/08**	
Member	0.75%	1.75%	0.00%
State (ARC)	13.61%	12.61%	0.05%
Total	14.36%	14.36%	0.05%

2. The valuation indicates that a total normal contribution of 7.53% of payroll is required to meet the cost of benefits currently accruing under the medical plans and 0.04% of payroll is required to meet the cost of benefits currently accruing under the life insurance plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 6.83% of payroll for the medical plans and 0.01% of payroll for the life insurance plan.

3. The unfunded actuarial accrued liability amounts to $6,225,630,010 for the medical plans and $5,631,484 for the life insurance plan as of the valuation date. An accrued liability contribution of 6.83% of payroll for the medical plans and 0.01% of payroll for the life insurance plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. The System's monthly contribution for retirees to opt into the medical plan is based upon date of hire and years of service at retirement. Additionally, beneficiary contributions may vary by plan election, Medicare eligibility and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Current employer contributions have been determined to be insufficient to fund the cost of the benefits to be provided. Benefits and contributions for university and non-university members are identical.

2. The valuation indicates that a significant increase in contributions is required to fund the medical plans in an actuarially sound manner and to ensure the future solvency of the Medical Insurance Fund. For those who became members of the System on or after July 1, 2008, a member contribution of 1.75% of payroll together with a state contribution of 12.61% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. For those who became members of the System prior to July 1, 2008, a member contribution of 0.75% of payroll together with a state contribution of 13.61% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.

Section VII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the medical and life insurance plans and the employer.

Number of Active and Retired Members in Medical Plan as of June 30, 2009

GROUP	NUMBER
Retirees currently receiving health benefits	33,481
Spouses of retirees currently receiving health benefits	6,808
Active plan members	75,937
Total	**116,226**

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2009

GROUP	NUMBER
Retirees	38,958
Active plan members	75,937
Total	**114,895**

Schedule of Funding Progress
Medical Insurance Fund
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2003	$ 165,537	$ 2,886,000	$ 2,720,463	5.7%	$ 2,497,731	108.9%
6/30/2004	158,862	3,166,568	3,007,706	5.0	2,641,533	113.9
6/30/2005	147,311	4,763,947	4,616,636	3.1	2,703,430	170.8
6/30/2006*	131,614	4,341,963	4,210,349	3.0	2,859,477	147.2
6/30/2007**	140,772	5,928,761	5,787,989	2.4	2,975,289	194.5
6/30/2008	185,883	6,434,522	6,248,639	2.9	3,190,332	195.9
6/30/2009***	229,103	6,454,733	6,225,630	3.5	3,253,077	191.4

*Reflects change in decrement assumptions and plan design. **Reflects change in discount rate to 4.5% and updating medical trend. ***Reflects change in participation assumptions and plan design.

Schedule of Funding Progress
Life Insurance Fund
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2007	$ 71,426	$ 82,722	$ 11,296	86.3%	$ 2,975,289	0.38%
6/30/2008	77,658	84,265	6,607	92.2	3,190,332	0.21
6/30/2009	84,703	90,334	5,631	93.8	3,253,077	0.17

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2009. Additional information as of the latest actuarial valuation follows.

Valuation Date 06/30/2009

Actuarial cost method ..... Projected unit credit

Amortization method ..... Level percent of pay, open

Remaining amortization period ..... 30 years

Asset valuation method ..... Market Value of Assets

Actuarial Assumptions:

Investment Rate of Return*
4.50%for Medical &
7.50% for Life Insurance

Healthcare Trend Rate*
10.50%

Ultimate Trend Rate
5.00%

Year of Ultimate Trend Rate
2017

**Includes Inflation at 4.00%*

Schedule of Employer Contributions
Medical Insurance Fund

Fiscal Year Ending	Annual Required Contribution (ARC) (a)	Actual Employer Contribution (b)	Retiree Drug Subsidy Contribution (c)	Total Contribution (b) + (c)	Percentage of ARC Contributed [(b) + (c)] / (a)]
6/30/2007	$ 231,473,321	$ 113,258,761	$ 10,312,361	$ 123,571,122	53.4%
6/30/2008	395,282,164	148,954,644	11,911,565	160,866,209	40.7
6/30/2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1

Schedule of Employer Contributions
Life Insurance Fund

Fiscal Year Ending	Annual Required Contribution (ARC) (a)	Actual Employer Contribution (b)	Percentage of ARC Contributed (b) / (a)
6/30/2007	$ 1,785,173	$ 5,022,137	281.3%
6/30/2008	1,914,199	5,411,249	282.7
6/30/2009	1,498,076	5,455,473	364.2

3. Following is the calculation of the Annual OPEB Cost (AOC) and the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2009. As the medical and life insurance plans are cost-sharing multiple-employer plans, GASB Statement 45 does not require the participating employers to disclose this information.

Annual OPEB Cost and Net OPEB Obligation
for the Medical Insurance Fund for Fiscal Year Ending June 30, 2009

(a) Employer Annual Required Contribution	$ 467,312,904
(b) Interest on Net OPEB Obligation	10,548,718
(c) Adjustment to Annual Required Contribution	8,369,404
(d) Annual OPEB Cost: (a) + (b) - (c)	469,492,218
(e) Employer contributions for Fiscal Year 2009	178,091,867
(f) Increase in Net OPEB Obligation: (d) - (e)	291,400,351
(g) Net OPEB Obligation at beginning of Fiscal Year	234,415,955
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ 525,816,306

Trend Information for the Medical Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$ 395,282,164	40.7%	$ 234,415,955
6/30/2009	469,492,218	37.9	525,816,306

Annual OPEB Cost and Net OPEB Obligation for the Life Insurance Fund for Fiscal year Ending June 30, 2009

(a) Employer Annual Required Contribution	$ 1,498,076
(b) Interest on Net OPEB Obligation	(262,279)
(c) Adjustment to Annual Required Contribution	(180,859)
(d) Annual OPEB Cost: (a) + (b) - (c)	1,416,656
(e) Employer contributions for Fiscal Year 2009	5,455,473
(f) Increase in Net OPEB Obligation: (d) - (e)	(4,038,817)
(g) Net OPEB Obligation at beginning of Fiscal Year	(3,497,050)
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	($7,535,867)

Trend Information for the Life Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$ 1,914,199	282.7%	($3,497,050)
6/30/2009	1,416,656	385.1	(7,535,867)

SCHEDULE A
Benefits of Pre-Funding Medical Plan
(1,000's)

	Pay-As-You-Go Discount Rate 4.50%		Pre-Funding Discount Rate 7.50%		Pre-Funding Discount Rate 8.00%	
PAYROLL	$ 3,253,077		$ 3,253,077		$ 3,253,077	
ACTUARIAL ACCRUED LIABILITY						
Present value of prospective benefits payable in respect of:						
(a) Present active members:	$ 3,250,990		$ 1,689,955		$ 1,536,618	
(b) Present retired members and covered spouses:	3,203,743		2,288,593		2,179,273	
(c) Total actuarial accrued liability	6,454,733		3,978,548		3,715,891	
PRESENT ASSETS FOR VALUATION PURPOSES	229,103		229,103		229,103	
UNFUNDED ACTUARIAL ACCRUED LIABILITY	$ 6,225,630		3,749,445		3,486,788	
CONTRIBUTIONS FOR FISCAL YEAR ENDING JUNE 30, 2012:						
Normal	7.53 %		3.42 %		3.05 %	
Accrued Liability	6.83		5.96		5.86	
Total	14.36 %		9.38 %		8.91%	
	Hired prior to 7/1/08	**Hired on or after 7/1/08**	**Hired prior to 7/1/08**	**Hired on or after 7/1/08**	**Hired prior to 7/1/08**	**Hired on or after 7/1/08**
Member	0.75%	1.75%	0.75%	1.75%	0.75%	1.75%
State (ARC)	13.61	12.61	8.63	7.63	8.16	7.16
Total	14.36%	14.36%	9.38%	9.38%	8.91%	8.91%

SCHEDULE B
MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2009	June 30, 2008
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 25,134,252	$ 24,125,800
Payment by Retired Members	33,554,515	31,277,030
Total Members	58,688,767	55,402,830
State Statutory Contributions	25,022,737	23,929,322
State Special	0	0
General Fund Surplus (6/2006)	0	0
Allotment from Pension Fund	139,385,300	125,000,000
Total Employer	164,408,037	148,929,322
Grand Total	223,096,804	204,332,152
Recovery Income	72,082	25,322
Medicare D Receipts	13,611,748	11,911,565
Net Investment Income	11,296,280	8,128,179
TOTAL	248,076,914	224,397,218
Disbursements for the Year		
Refunds to Members	0	10,015
Medical Insurance Expense	204,857,122	179,276,215
TOTAL	204,857,122	179,286,230
Excess of Receipts over Disbursements	43,219,792	45,110,988
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	185,883,223	140,772,235
Excess of Receipts over Disbursements	43,219,792	45,110,988
Asset Balance as of the End of the Year	$ 229,103,015	$ 185,883,223

SCHEDULE B (continued)
LIFE INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending	
RECEIPTS FOR THE YEAR	June 30, 2009	June 30, 2008
Contributions		
Members	$ 0	$ 0
Employers	5,455,473	5,411,249
Total	5,455,473	5,411,249
Net Investment Income	5,282,958	6,321,491
TOTAL	10,738,431	11,732,740
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	3,694,000	4,003,000
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	0	0
TOTAL	3,694,000	4,003,000
EXCESS OF RECEIPTS OVER DISBURSEMENTS	7,044,431	7,729,740
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	77,658,203	69,928,463
Excess of Receipts over Disbursements	7,044,431	7,729,740
Asset Balance as of End of the Year	$ 84,702,634	$ 77,658,203

SCHEDULE C
Outline of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, and termination used in the valuation were selected by the Actuary based on the actuarial experience investigation as of June 30, 2005 and adopted by the Board of Trustees on September 18, 2006. The discount rate, rates of future participation, health care cost trend rates, and expected plan costs were determined by the actuary based on plan experience.

Valuation Date: June 30, 2009

Discount Rate: 4.5% per annum, compounded annually for medical plans
7.5% per annum, compounded annually for life insurance plan

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

Fiscal Year	Trend
2010	10.5%
2011	9.5
2012	8.5
2013	7.5
2014	6.5
2015	6.0
2016	5.5
2017 and beyond	5.0

Age Related Morbidity: For retirees age 65 and older, per capita costs are adjusted to reflect expected medical cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 - 69	3.0 %
70 - 74	2.5
75 - 79	2.0
80 - 84	1.0
85 - 89	0.5
90 and over	0.0

Anticipated Plan Participation: Representative values of the assumed annual rates of medical plan participation are as follows:

Years of Service	Hired 7/1/08 and later	Hired after 6/30/02 and before 7/1/08
5-9.99	Not Eligible	10%
10-14.99	Not Eligible	25
15-19.99	45%	45
20-24.99	65	65
25-25.99	90	90
26-26.99	93	93
27 or more	93	93

	Hired 6/30/02 and earlier	
Years of Service	Age 65 on 12/31/04 and earlier	Age 65 on 1/1/05 and later
5-9.99	70%	25%
10-14.99	80	50
15-19.99	90	75
20-24.99	93	93
25-25.99	93	93
26-26.99	93	93
27 or more	93	93

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.003%	0.01%	9.00%				
25	0.010	0.01	9.00	1.50%			
30	0.016	0.02	9.00	3.00	3.00%		
35	0.032	0.05	10.00	3.25	1.50		
40	0.048	0.08	10.00	3.75	1.50		
45	0.064	0.22	9.50	2.50	1.50		25.0%
50	0.104	0.42	10.00	4.00	3.00		20.0
55	0.216	0.60	11.00	3.00	2.70	6.0%	35.0
60	0.375	0.79	11.00	3.00	2.70	14.0	25.0
62	0.438	0.83	11.00	3.00	2.70	14.0	23.0
65	0.566	0.90	11.00	3.00	2.70	22.5	35.0
70	0.905	0.00	0.00	0.00	0.00	100.0	100.0

** Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.002%	0.03%	6.00 %				
25	0.007	0.03	8.50	3.00 %			
30	0.014	0.04	9.00	4.00	1.50%		
35	0.026	0.11	8.50	4.00	2.00		
40	0.044	0.22	8.50	2.50	1.50		
45	0.055	0.38	7.00	2.50	1.50		25.0%
50	0.066	0.44	8.50	3.00	2.25		20.0
55	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	0.195	0.00	0.00	0.00	0.00	100.0	100.0

** Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: According to the 1994 Group Annuity Mortality table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

	Service Retirement		Disability Retirement	
Annual Rate of Death After . . . Age	MALE	FEMALE	MALE	FEMALE
45	0.1578 %	0.0973 %	6.500 %	6.500 %
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

Actuarial Method: Costs were determined using the Projected Unit Credit Actuarial Cost Method. The annual service cost is the present value of the portion of the projected benefit attributable to participation service during the upcoming year, and the Actuarial Accrued Liability (AAL) is equal to the present value of the portion of the projected benefit attributable to service before the valuation date. Service from hire date through the date of full retirement eligibility was used in allocating costs.

Assets: Market Value as provided by KTRS. Return on assets assumed to be 4.50% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

Spouse Coverage: Use actual census data and current plan elections for spouses of current retirees. For spouses of future retirees, assumed 20% of future retirees will cover spouses, with females 3 years younger than males.

Medical Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following is a chart detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that KTRS pays as the full contribution amount. For retirees age 65 and older, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

	Average Monthly KTRS Full Costs & Contributions		
Year	Pre-65 Full Cost and Contributions	Post-65 Full Costs	Post-65 Contributions
CY 2004	$ 293	$ 274	$ 274
CY 2005	412	288	288
CY 2006	461	315	315
CY 2007	458	283	283
CY 2008	484	278	278
CY 2009	545	301*	285
CY 2010	594	373*	342

** Under GASB 43 and 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy cannot be taken into account in the gross cost calculations.*

SCHEDULE D
Summary of Main Plan Provisions as Interpreted for Valuation Purposes

RETIREE MEDICAL ELIGIBILITY: For those hired prior to July 1, 2008, retiree medical eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. For those hired on or after July 1, 2008, employees may retire after the completion of 27 years of service, the attainment of age 55 and 10 years of service, or the attainment of age 60 and 5 years of service, but must complete a minimum of 15 years of service to be eligible for medical benefits. Disabled employees, who are totally and permanently incapable of being employed as a teacher and under age 60, but after completing the minimum years of service requirement, are eligible for subsidized retiree medical coverage that is based on the number of years of service credit accrued at disability retirement. At the expiration of the disability entitlement period, the subsidy is recalculated based upon the number of years of service credit that would have accrued had the member remained active. Spouses of those actives who die while eligible to retire are eligible for retiree medical coverage when the death occurred prior to July 1, 2002.

MEDICAL PLAN CONTRIBUTIONS: The full contribution is provided to retirees with 27 or more years of service. The full contribution is determined by KTRS; the full cost is projected based on historical claims data. For retirees with less than 27 years of service, the following percentages of these full contributions are provided:

Percentage of Full Medical Contribution Provided to Retirees

Years of Service	Hired before 7/1/02 (age 65 on 12/31/04 or earlier)	Hired Before 7/1/02 (age 65 on 1/1/05 or later)	Hired after 6/30/02 and before 7/1/08	Hired 7/1/08 and later
27 or more	100 %	100 %	100 %	100 %
26 - 26.99	100	100	95	95
25 - 25.99	100	100	90	90
20 - 24.99	100	100	65	65
15 - 19.99	90	75	45	45
10 - 14.99	80	50	25	Not Eligible
5 - 9.99	70	25	10	Not Eligible

Effective 1/1/2009, contributions towards pre-65 retirees and spouses healthcare are based upon the Commonwealth Capital Choice Plan which has a total rate of $594.14 per month for Single Coverage. A minimum contribution of $5.00 is required to be paid by all pre-65 retirees and an additional $24.00 per month contribution is required for pre-65 retiree smokers.

Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. For spouses of active members who died while eligible to retire, prior to July 1, 2002, KTRS provides the same subsidy they would have provided to the retiree for the lifetime of the spouse, or until remarriage. For spouses of active members who die while eligible to retire July 1, 2002, or later, spouses pay 100% of the full contribution.

100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.

Life Insurance Benefit

(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Qualified members working 45 days per year will be eligible for survivor benefits and a life insurance benefit for the balance of the fiscal year and disability benefits under certain conditions. For substitute and part-time members, the survivor benefits and life insurance benefit are provided during the first 44 days if death occurs as the result of a physical injury on the job. The disability benefit is available as a direct result of a physical injury on the job during the five-year vesting period. After vesting, the disability benefit is available upon working 45 days for the balance of that fiscal year in accordance with the regular KTRS disability program.

SCHEDULE E
Age - Service Table
Distribution of Active Members as of June 30, 2009
by Age and Service Groups

Attatined Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,595								2,595
Total Pay	39,745,490								39,745,490
Avg. Pay	15,316								15,316
25 to 29	7,615	1,290							8,905
Total Pay	227,008,336	57,380,853							284,389,189
Avg. Pay	29,811	44,481							31,936
30 to 34	3,882	4,670	830						9,382
Total Pay	113,269,413	218,043,692	44,291,642						375,604,747
Avg. Pay	29,178	46,690	53,363						40,035
35 to 39	3,010	2,545	3,984	662					10,201
Total Pay	79,647,918	121,131,930	221,265,021	39,293,353					461,338,222
Avg. Pay	26,461	47,596	55,538	59,356					45,225
40 to 44	3,840	1,648	2,095	2,717	664				10,964
Total Pay	79,186,648	79,487,856	116,421,557	166,421,024	41,840,206				483,357,291
Avg. Pay	20,622	48,233	55,571	61,252	63,012				44,086
45 to 49	1,939	1,291	1,361	1,452	2,172	600			8,815
Total Pay	48,445,446	63,598,288	77,417,070	89,497,680	138,769,270	39,410,174			457,137,928
Avg. Pay	24,985	49,263	56,882	61,638	63,890	65,684			51,859
50 to 54	1,697	1,024	1,183	1,249	1,374	1,625	538		8,690
Total Pay	33,728,120	51,433,269	67,764,908	76,847,143	90,516,215	109,873,901	36,696,325		466,859,881
Avg. Pay	19,875	50,228	57,282	61,527	65,878	67,615	68,209		53,724
55 to 59	2,797	762	946	1,088	1,174	785	780	117	8,449
Total Pay	45,773,868	40,581,777	56,268,484	69,862,760	78,212,871	54,852,877	58,587,128	9,522,788	413,662,553
Avg. Pay	16,365	53,257	59,480	64,212	66,621	69,876	75,112	81,391	48,960
60 to 64	2,712	425	428	526	532	306	156	124	5,209
Total Pay	37,994,285	22,697,514	26,730,945	33,975,145	36,953,135	22,058,924	13,278,778	11,209,862	204,898,588
Avg. Pay	14,010	53,406	62,455	64,592	69,461	72,088	85,120	90,402	39,335
65 & over	2,055	128	108	105	127	59	53	92	2,727
Total Pay	19,405,654	6,689,343	6,997,460	7,054,833	8,858,222	4,351,813	4,221,793	8,503,592	66,082,710
Avg. Pay	9,443	52,260	64,791	67,189	69,750	73,760	79,656	92,430	24,233
Total	32,142	13,783	10,935	7,799	6,043	3,375	1,527	333	75,937
Total Pay	724,205,178	661,044,522	617,157,087	482,951,938	395,149,919	230,547,689	112,784,024	29,236,242	3,253,076,599
Avg. Pay	22,531	47,961	56,439	61,925	65,390	68,310	73,860	87,797	42,839

Retirees Receiving Health Benefits as of June 30, 2009

	Under 65	Over 65	Total
Number	15,614	17,867	33,481
Average Age	59.7	75.0	67.9

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Statistical Section

for Fiscal Year ending June 30, 2009

PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

Jackson School, 1892
Woodford County, Kentucky

This section of the Kentucky Teachers' Retirement System Comprehensive Annual Financial Report (KTRS CAFR) presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

Contents

Financial Trends ..... page 117
These schedules contain trend information to help the reader understand how KTRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 119
These schedules offer demographic and economic indicators to help the reader understand the System's environment within which KTRS's financial activities take place.

Operating Information ..... page 126
These schedules contain benefits, service, and employer contribution data to help the reader understand how KTRS's financial report relates to KTRS's services and activities.

Defined Benefit Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Assets
2009	$ 442,549,935	$ 293,678,564	$ (2,020,682,522)	$ (1,284,454,023)
2008	466,247,782	291,423,948	(909,083,525)	(151,411,795)
2007	434,890,469	269,687,864	2,063,878,767	2,768,457,100
2006	410,920,969	258,464,856	717,308,002	1,386,693,827
2005	388,346,438	247,024,518	946,070,556	1,581,441,512
2004	382,280,099	238,922,086	1,158,182,688	1,779,384,873
2003	341,132,900	233,429,797	538,552,074	1,113,114,771
2002	303,521,106	224,361,453	(520,214,494)	7,668,065
2001	280,108,701	208,702,802	(104,903,741)	383,907,762
2000	311,286,811	203,149,281	454,251,324	968,687,416

Deductions by Type

(Including Benefits by Type)

YEAR	Service Retirants	Disability Retirants	Survivors	Life Insurance*	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Assets
2009	$ 1,184,075,934	$ 54,562,038	$ 14,342,435	$	$ 1,252,980,407	$ 15,208,419	$ 8,165,757	$ 1,276,354,583
2008	1,105,078,345	51,842,271	14,048,485		1,170,969,101	15,965,083	7,551,936	1,194,486,120
2007	1,040,003,417	48,863,876	13,671,586		1,102,538,879	14,822,827	7,351,846	1,124,713,552
2006	972,018,057	46,750,585	12,943,639	3,894,000	1,035,606,281	12,834,222	6,839,859	1,055,280,362
2005	902,863,420	44,070,071	12,585,248	3,852,800	963,371,539	10,975,941	6,652,673	981,000,153
2004	827,731,523	41,491,490	12,047,275	4,015,801	885,286,089	10,471,607	6,578,420	902,336,116
2003	763,099,082	38,744,454	11,259,332	3,961,800	817,064,668	9,951,410	6,388,183	833,404,261
2002	688,754,130	35,947,786	10,532,466	4,210,800	739,445,182	9,146,820	6,677,819	755,269,821
2001	627,637,879	32,233,070	10,005,656	4,110,400	673,987,005	10,673,981	5,950,036	690,611,022
2000	568,538,294	29,148,420	9,322,582	2,350,600	609,359,896	11,304,485	4,859,623	625,524,004

* *Life Insurance Plan valued separately-- see page 119.*

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2009	$(1,284,454,023)	$ 1,276,354,583	$ (2,560,808,606)
2008	(151,411,795)	1,194,486,120	(1,345,897,915)
2007	2,768,457,100	1,124,713,552	1,643,743,548
2006	1,386,693,827	1,055,280,362	331,413,465
2005	1,581,441,512	981,000,153	600,441,359
2004	1,779,384,873	902,336,116	877,048,757
2003	1,113,114,771	833,404,261	279,710,510
2002	7,668,065	755,269,821	(747,601,756)
2001	383,907,762	690,611,022	(306,703,260)
2000	968,687,416	625,524,004	343,163,412

Medical Insurance Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Recovery Income	Net Investment Income	Total Additions to Plan Net Assets
2009	$ 164,408,037	$ 58,688,767	$ 13,683,830	$ 11,296,280	$ 248,076,914
2008	148,929,322	55,402,830	11,936,887	8,128,179	224,397,218
2007	113,233,784	53,099,678	10,337,338	6,722,080	183,392,880
2006	89,319,498	51,697,167	6,117,979	6,804,286	153,938,930
2005	79,022,562	51,576,031		6,507,537	137,106,130
2004	53,346,747	53,903,551		7,127,109	114,377,407
2003	77,235,407	50,718,084		7,391,671	135,345,162
2002	95,261,407	46,184,010		6,142,817	147,588,234
2001	92,429,167	40,017,682		5,286,426	137,733,275
2000	48,946,646	36,392,846		3,710,881	89,050,373

Deductions by Type

(Including Benefits by Type)

	Insurance Benefit Expense					
YEAR	Under Age 65	Age 65 & Over	Third Party Service Fee	Total Insurance Benefits Expense	Refunds	Total Deductions to Plan Net Assets
2009	$ 123,819,475	$ 81,037,647	$	$204,857,122	$	$ 204,857,122
2008	107,437,450	71,838,765		179,276,215	10,014	179,286,229
2007	104,828,254	69,400,843		174,229,097	5,834	174,234,931
2006	102,970,290	66,660,106		169,630,396	5,143	169,635,539
2005	82,186,847	64,233,482		146,420,329	9,072	146,429,401
2004	69,139,458	54,128,210		123,267,668	12,150	123,279,818
2003	63,546,028	52,300,059		115,846,087	7,808	115,853,895
2002	54,412,278	50,566,637	3,221,712	104,978,915	6,066	104,984,981
2001	46,544,264	38,389,936	3,023,755	88,155,912	5,155	88,161,067
2000	38,553,599	38,786,138			2,246	80,365,738

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2009	$ 248,076,914	$ 204,857,122	$ 43,219,792
2008	224,397,218	179,286,229	45,110,989
2007	183,392,880	174,234,931	9,157,949
2006	153,938,930	169,635,539	(15,696,609)
2005	137,106,130	146,429,401	(9,323,271)
2004	114,377,407	123,279,818	(8,902,411)
2003	135,345,162	115,853,895	19,491,267
2002	147,588,234	104,984,981	42,603,253
2001	137,733,275	88,161,067	49,572,208
2000	89,050,373	80,365,738	8,684,635
	83,054,541	70,357,216	12,697,325

Life Insurance Plan

Past Three Fiscal Years

Additions by Source

YEAR	Employer Contributions	Net Investment Income	Total Additions to Plan Net Assets
2009	$ 5,455,473	$ 5,282,958	$ 10,738,431
2008	5,411,249	6,321,491	11,732,740
2007	5,022,137	(3,413,537)	1,608,600

Deductions by Type (Including Benefits by Type) / Changes in Net Assets

YEAR	Life Insurance	Total Deductions to Plan Net Assets	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2009	$ 3,694,000	$ 3,694,000	$ 10,738,431	$ 3,694,000	$ 7,044,431
2008	4,003,000	4,003,000	11,732,740	4,003,000	7,729,740
2007	4,245,000	4,245,000	1,608,600	4,245,000	(2,636,400)

Distribution of Active Contributing Members as of June 30, 2009

By Age

Age	Male	Female
20-24	915	2,961
25-29	2,731	7,922
30-34	2,454	7,264
35-39	2,449	7,774
40-44	2,100	7,033
45-49	2,029	6,550
50-54	2,034	6,385
55-59	2,037	5,780
60-64	1,425	3,351
65-69	607	1,204
Over 70	287	645
TOTAL	19,068	56,869

By Service

Years of Service	Male	Female
Less than 1	5,860	15,445
1-4	4,421	13,858
5-9	3,031	9,599
10-14	2,241	6,912
15-19	1,516	4,760
20-24	1,116	3,584
25-29	559	1,869
30-34	241	727
35 or more	83	115
TOTAL	19,068	56,869

Principal Participating Employers
Current Year and Nine Years Ago

	2009			2000		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	9,999	1	13.02%	7,051	1	12.82%
Fayette County Public Schools	4,272	2	5.56	2,924	2	5.32
Boone County Schools	1,802	3	2.35	912	5	1.66
Hardin County Schools	1,348	4	1.75	998	3	1.81
Kenton County Schools	1,280	5	1.67	804	7	1.46
Oldham County Schools	1,217	6	1.58	609	15	1.11
Bullitt County Schools	1,216	7	1.58	733	11	1.33
Warren County Schools	1,206	8	1.57	773	9	1.41
Madison County Schools	1,180	9	1.54	653	13	1.19
Daviess County Schools	1,165	10	1.52	775	8	1.41
All Other	52,141		67.87%	38,771		70.49%
Total * (197 Employers)	76,826		100.00%	55,003		100.00%

** Includes new retirees with contributions during the fisal year.*

KTRS Schedule of Participating Employers
School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

KTRS Schedule of Participating Employers *(continued)*

School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Monticello
36. Murray
37. Newport
38. Owensboro
39. Paducah
40. Paintsville
41. Paris
42. Pikeville
43. Pineville
44. Raceland
45. Russell
46. Russellville
47. Science Hill
48. Silver Grove
48. Somerset
50. Southgate
51. Walton-Verona
52. West Point
53. Williamsburg
54. Williamstown

Universities & Community/ Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/ Other Organizations

State of Kentucky

1. Education and Humanities Cabinet
2. Legislative Research Commission
3. Workforce Investment Cabinet
4. Finance and Administration Cabinet

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association President
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative
13. Jefferson County Teacher's Association

107	Alabama	2	New Hampshire
2	Alaska	8	New Jersey
66	Arizona	15	New Mexico
27	Arkansas	38	New York
100	California	221	North Carolina
46	Colorado	2	North Dakota
12	Connecticut	491	Ohio
6	Delaware	19	Oklahoma
4	District of Columbia	23	Oregon
857	Florida	36	Pennsylvania
212	Georgia	0	Rhode Island
5	Hawaii	148	South Carolina
5	Idaho	8	South Dakota
73	Illinois	689	Tennessee
544	Indiana	152	Texas
16	Iowa	10	Utah
27	Kansas	1	Vermont
24	Louisiana	121	Virginia
12	Maine	31	Washington
25	Maryland	82	West Virginia
17	Massachusetts	22	Wisconsin
37	Michigan	5	Wyoming
18	Minnesota		
62	Mississippi		
59	Missouri		
8	Montana		
4	Nebraska		
16	Nevada		

Distribution of Retirement Payments Worldwide

As of June 30, 2009

Additional Distribution Outside USA

1	AUSTRALIA	1	PHILIPPINES
4	CANADA	1	SWITZERLAND
3	MILITARY APO	1	BARBADOS

TOTAL: Number of Out of State Payments 4,526
TOTAL: Out of State Payments ..... $ 96,987,492
TOTAL: Number of Payments 43,140
GRAND TOTAL: Amount of Payments ..... $ 1,252,921,522

Distribution of Retirement Payments Statewide

as of June 30, 2009

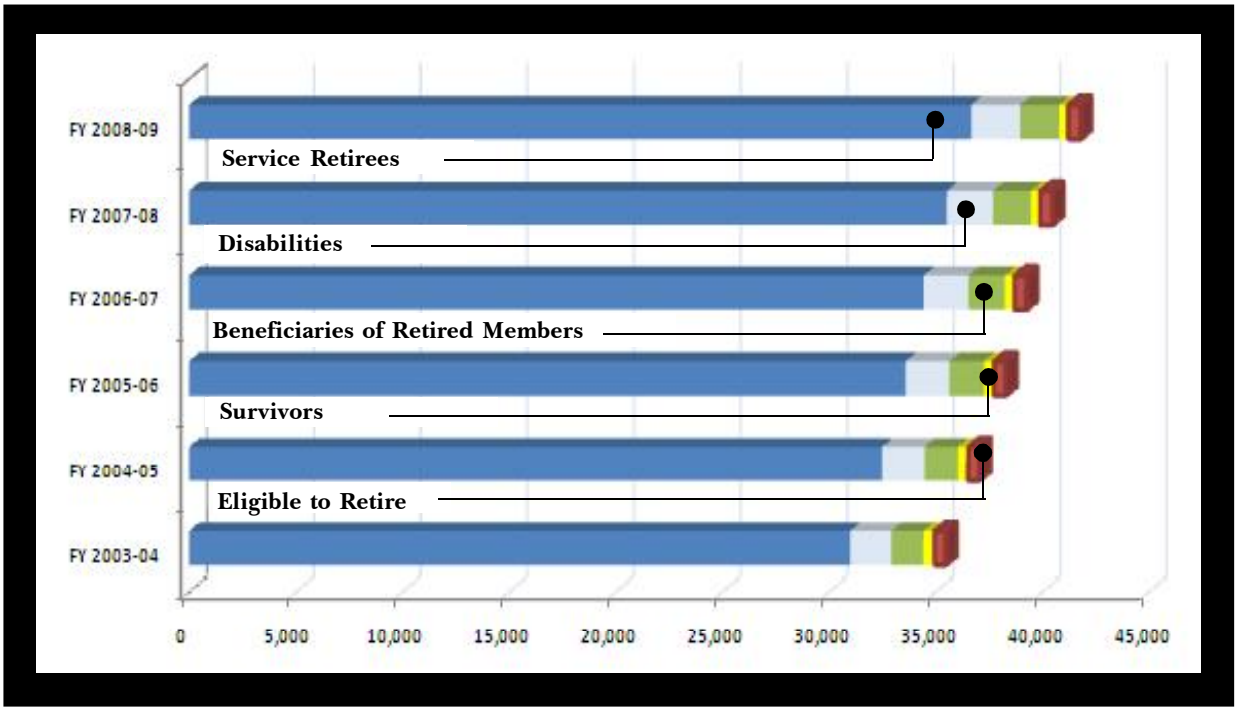
County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Adair	$ 4,733,196	184	Franklin	20,693,822	839
Allen	4,267,558	148	Fulton	2,031,719	66
Anderson	5,103,405	178	Gallatin	529,150	19
Ballard	3,009,414	98	Garrard	4,271,559	146
Barren	10,746,685	366	Grant	4,341,609	136
Bath	3,266,406	124	Graves	10,337,540	341
Bell	9,694,790	350	Grayson	6,952,743	233
Boone	22,025,634	696	Green	2,993,054	105
Bourbon	4,983,446	175	Greenup	9,806,808	337
Boyd	15,112,419	487	Hancock	2,042,164	65
Boyle	10,953,760	370	Hardin	21,515,452	713
Bracken	2,226,983	76	Harlan	10,792,609	383
Breathitt	6,067,952	237	Harrison	5,278,334	178
Breckinridge	5,065,782	164	Hart	4,253,073	143
Bullitt	11,842,871	356	Henderson	10,739,677	363
Butler	2,048,932	76	Henry	4,602,105	160
Caldwell	4,538,833	158	Hickman	976,540	32
Calloway	17,882,193	595	Hopkins	12,740,610	427
Campbell	18,447,594	578	Jackson	3,016,042	117
Carlisle	1,319,422	52	Jefferson	195,092,605	5,676
Carroll	2,186,175	76	Jessamine	7,925,953	280
Carter	8,980,781	317	Johnson	8,925,789	304
Casey	3,980,611	159	Kenton	22,566,489	739
Christian	13,982,530	458	Knott	5,981,231	223
Clark	8,918,437	315	Knox	6,263,892	237
Clay	7,148,430	252	Larue	4,390,858	136
Clinton	3,438,345	125	Laurel	14,034,013	517
Crittenden	1,671,201	63	Lawrence	3,529,509	126
Cumberland	2,193,485	77	Lee	1,736,646	72
Daviess	27,642,927	907	Leslie	3,708,417	137
Edmonson	2,279,059	83	Letcher	8,512,295	305
Elliott	1,454,882	63	Lewis	4,788,548	162
Estill	3,624,746	126	Lincoln	7,402,322	247
Fayette	73,811,604	2,466	Livingston	2,461,682	88
Fleming	4,332,934	155	Logan	6,763,543	244
Floyd	14,699,468	541	Lyon	2,505,028	90

Distribution of Retirement Payments Statewide

as of June 30, 2009 continued . . .

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Madison	35,762,198	1,144	Taylor	7,318,620	261
Magoffin	3,988,460	148	Todd	2,236,275	82
Marion	4,227,871	147	Trigg	4,215,420	151
Marshall	9,590,488	310	Trimble	1,624,566	47
Martin	3,589,071	130	Union	3,036,563	110
Mason	5,008,003	167	Warren	41,197,516	1,415
McCracken	18,418,557	612	Washington	2,952,476	107
McCreary	5,088,335	187	Wayne	5,994,300	209
McLean	2,765,916	91	Webster	3,546,093	125
Meade	4,756,168	145	Whitley	15,110,489	548
Menifee	1,469,024	61	Wolfe	3,051,474	113
Mercer	5,967,237	221	Woodford	7,279,409	243
Metcalfe	2,902,120	100			
Monroe	4,422,781	157			
Montgomery	7,381,213	247	**Total in**		
Morgan	4,772,796	164	**Kentucky**	**$1,155,934,030**	**38,614**
Muhlenberg	7,857,907	264			
Nelson	9,788,125	312			
Nicholas	1,615,956	57			
Ohio	5,453,462	188			
Oldham	12,613,457	390			
Owen	2,177,687	78			
Owsley	3,081,686	112			
Pendleton	3,428,484	113			
Perry	9,815,742	353			
Pike	21,907,318	776			
Powell	2,914,125	103			
Pulaski	17,380,083	618			
Robertson	602,197	22			
Rockcastle	4,471,115	169			
Rowan	12,721,403	448			
Russell	5,451,448	190			
Scott	9,638,971	319			
Shelby	11,253,532	369			
Simpson	4,422,019	150			
Spencer	3,479,554	104			

Growth in Annuitants
as of June 30, 2009



Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Survivors	Eligible to Retire
FY 2003-04	31,003	1,934	1,505	536	518
FY 2004-05	32,506	1,987	1,566	507	525
FY 2005-06	33,618	2,039	1,631	495	531
FY 2006-07	34,462	2,086	1,722	466	549
FY 2007-08	35,550	2,155	1,778	468	554
FY 2008-09	36,684	2,209	1,837	448	559

Schedule of Annuitants by Type of Benefit as of June 30, 2009

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Retirement*				
		1	2	3	4	5
1 - 500	3,119	2,227	18	396	195	283
501 - 1,000	2,693	2,032	203	11	447	0
1,001 - 1,500	3,537	2,625	336	0	576	0
1,501 - 2,000	4,323	3,490	449	2	382	0
2,001 - 2,500	6,895	5,948	614	17	316	0
2,501 - 3,000	8,367	7,784	354	13	216	0
3,001 - 3,500	5,462	5,204	140	4	114	0
3,501 - 4,000	3,166	3,029	65	2	70	0
4,001 - 4,500	1,906	1,843	21	2	40	0
4,501 - 5,000	1,061	1,039	6	0	16	0
5,001 & OVER	1,491	1,463	3	1	24	0
Total**	42,020	36,684	2,209	448	2,396	283

***Type of Retirement**

1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Survivor Payment - Active Member*
4-*Beneficiary Payment - Retired Member*
5-*Disabled Adult Child*

*** Retirees in waiver program are not included.*

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,530	366	247	66	9	380	121	400
501 - 1,000	1,401	327	219	138	10	299	215	84
1,001 - 1,500	1,850	436	331	173	13	351	290	93
1,501 - 2,000	2,303	491	385	163	5	526	317	133
2,001 - 2,500	3,229	659	586	245	11	1,179	706	280
2,501 - 3,000	4,329	859	630	243	10	1,281	880	135
3,001 - 3,500	2,827	598	432	186	7	771	593	48
3,501 - 4,000	1,577	324	291	111	8	459	381	15
4,001 - 4,500	961	208	176	75	9	256	217	4
4,501 - 5,000	515	105	123	57	4	134	122	1
5,001 & OVER	763	132	162	83	11	158	179	3
Total	21,285	4,505	3,582	1,540	97	5,794	4,021	1,196

***Option selected:**

1 - Straight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/1999 TO 06/30/2000								
Average monthly benefit	$195	$444	$840	$1,232	$1,721	$2,414	$3,052	
Average final average salary	$3,764	$3,183	$3,198	3,390	$3,573	$3,958	$4,461	
Number of retired members	54	82	74	82	95	1180	473	2,040
07/01/2000 TO 06/30/2001								
Average monthly benefit	$145	$402	$881	$1,283	$1,779	$2,472	$3,246	
Average final average salary	$3,695	$2,842	$3,444	$3,550	$3,807	$4,024	$4,707	
Number of retired members	48	73	86	85	143	1008	486	1,929
07/01/2001 TO 06/30/2002								
Average monthly benefit	$204	$408	$790	$1,296	$1,898	$2,552	$3,407	
Average final average salary	$4,143	$2,950	$3,312	$3,613	$3,920	$4,115	$4,884	
Number of retired members	65	128	82	116	107	1019	574	2,091
07/01/2002 TO 06/30/2003								
Average monthly benefit	$205	$480	$940	$1,344	$1,940	$2,715	$3,592	
Average final average salary	$4,301	$3,380	$3,714	$3,798	$4,078	$4,378	$5,121	
Number of retired members	58	83	98	103	155	837	508	1,842
07/01/2003 TO 06/30/2004								
Average monthly benefit	$220	$474	$839	$1,444	$1,978	$2,758	$3,486	
Average final average salary	$5,243	$3,357	$3,349	$3,936	$4,182	$4,425	$5,062	
Number of retired members	43	84	98	96	145	818	405	1,689
07/01/2004 TO 06/30/2005								
Average monthly benefit	$187	$528	$906	$1,488	$2,037	$2,892	$3,860	
Average final average salary	$4,353	$3,511	$3,647	$4,055	$4,317	$4,602	$5,275	
Number of retired members	55	98	107	106	145	811	875	2,197
07/01/2005 TO 06/30/2006								
Average monthly benefit	$202	$473	$1,019	$1,493	$2,136	$2,998	$4,063	
Average final average salary	$4,106	$3,253	$4,052	$4,117	$4,537	$4,721	$5,490	
Number of retired members	44	105	106	132	193	689	604	1,873
07/01/2006 TO 06/30/2007								
Average monthly benefit	$178	$514	$930	$1,559	$2,276	$3,140	$4,263	
Average final average salary	$4,102	$3,346	$3,590	$4,228	$4,612	$4,970	$5,758	
Number of retired members	48	113	90	109	169	534	514	1,577
07/01/2007 TO 06/30/2008								
Average monthly benefit	$199	$524	$1,117	$1,658	$2,436	$3,279	$4,319	
Average final average salary	$3,816	$3,066	$4,215	$4,412	$4,983	$5,067	$5,786	
Number of retired members	50	130	112	150	217	557	615	1,831
07/01/2008 TO 06/30/2009								
Average monthly benefit	$200	$573	$1,005	$1,725	$2,427	$3,368	$4,496	
Average final average salary	$4,617	$3,942	$3,873	$4,686	$4,974	$5,278	$5,960	
Number of retired members	72	168	137	115	242	505	585	1,824

Medical Insurance Plan

Average Insurance Premium Supplements for the Last Nine Years

	Years of Service Credit				
	00-9.99	10-14.99	15-19.99	20>=	TOTAL
Retirement Effective Dates					
07/01/2000 TO 06/30/2001					
Average monthly supplement	$ 107.71	$ 165.08	$ 201.72	$ 233.51	
Number of retired members	42	69	96	1634	1,841
07/01/2001 TO 06/30/2002					
Average monthly supplement	$ 128.78	$ 167.74	$ 201.48	$ 252.15	
Number of retired members	59	62	99	1694	1,914
07/01/2002 TO 06/30/2003					
Average monthly supplement	$ 106.62	$ 142.57	$ 212.81	$ 277.64	
Number of retired members	34	59	91	1457	1,641
07/01/2003 TO 06/30/2004					
Average monthly supplement	$ 100.50	$ 148.85	$ 219.41	$ 289.98	
Number of retired members	30	59	82	1365	1,536
07/01/2004 TO 06/30/2005					
Average monthly supplement	$ 138.29	$ 214.32	$ 305.39	$ 394.92	
Number of retired members	36	70	93	1768	1,967
07/01/2005 TO 06/30/2006					
Average monthly supplement	$ 161.03	$ 241.76	$ 362.31	$ 487.23	
Number of retired members	28	49	106	1440	1,623
07/01/2006 TO 06/30/2007					
Average monthly supplement	$ 146.24	$ 260.95	$ 363.45	$ 489.73	
Number of retired members	29	53	80	949	1,111
07/01/2007 TO 06/30/2008					
Average monthly supplement	$ 162.54	$ 260.71	$ 378.28	$ 512.29	
Number of retired members	36	61	104	952	1,153
07/01/2008 TO 06/30/2009					
Average monthly supplement	$ 167.78	$ 298.09	$ 414.38	$ 562.59	1,522
Number of retired members	26	64	103	1,329	

Summary of Fiscal Year 2008-2009
Retiree Sick Leave Payments

ACTUARIAL RATE

Grand Total Members Retiring	1,921
Total members receiving sick leave payments	1,304
Total amount of sick leave payments @ 9.855% contribution rate	$ 16,809,805.35
Average payment per retiree	$ 12,890.96
Total increase in final 3/5 average salary base	$ 4,935,738.33
Average increase in final average salary	$ 3,785.08
Total service credit of 1,304 retirees	34,860.13
Average service credit of 1,304 retirees	26.73
Additional Average Monthly Annuity payment per Retirement Formula	
3,785.08 x .73 x 2.00% =	$ 55.26
3,785.08 x 26.00 x 2.50% =	2,460.30
Total	$ 2,515.56
2,515.56/ 12 months =	$ 209.63
Anticipated Lifetime Payout of Additional Annuity	
209.63 X 144.5250 X 1,304 new factor	$ 39,506,995.58

Funding of Additional Payments

Member Contributions 9.855% x $16,809,805.35 =	$ 1,656,606.32
State Contributions 13.105% x $16,809,805.35 =	2,202,924.99
Total Member-State Contributions	$ **3,859,531.31**
DEFICIT:	
Anticipated additional payout	$ 39,506,995.58
Less total Member & State Contributions	3,859,531.31
Subtotal unfunded debt	35,647,464.27
Less current year appropriation	5,684,000.00
TOTAL DEFICIT (overpayment) *	$ **29,963,464.27** *

* NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. Sick leave deficits are amortized over 20 year periods.

Summary of State Match and Supplemental Appropriations for Member Contributions to Teachers' Retirement System

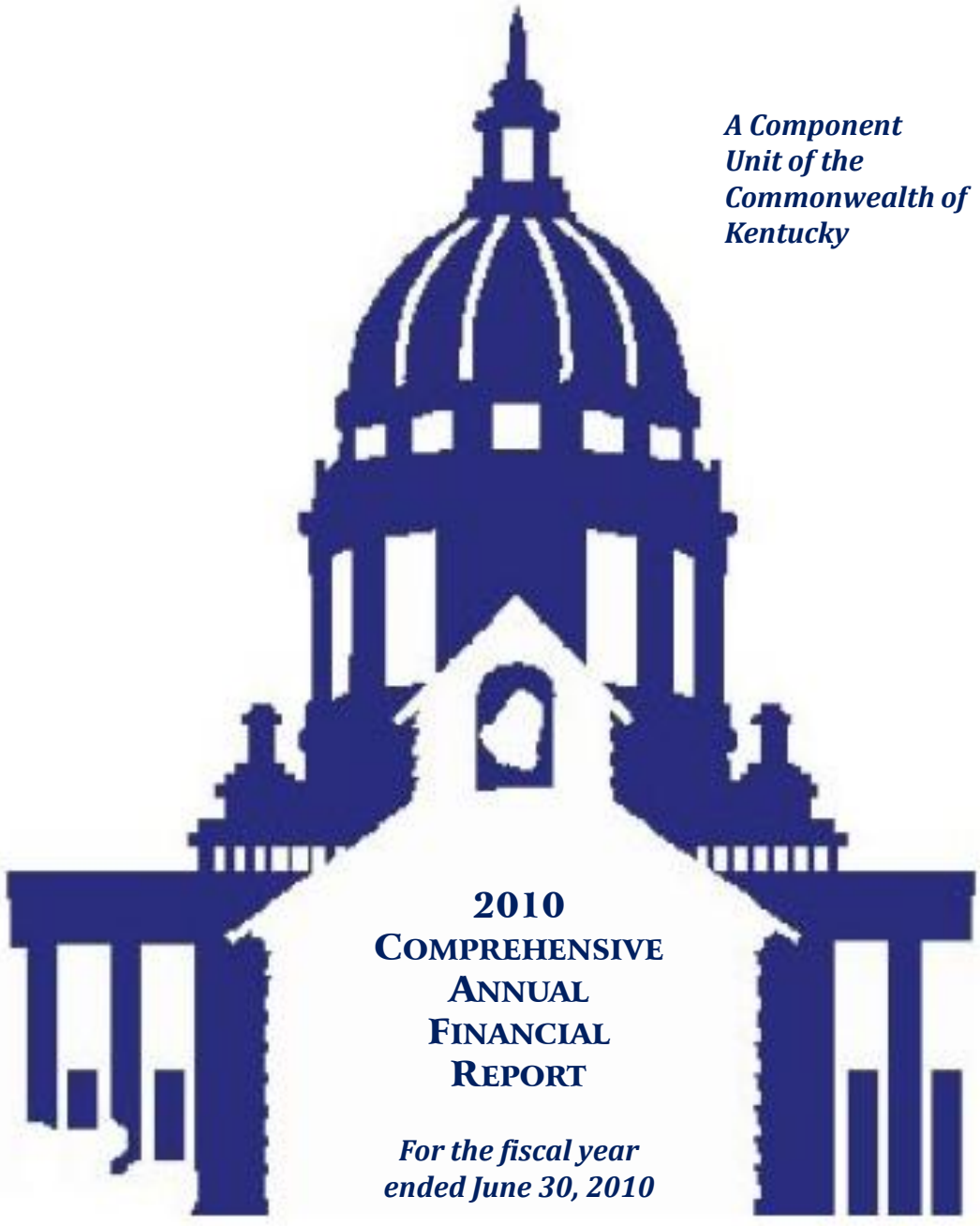
for Fiscal Year Ended June 30, 2009 (in dollars)

Fiscal Year	Total Member Contributions	Employer/ Federal Payments	Required State Match Contributions	Required Supplemental Appropriation	Required Sick Leave Payments	Total State Appropriation	(Deficit) Surplus State Funding
1944-48	3,184,178		3,184,178			3,039,017	(145,160)
1948-52	4,951,458		4,951,458			5,090,848	(139,390)
1952-56	7,267,163		7,267,163			6,494,102	(773,062)
1956-60	14,970,961		14,970,961			14,963,272	(7,689)
1960-64	25,945,897		25,945,897			25,938,763	(7,134)
1964-68	49,957,299	2,042,014	47,915,285			45,317,694	(2,597,591)
1968-72	82,922,869	6,044,865	76,878,005			80,091,951	3,213,946
1972-76	120,349,350	8,019,216	112,330,134			111,665,685	(664,449)
1976-80	189,072,371	12,044,186	177,028,185	75,010,028		256,784,030	4,745,817
1980-84	272,744,772	16,334,937	256,409,836	109,622,111	5,197,234	378,667,011	7,437,831
1984-88	413,932,416	21,417,604	392,514,811	141,251,827	13,341,243	515,932,177	(31,175,706)
1988-92	602,399,432	119,352,211	483,347,221	133,545,987	28,978,117	634,358,200	(11,537,557)
1992-96	756,817,769	154,296,351(2)	602,521,418	213,030,177	53,308,591	854,138,311	(14,751,875)
1996-00	863,954,020	171,037,889	692,916,131	245,400,594	43,209,004(1)	990,501,344	8,975,615
2000-04	999,971,551	200,041,662	799,935,889	289,439,321		1,065,262,116	(24,113,095)
2004-08	1,189,003,238	268,868,767	920,134,471	343,060,563		1,272,694,016	9,498,982
2008-09	328,758,427	71,961,946	256,796,481	94,704,501		355,298,858	3,797,878

(1) The state appropriations for the sick leave deficit started being amortized over 15 years in the year ended June 1999 through the year ended June 2002. Starting the fiscal year 2003 the sick leave deficits were amortized over 20 years.

(2) Beginning with the 1988-89 fiscal year, the Department of Education and the state universities were responsible for matching their members' contributions with the state reimbursing the respective agencies in their normal budget appropriation.

Teachers' Retirement System of the State of Kentucky



A Component Unit of the Commonwealth of Kentucky

2010 Comprehensive Annual Financial Report

For the fiscal year ended June 30, 2010

Teachers' Retirement System
of the State of Kentucky

The 70th Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Year Ended June 30, 2010

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN, CPA
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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Introductory Section

for Fiscal Year ending June 30, 2010

Chairperson's Letter

Teachers' Retirement System of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

BOARD OF TRUSTEES

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OF EDUCATION

EX OFFICIO
TODD HOLLENBACH
STATE TREASURER

December 30, 2010

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2010, the 70th year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

KTRS closed the 2009-2010 fiscal year with $12.8 billion net assets. The active membership totaled 76,387 and the retired membership was 43,134 with an annual payroll of $1.3 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. Every effort will be made to insure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Barbara G. Sterrett
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 30, 2010

Honorable Steven L. Beshear, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky

Dear Governor Beshear:

It is my pleasure to submit the 70th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a Component Unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2010. State law provides the legal requirement for the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system are also required. Kentucky Teachers' Retirement System (KTRS) has produced an annual report that will provide you, the General Assembly, and the general public, with information necessary to gain a better understanding of KTRS.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of KTRS for the year ended June 30, 2010. Discussion and analysis of net assets and related additions and deductions is presented in Management's Discussion and Analysis beginning on page 15.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are accurately executed and financial statements are fairly presented. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Secretary and the Governance and Audit Committee of the Board of Trustees.

Profile of KTRS

KTRS was established on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement benefits to the educators and some public employees of the state. KTRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 24. Also, the summary of the plan provisions starting on page 91 is useful in understanding benefit and contribution provisions. The population of KTRS membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the pension fund. The budget is approved by the Board of Trustees and submitted to the Kentucky General Assembly for legal adoption. The KTRS investment earnings fund the administrative budget appropriations.

Major Initiatives

The System continually seeks opportunities to better serve its membership. During the past year, KTRS has continued work on several major initiatives concerning funding for retiree health care, the investment program, and information technology.

"Shared Responsibility" Solution for Funding Retiree Health Care

The Board of Trustees and Staff appreciate the extraordinary efforts of the many active and retired teachers and education community constituency groups who helped develop a "shared responsibility" solution for adequately funding retiree health care benefits. The Board and Staff are also grateful for the hard work of the General Assembly and Governor in enacting the plan. The

shared responsibility solution for funding retiree health care was truly a historic accomplishment that will help insure the retirement security of the state's teachers.

The shared responsibility solution, which was introduced on February 26, 2010, as House Bill 540, passed through both chambers of the General Assembly without a single negative vote, and was signed into law on Tuesday, April 13, 2010, by the Governor. The funding solution provides that active teachers, retired teachers, school districts, and the state will all share in prefunding retiree health care benefits. This approach will help insure that both current retired teachers and active teachers will receive health care benefits during retirement. Moreover, prefunding retiree health care benefits with shared responsibility by all interested parties is the most cost effective and actuarially sound method for providing retiree health care benefits.

The shared responsibility solution also helps the pension fund by stopping the redirection of contributions from the pension fund to pay for the costs of current retiree health care. From fiscal year 2005 through fiscal year 2010, over $560 million was redirected from the pension fund to the medical insurance fund with the agreement that the amount would be repaid by the state with interest over staggered 10 year terms. On August 26, 2010, this debt by the state to the KTRS pension fund was fully satisfied ahead of schedule when KTRS received the proceeds of a bond issued by the state. The Board is also very grateful to the Governor and General Assembly for this affirmative action to help insure the retirement security of the state's teachers.

Although the shared responsibility solution for funding retiree health care was effective on July 1, 2010, and the bond proceeds were received in the KTRS pension fund on August 26, 2010, both developments had positive effects on the actuarial valuations of the retiree medical and pension plans as of June 30, 2010. Furthermore, in the future, the shared responsibility solution for prefunding retiree health care and stopping the redirection of contributions from the pension fund to pay for the costs of current retiree health care will improve the funding status of both the KTRS medical insurance and pension plans.

Investment Program

KTRS's investment program had solid performance during the year. Additionally, because of KTRS's focus on fundamental value and risk control, it was able to continue a multiyear program of broadening the portfolio's diversification. This included new opportunistic investments that took advantage of dislocated financial markets. During the year, KTRS's independent investment consultant completed an asset liability modeling study, which included an analysis of the shared responsibility solution for funding retiree health care and receipt of the proceeds of a bond in the KTRS pension fund. These ongoing efforts are a continuation of a disciplined investment process and long term focus on retirement security. This focus has generated exceptionally stable returns through the System's history and we have every confidence that it will do so in the future. KTRS's investment program continues to be recognized as a leader in the public pension community for governance structure, trustee education, and cost effectiveness.

Information Technology

KTRS Staff has continued working on a new information technology system known as the "Pathway Project," making preparations to begin the second phase of the project during the year. The objective of the Pathway Project is to streamline retirement processes, and improve staff efficiency in providing services to retirees and active members. During this project, the current legacy KTRS Pension Management System will be replaced with a new system of database software and applications, which will accomplish these goals. The new system will allow KTRS to redesign and improve office processes and ultimately apply new technologies to these processes. This will increase staff productivity, provide seamless member account management, and simplify future system modifications. As KTRS continues to implement changes to the information technology system under the Pathway Project, we expect that the new technology will help the System better serve its membership.

Economic Condition

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 51 contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules among others.

The investment portfolio experienced a growth in value during the 2009-2010 fiscal year as the portfolio's market value increased from $11,732,059,913 to $12,680,439,457. The increase in value of the portfolio and of the overall market was due to improvements in the financial markets and realized capital gains. Employer and employee contributions also provided significant income to the portfolio.

Investment income, including appreciation of asset values, net of investment expenses, for the 2009-2010 fiscal year was $1,527,495,352. The major contributing factor of the positive return from the System's investment portfolio was the net appreciation in fair value of investments in the amount of $1,170,428,775. The largest earnings component, $209,869,513 was the result of interest income. Other income, net of expenses, of $147,197,064 was generated from dividends, rent and securities lending.

According to the KRS 161.430 the KTRS Board of Trustees has the responsibility to invest the assets of the System. The Board of Trustees delegates investment authority to the Investment Committee. The Investment Committee works closely with experienced investment counselors and the System's professional staff in evaluating and selecting investment allocations.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the Plan and its Trust Funds. The investment program shall also provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. While the entire portfolio earned a total return of positive 13.1% in 2009-10, the portfolio's ten-year annualized rate of return is 2.7% and the twenty-year annualized rate of return is 7.2%.

KTRS annuities have a bolstering impact on the Commonwealth of Kentucky's economy, as approximately 92% of retired teachers reside within the state. Total benefits (retirement, medical...etc.) paid this fiscal year were approximately $1.6 billion.

Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes by statute the levels of contribution that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

The latest actuarial valuation was for the period ending June 30, 2010. This report reflects the System's assets, based on modified market value; totaled $14.9 billion and the liabilities totaled $24.3 billion. The funded ratio of actuarial assets to liabilities is 61%. The actuary reports: "In our opinion, the System is not operating on an actuarially sound basis, since a portion of the annual contributions required to fund pension benefits have been allocation to the Medical Insurance Fund. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated."

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions (on page 43). The 2010 employer shortfall of contributions created a net pension obligation of $576,328,182 (as detailed on page 85). Annual required employer contributions for the Medical Insurance Fund are provided in the schedule of employer contributions (on page 44). The 2010 employer shortfall of contributions created a net OPEB obligation of $814,379,040 (as detailed on page 107).

The sustained decline in the funded ratio is a continuation of the cumulative effect of the

transfer of contributions from the retirement fund to the medical insurance fund from 1998-2010. Also contributing to the reduced funded ratio are market fluctuations that are being recognized using actuarial smoothing over a five-year period.

KTRS expects that the shared responsibility solution for funding retiree health care will help improve the funded status of the pension fund in the future by stopping the redirection of contributions from the pension fund to pay for the costs of current retiree health care. As well, on August 26, 2010, KTRS received $465 million in proceeds from a bond issued by the state. This bond issue was approved by the Governor under the authority of legislation enacted by both chambers of the General Assembly during the 2010 Regular and Special Sessions. The proceeds of this bond issue were deposited in the KTRS pension fund in repayment of retirement contributions that had been redirected by the state to pay retiree health care from fiscal year 2005 through fiscal year 2010. In calculating the actuarial value of assets as of June 30, 2010, the actuary was able to include the $465 million proceeds from the bond (as detailed on page 87).

KTRS Medical Insurance Plan

KTRS health care costs keep escalating at a much faster clip than revenue growth in the Medical Insurance Plan. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2010 indicated that the fund has an unfunded liability of $3.0 billion. The funded ratio of actuarial assets to liabilities is 7.5%. As noted above, the shared responsibility solution for funding retiree health care, which went into effect on July 1, 2010, provides a method of prefunding retiree health care over a 30 year period. The System believes that the shared responsibility solution for funding retiree health care will help insure the retirement security of the state's teachers.

Additionally, the System believes continued steps must be taken to realize true cost containment through legislation on both the state and national levels. KTRS will continue to take measures to contain costs and increase revenues to the insurance fund, adjusting coverage to meet existing revenues, or a combination of the two.

Effective January 1, 1999 KTRS eligible retirees and eligible dependents under the age of 65 have their health insurance provided by plans administered by the Kentucky Department for Employee Insurance. Under this arrangement, KTRS provides a monthly supplement to assist the eligible retiree in purchasing health insurance. Retirees 65 and over remain in the Medicare Eligible Health Plan sponsored by KTRS. These retirees also receive a supplement for the cost of their coverage.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the KTRS. A certification from the Certified Public Accountant and Actuary are enclosed in this report. The System's consultants who are appointed by the Board are listed on pages 46, 47, and 72 of this report.

National Recognition

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2009. The Certificate of Achievement is a prestigious national award-recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. KTRS has received the Certificate of Achievement for the last twenty-two consecutive years (fiscal years ended 1988-2009). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council (PPCC) awarded a Certificate of Achievement to the Teachers' Retirement of the State of Kentucky for 2010 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure, and are widely acknowledged to be marks of excellence in the public pension industry.

The PPCC is a coalition of the four major public pension organizations in the nation. These include the National Association of State Retirement Administrators, The National Council on Teacher Retirement, the National Conference on Public Employees Retirement Systems, and the Government Finance Officers Association.

NCTR Executive Committee

Gary L. Harbin serves as the Past-President on the Executive Committee of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 69 state, territorial, local and university pension systems with combined assets in excess of 2 trillion, serving more than 18 million active and retired teachers, non-teaching personnel and other public employees.

Public Sector HealthCare Roundtable

Mr. Harbin also serves on the Board of Directors and as President of the Public Sector HealthCare Roundtable. The Roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector are properly represented during the formulation, debate, and implementation of federal health care reform initiatives. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

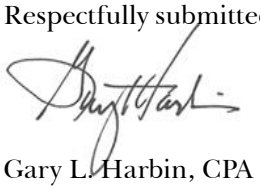
Acknowledgments

The preparation of this report reflects the combined efforts of the KTRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship of the assets contributed by KTRS members and their employers.

This report is located at the KTRS web address www.ktrs.ky.gov, and is made available to all employer members of the System whose cooperation continues to contribute significantly to our success, and who form the vital link between KTRS and its active members.

KTRS management and staff are committed to the continued operation of an actuarially sound retirement system. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



Gary L. Harbin, CPA
Executive Secretary

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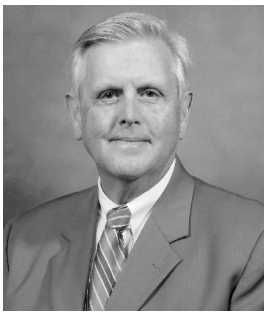
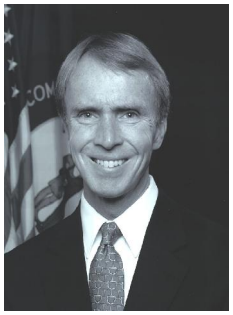


Dr. Terry Holliday
Ex Officio Trustee
Commissioner,
Dept. of Education



Todd Hollenbach
Ex Officio Trustee
State Treasurer

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

GARY L. HARBIN, CPA
Executive Secretary

ROBERT B. BARNES, JD
General Counsel and
Deputy Executive Secretary
Operations

J. ERIC WAMPLER, JD
Deputy Executive Secretary
Finance & Administration

PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

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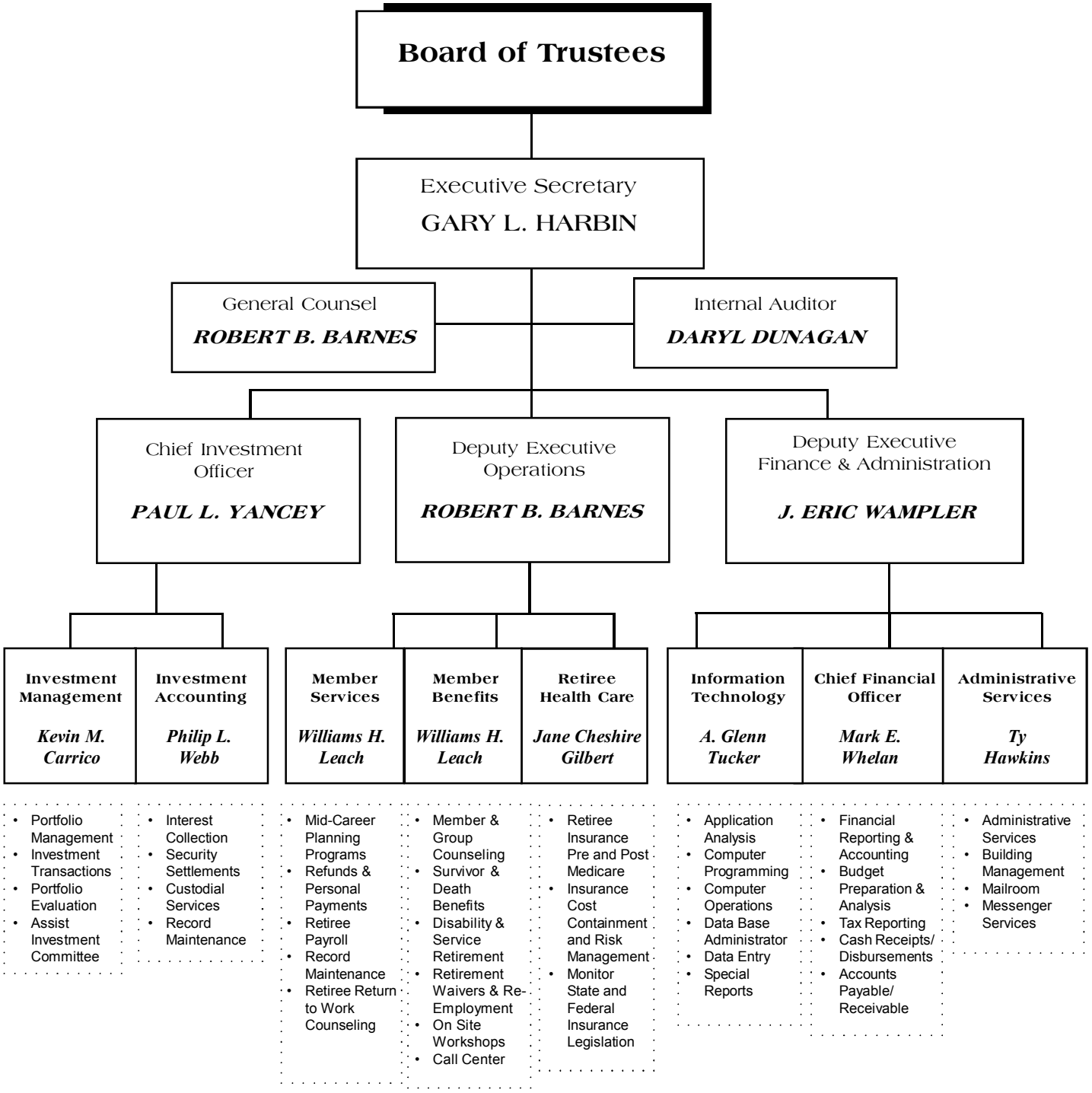
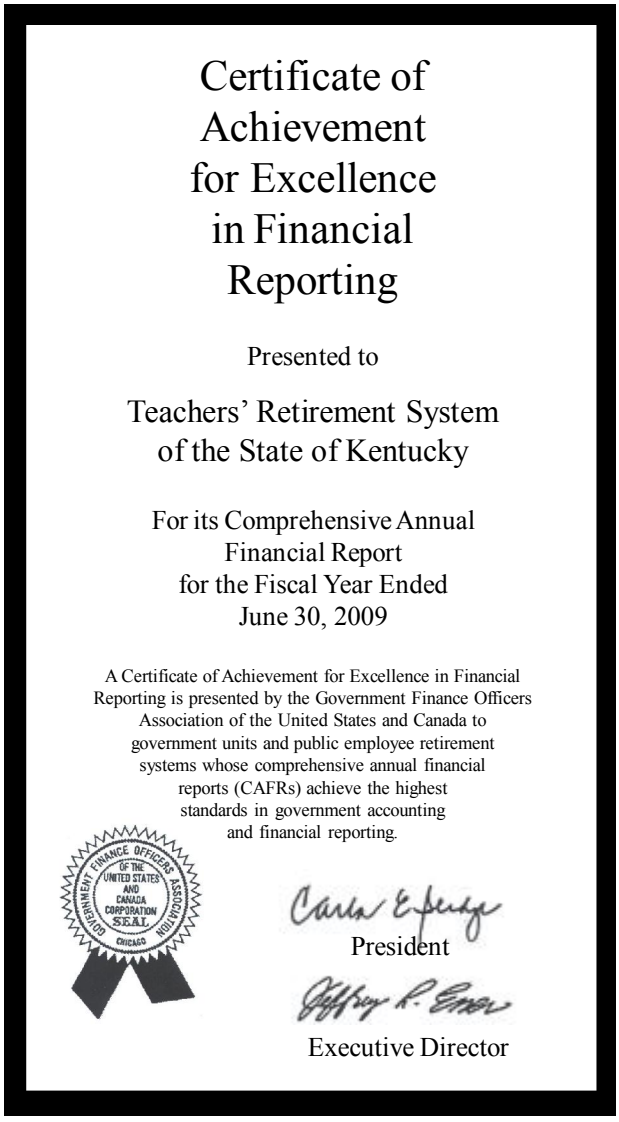
201 West Main Street
P.O. Box 698
Frankfort, Kentucky 40601

** See page 70 of the Investment Section for investment consultants.*

Kentucky Teachers' Retirement System
Organizational Chart





GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last twenty-two consecutive years (fiscal years ended 1988-2009).

Public Pension Coordinating Council

Public Pension Standards

2010 Award

Presented to

Kentucky Teachers Retirement System

In recognition of meeting professional standards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of state Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2010 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

Financial Section

for Fiscal Year ending June 30, 2010

Charles T. Mitchell Co. LLP
Certified Public Accountants

William G. Johnson , Jr., C.P.A
James Clouse,C.P.A
Bernadette Smith, C.P.A
Kim Field, C.P.A
Greg Miklavcic, C.P.A
Don C. Giles, C.P.A, Consultant

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the accompanying statements of plan net assets of the Teachers' Retirement System of the State of Kentucky as of June 30, 2010 and 2009 and the related statements of changes in plan net assets for the years then ended. These component unit financial statements are the responsibility of the Teachers' Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the plan net assets of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, at June 30, 2010 and 2009 and the changes in its plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated December 17, 2010 on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

The Management's Discussion and Analysis on pages 15-19 are not a required part of the basic financial statements but is supplemental information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplemental information. However, we did not audit the information and express no opinion on it.

The financial section supporting schedules listed in the table-of-contents are presented for the purpose of additional analysis and are not a required part of the basic financial statements. These schedules are the responsibility of the System's management. Such schedules as of and for the year ended June 30, 2010 have been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

We did not audit the data included in the Introductory and Statistical sections of the report and therefore express no opinion on them.

Charles T. Mitchell Co.

Frankfort, Kentucky
December 17, 2010

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MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of Kentucky Teachers' Retirement System's financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2010. Please read it in conjunction with the respective financial statements, which begin on page 20.

USING THIS FINANCIAL REPORT

Because of the long-term nature of a defined benefit pension plan, and the medical and life insurance plans, financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. The Statement of Plan Net Assets and Statement of Changes in Plan Net Assets (on pages 20-23) provide information about the activities of the defined benefit plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Kentucky Teachers' Retirement System is the fiduciary of funds held in trust for its members.

The Schedule of Funding Progress (on pages 43-45) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (on pages 43-45) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2010, Kentucky Teachers' Retirement System's combined plan net assets increased by $956.5 million – from $11,830.2 million to $12,786.7 million. The following summaries focus on plan net assets and changes in plan net assets of Kentucky Teachers' Retirement System's defined benefit plan, medical insurance plan, life insurance plan and other funds.

Summary of
Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2010	2009	2008	2010	2009	2008	2010	2009	2008
Cash & Investments	$ 12,513.9	$ 11,591.9	$ 14,224.0	$ 237.1	$ 225.0	$ 182.0	$ 87.1	$ 89.0	$ 76.8
Receivables	96.5	94.3	93.6	7.9	7.1	6.2	.9	.7	.8
Capital Assets	3.4	3.2	3.0						
Total Assets	12,613.8	11,689.4	14,320.6	245.0	232.1	188.2	88.0	89.7	77.6
Total Liabilities	(157.2)	(174.0)	(243.9)	(3.8)	(3.0)	(2.3)	(0.1)	(5.0)	
Plan Net Assets	$ 12,456.6	$ 11,515.4	$ 14,076.7	$ 241.2	$ 229.1	$ 185.9	$ 87.9	$ 84.7	$ 77.6

*TOTALS	2010	2009	2008
Cash & Investments	$ 12,838.1	$ 11,905.9	$ 14,482.8
Receivables	105.3	102.1	100.6
Capital Assets	3.4	3.2	3.0
Total Assets	12,946.8	12,011.2	14,586.4
Total Liabilities	(161.1)	(182.0)	(246.2)
Plan Net Assets	$ 12,785.7	$ 11,829.2	$ 14,340.2

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Supplemental Benefit Fund and the Losey Scholarship fund had combined plan net assets of $.9 million for years ended 2010 and 2009. Only the 403(b) Tax Shelter Plan amount of $.5 million plan net assets is available for 2008.*

Plan net assets of the defined benefit plan increased by 8.2% ($12,456.6 million compared to $11,515.4 million). The increase is primarily due to improvements in market conditions which resulted in a net investment income increase of $3.5 billion. The defined benefit plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries.

Plan net assets of the medical insurance plan increased by 5.3% ($241.2 million compared to $229.1 million) primarily due to state allocations from redirecting contributions from the retirement fund to the medical plan. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

Summary of
Changes in Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan 2010	2009	2008	Medical Insurance Plan 2010	2009	2008	Life Insurance Fund 2010	2009	2008
ADDITIONS									
Member Contributions	$ 297.6	$ 293.7	$ 291.4	$ 63.8	$ 58.7	$ 55.4	$	$	$
Employer Contributions	479.8	442.5	466.2	158.8	164.4	148.9	1.9	5.4	5.4
Net Investment Income	1,509.8	(2,020.7)	(909.1)	12.3	11.3	8.1	5.4	5.3	6.3
Other Income				14.6	13.7	11.9			
TOTAL ADDITIONS	2,287.2	(1,284.5)	(151.5)	249.5	248.1	224.3	7.3	10.7	11.7
DEDUCTIONS									
Benefit Payments	1,321.8	1,252.9	1,170.9				4.1	3.7	4.0
Refunds	15.3	15.2	15.9						
Administrative Expense	8.8	8.2	7.6						
Insurance Expenses				237.4	204.8	179.2			
TOTAL DEDUCTIONS	1,345.9	1,276.3	1,194.4	237.4	204.8	179.2	4.1	3.7	4.0
Increase (Decrease) in Plan Net Assets	$ 941.3	$ (2,560.8)	$ (1,345.9)	$ 12.1	$ 43.3	$ 45.1	$ 3.2	$ 7.0	$ 7.7

TOTALS	2010	2009	2008
ADDITIONS			
Member Contributions	$ 361.4	$ 352.4	$ 346.8
Employer Contributions	640.5	612.3	620.5
Net Investment Income	1,527.5	(2,004.1)	(894.7)
Other Income	14.6	13.7	11.9
TOTAL ADDITIONS	2,544.0	(1,025.7)	84.5
DEDUCTIONS			
Benefit Payments	1,325.9	1,256.6	1,174.9
Refunds	15.3	15.2	15.9
Administrative Expense	8.8	8.2	7.6
Insurance Expenses	237.4	204.8	179.2
TOTAL DEDUCTIONS	1,587.4	1,484.8	1,377.6
Increase (Decrease) in Plan Net Assets	$ 956.6	$ (2,510.5)	$ (1,293.1)

DEFINED BENEFIT PLAN ACTIVITIES

Member contributions increased $3.9 million. Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions totaled $479.8 million, a net increase of $37.3 million over the 2009 fiscal year.

The System experienced an increase in net investment income compared to the loss of the previous year ($1,509.8 million at June 30, 2010 as compared to a $2,020.7 million decrease at June 30, 2009). The increase in the fair value of investments is mainly due to favorable market conditions for the year ended June 30, 2010. This can be illustrated as follows:

(In Millions)	2010	2009	2008
Appreciation (depreciation) in fair value of investments – June 30, prior year	$ (1,336.2)	$ 385.4	$ 1,904.0
Appreciation (depreciation) in fair value of investments – June 30, end of year	(235.5)	(1,336.2)	385.4
Change in net appreciation (depreciation) in fair value of investments	1,100.7	(1,721.6)	(1,518.6)
Net income (net of investment expense)	341.3	373.1	426.9
Net gain on sale of investments	67.8	(672.2)	182.6
Investment Income (net) – June 30, end of year	$ 1,509.8	$ (2,020.7)	$ (909.1)

Program deductions in 2010 increased $69.6 million. The increase was caused principally by an increase of $68.9 million in benefit payments. Members who were drawing benefits as of June 2009 received an increase of 1.5% to their retirement allowances in July 2009. Also, there was an increase of 1,084 members and beneficiaries on the retired payroll as of June 30, 2010.

OTHER POST EMPLOYMENT BENEFIT ACTIVITIES

During the 2010 fiscal year, the medical insurance plan member contributions increased $5.1 million and employer contributions decreased by $5.6 million over fiscal year 2009. The employer contributions decreased primarily because less was placed in stabilization funding in the medical insurance fund from the pension fund. Stabilization Funding amounts were scheduled to be repaid over ten years per KRS 161.553 but in August 2010, bond proceeds were received to repay the pension fund for stabilization amounts redirected since fiscal year 2005.

Program deductions increased $32.6 million due mainly to an increase of insurance premiums with the Medicare Advantage Program due to federal reimbursement cuts. The monthly premium subsidy for retirees under age 65 increased 8.1% from fiscal year 2009 to fiscal year 2010. No increase is expected for calendar year 2011. The monthly premium subsidy for retirees age 65 and over increased by 20% from

fiscal year 2009 to fiscal year 2010. A decrease is expected for calendar year 2011 due to the implementation of both an insured Medicare Advantage Regional PPO and an insured Employer Group Waiver Prescription Drug Plan as of July 1, 2010.

Net investment income increased $1 million from $11.3 million in 2009 to $12.3 million in 2010. This is due to the recognition of interest income since all investments for the Medical Insurance Plan are short term in nature and the recognition of appreciation in fair value is not feasible. This can be illustrated as follows:

(In Millions)	2010	2009	2008
Appreciation in fair value of investments – June 30, prior year	$ 0	$ 0	$ 0
Appreciation in fair value of investments – June 30 end of year	0	0	0
Net appreciation in fair value of investments	0	0	0
Net income (net of investment expense)	12.3	11.3	8.1
Net gain on sale of investments	0	0	0
Investment Income (net) – June 30	$ 12.3	$ 11.3	$ 8.1

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2010, 2009 and 2008 were $4.1, $3.7 and $4.0 million respectively.

HISTORICAL TRENDS

Accounting standards require that the Statement of Plan Net Assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information regarding the actuarial funding status of the defined benefit plan, the medical insurance plan, and the life insurance plan is provided in the Schedule of Funding Progress (beginning on page 43). The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the projected unit credit cost method.

The 2010 fiscal year reveals a decline in funding position of the pension plan due to an increase in the actuarial liability.

Annual required employer contributions of the defined benefit plan are provided in the Schedule of Employer Contributions (on page 43) and a shortfall of employer contributions has resulted in an accumulated net pension obligation of $576,328,182 as of June 30, 2010 (as detailed on page 85).

The medical insurance plan is not as vulnerable to adverse market conditions since its assets are all short term in nature and less likely to experience huge fluctuations. Although the plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding.

Annual required contributions of the Medical Insurance Plan are provided in the Schedule of Employer Contributions (on page 44) and a shortfall of employer contributions has resulted in an accumulated net OPEB obligation of $814,379,040 as of June 30, 2010 (as detailed on page 107).

Statement of Plan Net Assets
As of June 30, 2010

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	2010 TOTAL
ASSETS					
Cash	$ 2,497,492	$	$ 592,345	$ 48,283	$ 3,138,120
Prepaid Expenses	127,531	147,000			274,531
Receivables					
Contributions	38,343,995	3,055,730	32,225		41,431,950
State of Kentucky	71,937				71,937
Investment Income	57,550,193		895,791	7,514	58,453,498
Installment Account Receivable	530,191				530,191
Medicare D Receivables		4,838,295			4,838,295
Total Receivables	96,496,316	7,894,025	928,016	7,514	105,325,871
Investments at Fair Value (See Note 5)					
Short-Term Investments	64,445,908	237,013,895	5,400,000	518,475	307,378,278
Bonds and Mortgages	4,045,405,431		81,056,169	411,764	4,126,873,364
Equities	7,526,938,498				7,526,938,498
Alternative Investments	299,635,647				299,635,647
Real Estate	419,613,670				419,613,670
Total Investments	12,356,039,154	237,013,895	86,456,169	930,239	12,680,439,457
Invested Security Lending Collateral	155,226,862				155,226,862
Capital Assets, at cost net of accumulated depreciation of $1,995,799 (See Note 2)	3,483,370				3,483,370
Total Assets	12,613,870,725	245,054,920	87,976,530	986,036	12,947,888,211
LIABILITIES					
Accounts Payable	1,124,143		71,937		1,196,080
Insurance Claims Payable		3,831,080			3,831,080
Investment Purchases Payable	900,638				900,638
Obligations Under Securities Lending	155,226,862				155,226,862
Total Liabilities	157,251,643	3,831,080	71,937	0	161,154,660
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:	$ 12,456,619,082	$ 241,223,840	$ 87,904,593	$ 986,036	$ 12,786,733,551

The accompanying notes are an integral part of these financial statements.

Statement of Plan Net Assets
As of June 30, 2009

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	2009 TOTAL
ASSETS					
Cash	$ 4,901,504	$	$ 1,736,300	$ 25,558	$ 6,663,362
Prepaid Expenses	148,786	121,000			269,786
Receivables					
Contributions	34,794,627	2,762,036	77,453		37,634,116
State of Kentucky	2,966,717				2,966,717
Investment Income	55,886,305		674,184		56,560,489
Installment Account Receivable	605,511				605,511
Medicare D Receivables		4,328,805			4,328,805
Total Receivables	94,253,160	7,090,841	751,637	0	102,095,638
Investments at Fair Value (See Note 5)					
Short-Term Investments	19,091,857	224,866,481	12,400,000	541,662	256,900,000
Bonds and Mortgages	3,710,519,898		74,889,911	426,564	3,785,836,373
Equities	7,086,247,046				7,086,247,046
Alternative Investments	177,330,444				177,330,444
Real Estate	425,746,050				425,746,050
Total Investments	11,418,935,295	224,866,481	87,289,911	968,226	11,732,059,913
Invested Security Lending Collateral	167,874,202				167,874,202
Capital Assets, at cost net of accumulated depreciation of $2,087,345 (See Note 2)	3,219,786				3,219,786
Total Assets	11,689,332,733	232,078,322	89,777,848	993,784	12,012,182,687
LIABILITIES					
Accounts Payable	1,028,771		78,339		1,107,110
Insurance Claims Payable		2,975,307			2,975,307
Investment Purchases Payable	5,065,608		4,996,875		10,062,483
Obligations Under Securities Lending	167,874,202				167,874,202
Total Liabilities	173,968,581	2,975,307	5,075,214	0	182,019,102
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:	$ 11,515,364,152	$ 229,103,015	$ 84,702,634	$ 993,784	$ 11,830,163,585

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
For the Year Ended June 30, 2010

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	2010 TOTAL
ADDITIONS					
Contributions					
Employer	$ 479,805,088	$ 158,761,433	$ 1,966,826	$ 60,000	$ 640,593,347
Member	297,613,965	63,805,573			361,419,538
Total Contributions	777,419,053	222,567,006	1,966,826	60,000	1,002,012,885
Other Income					
Recovery Income		4,063			4,063
Medicare D Receipts		14,614,285			14,614,285
Total Other Income		14,618,348			14,618,348
Investment Income					
Net Appreciation/(Depreciation) in FV of Investments	1,168,500,111		1,943,464	(14,800)	1,170,428,775
Interest	194,088,206	12,312,999	3,440,180	28,128	209,869,513
Dividends	133,351,529				133,351,529
Rental Income, Net	30,968,132				30,968,132
Securities Lending, Gross Earnings	1,549,318				1,549,318
Gross Investment Income	1,528,457,296	12,312,999	5,383,644	13,328	1,546,167,267
Less Investment Expense	(18,206,407)				(18,206,407)
Less Securities Lending Expense	(465,508)				(465,508)
Net Investment Income	1,509,785,381	12,312,999	5,383,644	13,328	1,527,495,352
Total Additions	2,287,204,434	249,498,353	7,350,470	73,328	2,544,126,585
DEDUCTIONS					
Benefits	1,321,808,770		4,148,511	81,076	1,326,038,357
Refunds of Contributions	15,310,680				15,310,680
Insurance Expenses		237,377,528			237,377,528
Administrative Expense	8,830,054				8,830,054
Total Deductions	1,345,949,504	237,377,528	4,148,511	81,076	1,587,556,619
Net Increase (Decrease)	941,254,930	12,120,825	3,201,959	(7,748)	956,569,966
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:					
Beginning of year	11,515,364,152	229,103,015	84,702,634	993,784	11,830,163,585
Ending of year	$ 12,456,619,082	$ 241,223,840	$ 87,904,593	$ 986,036	$ 12,786,733,551

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
For the Year Ended June 30, 2009

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	2009 TOTAL
ADDITIONS					
Contributions					
Employer	$ 442,489,935	$ 164,408,037	$ 5,455,473	$ 60,000	$ 612,413,445
Member	293,678,564	58,688,767			352,367,331
Total Contributions	736,168,499	223,096,804	5,455,473	60,000	964,780,776
Other Income					
Recovery Income		72,082			72,082
Medicare D Receipts		13,611,748			13,611,748
Total Other Income		13,683,830			13,683,830
Investment Income					
Net Appreciation/(Depreciation) in FV of Investments	(2,393,829,082)		1,888,614	4,156	(2,391,936,312)
Interest	206,675,446	11,296,280	3,394,344	23,625	221,389,695
Dividends	150,828,141				150,828,141
Rental Income, Net	29,794,103				29,794,103
Securities Lending, Gross Earnings	3,053,121				3,053,121
Gross Investment Income	(2,003,478,271)	11,296,280	5,282,958	27,781	(1,986,871,252)
Less Investment Expense	(16,321,910)				(16,321,910)
Less Securities Lending Expense	(906,950)				(906,950)
Net Investment Income	(2,020,707,131)	11,296,280	5,282,958	27,781	(2,004,100,112)
Total Additions	(1,284,538,632)	248,076,914	10,738,431	87,781	(1,025,635,506)
DEDUCTIONS					
Benefits	1,252,914,387		3,694,000	93,752	1,256,702,139
Refunds of Contributions	15,208,419				15,208,419
Insurance Expenses		204,857,122			204,857,122
Administrative Expense	8,165,757				8,165,757
Total Deductions	1,276,288,563	204,857,122	3,694,000	93,752	1,484,933,437
Net Increase (Decrease)	(2,560,827,195)	43,219,792	7,044,431	(5,971)	(2,510,568,943)
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:					
Beginning of year	14,076,191,347	185,883,223	77,658,203	999,755	14,340,732,528
Ending of year	$ 11,515,364,152	$ 229,103,015	$ 84,702,634	$ 993,784	$ 11,830,163,585

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements
Years Ended June 30, 2010 and 2009

Note 1: Description of Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan established to provide pension benefit plan coverage for local school districts and other public educational agencies in the state.

B. PARTICIPANTS

As of June 30, 2010 a total of 197 employers participated in the plan. Employers are comprised of 174 local school districts, 17 Department of Education Agencies and other educational organizations, 5 universities and also the Kentucky Community and Technical College System.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

	2010	2009
Active contributing members:		
Vested	47,083	45,843
Non-vested	29,304	30,094
Inactive members, vested	5,637	5,245
Retirees and beneficiaries currently receiving benefits	43,134	42,050
Total members, retirees, and beneficiaries	**125,158**	**123,232**

C. BENEFIT PROVISIONS

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete 27 years of Kentucky service.

Participants that retire before age 60 with less than 27 years of service receive reduced retirement benefits. Non-university members receive monthly payments equal to two (2) percent (service prior to July 1, 1983) and two and one-half (2.5) percent (service after July 1, 1983) of their final average salaries for each year of credited service. University employees receive monthly benefits equal to two (2) percent

Note 1: Description of Plan continued . . .

of their final average salary for each year of credited service. The final average salary is the member's five (5) highest annual salaries except members at least 55 with 27 or more years of service may use their three (3) highest annual salaries. New members (including second retirement accounts) started after July 1, 2002 will receive monthly benefits equal to 2% of their final average salary for each year of service if, upon retirement, their total service is less than ten years. New members after July 1, 2002 who retire with ten or more years of total service will receive monthly benefits equal to 2.5% of their final average salary for each year of service, including the first ten years. In addition, non-university members who retire July 1, 2004 and later with more than 30 years of service will have their multiplier increased for all years over 30 from 2.5% to 3.0% to be used in their benefit calculation.

The System also provides disability benefits for vested members at the rate of sixty (60) percent of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half (1.5) percent annually. Additional ad hoc increases and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

KTRS has four cash accounts. At June 30, 2010, the pension cash account totaled $149,297. The administrative expense fund cash account was $2,348,195 and the life insurance cash account totaled $592,345. The excess benefit fund cash account contained $48,283. Therefore, the carrying value of cash was $3,138,120 and the corresponding bank balance was $4,159,143. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2010.

C. CAPITAL ASSETS

Fixed assets are recorded at historical cost less straight-line accumulated depreciation. The classes of fixed assets are furniture and equipment, the KTRS office buildings and land. Furniture and equipment are depreciated over an average useful life of five to seven years. The office buildings are depreciated over forty years. Internally created software for the Pathway capital project is capitalized and amortized over five years. The Pathway project will update technological record keeping abilities and improve timeliness and accuracy of responses to member inquiries.

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and

Note 2: Summary of Significant Accounting Policies continued . . .

preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in plan net assets.

Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by the System's employees are recorded when earned. Upon termination or retirement, employees of the System are paid for accumulated vacation time limited to 60 days and accumulated compensatory time limited to 200 hours. As of June 30, 2010 and 2009 accrued compensated absences were $756,747 and $733,610.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which the System is exposed. In order to cover such risks the System carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

G. OTHER RECEIVABLES

KTRS allows qualified purchases of service credit to be made by installment payments not to exceed a five-year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2010 and 2009 installment contract receivables were $530,191 and $605,511.

H. USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The System's management believes that it has operated the plans within the constraints imposed by federal tax law.

J. RECLASSIFICATIONS

Certain 2009 amounts have been reclassified in conformity with the 2010 presentation.

Note 3: Contributions and Reserves

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Pre July 2008 members are required to contribute 9.855% of their salaries to the System; university members are required to contribute 8.375% of their salaries. KRS 161.580 allows each university to reduce the contribution of its members by 2.215%; therefore, university members contribute 6.16% of their salary to KTRS. Post July 2008 members are required to contribute an additional 1% to the medical insurance fund.

Participating employers are required to contribute the percentage contributed by members plus an additional 3.25% of members' gross salaries. The Commonwealth of Kentucky contributes the required percentages for the local school district employers except for those members who are employed in federally funded positions, in which case the federal program pays the required percentages.

The member and employer contributions consist of pension contributions and post-retirement contributions to the medical insurance fund. The post-retirement contribution from employee (.75% for members prior to July 1, 2008 or 1.75% for members who joined after July 1, 2008) and the employer contribution rate of .75% of members' gross salaries help finance KTRS's retiree medical insurance plan.

If an employee leaves covered employment before accumulating five (5) years of credited service, accumulated employee contributions plus interest are refunded to the employee upon the member's request.

B. RESERVES

Member Reserve

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from Unallocated Reserves. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Benefit Reserves, the fund from which retirement benefits are paid.

Employer Reserve

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky.

Benefit Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

Note 3: Contributions and Reserves continued . . .

Unallocated Reserve

This fund was established by KRS 161.420(6) as the Guarantee Fund, to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of the System, and deficiencies not covered by the other funds.

Administrative Expense Reserve

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from Unallocated Reserves is used to pay the administrative expenses of the System.

Note 4: Funded Status and Funding Progress

A. DESCRIPTION OF FUNDING PROGRESS

The funded status of the Defined Benefit Plan as of the most recent actuarial valuation date is as follows:

(Dollar amount in 1,000's)

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2010	$ 14,851,330	$ 24,344,316	$ 9,492,986	61.0%	$ 3,321,614	285.8%

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear funding trend information as obtained from the System's independent actuary's annual valuation report.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the System is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the retirement system. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the retirement system.

The accompanying schedule of employer contributions, presented as required supplementary information following the notes to the financial statements, presents trend information about the amounts contributed to the plan by employers in comparison to the Annual Required Contribution (ARC). The ARC is actuarially determined in accordance with the parameters of GASB Statement 50. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each

Note 4: Funded Status and Funding Progress continued . . .

year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

B. METHODOLOGIES

The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the projected unit credit actuarial cost method. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period using an open amortization approach. The five (5) year smoothed market approach is used for asset valuation.

Actuarial Value Assets

(1)	Actuarial Value of Assets on June 30, 2009	$ 14,885,981,251
(2)	Market Value End of Year June 30, 2010	12,456,619,082
(3)	Market Value Beginning of Year June 30, 2009	11,515,883,575
(4)	Cash Flow	
	a. Contributions	777,419,053
	b. Benefit Payments	(1,337,119,450)
	c. Administrative Expenses	(8,830,054)
	d. Net	(568,530,451)
(5)	Investment Income	
	a. Market total: (2) - (3) - (4)d	1,509,265,958
	b. Assumed Rate	7.5%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	842,371,376
	d. Amount for Phased-In Recognition: (5)a - (5)c	666,894,582
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20 x (5)d	133,378,916
	b. First Prior Year	(611,235,941)
	c. Second Prior Year	(409,879,449)
	d. Third Prior Year	190,240,386
	e. Fourth Prior Year	(75,996,339)
	f. Total Recognized Investment Gain	(773,492,427)
(7)	Actuarial Value End of Year (1) + (4)d + (5)c + (6)f	14,386,329,749
(8)	Additional Contribution from Pension Obligation Bond	465,000,000
(9)	Final Actuarial Value of Assets End of Year: (7) + (8)	14,851,329,749
(10)	Difference Between Market & Actuarial Values: (2) - (7) (prior to Pension Obligation Bond)	$ (1,929,710,667)

Note 4: Funded Status and Funding Progress continued . . .

C. ASSUMPTIONS

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2010, the most recent updated actuarial information include:

*	Assumed inflation rate	4%
*	Assumed investment rate	7.5%
*	Assumed projected salary increases	4.0% - 8.20%
*	Assumed post retirement benefit increase	1.5%

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of KTRS's financial statements assess the risks KTRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430. The parameters as outlined in Title 102, Chapter 1.175, Section 2 of the Kentucky Administrative Regulations are as follows:

- There shall be no limit on the amount of investments owned by the System if the investments are guaranteed by the U.S. Government.
- Not more than thirty-five percent (35%) of the assets of the System at market value shall be invested in corporate debt obligations.
- Not more than sixty-five percent (65%) of the assets of the System at market value shall be invested in common stocks or preferred stocks. Not more than twenty-five percent (25%) of the assets of the System at market value shall be invested in a stock portfolio designed to replicate a general stock index. Not more than fifteen percent (15%) of the assets of the System at market value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks.
- Not more than ten percent (10%) of the assets of the System at market value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.
- Not more than ten percent (10%) of the assets of the System at market value shall be invested in alternative investments. This would include private equity, venture capital, timberland, and infrastructure investments.
- Not more than ten percent (10%) of the assets of the System at market value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the retirement system's deposits may not be returned to the System. The bank's total balance at June 30, 2010 was $4,159,143. An amount of $2,348,195 represents funds held in the bank but their investment is controlled by the Commonwealth of Kentucky. There were various outstanding checks and vouchers totaling a $1,025,446 balance reduction while the amount of $1,810,948 was the amount invested in cash equivalents. Cash equivalents are created through the daily sweeps of available excess cash by the System's custodial bank into bank sponsored short-term investment funds. These funds are custodial bank sponsored commingled funds which are invested in short-term securities backed by the U.S. Government and its agencies. The actual cash deposits held in bank accounts are currently insured up to $250,000 as covered by federal depository insurance and uncollateralized until being invested in cash equivalents.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,
b. collateralized with securities held by the pledging financial institution, or
c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2010, the System's cash equivalents in the amount of $1,810,948 were not exposed to custodial credit risk since this amount was invested by the custodial bank and collateralized at 102% with the collateral pledged to the Treasurer of the Commonwealth of Kentucky.

C. INVESTMENTS

All of the System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate and alternative investments. These assets are reported at fair market value. Investments are governed by the Board of Trustees' policy while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims."

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following chart represents the fair market values of the investments of the Kentucky Teachers' Retirement System for June 30, 2010.

Schedule of Investments

	Market Value June 30, 2010	Market Value June 30, 2009
Short-Term Investments		
Repurchase Agreements	$ 304,700,000	$ 256,900,000
Agency & Other (Short-Term)	2,678,278	0
Total Short-Term Investments	**307,378,278**	**256,900,000**
Bonds and Mortgages		
U. S. Government	678,247,718	579,447,437
Agency Bonds	337,019,558	393,391,786
Mortgage-Backed Securities	297,733,549	385,320,648
Collateralized Mortgage Obligations	116,575,407	125,751,715
Asset Backed Securities	37,860,172	67,889,109
Commercial Mortgage-Backed Securities	239,293,225	203,469,640
Municipal Bonds	484,588,328	393,237,899
Corporate Bonds	1,935,555,407	1,637,328,139
Total Bonds and Mortgages	**4,126,873,364**	**3,785,836,373**
Equities		
International Equity	1,769,557,930	1,355,549,565
U. S. Equity	5,757,380,568	5,730,697,481
Total Equities	**7,526,938,498**	**7,086,247,046**
Real Estate		
Real Estate Equity	419,613,670	425,746,050
Total Real Estate	**419,613,670**	**425,746,050**
Alternative Investments		
PPIP	80,295,627	
Private Equity	110,757,811	60,731,073
Timberland	108,582,209	116,599,371
Total Alternative Investments	**299,635,647**	**177,330,444**
TOTAL INVESTMENTS	**$ 12,680,439,457**	**$ 11,732,059,913**

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the pension trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system, and are held by either:

a. the counterparty or

b. the counterparty's trust department or agent, but not in the System's name.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The cash reserve of the System is maintained in high quality short-term investments. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, banker's acceptances, and repurchase agreements are all permissible investments. The System utilized investment instruments it regards as the most secure and having the best returns and does not use short-term investments that finance foreign businesses unless they are issued and guaranteed by the United States Government.

Individual repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers under terms dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS's nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a market value of at least 102% of the value of the repurchase agreements.

As of June 30, 2010, cash collateral reinvestment securities acquired through securities lending by the System's custodian, who is also the lending agent/counterparty, amounted to $155,226,862 related to $151,070,706 securities lent. This is consistent with the System's securities lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the System's investments. In general, the longer the period until an investment matures, the greater the negative impact that changes in interest rates can have on fair value.

As of June 30, 2010 KTRS had the following investments and weighted average maturities:

Investment Type	Fair Value	Average Maturity (years)
U.S. Government	$ 678,247,718	9.58
Agency	337,019,558	9.71
MBS	297,733,549	13.85
CMO	116,575,407	20.76
ABS	37,860,172	15.48
CMBS	239,293,225	29.06
Muni	484,588,328	14.04
Corporate	1,935,555,407	7.75
Totals	$ **4,126,873,364**	**10.9**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

In addition to the above securities, Repurchase Agreements (short-term investments) and STIF held at the Bank of New York Mellon had a total fair value of $307,378,278 and had a weighted average maturity of two days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates.

Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity.

Mortgage-backed securities, which are generally pre-payable, and other callable bonds, are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology. It is widely used in the management of fixed income portfolios by quantifying the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of change in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the System manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by the System were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The System held $297.7 million in mortgage-backed securities as of June 30, 2010.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The System held $116.6 million in collateralized mortgage obligations as of June 30, 2010.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other credit providers. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The asset-backed securities in the amount of $37.9 million held by the System as of June 30, 2010 are moderately sensitive to changes in interest rates.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The System's commercial mortgage-backed securities investments consist of highly rated relatively senior tranches. The average maturity of the System's commercial mortgage-backed securities holdings in the

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The System held $239.3 million in commercial mortgage-backed securities investments as of June 30, 2010.

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedule lists KTRS's fixed income investments (net of cash equivalents) according to credit ratings as of June 30, 2010:

RATING	FAIR VALUE	%
U.S. Government	$ 678,247,718	16.4
Agency	337,019,558	8.2
AAA	978,277,426	23.6
AA	451,960,420	11.0
A	869,787,468	21.1
BBB	577,703,721	14.0
BB	99,145,409	2.4
B	134,731,644	3.3
Total	**$ 4,126,873,364**	**100.0**

Total market value of the fixed income portfolio was $4,126,873,364 on June 30, 2010. The rating system used in the chart is the nationally recognized Standard & Poor's rating system.

In addition to the above categories, the System held $307,378,278 in Cash Equivalents or short-term investments. The credit risk associated with these Cash Equivalents is very minimal as the general rating of these securities is higher than AAA. In addition, investments in US Government and Agency securities are also highly rated securities since they are backed by the US Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

The System's policy on credit rating as stated in 102 KAR 1:175 is that:

"A fixed income investment shall be rated at the time of purchase within the four (4) highest credit classifications identified by one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. Notwithstanding the foregoing, the fixed income investment portfolio as a whole shall maintain an average rating equal to at least the second highest credit classification."

The policy also allows that up to ten percent of System assets may be invested in additional categories of investments approved by the Board of Trustees. Having been approved by the Board as an additional category of investments, a high yield bond portfolio was funded in fiscal year 2010 with an initial allotment of $225 million.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the System is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the System.

"The System's position in a single stock shall not exceed two and one-half (2.5) percent of the System's assets. The System's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program."

KTRS has not invested greater than five percent (5%) of the System's assets at book value in any single issuer and is in compliance with the System's policies as stated here.

Foreign Currency Risk

As of June 30, 2010, KTRS exposure to foreign currency risk consisted of $1,180,792,803 of foreign equity investments through commingled funds managed by UBS Global Asset Management, Baring Asset Management, and Baillie Gifford as follows:

UBS International Collective	$ 514,470,507
Baring Asset Management	319,619,142
Baillie Gifford	346,703,154
Total	$ **1,180,792,803**

These amounts represent the market values of equities held by the Fund as a result of cash contributions to each Fund by KTRS.

In addition to the commingled funds investing in foreign securities, KTRS held $588,765,127 associated with foreign interests in American Depositary Receipt investments. These American Depositary Receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. American Depositary Receipts are denominated in U.S. currency.

The System's policy regarding foreign equities is that not more than fifteen percent (15%) of the assets of the System at market value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the System. The System operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international stocks are the types of securities that are lent. The System's sub-custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the System.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. The following section details the net income earned from securities lending for the fiscal year ended June 30, 2010:

Item	**Earnings**
Gross Earnings (Interest and fees)	$ 184,579
Plus: Gross Borrower Rebates	1,364,739
Less: Bank Fees	(465,508)
Net Earnings	$ **1,083,810**

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. As of June 30, 2010 the loan average days to maturity was one (1) day and the weighted average investment maturity of cash collateral investments was one (1) day.

At fiscal year end, the System has no credit risk exposure to borrowers, since the amounts the System owes the borrowers exceeds the amounts the borrowers owe the System and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The System minimizes interest rate risk by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2010:

Type of Security Lent	**Fair Value**	**Cash Collateral Received Non-cash Collateral Value***
U.S. Equities	$ 151,070,706	$ 155,226,862

* *Represents value of cash collateral only. Loan or margin collateral requirements met via the use of non-cash collateral (e.g. Government securities or Letters of Credit) are excluded from these values.*

Note 6: Pension Plan for Employees of the System

Full-time employees of Kentucky Teachers' Retirement System (KTRS) participate in either KTRS or Kentucky Employees Retirement System. Both plans are multiple-employer cost sharing defined benefit pension plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for KTRS employee members for the fiscal years 2010, 2009 and 2008 were $476,918, $456,258, and $413,492 respectively. KTRS contributed 100% of the required contribution each year.

All other KTRS employees are covered under the Kentucky Employee Retirement System (KERS) in the Non-Hazardous Employees Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. The System's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS were required to contribute 5% of their annual creditable compensation for the fiscal years 2010, 2009, and 2008. As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2010, 2009 and 2008 were 11.61%, 10.01% and 8.5%; and the System's annual required contributions to KERS were $174,203, $182,399 and $129,356 respectively. KTRS contributed 100% of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: Other Funds

A. 403(B) TAX-SHELTERED ANNUITY PLAN

Plan Description

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by the System's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2010, the twenty-two members who are receiving

Note 7: 403(b) Tax-Sheltered Annuity Plan continued . . .

annuities will continue to receive distributions according to the terms of their respective elections.

Summary of Significant Policies

Basis of Accounting - The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan; therefore, there are no receivables to be recognized.

Method Used to Value Investments - The short-term investments are reported at cost, which approximates fair value.

B. SUPPLEMENTAL BENEFIT FUND

The Supplemental Retirement Benefit Fund is a qualified governmental excess benefit arrangement as described in Section 415 of the Internal Revenue Code. In accordance with KRS 161.611 and KRS 161.420(8), KTRS is authorized to provide a supplemental retirement benefit fund for the sole purpose of enabling the employer to apply the same formula for determining benefits payable to all members of the retirement system employed by the employer, whose benefits under the retirement system are limited by Section 415 of the Internal Revenue Code of 1986, as amended from time to time. Funding of benefits payable under this fund are provided by the state, as employer, and are segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system.

C. JUNITA LOSEY SCHOLARSHIP BEQUEST

Junita Losey, a retired teacher, designated KTRS as a residuary beneficiary of her estate and expressed a desire that KTRS establish a scholarship program for Kentucky students studying to be teachers. Ms. Losey died in 1997 and thereafter her estate provided a scholarship bequest to KTRS. The scholarship bequest has at all times been segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system. The Scholarship Committee of the System's Board of Trustees meets each December to consider scholarship standards and administration of the scholarship bequest.

Note 8: Medical Insurance Plan & Post-Employment Benefits

A. PLAN DESCRIPTION

In addition to pension benefits described in Note 1, Kentucky Revised Statute 161.675 requires KTRS to provide access to post-retirement healthcare benefits for eligible members and dependents. The KTRS Medical Insurance benefit is funded by employer and employee contributions. Changes made to the medical plan may be made by the KTRS Board of Trustees, the Kentucky Department of Employee Insurance and the General Assembly.

To be eligible for medical benefits, the member must have retired either for service or disability. The KTRS Medical Insurance Fund offers coverage to members under the age of 65 through the Kentucky Employees Health Plan administered by the Kentucky Department of Employee Insurance. KTRS retired members are given a supplement to be used for payment of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the KTRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The Commonwealth of Kentucky bears risk for excess claims expenses that exceed the premium equivalents

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the KTRS Medicare Eligible Health Plan. KTRS bears the risk for actual drug claims cost in the Medicare Eligible Health Plan through June 30, 2010.

At June 30, 2010, KTRS insurance covered 34,315 retirees and 6,834 dependents. There are 197 participating employers and 76,387 active members contributing to the Medical Insurance Fund.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Medical Insurance Plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due.

Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

C. CONTRIBUTIONS

The post-retirement healthcare provided by KTRS is financed on a pay-as-you-go basis. In order to fund the post-retirement healthcare benefit, active member contributions are matched by the state at .75% of members' gross salaries. Those who became members before July 1, 2008 contribute 0.75% of gross payroll to the plan. Member contributions are 1.75% of gross payroll for those who became members of the System after July 1, 2008. Also, the premiums collected from retirees as described in the plan description and investment interest help meet the medical expenses of the plan.

Escalating medical expenses have made it increasingly difficult to meet the expenses of the retiree health insurance program. To further fund the plan, the state legislature has directed a portion of the state employer contribution in a sufficient amount to be allocated to the Medical Insurance Fund instead of the pension fund. The System actuary calculated those amounts to be $125,000,000 and $125,000,000 for fiscal years 2010 and 2009 respectively. The balances are to be amortized over a period of 10 years. The Legislature appropriated $36,490,700 in fiscal year 2010 and $18,280,000 in fiscal year 2009 to apply to amortization of the balances.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Medical Insurance Plan as of the most recent actuarial valuation date is as follows:

(Dollar amount in 1,000's):

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2010	$ 241,224	$ 3,206,806	$ 2,965,582	7.5%	$ 3,321,614	89.3%

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedule of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the ARC, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methodologies and assumptions employed as of the June 30, 2010 valuation date include the following:

Actuarial cost method	Projected unit credit
Actuarial value of assets	Market value of assets
Assumed inflation rate	4.0%
Investment rate of return	8.0%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Medical Trend Assumption (Pre-Medicare)	10.50% - 5.0%
Medical Trend Assumption (Post-Medicare)	9.50% - 5.0%
Year of Ultimate Pre-Medicare trend rate	2018

E. INCURRED BUT NOT REPORTED CLAIMS LIABILITIES

KTRS recognizes estimates of liabilities for self-insured unpaid claims that have incurred (both reported and unreported) using the development method. This method uses past observed patterns of time between the date the claim is incurred and the date the claim is paid to estimate incurred claims from available paid claim information.

The following schedule shows the change in the claims and liability and the claims activity for the years ended June 30, 2010 and 2009.

	Fiscal Year 2010	Fiscal Year 2009
Beginning Unpaid Claims Liability	$ 2,969,754	$ 2,289,841
Current Year Claims and Changes in Estimates	233,703,094	201,400,693
Claims Payments	(232,845,365)	(200,720,780)
Ending Unpaid Claims Liability	$ 3,827,483	$ 2,969,754

Note 9: Life Insurance Plan

A. PLAN DESCRIPTON

The System administers the Life Insurance Plan as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 197 participating employers. The benefit is $5,000 for members who are retired for service or disability, and $2,000 for active contributing members.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Life Insurance Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized in the fiscal year due.

Method Used to Value Investments

Life Insurance Plan investments are reported at fair value. The short-term securities are carried at cost, which approximates fair value. Fixed income is generally valued based on published market prices and quotations from national security exchanges and securities pricing services.

C. CONTRIBUTIONS

To finance the life insurance benefit a portion of the employer contribution rate is directed to the plan as recommended by the System's actuary. For fiscal years 2010 and 2009, this rate has been .06% and .17% of active members' payroll, respectively.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Life Insurance Plan as of the most recent actuarial valuation date is as follows:

(Dollar amounts in 1,000's)

Valuation Year June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liabilities (b)	Unfunded Actuarial Accrued Liabilities (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
2010	$ 87,905	$92,091	$ 4,186	95.5%	$ 3,321,614	.13%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The required supplementary schedules following the notes to the financial section contain more actuarial information. Significant actuarial methodologies and assumptions employed as of the June 30, 2010 valuation date include the following:

Actuarial cost method	Projected unit credit
Actuarial value of assets	Market value of assets
Assumed inflation rate	4.0%
Investment rate of return	7.5%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years

Note 10: Subsequent Event

On August 26, 2010, KTRS received $465,384,165 in proceeds from a bond issued by the Commonwealth of Kentucky. The proceeds of this bond issue were deposited in the KTRS pension fund and represent the repayment of retirement contributions that had been redirected by the state to pay retiree health insurance during Fiscal Year 2005 through Fiscal Year 2010.

Required Supplementary Information

Defined Benefit Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2005	$ 14,598.8	$ 19,134.8	$ 4,536.0	76.3%	$ 2,703.4	167.8%
2006	14,857.6	20,324.7	5,467.1	73.1	2,859.5	191.2
2007	15,285.0	21,255.0	5,970.0	71.9	2,975.3	200.7
2008	15,321.3	22,460.3	7,139.0	68.2	3,190.3	223.8
2009	14,885.9	23,400.3	8,514.4	63.6	3,253.1	261.7
2010	14,851.3	24,344.3	9,493.0	61.0	3,321.6	285.8

The amounts reported in this schedule of funding progress do not include assets or liabilities for postemployment benefits, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Defined Benefit Plan
Schedule of Employer Contributions

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS	PERCENTAGE CONTRIBUTED
2005	$ 412,946,526	93 %
2006	464,152,466	87
2007	494,565,369	88
2008	563,789,483	83
2009	600,282,735	74
2010	633,938,088	76

Required Supplementary Information continued . . .

Medical Insurance Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2005	$ 147.3	$ 4,763.9	$ 4,616.6	3.1%	$ 2,703.4	170.8%
2006	131.6	4,341.9	4,210.3	3.0	2,859.5	147.2
2007	140.8	5,928.8	5,788.0	2.4	2,975.3	194.5
2008	185.9	6,434.5	6,248.6	2.9	3,190.3	195.9
2009	229.1	6,454.7	6,225.6	3.5	3,253.1	191.4
2010	241.2	3,206.8	2,965.6	7.5	3,321.6	89.3

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Medical Insurance Plan
Schedule of Employer Contributions

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	RETIREE DRUG SUBSIDY CONTRIBUTION	TOTAL CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(a)	**(b)**	**(c)**	**(b) + (c)**	**[(b) + (c)/(a)]**
2007	$ 231,473,321	$ 113,258,761	$ 10,312,361	$ 123,571,122	53.4%
2008	395,282,164	148,954,644	11,911,565	160,866,209	40.7
2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1
2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9

Only four years of actuarial calculations of annual required contributions are available.

Required Supplementary Information continued . . .

Life Insurance Plan
Schedule of Funding Progress
(dollar amounts in thousands)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2007	$ 71,426	$ 82,722	$ 11,296	86.3%	$ 2,975,289	0.38%
2008	77,658	84,265	6,607	92.2	3,190,332	0.21
2009	84,703	90,334	5,631	93.8	3,253,077	0.17
2010	87,905	92,091	4,186	95.5	3,321,614	0.13

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or medical insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Life Insurance Plan
Schedule of Employer Contributions

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS (ARC)	ACTUAL EMPLOYER CONTRIBUTIONS	PERCENTAGE OF ARC CONTRIBUTED
2007	$ 1,785,173	$ 5,022,137	281.3 %
2008	1,914,199	5,411,249	282.7
2009	1,498,076	5,455,473	364.2
2010	1,992,969	1,966,826	98.7

Required Supporting Schedules

Supporting Schedule 1

Schedule of Administrative Expenses
Year Ended June 30, 2010

Salaries	$ 6,001,066
Other Personnel Costs	668,029
Professional Services & Contracts	652,175
Utilities	78,610
Rentals	17,977
Maintenance	167,510
Postage & Related Services	315,645
Printing	148,524
Insurance	139,494
Miscellaneous Services	117,083
Telecommunications	27,115
Computer Services	59,086
Supplies	61,986
Depreciation	111,448
Travel	69,284
Dues & Subscriptions	41,037
Miscellaneous Commodities	13,758
Furniture, Fixtures, & Equipment not Capitalized	117,090
Compensated Absences	23,137
TOTAL ADMINISTRATIVE EXPENSES	$ 8,830,054

Supporting Schedule 2

Schedule of Professional Fees for Year Ended June 30, 2010

PROFESSIONAL	NATURE OF SERVICE	
Cavanaugh Macdonald Consulting	Actuarial Services	$ 267,376
Charles T. Mitchell Company	Auditing Services	30,600
Farmers Bank	Bank Services	15,737
International Claim Specialist	Investigative Services	4,025
Attorney General	Attorney Services	5,500
Ice Miller	Attorney Services	152,017
Reinhart, Boerner VanDeuren	Attorney Services	16,243
Stoll Keenon Ogden	Attorney Services	10,424
Peritus	Communications	90,000
Bevis Longstreth	Investment Committee Advisor	40,253
George Philip	Investment Committee Advisor	20,000
	TOTAL	$ 652,175

Required Supporting Schedules continued . . .

Supporting Schedule 3
Schedule of Contracted Investment Management Expenses and Miscellaneous Expenses
Year Ended June 30, 2010

EQUITY MANAGERS		
Baillie Gifford	$ 1,770,389	
Baring Asset Management, Inc.	1,500,000	
GE Asset Management	763,744	
Todd-Veredus Asset Management LLC	1,188,499	
UBS Global Asset Management	2,480,240	
Wellington Management Company	2,251,916	
Total Equity Managers		$ 9,954,788
FIXED INCOME MANAGERS		
Fort Washington Investment Advisors	502,751	
Galliard Capital Management	342,062	
Total Fixed Income Managers		844,813
REAL ESTATE		
Prudential Real Estate		328,140
ALTERNATIVE INVESTMENTS		
PPIP	138,211	
Private Equity	5,480,032	
Total Alternative Investments		5,618,244
CUSTODIAN		
Farmers Bank		501,872
CONSULTANT		
Hewitt Enis Knupp		364,178
LEGAL & RESEARCH		
Stoll, Keenon, Ogden, PLLC	2,450	
Schottenstein, Zox & Dunn	48,054	
Total Legal & Research		50,504
OTHER		
Subscription/Services		543,868
TOTAL CONTRACTED INVESTMENT MANAGEMENT EXPENSES		$ 18,206,407

Required Supporting Schedules continued . . .

Supporting Schedule 4
Combining Statement of Plan Net Assets - Other Funds
As of June 30, 2010

	403(b) TAX SHELTERED	SUPPLEMENTAL BENEFIT FUND	LOSEY SCHOLARSHIP	2010 TOTAL
ASSETS				
Cash	$	$ 48,283	$	$ 48,283
Receivables				
Investment Income			7,514	7,514
Investments at Fair Value				
Short-Term Investments	448,086		70,389	518,475
Bonds and Mortgages			411,764	411,764
Total Investments	448,086		482,153	930,239
Total Assets	448,086	48,283	489,667	986,036
Liabilities				
Net Assets Held In Trust For Pension And Other Benefits	$ 448,086	$ 48,283	$ 489,667	$ 986,036

Required Supporting Schedules continued . . .

Supporting Schedule 5
Combining Statement of Changes in Plan Net Assets - Other Funds
For the Year Ended June 30, 2010

	403(b) TAX SHELTERED	SUPPLEMENTAL BENEFIT FUND	LOSEY SCHOLARSHIP	2010 TOTAL
ADDITIONS				
Contributions				
Employer	$	$ 60,000	$	$ 60,000
Investment Income				
Net Appreciation/(Depreciation) in Fair Value of Investments			(14,800)	(14,800)
Interest	525		27,603	28,128
Net Investment Income	525		12,803	13,328
Total Additions	525	60,000	12,803	73,328
DEDUCTIONS				
Benefits	26,800	37,276	17,000	81,076
Net Increase (Decrease)	(26,275)	22,724	(4,197)	(7,748)
Net Assets Held In Trust For Pension And Other Benefits				
Beginning of Year	474,361	25,559	493,864	993,784
End of Year	$ 448,086	$ 48,283	$ 489,667	$ 986,036

Charles T. Mitchell Co. LLP
Certified Public Accountants

William G. Johnson , Jr., C.P.A
James Clouse,C.P.A
Bernadette Smith, C.P.A
Kim Field, C.P.A
Greg Miklavcic, C.P.A
Don C. Giles, C.P.A, Consultant

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the financial statements of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2010 have issued our report thereon dated December 17, 2010. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Teachers' Retirement System of the State of Kentucky's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Teachers' Retirement System of the State of Kentucky's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Teachers' Retirement System of the State of Kentucky's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information and use of management, and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties.

Charles T. Mitchell Co.

Frankfort, Kentucky
December 17, 2010

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Investment Section

for Fiscal Year ending June 30, 2010

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Kentucky Teachers' Retirement System.

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

INVESTMENT COMMITTEE

Mr. Robert M. Conley
Chair

Mr. Ronald L. Sanders
Vice-Chair

Ms. Barbara G. Sterrett
Member

Dr. Jay Morgan
Member

Mr. Tom Shelton
Member

Mr. Bevis Longstreth
Investment Advisor to KTRS Investment Committee

Mr. George Philip
Investment Advisor to KTRS Investment Committee

EXECUTIVE INVESTMENT STAFF

Mr. Gary L. Harbin, CPA
Executive Secretary

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Hewitt ennisknupp
An Aon Company

December 1, 2010

To the members of the Board of Trustees and participants of the Teachers' Retirement System of Kentucky:

The financial markets produced solid returns in the fiscal year ended June 30, 2010 as the frightening downward spiral of financial crisis and severe recession was arrested. Markets rebounded as economic growth resumed in the second half of 2009. It soon became clear, however, that the effects of the financial crisis - and the excesses that led to it-would be long-lasting. At the end of the fiscal year, a still-distressed housing market, an overleveraged consumer sector, and fiscal problems at all levels of government seemed to portend a long, slow recovery with unemployment remaining abnormally high. With the solvency of some European governments coming into question in the spring of 2010, even the stability of the global financial system remained in doubt.

Still-dislocated financial markets afforded exceptional opportunities, which the System actively sought to take advantage of. For the first time, the System invested in high yield bonds, with an allocation of $225 million, due to extraordinary value in that sector. A total commitment of $120 million was made to two fund managers participating in the U.S. Treasury's Public-Private Investment Program (PPIP) to take advantage of dislocations in the residential and commercial mortgage-backed securities markets. Both the high yield bonds and PPIP commitments were approved by the Board of Trustees as "additional categories" of investments as required by administrative regulation. A total of $185 million in private equity commitments were made during the fiscal year, with the focus generally being one of capitalizing on unusual opportunities in specific sectors.

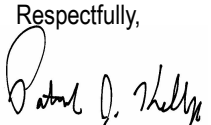
The System's portfolio returned 13.1% in the fiscal year, matching the return of the benchmark Policy Index. Domestic equities returned 15.1% versus 15.6% for the S&P 1500 Index. International equities returned 12.5% versus 10.9% for the MSCI All Country World (ex-U.S.) Index. Fixed income returned 11.7% versus 9.7% for the Barclays Government/Credit Index. Alternative strategies, including the opportunistic investments mentioned above, are expected to make a more significant contribution to total return in future years.

An expanded Investment Committee, including two outside experts, improved the decision-making process during the fiscal year. In legislative developments, House Bill 540 was passed by the Kentucky General Assembly, which ended the practice of diverting pension contributions to fund the Medical Insurance Fund and established a plan to, over time, pre-fund those benefits.

The System's investment program has always been based on fundamental value, a long-term focus on funding obligations to its members, and risk control. This philosophy led to a successful navigation of the financial turmoil of recent years. Continued adherence to these principles will help the System to meet its goals through whatever challenges and opportunities lie ahead.

It is a privilege to work with the System's investment staff, Investment Committee, and Board of Trustees. We look forward to continuing to help the System meet its long-term goals.

Respectfully,



Patrick J. Kelly, CFA
Principal

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Hewitt Investment Group LLC and Ennis, Knupp & Associates, Inc.
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INVESTMENT POLICY SUMMARY

The KTRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principles that guide investment-related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the System. This broad summary is a reference point for management of System assets and outlines the investment philosophy and practice of KTRS.

INVESTMENT OBJECTIVES

KTRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them. Generally, the System's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, KTRS holdings can withstand some short-term volatility. The System's long-term investment objective is to achieve an annualized rate of return of 7.5%.

RISK CONTROLS

The KTRS investment program faces various risks; however, the primary risk to KTRS is that the assets will not support liabilities over long periods of time. In order to control this risk and any other risks, the board has taken the following steps on an ongoing basis:

- Actuarial valuations are performed each year to evaluate the funding objectives of the System. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the System.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the System.
- The KTRS Investment Committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

ASSET ALLOCATION

Operating within relevant regulatory limitations, the System's investment consultant, on an annual basis, presents to the Investment Committee for approval target percentages and ranges for the System's various asset classes. Annually approved asset allocation parameters serve to balance the System's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The System's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the System's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as liability requirements, the level of funding, and statutory investment restrictions are important considerations within the context of the asset allocation decision making process. Consequently, asset allocations may differ markedly between various pension plans due to their unique circumstances.

The information below shows the System's asset allocation by market value as of June 30, 2010, and June 30, 2009, as well as the target and strategic range for each asset class for fiscal year 2010.

	June 30, 2010	%	June 30, 2009	%
Cash Equivalents *	$ 218,429,317	1.7	$ 134,219,594	1.1
Fixed Income **	3,933,016,478***	31.1	3,865,135,688	33.1
Domestic Equities	5,872,001,227	46.3	5,784,174,002	49.4
International Equities	1,703,159,180	13.4	1,344,393,598	11.3
Real Estate	419,613,671	3.3	425,746,050	3.6
Private Equity	110,757,811	0.9	60,731,073	0.5
Timberland	108,582,209	0.8	116,599,371	1.0
Additional Categories	312,947,084	2.5	-0-	0.0
Totals	$12,678,506,977	100.0	$11,730,999,376	100.0

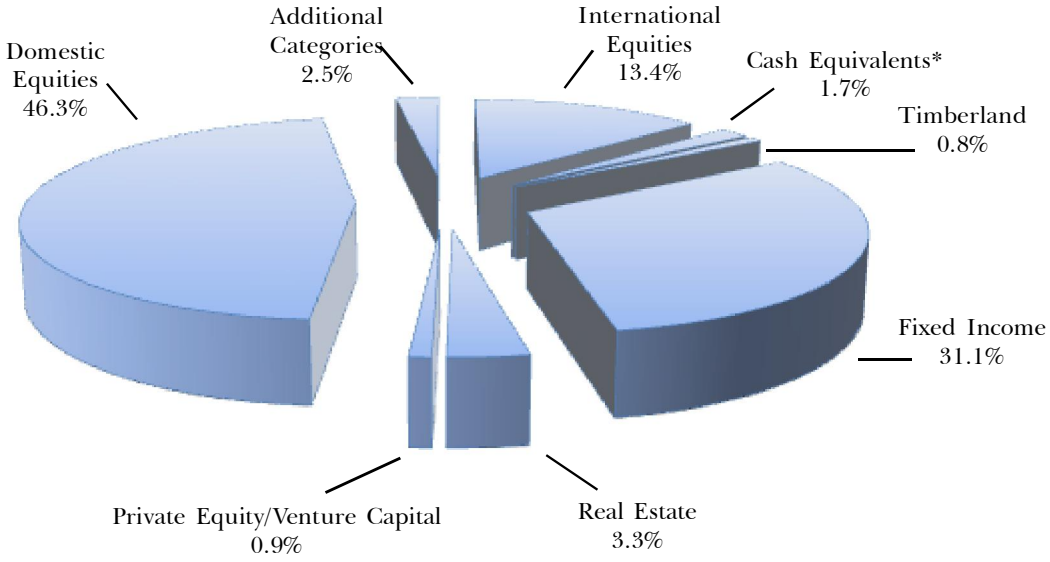
* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

** Excludes purchased interest of $1,450,327 as of June 30, 2010. Also, excludes purchased interest of $1,060,537 as of June 30, 2009.

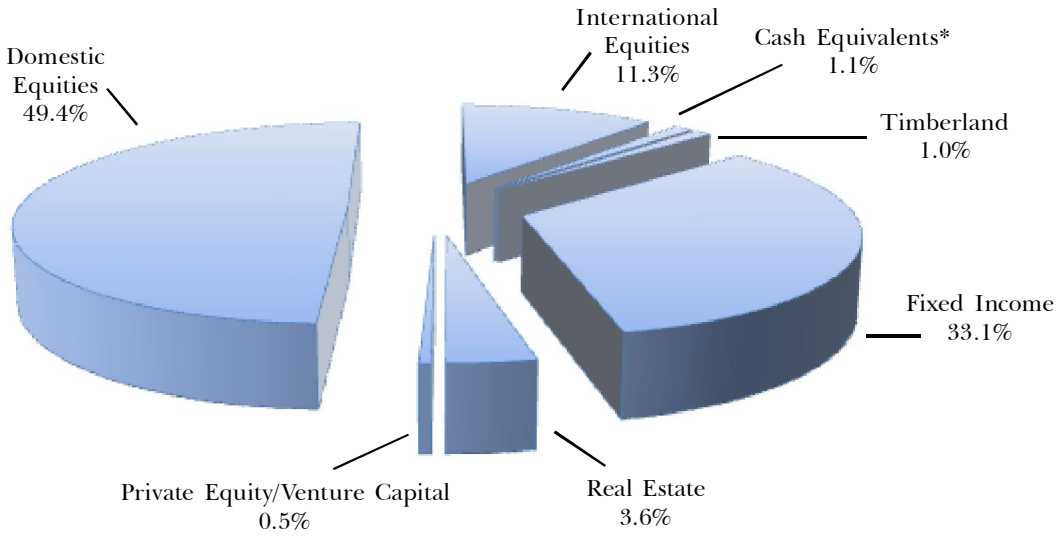
*** As of June 30, 2010, the Scholarship Fund is no longer reported in the pension fund Investment portfolio. The value of this fund at June 30, 2010 was $482,153.

Distribution of Investments
Market Values

June 30, 2010



June 30, 2009



* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

Strategic Weightings by Asset Class

Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2010 (Mkt)
Cash		1 - 3%	2.0%	1.7%
Fixed Income		25 - 32	28.0	31.1
Government/Agency/Other	Unlimited			17.4
Corporate	35%			13.7
Equity	65%	55 - 63	62.0	59.7
Domestic Large Cap		37 - 43	40.0	39.2
Domestic Mid Cap		3 - 6	5.0	4.4
Domestic Small Cap		2 - 4	3.0	2.7
International	15%	11 - 15	14.0	13.4
Real Estate	10%	3 - 5	4.0	3.3
Alternative Investments*	10%	1 - 3	2.0	1.7
Additional Categories	10%	1 - 4	2.0	2.5
TOTAL			**100.0%**	**100.0%**

This weighting reflects cash with manager in the manager's asset class.

* Alternative Investments includes Private Equity, Timberland, Venture Capital and Infrastructure investments.

PORTFOLIO RETURNS

For the fiscal year, the System's portfolio generated a total return of 13.1%, matching the return of the benchmark Policy Index. Domestic equities returned 15.1% versus 15.6% for the Standard & Poor's 1500 Index, while international equities returned 12.5% versus 10.9% for the MSCI All Country World (Ex-US) Index. Fixed income investments outperformed, returning 11.7% versus 9.7% for the Barclays Government/Credit Index. Other asset classes such as alternative investments, though growing, were not large enough to substantially impact total System performance in the fiscal year.

The table below details historical performance for the System and its component asset classes for the period ended June 30, 2010. The System's domestic equity and fixed income components have regularly exceeded the returns of their benchmarks over long periods of time. International equities, with a shorter history in the System, have outperformed their benchmark. Other asset classes are expected to generate a more significant portion of the System's total return in the future. The System's returns were generated by the Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

	1 Yr.[2]	3 Yr.[2]	5 Yr.[2]	10 Yr.[2]	20 Yr.[2]
Total Fund					
KTRS	13.1	-2.9	2.2	2.7	7.2
Policy Index[1]	13.1	-	-	-	-
Equities					
Domestic Equities	15.1	-9.1	-0.4	-0.2	8.3
S & P Blended Index[3]	15.6	-9.5	-0.6	-1.5	7.7
International Equities	12.5	-10.2	-	-	-
MSCI AC World (Ex US)	10.9	-10.3	-	-	-
Total Equities	14.4	-9.2	-0.4	-0.2	8.3
Fixed Income					
Total Fixed Income	11.7	8.7	6.2	7.0	7.5
Barclays Govt/Credit Index	9.7	7.4	5.3	6.5	7.2
Real Estate					
Real Estate Equity	-16.8	-	-	-	-
NCREIF ODCE	-6.0	-	-	-	-
Triple Net Lease Real Estate	8.8	8.8	9.2	9.0	8.8
CPI plus 2%	3.1	3.6	4.3	4.4	4.6
Alternative Investments					
Private Equity[4]	17.1	1.6	-	-	-
Timberland	-4.2	-	-	-	-
NCREIF Timberland Index	-3.5	-	-	-	-
Cash					
Cash (Unallocated)	0.2	1.8	3.5	3.0	4.3
Additional Categories[5]					
High Yield Bond Fund	-	-	-	-	-
Public-Private Investments	-	-	-	-	-

(1) *Prior to July 1, 2008, KTRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.*

(2) *Annualized.*

(3) *Total Domestic Equity is benchmarked to a S & P Blended Index. Total domestic equity was benchmarked to the S & P 500 through the fiscal year ending 6/30/2007. As of 7/1/2007, domestic equity is benchmarked to the S & P 1500 Index since the System's domestic stock mix is most comparable to this index.*

(4) *For a period of five years private equity will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the commitment date, investments in this class shall be benchmarked versus the S & P 500 plus 3%, which is the System's long-term expected return for this asset class.*

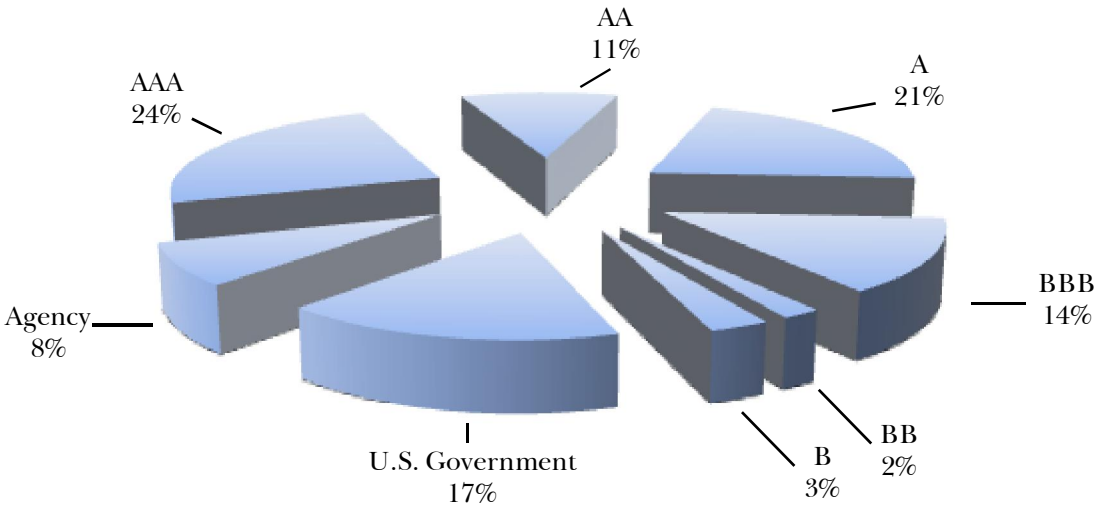
(5) *The investments in the Additional Categories asset class have not been in existence for a complete fiscal year; therefore, no yearly returns are available. The investments in this class shall be benchmarked versus the Merrill Lynch High Yield Master II.*

FIXED INCOME INVESTMENTS

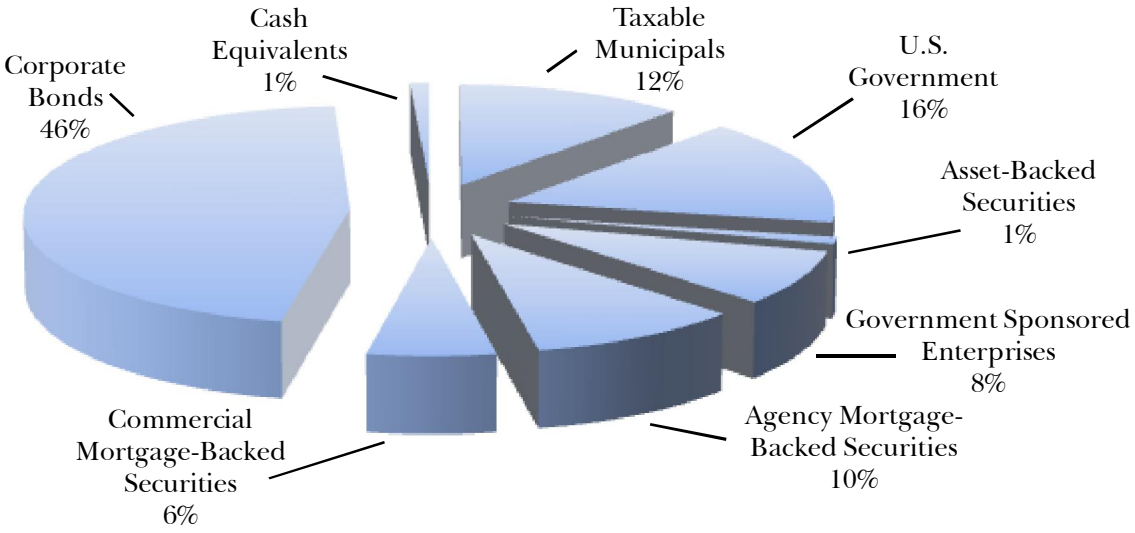
As of June 30, 2010, the System had approximately $4.17 billion in fixed income assets, including $232.7 million in high-yield bonds. The System's investment policy established by administrative regulation requires that all fixed income investments be rated investment grade at the time of purchase and that the fixed income portfolios as a whole maintain an average rating equal to at least "AA" by one of the major rating agencies. The regulation also allows that up to 10% of System assets may be invested in additional categories of investments approved by the Board of Trustees. Having been approved by the Board as an additional category of investments, a high-yield bond portfolio was funded in the fiscal year with an initial allotment of $225 million.

Excluding the high-yield portfolio, fixed income investments maintained the required "AA" average rating as of June 30, 2010. The credit quality distribution, including the high-yield portfolio, is illustrated below. Also illustrated below is the distribution of fixed income assets by sector, again including the high-yield portfolio.

FIXED INCOME QUALITY DISTRIBUTION



FIXED INCOME SECTOR DISTRIBUTION



FIXED INCOME MARKET OVERVIEW

The functioning of credit markets healed surprisingly quickly over the fiscal year, even as it became increasingly clear that healing the economy's woes was a long-term proposition. Bond market sectors that became dysfunctional and plunged in value during the financial crisis and recession recovered impressively. The Barclays High Yield Index returned 26.77% for the fiscal year, while investment grade commercial mortgage-backed securities returned 30.12%. Investment grade corporate bonds returned 15.92% while safe havens such as agency mortgage-backed securities returned 7.47% and U.S. Treasuries returned 6.67%. The Barclays Government/Credit Index returned 9.65%.

The Federal Reserve kept short-term rates near zero throughout the fiscal year. Yields on risk-free Treasuries trended up from the late fall of 2009 to the early spring of 2010 as the economy rebounded from the depths of the recession. Treasury yields then started a renewed plunge downward in the spring as it became clear that the U.S. recovery was weakening and a sovereign debt crisis in Europe hit the headlines. Over the fiscal year, the yield on the two-year Treasury declined from 1.11% to 0.60% and the yield on the thirty-year Treasury declined from 4.33% to 3.89%.

At the end of the fiscal year, the economic landscape was looking decidedly dismal. Inflation-adjusted GDP growth had slowed from a 5.0% annual rate in the quarter ended December 31, to 3.7% in the March 31 quarter, to a mere 1.7% rate in the June 30 quarter. With the economy too anemic to generate significant job creation, the unemployment rate remained at 9.5%. The housing market, so central to the financial crisis, remained deeply distressed. Mortgage delinquency and foreclosure rates seemed to have peaked, but were still near record levels, and the Case-Shiller Index of home prices remained over 28% below its peak with a massive inventory of unsold homes still overhanging the market. With confidence weak and credit availability still limited, consumers were in a deleveraging mode. There were fiscal problems at all levels of government. Consumer price inflation, excluding food and energy, was running at 0.9% annually. There was no prospect of a reversal of monetary policy in the foreseeable future.

The System moved to take advantage of opportunities in still-dislocated sectors of the credit markets during the fiscal year. A $225 million initial allotment was made to a high-yield bond portfolio. To take advantage of dislocations in the residential and commercial mortgage-backed securities markets, a total commitment of $120 million was made to two fund managers participating in the U.S. Treasury's Public-Private Investment Program (PPIP). As required by administrative regulation, both the high-yield bond portfolio and the PPIP commitments were approved by the Board as "additional categories of investments." Other than Board-approved "additional categories," fixed income investments are governed by conservative guidelines in administrative regulation. In those core portfolios, changes were made, such as increasing exposure to high quality commercial mortgage-backed securities, to capture superior relative value. By the end of the fiscal year, previously undervalued sectors had largely recovered and opportunities to pick up relative value had diminished.

As of mid-2010, bond yields were at historic lows, the economy was weak and uncertain, and there appeared no near-term prospect of a change in Federal Reserve policy of near zero short-term interest rates. Return prospects on core fixed income were clearly unappealing. While conditions seemed to portend an extended period of ultra-low yields, the risks of market losses were high in the event of rising rates or credit deterioration. Going forward in this environment, the focus was on risk control and fixed income's role in providing diversification and liquidity to the overall portfolio.

EQUITY INVESTMENTS

As of June 30, 2010 the System's public equity investments had a market value of $7.6 billion, representing 59.7% of total assets. Strong equity returns over the first nine months of the year prompted several rebalancing sales to reduce equity exposure back to target levels. The System divides its public equity investments into two broad categories: domestic and international.

The domestic portfolio had a market value of $5.9 billion as of June 30, representing 46.3% of total assets. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of three well known component indices based upon capitalization: the S&P 500 large cap, S&P 400 mid cap, and the small cap S&P 600. The System's domestic equity holdings are comprised of eleven portfolios. Three of the portfolios are internal passively managed portfolios benchmarked to the S&P 500, S&P 400, and S&P 600. The other eight portfolios are managed externally with each representing a specific strategy and measured against an appropriate benchmark. The collective array of portfolios provides diversification by capitalization, manager, style, and strategy.

The market value of international equity holdings as of June 30, 2010 was $1.7 billion representing 13.4% of total assets. The benchmark for international equities is the Morgan Stanley Capital International All Country World Index ex US (MSCI ACWI-exUS), which represents the markets of 24 developed countries and 21 emerging markets countries. Four external managers manage the System's international equities. During the fiscal year, international equities increased as a percent of total assets despite the decline in international markets as the System continued to increase its exposure to international equities. The System plans to continue increasing the international equity exposure during the coming fiscal year.

EQUITY MARKET OVERVIEW

For the fiscal year 2010, equity markets staged a rebound as they recovered from the financial crisis. The Morgan Stanley Capital International (MSCI) World Index advanced 10.8%. Returns of domestic stocks, as measured by the Standard & Poor's 1500 Index, were 15.6%. The MSCI EAFE, which measures the returns of international developed markets, had a return of 6.4%. This was the second straight year that domestic equity returns outperformed those of the MSCI EAFE. Emerging market returns topped those of developed markets as the MSCI Emerging Markets Index advanced 23.5%.

Domestic stocks enjoyed strong returns for the first nine months of the fiscal year as the S&P 1500 rose 30.1%. Several events occurred late in the year which shook investor confidence and resulted in a decline of 11.2% over the last quarter. For the first nine months, the market continued to ride the rebound from the March 2009 lows, believing that the worst of the recession was over and that economic activity and corporate profits would improve. As the year progressed, it became apparent that the recovery would not be as robust or as certain as was believed earlier in the year. Real GDP growth, which registered 5.0% for the December 31 quarter, slowed to 1.7% for the June 30, 2010 quarter. Housing prices showed only modest improvement from their mid 2009 lows, and the unemployment rate ended the year at 9.5%, the same level as when the year began.

The past year was marked by several events which led to a decline in investor confidence and a late year stock selloff. Fears of sovereign debt default of several European countries had been simmering for months and reached a flashpoint when Standard & Poor's downgraded Greece's credit rating to junk status in April. Although Greece represents only about 2% of the European Union's GDP, many feared that the crisis could spread to other European countries such as Spain, Portugal, and Ireland, which, like Greece, have debt levels which are a large percentage of their GDP. Although the European Union agreed to provide financial relief to struggling countries, the damage to confidence had already occurred. Another event undermining investor confidence was dubbed the "flash crash" and occurred late in the afternoon of May 6, 2010. Within minutes the Dow Jones Industrial Average fell hundreds of points to an intra-day decline of almost 1,000 points before rebounding almost as fast to end the day down several hundred points. Many stocks traded at unexplainable levels, forcing the exchange to cancel many trades. The inability of the regulators to explain the event only added to investor anxiety. On April 20, 2010, a rig contracted by BP in the Gulf of Mexico exploded and sank, resulting in the largest domestic oil spill ever. The continual media coverage of the event and the resulting financial and ecological damage had a negative impact on consumer confidence. The accident had a direct effect upon energy stocks, and the energy sector was the worst performing sector for the second year in a row.

As was the case in 2009, the role government played with regard to regulation, stimulus, and monetary policy was central to investor confidence. Following the financial crisis and subsequent fallout, much attention was focused on Washington and what new regulations would be crafted regarding financial institutions and the amount of risk they could bear. "Too big to fail", the Madoff fraud, and the "flash crash" were hot topics on the regulatory agenda. While the government was winding down its Troubled Asset Relief Program (TARP), it still found itself in an ownership or creditor relationship with private companies. The government still controlled, or owned large stakes in, Fannie Mae, Freddie Mac, American International Group, Citigroup, Chrysler, and General Motors. On the stimulus front, the administration has made many efforts to boost the economy and create jobs with programs such as the American Recovery and Reinvestment Act of 2009, along with stimulus programs aimed at home ownership and auto sales. The Federal Reserve has continued its policy of keeping rates low to help stimulate the economy. With rates low, the Federal Reserve has also resorted to quantitative easing, whereby it increases the supply of money by buying securities held by banks and other financial institutions. The role of government with regard to regulation, stimulus, and monetary policy will play a central role in the performance of the equity markets during the coming year.

REAL ESTATE

The System's real estate investments had a market value of $419.6 million as of June 30, 2010, representing 3.3% of total assets. The System's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow, and provide diversification, thereby reducing the volatility of the overall investment portfolio.

The System's real estate exposure is currently provided through two portfolios. The System maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high credit quality tenants. The System is also invested in a commingled real estate fund (PRISA FUND), which is managed by Prudential Real Estate Investors. This fund is a core real estate equity fund which invests primarily in existing income-producing properties with strong cash flow and the potential for capital appreciation. The fund is diversified across several property types including office, retail, industrial, apartment, self-storage, and hotel.

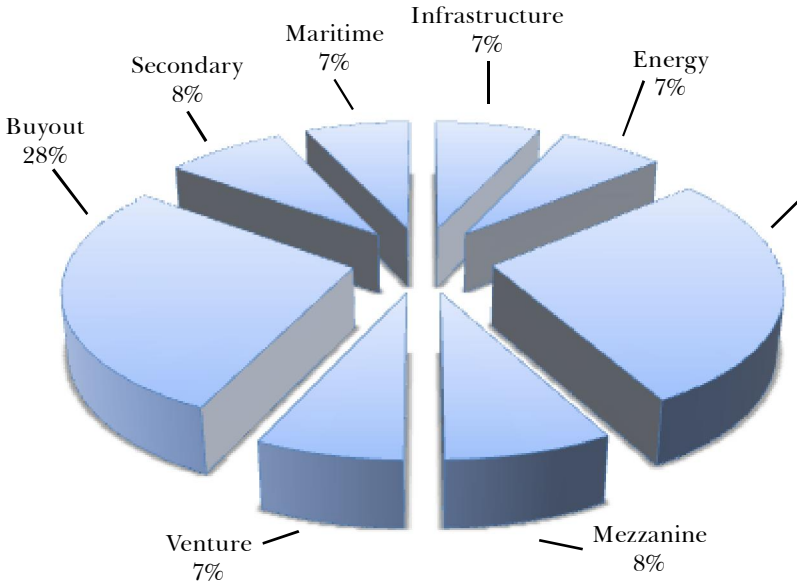
REAL ESTATE OVERVIEW

Real estate fundamentals improved in the second half of the fiscal year as commercial real estate investors sensed that property values were at or near a cyclical bottom. Both equity and debt capital flows into real estate picked up as occupancy rates and rents started to improve in select property types and markets. While broad market improvement in rents and occupancy will remain sluggish until a sustained improvement in job growth occurs, there were clearly opportunities for investors to take advantage of buying opportunities in a depressed market.

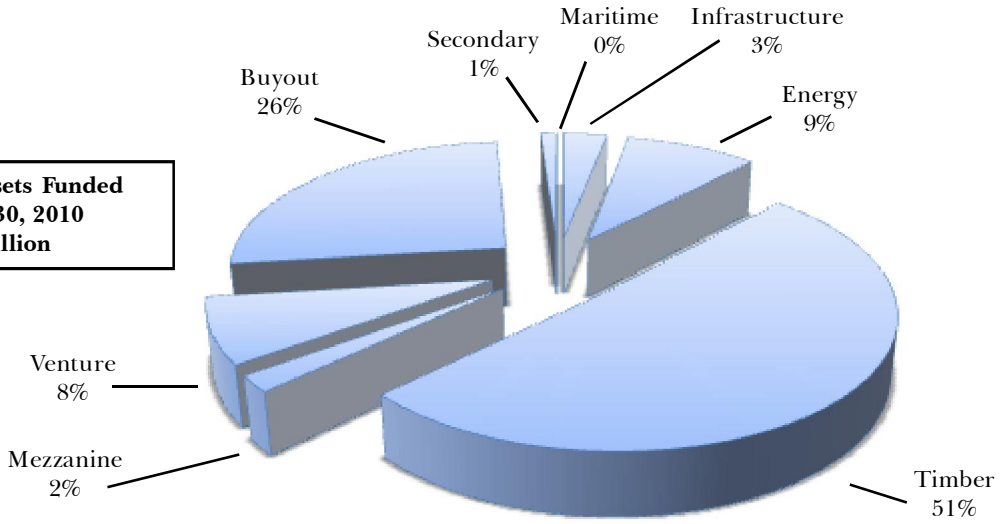
We expect the 2010-2011 fiscal year to be one of transition as fund managers continue to deleverage and refinance existing properties. While the contraction in demand appears to be largely over, new supply is expected to remain subdued for several more years. Opportunistic investments will be abundant for those investors who have available capital to provide financing at profitable rates and who are in a position to purchase properties at attractive levels from distressed sellers.

ALTERNATIVE ASSETS

As of June 30, 2010, the System had committed $715 million to alternative investments and had funded $215 million of those commitments. The percentage of the System's portfolio in alternative assets was 1.7%. The System's current alternative asset portfolio consists of private equity investments and timberland.



Alternative Assets Committed as of June 30, 2010 $715 Million



Alternative Assets Funded as of June 30, 2010 $215 Million

PRIVATE EQUITY

The System has exposure to venture, buyout, infrastructure, energy, and mezzanine via participation in limited partnerships as well as investments in funds of funds. The System is in the early stages of its private equity investment program, which it intends to grow with a disciplined plan of commitments over the next several years. The System looks to diversify its private equity portfolio by firm, country, strategy, and vintage year. The System will achieve vintage year diversification by building out the portfolio with disciplined levels of commitments over time. The System's commitment to any given partnership shall not exceed 20% of the partnership's total commitments.

The Board and staff understand that private equity (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with other publicly traded assets, this asset class can help to diversify and reduce risk for the System's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence.

PRIVATE EQUITY MARKET OVERVIEW

The private equity market showed notable signs of improvement as the fiscal year progressed after experiencing a near standstill during the credit crisis. While nowhere near pre-crisis levels, the ability of fund managers to raise investment capital has clearly seen an uptick. An overall improvement in the stock market has led to increased activity in the IPO market, providing more opportunities for fund managers to exit existing investments. As the financial markets continue to heal, capital calls will pick up as more investment opportunities present themselves, although distributions will probably remain subdued over the next year.

Large buyout funds have been largely out of favor since the beginning of the financial crisis due to a lack of favorable financing. However, attractive opportunities were ample in the mezzanine and secondary sectors during the past year. Looking forward, it is anticipated that solid investment opportunities will be available in the distressed credit sector of the market, primarily in the middle market space. The financial crisis currently unfolding in the Eurozone should provide a favorable environment to invest in distressed credit markets in Europe

.

TIMBERLAND

In addition to private equity, the System has invested in timberland in the alternative asset class. As of June 30, 2010 the System owns approximately 73,000 acres of timberland outright and has a 7.15% interest in a commingled fund that holds 97,938 acres of timberland. Timberland is, by nature, a long term investment as our anticipated time horizon in this asset category is generally a minimum of ten to fifteen years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the System's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long-term.

The System diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are primarily driven from net cash flow generated from the sale of trees (referred to as stumpage sales) and capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of the forest commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland from the conversion of timberland into higher and better uses, such as vacation property sales.

TIMBERLAND MARKET OVERVIEW

The tepid pace of recovery in both the U.S. housing market and the overall economy continues to adversely affect U.S. timber markets. A rebound in the housing market remains constrained by record foreclosures, tight credit conditions, and stubbornly high unemployment. However, going into next fiscal year many industry experts are cautiously optimistic about a gradual recovery in the demand for lumber. This optimism is based on an expected increase in U.S. construction spending and an anticipated uptick in home improvement and remodeling activity. Furthermore, as the global economy recovers, we should see a pickup in timber exports to countries such as China and South Korea.

PORTFOLIOS
MARKET VALUES **
June 30, 2010

Internally Managed

Cash Equivalents	
Cash Collections Fund (Unallocated)	218,429,317
Fixed Income*	
Broad Market Bond Fund	1,029,183,758
Long Term Bond Fund	586,992,599
Intermediate Bond Fund	470,484,165
Internal Bond Fund	261,006,375
Life Insurance Trust	86,455,572
Tax Shelter Fund	448,085
Equity	
S & P 500 Stock Index Fund (Large Cap)	2,057,546,867
S & P 400 Stock Index Fund (Mid Cap)	317,995,096
S & P 600 Stock Index Fund (Small Cap)	221,369,425
Real Estate	
Internally Managed Fund	391,439,237
Subtotal	**5,641,350,496** ***

Externally Managed

Fixed Income	
Galliard Capital Management	769,966,491
Ft. Washington Broad Market	728,479,433
Domestic Equity	
Todd - Veredus (Large Cap Core)	1,040,553,447
UBS (Large Cap Value)	752,827,093
GE Asset Management (Large Cap Growth)	550,145,051
Wellington (Large Cap Core)	393,820,288
Wellington (Mid Cap Core)	236,813,283
Wellington (Small Cap Core)	117,881,282
Todd - Veredus Opportunity Fund	97,236,017
UBS (130/30)	85,813,378
International Equity	
Todd - Veredus International	522,366,377
UBS International	514,470,507
Baillie Gifford EAFE Alpha	346,703,154
Baring Focused International Equity	319,619,142
Real Estate	
Prudential PRISA Fund	28,174,434

continued ...

PORTFOLIOS continued ...
JUNE 30, 2010

Alternative Investments	
Molpus Woodlands Group Lake Superior Timberlands LLC	89,260,480
Hancock Bluegrass LLC - Oregon	19,321,729
Riverstone/Carlyle E & P Fund IV	22,564,831
KKR & Co European Fund III	21,836,749
KKR & Co Fund 2006	18,463,171
Ft. Washington Fund VI	12,364,325
Chrysalis Venture Fund III	10,195,122
Alinda Infrastructure Fund II	9,496,506
Ft. Washington Fund V	8,422,784
Landmark Equity Partners Fund XIV	2,702,755
CapitalSouth Partners Fund III	1,718,002
Oaktree Mezzanine Fund III	1,400,000
Parish Capital Fund III	1,136,304
J. P. Morgan Maritime Fund	320,034
Lexington Capital Partners Fund VII	137,228
Additional Categories	
Fort Washington High Yield Bond Fund	232,651,457
Marathon Legacy Securities PPIP	40,598,924
AG GECC PPIF, LP	39,696,703
Subtotal	**7,037,156,481**
Total Assets	**12,678,506,977**

* Excludes purchased interest of $1,450,327 as June 30, 2010
** Detailed information concerning these market values of all KTRS investments is available upon request.
*** As of June 30, 2010, the Scholarship Fund is no longer reported in the pension fund Investment portfolio. The value of this fund at June 30, 2010 was $482,153.

Investment Summary
Fair Market Value – Total Funds
June 30, 2010

Type of Investment	Fair Value 07/01/09	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/10
Cash Equivalents	$ 256,900,000	$ 53,043,964,900	$ -	$ 52,993,486,600	$ 307,378,300
Fixed Income	3,785,836,400	2,233,431,200	240,528,800	2,132,923,000	4,126,873,400
Equities	7,086,247,000	2,128,364,300	929,219,800	2,616,892,600	7,526,938,500
Real Estate	425,746,100	2,390,800	(8,523,200)	-	419,613,700
Alternative	177,330,400	129,673,700	9,203,400	16,571,900	299,635,600
TOTAL	$ 11,732,059,900	$ 57,537,824,900	$ 1,170,428,800	$ 57,759,874,100	$ 12,680,439,500

Contracted Investment Management Expenses
Fiscal Year 2009-10
(in thousands of dollars)

Investment Manager Fees	Assets Under Management	Expense	Basis Points (1)
Equity Managers	$ 4,978,249	$ 9,955	
Fixed Income Managers	1,731,097	845	
Real Estate	28,174	328	
Alternative Investments (2)	299,636	5,618	
Total	$ 7,037,156	$ 16,746	23.8
Other Investment Services			
Custodian Fees	$ 12,678,507	$ 502	0.4
Consultant Fees		364	
Legal & Research		50	
Subscriptions/Services		544	
Total		1,460	
Grand Total		$ **18,206**	**14.4**

1 – One basis point is one hundredth of one percent or the equivalent of .0001.
2 – Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.

Transaction Commissions
Fiscal Year 2009-10

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
Barclays	1,826,271	$ 63,006.25	0.0345
Bass / Baypoint Trading	42,300	1,692.00	0.0400
BB & T Capital Markets	74,300	2,972.00	0.0400
Bear Stearns & Co., Inc.	12,200	488.00	0.0400
Blair, William & Co	209,880	8,147.20	0.0388
BMO Capital Markets	63,900	2,556.00	0.0400
BNY ConvergEX Group	1,313,914	40,327.01	0.0307
Boenning & Scattergood	4,000	90.00	0.0225
BTIG	246,000	10,403.00	0.0423
Canacord Adams	69,700	2,788.00	0.0400
Cantor Fitzgerald & Co	62,600	2,406.00	0.0384
Chapdelaine Institutional	10,340	413.60	0.0400
CIBC Oppenheimer Worldmarket	87,800	3,512.00	0.0400
Citigroup Global	1,006,706	30,070.03	0.0299
Collins Stewart LLC	6,900	288.00	0.0417
Cowen & Co	306,690	11,517.60	0.0376
Credit Research & Trading LLC	41,700	1,668.00	0.0400
Credit Suisse Sec. LLC	3,410,840	116,603.20	0.0342
Crowell Weedon & Co	82,100	3,067.00	0.0374
CRT Capital LLC	14,100	564.00	0.0400
CSI US Institutional (Calyon)	43,200	1,728.00	0.0400
Cuttone & Co Inc	6,200	139.50	0.0225
D A Davidson & Co	47,400	1,896.00	0.0400
Dahlman Rose & Co LLC	14,600	584.00	0.0400
Deutsche Bank	618,650	28,928.75	0.0468
Dowling & Partners	60,200	2,408.00	0.0400
First Kentucky Securities Corp	2,421,500	80,182.00	0.0331
Fox Pitt Kelton Inc	16,200	648.00	0.0400
Freidman Billings	183,100	7,324.00	0.0400
FTN Financial	3,600	144.00	0.0400
Goldman Sachs	3,208,992	105,126.88	0.0328
Heflin & Co	73,200	2,928.00	0.0400
Hudson Securities	1,300	52.00	0.0400
ICAP Corporates LLC	9,600	384.00	0.0400
Instinet	9,053	103.03	0.0114
Investment Tech Grp Transition	10,118,787	88,092.45	0.0087
Investment Technology Grp	56,588,062	718,544.07	0.0127
ISI Group	3,401,610	110,749.52	0.0326
J.J.B. Hilliard, W.L. Lyons	3,157,502	103,835.07	0.0329
Janney Montgomery Scott Inc	72,300	2,892.00	0.0400
Jefferies & Co.	556,680	19,183.60	0.0345
JMP Securities	108,800	4,422.00	0.0406
Jones & Associates	2,500	100.00	0.0400
JP Morgan & Chase	1,098,385	26,557.23	0.0242
Keefe Bruyette & Woods	43,366	7,731.89	0.1783
Kellogg Partners Inst Svs	1,300	29.25	0.0225
Keybanc Capital	18,200	3,227.00	0.1773
Knight Equity Markets	251,200	9,797.00	0.0390
LaBranche Financial Svs LLC	46,400	1,856.00	0.0400
Lazard Freres & Co.	3,038,630	102,561.20	0.0338
Leerink Swann & Co.	54,800	2,215.00	0.0404
Legent Clearing Corp	14,000	560.00	0.0400
Lexington Investment Co.	1,271,570	39,786.60	0.0313
Liquidnet Inc	7,180,595	102,243.76	0.0142
Longbow Securities LLC	3,800	152.00	0.0400
MacQuarie Securities Inc	65,200	2,678.00	0.0411

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
Melvin Securities Inc	4,400	44.00	0.0100
Merrill Lynch	10,913,793	204,129.33	0.0187
Miller Tabak & Co. LLC	40,200	1,608.00	0.0400
Morgan Keegan	1,919,200	63,000.50	0.0328
Morgan Stanley Smith Barney-Hunt	3,074,524	100,980.84	0.0328
Morgan Stanley Smith Barney-Louv	1,876,300	61,692.00	0.0329
Morgan Stanley Smith Barney-NKY	3,049,400	101,229.00	0.0332
Morgan Stanley	2,417,049	51,930.77	0.0215
Murphy & Durieu	27,400	616.50	0.0225
Needham	38,700	1,548.00	0.0400
Nomura Securities Intrntl Inc	10,800	-	0.0000
Nova Capital Markets LLC	32,900	1,316.00	0.0400
OTA Limited Partners	68,800	2,752.00	0.0400
Pali Capital Inc.	45,500	1,820.00	0.0400
Pershing LLC	125,850	3,363.63	0.0267
Pickering Energy Partners Inc.	6,800	272.00	0.0400
Pipeline Trading	65,000	650.00	0.0100
Piper Jaffray	115,100	4,398.00	0.0382
Pulse Trading	448,490	9,174.53	0.0205
R W Baird	171,600	5,761.00	0.0336
Raymond James & Assoc	5,375,858	175,434.86	0.0326
RBC Capital Markets	207,300	8,218.00	0.0396
Ross Sinclaire & Assoc	1,219,500	40,110.00	0.0329
Sandler O'Neill	28,400	7,350.60	0.2588
Sanford C Bernstein	856,527	13,043.27	0.0152
Simmons & Co	65,750	2,630.00	0.0400
SJ Levinson & Sons LLC	18,200	728.00	0.0400
Soleil Securities Co	17,600	704.00	0.0400
State Street Global	12,500	375.00	0.0300
Stephens Inc.	24,300	3,819.00	0.1572
Sterne, Agee & Leach	191,300	8,689.00	0.0454
Stifel, Nicolaus & Co	2,649,300	88,755.00	0.0335
Stifel, Nicolaus & Co-Louisville	1,270,600	43,846.00	0.0345
Suntrust Robinson	24,400	976.00	0.0400
Susquehanna Brokerage	351,326	10,473.50	0.0298
The Benchmark Company LLC	14,200	568.00	0.0400
Think Equity Partners	8,600	344.00	0.0400
Thomas Weisel Partners	63,900	1,484.00	0.0232
UBS/Paine Webber Securities	1,939,009	37,000.98	0.0191
UBS/Paine Webber-Louisville	5,107,300	162,385.49	0.0318
Wachovia / First Clearing Corp	7,100	284.00	0.0400
Weeden & Co	3,270,600	108,422.00	0.0332
Wells Fargo Securities, LLC	124,000	5,120.00	0.0413
White Cap Trading LLC	4,400	99.00	0.0225
WUB Capital Group Inc	42,000	1,680.00	0.0400
GRAND TOTAL	**150,048,499**	**$ 3,221,194.49**	**0.0215**

The over-the-counter commission rate on medium to large capitalization stocks is assumed to be $.03 per share. The acquisition of initial public offerings (IPOs) represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate. However, the security issuers and not the investors pay the commissions. In 2009-10, the System bought small capitalization IPOs that generated $43,352 in commissions. Although these commissions were not paid by the Retirement System, they resulted from the System's investment activities and are included in the total commissions of $3,221,194. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.03 per share or less. Investment companies usually provide investment research for brokerage clients. On occasion, investment companies direct third party research to active clients. The Retirement System received third party research through BNY Convergex. Trading commissions of $30,399 were associated with third party research obligations. The primary research providers were: Bloomberg, Interactive Data, Rogers Casey, RiskMetrics Group, QED Financial Systems, Standard & Poor's, and Thomson Financial.

Ten Largest Stock Holdings Ranked (1) (2)
by Market Value
June 30, 2010

Rank	Name	Market Value	Percentage of Equities
1	Microsoft Corp	115,166,684	1.839
2	Exxon Mobil Corp	106,591,180	1.702
3	Apple Inc	103,743,549	1.657
4	Pepsico Inc	93,166,281	1.488
5	A T & T Inc	82,812,070	1.322
6	Johnson & Johnson	81,913,503	1.308
7	Cisco Systems Inc	76,585,114	1.223
8	Qualcomm Inc	69,987,163	1.117
9	Hewlett Packard	65,526,656	1.046
10	Chevron Corp	60,874,967	0.972

Top Ten Fixed Income Holdings (2)
by Market Value
June 30, 2010

Rank	Description	Maturity	Coupon	Par	Market Value	Percent of Fixed Income
1	U S Treasury Bonds	8/15/2023	6.250	61,500,000.00	79,719,375.00	2.048
2	U S Treasury Notes	5/15/2020	3.500	75,640,000.00	79,161,798.40	2.033
3	U S Treasury Notes	6/30/2016	3.250	40,000,000.00	42,422,000.00	1.090
4	U S Treasury TIPS	4/15/2012	2.000	37,000,000.00	41,177,296.30	1.058
5	U S Treasury Notes	3/31/2015	2.500	38,000,000.00	39,377,500.00	1.011
6	FNMA Notes	1/15/2030	7.130	25,000,000.00	34,031,250.00	0.874
7	U S Treasury Bonds	8/15/2029	6.130	22,000,000.00	29,225,680.00	0.751
8	U S Treasury TIPS	1/15/2029	2.500	25,000,000.00	28,689,475.75	0.737
9	CMO FHR 3095 JE	7/15/2031	5.500	23,604,000.00	24,862,109.72	0.639
10	U S Treasury Notes	11/15/2013	4.250	22,000,000.00	24,261,820.00	0.623

(1) Includes only actively managed separate accounts.
(2) Detailed information concerning these values along with book values and cost values of all KTRS investments is available upon request.

PROXY VOTING AND CORPORATE BEHAVIOR

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The Board has adopted the following position on corporate behavior:

The Board's stated fiduciary duty is to obtain the highest return for the Fund commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the Fund as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the Fund has invested.

The Board expects the managements of the companies whose equity securities are held in the Fund's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the Board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the Board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission, and others which are covered by the laws of the United States Government or the State of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the System's holdings in the company, if the sale is consistent with sound investment policy.

SECURITY LENDING

The System operates a security lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and select stocks and bonds are the types of securities loaned. The System's sub-custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral, at the time of the loan, has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral consists of cash, marketable U.S. Government securities, and selected marketable U.S. Government agency securities approved by the System.

Cash collateral is invested in short term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities unless the borrower defaults. The lending agent also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. The weighted average maturity of cash collateral investments is typically two days. The System has no credit risk exposure to borrowers, since the amounts the System owes borrowers exceeds the amounts the borrowers owe the System.

Security lending programs can entail considerable interest rate risk and credit risk. The System has structured its program to minimize these two main categories of risk. The interest rate risk is managed, as mentioned above, by limiting the term of cash collateral investments to several days.

The credit risk is controlled by investing cash collateral in securities with qualities similar to the creditworthiness of lent securities.

KENTUCKY INVESTMENTS

The System is ever-mindful of its impact on the Commonwealth's economy. For the fiscal year ended June 30, 2010, approximately $1.2 billion in defined benefit pension payments were distributed to annuitants living in Kentucky. Approximately $325 million of the System's investments directly impact the Commonwealth. These investments include: pools of single-family mortgages in Kentucky; financing for multi-family housing; bonds issued by public agencies of the Commonwealth and those of local municipalities; direct ownership of commercial real estate, and investments in the bonds of Kentucky-based corporations. This excludes hundreds of millions in equity investments in companies which have an impact on the Commonwealth's economy but receive earnings from world-wide operations. Fiduciary duty requires that investments be made solely for the benefit of the System's members and annuitants. Investments which benefit the Commonwealth's economy are made only when fully consistent with this fiduciary duty.

PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
Hewitt Ennis Knupp + Associates

Investment Custodian/Subcustodian
Farmers Bank & Capital Trust Company
The Bank of New York Mellon

Fixed Income Managers
Galliard Capital Management
Ft. Washington Investment Advisors

Domestic Equity Managers
Todd-Veredus Asset Management LLC
UBS Global Asset Management
Wellington Management Company
GE Asset Management

International Equity Managers
Todd-Veredus Asset Management LLC
UBS Global Asset Management
Baring Asset Management, Inc.
Baillie Gifford

Real Estate Managers
Prudential Real Estate Investors

Alternative Investment Managers
Molpus Woodlands Group
Hancock Natural Resources Group
Kohlberg Kravis Roberts & Co.
Chrysalis Ventures
Ft. Washington Private Equity Investors
Alinda Capital Partners, LLC
Riverstone Holdings, LLC
CapitalSouth Partners
Landmark Partners
Lexington Partners
Oaktree Capital Management
Parish Capital Advisors, LLP
Audax Group
J.P. Morgan Asset Management
Marathon Legacy Securities GP, LLC
AG GECC PPIF GP, LLC

Attorney
Schottenstein, Zox & Dunn, Co.

Actuarial Section

Report of the Actuary on the Annual Valuation

for Fiscal Year ending June 30, 2010

Cavanaugh Macdonald
CONSULTING, LLC

December 10, 2010

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2010. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2013 required to support the benefits of the System are 29.41% of payroll for university members hired before July 1, 2008, 30.41% of payroll for university members hired on and after July 1, 2008, 32.37% of payroll for non-university members hired before July 1, 2008, and 33.37% of payroll for non-university members hired on and after July 1, 2008.

These rates represent an increase since the previous valuation in the required employer contribution rate of 1.27% of payroll for the 2012/2013 fiscal year. There has been a net decrease in the expected state special appropriation from 3.88% to 3.69%, or -0.19% of payroll. Therefore, for the 2012/2013 fiscal year, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 7.27%; 1.46% from this valuation and 5.81% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time.

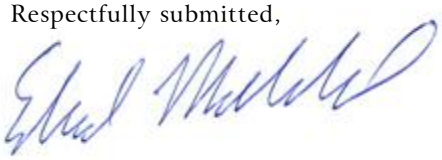
Board of Trustees
December 10, 2010
Page 2

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, since a portion of the annual contributions required to fund the pension benefits have been allocated to the Medical Insurance Fund by the employer, the retirement fund is not funded by the employer on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,



Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Senior Actuary

Report of Actuary on the Valuation
Prepared as of June 30, 2010
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2010	June 30, 2009
Number of active members	76,387	75,937
Annual salaries	$ 3,321,614	$ 3,253,077
Number of annuitants and beneficiaries	43,134	42,050
Annual allowances	$ 1,352,158	$ 1,280,316
Assets		
Market value	$12,456,619	$11,515,884
Actuarial value	$14,851,330	$14,885,981
Unfunded actuarial accrued liability	$ 9,492,986	$ 8,514,445
Funded Ratio	61.0%	63.6%
Amortization period (years)	30	30

Contribution Rates for University Members

Valuation Date	June 30, 2010		June 30, 2009	
For Fiscal Year Ending	June 30, 2013		June 30, 2012	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	13.31 %	13.31 %	13.41 %	13.41 %
Accrued liability	16.10	17.10	14.73	15.73
Total	29.41 %	30.41 %	28.14 %	29.14 %
Member	7.625%	7.625%	7.625%	7.625%
State (ARC)	21.785	22.785	20.515	21.515
Total	29.41 %	30.41 %	28.14 %	29.14 %
Life Insurance Fund:				
State *	0.05 %	0.05 %	0.05 %	0.05 %
Medical Insurance Fund:				
Member	1.43 %	1.75 %	0.75 %	1.75 %
State Match	1.43	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	2.86 %	2.50 %	1.50 %	2.50 %
Total Contributions	32.32 %	32.96 %	29.69 %	31.69 %
Member Statutory	90.55 %	9.375 %	8.375%	9.375%
State Statutory	12.305	12.625	11.625	12.625
Required Increase *	7.27	7.27	5.81	5.81
State Special	3.69	3.69	3.88	3.88
Total	32.32 %	32.96 %	29.69 %	31.69 %

** The 2009 Valuation Results were revised from last year due to a reduction in the Life Insurance Fund State Contribution Rate from 0.17% to 0.05%. This in turn lowered the required increase for the 2012 fiscal year from 5.93% to 5.81%.*

Contribution Rates for Non-University Members

Valuation Date	June 30, 2010		June 30, 2009	
For Fiscal Year Ending	June 30, 2013		June 30, 2012	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	17.21 %	17.21 %	17.19 %	17.19 %
Accrued liability	15.16	16.16	13.91	14.91
Total	32.37 %	33.37 %	31.10 %	32.10 %
Member	9.105%	9.105%	9.105%	9.105%
State (ARC)	23.265	24.265	21.995	22.995
Total	32.37 %	33.37 %	31.10 %	32.10 %
Life Insurance Fund:				
State *	0.05 %	0.05 %	0.05 %	0.05 %
Medical Insurance Fund:				
Member	1.75 %	1.75 %	0.75 %	1.75 %
State Match	1.75	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	3.50 %	2.50 %	1.50 %	2.50 %
Total Contributions	35.92 %	35.92 %	32.65 %	34.65 %
Member Statutory	10.855%	10.855%	9.855%	10.855%
State Statutory	14.105	14.105	13.105	14.105
Required Increase *	7.27	7.27	5.81	5.81
State Special	3.69	3.69	3.88	3.88
Total	35.92 %	35.92 %	32.65 %	34.65 %

** The 2009 Valuation Results were revised from last year due to a reduction in the Life Insurance Fund State Contribution Rate from 0.17% to 0.05%. This in turn lowered the required increase for the 2012 fiscal year from 5.93% to 5.81%.*

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2010 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

5. Provisions of the System, as summarized in Schedule E, were taken into account in the current valuation. The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2010 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
Full Time	58,983	$ 3,211,563
Part Time	17,404	110,051
Total	76,387	$ 3,321,614

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2010

Group	Number	Annual Retirement Allowances[1] ($1,000's)
Service Retirements	37,667	$ 1,237,529
Disability Retirements	2,284	58,736
Beneficiaries of Deceased Members	3,183	55,893
Total	43,134	$ 1,352,158

[1] *Includes cost-of-living adjustments effective through July 1, 2010.*

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2010 the market value of Pension Plan assets for valuation purposes held by the System amounted to $12,456,619,082. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2010 was $14,851,329,749. This amount includes a Pension Obligation Bond of $465,000,000 contributed on August 26, 2010. Schedule B shows the development of the actuarial value of assets as of June 30, 2010.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $9,333,934,383 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $14,790,872,620 of which $990,508,323 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $219,508,635. The total actuarial accrued liability of the System amounts to $24,344,315,638. Against these liabilities, the System has present assets for valuation purposes of $14,851,329,749. When this amount is deducted from the actuarial accrued liability of $24,344,315,638, there remains $9,492,985,889 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 13.31% of payroll for university members and 17.21% for non-university members.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member who becomes a member before July 1, 2008 will contribute 9.055% of annual salary to the System and each non-university member who becomes a member before July 1, 2008 will contribute 10.855% of annual salary. Of this amount, for each university member, 1.43% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 1.75% if paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.540 also provides that each university member who becomes a member on or after July 1, 2008 will contribute 9.375% of annual salary to the System and each non-university member who becomes a member on or after July 1, 2008 will contribute 10.855% of annual salary. Of this amount, 1.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

3. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2012/2013 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**

4. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.05% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 7.27% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 3.69% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 21.785% for university members who become members before July 1, 2008 and 22.785% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 23.265% for non-university members who become members before July 1, 2008 and 24.265% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source
University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	9.055%	9.375%
Statutory Medical Insurance Fund	(1.43)	(1.75)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	9.055%	9.375%
Statutory Medical Insurance Fund	(1.43)	(0.75)
Supplemental Funding	3.250	3.250
Subtotal	10.875%	11.875%
Life Insurance	(0.05) %	(0.05) %
Additional to Maintain 30-Year Amortization	7.27	7.27
Special Appropriation	3.69	3.69
Contribution to Pension Plan	21.785%	22.785%
Total Contribution to Pension Plan	29.41 %	30.41 %

Contribution Rates by Source
Non-University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	10.855%	10.855%
Statutory Medical Insurance Fund	(1.75)	(1.75)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	10.855%	10.855%
Statutory Medical Insurance Fund	(1.75)	(0.75)
Supplemental Funding	3.250	3.250
Subtotal	12.355%	13.355%
Life Insurance	(0.05) %	(0.05) %
Additional to Maintain 30-Year Amortization	7.27	7.27
Special Appropriation	3.69	3.69
Contribution to Pension Plan	23.265%	24.265%
Total Contribution to Pension Plan	32.37 %	33.37 %

4. The valuation indicates that normal contributions at the rate of 13.31% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.21%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 16.10% for university members hired before July 1, 2008, 17.10% for university members hired on and after July 1, 2008, 15.16% for non-university members hired before July 1, 2008, and 16.16% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.69% of payroll to be made by the State. These rates are shown in the following table.

Actuarially Determined Contribution Rates

Rate	Percentage of Active Members' Salaries			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	13.31%	13.31%	17.21%	17.21%
Accrued Liability *	16.10	17.10	15.16	16.16
Total	29.41%	30.41%	32.37%	33.37%

* *Includes special appropriations of 3.69% of payroll to be made by the State.*

5. The unfunded actuarial accrued liability amounts to $9,492,985,889 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 7.27%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. Since the 2005 fiscal year, a portion of the contributions required for the pension fund have been allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, additional contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. It is our understanding that beginning with the 2011 fiscal year, there will be no further loans for stabilization funding. The following table shows the amounts borrowed, annual payments and remaining balances as of June 30, 2010:

Medical Insurance Fund
Stabilization Funding

FISCAL YEAR	LOAN AMOUNT	ANNUAL PAYMENT	BALANCE AS OF JUNE 30, 2010
2004/2005	$ 29,169,700	$ 4,249,600	$ 17,193,538
2005/2006	62,294,800	9,075,500	42,598,781
2006/2007	73,000,000	10,207,400	53,174,638
2007/2008	125,000,000	18,280,000	106,522,125
2008/2009*	133,400,000	19,516,900	123,970,500
2009/2010**	134,200,000	19,611,300	134,200,000
TOTAL	$ 557,064,500	$ 80,940,700	$ 477,659,582

* *Includes $125,000,000 for Stabilization Funding and $8,400,000 for non-single subsidy funding.*
** *Includes $125,000,000 for Stabilization Funding and $9,200,000 for non-single subsidy funding.*

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 7.27% of payroll for the fiscal year ending June 30, 2013, as shown in the following table:

VALUATION DATE	FISCAL YEAR	INCREASE	CUMULATIVE INCREASE
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46
June 30, 2008	June 30, 2011	1.13	3.59
June 30, 2009	June 30, 2012	2.22*	5.81*
June 30, 2010	June 30, 2013	1.46	7.27

** The 2009 Valuation Results were revised from last year due to a reduction in the Life Insurance Fund State Contribution Rate from 0.17% to 0.05%. This in turn lowered the required increase for the 2012 fiscal year from 5.93% to 5.81%.*

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $978,540,691 in the unfunded accrued liability from $8,514,445,198 to $9,492,985,889 during the year ending June 30, 2010.

Analysis of Financial Experience
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.5%) added to previous unfunded accrued liability	$ 638,583
Expected accrued liability contribution	(294,071)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2009/2010 fiscal year with interest	139,233
Repayment of prior year's MIF Stabilization Funding with interest	(63,544)
Pension Obligation Bond contribution made in August 2010	(465,000)
Experience:	
Valuation asset growth	1,026,250
Pensioners' mortality	20,027
Turnover and retirements	18,096
New entrants	56,140
Salary increases	(97,173)
Amendments	0
Assumption and method changes	0
Total	$ 978,541

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Members as of June 30, 2010

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	43,134
Terminated employees entitled to benefits but not yet receiving benefits	5,637
Active plan members	76,387
Total	125,158

2. Another such item is the schedule of funding progress as shown below.

Schedule of Funding Progress (Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2005	$ 14,598,843	$ 19,134,870	$ 4,536,027	76.3%	$ 2,703,430	167.8%
6/30/2006*	14,857,641	20,324,781	5,467,140	73.1	2,859,477	191.2
6/30/2007	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8

** Reflects change in decremental assumptions.*

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2010. Additional information as of the latest actuarial valuation follows.

Valuation Date	06/30/2010	**Actuarial Assumptions:**
Actuarial cost method	Projected unit credit	Investment Rate of Return* 7.50%
Amortization method	Level percent of pay, open	Projected Salary Increases* 4.00 - 8.20%
Remaining amortization period	30 years	Cost-of-Living Adjustments 1.50% Annually
Asset valuation method	5-year smoothed market	**Includes Inflation at 4.00%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Annual Required Contributions	Percentage Contributed
2005	$ 412,946,526	93%
2006	464,152,466	87
2007	494,565,369	88
2008	563,789,483	83
2009	600,282,735	74
2010	633,938,088	76

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2010. Since KTRS is a cost sharing multi-employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Obligation for Fiscal Year Ending June 30, 2010

(a)	Employer annual required contribution	$ 633,938,088
(b)	Interest on net pension obligation	30,996,927
(c)	Adjustment to annual required contribution	22,094,107
(d)	Annual pension cost: (a) + (b) - (c)	$ 642,840,908
(e)	Employer contributions made for fiscal year ending June 30, 2010	479,805,088
(f)	Increase (decrease) in net pension obligation: (d) - (e)	$ 163,035,820
(g)	Net pension obligation beginning of fiscal year	413,292,362
(h)	Net pension obligation end of fiscal year: (f) + (g)	$ 576,328,182

TREND INFORMATION

YEAR ENDING	ANNUAL PENSION COST (APC)	PERCENTAGE OF APC CONTRIBUTED	NET PENSION OBLIGATION (NPO)
June 30, 2008	$ 567,007,965	82%	$ 250,170,583
June 30, 2009	605,671,714	73	413,292,362
June 30, 2010	642,840,908	75	576,328,182

SCHEDULE A

Results of the Valuation
Prepared as of June 30, 2010
($1,000's)

1.	**ACTUARIAL ACCRUED LIABILITY**			
	Present value of prospective benefits payable in respect of:			
	(a) Present active members			
	- Service retirement benefits		$ 8,706,018	
	- Disability retirement benefits		393,535	
	- Death and survivor benefits		72,141	
	- Refunds of member contributions		162,240	
	Total			$ 9,333,934
	(b) Present inactive members and members entitled to deferred vested benefits:			219,509
	(c) Present annuitants and benficiaries:			
	- Service retirement benefits		$ 13,828,755	
	- Disability retirement benefits		467,724	
	- Death and survivor benefits		494,394	
	Total			$ 14,790,873
	(d) Total actuarial accrued liability			$ 24,344,316
2.	**PRESENT ASSETS FOR VALUATION PURPOSES**			$ 14,851,330
3.	**UNFUNDED ACTUARIAL ACCRUED LIABILITY [1(d) - 2]**			$ 9,492,986
4.	**NORMAL CONTRIBUTION RATE**		**UNIVERSITY**	**NON-UNIVERSITY**
	(a) Actuarial present value of benefits accruing annually		$ 27,520	$ 536,038
	(b) Annual payroll of active members		$ 206,823	$ 3,114,792
	(c) Normal contribution rate [(4(a) / 4(b)]		13.31%	17.21%

Solvency Test

(in millions of dollars)

Fiscal Year Ending	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2005	$ 2,621.3	$ 11,370.4	$ 5,143.2	$ 14,598.8	100%	100%	12%
6/30/2006	2,615.8	12,216.6	5,492.4	14,857.6	100	100	0
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0	100	97	0
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3	100	91	0
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0

SCHEDULE B
Development of Actuarial Value of Assets as of June 30, 2010

(1)	Actuarial Value of Assets Beginning of Year		$ 14,885,981,251
(2)	Market Value of Assets End of Year		$ 12,456,619,082
(3)	Market Value of Assets Beginning of Year		$ 11,515,883,575
(4)	Cash Flow		
	a.	Contributions	$ 777,419,053
	b.	Benefit Payments	1,337,119,450
	c.	Administrative Expense	8,830,054
	d.	Net: (4)a - (4)b - (4)c	$ (568,530,451)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	$ 1,509,265,958
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	$ 842,371,376
	d.	Amount for Phased-In Recognition: (5)a - (5)c	$ 666,894,582
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	$ 133,378,916
	b.	First Prior Year	(611,235,941)
	c.	Second Prior Year	(409,879,449)
	d.	Third Prior Year	190,240,386
	e.	Fouth Prior Year	(75,996,339)
	f.	Total Recognized Investment Gain	$ (773,492,427)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 14,386,329,749
(8)	Additional Contribution from Pension Obligation Bond		$ 465,000,000
(9)	Final Actuarial Value of Assets End of Year: (7) + (8)		$ 14,851,329,749
(10)	Difference Between Market & Actuarial Values: (2) - (7) (prior to Pension Obligation Bond)		$ (1,929,710,667)

SCHEDULE C
PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2010	For the Year Ending June 30, 2009
Receipts for the Year		
Contributions		
Members	$ 297,613,965	$ 293,678,564
Employers	479,805,088	442,549,935
Total	$ 777,419,053	$ 736,228,499
Net Investment Income	1,509,265,958	(2,020,682,522)
TOTAL	$ 2,286,685,011	$ (1,284,454,023)
Disbursements for the Year		
Benefit Payments	$ 1,321,808,770	$ 1,252,980,407
Refunds to Members	15,310,680	15,208,419
Medical Insurance Payments	0	0
Miscellaneous, including expenses	8,830,054	8,165,757
TOTAL	$ 1,345,949,504	$ 1,276,354,583
Excess of Receipts over Disbursements	$ 940,735,507	$ (2,560,808,606)
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 11,515,883,575	$ 14,076,692,181
Excess of Receipts over Disbursements	940,735,507	(2,560,808,606)
Asset Balances as of the End of the Year	$ 12,456,619,082	$ 11,515,883,575
Rate of Return	13.44%	-14.64%

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE D

Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2005, submitted to and adopted by the Board on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.70%	4.50%	4.30%	4.20%	4.00%

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.003%	0.01%	9.00%				
25	0.010	0.01	9.00	1.50%			
30	0.016	0.02	9.00	3.00	3.00%		
35	0.032	0.05	10.00	3.25	1.50		
40	0.048	0.08	10.00	3.75	1.50		
45	0.064	0.22	9.50	2.50	1.50		25.0%
50	0.104	0.42	10.00	4.00	3.00		20.0
55	0.216	0.60	11.00	3.00	2.70	6.0%	35.0
60	0.375	0.79	11.00	3.00	2.70	14.0	25.0
62	0.438	0.83	11.00	3.00	2.70	14.0	23.0
65	0.566	0.90	11.00	3.00	2.70	22.5	35.0
70	0.905	0.00	0.00	0.00	0.00	100.0	100.0

**Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .							
			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.002%	0.03%	6.00%				
25	0.007	0.03	8.50	3.00%			
30	0.014	0.04	9.00	4.00	1.50%		
35	0.026	0.11	8.50	4.00	2.00		
40	0.044	0.22	8.50	2.50	1.50		
45	0.055	0.38	7.00	2.50	1.50		25.0%
50	0.066	0.44	8.50	3.00	2.25		20.0
55	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	0.195	0.00	0.00	0.00	0.00	100.0	100.0

**Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

DEATHS AFTER RETIREMENT: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

Actuarial Method: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

Assets: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

Expense Load: None.

Percent Married: 100%, with females 3 years younger than males.

Loads: Unused Sick Leave: 1% of active liability

SCHEDULE E

Summary of Main System Provisions
As Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2010. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes are reflected in the June 30, 2009 valuation. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1. DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2. BENEFITS

Service Retirement Allowance: Members Before 7/1/2008

Condition for Allowance: Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance: Members On or After 7/1/2008

Condition for Retirement: Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 1.7% of final average salary if service is 10 years or less.

(b) 2.0% of final average salary if service is greater than 10 years and no more than 20 years.

(c) 2.3% of final average salary if service is greater than 20 years but no more than 26 years.

(d) 2.5% of final average salary if service is greater than 26 years but no more than 30 years.

(e) 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

(a) 1.5% of final average salary if service is 10 years or less.

(b) 1.7% of final average salary if service is greater than 10 years and no more than 20 years.

(c) 1.85% of final average salary if service is greater than 20 years but less than 27 years.

(d) 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance: Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance: The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000, to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	1	2	3	4 or more
Annual Allowance	$ 2,400	$ 4,080	$ 4,800	$ 5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.
If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options:

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2	A single life annuity payable during the member's lifetime with payments for 10 years certain.
Option 3	At the death of the member his allowance is continued throughout the life of his beneficiary.
Option 3(a)	At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.
Option 4	At the death of the member one half of his allowance is continued throughout the life of his beneficiary.
Option 4(a)	At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3. CONTRIBUTIONS

Member Contributions

Members before 7/1/2008: University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

Members on and after 7/1/2008: University members contribute 9.375% of salary of which 7.625% is contributed to the Retirement System and 1.75% is contributed to the Medical Insurance Fund. Non-university members contribute 10.855% of salary of which 9.105% is contributed to the Retirement System and 1.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

SCHEDULE F
Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2010
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,552								2,552
Total Pay	41,410,302								41,410,302
Avg. Pay	16,227								16,227
25 to 29	7,342	1,401							8,743
Total Pay	217,949,175	63,246,757							281,195,932
Avg. Pay	29,685	45,144							32,162
30 to 34	3,818	4,865	937						9,620
Total Pay	111,452,897	227,947,351	49,974,032						389,374,280
Avg. Pay	29,191	46,855	53,334						40,475
35 to 39	2,817	2,509	4,012	706					10,044
Total Pay	74,313,656	120,604,468	225,193,125	42,603,634					462,714,883
Avg. Pay	26,380	48,069	56,130	60,345					46,069
40 to 44	3,879	1,808	2,277	2,904	723				11,591
Total Pay	79,944,872	88,446,267	128,003,793	178,515,920	46,125,557				521,036,409
Avg. Pay	20,610	48,919	56,216	61,472	63,797				44,952
45 to 49	1,814	1,269	1,334	1,528	2,155	639			8,739
Total Pay	44,689,939	62,904,777	75,802,300	95,801,767	138,579,018	42,056,954			459,834,755
Avg. Pay	24,636	49,570	56,823	62,697	64,306	65,817			52,619
50 to 54	1,657	1,023	1,173	1,232	1,377	1,645	476		8,583
Total Pay	34,303,799	50,798,111	67,243,927	77,191,072	90,754,269	113,263,204	32,669,109		466,223,491
Avg. Pay	20,702	49,656	57,326	62,655	65,907	68,853	68,633		54,319
55 to 59	2,510	755	944	1,083	1,158	823	707	103	8,083
Total Pay	39,542,880	39,660,051	56,148,619	70,541,207	77,380,607	59,083,162	54,593,179	8,806,679	405,756,384
Avg. Pay	15,754	52,530	59,479	65,135	66,823	71,790	77,218	85,502	50,199
60 to 64	2,844	431	487	573	583	372	165	122	5,577
Total Pay	39,563,979	23,085,640	30,037,551	37,299,758	40,586,147	27,094,465	13,907,160	11,098,734	222,673,434
Avg. Pay	13,911	53,563	61,679	65,096	69,616	72,835	84,286	90,973	39,927
65 & over	2,096	148	134	119	129	98	47	84	2,855
Total Pay	19,263,491	7,200,683	8,811,446	8,107,359	9,067,291	7,442,506	3,632,962	7,868,617	71,394,355
Avg. Pay	9,191	48,653	65,757	68,129	70,289	75,944	77,297	93,674	25,007
Total	31,329	14,209	11,298	8,145	6,125	3,577	1,395	309	76,387
Total Pay	702,434,990	683,894,105	641,214,793	510,060,717	402,492,889	248,940,291	104,802,410	27,774,030	3,321,614,225
Avg. Pay	22,421	48,131	56,755	62,623	65,713	69,595	75,127	89,884	43,484

Average Age: 43.5

Average Service: 10.8

SCHEDULE F

Table 2

Number of Retired Members and Beneficiaries and their Benefits by Age

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	761	$ 8,716,500	$ 11,454
50 - 54	1,166	38,144,970	32,714
55 - 59	6,003	221,760,971	36,942
60 - 64	10,935	386,467,941	35,342
65 - 69	8,197	271,854,309	33,165
70 - 74	5,781	176,024,375	30,449
75 - 79	4,103	113,668,963	27,704
80 & Over	6,188	135,519,537	21,900
TOTAL	**43,134**	**$1,352,157,566**	**$ 31,348**

SCHEDULE F

Table 3

Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR			
Year Ended	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Increase in Annual Allowances	Average Annual Allowance
2001	2,410	$77.0	1,128	$16.5	31,897	$679.8	9.8%	$21,311
2002	2,577	86.2	1,063	16.8	33,408	749.2	10.2	22,425
2003	2,252	86.7	1,015	16.9	34,645	819.0	9.3	23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6	31,348

Actuarial Section

Report of the Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans

for Fiscal Year ending June 30, 2010

Cavanaugh Macdonald
CONSULTING, LLC

December 16, 2010

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require the Teachers' Retirement System of the State of Kentucky (the System) to conduct actuarial valuations of the System's retiree medical and other post employment benefit plans. This report covers the Medical Insurance Fund and OPEB liabilities related to the Life Insurance Fund. Cavanaugh Macdonald Consulting, LLC (CMC) has submitted the results of the annual actuarial valuation prepared as of June 30, 2010. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total annual required contribution of 7.20% of active member payroll for the Medical Insurance Fund payable for the fiscal year ending June 30, 2013 is required to support the benefits of the Kentucky Employees Health Plan and the Medicare Eligible Health Plan. Of this amount, 1.43% of payroll is estimated to be paid by University members entering the system prior to July 1, 2008 and 1.75% of payroll is estimated to be paid by all other members, leaving 5.77% and 5.45% respectively, as the remaining annual required contribution. This annual required contribution reflects the assets currently held in the Medical Insurance Fund. Given the changes to benefits, funding, and investment policy, the discount rate for valuing liabilities is 8.00%. Schedule A provides the liabilities of the medical plans under the alternate discount rate assumptions of 4.50% and 7.50%.

The Medical Insurance Fund valuation takes into account, as appropriate, the effect of amendments to the medical plans enacted through the most recent session of the Legislature. These changes include: an increase in cost sharing for current and future retirees not eligible for Medicare in the form of a minimum contribution based upon the projected Medicare Part B premium (phased-in over three years, beginning July 1, 2010); payment by the Commonwealth of KTRS' net premium cost (capped at 3.00% of payroll) of those members who retire July 1, 2010 and later that are not eligible for Medicare; and the increases in member and employer contributions scheduled to begin July 1, 2010. The valuation's discount rate assumption has been increased to 8.00% to reflect the impact of these changes, along with the adjustment to the Medical Insurance Fund's investment policy to achieve a long-term rate of return of 8.00%. Additionally, the assumed rates of health care inflation were revised to reflect current expectations. The actuarial accrued liability decreased from $6.5 billion in 2009 to $3.2 billion in 2010.

The Life Insurance Fund valuation indicates a total annual required contribution of 0.05% of active member payroll payable for the fiscal year ending June 30, 2013 is required to support the benefits of the Life Insurance Fund. The contribution rate of 0.05% equals the amount to be contributed in the prior fiscal year. With the State contributions to the Life Insurance Fund meeting the required levels, the discount rate for valuing liabilities is 7.50%.

The promised benefits of the medical and life insurance plans are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. The market value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Board of Trustees
December 16, 2010
Page 2

the actuary and adopted by the Board are in aggregate reasonably related to the experience under the medical and life insurance plans and to reasonable expectations of anticipated experience under the medical and life insurance plans and meet the parameters for the disclosures under GASB 43 and 45.

CMC has prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A and Schedule C shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the medical and life insurance plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, if the State contributions to the Medical Insurance Fund are increased to the planned levels, the medical plans will begin to operate in a more actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the medical plans will improve.

Respectfully submitted,

Eric Gary, FSA, FCA, MAAA
Senior Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Senior Actuary

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Report of Actuary on the on the Annual Valuation of the Retiree Medical and Life Insurance Plans
Prepared as of June 30, 2010

Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

~ Medical Insurance Fund ~

Valuation Date	June 30, 2010	June 30, 2009
Number of active members	76,387	75,937
Annual salaries	$ 3,321,614	$ 3,253,077
Number of annuitants in medical plans	34,315	33,481
Number of spouses and beneficiaries in medical plans	6,834	6,808
Total	41,149	40,289
Assets:		
Market value	$ 241,224	$ 229,103
Unfunded actuarial accrued liability	$ 2,965,582	$ 6,225,630
Amortization period (years)	30	30
Discount rate	8.00%	4.50%

Medical Insurance Fund Contribution Rates for University Members

Valuation Date	June 30, 2010		June 30, 2009*	
For Fiscal Year Ending	June 30, 2013		June 30, 2012	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	2.32 %	2.32 %	7.53 %	7.53 %
Accrued liability	4.88	4.88	6.83	6.83
Total	7.20 %	7.20 %	14.36 %	14.36 %
Member	1.43 %	1.75 %	0.75 %	1.75 %
Employer	1.43	0.75	0.75	0.75
State (ARC)	4.34	4.70	12.86	11.86
Total	7.20 %	7.20 %	14.36 %	14.36 %

* *The June 30, 2009 valuation results reflect provisions as of that date and are provided for informational purposes. For the fiscal years ending June 30, 2011 and June 30, 2012, it is recommended that the results of the June 30, 2010 valuation be appropriately used to determine the State contribution.*

Medical Insurance Fund Contribution Rates for School District Employees (Non-Federal)

Valuation Date	June 30, 2010		June 30, 2009*	
For Fiscal Year Ending	June 30, 2013		June 30, 2012	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	2.32 %	2.32 %	7.53 %	7.53 %
Accrued liability	4.88	4.88	6.83	6.83
Total	7.20 %	7.20 %	14.36 %	14.36 %
Member	1.75 %	1.75 %	0.75 %	1.75 %
Employer	1.00	1.00	0.00	0.00
State (ARC)	4.45	4.45	13.61	12.61
Total	7.20 %	7.20 %	14.36 %	14.36 %

**The June 30, 2009 valuation results reflect provisions as of that date and are provided for informational purposes. For the fiscal years ending June 30, 2011 and June 30, 2012, it is recommended that the results of the June 30, 2010 valuation be appropriately used to determine the State contribution.*

Medical Insurance Fund Contribution Rates for Other Employees

Valuation Date For Fiscal Year Ending	June 30, 2010 June 30, 2013		June 30, 2009* June 30, 2012	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	2.32 %	2.32 %	7.53 %	7.53 %
Accrued liability	4.88	4.88	6.83	6.83
Total	7.20 %	7.20 %	14.36 %	14.36 %
Member	1.75 %	1.75 %	0.75 %	1.75 %
Employer	1.75	0.75	0.75	0.75
State (ARC)	3.70	4.70	12.86	11.86
Total	7.20 %	7.20 %	14.36 %	14.36 %

* *The June 30, 2009 valuation results reflect provisions as of that date and are provided for informational purposes. For the fiscal years ending June 30, 2011 and June 30, 2012, it is recommended that the results of the June 30, 2010 valuation be appropriately used to determine the State contribution.*

~ Life Insurance Fund ~

(dollar amounts are $1,000's)

Valuation Date	June 30, 2010	June 30, 2009
Number of active members	76,387	75,937
Annual salaries	$ 3,321,614	$ 3,253,077
Number of retirees in Life Insurance Plan	39,951	38,958
Assets:		
Market value	$ 87,905	$ 84,703
Unfunded actuarial accrued liability*	$ 4,186	$ 5,631
Amortization period (years)	30	30
Discount rate	7.50%	7.50%
Contribution for fiscal year ending	**June 30, 2012**	**June 30, 2012**
Normal	0.04%	0.04%
Accrued liability	0.01%	0.01%
Total	0.05%	0.05%

* *Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45.*

2. The valuation indicates combined member, employer, and State contributions of 7.20% of active member payroll would be sufficient to support the current benefits of the medical plans and State contributions of 0.05% of active member payroll would be sufficient to support the current benefits of the life insurance plan. Comments on the valuation results as of June 30, 2010 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

3. Schedule C of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. Since the previous valuation, the medical plan discount rate was increased from 4.50% to 8.00%. The impact of this change is shown on Schedule A.

4. The valuation takes into account the effect of amendments to the medical plans enacted

through the most recent session of the Legislature. Effective July 1, 2010, retirees under age 65 began a three year phase-in of the Shared Responsibility Contribution, the basis of which will, in the third year, equal the Standard Medicare Part B premium required to be paid by retirees age 65 and over. This additional contribution required from retirees under age 65 resulted in a decrease of $173,536,621 in the accrued liability and $16,306,917, or 0.49% of payroll, in the annual required contribution. Effective July 1, 2010, the Commonwealth of Kentucky will begin paying the System's cost of medical insurance for new retirees under the age of 65, less what those retirees are otherwise required to pay (capped at an ultimate amount of 3.00% of payroll). This change represents $590,529,804 of the accrued liability and $68,599,691, or 2.06% of payroll, in the annual required contribution. Effective July 1, 2010, active members will begin a six-year phase-in to an additional contribution to the medical insurance fund. Previously, members hired before July 1, 2008 were required to contribute 0.75% of pay and members hired on or after July 1, 2008 were required to contribute 1.75% of pay. For the fiscal year ending June 30, 2013, member contributions will be 1.43% for University employees who became members of the System before July 1, 2008 and 1.75% for all other members.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the medical and life insurance plans for use as a basis of the valuation were furnished by the System office. The following table shows the number of active members and their annual salaries as of June 30, 2010 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
Full Time	58,983	$ 3,211,563
Part Time	17,404	110,051
Total	76,387	$ 3,321,614

Section III - ASSETS

1. As of June 30, 2010 the market value of Medical Insurance Fund assets for valuation purposes held by the medical plans amounted to $241,223,840 and the market value of Life Insurance Fund assets for valuation purposes held by the life insurance plan amounted to $87,904,593.

2. Schedule B shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Medical Insurance Fund and the Life Insurance Fund.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation and illustrates the benefits of pre-funding the liability for the medical and life insurance plans. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule C.

2. The valuation shows that the medical plans have an actuarial accrued liability of $1,258,246,049 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to retirees and covered spouses

amounts to $1,948,560,035. The total actuarial accrued liability of the medical plans amounts to $3,206,806,084. Against these liabilities, the medical plans have present assets for valuation purposes of $241,223,840. When this amount is deducted from the actuarial accrued liability of $3,206,806,084 there remains $2,965,582,244 as the unfunded actuarial accrued liability for the medical plans.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the medical plans is determined to be $77,101,531 or 2.32% of payroll.

4. The valuation shows that the life insurance plan has an actuarial accrued liability of $17,657,348 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to retirees amounts to $74,433,365. The total actuarial accrued liability of the life insurance plan amounts to $92,090,713. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for active and post employment purposes. As this could be administratively burdensome and, as death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45. Against these liabilities, the life insurance plan has present assets for valuation purposes of $87,904,593. When this amount is deducted from the actuarial accrued liability of $92,090,713 there remains $4,186,120 as the unfunded actuarial accrued liability for the life insurance plan.

5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $1,275,631, or 0.04% of payroll.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Sections 161.420 and 161.550 of the Kentucky Revised Statutes provide the amounts employers and the State are required to contribute to the Medical Insurance Fund. These contribution amounts vary by fiscal year, date of membership, and employee type.

Employer Percentage of Payroll Contributions Made to Medical Insurance Fund

Fiscal Year Ending	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
2011	0.920%	0.750%	0.250%	0.250%	1.000%	0.750%
2012	1.090	0.750	0.500	0.500	1.250	0.750
2013	1.430	0.750	1.000	1.000	1.750	0.750
2014	1.750	0.750	1.500	1.500	2.250	1.250
2015	2.270	1.270	2.250	2.250	3.000	2.000
2016 and Later	2.775	1.775	3.000	3.000	3.750	2.750

* *In addition to the amounts contributed by School Districts on behalf of Non-Federal employees, the State contributes 0.75%.*

For the fiscal year ending June 30, 2013, member contributions will be 1.43% for University employees who became members of the System before July 1, 2008 and 1.75% for all other members. CMC recommends employer and State contributions increase to the required amount of 5.77% of payroll for University employees hired prior to July 1, 2008 and 5.45% of payroll for all other members. The State is scheduled to contribute 0.05% of salary to the Life Insurance Fund for the fiscal year ending June 30, 2012. CMC's valuation indicates the same contribution of 0.05% for the fiscal year ending June 30, 2013 is required to sufficiently support the benefits of the life insurance plan.

REQUIRED CONTRIBUTION RATES
For Fiscal Year Ending June 30, 2013
Medical Insurance Fund

Normal	2.32%
Accrued liability	4.88
Total	7.20%

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES	
	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
Member	1.43%	1.75%	1.75%	1.75%	1.75%	1.75%
Employer (ARC)	1.43	0.75	1.00	1.00	1.75	1.75
State (ARC)	4.34	4.70	4.45	4.45	3.70	3.70
	7.20%	7.20%	7.20%	7.20%	7.20%	7.20%

Life Insurance Fund

Normal	0.04%
Accrued liability	0.01
Total	0.05%
Member	0.00%
State (ARC)	0.05
Total	0.05%

2. The valuation indicates that a total normal contribution of 2.32% of payroll is required to meet the cost of benefits currently accruing under the medical plans and 0.04% of payroll is required to meet the cost of benefits currently accruing under the life insurance plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 4.88% of payroll for the medical plans and 0.01% of payroll for the life insurance plan.

3. The unfunded actuarial accrued liability amounts to $2,965,582,244 for the medical plans and $4,186,120 for the life insurance plan as of the valuation date. An accrued liability contribution of 4.88% of payroll for the medical plans and 0.01% of payroll for the life insurance plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. The System's monthly contribution for retirees to opt into the medical plan is based upon date of hire and years of service at retirement. Additionally, beneficiary contributions may vary by plan election, Medicare eligibility, and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Current employer and State contributions have been determined to be insufficient to fund the cost of the benefits to be provided. Benefits for university, school district (non-Federal), and other members are identical, although active employee contributions collected from university, school district (non-Federal), and other members differ. A listing of member contributions by fiscal year, date of membership, and employer type is provided in Schedule D.
2. The valuation indicates an increase in contributions is required to fund the medical plans in an actuarially sound manner and to ensure the future solvency of the Medical Insurance Fund. For University employees who became members of the System before July 1, 2008, a member contribution of 1.43% of payroll together with employer and State contributions of 5.77% of payroll are required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. For the remaining membership, a member contribution of 1.75% of payroll together with employer and State contributions of 5.45% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.

Section VII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the medical and life insurance plans and the employer.

Number of Active and Retired Members in Medical Plan as of June 30, 2010

GROUP	NUMBER
Retirees currently receiving health benefits	34,315
Spouses of retirees currently receiving health benefits*	6,834
Active plan members	76,387
Total	**117,536**

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2010

GROUP	NUMBER
Retirees	39,951
Active plan members	76,387
Total	**116,338**

** Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. 100% of the full contribution for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.*

Schedule of Funding Progress
Medical Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL) PROJECTED UNIT CREDIT	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
6/30/2005	$ 147,311	$ 4,763,947	$ 4,616,636	3.1%	$ 2,703,430	170.8
6/30/2006[1]	131,614	4,341,963	4,210,349	3.0	2,859,477	147.2
6/30/2007[2]	140,772	5,928,761	5,787,989	2.4	2,975,289	194.5
6/30/2008	185,883	6,434,522	6,248,639	2.9	3,190,332	195.9
6/30/2009[3]	229,103	6,454,733	6,225,630	3.5	3,253,077	191.4
6/30/2010[4]	241,224	3,206,806	2,965,582	7.5	3,321,614	89.3

[1]Reflects change in decrement assumptions and plan design.
[2]Reflects change in discount rate to 4.5% and updating medical trend.
[3]Reflects change in participation assumptions and plan design.
[4]Reflects change in discount rate to 8.0%, change in plan design and updating medical trend.

Schedule of Funding Progress
Life Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL) PROJECTED UNIT CREDIT	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
6/30/2007	$ 71,426	$ 82,722	$ 11,296	86.3%	$ 2,975,289	0.38%
6/30/2008	77,658	84,265	6,607	92.2	3,190,332	0.21
6/30/2009	84,703	90,334	5,631	93.8	3,253,077	0.17
6/30/2010	87,905	92,091	4,186	95.5	3,321,614	0.13

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2010. Additional information as of the latest actuarial valuation follows.

Valuation Date 06/30/2010

Actuarial cost method ..... Projected unit credit

Amortization method ..... Level percent of pay, open

Remaining amortization period ..... 30 years

Asset valuation method ..... Market Value of Assets

Actuarial Assumptions:
Investment Rate of Return*
8.0% for Medical &
7.50% for Life Insurance

Medical Trend Assumption
(Pre-Medicare)**
10.5% - 5.0%

Medical Trend Assumption
(Post-Medicare)
9.0% - 5.0%

Year of Ultimate Trend Rate
2018

** Includes Inflation at 4.00%.*
*** Alternate trend rates were used for Medicare Part B premiums and are disclosed in Schedule C.*

Schedule of Employer Contributions
Medical Insurance Fund

VALUATION YEAR JUNE 30	ANNUAL REQUIRED CONTRIBUTION	ACTUAL EMPLOYER CONTRIBUTION	RDS CONTRIBUTION	TOTAL CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(a)	(b)	(c)	(b) + (c)	[(b) + (c)]/(a)
6/30/2007	$ 231,473,321	$ 113,258,761	$ 10,312,361	$ 123,571,122	53.4%
6/30/2008	395,282,164	148,954,644	11,911,565	160,866,209	40.7
6/30/2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1
6/30/2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9

Schedule of Employer Contributions
Life Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(a)	(b)	(b) / (a)
6/30/2007	$ 1,785,173	$ 5,022,137	281.3%
6/30/2008	1,914,199	5,411,249	282.7
6/30/2009	1,498,076	5,455,473	364.2
6/30/2010	1,992,969	1,966,826	98.7

3. Following is the calculation of the Annual OPEB Cost (AOC) and the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2010. As the medical and life insurance plans are cost-sharing multiple-employer plans, GASB Statement 45 does not require the participating employers to disclose this information.

Annual OPEB Cost and Net OPEB Obligation
for the Medical Insurance Fund for Fiscal Year Ending June 30, 2010

(a) Employer Annual Required Contribution	$ 457,054,117
(b) Interest on Net OPEB Obligation	23,661,734
(c) Adjustment to Annual Required Contribution	18,773,335
(d) Annual OPEB Cost: (a) + (b) - (c)	461,942,516
(e) Employer Contributions for Fiscal Year 2010	173,379,781
(f) Increase in Net OPEB Obligation: (d) - (e)	288,562,734
(g) Net OPEB Obligation at beginning of Fiscal Year	525,816,306
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ 814,379,040

Trend Information for the Medical Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$ 395,282,164	40.7%	$ 234,415,955
6/30/2009	469,492,218	37.9	525,816,306
6/30/2010	461,942,516	37.5	814,379,040

Annual OPEB Cost and Net OPEB Obligation for the Life Insurance Fund for Fiscal year Ending June 30, 2010

(a) Employer Annual Required Contribution	$ 1,992,969
(b) Interest on Net OPEB Obligation	(565,190)
(c) Adjustment to Annual Required Contribution	(389,738)
(d) Annual OPEB Cost: (a) + (b) - (c)	1,817,516
(e) Employer contributions for Fiscal Year 2010	1,966,826
(f) Increase in Net OPEB Obligation: (d) - (e)	(149,310)
(g) Net OPEB Obligation at beginning of Fiscal Year	(7,535,867)
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$(7,685,177)

Trend Information for the Life Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$ 1,914,199	282.7%	$ (3,497,050)
6/30/2009	1,416,656	385.1	(7,535,867)
6/30/2010	1,817,516	108.2	(7,685,177)

SCHEDULE A
Benefits of Pre-Funding Medical Plan
(1,000's)

	Pay-As-You-Go Discount Rate 4.50%	Pre-Funding Discount Rate 7.50%	Pre-Funding Discount Rate 8.00%
PAYROLL	$ 3,321,614	$ 3,321,614	$ 3,321,614
ACTUARIAL ACCRUED LIABILITY			
Present value of prospective benefits payable in respect of:			
(a) Present active members:	$ 2,648,229	$ 1,382,989	$ 1,258,246
(b) Present retired members and covered spouses:	2,853,671	2,045,561	1,948,560
(c) Total actuarial accrued liability	5,501,900	3,428,550	3,206,806
PRESENT ASSETS FOR VALUATION PURPOSES	241,224	241,224	241,224
UNFUNDED ACTUARIAL ACCRUED LIABILITY	$ 5,260,676	3,187,326	2,965,582
CONTRIBUTIONS FOR FISCAL YEAR ENDING JUNE 30, 2013:			
Normal	5.58 %	2.60 %	2.32%
Accrued Liability	5.65	4.96	4.88
Total	11.23 %	7.56 %	7.20%
Member	1.73 %	1.73 %	1.73%
Employer (ARC)	1.02	1.02	1.02
State (ARC)	8.48	4.81	4.45
Total	11.23 %	7.56 %	7.20%

SCHEDULE B
MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2010	June 30, 2009
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 26,579,278	$ 25,134,252
Payment by Retired Members	37,226,295	33,554,515
Total Members	63,805,573	58,688,767
State Statutory Contributions	24,561,433	25,022,737
State Special	0	0
General Fund Surplus	0	0
Allotment from Pension Fund	134,200,000	139,385,300
Total Employer	158,761,433	164,408,037
Grand Total	222,567,006	223,096,804
Recovery Income	4,063	72,082
Medicare D Receipts	14,614,285	13,611,748
Net Investment Income	12,312,999	11,296,280
TOTAL	249,498,353	248,076,914
DISBURSEMENTS FOR THE YEAR		
Refunds to Members	0	0
Medical Insurance Expense	237,377,528	204,857,122
TOTAL	237,377,528	204,857,122
EXCESS OF RECEIPTS OVER DISBURSEMENTS	12,120,825	43,219,792
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	229,103,015	185,883,223
Excess of Receipts over Disbursements	12,120,825	43,219,792
Asset Balance as of the End of the Year	$ 241,223,840	$ 229,103,015

SCHEDULE B (continued)
LIFE INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2010	For the Year Ending June 30, 2009
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 0	$ 0
Employers	1,966,826	5,455,473
Total	1,966,826	5,455,473
Net Investment Income	5,383,644	5,282,958
TOTAL	7,350,470	10,738,431
DISBURSEMENTS FOR THE YEAR		
Benefit Payments	4,148,511	3,694,000
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	0	0
TOTAL	4,148,511	3,694,000
EXCESS OF RECEIPTS OVER DISBURSEMENTS	3,201,959	7,044,431
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	84,702,634	77,658,203
Excess of Receipts over Disbursements	3,201,959	7,044,431
Asset Balance as of the End of the Year	$ 87,904,593	$ 84,702,634

SCHEDULE C
Outline of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, and termination used in the valuation were selected by the Actuary based on the actuarial experience investigation as of June 30, 2005 and adopted by the Board of Trustees on September 18, 2006. The discount rate, rates of future participation, health care cost trend rates, and expected plan costs were determined by the actuary based on plan experience.

Valuation Date: June 30, 2010

Discount Rate: 8.0% per annum, compounded annually for medical plans.
7.5% per annum, compounded annually for life insurance plan.

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

FISCAL YEAR	MEDICARE PART B TREND	UNDER AGE 65 TREND	AGE 65 & OVER TREND
2011	4.4%	10.5%	9.0%
2012	-1.4	9.5	8.5
2013	3.0	8.5	7.5
2014	5.0	7.5	7.0
2015	4.1	6.5	6.5
2016	4.5	6.0	6.0
2017	5.5	5.5	5.5
2018	6.8	5.0	5.0
2019	6.1	5.0	5.0
2020	5.5	5.0	5.0
2021 and beyond	5.0	5.0	5.0

Age Related Morbidity: For retirees age 65 and older, per capita costs are adjusted to reflect expected medical cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 - 69	3.0 %
70 - 74	2.5
75 - 79	2.0
80 - 84	1.0
85 - 89	0.5
90 and over	0.0

Anticipated Plan Participation: Representative values of the assumed annual rates of medical plan participation are as follows:

Years of Service	Hired 7/1/08 and later	Hired after 6/30/02 and before 7/1/08
5-9.99	Not Eligible	10%
10-14.99	Not Eligible	25
15-19.99	45%	45
20-24.99	65	65
25-25.99	90	90
26-26.99	93	93
27 or more	93	93

	Hired 6/30/02 and earlier	
Years of Service	Age 65 on 12/31/04 and earlier	Age 65 on 1/1/05 and later
5-9.99	70%	25%
10-14.99	80	50
15-19.99	90	75
20-24.99	93	93
25-25.99	93	93
26-26.99	93	93
27 or more	93	93

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	SALARY*	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service**
20	8.10%	0.003%	0.01%	9.00%				
25	7.20	0.010	0.01	9.00	1.50%			
30	6.20	0.016	0.02	9.00	3.00	3.00%		
35	5.50	0.032	0.05	10.00	3.25	1.50		
40	5.00	0.048	0.08	10.00	3.75	1.50		
45	4.70	0.064	0.22	9.50	2.50	1.50		25.0%
50	4.50	0.104	0.42	10.00	4.00	3.00		20.0
55	4.30	0.216	0.60	11.00	3.00	2.70	6.0%	35.0
60	4.20	0.375	0.79	11.00	3.00	2.70	14.0	25.0
62	4.10	0.438	0.83	11.00	3.00	2.70	14.0	23.0
65	4.00	0.566	0.90	11.00	3.00	2.70	22.5	35.0
70	4.00	0.905	0.00	0.00	0.00	0.00	100.0	100.0

**Includes inflation at 4.0% per annum.*
***Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	SALARY*	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	8.10%	0.002%	0.03%	6.00 %				
25	7.20	0.007	0.03	8.50	3.00 %			
30	6.20	0.014	0.04	9.00	4.00	1.50%		
35	5.50	0.026	0.11	8.50	4.00	2.00		
40	5.00	0.044	0.22	8.50	2.50	1.50		
45	4.70	0.055	0.38	7.00	2.50	1.50		25.0%
50	4.50	0.066	0.44	8.50	3.00	2.25		20.0
55	4.30	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	4.20	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	4.10	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	4.00	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	4.00	0.195	0.00	0.00	0.00	0.00	100.0	100.0

**Includes inflation at 4.0% per annum.*
***Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: According to the 1994 Group Annuity Mortality table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1578 %	0.0973 %	6.500 %	6.500 %
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

Actuarial Method: Costs were determined using the Projected Unit Credit Actuarial Cost Method. The annual service cost is the present value of the portion of the projected benefit attributable to participation service during the upcoming year, and the Actuarial Accrued Liability (AAL) is equal to the present value of the portion of the projected benefit attributable to service before the valuation date. Service from hire date through the date of full retirement eligibility was used in allocating costs.

Assets: Market Value as provided by KTRS. Return on assets assumed to be 8.00% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

Spouse Coverage in Medical Plans: Use actual census data and current plan elections for spouses of current retirees. For spouses of future retirees, assumed 20% of future retirees will cover spouses, with females 3 years younger than males.

Medical Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following is a chart detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that KTRS pays as the full contribution amount. For retirees age 65 and older, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

Average Monthly KTRS Full Costs & Contributions

Year	Pre-65 Full Cost and Contributions	Post-65 Full Costs	Post-65 Contributions
CY 2004	$ 293	$ 274	$ 274
CY 2005	412	288	288
CY 2006	461	315	315
CY 2007	458	283	283
CY 2008	484	278	278
CY 2009	545	301[1]	285
CY 2010	594	373[1]	342
CY 2011	626	289[2]	289

[1] Under GASB 43 and 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy cannot be taken into account in the gross cost calculations.

[2] 1,800 current benefit recipients are not eligible for premium-free Medicare Part A benefits. For these individuals, the full cost of coverage is, on average, $606 per month. It is assumed no new members will enter this population, as all active members are assumed to have begun contributing to Medicare as of 4/1/1986.

SCHEDULE D
Summary of Main Plan Provisions as Interpreted for Valuation Purposes

RETIREE MEDICAL ELIGIBILITY: For those hired prior to July 1, 2008, retiree medical eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. For those hired on or after July 1, 2008, employees may retire after the completion of 27 years of service, the attainment of age 55 and 10 years of service, or the attainment of age 60 and 5 years of service, but must complete a minimum of 15 years of service to be eligible for medical benefits. Disabled employees, who are totally and permanently incapable of being employed as a teacher and under age 60, but after completing the minimum years of service requirement, are eligible for subsidized retiree medical coverage that is based on the number of years of service credit accrued at disability retirement. At the expiration of the disability entitlement period, the subsidy is recalculated based upon the number of years of service credit that would have accrued had the member remained active. Spouses of those actives who die while eligible to retire are eligible for retiree medical coverage when the death occurred prior to July 1, 2002.

MEDICAL PLAN CONTRIBUTIONS: The full contribution is provided to retirees with 27 or more years of service. The full contribution is determined by KTRS; the full cost is projected based on historical claims data. For retirees with less than 27 years of service, the following percentages of these full contributions are provided:

Percentage of Full Medical Contribution Provided to Retirees

Years of Service	Hired before 7/1/02 (age 65 on 12/31/04 or earlier)	Hired Before 7/1/02 (age 65 on 1/1/05 or later)	Hired after 6/30/02 and before 7/1/08	Hired 7/1/08 and later
27 or more	100%	100%	100%	100%
26 - 26.99	100	100	95	95
25 - 25.99	100	100	90	90
20 - 24.99	100	100	65	65
15 - 19.99	90	75	45	45
10 - 14.99	80	50	25	Not Eligible
5 - 9.99	70	25	10	Not Eligible

Effective January 1, 2009, contributions towards pre-65 retirees and spouses healthcare are based upon the Commonwealth Capital Choice Plan which has a total rate of $625.68 per month for single coverage (rate effective January 1, 2011). A minimum contribution of $36.54 is required to be paid by all pre-65 retirees and an additional $24.00 per month contribution is required for pre-65 retiree smokers.

Effective July 1, 2010, retirees under the age of 65 began a three-year phase-in of the Shared Responsibility Contribution. This contribution reduces the applicable amount of the full contribution provided by the System to retirees, and is the full Shared Responsibility Contribution amount adjusted by the appropriate percentage from the above table. In the first six months, the full amount equaled $37 per month and will increase slightly to $39 per month due to the increase in the Medicare Part B premium cost from $110.50 in 2010 to $115.40 in 2011. Effective July 1, 2011, the full amount will equal $77, which represents two-thirds of the Medicare Part B premium. Effective July 1, 2012, the full Shared Responsibility Contribution will equal the Standard Part B premium that is paid by retirees age 65 and over.

Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. For spouses of active members who died while eligible to retire, prior to July 1, 2002, KTRS provides the same subsidy they would have provided to the retiree for the lifetime of the spouse, or until remarriage. For spouses of active members who die while eligible to retire July 1, 2002, or later, spouses pay 100% of the full contribution. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.

MEMBER CONTRIBUTIONS: Active members make payroll contributions to the Medical Insurance Fund based upon the following schedule:

Employer Percentage of Payroll Contributions Made to Medical Insurance Fund

Fiscal Year Ending	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES	
	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
2011	0.920%	1.750%	1.000%	1.750%	1.000%	1.750%
2012	1.090	1.750	1.250	1.750	1.250	1.750
2013	1.430	1.750	1.750	1.750	1.750	1.750
2014	1.750	1.750	2.250	2.250	2.250	2.250
2015	2.270	2.270	3.000	3.000	3.000	3.000
2016 and Later	2.775	2.775	3.750	3.750	3.750	3.750

Life Insurance Benefit

(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Qualified members working 45 days per year will be eligible for survivor benefits and a life insurance benefit for the balance of the fiscal year and disability benefits under certain conditions. For substitute and part-time members, the survivor benefits and life insurance benefit are provided during the first 44 days if death occurs as the result of a physical injury on the job. The disability benefit is available as a direct result of a physical injury on the job during the five-year vesting period. After vesting, the disability benefit is available upon working 45 days for the balance of that fiscal year in accordance with the regular KTRS disability program.

SCHEDULE E

Active Age and Service Table as of June 30, 2010

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,552								2,552
Total Pay	41,410,302								41,410,302
Avg. Pay	16,227								16,227
25 to 29	7,342	1,401							8,743
Total Pay	217,949,175	63,246,757							281,195,932
Avg. Pay	29,685	45,144							32,162
30 to 34	3,818	4,865	937						9,620
Total Pay	111,452,897	227,947,351	49,974,032						389,374,280
Avg. Pay	29,191	46,855	53,334						40,475
35 to 39	2,817	2,509	4,012	706					10,044
Total Pay	74,313,656	120,604,468	225,193,125	42,603,634					462,714,883
Avg. Pay	26,380	48,069	56,130	60,345					46,069
40 to 44	3,879	1,808	2,277	2,904	723				11,591
Total Pay	79,944,872	88,446,267	128,003,793	178,515,920	46,125,557				521,036,409
Avg. Pay	20,610	48,919	56,216	61,472	63,797				44,952
45 to 49	1,814	1,269	1,334	1,528	2,155	639			8,739
Total Pay	44,689,939	62,904,777	75,802,300	95,801,767	138,579,018	42,056,954			459,834,755
Avg. Pay	24,636	49,570	56,823	62,697	64,306	65,817			52,619
50 to 54	1,657	1,023	1,173	1,232	1,377	1,645	476		8,583
Total Pay	34,303,799	50,798,111	67,243,927	77,191,072	90,754,269	113,263,204	32,669,109		466,223,491
Avg. Pay	20,702	49,656	57,326	62,655	65,907	68,853	68,633		54,319
55 to 59	2,510	755	944	1,083	1,158	823	707	103	8,083
Total Pay	39,542,880	39,660,051	56,148,619	70,541,207	77,380,607	59,083,162	54,593,179	8,806,679	405,756,384
Avg. Pay	15,754	52,530	59,479	65,135	66,823	71,790	77,218	85,502	50,199
60 to 64	2,844	431	487	573	583	372	165	122	5,577
Total Pay	39,563,979	23,085,640	30,037,551	37,299,758	40,586,147	27,094,465	13,907,160	11,098,734	222,673,434
Avg. Pay	13,911	53,563	61,679	65,096	69,616	72,835	84,286	90,973	39,927
65 & over	2,096	148	134	119	129	98	47	84	2,855
Total Pay	19,263,491	7,200,683	8,811,446	8,107,359	9,067,291	7,442,506	3,632,962	7,868,617	71,394,355
Avg. Pay	9,191	48,653	65,757	68,129	70,289	75,944	77,297	93,674	25,007
Total	31,329	14,209	11,298	8,145	6,125	3,577	1,395	309	76,387
Total Pay	702,434,990	683,894,105	641,214,793	510,060,717	402,492,889	248,940,291	104,802,410	27,774,030	3,321,614,225
Avg. Pay	22,421	48,131	56,755	62,623	65,713	69,595	75,127	89,884	43,484

Average Age: 43.5 Average Service10.8

All Retirees and Spouses Receiving Health Benefits as of June 30, 2010
Male and Femal Demographic Breakdown

ATTAINED AGE	NUMBER OF MALES	NUMBER OF FEMALES	TOTAL NUMBER
Under 40	6	30	36
40-44	18	65	83
45-49	42	175	217
50-54	344	980	1,324
55-59	1,804	4,178	5,982
60-64	3,581	6,867	10,448
65-69	2,942	4,729	7,671
70-74	2,134	3,344	5,478
75-79	1,645	2,315	3,960
80-84	1,045	1,873	2,918
85-89	597	1,186	1,783
90-94	221	623	844
95-99	63	288	351
100	2	19	21
101	1	16	17
102	0	5	5
103	0	5	5
104	0	2	2
105 & Over	0	4	4
Total	14,445	26,704	41,149

Retirees Receiving Health Benfits as of June 30, 2010

	UNDER AGE 65	AGE 65 AND OVER	TOTAL
Number	15,627	18,688	34,315
Average Age	60.0	74.9	68.1

Spouses Receiving Health Benfits as of June 30, 2010

	UNDER AGE 65	AGE 65 AND OVER	TOTAL
Number	3,272	3,562	6,834
Average Age	58.8	75.8	67.6

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Statistical Section

for Fiscal Year ending June 30, 2010

This section of the Kentucky Teachers' Retirement System Comprehensive Annual Financial Report (KTRS CAFR) presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

Contents

Financial Trends ..... page 121
These schedules contain trend information to help the reader understand how KTRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 123
These schedules offer demographic and economic indicators to help the reader understand the System's environment within which KTRS's financial activities take place.

Operating Information ..... page 129
These schedules contain benefits, service, and employer contribution data to help the reader understand how KTRS's financial report relates to KTRS's services and activities.

Defined Benefit Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Assets
2010	$ 479,805,088	$ 297,613,965	$ 1,509,785,381	$ 2,287,204,434
2009	442,549,935	293,678,564	(2,020,682,522)	(1,284,454,023)
2008	466,247,782	291,423,948	(909,083,525)	(151,411,795)
2007	434,890,469	269,687,864	2,063,878,767	2,768,457,100
2006	410,920,969	258,464,856	717,308,002	1,386,693,827
2005	388,346,438	247,024,518	946,070,556	1,581,441,512
2004	382,280,099	238,922,086	1,158,182,688	1,779,384,873
2003	341,132,900	233,429,797	538,552,074	1,113,114,771
2002	303,521,106	224,361,453	(520,214,494)	7,668,065
2001	280,108,701	208,702,802	(104,903,741)	383,907,762

Deductions by Type

(Including Benefits by Type)

YEAR	Service Retirants	Disability Retirants	Survivors	Life Insurance*	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Assets
2010	$ 1,249,272,057	$ 57,782,651	$ 14,754,062	$	$ 1,321,808,770	$ 15,310,680	$ 8,830,054	$ 1,345,949,504
2009	1,184,075,934	54,562,038	14,342,435		1,252,980,407	15,208,419	8,165,757	1,276,354,583
2008	1,105,078,345	51,842,271	14,048,485		1,170,969,101	15,965,083	7,551,936	1,194,486,120
2007	1,040,003,417	48,863,876	13,671,586		1,102,538,879	14,822,827	7,351,846	1,124,713,552
2006	972,018,057	46,750,585	12,943,639	3,894,000	1,035,606,281	12,834,222	6,839,859	1,055,280,362
2005	902,863,420	44,070,071	12,585,248	3,852,800	963,371,539	10,975,941	6,652,673	981,000,153
2004	827,731,523	41,491,490	12,047,275	4,015,801	885,286,089	10,471,607	6,578,420	902,336,116
2003	763,099,082	38,744,454	11,259,332	3,961,800	817,064,668	9,951,410	6,388,183	833,404,261
2002	688,754,130	35,947,786	10,532,466	4,210,800	739,445,182	9,146,820	6,677,819	755,269,821
2001	627,637,879	32,233,070	10,005,656	4,110,400	673,987,005	10,673,981	5,950,036	690,611,022

* *Life Insurance Plan valued separately-- see page 119.*

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2010	$ 2,287,204,434	$ 1,345,949,504	$ 941,254,930
2009	(1,284,454,023)	1,276,354,583	(2,560,808,606)
2008	(151,411,795)	1,194,486,120	(1,345,897,915)
2007	2,768,457,100	1,124,713,552	1,643,743,548
2006	1,386,693,827	1,055,280,362	331,413,465
2005	1,581,441,512	981,000,153	600,441,359
2004	1,779,384,873	902,336,116	877,048,757
2003	1,113,114,771	833,404,261	279,710,510
2002	7,668,065	755,269,821	(747,601,756)
2001	383,907,762	690,611,022	(306,703,260)

Medical Insurance Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Recovery Income	Net Investment Income	Total Additions to Plan Net Assets
2010	$ 158,761,433	$ 63,805,573	$ 14,618,348	$ 12,312,999	$ 249,498,353
2009	164,408,037	58,688,767	13,683,830	11,296,280	248,076,914
2008	148,929,322	55,402,830	11,936,887	8,128,179	224,397,218
2007	113,233,784	53,099,678	10,337,338	6,722,080	183,392,880
2006	89,319,498	51,697,167	6,117,979	6,804,286	153,938,930
2005	79,022,562	51,576,031		6,507,537	137,106,130
2004	53,346,747	53,903,551		7,127,109	114,377,407
2003	77,235,407	50,718,084		7,391,671	135,345,162
2002	95,261,407	46,184,010		6,142,817	147,588,234
2001	92,429,167	40,017,682		5,286,426	137,733,275

Deductions by Type

(Including Benefits by Type)

	Insurance Benefit Expense					
YEAR	Under Age 65	Age 65 & Over	Third Party Service Fee	Total Insurance Benefits Expense	Refunds	Total Deductions to Plan Net Assets
2010	$ 136,702,152	$ 100,675,376	$	$ 237,377,528	$	$ 237,377,528
2009	123,819,475	81,037,647		204,857,122		204,857,122
2008	107,437,450	71,838,765		179,276,215	10,014	179,286,229
2007	104,828,254	69,400,843		174,229,097	5,834	174,234,931
2006	102,970,290	66,660,106		169,630,396	5,143	169,635,539
2005	82,186,847	64,233,482		146,420,329	9,072	146,429,401
2004	69,139,458	54,128,210		123,267,668	12,150	123,279,818
2003	63,546,028	52,300,059		115,846,087	7,808	115,853,895
2002	54,412,278	50,566,637	3,221,712	104,978,915	6,066	104,984,981
2001	46,544,264	38,389,936	3,023,755	88,155,912	5,155	88,161,067

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2010	$ 249,498,353	$ 237,377,528	$ 12,120,825
2009	248,076,914	204,857,122	43,219,792
2008	224,397,218	179,286,229	45,110,989
2007	183,392,880	174,234,931	9,157,949
2006	153,938,930	169,635,539	(15,696,609)
2005	137,106,130	146,429,401	(9,323,271)
2004	114,377,407	123,279,818	(8,902,411)
2003	135,345,162	115,853,895	19,491,267
2002	147,588,234	104,984,981	42,603,253
2001	137,733,275	88,161,067	49,572,208
	89,050,373	80,365,738	8,684,635

Life Insurance Plan
Past Four Fiscal Years

Additions by Source

YEAR	Employer Contributions	Net Investment Income	Total Additions to Plan Net Assets
2010	$ 1,966,826	$ 5,383,644	$ 7,350,470
2009	5,455,473	5,282,958	10,738,431
2008	5,411,249	6,321,491	11,732,740
2007	5,022,137	(3,413,537)	1,608,600

Deductions by Type
(Including Benefits by Type)

Changes in Net Assets

YEAR	Life Insurance	Total Deductions to Plan Net Assets	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2010	$ 4,148,511	$ 4,148,511	$ 7,350,470	$ 4,148,511	$ 3,201,959
2009	3,694,000	3,694,000	10,738,431	3,694,000	7,044,431
2008	4,003,000	4,003,000	11,732,740	4,003,000	7,729,740
2007	4,245,000	4,245,000	1,608,600	4,245,000	(2,636,400)

Distribution of Active Contributing Members as of June 30, 2010

By Age

Age	Male	Female
20-24	900	2,934
25-29	2,740	7,761
30-34	2,552	7,462
35-39	2,473	7,753
40-44	2,202	7,322
45-49	2,084	6,524
50-54	1,976	6,247
55-59	1,951	5,498
60-64	1,507	3,562
65-69	636	1,319
Over 70	312	672
TOTAL	19,333	57,054

By Service

Years of Service	Male	Female
Less than 1	6,047	15,431
1-4	4,312	13,559
5-9	3,098	9,801
10-14	2,261	7,115
15-19	1,591	4,914
20-24	1,144	3,584
25-29	614	1,904
30-34	194	645
35 or more	72	101
TOTAL	19,333	57054

Principal Participating Employers
Current Year and Nine Years Ago

	2010			2001		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	10,058	1	13.02%	7,108	1	12.83%
Fayette County Public Schools	4,384	2	5.67	2,958	2	5.34
Boone County Schools	1,826	3	2.36	929	5	1.68
Hardin County Schools	1,370	4	1.77	982	3	1.77
Kenton County Schools	1,299	5	1.68	833	8	1.50
Warren County Schools	1,260	6	1.63	779	10	1.41
Bullitt County Schools	1,239	7	1.60	758	11	1.37
Oldham County Schools	1,190	8	1.54	649	15	1.17
Madison County Schools	1,177	9	1.52	679	14	1.23
Daviess County Schools	1,157	10	1.50	790	9	1.43
All Other *	52,316		67.70%	38,930		70.28%
Total (197 Employers)	77,276		100.00%	55,395		100.00%

** Includes new retirees with contributions during the fiscal year.*

KTRS Schedule of Participating Employers
School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

KTRS Schedule of Participating Employers *(continued)*

School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Monticello
36. Murray
37. Newport
38. Owensboro
39. Paducah
40. Paintsville
41. Paris
42. Pikeville
43. Pineville
44. Raceland
45. Russell
46. Russellville
47. Science Hill
48. Silver Grove
48. Somerset
50. Southgate
51. Walton-Verona
52. West Point
53. Williamsburg
54. Williamstown

Universities & Community/ Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/ Other Organizations

State of Kentucky

1. Education and Humanities Cabinet
2. Legislative Research Commission
3. Workforce Investment Cabinet
4. Finance and Administration Cabinet

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association President
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative
13. Jefferson County Teacher's Association

108	Alabama	3	New Hampshire
3	Alaska	8	New Jersey
69	Arizona	16	New Mexico
32	Arkansas	38	New York
99	California	228	North Carolina
46	Colorado	1	North Dakota
12	Connecticut	519	Ohio
5	Delaware	21	Oklahoma
4	District of Columbia	24	Oregon
887	Florida	37	Pennsylvania
209	Georgia	0	Rhode Island
5	Hawaii	149	South Carolina
7	Idaho	8	South Dakota
77	Illinois	717	Tennessee
573	Indiana	162	Texas
15	Iowa	11	Utah
27	Kansas	1	Vermont
27	Louisiana	125	Virginia
11	Maine	33	Washington
27	Maryland	82	West Virginia
17	Massachusetts	21	Wisconsin
35	Michigan	4	Wyoming
17	Minnesota		
53	Mississippi		
68	Missouri		
8	Montana		
6	Nebraska		
19	Nevada		

Distribution of Retirement Payments Worldwide

As of June 30, 2010

Additional Distribution Outside USA

5	Canada	1	Switzerland
2	Military Apo	1	Barbados
1	Philippines		

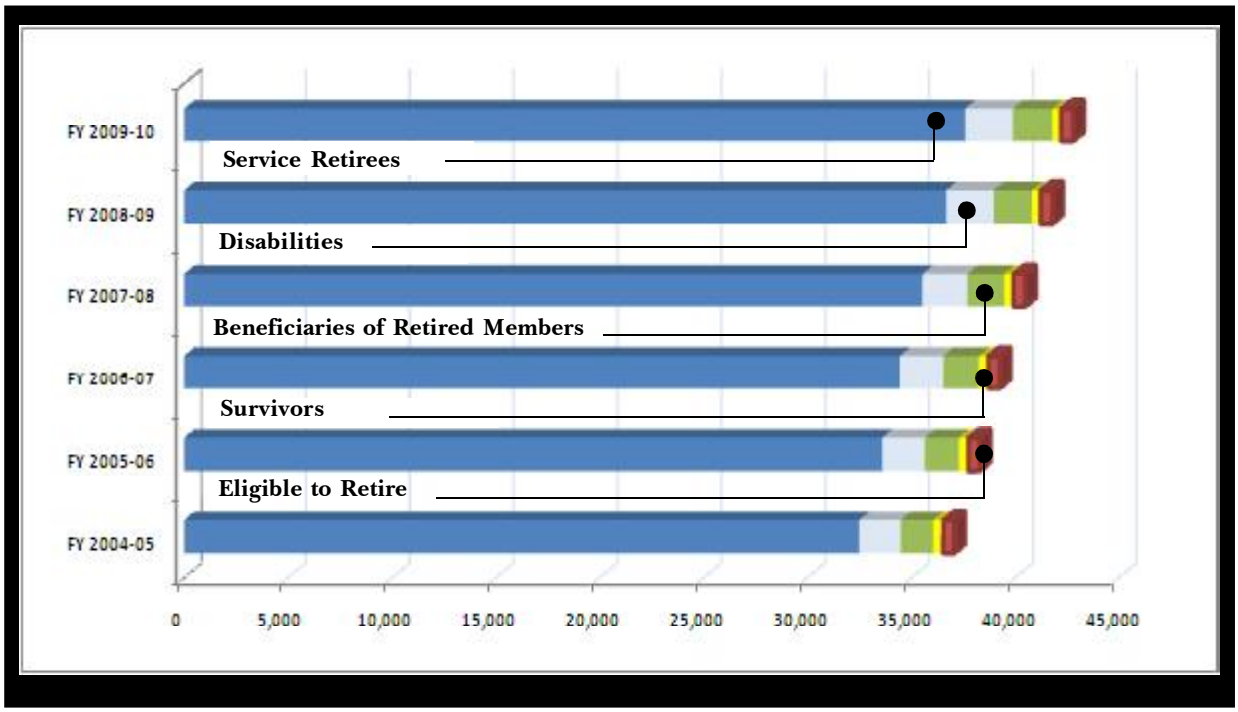
TOTAL: Number of Out of State Payments 4,684
TOTAL: Out of State Payments ..... $ 103,518,389
TOTAL: Number of Payments 44,285
GRAND TOTAL: Amount of Payments ..... $ 1,321,792,347

Distribution of Retirement Payments Statewide

as of June 30, 2010

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Adair	$ 5,046,949	179	Laurel	14,703,176	524
Allen	4,358,581	147	Lawrence	3,671,436	133
Anderson	5,464,510	184	Lee	1,865,249	75
Ballard	3,140,870	105	Leslie	3,859,452	137
Barren	11,356,861	372	Letcher	8,723,935	305
Bath	3,336,531	122	Lewis	4,819,792	161
Bell	9,929,150	354	Lincoln	7,761,152	256
Boone	23,174,458	708	Livingston	2,515,494	90
Bourbon	5,214,215	180	Logan	7,436,422	261
Boyd	15,375,237	479	Lyon	2,720,016	91
Boyle	11,882,687	394	Madison	37,153,119	1,172
Bracken	2,374,046	80	Magoffin	4,379,390	152
Breathitt	6,094,900	228	Marion	4,376,032	153
Breckinridge	5,301,383	164	Marshall	10,026,018	320
Bullitt	12,958,840	375	Martin	3,636,487	133
Butler	2,175,714	76	Mason	5,394,409	179
Caldwell	4,949,493	168	McCracken	19,448,847	633
Calloway	18,832,064	611	McCreary	5,226,260	182
Campbell	19,921,235	608	McLean	2,902,186	93
Carlisle	1,261,293	46	Meade	4,983,202	148
Carroll	2,401,493	80	Menifee	1,571,667	63
Carter	9,479,770	331	Mercer	6,249,553	230
Casey	4,375,854	159	Metcalfe	2,936,495	99
Christian	14,754,328	474	Monroe	4,537,651	158
Clark	9,199,139	316	Montgomery	7,714,870	259
Clay	7,676,353	265	Morgan	5,218,535	170
Clinton	3,601,262	127	Muhlenberg	8,568,917	282
Crittenden	1,775,228	65	Nelson	10,861,058	335
Cumberland	2,242,385	77	Nicholas	1,685,432	58
Daviess	29,231,301	945	Ohio	5,672,205	189
Edmonson	2,582,356	89	Oldham	13,290,103	401
Elliott	1,579,785	63	Owen	2,264,598	77
Estill	3,825,725	133	Owsley	3,117,552	108
Fayette	77,645,414	2,539	Pendleton	3,733,108	124
Fleming	4,392,084	158	Perry	10,181,615	349
Floyd	14,865,877	540	Pike	22,680,322	779
Franklin	21,067,838	838	Powell	3,188,425	107
Fulton	2,090,200	67	Pulaski	18,180,253	627
Gallatin	561,070	20	Robertson	588,138	22
Garrard	4,705,953	156	Rockcastle	4,871,269	176
Grant	4,838,170	149	Rowan	13,279,586	446
Graves	10,789,694	357	Russell	5,657,935	194
Grayson	7,484,611	246	Scott	10,617,302	336
Green	3,020,972	105	Shelby	12,003,580	383
Greenup	10,313,662	345	Simpson	4,623,705	153
Hancock	2,061,265	69	Spencer	3,647,377	105
Hardin	22,852,558	722	Taylor	7,924,415	265
Harlan	11,114,936	385	Todd	2,292,982	85
Harrison	5,324,263	174	Trigg	4,554,520	157
Hart	4,457,442	144	Trimble	1,649,437	46
Henderson	11,606,657	370	Union	3,322,984	120
Henry	4,643,080	161	Warren	43,156,408	1,444
Hickman	1,074,428	36	Washington	2,966,809	109
Hopkins	13,276,111	432	Wayne	6,200,471	213
Jackson	3,113,651	121	Webster	3,885,168	133
Jefferson	205,877,867	5,839	Whitley	16,195,251	565
Jessamine	8,428,108	291	Wolfe	3,277,435	115
Johnson	9,503,858	312	Woodford	7,806,516	253
Kenton	24,747,630	783			
Knott	6,510,376	235	**Total in Kentucky**	**$1,218,273,958**	**39,601**
Knox	6,624,048	230			
Larue	4,632,418	140			

Growth in Annuitants
as of June 30, 2010



Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Survivors	Eligible to Retire
FY 2004-05	32,506	1,987	1,566	507	525
FY 2005-06	33,618	2,039	1,631	495	531
FY 2006-07	34,462	2,086	1,722	466	549
FY 2007-08	35,550	2,155	1,778	468	554
FY 2008-09	36,684	2,209	1,837	448	559
FY 2009-10	37,607	2,284	1,915	435	567

Schedule of Annuitants by Type of Benefit as of June 30, 2010

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Retirement*				
		1	2	3	4	5
1 - 500	3,142	2,251	17	387	196	291
501 - 1,000	2,661	2,020	189	9	443	0
1,001 - 1,500	3,399	2,481	336	0	582	0
1,501 - 2,000	4,165	3,343	446	2	374	0
2,001 - 2,500	6,563	5,590	611	14	348	0
2,501 - 3,000	8,544	7,880	409	14	241	0
3,001 - 3,500	5,875	5,595	150	4	126	0
3,501 - 4,000	3,558	3,390	84	2	82	0
4,001 - 4,500	2,171	2,101	23	2	45	0
4,501 - 5,000	1,211	1,182	11	0	18	0
5,001 & OVER	1,810	1,774	8	1	27	0
Total**	43,099	37,607	2,284	435	2,482	291

***Type of Retirement**

1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Survivor Payment - Active Member*
4-*Beneficiary Payment - Retired Member*
5-*Disabled Adult Child*

*** Retirees in waiver program are not included.*

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,556	369	246	65	9	381	123	393
501 - 1,000	1,382	325	218	141	9	295	207	84
1,001 - 1,500	1,776	403	318	161	16	350	282	93
1,501 - 2,000	2,208	481	371	160	5	522	296	122
2,001 - 2,500	3,086	610	590	234	9	1,114	648	272
2,501 - 3,000	4,387	902	642	241	11	1,327	890	144
3,001 - 3,500	3,030	627	465	194	9	843	652	55
3,501 - 4,000	1,768	376	318	122	7	513	430	24
4,001 - 4,500	1,084	237	195	84	7	305	253	6
4,501 - 5,000	594	128	127	64	4	152	140	2
5,001 & OVER	922	160	202	99	14	196	213	4
Total	21,793	4,618	3,692	1,565	100	5,998	4,134	1,199

***Option selected:**

1 - Straight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/2000 TO 06/30/2001								
Average monthly benefit	$145	$402	$881	$1,283	$1,779	$2,472	$3,246	
Average final average salary	$3,695	$2,842	$3,444	$3,550	$3,807	$4,024	$4,707	
Number of retired members	48	73	86	85	143	1008	486	1,929
07/01/2001 TO 06/30/2002								
Average monthly benefit	$204	$408	$790	$1,296	$1,898	$2,552	$3,407	
Average final average salary	$4,143	$2,950	$3,312	$3,613	$3,920	$4,115	$4,884	
Number of retired members	65	128	82	116	107	1019	574	2,091
07/01/2002 TO 06/30/2003								
Average monthly benefit	$205	$480	$940	$1,344	$1,940	$2,715	$3,592	
Average final average salary	$4,301	$3,380	$3,714	$3,798	$4,078	$4,378	$5,121	
Number of retired members	58	83	98	103	155	837	508	1,842
07/01/2003 TO 06/30/2004								
Average monthly benefit	$220	$474	$839	$1,444	$1,978	$2,758	$3,486	
Average final average salary	$5,243	$3,357	$3,349	$3,936	$4,182	$4,425	$5,062	
Number of retired members	43	84	98	96	145	818	405	1,689
07/01/2004 TO 06/30/2005								
Average monthly benefit	$187	$528	$906	$1,488	$2,037	$2,892	$3,860	
Average final average salary	$4,353	$3,511	$3,647	$4,055	$4,317	$4,602	$5,275	
Number of retired members	55	98	107	106	145	811	875	2,197
07/01/2005 TO 06/30/2006								
Average monthly benefit	$202	$473	$1,019	$1,493	$2,136	$2,998	$4,063	
Average final average salary	$4,106	$3,253	$4,052	$4,117	$4,537	$4,721	$5,490	
Number of retired members	44	105	106	132	193	689	604	1,873
07/01/2006 TO 06/30/2007								
Average monthly benefit	$178	$514	$930	$1,559	$2,276	$3,140	$4,263	
Average final average salary	$4,102	$3,346	$3,590	$4,228	$4,612	$4,970	$5,758	
Number of retired members	48	113	90	109	169	534	514	1,577
07/01/2007 TO 06/30/2008								
Average monthly benefit	$199	$524	$1,117	$1,658	$2,436	$3,279	$4,319	
Average final average salary	$3,816	$3,066	$4,215	$4,412	$4,983	$5,067	$5,786	
Number of retired members	50	130	112	150	217	557	615	1,831
07/01/2008 TO 06/30/2009								
Average monthly benefit	$200	$573	$1,005	$1,725	$2,427	$3,368	$4,496	
Average final average salary	$4,617	$3,942	$3,873	$4,686	$4,974	$5,278	$5,960	
Number of retired members	72	168	137	115	242	505	585	1,824
07/01/2009 TO 06/30/2010								
Average monthly benefit	$185	$525	$1,104	$1,700	$2,513	$3,468	$4,670	
Average final average salary	$3,654	$3,637	$4,124	$4,508	$5,184	$5,383	$6,102	
Number of retired members	28	133	98	103	242	442	601	1,647

Medical Insurance Plan

Average Insurance Premium Supplements for the Last Ten Years

	Years of Service Credit				
	00-9.99	10-14.99	15-19.99	20>=	TOTAL
Retirement Effective Dates					
07/01/2000 TO 06/30/2001					
Average monthly supplement	$107.71	$ 165.08	$ 201.72	$ 233.51	
Number of retired members	42	69	96	1,634	1,841
07/01/2001 TO 06/30/2002					
Average monthly supplement	$ 128.78	$ 167.74	$ 201.48	$ 252.15	
Number of retired members	59	62	99	1,694	1,914
07/01/2002 TO 06/30/2003					
Average monthly supplement	$ 106.62	$ 142.57	$ 212.81	$ 277.64	
Number of retired members	34	59	91	1,457	1,641
07/01/2003 TO 06/30/2004					
Average monthly supplement	$ 100.50	$ 148.85	$ 219.41	$ 289.98	
Number of retired members	30	59	82	1,365	1,536
07/01/2004 TO 06/30/2005					
Average monthly supplement	$ 138.29	$ 214.32	$ 305.39	$ 394.92	
Number of retired members	36	70	93	1,768	1,967
07/01/2005 TO 06/30/2006					
Average monthly supplement	$ 161.03	$ 241.76	$ 362.31	$ 487.23	
Number of retired members	28	49	106	1,440	1,623
07/01/2006 TO 06/30/2007					
Average monthly supplement	$ 146.24	$ 260.95	$ 363.45	$ 489.73	
Number of retired members	29	53	80	949	1,111
07/01/2007 TO 06/30/2008					
Average monthly supplement	$ 162.54	$ 260.71	$ 378.28	$ 512.29	
Number of retired members	36	61	104	952	1,153
07/01/2008 TO 06/30/2009					
Average monthly supplement	$ 167.78	$ 298.09	$ 414.38	$ 562.59	1,522
Number of retired members	26	64	103	1,329	
07/01/2009 TO 06/30/2010					
Average monthly supplement	$ 151.05	$ 339.31	$ 435.19	$ 621.12	
Number of retired members	32	73	103	1,276	1,484

Summary of Fiscal Year 2009-2010
Retiree Sick Leave Payments

ACTUARIAL RATE

Grand Total Members Retiring	1,911
Total members receiving sick leave payments	1,403
Total amount of sick leave payments @ 9.855% contribution rate	$ 17,974,601.49
Average payment per retiree	$ 12,811.55
Total increase in final 3/5 average salary base	$ 5,260,978.02
Average increase in final average salary	$ 3,749.81
Total service credit of 1,403 retirees	37,779.32
Average service credit of 1,403 retirees	26.93
Additional Average Monthly Annuity payment per Retirement Formula	
3,749.81 x 26.93 x 2.50% =	$ 2,524.56
2,524.56/ 12 months	$ 210.38
Anticipated Lifetime Payout of Additional Annuity	
210.38 X 142.1587 X 1403 new factor	$ 41,960,008.27

Funding of Additional Payments

Member Contributions 9.855% x $17,974,601.49 =	$ 1,771,396.98
State Contributions 13.105% x $17,974,601.49 =	2,355,571.53
Total Member-State Contributions	$ 4,126,968.50
DEFICIT:	
Anticipated additional payout	$ 41,960,008.27
Less total Member & State Contributions	4,126,968.50
Subtotal unfunded debt	37,833,039.77
Less current year appropriation	6,281,300.00
TOTAL DEFICIT (overpayment) *	$ 31,551,739.77 *

* NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. Sick leave deficits are amortized over 20 year periods.

Teachers' Retirement System
of the State of Kentucky

The 71st Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Year Ended June 30, 2011

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN, CPA
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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Introductory Section

for Fiscal Year ending June 30, 2011

Chairperson's Letter

Teachers' Retirement System
of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

BOARD OF TRUSTEES

BARBARA G. STERRETT
CHAIRPERSON
LEXINGTON

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EX OFFICIO
DR. TERRY HOLLIDAY
COMMISSIONER
DEPARTMENT
OF EDUCATION

EX OFFICIO
TODD HOLLENBACH
STATE TREASURER

December 30, 2011

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2011, the 71st year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

KTRS closed the 2010-2011 fiscal year with $15.5 billion net assets. The active membership totaled 76,349 and the retired membership was 44,419 with an annual payroll of $1.4 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. Every effort will be made to insure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Barbara G. Sterrett
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 30, 2011

Honorable Steven L. Beshear, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky

Dear Governor Beshear:

It is my pleasure to submit the 71st Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a Component Unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2011. State law provides the legal requirement for the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system are also required. Kentucky Teachers' Retirement System (KTRS) has produced an annual report that will provide you, the General Assembly, and the general public, with information necessary to gain a better understanding of KTRS.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of KTRS for the year ended June 30, 2011. Discussion and analysis of net assets and related additions and deductions is presented in Management's Discussion and Analysis beginning on page 15.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are accurately executed and financial statements are fairly presented. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Secretary and the Governance and Audit Committee of the Board of Trustees.

Profile of KTRS

KTRS began operations on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state. KTRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 24. Also, the summary of the plan provisions starting on page 94 is useful in understanding benefit and contribution provisions. The population of KTRS membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the retirement system. The budget is approved by the Board of Trustees and submitted to the Kentucky General Assembly for legal adoption. The KTRS investment earnings fund the administrative budget appropriations.

Major Initiatives

The System continually seeks opportunities to better serve its membership. During the past year, KTRS has continued work on several major initiatives concerning funding and cost containment for retiree health care, the investment program, and information technology.

Implementation of the "Shared Responsibility" Solution for Funding Retiree Health Care

The Board of Trustees and Staff appreciate the extraordinary efforts of the many active and retired teachers and education community constituency groups who helped develop a "shared responsibility" solution for adequately funding retiree health care benefits. The Board and Staff are also grateful for the hard work of the General Assembly and Governor in enacting the plan. The shared responsibility solution for funding retiree health care was truly a historic accomplishment that will help insure the retirement security of the state's teachers.

The shared responsibility solution, which was introduced as House Bill 540 in 2010, passed through both chambers of the General Assembly without a single negative vote, and was signed into law by the Governor. The funding solution provides that active teachers, retired teachers, school districts,

and the state will all share in prefunding retiree health care benefits. This approach will help insure that both current retired teachers and active teachers will receive health care benefits during retirement. Moreover, prefunding retiree health care benefits with shared responsibility by all interested parties is the most cost effective and actuarially sound method for providing retiree health care benefits.

The shared responsibility solution also aids the actuarial stability of the retirement annuity fund by stopping the redirection of contributions from the retirement annuity fund to pay for the costs of current retiree health care. From fiscal year 2005 through fiscal year 2010, over $560 million was redirected from the retirement annuity fund to the medical insurance fund with the agreement that the amount would be repaid by the state with interest over staggered 10 year terms. On August 26, 2010, this debt by the state to the KTRS retirement annuity fund was fully satisfied ahead of schedule when KTRS received the proceeds of a bond issued by the state. The Board is also very grateful to the Governor and General Assembly for this affirmative action to help insure the retirement security of the state's teachers.

The shared responsibility solution for funding retiree health care was effective on July 1, 2010, and the bond proceeds were received in the KTRS pension fund on August 26, 2010, both developments had positive effects on the actuarial valuations of the retiree medical and pension plans as of June 30, 2011. Furthermore, in the future, the shared responsibility solution for prefunding retiree health care and stopping the redirection of contributions from the retirement annuity fund to pay for the costs of current retiree health care will improve the funding status of both the KTRS medical insurance and retirement annuity plans.

KTRS Initiatives to Contain Health Plan Costs

The Board views the obligation to contain health plan costs where practical without shifting material costs to retired members or substantially decreasing retired members' benefits as part of its fiduciary responsibility. During the year, KTRS took action to implement several initiatives to contain costs in the health plan and improve the retirement security of the state's teachers.

On July 1, 2010, KTRS moved its Medicare drug plan to an insured Employer Group Waiver Prescription Drug Plan. KTRS took this action in order to receive deeper federal subsidies on an annual basis, and to reduce the actuarial liability of the KTRS Medical Insurance Fund by $900 million. Although the cost savings from this action was dramatic, there were no material changes to the existing drug plan design.

KTRS also took action during the year to add a "commercial wrap" to the existing KTRS Employer Group Waiver Prescription Drug Plan for plan year 2012. The commercial wrap, which is permitted under the federal health care reform, includes some infrastructure changes that will result in cost savings without significant changes to the drug plan for retired members.

During the year, KTRS took action to join the KY Rx Coalition spearheaded by the University of Kentucky. By joining the KY Rx Coalition effective January 1, 2012, KTRS will achieve annual savings through leveraging greater prescription purchasing power and deeper drug discounts. Another advantage will be the availability of the University of Kentucky resources with a dedicated University of Kentucky pharmacist available by phone and assigned to KTRS retirees to field prescription questions and to help find lower-cost generic equivalent drugs.

Implementation of the commercial wrap and joining the KY Rx Coalition during plan year 2012 will produce projected annual savings of $11 million and reduces the actuarial liability of the KTRS Medical Insurance Fund by $400 million.

Investment Program

KTRS's investment program had exceptional performance during the year with positive returns of 21.6%. Additionally, because of KTRS's focus on fundamental value and risk control, it was able to continue a multiyear program of broadening the portfolio's diversification. This included new opportunistic investments that took advantage of dislocated financial markets. Moreover, during the year, KTRS continued to implement changes to the investment program based upon an asset liability modeling study, which included an analysis of the shared responsibility solution for funding retiree health care and receipt of the proceeds of a bond in the KTRS pension fund. These ongoing efforts are a continuation of a disciplined investment process and long term focus on retirement security. This focus has generated exceptionally stable returns through the System's history and we have every confidence that it will do so in the future. KTRS's investment program continues to be recognized as a leader in the public pension community for

governance structure, trustee education, and cost effectiveness.

Information Technology

KTRS staff has continued working on a multi-year project planning and designing a new information technology system known as the "Pathway System." During the year, the Board took action and authorized hiring a vendor to begin building and installation of the new system. The objective of the Pathway System is to streamline retirement processes, and improve staff efficiency in providing services to retirees and active members. During this project, the current legacy KTRS Pension Management System will be replaced with a new system of database software and applications, which will accomplish these goals. The new system will allow KTRS to redesign and improve office processes and ultimately apply new technologies to these processes. This will increase staff productivity, provide seamless member account management, and simplify future system modifications. As KTRS continues to implement changes to the information technology system under the Pathway System, we expect that the new technology will help the retirement system better serve its membership.

Economic Condition

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 51 contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules among others.

The investment portfolio experienced a growth in value during the 2010-2011 fiscal year as the portfolio's market value increased from $12,680,439,457 to $15,547,900,381. The increase in value of the portfolio and of the overall market was due to improvements in the financial markets and realized capital gains. Employer and employee contributions also provided significant income to the portfolio.

Investment income, including appreciation of asset values, net of investment expenses, for the 2010-2011 fiscal year was $2,772,410,985. The major contributing factor of the positive return from the System's investment portfolio was the net appreciation in fair value of investments in the amount of $2,397,731,918. The largest earnings component, $212,381,957 was the result of interest income. Other income, net of expenses, of $162,297,110 was generated from dividends, rent and securities lending.

According to the KRS 161.430 the KTRS Board of Trustees has the responsibility to invest the assets of the System. The Board of Trustees delegates investment authority to the Investment Committee. The Investment Committee works closely with experienced investment counselors and the System's professional staff in evaluating and selecting investment allocations.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the retirement system and its Trust Funds. The investment program shall also provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. While the entire portfolio earned a total return of positive 21.6% in 2010-11, the portfolio's ten-year annualized rate of return is 4.8% and the twenty-year annualized rate of return is 7.7%.

KTRS annuities have a bolstering impact on the Commonwealth of Kentucky's economy, as approximately 92% of retired teachers reside within the state. Total benefits (retirement, medical...etc.) paid this fiscal year were approximately $1.7 billion.

Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes by statute the levels of contribution that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

The latest actuarial valuation was for the period ending June 30, 2011. This report reflects the System's assets, based on modified market value; totaled $14.9 billion and the liabilities totaled $26 billion. The funded ratio of actuarial assets to liabilities is 57.4%. The actuary reports: "…Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the

benefits called for under the System may be safely anticipated…."

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions (on page 43). After the 2011 employer contributions there remains a net pension obligation of $229,548,428 (as detailed on page 88). Annual required employer contributions for the Medical Insurance Fund are provided in the schedule of employer contributions (on page 44). The 2011 employer shortfall of contributions created a net OPEB obligation of $1,110,938,699 (as detailed on page 112).

The sustained decline in the funded ratio is a continuation of the cumulative effect of the transfer of contributions from the retirement fund to the medical insurance fund from 1998-2005. Also contributing to the reduced funded ratio are market fluctuations that are being recognized using actuarial smoothing over a five-year period and the changing demographics of the retirement system.

KTRS expects that the shared responsibility solution for funding retiree health care will help improve the funded status of the pension fund in the future by stopping the redirection of contributions from the pension fund to pay for the costs of current retiree health care. As well, on August 26, 2010, KTRS received $465 million in proceeds from a bond issued by the state. This bond issue was approved by the Governor under the authority of legislation enacted by both chambers of the General Assembly during the 2010 Regular and Special Sessions. The proceeds of this bond issue were deposited in the KTRS retirement annuity fund in repayment of retirement contributions that had been redirected by the state to pay retiree health care from fiscal year 2005 through fiscal year 2010.

KTRS Medical Insurance Plan

The shared responsibility solution for funding retiree health care, which went into effect on July 1, 2010, provides a method of prefunding retiree health care over a 30 year period. The System believes that the shared responsibility solution for funding retiree health care will help insure the retirement security of the state's teachers. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2011 indicated that the fund has an unfunded liability of $3.1 billion. The funded ratio of actuarial assets to liabilities is 8.6%. The actuary reports: "…if the State contributions to the Medical Insurance Fund are increased to the planned levels, the medical plans will begin to operate in a more actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the medical plans will improve…."

Additionally, the System believes continued steps must be taken to realize true cost containment through legislation on both the state and national levels. KTRS will continue to take measures to contain costs and increase revenues to the Medical Insurance Plan or may adjust coverage to meet existing revenues.

Effective January 1, 1999 KTRS eligible retirees and eligible dependents, who are not eligible for Medicare, have their health insurance through plans administered by the Kentucky Department for Employee Insurance. Under this arrangement, KTRS provides a monthly supplement to assist the eligible retiree in purchasing health insurance. Retirees eligible for Medicare have their health insurance through the Medicare Eligible Health Plan sponsored by KTRS. These retirees also receive a supplement for the cost of their coverage.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the KTRS. A certification from the Certified Public Accountant and Actuary are enclosed in this report. The System's consultants who are appointed by the Board are listed on pages 46, 47, and 74 of this report.

National Recognition

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2010. The Certificate of Achievement is a prestigious national award-

recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. KTRS has received the Certificate of Achievement for the last twenty-three consecutive years (fiscal years ended 1988-2010). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council (PPCC) awarded a Certificate of Achievement to the Teachers' Retirement of the State of Kentucky for 2011 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure, and are widely acknowledged to be marks of excellence in the public pension industry.

The PPCC is a coalition of the four major public pension organizations in the nation. These include the National Association of State Retirement Administrators, The National Council on Teacher Retirement, the National Conference on Public Employees Retirement Systems, and the Government Finance Officers Association.

NCTR Executive Committee

Gary L. Harbin serves as the Past-President on the Executive Committee of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 69 state, territorial, local and university pension systems with combined assets in excess of 2 trillion, serving more than 18 million active and retired teachers, non-teaching personnel and other public employees.

Public Sector HealthCare Roundtable

Mr. Harbin also serves on the Board of Directors and as President of the Public Sector HealthCare Roundtable. The Roundtable is a national coalition of public sector health care purchasers that was formed to insure that the interests of the public sector are properly represented during the formulation, debate, and implementation of federal health care reform initiatives. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

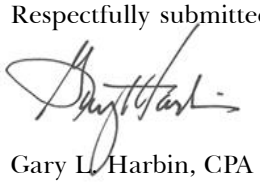
Acknowledgments

The preparation of this report reflects the combined efforts of the KTRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship of the assets contributed by KTRS members and their employers.

This report is located at the KTRS web address www.ktrs.ky.gov, and is made available to all employer members of the System whose cooperation continues to contribute significantly to our success, and who form the vital link between KTRS and its active members.

KTRS management and staff are committed to the continued operation of an actuarially sound retirement system. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



Gary L. Harbin, CPA
Executive Secretary

Board of Trustees

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Chairperson
Retired Teacher Trustee
Lexington

Ronald L. Sanders
Vice Chairperson
Lay Trustee
Hodgenville

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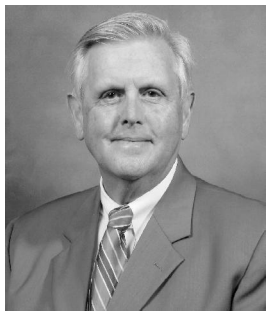
Charles Ludwig
Teacher Trustee
Louisville

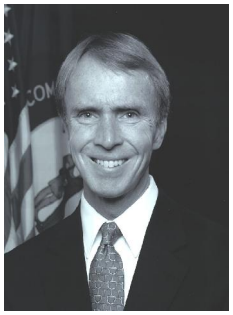
Dr. Tom Shelton
Teacher Trustee
Lexington

Ruth Ann Sweazy
Teacher Trustee
Taylorsville

Laura Zimmerman
Teacher Trustee
Lexington



Dr. Terry Holliday
Ex Officio Trustee
Commissioner,
Dept. of Education



Todd Hollenbach
Ex Officio Trustee
State Treasurer

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

GARY L. HARBIN, CPA
Executive Secretary

ROBERT B. BARNES, JD
General Counsel and
Deputy Executive Secretary
Operations

J. ERIC WAMPLER, JD
Deputy Executive Secretary
Finance & Administration

PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

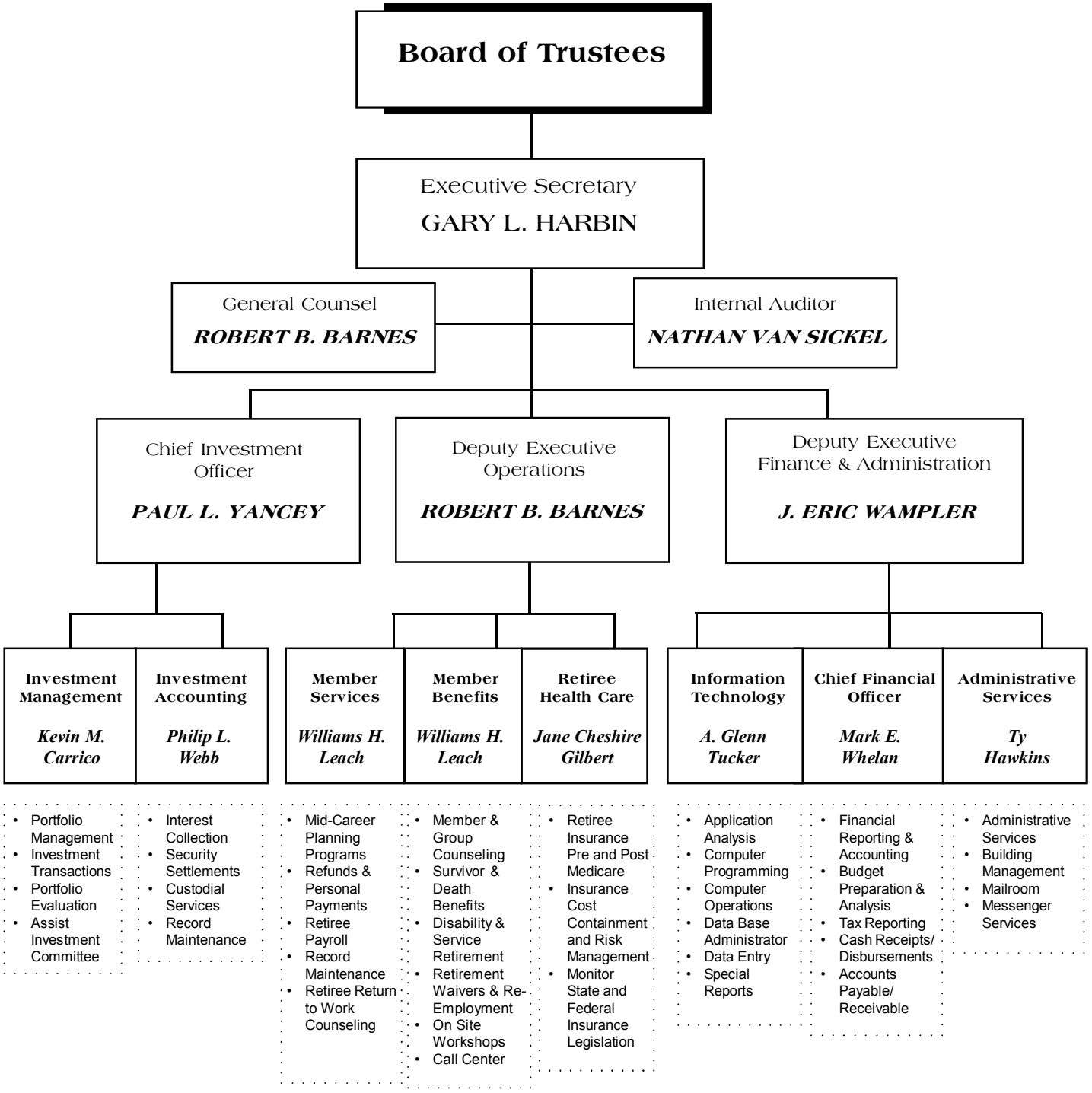
Cavanaugh Macdonald Consulting, LLC
3550 Busbee Parkway, Suite 250
Kennesaw, GA 30144

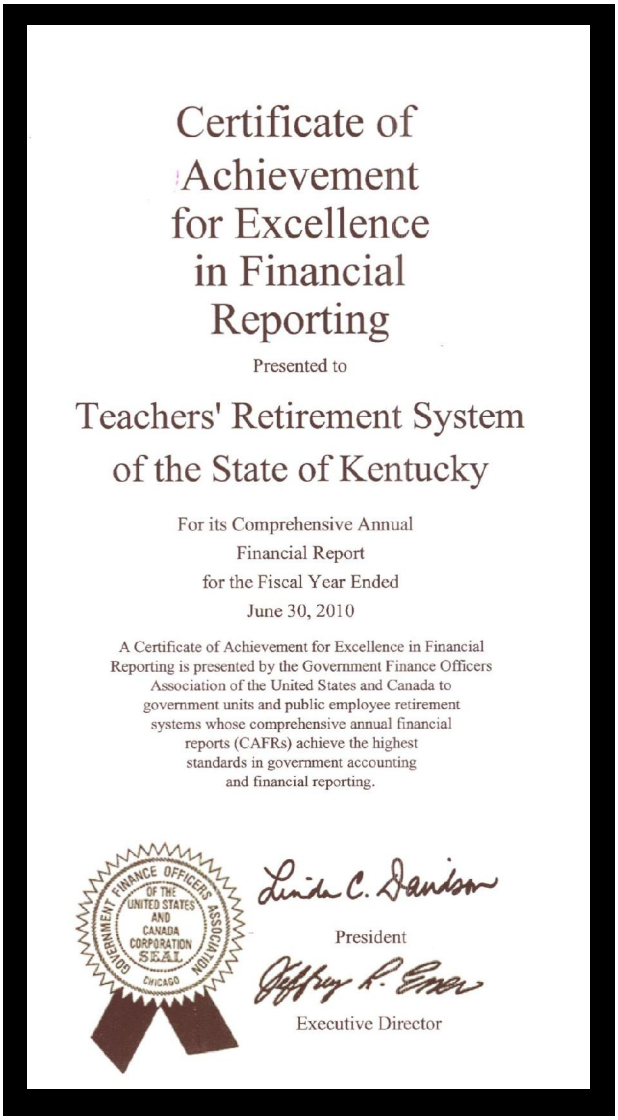
AUDITOR

Charles T. Mitchell, LLP
229 West Main Street, Suite 103
P.O. Box 698
Frankfort, Kentucky 40601

** See page 74 of the Investment Section for investment consultants.*

Kentucky Teachers' Retirement System
Organizational Chart





Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

Teachers' Retirement System
of the State of Kentucky

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended
June 30, 2010

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

GOVERNMENT FINANCE OFFICERS ASSOCIATION OF THE UNITED STATES AND CANADA CORPORATION SEAL CHICAGO

Linda C. Davidson
President

Jeffrey L. Esser
Executive Director

GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last twenty-three consecutive years (fiscal years ended 1988-2010).

Public Pension Coordinating Council

Public Pension Standards

2011 Award

Presented to

Kentucky Teachers Retirement System

In recognition of meeting professional standards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of state Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2011 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

Financial Section

for Fiscal Year ending June 30, 2011

Charles T. Mitchell Co. LLP
Certified Public Accountants

William G. Johnson , Jr., C.P.A
James Clouse,C.P.A
Bernadette Smith, C.P.A
Kim Field, C.P.A
Greg Miklavcic, C.P.A
Don C. Giles, C.P.A, Consultant

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the accompanying statements of plan net assets of the Teachers' Retirement System of the State of Kentucky as of June 30, 2011 and 2010 and the related statements of changes in plan net assets for the years then ended. These component unit financial statements are the responsibility of the Teachers' Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, at June 30, 2011 and 2010 and the changes in its plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated December 16, 2011 on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audit.

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 15 through 19 be presented to supplement the basic financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management regarding the methods of preparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

The financial section supporting schedules listed in the table of contents are presented for the purpose of additional analysis and are not a required part of the financial statements. These schedules are the responsibility of the Teachers' Retirement System of Kentucky's management. Such schedules as of and for the year ended June 30, 2011 have been subjected to the auditing procedures applied in our audit of the financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

We did not audit the data included in the Introductory and Statistical sections of the report and therefore express no opinion on them.

Charles T. Mitchell Co.

Frankfort, Kentucky
December 16, 2011

229 West Main Street, Suite 103, Frankfort, Kentucky 40601 | P.O. Box 698, Frankfort, Kentucky 40602-0698
(502) 227-7395 | Fax (502) 227-8005 | www.ctmcpa.com

MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of Kentucky Teachers' Retirement System's (KTRS, System, or Plan) financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2011. Please read it in conjunction with the respective financial statements, which begin on page 20.

USING THIS FINANCIAL REPORT

Because of the long-term nature of the defined benefit retirement annuity plan, and the medical and life insurance plans, financial statements alone cannot provide sufficient information to properly reflect the ongoing perspective of the System. The Statement of Plan Net Assets and Statement of Changes in Plan Net Assets (on pages 20-23) provide information about the activities of the defined benefit retirement annuity plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Kentucky Teachers' Retirement System is the fiduciary of funds held in trust for its members.

The Schedule of Funding Progress (on pages 43-45) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (on pages 43-45) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2011, Kentucky Teachers' Retirement System's combined plan net assets increased by $2,728.2 million - from $12,786.7 million in 2010 to $15,514.9 million in 2011. In 2009, combined net assets totaled $11,830.2 million. The following summaries focus on plan net assets and changes in plan net assets of Kentucky Teachers' Retirement System's defined benefit retirement annuity plan, medical insurance plan, life insurance plan and other funds.

Summary of
Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2011	2010	2009	2011	2010	2009	2011	2010	2009
Cash & Investments	$ 15,192.9	$ 12,513.9	$11,591.9	$492.2	$ 237.1	$ 225.0	$ 87.4	$ 87.1	$ 89.0
Receivables	180.7	96.5	94.3	5.3	7.9	7.1	1.1	.9	.7
Capital Assets	3.8	3.4	3.2						
Total Assets	15,337.4	12,613.8	11,689.4	434.5	245.0	232.1	88.5	88.0	89.7
Total Liabilities	(246.8)	(157.2)	(174.0)	39.7)	(3.8)	(3.0)		(0.1)	(5.0)
Plan Net Assets	$ 15,130.6	$ 12,456.6	$11,515.4	$ 294.8	$ 241.2	$ 229.1	$ 88.5	$ 87.9	$ 84.7

*TOTALS	2011	2010	2009
Cash & Investments	$ 15,709.5	$ 12,838.1	$ 11,905.9
Receivables	187.1	105.3	102.1
Capital Assets	3.8	3.4	3.2
Total Assets	15,900.4	12,946.8	12,011.2
Total Liabilities	(386.5)	(161.1)	(182.0)
Plan Net Assets	$ 15,513.9	$ 12,785.7	$ 11,829.2

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had combined plan net assets of $.9 million for years ended 2011, 2010 and 2009.*

Plan net assets of the defined benefit retirement annuity plan increased by 21.5% ($15,130.6 million compared to $12,456.6 million) and in 2009, plan net assets of the defined benefit plan totaled $11,515.4 million. The increase is primarily due to improvements in market conditions which resulted in a net investment income increase of $1.25 billion more than 2010 which was $3.5 billion more than 2009. The defined benefit retirement annuity plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries. Plan net assets of the medical insurance plan increased by 22.2% ($294.8 million compared to $241.2 million) primarily due to bond proceeds received for the state's portion of medical funding for the 2010-2012 biennium. This compares to 2009 where plan net assets of the medical insurance fund totaled $229.1 million. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

Summary of
Changes in Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan 2011	2010	2009	Medical Insurance Plan 2011	2010	2009	Life Insurance Fund 2011	2010	2009
ADDITIONS									
Member Contributions	$ 302.3	$ 297.6	$ 293.7	$ 84.1	$ 63.8	$ 58.7	$	$	$
Employer Contributions	1,037.9	479.8	442.5	188.3	158.8	164.4	1.7	1.9	5.4
Net Investment Income	2,761.0	1,509.8	(2,020.7)	8.3	12.3	11.3	3.1	5.4	5.3
Other Income				0.5	14.6	13.7			
TOTAL ADDITIONS	4,101.2	2,287.2	(1,284.5)	281.2	249.5	248.1	4.8	7.3	10.7
DEDUCTIONS									
Benefit Payments	1,402.6	1,321.8	1,252.9				4.2	4.1	3.7
Refunds	17.3	15.3	15.2						
Administrative Expense	7.3	8.8	8.2	1.2					
Insurance Expenses				226.4	237.4	204.8			
TOTAL DEDUCTIONS	1,427.2	1,345.9	1,276.3	227.6	237.4	204.8	4.2	4.1	3.7
Increase (Decrease) in Plan Net Assets	$ 2,674.0	$ 941.3	$ (2,560.8)	$ 53.6	$ 12.1	$ 43.3	$ 0.6	$ 3.2	$ 7.0

TOTALS	2011	2010	2009
ADDITIONS			
Member Contributions	$ 386.4	$ 361.4	$ 352.4
Employer Contributions	1,227.9	640.5	612.3
Net Investment Income	2,772.4	1,527.5	(2,004.1)
Other Income	0.5	14.6	13.7
TOTAL ADDITIONS	4,387.2	2,544.0	(1,025.7)
DEDUCTIONS			
Benefit Payments	1,406.8	1,325.9	1,256.6
Refunds	17.3	15.3	15.2
Administrative Expense	8.5	8.8	8.2
Insurance Expenses	226.4	237.4	204.8
TOTAL DEDUCTIONS	1,659.0	1,587.4	1,484.8
Increase (Decrease) in Plan Net Assets	$ 2,728.2	$ 956.6	$ (2,510.5)

DEFINED BENEFIT RETIREMENT ANNUITY PLAN ACTIVITIES

Member contributions increased $4.6 million. Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions totaled $1,037.9 million, a net increase of $558.1 million over the 2010 fiscal year, primarily due to bond proceeds received of $465,384,165 to satisfy amounts in that were being amortized in the state budget. The employer contributions received in the 2010 fiscal year were $37.3 million more than 2009 mainly due to an increase in the state appropriation due to increasing amortization payments.

The System experienced an increase in net investment income compared to the previous year ($2,761 million at June 30, 2011 as compared to a $1,509.8 million at June 30, 2010). For 2009, net investment income totaled a negative $2,020.7 million. The increase in the fair value of investments is mainly due to favorable market conditions for the year ended June 30, 2011.

This can be illustrated as follows:

(In Millions)	2011	2010	2009
Appreciation (depreciation) in fair value of investments – June 30, prior year	$ (235.5)	$ (1,336.2)	$ 385.4
Appreciation (depreciation) in fair value of investments – June 30, end of year	1,842.0	(235.5)	(1,336.2)
Change in net appreciation (depreciation) in fair value of investments	2,077.5	1,100.7	(1,721.6)
Net income (net of investment expense)	362.3	341.3	373.1
Net gain on sale of investments	321.2	67.8	(672.2)
Investment Income (net) – June 30, end of year	$ 2,761.0	$ 1,509.8	$(2,020.7)

Program deductions in 2011 increased $81.2 million. The increase was caused principally by an increase of $80.7 million in benefit payments. Members who were drawing benefits as of June 2010 received an increase of 1.5% to their retirement allowances in July 2010. Also, there was an increase of 1,285 members and beneficiaries on the retired payroll as of June 30, 2011.

OTHER POST EMPLOYMENT BENEFIT ACTIVITIES

During the 2011 fiscal year, the medical insurance plan member contributions increased $20.3 million and employer contributions increased by $29.5 million over fiscal year 2010. The contributions increased primarily due to the implementation of the Shared Responsibility Plan beginning July 1, 2010 which includes increased contributions from active and retired members, employers and the state. The state's contribution for the 2010-2012 biennium was made with bond proceeds received in March 2011.

Program deductions decreased $9.8 million mainly due to a continued savings with the Medicare Advantage program and the implementation of both an insured Medicare Advantage Regional PPO and an insured Employer Group Waiver Prescription Drug Plan as of July 1, 2010.

Net investment income decreased $4 million from $12.3 million in 2010 to $8.3 million in 2011 and in 2009, net investment income totaled $11.3 million. This can be illustrated as follows:

(In Millions)	2011	2010	2009
Appreciation in fair value of investments – June 30, prior year	$ 0	$ 0	$ 0
Appreciation in fair value of investments – June 30 end of year	0	0	0
Net appreciation in fair value of investments	0	0	0
Net income (net of investment expense)	8.3	12.3	11.3
Net gain on sale of investments	0	0	0
Investment Income (net) – June 30	$ 8.3	$ 12.3	$ 11.3

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2011, 2010 and 2009 were $4.2, $4.1 and $3.7 million respectively.

HISTORICAL TRENDS

Accounting standards require that the Statement of Plan Net Assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information regarding the actuarial funding status of the defined benefit plan, the medical insurance plan, and the life insurance plan is provided in the Schedule of Funding Progress (beginning on page 43). The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the entry age cost method.

The 2011 fiscal year reveals a decline in funding position of the retirement annuity plan due primarily to an increase in the actuarial liability while the actuarial value of the assets remained flat due to market declines in prior years. Annual required employer contributions of the defined benefit plan are provided in the Schedule of Employer Contributions (on page 43) and a shortfall of employer contributions has resulted in an accumulated net pension obligation of $229,548,428 as of June 30, 2011.

Although the medical insurance plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding. Effective July 1, 2010 the Shared Responsibility Plan for funding retiree health benefits requires members, retirees, participating employers and the state to make contributions for pre-funding retiree medical benefits. Annual required contributions of the medical insurance plan are provided in the Schedule of Employer Contributions (on page 44) and a shortfall of employer contributions has resulted in an accumulated net OPEB obligation of $1,110,938,699 as of June 30, 2011.

Statement of Plan Net Assets
As of June 30, 2011

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 2,014,331	$ 175,762	$ 385,672	$ 65,108	$ 2,640,873
Prepaid Expenses	40,263	147,000			187,263
Receivables					
Contributions	30,046,110	3,298,187	27,501		33,371,798
Due From Other Trust Funds	1,207,985				1,207,985
State of Kentucky		193,954			193,954
Investment Income	53,218,525	943,333	1,113,843	1,149	55,276,850
Investment Sales Receivable	95,747,740				95,747,740
Other Receivables	431,187	849,412			1,280,599
Total Receivables	180,651,547	5,284,886	1,141,344	1,149	187,078,926
Investments at Fair Value (See Note 5)					
Short-Term Investments	588,462,274	141,587,315	1,654,850	698,978	732,403,417
Bonds and Mortgages	3,797,591,983	136,110,938	85,366,325	205,312	4,019,274,558
Equities	9,588,077,134	151,170,232			9,739,247,366
Alternative Investments	576,527,803				576,527,803
Real Estate	480,447,237				480,447,237
Total Investments	15,031,106,431	428,868,485	87,021,175	904,290	15,547,900,381
Invested Security Lending Collateral	159,808,327				159,808,327
Capital Assets, at cost net of accumulated depreciation of $2,101,508 (See Note 2)	3,803,072				3,803,072
Total Assets	15,377,423,971	434,476,133	88,548,191	970,547	15,901,418,842
LIABILITIES					
Accounts Payable	1,221,191				1,221,191
Due to Other Trust Funds		1,186,029	21,511	445	1,207,985
Insurance Claims Payable		403,000			403,000
Revenues Collected in Advance		122,500,000			122,500,000
Investment Purchases Payable	85,788,174	15,568,509			101,356,683
Obligations Under Securities Lending	159,808,327				159,808,327
Total Liabilities	246,817,692	139,657,538	21,511	445	386,497,186
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:	$ 15,130,606,279	$ 294,818,595	$ 88,526,680	$ 970,102	$ 15,514,921,656

The accompanying notes are an integral part of these financial statements.

Statement of Plan Net Assets
As of June 30, 2010

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 2,497,492	$	$ 592,345	$ 48,283	$ 3,138,120
Prepaid Expenses	127,531	147,000			274,531
Receivables					
Contributions	38,343,995	3,055,730	32,225		41,431,950
State of Kentucky	71,937				71,937
Investment Income	57,550,193		895,791	7,514	58,453,498
Installment Account Receivable	530,191				530,191
Medicare D Receivables		4,838,295			4,838,295
Total Receivables	96,496,316	7,894,025	928,016	7,514	105,325,871
Investments at Fair Value (See Note 5)					
Short-Term Investments	64,445,908	237,013,895	5,400,000	518,475	307,378,278
Bonds and Mortgages	4,045,405,431		81,056,169	411,764	4,126,873,364
Equities	7,526,938,498				7,526,938,498
Alternative Investments	299,635,647				299,635,647
Real Estate	419,613,670				419,613,670
Total Investments	12,356,039,154	237,013,895	86,456,169	930,239	12,680,439,457
Invested Security Lending Collateral	155,226,862				155,226,862
Capital Assets, at cost net of accumulated depreciation of $1,995,799 (See Note 2)	3,483,370				3,483,370
Total Assets	12,613,870,725	245,054,920	87,976,530	986,036	12,947,888,211
LIABILITIES					
Accounts Payable	1,124,143		71,937		1,196,080
Insurance Claims Payable		3,831,080			3,831,080
Investment Purchases Payable	900,638				900,638
Obligations Under Securities Lending	155,226,862				155,226,862
Total Liabilities	157,251,643	3,831,080	71,937	0	161,154,660
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:	$ 12,456,619,082	$ 241,223,840	$ 87,904,593	$ 986,036	$ 12,786,733,551

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
For the Year Ended June 30, 2011

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
Employer	$ 1,037,935,993	$ 188,241,202	$ 1,668,822	$ 60,000	$ 1,227,906,017
Member	302,262,819	84,147,337			386,410,156
Total Contributions	1,340,198,812	272,388,539	1,668,822	60,000	1,614,316,173
Other Income					
Recovery Income		212,727			212,727
Medicare D Receipts		280,585			280,585
Total Other Income		493,312			493,312
Investment Income					
Net Appreciation/(Depreciation) in FV of Investments	2,398,629,230	(200,122)	(691,253)	(5,937)	2,397,731,918
Interest	200,003,244	8,577,058	3,786,029	15,626	212,381,957
Dividends	152,176,305	18,438			152,194,743
Rental Income, Net	30,610,988				30,610,988
Securities Lending, Gross Earnings	2,447,181				2,447,181
Gross Investment Income	2,783,866,948	8,395,374	3,094,776	9,689	2,795,366,787
Less Investment Expense	(22,160,690)	(61,078)			(22,221,768)
Less Securities Lending Expense	(734,034)				(734,034)
Net Investment Income	2,760,972,224	8,334,296	3,094,776	9,689	2,772,410,985
Total Additions	4,101,171,036	281,216,147	4,763,598	69,689	4,387,220,470
DEDUCTIONS					
Benefits	1,402,535,713		4,120,000	85,178	1,406,740,891
Refunds of Contributions	17,325,387				17,325,387
Insurance Expenses		226,435,363			226,435,363
Administrative Expense	7,322,739	1,186,029	21,511	445	8,530,724
Total Deductions	1,427,183,839	227,621,392	4,141,511	85,623	1,659,032,365
Net Increase (Decrease)	2,673,987,197	53,594,755	622,087	(15,934)	2,728,188,105
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:					
Beginning of year	12,456,619,082	241,223,840	87,904,593	986,036	12,786,733,551
Ending of year	$ 15,130,606,279	$ 294,818,595	$ 88,526,680	$ 970,102	$ 15,514,921,656

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
For the Year Ended June 30, 2010

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
Employer	$ 479,805,088	$ 158,761,433	$ 1,966,826	$ 60,000	$ 640,593,347
Member	297,613,965	63,805,573			361,419,538
Total Contributions	777,419,053	222,567,006	1,966,826	60,000	1,002,012,885
Other Income					
Recovery Income		4,063			4,063
Medicare D Receipts		14,614,285			14,614,285
Total Other Income		14,618,348			14,618,348
Investment Income					
Net Appreciation/(Depreciation) in FV of Investments	1,168,500,111		1,943,464	(14,800)	1,170,428,775
Interest	194,088,206	12,312,999	3,440,180	28,128	209,869,513
Dividends	133,351,529				133,351,529
Rental Income, Net	30,968,132				30,968,132
Securities Lending, Gross Earnings	1,549,318				1,549,318
Gross Investment Income	1,528,457,296	12,312,999	5,383,644	13,328	1,546,167,267
Less Investment Expense	(18,206,407)				(18,206,407)
Less Securities Lending Expense	(465,508)				(465,508)
Net Investment Income	1,509,785,381	12,312,999	5,383,644	13,328	1,527,495,352
Total Additions	2,287,204,434	249,498,353	7,350,470	73,328	2,544,126,585
DEDUCTIONS					
Benefits	1,321,808,770		4,148,511	81,076	1,326,038,357
Refunds of Contributions	15,310,680				15,310,680
Insurance Expenses		237,377,528			237,377,528
Administrative Expense	8,830,054				8,830,054
Total Deductions	1,345,949,504	237,377,528	4,148,511	81,076	1,587,556,619
Net Increase (Decrease)	941,254,930	12,120,825	3,201,959	(7,748)	956,569,966
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:					
Beginning of year	11,515,364,152	229,103,015	84,702,634	993,784	11,830,163,585
Ending of year	$ 12,456,619,082	$ 241,223,840	$ 87,904,593	$ 986,036	$ 12,786,733,551

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements
Years Ended June 30, 2011 and 2010

Note 1: Description of Retirement Annuity Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan established to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state.

B. PARTICIPANTS

As of June 30, 2011 a total of 208 employers participated in the plan. Employers are comprised of 174 local school districts, 17 Department of Education Agencies and other educational organizations, 5 universities and also the Kentucky Community and Technical College System.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

	2011	2010
Active contributing members:		
Vested	47,945	47,083
Non-vested	28,404	29,304
Inactive members, vested	6,135	5,637
Retirees and beneficiaries currently receiving benefits	44,419	43,134
Total members, retirees, and beneficiaries	**126,903**	**125,158**

C. BENEFIT PROVISIONS

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete 27 years of Kentucky service.

Participants that retire before age 60 with less than 27 years of service receive reduced retirement benefits. Non-university members receive monthly payments equal to two percent (2%) (service prior to July 1, 1983) and two and one-half percent (2.5%) (service after July 1,1983) of their final average salaries for each year of credited service. University employees receive monthly benefits equal to two percent (2%)

Note 1: Description of Plan continued . . .

of their final average salary for each year of credited service. The final average salary is the member's five (5) highest annual salaries except members at least 55 with 27 or more years of service may use their three (3) highest annual salaries. New members (including second retirement accounts started) after July 1, 2002 will receive monthly benefits equal to two percent (2%) of their final average salary for each year of service if, upon retirement, their total service is less than ten years. New members after July 1, 2002 who retire with ten or more years of total service will receive monthly benefits equal to two and one-half percent (2.5%) of their final average salary for each year of service, including the first ten years. In addition, non-university members who retire July 1, 2004 and later with more than 30 years of service will have their multiplier increased for all years over 30 from two and one-half percent (2.5%) to three percent (3.0%) to be used in their benefit calculation.

The System also provides disability benefits for vested members at the rate of sixty percent (60%) of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half percent (1.5%) annually. Additional ad hoc increases and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

KTRS has five cash accounts. At June 30, 2011, the retirement annuity cash account totaled ($1,388,743). The administrative expense fund cash account was $3,403,074 and the medical insurance cash account totaled $175,762. The life insurance plan cash account totaled $385,672 and the excess benefit fund cash account contained $65,108. Therefore, the carrying value of cash was $2,640,873 and the corresponding bank balance was $6,619,860. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2011.

C. CAPITAL ASSETS

Fixed assets are recorded at historical cost less straight-line accumulated depreciation. The classes of fixed assets are furniture and equipment, the KTRS office buildings and land. Furniture and equipment are depreciated over an average useful life of five to seven years. The office buildings are depreciated over forty years. Internally created software for the Pathway capital project is capitalized and amortized over five years. The Pathway project will update technological record keeping abilities and improve timeliness and accuracy of responses to member inquiries.

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national

Note 2: Summary of Significant Accounting Policies continued . . .

security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in plan net assets.

Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by the System's employees are recorded when earned. Upon termination or retirement, employees of the System are paid for accumulated vacation time limited to 60 days and accumulated compensatory time limited to 240 hours. As of June 30, 2011 and 2010 accrued compensated absences were $830,349 and $756,747.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which the System is exposed. In order to cover such risks the System carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

G. OTHER RECEIVABLES

KTRS allows qualified purchases of service credit to be made by installment payments not to exceed a five-year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2011 and 2010 installment contract receivables were $431,187 and $530,191.

The other receivables reported in the medical insurance fund consists primarily of Kentucky Retirement Systems' net cost of their retirees who elect to take their health benefits with KTRS in the amount of $726,672 for the 2011 fiscal year. The remaining amount is a receivable from a drug settlement in a civil case.

H. USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The System's management believes that it has operated the plans within the constraints imposed by federal tax law.

J. RECLASSIFICATIONS

Certain 2010 amounts have been reclassified in conformity with the 2011 presentation.

Note 3: Contributions and Reserves

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Non-university members who joined the plan prior to July 2008 are required to contribute 10.105% of their salaries to the System; university members are required to contribute 8.545% of their salaries. KRS 161.565 allows each university to reduce the contribution of its members by 2.215%; therefore, university members contribute 6.33% of their salary to KTRS. Members who joined the plan on and after July 2008 are required to contribute an additional .75% to the medical insurance plan.

For members employed by local school districts, the state contributes 13.105% of salary for those who joined before July 1, 2008 and 14.105% for those after, except for those members who are employed in federally funded positions, in which case the federal program pays the required percentages. Other participating employers are required to contribute the percentage contributed by members plus an additional 3.25% of members' gross salaries.

The member and employer contributions consist of retirement annuity contributions and post-employment contributions to the medical insurance plan. The post-employment contribution from employee (1.00% for members prior to July 1, 2008 or 1.75% for members who joined after July 1, 2008) and the employer contribution rate of .75% of members' gross salaries funded KTRS's retiree medical insurance plan. Also, after July 1, 2010 employers (other than the state) contribute .25% of members' salaries and the state contributes the net cost of health insurance premiums for new retirees after June 30, 2010 in the non-Medicare eligible group.

If a member leaves covered employment before accumulating five (5) years of credited service, accumulated member contributions to the retirement annuity plan plus interest are refunded upon the member's request.

B. RESERVES

Member Reserve

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from Unallocated Reserves. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Benefit Reserves, the fund from which retirement benefits are paid.

Employer Reserve

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky.

Benefit Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from

Note 3: Contributions and Reserves continued . . .

the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

Unallocated Reserve

This fund was established by KRS 161.420(6) as the Guarantee Fund, to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of the System, and deficiencies not covered by the other funds.

Administrative Expense Reserve

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from Unallocated Reserves is used to pay the administrative expenses of the System. Starting July 1, 2010 administrative expenses are allocated among the funds based on benefits paid.

Note 4: Funded Status and Funding Progress

A. DESCRIPTION OF FUNDING PROGRESS

The funded status of the Defined Benefit Retirement Annuity Plan as of the most recent actuarial valuation date is as follows:

(Dollar amount in 1,000's)

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2011	$ 14,908,138	$ 25,968,692	$ 11,060,554	57.4%	$ 3,451,756	320.4%

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear funding trend information as obtained from the System's independent actuary's annual valuation report.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the System is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the retirement system. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the retirement system.

Note 4: Funded Status and Funding Progress continued . . .

The accompanying schedule of employer contributions, presented as required supplementary information following the notes to the financial statements, presents trend information about the amounts contributed to the plan by employers in comparison to the Annual Required Contribution (ARC). The ARC is actuarially determined in accordance with the parameters of GASB Statement 50. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

B. METHODOLOGIES

The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the entry age actuarial cost method. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period using an open amortization approach. The five (5) year smoothed market approach is used for asset valuation.

Actuarial Value Assets

(1)	Actuarial Value of Assets on June 30, 2010	$ 14,386,329,749
(2)	Market Value End of Year June 30, 2011	15,130,606,279
(3)	Market Value Beginning of Year June 30, 2010	12,456,619,082
(4)	Cash Flow	
	a. Contributions (exclusive of Pension Obligation Bond)	874,814,647
	b. Benefit Payments	(1,419,861,100)
	c. Administrative Expenses	(7,322,739)
	d. Net	(552,369,192)
	e. Pension Obligation Bond	465,384,165
(5)	Investment Income	
	a. Market total: (2) - (3) -(4)d-(4)e	2,760,972,224
	b. Assumed Rate	7.5%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d * (5)b * 0.5] + [(4)e * (5)b * 10/12]	942,619,097
	d. Amount for Phased-In Recognition: (5)a - (5)c	1,818,353,127
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20 x (5)d	363,670,625
	b. First Prior Year	133,378,916
	c. Second Prior Year	(611,235,941)
	d. Third Prior Year	(409,879,449)
	e. Fourth Prior Year	190,240,386
	f. Total Recognized Investment Gain	(333,825,463)
(7)	Actuarial Value End of Year (1) + (4)d + (4)e + (5)c +(6)f	14,908,138,356
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$ 222,467,923

Note 4: Funded Status and Funding Progress continued . . .

C. ASSUMPTIONS

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2011, the most recent updated actuarial information include:

*	Assumed inflation rate	3.5%
*	Assumed investment rate	7.5%
*	Assumed projected salary increases	4.0% - 8.20%
*	Assumed annual cost of living adjustments	1.5%

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of KTRS' financial statements assess the risks KTRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430.

KTRS administers a retirement annuity trust fund and a health insurance trust fund in accordance with state and federal law. KTRS provides service and disability retirement benefits, death and survivor benefits, health insurance benefits, and life insurance benefits for Kentucky public education employees and their beneficiaries. The trust funds managed by KTRS shall be referred to collectively as the "retirement system" unless the context requires a specific reference to a particular fund.

The asset allocation parameters for the retirement annuity trust fund are set forth in Title 102, Chapter 1:175, Section 2 of the Kentucky Administrative Regulations as follows:

- There shall be no limit on the amount of investments owned by the retirement annuity trust fund if the investments are guaranteed by the United States government.
- Not more than thirty-five percent (35%) of the assets of the retirement annuity trust fund at market value shall be invested in corporate debt obligations.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at market value shall be invested in foreign debt.
- Not more than sixty-five percent (65%) of the assets of the retirement annuity trust fund at market value shall be invested in common stocks or preferred stocks. Not more than twenty-five percent (25%) of the assets of the retirement annuity trust fund at market value shall be invested in a stock portfolio designed to replicate a general stock index. Not more than thirty percent (30%) of the assets of the retirement annuity trust fund at market value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at market value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.

- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at market value shall be invested in alternative investments. This category may include private equity, venture capital, timberland, and infrastructure investments.

- Not more than fifteen percent (15%) of the assets of the retirement annuity trust fund at market value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

The asset allocation parameters for the health insurance trust fund are set forth in Title 102, Chapter 1:178, Section 2 of the Kentucky Administrative Regulations as follows:

- In order to preserve the assets of the health insurance trust fund and produce the required rate of return while minimizing risk, assets shall be prudently diversified among various classes of investments.

- In determining asset allocation policy, the investment committee and the board shall be mindful of the health insurance trust fund's liquidity and its capability of meeting both short and long-term obligations.

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the retirement system's deposits may not be returned to the system. The bank's total balance at June 30, 2011 was $6,619,860. An amount of $3,403,074 represents funds held in the bank but their investment is controlled by the Commonwealth of Kentucky. There were various outstanding checks and vouchers totaling a $1,791,228 balance reduction while the amount of $3,216,786 was the amount invested in cash equivalents. Cash equivalents are created through the daily sweeps of available excess cash by the retirement system's custodial bank into bank sponsored short-term investment funds. These funds are custodial bank sponsored commingled funds which are invested in short-term securities backed by the U.S. Government and its agencies. The actual cash deposits held in bank accounts are currently insured up to $250,000 as covered by federal depository insurance and uncollateralized until being invested in cash equivalents.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,
b. collateralized with securities held by the pledging financial institution, or
c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2011, the retirement system's cash equivalents in the amount of $3,216,786 were not exposed to custodial credit risk since this amount was invested by the custodial bank and collateralized at 102% with the collateral pledged to the Treasurer of the Commonwealth of Kentucky.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

C. INVESTMENTS

All of the retirement system's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, and alternative investments, including additional categories. These assets are reported at fair market value.

Investments are governed by the Board of Trustees' policies while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

The following chart represents the fair market values of the investments of the Kentucky Teachers' Retirement System for June 30, 2011.

Schedule of Investments

	Market Value June 30, 2011	Market Value June 30, 2010
Short-Term Investments		
Repurchase Agreements	$ 58,200,000	$ 304,700,000
STIF (BNYM)	674,203,417	2,678,278
Total Short-Term Investments	**732,403,417**	**307,378,278**
Bonds and Mortgages		
U.S. Government	614,166,764	678,247,718
Agency Bonds	354,226,324	337,019,558
Mortgage-Backed Securities	243,091,496	297,733,549
Collateralized Mortgage Obligations	90,802,918	116,575,407
Asset Backed Securities	52,940,222	37,860,172
Commercial Mortgage-Backed Securities	346,576,905	239,293,225
Municipal Bonds	509,893,503	484,588,328
Corporate Bonds	1,807,576,426	1,935,555,407
Total Bonds and Mortgages	**4,019,274,558**	**4,126,873,364**
Equities		
Global	150,698,032	-
International Equity	2,417,879,386	1,769,557,930
U. S. Equity	7,170,669,948	5,757,380,568
Total Equities	**9,739,247,366**	**7,526,938,498**
Real Estate		
Real Estate Equity	480,447,237	419,613,670
Total Real Estate	**480,447,237**	**419,613,670**
Alternative Investments		
Additional Categories	207,077,927	80,295,627
Private Equity	189,131,442	110,757,811
Timberland	180,318,434	108,582,209
Total Alternative Investments	**576,527,803**	**299,635,647**
TOTAL INVESTMENTS	**$ 15,547,900,381**	**$ 12,680,439,457**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the pension trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system,and are held by either:

a. the counterparty or
b. the counterparty's trust department or agent, but not in the System's name.

The cash reserve of the retirement system is maintained in high quality short term investments. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, banker's acceptances, and repurchase agreements are all permissible investments. The retirement system utilized investment instruments it regards as the most secure and having the best returns and does not use short term investments that finance foreign businesses unless they are issued and guaranteed by the United States Government.

Individual repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers under terms dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS' nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a market value of at least 102% of the value of the repurchase agreements.

As of June 30, 2011, cash collateral reinvestment securities acquired through securities lending for the retirement annuity trust fund by KTRS's custodian, who is also the lending agent/counterparty, amounted to $159,808,327 related to $156,075,131 securities lent. This is consistent with the KTRS's securities lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the retirement system's investments. In general, the longer the period until an investment matures, the greater the negative impact that changes in interest rates can have on fair value.

As of June 30, 2011 KTRS had the following investments and weighted average maturities:

Investment Type	Fair Value	Average Maturity (years)
U.S. Government	$ 614,166,764	10.42
Agency	354,226,324	7.44
MBS	243,091,496	12.42
CMO	90,802,918	20.44
ABS	52,940,222	16.32
CMBS	346,576,905	28.97
Muni	509,893,503	13.64
Corporate	1,807,576,426	8.58
Totals	**$ 4,019,274,558**	**11.76**

*This schedule includes $243,806,044 of fixed income securities classified as additional investments

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

In addition to the above securities, Repurchase Agreements (short-term investments) and STIF held at the Bank of New York Mellon had a total fair value of $732,403,417 and had a weighted average maturity of next day. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology. It is widely used in the management of fixed income portfolios by quantifying the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of changes in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the retirement system manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by the retirement system were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The retirement system held $243.1 million in mortgage-backed securities as of June 30, 2011.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The System held $90.8 million in collateralized mortgage obligations as of June 30, 2011.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other credit providers. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The asset-backed securities in the amount of $52.9 million, held by the retirement system as of June 30, 2011, are moderately sensitive to changes in interest rates.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The retirement system's commercial mortgage-backed securities investments consist of highly rated relatively senior tranches. The average maturity of the retirement system's commercial mortgage-backed securities holdings in the schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The retirement system held $346.6 million in commercial mortgage-backed securities investments as of June 30, 2011.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedule lists KTRS's fixed income investments (net of cash equivalents) according to credit ratings as of June 30, 2011:

RATING	FAIR VALUE	%
U.S. Government	$ 614,166,764	15.3
AAA	1,234,366,008	30.7
AA	494,546,589	12.3
A	826,786,400	20.6
BBB	537,734,933	13.4
BB	130,730,057	3.2
B	176,109,302	4.4
CCC	4,834,505	0.1
Total	$ **4,019,274,558**	**100.0%**

Total market value of the fixed income portfolio was $4,019,274,558 on June 30, 2011. The rating system used in the chart is the nationally recognized Standard & Poor's rating system.

In addition to the above categories, the retirement system held $732,403,417 in Cash Equivalents or short term investments. The credit risk associated with these Cash Equivalents is very minimal as the general rating of these securities is higher than AAA. In addition, investments in US Government and Agency securities are also highly rated securities since they are backed by the US Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

The retirement annuity trust fund's policy on credit rating is set forth in 102 KAR 1:175 and reads as follows:

"A fixed income investment shall be rated at the time of purchase as investment grade by at least one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. The fixed income investment portfolio as a whole shall maintain an average rating of investment grade by at least one (1) of the major rating services."

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the retirement annuity trust fund is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five percent (5%) of the assets of the system.

"The System's position in a single stock shall not exceed two and one-half (2.5%) percent of the System's assets. The system's position in a single stock shall not exceed five percent (5%) of the outstanding stock for that company unless the investment is part of a venture capital program."

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

KTRS has not invested greater than five percent (5%) of the retirement annuity trust fund's assets at market value in any single issuer and is in compliance with investment policy.

Foreign Currency Risk

As of June 30, 2011, the retirement system's exposure to foreign currency risk consisted of $1,657,656,979 of foreign equity investments through commingled funds managed by UBS Global Asset Management, Baillie Gifford, Baring Asset Management, and Black Rock as follows:

UBS International Collective	$ 667,852,908
Baillie Gifford	504,036,473
Baring Asset Management	401,567,223
Black Rock	84,200,375
Total	$ **1,657,656,979**

These amounts represent the market values of equities held by the retirement system as a result of cash contributions to each portfolio manager by KTRS.

In addition to the commingled funds investing in foreign securities, retirement annuity trust fund held $844,422,782 associated with foreign interests in American Depositary Receipt investments. These American Depositary Receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. American Depositary Receipts are denominated in U.S. currency.

The retirement annuity trust fund's policy regarding foreign equities is that not more than thirty percent (30%) of the assets of the retirement annuity trust fund at market value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the retirement system. The retirement system operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international stocks are the types of securities that are lent. The retirement system's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the retirement system.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. During the fiscal year ended June 30, 2011, only the retirement annuity trust fund had securities lending transactions. The following section details the net income earned in the retirement annuity trust fund from securities lending for the fiscal year ended June 30, 2011:

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Item	Earnings
Gross Earnings (Interest and fees)	$ 284,495
Gross Borrower Rebates	2,162,686
Bank Fees	(734,034)
Net Earnings	$ **1,713,147**

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The retirement system cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the retirement system from any financial loss associated with a borrower's default and collateral inadequacy.

As of June 30, 2011 the loan average days to maturity in the retirement annuity trust fund was one (1) day and the weighted average investment maturity of cash collateral investments was one (1) day. At fiscal year end, the retirement annuity trust fund had no credit risk exposure to borrowers, since the amounts the retirement annuity trust fund owes the borrowers exceeds the amounts the borrowers owe the retirement annuity trust fund and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The retirement system minimizes interest rate risk by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2011:

Type of Security Lent	Fair Value	Cash Collateral Received Non-cash Collateral Value*
U.S. Equities	$ **156,075,131**	$ **159,808,327**

**Represents value of cash collateral only. Loan or margin collateral requirements met via the use of non-cash collateral (e.g. Government securities or Letters of Credit) are excluded from these values.*

Note 6: Retirement Plan for Employees of the System

Full-time employees of Kentucky Teachers' Retirement System (KTRS) participate in either KTRS or Kentucky Employees Retirement System. Both plans are multiple-employer cost sharing defined benefit retirement annuity plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for KTRS employee members for the fiscal years 2011, 2010 and 2009 were $469,896, $476,918 and $456,258 respectively. KTRS contributed 100% of the required contribution each year.

All other KTRS employees are covered under the Kentucky Employee Retirement System (KERS) in the Non-Hazardous Employees Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. The System's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS who joined prior to July 1, 2008, are required to contribute 5% of their annual creditable compensation for the fiscal years 2011, 2010, and 2009 and members who joined on or after July 1, 2008 contribute an additinal 1%. As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2011, 2010 and 2009 were 16.98%, 11.61% and 10.01% and the System's annual required contributions to KERS were $241,899, $174,203 and $182,399 respectively. KTRS contributed 100% of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: Other Funds

A. 403(B) TAX-SHELTERED ANNUITY PLAN

Plan Description

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by the System's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2011, the seventeen members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

Note 7: Other Funds continued . . .

Summary of Significant Policies

Basis of Accounting - The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan; therefore, there are no receivables to be recognized.

Method Used to Value Investments - The short-term investments are reported at cost, which approximates fair value.

B. SUPPLEMENTAL BENEFIT FUND

The Supplemental Retirement Benefit Fund is a qualified governmental excess benefit arrangement as described in Section 415 of the Internal Revenue Code. In accordance with KRS 161.611 and KRS 161.420(8), KTRS is authorized to provide a supplemental retirement benefit fund for the sole purpose of enabling the employer to apply the same formula for determining benefits payable to all members of the retirement system employed by the employer, whose benefits under the retirement system are limited by Section 415 of the Internal Revenue Code of 1986, as amended from time to time. Funding of benefits payable under this fund are provided by the state, as employer, and are segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system.

C. JUNITA LOSEY SCHOLARSHIP BEQUEST

Junita Losey, a retired teacher, designated KTRS as a residuary beneficiary of her estate and expressed a desire that KTRS establish a scholarship program for Kentucky students studying to be teachers. Ms. Losey died in 1997 and thereafter her estate provided a scholarship bequest to KTRS. The scholarship bequest has at all times been segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system. The Scholarship Committee of the System's Board of Trustees meets each December to consider scholarship standards and administration of the scholarship bequest.

Note 8: Medical Insurance Plan & Post-Employment Benefits

A. PLAN DESCRIPTION

In addition to the retirement annuity plan described in Note 1, Kentucky Revised Statute 161.675 requires KTRS to provide access to post-employment healthcare benefits for eligible members and dependents. The KTRS medical plan is funded by employer and member contributions. Changes made to the medical plan may be made by the KTRS Board of Trustees, the Kentucky Department of Employee Insurance and the General Assembly.

The KTRS medical plan is funded by employee contributions to an account established pursuant to 26 U.S.C. sec. 401(h). Additional funding is derived from the Kentucky Teachers' Retirement System insurance trust fund that went into effect on July 1, 2010. The insurance trust fund provides a trust separate from the account established pursuant to 26 U.S.C. sec. 401(h). The insurance trust fund includes employer and retired member contributions required under KRS 161.550 and KRS 161.675(4)(b).

To be eligible for medical benefits, the member must have retired either for service or disability. The KTRS medical plan offers coverage to members under the age of 65 through the Kentucky Employees Health Plan administered by the Kentucky Department of Employee Insurance. KTRS retired members are given a supplement to be used for payment of their health insurance premium. The amount of the

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

member's supplement is based on a contribution supplement table approved by the KTRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The Commonwealth of Kentucky bears risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the KTRS Medicare Eligible Health Plan. KTRS bears the risk for actual drug claims cost in the Medicare Eligible Health Plan through June 30, 2011.

At June 30, 2011, KTRS insurance covered 35,033 retirees and 6,922 dependents. There are 208 participating employers and 76,349 active members contributing to the medical plan.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Medical Insurance Plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due.

Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

C. CONTRIBUTIONS

The post-employment healthcare benefit provided by KTRS is financed on a pre-funded basis beginning July 1, 2010 with the implementation of the Shared Responsibility Plan. In order to fund healthcare benefits, active member contributions are matched by the state at .75% of members' gross salaries. Those members who joined the System before July 1, 2008 contributed 0.75% of gross payroll to the KTRS medical plan and beginning July 1, 2010 the contribution increases incrementally to 3.75% by July 1, 2015 under the Shared Responsibility Plan. Member contributions to the KTRS medical plan are 1.75% of gross payroll for those who joined the System after July 1, 2008 and beginning July 1, 2010 the contribution increases incrementally to 3.75% by July 1, 2015 under the Shared Responsibility Plan. Also, the premiums collected from retirees and investment income contributes to funding the plan. The KTRS medical plan received $268,400,000 in fiscal year 2011 in funding from the state, which was contributed to the insurance trust fund. This transitional funding and increased contributions are for the 2011 and 2012 fiscal years.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Medical Insurance Plan as of the most recent actuarial valuation date is as follows:

(Dollar amount in 1,000's):

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2011	$ 294,819	$ 3,423,149	$ 3,128,330	8.6%	$ 3,451,756	90.6%

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedule of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the ARC, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methodologies and assumptions employed as of the June 30, 2011 valuation date include the following:

Actuarial cost method	Entry Age
Actuarial value of assets	Market value of assets
Assumed inflation rate	3.5%
Investment rate of return	8.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Medical Trend Assumption (Pre-Medicare)	10.50% - 5.0%
Medical Trend Assumption (Post-Medicare)	8.50% - 5.0%
Year of Ultimate Pre-Medicare trend rate	2019

E. INCURRED BUT NOT REPORTED CLAIMS LIABILITIES

KTRS recognizes estimates of liabilities for self-insured unpaid claims that have incurred (both reported and unreported) using the development method. This method uses past observed patterns of time between the date the claim is incurred and the date the claim is paid to estimate incurred claims from available paid claim information.

The following schedule shows the change in the claims and liability and the claims activity for the years ended June 30, 2011 and 2010.

	2011	2010
Beginning Unpaid Claims Liability	$ 3,827,483	$ 2,969,754
Current Year Claims and Changes in Estimates	177,509,547	233,703,094
Claims Payments	(180,934,030)	(232,845,365)
Ending Unpaid Claims Liability	$ 403,000	$ 3,827,483

Note 9: Life Insurance Plan

A. PLAN DESCRIPTON

KTRS administers the Life Insurance Plan as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 208 participating employers. The benefit is $5,000 for members who are retired for service or disability, and $2,000 for active contributing members.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Life Insurance Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized in the fiscal year due.

Method Used to Value Investments

Life Insurance Plan investments are reported at fair value. The short-term securities are carried at cost, which approximates fair value. Fixed income is generally valued based on published market prices and quotations from national security exchanges and securities pricing services.

C. CONTRIBUTIONS

To finance the life insurance benefit a portion of the employer contribution rate is directed to the plan as recommended by the KTRS's actuary. For fiscal years 2011 and 2010, this rate has been .05% and .06% of active members' payroll, respectively.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Life Insurance Plan as of the most recent actuarial valuation date is as follows:

(Dollar amounts in 1,000's)

Valuation Year June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liabilities (b)	Unfunded Actuarial Accrued Liabilities (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
2011	$ 88,527	$ 88,088	$ (439)	100.5%	$ 3,451,756	(0.01%)

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The required supplementary schedules following the notes to the financial section contain more actuarial information. Significant actuarial methodologies and assumptions employed as of the June 30, 2011 valuation date include the following:

Actuarial cost method	Entry Age
Actuarial value of assets	Market value of assets
Assumed inflation rate	3.5%
Investment rate of return	7.5%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years

Required Supplementary Information

Defined Benefit Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2006	$ 14,857.6	$ 20,324.7	$ 5,467.1	73.1%	$ 2,859.5	191.2%
2007	15,285.0	21,255.0	5,970.0	71.9	2,975.3	200.7
2008	15,321.3	22,460.3	7,139.0	68.2	3,190.3	223.8
2009	14,885.9	23,400.3	8,514.4	63.6	3,253.1	261.7
2010	14,851.3	24,344.3	9,493.0	61.0	3,321.6	285.8
2011	14,908.1	25,968.7	11,060.6	57.4	3,451.8	320.4

The amounts reported in this schedule of funding progress do not include assets or liabilities for postemployment benefits, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Defined Benefit Plan
Schedule of Employer Contributions

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS	PERCENTAGE CONTRIBUTED
2006	$ 464,152,466	87%
2007	494,565,369	88
2008	563,789,483	83
2009	600,282,735	74
2010	633,938,088	76
2011	678,741,428	153

Required Supplementary Information continued . . .

Medical Insurance Plan
Schedule of Funding Progress
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2006	$ 131.6	$ 4,341.9	$ 4,210.3	3.0%	$ 2,859.5	147.2%
2007	140.8	5,928.8	5,788.0	2.4	2,975.3	194.5
2008	185.9	6,434.5	6,248.6	2.9	3,190.3	195.9
2009	229.1	6,454.7	6,225.6	3.5	3,253.1	191.4
2010	241.2	3,206.8	2,965.6	7.5	3,321.6	89.3
2011	294.8	3,423.1	3,128.3	8.6	3,451.8	90.6

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Medical Insurance Plan
Schedule of Employer Contributions

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	RETIREE DRUG SUBSIDY CONTRIBUTION	TOTAL CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(a)	**(b)**	**(c)**	**(b) + (c)**	**[(b) + (c)/(a)]**
2007	$ 231,473,321	$ 113,258,761	$ 10,312,361	$ 123,571,122	53.4%
2008	395,282,164	148,954,644	11,911,565	160,866,209	40.7
2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1
2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9
2011	477,723,070	188,453,929	280,585	188,734,514	39.5

Only five years of actuarial calculations of annual required contributions are available.

Required Supplementary Information continued . . .

Life Insurance Plan
Schedule of Funding Progress
(dollar amounts in thousands)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
2007	$ 71,426	$ 82,722	$ 11,296	86.3%	$ 2,975,289	0.38%
2008	77,658	84,265	6,607	92.2	3,190,332	0.21
2009	84,703	90,334	5,631	93.8	3,253,077	0.17
2010	87,905	92,091	4,186	95.5	3,321,614	0.13
2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or medical insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.Only five years of actuarial calculations of annual required contributions are available.

Life Insurance Plan
Schedule of Employer Contributions

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS (ARC)	ACTUAL EMPLOYER CONTRIBUTIONS	PERCENTAGE OF ARC CONTRIBUTED
2007	$ 1,785,173	$ 5,022,137	281.3 %
2008	1,914,199	5,411,249	282.7
2009	1,498,076	5,455,473	364.2
2010	1,992,969	1,966,826	98.7
2011	1,725,878	1,668,822	96.7

Only five years of actuarial calculations of annual required contributions are available.

Required Supporting Schedules

Supporting Schedule 1
Schedule of Administrative Expenses
Year Ended June 30, 2011

Salaries	$ 5,866,495
Other Personnel Costs	690,802
Professional Services & Contracts	372,240
Utilities	88,425
Rentals	18,197
Maintenance	110,393
Postage & Related Services	397,574
Printing	163,398
Insurance	127,748
Miscellaneous Services	126,164
Telecommunications	30,653
Computer Services	117,577
Supplies	52,418
Depreciation	105,709
Travel	46,935
Dues & Subscriptions	34,550
Miscellaneous Commodities	11,780
Furniture, Fixtures, & Equipment not Capitalized	96,064
Compensated Absences	73,602
TOTAL ADMINISTRATIVE EXPENSES	$ 8,530,724

Supporting Schedule 2
Schedule of Professional Fees for Year Ended June 30, 2011

PROFESSIONAL	NATURE OF SERVICE	
Cavanaugh Macdonald Consulting	Actuarial Services	$ 137,311
Charles T. Mitchell Company	Auditing Services	30,600
Farmers Bank	Bank Services	17,169
International Claim Specialist	Investigative Services	2,754
Ice Miller	Attorney Services	84,956
Reinhart, Boerner VanDeuren	Attorney Services	14,595
Stoll Keenon Ogden	Attorney Services	54,428
Schottenstein, Zox & Dunn	Attorney Services	427
Peritus	Communications	30,000
	TOTAL	**$ 372,240**

Required Supporting Schedules continued . . .

Supporting Schedule 3
Schedule of Contracted Investment Management Expenses and Miscellaneous Expenses
Year Ended June 30, 2011

	Pension	Medical	TOTAL
EQUITY MANAGERS			
Baillie Gifford	$ 1,962,864	$	$
Baring Asset Management, Inc.	1,918,420		
Black Rock		28,617	
GE Asset Management	800,000		
Todd-Veredus Asset Management LLC	1,247,781		
UBS Global Asset Management	2,736,299		
Wellington Management Company	2,647,162		
Total Equity Managers	11,312,526	28,617	11,341,143
FIXED INCOME MANAGERS			
Fort Washington Investment Advisors	689,159	25,016	
Galliard Capital Management	344,229		
Total Fixed Income Managers	1,033,388	25,016	1,058,404
REAL ESTATE	899,445		899,445
ALTERNATIVE INVESTMENTS	7,455,007		7,455,007
CUSTODIAN			
The Bank of New York Mellon	330,773		330,773
CONSULTANT			
Hewitt Enis Knupp, Inc.	359,343		359,343
LEGAL & RESEARCH			
Schottenstein, Zox & Dunn	74,956	7,445	
Investment Advisors	80,000		
Total Legal & Research	154,956	7,445	162,401
OTHER			
Subscription/Services	615,252		615,252
TOTAL CONTRACTED INVESTMENT MANAGEMENT EXPENSES	**$ 22,160,690**	**$ 61,078**	**$ 22,221,768**

Required Supporting Schedules continued . . .

Supporting Schedule 4
Combining Statement of Plan Net Assets - Other Funds
As of June 30, 2011

	403(b) TAX SHELTERED	SUPPLEMENTAL BENEFIT FUND	LOSEY SCHOLARSHIP	TOTAL
ASSETS				
Cash	$	$ 65,108	$	$ 65,108
Receivables				
Investment Income			1,149	1,149
Investments at Fair Value				
Short-Term Investments	423,376		275,602	698,978
Bonds and Mortgages			205,312	205,312
Total Investments	423,376		480,914	904,290
Total Assets	423,376	65,108	482,063	970,547
LIABILITIES				
Due to Other Trust Funds	130	225	90	445
Net Assets Held In Trust For Pension And Other Benefits	$ 423,246	$ 64,883	$ 481,973	$ 970,102

Required Supporting Schedules continued . . .

Supporting Schedule 5
Combining Statement of Changes in Plan Net Assets - Other Funds
For the Year Ended June 30, 2011

	403(b) TAX SHELTERED	SUPPLEMENTAL BENEFIT FUND	LOSEY SCHOLARSHIP	TOTAL
ADDITIONS				
Contributions				
Employer	$	$ 60,000	$	$ 60,000
Investment Income				
Net Appreciation/(Depreciation) in Fair Value of Investments			(5,937)	(5,937)
Interest	293		15,333	15,626
Net Investment Income	293		9,396	9,689
Total Additions	293	60,000	9,396	69,689
DEDUCTIONS				
Benefits	25,003	43,175	17,000	85,178
Administrative Expense	130	225	90	445
Total Additions	25,133	43,400	17,090	85,623
Net Increase (Decrease)	(24,840)	16,600	(7,694)	(15,934)
Net Assets Held In Trust For Pension And Other Benefits				
Beginning of Year	448,086	48,283	489,667	986,036
End of Year	$ 423,246	$ 64,883	$ 481,973	$ 970,102

Charles T. Mitchell Co. LLP
Certified Public Accountants

William G. Johnson , Jr., C.P.A
James Clouse,C.P.A
Bernadette Smith, C.P.A
Kim Field, C.P.A
Greg Miklavcic, C.P.A
Don C. Giles, C.P.A, Consultant

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the financial statements of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2011, and have issued our report thereon dated December 16, 2011. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Teachers' Retirement System of the State of Kentucky's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Teachers' Retirement System of the State of Kentucky's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information and use of management and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties.

Charles T. Mitchell Co.

Frankfort, Kentucky
December 16, 2011

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Investment Section

for Fiscal Year ending June 30, 2011

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Kentucky Teachers' Retirement System.

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

INVESTMENT COMMITTEE

Mr. Robert M. Conley
Chair

Mr. Ronald L. Sanders
Vice-Chair

Ms. Barbara G. Sterrett
Member

Dr. Jay Morgan
(Resigned effective December 31, 2010)
Member

Dr. Tom Shelton
Member

Mr. Bevis Longstreth
Investment Advisor to KTRS Investment Committee

Mr. George Philip
Investment Advisor to KTRS Investment Committee

EXECUTIVE INVESTMENT STAFF

Mr. Gary L. Harbin, CPA
Executive Secretary

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Hewitt ennisknupp
An Aon Company

December 1, 2011

To the members of the Board of Trustees and participants of the Teachers' Retirement System of Kentucky:

The retirement system's investment program had a successful year in an environment where financial markets and economies throughout the developed world continued to grapple with the aftermath of the Great Recession and structural economic imbalances. From late summer 2010 until early 2011, markets steadily rallied until Middle East unrest and rising oil prices reintroduced substantial volatility. It was clear by late spring 2011 that the Eurozone debt crisis was deepening and that economic growth was slowing sharply in the U.S. and Europe. As of June 30, 2011, the inflation-adjusted gross domestic product in the U.S. had grown a disappointing 1.6% over the previous year and the unemployment rate stood at 9.2%.

Despite the unsettled environment, the retirement annuity trust fund portfolio returned 21.6% in the fiscal year, beating the benchmark Policy Index return of 20.9%. Equities, which represented 63.5% of assets as of June 30, 2011, were the strongest contributor to those results. Domestic equities returned 32.5% versus 31.7% for the S&P 1500 Index. International equities returned 31.4% versus 30.3% for the MSCI All Country World (ex-U.S.) Index. Fixed income returned 4.8% versus 3.7% for the Barclays Government/Credit Index.

Less traditional asset classes, such as real estate, private equity, and other categories approved by the Board of Trustees represented 8.5% of assets by fiscal year-end and contributed to investment returns despite their still-modest relative balances. Investments in the U.S. Treasury's Public-Private Investment Program returned 27.8% for the fiscal year. Investments in private equity returned 24.1%.

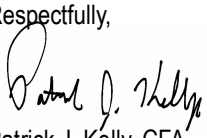
The retirement system's investment program remains alert to a complex and evolving global economic and financial environment and its inherent opportunities and risks. Over the fiscal year, the retirement system committed $100 million to a distressed debt fund, $100 million to a multi-sector opportunistic credit mandate, and $50 million to an opportunistic real estate fund. The retirement system continues to evaluate its asset allocation in order to prudently fund its commitments in a changing investment landscape.

Following critical legislation passed in the previous fiscal year, funding began on a new health insurance trust fund. By June 30, 2011, that Fund had $379 million in assets and is expected to grow rapidly in the years to come. The pre-funding of retiree medical benefits represents an important step for the retirement system's members. The funding mechanism established by law and investment earnings on those assets will better protect those benefits and provide them at a lower cost to the Commonwealth.

The retirement system has a long and consistent record of strong investment performance. These results have been the product of a sound fundamental investment philosophy and a high degree of professionalism. Continued commitment to those values and to the retirement system's long-term focus on funding its obligations to its members should ensure continued success.

We would like to thank the Board of Trustees, Investment Committee, and investment staff for their confidence. We appreciate the opportunity to assist the retirement system in meeting its investment goals.

Respectfully,



Patrick J. Kelly, CFA
Principal

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Hewitt Investment Group LLC and Ennis, Knupp & Associates, Inc.
are part of the Hewitt global investment network.

INVESTMENT POLICY SUMMARY

The KTRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principles that guide investment–related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the retirement system. This broad summary is a reference point for management of the retirement system's assets and outlines the investment philosophy and practice of KTRS.

INVESTMENT OBJECTIVES

KTRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn, this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them. Generally, the retirement system's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, KTRS holdings can withstand some short-term volatility. The retirement annuity trust fund's long-term investment objective is to achieve an annualized rate of return of 7.5%; while the health insurance trust fund's long term investment objective is 8.0%.

RISK CONTROLS

The KTRS investment program faces various risks; however, the primary risk to KTRS is that the assets will not support liabilities over long periods of time. In order to control this risk and any other risks, the board has taken the following steps on an ongoing basis:

- Actuarial valuations are performed each year to evaluate the funding objectives of the retirement system. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the retirement system.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the retirement system.
- The KTRS Investment Committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

ASSET ALLOCATION

Operating within relevant regulatory limitations, the retirement system's investment consultant, on an annual basis, presents to the Investment Committee for approval target percentages and ranges for the retirement system's various asset classes. Annually approved asset allocation parameters serve to balance the retirement system's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The retirement system's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the retirement system's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as liability requirements, the level of funding, and statutory investment restrictions are important considerations within the context of the asset allocation decision making

process. Consequently, asset allocations may differ markedly between various pension plans due to their unique circumstances.

The information below shows the retirement system's asset allocations by market value as of June 30, 2011, and June 30, 2010, as well as the target and strategic range for each asset class for fiscal year 2011.

Retirement Annuity Trust*

	June 30, 2011	%	June 30, 2010	%
Cash Equivalents**	$ 352,707,345	2.4	$ 218,429,317	1.7
Fixed Income ***	3,856,183,434	25.6	3,933,016,478	31.1
Domestic Equities	7,356,796,262	48.4	5,872,001,227	46.3
International Equities	2,294,036,935	15.1	1,703,159,180	13.4
Real Estate	480,447,237	3.1	419,613,671	3.3
Private Equity	189,131,441	1.2	110,757,811	0.9
Timberland	180,318,434	1.2	108,582,209	0.8
Additional Categories	457,628,442	3.0	312,947,084	2.5
Totals	$ 15,167,249,530	100.0	$ 12,678,506,977	100.0

* Includes Life Insurance Trust values.

** Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

*** Excludes purchased interest of $779,260 as of June 30, 2011. Also, excludes purchased interest of $1,450,327 as of June 30, 2010.

Health Insurance Trust

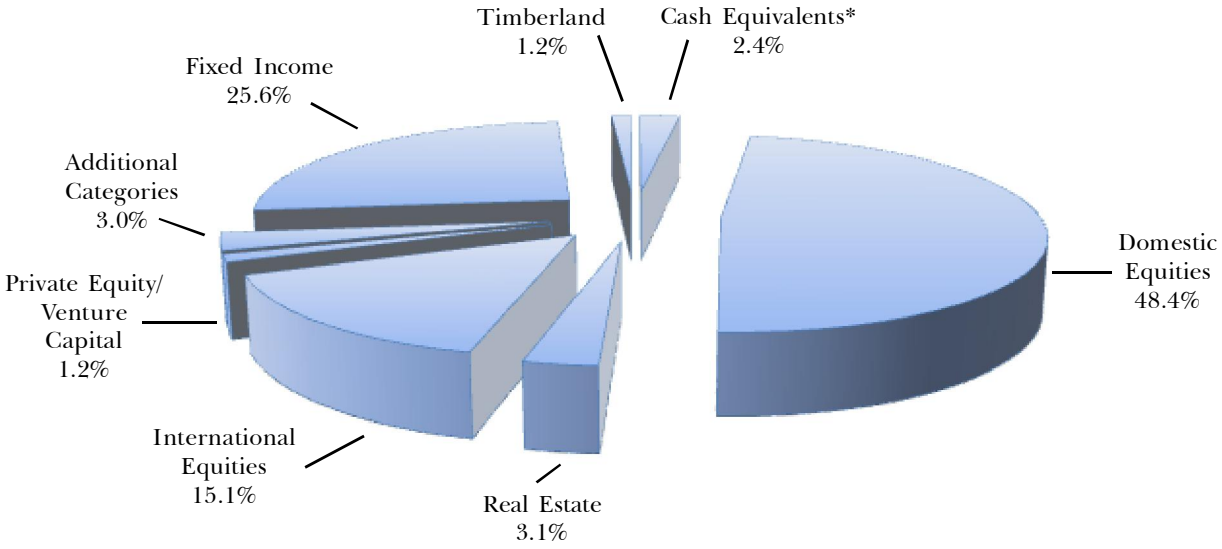
	June 30, 2011	%	June 30, 2010	%
Cash Equivalents *	$ 63,546,353	16.8	$ -0-	0.0
Fixed Income **	164,924,873	43.5	-0-	0.0
Global Equities	150,698,032	39.7	-0-	0.0
Totals	$ 379,169,258	100.0	$ -0-	0.0

* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

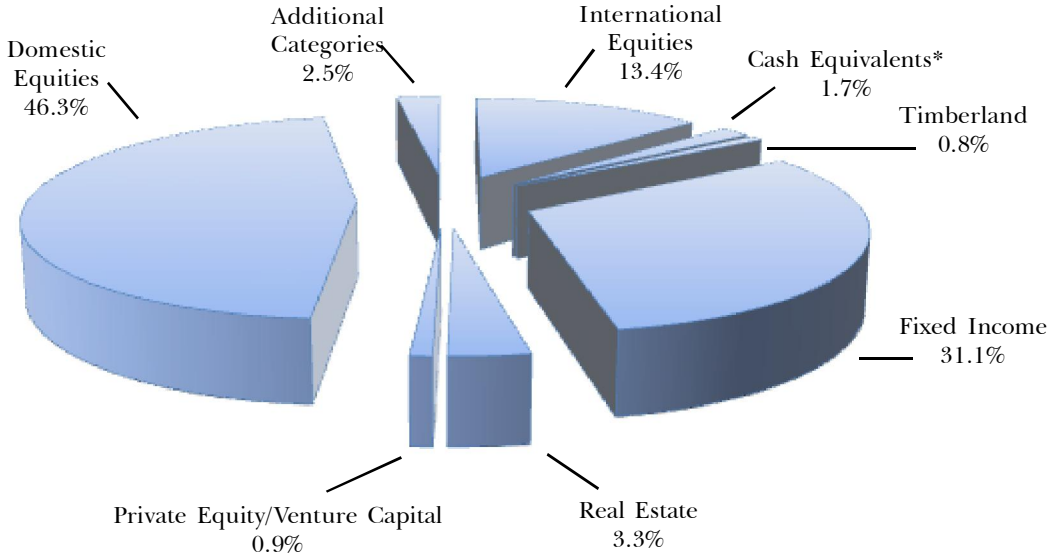
** Excludes purchased interest of $221,418 as of June 30, 2011.

Distribution of Investments
Retirement Annuity Trust**
Market Values

June 30, 2011



June 30, 2010



* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

** Includes Life Insurance Trust values.

Strategic Weightings by Asset Class

Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2011 (Mkt)
Cash		1 - 3%	2.0%	2.4%
Fixed Income		24 - 30	27.0	25.6
Government/Agency/Other	Unlimited			13.3
Corporate	35%			12.3
Equity	65%	57 - 65	61.0	63.5
Domestic Large Cap		37 - 45	41.0	41.0
Domestic Mid Cap		3 - 5	4.0	4.5
Domestic Small Cap		1 - 3	2.0	2.9
International	30%	11 - 15	14.0	15.1
Real Estate	10%	2 - 6	4.0	3.1
Alternative Investments*	10%	1 - 5	3.0	2.4
Additional Categories	15%	1 - 5	3.0	3.0
TOTAL			**100.0%**	**100.0%**

This weighting reflects cash with manager in the manager's asset class.

* Alternative Investments includes Private Equity, Timberland, Venture Capital and Infrastructure investments.

PORTFOLIO RETURNS

For the fiscal year, the retirement annuity trust fund's portfolio generated a total return of 21.6%, versus a 20.9% return for the benchmark Policy Index. Domestic equities returned 32.5% versus 31.7% for the Standard & Poor's 1500 Index, while international equities returned 31.4% versus 30.3% for the MSCI All Country World (Ex-US) Index. Fixed income investments outperformed, returning 4.8% versus 3.7% for the Barclays Government/Credit Index.

The table below details historical performance for the retirement annuity trust fund and its component asset classes for the period ended June 30, 2011. The retirement annuity trust fund's domestic equity and fixed income components have regularly exceeded the returns of their benchmarks over long periods of time. International equities, with a shorter history in the retirement annuity trust fund, have outperformed their benchmark. Other asset classes, though modest in relative size, also contributed. Investments in the U.S. Treasury's Public-Private Investment Program returned 27.8%. Investments in private equity returned 24.1%. The retirement annuity trust fund's returns were generated by the Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

	1 Yr. [2]	3 Yr. [2]	5 Yr. [2]	10 Yr. [2]	20 Yr. [2]
Total Fund					
KTRS	21.6	5.6	5.1	4.8	7.7
Policy Index [1]	20.9	-	-	-	-
Equities					
Domestic Equities	32.5	4.3	3.6	3.5	9.2
S & P Blended Index [3]	31.7	3.9	3.3	2.9	8.8
International Equities	31.4	2.3	4.1	-	-
MSCI AC World (Ex US)	30.3	0.1	4.1	-	-
Total Equities	32.2	4.1	3.6	3.5	9.2
Fixed Income					
Total Fixed Income	4.8	7.9	7.4	6.4	7.2
Barclays Govt/Credit Index	3.7	6.2	6.4	5.7	6.9
Real Estate					
Real Estate Equity	20.5	-11.3	-	-	-
NCREIF ODCE	20.6	-7.6	-	-	-
Triple Net Lease Real Estate	7.2	8.6	8.3	8.7	9.0
CPI plus 2%	5.5	3.1	4.2	4.4	4.6
Alternative Investments					
Private Equity [4]	24.1	11.2	-	-	-
Timberland	6.7	2.8	-	-	-
NCREIF Timberland Index	0.5	0.0	-	-	-
Cash					
Cash (Unallocated)	0.1	0.5	2.5	2.5	3.8
Additional Categories					
High Yield Bond Fund	15.6	-	-	-	-
Public-Private Investments	27.8	-	-	-	-
Merrill Lynch High Yield Master II	15.4	-	-	-	-

(1) Prior to July 1, 2008, KTRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.

(2) Annualized

(3) Total Domestic Equity is benchmarked to a S & P Blended Index. Total domestic equity was benchmarked to the S & P 500 through the fiscal year ending 6/30/2007. As of 7/1/2007, domestic equity is benchmarked to the S & P 1500 Index since the retirement annuity trust fund's domestic stock mix is most comparable to this index.

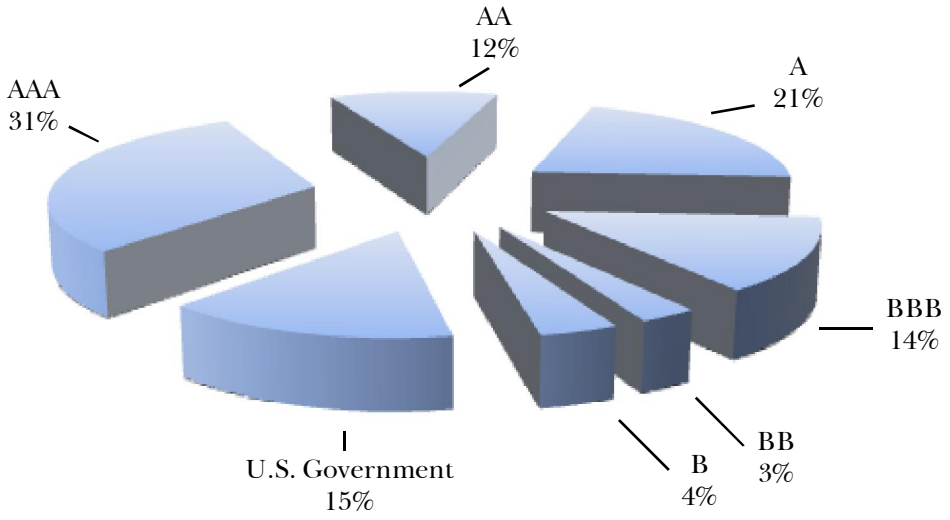
(4) For a period of five years private equity will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the commitment date, investments in this class shall be benchmarked versus the S & P 500 plus 3%, which is the retirement annuity trust fund's long-term expected return for this asset class.

FIXED INCOME INVESTMENTS

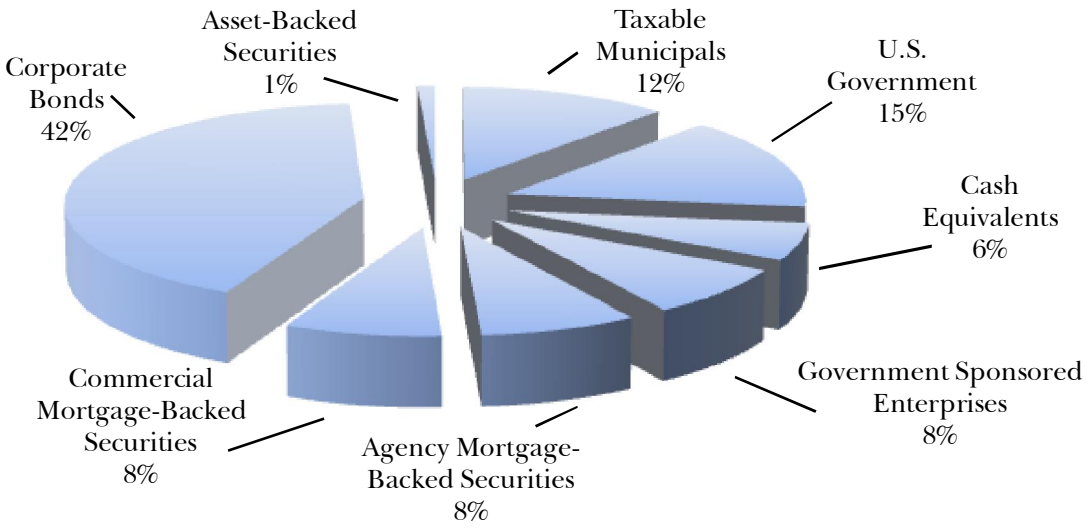
As of June 30, 2011, the retirement annuity trust fund had approximately $3.86 billion (25.6% of assets) in investment grade fixed income assets. In addition, the retirement annuity trust fund had $457.6 million (3.0% of assets) in other debt-related investments approved under a regulatory provision which allows for up to 15% of assets in additional "categories of investments" approved by the Board of Trustees. Investments under this authorization included a high yield bond portfolio, investments with two managers participating in the U.S. Treasury's Public-Private Investment Program (PPIP), and an investment in a distressed debt fund. The health insurance trust fund had $115.1 million in short-term high quality bonds for liquidity purposes and $49.8 million in a high yield bond portfolio.

Excluding the other debt-related investments discussed above, the retirement annuity trust fund's fixed income investments maintained the average investment grade rating required by administrative regulation as of June 30, 2011. The credit quality distribution, including the high yield portfolio, is illustrated below. Also illustrated below is the distribution of fixed income assets by sector, again including the high-yield portfolio.

FIXED INCOME QUALITY DISTRIBUTION



FIXED INCOME SECTOR DISTRIBUTION



FIXED INCOME MARKET OVERVIEW

Over the fiscal year, the U.S. credit markets were a reflection of a financial system and economy that were still recovering from the 2008 crisis and struggling with a weak and uncertain recovery. The Federal Reserve kept short-term rates near zero throughout the fiscal year and continued to employ unconventional monetary measures to support the economy. A $600 billion program of bond purchases by the Federal Reserve concluded in June, 2011. Despite the monetary activism, economic growth weakened in the spring and summer of 2011. Inflation-adjusted GDP grew only 1.6% over the fiscal year. The unemployment rate remained stubbornly high at 9.2%, down from 9.5% a year earlier.

A period of decent, if restrained, economic recovery from late 2009 through calendar 2010 was followed by renewed weakness in 2011. Inflation-adjusted GDP grew at a 0.4% annual rate in the quarter ended March 31 and a 1.3% annual rate in the quarter ended June 30. Market volatility surged in mid-2011 and consumer confidence collapsed. The housing downturn dragged on, with the Case-Shiller Index of home prices declining 4.5% over the fiscal year; the Index was down 31.6% from its peak in July, 2006. With U.S. fiscal challenges in the headlines, the Eurozone debt crisis was clearly deepening. By the end of the fiscal year, fears were mounting of a full-blown crisis in Europe and renewed recession in the U.S.

Fixed income sectors that were the most battered during the 2008 crisis continued to outperform. The Barclays High Yield Index returned 15.63% for the fiscal year, while investment grade commercial mortgage-backed securities returned 12.22%. Investment grade corporate bonds returned 6.29% while agency mortgage-backed securities returned 3.77% and U.S. Treasury securities returned 2.24%. The Barclays Government/Credit Index, which is heavily weighted in government bonds, returned 3.68%.

The retirement annuity trust fund's investments in fiscal year 2010 into high yield bonds and the U.S. Treasury's Public-Private Investment Program (PPIP) funds proved to be timely. The high yield bond portfolio returned 15.6% for the fiscal year while the PPIP investments returned 27.8%. In a continuing effort to find attractive alternatives to traditional fixed income, a $100 million commitment was made in fiscal year 2011 to a distressed debt fund and $100 million was committed to a multi-sector opportunistic credit mandate. The retirement system continues to evaluate alternative debt-related investment options in an effort to improve the risk/reward tradeoff within the asset class while maintaining the diversification and liquidity that the retirement system's portfolios require.

Despite near-term downside risks to the economy, the long-term risk/reward potential for high quality U.S. fixed income was clearly unattractive at fiscal year-end. On June 30, the yield on the 10-year U.S. Treasury bond was 3.16%, while the consumer price index had risen 3.6% over the previous twelve months, representing a potentially negative inflation-adjusted return. Strategic investments in sectors which represented better relative value continued to make sense. Going forward, the focus remained on structuring the asset class exposure to improve return potential and control risk.

EQUITY INVESTMENTS

As of June 30, 2011 the retirement annuity trust fund's public equity investments had a market value of $9.65 billion, representing 63.5% of total assets. Strong equity returns over the first nine months of the year prompted several rebalancing sales to reduce equity exposure back to target levels. The retirement annuity trust fund divides its public equity investments into two broad categories: domestic and international.

The domestic portfolio had a market value of $7.4 billion as of June 30, representing 48.4% of total assets. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of 3 well known component indices based upon capitalization: the S&P 500 large cap, S&P 400 mid cap, and the small cap S&P 600. The retirement annuity trust fund's domestic equity holdings are comprised of eleven portfolios. Three of the portfolios are internal passively managed portfolios benchmarked to the S&P 500,

S&P 400, and S&P 600. The other eight portfolios are managed externally with each representing a specific strategy and measured against an appropriate benchmark. The collective array of portfolios provides diversification by capitalization, manager, style, and strategy.

The market value of international equity holdings as of June 30, 2011 was $2.29 billion representing 15.1% of total assets. The benchmark for international equities is the Morgan Stanley Capital International All Country World Index ex US (MSCI ACWI-exUS), which represents the markets of 24 developed countries and 21 emerging markets countries. Four external managers manage the retirement annuity trust fund's international equities. During the fiscal year international equities increased as a percent of total assets. The retirement annuity trust fund plans to continue increasing the international equity exposure during the coming fiscal year.

The health insurance trust fund had $150.7 million invested in a global stock index fund.

EQUITY MARKET OVERVIEW

For the fiscal year 2011, stocks continued their strong rebound from their financial crisis/recession induced lows of 2009. Returns of domestic stocks as measured by the S&P 1500 were 31.7% for the year after a 15.6% gain in fiscal 2010. The Morgan Stanley Capital International (MSCI) World Index advanced 31.2%, while the MSCI EAFE which measures foreign developed markets returned 30.9%. The MSCI Emerging Markets Index was up 28.2% despite lagging performance in China and India.

Domestic stocks turned in a strong performance for fiscal year 2011 as the S&P 1500 gained 31.7%. Most all the gains came in the first three quarters, as the last quarter returns were flat. The first two quarters produced a 23.9% return as stocks rebounded from the June 2010 quarter sell-off. During the first quarter of the year the market rose on expectations of an economic rebound and strong corporate profit growth. Toward the end of the quarter there were rumors that the Federal Reserve may engage in a Quantitative Easing (QE) whereby the Fed injects more money into the economy by buying financial assets from banks and other private sector businesses. In November Federal Reserve chairman Ben Bernanke announced a $600 billion QE program, dubbed "QE 2". The QE announcement buoyed expectations that the economy would likely recover and that the Fed stood ready to provide liquidity.

During the second half of fiscal year 2011, the market wrestled with several crosscurrents of economic and political events. The market delivered strong returns during January and February as it digested the strong corporate earnings reports for the December quarter and the continued "QE 2" inspired optimism. The market appeared to disregard disappointing housing statistics, stubbornly high unemployment, rising oil prices, and rumblings of sovereign debt troubles in Europe. The S&P/Case-Shiller Home Price Index showed a 3.6% quarter-over-quarter price decline for the December quarter, which was released in February. Although the national unemployment rate dropped to 8.8% by the end of March from the 9.4% at the end of December, job growth continued to disappoint forecasts. Oil prices continued to rise as the price per barrel of crude rose from $91 at the end of December to almost $100 by the end of February.

On March 11 a major earthquake struck off the coast of Japan. The quake along with the resulting tsunami resulted in a catastrophic human toll with more than 16,000 fatalities. The quake and tsunami also crippled several nuclear reactors. The magnitude of the damage and speculation regarding a possible melt-down of some reactors resulted in a sharp decline in the market. Although the market rebounded in late March to finish the month flat, the earthquake and market volatility resulted in a drop in the Conference Board's Consumer Confidence Index (CCI) from a 12 month high of 72 in February to 63.8 by the end of March.

Returns for the domestic equity market were flat for the fourth quarter. Many market analysts expounded that the market looked "cheap" based upon corporate earnings. At the beginning of calendar year 2011, consensus expectations for corporate profits as measured by the S&P 500 were for earnings of $101.5 per share. With the S&P trading at around 1,326 at the end of March this meant the market was

trading at a price/earnings ratio of 13, inexpensive by historical standards. The expectations for stronger corporate profits were set against a backdrop of deteriorating economic statistics, sovereign debt fears, and political policy uncertainty. Over the final quarter of the fiscal year the unemployment rate climbed to 9.2% from 8.8% at the end of March. Housing statistics continued to remain dismal as the quarter-over-quarter home price index fell 4.2% for the March quarter and the supply of existing single family homes rose to 9.4 months. European sovereign debt issues once again came into the headlines as bearish investors warned that high debt levels in countries such as Portugal, Ireland, Italy, and Spain could lead to needed bailouts or defaults. Leading European countries such as Germany and France which were called upon to help bail Greece out of its debt crisis were sounding a bit more circumspect with regard to continued bailouts as it was becoming politically unpopular in their home countries. Italy represents a particular concern as its GDP represents approximately 12% of the European Union. There were even rumors that the ratings agencies were taking a look at the US as the deficit continues to rise in the face of flagging economic growth and political wrangling. The price of gold continued to rise to over $1,500 per ounce during the final quarter as investors sought hard asset protection.

The continued weakness in housing and employment had some analysts calling for a QE 3 once QE 2 was to come to an end at the end of June. Many economists however began to question how effective QE 2 actually was. Some argued that it merely inflated asset prices such as stocks and some commodities. There is growing concern that the Fed may not be able to do anything else to boost the economy and that fiscal stimulus may be needed. However, the fiscal situation limits this option.

Within the domestic market the energy sector delivered the best returns for the fiscal year while financials were the weakest performer. Energy stocks rebounded from being the worst performing sector over the prior two years as the price of crude oil averaged almost $90 per barrel over the past year. For the first half of the year energy and material stocks were the top performing sectors while more defensive sectors such as utility and healthcare were the weakest. This reflected investors' belief that an economic recovery and a rise in interest rates were likely. For the second half of the year the health care and utility sectors were among the best performing as it became clear that economic growth would be much lower than expected and interest rates fell instead of rising.

REAL ESTATE

The retirement annuity trust fund's real estate investments had a market value of $480.4 million as of June 30, 2011, representing 3.1% of total assets. The retirement annuity trust fund's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow, and provide diversification, thereby reducing the volatility of the overall investment portfolio.

The retirement annuity trust fund's real estate exposure is currently provided through three portfolios. The retirement annuity trust fund maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high credit quality tenants. The retirement annuity trust fund is also invested in a commingled real estate fund (PRISA Fund), which is managed by Prudential Real Estate Investors. This fund is a core real estate equity fund which invests primarily in existing income-producing properties with strong cash flows and the potential for capital appreciation. The fund is diversified across several property types including office, retail, industrial, apartment, self-storage and hotel. Additionally, the retirement annuity trust fund is invested in a real estate limited partnership (Carlyle Realty Partners VI, L.P.), which is managed by the Carlyle Group. This fund is an opportunistic real estate fund

targeting distressed properties where fundamentals such as supply, demand and location indicate that the property can be successfully turned around. This fund will focus on the major markets on the East and West Coasts and across all property types.

REAL ESTATE OVERVIEW

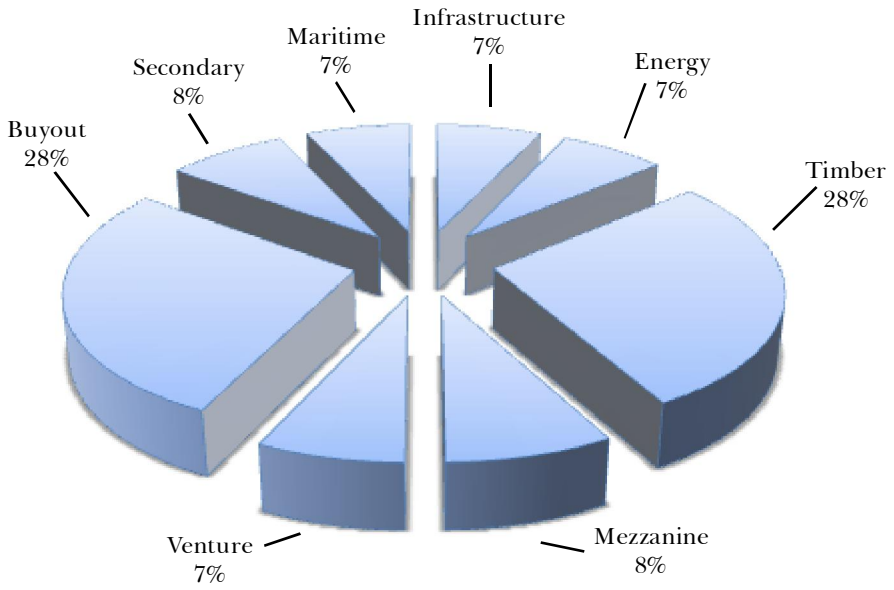
Interest in commercial real estate was quite strong during the fiscal year as investors sought investments offering stable, secure cash flows at attractive yield levels. Property values of core assets located in prime markets saw a meaningful rebound, while the recovery in the broader market was somewhat weaker due to limited transaction activity and distressed sales. Demand was strongest in the apartment and hotel sectors, while industrial and office space saw less investor interest.

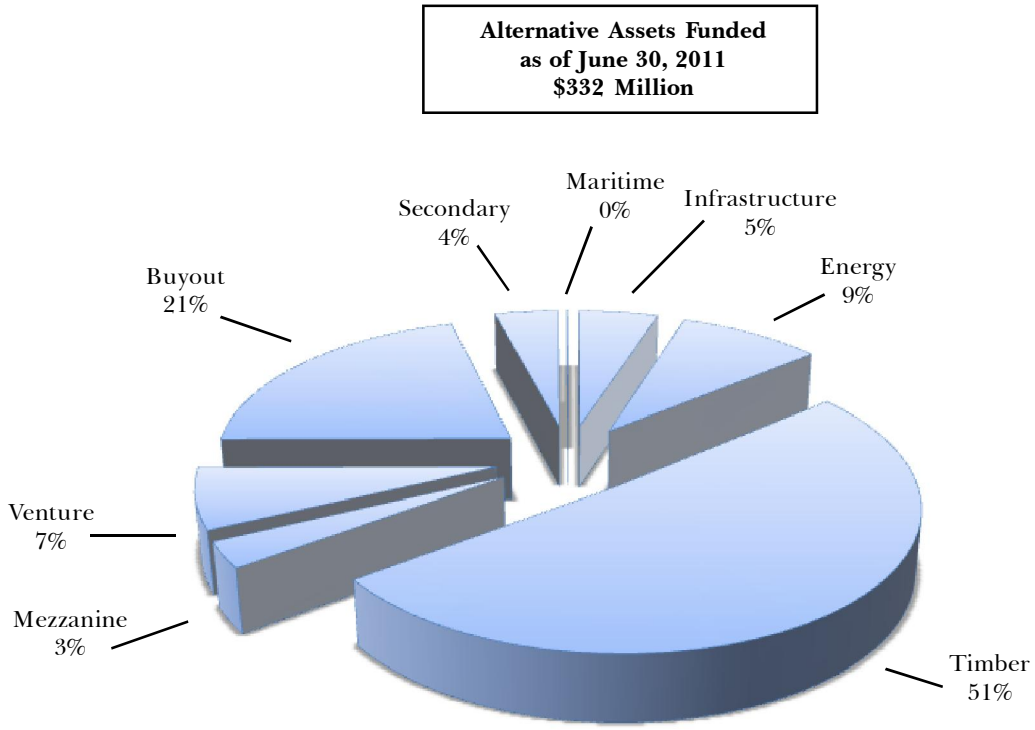
With the exception of multifamily housing, new construction activity is expected to be quite limited over the upcoming year. The lack of new supply and an expected moderate increase in tenant demand should lead to higher occupancy rates and an increase in rents in the strongest segments of the market. Opportunistic investments will continue to be available for investors who have ready cash to provide financing at attractive terms, and for those who are in a position to purchase property from owners who are unable to pay or refinance maturing debt.

ALTERNATIVE ASSETS

As of June 30, 2011, the retirement annuity trust fund had committed $715 million to alternative investments and had funded $332 million of those commitments. There were no commitments to the health insurance trust fund. The percentage of the retirement annuity trust fund's portfolio in alternative assets was 2.4%. The retirement annuity trust fund's current alternative asset portfolio consists of private equity investments and timberland.

Alternative Assets Committed as of June 30, 2011 $715 Million





PRIVATE EQUITY

The retirement annuity trust fund has exposure to venture, buyout, infrastructure, energy, mezzanine and several other private equity sectors via participation in limited partnerships as well as investments in funds of funds. The retirement annuity trust fund is in the early stages of its private equity investment program, which it intends to grow with a disciplined plan of commitments over the next several years. The retirement annuity trust fund looks to diversify its private equity portfolio by firm, country, strategy, and vintage year, and will achieve vintage year diversification by building out the portfolio with disciplined levels of commitments over time. The retirement annuity trust fund's commitment to any given partnership shall not exceed 20% of the partnership's total commitments.

The Board and staff understand that private equity (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with other publicly traded assets, this asset class can help to diversify and reduce risk for the retirement annuity trust fund's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence.

PRIVATE EQUITY MARKET OVERVIEW

The private equity market continues to heal from the devastating effects of the financial crisis. Fund raising has picked up as many investors have increased their allocation to private equity over the past fiscal year. The reopening of the IPO market has been a key driver in the ability of fund managers to begin to exit their underlying portfolio companies and return funds to the limited partners. With the rebound in the private equity markets we have seen an increase in capital calls and expect this to continue in the foreseeable future.

Limited partners are becoming more selective in their allocation to private equity with a strong bias toward the top tier firms. This should, over the long term, provide a shakeup in this space as the weaker firms are forced to exit. As large buyout funds continue to be out of favor, we are seeing more opportunity in the middle market space and in other more niche areas such as energy, infrastructure and distressed credit. Additionally, the stress in the European markets should continue to present investment opportunities in the private equity space over the next fiscal year.

TIMBERLAND

In addition to private equity, the retirement annuity trust fund has invested in timberland in the alternative asset class. As of June 30, 2011 the retirement annuity trust fund owns approximately 73,000 acres of timberland outright and has a 7.15% interest in a commingled fund that holds approximately 98,000 acres of timberland. Additionally, during the past fiscal year the retirement annuity trust fund purchased an interest in approximately 124,000 acres of timberland located across seven southern states. Timberland is, by nature, a long term investment as our anticipated time horizon in this asset category is generally a minimum of ten to fifteen years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the retirement annuity trust fund's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long-term.

The retirement annuity trust fund diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are primarily driven from net cash flow generated from the sale of trees (referred to as stumpage sales) and capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of the forest commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland from the conversion of timberland into higher and better uses, such as vacation property sales.

TIMBERLAND MARKET OVERVIEW

Over the past fiscal year the timber markets, particularly in the Southern U.S., have generally been flat. The soft economy, persistently high unemployment and the ailing housing market have left mills with an oversupply of inventory and limited pricing power for timberland owners. A rebound in the economy and with that a recovery in the construction market should help to alleviate this oversupply and allow for some upward pricing power over the long term. One bright spot in this rather lackluster timber market has been the Pacific Northwest, which has seen demand and prices rebound from their post financial crisis lows. This rebound can be attributed to the demand for timber from the Far East, particularly China and Japan. Demand is stemming from China's growth and Japan's reconstruction, following the earthquake and tsunami that occurred in March 2011.

RETIREMENT ANNUITY TRUST PORTFOLIOS

MARKET VALUES **

June 30, 2011

Internally Managed

Cash Equivalents	
Cash Collections Fund (Unallocated)	352,707,345
Fixed Income*	
Broad Market Bond Fund	965,175,899
Long Term Bond Fund	548,731,286
Intermediate Bond Fund	442,760,524
Internal Bond Fund	374,955,512
Life Insurance Trust	87,011,298
Tax Shelter Fund	423,376
Equity	
S & P 500 Stock Index Fund (Large Cap)	2,588,717,651
S & P 400 Stock Index Fund (Mid Cap)	399,534,211
S & P 600 Stock Index Fund (Small Cap)	270,345,296
Real Estate	
Internally Managed Fund	387,947,157
Subtotal	6,418,309,555

Externally Managed

Fixed Income	
Galliard Capital Management	737,526,988
Ft. Washington Broad Market	699,598,551
Domestic Equity	
Todd - Veredus (Large Cap Core)	1,255,896,326
UBS (Large Cap Value)	962,991,298
GE Asset Management (Large Cap Growth)	655,251,249
Wellington (Large Cap Core)	526,994,388
Wellington (Mid Cap Core)	293,082,593
Wellington (Small Cap Core)	165,530,699
Todd - Veredus Opportunity Fund	127,546,997
UBS (130/30)	110,905,553
International Equity	
Todd - Veredus International	720,580,331
UBS International	667,852,908
Baillie Gifford EAFE Alpha	504,036,473
Baring Focused International Equity	401,567,223
Real Estate	
Prudential PRISA Fund	88,087,181
Carlyle Realty Partners VI	4,412,899
Alternative Investments	
Molpus Woodlands Group Lake Superior Timberlands LLC	88,927,058

continued ...

RETIREMENT ANNUITY TRUST PORTFOLIOS continued ...
JUNE 30, 2011

Molpus Seven States LLC	71,318,161
Riverstone/Carlyle E & P Fund IV	41,757,750
KKR & Co European Fund III	30,832,809
KKR & Co Fund 2006	20,249,639
Hancock Bluegrass LLC - Oregon	20,073,215
Alinda Infrastructure Fund II	19,440,393
Ft. Washington Fund VI	17,978,217
Chrysalis Venture Fund III	14,825,854
Lexington Capital Partners Fund VII	12,717,189
Ft. Washington Fund V	11,615,950
Landmark Equity Partners Fund XIV	6,214,837
Oaktree Mezzanine Fund III	5,164,810
Parish Capital Fund III	5,127,211
CapitalSouth Partners Fund III	1,796,973
Audax Mezzanine Fund III	1,322,241
J. P. Morgan Maritime Fund	87,569
Additional Categories	
Fort Washington High Yield Bond Fund	250,550,515
Marathon Legacy Securities PPIP	72,126,160
AG GECC PPIF, LP	69,150,793
Avenue Special Situations Fund VI	65,800,974
Subtotal	8,748,939,975
Total Assets	15,167,249,530

* *Excludes purchased interest of $779,260 as of June 30, 2011*
** *Detailed information concerning these market values of all KTRS investments is available upon request.*

HEALTH INSURANCE TRUST PORTFOLIOS
MARKET VALUES **
June 30, 2011

Cash Equivalents	
Cash Collections Fund	63,546,353
Fixed Income*	
Internal Bond Fund	115,102,621
Subtotal	**178,648,974**
Fixed Income*	
Ft. Washington High Yield Bond Fund	49,822,252
Global Equities	
BlackRock Fund B	150,698,033
Subtotal	**200,520,285**
Total Assets	**379,169,259**

* *Excludes purchased interest of $221,418 as of June 30, 2011.*
** *Detailed information concerning these market values of all KTRS investments is available upon request.*

Investment Summary
Fair Market Value – Total Funds
June 30, 2011

Type of Investment	Fair Value 07/01/10	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/11
Cash Equivalents	$ 307,378,300	$ 5,265,658,700	$ -	$ 4,840,633,600	$ 732,403,400
Fixed Income	4,126,873,400	3,562,511,300	12,070,600	3,682,180,700	4,019,274,600
Equities	7,526,938,500	2,352,793,400	2,317,955,700	2,458,440,100	9,739,247,400
Real Estate	419,613,700	57,632,800	3,452,800	252,000	480,447,200
Alternative	299,635,600	254,439,000	62,802,600	40,349,500	576,527,800
TOTAL	$12,680,439,500	$ 11,493,035,200	$ 2,396,281,700	$ 11,021,855,900	$ 15,547,900,400

Contracted Investment Management Expenses
Fiscal Year 2010-11
(in thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 6,392,236	$ 11,313	
Fixed Income Manager	1,687,676	1,033	
Real Estate	92,500	899	
Alternative Investments [2]	576,528	7,455	
Total	$ 8,748,940	$ 20,700	23.7
Other Investment Services			
Custodian Fees	$ 15,167,731	$ 331	0.2
Consultant Fees		359	
Legal & Research		155	
Subscriptions/Services		615	
Total		$ 1,460	
Grand Total		$ 22,160	**14.6**

(1) – One basis point is one hundredth of one percent or the equivalent of .0001.

(2) – Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.

Health Insurance Trust Fund
Contracted Investment
Management Expenses
Fiscal Year 2010-11
(in thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 150,698	$ 29	
Fixed Income Manager	49,822	25	
Real Estate	-	-	
Alternative Investments [2]	-	-	
Total	$ 200,520	$ 54	2.7
Other Investment Services			
Custodian Fees	$ 379,169	$ -	0.0
Consultant Fees		-	
Legal & Research		7	
Subscriptions/Services		-	
Total		$ 7	
Grand Total		$ 61	**1.6**

(1) – One basis point is one hundredth of one percent or the equivalent of .0001.
(2) – Private equity fees are either withheld from the Fund operations or paid by direct" disbursement, depending on contract terms."

Transaction Commissions
Fiscal Year 2010-11

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Barclays Total	1,999,359	66,096	$0.0331	2.16 %
BB & T Capital Markets Total	5,900	236	0.0400	0.01
Blair, William & Co Total	87,200	3,488	0.0400	0.11
BMO Capital Markets Total	30,075	1,203	0.0400	0.04
BNP Paribas Securities Bond Total	122,375	3,491	0.0285	0.11
BNY ConvergEX Group Total	3,784,214	69,429	0.0183	2.27
Brean Murray, Carret & Co., LLC Total	3,300	132	0.0400	0.00
BTIG Total	176,845	6,444	0.0364	0.21
Canacord Adams Total	18,100	724	0.0400	0.02
Cantor Fitzgerald & Co Total	105,450	4,170	0.0395	0.14
CIBC Oppenheimer Worldmarket Total	96,885	32,893	0.3395	1.08
Citigroup Global Total	277,480	10,005	0.0361	0.33
Collins Stewart LLC Total	52,950	2,118	0.0400	0.07
Cowen & Co Total	472,600	13,105	0.0277	0.43
Credit Research & Trading LLC Total	33,800	1,234	0.0365	0.04
Credit Suisse Sec. LLC Total	3,762,535	111,433	0.0296	3.64
Crowell Weedon & Co Total	9,200	368	0.0400	0.01
CSI US Institutional (Calyon) Total	291,215	10,003	0.0343	0.33
Cuttone & Co Inc Total	49,700	1,118	0.0225	0.04
D A Davidson & Co Total	14,300	572	0.0400	0.02
Dahlman Rose & Co LLC Total	65,520	2,621	0.0400	0.09
Deutsche Bank Total	744,404	22,985	0.0309	0.75
Dowling & Partners Total	11,500	460	0.0400	0.02
Fidelity Capital Markets Total	29,575	810	0.0274	0.03
First Kentucky Securities Corp Total	2,164,600	64,938	0.0300	2.12
Freidman Billings Total	131,508	5,048	0.0384	0.17
Gleacher & Company Securities Total	35,000	1,400	0.0400	0.05
Goldman Sachs Total	4,062,031	125,229	0.0308	4.09
Heflin & Co Total	54,200	2,168	0.0400	0.07
Hudson Securities Total	9,600	384	0.0400	0.01
Investment Tech Grp Transition Total	11,455,230	114,552	0.0100	3.74
Investment Technology Grp Total	37,198,993	513,320	0.0138	16.78
ISI Group Total	3,278,981	94,514	0.0288	3.09
J.J.B. Hilliard, W.L. Lyons Total	3,513,100	105,393	0.0300	3.45
Janney Montgomery Scott Inc Total	145,200	5,808	0.0400	0.19
Jefferies & Co. Total	416,325	14,625	0.0351	0.48
JMP Securities Total	94,225	3,769	0.0400	0.12
Jones & Associates Total	45,600	1,824	0.0400	0.06
JP Morgan & Chase Total	690,605	20,654	0.0299	0.68
Keefe Bruyette & Woods Total	58,575	2,343	0.0400	0.08
Keybanc Capital Total	29,690	1,188	0.0400	0.04
Knight Equity Markets Total	56,630	2,082	0.0368	0.07
Lazard Freres & Co. Total	3,735,410	109,157	0.0292	3.57
Leerink Swann & Co. Total	104,050	2,623	0.0252	0.09
Lexington Investment Co. Total	1,465,890	43,977	0.0300	1.44
Liquidnet Inc Total	11,462,710	120,250	0.0105	3.93
Longbow Securities LLC Total	8,857	354	0.0400	0.01
MacQuarie Securities Inc Total	56,175	2,247	0.0400	0.07
Melvin Securities Inc Total	9,100	91	0.0100	0.00
Merrill Lynch Total	8,570,585	149,920	0.0175	4.90
Merrill Lynch, Pierce, Fenner & Total	15,950	638	0.0400	0.02
Miller Tabak & Co. LLC Total	32,200	1,288	0.0400	0.04
Mizuho Securities, USA Total	1,400	56	0.0400	0.00
MKM Partners Total	43,565	1,187	0.0272	0.04
Morgan Keegan Total	3,038,154	89,966	0.0296	2.94
Morgan Stanley Smith Barney-Hunt Total	3,598,560	107,957	0.0300	3.53

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Morgan Stanley Smith Barney-Louv Total	2,872,860	86,186	0.0300	2.82
Morgan Stanley Smith Barney-NKY Total	3,679,820	110,395	0.0300	3.61
Morgan Stanley Total	2,303,118	59,171	0.0257	1.93
Needham Total	20,320	813	0.0400	0.03
Nomura Securities Intrntl Inc Total	94,970	3,114	0.0328	0.10
Oppenheimer & Co, Inc Total	4,700	188	0.0400	0.01
Pacific Crest Securities Total	5,600	224	0.0400	0.01
Pershing LLC Total	69,800	1,699	0.0243	0.06
Pipeline Trading Total	7,400	74	0.0100	0.00
Piper Jaffray Total	79,090	4,027	0.0509	0.13
Pulse Trading Total	263,820	5,688	0.0216	0.19
R W Baird Total	344,864	9,696	0.0281	0.32
Raymond James & Assoc Total	5,924,948	179,175	0.0302	5.86
RBC Capital Markets Total	261,510	9,621	0.0368	0.31
Rosenblatt Securities LLC Total	8,000	320	0.0400	0.01
Ross Sinclaire & Assoc Total	1,418,450	42,554	0.0300	1.39
Sanford C Bernstein Total	854,578	15,394	0.0180	0.50
SG AMERICAS SECURITIES Total	4,025	161	0.0400	0.01
Simmons & Co Total	8,600	344	0.0400	0.01
SJ Levinson & Sons LLC Total	3,500	140	0.0400	0.00
Soleil Securities Co Total	11,400	456	0.0400	0.01
State Street Global Total	90,550	2,717	0.0300	0.09
Stephens Inc. Total	25,550	1,022	0.0400	0.03
Sterne, Agee & Leach Total	166,195	6,648	0.0400	0.22
Stifel, Nicolaus & Co Total	2,533,489	87,360	0.0345	2.86
Stifel, Nicolaus & Co-Louisville Total	1,409,770	42,293	0.0300	1.38
Suntrust Robinson Total	46,150	1,846	0.0400	0.06
Susquehanna Brokerage Total	219,664	7,443	0.0339	0.24
Think Equity Partners Total	1,700	68	0.0400	0.00
UBS/Paine Webber Securities Total	1,210,582	24,105	0.0199	0.79
UBS/Paine Webber-Louisville Total	4,350,950	130,529	0.0300	4.27
Wedbush Morgan Securities Total	20,100	804	0.0400	0.03
Weeden & Co Total	4,506,244	135,748	0.0301	4.44
Wells Fargo Securities, LLC Total	338,895	13,304	0.0393	0.43
WJB Capital Group Inc	44,250	1,770	0.0400	0.06
TOTAL	**141,032,643**	**3,059,182**	**0.0217**	**100%**

The acquisition of initial public offerings (IPOs) represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate; however, the security issuers and not the investors pay the commissions. In 2010-11, the retirement annuity trust fund bought small capitalization IPOs that generated $122,318 in commissions. Although these commissions were not paid by the retirement system, they resulted from the retirement annuity trust fund's investment activities and are included in the total commissions of $3,059,182. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.03 per share or less. Investment companies usually provide investment research for brokerage clients. On occasion, investment companies direct third party research to active clients. The retirement system received third party research credit through BNY ConvergEx during this fiscal year. Trading commissions of $6,640.43 were associated with third party research obligations. The primary research providers were: Bloomberg, Interactive Data, Rogers Casey, RiskMetrics Group, QED Financial Systems, and Thomson Financial; however, KTRS began the process of paying for research directly to vendors instead of through third party research agreements.

Ten Largest Stock Holdings Ranked (1) (2)
by Market Value
June 30, 2011

Rank	Name	Market Value	Percentage of Equities
1	Exxon Mobil Corp	163,055,165	2.063
2	Apple Inc	137,503,859	1.739
3	Pepsico Inc	109,219,956	1.381
4	Qualcomm Inc	108,290,352	1.370
5	Chevron Corp	86,019,181	1.088
6	Philip Morris Inc	82,951,042	1.049
7	International Business Machines	79,540,873	1.006
8	Microsoft Corp	78,388,986	0.991
9	Oracle Corp	73,974,835	0.935
10	United Health Group	67,611,786	0.855

Top Ten Fixed Income Holdings (2)
by Market Value
June 30, 2011

Rank	Description	Maturity	Coupon	Par Value	Market Value	Percent of Fixed Income
1	U S Treasury Bonds	8/15/2023	6.250	46,000,000	58,355,140	1.503
2	U S Treasury	5/15/2041	4.380	54,820,000	54,734,481	1.410
3	U S Treasury TIPS	4/15/2013	0.630	49,540,000	54,254,212	1.397
4	U S Treasury	5/15/2021	3.130	47,930,000	47,795,317	1.231
5	U S Treasury	4/30/2013	0.630	44,375,000	44,534,306	1.147
6	U S Treasury	5/31/2013	0.500	42,575,000	42,619,704	1.098
7	FNMA Notes	1/15/2030	7.130	25,000,000	33,264,000	0.857
8	U S Treasury Bonds	8/15/2029	6.130	22,000,000	27,953,860	0.720
9	U S Treasury TIPS	1/15/2029	2.500	22,000,000	26,759,839	0.689
10	CMO FHR 3095 JE	7/15/2031	5.500	23,604,000	24,441,010	0.629

(1) Includes only actively managed separate accounts.
(2) Detailed information concerning these values along with book values and cost values of all KTRS investments is available upon request.

PROXY VOTING AND CORPORATE BEHAVIOR

The retirement system regularly votes proxy statements associated with its equity ownership. The positions assumed by the retirement system are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the retirement system to social or political protests. At the same time, the retirement system expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The Board has adopted the following position on corporate behavior:

The Board's stated fiduciary duty is to obtain the highest return for the retirement system commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the retirement system as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the retirement system has invested.

The Board expects the managements of the companies whose equity securities are held in the retirement system's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the Board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the Board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission, and others which are covered by the laws of the United States Government or the State of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the retirement system's holdings in the company, if the sale is consistent with sound investment policy.

SECURITY LENDING

The retirement system operates a security lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and select stocks and bonds are the types of securities loaned. The retirement system's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral, at the time of the loan, has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral consists of cash, marketable U.S. Government securities, and selected marketable U.S. Government agency securities approved by the retirement system.

Cash collateral is invested in short term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The retirement system cannot pledge or sell collateral securities unless the borrower defaults. The lending agent also indemnifies the retirement system from any financial loss associated with a borrower's default and collateral inadequacy. The weighted average maturity of cash collateral investments is typically two days. The retirement system has no credit risk exposure to borrowers, since the amounts the retirement system owes borrowers exceeds the amounts the borrowers owe the retirement system.

Security lending programs can entail considerable interest rate risk and credit risk. The retirement system has structured its program to minimize these two main categories of risk. The interest rate risk is managed, as mentioned above, by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the creditworthiness of lent securities.

KENTUCKY INVESTMENTS

The retirement system is keenly aware of the scale and importance of its role in the Commonwealth's economy. For the fiscal year ended June 30, 2011, approximately $1.7 billion in benefit payments (retirement, health, ...etc.) were distributed to annuitants living in Kentucky. Approximately $330 million of the retirement annuity trust fund's investments directly impact the Commonwealth. These investments include: commercial real estate; bonds issued by public agencies of the Commonwealth and those of local municipalities; pools of single-family mortgages in Kentucky; financing for multi-family housing, and; investments in the bonds of Kentucky-based corporations. This excludes hundreds of millions in equity investments in companies which have an impact on the Commonwealth's economy but receive earnings from world-wide operations. Fiduciary duty requires that investments be made solely for the benefit of the retirement system's members and annuitants. Investments which benefit the Commonwealth's economy are made only when fully consistent with this fiduciary duty.

PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
Hewitt EnnisKnupp, Inc.

Investment Custodian
The Bank of New York Mellon

Fixed Income Managers
Galliard Capital Management
Ft. Washington Investment Advisors

Domestic Equity Managers
Todd-Veredus Asset Management LLC
UBS Global Asset Management
Wellington Management Company
GE Asset Management

International Equity Managers
Todd-Veredus Asset Management LLC
UBS Global Asset Management
Baring Asset Management, Inc.
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Real Estate Managers
Prudential Real Estate Investors
Carlyle Realty Partners

Alternative Investment Managers
Molpus Woodlands Group
Hancock Natural Resources Group
Kohlberg Kravis Roberts & Co.
Chrysalis Ventures
Ft. Washington Private Equity Investors
Alinda Capital Partners, LLC
Riverstone Holdings, LLC
CapitalSouth Partners
Landmark Partners
Lexington Partners
Oaktree Capital Management
Parish Capital Advisors, LLP
Audax Group
J.P. Morgan Asset Management
Marathon Legacy Securities GP, LLC
AG GECC PPIF GP, LLC
Avenue Capital Group

Attorney
Schottenstein, Zox & Dunn, Co.

HEALTH INSURANCE TRUST PROFESSIONAL SERVICE PROVIDERS

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Investment Custodian
The Bank of New York Mellon

Fixed Income Manager
Ft. Washington Investment Advisors

Global Equity Manager
BlackRock Institutional Trust Company

Attorney
Schottenstein, Zox & Dunn, Co.

Actuarial Section

Report of the Actuary on the Annual Valuation

for Fiscal Year ending June 30, 2011

Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

December 14, 2011

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2011. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2014 required to support the benefits of the System are 29.99% of payroll for university members hired before July 1, 2008, 30.99% of payroll for university members hired on and after July 1, 2008, 32.95% of payroll for non-university members hired before July 1, 2008, and 33.95% of payroll for non-university members hired on and after July 1, 2008.

These rates represent an increase since the previous valuation in the Pension required employer contribution rate of 0.58% of payroll for the 2013/2014 fiscal year. In addition, there has been a net decrease in the expected state special appropriation from 3.69% to 3.50%, or 0.19% of payroll and a decrease in the amount required for life insurance benefits from 0.05% to 0.03%, or -0.02%. Therefore, the net impact on the required increase in the total employer contribution rate is 0.75% of payroll.

For the 2013/2014 fiscal year, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 8.02%; 0.75% from this valuation and 7.27% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

Since the previous valuation, various assumptions and methods have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2010. These revised changes were adopted by the Board on September 19, 2011 and are discussed in depth on pages 77 and 78 of the report. The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

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Board of Trustees
December 14, 2011
Page 2

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Report of Actuary on the Valuation
Prepared as of June 30, 2011
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2011	June 30, 2010
Number of active members	76,349	76,387
Annual salaries	$ 3,451,756	$ 3,321,614
Number of annuitants and beneficiaries	44,419	43,134
Annual allowances	$ 1,433,386	$ 1,352,158
Assets		
Market value	$ 15,130,606	$ 12,456,619
Actuarial value	$ 14,908,138	$ 14,851,330
Unfunded actuarial accrued liability	$ 11,060,554	$ 9,492,986
Funded Ratio	57.4%	61.0%
Amortization period (years)	30	30

Contribution Rates for University Members

Valuation Date	June 30, 2011		June 30, 2010	
For Fiscal Year Ending	June 30, 2014		June 30, 2013	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	11.77 %	11.77 %	13.31 %	13.31 %
Accrued liability	18.22	19.22	16.10	17.10
Total	29.99 %	30.99 %	29.41 %	30.41 %
Member	7.625%	7.625%	7.625%	7.625%
State (ARC)	22.365	23.365	21.785	22.785
Total	29.99 %	30.99 %	29.41 %	30.41 %
Life Insurance Fund:				
State	0.03 %	0.03 %	0.05 %	0.05 %
Medical Insurance Fund:				
Member	1.75 %	1.75 %	1.43 %	1.75 %
State Match	1.75	0.75	1.43	0.75
State Additional	0.00	0.00	0.00	0.00
Total	3.50 %	2.50 %	2.86 %	2.50 %
Total Contributions	33.52 %	33.52 %	32.32 %	32.96 %
Member Statutory	9.375%	9.375%	9.055%	9.375%
State Statutory	12.625	12.625	12.305	12.625
Required Increase	8.02	8.02	7.27	7.27
State Special	3.50	3.50	3.69	3.69
Total	33.52 %	33.52 %	32.32 %	32.96 %

Contribution Rates for Non-University Members

Valuation Date	June 30, 2011		June 30, 2010	
For Fiscal Year Ending	June 30, 2014		June 30, 2013	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	15.05 %	15.05 %	17.21 %	17.21 %
Accrued liability	17.90	18.90	15.16	16.16
Total	32.95 %	33.95 %	32.37 %	33.37 %
Member	9.105%	9.105%	9.105%	9.105%
State (ARC)	23.845	24.845	23.265	24.265
Total	32.95 %	33.95 %	32.37 %	33.37 %
Life Insurance Fund:				
State	0.03 %	0.03 %	0.05 %	0.05 %
Medical Insurance Fund:				
Member	2.25 %	2.25 %	1.75 %	1.75 %
State Match	2.25	1.25	1.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	4.50 %	3.50 %	3.50 %	2.50 %
Total Contributions	37.48 %	37.48 %	35.92 %	35.92 %
Member Statutory	11.355%	11.355%	10.855%	10.855%
State Statutory	14.605	14.605	14.105	14.105
Required Increase	8.02	8.02	7.27	7.27
State Special	3.50	3.50	3.69	3.69
Total	37.48 %	37.48 %	35.92 %	35.92 %

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2011 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Since the previous valuation, various assumptions and methods have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2010. The changes adopted by the Board on September 19, 2011, include various revised demographic and economic assumptions, a valuation interest smoothing methodology and a change in the actuarial cost method from Projected Unit Credit to the Entry Age Normal. Schedule D of this report shows the development of the smoothed interest rate and Schedule F shows a brief description of the actuarial cost method. The following chart summarizes all the changes adopted by the Board that are reflected in the valuation.

Summary of Assumptions and Methods
as of June 30, 2011

	Economic Assumptions
Price Inflation	Changed assumed rate from 4.00% to 3.50%
Ultimate Investment Rate of Return *	No change to current assumption
Wage Inflation	No change to current assumption
	Demographic Assumptions
Withdrawal	Changed rates to more closely reflect experience
Pre-Retirement Mortality	Changed to prescribed table that matches Post-Retirement Mortality
Disability	Lowered rates for most ages
Service Retirement	Changed rates to more closely reflect experience
Post-Retirement Mortality	Changed to RP2000 Combined Mortality Table
Salary Scale	No change to current assumption
	Other Assumptions and Methods Changes
Actuarial Cost Method	Change from Projected Unit Credit (PUC) to Entry Age Normal (EAN) Cost Method
Unused Sick Leave	Increase Load Assumption from 1% to 2%
Asset Smoothing	No change to current method
Interest Smoothing*	Change to interest smoothing methodology

* The Board adopted a Smoothed Interest Rate Methodology whereby the investment rate of return expected to be earned during a 25 year look forward period beginning on the valuation date and the actual returns earned during the 5 year look back period will result in an average rate of return over the combined 30 year period equivalent to the Ultimate Investment Rate of Return of 7.50%. A corridor of 0.50% around the ultimate investment rate of return will be applied in determining the smoothed interest rate.

5. Schedule B shows the development of the actuarial value of assets. Schedule E of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

6. Provisions of the System, as summarized in Schedule G, were taken into account in the current valuation. The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2011 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
Full Time	59,089	$ 3,337,547
Part Time	17,260	114,209
Total	76,349	$ 3,451,756

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2011

Group	Number	Annual Retirement Allowances[1] ($1,000's)
Service Retirements	38,755	$ 1,310,584
Disability Retirements	2,379	62,730
Beneficiaries of Deceased Members	3,285	60,072
Total	44,419	$ 1,433,386

[1] *Includes cost-of-living adjustments effective through July 1, 2011.*

3. Table 1 of Schedule H shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2011 the market value of Pension Plan assets for valuation purposes held by the System amounted to $15,130,606,279. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2011 was $14,908,138,356. Schedule B shows the development of the actuarial value of assets as of June 30, 2011.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2011. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule E and Schedule F.

2. The valuation balance sheet shows that the System has total prospective liabilities of $15,233,865,216 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $15,330,710,085 of which $965,191,446 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $227,185,346. The total prospective liabilities of the System amounts to $30,791,760,647. Against these liabilities, the System has present assets for valuation purposes of $14,908,138,356. When this amount is deducted from the total liabilities of $30,791,760,647, there remains $15,883,622,291 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 11.77% of payroll for University and 15.05% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,823,068,059. When this amount is subtracted from $15,883,622,291, which is the present value of the total future contributions to be made by the employer, there remains $11,060,554,232 as the amount of future unfunded accrued liability contributions.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member who becomes a member before July 1, 2008 will contribute 9.375% of annual salary to the System and each non-university member who becomes a member before July 1, 2008 will contribute 11.355% of annual salary. Of this amount, for each university member, 1.75% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 2.25% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.540 also provides that each university member who becomes a member on or after July 1, 2008 will contribute 9.375% of annual salary to the System and each non-university member who becomes a member on or after July 1, 2008 will contribute 11.355% of annual salary. Of this amount, 1.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

3. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2013/2014 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**

4. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.03% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 8.02% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 3.50% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 22.365% for university members who become members before July 1, 2008 and 23.365% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 23.845% for non-university members who become members before July 1, 2008 and 24.845% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source
University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	9.375%	9.375%
Statutory Medical Insurance Fund	(1.75)	(1.75)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	9.375%	9.375%
Statutory Medical Insurance Fund	(1.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	11.875%
Life Insurance	(0.03) %	(0.03) %
Additional to Maintain 30-Year Amortization	8.02	8.02
Special Appropriation	3.50	3.50
Contribution to Pension Plan	22.365%	22.365%
Total Contribution to Pension Plan	29.99 %	30.99 %

Contribution Rates by Source
Non-University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	11.355%	11.355%
Statutory Medical Insurance Fund	(2.25)	(2.25)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	11.355%	11.355%
Statutory Medical Insurance Fund	(2.25)	(1.25)
Supplemental Funding	3.25	3.25
Subtotal	12.355%	13.355%
Life Insurance	(0.03) %	(0.03) %
Additional to Maintain 30-Year Amortization	8.02	8.02
Special Appropriation	3.50	3.50
Contribution to Pension Plan	23.845%	24.845%
Total Contribution to Pension Plan	32.95 %	33.95 %

4. The valuation indicates that normal contributions at the rate of 11.77% of active university members' salaries and 15.05% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 18.22% for university members hired before July 1, 2008, 19.22% for university members hired on and after July 1, 2008, 17.90% for non-university members hired before July 1, 2008, and 18.90% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.50% of payroll to be made by the State. These rates are shown in the following table.

Actuarially Determined Contribution Rates

Rate	Percentage of Active Members' Salaries			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	11.77%	11.77%	15.05%	15.05%
Accrued Liability *	18.22	19.22	17.90	18.90
Total	29.99%	30.99%	32.95%	33.95%

* *Includes special appropriations of 3.50% of payroll to be made by the State.*

5. The unfunded actuarial accrued liability amounts to $11,060,554,232 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 8.02%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, additional contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2010, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. In addition, it is our understanding that beginning with the 2011 fiscal year, there will be no further loans for Stabilization Funding. The following table shows the amounts borrowed, annual payments and remaining balances as of June 30, 2011:

Medical Insurance Fund
Stabilization Funding

FISCAL YEAR	LOAN AMOUNT	ANNUAL PAYMENT	BALANCE AS OF JUNE 30, 2011
2004/2005	$ 29,169,700	$ 0	$ 0
2005/2006	62,294,800	0	0
2006/2007	73,000,000	0	0
2007/2008	125,000,000	0	0
2008/2009*	133,400,000	1,228,900	7,343,046
2009/2010**	134,200,000	1,345,200	8,746,642
2010/2011***	10,700,000	1,405,600	10,700,000
TOTAL	$ 567,764,500	$ 3,979,700	$ 26,789,688

* *Includes $125,000,000 for Stabilization Funding and $8,400,000 for non-single subsidy funding.*
** *Includes $125,000,000 for Stabilization Funding and $9,200,000 for non-single subsidy funding.*
*** *For non-single subsidy funding.*

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 8.02% of payroll for the fiscal year ending June 30, 2014, as shown in the following table:

VALUATION DATE	FISCAL YEAR	INCREASE	CUMULATIVE INCREASE
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46
June 30, 2008	June 30, 2011	1.13	3.59
June 30, 2009	June 30, 2012	2.22	5.81
June 30, 2010	June 30, 2013	1.46	7.27
June 30, 2011	June 30, 2014	0.75	8.02

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,567,568,343 in the unfunded accrued liability from $9,492,985,889 to $11,060,554,232 during the year ending June 30, 2011.

Analysis of Financial Experience
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 711,974
Expected accrued liability contribution	(331,360)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2010/2011 fiscal year with interest	11,101
Repayment of prior year's MIF Stabilization Funding with interest	(2,671)
Experience:	
Valuation asset growth	521,208
Pensioners' mortality	11,676
Turnover and retirements	13,570
New entrants	53,011
Salary increases	(164,032)
Amendments	0
Assumption changes	750,720
Method changes	(7,629)
Total	$ 1,567,568

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Members
as of June 30, 2011

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	44,419
Terminated employees entitled to benefits but not yet receiving benefits	6,135
Active plan members	76,349
Total	126,903

2. Another such item is the schedule of funding progress as shown below.

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2006**	$ 14,857,641	$ 20,324,781	$ 5,467,140	73.1%	$ 2,859,477	191.2%
6/30/2007	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8
6/30/2011***	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4

* *Funding method Projected Unit Credit prior to 6/30/2011*
Funding method Entry Age Normal 6/30/2011 and after
** *Reflects change in decremental assumptions*
*** *Reflects change in assumptions and methods*

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2011. Additional information as of the latest actuarial valuation follows.

Valuation date	06/30/2011
Actuarial cost method	Entry age
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market

Actuarial Assumptions:

Investment rate of return*
7.50%

Projected salary increases**
4.00 - 8.20%

Cost-of-living adjustments
1.50% Annually

**Includes price inflation at 3.5%*
***Includes wage inflation at 4.00%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Annual Required Contributions	Percentage Contributed
2006	$ 464,152,466	87%
2007	494,565,369	88
2008	563,789,483	83
2009	600,282,735	74
2010	633,938,088	76
2011	678,741,428	153

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2011. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Obligation for Fiscal Year Ending June 30, 2011

(a)	Employer annual required contribution	$ 678,741,428
(b)	Interest on net pension obligation	43,224,614
(c)	Adjustment to annual required contribution	30,809,803
(d)	Annual pension cost: (a) + (b) - (c)	$ 691,156,239
(e)	Employer contributions made for fiscal year ending June 30, 2011	1,037,935,993
(f)	Increase (decrease) in net pension obligation: (d) - (e)	(346,779,754)
(g)	Net pension obligation beginning of fiscal year	576,328,182
(h)	Net pension obligation end of fiscal year: (f) + (g)	$ 229,548,428

TREND INFORMATION

YEAR ENDING	ANNUAL PENSION COST (APC)	PERCENTAGE OF APC CONTRIBUTED	NET PENSION OBLIGATION (NPO)
June 30, 2009	$ 605,671,714	73%	$ 413,292,362
June 30, 2010	642,840,908	75	576,328,182
June 30, 2011	691,156,239	150	229,548,428

SCHEDULE A
VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2011
(Dollar amount in thousands)

ACTUARIAL LIABILITIES

Present value of prospective benefits payable in respect of:

(1)	Present active members		
	- Service retirement benefits	$ 14,178,955	
	- Disability retirement benefits	697,309	
	- Death and survivor benefits	138,465	
	- Refunds of member contributions	219,136	
	Total		$ 15,233,865
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits		
	- Service retirement benefits	$ 14,224,794	
	- Disability retirement benefits	585,781	
	- Death and survivor benefits	520,135	
	Total		$ 15,330,710
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 227,186
(4)	TOTAL ACTUARIAL LIABILITIES		$ 30,791,761

PRESENT AND PROSPECTIVE ASSETS

(5)	Actuarial value of assets		$ 14,908,138
(6)	Present value of total future contributions = (4)-(5)	$ 15,883,623	
(7)	Present value of future member contributions and employer normal contributions		4,823,069
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		11,060,554
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 30,791,761

Schedule A continued ...

Solvency Test

(in millions of dollars)

Fiscal Year Ending	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2006	$ 2,615.8	$ 12,216.6	$ 5,492.4	$ 14,857.6	100%	100%	0%
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0	100	97	0
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3	100	91	0
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0

SCHEDULE B

Development of Actuarial Value of Assets as of June 30, 2011

(1)	Actuarial Value of Assets Beginning of Year (exclusive of Pension Obligation Bond)	$	14,386,329,749
(2)	Market Value of Assets End of Year	$	15,130,606,279
(3)	Market Value of Assets Beginning of Year	$	12,456,619,082
(4)	Cash Flow		
	a. Contributions (exclusive of Pension Obligation Bond)	$	874,814,647
	b. Benefit Payments		1,419,861,100
	c. Administrative Expense		7,322,739
	d. Net: (4)a - (4)b - (4)c	$	(552,369,192)
	e. Pension Obligation Bond	$	465,384,165
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)d - (4)e	$	2,760,972,224
	b. Assumed Rate		7.50%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5] + [(4)e x (5)b x 10/12]	$	942,619,097
	d. Amount for Phased-In Recognition: (5)a - (5)c	$	1,818,353,127
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	$	363,670,625
	b. First Prior Year		133,378,916
	c. Second Prior Year		(611,235,941)
	d. Third Prior Year		(409,879,449)
	e. Fourth Prior Year		190,240,386
	f. Total Recognized Investment Gain	$	(333,825,463)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (4)e + (5)c + (6)f	$	14,908,138,356
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	222,467,923

SCHEDULE C
PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2011	For the Year Ending June 30, 2010
Receipts for the Year		
Contributions		
Members	$ 302,262,819	$ 297,613,965
Employers	1,037,935,993	479,805,088
Total	$ 1,340,198,812	$ 777,419,053
Net Investment Income	2,760,972,224	1,509,265,958
Total	$ 4,101,171,036	$ 2,286,685,011
Disbursements for the Year		
Benefit Payments	$ 1,402,535,713	$ 1,321,808,770
Refunds to Members	17,325,387	15,310,680
Miscellaneous, including expenses	7,322,739	8,830,054
Total	$ 1,427,183,839	$ 1,345,949,504
Excess of Receipts over Disbursements	$ 2,673,987,197	$ 940,735,507
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 12,456,619,082	$ 11,515,883,575
Excess of Receipts over Disbursements	2,673,987,197	940,735,507
Asset Balances as of the End of the Year	$ 15,130,606,279	$ 12,456,619,082
Rate of Return	21.60%	13.44%

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE D
SMOTHED INTEREST RATE
Actual Rate of Return for 5-Year Look Back Period

Fiscal Year Ending June 30	Actual Rate of Return for Fiscal Year
2007	14.56%
2008	(6.46)
2009	(14.64)
2010	13.44
2011	21.60

SMOOTHED INTEREST RATE: The assumed rate of return during the 25-year look forward period beginning on the valuation date. This is the investment rate of return expected to be earned during this period based on the actual rates earned during the five year look back period shown above such that the average rate of return over the combined 30 year period is equivalent to the ultimate investment rate of return (currently 7.50%). On this basis, for the June 30, 2011 valuation, the smoothed interest rate during the 25 year look forward period has been determined to be 8.06%.

ULTIMATE INVESTMENT RATE OF RETURN (DISCOUNT RATE): The assumed investment rate of return used in determining the smoothed interest rate described above. This is also the assumed investment rate of return after the 25 year look forward period and is currently 7.50%.

CORRIDOR AROUND SMOOTHED INTEREST RATE: A corridor of 0.50% around the ultimate investment rate of return is applied in determining the smoothed interest rate.

LIMITED SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period as limited based on the application of the corridor above and used for valuation purposes. Since the smoothed interest rate above 8.06% the assumed rate for the first 25 years after the valuation date is limited to 8.00% by the corridor.

SCHEDULE E

Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011.

ULTIMATE INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.5% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.60%	4.50%	4.30%	4.20%	4.00%

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .							
			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.5	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set back five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

	Annual Rate of Death After . . .			
	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability.

VALUATION INTEREST RATE SMOOTHING: The valuation liabilities are calculated using a smoothed interest rate method. The interest rate assumed during the look forward period (currently 25 years from the valuation date) is the investment rate of return expected to be earned during the look

forward period based on the actual rate of return earned during the look back period (currently 5 years) such that the average assumed rate of return over the combined 30-year period is equivalent to the assumed ultimate investment rate of return (currently 7.50%). The interest rate after the 25-year look forward period is the ultimate investment rate of return of 7.50%.

CORRIDOR LIMIT ON INTEREST RATE SMOOTHING: The smoothed interest rate used during the 25-year look forward period is limited to a corridor of 0.50% around the ultimate investment rate of return.

SCHEDULE F

Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (see Schedules C and E for a description of the interest rate used), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE G

Summary of Main System Provisions as Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2011. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1. DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after

attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2. BENEFITS

Service Retirement Allowance: Members Before 7/1/2008

Condition for Allowance: Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance: Members On or After 7/1/2008

Condition for Retirement: Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 1.7% of final average salary if service is 10 years or less.

(b) 2.0% of final average salary if service is greater than 10 years and no more than 20 years.

(c) 2.3% of final average salary if service is greater than 20 years but no more than 26 years.

(d) 2.5% of final average salary if service is greater than 26 years but no more than 30 years.

(e) 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

(a) 1.5% of final average salary if service is 10 years or less.

(b) 1.7% of final average salary if service is greater than 10 years and no more than 20 years.

(c) 1.85% of final average salary if service is greater than 20 years but less than 27 years.

(d) 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance: Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance: The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000, to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	1	2	3	4 or more
Annual Allowance	$ 2,400	$ 4,080	$ 4,800	$ 5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options:

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2	A single life annuity payable during the member's lifetime with payments for 10 years certain.
Option 3	At the death of the member his allowance is continued throughout the life of his beneficiary.
Option 3(a)	At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.
Option 4	At the death of the member one half of his allowance is continued throughout the life of his beneficiary.
Option 4(a)	At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3. CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE H
Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2011
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,461	1							2,462
Total Pay	41,168,000	43,000							41,211,000
Avg. Pay	16,728	43,000							16,739
25 to 29	7,124	1,405							8,529
Total Pay	222,544,000	66,018,000							288,562,000
Avg. Pay	31,239	46,988							33,833
30 to 34	3,770	5,093	967						9,830
Total Pay	111,427,000	250,802,000	53,648,000						415,877,000
Avg. Pay	29,556	49,244	55,479						42,307
35 to 39	2,716	2,470	4,124	628					9,938
Total Pay	73,577,000	122,975,000	240,200,000	39,874,000					476,626,000
Avg. Pay	27,090	49,787	58,244	63,494					47,960
40 to 44	3,698	1,903	2,459	3,164	713				11,937
Total Pay	78,560,000	95,796,000	142,806,000	202,764,000	47,075,000				567,001,000
Avg. Pay	21,244	50,339	58,075	64,085	66,024				47,499
45 to 49	1,742	1,259	1,391	1,511	2,273	631			8,807
Total Pay	40,970,000	64,667,000	81,094,000	98,367,000	151,467,000	42,699,000			479,264,000
Avg. Pay	23,519	51,364	58,299	65,101	66,637	67,669			54,419
50 to 54	1,511	973	1,194	1,211	1,320	1,739	381		8,329
Total Pay	31,062,000	49,208,000	70,429,000	78,534,000	90,131,000	123,612,000	26,959,000		469,935,000
Avg. Pay	20,557	50,573	58,986	64,851	68,281	71,082	70,759		56,422
55 to 59	2,245	724	982	1,035	1,125	821	597	82	7,611
Total Pay	33,132,000	37,292,000	59,798,000	68,831,000	77,411,000	61,016,000	46,788,000	7,134,000	391,402,000
Avg. Pay	14,758	51,508	60,894	66,503	68,810	74,319	78,372	87,000	51,426
60 to 64	2,842	519	494	627	638	439	151	115	5,825
Total Pay	38,464,000	26,979,000	31,260,000	41,981,000	46,193,000	33,463,000	13,713,000	10,452,000	242,505,000
Avg. Pay	13,534	51,983	63,279	66,955	72,403	76,226	90,815	90,887	41,632
65 & over	2,164	246	155	144	145	112	40	75	3,081
Total Pay	20,190,000	10,359,000	9,870,000	9,807,000	10,342,000	8,439,000	3,365,000	7,001,000	79,373,000
Avg. Pay	9,330	42,110	63,677	68,104	71,324	75,348	84,125	93,347	25,762
Total	30,273	14,593	11,766	8,320	6,214	3,742	1,169	272	76,349
Total Pay	691,094,000	724,139,000	689,105,000	540,158,000	422,619,000	269,229,000	90,825,000	24,587,000	3,451,756,000
Avg. Pay	22,829	49,622	58,567	64,923	68,011	71,948	77,695	90,393	45,210

Average Age: 43.6 Average Service: 10.9

SCHEDULE H

Table 2: Number of Retired Members and Beneficiaries and their Benefits by Age as of June 30, 2011

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	771	$ 9,250,517	$ 11,998
50 - 54	1,067	35,560,948	33,328
55 - 59	5,446	207,980,428	38,190
60 - 64	11,248	407,961,327	36,270
65 - 69	8,963	305,262,297	34,058
70 - 74	6,252	197,772,903	31,634
75 - 79	4,295	123,861,204	28,838
80 & Over	6,377	145,736,271	22,853
TOTAL	**44,419**	**$ 1,433,385,895**	**$ 32,270**

SCHEDULE H

Table 3: Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

	ADD TO ROLLS		REMOVED FROM ROLLS		ROLLS END OF YEAR			
Fiscal Year	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)	Increase In Annual Allowances	Average Annual Allowance
2002	2,577	$ 86.2	1,063	$ 16.8	33,408	$ 749.2	10.2%	$ 22,425
2003	2,252	86.7	1,015	16.9	34,645	819.0	9.3	23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0	32,270

SCHEDULE H

Table 4: Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2011	76,349	$ 3,451,756,288	$ 45,210	3.97%
6/30/2010	76,387	3,321,614,223	43,484	1.51
6/30/2009	75,937	3,253,076,000	42,839	1.43
6/30/2008	75,539	3,190,332,239	42,234	6.67
6/30/2007	75,144	2,975,289,033	39,594	2.10
6/30/2006	73,740	2,859,477,425	38,778	3.68

Actuarial Section

Report of the Actuary
on the
Annual Valuation
of the
Retiree Medical and Life Insurance Plans

for Fiscal Year ending June 30, 2011

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 16, 2011

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require the Teachers' Retirement System of the State of Kentucky (the System) to conduct actuarial valuations of the System's retiree medical and other post employment benefit plans. This report covers the Medical Insurance Fund and OPEB liabilities related to the Life Insurance Fund. Cavanaugh Macdonald Consulting, LLC (CMC) has submitted the results of the annual actuarial valuation prepared as of June 30, 2011. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total annual required contribution of 6.95% of active member payroll for the Medical Insurance Fund payable for the fiscal year ending June 30, 2014 is required to support the benefits of the Kentucky Employees' Health Plan (KEHP) and the Medicare Eligible Health Plan (MEHP). Of this amount, 1.75% of payroll is estimated to be paid by University members entering the System prior to July 1, 2008 and 2.25% of payroll is estimated to be paid by all other members, leaving 5.20% and 4.70% respectively, as the remaining annual required contribution. This annual required contribution reflects the assets currently held in the Medical Insurance Fund and an 8.00% discount rate for valuing liabilities.

Since the previous valuation, various assumptions and methods have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2010. These revised changes were adopted by the Board on September 19, 2011. Effective January 1, 2012, the KTRS MEHP will join the Kentucky Rx Coalition administered by Express Scripts in order to facilitate a more cost effective prescription drug plan for Medicare eligible retirees.

The Life Insurance Fund valuation indicates a total annual required contribution of 0.03% of active member payroll payable for the fiscal year ending June 30, 2014 is required to support the benefits of the Life Insurance Fund. As contributions to the Life Insurance Fund meet the required levels, the discount rate for valuing liabilities is 7.50%.

The promised benefits of the medical and life insurance plans are included in the actuarially calculated contribution rates which are developed using the entry age normal actuarial cost method. The market value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in aggregate reasonably related to the experience under the medical and life

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insurance plans and to reasonable expectations of anticipated experience under the medical and life insurance plans and meet the parameters for the disclosures under GASB 43 and 45.

CMC has prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Section VII shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the medical and life insurance plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, if the State contributions to the Medical Insurance Fund are increased to the planned levels, the medical plans will begin to operate in a more actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the medical plans will improve.

Respectfully submitted,

Eric Gary, FSA, FCA, MAAA
Senior Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Senior Actuary

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Report of Actuary on the on the Annual Valuation of the Retiree Medical and Life Insurance Plans
Prepared as of June 30, 2011

Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

~ Medical Insurance Fund ~

Valuation Date	June 30, 2011	June 30, 2010
Number of active members	76,349	76,387
Annual salaries	$ 3,451,756	$ 3,321,614
Number of vested former members	3,485	3,412
Number of annuitants in medical plans	35,033	34,315
Number of spouses and beneficiaries in medical plans*	6,922	6,834
Total	41,955	41,149
Assets:		
Market value	$ 294,819	$ 241,224
Unfunded actuarial accrued liability	$ 3,128,330	$ 2,965,582
Amortization period (years)	30	30
Discount rate	8.00%	8.00%

**Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. 100% of the full contribution for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.*

Medical Insurance Fund Contribution Rates for University Members

Valuation Date	June 30, 2011		June 30, 2010	
For Fiscal Year Ending	June 30, 2014		June 30, 2013	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	2.00 %	2.00 %	2.32 %	2.32 %
Accrued liability	4.95	4.95	4.88	4.88
Total	6.95 %	6.95 %	7.20 %	7.20 %
Member	1.75 %	1.75 %	1.43 %	1.75 %
Employer	1.75	0.75	1.43	0.75
State (ARC)	3.45	4.45	4.34	4.70
Total	6.95 %	6.95 %	7.20 %	7.20 %

Medical Insurance Fund Contribution Rates for School District Employees (Non-Federal)

Valuation Date	June 30, 2011		June 30, 2010	
For Fiscal Year Ending	June 30, 2014		June 30, 2013	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	2.00 %	2.00 %	2.32 %	2.32 %
Accrued liability	4.95	4.95	4.88	4.88
Total	6.95 %	6.95 %	7.20 %	7.20 %
Member	2.25 %	2.25 %	1.75 %	1.75 %
Employer	1.50	1.50	1.00	1.00
State (ARC)	3.20	3.20	4.45	4.45
Total	6.95 %	6.95 %	7.20 %	7.20 %

Medical Insurance Fund Contribution Rates for Other Employees

Valuation Date For Fiscal Year Ending	June 30, 2011 June 30, 2014		June 30, 2010 June 30, 2013	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	2.00 %	2.00 %	2.32 %	2.32 %
Accrued liability	4.95	4.95	4.88	4.88
Total	6.95 %	6.95 %	7.20 %	7.20 %
Member	2.25 %	2.25 %	1.75 %	1.75 %
Employer	2.25	1.25	1.75	0.75
State (ARC)	2.45	3.45	3.70	4.70
Total	6.95 %	6.95 %	7.20 %	7.20 %

~ Life Insurance Fund ~

(dollar amounts are $1,000's)

Valuation Date	June 30, 2011	June 30, 2010
Number of active members	76,349	76,387
Annual salaries	$ 3,451,756	$ 3,321,614
Number of vested former members	3,485	3,412
Number of retirees in Life Insurance Plan	41,118	39,951
Assets:		
Market value	$ 88,527	$ 87,905
Unfunded actuarial accrued liability*	$ (439)	$ 4,186
Amortization period (years)	30	30
Discount rate	7.50%	7.50%
Contribution for fiscal year ending	**June 30, 2014**	**June 30, 2013**
Normal	0.03%	0.04%
Accrued liability	0.00%	0.01%
Total	0.03%	0.05%

** Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45.*

2. The valuation indicates combined member, employer, and State contributions of 6.95% of active member payroll would be sufficient to support the current benefits of the medical plans and State contributions of 0.03% of active member payroll would be sufficient to support the current benefits of the life insurance plan. Comments on the valuation results as of June 30, 2011 are given in Section IV and further discussion of the contribution levels is set out in Sections VI and VII.

3. Since the previous valuation, various assumptions and methods have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2010. These revised changes were adopted by the Board on September 19, 2011. Schedule C of this report outlines the full set of

actuarial assumptions and methods employed in the current valuation.

4. There were no changes in benefit provisions since the last valuation. However, the prescription drug provider for the Medicare eligible plan has changed and plan designs have changed for the Health Insurance plans that cover non-Medicare eligible retirees. The changes are summarized below.

   • Effective January 1, 2012, the KTRS MEHP will join the Kentucky Rx Coalition administered by Express Scripts in order to facilitate a more cost effective prescription drug plan for Medicare eligible retirees.

   • Plan design changes have also been implemented for Plan Year 2012 for the Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the medical and life insurance plans for use as a basis of the valuation were furnished by the System's office. The following tables summarize the membership of the System as of June 30, 2011, upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Group	Number	Annual Salaries ($1,000's)
Full Time	59,089	$ 3,337,547
Part Time	17,260	114,209
Total	76,349	$ 3,451,756

The following tables show the number of retired members and their beneficiaries receiving health care as of the valuation date as well as average ages.

Retirees Receiving Health Benefits as of June 30, 2011

	Under Age 65	Age 65 and Over	TOTAL
Number	15,557	19,476	35,033
Average Age	60.3	74.8	68.4

Spouses Receiving Health Benefits as of June 30, 2011

	Under Age 65	Age 65 and Over	TOTAL
Number	3,348	3,574	6,922
Average Age	59.1	75.9	67.8

The valuation also includes 3,485 inactive members eligible for health care at age 60.

Section III - ASSETS

1. As of June 30, 2011 the market value of Medical Insurance Fund assets for valuation purposes held by the medical plans amounted to $294,818,595 and the market value of Life Insurance Fund assets for valuation purposes held by the life insurance plan amounted to $88,526,680.

2. Schedule B shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Medical Insurance Fund and the Life Insurance Fund.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule C.

2. The valuation shows that the medical plans have an actuarial accrued liability of $1,513,059,331 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of inactive members amounts to $14,242,655. The liability on account of benefits payable to retirees and covered spouses amounts to $1,895,846,379. The total actuarial accrued liability of the medical plans amounts to $3,423,148,365. Against these liabilities, the medical plans have present assets for valuation purposes of $294,818,595. When this amount is deducted from the actuarial accrued liability of $3,423,148,365 there remains $3,128,329,770 as the unfunded actuarial accrued liability for the medical plans.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the medical plans is determined to be $68,938,173, or 2.00% of payroll.

4. The valuation shows that the life insurance plan has an actuarial accrued liability of $15,918,883 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of inactive members amounts to $1,666,481. The liability on account of benefits payable to retirees amounts to $70,502,418. The total actuarial accrued liability of the life insurance plan amounts to $88,087,782. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for active and post employment purposes. As this could be administratively burdensome and, as death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45. Against these liabilities, the life insurance plan has present assets for valuation purposes of $88,526,680. When this amount is deducted from the actuarial accrued liability of $88,087,782 there remains $(438,898) as the unfunded actuarial accrued liability for the life insurance plan.

5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $1,070,709, or 0.03% of payroll.

Section V - DERIVATION OF EXPERIENCE GAINS AND LOSSES

1. Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2011 is shown below ($1,000's).

	EXPERIENCE GAIN/(LOSS) OF THE:	MEDICAL INSURANCE FUND	LIFE INSURANCE FUND
(1)	UAAL* as of 6/30/2010	$ 2,965,582	$ 4,186
(2)	Normal cost from last valuation	77,102	1,276
(3)	Expected employer contributions	477,723	1,726
(4)	Interest accrual:		
	[(1) + (2) - (3)] x interest**	205,197	280
(5)	Expected UAAL before changes:		
	(1) + (2) - (3) + (4)	$ 2,770,158	$ 4,016
(6)	Change due to plan amendments	0	0
(7)	Change due to new actuarial assumptions	363,153	(4,792)
(8)	Change due to claims experience	(476,581)	0
(9)	Expected UAAL after changes:		
	(5) + (6) + (7) + (8)	$ 2,656,730	$ (776)
(10)	Actual UAAL as of 6/30/2011	$ 3,128,330	$ (439)
(11)	Total gain/(loss): (9) - (10)	$ (471,600)	$ (337)
	(a) Contribution shortfall and investment loss	(314,847)	(3,487)
	(b) Experience gain/(loss) (11) - (11a)	$ (156,753)	$ 3,150
(12)	Accrued liabilities as of 6/30/2010	$ 3,206,806	$ 92,091
(13)	Experience gain/(loss) as percent of actuarial accrued liabilities at start of year (11b) / (12)	(4.9%)	3.4%

* *Unfunded Actuarial Accrued Liability*
** *Interest is 8.0% for the Medical Insurance Fund and 7.5% for the Life Insurance Fund*

Section VI - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Sections 161.420 and 161.550 of the Kentucky Revised Statutes provide the amounts employers and the State are required to contribute to the Medical Insurance Fund. These contribution amounts vary by fiscal year, date of membership, and employee type.

Employer Percentage of Payroll Contributions Made to Medical Insurance Fund

Fiscal Year Ending	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
2012	1.090%	0.750%	0.500%	0.500%	1.250%	0.750%
2013	1.430	0.750	1.000	1.000	1.750	0.750
2014	1.750	0.750	1.500	1.500	2.250	1.250
2015	2.270	1.270	2.250	2.250	3.000	2.000
2016 and Later	2.775	1.775	3.000	3.000	3.750	2.750

* *In addition to the amounts contributed by School Districts on behalf of Non-Federal employees, the State contributes 0.75%.*

For the fiscal year ending June 30, 2014, member contributions will be 1.75% for University employees who became members of the System before July 1, 2008 and 2.25% for all other members. CMC recommends employer and State contributions increase to the required amount of 5.20% of payroll for University employees hired prior to July 1, 2008 and 4.70% of payroll for all other members. The State is scheduled to contribute 0.05% of salary to the Life Insurance Fund for the fiscal year ending June 30, 2013. CMC's valuation indicates a contribution of 0.03% for the fiscal year ending June 30, 2014 is required to sufficiently support the benefits of the life insurance plan.

REQUIRED CONTRIBUTION RATES
For Fiscal Year Ending June 30, 2014
Medical Insurance Fund

Normal	2.00%
Accrued liability	4.95
Total	6.95%

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
Member	1.75%	1.75%	2.25%	2.25%	2.25%	2.25%
Employer (ARC)	1.75	0.75	1.50	1.50	2.25	1.25
State (ARC)	3.45	4.45	3.20	3.20	2.45	3.45
Total	6.95%	6.95%	6.95%	6.95%	6.95%	6.95%

Life Insurance Fund

Normal	0.03%
Accrued liability	0.00
Total	0.03%
Member	0.00%
State (ARC)	0.03
Total	0.03%

2. The valuation indicates that a total normal contribution of 2.00% of payroll is required to meet the cost of benefits currently accruing under the medical plans and 0.03% of payroll is required to meet the cost of benefits currently accruing under the life insurance plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 4.95% of payroll for the medical plans and 0.00% of payroll for the life insurance plan.

3. The unfunded actuarial accrued liability amounts to $3,128,329,770 for the medical plans and $(438,898) for the life insurance plan as of the valuation date. An accrued liability contribution of 4.95% of payroll for the medical plans and 0.00% of payroll for the life insurance plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VII - COMMENTS ON LEVEL OF FUNDING

1. The System's monthly contribution for retirees to opt into the medical plan is based upon date of hire and years of service at retirement. Additionally, beneficiary contributions may vary by plan election, Medicare eligibility, and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Current employer and State contributions have been determined to be insufficient to fund the cost of the benefits to be provided. Benefits for university, school district (non-Federal), and other members are identical, although active employee contributions collected from university, school district (non-Federal), and other members differ. A listing of member contributions by fiscal year, date of membership, and employer type is provided in Schedule D.

2. The valuation indicates an increase in scheduled contributions is required to fund the medical plans in an actuarially sound manner and to ensure the future solvency of the Medical Insurance Fund. For University employees who became members of the System before July 1, 2008, a member contribution of 1.75% of payroll together with employer and State contributions of 5.20% of payroll are required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. For the remaining membership, a member contribution of 2.25% of payroll together with employer and State contributions of 4.70% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the medical and life insurance plans and the employer.

Number of Active and Retired Members in Medical Plan as of June 30, 2011

GROUP	NUMBER
Retirees currently receiving health benefits	35,033
Spouses of retirees currently receiving health benefits	6,922
Terminated employees entitled to benefits but not yet receiving benefits	3,485
Active plan members	76,349
Total	**121,789**

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2011

GROUP	NUMBER
Retirees	41,118
Terminated employees	3,485
Active plan members	76,349
Total	120,952

Schedule of Funding Progress
Medical Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL)	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
6/30/2005	$ 147,311	$ 4,763,947	$ 4,616,636	3.1%	$ 2,703,430	170.8
6/30/2006[1]	131,614	4,341,963	4,210,349	3.0	2,859,477	147.2
6/30/2007[2]	140,772	5,928,761	5,787,989	2.4	2,975,289	194.5
6/30/2008	185,883	6,434,522	6,248,639	2.9	3,190,332	195.9
6/30/2009[3]	229,103	6,454,733	6,225,630	3.5	3,253,077	191.4
6/30/2010[4]	241,224	3,206,806	2,965,582	7.5	3,321,614	89.3
6/30/2011[5]	294,819	3,423,149	3,128,330	8.6	3,451,756	90.6

[1]Reflects change in decrement assumptions and plan design. [2]Reflects change in discount rate to 4.5% and updating medical trend. [3]Reflects change in participation assumptions and plan design. [4]Reflects change in discount rate to 8.0%, change in plan design and updating medical trend. [5]Reflects changes in decrement assumptions and updating medical trend.

Schedule of Funding Progress
Life Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL)	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	a	**b**	**(b-a)**	**(a/b)**	**c**	**[(b-a)/c]**
6/30/2007	$ 71,426	$ 82,722	$ 11,296	86.3%	$ 2,975,289	0.38%
6/30/2008	77,658	84,265	6,607	92.2	3,190,332	0.21
6/30/2009	84,703	90,334	5,631	93.8	3,253,077	0.17
6/30/2010	87,905	92,091	4,186	95.5	3,321,614	0.13
6/30/2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2011. Additional information as of the latest actuarial valuation follows.

Valuation Date 06/30/2011

Actuarial cost method ..... Entry age

Amortization method ..... Level percent of pay, open

Remaining amortization period ..... 30 years

Asset valuation method ..... Market Value of Assets

Actuarial Assumptions:

Investment Rate of Return*
8.0% for Medical &
7.5% for Life Insurance

Medical Trend Assumption
(Pre-Medicare)**
10.5% - 5.0%

Medical Trend Assumption
(Post-Medicare)
8.5% - 5.0%

Year of Ultimate Trend Rate
2019

* *Includes Inflation at 3.50%.*

** *Alternate trend rates were used for Medicare Part B premiums and are disclosed in Schedule C.*

Schedule of Employer Contributions
Medical Insurance Fund

VALUATION YEAR JUNE 30	ANNUAL REQUIRED CONTRIBUTION	ACTUAL EMPLOYER CONTRIBUTION	RDS CONTRIBUTION	TOTAL CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(a)	(b)	(c)	(b) + (c)	[(b) + (c)]/(a)
6/30/2007	$ 231,473,321	$ 113,258,761	$ 10,312,361	$ 123,571,122	53.4%
6/30/2008	395,282,164	148,954,644	11,911,565	160,866,209	40.7
6/30/2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1
6/30/2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9
6/30/2011	477,723,070	188,453,929	280,585	188,734,514	39.5

Schedule of Employer Contributions
Life Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(a)	(b)	(b) / (a)
6/30/2007	$ 1,785,173	$ 5,022,137	281.3%
6/30/2008	1,914,199	5,411,249	282.7
6/30/2009	1,498,076	5,455,473	364.2
6/30/2010	1,992,969	1,966,826	98.7
6/30/2011	1,725,878	1,668,822	96.7

3. Following is the calculation of the Annual OPEB Cost (AOC) and the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2011. As the medical and life insurance plans are cost-sharing multiple-employer plans, GASB Statement 45 does not require the participating employers to disclose this information.

Annual OPEB Cost and Net OPEB Obligation
for the Medical Insurance Fund for Fiscal Year Ending June 30, 2011

(a) Employer Annual Required Contribution	$ 477,723,070
(b) Interest on Net OPEB Obligation	36,647,057
(c) Adjustment to Annual Required Contribution	29,075,954
(d) Annual OPEB Cost: (a) + (b) - (c)	$ 485,294,173
(e) Employer Contributions for Fiscal Year 2011	188,734,514
(f) Increase in Net OPEB Obligation: (d) - (e)	$ 296,559,659
(g) Net OPEB Obligation at beginning of Fiscal Year	$ 814,379,040
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ 1,110,938,699

Trend Information for the Medical Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$ 395,282,164	40.7%	$ 234,415,955
6/30/2009	469,492,218	37.9	525,816,306
6/30/2010	461,942,516	37.5	814,379,040
6/30/2011	485,294,173	38.9	1,110,938,699

Annual OPEB Cost and Net OPEB Obligation for the Life Insurance Fund for Fiscal year Ending June 30, 2011

(a) Employer Annual Required Contribution	$ 1,725,878
(b) Interest on Net OPEB Obligation	(576,388)
(c) Adjustment to Annual Required Contribution	(397,460)
(d) Annual OPEB Cost: (a) + (b) - (c)	$ 1,546,950
(e) Employer contributions for Fiscal Year 2011	1,668,822
(f) Increase in Net OPEB Obligation: (d) - (e)	$ (121,872)
(g) Net OPEB Obligation at beginning of Fiscal Year	($ 7,685,177)
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	($ 7,807,049)

Trend Information for the Life Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$ 1,914,199	282.7%	$ (3,497,050)
6/30/2009	1,416,656	385.1	(7,535,867)
6/30/2010	1,817,516	108.2	(7,685,177)
6/30/2011	1,546,950	107.9	(7,807,049)

SCHEDULE A
RESULTS OF THE VALUATION AS OF JUNE 30, 2011
(Dollar amounts in thousands)

	Medical Insurance Fund	Life Insurance Fund
PAYROLL	$ 3,451,756	$ 3,451,756
ACTUARIAL ACCRUED LIABILITY		
Present value of prospective benefits payable in respect of:		
(a) Present active members	$ 1,513,059	$ 15,919
(b) Present terminated vested members	14,243	1,667
(c) Present retired members and covered spouses	1,895,847	70,502
(d) Total actuarial accrued liability	3,423,149	88,088
PRESENT ASSETS FOR VALUATION PURPOSES	294,819	88,527
UNFUNDED ACTUARIAL ACCRUED LIABILITY	$ 3,128,330	$ (439)
CONTRIBUTIONS FOR FISCAL YEAR ENDING JUNE 30, 2014:		
Normal	2.00 %	0.03 %
Accrued Liability	4.95	0.00
Total	6.95 %	0.03 %
Member	2.22 %	0.00 %
Employer (ARC)	1.51	0.00
State (ARC)	3.22	0.03
Total	6.95 %	0.03 %

MEDICAL INSURANCE FUND
Solvency Test
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2006	$ 0.0	$ 2,434.1	$ 1,907.9	$ 131.6	n/a	5%	0%
6/30/2007	0.0	2,816.3	3,112.5	140.8	n/a	5	0
6/30/2008	0.0	3,084.4	3,350.2	185.9	n/a	6	0
6/30/2009	0.0	3,203.7	3,251.0	229.1	n/a	7	0
6/30/2010	0.0	1,948.6	1,258.2	241.2	n/a	12	0
6/30/2011	0.0	1,910.1	1,513.1	294.8	n/a	15	0

LIFE INSURANCE FUND
Solvency Test
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2007	$ 0.0	$ 64.8	$ 18.0	$ 71.4	n/a	100%	37%
6/30/2008	0.0	66.9	17.4	77.7	n/a	100	62
6/30/2009	0.0	72.0	18.4	84.7	n/a	100	69
6/30/2010	0.0	74.4	17.7	87.9	n/a	100	76
6/30/2011	0.0	72.2	15.9	88.5	n/a	100	103

SCHEDULE B
MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2011	June 30, 2010
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 35,472,931	$ 26,579,278
Payment by Retired Members	48,674,406	37,226,295
Total Members	84,147,337	63,805,573
State Statutory Contributions	32,455,802	24,561,433
State Special	145,900,000	0
Allotment from Pension Fund	9,885,400	134,200,000
TOTAL EMPLOYER	188,241,202	158,761,433
GRAND TOTAL	273,388,539	222,567,006
Recovery Income	212,727	4,063
Medicare D Receipts	280,585	14,614,285
Net Investment Income	8,334,296	12,312,999
TOTAL	281,216,147	249,498,353
DISBURSEMENTS FOR THE YEAR		
Administrative Expense	1,186,029	0
Medical Insurance Expense	226,435,363	237,377,528
TOTAL	227,621,392	237,377,528
EXCESS OF RECEIPTS OVER DISBURSEMENTS	53,594,755	12,120,825
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	241,223,840	229,103,015
Excess of Receipts over Disbursements	53,594,755	12,120,825
Asset Balance as of the End of the Year	$ 294,818,595	$ 241,223,840

SCHEDULE B (continued)
LIFE INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2011	For the Year Ending June 30, 2010
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 0	$ 0
State	1,668,822	1,966,826
TOTAL	1,668,822	1,966,826
Net Investment Income	3,094,776	5,383,644
TOTAL	4,763,598	7,350,470
DISBURSEMENTS FOR THE YEAR		
Benefit Payments	4,120,000	4,148,511
Miscellaneous, including expenses	21,511	0
TOTAL	4,141,511	4,148,511
EXCESS OF RECEIPTS OVER DISBURSEMENTS	622,087	3,201,959
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	87,904,593	84,702,634
Excess of Receipts over Disbursements	622,087	3,201,959
Asset Balance as of the End of the Year	$ 88,526,680	$ 87,904,593

SCHEDULE C
Outline of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, termination, and salary increases used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011. The discount rate, rates of future participation, health care cost trend rates, and expected plan costs were determined by the actuary based on plan experience.

Valuation Date: June 30, 2011

Discount Rate: 8.0% per annum, compounded annually for medical plans.
7.5% per annum, compounded annually for life insurance plan.

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

FISCAL YEAR	MEDICARE PART B TREND	UNDER AGE 65 TREND	AGE 65 & OVER TREND
2012	-13.4%	10.5%	8.5%
2013	10.6	9.5	7.5
2014	4.8	8.5	7.0
2015	4.3	7.5	6.5
2016	4.3	6.5	6.0
2017	5.3	6.0	5.5
2018	5.7	5.5	5.0
2019	5.8	5.0	5.0
2020	5.5	5.0	5.0
2021 and beyond	5.0	5.0	5.0

Age Related Morbidity: For retirees age 65 and older, per capita costs are adjusted to reflect expected medical cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 - 69	3.0 %
70 - 74	2.5
75 - 79	2.0
80 - 84	1.0
85 - 89	0.5
90 and over	0.0

Medical Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that KTRS pays as the full contribution amount. For retirees age 65 and older, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

Average Monthly KTRS Full Costs & Contributions

Year	Pre-65 Full Cost and Contributions	Post-65 Full Costs	Post-65 Contributions
CY 2004	$ 293	$ 274	$ 274
CY 2005	412	288	288
CY 2006	461	315	315
CY 2007	458	283	283
CY 2008	484	278	278
CY 2009	545	301[1]	285
CY 2010	594	373[1]	342
CY 2011	626	289	289
CY 2012	638	270[2]	270

[1] *Under GASB 43 and 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy cannot be taken into account in the gross cost calculations.*

[2] *1,800 current benefit recipients are not eligible for premium-free Medicare Part A benefits. For these individuals, the full cost of coverage is, on average, $590 per month. It is assumed no new members will enter this population, as all active members are assumed to have begun contributing to Medicare as of 4/1/1986.*

Pre-65 Full Costs as of January 1, 2012

Tier	Commonwealth Standard PPO	Commonwealth Capitol Choice	Commonwealth Optimum PPO
Single	$ 496	$ 638	$ 663
Parent Plus	765	927	923
Couple	1,145	1,414	1,432
Family	1,273	1,568	1,596

Anticipated Future Medical Plan Elections: The assumed annual rates of member plan elections were based upon current retiree under age 65 plan elections, and are as follows:

Commonwealth Standard PPO	Commonwealth Capitol Choice	Commonwealth Optimum PPO
3%	19%	78%

Anticipated Member Medical Plan Participation: Representative values of the assumed annual rates of medical plan participation are as follows:

Member Participation*

Years of Service	Hired Before 7/1/2002 (Age 65 on 12/31/2004 or Earlier)	Hired Before 7/1/2002 (Age 65 on 1/1/2005 or Later)	Hired After 6/30/2002 and Before 7/1/2008	Hired 7/1/2008 and Later
5-9.99	70%	25%	10%	Not Eligible
10-14.99	80	50	25	Not Eligible
15-19.99	90	75	45	45%
20-24.99	93	93	65	65
25-25.99	93	93	90	90
26-26.99	93	93	93	93
27 or more	93	93	93	93

** Members retiring from inactive status are assumed to participate at 50% of the corresponding rate listed.*

Spouse Coverage in Medical Plans: Used actual census data and current plan elections for spouses of current retirees. For spouses of future retirees, assumed 20% of future retirees will cover spouses, with females 3 years younger than males.

Withdrawal Assumption: It is assumed 30% of the vested members who terminate elect to withdraw their contributions while the remaining 70% elect to leave their contributions in the plan in order to be eligible for a benefit at their retirement date.

Disabled Dependent Children: The liability associated with disabled dependent children was determined to be de minimis and was therefore excluded from this valuation.

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	SALARY*	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service**
20	8.10%	0.012%	0.01%	9.00%				
25	7.20	0.015	0.01	9.00	3.00%			
30	6.20	0.020	0.02	9.00	3.00	3.00%		
35	5.50	0.035	0.05	10.00	3.25	1.75		
40	5.00	0.046	0.09	10.00	4.00	1.40		
45	4.60	0.058	0.18	11.00	4.00	1.50		17.0%
50	4.50	0.074	0.33	9.00	4.00	2.00		17.0
55	4.30	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	4.20	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	4.10	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	4.00	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	4.00	0.821	0.70	0.00	0.00	0.00	100.0	100.0

* *Includes inflation at 3.5% per annum.*
** *Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	SALARY*	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service**
20	8.10%	0.007%	0.01%	7.00%				
25	7.20	0.008	0.02	8.50	4.00%			
30	6.20	0.010	0.04	9.00	4.00	1.65%		
35	5.50	0.017	0.08	9.00	3.75	1.85		
40	5.00	0.024	0.14	8.50	3.25	1.50		
45	4.60	0.037	0.32	7.50	3.25	1.25		15.0%
50	4.50	0.055	0.42	9.50	3.50	1.75		15.0
55	4.30	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	4.20	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	4.10	0.263	0.85	11.00	4.00	2.00	12.5	25.0
65	4.00	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	4.00	0.672	0.85	0.00	0.00	0.00	100.0	100.0

* *Includes inflation at 3.5% per annum.*
** *Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: The RP-2000 Combined Mortality Table (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set back five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

	Service Retirement		Disability Retirement	
Annual Rate of Death After . . . Age	MALE	FEMALE	MALE	FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535% %
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

Payroll Growth: 4.00% per annum, compounded annually.

Price Inflation: 3.50% per annum, compounded annually.

Actuarial Method: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

Asset Valuation Method: Market Value as provided by KTRS. Return on assets assumed to be 8.00% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

SCHEDULE D
Summary of Main Plan Provisions as Interpreted for Valuation Purposes

ELIGIBILITY FOR ACCESS TO RETIREE MEDICAL COVERAGE:

Service Retirement: For employees hired prior to July 1, 2008, retiree medical coverage eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. For employees hired on or after July 1, 2008, employees may retire after the completion of 27 years of service, the attainment of age 55 and 10 years of service, or the attainment of age 60 and 5 years of service, but must complete a minimum of 15 years of service to be eligible for retiree medical coverage.

Disability Retirement: Disabled employees with at least 5 years of service, who are totally and permanently incapable of being employed as a teacher, are eligible for retiree medical coverage.

Survivors: Spouses of employees who die in service while eligible to retire, as well as survivors of service and disabled retirees, are eligible for retiree medical coverage.

Termination: Members that terminated with at least 5 years of service and have attained age 60 are eligible for retiree medical coverage.

COVERED MEMBER MEDICAL PLAN CONTRIBUTIONS:

Retiree Years of Service Percentage Contribution: Retirees contribute the following percentages based on years of service at retirement:

Retiree Percentage Contribution

Years of Service	Hired before 7/1/02 (age 65 on 12/31/04 or earlier)	Hired Before 7/1/02 (age 65 on 1/1/05 or later)	Hired after 6/30/02 and before 7/1/08	Hired 7/1/08 and later
5-9.99	30%	75%	90%	Not Eligible
10-14.99	20	50	75	Not Eligible
15-19.99	10	25	55	55%
20-24.99	0	0	35	35
25-25.99	0	0	10	10
26-26.99	0	0	5	5
27 or more	0	0	0	0

Retiree contributions toward pre-65 healthcare are based upon the rate of $600.92 per month for single coverage effective January 1, 2012, and retiree contributions toward post-65 healthcare are based upon the rate of $270 per month for single coverage effective January 1, 2012.

Pre-65 Retiree Shared Responsibility Contribution: Effective July 1, 2010, retirees under the age of 65 began a three-year phase-in of the Shared Responsibility Contribution. This contribution reduces the applicable amount of the full contribution provided by the System to retirees, by adjusting the Shared Responsibility Contribution amount by 100% less the appropriate percentage from the Retiree Percentage Contribution table. Effective July 1, 2012, the full Shared Responsibility Contribution will equal the Standard Part B premium that is paid by retirees age 65 and over.

Pre-65 Shared Responsibility Timeline

Effective Date	Medicare Part B Monthly Cost	Formula	Shared Responsibility Contribution
July 1, 2010	$ 110.50	(1/3 x $110.50)	$ 37.00
January 1, 2011	115.40	(1/3 x $115.40)	39.00
July 1, 2011	115.40	(2/3 x $115.40)	77.00
January 1, 2012	99.90	(2/3 x $99.90)	66.00
July 1, 2012	99.90	$99.90	99.90

Pre-65 Retiree Plan Cost Contribution: A contribution according to the table below is required to be paid by pre-65 retirees based on the plan elected:

Pre-65 Full Cost Contribution*

Tier	Commonwealth Standard PPO	Commonwealth Capitol Choice	Commonwealth Optimum PPO
Single	$ 0	$ 37	$ 63
Parent Plus	8	160	196
Couple	282	493	521
Family	288	584	623

** Does not include the additional contribution required to be paid by pre-65 retiree smokers, which also varies on the plan elected.*

Spouse Contributions: 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. Spouses of active members who died while eligible to retire prior to July 1, 2002, are provided the same subsidy by KTRS that would have been provided to the retiree for the lifetime of the spouse, or until remarriage. Spouses of active members who die while eligible to retire July 1, 2002, and later, pay 100% of the full contribution.

Pre-65 Surviving Spouse Contribution

Tier	Commonwealth Standard PPO	Commonwealth Capitol Choice	Commonwealth Optimum PPO
Single Spouse	$ 502	$ 644	$ 669

SYSTEM MEDICAL PLAN CONTRIBUTIONS: The full contribution is determined by KTRS; and the full cost is projected based on historical claims data. For retirees the following percentages of full contributions are provided based on years of service at retirement:

Percentage of Full Medical Contribution Provided to Retirees

Years of Service	Hired Before 7/1/2002 (Age 65 on 12/31/2004 or Earlier)	Hired Before 7/1/2002 (Age 65 on 1/1/2005 or Later)	Hired After 6/30/2002 and Before 7/1/2008	Hired 7/1/2008 and Later
5-9.99	70%	25%	10%	Not Eligible
10-14.99	80	50	25	Not Eligible
15-19.99	90	75	45	45%
20-24.99	100	100	65	65
25-25.99	100	100	90	90
26-26.99	100	100	95	95
27 or more	100	100	100	100

Effective January 1, 2009, contributions toward pre-65 healthcare are based upon the Commonwealth Capital Choice Plan which has a net rate of $600.92 ($638.16 less the required retiree plan cost contribution of $37.24) per month for single coverage effective January 1, 2012.

Contributions toward post-65 healthcare are based upon the rate of $270 per month for single coverage effective January 1, 2012.

Active Member Plan Contributions: Active members make payroll contributions to the Medical Insurance Fund based upon the following schedule:

Active Member Percentage of Payroll Contribution Made to Medical Insurance Fund

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
Fiscal Year Ending	Hired Before 7/1/2008	Hired On or After 7/1/2008	Hired Before 7/1/2008	Hired On or After 7/1/2008	Hired Before 7/1/2008	Hired On or After 7/1/2008
2012	1.090%	1.750%	1.250%	1.750%	1.250%	1.750%
2013	1.430	1.750	1.750	1.750	1.750	1.750
2014	1.750	1.750	2.250	2.250	2.250	2.250
2015	2.270	2.270	3.000	3.000	3.000	3.000
2016 & Later	2.775	2.775	3.750	3.750	3.750	3.750

Life Insurance Benefit

(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Qualified members working 45 days per year will be eligible for survivor benefits and a life insurance benefit for the balance of the fiscal year and disability benefits under certain conditions. For substitute and part-time members, the survivor benefits and life insurance benefit are provided during the first 44 days if death occurs as the result of a physical injury on the job. The disability benefit is available as a direct result of a physical injury on the job during the five-year vesting period. After vesting, the disability benefit is available upon working 45 days for the balance of that fiscal year in accordance with the regular KTRS disability program.

SCHEDULE E

Table 1
Active Age and Service Table
as of June 30, 2011

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,461	1							2,462
Total Pay	41,168,000	43,000							41,211,000
Avg. Pay	16,728	43,000							16,739
25 to 29	7,124	1,405							8,529
Total Pay	222,544,000	66,018,000							288,562,000
Avg. Pay	31,239	46,988							33,833
30 to 34	3,770	5,093	967						9,830
Total Pay	111,427,000	250,802,000	53,648,000						415,877,000
Avg. Pay	29,556	49,244	55,479						42,307
35 to 39	2,716	2,470	4,124	628					9,938
Total Pay	73,577,000	122,975,000	240,200,000	39,874,000					476,626,000
Avg. Pay	27,090	49,787	58,244	63,494					47,960
40 to 44	3,698	1,903	2,459	3,164	713				11,937
Total Pay	78,560,000	95,796,000	142,806,000	202,764,000	47,075,000				567,001,000
Avg. Pay	21,244	50,339	58,075	64,085	66,024				47,499
45 to 49	1,742	1,259	1,391	1,511	2,273	631			8,807
Total Pay	40,970,000	64,667,000	81,094,000	98,367,000	151,467,000	42,699,000			479,264,000
Avg. Pay	23,519	51,364	58,299	65,101	66,637	67,669			54,419
50 to 54	1,511	973	1,194	1,211	1,320	1,739	381		8,329
Total Pay	31,062,000	49,208,000	70,429,000	78,534,000	90,131,000	123,612,000	26,959,000		469,935,000
Avg. Pay	20,557	50,573	58,986	64,851	68,281	71,082	70,759		56,422
55 to 59	2,245	724	982	1,035	1,125	821	597	82	7,611
Total Pay	33,132,000	37,292,000	59,798,000	68,831,000	77,411,000	61,016,000	46,788,000	7,134,000	391,402,000
Avg. Pay	14,758	51,508	60,894	66,503	68,810	74,319	78,372	87,000	51,426
60 to 64	2,842	519	494	627	638	439	151	115	5,825
Total Pay	38,464,000	26,979,000	31,260,000	41,981,000	46,193,000	33,463,000	13,713,000	10,452,000	242,505,000
Avg. Pay	13,534	51,983	63,279	66,955	72,403	76,226	90,815	90,887	41,632
65 & over	2,164	246	155	144	145	112	40	75	3,081
Total Pay	20,190,000	10,359,000	9,870,000	9,807,000	10,342,000	8,439,000	3,365,000	7,001,000	79,373,000
Avg. Pay	9,330	42,110	63,677	68,104	71,324	75,348	84,125	93,347	25,762
Total	30,273	14,593	11,766	8,320	6,214	3,742	1,169	272	76,349
Total Pay	691,094,000	724,139,000	689,105,000	540,158,000	422,619,000	269,229,000	90,825,000	24,587,000	3,451,756,000
Avg. Pay	22,829	49,622	58,567	64,923	68,011	71,948	77,695	90,393	45,210

Average Age: 43.6 Average Service10.9

Table 2
Schedule of Total Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage Increase in Average Pay
6/30/2011	76,349	$ 3,451,756,288	$ 45,210	3.97%
6/30/2010	76,387	3,321,614,223	43,484	1.51
6/30/2009	75,937	3,253,076,600	42,839	1.43
6/30/2008	75,539	3,190,332,239	42,234	6.67
6/30/2007	75,144	2,975,289,033	39,594	2.10
6/30/2006	73,740	2,859,477,425	38,778	3.68

Table 3
All Retirees and Spouses Receiving Health Benefits as of June 30, 2011
Male and Femal Demographic Breakdown

ATTAINED AGE	NUMBER OF MALES	NUMBER OF FEMALES	TOTAL NUMBER
Under 40	8	29	37
40-44	18	57	75
45-49	50	180	230
50-54	301	868	1,169
55-59	1,604	3,813	5,417
60-64	3,573	7,120	10,693
65-69	3,112	5,227	8,339
70-74	2,232	3,610	5,842
75-79	1,724	2,350	4,074
80-84	1,076	1,927	3,003
85-89	643	1,202	1,845
90-94	234	606	840
95-99	51	273	324
100	6	23	29
101	2	13	15
102	0	13	13
103	0	3	3
104	0	2	2
105 & Over	0	5	5
Total	**14,634**	**27,321**	**41,955**

Table 4
Terminated Vested Members Eligible for Health Care at Age 60
Male and Female Demographic Breakdown
As of June 30, 2011

Attained Age	Number of Males	Number of Females	Total Number
Under 30	1	15	16
30-34	47	228	275
35-39	110	420	530
40-44	139	498	637
45-49	144	458	602
50-54	154	473	627
55-59	132	377	509
60 & Over	80	209	289
Total	807	2,678	3,485

Table 5
Schedule of Retireants, Beneficiaries and Survivors added to and Removed From Rolls*
Medical Insurance Fund

Fiscal Year Ending June 30	Number of Members Added to Rolls	Number of Spouses** Added to Rolls	Total Number Added to Rolls	Number of Members Removed from Rolls	Number of Spouses** Removed from Rolls	Total Number Removed from Rolls	Number of Members on Rolls at the End of the Year	Number of Spouses** on Rolls at the End of the Year	Total Number on Rolls at the End of the Year
2006	n/a	n/a	n/a	n/a	n/a	n/a	30,977	6,606	37,583
2007	1,674	580	2,254	1,009	512	1,521	31,642	6,674	38,316
2008	1,850	593	2,443	901	589	1,490	32,591	6,678	39,269
2009	1,777	640	2,417	887	510	1,397	33,481	6,808	40,289
2010	1,710	555	2,265	876	529	1,405	34,315	6,834	41,149
2011	1,770	629	2,399	1,052	541	1,593	35,033	6,922	41,955

** Reflects members, spouses, and beneficiaries participating in a health care plan.* *** Includes spouses, beneficiaries, and surviving spouses.*

Table 6
Schedule of Retireants, Beneficiaries and Survivors added to and Removed From Rolls*
Life Insurance Fund

Fiscal Year Ending June 30	Number Added to Rolls	Life Insurance Benefit ($1,000's)	Number Removed from Rolls	Life Insurance Benefit ($1,000's)	Number on Rolls at the End of the Year	Life Insurance Benefit ($1,000's)	Increase in Life Insurance Benefit	Average Life Insurance Benefit
2007	n/a	n/a	n/a	n/a	36,616	$ 183,080	n/a	$ 5,000
2008	1,966	$ 9,830	804	$ 4,020	37,778	188,890	3.17%	5,000
2009	1,949	9,745	769	3,845	38,958	194,790	3.12	5,000
2010	1,799	8,995	806	4,030	39,951	199,755	2.55	5,000
2011	2,025	10,125	858	4,290	41,118	205,590	2.92	5,000

** The life insurance benefit is payable upon the death of only members retired for service or disability. Numbers do not include life insurance benefits payable upon the death of an active contributing member.*

Statistical Section

for Fiscal Year ending June 30, 2011

This section of the Kentucky Teachers' Retirement System Comprehensive Annual Financial Report (KTRS CAFR) presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

Contents

Financial Trends ..... page 129
These schedules contain trend information to help the reader understand how KTRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 131
These schedules offer demographic and economic indicators to help the reader understand the System's environment within which KTRS's financial activities take place.

Operating Information ..... page 137
These schedules contain benefits, service, and employer contribution data to help the reader understand how KTRS's financial report relates to KTRS's services and activities.

Defined Benefit Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Assets
2011	$ 1,037,935,993	$ 302,262,819	$ 2,760,972,224	$ 4,101,171,036
2010	479,805,088	297,613,965	1,509,785,381	2,287,204,434)
2009	442,549,935	293,678,564	(2,020,682,522)	(1,284,454,023)
2008	466,247,782	291,423,948	(909,083,525)	(151,411,795
2007	434,890,469	269,687,864	2,063,878,767	2,768,457,100
2006	410,920,969	258,464,856	717,308,002	1,386,693,827
2005	388,346,438	247,024,518	946,070,556	1,581,441,512
2004	382,280,099	238,922,086	1,158,182,688	1,779,384,873
2003	341,132,900	233,429,797	538,552,074	1,113,114,771
2002	303,521,106	224,361,453	(520,214,494)	7,668,065

Deductions by Type

(Including Benefits by Type)

YEAR	Service Retirants	Disability Retirants	Survivors	Life Insurance*	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Assets
2011	$ 1,326,033,698	$ 60,950,214	$ 15,551,801	$	$ 1,402,535,713	$ 17,325,387	$ 7,322,739	$ 1,427,183,839
2010	1,249,272,057	57,782,651	14,754,062		1,321,808,770	15,310,680	8,830,054	1,345,949,504
2009	1,184,075,934	54,562,038	14,342,435		1,252,980,407	15,208,419	8,165,757	1,276,354,583
2008	1,105,078,345	51,842,271	14,048,485		1,170,969,101	15,965,083	7,551,936	1,194,486,120
2007	1,040,003,417	48,863,876	13,671,586		1,102,538,879	14,822,827	7,351,846	1,124,713,552
2006	972,018,057	46,750,585	12,943,639	3,894,000	1,035,606,281	12,834,222	6,839,859	1,055,280,362
2005	902,863,420	44,070,071	12,585,248	3,852,800	963,371,539	10,975,941	6,652,673	981,000,153
2004	827,731,523	41,491,490	12,047,275	4,015,801	885,286,089	10,471,607	6,578,420	902,336,116
2003	763,099,082	38,744,454	11,259,332	3,961,800	817,064,668	9,951,410	6,388,183	833,404,261
2002	688,754,130	35,947,786	10,532,466	4,210,800	739,445,182	9,146,820	6,677,819	755,269,821

* *Life Insurance Plan valued separately-- see page 131.*

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2011	$ 4,101,171,036	$1,427,183,839	$ 2,673,987,197
2010	2,287,204,434	1,345,949,504	941,254,930
2009	(1,284,454,023)	1,276,354,583	(2,560,808,606)
2008	(151,411,795)	1,194,486,120	(1,345,897,915)
2007	2,768,457,100	1,124,713,552	1,643,743,548
2006	1,386,693,827	1,055,280,362	331,413,465
2005	1,581,441,512	981,000,153	600,441,359
2004	1,779,384,873	902,336,116	877,048,757
2003	1,113,114,771	833,404,261	279,710,510
2002	7,668,065	755,269,821	(747,601,756)

Medical Insurance Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Recovery Income	Net Investment Income	Total Additions to Plan Net Assets
2011	$ 188,241,202	$ 84,147,337	$ 493,312	$ 8,334,296	$ 281,216,147
2010	158,761,433	63,805,573	14,618,348	12,312,999	249,498,353
2009	164,408,037	58,688,767	13,683,830	11,296,280	248,076,914
2008	148,929,322	55,402,830	11,936,887	8,128,179	224,397,218
2007	113,233,784	53,099,678	10,337,338	6,722,080	183,392,880
2006	89,319,498	51,697,167	6,117,979	6,804,286	153,938,930
2005	79,022,562	51,576,031		6,507,537	137,106,130
2004	53,346,747	53,903,551		7,127,109	114,377,407
2003	77,235,407	50,718,084		7,391,671	135,345,162
2002	95,261,407	46,184,010		6,142,817	147,588,234

Deductions by Type

(Including Benefits by Type)

	Insurance Benefit Expense					
YEAR	Under Age 65	Age 65 & Over	Administrative Expense	Total Insurance Benefits Expense	Refunds	Total Deductions to Plan Net Assets
2011	$ 145,544,405	$ 80,890,958	$ 1,186,029	$ 227,621,392	$	$ 227,621,392
2010	136,702,152	100,675,376		237,377,528		237,377,528
2009	123,819,475	81,037,647		204,857,122		204,857,122
2008	107,437,450	71,838,765		179,276,215	10,014	179,286,229
2007	104,828,254	69,400,843		174,229,097	5,834	174,234,931
2006	102,970,290	66,660,106		169,630,396	5,143	169,635,539
2005	82,186,847	64,233,482		146,420,329	9,072	146,429,401
2004	69,139,458	54,128,210		123,267,668	12,150	123,279,818
2003	63,546,028	52,300,059		115,846,087	7,808	115,853,895
2002	54,412,278	50,566,637		108,200,627	6,066	104,984,981

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2011	$ 281,216,147	$ 227,621,392	$ 53,594,755
2010	249,498,353	237,377,528	12,120,825
2009	248,076,914	204,857,122	43,219,792
2008	224,397,218	179,286,229	45,110,989
2007	183,392,880	174,234,931	9,157,949
2006	153,938,930	169,635,539	(15,696,609)
2005	137,106,130	146,429,401	(9,323,271)
2004	114,377,407	123,279,818	(8,902,411)
2003	135,345,162	115,853,895	19,491,267
2002	147,588,234	104,984,981	42,603,253
	137,733,275	88,161,067	49,572,208
	89,050,373	80,365,738	8,684,635

Life Insurance Plan
Past Four Fiscal Years

Additions by Source

YEAR	Employer Contributions	Net Investment Income	Total Additions to Plan Net Assets
2011	$ 1,668,822	$ 3,094,776	$ 4,763,598
2010	1,966,826	5,383,644	7,350,470
2009	5,455,473	5,282,958	10,738,431
2008	5,411,249	6,321,491	11,732,740
2007	5,022,137	(3,413,537)	1,608,600

Deductions by Type (Including Benefits by Type) / Changes in Net Assets

YEAR	Life Insurance	Total Deductions to Plan Net Assets	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2011	$ 4,120,000	$ 4,141,511	$ 4,763,598	$ 4,141,511	$ 622,087
2010	4,148,511	4,148,511	7,350,470	4,148,511	3,201,959
2009	3,694,000	3,694,000	10,738,431	3,694,000	7,044,431
2008	4,003,000	4,003,000	11,732,740	4,003,000	7,729,740
2007	4,245,000	4,245,000	1,608,600	4,245,000	(2,636,400)

Distribution of Active Contributing Members as of June 30, 2011

By Age

Age	Male	Female
20-24	909	2,884
25-29	2,705	7,634
30-34	2,687	7,654
35-39	2,423	7,527
40-44	2,296	7,732
45-49	2,058	6,438
50-54	1,910	6,035
55-59	1,882	5,273
60-64	1,548	3,799
65-69	637	1,328
Over 70	324	666
TOTAL	19,379	56,970

By Service

Years of Service	Male	Female
Less than 1	6,093	15,492
1-4	4,205	13,092
5-9	3,143	9,948
10-14	2,298	7,335
15-19	1,615	4,935
20-24	1,158	3,585
25-29	627	1,958
30-34	171	522
35 or more	68	103
TOTAL	19,379	56,970

Principal Participating Employers
Current Year and Nine Years Ago

	2011			2002		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	10,172	1	13.16%	7,135	1	12.77%
Fayette County Public Schools	4,581	2	5.93	2,965	2	5.31
Boone County Schools	1,832	3	2.37	968	4	1.73
Hardin County Schools	1,413	4	1.83	1,002	3	1.79
Kenton County Schools	1,320	5	1.71	867	7	1.55
Warren County Schools	1,278	6	1.65	810	9	1.45
Bullitt County Schools	1,237	7	1.60	755	11	1.35
Oldham County Schools	1,176	8	1.52	671	15	1.20
Madison County Schools	1,169	9	1.51	687	14	1.23
Daviess County Schools	1,112	10	1.44	789	10	1.41
All Other *	51,995		67.28%	39,228		70.20
Total (208 Employers)	77,285		100.00%	55,877		100.00

** Includes new retirees with contributions during the fiscal year.*

KTRS Schedule of Participating Employers
School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

KTRS Schedule of Participating Employers *(continued)*

School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Monticello
36. Murray
37. Newport
38. Owensboro
39. Paducah
40. Paintsville
41. Paris
42. Pikeville
43. Pineville
44. Raceland
45. Russell
46. Russellville
47. Science Hill
48. Silver Grove
48. Somerset
50. Southgate
51. Walton-Verona
52. West Point
53. Williamsburg
54. Williamstown

Universities & Community/ Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/ Other Organizations

State of Kentucky

1. Education and Humanities Cabinet
2. Legislative Research Commission
3. Workforce Investment Cabinet
4. Finance and Administration Cabinet

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative

110	Alabama	5	New Hampshire
1	Alaska	7	New Jersey
77	Arizona	18	New Mexico
33	Arkansas	38	New York
95	California	234	North Carolina
45	Colorado	1	North Dakota
9	Connecticut	549	Ohio
7	Delaware	26	Oklahoma
5	District of Columbia	22	Oregon
915	Florida	39	Pennsylvania
218	Georgia	0	Rhode Island
5	Hawaii	155	South Carolina
8	Idaho	7	South Dakota
83	Illinois	745	Tennessee
586	Indiana	175	Texas
14	Iowa	17	Utah
27	Kansas	1	Vermont
26	Louisiana	132	Virginia
14	Maine	33	Washington
27	Maryland	82	West Virginia
14	Massachusetts	21	Wisconsin
32	Michigan	2	Wyoming
18	Minnesota		
52	Mississippi		
68	Missouri		
7	Montana		
6	Nebraska		
19	Nevada		

Distribution of Retirement Payments Worldwide

As of June 30, 2011

Additional Distribution Outside USA

5	Canada	1	Switzerland
2	Military Apo	1	Barbados
1	Philippines		

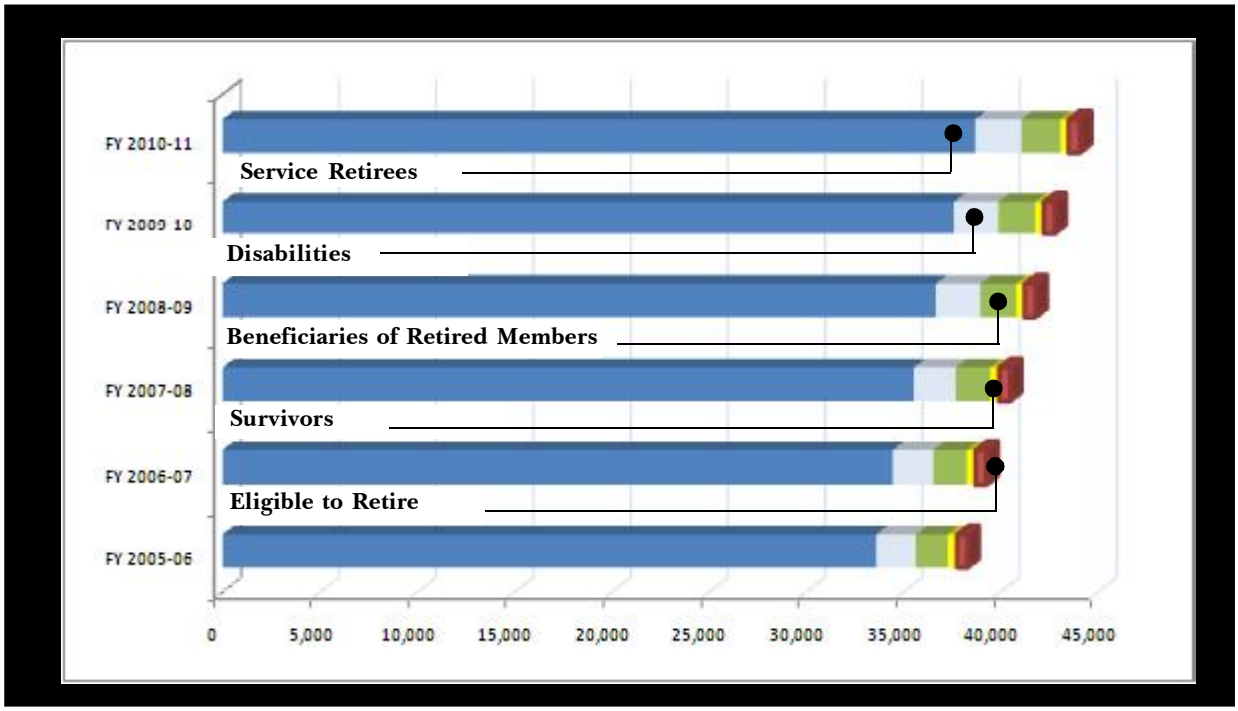
TOTAL: Number of Out of State Payments 4,841
TOTAL: Out of State Payments $110,007,651
TOTAL: Number of Payments 45,551
GRAND TOTAL: Amount of Payments $1,402,549,141

Distribution of Retirement Payments Statewide

as of June 30, 2011

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Adair	$ 5,233,448	183	Laurel	15,670,450	542
Allen	4,785,797	152	Lawrence	4,222,014	148
Anderson	5,697,262	186	Lee	1,867,060	73
Ballard	3,288,662	108	Leslie	4,208,936	140
Barren	11,952,131	380	Letcher	9,284,792	316
Bath	3,470,564	124	Lewis	5,199,520	167
Bell	10,466,016	353	Lincoln	8,237,318	267
Boone	25,178,324	745	Livingston	2,605,071	91
Bourbon	5,487,804	186	Logan	8,066,485	266
Boyd	16,559,422	495	Lyon	2,961,617	96
Boyle	13,104,405	409	Madison	39,525,948	1,210
Bracken	2,645,227	84	Magoffin	4,587,318	153
Breathitt	6,408,351	230	Marion	4,729,380	167
Breckinridge	5,717,749	173	Marshall	10,431,482	320
Bullitt	13,686,036	384	Martin	3,802,830	131
Butler	2,445,702	84	Mason	5,742,354	184
Caldwell	5,250,715	174	McCracken	20,488,681	657
Calloway	20,064,704	627	McCreary	5,578,758	189
Campbell	21,245,143	635	McLean	3,194,699	100
Carlisle	1,305,603	46	Meade	5,169,276	149
Carroll	2,368,599	74	Menifee	1,705,659	64
Carter	9,814,691	340	Mercer	6,541,398	232
Casey	4,468,713	158	Metcalfe	3,104,667	102
Christian	15,557,803	480	Monroe	4,640,572	152
Clark	9,608,390	319	Montgomery	8,458,163	273
Clay	8,264,588	271	Morgan	5,387,863	169
Clinton	3,918,310	134	Muhlenberg	9,097,658	276
Crittenden	1,860,090	67	Nelson	11,470,902	354
Cumberland	2,522,327	81	Nicholas	1,695,270	56
Daviess	31,435,483	972	Ohio	5,840,973	193
Edmonson	2,924,123	97	Oldham	14,155,987	407
Elliott	1,669,660	64	Owen	2,452,339	82
Estill	4,057,525	130	Owsley	3,244,445	110
Fayette	83,079,140	2,624	Pendleton	3,872,617	127
Fleming	4,665,451	160	Perry	10,739,899	364
Floyd	15,449,360	541	Pike	23,794,681	806
Franklin	22,178,888	863	Powell	3,362,974	113
Fulton	2,135,347	68	Pulaski	18,900,826	640
Gallatin	643,697	22	Robertson	632,174	22
Garrard	5,161,948	163	Rockcastle	5,310,724	177
Grant	5,361,220	160	Rowan	14,253,534	463
Graves	11,735,187	375	Russell	5,972,359	197
Grayson	7,877,744	254	Scott	11,218,054	348
Green	3,222,546	106	Shelby	12,922,166	389
Greenup	10,646,811	344	Simpson	4,918,868	156
Hancock	2,177,643	68	Spencer	3,981,495	115
Hardin	24,379,364	748	Taylor	8,420,766	280
Harlan	11,661,174	395	Todd	2,400,126	86
Harrison	5,666,832	183	Trigg	4,929,107	167
Hart	4,532,177	140	Trimble	1,746,995	49
Henderson	12,141,371	379	Union	3,715,314	128
Henry	4,983,006	166	Warren	46,189,060	1,486
Hickman	1,039,784	35	Washington	3,134,198	108
Hopkins	13,964,492	435	Wayne	6,449,849	218
Jackson	3,126,004	117	Webster	4,030,539	137
Jefferson	216,188,278	5,963	Whitley	17,859,017	601
Jessamine	9,433,149	312	Wolfe	3,156,862	108
Johnson	10,259,129	329	Woodford	8,175,794	261
Kenton	26,216,699	806			
Knott	7,049,396	243	**Total in Kentucky**	$1,292,541,490	40,710
Knox	6,983,261	246			
Larue	4,661,142	138			

Growth in Annuitants
as of June 30, 2011



Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Survivors	Eligible to Retire
FY 2005-06	33,618	2,039	1,631	495	531
FY 2006-07	34,462	2,086	1,722	466	549
FY 2007-08	35,550	2,155	1,778	468	554
FY 2008-09	36,684	2,209	1,837	448	559
FY 2009-10	37,607	2,284	1,915	435	567
FY 2010-11	38,705	2,379	2,003	430	584

Schedule of Annuitants by Type of Benefit as of June 30, 2011

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Retirement*				
		1	2	3	4	5
1 - 500	3,180	2,283	18	381	202	296
501 - 1,000	2,676	2,042	189	10	435	0
1,001 - 1,500	3,283	2,381	326	0	576	0
1,501 - 2,000	4,059	3,244	419	2	394	0
2,001 - 2,500	6,248	5,218	643	14	373	0
2,501 - 3,000	8,641	7,899	471	14	257	0
3,001 - 3,500	6,299	5,976	169	4	150	0
3,501 - 4,000	3,971	3,787	94	1	89	0
4,001 - 4,500	2,451	2,371	28	3	49	0
4,501 - 5,000	1,401	1,360	17	0	24	0
5,001 & OVER	2,188	2,144	5	1	38	0
Total**	44,397	38,705	2,379	430	2,587	296

***Type of Retirement**

1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Survivor Payment - Active Member*
4-*Beneficiary Payment - Retired Member*
5-*Disabled Adult Child*

*** Retirees in waiver program are not included.*

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,571	379	258	66	9	391	122	384
501 - 1,000	1,391	322	225	132	8	302	207	89
1,001 - 1,500	1,688	377	312	155	11	365	287	88
1,501 - 2,000	2,158	458	377	166	8	502	287	103
2,001 - 2,500	2,939	596	555	231	10	1,026	606	285
2,501 - 3,000	4,381	896	656	230	10	1,393	887	188
3,001 - 3,500	3,231	686	496	204	10	904	710	58
3,501 - 4,000	2,006	427	342	131	6	579	450	30
4,001 - 4,500	1,232	254	215	98	7	336	299	10
4,501 - 5,000	693	151	128	71	5	192	155	6
5,001 & OVER	1,121	195	237	112	13	248	259	3
Total	22,411	4,741	3,801	1,596	97	6,238	4,269	1,244

***Option selected:**

1 - Straight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/2001 TO 06/30/2002								
Average monthly benefit	$204	$408	$790	$1,296	$1,898	$2,552	$3,407	
Average final average salary	$4,143	$2,950	$3,312	$3,613	$3,920	$4,115	$4,884	
Number of retired members	65	128	82	116	107	1019	574	2,091
07/01/2002 TO 06/30/2003								
Average monthly benefit	$205	$480	$940	$1,344	$1,940	$2,715	$3,592	
Average final average salary	$4,301	$3,380	$3,714	$3,798	$4,078	$4,378	$5,121	
Number of retired members	58	83	98	103	155	837	508	1,842
07/01/2003 TO 06/30/2004								
Average monthly benefit	$220	$474	$839	$1,444	$1,978	$2,758	$3,486	
Average final average salary	$5,243	$3,357	$3,349	$3,936	$4,182	$4,425	$5,062	
Number of retired members	43	84	98	96	145	818	405	1,689
07/01/2004 TO 06/30/2005								
Average monthly benefit	$187	$528	$906	$1,488	$2,037	$2,892	$3,860	
Average final average salary	$4,353	$3,511	$3,647	$4,055	$4,317	$4,602	$5,275	
Number of retired members	55	98	107	106	145	811	875	2,197
07/01/2005 TO 06/30/2006								
Average monthly benefit	$202	$473	$1,019	$1,493	$2,136	$2,998	$4,063	
Average final average salary	$4,106	$3,253	$4,052	$4,117	$4,537	$4,721	$5,490	
Number of retired members	44	105	106	132	193	689	604	1,873
07/01/2006 TO 06/30/2007								
Average monthly benefit	$178	$514	$930	$1,559	$2,276	$3,140	$4,263	
Average final average salary	$4,102	$3,346	$3,590	$4,228	$4,612	$4,970	$5,758	
Number of retired members	48	113	90	109	169	534	514	1,577
07/01/2007 TO 06/30/2008								
Average monthly benefit	$199	$524	$1,117	$1,658	$2,436	$3,279	$4,319	
Average final average salary	$3,816	$3,066	$4,215	$4,412	$4,983	$5,067	$5,786	
Number of retired members	50	130	112	150	217	557	615	1,831
07/01/2008 TO 06/30/2009								
Average monthly benefit	$200	$573	$1,005	$1,725	$2,427	$3,368	$4,496	
Average final average salary	$4,617	$3,942	$3,873	$4,686	$4,974	$5,278	$5,960	
Number of retired members	72	168	137	115	242	505	585	1,824
07/01/2009 TO 06/30/2010								
Average monthly benefit	$185	$525	$1,104	$1,700	$2,513	$3,468	$4,670	
Average final average salary	$3,654	$3,637	$4,124	$4,508	$5,184	$5,383	$6,102	
Number of retired members	28	133	98	103	242	442	601	1,647
07/01/2010TO 06/30/2011								
Average monthly benefit	$149	$519	$1,225	$1,781	$2,529	$3,621	$4,827	
Average final average salary	$3,570	$3,640	$4,423	$4,825	$5,143	$5,574	$6,235	
Number of retired members	45	157	144	112	235	544	617	1,854

Medical Insurance Plan

Average Insurance Premium Supplements for the Last Ten Years

	Years of Service Credit				
	00-9.99	10-14.99	15-19.99	20>=	TOTAL
Retirement Effective Dates					
07/01/2001 TO 06/30/2002					
Average monthly supplement	$ 128.78	$ 167.74	$ 201.48	$ 252.15	
Number of retired members	59	62	99	1,694	1,914
07/01/2002 TO 06/30/2003					
Average monthly supplement	$ 106.62	$ 142.57	$ 212.81	$ 277.64	
Number of retired members	34	59	91	1,457	1,641
07/01/2003 TO 06/30/2004					
Average monthly supplement	$ 100.50	$ 148.85	$ 219.41	$ 289.98	
Number of retired members	30	59	82	1,365	1,536
07/01/2004 TO 06/30/2005					
Average monthly supplement	$ 138.29	$ 214.32	$ 305.39	$ 394.92	
Number of retired members	36	70	93	1,768	1,967
07/01/2005 TO 06/30/2006					
Average monthly supplement	$ 161.03	$ 241.76	$ 362.31	$ 487.23	
Number of retired members	28	49	106	1,440	1,623
07/01/2006 TO 06/30/2007					
Average monthly supplement	$ 146.24	$ 260.95	$ 363.45	$ 489.73	
Number of retired members	29	53	80	949	1,111
07/01/2007 TO 06/30/2008					
Average monthly supplement	$ 162.54	$ 260.71	$ 378.28	$ 512.29	
Number of retired members	36	61	104	952	1,153
07/01/2008 TO 06/30/2009					
Average monthly supplement	$ 167.78	$ 298.09	$ 414.38	$ 562.59	
Number of retired members	26	64	103	1,329	1,522
07/01/2009 TO 06/30/2010					
Average monthly supplement	$ 151.05	$ 339.31	$ 435.19	$ 621.12	
Number of retired members	32	73	103	1,276	1,484
07/01/2010 TO 06/30/2011					
Average monthly supplement	$ 167.03	$ 311.93	$ 438.84	$ 597.41	
Number of retired members	30	32	109	1,360	1,570

Summary of Fiscal Year 2010-2011
Retiree Sick Leave Payments

ACTUARIAL RATE

Grand Total Members Retiring	2,002
Total members receiving sick leave payments	1,432
Total amount of sick leave payments @ 10.105% contribution rate	$ 17,843,855.37
Average payment per retiree	$ 12,460.79
Total increase in final 3/5 average salary base	$ 5,107,614.48
Average increase in final average salary	$ 3,566.77
Total service credit of 1,432 retirees	37,285.59
Average service credit of 1,432 retirees	26.04
Additional Average Monthly Annuity payment per Retirement Formula	
3,566.77 x 26.04 x 2.50% =	$ 2,321.97
2,321.97/ 12 months	$ 193.50
Anticipated Lifetime Payout of Additional Annuity	
193.50 X 144.5250 X 1432 new factor	$ 40,046,721.30

Funding of Additional Payments

Member contributions 10.105% x $17,843,855.37 =	$ 1,803,121.59
Employer contributions 13.355% x $17,843,855.37 =	2,383,046.88
Total Contributions	$ 4,186,168.47
DEFICIT:	
Anticipated additional payout	$ 40,046,721.30
Less total contributions	4,186,168.47
Subtotal unfunded debt	35,860,552.83
Less current year appropriation	6,516,600.00
TOTAL DEFICIT (overpayment) *	$ 29,343,952.83 *

* NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. Sick leave deficits are amortized over 20 year periods.

Teachers' Retirement System of the State of Kentucky

The 72nd Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Year Ended June 30, 2012

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN, CPA
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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Introductory Section

for Fiscal Year ending June 30, 2012

Chairperson's Letter

Teachers' Retirement System of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

BOARD OF TRUSTEES

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CHAIRPERSON
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TAYLORSVILLE

LAURA ZIMMERMAN
LEXINGTON

EX OFFICIO
DR. TERRY HOLLIDAY
COMMISSIONER
DEPARTMENT
OF EDUCATION

EX OFFICIO
TODD HOLLENBACH
STATE TREASURER

December 28, 2012

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2012, the 72nd year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

KTRS closed the 2011-2012 fiscal year with $15.2 billion net assets. The active membership totaled 75,951 and the retired membership was 46,094 with annual annuity and medical insurance benefits totaling $1.7 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. Every effort will be made to insure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Tom Shelton

Dr. Tom Shelton
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 28, 2012

Honorable Steven L. Beshear, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky

Dear Governor Beshear:

It is my pleasure to submit the 72nd Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a Component Unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2012. State law provides the legal requirement for the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system are also required. Kentucky Teachers' Retirement System (KTRS) has produced an annual report that will provide you, the General Assembly, and the general public, with information necessary to gain a better understanding of KTRS.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of KTRS for the year ended June 30, 2012. Discussion and analysis of net assets and related additions and deductions is presented in Management's Discussion and Analysis beginning on page 15.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are accurately executed and financial statements are fairly presented. There are limits inherent in all systems of internal control based on the recognition that the costs of such systems should be related to the benefits to be derived. Management believes KTRS's controls provide this appropriate balance. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Secretary and the Governance and Audit Committee of the Board of Trustees.

Profile of KTRS

KTRS began operations on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state. KTRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 24. Also, the summary of the plan provisions starting on page 97 is useful in understanding benefit and contribution provisions. The population of KTRS membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the retirement system. The budget is approved by the Board of Trustees and submitted to the Kentucky General Assembly for legal adoption. The KTRS investment earnings fund the administrative budget appropriations.

Major Initiatives

KTRS continually seeks opportunities to better serve its membership. During the past year, KTRS has continued work on several major initiatives concerning funding and cost containment for retiree health care, the investment program, and information technology.

Implementation of the "Shared Responsibility" Solution for Funding Retiree Health Care and Careful Management of Medical Insurance Costs

June 30, 2012 marked the end of the second year of the six year phase in of the "shared responsibility" solution for prefunding retired teacher health care. The Board of Trustees and staff are very pleased to report that $3.1 billion in actuarial liability has been eliminated from the retired teacher health care plan through implementation of this solution. Another $1.9 billion savings in actuarial liability was accomplished through careful management of health care costs. Thus, since implementing "shared responsibility" and other cost control measures, more than $5 billion in actuarial accrued liability has been eliminated from the KTRS Medical Insurance Fund.

The Governor and Legislative leaders have commended Kentucky's education community for their strong leadership and hard work in developing and

implementing the solution. Constituent groups representing retired teachers, active teachers, school boards, school superintendents, and the state, all worked on the consensus funding solution. The solution provides that all the groups share in the solution by investing a little more now to receive substantial returns later. After two years, and $3.1 billion in savings by converting to a pre-funded plan, the "shared responsibility" solution is truly a significant accomplishment on the road to retirement security for current and future retired teachers.

The Board of Trustees of KTRS regularly reviews the health care plan to contain costs and maintain a meaningful benefit for retired teachers. The move to Medicare Advantage, now in the seventh year, continues to be stable and financially feasible for members and the KTRS medical plan.

Some recent cost saving initiatives include moving the KTRS sponsored Medicare drug plan to an insured Employer Group Waiver Prescription Drug Plan with a commercial wrap in the drug coverage gap to achieve the greatest amount of federal subsidies for 2012. Additionally, KTRS joined the KY Rx Coalition in 2012, which is spearheaded by the University of Kentucky. By joining the coalition, KTRS will achieve annual savings through leveraging greater prescription purchasing power and deeper drug discounts. As an added benefit, a dedicated staff of pharmacists with the KY Rx Coalition can help each member with their prescriptions and how to maximize their prescription dollars.

Other cost containment measures communicated to the membership in 2012 for an effective date of 2013 involved the elimination of the future risk of adverse selection with our Medicare eligible spouses of retired teachers; and assisting those retirees and their spouses who are Medicare eligible, but under the normal Medicare age, to join the Medicare plan in 2013 achieving future savings for our members, the KTRS retiree medical plan, and the Commonwealth of Kentucky. KTRS is also exploring the industry best practice of utilizing a high performance formulary for 2014 with our drug plan.

KTRS is efficient, effective, and always working to improve the retirement security of Kentucky's teachers. Eliminating more than $5 billion in liability helps the financial condition of the Commonwealth and eases burdens on taxpayers.

Investment Program

KTRS's investment program was in the top 26% of returns for pension funds with over $1 billion in assets with positive returns of 2.4%. Additionally, because of KTRS's focus on fundamental value and risk control, it was able to continue a multiyear program of broadening the portfolio's diversification. This included new opportunistic investments that took advantage of dislocated financial markets. KTRS also continued to implement changes to the investment program based upon an asset liability modeling study, which included an analysis of the shared responsibility solution for funding retiree health care and receipt of the proceeds of bonds in the KTRS retirement annuity and medical insurance funds. These ongoing efforts are a continuation of a disciplined investment process and long term focus on retirement security. This focus has generated exceptionally stable returns through the System's history and we have every confidence that it will do so in the future. KTRS's investment program continues to be recognized as a leader in the public pension community for governance structure, trustee education, and cost effectiveness.

Information Technology

KTRS staff has continued working on a multi-year project planning, designing, and constructing a new information technology system known as the "Pathway System." Last year, the Board took action and authorized hiring a vendor to begin building and installation of the new system.

The vendor has been working with staff on-site at KTRS since September 2011. The focus of work has been developing and constructing the first major component of the new system. The design work for internet based functions including member enrollment, employer reporting, service credit purchases, and related accounting functions, was completed in the spring of 2012. Based upon the design work, the construction of member enrollment and employer reporting was completed and extensive testing of those components has begun. More than 33% of the overall project has been completed and work has been proceeding according to schedule and within budget.

The objective of the Pathway System is to streamline retirement processes and improve staff efficiency in providing services to retirees and active members. In developing the new system, KTRS is redesigning and improving office processes and ultimately will be applying new internet based technologies to these processes. This will increase staff productivity, provide seamless member account management, and simplify future system modifications. As KTRS continues to implement changes to the information technology system under the Pathway System, we expect that the new technology will help the System better serve its membership.

Economic Condition

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 51 contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules among others.

The investment portfolio experienced a decline in value during the 2011-2012 fiscal year as the portfolio's market value decreased from $15,547,900,381 to $15,133,117,118. The decline in value of the portfolio and of the overall market was primarily due to turmoil in the international financial markets. This decline was offset with investment income that included interest income and dividends. Employer and employee contributions also provided significant income to the portfolio. However, because benefits paid out exceeded contributions to the System, the portfolio's market value decreased.

Investment income, including depreciation of asset values, net of investment expenses, for the 2011-2012 fiscal year was $312,233,315. The major contributing factor of the positive return from the System's investment portfolio resulted from the net depreciation in fair value of investments in the amount of $75,746,538 which was offset by investment income receipts. The largest earnings component, $220,176,938 was the result of interest income. Other income, net of expenses, of $167,802,915 was generated from dividends, rent and securities lending.

According to the KRS 161.430 the Board of Trustees has the responsibility to invest the assets of the System. The Board of Trustees delegates investment authority to the Investment Committee. The Investment Committee works closely with experienced investment counselors and the System's professional staff in evaluating and selecting investment allocations.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the Plan and its Trust Funds. The investment program shall also provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. While the entire portfolio earned a total return of positive 2.4% in 2011-12, the portfolio's ten-year annualized rate of return is 5.5%, the twenty-year annualized rate of return is 7.2% and the thirty-year annualized rate of return is 9.5%.

KTRS annuities have a bolstering impact on the Commonwealth of Kentucky's economy, as approximately 92% of retired teachers reside within the state. Total benefits (retirement, medical insurance, life insurance, and other benefits) paid during the fiscal year were approximately $1.7 billion.

Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes by statute the levels of contribution that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

The latest actuarial valuation was for the period ending June 30, 2012. This report reflects the System's actuarial value of assets totaling $14.7 billion and actuarial determined liabilities totaling $27 billion. The funded ratio of actuarial assets to liabilities is 54.5%. The actuary reports: "...In our opinion, the System is not being funded on an actuarially sound basis since the actuarially required contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated...."

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions (on page 43). After the 2012 employer contributions there remains a net pension obligation of $436,123,560 (as detailed on page 91). Annual required employer contributions for the Medical Insurance Fund are provided in the schedule of employer contributions (on page 44). The 2012 employer shortfall of contributions created a net OPEB obligation of $1,413,736,073 (as detailed on page 114).

The sustained decline in the funded ratio is from the cumulative effect of the employer failing to make actuarially required contributions. Also contributing to the reduced funded ratio are market fluctuations that are being recognized using actuarial smoothing over a five-year period and the changing demographics of the retirement system.

KTRS expects that the shared responsibility solution for funding retiree health care will help improve the funded status of the pension fund in the future by stopping the redirection of contributions from the pension fund to pay for the costs of current retiree health care. As well, on August 26, 2010, KTRS received $465 million in proceeds from a bond issued by the state. This bond issue was approved by the Governor under the authority of legislation enacted by both chambers of the General Assembly during the 2010 Regular and Special Sessions. The proceeds of this bond issue were deposited in the KTRS retirement annuity fund in repayment of retirement contributions that had been redirected by the state to pay retiree health care from fiscal year 2005 through fiscal year 2010.

KTRS Medical Insurance Plan

The shared responsibility solution for funding retiree health care, which went into effect on July 1, 2010, provides a method of prefunding retiree health care over a 30 year period. The System believes that the shared responsibility solution for funding retiree health care will help insure the retirement security of the state's teachers. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2012 indicated that the fund has an unfunded liability of $3.3 billion. The funded ratio of actuarial assets to liabilities is 9.4%. The actuary reports: "...if the State contributions to the Medical Insurance Fund are increased to the planned levels, the Retiree Medical Plan will begin to operate in a more actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Retiree Medical Plan to provide the benefits called for under the Retiree Medical Plan will improve...."

Additionally, the System believes continued steps must be taken to realize true cost containment through legislation on both the state and national levels. KTRS will continue to take measures to contain costs and increase revenues to the Medical Insurance Plan or may adjust coverage to meet existing revenues.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the KTRS. Certifications from the Board's External Auditor and Independent Actuary are enclosed in this report. The System's consultants who are appointed by the Board are listed on pages 45, 46, 73 and 78 of this report.

National Recognition

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2011. The Certificate of Achievement is a prestigious national award-recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. KTRS has received the Certificate of Achievement for the last twenty-four consecutive years (fiscal years ended 1988-2011). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council (PPCC) awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2012 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure, and are widely acknowledged to be marks of excellence in the public pension industry.

In 2012, for the first time, KTRS was not awarded the PPCC Certificate of Achievement for funding. Failure to qualify for the award reflects the employer's continued underfunding of KTRS's retirement annuity plan.

The PPCC is a coalition of three national associations that represent public retirement systems and administrators. The associations that form the PPCC are the National Association of State Retirement Administrators; the National Council on Teacher Retirement; and the National Conference on Public Employee Retirement Systems.

NCTR Executive Committee

Gary L. Harbin is the Past-President of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 68 state, territorial, local and university pension systems with combined assets of almost $2 trillion, serving more than 19 million active and retired teachers, non-teaching personnel and other public employees.

Public Sector HealthCare Roundtable

Mr. Harbin also serves on the Board of Directors and as President of the Public Sector HealthCare Roundtable. The Roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector were properly represented during the formulation and debate, and now implementation of the Patient Protection and Affordable Care Act. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

Our Gratitude

At the regular quarterly meeting of the Board of Trustees on June 18, 2012, Mr. Robert M. Conley announced that he was resigning from the Board effective June 30, 2012. In 1988, Mr. Conley was elected as a lay member of the Board. In 1991, Mr. Conley was appointed vice chair of the Investment Committee and served in that role for 15 years. Thereafter, he served as chair of the Investment Committee until his resignation. He had a significant oversight role in modernizing and diversifying the investment program and during his service assets under management increased from $3.3 billion to $15.6 billion. We would like to thank Mr. Conley for his exemplary service and numerous contributions to the successful operation of KTRS.

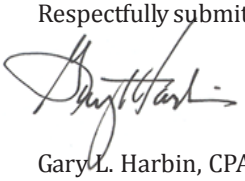
Acknowledgments

The preparation of this report reflects the combined efforts of the KTRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship of the assets contributed by KTRS members and their employers.

This report is located at the KTRS web address www.ktrs.ky.gov, and is made available to all employers whose cooperation continues to contribute significantly to our success, and who form the vital link between KTRS and its active members.

KTRS management and staff are committed to the continued operation of an actuarially sound retirement system. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



Gary L. Harbin, CPA
Executive Secretary

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Teacher Trustee
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Vice Chairperson
Lay Trustee
Hodgenville

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Taylorsville

Laura Zimmerman
Teacher Trustee
Lexington

Dr. Terry Holliday
Ex Officio Trustee
Commissioner,
Dept. of Education

Todd Hollenbach
Ex Officio Trustee
State Treasurer

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

GARY L. HARBIN, CPA
Executive Secretary

ROBERT B. BARNES, JD
General Counsel and
Deputy Executive Secretary
Operations

J. ERIC WAMPLER, JD
Deputy Executive Secretary
Finance & Administration

PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

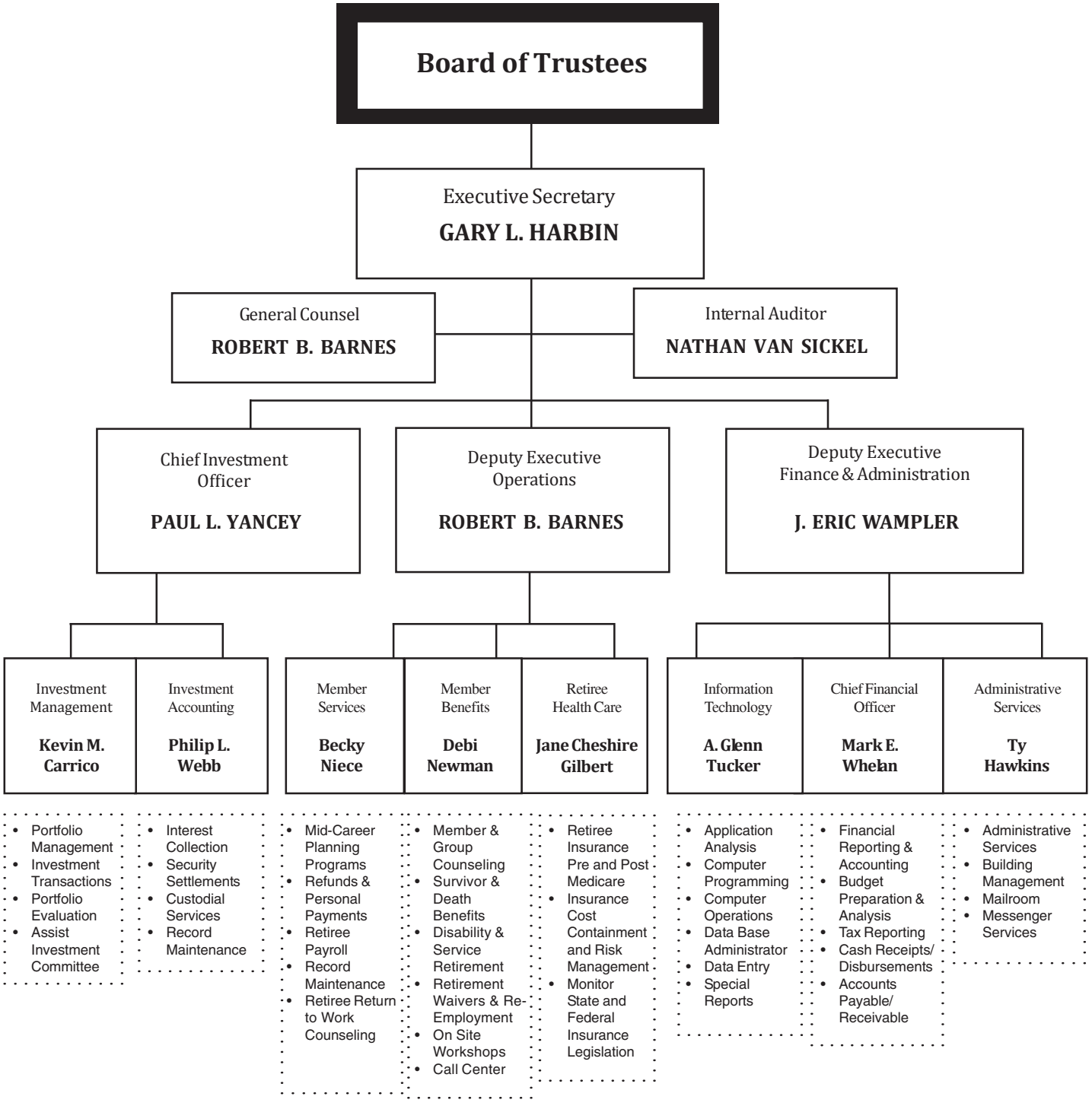
Cavanaugh Macdonald Consulting, LLC
3550 Busbee Parkway, Suite 250
Kennesaw, GA 30144

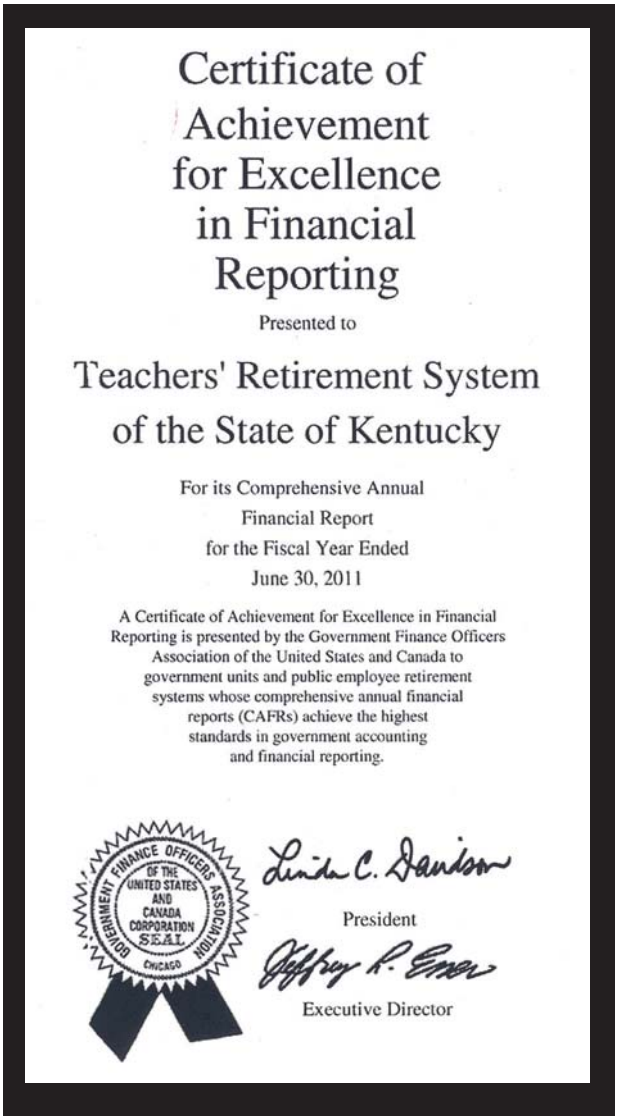
AUDITOR

Mountjoy Chilton Medley, LLC
1000 Bluegrass Corporate Center
333 West Vine Street
Lexington, KY 40507

** See pages 73 and 78 of the Investment Section for investment consultants.*

Kentucky Teachers' Retirement System
Organizational Chart





Certificate of Achievement for Excellence in Financial Reporting

Presented to

Teachers' Retirement System of the State of Kentucky

For its Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2011

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

GOVERNMENT FINANCE OFFICERS ASSOCIATION OF THE UNITED STATES AND CANADA CORPORATION SEAL CHICAGO

Linda C. Davidson

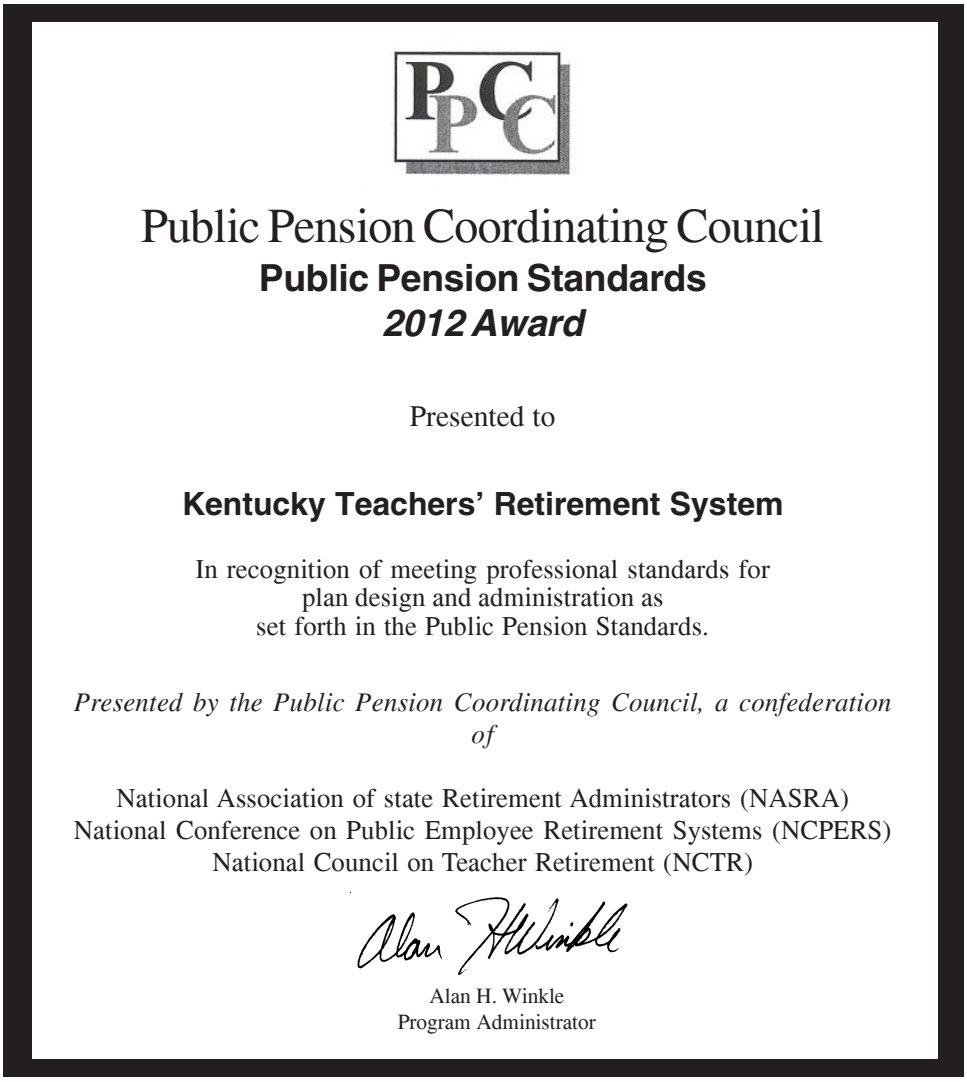
President

Jeffrey P. Ener

Executive Director

GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last twenty-four consecutive years (fiscal years ended 1988-2011).



Public Pension Coordinating Council
Public Pension Standards
2012 Award

Presented to

Kentucky Teachers' Retirement System

In recognition of meeting professional standards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of state Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2012 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

Financial Section

for Fiscal Year ending June 30, 2012

Mountjoy Chilton Medley

Independent Auditor's Report on Financial Statements

To the Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited the accompanying statement of plan net assets of the Teachers' Retirement System of the State of Kentucky as of and for the year ended June 30, 2012, and the related statement of changes in plan net assets for the year then ended. These component unit financial statements are the responsibility of the Teachers' Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of June 30, 2012, and the respective changes in its plan net assets for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The financial statements of Teachers' Retirement System of the State of Kentucky as of June 30, 2011, were audited by other auditors whose report dated December 16, 2011 expressed an unmodified opinion on those statements.

In accordance with Government Auditing Standards, we have also issued our report dated December 17, 2012, on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audit.

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 15 through 19 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Teachers' Retirement System of the State of Kentucky's financial statements as a whole. The financial section and supporting schedules listed in the table of contents are presented for purposes of additional analysis and are not a required part of the financial statements. These schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole. The introductory, statistical, investment, actuarial, and financial sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

/s/ Mountjoy Chilton Medley LLP

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December 17, 2012

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MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of Kentucky Teachers' Retirement System's (KTRS, System, or Plan) financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2012. Please read it in conjunction with the respective financial statements, which begin on page 20.

USING THIS FINANCIAL REPORT

Because of the long-term nature of the defined benefit retirement annuity plan, the medical plan and life insurance plan, financial statements alone cannot provide sufficient information to properly reflect the ongoing perspective of the System. The Statement of Plan Net Assets and Statement of Changes in Plan Net Assets (on pages 20-23) provide information about the activities of the defined benefit retirement annuity plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Kentucky Teachers' Retirement System is the fiduciary of funds held in trust for its members.

The Schedule of Funding Progress (on pages 43-44) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (on pages 43-44) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2012, Kentucky Teachers' Retirement System's combined plan net assets decreased by $285.8 million - from $15,514.9 million in 2011 to $15,229.1 million in 2012. In 2010, combined net assets totaled $12,786.7 million. The following summaries focus on plan net assets and changes in plan net assets of Kentucky Teachers' Retirement System's defined benefit retirement annuity plan, medical insurance plan, life insurance plan and other funds.

Summary of Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2012	2011	2010	2012	2011	2010	2012	2011	2010
Cash & Investments	$ 15,123.6	$ 15,192.9	$ 12,513.9	$ 345.0	$ 429.2	$ 237.1	$ 91.1	$ 87.4	$ 87.1
Receivables	133.4	180.7	96.5	16.3	5.3	7.9	1.1	1.1	0.9
Capital Assets	6.8	3.8	3.4						
Total Assets	15,263.8	15,377.4	12,613.8	361.3	434.5	245.0	92.2	88.5	88.0
Total Liabilities	(466.7)	(246.8)	(157.2)	(22.5)	(139.7)	(3.8)			(0.1)
Plan Net Assets	$ 14,797.1	$ 15,130.6	$ 12,456.6	$ 338.8	$ 294.8	$ 241.2	$ 92.2	$ 88.5	$ 87.9

*TOTALS	2012	2011	2010
Cash & Investments	$ 15,559.7	$ 15,709.5	$ 12,838.1
Receivables	150.8	187.1	105.3
Capital Assets	6.8	3.8	3.4
Total Assets	15,717.3	15,900.4	12,946.8
Total Liabilities	(489.2)	(386.5)	(161.1)
Plan Net Assets	$ 15,228.1	$ 15,513.9	$ 12,785.7

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had combined plan net assets of $.9 million for years ended 2012, 2011 and 2010.*

Plan net assets of the defined benefit retirement annuity plan decreased by 2.2% ($14,797.1 million compared to $15,130.6 million) and in 2010, plan net assets of the defined benefit plan totaled $12,456.6 million. The decrease is primarily due to unfavorable market conditions which resulted in a net investment income decrease of $2.45 billion less than 2011. The 2012 amount was $1.2 billion less than 2010. The defined benefit retirement annuity plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries. Plan net assets of the medical insurance plan increased by 14.9% ($338.8 million compared to $294.8 million) primarily due to contributions from members and employers exceeding insurance expenses due to legislation passed in 2010. This compares to 2010 where plan net assets of the medical insurance fund totaled $241.2 million. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

Summary of Changes in Plan Net Assets
(In Millions)

Categories	Defined Benefit Plan 2012	Defined Benefit Plan 2011	Defined Benefit Plan 2010	Medical Insurance Plan 2012	Medical Insurance Plan 2011	Medical Insurance Plan 2010	Life Insurance Fund 2012	Life Insurance Fund 2011	Life Insurance Fund 2010
ADDITIONS									
Member Contributions	$ 309.8	$ 302.3	$ 297.6	$ 100.3	$ 84.1	$ 63.8	$	$	$
Employer Contributions	557.3	1,037.9	479.8	174.0	188.3	158.8	1.7	1.7	1.9
Net Investment Income	309.7	2,761.0	1,509.8	(4.0)	8.3	12.3	6.4	3.1	5.4
Other Income				3.8	0.5	14.6			
TOTAL ADDITIONS	1,176.8	4,101.2	2,287.2	274.1	281.2	249.5	8.1	4.8	7.3
DEDUCTIONS									
Benefit Payments	1,482.9	1,402.6	1,321.8				4.4	4.2	4.1
Refunds	19.5	17.3	15.3						
Administrative Expense	7.8	7.3	8.8	1.2	1.2				
Insurance Expenses				229.0	226.4	237.4			
TOTAL DEDUCTIONS	1,510.2	1,427.2	1,345.9	230.2	227.6	237.4	4.4	4.2	4.1
Increase (Decrease) in Plan Net Assets	$ (333.4)	$ 2,674.0	$ 941.3	$ 43.9	$ 53.6	$ 12.1	$ 3.7	$ 0.6	$ 3.2

TOTALS	2012	2011	2010
ADDITIONS			
Member Contributions	$ 410.1	$ 386.4	$ 361.4
Employer Contributions	733.0	1,227.9	640.5
Net Investment Income	312.1	2,772.4	1,527.5
Other Income	3.8	0.5	14.6
TOTAL ADDITIONS	1,459.0	4,387.2	2,544.0
DEDUCTIONS			
Benefit Payments	1,487.3	1,406.8	1,325.9
Refunds	19.5	17.3	15.3
Administrative Expense	9.0	8.5	8.8
Insurance Expenses	229.0	226.4	237.4
TOTAL DEDUCTIONS	1,744.8	1,659.0	1,587.4
Increase (Decrease) in Plan Net Assets	$ (285.8)	$ 2,728.2	$ 956.6

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

DEFINED BENEFIT RETIREMENT ANNUITY PLAN ACTIVITIES

Member contributions increased $7.5 million. Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions totaled $557.3 million, a net decrease of $480.6 million from the 2011 fiscal year. This was primarily due to bond proceeds received in the 2011 fiscal year of $465.4 million to satisfy amounts that were being amortized in the state budget. These bond proceeds, along with $124.3 million of contributions redirected to the medical insurance fund from the pension fund caused the employer contributions to be $558.1 million more in 2011 when compared to 2010.

The System experienced a decrease in net investment income compared to the previous year ($309.7 million at June 30, 2012 as compared to a $2,761.0 million at June 30, 2011). For 2010, net investment income totaled $1,509.8 million. The decrease in the fair value of investments is mainly due to unfavorable market conditions for the year ended June 30, 2012 and is illustrated as follows:

Dollar Amount in Millions

	2012	2011	2010
Appreciation (depreciation) in fair value of investments – June 30, prior year	$ 1,842.0	$ (235.5)	$ (1,336.2)
Appreciation (depreciation) in fair value of investments – June 30, end of year	1,411.6	1,842.0	(235.5)
Change in net appreciation (depreciation) in fair value of investments	(430.4)	2,077.5	1,100.7
Net income (net of investment expense)	378.2	362.3	341.3
Net gain on sale of investments	361.9	321.2	67.8
Investment Income (net) – June 30, end of year	$ 309.7	$ 2,761.0	$ 1,509.8

Program deductions in 2012 increased $83.0 million. The increase was caused principally by an increase of $80.3 million in benefit payments. Members who were drawing benefits as of June 2011 received an increase of 1.5% to their retirement allowances in July 2011. Also, there was an increase of 1,675 members and beneficiaries on the retired payroll as of June 30, 2012.

OTHER POST EMPLOYMENT BENEFIT ACTIVITIES

During the 2012 fiscal year, the medical insurance plan member contributions increased $16.2 million and employer contributions decreased $14.3 million under fiscal year 2011. The member contributions increased primarily due to the implementation of the Shared Responsibility Plan beginning July 1, 2010 which includes increased contributions from active and retired members, employers and the state. The employer contributions decreased due to less transition funding paid by the state as the Shared Responsibility plan phases in until the 2016 fiscal year. The state's contribution for the 2010-2012 biennium was made with bond proceeds received in March 2011.

Net investment income decreased $12.3 million from $8.3 million in 2011 to a negative $4.0 million in 2012. In 2010, net investment income totaled $12.3 million. This can be illustrated as follows:

Dollar Amount in Millions

	2012	2011	2010
Appreciation (depreciation) in fair value of investments – June 30, prior year	$ 0	$ 0	$ 0
Appreciation (depreciation) in fair value of investments – June 30 end of year	(9.7)	0	0
Change in net appreciation(depreciation) in fair value of investments	(9.7)	0	0
Net income (net of investment expense)	6.0	8.3	12.3
Net gain (loss) on sale of investments	(0.3)	0	0
Investment Income (net) – June 30	$ (4.0)	$ 8.3	$ 12.3

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2012, 2011 and 2010 were $4.4, $4.2, and $4.1 million respectively.

HISTORICAL TRENDS

Accounting standards require that the Statement of Plan Net Assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information regarding the actuarial funding status of the defined benefit plan, the medical insurance plan, and the life insurance plan is provided in the Schedule of Funding Progress (beginning on page 43). The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the entry age cost method.

The 2012 fiscal year reveals a decline in funding position of the retirement annuity plan due primarily to an increase in the actuarial liability while the actuarial value of the assets remained flat due to market decline in prior years. Annual required employer contributions of the defined benefit plan are provided in the Schedule of Employer Contributions (on page 43) and a shortfall of employer contributions has resulted in an accumulated net pension obligation of $436,123,560 as of June 30, 2012.

Although the medical insurance plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding. Effective July 1, 2010 the Shared Responsibility Plan for funding retiree health benefits requires members, retirees, participating employers and the state to make contributions for pre-funding retiree medical benefits. Annual required contributions of the medical insurance plan are provided in the Schedule of Employer Contributions (on page 44) and a shortfall of employer contributions has resulted in an accumulated net OPEB obligation of $1,413,736,073 as of June 30, 2012.

Statement of Plan Net Assets
As of June 30, 2012

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 25,314,512	$ 5,202,577	$ 299,153	$ 9,828	$ 30,826,070
Prepaid Expenses	62,774	147,000			209,774
Receivables					
Contributions	37,851,376	5,574,370	31,987		43,457,733
Due From Other Trust Funds	2,432,980				2,432,980
State of Kentucky	9,162,962	5,714,136	21,590		14,898,688
Investment Income	49,846,104	1,143,178	1,065,552	1,183	52,056,017
Investment Sales Receivable	33,559,535				33,559,535
Other Receivables	499,433	3,873,520			4,372,953
Total Receivables	133,352,390	16,305,204	1,119,129	1,183	150,777,906
Investments at Fair Value (See Note 5)					
Short-Term Investments	608,260,247	57,658,400	4,521,129	673,015	671,112,791
Bonds and Mortgages	3,481,878,618	140,165,798	86,346,232	270,532	3,708,661,180
Equities	9,260,311,630	141,013,192			9,401,324,822
Alternative Investments	764,469,456	748,103			765,217,559
Real Estate	586,800,766				586,800,766
Total Investments	14,701,720,717	339,585,493	90,867,361	943,547	15,133,117,118
Invested Security Lending Collateral	396,546,893				396,546,893
Capital Assets, at cost net of accumulated depreciation of $2,202,905 (See Note 2)	6,858,662				6,858,662
Total Assets	15,263,855,948	361,240,274	92,285,643	954,558	15,718,336,423
LIABILITIES					
Accounts Payable	4,052,099	3,762,868			7,814,967
Due to Other Trust Funds		2,387,658	44,397	925	2,432,980
Insurance Claims Payable		67,000			67,000
Revenues Collected in Advance		6,153,310			6,153,310
Investment Purchases Payable	66,136,067	10,122,885			76,258,952
Obligations Under Securities Lending	396,546,893				396,546,893
Total Liabilities	466,735,059	22,493,721	44,397	925	489,274,102
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:	$ 14,797,120,889	$ 338,746,553	$ 92,241,246	$ 953,633	$ 15,229,062,321

The "Schedule of Funding Progress" is presented in the Required Supplementary Information section of this report. The accompanying notes are an integral part of these financial statements.

Statement of Plan Net Assets
As of June 30, 2011

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 2,014,331	$ 175,762	$ 385,672	$ 65,108	$ 2,640,873
Prepaid Expenses	40,263	147,000			187,263
Receivables					
Contributions	30,046,110	3,298,187	27,501		33,371,798
Due From Other Trust Funds	1,207,985				1,207,985
State of Kentucky		193,954			193,954
Investment Income	53,218,525	943,333	1,113,843	1,149	55,276,850
Investment Sales Receivable	95,747,740				95,747,740
Other Receivables	431,187	849,412			1,280,599
Total Receivables	180,651,547	5,284,886	1,141,344	1,149	187,078,926
Investments at Fair Value (See Note 5)					
Short-Term Investments	588,462,274	141,587,315	1,654,850	698,978	732,403,417
Bonds and Mortgages	3,797,591,983	136,110,938	85,366,325	205,312	4,019,274,558
Equities	9,588,077,134	151,170,232			9,739,247,366
Alternative Investments	576,527,803				576,527,803
Real Estate	480,447,237				480,447,237
Total Investments	15,031,106,431	428,868,485	87,021,175	904,290	15,547,900,381
Invested Security Lending Collateral	159,808,327				159,808,327
Capital Assets, at cost net of accumulated depreciation of $2,101,508 (See Note 2)	3,803,072				3,803,072
Total Assets	15,377,423,971	434,476,133	88,548,191	970,547	15,901,418,842
LIABILITIES					
Accounts Payable	1,221,191				1,221,191
Due to Other Trust Funds		1,186,029	21,511	445	1,207,985
Insurance Claims Payable		403,000			403,000
Revenues Collected in Advance		122,500,000			122,500,000
Investment Purchases Payable	85,788,174	15,568,509			101,356,683
Obligations Under Securities Lending	159,808,327				159,808,327
Total Liabilities	246,817,692	139,657,538	21,511	445	386,497,186
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:	$ 15,130,606,279	$ 294,818,595	$ 88,526,680	$ 970,102	$ 15,514,921,656

The "Schedule of Funding Progress" is presented in the Required Supplementary Information section of this report. The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
For the Year Ended June 30, 2012

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
Employer	$ 557,339,552	$ 173,966,623	$ 1,684,711	$	$ 732,990,886
Member	309,729,924	100,346,070			410,075,994
Total Contributions	867,069,476	274,312,693	1,684,711		1,143,066,880
Other Income					
Recovery Income		3,483,583			3,483,583
Medicare D Receipts		297,639			297,639
Total Other Income		3,781,222			3,781,222
Investment Income					
Net Appreciation/(Depreciation) in FV of Investments	(68,546,089)	(9,970,177)	2,703,508	66,220	(75,746,538)
Interest	210,189,576	6,231,117	3,746,222	10,023	220,176,938
Dividends	163,431,233	32,266			163,463,499
Rental Income, Net	30,536,687				30,536,687
Securities Lending, Gross Earnings	3,104,925		292		3,105,217
Gross Investment Income	338,716,332	(3,706,794)	6,450,022	76,243	341,535,803
Less Investment Expense	(28,088,560)	(282,408)			(28,370,968)
Less Securities Lending Expense	(931,520)				(931,520)
Net Investment Income	309,696,252	(3,989,202)	6,450,022	76,243	312,233,315
Total Additions	1,176,765,728	274,104,713	8,134,733	76,243	1,459,081,417
DEDUCTIONS					
Benefits	1,482,939,165		4,397,281	92,232	1,487,428,678
Refunds of Contributions	19,549,073				19,549,073
Insurance Expenses		228,975,126			228,975,126
Administrative Expense	7,762,880	1,201,629	22,886	480	8,987,875
Total Deductions	1,510,251,118	230,176,755	4,420,167	92,712	1,744,940,752
Net Increase (Decrease)	(333,485,390)	43,927,958	3,714,566	(16,469)	(285,859,335)
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:					
Beginning of year	15,130,606,279	294,818,595	88,526,680	970,102	15,514,921,656
Ending of year	$ 14,797,120,889	$ 338,746,553	$ 92,241,246	$ 953,633	$ 15,229,062,321

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Assets
For the Year Ended June 30, 2011

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
Employer	$ 1,037,935,993	$ 188,241,202	$ 1,668,822	$ 60,000	$ 1,227,906,017
Member	302,262,819	84,147,337			386,410,156
Total Contributions	1,340,198,812	272,388,539	1,668,822	60,000	1,614,316,173
Other Income					
Recovery Income		212,727			212,727
Medicare D Receipts		280,585			280,585
Total Other Income		493,312			493,312
Investment Income					
Net Appreciation/(Depreciation) in FV of Investments	2,398,629,230	(200,122)	(691,253)	(5,937)	2,397,731,918
Interest	200,003,244	8,577,058	3,786,029	15,626	212,381,957
Dividends	152,176,305	18,438			152,194,743
Rental Income, Net	30,610,988				30,610,988
Securities Lending, Gross Earnings	2,447,181				2,447,181
Gross Investment Income	2,783,866,948	8,395,374	3,094,776	9,689	2,795,366,787
Less Investment Expense	(22,160,690)	(61,078)			(22,221,768)
Less Securities Lending Expense	(734,034)				(734,034)
Net Investment Income	2,760,972,224	8,334,296	3,094,776	9,689	2,772,410,985
Total Additions	4,101,171,036	281,216,147	4,763,598	69,689	4,387,220,470
DEDUCTIONS					
Benefits	1,402,535,713		4,120,000	85,178	1,406,740,891
Refunds of Contributions	17,325,387				17,325,387
Insurance Expenses		226,435,363			226,435,363
Administrative Expense	7,322,739	1,186,029	21,511	445	8,530,724
Total Deductions	1,427,183,839	227,621,392	4,141,511	85,623	1,659,032,365
Net Increase (Decrease)	2,673,987,197	53,594,755	622,087	(15,934)	2,728,188,105
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:					
Beginning of year	12,456,619,082	241,223,840	87,904,593	986,036	12,786,733,551
Ending of year	$ 15,130,606,279	$ 294,818,595	$ 88,526,680	$ 970,102	$ 15,514,921,656

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements
Years Ended June 30, 2012 and 2011

Note 1: Description of Retirement Annuity Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan established to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state.

B. PARTICIPANTS

As of June 30, 2012 a total of 208 employers participated in the plan. Employers are comprised of 174 local school districts, 17 Department of Education Agencies and other educational organizations, 5 universities and also the Kentucky Community and Technical College System.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

	2012	2011
Active contributing members:		
Vested	48,383	47,945
Non-vested	27,568	28,404
Inactive members, vested	6,668	6,135
Retirees and beneficiaries currently receiving benefits	46,094	44,419
Total members, retirees, and beneficiaries	**128,713**	**126,903**

C. BENEFIT PROVISIONS

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete 27 years of Kentucky service.

Participants that retire before age 60 with less than 27 years of service receive reduced retirement benefits. Non-university members receive monthly payments equal to two percent (2%) (service prior to July 1, 1983) and two and one-half percent (2.5%) (service after July 1,1983) of their final average salaries for each year of credited service. University employees receive monthly benefits equal to two percent (2%) of their

Note 1: Description of Plan continued . . .

final average salary for each year of credited service. The final average salary is the member's five (5) highest annual salaries except members at least 55 with 27 or more years of service may use their three (3) highest annual salaries. New members (including second retirement accounts started) after July 1, 2002 will receive monthly benefits equal to two percent (2%) of their final average salary for each year of service if, upon retirement, their total service is less than ten years. New members after July 1, 2002 who retire with ten or more years of total service will receive monthly benefits equal to two and one-half percent (2.5%) of their final average salary for each year of service, including the first ten years. In addition, non-university members who retire July 1, 2004 and later with more than 30 years of service will have their multiplier increased for all years over 30 from two and one-half percent (2.5%) to three percent (3.0%) to be used in their benefit calculation.

The System provides medical benefits to retirees as fully described in Note 8. The System also provides disability benefits for vested members at the rate of sixty percent (60%) of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half percent (1.5%) annually. Additional ad hoc increases and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

KTRS has five cash accounts. At June 30, 2012, the retirement annuity cash account totaled $24,131,311 and the administrative expense fund cash account was $1,183,201 for a total of $25,314,512 as carrying value of cash in the defined benefit plan. The medical insurance cash account totaled $5,202,577, the life insurance plan cash account totaled $299,153 and the excess benefit fund cash account contained $9,828. Therefore, the carrying value of cash was $30,826,070 and the bank balance was $38,615,798 and funds controlled by the Commonwealth of Kentucky of $4,555,141. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2012.

C. CAPITAL ASSETS

Fixed assets are recorded at historical cost less straight-line accumulated depreciation. The classes of fixed assets are furniture and equipment, the KTRS office buildings and land. Furniture and equipment are depreciated over an average useful life of five years. The office buildings are depreciated over forty years. Internally created software for the Pathway capital project will be capitalized and amortized over fifteen years. The Pathway project will update technological record keeping abilities and improve timeliness and accuracy of responses to member inquiries.

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers. Alternative investments such as private equity, timberland, and other additional categories are valued using the most recent general partner statement of fair value based on independent appraisals, updated

Note 2: Summary of Significant Accounting Policies continued . . .

for any subsequent partnership interests' cash flows.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in plan net assets. Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by the System's employees are recorded when earned. Upon termination or retirement, employees of the System are paid for accumulated vacation time limited to 60 days and accumulated compensatory time limited to 240 hours. As of June 30, 2012 and 2011 accrued compensated absences were $876,573 and $830,349.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which the System is exposed. In order to cover such risks the System carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

G. OTHER RECEIVABLES

KTRS allows qualified purchases of service credit to be made by installment payments not to exceed a five-year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2012 and 2011 installment contract receivables were $499,433 and $431,187.

The other receivables reported in the medical insurance fund consists primarily of Kentucky Retirement Systems' net cost of their retirees who elect to take their health benefits with KTRS in the amount of $3,873,520 for the 2012 fiscal year.

H. USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The System's management believes that it has operated the plans within the constraints imposed by federal tax law.

J. RECENT PRONOUNCEMENTS

In June 2011, the GASB issued Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position. GASB Statement No. 63 provides financial reporting guidance relative to deferred outflows of resources, a consumption of net assets by KTRS that is applicable to a future reporting period, and deferred inflows of resources, an acquisition of net assets by KTRS that is applicable to a future reporting period. GASB Statement No. 63 incorporates deferred outflows and inflows of resources into the definitions of the required components of the residual measure, renaming such measure as net position, rather than net assets. The provisions of GASB Statement No. 63 are effective for fiscal periods beginning after December 15, 2011 (the fiscal year ended June 30, 2013). While KTRS has not yet evaluated the impact the provisions of GASB Statement No. 63 will have on its financial statements as of and for the year ended June 30, 2013, the adoption of this standard is not expected to have an impact on KTRS's financial position, results of operations, and/or cash flows.

Note 3: Contributions and Reserves

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Non-university members who joined the plan prior to July 2008 are required to contribute 10.355% of their salaries to the System; university members are required to contribute 8.715% of their salaries. KRS 161.565 allows each university to reduce the contribution of its members by 2.215%; therefore, university members contribute 6.50% of their salary to KTRS. Members who joined the plan on and after July 2008 are required to contribute an additional .50% to the medical insurance plan.

For members employed by local school districts, the state contributes 13.105% of salary for those who joined before July 1, 2008 and 14.105% for those after, except for those members who are employed in federally funded positions, in which case the federal program pays the required percentages. Other participating employers are required to contribute the percentage contributed by members plus an additional 3.25% of members' gross salaries.

The member and employer contributions consist of retirement annuity contributions and post-employment contributions to the medical insurance plan. The post-employment contribution from employee (1.25% for members prior to July 1, 2008 or 1.75% for members who joined after July 1, 2008) and the employer contribution rate of .75% of members' gross salaries funded KTRS's retiree medical insurance plan. Also, after July 1, 2010 employers (other than the state) contribute .50% of members' salaries and the state contributes the net cost of health insurance premiums for new retirees after June 30, 2010 in the non-Medicare eligible group. If a member leaves covered employment before accumulating five (5) years of credited service, accumulated member contributions to the retirement annuity plan plus interest are refunded upon the member's request.

The KTRS defined benefit retirement annuity plan received $465,384,165 in fiscal year 2011 in funding from the state in the form of bond proceeds which fully satisfied amortized payments that the state was making for amounts that were redirected to the medical insurance plan from fiscal year 2005 through fiscal year 2010.

B. RESERVES

Member Reserve

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from Unallocated Reserves. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Benefit Reserves, the fund from which retirement benefits are paid.

Employer Reserve

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky.

Benefit Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay

Note 3: Contributions and Reserves continued . . .

the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

Unallocated Reserve

This fund was established by KRS 161.420(6) as the Guarantee Fund, to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of the System, and deficiencies not covered by the other funds.

Administrative Expense Reserve

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from Unallocated Reserves is used to pay the administrative expenses of the System. Starting July 1, 2010 administrative expenses are allocated among the funds based on benefits paid.

Note 4: Funded Status and Funding Progress

A. DESCRIPTION OF FUNDING PROGRESS

The funded status of the Defined Benefit Retirement Annuity Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accured Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL As a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2012	$ 14,691,371	$ 26,973,854	$ 12,282,483	54.5%	$ 3,479,567	353.0%

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear funding trend information as obtained from the System's independent actuary's annual valuation report.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the System is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the retirement system. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the retirement system.

Note 4: Funded Status and Funding Progress continued . . .

The accompanying schedule of employer contributions, presented as required supplementary information following the notes to the financial statements, presents trend information about the amounts contributed to the plan by employers in comparison to the Annual Required Contribution (ARC). The ARC is actuarially determined in accordance with the parameters of GASB Statement 50. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

B. METHODOLOGIES

The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the entry age actuarial cost method. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period using an open amortization approach. The five (5) year smoothed market approach is used for asset valuation.

Actuarial Value Assets

(1)	Actuarial Value of Assets on June 30, 2011		$ 14,908,138,356
(2)	Market Value End of Year June 30, 2012		14,797,120,889
(3)	Market Value Beginning of Year June 30, 2011		15,130,606,279
(4)	Cash Flow		
	a.	Contributions	867,069,476
	b.	Benefit Payments	(1,502,488,237)
	c.	Administrative Expenses	(7,762,880)
	d.	Net	(643,181,641)
(5)	Investment Income		
	a.	Market total: (2) - (3) -(4)d	309,696,251
	b.	Assumed Rate	7.5%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d * (5)b * 0.5]	1,110,676,159
	d.	Amount for Phased-In Recognition: (5)a - (5)c	(800,979,908)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	(160,195,982)
	b.	First Prior Year	363,670,625
	c.	Second Prior Year	133,378,916
	d.	Third Prior Year	(611,235,941)
	e.	Fourth Prior Year	(409,879,449)
	f.	Total Recognized Investment Gain	(684,261,831)
(7)	Actuarial Value End of Year (1) + (4)d + (5)c +(6)f		14,691,371,044
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ 105,749,845
(9)	Rate of Return on Actuarial Value		2.92%

Note 4: Funded Status and Funding Progress continued . . .

C. ASSUMPTIONS

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2012, the most recent updated actuarial information include:

*	Assumed inflation rate	3.5%
*	Assumed investment rate	7.5%
*	Assumed projected salary increases	4.0% - 8.20%
*	Assumed annual cost of living adjustments	1.5%

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of KTRS' financial statements assess the risks KTRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430.

KTRS administers a retirement annuity trust fund, and a health insurance trust fund in accordance with state and federal law. KTRS provides service and disability retirement benefits, death and survivor benefits, health insurance benefits, and life insurance benefits for Kentucky public education employees and their beneficiaries. The trust funds managed by KTRS shall be referred to collectively as the "retirement system" unless the context requires a specific reference to a particular fund.

The asset allocation parameters for the retirement annuity trust fund are set forth in Title 102, Chapter 1:175, Section 2 of the Kentucky Administrative Regulations as follows:

- There shall be no limit on the amount of investments owned by the retirement annuity trust fund if the investments are guaranteed by the United States government.
- Not more than thirty-five percent (35%) of the assets of the retirement annuity trust fund at market value shall be invested in corporate debt obligations.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at market value shall be invested in foreign debt.
- Not more than sixty-five percent (65%) of the assets of the retirement annuity trust fund at market value shall be invested in common stocks or preferred stocks. Not more than twenty-five percent (25%) of the assets of the retirement annuity trust fund at market value shall be invested in a stock portfolio designed to replicate a general stock index. Not more than thirty percent (30%) of the assets of the retirement annuity trust fund at market value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at market value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.

- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at market value shall be invested in alternative investments. This category may include private equity, venture capital, timberland, and infrastructure investments.

- Not more than fifteen percent (15%) of the assets of the retirement annuity trust fund at market value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

The asset allocation parameters for the health insurance trust fund are set forth in Title 102, Chapter 1:178, Section 2 of the Kentucky Administrative Regulations as follows:

- In order to preserve the assets of the health insurance trust fund and produce the required rate of return while minimizing risk, assets shall be prudently diversified among various classes of investments.

- In determining asset allocation policy, the investment committee and the board shall be mindful of the health insurance trust fund's liquidity and its capability of meeting both short and long-term obligations.

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the retirement system's deposits may not be returned to the system. The retirement system's total cash balance held at J.P. Morgan Chase Bank in noninterest bearing accounts on June 30, 2012 was $38,615,798. In addition to these funds, an amount of $4,555,141 represents funds transferred to and controlled by the Commonwealth of Kentucky.

On November 9, 2010, the FDIC issued a Final Rule implementing Section 343 of the Dodd-Frank Wall Street Reform and Consumer Protection Act that provides for unlimited insurance coverage of noninterest-bearing transaction accounts. Beginning December 31, 2010, through December 31, 2012, all noninterest-bearing transaction accounts are fully insured, regardless of the balance of the account, at all FDIC-insured institutions.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,
b. collateralized with securities held by the pledging financial institution, or
c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2012, the retirement system's cash balance in the amount of $38,615,798 was not exposed to custodial credit risk since this amount was fully insured by the FDIC as outlined above.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

C. INVESTMENTS

All of the retirement system's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, and alternative investments, including additional categories as permitted by regulation. These assets are reported at fair market value.

Investments are governed by the Board of Trustees' policies while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

The following chart represents the fair market values of the investments of the Kentucky Teachers' Retirement System for June 30, 2012.

Schedule of Investments

	Market Value June 30, 2012	Market Value June 30, 2011
Cash Equivalents		
Repurchase Agreements	$ 0	$ 58,200,000
Short-Term Cash Investments	671,112,791	674,203,417
Total Short-Term Investments	**671,112,791**	**732,403,417**
Bonds and Mortgages		
U. S. Government	503,083,086	614,166,764
Agency Bonds	244,307,582	354,226,324
Mortgage Backed Securities	199,146,287	243,091,496
Asset Backed Securities	60,608,480	52,940,222
Commercial Mortgage Backed Securities	295,710,595	346,576,905
Collateralized Mortgage Obligations	43,276,306	90,802,918
Municipal Bonds	511,058,651	509,893,503
Corporate Bonds	1,851,470,193	1,807,576,426
Total Fixed Income	**3,708,661,180**	**4,019,274,558**
Equities		
Global	140,740,862	150,698,032
International Equity	2,307,653,944	2,417,879,386
U.S. Preferred Equity	1,281,501	0
U. S. Equity	6,951,648,515	7,170,669,948
Total Equities	**9,401,324,822**	**9,739,247,366**
Real Estate		
Real Estate Equity	586,800,766	480,447,237
Total Real Estate	**586,800,766**	**480,447,237**
Alternative Investments		
Additional Categories	313,203,119	207,077,927
Private Equity	266,581,754	189,131,442
Timberland	185,432,686	180,318,434
Total Alternative & Additional Investments	**765,217,559**	**576,527,803**
Total Investments	**$ 15,133,117,118**	**$ 15,547,900,381**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the pension trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system,and are held by either:

a. the counterparty or
b. the counterparty's trust department or agent, but not in the System's name.

The cash reserve of the retirement system is primarily maintained in high quality short term investments through the Dreyfus Institutional Cash Advantage Fund. This Fund invests in a diversified portfolio of high quality, short-term debt securities and the Fund is rated AAA by S&P, Moody's, and Fitch, Inc. The Fund's portfolio is structured within the confines of Rule 2a-7 under the Investment Company Act of 1940, as amended. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, bankers' acceptances, repurchase agreements, time deposits, etc. are all permissible investments within this Fund.

Whenever repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers, the terms are dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS' nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a market value of at least 102% of the value of the repurchase agreements.

As of June 30, 2012, cash collateral reinvestment securities acquired through securities lending for the retirement annuity trust fund by KTRS's custodian, who is also the lending agent/counterparty, amounted to $396,546,893 related to $391,348,088 securities lent consistent with the lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the retirement system's investments. In general, the longer the period until an investment matures, the greater the risk of a negative impact on fair value resulting from changes in interest rates.

As of June 30, 2012 KTRS had the following investments and weighted average maturities:

Investment Type	Fair Value	Average Maturity (years)
U.S. Government	$ 503,083,086	10.42
Agency	244,307,582	8.26
MBS	199,146,287	12.62
CMO	43,276,306	18.85
ABS	60,608,480	13.69
CMBS	295,710,595	28.07
Muni	511,058,651	14.58
Corporate	1,851,470,193	8.49
Totals	**$ 3,708,661,180**	**11.57**

*This schedule includes $272,005,420 of fixed income securities classified in additional categories.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

In addition to the above securities, short-term cash investments in the Dreyfus Institutional Cash Advantage Fund and STIF held at the Bank of New York Mellon had a total fair value of $671,112,791 and had a weighted average maturity of thirty-seven (37) days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology to quantify the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of changes in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the retirement system manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by the retirement system were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The retirement system held $199.1 million in mortgage-backed securities as of June 30, 2012.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The System held $43.3 million in collateralized mortgage obligations as of June 30, 2012.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other credit providers. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The asset-backed securities in the amount of $60.6 million, held by the retirement system as of June 30, 2012, are moderately sensitive to changes in interest rates.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The retirement system's commercial mortgage-backed securities investments consist of highly rated relatively senior tranches. The average maturity of the retirement system's commercial mortgage-backed securities holdings in the schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The retirement system held $295.7 million in commercial mortgage-backed securities investments as of June 30, 2012.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedule lists KTRS's fixed income investments (net of cash equivalents) according to credit ratings as of June 30, 2012:

Rating		Fair Value	%
U.S. Government	$	503,083,086	13.6
AAA		492,680,759	13.3
AA		995,406,618	26.8
A		758,182,293	20.4
BBB		636,145,588	17.2
BB		137,417,611	3.7
B		181,166,681	4.9
CCC		4,578,544	0.1
Total	**$**	**3,708,661,180**	**100.0%**

*This schedule includes $272,005,420 of fixed income securities classified in additional categories.

Total market value of the fixed income portfolio was $3,708,661,180 on June 30, 2012. The rating system used in the chart is the nationally recognized Standard & Poor's rating system.

In addition to the above categories, the retirement system held $671,112,791 in short term investments through the Dreyfus Institutional Cash Advantage Fund. The credit risk associated with this Fund is minimal as the securities held are required to maintain the highest possible short-term credit ratings by Moody's and Standard & Poor's. In addition, investments in US Government and Agency securities are also highly rated securities since they are backed by the US Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

The retirement annuity trust fund's policy on credit rating is set forth in 102 KAR 1:175 and reads as follows:

"A fixed income investment shall be rated at the time of purchase as investment grade by at least one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. The fixed income investment portfolio as a whole shall maintain an average rating of investment grade by at least one (1) of the major rating services."

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the retirement annuity trust fund is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five percent (5%) of the assets of the system.

"The System's position in a single stock shall not exceed two and one-half percent (2.5%) of the System's assets. The system's position in a single stock shall not exceed five percent (5%) of the outstanding stock for that company unless the investment is part of a venture capital program."

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

KTRS has not invested greater than five percent (5%) of the retirement annuity trust fund's assets at market value in any single issuer and is in compliance with investment policy.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. As of June 30, 2012, the retirement system's exposure to foreign currency risk consisted of $2,564,615,958 of foreign investments.

The following amounts represent the market values of investments that are subject to foreign currency as a result of cash contributions to each portfolio manager.

Investment	Amount
Commingled Funds	
UBS International Collective	$ 655,036,895
Baillie Gifford	535,638,515
Baring Asset Management	388,140,136
Black Rock Fund B	73,055,358
Alternative Funds	
KKR & Co European Fund III	37,466,724
Oaktree European Principal Fund III	7,561,954
Fixed Income Securities (Misc Funds)	177,129,968
Equity Securities (ADR's)	690,586,408
Total	**$ 2,564,615,958**

The following table reflects the various foreign currencies associated with the retirement system's investment in the funds outlined above:

Currency	Market Value	Currency	Market Value
Austrailian Dollar	$ 135,452,957	Mexican Peso	50,854,224
Bermudian Dollar	12,972,885	Moroccan Dirham	16,674
Brazilian Real	66,644,745	New Zealand Dollar	94,344
British Pound Sterling	437,457,420	Norwegian Krone	20,365,283
Canadian Dollar	198,176,265	Panamanian Balboa	7,423,200
Cayman Islands Dollar	8,343,708	Papua New Guinea Kina	3,176,493
Chilean Peso	3,400,242	Peruvian Nuevo Sol	4,159,516
Chinese Yuan	142,014,107	Philippine Peso	179,443
Colombian Peso	8,677,301	Polish Z?oty	8,964,135
Czech Crown	55,214	Russian Ruble	61,018,872
Danish Krone	33,887,931	Singapore Dollar	43,547,494
Egyptian Pound	65,781	South African Rand	14,260,974
Euro	457,450,912	South Korean Won	76,672,264
Hong Kong Dollar	70,763,526	Swedish Krona	92,456,804
Hungarian Forint	48,236	Swiss Franc	179,152,580
Indian Rupee	7,018,758	Taiwan Dollar	34,120,691
Indonesian Rupiah	12,014,734	Thai Baht	9,997,268
Israeli New Shekel	46,178,752	Turkish Lira	7,672,924
Japanese Yen	290,285,010	Various	3,273,593
Jersey Pound	5,266,700		
Malaysian Ringgit	6,238,102	**Total**	**$ 2,564,615,958**
Malian Franc	4,795,897		

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The majority of foreign investments are held in commingled funds managed by UBS Global Asset Management, Baillie Gifford, Baring Asset Management, and Black Rock. In addition to the commingled funds investing in foreign securities, the retirement annuity trust fund held $690,586,408 associated with foreign interests in American Depositary Receipt investments. These American Depositary Receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. American Depositary Receipts are denominated in U.S. currency. Other foreign securities and investments consisted of debt securities and alternative investment opportunities.

The retirement annuity trust fund's policy regarding foreign equities is that not more than thirty percent (30%) of the assets of the retirement annuity trust fund at market value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the retirement system. The retirement system operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international stocks are the types of securities that are lent. The retirement system's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the retirement system.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. During the fiscal year ended June 30, 2012, only the retirement annuity trust fund had securities lending transactions. The following section details the net income earned in the retirement annuity trust fund from securities lending for the fiscal year ended June 30, 2012:

Item	Earnings
Gross Earnings (Interest and fees)	$ 314,708
Gross Borrower Rebates	2,790,509
Bank Fees	(931,520)
Net Earnings	**$ 2,173,697**

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The retirement system cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the retirement system from any financial loss associated with a borrower's default and collateral inadequacy.

As of June 30, 2012 the loan average days to maturity in the retirement annuity trust fund was three (3) days and the weighted average investment maturity of cash collateral investments was three (3) days. At fiscal year end, the retirement annuity trust fund had no credit risk exposure to borrowers, since the amounts the retirement annuity trust fund owes the borrowers exceeds the amounts the borrowers owe the retirement annuity trust fund and there were no losses resulting during the period.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Security lending programs can entail interest rate risk and credit risk. The retirement system minimizes interest rate risk by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2012:

Type of Security Lent	Fair Value	Cash & Non-Cash Collateral Value Received*
Fixed Income	$ 184,747,586	$ 191,392,812
Equities	206,600,502	205,154,081
Total	**$ 391,348,088**	**$ 396,546,893**

**Represents value of cash collateral only. Loan or margin collateral requirements met via the use of non-cash collateral (e.g. Government securities or Letters of Credit) are excluded from these values.*

Note 6: Retirement Plan for Employees of the System

Full-time employees of Kentucky Teachers' Retirement System (KTRS) participate in either KTRS or Kentucky Employees Retirement System. Both plans are multiple-employer cost sharing defined benefit retirement annuity plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for KTRS employee members for the fiscal years 2012, 2011 and 2010 were $533,378, $469,896, and $476,918 respectively. KTRS contributed 100% of the required contribution each year.

All other KTRS employees are covered under the Kentucky Employee Retirement System (KERS) in the Non-Hazardous Employees Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. The System's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS who joined prior to July 1, 2008, are required to contribute 5% of their annual creditable compensation for the fiscal years 2012, 2011 and 2010 and members who joined on or after July 1, 2008 contribute an additional 1%. As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2012, 2011 and 2010 were 23.61%, 16.98%, and 11.61% and the System's annual required

Note 6: Retirement Plan for Employees of the System continued . . .

contributions to KERS were $350,869, $241,899, and $174,203 respectively. KTRS contributed 100% of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: Other Funds

A. 403(B) TAX-SHELTERED ANNUITY PLAN

Plan Description

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by the System's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2012, the fourteen members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

Summary of Significant Policies

Basis of Accounting - The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan; therefore, there are no receivables to be recognized.

Method Used to Value Investments - The short-term investments are reported at cost, which approximates fair value.

B. SUPPLEMENTAL BENEFIT FUND

The Supplemental Retirement Benefit Fund is a qualified governmental excess benefit arrangement as described in Section 415 of the Internal Revenue Code. In accordance with KRS 161.611 and KRS 161.420(8), KTRS is authorized to provide a supplemental retirement benefit fund for the sole purpose of enabling the employer to apply the same formula for determining benefits payable to all members of the retirement system employed by the employer, whose benefits under the retirement system are limited by Section 415 of the Internal Revenue Code of 1986, as amended from time to time. Funding of benefits payable under this fund are provided by the state, as employer, and are segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system.

C. JUNITA LOSEY SCHOLARSHIP BEQUEST

Junita Losey, a retired teacher, designated KTRS as a residuary beneficiary of her estate and expressed a desire that KTRS establish a scholarship program for Kentucky students studying to be teachers. Ms. Losey died in 1997 and thereafter her estate provided a scholarship bequest to KTRS. The scholarship bequest has at all times been segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system. The Scholarship Committee of the System's Board of Trustees meets each December to consider scholarship standards and administration of the scholarship bequest.

Note 8: Medical Insurance Plan & Post-Employment Benefits

A. PLAN DESCRIPTION

In addition to the retirement annuity plan described in Note 1, Kentucky Revised Statute 161.675 requires KTRS to provide access to post-employment healthcare benefits for eligible members and dependents. The KTRS medical plan is funded by employer and member contributions. Changes made to the medical plan may be made by the KTRS Board of Trustees, the Kentucky Department of Employee Insurance and the General Assembly.

The KTRS medical plan is funded by employee contributions to an account established pursuant to 26 U.S.C. sec. 401(h). Additional funding is derived from the Kentucky Teachers' Retirement System insurance trust fund that went into effect on July 1, 2010. The insurance trust fund provides a trust separate from the account established pursuant to 26 U.S.C. sec. 401(h). The insurance trust fund includes employer and retired member contributions required under KRS 161.550 and KRS 161.675(4)(b).

To be eligible for medical benefits, the member must have retired either for service or disability. The KTRS medical plan offers coverage to members under the age of 65 through the Kentucky Employees Health Plan administered by the Kentucky Department of Employee Insurance. KTRS retired members are given a supplement to be used for payment of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the KTRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The Commonwealth of Kentucky bears risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the KTRS Medicare Eligible Health Plan.

At June 30, 2012, KTRS insurance covered 36,000 retirees and 7,008 dependents. There are 208 participating employers and 75,951 active members contributing to the medical plan.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The KTRS Medical Insurance Plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due.

Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

C. CONTRIBUTIONS

The post-employment healthcare benefit provided by KTRS is financed on a pre-funded basis beginning July 1, 2010 with the implementation of the Shared Responsibility Plan. In order to fund healthcare benefits, active member contributions are matched by the state at .75% of members' gross salaries. Those members who joined the System before July 1, 2008 contributed 0.75% of gross payroll to the KTRS medical plan and beginning July 1, 2010 the contribution increases incrementally to 3.75% by July 1, 2015 under the Shared Responsibility Plan. Member contributions to the KTRS medical plan are 1.75% of gross payroll for those who

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

joined the System after July 1, 2008 and beginning July 1, 2010 the contribution increases incrementally to 3.75% by July 1, 2015 under the Shared Responsibility Plan. Also, the premiums collected from retirees and investment income contributes to funding the plan. The KTRS medical plan received $268,400,000 in fiscal year 2011 in funding from the state, which was contributed to the insurance trust fund. This transitional funding and increased contributions are for the 2011 and 2012 fiscal years.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Medical Insurance Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accured Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL As a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2012	$338,746	$ 3,594,540	$ 3,255,794	9.4%	$3,479,567	93.6%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedule of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the ARC, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methodologies and assumptions employed as of the June 30, 2012 valuation date include the following:

Actuarial cost method	Entry Age
Actuarial value of assets	Market value of assets
Assumed inflation rate	3.5%
Investment rate of return	8.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Medical Trend Assumption (Pre-Medicare)	9.50% - 5.00%
Medical Trend Assumption (Post-Medicare)	7.50% - 5.00%
Year of Ultimate Pre-Medicare trend rate	2019

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

E. INCURRED BUT NOT REPORTED CLAIMS LIABILITIES

KTRS recognizes estimates of liabilities for self-insured unpaid claims that have incurred (both reported and unreported) using the development method. This method uses past observed patterns of time between the date the claim is incurred and the date the claim is paid to estimate incurred claims from available paid claim information.

The following schedule shows the change in the claims and liability and the claims activity for the years ended June 30, 2012 and 2011.

	2012	2011
Beginning Unpaid Claims Liability	$ 403,000	$ 3,827,483
Current Year Claims and Changes in Estimates	189,926,846	177,509,547
Claims Payments	(190,262,846)	(180,934,030)
Ending Unpaid Claims Liability	**$ 67,000**	**$ 403,000**

Note 9: Life Insurance Plan

A. PLAN DESCRIPTON

KTRS administers the Life Insurance Plan as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 208 participating employers. The benefit is $5,000 for members who are retired for service or disability, and $2,000 for active contributing members.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Life Insurance Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized in the fiscal year due.

Method Used to Value Investments

Life Insurance Plan investments are reported at fair value. The short-term securities are carried at cost, which approximates fair value. Fixed income is generally valued based on published market prices and quotations from national security exchanges and securities pricing services.

C. CONTRIBUTIONS

To finance the life insurance benefit a portion of the employer contribution rate is directed to the plan as recommended by the KTRS's actuary. For both fiscal years 2012 and 2011, this rate has been .05% of active members' payroll.

Note 9: Life Insurance Plan continued . . .

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Life Insurance Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL)	Unfunded Actuarial Accured Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL As a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2012	$ 92,241	$ 91,398	$ (843)	100.9%	$ 3,479,567	(0.02)%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The required supplementary schedules following the notes to the financial section contain more actuarial information. Significant actuarial methodologies and assumptions employed as of the June 30, 2012 valuation date include the following:

Actuarial cost method	Entry Age
Actuarial value of assets	Market value of assets
Assumed inflation rate	3.5%
Investment rate of return	7.5%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years

Required Supplementary Information

Defined Benefit Plan – Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL)	Unfunded Actuarial Accured Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2007	$ 15,285.0	$ 21,255.0	$ 5,970.0	71.9%	$ 2,975.3	200.7%
6/30/2008	15,321.3	22,460.3	7,139.0	68.2	3,190.3	223.8
6/30/2009	14,885.9	23,400.3	8,514.4	63.6	3,253.1	261.7
6/30/2010	14,851.3	24,344.3	9,493.0	61.0	3,321.6	285.8
6/30/2011	14,908.1	25,968.7	11,060.6	57.4	3,451.8	320.4
6/30/2012	14,691.4	26,973.9	12,282.5	54.5	3,479.6	353.0

The amounts reported in this schedule of funding progress do not include assets or liabilities for postemployment benefits, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Defined Benefit Plan – Schedule of Employer Contributions

Fiscal Year Ended	Annual Required Contributions	Actual Employer Contributions	Percentage Contributed
	(A)	(B)	(B) / (A)
6/30/2007	$ 494,565,369	$ 434,890,469	88%
6/30/2008	563,789,483	466,247,783	83
6/30/2009	600,282,735	442,549,935	74
6/30/2010	633,938,088	479,805,088	76
6/30/2011	678,741,428	1,037,935,993*	153
6/30/2012	757,822,190	557,339,552	74

** Includes Pension Obligation Bond proceeds of $465,384,165*

Medical Insurance Fund – Schedule of Funding Progress

(Dollar amount in millions)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL)	Unfunded Actuarial Accured Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2007	$ 140.8	$ 5,928.8	$ 5,788.0	2.4%	$ 2,975.3	194.5%
6/30/2008	185.9	6,434.5	6,248.6	2.9	3,190.3	195.9
6/30/2009	229.1	6,454.7	6,225.6	3.5	3,253.1	191.4
6/30/2010	241.2	3,206.8	2,965.6	7.5	3,321.6	89.3
6/30/2011	294.8	3,423.1	3,128.3	8.6	3,451.8	90.6
6/30/2012	338.7	3,594.5	3,255.8	9.4	3,479.6	93.6

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Medical Insurance Plan – Schedule of Employer Contributions

Fiscal Year Ended	Annual Required Contribution	Actual Employer Contribution	Retiree Drug Subsidy Contribution	Total Contribution	Percentage of ARC Contribution
	(A)	(B)	(C)	(B) + (C)	[(B) + (C)]/(A)
6/30/2007	$ 231,473,321	$ 113,258,761	$ 10,312,361	$ 123,571,122	53.4%
6/30/2008	395,282,164	148,954,644	11,911,565	160,866,209	40.7
6/30/2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1
6/30/2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9
6/30/2011	477,723,070	188,453,929	280,585	188,734,514	39.5
6/30/2012	470,217,067	177,450,206	297,639	177,747,845	37.8

Life Insurance Fund – Schedule of Funding Progress

(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL As a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2007	$ 71,426	$ 82,722	$ 11,296	86.3%	$ 2,975,289	0.38%
6/30/2008	77,658	84,265	6,607	92.2	3,190,332	0.21
6/30/2009	84,703	90,334	5,631	93.8	3,253,077	0.17
6/30/2010	87,905	92,091	4,186	95.5	3,321,614	0.13
6/30/2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)
6/30/2012	92,241	91,398	(843)	100.9	3,479,567	(0.02)

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Life Insurance Plan – Schedule of Employer Contributions

Fiscal Year Ended	Annual Required Contribution (ARC)	Actual Employer Contribution	Percentage of ARC Contributed
	(A)	(B)	(B) / (A)
6/30/2007	$ 1,785,173	$ 5,022,137	281.3%
6/30/2008	1,914,199	5,411,249	282.7
6/30/2009	1,498,076	5,455,473	364.2
6/30/2010	1,992,969	1,966,826	98.7
6/30/2011	1,725,878	1,668,822	96.7
6/30/2012	1,732,831	1,684,711	97.2

Required Supporting Schedules

Supporting Schedule 1
Schedule of Administrative Expenses
Year Ended June 30, 2012

Expense	Amount
Salaries	$ 6,396,770
Other Personnel Costs	692,250
Professional Services and Contracts	327,192
Utilities	90,501
Rentals	20,005
Maintenance	123,873
Postage & Related Services	342,433
Printing	110,040
Insurance	135,510
Miscellaneous Services	108,308
Telecommunications	36,565
Computer Services	140,669
Supplies	62,053
Depreciation	101,396
Travel	36,172
Dues & Subscriptions	44,945
Miscellaneous Commodities	14,357
Furniture, Fixtures, & Equipment not Capitalized	158,612
Compensated Absences	46,224
Total Administrative Expenses	**$ 8,987,875**

Supporting Schedule 2
Schedule of Professional Fees for Year Ended June 30, 2012

Professional	Nature of Service	Amount
Cavanaugh Macdonald Consulting	Actuarial Services	$ 140,250
Charles T. Mitchell Company	Auditing Services	30,825
Farmers Bank	Bank Services	15,149
International Claim Specialist	Investigative Services	1,600
Groom Law Group	Attorney Services	30,000
Ice Miller	Attorney Services	86,265
Reinhart, Boerner VanDeuren	Attorney Services	661
Stoll Keenon Ogden	Attorney Services	771
Wyatt Tarrant and Combs	Attorney Services	10,869
Digital Business Solutions	Website Design Consultant	10,802
Total Professional Services and Contracts		**$ 327,192**

Required Supporting Schedules continued . . .

Supporting Schedule 3
Schedule of Contracted Investment Management Expenses and Miscellaneous Expenses
Year Ended June 30, 2012

	Pension	Medical	Total
Equity Managers			
Baillie Gifford	$ 2,058,808	$	$
Baring Asset Management, Inc.	1,952,455		
Black Rock		89,693	
GE Asset Management	800,000		
Todd-Veredus Asset Management LLC	1,204,513		
UBS Global Asset Management	2,736,797		
Wellington Management Company	2,563,239		
Total Equity Managers	11,315,812	89,693	11,405,505
Fixed Income Managers			
Fort Washington Investment Advisors	716,490	106,932	
Galliard Capital Management	322,081		
Total Fixed Income Managers	1,038,571	106,932	1,145,503
Real Estate	2,222,883		2,222,883
Alternative Investments	11,977,439	75,000	12,052,439
Custodian			
The Bank of New York Mellon	304,842	4,998	309,840
Consultant			
Hewitt Ennis Knupp, Inc.	358,720		358,720
Legal & Research			
Schottenstein, Zox & Dunn	8,707		
Ice Miller	33,210	5,785	
Bevis Longstreth	50,417		
George Philip	30,000		
Miscellaneous	1,982		
Total Legal & Research	124,316	5,785	130,101
Other			
Subscription/Services	745,977		745,977
Total Contracted Investment Management Expenses	**$ 28,088,560**	**$ 282,408**	**$ 28,370,968**

Required Supporting Schedules continued . . .

Supporting Schedule 4
Combining Statement of Plan Net Assets - Other Funds
As of June 30, 2012

	403(b) Tax Sheltered	Supplemental Benefit Fund	Losey Scholarship	Total
ASSETS				
Cash	$	$ 9,828	$	$ 9,828
Receivables				
Investment Income			1,183	1,183
Investments at Fair Value				
Short-Term Investments	405,136		267,879	673,015
Bonds and Mortgages			270,532	270,532
Total Investments	405,136		538,411	943,547
Total Assets	405,136	9,828	539,594	954,558
LIABILITIES				
Due to Other Trust Funds	229	513	183	925
Net Assets Held In Trust For Pension And Other Benefits	$ 404,907	$ 9,315	$ 539,411	$ 953,633

Required Supporting Schedules continued . . .

Supporting Schedule 5
Combining Statement of Changes in Plan Net Assets - Other Funds
For the Year Ended June 30, 2012

	403(b) Tax Sheltered	Supplemental Benefit Fund	Losey Scholarship	Total
ADDITIONS	$	$	$	$
Contributions				
Employer				
Investment Income				
Net Appreciation/(Depreciation) in Fair Value of Investments			66,220	66,220
Interest	713		9,310	10,023
Net Investment Income	713		75,530	76,243
Total Additions	713		75,530	76,243
DEDUCTIONS				
Benefits	18,952	55,280	18,000	92,232
Administrative Expense	99	287	94	480
Net Increase (Decrease)	(18,338)	(55,567)	57,436	(16,469)
Net Assets Held In Trust For Pension And Other Benefits				
Beginning of Year	423,245	64,882	481,975	970,102
End of Year	**$ 404,907**	**$ 9,315**	**$ 539,411**	**$ 953,633**

Mountjoy Chilton Medley

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

To the Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, KY

We have audited the statement of plan net assets of the Teachers' Retirement System of the State of Kentucky, as of and for the year ended June 30, 2012, and the related statement of changes in plan net assets for the year then ended and have issued our report thereon dated December 17, 2012. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

Management of the Teachers' Retirement System of the State of Kentucky, is responsible for establishing and maintaining effective internal control over financial reporting. In planning and performing our audit, we considered the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Teachers' Retirement System of the State of Kentucky's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information and use of management, the Board of Trustees, the Commonwealth of Kentucky, and others within the entity and is not intended to be and should not be used by anyone other than these specified parties.

/s/ Mountjoy Chilton Medley LLP

Lexington, KY
December 17, 2012

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Louisville, KY 40202

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Suite 200
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Investment Section

for Fiscal Year ending June 30, 2012

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Kentucky Teachers' Retirement System.

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

INVESTMENT COMMITTEE

Mr. Robert M. Conley
Chairperson

Mr. Ronald L. Sanders
Vice-Chairperson

Ms. Barbara G. Sterrett
Member

Dr. Tom Shelton
Member

Ms. Laura A. Zimmerman
Member

Mr. Bevis Longstreth
Investment Advisor to KTRS Investment Committee

Mr. George Philip
Investment Advisor to KTRS Investment Committee

EXECUTIVE INVESTMENT STAFF

Mr. Gary L. Harbin, CPA
Executive Secretary

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Hewitt ennisknupp
An Aon Company

December 3, 2012

To the members of the Board of Trustees and participants of the Teachers' Retirement System of Kentucky:

Investment returns were lackluster in the twelve-month period ended June 30, 2012, reflecting a subpar U.S. economic recovery, the ongoing Eurozone debt crisis, and slowing economic growth in emerging markets. The retirement annuity trust fund's total return for the fiscal year was 2.4%. While less than a banner year in an absolute sense, this return ranked in the top 26% of returns of our universe of pension funds with over $1 billion in assets.

Over the past fiscal year, U.S. inflation-adjusted gross domestic product grew by 2.1% while the unemployment rate fell from 9.1% to a still-high 8.2%. Risk aversion caused by a growth slowdown in the U.S. and an intensification of the Eurozone crisis led risky assets to plunge in the late summer and early fall of 2011 while safe haven assets such as U.S. Treasury bonds rallied. Growth picked up and fear abated, causing risky assets to generally rebound from fall, 2011, to spring, 2012. By late spring, a slowdown in growth in the U.S. and China was apparent and no resolution to the Eurozone crisis was in sight. Equities and other risky assets retreated once again.

Equities, which represented 63.1% of assets as of June 30, 2012, had a particularly difficult fiscal year. Domestic equities returned 2.8% versus 4.6% for the S&P 1500 Index. Most active equity managers underperformed in an environment characterized by enormous outperformance of defensive industries. International equities were battered, with the MSCI All Country World (ex-U.S.) Index declining by 14.2%. The retirement system's international equities were relatively resilient, declining by 12.1%. Investment grade fixed income returned 9.6% versus 8.8% for the Barclays Government/Credit Index.

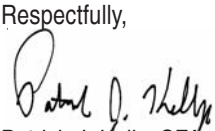
Real estate investments generally performed well, as the commercial real estate market continued to recover. The retirement system's private equity program, still in its early stages, showed promising results. Other non-traditional strategies, such as alternative credit and timberland, were mixed in a volatile year.

The retirement system's investment performance has been strong in recent years relative to its peers as a multi-year program of improving the diversification of its asset allocation has been implemented. In a rapidly evolving global economic and financial climate, the investment program has responded well to both emerging opportunities and risks.

The philosophy which guides the investment program is grounded in fundamental economic value and, above all, safely funding its long-term obligations to its members. A robust process and uncompromising commitment to best practices has led to successful implementation and strong risk control. We believe continued commitment to this philosophy and process will help ensure long-term success in meeting the retirement system's goals.

We are grateful to be a part of this process. As always, we would like to thank the Board of Trustees, Investment Committee, and investment staff for their confidence.

Respectfully,



Patrick J. Kelly, CFA, CAIA
Partner

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Hewitt Investment Group LLC and Ennis, Knupp & Associates, Inc.
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RETIREMENT ANNUITY TRUST FUND

INVESTMENT POLICY SUMMARY

The KTRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principles that guide investment–related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the System. This broad summary is a reference point for management of retirement assets and outlines the investment philosophy and practice of KTRS.

INVESTMENT OBJECTIVES

KTRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them. Generally, the retirement system's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, KTRS holdings can withstand some short-term volatility. The retirement annuity trust fund's long-term investment objective is to achieve an annualized rate of return of 7.5%.

RISK CONTROLS

The KTRS investment program faces various risks; however, the primary risk to KTRS is that the assets will not support liabilities over long periods of time. In order to control this risk and any other risks, the board has taken the following steps on an ongoing basis:

- Actuarial valuations are performed each year to evaluate the funding objectives of the retirement system. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the System.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the retirement system.
- The KTRS Investment Committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

ASSET ALLOCATION

Operating within relevant regulatory limitations, the retirement system's investment consultant, on an annual basis, presents to the Investment Committee for approval target percentages and ranges for the retirement system's various asset classes. Annually approved asset allocation parameters serve to balance the retirement system's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The retirement system's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the retirement system's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as liability requirements, the level of funding, and statutory investment restrictions are important considerations within the context of the asset allocation decision making process.

Consequently, asset allocations may differ markedly between various pension plans due to their unique circumstances.

The information below shows the retirement annuity trust fund's asset allocation by market value as of June 30, 2012, and June 30, 2011, as well as the target and strategic range for each asset class for fiscal year 2012.

Retirement Annuity Trust*

	June 30, 2012	%	June 30, 2011	%
Cash Equivalents**	$ 431,810,127	2.9	$ 352,707,345	2.4
Fixed Income ***4	3,391,777,780	23.0	3,856,183,434	25.6
Domestic Equities	7,044,415,411	47.5	7,356,796,262	48.4
International Equities	2,309,883,058	15.6	2,294,036,935	15.1
Real Estate	586,800,767	4.0	480,447,237	3.1
Private Equity	265,833,651	1.8	189,131,441	1.2
Timberland	185,432,686	1.2	180,318,434	1.2
Additional Categories	587,848,810	4.0	457,628,442	3.0
Totals	$ **14,803,802,290**	**100.00**	$ **15,167,249,530**	**100.0**

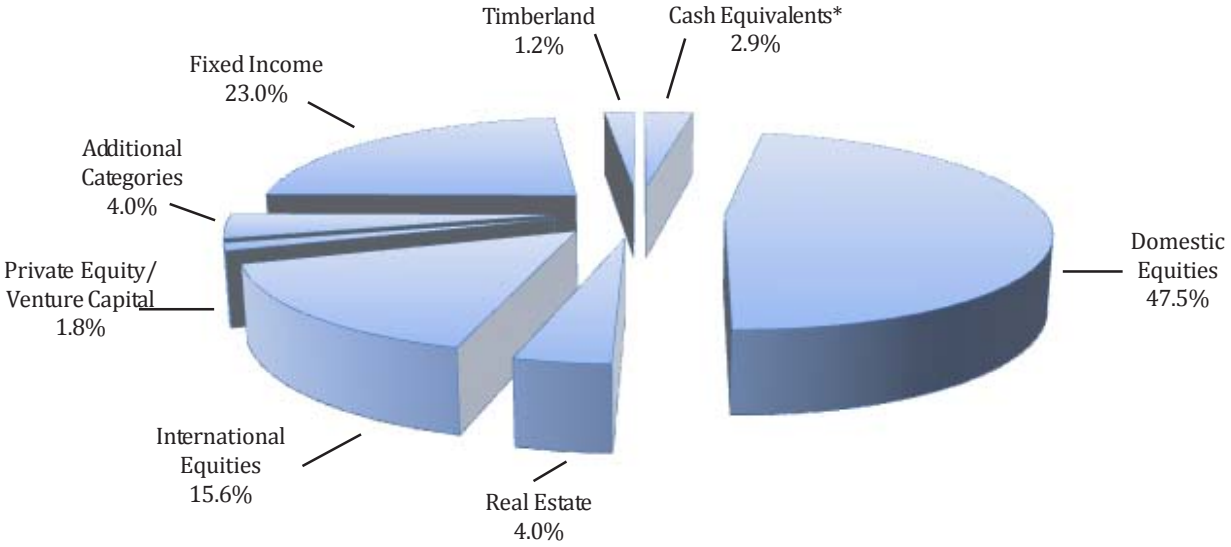
* Includes Life Insurance Trust values of $90,867,361 Tax Shelter Annuity value of $405,136, and 401(h) value of $11,606,479.

** Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

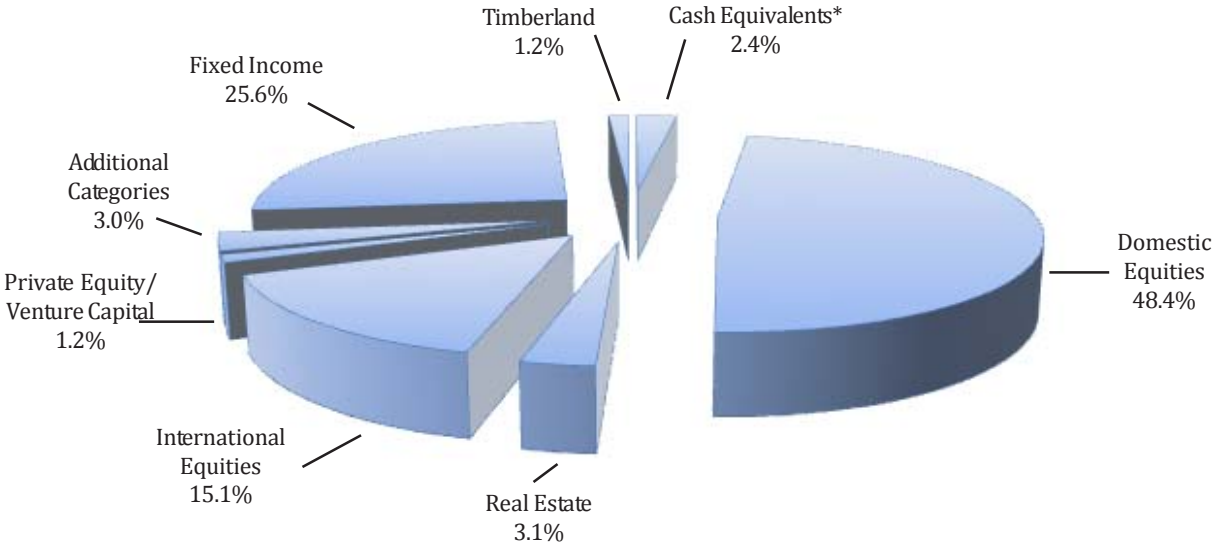
*** Excludes purchased interest of $797,403 as of June 30, 2012, and $779,260 as of June 30, 2011.

Distribution of Investments
Retirement Annuity Trust**
Market Values

June 30, 2012



June 30, 2011



* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

** Includes Life Insurance Trust values.

Strategic Weightings by Asset Class

Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2012 (Mkt)**
Cash		1 - 3%	2.0%	2.9%
Fixed Income		21 - 27	24.0	23.0
Government/Agency/Other	Unlimited			10.7
Corporate	35%			12.3
Equity	65%	58 - 65	62.0	63.1
Domestic Large Cap		35 - 45	40.0	40.3
Domestic Mid Cap		1 - 5	3.0	4.5
Domestic Small Cap		1 - 3	2.0	2.7
International* **	30%	14 - 20	17.0	15.6
Real Estate	10%	2 - 6	4.0	4.0
Alternative Investments*	10%	2 - 6	4.0	3.0
Additional Categories	15%	2 - 6	4.0	4.0
TOTAL			**100.0%**	**100.0%**

* Includes private equity, venture capital, timberland, and infrastructure investments.

** Starting with 7/2008, Cash is only the unallocated cash balance. Manager cash balances will be included with the asset type of the managers investments.

*** As of 6/30/12, 20.3% of Total International Equities was invested in Emerging Markets.

PORTFOLIO RETURNS

For the fiscal year, the retirement annuity trust fund's portfolio generated a total return of 2.4%, versus a 3.1% return for the benchmark Policy Index. Domestic equities returned 2.8% versus 4.6% for the Standard & Poor's 1500 Index, while international equities returned -12.1% versus -14.2% for the MSCI All Country World (Ex-US) Index. Fixed income investments outperformed, returning 9.6% versus 8.8% for the Barclays Government/Credit Index. Investments in real estate, private equity, high yield bonds, and alternative credit contribute a modest, but growing, portion of total return due to increasing exposure to these asset classes.

The table below details historical performance for the retirement annuity trust fund and its component asset classes for the period ended June 30, 2012. The retirement annuity trust fund's returns were generated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

	1 Yr. (2)	3 Yr. (2)	5 Yr. (2)	10 Yr. (2)	20 Yr. (2)
Total Fund					
KTRS	2.4	12.1	2.6	5.5	7.2
Policy Index (1)	3.1	12.1	-	-	-
Equities					
Domestic Equities	2.8	16.1	0.4	5.4	8.7
S & P Blended Index (3)	4.6	16.8	0.5	5.4	8.4
International Equities	-12.1	9.2	-3.5	-	-
MSCI AC World (Ex US)	-14.2	7.4	-4.2	-	-
Total Equities	-1.0	14.4	-0.4	5.1	8.5
Fixed Income					
Total Fixed Income	9.6	8.7	8.1	6.4	7.0
Barclays Govt/Credit Index	8.8	7.3	6.9	5.8	6.6
Real Estate					
Non-Core Real Estate	4.8	-	-	-	-
NCREIF Index	12.0	-	-	-	-
Core Real Estate	14.7	4.7	-	-	-
NCREIF ODCE	12.4	8.4	-	-	-
Triple Net Lease Real Estate	8.2	8.1	8.3	9.0	9.1
CPI plus 2%	3.7	4.1	4.0	4.5	4.5
Alternative Investments					
Private Equity (4)	9.7	16.8	9.3	-	-
Timberland	3.0	1.7	-	-	-
NCREIF Timberland Index	1.1	-0.7	-	-	-
Cash					
Cash (Unallocated)	0.1	0.2	1.1	2.2	3.6
90 Day Treasury Bill	0.0	0.1	1.0	1.8	3.1
Additional Categories					
High Yield Bond Fund	7.6	-	-	-	-
Public-Private Investments	1.7	-	-	-	-
Special Situations Fund	-7.8	-	-	-	-
KTRS Credit Fund	1.4	-	-	-	-
B of A Merrill Lynch High Yield Master II	6.5	-	-	-	-

(1) Prior to July 1, 2008, KTRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.

(2) Annualized

(3) Total Domestic Equity is benchmarked to a S & P Blended Index. Total domestic equity was benchmarked to the S & P 500 through the fiscal year ending 6/30/2007. As of 7/1/2007, domestic equity is benchmarked to the S & P 1500 Index since the System's domestic stock mix is most comparable to this index.

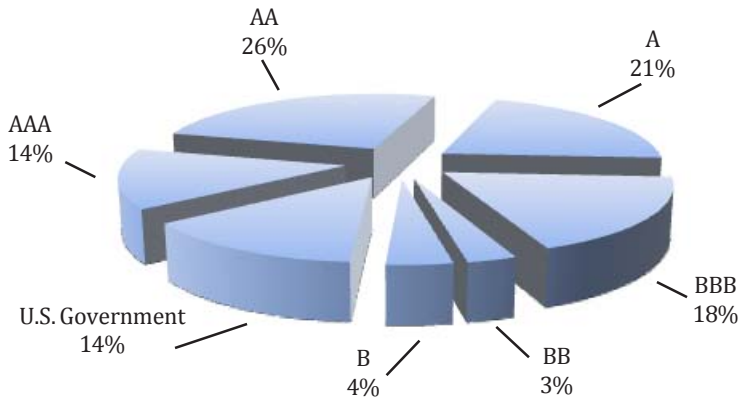
(4) For a period of five years private equity will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the commitment date, investments in this class shall be benchmarked versus the S & P 500 plus 3%, which is the System's long-term expected return for this asset class.

FIXED INCOME INVESTMENTS

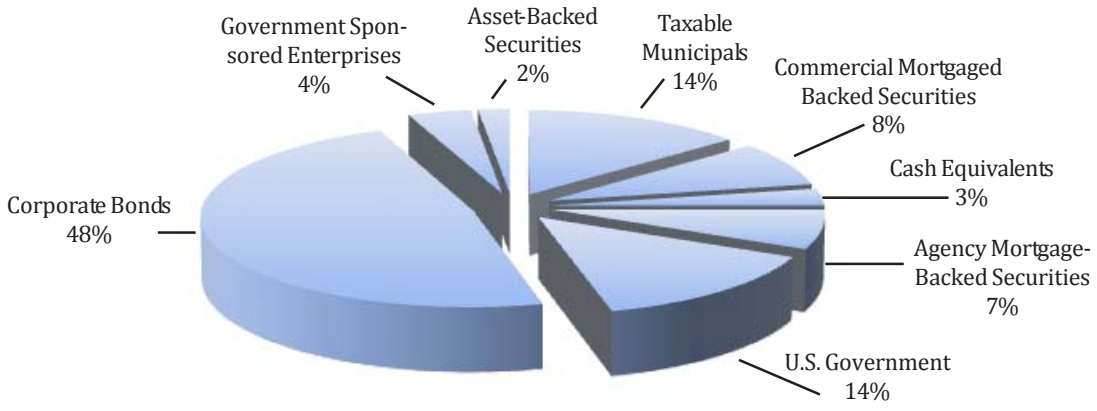
As of June 30, 2012, the retirement annuity trust fund had approximately $3.39 billion, 23% of total assets, in investment grade fixed income assets. In addition, the retirement annuity trust fund had $587.85 million, 4% of total assets, in other debt related investments approved under a regulatory provision which allows for up to 15% of assets in "additional categories of investments" approved by the Board of Trustees. Investments under this authorization included a high yield bond portfolio, investments with two managers participating in U.S. Treasury's Public-Private Investment Program (PPIP), and two alternative credit funds.

Excluding the other debt-related investments discussed above, the retirement annuity trust fund's fixed income investments maintained the average investment grade rating required by administrative regulation as of June 30, 2012. The credit quality distribution, including the high yield portfolio, is illustrated below. Also illustrated below is the distribution of fixed income assets by sector, again including the high yield portfolio.

FIXED INCOME QUALITY DISTRIBUTION



FIXED INCOME SECTOR DISTRIBUTION



FIXED INCOME MARKET OVERVIEW

U.S. bond markets performed remarkably well over the fiscal year with all major fixed income market sectors posting positive returns. High quality long-term bonds performed the best as the rally in the fixed income markets was driven by continuing uncertainties in Europe, domestic fiscal gridlock, and the continued application of easy monetary policies by the Federal Reserve. Despite a slow start, the economy showed definite signs of strength as GDP grew 2.1%, up from 1.9% the previous year, and the unemployment rate dropped to 8.2% from 9.1% a year earlier. Inflation was mixed with the headline CPI measure dropping from 3.6% to 1.7% year over year. The CPI "core" measure, which excludes food and energy prices, increased from 1.6% in the year ending June 2011 to 2.2% by June 30, 2012.

The fiscal year began amid turmoil as Eurozone finance ministers struggled to put together a package of supports to keep Greece from defaulting on its sovereign debts. Domestically, the U.S. Government had reached its debt limit in May of 2011 and was embroiled in a stalemate between the Obama administration and the Republican House over raising the debt ceiling. A $600 billion program of bond purchases by the Federal Reserve had just concluded in June and the economy was slowing. Indeed, U.S. GDP grew at only 1.6% year-over-year in the quarter ending September 2011. The debt of the U.S. Treasury was ultimately downgraded to AA+ from AAA by Standard and Poor's over the handling of the debt ceiling fiasco.

Despite the eventual resolution of these issues, confidence in risky assets dropped sharply; equity and lower quality corporate bond markets were roiled in the first quarter of the fiscal year. The flight out of risky assets caused a sharp rally in U.S. Treasuries, driving the yield on 30 year Treasuries under 2.75% by early October, down from 4.4% in July.

In addition to the crisis of confidence, the rally in high grade bonds was also aided by the announcement of additional policy action by the Federal Reserve. At the September 2011 Federal Open Market Committee meeting, the Federal Reserve announced that it would begin a $400 billion bond purchase program that would extend until June 2012. This program, commonly referred to as "operation twist", was an attempt to bring down long term interest rates by buying U.S. Treasuries with maturities of 6 to 30 years. The purchases would be financed by sales of Treasuries with less than 3 year maturities.

The Fed's policy was very effective not only in lowering long term interest rates, but also in keeping them low throughout the year, as the yield on 30 year Treasuries ended the fiscal year at 2.75%. The low Treasury rates held down mortgage rates, giving a much needed boost to the real estate market. The average 30 year fixed mortgage rate dropped from 4.51% to 3.66% during the course of operation twist.

As the fiscal year progressed, the low long term Treasury rates provided a boost to other markets as investors accepted additional risk in search of higher yield. Investment grade corporate bonds returned 9.71% for the year while high yield bonds rebounded from lows early in the year to return 6.51%. Agency mortgage-backed securities returned 4.97%. U.S. Treasuries returned 8.32% overall. The retirement annuity trust fund's total fixed income return was 9.6%, outpacing the Barclays Government/Credit index, which returned 8.78% for the year ended June 30, 2012.

In June of 2012, the Federal Reserve announced it would extend its current bond purchase program, operation twist, through the end of calendar year 2012 by adding an additional $267 billion in long term bond purchases. The Fed's policy of keeping both short and longer term interest rates low has been supportive to some areas of the economy. However, low rates have left investment grade bond prices higher than they would otherwise be. The result is an asset class with unfavorable risk and reward characteristics. The retirement system continues to adjust the structure of its fixed income portfolio to control risk and maintain required liquidity. An important part of this work is an increasing exposure to nontraditional debt-related investments, which offer both diversification and better risk / reward potential.

EQUITY INVESTMENTS

As of June 30, 2012, the retirement annuity trust fund's public equity investments had a market value of $9.35 billion, representing 63.1% of total assets. Strong equity returns over the last six months of the fiscal year prompted some rebalancing sales to reduce equity exposure back to target levels and to raise cash to fund pension benefits. The retirement annuity trust fund divides its public equity into two broad categories: domestic and international.

The domestic portfolio had a market value of $7.04 billion as of June 30, representing 47.5% of total assets. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of three well known component indices based upon market capitalization: the S&P 500 large cap, S&P 400 mid cap, and the S&P 600 small cap. The retirement annuity trust fund's domestic equity holdings are comprised of eleven portfolios. Three of the portfolios are internal passively managed index portfolios benchmarked to the S&P 500, S&P 400, and S&P 600. The other eight portfolios are managed externally by four different asset managers, with each portfolio representing a specific strategy and measured against an appropriate benchmark. The collective array of portfolios provides diversification by capitalization, manager, style, and strategy.

The market value of the international equity holdings as of June 30, 2012 was $2.31 billion, representing 15.6% of total assets. The benchmark for international equities is the Morgan Stanley Capital International All Country World Index ex US (MSCI ACWI ex US), which represents the markets of 23 developed countries and 21 emerging market countries. Four external asset managers manage the retirement annuity trust fund's international equities. During the fiscal year international equities increased slightly as a percent of total assets. The retirement annuity trust fund plans to continue increasing the international equity exposure during the coming fiscal year.

EQUITY MARKET OVERVIEW

For the fiscal year 2012, stocks were flat to slightly down overall, but experienced high volatility throughout the year. Returns of domestic stocks as measured by the S&P 1500 and Russell 2000 were up 4.63% and down 2.08%, respectively. Domestic large caps fared relatively well on the year, as the Dow Jones advanced 6.63% and the S&P 500 was up 5.45%. The Morgan Stanley Capital International (MSCI) World Index was down 4.41% for the year, brought down by foreign markets. The MSCI EAFE, which measures the foreign developed markets, fell 13.38%, while the MSCI Emerging Markets Index was down 15.66%.

Following two strong years, fiscal year 2012 was a tale of two halves. Momentum died early in the fiscal year as stocks plummeted in late July and continued the downward trend for the better part of the first and second quarters. Volatility was extremely high with the market reaching its lows in October and beginning its recovery in December.

The domestic markets were generally led down by many market uncertainties, both domestic and abroad. Locally, negative investor sentiment was driven by the sluggish labor market and the U.S. government's debt ceiling crisis. Although Congress ultimately reached a compromise, employment and confidence remained weak. Most of the decline was led by the energy and financial sectors. International uncertainty centered on the European debt crisis. This crisis came to the forefront in the first quarter as Greece teetered on defaulting on its sovereign debts. European and International Monetary Fund officials engineered a debt restructuring that kept Greece in the euro. The crisis was, however, ominously spreading to Spain and Italy. The associated austerity measures and political turmoil generated tremendous volatility in the markets.

The second half of the fiscal year was a completely different story, as stocks generally rallied, particularly in the third quarter. This rally was led by strong corporate earnings, despite the uncertain macroeconomic outlook. When calendar year-end earnings were all reported, 61% of the companies in the S&P 500 had exceeded expected earnings with an average 3.9% earnings surprise to the upside. The strong earnings were led by Apple Corp (AAPL) who successfully rolled out their iPad2 and iPhone4S. Also aiding the second half

resurgence was the Fed's decision to keep interest rates low and the European Central Bank's aggressive rate cuts. The housing market benefitted from the continued promise by the Fed to maintain low borrowing rates. The housing and real estate market, as measured by the MSCI US REIT Index, advanced 14.88% in the second half and was up 39.23% from its 52 week low on October 3, 2011. Labor markets also improved on the back of the strong corporate earnings as unemployment fell from 9.07 on September 30, 2011 to 8.17 as of the end of the fiscal year. Stocks, however, did see a slight pullback at the end of the fourth quarter of the fiscal year, as concerns re-emerged about a growth slowdown in the U.S.

Domestically, the Presidential campaign dominated the headlines. Concern over the growing national debt and national healthcare kept investors from buying into the recovery. Internationally, the European debt crisis and an interest rate fixing scandal dampened confidence. China also experienced a pullback in equity markets as investors found better opportunities in other emerging markets.

In summary, despite tremendous volatility manifested in a plummeting first quarter and a soaring third quarter, we ended the year fairly flat. Generally, defensive industries and countries performed relatively well while those perceived as riskier performed poorly. Large cap U.S. stocks did well while small cap stocks were down slightly. European and emerging markets stocks suffered significant declines. Financial markets are expected to remain volatile at least through the national elections in November, 2012.

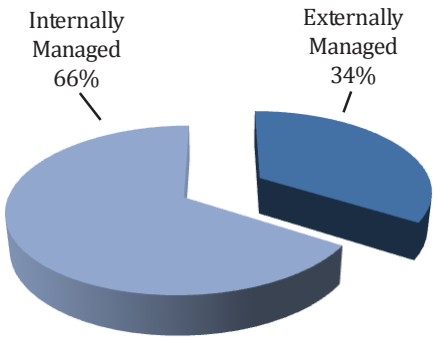
REAL ESTATE

The retirement annuity trust fund's real estate investments had a market value of $586.8 million as of June 30, 2012, representing 4.0% of total assets. The retirement annuity trust fund's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow, and provide diversification, thereby reducing the volatility of the overall investment portfolio.

The retirement annuity trust fund's real estate exposure is currently provided through four portfolios. The retirement annuity trust fund maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high credit quality tenants. The retirement annuity trust fund is also invested in a commingled real estate fund (PRISA Fund), which is managed by Prudential Real Estate Investors. This fund is a core real estate equity fund which invests primarily in existing income-producing properties with strong cash flows and the potential for capital appreciation. The fund is diversified across several property types including office, retail, industrial, apartment, self-storage and hotel.

Additionally, the retirement annuity trust fund is invested in two real estate limited partnerships: Carlyle Realty Partners VI, L.P., and Blackstone Real Estate Partners VII, L.P. Carlyle Realty Partners VI is an opportunistic real estate fund targeting distressed properties where fundamentals such as supply, demand, and location indicate that the property can be successfully turned around. This fund focuses on the major markets on the East and West Coasts and across all property types. Blackstone Real Estate Partners VII is an opportunistic real estate fund whose goal is to create core real estate by buying distressed and/or undermanaged assets at below market prices, executing a strategy to fix the issues and sell to institutional or strategic buyers or the public markets at higher values. Blackstone prefers to acquire high quality, income-producing assets in favor of engaging in development activities.

Real Estate Investments
$586.8 Million Market Value
As of June 30, 2012



REAL ESTATE OVERVIEW

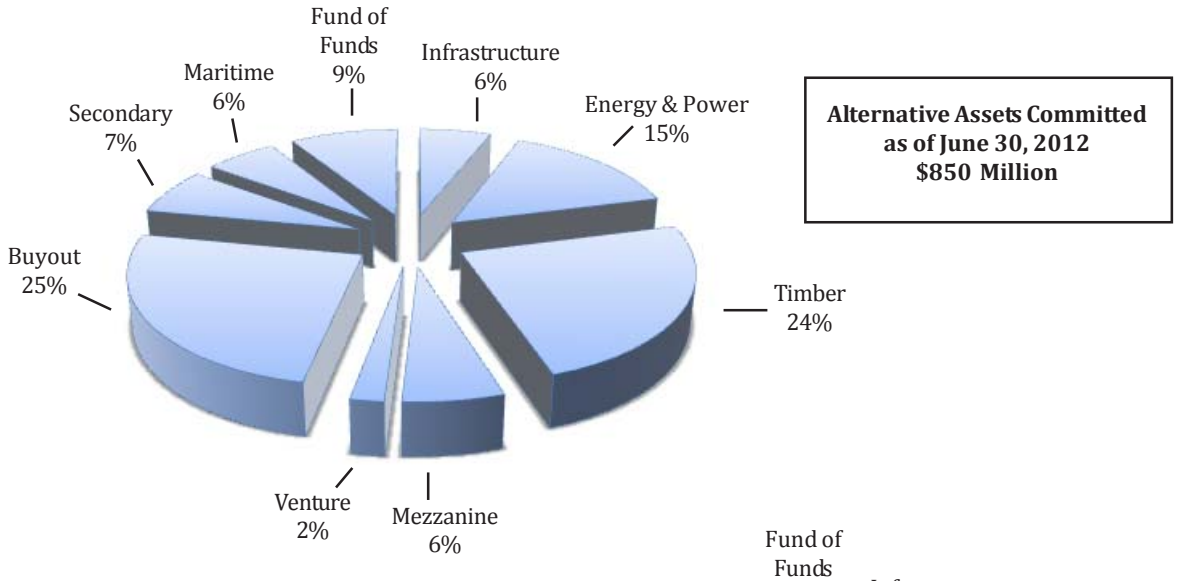
The commercial real estate market experienced a second consecutive year of moderate recovery during the

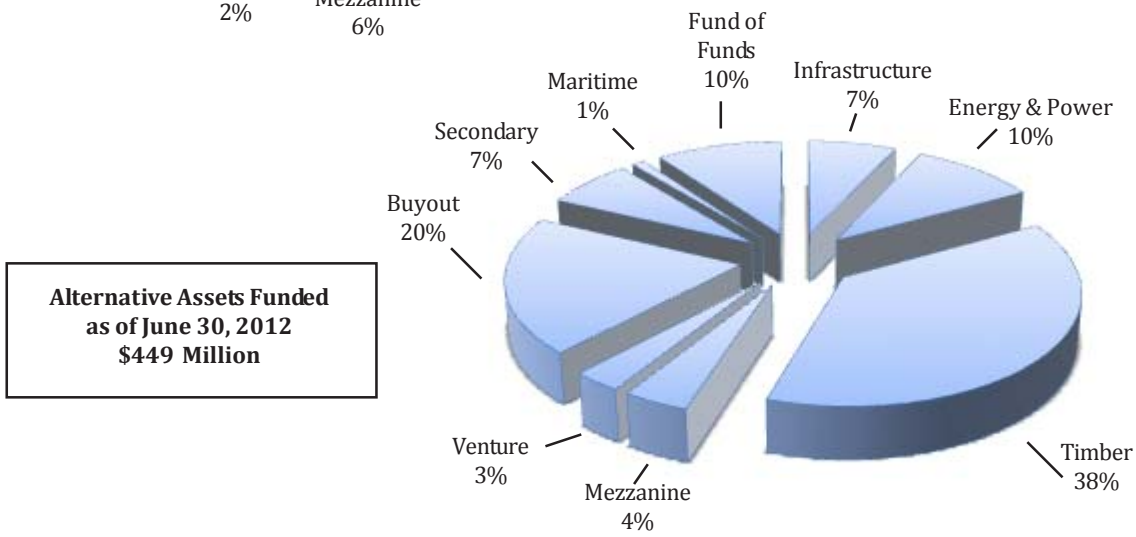
fiscal year. Demand remained strong for trophy properties located in gateway markets, while improving lending conditions helped support growing transaction volume in the broader market as well. Property yields continue to provide an attractive option to investors in a low interest rate environment with government bond yields near record lows. New construction activity in most sectors of the market remained constrained with the notable exception of multifamily construction.

Over the upcoming year, demand for apartments should remain strong due to favorable demographics and declining homeownership rates. The lack of new supply in the office, retail, and industrial sectors should promote a gradual recovery in overall rent and vacancies. It is estimated that up to $2 trillion in commercial mortgage debt will need to be refinanced over the next five years. These impending debt maturities will force owners who are unable to retire or refinance maturing debt to bring high quality assets to market. This will provide an opportunity for investors with ready capital to acquire commercial real estate properties at attractive prices.

ALTERNATIVE ASSETS

As of June 30, 2012, the retirement annuity trust fund had committed $850 million to alternative investments and had funded $449 million of those commitments. The percentage of the retirement annuity trust fund's portfolio in alternative assets was 3.0%. The retirement annuity trust fund's current alternative asset portfolio consists of private equity investments and timberland.





PRIVATE EQUITY

The retirement annuity trust fund has exposure to venture, buyout, infrastructure, energy, mezzanine and several other private equity sectors via participation in limited partnerships as well as investments in funds of funds. The retirement annuity trust fund is in the early stages of its private equity investment program, which it intends to grow with a disciplined plan of commitments over the next several years. The retirement annuity trust fund looks to diversify its private equity portfolio by firm, country, strategy, and vintage year. Vintage year diversification is achieved by building out the portfolio with disciplined levels of commitments over time. A commitment to any given partnership shall not exceed 20% of the partnership's total commitments.

The Board and staff understand that private equity (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with other publicly traded assets, this asset class can help to diversify and reduce risk for the retirement annuity trust fund's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence, during the harvesting period.

PRIVATE EQUITY MARKET OVERVIEW

The private equity markets continue to rebound from the effects of the financial crisis. Investors, especially on the institutional side, continue to increase their allocation to alternative investments, including private equity. However, continued uncertainty in the financial markets along with the record number of funds coming into the market over the next twelve months means that fund raising will remain challenging for all but the top tier funds. A strong IPO market remains the linchpin of the rebound in private equity as many funds that are in the harvesting period have not been able to dispose of the underlying portfolio companies in the time frame they had anticipated. As the IPO market begins to open back up this trend should reverse itself, and funds will begin to harvest their underlying portfolio companies at an accelerated pace.

As limited partners have become more selective in the funds in which they invest we continue to see a bifurcation in the private equity market with the top tier funds raising capital much easier than less desirable funds. This should, over the long term, provide a shakeup in this space as the weaker firms are forced to exit. The past fiscal year has also seen a large amount of buyout funds returning to the marketplace with mixed results. We continue to see more opportunity in the middle market space and in other niche areas such as energy, infrastructure, distressed credit, and emerging markets. Additionally, the stress in the European markets should continue to present investment opportunities in the private equity space over the next fiscal year.

TIMBERLAND

In addition to private equity, the retirement annuity trust fund has invested in timberland in the alternative asset class. As of June 30, 2012 the retirement annuity trust fund owns approximately 73,000 acres of timberland outright, has a 7.15% interest in a commingled fund that holds approximately 98,000 acres of timberland and is a member of a joint venture that owns an interest in approximately 124,000 acres of timberland located across seven southern states. Timberland is, by nature, a long term investment as our anticipated time horizon in this asset category is generally a minimum of ten to fifteen years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the retirement annuity trust fund's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long-term.

The retirement annuity trust fund diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are primarily driven from net cash flow

generated from the sale of trees (referred to as stumpage sales) and capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of forest commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland from the conversion of timberland into higher and better uses, such as vacation property sales.

TIMBERLAND MARKET OVERVIEW

The stagnation in the general economy and the poor housing market continued to negatively affect the global timber markets over the past fiscal year. However, many economists are expressing a guarded optimism that the domestic housing market is finally beginning a sustained turnaround, with the supply of homes moving downward and housing starts beginning to show some signs of life. Forecasts project timber demand, primarily softwood lumber and hardwoods, used in housing construction, improving over the next several years as the housing market continues its recovery. A return of a strong, stable domestic housing market will be crucial to a reemergence of strong timber markets across the timber-growing regions of the U.S. Currently the export timber markets are a mixed bag, with Vietnam heating up while China is cooling and Europe is mixed, due to its economic issues. However, both the international and domestic sectors are displaying a continued interest in biomass as a renewable energy source. As full-scale biomass facilities continue to come online in the next several years, pulpwood demand could pick up in specific target markets.

RETIREMENT ANNUITY TRUST
PORTFOLIOS
MARKET VALUES **
June 30, 2012

Internally Managed	
Cash Equivalents	
Cash Collections Fund (Unallocated)	$ 431,810,127
Fixed Income*	
Broad Market Bond Fund	750,385,239
Long Term Bond Fund	598,106,329
Intermediate Bond Fund	549,189,016
Internal Bond Fund	201,888,109
Life Insurance Trust	90,866,589
Tax Shelter Fund	405,136
Equity	
S & P 500 Stock Index Fund (Large Cap)	2,564,993,470
S & P 400 Stock Index Fund (Mid Cap)	379,525,980
S & P 600 Stock Index Fund (Small Cap)	254,716,531
Real Estate	
Internally Managed Fund	387,922,191
Subtotal	6,209,808,717
Externally Managed	
Fixed Income	
Galliard Capital Management	625,593,033
Ft. Washington Broad Market	575,344,329
Domestic Equity	
Todd - Veredus (Large Cap Core)	1,149,720,807
UBS (Large Cap Value)	810,731,375
GE Asset Management (Large Cap Growth)	689,778,128
Wellington (Large Cap Core)	531,381,716
Wellington (Mid Cap Core)	280,311,563
Wellington (Small Cap Core)	145,277,634
Todd - Veredus Opportunity Fund	128,992,509
UBS (130/30)	108,985,699
International Equity	
Todd - Veredus International	692,815,522
UBS All Country World ex US	676,201,690
Baillie Gifford EAFE Alpha	540,343,180
Baring All Country World ex US	400,522,666

continued ...

RETIREMENT ANNUITY TRUST PORTFOLIOS continued ...
JUNE 30, 2012

Real Estate	
Prudential PRISA Fund	178,863,056
Blackstone Partners VII, LP	10,677,256
Carlyle Realty Partners VI	9,338,263
Alternative Investments	
Molpus Woodlands Group Lake Superior Timberlands LLC	90,793,322
Molpus Seven States LLC	72,658,059
Riverstone/Carlyle E & P Fund IV	45,047,180
KKR & Co European Fund III	37,466,724
Alinda Infrastructure Fund II	30,561,419
Ft. Washington Fund VI	25,022,073
Hancock Bluegrass LLC - Oregon	21,981,305
KKR & Co Fund 2006	20,495,041
Chrysalis Venture Fund III	18,654,648
Lexington Capital Partners Fund VII	14,097,411
Landmark Equity Partners Fund XIV	13,821,365
Ft. Washington Fund V	12,975,169
Hellman & Friedman Fund VII	9,619,080
Stepstone Pioneer Capital Fund III, LP	9,396,601
Oaktree Mezzanine Fund III	9,276,709
Oaktree European Principal Fund III	7,561,954
Audax Mezzanine Fund III	4,578,412
NGP Natural Resources X, LP	3,262,969
CapitalSouth Partners Fund III	3,115,049
J. P. Morgan Maritime Fund	881,847
Additional Categories	
Fort Washington High Yield Bond Fund	274,645,691
Marathon KTRS/Credit Fund LP	100,513,682
Avenue Special Situations Fund VI	91,332,362
Marathon Legacy Securities PPIP	69,805,272
AG GECC PPIF, LP	51,551,803
Subtotal	8,593,993,573
Total Assets	$ 14,803,802,290

* *Excludes purchased interest of $797,403 as of June 30, 2012.*
** *Detailed information concerning these market values of all KTRS investments is available upon request.*

Investment Summary
Fair Market Value – Retirement Annuity Trust*
June 30, 2012

Type of Investment	Fair Value 07/01/11	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/12
Cash Equivalents	$ 640,018,300	$ 3,663,036,500	$ -	$ 3,678,261,800	$ 624,793,000
Fixed Income**	3,882,958,300	2,610,743,300	182,636,200	3,108,112,800	3,568,225,000
Equities	9,588,077,100	3,171,547,400	(249,922,900)	3,249,390,000	9,260,311,600
Real Estate	480,447,200	103,402,100	11,274,300	8,322,900	586,800,700
Alternative	576,527,800	219,172,600	(9,829,200)	21,401,800	764,469,400
TOTAL	$ 15,168,028,700	$ 9,767,901,900	$ (65,841,600)	$ 10,065,489,300	$ 14,804,599,700

* Includes Life Insurance Trust Values and Tax Shelter Annuity.
** Includes Purchased Interest.

Contracted Investment Management Expenses
Fiscal Year 2011-12
(in thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points (1)
Equity Manager(s)	$ 6,155,062	$ 11,316	
Fixed Income Manager	1,475,583	1,039	
Real Estate	198,879	2,223	
Alternative Investments (2)	764,469	11,977	
Total	$ 8,593,993	$ 26,555	30.9
Other Investment Services			
Custodian Fees	$ 14,805,138	$ 305	0.2
Consultant Fees		359	0.2
Legal & Research		124	0.1
Subscriptions/Services		746	0.5
Total		$ 1,534	1.0
Grand Total		$ 28,089	**19.0**

(1) – One basis point is one hundredth of one percent or the equivalent of .0001.
(2) – Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.

Ten Largest Stock Holdings Ranked [1] [2]
by Market Value
June 30, 2012

Rank	Description	Market Value	Percentage of Equities
1	Apple Inc	231,970,640	3.078
2	Exxon Mobil Corp	119,695,145	1.588
3	Philip Morris Inc	95,036,611	1.261
4	Microsoft Corp	93,227,338	1.237
5	Pepsico Inc	86,087,480	1.142
6	Qualcomm Inc	81,809,009	1.085
7	Chevron Corp	78,823,587	1.046
8	Wells Fargo & Co	74,800,832	0.992
9	Oracle Corp	72,683,236	0.964
10	International Business Machines	71,949,970	0.954

Top Ten Fixed Income Holdings [2]
by Market Value
June 30, 2012

Rank	Description	Maturity	Coupon	Par Value	Market Value	Percent of Fixed Income
1	U S Treasury Bonds	8/15/2023	6.250	31,900,000	46,334,750	1.298
2	U S Treasury TIPs	4/15/2014	1.250	39,515,000	44,344,111	1.243
3	U S Treasury	5/15/2022	1.750	39,270,000	39,589,265	1.109
4	U S Treasury	2/15/2022	2.000	36,670,000	37,904,679	1.062
5	U S Treasury Bonds	8/15/2029	6.130	22,000,000	33,986,480	0.952
6	Treasury Inflation Index	2/15/2042	0.750	30,000,000	32,037,420	0.898
7	U S Treasury	4/30/2017	0.880	29,800,000	30,025,884	0.841
8	U S Treasury	3/31/2017	1.000	28,180,000	28,567,475	0.800
9	U S Treasury Bonds	11/15/2026	6.500	16,000,000	24,664,960	0.691
10	U S Treasury Bonds	2/15/2020	8.500	14,980,000	22,961,494	0.643

(1) Includes only actively managed separate accounts.
(2) Detailed information concerning these values along with book values and cost values of all KTRS investments is available upon request.

Transaction Commissions Fiscal Year 2011-12

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Allen & Co	1,400	$ 764	$ 0.5460	0.03 %
Assent LLC	3,815	153	0.0400	0.01
Avondale Partners, LLC	48,460	1,938	0.0400	0.08
Barclays	1,882,919	69,378	0.0368	2.71
Bass / Baypoint Trading	8,030	321	0.0400	0.01
BB & T Capital Markets	21,905	876	0.0400	0.03
Blair, William & Co	91,195	3,648	0.0400	0.14
BMO Capital Markets	39,025	1,561	0.0400	0.06
BNP Paribas Securities Bond	46,860	1,874	0.0400	0.07
BNY ConvergEX Group	3,123,502	65,901	0.0211	2.58
Boenning & Scattergood	7,770	311	0.0400	0.01
Brean Murray, Carret & Co., LLC	50,995	2,040	0.0400	0.08
Broadpoint Capital	8,866	582	0.0656	0.02
BTIG	174,970	5,073	0.0290	0.20
Burke & Quick Partners LLC	9,025	361	0.0400	0.01
Cabrera Capital	21,805	590	0.0271	0.02
Canaccord Genuity, Inc.	89,876	3,595	0.0400	0.14
Cantor Fitzgerald & Co	38,826	1,265	0.0326	0.05
CIBC Oppenheimer Worldmarket	98,140	3,952	0.0403	0.15
Citigroup Global	247,000	9,503	0.0385	0.37
Collins Stewart LLC	56,680	2,267	0.0400	0.09
Cowen & Co	367,515	13,231	0.0360	0.52
Credit Suisse Sec. LLC	3,524,206	88,051	0.0250	3.44
Crowell Weedon & Co	68,105	2,724	0.0400	0.11
CSI US Institutional (Calyon)	90,972	3,639	0.0400	0.14
Cuttone & Co Inc 3	19,270	434	0.0225	0.02
D A Davidson & Co	9,600	384	0.0400	0.02
Dahlman Rose & Co LLC	26,300	1,052	0.0400	0.04
Davenport & Company LLC	6,800	272	0.0400	0.01
Deutsche Bank	627,405	21,622	0.0345	0.84
Dowling & Partners	60,285	2,411	0.0400	0.09
Fidelity Capital Markets	1,980	59	0.0300	0.00
First Kentucky Securities Corp	1,656,895	49,707	0.0300	1.94
Freidman Billings	136,135	5,529	0.0406	0.22
Gleacher & Company Securities	1,500	60	0.0400	0.00
Goldman Sachs	2,858,273	94,979	0.0332	3.71
Green Street Advisors	41,355	1,654	0.0400	0.06
Heflin & Co	20,325	813	0.0400	0.03
HSBC	4,400	176	0.0400	0.01
Instinet	2,700	108	0.0400	0.00
Investment Tech Group Transition	17,228,270	159,122	0.0092	6.22
Investment Technology Group	22,935,980	337,885	0.0147	13.20
ISI Group	2,589,165	73,717	0.0285	2.88
J.J.B. Hilliard, W.L. Lyons	2,823,420	84,703	0.0300	3.31
Janney Montgomery Scott Inc	157,725	6,097	0.0387	0.24
Jefferies & Co.	514,239	18,942	0.0368	0.74
JMP Securities	18,420	737	0.0400	0.03
Jones & Associates	7,724	309	0.0400	0.01
JP Morgan & Chase	951,563	55,076	0.0579	2.15
Keefe Bruyette & Woods	90,635	11,412	0.1259	0.45
Keybanc Capital	114,805	10,582	0.0922	0.41
King, CL, & Associates, Inc.	8,090	324	0.0400	0.01
Knight Equity Markets	71,399	2,635	0.0369	0.10
Lazard Freres & Co.	2,713,805	81,775	0.0301	3.20
Leerink Swann & Co.	98,675	30,666	0.3108	1.20
Lexington Investment Co.	1,130,475	33,914	0.0300	1.33
Liquidnet Inc	10,382,594	107,285	0.0103	4.19
Longbow Securities LLC	21,135	845	0.0400	0.03
Loop Capital Markets, LLC	11,820	309	0.0261	0.01

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
MacQuarie Securities Inc	100,545	4,053	0.0403	0.16
Merrill Lynch	3,538,209	120,064	0.0339	4.69
Merrill Lynch, Pierce, Fenner	67,915	2,717	0.0400	0.11
Miller Tabak & Co. LLC	146,005	5,840	0.0400	0.23
Mischler Financial Group Inc	4,500	180	0.0400	0.01
Mizuho Securities, USA	7,900	316	0.0400	0.01
MKM Partners	41,945	1,678	0.0400	0.07
Morgan Keegan	2,151,500	64,545	0.0300	2.52
Morgan Stanley Smith Barney-Huntington	2,176,090	65,283	0.0300	2.55
Morgan Stanley Smith Barney-Louisville	2,184,750	65,543	0.0300	2.56
Morgan Stanley Smith Barney-Northern KY	2,931,559	87,947	0.0300	3.44
Morgan Stanley	1,335,761	33,226	0.0249	1.30
Needham	3,900	156	0.0400	0.01
Nomura Securities Intrntl Inc	181,260	6,247	0.0345	0.24
Pacific Crest Securities	20,755	1,632	0.0786	0.06
Pershing LLC	47,250	1,790	0.0379	0.07
Pipeline Trading	20,455	205	0.0100	0.01
Piper Jaffray	109,980	4,399	0.0400	0.17
Pulse Trading	37,830	559	0.0148	0.02
R W Baird	460,136	19,064	0.0414	0.75
Raymond James & Assoc	4,991,335	154,456	0.0309	6.04
RBC Capital Markets	540,215	21,301	0.0394	0.83
Rosenblatt Securities LLC	1,500	60	0.0400	0.00
Ross Sinclaire & Assoc	1,116,600	33,498	0.0300	1.31
Sandler O'Neill	10,450	468	0.0448	0.02
Sanford C Bernstein	633,536	13,484	0.0213	0.53
SG AMERICAS SECURITIES	12,620	505	0.0400	0.02
Sidoti & Company LLC	8,380	335	0.0400	0.01
Simmons & Co	31,120	1,245	0.0400	0.05
SJ Levinson & Sons LLC	7,400	296	0.0400	0.01
State Street Global	21,400	642	0.0300	0.03
Stephens Inc.	74,550	2,982	0.0400	0.12
Sterne, Agee & Leach	134,925	5,397	0.0400	0.21
Stifel, Nicolaus & Co	1,934,149	93,922	0.0486	3.67
Stifel, Nicolaus & Co-Louisville	1,103,085	33,093	0.0300	1.29
Suntrust Robinson	15,661	626	0.0400	0.02
Susquehanna Brokerage	55,980	2,239	0.0400	0.09
Telsey Advisory Group LLC	153,865	5,837	0.0379	0.23
The Benchmark Company LLC	3,950	158	0.0400	0.01
UBS/Paine Webber Securities	760,251	16,949	0.0223	0.66
UBS/Paine Webber-Louisville	2,687,140	80,614	0.0300	3.15
Wedbush Morgan Securities	15,010	600	0.0400	0.02
Weeden & Co	3,588,160	107,853	0.0301	4.21
Wells Fargo Securities, LLC	410,185	12,213	0.0298	0.48
Williams Capital Group	5,830	233	0.0400	0.01
WJB Capital Group Inc	129,500	5,180	0.0400	0.20
TOTAL	**111,480,066**	**$ 2,558,823**	**$ 0.0230**	**100%**

The acquisition of initial public offerings (IPOs) represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate; however, the security issuers and not the investors pay the commissions. In 2011-12, the retirement annuity trust fund bought small capitalization IPOs that generated $240,230 in commissions. Although these commissions were not paid by the retirement system, they resulted from the retirement annuity trust fund's investment activities and are included in the total commissions of $2,558,823. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.03 per share or less. Investment companies usually provide investment research for brokerage clients. On occasion, investment companies direct third party research to active clients. The retirement system received third party research credit through BNY ConvergEx during this fiscal year. The primary research providers were: Bloomberg, Interactive Data, Segal Rogers Casey, ISS, QED Financial Systems, and Thomson Financial; however, KTRS began the process of paying for research directly to vendors instead of through third party research agreements.

PROXY VOTING AND CORPORATE BEHAVIOR

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The Board has adopted the following position on corporate behavior:

The Board's stated fiduciary duty is to obtain the highest return for the Fund commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the Fund as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the Fund has invested.

The Board expects the managements of the companies whose equity securities are held in the Fund's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the Board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the Board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission, and others which are covered by the laws of the United States Government or the State of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the System's holdings in the company, if the sale is consistent with sound investment policy.

SECURITY LENDING

The System operates a security lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and select stocks and bonds are the types of securities loaned. The System's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral, at the time of the loan, has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral consists of cash, marketable U.S. Government securities, and selected marketable U.S. Government agency securities approved by the System.

Cash collateral is invested in short term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities unless the borrower defaults. The lending agent also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. The weighted average maturity of cash collateral investments is typically two days. The System has no credit risk exposure to borrowers, since the amounts the System owes borrowers exceeds the amounts the borrowers owe the System.

Security lending programs can entail considerable interest rate risk and credit risk. The System has structured its program to minimize these two main categories of risk. The interest rate risk is managed, as mentioned above, by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the creditworthiness of lent securities.

KENTUCKY INVESTMENTS

The retirement system is ever mindful of its significance to the Commonwealth's economy. For the fiscal year ended June 30, 2012, approximately $1.5 billion in benefits were distributed to members living in Kentucky. Approximately $331 million of the retirement annuity trust fund's investments directly impact the Commonwealth. These investments include: commercial real estate; bonds issued by public agencies of the Commonwealth and those of local municipalities; pools of single-family mortgages in Kentucky; financing for multi-family housing, and; investments in companies which have an impact on the Commonwealth's economy but receive earnings from global operations. Fiduciary duty requires that investments be made solely for the benefit of the retirement system's members and annuitants. Investments which benefit the Commonwealth's economy are made only when fully consistent with this fiduciary duty.

PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
Hewitt EnnisKnupp, Inc.

Investment Custodian
The Bank of New York Mellon

Fixed Income Managers
Galliard Capital Management
Ft. Washington Investment Advisors

Domestic Equity Managers
Todd-Veredus Asset Management LLC
UBS Global Asset Management
Wellington Management Company
GE Asset Management

International Equity Managers
Todd-Veredus Asset Management LLC
UBS Global Asset Management
Baring Asset Management, Inc.
Baillie Gifford

Real Estate Managers
Prudential Real Estate Investors
Carlyle Realty Partners
Blackstone Real Estate Partners

Alternative Investment Managers
Molpus Woodlands Group
Hancock Natural Resources Group
Kohlberg Kravis Roberts & Co.
Chrysalis Ventures
Ft. Washington Private Equity Investors
Alinda Capital Partners, LLC
Riverstone Holdings, LLC
CapitalSouth Partners
Landmark Partners
Lexington Partners
Oaktree Capital Management
Stepstone Pioneer Capital
Audax Group
J.P. Morgan Asset Management
Marathon Legacy Securities GP, LLC
AG GECC PPIF GP, LLC
Avenue Capital Group
Hellman & Friedman Capital Partners
Natural Gas Partners
Marathon Asset Management

Attorney
Ice Miller LLP

HEALTH INSURANCE TRUST FUND

INVESTMENT POLICY SUMMARY

The statute that created the health insurance trust fund on July 1, 2010, KRS 161.677, obliges the Board to "manage the assets of the fund in the same general manner in which it administers the retirement funds, except that the asset allocation may differ and separate accounting and financial reporting shall be maintained for the trust fund." KRS 161.430, which governs the investment of funds for the retirement funds, requires that members' assets be managed in a manner consistent with fiduciary standards set forth in the "prudent person rule." Subject to this statute, administrative regulation 102 KAR 1:178 establishes investment policies for the health insurance trust fund. This regulation requires the Board and Investment Committee to prudently diversify assets and to consider the fund's "liquidity and its capability of meeting both short and long-term obligations" in setting asset allocation policy.

Due to an imbalance of required distributions over contributions early in the fund's existence, liquidity needs have dominated investment policy. This will evolve as contribution rate increases provided in statute improve cash flow in future years. As near-term liquidity needs recede in importance, the focus will increasingly be on establishing an investment policy which achieves the required rate of return and matches the health insurance liability.

INVESTMENT OBJECTIVES

The definitive objective of the health insurance trust fund is to provide for beneficiaries' health insurance benefit obligations, both short and long-term. In support of this objective, investment policy will be designed, on an ongoing basis, to: (1) meet all liquidity needs, (2) achieve the actuarially assumed 8.0% rate of return over the long-term, and (3) do so within appropriate risk levels.

RISK CONTROLS

Any investment program faces various risks; as with the retirement funds, the primary risk is that the assets will not support liabilities over the long-term. Risk control measures for the health insurance trust fund mirror those of the retirement annuity trust fund, but are customized to reflect the fund's unique liability. Primary risk control measures include the following steps:

- Actuarial valuations are performed each year to evaluate the funding objectives of the health insurance trust fund. Every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the fund.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the fund.
- In accordance with administrative regulation 102 KAR 1:178, which governs investment policies for the fund, the KTRS Investment Committee adopts and regularly reviews an asset allocation policy designed to meet the fund's needs.

ASSET ALLOCATION

As of June 30, 2012, the health insurance trust fund had approximately $327.9 million in total assets. This included $22.3 million in cash and $110.9 million in short-term high quality bonds for liquidity purposes. This trust fund also had $53.3 million in high yield bonds, $140.7 million in a global stock index fund, and $748,000 in private equity investments.

Asset allocation will be adjusted annually by the Investment Committee to reflect changing liquidity needs and actuarial funding status. Due to upcoming contribution rate increases enacted in statute, liquidity needs are expected to decline in coming years while funding status improves. The information below shows the health insurance trust fund's asset allocation by market value as of June 30, 2012 and June 30, 2011.

Health Insurance Trust

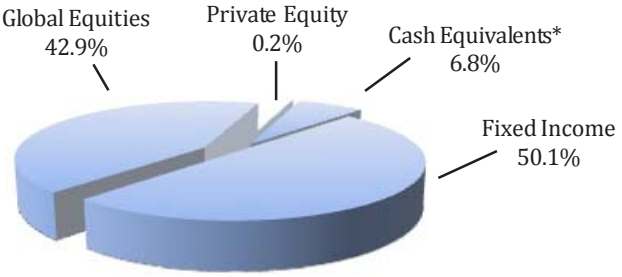
	June 30, 2012	%	June 30, 2011	%
Cash Equivalents *	$ 22,265,278	6.8	$ 63,546,353	16.8
Fixed Income **	164,189,966	50.1	164,924,873	43.5
Global Equities	140,740,861	42.9	150,698,032	39.7
Private Equity	748,103	0.2	-0-	0.0
Totals	**$ 327,944,208**	**100.0**	**$ 379,169,258**	**100.0**

* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

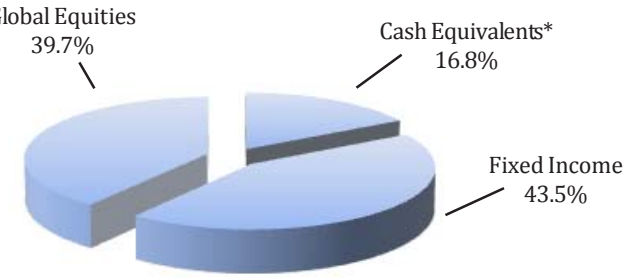
** Excludes purchased interest of $34,806 as of June 30, 2012, and $221,418 as of June 30, 2011. Also excludes 401(h) value of $11,606,479.

Distribution of Investments Health Insurance Trust Market Values

June 30, 2012



June 30, 2011



** Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

HEALTH INSURANCE TRUST

PORTFOLIO RETURNS

For the fiscal year, the health insurance trust fund's portfolio returned -1.1%, largely the net result of exposure to global equities offset by the stability of short-term bonds. The fund's global equities returned -6.6% versus -6.9% for the MSCI All country World IMI Index. A short-term bond fund held for liquidity purposes returned 0.8%. A high yield bond fund returned 8.1% versus 6.5% for its benchmark.

Due to a necessary focus on liquidity needs early in the fund's existence and rapidly evolving asset allocation as its funding mechanism is implemented, no policy benchmark has yet been established. Returns were generated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

	1 Yr. (1)	3 Yr. (1)	5 Yr. (1)	10 Yr. (1)	20 Yr. (1)
Total Fund					
KTRS Health Insurance Trust	-1.1	-	-	-	-
Equities					
Global Equities	-6.6	-	-	-	-
MSCI AC World IMI	-6.9	-	-	-	-
Fixed Income					
High Yield Bond Fund	8.1	-	-	-	-
B of A MerrillLynch High Yield Master II	6.5	-	-	-	-
Internal Bond Fund	0.8	-	-	-	-
90 Day Treasury Bill	0.0	-	-	-	-
Alternative Investments					
Private Equity (2)	-	-	-	-	-
Cash					
Cash (Unallocated)	0.1	-	-	-	-
90 Day Treasury Bill	0.0	-	-	-	-

(1) Annualized.

(2) For a period of five years private equity will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the commitment date, investments in this class shall be benchmarked versus the S & P 500 plus 3%, which is the System's long-term expected return for this asset class.

HEALTH INSURANCE TRUST
PORTFOLIOS
MARKET VALUES **
June 30, 2012

Cash Equivalents	
Cash Collections Fund	$ 22,265,278
Fixed Income*	
Internal Bond Fund	110,899,830
Subtotal	133,165,108
Fixed Income*	
Ft. Washington High Yield Bond Fund	53,290,136
Global Equities	
BlackRock Fund B	140,740,861
Alternative Investments	
Ft. Washington Fund VII	748,103
Subtotal	194,779,100
Total Assets	$ 327,944,208

* *Excludes purchased interest of $34,806 as of June 30, 2012.*
** *Detailed information concerning these market values of all KTRS investments is available upon request.*

Investment Summary
Fair Market Value – Medical Insurance Trust
June 30, 2012

Type of Investment	Fair Value 06/30/11	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/12
Cash Equivalents	$ 92,109,500	$ 479,798,400	$ -	$ 525,856,000	$ 46,051,900
Fixed Income *	136,110,900	136,294,900	112,600	132,352,600	140,165,800
Equities	151,170,200	-	(9,925,000)	232,000	141,013,200
Real Estate	-	-	-	-	-
Alternative	-	750,000	19,100	21,000	748,100
TOTAL	$ 379,390,600	$ 616,843,300	$ (9,793,300)	$ 658,461,600	$ 327,979,000

* Includes Purchased Interest.

Health Insurance Trust Fund
Contracted Investment
Management Expenses
Fiscal Year 2011-12
(in thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 140,741	$ 89	
Fixed Income Manager	53,325	107	
Real Estate	-	-	
Alternative Investments [2]	748	75	
Total	$ 194,814	$ 271	13.9
Other Investment Services			
Custodian Fees	$ 327,979	$ 5	0.2
Consultant Fees		-	0.0
Legal & Research		6	0.2
Subscriptions/Services		-	0.0
Total		$ 11	0.3
Grand Total		$ 282	**8.6**

(1) – One basis point is one hundredth of one percent or the equivalent of .0001.
(2) – Private equity fees are either withheld from the Fund operations or paid by direct" disbursement, depending on contract terms."

HEALTH INSURANCE TRUST PROFESSIONAL SERVICE PROVIDERS

Investment Consultants
Hewitt EnnisKnupp, Inc.

Investment Custodian
The Bank of New York Mellon

Fixed Income Manager
Ft. Washington Investment Advisors

Global Equity Manager
BlackRock Institutional Trust Company

Alternative Investment Manager
Ft. Washington Private Equity Investors

Attorney
Ice Miller LLP

Actuarial Section

Report of the Actuary on the Annual Valuation

for Fiscal Year ending June 30, 2012

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 11, 2012

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2012. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2015 required to support the benefits of the System are 31.89% of payroll for university members hired before July 1, 2008, 32.89% of payroll for university members hired on and after July 1, 2008, 34.85% of payroll for non-university members hired before July 1, 2008, and 35.85% of payroll for non-university members hired on and after July 1, 2008.

These rates represent an increase since the previous valuation in the Pension required employer contribution rate of 1.90% of payroll for the 2014/2015 fiscal year. In addition, there has been a net decrease in the expected state special appropriation from 3.50% to 3.00%, or 0.50% of payroll and no change in the amount required for life insurance benefits. Therefore, the net impact on the required increase in the total employer contribution rate is 2.40% of payroll.

For the 2014/2015 fiscal year, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 10.42%; 2.40% from this valuation and 8.02% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

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We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

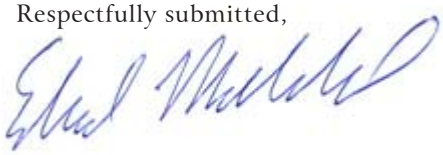
The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, the System is not being funded on an actuarially sound basis since the actuarially required contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,



Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Report of Actuary on the Valuation
Prepared as of June 30, 2012
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2012	June 30, 2011
Number of active members	75,951	76,349
Annual salaries	$ 3,479,567	$ 3,451,756
Number of annuitants and beneficiaries	46,094	44,419
Annual allowances	$ 1,525,184	$ 1,433,386
Assets		
Market value	$ 14,797,121	$ 15,130,606
Actuarial value	$ 14,691,371	$ 14,908,138
Unfunded actuarial accrued liability	$ 12,282,483	$ 11,060,554
Funded Ratio	54.5%	57.4%
Amortization period (years)	30	30

Contribution Rates for University Members

Valuation Date	June 30, 2012		June 30, 2011	
For Fiscal Year Ending	June 30, 2015		June 30, 2014	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	11.790 %	11.790 %	11.770 %	11.770 %
Accrued liability	20.100	21.100	18.220	19.220
Total	31.890 %	32.890 %	29.990 %	30.990 %
Member	7.625 %	7.625 %	7.625 %	7.625 %
State (ARC)	24.265	25.265	22.365	23.365
Total	31.890 %	32.890 %	29.990 %	30.990 %
Life Insurance Fund:				
State	0.030 %	0.030 %	0.030 %	0.030 %
Medical Insurance Fund:				
Member	2.270 %	2.270 %	1.750 %	1.750 %
State Match	2.270	1.270	1.750	0.750
Total	4.540 %	3.540 %	3.500 %	2.500 %
Total Contributions	36.460 %	36.460 %	33.520 %	33.520 %
Member Statutory	9.895 %	9.895 %	9.375 %	9.375 %
State Statutory	13.145	13.145	12.625	12.625
Required Increase	10.420	10.420	8.020	8.020
State Special	3.000	3.000	3.500	3.500
Total	36.460 %	36.460 %	33.520 %	33.520 %

Contribution Rates for Non-University Members

Valuation Date	June 30, 2012		June 30, 2011	
For Fiscal Year Ending	June 30, 2015		June 30, 2014	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	15.150 %	15.150 %	15.050 %	15.050 %
Accrued liability	19.700	20.700	17.900	18.900
Total	34.850 %	35.850 %	32.950 %	33.950 %
Member	9.105 %	9.105 %	9.105 %	9.105 %
State (ARC)	25.745	26.745	23.845	24.845
Total	34.850 %	35.850 %	32.950 %	33.950 %
Life Insurance Fund:				
State	0.030 %	0.030 %	0.030 %	0.030 %
Medical Insurance Fund:				
Member	3.000 %	3.000 %	2.250 %	2.250 %
State Match	3.000	2.000	2.250	1.250
Total	6.000 %	5.000 %	4.500 %	3.500 %
Total Contributions	40.880 %	40.880 %	37.480 %	37.480 %
Member Statutory	12.105 %	12.105 %	11.355 %	11.355 %
State Statutory	15.355	15.355	14.605	14.605
Required Increase	10.420	10.420	8.020	8.020
State Special	3.000	3.000	3.500	3.500
Total	40.880 %	40.880 %	37.480 %	37.480 %

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2012 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule E of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation.

5. The System currently uses a smoothed interest rate methodology to determine liabilities. The development of the smoothed interest rate used in the June 30, 2012 valuation is shown in Schedule D.

6. Provisions of the System, as summarized in Schedule G, were taken into account in the current valuation. There have been no changes since the previous valuation.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2012 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
Full Time	58,874	$ 3,361,793
Part Time	7,077	117,774
Total	75,951	$ 3,479,567

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2012

Group	Number	Annual Retirement Allowances[1] ($1,000's)
Service Retirements	40,152	$ 1,392,874
Disability Retirements	2,477	67,006
Beneficiaries of Deceased Members	3,465	65,304
Total	46,094	$ 1,525,184

[1] *Includes cost-of-living adjustments effective through July 1, 2012.*

3. Table 1 of Schedule H shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2012 the market value of Pension Plan assets for valuation purposes held by the System amounted to $14,797,120,889. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2012 was $14,691,371,043. Schedule B shows the development of the actuarial value of assets as of June 30, 2012.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2012. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule E and Schedule F.

2. The valuation balance sheet shows that the System has total prospective liabilities of $15,391,786,788 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $16,229,256,850 of which $832,505,614 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $242,964,774. The total prospective liabilities of the System amounts to $31,864,008,412. Against these liabilities, the System has present assets for valuation purposes of $14,691,371,043. When this amount is deducted from the total liabilities of $31,864,008,412, there remains $17,172,637,369 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 11.79% of payroll for University and 15.15% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,890,154,454. When this amount is subtracted from $17,172,637,369, which is the present value of the total future contributions to be made by the employer, there remains $12,282,482,915 as the amount of future unfunded accrued liability contributions.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 9.895% of annual salary to the System and each non-university member contribute 12.105% of annual salary. Of this amount, for each university member, 2.27% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.00% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.03% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 10.42% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 3.00% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 24.265% for university members who become members before July 1, 2008 and 25.265% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 25.745% for non-university members who become members before July 1, 2008 and 26.745% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source
University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	9.895 %	9.895 %
Statutory Medical Insurance Fund	(2.270)	(2.270)
Contribution to Pension Plan	7.625 %	7.625 %
Employer		
Statutory Matching Total	9.895 %	9.895 %
Statutory Medical Insurance Fund	(2.270)	(1.270)
Supplemental Funding	3.250	3.250
Subtotal	10.875 %	11.875 %
Life Insurance	(0.030) %	(0.030) %
Additional to Maintain 30-Year Amortization	10.420	10.420
Special Appropriation	3.000	3.000
Contribution to Pension Plan	24.265 %	24.265%
Total Contribution to Pension Plan	31.890 %	32.890 %

Contribution Rates by Source
Non-University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	12.105 %	12.105 %
Statutory Medical Insurance Fund	(3.000)	(3.000)
Contribution to Pension Plan	9.105 %	9.105 %
Employer		
Statutory Matching Total	12.105 %	12.105 %
Statutory Medical Insurance Fund	(3.000)	(2.000)
Supplemental Funding	3.250	3.250
Subtotal	12.355 %	13.355 %
Life Insurance	(0.030) %	(0.030) %
Additional to Maintain 30-Year Amortization	10.420	10.420
Special Appropriation	3.000	3.000
Contribution to Pension Plan	25.745 %	26.745 %
Total Contribution to Pension Plan	34.850 %	35.850 %

4. The valuation indicates that normal contributions at the rate of 11.79% of active university members' salaries and 15.15% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 20.10% for university members hired before July 1, 2008, 21.10% for university members hired on and after July 1, 2008, 19.70% for non-university members hired before July 1, 2008, and 20.70% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.00% of payroll to be made by the State. These rates are shown in the following table.

Actuarially Determined Contribution Rates

Rate	Percentage of Active Members' Salaries			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	11.79 %	11.79 %	15.15 %	15.15 %
Accrued Liability *	20.10	21.10	19.70	20.70
Total	31.89 %	32.89 %	34.85 %	35.85 %

** Includes special appropriations of 3.00% of payroll to be made by the State.*

5. The unfunded actuarial accrued liability amounts to $12,282,482,915 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 10.42%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2011, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. In addition, it is our understanding that beginning with the 2011 fiscal year, there will be no further loans for Stabilization Funding. The following table shows the amounts borrowed, annual payments and remaining balances for the non-single subsidy funding as of June 30, 2012:

Medical Insurance Fund
Stabilization Funding

FISCAL YEAR	LOAN AMOUNT	ANNUAL PAYMENT	BALANCE AS OF JUNE 30, 2012
2008/2009*	$ 8,400,000	$ 1,228,900	$ 6,645,514
2009/2010*	9,200,000	1,345,200	8,037,793
2010/2011*	10,700,000	1,564,500	10,172,724
2011/2012	12,300,000	1,798,700	12,300,000
TOTAL	$ 40,600,000	$ 5,937,300	$ 37,156,031

* *For non-single subsidy funding.*

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 10.42% of payroll for the fiscal year ending June 30, 2015, as shown in the following table:

VALUATION DATE	FISCAL YEAR	INCREASE	CUMULATIVE INCREASE
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46
June 30, 2008	June 30, 2011	1.13	3.59
June 30, 2009	June 30, 2012	2.22	5.81
June 30, 2010	June 30, 2013	1.46	7.27
June 30, 2011	June 30, 2014	0.75	8.02
June 30, 2012	June 30, 2015	2.40	10.42

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,221,928,683 in the unfunded accrued liability from $11,060,554,232 to $12,282,482,915 during the year ending June 30, 2012.

Analysis of Financial Experience
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (8.00%) added to previous unfunded accrued liability	$ 884,844
Expected accrued liability contribution	(377,897)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2011/2012 fiscal year with interest	12,792
Repayment of prior year's MIF Stabilization Funding with interest	(4,304)
Experience:	
Valuation asset growth	740,509
Pensioners' mortality	15,768
Turnover and retirements	34,857
New entrants	53,409
Salary increases	(108,489)
Amendments	0
Assumption changes*	(29,560)
Method changes	0
Total	$ 1,221,929

** Change occurs due to interest smoothing methodology.*

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Members as of June 30, 2012

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	46,094
Terminated employees entitled to benefits but not yet receiving benefits	6,668
Active plan members	75,951
Total	128,713

2. Another such item is the schedule of funding progress as shown below.

Schedule of Funding Progress (Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2007	$ 15,284,955	$ 21,254,974	$ 5,970,019	71.9%	$ 2,975,289	200.7%
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8
6/30/2011 **	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4
6/30/2012	14,691,371	26,973,854	12,282,483	54.5	3,479,567	353.0

* *Funding method Projected Unit Credit prior to 6/30/2011*
Funding method Entry Age Normal 6/30/2011 and after
** *Reflects change in assumptions and methods*

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2012. Additional information as of the latest actuarial valuation follows.

Valuation date	06/30/2012
Actuarial cost method	Entry age
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market

Actuarial Assumptions:

Investment rate of return*
7.50%

Projected salary increases**
4.00 - 8.20%

Cost-of-living adjustments
1.50% Annually

**Includes price inflation at 3.50%*
***Includes wage inflation at 4.00%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Annual Required Contributions	Actual Employer Contributions	Percentage Contributed
2007	$ 494,565,369	$ 434,890,469	88%
2008	563,789,483	466,247,783	83
2009	600,282,735	442,549,935	74
2010	633,938,088	479,805,088	76
2011	678,741,428	1,037,935,993*	153
2012	757,822,190	557,339,552	74

** Includes Pension Obligation Bond proceeds of $465,384,165.*

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2012. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Obligation for Fiscal Year Ending June 30, 2012

(a)	Employer annual required contribution	$ 757,822,190
(b)	Interest on net pension obligation	18,363,874
(c)	Adjustment to annual required contribution	12,271,380
(d)	Annual pension cost: (a) + (b) - (c)	763,914,684
(e)	Employer contributions made for fiscal year ending June 30, 2012	557,339,552
(f)	Increase (decrease) in net pension obligation: (d) - (e)	206,575,132
(g)	Net pension obligation beginning of fiscal year	229,548,428
(h)	Net pension obligation end of fiscal year: (f) + (g)	$ 436,123,560

Trend Information

YEAR ENDING	ANNUAL PENSION COST (APC)	PERCENTAGE OF APC CONTRIBUTED	NET PENSION OBLIGATION (NPO)
June 30, 2010	$ 642,840,908	75%	$ 576,328,182
June 30, 2011	691,156,239	150	229,548,428
June 30, 2012	763,914,684	73	436,123,560

SCHEDULE A
VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2012
(Dollar amount in thousands)

ACTUARIAL LIABILITIES

(1)	Present value of prospective benefits payable in respect of present active members			
	-	Service retirement benefits	$ 14,341,125	
	-	Disability retirement benefits	706,593	
	-	Death and survivor benefits	131,049	
	-	Refunds of member contributions	213,019	
		Total		$ 15,391,786
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits			
	-	Service retirement benefits	$ 15,035,616	
	-	Disability retirement benefits	622,588	
	-	Death and survivor benefits	571,053	
		Total		$ 16,229,257
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits			$ 242,965
(4)	TOTAL ACTUARIAL LIABILITIES			$ 31,864,008

PRESENT AND PROSPECTIVE ASSETS

(5)	Actuarial value of assets	$ 14,691,371
(6)	Present value of total future contributions = (4)-(5)	17,172,637
(7)	Present value of future member contributions and employer normal contributions	4,890,154
(8)	Prospective unfunded accrued liability contributions = (6)-(7)	12,282,483
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS	$ 31,864,008

Schedule A continued ...

Solvency Test

(in millions of dollars)

Fiscal Year Ending	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation of Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2007	$ 2,762.8	$ 12,843.7	$ 5,648.5	$ 15,285.0	100%	97 %	0%
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3	100	91	0
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0
6/30/2012	3,415.2	16,472.2	7,086.4	14,691.4	100	68	0

SCHEDULE B

Development of Actuarial Value of Assets as of June 30, 2012

(1)	Actuarial Value of Assets Beginning of Year		$ 14,908,138,356
(2)	Market Value of Assets End of Year		14,797,120,889
(3)	Market Value of Assets Beginning of Year		15,130,606,279
(4)	Cash Flow		
	a.	Contributions	867,069,476
	b.	Benefit Payments	1,502,488,238
	c.	Administrative Expense	7,762,880
	d.	Net: (4)a - (4)b - (4)c	(643,181,642)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	309,696,252
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,110,676,159
	d.	Amount for Phased-In Recognition: (5)a - (5)c	(800,979,907)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	(160,195,981)
	b.	First Prior Year	363,670,625
	c.	Second Prior Year	133,378,916
	d.	Third Prior Year	(611,235,941)
	e.	Fourth Prior Year	(409,879,449)
	f.	Total Recognized Investment Gain	(684,261,830)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		14,691,371,043
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ 105,749,846
(9)	Rate of Return on Actuarial Value:		2.92%

SCHEDULE C
PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2012	For the Year Ending June 30, 2011
Receipts for the Year		
Contributions		
Members	$ 309,729,924	$ 302,262,819
Employers	557,339,552	1,037,935,993
Total	867,069,476	1,340,198,812
Net Investment Income	309,696,252	2,760,972,224
Total	1,176,765,728	4,101,171,036
Disbursements for the Year		
Benefit Payments	1,482,939,165	1,402,535,713
Refunds to Members	19,549,073	17,325,387
Miscellaneous, including expenses	7,762,880	7,322,739
Total	1,510,251,118	1,427,183,839
Excess of Receipts over Disbursements	(333,485,390)	2,673,987,197
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	15,130,606,279	12,456,619,082
Excess of Receipts over Disbursements	(333,485,390)	2,673,987,197
Asset Balances as of the End of the Year	$ 14,797,120,889	$ 15,130,606,279
Rate of Return	2.4%	21.60%

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE D
SMOOTHED INTEREST RATE
Actual Rate of Return for 5-Year Look Back Period

Fiscal Year Ending June 30	Actual Rate of Return for Fiscal Year
2008	-5.7%
2009	-14.3
2010	13.1
2011	21.6
2012	2.4

SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period beginning on the valuation date. This is the investment rate of return expected to be earned during this period based on the actual rates earned during the five year look back period shown above such that the average rate of return over the combined 30 year period is equivalent to the ultimate investment rate of return (currently 7.50%). On this basis, for the June 30, 2012 valuation, the smoothed interest rate during the 25 year look forward period has been determined to be 8.50%.

ULTIMATE INVESTMENT RATE OF RETURN (DISCOUNT RATE): The assumed investment rate of return used in determining the smoothed interest rate described above. This is also the assumed investment rate of return after the 25 year look forward period and is currently 7.50%.

CORRIDOR AROUND SMOOTHED INTEREST RATE: A corridor of 0.50% around the ultimate investment rate of return is applied in determining the smoothed interest rate.

LIMITED SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period as limited based on the application of the corridor above and used for valuation purposes. Since the smoothed interest rate above is 8.50% the assumed rate for the first 25 years after the valuation date is limited to 8.00% by the corridor.

SCHEDULE E

Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011.

ULTIMATE INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.5% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.60%	4.50%	4.30%	4.20%	4.00%

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

Annual Rate of Death After . . .

Age	Service Retirement MALE	Service Retirement FEMALE	Disability Retirement MALE	Disability Retirement FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability.

VALUATION INTEREST RATE SMOOTHING: The valuation liabilities are calculated using a smoothed interest rate method. The interest rate assumed during the look forward period (currently 25 years from the valuation date) is the investment rate of return expected to be earned during the look forward period based on

the actual rate of return earned during the look back period (currently 5 years) such that the average assumed rate of return over the combined 30-year period is equivalent to the assumed ultimate investment rate of return (currently 7.50%). The interest rate after the 25-year look forward period is the ultimate investment rate of return of 7.50%.

CORRIDOR LIMIT ON INTEREST RATE SMOOTHING: The smoothed interest rate used during the 25-year look forward period is limited to a corridor of 0.50% around the ultimate investment rate of return.

SCHEDULE F

Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (see Schedules C and E for a description of the interest rate used), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE G

Summary of Main System Provisions as Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2012. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1. DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2. BENEFITS

Service Retirement Allowance: Members Before 7/1/2008

Condition for Allowance: Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance: Members On or After 7/1/2008

Condition for Retirement: Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 1.7% of final average salary if service is 10 years or less.

(b) 2.0% of final average salary if service is greater than 10 years and no more than 20 years.

(c) 2.3% of final average salary if service is greater than 20 years but no more than 26 years.

(d) 2.5% of final average salary if service is greater than 26 years but no more than 30 years.

(e) 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

(a) 1.5% of final average salary if service is 10 years or less.

(b) 1.7% of final average salary if service is greater than 10 years and no more than 20 years.

(c) 1.85% of final average salary if service is greater than 20 years but less than 27 years.

(d) 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance: Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance: The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000, to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	1	2	3	4 or more
Annual Allowance	$ 2,400	$ 4,080	$ 4,800	$ 5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.
If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options:

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2	A single life annuity payable during the member's lifetime with payments for 10 years certain.
Option 3	At the death of the member his allowance is continued throughout the life of his beneficiary.
Option 3(a)	At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.
Option 4	At the death of the member one half of his allowance is continued throughout the life of his beneficiary.
Option 4(a)	At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3. CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE H
Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2012
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,365	1							2,366
Total Pay	40,846,000	45,000							40,891,000
Avg. Pay	17,271	45,000							17,283
25 to 29	7,069	1,365							8,434
Total Pay	222,006,000	64,597,000							286,603,000
Avg. Pay	31,406	47,324							33,982
30 to 34	3,713	5,255	908						9,876
Total Pay	109,834,000	260,683,000	50,523,000						421,040,000
Avg. Pay	29,581	49,607	55,642						42,633
35 to 39	2,605	2,485	4,229	628					9,947
Total Pay	70,984,000	124,123,000	248,149,000	40,344,000					483,600,000
Avg. Pay	27,249	49,949	58,678	64,242					48,618
40 to 44	3,521	1,920	2,490	3,371	673	1			11,976
Total Pay	77,925,000	98,559,000	146,062,000	217,339,000	45,705,000	205,000			585,795,000
Avg. Pay	22,131	51,333	58,659	64,473	67,912	205,000			48,914
45 to 49	1,722	1,231	1,454	1,576	2,373	651			9,007
Total Pay	40,472,000	63,140,000	85,800,000	102,363,000	160,069,000	44,672,000			496,516,000
Avg. Pay	23,503	51,292	59,010	64,951	67,454	68,621			55,126
50 to 54	1,483	956	1,148	1,173	1,332	1,704	336		8,132
Total Pay	30,482,000	48,757,000	67,472,000	76,713,000	91,714,000	122,232,000	24,752,000		462,122,000
Avg. Pay	20,554	51,001	58,774	65,399	68,854	71,732	73,667		56,828
55 to 59	2,153	667	955	1,048	1,068	792	444	74	7,201
Total Pay	33,635,000	33,944,000	57,464,000	69,754,000	74,916,000	59,806,000	35,896,000	6,522,000	371,937,000
Avg. Pay	15,622	50,891	60,172	66,559	70,146	75,513	80,847	88,135	51,651
60 to 64	2,643	533	520	596	625	418	114	113	5,562
Total Pay	36,178,000	25,746,000	32,732,000	41,293,000	45,923,000	33,164,000	10,223,000	11,375,000	236,634,000
Avg. Pay	13,688	48,304	62,946	69,284	73,477	79,340	89,675	100,664	42,545
65 & over	2,276	359	181	176	177	155	43	83	3,450
Total Pay	20,242,000	12,464,000	11,931,000	12,303,000	13,673,000	12,141,000	3,921,000	7,754,000	94,429,000
Avg. Pay	8,894	34,719	65,917	69,903	77,249	78,329	91,186	93,422	27,371
Total	29,550	14,772	11,885	8,568	6,248	3,721	937	270	75,951
Total Pay	682,604,000	732,058,000	700,133,000	560,109,000	432,000,000	272,220,000	74,792,000	25,651,000	3,479,567,000
Avg. Pay	23,100	49,557	58,909	65,372	69,142	73,158	79,821	95,004	45,813

Average Age: 43.6 Average Service: 11.0

SCHEDULE H

Table 2: Number of Retired Members and Beneficiaries and their Benefits by Age as of June 30, 2012

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	823	$ 9,726,856	$ 11,819
50 - 54	1,148	40,343,440	35,142
55 - 59	5,076	198,687,289	39,142
60 - 64	10,970	408,588,247	37,246
65 - 69	10,087	350,225,048	34,720
70 - 74	6,879	224,196,637	32,591
75 - 79	4,544	136,335,293	30,003
80 & Over	6,567	157,080,688	23,920
TOTAL	**46,094**	**$ 1,525,183,498**	**$ 33,089**

SCHEDULE H

Table 3: Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

	ADD TO ROLLS		REMOVED FROM ROLLS		ROLLS END OF YEAR			
Fiscal Year	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)	Increase In Annual Allowances	Average Annual Allowance
2003	2,252	$ 86.7	1,015	$ 16.9	34,645	$ 819.0	9.3%	$ 23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4	33,089

Actuarial Section

Report of the Actuary
on the
Annual Valuation
of the
Retiree Medical and Life Insurance Plans

for Fiscal Year ending June 30, 2012

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 10,2012

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require the Teachers' Retirement System of the State of Kentucky (the System) to conduct actuarial valuations of the System's retiree medical and other post employment benefit plans. This report covers the Retiree Medical Plan funded by the Medical Insurance Fund and OPEB liabilities related to the Life Insurance Plan funded by the Life Insurance Fund. Cavanaugh Macdonald Consulting, LLC (CMC) has submitted the results of the annual actuarial valuation prepared as of June 30, 2012. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total annual required contribution of 7.10% of active member payroll for the Medical Insurance Fund payable for the fiscal year ending June 30, 2015 is required to support the benefits of the Kentucky Employees' Health Plan (KEHP) and the Medicare Eligible Health Plan (MEHP). Of this amount, 2.27% of payroll is estimated to be paid by University members and 3.00% of payroll is estimated to be paid by all other members, leaving 4.83% and 4.10% respectively, as the remaining annual required contribution. This annual required contribution reflects the assets currently held in the Medical Insurance Fund and an 8.00% discount rate for valuing liabilities.

Since the previous valuation, the assumed rates of participation of future retirees in the Retiree Medical Plan have been adjusted to reflect experience.

The Life Insurance Plan valuation indicates a total annual required contribution of 0.03% of active member payroll payable for the fiscal year ending June 30, 2015 is required to support the benefits of the Life Insurance Fund. As contributions to the Life Insurance Fund meet the required levels, the discount rate for valuing liabilities is 7.50%.

The promised benefits of the Retiree Medical and Life Insurance Plans are included in the actuarially calculated contribution rates which are developed using the entry age normal actuarial cost method. The market value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in aggregate reasonably related to the experience under the Retiree Medical and Life Insurance Plans and to reasonable expectations of anticipated experience under the Retiree Medical and Life Insurance Plans and meet the parameters for the disclosures under GASB 43 and 45.

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CMC has prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Section VII shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Retiree Medical and Life Insurance Plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, if the State contributions to the Medical Insurance Fund are increased to the planned levels, the Retiree Medical Plan will begin to operate in a more actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the Retiree Medical Plan will improve.

Respectfully submitted,

Eric Gary, FSA, FCA, MAAA
Senior Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Senior Actuary

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Report of Actuary on the on the Annual Valuation of the Retiree Medical and Life Insurance Plans
Prepared as of June 30, 2012

Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

~ Medical Insurance Fund ~

Valuation Date	June 30, 2012	June 30, 2011
Number of active members	75,951	76,349
Annual salaries	$ 3,479,567	$ 3,451,756
Number of vested former members	3,641	3,485
Number of annuitants in medical plans	36,000	35,033
Number of spouses and beneficiaries in medical plans*	7,008	6,922
Total	43,008	41,955
Assets:		
Market value	$ 338,746	$ 294,819
Unfunded actuarial accrued liability	$ 3,255,794	$ 3,128,330
Amortization period (years)	30	30
Discount rate	8.00%	8.00%

**Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. 100% of the full contribution for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.*

Medical Insurance Fund Contribution Rates for University Members

Valuation Date For Fiscal Year Ending	**June 30, 2012** June 30, 2015		**June 30, 2011** June 30, 2014	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.99 %	1.99 %	2.00 %	2.00 %
Accrued liability	5.11	5.11	4.95	4.95
Total	7.10 %	7.10 %	6.95 %	6.95 %
Member	2.27 %	2.27 %	1.75 %	1.75 %
Employer (ARC)	2.27	1.27	1.75	0.75
State (ARC)	2.56	3.56	3.45	4.45
Total	7.10 %	7.10 %	6.95 %	6.95 %

Medical Insurance Fund Contribution Rates for School District Employees (Non-Federal)

Valuation Date For Fiscal Year Ending	**June 30, 2012** June 30, 2015		**June 30, 2011** June 30, 2014	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.99 %	1.99 %	2.00 %	2.00 %
Accrued liability	5.11	5.11	4.95	4.95
Total	7.10 %	7.10 %	6.95 %	6.95 %
Member	3.00 %	3.00 %	2.25 %	2.25 %
Employer (ARC)	2.25	2.25	1.50	1.50
State (ARC)	1.85	1.85	3.20	3.20
Total	7.10 %	7.10 %	6.95 %	6.95 %

Medical Insurance Fund Contribution Rates for Other Employees

Valuation Date	June 30, 2012		June 30, 2011	
For Fiscal Year Ending	June 30, 2015		June 30, 2014	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.99 %	1.99 %	2.00 %	2.00 %
Accrued liability	5.11	5.11	4.95	4.95
Total	7.10 %	7.10 %	6.95 %	6.95 %
Member	3.00 %	3.00 %	2.25 %	2.25 %
Employer (ARC)	3.00	2.00	2.25	1.25
State (ARC)	1.10	2.10	2.45	3.45
Total	7.10 %	7.10 %	6.95 %	6.95 %

~ Life Insurance Fund ~

(dollar amounts are $1,000's)

Valuation Date	June 30, 2012	June 30, 2011
Number of active members	75,951	76,349
Annual salaries	$ 3,479,567	$ 3,451,756
Number of vested former members	3,641	3,485
Number of retirees in Life Insurance Plan	42,602	41,118
Assets:		
Market value	$ 92,241	$ 88,527
Unfunded actuarial accrued liability*	$ (843)	$ (439)
Amortization period (years)	30	30
Discount rate	7.50%	7.50 %

Contribution for fiscal year ending	June 30, 2015	June 30, 2014
Normal	0.03%	0.03%
Accrued liability	0.00	0.00
Total	0.03%	0.03%

** Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45.*

2. The valuation indicates combined member, employer, and State contributions of 7.10% of active member payroll would be sufficient to support the current benefits of the Retiree Medical Plan and State contributions of 0.03% of active member payroll would be sufficient to support the current benefits of the Life Insurance Plan. Comments on the valuation results as of June 30, 2012 are given in Section IV and further discussion of the contribution levels is set out in Sections VI and VII.

3. Since the previous valuation an assumption change regarding future retiree participation was made to reflect fewer retirees electing coverage under the KEHP or the MEHP if the maximum benefit is not payable upon retirement. Schedule C of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

4. There were no changes in benefit provisions since the last valuation. However, the health insurance plan designs have changed for eligible retirees. The changes are summarized below.

    - Plan design changes are to be implemented for Plan Year 2013 for the KEHP, the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky.
    - The open enrollment for the MEHP for an effective date of January 1, 2013 is the last open enrollment opportunity for a spouse who is currently waiving coverage under the MEHP. After January 1, 2013, an MEHP spouse must have one of six qualifying events occur to enroll in the MEHP.
    - In 2013, the Kentucky Retirement Systems' (KRS) Medicare eligible premium is expected to be less than the MEHP premium. KRS will only allow a bill for a portion of the lower KRS premium, creating a discrepancy in premiums for 2013. As such, reciprocity retirees with less than 20 years of KTRS service (or less than 27 KTRS years for retirees who entered KTRS after 2002) will be responsible for the balance of the premium in addition to any other portion of the premium for which he/she is responsible. As the discrepancy is assumed to occur over a short period and impact a small number of participants, the impact to the Retiree Medical Plan's liability is assumed to be de minimis.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the medical and life insurance plans for use as a basis of the valuation were furnished by the System's office. The following tables summarize the membership of the System as of June 30, 2012, upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members as of June 30, 2012

Group	Number	Annual Salaries ($1,000's)
Full Time	58,874	$ 3,361,793
Part Time	17,007	117,774
Total	75,951	$ 3,479,567

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following tables show the number of retired members and their beneficiaries receiving health care as of the valuation date as well as average ages.

Retirees Receiving Health Benefits as of June 30, 2012

	Under Age 65	Age 65 and Over	TOTAL
Number	14,952	21,048	36,000
Average Age	60.3	74.4	68.6

Spouses Receiving Health Benefits as of June 30, 2012

Number	3,273	3,735	7,008
Average Age	59.1	75.6	67.9

3. The valuation also includes 3,641 deferred vested members eligible for health care at age 60.

Section III - ASSETS

1. As of June 30, 2012 the market value of Medical Insurance Fund assets for valuation purposes held by the Retiree Medical Plan amounted to $338,746,553 and the market value of Life Insurance Fund assets for valuation purposes held by the Life Insurance Plan amounted to $92,241,246.

2. Schedule B shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Medical Insurance Fund and the Life Insurance Fund.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule C.

2. The valuation shows the Retiree Medical Plan has an actuarial accrued liability of $1,547,871,105 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $13,409,898. The liability on account of benefits payable to retirees and covered spouses amounts to $2,033,259,311. The total actuarial accrued liability of the Retiree Medical Plan amounts to $3,594,540,314. Against these liabilities, the Retiree Medical Plan has present assets for valuation purposes of $338,746,553. When this amount is deducted from the actuarial accrued liability of $3,594,540,314 there remains $3,255,793,761 as the unfunded actuarial accrued liability for the Retiree Medical Plan.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the Retiree Medical Plan is determined to be $69,338,237, or 1.99% of payroll.

4. The valuation shows that the Life Insurance Plan has an actuarial accrued liability of $16,160,647 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $1,726,221. The liability on account of benefits payable to retirees amounts to $73,511,496. The total actuarial accrued liability of the Life Insurance Plan amounts to $91,398,364. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for active and post employment purposes. As this could be administratively burdensome and, as death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45. Against these liabilities, the Life Insurance Plan has present assets for valuation purposes of $92,241,246. When this amount is deducted from the actuarial accrued liability of $91,398,364 there remains ($842,882) as the unfunded actuarial accrued liability for the life insurance plan.

5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $1,065,834, or 0.03% of payroll.

Section V - DERIVATION OF EXPERIENCE GAINS AND LOSSES

1. Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2012 is shown below ($1,000's).

	EXPERIENCE GAIN/(LOSS) OF THE:	MEDICAL INSURANCE FUND	LIFE INSURANCE FUND
(1)	UAAL* as of 6/30/2011	$ 3,128,330	$ (439)
(2)	Normal cost from last valuation	68,938	1,071
(3)	Expected employer contributions	239,910	1,048
(4)	Interest accrual: [(1) + (2) - (3)] x interest**	236,589	(31)
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	3,193,947	(447)
(6)	Change due to plan amendments	0	0
(7)	Change due to new actuarial assumptions	(11,834)	0
(8)	Change due to claims experience	(13,009)	0
(9)	Expected UAAL after changes: (5) + (6) + (7) + (8)	3,169,104	(447)
(10)	Actual UAAL as of 6/30/2012	3,255,794	(843)
(11)	Total gain/(loss): (9) - (10)	(86,690)	396
	(a) Contribution shortfall and investment loss	(52,060)	574
	(b) Experience gain/(loss) (11) - (11a)	(34,630)	(178)
(12)	Accrued liabilities as of 6/30/2011	$ 3,423,148	$ 88,088
(13)	Experience gain/(loss) as percent of actuarial accrued liabilities at start of year (11b) / (12)	(1.0%)	(0.2%)

* *Unfunded Actuarial Accrued Liability*
** *Interest is 8.0% for the Medical Insurance Fund and 7.5% for the Life Insurance Fund*

Section VI - CONTRIBUTIONS PAYABLE UNDER THE PLANS

1. Sections 161.420 and 161.550 of the Kentucky Revised Statutes provide the amounts employers and the State are required to contribute to the Medical Insurance Fund. These contribution amounts vary by fiscal year, date of membership, and employee type.

Employer Percentage of Payroll Contributions Made to Medical Insurance Fund

Fiscal Year Ending	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
2013	1.430%	0.750%	1.000%	1.000%	1.750%	0.750%
2014	1.750	0.750	1.500	1.500	2.250	1.250
2015	2.270	1.270	2.250	2.250	3.000	2.000
2016 and Later	2.775	1.775	3.000	3.000	3.750	2.750

* *In addition to the amounts contributed by School Districts on behalf of Non-Federal employees, the State contributes 0.75%.*

For the fiscal year ending June 30, 2015, member contributions will be 2.27% for University employees and 3.00% for all other members. CMC recommends employer and State contributions increase to the required amount of 4.83% of payroll for University employees and 4.10% of payroll for all other members. The State is scheduled to contribute 0.03% of salary to the Life Insurance Fund for the fiscal year ending June 30, 2014. CMC's valuation indicates a contribution of 0.03% for the fiscal year ending June 30, 2015 is required to sufficiently support the benefits of the Life Insurance Plan.

REQUIRED CONTRIBUTION RATES
For Fiscal Year Ending June 30, 2015
Medical Insurance Fund

Normal	1.99%
Accrued liability	5.11
Total	7.10%

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
Member	2.27%	2.27%	3.00%	3.00%	3.00%	3.00%
Employer (ARC)	2.27	1.27	2.25	2.25	3.00	2.00
State (ARC)	2.56	3.56	1.85	1.85	1.10	2.10
Total	7.10%	7.10%	7.10%	7.10%	7.10%	7.10%

Life Insurance Fund

Normal	0.03%
Accrued liability	0.00
Total	0.03%
Member	0.00%
State (ARC)	0.03
Total	0.03%

2. The valuation indicates that a total normal contribution of 1.99% of payroll is required to meet the cost of benefits currently accruing under the Retiree Medical Plan and 0.03% of payroll is required to meet the cost of benefits currently accruing under the Life Insurance Plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 5.11% of payroll for the Retiree Medical Plan and 0.00% of payroll for the Life Insurance Plan.

3. The unfunded actuarial accrued liability amounts to $3,255,793,761 for the Retiree Medical Plan and ($842,882) for the Life Insurance Plan as of the valuation date. An accrued liability contribution of 5.11% of payroll for the Retiree Medical Plan and 0.00% of payroll for the Life Insurance Plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VII - COMMENTS ON LEVEL OF FUNDING

1. The System's monthly contribution for retirees who opt into the Retiree Medical Plan is based upon date of hire, date of attaining age 65, and years of service at retirement. Additionally, beneficiary contributions may vary by date of hire, date of attaining age 65, years of service at retirement, plan election, Medicare eligibility, and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Current employer and State contributions have been determined to be insufficient to fund the cost of the benefits to be provided. Benefits for university, school district (non-Federal), and other members are identical, although active employee contributions collected from university, school district (non-Federal), and other members differ. A listing of active member Retiree Medical Plan contributions by fiscal year, date of membership, and employer type is provided in Schedule D.

2. The valuation indicates an increase in scheduled contributions is required to fund the Retiree Medical Plan in an actuarially sound manner and to ensure the future solvency of the Medical Insurance Fund. For University employees a member contribution of 2.27% of payroll together with employer and State contributions of 4.83% of payroll are required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. For the remaining membership, a member contribution of 3.00% of payroll together with employer and State contributions of 4.10% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the medical and life insurance plans and the employer.

Number of Active and Retired Members in Medical Plan as of June 30, 2012

GROUP	NUMBER
Retirees currently receiving health benefits	36,000
Spouses of retirees currently receiving health benefits	7,008
Terminated employees entitled to benefits but not yet receiving benefits	3,641
Active plan members	75,951
Total	**122,600**

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2012

GROUP	NUMBER
Retirees	42,602
Terminated employees	3,641
Active plan members	75,951
Total	**122,194**

Schedule of Funding Progress
Medical Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL)	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2007[1]	$ 140,772	$ 5,928,761	$ 5,787,989	2.4%	$ 2,975,289	194.5%
6/30/2008	185,883	6,434,522	6,248,639	2.9	3,190,332	195.9
6/30/2009[2]	229,103	6,454,733	6,225,630	3.5	3,253,077	191.4
6/30/2010[3]	241,224	3,206,806	2,965,582	7.5	3,321,614	89.3
6/30/2011[4]	294,819	3,423,149	3,128,330	8.6	3,451,756	90.6
6/30/2012	338,746	3,594,540	3,255,794	9.4	3,479,567	93.6

[1] *Reflects change in discount rate to 4.5% and updating medical trend.*
[2] *Reflects change in participation assumptions and plan design.*
[3] *Reflects change in discount rate to 8.0%, change in plan design and updating medical trend.*
[4] *Reflects change in decrement assumptions and updating medical trend.*

Schedule of Funding Progress
Life Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL)	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2007	$ 71,426	$ 82,722	$ 11,296	86.3%	$ 2,975,289	0.38%
6/30/2008	77,658	84,265	6,607	92.2	3,190,332	0.21
6/30/2009	84,703	90,334	5,631	93.8	3,253,077	0.17
6/30/2010	87,905	92,091	4,186	95.5	3,321,614	0.13
6/30/2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)
6/30/2012	92,241	91,398	(843)	100.9	3,479,567	(0.02)

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2012. Additional information as of the latest actuarial valuation follows.

Valuation Date	06/30/2012
Actuarial cost method	Entry age
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	Market Value of Assets

Actuarial Assumptions:
Investment Rate of Return*
8.00% for Medical &
7.50% for Life Insurance
Medical Trend Assumption (Pre-Medicare)**
9.5% - 5.0%

Medical Trend Assumption (Post-Medicare)
7.5% - 5.0%
Year of Ultimate Trend Rate
2019

* *Includes Inflation at 3.50%.*
** *Alternate trend rates were used for Medicare Part B premiums and are disclosed in Schedule C.*

Schedule of Employer Contributions
Medical Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	RDS CONTRIBUTION	TOTAL CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(A)	(B)	(C)	(B) + (C)	[(B) + (C)]/(A)
6/30/2007	$ 231,473,321	$ 113,258,761	$ 10,312,361	$ 123,571,122	53.4%
6/30/2008	395,282,164	148,954,644	11,911,565	160,866,209	40.7
6/30/2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1
6/30/2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9
6/30/2011	477,723,070	188,453,929	280,585	188,734,514	39.5
6/30/2012	470,217,067	177,450,206	297,639	177,747,845	37.8

Schedule of Employer Contributions
Life Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(A)	(B)	(B) / (A)
6/30/2007	$ 1,785,173	$ 5,022,137	281.3%
6/30/2008	1,914,199	5,411,249	282.7
6/30/2009	1,498,076	5,455,473	364.2
6/30/2010	1,992,969	1,966,826	98.7
6/30/2011	1,725,878	1,668,822	96.7
6/30/2012	1,732,831	1,684,711	97.2

3. Following is the calculation of the Annual OPEB Cost (AOC) and the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2012. As the Retiree Medical and Life Insurance Plans are cost-sharing multiple-employer plans, GASB Statement 45 does not require the participating employers to disclose this information.

Annual OPEB Cost and Net OPEB Obligation
for the Medical Insurance Fund for Fiscal Year Ending June 30, 2012

(a) Employer Annual Required Contribution	$ 470,217,067
(b) Interest on Net OPEB Obligation	49,992,241
(c) Adjustment to Annual Required Contribution	39,664,089
(d) Annual OPEB Cost: (a) + (b) - (c)	480,545,219
(e) Employer Contributions for Fiscal Year 2012	177,747,845
(f) Increase in Net OPEB Obligation: (d) - (e)	302,797,374
(g) Net OPEB Obligation at beginning of Fiscal Year	1,110,938,699
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ 1,413,736,073

Trend Information for the Medical Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$ 395,282,164	40.7%	$ 234,415,955
6/30/2009	469,492,218	37.9	525,816,306
6/30/2010	461,942,516	37.5	814,379,040
6/30/2011	485,294,173	38.9	1,110,938,699
6/30/2012	480,545,219	37.0	1,413,736,073

Annual OPEB Cost and Net OPEB Obligation for the Life Insurance Fund for Fiscal year Ending June 30, 2012

(a) Employer Annual Required Contribution	$ 1,732,831
(b) Interest on Net OPEB Obligation	(585,529)
(c) Adjustment to Annual Required Contribution	(403,763)
(d) Annual OPEB Cost: (a) + (b) - (c)	1,551,065
(e) Employer contributions for Fiscal Year 2012	1,684,711
(f) Increase in Net OPEB Obligation: (d) - (e)	(133,646)
(g) Net OPEB Obligation at beginning of Fiscal Year	(7,807,049)
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ (7,940,695)

Trend Information for the Life Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$ 1,914,199	282.7%	$ (3,497,050)
6/30/2009	1,416,656	385.1	(7,535,867)
6/30/2010	1,817,516	108.2	(7,685,177)
6/30/2011	1,546,950	107.9	(7,807,049)
6/30/2012	1,551,065	108.6	(7,940,695)

SCHEDULE A
RESULTS OF THE VALUATION AS OF JUNE 30, 2012
(Dollar amounts in thousands)

		Medical Insurance Fund	Life Insurance Fund
PAYROLL		$ 3,479,567	$ 3,479,567
ACTUARIAL ACCRUED LIABILITY			
Present value of prospective benefits payable in respect of:			
(a)	Present active members	$ 1,547,871	$ 16,161
(b)	Present terminated vested members	13,410	1,726
(c)	Present retired members and covered spouses	2,033,259	73,511
(d)	Total actuarial accrued liability	$ 3,594,540	$ 91,398
PRESENT ASSETS FOR VALUATION PURPOSES		338,746	92,241
UNFUNDED ACTUARIAL ACCRUED LIABILITY		$ 3,255,794	$ (843)
CONTRIBUTIONS FOR FISCAL YEAR ENDING JUNE 30, 2014:			
	Normal	1.99%	0.03%
	Accrued Liability	5.11	0.00
	Total	7.10%	0.03%
	Member	2.96%	0.00%
	Employer (ARC)	2.24	0.00
	State (ARC)	1.90	0.03
	Total	7.10%	0.03%

MEDICAL INSURANCE FUND
Solvency Test
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2007	n/a	$ 2,816.3	$ 3,112.5	$ 140.8	n/a	5%	0%
6/30/2008	n/a	3,084.4	3,350.2	185.9	n/a	6	0
6/30/2009	n/a	3,203.7	3,251.0	229.1	n/a	7	0
6/30/2010	n/a	1,948.6	1,258.2	241.2	n/a	12	0
6/30/2011	n/a	1,910.1	1,513.1	294.8	n/a	15	0
6/30/2012	n/a	2,046.7	1,547.9	338.7	n/a	17	0

LIFE INSURANCE FUND
Solvency Test
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2007	n/a	$ 64.8	$ 18.0	$ 71.4	n/a	100%	37%
6/30/2008	n/a	66.9	17.4	77.7	n/a	100	62
6/30/2009	n/a	72.0	18.4	84.7	n/a	100	69
6/30/2010	n/a	74.4	17.7	87.9	n/a	100	76
6/30/2011	n/a	72.2	15.9	88.5	n/a	100	103
6/30/2012	n/a	75.2	16.2	92.2	n/a	100	105

SCHEDULE B
MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2012	June 30, 2011
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 44,243,026	$ 35,472,931
Payment by Retired Members	56,103,044	48,674,406
Total Members	100,346,070	84,147,337
Employer/State Statutory Contributions	39,166,623	32,455,802
State Statutory - Transition Fund/KEHP	122,500,000	145,900,000
General Fund Surplus	0	0
Allotment from Pension Fund	12,300,000	9,885,400
TOTAL EMPLOYER	173,966,623	188,241,202
GRAND TOTAL	274,312,693	273,388,539
Recovery Income	3,483,583	212,727
Medicare D Receipts	297,639	280,585
Net Investment Income	(3,989,202)	8,334,296
TOTAL	274,104,713	281,216,147
DISBURSEMENTS FOR THE YEAR		
Refunds to Members	0	0
Administrative Expense	1,201,629	1,186,029
Medical Insurance Expense	228,975,126	226,435,363
TOTAL	230,176,755	227,621,392
Excess of Receipts over Disbursements	43,927,958	53,594,755
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	294,818,595	241,223,840
Excess of Receipts over Disbursements	43,927,958	53,594,755
Asset Balance as of the End of the Year	$ 338,746,553	$ 294,818,595

SCHEDULE B (continued)
LIFE INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2012	For the Year Ending June 30, 2011
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 0	$ 0
State	1,684,711	1,668,822
TOTAL	1,684,711	1,668,822
Net Investment Income	6,450,022	3,094,776
TOTAL	8,134,733	4,763,598
DISBURSEMENTS FOR THE YEAR		
Benefit Payments	4,397,281	4,120,000
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	22,886	21,511
TOTAL	4,420,167	4,141,511
EXCESS OF RECEIPTS OVER DISBURSEMENTS	3,714,566	622,087
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	88,526,680	87,904,593
Excess of Receipts over Disbursements	3,714,566	622,087
Asset Balance as of the End of the Year	$ 92,241,246	$ 88,526,680

SCHEDULE C
Statement of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, termination, and salary increases used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011. The rates of future participation, health care cost trend rates, and expected plan costs were determined by the actuary based on plan experience.

Valuation Date: June 30, 2012

Discount Rate: 8.0% per annum, compounded annually for medical plans.
7.5% per annum, compounded annually for life insurance plan.

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

FISCAL YEAR ENDED	MEDICARE PART B TREND	UNDER AGE 65 TREND	AGE 65 & OVER TREND
2013	5.0%	9.5%	7.5%
2014	6.9	8.5	7.0
2015	4.4	7.5	6.5
2016	4.3	6.5	6.0
2017	5.1	6.0	5.5
2018	5.7	5.5	5.0
2019	6.0	5.0	5.0
2020	5.8	5.0	5.0
2021	5.5	5.0	5.0
2022 and beyond	5.0	5.0	5.0

Age Related Morbidity: For retirees age 65 and older, per capita costs are adjusted to reflect expected medical cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65 - 69	3.0 %
70 - 74	2.5
75 - 79	2.0
80 - 84	1.0
85 - 89	0.5
90 and over	0.0

For the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP.

Retiree Medical Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that KTRS pays as the full contribution amount. For retirees ages 65 and older, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

Under Age65 (KEHP) Full Costs as of January 1, 2013

Fiscal Year	Commonwealth Standard PPO	Commonwealth Common choice	Commonwealth Optimum PPO
Single	$ 506.06	$ 650.22	$ 675.34
Parent Plus	791.54	961.42	961.84
Couple	1,177.80	1,457.90	1,476.00
Family	1,314.12	1,613.74	1,642.78

Average Monthly KTRS Full Costs & Contributions

Calendar Year	Under Age 65 (KEHP) Contributions	Age 65 & Over (MEHP) Full Costs	Age 65 & OVer (MEHP) Contributions
2004	$ 293	$ 274	$ 274
2005	412	288	288
2006	461	315	315
2007	458	283	283
2008	484	278	278
2009	545	301[1]	285
2010	594	373[1]	342
2011	626	289	289
2012	622	270[2]	270
2013	635	294[2]	290

[1] Under GASB 43 and 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy cannot be taken into account in the gross cost calculations.

[2] 2,000 current benefit recipients are not eligible for premium-free Medicare Part A benefits. For these individuals, the full cost of coverage is, on average, $650 per month. It is assumed 17% of current benefit recipients under the age of 65 who were hired prior to 4/1/1986 and left covered employment prior to 4/1/1996 will not be eligible for premium-free Medicare Part A benefits. All active members are assumed to have begun contributing to Medicare as of 4/1/1986 and are assumed eligible for premium-free Medicare Part A benefits.

Anticipated Future Medical Plan Elections: The assumed annual rates of member plan elections were based upon current retiree under age 65 plan elections, and are as follows:

Commonwealth Standard PPO	Commonwealth Capitol Choice	Commonwealth Optimum PPO
4%	18%	78%

Anticipated Member Medical Plan Participation: Representative values of the assumed annual rates of medical plan participation are as follows:

Member Participation*

Years of Service	Hired before 7/1/2002 (age 65 on 12/31/2004 or earlier)	Hired Before 7/1/2002 (age 65 on 1/1/2005 or later)	Hired after 6/30/2002 and hired before 7/1/2008	Hired 7/1/2008 and later
5-9.99	63.0%	23.0%	9.0%	Not Eligible
10-14.99	72.0	45.0	23.0	Not Eligible
15-19.99	81.0	68.0	41.0	41.0%
20-24.99	93.0	93.0	59.0	59.0
25-25.99	93.0	93.0	81.0	81.0
26-26.99	93.0	93.0	86.0	86.0
27 or more	93.0	93.0	93.0	93.0

** Members retiring from deferred vested status are assumed to participate at 50% of the corresponding rate listed.*

Spouse Coverage in Medical Plans: Used actual census data and current plan elections for spouses of current retirees. For spouses of future retirees, assumed 20% of future retirees will cover spouses, with females 3 years younger than males.

Disabled Dependent Children: The liability associated with disabled dependent children was determined to be de minimis and was therefore excluded from this valuation.

Reciprocity Service: In 2013, the Kentucky Retirement Systems' (KRS) Medicare eligible premium is expected to be less than the MEHP premium. KRS will only allow a bill for a portion of the lower KRS premium, creating a discrepancy in premiums for 2013. As such, reciprocity retirees with less than 20 years of KTRS service (or less than 27 KTRS years for retirees who entered KTRS after 2002) will be responsible for the balance of the premium in addition to any other portion of the premium for which he/she is responsible. As the discrepancy is assumed to occur over a short period and impact a small number of participants, the impact to the Retiree Medical Plan's liability is assumed to be de minimis.

Withdrawal Assumption: It is assumed 30% of the vested members who terminate elect to withdraw their contributions while the remaining 70% elect to leave their contributions in the plan in order to be eligible for a benefit at their retirement date.

Payroll Growth: 4.00% per annum, compounded annually.

Price Inflation: 3.5% per annum, compounded annually.

Asset Valuation Method: Market Value as provided by KTRS. Return on assets assumed to be 8.00% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

				WITHDRAWAL			RETIREMENT	
				SERVICE				
AGE	SALARY*	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service**
20	8.10%	0.012%	0.01%	9.00%				
25	7.20	0.015	0.01	9.00	3.00%			
30	6.20	0.020	0.02	9.00	3.00	3.00%		
35	5.50	0.035	0.05	10.00	3.25	1.75		
40	5.00	0.046	0.09	10.00	4.00	1.40		
45	4.60	0.058	0.18	11.00	4.00	1.50		17.0%
50	4.50	0.074	0.33	9.00	4.00	2.00		17.0
55	4.30	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	4.20	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	4.10	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	4.00	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	4.00	0.821	0.70	0.00	0.00	0.00	100.0	100.0

** Includes inflation at 3.5% per annum*
*** Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	SALARY*	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service**
20	8.10%	0.007%	0.01%	7.00%				
25	7.20	0.008	0.02	8.50	4.00%			
30	6.20	0.010	0.04	9.00	4.00	1.65%		
35	5.50	0.017	0.08	9.00	3.75	1.85		
40	5.00	0.024	0.14	8.50	3.25	1.50		
45	4.60	0.037	0.32	7.50	3.25	1.25		15.0%
50	4.50	0.055	0.42	9.50	3.50	1.75		15.0
55	4.30	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	4.20	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	4.10	0.263	0.85	11.00	4.00	2.00	12.5	25.0
65	4.00	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	4.00	0.672	0.85	0.00	0.00	0.00	100.0	100.0

** Includes inflation at 3.5% per annum*
*** Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

Actuarial Cost Method: The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his/her age, service, and gender. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and deferred vested members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his/her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his/her behalf.

The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE D
Summary of Main Plan Provisions as Interpreted for Valuation Purposes

ELIGIBILITY FOR ACCESS TO RETIREE MEDICAL COVERAGE:

Service Retirement: For employees hired prior to July 1, 2008, retiree medical coverage eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. For employees hired on or after July 1, 2008, employees may retire after the completion of 27 years of service, the attainment of age 55 and 10 years of service, or the attainment of age 60 and 5 years of service, but must complete a minimum of 15 years of service to be eligible for Retiree Medical Plan coverage.

Disability Retirement: Disabled employees with at least 5 years of service, who are totally and permanently incapable of being employed as a teacher, are eligible for Retiree Medical Plan coverage.

Survivors: Spouses of employees who die in service while eligible to retire, as well as survivors of service and disabled retirees, are eligible for Retiree Medical Plan coverage.

Termination: For employees hired prior to July 1, 2008 and who terminated with at least 5 years of service, Retiree Medical Plan coverage eligibility is attained at age 60. For employees hired on or after July 1, 2008 and who terminated with at least 15 years of service, Retiree Medical Plan coverage eligibility is attained at age 60.

COVERED MEMBER MEDICAL PLAN CONTRIBUTIONS:

Under Age 65 Retiree Shared Resonsibility Contribution: Effective July 1, 2010, retirees under the age of 65 began a three-year phase-in of the Shared Responsibility Contribution. This contribution reduces the applicable amount of the full contribution provided by the System to retirees, by adjusting the Shared Responsibility Contribution amount by 100% less the appropriate percentage from the Retiree Percentage Contribution table on the following page. Effective July 1, 2012, the full Shared Responsibility Contribution equals the Standard Medicare Part B premium paid by retirees ages 65 and older.

Under Age 65 Shared Responsibility Contribution Timeline

Effective Date	Medicare Part B Monthly Cost	Formula	Shared Responsibility Contribution
July 1, 2010	$ 110.50	(1/3 x $110.50)	$ 37.00
January 1, 2011	115.40	(1/3 x 115.40)	39.00
July 1, 2011	115.40	(2/3 x 115.40)	77.00
January 1, 2012	99.90	(2/3 x 99.90)	66.00
July 1, 2012	99.90	99.90	99.90
January 1, 2013	104.90	104.90	104.90

Retiree Years of Service Percentage Contribution: Retirees contribute the following percentages based on years of service at retirement, which are then applied to the Retiree Contribution Rate Basis:

Retiree Percentage Contribution

Years of Service	Hired before 7/1/2002 (age 65 on 12/31/2004 or earlier)	Hired before 7/1/2002 (age 65 on 1/1/2005 or earlier)	Hired after 6/30/2002 and before 7/1/2008	Hired after 7/1/2008 or later
5 - 9.99	30%	75%	90%	Not Eligible
10 - 14.99	20	50	75	Not Eligible
15 - 19.99	10	25	55	55%
20 - 24.99	0	0	35	35
25 - 25.99	0	0	10	10
26 - 26.99	0	0	5	5
27 or more	0	0	0	0

Retiree Contribution Rate Basis
Effective January 1, 2013
Under Age 65 (KEHP)

Tier Elected	Commonwealth Standard PPO	Commonwealth Capitol Choice	Commonwealth Optimum PPO	Age 65 & Older (MEHP)
Single	$506.06	$612.94	$612.58	$290.00
Parent Plus	612.94	612.94	612.94	290.00
Couple	612.94	612.94	612.94	290.00
Family	612.94	612.94	612.94	290.00

Under Age 65 Retiree Plan Cost Contribution: A contribution according to the table below is required to be paid by retirees under the age of 65 based upon the plan elected:

Under Age 65 Plan Cost Contribution*
Effective January 1, 2013

Tier Elected	Commonwealth Standard PPO	Commonwealth Capitol Choice	Commonwealth Optimum PPO
Single	$ 0.00	$ 37.28	$ 62.76
Parent Plus **	178.60	348.48	348.90
Couple **	564.86	844.96	863.06
Family **	701.18	1,000.80	1,029.84

* *Does not include the additional contribution required to be paid by retirees under the age of 65 who smoke, which also varies on the plan elected.*

** *Contribution for Parent Plus, Couple, and Family tiers is offset by the State Under Age 65 Spouse/Dependent Subsidy*

The Under Age 65 Plan Cost Contribution is reduced by subtracting the State Under Age 65 Spouse/ Dependent Subsidy multiplied by 100% less the appropriate percentage in the Retiree Percentage Contribution table on the previous page, from the Under Age 65 Plan Cost Contribution.

State Under Age 65 Spouse/Dependent Subsidy
Effective January 1, 2013

Tier Elected	Commonwealth Standard PPO	Commonwealth Capitol Choice	Commonwealth Optimum PPO
Parent Plus	$ 158.60	$ 169.48	$ 128.90
Couple	266.86	326.96	317.06
Family	391.18	390.80	379.84

Spouse Contributions: 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. Spouses of active members who died while eligible to retire prior to July 1, 2002, are provided the same subsidy by KTRS that would have been provided to the retiree for the lifetime of the spouse, or until remarriage. Spouses of active members who die while eligible to retire July 1, 2002, and later, pay 100% of the full contribution.

Surviving Spouse Contribution
Effective January 1, 2013
Under Age 65 (KEHP)

Tier Elected	Commonwealth Standard PPO	Commonwealth Capitol Choice	Commonwealth Optimum PPO	Ages 65 & Older (MEHP)
Single Spouse	$ 511.76	$ 655.92	$ 681.04	$ 290.00

System Retiree Medical Plan Contributions: The System Contribution Rate Basis is determined annually by KTRS; and the full cost is projected based on historical claims data. For retirees, the following percentages are based on years of service at retirement and are then applied to the System Contribution Rate Basis:

Percentage of System Contribution Rate Provided to Retirees

Years of Service	Hired before 7/1/2002 (age 65 on 12/31/2004 or earlier)	Hired before 7/1/2002 (age 65 on 1/1/2005 or earlier)	Hired after 6/30/2002 and before 7/1/2008	Hired after 7/1/2008 or later
5 - 9.99	70%	25%	10%	Not Eligible
10 - 14.99	80	50	25	Not Eligible
15 - 19.99	90	75	45	45%
20 - 24.99	100	100	65	65
25 - 25.99	100	100	90	90
26 - 26.99	100	100	95	95
27 or more	100	100	100	100

System Contribution Rate Basis
Effective January 1, 2013
Under Age 65 (KEHP)

Tier Elected	Commonwealth Standard PPO	Commonwealth Capitol Choice	Commonwealth Optimum PPO	Age 65 & Older (MEHP)
Single	$ 506.06	$ 612.94	$ 612.58	$ 290.00
Parent Plus	612.94	612.94	612.94	290.00
Couple	612.94	612.94	612.94	290.00
Family	612.94	612.94	612.94	290.00

Active Member Retiree Medical Plan Contributions: Actively employed members make payroll contributions to the Medical Insurance Fund based upon the following schedule:

Active Member Percentage of Payroll Contribution Made to Medical Insurance Fund

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
Fiscal Year Ending	Hired before 7/1/2008	Hired on or After 7/1/2008	Hired before 7/1/2008	Hired on or After 7/1/2008	Hired before 7/1/2008	Hired on or After 7/1/2008
2013	1.430%	1.750%	1.750%	1.750%	1.750%	1.750%
2014	1.750	1.750	2.250	2.250	2.250	2.250
2015	2.270	2.270	3.000	3.000	3.000	3.000
2016 & Later	2.775	2.775	3.750	3.750	3.750	3.750

Life Insurance Plan Benefits:
(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Members employed on a substitute or part-time basis and working at least 69% of a full contract year in a single fiscal year will be eligible for a life insurance benefit for the balance of the fiscal year or the immediately succeeding fiscal year under certain conditions. For non-vested members employed on a substitute or part-time basis, the life insurance benefit is provided if death occurs as the result of a physical injury on the job. For vested members employed on a substitute or part-time basis, death does not have to be the result of a physical injury on the job for life insurance benefits to be provided.

SCHEDULE E
Table 1 – Service Table
Distribution of Active Members as of June 30, 2012
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,365	1							2,366
Total Pay	40,846,000	45,000							40,891,000
Avg. Pay	17,271	45,000							17,283
25 to 29	7,069	1,365							8,434
Total Pay	222,006,000	64,597,000							286,603,000
Avg. Pay	31,406	47,324							33,982
30 to 34	3,713	5,255	908						9,876
Total Pay	109,834,000	260,683,000	50,523,000						421,040,000
Avg. Pay	29,581	49,607	55,642						42,633
35 to 39	2,605	2,485	4,229	628					9,947
Total Pay	70,984,000	124,123,000	248,149,000	40,344,000					483,600,000
Avg. Pay	27,249	49,949	58,678	64,242					48,618
40 to 44	3,521	1,920	2,490	3,371	673	1			11,976
Total Pay	77,925,000	98,559,000	146,062,000	217,339,000	45,705,000	205,000			585,795,000
Avg. Pay	22,131	51,333	58,659	64,473	67,912	205,000			48,914
45 to 49	1,722	1,231	1,454	1,576	2,373	651			9,007
Total Pay	40,472,000	63,140,000	85,800,000	102,363,000	160,069,000	44,672,000			496,516,000
Avg. Pay	23,503	51,292	59,010	64,951	67,454	68,621			55,126
50 to 54	1,483	956	1,148	1,173	1,332	1,704	336		8,132
Total Pay	30,482,000	48,757,000	67,472,000	76,713,000	91,714,000	122,232,000	24,752,000		462,122,000
Avg. Pay	20,554	51,001	58,774	65,399	68,854	71,732	73,667		56,828
55 to 59	2,153	667	955	1,048	1,068	792	444	74	7,201
Total Pay	33,635,000	33,944,000	57,464,000	69,754,000	74,916,000	59,806,000	35,896,000	6,522,000	371,937,000
Avg. Pay	15,622	50,891	60,172	66,559	70,146	75,513	80,847	88,135	51,651
60 to 64	2,643	533	520	596	625	418	114	113	5,562
Total Pay	36,178,000	25,746,000	32,732,000	41,293,000	45,923,000	33,164,000	10,223,000	11,375,000	236,634,000
Avg. Pay	13,688	48,304	62,946	69,284	73,477	79,340	89,675	100,664	42,545
65 & over	2,276	359	181	176	177	155	43	83	3,450
Total Pay	20,242,000	12,464,000	11,931,000	12,303,000	13,673,000	12,141,000	3,921,000	7,754,000	94,429,000
Avg. Pay	8,894	34,719	65,917	69,903	77,249	78,329	91,186	93,422	27,371
Total	29,550	14,772	11,885	8,568	6,248	3,721	937	270	75,951
Total Pay	682,604,000	732,058,000	700,133,000	560,109,000	432,000,000	272,220,000	74,792,000	25,651,000	3,479,567,000
Avg. Pay	23,100	49,557	58,909	65,372	69,142	73,158	79,821	95,004	45,813

Average Age: 43.6 Average Service: 11.0

SCHEDULE E
Table 2 – Total Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage Increase in Average Pay
6/30/2012	75,951	$3,479,567,004	$45,813	1.33%
6/30/2011	76,349	3,451,756,288	45,210	3.97
6/30/2010	76,387	3,321,614,223	43,484	1.51
6/30/2009	75,937	3,253,076,600	42,839	1.43
6/30/2008	75,539	3,190,332,239	42,234	6.67
6/30/2007	75,144	2,975,289,033	39,594	2.10

SCHEDULE E
Table 3 – Eligible Deferred Vested Members as of June 30, 2012
Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	4	17	21
30-34	53	258	311
35-39	115	433	548
40-44	154	519	673
45-49	147	493	640
50-54	150	473	623
55-59	149	370	519
60 & Over	82	224	306
Total	**854**	**2,787**	**3,641**

SCHEDULE E
Table 4 – All Retirees & Spouses Receiving Health Care Benefits as of June 30, 2012
Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 40	7	30	37
40-44	24	59	83
45-49	61	216	277
50-54	357	1,028	1,385
55-59	1,666	3,966	5,632
60-64	3,571	7,240	10,811
65-69	3,245	5,624	8,869
70-74	2,295	3,701	5,996
75-79	1,714	2,376	4,090
80-84	1,053	1,884	2,937
85-89	616	1,162	1,778
90-94	226	558	784
95-99	49	220	269
100	3	23	26
101	2	14	16
102	1	9	10
103	0	2	2
104	0	0	0
105 & Over	0	6	6
Total	14,890	28,118	43,008

SCHEDULE E

Table 5 – Retirees, Beneficiaries and Survivors added to and Removed From Rolls *

Medical Insurance Fund

Fiscal Year Ending June 30	Number of Members Added to Rolls	Number of Spouses** Added to Rolls	Total Number Added to Rolls	Number of Members Removed from Rolls	Number of Spouses** Removed from Rolls	Total Number Removed from Rolls	Number of Members on Rolls at the End of the Year	Number of Spouses** on Rolls at the End of the Year	Total Number on Rolls at the End of the Year
2007	1,674	580	2,254	1,009	512	1,521	31,642	6,674	38,316
2008	1,850	593	2,443	901	589	1,490	32,591	6,678	39,269
2009	1,777	640	2,417	887	510	1,397	33,481	6,808	40,289
2010	1,710	555	2,265	876	529	1,405	34,315	6,834	41,149
2011	1,770	629	2,399	1,052	541	1,593	35,033	6,922	41,955
2012	1,996	702	2,698	1,029	616	1,645	36,000	7,008	43,008

** Reflects members, spouses, and beneficiaries participating in a health care plan.* *** Includes spouses, beneficiaries, and surviving spouses.*

SCHEDULE E

Table 6 – Retirees, Beneficiaries and Survivors added to and Removed From Rolls *

Life Insurance Fund

Fiscal Year Ending June 30	Number Added to Rolls	Life Insurance Benefit ($1,000's)	Number Removed from Rolls	Life Insurance Benefit ($1,000's)	Number on Rolls at the End of the Year	Life Insurance Benefit ($1,000's)	Increase in Life Insurance Benefit	Average Life Insurance Benefit
2007	n/a	n/a	n/a	n/a	36,616	$ 183,080	n/a	$ 5,000
2008	1,966	$ 9,830	804	$ 4,020	37,778	188,890	3.17%	5,000
2009	1,949	9,745	769	3,845	38,958	194,790	3.12	5,000
2010	1,799	8,995	806	4,030	39,951	199,755	2.55	5,000
2011	2,025	10,125	858	4,290	41,118	205,590	2.92	5,000
2012	2,364	11,820	880	4,400	42,602	213,010	3.61	5,000

** The life insurance benefit is payable upon the death of only members retired for service or disability. Numbers do not include life insurance benefits payable upon the death of an active contributing member.*

Statistical Section

for Fiscal Year ending June 30, 2012

This section of the Kentucky Teachers' Retirement System Comprehensive Annual Financial Report (KTRS CAFR) presents detailed information as a context for understanding the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

Contents

Financial Trends ..... page 133

These schedules contain trend information to help the reader understand how KTRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 135

These schedules offer demographic and economic indicators to help the reader understand the System's environment within which KTRS's financial activities take place.

Operating Information ..... page 141

These schedules contain benefits, service, and employer contribution data to help the reader understand how KTRS's financial report relates to KTRS's services and activities.

Defined Benefit Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Assets
2012	$ 557,339,552	$ 309,729,924	$ 309,696,252	$ 1,176,765,728
2011	1,037,935,993	302,262,819	2,760,972,224	4,101,171,036
2010	479,805,088	297,613,965	1,509,785,381	2,287,204,434
2009	442,549,935	293,678,564	(2,020,682,522)	(1,284,454,023)
2008	466,247,782	291,423,948	(909,083,525)	(151,411,795)
2007	434,890,469	269,687,864	2,063,878,767	2,768,457,100
2006	410,920,969	258,464,856	717,308,002	1,386,693,827
2005	388,346,438	247,024,518	946,070,556	1,581,441,512
2004	382,280,099	238,922,086	1,158,182,688	1,779,384,873
2003	341,132,900	233,429,797	538,552,074	1,113,114,771

Deductions by Type

(Including Benefits by Type)

YEAR	Service Retirants	Disability Retirants	Survivors	Life Insurance*	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Assets
2012	$ 1,401,380,816	$ 65,297,491	$ 16,260,858	$	$ 1,482,939,165	$ 19,549,073	$ 7,762,880	$ 1,510,251,118
2011	1,326,033,698	60,950,214	15,551,801		1,402,535,713	17,325,387	7,322,739	1,427,183,839
2010	1,249,272,057	57,782,651	14,754,062		1,321,808,770	15,310,680	8,830,054	1,345,949,504
2009	1,184,075,934	54,562,038	14,342,435		1,252,980,407	15,208,419	8,165,757	1,276,354,583
2008	1,105,078,345	51,842,271	14,048,485		1,170,969,101	15,965,083	7,551,936	1,194,486,120
2007	1,040,003,417	48,863,876	13,671,586		1,102,538,879	14,822,827	7,351,846	1,124,713,552
2006	972,018,057	46,750,585	12,943,639	3,894,000	1,035,606,281	12,834,222	6,839,859	1,055,280,362
2005	902,863,420	44,070,071	12,585,248	3,852,800	963,371,539	10,975,941	6,652,673	981,000,153
2004	827,731,523	41,491,490	12,047,275	4,015,801	885,286,089	10,471,607	6,578,420	902,336,116
2003	763,099,082	38,744,454	11,259,332	3,961,800	817,064,668	9,951,410	6,388,183	833,404,261

** Life Insurance Plan valued separately-- see page 135.*

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2012	$ 1,176,765,728	$ 1,510,251,118	$ (333,485,390)
2011	4,101,171,036	1,427,183,839	2,673,987,197
2010	2,287,204,434	1,345,949,504	941,254,930
2009	(1,284,454,023)	1,276,354,583	(2,560,808,606)
2008	(151,411,795)	1,194,486,120	(1,345,897,915)
2007	2,768,457,100	1,124,713,552	1,643,743,548
2006	1,386,693,827	1,055,280,362	331,413,465
2005	1,581,441,512	981,000,153	600,441,359
2004	1,779,384,873	902,336,116	877,048,757
2003	1,113,114,771	833,404,261	279,710,510

Medical Insurance Plan

Past Ten Fiscal Years

Additions by Source

YEAR	Employer Contributions	Member Contributions	Recovery Income	Net Investment Income	Total Additions to Plan Net Assets
2012	$ 173,966,623	$ 100,346,070	$ 3,781,222	$ (3,989,202)	$ 274,104,713
2011	188,241,202	84,147,337	493,312	8,334,296	281,216,147
2010	158,761,433	63,805,573	14,618,348	12,312,999	249,498,353
2009	164,408,037	58,688,767	13,683,830	11,296,280	248,076,914
2008	148,929,322	55,402,830	11,936,887	8,128,179	224,397,218
2007	113,233,784	53,099,678	10,337,338	6,722,080	183,392,880
2006	89,319,498	51,697,167	6,117,979	6,804,286	153,938,930
2005	79,022,562	51,576,031		6,507,537	137,106,130
2004	53,346,747	53,903,551		7,127,109	114,377,407
2003	77,235,407	50,718,084		7,391,671	135,345,162

Deductions by Type

(Including Benefits by Type)

	Insurance Benefit Expense					
YEAR	Under Age 65	Age 65 & Over	Administrative Expense	Total Insurance Benefits Expense	Refunds*	Total Deductions to Plan Net Assets
2012	$ 156,228,181	$ 72,746,945	$ 1,201,629	$ 230,176,755	$	$ 230,176,755
2011	145,544,405	80,890,958	1,186,029	227,621,392		227,621,392
2010	136,702,152	100,675,376		237,377,528		237,377,528
2009	123,819,475	81,037,647		204,857,122		204,857,122
2008	107,437,450	71,838,765		179,276,215	10,014	179,286,229
2007	104,828,254	69,400,843		174,229,097	5,834	174,234,931
2006	102,970,290	66,660,106		169,630,396	5,143	169,635,539
2005	82,186,847	64,233,482		146,420,329	9,072	146,429,401
2004	69,139,458	54,128,210		123,267,668	12,150	123,279,818
2003	63,546,028	52,300,059		115,846,087	7,808	115,853,895

**Refunds are netted against member contributions beginning fiscal year 2009.*

Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2012	$ 274,104,713	$ 230,176,755	$ 43,927,958
2011	281,216,147	227,621,392	53,594,755
2010	249,498,353	237,377,528	12,120,825
2009	248,076,914	204,857,122	43,219,792
2008	224,397,218	179,286,229	45,110,989
2007	183,392,880	174,234,931	9,157,949
2006	153,938,930	169,635,539	(15,696,609)
2005	137,106,130	146,429,401	(9,323,271)
2004	114,377,407	123,279,818	(8,902,411)
2003	135,345,162	115,853,895	19,491,267

Life Insurance Plan

Past Six Fiscal Years

Additions by Source

YEAR	Employer Contributions	Net Investment Income	Total Additions to Plan Net Assets
2012	$ 1,684,711	$ 6,450,022	$ 8,134,733
2011	1,668,822	3,094,776	4,763,598
2010	1,966,826	5,383,644	7,350,470
2009	5,455,473	5,282,958	10,738,431
2008	5,411,249	6,321,491	11,732,740
2007	5,022,137	(3,413,537)	1,608,600

Deductions by Type (Including Benefits by Type) / Changes in Net Assets

YEAR	Life Insurance	Total Deductions to Plan Net Assets	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2012	$ 4,397,281	$ 4,420,167	$ 8,134,733	$ 4,420,167	$ 3,714,566
2011	4,120,000	4,141,511	4,763,598	4,141,511	622,087
2010	4,148,511	4,148,511	7,350,470	4,148,511	3,201,959
2009	3,694,000	3,694,000	10,738,431	3,694,000	7,044,431
2008	4,003,000	4,003,000	11,732,740	4,003,000	7,729,740
2007	4,245,000	4,245,000	1,608,600	4,245,000	(2,636,400)

Distribution of Active Contributing Members as of June 30, 2012

By Age

Age	Male	Female
20-24	828	2,712
25-29	2,703	7,653
30-34	2,754	7,799
35-39	2,476	7,385
40-44	2,406	7,872
45-49	2,076	6,424
50-54	1,803	5,826
55-59	1,731	4,951
60-64	1,475	3,787
65-69	720	1,535
Over 70	352	683
Total	19,324	56,627

By Service

Years of Service	Male	Female
Less than 1	6,126	15,467
1-4	4,131	12,705
5-9	3,142	10,016
10-14	2,286	7,350
15-19	1,668	5,016
20-24	1,163	3,561
25-29	605	1,951
30-34	135	453
35 or more	68	108
TOTAL	19,324	56,627

Principal Participating Employers
Current Year and Nine Years Ago

	2012			2003		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	10,304	1	13.34%	9,139	1	12.68%
Fayette County Public Schools	4,651	2	6.02	3,900	2	5.41
Boone County Schools	1,866	3	2.42	1,341	3	1.86
Hardin County Schools	1,402	4	1.82	1,194	4	1.66
Kenton County Schools	1,332	5	1.72	1,099	5	1.53
Warren County Schools	1,302	6	1.69	1,043	7	1.45
Oldham County Schools	1,230	7	1.59	925	11	1.28
Bullitt County Schools	1,218	8	1.58	981	10	1.36
Madison County Schools	1,162	9	1.50	988	9	1.37
Daviess County Schools	1,118	10	1.45	994	8	1.38
All Other*	51,653		66.88%	50,452		70.02%
TOTAL (208 Employers)	**77,238**		**100.00%**	**72,056**		**100.00%**

** In 2012, "all other" consisted of:*

Type	*Number*	*Employees*
Local School Districts	*164*	*45,885*
Higher Education	*6*	*3,613*
State Agencies	*16*	*1,755*
Regional Coops	*7*	*303*
Other	*5*	*97*
TOTAL	***198***	***51,653***

KTRS Schedule of Participating Employers
School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

KTRS Schedule of Participating Employers *(continued)*
School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Monticello
36. Murray
37. Newport
38. Owensboro
39. Paducah
40. Paintsville
41. Paris
42. Pikeville
43. Pineville
44. Raceland
45. Russell
46. Russellville
47. Science Hill
48. Silver Grove
48. Somerset
50. Southgate
51. Walton-Verona
52. West Point
53. Williamsburg
54. Williamstown

Universities & Community/ Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/ Other Organizations

State of Kentucky

1. Education and Humanities Cabinet
2. Legislative Research Commission
3. Workforce Investment Cabinet
4. Finance and Administration Cabinet

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative

113	ALABAMA
1	ALASKA
79	ARIZONA
33	ARKANSAS
96	CALIFORNIA
50	COLORADO
9	CONNECTICUT
8	DELAWARE
967	FLORIDA
228	GEORGIA
5	HAWAII
8	IDAHO
92	ILLINOIS
613	INDIANA
16	IOWA
33	KANSAS
29	LOUISIANA
15	MAINE
30	MARYLAND
16	MASSACHUSETTS
36	MICHIGAN
18	MINNESOTA
50	MISSISSIPPI
68	MISSOURI
7	MONTANA
7	NEBRASKA
21	NEVADA
4	NEW HAMPSHIRE
7	NEW JERSEY
17	NEW MEXICO
39	NEW YORK
237	NORTH CAROLINA
1	NORTH DAKOTA
550	OHIO
29	OKLAHOMA
23	OREGON
43	PENNSYLVANIA
0	RHODE ISLAND
160	SOUTH CAROLINA
10	SOUTH DAKOTA
777	TENNESSEE
177	TEXAS
20	UTAH
1	VERMONT
141	VIRGINIA
38	WASHINGTON
91	WEST VIRGINIA
25	WISCONSIN
2	WYOMING

Distribution of Retirement Payments Worldwide

As of June 30, 2012

Additional Distribution Outside USA

1	Australia	1	England
1	Barbados	2	Military APO
5	Canada	1	Philippines
5	District of Columbia	1	Switzerland

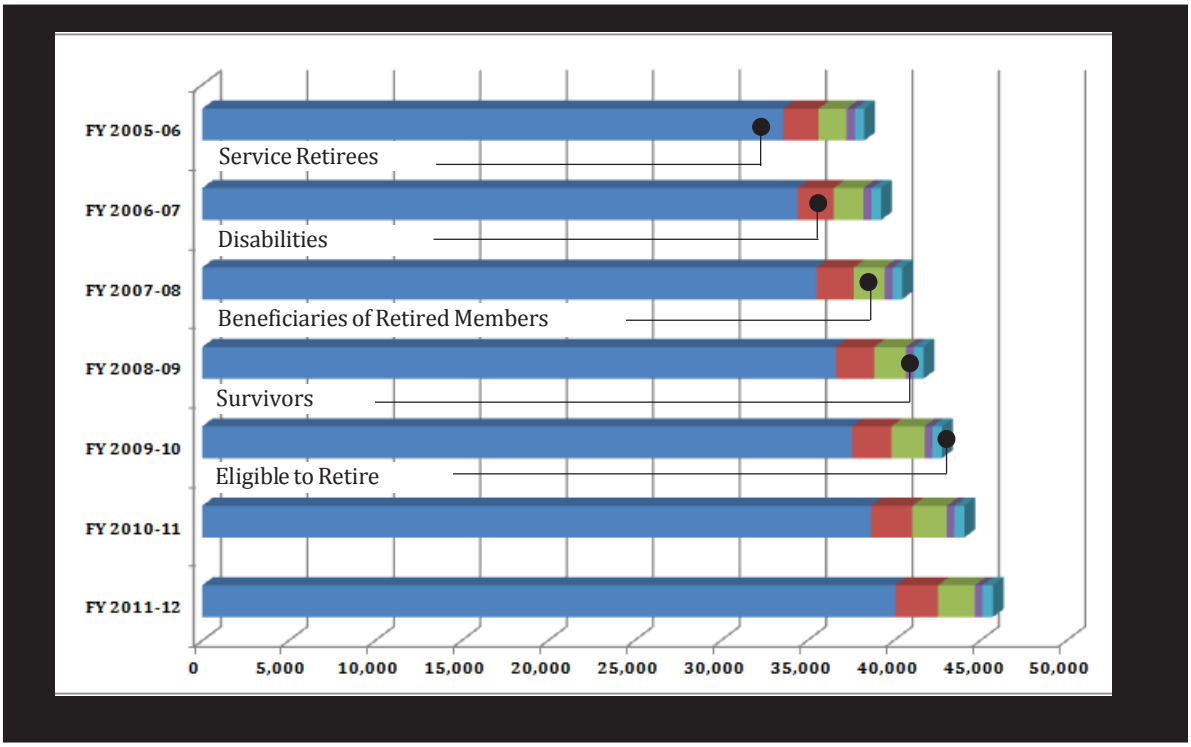
TOTAL: Number of Out of State Payments 5,057
TOTAL: Out of State Payments $118,380,267
TOTAL: Number of Payments 47,294
GRAND TOTAL: Amount of Payments $1,482,878,645

Distribution of Retirement Payments Statewide

as of June 30, 2012

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Adair	$ 5,361,714	156	Laurel	17,425,065	502
Allen	5,148,856	132	Lawrence	4,395,874	127
Anderson	6,046,502	157	Lee	2,063,208	61
Ballard	3,771,119	100	Leslie	4,490,182	127
Barren	12,675,064	343	Letcher	9,640,930	258
Bath	3,481,149	103	Lewis	5,527,016	152
Bell	11,145,513	310	Lincoln	8,794,937	243
Boone	27,322,199	645	Livingston	2,714,942	73
Bourbon	5,774,922	159	Logan	8,395,640	240
Boyd	17,219,133	438	Lyon	3,152,136	84
Boyle	13,749,513	361	Madison	40,888,796	1,043
Bracken	2,775,932	77	Magoffin	4,844,987	150
Breathitt	6,876,973	194	Marion	5,029,973	141
Breckinridge	5,947,309	154	Marshall	10,919,029	287
Bullitt	14,207,654	328	Martin	3,916,876	120
Butler	2,615,408	80	Mason	5,870,058	156
Caldwell	5,492,391	153	McCracken	21,293,602	590
Calloway	20,624,636	551	McCreary	6,091,884	174
Campbell	22,700,398	538	McLean	3,592,783	96
Carlisle	1,369,940	37	Meade	5,631,916	134
Carroll	2,456,077	66	Menifee	1,710,421	54
Carter	10,550,689	300	Mercer	6,959,709	202
Casey	4,566,117	137	Metcalfe	3,226,371	92
Christian	16,148,327	434	Monroe	4,776,083	136
Clark	9,993,538	278	Montgomery	9,241,195	261
Clay	8,701,555	238	Morgan	5,447,426	145
Clinton	4,180,402	117	Muhlenberg	9,631,396	245
Crittenden	1,989,034	59	Nelson	12,297,380	304
Cumberland	2,814,774	70	Nicholas	1,710,359	48
Daviess	33,082,496	873	Ohio	6,025,076	158
Edmonson	3,045,755	90	Oldham	14,653,030	340
Elliott	1,661,897	53	Owen	2,576,599	67
Estill	4,114,853	113	Owsley	3,461,516	97
Fayette	88,226,306	2,244	Pendleton	4,088,581	112
Fleming	4,858,000	139	Perry	11,308,752	308
Floyd	16,136,831	452	Pike	25,114,557	678
Franklin	23,181,292	567	Powell	3,858,367	101
Fulton	2,186,185	59	Pulaski	19,945,751	570
Gallatin	798,583	23	Robertson	683,616	20
Garrard	5,503,819	144	Rockcastle	5,492,031	162
Grant	5,788,445	150	Rowan	14,461,053	382
Graves	12,331,243	341	Russell	6,503,429	177
Grayson	7,962,964	214	Scott	12,017,910	296
Green	3,564,990	105	Shelby	13,733,897	314
Greenup	11,329,413	297	Simpson	4,923,623	143
Hancock	2,326,185	58	Spencer	4,402,648	108
Hardin	25,801,780	610	Taylor	8,661,209	244
Harlan	11,969,815	336	Todd	2,670,977	74
Harrison	6,065,657	168	Trigg	5,105,223	146
Hart	4,552,218	119	Trimble	1,844,548	46
Henderson	13,132,900	344	Union	3,816,683	104
Henry	5,300,246	149	Warren	49,205,808	1,288
Hickman	1,033,512	26	Washington	3,165,872	87
Hopkins	14,184,581	371	Wayne	6,675,154	201
Jackson	3,577,426	106	Webster	4,121,103	121
Jefferson	229,335,342	5,170	Whitley	19,122,431	533
Jessamine	10,203,349	284	Wolfe	3,230,747	91
Johnson	10,933,920	286	Woodford	8,760,420	212
Kenton	27,595,605	671			
Knott	7,108,870	185	**Total in Kentucky**	**$ 1,364,498,378**	**35,236**
Knox	7,651,212	216			
Larue	4,935,065	133			

Growth in Annuitants as of June 30, 2012



Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Survivors	Eligible to Retire
2005-06	33,618	2,039	1,631	495	531
2006-07	34,462	2,086	1,722	466	549
2007-08	35,550	2,155	1,778	468	554
2008-09	36,684	2,209	1,837	448	559
2009-10	37,607	2,284	1,915	435	567
2010-11	38,705	2,379	2,003	430	584
2011-12	40,107	2,478	2,126	444	596

Schedule of Annuitants by Type of Benefit as of June 30, 2012

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Retirement*				
		1	2	3	4	5
1 - 500	3,318	2,399	18	398	199	304
501 - 1,000	2,678	2,064	178	7	429	0
1,001 - 1,500	3,184	2,274	321	0	589	0
1,501 - 2,000	3,956	3,111	427	1	417	0
2,001 - 2,500	5,996	4,959	631	14	392	0
2,501 - 3,000	8,751	7,917	544	15	275	0
3,001 - 3,500	6,767	6,398	188	3	178	0
3,501 - 4,000	4,429	4,209	115	1	104	0
4,001 - 4,500	2,796	2,703	30	4	59	0
4,501 - 5,000	1,615	1,565	17	0	33	0
5,001 & OVER	2,565	2,508	9	1	47	0
Total**	46,055	40,107	2,478	444	2,722	304

***Type of Retirement**

1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Survivor Payment - Active Member*
4-*Beneficiary Payment - Retired Member*
5-*Disabled Adult Child*

*** Retirees in waiver program are not included.*

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,674	394	269	63	8	398	118	394
501 - 1,000	1,392	324	230	124	8	313	202	85
1,001 - 1,500	1,626	341	304	141	12	375	299	86
1,501 - 2,000	2,102	442	361	166	7	493	280	105
2,001 - 2,500	2,822	591	529	225	6	986	581	256
2,501 - 3,000	4,434	888	675	235	13	1,393	879	234
3,001 - 3,500	3,480	730	509	216	9	1,003	754	66
3,501 - 4,000	2,267	460	365	137	6	655	493	46
4,001 - 4,500	1,406	289	251	99	7	380	355	9
4,501 - 5,000	799	176	135	84	6	235	175	5
5,001 & OVER	1,338	220	276	122	14	290	300	5
Total	23,340	4,855	3,904	1,612	96	6,521	4,436	1,291

***Option selected:**

1 - Straight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/2002 TO 06/30/2003								
Average monthly benefit	$205	$480	$940	$1,344	$1,898	$2,715	$3,592	
Average final monthly salary	$4,301	$3,380	$3,714	$3,798	$3,920	$4,378	$5,121	
Number of retired members	58	83	98	103	107	837	508	1,794
07/01/2003 TO 06/30/2004								
Average monthly benefit	$220	$474	$839	$1,444	$1,940	$2,758	$3,486	
Average final monthly salary	$5,243	$3,357	$3,349	$3,936	$4,078	$4,425	$5,062	
Number of retired members	43	84	98	96	155	818	405	1,699
07/01/2004 TO 06/30/2005								
Average monthly benefit	$187	$528	$906	$1,488	$1,978	$2,892	$3,860	
Average final monthly salary	$4,353	$3,511	$3,647	$4,055	$4,182	$4,602	$5,275	
Number of retired members	55	98	107	106	145	811	875	2,197
07/01/2005 TO 06/30/2006								
Average monthly benefit	$202	$473	$1,019	$1,493	$2,037	$2,998	$4,063	
Average final monthly salary	$4,106	$3,253	$4,052	$4,117	$4,317	$4,721	$5,490	
Number of retired members	44	105	106	132	145	689	604	1,825
07/01/2006 TO 06/30/2007								
Average monthly benefit	$178	$514	$930	$1,559	$2,136	$3,140	$4,263	
Average final monthly salary	$4,102	$3,346	$3,590	$4,228	$4,537	$4,970	$5,758	
Number of retired members	48	113	90	109	193	534	514	1,601
07/01/2007 TO 06/30/2008								
Average monthly benefit	$199	$524	$1,117	$1,658	$2,276	$3,279	$4,319	
Average final monthly salary	$3,816	$3,066	$4,215	$4,412	$4,612	$5,067	$5,786	
Number of retired members	50	130	112	150	169	557	615	1,783
07/01/2008 TO 06/30/2009								
Average monthly benefit	$200	$573	$1,005	$1,725	$2,436	$3,368	$4,496	
Average final monthly salary	$4,617	$3,942	$3,873	$4,686	$4,983	$5,278	$5,960	
Number of retired members	72	168	137	115	217	505	585	1,799
07/01/2009 TO 06/30/2010								
Average monthly benefit	$185	$525	$1,104	$1,700	$2,427	$3,468	$4,670	
Average final monthly salary	$3,654	$3,637	$4,124	$4,508	$4,974	$5,383	$6,102	
Number of retired members	28	133	98	103	242	442	601	1,647
07/01/2010TO 06/30/2011								
Average monthly benefit	$149	$519	$1,225	$1,781	$2,513	$3,621	$4,827	
Average final monthly salary	$3,570	$3,640	$4,423	$4,825	$5,184	$5,574	$6,235	
Number of retired members	45	157	144	112	242	544	617	1,861
07/01/2011 TO 06/30/2012								
Average monthly benefit	$175	$507	$1,170	$1,897	$2,613	$3,674	$4,726	
Average final monthly salary	$3,292	$3,759	$4,307	$4,898	$5,219	$5,605	$6,109	
Number of retired members	45	197	146	162	303	778	569	2,200

Medical Insurance Plan

Average Insurance Premium Supplements for the Last Ten Years

	Years of Service Credit				
	00-9.99	10-14.99	15-19.99	20>=	TOTAL
Retirement Effective Dates					
07/01/2002 TO 06/30/2003					
Average monthly supplement	$ 106.62	$ 142.57	$ 212.81	$ 277.64	
Number of retired members	34	59	91	1,457	1,641
07/01/2003 TO 06/30/2004					
Average monthly supplement	$ 100.50	$ 148.85	$ 219.41	$ 289.98	
Number of retired members	30	59	82	1,365	1,536
07/01/2004 TO 06/30/2005					
Average monthly supplement	$ 138.29	$ 214.32	$ 305.39	$ 394.92	
Number of retired members	36	70	93	1,768	1,967
07/01/2005 TO 06/30/2006					
Average monthly supplement	$ 161.03	$ 241.76	$ 362.31	$ 487.23	
Number of retired members	28	49	106	1,440	1,623
07/01/2006 TO 06/30/2007					
Average monthly supplement	$ 146.24	$ 260.95	$ 363.45	$ 489.73	
Number of retired members	29	53	80	949	1,111
07/01/2007 TO 06/30/2008					
Average monthly supplement	$ 162.54	$ 260.71	$ 378.28	$ 512.29	
Number of retired members	36	61	104	952	1,153
07/01/2008 TO 06/30/2009					
Average monthly supplement	$ 167.78	$ 298.09	$ 414.38	$ 562.59	
Number of retired members	26	64	103	1,329	1,522
07/01/2009 TO 06/30/2010					
Average monthly supplement	$ 151.05	$ 339.31	$ 435.19	$ 621.12	
Number of retired members	32	73	103	1,276	1,484
07/01/2010 TO 06/30/2011					
Average monthly supplement	$ 167.03	$ 311.93	$ 438.84	$ 597.41	
Number of retired members	30	32	109	1,360	1,531
07/01/2011 TO 06/30/2012					
Average monthly supplement	$ 164.12	$ 302.19	$ 433.25	$ 579.29	
Number of retired members	29	81	121	1,568	1,799

Summary of Fiscal Year 2011-2012
Retiree Sick Leave Payments

ACTUARIAL RATE

Grand Total Members Retiring		2,318
Total members receiving sick leave payments		1,657
Total amount of sick leave payments @ 10.355% contribution rate	$	22,590,093.82
Average payment per retiree	$	13,633.13
Total increase in final 3/5 average salary base	$	6,337,194.60
Average increase in final average salary	$	3,824.50
Total service credit of 1,657 retirees		42,631.49
Average service credit of 1,657retirees		25.73
Additional Average Monthly Annuity payment per Retirement Formula		
3,824.50 x 25.73 x 2.50% =	$	2,459.93
2,459.93/ 12 months	$	204.99
Anticipated Lifetime Payout of Additional Annuity		
204.99 x 142.1587 x 1,657 new factor	$	48,287,781.48

Funding of Additional Payments

Member contributions 9.105% x $22,590,093.82 =	$	2,056,828.04
Employer contributions 12.305% x $22,590,093.82 =		2,779,711.04
Total Contributions	$	4,836,539.08
DEFICIT:		
Anticipated additional payout	$	48,287,781.48
Less total contributions		4,836,539.09
Subtotal unfunded debt		43,451,242.39
Less current year appropriation		7,158,200.00
TOTAL DEFICIT (overpayment) *	$	36,293,042.39

** NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. Sick leavedeficits are amortized over 20 year periods.*

Teachers' Retirement System of the State of Kentucky

The 73rd Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Year Ended June 30, 2013

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN, CPA
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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Introductory Section

for Fiscal Year ending June 30, 2013

Chairperson's Letter

Teachers' Retirement System of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

BOARD OF TRUSTEES

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EX OFFICIO
DR. TERRY HOLLIDAY
COMMISSIONER
DEPARTMENT
OF EDUCATION

EX OFFICIO
TODD HOLLENBACH
STATE TREASURER

December 30, 2013

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2013, the 73rd year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

KTRS closed the 2012-2013 fiscal year with a net position of $16.6 billion. The active membership totaled 74,831 and the retired membership was 47,406 with an annual annuity and medical insurance benefits of $1.8 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. Every effort will be made to ensure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Tom Shelton

Dr. Tom Shelton
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 30, 2013

Honorable Steven L. Beshear, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky

Dear Governor Beshear:

It is my pleasure to submit the 73rd Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a Component Unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2013. State law provides the legal requirement for the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system are also required. Kentucky Teachers' Retirement System (KTRS) has produced an annual report that will provide you, the General Assembly, and the general public, with information necessary to gain a better understanding of KTRS.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of KTRS for the year ended June 30, 2013. Discussion and analysis of net assets and related additions and deductions is presented in Management's Discussion and Analysis beginning on page 18.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are accurately executed and financial statements are fairly presented. There are limits inherent in all systems of internal control based on the recognition that the costs of such systems should be related to the benefits to be derived. Management believes the System's controls provide this appropriate balance. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Secretary and the Governance and Audit Committee of the Board of Trustees.

Profile of KTRS

KTRS began operations on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state. KTRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 28. Also, the summary of the plan provisions starting on page 101 is useful in understanding benefit and contribution provisions. The population of KTRS membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the retirement system. The budget is approved by the Board of Trustees and submitted to the Kentucky General Assembly for legal adoption. The KTRS investment earnings fund the administrative budget appropriations.

Major Initiatives

The System continually seeks opportunities to better serve its membership. During the past year, KTRS has continued work on several major initiatives concerning funding and cost containment for retiree health care, the investment program, and information technology.

Implementation of the "Shared Responsibility" Solution for Funding Retiree Health Care and Careful Management of Medical Insurance Costs

June 30, 2013 marked the end of the third year of the six year phase in of the "shared responsibility" solution for pre-funding retired teacher health care. The Board of Trustees and

Staff are very pleased to report that $3.1 billion in actuarial liability has been eliminated from the retired teacher health care plan through implementation of this solution. Another $1.9 billion savings in actuarial liability was accomplished through careful management of health care costs. Thus, since implementing "shared responsibility" and other cost control measures, more than $5 billion in actuarial accrued liability has been eliminated from the KTRS Medical Insurance Fund.

The Governor and Legislative leaders have commended Kentucky's education community for their strong leadership and hard work in developing and implementing the solution. Constituent groups representing retired teachers, active teachers, school boards, school superintendents, and the state, all worked on the consensus funding solution. The solution provides that all the groups share in the solution by investing a little more now to receive substantial returns later. After two years, and $3.1 billion in savings by converting to a pre-funded plan, the "shared responsibility" solution is truly a significant accomplishment on the road to retirement security for current and future retired teachers.

The Board of Trustees of KTRS regularly reviews the health care plan to contain costs and maintain a meaningful benefit for retired teachers. The move to Medicare Advantage, now in our eighth year, continues to be stable and financially feasible for our members and the KTRS medical plan.

Some recent cost saving initiatives include moving the KTRS sponsored Medicare drug plan to an insured Employer Group Waiver Prescription Drug Plan with a commercial wrap in the drug coverage gap to achieve the greatest amount of federal subsidies for 2013. Additionally, KTRS joined the KY Rx Coalition in 2012, which is spearheaded by the University of Kentucky. By joining the coalition, KTRS will achieve annual savings through leveraging greater prescription purchasing power and deeper drug discounts. As an added benefit, a dedicated staff of pharmacists with the KY Rx Coalition can help each member with their prescriptions and how to maximize their prescription dollars.

Other cost containment measures implemented in 2013 involved the elimination of the future risk of adverse selection with our Medicare eligible spouses of retired teachers; and assisting those retirees and their spouses who were Medicare eligible, but under the normal Medicare age, to join the Medicare plan in 2013 achieving future savings for our members, the KTRS retiree medical plan, and the Commonwealth of Kentucky. KTRS is utilizing the industry best practice of a high performance formulary for 2014 with the Medicare Eligible retiree drug plan. The high performance formulary greatly incents participants to use lower cost brand and generic alternatives when clinically appropriate.

For 2014, the Board contracted with Edumedics for disease management services for Medicare Eligible retirees with diabetes, hypertension, hyperlipidemia, and other co-morbidity diseases. The Board of Trustees has been studying chronic disease management for several years and selected Edumedics to implement the disease management program. Edumedics is a Kentucky based company spun out from the University of Louisville.

Edumedics will be educating retirees with these diseases about nutrition, drug regime, exercise, and other matters. These educational efforts will be ongoing with routine face-to-face checkups with participating retirees. Edumedics will monitor adherence to a nutrition and wellness plan developed by the participating retiree, the retiree's physician, and Edumedics. This effort will ramp up over the next two years and thereafter the Board will likely expand this program to other chronic diseases.

KTRS is efficient, effective, and always working to improve the retirement security of Kentucky's teachers. Eliminating more than $5 billion in liability helps the financial condition of the Commonwealth and eases burdens on taxpayers.

Investment Program

For the twelve month period ended June 30, 2013, KTRS's investment program produced a total return of 14.1%. This ranked in the top 10% of returns for pension funds with over $1 billion in assets. During the period including the last five years, KTRS's investment returns ranked in the top 7%. Moreover, during the last thirty years, KTRS investment returns have averaged 8.9%, which is consistent with the long-term assumed rate of return of 7.5%.

Because of KTRS's focus on fundamental value and risk control, it was able to continue a multiyear program of broadening the portfolio's diversification. KTRS also continued to implement changes to the investment program based upon an asset liability modeling study and an analysis of the shared responsibility solution for funding retiree health care and receipt of the proceeds of bonds in the KTRS retirement annuity and medical insurance funds. These ongoing efforts are a continuation of a disciplined investment process and long term focus on retirement security. This focus has generated exceptionally stable returns through the System's history and we have every confidence that it will do so in the future. KTRS's investment program continues to be recognized as a leader in the public pension community for governance structure, trustee education, and cost effectiveness.

Information Technology

KTRS staff has continued working on a multi-year project planning, designing, and constructing a new information technology system known as the "Pathway System." The Board took action and authorized hiring a vendor to begin building and installation of the new system. The vendor has been working with staff on-site at KTRS since September 2011. The focus of work has been developing and constructing the first major component of the new system.

On July 15, 2013, the first major component of the new system (member enrollment, employer reporting, service credit purchases, and related accounting functions), was put into production. The implementation was highly successful. To date, more than 54% of the overall project has been completed and work has been proceeding according to schedule and within budget.

The objective of the Pathway System is to streamline retirement processes and improve staff efficiency in providing services to retirees and active members. In developing the Pathway System, KTRS is redesigning and improving office processes and ultimately will be applying new web-based technologies to these processes. This will increase staff productivity, provide seamless member account management, and simplify future system modifications. As KTRS continues to implement changes under the Pathway System, we expect that the new technology will help the System better serve its membership.

Economic Condition

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 55 contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules among others.

The investment portfolio experienced a growth in value during the 2012-2013 fiscal year as the portfolio's market value increased from $15,132,284,908 to $16,597,563,301. The increase in value of the portfolio and of the overall market was primarily due to improvements in the financial markets and realized capital gains. This increase was supported with investment income that included interest income and dividends. Employer and employee contributions also provided significant income to the portfolio.

Investment income, including appreciation of asset values, net of investment expenses, for the 2012-2013 fiscal year was $2,071,260,168. The major contributing factor of the positive return from the System's investment portfolio resulted from the net appreciation in fair value of investments in the amount of $1,624,371,455. The largest earnings component, $264,247,210 was the result of interest income. Other income, net of expenses, of $182,641,503 was generated from dividends, rent and securities lending.

According to the KRS 161.430 the KTRS Board of Trustees has the responsibility to invest the assets of the System. The Board of Trustees delegates investment authority to the Investment Committee. The Investment Committee works closely with experienced investment counselors and the System's professional staff in evaluating and selecting investment allocations.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the Plan and its Trust Funds. The investment program shall also provide a

reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. While the entire portfolio earned a total return of positive 14.1% in 2012-13, the portfolio's ten-year annualized rate of return is 6.4% and the twenty-year annualized rate of return is 7.3%.

KTRS annuities have a bolstering impact on the Commonwealth of Kentucky's economy, as approximately 92% of retired teachers reside within the state. Total benefits (retirement, medical...etc.) paid during the fiscal year were approximately $1.8 billion.

Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes by statute the levels of contribution that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

Since fiscal year 2008, the state has not paid the recommended annual employer contribution necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual employer contributions have grown significantly from $60.5 million (Fiscal Year 2009) to $487 million (Fiscal Year 2016). The following schedule details the growth of the additional annual employer contributions payable by the state:

Fiscal Year	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000

The Board has always taken action as required by state law and recommended annual employer contributions payable by the state that would ensure that the state meets the contractual obligations to members.

The latest actuarial valuation was for the period ending June 30, 2013. This report reflects the System's actuarial value of assets totaling $15.0 billion and actuarial determined liabilities totaling $28.8 billion. The funded ratio of actuarial assets to liabilities is 51.9%. The actuary reports: "…In our opinion, the System is not being funded on an actuarially sound basis since the actuarially required contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated…."

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions (on page 50). After the 2013 employer contributions there remains a net pension obligation of $682,450,008 (as detailed on page 95). Annual required employer contributions for the Medical Insurance Fund are provided in the Schedule of Employer Contributions (on page 51). The 2013 employer shortfall of contributions created a net OPEB obligation of $1,469,685,047 (as detailed on page 118).

The sustained decline in the funded ratio is from the cumulative effect of the employer failing to make actuarially required contributions. Also contributing to the reduced funded ratio are market fluctuations that are being recognized using actuarial smoothing over a five-year period and the changing demographics of the retirement system.

KTRS Medical Insurance Plan

The shared responsibility solution for funding retiree health care, which went into effect on July 1, 2010, provides a method of pre-funding retiree health care over a 30 year period. The System believes that the shared responsibility solution for

funding retiree health care will help ensure the retirement security of the state's teachers. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2013 indicated that the fund has an unfunded liability of $3.1 billion. The funded ratio of actuarial assets to liabilities is 11.7%, which is trending upward from past years. The actuary reports: "…if the State contributions to the Medical Insurance Fund are increased to the planned levels, the Retiree Medical Plan will begin to operate in a more actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the Retiree Medical Plan will improve…."

Additionally, the System believes continued steps must be taken to realize true cost containment through legislation on both the state and national levels. KTRS will continue to take measures to contain costs and increase revenues to the Medical Insurance Plan or may adjust coverage to meet existing revenues.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the KTRS. Certifications from the Board's External Auditor and Independent Actuary are enclosed in this report. The System's consultants who are appointed by the Board are listed on pages 52, 53, 77 and 82 of this report.

National Recognition

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2012. The Certificate of Achievement is a prestigious national award-recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. KTRS has received the Certificate of Achievement for the last twenty-five consecutive years (fiscal years ended 1988-2012). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council (PPCC) awarded a Certificate of Achievement to the Teachers' Retirement of the State of Kentucky for 2013 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure, and are widely acknowledged to be marks of excellence in the public pension industry.

In 2013, for the second consecutive year, KTRS was not awarded the PPCC Certificate of Achievement for funding. Failure to qualify for the award reflects the employer's continued underfunding of KTRS's retirement annuity plan.

The PPCC is a coalition of three national associations that represent public retirement systems and administrators. Combined, these associations serve retirement systems that provide pension coverage for most of the nation's 16 million employees of state and local government. The associations that form the PPCC are the National Association of State Retirement Administrators; the National Council on Teacher Retirement; and the National Conference on Public Employee Retirement Systems.

NCTR Executive Committee

Gary L. Harbin is a former president of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 69 state, territorial, local and university pension systems with combined assets in excess of $2 trillion, serving more than 18 million active and retired teachers, non-teaching personnel and other public employees.

Public Sector HealthCare Roundtable

Mr. Harbin also serves on the Board of Directors and as President of the Public Sector HealthCare Roundtable. The Roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector were properly represented during the formulation and debate, and now implementation of the Patient Protection and Affordable Care Act. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

Our Gratitude

At the regular quarterly meeting of the Board of Trustees on June 17, 2013, Ms. Barbara G. Sterrett announced that her term on the Board would conclude on June 30, 2013. Ms. Sterrett served with distinction on the Board as an Active Teacher Trustee from July 1, 1990 through June 30, 2003, and as a Retired Teacher Trustee from July 1, 2005 through June 30, 2013. She served as Chair of the Board from July 1, 2008 through June 30, 2012 and as Vice Chair of the Board from July 1, 2006 through June 30, 2008. During her service assets under management increased from $3.75 billion in 1990 to $16.58 billion in 2013. During Ms. Sterrett's tenure as Chair of the Board, the retirement system secured long-term funding and cost reductions of retiree health care that reduced the unfunded liability of the retirement system by over $5 billion. We would like to thank Ms. Sterrett for her exemplary service and numerous contributions to the successful operation of the system.

At the regular quarterly meeting of the Board of Trustees on June 17, 2013, Mr. Charles Ludwig announced that his term on the Board would conclude on June 30, 2013. Mr. Ludwig served with distinction on the Board as an Active Teacher Trustee from March 21, 2011 through June 30, 2013. During his tenure on the Board, the retirement system implemented the "Shared Responsibility" solution to pre-fund medical insurance benefits for retired Kentucky educators. We would like to thank Mr. Ludwig for his exemplary service and numerous contributions to the successful operation of the system.

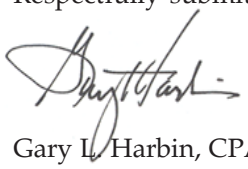
Acknowledgments

The preparation of this report reflects the combined efforts of the KTRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship of the assets contributed by KTRS members and their employers.

This report is located at the KTRS web address www.ktrs.ky.gov, and is made available to all employers whose cooperation continues to contribute significantly to our success, and who form the vital link between KTRS and its active members.

KTRS management and staff are committed to the continued operation of an actuarially sound retirement system. Your support is an essential part of this commitment, and we look forward to working with you.

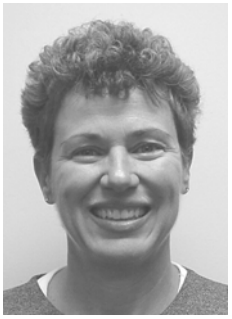
Respectfully submitted,



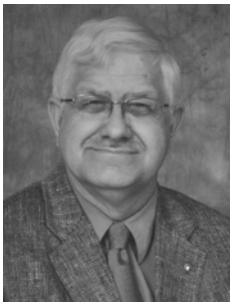
Gary L. Harbin, CPA
Executive Secretary

BOARD OF TRUSTEES

Dr. Tom Shelton
Chairperson
Teacher Trustee
Lexington



Laura Zimmerman
Vice Chairperson
Teacher Trustee
Lexington



Arthur Green
Retired Teacher Trustee
Elkton

Hollis Gritton
Lay Trustee
Union

Jay Morgan, Ph.D.
Teacher Trustee
Murray

Ronald L. Sanders
Lay Trustee
Hodgenville

Ruth Ann Sweazy
Teacher Trustee
Taylorsville

Dr. Terry Holliday
Ex Officio Trustee
Commissioner,
Dept. of Education

Todd Hollenbach
Ex Officio Trustee
State Treasurer

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

GARY L. HARBIN, CPA
Executive Secretary

ROBERT B. BARNES, JD
General Counsel and
Deputy Executive Secretary
Operations

J. ERIC WAMPLER, JD
Deputy Executive Secretary
Finance & Administration

PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

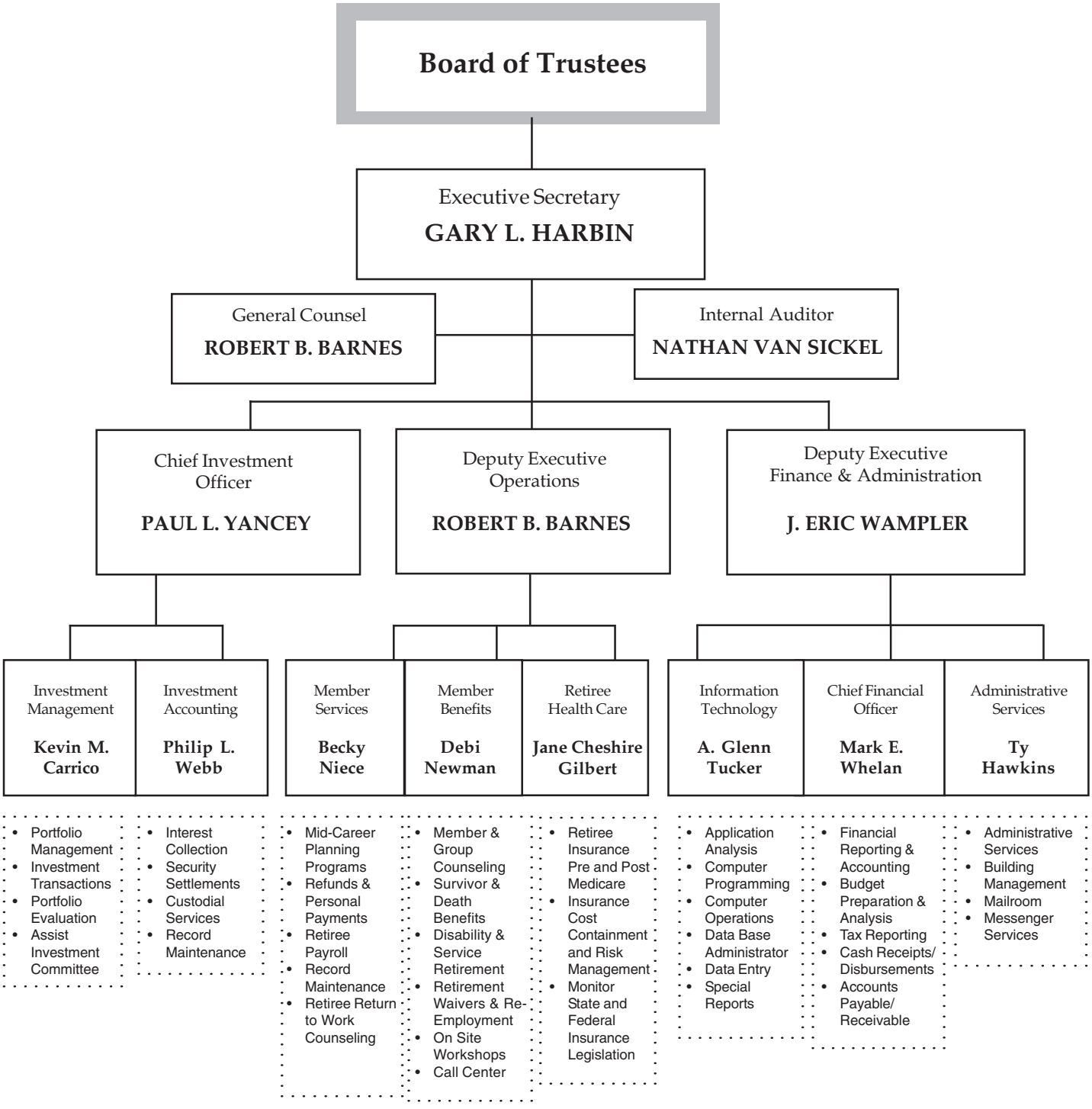
Cavanaugh Macdonald Consulting, LLC
3550 Busbee Parkway, Suite 250
Kennesaw, GA 30144

AUDITOR

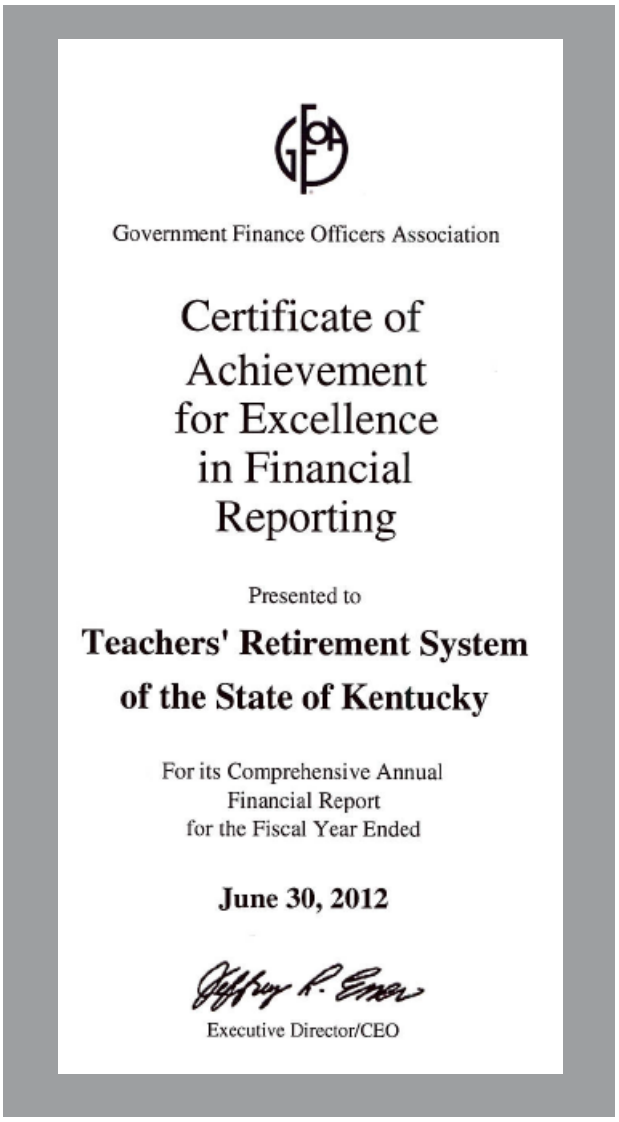
Mountjoy Chilton Medley LLC
1000 Bluegrass Corporate Center
333 West Vine Street
Lexington, KY 40507

** See pages 77 and 82 of the Investment Section for investment consultants.*

Kentucky Teachers' Retirement System
Organizational Chart



GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Teachers' Retirement System of the State of Kentucky

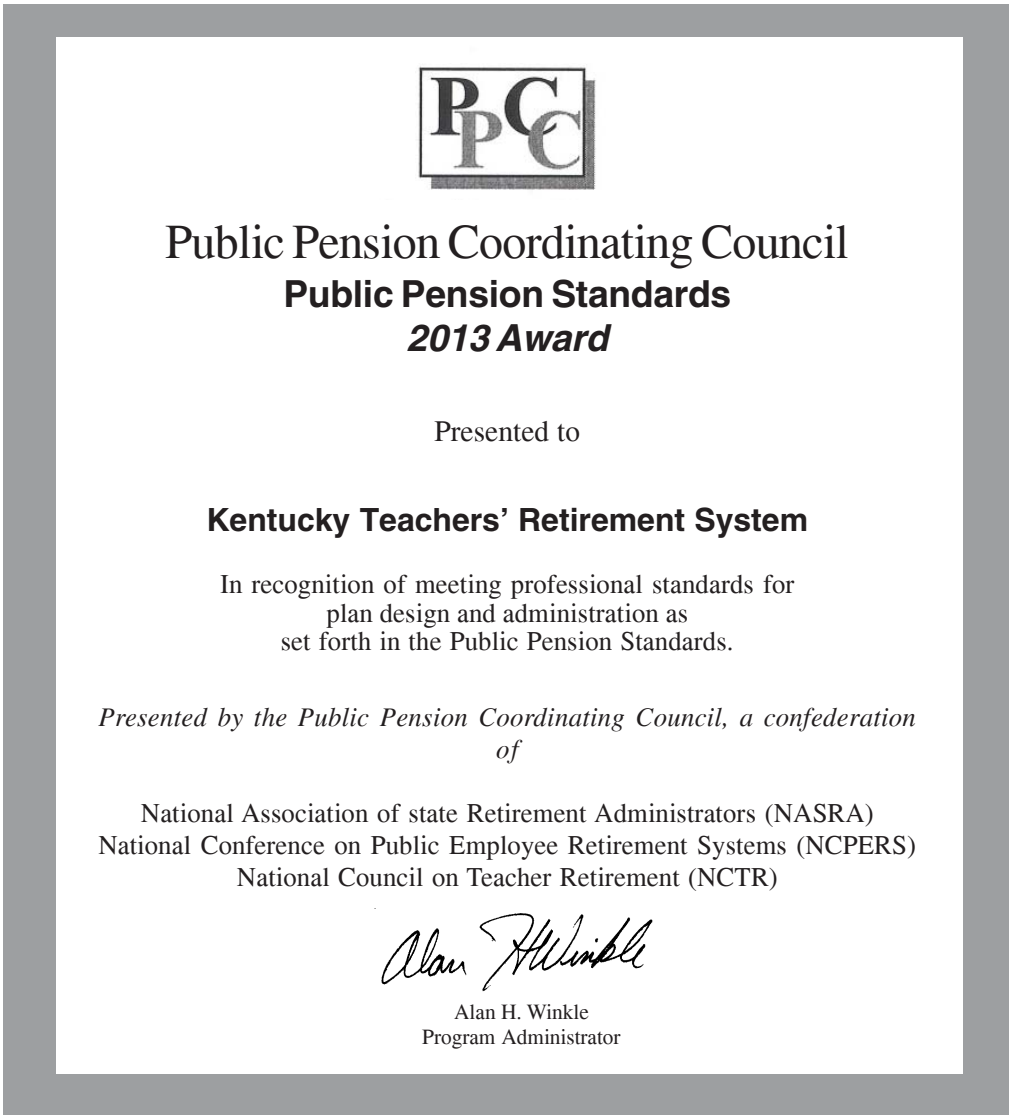
For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2012

Executive Director/CEO

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last twenty-five consecutive years (fiscal years ended 1988-2012).

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS



Public Pension Coordinating Council
Public Pension Standards
2013 Award

Presented to

Kentucky Teachers' Retirement System

In recognition of meeting professional standards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of state Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2013 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

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Financial Section

for Fiscal Year ending June 30, 2013

Independent Auditor's Report on Financial Statements

To the Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

Report on the Financial Statements

We have audited the accompanying statements of the plan net position of the Teachers' Retirement System of the State of Kentucky as of and for the years ended June 30, 2013 and 2012, and the related statements of changes in plan net position for the years then ended, and the related notes to the financial statements which collectively comprise the component unit financial statements of the Teachers' Retirement System of the State of Kentucky as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective plan net position of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of June 30, 2013 and 2012, and the respective changes in its plan net position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

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Frankfort, KY 40602

Cincinnati
1440 PNC Center
201 East Fifth Street
Cincinnati, OH 45202

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Other Matters

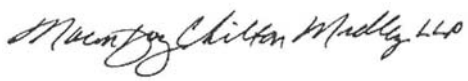
Required Supplementary Information
Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 18 through 21 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information
Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Teachers' Retirement System of the State of Kentucky's basic financial statements. The financial section and supporting schedules listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. These schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole. The introductory, statistical, investment, actuarial, and financial sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 16, 2013, on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and compliance.

Mountjoy Chilton Medley LLP



Lexington, KY
December 16, 2013

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of The Teachers' Retirement System of the State of Kentucky (Kentucky Teachers' Retirement System, KTRS, System, or Plan) financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2013. Please read it in conjunction with the respective financial statements, which begin on page 22.

USING THIS FINANCIAL REPORT

Because of the long-term nature of the defined benefit retirement annuity plan, and the medical and life insurance plans, financial statements alone cannot provide sufficient information to properly reflect the ongoing perspective of the System. The Statement of Plan Net Position and Statement of Changes in Plan Net Position (on pages 22-25) provide information about the activities of the defined benefit retirement annuity plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Kentucky Teachers' Retirement System is the fiduciary of funds held in trust for its members.
The Schedule of Funding Progress (on pages 50 and 51) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (on pages 50 and 51) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2013, Kentucky Teachers' Retirement System's combined plan net position increased by $1,384.3 million - from $15,229.1 million in 2012 to $16,613.4 million in 2013. In 2011, the combined net position totaled $15,514.9 million. The following summaries focus on plan net position and changes in plan net position of Kentucky Teachers' Retirement System's defined benefit retirement annuity plan, medical insurance plan, life insurance plan and other funds.

Summary of Plan Net Position
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2013	2012	2011	2013	2012	2011	2013	2012	2011
Cash & Investments	$ 16,549.7	$ 15,123.6	$ 15,192.9	$ 456.5	$ 345.0	$ 429.2	$ 88.8	$ 91.1	$ 87.4
Receivables	173.0	133.4	180.7	16.8	16.3	5.3	1.1	1.1	1.1
Capital Assets	9.2	6.8	3.8						
Total Assets	16,731.9	15,263.8	15,377.4	473.3	361.3	434.5	89.9	92.2	88.5
Total Liabilities	(623.1)	(466.7)	(246.8)	(59.6)	(22.5)	(139.7)			
Plan Net Position	$ 16,108.8	$ 14,797.1	$ 15,130.6	$ 413.7	$ 338.8	$ 294.8	$ 89.9	$ 92.2	$ 88.5

*TOTALS	2013	2012	2011
Cash & Investments	$ 17,095.0	$ 15,559.7	$ 15,709.5
Receivables	190.9	150.8	187.1
Capital Assets	9.2	6.8	3.8
Total Assets	17,295.1	15,717.3	15,900.4
Total Liabilities	(682.7)	(489.2)	(386.5)
Plan Net Assets	$ 16,612.4	$ 15,228.1	$ 15,513.9

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had a combined plan net position of $.9 million for years ended 2013, 2012 and 2011.*

The plan net position of the defined benefit retirement annuity plan increased by 8.9 percent ($16,108.8 million compared to $14,797.1 million) and in 2011, the plan net position of the defined benefit plan totaled $15,130.6 million. The increase is primarily due to improvements in market conditions which resulted in a net investment income increase of $1.73 billion more than 2012. The 2013 amount was $.72 billion less than 2011. The defined benefit retirement annuity plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries. Plan net position of the medical insurance plan increased by 22.1 percent ($413.7 million compared to $338.8 million) primarily due to contributions from members and employers exceeding insurance expenses due to legislation passed in 2010. This compares to 2011 where plan net position of the medical insurance fund totaled $294.8 million. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

Summary of Changes in Plan Net Position

(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2013	2012	2011	2013	2012	2011	2013	2012	2011
ADDITIONS									
Member Contributions	$ 304.7	$ 309.8	$ 302.3	$ 119.8	$ 100.3	$ 84.1	$	$	$
Employer Contributions	568.2	557.3	1,037.9	166.6	174.0	188.3	1.7	1.7	1.7
Net Investment Income	2,039.9	309.7	2,761.0	30.7	(4.0)	8.3	0.7	6.4	3.1
Other Income					3.8	0.5			
TOTAL ADDITIONS	2,912.8	1,176.8	4,101.2	317.1	274.1	281.2	2.4	8.1	4.8
DEDUCTIONS									
Benefit Payments	1,570.7	1,482.9	1,402.6				4.6	4.4	4.2
Refunds	22.1	19.5	17.3						
Administrative Expense	8.4	7.8	7.3	1.3	1.2	1.2			
Insurance Expenses				240.9	229.0	226.4			
TOTAL DEDUCTIONS	1,601.2	1,510.2	1,427.2	242.2	230.2	227.6	4.6	4.4	4.2
Increase (Decrease) in Plan Net Position	$ 1,311.6	$ (333.4)	$ 2,674.0	$ 74.9	$ 43.9	$ 53.6	$ (2.2)	$ 3.7	$ 0.6

TOTALS	2013	2012	2011
ADDITIONS			
Member Contributions	$ 424.5	$ 410.1	$ 386.4
Employer Contributions	736.5	733.0	1,227.9
Net Investment Income	2,071.3	312.1	2,772.4
Other Income		38	0.5
TOTAL ADDITIONS	3,232.3	1,459.0	4,387.2
DEDUCTIONS			
Benefit Payments	1,575.3	1,487.3	1,406.8
Refunds	22.1	19.5	17.3
Administrative Expense	9.7	9.0	8.5
Insurance Expenses	240.9	229.0	226.4
TOTAL DEDUCTIONS	1,848.0	1,744.8	1,659.0
Increase (Decrease) in Plan Net Assets	$ 1,384.3	$ (285.8)	$ 2,728.2

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

DEFINED BENEFIT RETIREMENT ANNUITY PLAN ACTIVITIES

Member contributions decreased $5.1 million. Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions totaled $568.2 million, a net increase of $10.9 million from the 2012 fiscal year.

The System experienced an increase in net investment income compared to the previous year ($2,039.9 million at June 30, 2013 as compared to a $309.7 million at June 30, 2012). For 2011, net investment income totaled $2,761.0 million. The increase in the fair value of investments is mainly due to favorable market conditions for the year ended June 30, 2013 and is illustrated as follows:

Dollar Amount in Millions

	2013	2012	2011
Appreciation (depreciation) in fair value of investments – June 30, prior year	$ 1,411.6	$ 1,842.0	$ (235.5)
Appreciation (depreciation) in fair value of investments – June 30, end of year	2,428.5	1,411.6	1,842.0
Change in net appreciation (depreciation) in fair value of investments	1,016.9	(430.4)	2,077.5
Net income (net of investment expense)	438.1	378.2	362.3
Net gain on sale of investments	548.9	361.9	321.2
Investment Income (net) – June 30, end of year	$ 2,039.9	$ 309.7	$ 2,761.0

Program deductions in 2013 increased $91.0 million. The increase was caused principally by an increase of $87.8 million in benefit payments. Members who were drawing benefits as of June 2012 received an increase of one and one-half percent to their retirement allowances in July 2012. Also, there was an increase of 1,312 members and beneficiaries on the retired payroll as of June 30, 2013.

OTHER POST EMPLOYMENT BENEFIT ACTIVITIES

During the 2013 fiscal year, the medical insurance plan member contributions increased $19.5 million and employer contributions decreased $7.4 million from fiscal year 2012. The member contributions increased primarily due to the implementation of the Shared Responsibility Plan beginning July 1, 2010 which includes increased contributions from active and retired members, employers and the state. The employer contributions decreased due to less transition funding paid by the state as the Shared Responsibility plan phases in until the 2016 fiscal year. The state's contribution for the fiscal year was made with bond proceeds received in March 2013.

Net investment income increased $34.7 million from a negative $4.0 million in 2012 to $30.7 million in 2013. In 2011, net investment income totaled $8.3 million. This can be illustrated as follows:

Dollar Amount in Millions

	2013	2012	2011
Appreciation (depreciation) in fair value of investments – June 30, prior year	(9.7)	$ 0	$ 0
Appreciation (depreciation) in fair value of investments – June 30 end of year	15.7	(9.7)	0
Change in net appreciation(depreciation) in fair value of investments	25.4	(9.7)	0
Net income (net of investment expense)	5.3	6.0	8.3
Net gain (loss) on sale of investments	0	(0.3)	0
Investment Income (net) – June 30	$ 30.7	$ (4.0)	$ 8.3

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2013, 2012 and 2011 were $4.6, $4.4, and $4.2 million respectively.

HISTORICAL TRENDS

Accounting standards require that the Statement of Plan Net Position state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information regarding the actuarial funding status of the defined benefit plan, the medical insurance plan, and the life insurance plan is provided in the Schedule of Funding Progress (beginning on page 50). The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the entry age cost method.

The 2013 fiscal year reveals a decline in funding position of the retirement annuity plan due primarily to an increase in the actuarial liability while the actuarial value of the assets remained flat due to market decline in prior years. Annual required employer contributions of the defined benefit plan are provided in the Schedule of Employer Contributions (on page 50) and a shortfall of employer contributions has resulted in an accumulated net pension obligation of $682,450,008 as of June 30, 2013.

Although the medical insurance plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding. Effective July 1, 2010 the Shared Responsibility Plan for funding retiree health benefits requires members, retirees, participating employers and the state to make contributions for pre-funding retiree medical benefits. Annual required contributions of the medical insurance plan are provided in the Schedule of Employer Contributions (on page 51) and a shortfall of employer contributions has resulted in an accumulated net OPEB obligation of $1,469,685,047 as of June 30, 2013.

Statement of Plan Net Position
As of June 30, 2013

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 26,650,916	$ 6,879,174	$ 226,483	$ 68,943	$ 33,825,516
Prepaid Expenses	125,364	147,000			272,364
Receivables					
Contributions	38,461,507	9,771,489	22,945		48,255,941
Due From Other Trust Funds	1,300,238				1,300,238
State of Kentucky	31,975,561	3,350,147	69,683		35,395,391
Investment Income	48,247,677	1,375,970	1,039,330	1,607	50,664,584
Investment Sales Receivable	52,391,569	2,348,249			54,739,818
Other Receivables	656,500				656,500
Total Receivables	173,033,052	16,845,855	1,131,958	1,607	191,012,472
Investments at Fair Value (See Note 5)					
Short-Term Investments	796,485,774	56,915,874	1,907,900	541,819	855,851,367
Bonds and Mortgages	3,093,270,830	64,728,260	86,715,442	238,626	3,244,953,158
Equities	10,102,552,862	243,022,751		120,315	10,345,695,928
Alternative Investments	540,739,121	1,255,715			541,994,836
Real Estate	642,611,173				642,611,173
Additional Categories	882,969,785	83,487,054			966,456,839
Total Investments	16,058,629,545	449,409,654	88,623,342	900,760	16,597,563,301
Invested Security Lending Collateral	464,229,713				464,229,713
Capital Assets, at cost net of accumulated depreciation of $2,536,306 (See Note 2)	9,249,324				9,249,324
Total Assets	16,731,917,914	473,281,683	89,981,783	971,310	17,296,152,690
LIABILITIES					
Accounts Payable	1,513,830	4,058,236			5,572,066
Due to Other Trust Funds		1,275,206	24,425	607	1,300,238
Insurance Claims Payable		137,000			137,000
Revenues Collected in Advance		49,373,905			49,373,905
Investment Purchases Payable	157,366,066	4,771,571			162,137,637
Obligations Under Securities Lending	464,229,713				464,229,713
Total Liabilities	623,109,609	59,615,918	24,425	607	682,750,559
NET POSITION-RESTRICTED FOR PENSION AND OTHER POST-EMPLOYMENT BENEFITS:	$ 16,108,808,305	$ 413,665,765	$ 89,957,358	$ 970,703	$ 16,613,402,131

The combining statement of "Plan Net Position - Other Funds" is presented on page 26.
The accompanying notes are an integral part of these financial statements.

Statement of Plan Net Position
As of June 30, 2012

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 25,314,512	$ $5,202,577	$ 299,153	$ 9,828	$ 30,826,070
Prepaid Expenses	62,774	147,000			209,774
Receivables					
Contributions	37,851,376	5,574,370	31,987		43,457,733
Due From Other Trust Funds	2,432,980				2,432,980
State of Kentucky	9,162,962	5,714,136	21,590		14,898,688
Investment Income	50,642,735	1,177,984	1,066,325	1,183	52,888,227
Investment Sales Receivable	33,559,535				33,559,535
Other Receivables	499,433	3,873,520			4,372,953
Total Receivables	134,149,021	16,340,010	1,119,902	1,183	151,610,116
Investments at Fair Value (See Note 5)					
Short-Term Investments	608,260,247	57,658,400	4,521,129	673,015	671,112,791
Bonds and Mortgages	3,209,187,529	87,375,468	86,345,459	270,532	3,383,178,988
Equities	9,259,302,459	140,740,862			9,400,043,321
Alternative Investments	451,266,337	748,103			452,014,440
Real Estate	586,800,766				586,800,766
Aditional Categories	586,106,748	53,027,854			639,134,602
Total Investments	14,700,924,086	339,550,687	90,866,588	943,547	15,132,284,908
Invested Security Lending Collateral	396,546,893				396,546,893
Capital Assets, at cost net of accumulated depreciation of $2,202,905 (See Note 2)	6,858,662				6,858,662
Total Assets	15,263,855,948	361,240,274	92,285,643	954,558	15,718,336,423
LIABILITIES					
Accounts Payable	4,052,099	3,762,868			7,814,967
Due to Other Trust Funds		2,387,658	44,397	925	2,432,980
Insurance Claims Payable		67,000			67,000
Revenues Collected in Advance		6,153,310			6,153,310
Investment Purchases Payable	66,136,067	10,122,885			76,258,952
Obligations Under Securities Lending	396,546,893				396,546,893
Total Liabilities	466,735,059	22,493,721	44,397	925	489,274,102
NET POSITION-RESTRICTED FOR PENSION AND OTHER POST-EMPLOYMENT BENEFITS:	$ 14,797,120,889	$ 338,746,553	$ 92,241,246	$ 953,633	$ 15,229,062,321

The combining statement of "Plan Net Position - Other Funds" is presented on page 27.
The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Position
For the Year Ended June 30, 2013

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
Employer	$ 568,233,446	$ 166,576,444	$ 1,680,495	$ 140,000	$ 736,630,385
Member	304,738,728	119,795,780			424,534,508
Total Contributions	872,972,174	286,372,224	1,680,495	140,000	1,161,164,893
Other Income					
Recovery Income		34,976			34,976
Total Other Income		34,976			34,976
Investment Income					
Net Appreciation/(Depreciation) in FV of Investments	1,601,781,093	25,431,394	(2,822,147)	(18,885)	1,624,371,455
Interest	254,918,477	5,822,532	3,496,517	9,684	264,247,210
Dividends	184,104,556	20,949		1,507	184,127,012
Rental Income, Net	30,059,686				30,059,686
Securities Lending, Gross Earnings	3,077,116		390	3	3,077,509
Gross Investment Income	2,073,940,928	31,274,875	674,760	(7,691)	2,105,882,872
Less Investment Expense	(33,143,497)	(556,039)			(33,699,536)
Less Securities Lending Expense	(923,168)				(923,168)
Net Investment Income	2,039,874,263	30,718,836	674,760	(7,691)	2,071,260,168
Total Additions	2,912,846,437	317,126,036	2,355,255	132,309	3,232,460,037
DEDUCTIONS					
Benefits	1,570,722,924		4,614,718	114,632	1,575,452,274
Refunds of Contributions	22,059,094				22,059,094
Insurance Expenses		240,931,618			240,931,618
Administrative Expense	8,377,003	1,275,206	24,425	607	9,677,241
Total Deductions	1,601,159,021	242,206,824	4,639,143	115,239	1,848,120,227
Net Increase (Decrease)	1,311,687,416	74,919,212	(2,283,888)	17,070	1,384,339,810
NET POSITION-RESTRICTED FOR PENSION AND OTHER POST-EMPLOYMENT BENEFITS:					
Beginning of year	14,797,120,889	338,746,553	92,241,246	953,633	15,229,062,321
Ending of year	$16,108,808,305	$ 413,665,765	$ 89,957,358	$ 970,703	$ 16,613,402,131

The combining statement of "Changes in Plan Net Position - Other Funds" is presented on page 26.
The accompanying notes are an integral part of these financial statements.

Statement of Changes in Plan Net Position
For the Year Ended June 30, 2012

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
Employer	$ 557,339,552	$ 173,966,623	$ 1,684,711	$	$ 732,990,886
Member	309,729,924	100,346,070			410,075,994
Total Contributions	867,069,476	274,312,693	1,684,711		1,143,066,880
Other Income					
Recovery Income		3,483,583			3,483,583
Medicare D Receipts		297,639			297,639
Total Other Income		3,781,222			3,781,222
Investment Income					
Net Appreciation/(Depreciation) in FV of Investments	(68,546,089)	(9,970,177)	2,703,508	66,220	(75,746,538)
Interest	210,189,576	6,231,117	3,746,222	10,023	220,176,938
Dividends	163,431,233	32,266			163,463,499
Rental Income, Net	30,536,687				30,536,687
Securities Lending, Gross Earnings	3,104,925		292		3,105,217
Gross Investment Income	338,716,332	(3,706,794	6,450,022	76,243	341,535,803
Less Investment Expense	(28,088,560)	(282,408)			(28,370,968)
Less Securities Lending Expense	(931,520)				(931,520)
Net Investment Income	309,696,252	(3,989,202	6,450,022	76,243	312,233,315
Total Additions	1,176,765,728	274,104,713	8,134,733	76,243	1,459,081,417
DEDUCTIONS					
Benefits	1,482,939,165		4,397,281	92,232	1,487,428,678
Refunds of Contributions	19,549,073				19,549,073
Insurance Expenses		228,975,126			228,975,126
Administrative Expense	7,762,880	1,201,629	22,886	480	8,987,875
Total Deductions	1,510,251,118	230,176,755	4,420,167	92,712	1,744,940,752
Net Increase (Decrease)	(333,485,390)	43,927,958	3,714,566	(16,469)	(285,859,335)
NET POSITION-RESTRICTED FOR PENSION AND OTHER POST-EMPLOYMENT BENEFITS:					
Beginning of year	15,130,606,279	294,818,595	88,526,680	970,102	15,514,921,656
Ending of year	$ 14,797,120,889	$ 338,746,553	$ 92,241,246	$ 953,633	$ 15,229,062,321

The combining statement of "Changes in Plan Net Position - Other Funds" is presented on page 27.
The accompanying notes are an integral part of these financial statements.

Combining Statement of Plan Net Position
as of June 30, 2013
OTHER FUNDS

	403(B) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 68,943	$	$ 68,943
Receivables				
Investment Income			1,607	1,607
Investments at Fair Value				
Short Term Investments	391,095		150,724	541,819
Bonds and Mortgages			238,626	238,626
Equities			120,315	120,315
Total Investments	391,095		509,665	900,760
Total Assets	391,095	68,943	511,272	971,310
Liabilities				
Due to Other Trust Funds	76	425	106	607
Net Position - Restricted for Pension and Other Post-Employment Benefits	$ 391,019	$ 68,518	$ 511,166	$ 970,703

Combining Statement of Changes in Plan Net Position
as of June 30, 2013
OTHER FUNDS

	403(B) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Contributions				
Employer	$	$ 140,000	$	$ 140,000
Investment Income/(Loss)				
Net Appreciation/(Depreciation) in Fair Value of Investments			(18,885)	(18,885)
Interest	448		9,236	9,684
Dividends			1,507	1,507
Securities Lending, Net			3	3
Net Investment Income/(Loss)	448		(8,139)	(7,691)
Total Additions	448	140,000	(8,139)	132,309
Deductions				
Benefits	14,260	80,372	20,000	114,632
Administrative Expense	76	425	106	607
Net Increase (Decrease)	(13,888)	59,203	(28,245)	17,070
Net Position - Restricted for Pension and Other Post-Employment Benefits				
Beginning of Year	404,907	9,315	539,411	953,633
End of Year	$ 391,019	$ 68,518	$ 511,166	$ 970,703

The accompanying notes are an integral part of these financial statements.

Combining Statement of Plan Net Position
as of June 30, 2012
OTHER FUNDS

	403(B) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 9,828	$	$ 9,828
Receivables				
Investment Income			1,183	1,183
Investments at Fair Value				
Short Term Investments	405,136		267,879	673,015
Bonds and Mortgages			270,532	270,532
Equities				
Total Investments	405,136		538,411	943,547
Total Assets	405,136	9,828	539,594	954,558
Liabilities				
Due to Other Trust Funds	229	513	183	925
Net Position - Restricted for Pension and Other Post-Employment Benefits	$ 404,907	$ 9,315	$ 539,411	$ 953,633

Combining Statement of Changes in Plan Net Position
as of June 30, 2012
OTHER FUNDS

	403(B) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Contributions				
Employer	$	$	$	$
Investment Income/(Loss)				
Net Appreciation/(Depreciation) in Fair Value of Investments			66,220	66,220
Interest	713		9,310	10,023
Net Investment Income/(Loss)	713		75,530	76,243
Total Additions	713		75,530	76,243
Deductions				
Benefits	18,952	55,280	18,000	92,232
Administrative Expense	99	287	94	480
Net Increase (Decrease)	(18,338)	(55,567)	57,436	(16,469)
Net Position - Restricted for Pension and Other Post-Employment Benefits				
Beginning of Year	423,245	64,882	481,975	970,102
End of Year	$ 404,907	$ 9,315	$ 539,411	$ 953,633

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements
Years Ended June 30, 2013 and 2012

Note 1: Description of Retirement Annuity Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan established to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state.

B. PARTICIPANTS

As of June 30, 2013 a total of 208 employers participated in the plan. Employers are comprised of local school districts, Department of Education Agencies, universities, the Kentucky Community and Technical College System, and other educational organizations.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

	2013	2012
Active contributing members:		
Vested	48,620	48,383
Non-vested	26,211	27,568
Inactive members, vested	7,194	6,668
Retirees and beneficiaries currently receiving benefits	47,406	46,094
Total members, retirees, and beneficiaries	**129,431**	**128,713**

C. BENEFIT PROVISIONS

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or
2.) Complete 27 years of Kentucky service.

Participants that retire before age sixty (60) with less than twenty-seven (27) years of service receive reduced retirement benefits. Non-university members receive monthly payments equal to two percent (2%) (service prior to July 1, 1983) and two and one-half percent (2.5%) (service after July 1, 1983) of their final average salaries for each year of credited service. University employees receive monthly benefits equal to two percent (2%) of their final average salary for each year of credited service. The final average salary is the member's five (5) highest annual salaries except members at least age fifty-five (55) with twenty-seven (27) or more years of service may use their three (3) highest annual salaries. New members (including second retirement accounts started) after July 1, 2002 will receive monthly benefits equal to two percent (2%) of their final average salary for each year of service if, upon retirement, their total service is less than ten (10) years. New members after July 1, 2002 who retire with ten (10) or more years of total service will receive monthly benefits equal to two and one-half percent (2.5%) of their final average salary for each year of service, including the first ten (10) years. In addition, non-university members who retire July 1, 2004 and later with more than thirty (30) years of service will have their multiplier increased for all years over thirty (30) from two and one-half percent (2.5%) to three percent (3%) to be used in their benefit calculation.

Note 1: Description of Retirement Annuity Plan continued . . .

The System provides post-employment medical benefits to retirees as fully described in Note 8. The System also provides disability benefits for vested members at the rate of sixty percent (60%) of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half percent (1.5%) annually. Additional ad hoc increases and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

KTRS has five cash accounts. At June 30, 2013, the retirement annuity cash account totaled $25,651,419 and the administrative expense fund cash account was $999,497 for a total of $26,650,916 as carrying value of cash in the defined benefit plan. The medical insurance cash account totaled $6,879,174, the life insurance plan cash account totaled $226,483 and the excess benefit fund cash account contained $68,943. Therefore, the carrying value of cash was $33,825,516 and the bank balance was $30,191,478 and funds controlled by the Commonwealth of Kentucky of $6,527,386. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2013.

C. CAPITAL ASSETS

Fixed assets are recorded at historical cost less straight-line accumulated depreciation. The classes of fixed assets are furniture and equipment, the KTRS office buildings and land. Furniture and equipment are depreciated over an average useful life of five (5) years. The office buildings are depreciated over forty years. The Pathway System will be capitalized and amortized or depreciated over ten years. The Pathway System will replace KTRS's legacy computer system and be KTRS's primary line of business information technology system. As of June 30, 2013, the project to build and implement the Pathway System was approximately fifty percent (50%) complete.

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers. Alternative investments such as private equity, timberland, and other additional categories are valued using the most recent general partner statement of fair value based on independent appraisals, updated for any subsequent partnership interests' cash flows.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in plan net position. Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by the System's employees

Note 2: Summary of Significant Accounting Policies continued . . .

are recorded when earned. Upon termination or retirement, employees of the System are paid for accumulated vacation time limited to sixty (60) days and accumulated compensatory time limited to two hundred-forty (240) hours. As of June 30, 2013 and 2012 accrued compensated absences were $979,037 and $876,573.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which the System is exposed. In order to cover such risks the System carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

G. OTHER RECEIVBLES

KTRS allows qualified purchases of service credit to be made by installment payments not to exceed a five (5) year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2013 and 2012 installment contract receivables were $656,500 and $499,433.

H. USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The System’s management believes that it has operated the plans within the constraints imposed by federal tax law.

J. RECENT PRONOUNCEMENTS

In June 2011, the GASB issued Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position. GASB Statement No. 63 provides financial reporting guidance relative to deferred outflows of resources, a consumption of net assets by KTRS that is applicable to a future reporting period, and deferred inflows of resources, an acquisition of net assets by KTRS that is applicable to a future reporting period. GASB Statement No. 63 incorporates deferred outflows and inflows of resources into the definitions of the required components of the residual measure, renaming such measure as net position, rather than net assets. The provisions of GASB Statement No. 63 are effective for fiscal periods beginning after December 15, 2011 (the fiscal year ended June 30, 2013) and did not have a significant impact on the Systems’ financial statements.

In April 2012, GASB issued Statement No. 65, Items Previously Reported as Assets and Liabilities. This pronouncement clarifies the appropriate reporting of deferred outflows of resources and deferred inflows of resources to ensure consistency in financial reporting. GASB Statement No. 65 is effective for fiscal years beginning after December 15, 2012 (the fiscal year ended June 30, 2014). The impact of this statement on the financial statements has not yet been determined.

In June 2012, the GASB issued Statement No. 67, Financial Reporting for Pension Plans and Statement No. 68, Accounting and Financial Reporting for Pensions. GASB Statement No. 67 replaces GASB Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans. GASB Statement No. 68 replaces GASB Statement No. 27, Accounting for Pensions by State and Local Governmental Employers. GASB Statement No. 67 is effective for the year ending June 30, 2014, and GASB Statement No. 68 will be effective for the year ending June 30, 2015. At this time,

Note 2: Summary of Significant Accounting Policies continued . . .

management is reviewing the recently issued pronouncements to determine the impact on KTRS's financial statements. An additional report related to GASB Statement No. 67 can be found beginning on page 139 in the Actuarial section of this CAFR.

K. RECLASSIFICATIONS

Certain 2012 amounts have been reclassified in conformity with the 2013 presentation.

Note 3: Contributions and Reserves

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Non-university members are required to contribute 10.855 percent of their salaries to the System; university members are required to contribute 9.055 percent of their salaries. KRS 161.565 allows each university to reduce the contribution of its members by 2.215 percent; therefore, university members contribute 6.840 percent of their salary to KTRS. University members who joined the plan on and after July 2008 are required to contribute an additional .32 percent to the medical insurance plan.

For members employed by local school districts, the state contributes 13.105 percent of salary for those who joined before July 1, 2008 and 14.105 percent for those who joined thereafter.

Other participating employers are required to contribute the percentage contributed by members plus an additional 3.25 percent of members' gross salaries.

The member and employer contributions consist of retirement annuity contributions and other post-employment benefit contributions to the medical and life insurance plans. The member post-employment medical contribution is 1.75 percent. The employer post-employment medical contribution is .75 percent of member gross salaries. Also, after July 1, 2010 employers (other than the state) contribute 1.0 percent of members' salaries and the state contributes the net cost of health insurance premiums for new retirees after June 30, 2010 in the non-Medicare eligible group. If a member leaves covered employment before accumulating five (5) years of credited service, accumulated member contributions to the retirement annuity plan plus interest are refunded upon the member's request.

B. RESERVES

Member Reserve

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from Unallocated Reserves. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Benefit Reserves, the fund from which retirement benefits are paid.

Employer Reserve

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky.

Benefit Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to

Note 3: Contributions and Reserves continued . . .

pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

Unallocated Reserve

This fund was established by KRS 161.420(6) as the Guarantee Fund, to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of the System, and deficiencies not covered by the other funds.

Administrative Expense Reserve

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from Unallocated Reserves is used to pay the administrative expenses of the System. Starting July 1, 2010 administrative expenses are allocated among the funds based on benefits paid.

Note 4: Funded Status and Funding Progress

A. DESCRIPTION OF FUNDING PROGRESS

The funded status of the Defined Benefit Retirement Annuity Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accured Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL As a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2013	$ 14,962,758	$ 28,817,232	$ 13,854,474	51.9%	$ 3,480,066	398.1%

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear funding trend information as obtained from the System's independent actuary's annual valuation report.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the System is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the retirement system. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the retirement system.

The accompanying schedule of employer contributions, presented as required supplementary information following the notes to the financial statements, presents trend information about the amounts contributed to the plan by employers in comparison to the Annual Required Contribution (ARC). The ARC is actuarially determined in accordance with the parameters of GASB Statement 50. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Note 4: Funded Status and Funding Progress continued . . .

B. METHODOLOGIES

The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the entry age actuarial cost method. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a thirty (30) year period using an open amortization approach. The five (5) year smoothed market approach is used for asset valuation.

Actuarial Value of Assets

(1)	Actuarial Value of Assets on June 30, 2012		$ 14,691,371,043
(2)	Market Value End of Year June 30, 2013		16,108,808,305
(3)	Market Value Beginning of Year June 30, 2012		14,797,120,889
(4)	Cash Flow		
	a.	Contributions (exclusive of Pension Obligation Bond)	872,972,174
	b.	Benefit Payments	(1,592,782,018)
	c.	Administrative Expenses	(8,377,003)
	d.	Net	(728,186,847)
(5)	Investment Income		
	a.	Market total: (2) - (3) -(4)d	2,039,874,263
	b.	Assumed Rate	7.5%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d * (5)b * 0.5]	1,082,477,060
	d.	Amount for Phased-In Recognition: (5)a - (5)c	957,397,203
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	191,479,441
	b.	First Prior Year	(160,195,981)
	c.	Second Prior Year	363,670,625
	d.	Third Prior Year	133,378,916
	e.	Fourth Prior Year	(611,235,941)
	f.	Total Recognized Investment Gain	(82,902,940)
(7)	Actuarial Value End of Year	(1) + (4)d + (5)c +(6)f	14,962,758,316
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ 1,146,049,989
(9)	Rate of Return on Actuarial Value		6.98%

C. ASSUMPTIONS

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2013, the most recent updated actuarial information include:

*	Assumed inflation rate	3.50%
*	Assumed investment rate	7.50%
*	Assumed projected salary increases	4.00% - 8.20%
*	Assumed annual cost of living adjustments	1.50%

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of KTRS' financial statements assess the risks KTRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430.

KTRS administers a retirement annuity trust fund and a health insurance trust fund in accordance with state and federal law. KTRS provides service and disability retirement benefits, death and survivor benefits, health insurance benefits, and life insurance benefits for Kentucky public education employees and their beneficiaries. The trust funds managed by KTRS shall be referred to collectively as the "retirement system" unless the context requires a specific reference to a particular fund.

The asset allocation parameters for the retirement annuity trust fund are set forth in Title 102, Chapter 1:175, Section 2 of the Kentucky Administrative Regulations as follows:

- There shall be no limit on the amount of investments owned by the retirement annuity trust fund if the investments are guaranteed by the United States government.
- Not more than thirty-five percent (35%) of the assets of the retirement annuity trust fund at fair value shall be invested in corporate debt obligations.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in foreign debt.
- Not more than sixty-five percent (65%) of the assets of the retirement annuity trust fund at fair value shall be invested in common stocks or preferred stocks. Not more than twenty-five percent (25%) of the assets of the retirement annuity trust fund at fair value shall be invested in a stock portfolio designed to replicate a general stock index. Not more than thirty percent (30%) of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in alternative investments. This category may include private equity, venture capital, timberland, and infrastructure investments.
- Not more than fifteen percent (15%) of the assets of the retirement annuity trust fund at fair value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

The asset allocation parameters for the health insurance trust fund are set forth in Title 102, Chapter 1:178, Section 2 of the Kentucky Administrative Regulations as follows:

- In order to preserve the assets of the health insurance trust fund and produce the required rate of return while minimizing risk, assets shall be prudently diversified among various classes of investments.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

- In determining asset allocation policy, the investment committee and the board shall be mindful of the health insurance trust fund's liquidity and its capability of meeting both short and long-term obligations.

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the retirement system's deposits may not be returned to the system. The retirement system's total cash balance held at J.P. Morgan Chase Bank in noninterest-bearing accounts on June 30, 2013 was $30,191,478. In addition to these funds, an amount of $6,527,386 represents funds transferred to and controlled by the Commonwealth of Kentucky.

On November 9, 2010, the FDIC issued a Final Rule implementing Section 343 of the Dodd-Frank Wall Street Reform and Consumer Protection Act that provides for unlimited insurance coverage of noninterest-bearing transaction accounts. Beginning December 31, 2010, through December 31, 2012, all noninterest-bearing transaction accounts are fully insured, regardless of the balance of the account, at all FDIC-insured institutions. Therefore, all cash balances were fully insured by the FDIC through December 31, 2012. Beginning January 1, 2013, all cash balances at J.P. Morgan Chase Bank were insured up to $250,000 and the remaining balances fully collateralized with securities held by the Federal Reserve Bank of New York in the name of the Commonwealth of Kentucky-Teachers' Retirement.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,
b. collateralized with securities held by the pledging financial institution, or
c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2013, the retirement system's cash balance in the amount of $30,191,478 was not exposed to custodial credit risk since this amount was fully insured by the FDIC limit of $250,000 and the remaining balances collateralized with securities valued at $42,467,757.

C. INVESTMENTS

All of the retirement system's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, alternative investments, and additional categories as permitted by regulation. These assets are reported at fair value.

Investments are governed by the Board of Trustees' policies while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following chart represents the fair values of the investments of the Kentucky Teachers' Retirement System for June 30, 2013.

Schedule of Investments
Retirement Annuity Trust

	Fair Value June 30, 2013	Fair Value June 30, 2012
Money Market Fund	$ 766,568,843	$ 625,060,870
Commercial Paper	34,560,147	
Total Cash Equivalents*	**801,128,990**	**625,060,870**
U.S. Government	650,217,435	502,533,682
Agency Bonds	146,127,074	156,932,114
Mortgage Backed Securities	180,378,637	199,128,064
Asset Backed Securities	41,175,017	60,608,480
Commercial Mtg Backed Securities	210,980,212	295,709,822
Collateralized Mtg Obligations	41,523,706	43,276,306
Municipal Bonds	460,132,862	511,018,984
Corporate Bonds	1,449,689,955	1,526,596,068
Total Fixed Income	**3,180,224,898**	**3,295,803,520**
Global		
International Equity	2,676,211,485	2,307,653,944
U.S. Equity	7,426,461,692	6,951,648,515
Total Equities	**10,102,673,177**	**9,259,302,459**
Real Estate Equity	642,611,173	586,800,766
Total Real Estate Equity	**642,611,173**	**586,800,766**
Private Equity	343,259,092	265,833,651
Timberland	197,480,029	185,432,686
Total Alternative Investments	**540,739,121**	**451,266,337**
Opportunistic Credit	477,554,833	191,846,044
Corporate	307,715,989	271,894,458
International Bonds	91,778,981	
PPIP	4,859,928	121,357,075
Preferred US Equity	1,060,054	1,009,171
Total Additional Categories	**882,969,785**	**586,106,748**
TOTAL INVESTMENTS	**$ 16,150,347,144**	**$ 14,804,340,700**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments Comparison
Health Insurance Trust

	Fair Value June 30, 2013	Fair Value June 30, 2012
Money Market Fund	$ 54,722,377	$ 46,051,921
Total Cash Equivalents	**54,722,377**	**46,051,921**
Agency Bonds	32,292,470	87,375,468
Asset Backed Securities	9,360,161	
Corporate Bonds	23,075,629	52,755,524
Total Fixed Income	**64,728,260**	**140,130,992**
Global	243,022,751	140,740,862
Total Equities	**243,022,751**	**140,740,862**
Private Equity	1,255,715	748,103
Total Alternative Investments	**1,255,715**	**748,103**
Opportunistic Credit	23,840,109	
Corporate	59,360,240	
Preferred US Equity	286,705	272,330
Total Additional Categories	**83,487,054**	**272,330**
Total Investments	**$ 447,216,157**	**$ 327,944,208**

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the pension trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system,and are held by either:

a. the counterparty or
b. the counterparty's trust department or agent, but not in the System's name.

The cash reserve of the retirement system is primarily maintained in high quality short term investments through the Dreyfus Institutional Cash Advantage Fund. This Fund invests in a diversified portfolio of high quality, short-term debt securities and the Fund is rated AAA by S&P, Moody's, and Fitch, Inc. The Fund's portfolio is structured within the confines of Rule 2a-7 under the Investment Company Act of 1940, as amended. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, bankers' acceptances, repurchase agreements, time deposits, etc. are all permissible investments within this Fund.

Whenever repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers, the terms are dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS' nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a fair value of at least 102 percent of the value of the repurchase agreements.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

As of June 30, 2013, cash collateral reinvestment securities acquired through securities lending for the retirement annuity trust fund by KTRS's custodian, who is also the lending agent/counterparty, amounted to $464,229,713 related to $450,695,509 securities lent consistent with the lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the retirement system's investments. In general, the longer the period until an investment matures, the greater the risk of a negative impact on fair value resulting from changes in interest rates.

As of June 30, 2013, the retirement annuity trust and health insurance trusts had the following investments and weighted average maturities:

Retirement Annuity Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
U.S. Government	$ 650,217,435	$	8.36
Agency	146,127,074		8.41
MBS	180,378,637		13.76
CMO	41,523,706		18.63
ABS	41,175,017		15.30
CMBS	210,980,212		25.70
Muni	460,132,862	53,077,891	13.11
Corporate	1,449,689,955	522,504,400	7.95
Totals	**$ 3,180,224,898**	**$ 575,582,291**	**10.22**

Health Insurance Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
Agency	$ 32,292,470	$	6.05
ABS	9,360,161		1.20
Corporate	23,075,629	82,069,081	5.65
Totals	**$ 64,728,260**	**$ 82,069,081**	**5.45**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

In addition to the above securities, the System held short-term cash investments in the Dreyfus Institutional Cash Advantage Fund and STIF, held at the Bank of New York Mellon, with a total fair value of $821,291,220 and had a weighted average maturity of forty-one (41) days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology to quantify the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of changes in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the retirement system manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by the retirement system were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The retirement system held $180.4 million in mortgage-backed securities as of June 30, 2013.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The System held $41.5 million in collateralized mortgage obligations as of June 30, 2013.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivables originated by banks, credit card companies, or other credit providers, and are considered to be moderately sensitive to changes in interest rates. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The retirement annuity trust held $41.2 million, and the health insurance trust held $9.4 million in asset backed securities as of June 30, 2013.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The retirement system's commercial mortgage-backed securities investments consist of highly rated relatively senior tranches. The average maturity of the retirement system's commercial mortgage-backed securities holdings in the schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The retirement system held $211.0 million in commercial mortgage-backed securities investments as of June 30, 2013.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedule lists KTRS's fixed income investments (net of cash equivalents) according to credit ratings as of June 30, 2013:

Retirement Annuity Trust

Rating	Bonds & Mortgages	Additional Categories	Total	%
U.S. Government	$ 650,217,435	$	$ 650,217,435	17.31
AAA	395,149,816	21,149,744	416,299,560	11.08
AA	887,644,553	23,525,750	911,170,303	24.26
A	691,886,217	32,343,439	724,229,656	19.29
BBB	520,466,142	36,753,231	557,219,373	14.84
BB	13,617,750	207,935,099	221,552,849	5.90
B	11,260,000	226,575,403	237,835,403	6.33
CCC		21,397,284	21,397,284	0.57
D		722,240	722,240	0.02
Not Rated	9,982,985	5,180,101	15,163,086	0.40
Total	**$ 3,180,224,898**	**$ 575,582,291**	**$ 3,755,807,189**	**100.00%**

Health Insurance Trust

Rating	Bonds & Mortgages	Additional Categories	Total	%
AAA	$ 9,360,161	$	$ 9,360,161	6.38
AA	33,782,961		33,782,961	23.01
A	21,585,138	258,390	21,843,528	14.88
BBB		5,683,810	5,683,810	3.88
BB		32,396,397	32,396,397	22.07
B		40,562,606	40,562,606	27.63
CCC		2,790,659	2,790,659	1.90
D		152,500	152,500	0.10
Not Rated		224,719	224,719	0.15
Total	**$ 64,728,260**	**$ 82,069,081**	**$ 146,797,341**	**100.00%**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Total fair value of the retirement annuity trust's fixed income portfolio was $3,755,807,189 on June 30, 2013. The health insurance trust's fixed income portfolio was valued at $146,797,341. The rating system used in the above charts is the Standard and Poor's rating system. For securities where a Standard and Poor's rating is not provided, another nationally recognized system is used and translated to the Standard and Poor's rating system.

In addition to the above categories, the retirement annuity trust held $766,568,843 in short term investments through the Dreyfus Institutional Cash Advantage Fund, and $34,560,147 in short term commercial paper. The health insurance trust held $54,722,377 in the Dreyfus Institutional Cash Advantage Fund. The credit risk associated with this Fund is minimal as the securities held are required to maintain the highest possible short-term credit ratings by Moody's and Standard & Poor's. In addition, investments in US Government and Agency securities are also highly rated securities since they are backed by the US Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

The retirement annuity trust fund's policy on credit rating is set forth in 102 KAR 1:175 and reads as follows:

"A fixed income investment shall be rated at the time of purchase as investment grade by at least one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. The fixed income investment portfolio as a whole shall maintain an average rating of investment grade by at least one (1) of the major rating services."

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the retirement annuity trust fund is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the system.

"The System's position in a single stock shall not exceed two and one-half (2.5) percent of the System's assets. The system's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program."

KTRS has not invested greater than five percent (5%) of the retirement annuity trust fund's assets at fair value in any single issuer and is in compliance with investment policy.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. As of June 30, 2013, the retirement system's exposure to foreign currency risk consisted of $3,095,845,767 and $150,873,788 in the retirement annuity trust and health insurance trust funds respectively.

The following tables represent the fair values of investments that are subject to foreign currency as a result of cash contributions to each portfolio manager.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Retirement Annuity Trust

Commingled Funds	
Rogge Global Int'l Fixed Income	$ 73,866,899
Baillie Gifford Intrntl EAFE	621,831,309
Baring All Country World ex US	445,951,918
BlackRock ACWI EX-US IMI	350,243,165
UBS All Country World ex US	471,191,694
Alternative Funds	
KKR & Co. European Fund III	56,543,955
Oaktree European Principal Fund III	10,157,366
ADRs (Equities)	742,298,527
Bonds (Fixed Income)	263,935,728
Additional Categories (Fixed Income)	59,825,206
Total	**$ 3,095,845,767**

Health Insurance Trust

Commingled Funds	
Medical Ins. Black Rock Fund B	$ 123,779,544
Bonds (Fixed Income)	16,494,738
Additional Categories (Fixed Income)	10,599,506
Total	**$ 150,873,788**

The following tables reflect the various foreign currencies associated with the System's investments in the funds outlined previously:

Retirement Annuity Trust

Currency	Market Value	Currency	Market Value
Australian Dollar	$ 139,445,987	Liberian Dollar	623,428
Bermudian Dollar	25,839,445	Malaysian Ringgit	11,754,031
Bolívar Fuerte	4,073,160	Mexican Peso	38,235,293
Brazilian Real	55,494,528	Moroccan Dirham	55,074
British Pound Sterling	444,596,277	New Zealand Dollar	4,849,609
Canadian Dollar	251,933,687	Norwegian Krone	31,375,502
Cayman Islands Dollar	21,138,551	Panamanian Balboa	12,456,400
Chilean Peso	3,943,914	Peruvian Nuevo Sol	9,007,698
Chinese Yuan	129,822,181	Philippine Peso	813,813
Colombian Peso	6,597,535	Polish Zloty	8,464,289
Czech Crown	215,546	Riyal	873,676
Danish Krone	39,745,423	Russian Ruble	70,082,989
Dominican Peso	293,074	Singapore Dollar	45,740,231
Egyptian Pound	236,259	South African Rand	16,219,538
Euro	688,338,617	South Korean Won	74,639,548
Hong Kong Dollar	72,220,920	Swedish Krona	106,734,326
Hungarian Forint	181,169	Swiss Franc	238,386,117
Indian Rupee	29,461,493	Taiwan Dollar	47,424,825
Indonesian Rupiah	5,784,260	Thai Baht	9,219,788
Israeli New Shekel	35,107,147	Turkish Lira	12,314,086
Japanese Yen	378,471,443	Various	5,391,439
Jersey Pound	18,029,727		
Kuna	213,724	**Total**	**$ 3,095,845,767**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following table reflects the various foreign currencies associated with the retirement system's investment in the funds outlined above:

Health Insurance Trust

Currency	Market Value	Currency	Market Value
Australian Dollar	$ 7,313,118	Mexican Peso	1,360,770
Brazilian Real	2,911,930	Moroccan Dirham	20,324
British Pound Sterling	19,024,292	New Zealand Dollar	196,583
Canadian Dollar	16,175,326	Norwegian Krone	872,933
Cayman Islands Dollar	1,158,038	Peruvian Nuevo Sol	7,294
Chilean Peso	510,183	Philippine Peso	300,096
Chinese Yuan	99,323	Polish Zloty	408,204
Colombian Peso	277,911	Russian Ruble	1,082,483
Czech Crown	59,223	Singapore Dollar	1,588,529
Danish Krone	1,548,560	South African Rand	1,977,658
Egyptian Pound	85,039	South Korean Won	4,020,630
Euro	38,158,584	Swedish Krona	2,742,732
Hong Kong Dollar	7,348,663	Swiss Franc	9,812,335
Hungarian Forint	63,670	Taiwan Dollar	3,516,810
Indian Rupee	1,801,775	Thai Baht	809,220
Indonesian Rupiah	934,193	Turkish Lira	549,548
Israeli New Shekel	535,800	Various	1,873,527
Japanese Yen	20,474,487		
Liberian Dollar	114,660	**Total**	**$ 150,873,788**
Malaysian Ringgit	1,139,337		

The majority of foreign investments are held in commingled funds managed by Rogge Global Partners, UBS Global Asset Management, Baillie Gifford, Baring Asset Management, and Black Rock. In addition to the commingled funds investing in foreign securities, the retirement annuity trust fund held $742,298,527 associated with foreign interests in American Depositary Receipt investments. These American Depositary Receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. American Depositary Receipts are denominated in U.S. currency. Other foreign securities and investments consisted of debt securities and alternative investment opportunities.

The retirement annuity trust fund's policy regarding foreign equities is that not more than thirty percent (30%) of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the retirement system. The retirement system operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international stocks are the types of securities that are lent. The retirement system's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the fair value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the retirement system.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. During the fiscal year ended June 30, 2013, only the retirement annuity trust fund had securities lending transactions. The following section details the net income earned in the retirement annuity trust fund from securities lending for the fiscal year ended June 30, 2013:

Item	2013 Earnings	2012 Earnings
Gross Earnings (Interest and Fees)	$ 600,782	$ 314,708
Gross Borrower Rebates	2,476,727	2,790,509
Bank Fees	(923,168)	(931,520)
Net Earnings	**$ 2,154,341**	**$ 2,173,697**

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The retirement system cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the retirement system from any financial loss associated with a borrower's default and collateral inadequacy.

As of June 30, 2013 the loan average days to maturity in the retirement annuity trust fund was one (1) days and the weighted average investment maturity of cash collateral investments was one (1) days. At fiscal year end, the retirement annuity trust fund had no credit risk exposure to borrowers, since the amounts the retirement annuity trust fund owes the borrowers exceeds the amounts the borrowers owe the retirement annuity trust fund and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The retirement system minimizes interest rate risk by limiting the term of cash collateral investments to several days.

The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2013:

Type of Security Lent	Fair Value	Cash & Non-Cash Collateral Value Received
Fixed Income	$ 274,689,711	$ 282,088,080
Equities	176,005,798	182,141,633
Total	**$ 450,695,509**	**$ 464,229,713**

Note 6: Retirement Plan for Employees of the System

Full-time employees of Kentucky Teachers' Retirement System (KTRS) participate in either KTRS or Kentucky Employees Retirement System. Both plans are multiple-employer cost sharing defined benefit retirement annuity plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for KTRS employee members for the fiscal years 2013, 2012 and 2011 were $574,432, $533,378, and $469,896 respectively. KTRS contributed one hundred percent (100%) of the required contribution each year.

All other KTRS employees are covered under the Kentucky Employee Retirement System (KERS) in the Non-Hazardous Employees' Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. The System's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS who joined prior to July 1, 2008, are required to contribute five percent (5%) of their annual creditable compensation for the fiscal years 2013, 2012 and 2011 and members who joined on or after July 1, 2008 contribute an additional one percent (1%). As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2013, 2012 and 2011 were 23.61 percent, 19.82 percent and 16.98 percent and the System's annual required contributions to KERS were $331,989, $350,869, and $241,899 respectively. KTRS contributed one hundred percent (100%) of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: Other Funds

A. 403(B) TAX-SHELTERED ANNUITY PLAN

Plan Description

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by the System's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2013, the twelve members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

Note 7: Other Funds continued . . .

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting - The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan; therefore, there are no receivables to be recognized.

Method Used to Value Investments - The short-term investments are reported at cost, which approximates fair value.

C. SUPPLEMENTAL BENEFIT FUND

The Supplemental Retirement Benefit Fund is a qualified governmental excess benefit arrangement as described in Section 415 of the Internal Revenue Code. In accordance with KRS 161.611 and KRS 161.420(8), KTRS is authorized to provide a supplemental retirement benefit fund for the sole purpose of enabling the employer to apply the same formula for determining benefits payable to all members of the retirement system employed by the employer, whose benefits under the retirement system are limited by Section 415 of the Internal Revenue Code of 1986, as amended from time to time. Funding of benefits payable under this fund are provided by the state, as employer, and are segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system.

D. JUNITA LOSEY SCHOLARSHIP BEQUEST

Junita Losey, a retired teacher, designated KTRS as a residuary beneficiary of her estate and expressed a desire that KTRS establish a scholarship program for Kentucky students studying to be teachers. Ms. Losey died in 1997 and thereafter her estate provided a scholarship bequest to KTRS. The scholarship bequest has at all times been segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system. The Scholarship Committee of the System's Board of Trustees meets each December to consider scholarship standards and administration of the scholarship bequest.

Note 8: Medical Insurance Plan & Post-Employment Benefits

A. PLAN DESCRIPTION

In addition to the retirement annuity plan described in Note 1, Kentucky Revised Statute 161.675 requires KTRS to provide access to post-employment healthcare benefits for eligible members and dependents. The KTRS medical plan is funded by employer and member contributions. Changes made to the medical plan may be made by the KTRS Board of Trustees, the Kentucky Department of Employee Insurance and the General Assembly.

The KTRS medical plan is funded by employee contributions to an account established pursuant to 26 U.S.C. sec. 401(h). Additional funding is derived from the Kentucky Teachers' Retirement System insurance trust fund that went into effect on July 1, 2010. The insurance trust fund provides a trust separate from the account established pursuant to 26 U.S.C. sec. 401(h). The insurance trust fund includes employer and retired member contributions required under KRS 161.550 and KRS 161.675(4)(b).

To be eligible for medical benefits, the member must have retired either for service or disability. The KTRS medical plan offers coverage to members under the age of 65 through the Kentucky Employees Health Plan administered by the Kentucky Department of Employee Insurance. KTRS retired members

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

are given a supplement to be used for payment of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the KTRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The Commonwealth of Kentucky bears risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the KTRS Medicare Eligible Health Plan.

At June 30, 2013, KTRS insurance covered 36,777 retirees and 7,053 dependents. There are 208 participating employers and 74,831 active members contributing to the medical plan.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The KTRS medical plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due.

Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

C. CONTRIBUTIONS

The post-employment medical benefit provided by KTRS is financed on a pre-funded basis beginning July 1, 2010 with the implementation of the "Shared Responsibility" legislation. In order to fund medical benefits, active member contributions are matched by the state at .75% of members' gross salaries. Members contributed 1.75% of gross payroll to the KTRS medical plan and beginning July 1, 2010 the contribution increases incrementally to 3.75% by July 1, 2015 under the Shared Responsibility Plan. Also, the premiums collected from retirees and investment income contributes to funding the plan. The KTRS medical plan received $152,400,000 in fiscal year 2013 in funding from the state, which was contributed to the insurance trust fund. This transitional funding and increased contributions are for the 2013 and 2014 fiscal years.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Medical Insurance Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accured Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL As a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2013	$ 412,185	$ 3,521,073	$ 3,108,888	11.7%	$ 3,480,066	89.3%

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedule of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the ARC, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methodologies and assumptions employed as of the June 30, 2013 valuation date include the following:

Actuarial Cost Method	Actuarial Value of Assets	Assumed Inflation Rate	Investment Rate of Return	Amortization Method	Remaining Amortization Period
Entry Age	Market value of assets	3.50%	8.00%	Level percent of pay, open	30 years

Medical Trend Assumption	Pre-Medicare	Medicare
Fiscal Year Ending 6/30/2014	8.50%	0.00%
Fiscal Year Ending 6/30/2015	7.50%	6.00%
Ultimate Trend Rate	5.00%	5.00%
Year of Ultimate Trend Rate	2019	2018

E. INCURRED BUT NOT REPORTED CLAIMS LIABILITIES

KTRS recognizes estimates of liabilities for self-insured unpaid claims that have incurred (both reported and unreported) using the development method. This method uses past observed patterns of time between the date the claim is incurred and the date the claim is paid to estimate incurred claims from available paid claim information.

The following schedule shows the change in the claims and liability and the claims activity for the years ended June 30, 2013 and 2012.

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

	2013	2012
Beginning Unpaid Claims Liability	$ 67,000	$ 403,000
Current Year Claims and Changes in Estimates	196,676,714	189,926,846
Claims Payments	(196,606,714)	(190,262,846)
Ending Unpaid Claims Liability	**$ 137,000**	**$ 67,000**

Note 9: Life Insurance Plan

A. PLAN DESCRIPTON

KTRS administers the Life Insurance Plan as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 208 participating employers. The benefit is $5,000 for members who are retired for service or disability, and $2,000 for active contributing members.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Life Insurance Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized in the fiscal year due.

Method Used to Value Investments

Life Insurance Plan investments are reported at fair value. The short-term securities are carried at cost, which approximates fair value. Fixed income is generally valued based on published market prices and quotations from national security exchanges and securities pricing services.

C. CONTRIBUTIONS

To finance the life insurance benefit a portion of the employer contribution rate is directed to the plan as recommended by the KTRS's actuary. For both fiscal years 2013 and 2012, this rate has been .05% of active members' payroll.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Life Insurance Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets A	Actuarial Accrued Liabilities (AAL) B	Unfunded Actuarial Accured Liabilities (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL As a % of Covered Payroll [(B-A)/C]
6/30/2013	$ 94,863	$ 94,325	$ (538)	100.6%	$ 3,480,066	(0.02)%

Note 9: Life Insurance Plan continued . . .

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The required supplementary schedules following the notes to the financial section contain more actuarial information. Significant actuarial methodologies and assumptions employed as of the June 30, 2013 valuation date include the following:

Actuarial Cost Method	Actuarial Value of Assets	Assumed Inflation Rate	Investment Rate of Return	Projected Salary Increases	Amortization Method	Remaining Amortization Period
Entry Age	Market value of assets	3.50%	7.50%	4.00%	Level percent of pay, open	30 years

Required Supplementary Information

Defined Benefit Plan – Schedule of Funding Progress

(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets A	Actuarial Accrued Liabilities (AAL) B	Unfunded Actuarial Accured Liabilities (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL as a % of Covered Payroll [(B-A)/C]
6/30/2008	$ 15,321.3	$ 22,460.3	$ 7,139.0	68.2%	$ 3,190.3	223.8%
6/30/2009	14,886.9	23,400.3	8,514.4	63.6	3,253.1	261.7
6/30/2010	14,851.3	24,344.3	9,493.0	61.0	3,321.6	285.8
6/30/2011	14,908.1	25,968.7	11,060.6	57.4	3,451.8	320.4
6/30/2012	14,691.4	26,973.9	12,282.5	54.5	3,479.6	353.0
6/30/2013	14,962.8	28,817.2	13,854.4	51.9	3,480.1	398.1

The amounts reported in this schedule of funding progress do not include assets or liabilities for postemployment benefits, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Defined Benefit Plan – Schedule of Employer Contributions

Fiscal Year Ended	Annual Required Contributions (A)	Actual Employer Contributions (B)	Percentage Contributed (B) / (A)	
6/30/2008	$ 563,789,483	$ 466,247,783	83%	
6/30/2009	600,282,735	442,549,935	74	
6/30/2010	633,938,088	479,805,088	76	
6/30/2011	678,741,428	1,037,935,993*	153	* Includes Pension Obligation Bond proceeds of $465,384,165
6/30/2012	757,822,190	557,339,552	74	
6/30/2013	802,984,644	568,233,446	71	

Note 9: Life Insurance Plan continued . . .

Note 9: Required Supplementary Information continued . . .

Medical Insurance Fund – Schedule of Funding Progress

(Dollar amount in millions)

Actuarial Valuation Date	Actuarial Value of Assets A	Actuarial Accrued Liabilities (AAL) B	Unfunded Actuarial Accured Liabilities (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL as a % of Covered Payroll [(B-A)/C]
6/30/2008	$ 185.9	$ 6,434.5	$ 6,248.6	2.9%	$ 3,190.3	195.9%
6/30/2009	229.1	6,454.7	6,225.6	3.5	3,253.1	191.4
6/30/2010	241.2	3,206.8	2,965.6	7.5	3,321.6	89.3
6/30/2011	294.8	3,423.1	3,128.3	8.6	3,451.8	90.6
6/30/2012	338.7	3,594.5	3,255.8	9.4	3,479.6	93.6
6/30/2013	412.2	3,521.1	3,108.9	11.7	3,480.0	89.3

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Medical Insurance Plan – Schedule of Employer Contributions

Fiscal Year Ended	Annual Required Contribution (A)	Actual Employer Contribution (B)	Retiree Drug Subsidy Contribution (C)	Total Contribution (B) + (C)	Percentage of ARC Contribution [(B) + (C)]/(A)
6/30/2008	$ 395,282,164	$ 148,954,644	$ 11,911,565	$ 160,866,209	40.7%
6/30/2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1
6/30/2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9
6/30/2011	477,723,070	188,453,929	280,585	188,734,514	39.5
6/30/2012	470,217,067	177,450,206	297,639	177,747,845	37.8
6/30/2013	186,725,823	166,611,420		166,611,420	89.2

Life Insurance Fund – Schedule of Funding Progress

(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets A	Actuarial Accrued Liabilities (AAL) B	Unfunded AAL (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL As a % of Covered Payroll [(B-A)/C]
6/30/2008	$ 77,658	$ 84,265	$ 6,607	92.2%	$ 3,190,332	0.21%
6/30/2009	84,703	90,334	5,631	93.8	3,253,077	0.17
6/30/2010	87,905	92,091	4,186	95.5	3,321,614	0.13
6/30/2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)
6/30/2012	92,241	91,398	(843)	100.9	3,479,567	(0.02)
6/30/2013	94,863	94,325	(538)	100.6	3,480,066	(0.02)

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Life Insurance Plan – Schedule of Employer Contributions

Fiscal Year Ended	Annual Required Contribution (ARC) (A)	Actual Employer Contribution (B)	Percentage of ARC Contributed (B) / (A)
6/30/2008	$ 1,914,199	$ 5,411,249	282.7%
6/30/2009	1,498,076	5,455,473	364.2
6/30/2010	1,992,969	1,966,826	98.7
6/30/2011	1,725,878	1,668,822	96.7
6/30/2012	1,732,831	1,684,711	97.2
6/30/2013	1,739,908	1,680,495	96.6

Required Supporting Schedules

Supporting Schedule 1
Schedule of Administrative Expenses
Year Ended June 30, 2013

Expense	Amount
Salaries	$ 6,670,002
Other Personnel Costs	760,113
Professional Services and Contracts	331,275
Utilities	93,986
Rentals	18,782
Maintenance	195,890
Postage & Related Services	420,965
Printing	74,389
Insurance	138,029
Miscellaneous Services	119,064
Telecommunications	33,068
Computer Services	108,199
Supplies	77,338
Depreciation	333,401
Travel	44,343
Dues & Subscriptions	45,113
Miscellaneous Commodities	16,730
Furniture, Fixtures, & Equipment not Capitalized	94,090
Compensated Absences	102,464
Total Administrative Expenses	**$ 9,677,241**

Supporting Schedule 2
Schedule of Professional Fees for Year Ended June 30, 2013

Professional	Nature of Service	Amount
Cavanaugh Macdonald Consulting	Actuarial Services	$ 207,604
Mountjoy Chilton Medley	Auditing Services	39,000
Farmers Bank	Bank Services	120
International Claim Specialist	Investigative Services	960
Groom Law Group	Attorney Services	2,000
Ice Miller	Attorney Services	40,934
Reinhart, Boerner VanDeuren	Attorney Services	216
Wyatt Tarrant and Combs	Attorney Services	32,273
Peritus	Communications	8,168
Total Professional Services and Contracts		**$ 331,275**

Note 9: Required Supplementary Information continued . . .

Supporting Schedule 3
Schedule of Contracted Investment Management Expenses and Miscellaneous Expenses
Year Ended June 30, 2013

	Pension	Medical	Total
Equity Managers			
Baillie Gifford	$ 2,152,311	$	$ 2,152,311
Baring Asset Management, Inc.	2,197,067		2,197,067
Black Rock	62,943	11,948	174,891
GE Asset Management	800,000		800,000
Todd-Veredus Asset Management LLC	1,271,143		1,271,143
UBS Global Asset Management	2,798,232		2,798,232
Wellington Management Company	2,827,337		2,827,337
Total Equity Managers	12,109,033	11,948	12,220,981
Fixed Income Managers			
Fort Washington Investment Advisors	160,533		160,533
Galliard Capital Management	287,976		287,976
Total Fixed Income Managers	448,509		448,509
Real Estate	3,956,528		3,956,528
Additional Categories	4,122,473	152,281	4,274,754
Alternative Investments	10,958,668	283,528	11,242,196
Custodian			
The Bank of New York Mellon	332,982	7,356	340,338
Consultant			
Hewitt Ennis Knupp, Inc.	358,850		358,850
Legal & Research			
Stoll, Keenon, Ogden, PLLC	888		888
Wolters Kluwer	3,952		3,952
Ice Miller	65,678		65,678
Bevis Longstreth	51,983		51,983
George Philip	33,269		33,269
Total Legal & Research	155,770		155,770
Other			
Subscription/Services	700,684	926	701,610
Total Contracted Investment Management Expenses	**$ 33,143,497**	**$ 556,039**	**$ 33,699,536**

Mountjoy Chilton Medley

INDEPENDENT AUDITORS REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

To the Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States the financial statements of the Teachers' Retirement System of the State of Kentucky, which comprise the statement of plan net position as of June 30, 2013, and the related statements of changes in plan net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated December 16, 2013.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Teachers' Retirement System of the State of Kentucky's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control. Accordingly, we do not express an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A s*ignificant deficiency* is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weakness or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Teachers' Retirement System of the State of Kentucky's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Teachers' Retirement System of the State of Kentucky's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

/s/ Mountjoy Chilton Medley LLP

Mountjoy Chilton Medley LLP

Lexington, KY
December 16, 2013

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Investment Section

for Fiscal Year ending June 30, 2013

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Kentucky Teachers' Retirement System.

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

INVESTMENT COMMITTEE

Mr. Ronald L. Sanders
Chairperson

Ms. Barbara G. Sterrett
Vice-Chairperson

Mr. Hollis Gritton
Member

Dr. Tom Shelton
Member

Ms. Laura A. Zimmerman
Member

Mr. Bevis Longstreth
Investment Advisor to KTRS Investment Committee

Mr. George Philip
Investment Advisor to KTRS Investment Committee

EXECUTIVE INVESTMENT STAFF

Mr. Gary L. Harbin, CPA
Executive Secretary

Mr. Paul L. Yancey, CFA
Chief Investment Officer

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An Aon Company

December 1, 2013

To the members of the Board of Trustees and participants of the Teachers' Retirement System of Kentucky:

The KTRS investment program produced a total return of 14.1% in the twelve-month period ended June 30, 2013. This exceeded the policy benchmark return of 12.9% and ranked in the top 10% of returns of a universe of 62 pension funds with over $1 billion in assets. The outperformance was attributed to successful application of the program's strategic asset allocation policy and the strong relative performance of individual asset classes.

A relatively high weighting to equities, at 63.2% of assets as of June 30, drove the strong performance. The system's domestic equities returned 22.7% versus 21.1% for the S&P 1500 Index. The system's international equities returned 14.7% versus 14.1% for the MSCI All Country World (ex-U.S) Index. Gains were harvested from the equity allocation over the course of the fiscal year as rising prices pushed total market value near the top of the asset class's strategic range.

Fixed income returns were less attractive during the fiscal year, particularly at the end of the period as interest rates rose. The system's fixed income portfolio was resilient during the fiscal year, returning 0.7%, vs. the -0.6% return of Barclay's Government Credit Index, thanks to less interest rate risk exposure and greater exposure to corporate bonds, which outperformed government bonds. A reduced overall exposure to the asset class also helped overall returns as well. The program's allocation to fixed income declined from 31.1% of total assets as of June 30, 2010 to 21.3% as of June 30, 2013.

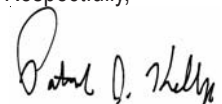
The program's alternative investments, which include real estate, private equity, and alternative credit strategies, also performed well over the fiscal year. Collectively, the strategies represented 13.1% of the total assets as of June 30. These growing allocations have absorbed the majority of the assets removed from fixed income in recent years.

Markets were heavily influenced by an unconventional Federal Reserve policy over the past fiscal year that kept interest rates at artificially low levels since the financial crisis of 2008. Near the end of the period, almost five years after the peak of the crisis, official talk of a foreseeable reduction in monetary stimulus sent interest rates upward and halted the equity markets' upward surge. The markets view an imminent reduction and eventual end to monetary stimulus with trepidation in light of a stronger financial system but soft economic growth.

Over the trailing five-year period, KTRS' investment returns rank in the top 7% of the pension fund universe cited earlier. We believe consistently strong relative returns in recent years have been the result of a successful implementation of a sound philosophy rooted in fundamental value and a "best practices" culture. This philosophy and process has led the investment program to respond well to changing investment opportunities and risks since the financial crisis.

As always, we are grateful to be a part of this process. We sincerely thank the Board of Trustees, Investment Committee, and investment staff for their continued confidence.

Respectfully,



Patrick J. Kelly, CFA, CAIA

Partner

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RETIREMENT ANNUITY TRUST FUND

INVESTMENT POLICY SUMMARY

The KTRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principles that guide investment–related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the System. This broad summary is a reference point for management of retirement assets and outlines the investment philosophy and practice of KTRS.

INVESTMENT OBJECTIVES

KTRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them. Generally, the retirement system's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, KTRS holdings can withstand some short-term volatility. The retirement annuity trust fund's long-term investment objective is to achieve an annualized rate of return of 7.5%.

RISK CONTROLS

The KTRS investment program faces various risks; however, the primary risk to KTRS is that the assets will not support liabilities over long periods of time. In order to control this risk and any other risks, the board has taken the following steps on an ongoing basis:

- Actuarial valuations are performed each year to evaluate the funding objectives of the retirement system. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the System.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the retirement system.
- The KTRS Investment Committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

ASSET ALLOCATION

Operating within relevant regulatory limitations, the retirement system's investment consultant, on an annual basis, presents to the Investment Committee for approval target percentages and ranges for the retirement system's various asset classes. Annually approved asset allocation parameters serve to balance the retirement system's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The retirement system's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the retirement system's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as liability requirements, the level of funding, and statutory investment

restrictions are important considerations within the context of the asset allocation decision making process. Consequently, asset allocations may differ markedly between various pension plans due to their unique circumstances.

The information below shows the retirement system's asset allocation by fair value as of June 30, 2013, and June 30, 2012, as well as the target and strategic range for each asset class for fiscal year 2013.

Retirement Annuity Trust

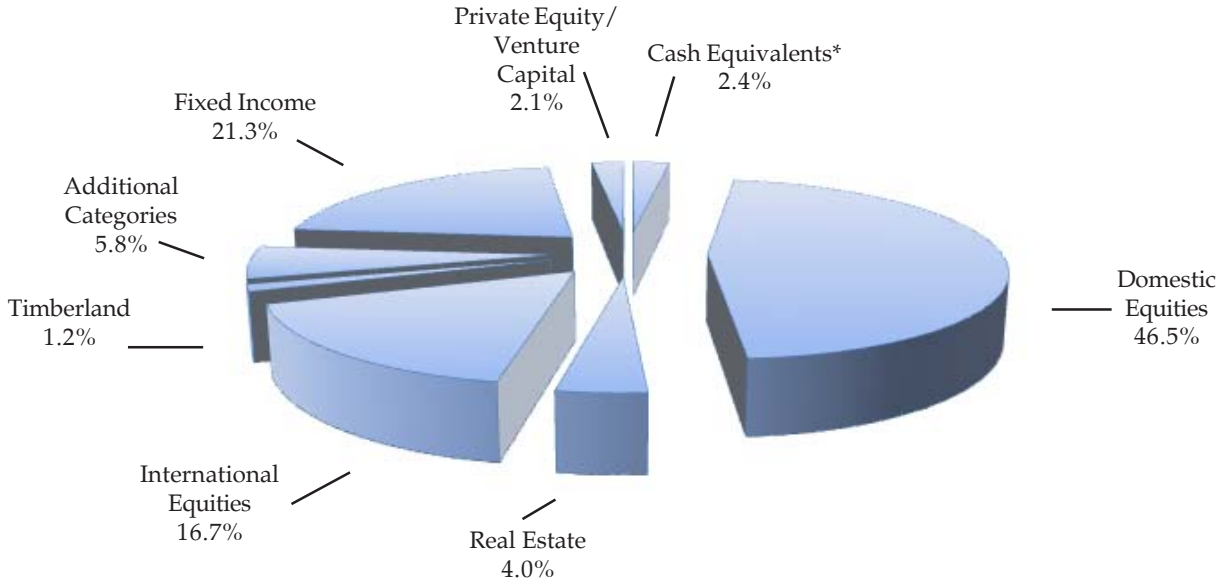
	June 30, 2013*	%	June 30, 2012	%
Cash Equivalents**	$ 386,683,234	2.4	$ 431,810,127	2.9
Fixed Income	3,434,080,377	21.3	3,391,777,780	23.0
Domestic Equities	7,511,572,763	46.5	7,044,415,411	47.5
International Equities	2,698,774,335	16.7	2,309,883,058	15.6
Real Estate	642,611,173	4.0	586,800,767	4.0
Private Equity	343,259,092	2.1	265,833,651	1.8
Timberland	197,480,029	1.2	185,432,686	1.2
Additional Categories	935,376,476	5.8	587,848,810	4.0
Totals	$ **16,149,837,479**	**100.0**	$ **14,803,802,290**	**100.0**

* Includes Life Insurance Trust values of $88,623,343, Tax Shelter Annuity value of $391,095 and 401(h) value of $2,193,497.

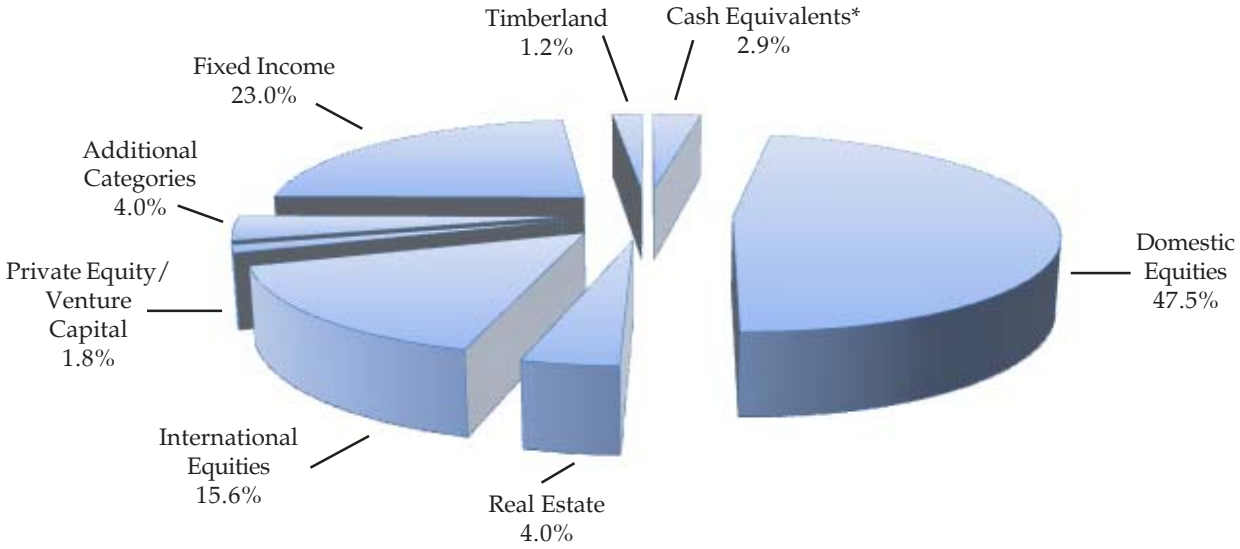
** Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

Distribution of Investments
Retirement Annuity Trust**
Fair Values

June 30, 2013



June 30, 2012



* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

** Includes Life Insurance Trust values.

Strategic Weightings by Asset Class

Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2013 (Mkt)**
Cash		1 - 3%	2.0%	**2.4%**
Fixed Income		18 - 24	21.0	**21.3**
Government/Agency/Other	Unlimited			10.3
Corporate	35%			11.0
Equity	65%	58 - 65	62.0	**63.2**
Domestic Large Cap		35 - 45	40.0	39.5
Domestic Mid Cap		1 - 5	3.0	4.3
Domestic Small Cap		1 - 3	2.0	2.7
International* **	30%	14 - 20	17.0	16.7
Real Estate	10%	2 - 6	4.0	**4.0**
Alternative Investments*	10%	2 - 8	5.0	**3.3**
Additional Categories	15%	3 - 9	6.0	**5.8**
TOTAL			**100.0%**	**100.0%**

* Includes private equity, venture capital, timberland, and infrastructure investments.

** Starting with 7/2008, Cash is only the unallocated cash balance. Manager cash balances will be included with the asset type of the managers investments.

*** As of 6/30/13, 18.9% of Total International Equities was invested in Emerging Markets.

PORTFOLIO RETURNS

For the fiscal year, the retirement annuity trust fund's portfolio generated a total return of 14.1%, exceeding the policy benchmark return of 12.9%. Domestic equities returned 22.7% versus 21.1% for the Standard & Poor's 1500 Index, while international equities returned 14.7% versus 14.1% for the MSCI All Country World (Ex-US) Index. Fixed income investments outperformed, returning 0.7% versus -0.6% for the Barclays Government/Credit Index.

Less traditional asset classes such as real estate, private equity, timberland, and alternative credit are beginning to contribute meaningfully to total return as those programs are expanded.

The table below details historical performance for the retirement annuity trust fund and its component asset classes for the period ended June 30, 2013. The retirement annuity trust fund's returns were generated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

	1 Yr[2]	3 Yr[2]	5 Yr[2]	10 Yr[2]	20 Yr[2]
Total Fund					
KTRS	14.1	12.4	6.6	6.4	7.3
Policy Index [1]	12.9	12.1	6.0	-	-
Equities					
Domestic Equities	22.7	18.7	7.4	7.7	9.1
S & P Blended Index [3]	21.1	18.6	7.3	7.5	8.7
International Equities [5]	14.7	9.9	1.6	-	-
MSCI AC World (Ex US)	14.1	8.5	-0.3	-	-
Total Equities	20.5	16.4	6.1	7.2	8.8
Fixed Income					
Total Fixed Income	0.7	5.0	6.7	5.2	6.3
Barclays Govt/Credit Index	-0.6	3.9	5.3	4.4	5.9
Real Estate					
Non-Core Real Estate	30.1	-	-	-	-
NCREIF Index	10.7	-	-	-	-
Core Real Estate	9.7	14.9	-2.6	-	-
NCREIF ODCE	12.0	14.9	-0.2	-	-
Triple Net Lease Real Estate	8.3	7.9	8.4	8.9	9.0
CPI plus 2%	3.8	4.4	3.4	4.5	4.4
Alternative Investments					
Private Equity [4]	8.7	14.0	10.4	-	-
Timberland	7.7	5.8	3.8	-	-
NCREIF Timberland Index	9.4	3.6	2.1	-	-
Cash					
Cash (Unallocated)	0.1	0.1	0.3	2.1	3.4
90 Day Treasury Bill	0.1	0.1	0.3	1.7	3.0
Additional Categories					
High Yield					
High Yield Bond Fund	8.8	10.6	-	-	-
B of A Merrill Lynch High Yield Master II	9.6	10.4	-	-	-
Alternative Credit					
Special Situations Fund	11.4	-	-	-	-
KTRS Credit Fund	21.8	-	-	-	-
B of A Merrill Lynch High Yield Master II	9.6	10.4	-	-	-

(1) Prior to July 1, 2008, KTRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.

(2) Annualized

(3) Total Domestic Equity is benchmarked to a S & P Blended Index. Total domestic equity was benchmarked to the S & P 500 through the fiscal year ending 6/30/2007. As of 7/1/2007, domestic equity is benchmarked to the S & P 1500 Index since the System's domestic stock mix is most comparable to this index.

(4) For a period of five years private equity will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the commitment date, investments in this class shall be benchmarked versus the S & P 500 plus 3%, which is the System's long-term expected return for this asset class.

(5) As of June 30, 2013, 18.9% of Total International Equities was invested in emerging markets.

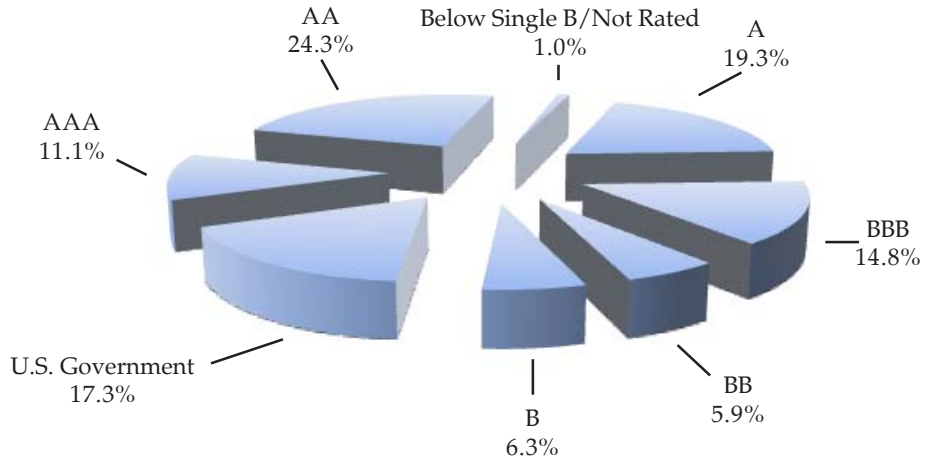
FIXED INCOME INVESTMENTS

As of June 30, 2013, the retirement annuity trust fund had approximately $3.43 billion, 21.3% of total assets, in the fixed income category of investments. The retirement annuity trust fund's fixed income investments maintained the average investment grade rating required by administrative regulation as of June 30, 2013.

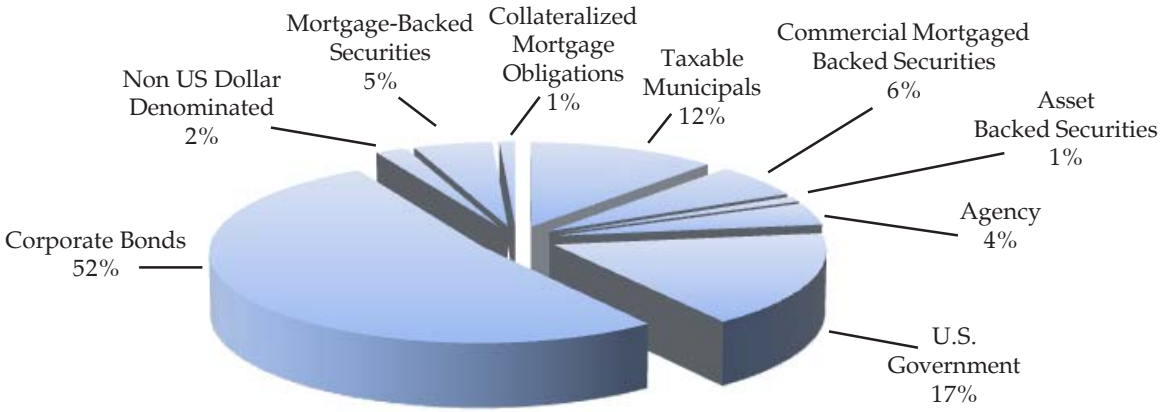
In addition, the retirement annuity trust fund had $935.38 million, 5.8% of total assets, in other debt related investments under a regulatory provision which allows for up to 15% of assets in "additional categories of investments" approved by the Board of Trustees. Investments under this authorization included a high yield bond portfolio, an international fixed income portfolio, and a syndicated bank loan portfolio. Also under this provision are several alternative credit portfolios including a multi - strategy opportunistic credit portfolio as well as distressed debt and specialty lending funds.

The credit quality distribution for the retirement annuity trust fund is illustrated below. This chart includes the fixed income category of investments as well as the high yield bond, international fixed income, and the syndicated bank loan portfolios included in "additional categories of investments". Also illustrated below is the distribution of fixed income assets by sector, again including the high yield bond, international fixed income, and the syndicated bank loan portfolios held under "additional categories of investments".

FIXED INCOME QUALITY DISTRIBUTION



FIXED INCOME SECTOR DISTRIBUTION



FIXED INCOME MARKET OVERVIEW

Interest rates on U.S. Treasury bonds tended to drift higher over most of the fiscal year, spiking upward sharply in May and June, 2013 on expectations of an imminent reduction of the Federal Reserve's quantitative easing program. Prices generally declined, with the Barclays U.S. Government / Credit Index returning -0.6% for the fiscal year. The retirement annuity trust fund's investment grade bonds were more resilient, returning 0.7%. The outperformance was driven by less duration (interest rate risk) than the benchmark and an overweighting to corporate bonds, which substantially outperformed government bonds.

Prices of long-term bonds dropped more than those with shorter maturities as long term rates rose more than short term rates. The spread between the 30 year and 2 year Treasury widened to 314 basis points after starting the year at 240 basis points. Due to a narrowing of risk premiums, corporate bonds outperformed U.S. Treasuries of similar duration. The Barclays U.S. Government index declined by 1.5% over the year, and the Barclays Corporate Investment Grade Index produced a positive 1.4% return over the same time period. High Yield bonds performed very well returning 9.6% for the year as measured by the B of A Merrill Lynch High Yield Master II Index.

Gross Domestic Product (GDP) grew 1.6% for the fiscal year ended June 30, 2013. Inflation, as measured by the GDP price deflator rose 1.5% for the fiscal year. The economy added an average of 180,000 jobs per month according to the Bureau of Labor Statistics' non-farm payrolls report. Normally, these rates of increase would be considered a good environment for fixed income securities, but, given the low level of real interest rates to begin the fiscal year, the slow growth environment was already priced into the market. As has been the case since the economic recovery began in 2009, the performance of domestic fixed income markets was driven more by the influence of the Federal Reserve than by the traditional economic fundamentals of growth and inflation.

In June of 2012, the Federal Reserve announced it would extend its bond purchase program, commonly referred to as Operation Twist, through the end of calendar year 2012 by adding an additional $267 billion in long term bond purchases. When this program was completed in December of 2012, the Fed implemented another asset purchase program, pledging to purchase U.S. Treasury securities at an initial pace of $45 billion per month for an indefinite time period. This latest asset purchase program is unique as there was no definitive date targeted by the Federal Reserve for ending the Treasury purchases. In addition, the Fed indicated it would continue its existing program to purchase $40 billion per month in mortgage backed securities.

In its December 12, 2012 press release, the Fed outlined its rationale and expectations for the new asset purchase program. The Fed's statement indicated that it was concerned that "without sufficient policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions", and that "these actions should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative".

Given the near term concerns outlined above, the Fed's asset purchase program was somewhat successful. The economy grew, albeit at a subdued pace, and continued to add jobs. Mortgage interest rates remained near historical lows while the median existing home sale price increased 18.8% from December 2012 to June 2013. The S & P 500 Index returned 15.3% from the Fed statement in December 2012 to the end of May 2013.

In May 2013 the Fed surprised the markets by suggesting that it may start to "taper" its program of purchasing Treasuries and mortgage backed securities. The market adjusted to this new guidance by pushing interest rates sharply higher, causing a substantial selloff in investment grade fixed income as the fiscal year came to a close.

Despite the recent increase in interest rates, the Fed's policy of keeping both short and longer term interest rates low has been supportive to many areas of the economy. However, low rates have left

investment grade bond prices higher than they would otherwise be. Currently, investment grade fixed income is an asset class with moderately unfavorable risk / reward characteristics and below average upside potential. The retirement system continues to adjust the structure of its fixed income portfolio to control risk and maintain required liquidity. Specifically, the retirement system continues to increase exposure to nontraditional debt-related investments, reduce exposure to investment grade fixed income, and limit interest rate risk.

EQUITY INVESTMENTS

As of June 30, 2013 the retirement annuity trust fund's public equity investments had a fair value of $10.21 billion, representing 63.2% of total assets. Strong equity returns over the fiscal year prompted several rebalancing sales to reduce equity exposure back to target levels and to raise cash to fund pension benefits. The retirement annuity trust fund divides its public equity into two broad categories: domestic and international.

The domestic portfolio had a fair value of $7.51 billion as of June 30, representing 46.5% of total assets. This is a $467 million increase over last year despite rebalancing sales. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of three well known component indices based upon market capitalization: the S&P 500 large cap, S&P 400 mid cap, and the S&P 600 small cap. The retirement annuity trust fund's domestic equity holdings are comprised of eleven portfolios. Three of the portfolios are internal passively managed index portfolios benchmarked to the S&P 500, 400, and 600. The other eight portfolios are managed externally by four different asset managers, with each portfolio representing a specific strategy and measured against an appropriate benchmark. The collective array of portfolios provides diversification by capitalization, manager, style, and strategy.

The fair value of the international equity holdings as of June 30, 2013 was $2.7 billion, representing 16.7% of total assets, up from 15.6% a year earlier. The benchmark for international equities is the Morgan Stanley Capital International All Country World Index ex US (MSCI ACWI ex US), which represents the markets of 24 developed countries and 21 emerging market countries. Five external asset managers manage the retirement annuity trust fund's international equities, one of which is a passively managed international index fund. The retirement annuity trust fund plans to continue increasing the international equity exposure during the coming fiscal year.

EQUITY MARKET OVERVIEW

Stocks rallied steadily throughout fiscal year 2013. The upward trend was fairly consistent, with hiccups only in the fall of 2012 and the early summer of 2013. Returns of domestic stocks as measured by the S&P 1500 and Russell 2000 were 21.13% and 24.21%, respectively. Within the S&P 1500, small and mid-cap stocks were up 25.18%, while the large-cap S&P 500 was up 20.60%. Non-U.S. stocks also performed very well on the year, but with higher volatility and a steeper pullback at the end of the year. The Morgan Stanley Capital International (MSCI) World (ex-U.S.) Index returned 17.62%. The MSCI Emerging Markets Index was up only 3.23%.

The domestic markets were propelled by rising payrolls and declining unemployment in the first half of the year. In September the FOMC announced its plan to purchase $40 billion per month of agency mortgage backed securities in addition to $45 billion of U.S. Treasury securities. While this kept key interest rates low, markets dipped on lower consumer confidence due to negative expectations for the economy. Financial stocks were the biggest winners in the first half, posting a 13.28% gain in the first six months. Internationally there was a similar story as the European Central Bank and the Bank of Japan also initiated quantitative easing programs in September. This news, however, was much better received

internationally as the MSCI EAFE and ACWI ex US posted much stronger returns in the first half. European markets, which had been in turmoil due to the ongoing Eurozone crisis, were stabilized by the ECB's bond purchase program. Asia also experienced a favorable reaction to QE, led by Japan, whose stocks rose 5.3% in December alone.

The second half of the fiscal year continued an upward trend, as stocks rallied on better employment data and continued signs of strength in the manufacturing sector. Consumer confidence also made progress. Manufacturing was primarily led by a jump in the housing market. Increasing employment numbers coupled with low borrowing costs were the main drivers of the housing market. Stocks did see a slight pullback at the end of the fourth quarter of the fiscal year. In May, the Fed announced it may begin to "taper" its quantitative easing program later in the calendar year. Interest rates immediately spiked and money began to flow modestly away from equities. Internationally, emerging markets lagged due to China's slowing growth. Europe and Japan, however, continued to post gains on the heels of their respective central banks' QE programs.

Politically, the Presidential election dominated the headlines during the first half of the fiscal year. Concern over the growing national debt and national healthcare tempered investors' enthusiasm. Fortunately, the strong labor market and the rising manufacturing numbers were able to increase consumer confidence overall. Internationally, the ongoing European debt crisis and the slowdown in China dampened consumer confidence, but strong returns were still realized, driven by Europe and Japan.

In summary, we experienced a very strong equity market for the fiscal year. Small and mid cap domestics were the drivers, but domestic and international large caps also enjoyed double digit gains on the year. Having been buoyed by monetary stimulus over the past year, markets are wary going forward of any potential reduction or elimination of that stimulus.

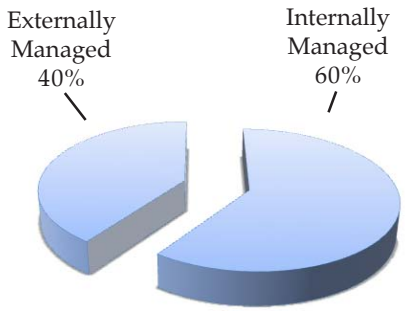
REAL ESTATE

The retirement annuity trust fund's real estate investments had a fair value of $642.6 million as of June 30, 2013, representing 4.0% of total assets. The retirement annuity trust fund's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow, and provide diversification, thereby reducing the volatility of the overall investment portfolio.

The retirement annuity trust fund's real estate exposure is currently provided through six portfolios. The retirement annuity trust fund maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high credit quality tenants. The retirement annuity trust fund is also invested in a commingled real estate fund (PRISA Fund), which is managed by Prudential Real Estate Investors. This fund is a core real estate equity fund which invests primarily in existing income-producing properties with strong cash flows and the potential for capital appreciation. The fund is diversified across several property types including office, retail, industrial, apartment, self-storage and hotel.

Additionally, the retirement annuity trust fund is invested in four real estate limited partnerships: Carlyle Realty Partners VI, Blackstone Real Estate Partners VII, Rockwood Capital Real Estate Fund IX, and TA Realty Associates Fund X. Going forward, investment staff will continue to opportunistically add to the annuity trust fund's real estate investments.

Real Estate Investments
$642.6 Million Fair Value
As of June 30, 2013



REAL ESTATE OVERVIEW

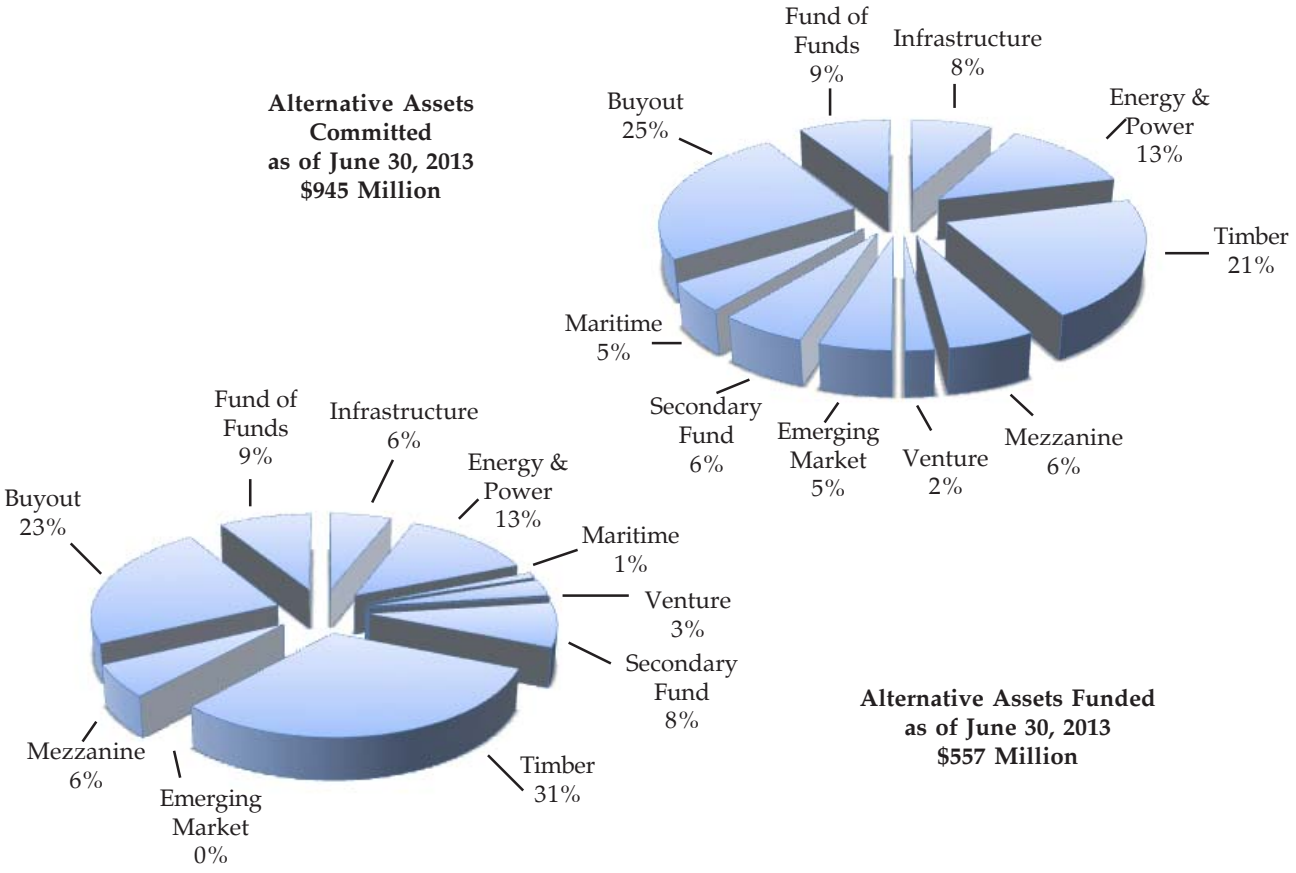
Investor demand for commercial real estate was quite strong during the fiscal year. Demand for core properties was especially robust with top-tier properties located in gateway markets commanding prices that are back to 2007 levels. Property values in secondary markets also got a boost as investors moved up the risk spectrum to capture more yield and financing became more readily available. Investor appetite for real estate investments should remain strong over the next year due to the sector's solid income yields and improving fundamentals.

According to Real Capital Analytics, $145.3 billion of properties traded in 2013 through June, an improvement of 24% from the same period in 2012. With construction completions at 50-year lows, there has been a lack of new supply in most sectors of the commercial real estate market. This lack of supply in conjunction with a moderately improving economy should provide a favorable environment for higher rents and lower vacancy rates. Property rents are expected to grow by 1% to 4% on average over the next year.

A growing area of opportunity for investors is in the real estate debt markets. An estimated $374 billion in commercial and multi-family mortgages will mature in 2013 while another $1.3 trillion in loans are expected to mature from 2014 to 2017. As borrowers look to refinance, this should provide non-traditional lenders of capital an opportunity to provide financing at attractive levels.

ALTERNATIVE ASSETS

As of June 30, 2013, the retirement annuity trust fund had committed $945 million to alternative investments and had funded $557 million of those commitments. The percentage of the retirement annuity trust fund's portfolio in alternative assets was 3.3%. The retirement annuity trust fund's current alternative asset portfolio consists of private equity investments and timberland.



PRIVATE EQUITY

The retirement annuity trust fund has exposure to venture, buyout, infrastructure, energy, mezzanine and several other private equity sectors via participation in limited partnerships as well as investments in funds of funds. The retirement annuity trust fund is in the early stages of its private equity investment program, which it intends to grow with a disciplined plan of commitments over the next several years. The retirement annuity trust fund looks to diversify its private equity portfolio by firm, country, strategy, and vintage year. Vintage year diversification is achieved by building out the portfolio with disciplined levels of commitments over time. A commitment to any given partnership shall not exceed 20% of the partnership's total commitments.

The Board and staff understand that private equity (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with publicly traded assets, this asset class can help to diversify and reduce risk for the retirement annuity trust fund's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence, during the harvesting period.

PRIVATE EQUITY MARKET OVERVIEW

The private equity markets continue to rebound from the effects of the financial crisis. Investors, especially on the institutional side, continue to increase their allocation to alternative investments, including private equity. However, fundraising continues to remain challenging for all but the top tier funds, with many funds extending their initial fundraising term. A strong equity market and low interest rates has allowed many private equity funds to exit their portfolio companies either through the IPO market or sales to strategic buyers. A strong IPO market remains the linchpin of the rebound in private equity.

The bifurcation in the private equity market continues with the top tier funds raising capital much easier than less desirable funds. This should, over the long term, provide a shakeup in this space as the weaker firms are forced to exit. The past fiscal year has also seen a large amount of buyout funds returning to the marketplace with mixed results. We continue to see more opportunity in the middle market space and in other niche areas such as energy, infrastructure, distressed credit, and emerging markets. Additionally, the stress in the European markets should continue to present investment opportunities in the private equity space over the next fiscal year.

TIMBERLAND

In addition to private equity, the retirement annuity trust fund has invested in timberland in the alternative asset class. As of June 30, 2013 the retirement annuity trust fund owns approximately 73,000 acres of timberland outright, has a 7.15% interest in a commingled fund that holds approximately 98,000 acres of timberland and is a member of a joint venture that owns an interest in approximately 124,000 acres of timberland located across seven southern states. Timberland is, by nature, a long term investment as our anticipated time horizon in this asset category is generally a minimum of ten to fifteen years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the retirement annuity trust fund's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long-term.

The retirement annuity trust fund diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are primarily driven from net cash flow generated from the sale of trees (referred to as stumpage sales) and capital appreciation from

the biological growth of the trees. Both of these return factors depend to some degree upon the direction of forest commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland from the conversion of timberland into higher and better uses, such as vacation property sales.

TIMBERLAND MARKET OVERVIEW

The improving U.S. housing market, continued demand from China, and the reduced supply of Canadian timber, have begun to have a positive impact on the U.S. timber market. Despite the usual pricing dips associated with late spring and summer, market fundamentals have continued to support a sustained recovery. During the second quarter of 2013, there was a flurry of announcements regarding increases in production capacity and new investments of capital by U.S. lumber and plywood facilities. The forest products industry is seeking to increase its use of existing assets and add capacity in order to meet current and expected product demand, a welcome development for timberland owners and further evidence that markets for saw timber and ply logs are improving. In the U.S. South, prices for all products continued to strengthen. Normal weather patterns persisted throughout the winter, with rain events providing regional upticks in pulpwood stumpage as facilities liquidated stored on-site inventories.

RETIREMENT ANNUITY TRUST
PORTFOLIOS
FAIR VALUES *
June 30, 2013

Internally Managed	
Cash Equivalents	
Cash Collections Fund (Unallocated)	$ 386,683,234
Fixed Income	
Intermediate Bond Fund	795,899,998
Broad Market Bond Fund	649,467,257
Long Term Bond Fund	520,333,595
Internal Bond Fund	326,217,515
Life Insurance Trust	88,623,343
Tax Shelter Fund	391,095
Equity	
S & P 500 Stock Index Fund (Large Cap)	2,633,692,407
S & P 400 Stock Index Fund (Mid Cap)	395,801,667
S & P 600 Stock Index Fund (Small Cap)	274,394,764
Real Estate	
Internally Managed Fund	387,422,184
Subtotal	$ 6,458,927,059
Externally Managed	
Fixed Income	
Galliard Capital Management	529,404,800
Ft. Washington Broad Market	523,742,773
Domestic Equity	
Todd Asset Management (Large Cap Core)	1,247,098,155
UBS (Large Cap Value)	1,009,186,556
GE Asset Management (Large Cap Growth)	609,224,099
Wellington (Large Cap Core)	588,175,698
Wellington (Mid Cap Core)	293,729,796
Wellington (Small Cap Core)	161,246,606
Todd Asset Management Opportunity Fund	160,371,755
UBS (130/30)	138,651,261
International Equity	
Todd Asset Management International	764,861,378
Baillie Gifford EAFE Alpha	627,629,002
UBS All Country World ex US	495,487,967
Baring All Country World ex US	459,890,115
Blackrock All Country World ex US IMI	350,905,874

continued ...

RETIREMENT ANNUITY TRUST PORTFOLIOS continued ...
JUNE 30, 2013

Real Estate	
Prudential PRISA Fund	196,179,640
Blackstone Partners VII, LP	27,825,130
Carlyle Realty Partners VI	21,155,651
The Realty Associates Fund X	10,028,567
Rockwood Capital Real Estate Fund IX	1
Alternative Investments	
Molpus Woodlands Group Lake Superior Timberlands LLC	97,835,024
Molpus Seven States LLC	74,912,053
KKR & Co European Fund III	56,543,955
Riverstone/Carlyle E & P Fund IV	42,056,249
Alinda Infrastructure Fund II	31,537,771
Ft. Washington Fund VI	27,641,971
Hancock Bluegrass LLC - Oregon	24,732,952
KKR & Co Fund 2006	18,873,820
NGP Natural Resources X, LP	18,765,153
Landmark Equity Partners Fund XIV	18,606,867
Lexington Capital Partners Fund VII	18,437,263
Chrysalis Venture Fund III	17,184,268
Ft. Washington Fund V	13,615,257
Oaktree Mezzanine Fund III	13,248,259
Hellman & Friedman Fund VII	12,494,953
Stepstone Pioneer Capital Fund III, LP	10,676,201
Oaktree European Principal Fund III	10,157,366
Audax Mezzanine Fund III	9,871,455
Riverstone E & P Fund V	8,201,917
CapitalSouth Partners Fund III	4,533,801
J. P. Morgan Maritime Fund	3,243,342
Audax Private Equity Fund IV, LP	3,214,644
APAX VIII, LP	2,738,899
Actis Global Fund IV	1,607,674
Alinda Core I	8,007
Additional Categories	
Fort Washington High Yield Bond Fund	305,843,652
Shenkman Capital Management	232,452,630
Marathon KTRS/Credit Fund LP	174,213,019
Avenue Special Situations Fund VI	109,931,579
Rogge Global International Fixed Income	91,778,981
Highbridge Principal Strategies III	11,312,685
Oaktree Opportunities IX, LP	4,984,001
Marathon Legacy Securities PPIP	4,826,734
AG GECC PPIF, LP	33,194
Subtotal	**$ 9,690,910,420**
Total Assets	**$ 16,149,837,479**

* *Detailed information concerning the market values of all KTRS investments is available upon request.*

Investment Summary
Fair Value – Retirement Annuity Trust*
June 30, 2013

Type of Investment	Fair Value 07/01/12	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/13
Cash Equivalents	$ 624,793,000	$ 3,665,519,800	$ -	$ 3,489,334,500	$ 800,978,300
Fixed Income	3,295,533,000	3,410,462,600	(111,041,000)	3,414,968,300	3,179,986,300
Equities	9,259,302,400	2,674,158,900	1,677,527,300	3,508,435,800	10,102,552,800
Real Estate	586,800,800	49,233,000	13,870,400	7,292,900	642,611,300
Alternative	451,266,300	110,612,900	17,538,500	38,678,600	540,739,100
Additional Categories	586,106,700	594,661,200	1,063,800	298,862,000	882,969,700
TOTAL	**$ 14,803,802,200**	**$ 10,504,648,400**	**$ 1,598,959,000**	**$ 10,757,572,100**	**$ 16,149,837,500**

* Includes Life Insurance Trust values of $88,623,343, Tax Shelter Annuity value of $391,095 and 401(h) value of $2,193,497.

Contracted Investment Management Expenses
Fiscal Year 2012-13
(in thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points (1)
Equity Manager(s)	$ 6,906,458	$ 12,109	
Fixed Income Manager(s)	1,053,148	448	
Real Estate	255,189	3,957	
Additional Categories	935,376	4,122	
Alternative Investments (2)	540,739	10,959	
Total	$ 9,690,910	$ 31,595	32.6
Other Investment Services			
Custodian Fees (3)	$ 16,150,347	$ 333	0.2
Consultant Fees		359	0.2
Legal & Research		156	0.1
Subscriptions/Services		700	0.4
Total	$ 16,150,347	$ 1,548	1.0
Grand Total		$ 33,143	**20.5**

(1) – One basis point is one hundredth of one percent or the equivalent of .0001.
(2) – Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.
(3) – Includes J. Losey Scholarship Fund.

Ten Largest Stock Holdings Ranked [1] [2]
by Fair Value
June 30, 2013

Rank	Description	Fair Value	Percentage of Equities
1	Apple Inc	140,776,477	1.752
2	JP Morgan Chase	115,322,289	1.435
3	Exxon Mobil Corp	113,519,444	1.413
4	Philip Morris Inc	100,467,939	1.250
5	Wells Fargo & Co	98,465,556	1.226
6	Google Inc CL A	95,260,436	1.186
7	Citigroup Inc	90,207,681	1.123
8	Microsoft Corp	84,672,939	1.054
9	Chevron Corp	77,297,676	0.962
10	Qualcomm Inc	72,744,506	0.905

Top Ten Fixed Income Holdings [2]
by Fair Value
June 30, 2013

Rank	Description	Maturity	Coupon	Par Value	Fair Value	Percent of Fixed Income
1	U S Treasury	4/30/2017	0.880	55,000,000	54,725,000	1.500
2	U S Treasury	5/31/2015	0.250	50,000,000	49,912,000	1.364
3	U S Treasury	5/15/2016	0.250	49,950,000	49,419,531	1.362
4	U S Treasury	4/30/2018	0.630	50,290,000	48,600,759	1.372
5	U S Treasury	5/15/2023	1.750	49,415,000	46,280,112	1.348
6	U S Treasury Bonds	8/15/2023	6.250	31,900,000	42,805,972	0.870
7	U S Treasury	1/15/2023	0.130	32,475,000	31,724,558	0.886
8	U S Treasury Bonds	8/15/2029	6.130	22,000,000	30,603,980	0.600
9	FNMA	7/01/2043	3.000	26,650,000	26,037,850	0.727
10	U S Treasury	3/31/2017	1.000	23,180,000	23,201,789	0.632

(1) Includes only actively managed separate accounts.
(2) Detailed information concerning these values along with book values and cost values of all KTRS investments is available upon request.

Transaction Commissions Fiscal Year 2012-13

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Academy Securities, Inc.	18,410	$ 720.90	$ 0.04	0.03 %
Allen & Co	1,400	1,411.20	1.01	0.05
Avondale Partners, LLC	25,655	939.51	0.04	0.03
B. Riley & Co. LLC	1,510	60.40	0.04	0.00
Barclays	1,475,278	50,318.74	0.03	1.79
Barclays Capital, London	1,200	12.00	0.01	0.00
Bay Crest Partners, LLC	4,010	160.40	0.04	0.01
BB & T Capital Markets	1,500	1,140.00	0.76	0.04
Blair, William & Co	44,383	1,696.48	0.04	0.06
BMO Capital Markets	17,100	684.00	0.04	0.02
BNP Paribas Securities Bond	36,410	1,456.40	0.04	0.05
BNY ConvergEX Group	6,053,748	110,036.70	0.02	3.92
Brean Murray, Carret & Co., LLC	10,380	415.20	0.04	0.01
BTIG	82,100	3,129.60	0.04	0.11
Burke & Quick Partners LLC	3,620	144.80	0.04	0.01
Cabrera Capital	20,320	802.45	0.04	0.03
Canaccord Genuity, Inc.	35,105	1,388.41	0.04	0.05
Cantor Fitzgerald & Co	35,490	1,547.55	0.04	0.06
CIBC Worldmarket	20,100	804.00	0.04	0.03
Citigroup Global	363,070	22,564.78	0.06	0.80
Cowen & Co	274,085	12,707.38	0.05	0.45
Credit Agricole Securities	27,470	997.94	0.04	0.04
Credit Research & Trading LLC	132,610	3,692.50	0.03	0.13
Credit Suisse Sec. LLC	3,161,651	118,937.19	0.04	4.23
Crowell Weedon & Co	98,185	3,927.40	0.04	0.14
CSI US Institutional (Calyon)	244,030	9,712.30	0.04	0.35
Cuttone & Co Inc	12,300	485.00	0.04	0.02
D A Davidson & Co	23,270	911.70	0.04	0.03
Dahlman Rose & Co LLC	14,930	597.20	0.04	0.02
Deutsche Bank	1,217,738	52,018.98	0.04	1.85
Dowling & Partners	3,860	154.40	0.04	0.01
Drexel Hamilton LLC	5,690	199.15	0.04	0.01
Evercore Group LLC	4,938	194.52	0.04	0.01
Fidelity Capital Markets	4,600	184.00	0.04	0.01
Fig Partners, LLC	28,840	1,153.60	0.04	0.04
First Kentucky Securities Corp	1,334,140	40,024.20	0.03	1.42
Freidman Billings	130,065	6,542.75	0.05	0.23
Goldman Sachs	3,030,494	116,895.54	0.04	4.16
Green Street Advisors	30,650	1,226.00	0.04	0.04
Imperial Capital	4,942	197.68	0.04	0.01
Instinet	26,420	264.20	0.01	0.01
Investment Tech Grp Transition	23,741,366	230,536.44	0.01	8.21
Investment Technology Grp	23,942,525	345,076.51	0.01	12.28
ISI Group	3,333,962	96,959.83	0.03	3.45
J.J.B. Hilliard, W.L. Lyons	3,094,796	92,843.88	0.03	3.30
Janney Montgomery Scott Inc	173,170	5,212.30	0.03	0.19
Jefferies & Co.	576,622	12,096.68	0.02	0.43
JMP Securities	7,400	296.00	0.04	0.01
Jones & Associates	87,910	3,545.40	0.04	0.13
JP Morgan & Chase	643,306	42,235.41	0.07	1.50
Keefe Bruyette & Woods	46,880	1,875.20	0.04	0.07
Keybanc Capital	53,390	2,084.00	0.04	0.07
King, CL, & Associates, Inc.	49,970	1,998.80	0.04	0.07
Knight Equity Markets	41,250	1,057.40	0.03	0.04
Lazard Freres & Co.	3,847,179	115,722.70	0.03	4.12
Leerink Swann & Co.	82,830	3,334.45	0.04	0.12
Lexington Investment Co.	611,500	18,345.00	0.03	0.65
Liquidnet Inc	18,385,361	170,743.57	0.01	6.08
Liquidnet Inc - Transition	5,753,200	43,149.00	0.01	1.54

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Longbow Securities LLC	62,770	2,510.80	0.04	0.09
Loop Capital Markets, LLC	9,270	168.60	0.02	0.01
MacQuarie Securities Inc Total	36,890	1,475.60	0.04	0.05
Merrill Lynch	5,481,270	121,746.59	0.02	4.33
Merrill Lynch, Pierce, Fenner	81,310	3,072.95	0.04	0.11
Miller Tabak & Co. LLC	22,530	901.20	0.04	0.03
Mizuho Securities, USA	79,390	2,986.35	0.04	0.11
MKM Partners	26,860	1,074.40	0.04	0.04
Morgan Keegan	2,566,520	76,995.60	0.03	2.74
Morgan Stanley	709,638	26,190.99	0.04	0.93
Morgan Stanley Smith Barney-Huntington	2,306,600	69,198.00	0.03	2.46
Morgan Stanley Smith Barney-Louisville	2,436,910	73,107.30	0.03	2.60
Morgan Stanley Smith Barney-Northern KY	2,907,190	87,215.70	0.03	3.10
Needham	19,680	787.20	0.04	0.03
Nomura Securities Intrntl Inc	4,000	160.00	0.04	0.01
OTA Limited Partners	11,890	475.60	0.04	0.02
Pacific Crest Securities	44,185	1,767.40	0.04	0.06
Pershing LLC	25,190	1,007.60	0.04	0.04
Piper Jaffray	82,198	3,249.08	0.04	0.12
Pulse Trading	8,420	84.20	0.01	0.00
R W Baird	359,855	12,428.37	0.03	0.44
Raymond James & Assoc	5,392,070	179,638.36	0.03	6.39
RBC Capital Markets	394,016	15,767.59	0.04	0.56
Rosenblatt Securities LLC	13,590	168.90	0.01	0.01
Ross Sinclaire & Assoc	720,200	21,606.00	0.03	0.77
Sandler O'Neill	31,080	1,087.80	0.04	0.04
Sanford C Bernstein	581,468	7,968.53	0.01	0.28
Scotia Capital, USA	9,200	368.00	0.04	0.01
SG AMERICAS SECURITIES	30,000	1,350.00	0.05	0.05
Sidoti & Company LLC	25,400	991.60	0.04	0.04
Simmons & Co	18,970	758.80	0.04	0.03
State Street Global	50,150	1,515.00	0.03	0.05
Stephens Inc.	21,545	855.80	0.04	0.03
Sterne, Agee & Leach	118,890	4,370.85	0.04	0.16
Stifel, Nicolaus & Co	2,072,190	67,386.59	0.03	2.40
Stifel, Nicolaus & Co-Louisville	690,440	20,713.20	0.03	0.74
Suntrust Robinson	41,130	4,039.30	0.10	0.14
Susquehanna Brokerage	118,730	4,732.70	0.04	0.17
Telsey Advisory Group LLC	106,133	4,056.36	0.04	0.14
The Benchmark Company LLC	10,580	450.00	0.04	0.02
UBS/Paine Webber Securities	763,396	15,683.36	0.02	0.56
UBS/Paine Webber-Louisville	2,539,990	76,199.70	0.03	2.71
Wedbush Morgan Securities	9,840	393.60	0.04	0.01
Weeden & Co	3,949,505	118,655.18	0.03	4.22
Wells Fargo Securities, LLC	181,012	16,011.22	0.09	0.57
Williams Capital Group	7,070	282.80	0.04	0.01
Zacks & Company	600	24.00	0.04	0.00
TOTAL	**137,714,075**	**$ 2,809,248.49**	**$ 0.02**	**100%**

The acquisition of initial public offerings (IPOs)represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate; however, the security issuers and not the investors pay the commissions. In 2012-13, the retirement annuity trust fund bought small capitalization IPOs that generated $239,941 in commissions. Although these commissions were not paid by the retirement system, they resulted from the retirement annuity trust fund's investment activities and are included in the total commissions of $2,809,248. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.03 per share or less. Investment companies usually provide investment research for brokerage clients. On occasion, investment companies direct third party research to active clients. The primary research provideres were: Bloomberg, Interactive Data, Segal Rogers Casey, ISS, QED Financial Systems, and Thomson Financial.

PROXY VOTING AND CORPORATE BEHAVIOR

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The Board has adopted the following position on corporate behavior:

The Board's stated fiduciary duty is to obtain the highest return for the Fund commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the Fund as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the Fund has invested.

The Board expects the managements of the companies whose equity securities are held in the Fund's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the Board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the Board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission, and others which are covered by the laws of the United States Government or the State of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the System's holdings in the company, if the sale is consistent with sound investment policy.

SECURITY LENDING

The System operates a security lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and select stocks and bonds are the types of securities loaned. The System's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral, at the time of the loan, has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral consists of cash, marketable U.S. Government securities, and selected marketable U.S. Government agency securities approved by the System.

Cash collateral is invested in short term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities unless the borrower defaults. The lending agent also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. The weighted average maturity of cash collateral investments is typically two days. The System has no credit risk exposure to borrowers, since the amounts the System owes borrowers exceeds the amounts the borrowers owe the System.

Security lending programs can entail considerable interest rate risk and credit risk. The System has structured its program to minimize these two main categories of risk. The interest rate risk is managed, as mentioned above, by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the creditworthiness of lent securities.

KENTUCKY INVESTMENTS

The retirement system is always cognizant of its significant role in the Commonwealth's economy. Over $1.5 billion in benefits are distributed to members and annuitants living in Kentucky annually. Approximately $318 million of the retirement annuity trust fund's investments directly impact the Commonwealth. These investments include: commercial real estate; bonds issued by public agencies of the Commonwealth and those of local municipalities; pools of single-family mortgages in Kentucky; financing for multi-family housing, and; investments in companies which have an impact on the Commonwealth's economy but receive earnings from global operations. Fiduciary duty requires that investments be made solely for the benefit of the retirement system's members and annuitants. Investments which benefit the Commonwealth's economy are made only when fully consistent with this fiduciary duty.

PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
Hewitt EnnisKnupp, Inc.

Investment Custodian
The Bank of New York Mellon

Fixed Income Managers
Galliard Capital Management
Ft. Washington Investment Advisors

Domestic Equity Managers
Todd Asset Management LLC
UBS Global Asset Management
Wellington Management Company
GE Asset Management

International Equity Managers
Todd Asset Management LLC
UBS Global Asset Management
Baring Asset Management, Inc.
Baillie Gifford
Blackrock Institutional Trust Company

Real Estate Managers
Prudential Real Estate Investors
Carlyle Realty Partners
Blackstone Real Estate Partners
Rockwood Capital Real Estate
TA Associates Realty

Alternative Investment Managers
Molpus Woodlands Group
Hancock Natural Resources Group
Kohlberg Kravis Roberts & Co.
Chrysalis Ventures
Ft. Washington Private Equity Investors
Alinda Capital Partners, LLC
Riverstone Holdings, LLC
CapitalSouth Partners
Landmark Partners
Lexington Partners
Oaktree Capital Management
Stepstone Pioneer Capital
Audax Group
J.P. Morgan Asset Management
Hellman & Friedman Capital Partners
Natural Gas Partners
Apax Partners
Actis LLP

Additional Categories Investment Managers
AG GECC PPIF GP, LLC
Avenue Capital Group
Marathon Asset Management
Ft. Washington Investment Advisors
Oaktree Capital Management
Shenkman Capital Management, Inc
Rogge Global Partners
Highbridge Principal Strategies, LLC

Attorney
Ice Miller LLP

HEALTH INSURANCE TRUST FUND

INVESTMENT POLICY SUMMARY

The statute that created the health insurance trust fund on July 1, 2010, KRS 161.677, obliges the Board to "manage the assets of the fund in the same general manner in which it administers the retirement funds, except that the asset allocation may differ and separate accounting and financial reporting shall be maintained for the trust fund." KRS 161.430, which governs the investment of funds for the retirement funds, requires that members' assets be managed in a manner consistent with fiduciary standards set forth in the "prudent person rule." Subject to this statute, administrative regulation 102 KAR 1:178 establishes investment policies for the health insurance trust fund. This regulation requires the Board and Investment Committee to prudently diversify assets and to consider the fund's "liquidity and its capability of meeting both short and long-term obligations" in setting asset allocation policy.

Due to an imbalance of required distributions over contributions early in the fund's existence, liquidity needs have dominated investment policy. This will evolve as contribution rate increases provided in statute improve cash flow in future years. As near-term liquidity needs recede in importance, the focus will increasingly be on establishing an investment policy which achieves the required rate of return and matches the health insurance liability.

INVESTMENT OBJECTIVES

The definitive objective of the health insurance trust fund is to provide for beneficiaries' health insurance benefit obligations, both short and long-term. In support of this objective, investment policy will be designed, on an ongoing basis, to: (1) meet all liquidity needs, (2) achieve the actuarially assumed 8.0% rate of return over the long-term, and (3) do so within appropriate risk levels.

RISK CONTROLS

Any investment program faces various risks; as with the retirement funds, the primary risk is that the assets will not support liabilities over the long-term. Risk control measures for the health insurance trust fund mirror those of the retirement annuity trust fund, but are customized to reflect the fund's unique liability. Primary risk control measures include the following steps:

- Actuarial valuations are performed each year to evaluate the funding objectives of the health insurance trust fund. Every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the fund.

- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the fund.

- In accordance with administrative regulation 102 KAR 1:178, which governs investment policies for the fund, the KTRS Investment Committee adopts and regularly reviews an asset allocation policy designed to meet the fund’s needs.

ASSET ALLOCATION

As of June 30, 2013, the health insurance trust fund had approximately $447.2 million in total assets. This included $39.5 million in cash and $76.9 million in short-term high quality bonds for liquidity purposes. This trust fund also had $59.2 million in high yield bonds, $243.0 million in a global stock index fund, $1.3 million in private equity investments, $26.2 million in bank loans, and $1.1 million in an alternative credit fund.

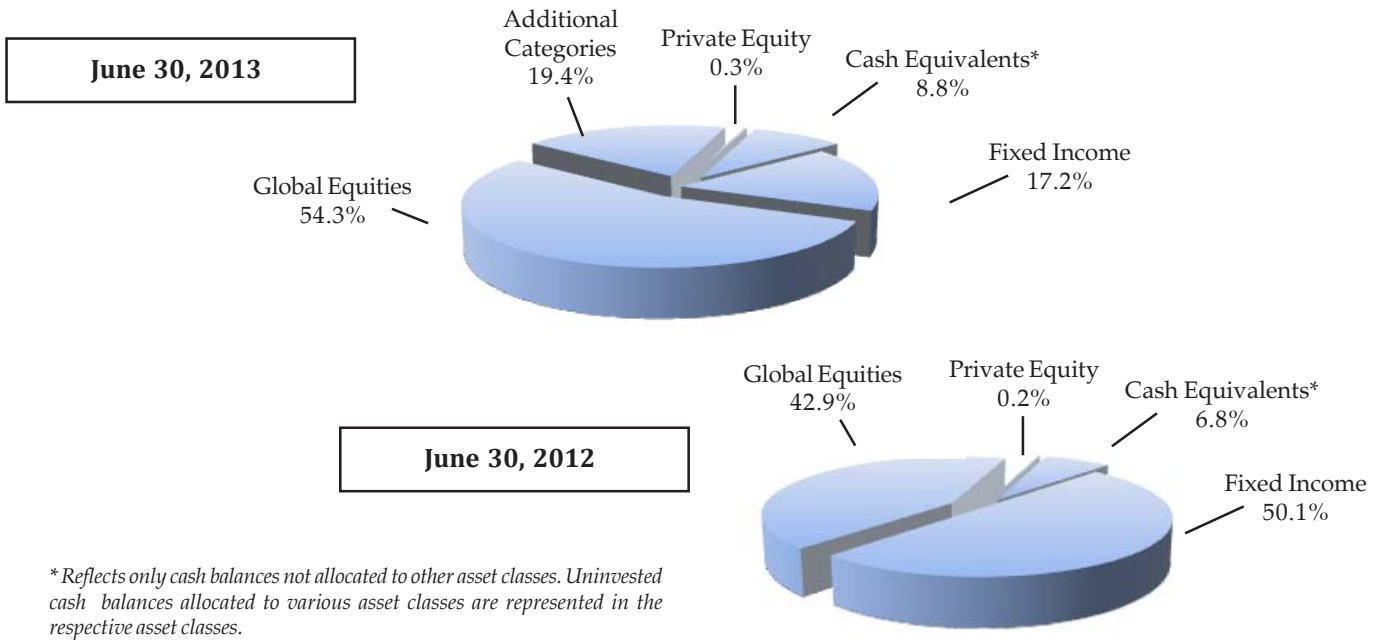
Asset allocation will be adjusted annually by the Investment Committee to reflect changing liquidity needs and actuarial funding status. Due to upcoming contribution rate increases enacted in statute, liquidity needs are expected to decline in coming years while funding status improves. The information below shows the health insurance trust fund's asset allocation by fair value as of June 30, 2013 and June 30, 2012.

Health Insurance Trust

	June 30, 2013	%	June 30, 2012	%
Cash Equivalents *	$ 39,455,381	8.8	$ 22,265,278	6.8
Fixed Income	76,930,328	17.2	164,189,966	50.1
Global Equities	243,022,751	54.3	140,740,861	42.9
Additional Categories	86,551,982	19.4	-0-	0.0
Private Equity	1,255,715	0.3	748,103	0.2
Totals	**$ 447,216,157**	**100.0**	**$ 327,944,208**	**100.0**

* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

Distribution of Investments Health Insurance Trust Fair Values



** Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

HEALTH INSURANCE TRUST

PORTFOLIO RETURNS

For the fiscal year, the health insurance trust fund's portfolio returned 10.1%. The fund's global equities returned 17.6% versus 17.1% for the MSCI All country World IMI Index. A short-term bond fund held for liquidity purposes returned 0.1%. A high yield bond fund returned 8.8% versus 9.6% for its benchmark.

Due to a necessary focus on liquidity needs early in the fund's existence and rapidly evolving asset allocation as its funding mechanism is implemented, no policy benchmark has yet been established. Returns were generated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

	1 Yr. [1]	3 Yr. [1]	5 Yr. [1]	10 Yr. [1]	20 Yr. [1]
Total Fund					
KTRS Health Insurance Trust	10.1	-	-	-	-
Equities					
Global Equities	17.6	-	-	-	-
MSCI AC World IMI	17.1	-	-	-	-
Fixed Income					
Internal Bond Fund	0.1	-	-	-	-
90 Day Treasury Bill	0.1	-	-	-	-
Alternative Investments					
Private Equity [2]	40.1	-	-	-	-
Additional Categories					
High Yield Bond Fund	8.8	-	-	-	-
B of A Merrill Lynch High Yield Master II	9.6	-	-	-	-
Shenkman Capital Management	-	-	-	-	-
Highbridge Principal Strategies III	-	-	-		-
S & P LSTA Leverage Loan Index	-	-	-	-	-
Cash					
Cash (Unallocated)	0.1	-	-	-	-
90 Day Treasury Bill	0.1	-	-	-	-

(1) Annualized.

(2) For a period of five years private equity will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the commitment date, investments in this class shall be benchmarked versus the S & P 500 plus 3%, which is the System's long-term expected return for this asset class.

HEALTH INSURANCE TRUST PORTFOLIOS
FAIR VALUES *
June 30, 2013

Internally Managed	
Cash Equivalents	
Cash Collections Fund	$ 39,455,381
Fixed Income	
Internal Bond Fund	76,930,328
Subtotal	116,385,709
Externally Managed	
Global Equities	
BlackRock Fund B	243,022,751
Alternative Investments	
Ft. Washington Fund VII	1,096,647
Actis Global Fund IV	157,467
Alinda Core Fund I	1,601
Additional Categories	
Ft. Washington High Yield Bond Fund	59,184,982
Shenkman Capital Management	26,235,731
Highbridge Principal Strategies III	1,131,269
Subtotal	**330,830,448**
Total Assets	**$ 447,216,157**

* *Detailed information concerning these fair values of all KTRS investments is available upon request.*

Investment Summary
Fair Value – Medical Insurance Trust
June 30, 2013

Type of Investment	Fair Value 07/1/2012	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/13
Cash Equivalents	$ 46,051,900	$ 566,757,800	$ -	$ 558,087,300	$ 54,722,400
Fixed Income	87,375,500	71,955,100	(533,300)	94,069,100	64,728,200
Real Estate	-	-	-	-	-
Equities	140,740,900	77,004,700	25,277,200	-	243,022,800
Alternative	748,100	1,126,500	69,600	688,500	1,255,700
Additional Categories	53,027,900	61,167,900	617,900	31,326,600	83,487,100
TOTAL	$ 327,944,200	$ 778,012,000	$ 25,431,400	$ 684,171,400	$ 447,216,200

Health Insurance Trust Fund
Contracted Investment
Management Expenses
Fiscal Year 2012-13
(in thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 243,023	$ 112	
Fixed Income Manager(s)	0	0	
Additional Categories	86,552	152	
Alternative Investments [2]	1,256	284	
Total	$ 330,831	$ 548	16.6
Other Investment Services			
Custodian Fees	447,216	$ 7	0.2
Consultant Fees		0	0.0
Legal & Research		0	0.0
Subscriptions/Services		1	0.0
Total	$ 447,216	$ 8	0.2
Grand Total		$ 556	**12.4**

(1) – One basis point is one hundredth of one percent or the equivalent of .0001.
(2) – Private equity fees are either withheld from the Fund operations or paid by direct" disbursement, depending on contract terms."

HEALTH INSURANCE TRUST PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
Hewitt EnnisKnupp, Inc.

Investment Custodian
The Bank of New York Mellon

Additional Categories Managers
Ft. Washington Investment Advisors
Shenkman Capital Management, Inc
Highbridge Principal Strategies, LLC

Global Equity Manager
BlackRock Institutional Trust Company

Alternative Investment Managers
Ft. Washington Private Equity Investors
Actis LLP
Alinda Capital Partners, LLC

Attorney
Ice Miller LLP

Actuarial Section

Report of the Actuary on the Annual Valuation

for Fiscal Year ending June 30, 2012

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 11, 2012

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2012. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2015 required to support the benefits of the System are 31.89% of payroll for university members hired before July 1, 2008, 32.89% of payroll for university members hired on and after July 1, 2008, 34.85% of payroll for non-university members hired before July 1, 2008, and 35.85% of payroll for non-university members hired on and after July 1, 2008.

These rates represent an increase since the previous valuation in the Pension required employer contribution rate of 1.90% of payroll for the 2014/2015 fiscal year. In addition, there has been a net decrease in the expected state special appropriation from 3.50% to 3.00%, or 0.50% of payroll and no change in the amount required for life insurance benefits. Therefore, the net impact on the required increase in the total employer contribution rate is 2.40% of payroll.

For the 2014/2015 fiscal year, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 10.42%; 2.40% from this valuation and 8.02% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

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We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

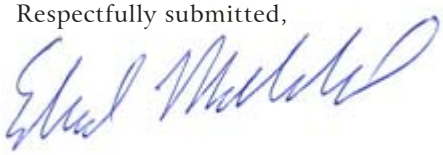
The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, the System is not being funded on an actuarially sound basis since the actuarially required contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,



Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Report of Actuary on the Valuation
Prepared as of June 30, 2012
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2012	June 30, 2011
Number of active members	75,951	76,349
Annual salaries	$ 3,479,567	$ 3,451,756
Number of annuitants and beneficiaries	46,094	44,419
Annual allowances	$ 1,525,184	$ 1,433,386
Assets		
Market value	$ 14,797,121	$ 15,130,606
Actuarial value	$ 14,691,371	$ 14,908,138
Unfunded actuarial accrued liability	$ 12,282,483	$ 11,060,554
Funded Ratio	54.5%	57.4%
Amortization period (years)	30	30

Contribution Rates for University Members

Valuation Date	June 30, 2012		June 30, 2011	
For Fiscal Year Ending	June 30, 2015		June 30, 2014	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	11.790 %	11.790 %	11.770 %	11.770 %
Accrued liability	20.100	21.100	18.220	19.220
Total	31.890 %	32.890 %	29.990 %	30.990 %
Member	7.625 %	7.625 %	7.625 %	7.625 %
State (ARC)	24.265	25.265	22.365	23.365
Total	31.890 %	32.890 %	29.990 %	30.990 %
Life Insurance Fund:				
State	0.030 %	0.030 %	0.030 %	0.030 %
Medical Insurance Fund:				
Member	2.270 %	2.270 %	1.750 %	1.750 %
State Match	2.270	1.270	1.750	0.750
Total	4.540 %	3.540 %	3.500 %	2.500 %
Total Contributions	36.460 %	36.460 %	33.520 %	33.520 %
Member Statutory	9.895 %	9.895 %	9.375 %	9.375 %
State Statutory	13.145	13.145	12.625	12.625
Required Increase	10.420	10.420	8.020	8.020
State Special	3.000	3.000	3.500	3.500
Total	36.460 %	36.460 %	33.520 %	33.520 %

Contribution Rates for Non-University Members

Valuation Date	June 30, 2012		June 30, 2011	
For Fiscal Year Ending	June 30, 2015		June 30, 2014	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	15.150 %	15.150 %	15.050 %	15.050 %
Accrued liability	19.700	20.700	17.900	18.900
Total	34.850 %	35.850 %	32.950 %	33.950 %
Member	9.105 %	9.105 %	9.105 %	9.105 %
State (ARC)	25.745	26.745	23.845	24.845
Total	34.850 %	35.850 %	32.950 %	33.950 %
Life Insurance Fund:				
State	0.030 %	0.030 %	0.030 %	0.030 %
Medical Insurance Fund:				
Member	3.000 %	3.000 %	2.250 %	2.250 %
State Match	3.000	2.000	2.250	1.250
Total	6.000 %	5.000 %	4.500 %	3.500 %
Total Contributions	40.880 %	40.880 %	37.480 %	37.480 %
Member Statutory	12.105 %	12.105 %	11.355 %	11.355 %
State Statutory	15.355	15.355	14.605	14.605
Required Increase	10.420	10.420	8.020	8.020
State Special	3.000	3.000	3.500	3.500
Total	40.880 %	40.880 %	37.480 %	37.480 %

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2012 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule E of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation.

5. The System currently uses a smoothed interest rate methodology to determine liabilities. The development of the smoothed interest rate used in the June 30, 2012 valuation is shown in Schedule D.

6. Provisions of the System, as summarized in Schedule G, were taken into account in the current valuation. There have been no changes since the previous valuation.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2012 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
Full Time	58,874	$ 3,361,793
Part Time	7,077	117,774
Total	75,951	$ 3,479,567

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2012

Group	Number	Annual Retirement Allowances[1] ($1,000's)
Service Retirements	40,152	$ 1,392,874
Disability Retirements	2,477	67,006
Beneficiaries of Deceased Members	3,465	65,304
Total	46,094	$ 1,525,184

[1] *Includes cost-of-living adjustments effective through July 1, 2012.*

3. Table 1 of Schedule H shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2012 the market value of Pension Plan assets for valuation purposes held by the System amounted to $14,797,120,889. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2012 was $14,691,371,043. Schedule B shows the development of the actuarial value of assets as of June 30, 2012.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2012. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule E and Schedule F.

2. The valuation balance sheet shows that the System has total prospective liabilities of $15,391,786,788 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $16,229,256,850 of which $832,505,614 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $242,964,774. The total prospective liabilities of the System amounts to $31,864,008,412. Against these liabilities, the System has present assets for valuation purposes of $14,691,371,043. When this amount is deducted from the total liabilities of $31,864,008,412, there remains $17,172,637,369 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 11.79% of payroll for University and 15.15% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,890,154,454. When this amount is subtracted from $17,172,637,369, which is the present value of the total future contributions to be made by the employer, there remains $12,282,482,915 as the amount of future unfunded accrued liability contributions.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 9.895% of annual salary to the System and each non-university member contribute 12.105% of annual salary. Of this amount, for each university member, 2.27% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.00% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.03% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 10.42% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 3.00% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 24.265% for university members who become members before July 1, 2008 and 25.265% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 25.745% for non-university members who become members before July 1, 2008 and 26.745% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source
University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	9.895 %	9.895 %
Statutory Medical Insurance Fund	(2.270)	(2.270)
Contribution to Pension Plan	7.625 %	7.625 %
Employer		
Statutory Matching Total	9.895 %	9.895 %
Statutory Medical Insurance Fund	(2.270)	(1.270)
Supplemental Funding	3.250	3.250
Subtotal	10.875 %	11.875 %
Life Insurance	(0.030) %	(0.030) %
Additional to Maintain 30-Year Amortization	10.420	10.420
Special Appropriation	3.000	3.000
Contribution to Pension Plan	24.265 %	24.265%
Total Contribution to Pension Plan	31.890 %	32.890 %

Contribution Rates by Source
Non-University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	12.105 %	12.105 %
Statutory Medical Insurance Fund	(3.000)	(3.000)
Contribution to Pension Plan	9.105 %	9.105 %
Employer		
Statutory Matching Total	12.105 %	12.105 %
Statutory Medical Insurance Fund	(3.000)	(2.000)
Supplemental Funding	3.250	3.250
Subtotal	12.355 %	13.355 %
Life Insurance	(0.030) %	(0.030) %
Additional to Maintain 30-Year Amortization	10.420	10.420
Special Appropriation	3.000	3.000
Contribution to Pension Plan	25.745 %	26.745 %
Total Contribution to Pension Plan	34.850 %	35.850 %

4. The valuation indicates that normal contributions at the rate of 11.79% of active university members' salaries and 15.15% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 20.10% for university members hired before July 1, 2008, 21.10% for university members hired on and after July 1, 2008, 19.70% for non-university members hired before July 1, 2008, and 20.70% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.00% of payroll to be made by the State. These rates are shown in the following table.

Actuarially Determined Contribution Rates

Rate	Percentage of Active Members' Salaries			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	11.79 %	11.79 %	15.15 %	15.15 %
Accrued Liability *	20.10	21.10	19.70	20.70
Total	31.89 %	32.89 %	34.85 %	35.85 %

** Includes special appropriations of 3.00% of payroll to be made by the State.*

5. The unfunded actuarial accrued liability amounts to $12,282,482,915 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 10.42%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2011, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. In addition, it is our understanding that beginning with the 2011 fiscal year, there will be no further loans for Stabilization Funding. The following table shows the amounts borrowed, annual payments and remaining balances for the non-single subsidy funding as of June 30, 2012:

Medical Insurance Fund
Stabilization Funding

FISCAL YEAR	LOAN AMOUNT	ANNUAL PAYMENT	BALANCE AS OF JUNE 30, 2012
2008/2009*	$ 8,400,000	$ 1,228,900	$ 6,645,514
2009/2010*	9,200,000	1,345,200	8,037,793
2010/2011*	10,700,000	1,564,500	10,172,724
2011/2012	12,300,000	1,798,700	12,300,000
TOTAL	$ 40,600,000	$ 5,937,300	$ 37,156,031

* *For non-single subsidy funding.*

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 10.42% of payroll for the fiscal year ending June 30, 2015, as shown in the following table:

VALUATION DATE	FISCAL YEAR	INCREASE	CUMULATIVE INCREASE
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46
June 30, 2008	June 30, 2011	1.13	3.59
June 30, 2009	June 30, 2012	2.22	5.81
June 30, 2010	June 30, 2013	1.46	7.27
June 30, 2011	June 30, 2014	0.75	8.02
June 30, 2012	June 30, 2015	2.40	10.42

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,221,928,683 in the unfunded accrued liability from $11,060,554,232 to $12,282,482,915 during the year ending June 30, 2012.

Analysis of Financial Experience
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (8.00%) added to previous unfunded accrued liability	$ 884,844
Expected accrued liability contribution	(377,897)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2011/2012 fiscal year with interest	12,792
Repayment of prior year's MIF Stabilization Funding with interest	(4,304)
Experience:	
Valuation asset growth	740,509
Pensioners' mortality	15,768
Turnover and retirements	34,857
New entrants	53,409
Salary increases	(108,489)
Amendments	0
Assumption changes*	(29,560)
Method changes	0
Total	$ 1,221,929

** Change occurs due to interest smoothing methodology.*

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Members as of June 30, 2012

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	46,094
Terminated employees entitled to benefits but not yet receiving benefits	6,668
Active plan members	75,951
Total	128,713

2. Another such item is the schedule of funding progress as shown below.

Schedule of Funding Progress (Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2007	$ 15,284,955	$ 21,254,974	$ 5,970,019	71.9%	$ 2,975,289	200.7%
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8
6/30/2011 **	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4
6/30/2012	14,691,371	26,973,854	12,282,483	54.5	3,479,567	353.0

* *Funding method Projected Unit Credit prior to 6/30/2011*
Funding method Entry Age Normal 6/30/2011 and after
** *Reflects change in assumptions and methods*

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2012. Additional information as of the latest actuarial valuation follows.

Valuation date	06/30/2012
Actuarial cost method	Entry age
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market

Actuarial Assumptions:

Investment rate of return*
7.50%

Projected salary increases**
4.00 - 8.20%

Cost-of-living adjustments
1.50% Annually

**Includes price inflation at 3.50%*
***Includes wage inflation at 4.00%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Annual Required Contributions	Actual Employer Contributions	Percentage Contributed
2007	$ 494,565,369	$ 434,890,469	88%
2008	563,789,483	466,247,783	83
2009	600,282,735	442,549,935	74
2010	633,938,088	479,805,088	76
2011	678,741,428	1,037,935,993*	153
2012	757,822,190	557,339,552	74

** Includes Pension Obligation Bond proceeds of $465,384,165.*

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2012. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Obligation for Fiscal Year Ending June 30, 2012

(a)	Employer annual required contribution	$ 757,822,190
(b)	Interest on net pension obligation	18,363,874
(c)	Adjustment to annual required contribution	12,271,380
(d)	Annual pension cost: (a) + (b) - (c)	763,914,684
(e)	Employer contributions made for fiscal year ending June 30, 2012	557,339,552
(f)	Increase (decrease) in net pension obligation: (d) - (e)	206,575,132
(g)	Net pension obligation beginning of fiscal year	229,548,428
(h)	Net pension obligation end of fiscal year: (f) + (g)	$ 436,123,560

Trend Information

YEAR ENDING	ANNUAL PENSION COST (APC)	PERCENTAGE OF APC CONTRIBUTED	NET PENSION OBLIGATION (NPO)
June 30, 2010	$ 642,840,908	75%	$ 576,328,182
June 30, 2011	691,156,239	150	229,548,428
June 30, 2012	763,914,684	73	436,123,560

SCHEDULE A
VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2012
(Dollar amount in thousands)

ACTUARIAL LIABILITIES

(1)	Present value of prospective benefits payable in respect of present active members			
	-	Service retirement benefits	$ 14,341,125	
	-	Disability retirement benefits	706,593	
	-	Death and survivor benefits	131,049	
	-	Refunds of member contributions	213,019	
		Total		$ 15,391,786
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits			
	-	Service retirement benefits	$ 15,035,616	
	-	Disability retirement benefits	622,588	
	-	Death and survivor benefits	571,053	
		Total		$ 16,229,257
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits			$ 242,965
(4)	TOTAL ACTUARIAL LIABILITIES			$ 31,864,008

PRESENT AND PROSPECTIVE ASSETS

(5)	Actuarial value of assets	$ 14,691,371
(6)	Present value of total future contributions = (4)-(5)	17,172,637
(7)	Present value of future member contributions and employer normal contributions	4,890,154
(8)	Prospective unfunded accrued liability contributions = (6)-(7)	12,282,483
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS	$ 31,864,008

Schedule A continued ...

Solvency Test

(in millions of dollars)

Fiscal Year Ending	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation of Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2007	$ 2,762.8	$ 12,843.7	$ 5,648.5	$ 15,285.0	100%	97 %	0%
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3	100	91	0
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0
6/30/2012	3,415.2	16,472.2	7,086.4	14,691.4	100	68	0

SCHEDULE B

Development of Actuarial Value of Assets as of June 30, 2012

(1)	Actuarial Value of Assets Beginning of Year		$ 14,908,138,356
(2)	Market Value of Assets End of Year		14,797,120,889
(3)	Market Value of Assets Beginning of Year		15,130,606,279
(4)	Cash Flow		
	a.	Contributions	867,069,476
	b.	Benefit Payments	1,502,488,238
	c.	Administrative Expense	7,762,880
	d.	Net: (4)a - (4)b - (4)c	(643,181,642)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	309,696,252
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,110,676,159
	d.	Amount for Phased-In Recognition: (5)a - (5)c	(800,979,907)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	(160,195,981)
	b.	First Prior Year	363,670,625
	c.	Second Prior Year	133,378,916
	d.	Third Prior Year	(611,235,941)
	e.	Fourth Prior Year	(409,879,449)
	f.	Total Recognized Investment Gain	(684,261,830)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		14,691,371,043
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ 105,749,846
(9)	Rate of Return on Actuarial Value:		2.92%

SCHEDULE C
PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2012	For the Year Ending June 30, 2011
Receipts for the Year		
Contributions		
Members	$ 309,729,924	$ 302,262,819
Employers	557,339,552	1,037,935,993
Total	867,069,476	1,340,198,812
Net Investment Income	309,696,252	2,760,972,224
Total	1,176,765,728	4,101,171,036
Disbursements for the Year		
Benefit Payments	1,482,939,165	1,402,535,713
Refunds to Members	19,549,073	17,325,387
Miscellaneous, including expenses	7,762,880	7,322,739
Total	1,510,251,118	1,427,183,839
Excess of Receipts over Disbursements	(333,485,390)	2,673,987,197
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	15,130,606,279	12,456,619,082
Excess of Receipts over Disbursements	(333,485,390)	2,673,987,197
Asset Balances as of the End of the Year	$ 14,797,120,889	$ 15,130,606,279
Rate of Return	2.4%	21.60%

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE D
SMOOTHED INTEREST RATE
Actual Rate of Return for 5-Year Look Back Period

Fiscal Year Ending June 30	Actual Rate of Return for Fiscal Year
2008	-5.7%
2009	-14.3
2010	13.1
2011	21.6
2012	2.4

SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period beginning on the valuation date. This is the investment rate of return expected to be earned during this period based on the actual rates earned during the five year look back period shown above such that the average rate of return over the combined 30 year period is equivalent to the ultimate investment rate of return (currently 7.50%). On this basis, for the June 30, 2012 valuation, the smoothed interest rate during the 25 year look forward period has been determined to be 8.50%.

ULTIMATE INVESTMENT RATE OF RETURN (DISCOUNT RATE): The assumed investment rate of return used in determining the smoothed interest rate described above. This is also the assumed investment rate of return after the 25 year look forward period and is currently 7.50%.

CORRIDOR AROUND SMOOTHED INTEREST RATE: A corridor of 0.50% around the ultimate investment rate of return is applied in determining the smoothed interest rate.

LIMITED SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period as limited based on the application of the corridor above and used for valuation purposes. Since the smoothed interest rate above is 8.50% the assumed rate for the first 25 years after the valuation date is limited to 8.00% by the corridor.

SCHEDULE E

Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011.

ULTIMATE INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.5% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.60%	4.50%	4.30%	4.20%	4.00%

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

Annual Rate of Death After . . .

Age	Service Retirement MALE	Service Retirement FEMALE	Disability Retirement MALE	Disability Retirement FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability.

VALUATION INTEREST RATE SMOOTHING: The valuation liabilities are calculated using a smoothed interest rate method. The interest rate assumed during the look forward period (currently 25 years from the valuation date) is the investment rate of return expected to be earned during the look forward period based on

the actual rate of return earned during the look back period (currently 5 years) such that the average assumed rate of return over the combined 30-year period is equivalent to the assumed ultimate investment rate of return (currently 7.50%). The interest rate after the 25-year look forward period is the ultimate investment rate of return of 7.50%.

CORRIDOR LIMIT ON INTEREST RATE SMOOTHING: The smoothed interest rate used during the 25-year look forward period is limited to a corridor of 0.50% around the ultimate investment rate of return.

SCHEDULE F

Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (see Schedules C and E for a description of the interest rate used), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE G

Summary of Main System Provisions as Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2012. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1. DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2. BENEFITS

Service Retirement Allowance: Members Before 7/1/2008

Condition for Allowance: Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance: Members On or After 7/1/2008

Condition for Retirement: Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 1.7% of final average salary if service is 10 years or less.

(b) 2.0% of final average salary if service is greater than 10 years and no more than 20 years.

(c) 2.3% of final average salary if service is greater than 20 years but no more than 26 years.

(d) 2.5% of final average salary if service is greater than 26 years but no more than 30 years.

(e) 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

(a) 1.5% of final average salary if service is 10 years or less.

(b) 1.7% of final average salary if service is greater than 10 years and no more than 20 years.

(c) 1.85% of final average salary if service is greater than 20 years but less than 27 years.

(d) 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance: Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance: The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000, to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	1	2	3	4 or more
Annual Allowance	$ 2,400	$ 4,080	$ 4,800	$ 5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.
If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options:

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2	A single life annuity payable during the member's lifetime with payments for 10 years certain.
Option 3	At the death of the member his allowance is continued throughout the life of his beneficiary.
Option 3(a)	At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.
Option 4	At the death of the member one half of his allowance is continued throughout the life of his beneficiary.
Option 4(a)	At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3. CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE H
Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2012
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,365	1							2,366
Total Pay	40,846,000	45,000							40,891,000
Avg. Pay	17,271	45,000							17,283
25 to 29	7,069	1,365							8,434
Total Pay	222,006,000	64,597,000							286,603,000
Avg. Pay	31,406	47,324							33,982
30 to 34	3,713	5,255	908						9,876
Total Pay	109,834,000	260,683,000	50,523,000						421,040,000
Avg. Pay	29,581	49,607	55,642						42,633
35 to 39	2,605	2,485	4,229	628					9,947
Total Pay	70,984,000	124,123,000	248,149,000	40,344,000					483,600,000
Avg. Pay	27,249	49,949	58,678	64,242					48,618
40 to 44	3,521	1,920	2,490	3,371	673	1			11,976
Total Pay	77,925,000	98,559,000	146,062,000	217,339,000	45,705,000	205,000			585,795,000
Avg. Pay	22,131	51,333	58,659	64,473	67,912	205,000			48,914
45 to 49	1,722	1,231	1,454	1,576	2,373	651			9,007
Total Pay	40,472,000	63,140,000	85,800,000	102,363,000	160,069,000	44,672,000			496,516,000
Avg. Pay	23,503	51,292	59,010	64,951	67,454	68,621			55,126
50 to 54	1,483	956	1,148	1,173	1,332	1,704	336		8,132
Total Pay	30,482,000	48,757,000	67,472,000	76,713,000	91,714,000	122,232,000	24,752,000		462,122,000
Avg. Pay	20,554	51,001	58,774	65,399	68,854	71,732	73,667		56,828
55 to 59	2,153	667	955	1,048	1,068	792	444	74	7,201
Total Pay	33,635,000	33,944,000	57,464,000	69,754,000	74,916,000	59,806,000	35,896,000	6,522,000	371,937,000
Avg. Pay	15,622	50,891	60,172	66,559	70,146	75,513	80,847	88,135	51,651
60 to 64	2,643	533	520	596	625	418	114	113	5,562
Total Pay	36,178,000	25,746,000	32,732,000	41,293,000	45,923,000	33,164,000	10,223,000	11,375,000	236,634,000
Avg. Pay	13,688	48,304	62,946	69,284	73,477	79,340	89,675	100,664	42,545
65 & over	2,276	359	181	176	177	155	43	83	3,450
Total Pay	20,242,000	12,464,000	11,931,000	12,303,000	13,673,000	12,141,000	3,921,000	7,754,000	94,429,000
Avg. Pay	8,894	34,719	65,917	69,903	77,249	78,329	91,186	93,422	27,371
Total	29,550	14,772	11,885	8,568	6,248	3,721	937	270	75,951
Total Pay	682,604,000	732,058,000	700,133,000	560,109,000	432,000,000	272,220,000	74,792,000	25,651,000	3,479,567,000
Avg. Pay	23,100	49,557	58,909	65,372	69,142	73,158	79,821	95,004	45,813

Average Age: 43.6 Average Service: 11.0

SCHEDULE H

Table 2: Number of Retired Members and Beneficiaries and their Benefits by Age as of June 30, 2012

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	823	$ 9,726,856	$ 11,819
50 - 54	1,148	40,343,440	35,142
55 - 59	5,076	198,687,289	39,142
60 - 64	10,970	408,588,247	37,246
65 - 69	10,087	350,225,048	34,720
70 - 74	6,879	224,196,637	32,591
75 - 79	4,544	136,335,293	30,003
80 & Over	6,567	157,080,688	23,920
TOTAL	**46,094**	**$ 1,525,183,498**	**$ 33,089**

SCHEDULE H

Table 3: Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

	ADD TO ROLLS		REMOVED FROM ROLLS		ROLLS END OF YEAR			
Fiscal Year	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)	Increase In Annual Allowances	Average Annual Allowance
2003	2,252	$ 86.7	1,015	$ 16.9	34,645	$ 819.0	9.3%	$ 23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4	33,089

Actuarial Section

Report of the Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans

for Fiscal Year ending June 30, 2013

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 11,2013

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require the Teachers' Retirement System of the State of Kentucky (the System) to conduct actuarial valuations of the System's retiree medical and other post employment benefit plans. This report covers the Retiree Medical Plan funded by the Medical Insurance Fund (MIF) and OPEB liabilities related to the Life Insurance Plan funded by the Life Insurance Fund (LIF). Cavanaugh Macdonald Consulting, LLC (CMC) has submitted the results of the annual actuarial valuation prepared as of June 30, 2013. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total annual required contribution of 6.80% of active member payroll for the MIF payable for the fiscal year ending June 30, 2014 is required to support the benefits of the Kentucky Employees' Health Plan (KEHP) and the Medicare Eligible Health Plan (MEHP). Of this amount, 1.75% of payroll is estimated to be paid by University members and 2.25% of payroll is estimated to be paid by all other members, leaving 5.05% and 4.55% respectively, as the remaining annual required contribution. This annual required contribution reflects the actuarial value of assets of the MIF and an 8.00% discount rate for valuing liabilities.

Since the previous valuation, the methodology used to develop the actuarial value of assets has been changed from market value of assets to a five-year market related actuarial value. To reflect the plan design changes to be implemented for plan year 2014 for KEHP, the rates of anticipated health care plan election for the KEHP plans have been estimated. Additionally, the initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised since the previous valuation to reflect recent experience. Last, the MIF's reporting lag for accounting entries has been changed from 24 months to the valuation date prior to the beginning of the applicable fiscal year.

The Life Insurance Plan valuation indicates a total annual required contribution of 0.03% of active member payroll payable for the fiscal year ending June 30, 2016 is required to support the benefits of the LIF. This annual required contribution reflects the actuarial value of assets of the LIF and a 7.50% discount rate for valuing liabilities.

The promised benefits of the Retiree Medical and Life Insurance Plans are included in the actuarially calculated contribution rates which are developed using the entry age normal actuarial cost method. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.00% annually. The assumptions recommended by the actuary and adopted by the Board are in aggregate reasonably related to the experience under the Retiree Medical and Life Insurance Plans and to reasonable expectations of anticipated experience under the Retiree Medical and Life Insurance Plans and meet the parameters for the disclosures under GASB 43 and 45.

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CMC has prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Section VII shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Retiree Medical and Life Insurance Plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, if the State contributions to the Medical Insurance Fund are increased to the planned levels, the Retiree Medical Plan will begin to operate in a more actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the Retiree Medical Plan will improve.

Respectfully submitted,

Eric Gary, FSA, FCA, MAAA
Senior Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Senior Actuary

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Report of Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans
Prepared as of June 30, 2013

Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (dollar amounts are in thousands):

Medical Insurance Fund

Valuation Date	June 30, 2013	June 30, 2012
Number of active members	74,831	75,951
Annual salaries	$ 3,480,066	$ 3,479,567
Number of vested former members	4,910	3,641
Number of annuitants in medical plans	36,777	36,000
Number of spouses and beneficiaries in medical plans*	7,053	7,008
Total	43,830	43,008
Assets:		
Market value	$ 413,666	$ 338,746
Actuarial value	$ 412,185	338,746
Unfunded actuarial accrued liability	3,108,888	$ 3,255,794
Amortization period (years)	30	30
Discount rate	8.00%	8.00%

** Spouses of post-65 retirees, as well as surviving spouses of deceased retirees on or after July 1, 2002, pay 100% of the full contribution. 100% of the full contribution for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.*

Medical Insurance Fund Contribution Rates for University Members

Valuation Date	June 30, 2013		June 30, 2012	
For Fiscal Year Ending	June 30, 2014		June 30, 2013	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.92 %	1.92 %	1.99 %	1.99 %
Accrued liability	4.88	4.88	5.11	5.11
Total	6.80 %	6.80 %	7.10 %	7.10 %
Member	1.75 %	1.75 %	1.43 %	1.75 %
Employer (ARC)	1.75	0.75	1.43	0.75
State (ARC)	3.30	4.30	4.24	4.60
Total	6.80 %	6.80 %	7.10 %	7.10 %

Medical Insurance Fund Contribution Rates for School District Employees (Non-Federal)

Valuation Date	June 30, 2013		June 30, 2012	
For Fiscal Year Ending	June 30, 2014		June 30, 2013	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.92 %	1.92 %	1.99 %	1.99 %
Accrued liability	4.88	4.88	5.11	5.11
Total	6.80 %	6.80 %	7.10 %	7.10 %
Member	2.25 %	2.25 %	1.75 %	1.75 %
Employer (ARC)	1.50	1.50	1.00	1.00
State (ARC)	3.05	3.05	4.35	4.35
Total	6.80 %	6.80 %	7.10 %	7.10 %

Medical Insurance Fund Contribution Rates for Other Employees

Valuation Date For Fiscal Year Ending	June 30, 2013 June 30, 2014		June 30, 2012 June 30, 2013	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.92 %	1.92 %	1.99 %	1.99 %
Accrued liability	4.88	4.88	5.11	5.11
Total	6.80 %	6.80 %	7.10 %	7.10 %
Member	2.25 %	2.25 %	1.75 %	1.75 %
Employer (ARC)	2.25	1.25	1.75	.75
State (ARC)	2.30	3.30	3.60	4.60
Total	6.80 %	6.80 %	7.10 %	7.10 %

Life Insurance Fund

(dollar amounts in thousands)

Valuation Date	June 30, 2013	June 30, 2012
Number of active members	74,831	75,951
Annual salaries	$ 3,480,066	$ 3,479,567
Number of vested former members	3,839	3,641
Number of retirees in Life Insurance Plan	43,845	42,602
Assets:		
Market value	$ 89,957	$ 92,241
Actuarial value	$ 94,863	$ 92,241
Unfunded actuarial accrued liability*	$ (538)	$ (843)
Amortization period (years)	30	30
Discount rate	7.50%	7.50%

Contribution for fiscal year ending	June 30, 2016	June 30, 2015
Normal	0.03 %	0.03 %
Accrued liability	0.00	0.00
Total	0.03 %	0.03 %

** Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45.*

2. The valuation indicates combined member, employer, and State contributions of 6.80% of active member payroll would be sufficient to support the current benefits of the Retiree Medical Plan and State contributions of 0.03% of active member payroll would be sufficient to support the current benefits of the Life Insurance Plan. Comments on the valuation results as of June 30, 2013 are given in Section IV and further discussion of the contribution levels is set out in Sections VI and VII.

3. Since the previous valuation, the methodology used to develop the actuarial value of assets has been changed from market value of assets to a five-year market related actuarial value. Additionally, the initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised since the previous valuation to reflect recent experience.

Last, the MIF's reporting lag for accounting entries has been changed from 24 months to the valuation date prior to the beginning of the applicable fiscal year. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

4. There were no changes in benefit provisions since the last valuation. However, the health insurance plan designs have changed for eligible retirees. The changes are summarized below.

   - Plan design changes are to be implemented for Plan Year 2014 for the KEHP, the plans for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky. To reflect the plan design changes in the valuation's results, the rates of anticipated health care plan election for the KEHP plans have been estimated and the initial per capita costs of health care have been revised.
   - The level of coinsurance for non-preferred brand-name drugs (Tier 3, mail and retail) has been increased for Plan Year 2014 for the MEHP, the plan for Medicare eligible retirees administered by KTRS, helping to keep the MEHP initial per capita cost at its previous level. Additionally, the assumed rate of health care inflation for the fiscal year ending June 30, 2014 has been adjusted to 0.00% to reflect the anticipation of a more competitive cost structure for the MEHP resulting from the marketing process.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the Retiree Medical and Life Insurance Plans for use as a basis of the valuation were furnished by the System's office. The following tables summarize the membership of the System as of June 30, 2013, upon which the valuation was based. Detailed tabulations of the data are given in Schedule F.

Active Members as of June 30, 2013

Group	Number	Annual Salaries ($1,000's)
Full Time	58,390	$ 3,366,097
Part Time	16,441	113,969
Total	74,831	$ 3,480,066

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following tables show the number of retired members and their beneficiaries receiving health care as of the valuation date as well as average ages.

Retirees Receiving Health Benefits as of June 30, 2013

	Under Age 65	Age 65 and Over	TOTAL
Number	14,292	22,485	36,777
Average Age	60.4	74.2	68.8

Spouses Receiving Health Benefits as of June 30, 2013

Number	3,141	3,912	7,053
Average Age	59.1	75.4	68.1

3. The Retiree Medical Plan valuation also includes 4,910 deferred vested members eligible for health care at age 60.

Section III - ASSETS

1. As of June 30, 2013 the market value of Medical Insurance Fund assets held by the Retiree Medical Plan amounted to $413,665,765 and the market value of Life Insurance Fund assets held by the Life Insurance Plan amounted to $89,957,358.

2. The five-year market related value of Medical Insurance Fund assets used for valuation purposes as of June 30, 2013 was $412,184,887 and the five-year market related value of Life Insurance Fund assets used for valuation purposes as of June 30, 2013 was $94,863,265. Schedule B shows the development of the actuarial value of assets as of June 30, 2013.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Medical Insurance Fund and the Life Insurance Fund.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows the Retiree Medical Plan has an actuarial accrued liability of $1,519,278,878 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $27,378,882. The liability on account of benefits payable to retirees and covered spouses amounts to $1,974,414,969. The total actuarial accrued liability of the Retiree Medical Plan amounts to $3,521,072,729. Against these liabilities, the Retiree Medical Plan has present assets for valuation purposes of $412,184,887. When this amount is deducted from the actuarial accrued liability of $3,521,072,729, there remains $3,108,887,842 as the unfunded actuarial accrued liability for the Retiree Medical Plan.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the Retiree Medical Plan is determined to be $66,890,587, or 1.92% of payroll.

4. The valuation shows that the Life Insurance Plan has an actuarial accrued liability of $16,195,125 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $1,819,103. The liability on account of benefits payable to retirees amounts to $76,310,703. The total actuarial accrued liability of the Life Insurance Plan amounts to $94,324,931. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for active and post employment purposes. As this could be administratively burdensome and, as death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45. Against these liabilities, the Life Insurance Plan has present assets for valuation purposes of $94,863,265. When this amount is deducted from the actuarial accrued liability of $94,324,931, there is a surplus of $538,334 over the actuarial accrued liability for the life insurance plan.

5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $1,051,588, or 0.03% of payroll.

Section V - DERIVATION OF EXPERIENCE GAINS AND LOSSES

1. Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2013 is shown below ($1,000's).

	EXPERIENCE GAIN/(LOSS) OF THE:	MEDICAL INSURANCE FUND	LIFE INSURANCE FUND
(1)	UAAL* as of 6/30/2012	$ 3,255,794	$ (843)
(2)	Normal cost from last valuation	69,338	1,066
(3)	Expected employer contributions	247,276	1,022
(4)	Interest accrual: [(1) + (2) - (3)] x interest**	246,228	(60)
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	3,324,084	(859)
(6)	Change due to plan amendments	0	0
(7)	Change due to new actuarial assumptions	0	0
(8)	Change due to claims experience	(301,883)	0
(9)	Expected UAAL after changes: (5) + (6) + (7) + (8)	3,022,201	(859)
(10)	Actual UAAL as of 6/30/2013	3,108,888	(538)
(11)	Total gain/(loss): (9) - (10)	(86,687)	(321)
	(a) Contribution shortfall and investment loss	(22,779)	(544)
	(b) Experience gain/(loss) (11) - (11a)	(63,908)	223
(12)	Accrued liabilities as of 6/30/2012	$ 3,594,540	$ 91,398
(13)	Experience gain/(loss) as percent of actuarial accrued liabilities at start of year (11b) / (12)	(1.8%)	0.2%

* *Unfunded Actuarial Accrued Liability*
** *Interest is 8.0% for the Medical Insurance Fund and 7.5% for the Life Insurance Fund*

Section VI - CONTRIBUTIONS PAYABLE UNDER THE PLANS

1. Sections 161.420 and 161.550 of the Kentucky Revised Statutes provide the amounts employers and the State are required to contribute to the Medical Insurance Fund. These contribution amounts vary by fiscal year, date of membership, and employee type.

Employer Percentage of Payroll Contributions Made to Medical Insurance Fund

Fiscal Year Ending	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
2014	1.750%	0.750%	1.500%	1.500%	2.250%	1.250%
2015	2.270	1.270	2.250	2.250	3.000	2.000
2016 and Later	2.775	1.775	3.000	3.000	3.750	2.750

* *In addition to the amounts contributed by School Districts on behalf of Non-Federal employees, the State contributes 0.75%.*

For the fiscal year ending June 30, 2014, member contributions will be 1.75% for University employees and 2.25% for all other members. CMC recommends employer and State contributions increase to the required amount of 5.05% of payroll for University employees and 4.55% of payroll for all other members. The State is scheduled to contribute 0.03% of salary to the Life Insurance Fund for the fiscal year ending June 30, 2015. CMC's valuation indicates a contribution of 0.03% for the fiscal year ending June 30, 2016 is required to sufficiently support the benefits of the life insurance plan.

Required Contribution Rates
For Fiscal Year Ending June 30, 2014
Medical Insurance Fund

Normal	1.92%
Accrued liability	4.88
Total	6.80%

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
Member	1.75%	1.75%	2.25%	2.25%	2.25%	2.25%
Employer (ARC)	1.75	0.75	1.50	1.50	2.25	1.25
State (ARC)	3.30	4.30	3.05	3.05	2.30	3.30
Total	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%

Required Contribution Rates
Life Insurance Fund
For Fiscal Year Ending June 30, 2016

Normal	0.03%
Accrued liability	0.00
Total	0.03%
Member	0.00%
State (ARC)	0.03
Total	0.03%

2. The valuation indicates that a total normal contribution of 1.92% of payroll is required to meet the cost of benefits currently accruing under the Retiree Medical Plan and 0.03% of payroll is required to meet the cost of benefits currently accruing under the Life Insurance Plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 4.88% of payroll for the Retiree Medical Plan and 0.00% of payroll for the Life Insurance Plan.

3. The unfunded actuarial accrued liability amounts to $3,108,887,842 for the Retiree Medical Plan and ($538,334) for the Life Insurance Plan as of the valuation date. An accrued liability contribution of 4.88% of payroll for the Retiree Medical Plan and 0.00% of payroll for the Life Insurance Plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 30-year period, based on the assumption that the payroll will increase by 4.00% annually.

Section VII - COMMENTS ON LEVEL OF FUNDING

1. The System's monthly contribution for retirees who opt into the Retiree Medical Plan is based upon date of hire, date of attaining age 65, and years of service at retirement. Additionally, beneficiary contributions may vary by date of hire, date of attaining age 65, years of service at retirement, plan election, Medicare eligibility, and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Current employer and State contributions have been determined to be insufficient to fund the cost of the benefits to be provided. Benefits for university, school district (non-Federal), and other members are identical, although active employee contributions collected from university, school district (non-Federal), and other members differ. A listing of active member Retiree Medical Plan contributions by fiscal year, date of membership, and employer type is provided in Schedule E.

2. The valuation indicates an increase in scheduled contributions is required to fund the Retiree Medical Plan in an actuarially sound manner and to ensure the future solvency of the Medical Insurance Fund. For University employees a member contribution of 1.75% of payroll together with employer and State contributions of 5.05% of payroll are required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. For the remaining membership, a member contribution of 2.25% of payroll together with employer and State contributions of 4.55% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the Retiree Medical and Life Insurance Plans and the employer.

Number of Active and Retired Members in Medical Plan as of June 30, 2013

GROUP	NUMBER
Retirees currently receiving health benefits	36,777
Spouses of retirees currently receiving health benefits	7,053
Terminated employees entitled to benefits but not yet receiving benefits	4,910
Active plan members	74,831
Total	**123,571**

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2013

GROUP	NUMBER
Retirees	43,845
Terminated employees	3,839
Active plan members	74,831
Total	**122,515**

Schedule of Funding Progress [1]
Medical Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL)	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2008	$ 185,883	$ 6,434,522	$ 6,248,639	2.9%	$ 3,190,332	195.9%
6/30/2009 [2]	229,103	6,454,733	6,225,630	3.5	3,253,077	191.4
6/30/2010 [3]	241,224	3,206,806	2,965,582	7.5	3,321,614	89.3
6/30/2011 [4]	294,819	3,423,149	3,128,330	8.6	3,451,756	90.6
6/30/2012	338,746	3,594,540	3,255,794	9.4	3,479,567	93.6
6/30/2013	412,185	3,521,073	3,108,888	11.7	3,480,066	89.3

[1] *Reflects change in discount rate to 4.5% and updating medical trend.*
[2] *Reflects change in participation assumptions and plan design.*
[3] *Reflects change in discount rate to 8.0%, change in plan design and updating medical trend.*
[4] *Reflects change in decrement assumptions and updating medical trend.*

Schedule of Funding Progress [1]
Life Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL)	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2008	$ 77,658	$ 84,265	$ 6,607	92.2%	$ 3,190,332	0.21%
6/30/2009	84,703	90,334	5,631	93.8	3,253,077	0.17
6/30/2010	87,905	92,091	4,186	95.5	3,321,614	0.13
6/30/2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)
6/30/2012	92,241	91,398	(843)	100.9	3,479,567	(0.02)
6/30/2013	94,863	94,325	(538)	100.6	3,480,066	(0.02)

[1] *Actuarial cost Method of Projected Unit Credit prior to 6/30/2011 and Entry Age Normal 6/30/2011 and after.*

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2013. Additional information as of the latest actuarial valuation follows.

Valuation Date	Actuarial Cost Method	Amortization Method	Remaining Amortization Period	Asset Valuation Method	Actuarial Assumptions: Investment Rate of Return*	Actuarial Assumptions: Investment Rate of Return*
06/30/2013	Entry age	Level percent of pay, open	30 years	Market value of assets	8.00%-Retiree Medical Plan	7.50%-Retiree Life Insurance Plan

Medical Trend Assumption	Pre-Medicare**	Medicare
Fiscal Year Ending 6/30/2014	8.50%	0.00%
Fiscal Year Ending 6/30/2015	7.50%	6.00%
Ultimate Trend Rate	5.00%	5.00%
Year of Ultimate Trend Rate	2019	2018

** Includes price inflation at 3.50%.*
***Alternate trend rates were used for Medicare Part B premiums and are disclosed in Schedule D.*

Schedule of Employer Contributions
Medical Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	RDS CONTRIBUTION	TOTAL CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(A)	(B)	(C)	(B) + (C)	[(B) + (C)]/(A)
6/30/2008	$ 395,282,164	$ 148,954,644	$ 11,911,565	$ 160,866,209	40.7%
6/30/2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1
6/30/2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9
6/30/2011	477,723,070	188,453,929	280,585	188,734,514	39.5
6/30/2012	470,217,067	177,450,206	297,639	177,747,845	37.8
6/30/2013	186,725,823	166,611,420	0	166,611,420	89.2

Schedule of Employer Contributions
Life Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(A)	(B)	(B) / (A)
6/30/2008	$ 1,914,199	$ 5,411,249	282.7%
6/30/2009	1,498,076	5,455,473	364.2
6/30/2010	1,992,969	1,966,826	98.7
6/30/2011	1,725,878	1,668,822	96.7
6/30/2012	1,732,831	1,684,711	97.2
6/30/2013	1,739,908	1,680,495	96.6

3. Following is the calculation of the Annual OPEB Cost (AOC) and the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2013. As the Retiree Medical and Life Insurance Plans are cost-sharing multiple-employer plans, GASB Statement 45 does not require the participating employers to disclose this information

Annual OPEB Cost and Net OPEB Obligation
for the Medical Insurance Fund for Fiscal Year Ending June 30, 2013

(a) Employer Annual Required Contribution	$ 186,725,823
(b) Interest on Net OPEB Obligation	113,098,886
(c) Adjustment to Annual Required Contribution	77,264,315
(d) Annual OPEB Cost: (a) + (b) - (c)	222,560,394
(e) Employer Contributions for Fiscal Year 2013	166,611,420
(f) Increase in Net OPEB Obligation: (d) - (e)	55,948,974
(g) Net OPEB Obligation at beginning of Fiscal Year	1,413,736,073
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ 1,469,685,047

Trend Information for the Medical Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$ 395,282,164	40.7%	$ 234,415,955
6/30/2009	469,492,218	37.9	525,816,306
6/30/2010	461,942,516	37.5	814,379,040
6/30/2011	485,294,173	38.9	1,110,938,699
6/30/2012	480,545,219	37.0	1,413,736,073
6/30/2013	222,560,394	74.9	1,469,685,047

Annual OPEB Cost and Net OPEB Obligation for the Life Insurance Fund for Fiscal Year Ending June 30, 2013

(a) Employer Annual Required Contribution	$ 1,739,908
(b) Interest on Net OPEB Obligation	(595,552)
(c) Adjustment to Annual Required Contribution	(410,675)
(d) Annual OPEB Cost: (a) + (b) - (c)	1,555,031
(e) Employer contributions for Fiscal Year 2013	1,680,495
(f) Increase in Net OPEB Obligation: (d) - (e)	(125,464)
(g) Net OPEB Obligation at beginning of Fiscal Year	(7,940,695)
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ (8,066,159)

Trend Information for the Life Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2008	$ 1,914,199	282.7%	$ (3,497,050)
6/30/2009	1,416,656	385.1	(7,535,867)
6/30/2010	1,817,516	108.2	(7,685,177)
6/30/2011	1,546,950	107.9	(7,807,049)
6/30/2012	1,551,065	108.6	(7,940,695)
6/30/2013	1,555,031	108.1	(8,066,159)

SCHEDULE A

RESULTS OF THE VALUATION AS OF JUNE 30, 2013
(Dollar amounts in thousands)

		Medical Insurance Fund	Life Insurance Fund
PAYROLL		$ 3,480,066	$ 3,480,066
ACTUARIAL ACCRUED LIABILITY			
Present value of prospective benefits payable in respect of:			
(a)	Present active members	$ 1,519,279	$ 16,195
(b)	Present terminated vested members	27,379	1,819
(c)	Present retired members and covered spouses	1,974,415	76,311
(d)	Total actuarial accrued liability	$ 3,521,073	$ 94,325
PRESENT ASSETS FOR VALUATION PURPOSES		$ 412,185	$ 94,863
UNFUNDED ACTUARIAL ACCRUED LIABILITY		$ 3,108,888	$ (538)
CONTRIBUTIONS		**FY Ending June 30, 2014**	**FY Ending June 30, 2016**
	Normal	1.92%	0.03%
	Accrued Liability	4.88	0.00
	Total	6.80%	0.03%
	Member	2.22%	0.00%
	Employer (ARC)	1.50	0.00
	State (ARC)	3.08	0.03
	Total	6.80%	0.03%

MEDICAL INSURANCE FUND
Solvency Test
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2008	n/a	$ 3,084.4	$ 3,350.2	$ 185.9	n/a	6%	0%
6/30/2009	n/a	3,203.7	3,251.0	229.1	n/a	7	0
6/30/2010	n/a	1,948.6	1,258.2	241.2	n/a	12	0
6/30/2011	n/a	1,910.1	1,513.1	294.8	n/a	15	0
6/30/2012	n/a	2,046.7	1,547.9	338.7	n/a	17	0
6/30/2013	n/a	2,001.8	1,519.3	412.2	n/a	21	0

Schedule A continued ...

LIFE INSURANCE FUND
Solvency Test
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2008	n/a	$ 66.9	$ 17.4	$ 77.7	n/a	100%	62%
6/30/2009	n/a	72.0	18.4	84.7	n/a	100	69
6/30/2010	n/a	74.4	17.7	87.9	n/a	100	76
6/30/2011	n/a	72.2	15.9	88.5	n/a	100	103
6/30/2012	n/a	75.2	16.2	92.2	n/a	100	105
6/30/2013	n/a	78.1	16.2	94.9	n/a	100	104

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
MEDICAL INSURANCE FUND
AS OF JUNE 30, 2013

(1)	Actuarial Value of Assets Beginning of Year		$ 338,746,553
(2)	Market Value of Assets End of Year		$ 413,665,765
(3)	Market Value of Assets Beginning of Year		$ 338,746,553
(4)	Cash Flow		
	a.	Contributions	$ 286,372,224
	b.	Benefit Payments	240,896,642
	c.	Administrative Expense	1,275,206
	d.	Net: (4)a - (4)b - (4)c	$ 44,200,376
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	$ 30,718,836
	b.	Assumed Rate	8.00%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	28,867,739
	d.	Amount for Phased-In Recognition: (5)a - (5)c	$ 1,851,097
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	$ 370,219
	b.	First Prior Year	0
	c.	Second Prior Year	0
	d.	Third Prior Year	0
	e.	Fourth Prior Year	0
	f.	Total Recognized Investment Gain	$ 370,219
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 412,184,887
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ 1,480,878
(9)	Rate of Return on Actuarial Value:		8.10%

Schedule B continued ...

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
LIFE INSURANCE FUND
AS OF JUNE 30, 2013

(1)	Actuarial Value of Assets Beginning of Year	$	92,241,246
(2)	Market Value of Assets End of Year	$	89,957,358
(3)	Market Value of Assets Beginning of Year	$	92,241,246
(4)	Cash Flow		
	a. Contributions	$	1,680,495
	b. Benefit Payments		4,614,718
	c. Administrative Expense		24,425
	d. Net: (4)a - (4)b - (4)c	$	(2,958,648)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)d	$	674,760
	b. Assumed Rate		7.50%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]		6,807,144
	d. Amount for Phased-In Recognition: (5)a - (5)c	$	(6,132,384)
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	$	(1,226,477)
	b. First Prior Year		0
	c. Second Prior Year		0
	d. Third Prior Year		0
	e. Fourth Prior Year		0
	f. Total Recognized Investment Gain	$	(1,226,477)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f	$	94,863,265
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	(4,905,907)
(9)	Rate of Return on Actuarial Value:		6.15%

SCHEDULE C

MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2013	June 30, 2012
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 58,440,844	$ 44,243,026
Payment by Retired Members	61,354,936	56,103,044
Total Members	119,795,780	100,346,070
Employer/State Statutory Contributions	60,076,444	39,166,623
State Statutory - Transition Fund/KEHP	106,500,000	122,500,000
General Fund Surplus	0	0
Allotment from Pension Fund	0	12,300,000
TOTAL EMPLOYER	166,576,444	173,966,623
GRAND TOTAL	286,372,224	274,312,693
Recovery Income	34,976	3,483,583
Medicare D Receipts	0	297,639
Net Investment Income	30,718,836	(3,989,202)
TOTAL	317,126,036	274,104,713
DISBURSEMENTS FOR THE YEAR		
Refunds to Members	0	0
Administrative Expense	1,275,206	1,201,629
Medical Insurance Expense	240,931,618	228,975,126
TOTAL	242,206,824	230,176,755
Excess of Receipts over Disbursements	74,919,212	43,927,958
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	338,746,553	294,818,595
Excess of Receipts over Disbursements	74,919,212	43,927,958
Asset Balance as of the End of the Year	$ 413,665,765	$ 338,746,553

Schedule C continued ...

LIFE INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2013	For the Year Ending June 30, 2012
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 0	$ 0
State	1,680,495	1,684,711
TOTAL	1,680,495	1,684,711
Net Investment Income	674,760	6,450,022
TOTAL	2,355,255	8,134,733
DISBURSEMENTS FOR THE YEAR		
Benefit Payments	4,614,718	4,397,281
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	24,425	22,886
TOTAL	4,639,143	4,420,167
EXCESS OF RECEIPTS OVER DISBURSEMENTS	(2,283,888)	3,714,566
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	92,241,246	88,526,680
Excess of Receipts over Disbursements	(2,283,888)	3,714,566
Asset Balance as of the End of the Year	$ 89,957,358	$ 92,241,246

SCHEDULE D
Statement of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, termination, and salary increases used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011. The rates of future participation, health care cost trend rates, and expected plan costs were determined by the actuary based on plan experience.

Valuation Date: June 30, 2013

Discount Rate: 8.0% per annum, compounded annually for Medical Insurance Fund.
7.5% per annum, compounded annually for Life Insurance Fund.

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

Schedule D continued ...

Annual Trend Rate

Fiscal Year Ended	Medicare Part B	Under Age 65	Age 65 and Over
2014	2.76%	8.50%	0.00%
2015	4.87	7.50	6.00
2016	4.51	6.50	5.75
2017	5.08	6.00	5.25
2018	5.44	5.50	5.00
2019	5.50	5.00	5.00
2020	5.65	5.00	5.00
2021	5.64	5.00	5.00
2022	5.24	5.00	5.00
2023 and beyond	5.00	5.00	5.00

Age Related Morbidity: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred health care claims is assumed to be:

Participant Age	Annual Increases
65 – 69	3.0%
70 – 74	2.5
75 – 79	2.0
80 – 84	1.0
85 - 89	0.5
90 and over	0.0

For the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP.

Retiree Medical Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that KTRS pays as the full contribution amount. The amounts include medical and drug costs. An additional $5.70 per month is paid to the Department of Employee Insurance (DEI) and is not included in the under age 65 costs listed below. For retirees ages 65 and older, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

Under Age 65 (KEHP) Full Costs as of January 1, 2014

Fiscal Year	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 733.88	$ 699.28	$ 656.28	$ 641.50
Parent Plus	1,045.20	995.94	934.70	913.66
Couple	1,603.94	1,528.34	1,434.36	1,402.06
Family	1,785.16	1,701.04	1,596.42	1,560.48
Family C-R	882.94	841.34	789.60	771.82

Schedule D continued ...

Average Monthly KTRS Full Costs & Contributions

Calendar Year	Under Age 65 (KEHP) Contributions	Age 65 & Over (MEHP) Full Costs	Age 65 & Over (MEHP) Contributions
2004	$ 293	$ 274	$274
2005	412	288	288
2006	461	315	315
2007	458	283	283
2008	484	278	278
2009	545	301[1]	285
2010	594	373[1]	342
2011	626	289	289
2012	622	270[2]	270
2013	635	294[2]	290
2014	679	290[2]	290

[1] Under GASB 43 and 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy cannot be taken into account in the gross cost calculations.

[2] 2,052 current benefit recipients are not eligible for premium-free Medicare Part A benefits. For these individuals, the full cost of coverage is, on average, $649 per month. It is assumed 19% of current benefit recipients under the age of 65 who were hired prior to 4/1/1986 and left covered employment prior to 4/1/1996 will not be eligible for premium-free Medicare Part A benefits. All active members are assumed to have begun contributing to Medicare as of 4/1/1986 and are assumed eligible for premium-free Medicare Part A benefits.

Current Retiree Medical Plan Participation: Actual census data and current plan elections (including waivers) provided by the System were used for those retirees currently participating in the Retiree Medical Plan. Current participants are assumed to maintain their current Retiree Medical Plan coverage until they are no longer eligible.

Anticipated Retireee Medical Plan Participation: The assumed annual rates of health care plan participation for future retirees are as follows:

Member Participation*

Years of Service	Entered KTRS Before 7/1/2002	Entered KTRS After 6/30/2002	Entered KTRS After 6/30/2008
5-9.99	23%	9%	Not Eligible
10-14.99	45	23	Not Eligible
15-19.99	68	41	41%
20-24.99	93	59	59
25-25.99	93	81	81
26-26.99	93	86	86
27 or more	93	93	93

** Members retiring from deferred vested status are assumed to participate at 50% of the corresponding rate listed.*

Anticipated Retiree Medical Plan Elections: The assumed rates of plan election for future retirees participating in the KEHP plans are provided in the following table. As the assumed plan election rates are estimates and actual results may be materially different, this assumption will need to be revised as experience evolves.

LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
35%	55%	10%	0%

Schedule D continued ...

Spouse Coverage in Medical Plans: Actual census data and current plan elections were used for spouses (including beneficiaries) of current retirees. For spouses of future retirees, 20% of future retirees are assumed to cover their spouse, with females 3 years younger than males.

Disabled Dependent Children: The liability associated with disabled dependent children was determined to be de minimis and was therefore excluded from this valuation.

Reciprocity Service: In 2014, the Kentucky Retirement Systems' (KRS) Medicare eligible premium is expected to be less than the MEHP premium. KRS will only allow a bill for a portion of the lower KRS premium, creating a discrepancy in premiums for 2014. As such, reciprocity retirees with less than 20 years of KTRS service (or less than 27 KTRS years for retirees who entered KTRS after 2002) will be responsible for the balance of the premium in addition to any other portion of the premium for which he/she is responsible. As the discrepancy is assumed to occur over a short period and impact a small number of participants, the impact to the Retiree Medical Plan's liability is assumed to be de minimis.

Withdrawal Assumption: It is assumed 30% of future vested members who terminate elect to withdraw their contributions while the remaining 70% elect to leave their contributions in the plan in order to be eligible for a benefit at their retirement date.

Payroll Growth: 4.00% per annum, compounded annually.

Price Inflation: 3.50% per annum, compounded annually.

Affordable Care Act (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2018 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the Retiree Medical Plan's liability will be required.

Asset Valuation Method : Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The ultimate assumed valuation rate of return is assumed to be 8.00% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

Actuarial Cost Method: The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his/her age, service, and gender. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and deferred vested members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

Schedule D continued ...

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his/her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his/her behalf.

The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

Separation From Service: Representative values of the assumed annual rates of salary increases, death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

				WITHDRAWAL			RETIREMENT	
				SERVICE				
AGE	SALARY*	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service**
20	8.10%	0.012%	0.01%	9.00%				
25	7.20	0.015	0.01	9.00	3.00%			
30	6.20	0.020	0.02	9.00	3.00	3.00%		
35	5.50	0.035	0.05	10.00	3.25	1.75		
40	5.00	0.046	0.09	10.00	4.00	1.40		
45	4.60	0.058	0.18	11.00	4.00	1.50		17.0%
50	4.50	0.074	0.33	9.00	4.00	2.00		17.0
55	4.30	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	4.20	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	4.10	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	4.00	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	4.00	0.821	0.70	0.00	0.00	0.00	100.0	100.0

** Includes inflation at 3.5% per annum*
*** Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Schedule D continued ...

FEMALES: Annual Rate of . . .

AGE	SALARY*	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service**
20	8.10%	0.007%	0.01%	7.00%				
25	7.20	0.008	0.02	8.50	4.00%			
30	6.20	0.010	0.04	9.00	4.00	1.65%		
35	5.50	0.017	0.08	9.00	3.75	1.85		
40	5.00	0.024	0.14	8.50	3.25	1.50		
45	4.60	0.037	0.32	7.50	3.25	1.25		15.0%
50	4.50	0.055	0.42	9.50	3.50	1.75		15.0
55	4.30	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	4.20	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	4.10	0.263	0.85	11.00	4.00	2.00	12.5	25.0
65	4.00	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	4.00	0.672	0.85	0.00	0.00	0.00	100.0	100.0

** Includes inflation at 3.5% per annum*
*** Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

SCHEDULE E
Summary of Main Plan Provisions as Interpreted for Valuation Purposes

ELIGIBILITY FOR ACCESS TO RETIREE MEDICAL COVERAGE:

Service Retirement: For employees hired prior to July 1, 2008, Retiree Medical Plan coverage eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. For employees hired on or after July 1, 2008, employees may retire after the completion of 27 years of service, the attainment of age 55 and 10 years of service, or the attainment of age 60 and 5 years of service, but must complete a minimum of 15 years of service to be eligible for Retiree Medical Plan coverage.

Disability Retirement: Disabled employees hired prior to July 1, 2008 with at least 5 years of service, who are totally and permanently incapable of being employed as a teacher, are eligible for Retiree Medical Plan coverage. Disabled employees hired after July 1, 2008 must have 15 years of service to be eligible for Retiree Medical Plan coverage.

Survivors: Spouses of employees who die in service while eligible to retire, as well as survivors of service and disabled retirees, are eligible for Retiree Medical Plan coverage.

Termination: For employees hired prior to July 1, 2008 and who terminated with at least 5 years of service, Retiree Medical Plan coverage eligibility is attained at age 60. For employees hired on or after July 1, 2008 and who terminated with at least 15 years of service, Retiree Medical Plan coverage eligibility is attained at age 60.

COVERED MEMBER MEDICAL PLAN CONTRIBUTIONS:

Under Age 65 Retiree Shared Resonsibility Contribution: EEffective July 1, 2010, retirees under the age of 65 began a three-year phase-in of the Shared Responsibility Contribution. This contribution reduces the applicable amount of the full contribution provided by the System to retirees, by adjusting the Shared Responsibility Contribution amount by 100% less the appropriate percentage from the Retiree Percentage Contribution table on the following page. Effective July 1, 2012, the full Shared Responsibility Contribution equals the Standard Medicare Part B premium paid by retirees ages 65 and older.

Under Age 65 Shared Responsibility Contribution Timeline

Effective Date	Medicare Part B Monthly Cost	Formula	Shared Responsibility Contribution
July 1, 2010	$ 110.50	(1/3 x $110.50)	$ 37.00
January 1, 2011	115.40	(1/3 x 115.40)	39.00
July 1, 2011	115.40	(2/3 x 115.40)	77.00
January 1, 2012	99.90	(2/3 x 99.90)	66.00
July 1, 2012	99.90	99.90	99.90
January 1, 2013	104.90	104.90	104.90
January 1, 2014	104.90	104.90	104.90

Schedule E continued ...

Retiree Years of Service Percentage Contribution: Retirees contribute the following percentages based on years of service at retirement, which are then applied to the Retiree Contribution Rate Basis:

Retiree Percentage Contribution

Years of Service	Hired before 7/1/2002 (age 65 on 12/31/2004 or earlier)	Hired before 7/1/2002 (age 65 on 1/1/2005 or earlier)	Hired after 6/30/2002 and before 7/1/2008	Hired after 7/1/2008 or later
5 - 9.99	30%	75%	90%	Not Eligible
10 - 14.99	20	50	75	Not Eligible
15 - 19.99	10	25	55	55%
20 - 24.99	0	0	35	35
25 - 25.99	0	0	10	10
26 - 26.99	0	0	5	5
27 or more	0	0	0	0

Retiree Contribution Rate Basis
Effective January 1, 2014

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Ages 65 and Older (MEHP)
Single	$ 685.90	$ 619.30	$ 608.30	$ 628.52	$ 290.00
Parent Plus	685.90	685.90	685.90	685.90	290.00
Couple	685.90	685.90	685.90	685.90	290.00
Family	685.90	685.90	685.90	685.90	290.00
Family C-R	685.90	685.90	685.90	685.90	290.00

Under Age 65 Retiree Plan Cost Contribution: A contribution according to the table below is required to be paid by retirees under the age of 65 based upon the plan elected:

Under Age 65 Plan Cost Contribution*
Effective January 1, 2014

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 47.98	$ 79.98	$ 47.98	$ 12.98
Parent Plus**	359.30	310.04	248.40	227.76
Couple**	918.04	842.44	748.46	716.16
Family**	1,099.26	1,015.14	910.52	874.58
Family C-R**	197.04	155.44	103.70	85.92

** Does not include the additional contribution required to be paid by retirees under the age of 65 who smoke ($40 for Single or Family Cross-Reference, and $80 for Parent Plus, Couple or Family).*
*** Contribution for Parent Plus, Couple, Family and Family Cross-Reference tiers is offset by the State Under Age 65 Spouse/Dependent Subsidy.*

Schedule E continued ...

The Under Age 65 Plan Cost Contribution is reduced by subtracting the State Under Age 65 Spouse/Dependent Subsidy multiplied by 100% less the appropriate percentage in the Retiree Percentage Contribution table on the previous page, from the Under Age 65 Plan Cost Contribution.

State Under Age 65 Spouse/Dependent Subsidy
Effective January 1, 2014

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Parent Plus**	$ 236.32	$ 82.06	$125.82	$154.78
Couple**	630.06	329.46	460.48	453.18
Family**	761.28	372.16	572.54	561.60
Family C-R**	119.06	2.46	25.72	52.94

Spouse Contributions: 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Spouses of post-65 retirees, as well as surviving spouses of deceased retirees on or after July 1, 2002, pay 100% of the full contribution. Spouses of active members who died while eligible to retire prior to July 1, 2002, are provided the same subsidy by KTRS that would have been provided to the retiree for the lifetime of the spouse, or until remarriage. Spouses of active members who die while eligible to retire July 1, 2002, and later, pay 100% of the full contribution.

Surviving Spouse Contribution
Effective January 1, 2014
Under Age 65 (KEHP)

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Age 65 & Over (MEHP)
Single	$ 739.58	$ 704.98	$ 661.98	$ 647.20	$ 290.00
Parent Plus	1,050.90	1,001.64	940.40	919.36	n/a

System Retiree Medical Plan Contributions: The System Contribution Rate Basis is determined annually by KTRS; and the full cost is projected based on historical claims data. For retirees, the following percentages are based on years of service at retirement and are then applied to the System Contribution Rate Basis:

Percentage of System Contribution Rate Provided to Retirees

Years of Service	Age 65 & Over and Covered Before 1/1/2005	Age 65 & Over and Covered Before 12/31/2004	Entered KTRS After 6/30/2002 and Before 7/1/2008	Entered KTRS After 6/30/2008
5 - 9.99	70%	25%	10%	Not Eligible
10 - 14.99	80	50	25	Not Eligible
15 - 19.99	90	75	45	45%
20 - 24.99	100	100	65	65
25 - 25.99	100	100	90	90
26 - 26.99	100	100	95	95
27 or more	100	100	100	100

Schedule E continued ...

System Contribution Rate Basis
Effective January 1, 2014
Under Age 65 (KEHP)

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Ages 65 and Older (MEHP)
Single	$ 685.90	$ 619.30	$ 608.30	$ 628.52	$ 290.00
Parent Plus	685.90	685.90	685.90	685.90	290.00
Couple	685.90	685.90	685.90	685.90	290.00
Family	685.90	685.90	685.90	685.90	290.00
Family C-R	685.90	685.90	685.90	685.90	290.00

Active Member Retiree Medical Plan Contributions: Actively employed members make payroll contributions to the Medical Insurance Fund based upon the following schedule:

Active Member Percentage of Payroll Contribution Made to Medical Insurance Fund

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
Fiscal Year Ending	Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008
2014	1.750%	1.750%	2.250%	2.250%	2.250%	2.250%
2015	2.270	2.270	3.000	3.000	3.000	3.000
2016 & Later	2.775	2.775	3.750	3.750	3.750	3.750

Life Insurance Plan Benefits:

(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Members employed on a substitute or part-time basis and working at least 69% of a full contract year in a single fiscal year will be eligible for a life insurance benefit for the balance of the fiscal year or the immediately succeeding fiscal year under certain conditions. For non-vested members employed on a substitute or part-time basis, the life insurance benefit is provided if death occurs as the result of a physical injury on the job. For vested members employed on a substitute or part-time basis, death does not have to be the result of a physical injury on the job for life insurance benefits to be provided.

SCHEDULE F
Table 1 – Service Table
Distribution of Active Members as of June 30, 2013
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,217								2,217
Total Pay	38,794,764								38,794,764
Avg. Pay	17,499								17,499
25 to 29	6,792	1,343							8,135
Total Pay	215,924,099	64,179,614							280,103,713
Avg. Pay	31,791	47,788							34,432
30 to 34	3,657	5,211	1,031						9,899
Total Pay	111,425,382	260,737,984	57,355,777						429,519,143
Avg. Pay	30,469	50,036	55,631						43,390
35 to 39	2,552	2,504	4,182	662					9,900
Total Pay	71,285,307	125,543,255	246,666,064	42,971,906					486,466,532
Avg. Pay	27,933	50,137	58,983	64,912					49,138
40 to 44	3,067	1,800	2,474	3,563	680				11,584
Total Pay	67,191,849	92,622,129	145,446,626	230,950,606	45,969,397				582,180,607
Avg. Pay	21,908	51,457	58,790	64,819	67,602				50,257
45 to 49	1,735	1,298	1,417	1,746	2,491	602			9,289
Total Pay	41,056,264	67,430,234	83,499,390	112,838,960	169,887,231	42,236,173			516,948,252
Avg. Pay	23,664	51,949	58,927	64,627	68,200	70,160			55,652
50 to 54	1,458	912	1,144	1,178	1,310	1,710	294		8,006
Total Pay	31,190,824	47,134,890	67,514,047	77,392,738	90,545,146	122,933,736	22,391,365		459,102,746
Avg. Pay	21,393	51,683	59,016	65,698	69,118	71,891	76,161		57,345
55 to 59	1,949	613	902	1,024	1,065	853	357	75	6,838
Total Pay	30,418,848	30,325,677	54,329,445	67,848,589	74,246,893	64,804,957	29,589,505	6,415,761	357,979,675
Avg. Pay	15,607	49,471	60,232	66,258	69,715	75,973	82,884	85,543	52,352
60 to 64	2,495	496	513	605	572	463	99	92	5,335
Total Pay	32,455,630	23,100,794	32,725,511	41,206,400	42,376,896	36,941,095	8,709,800	8,983,816	226,499,942
Avg. Pay	13,008	46,574	63,792	68,110	74,085	79,786	87,978	97,650	42,455
65 & over	2,287	446	197	200	193	173	51	81	3,628
Total Pay	19,301,100	14,575,089	12,694,895	14,471,923	15,031,034	14,072,640	4,570,695	7,753,657	102,471,033
Avg. Pay	8,439	32,680	64,441	72,360	77,881	81,345	89,621	95,724	28,244
Total	28,209	14,623	11,860	8,978	6,311	3,801	801	248	74,831
Total Pay	659,044,067	725,649,666	700,231,755	587,681,122	438,056,597	280,988,601	65,261,365	23,153,234	3,480,066,407
Avg. Pay	23,363	49,624	59,041	65,458	69,412	73,925	81,475	93,360	46,506

Average Age: 43.6 Average Service: 11.2

Schedule F continued ...

Table 2 – Total Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage Increase in Average Pay
6/30/2013	74,831	$ 3,480,066,406	$ 46,506	1.51%
6/30/2012	75,951	3,479,567,004	45,813	1.33
6/30/2011	76,349	3,451,756,288	45,210	3.97
6/30/2010	76,387	3,321,614,223	43,484	1.51
6/30/2009	75,937	3,253,076,600	42,839	1.43
6/30/2008	75,539	3,190,332,239	42,234	6.67

Table 3 – Eligible Deferred Vested Members as of June 30, 2013
Medical Insurance Fund
Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	3	22	25
30-34	63	336	399
35-39	150	518	668
40-44	214	633	847
45-49	205	628	833
50-54	200	653	853
55-59	186	543	729
60 & Over	190	366	556
Total	**1,211**	**3,699**	**4,910**

Table 3 – Eligible Deferred Vested Members as of June 30, 2013
Life Insurance Fund
Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	3	21	24
30-34	50	313	363
35-39	115	449	564
40-44	166	539	705
45-49	154	510	664
50-54	157	498	655
55-59	138	413	551
60 & Over	87	226	313
Total	**870**	**2,969**	**3,839**

Schedule F continued ...

Table 4 – All Retirees & Spouses Receiving Health Care Benefits as of June 30, 2013 Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 40	11	30	41
40-44	23	64	87
45-49	64	205	269
50-54	376	1,025	1,401
55-59	1,486	3,600	5,086
60-64	3,376	7,173	10,549
65-69	3,423	6,115	9,538
70-74	2,532	4,101	6,633
75-79	1,797	2,550	4,347
80-84	1,097	1,867	2,964
85-89	640	1,191	1,831
90-94	216	568	784
95-99	56	190	246
100	2	14	16
101	2	14	16
102	2	11	13
103	1	5	6
104	0	0	0
105 & Over	0	3	3
Total	**15,104**	**28,726**	**43,830**

Table 5 – Retirees, Beneficiaries and Survivors added to and Removed From Rolls * Medical Insurance Fund

Fiscal Year Ending June 30	Number of Members Added to Rolls	Number of Spouses** Added to Rolls	Total Number Added to Rolls	Number of Members Removed from Rolls	Number of Spouses** Removed from Rolls	Total Number Removed from Rolls	Number of Members on Rolls at the End of the Year	Number of Spouses** on Rolls at the End of the Year	Total Number on Rolls at the End of the Year
2008	1,850	593	2,443	901	589	1,490	32,591	6,678	39,269
2009	1,777	640	2,417	887	510	1,397	33,481	6,808	40,289
2010	1,710	555	2,265	876	529	1,405	34,315	6,834	41,149
2011	1,770	629	2,399	1,052	541	1,593	35,033	6,922	41,955
2012	1,996	702	2,698	1,029	616	1,645	36,000	7,008	43,008
2013	1,853	664	2,517	1,076	619	1,695	36,777	7,053	43,830

** Reflects members, spouses, and beneficiaries participating in a health care plan. ** Includes spouses, beneficiaries, and surviving spouses.*

Schedule F continued ...

Table 6 – Retirees, Beneficiaries and Survivors added to and Removed From Rolls *
Life Insurance Fund

Fiscal Year Ending June 30	Number Added to Rolls	Life Insurance Benefit ($1,000's)	Number Removed from Rolls	Life Insurance Benefit ($1,000's)	Number on Rolls at the End of the Year	Life Insurance Benefit ($1,000's)	Increase in Life Insurance Benefit	Average Life Insurance Benefit
2008	1,966	$ 9,830	804	$ 4,020	37,778	$ 188,890	3.17%	$ 5,000
2009	1,949	9,745	769	3,845	38,958	194,790	3.12	5,000
2010	1,799	8,995	806	4,030	39,951	199,755	2.55	5,000
2011	2,025	10,125	858	4,290	41,118	205,590	2.92	5,000
2012	2,364	11,820	880	4,400	42,602	213,010	3.61	5,000
2013	2,195	10,975	952	4,760	43,845	219,225	2.92	5,000

** The life insurance benefit is payable upon the death of only members retired for service or disability. Numbers do not include life insurance benefits payable upon the death of an active contributing member.*

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Actuarial Section

Additional Report on GASB Statement Number 67

Cavanaugh Macdonald
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December 13, 2013

Mr. Mark Whelan
Chief Financial Officer
Teachers Retirement System of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Impact of New GASB Standards – Based on June 30, 2013 Valuation

Dear Mark:

As requested, we have prepared the accounting information that will be required for KTRS under the newly released Statement No. 67, Financial Reporting for Pension Plans, based on our understanding of the Statement. For KTRS, which is a cost sharing multiple employer plan, all information is reported for the Plan in total. The effective date for Statement 67 is for fiscal years beginning after June 30, 2013, so the first financial statements that would actually reflect the new standards for KTRS would be those prepared for fiscal year ending June 30, 2014.

GASB 67 requires new disclosure information for the Notes to the Plan's Financial Statements and for the Required Supplementary Information. The new statement requires calculation of the Total Pension Liability (TPL) and the Net Pension Liability (NPL). The TPL is the actuarial accrued liability based on certain parameters, and the NPL is the TPL less the market value of assets (referred to in the Statements as the Plan Fiduciary Net Position).

In determining the TPL, the actuary must project assets and expected benefit payments for current active and inactive members to determine if the plan's assets will be sufficient to pay all benefits. In determining the future employer contributions to be used in the projection of the assets, the actuary must use professional judgment if: (a) the contributions are established by statute or contract or (b) a formal, written policy exists. It is our recommendation that the Board of Trustees adopt a formal written funding policy. However, in the absence of such a policy, it is our opinion that the conditions under (a) are met, therefore the actuary may use profession judgment to determine the expected future employer contributions.

If assets are determined to be sufficient to pay expected benefits, the discount rate used to determine the TPL is the expected long-term rate of return on pension plan investments (currently 7.68% for 25 years and 7.50% thereafter, based on valuation interest smoothing methodology). If the assets are not expected to be sufficient, the discount rate is determined as a single rate that reflects the long-term expected rate of return for the period of time that assets are sufficient, and the index rate for 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher (estimated to be 4.32% as of June 30, 2013) for the period thereafter.

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We have prepared the disclosures based on two different scenarios. In the first scenario, since the annual required employer contributions determined by actuarial valuations have not been made, we have assumed that the statutory employer rates currently in effect will remain in effect for all years in the future. On this basis, assets would be expected to be depleted in 2037 and we estimated that the single equivalent discount rate to be used to determine the TPL is 5.32%. This reflects the smoothed interest rate as the expected return until the assets are depleted and a 4.32% expected rate of return thereafter.

In the second scenario, we have assumed the employer's annual required contributions will be made through either increases in the contributions or pension obligation bonds. On this basis, assets would be sufficient to pay expected benefit payments and the discount rate used to determine the TPL is the expected long-term rate of return on pension plan investments (currently 7.68% for 25 years and 7.50% thereafter, based on valuation interest smoothing methodology).

The results are based on the June 30, 2013 valuations as though the GASB standards were in effect on those dates.

The following Exhibits are attached to this letter:

I. Notes to the Financial Statements

II. Schedules of Required Supplementary Information. The liability numbers shown in the schedules have been prepared based on the two scenarios:

   a. Discount rate determined using a 5.09% interest rate at the beginning of the year and 5.32% at the end of year; and

   b. Long-term rate of return on pension plan investments.

The disclosure information required under GASB Statement No. 68, Accounting and Financial Reporting for Pensions will apply to employers and non-employer contributing entities with an effective date for fiscal years beginning after June 30, 2014. A proportionate share of the NPL, as well as an annual pension expense will need to be disclosed on the financial statements of each employer or contributing entity of cost sharing plans such as KTRS. In addition, there are multiple Note disclosures and Required Supplementary Information requirements for the employers under GASB 68. We have not enclosed any exhibits related to this statement. We plan to prepare disclosures for sample employers, including the State of Kentucky, since they are the largest contributing entity, which will be sent under separate cover.

If you have any questions, please give us a call.

Sincerely,

Edward J. Koebel EA, FCA, MAAA
Principal and Consulting Actuary

Cathy Turcot
Principal and Managing Director

EXHIBIT I

Notes to the Financial Statements
For the Year Ended June 30, 2013
(Dollar amounts in thousands)

Net Pension Liability of Participating Employers and Non-Employer Contributing Entities

The components of the net pension liability of the employers and non-employer contributing entities at June 30, 2013 were determined based on two different scenarios.

The components, **assuming that employer contributions continue at current levels**, were as follows:

Total pension liability	$ 38,014,440
Plan fiduciary net position	(16,108,808)
Net pension liability	$ 21,905,632

Plan fiduciary net position as a percentage of the total pension liability: 42.38%

Actuarial Assumptions: The total pension liability on this basis was determined by an actuarial valuation as of June 30, 2013, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	4.00%
Salary increases	4.00-8.20%, including inflation
Long-term expected Investment rate of return	7.68%f or 25 years and 7.50% thereafter, net of pension plan investment expense, including inflation
Municipal Bond Rate	4.32%
Discount Rate	5.32%

The components, **assuming that all annual required employer contributions will be made**, were as follows:

Total pension liability	$ 28,817,232
Plan fiduciary net position	(16,108,808)
Net pension liability	$ 12,708,424

Plan fiduciary net position as a percentage of the total pension liability: 55.90%

Exhibit I continued ...

Actuarial Assumptions: The total pension liability on this basis was determined by an actuarial valuation as of June 30, 2013, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	4.00%
Salary increases	4.00-8.20%, including inflation
Long-term expected Investment rate of return thereafter, net of pension plan investment expense, including inflation	7.68% for 25 years and 7.50%

Other Assumptions: Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, set back one year for females, with adjustments for mortality improvements based on Scale AA projected to 2020.

The actuarial assumptions used in the June 30, 2013 valuation were based on the results of an actuarial experience study for the period July 1, 2005 - June 30, 2010.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2013 (see the discussion of the pension plan's investment policy) are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return	Long-Term Expected Nominal Rate of Return (Includes 4% Inflation)
Fixed Income	1.6 %	5.6 %
US Equity	6.4	10.4
Non US Equity	6.5	10.5
High Yield Bonds	3.1	7.1
Alternatives	6.8	10.8
Real Estate	5.8	9.8
Cash	1.5	5.5

Exhibit I continued ...

Municipal Bond Rate: The municipal bond rate was based on the S&P Municipal Bond 20 Year High Grade Rate Index published for the week of June 30, 2013.

Discount Rate: The discount rate used to measure the total pension liability on the first basis was 5.32%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current statutory contribution rates and that contributions from employers and non-employer contributing entities will be made at the current statutory contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make projected future benefit payments of current plan members through June 30, 2037. The long-term expected rate of return on pension plan investments was applied to periods of projected benefit payments through this date and the municipal bond rate was used for the period thereafter to determine the total pension liability. The discount rate used to measure the total pension liability on the second basis was 7.68% for 25 years and 7.5% thereafter. This is equivalent to an average assumed rate of return of approximately 7.66%.

Sensitivity of the net pension liability to changes in the discount rate: The following presents the net pension liability of the employers calculated using the discount rate of 5.32%, as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (4.32%) or 1 percentage point higher (6.32%) than the current rate:

	1% Decrease (4.32%)	Current Discount Rate (5.32%)	1% Increase (6.32%)
Employers' net pension liability	$ 27,227,191	$ 21,905,632	$ 17,513,811

The following presents the net pension liability of the employers calculated using the discount rate of 7.66 percent, as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.66%) or 1 percentage point higher (8.66%) than the current rate:

	1% Decrease (6.66%)	Current Discount Rate (7.66%)	1% Increase (8.66%)
Employers' net pension liability	$ 16,197,051	$ 12,708,424	$ 9,872,575

EXHIBIT II

Schedules of Required Supplementary Information
Schedule of Changes in the Employers' Net Pension Liability

Based on 5.32% Discount Rate
Last 10 Fiscal Years
(Dollar amounts in thousands)

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Total Pension Liability										
Service Cost	$ 1,020,475									
Interest	1,893,339									
Benefit Changes	0									
Difference Between Expected and Actual Experience	(166,584)									
Changes of Assumptions	(1,133,629)									
Benefit Payments	(1,570,723)									
Refunds of Contributions	(22,059)									
Net Change in Total Pension Liability	20,819									
Total Pension Liability-Beginning	37,993,621									
Total Pension Liability-Ending (a)	38,014,440									
Plan Fiduciary Net Position										
Contributions - Employer	568,233									
Contributions - Member	304,739									
Net Investment Income	2,039,874									
Benefit Payments	(1,570,723)									
Administrative Expense	(8,377)									
Refunds of Contributions	(22,059)									
Other	0									
Net Change in Plan Fiduciary Net Position	1,311,687									
Plan Fiduciary Net Position - Beginning	14,797,121									
Plan Fiduciary Net Position - Ending (b)	16,108,808									
Employers' Net Pension Liability - Ending (a) - (b)	$ 21,905,632									

Exhibit II continued ...

Schedules of Required Supplementary Information
Schedule of Changes in the Employers' Net Pension Liability

Based on Valuation Interest Smoothing
Last 10 Fiscal Years
(Dollar amounts in thousands)

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Total Pension Liability										
Service Cost	$ 539,779									
Interest	2,086,344									
Benefit Changes	0									
Difference Between Expected and Actual Experience	(110,704)									
Changes of Assumptions	920,741									
Benefit Payments	(1,570,723)									
Refunds of Contributions	(22,059)									
Net Change in Total Pension Liability	1,843,378									
Total Pension Liability-Beginning	26,973,854									
Total Pension Liability-Ending (a)	28,817,232									
Plan Fiduciary Net Position										
Contributions - Employer	568,233									
Contributions - Member	304,739									
Net Investment Income	2,039,874									
Benefit Payments	(1,570,723)									
Administrative Expense	(8,377)									
Refunds of Contributions	(22,059)									
Other	0									
Net Change in Plan Fiduciary Net Position	1,311,687									
Plan Fiduciary Net Position - Beginning	14,797,121									
Plan Fiduciary Net Position - Ending (b)	16,108,808									
Employers' Net Pension Liability - Ending (a) - (b)	$ 12,708,424									

Exhibit II continued ...

Schedules of Required Supplementary Information
Schedule of Employers' Net Pension Liability

Based on 5.32% Discount Rate
Last 10 Fiscal Years
(Dollar amounts in thousands)

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Total Pension Liability	$ 38,014,440									
Plan Fiduciary Net Position	16,108,808									
Employers' Net Pension Liability (asset)	21,905,632									
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	42.38%									
Covered-Employee Payroll	3,480,066									
Employers' Net Pension Liability (asset) as a Percentage of Covered-Employee Payroll	629.46%									

Schedules of Required Supplementary Information
Schedule of Employers' Net Pension Liability

Based on Valuation Insterest Smoothing
Last 10 Fiscal Years
(Dollar amounts in thousands)

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Total Pension Liability	$ 28,817,232									
Plan Fiduciary Net Position	16,108,808									
Employers' Net Pension Liability (asset)	12,708,424									
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	55.90%									
Covered-Employee Payroll	3,480,066									
Employers' Net Pension Liability (asset) as a Percentage of Covered-Employee Payroll	365.18%									

Exhibit II continued ...

Schedules of Required Supplementary Information

Schedule of Employer Contributions
Last 10 Fiscal Years
(Dollar amounts in thousands)

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Covered-Employee Payroll	3,480,066	3,479,567	3,451,756	3,321,614	3,253,077	3,190,332	2,975,289	2,859,477	2,703,430	2,641,533
Actual Employer Contributions	568,233	557,340	1,037,936	479,805	442,550	466,248	434,890	406,107	383,777	364,351
Actuarially Determined Employer Contribution	802,985	757,822	678,741	633,938	600,283	563,789	494,565	406,107	383,777	364,351
Annual Contribution Excess (Deficiency)	(234,752)	(200,482)	359,195	(154,133)	(157,733)	(97,541)	(59,675)	0	0	0
Actual Employer Contributions as a Percentage of Covered-Employee Payroll	16.33%	16.02%	30.07%	14.44%	13.60%	14.61%	14.62%	14.20%	14.20%	13.79%

Notes to Required Supplementary Information for theYear Ended June 30, 2013

Methods and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employers' contributions are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine the most recent actuarially determined contribution reported in that schedule:

Actuarial Cost Method	Projected Unit Credit
Amortization method	Level percentage of payroll, open
Remaining amortization period	30 years
Asset Valuation Method	5-year smoothed market
Inflation	4.00%
Salary increases	4.00-8.20% including inflation
Investment rate of return	7.50% net of pension plan investment expense, including inflation

Statistical Section

for Fiscal Year ending June 30, 2013

This section of the Kentucky Teachers' Retirement System Comprehensive Annual Financial Report (KTRS CAFR) presents detailed information as a context for understanding the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

CONTENTS

Financial Trends ..... page 151

These schedules contain trend information to help the reader understand how KTRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 153

These schedules offer demographic and economic indicators to help the reader understand the System's environment within which KTRS's financial activities take place.

Operating Information ..... page 159

These schedules contain benefits, service, and employer contribution data to help the reader understand how KTRS's financial report relates to KTRS's services and activities.

Defined Benefit Plan
Past Ten Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Assets
2013	$ 568,233,446	$ 304,738,728	$ 2,039,874,263	$ 2,912,846,437
2012	557,339,552	309,729,924	309,696,252	1,176,765,728
2011	1,037,935,993	302,262,819	2,760,972,224	4,101,171,036
2010	479,805,088	297,613,965	1,509,785,381	2,287,204,434
2009	442,549,935	293,678,564	(2,020,682,522)	(1,284,454,023)
2008	466,247,782	291,423,948	(909,083,525)	(151,411,795
2007	434,890,469	269,687,864	2,063,878,767	2,768,457,100
2006	410,920,969	258,464,856	717,308,002	1,386,693,827
2005	388,346,438	247,024,518	946,070,556	1,581,441,512
2004	382,280,099	238,922,086	1,158,182,688	1,779,384,873

Deductions by Type
(Including Benefits by Type)

Year	Service Retirants	Disability Retirants	Survivors	Life Insurance*	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Assets
2013	$ 1,483,412,203	$ 75,229,293	$ 12,081,428	$	$ 1,570,722,924	$ 22,059,094	$ 8,377,003	$ 1,601,159,021
2012	1,401,380,816	65,297,491	16,260,858		1,482,939,165	19,549,073	7,762,880	1,510,251,118
2011	1,326,033,698	60,950,214	15,551,801		1,402,535,713	17,325,387	7,322,739	1,427,183,839
2010	1,249,272,057	57,782,651	14,754,062		1,321,808,770	15,310,680	8,830,054	1,345,949,504
2009	1,184,075,934	54,562,038	14,342,435		1,252,980,407	15,208,419	8,165,757	1,276,354,583
2008	1,105,078,345	51,842,271	14,048,485		1,170,969,101	15,965,083	7,551,936	1,194,486,120
2007	1,040,003,417	48,863,876	13,671,586		1,102,538,879	14,822,827	7,351,846	1,124,713,552
2006	972,018,057	46,750,585	12,943,639	3,894,000	1,035,606,281	12,834,222	6,839,859	1,055,280,362
2005	902,863,420	44,070,071	12,585,248	3,852,800	963,371,539	10,975,941	6,652,673	981,000,153
2004	827,731,523	41,491,490	12,047,275	4,015,801	885,286,089	10,471,607	6,578,420	902,336,116

* *Life Insurance Plan valued separately-- see page 153.*

Changes in Net Assets

Year	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2013	$ 2,912,846,437	$ 1,601,159,021	$ 1,311,687,416
2012	1,176,765,728	1,510,251,118	(333,485,390)
2011	4,101,171,036	1,427,183,839	2,673,987,197
2010	2,287,204,434	1,345,949,504	941,254,930
2009	(1,284,454,023)	1,276,354,583	(2,560,808,606)
2008	(151,411,795)	1,194,486,120	(1,345,897,915)
2007	2,768,457,100	1,124,713,552	1,643,743,548
2006	1,386,693,827	1,055,280,362	331,413,465
2005	1,581,441,512	981,000,153	600,441,359
2004	1,779,384,873	902,336,116	877,048,757

Medical Insurance Plan
Past Ten Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions	Recovery Income	Net Investment Income	Total Additions to Plan Net Assets
2013	$ 166,576,444	$ 119,795,780	$ 34,976	$ 30,718,836	$ 317,126,036
2012	173,966,623	100,346,070	3,781,222	(3,989,202)	274,104,713
2011	188,241,202	84,147,337	493,312	8,334,296	281,216,147
2010	158,761,433	63,805,573	14,618,348	12,312,999	249,498,353
2009	164,408,037	58,688,767	13,683,830	11,296,280	248,076,914
2008	148,929,322	55,402,830	11,936,887	8,128,179	224,397,218
2007	113,233,784	53,099,678	10,337,338	6,722,080	183,392,880
2006	89,319,498	51,697,167	6,117,979	6,804,286	153,938,930
2005	79,022,562	51,576,031		6,507,537	137,106,130
2004	53,346,747	53,903,551		7,127,109	114,377,407

Deductions by Type
(Including Benefits by Type)

	Insurance Benefit Expense					
Year	Under Age 65	Age 65 & Over	Administrative Expense	Total Insurance Benefits Expense	Refunds*	Total Deductions to Plan Net Assets
2013	$ 142,170,438	$ 98,761,180	$ 1,275,206	$ 242,206,824	$	$ 242,206,824
2012	156,228,181	72,746,945	1,201,629	230,176,755		230,176,755
2011	145,544,405	80,890,958	1,186,029	227,621,392		227,621,392
2010	136,702,152	100,675,376		237,377,528		237,377,528
2009	123,819,475	81,037,647		204,857,122		204,857,122
2008	107,437,450	71,838,765		179,276,215	10,014	179,286,229
2007	104,828,254	69,400,843		174,229,097	5,834	174,234,931
2006	102,970,290	66,660,106		169,630,396	5,143	169,635,539
2005	82,186,847	64,233,482		146,420,329	9,072	146,429,401
2004	69,139,458	54,128,210		123,267,668	12,150	123,279,818

**Refunds are netted against member contributions beginning fiscal year 2009.*

Changes in Net Assets

Year	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2013	$ 317,126,036	$ 242,206,824	$ 74,919,212
2012	274,104,713	230,176,755	43,927,958
2011	281,216,147	227,621,392	53,594,755
2010	249,498,353	237,377,528	12,120,825
2009	248,076,914	204,857,122	43,219,792
2008	224,397,218	179,286,229	45,110,989
2007	183,392,880	174,234,931	9,157,949
2006	153,938,930	169,635,539	(15,696,609)
2005	137,106,130	146,429,401	(9,323,271)
2004	114,377,407	123,279,818	(8,902,411)

Life Insurance Plan
Past Seven Fiscal Years

Additions by Source

Year	Employer Contributions	Net Investment Income	Total Additions to Plan Net Assets
2013	$ 1,680,495	$ 674,760	$ 2,355,255
2012	1,684,711	6,450,022	8,134,733
2011	1,668,822	3,094,776	4,763,598
2010	1,966,826	5,383,644	7,350,470
2009	5,455,473	5,282,958	10,738,431
2008	5,411,249	6,321,491	11,732,740
2007	5,022,137	(3,413,537)	1,608,600

Deductions by Type (Including Benefits by Type) / Changes in Net Assets

Year	Life Insurance	Total Deductions to Plan Net Assets	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2013	$ 4,614,718	$ 4,639,143	$ 2,355,255	$ 4,639,143	$ (2,283,888)
2012	4,397,281	4,420,167	8,134,733	4,420,167	3,714,566
2011	4,120,000	4,141,511	4,763,598	4,141,511	622,087
2010	4,148,511	4,148,511	7,350,470	4,148,511	3,201,959
2009	3,694,000	3,694,000	10,738,431	3,694,000	7,044,431
2008	4,003,000	4,003,000	11,732,740	4,003,000	7,729,740
2007	4,245,000	4,245,000	1,608,600	4,245,000	(2,636,400)

Distribution of Active Contributing Members as of June 30, 2013

By Age

Age	Male	Female
20-24	985	3,139
25-29	3,562	9,958
30-34	3,732	10,489
35-39	3,352	9,796
40-44	3,320	10,710
45-49	2,785	8,887
50-54	2,410	7,635
55-59	2,163	6,372
60-64	1,869	4,869
65-69	1,028	2,239
Over 70	484	951
Total	25,690	75,045

By Service

Years of Service	Male	Female
Less than 1	9,374	23,982
1-4	5,121	16,003
5-9	3,952	12,682
10-14	2,894	9,353
15-19	2,107	6,302
20-24	1,447	4,337
25-29	620	1,962
30-34	115	332
35 or more	60	92
TOTAL	25,690	75,045

Principal Participating Employers
Current Year and Nine Years Ago

	2013			2004		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	10,215	1	13.44%	9,457	1	13.00%
Fayette County Public Schools	4,691	2	6.17	3,944	2	5.42
Boone County Schools	1,852	3	2.44	1,385	3	1.90
Hardin County Schools	1,357	4	1.79	1,230	4	1.69
Kenton County Schools	1,297	5	1.71	1,094	5	1.50
Warren County Schools	1,260	6	1.66	1,037	7	1.43
Bullitt County Schools	1,238	7	1.63	988	11	1.36
Oldham County Schools	1,203	8	1.58	965	10	1.33
Madison County Schools	1,159	9	1.52	1,022	9	1.41
Daviess County Schools	1,087	10	1.43	1,019	8	1.40
All Other*	50,651		66.64	50,591		69.56%
TOTAL (208 Employers)	**76,010**		**100.00%**	**72,732**		**100.00%**

** In 2013, "all other" consisted of:*

Type	*Number*	*Employees*
Local School Districts	*164*	*44,943*
Higher Education	*6*	*3,663*
State Agencies	*16*	*1,642*
Regional Coops	*7*	*301*
Other	*5*	*102*
TOTAL	***198***	***50,651***

KTRS Schedule of Participating Employers
School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

KTRS Schedule of Participating Employers *(continued)*
School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Monticello
36. Murray
37. Newport
38. Owensboro
39. Paducah
40. Paintsville
41. Paris
42. Pikeville
43. Pineville
44. Raceland
45. Russell
46. Russellville
47. Science Hill
48. Silver Grove
48. Somerset
50. Southgate
51. Walton-Verona
52. West Point
53. Williamsburg
54. Williamstown

Universities & Community/ Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/ Other Organizations

State of Kentucky

1. Education and Humanities Cabinet
2. Legislative Research Commission
3. Workforce Investment Cabinet
4. Finance and Administration Cabinet

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative

117	ALABAMA	8	NEW JERSEY
1	ALASKA	18	NEW MEXICO
83	ARIZONA	40	NEW YORK
34	ARKANSAS	233	NORTH CAROLINA
101	CALIFORNIA	2	NORTH DAKOTA
55	COLORADO	568	OHIO
11	CONNECTICUT	28	OKLAHOMA
8	DELAWARE	27	OREGON
1011	FLORIDA	50	PENNSYLVANIA
249	GEORGIA	0	RHODE ISLAND
3	HAWAII	172	SOUTH CAROLINA
8	IDAHO	10	SOUTH DAKOTA
91	ILLINOIS	810	TENNESSEE
645	INDIANA	180	TEXAS
16	IOWA	25	UTAH
35	KANSAS	1	VERMONT
37	LOUISIANNA	145	VIRGINIA
16	MAINE	40	WASHINGTON
30	MARYLAND	99	WEST VIRGINIA
22	MASSACHUSETTS	27	WISCONSIN
43	MICHIGAN	1	WYOMING
19	MINNESOTA		
52	MISSISSIPPI		
77	MISSOURI		
6	MONTANA		
6	NEBRASKA		
21	NEVADA		
5	NEW HAMPSHIRE		

Distribution of Retirement and Medical Payments Worldwide

As of June 30, 2013

Additional Distribution Outside USA

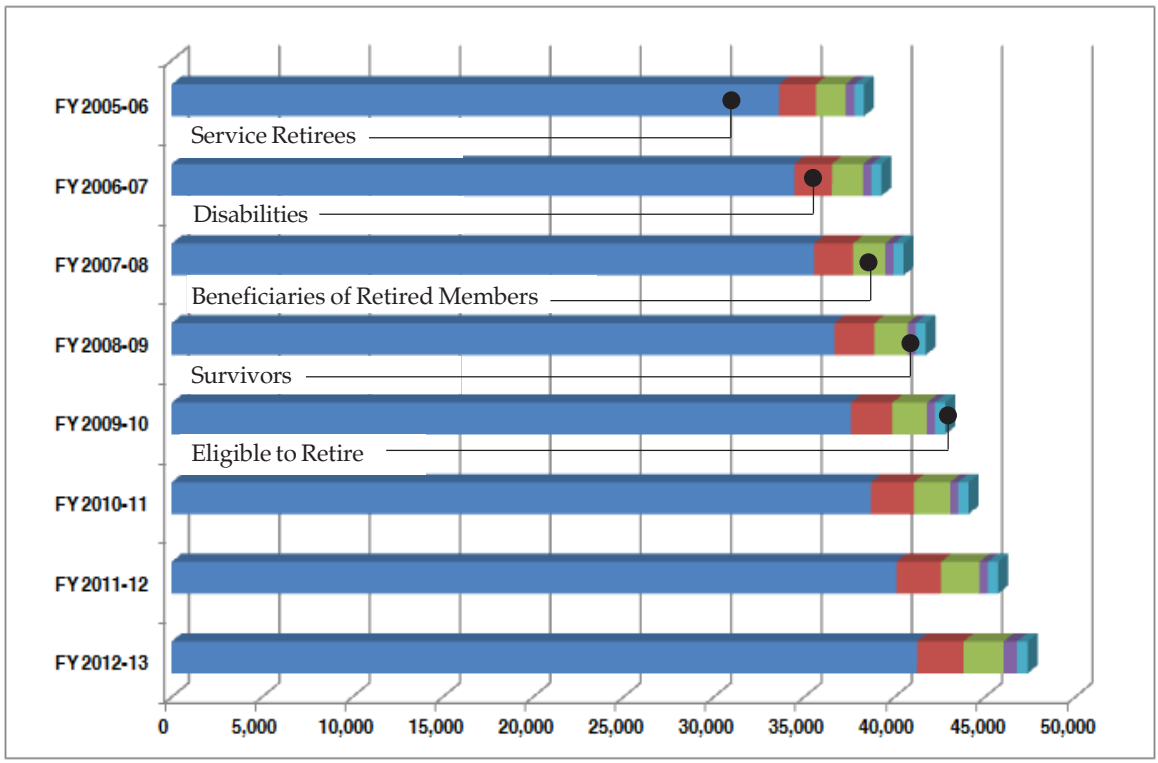
1	Australia	2	Military APO
1	Barbados	1	Philippines
5	Canada	1	Switzerland
7	District of Columbia		

TOTAL: Number of Out of State Payments 5,304
TOTAL: Out of State Payments $138,906,802
TOTAL: Number of Payments 48,714
GRAND TOTAL: Amount of Payments $1,733,296,377

Distribution of Retirement and Medical Payments Statewide
as of June 30, 2013

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Adair	$ 6,242,878	192	Laurel	21,139,251	612
Allen	6,094,938	168	Lawrence	5,049,212	153
Anderson	7,189,732	210	Lee	2,568,353	79
Ballard	4,336,077	126	Leslie	5,281,291	151
Barren	14,818,112	406	Letcher	11,383,077	335
Bath	4,135,329	127	Lewis	6,435,760	179
Bell	13,230,779	382	Lincoln	10,372,481	283
Boone	32,635,128	836	Livingston	3,253,079	93
Bourbon	6,673,696	193	Logan	9,462,678	268
Boyd	19,561,013	520	Lyon	3,789,274	102
Boyle	16,276,131	440	Madison	47,803,595	1292
Bracken	3,652,718	99	Magoffin	6,070,001	175
Breathitt	8,069,676	241	Marion	6,013,514	173
Breckinridge	6,562,334	177	Marshall	12,743,463	342
Bullitt	16,285,050	408	Martin	4,906,084	141
Butler	3,443,798	98	Mason	6,913,623	197
Caldwell	6,467,090	183	McCracken	25,398,824	693
Calloway	23,500,809	645	McCreary	6,757,180	207
Campbell	26,233,875	672	McLean	4,029,455	107
Carlisle	1,456,056	47	Meade	6,698,398	171
Carroll	2,971,484	83	Menifee	2,045,626	67
Carter	12,713,540	373	Mercer	8,373,946	253
Casey	5,324,707	166	Metcalfe	3,804,587	108
Christian	18,812,669	521	Monroe	5,376,133	155
Clark	11,890,508	336	Montgomery	11,568,396	313
Clay	10,328,931	277	Morgan	6,324,960	177
Clinton	5,086,597	147	Muhlenberg	11,369,066	293
Crittenden	2,215,039	71	Nelson	14,372,885	379
Cumberland	3,371,090	93	Nicholas	2,002,730	57
Daviess	38,780,851	1047	Ohio	7,019,784	200
Edmonson	3,672,599	101	Oldham	17,080,503	430
Elliott	2,094,174	67	Owen	2,910,060	84
Estill	5,110,796	144	Owsley	3,915,257	116
Fayette	101,402,558	2814	Pendleton	4,873,216	139
Fleming	5,739,688	174	Perry	13,234,747	381
Floyd	19,019,889	561	Pike	29,014,805	831
Franklin	26,590,909	884	Powell	4,410,859	120
Fulton	2,581,466	72	Pulaski	23,829,018	691
Gallatin	932,366	25	Robertson	784,948	22
Garrard	6,704,084	182	Rockcastle	6,735,366	186
Grant	6,791,441	170	Rowan	16,569,435	467
Graves	14,439,281	395	Russell	7,973,833	222
Grayson	9,296,068	257	Scott	13,964,536	388
Green	4,153,310	111	Shelby	15,695,497	424
Greenup	13,634,173	380	Simpson	5,679,085	156
Hancock	2,694,191	73	Spencer	5,065,605	129
Hardin	30,468,102	820	Taylor	10,291,062	300
Harlan	13,978,998	407	Todd	3,198,516	97
Harrison	7,404,029	203	Trigg	5,955,104	175
Hart	5,062,238	134	Trimble	2,021,031	50
Henderson	15,092,861	401	Union	4,187,272	122
Henry	6,404,421	188	Warren	56,722,179	1579
Hickman	1,207,478	35	Washington	3,756,029	108
Hopkins	16,542,346	450	Wayne	7,912,998	222
Jackson	4,347,235	139	Webster	4,613,511	135
Jefferson	265,033,692	6353	Whitley	22,987,712	656
Jessamine	11,949,392	341	Wolfe	3,906,135	115
Johnson	12,370,328	338	Woodford	10,152,422	277
Kenton	32,585,335	870			
Knott	8,083,545	238	**Total in Kentucky**	**$ 1,594,389,575**	**43,410**
Knox	9,351,018	274			
Larue	5,523,482	148			

Growth in Annuitants as of June 30, 2013



Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Survivors	Eligible to Retire
2005-06	33,618	2,039	1,631	495	531
2006-07	34,462	2,086	1,722	466	549
2007-08	35,550	2,155	1,778	468	554
2008-09	36,684	2,209	1,837	448	559
2009-10	37,607	2,284	1,915	435	567
2010-11	38,705	2,379	2,003	430	584
2011-12	40,107	2,478	2,126	444	596
2012-13	41,255	2,582	2,207	735	601

Schedule of Annuitants by Type of Benefit as of June 30, 2013

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Retirement*				
		1	2	3	4	5
1 - 500	3,406	2,506	21	383	193	303
501 - 1,000	2,679	2,089	175	7	408	0
1,001 - 1,500	3,139	2,228	310	3	598	0
1,501 - 2,000	3,780	2,928	420	1	431	0
2,001 - 2,500	5,725	4,690	623	14	398	0
2,501 - 3,000	8,732	7,809	609	14	300	0
3,001 - 3,500	7,219	6,797	233	4	185	0
3,501 - 4,000	4,773	4,520	120	1	132	0
4,001 - 4,500	3,110	2,996	43	4	67	0
4,501 - 5,000	1,822	1,767	18	0	37	0
5,001 & OVER	2,995	2,925	10	1	59	0
Total**	47,380	41,255	2,582	432	2,808	303

***Type of Retirement**

1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Survivor Payment - Active Member*
4-*Beneficiary Payment - Retired Member*
5-*Disabled Adult Child*

*** Retirees in waiver program are not included.*

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,762	394	279	62	7	407	113	382
501 - 1,000	1,400	315	228	114	9	326	209	78
1,001 - 1,500	1,555	338	307	145	10	394	300	90
1,501 - 2,000	2,011	414	349	158	9	472	268	99
2,001 - 2,500	2,714	562	510	214	5	909	566	245
2,501 - 3,000	4,381	868	676	227	12	1,425	868	275
3,001 - 3,500	3,756	785	520	224	11	1,070	775	78
3,501 - 4,000	2,433	495	397	153	7	717	523	48
4,001 - 4,500	1,597	309	265	97	5	426	397	14
4,501 - 5,000	911	204	147	90	8	259	197	6
5,001 & OVER	1,544	256	326	147	15	350	353	4
Total	24,064	4,940	4,004	1,631	98	6,755	4,569	1,319

***Option selected:**

1 - Straight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/2003 TO 06/30/2004								
Average monthly benefit	$220	$474	$839	$1,444	$1,940	$2,758	$3,486	**$2,502**
Average final monthly salary	$5,243	$3,357	$3,349	$3,936	$4,078	$4,425	$5,062	**$4,435**
Number of retired members	43	84	98	96	155	818	405	**1,689**
07/01/2004 TO 06/30/2005								
Average monthly benefit	$187	$528	$906	$1,488	$1,978	$2,892	$3,860	**$2,883**
Average final monthly salary	$4,353	$3,511	$3,647	$4,055	$4,182	$4,602	$5,275	**$4,724**
Number of retired members	55	98	107	106	145	811	875	**2,197**
07/01/2005 TO 06/30/2006								
Average monthly benefit	$202	$473	$1,019	$1,493	$2,037	$2,998	$4,063	**$2,827**
Average final monthly salary	$4,106	$3,253	$4,052	$4,117	$4,317	$4,721	$5,490	**$4,773**
Number of retired members	44	105	106	132	145	689	604	**1,873**
07/01/2006 TO 06/30/2007								
Average monthly benefit	$178	$514	$930	$1,559	$2,136	$3,140	$4,263	**$2,900**
Average final monthly salary	$4,102	$3,346	$3,590	$4,228	$4,537	$4,970	$5,758	**$4,916**
Number of retired members	48	113	90	109	193	534	514	**1,577**
07/01/2007 TO 06/30/2008								
Average monthly benefit	$199	$524	$1,117	$1,658	$2,276	$3,279	$4,319	**$2,984**
Average final monthly salary	$3,816	$3,066	$4,215	$4,412	$4,612	$5,067	$5,786	**$5,017**
Number of retired members	50	130	112	150	169	557	615	**1,831**
07/01/2008 TO 06/30/2009								
Average monthly benefit	$200	$573	$1,005	$1,725	$2,436	$3,368	$4,496	**$2,941**
Average final monthly salary	$4,617	$3,942	$3,873	$4,686	$4,983	$5,278	$5,960	**$5,164**
Number of retired members	72	168	137	115	217	505	585	**1,824**
07/01/2009 TO 06/30/2010								
Average monthly benefit	$185	$525	$1,104	$1,700	$2,427	$3,468	$4,670	**$3,222**
Average final monthly salary	$3,654	$3,637	$4,124	$4,508	$4,974	$5,383	$6,102	**$5,316**
Number of retired members	28	133	98	103	242	442	601	**1,647**
07/01/2010TO 06/30/2011								
Average monthly benefit	$149	$519	$1,225	$1,781	$2,513	$3,621	$4,827	**$3,240**
Average final monthly salary	$3,570	$3,640	$4,423	$4,825	$5,184	$5,574	$6,235	**$5,392**
Number of retired members	45	157	144	112	242	544	617	**1,854**
07/01/2011 TO 06/30/2012								
Average monthly benefit	$175	$507	$1,170	$1,897	$2,613	$3,674	$4,726	**$3,148**
Average final monthly salary	$3,292	$3,759	$4,307	$4,898	$5,219	$5,605	$6,109	**$5,331**
Number of retired members	45	197	146	162	303	778	569	**2,200**
07/01/2012 TO 06/30/2013								
Average monthly benefit	$161	$475	$1,186	$1,963	$2,781	$3,811	$5,162	**$3,149**
Average final monthly salary	$3,362	$3,660	$4,498	$4,956	$5,518	$5,799	$6,632	**$5,476**
Number of retired members	44	234	156	154	294	685	447	**2,014**
Ten Years Ended June 30,2013								
Average monthly benefit	**$186**	**$512**	**$1,067**	**$1,691**	**$2,429**	**$3,276**	**$4,373**	**$2,985**
Average final monthly salary	**$4,060**	**$3,565**	**$4,058**	**$4,499**	**$4,961**	**$5,106**	**$5,820**	**$5,061**
Number of retired members	**474**	**1,419**	**1,194**	**1,239**	**2,185**	**6,363**	**5,832**	**18,706**

Medical Insurance Plan
Average Insurance Premium Supplements for the Last Ten Years

	Years of Service Credit				
	00-9.99	10-14.99	15-19.99	20>=	TOTAL
Retirement Effective Dates					
07/01/2003 to 06/30/2004					
Average monthly supplement	$ 100.50	$ 148.85	$ 219.41	$ 289.98	
Number of retired members	30	59	82	1,365	1,536
07/01/2004 to 06/30/2005					
Average monthly supplement	$ 138.29	$ 214.32	$ 305.39	$ 394.92	
Number of retired members	36	70	93	1,768	1,967
07/01/2005 to 06/30/2006					
Average monthly supplement	$ 161.03	$ 241.76	$ 362.31	$ 487.23	
Number of retired members	28	49	106	1,440	1,623
07/01/2006 to 06/30/2007					
Average monthly supplement	$ 146.24	$ 260.95	$ 363.45	$ 489.73	
Number of retired members	29	53	80	949	1,111
07/01/2007 to 06/30/2008					
Average monthly supplement	$ 162.54	$ 260.71	$ 378.28	$ 512.29	
Number of retired members	36	61	104	952	1,153
07/01/2008 to 06/30/2009					
Average monthly supplement	$ 167.78	$ 298.09	$ 414.38	$ 562.59	
Number of retired members	26	64	103	1,329	1,522
07/01/2009 to 06/30/2010					
Average monthly supplement	$ 151.05	$ 339.31	$ 435.19	$ 621.12	
Number of retired members	32	73	103	1,276	1,484
07/01/2010 to 06/30/2011					
Average monthly supplement	$ 167.03	$ 311.93	$ 438.84	$ 597.41	
Number of retired members	30	32	109	1,360	1,531
07/01/2011 to 06/30/2012					
Average monthly supplement	$ 164.12	$ 302.19	$ 433.25	$ 579.29	
Number of retired members	29	81	121	1,568	1,799
07/01/2012 to 06/30/2013					
Average monthly supplement	$ 80.23	$ 227.32	$ 366.98	$ 499.25	
Number of retired members	29	90	104	1,373	1,596

Summary of Fiscal Year 2012-2013

Retiree Sick Leave Payments

ACTUARIAL RATE

Grand Total Members Retiring		2238
Total members receiving sick leave payments		1539
Total amount of sick leave payments @ 10.855% contribution rate	$	21,244,401
Average payment per retiree	$	13,804
Total increase in final 3/5 average salary base	$	5,886,567
Average increase in final average salary	$	3,825
Total service credit of 1,539 retirees		38,959
Average service credit of 1,539 retirees		25.31
Additional Average Monthly Annuity payment per Retirement Formula		
3,825 x 25.31 x 2.50% =	$	2,420
2,420 / 12 months	$	202
Anticipated Lifetime Payout of Additional Annuity		
202 x 142.1587 x 1,539 new factor	$	44,133,035

Funding of Additional Payments

Member contributions 9.105% x $21,244,401 =	$ 1,934,303
Employer contributions 12.305% x $21,244,401 =	2,614,123
Total Contributions	$ 4,548,426
DEFICIT:	
Anticipated additional payout	$ 44,133,035
Less total contributions	4,548,426
Subtotal unfunded debt	39,584,609
Less current year appropriation	4,190,100
TOTAL DEFICIT (overpayment)*	$ 35,394,509

* *NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. Sick leave deficits are amortized over 20 year periods.*

Teachers' Retirement System of the State of Kentucky

The 74th Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Year Ended June 30, 2014

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN, CPA
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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Kentucky Teachers' Retirement System

2014

Introductory Section

Chairperson's Letter

Teachers' Retirement System of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

BOARD OF TRUSTEES

DR. TOM SHELTON
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EX OFFICIO
DR. TERRY HOLLIDAY
COMMISSIONER
DEPARTMENT
OF EDUCATION

EX OFFICIO
TODD HOLLENBACH
STATE TREASURER

December 15, 2014

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2014, the 74th year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

KTRS closed the 2013-2014 fiscal year with $18.7 billion net assets. The active membership totaled 73,407 and the retired membership was 48,576 with annual annuity and medical insurance benefits of $1.9 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. Every effort will be made to ensure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Tom Shelton

Dr. Tom Shelton
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 15, 2014

Honorable Steven L. Beshear, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky

Dear Governor Beshear:

It is my pleasure to submit the 74th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a Component Unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2014. State law provides the legal requirement for the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system are also required. Kentucky Teachers' Retirement System (KTRS) has produced an annual report that will provide you, the General Assembly, and the general public, with information necessary to gain a better understanding of KTRS.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of KTRS for the year ended June 30, 2014. Discussion and analysis of net position and related additions and deductions is presented in Management's Discussion and Analysis beginning on page 15.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are accurately executed and financial statements are fairly presented. There are limits inherent in all systems of internal control based on the recognition that the costs of such systems should be related to the benefits to be derived. Management believes the System's controls provide this appropriate balance. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Secretary and the Governance and Audit Committee of the Board of Trustees.

Profile of KTRS

KTRS began operations on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state. KTRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 24. Also, the summary of the plan provisions starting on page 97 is useful in understanding benefit and contribution provisions. The population of KTRS membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the retirement system. The budget is approved by the Board of Trustees and submitted to the Kentucky General Assembly for legal adoption. The KTRS investment earnings fund the administrative budget appropriations.

Major Initiatives

The System continually seeks opportunities to better serve its membership. During the past year, KTRS has continued work on several major initiatives concerning funding and cost containment for retiree health care, the investment program, and information technology.

Implementation of the "Shared Responsibility" Solution for Funding Retiree Health Care and Careful Management of Medical Insurance Costs

June 30, 2014 marked the end of the fourth year of the six year phase in of the "shared responsibility" solution for pre-funding retired teacher health care. The Board of Trustees and Staff are very pleased to report that $3.1 billion in

actuarial liability has been eliminated from the retired teacher health care plan through implementation of this solution. Another $1.9 billion savings in actuarial liability was accomplished through careful management of health care costs. Thus, since implementing "shared responsibility" and other cost control measures, more than $5 billion in actuarial accrued liability has been eliminated from the KTRS Medical Insurance Fund.

The Governor and Legislative leaders have commended Kentucky's education community for their strong leadership and hard work in developing and implementing the solution. Constituent groups representing retired teachers, active teachers, school boards, school superintendents, and the state, all worked on the consensus funding solution. The solution provides that all the groups share in the solution by investing a little more now to receive substantial returns later. After two years, and $3.1 billion in savings by converting to a pre-funded plan, the "shared responsibility" solution is truly a significant accomplishment on the road to retirement security for current and future retired teachers.

The Board of Trustees of KTRS regularly reviews the health care plan to contain costs and maintain a meaningful benefit for retired teachers. The move to Medicare Advantage, now in our ninth year, continues to be stable and financially feasible for our members and the KTRS medical plan.

Some recent cost saving initiatives include moving the KTRS sponsored Medicare drug plan to an insured Employer Group Waiver Prescription Drug Plan with a commercial wrap in the drug coverage gap to achieve the greatest amount of federal subsidies for 2014. Additionally, KTRS joined the KY Rx Coalition in 2012, which is spearheaded by the University of Kentucky. By joining the coalition, KTRS will achieve annual savings through leveraging greater prescription purchasing power and deeper drug discounts. As an added benefit, a dedicated staff of pharmacists with the KY Rx Coalition can help each member with their prescriptions and how to maximize their prescription dollars.

In the past year, KTRS undertook cost containment measures including self-funding the prescription drug portion of the MEHP and seeking competitive bids for the Medicare Advantage program resulting in premium reductions of more than $17 million for plan year 2015. Other cost containment measures involved the elimination of the future risk of adverse selection with Medicare eligible spouses of retired teachers and assisting those retirees and their spouses who were Medicare eligible, but under the normal Medicare age, to join the Medicare plan achieving future savings for our members, the KTRS retiree medical plan, and the Commonwealth of Kentucky. KTRS continues utilizing the industry best practice of a high performance formulary with the Medicare Eligible retiree drug plan. The high performance formulary greatly incentivizes participants to use lower cost brand and generic alternatives when clinically appropriate.

The Board contracted with Edumedics for disease management services for Medicare Eligible retirees with diabetes, hypertension, hyperlipidemia, and other co-morbidity diseases. The Board of Trustees has been studying chronic disease management for several years and selected Edumedics to implement the disease management program. Edumedics is a Kentucky based company spun out from the University of Louisville.

Edumedics will be educating retirees with these diseases about nutrition, drug regime, exercise, and other matters. These educational efforts will be ongoing with routine face-to-face checkups with participating retirees. Edumedics will monitor adherence to a nutrition and wellness plan developed by the participating retiree, the retiree's physician, and Edumedics. This effort will increase over the next two years and thereafter the Board will likely expand this program to other chronic diseases.

KTRS is efficient, effective, and always working to improve the retirement security of Kentucky's teachers. Eliminating more than $5 billion in liability helps the financial condition of the Commonwealth and eases burdens on taxpayers.

Investment Program

For the twelve month period ended June 30, 2014, KTRS's investment program produced a total return of 18.1%. This ranked in the top 23% of returns for pension funds with over $1 billion in assets. During the period including the last five years, KTRS's investment returns rank in the top

24%. Moreover, during the last thirty years, KTRS investment returns have averaged 9.5%, which is consistent with the long-term assumed rate of return of 7.5%.

Because of KTRS's focus on fundamental value and risk control, it was able to continue a multiyear program of broadening the portfolio's diversification. KTRS also continued to implement changes to the investment program based upon an asset liability modeling study and an analysis of the shared responsibility solution for funding retiree health care. These ongoing efforts are a continuation of a disciplined investment process and long term focus on retirement security. This focus has generated exceptionally stable returns through the System's history and we have every confidence that it will do so in the future. KTRS's investment program continues to be recognized as a leader in the public pension community for governance structure, trustee education, and cost effectiveness.

Information Technology

KTRS staff has continued working on a multi-year project planning, designing, and constructing a new information technology system known as the "Pathway System." The selected vendor who was authorized by the Board to build and install the new system has been working with staff on-site at KTRS since September 2011. The focus of work has been developing and constructing the first major component of the new system. On July 15, 2013, member enrollment, employer reporting, service credit purchases, and related accounting functions, was put into production. The implementation was highly successful. In January 2015, new modules for member benefits, insurance, and retiree payroll will go into production. To date, more than 80% of the overall project has been completed and work has been proceeding according to schedule and within budget.

The objective of the Pathway System is to streamline retirement processes and improve staff efficiency in providing services to retirees and active members. In developing the Pathway System, KTRS is redesigning and improving office processes and ultimately will be applying new web-based technologies to these processes. This will increase staff productivity, provide seamless member account management, and simplify future system modifications. As KTRS continues to implement changes under the Pathway System, we expect that the new technology will help the System better serve its membership.

Economic Condition

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 55 contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules among others.

The investment portfolio experienced a growth in value during the 2013-2014 fiscal year as the portfolio's market value increased from $16,597,563,301 to $18,527,307,235. The increase in value of the portfolio and of the overall market was primarily due to improvements in the financial markets and realized capital gains. This increase was supported with investment income that included interest income and dividends. Employer and employee contributions also provided significant income to the portfolio.

Investment income, including appreciation of asset values, net of investment expenses, for the 2013-2014 fiscal year was $2,875,609,844. The major contributing factor of the positive return from the System's investment portfolio resulted from the net appreciation in fair value of investments in the amount of $2,485,340,596. Another major contributor to income in the amount of $217,790,015 was the result of interest income. Other income, net of expenses, of $172,479,233 was generated from dividends, rent and securities lending.

According to the KRS 161.430 the KTRS Board of Trustees has the responsibility to invest the assets of the System. The Board of Trustees delegates investment authority to the Investment Committee. The Investment Committee works closely with experienced investment counselors and the System's professional staff in evaluating and selecting investment allocations.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing

benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the Plan and its Trust Funds. The investment program shall also provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. While the entire portfolio earned a total return of positive 18.1% in 2013-14, the portfolio's ten-year annualized rate of return is 7.2% and the twenty-year annualized rate of return is 8.2%.

KTRS annuities have a bolstering impact on the Commonwealth of Kentucky's economy, as approximately 92% of retired teachers reside within the state. Total benefits (retirement, medical...etc.) paid during the fiscal year were approximately $1.9 billion.

Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes by statute the levels of contribution that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

Since fiscal year 2008, the state has not paid the recommended annual employer contribution necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual employer contributions have grown significantly from $60.5 million (Fiscal Year 2009) to $502.4 million (Fiscal Year 2017). The following schedule details the growth of the additional annual employer contributions payable by the state:

Fiscal Year	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	502,372,000

(Source: KTRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2014).

The Board has always taken action as required by state law and recommended annual employer contributions payable by the state that would ensure that the state meets the contractual obligations to members.

The latest actuarial valuation was for the period ending June 30, 2014. This report reflects the System's actuarial value of assets totaling $16.2 billion and actuarial determined liabilities totaling $30.2 billion. The funded ratio of actuarial assets to liabilities is 53.6%, which is an increase from the previous year and is primarily due to market appreciation of investments. The actuary reports: "…In our opinion, the System is not being funded on an actuarially sound basis since the actuarially required contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated…."

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions (on page 43). After the 2014 employer contributions there remains a net pension obligation of $956,614,166 (as detailed on page 87). Annual required employer contributions for the Medical Insurance Fund are provided in the schedule of employer contributions (on page 44). The 2014 employer shortfall of contributions created a net OPEB obligation of $1,503,952,786 (as detailed on page 112).

KTRS Medical Insurance Plan

The shared responsibility solution for funding retiree health care, which went into effect on July 1, 2010, provides a method of pre-funding retiree health care over a 30 year period. The System believes that the shared responsibility solution for funding retiree health care will help insure the retirement security of the state's teachers. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2014 indicated that the fund has an unfunded liability of $3.1

billion. The funded ratio of actuarial assets to liabilities is 15.9%, which is trending upward from past years. The actuary reports: "…if the State contributions to the Medical Insurance Fund are increased to the planned levels, the Retiree Medical Plan will begin to operate in a more actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the Retiree Medical Plan will improve…."

Additionally, the System believes continued steps must be taken to realize true cost containment through legislation on both the state and national levels. KTRS will continue to take measures to contain costs and increase revenues to the Medical Insurance Plan or may adjust coverage to meet existing revenues.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the KTRS. Certifications from the Board's External Auditor and Independent Actuary are enclosed in this report. The System's consultants who are appointed by the Board are listed on pages 46, 47, and 74 of this report.

National Recognition

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2013. The Certificate of Achievement is a prestigious national award-recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. KTRS has received the Certificate of Achievement for the last twenty-six consecutive years (fiscal years ended 1988-2013). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council (PPCC) awarded a Certificate of Achievement to the Teachers' Retirement of the State of Kentucky for 2014 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure, and are widely acknowledged to be marks of excellence in the public pension industry.

In 2014, for the third consecutive year, KTRS was not awarded the PPCC Certificate of Achievement for funding. Failure to qualify for the award reflects the employer's continued underfunding of KTRS's retirement annuity plan.

The PPCC is a coalition of three national associations that represent public retirement systems and administrators. Combined, these associations serve retirement systems that provide pension coverage for most of the nation's 16 million employees of state and local government. The associations that form the PPCC are the National Association of State Retirement Administrators; the National Council on Teacher Retirement; and the National Conference on Public Employee Retirement Systems.

NCTR Executive Committee

Gary L. Harbin is the Past-President of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose

mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 69 state, territorial, local and university pension systems with combined assets in excess of $2 trillion, serving more than 18 million active and retired teachers, non-teaching personnel and other public employees.

Public Sector HealthCare Roundtable

Mr. Harbin also serves on the Board of Directors and as President of the Public Sector HealthCare Roundtable. The Roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector were properly represented during the formulation and debate, and now implementation of the Patient Protection and Affordable Care Act. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

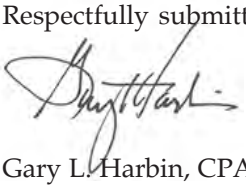
Acknowledgements

The preparation of this report reflects the combined efforts of the KTRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship of the assets contributed by KTRS members and their employers.

This report is located at the KTRS web address www.ktrs.ky.gov, and is made available to all employer members of the System whose cooperation continues to contribute significantly to our success, and who form the vital link between KTRS and its active members.

KTRS management and staff are committed to the continued operation of an actuarially sound retirement system. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



Gary L. Harbin, CPA

BOARD OF TRUSTEES

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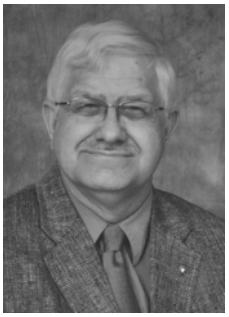
Chairperson
Teacher Trustee
Lexington

Laura Zimmerman
Vice Chairperson
Teacher Trustee
Lexington



Arthur Green
Retired Teacher Trustee
Elkton

Hollis Gritton
Lay Trustee
Union

Dr. Jay Morgan
Teacher Trustee
Murray

Ronald L. Sanders
Lay Trustee
Hodgenville

Ruth Ann Sweazy
Teacher Trustee
Taylorsville

Dr. Terry Holliday
Ex Officio Trustee
Commissioner,
Dept. of Education

Todd Hollenbach
Ex Officio Trustee
State Treasurer

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

GARY L. HARBIN, CPA
Executive Secretary

ROBERT B. BARNES, JD
General Counsel and
Deputy Executive Secretary
Operations

J. ERIC WAMPLER, JD
Deputy Executive Secretary
Finance & Administration

PAUL L. YANCEY, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

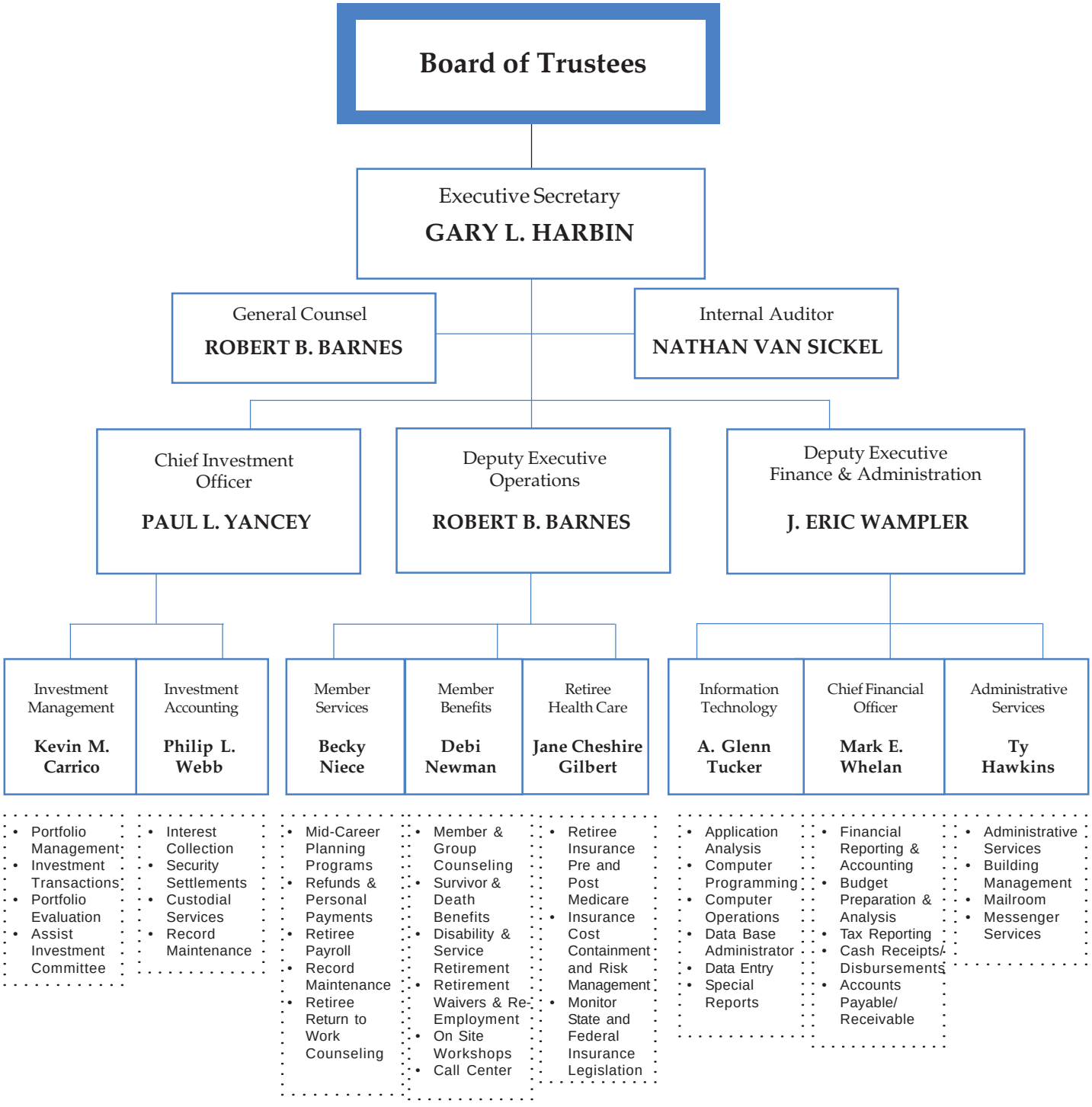
Cavanaugh Macdonald Consulting, LLC
3550 Busbee Parkway, Suite 250
Kennesaw, GA 30144

AUDITOR

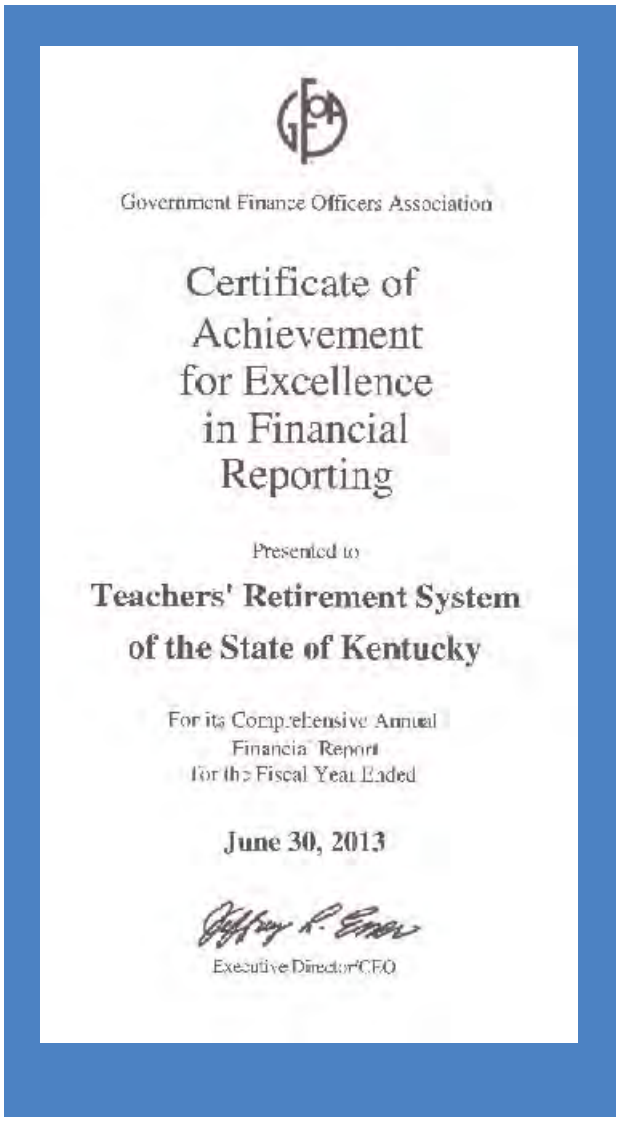
Kentucky Auditor of Public Accounts
209 St. Clair Street
Frankfort, KY 40601

** See pages 77 and 82 of the Investment Section for investment consultants.*

Kentucky Teachers' Retirement System
Organizational Chart



GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)



The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last twenty-six consecutive years (fiscal years ended 1988-2013).

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS

Public Pension Coordinating Council
Public Pension Standards
2014 Award

Presented to

Kentucky Teachers' Retirement System

In recognition of meeting professional standards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of state Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2014 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

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Kentucky Teachers' Retirement System

2014

Financial Section

ADAM H. EDELEN
AUDITOR OF PUBLIC ACCOUNTS

Board of Trustees
Kentucky Teachers' Retirement Systems
Frankfort, Kentucky

Independent Auditor's Report

Report on the Financial Statements

We have audited the accompanying financial statements of the Kentucky Teachers' Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2014, and the related notes to the financial statements, which collectively comprise the Kentucky Teachers' Retirement Systems basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

209 ST. CLAIR STREET
FRANKFORT, KY 40601-1817

TELEPHONE 502.564.5841
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WWW.AUDITOR.KY.GOV

AN EQUAL OPPORTUNITY EMPLOYER M/F/D

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Kentucky Teachers' Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2014 and the changes in fiduciary net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Emphasis-of-Matter

Reporting Entity

As discussed in Note 1, the financial statements present only the Kentucky Teachers' Retirement Systems, and are not intended to present fairly the financial position of the Commonwealth of Kentucky, or the results of its operations in conformity with accounting principles generally accepted in the United States of America.

GASB 67

As discussed in Note 2 to the financial statements, during the year ended June 30, 2014, the Kentucky Teachers' Retirement System adopted Governmental Accounting Standards Board Statement 67, Financial Reporting for Pension Plans. Our opinion is not modified with respect to this matter.

Comparative Financial Statements

The financial statements of Kentucky Teachers' Retirement Systems for the year ended June 30, 2013, were audited by other auditors whose report dated December 16, 2013, stated that the fiduciary net position as of June 30, 2013 and changes in fiduciary net position for the year then ended were in conformity with accounting principles generally accepted in the United States of America. The financial statements for the year then ended, were audited by other auditors whose report, dated December 16, 2013, expressed an unmodified opinion on those statements.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (pages 19 through 21) and the Schedule of Changes in Net Pension Liability (page 49-50), Schedule of Net Pension Liability (page 50), Schedule of Employer Contributions (page 50) Schedule of Investment Returns (page 51), Medical Insurance Schedule of Funding Progress and Schedule of Employer Contributions (page 51-52), and Life Insurance Schedule of Funding Progress and Schedule of Employer Contributions (page 52) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic financial statements in an appropriate operational, economical, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information

for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures did not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Kentucky Teachers' Retirement System's basic financial statements. The additional supporting schedules (pages 53 through 54) are presented for purposes of additional analysis and are not a required part of the basic financial statements. The Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

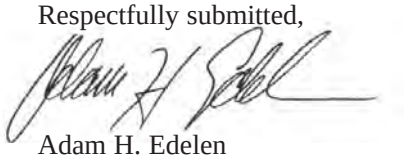
The Introductory, Actuarial, Investment, and Statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated December 15, 2014 on our consideration of the Kentucky Teachers' Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance.

That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Kentucky Teachers' Retirement Systems internal control over financial reporting and compliance.

Respectfully submitted,



Adam H. Edelen
Auditor of Public Accounts

December 15, 2014

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of The Teachers' Retirement System of the State of Kentucky (Kentucky Teachers' Retirement System, KTRS, System, or Plan) financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2014. Please read it in conjunction with the respective financial statements, which begin on page 22.

USING THIS FINANCIAL REPORT

Because of the long-term nature of the defined benefit retirement annuity plan, and the medical and life insurance plans, financial statements alone cannot provide sufficient information to properly reflect the ongoing perspective of the System. The Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position (on pages 21-25) provide information about the activities of the defined benefit retirement annuity plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Kentucky Teachers' Retirement System is the fiduciary of funds held in trust for its members.

The Required Supplementary Information includes historical trend information about the funded status of the defined benefit retirement annuity plan. The Supporting Schedules section includes historical trend information about the actuarial funded status of the medical insurance and life insurance plans from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of Employer Contributions present historical trend information about the required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2014, Kentucky Teachers' Retirement System's combined fiduciary net position increased by $2,107 million - from $16,613.4 million in 2013 to $18,720.4 million in 2014. In 2012, the combined net position totaled $15,229 million. The following summaries focus on fiduciary net position and changes in fiduciary net position of Kentucky Teachers' Retirement System's defined benefit retirement annuity plan, medical insurance plan, life insurance plan and other funds.

Summary of Fiduciary Net Position
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2014	2013	2012	2014	2013	2012	2014	2013	2012
Cash & Investments	$ 18,426.8	$ 16,549.7	$ 15,123.6	$ 536.2	$ 456.5	$ 344.9	$ 89.7	$ 88.8	$ 91.1
Receivables	310.5	173.0	133.4	12.4	16.8	16.3	1.1	1.1	1.1
Capital Assets	11.5	9.2	6.8						
Total Assets	18,748.8	16,731.9	15,263.8	548.6	473.3	361.2	90.8	89.9	92.2
Total Liabilities	(656.2)	(623.1)	(466.7)	(12.6)	(59.6)	(22.5)			
Net Position	$ 18,092.6	$ 16,108.8	$ 14,797.1	$ 536.0	$ 413.7	$ 338.7	$ 90.8	$ 89.9	$ 92.2

*TOTALS	2014	2013	2012
Cash & Investments	$ 19,052.7	$ 17,095.0	$ 15,559.6
Receivables	324.0	190.9	150.8
Capital Assets	11.5	9.2	6.8
Total Assets	19,388.2	17,295.1	15,717.2
Total Liabilities	(668.8)	(682.7)	(489.2)
Net Position	$ 18,719.4	$ 16,612.4	$ 15,228.0

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had a combined plan net position of $1.0 million for year ended 2014, and .9 million for years ended 2013 and 2012.*

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

The fiduciary net position of the defined benefit retirement annuity plan increased by 12.3 percent ($18,092.6 million compared to $16,108.8 million) and in 2012, the fiduciary net position of the defined benefit plan totaled $14,797.1 million. The increases are primarily due to improvements in market conditions which resulted in a net investment income increase of $.8 billion more than 2013. The 2014 amount was $2.5 billion more than 2012. The defined benefit retirement annuity plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries. Fiduciary net position of the medical insurance plan increased by 29.6 percent ($536.0 million compared to $413.7 million) primarily due to contributions from members and employers exceeding insurance expenses due to legislation passed in 2010. This compares to 2012 where fiduciary net position of the medical insurance fund totaled $338.7 million. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

Summary of Changes in Fiduciary Net Position
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2014	2013	2012	2014	2013	2012	2014	2013	2012
ADDITIONS									
Member Contributions	$ 305.0	$ 304.7	$ 309.8	$ 135.2	$ 119.8	$ 100.3	$	$	$
Employer Contributions	563.3	568.2	557.3	157.7	166.6	174.0	1.0	1.7	1.7
Net Investment Income (loss)	2,803.2	2,039.9	309.7	67.7	30.7	(4.0)	4.6	0.7	6.4
Other Income				4.9		3.8			
TOTAL ADDITIONS	3,671.5	2,912.8	1,176.8	365.5	317.1	274.1	5.6	2.4	8.1
DEDUCTIONS									
Benefit Payments	1,654.4	1,570.7	1,482.9				4.7	4.6	4.4
Refunds	25.5	22.1	19.5						
Administrative Expense	7.9	8.4	7.8	1.1	1.3	1.2			
Insurance Expenses				242.1	240.9	229.0			
TOTAL DEDUCTIONS	1,687.8	1,601.2	1,510.2	243.2	242.2	230.2	4.7	4.6	4.4
Increase (Decrease) in Net Position	$ 1,983.7	$ 1,311.6	$ (333.4)	$ 122.3	$ 74.9	$ 43.9	$ 0.9	$ (2.2)	$ 3.7

*TOTALS

	2014	2013	2012
ADDITIONS			
Member Contributions	$ 440.2	$ 424.5	$ 410.1
Employer Contributions	722.0	736.5	733.0
Net Investment Income	2,875.5	2,071.3	312.1
Other Income	4.9		3.8
TOTAL ADDITIONS	$ 4,042.6	$ 3,232.3	1,459.0
DEDUCTIONS			
Benefit Payments	$ 1,659.1	$ 1,575.3	1,487.3
Refunds	25.5	22.1	19.5
Administrative Expense	9.0	9.7	9.0
Insurance Expenses	242.1	240.9	229.0
TOTAL DEDUCTIONS	$ 1,935.7	$ 1,848.0	1,744.8
Increase (Decrease) in Net Position	$ 2,106.9	$ 1,384.3	$ (285.8)

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had a combined plan net position of $1.0 million for year ended 2014, and .9 million for years ended 2013 and 2012.*

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

DEFINED BENEFIT RETIREMENT ANNUITY PLAN ACTIVITIES

Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

In 2014, employer contributions totaled $563.3 million, a net decrease of $4.9 million from the prior fiscal year. The decrease was due to declining amortization payments from the State on prior benefit improvements. In 2013, employer contributions increased $10.9 million compared to the prior fiscal year due to an increased amount needed from the State to match contributions made by members.

In 2014, the System experienced an increase in net investment income compared to the previous year ($2,803.2 million compared to $2,039.9 million). For 2012, net investment income totaled $309.7 million. The increase in the fair value of investments is mainly due to favorable market conditions for the year ended June 30, 2014. Total deductions in 2014 increased $86.6 million. The increase was caused principally by an increase of $83.7 million in defined benefit payments. Members who were drawing benefits as of June 2014 received an increase of one and one-half percent to their retirement allowances in July 2014. Also, there was an increase of 1,170 members and beneficiaries on the retired payroll as of June 30, 2014.

OTHER POST EMPLOYMENT BENEFIT ACTIVITIES

During the 2014 fiscal year, the medical insurance plan member contributions increased $15.4 million and employer contributions decreased $8.9 million from fiscal year 2013. The member contributions increased primarily due to the implementation of the Shared Responsibility Plan beginning July 1, 2010 which includes increased contributions from active and retired members, employers and the state. The employer contributions decreased due to less transition funding paid by the State as the Shared Responsibility Plan phases in until the 2016 fiscal year.

Net investment income increased $37 million from $30.7 million in 2013 to $67.7 million in 2014. In 2012, net investment income totaled a negative $4 million.

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2014, 2013, and 2012 were $4.7, $4.6, and $4.4 million respectively.

HISTORICAL TRENDS

Accounting standards require that the Statement of Fiduciary Net Position present asset values at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information required according to new accounting standards regarding the funded status of the defined benefit retirement annuity plan is presented in Note 4 of the financial statements. The blended discount rate mandated by the new accounting standards result in a lower funding level when compared to the actuarially determined funded levels reported in past years. The Schedule of Employer Contributions is provided in the Required Supplementary Information.

The actuarial funding of the medical insurance and life insurance plans is provided in the Schedule of Funding Progress presented in the Required Supplementary Information. The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the entry age cost method. Although the medical insurance plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding. Effective July 1, 2010 the Shared Responsibility Plan for funding retiree health benefits requires members, retirees, participating employers and the state to make contributions for pre-funding retiree medical benefits. Annual required contributions of the medical insurance plan are provided in the Schedule of Employer Contributions presented in the Required Supplementary Information and a shortfall of employer contributions has resulted in an accumulated net Other Post Employment Benefit obligation of $1,503,952,786 as of June 30, 2014.

STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2014

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 63,110,212	$ 2,954,897	$ 487,301	$ 52,939	$ 66,605,349
Prepaid Expenses	70,971	20,000			90,971
Receivables					
Contributions	40,339,941	7,059,521	110,926		47,510,388
Due From Other Trust Funds	1,177,057				1,177,057
State of Kentucky	54,812,142	2,983,504	65,549		57,861,195
Investment Income	44,000,029	1,152,675	939,004	2,146	46,093,854
Investment Sales Receivable	169,491,434	1,227,111			170,718,545
Other Receivables	653,721				653,721
Total Receivables	310,474,324	12,422,811	1,115,479	2,146	324,014,760
Investments at Fair Value (See Note 5)					
Short-Term Investments	784,994,421	112,371,006	2,755,752	468,433	900,589,612
Bonds and Mortgages	3,242,639,057	21,234,589	86,494,824	243,188	3,350,611,658
Equities	11,266,188,790	300,857,011		205,506	11,567,251,307
Alternative Investments	643,890,290	4,251,239			648,141,529
Real Estate	733,045,846				733,045,846
Additional Categories	1,233,210,529	94,456,754			1,327,667,283
Total Investments, at fair value	17,903,968,933	533,170,599	89,250,576	917,127	18,527,307,235
Invested Security Lending Collateral	459,645,254				459,645,254
Capital Assets, at cost net of accumulated depreciation of $3,393,372 (See Note 2)	11,495,190				11,495,190
Total Assets	18,748,764,884	548,568,307	90,853,356	972,212	19,389,158,759
LIABILITIES					
Accounts Payable	1,815,576	4,059,733	780	8	5,876,097
Due to Other Trust Funds		1,145,785	29,606	1,665	1,177,056
Insurance Claims Payable		120,992			120,992
Revenues Collected in Advance		3,624,881			3,624,881
Investment Purchases Payable	194,733,439	3,621,466			198,354,905
Obligations Under Securities Lending	459,645,254				459,645,254
Total Liabilities	656,194,269	12,572,857	30,386	1,673	668,799,185
NET POSITION-RESTRICTED FOR PENSION AND OTHER POST-EMPLOYMENT BENEFITS:	$ 18,092,570,615	$ 535,995,450	$ 90,822,970	$ 970,539	$ 18,720,359,574

The combining statement of "Fiduciary Net Position - Other Funds" is presented on page 25.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2013

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 26,650,916	$ 6,879,174	$ 226,483	$ 68,943	$ 33,825,516
Prepaid Expenses	125,364	147,000			272,364
Receivables					
Contributions	38,461,507	9,771,489	22,945		48,255,941
Due From Other Trust Funds	1,300,238				1,300,238
State of Kentucky	31,975,561	3,350,147	69,683		35,395,391
Investment Income	48,247,677	1,375,970	1,039,330	1,607	50,664,584
Investment Sales Receivable	52,391,569	2,348,249			54,739,818
Other Receivables	656,500				656,500
Total Receivables	173,033,052	16,845,855	1,131,958	1,607	191,012,472
Investments at Fair Value (See Note 5)					
Short-Term Investments	796,485,774	56,915,874	1,907,900	541,819	855,851,367
Bonds and Mortgages	3,093,270,830	64,728,260	86,715,442	238,626	3,244,953,158
Equities	10,102,552,862	243,022,751		120,315	10,345,695,928
Alternative Investments	540,739,121	1,255,715			541,994,836
Real Estate	642,611,173				642,611,173
Additional Categories	882,969,785	83,487,054			966,456,839
Total Investments, at Fair Value	16,058,629,545	449,409,654	88,623,342	900,760	16,597,563,301
Invested Security Lending Collateral	464,229,713				464,229,713
Capital Assets, at cost net of accumulated depreciation of $2,536,306 (See Note 2)	9,249,324				9,249,324
Total Assets	16,731,917,914	473,281,683	89,981,783	971,310	17,296,152,690
LIABILITIES					
Accounts Payable	1,513,830	4,058,236			5,572,066
Due to Other Trust Funds		1,275,206	24,425	607	1,300,238
Insurance Claims Payable		137,000			137,000
Revenues Collected in Advance		49,373,905			49,373,905
Investment Purchases Payable	157,366,066	4,771,571			162,137,637
Obligations Under Securities Lending	464,229,713				464,229,713
Total Liabilities	623,109,609	59,615,918	24,425	607	682,750,559
NET POSITION-RESTRICTED FOR PENSION AND OTHER POST-EMPLOYMENT BENEFITS:	$ 16,108,808,305	$ 413,665,765	$ 89,957,358	$ 970,703	$ 16,613,402,131

The combining statement of "Fiduciary Net Position - Other Funds" is presented on page 26.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For the Fiscal Year Ended June 30, 2014

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
State of Kentucky	$ 483,330,289	$ 105,441,052	$ 839,681	$	$ 589,611,022
Other Employers	79,995,960	52,247,362	166,410	80,000	132,489,732
Member	304,981,620	135,190,891			440,172,511
Total Contributions	868,307,869	292,879,305	1,006,091	80,000	1,162,273,265
Other Income					
Recovery Income		4,879,981			4,879,981
Investment Income/(Loss)					
Net Appreciation/(Depreciation) in Fair Value of Investments	2,422,760,237	61,300,016	1,244,808	35,535	2,485,340,596
Interest	207,296,849	7,146,893	3,336,961	9,312	217,790,015
Dividends	179,227,537	5,237		3,172	179,235,946
Rental Income, Net	29,245,271				29,245,271
Securities Lending, Gross Earnings	2,708,225		197	77	2,708,499
Gross Investment Income/(Loss)	2,841,238,119	68,452,146	4,581,966	48,096	2,914,320,327
Less: Investment Expense	(37,177,750)	(711,083)	(9,062)	(93)	(37,897,988)
Less: Securities Lending Expense	(812,413)		(59)	(23)	(812,495)
Net Investment Income/(Loss)	2,803,247,956	67,741,063	4,572,845	47,980	2,875,609,844
Total Additions	3,671,555,825	365,500,349	5,578,936	127,980	4,042,763,090
DEDUCTIONS					
Benefits	1,654,375,700		4,692,000	127,564	1,659,195,264
Refunds of Contributions	25,461,843				25,461,843
Insurance Expenses		242,070,531			242,070,531
Administrative Expense	7,955,972	1,100,133	21,324	580	9,078,009
Total Deductions	1,687,793,515	243,170,664	4,713,324	128,144	1,935,805,647
Net Increase(Decrease)	1,983,762,310	122,329,685	865,612	(164)	2,106,957,443
Net Position - Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	16,108,808,305	413,665,765	89,957,358	970,703	16,613,402,131
End of Year	$ 18,092,570,615	$ 535,995,450	$ 90,822,970	$ 970,539	$ 18,720,359,574

The "Combining Statement of Changes in Fiduciary Net Position - Other Funds" is presented on page 26.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For the Fiscal Year Ended June 30, 2013

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
State of Kentucky	$ 486,936,783	$ 129,586,274	$ 1,392,223	$	$ 617,915,280
Other Employers	81,296,663	36,990,170	288,272	140,000	118,715,105
Member	304,738,728	119,795,780			424,534,508
Total Contributions	872,972,174	286,372,224	1,680,495	140,000	1,161,164,893
Other Income					
Recovery Income		34,976			34,976
Investment Income/(Loss)					
Net Appreciation/(Depreciation) in Fair Value of Investments	1,601,781,093	25,431,394	(2,822,147)	(18,885)	1,624,371,455
Interest	254,918,477	5,822,532	3,496,517	9,684	264,247,210
Dividends	184,104,556	20,949		1,507	184,127,012
Rental Income, Net	30,059,686				30,059,686
Securities Lending, Gross Earnings	3,077,116		390	3	3,077,509
Gross Investment Income/(Loss)	2,073,940,928	31,274,875	674,760	(7,691)	2,105,882,872
Less: Investment Expense	(33,143,497)	(556,039)			(33,699,536)
Less: Securities Lending Expense	(923,168)				(923,168)
Net Investment Income/(Loss)	2,039,874,263	30,718,836	674,760	(7,691)	2,071,260,168
Total Additions	2,912,846,437	317,126,036	2,355,255	132,309	3,232,460,037
DEDUCTIONS					
Benefits	1,570,722,924		4,614,718	114,632	1,575,452,274
Refunds of Contributions	22,059,094				22,059,094
Insurance Expenses		240,931,618			240,931,618
Administrative Expense	8,377,003	1,275,206	24,425	607	9,677,241
Total Deductions	1,601,159,021	242,206,824	4,639,143	115,239	1,848,120,227
Net Increase(Decrease)	1,311,687,416	74,919,212	(2,283,888)	17,070	1,384,339,810
Net Position - Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	14,797,120,889	338,746,553	92,241,246	953,633	15,229,062,321
End of Year	$ 16,108,808,305	$ 413,665,765	$ 89,957,358	$ 970,703	$ 16,613,402,131

The "Combining Statement of Changes in Fiduciary Net Position - Other Funds" is presented on page 27.
The accompanying notes are an integral part of these financial statements.

Combining Statement of Fiduciary Net Position
As of June 30, 2014
Other Funds

	403(B) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 52,940	$	$ 52,940
Receivables				
Investment Income			2,145	2,145
Investments at Fair Value				
Short Term Investments	377,268		91,165	468,433
Bonds and Mortgages			243,188	243,188
Equities			205,506	205,506
Total Investments	377,268		539,859	917,127
Total Assets	377,268	52,940	542,004	972,212
Liabilities				
Accounts Payable	3		5	8
Due to Other Trust Funds	99	435	1,131	1,665
Net Position - Restricted for Pension and Other Post-Employment Benefits	$ 377,166	$ 52,505	$ 540,868	$ 970,539

Combining Statement of Changes in Fiduciary Net Position
For the Fiscal Year Ended June 30, 2014
Other Funds

	403(B) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Contributions				
Other Employers	$	$ 80,000	$	$ 80,000
Investment Income/(Loss)				
Net Appreciation/(Depreciation) in Fair Value of Investments			35,535	35,535
Interest	234		9,078	9,312
Dividends			3,172	3,172
Securities Lending,Gross			77	77
Gross Investment Income/(Loss)	234		47,862	48,096
Less Securities Lending Expense			(23)	(23)
Less Investment Expense	(38)		(55)	(93)
Total Additions	196	80,000	47,784	127,980
Deductions				
Benefits	13,986	95,578	18,000	127,564
Administrative Expense	63	435	82	580
Total Deductions	14,049	96,013	18,082	128,144
Net Increase (Decrease)	(13,853)	(16,013)	29,702	(164)
Net Position - Restricted for Pension and Other Post-Employment Benefits				
Beginning of Year	391,019	65,518	511,166	970,703
End of Year	$ 377,166	$ 52,505	$ 540,868	$ 970,539

The accompanying notes are an integral part of these financial statements.

Combining Statement of Fiduciary Net Position
As of June 30, 2013
Other Funds

	403(B) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 68,943	$	$ 68,943
Receivables				
Investment Income			1,607	1,607
Investments at Fair Value				
Short Term Investments	391,095		150,724	541,819
Bonds and Mortgages			238,626	238,626
Equities			120,315	120,315
Total Investments	391,095		509,665	900,760
Total Assets	391,095	68,943	511,272	971,310
Liabilities				
Due to Other Trust Funds	76	425	106	607
Net Position - Restricted for Pension and Other Post-Employment Benefits	$ 391,019	$ 68,518	$ 511,166	$ 970,703

Combining Statement of Changes in Fiduciary Net Position
For the Fiscal Year Ended June 30, 2013
Other Funds

	403(B) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Contributions				
Other Employers	$	$ 140,000	$	$ 140,000
Investment Income/(Loss)				
Net Appreciation/(Depreciation) in Fair Value of Investments			(18,885)	(18,885)
Interest	448		9,236	9,684
Dividends			1,507	1,507
Securities Lending,Gross			3	3
Gross Investment Income/(Loss)	448		(8,139)	(7,691)
Less Securities Lending Expense				
Less Investment Expense				
Total Additions	448	140,000	(8,139)	132,309
Deductions				
Benefits	14,260	80,372	20,000	114,632
Administrative Expense	76	425	106	607
Total Deductions	14,336	80,797	20,106	115,239
Net Increase (Decrease)	(13,888)	59,203	(28,245)	17,070
Net Position - Restricted for Pension and Other Post-Employment Benefits				
Beginning of Year	404,907	9,315	539,411	953,633
End of Year	$ 391,019	$ 68,518	$ 511,166	$ 970,703

The accompanying notes are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS

Note 1: Description of Retirement Annuity Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan with a special funding situation established to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state.

KRS 161.250 provides that the general administration and management of KTRS, and the responsibility for its proper operation, is vested in a board of trustees. The board of trustees consists of the chief state school officer, the State Treasurer, and seven elected trustees. Four of the elected trustees are active teachers, two are not members of the teaching profession, and one is an annuitant of the retirement system.

B. PARTICIPANTS

As of June 30, 2014 a total of 208 employers participated in the plan. Employers are comprised of local school districts, Department of Education Agencies, universities, the Kentucky Community and Technical College System, and other educational organizations. The State under GASB No. 67 is recognized as a non-employer contributing entity providing the employer matching contributions for members employed by the local school districts and regional educational cooperatives.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

	2014	2013
Active contributing members:		
Vested	48,836	48,620
Non-vested	24,571	26,211
Inactive members, vested	7,762	7,194
Inactive members, non-vested	27,689	22,848
Retirees and beneficiaries currently receiving benefits	48,576	47,406
Total members, retirees, and beneficiaries	**157,434**	**152,279**

C. BENEFIT PROVISIONS

For Members Before July 1, 2008:

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete twenty-seven (27) years of Kentucky service.

Non-university members receive monthly payments equal to two percent (2%) (service prior to July 1, 1983) and two and one-half percent (2.5%) (service after July 1, 1983) of their final average salaries for each year of credited service. Non-university members who became members on or after July 1, 2002 will receive monthly benefits equal to two percent (2%) of their final average salary for each year of service if, upon retirement, their total service is less than ten (10) years. New members after July 1, 2002 who retire with ten (10) or more years of total service will receive monthly benefits equal to two and one-half percent (2.5%) of their final average salary for each year of service, including the first ten (10) years. In addition, non-university members who retire July 1, 2004 and later with more than thirty (30) years of service will have their multiplier increased for all years over thirty (30) from two and one-half

Note 1: Description of Retirement Annuity Plan continued . . .

percent (2.5%) to three percent (3%) to be used in their benefit calculation.

University employees receive monthly benefits equal to two percent (2%) of their final average salary for each year of credited service.

The final average salary is the member's five (5) highest annual salaries except members at least age fifty-five (55) with twenty-seven (27) or more years of service may use their three (3) highest annual salaries. For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service. The minimum annual service allowance for all members is $440 multiplied by credited service.

For Members On or After July 1, 2008:

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age sixty (60) and complete five (5) years of Kentucky service, or

2.) Complete twenty-seven (27) years of Kentucky service, or

3.) Attain age fifty-five (55) and complete ten (10) years of Kentucky service.

The annual retirement allowance for non-university members is equal to: (a) one and seven tenths percent (1.7%) of final average salary for each year of credited service if their service is 10 years or less; (b) two percent (2.0%) of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) two and three tenths percent (2.3%) of final average salary for each year of credited service if their service is greater than 20 years but no more than 26 years; (d) two and one half percent (2.5%) of final average salary for each year of credited service if their service is greater than 26 years but no more than 30 years; (e) three percent (3.0%) of final average salary for years of credited service greater than 30 years.

The annual retirement allowance for university members is equal to: (a) one and one-half percent (1.5%) of final average salary for each year of credited service if their service is 10 years or less; (b) one and seven tenths percent (1.7%) of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) one and eighty five hundredths percent (1.85%) of final average salary for each year of credited service if their service is greater than 20 years but less than 27years; (d) two percent (2.0%) of final average salary for each year of credited service if their service is greater than or equal to 27 years.

The final average salary is the member's five (5) highest annual salaries except members at least age fifty-five (55) with twenty-seven (27) or more years of service may use their three (3) highest annual salaries. For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Other Benefits:

The System provides post-employment medical benefits to retirees as fully described in Note 8. The System also provides disability benefits for vested members at the rate of sixty percent (60%) of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half percent (1.5%) annually. Additional ad hoc increases and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

KTRS has seven cash accounts. At June 30, 2014, the retirement annuity cash account totaled $34,981,587, the employer control cash account totaled $27,413,166 and the administrative expense fund cash account was $715,459 for a total of $63,110,212 as carrying value of cash in the defined benefit plan. The medical insurance trust cash account totaled $2,921,118 and the medical insurance claims cash account totaled $33,779 for a total of $2,954,897 as carrying value of cash in the medical insurance plan. The life insurance plan cash account totaled $487,301 and the excess benefit fund cash account contained $52,939. Therefore, the carrying value of cash was $66,605,349 and the bank balance was $64,193,257 and funds controlled by the Commonwealth of Kentucky of $4,612,451. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2014.

C. CAPITAL ASSETS

Capital assets are recorded at historical cost less straight-line accumulated depreciation. The classes of capital assets are furniture and equipment, the KTRS office buildings and land. Furniture and equipment are depreciated over an average useful life of five (5) years. The office buildings are depreciated over forty years. The Pathway System will be capitalized and amortized or depreciated over ten years. The Pathway System will replace KTRS's legacy computer system and be KTRS's primary line of business information technology system. As of June 30, 2014, the project to build and implement the Pathway System was approximately sixty-five percent (65%) complete.

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers. Alternative investments such as private equity, timberland, and other additional categories are valued using the most recent general partner statement of fair value based on independent appraisals, updated for any subsequent partnership interests' cash flows.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in fiduciary net position. Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by the System's employees are recorded when earned. Upon termination or retirement, employees of the System are paid for accumulated vacation time limited to sixty (60) days and accumulated compensatory time limited to two hundred-forty (240) hours. As of June 30, 2014 and 2013 accrued compensated absences were $1,058,460 and $979,037.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which the System is exposed. In order to cover such risks the System carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

G. OTHER RECEIVBLES

KTRS allows qualified purchases of service credit to be made by installment payments not to exceed a five (5) year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2014 and 2013 installment contract receivables were $653,721 and $656,500.

H. USE OF ESTIMATES

The preparation of financial statements in accordance with accounting principles generally accepted in the United

Note 2: Summary of Significant Accounting Policies continued . . .

States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The System's management believes that it has operated the plans within the constraints imposed by federal tax law.

J. RECENT PRONOUNCEMENTS

In June 2011, the GASB issued Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position. GASB Statement No. 63 provides financial reporting guidance relative to deferred outflows of resources, a consumption of net assets by KTRS that is applicable to a future reporting period, and deferred inflows of resources, an acquisition of net assets by KTRS that is applicable to a future reporting period. GASB Statement No. 63 incorporates deferred outflows and inflows of resources into the definitions of the required components of the residual measure, renaming such measure as net position, rather than net assets. The provisions of GASB Statement No. 63 are effective for fiscal periods beginning after December 15, 2011 (the fiscal year ended June 30, 2013) and did not have a significant impact on the Systems' financial statements.

In April 2012, GASB issued Statement No. 65, Items Previously Reported as Assets and Liabilities. This pronouncement clarifies the appropriate reporting of deferred outflows of resources and deferred inflows of resources to ensure consistency in financial reporting. GASB Statement No. 65 is effective for fiscal years beginning after December 15, 2012 (the fiscal year ended June 30, 2014) and did not have a significant impact on the System's financial statements.

GASB Statement No. 67 which was adopted during the year ended June 30, 2014, addresses accounting and financial reporting requirements for pension plans. The requirements for GASB No. 67 require changes in presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The implementation of GASB No. 67 did not significantly impact the accounting for accounts receivable and investment balances. The total pension liability, determined in accordance with GASB No. 67, is presented in Note 4 and in the Required Supplementary Information.

K. RECLASSIFICATIONS

Due to the implementation of GASB No. 67, certain 2013 amounts have been reclassified in conformity with the 2014 presentation regarding the amount paid by the State as a non-employer contributing entity on the Statement of Changes in Fiduciary Net Position.

Note 3: Contributions and Funds of the System

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Non-university members are required to contribute 11.355 percent of their salaries to the System; university members are required to contribute 9.375 percent of their salaries. KRS 161.565 allows each university to reduce the contribution of its members by 2.215 percent; therefore, university members contribute 7.16 percent of their salary to KTRS. For members employed by local school districts, the State, as a non-employer contributing entity, contributes 13.105 percent of salary for those who joined before July 1, 2008 and 14.105 percent for those who joined thereafter.

Other participating employers are required to contribute the percentage contributed by members plus an additional 3.25 percent of members' gross salaries.

The member and employer contributions consist of retirement annuity contributions and other post-employment benefit contributions to the medical and life insurance plans. The member post-employment medical contribution is 2.25 percent. The employer post-employment medical contribution is .75 percent of member gross salaries. Also, after July 1, 2010 employers (other than the state) contribute 1.5 percent of members' salaries and the state contributes the net cost of health insurance premiums for new retirees after June 30, 2010 in the non-Medicare eligible group. If a member leaves covered employment before accumulating five (5) years of credited service, accumulated member contributions to the retirement annuity plan plus interest are refunded upon the member's request.

B. FUNDS OF THE SYSTEM

Teacher Savings Fund

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from the Guarantee Fund. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Allowance Reserve Fund, the fund from which retirement benefits are paid.

State Accumulation Fund

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky.

Allowance Reserve Fund

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from the Guarantee Fund.

Guarantee Fund

This fund was established by KRS 161.420(6) as the Guarantee Fund, to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of the System, and deficiencies not covered by the other funds.

Administrative Expense

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from the Guarantee Fund is used to pay the administrative expenses of the System. Administrative expenses are allocated among the funds based on benefits paid.

Note 4: Net Pension Liability of Employers

A. NET PENSION LIABILITY OF EMPLOYERS

The net pension liability (i.e., the retirement system's liability determined in accordance with GASB No. 67 less the fiduciary net position) as of June 30, 2014 is shown below.

Net Pension Liability of Employers
(In thousands)

Fiscal Year Ending June 30	Total Pension Liability A	Plan Fiduciary Net Position B	Employers Net Liability (A-B)	Plan Fiduciary Net Position as a % of Total Pension Liability (B/A)	Covered Payroll C	Net Pension Liability as a % of Covered Payroll [A-B/C]
2014	$ 39,684,776	$ 18,092,571	$ 21,592,205	45.6%	$ 3,443,138	627.1%

B. SUMMARY OF ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below.

Valuation Date	6/30/2013
Actuarial cost method	Entry Age
Actuarial Assumptions:	
Investment rate of return	7.50%, net of pension plan investment expense, including inflation.
Projected salary increases	4.00 - 8.20%, including inflation
Inflation rate	3.50%
Municipal Bond Index Rate	4.35%
Single Equivalent Interest Rate	5.23%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale AA to 2020 with a setback of 1 year for females. The last experience study was performed in 2011 and the next experience study is scheduled to be conducted in 2016.

C. TARGET ALLOCATION

The long-term expected real rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by KTRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	45.0%	6.4%
Non U.S. Equity	17.0	6.5
Fixed Income	24.0	1.6
High Yield Bonds	4.0	3.1
Real Estate	4.0	5.8
Alternatives	4.0	6.8
Cash	2.0	1.5
Total	100.0	

Note 4: Net Pension Liability of Employers continued ...

D. DISCOUNT RATE

The discount rate used to measure the total pension liability was 5.23%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the Employer contributions will be made at statutorily required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2036 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2035 and a municipal bond index rate of 4.35% was applied to all periods of projected benefit payments after 2035. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

The following table presents the net pension liability of the System, calculated using the discount rate of 5.23%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (4.23%) or 1-percentage-point higher (6.23%) than the current rate:

(in thousands)	**1% Decrease (4.23%)**	**Current Discount Rate (5.23%)**	**1% Increase (6.23%)**
System's net pension liability	$ 27,122,640	$ 21,592,157	$ 17,027,992

June 30, 2013 is the actuarial valuation date upon which the TPL is based. The TPL as of June 30, 2013 was determined using a discount rate of 5.16% which was based on a municipal bond index rate as of that date equal to 4.27%. An expected TPL is determined as of June 30, 2014 using standard roll forward techniques. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate for the year. The final TPL as of June 30, 2014 reflects that the assumed municipal bond index rate increase from 4.27% to 4.35%, resulting in a change in the SEIR from 5.16% to 5.23%. The impact of this change in the discount rate is a change in assumptions that is added to the expected TPL to determine the final TPL as of June 30, 2014.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of KTRS' financial statements assess the risks KTRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430.

KTRS administers a retirement annuity trust fund and a health insurance trust fund in accordance with state and federal law. KTRS provides service and disability retirement benefits, death and survivor benefits, health insurance benefits, and life insurance benefits for Kentucky public education employees and their beneficiaries. The trust funds managed by KTRS shall be referred to collectively as the "retirement system" unless the context requires a specific reference to a particular fund.

The asset allocation parameters for the retirement annuity trust fund are set forth in Title 102, Chapter 1:175, Section 2 and Section 3 of the Kentucky Administrative Regulations as follows:

- There shall be no limit on the amount of investments owned by the retirement annuity trust fund if the investments are guaranteed by the United States government.
- Not more than thirty-five percent (35%) of the assets of the retirement annuity trust fund at fair value shall be invested in corporate debt obligations.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in foreign debt.
- Not more than sixty-five percent (65%) of the assets of the retirement annuity trust fund at fair value shall be invested in common stocks or preferred stocks.
- Not more than twenty-five percent (25%) of the assets of the retirement annuity trust fund at fair value shall be invested in a stock portfolio designed to replicate a general stock index.
- Not more than thirty percent (30%) of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in alternative investments. This category may include private equity, venture capital, timberland, and infrastructure investments.
- Not more than fifteen percent (15%) of the assets of the retirement annuity trust fund at fair value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

The asset allocation parameters for the health insurance trust fund are set forth in Title 102, Chapter 1:178, Section 2 of the Kentucky Administrative Regulations as follows:

- In order to preserve the assets of the health insurance trust fund and produce the required rate of return while minimizing risk, assets shall be prudently diversified among various classes of investments.
- In determining asset allocation policy, the investment committee and the board shall be mindful of the health insurance trust fund's liquidity and its capability of meeting both short and long-term obligations.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the retirement system's deposits may not be returned to the system. The retirement system's total cash balance held at J.P. Morgan Chase Bank in noninterest-bearing accounts on June 30, 2014 was $64,193,257. In addition to these funds, an amount of $4,612,451 represents funds transferred to and controlled by the Commonwealth of Kentucky.

On November 9, 2010, the FDIC issued a Final Rule implementing Section 343 of the Dodd-Frank Wall Street Reform and Consumer Protection Act that provides for unlimited insurance coverage of noninterest-bearing transaction accounts. Beginning December 31, 2010, through December 31, 2012, all noninterest-bearing transaction accounts are fully insured, regardless of the balance of the account, at all FDIC-insured institutions. Therefore, all cash balances were fully insured by the FDIC through December 31, 2012. Beginning January 1, 2013, all cash balances at J.P. Morgan Chase Bank were insured up to $250,000 and the remaining balances fully collateralized with securities held by the Federal Reserve Bank of New York in the name of the Commonwealth of Kentucky-Teachers' Retirement.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,
b. collateralized with securities held by the pledging financial institution, or
c. collateralized with securities held by the pledging financial institution's trust department or agent

but not in the depositor-government's name.

As of June 30, 2014, the retirement system's cash balance in the amount of $64,193,257 was not exposed to custodial credit risk since this amount was fully insured by the FDIC limit of $250,000 and the remaining balances collateralized with securities valued at $155,641,514.

C. INVESTMENTS

All of the retirement system's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, alternative investments, and additional categories as permitted by regulation. These assets are reported at fair value.

Investments are governed by the Board of Trustees' policies while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims."

The following chart represents the fair values of the investments of the Kentucky Teachers' Retirement System for June 30, 2014.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments Comparison
Retirement Annuity Trust

	Fair Value June 30, 2014	Fair Value June 30, 2013
Money Market Fund	$ 828,490,897	$ 766,566,559
STIFF (BNYM)	965,082	2,284
Commercial Paper		34,560,147
Total Cash Equivalents	**829,455,979**	**801,128,990**
U.S. Government	754,145,490	650,217,435
Agency Bonds	97,373,643	146,127,074
Mortgage Backed Securities	126,831,928	180,378,637
Asset Backed Securities	84,761,591	41,175,017
Commercial Mtg Backed Securities	149,223,291	210,980,212
Collateralized Mtg Obligations	18,382,246	41,523,706
Municipal Bonds	472,846,382	460,132,862
Corporate Bonds	1,625,812,498	1,449,689,955
Total Fixed Income	**3,329,377,069**	**3,180,224,898**
International Equity	3,868,325,879 *	2,676,211,485
U.S. Equity	7,398,068,417	7,426,461,692
Total Equities	**11,266,394,296**	**10,102,673,177**
Real Estate Equity	733,045,846	642,611,173
Total Real Estate Equity	**733,045,846**	**642,611,173**
Private Equity	457,408,593	343,259,092
Timberland	186,481,696	197,480,029
Total Alternative Investments	**643,890,289**	**540,739,121**
Opportunistic Credit	501,000,040	477,554,833
Corporate Bonds	336,434,902	307,715,989
Corporate Loans	295,017,173	
International Bonds	100,725,256	91,778,981
PPIP	33,158	4,859,928
U.S. Equity		1,060,054
Total Additional Categories	**1,233,210,529**	**882,969,785**
TOTAL INVESTMENTS	**$ 18,035,374,008**	**$ 16,150,347,144**

**** FY 2014 reflects reclassification in the amount of $335,347,004 in cross-listed equities from the FY 2013 U.S. Equity category to the International Equity category.***

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments Comparison
Health Insurance Trust

	Fair Value June 30, 2014	Fair Value June 30, 2013
Money Market Fund	$ 71,124,623	$ 54,722,377
STIFF (BNYM)	9,009	
Total Cash Equivalents	**71,133,632**	**54,722,377**
Agency Bonds	12,505,055	32,292,470
Asset Backed Securities	704,344	9,360,161
Corporate Bonds	8,025,190	23,075,629
Total Fixed Income	**21,234,589**	**64,728,260**
Global Equities	300,857,011	243,022,751
Total Equities	**300,857,011**	**243,022,751**
Private Equity	4,251,239	1,255,715
Total Alternative Investments	**4,251,239**	**1,255,715**
Opportunistic Credit	5,421,045	23,840,109
Corporate Bonds	64,614,031	59,360,240
Corporate Loans	24,421,678	
U.S. Equity		286,705
Total Additional Categories	**94,456,754**	**83,487,054**
TOTAL INVESTMENTS	**$ 491,933,225**	**$ 447,216,157**

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the retirement system will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system,and are held by either:

a. the counterparty or
b. the counterparty's trust department or agent, but not in the System's name.

The cash reserve of the retirement system is primarily maintained in high quality short term investments through the Dreyfus Institutional Cash Advantage Fund. This Fund invests in a diversified portfolio of high quality, short-term debt securities and the Fund is rated AAA by S&P, Moody's, and Fitch, Inc. The Fund's portfolio is structured within the confines of Rule 2a-7 under the Investment Company Act of 1940, as amended. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, bankers' acceptances, repurchase agreements, time deposits, etc. are all permissible investments within this Fund.

Whenever repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers, the terms are dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS' nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a fair value of at least 102 percent of the value of the repurchase agreements.

As of June 30, 2014, cash collateral reinvestment securities acquired through securities lending for the retirement annuity trust fund by KTRS's custodian, who is also the lending agent/counterparty, amounted to $459,645,254 related to $447,453,523 securities lent consistent with the lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the retirement system's investments. In general, the longer the period until an investment matures, the greater the risk of a negative impact on fair value resulting from changes in interest rates.

As of June 30, 2014, the retirement annuity trust and health insurance trusts had the following investment fair values and weighted average maturities:

Retirement Annuity Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
U.S. Government	$ 754,145,490	$ 1,177,622	6.09
Agency	97,373,642		8.08
MBS	126,831,929	1,359,834	13.90
CMO	18,382,246		20.98
ABS	84,761,591		10.61
CMBS	149,223,291	412,772	22.62
Muni	472,846,382	51,342,159	12.40
Corporate Bonds	1,625,812,498	378,919,993	7.37
Corporate Loans		280,295,048	5.59
TOTAL	**$ 3,329,377,069**	**$ 713,507,428**	**8.58**

Health Insurance Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
Agency	$ 12,505,055	$	9.00
ABS	704,344		1.12
Corporate Bonds	8,025,190	64,614,031	6.15
Corporate Loans		24,421,678	5.75
TOTAL	**$ 21,234,589**	**$ 89,035,709**	**6.35**

In addition to the above securities, the System held short-term cash investments in the Dreyfus Institutional Cash Advantage Fund and STIF, held at the Bank of New York Mellon, with a total fair value of $900,589,611 and had a weighted average maturity of forty-seven (47) days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology to quantify the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of changes in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the retirement system manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by the retirement system were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The retirement system held $126.8 million in mortgage-backed securities as of June 30, 2014. The retirement system also held $1.36 million in mortgage backed securities under additional categories in which securities were held by a limited partnership fund.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The System held $18.4 million in collateralized mortgage obligations as of June 30, 2014.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivables originated by banks, credit card companies, or other credit providers, and are considered to be moderately sensitive to changes in interest rates. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The retirement annuity trust held $84.8 million, and the health insurance trust held $0.7 million in asset backed securities as of June 30, 2014.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The retirement system's commercial mortgage-backed securities investments consist of highly rated relatively senior tranches. The average maturity of the retirement system's commercial mortgage-backed securities holdings in the schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The retirement system held $149.2 million in commercial mortgage-backed securities investments as of June 30, 2014. The retirement system also held $0.4 million in commercial mortgage-backed securities under additional categories in which securities were held by a limited partnership fund.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedules list KTRS's fixed income investments fair values (net of cash equivalents) according to credit ratings as of June 30, 2014:

Retirement Annuity Trust

Rating	Bonds & Mortgages	Additional Categories	Total	%
U.S. Government	$ 754,145,490	$ 1,177,622	$ 755,323,112	18.68
AAA	408,865,144	19,179,372	428,044,516	10.59
AA	836,708,356	28,449,417	865,157,773	21.40
A	716,807,164	28,249,897	745,057,061	18.43
BBB	592,306,613	27,997,543	620,304,156	15.34
BB	12,201,750	225,581,496	237,783,246	5.88
B	4,390,000	267,907,115	272,297,115	6.74
CCC		16,663,956	16,663,956	.41
Not Rated	3,952,552	98,301,010	102,253,562	2.53
TOTAL	**$ 3,329,377,069**	**$ 713,507,428**	$ 4,042,884,497	**100.00%**

Health Insurance Trust

Rating	Bonds & Mortgages	Additional Categories	Total	%
AAA	$ 704,344	$	$ 704,344	0.64
AA	17,528,705		17,528,705	15.90
A	3,001,540		3,001,540	2.72
BBB		2,981,562	2,981,562	2.70
BB		39,598,778	39,598,778	35.91
B		40,639,994	40,639,994	36.85
CCC		1,285,017	1,285,017	1.17
Not Rated		4,530,358	4,530,358	4.11
TOTAL	**$ 21,234,589**	**$ 89,035,709**	**$ 110,270,298**	**100.00%**

Total fair value of the retirement annuity trust's fixed income portfolio was $4,042,884,497 on June 30, 2014. The health insurance trust's fixed income portfolio was valued at $110,270,298. The rating system used in the above charts is the Standard and Poor's rating system. For securities where a Standard and Poor's rating is not provided, another nationally recognized system is used and translated to the Standard and Poor's rating system.

In addition to the above categories, the retirement annuity trust held $829,455,979 in short term investments through the Dreyfus Institutional Cash Advantage Fund. The health insurance trust held $71,133,632 in the Dreyfus Institutional Cash Advantage Fund. The credit risk associated with this Fund is minimal as the securities held are required to maintain the highest possible short-term credit ratings by Moody's and Standard & Poor's. In addition, investments in US Government and Agency securities are also highly rated securities since they are backed by the US Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The retirement annuity trust fund's policy on credit rating is set forth in 102 KAR 1:175 and reads as follows:

"A fixed income investment shall be rated at the time of purchase as investment grade by at least one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. The fixed income investment portfolio as a whole shall maintain an average rating of investment grade by at least one (1) of the major rating services."

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the retirement annuity trust fund is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the system."

"The System's position in a single stock shall not exceed two and one-half (2.5) percent of the System's assets. The system's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program."

KTRS has not invested greater than five percent (5%) of the retirement annuity trust fund's assets at fair value in any single issuer and is in compliance with investment policy.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. As of June 30, 2014, the retirement system's exposure to foreign currency risk consisted of $4,480,096,776 and $170,622,695 in the retirement annuity trust and health insurance trust funds respectively.

The following tables represent the fair values of investments that are subject to foreign currency as a result of cash contributions to each portfolio manager:

Retirement Annuity Trust

Commingled Funds	
Rogge Global Int'l Fixed Income	$ 110,758,215
Baillie Gifford Intrntl EAFE	847,561,410
Baring All Country World ex US	524,421,742
BlackRock ACWI EX-US IMI	492,783,364
UBS All Country World ex US	590,937,938
Alternative Funds	
KKR & Co. European Fund III	70,201,067
Oaktree European Principal Fund III	14,226,029
ADRs (Equities)	538,960,837
Cross-Listed Equities	810,401,671
Bonds (Fixed Income)	355,643,065
Additional Categories (Fixed Income)	85,848,897
Additional Categories (Opportunistic)	38,352,541
TOTAL	**$ 4,480,096,776**

Health Insurance Trust

Commingled Funds	
Medical Ins. Black Rock Fund B	$ 152,151,446
Bonds (Fixed Income)	995,820
Additional Categories (Fixed Income)	15,226,662
Additional Categories (Opportunistic)	2,248,767
TOTAL	**$ 170,622,695**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following tables reflect the various foreign currencies associated with the System's investments in the funds outlined previously:

Retirement Annuity Trust

Currency	Fair Value
Australian Dollar	$ 136,454,041
Bermudian Dollar	100,864,681
Brazilian Real	62,502,090
British Pound Sterling	591,287,332
Canadian Dollar	361,992,659
Cayman Islands Dollar	94,019,482
Chilean Peso	10,213,576
Chinese Yuan	126,579,813
Colombian Peso	1,006,904
Czech Crown	227,828
Danish Krone	64,451,325
Dominican Peso	316,624
Egyptian Pound	292,968
Euro	1,204,979,461
Hong Kong Dollar	96,422,178
Hungarian Forint	769,830
Indian Rupee	82,342,797
Indonesian Rupiah	8,371,568
Israeli New Shekel	38,642,187
Japanese Yen	481,918,833
Jersey Pound	98,043,908
Jordanian Dinar	2,228,116
Liberian Dollar	1,263,485
Malaysian Ringgit	16,016,496
Mexican Peso	41,032,533
Netherlands Antillean Guilder	73,009,281
New Zealand Dollar	4,849,666
Norwegian Krone	28,744,042
Panamanian Balboa	30,071,768
Peruvian Nuevo Sol	7,784,546
Philippine Peso	1,041,540
Polish Zloty	5,426,782
Riyal	436,267
Russian Ruble	32,148,567
Singapore Dollar	42,224,890
South African Rand	20,022,097
South Korean Won	97,537,400
Swedish Krona	159,537,086
Swiss Franc	270,035,331
Taiwan Dollar	59,932,051
Thai Baht	5,542,255
Turkish Lira	14,009,911
UAE Dirham	519,600
Uruguayan Peso	269,506
Various	4,713,475
TOTAL	**$ 4,480,096,776**

Health Insurance Trust

Currency	Fair Value
Australian Dollar	$ 8,606,643
Bermudian Dollar	272,301
Brazilian Real	3,290,956
British Pound Sterling	23,901,098
Canadian Dollar	16,485,624
Cayman Islands Dollar	1,553,816
Chilean Peso	487,491
Chinese Yuan	83,740
Colombian Peso	304,008
Czech Crown	76,529
Danish Krone	1,674,370
Egyptian Pound	93,450
Euro	42,259,571
Hong Kong Dollar	8,804,980
Hungarian Forint	66,462
Indian Rupee	2,210,388
Indonesian Rupiah	832,314
Israeli New Shekel	664,515
Japanese Yen	22,717,105
Liberian Dollar	234,150
Malaysian Ringgit	1,287,425
Mexican Peso	1,550,954
New Zealand Dollar	269,100
Norwegian Krone	1,115,426
Panamanian Balboa	4,030
Peruvian Nuevo Sol	6,376
Philippine Peso	320,814
Polish Zloty	521,532
Riyal	134,199
Russian Ruble	1,231,985
Singapore Dollar	1,671,168
South African Rand	2,415,831
South Korean Won	5,235,194
Swedish Krona	3,568,456
Swiss Franc	9,343,348
Taiwan Dollar	4,298,631
Thai Baht	796,469
Turkish Lira	558,149
UAE Dirham	163,205
Various	1,510,892
TOTAL	**$ 170,622,695**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The majority of foreign investments are held in commingled funds managed by Rogge Global Partners, UBS Global Asset Management, Baillie Gifford, Baring Asset Management, and Black Rock. In addition to the commingled funds investing in foreign securities, the retirement annuity trust fund held $538,960,837 associated with foreign interests in American Depositary Receipt investments. These American Depositary Receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. American Depositary Receipts are denominated in U.S. currency. Also, the cross listed equities, in the amount of $810,401,671, represent securities domiciled in foreign countries, but are listed and traded on U.S. exchanges. Other foreign securities and investments consisted of debt securities and alternative investment opportunities. Foreign holdings, including investment receivables/payables, that were not readably identifiable to a specific country were listed in the "various" category pertaining to currency type.

The retirement annuity trust fund's policy regarding foreign equities is that not more than thirty percent (30%) of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the retirement system. The retirement system operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international stocks are the types of securities that are lent. The retirement system's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the fair value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the retirement system.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. During the fiscal year ended June 30, 2014, only the retirement annuity trust fund had securities lending transactions. The following section details the net income earned in the retirement annuity trust fund from securities lending for the fiscal year ended June 30, 2014:

Item	2014 Earnings	2013 Earnings
Gross Earnings (Interest and Fees)	$ 285,931	$ 600,782
Gross Borrower Rebates	2,422,568	2,476,727
Bank Fees	(812,495)	(923,168)
Net Earnings	**$ 1,896,004**	**$ 2,154,341**

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The retirement system cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the retirement system from any financial loss associated with a borrower's default and collateral inadequacy.

As of June 30, 2014, the loan average days to maturity in the retirement annuity trust fund was one (1) days and the weighted average investment maturity of cash collateral investments was one (1) days. At fiscal year end, the retirement annuity trust fund had no credit risk exposure to borrowers, since the amounts the retirement annuity trust fund owes the borrowers exceeds the amounts the borrowers owe the retirement annuity trust fund and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The retirement system minimizes interest rate risk by limiting the term of cash collateral investments to several days.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2014:

Type of Securities Lent	Fair Value	Cash & Non-Cash Collateral Value Received
Fixed Income	$ 255,446,359	$ 264,235,048
Equities	192,007,164	195,410,206
TOTAL	**$ 447,453,523**	**$ 459,645,254**

Note 6: Retirement Plan for Employees of the System

Full-time employees of Kentucky Teachers' Retirement System (KTRS) participate in either KTRS or Kentucky Employees Retirement System. Both plans are multiple-employer cost sharing defined benefit retirement annuity plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for KTRS employee members for the fiscal years 2014, 2013, and 2012 were $656,152, $574,432, and $533,378 respectively. KTRS contributed one hundred percent (100%) of the required contribution each year.

All other KTRS employees are covered under the Kentucky Employee Retirement System (KERS) in the Non-Hazardous Employees' Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. The System's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS who joined prior to July 1, 2008, are required to contribute five percent (5%) of their annual creditable compensation for the fiscal years 2014, 2013, and 2012 and members who joined on or after July 1, 2008 contribute an additional one percent (1%). As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2014, 2013, and 2012 were 26.79 percent, 23.61 percent, and 19.82 percent and the System's annual required contributions to KERS were $365,610, 331,989, and $350,869 respectively. KTRS contributed one hundred percent (100%) of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: Other Funds

A. 403(B) TAX-SHELTERED ANNUITY PLAN

Plan Description

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by the System's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2014, the twelve members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan; therefore, there are no receivables to be recognized.

Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

C. SUPPLEMENTAL BENEFIT FUND

The Supplemental Retirement Benefit Fund is a qualified governmental excess benefit arrangement as described in Section 415 of the Internal Revenue Code. In accordance with KRS 161.611 and KRS 161.420(8), KTRS is authorized to provide a supplemental retirement benefit fund for the sole purpose of enabling the employer to apply the same formula for determining benefits payable to all members of the retirement system employed by the employer, whose benefits under the retirement system are limited by Section 415 of the Internal Revenue Code of 1986, as amended from time to time. Funding of benefits payable under this fund are provided by the state, as employer, and are segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system.

D. JUNITA LOSEY SCHOLARSHIP BEQUEST

Junita Losey, a retired teacher, designated KTRS as a residuary beneficiary of her estate and expressed a desire that KTRS establish a scholarship program for Kentucky students studying to be teachers. Ms. Losey died in 1997 and thereafter her estate provided a scholarship bequest to KTRS. The scholarship bequest has at all times been segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system. The Scholarship Committee of the System's Board of Trustees meets each December to consider scholarship standards and administration of the scholarship bequest.

Note 8: Medical Insurance Plan & Post-Employment Benefits

A. PLAN DESCRIPTION

In addition to the retirement annuity plan described in Note 1, Kentucky Revised Statute 161.675 requires KTRS to provide access to post-employment healthcare benefits for eligible members and dependents. The KTRS medical plan is funded by employer and member contributions. Changes made to the medical plan may be made by the KTRS Board of Trustees, the Kentucky Department of Employee Insurance and the General Assembly.

The KTRS medical plan is funded by employee contributions to an account established pursuant to 26 U.S.C. sec. 401(h). Additional funding is derived from the Kentucky Teachers' Retirement System insurance trust fund that went into effect on July 1, 2010. The insurance trust fund provides a trust separate from the account established pursuant to 26 U.S.C. sec. 401(h). The insurance trust fund includes employer and retired member contributions required under KRS 161.550 and KRS 161.675(4)(b).

To be eligible for medical benefits, the member must have retired either for service or disability. The KTRS medical plan offers coverage to members under the age of 65 through the Kentucky Employees Health Plan administered by the Kentucky Department of Employee Insurance. KTRS retired members are given a supplement to be used for payment

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the KTRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The Commonwealth of Kentucky bears risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the KTRS Medicare Eligible Health Plan.

At June 30, 2014, KTRS insurance covered 37,275 retirees and 7,031 dependents. There are 208 participating employers and 73,407 active members contributing to the medical plan.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The KTRS medical plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due.

Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

C. CONTRIBUTIONS

The post-employment medical benefit provided by KTRS is financed on a pre-funded basis beginning July 1, 2010 with the implementation of the "Shared Responsibility" legislation. In order to fund medical benefits, active member contributions are matched by the state at .75% of members' gross salaries. Members contributed 1.75% of gross payroll to the KTRS medical plan and beginning July 1, 2010 the contribution increases incrementally to 3.75% by July 1, 2015 under the Shared Responsibility Plan. Also, the premiums collected from retirees and investment income contributes to funding the plan. The KTRS medical plan received bond proceeds of $152,400,000 in fiscal year 2013 in funding from the state, which was contributed to the insurance trust fund. This transitional funding and increased contributions are for the 2013 and 2014 fiscal years.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Medical Insurance Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(In thousands)

Valuation Year Ending June 30	Actuarial Value of Assets A	Actuarial Accrued Liabilities B	Unfunded Actuarial Accrued Liabilities (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL as a % of Covered Payroll [B-A/C]
2014	$ 508,913	$ 3,194,689	$ 2,685,776	15.9%	$ 3,486,327	77.0%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedule of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the Annual Required Contribution, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The Annual Required Contribution represents a level of

Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methodologies and assumptions employed as of the June 30, 2014 valuation date include the following:

Actuarial Cost Method	Actuarial Value of Assets	Assumed Inflation Rate	Investment Rate of Return	Amortization Method	Remaining Amortization Period
Entry Age	Market value of assets	3.50%	8.00%	Level percent of pay, open	30 years

Medical Trend Assumption	Pre-Medicare	Medicare
Fiscal Year Ending 6/30/2014	7.75%	5.75%
Fiscal Year Ending 6/30/2015	6.75%	5.50%
Ultimate Trend Rate	5.00%	5.00%
Year of Ultimate Trend Rate	2020	2018

Note 9: Life Insurance Plan

A. PLAN DESCRIPTON

KTRS administers the Life Insurance Plan as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 208 participating employers. The benefit is $5,000 for members who are retired for service or disability, and $2,000 for active contributing members.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Life Insurance Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized in the fiscal year due.

Method Used to Value Investments

Life Insurance Plan investments are reported at fair value. The short-term securities are carried at cost, which approximates fair value. Fixed income is generally valued based on published market prices and quotations from national security exchanges and securities pricing services.

C. CONTRIBUTIONS

To finance the life insurance benefit a portion of the employer contribution rate is directed to the plan as recommended by the KTRS's actuary. The contribution rate of active members' payroll recommended by the actuary was .03% for fiscal year 2014 and .05% for fiscal year 2013.

Note 9: Life Insurance Plan continued . . .

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Life Insurance Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(In Thousands)

Valuation Year June 30	Actuarial Value of Assets A	Actuarial Accrued Liabilities B	Unfunded Actuarial Accrued Liabilities (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL as a % of Covered Payroll [B-A/C]
2014	$ 96,130	$ 97,354	$ 1,224	98.7%	$ 3,486,327	0.04%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The required supplementary schedules following the notes to the financial section contain more actuarial information. Significant actuarial methodologies and assumptions employed as of the June 30, 2014 valuation date include the following:

Actuarial Cost Method	Actuarial Value of Assets	Assumed Inflation Rate	Investment Rate of Return	Projected Salary Increases	Amortization Method	Remaining Amortization Period
Entry Age	Market value of assets	3.50%	7.50%	4.00%	Level percent of pay, open	30 years

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in the Net Pension Liability
(In Thousands)

Change in the Total Pension Liability	2014
Total pension liability	
Service Cost	$ 1,002,338
Interest	1,956,610
Benefit changes	
Difference between expected and actual experience	
Changes of assumptions	(353,043
Benefit payments	(1,654,376)
Refunds of contributions	(25,462)
Net change in total pension liability	926,067
Total pension liability - beginning	38,758,709
Total pension liability - ending (a)	$ 39,684,776
Plan Net Position	
Contributions - State of Kentucky	$483,330
Contributions - Other Employers	79,996
Contributions - Members	304,982
Net investment income	2,803,248
Benefit payments	(1,654,375)
Administrative expense	(7,956)
Refunds of contributions	(25,462)
Net change in plan net position	1,983,763
Plan net position - beginning	16,108,808
Plan net position - ending (b)	$ 18,092,571
Net pension liability - ending (a) - (b)	**$ 21,592,205**

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Required Supplementary Information continued . . .

NOTE 1
Schedule of Changes in the Net Pension Liability

The total pension liability contained in this schedule was provided by the System's actuary, Cavanaugh Macdonald Consulting, LLC. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the System.

Changes of Benefit Terms. None

Changes of assumptions. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2011. In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation, the Board adopted an interest smoothing methodology to calculate liabilities for purposes of determining the actuarially determined contributions.

Schedule of Net Pension Liability
(In Thousands)

	2014
Total pension liability	$ 39,684,776
Plan net position	18,092,571
Net pension liability	$ 21,592,205
Ratio of plan net position to total pension liability	45.59%
Covered-employee payroll	$ 3,443,138
Net pension liability as a percentage of covered-employee payroll	627.11%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule of Employer Contributions
(In Thousands)

Fiscal Year Ended June 30	Covered Payroll	Actual Employer Contributions	Actuarially Determined Employer Contributions	Annual Contribution Excess (Deficiency)	Actual Contributions as a Percentage of Covered Payroll
2005	$ 2,703,430	$ 383,777	$ 383,777	$	14.20 %
2006	2,859,477	406,107	406,107		14.20
2007	2,975,289	434,890	494,565	(59,675)	14.62
2008	3,190,332	466,248	563,789	(97,541)	14.61
2009	3,253,077	442,550	600,283	(157,733)	13.60
2010	3,321,614	479,805	633,938	(154,133)	14.44
2011	3,283,749	1,037,936	678,741	359,195	31.61
2012	3,310,176	557,340	757,822	(200,482)	16.84
2013	3,310,710	568,233	802,985	(234,752)	17.16
2014	3,443,138	563,326	823,446	(260,120)	16.36

Required Supplementary Information continued . . .

NOTE 2
Schedule of Employer Contributions

The required employer contributions and percent of those contributions actually made are presented in the schedule.

NOTE 3
Actuarial Methods and Assumptions

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of the schedule:

Actuarial Cost Method	Amortization Period	Remaining Amortization Period	Asset Valuation Method	Inflation	Salary Increase	Ultimate Investment Rate of Return*
Entry Age	Level percentage of payroll, open	30 Years	5-year smoothed market	3.50%	4.00 to 8.20%, including inflation	7.50 percent, net of pension plan investment expense, including inflation

**The actuarially determined contribution rates are determined using the interest smoothing Methodology adopted by the Board.*

Schedule of Investment Returns

	2014
Annual money weighted rate of return, net of investment expense	17.95%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Medical Insurance Plan – Schedule of Funding Progress
(In Millions)

Valuation Year June 30	Actuarial Value of Assets A	Actuarial Accrued Liabilities (AAL) B	Unfunded Actuarial Accrued Liabilities (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL as a % of Covered Payroll [(B-A)/C]
2008	$ 185.9	$ 6,434.5	$6,248.6	2.9%	$3,190.3	195.9%
2009	229.1	6,454.7	6,225.6	3.5	3,253.1	191.4
2010	241.2	3,206.8	2,965.6	7.5	3,321.6	89.3
2011	294.8	3,423.1	3,128.3	8.6	3,451.8	90.6
2012	338.7	3,594.5	3,255.8	9.4	3,479.6	93.6
2013	412.2	3,521.1	3,108.9	11.7	3,480.0	89.3
2014	508.9	3,194.7	2,685.8	15.9	3,486.3	77.0

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Required Supplementary Information continued . . .

Medical Insurance Plan – Schedule of Employer Contributions

Valuation Year June 30	Annual Required Contribution (ARC) (A)	Actual Employer Contribution (B)	Retiree Drug Subsidy Contribution (C)	Total Contribution (B) + (C)	Percentage of ARC Contribution [(B) + (C)]/(A)
2008	$ 395,282,164	$ 148,954,644	$ 11,911,565	$160,866,209	40.7%
2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1
2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9
2011	477,723,070	188,453,929	280,585	188,734,514	39.5
2012	470,217,067	177,450,206	297,639	177,747,845	37.8
2013	186,725,823	166,611,420		166,611,420	89.2
2014	159,583,400	162,568,395		162,568,395	101.9

Life Insurance Plan – Schedule of Funding Progress

(In Thousands)

Valuation Year June 30	Actuarial Value of Assets A	Actuarial Accrued Liabilities (AAL) B	Unfunded AAL (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL As a % of Covered Payroll [(B-A)/C]
2008	$ 77,658	$ 84,265	$ 6,607	92.2%	$ 3,190,332	0.21%
2009	84,703	90,334	5,631	93.8	3,253,077	0.17
2010	87,905	92,091	4,186)	95.5	3,321,614	0.13
2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)
2012	92,241	91,398	(843)	100.9	3,479,567	(0.02)
2013	94,863	94,325	(538	100.6	3,480,066	(0.02)
2014	96,130	97,354	1,224	98.7	3,486,327	0.04

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or medical insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Life Insurance Plan – Schedule of Employer Contributions

Valuation Year June 30	Annual Required Contribution (ARC) (A)	Actual Employer Contribution (B)	Percentage of ARC Contributed (B) / (A)
2008	$ 1,914,199	$ 5,411,249	282.7%
2009	1,498,076	5,455,473	364.2
2010	1,992,969	1,966,826	98.7
2011	1,725,878	1,668,822	96.7
2012	1,732,831	1,684,711	97.2
2013	1,739,908	1,680,495	96.6
2014	1,044,959	1,006,091	96.3

ADDITIONAL SUPPORTING SCHEDULES

Schedule of Administrative Expenses
Year Ended June 30, 2014

Expense	Amount
Salaries	$ 5,618,962
Other Personnel Costs	580,643
Professional Services and Contracts	454,940
Utilities	98,565
Rentals	26,001
Maintenance	117,847
Postage & Related Services	402,543
Printing	141,762
Insurance	171,229
Miscellaneous Services	117,450
Telecommunications	32,736
Computer Services	107,393
Supplies	63,561
Depreciation	857,066
Travel	43,963
Dues & Subscriptions	45,865
Miscellaneous Commodities	10,317
Furniture, Fixtures, & Equipment not Capitalized	107,743
Compensated Absences	79,423
Total Administrative Expenses	**$ 9,078,009**

Schedule of Professional Fees
Year Ended June 30, 2014

Professional	Nature of Service	Amount
Cavanaugh Macdonald Consulting	Actuarial Services	$ 239,307
Mountjoy Chilton Medley	Auditing Services	39,000
Auditor of Public Accounts	Auditing Services	49,995
International Claim Specialist	Investigative Services	480
Ice Miller	Attorney Services	26,333
Reinhart, Boerner VanDeuren	Attorney Services	4,256
Stoll, Keenon, and Ogden	Attorney Services	112
Peritus	Communications	95,457
Total Professional Services and Contracts		**$ 454,940**

Additional Supporting Schedules continued . . .

Schedule of Contracted Investment Management Expenses
Year Ended June 30, 2014

	Pension	Medical	Total
Equity Managers			
Baillie Gifford	$ 2,946,160	$	$ 2,946,160
Baring Asset Management, Inc.	2,408,105		2,408,105
Black Rock	222,724	158,797	381,521
GE Asset Management	800,000		800,000
Todd-Veredus Asset Management LLC	1,358,058		1,358,058
UBS Global Asset Management	2,914,577		2,914,577
Wellington Management Company	3,063,448		3,063,448
Total Equity Managers	13,713,072	158,797	13,871,869
Fixed Income Managers			
Fort Washington Investment Advisors	175,713		175,713
Galliard Capital Management	266,027		266,027
Total Fixed Income Managers	441,740		441,740
Real Estate	4,198,106	11,507	4,209,613
Additional Categories	5,979,828	271,398	6,251,226
Alternative Investments	9,290,433	209,039	9,499,472
Custodian			
The Bank of New York Mellon	353,749	10,392	364,141
Consultant			
Hewitt Ennis Knupp, Inc.	358,850		358,850
Bevis Longstreth	54,553		54,553
George Philip	33,056		33,056
Total Consultants	446,459		446,459
Legal & Research			
Reinhart Boerner Van Deuren	2,237		2,237
Wolters Kluwer	8,254		8,254
Ice Miller	79,848		79,848
Total Legal & Research	90,339		90,339
Other			
Administrative and Operational (includes Personnel)	2,664,024	49,950	2,713,974
Total Contracted Investment Management Expenses	**$ 37,177,750**	**$ 711,083**	**$ 37,888,833**

Kentucky Teachers' Retirement System

2014

Investment Section

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Kentucky Teachers' Retirement System.

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

INVESTMENT COMMITTEE

Mr. Ronald L. Sanders
Chairperson

Ms. Laura A. Zimmerman
Vice-Chairperson

Mr. Hollis Gritton
Member

Dr. Tom Shelton
Member

Ms. Ruth Ann Sweazy
Member

Mr. Bevis Longstreth
Investment Advisor to KTRS Investment Committee

Mr. George Philip
Investment Advisor to KTRS Investment Committee

EXECUTIVE INVESTMENT STAFF

Mr. Gary L. Harbin, CPA
Executive Secretary

Mr. Paul L. Yancey, CFA
Chief Investment Officer

Hewitt ennisknupp
An Aon Company

December 1, 2014

To the members of the Board of Trustees and participants of the Teachers' Retirement System of Kentucky:

The KTRS investment program continued to perform exceptionally well in the fiscal year ended June 30, 2014, producing a total return of 18.1%. This exceeded the policy benchmark return of 17.6% and ranked in the top 23% of returns in a peer group universe of 77 public pensions with over $1 billion in assets. The performance was driven by a relatively high weighting in U.S. and international equities, which performed extremely well, as well as strong relative performance generally within the fund's various asset classes.

The markets' strong, relatively steady, performance was underpinned by consistent monetary support from the Federal Reserve and a continuing, if modest, global economic recovery. One hiccup in the uptrend, in the summer of 2013, followed the Federal Reserve's initial comments about a future reduction in monetary stimulus. Another came in early 2014 when monetary stimulus actually began to be scaled back in coincidence with a harsh winter in the U.S. Economic growth temporarily stalled in early 2014. After both minor setbacks, markets quickly resumed their positive performance.

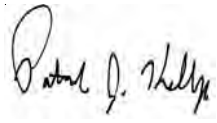
The system's public equity exposure, which totaled 63.2% of assets at June 30, 2014, returned 25.2%. Domestic equities returned 26.3% versus 24.7% for the S&P 1500 Index. International equities returned 22.9% versus 22.3% for the MSCI All Country World (ex-U.S.) Index.

Fixed income returns were lower at 4.8% but exceeded the benchmark Barclays Government/Credit Index return of 4.3%. Exposure to fixed income continued to decline, from 21.3% of assets a year earlier to 19.9% on June 30, 2014, as the relative attractiveness of the asset class continued to deteriorate.

Less traditional investment strategies, including real estate, private equity, and alternative credit strategies rose to 14.6% of assets over the fiscal year, up from 13.1% a year earlier. Returns were generally strong across the various strategies and contributed meaningfully to overall performance.

A sound investment philosophy and implementation through a robust professional process are the keys to a successful program. We believe the consistently strong relative returns achieved over the past several years evidence the soundness of the system's philosophy, asset allocation strategy, and execution. We are grateful to be a part of the process. We would like to express that gratitude to the Board of Trustees, Investment Committee, and investment staff for their continuing confidence.

Respectfully,



Patrick J. Kelly, CFA, CAIA
Partner

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RETIREMENT ANNUITY TRUST FUND

INVESTMENT POLICY SUMMARY

The KTRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principles that guide investment–related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the System. This broad summary is a reference point for management of retirement assets and outlines the investment philosophy and practice of KTRS.

INVESTMENT OBJECTIVES

KTRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them. Generally, the retirement system's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, KTRS holdings can withstand some short-term volatility. The retirement annuity trust fund's long-term investment objective is to achieve an annualized rate of return of 7.5%.

RISK CONTROLS

The KTRS investment program faces various risks; however, the primary risk to KTRS is that the assets will not support liabilities over long periods of time. In order to control this risk and any other risks, the board has taken the following steps on an ongoing basis:

- Actuarial valuations are performed each year to evaluate the funding objectives of the retirement system. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the System.

- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the retirement system.

- The KTRS Investment Committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

ASSET ALLOCATION

Operating within relevant regulatory limitations, the retirement system's investment consultant, on an annual basis, presents to the Investment Committee for approval target percentages and ranges for the retirement system's various asset classes. Annually approved asset allocation parameters serve to balance the retirement system's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The retirement system's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the retirement system's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as liability requirements, the level of funding, and statutory investment restrictions are important considerations within the context of the asset allocation decision making process. Consequently, asset allocations may differ markedly between various pension plans due to their unique circumstances.

The information below shows the retirement system's asset allocation by fair value as of June 30, 2014, and June 30, 2013, as well as the target and strategic range for each asset class for fiscal year 2014.

Retirement Annuity Trust

	June 30,2014*	%	June 30,2013**	%
Cash Equivalents***	$ 420,338,047	2.3	$ 386,683,234	2.4
Fixed Income	3,594,965,963	19.9	3,434,080,377	21.3
Domestic Equities	7,982,520,773	44.3	7,511,572,763	46.5
International Equities	3,411,422,169	18.9	2,698,774,335	16.7
Real Estate	733,045,846	4.1	642,611,173	4.0
Private Equity	457,408,593	2.6	343,259,092	2.1
Timberland	186,481,696	1.0	197,480,029	1.2
Additional Categories	1,248,651,062	6.9	935,376,476	5.8
TOTALS	**$ 18,034,834,149**	**100.0**	**$ 16,149,837,479**	**100.0**

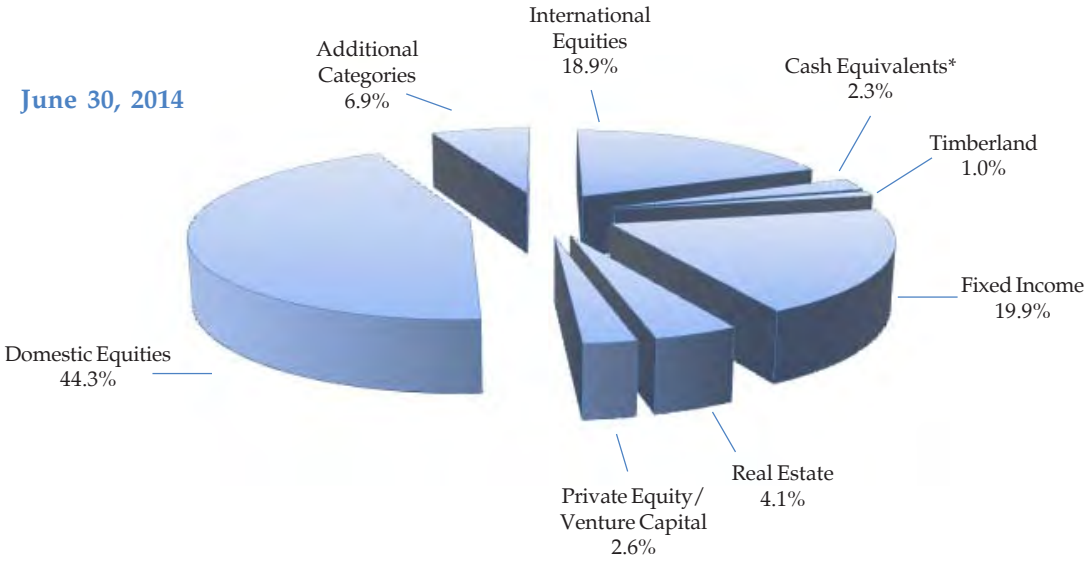
* *Includes Life Insurance Trust values of $89,250,576, Tax Shelter Annuity value of $377,268, and 401(h) value of $41,237,374.*

** *Includes Life Insurance Trust values of $88,623,343, Tax Shelter Annuity value of $391,095, and 401(h) value of $2,193,497.*

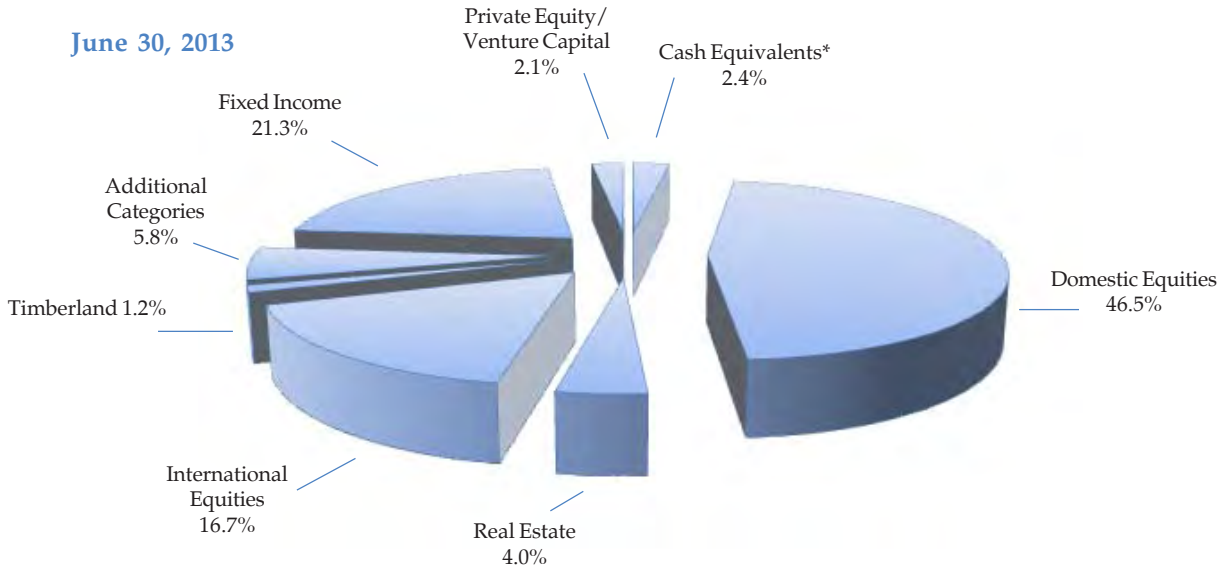
*** *Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

Distribution of Investments
Retirement Annuity Trust**
Fair Values

June 30, 2014



June 30, 2013



* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

** Includes Life Insurance Trust values.

Strategic Weightings by Asset Class

Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2014 (Mkt)**
Cash		1 - 3%	2.0%	**2.3%**
Fixed Income		16 - 22	19.0	**19.9**
Government/Agency/Other	Unlimited			10.1
Corporate	35%			9.8
Equity	65%	58 - 65	62.0	**63.2**
Domestic Large Cap		34 - 44	39.0	38.0
Domestic Mid Cap		1 - 5	3.0	3.8
Domestic Small Cap		1 - 3	2.0	2.5
International* **	30%	15 - 21	18.0	18.9
Real Estate	10%	3 - 7	5.0	**4.1**
Alternative Investments*	10%	2 - 8	5.0	**3.6**
Additional Categories	15%	4 - 10	7.0	**6.9**
TOTAL			**100.0%**	**100.0%**

* Includes private equity, venture capital, timberland, and infrastructure investments.
** Starting with 7/2008, Cash is only the unallocated cash balance. Manager cash balances will be included with the asset type of the managers investments.
*** As of 6/30/14, 18.2% of Total International Equities was invested in Emerging Markets.

PORTFOLIO RETURNS

For the fiscal year, the retirement annuity trust fund's portfolio generated a total return of 18.1%, exceeding the policy benchmark return of 17.6%. Domestic equities returned 26.3% versus 24.7% for the Standard & Poor's 1500 Index, while international equities returned 22.9% versus 22.3% for the MSCI All Country World (Ex-US) Index. Fixed income investments outperformed, returning 4.8% versus 4.3% for the Barclays Government/Credit Index. Less traditional asset classes such as real estate, private equity, timberland, and alternative credit are beginning to contribute meaningfully to total return as those programs are expanded.

The table below details historical performance for the retirement annuity trust fund and its component asset classes for the period ended June 30, 2014. The retirement annuity trust fund's returns were generated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

Portfolio Returns continued ...

	1 Yr[2]	3 Yr[2]	5 Yr[2]	10 Yr[2]	20 Yr[2]
Total Fund					
KTRS	18.1	11.3	13.7	7.2	8.2
Policy Index [1]	17.6	11.0	13.3	-	-
Equities					
Domestic Equities	26.3	16.8	19.4	8.3	10.2
S & P Blended Index [3]	24.7	16.5	19.2	8.0	9.9
International Equities [4]	22.9	7.4	12.9	-	-
MSCI AC World (Ex US)	22.3	6.2	11.6	-	-
Total Equities	25.2	14.3	17.7	7.7	9.9
Fixed Income					
Total Fixed Income	4.8	5.0	6.3	5.8	6.6
Barclays Govt/Credit Index	4.3	4.1	5.1	4.9	6.2
Real Estate					
Non-Core Real Estate	21.6	18.3	-	-	-
NCREIF Index	11.2	11.3	-	-	-
Core Real Estate	13.8	12.7	7.5	-	-
NCREIF ODCE	12.8	12.5	10.0	-	-
Triple Net Lease Real Estate	6.6	7.7	7.8	8.6	9.0
CPI plus 2%	4.1	3.9	4.1	4.4	4.4
Alternative Investments					
Private Equity [5]	18.6	12.2	15.5	-	-
Timberland	-1.0	3.2	2.3	-	-
NCREIF Timberland Index	9.9	6.7	3.3	-	-
Cash					
Cash (Unallocated)	0.1	0.1	0.1	2.0	3.2
90 Day Treasury Bill	0.0	0.1	0.1	1.6	2.8
Additional Categories					
High Yield					
High Yield Bond Fund	11.0	9.1	-	-	-
B of A Merrill Lynch High Yield Master II	11.8	9.3	-	-	-
Alternative Credit					
KTRS Credit Fund	14.1	-	-	-	-
Special Situations Fund	15.1	5.8		-	-
Oaktree Opportunities Fund	11.2	-	-	-	-
AG Select Partners Adv Fund	-	-	-	-	-
B of A Merrill Lynch High Yield Master II	11.8	9.3		-	-
Shenkman Capital Mgmt	6.6	-	-	-	-
Highbridge Pr Str III	8.6	-	-	-	-
Golub Pearls 11	-	-	-	-	-
Oaktree Eur Dislocation Fund	-	-	-	-	-
Marathon Eur Cr Opp Fund	-	-	-	-	-
S & P LSTA Leverage Loan Index	5.6	-	-	-	-
Non-US Dollar Fixed Income					
Rogge Global Intl Fixed Income	10.0	-	-	-	-
Barclays Global Aggregate ex USD 25% EUR 25% JPY Index	9.5	-	-	-	-

(1) Prior to July 1, 2008, KTRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.

(2) Annualized

(3) Total Domestic Equity is benchmarked to a S & P Blended Index. Total domestic equity was benchmarked to the S & P 500 through the fiscal year ending 6/30/2007. As of 7/1/2007, domestic equity is benchmarked to the S & P 1500 Index since the System's domestic stock mix is most comparable to this index.

(4) As of 06/30/14 18.2% of Total International Equities were invested in emerging markets.

(5) For a period of five years private equity investments will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the first capital call, investments in this class shall be benchmarked versus theS & P 500 plus 3%, which is the System's long-term expected return for this asset class.

SCHEDULE OF INVESTMENT RETURNS - RETIREMENT ANNUITY TRUST

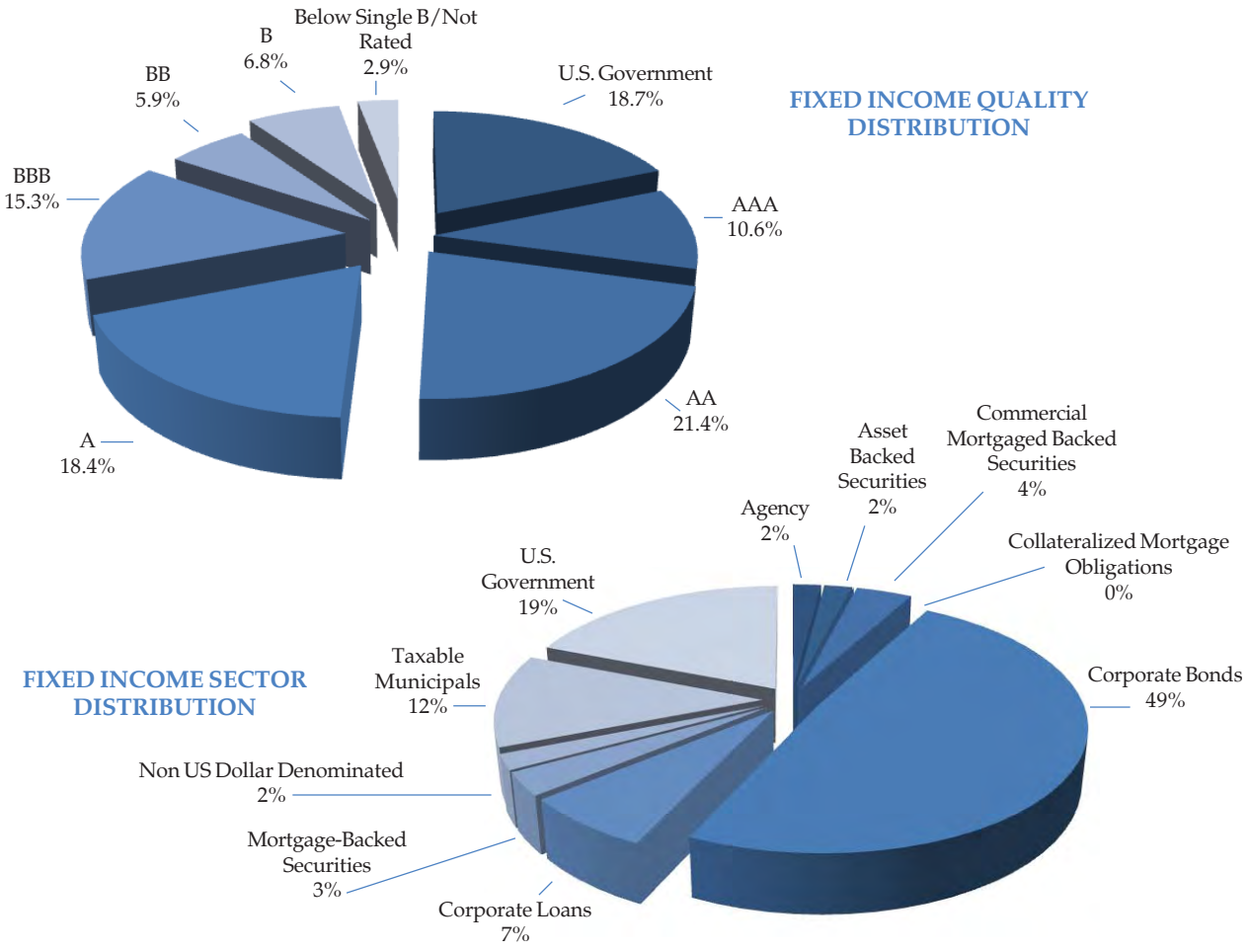
2014	Annual Rate of Return Net of Investment Expense	17.95%

FIXED INCOME INVESTMENTS

As of June 30, 2014, the retirement annuity trust fund had approximately $3.59 billion, 19.9% of total assets, in the fixed income category of investments. The retirement annuity trust fund's fixed income investments maintained the average investment grade rating required by administrative regulation as of June 30, 2014.

In addition, the retirement annuity trust fund had $1.25 billion, 6.9% of total assets, in other debt related investments under a regulatory provision which allows for up to 15% of assets in "additional categories of investments" approved by the Board of Trustees. Investments under this authorization included a high yield bond portfolio, an international fixed income portfolio, and a syndicated bank loan portfolio. Also under this provision are several alternative credit portfolios including a multi - strategy opportunistic credit portfolio as well as distressed debt and specialty lending funds.

The credit quality distribution for the retirement annuity trust fund is illustrated below. This chart includes the fixed income category of investments as well as the high yield bond, international fixed income, and the syndicated bank loan portfolios included in "additional categories of investments". Also illustrated below is the distribution of fixed income assets by sector, again including the high yield bond, international fixed income, and the syndicated bank loan portfolios held under "additional categories of investments".



FIXED INCOME MARKET OVERVIEW

The retirement annuity trust fund's investment grade fixed income portfolios returned 4.8% for the fiscal year ending June 2014. This compares favorably to the trust fund's fixed income benchmark, the Barclays U.S. Government / Credit Index, which returned 4.3%. The outperformance was driven by the system's overweighting in corporate bonds which outperformed government bonds by a substantial margin.

Yields on benchmark U.S Treasuries ended fiscal year 2014 largely unchanged from the close of the previous year. It was hardly uneventful in the rates markets, however, as rates were pushed higher throughout the first half of the year and then drifted back down during the second half. As was the case in fiscal 2013, market participants were focused mainly on the development of the Federal Reserve's monetary policy, but additional factors seemed to have a significant influence on the level of interest rates as the year progressed.

Shortly before the beginning of fiscal year 2014, in May 2013, the Federal Reserve surprised the markets by suggesting that it may start to "taper" its program of purchasing U.S. Treasuries and mortgage backed securities earlier than market participants were expecting. The market adjusted to this new guidance by pushing interest rates sharply higher, causing a substantial selloff in U.S. Treasuries and, to a lesser extent, investment grade fixed income in general as the fiscal year began.

The move higher in interest rates was exacerbated by stronger than expected GDP reports in the first two quarters of the fiscal year. The economy grew by 4.5% in the quarter ended September 2013 and 3.5% in the quarter ended December 2013. These were the second and fifth strongest quarters of GDP growth since June 2006. The robust growth was driven by a significant increase in personal consumption as healthcare and medical procedure expenditures were pulled forward ahead of the rollout of the Affordable Care Act. The yield on 10 year U.S. Treasuries rose from 2.13% at the start of the fiscal year to 3.03% on December 31, 2013, just six months later.

The quick and substantial rise in longer term interest rates, along with unusually cold winter weather, curtailed growth in the quarter ending March 2014. GDP fell 2.1% from the previous quarter, the worst performance since the financial crisis in early 2009. The effects of tighter monetary policy and higher interest rates were especially felt in interest sensitive areas of the economy such as housing. Year over year home price appreciation slowed from 13.3% in June 2013 to 3.7% by the end of fiscal year 2014. The volume of mortgage loan applications for home purchases fell 29% from its peak when rates had bottomed in April 2013. U.S. Treasury rates responded to the slower growth by reversing course, with short rates falling modestly and longer term rates falling sharply.

Despite the slow quarter, the Federal Reserve continued with its pace of tapering asset purchases, a process it started in December 2013 and is expected to complete in October 2014. The decision was well received by market participants, and proved to be the correct course of action. GDP rebounded in the fourth quarter of the fiscal year growing 4.2% on the back of a significant inventory build and catch up from economic activity that was delayed due to the previous quarter's poor weather.

Despite the bounce back in GDP growth, long term interest rates continued their decline while short term rates remained relatively stable causing the term structure to flatten. Market participants' anticipation of the Federal Reserve raising the Federal Funds rate supported shorter term rates while tighter monetary policy lessened the threat of future inflation and caused long term rates to fall. The spread between 30 year U.S. Treasuries and 2 year U.S. Treasuries narrowed to 290 basis points at fiscal year end from 359 basis points at the end of December 2013. By fiscal year end, U.S. Treasury rates had fallen to levels close to where they were at the beginning of the fiscal year. Shorter term rates finished slightly higher and long term rates slightly lower than when the year began in June 2013. Meanwhile, the strength of the economy over the course of the fiscal year proved to be a good environment for corporate bonds. The yield on the Barclay's Investment Grade Long Corporate Index fell from 5.19% to 4.57% as risk premiums shrank consistently throughout the fiscal year.

With U.S. Treasury rates and risk premiums on corporate bonds both near the low end of their historical range, investment grade fixed income is an asset class with moderately unfavorable risk / reward characteristics and below average upside potential. The retirement system continues to adjust the structure of its fixed income portfolio to control risk and maintain required liquidity. Specifically, the retirement system continues to increase exposure to nontraditional debt-related investments, reduce exposure to investment grade fixed income, and limit interest rate risk.

EQUITY INVESTMENTS

As of June 30, 2014 the retirement annuity trust fund's public equity investments had a fair value of $11.39 billion, representing 63.2% of total assets. Strong equity returns over the fiscal year prompted several rebalancing sales to reduce equity exposure back to target levels and to raise cash to fund pension benefits. The retirement annuity trust fund divides its public equity into two broad categories: domestic and international.

The domestic portfolio had a fair value of $7.98 billion as of June 30, representing 44.3% of total assets. This is a $470 million increase over last year despite rebalancing sales. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of three well known component indices based upon market capitalization: the S&P 500 large cap, S&P 400 mid cap, and the S&P 600 small cap. The retirement annuity trust fund's domestic equity holdings are comprised of eleven portfolios. Three of the portfolios are internal passively managed index portfolios benchmarked to the S&P 500, 400, and 600. The other eight portfolios are managed externally by four different asset managers, with each portfolio representing a specific strategy and measured against an appropriate benchmark. The collective array of portfolios provides diversification by capitalization, manager, style, and strategy.

The fair value of the international equity holdings as of June 30, 2014 was $3.41 billion, representing 18.9% of total assets, up from 16.7% a year earlier. The benchmark for international equities is the Morgan Stanley Capital International All Country World Index ex US (MSCI ACWI ex US), which represents the markets of 22 developed countries and 23 emerging market countries. Five external asset managers manage the retirement annuity trust fund's international equities, one of which is a passively managed international index fund. The retirement annuity trust fund plans to continue increasing the international equity exposure during the coming fiscal year.

EQUITY MARKET OVERVIEW

Stocks rallied steadily throughout fiscal year 2014. The upward trend was fairly consistent starting in October after a moderate first quarter. This strong, steady rise saw few hiccups, with the most pronounced setback coming in late January to early February 2014. Returns of domestic stocks as measured by the S&P 1500 and Russell 2000 were 24.7% and 23.6%, respectively. Within the S&P 1500, small (S&P 600) and mid-cap (S&P 400) stocks were up 25.5% and 25.2%, while the large-cap S&P 500 was up 24.6%. Non-U.S. stocks also performed very well on the year, but with higher volatilities. The Morgan Stanley Capital International (MSCI) All Country World (ex-U.S.) Index returned 22.3%. The MSCI Emerging Markets Index was up 14.7%, showing strong returns across international markets.

The domestic markets were propelled by rising housing prices and stronger consumer confidence in the first half of the fiscal year. Despite rumors to the contrary, in September the FOMC announced it would not reduce the pace of its monthly bond buybacks, better known as quantitative easing. This kept key interest rates low and markets rallied. Political infighting, however, kept stock prices in check in the first half of the year, primarily in September and October. There was political stalemate over a Federal Funding Bill, primarily over the funding allocation to be given to the Affordable Care Act. Without a bi-partisan resolution, this may have caused a government shutdown of most federal programs, resulting in thousands of people being furloughed from their jobs nationwide. Additionally, there were heated debates over the soaring national debt. A decision had to be made to raise the federal debt limit. Without a higher debt ceiling, the federal government would have had to default on select payment obligations, possibly sending the markets into a tailspin. While the looming government shutdown and possible defaults accounted for a pullback in the market, this pullback was relatively short lived as politicians ultimately reached an agreement on the budget issues. The markets rallied strong to finish out the first half of the fiscal year with the S&P 500 posting a gain of 16.3% for the first two quarters.

The second half of the fiscal year continued an upward trend domestically, as stocks rallied on better employment data and continued signs of strength in the manufacturing sector. Consumer confidence was also at favorable levels. Manufacturing was primarily led by a jump in the housing market. Rising employment numbers coupled with low borrowing costs were the main drivers of the housing market. Stocks did see a significant pullback at the end of January which was primarily attributed to the brutal winter. The cold winter coupled with higher than average snowfall took a bite out of retail sales and consequently lowered manufacturing numbers. This proved to be a minor bump in the road however, as consumer confidence remained undeterred and continued to rise. As a result, the equity markets rallied steadily in the second half, finishing the fiscal year at all-time highs. Another attribute of the strong equity market was the historically low volatility the markets experienced.

Internationally, there was a similar story as the European Central Bank (ECB) and the Bank of Japan (BOJ) continued quantitative easing programs. The MSCI EAFE and ACWI ex US posted similar returns to the US markets in

the first half of the fiscal year. European markets stabilized with the ECB's bond purchase program and the UK saw strong rises in their housing market. Asia continued to experience a favorable reaction to QE. Japan started slower than the rest of Asia, but rallied strong due to concerted efforts to devalue the Yen and boost its export economy. As a result, their manufacturing numbers saw heavy gains bolstering the economy as a whole.

In the second half of the fiscal year emerging markets rallied as China announced the issuance of several new IPOs. This showed confidence in their stabilizing economy. Europe and Japan also continued to post gains on the heels of their respective low interest rate environments and their improving housing and manufacturing markets.

In summary, we experienced a very strong equity market for the fiscal year. Small and mid-cap domestics were technically the drivers, but domestic and international large caps also enjoyed double digit gains on the year. Having been buoyed by monetary stimulus over the past couple of years, markets are wary going forward of any potential reduction or elimination of that stimulus. This, coupled with rising valuations in the market and growing geopolitical tension, may give some investors pause for the coming year. On the other hand, FOMC Chair Janet Yellen has already announced continued use of accommodative monetary policy that will keep rates low in the near future and consumer confidence seems undeterred by most external factors.

REAL ESTATE

The retirement annuity trust fund's real estate investments had a fair value of $733.0 million as of June 30, 2014, representing 4.1% of total assets. The retirement annuity trust fund's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow, and provide diversification, thereby reducing the volatility of the overall investment portfolio.

The retirement annuity trust fund's real estate exposure is currently provided through seven portfolios. The retirement annuity trust fund maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high credit quality tenants. The retirement annuity trust fund is also invested in a commingled real estate fund (PRISA Fund), which is managed by Prudential Real Estate Investors. This fund is a core real estate equity fund which invests primarily in existing income-producing properties with strong cash flows and the potential for capital appreciation. The fund is diversified across several property types including office, retail, industrial, apartment, self-storage and hotel.

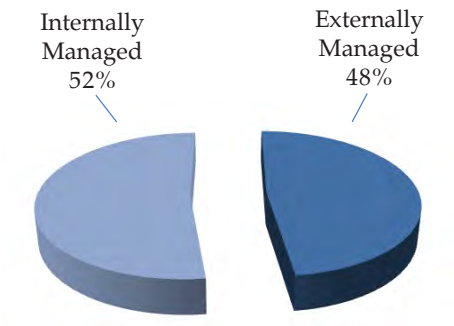
Additionally, the retirement annuity trust fund is invested in five real estate limited partnerships: Carlyle Realty Partners VI, Blackstone Real Estate Partners VII, Rockwood Capital Real Estate Fund IX, TA Realty Associates Fund X, and AG Net Lease Realty Fund III. Going forward, investment staff will continue to opportunistically add to the annuity trust fund's real estate investments.

REAL ESTATE OVERVIEW

Demand for commercial real estate remained strong during the fiscal year as investors sought both higher yields than those offered by other asset classes and the potential upside created by improving supply/demand factors. Property rents are expected to grow from 2.0% to 3.5% during the year due to improving fundamentals which include: a strengthening economy, falling vacancies, low financing rates, and moderate levels of new construction activity. Due to the run-up in prices of prime properties located in gateway markets, many investors are now focusing on non-core assets located in secondary markets.

One factor that has energized the real estate markets is the increase in lending activity. Commercial and multi-family loan originations are at their highest levels in six years. According to the Mortgage Bankers Association, an estimated $280 billion in new loans was originated in 2013, up from $244 billion the previous year. In conjunction with this increase in lending, a tremendous volume of existing commercial and multi-family mortgage loans will be rolling off the books in coming years, with approximately $330 billion maturing in 2014 and another $981 billion expected to mature between 2015 and 2017. As borrowers

Real Estate Investments
$733.0 Million Fair Value
As of June 30, 2014



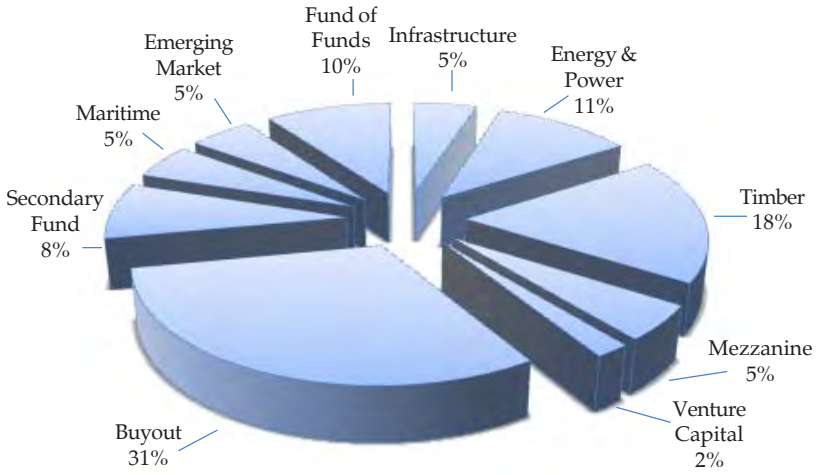
look to recapitalize this maturing debt, both equity and mezzanine debt investors will have ample opportunities to provide financing at attractive levels.

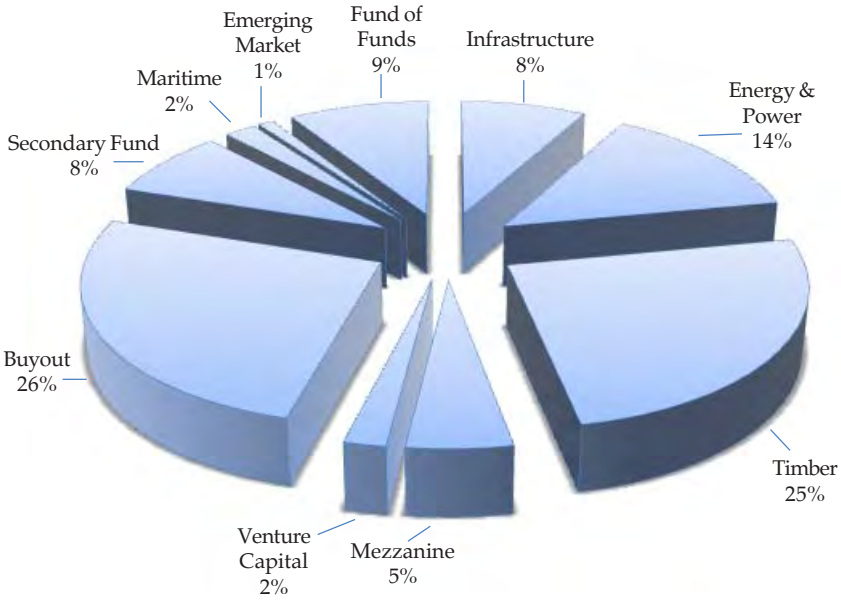
Investor demand for real estate investments should remain strong over the next year due to the sector's solid income yields and improving fundamentals. Interest rates are expected to remain low over the upcoming year while demand for property space continues to grow, providing a favorable environment for lower vacancy rates, higher rents, and competitive returns.

ALTERNATIVE ASSETS

As of June 30, 2014, the retirement annuity trust fund had committed $1.095 billion to alternative investments and had funded $679 million of those commitments. The percentage of the retirement annuity trust fund's portfolio in alternative assets was 3.6%. The retirement annuity trust fund's current alternative asset portfolio consists of private equity investments and timberland.

Alternative Assets Committed $1.095 Billion as of June 30, 2014





Alternative Assets Funded $679 Million as of June 30, 2014

PRIVATE EQUITY

The retirement annuity trust fund has exposure to venture, buyout, infrastructure, energy, mezzanine and several other private equity sectors via participation in limited partnerships as well as investments in funds of funds. The retirement annuity trust fund is in the early stages of its private equity investment program, which it intends to grow with a disciplined plan of commitments over the next several years. The retirement annuity trust fund looks to diversify its private equity portfolio by firm, country, strategy, and vintage year. Vintage year diversification is achieved by building out the portfolio with disciplined levels of commitments over time. A commitment to any given partnership shall not exceed 20% of the partnership's total commitments.

The Board and staff understand that private equity (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with other publicly traded assets, this asset class can help to diversify and reduce risk for the retirement annuity trust fund's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence, during the harvesting period.

PRIVATE EQUITY MARKET OVERVIEW

The private equity markets continue to be positively affected by the strong public equity markets. Strength in the public equity markets enabled older vintage funds to shed many of their portfolio companies either through a sale or an IPO. This return of capital has encouraged investors, especially on the institutional side to continue to increase their allocation to alternative investments, including private equity. However, fundraising continues to remain challenging for all but the top tier funds.

The bifurcation in the private equity market continues with the top tier funds raising capital much easier than less desirable funds. This should, over the long term, provide a shakeup in this space as the weaker firms are forced to exit. The past fiscal year has also seen a large amount of buyout funds returning to the marketplace with mixed results. We continue to see more opportunity in the middle market space and in other niche areas such as energy, infrastructure, distressed credit, and emerging markets. Additionally, the stress in the European markets should continue to present investment opportunities in the private equity space over the next fiscal year.

TIMBERLAND

In addition to private equity, the retirement annuity trust fund has invested in timberland in the alternative asset class. As of June 30, 2014 the retirement annuity trust fund owns approximately 73,000 acres of timberland outright, has a 7.15% interest in a commingled fund that holds approximately 98,000 acres of timberland and is a member of a joint venture that purchased an interest in approximately 124,000 acres of timberland located across seven southern states. Timberland is, by nature, a long term investment as our anticipated time horizon in this asset category is generally a minimum of ten to fifteen years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the retirement annuity trust fund's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long-term.

The retirement annuity trust fund diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are primarily driven from net cash flow generated from the sale of trees (referred to as stumpage sales) and capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of forest commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland from the conversion of timberland into higher and better uses, such as vacation property sales.

TIMBERLAND MARKET OVERVIEW

An increase in construction activity during the year provided support to lumber prices as the U.S. housing market continues to steadily rebound. Demand from China softened somewhat over the past year as their economic growth has slowed. However, demand for hardwood has remained strong and as a result, hardwood pulpwood and hardwood sawtimber prices have moved to levels well above their long-term trend lines. Transaction activity in the

North America timberlands space is picking up momentum, which is a positive sign for a sustained recovery in timberland prices.

The forest products industry is seeking to increase its use of existing assets and add capacity in order to meet current and expected product demand, a welcome development for timberland owners and further evidence that markets for timber products are improving. In the U.S. South, prices for all products continued to strengthen, although some species at a slower pace than others. Despite the usual pricing volatility associated with late spring and early summer, market fundamentals have continued to be strong.

RETIREMENT ANNUITY TRUST
PORTFOLIOS
FAIR VALUES *
June 30, 2014

Internally Managed	
Cash Equivalents	
Cash Collections Fund (Unallocated)	$ 420,338,047
Fixed Income	
Intermediate Bond Fund	903,853,177
Broad Market Bond Fund	656,009,896
Long Term Bond Fund	530,521,107
Internal Bond Fund	367,876,859
Life Insurance Trust	89,250,576
Tax Shelter Fund	377,267
Equity	
S & P 500 Stock Index Fund (Large Cap)	2,674,052,873
S & P 400 Stock Index Fund (Mid Cap)	369,830,139
S & P 600 Stock Index Fund (Small Cap)	259,503,908
Converted Equity Holdings	4,303,142
Real Estate	
Internally Managed Fund	382,542,197
Subtotal	6,658,459,188
Externally Managed	
Fixed Income	
Galliard Capital Management	535,942,448
Ft. Washington Broad Market	511,134,634
Domestic Equity	
Todd Asset Management (Large Cap Core)	1,321,587,395
UBS (Large Cap Value)	1,053,855,212
GE Asset Management (Large Cap Growth)	711,928,370
Wellington (Large Cap Core)	616,936,214
Wellington (Mid Cap Core)	315,532,711
Todd Asset Management Opportunity Fund	306,837,942
UBS (130/30)	177,464,526
Wellington (Small Cap Core)	170,688,341
International Equity	
Baillie Gifford EAFE Alpha	858,783,524
Todd Asset Management International	834,105,006
UBS All Country World ex US	610,033,944
Baring All Country World ex US	527,320,034
BlackRock All Country World ex US IMI	493,949,410
Todd Asset Management International Intrinsic Value	87,230,251
Real Estate	
Prudential PRISA Fund	223,183,257
Blackstone Partners VII, LP	41,935,778
The Realty Associates Fund X	33,550,648
Carlyle Realty Partners VI	31,821,452
Rockwood Capital Real Estate Fund IX	18,109,844
AG Net Lease Realty Fund III, LP	1,902,669

Externally Managed continued ...	
Alternative Investments	
Molpus Woodlands Group Lake Superior Timberlands LLC	101,664,498
KKR & Co European Fund III	70,201,067
Molpus Seven States LLC	57,028,605
Alinda Infrastructure Fund II	44,390,951
Riverstone/Carlyle E & P Fund IV	33,217,261
Ft. Washington Fund VI	33,180,145
Hellman & Friedman Fund VII	32,670,143
NGP Natural Resources X, LP	32,183,738
Hancock Bluegrass LLC - Oregon	27,788,593
Lexington Capital Partners Fund VII	19,989,023
Landmark Equity Partners Fund XIV, LP	19,305,809
KKR & Co Fund 2006	19,175,706
Chrysalis Venture Fund III	18,944,406
J. P. Morgan Maritime Fund	17,917,553
Riverstone E & P Fund V	15,161,443
Ft. Washington Fund V	14,621,971
Oaktree European Principal Fund III	14,226,029
Stepstone Pioneer Capital Fund III, LP	13,556,822
Oaktree Mezzanine Fund III	11,971,475
Audax Mezzanine Fund III	11,433,600
Actis Global Fund IV	10,967,792
APAX VIII, LP	7,929,973
Audax Private Equity Fund IV, LP	7,030,126
Landmark Equity Partners Fund XV, LP	4,505,775
Carlyle Global Financial Services Partners II	3,690,622
Ft. Washington Fund VIII	581,426
CapitalSouth Partners Fund III	555,737
Additional Categories	
Fort Washington High Yield Bond Fund	320,156,739
Marathon KTRS/Credit Fund LP	277,608,701
Shenkman Capital Management	263,576,820
Avenue Special Situations Fund VI	111,561,330
Rogge Global International Fixed Income	100,725,256
Golub Capital Pearls 11, LLC	63,159,049
Marathon European Credit Opp Fund II	33,731,503
Oaktree Opportunities IX, LP	33,508,417
Highbridge Principal Strategies III	31,722,781
AG Select Partners Advantage Fund	8,246,270
Oaktree European Dislocation Fund, LP	4,621,038
AG GECC PPIF, LP	33,158
Subtotal	**$ 11,376,374,961**
TOTAL ASSETS	**$ 18,034,834,149**

* *Detailed information concerning the market values of all KTRS investments is available upon request.*

Investment Summary
Fair Value – Retirement Annuity Trust*
June 30, 2014

Type of Investment	Fair Value 07/01/13	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/14
Cash Equivalents	$ 800,978,300	$ 4,457,688,600	$ -	$ 4,429,302,100	$ 829,364,800
Fixed Income	3,179,986,300	2,917,329,700	38,124,700	2,806,306,800	3,329,133,900
Real Estate	642,611,200	88,488,500	23,972,100	22,026,000	733,045,800
Alternative	540,739,200	175,148,100	41,996,200	113,993,200	643,890,300
Equities	10,102,552,800	2,805,808,600	2,254,541,600	3,896,714,200	11,266,188,800
Additional Categories	882,969,700	692,687,400	65,369,500	407,816,100	1,233,210,500
TOTAL	**$ 16,149,837,500**	**$ 11,137,150,900**	**$ 2,424,004,100**	**$ 11,676,158,400**	**$ 18,034,834,100**

* *Includes Life Insurance Trust values of $89,250,576, Tax Shelter Annuity value of $377,267, and 401(h) value of $41,237,374.*

Contracted Investment Management Expenses
Fiscal Year 2013-14
(in thousands)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 8,086,253	$ 13,713	
Fixed Income Manager(s)	1,047,077	442	
Real Estate	350,504	4,198	
Additional Categories	1,248,651	5,980	
Alternative Investments [2]	643,890	9,290	
TOTAL	$ 11,376,375	$ 33,623	29.6
Other Investment Services			
Custodian Fees [3]	$ 18,035,374	$ 354	0.2
Consultant Fees		446	0.3
Legal & Research		90	0.0
Other Administrative and Operational		2,664	1.5
TOTAL	**$ 18,035,374**	**$ 3,554**	**2.0**
GRAND TOTAL		**$ 37,177**	**20.6**

(1) – One basis point is one hundredth of one percent or the equivalent of .0001.
(2) – Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.
(3) – Includes J. Losey Scholarship Fund.

Schedule of Contracted and Administrative Investment Expenses
Retirement Annuity Trust
June 30, 2014

INVESTMENT COUNSELOR FEES

EQUITY MANAGERS		
Baillie Gifford	$	2,946,160
Baring Asset Management, Inc.		2,408,105
GE Asset Management		800,000
Todd-Veredus Asset Management LLC		1,358,058
UBS Global Asset Management		2,914,577
Wellington Management Company		3,063,448
BlackRock		222,724
Total Equity Managers	**$**	**13,713,072**
FIXED INCOME MANAGERS		
Fort Washington Investment Broad Market		175,713
Galliard Capital Mangement		266,027
Total Fixed Income Managers	**$**	**441,740**
REAL ESTATE		
Prudential PRISA		1,551,710
Angelo Gordon Net Lease Fund III		129,986
Blackstone Partners Fund VII, L.P.		745,513
Carlyle Realty Partners Fund VI, L.P.		746,918
Carlyle Realty Partners Fund VII, L.P.		57,534
Rockwood Capital Real Estate Fund IX, L.P.		583,788
TA Realty Associates Fund X, L.P.		382,657
Total Real Estate Managers	**$**	**4,198,106**
ADDITIONAL CATEGORIES		
Angelo Gordon Select Partners Advantage Fund		26,584
Avenue Capital Special Situations Fund VI, L.P.		854,665
Fort Washington Investments High Yield		626,443
Golub Capital - Pearls 11, LLC		193,866
Highbridge Principle Strategies Fund III, L.P.		278,595
Marathon Credit Fund		2,153,091
Marathon European Credit Fund II		136,651
Marathon Legacy Securities PPIP		2,785
Oaktree European Dislocation Fund, L.P.		58,567
Oaktree Opportunities Fund IX, L.P.		471,420
Rogge Global International Fund		240,384
Shenkman Capital		936,777
Total Additional Category Managers	**$**	**5,979,828**
ALTERNATIVE INVESTMENTS		
Actis Global Fund IV, L.P.		499,000
Alinda Core Fund III, L.P.		185,366
Alinda Infrastructure Fund II, L.P.		367,370
APAX Fund VIII, L.P.		415,747
Audax Mezzanine Fund III, L.P.		284,571
Audax Private Equity Fund IV, L.P.		105,675
Capital South Fund III, L.P.		-
Carlyle Global Finacial Services Fund II, L.P.		672,399
Chrysalis Fund III, L.P.		427,342
Fort Washington Fund V, L.P.		98,964
Fort Washington Fund VI, L.P.		247,000
Fort Washington Fund VIII, L.P.		48,113
Hancock Bluegrass LLC Oregon		222,822
Hellman and Friedman Fund VII, L.P.		548,105
JP Morgan Maritime Fund , L.P.		524,742
KKR Fund 2006, L.P.		78,455
KKR European Fund III, L.P.		497,544
Landmark Equity Partners Fund XIV, L.P.		375,000
ALTERNATIVE INVESTMENTS continued ...		
Landmark Equity Partners Fund XV, L.P.		424,315
Lexington Capital Partners Fund VII, L.P.		239,298
Molpus Lake Superior Michigan		766,830
Molpus Lake Superior Hiwassee		65,875
Molpus Seven States		546,311
NGP Natural Resources Fund X, L.P.		319,266
Oaktree European Principal Fund III, L.P.		375,858
Oaktree Mezzanine Fund III, L.P.		375,000
Stepstone Partners Fund III, L.P.		195,217
Riverstone/Carlyle Energy and Power Fund IV, L.P.		164,423
Riverstone Energy and Power Fund V, L.P.		219,825
Total Alternative Managers	**$**	**9,290,433**

ADMINISTRATIVE AND OPERATIONAL EXPENSES

CUSTODIAN		
The Bank of New York Mellon		353,749
Total Custodian Fees	**$**	**353,749**
CONSULTANT		
Hewitt EnnisKnupp + Associates		358,850
Bevis Longstreth		54,553
George Philip		33,056
Total Consultant Fees	**$**	**446,459**
LEGAL & RESEARCH		
Reinhart Boerner Van Deuren		2,237
Wolters Kluwer		8,254
Ice Miller		79,848
Total Legal & Research	**$**	**90,339**
OTHER		
Other Administrative and Operational (includes Personnel, Subscription services, etc…)		2,664,024
Total Other Administrative and Operational	**$**	**2,664,024**
TOTAL INVESTMENT EXPENSES	**$**	**37,177,750**

Ten Largest Stock Holdings Ranked [1] [2] by Fair Value
June 30, 2014

Rank	Description	Fair Value	Percentage of Equities
1	Apple Inc	211,831,798	2.460
2	JP Morgan Chase	101,866,859	1.183
3	Wells Fargo & Co	94,439,125	1.096
4	Exxon Mobil Corp	89,301,247	1.037
5	Qualcomm Inc	87,166,411	1.012
6	Gilead Sciences	86,274,654	1.002
7	Chevron Corp	79,825,189	0.927
8	Citigroup Inc	78,453,622	0.911
9	Schlumberger Ltd	73,009,281	0.848
10	Pepsico Inc	72,335,828	0.840

Top Ten Fixed Income Holdings [2] by Fair Value
June 30, 2014

Rank	Description	Maturity	Coupon	Par Value	Fair Value	Percent of Fixed Income
1	U S Treasury	10/15/2016	0.630	75,000,000	75,076,500	2.255
2	U S Treasury TIPS	4/15/2016	0.130	55,825,000	61,532,188	1.848
3	U S Treasury	9/30/2017	0.630	55,375,000	54,687,243	1.643
4	U S Treasury	4/30/2018	0.630	50,290,000	49,103,659	1.475
5	U S Treasury Bonds	8/15/2023	6.250	31,900,000	42,078,014	1.264
6	U S Treasury	11/30/2015	0.250	30,980,000	30,993,321	0.931
7	U S Treasury Bonds	8/15/2029	6.130	22,000,000	30,707,160	0.922
8	U S Treasury	5/31/2015	0.250	30,000,000	30,037,500	0.902
9	U S Treasury	6/30/2020	1.880	26,000,000	25,975,560	0.780
10	U S Treasury	3/31/2017	1.000	23,180,000	23,317,689	0.700

(1) Includes only actively managed separate accounts.
(2) Detailed information concerning these values along with book values and cost of all KTRS investments is available upon request.

Transaction Commissions Fiscal Year 2013-2014

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Academy Securities, Inc.	27,649	$ 967.73	$ 0.035	0.04 %
Allen & Co	700	382.20	0.546	0.02
B. Riley & Co. LLC	18,614	651.49	0.035	0.03
Barclays	779,804	34,366.53	0.044	1.44
Barclays Capital, London	14,789	318.31	0.022	0.01
Bay Crest Partners, LLC	400	14.00	0.035	0.00
BB & T Capital Markets	6,100	213.50	0.035	0.01
Blair, William & Co	126,546	4,643.80	0.037	0.19
BMO Capital Markets	94,892	4,760.05	0.050	0.20
BNP Paribas Securities Bond	15,208	537.28	0.035	0.02
BNY ConvergEX Group	1,400	49.00	0.035	0.00
Brean Murray, Carret & Co., LLC	11,525	403.38	0.035	0.02
BTIG	189,705	7,787.10	0.041	0.33
Burke & Quick Partners LLC	4,040	141.40	0.035	0.01
Cabrera Capital	2,540	88.90	0.035	0.00
Canaccord Genuity, Inc.	92,083	3,229.72	0.035	0.14
Cantor Fitzgerald & Co	46,533	1,124.34	0.024	0.05
CIBC Worldmarket	23,510	822.86	0.035	0.03
Citigroup Global	342,471	37,118.33	0.108	1.56
ConvergEx - Algos	19,501,259	97,470.30	0.005	4.09
ConvergEx - FS	1,570,165	23,689.98	0.015	0.99
ConvergEx ADR Conversions	3,310,550	118,697.31	0.036	4.98
Cowen & Co	50,487	8,955.06	0.177	0.38
Credit Agricole Securities	99,075	3,457.31	0.035	0.15
Credit Research & Trading LLC	27,911	1,197.41	0.043	0.05
Credit Suisse Sec. LLC	2,223,098	60,670.45	0.027	2.55
Cuttone & Co Inc	8,066	288.82	0.036	0.01
D A Davidson & Co	700	24.50	0.035	0.00
Deutsche Bank	463,266	36,404.24	0.079	1.53
Drexel Hamilton LLC 3	26,224	917.86	0.035	0.04
Evercore Group LLC	2,260	79.10	0.035	0.00
FBR Capital Markets	9,500	332.50	0.035	0.01
Fig Partners, LLC	81,840	2,571.30	0.031	0.11
First Kentucky Securities Corp	584,600	17,538.00	0.030	0.74
Freidman Billings	48,720	1,705.21	0.035	0.07
GFI Securities LLC	1,300	45.50	0.035	0.00
Goldman Sachs	1,744,538	69,381.60	0.040	2.91
Imperial Capital	12,700	571.50	0.045	0.02
Instinet	67,524	1,364.88	0.020	0.06
Investment Tech Grp Transition	41,174,306	401,213.95	0.010	16.83
Investment Technology Grp	16,767,580	241,556.47	0.014	10.13
ISI Group	2,271,997	63,848.84	0.028	2.68
J.J.B. Hilliard, W.L. Lyons	2,225,709	66,771.27	0.030	2.80
Janney Montgomery Scott Inc	65,820	2,305.16	0.035	0.10
Jefferies & Co.	375,291	20,919.41	0.056	0.88
JMP Securities	23,790	832.65	0.035	0.03
Jones & Associates	19,385	829.64	0.043	0.03
JP Morgan & Chase	696,953	24,805.84	0.036	1.04
Keefe Bruyette & Woods	115,710	4,953.06	0.043	0.21
Keybanc Capital	75,400	3,468.66	0.046	0.15
King, CL, & Associates, Inc.	4,650	165.75	0.036	0.01
Knight Equity Markets	29,300	1,031.76	0.035	0.04
Lazard Freres & Co.	1,768,320	53,049.60	0.030	2.23
Leerink Swann & Co.	25,885	1,521.07	0.059	0.06
Lexington Investment Co.	191,400	5,742.00	0.030	0.24
Liquidnet Inc	14,265,435	142,628.34	0.010	5.98
Liquidnet Inc - Transition	13,297,700	99,732.85	0.008	4.18

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Longbow Securities LLC	200	7.00	0.035	0.00
Loop Capital Markets, LLC	1,170	39.70	0.034	0.00
MacQuarie Securities Inc	37,744	695.86	0.018	0.03
Merrill Lynch	4,924,017	109,542.82	0.022	4.60
Merrill Lynch ADR Conversions	409,781	12,293.43	0.030	0.52
Merrill Lynch, Pierce, Fenner	37,712	15,400.42	0.408	0.65
Mischler Financial Group Inc	3,310	115.85	0.035	0.00
Mizuho Securities, USA	20,445	715.58	0.035	0.03
MKM Partners	7,450	260.75	0.035	0.01
Morgan Keegan	1,190,500	35,715.00	0.030	1.50
Morgan Stanley	414,118	19,631.61	0.047	0.82
Morgan Stanley Smith Barney-Huntington	1,224,200	36,726.00	0.030	1.54
Morgan Stanley Smith Barney-Louisville	1,661,450	49,843.50	0.030	2.09
Morgan Stanley Smith Barney-Northern KY	1,648,000	49,440.00	0.030	2.07
National Financial Services Corp	1,700	59.50	0.035	0.00
OTA Limited Partners	16,010	609.46	0.038	0.03
Pacific Crest Securities	2,060	272.10	0.132	0.01
Pershing LLC	85,390	2,988.66	0.035	0.13
Piper Jaffray	111,425	8,944.97	0.080	0.38
Pulse Trading	88,162	881.62	0.010	0.04
R W Baird	300,704	10,523.10	0.035	0.44
Raymond James & Assoc	3,106,239	94,486.05	0.030	3.96
RBC Capital Markets	201,936	7,157.44	0.035	0.30
Rosenblatt Securities LLC	400	18.00	0.045	0.00
Ross Sinclaire & Assoc	202,320	6,069.60	0.030	0.25
Sanford C Bernstein	272,223	3,405.82	0.013	0.14
Scotia Capital, USA	14,080	497.27	0.035	0.02
SG AMERICAS SECURITIES	5,300	238.50	0.045	0.01
Sidoti & Company LLC	4,050	141.75	0.035	0.01
Simmons & Co	14,150	495.25	0.035	0.02
State Street Global	24,040	1,081.80	0.045	0.05
Stephens Inc.	53,780	1,896.01	0.035	0.08
Sterne, Agee & Leach	37,160	1,369.80	0.037	0.06
Stifel, Nicolaus & Co	1,448,747	76,513.60	0.053	3.21
Stifel, Nicolaus & Co-Louisville	199,100	5,973.00	0.030	0.25
Suntrust Robinson	63,240	2,298.13	0.036	0.10
Susquehanna Brokerage	1,480	66.60	0.045	0.00
Telsey Advisory Group LLC	186,207	6,517.34	0.035	0.27
The Benchmark Company LLC	14,700	661.50	0.045	0.03
The Seaport Group	53,705	69.11	0.001	0.00
UBS/Paine Webber Securities	558,817	10,460.66	0.019	0.44
UBS/Paine Webber-Louisville	1,131,610	33,948.30	0.030	1.42
Wachovia / First Clearing Corp	3,840	134.40	0.035	0.01
Wedbush Morgan Securities	21,770	815.95	0.037	0.03
Weeden & Co	2,491,557	76,081.80	0.031	3.19
Wells Fargo Securities, LLC	222,843	16,637.71	0.075	0.70
Wunderlich Securities Inc	8,265	3,293.58	0.398	0.14
TOTAL	**147,554,030**	**$ 2,383,394.97**	**$ 0.02**	**100%**

The acquisition of initial public offerings (IPOs)represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate; however, the security issuers and not the investors pay the commissions. In 2013-14, the retirement annuity trust fund bought small capitalization IPOs that generated $324,724 in commissions. Although these commissions were not paid by the retirement system, they resulted from the retirement annuity trust fund's investment activities and are included in the total commissions of $2,383,395. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.03 per share or less. Investment companies usually provide investment research for brokerage clients.

PROXY VOTING AND CORPORATE BEHAVIOR

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The Board has adopted the following position on corporate behavior:

The Board's stated fiduciary duty is to obtain the highest return for the Fund commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the Fund as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the Fund has invested.

The Board expects the managements of the companies whose equity securities are held in the Fund's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the Board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the Board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission, and others which are covered by the laws of the United States Government or the State of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the System's holdings in the company, if the sale is consistent with sound investment policy.

SECURITY LENDING

The System operates a security lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and select stocks and bonds are the types of securities loaned. The System's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral, at the time of the loan, has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral consists of cash, marketable U.S. Government securities, and selected marketable U.S. Government agency securities approved by the System.

Cash collateral is invested in short term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities unless the borrower defaults. The lending agent also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. The weighted average maturity of cash collateral investments is typically two days. The System has no credit risk exposure to borrowers, since the amounts the System owes borrowers exceeds the amounts the borrowers owe the System.

Security lending programs can entail considerable interest rate risk and credit risk. The System has structured its program to minimize these two main categories of risk. The interest rate risk is managed, as mentioned above, by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the creditworthiness of lent securities.

KENTUCKY INVESTMENTS

The retirement system is always cognizant of its significant role in the Commonwealth's economy. Over $1.6 billion in benefits are distributed to members and annuitants living in Kentucky annually. Approximately $300 million of the retirement annuity trust fund's investments directly impact the Commonwealth. These investments include: commercial real estate; bonds issued by public agencies of the Commonwealth and those of local municipalities; pools of single-family mortgages in Kentucky; financing for multi-family housing, and; investments in companies which have an impact on the Commonwealth's economy but receive earnings from global operations. Fiduciary duty requires that investments be made solely for the benefit of the retirement system's members and annuitants. Investments which benefit the Commonwealth's economy are made only when fully consistent with this fiduciary duty.

PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
Hewitt EnnisKnupp, Inc.

Investment Custodian
The Bank of New York Mellon

Fixed Income Managers
Galliard Capital Management
Ft. Washington Investment Advisors

Domestic Equity Managers
Todd Asset Management LLC
UBS Global Asset Management
Wellington Management Company
GE Asset Management

International Equity Managers
Todd Asset Management LLC
UBS Global Asset Management
Baring Asset Management, Inc.
Baillie Gifford
BlackRock Institutional Trust Company

Real Estate Managers
Prudential Real Estate Investors
Carlyle Realty Partners
Blackstone Real Estate Partners
Rockwood Capital Real Estate
TA Associates Realty
Angelo Gordon & Co.

Alternative Investment Managers
Molpus Woodlands Group
Hancock Natural Resources Group
Kohlberg Kravis Roberts & Co.
Chrysalis Ventures
Ft. Washington Private Equity Investors
Alinda Capital Partners, LLC
Riverstone Holdings, LLC
CapitalSouth Partners
Landmark Partners
Lexington Partners
Oaktree Capital Management
Stepstone Pioneer Capital
Audax Group
J.P. Morgan Asset Management
Hellman & Friedman Capital Partners
Natural Gas Partners
Apax Partners
Actis LLP
Carlyle Global Partners

Additional Categories Investment Managers
Avenue Capital Group
Marathon Asset Management
Ft. Washington Investment Advisors
Oaktree Capital Management
Shenkman Capital Management, Inc
Rogge Global Partners
Highbridge Principal Strategies, LLC
Angelo Gordon & Co.
Golub Capital

Attorney
Ice Miller LLP

HEALTH INSURANCE TRUST FUND

INVESTMENT POLICY SUMMARY

The statute that created the health insurance trust fund on July 1, 2010, KRS 161.677, obliges the Board to "manage the assets of the fund in the same general manner in which it administers the retirement funds, except that the asset allocation may differ and separate accounting and financial reporting shall be maintained for the trust fund." KRS 161.430, which governs the investment of funds for the retirement funds, requires that members' assets be managed in a manner consistent with fiduciary standards set forth in the "prudent person rule." Subject to this statute, administrative regulation 102 KAR 1:178 establishes investment policies for the health insurance trust fund. This regulation requires the Board and Investment Committee to prudently diversify assets and to consider the fund's "liquidity and its capability of meeting both short and long-term obligations" in setting asset allocation policy.

Due to an imbalance of required distributions over contributions early in the fund's existence, liquidity needs have dominated investment policy. This will evolve as contribution rate increases provided in statute improve cash flow in future years. As near-term liquidity needs recede in importance, the focus will increasingly be on establishing an investment policy which achieves the required rate of return and matches the health insurance liability.

INVESTMENT OBJECTIVES

The definitive objective of the health insurance trust fund is to provide for beneficiaries' health insurance benefit obligations, both short and long-term. In support of this objective, investment policy will be designed, on an ongoing basis, to: (1) meet all liquidity needs, (2) achieve the actuarially assumed 8.0% rate of return over the long-term, and (3) do so within appropriate risk levels.

RISK CONTROLS

Any investment program faces various risks; as with the retirement funds, the primary risk is that the assets will not support liabilities over the long-term. Risk control measures for the health insurance trust fund mirror those of the retirement annuity trust fund, but are customized to reflect the fund's unique liability. Primary risk control measures include the following steps:

- Actuarial valuations are performed each year to evaluate the funding objectives of the health insurance trust fund. Every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the fund.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the fund.
- In accordance with administrative regulation 102 KAR 1:178, which governs investment policies for the fund, the KTRS Investment Committee adopts and regularly reviews an asset allocation policy designed to meet the fund's needs.

ASSET ALLOCATION

As of June 30, 2014, the health insurance trust fund had approximately $491.9 million in total assets. This included $20.1 million in cash and $67.6 million in short-term high quality bonds for liquidity purposes. This trust fund also had $65.4 million in high yield bonds, $300.9 million in a global stock index fund, $4.3 million in private equity investments, $28.2 million in bank loans, and $5.4 million in alternative credit funds.

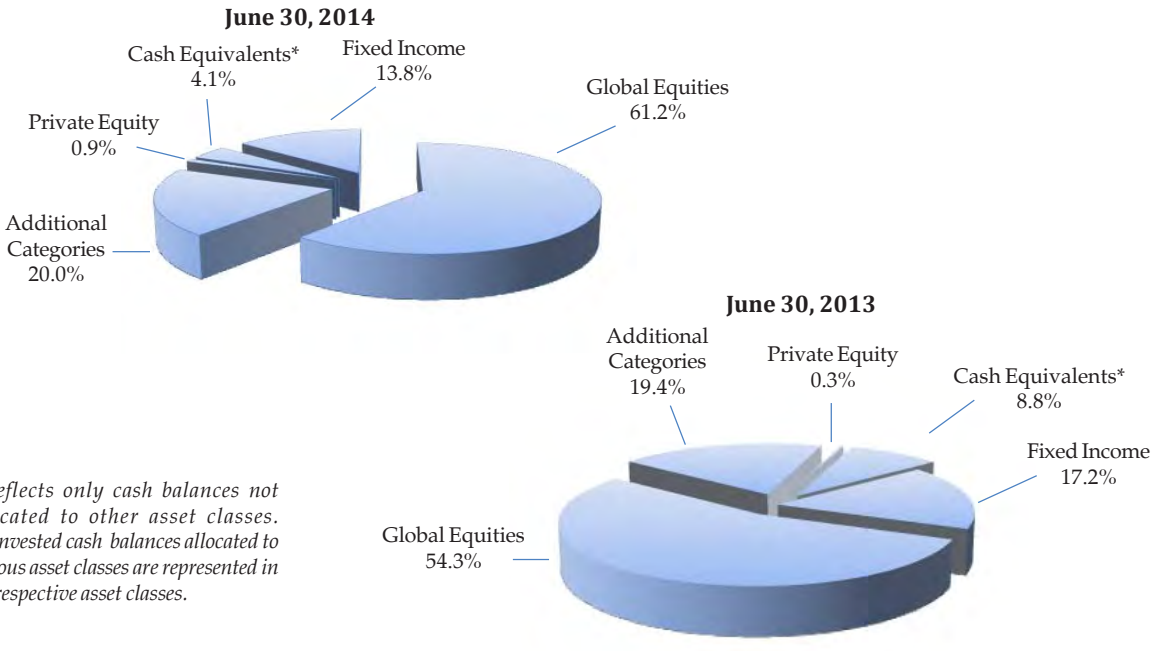
Asset allocation will be adjusted annually by the Investment Committee to reflect changing liquidity needs and actuarial funding status. Due to upcoming contribution rate increases enacted in statute, liquidity needs are expected to decline in coming years while funding status improves. The information below shows the health insurance trust fund's asset allocation by market value as of June 30, 2014 and June 30, 2013.

Health Insurance Trust

	June 30,2014	%	June 30,2013	%
Cash Equivalents*	$ 20,149,704	4.1	$ 39,455,381	8.8
Fixed Income	67,647,915	13.8	76,930,328	17.2
Global Equities	300,857,011	61.2	243,022,751	54.3
Additional Categories	99,027,356	20.0	86,551,982	19.4
Private Equity	4,251,239	0.9	1,255,715	0.3
TOTALS	**$ 491,933,225**	**100.0**	**$ 447,216,157**	**100.0**

* *Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

Distribution of Investments Health Insurance Trust Fair Values



* *Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

HEALTH INSURANCE TRUST

PORTFOLIO RETURNS

For the fiscal year, the health insurance trust fund's portfolio returned 15.5%. The fund's global equities returned 23.8% versus 23.4% for the MSCI All Country World IMI Index. A short-term bond fund held for liquidity purposes returned 0.8%. A high yield bond fund returned 11.0% versus 11.8% for its benchmark.

Due to a necessary focus on liquidity needs early in the fund's existence and rapidly evolving asset allocation as its funding mechanism is implemented, no policy benchmark has yet been established. Returns were generated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

	1 Yr[1]	3 Yr[1]	5 Yr[1]	10 Yr[1]	20 Yr[1]
Total Fund					
KTRS Health Insurance Trust	15.5	7.9	-	-	-
Equities					
Global Equities	23.8	10.8	-	-	-
MSCI AC World IMI	23.4	10.4	-	-	-
Fixed Income					
Internal Bond Fund	0.8	0.6	-	-	-
90 Day Treasury Bill	0.0	0.1	-	-	-
Alternative Investments					
Private Equity[2]	17.6	-	-	-	-
Additional Categories					
High Yield					
High Yield Bond Fund	11.0	9.3	-	-	-
B of A Merrill Lynch High Yield Master II	11.8	9.3	-	-	-
Alternative Credit					
Shenkman Capital Management	7.3	-	-	-	-
Highbridge Principal Strategies	8.6	-	-	-	-
Marathon European Credit Opportunties	-	-	-	-	-
S & P LSTA Leverage Loan Index	5.6	-	-	-	-
Cash					
Cash(Unallocated)	0.1	0.1	-	-	-
90 Day Treasury Bill	0.0	0.1	-	-	-

(1) *Annualized.*

(2) *For a period of five years private equity will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the commitment date, investments in this class shall be benchmarked versus the S & P 500 plus 3%, which is the System's long-term expected return for this asset class.*

SCHEDULE OF INVESTMENT RETURNS - HEALTH INSURANCE TRUST

2014	Annual Rate of Return Net of Investment Expense	15.38%

HEALTH INSURANCE TRUST
PORTFOLIOS
FAIR VALUES *
June 30, 2014

Internally Managed	
Cash Equivalents	
Cash Collections Fund (Unallocated)	$ 20,149,704
Fixed Income	
Internal Bond Fund	67,647,915
Subtotal	**$ 87,797,619**

Externally Managed	
Global Equities	
BlackRock Fund B	300,857,011
Alternative Investments	
Ft. Washington Fund VII	2,238,277
Actis Global Fund IV	1,095,879
Landmark Equity XV	750,961
Ft. Washington Fund VIII	166,122
Additional Categories	
Fort Washington High Yield Bond Fund	65,430,375
Shenkman Capital Management	28,175,936
Highbridge Principal Strategies III	3,172,278
Marathon European Credit Opp Fund II	2,248,767
Subtotal	**$ 404,135,606**
TOTAL ASSETS	**$ 491,933,225**

* *Detailed information concerning these fair values of all KTRS investments is available upon request.*

Investment Summary
Fair Value – Medical Insurance Trust
June 30, 2014

Type of Investment	Fair Value 06/30/13	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/14
Cash Equivalents	$ 54,722,400	$ 253,265,800	$ -	$ 236,854,600	$ 71,133,600
Fixed Income	64,728,200	34,163,400	(175,800)	77,481,200	21,234,600
Equities	243,022,800	-	57,905,000	70,800	300,857,000
Alternative	1,255,700	3,069,000	479,600	553,100	4,251,200
Additional Categories	83,487,100	60,737,000	3,091,200	52,858,500	94,456,800
TOTAL	$ 447,216,200	$ 351,235,200	$ 61,300,000	$ 367,818,200	$ 491,933,200

Health Insurance Trust Fund
Contracted Investment Management Expenses
Fiscal Year 2013-14
(in thousands)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 300,857	$ 159	
Fixed Income Manager(s)			
Real Estate		12	
Additional Categories	99,027	271	
Alternative Investments [2]	4,251	209	
TOTAL	**$ 404,135**	**$ 651**	16.1
Other Investment Services			
Custodian Fees	491,933	$ 10	0.2
Consultant Fees			0.0
Legal & Research			0.0
Other Administrative and Operational		50	1.0
TOTAL	**$ 491,933**	**$ 60**	**1.2**
GRAND TOTAL		**$ 711**	**14.5**

1 - One basis point is one hundredth of one percent or the equivalent of .0001.
2 - Accrual of fees payable as of June 30, 2014
3 - Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.

Schedule of Contracted and Administrative Investment Expenses
Health Insurance Trust Fund
June 30, 2014

INVESTMENT COUNSELOR FEES

EQUITY MANAGERS	
BlackRock	158,797
Total Equity Managers	**$ 158,797**
REAL ESTATE	
Carlyle VII	11,507
Total Real Estate	**$ 11,507**
ADDITIONAL CATEGORIES	
Highbridge Principal Strategies Fund III,L.P.	27,859
Fort Washington Investmetns High Yield	124,836
Marathon European Credit Fund II	9,110
Shenkman Capital	109,593
Total Additional Category Managers	**$ 271,398**
ALTERNATIVE INVESTMENTS	
Actis Global Fund IV, L.P.	50,000
Alinda Core Fund III, L.P.	37,073
Fort Washington Fund VII, L.P.	37,500
Fort Washington Fund VIII, L.P.	13,747
Landmark Fund XV ,L.P.	70,719
Total Alternative Managers	**$ 209,039**

ADMINISTRATIVE AND OPERATIONAL EXPENSES

CUSTODIAN	
The Bank of New York Mellon	10,392
Total Custodian	**$ 10,392**
LEGAL & RESEARCH	
Ice Miller	-
Total Legal & Research	**$ -**
OTHER	
Other Administrative and Operational (includes Personnel, Subscription services, etc…)	49,950
Total Other	**$ 49,950**
TOTAL INVESTMENT EXPENSES	**$ 711,083**

HEALTH INSURANCE TRUST PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
Hewitt EnnisKnupp, Inc.

Investment Custodian
The Bank of New York Mellon

Additional Categories Managers
Ft. Washington Investment Advisors
Shenkman Capital Management, Inc
Highbridge Principal Strategies, LLC
Marathon Asset Management

Global Equity Manager
BlackRock Institutional Trust Company

Alternative Investment Managers
Ft. Washington Private Equity Investors
Actis LLP
Landmark Partners

Attorney
Ice Miller LLP

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Kentucky Teachers' Retirement System

2014

Actuarial Section

Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

December 12, 2014

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2014. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2017 required to support the benefits of the System are as follows:

Group	Combined Member and State Contribution Requirement
University members hired before July 1, 2008	34.97%
University members hired on or after July 1, 2008	35.97%
Non-University members hired before July 1, 2008	37.93%
Non-University members hired on or after July 1, 2008	38.93%

These rates represent an increase since the previous valuation in the Pension required employer contribution rate of 0.63% of payroll for the fiscal year ending June 30, 2017. In addition, there has been a net decrease in the expected state special appropriation from 2.90% to 2.70%, or 0.20% of payroll and no change in the amount required for life insurance benefits. Therefore, the net impact on the required increase in the total employer contribution rate is 0.83% of payroll.

For the fiscal year ending June 30, 2017, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 13.80%; 0.83% from this valuation and 12.97% from the previous valuation.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

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Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund from 2005 to 2010 were allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund. No additional contributions were allocated during the 2014 fiscal year.

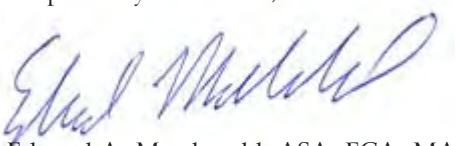
Since the previous valuation, the Board has adopted a funding policy, which is shown in Schedule H of the Report. In addition, the valuation interest smoothing methodology which was utilized in the previous valuation will no longer be used to determine the discount rate. The assumed discount rate will be 7.50%, which was the ultimate investment rate of return in the previous valuation.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

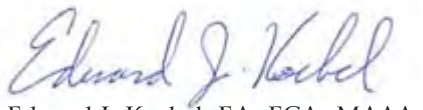
Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, the System is not being funded on an actuarially sound basis since the actuarially required contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,



Edward A. Macdonald, ASA, FCA, MAAA
President



Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Report of Actuary on the Valuation Prepared as of June 30, 2014
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (dollar amounts in thousands):

Valuation Date	June 30, 2014	June 30, 2013
Number of active members	73,407	74,831
Annual salaries	$ 3,486,327	$ 3,480,066
Number of annuitants and beneficiaries	48,576	47,406
Annual allowances	$ 1,684,852	$ 1,608,659
Assets		
Market value	$ 18,092,571	$ 16,108,808
Actuarial value	$ 16,174,199	$ 14,962,758
Unfunded actuarial accrued liability	$ 14,010,205	$ 13,854,474
Funded Ratio	53.6 %	51.9 %
Amortization period (years)	30	30

Contribution Rates for University Members

Valuation Date	June 30, 2014		June 30, 2013	
For Fiscal Year Ending	June 30, 2017		June 30, 2016	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	12.270 %	12.270 %	12.290 %	12.290 %
Accrued liability	22.700	23.700	22.050	23.050
Total	34.970 %	35.970 %	34.340 %	35.340 %
Member	7.625 %	7.625 %	7.625 %	7.625 %
State (ARC)	27.345	28.345	26.715	27.715
Total	34.970 %	35.970 %	34.340 %	35.340 %
Life Insurance Fund:				
State	0.030 %	0.030 %	0.030 %	0.030 %
Medical Insurance Fund:				
Member	2.775 %	2.775 %	2.775 %	2.775 %
State Match	2.775	1.775	2.775	1.775
Total	5.550 %	4.550 %	5.550 %	4.550 %
Total Contributions	40.550 %	40.550 %	39.920 %	39.920 %
Member Statutory	10.400 %	10.400 %	10.400 %	10.400 %
State Statutory	13.650	13.650	13.650	13.650
Required Increase	13.800	13.800	12.970	12.970
State Special	2.700	2.700	2.900	2.900
Total	40.550 %	40.550 %	39.920 %	39.920 %

Contribution Rates for Non-University Members

Valuation Date	June 30, 2014		June 30, 2013	
For Fiscal Year Ending	June 30, 2017		June 30, 2016	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	16.720 %	16.720 %	15.810 %	15.810 %
Accrued liability	21.210	22.210	21.490	22.490
Total	37.930 %	38.930 %	37.300 %	38.300 %
Member	9.105 %	9.105 %	9.105 %	9.105 %
State (ARC)	28.825	29.825	28.195	29.195
Total	37.930 %	38.930 %	37.300 %	38.300 %
Life Insurance Fund:				
State	0.030 %	0.030 %	0.030 %	0.030 %
Medical Insurance Fund:				
Member	3.750 %	3.750 %	3.750 %	3.750 %
State Match	3.750	2.750	3.750	2.750
Total	7.500 %	6.500 %	7.500 %	6.500 %
Total Contributions	45.460 %	45.460 %	44.830 %	44.830 %
Member Statutory	12.855 %	12.855 %	12.855 %	12.855 %
State Statutory	16.105	16.105	16.105	16.105
Required Increase	13.800	13.800	12.970	12.970
State Special	2.700	2.700	2.900	2.900
Total	45.460 %	45.460 %	44.830 %	44.830 %

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2014 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. Since the previous valuation, the Board has adopted a funding policy, which is shown in Schedule H of the Report. In addition, the valuation interest smoothing methodology which was utilized in the previous valuation will no longer be used to determine the discount rate. The assumed discount rate will be 7.50%, which was the ultimate investment rate of return in the previous valuation.

5. Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. There have been no changes since the previous valuation.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2014 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
University Full Time hired before 7/1/2008	2,235	$ 158,132
University Full Time hired after 7/1/2008	1,172	57,918
University Part Time hired before 7/1/2008	31	1,452
University Part Time hired after 7/1/2008	66	1,667
Non-University Full Time hired before 7/1/2008	43,827	2,653,054
Non-University Full Time hired after 7/1/2008	12,562	537,383
Non-University Part Time hired before 7/1/2008	6,911	51,444
Non-University Part Time hired after 7/1/2008	6,603	25,277
TOTAL	73,407	$ 3,486,327

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2014

Group	Number	Annual Retirement Allowances[1] ($1,000's)
Service Retirements	42,308	$ 1,536,273
Disability Retirements	2,641	74,947
Beneficiaries of Deceased Members	3,627	73,632
TOTAL	48,576	$ 1,684,852

[1] *Includes cost-of-living adjustments effective through July 1, 2014.*

3. Table 1 of Schedule G shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2014 the market value of Pension Plan assets for valuation purposes held by the System amounted to $18,092,570,615. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2014 was $16,174,199,191. Schedule B shows the development of the actuarial value of assets as of June 30, 2014.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2014. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.

2. The valuation balance sheet shows that the System has total prospective liabilities of $16,977,257,916 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $18,389,363,616 of which $801,066,667 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $286,908,616. The total prospective liabilities of the System amounts to $35,653,530,148. Against these liabilities, the System has present assets for valuation purposes of $16,174,199,191. When this amount is deducted from the total liabilities of $35,653,530,148, there remains $19,479,330,957 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 12.27% of payroll for University and 16.72% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $5,469,126,099. When this amount is subtracted from $19,479,330,957, which is the present value of the total future contributions to be made by the employer, there remains $14,010,204,858 as the amount of future unfunded accrued liability contributions.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 10.400% of annual salary to the System and each non-university member contribute 12.855% of annual salary. Of this amount, for each university member, 2.775% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.75% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.03% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 13.80% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 2.70% of total payroll will be made by the

State. Therefore, the total required employer contribution rate to the Pension Plan is 27.345% for university members who become members before July 1, 2008 and 28.345% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 28.825% for non-university members who become members before July 1, 2008 and 29.825% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source
University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	10.400 %	10.400 %
Statutory Medical Insurance Fund	(2.775)	(2.775)
Contribution to Pension Plan	7.625 %	7.625 %
Employer		
Statutory Matching Total	10.400 %	10.400 %
Statutory Medical Insurance Fund	(2.775)	(1.775)
Supplemental Funding	3.250	3.250
Subtotal	10.875 %	11.875 %
Life Insurance	(0.030) %	(0.030) %
Additional to Maintain 30-Year Amortization	13.800	13.800
Special Appropriation	2.700	2.700
Contribution to Pension Plan	27.345 %	28.345 %
Total Contribution to Pension Plan	34.970 %	35.970 %

Contribution Rates by Source
Non-University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	12.855 %	12.855 %
Statutory Medical Insurance Fund	(3.750)	(3.750)
Contribution to Pension Plan	9.105 %	9.105 %
Employer		
Statutory Matching Total	12.855 %	12.855 %
Statutory Medical Insurance Fund	(3.750)	(2.750)
Supplemental Funding	3.250	3.250
Subtotal	12.355 %	13.355 %
Life Insurance	(0.030) %	(0.030) %
Additional to Maintain 30-Year Amortization	13.800	13.800
Special Appropriation	2.700	2.700
Contribution to Pension Plan	28.825 %	29.825 %
Total Contribution to Pension Plan	37.930 %	38.930 %

4. The valuation indicates that normal contributions at the rate of 12.27% of active university members' salaries and 16.72% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 22.70% for university members hired before July 1, 2008, 23.70% for university members hired on and after July 1, 2008, 21.21% for non-university members hired before July 1, 2008, and 22.21% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 2.70% of payroll to be made by the State. These rates are shown in the following table.

Actuarially Determined Contribution Rates

Rate	Percentage of Active Members' Salaries			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	12.27 %	12.27 %	16.72 %	16.72 %
Accrued Liability *	22.70	23.70	21.21	22.21
Total	34.97 %	35.97 %	37.93 %	38.93 %

** Includes special appropriations of 2.70% of payroll to be made by the State.*

5. Since the previous valuation, the Board adopted a funding policy, shown in Schedule H of this report. This policy states that the unfunded liability determined as of this valuation, known as the "legacy unfunded liability" will be amortized over a closed 30 year period. New sources of unfunded liability each year after June 30, 2014 will be amortized over closed 20 year periods. The unfunded actuarial accrued liability (legacy unfunded liability) amounts to $14,010,204,858 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 13.80%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2010, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. Beginning with the 2011 fiscal year, there have been no further loans for Stabilization Funding. In addition, there were no loans for single-subsidy funding for fiscal years 2013 or 2014. The table on the following page shows the amounts borrowed, annual payments and remaining balances for the non-single subsidy funding as of June 30, 2014:

Medical Insurance Fund
Stabilization Funding

FISCAL YEAR	LOAN AMOUNT	ANNUAL PAYMENT	BALANCE AS OF JUNE 30, 2014
2008/2009	$ 8,400,000	$ 1,228,900	$ 5,084,887
2009/2010	9,200,000	1,345,200	6,451,844
2010/2011	10,700,000	1,564,500	8,460,286
2011/2012	12,300,000	1,798,700	10,747,650
TOTAL	**$ 40,600,000**	**$ 5,937,300**	**$ 30,744,667**

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 13.80% of payroll for the fiscal year ending June 30, 2017, as shown in the following table:

VALUATION DATE	FISCAL YEAR	INCREASE	CUMULATIVE INCREASE	AMOUNT
June 30, 2004	June 30, 2007	0.11%	0.11%	$ 3,174,600
June 30, 2005	June 30, 2008	1.21	1.32	38,965,900
June 30, 2006	June 30, 2009	0.56	1.88	60,499,800
June 30, 2007	June 30, 2010	0.58	2.46	82,331,200
June 30, 2008	June 30, 2011	1.13	3.59	121,457,000
June 30, 2009	June 30, 2012	2.22	5.81	208,649,000
June 30, 2010	June 30, 2013	1.46	7.27	260,980,000
June 30, 2011	June 30, 2014	0.75	8.02	299,420,000
June 30, 2012	June 30, 2015	2.40	10.42	386,400,000
June 30, 2013	June 30, 2016	2.55	12.97	487,400,000
June 30, 2014	June 30, 2017	0.83	13.80	520,372,000

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the legacy unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $155,730,786 in the unfunded accrued liability from $13,854,474,072 to $14,010,204,858 during the year ending June 30, 2014.

Analysis of Financial Experience
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.68%) added to previous unfunded accrued liability	$ 1,064,024
Expected accrued liability contribution	(332,765)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2013/2014 fiscal year with interest	0
Repayment of prior year's MIF Stabilization Funding with interest	(6,165)
Experience:	
Valuation asset growth	(913,255)
Pensioners' mortality	42,234
Turnover and retirements	(177,990)
New entrants	49,210
Salary increases	(190,240)
Amendments	0
Assumption changes*	620,678
Method changes	0
Total	**$ 155,731**

** Change from interest smoothing methodology to 7.50% annual assumed rate of return.*

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board (GASB) has issued Statement No. 67 which replaces Statement 25 for plan years beginning after June 15, 2013. The information required under GASB 67 was issued in a separate report. The following information is provided for informational purposes and for disclosure in the financial statements of the employer under GASB 27. The following is a distribution of the number of employees by type of membership.

Number of Active and Retired Members as of June 30, 2014

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	48,576
Terminated vested employees entitled to benefits but not yet receiving benefits	7,762
Inactive non-vested members	27,689
Active plan members	73,407
Total	157,434

2. The schedule of funding progress is shown below.

Schedule of Funding Progress

(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2009	$ 14,885,981	$ 23,400,426	$ 8,514,445	63.6%	$ 3,253,077	261.7%
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8
6/30/2011**	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4
6/30/2012	14,691,371	26,973,854	12,282,483	54.5	3,479,567	353.0
6/30/2013	14,962,758	28,817,232	13,854,474	51.9	3,480,066	398.1
6/30/2014***	16,174,199	30,184,404	14,010,205	53.6	3,486,327	401.9

* *Funding method Projected Unit Credit prior to 6/30/2011*
Funding method Entry Age Normal 6/30/2011 and after.
** *Reflects change in assumptions and methods.*
*** *Reflects change in assumption.*

3. The information presented above was determined as part of the actuarial valuation at June 30, 2014. Additional information as of the latest actuarial valuation follows.

Valuation date	06/30/2014
Actuarial cost method	Entry age
Amortization method	Level percent of pay, closed
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market

Actuarial Assumptions:

Investment rate of return*
7.50%

Projected salary increases**
4.00 - 8.20%

Cost-of-living adjustments
1.50% Annually

Includes price inflation at 3.50%
***Includes wage inflation at 4.00%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Annual Required Contributions	Actual Employer Contributions	Percentage Contributed
2009	$ 600,282,735	$ 442,549,935	74%
2010	633,938,088	479,805,088	76
2011	678,741,428	1,037,935,993*	153
2012	757,822,190	557,339,552	74
2013	802,984,644	568,233,446	71
2014	823,446,156	563,326,249	68

** Includes Pension Obligation Bond proceeds of $465,384,165.*

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2014. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Obligation for Fiscal Year Ending June 30, 2014

(a)	Employer annual required contribution	$ 823,446,156
(b)	Interest on net pension obligation	52,412,161
(c)	Adjustment to annual required contribution	38,367,910
(d)	Annual pension cost: (a) + (b) - (c)	$ 837,490,407
(e)	Employer contributions made for fiscal year ending June 30, 2014	563,326,249
(f)	Increase (decrease) in net pension obligation: (d) - (e)	$ 274,164,158
(g)	Net pension obligation beginning of fiscal year	682,450,008
(h)	Net pension obligation end of fiscal year: (f) + (g)	$ 956,614,166

Trend Information

YEAR ENDING	ANNUAL PENSION COST (APC)	PERCENTAGE OF APC CONTRIBUTED	NET PENSION OBLIGATION (NPO)
June 30, 2012	$ 763,914,684	73%	$ 436,123,560
June 30, 2013	814,559,894	70	682,450,008
June 30, 2014	837,490,407	67	956,614,166

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2014
(Dollar amount in thousands)

ACTUARIAL LIABILITIES

(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 15,860,700	
	- Disability retirement benefits	744,709	
	- Death and survivor benefits	138,806	
	- Refunds of member contributions	233,043	
	Total		$ 16,977,258
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits		
	- Service retirement benefits	$ 17,017,825	
	- Disability retirement benefits	716,654	
	- Death and survivor benefits	654,885	
	Total		$ 18,389,364
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 286,908
(4)	TOTAL ACTUARIAL LIABILITIES		$ 35,653,530

PRESENT AND PROSPECTIVE ASSETS

(5)	Actuarial value of assets	$ 16,174,199
(6)	Present value of total future contributions = (4)-(5)	19,479,331
(7)	Present value of future member contributions and employer normal contributions	5,469,126
(8)	Prospective unfunded accrued liability contributions = (6)-(7)	14,010,205
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS	$ 35,653,530

Schedule A continued ...

Solvency Test

(dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation of Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2009	$ 3,042.3	$ 14,309.9	$ 6,048.2	$ 14,886.0	100%	83 %	0%
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0
6/30/2012	3,415.2	16,472.2	7,086.4	14,691.4	100	68	0
6/30/2013	3,514.4	17,716.4	7,586.4	14,962.8	100	65	0
6/30/2014	3,629.7	18,676.3	7,878.4	16,174.2	100	67	0

SCHEDULE B

Development of Actuarial Value of Assets as of June 30, 2014

(1)	Actuarial Value of Assets Beginning of Year		$ 14,962,758,316
(2)	Market Value of Assets End of Year		18,092,570,615
(3)	Market Value of Assets Beginning of Year		16,108,808,305
(4)	Cash Flow		
	a.	Contributions	868,307,869
	b.	Benefit Payments	1,679,837,543
	c.	Administrative Expense	7,955,972
	d.	Net: (4)a - (4)b - (4)c	(819,485,646)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	2,803,247,956
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,177,429,911
	d.	Amount for Phased-In Recognition: (5)a - (5)c	1,625,818,045
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	325,163,609
	b.	First Prior Year	191,479,441
	c.	Second Prior Year	(160,195,981)
	d.	Third Prior Year	363,670,625
	e.	Fourth Prior Year	133,378,916
	f.	Total Recognized Investment Gain	853,496,610
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		16,174,199,191
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ 1,918,371,424
(9)	Rate of Return on Actuarial Value:		13.96%

SCHEDULE C

PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2014	For the Year Ending June 30, 2013
Receipts for the Year		
Contributions		
Members	$ 304,981,620	$ 304,738,728
Employers	563,326,249	568,233,446
Total	868,307,869	872,972,174
Net Investment Income	2,803,247,956	2,039,874,263
Total	3,671,555,825	2,912,846,437
Disbursements for the Year		
Benefit Payments	1,654,375,700	1,570,722,924
Refunds to Members	25,461,843	22,059,094
Miscellaneous, including expenses	7,955,972	8,377,003
Total	1,687,793,515	1,601,159,021
Excess of Receipts over Disbursements	1,983,762,310	1,311,687,416
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	16,108,808,305	14,797,120,889
Excess of Receipts over Disbursements	1,983,762,310	1,311,687,416
Asset Balances as of the End of the Year	$ 18,092,570,615	$ 16,108,808,305
Rate of Return	18.1%	14.1%

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE D
Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011.

ULTIMATE INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.60%	4.50%	4.30%	4.20%	4.00%

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Schedule D continued ...

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below.

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability.

Annual Rate of Death After . . .

AGE	SERVICE RETIREMENT MALE	SERVICE RETIREMENT FEMALE	DISABILITY RETIREMENT MALE	DISABILITY RETIREMENT FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

SCHEDULE E

Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently at 7.50%), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE F

Summary of Main System Provisions as Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2014. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance for Members Before 7/1/2008
Condition for Allowance

- Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance

- The annual retirement allowance for non-university members is equal to:
  - (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
  - (b) 2.5% of final average salary multiplied by service after July 1, 1983.
  - (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
  - (d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

Schedule F continued ...

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance for Members on and after 7/1/2008
Condition for Allowance

- Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

- 1.7% of final average salary if service is 10 years or less.
- 2.0% of final average salary if service is greater than 10 years and no more than 20 years.
- 2.3% of final average salary if service is greater than 20 years but no more than 26 years.
- 2.5% of final average salary if service is greater than 26 years but no more than 30 years.
- 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

- 1.5% of final average salary if service is 10 years or less.
- 1.7% of final average salary if service is greater than 10 years and no more than 20 years.
- 1.85% of final average salary if service is greater than 20 years but less than 27 years.
- 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance
Condition for Allowance

- Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance

- The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

- Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

- A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

Schedule F continued ...

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3- CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE G
Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2014
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	1,204								1,204
Total Pay	30,306,197								30,306,197
Avg. Pay	25,171								25,171
25 to 29	5,580	1,434							7,014
Total Pay	193,970,612	67,358,025							261,328,637
Avg. Pay	34,762	46,972							37,258
30 to 34	2,781	5,186	1,217						9,184
Total Pay	92,513,906	256,970,385	66,796,986						416,281,277
Avg. Pay	33,266	49,551	54,887						45,327
35 to 39	1,898	2,496	4,429	863	1				9,687
Total Pay	56,555,071	124,293,536	256,631,937	54,675,650	53,340				492,209,534
Avg. Pay	29,797	49,797	57,944	63,355	53,340				50,811
40 to 44	5,052	1,716	2,366	4,050	747	16			13,947
Total Pay	80,379,772	83,794,962	135,195,300	259,149,673	49,078,966	163,529			607,762,202
Avg. Pay	15,910	48,832	57,141	63,988	65,701	10,221			43,577
45 to 49	1,458	1,205	1,432	1,995	2,861	691	7		9,649
Total Pay	33,919,137	60,198,868	82,097,312	126,497,133	194,503,113	48,070,745	176,601		545,462,909
Avg. Pay	23,264	49,958	57,331	63,407	67,984	69,567	25,229		56,531
50 to 54	1,071	794	1,103	1,293	1,454	1,789	327	3	7,834
Total Pay	23,600,498	40,049,425	63,071,897	81,900,405	99,886,590	128,070,681	23,619,195	138,015	460,336,706
Avg. Pay	22,036	50,440	57,182	63,341	68,698	71,588	72,230	46,005	58,761
55 to 59	1,476	467	746	1,030	1,109	919	451	66	6,264
Total Pay	23,836,597	22,197,101	43,680,065	66,568,849	75,368,014	69,124,953	36,616,202	4,867,334	342,259,115
Avg. Pay	16,149	47,531	58,552	64,630	67,960	75,218	81,189	73,747	54,639
60 to 64	1,996	463	446	655	626	534	138	116	4,974
Total Pay	26,390,926	18,546,024	26,950,845	42,661,444	45,836,673	41,747,171	10,565,625	10,334,994	223,033,702
Avg. Pay	13,222	40,056	60,428	65,132	73,222	78,178	76,563	89,095	44,840
65 & over	2,062	532	213	254	220	203	69	97	3,650
Total Pay	18,463,630	14,329,380	11,856,787	16,552,947	16,366,985	15,093,672	6,003,364	8,679,755	107,346,520
Avg. Pay	8,954	26,935	55,666	65,169	74,395	74,353	87,005	89,482	29,410
Total	24,578	14,293	11,952	10,140	7,018	4,152	992	282	73,407
Total Pay	579,936,346	687,737,706	686,281,129	648,006,101	481,093,681	302,270,751	76,980,987	24,020,098	3,486,326,799
Avg. Pay	23,596	48,117	57,420	63,906	68,551	72,801	77,602	85,178	47,493

Average Age: 44.1 **Average Service:** 10.7

Schedule G continued ...

Table 2: Number of Retired Members and Beneficiaries and their Benefits by Age as of June 30, 2014

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	829	$ 10,522,724	$ 12,693
50 - 54	1,217	44,794,025	36,807
55 - 59	4,222	173,283,069	41,043
60 - 64	10,080	391,957,441	38,885
65 - 69	12,149	441,374,364	36,330
70 - 74	8,076	279,210,994	34,573
75 - 79	5,073	162,581,658	32,048
80 - 84	3,409	97,645,359	28,643
85 - 89	2,174	55,087,542	25,339
90 & Over	1,347	28,394,502	21,080
TOTAL	48,576	$ 1,684,851,678	$ 34,685

Average Age: 68.7 **Average Age at Retirement:** 55.7

Table 3: Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

Fiscal Year	ADD TO ROLLS Number	ADD TO ROLLS Annual Allowances (Millions)	REMOVED FROM ROLLS Number	REMOVED FROM ROLLS Annual Allowances (Millions)	ROLLS END OF YEAR Number	ROLLS END OF YEAR Annual Allowances (Millions)	Increase In Annual Allowances	Average Annual Allowance
2005	2,644	$ 105.1	1,036	$ 18.9	37,346	$ 973.1	9.7%	$ 26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4	33,089
2013	2,303	105.7	991	22.2	47,406	1,608.7	5.5	33,934
2014	2,146	99.6	976	23.4	48,576	1,684.9	4.7	34,685

Schedule H

Board Funding Policy

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("KTRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background

State law provides that the retirement benefits promised to members of KTRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in KTRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state-as plan guarantor-is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $487 million (Fiscal Year 2016). The following schedule details the growth of the annual retirement appropriations payable by the state:

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000

(Source: KTRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2013).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

Section H: Board Funding Policy continued ...

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which-if paid-will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

    - Use the Entry Age Normal actuarial cost method;
    - Use a five-year asset smoothing method;
    - Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
    - Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
    - Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and KTRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

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Kentucky Teachers' Retirement System

2014

Actuarial Section

Report of the Actuary on the Annual Valuation of the Retiree Medical Plan and the Life Insurance Plan

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 12, 2014

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require the Teachers' Retirement System of the State of Kentucky (the System) to conduct actuarial valuations of the System's retiree medical and other post-employment benefit plans. This report covers the Retiree Medical Plan funded by the Medical Insurance Fund (MIF) and OPEB liabilities related to the Life Insurance Plan funded by the Life Insurance Fund (LIF). Cavanaugh Macdonald Consulting, LLC (CMC) has submitted the results of the annual actuarial valuation prepared as of June 30, 2014. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total annual required contribution of 6.00% of active member payroll for the MIF payable for the fiscal year ending June 30, 2015 is required to support the benefits of the Kentucky Employees' Health Plan (KEHP) and the Medicare Eligible Health Plan (MEHP). Of this amount, 2.27% of payroll is estimated to be paid by University members and 3.00% of payroll is estimated to be paid by all other members, leaving 3.73% and 3.00% respectively, as the remaining annual required contribution. This annual required contribution reflects the actuarial value of assets of the MIF and an 8.00% discount rate for valuing liabilities.

The initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised since the previous valuation to reflect recent experience.

The Life Insurance Plan valuation indicates a total annual required contribution of 0.03% of active member payroll payable for the fiscal year ending June 30, 2017 is required to support the benefits of the LIF. This annual required contribution reflects the actuarial value of assets of the LIF and a 7.50% discount rate for valuing liabilities.

The promised benefits of the Retiree Medical and Life Insurance Plans are included in the actuarially calculated contribution rates which are developed using the entry age normal actuarial cost method. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.00% annually. The assumptions recommended by the actuary and adopted by the Board are in aggregate reasonably related to the experience under the Retiree Medical and Life Insurance Plans and to reasonable expectations of anticipated experience under the Retiree Medical and Life Insurance Plans and meet the parameters for the disclosures under GASB 43 and 45.

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CMC has prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Section VII shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Retiree Medical and Life Insurance Plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, if the State contributions to the Medical Insurance Fund continue to increase to the planned levels, the Retiree Medical Plan will begin to operate in an actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the Retiree Medical Plan will improve.

Respectfully submitted,

Eric Gary, FSA, FCA, MAAA
Senior Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Senior Actuary

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Report of Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans Prepared as of June 30, 2014
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (dollar amounts are in thousands):

Valuation Date	June 30, 2014	June 30, 2013
Number of active members	73,407	74,831
Annual salaries	$ 3,486,327	$ 3,480,066
Number of deferred vested members	5,188	4,910
Number of annuitants in medical plans	37,275	36,777
Number of spouses and beneficiaries in medical plans*	7,031	7,053
Total	44,306	43,830
Assets:		
Market value	$ 535,995	$ 413,666
Actuarial value	$ 508,913	$ 412,185
Unfunded actuarial accrued liability	$ 2,685,776	$ 3,108,888
Amortization period (years)	30	30
Discount rate	8.00%	8.00%

* *Spouses of post-65 retirees, as well as surviving spouses of deceased retirees on or after July 1, 2002, pay 100% of the full contribution. 100% of the full contribution for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.*

Medical Insurance Fund Contribution Rates for University Members

Valuation Date	June 30, 2014		June 30, 2013	
Contribution For Fiscal Year Ending	June 30, 2015		June 30, 2014	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.79 %	1.79 %	1.92 %	1.92 %
Accrued liability	4.21	4.21	4.88	4.88
Total	6.00 %	6.00 %	6.80 %	6.80 %
Member	2.27 %	2.27 %	1.75 %	1.75 %
Employer (ARC)	2.27	1.27	1.75	0.75
State (ARC)	1.46	2.46	3.30	4.30
Total	6.00 %	6.00 %	6.80 %	6.80 %

Medical Insurance Fund Contribution Rates for School District Employees (Non-Federal)

Valuation Date	June 30, 2014		June 30, 2013	
Contribution For Fiscal Year Ending	June 30, 2015		June 30, 2014	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.79 %	1.79 %	1.92 %	1.92 %
Accrued liability	4.21	4.21	4.88	4.88
Total	6.00 %	6.00 %	6.80 %	6.80 %
Member	3.00 %	3.00 %	2.25 %	2.25 %
Employer (ARC)	2.25	2.25	1.50	1.50
State (ARC)	0.75	0.75	3.05	3.05
Total	6.00 %	6.00 %	6.80 %	6.80 %

Medical Insurance Fund Contribution Rates for Other Employees

Valuation Date	June 30, 2014		June 30, 2013	
Contribution For Fiscal Year Ending	June 30, 2015		June 30, 2014	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.79 %	1.79 %	1.92 %	1.92 %
Accrued liability	4.21	4.21	4.88	4.88
Total	6.00 %	6.00 %	6.80 %	6.80 %
Member	3.00 %	3.00 %	2.25 %	2.25 %
Employer (ARC)	3.00	2.00	2.25	1.25
State (ARC)	0.00	1.00	2.30	3.30
Total	6.00 %	6.00 %	6.80 %	6.80 %

Life Insurance Fund
(dollar amounts in thousands)

Valuation Date	June 30, 2014	June 30, 2013
Number of active members	73,407	74,831
Annual salaries	$ 3,486,327	$ 3,480,066
Number of vested former members	4,113	3,839
Number of retirees in Life Insurance Plan	44,855	43,845
Assets:		
Market value	$ 90,823	$ 89,957
Actuarial value	$ 96,130	$ 94,863
Unfunded actuarial accrued liability*	$ 1,224	$ (538)
Amortization period (years)	30	30
Discount rate	7.50%	7.50 %

Contribution for fiscal year ending	June 30, 2017	June 30, 2016
Normal	0.03 %	0.03 %
Accrued liability	0.00	0.00
Total	0.03 %	0.03 %

** Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post-employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45.*

2. The valuation indicates combined member, employer, and State contributions of 6.00% of active member payroll would be sufficient to support the current benefits of the Retiree Medical Plan and State contributions of 0.03% of active member payroll would be sufficient to support the current benefits of the Life Insurance Plan. Comments on the valuation results as of June 30, 2014 are given in Section IV and further discussion of the contribution levels is set out in Sections VI and VII.

3. Since the previous valuation, the initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised to reflect recent experience.

Report of Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans continued ...

4. There were no changes in benefit provisions since the last valuation. However, the health insurance plan designs have changed for eligible retirees. The changes are summarized below.

   - The Kentucky Employees' Health Plan (KEHP), the self-insured plan for active employees and non-Medicare eligible retirees administered by the Commonwealth of Kentucky, has made the following changes for plan year 2015:
     - The new medical plan administrator is Anthem Blue Cross Blue Shield.
     - The new prescription drug plan administrator is CVS/caremark and changes were made to the prescription drug formulary.
     - Out-of-pocket maximums are now tracked separately for medical and prescription drug coverage. Prescription drug coverage is now capped.
     - The LivingWell PPO plan has lowered co-pays for mental health and allergy injections.

   - The MEHP, the plan for Medicare eligible retirees administered by KTRS, has made the following changes for plan year 2015:
     - The new medical plan administrator is UnitedHealthcare (UHC), and a number of enhancements were made to the medical plan.
     - The prescription drug plan is now self-funded.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the Retiree Medical and Life Insurance Plans for use as a basis of the valuation were furnished by the System's office. The following tables summarize the membership of the System as of June 30, 2014, upon which the valuation was based. Detailed tabulations of the data are given in Schedule F.

Active Members as of June 30, 2014

Group	Number	Annual Salaries ($1,000's)
University Full Time hired before 7/1/2008	2,235	$ 158,132
University Full Time hired after 7/1/2008	1,172	57,918
University Part Time hired before 7/1/2008	31	1,452
University Part Time hired after 7/1/2008	66	1,667
Non-University Full Time hired before 7/1/2008	43,827	2,653,054
Non-University Full Time hired after 7/1/2008	12,562	537,383
Non-University Part Time hired before 7/1/2008	6,911	51,444
Non-University Part Time hired after 7/1/2008	6,603	25,277
TOTAL	73,407	$ 3,486,327

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following tables show the number of retired members and their beneficiaries receiving health care as of the valuation date as well as average ages.

Retirees Receiving Health Benefits as of June 30, 2014

	Under Age 65	Age 65 and Over	TOTAL
Number	13,163	24,112	37,275
Average Age	60.4	73.9	69.1

Spouses Receiving Health Benefits as of June 30, 2014

Number	2,990	4,041	7,031
Average Age	59.2	75.3	68.5

3. The Retiree Medical Plan valuation also includes 5,188 deferred vested members eligible for health care at age 60.

Section III - ASSETS

1. As of June 30, 2014 the market value of MIF assets held by the Retiree Medical Plan amounted to $535,995,450 and the market value of LIF assets held by the Life Insurance Plan amounted to $90,822,970.

2. The five-year market related value of MIF assets used for valuation purposes as of June 30, 2014 was $508,913,385 and the five-year market related value of LIF assets used for valuation purposes as of June 30, 2014 was $96,130,349. Schedule B shows the development of the actuarial value of assets as of June 30, 2014.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the MIF and the LIF.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows the Retiree Medical Plan has an actuarial accrued liability of $1,422,833,776 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $24,300,513. The liability on account of benefits payable to retirees and covered spouses amounts to $1,747,554,616. The total actuarial accrued liability of the Retiree Medical Plan amounts to $3,194,688,905. Against these liabilities, the Retiree Medical Plan has present assets for valuation purposes of $508,913,385. When this amount is deducted from the actuarial accrued liability of $3,194,688,905, there remains $2,685,775,520 as the unfunded actuarial accrued liability for the Retiree Medical Plan.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the Retiree Medical Plan is determined to be $62,262,315, or 1.79% of payroll.

4. The valuation shows that the Life Insurance Plan has an actuarial accrued liability of $16,330,423 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $2,034,372. The liability on account of benefits payable to retirees amounts to $78,989,251. The total actuarial accrued liability of the Life Insurance Plan amounts to $97,354,046. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for active and post-employment purposes. As this could be administratively burdensome and, as death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45. Against these liabilities, the Life Insurance Plan has present assets for valuation purposes of $96,130,349. When this amount is deducted from the actuarial accrued liability of $97,354,046, there remains $1,223,697 as the unfunded actuarial accrued liability for the life insurance plan.

5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $1,078,937, or 0.03% of payroll.

Section V - DERIVATION OF EXPERIENCE GAINS AND LOSSES

1. Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2014 is shown below ($1,000's).

	EXPERIENCE GAIN/(LOSS) OF THE:	MEDICAL INSURANCE FUND	LIFE INSURANCE FUND
(1)	UAAL* as of 6/30/2013	$ 3,108,888	$ (538)
(2)	Normal cost from last valuation	66,891	1,052
(3)	Expected employer contributions	236,800	1,024
(4)	Interest accrual: [(1) + (2) - (3)] x interest**	235,118	(38)
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	3,174,097	(548)
(6)	Change due to plan amendments	0	0
(7)	Change due to new actuarial assumptions	0	0
(8)	Change due to claims experience	(533,866)	0
(9)	Expected UAAL after changes: (5) + (6) + (7) + (8)	$ 2,640,231	$ (548)
(10)	Actual UAAL as of 6/30/2014	$ 2,685,776	$ 1,224
(11)	Total gain/(loss): (9) - (10)	(45,545)	(1,772)
	(a) Contribution shortfall and investment loss	409	3,254
	(b) Experience gain/(loss) (11) - (11a)	$ (45,954)	$ (5,026)
(12)	Accrued liabilities as of 6/30/2013	$ 3,521,073	$ 94,325
(13)	Experience gain/(loss) as percent of actuarial accrued liabilities at start of year (11b) / (12)	(1.3%)	(5.3%)

* *Unfunded Actuarial Accrued Liability*
** *Interest is 8.0% for the Medical Insurance Fund and 7.5% for the Life Insurance Fund*

Section VI - CONTRIBUTIONS PAYABLE UNDER THE PLANS

1. Sections 161.420 and 161.550 of the Kentucky Revised Statutes provide the amounts employers and the State are required to contribute to the Medical Insurance Fund. These contribution amounts vary by fiscal year, date of membership, and employee type.

Employer Percentage of Payroll Contributions Made to Medical Insurance Fund

Fiscal Year Ending	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
2015	2.270 %	1.270 %	2.250 %	2.250 %	3.000 %	2.000 %
2016 and Later	2.775	1.775	3.000	3.000	3.750	2.750

* *In addition to the amounts contributed by School Districts on behalf of Non-Federal employees, the State contributes 0.75%.*

For the fiscal year ending June 30, 2015, member contributions will be 2.27% for University employees and 3.00% for all other members. CMC recommends employer and State contributions of the required amount of 3.73% of payroll for University employees and 3.00% of payroll for all other members. The State is scheduled to contribute 0.03% of salary to the Life Insurance Fund for the fiscal year ending June 30, 2016. CMC's valuation indicates a contribution of 0.03% for the fiscal year ending June 30, 2017 is required to sufficiently support the benefits of the life insurance plan.

Required Contribution Rates For Fiscal Year Ending June 30, 2015 Medical Insurance Fund

Normal	1.79 %
Accrued liability	4.21
Total	6.00 %

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
Member	2.27 %	2.27 %	3.00 %	3.00 %	3.00 %	3.00 %
Employer (ARC)	2.27	1.27	2.25	2.25	3.00	2.00
State (ARC)	1.46	2.46	0.75	0.75	0.00	1.00
Total	6.00 %	6.00 %	6.00 %	6.00 %	6.00 %	6.00 %

Required Contribution Rates Life Insurance Fund For Fiscal Year Ending June 30, 2017

Normal	0.03 %
Accrued liability	0.00
Total	0.03 %
Member	0.00 %
State (ARC)	0.03
Total	0.03 %

2. The valuation indicates that a total normal contribution of 1.79% of payroll is required to meet the cost of benefits currently accruing under the Retiree Medical Plan and 0.03% of payroll is required to meet the cost of benefits currently accruing under the Life Insurance Plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 4.21% of payroll for the Retiree Medical Plan and 0.00% of payroll for the Life Insurance Plan.

3. The unfunded actuarial accrued liability amounts to $2,685,775,520 for the Retiree Medical Plan and $1,223,697 for the Life Insurance Plan as of the valuation date. An accrued liability contribution of 4.21% of payroll for the Retiree Medical Plan and 0.00% of payroll for the Life Insurance Plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 30-year period, based on the assumption that the payroll will increase by 4.00% annually.

Section VII - COMMENTS ON LEVEL OF FUNDING

1. The System's monthly contribution for retirees who opt into the Retiree Medical Plan is based upon date of hire, date of attaining age 65, and years of service at retirement. Additionally, beneficiary contributions may vary by date of hire, date of attaining age 65, years of service at retirement, plan election, Medicare eligibility, and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Current employer and State contributions have been determined to be insufficient to fund the cost of the benefits to be provided. Benefits for university, school district (non-Federal), and other members are identical, although active employee contributions collected from university, school district (non-Federal), and other members differ. A listing of active member Retiree Medical Plan contributions by fiscal year, date of membership, and employer type is provided in Schedule E.

2. This valuation provides the contributions required to fund the Retiree Medical Plan in an actuarially sound manner and to ensure the future solvency of the Medical Insurance Fund. For University employees a member contribution of 2.27% of payroll together with employer and State contributions of 3.73% of payroll are required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. For the remaining membership, a member contribution of 3.00% of payroll together with employer and State contributions of 3.00% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the Retiree Medical and Life Insurance Plans and the employer.

Number of Active and Retired Members in Medical Plan as of June 30, 2014

GROUP	NUMBER
Retirees currently receiving health benefits	37,275
Spouses of retirees currently receiving health benefits	7,031
Terminated employees entitled to benefits but not yet receiving benefits	5,188
Active plan members	73,407
Total	**122,901**

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2014

GROUP	NUMBER
Retirees	44,855
Terminated employees	4,113
Active plan members	73,407
Total	**122,375**

Schedule of Funding Progress [1]
Medical Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL)	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2009 [2]	$ 229,103	$ 6,454,733	$ 6,225,630	3.5 %	$ 3,253,077	191.4%
6/30/2010 [3]	241,224	3,206,806	2,965,582	7.5	3,321,614	89.3
6/30/2011 [4]	294,819	3,423,149	3,128,330	8.6	3,451,756	90.6
6/30/2012	338,746	3,594,540	3,255,794	9.4	3,479,567	93.6
6/30/2013	412,185	3,521,073	3,108,888	11.7	3,480,066	89.3
6/30/2014	508,913	3,194,689	2,685,776	15.9	3,486,327	77.0

[1] *Actuarial cost method of Projected Unit Credit prior to 6/30/2011 and Entry Age Normal 6/30/2011 and after.*
[2] *Reflects change in participation assumptions and plan design.*
[3] *Reflects change in discount rate to 8.0%, change in plan design and updating medical trend.*
[4] *Reflects change in decrement assumptions and updating medical trend.*

Schedule of Funding Progress [1]
Life Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL)	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2009	$ 84,703	$ 90,334	$ 5,631	93.8 %	$ 3,253,077	0.17%
6/30/2010	87,905	92,091	4,186	95.5	3,321,614	0.13
6/30/2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)
6/30/2012	92,241	91,398	(843)	100.9	3,479,567	(0.02)
6/30/2013	94,863	94,325	(538)	100.6	3,480,066	(0.02)
6/30/2014	96,130	97,354	1,224	98.7	3,486,327	0.04

[1] *Actuarial cost Method of Projected Unit Credit prior to 6/30/2011 and Entry Age Normal 6/30/2011 and after.*

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2014. Additional information as of the latest actuarial valuation follows.

Valuation Date	Actuarial Cost Method	Amortization Method	Remaining Amortization Period	Asset Valuation Method	Actuarial Assumptions: Investment Rate of Return*	Actuarial Assumptions: Investment Rate of Return*
06/30/2014	Entry age	Level percent of pay, open	30 years	Market value of assets	8.00%-Retiree Medical Plan	7.50%-Retiree Life Insurance Plan

Medical Trend Assumption	Pre-Medicare**	Medicare
Fiscal Year Ending 6/30/2015	7.75 %	5.75 %
Fiscal Year Ending 6/30/2016	6.75 %	5.50 %
Ultimate Trend Rate	5.00 %	5.00 %
Year of Ultimate Trend Rate	2020	2018

* *Includes price inflation at 3.50%.*
***Alternate trend rates were used for Medicare Part B premiums and are disclosed in Schedule D.*

Schedule of Employer Contributions
Medical Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	RDS CONTRIBUTION	TOTAL CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(A)	(B)	(C)	(B) + (C)	[(B) + (C)]/(A)
6/30/2009	$ 467,312,904	$ 164,480,119	$ 13,611,748	$ 178,091,867	38.1%
6/30/2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9
6/30/2011	477,723,070	188,453,929	280,585	188,734,514	39.5
6/30/2012	470,217,067	177,450,206	297,639	177,747,845	37.8
6/30/2013	186,725,823	166,611,420	0	166,611,420	89.2
6/30/2014	159,583,400	162,568,395	0	162,568,395	101.9

Schedule of Employer Contributions
Life Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(A)	(B)	(B) / (A)
6/30/2009	$ 1,498,076	$ 5,455,473	364.2%
6/30/2010	1,992,969	1,966,826	98.7
6/30/2011	1,725,878	1,668,822	96.7
6/30/2012	1,732,831	1,684,711	97.2
6/30/2013	1,739,908	1,680,495	96.6
6/30/2014	1,044,959	1,006,091	96.3

3. Following is the calculation of the Annual OPEB Cost (AOC) and the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2014. As the Retiree Medical and Life Insurance Plans are cost-sharing multiple-employer plans, GASB Statement 45 does not require the participating employers to disclose this information

Annual OPEB Cost and Net OPEB Obligation
for the Medical Insurance Fund for Fiscal Year Ending June 30, 2014

(a) Employer Annual Required Contribution	$ 159,583,400
(b) Interest on Net OPEB Obligation	117,574,804
(c) Adjustment to Annual Required Contribution	80,322,070
(d) Annual OPEB Cost: (a) + (b) - (c)	$ 196,836,134
(e) Employer Contributions for Fiscal Year 2014	162,568,395
(f) Increase in Net OPEB Obligation: (d) - (e)	$ 34,267,739
(g) Net OPEB Obligation at beginning of Fiscal Year	1,469,685,047
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ 1,503,952,786

Trend Information for the Medical Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2009	$ 469,492,218	37.9%	$ 525,816,306
6/30/2010	461,942,516	37.5	814,379,040
6/30/2011	485,294,173	38.9	1,110,938,699
6/30/2012	480,545,219	37.0	1,413,736,073
6/30/2013	222,560,394	74.9	1,469,685,047
6/30/2014	196,836,134	82.6	1,503,952,786

Annual OPEB Cost and Net OPEB Obligation for the Life Insurance Fund for Fiscal Year Ending June 30, 2014

(a) Employer Annual Required Contribution	$ 1,044,959
(b) Interest on Net OPEB Obligation	(604,962)
(c) Adjustment to Annual Required Contribution	(417,164)
(d) Annual OPEB Cost: (a) + (b) - (c)	857,161
(e) Employer contributions for Fiscal Year 2014	1,006,091
(f) Increase in Net OPEB Obligation: (d) - (e)	(148,930)
(g) Net OPEB Obligation at beginning of Fiscal Year	(8,066,159)
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ (8,215,089)

Trend Information for the Life Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2009	$ 1,416,656	385.1%	$ (7,535,867)
6/30/2010	1,817,516	108.2	(7,685,177)
6/30/2011	1,546,950	107.9	(7,807,049)
6/30/2012	1,551,065	108.6	(7,940,695)
6/30/2013	1,555,031	108.1	(8,066,159)
6/30/2014	857,161	117.4	(8,215,089)

SCHEDULE A

RESULTS OF THE VALUATION AS OF JUNE 30, 2014
(Dollar amounts in thousands)

		Medical Insurance Fund	Life Insurance Fund
PAYROLL		$ 3,486,327	$ 3,486,327
ACTUARIAL ACCRUED LIABILITY			
Present value of prospective benefits payable in respect of:			
(a)	Present active members	$ 1,422,834	$ 16,331
(b)	Present terminated vested members	24,301	2,034
(c)	Present retired members and covered spouses	1,747,554	78,989
(d)	Total actuarial accrued liability	$ 3,194,689	$ 97,354
PRESENT ASSETS FOR VALUATION PURPOSES		508,913	96,130
UNFUNDED ACTUARIAL ACCRUED LIABILITY		$ 2,685,776	$ 1,224
CONTRIBUTIONS		**Fiscal Year Ending June 30, 2015**	Fiscal Year Ending June 30, 2017
	Normal	1.79%	0.03%
	Accrued Liability	4.21	0.00
	Total	6.00%	0.03%
	Member	2.95%	0.00%
	Employer (ARC)	2.23	0.00
	State (ARC)	0.82	0.03
	Total	6.00%	0.03%

MEDICAL INSURANCE FUND
Solvency Test
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2009	n/a	$ 3,203.7	$ 3,251.0	$ 229.1	n/a	7%	0%
6/30/2010	n/a	1,948.6	1,258.2	241.2	n/a	12	0
6/30/2011	n/a	1,910.1	1,513.1	294.8	n/a	15	0
6/30/2012	n/a	2,046.7	1,547.9	338.7	n/a	17	0
6/30/2013	n/a	2,001.8	1,519.3	412.2	n/a	21	0
6/30/2014	n/a	1,771.9	1,422.8	508.9	n/a	29	0

Schedule A continued ...

LIFE INSURANCE FUND
Solvency Test
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2009	n/a	$ 72.0	$ 18.4	$ 84.7	n/a	100%	69%
6/30/2010	n/a	74.4	17.7	87.9	n/a	100	76
6/30/2011	n/a	72.2	15.9	88.5	n/a	100	103
6/30/2012	n/a	75.2	16.2	92.2	n/a	100	105
6/30/2013	n/a	78.1	16.2	94.9	n/a	100	104
6/30/2014	n/a	81.0	16.3	96.1	n/a	100	93

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
MEDICAL INSURANCE FUND
AS OF JUNE 30, 2014

(1)	Actuarial Value of Assets Beginning of Year		$ 412,184,887
(2)	Market Value of Assets End of Year		$ 535,995,450
(3)	Market Value of Assets Beginning of Year		$ 413,665,765
(4)	Cash Flow		
	a.	Contributions	$ 292,879,305
	b.	Benefit Payments	237,190,550
	c.	Administrative Expense	1,100,133
	d.	Net: (4)a - (4)b - (4)c	$ 54,588,622
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	$ 67,741,063
	b.	Assumed Rate	8.00%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	35,276,806
	d.	Amount for Phased-In Recognition: (5)a - (5)c	$ 32,464,257
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	$ 6,492,851
	b.	First Prior Year	370,219
	c.	Second Prior Year	0
	d.	Third Prior Year	0
	e.	Fourth Prior Year	0
	f.	Total Recognized Investment Gain	$ 6,863,070
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 508,913,385
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ 27,082,065
(9)	Rate of Return on Actuarial Value:		9.59%

Schedule B continued ...

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
LIFE INSURANCE FUND
AS OF JUNE 30, 2014

(1)	Actuarial Value of Assets Beginning of Year	$	94,863,265
(2)	Market Value of Assets End of Year	$	90,822,970
(3)	Market Value of Assets Beginning of Year	$	89,957,358
(4)	Cash Flow		
	a. Contributions	$	1,006,091
	b. Benefit Payments		4,692,000
	c. Administrative Expense		21,324
	d. Net: (4)a - (4)b - (4)c	$	(3,707,233)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)d	$	4,572,845
	b. Assumed Rate		7.50%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]		6,607,781
	d. Amount for Phased-In Recognition: (5)a - (5)c	$	(2,034,936)
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	$	(406,987)
	b. First Prior Year		(1,226,477)
	c. Second Prior Year		0
	d. Third Prior Year		0
	e. Fourth Prior Year		0
	f. Total Recognized Investment Gain	$	(1,633,464)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f	$	96,130,349
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	(5,307,379)
(9)	Rate of Return on Actuarial Value:		5.35%

SCHEDULE C

MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2014	June 30, 2013
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 74,329,798	$ 58,440,844
Payment by Retired Members	60,861,093	61,354,936
TOTAL MEMBERS	135,190,891	119,795,780
Employer/State Statutory Contributions	73,088,414	60,076,444
State Statutory - Transition Fund/KEHP	84,600,000	106,500,000
General Fund Surplus	0	0
Allotment from Pension Fund	0	0
TOTAL EMPLOYER	157,688,414	166,576,444
GRAND TOTAL	292,879,305	286,372,224
Recovery Income	4,879,981	34,976
Medicare D Receipts	0	0
Net Investment Income	67,741,063	30,718,836
TOTAL	365,500,349	317,126,036
DISBURSEMENTS FOR THE YEAR		
Refunds to Members	0	0
Administrative Expense	1,100,133	1,275,206
Medical Insurance Expense	242,070,531	240,931,618
TOTAL	243,170,664	242,206,824
Excess of Receipts over Disbursements	122,329,685	74,919,212
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	413,665,765	338,746,553
Excess of Receipts over Disbursements	122,329,685	74,919,212
Asset Balance as of the End of the Year	$ 535,995,450	$ 413,665,765

Schedule C continued ...

LIFE INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2014	For the Year Ending June 30, 2013
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 0	$ 0
State	1,006,091	1,680,495
TOTAL	1,006,091	1,680,495
Net Investment Income	4,572,845	674,760
TOTAL	5,578,936	2,355,255
DISBURSEMENTS FOR THE YEAR		
Benefit Payments	4,692,000	4,614,718
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	21,324	24,425
TOTAL	4,713,324	4,639,143
EXCESS OF RECEIPTS OVER DISBURSEMENTS	865,612	(2,283,888)
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	89,957,358	92,241,246
Excess of Receipts over Disbursements	865,612	(2,283,888)
Asset Balance as of the End of the Year	$ 90,822,970	$ 89,957,358

SCHEDULE D
Statement of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, termination, and salary increases used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011. The rates of future participation, health care cost trend rates, and expected plan costs were determined by the actuary based on plan experience.

Valuation Date: June 30, 2014

Discount Rate: 8.0% per annum, compounded annually for Medical Insurance Fund.
7.5% per annum, compounded annually for Life Insurance Fund.

Schedule D continued ...

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

Annual Trend Rate

Fiscal Year Ended	Medicare Part B	Under Age 65	Age 65 and Over
2015	0.76 %	7.75 %	5.75 %
2016	3.93	6.75	5.50
2017	5.78	6.25	5.25
2018	5.42	5.75	5.00
2019	5.63	5.25	5.00
2020	5.56	5.00	5.00
2021	5.49	5.00	5.00
2022	5.55	5.00	5.00
2023	5.39	5.00	5.00
2024	5.12	5.00	5.00
2025 and beyond	5.00	5.00	5.00

Age Related Morbidity: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred health care claims is assumed to be:

Participant Age	Annual Increases
65 – 69	3.0 %
70 – 74	2.5
75 – 79	2.0
80 – 84	1.0
85 - 89	0.5
90 and over	0.0

For the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP.

Retiree Medical Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that KTRS pays as the full contribution amount. The amounts include medical and drug costs. An additional $6.58 per month is paid to the Department of Employee Insurance (DEI) and is not included in the under age 65 costs listed below. For retirees ages 65 and older, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

Under Age 65 (KEHP) Full Costs as of January 1, 2015

Fiscal Year	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 689.28	$ 708.56	$ 665.40	$ 650.92
Parent Plus	950.62	1,007.46	946.88	913.28
Couple	1,282.84	1,543.58	1,451.56	1,406.14
Family	1,432.06	1,716.92	1,615.30	1,566.20
Family C-R	795.64	851.66	800.28	777.90

Schedule D continued ...

Average Monthly KTRS Full Costs & Contributions

Calendar Year	Under Age 65 (KEHP) Contributions	Age 65 & Over (MEHP) Full Costs	Age 65 & Over (MEHP) Contributions
2004	$ 293	$ 274	$ 274
2005	412	288	288
2006	461	315	315
2007	458	283	283
2008	484	278	278
2009	545	301[1]	285
2010	594	373[1]	342
2011	626	289	289
2012	622	270[2]	270
2013	635	294[2]	290
2014	679	290[2]	290
2015	669	240[2]	240

[1] *Under GASB 43 and 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy cannot be taken into account in the gross cost calculations.*

[2] *2,105 current benefit recipients are assumed to be not eligible for premium-free Medicare Part A benefits. For these individuals, the full cost of coverage is, on average, $581 per month. It is assumed 21% of current benefit recipients under the age of 65 who were hired prior to 4/1/1986 and left covered employment prior to 4/1/1996 will not be eligible for premium-free Medicare Part A benefits. All active members are assumed to have begun contributing to Medicare as of 4/1/1986 and are assumed eligible for premium-free Medicare Part A benefits.*

Current Retiree Medical Plan Participation: Actual census data and current plan elections (including waivers) provided by the System were used for those retirees currently participating in the Retiree Medical Plan. Current participants are assumed to maintain their current Retiree Medical Plan coverage until they are no longer eligible.

Anticipated Retireee Medical Plan Participation: The assumed annual rates of health care plan participation for future retirees are as follows:

Member Participation*

Years of Service	Entered KTRS Before 7/1/2002	Entered KTRS After 6/30/2002	Entered KTRS After 6/30/2008
5-9.99	23%	9%	Not Eligible
10-14.99	45	23	Not Eligible
15-19.99	68	41	41%
20-24.99	93	59	59
25-25.99	93	81	81
26-26.99	93	86	86
27 or more	93	93	93

** Members retiring from deferred vested status are assumed to participate at 50% of the corresponding rate listed.*

Anticipated Retiree Medical Plan Elections: The assumed rates of plan election for future retirees participating in the KEHP plans are provided in the following table. As the assumed plan election rates are estimates and actual results may be materially different, this assumption will need to be revised as experience evolves.

LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
32%	51%	10%	7%

Schedule D continued ...

Spouse Coverage in Medical Plans: Actual census data and current plan elections were used for spouses (including beneficiaries) of current retirees. For spouses of future retirees, 20% of future retirees are assumed to cover their spouse, with females 3 years younger than males.

Disabled Dependent Children: The liability associated with disabled dependent children was determined to be de minimis and was therefore excluded from this valuation.

Withdrawal Assumption: It is assumed 30% of future vested members who terminate elect to withdraw their contributions while the remaining 70% elect to leave their contributions in the plan in order to be eligible for a benefit at their retirement date.

Payroll Growth: 4.00% per annum, compounded annually.

Price Inflation: 3.50% per annum, compounded annually.

Affordable Care Act (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2018 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the Retiree Medical Plan's liability will be required.

Asset Valuation Method : Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The ultimate assumed valuation rate of return is assumed to be 8.00% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

Actuarial Cost Method: The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his/her age, service, and gender. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and deferred vested members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his/her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his/her behalf.

The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

Separation From Service: Representative values of the assumed annual rates of salary increases, death, disability, withdrawal, service retirement and early retirement are as follows:

Schedule D continued ...

MALES: Annual Rate of . . .

AGE	SALARY*	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	8.10%	0.012%	0.01%	9.00%				
25	7.20	0.015	0.01	9.00	3.00%			
30	6.20	0.020	0.02	9.00	3.00	3.00%		
35	5.50	0.035	0.05	10.00	3.25	1.75		
40	5.00	0.046	0.09	10.00	4.00	1.40		
45	4.60	0.058	0.18	11.00	4.00	1.50		17.0%
50	4.50	0.074	0.33	9.00	4.00	2.00		17.0
55	4.30	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	4.20	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	4.10	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	4.00	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	4.00	0.821	0.70	0.00	0.00	0.00	100.0	100.0

* *Includees inflation at 3.5% per annum.*
** *Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	SALARY*	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service**
20	8.10%	0.007%	0.01%	7.00%				
25	7.20	0.008	0.02	8.50	4.00%			
30	6.20	0.010	0.04	9.00	4.00	1.65%		
35	5.50	0.017	0.08	9.00	3.75	1.85		
40	5.00	0.024	0.14	8.50	3.25	1.50		
45	4.60	0.037	0.32	7.50	3.25	1.25		15.0%
50	4.50	0.055	0.42	9.50	3.50	1.75		15.0
55	4.30	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	4.20	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	4.10	0.263	0.85	11.00	4.00	2.00	12.5	25.0
65	4.00	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	4.00	0.672	0.85	0.00	0.00	0.00	100.0	100.0

* *Includees inflation at 3.5% per annum.*
** *Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Schedule D continued ...

Deaths After Retirement: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

SCHEDULE E
Summary of Main Plan Provisions as Interpreted for Valuation Purposes

ELIGIBILITY FOR ACCESS TO RETIREE MEDICAL COVERAGE

Service Retirement: For employees hired prior to July 1, 2008, Retiree Medical Plan coverage eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. For employees hired on or after July 1, 2008, employees may retire after the completion of 27 years of service, the attainment of age 55 and 10 years of service, or the attainment of age 60 and 5 years of service, but must complete a minimum of 15 years of service to be eligible for Retiree Medical Plan coverage.

Disability Retirement: Disabled employees hired prior to July 1, 2008 with at least 5 years of service, who are totally and permanently incapable of being employed as a teacher, are eligible for Retiree Medical Plan coverage. Disabled employees hired after July 1, 2008 must have 15 years of service to be eligible for Retiree Medical Plan coverage.

Survivors: Spouses of employees who die in service while eligible to retire, as well as survivors of service and disabled retirees, are eligible for Retiree Medical Plan coverage.

Termination: For employees hired prior to July 1, 2008 and who terminated with at least 5 years of service, Retiree Medical Plan coverage eligibility is attained at age 60. For employees hired on or after July 1, 2008 and who terminated with at least 15 years of service, Retiree Medical Plan coverage eligibility is attained at age 60.

Schedule E continued ...

COVERED MEMBER MEDICAL PLAN CONTRIBUTIONS

Under Age 65 Retiree Shared Resonsibility Contribution: Effective July 1, 2010, retirees under the age of 65 began a three-year phase-in of the Shared Responsibility Contribution. This contribution reduces the applicable amount of the full contribution provided by the System to retirees, by adjusting the Shared Responsibility Contribution amount by 100% less the appropriate percentage from the Retiree Percentage Contribution table on the following page. Effective July 1, 2012, the full Shared Responsibility Contribution equals the Standard Medicare Part B premium paid by retirees ages 65 and older.

Under Age 65 Shared Responsibility Contribution Timeline

Effective Date	Medicare Part B Monthly Cost	Formula	Shared Responsibility Contribution
July 1, 2010	$ 110.50	(1/3 x $110.50)	$ 37.00
January 1, 2011	115.40	(1/3 x 115.40)	39.00
July 1, 2011	115.40	(2/3 x 115.40)	77.00
January 1, 2012	99.90	(2/3 x 99.90)	66.00
July 1, 2012	99.90	99.90	99.90
January 1, 2013	104.90	104.90	104.90
January 1, 2014	104.90	104.90	104.90
January 1, 2015	104.90	104.90	104.90

Retiree Years of Service Percentage Contribution: Retirees contribute the following percentages based on years of service at retirement, which are then applied to the Retiree Contribution Rate Basis:

Retiree Percentage Contribution

Years of Service	Hired before 7/1/2002 (age 65 on 12/31/2004 or earlier)	Hired before 7/1/2002 (age 65 on 1/1/2005 or earlier)	Hired after 6/30/2002 and before 7/1/2008	Hired after 7/1/2008 or later
5 - 9.99	30%	75%	90%	Not Eligible
10 - 14.99	20	50	75	Not Eligible
15 - 19.99	10	25	55	55%
20 - 24.99	0	0	35	35
25 - 25.99	0	0	10	10
26 - 26.99	0	0	5	5
27 or more	0	0	0	0

Retiree Contribution Rate Basis Effective January 1, 2015

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Ages 65 and Older (MEHP)
Single	$ 641.30	$ 628.58	$ 617.42	$ 637.94	$ 240.00
Parent Plus	641.30	641.30	641.30	641.30	240.00
Couple	641.30	641.30	641.30	641.30	240.00
Family	641.30	641.30	641.30	641.30	240.00
Family C-R	641.30	641.30	641.30	641.30	240.00

Schedule E continued ...

Under Age 65 Retiree Plan Cost Contribution: A contribution according to the table below is required to be paid by retirees under the age of 65 based upon the plan elected:

Under Age 65 Plan Cost Contribution*
Effective January 1, 2015

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 47.98	$ 79.98	$ 47.98	$ 12.98
Parent Plus**	309.32	366.16	305.58	271.98
Couple**	641.54	902.28	810.26	764.84
Family**	790.76	1,075.62	974.00	924.90
Family C-R**	154.34	210.36	158.98	136.60

* *Does not include the additional contribution required to be paid by retirees under the age of 65 who smoke ($40 for Single or Family Cross-Reference, and $80 for Parent Plus, Couple or Family).*
** *Contribution for Parent Plus, Couple, Family and Family Cross-Reference tiers is offset by the State Under Age 65 Spouse/Dependent Subsidy.*

The Under Age 65 Plan Cost Contribution is reduced by subtracting the State Under Age 65 Spouse/Dependent Subsidy multiplied by 100% less the appropriate percentage in the Retiree Percentage Contribution table on the previous page, from the Under Age 65 Plan Cost Contribution.

State Under Age 65 Spouse/Dependent Subsidy
Effective January 1, 2015

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Parent Plus**	$ 186.34	$ 138.18	$182.60	$212.00
Couple**	353.56	389.30	522.28	514.86
Family**	452.78	432.64	636.02	624.92
Family C-R**	76.36	57.38	81.00	108.62

Spouse Contributions: 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Spouses of post-65 retirees, as well as surviving spouses of deceased retirees on or after July 1, 2002, pay 100% of the full contribution. Spouses of active members who died while eligible to retire prior to July 1, 2002, are provided the same subsidy by KTRS that would have been provided to the retiree for the lifetime of the spouse, or until remarriage. Spouses of active members who die while eligible to retire July 1, 2002, and later, pay 100% of the full contribution.

Surviving Spouse Contribution
Effective January 1, 2015
Under Age 65 (KEHP)

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Age 65 & Over (MEHP)
Single	$ 695.86	$ 715.14	$ 671.98	$ 657.50	$ 240.00
Parent Plus	957.20	1,014.04	953.46	919.86	n/a

Schedule E continued ...

System Retiree Medical Plan Contributions: The System Contribution Rate Basis is determined annually by KTRS; and the full cost is projected based on historical claims data. For retirees, the following percentages are based on years of service at retirement and are then applied to the System Contribution Rate Basis:

Percentage of System Contribution Rate Provided to Retirees

Years of Service	Age 65 & Over and Covered Before 1/1/2005	Age 65 & Over and Covered Before 12/31/2004	Entered KTRS After 6/30/2002 and Before 7/1/2008	Entered KTRS After 6/30/2008
5 - 9.99	70%	25%	10%	Not Eligible
10 - 14.99	80	50	25	Not Eligible
15 - 19.99	90	75	45	45%
20 - 24.99	100	100	65	65
25 - 25.99	100	100	90	90
26 - 26.99	100	100	95	95
27 or more	100	100	100	100

System Contribution Rate Basis Effective January 1, 2015 Under Age 65 (KEHP)

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Ages 65 and Older (MEHP)
Single	$ 641.30	$ 628.58	$ 617.42	$ 637.94	$ 240.00
Parent Plus	641.30	641.30	641.30	641.30	240.00
Couple	641.30	641.30	641.30	641.30	240.00
Family	641.30	641.30	641.30	641.30	240.00
Family C-R	641.30	641.30	641.30	641.30	240.00

Active Member Retiree Medical Plan Contributions: Actively employed members make payroll contributions to the Medical Insurance Fund based upon the following schedule:

Active Member Percentage of Payroll Contribution Made to Medical Insurance Fund

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
Fiscal Year Ending	Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008
2015	2.270 %	2.270 %	3.000 %	3.000 %	3.000 %	3.000 %
2016 & Later	2.775	2.775	3.750	3.750	3.750	3.750

Schedule E continued ...

Life Insurance Plan Benefits:
(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Members employed on a substitute or part-time basis and working at least 69% of a full contract year in a single fiscal year will be eligible for a life insurance benefit for the balance of the fiscal year or the immediately succeeding fiscal year under certain conditions. For non-vested members employed on a substitute or part-time basis, the life insurance benefit is provided if death occurs as the result of a physical injury on the job. For vested members employed on a substitute or part-time basis, death does not have to be the result of a physical injury on the job for life insurance benefits to be provided.

SCHEDULE F
Table 1 – Service Table
Distribution of Active Members as of June 30, 2014
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	1,203	1							1,204
Total Pay	30,289,473	16,724							30,306,197
Avg. Pay	25,178	16,724							25,171
25 to 29	5,580	1,434							7,014
Total Pay	193,970,612	67,358,025							261,328,637
Avg. Pay	34,762	46,972							37,258
30 to 34	2,781	5,186	1,217						9,184
Total Pay	92,513,906	256,970,385	66,796,986						416,281,277
Avg. Pay	33,266	49,551	54,887						45,327
35 to 39	1,898	2,496	4,429	863	1				9,687
Total Pay	56,555,071	124,293,536	256,631,937	54,675,650	53,340				492,209,534
Avg. Pay	29,797	49,797	57,944	63,355	53,340				50,811
40 to 44	5,052	1,716	2,366	4,050	747	16	3		13,950
Total Pay	80,379,772	83,794,962	135,195,300	259,149,673	49,078,966	163,529	4,440		607,766,642
Avg. Pay	15,910	48,832	57,141	63,988	65,701	10,221	1,480		43,568
45 to 49	1,458	1,205	1,432	1,995	2,861	691	4		9,646
Total Pay	33,919,137	60,198,868	82,097,312	126,497,133	194,503,113	48,070,745	172,161		545,458,469
Avg. Pay	23,264	49,958	57,331	63,407	67,984	69,567	43,040		56,548
50 to 54	1,071	794	1,103	1,293	1,454	1,789	327	3	7,834
Total Pay	23,600,498	40,049,425	63,071,897	81,900,405	99,886,590	128,070,681	23,619,195	138,015	460,336,706
Avg. Pay	22,036	50,440	57,182	63,341	68,698	71,588	72,230	46,005	58,761
55 to 59	1,476	467	746	1,030	1,109	919	451	66	6,264
Total Pay	23,836,597	22,197,101	43,680,065	66,568,849	75,368,014	69,124,953	36,616,202	4,867,334	342,259,115
Avg. Pay	16,149	47,531	58,552	64,630	67,960	75,218	81,189	73,747	54,639
60 to 64	1,996	463	446	655	626	534	138	116	4,974
Total Pay	26,390,926	18,546,024	26,950,845	42,661,444	45,836,673	41,747,171	10,565,625	10,334,994	223,033,702
Avg. Pay	13,222	40,056	60,428	65,132	73,222	78,178	76,563	89,095	44,840
65 & over	2,062	532	213	254	220	203	69	97	3,650
Total Pay	18,463,630	14,329,380	11,856,787	16,552,947	16,366,985	15,093,672	6,003,364	8,679,755	107,346,520
Avg. Pay	8,954	26,935	55,666	65,169	74,395	74,353	87,005	89,482	29,410
Total	24,577	14,294	11,952	10,140	7,018	4,152	992	282	73,407
Total Pay	579,919,622	687,754,430	686,281,129	648,006,101	481,093,681	302,270,751	76,980,987	24,020,098	3,486,326,799
Avg. Pay	23,596	48,115	57,420	63,906	68,551	72,801	77,602	85,178	47,493

Average Age: 44.1 **Average Service: 10.7**

Schedule F continued ...

Table 2 – Total Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage Increase in Average Pay
6/30/2014	73,407	$ 3,486,326,799	$ 47,493	2.12 %
6/30/2013	74,831	3,480,066,406	46,506	1.51
6/30/2012	75,951	3,479,567,004	45,813	1.33
6/30/2011	76,349	3,451,756,288	45,210	3.97
6/30/2010	76,387	3,321,614,223	43,484	1.51
6/30/2009	75,937	3,253,076,600	42,839	1.43

Table 3 – Eligible Deferred Vested Members as of June 30, 2014 Medical Insurance Fund

Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	1	13	14
30-34	65	352	417
35-39	158	549	707
40-44	220	648	868
45-49	194	670	864
50-54	209	647	856
55-59	187	581	768
60 & Over	219	475	694
Total	**1,253**	**3,935**	**5,188**

Table 3 – Eligible Deferred Vested Members as of June 30, 2014 Life Insurance Fund

Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	3	17	20
30-34	52	335	387
35-39	122	476	598
40-44	178	542	720
45-49	151	545	696
50-54	164	515	679
55-59	157	450	607
60 & Over	103	303	406
Total	**930**	**3,183**	**4,113**

Schedule F continued ...

Table 4 – All Retirees & Spouses Receiving Health Care Benefits as of June 30, 2014 Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 40	3	24	27
40-44	19	57	76
45-49	63	211	274
50-54	371	975	1,346
55-59	1,348	3,236	4,584
60-64	3,110	6,736	9,846
65-69	3,615	6,918	10,533
70-74	2,720	4,344	7,064
75-79	1,843	2,704	4,547
80-84	1,185	1,865	3,050
85-89	625	1,240	1,865
90-94	244	579	823
95-99	47	170	217
100	3	24	27
101	1	6	7
102	1	6	7
103	0	9	9
104	0	3	3
105 & Over	0	1	1
Total	**15,198**	**29,108**	**44,306**

Table 5 – Retirees, Beneficiaries and Survivors Added To and Removed From Rolls * Medical Insurance Fund

Fiscal Year Ending June 30	Number of Members Added to Rolls	Number of Spouses** Added to Rolls	Total Number Added to Rolls	Number of Members Removed from Rolls	Number of Spouses** Removed from Rolls	Total Number Removed from Rolls	Number of Members on Rolls at the End of the Year	Number of Spouses** on Rolls at the End of the Year	Total Number on Rolls at the End of the Year
2009	1,777	640	2,417	887	510	1,397	33,481	6,808	40,289
2010	1,710	555	2,265	876	529	1,405	34,315	6,834	41,149
2011	1,770	629	2,399	1,052	541	1,593	35,033	6,922	41,955
2012	1,996	702	2,698	1,029	616	1,645	36,000	7,008	43,008
2013	1,853	664	2,517	1,076	619	1,695	36,777	7,053	43,830
2014	1,663	638	2,301	1,165	660	1,825	37,275	7,031	44,306

** Reflects members, spouses, and beneficiaries participating in a health care plan.* *** Includes spouses, beneficiaries, and surviving spouses.*

Schedule F continued ...

Table 6 – Retirees, Beneficiaries and Survivors Added To and Removed From Rolls * Life Insurance Fund

Fiscal Year Ending June 30	Number Added to Rolls	Life Insurance Benefit ($1,000's)	Number Removed from Rolls	Life Insurance Benefit ($1,000's)	Number on Rolls at the End of the Year	Life Insurance Benefit ($1,000's)	Increase in Life Insurance Benefit	Average Life Insurance Benefit
2009	1,949	$ 9,745	769	$ 3,845	38,958	$ 194,790	3.12%	$ 5,000
2010	1,799	8,995	806	4,030	39,951	199,755	2.55	5,000
2011	2,025	10,125	858	4,290	41,118	205,590	2.92	5,000
2012	2,364	11,820	880	4,400	42,602	213,010	3.61	5,000
2013	2,195	10,975	952	4,760	43,845	219,225	2.92	5,000
2014	1,964	9,820	954	4,770	44,855	224,275	2.30	5,000

** The life insurance benefit is payable upon the death of only members retired for service or disability. Numbers do not include life insurance benefits payable upon the death of an active contributing member.*

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Kentucky Teachers' Retirement System

2014

Actuarial Section

Additional Report on

GASB Statement Number 67

December 11, 2014

Board of Trustees
Teachers' Retirement System
of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Presented in this report is information to assist the Teachers' Retirement System of the State of Kentucky (KTRS), in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. This report has been prepared as of June 30, 2014 (the Measurement Date) to assist KTRS in better understanding the requirements of GASB 67 and to identify the information to be provided by KTRS's actuary, Cavanaugh Macdonald Consulting (CMC).

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2013. The valuation was based upon data, furnished by the Executive Secretary and KTRS staff, concerning active, inactive and retired members along with pertinent financial information.

To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 67.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the

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calculations were completed in compliance with the laws governing the System. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel EA, FCA, MAAA
Principal and Consulting Actuary

REPORT OF THE ANNUAL GASB STATEMENT NO. 67 REQUIRED INFORMATION FOR THE TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY PREPARED AS OF JUNE 30, 2014

Section 1: Introduction

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "Financial Reporting For Pension Plans", in June 2012. GASB 67's effective date is for plan years beginning after June 15, 2013. This report, prepared as of June 30, 2014 (the Measurement Date), presents information to assist the Teachers' Retirement System of the State of Kentucky (KTRS), in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of KTRS as of June 30, 2013. The results of that valuation were detailed in a report dated December 6, 2013.

GASB 67 replaces GASB 25, and represents a significant departure from the requirements of that older statement. GASB 25 was issued as a funding friendly statement that required pension plans to report items consistent with the results of the plan's actuarial valuations, as long as those valuations met certain parameters. GASB 67 basically separates accounting from funding by creating disclosure and reporting requirements that may or may not be consistent with the basis used for funding the System.

GASB 67 requires us to determine the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. If the valuation date at which the TPL is determined is before the measurement date, as is the case here, the TPL must be rolled forward to the measurement date. The Net Pension Liability (NPL) is then set equal to the rolled forward TPL minus the System's Fiduciary Net Position (FNP) (basically the market values of assets) as of the Measurement Date. The benefit provisions recognized in the calculation of the TPL are summarized in Schedule B. The development of the roll-forward of the TPL is shown in the table on page 144.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR) as described by GASB 67. To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the membership and beneficiaries of the System on the Measurement Date. We have projected future employer contributions to be made based on the amounts required by statute. Although the KTRS Board of Trustees adopted a funding policy, shown in Schedule E, on December 16, 2013, the State has not funded the actuarially determined contributions since 2009. On this basis, if the FNP is not projected to be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. Our calculations indicated that the FNP is projected to be depleted, so a bond rate is used in the determination of the SEIR. On this basis, we have determined that a discount rate of 5.23 percent meets the requirements of GASB 67.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information.

Section 2: Financial Statement Notes

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30(a) (1)-(3): The information required is to be supplied by the System.

Paragraph 30(a) (4): The data required regarding the membership of the KTRS were furnished by the System office. The following table summarizes the membership of the System as of June 30, 2013, the actuarial valuation date.

Membership

	Number
Retirees And Survivors Currently Receiving Benefits	47,406
Terminated Vested Employees Entitled To But Not Yet Receiving Benefits	7,194
Inactive Non-vested Members	22,848
Active Members	74,831
TOTAL	**152,279**

Paragraphs 30(a)(5)-(6) and Paragraphs 30(b)-(f): The information required is to be supplied by the System.

Paragraphs 31(a) (1)-(4): The information is provided in the following table. As stated on the previous page, the Net Pension Liability (NPL) is equal to the Total Pension Liability (TPL) minus the Fiduciary Net Position (FNP). That result as of June 30, 2014 is presented in the table below ($ thousands).

	Fiscal Year Ending 6/30/2014
Total Pension Liability (TPL)	$ 39,684,776
Fiduciary Net Position (FNP)	18,092,619
Net Pension Liability (NPL)	$ 21,592,157
Ratio of FNP to TPL	45.59%

Paragraph 31(b) (1)(a)-(f): This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The set of actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The total pension liability was determined by an actuarial valuation as of June 30, 2013, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.50 percent
Salary increases	4.00 - 8.20 percent, including inflation
Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation
Municipal Bond Index Rate	4.35%
Single Equivalent Interest Rate	5.23%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale AA to 2020 with a set back of 1 year for females.

The actuarial assumptions used in the June 30, 2013 valuation were based on the results of an actuarial experience study for the period July 1, 2005 - June 30, 2010 adopted by the Board on December 19, 2011.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by KTRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	45.0%	6.4%
Non U.S. Equity	17.0%	6.5%
Fixed Income	24.0%	1.6%
High Yield Bonds	4.0%	3.1%
Real Estate	4.0%	5.8%
Alternatives	4.0%	6.8%
Cash	2.0%	1.5%
Total	100.0%	

Section 2: Financial Statement Notes continued ...

Discount rate. The discount rate used to measure the total pension liability was 5.23 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that Employer contributions will be made at statutorily required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2036 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2035 and a municipal bond index rate of 4.35 percent was applied to all periods of projected benefit payments after 2035. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

Paragraph 31(b) (1) (g): This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 5.23 percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (4.23 percent) or 1-percentage-point higher (6.23 percent) than the current rate ($ thousands):

(in thousands)	1% Decrease (4.23%)	Current Discount Rate (5.23%)	1% Increase (6.23%)
System's net pension liability	$ 27,122,640	$ 21,592,157	$ 17,027,992

Paragraph 31(c): June 30, 2013 is the actuarial valuation date upon which the TPL is based. The TPL as of June 30, 2013 was determined using a discount rate of 5.16% which was based on a municipal bond index rate as of that date equal to 4.27%. An expected TPL is determined as of June 30, 2014 using standard roll forward techniques. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate for the year. The final TPL as of June 30, 2014 reflects that the assumed municipal bond index rate increased from 4.27% to 4.35%, resulting in a change in the SEIR from 5.16% to 5.23%. The impact of this change in the discount rate is a change in assumptions that is added to the expected TPL to determine the final TPL as of June 30, 2014. This procedure is shown in the following table:

TPL Roll-Forward *(in thousands)*		
(a)	TPL as of June 30, 2013	$ 38,758,709
(b)	Entry Age Normal Cost for the Year July 1, 2013 - June 30, 2014	1,002,338
(c)	Actual Benefit Payments (including refunds) for the Year July 1, 2013 - June 30, 2014	1,679,838
(d)	Expected TPL as of June 30, 2014 = [(a) x (1.0516)] + (b) - [(c) x (1.0258)]	$ 40,037,819
(e)	Change in Assumptions (Discount Rate from 5.16% to 5.23%)	(353,043)
(f)	Final TPL as of June 30, 2014 = (d) + (e)	$ 39,684,776

Section 3: Required Supplementary Information

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 32(a)-(c): The required tables are provided in Schedule A.

Paragraph 32(d): The money-weighted rates of return required are to be supplied by the System.

Paragraph 34: In addition the following should be noted regarding the RSI:

Changes of benefit terms. None

Changes of assumptions. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2011. In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation, the Board adopted an interest smoothing methodology to calculate liabilities for purposes of determining the actuarially determined contributions.

Methods and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of that schedule:

Actuarial Cost Method	Amortization Method	Remaining Amortization Period	Asset Valuation Method	Inflation	Salary Increase	Ultimate Investment Rate of Return*
Entry Age	Level percent of pay, open	30 years	5-year smoothed market	3.50%	4.00 to 8.20 percent, including inflation	7.50 percent, net of pension plan investment expense, including inflation

**The actuarially determined contribution rates are determined using the interest smoothing methodology adopted by the Board*

Schedule A
Required Supplementary Information
Schedule of Changes in the Net Pension Liability
GASB 67 Paragraph 32(a)
(In Thousands)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Pension Liability										
Service Cost	$ 1,002,338									
Interest	1,956,610									
Benefit Changes	0									
Difference Between Expected and Actual Experience	0									
Changes of Assumptions	(353,043)									
Benefit Payments	(1,654,376)									
Refunds of Contributions	(25,462)									
Net Change in Total Pension Liability	926,067									
Total Pension Liability-Beginning	38,758,709									
Total Pension Liability-Ending (a)	$ 39,684,776									
Plan Net Position										
Contributions-State of KY	$ 483,330									
Contributions-Other Employers	79,996									
Contributions-Member	304,982									
Net Investment Income	2,803,249									
Benefit Payments	(1,654,376)									
Administrative Expense	(7,956)									
Refunds of Contributions	(25,462)									
Other	0									
Net Change in Plan Net Position	1,983,763									
Plan Net Position - Beginning	16,108,808									
Plan Net Position - Ending (b)	$ 18,092,571									
Employers' Net Pension Liability - Ending (a) - (b)	$ 21,592,205									

Schedule A: Required Supplementary Information continued ...

Schedule A
Required Supplementary Information
Schedule of Net Pension Liability
GASB 67 Paragraph 32(b)
(In Thousands)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Pension Liability	$ 39,684,776									
Plan Net Position	18,092,571									
Net Pension Liability	$ 21,592,205									
Ratio of Plan Net Position to Total Pension Liability	45.59%									
Covered-Employee Payroll	$ 3,443,138									
Net Pension Liability as a Percentage of Covered-Employee Payroll	627.11%									

Schedule A
Required Supplementary Information
Schedule of Employer Contributions
GASB 67 Paragraph 32(c)
(In Thousands)

	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Covered-Employee Payroll	$3,443,138	$3,310,710	$3,310,176	$3,283,749	$3,321,614	$3,253,077	$3,190,332	$2,975,289	$2,859,477	$2,703,430
Actual Employer Contributions	$ 563,326	$ 568,233	$ 557,340	$1,037,936	$ 479,805	$ 442,550	$ 466,248	$ 434,890	$ 406,107	$ 383,777
Actuarially Determined Employer Contributions	823,446	802,985	757,822	678,741	633,938	600,283	563,789	494,565	406,107	383,777
Annual Contribution Excess (Deficiency)	$ (260,120)	$ (234,752)	$ (200,482)	$ 359,195	$ (154,133)	$ (157,733)	$ (97,541)	$ (59,675)	$	$
Actual Contributions as a Percentage of Covered-Employee Payroll	16.36%	17.16%	16.84%	31.61%	14.44%	13.60%	14.61%	14.62%	14.20%	14.20%

Schedule B

Summary of Main Benefit Provisions

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2013. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance for Members Before 7/1/2008
Condition for Allowance

- Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance

- The annual retirement allowance for non-university members is equal to:
  - (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
  - (b) 2.5% of final average salary multiplied by service after July 1, 1983.
  - (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
  - (d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance for Members on and after 7/1/2008
Condition for Allowance

- Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

- 1.7% of final average salary if service is 10 years or less.
- 2.0% of final average salary if service is greater than 10 years and no more than 20 years.
- 2.3% of final average salary if service is greater than 20 years but no more than 26 years.
- 2.5% of final average salary if service is greater than 26 years but no more than 30 years.
- 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

- 1.5% of final average salary if service is 10 years or less.
- 1.7% of final average salary if service is greater than 10 years and no more than 20 years.
- 1.85% of final average salary if service is greater than 20 years but less than 27 years.
- 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Section B: Summary of Main Benefit Provisions continued ...

Disability Retirement Allowance
Condition for Allowance

- Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance

- The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

- Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

- A member who has completed 5 years of creditabA separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Section B: Summary of Main Benefit Provisions continued ...

Post-Retirement Adjustments
The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3- CONTRIBUTIONS

Member Contributions
University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

Schedule C

Statement of Actuarial Assumptions and Methods

Investment Rate of Return: 7.50% per annum, compounded annually.

Salary Increases: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.60%	4.50%	4.30%	4.20%	4.00%

Separations From Service: : Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Section C: Statement of Actuarial Assumptions and Methods continued ...

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Annual Rate of Death After . . .

AGE	SERVICE RETIREMENT MALE	SERVICE RETIREMENT FEMALE	DISABILITY RETIREMENT MALE	DISABILITY RETIREMENT FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Market Value

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

Schedule D

Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

Schedule E

Board Funding Policy

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("KTRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background

State law provides that the retirement benefits promised to members of KTRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in KTRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state-as plan guarantor-is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $487 million (Fiscal Year 2016). The following schedule details the growth of the annual retirement appropriations payable by the state:

Section E: Board Funding Policy continued ...

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000

(Source: KTRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2013).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which-if paid-will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

    - Use the Entry Age Normal actuarial cost method;
    - Use a five-year asset smoothing method;
    - Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
    - Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
    - Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and KTRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

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Kentucky Teachers' Retirement System

2014

Statistical Section

This section of the Kentucky Teachers' Retirement System Comprehensive Annual Financial Report (KTRS CAFR) presents detailed information as a context for understanding the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

CONTENTS

Financial Trends ..... page 161

These schedules contain trend information to help the reader understand how KTRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 163

These schedules offer demographic and economic indicators to help the reader understand the System's environment within which KTRS's financial activities take place.

Operating Information ..... page 168

These schedules contain benefits, service, and employer contribution data to help the reader understand how KTRS's financial report relates to KTRS's services and activities.

Defined Benefit Plan
Past Ten Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Position
2014	$ 563,326,249	$ 304,981,620	$ 2,803,247,956	$ 3,671,555,825
2013	568,233,446	304,738,728	2,039,874,263	2,912,846,437
2012	557,339,552	309,729,924	309,696,252	1,176,765,728
2011	1,037,935,993	302,262,819	2,760,972,224	4,101,171,036
2010	479,805,088	297,613,965	1,509,785,381	2,287,204,434
2009	442,549,935	293,678,564	(2,020,682,522)	(1,284,454,023)
2008	466,247,782	291,423,948	(909,083,525)	(151,411,795)
2007	434,890,469	269,687,864	2,063,878,767	2,768,457,100
2006	410,920,969	258,464,856	717,308,002	1,386,693,827
2005	388,346,438	247,024,518	946,070,556	1,581,441,512

Deductions by Type
(Including Benefits by Type)

Year	Service Retirants	Disability Retirants	Survivors	Life Insurance*	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Position
2014	$ 1,563,634,993	$ 73,501,441	$ 17,239,266	$	$ 1,654,375,700	$ 25,461,843	$ 7,955,972	$ 1,687,793,515
2013	1,484,132,938	69,808,291	16,781,695		1,570,722,924	22,059,094	8,377,003	1,601,159,021
2012	1,401,380,816	65,297,491	16,260,858		1,482,939,165	19,549,073	7,762,880	1,510,251,118
2011	1,326,033,698	60,950,214	15,551,801		1,402,535,713	17,325,387	7,322,739	1,427,183,839
2010	1,249,272,057	57,782,651	14,754,062		1,321,808,770	15,310,680	8,830,054	1,345,949,504
2009	1,184,075,934	54,562,038	14,342,435		1,252,980,407	15,208,419	8,165,757	1,276,354,583
2008	1,105,078,345	51,842,271	14,048,485		1,170,969,101	15,965,083	7,551,936	1,194,486,120
2007	1,040,003,417	48,863,876	13,671,586		1,102,538,879	14,822,827	7,351,846	1,124,713,552
2006	972,018,057	46,750,585	12,943,639	3,894,000	1,035,606,281	12,834,222	6,839,859	1,055,280,362
2005	902,863,420	44,070,071	12,585,248	3,852,800	963,371,539	10,975,941	6,652,673	981,000,153

* *Life Insurance Plan valued separately-- see page 153.*

Changes in Plan Net Position

Year	Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
2014	$ 3,671,555,825	$ 1,687,793,515	$1,983,762,310
2013	2,912,846,437	1,601,159,021	1,311,687,416
2012	1,176,765,728	1,510,251,118	(333,485,390)
2011	4,101,171,036	1,427,183,839	2,673,987,197
2010	2,287,204,434	1,345,949,504	941,254,930
2009	(1,284,454,023)	1,276,354,583	(2,560,808,606)
2008	(151,411,795)	1,194,486,120	(1,345,897,915)
2007	2,768,457,100	1,124,713,552	1,643,743,548
2006	1,386,693,827	1,055,280,362	331,413,465
2005	1,581,441,512	981,000,153	600,441,359

Medical Insurance Plan
Past Ten Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions	Recovery Income	Net Investment Income	Total Additions to Plan Net Position
2014	$ 157,688,414	$ 135,190,891	$ 4,879,981	$ 67,741,063	$ 365,500,349
2013	166,576,444	119,795,780	34,976	30,718,836	317,126,036
2012	173,966,623	100,346,070	3,781,222	(3,989,202)	274,104,713
2011	188,241,202	84,147,337	493,312	8,334,296	281,216,147
2010	158,761,433	63,805,573	14,618,348	12,312,999	249,498,353
2009	164,408,037	58,688,767	13,683,830	11,296,280	248,076,914
2008	148,929,322	55,402,830	11,936,887	8,128,179	224,397,218
2007	113,233,784	53,099,678	10,337,338	6,722,080	183,392,880
2006	89,319,498	51,697,167	6,117,979	6,804,286	153,938,930
2005	79,022,562	51,576,031		6,507,537	137,106,130

Deductions by Type
(Including Benefits by Type)

	Insurance Benefit Expense					
Year	Under Age 65	Age 65 & Over	Administrative Expense	Total Insurance Benefits Expense	Refunds*	Total Deductions to Plan Net Position
2014	$ 136,963,208	$ 105,107,323	$ 1,100,133	$ 243,170,664	$	$ 243,170,664
2013	142,170,438	98,761,180	1,275,206	242,206,824		242,206,824
2012	156,228,181	72,746,945	1,201,629	230,176,755		230,176,755
2011	145,544,405	80,890,958	1,186,029	227,621,392		227,621,392
2010	136,702,152	100,675,376		237,377,528		237,377,528
2009	123,819,475	81,037,647		204,857,122		204,857,122
2008	107,437,450	71,838,765		179,276,215	10,014	179,286,229
2007	104,828,254	69,400,843		174,229,097	5,834	174,234,931
2006	102,970,290	66,660,106		169,630,396	5,143	169,635,539
2005	82,186,847	64,233,482		146,420,329	9,072	146,429,401

**Refunds are netted against member contributions beginning fiscal year 2009.*

Changes in Plan Net Position

Year	Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
2014	$ 365,500,349	$ 243,170,664	$ 122,329,685
2013	317,126,036	242,206,824	74,919,212
2012	274,104,713	230,176,755	43,927,958
2011	281,216,147	227,621,392	53,594,755
2010	249,498,353	237,377,528	12,120,825
2009	248,076,914	204,857,122	43,219,792
2008	224,397,218	179,286,229	45,110,989
2007	183,392,880	174,234,931	9,157,949
2006	153,938,930	169,635,539	(15,696,609)
2005	137,106,130	146,429,401	(9,323,271)

Life Insurance Plan
Past Eight Fiscal Years

Additions by Source

Year	Employer Contributions	Net Investment Income	Total Additions to Plan Net Position
2014	$ 1,006,091	$ 4,572,845	$ 5,578,936
2013	1,680,495	674,760	2,355,255
2012	1,684,711	6,450,022	8,134,733
2011	1,668,822	3,094,776	4,763,598
2010	1,966,826	5,383,644	7,350,470
2009	5,455,473	5,282,958	10,738,431
2008	5,411,249	6,321,491	11,732,740
2007	5,022,137	(3,413,537)	1,608,600

Deductions by Type
(Including Benefits by Type)

Year	Life Insurance	Total Deductions to Plan Net Position
2014	$ 4,692,000	$ 4,713,324
2013	4,614,718	4,639,143
2012	4,397,281	4,420,167
2011	4,120,000	4,141,511
2010	4,148,511	4,148,511
2009	3,694,000	3,694,000
2008	4,003,000	4,003,000
2007	4,245,000	4,245,000

Changes in Plan Net Position

Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
$ 5,578,936	$ 4,713,324	$ 865,612
2,355,255	4,639,143	(2,283,888)
8,134,733	4,420,167	3,714,566
4,763,598	4,141,511	622,087
7,350,470	4,148,511	3,201,959
10,738,431	3,694,000	7,044,431
11,732,740	4,003,000	7,729,740
1,608,600	4,245,000	(2,636,400)

Distribution of Active Contributing Members as of June 30, 2014

By Age

Age	Male	Female
20-24	235	969
25-29	1,556	5,458
30-34	2,266	6,918
35-39	2,414	7,273
40-44	2,533	11,417
45-49	2,169	7,477
50-54	1,898	5,936
55-59	1,523	4,741
60-64	1,297	3,677
65 & over	1,090	2,560
TOTAL	**16,981**	**56,426**

By Service

Years of Service	Male	Female
Less than 1	1,185	6,403
1-4	3,981	13,002
5-9	3,453	10,843
10-14	2,807	9,148
15-19	2,467	7,672
20-24	1,684	5,326
25-29	1,034	3,125
30-34	262	732
35 or more	108	175
TOTAL	**16,981**	**56,426**

Principal Participating Employers
Current Year and Nine Years Ago

	2014			2005		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	10,255	1	13.48%	9,646	1	13.06%
Fayette County Public Schools	4,580	2	6.02	3,889	2	5.26
Boone County Schools	1,872	3	2.46	1,470	3	1.99
Hardin County Schools	1,343	4	1.77	1,270	4	1.72
Kenton County Schools	1,327	5	1.74	1,126	5	1.52
Bullitt County Schools	1,318	6	1.73	1,031	10	1.40
Warren County Schools	1,262	7	1.66	1,054	9	1.43
Oldham County Schools	1,192	8	1.57	988	11	1.34
Daviess County Schools	1,103	9	1.45	1,054	8	1.43
Madison County Schools	1,101	10	1.45	1,061	7	1.44
All Other*	50,716		66.67	51,289		69.42
TOTAL (208 Employers)	**76,069**		**100.00%**	**73,878**		**100.00%**

** In 2014, "all other" consisted of:*

Type	*Number*	*Employees*
Local School Districts	*163*	*44,608*
Higher Education	*6*	*4,023*
State Agencies	*15*	*1,640*
Regional Coops	*8*	*340*
Other	*6*	*105*
TOTAL	***198***	***50,716***

KTRS Schedule of Participating Employers
School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

KTRS Schedule of Participating Employers *(continued)*
School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Murray
36. Newport
37. Owensboro
38. Paducah
39. Paintsville
40. Paris
41. Pikeville
42. Pineville
43. Raceland
44. Russell
45. Russellville
46. Science Hill
47. Silver Grove
48. Somerset
48. Southgate
50. Walton-Verona
51. West Point
52. Williamsburg
53. Williamstown

Universities & Community/ Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/ Other Organizations

1. Education and Workforce Development Cabinet
2. Legislative Research Commission
3. Finance and Administration Cabinet

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative
13. Southeast South-Central Educational Cooperative

Number of Payments in United States

119	ALABAMA
1	ALASKA
86	ARIZONA
36	ARKANSAS
102	CALIFORNIA
56	COLORADO
9	CONNECTICUT
7	DELAWARE
1,063	FLORIDA
247	GEORGIA
5	HAWAII
7	IDAHO
94	ILLINOIS
664	INDIANA
14	IOWA
33	KANSAS
43	LOUISIANNA
16	MAINE
28	MARYLAND
18	MASSACHUSETTS
40	MICHIGAN
19	MINNESOTA
50	MISSISSIPPI
75	MISSOURI
6	MONTANA
8	NEBRASKA
21	NEVADA
5	NEW HAMPSHIRE
8	NEW JERSEY
17	NEW MEXICO
40	NEW YORK
246	NORTH CAROLINA
2	NORTH DAKOTA
586	OHIO
27	OKLAHOMA
29	OREGON
51	PENNSYLVANIA
0	RHODE ISLAND
180	SOUTH CAROLINA
9	SOUTH DAKOTA
855	TENNESSEE
183	TEXAS
25	UTAH
1	VERMONT
148	VIRGINIA
38	WASHINGTON
103	WEST VIRGINIA
28	WISCONSIN
1	WYOMING

Distribution of Retirement and Medical Payments Worldwide

As of June 30, 2014

Number of Payments Outside United States

7	DIST COLUMBIA
3	MILITARY APO
1	AUSTRALIA
1	BARBADOS
5	CANADA
1	ENGLAND
1	PHILIPPINES
1	SWEDEN
1	SWITZERLAND

TOTALS

Number of Out of State Payments	**5,470**
Out of State Payments	**$148,464,568**
Number of Payments	**49,856**
Amount of Payments	**$1,816,125,586**

Distribution of Retirement and Medical Payments Statewide as of June 30, 2014

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Adair	$ 6,925,893	199	Laurel	22,589,262	631
Allen	6,440,822	174	Lawrence	5,231,066	147
Anderson	7,691,376	216	Lee	2,691,803	80
Ballard	4,613,421	126	Leslie	5,473,467	148
Barren	15,070,047	404	Letcher	11,901,603	336
Bath	4,231,605	128	Lewis	6,408,833	178
Bell	13,873,400	382	Lincoln	10,647,715	284
Boone	34,614,035	867	Livingston	3,233,784	90
Bourbon	7,203,947	200	Logan	9,676,713	267
Boyd	19,985,505	524	Lyon	3,907,255	105
Boyle	17,077,351	451	Madison	50,567,450	1,329
Bracken	3,811,808	100	Magoffin	6,428,112	176
Breathitt	8,371,099	248	Marion	6,463,603	187
Breckinridge	6,867,160	178	Marshall	13,474,756	361
Bullitt	17,187,449	429	Martin	4,877,716	140
Butler	3,560,428	101	Mason	7,293,246	199
Caldwell	6,768,176	187	McCracken	26,532,985	708
Calloway	24,090,369	649	McCreary	7,248,989	208
Campbell	27,368,619	687	McLean	4,106,341	111
Carlisle	1,589,726	48	Meade	7,086,605	173
Carroll	2,981,501	81	Menifee	2,115,473	69
Carter	13,011,273	377	Mercer	8,715,093	257
Casey	5,671,520	164	Metcalfe	3,750,944	101
Christian	19,688,721	535	Monroe	5,530,340	159
Clark	12,144,662	343	Montgomery	11,949,069	321
Clay	10,787,010	276	Morgan	6,501,047	184
Clinton	5,284,797	148	Muhlenberg	11,715,321	295
Crittenden	2,305,528	74	Nelson	14,775,172	393
Cumberland	3,502,004	96	Nicholas	2,012,143	57
Daviess	40,512,111	1,077	Ohio	7,044,003	199
Edmonson	3,660,503	101	Oldham	18,212,692	438
Elliott	2,204,946	69	Owen	3,131,627	83
Estill	5,193,497	144	Owsley	4,061,170	116
Fayette	106,597,756	2,890	Pendleton	4,735,761	137
Fleming	6,118,058	175	Perry	13,722,088	375
Floyd	19,598,061	563	Pike	29,233,788	824
Franklin	27,206,750	889	Powell	4,751,288	125
Fulton	2,697,225	74	Pulaski	25,220,219	730
Gallatin	951,914	25	Robertson	786,833	23
Garrard	7,041,269	185	Rockcastle	7,135,145	189
Grant	6,936,366	169	Rowan	17,329,787	479
Graves	15,289,313	408	Russell	8,302,597	225
Grayson	9,703,562	266	Scott	14,598,196	391
Green	4,300,995	115	Shelby	17,057,564	440
Greenup	13,894,337	377	Simpson	6,063,999	165
Hancock	2,927,283	78	Spencer	5,440,122	135
Hardin	31,703,302	829	Taylor	10,952,056	318
Harlan	14,874,100	414	Todd	3,190,730	96
Harrison	7,466,847	204	Trigg	6,322,545	182
Hart	5,234,091	136	Trimble	2,068,824	54
Henderson	15,888,232	417	Union	4,235,548	122
Henry	6,698,084	188	Warren	58,496,633	1,590
Hickman	1,457,783	40	Washington	3,930,197	109
Hopkins	17,073,864	457	Wayne	8,331,428	228
Jackson	4,631,682	144	Webster	4,777,432	138
Jefferson	279,811,109	6,581	Whitley	24,432,161	679
Jessamine	12,729,141	356	Wolfe	4,081,862	119
Johnson	12,974,195	345	Woodford	10,673,898	289
Kenton	34,162,691	909			
Knott	8,567,431	246	**Total in Kentucky**	**$ 1,667,661,018**	**44,386**
Knox	9,573,100	283			
Larue	6,036,069	148			

Growth in Annuitants
as of June 30, 2014

Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Survivors	Eligible to Retire
2005-06	33,618	2,039	1,631	495	531
2006-07	34,462	2,086	1,722	466	549
2007-08	35,550	2,155	1,778	468	554
2008-09	36,684	2,209	1,837	448	559
2009-10	37,607	2,284	1,915	435	567
2010-11	38,705	2,379	2,003	430	584
2011-12	40,107	2,478	2,126	444	596
2012-13	41,255	2,582	2,207	432	601
2013-14	42,581	2,641	2,304	429	596

Schedule of Annuitants by Type of Benefit
as of June 30, 2014

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Benefit*				
		1	2	3	4	5
1 - 500	3,519	2,506	19	382	185	316
501 - 1,000	2,734	2,089	170	6	413	0
1,001 - 1,500	3,038	2,228	295	2	589	0
1,501 - 2,000	3,666	2,928	410	1	459	0
2,001 - 2,500	5,424	4,690	611	10	402	0
2,501 - 3,000	8,636	7,809	643	18	326	0
3,001 - 3,500	7,542	6,797	276	3	187	0
3,501 - 4,000	5,150	4,520	128	2	147	0
4,001 - 4,500	3,349	2,996	56	4	81	0
4,501 - 5,000	2,063	1,767	21	0	44	0
5,001 & OVER	3,430	2,925	12	1	67	0
TOTAL**	**48,551**	**41,255**	**2,641**	**429**	**2,900**	**316**

*Type of Benefit
1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Survivor Payment - Active Member*
4-*Beneficiary Payment - Retired Member*
5-*Disabled Adult Child*

*** Retirees in waiver program are not included.*

Schedule of Annuitants by Option Selected
as of June 30, 2014

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,831	414	289	58	6	421	120	380
501 - 1,000	1,443	329	225	112	9	329	211	76
1,001 - 1,500	1,481	314	290	145	10	398	305	95
1,501 - 2,000	1,939	397	343	152	10	470	266	89
2,001 - 2,500	2,567	515	486	201	5	880	540	230
2,501 - 3,000	4,290	869	680	218	10	1,430	836	303
3,001 - 3,500	3,943	835	527	230	11	1,103	802	91
3,501 - 4,000	2,643	536	420	159	8	787	551	46
4,001 - 4,500	1,696	323	297	111	5	473	422	22
4,501 - 5,000	1,049	227	160	88	8	287	236	8
5,001 & OVER	1,750	307	362	167	16	422	400	6
TOTAL	**24,632**	**5,066**	**4,079**	**1,641**	**98**	**7,000**	**4,689**	**1,346**

***Option selected:**

1 - Straight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/2004 TO 06/30/2005								
Average monthly benefit	$187	$528	$906	$1,488	$1,978	$2,892	$3,860	**$2,883**
Average final average salary	$4,353	$3,511	$3,647	$4,055	$4,182	$4,602	$5,275	**$4,724**
Number of retired members	55	98	107	106	145	811	875	**2,197**
07/01/2005 TO 06/30/2006								
Average monthly benefit	$202	$473	$1,019	$1,493	$2,037	$2,998	$4,063	**$2,827**
Average final average salary	$4,106	$3,253	$4,052	$4,117	$4,317	$4,721	$5,490	**$4,773**
Number of retired members	44	105	106	132	145	689	604	**1,873**
07/01/2006 TO 06/30/2007								
Average monthly benefit	$178	$514	$930	$1,559	$2,136	$3,140	$4,263	**$2,900**
Average final average salary	$4,102	$3,346	$3,590	$4,228	$4,537	$4,970	$5,758	**$4,916**
Number of retired members	48	113	90	109	193	534	514	**1,577**
07/01/2007 TO 06/30/2008								
Average monthly benefit	$199	$524	$1,117	$1,658	$2,276	$3,279	$4,319	**$2,984**
Average final average salary	$3,816	$3,066	$4,215	$4,412	$4,612	$5,067	$5,786	**$5,017**
Number of retired members	50	130	112	150	169	557	615	**1,831**
07/01/2008 TO 06/30/2009								
Average monthly benefit	$200	$573	$1,005	$1,725	$2,436	$3,368	$4,496	**$2,941**
Average final average salary	$4,617	$3,942	$3,873	$4,686	$4,983	$5,278	$5,960	**$5,164**
Number of retired members	72	168	137	115	217	505	585	**1,824**
07/01/2009 TO 06/30/2010								
Average monthly benefit	$185	$525	$1,104	$1,700	$2,427	$3,468	$4,670	**$3,222**
Average final average salary	$3,654	$3,637	$4,124	$4,508	$4,974	$5,383	$6,102	**$5,316**
Number of retired members	28	133	98	103	242	442	601	**1,647**
07/01/2010 TO 06/30/2011								
Average monthly benefit	$149	$519	$1,225	$1,781	$2,513	$3,621	$4,827	**$3,240**
Average final average salary	$3,570	$3,640	$4,423	$4,825	$5,184	$5,574	$6,235	**$5,392**
Number of retired members	45	157	144	112	242	544	617	**1,854**
07/01/2011 TO 06/30/2012								
Average monthly benefit	$175	$507	$1,170	$1,897	$2,613	$3,674	$4,726	**$3,148**
Average final average salary	$3,292	$3,759	$4,307	$4,898	$5,219	$5,605	$6,109	**$5,331**
Number of retired members	45	197	146	162	303	778	569	**2,200**
07/01/2012 TO 06/30/2013								
Average monthly benefit	$161	$475	$1,186	$1,963	$2,781	$3,811	$5,162	**$3,149**
Average final average salary	$3,362	$3,660	$4,498	$4,956	$5,518	$5,799	$6,632	**$5,476**
Number of retired members	44	234	156	154	294	685	447	**2,014**
07/01/2013 TO 06/30/2014								
Average monthly benefit	$192	$484	$1,270	$2,068	$2,797	$3,847	$5,362	**$3,126**
Average final average salary	$4,148	$3,677	$4,751	$5,364	$5,600	$5,902	$6,860	**$5,589**
Number of retired members	56	211	161	145	258	678	344	**1,853**
Ten Years Ended June 30, 2014								
Average monthly benefit	**$184**	**$510**	**$1,111**	**$1,751**	**$2,499**	**$3,406**	**$4,494**	**$3,042**
Average final average salary	**$3,966**	**$3,592**	**$4,202**	**$4,638**	**$5,082**	**$5,283**	**$5,935**	**$5,169**
Number of retired members	**487**	**1,546**	**1,257**	**1,288**	**2,298**	**6,223**	**5,771**	**18,870**

Medical Insurance Plan
Average Insurance Premium Supplements for the Last Ten Years
By Years of Service Credit

Retirement Effective Dates	00-9.99	10-14.99	15-19.99	20>=	TOTAL
07/01/2004 to 06/30/2005					
Average monthly supplement	$ 138	$ 214	$ 305	$ 395	
Number of retired members	36	70	93	1,768	1,967
07/01/2005 to 06/30/2006					
Average monthly supplement	$ 161	$ 242	$ 362	$ 487	
Number of retired members	28	49	106	1,440	1,623
07/01/2006 to 06/30/2007					
Average monthly supplement	$ 146	$ 261	$ 363	$ 490	
Number of retired members	29	53	80	949	1,111
07/01/2007 to 06/30/2008					
Average monthly supplement	$ 163	$ 261	$ 378	$ 512	
Number of retired members	36	61	104	952	1,153
07/01/2008 to 06/30/2009					
Average monthly supplement	$ 168	$ 298	$ 414	$ 563	
Number of retired members	26	64	103	1,329	1,522
07/01/2009 to 06/30/2010					
Average monthly supplement	$ 151	$ 339	$ 435	$ 621	
Number of retired members	32	73	103	1,276	1,484
07/01/2010 to 06/30/2011					
Average monthly supplement	$ 167	$ 312	$ 439	$ 597	
Number of retired members	30	32	109	1,360	1,531
07/01/2011 to 06/30/2012					
Average monthly supplement	$ 164	$ 302	$ 433	$ 579	
Number of retired members	29	81	121	1,568	1,799
07/01/2012 to 06/30/2013					
Average monthly supplement	$ 80	$ 227	$ 367	$ 499	
Number of retired members	29	90	104	1,373	1,596
07/01/2013 TO 06/30/2014					
Average monthly supplement	$ 52	$190	$335	$484	
Number of retired members	15	82	100	1,227	1,424

Summary of Fiscal Year 2013-2014

Retiree Sick Leave Payments

ACTUARIAL RATE

Grand total members retiring		2,228
Total members receiving sick leave payments		1,548
Total amount of sick leave payments @ 11.355% contribution rate	$	19,692,958
Average payment per retiree	$	12,722
Total increase in final 3/5 average salary base	$	5,433,667
Average increase in final average salary	$	3,510
Total service credit of 1,548 retirees		38,938
Average service credit of 1,548 retirees		25.15

ANTICIPATED LIFETIME PAYOUT OF ADDITIONAL ANNUITY

Actuarial cost of sick leave as salary credit	$	45,174,969

Funding of Additional Payments

Member contributions 9.105% x $19,692,958 =	$	1,793,044
Employer contributions 12.305% x $19,692,958 =		2,423,218
Total Contributions	$	4,216,262

DEFICIT:

Anticipated additional payout	$	45,174,969
Less total contributions		4,216,262
Subtotal unfunded debt		40,958,707
Less current year appropriation		4,440,300
TOTAL DEFICIT (overpayment)*	$	36,518,407

* *NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. Sick leave deficits are amortized over 20 year periods.*

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Teachers' Retirement System of the State of Kentucky

The 75th Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Year Ended June 30, 2015

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN, CPA
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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Kentucky Teachers' Retirement System

2015

Introductory Section

Chairperson's Letter

Teachers' Retirement System of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

BOARD OF TRUSTEES

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STEPHEN L. PRUITT
COMMISSIONER
DEPARTMENT
OF EDUCATION

EX OFFICIO
TODD HOLLENBACH
STATE TREASURER

December 9, 2015

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2015, the 75th year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

KTRS closed the 2014-2015 fiscal year with $18.8 billion net assets. The active membership totaled 72,246 and the retired membership was 49,822 with annual annuity and medical insurance benefits of $2 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. Every effort will be made to ensure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Arthur Green
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 9, 2015

Honorable Matthew G. Bevin, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky

Dear Governor Bevin:

It is my pleasure to submit the 75th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2015. State law requires the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system also are required. The Kentucky Teachers' Retirement System (KTRS) produced this annual report that provides you, the General Assembly and the public with information necessary to better understand KTRS. Contained within are numerous examples of how Kentucky teachers' future well-being is being provided for at a low cost with a great economic benefit for those educators and the state's businesses, which receive many of those retirement dollars as they are spent by retirees.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of KTRS for the year ended June 30, 2015. Discussion and analysis of net assets and related additions and deductions are presented in Management's Discussion and Analysis beginning on page 18.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are executed accurately and financial statements are fairly presented. There are limits inherent in all systems of internal control based on the recognition that the costs of such systems should be related to the benefits to be derived. Management believes the System's controls provide this appropriate balance. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Secretary and the Governance and Audit Committee of the Board of Trustees.

Profile of KTRS

KTRS began operations on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state. KTRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 29. Also, the summary of the plan provisions starting on page 104 is useful in understanding benefit and contribution provisions. The population of KTRS membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the retirement system. The budget is approved by the Board of Trustees and submitted to the Kentucky General Assembly for adoption. KTRS's investment earnings pay for the agency's administrative expenses, which are among the lowest of its peers.

Major Initiatives

The System continually seeks opportunities to better serve its membership. During the past year, KTRS has continued work on several major initiatives concerning funding and cost containment for retiree health care, the investment program and information technology.

Implementation of the "Shared Responsibility" Solution for Funding Retiree Health Care, Careful Management of Medical Insurance Costs and

Protecting Members From an Unfair Medicare Part B Premium Increase

June 30, 2015 marked the end of the fifth year of the six-year phase in of the "shared responsibility" solution for prefunding retired teacher health care. The Board of Trustees and Staff are very pleased to report that $3.1 billion in actuarial liability has been eliminated from the retired teacher health care plan through implementation of this solution. Another $1.9 billion savings in actuarial liability was accomplished through careful management of health care costs. Thus, since implementing "shared responsibility" and other cost control measures, more than $5 billion in actuarial accrued liability has been eliminated from the KTRS Medical Insurance Fund.

Elected officials have commended Kentucky's education community for its strong leadership and hard work in developing and implementing the solution. Constituent groups – representing retired teachers, active teachers, school boards, school superintendents and the state – all worked on the consensus funding solution. The solution provides that all the groups share in the solution by investing a little more now to receive substantial returns later. After five years, and the $3.1 billion in lowered liabilities by converting to a prefunded plan and other cost-saving measures, the "shared responsibility" solution is truly a significant accomplishment on the road to retirement security for current and future retired teachers. Kentucky is a national leader in prefunding retiree health benefits.

KTRS is efficient, effective and always working to improve the retirement security of Kentucky's teachers. Eliminating more than $5 billion in liability helps the financial condition of the Commonwealth and eases burdens on taxpayers.

The Board of Trustees of KTRS regularly reviews the health care plan to contain costs and maintain a meaningful benefit for retired teachers. The move to Medicare Advantage, now in our ninth year, continues to be stable and financially feasible for our members and the KTRS medical plan.

Some recent cost saving initiatives include moving the KTRS-sponsored Medicare drug plan from fully insured to a self-funded plan to achieve the greatest amount of federal subsidies for 2015. Additionally, KTRS joined the KY Rx Coalition in 2012, which is spearheaded by the University of Kentucky. By joining the coalition, KTRS will achieve annual savings through leveraging greater prescription purchasing power and deeper drug discounts. As an added benefit, a dedicated staff of pharmacists with the KY Rx Coalition can help each member with their prescriptions and how to maximize their prescription dollars.

In the past year, KTRS played an integral role educating federal lawmakers about a proposed 52 percent Medicare Part B premium increase for our retirees and convincing Congress to approve a less draconian solution. With the assistance of U.S. Senate Majority Leader Mitch McConnell and other members of the congressional delegation, KTRS successfully helped our members avoid the worst of an increase that unfairly impacted our retirees while leaving most Medicare recipients at this year's rate. Without the reform, our retirees would have paid the full brunt of a federally mandated Medicare Part B premium increase while recipients whose premiums are deducted from their Social Security benefit would have paid nothing additional (because SSI recipients are held harmless from proposed increases when there is no cost of living benefit adjustment.)

KTRS also has undertaken cost containment measures by seeking competitive bids for the Medicare Advantage program that resulted in premium reductions of more than $13 million for plan year 2015.

The Board has contracted with Edumedics for disease management services for Medicare-eligible retirees with diabetes, hypertension and hyperlipidemia. Edumedics is a Kentucky-based company spun out from the University of Louisville. Edumedics is educating retirees with these conditions about nutrition, drug regime, exercise and other matters. These educational efforts are ongoing, involving routine face-to-face checkups with participating retirees. If deemed successful at the conclusion of a three-year pilot period in 2016, the Board will likely expand this program to other chronic diseases.

Investment Program

For the twelve month period ended June 30, 2015, KTRS's investment program produced a total return of 5.1%. This ranked in the top 6% of

returns for pension funds with over $1 billion in assets. During the period including the last five years, KTRS's investment returns rank in the top 9%. Moreover, during the last 20 years, KTRS investment returns have averaged 7.6%, which meets the long-term assumed rate of return of 7.5%.

Because of KTRS's focus on fundamental value and risk control, it was able to continue a multiyear program of diversifying the portfolio. KTRS also continued to implement changes to the investment program based upon an asset liability modeling study and an analysis of the shared responsibility solution for funding retiree health care. These ongoing efforts are a continuation of a disciplined investment process and long-term focus on retirement security. This focus has generated exceptionally stable returns through the System's history, and we have every confidence that it will do so in the future. KTRS's investment program continues to be recognized as a leader in the public pension community for governance structure, trustee education and cost effectiveness.

Information Technology

Members recently began accessing their account information online – available anytime from anywhere – with KTRS's Pathway information technology system. The members' portal is the final phase of a multiyear effort to modernize KTRS's information technology infrastructure. The vendor authorized by the Board to build and install the new system has been working with staff onsite at KTRS since September 2011. In July 2013, member enrollment, employer reporting, service credit purchases and related accounting functions were put into production. In January 2015, new modules for member benefits, insurance, and retiree payroll went live. To date, more than 95% of the overall project has been completed, and work has been proceeding according to schedule and within budget. The project is expected to reach completion by May. The objective of Pathway is to make it easier for members to answer their own questions about their retirement and insurance accounts while streamlining retirement processes and improving staff efficiency in providing services to retirees and active members. In developing Pathway, KTRS is redesigning and improving office processes and applying new web-based technologies to these processes. This will increase staff productivity, provide seamless member account management, and simplify future system modifications. As KTRS continues to implement changes under Pathway, we expect that the new technology will help the System better serve its membership.

Funding Work Group

Leaders from the Kentucky General Assembly and the education community met for the last five months of 2015 to find solutions to address pension underfunding as part of the KTRS Funding Work Group established by then-Gov. Steve Beshear. The Funding Work Group allowed all sides to present their cases and produced valuable information and findings that will aid the development of a solution in the 2016 legislative session. I am encouraged that a single solution can be found, and agreed upon, before the General Assembly convenes in January.

Economic Condition

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 57 contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules, among others.

KTRS's investment portfolio outperformed its peers in a year when the markets challenged all investors. The entire pension portfolio gained 5.1% in 2014-15, where peers gained 3.1% – that difference of 2 percentage points shows KTRS's investments outperformed peers by 50 percent. The portfolio's 10-year annualized rate of return is 7.0% and the 20-year annualized rate of return is 7.6%.

The results show KTRS's investment team is meeting the goals set out in Board policy.

According to KRS 161.430 the KTRS Board of Trustees has the responsibility to invest the System's assets. The Board of Trustees delegates investment authority to the Investment Committee. The Investment Committee works closely with experienced investment counselors and the System's professional staff in evaluating and selecting investment allocations.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the Plan and its Trust Funds. The investment program shall also provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets.

The investment portfolio experienced a decrease in value during the 2014-2015 fiscal year as the portfolio's market value went from $18,527,307,235 to $18,447,494,794. The decrease in value of the portfolio was the result of negative cash flow for the pension fund and the compounded impact of lost opportunity due to underfunding. This decrease was offset partially by investment income that included interest income and dividends. Employer and employee contributions also provided significant income to the portfolio.

Investment income decreased to $871,554,710 from the 2013-2014 fiscal year total of $2,875,609,844 when the portfolio's investments gained 18.1 percent. The major contributing factor of the decrease in return from the System's investment portfolio resulted from the net appreciation in fair value of investments of only $428,758,194 at June 30, 2015 compared to $2,485,340,569 at June 30, 2014. It should be noted that KTRS annuities bolster the Commonwealth of Kentucky's economy, as approximately 92% of retired teachers reside within the state. Total benefits (retirement, medical...etc.) paid during the fiscal year were nearly $2 billion.

Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes, by statute, the contribution levels that are to be made by members and employers to fund the liabilities of the System. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

Since fiscal year 2008, the state has not paid the full recommended annual employer contribution necessary to prefund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of this failure to make the additional appropriation beyond salary-based contributions, the actuary says the state's annual additionally required employer contributions have grown significantly from $60.5 million (fiscal year 2009) to $512.9 million (fiscal year 2018). The following schedule details the growth of the additional annual employer contributions payable by the state:

Fiscal Year	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	520,372,000
2018	13.49	512,883,000

(Source: KTRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2015).

The Board has always taken action as required by state law and recommended annual employer contributions payable by the state that would ensure that the state meets the contractual obligations to members.

The latest actuarial valuation was for the period ending June 30, 2015. This report reflects the System's actuarial value of assets totaling $17.2 billion and actuarial determined liabilities totaling $31.1 billion. The funded ratio of actuarial assets to liabilities is 55.3%, which is an increase from the previous year and is primarily due to market appreciation of investments and smoothing of investment returns. The actuary reports: "In our opinion, the System is not being funded on an actuarially sound basis since the actuarially determined contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive

actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated."

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions (on page 51). After 2015 the actuary recommends an increase in employer contributions of 13.49% of pay for the 2017-2018 fiscal year (as detailed on page 90). Annual required employer contributions for the Medical Insurance Fund are provided in the schedule of employer contributions (on page 53). The 2015 employer shortfall of contributions created a net Other Post-Employment Benefits (OPEB) obligation of $1,480,595,898 (as detailed on page 122).

KTRS Medical Insurance Plan

The shared responsibility solution for funding retiree health care, which went into effect on July 1, 2010, provides a method of prefunding retiree health care over a 30-year period. The System believes that the shared responsibility solution for funding retiree health care will help ensure the retirement security of the state's teachers. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2015 indicated that the fund has an unfunded liability of $2.89 billion. The funded ratio of actuarial assets to liabilities is 18.09%, which is trending upward from past years. The actuary's opinion is: "… if the State contributions to the Medical Insurance Fund continue to increase to the planned levels, the Retiree Medical Plan will begin to operate in a more actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the Retiree Medical Plan will improve."

Additionally, the System believes continued steps must be taken to realize true cost containment through legislation on both the state and national levels. KTRS will continue to take measures to contain costs and increase revenues to the Medical Insurance Plan or may adjust coverage to meet existing revenues.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of KTRS. Certifications from the Board's External Auditor and Independent Actuary are enclosed in this report. The System's consultants who are appointed by the Board are listed on pages 54, 55, 79 and 85 of this report.

National Recognition

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2014. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. KTRS has received the Certificate of Achievement for the last twenty-seven consecutive years (fiscal years ended 1988-2014). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council (PPCC) awarded a Certificate of Achievement to the Teachers' Retirement of the State of Kentucky for 2015 for implementing and maintaining high

professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure, and are widely acknowledged to be marks of excellence in the public pension industry.

In 2015, for the fourth consecutive year, KTRS was not awarded the PPCC Certificate of Achievement for funding. Failure to qualify for the award reflects the employer's continued underfunding of KTRS's retirement annuity plan.

The PPCC is a coalition of three national associations that represent public retirement systems and administrators. Combined, these associations serve retirement systems that provide pension coverage for most of the nation's 16 million employees of state and local government. The associations that form the PPCC are the National Association of State Retirement Administrators; the National Council on Teacher Retirement; and the National Conference on Public Employee Retirement Systems.

Public Sector HealthCare Roundtable

KTRS is a member of the Public Sector HealthCare Roundtable, and I serve as its president and on its board of directors. The Roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector were properly represented during the formulation and debate, and now implementation of the Patient Protection and Affordable Care Act. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

Our Gratitude

Three elected members of the KTRS Board of Trustees left the board during the fiscal year. Dr. Tom Shelton served as an active teacher trustee from July 1, 2008 through December 31, 2014, including as chair of the board from June 1, 2012 through December 31, 2014. Ruth Ann Sweazy served as an active teacher trustee from July 1, 2003 through June 30, 2015, including as chair of the insurance committee from July 1, 2005 through June 30, 2015. Laura Zimmerman served as an active teacher trustee from September 15, 2003 through June 30, 2015, including as chair of the board from January 1, 2015 through June 30, 2015. During their tenures, the retirement system's retiree health care program secured long-term funding – in addition to implementing cost reductions – that lowered its unfunded liability by more than $5 billion. We thank them for their exemplary service and numerous contributions to the successful operation of the System.

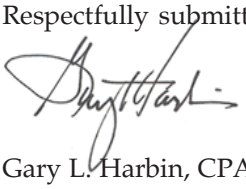
Acknowledgements

The preparation of this report reflects the combined efforts of the KTRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship of the assets contributed by KTRS members and their employers.

This report is located at the KTRS web address http://ktrs.ky.gov, and is made available to all System employer members, whose cooperation continues to contribute significantly to our success, and who form the vital link between KTRS and its active members.

KTRS management and staff are committed to the continued operation of an actuarially sound retirement system. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



Gary L. Harbin, CPA

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Retired Teacher Trustee
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Teacher Trustee
Murray

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Brodhead

Hollis Gritton
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Eddyville

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Georgetown

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Ex Officio Trustee
Commissioner,
Dept. of Education

Todd Hollenbach
Ex Officio Trustee
State Treasurer

Kentucky Teachers' Retirement System
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

GARY L. HARBIN, CPA
Executive Secretary

ROBERT B. BARNES, JD
General Counsel and
Deputy Executive Secretary
Operations

J. ERIC WAMPLER, JD
Deputy Executive Secretary
Finance & Administration

TOM SIDEREWICZ, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

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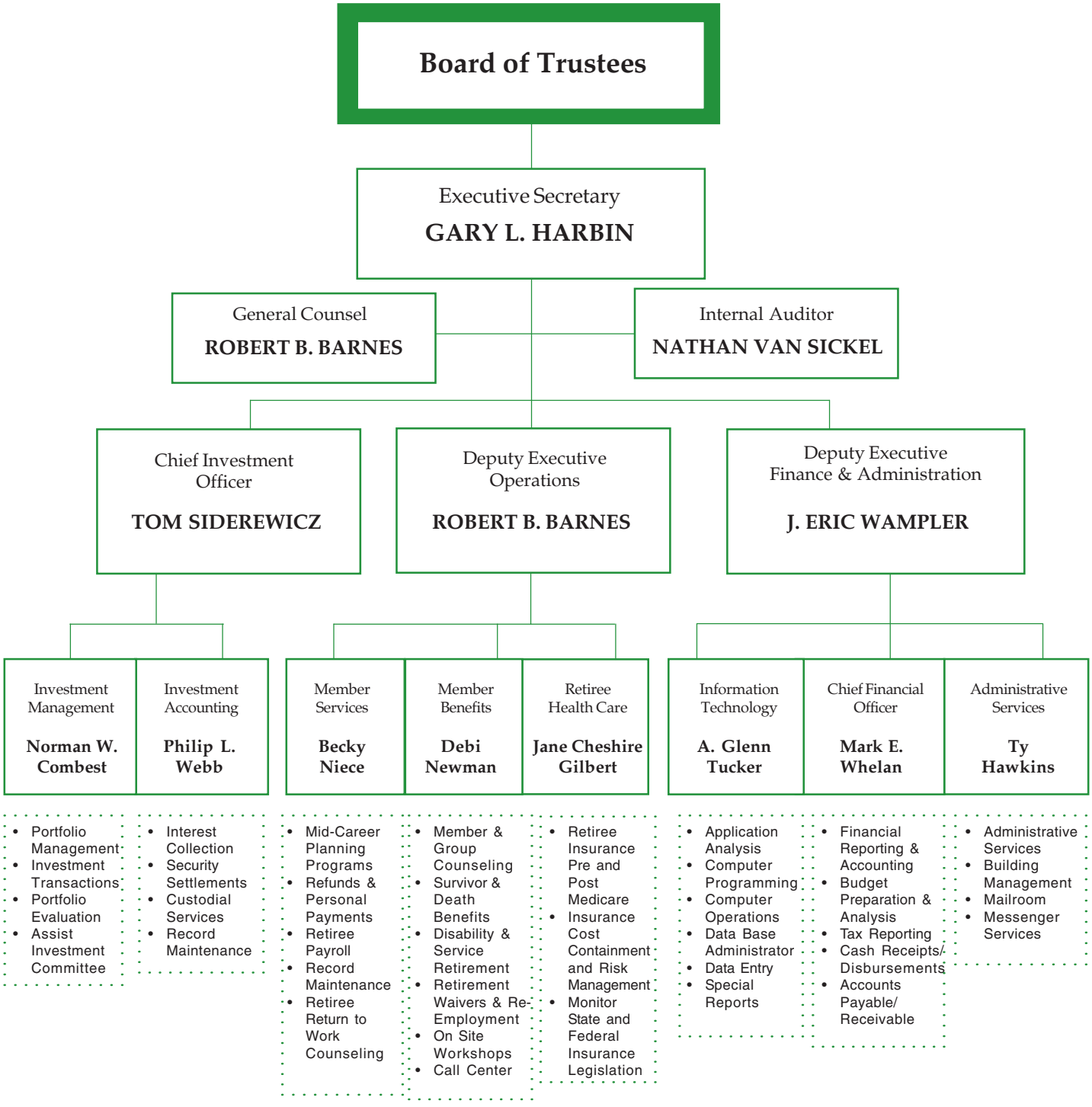
3550 Busbee Parkway, Suite 250
Kennesaw, GA 30144

AUDITOR

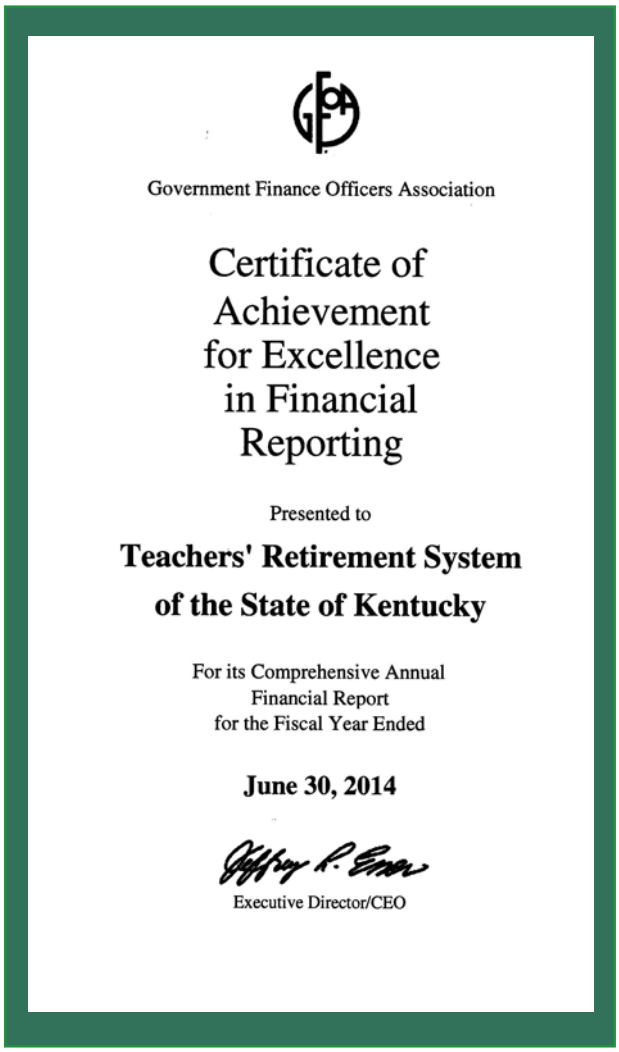
Mountjoy Chilton Medley LLC
1000 Bluegrass Corporate Center
333 West Vine Street
Lexington, KY 40507

** See pages 79 and 85 of the Investment Section for investment consultants.*

Kentucky Teachers' Retirement System
Organizational Chart



GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Teachers' Retirement System of the State of Kentucky

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2014

Executive Director/CEO

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last twenty-seven consecutive years (fiscal years ended 1988-2014).

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS

Public Pension Coordinating Council
Public Pension Standards
2015 Award

Presented to

Kentucky Teachers' Retirement System

In recognition of meeting professional standards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of state Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2015 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

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Kentucky Teachers' Retirement System

2015

Financial Section

Independent Auditor's Report

Board of Trustees
Kentucky Teachers' Retirement Systems
Frankfort, Kentucky

Report on the Financial Statements

We have audited the accompanying statement of fiduciary net position of the Teachers' Retirement System of the State of Kentucky as of June 30, 2015, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, which collectively comprise the component unit financial statements of the Teachers' Retirement System of the State of Kentucky as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility on the 2015 Financial Statements

Our responsibility is to express an opinion on the 2015 financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the 2015 financial statements.

Opinion on the 2015 Financial Statements

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of June 30, 2015, and the respective changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Kentucky
Indiana
Ohio

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Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 18 through 21 and the Schedule of Changes in Net Pension Liability (page 50), Schedule of Net Pension Liability (page 51), Schedule of Employer Contributions (page 51) Schedule of Investment Returns (page 52), Medical Insurance Schedule of Funding Progress (page 52) and Schedule of Employer Contributions (page 53), and Life Insurance Schedule of Funding Progress and Schedule of Employer Contributions (page 53) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the 2015 financial statements that collectively comprise the Teachers' Retirement System of the State of Kentucky's basic financial statements. The introductory, financial – supplementary schedules, investment, actuarial and statistical sections listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

2014 Financial Statements

The financials statements of the Teachers' Retirement System of the State of Kentucky as of and for the year ended June 30, 2014, were audited by predecessor auditors whose report December 15, 2014, expressed an unmodified opinion on those financial statements.

Other Reporting Required by *Government Auditing Standards*

In accordance with Government Auditing Standards, we have also issued our report dated December 9, 2015, on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and compliance.

/s/ Mountjoy Chilton Medley LLP

Lexington, Kentucky
December 9, 2015

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of the Teachers' Retirement System of the State of Kentucky (Kentucky Teachers' Retirement System, KTRS, Retirement System, or Plan) financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2015. Please read it in conjunction with the respective financial statements, which begin on page 22.

USING THIS FINANCIAL REPORT

Because of the long-term nature of the defined benefit retirement annuity plan, and the medical and life insurance plans, financial statements alone cannot provide sufficient information to properly reflect the ongoing perspective of the Retirement System. The Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position (on pages 22-25) provide information about the activities of the defined benefit retirement annuity plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Kentucky Teachers' Retirement System is the fiduciary of funds held in trust for its members.

The Required Supplementary Information includes historical trend information about the funded status of the defined benefit retirement annuity plan and of the medical insurance and life insurance plans from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of Employer Contributions present historical trend information about the required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2015, Kentucky Teachers' Retirement System's combined fiduciary net position increased by $46.4 million - from $18,720.4 million in 2014 to $18,766.8 million in 2015. In 2013, the combined net position totaled $16,613.4 million. The following summaries focus on the fiduciary net position and changes in fiduciary net position of Kentucky Teachers' Retirement System's defined benefit retirement annuity plan, medical insurance plan, and life insurance plan.

Summary of Fiduciary Net Position
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2015	2014	2013	2015	2014	2013	2015	2014	2013
Cash & Investments	$ 18,428.9	$ 18,426.8	$ 16,549.7	$ 609.7	$ 536.2	$ 456.5	$ 88.6	$ 89.7	$ 88.8
Receivables	295.4	310.5	173.0	29.1	12.4	16.8	1.1	1.1	1.1
Capital Assets	14.9	11.5	9.2						
Total Assets	18,739.2	18,748.8	16,731.9	638.8	548.6	473.3	89.7	90.8	89.9
Total Liabilities	(690.1)	(656.2)	(623.1)	(11.8)	(12.6)	(59.6)			
Net Position	$ 18,049.1	$ 18,092.6	$ 16,108.8	$ 627.0	$ 536.0	$ 413.7	$ 89.7	$ 90.8	$ 89.9

*TOTALS	2015	2014	2013
Cash & Investments	$ 19,127.2	$ 19,052.7	$ 17,095.0
Receivables	325.6	324.0	190.9
Capital Assets	14.9	11.5	9.2
Total Assets	$ 19,467.7	$ 19,388.2	$ 17,295.1
Total Liabilities	(701.9)	(668.8)	(682.7)
Net Position	$ 18,765.8	$ 18,719.4	$ 16,612.4

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had a combined plan net position of $1.0 million for years ended 2015, 2014 and 2013.*

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

The fiduciary net position of the defined benefit retirement annuity plan decreased by .24 percent ($18,049.1 million compared to $18,092.6 million) and in 2013, the fiduciary net position of the defined benefit plan totaled $16,108.8 million. The decrease is primarily due to deteriorations in market conditions which resulted in a net investment income decrease of $1.9 billion less than 2014. The 2014 amount was $.8 billion more than 2013. The defined benefit retirement annuity plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries. The fiduciary net position of the medical insurance plan increased by 17 percent ($627 million compared to $536 million) primarily due to contributions from members and employers exceeding insurance expenses due to legislation passed in 2010. This compares to 2013 where fiduciary net position of the medical insurance fund totaled $413.7 million. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

Summary of Changes in Fiduciary Net Position
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2015	2014	2013	2015	2014	2013	2015	2014	2013
ADDITIONS									
Member Contributions	$ 308.2	$ 305.0	$ 304.7	$ 157.5	$ 135.2	$ 119.8	$	$	$
Employer Contributions	559.6	563.3	568.2	145.3	157.7	166.6	1.0	1.0	1.7
Net Investment Income	862.2	2,803.2	2,039.9	7.4	67.7	30.7	2.0	4.6	0.7
Other Income				22.8	4.9				
TOTAL ADDITIONS	$ 1,730.0	3,671.5	2,912.8	$ 333.0	365.5	317.1	3.0	5.6	2.4
DEDUCTIONS									
Benefit Payments	$ 1,741.5	1,654.4	1,570.7	$			4.1	4.7	4.6
Refunds	23.1	25.5	22.1						
Administrative Expense	8.9	7.9	8.4	1.6	1.1	1.3			
Insurance Expenses				240.4	242.1	240.9			
TOTAL DEDUCTIONS	1,773.5	1,687.8	1,601.2	242.0	243.2	242.2	4.1	4.7	4.6
Increase (Decrease) in Net Position	$ (43.5)	$ 1,983.7	$ 1,311.6	$ 91.0	$ 122.3	$ 74.9	$ (1.1)	$ 0.9	$ (2.2)

*TOTALS

	2015	2014	2013
ADDITIONS			
Member Contributions	$ 465.7	$ 440.2	$ 424.5
Employer Contributions	705.9	722.0	736.5
Net Investment Income	871.6	2,875.5	2,071.3
Other Income	22.8	4.9	
TOTAL ADDITIONS	$ 2,066.0	$ 4,042.6	$ 3,232.3
DEDUCTIONS			
Benefit Payments	$ 1,745.6	$ 1,659.1	$ 1,575.3
Refunds	23.1	25.5	22.1
Administrative Expense	10.5	9.0	9.7
Insurance Expenses	240.4	242.1	240.9
TOTAL DEDUCTIONS	$ 2,019.6	$ 1,935.7	$ 1,848.0
Increase (Decrease) in Net Position	$ 46.4	$ 2,106.9	$ 1,384.3

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had a combined plan net position of $1.0 million for years ended 2015, 2014 and 2013.*

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

DEFINED BENEFIT RETIREMENT ANNUITY PLAN ACTIVITIES

Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

In 2015, Employer contributions totaled $559.6 million, a net decrease of $3.7 million from the prior fiscal year. The decrease was due to declining amortization payments from the State on prior benefit improvements. In 2014, Employer contributions decreased $4.9 million compared to the prior fiscal year due to declining amortization payments from the State on prior benefit improvements.

In 2015, the Retirement System experienced a decrease in net investment income compared to the previous year ($862.2 million compared to $2,803.2 million). For 2013, net investment income totaled $2,039.9 million. The decrease in net investment income is mainly due to unfavorable market conditions for the year ended June 30, 2015 compared to 2014. Total deductions in 2015 increased $85.7 million. The increase was caused principally by an increase of $87.1 million in defined benefit payments. Members who were drawing benefits as of June 2014 received an increase of one and one-half percent to their retirement allowances in July 2014. Also, there was an increase of 1,246 members and beneficiaries on the retired payroll as of June 30, 2015.

OTHER POSTEMPLOYMENT BENEFIT ACTIVITIES

During the 2015 fiscal year, the medical insurance plan member contributions increased $22.3 million and employer contributions decreased $12.4 million from fiscal year 2014. The member contributions increased primarily due to the implementation of the Shared Responsibility Plan beginning July 1, 2010 which includes increased contributions from active and retired members, employers and the state. The employer contributions decreased due to less transition funding paid by the State as the Shared Responsibility Plan phases in until the 2016 fiscal year.

Net investment income for the medical insurance plan decreased $60.3 million from $67.7 million in 2014 to $7.4 million in 2015. In 2013, net investment income totaled $30.7 million.

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2015, 2014 and 2013 were $4.1, $4.7 and $4.6 million respectively.

FUNDING

Since fiscal year 2008, the state has not paid all of the annual required contribution (ARC), as determined by the actuary, necessary to prefund the pension benefit requirements of members of the Retirement System. Over this period of time, because of the failure to fund the full ARC, the state's additional annual employer contributions have grown significantly from $60.5 million (Fiscal Year 2009) to $520 million (Fiscal Year 2017). The latest actuarial valuation was for the period ending June 30, 2015. This report reflects the System's actuarial value of assets totaling $17.2 billion and actuarial determined liabilities totaling $31.1 billion. The funded ratio of actuarial assets to liabilities is 55.3%. Based upon these circumstances, the actuary opines the pension system is not being funded on an actuarially sound basis.

KTRS has negative cash flow related to the state not paying the entire ARC. In this regard, KTRS risks having to sell assets in adverse market conditions to satisfy retiree payroll. Because a plan to address the unfunded liability is not in place, the state's credit rating has been downgraded. Moreover, taxpayers pay higher ultimate pension costs as liability grows compounded. Without action to implement a funding plan, the risk rises that the state may be unable to fund the added annual amounts which would further increase the risk to KTRS related selling assets noted above. To address a long-term funding plan, then-Gov. Steven Beshear appointed a 25-member task force that submitted a report in December 2015 outlining funding options to be considered in the upcoming 2016 Regular Session of the General Assembly.

HISTORICAL TRENDS

Accounting standards require that the Statement of Fiduciary Net Position present asset values at fair value and include only benefits and refunds due to plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information required according to new accounting standards regarding the funded status of the defined benefit retirement annuity plan is presented in Note 4 of the financial statements. The blended discount rate mandated by the new accounting standards result in a lower funding level when compared to the actuarially determined funded levels reported in past years. The Schedule of Employer Contributions is provided in the Required Supplementary Information.

The actuarial funding of the medical insurance and life insurance plans is provided in the Schedule of Funding Progress presented in the Required Supplementary Information. The asset value, stated in the Schedule of Funding Progress, is determined by the Retirement System's independent actuary. The actuarial accrued liability is calculated using the entry age cost method. Although the medical insurance plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding. Effective July 1, 2010 the Shared Responsibility Plan for funding retiree health benefits requires members, retirees, participating employers and the state to make contributions for pre-funding retiree medical benefits. Annual required contributions of the medical insurance plan are provided in the Schedule of Employer Contributions presented in the Required Supplementary Information and a shortfall of employer contributions has resulted in an accumulated net Other Postemployment Benefit obligation of $1,480,595,898 as of June 30, 2015.

This financial report is designed to provide citizens, participating employers, plan members, and other users with an overview of the Kentucky Teachers' Retirement System's fiscal practices and responsibility. If you have questions or need additional information, please contact Mark Whelan, Chief Financial Officer, Kentucky Teachers' Retirement System at 479 Versailles Road, Frankfort, Kentucky 40601.

STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2015

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 153,403,413	$ 27,608,169	$ $688,739	$ $66,698	$ 181,767,019
Prepaid Expenses	109,881	1,000			110,881
Receivables					
Contributions	50,495,681	7,531,532	67,162		58,094,375
Due From Other Trust Funds	4,312,155				4,312,155
State of Kentucky	26,885,159	2,580,839	61,789		29,527,787
Investment Income	40,683,260	1,289,669	999,217	2,434	42,974,580
Investment Sales Receivable	172,483,377	673,686			173,157,063
Other Receivables	588,560	16,979,307			17,567,867
Total Receivables	295,448,192	29,055,033	1,128,168	2,434	325,633,827
Investments at Fair Value (See Note 5)					
Short-Term Investments	611,762,670	35,611,846	2,374,735	439,079	650,188,330
Bonds and Mortgages	2,945,268,960	42,746,464	85,589,214	250,032	3,073,854,670
Equities	11,163,565,280	355,702,555		226,083	11,519,493,918
Alternative Investments	844,688,096	11,698,357			856,386,453
Real Estate	825,335,346	1,762,328			827,097,674
Additional Categories	1,385,897,391	134,576,358			1,520,473,749
Total Investments, at fair value	17,776,517,743	582,097,908	87,963,949	915,194	18,447,494,794
Invested Security Lending Collateral	498,859,702				498,859,702
Capital Assets, at cost net of accumulated depreciation of $4,486,539 (See Note 2)	14,906,438				14,906,438
Total Assets	18,739,245,369	638,762,110	89,780,856	984,326	19,468,772,661
LIABILITIES					
Accounts Payable	1,666,331	20,094	360	4	1,686,789
Due to Other Trust Funds		4,277,470	33,989	696	4,312,155
Revenues Collected in Advance		4,914,365			4,914,365
Investment Purchases Payable	189,588,599	2,587,811			192,176,410
Obligations Under Securities Lending	498,859,702				498,859,702
Total Liabilities	690,114,632	11,799,740	34,349	700	701,949,421
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 18,049,130,737	$ 626,962,370	$ 89,746,507	$ 983,626	$ 18,766,823,240

The "Combining Statement of Fiduciary Net Position - Other Funds" is presented on page 26.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2014

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 63,110,212	$ 2,954,897	$ 487,301	$ 52,939	$ 66,605,349
Prepaid Expenses	70,971	20,000			90,971
Receivables					
Contributions	40,339,941	7,059,521	110,926		47,510,388
Due From Other Trust Funds	1,177,057				1,177,057
State of Kentucky	54,812,142	2,983,504	65,549		57,861,195
Investment Income	44,000,029	1,152,675	939,004	2,146	46,093,854
Investment Sales Receivable	169,491,434	1,227,111			170,718,545
Other Receivables	653,721				653,721
Total Receivables	310,474,324	12,422,811	1,115,479	2,146	324,014,760
Investments at Fair Value (See Note 5)					
Short-Term Investments	784,994,421	112,371,006	2,755,752	468,433	900,589,612
Bonds and Mortgages	3,242,639,057	21,234,589	86,494,824	243,188	3,350,611,658
Equities	11,266,188,790	300,857,011		205,506	11,567,251,307
Alternative Investments	643,890,290	4,251,239			648,141,529
Real Estate	733,045,846				733,045,846
Additional Categories	1,233,210,529	94,456,754			1,327,667,283
Total Investments, at fair value	17,903,968,933	533,170,599	89,250,576	917,127	18,527,307,235
Invested Security Lending Collateral	459,645,254				459,645,254
Capital Assets, at cost net of accumulated depreciation of $3,393,372 (See Note 2)	11,495,190				11,495,190
Total Assets	18,748,764,884	548,568,307	90,853,356	972,212	19,389,158,759
LIABILITIES					
Accounts Payable	1,815,576	4,059,733	780	8	5,876,097
Due to Other Trust Funds		1,145,785	29,606	1,665	1,177,056
Insurance Claims Payable		120,992			120,992
Revenues Collected in Advance		3,624,881			3,624,881
Investment Purchases Payable	194,733,439	3,621,466			198,354,905
Obligations Under Securities Lending	459,645,254				459,645,254
Total Liabilities	656,194,269	12,572,857	30,386	1,673	668,799,185
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 18,092,570,615	$ 535,995,450	$ 90,822,970	$ 970,539	$ 18,720,359,574

The "Combining Statement of Fiduciary Net Position - Other Funds" is presented on page 26.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For the Fiscal Year Ended June 30, 2015

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
State of Kentucky	$ 480,073,445	$ 67,608,148	$ 855,012	$	$ 548,536,605
Other Employers	79,505,845	77,655,778	164,507	80,000	157,406,130
Member	308,159,763	157,467,680			465,627,443
Total Contributions	867,739,053	302,731,606	1,019,519	80,000	1,171,570,178
Other Income					
Recovery Income		22,820,427			22,820,427
Total Other Income		22,820,427			22,820,427
Investment Income					
Net Appreciation/(Depreciation) in Fair Value of Investments	429,089,219	783,495	(1,131,703)	17,183	428,758,194
Interest	242,306,932	7,901,793	3,130,146	9,317	253,348,188
Dividends	204,861,024			4,391	204,865,415
Rental Income, Net	28,785,045				28,785,045
Securities Lending, Gross Earnings	2,661,499		204	172	2,661,875
Gross Investment Income	907,703,719	8,685,288	1,998,647	31,063	918,418,717
Less: Investment Expense	(44,726,561)	(1,330,584)	(8,262)	(89)	(46,065,496)
Less: Securities Lending Expense	(798,399)		(61)	(51)	(798,511)
Net Investment Income	862,178,759	7,354,704	1,990,324	30,923	871,554,710
Total Additions	1,729,917,812	332,906,737	3,009,843	110,923	2,065,945,315
DEDUCTIONS					
Benefits	1,741,456,095		4,061,000	97,230	1,745,614,325
Refunds of Contributions	23,032,624				23,032,624
Insurance Expenses		240,394,582			240,394,582
Administrative Expense	8,868,971	1,545,235	25,306	606	10,440,118
Total Deductions	1,773,357,690	241,939,817	4,086,306	97,836	2,019,481,649
Net Increase (Decrease)	(43,439,878)	90,966,920	(1,076,463)	13,087	46,463,666
Net Position - Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	18,092,570,615	535,995,450	90,822,970	970,539	18,720,359,574
End of Year	$ 18,049,130,737	$ 626,962,370	$ 89,746,507	$ 983,626	$ 18,766,823,240

The "Combining Statement of Changes in Fiduciary Net Position - Other Funds" is presented on page 27.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For the Fiscal Year Ended June 30, 2014

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
State of Kentucky	$ 483,330,289	$ 105,441,052	$ 839,681	$	$ 589,611,022
Other Employers	79,995,960	52,247,362	166,410	80,000	132,489,732
Member	304,981,620	135,190,891			440,172,511
Total Contributions	868,307,869	292,879,305	1,006,091	80,000	1,162,273,265
Other Income					
Recovery Income		4,879,981			4,879,981
Total Other Income		4,879,981			4,879,981
Investment Income					
Net Appreciation in Fair Value of Investments	2,422,760,237	61,300,016	1,244,808	35,535	2,485,340,596
Interest	207,296,849	7,146,893	3,336,961	9,312	217,790,015
Dividends	179,227,537	5,237		3,172	179,235,946
Rental Income, Net	29,245,271				29,245,271
Securities Lending, Gross Earnings	2,708,225		197	77	2,708,499
Gross Investment Income	2,841,238,119	68,452,146	4,581,966	48,096	2,914,320,327
Less: Investment Expense	(37,177,750)	(711,083)	(9,062)	(93)	(37,897,988)
Less: Securities Lending Expense	(812,413)		(59)	(23)	(812,495)
Net Investment Income	2,803,247,956	67,741,063	4,572,845	47,980	2,875,609,844
Total Additions	3,671,555,825	365,500,349	5,578,936	127,980	4,042,763,090
DEDUCTIONS					
Benefits	1,654,375,700		4,692,000	127,564	1,659,195,264
Refunds of Contributions	25,461,843				25,461,843
Insurance Expenses		242,070,531			242,070,531
Administrative Expense	7,955,972	1,100,133	21,324	580	9,078,009
Total Deductions	1,687,793,515	243,170,664	4,713,324	128,144	1,935,805,647
Net Increase (Decrease)	1,983,762,310	122,329,685	865,612	(164)	2,106,957,443
Net Position - Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	16,108,808,305	413,665,765	89,957,358	970,703	16,613,402,131
End of Year	$ 18,092,570,615	$ 535,995,450	$ 90,822,970	$ 970,539	$ 18,720,359,574

The "Combining Statement of Changes in Fiduciary Net Position - Other Funds" is presented on page 28.
The accompanying notes are an integral part of these financial statements.

Combining Statement of Fiduciary Net Position - Other Funds
As of June 30, 2015

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 66,698	$	$ 66,698
Receivables				
Investment Income	26		2,408	2,434
Investments at Fair Value				
Short Term Investments	363,978		75,101	439,079
Bonds and Mortgages			250,032	250,032
Equities			226,083	226,083
Total Investments	363,978		551,216	915,194
Total Assets	364,004	66,698	553,624	984,326
Liabilities				
Accounts Payable	2		2	4
Due to Other Trust Funds	119	410	167	696
Total Liabilities	121	410	169	700
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 363,883	$ 66,288	$ 553,455	$ 983,626

Combining Statement of Fiduciary Net Position - Other Funds
As of June 30, 2014

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 52,939	$	$ 52,939
Receivables				
Investment Income			2,146	2,146
Investments at Fair Value				
Short Term Investments	377,268		91,165	468,433
Bonds and Mortgages			243,188	243,188
Equities			205,506	205,506
Total Investments	377,268		539,859	917,127
Total Assets	377,268	52,939	542,005	972,212
Liabilities				
Accounts Payable	3		5	8
Due to Other Trust Funds	99	435	1,131	1,665
Total Liabilities	102	435	1,136	1,673
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 377,166	$ 52,504	$ 540,869	$ 970,539

The accompanying notes are an integral part of these financial statements.

Combining Statement of Changes in Fiduciary Net Position - Other Funds
For the Fiscal Year Ended June 30, 2015

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Contributions				
Other Employers	$	$ 80,000	$	$ 80,000
Investment Income				
Net Appreciation in Fair Value of Investments			17,183	17,183
Interest	261		9,056	9,317
Dividends			4,391	4,391
Securities Lending, Gross			172	172
Gross Investment Income	261		30,802	31,063
Less Securities Lending Expense			(51)	(51)
Less Investment Expense	(37)		(52)	(89)
Net Investment Income	224		30,699	30,923
Total Additions	224	80,000	30,699	110,923
Deductions				
Benefits	13,423	65,807	18,000	97,230
Administrative Expense	84	410	112	606
Total Deductions	13,507	66,217	18,112	97,836
Net Increase (Decrease)	(13,283)	13,783	12,587	13,087
Net Position - Restricted for Pension and Other Postemployment Benefits				
Beginning of Year	377,166	52,505	540,868	970,539
End of Year	$ 363,883	$ 66,288	$ 553,455	$ 983,626

The accompanying notes are an integral part of these financial statements.

Combining Statement of Changes in Fiduciary Net Position - Other Funds
For the Fiscal Year Ended June 30, 2014

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Contributions				
Other Employers	$	$ 80,000	$	$ 80,000
Investment Income				
Net Appreciation in Fair Value of Investments			35,535	35,535
Interest	234		9,078	9,312
Dividends			3,172	3,172
Securities Lending, Gross			77	77
Gross Investment Income	234		47,862	48,096
Less Securities Lending Expense			(23)	(23)
Less Investment Expense	(38)		(55)	(93)
Net Investment Income	196		47,784	47,980
Total Additions	196	80,000	47,784	127,980
Deductions				
Benefits	13,986	95,578	18,000	127,564
Administrative Expense	63	436	81	580
Total Deductions	14,049	96,014	18,081	128,144
Net Increase (Decrease)	(13,853)	(16,014)	29,703	(164)
Net Position - Restricted for Pension and Other Postemployment Benefits				
Beginning of Year	391,019	68,518	511,166	970,703
End of Year	$ 377,166	$ 52,504	$ 540,869	$ 970,539

The accompanying notes are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS

Note 1: Description of Retirement Annuity Plan

A. REPORTING ENTITY

The Kentucky Teachers' Retirement System (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan with a special funding situation established to provide retirement annuity plan coverage for local school districts and other public educational agencies in the Commonwealth.

KRS 161.250 provides that the general administration and management of KTRS, and the responsibility for its proper operation, is vested in a board of trustees. The board of trustees consists of the chief state school officer, the State Treasurer, and seven elected trustees. Four of the elected trustees are active teachers, two are not members of the teaching profession, and one is an annuitant of the Retirement System.

B. PARTICIPANTS

As of June 30, 2015 a total of 208 employers participated in the plan. Employers are comprised of local school districts, Department of Education Agencies, universities, the Kentucky Community and Technical College System, and other educational organizations. The State under the Governmental Accounting Standards Board (GASB) No. 67 is recognized as a non-employer contributing entity providing the employer matching contributions for members employed by the local school districts and regional educational cooperatives.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the Retirement System. The following illustrates the classifications of members:

	2015	2014
Active contributing members:		
Vested	48,426	48,836
Non-vested	23,820	24,571
Inactive members, vested	8,051	7,762
Retirees and beneficiaries currently receiving benefits	49,822	48,576
Total members, retirees, and beneficiaries	**130,119**	**129,745**

C. BENEFIT PROVISIONS

For Members Before July 1, 2008:

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete twenty-seven (27) years of Kentucky service.

Non-university members receive monthly payments equal to two percent (2%) (service prior to July 1, 1983) and two and one-half percent (2.5%) (service after July 1, 1983) of their final average salaries for each year of credited service. Non-university members who became members on or after July 1, 2002 will receive monthly benefits equal to two percent (2%) of their final average salary for each year of service if, upon retirement, their total service is less than ten (10) years. New members after July 1, 2002 who retire with ten (10) or more years of total service will receive monthly benefits equal to two and one-half percent (2.5%) of their final average salary for each year of service, including the first ten (10) years. In addition, non-university members who retire July 1, 2004 and later with more than thirty (30) years of service will have their multiplier increased for all years over thirty (30) from two and one-half

Note 1: Description of Retirement Annuity Plan continued . . .

percent (2.5%) to three percent (3%) to be used in their benefit calculation.

University employees receive monthly benefits equal to two percent (2%) of their final average salary for each year of credited service.

The final average salary is the member's five (5) highest annual salaries except members at least age fifty-five (55) with twenty-seven (27) or more years of service may use their three (3) highest annual salaries. For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service. The minimum annual service allowance for all members is $440 multiplied by credited service.

For Members On or After July 1, 2008:

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age sixty (60) and complete five (5) years of Kentucky service, or

2.) Complete twenty-seven (27) years of Kentucky service, or

3.) Attain age fifty-five (55) and complete ten (10) years of Kentucky service.

The annual retirement allowance for non-university members is equal to: (a) one and seven tenths percent (1.7%) of final average salary for each year of credited service if their service is 10 years or less; (b) two percent (2.0%) of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) two and three tenths percent (2.3%) of final average salary for each year of credited service if their service is greater than 20 years but no more than 26 years; (d) two and one half percent (2.5%) of final average salary for each year of credited service if their service is greater than 26 years but no more than 30 years; (e) three percent (3.0%) of final average salary for years of credited service greater than 30 years.

The annual retirement allowance for university members is equal to: (a) one and one-half percent (1.5%) of final average salary for each year of credited service if their service is 10 years or less; (b) one and seven tenths percent (1.7%) of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) one and eighty five hundredths percent (1.85%) of final average salary for each year of credited service if their service is greater than 20 years but less than 27years; (d) two percent (2.0%) of final average salary for each year of credited service if their service is greater than or equal to 27 years.

The final average salary is the member's five (5) highest annual salaries except members at least age fifty-five (55) with twenty-seven (27) or more years of service may use their three (3) highest annual salaries. For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Other Benefits:

KTRS provides postemployment medical benefits to retirees as fully described in Note 8. The Retirement System also provides disability benefits for vested members at the rate of sixty percent (60%) of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half percent (1.5%) annually. Additional ad hoc increases and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching contributions are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

KTRS has seven cash accounts. At June 30, 2015, the retirement annuity cash account totaled $118,364,871, the employer control cash account totaled $33,760,180 and the administrative expense fund cash account was $1,278,362 for a total of $153,403,413 as carrying value of cash in the defined benefit plan. The medical insurance trust cash account totaled $27,494,961 and the medical insurance claims cash account totaled $113,208 for a total of $27,608,169 as carrying value of cash in the medical insurance plan. The life insurance plan cash account totaled $688,739 and the excess benefit fund cash account contained $66,698. Therefore, the carrying value of cash was $181,767,019 and the bank balance was $198,500,955 and funds controlled by the Commonwealth of Kentucky of $3,698,608. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2015.

C. CAPITAL ASSETS

Property and equipment are carried at cost, less accumulated depreciation. All costs of property and equipment $5,000 (actual dollars) or greater are capitalized. Expenditures for maintenance and repairs are charged to operations as incurred. Depreciation is calculated using the straight-line method, with estimated lives ranging from five to forty years in the following major classes: office furniture and equipment, five years; other equipment, five years; computer software, ten years; KTRS office buildings, forty years. The Pathway System will replace KTRS's legacy computer system and be KTRS's primary line of business information technology system. The Pathway System will be capitalized and amortized or depreciated over ten years. As of June 30, 2015, the project to build and implement the Pathway System was approximately ninety percent (90%) complete.

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers. Alternative investments such as private equity, timberland, and other additional categories, such as opportunistic credit, high yield bonds, and direct lending are valued using the most recent general partner statement of fair value based on independent appraisals, updated for any subsequent partnership interests' cash flows.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in fiduciary net position. Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by KTRS's employees are recorded when earned. Upon termination or retirement, employees of KTRS are paid for accumulated vacation time limited to sixty (60) days and accumulated compensatory time limited to two hundred-forty (240) hours. As of June 30, 2015 and 2014 accrued compensated absences were $1,135,872 and $1,058,460, respectively.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which KTRS is exposed. In order to cover such risks KTRS carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

G. OTHER RECEIVBLES

KTRS allows qualified purchases of service credit to be made by installment payments not to exceed a five (5) year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2015 and 2014 installment contract receivables were $588,560 and $653,721, respectively.

Note 2: Summary of Significant Accounting Policies continued . . .

H. USE OF ESTIMATES

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The Retirement System's management believes that it has operated the plans within the constraints imposed by federal tax law.

J. RECENT PRONOUNCEMENTS

GASB Statement No. 67 which was adopted during the year ended June 30, 2014, addressed accounting and financial reporting requirements for pension plans. The requirements for GASB No. 67 required changes in presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes included an actuarial calculation of total and net pension liability. It also included comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The implementation of GASB No. 67 did not significantly impact the accounting for accounts receivable and investment balances. The total pension liability, determined in accordance with GASB No. 67, is presented in Note 4 and in the Required Supplementary Information.

In February 2015, GASB issued Statement No. 72, Fair Value Measurement and Application. This pronouncement clarifies the definition of fair value for financial reporting purposes, establishes general principles for measuring fair value, providing additional fair value guidance, and enhancing disclosures about fair value measurements. GASB Statement No. 72 is effective for fiscal years beginning after June 15, 2015 (the fiscal year ended June 30, 2016). The impact of this statement on the financial statements has not yet been determined.

In June 2015, GASB issued Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans and Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits other Than Pensions. GASB Statement No. 74 replaces GASB Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. GASB Statement No. 75 replaces GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefit Plans Other Than Pensions. GASB Statement No. 74 is effective for fiscal years beginning after June 15, 2016, and GASB Statement No. 75 is effective for fiscal years beginning after June 15, 2017. At this time, management is reviewing the recently issued pronouncements to determine the impact on KTRS's financial statements.

Note 3: Contributions and Funds of the System

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Non-university members are required to contribute 12.105 percent of their salaries to the Retirement System; university members are required to contribute 9.895 percent of their salaries. KRS 161.565 allows each university to reduce the contribution of its members by 2.215 percent; therefore, university members contribute 7.68 percent of their salary to KTRS. For members employed by local school districts, the State, as a non-employer contributing entity, contributes 13.105 percent of salary for those who joined before July 1, 2008 and 14.105 percent for those who joined thereafter.

Other participating employers are required to contribute the percentage contributed by members plus an additional 3.25 percent of members' gross salaries.

The member and employer contributions consist of retirement annuity contributions and other postemployment benefit contributions to the medical and life insurance plans. The member postemployment medical contribution is 3 percent. The employer postemployment medical contribution is .75 percent of member gross salaries. Also, after July 1, 2010 employers (other than the state) contribute 2.25 percent of members' salaries and the state contributes the net cost of health insurance premiums for new retirees after June 30, 2010 in the non-Medicare eligible group. If a member leaves covered employment before accumulating five (5) years of credited service, accumulated member contributions to the retirement annuity plan plus interest are refunded upon the member's request.

B. FUNDS OF THE SYSTEM

Teacher Savings Fund

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from the Guarantee Fund. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Allowance Reserve Fund, the fund from which retirement benefits are paid.

State Accumulation Fund

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky.

Allowance Reserve Fund

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of KTRS. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from the Guarantee Fund.

Guarantee Fund

This fund was established by KRS 161.420(6) as the Guarantee Fund, to collect income from investments, state matching contributions of members withdrawn from the Retirement System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of the System, and deficiencies not covered by the other funds.

Administrative Expense

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from the Guarantee Fund is used to pay the administrative expenses of the System. Administrative expenses are allocated among the funds based on benefits paid.

Note 4: Net Pension Liability of Employers

A. NET PENSION LIABILITY OF EMPLOYERS

The net pension liability (i.e., the Retirement System's liability determined in accordance with GASB No. 67 less the fiduciary net position) as of June 30, 2015 is shown below.

Net Pension Liability of Employers
(In thousands)

Fiscal Year Ending June 30	Total Pension Liability	Plan Fiduciary Net Position	Employers Net Liability	Plan Fiduciary Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
	A	B	(A-B)	(B/A)	C	[A-B/C]
2015	$ 42,476,699	$ 18,049,131	$ 24,427,568	42.5 %	$ 3,455,008	707.02 %

B. SUMMARY OF ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below.

Valuation Date	6/30/2014
Actuarial cost method	Entry Age
Actuarial Assumptions:	
Investment rate of return	7.50%, net of pension plan investment expense, including inflation.
Projected salary increases	4.00 - 8.20%, including inflation
Inflation rate	3.50%
Municipal Bond Index Rate	3.82%
Single Equivalent Interest Rate	4.88%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale AA to 2020 with a setback of 1 year for females. The last experience study was performed in 2011 and the next experience study is scheduled to be conducted in 2016.

C. TARGET ALLOCATIONS

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by KTRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	45.0 %	6.4 %
Non U.S. Equity	17.0	6.5
Fixed Income	24.0	1.6
High Yield Bonds	4.0	3.1
Real Estate	4.0	5.8
Alternatives	4.0	6.8
Cash	2.0	1.5
Total	100.0 %	

Note 4: Net Pension Liability of Employers continued ...

D. DISCOUNT RATE

The discount rate used to measure the total pension liability was 4.88%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the Employer contributions will be made at statutorily required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2039 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2038 and a municipal bond index rate of 3.82% was applied to all periods of projected benefit payments after 2038. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

The following table presents the net pension liability of the Retirement System, calculated using the discount rate of 4.88%, as well as what the Retirement System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.88%) or 1-percentage-point higher (5.88%) than the current rate:

(in thousands)	**1% Decrease (3.88%)**	**Current Discount Rate (4.88%)**	**1% Increase (5.88%)**
System's net pension liability	$ 30,402,796	$ 24,427,568	$ 19,482,972

June 30, 2014 is the actuarial valuation date upon which the TPL is based. The TPL as of June 30, 2014 was determined using a discount rate of 4.88% which was based on a municipal bond index rate as of that date equal to 3.82%. An expected TPL is determined as of June 30, 2015 using standard roll forward techniques. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate for the year. The final TPL as of June 30, 2014 reflects that the assumed municipal bond index rate decrease from 4.35% to 3.82%, resulting in a change in the SEIR from 5.23% to 4.88%. The impact of this change in the discount rate is a change in assumptions that is added to the expected TPL to determine the final TPL as of June 30, 2015.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of KTRS' financial statements assess the risks KTRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430.

KTRS administers a retirement annuity trust fund and a health insurance trust fund in accordance with state and federal law. KTRS provides service and disability retirement benefits, death and survivor benefits, health insurance benefits, and life insurance benefits for Kentucky public education employees and their beneficiaries. The trust funds managed by KTRS shall be referred to collectively as the "Retirement System" unless the context requires a specific reference to a particular fund.

The asset allocation parameters for the retirement annuity trust fund are set forth in Title 102, Chapter 1:175, Section 2 and Section 3 of the Kentucky Administrative Regulations as follows:

- There shall be no limit on the amount of investments owned by the retirement annuity trust fund if the investments are guaranteed by the United States government.
- Not more than thirty-five percent (35%) of the assets of the retirement annuity trust fund at fair value shall be invested in corporate debt obligations.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in foreign debt.
- Not more than sixty-five percent (65%) of the assets of the retirement annuity trust fund at fair value shall be invested in common stocks or preferred stocks.
- Not more than twenty-five percent (25%) of the assets of the retirement annuity trust fund at fair value shall be invested in a stock portfolio designed to replicate a general stock index.
- Not more than thirty percent (30%) of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in alternative investments. This category may include private equity, venture capital, timberland, and infrastructure investments.
- Not more than fifteen percent (15%) of the assets of the retirement annuity trust fund at fair value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

The asset allocation parameters for the health insurance trust fund are set forth in Title 102, Chapter 1:178, Section 2 of the Kentucky Administrative Regulations as follows:

- In order to preserve the assets of the health insurance trust fund and produce the required rate of return while minimizing risk, assets shall be prudently diversified among various classes of investments.
- In determining asset allocation policy, the investment committee and the board shall be mindful of the health insurance trust fund's liquidity and its capability of meeting both short and long-term obligations.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the Retirement System's deposits may not be returned to the Retirement System. The Retirement System's total cash balance held at J.P. Morgan Chase Bank in noninterest-bearing accounts on June 30, 2015 was $198,500,955. In addition to these funds, an amount of $3,698,608 represents funds transferred to and controlled by the Commonwealth of Kentucky.

On November 9, 2010, the FDIC issued a Final Rule implementing Section 343 of the Dodd-Frank Wall Street Reform and Consumer Protection Act that provides for unlimited insurance coverage of noninterest-bearing transaction accounts. Beginning January 1, 2013, all cash balances at J.P. Morgan Chase Bank were insured up to $250,000 and the remaining balances fully collateralized with securities held by the Federal Reserve Bank of New York in the name of the Commonwealth of Kentucky-Teachers' Retirement.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,
b. collateralized with securities held by the pledging financial institution, or
c. collateralized with securities held by the pledging financial institution's trust department or agent

but not in the depositor-government's name.

As of June 30, 2015, the Retirement System's cash balance in the amount of $198,500,955 was not exposed to custodial credit risk since this amount was fully insured by the FDIC limit of $250,000 and the remaining balances collateralized with securities valued at $190,643,775.

C. INVESTMENTS

All of the Retirement System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, alternative investments, and additional categories as permitted by regulation. These assets are reported at fair value.

Investments are governed by the Board of Trustees' policies while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following chart represents the fair values of the investments of the Kentucky Teachers' Retirement System for June 30, 2015 and 2014.

Schedule of Investments
Retirement Annuity Trust

	Fair Value June 30, 2015	Fair Value June 30, 2014
Money Market Fund*	$ 614,434,346	$ 787,253,524
STIFF (BNYM)	142,138	965,082
Total Cash Equivalents	**614,576,484**	**788,218,606**
U.S. Government	769,355,884	754,145,490
Agency Bonds	82,898,405	97,373,643
Mortgage Backed Securities	103,213,170	126,831,928
Asset Backed Securities	82,126,975	84,761,591
Commercial Mtg Backed Securities	118,318,341	149,223,291
Collateralized Mtg Obligations	12,884,110	18,382,246
Municipal Bonds	444,405,813	472,846,382
Corporate Bonds	1,417,905,508	1,625,812,498
Total Fixed Income	**3,031,108,206**	**3,329,377,069**
International Equity	3,964,258,297	3,868,325,879
U.S. Equity	7,199,533,066	7,398,068,417
Total Equities	**11,163,791,363**	**11,266,394,296**
Real Estate Equity	825,335,346	733,045,846
Total Real Estate Equity	825,335,346	**733,045,846**
Private Equity	636,890,428	457,408,594
Timberland	207,797,668	186,481,696
Total Alternative Investments	**844,688,096**	**643,890,290**
Opportunistic Credit	524,212,360	501,000,040
Corporate Bonds	308,659,155	336,434,902
Corporate Loans	463,525,551	295,017,173
International Bonds	89,500,325	100,725,256
PPIP		33,158
Total Additional Categories	**1,385,897,391**	**1,233,210,529**
TOTAL INVESTMENTS	**$ 17,865,396,886**	**$ 17,994,136,636**

** Money Market Funds consist of the Life Insurance Plan, 403(b) Tax Shelter Plan, and Losey Scholarship fund.*

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments
Health Insurance Trust

	Fair Value June 30, 2015	Fair Value June 30, 2014
Money Market Fund	$ 36,640,065	$ 112,361,997
STIFF (BNYM)	(1,028,219)	9,009
Total Cash Equivalents	**35,611,846**	**112,371,006**
Agency Bonds	1,000,830	12,505,055
Asset Backed Securities		704,344
Corporate Bonds	41,745,634	8,025,190
Total Fixed Income	**42,746,464**	**21,234,589**
Global Equities	355,702,555	300,857,011
Total Equities	**355,702,555**	**300,857,011**
Real Estate Equity	1,762,328	
Total Real Estate Equity	**1,762,328**	
Private Equity	11,698,357	4,251,239
Total Alternative Investments	**11,698,357**	**4,251,239**
Opportunistic Credit	43,821,956	5,421,045
Corporate Bonds	65,525,790	64,614,031
Corporate Loans	25,228,612	24,421,678
Total Additional Categories	**134,576,358**	**94,456,754**
TOTAL INVESTMENTS	**$ 582,097,908**	**$ 533,170,599**

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the Retirement System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the Retirement System, and are held by either:

a. the counterparty or
b. the counterparty's trust department or agent, but not in the System's name.

The cash reserve of the Retirement System is primarily maintained in high quality short term investments through the Dreyfus Institutional Cash Advantage Fund. This fund invests in a diversified portfolio of high quality, short-term debt securities and the Fund is rated AAA by S&P, Moody's, and Fitch, Inc. The Fund's portfolio is structured within the confines of Rule 2a-7 under the Investment Company Act of 1940, as amended. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, bankers' acceptances, repurchase agreements, time deposits, etc. are all permissible investments within this Fund.

Whenever repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers, the terms are dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS' nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a fair value of at least 102 percent of the value of the repurchase agreements.

As of June 30, 2015, cash collateral reinvestment securities acquired through securities lending for the retirement annuity trust fund by KTRS's custodian, who is also the lending agent/counterparty, amounted to $498,859,702 related to $489,589,262 securities lent consistent with the lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the Retirement System's investments. In general, the longer the period until an investment matures, the greater the risk of a negative impact on fair value resulting from changes in interest rates.

As of June 30, 2015, the retirement annuity trust and health insurance trusts had the following investment fair values and weighted average maturities:

Retirement Annuity Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
U.S. Government	$ 769,355,884	$ 75,729	7.10
Agency	82,898,405		7.77
MBS	103,213,170		12.86
CMO	12,884,110		20.48
ABS	82,126,975		11.01
CMBS	118,318,341		20.85
Muni	444,405,813	42,038,499	12.81
Corporate Bonds	1,417,905,508	352,565,519	7.69
Corporate Loans		458,038,262	4.91
TOTAL	**$ 3,031,108,206**	**$ 852,718,009**	**8.54**

Health Insurance Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
Agency	$ 1,000,830	$	4.84
Corporate Bonds	41,745,634	65,525,790	4.97
Corporate Loans		22,228,612	4.96
TOTAL	**$ 42,746,464**	**$ 90,754,402**	4.97

In addition to the above securities, the Retirement System held short-term cash investments in the Dreyfus Institutional Cash Advantage Fund and STIF, held at the Bank of New York Mellon, with a total fair value of $650,188,330 and had a weighted average maturity of thirty two (32) days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology to quantify the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of changes in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the Retirement System manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by the Retirement System were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The Retirement System held $103.2 million in mortgage-backed securities as of June 30, 2015.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The Retirement System held $12.9 million in collateralized mortgage obligations as of June 30, 2015.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivables originated by banks, credit card companies, or other credit providers, and are considered to be moderately sensitive to changes in interest rates. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The retirement annuity trust held $82.1 million as of June 30, 2015.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The Retirement System's commercial mortgage-backed securities investments consist of highly rated relatively senior tranches. The average maturity of the Retirement System's commercial mortgage-backed securities holdings in the schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The Retirement System held $118.3 million in commercial mortgage-backed securities investments as of June 30, 2015.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedules list the Retirement System's fixed income investment fair values (net of cash equivalents) according to credit ratings as of June 30, 2015:

Retirement Annuity Trust

Rating	Bonds & Mortgages	Additional Categories	Total
U.S. Government	$ 769,355,884	$ 75,729	$ 769,431,613
AAA	326,392,237	10,918,140	337,310,377
AA	736,586,417	15,833,604	752,420,021
A	626,012,106	35,403,125	661,415,231
BBB	554,378,423	36,410,306	590,788,729
BB	11,343,807	228,929,279	240,273,086
B	4,220,000	323,979,214	328,199,214
CCC		17,069,370	17,069,370
Not Rated	2,819,332	184,099,242	186,918,574
TOTAL	**$ 3,031,108,206**	**$ 852,718,009**	**$ 3,883,826,215**

Health Insurance Trust

Rating	Bonds & Mortgages	Additional Categories	Total
AAA	$ 1,985,000	$	$ 1,985,000
AA	9,326,116		9,326,116
A	18,408,228	630,596	19,038,824
BBB	13,027,120	2,557,284	15,584,404
BB		40,453,593	40,453,593
B		41,166,610	41,166,611
CCC		1,311,011	1,311,011
Not Rated		4,635,308	4,635,308
TOTAL	**$ 42,746,464**	**$ 90,754,402**	**$ 133,500,867**

Total fair value of the retirement annuity trust's fixed income portfolio was $3,883,826,215 on June 30, 2015. The health insurance trust's fixed income portfolio was valued at $133,500,867. The rating system used in the above charts is the Standard and Poor's rating system. For securities where a Standard and Poor's rating is not provided, another nationally recognized system is used and translated to the Standard and Poor's rating system.

In addition to the above categories, the retirement annuity trust held $614,576,484 in short term investments through the Dreyfus Institutional Cash Advantage Fund. The health insurance trust held $35,611,846 in the Dreyfus Institutional Cash Advantage Fund. The credit risk associated with this Fund is minimal as the securities held are required to maintain the highest possible short-term credit ratings by Moody's and Standard & Poor's. In addition, investments in US Government and Agency securities are also highly rated securities since they are backed by the US Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The retirement annuity trust fund's policy on credit rating is set forth in 102 KAR 1:175 and reads as follows:

"A fixed income investment shall be rated at the time of purchase as investment grade by at least one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. The fixed income investment portfolio as a whole shall maintain an average rating of investment grade by at least one (1) of the major rating services."

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the retirement annuity trust fund is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the System.

"The System's position in a single stock shall not exceed two and one-half (2.5) percent of the System's assets. The System's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program."

KTRS has not invested greater than five percent (5%) of the retirement annuity trust fund's assets at fair value in any single issuer and is in compliance with investment policy.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. As of June 30, 2015, the Retirement System's exposure to foreign currency risk consisted of $4,588,095,835 and $208,404,434 in the retirement annuity trust and health insurance trust funds respectively.

The following tables represent the fair values of investments that are subject to foreign currency as a result of cash contributions to each portfolio manager:

Retirement Annuity Trust

Commingled Funds		
Babson Capital European Loan Fd	$	91,602,618
Baillie Gifford Intrntl EAFE		843,978,097
Baring All Country World ex US		526,024,693
Black Rock ACWI EX-US IMI		466,047,348
Rogge Global Int'l Fixed Income		70,524,333
UBS All Country World ex US		665,846,453
Alternative Funds		
Carlyle Europe Partners IV, L.P.		7,487,702
KKR & Co European Fund III		50,737,741
KKR & European Fund IV		3,401,749
Oaktree European Principal III		18,061,782
ADRs (Equities)		463,191,410
Cross-Listed Equities		924,132,430
Bonds (Fixed Income)		279,936,698
Additional Categories (Fixed Income)		96,367,998
Additional Categories (Opportunistic)		80,754,783
TOTAL	**$**	**4,588,095,835**

Health Insurance Trust

Commingled Funds		
Medical Ins. Black Rock Fund B	$	178,846,093
Alternative Funds		
Medical Ins. Carlyle Europe IV		1,497,542
Medical Ins. KKR European IV		680,350
Bonds (Fixed Income)		6,992,500
Additional Categories (Fixed Income)		15,859,421
Additional Categories (Opportunistic)		4,528,528
TOTAL	**$**	**208,404,434**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following tables reflect the various foreign currencies associated with the Retirement System's investments in the funds outlined previously:

Retirement Annuity Trust

Currency	Fair Value
Argentine Peso	$ 9,573,070
Australian Dollar	125,655,878
Euro	1,439,668,665
Bermudian Dollar	104,762,665
Brazilian Real	48,940,406
Bulgarian Lev	417,919
Canadian Dollar	351,136,040
Cayman Islands Dollar	82,745,763
Chilean Peso	4,851,380
Chinese Yuan	184,096,216
Colombian Peso	524,833
Netherlands Antillean Guilder	55,086,040
Czech Crown	240,203
Danish Krone	60,651,532
Dominican Peso	154,741
Egyptian Pound	313,239
British Pound Sterling	596,398,991
Hong Kong Dollar	119,845,641
Hungarian Forint	196,999
Indian Rupee	91,000,474
Indonesian Rupiah	6,055,294
Israeli New Shekel	36,678,230
Japanese Yen	497,672,214
Jersey Pound	95,439,091
Jordanian Dinar	6,038,950
Kazakhstani Tenge	190,519
South Korean Won	49,325,951
Liberian Dollar	2,955,215
Malaysian Ringgit	3,703,749
Mexican Peso	52,077,690
New Zealand Dollar	1,061,394
Norwegian Krone	23,573,778
Panamanian Balboa	14,765,490
Peruvian Nuevo Sol	5,940,600
Philippine Peso	1,411,230
Polish Zloty	3,716,872
Riyal	897,328
Romanian Leu	169,115
Russian Ruble	27,135,863
Singapore Dollar	33,124,684
South African Rand	31,513,022
Swedish Krona	131,945,244
Swiss Franc	186,213,918
Taiwan Dollar	66,602,279
Thai Baht	5,321,137
Turkish Lira	16,351,343
UAE Dirham	9,980,231
Various	1,974,709
TOTAL	**$ 4,588,095,835**

Health Insurance Trust

Currency	Fair Value
Australian Dollar	$ 8,570,261
Euro	54,590,346
Bahamian Dollar	5,175
Bermudian Dollar	1,436,743
Brazilian Real	2,614,135
Canadian Dollar	23,816,243
Cayman Islands Dollar	845,912
Chilean Peso	454,236
Chinese Yuan	175,523
Colombian Peso	195,977
Netherlands Antillean Guilder	301,123
Czech Crown	62,819
Danish Krone	2,062,546
Egyptian Pound	121,669
British Pound Sterling	26,776,715
Hong Kong Dollar	13,084,319
Hungarian Forint	83,044
Indian Rupee	3,020,821
Indonesian Rupiah	893,155
Israeli New Shekel	785,964
Japanese Yen	29,148,726
Jersey Pound	201,193
South Korean Won	5,868,822
Liberian Dollar	343,266
Malaysian Ringgit	1,209,051
Mexican Peso	1,611,415
New Zealand Dollar	284,680
Norwegian Krone	955,333
Peruvian Nuevo Sol	20,442
Philippine Peso	508,438
Polish Zloty	526,664
Riyal	321,104
Russian Ruble	750,276
Singapore Dollar	2,195,999
South African Rand	2,863,000
Swedish Krona	3,889,774
Swiss Franc	11,035,398
Taiwan Dollar	5,021,704
Thai Baht	939,983
Turkish Lira	542,881
UAE Dirham	269,555
Various	4
TOTAL	**$ 208,404,434**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The majority of foreign investments are held in commingled funds managed by Babson Capital Management, Rogge Global Partners, UBS Global Asset Management, Baillie Gifford, Baring Asset Management, and Black Rock. In addition to the commingled funds investing in foreign securities, the retirement annuity trust fund held $463,191,410 associated with foreign interests in American Depositary Receipt investments. These American Depositary Receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. American Depositary Receipts are denominated in U.S. currency. Also, the cross listed equities, in the amount of $924,132,430, represent securities domiciled in foreign countries, but are listed and traded on U.S. exchanges. Other foreign securities and investments consisted of debt securities and alternative investment opportunities. Foreign holdings, including investment receivables/payables, that were not readably identifiable to a specific country were listed in the "various" category pertaining to currency type.

The retirement annuity trust fund's policy regarding foreign equities is that not more than thirty percent (30%) of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the Retirement System. The Retirement System operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international stocks are the types of securities that are lent. The Retirement System's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the fair value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the Retirement System.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. During the fiscal year ended June 30, 2015, only the retirement annuity trust fund had securities lending transactions. The following section details the net income earned in the retirement annuity trust fund from securities lending for the fiscal year ended June 30, 2015 and 2014:

Item	2015 Earnings	2014 Earnings
Gross Earnings (Interest and Fees)	$ 338,644	$ 285,931
Gross Borrower Rebates	2,323,231	2,422,568
Bank Fees	(798,511)	(812,495)
Net Earnings	**$ 1,863,364**	**$ 1,896,004**

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The Retirement System cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the Retirement System from any financial loss associated with a borrower's default and collateral inadequacy.

As of June 30, 2015, the loan average days to maturity in the retirement annuity trust fund was one (1) day and the weighted average investment maturity of cash collateral investments was one (1) day. At fiscal year end, the retirement annuity trust fund had no credit risk exposure to borrowers, since the amounts the retirement annuity trust fund owes the borrowers exceeds the amounts the borrowers owe the retirement annuity trust fund and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The Retirement System minimizes interest rate risk by limiting the term of cash collateral investments to several days.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2015:

Type of Securities Lent	Fair Value	Cash & Non-Cash Collateral Value Received
Fixed Income	$ 340,071,345	$ 347,416,026
Equities	149,517,917	151,443,676
TOTAL	**$ 489,589,262**	**$ 498,859,702**

E. ANNUAL MONEY-WEIGHTED RATE OF RETURN

A money-weighted rate of return is an expression of investment performance that is net of the plan's investment expenses (net the plan's administrative expenses). The following tables reflect the money-weighted rate of return for both the retirement annuity trust fund and the health insurance trust fund:

	Annual Rate of Return Net of Investment Expense	
	2015	2014
Retirement Annuity Trust	4.96 %	17.95 %
Health Insurance Trust	1.38 %	15.38 %

Note 6: Retirement Plan for Employees of the Retirement System

Full-time employees of KTRS participate in either KTRS or Kentucky Employees Retirement System (KERS). Both plans are multiple-employer cost sharing defined benefit retirement annuity plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the Retirement System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The Retirement System's annual required contributions for KTRS employee members for the fiscal years 2015, 2014 and 2013 were $767,958, $656,152 and $574,432, respectively. KTRS contributed one hundred percent (100%) of the required contribution each year.

All other KTRS employees are covered under KERS in the Non-Hazardous Employees' Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. KTRS's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS who joined prior to July 1, 2008, are required to contribute five percent (5%) of their annual creditable compensation and members who joined on or after July 1, 2008 contribute an additional one percent (1%). As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2015, 2014 and 2013 were 38.41 percent, 26.79 percent and 23.61 percent and KTRS's annual required contributions to KERS were $552,133, $365,610, and $331,989, respectively. KTRS contributed one hundred percent (100%) of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: Other Funds

A. 403(B) TAX-SHELTERED ANNUITY PLAN

Plan Description

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the Retirement System's Board of Trustees determined that the cost of providing the necessary services to assure the Retirement System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by KTRS's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2015, the ten members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan; therefore, there are no receivables to be recognized.

Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

C. SUPPLEMENTAL BENEFIT FUND

The Supplemental Retirement Benefit Fund is a qualified governmental excess benefit arrangement as described in Section 415 of the Internal Revenue Code. In accordance with KRS 161.611 and KRS 161.420(8), KTRS is authorized to provide a supplemental retirement benefit fund for the sole purpose of enabling the employer to apply the same formula for determining benefits payable to all members of the Retirement System employed by the employer, whose benefits under the Retirement System are limited by Section 415 of the Internal Revenue Code of 1986, as amended from time to time. Funding of benefits payable under this fund are provided by the state, as employer, and are segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the Retirement System.

D. JUNITA LOSEY SCHOLARSHIP BEQUEST

Junita Losey, a retired teacher, designated KTRS as a residuary beneficiary of her estate and expressed a desire that KTRS establish a scholarship program for Kentucky students studying to be teachers. Ms. Losey died in 1997 and thereafter her estate provided a scholarship bequest to KTRS. The scholarship bequest has at all times been segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the Retirement System. The Scholarship Committee of the Retirement System's Board of Trustees meets each December to consider scholarship standards and administration of the scholarship bequest.

Note 8: Medical Insurance Plan & Postemployment Benefits

A. PLAN DESCRIPTION

In addition to the retirement annuity plan described in Note 1, Kentucky Revised Statute 161.675 requires KTRS to provide access to postemployment healthcare benefits for eligible members and dependents. The KTRS medical plan is funded by employer and member contributions. Changes made to the medical plan may be made by the KTRS Board of Trustees, the Kentucky Department of Employee Insurance and the General Assembly.

The KTRS medical plan is funded by employee contributions to an account established pursuant to 26 U.S.C. sec. 401(h). Additional funding is derived from the Kentucky Teachers' Retirement System insurance trust fund that went into effect on July 1, 2010. The insurance trust fund provides a trust separate from the account established pursuant to 26 U.S.C. sec. 401(h). The insurance trust fund includes employer and retired member contributions required under KRS 161.550 and KRS 161.675(4)(b).

To be eligible for medical benefits, the member must have retired either for service or disability. The KTRS medical plan offers coverage to members under the age of 65 through the Kentucky Employees Health Plan administered by the Kentucky Department of Employee Insurance. KTRS retired members are given a supplement to be used for payment

Note 8: Medical Insurance Plan & Postemployment Benefits continued . . .

of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the KTRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The Commonwealth of Kentucky bears risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the KTRS Medicare Eligible Health Plan.

At June 30, 2015, KTRS insurance covered 38,075 retirees and 7,129 dependents. There are 208 participating employers and 72,246 active members contributing to the medical plan.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The KTRS medical plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

C. CONTRIBUTIONS

The postemployment medical benefit provided by KTRS is financed on a pre-funded basis beginning July 1, 2010 with the implementation of the "Shared Responsibility" legislation. In order to fund medical benefits, active member contributions are matched by the state at .75% of members' gross salaries. Members contributed 1.75% of gross payroll to the KTRS medical plan and beginning July 1, 2010 the contribution increased incrementally to 3.75% on July 1, 2015 under the Shared Responsibility Plan. Also, the premiums collected from retirees and investment income contributes to funding the plan. The KTRS medical plan received bond proceeds of $152,400,000 in fiscal year 2013 in funding from the state, which was contributed to the insurance trust fund. This transitional funding and increased contributions are for the 2013 and 2014 fiscal years.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Medical Insurance Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(In Thousands)

Valuation Year Ending June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[B-A/C]
2015	$ 637,839	$ 3,525,584	$ 2,887,745	18.1 %	$ 3,515,113	82.2 %

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedule of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the Annual Required Contribution, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The Annual Required Contribution represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Note 8: Medical Insurance Plan & Postemployment Benefits continued . . .

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methodologies and assumptions employed as of the June 30, 2015 valuation date include the following:

Actuarial Cost Method	Actuarial Value of Assets	Assumed Inflation Rate	Investment Rate of Return	Amortization Method	Remaining Amortization Period
Entry Age	Fair value of assets	3.50%	8.00%	Level percent of pay, open	30 years

Medical Trend Assumption	Pre-Medicare	Medicare
Fiscal Year Ending 6/30/2016	7.50%	5.50%
Fiscal Year Ending 6/30/2017	6.75%	5.25%
Ultimate Trend Rate	5.00%	5.00%
Year of Ultimate Trend Rate	2020	2017

Note 9: Life Insurance Plan

A. PLAN DESCRIPTON

KTRS administers the Life Insurance Plan as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 208 participating employers. The benefit is $5,000 for members who are retired for service or disability, and $2,000 for active contributing members.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Life Insurance Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized in the fiscal year due.

Method Used to Value Investments

Life Insurance Plan investments are reported at fair value. The short-term securities are carried at cost, which approximates fair value. Fixed income is generally valued based on published market prices and quotations from national security exchanges and securities pricing services.

C. CONTRIBUTIONS

To finance the life insurance benefit a portion of the employer contribution rate is directed to the plan as recommended by the KTRS's actuary. The contribution rate of active members' payroll recommended by the actuary was .03% for fiscal years 2015 and 2014.

Note 9: Life Insurance Plan continued . . .

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Life Insurance Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(In Thousands)

Valuation Year June 30	Actuarial Value of Assets A	Actuarial Accrued Liabilities B	Unfunded Actuarial Accrued Liabilities (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL as a % of Covered Payroll [B-A/C]
2015	$ 97,186	$ 98,739	$ 1,553	98.4%	$ 3,515,113	0.04%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The required supplementary schedules following the notes to the financial section contain more actuarial information. Significant actuarial methodologies and assumptions employed as of the June 30, 2015 valuation date include the following:

Actuarial Cost Method	Actuarial Value of Assets	Assumed Inflation Rate	Investment Rate of Return	Projected Salary Increases	Amortization Method	Remaining Amortization Period
Entry Age	Fair value of assets	3.50%	7.50%	4.00%	Level percent of pay, open	30 years

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in the Net Pension Liability
(In Thousands)

Change in the Total Pension Liability	2015	2014
Total pension liability		
Service Cost	$ 1,015,080	$ 1,002,338
Interest	2,029,372	1,956,610
Difference between expected and actual experience	1,511,960	
Changes of assumptions		(353,043)
Benefit payments	(1,741,456)	(1,654,376)
Refunds of contributions	(23,033)	(25,462)
Net change in total pension liability	2,791,923	926,067
Total pension liability - beginning	39,684,776	38,758,709
Total pension liability - ending (a)	$ 42,476,699	$ 39,684,776
Plan Net Position		
Contributions - State of Kentucky	$ 480,073	$ 483,330
Contributions - Other Employers	79,506	79,996
Contributions - Members	308,160	304,982
Net investment income	862,179	2,803,248
Benefit payments	(1,741,456)	(1,654,375)
Administrative expense	(8,869)	(7,956)
Refunds of contributions	(23,033)	(25,462)
Net change in plan net position	(43,440)	1,983,763
Plan net position - beginning	18,092,571	16,108,808
Plan net position - ending (b)	18,049,131	18,092,571
Net pension liability - ending (a) - (b)	**$ 24,427,568**	**$ 21,592,205**

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Required Supplementary Information continued . . .

NOTE 1
Schedule of Changes in the Net Pension Liability

The total pension liability contained in this schedule was provided by KTRS's actuary, Cavanaugh Macdonald Consulting, LLC. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the Retirement System.

Changes of Benefit Terms. None

Changes of assumptions. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2011. In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation, the Board adopted an interest smoothing methodology to calculate liabilities for purposes of determining the actuarially determined contributions.

Schedule of Net Pension Liability
(In Thousands)

	2015	2014
Total pension liability	$ 42,476,699	$ 39,684,776
Plan net position	18,049,131	18,092,571
Net pension liability	$ 24,427,568	$ 21,592,205
Ratio of plan net position to total pension liability	42.49%	45.59%
Covered-employee payroll	$ 3,455,008	$ 3,317,422*
Net pension liability as a percentage of covered-employee payroll	707.02%	650.87%

** Revised from previous year to reflect actual covered-employee payroll.*

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule of Employer Contributions
(In Thousands)

Fiscal Year Ended June 30	Covered Payroll	Actual Employer Contributions	Actuarially Determined Employer Contributions	Annual Contribution Excess (Deficiency)	Actual Contributions as a Percentage of Covered Payroll
2006	$ 2,859,477	$ 406,107	$ 406,107	$	14.20 %
2007	2,975,289	434,890	494,565	(59,675)	14.62
2008	3,190,332	466,248	563,789	(97,541)	14.61
2009	3,253,077	442,550	600,283	(157,733)	13.60
2010	3,321,614	479,805	633,938	(154,133)	14.44
2011	3,283,749	1,037,936	678,741	359,195	31.61
2012	3,310,176	557,340	757,822	(200,482)	16.84
2013	3,310,710	568,233	802,985	(234,752)	17.16
2014 *	3,317,422	563,326	823,446	(260,120)	16.98
2015	3,455,008	559,579	913,654	(354,075)	16.20

** Revised from previous year to reflect actual covered-employee payroll.*

Required Supplementary Information continued . . .

NOTE 2
Schedule of Employer Contributions

The required employer contributions and percent of those contributions actually made are presented in the schedule.

NOTE 3
Actuarial Methods and Assumptions

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of the schedule:

Actuarial Cost Method	Amortization Period	Remaining Amortization Period	Asset Valuation Method	Inflation	Salary Increase	Ultimate Investment Rate of Return*
Entry Age	Level percentage of payroll, open	30 Years	5-year smoothed market	3.50%	4.00 to 8.20%, including inflation	7.50 percent, net of pension plan investment expense, including inflation

**The actuarially determined contribution rates are determined using the interest smoothing methodology adopted by the Board.*

Schedule of Investment Returns

	2015	2014
Annual money weighted rate of return, net of investment expense	4.96%	17.95%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Medical Insurance Plan – Schedule of Funding Progress
(In Millions)

Valuation Year June 30	Actuarial Value of Assets A	Actuarial Accrued Liabilities (AAL) B	Unfunded Actuarial Accrued Liabilities (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL as a % of Covered Payroll [(B-A)/C]
2009	$ 229.1	$ 6,454.7	$ 6,225.6	3.5 %	$ 3,253.1	191.4 %
2010	241.2	3,206.8	2,965.6	7.5	3,321.6	89.3
2011	294.8	3,423.1	3,128.3	8.6	3,451.8	90.6
2012	338.7	3,594.5	3,255.8	9.4	3,479.6	93.6
2013	412.2	3,521.1	3,108.9	11.7	3,480.0	89.3
2014	508.9	3,194.7	2,685.8	15.9	3,486.3	77.0
2015	637.8	3,525.6	2,887.8	18.1	3,515.1	82.2

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Required Supplementary Information continued . . .

Medical Insurance Plan – Schedule of Employer Contributions

Valuation Year June 30	Annual Required Contribution (ARC) (A)	Actual Employer Contribution (B)	Retiree Drug Subsidy Contribution (C)	Total Contribution (B) + (C)	Percentage of ARC Contributed [(B) + (C)]/(A)
2009	$ 467,312,904	$ 164,480,119	$ 13,611,748	$ 178,091,867	38.1 %
2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9
2011	477,723,070	188,453,929	280,585	188,734,514	39.5
2012	470,217,067	177,450,206	297,639	177,747,845	37.8
2013	186,725,823	166,611,420		166,611,420	89.2
2014	159,583,400	162,568,395		162,568,395	101.9
2015	106,606,132	168,084,353		168,084,353	157.7

Life Insurance Plan – Schedule of Funding Progress

(In Thousands)

Valuation Year June 30	Actuarial Value of Assets A	Actuarial Accrued Liabilities (AAL) B	Unfunded AAL (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL as a % of Covered Payroll [(B-A)/C]
2009	$ 84,703	$ 90,334	$ 5,631	93.8 %	$ 3,253,077	0.17 %
2010	87,905	92,091	4,186	95.5	3,321,614	0.13
2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)
2012	92,241	91,398	(843)	100.9	3,479,567	(0.02)
2013	94,863	94,325	(538)	100.6	3,480,066	(0.02)
2014	96,130	97,354	1,224	98.7	3,486,327	0.04
2015	97,186	98,739	1,553	98.4	3,515,113	0.04

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or medical insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Life Insurance Plan – Schedule of Employer Contributions

Valuation Year June 30	Annual Required Contribution (ARC) (A)	Actual Employer Contribution (B)	Percentage of ARC Contributed (B) / (A)
2009	$ 1,498,076	$ 5,455,473	364.2 %
2010	1,992,969	1,966,826	98.7
2011	1,725,878	1,668,822	96.7
2012	1,732,831	1,684,711	97.2
2013	1,739,908	1,680,495	96.6
2014	1,044,959	1,006,091	96.3
2015	1,050,216	1,019,519	97.1

ADDITIONAL SUPPORTING SCHEDULES

Schedule of Administrative Expenses
Year Ended June 30, 2015

Expense	Amount
Salaries	$ 6,207,452
Other Personnel Costs	891,855
Professional Services and Contracts	459,012
Utilities	93,144
Rentals	25,546
Maintenance	150,180
Postage & Related Services	417,187
Printing	175,972
Insurance	172,849
Miscellaneous Services	136,523
Telecommunications	22,875
Computer Services	155,391
Supplies	56,168
Depreciation	1,093,167
Travel	45,910
Dues & Subscriptions	43,337
Miscellaneous Commodities	25,169
Furniture, Fixtures, & Equipment not Capitalized	190,969
Compensated Absences	77,412
Total Administrative Expenses	**$ 10,440,118**

Schedule of Professional Services and Contracts
Year Ended June 30, 2015

Professional	Nature of Service	Amount
Cavanaugh Macdonald Consulting	Actuarial Services	$ 207,431
Auditor of Public Accounts	Auditing Services	70,005
International Claim Specialist	Investigative Services	960
Ice Miller	Attorney Services	45,191
Reinhart, Boerner VanDeuren	Attorney Services	1,384
Stoll, Keenon, and Ogden	Attorney Services	14,041
Peritus	Communications	120,000
Total Professional Services and Contracts		**$ 459,012**

See accompanying independent auditor's report.

Additional Supporting Schedules continued . . .

Schedule of Contracted Investment Management Expenses
Year Ended June 30, 2015

	Pension	Medical	Total
Equity Managers			
Baillie Gifford	$ 3,083,458	$	$ 3,083,458
Baring Asset Management, Inc.	2,463,293		2,463,293
Black Rock	235,529	187,274	422,803
GE Asset Management	800,000		800,000
Todd-Veredus Asset Management LLC	1,377,639		1,377,639
UBS Global Asset Management	4,529,001		4,529,001
Wellington Management Company	3,107,897		3,107,897
Total Equity Managers	15,596,817	187,274	15,784,091
Fixed Income Managers			
Fort Washington Investment Advisors	157,680		157,680
Galliard Capital Management	245,252		245,252
Total Fixed Income Managers	402,932		402,932
Real Estate	5,862,636	264,176	6,126,812
Additional Categories	8,043,331	518,978	8,562,309
Alternative Investments	11,478,820	299,357	11,778,177
Custodian			
The Bank of New York Mellon	335,800	8,263	344,063
Consultant			
Hewitt Ennis Knupp, Inc.	358,850		358,850
Bevis Longstreth	55,262		55,262
George Philip	34,134		34,134
Total Consultants	448,246		448,246
Legal & Research			
Ice Miller	84,131		84,131
Total Legal & Research	84,131		84,131
Other			
Administrative and Operational (includes Personnel)	2,473,848	52,536	2,526,384
Total Contracted Investment Management Expenses	**$ 44,726,561**	**$ 1,330,584**	**$ 46,057,145**

See accompanying independent auditor's report.

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Kentucky Teachers' Retirement System

2015

Investment Section

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Kentucky Teachers' Retirement System.

Mr. Tom Siderewicz, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

INVESTMENT COMMITTEE

Mr. Ronald L. Sanders
Chairperson

Mr. Arthur Green
Vice-Chairperson

Mr. Hollis Gritton
Member

Dr. Jay Morgan
Member

Ms. Ali Wright
Member

Mr. Bevis Longstreth
Investment Advisor to KTRS Investment Committee

Mr. George Philip
Investment Advisor to KTRS Investment Committee

EXECUTIVE INVESTMENT STAFF

Mr. Gary L. Harbin, CPA
Executive Secretary

Mr. Tom Siderewicz, CFA
Chief Investment Officer

AON

December 1, 2015

To the members of the Board of Trustees and participants of the Teachers' Retirement System of Kentucky:

The KTRS investment program produced a total return of 5.1% in the twelve-month period ended June 30, 2015. This return exceeded that of the policy benchmark by 1.7 percentage points and ranked in the top 6% of returns in a peer group universe of 78 public pensions with over $1 billion in assets. This strong relative performance was driven by favorable investment manager returns relative to their given benchmarks for both internally and externally managed portfolios. Favorable asset allocation strategy and implementation, in addition to the strong manager performance, propelled KTRS to near the top of its peer universe rankings.

Over the past fiscal year, the global economy was characterized by ongoing central bank easing as it became clear that China's economy was experiencing a slowdown and the Eurozone continued to struggle with slow growth and high unemployment. Here in the U.S., the economy showed relatively steady progress as inflation-adjusted gross domestic product grew by 2.7% and the unemployment rate fell from 6.1% to 5.3%.

Equities, which represented 62.8% of the system's assets as of June 30, 2015, returned 5.7%. Domestic equities returned 9.0% versus 7.3% for the S&P 1500 Index. International equities returned -1.9% versus -4.9% for the MSCI All Country (ex-U.S.) Index. Fixed income, which composed 17.4% of assets, returned 2.1% versus 1.7% for the Barclays Government/Credit Index.

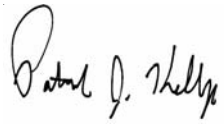
The system's other asset classes, including real estate, private equity, and alternative credit strategies, provided solid returns over the fiscal year. Collectively, these strategies represented 17.2% of total assets as of June 30.

Over the trailing five-year period, KTRS' investment returns rank in the top 9% of the pension fund universe cited earlier. We believe the consistently strong relative returns achieved over the past several years have been the result of the successful implementation of a sound investment philosophy and a high degree of professionalism.

The retirement annuity trust fund's returns were calculated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon market values.

We would like to thank the Board of Trustees, Investment Committee, and Investment Staff for their confidence. We appreciate the opportunity to assist the retirement system in meeting its investment goals.

Respectfully,



Patrick J. Kelly, CFA, CAIA

Partner

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RETIREMENT ANNUITY TRUST FUND

INVESTMENT POLICY SUMMARY

The KTRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principles that guide investment–related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the System. This broad summary is a reference point for management of retirement assets and outlines the investment philosophy and practice of KTRS.

INVESTMENT OBJECTIVES

KTRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them. Generally, the retirement system's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, KTRS holdings can withstand some short-term volatility. The retirement annuity trust fund's long-term investment objective is to achieve an annualized rate of return of 7.5%.

RISK CONTROLS

The KTRS investment program faces various risks; however, the primary risk to KTRS is that the assets will not support liabilities over long periods of time. In order to control this risk and any other risks, the board has taken the following steps on an ongoing basis:n order to control this risk and any other risks, the board has taken the following steps on an ongoing basis:

- Actuarial valuations are performed each year to evaluate the funding objectives of the retirement system. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the System.

- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the retirement system.

- The KTRS Investment Committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

ASSET ALLOCATION

Operating within relevant regulatory limitations, the retirement system's investment consultant, on an annual basis, presents to the Investment Committee for approval target percentages and ranges for the retirement system's various asset classes. Annually approved asset allocation parameters serve to balance the retirement system's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The retirement system's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the retirement system's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as liability requirements, the level of funding, and statutory investment restrictions are important considerations within the context of the asset allocation decision making process. Consequently, asset allocations may differ markedly between various pension plans due to their unique circumstances.

The information below shows the retirement system's asset allocation by fair value as of June 30, 2015, and June 30, 2014, as well as the target and strategic range for each asset class for fiscal year 2015.

Retirement Annuity Trust

	June 30,2015*	%	June 30,2014**	%
Cash Equivalents***	$ 477,398,294	2.6	$ 420,338,047	2.3
Fixed Income	3,103,821,351	17.4	3,594,965,963	19.9
Domestic Equities	7,798,497,485	43.6	7,982,520,773	44.3
International Equities	3,439,336,257	19.2	3,411,422,169	18.9
Real Estate	825,335,346	4.6	733,045,846	4.1
Private Equity	636,890,428	3.6	457,408,593	2.6
Timberland	207,797,668	1.1	186,481,696	1.0
Additional Categories	1,404,919,549	7.9	1,248,651,062	6.9
TOTALS	**$ 17,893,996,378**	**100.0**	**$ 18,034,834,149**	**100.0**

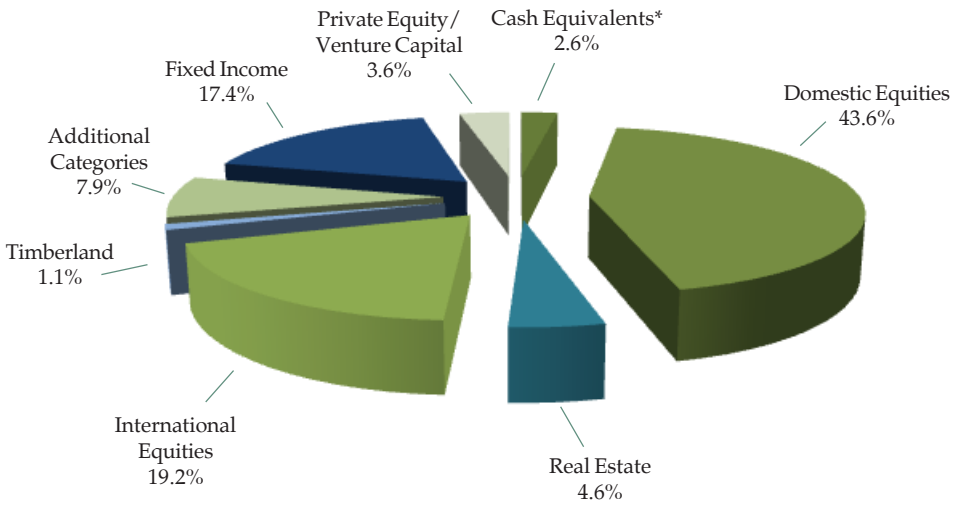
** Includes Life Insurance Trust values of $87,963,949, Tax Shelter Annuity value of $363,978, and 401(h) value of $29,150,708.*

*** Includes Life Insurance Trust values of $89,250,576, Tax Shelter Annuity value of $377,268, and 401(h) value of $41,237,374.*

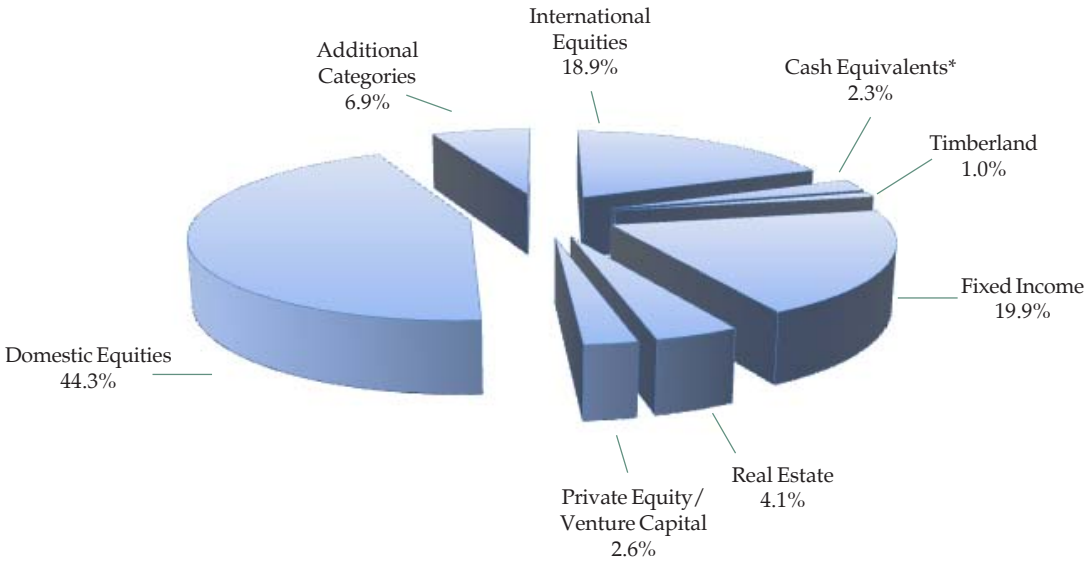
**** Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

Distribution of Investments
Retirement Annuity Trust**
Fair Values

June 30, 2015



June 30, 2014



* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

** Includes Life Insurance Trust values.

Strategic Weightings by Asset Class

Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2015 (Mkt)**
Cash		1 - 3%	2.0%	**2.6%**
Fixed Income		14 - 20	17.0	**17.4**
Government/Agency/Other	Unlimited			9.5
Corporate	35%			7.9
Equity	65%	58 - 65	62.0	**62.8**
Domestic Large Cap		34 - 42	38.0	37.3
Domestic Mid Cap		1 - 5	3.0	3.9
Domestic Small Cap		1 - 3	2.0	2.4
International* **	30%	16 - 22	19.0	19.2
Real Estate	10%	3 - 7	5.0	**4.6**
Alternative Investments*	10%	2 - 8	5.0	**4.7**
Additional Categories	15%	6 - 12	9.0	**7.9**
TOTAL			**100.0%**	**100.0%**

* Includes private equity, venture capital, timberland, and infrastructure investments.
** Starting with 7/2008, Cash is only the unallocated cash balance. Manager cash balances will be included with the asset type of the managers investments.
*** As of 6/30/15, 19.2% of Total International Equities was invested in Emerging Markets.

PORTFOLIO RETURNS

For the fiscal year, the retirement annuity trust fund's portfolio generated a total return of 5.1%, exceeding the policy benchmark return of 3.4%. Domestic equities returned 9.0% versus 7.3% for the Standard & Poor's 1500 Index, while international equities returned -1.9% versus -4.9% for the MSCI All Country World (Ex-US) Index. Fixed income investments outperformed, returning 2.1% versus 1.7% for the Barclays Government/Credit Index. Less traditional asset classes such as real estate, private equity, timberland, and alternative credit are beginning to contribute meaningfully to total return as those programs are expanded.

The table below details historical performance for the retirement annuity trust fund and its component asset classes for the period ended June 30, 2015. The retirement annuity trust fund's returns were generated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon market values.

Portfolio Returns continued ...

	1 Yr[2]	3 Yr[2]	5 Yr[2]	10 Yr[2]	20 Yr[2]
Total Fund					
KTRS	5.1	12.3	12.0	7.0	7.6
Policy Index[1]	3.4	11.1	11.3	-	-
Equities					
Domestic Equities	9.0	19.1	18.1	8.4	9.5
S & P Blended Index [3]	7.3	17.5	17.4	8.1	9.0
International Equities [4]	-1.9	11.4	9.8	-	-
MSCI AC World (Ex US)	-4.9	9.9	8.2	-	-
Total Equities	5.7	16.8	15.9	7.5	9.0
Fixed Income					
Total Fixed Income	2.1	2.5	4.4	5.3	6.1
Barclays Govt/Credit Index	1.7	1.8	3.5	4.4	5.7
Real Estate					
Non-Core Real Estate	23.0	24.8	-	-	-
NCREIF Index	13.0	11.6	-	-	-
Core Real Estate	14.2	12.5	14.5	-	-
NCREIF ODCE	14.4	13.1	14.4	-	-
Triple Net Lease Real Estate	7.9	7.6	7.6	8.4	8.9
CPI plus 2%	2.2	3.3	3.9	4.1	4.3
Alternative Investments					
Private Equity [5]	11.7	12.9	12.8	-	-
Timberland	15.6	7.2	6.3	-	-
NCREIF Timberland Index	10.0	9.8	6.1	-	-
Cash					
Cash (Unallocated)	0.1	0.1	0.1	1.8	2.9
90 Day Treasury Bill	0.0	0.1	0.1	1.4	2.5
Additional Categories					
High Yield					
High Yield Bond Fund	0.6	6.7	8.6	-	-
B of A Merrill Lynch High Yield Master II	-0.6	6.8	8.4	-	-
Alternative Credit					
KTRS Credit Fund	-1.0	11.3	-	-	-
Special Situations Fund	2.2	9.4	-	-	-
Oaktree Opportunities Fund	-1.0	-	-	-	-
AG Select Partners Adv Fund	-3.3	-	-	-	-
B of A Merrill Lynch High Yield Master II	-0.6	6.8	-	-	-
Shenkman Capital Mgmt	1.5				
Highbridge Pr Str III	11.1	-	-	-	-
Golub Pearls 11	6.2	-	-	-	-
Oaktree Eur Dislocation Fund	7.5	-	-	-	-
Marathon Eur Cr Opp Fund	5.4	-	-	-	-
S & P LSTA Leverage Loan Index	1.8	-	-	-	-
Babson Capital Eur Loan Fund	-	-	-	-	-
CS Institutional WELLI, USD Hedged	-	-	-	-	-
		-	-	-	-
Non-US Dollar Fixed Income					
Rogge Global Intl Fixed Income	-10.9	-	-	-	-
Barclays Global Aggregate ex USD 25% EUR 25% JPY Index	-10.7	-	-	-	-

Footnotes on page 65

(1) Prior to July 1, 2008, KTRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.

(2) Annualized

(3) Total Domestic Equity is benchmarked to a S&P Blended Index. Total domestic equity was benchmarked to the S&P 500 through the fiscal year ending 6/30/2007. As of 7/1 2007, domestic equity is benchmarked to the S&P 1500 Index since the System's domestic stock mix is most comparable to this index.

(4) As of 06/30/15 19.2% of Total International Equities were invested in emerging markets.

(5) For a period of five years private equity investments will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the first capital call, investments in this class shall be benchmarked versus theS & P 500 plus 3%, which is the System's long-term expected return for this asset class.

SCHEDULE OF INVESTMENT RETURNS - RETIREMENT ANNUITY TRUST

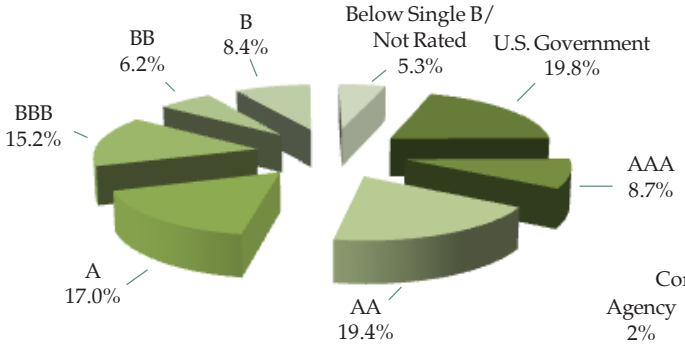
2015	Annual Rate of Return Net of Investment Expense	4.96%
2014	Annual Rate of Return Net of Investment Expense	17.95%

FIXED INCOME INVESTMENTS

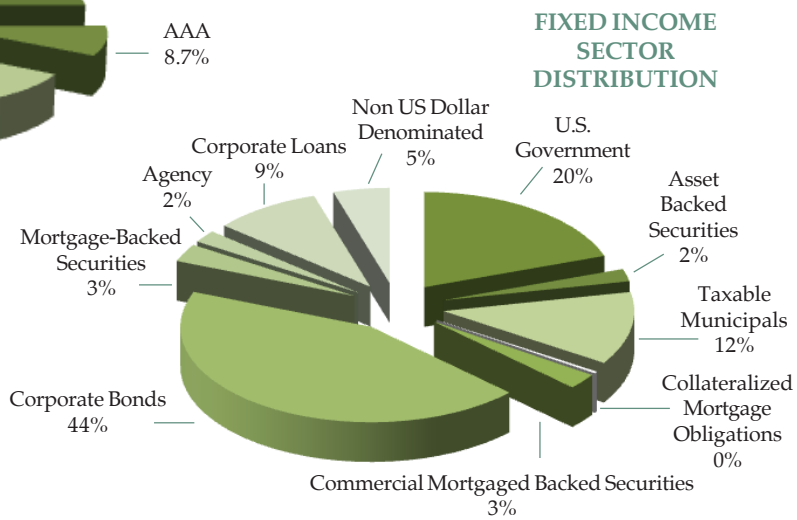
As of June 30, 2015, the retirement annuity trust fund had approximately $3.1 billion, 17.4% of total assets, in the fixed income category of investments. The retirement annuity trust fund's fixed income investments maintained the average investment grade rating required by administrative regulation as of June 30, 2015.

In addition, the retirement annuity trust fund had $1.4 Billion, 7.9% of total assets, in other debt related investments under a regulatory provision which allows for up to 15% of assets in "additional categories of investments" approved by the Board of Trustees. Investments under this authorization included a high yield bond portfolio, an international fixed income portfolio, and two syndicated bank loan portfolios. Also under this provision are several alternative credit portfolios including a multi - strategy opportunistic credit portfolio as well as distressed debt and specialty lending funds.

The credit quality distribution for the retirement annuity trust fund is illustrated below. This chart includes the fixed income category of investments as well as the high yield bond, international fixed income, and the syndicated bank loan portfolios included in "additional categories of investments". Also illustrated below is the distribution of fixed income assets by sector, again including the high yield bond, international fixed income, and the syndicated bank loan portfolios held under "additional categories of investments".



FIXED INCOME QUALITY DISTRIBUTION



FIXED INCOME SECTOR DISTRIBUTION

FIXED INCOME MARKET OVERVIEW

The retirement annuity trust fund's investment grade fixed income portfolios returned 2.1% for the fiscal year ending June 2015. This compares favorably to the trust fund's fixed income benchmark, the Barclays U.S. Government / Credit Index, which returned 1.7%. The outperformance was driven by the system's overweighting in corporate bonds which provided higher coupon interest than government bonds of similar duration.

As has been the case in recent years, fixed income markets were heavily influenced by the development of global Central Bank monetary policy, but additional factors seemed to have a significant weighing on the level of interest rates as the year progressed. Yields on long term U.S. Treasuries ended fiscal year 2015 modestly lower while yields on short term U.S. Treasuries rose over the same time period. This "flattening" of the interest rate term structure is consistent with market expectations of tighter monetary policy from the Federal Reserve, which was in the process of winding down its third asset purchase program, known as Quantitative Easing (QE), as the fiscal year began.

Beginning in February 2014, this latest round of QE was completed in October 2014, and market participants began to speculate about the timing of the first increase in the Federal Funds rate. Initially, investors were anticipating the rate increases to begin in the second quarter of calendar year 2015. At the same time, the Bank of Japan announced it was expanding its QE program and investors were expecting a similar announcement from the European Central Bank. The divergence in monetary policy among the major Central Banks, tighter U.S. policy contrasting with easier policy in Japan and Europe, caused a major rally in the U.S. Dollar. The U.S. Dollar index, which measures average exchange rates between the U.S. Dollar and other major currencies, rose from 79.78 on June 30, 2014 to a peak of 100.39 in mid-March 2015.

The strength in the U.S. Dollar had implications for other financial markets. The CRB commodity index fell from a high of 313.27 at the end of June, 2014 to 206.81 in mid-March, 2015. The drop was led by industrial and energy markets including crude oil. The price per barrel of West Texas Intermediate crude oil fell from $106.09 to $42.05 over the same time period. Long term U.S. Treasuries benefited greatly as foreign investors purchased Treasuries to participate in U.S. Dollar strength and U.S. investors lengthened the duration of their portfolios to take advantage of falling commodity price inflation. Yields on 30 year U.S. Treasuries fell from 3.47% at the beginning of the fiscal year to a record low of 2.22% at the end of January 2015. Corporate bonds also performed well during the first half of the fiscal year as corporate yields followed Treasury yields lower. The yield on the Barclays Investment Grade Long Corporate Index, which began the fiscal year at 4.57%, fell to 4.03% at the end of January.

Inflation, which had already been running below the Federal Reserve's stated target of 2%, began to decline in November of 2014, and also dropped significantly in December 2014 and January 2015. In response, the Federal Reserve issued a "dovish" statement following the January 2015 Federal Open Market Committee meeting stating that "inflation is anticipated to decline further in the near term". The statement caused market participants to reassess the timing of interest rate increases. Investors pushed out their expectation of the starting point for rate increases to the fourth quarter of calendar year 2015, later than previously expected. The more dovish view on rates truncated the rally in the U.S. Dollar and reversed some of the market action that had taken place over the first eight months of the fiscal year. The U.S. Dollar index fell to 93.13 before closing the fiscal year at 95.48. Oil rebounded to a near term high of $61.43 and closed the fiscal year at $59.47. Yields on both long term U.S. Treasuries and long term corporate bonds rose 90 basis points to finish the fiscal year at 3.12% and 4.93% respectively.

With U.S. Treasury rates and risk premiums on corporate bonds both near the low end of their historical range, investment grade fixed income is an asset class with moderately unfavorable risk / reward characteristics and below average upside potential. The retirement system continues to adjust the structure of its fixed income portfolio to control risk and maintain required liquidity. Specifically, the retirement system continues to increase exposure to nontraditional debt-related investments, reduce exposure to investment grade fixed income, and limit interest rate risk.

EQUITY INVESTMENTS

As of June 30, 2015 the retirement annuity trust fund's public equity investments had a market value of $11.24 billion, representing 62.8% of total assets. Positive equity returns over the fiscal year prompted several rebalancing sales to reduce equity exposure back to target levels and to raise cash to fund pension benefits. The retirement annuity trust fund divides its public equity into two broad categories: domestic and international.

The domestic portfolio had a market value of $7.80 billion as of June 30, representing 43.6% of total assets. This is a $180 million decrease from last year due to the rebalancing sales. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of three well known component indices based upon market capitalization: the S&P 500 large cap, S&P 400 mid cap, and the S&P 600 small cap. The retirement annuity trust fund's domestic equity holdings are comprised of eleven portfolios. Three of the portfolios are internal passively managed index portfolios benchmarked to the S&P 500, 400, and 600. The other eight portfolios are managed externally by four different asset managers, with each portfolio representing a specific strategy and measured against an appropriate benchmark. The collective array of portfolios provides diversification by capitalization, manager, style, and strategy.

The market value of the international equity holdings as of June 30, 2015 was $3.44 billion, representing 19.2% of total assets, up from 18.9% a year earlier. The benchmark for international equities is the Morgan Stanley Capital International All Country World Index ex US (MSCI ACWI ex US), which represents the markets of 22 developed countries and 23 emerging market countries. Five external asset managers manage the retirement annuity trust fund's international equities, one of which is a passively managed international index fund. The retirement annuity trust fund plans to continue incremental increases in the international equity exposure during the coming fiscal year.

EQUITY MARKET OVERVIEW

Public Equities maintained steady gains throughout fiscal year 2015. The upward trend was fairly consistent starting in October after a volatile first quarter. This steady rise saw just a few hiccups, with the most pronounced setbacks coming in mid-December and January. Returns of domestic stocks as measured by the S&P 1500 and Russell 2000 were 7.31% and 6.49%, respectively. Within the S&P 1500, small (S&P 600) and mid-cap (S&P 400) stocks were up 6.70% and 6.38%, while the large-cap S&P 500 was up 7.42%. The performance of International stocks was a drag on overall equity returns. The Morgan Stanley Capital International (MSCI) All Country World (ex-U.S.) Index returned -4.9%. The MSCI Emerging Markets Index was down -4.8%, with both indices showing volatile returns across international markets.

The domestic markets advanced overall throughout the fiscal year, due largely to easy monetary policies around the world driving asset prices higher. The first half of the year saw three major pullbacks, however. The beginning of August 2014 proved choppy because of geopolitical risks, such as Russia's military presence in Eastern Ukraine, and the US conducting airstrikes in Iraq against ISIS militants. After stocks rallied back, they once again stumbled from mid-September through the fiscal year low point on October 15, 2014. Domestically, this was attributed to the Ebola breakout and concerns over deflation. Globally, there were democracy protests in Hong Kong and major economic slowdowns in Europe and China. As volatile global markets increased investor demand for safe haven assets, the 10-year Treasury yield dropped to 2.06%, down from 2.6%. Again, however, US equities rallied on the back of stronger than expected GDP growth, and a surprise announcement from the Bank of Japan to increase the pace of its purchases of Japanese government bonds. The first half of the fiscal year saw a huge increase in market volatility. This, coupled with an accelerated decline in oil prices, triggered the third market setback in early to mid-December. Crude oil prices fell roughly 50% from July through December going from approximately $106 to $53 per barrel. The first half ended on a high note, thanks to China's central bank signaling further stimulus and easing lending requirements for home buying to boost their housing market.

The second half of the fiscal year continued the overall upward trend domestically, but started slow as January produced volatile and negative returns. Oil prices continued its downward spiral, dragging commodities and the energy sector down with it. Global GDP growth became a concern to investors as China and Europe both posted low numbers. Starting in February, markets rallied for most of the second half of the fiscal year. The US economy continued to add jobs at a high pace as inflation remained low and steady below the Fed's 2% target. The European Central Bank launched its quantitative easing program providing another boost to the market. Unfortunately, the last week of the fiscal year saw a 3% selloff in equities losing most of the gains from the previous five months. This was spurred by the revival of the Greek debt crisis and turmoil in China's markets.

Internationally, markets lagged the US as non-US equities produced negative returns for the fiscal year. The main drivers of this were the economic slowdowns in Europe and China. As the US dollar strengthened, international

investors fled Europe and Asia to invest in US markets. The Chinese economy grew at its slowest pace in six years as energy prices plummeted. At the end of the fiscal year China was exposed for restricting stock sales for market participants creating further turmoil in their stock market. Crude oil prices plunged to a fiscal year low of $42.05 per barrel in March sending a ripple effect throughout the global economy, hitting the Chinese and emerging markets the hardest. European markets were negatively affected by the Russian occupancy in the Ukraine and once again by Greece's debt crisis. Japan's quantitative easing was a rallying point for many Japanese and International stocks, but was not enough to bring the International indices into positive territory.

In summary, we experienced a positive equity market for the fiscal year. Domestic large caps were the drivers, but mid and small caps also enjoyed solid gains on the year. International and emerging markets were a drag on equity performance this year. Domestic and International monetary policies provided the tailwinds for equities, while growing geopolitical tension and a dramatic economic slowdown in China proved to be headwinds. In the coming fiscal year FOMC Chair Janet Yellen is expected to announce the first Fed Funds Rate hike in over nine years, however, the Federal Reserve is still expected to keep rates low in the near future.

REAL ESTATE

The retirement annuity trust fund's real estate investments had a market value of $825.3 million as of June 30, 2015, representing 4.6% of total assets. The retirement annuity trust fund's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow, and provide diversification, thereby reducing the volatility of the overall investment portfolio.

The retirement annuity trust fund's real estate exposure is currently provided through nine portfolios. The retirement annuity trust fund maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high credit quality tenants. The retirement annuity trust fund is also invested in a commingled real estate fund (PRISA Fund), which is managed by Prudential Real Estate Investors. This fund is a core real estate equity fund which invests primarily in existing income-producing properties with strong cash flows and the potential for capital appreciation. The fund is diversified across several property types including office, retail, industrial, apartment, self-storage and hotel.

Additionally, the retirement annuity trust fund is invested in seven real estate limited partnerships: Carlyle Realty Partners VI, Blackstone Real Estate Partners VII, Rockwood Capital Real Estate Fund IX, TA Realty Associates Fund X, AG Net Lease Realty Fund III, Carlyle Realty Partners VII, and Landmark Real Estate Partners VII. Going forward, investment staff will continue to opportunistically add to the annuity trust fund's real estate investments.

REAL ESTATE OVERVIEW

The commercial real estate market continued to attract substantial amounts of new capital during the fiscal year. According to Green Street Advisors, private real estate funds, publicly traded REITs and other entities raised approximately $440 billion of funds for investment in the U.S. property market in 2014. Over the coming year investor demand for commercial real estate should remain strong as the asset class is expected to generate attractive yields relative to other types of investments while also providing upside price appreciation due to strong supply/demand fundamentals. Depending on the sector, average rents nationwide should grow by 2% to 4% annually over the next two years.

According to Real Capital Analytics, nearly $424 billion in commercial and multi-family property transactions occurred in 2014. This was an 18% increase over the $362 billion in deals that were closed in the prior year. The largest volume of deals occurred in the office building and apartment sectors, while the industrial property sector had the least amount of activity. With the large inflow of capital into the market property values have been driven higher due to the increased competition for assets. The greatest run-up in prices has been in the market for core properties located in top-tier cities. This has led to investors focusing more on non-core assets located in secondary markets that offer higher total return potential.

Real Estate Investments
$825.3 Million Fair Value
As of June 30, 2015

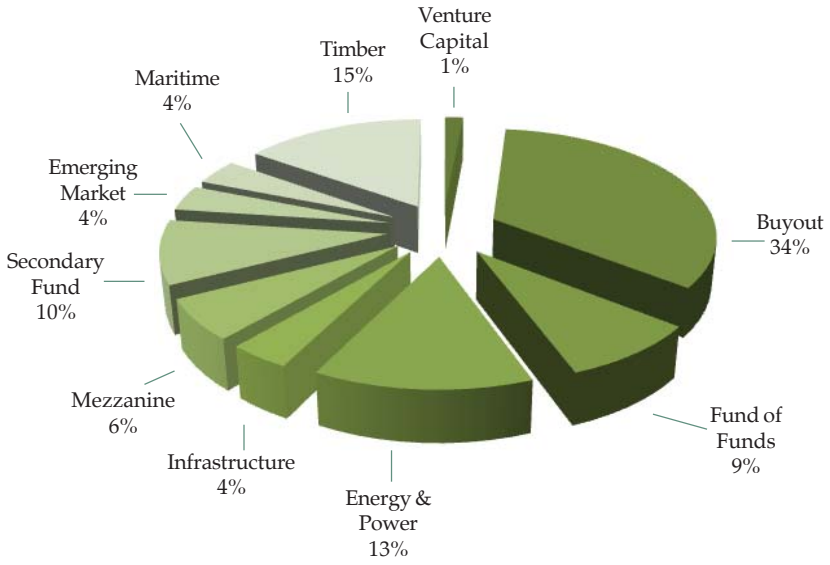
On the debt side of the market, lending activity remained robust across all sectors of commercial real estate. Data provided by the Mortgage Bankers Association show that an estimated $387 billion in new commercial and multi-family loans were originated in 2014, up from $359 billion in 2013. Loan originations are expected to grow to over $400 billion in 2015. Additionally, an estimated $1 trillion of existing commercial real estate loans are expected to come due over the next three years.

The environment for commercial real estate should remain favorable over the next year as the U.S. economy continues to slowly recover from the Great Recession of 2008-2009. Interest rates remain low, consumer and business confidence is growing, and the employment picture continues to improve. Upward pressure on commercial real estate prices should continue to increase as investors remain drawn to the relative value of the asset class. Furthermore, the steady income and inflation-hedging attributes which have traditionally made real estate an integral part of a diversified investment portfolio remain intact.

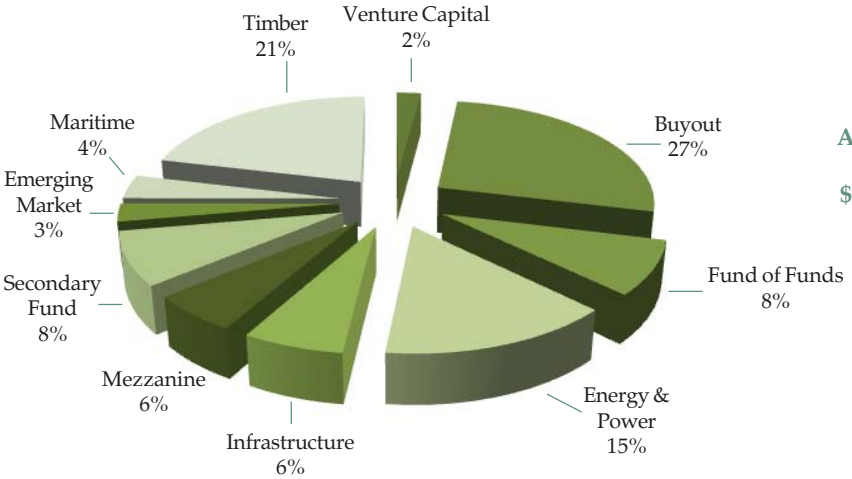
ALTERNATIVE ASSETS

As of June 30, 2015, the retirement annuity trust fund had committed $1.310 billion to alternative investments and had funded $784 million of those commitments. The percentage of the retirement annuity trust fund's portfolio invested in alternative assets was 4.7%. The retirement annuity trust fund's current alternative asset portfolio consists of private equity investments and timberland.

Alternative Assets Committed $1.310 Billion as of June 30, 2015



Alternative Assets Funded $784 Million as of June 30, 2015



PRIVATE EQUITY

The retirement annuity trust fund has exposure to venture, buyout, infrastructure, energy, mezzanine and several other private equity sectors via participation in limited partnerships as well as investments in funds of funds. The retirement annuity trust fund is in the early stages of its private equity investment program, which it intends to grow with a disciplined plan of commitments over the next several years. The retirement annuity trust fund looks to diversify its private equity portfolio by manager, country, strategy, and vintage year. Vintage year diversification is achieved by building out the portfolio with disciplined levels of commitments over time. A commitment to any given partnership shall not exceed 20% of the partnership's total commitments.

The Board and staff understand that private equity (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with other publicly traded assets, this asset class can help to diversify and reduce risk for the retirement annuity trust fund's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence, during the harvesting period.

PRIVATE EQUITY MARKET OVERVIEW

The private equity markets continued to be positively affected by the strong public equity markets in the first half of the fiscal year. Consequently, older vintage funds were able to shed many of their portfolio companies either through a sale or an IPO. This return of capital has encouraged investors, especially institutional investors, to continue to increase their allocation to alternative investments, including private equity. However, the pull back in the public equity markets and the increased volatility in the second half of the fiscal year have caused the private equity markets to see a slowdown in portfolio company exits during this time.

The bifurcation in the private equity market continues with the top tier funds raising capital much easier than less desirable funds. This should, over the long term, provide a shakeup in this space as the weaker firms are forced to exit. The past fiscal year has also seen a large amount of buyout funds returning to the marketplace with mixed results. We continue to see more opportunity in the middle market space and in other niche areas such as infrastructure and distressed credit. Additionally, the stress in the European markets should continue to present investment opportunities in the private equity space over the next fiscal year.

TIMBERLAND

In addition to private equity, the retirement annuity trust fund has invested in timberland in the alternative asset class. As of June 30, 2015 the retirement annuity trust fund owns approximately 73,000 acres of timberland outright, has a 7.15% interest in a commingled fund that holds approximately 98,000 acres of timberland and is a member of a joint venture that purchased an interest in approximately 124,000 acres of timberland located across seven southern states. Timberland is, by nature, a long term investment as our anticipated time horizon in this asset category is generally a minimum of ten to fifteen years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the retirement annuity trust fund's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long-term.

The retirement annuity trust fund diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are primarily driven from net cash flow generated from the sale of trees (referred to as stumpage sales) and capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of forest commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland from the conversion of timberland into higher and better uses, such as vacation property sales.

TIMBERLAND MARKET OVERVIEW

The U.S. continued to see improvement in the housing markets during the fiscal year. In the short term, published forecasts expect housing starts to reach 1.22 million in 2015, a level that has typically stimulated the southern timber market. Long term, demand for sawtimber is bright as forecasters call for sustained increases through 2017. Additionally, while sawtimber exports from the West Coast have been down, southern pine lumber exports were up over 20 percent in 2014. Interestingly, there has been a flurry of Canadian purchases of southern sawmills. With the current high levels of standing southern pine inventory, this additional usage will begin to bring supply back into line with demand.

Currently, however, markets have been impacted by seasonal conditions. 2015 has seen dry weather across the U.S. South, with the exception of the extreme East Coast, resulting in a tightening of the region's timber markets. In-woods operability has been good, and as a result, logging production and regional mill inventories have remained steady. While timber pricing was attractive based on historical levels, spot-market opportunities typically prompted by wet weather events were largely absent. Late spring, rainfall increased significantly, triggering some attractive selling opportunities. However, this situation was short-lived.

Similar market conditions persist in the U.S. North, with frozen ground conditions supporting high levels of logging production earlier in the year. After ending 2014 in somewhat of a panic mode, especially with regard to pulpwood markets, northern buyers have reversed their backsliding inventories, and timber markets have calmed.

RETIREMENT ANNUITY TRUST
PORTFOLIOS
FAIR VALUES *
June 30, 2015

Internally Managed

Cash Equivalents		
Cash Collections Fund (Unallocated)	$	477,398,294
Fixed Income		
Intermediate Bond Fund		832,814,130
Broad Market Bond Fund		546,362,748
Long Term Bond Fund		521,705,174
Internal Bond Fund		193,485,080
Life Insurance Trust		87,963,949
Tax Shelter Fund		363,978
Equity		
S & P 500 Stock Index Fund (Large Cap)		2,524,072,862
S & P 400 Stock Index Fund (Mid Cap)		383,171,980
S & P 600 Stock Index Fund (Small Cap)		256,604,671
Real Estate		
Internally Managed Fund		383,002,196
Subtotal		**6,206,945,062**

Externally Managed

Fixed Income	
Galliard Capital Management	480,842,149
Ft. Washington Broad Market	440,284,143
Domestic Equity	
Todd Asset Management (Large Cap Core)	1,297,404,384
UBS (Large Cap Value)	987,826,452
GE Asset Management (Large Cap Growth)	713,727,335
Wellington (Large Cap Core)	622,741,774
Todd Asset Management Opportunity Fund	328,809,349
Wellington (Mid Cap Core)	308,007,220
UBS (130/30)	202,012,960
Wellington (Small Cap Core)	174,118,498
International Equity	
Baillie Gifford EAFE Alpha	849,903,142
Todd Asset Management International	796,815,219
UBS All Country World ex US	691,720,452
Baring All Country World ex US	537,126,346
BlackRock All Country World ex US IMI	470,711,520
Todd Asset Management International Intrinsic Value	93,059,578
Real Estate	
Prudential PRISA Fund	254,856,900
The Realty Associates Fund X	51,967,460
Blackstone Partners VII, LP	49,484,809
Carlyle Realty Partners VI, LP	34,494,026
Rockwood Capital Real Estate Fund IX	28,063,167
AG Net Lease Realty Fund III, LP	14,655,153
Carlyle Realty Partners VII, LP	4,703,439
Landmark Real Estate Partners, VII	4,108,196

Externally Managed continued ...

Alternative Investments	
Molpus Woodlands Group Lake Superior Timberlands LLC	120,007,522
IFM Global Infrastructure LP	101,512,225
Molpus Seven States LLC	58,887,805
Alinda Infrastructure Fund II	54,492,129
KKR & Co European Fund III	50,737,741
NGP Natural Resources X, LP	38,493,411
Hellman & Friedman Fund VII	33,773,848
Ft. Washington Fund VI	33,055,512
Hancock Bluegrass LLC - Oregon	28,902,342
Riverstone/Carlyle E & P Fund IV	28,529,319
J. P. Morgan Maritime Fund	27,087,169
Actis Global Fund IV	25,329,873
Chrysalis Venture Fund III	19,476,691
Riverstone E & P Fund V	18,778,403
KKR & Co Fund 2006	18,397,645
Stepstone Pioneer Capital Fund III, LP	18,094,401
Oaktree European Principal Fund III	18,061,782
Lexington Capital Partners Fund VII	17,533,892
Landmark Equity Partners Fund XIV, LP	17,208,362
APAX VIII, LP	15,037,735
Audax Private Equity Fund IV, LP	14,947,109
Ft. Washington Fund V	13,479,197
Audax Mezzanine Fund III	13,245,014
Oaktree Mezzanine Fund III	11,908,903
Carlyle Global Financial Services Partners II	10,203,721
Carlyle Europe Partners IV, LP	7,487,702
Landmark Equity Partners Fund XV, LP	6,629,762
Oaktree Mezzanine Fund IV	5,753,759
Ft. Washington Fund VIII	4,569,146
Lexington Capital Partners Fund VIII	3,940,531
KKR & Co European Fund IV	3,401,749
NGP Natural Resources XI, LP	2,077,283
Public Pension Capital LLC	1,756,764
Gavea Investments Fund V, LP	1,333,912
CapitalSouth Partners Fund III	555,737
Additional Categories	
Fort Washington High Yield Bond Fund	299,669,960
Marathon KTRS/Credit Fund LP	272,347,137
Shenkman Capital Management	262,966,624
Golub Capital Pearls 11, LLC	125,730,280
Babson Capital European Loan Fund	102,840,000
Rogge Global International Fixed Income	89,500,325
Avenue Special Situations Fund VI	74,228,248
Marathon European Credit Opp Fund II	67,927,915
Oaktree Opportunities IX, LP	48,086,629
Highbridge Principal Strategies III	44,742,440
Oaktree European Dislocation Fund, LP	12,826,868
AG Select Partners Advantage Fund	4,053,123
Subtotal	**$ 11,687,051,316**
TOTAL ASSETS	**$ 17,893,996,378**

* *Detailed information concerning the market values of all KTRS investments is available upon request.*

Investment Summary
Fair Value – Retirement Annuity Trust*
June 30, 2015

Type of Investment	Fair Value 07/01/14	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/15
Cash Equivalents	$ 829,364,814	$ 3,935,054,978	$ -	$ 4,120,767,700	$ 643,652,091
Fixed Income	3,329,133,881	2,101,712,586	(41,430,930)	2,358,557,363	3,030,858,174
Real Estate	733,045,846	101,760,928	35,722,669	45,194,097	825,335,346
Alternative	643,890,289	298,205,608	53,827,202	151,235,005	844,688,096
Equities	11,266,188,790	3,250,052,524	443,499,691	3,796,175,725	11,163,565,280
Additional Categories	1,233,210,529	551,974,640	(63,558,077)	335,729,700	1,385,897,391
TOTAL	**$ 18,034,834,149**	**$ 10,238,761,264**	**$ 428,060,555**	**$ 10,807,659,590**	**$ 17,893,996,378**

* *Includes Life Insurance Trust Values of $87,963,949, Tax Shelter Annuity value of $363,978, and 401(h) value of $29,150,708.*

Contracted Investment Management Expenses
Fiscal Year 2014-15
(in thousands)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 8,073,984	$ 15,597	19.3
Fixed Income Manager(s)	921,126	403	4.4
Real Estate	442,333	5,863	132.5
Additional Categories	1,404,920	8,043	57.2
Alternative Investments [2]	$844,688	11,479	135.9
TOTAL	**$ 11,687,051**	**$ 41,385**	**35.4**
Administrative and Operation Expenses			
Custodian Fees [3]	$ 17,894,548	$ 336	0.2
Consultant Fees		448	0.3
Legal & Research		84	0.0
Other Administrative and Operational		2,474	1.5
TOTAL	**$ 17,894,548**	**$ 3,342**	**2.0**
GRAND TOTAL		**$ 44,727**	**25.1**

(1) – One basis point is one hundredth of one percent or the equivalent of .0001.
(2) – Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.
(3) – Includes J. Losey Scholarship Fund.

Schedule of Contracted and Administrative Investment Expenses
Retirement Annuity Trust
June 30, 2015

INVESTMENT COUNSELOR FEES

EQUITY MANAGERS		
Baillie Gifford	$	3,083,458
Baring Asset Management, Inc.		2,463,293
GE Asset Management		800,000
Todd Asset Management LLC		1,377,639
UBS Global Asset Management		4,529,001
Wellington Management Company		3,107,897
Blackrock		235,529
Total Equity Managers	**$**	**15,596,817**
FIXED INCOME MANAGERS		
Fort Washington Investment Broad Market		157,680
Galliard Capital Mangement		245,252
Total Fixed Income Managers	**$**	**402,932**
REAL ESTATE		
Prudential PRISA		1,713,599
Angelo Gordon Net Lease Fund III		312,555
Blackstone Partners Fund VII, L.P.		704,405
Carlyle Realty Partners Fund VI, L.P.		510,996
Carlyle Realty Partners Fund VII, L.P.		700,000
Landmark Real Estate Fund VII		620,879
Rockwood Capital Real Estate Fund IX, L.P.		685,026
TA Realty Associates Fund X, L.P.		615,176
Total Real Estate Managers	**$**	**5,862,636**
ADDITIONAL CATEGORIES		
Angelo Gordon Select Partners Advantage Fund		36,533
Avenue Capital Special Situations Fund VI, L.P.		438,216
Babson European Capital		258,264
Fort Washington Investments High Yield		608,313
Golub Capital - Pearls 11, LLC		835,529
Highbridge Principle Strategies Fund III, L.P.		560,862
Marathon Credit Fund		2,575,817
Marathon European Credit Fund II		481,696
Oaktree European Dislocation Fund, L.P.		144,331
Oaktree Opportunities Fund IX, L.P.		800,000
Rogge Global International Fund		234,376
Shenkman Capital		1,069,394
Total Additional Category Managers	**$**	**8,043,331**
ALTERNATIVE INVESTMENTS		
Actis Global Fund IV, L.P.		999,000
Alinda Infrastructure Fund II, L.P.		638,983
APAX Fund VIII, L.P.		485,726
Audax Mezzanine Fund III, L.P.		303,581
Audax Private Equity Fund IV, L.P.		0
Capital South Fund III, L.P.		0
Carlyle Europe Parners IV, L.P.		35,154
Carlyle Global Finacial Services Fund II, L.P.		624,148
Chrysalis Fund III, L.P.		387,162
Fort Washington Fund V, L.P.		87,243
Fort Washington Fund VI, L.P.		222,300
Fort Washington Fund VIII, L.P.		89,700
Gavea V		300,000
Hancock Bluegrass LLC Oregon		234,111
Hellman and Friedman Fund VII, L.P.		733,843
IFM Global		147,480
JP Morgan Maritime Fund , L.P.		561,617
KKR Fund 2006, L.P.		33,555
ALTERNATIVE INVESTMENTS continued ...		
KKR European Fund III, L.P.		(216,530)
KKR European Fund IV, L.P.		137,271
Landmark Equity Partners Fund XIV, L.P.		299,845
Landmark Equity Partners Fund XV, L.P.		300,000
Lexington Capital Partners Fund VII, L.P.		225,680
Lexington Capital Partners Fund VIII, L.P.		522,719
Molpus Lake Superior Michigan		859,775
Molpus Lake Superior Hiwassee		64,734
Molpus Seven States		577,811
NGP Natural Resources Fund X, L.P.		817,555
NGP Natural Resources Fund XI, L.P.		8,090
Oaktree European Principal Fund III, L.P.		343,776
Oaktree Mezzanine Fund III, L.P.		265,402
Oaktree Mezzanine Fund IV, L.P.		31,635
Stepstone Partners Fund III, L.P.		150,512
Public Pension Capital		857,363
Riverstone/Carlyle Energy and Power Fund IV, L.P.		127,654
Riverstone Energy and Power Fund V, L.P.		221,925
Total Alternative Managers	**$**	**11,478,820**

ADMINISTRATIVE & OPERATIONAL EXPENSES

CUSTODIAN		
The Bank of New York Mellon		335,800
Total Custodian Fees	**$**	**335,800**
CONSULTANT		
Aon Hewitt		358,850
Bevis Longstreth		55,262
George Philip		34,134
Total Consultant Fees	**$**	**448,246**
LEGAL & RESEARCH		
Ice Miller		84,131
Total Legal & Research	**$**	**84,131**
OTHER		
Other Administrative and Operational (includes Personnel, Subscription services, etc…)	$	2,639,773
Total Other Expenses	**$**	**2,639,773**
TOTAL INVESTMENT EXPENSES	**$**	**44,892,486**

Ten Largest Stock Holdings Ranked [1] [2] by Fair Value June 30, 2015

Rank	Description	Fair Value	Percentage of Equities
1	Apple Inc	221,037,732	2.627
2	JP Morgan Chase	107,408,273	1.276
3	Gilead Sciences	99,455,596	1.182
4	Allergan PLC	90,878,077	1.080
5	UnitedHealth Group	89,772,968	1.067
6	Amazon.com Inc	78,309,402	0.930
7	Home Depot Inc	72,689,133	0.864
8	Disney Walt Co (Holding Co)	71,443,878	0.849
9	Pepsico Inc	66,287,174	0.787
10	Wells Fargo & Co	64,633,314	0.768

Top Ten Fixed Income Holdings [2] by Fair Value June 30, 2015

Rank	Description	Maturity	Coupon	Par Value	Fair Value	Percent of Fixed Income
1	U S Treasury	11/15/2017	0.880	65,370,000	65,492,896	2.161
2	U S Treasury	10/15/2016	0.630	50,000,000	50,133,000	1.654
3	U S Treasury	2/15/2025	2.000	48,000,000	46,634,880	1.539
4	U S Treasury	6/30/2019	1.630	45,000,000	45,425,250	1.499
5	U S Treasury Bonds	8/15/2023	6.250	31,900,000	41,636,837	1.374
6	U S Treasury	4/30/2018	0.630	41,290,000	40,919,216	1.350
7	U S Treasury	5/15/2024	2.500	31,000,000	31,530,410	1.040
8	U S Treasury Bonds	8/15/2029	6.130	22,000,000	31,130,000	1.027
9	U S Treasury	11/30/2019	1.500	30,000,000	30,004,800	0.990
10	U S Treasury	7/31/2019	1.630	28,800,000	29,045,376	0.958

(1) Includes only actively managed separate accounts.
(2) Detailed information concerning these values along with book values and cost of all KTRS investments is available upon request.

Transaction Commissions Fiscal Year 2014-2015

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Abel Noser	4,995,835.00	$ 46,642.85	$ 0.009	2.23 %
Academy Securities, Inc.	20,240.00	708.42	0.035	0.03
Allen & Co	33,300.00	1,577.80	0.047	0.08
Avondale Partners, LLC	4,845.00	3,844.28	0.793	0.18
B. Riley & Co. LLC	30,541.00	1,147.95	0.038	0.05
Barclays	607,962.00	21,300.03	0.035	1.02
Bass / Baypoint Trading	13,030.00	458.39	0.035	0.02
BB & T Capital Markets	25,868.00	905.39	0.035	0.04
Blair, William & Co	68,570.00	8,346.04	0.122	0.40
BMO Capital Markets	94,179.00	3,553.20	0.038	0.17
BNP Paribas Securities Bond	1,650.00	57.75	0.035	0.00
BNY Brokerage	13,441.00	592.47	0.044	0.03
Brean Murray, Carret & Co., LLC	34,186.00	1,196.53	0.035	0.06
BTIG	173,886.00	6,394.34	0.037	0.31
Burke & Quick Partners LLC	1,082.00	37.87	0.035	0.00
Canaccord Genuity, Inc.	142,255.00	5,721.25	0.040	0.27
Cantor Fitzgerald & Co	26,362.00	1,021.80	0.039	0.05
CIBC Worldmarket	41,572.00	10,495.06	0.252	0.50
Citigroup Global	284,133.00	7,434.24	0.026	0.36
ConvergEx - Algos	36,637,262.00	186,809.75	0.005	8.94
ConvergEx - FS	2,007,580.00	21,876.80	0.011	1.05
ConvergEx ADR Conversions	4,957,873.00	109,878.32	0.022	5.26
Cornerstone	775,490.00	22,149.70	0.029	1.06
Cowen & Co	149,511.00	8,789.61	0.059	0.42
Credit Agricole Securities	175,298.00	6,148.69	0.035	0.29
Credit Research & Trading LLC	11,320.00	396.21	0.035	0.02
Credit Suisse Sec. LLC	2,430,284.00	70,061.33	0.029	3.35
Cuttone & Co Inc	5,225.00	182.88	0.035	0.01
Deutsche Bank	432,388.00	12,438.50	0.029	0.60
Drexel Hamilton LLC	25,464.00	891.30	0.035	0.04
Evercore Group LLC	3,560.00	92.60	0.026	0.00
Fidelity Capital Markets	2,670.00	93.45	0.035	0.00
First Kentucky Securities Corp	382,880.00	11,486.40	0.030	0.55
Freidman Billings	59,216.00	14,469.64	0.244	0.69
Goldman Sachs	1,824,240.00	80,420.44	0.044	3.85
Instinet	137,248.00	1,623.83	0.012	0.08
Investment Tech Grp Transition	20,324,639.00	195,971.40	0.010	9.38
Investment Technology Grp	19,095,084.00	208,528.36	0.011	9.98
ISI Group	2,063,441.00	59,263.09	0.029	2.84
J.J.B. Hilliard, W.L. Lyons	1,788,002.00	53,640.06	0.030	2.57
Janney Montgomery Scott Inc	92,839.00	3,232.38	0.035	0.15
Jefferies & Co.	309,307.00	7,217.68	0.023	0.35
Jones & Associates	45,083.00	1,658.22	0.037	0.08
JP Morgan & Chase	421,370.00	12,362.03	0.029	0.59
Keefe Bruyette & Woods	80,204.00	3,212.42	0.040	0.15
Keybanc Capital	46,225.00	1,608.74	0.035	0.08
King, CL, & Associates, Inc.	17,800.00	558.99	0.031	0.03
Knight Equity Markets	101,641.00	3,221.78	0.032	0.15
Leerink Swann & Co.	21,404.00	800.46	0.037	0.04
Lexington Investment Co.	169,670.00	5,090.10	0.030	0.24
Liquidnet Inc - Transition	18,294,256.00	137,207.21	0.008	6.57
Liquidnet Inc	12,624,819.00	124,086.29	0.010	5.94
Loop Capital Markets, LLC	8,685.00	86.85	0.010	0.00
MacQuarie Securities Inc	54,230.00	2,044.04	0.038	0.10
Merrill Lynch ADR Conversions	678,382.00	20,351.46	0.030	0.97
Merrill Lynch	3,077,006.00	89,877.50	0.029	4.30
Merrill Lynch, Pierce, Fenner	13,573.00	475.07	0.035	0.02

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Mizuho Securities, USA	11,837.00	414.31	0.035	0.02
MKM Partners	29,530.00	1,049.02	0.036	0.05
Morgan Stanley Smith Barney-Huntington	920,400.00	26,971.50	0.029	1.29
Morgan Stanley Smith Barney-Louisville	1,381,800.00	41,454.00	0.030	1.98
Morgan Stanley Smith Barney-Northern KY	1,386,485.00	41,594.55	0.030	1.99
Morgan Stanley	452,102.00	23,148.91	0.051	1.11
Pacific Crest Securities	9,030.00	316.05	0.035	0.02
Pershing LLC	227,133.00	7,875.21	0.035	0.38
Piper Jaffray	113,828.00	4,353.22	0.038	0.21
Pulse Trading	105,920.00	1,059.20	0.010	0.05
R W Baird	238,998.00	8,218.70	0.034	0.39
Raymond James & Assoc	3,106,220.00	94,096.02	0.030	4.50
RBC Capital Markets	147,813.00	9,112.27	0.062	0.44
Rosenblatt Securities LLC	1,865.00	65.28	0.035	0.00
Ross Sinclaire & Assoc	164,930.00	4,947.90	0.030	0.24
Royal Bank of Scotland RBS	2,511.00	113.00	0.045	0.01
Sandler O'Neill	23,200.00	14,407.20	0.621	0.69
Sanford C Bernstein	482,035.00	18,760.00	0.039	0.90
Scotia Capital, USA	60,359.00	2,112.59	0.035	0.10
Sidoti & Company LLC	4,780.00	167.30	0.035	0.01
Simmons & Co	6,160.00	215.60	0.035	0.01
State Street Global	1,500.00	60.50	0.040	0.00
Stephens Inc.	126,150.00	14,062.31	0.111	0.67
Sterne, Agee & Leach	1,525.00	53.38	0.035	0.00
Stifel, Nicolaus & Co	1,350,647.00	40,964.09	0.030	1.96
Stifel, Nicolaus & Co-Louisville	192,910.00	5,787.30	0.030	0.28
Suntrust Robinson	77,151.00	8,968.92	0.116	0.43
Susquehanna Brokerage	4,320.00	151.20	0.035	0.01
Telsey Advisory Group LLC	72,032.00	2,521.18	0.035	0.12
UBS/Paine Webber Securities	328,071.00	9,109.65	0.028	0.44
UBS/Paine Webber-Louisville	862,960.00	25,888.80	0.030	1.24
Wedbush Morgan Securities	1,350.00	47.25	0.035	0.00
Weeden & Co	2,187,579.00	66,686.97	0.030	3.19
Wells Fargo Securities, LLC	249,896.00	13,845.94	0.055	0.66
Wunderlich Securities Inc	16,200.00	567.02	0.035	0.03
Zacks & Company	2,900.00	101.50	0.035	0.00
TOTAL	**150,310,233.00**	**$ 2,089,007.08**	**$ 0.014**	**100%**

The acquisition of initial public offerings (IPOs)represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate; however, the security issuers and not the investors pay the commissions. In 2014-15, the retirement annuity trust fund bought small capitalization IPOs that generated $192,743 in commissions. Although these commissions were not paid by the retirement system, they resulted from the retirement annuity trust fund's investment activities and are included in the total commissions of $2,089,007. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.03 per share or less. Investment companies usually provide investment research for brokerage clients.

PROXY VOTING AND CORPORATE BEHAVIOR

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The Board has adopted the following position on corporate behavior:

The Board's stated fiduciary duty is to obtain the highest return for the Fund commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the Fund as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the Fund has invested.

The Board expects the managements of the companies whose equity securities are held in the Fund's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the Board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the Board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission, and others which are covered by the laws of the United States Government or the State of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the System's holdings in the company, if the sale is consistent with sound investment policy.

SECURITY LENDING

The System operates a security lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and select stocks and bonds are the types of securities loaned. The System's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral, at the time of the loan, has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral consists of cash, marketable U.S. Government securities, and selected marketable U.S. Government agency securities approved by the System.

Cash collateral is invested in short term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities unless the borrower defaults. The lending agent also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. The weighted average maturity of cash collateral investments is typically two days. The System has no credit risk exposure to borrowers, since the amounts the System owes borrowers exceeds the amounts the borrowers owe the System.

Security lending programs can entail considerable interest rate risk and credit risk. The System has structured its program to minimize these two main categories of risk. The interest rate risk is managed, as mentioned above, by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the creditworthiness of lent securities.

KENTUCKY INVESTMENTS

The retirement system is always cognizant of its significant role in the Commonwealth's economy. Over $1.7 billion in benefits are distributed to members and annuitants living in Kentucky annually. Approximately $300 million of the retirement annuity trust fund's investments directly impact the Commonwealth. These investments include: commercial real estate; bonds issued by public agencies of the Commonwealth and those of local municipalities; pools of single-family mortgages in Kentucky; financing for multi-family housing, and; investments in companies which have an impact on the Commonwealth's economy but receive earnings from global operations. Fiduciary duty requires that investments be made solely for the benefit of the retirement system's members and annuitants. Investments which benefit the Commonwealth's economy are made only when fully consistent with this fiduciary duty.

PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
Aon Hewitt

Investment Custodian
The Bank of New York Mellon

Fixed Income Managers
Galliard Capital Management
Ft. Washington Investment Advisors

Domestic Equity Managers
Todd Asset Management LLC
UBS Global Asset Management
Wellington Management Company
GE Asset Management

International Equity Managers
Todd Asset Management LLC
UBS Global Asset Management
Baring Asset Management, Inc.
Baillie Gifford
BlackRock Institutional Trust Company

Real Estate Managers
Prudential Real Estate Investors
Carlyle Realty Partners
Blackstone Real Estate Partners
Rockwood Capital Real Estate
TA Associates Realty
Angelo Gordon & Co.
Landmark Real Estate Partners

Alternative Investment Managers
Molpus Woodlands Group
Hancock Natural Resources Group
Kohlberg Kravis Roberts & Co.
Chrysalis Ventures
Ft. Washington Private Equity Investors
Alinda Capital Partners, LLC
Riverstone Holdings, LLC
CapitalSouth Partners
Landmark Partners
Lexington Partners
Oaktree Capital Management
Stepstone Pioneer Capital
Audax Group
J.P. Morgan Asset Management
Hellman & Friedman Capital Partners
Natural Gas Partners
Apax Partners
Actis LLP
Carlyle Global Partners
Public Pension Capital
IFM Investors
Gavea Investimentos

Additional Categories Investment Managers
Avenue Capital Group
Marathon Asset Management
Ft. Washington Investment Advisors
Oaktree Capital Management
Shenkman Capital Management, Inc
Rogge Global Partners
Highbridge Principal Strategies, LLC
Angelo Gordon & Co.
Golub Capital
Babson Capital Management

Attorney
Ice Miller LLP

HEALTH INSURANCE TRUST FUND

INVESTMENT POLICY SUMMARY

The statute that created the health insurance trust fund on July 1, 2010, KRS 161.677, obliges the Board to "manage the assets of the fund in the same general manner in which it administers the retirement funds, except that the asset allocation may differ and separate accounting and financial reporting shall be maintained for the trust fund." KRS 161.430, which governs the investment of funds for the retirement funds, requires that members' assets be managed in a manner consistent with fiduciary standards set forth in the "prudent person rule." Subject to this statute, administrative regulation 102 KAR 1:178 establishes investment policies for the health insurance trust fund. This regulation requires the Board and Investment Committee to prudently diversify assets and to consider the fund's "liquidity and its capability of meeting both short and long-term obligations" in setting asset allocation policy.

Due to an imbalance of required distributions over contributions early in the fund's existence, liquidity needs have dominated investment policy. This will evolve as contribution rate increases provided in statute improve cash flow in future years. As near-term liquidity needs recede in importance, the focus will increasingly be on establishing an investment policy which achieves the required rate of return and matches the health insurance liability.

INVESTMENT OBJECTIVES

The definitive objective of the health insurance trust fund is to provide for beneficiaries' health insurance benefit obligations, both short and long-term. In support of this objective, investment policy will be designed, on an ongoing basis, to: (1) meet all liquidity needs, (2) achieve the actuarially assumed 8.0% rate of return over the long-term, and (3) do so within appropriate risk levels.

RISK CONTROLS

Any investment program faces various risks; as with the retirement funds, the primary risk is that the assets will not support liabilities over the long-term. Risk control measures for the health insurance trust fund mirror those of the retirement annuity trust fund, but are customized to reflect the fund's unique liability. Primary risk control measures include the following steps:

- Actuarial valuations are performed each year to evaluate the funding objectives of the health insurance trust fund. Every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the fund.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the fund.
- In accordance with administrative regulation 102 KAR 1:178, which governs investment policies for the fund, the KTRS Investment Committee adopts and regularly reviews an asset allocation policy designed to meet the fund’s needs.

ASSET ALLOCATION

As of June 30, 2015, the health insurance trust fund had approximately $552.9 million in total assets. This included $47 million in short-term high quality bonds for liquidity purposes. This trust fund also had $65.1 million in high yield bonds, $355.7 million in a global stock index fund, $11.3 million in private equity investments, $28.8 million in bank loan investments, and $43.7 million in an alternative credit funds, and $1.2 million in real estate funds.

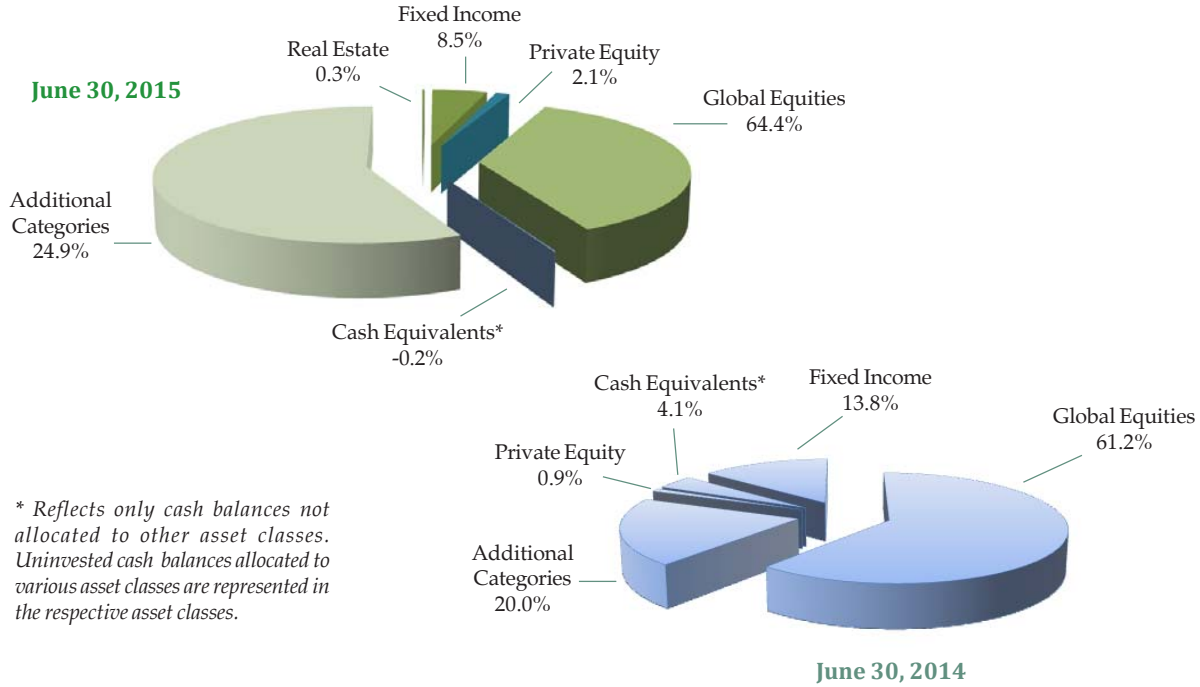
Asset allocation will be adjusted annually by the Investment Committee to reflect changing liquidity needs and actuarial funding status. Due to upcoming contribution rate increases enacted in statute, liquidity needs are expected to decline in coming years while funding status improves. The information below shows the health insurance trust fund's asset allocation by fair value as of June 30, 2015 and June 30, 2014.

Health Insurance Trust

	June 30,2015	%	June 30,2014	%
Cash Equivalents*	$ -1,034,005	-0.2	$ 20,149,704	4.1
Fixed Income	47,019,105	8.5	67,647,915	13.8
Global Equities	355,702,555	64.4	300,857,011	61.2
Real Estate	1,762,328	0.3	-	0.0
Additional Categories	137,798,860	24.9	99,027,356	20.0
Private Equity	11,698,357	2.1	4,251,239	0.9
TOTALS	**$ 552,947,200**	**100.0**	**$ 491,933,225**	**100.0**

* *Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

Distribution of Investments Health Insurance Trust Fair Values



** Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

HEALTH INSURANCE TRUST

PORTFOLIO RETURNS

For the fiscal year, the health insurance trust fund's portfolio returned 1.48%. The fund's global equities returned 1.36% versus .81% for the MSCI All country World IMI Index. A short-term bond fund held for liquidity purposes returned 0.96%. A high yield bond fund returned .55% versus -.55% for its benchmark.

Due to a necessary focus on liquidity needs early in the fund's existence and rapidly evolving asset allocation as its funding mechanism is implemented, no policy benchmark has yet been established. Returns were generated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon market values.

	1 Yr[1]	3 Yr[1]	5 Yr[1]	10 Yr[1]	20 Yr[1]
Total Fund					
KTRS Health Insurance Trust	1.5	8.9	-	-	-
Equities					
Global Equities	1.4	13.9	-	-	-
MSCI AC World IMI	0.8	13.3	-	-	-
Fixed Income					
Internal Bond Fund	1.0	0.6	-	-	-
90 Day Treasury Bill	0.0	0.1	-	-	-
Alternative Investments					
Private Equity[2]	13.6	23.3	-	-	-
Additional Categories					
High Yield					
High Yield Bond Fund	0.6	6.7	-	-	-
KTRS Credit Fund	-2.3	-	-	-	-
B of A Merrill Lynch High Yield Master II	-0.6	6.8			
Alternative Credit			-	-	-
Shenkman Capital Management	2.4	-	-	-	-
Highbridge Principal Strategies	11.0	-	-	-	-
Marathon European Credit Opportunties	5.3	-	-	-	-
S & P LSTA Leverage Loan Index	1.8	-			
Real Estate			-	-	-
Non-Core Real Estate	-32.4	-	-	-	-
NCREIF Index	13.0	-			
Cash					
Cash(Unallocated)	0.1	0.1			
90 Day Treasury Bill	0.0	0.1			

(1) Annualized.

(2) For a period of five years private equity investments will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the first capital call, investments in this class shall be benchmarked versus theS & P 500 plus 3%, which is the System's long-term expected return for this asset class.

SCHEDULE OF INVESTMENT RETURNS - HEALTH INSURANCE TRUST

2015	Annual Rate of Return Net of Investment Expense	1.38%
2014	Annual Rate of Return Net of Investment Expense	15.38%

HEALTH INSURANCE TRUST
PORTFOLIOS
FAIR VALUES *
June 30, 2015

Internally Managed	
Cash Equivalents	
Cash Collections Fund (Unallocated)	$ (1,034,005)
Fixed Income	
Internal Bond Fund	47,019,105
Subtotal	**$ 45,985,100**

Externally Managed	
Global Equities	
BlackRock Fund B	355,702,555
Alternative Investments	
Ft. Washington Fund VII	3,194,928
Actis Global Fund IV	2,532,587
Carlyle Europe Fund IV	1,497,542
Ft. Washington Fund VIII	1,305,470
Landmark Equity XV	1,104,964
Ft. Washington PE Opp III	967,060
KKR European Fund IV	680,350
NGP Natural Resources XI	415,456
Additional Categories	
Fort Washington High Yield Bond Fund	65,150,105
Marathon/KTRS Credit Fund	34,819,185
Shenkman Capital Management	28,826,798
Marathon European Credit Opp Fund II	4,528,528
Highbridge Principal Strategies III	4,474,244
Real Estate	
Carlyle Realty VII	940,688
Landmark Real Estate VII	821,640
Subtotal	**$ 506,962,100**
TOTAL ASSETS	**$ 552,947,200**

** Detailed information concerning the market values of all KTRS investments is available upon request.*

Investment Summary
Fair Value – Medical Insurance Trust
June 30, 2015

Type of Investment	Fair Value 06/30/14	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/15
Cash Equivalents	$ 71,133,632	$ 161,236,133	$ -	$ 225,908,627	$ 6,461,138
Fixed Income	21,234,589	47,584,313	(278,412)	25,794,026	42,746,464
Real Estate	-	2,430,795	227,808	896,275	1,762,328
Equities	300,857,011	50,001,212	4,844,331	-	355,702,555
Alternative	4,251,239	7,940,611	774,374	1,267,867	11,698,357
Additional Categories	94,456,754	82,629,225	(4,784,606)	37,725,014	134,576,358
TOTAL	**$ 491,933,225**	**$ 351,822,289**	**$ 783,495**	**$ 291,591,809**	**$ 552,947,200**

Health Insurance Trust Fund
Contracted Investment Management Expenses
Fiscal Year 2014-15
(in thousands)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 355,703	$ 187	
Fixed Income Manager(s)	-	-	
Real Estate [2]	1,762	264	
Additional Categories	137,799	519	
Alternative Investments [3]	11,698	299	
TOTAL	**$ 506,962**	**$ 1,269**	25.0
Other Investment Services			
Custodian Fees	552,947	$ 8	0.1
Consultant Fees		-	0.0
Legal & Research		-	0.0
Other Administrative and Operational		53	1.0
TOTAL	**$ 552,947**	**$ 61**	**1.2**
GRAND TOTAL		**$ 1,330**	**24.1**

1 - One basis point is one hundredth of one percent or the equivalent of .0001.
2 - Accrual of fees payable as of June 30, 2015.
3 - Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.

Schedule of Contracted and Administrative Investment Expenses
Health Insurance Trust Fund
June 30, 2015

INVESTMENT COUNSELOR FEES

EQUITY MANAGERS		
BlackRock		187,274
Total Equity Managers	**$**	**187,274**
REAL ESTATE		
Carlyle VII		140,000
Landmark VII		124,176
Total Real Estate	**$**	**264,176**
ADDITIONAL CATEGORIES		
Highbridge Principal Strategies Fund III,L.P.		56,088
Fort Washington Investments High Yield		128,982
Marathon Credit Fund		189,343
Marathon European Credit Fund II		32,113
Shenkman Capital		112,452
Total Additional Category Managers	**$**	**518,978**
ALTERNATIVE INVESTMENTS		
Actis Global Fund IV, L.P.		100,000
Fort Washington Private Equity III, L.P.		43,125
Fort Washington Fund VII, L.P.		37,500
Fort Washington Fund VIII, L.P.		39,660
KKR European IV, L.P.		27,454
Landmark Fund XV ,L.P.		50,000
NGP Natural Resources XI, L.P.		1,618
Total Alternative Managers	**$**	**299,357**

ADMINISTRATIVE AND OPERATIONAL EXPENSES

CUSTODIAN		
The Bank of New York Mellon		8,263
Total Custodian	**$**	**8,263**
LEGAL & RESEARCH		
Ice Miller		-
Total Legal & Research	**$**	**-**
OTHER		
Other Administrative and Operational (includes Personnel, Subscription services, etc…)		52,536
Total Other	**$**	**52,536**
TOTAL INVESTMENT EXPENSES	**$**	**1,330,584**

HEALTH INSURANCE TRUST PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
AON Hewitt

Investment Custodian
The Bank of New York Mellon

Additional Categories Managers
Ft. Washington Investment Advisors
Shenkman Capital Management, Inc.
Highbridge Principal Strategies, LLC
Marathon Asset Management

Global Equity Manager
BlackRock Institutional Trust Company

Alternative Investment Managers
Ft. Washington Private Equity Investors
Actis LLP
Landmark Partners
Kohlberg Kravis Roberts & Co.
Natural Gas Partners
Carlyle Global Partners

Real Estate
Carlyle Realty Partners
Landmark Real Estate Partners

Attorney
Ice Miller LLP

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Kentucky Teachers' Retirement System

2015

Actuarial Section

Report of the Actuary on the Annual Valuation

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 7, 2015

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2015. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contribution rates as a percentage of payroll for the fiscal year ending June 30, 2018 required to support the total benefits of the System are as follows:

Group	Combined Member and State Contribution Requirement
University members hired before July 1, 2008	34.90%
University members hired on or after July 1, 2008	35.90%
Non-University members hired before July 1, 2008	37.86%
Non-University members hired on or after July 1, 2008	38.86%

These rates represent a decrease since the previous valuation in the Pension actuarially determined employer contribution rate of 0.07% of payroll for the fiscal year ending June 30, 2018. In addition, there has been a net increase in the expected state special appropriation from 2.70% to 2.94%, or 0.24% of payroll and no change in the amount required for life insurance benefits.

For the fiscal year ending June 30, 2018, in addition to the State statutory contribution rates and the state special appropriation, there is an additional employer contribution rate of 13.49% of payroll required in order to amortize the unfunded accrued liability according to the funding policy adopted by the Board. This is 0.31% less than the 13.80% determined in the previous valuation.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the total unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll in accordance with the funding policy adopted by the Board, on the assumption that payroll will increase by

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4.0% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund from 2005 to 2010 were allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund. No additional contributions were allocated during the 2015 fiscal year.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, the System is not being funded on an actuarially sound basis since the full actuarially determined contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Eric H. Gary, FSA, FCA, MAAA
Chief Health Actuary

Cathy Turcot
Principal and Managing Director

Report of Actuary on the Valuation Prepared as of June 30, 2015 Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (dollar amounts in thousands):

Valuation Date	June 30, 2015	June 30, 2014
Number of active members	72,246	73,407
Annual salaries	$ 3,515,113	$ 3,486,327
Number of annuitants and beneficiaries	49,822	48,576
Annual allowances	$ 1,767,637	$ 1,684,852
Assets		
Market value	$ 18,049,131	$ 18,092,571
Actuarial value	$ 17,219,520	$ 16,174,199
Unfunded actuarial accrued liability	$ 13,930,442	$ 14,010,205
Funded Ratio	55.3 %	53.6 %
Amortization period (years)	29.3	30

Contribution rates are shown separately for university and non-university members on the following pages.

Contribution Rates for University Members

Valuation Date	June 30, 2015		June 30, 2014	
For Fiscal Year Ending	June 30, 2018		June 30, 2017	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	12.340 %	12.340 %	12.270 %	12.270 %
Accrued liability	22.560	23.560	22.700	23.700
Total	34.900 %	35.900 %	34.970 %	35.970 %
Member	7.625 %	7.625 %	7.625 %	7.625 %
State (ARC)	27.275	28.275	27.345	28.345
Total	34.900 %	35.900 %	34.970 %	35.970 %
Life Insurance Fund:				
State	0.030 %	0.030 %	0.030 %	0.030 %
Medical Insurance Fund:				
Member	2.775 %	2.775 %	2.775 %	2.775 %
State Match	2.775	1.775	2.775	1.775
Total	5.550 %	4.550 %	5.550 %	4.550 %
Total Contributions	40.480%	40.480%	40.550 %	40.550 %
Member Statutory	10.400 %	10.400 %	10.400 %	10.400 %
State Statutory	13.650	13.650	13.650	13.650
Required Increase	13.490	13.490	13.800	13.800
State Special	2.940	2.940	2.700	2.700
Total	40.480 %	40.480 %	40.550 %	40.550 %

Contribution Rates for Non-University Members

Valuation Date	June 30, 2015		June 30, 2014	
For Fiscal Year Ending	June 30, 2018		June 30, 2017	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	16.720 %	16.720 %	16.720 %	16.720 %
Accrued liability	21.140	22.140	21.210	22.210
Total	37.860 %	38.860 %	37.930 %	38.930 %
Member	9.105 %	9.105 %	9.105 %	9.105 %
State (ARC)	28.755	29.755	28.825	29.825
Total	37.860 %	38.860 %	37.930 %	38.930 %
Life Insurance Fund:				
State	0.030 %	0.030 %	0.030 %	0.030 %
Medical Insurance Fund:				
Member	3.750 %	3.750 %	3.750 %	3.750 %
State Match	3.750	2.750	3.750	2.750
Total	7.500 %	6.500 %	7.500 %	6.500 %
Total Contributions	45.390 %	45.390 %	45.460 %	45.460 %
Member Statutory	12.855 %	12.855 %	12.855 %	12.855 %
State Statutory	16.105	16.105	16.105	16.105
Required Increase	13.490	13.490	13.800	13.800
State Special	2.940	2.940	2.700	2.700
Total	45.390 %	45.390 %	45.460 %	45.460 %

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2015 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. The assumed investment rate of return is 7.50%. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation. The funding policy is shown in Schedule H of the Report.

5. Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. There have been no changes since the previous valuation.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2015 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
University hired before 7/1/2008	2,055	$ 147,256
University hired after 7/1/2008	1,360	67,694
Non-University Full Time hired before 7/1/2008	40,402	2,517,108
Non-University Full Time hired after 7/1/2008	16,764	708,842
Non-University Part Time hired before 7/1/2008	3,317	28,801
Non-University Part Time hired after 7/1/2008	8,348	45,412
TOTAL	**72,246**	**$ 3,515,113**

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2015

Group	Number	Annual Retirement Allowances[1] ($1,000's)
Service Retirements	43,349	$ 1,609,950
Disability Retirements	2,651	76,399
Beneficiaries of Deceased Members	3,822	81,288
TOTAL	**49,822**	**$ 1,767,637**

[1] *Includes cost-of-living adjustments effective through July 1, 2015.*

3. Table 1 of Schedule G shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2015 the market value of Pension Plan assets for valuation purposes held by the System amounted to $18,049,130,737. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes. The estimated market investment return for the plan year was 5.1%. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2015 was $17,219,519,677. The estimated investment return for the plan year ending June 30, 2015 on an actuarial value of assets basis was 12.41%, compared to the assumed investment rate of return for the period of 7.50%. Schedule B shows the development of the actuarial value of assets as of June 30, 2015.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2015. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.

2. The valuation balance sheet shows that the System has total prospective liabilities of $17,169,625,916 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $19,176,764,815 of which $851,860,475 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $345,742,284. The total prospective liabilities of the System amounts to $36,692,133,015. Against these liabilities, the System has present assets for valuation purposes of $17,219,519,677. When this amount is deducted from the total liabilities of $36,692,133,015, there remains $19,472,613,338 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 12.34% of payroll for University and 16.72% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $5,542,171,361. When this amount is subtracted from $19,472,613,338, which is the present value of the total future contributions to be made by the employer, there remains $13,930,441,977 as the amount of future unfunded accrued liability contributions.

5. The unfunded accrued liability decreased by approximately $80 million for the plan year ending June 30, 2015 and the funding ratio increased from 53.6% to 55.3%. The decrease in the unfunded accrued liability was primarily due to the investment return on an actuarial value basis for the year being more than expected. In addition, salary increases were less than assumed which resulted in a gain. Offsetting these gains was a loss due to contribution shortfall for the plan year and a small net demographic loss due to turnover, retirement and mortality. See Section VII for a complete breakdown of the experience of the System.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 10.400% of annual salary to the System and each non-university member contribute 12.855% of annual salary. Of this amount, for each university member, 2.775% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.75% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1,

2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.03% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 13.49% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan based on the funding policy adopted by the Board. An additional special appropriation of 2.94% of total payroll will be made by the State. Therefore, the total actuarially determined employer contribution rate to the Pension Plan is 27.275% for university members who become members before July 1, 2008 and 28.275% for university members who become members on or after July 1, 2008. The total actuarially determined employer contribution rate to the Pension Plan is 28.755% for non-university members who become members before July 1, 2008 and 29.755% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source
University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	10.400 %	10.400 %
Statutory Medical Insurance Fund	(2.775)	(2.775)
Contribution to Pension Plan	7.625 %	7.625 %
Employer		
Statutory Matching Total	10.400 %	10.400 %
Statutory Medical Insurance Fund	(2.775)	(1.775)
Supplemental Funding	3.250	3.250
Subtotal	10.875 %	11.875 %
Life Insurance	(0.030) %	(0.030) %
Additional to Maintain 30-Year Amortization	13.490	13.490
Special Appropriation	2.940	2.940
Contribution to Pension Plan	27.275 %	28.275 %
Total Contribution to Pension Plan	**34.900 %**	**35.900 %**

Contribution Rates by Source
Non-University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	12.855 %	12.855 %
Statutory Medical Insurance Fund	(3.750)	(3.750)
Contribution to Pension Plan	9.105 %	9.105 %
Employer		
Statutory Matching Total	12.855 %	12.855 %
Statutory Medical Insurance Fund	(3.750)	(2.750)
Supplemental Funding	3.250	3.250
Subtotal	12.355 %	13.355 %
Life Insurance	(0.030) %	(0.030) %
Additional to Maintain 30-Year Amortization	13.490	13.490
Special Appropriation	2.940	2.940
Contribution to Pension Plan	28.755 %	29.755 %
Total Contribution to Pension Plan	**37.860 %**	**38.860 %**

4. The valuation indicates that normal contributions at the rate of 12.34% of active university members' salaries and 16.72% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded accrued liability. This accrued liability rate is 22.56% for university members hired before July 1, 2008, 23.56% for university members hired on and after July 1, 2008, 21.14% for non-university members hired before July 1, 2008, and 22.14% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 2.94% of payroll to be made by the State. These rates are shown in the following table:

Actuarially Determined Contribution Rates

Rate	Percentage of Active Members' Salaries			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	12.34 %	12.34 %	16.72 %	16.72 %
Accrued Liability *	22.56	23.56	21.14	22.14
Total	**34.90 %**	**35.90 %**	**37.86 %**	**38.86 %**

** Includes special appropriations of 2.94% of payroll to be made by the State.*

5. The funding policy shown in Schedule H of this report, states that the unfunded accrued liability determined in the June 30, 2014 valuation, known as the "legacy unfunded liability" will be amortized over a closed 30 year period. New sources of unfunded liability each year after June 30, 2014 will be amortized over closed 20 year periods. The legacy unfunded liability determined as of June 30, 2014 was $14,010,204,858. The remaining balance of the legacy unfunded liability as of June 30, 2015 of $14,282,051,575 was determined by adding interest at 7.5% and subtracting the expected amortization payment of $778,918,647. The new source of unfunded liability of $(351,609,598) as of June 30, 2015, is determined by subtracting the remaining balance of the legacy unfunded liability from the total unfunded actuarial accrued liability of $13,930,441,977 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability in accordance with the Board funding policy, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 13.49%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded accrued liability in accordance with the Board funding policy. However, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2010, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. Beginning with the 2011 fiscal year, there have been no further loans for

Stabilization Funding. In addition, there were no loans for single-subsidy funding for fiscal years 2013 or 2014. The table on the following page shows the amounts borrowed, annual payments and remaining balances for the non-single subsidy funding as of June 30, 2015:

Medical Insurance Fund
Stabilization Funding

FISCAL YEAR	LOAN AMOUNT	ANNUAL PAYMENT	BALANCES AS OF JUNE 30, 2015
2008/2009	$ 8,400,000	$ 1,228,900	$ 4,213,170
2009/2010	9,200,000	1,345,200	5,565,983
2010/2011	10,700,000	1,564,500	7,503,774
2011/2012	12,300,000	1,798,700	9,726,708
TOTAL	**$ 40,600,000**	**$ 5,937,300**	**$ 27,009,635**

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 13.49% of payroll for the fiscal year ending June 30, 2018, as shown in the following table:

VALUATION DATE	FISCAL YEAR	INCREASE	CUMULATIVE INCREASE	AMOUNT
June 30, 2004	June 30, 2007	0.11%	0.11%	$ 3,174,600
June 30, 2005	June 30, 2008	1.21	1.32	38,965,900
June 30, 2006	June 30, 2009	0.56	1.88	60,499,800
June 30, 2007	June 30, 2010	0.58	2.46	82,331,200
June 30, 2008	June 30, 2011	1.13	3.59	121,457,000
June 30, 2009	June 30, 2012	2.22	5.81	208,649,000
June 30, 2010	June 30, 2013	1.46	7.27	260,980,000
June 30, 2011	June 30, 2014	0.75	8.02	299,420,000
June 30, 2012	June 30, 2015	2.40	10.42	386,400,000
June 30, 2013	June 30, 2016	2.55	12.97	487,400,000
June 30, 2014	June 30, 2017	0.83	13.80	520,372,000
June 30, 2015	June 30, 2018	(0.31)	13.49	512,883,000

In addition, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll, in order to amortize the unfunded actuarial accrued liability in accordance with the Board funding policy. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an decrease of $79,762,881 in the unfunded accrued liability from $14,010,204,858 to $13,930,441,977 during the year ending June 30, 2015.

Analysis of Financial Experience
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 1,050,765
Expected accrued liability contribution	(778,918)
Loss due to Contribution Shortfall and Timing	472,439
Experience:	
Valuation asset growth	(771,835)
Pensioners' mortality	(70,335)
Turnover and retirements	119,009
New entrants	38,561
Salary increases	(139,449)
Amendments	0
Assumption changes	
Method changes	0
Total	**$ (79,763)**

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board (GASB) has issued Statements No. 67 and 68 which replace Statement No. 25 and 27. The information required under the new GASB Statements will be issued in separate reports. The following information is provided for informational purposes only.

Number of Active and Retired Members as of June 30, 2015

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	49,822
Terminated vested employees entitled to benefits but not yet receiving benefits	8,051
Inactive non-vested members	19,720
Active plan members	72,246
Total	**149,839**

2. The schedule of funding progress is shown below.

Schedule of Funding Progress

(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2010	$ 14,851,330	$ 24,344,316	$ 9,492,986	61.0%	$ 3,321,614	285.8%
6/30/2011**	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4
6/30/2012	14,691,371	26,973,854	12,282,483	54.5	3,479,567	353.0
6/30/2013	14,962,758	28,817,232	13,854,474	51.9	3,480,066	398.1
6/30/2014***	16,174,199	30,184,404	14,010,205	53.6	3,486,327	401.9
6/30/2015	17,219,520	31,149,962	13,930,442	55.3	3,515,113	396.3

* *Funding method Projected Unit Credit prior to 6/30/2011*
Funding method Entry Age Normal 6/30/2011 and after.
** *Reflects change in assumptions and methods.*
*** *Reflects change in assumption.*

3. The information presented above was determined as part of the actuarial valuation at June 30, 2015. Additional information as of the latest actuarial valuation follows.

Valuation date	06/30/2015
Actuarial cost method	Entry age
Amortization method	Level percent of pay, closed
Remaining amortization period	29.3 years
Asset valuation method	5-year smoothed market

Actuarial Assumptions:

Investment rate of return*
7.50%

Projected salary increases**
4.00 - 8.20%

Cost-of-living adjustments
1.50% Annually

**Includes price inflation at 3.50%*
***Includes wage inflation at 4.00%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Annual Required Contributions	Actual Employer Contributions	Percentage Contributed
2010	$ 633,938,088	$ 479,805,088	76%
2011	678,741,428	1,037,935,993*	153
2012	757,822,190	557,339,552	74
2013	802,984,644	568,233,446	71
2014	823,446,156	563,326,249	68
2015	913,653,854	559,579,290	61

** Includes Pension Obligation Bond proceeds of $465,384,165.*

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2015

(Dollar amount in thousands)

ACTUARIAL LIABILITIES

(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 16,040,486	
	- Disability retirement benefits	749,304	
	- Death and survivor benefits	138,675	
	- Refunds of member contributions	241,160	
	Total		$ 17,169,626
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits	$ 17,727,682	
	- Service retirement benefits	728,940	
	- Disability retirement benefits	720,142	
	- Death and survivor benefits		
	Total		$ 19,176,765
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 345,742
(4)	TOTAL ACTUARIAL LIABILITIES		$ 36,692,133

PRESENT AND PROSPECTIVE ASSETS

(5)	Actuarial value of assets		$ 17,219,520
(6)	Present value of total future contributions = (4)-(5)	$ 19,472,613	
(7)	Present value of future member contributions and employer normal contributions		5,542,171
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		13,930,442
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 36,692,133

Schedule A continued ...

Solvency Test

(dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation of Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2010	$ 3,196.3	$ 15,010.4	$ 6,137.6	$ 14,851.3	100%	78 %	0 %
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0
6/30/2012	3,415.2	16,472.2	7,086.4	14,691.4	100	68	0
6/30/2013	3,514.4	17,716.4	7,586.4	14,962.8	100	65	0
6/30/2014	3,629.7	18,676.3	7,878.4	16,174.2	100	67	0
6/30/2015	3,700.6	19,522.5	7,926.9	17,219.5	100	69	0

SCHEDULE B

Development of Actuarial Value of Assets as of June 30, 2015

(1)	Actuarial Value of Assets Beginning of Year		$ 16,174,199,191
(2)	Market Value of Assets End of Year		18,049,130,737
(3)	Market Value of Assets Beginning of Year		18,092,570,615
(4)	Cash Flow		
	a.	Contributions	867,739,053
	b.	Benefit Payments	1,764,488,719
	c.	Administrative Expense	8,868,971
	d.	Net: (4)a - (4)b - (4)c	(905,618,637)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	862,178,759
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,322,982,097
	d.	Amount for Phased-In Recognition: (5)a - (5)c	(460,803,338)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	(92,160,668)
	b.	First Prior Year	325,163,609
	c.	Second Prior Year	191,479,441
	d.	Third Prior Year	(160,195,981)
	e.	Fourth Prior Year	363,670,625
	f.	Total Recognized Investment Gain	627,957,026
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		17,219,519,677
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ 829,611,060
(9)	Rate of Return on Actuarial Value:		12.41%

SCHEDULE C

PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2015	For the Year Ending June 30, 2014
Receipts for the Year		
Contributions		
Members	$ 308,159,763	$ 304,981,620
Employers	559,579,290	563,326,249
Total	867,739,053	868,307,869
Net Investment Income	862,178,759	2,803,247,956
Total	1,729,917,812	3,671,555,825
Disbursements for the Year		
Benefit Payments	1,741,456,095	1,654,375,700
Refunds to Members	23,032,624	25,461,843
Miscellaneous, including expenses	8,868,971	7,955,972
Total	1,773,357,690	1,687,793,515
Excess of Receipts over Disbursements	(43,439,878)	1,983,762,310
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	18,092,570,615	16,108,808,305
Excess of Receipts over Disbursements	(43,439,878)	1,983,762,310
Asset Balances as of the End of the Year	18,049,130,737	$ 18,092,570,615
Rate of Return	5.1%	18.1%

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE D
Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.60%	4.50%	4.30%	4.20%	4.00%

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Schedule D continued ...

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below.

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability.

Annual Rate of Death After . . .

AGE	SERVICE RETIREMENT MALE	SERVICE RETIREMENT FEMALE	DISABILITY RETIREMENT MALE	DISABILITY RETIREMENT FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

SCHEDULE E

Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently at 7.50%), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE F

Summary of Main System Provisions as Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2015. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance for Members Before 7/1/2008
Condition for Allowance

- Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance

- The annual retirement allowance for non-university members is equal to:
  - (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
  - (b) 2.5% of final average salary multiplied by service after July 1, 1983.
  - (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
  - (d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

Schedule F continued ...

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance for Members on and after 7/1/2008
Condition for Allowance

- Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

- 1.7% of final average salary if service is 10 years or less.
- 2.0% of final average salary if service is greater than 10 years and no more than 20 years.
- 2.3% of final average salary if service is greater than 20 years but no more than 26 years.
- 2.5% of final average salary if service is greater than 26 years but no more than 30 years.
- 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

- 1.5% of final average salary if service is 10 years or less.
- 1.7% of final average salary if service is greater than 10 years and no more than 20 years.
- 1.85% of final average salary if service is greater than 20 years but less than 27 years.
- 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance
Condition for Allowance

- Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance

- The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

- Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

- A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

Schedule F continued ...

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3- CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE G
Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2015
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 35	>= 35	TOTAL
24 & under	2,213	2							2,215
Total Pay	41,947,049	43,502							41,990,551
Avg. Pay	18,955	21,751							18,957
25 to 29	6,199	1,397	1						7,597
Total Pay	204,011,920	66,904,762	43,050						270,959,732
Avg. Pay	32,910	47,892	43,050						35,667
30 to 34	3,056	4,991	1,307	3					9,357
Total Pay	95,321,748	249,144,319	73,460,486	153,055					418,079,608
Avg. Pay	31,192	49,919	56,205	51,018					44,681
35 to 39	2,213	2,424	4,578	962	4				10,181
Total Pay	62,011,160	121,552,831	267,069,504	61,448,344	254,485				512,336,324
Avg. Pay	28,021	50,146	58,338	63,876	63,621				50,323
40 to 44	1,926	1,566	2,269	4,007	797	1			10,566
Total Pay	48,076,172	78,903,638	133,000,641	260,740,328	54,050,935	64,650			574,836,364
Avg. Pay	24,962	50,385	58,616	65,071	67,818	64,650			54,404
45 to 49	1,436	1,228	1,510	2,120	3,065	762	3		10,124
Total Pay	35,812,710	60,907,248	87,807,089	136,589,683	209,991,357	53,758,353	291,877		585,158,317
Avg. Pay	24,939	49,599	58,150	64,429	68,513	70,549	97,292		57,799
50 to 54	1,197	750	1,085	1,254	1,534	1,754	320	1	7,895
Total Pay	26,138,213	37,365,255	62,125,573	80,091,516	106,724,424	126,744,365	24,411,479	51,329	463,652,154
Avg. Pay	21,836	49,820	57,259	63,869	69,573	72,260	76,286	51,329	58,727
55 to 59	1,417	464	754	984	1,095	865	395	33	6,007
Total Pay	25,813,988	21,457,280	44,157,300	63,512,149	76,152,402	66,191,587	33,976,083	2,927,726	334,188,515
Avg. Pay	18,217	46,244	58,564	64,545	69,546	76,522	86,015	88,719	55,633
60 to 64	1,965	372	400	624	611	451	120	92	4,635
Total Pay	26,415,228	15,272,685	24,733,514	41,330,777	44,908,769	35,340,649	10,764,337	8,630,293	207,396,252
Avg. Pay	13,443	41,056	61,834	66,235	73,500	78,361	89,703	93,808	44,746
65 & over	2,198	484	191	237	220	197	58	84	3,669
Total Pay	19,925,732	12,980,171	11,414,848	16,368,292	16,473,814	15,983,130	4,964,889	8,404,433	106,515,309
Avg. Pay	9,065	26,819	59,764	69,065	74,881	81,133	85,602	100,053	29,031
Total	23,820	13,678	12,095	10,191	7,326	4,030	896	210	72,246
Total Pay	585,473,920	664,531,691	703,812,005	660,234,144	508,556,186	298,082,734	74,408,665	20,013,781	3,515,113,126
Avg. Pay	24,579	48,584	58,190	64,786	69,418	73,966	83,045	95,304	48,655

Average Age: 43.5 **Average Service:** 10.8

Schedule G continued ...

Table 2: Number of Retired Members and Beneficiaries and their Benefits by Age as of June 30, 2015

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	851	$ 10,886,660	$ 12,793
50 - 54	1,234	46,495,372	37,679
55 - 59	4,148	173,846,860	41,911
60 - 64	9,601	382,583,341	39,848
65 - 69	13,081	485,814,525	37,139
70 - 74	8,460	299,153,859	35,361
75 - 79	5,417	177,327,235	32,735
80 - 84	3,509	104,398,591	29,752
85 - 89	2,221	58,575,369	26,373
90 & Over	1,300	28,554,726	21,965
TOTAL	49,822	$ 1,767,636,538	$ 35,479

Average Age: 68.9 **Average Age at Retirement:** 55.8

Table 3: Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

Fiscal Year	ADD TO ROLLS Number	ADD TO ROLLS Annual Allowances (Millions)	REMOVED FROM ROLLS Number	REMOVED FROM ROLLS Annual Allowances (Millions)	ROLLS END OF YEAR Number	ROLLS END OF YEAR Annual Allowances (Millions)	Increase In Annual Allowances	Average Annual Allowance
2006	2,266	$ 121.1	1,115	$ 20.0	38,497	$ 1,074.2	10.4%	$ 27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4	33,089
2013	2,303	105.7	991	22.2	47,406	1,608.7	5.5	33,934
2014	2,146	99.6	976	23.4	48,576	1,684.9	4.7	34,685
2015	2,917	119.1	1,671	36.3	49,822	1,767.6	4.9	35,479

Schedule H

Board Funding Policy

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("KTRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background

State law provides that the retirement benefits promised to members of KTRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in KTRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state-as plan guarantor-is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $487 million (Fiscal Year 2016). The following schedule details the growth of the annual retirement appropriations payable by the state:

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000

(Source: KTRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2013).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

Section H: Board Funding Policy continued ...

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which-if paid-will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

    - Use the Entry Age Normal actuarial cost method;
    - Use a five-year asset smoothing method;
    - Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
    - Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
    - Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and KTRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

Kentucky Teachers' Retirement System

2015

Actuarial Section

Report of the Actuary
Annual Valuation
of the Retiree Medical Plan
and the Life Insurance Plan

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 7, 2015

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require the Teachers' Retirement System of the State of Kentucky (the System) to conduct actuarial valuations of the System's retiree medical and other post-employment benefit plans. This report covers the Retiree Medical Plan funded by the Medical Insurance Fund (MIF) and OPEB liabilities related to the Life Insurance Plan funded by the Life Insurance Fund (LIF). Cavanaugh Macdonald Consulting, LLC (CMC) has submitted the results of the annual actuarial valuation prepared as of June 30, 2015. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total annual required contribution of 6.44% of active member payroll for the MIF payable for the fiscal year ending June 30, 2015 is required to support the benefits of the Kentucky Employees' Health Plan (KEHP) and the Medicare Eligible Health Plan (MEHP). Of this amount, 2.775% of payroll is estimated to be paid by University members and 3.750% of payroll is estimated to be paid by all other members, leaving 3.665% and 2.690% respectively, as the remaining annual required contribution. This annual required contribution reflects the actuarial value of assets of the MIF and an 8.00% discount rate for valuing liabilities.

The initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised since the previous valuation to reflect recent experience. Additionally, a liability reflecting explicit KEHP dependent subsidies has been included in the liability of the MIF. Finally, some adjustments to the methods and assumptions have been made to accommodate changes made to the valuation data provided by the System.

The Life Insurance Plan valuation indicates a total annual required contribution of 0.030% of active member payroll payable for the fiscal year ending June 30, 2018 is required to support the benefits of the LIF. This annual required contribution reflects the actuarial value of assets of the LIF and a 7.50% discount rate for valuing liabilities.

The promised benefits of the Retiree Medical and Life Insurance Plans are included in the actuarially calculated contribution rates which are developed using the entry age normal actuarial cost method. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.00% annually. The assumptions recommended by the actuary and adopted by the Board are in aggregate reasonably related to the experience under the Retiree Medical and Life Insurance Plans and to reasonable expectations of anticipated experience under the Retiree Medical and Life Insurance Plans and meet the parameters for the disclosures under GASB 43 and 45.

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CMC has prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Section VII shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Retiree Medical and Life Insurance Plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, if the State contributions to the Medical Insurance Fund continue to increase to the planned levels, the Retiree Medical Plan will begin to operate in an actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the Retiree Medical Plan will improve.

Respectfully submitted,

Eric Gary, FSA, FCA, MAAA
Chief Health Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Report of Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans Prepared as of June 30, 2015
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (dollar amounts are in thousands):

Medical Insurance Fund

Valuation Date	June 30, 2015	June 30, 2014
Number of active members	72,246	73,407
Annual salaries	$ 3,515,113	$ 3,486,327
Number of deferred vested members	5,430	5,188
Number of annuitants in medical plans	38,075	37,275
Number of spouses and beneficiaries in medical plans*	7,129	7,031
Total	45,204	44,306
Assets:		
Market value	$ 626,962	$ 535,995
Actuarial value	$ 637,839	$ 508,913
Unfunded actuarial accrued liability	$ 2,887,745	$ 2,685,776
Amortization period (years)	30	30
Discount rate	8.00%	8.00%

* *Spouses of post-65 retirees, as well as surviving spouses of deceased retirees on or after July 1, 2002, pay 100% of the full contribution. 100% of the full contribution for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.*

Medical Insurance Fund Contribution Rates for University Members

Valuation Date	June 30, 2015		June 30, 2014	
Contribution For Fiscal Year Ending	June 30, 2016		June 30, 2015	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.95 %	1.95 %	1.79 %	1.79 %
Accrued liability	4.49	4.49	4.21	4.21
Total	6.44 %	6.44 %	6.00 %	6.00 %
Member	2.775 %	2.775 %	2.270 %	2.275 %
Employer (ARC)	2.775	1.775	2.270	1.270
State (ARC)	0.890	1.890	1.460	2.460
Total	6.440 %	6.440 %	6.000 %	6.000 %

Medical Insurance Fund Contribution Rates for School District Employees (Non-Federal)

Valuation Date	June 30, 2015		June 30, 2014	
Contribution For Fiscal Year Ending	June 30, 2016		June 30, 2015	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.95 %	1.95 %	1.79 %	1.79 %
Accrued liability	4.49	4.49	4.21	4.21
Total	6.44 %	6.44 %	6.00 %	6.00 %
Member	3.750 %	3.750 %	3.00 %	3.00 %
Employer (ARC)	3.000	3.000	2.25	2.25
State (ARC)	(0.310)	(0.310)	0.75	0.75
Total	6.440 %	6.440 %	6.00 %	6.00 %

Medical Insurance Fund Contribution Rates for Other Employees

Valuation Date	June 30, 2015		June 30, 2014	
Contribution For Fiscal Year Ending	June 30, 2016		June 30, 2015	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.95 %	1.95 %	1.79 %	1.79 %
Accrued liability	4.49	4.49	4.21	4.21
Total	6.44 %	6.44 %	6.00 %	6.00 %
Member	3.750 %	3.750 %	3.00 %	3.00 %
Employer (ARC)	3.750	2.750	3.00	2.00
State (ARC)	(1.060)	(0.060)	0.00	1.00
Total	6.440 %	6.440 %	6.00 %	6.00 %

Life Insurance Fund

(dollar amounts in thousands)

Valuation Date	June 30, 2015	June 30, 2014
Number of active members	72,246	73,407
Annual salaries	$ 3,515,113	$ 3,486,327
Number of vested former members	4,295	4,113
Number of retirees in Life Insurance Plan	45,484	44,855
Assets:		
Market value	$ 89,747	$ 90,823
Actuarial value	$ 97,186	$ 96,130
Unfunded actuarial accrued liability*	$ 1,553	$ 1,224
Amortization period (years)	30	30
Discount rate	7.50%	7.50 %

Contribution for fiscal year ending	June 30, 2018	June 30, 2017
Normal	0.03 %	0.03 %
Accrued liability	0.00	0.00
Total	0.03 %	0.03 %

** Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post-employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45.*

2. The valuation indicates combined member, employer, and State contributions of 6.44% of active member payroll would be sufficient to support the current benefits of the Retiree Medical Plan and State contributions of 0.03% of active member payroll would be sufficient to support the current benefits of the Life Insurance Plan. Comments on the valuation results as of June 30, 2015 are given in Section IV and further discussion of the contribution levels is set out in Sections VI and VII.

3. Since the previous valuation, the initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised to reflect recent experience. Additionally adjustments to the methods and assumptions used to value spouses currently covered by KEHP and the costs

Report of Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans continued ...

associated with future benefit recipients assumed to be ineligible for premium-free Medicare Part A have been made to accommodate changes made to the valuation data provided by the System

4. There were no changes in benefit provisions since the last valuation. However, the current treatment of KEHP dependent subsidies in the valuation process was reviewed and, as the subsidy has been in effect since 2006 and has been consistently renewed (part of the current substantive plan as understood by the employers and plan members), the liability associated with this benefit has been included in the June 30, 2015 valuation of the Retiree Medical Plan.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the Retiree Medical and Life Insurance Plans for use as a basis of the valuation were furnished by the System's office. The following tables summarize the membership of the System as of June 30, 2015, upon which the valuation was based. Detailed tabulations of the data are given in Schedule F.

Active Members as of June 30, 2015

Group	Number	Annual Salaries ($1,000's)
University Full Time hired before 7/1/2008	2,055	$ 147,256
University Full Time hired after 7/1/2008	1,360	67,694
Non-University Full Time hired before 7/1/2008	40,402	2,517,108
Non-University Full Time hired after 7/1/2008	16,764	708,842
Non-University Part Time hired before 7/1/2008	3,317	28,801
Non-University Part Time hired after 7/1/2008	8,348	45,412
TOTAL	72,246	$ 3,515,113

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following tables show the number of retired members and their beneficiaries receiving health care as of the valuation date as well as average ages.

Retirees Receiving Health Benefits as of June 30, 2015

	Under Age 65	Age 65 and Over	TOTAL
Number	12,549	25,526	38,075
Average Age	60.4	73.9	69.5

Spouses Receiving Health Benefits as of June 30, 2015

Number	2,624	4,505	7,129
Average Age	58.3	74.7	68.7

3. The Retiree Medical Plan valuation also includes 5,430 deferred vested members eligible for health care at age 60.

Section III - ASSETS

1. As of June 30, 2015 the market value of MIF assets held by the Retiree Medical Plan amounted to $626,962,370 and the market value of LIF assets held by the Life Insurance Plan amounted to $89,746,507.

2. The five-year market related value of MIF assets used for valuation purposes as of June 30, 2015 was $637,838,912 and the five-year market related value of LIF assets used for valuation purposes as of June 30, 2015 was $97,185,537. Schedule B shows the development of the actuarial value of assets as of June 30, 2015.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the MIF and the LIF.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows the Retiree Medical Plan has an actuarial accrued liability of $1,543,426,532 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $25,463,779. The liability on account of benefits payable to retirees and covered spouses amounts to $1,956,693,974. The total actuarial accrued liability of the Retiree Medical Plan amounts to $3,525,584,285. Against these liabilities, the Retiree Medical Plan has present assets for valuation purposes of $637,838,912. When this amount is deducted from the actuarial accrued liability of $3,525,584,285, there remains $2,887,745,373 as the unfunded actuarial accrued liability for the Retiree Medical Plan.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the Retiree Medical Plan is determined to be $68,408,971, or 1.95% of payroll.

4. The valuation shows that the Life Insurance Plan has an actuarial accrued liability of $16,012,905 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $2,041,222. The liability on account of benefits payable to retirees amounts to $80,684,522. The total actuarial accrued liability of the Life Insurance Plan amounts to $98,738,649. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for active and post-employment purposes. As this could be administratively burdensome and, as death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45. Against these liabilities, the Life Insurance Plan has present assets for valuation purposes of $97,185,537. When this amount is deducted from the actuarial accrued liability of $98,738,649, there remains $1,553,112 as the unfunded actuarial accrued liability for the life insurance plan.

5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $1,037,969, or 0.03% of payroll.

Section V - DERIVATION OF EXPERIENCE GAINS AND LOSSES

1. Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2015 is shown below ($1,000's).

	EXPERIENCE GAIN/(LOSS) OF THE:	MEDICAL INSURANCE FUND	LIFE INSURANCE FUND
(1)	UAAL* as of 6/30/2014	$ 2,685,776	$ 1,224
(2)	Normal cost from last valuation	62,262	1,079
(3)	Expected employer contributions	209,047	1,024
(4)	Interest accrual: [(1) + (2) - (3)] x interest**	203,119	96
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	2,742,110	1,375
(6)	Change due to plan amendments	143,896	0
(7)	Change due to new actuarial assumptions	0	0
(8)	Change due to claims experience	(59,191)	0
(9)	Expected UAAL after changes: (5) + (6) + (7) + (8)	$ 2,826,815	$ 1,375
(10)	Actual UAAL as of 6/30/2015	$ 2,887,745	$ 1,553
(11)	Total gain/(loss): (9) - (10)	(60,930)	(178)
	(a) Contribution excess and investment loss	62,266	(3,005)
	(b) Experience gain/(loss) (11) - (11a)	$ (123,196)	$ 2,827
(12)	Accrued liabilities as of 6/30/2014	$ 3,194,689	$ 97,354
(13)	Experience gain/(loss) as percent of actuarial accrued liabilities at start of year (11b) / (12)	(3.9%)	2.9%

* *Unfunded Actuarial Accrued Liability*
** *Interest is 8.0% for the Medical Insurance Fund and 7.5% for the Life Insurance Fund*

Section VI - CONTRIBUTIONS PAYABLE UNDER THE PLANS

1. Sections 161.420 and 161.550 of the Kentucky Revised Statutes provide the amounts employers and the State are required to contribute to the Medical Insurance Fund. These contribution amounts vary by fiscal year, date of membership, and employee type.

Employer Percentage of Payroll Contributions Made to Medical Insurance Fund

Fiscal Year Ending	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
2016 and Later	2.775 %	1.775 %	3.000 %	3.000 %	3.750 %	2.750 %

* *In addition to the amounts contributed by School Districts on behalf of Non-Federal employees, the State contributes 0.75%.*

For the fiscal year ending June 30, 2016, member contributions will be 2.775% for University employees and 3.750% for all other members. Based upon the amortization of the unfunded accrued liability over a 30-year period as a level percentage of payroll, the valuation indicates employer and State contributions of 3.665% of payroll for University employees and 2.690% of payroll for all other members. The State is scheduled to contribute 0.03% of salary to the Life Insurance Fund for the fiscal year ending June 30, 2017. CMC's valuation indicates a contribution of 0.030% for the fiscal year ending June 30, 2018 is required to sufficiently support the benefits of the Life Insurance Plan.

Required Contribution Rates For Fiscal Year Ending June 30, 2016 Medical Insurance Fund

Normal	1.95 %
Accrued liability	4.49
Total	6.44 %

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
Member	2.775 %	2.775 %	3.750 %	3.750 %	3.750 %	3.750 %
Employer (ARC)	2.775	1.775	3.000	3.000	3.750	2.750
State (ARC)	0.890	1.890	(0.310)	(0.310)	(1.060)	(0.060)
Total	6.440 %	6.440 %	6.440 %	6.440 %	6.440 %	6.440 %

Required Contribution Rates Life Insurance Fund For Fiscal Year Ending June 30, 2018

Normal	0.03 %
Accrued liability	0.00
Total	0.03 %
Member	0.00 %
State (ARC)	0.30
Total	0.30 %

2. The valuation indicates that a total normal contribution of 1.95% of payroll is required to meet the cost of benefits currently accruing under the Retiree Medical Plan and 0.03% of payroll is required to meet the cost of benefits currently accruing under the Life Insurance Plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 4.49% of payroll for the Retiree Medical Plan and 0.00% of payroll for the Life Insurance Plan.

3. The unfunded actuarial accrued liability amounts to $2,887,745,373 for the Retiree Medical Plan and $1,553,112 for the Life Insurance Plan as of the valuation date. An accrued liability contribution of 4.49% of payroll for the Retiree Medical Plan and 0.00% of payroll for the Life Insurance Plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 30-year period, based on the assumption that the payroll will increase by 4.00% annually.

Section VII - COMMENTS ON LEVEL OF FUNDING

1. The System's monthly contribution for retirees who opt into the Retiree Medical Plan is based upon date of hire, date of attaining age 65, and years of service at retirement. Additionally, beneficiary contributions may vary by date of hire, date of attaining age 65, years of service at retirement, plan election, Medicare eligibility, and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State on a current disbursement basis. Current employer and State contributions have been determined to be sufficient to fund the cost of the benefits to be provided. Benefits for university, school district (non-Federal), and other members are identical, although active employee contributions collected from university, school district (non-Federal), and other members differ. A listing of active member Retiree Medical Plan contributions by fiscal year, date of membership, and employer type is provided in Schedule E.

2. This valuation provides the contributions required to fund the Retiree Medical Plan in an actuarially sound manner and to ensure the future solvency of the Medical Insurance Fund. For University employees a member contribution of 2.775% of payroll together with employer and State contributions of 3.665% of payroll are required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. For the remaining membership, a member contribution of 3.750% of payroll together with employer and State contributions of 2.690% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the Retiree Medical and Life Insurance Plans and the employer.

Number of Active and Retired Members in Medical Plan as of June 30, 2015

GROUP	NUMBER
Retirees currently receiving health benefits	38,075
Spouses of retirees currently receiving health benefits	7,129
Terminated employees entitled to benefits but not yet receiving benefits	5,430
Active plan members	72,246
Total	**122,880**

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2015

GROUP	NUMBER
Retirees	45,484
Terminated employees	4,295
Active plan members	72,246
Total	**122,025**

Schedule of Funding Progress
Medical Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL) [1]	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2010 [2]	$ 241,224	$ 3,206,806	$ 2,965,582	7.5 %	$ 3,321,614	89.3 %
6/30/2011 [3]	294,819	3,423,149	3,128,330	8.6	3,451,756	90.6
6/30/2012	338,746	3,594,540	3,255,794	9.4	3,479,567	93.6
6/30/2013	412,185	3,521,073	3,108,888	11.7	3,480,066	89.3
6/30/2014	508,913	3,194,689	2,685,776	15.9	3,486,327	77.0
6/30/2015	637,839	3,525,584	2,887,745	18.1	3,515,113	82.2

[1] Actuarial cost method of Projected Unit Credit prior to 6/30/2011 and Entry Age Normal 6/30/2011 and after.

[2] Reflects change in discount rate to 8.0%, change in plan design and updating medical trend.

[3] Reflects change in decrement assumptions and updating medical trend.

Schedule of Funding Progress
Life Insurance Fund
(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL) [1]	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2010	$ 87,905	$ 92,091	$ 4,186	95.5 %	$ 3,321,614	0.13 %
6/30/2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)
6/30/2012	92,241	91,398	(843)	100.9	3,479,567	(0.02)
6/30/2013	94,863	94,325	(538)	100.6	3,480,066	(0.02)
6/30/2014	96,130	97,354	1,224	98.7	3,486,327	0.04
6/30/2015	97,186	98,739	1,553	98.4	3,515,113	0.04

[1] Actuarial cost Method of Projected Unit Credit prior to 6/30/2011 and Entry Age Normal 6/30/2011 and after.

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2015. Additional information as of the latest actuarial valuation follows.

Valuation Date	Actuarial Cost Method	Amortization Method	Remaining Amortization Period	Asset Valuation Method	Actuarial Assumptions: Investment Rate of Return*	Actuarial Assumptions: Investment Rate of Return*
06/30/2015	Entry age	Level percent of pay, open	30 years	5-Year Smoothed Market	8.00%-Retiree Medical Plan	7.50%-Retiree Life Insurance Plan

Medical Trend Assumption	Pre-Medicare**	Medicare
Fiscal Year Ending 6/30/2016	7.50 %	5.50 %
Fiscal Year Ending 6/30/2017	6.75 %	5.25 %
Ultimate Trend Rate	5.00 %	5.00 %
Year of Ultimate Trend Rate	2020	2017

** Includes price inflation at 3.50%.*

***Alternate trend rates were used for Medicare Part B premiums and are disclosed in Schedule D.*

Schedule of Employer Contributions
Medical Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	RDS CONTRIBUTION	TOTAL CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(A)	(B)	(C)	(B) + (C)	[(B) + (C)]/(A)
6/30/2010	$ 457,054,117	$ 158,765,496	$ 14,614,285	$ 173,379,781	37.9 %
6/30/2011	477,723,070	188,453,929	280,585	188,734,514	39.5
6/30/2012	470,217,067	177,450,206	297,639	177,747,845	37.8
6/30/2013	186,725,823	166,611,420	0	166,611,420	89.2
6/30/2014	159,583,400	162,568,395	0	162,568,395	101.9
6/30/2015	106,606,132	168,084,353	0	168,084,353	157.7

Schedule of Employer Contributions
Life Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(A)	(B)	(B) / (A)
6/30/2010	$ 1,992,969	$ 1,966,826	98.7 %
6/30/2011	1,725,878	1,668,822	96.7
6/30/2012	1,732,831	1,684,711	97.2
6/30/2013	1,739,908	1,680,495	96.6
6/30/2014	1,044,959	1,006,091	96.3
6/30/2015	1,050,216	1,019,519	97.1

3. Following is the calculation of the Annual OPEB Cost (AOC) and the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2015. As the Retiree Medical and Life Insurance Plans are cost-sharing multiple-employer plans, GASB Statement 45 does not require the participating employers to disclose this information.

Annual OPEB Cost and Net OPEB Obligation
for the Medical Insurance Fund for Fiscal Year Ending June 30, 2015

(a) Employer Annual Required Contribution	$ 106,606,132
(b) Interest on Net OPEB Obligation	120,316,223
(c) Adjustment to Annual Required Contribution	82,194,890
(d) Annual OPEB Cost: (a) + (b) - (c)	144,727,465
(e) Employer Contributions for Fiscal Year 2015	168,084,353
(f) Increase in Net OPEB Obligation: (d) - (e)	(23,356,888)
(g) Net OPEB Obligation at beginning of Fiscal Year	1,503,952,786
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	1,480,595,898

Trend Information for the Medical Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2010	$ 461,942,516	37.5 %	$ 814,379,040
6/30/2011	485,294,173	38.9	1,110,938,699
6/30/2012	480,545,219	37.0	1,413,736,073
6/30/2013	222,560,394	74.9	1,469,685,047
6/30/2014	196,836,134	82.6	1,503,952,786
6/30/2015	144,727,465	116.1	1,480,595,898

Annual OPEB Cost and Net OPEB Obligation for the Life Insurance Fund for Fiscal Year Ending June 30, 2015

(a) Employer Annual Required Contribution	$ 1,050,216
(b) Interest on Net OPEB Obligation	(616,132)
(c) Adjustment to Annual Required Contribution	(424,866)
(d) Annual OPEB Cost: (a) + (b) - (c)	858,950
(e) Employer contributions for Fiscal Year 2015	1,019,519
(f) Increase in Net OPEB Obligation: (d) - (e)	(160,569)
(g) Net OPEB Obligation at beginning of Fiscal Year	(8,215,089)
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ (8,375,658)

Trend Information for the Life Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2010	$ 1,817,516	108.2 %	$ (7,685,177)
6/30/2011	1,546,950	107.9	(7,807,049)
6/30/2012	1,551,065	108.6	(7,940,695)
6/30/2013	1,555,031	108.1	(8,066,159)
6/30/2014	857,161	117.4	(8,215,089)
6/30/2015	858,950	118.7	(8,375,658)

4. On June 2, 2015, GASB Statement No. 74 and GASB Statement No. 75 (GASB 74 and 75) were unanimously adopted by the GASB Board. The disclosure requirements of GASB 74 and 75 will be similar to the disclosure requirements for pension benefits under GASB Statement No. 67 and GASB Statement No. 68. GASB 74 relates to accounting disclosures for plan sponsors and, as such, replaces GASB 43 beginning with fiscal years ending June 30, 2017. GASB 75 relates to accounting disclosures for contributing employers and, as such, replaces GASB 45 beginning with fiscal years ending June 30, 2018. GASB 74 and 75 will require applicable OPEB plan sponsors and contributing employers to disclose the net OPEB liability on the statement of financial position and book an accounting expense based upon the entry age normal actuarial cost method. Beyond the use of a specified actuarial cost method, GASB's new disclosure standards will also require the discount rate used to calculate liabilities to be based upon the yield of 20-year, tax-exempt municipal bonds and the expected rate of return on plan assets, to the extent plan assets are projected to be available for the payment of future benefits. Additionally, GASB 74 and 75 will bring about many other changes in the liability valuation and accounting disclosure processes currently in place which are expected to significantly impact data collection, timing, and effort. As details for the new GASB OPEB disclosure standards emerge, planning and coordination between plan sponsors, contributing employers, actuaries, and auditors is recommended.

SCHEDULE A

RESULTS OF THE VALUATION AS OF JUNE 30, 2015
(Dollar amounts in thousands)

		Medical Insurance Fund	Life Insurance Fund
PAYROLL		$ 3,515,113	$ 3,515,113
ACTUARIAL ACCRUED LIABILITY			
Present value of prospective benefits payable in respect of:			
(a)	Present active members	1,543,426	$ 16,013
(b)	Present terminated vested members	25,464	2,041
(c)	Present retired members and covered spouses	1,956,694	80,685
(d)	Total actuarial accrued liability	3,525,584	$ 98,739
PRESENT ASSETS FOR VALUATION PURPOSES		637,839	97,186
UNFUNDED ACTUARIAL ACCRUED LIABILITY		2,887,745	$ 1,553
CONTRIBUTIONS		Fiscal Year Ending June 30, 2016	Fiscal Year Ending June 30, 2018
	Normal	1.95%	0.03%
	Accrued Liability	4.49	0.00
	Total	6.44%	0.03%
	Member	3.69%	0.00%
	Employer (ARC)	2.97	0.00
	State (ARC)	(0.22)	0.03
	Total	6.44%	0.03%

MEDICAL INSURANCE FUND
Solvency Test
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2010	n/a	$ 1,948.6	$ 1,258.2	$ 241.2	n/a	12%	0%
6/30/2011	n/a	1,910.1	1,513.1	294.8	n/a	15	0
6/30/2012	n/a	2,046.7	1,547.9	338.7	n/a	17	0
6/30/2013	n/a	2,001.8	1,519.3	412.2	n/a	21	0
6/30/2014	n/a	1,771.9	1,422.8	508.9	n/a	29	0
6/30/2015	n/a	1,982.2	1,543.4	637.8	n/a	32	0

Schedule A continued ...

LIFE INSURANCE FUND
Solvency Test
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2010	n/a	$ 74.4	$ 17.7	$ 87.9	n/a	100%	76 %
6/30/2011	n/a	72.2	15.9	88.5	n/a	100	103
6/30/2012	n/a	75.2	16.2	92.2	n/a	100	105
6/30/2013	n/a	78.1	16.2	94.9	n/a	100	104
6/30/2014	n/a	81.0	16.3	96.1	n/a	100	93
6/30/2015	n/a	82.7	16.0	97.2	n/a	100	91

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
MEDICAL INSURANCE FUND

(1)	Actuarial Value of Assets Beginning of Year	$	508,913,385
(2)	Market Value of Assets End of Year	$	626,962,370
(3)	Market Value of Assets Beginning of Year	$	535,995,450
(4)	Cash Flow		
	a. Contributions	$	325,552,033
	b. Benefit Payments		240,394,582
	c. Administrative Expense		1,545,235
	d. Net: (4)a - (4)b - (4)c	$	83,631,216
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)d	$	7,354,704
	b. Assumed Rate		8.00%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]		46,224,125
	d. Amount for Phased-In Recognition: (5)a - (5)c	$	(38,869,421)
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	$	(7,773,884)
	b. First Prior Year		6,492,851
	c. Second Prior Year		370,219
	d. Third Prior Year		0
	e. Fourth Prior Year		0
	f. Total Recognized Investment Gain	$	(910,814)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f	$	637,838,912
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	(10,876,542)
(9)	Rate of Return on Actuarial Value:		8.23%

Schedule B continued ...

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
LIFE INSURANCE FUND
AS OF JUNE 30, 2015

(1)	Actuarial Value of Assets Beginning of Year		$	96,130,349
(2)	Market Value of Assets End of Year		$	89,746,507
(3)	Market Value of Assets Beginning of Year		$	90,822,970
(4)	Cash Flow			
	a.	Contributions	$	1,019,519
	b.	Benefit Payments		4,061,000
	c.	Administrative Expense		25,306
	d.	Net: (4)a - (4)b - (4)c	$	(3,066,787)
(5)	Investment Income			
	a.	Market total: (2) - (3) - (4)d	$	1,990,324
	b.	Assumed Rate		7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]		6,696,718
	d.	Amount for Phased-In Recognition: (5)a - (5)c	$	(4,706,394)
(6)	Phased-In Recognition of Investment Income			
	a.	Current Year: 0.20 x (5)d	$	(941,279)
	b.	First Prior Year		(406,987)
	c.	Second Prior Year		(1,226,477)
	d.	Third Prior Year		0
	e.	Fourth Prior Year		0
	f.	Total Recognized Investment Gain	$	(2,574,743)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$	97,185,537
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$	(7,439,030)
(9)	Rate of Return on Actuarial Value:			4.36%

SCHEDULE C

MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2015	June 30, 2014
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 100,622,991	$ 74,329,798
Payment by Retired Members	56,844,689	60,861,093
TOTAL MEMBERS	157,467,680	135,190,891
State Statutory Contributions	21,375,292	20,841,052
Employer Contributions	77,655,778	52,247,362
State Statutory - Transition Fund/KEHP	46,232,856	84,600,000
TOTAL EMPLOYER	145,263,926	157,688,414
GRAND TOTAL	302,731,606	292,879,305
Recovery Income	22,820,427	4,879,981
Net Investment Income	7,354,704	67,741,063
TOTAL	332,906,737	365,500,349
DISBURSEMENTS FOR THE YEAR		
Administrative Expense	1,545,235	1,100,133
Medical Insurance Expense	240,394,582	242,070,531
TOTAL	241,939,817	243,170,664
Excess of Receipts over Disbursements	90,966,920	122,329,685
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	535,995,450	413,665,765
Excess of Receipts over Disbursements	90,966,920	122,329,685
Asset Balance as of the End of the Year	$ 626,962,370	$ 535,995,450

Schedule C continued ...

LIFE INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2015	For the Year Ending June 30, 2014
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 0	$ 0
State	855,012	839,681
Employer	164,507	166,410
TOTAL	$ 1,019,519	$ 1,006,091
Net Investment Income	1,990,324	4,572,845
TOTAL	$ 3,009,843	$ 5,578,936
DISBURSEMENTS FOR THE YEAR		
Benefit Payments	$ 4,061,000	$ 4,692,000
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	25,306	21,324
TOTAL	$ 4,086,306	$ 4,713,324
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ (1,076,463)	$ 865,612
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 90,822,970	$ 89,957,358
Excess of Receipts over Disbursements	(1,076,463)	865,612
Asset Balance as of the End of the Year	$ 89,746,507	$ 90,822,970

SCHEDULE D
Statement of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, termination, and salary increases used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011. The rates of future participation, health care cost trend rates, and expected plan costs were determined by the actuary based on plan experience.

Valuation Date: June 30, 2015

Discount Rate: 8.0% per annum, compounded annually for Medical Insurance Fund.
7.5% per annum, compounded annually for Life Insurance Fund.

Schedule D continued ...

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

Annual Trend Rate

Fiscal Year Ended	Medicare Part B	Under Age 65	Age 65 and Over
2016	8.29 %	7.50 %	5.50 %
2017	1.43	6.75	5.25
2018	4.62	6.25	5.00
2019	6.79	5.75	5.00
2020	4.46	5.25	5.00
2021	4.40	5.00	5.00
2022	5.57	5.00	5.00
2023	5.65	5.00	5.00
2024	5.60	5.00	5.00
2025	5.37	5.00	5.00
2026	5.12	5.00	5.00
2027 and beyond	5.00	5.00	5.00

Age Related Morbidity: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred health care claims is assumed to be:

Participant Age	Annual Increases
65 – 69	3.0 %
70 – 74	2.5
75 – 79	2.0
80 – 84	1.0
85 - 89	0.5
90 and over	0.0

For the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the health care trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP. Under Actuarial Standard of Practice No. 6 (ASOP No. 6), aging subsidies (or implicit rate subsidies) should be recognized, as the differences in health care utilization and cost due to age have been demonstrated and well quantified. The impact of aging on a valuation's results can be as significant as the use of mortality, trend, and discounting. It has been the long-standing position that the responsibility for compliance with GASB Statement No. 43, when it relates to KEHP implicit subsidies, rests with KEHP, not KTRS, as KTRS has no operational authority over KEHP. As such, KEHP implicit subsidies are excluded from the OPEB valuation process of the Retiree Medical Plan. As GASB 74 and 75 prohibit such a deviation from ASOP No. 6, additional consideration to the current treatment of KEHP implicit rate subsidies may be needed in the future.

Retiree Medical Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that KTRS pays as the full contribution amount. The amounts include medical and drug costs. An additional $6.58 per month is paid to the Department of Employee Insurance (DEI) and is not included in the under age 65 costs listed below. For retirees ages 65 and older, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

Under Age 65 (KEHP) Full Costs as of January 1, 2016

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 702.10	$ 721.14	$ 677.74	$ 663.68
Parent Plus	967.18	1,023.04	963.36	930.34
Couple	1,302.74	1,564.20	1,474.84	1,429.26
Family	1,453.94	1,738.40	1,640.84	1,591.52
Family C-R	810.00	865.64	814.72	792.90

Schedule D continued ...

Average Monthly KTRS Full Costs & Contributions

Calendar Year	Under Age 65 (KEHP) Contributions	Age 65 & Over (MEHP) Full Costs	Age 65 & Over (MEHP) Contributions
2004	$ 293	$ 274	$ 274
2005	412	288	288
2006	461	315	315
2007	458	283	283
2008	484	278	278
2009	545	301[1]	285
2010	594	373[1]	342
2011	626	289	289
2012	622	270[2]	270
2013	635	294[2]	290
2014	679	290[2]	290
2015	669	240[2]	240
2016	681	260	260

[1] *Under GASB 43 and 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy cannot be taken into account in the gross cost calculations.*

[2] *2,101 current, Medicare-eligible benefit recipients have been identified by the client to be ineligible for premium-free Medicare Part A benefits. For these individuals, the full cost of coverage is, on average, $595 per month. It is assumed 9% of current retirees under the age of 65 who were hired prior to 4/1/1986 will be ineligible for premium-free Medicare Part A benefits upon reaching Medicare eligibility (age 65) and 2% of these retirees will cover a spouse. All active members are assumed to have begun contributing to Medicare as of 4/1/1986 and are assumed eligible for premium-free Medicare Part A benefits.*

Current Retiree Medical Plan Participation: Actual census data and current plan elections (including waivers) provided by the System were used for those retirees currently participating in the Retiree Medical Plan. Current participants are assumed to maintain their current Retiree Medical Plan coverage until they are no longer eligible.

Anticipated Retireee Medical Plan Participation: The assumed annual rates of health care plan participation for future retirees are as follows:

Member Participation*

Years of Service	Entered KTRS Before 7/1/2002	Entered KTRS After 6/30/2002 & Before 7/1/2008	Entered KTRS After 6/30/2008
5-9.99	23%	9%	Not Eligible
10-14.99	45	23	Not Eligible
15-19.99	68	41	41%
20-24.99	93	59	59
25-25.99	93	81	81
26-26.99	93	86	86
27 or more	93	93	93

** Members retiring from deferred vested status are assumed to participate at 50% of the corresponding rate listed.*

Anticipated Retiree Medical Plan Elections: The assumed rates of plan election for future retirees participating in the KEHP plans are provided in the following table. As the assumed plan election rates are estimates and actual results may be materially different, this assumption will need to be revised as experience evolves.

LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
39%	46%	8%	7%

Schedule D continued ...

Spouse Coverage in Medical Plans: Actual census data and current plan elections were used for MEHP covered spouses (including beneficiaries) of current retirees. For KEHP covered spouses of current retirees, current plan elections were used and females were assumed to be 3 years younger than males. For spouses of future retirees, 20% of future retirees are assumed to cover their spouse, with females assumed to be 3 years younger than males.

Disabled Dependent Children in Retiree Medical Plan: The liability associated with disabled dependent children was determined to be de minimis and was therefore excluded from this valuation.

Withdrawal Assumption: It is assumed 30% of future vested members who terminate elect to withdraw their contributions while the remaining 70% elect to leave their contributions in the plan in order to be eligible for a benefit at their retirement date.

Payroll Growth: 4.00% per annum, compounded annually.

Price Inflation: 3.50% per annum, compounded annually.

Affordable Care Act (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2018 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the Retiree Medical Plan's liability will be required.

Asset Valuation Method: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The ultimate assumed valuation rate of return is assumed to be 8.00% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

Actuarial Cost Method: The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his/her age, service, and gender. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and deferred vested members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his/her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his/her behalf.

The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

Schedule D continued ...

Separation From Service: Representative values of the assumed annual rates of salary increases, death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	SALARY*	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service**
20	8.10%	0.012%	0.01%	9.00%				
25	7.20	0.015	0.01	9.00	3.00%			
30	6.20	0.020	0.02	9.00	3.00	3.00%		
35	5.50	0.035	0.05	10.00	3.25	1.75		
40	5.00	0.046	0.09	10.00	4.00	1.40		
45	4.60	0.058	0.18	11.00	4.00	1.50		17.0%
50	4.50	0.074	0.33	9.00	4.00	2.00		17.0
55	4.30	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	4.20	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	4.10	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	4.00	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	4.00	0.821	0.70	0.00	0.00	0.00	100.0	100.0

* *Includees inflation at 3.5% per annum.*
** *Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	SALARY*	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service**
20	8.10%	0.007%	0.01%	7.00%				
25	7.20	0.008	0.02	8.50	4.00%			
30	6.20	0.010	0.04	9.00	4.00	1.65%		
35	5.50	0.017	0.08	9.00	3.75	1.85		
40	5.00	0.024	0.14	8.50	3.25	1.50		
45	4.60	0.037	0.32	7.50	3.25	1.25		15.0%
50	4.50	0.055	0.42	9.50	3.50	1.75		15.0
55	4.30	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	4.20	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	4.10	0.263	0.85	11.00	4.00	2.00	12.5	25.0
65	4.00	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	4.00	0.672	0.85	0.00	0.00	0.00	100.0	100.0

* *Includees inflation at 3.5% per annum.*
** *Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Schedule D continued ...

Deaths After Retirement: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

SCHEDULE E
Summary of Main Plan Provisions as Interpreted for Valuation Purposes

ELIGIBILITY FOR ACCESS TO RETIREE MEDICAL COVERAGE

Service Retirement: For employees hired prior to July 1, 2008, Retiree Medical Plan coverage eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. For employees hired on or after July 1, 2008, employees may retire after the completion of 27 years of service, the attainment of age 55 and 10 years of service, or the attainment of age 60 and 5 years of service, but must complete a minimum of 15 years of service to be eligible for Retiree Medical Plan coverage.

Disability Retirement: Disabled employees hired prior to July 1, 2008 with at least 5 years of service, who are totally and permanently incapable of being employed as a teacher, are eligible for Retiree Medical Plan coverage. Disabled employees hired after July 1, 2008 must have 15 years of service to be eligible for Retiree Medical Plan coverage.

Survivors: Spouses of employees who die in service while eligible to retire, as well as survivors of service and disabled retirees, are eligible for Retiree Medical Plan coverage.

Termination: For employees hired prior to July 1, 2008 and who terminated with at least 5 years of service, Retiree Medical Plan coverage eligibility is attained at age 60. For employees hired on or after July 1, 2008 and who terminated with at least 15 years of service, Retiree Medical Plan coverage eligibility is attained at age 60.

Reemployed Retirees: Retirees who return to work in an agency that participates in KEHP are required to terminate their coverage through KTRS. Additionally, if a retiree returns to work somewhere that does not participate in the KEHP, but offers health insurance, the retiree must terminate KTRS coverage unless the employer coverage is of lesser value. For valuation purposes, active employees identified as currently receiving retiree health care through KTRS are valued as retirees.

Schedule E continued ...

COVERED MEMBER MEDICAL PLAN CONTRIBUTIONS

Under Age 65 Retiree Shared Resonsibility Contribution: Effective July 1, 2010, retirees under the age of 65 began a three-year phase-in of the Shared Responsibility Contribution. This contribution reduces the applicable amount of the full contribution provided by the System to retirees, by adjusting the Shared Responsibility Contribution amount by 100% less the appropriate percentage from the Retiree Percentage Contribution table on the following page. Effective July 1, 2012, the full Shared Responsibility Contribution equals the Standard Medicare Part B premium paid by retirees ages 65 and older.

Under Age 65 Shared Responsibility Contribution Timeline

Effective Date	Medicare Part B Monthly Cost	Formula	Shared Responsibility Contribution
July 1, 2010	$ 110.50	(1/3 x $110.50)	$ 37.00
January 1, 2011	115.40	(1/3 x 115.40)	39.00
July 1, 2011	115.40	(2/3 x 115.40)	77.00
January 1, 2012	99.90	(2/3 x 99.90)	66.00
July 1, 2012	99.90	99.90	99.90
January 1, 2013	104.90	104.90	104.90
January 1, 2014	104.90	104.90	104.90
January 1, 2015	104.90	104.90	104.90
January 1, 2016	121.80	121.80	121.80

Retiree Years of Service Percentage Contribution: Retirees contribute the following percentages based on years of service at retirement, which are then applied to the Retiree Contribution Rate Basis:

Retiree Percentage Contribution*

Years of Service	Hired before 7/1/2002: Age 65 or Older and Covered Before 1/1/2005	Hired before 7/1/2002: Age 65 After or Covered After 12/31/2004	Entered KTRS After 6/30/2002 and Before 7/1/2008	Entered KTRS After 6/30/2008
5 - 9.99	30%	75%	90%	Not Eligible
10 - 14.99	20	50	75	Not Eligible
15 - 19.99	10	25	55	55%
20 - 24.99	0	0	35	35
25 - 25.99	0	0	10	10
26 - 26.99	0	0	5	5
27 or more	0	0	0	0

** 0% for disabled retirees that retired prior to 1/1/2002.*

Retiree Contribution Rate Basis Effective January 1, 2016

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Ages 65 and Older (MEHP)
Single	$ 654.12	$ 641.16	$ 629.76	$ 650.70	$ 260.00
Parent Plus	654.12	654.12	654.12	654.12	260.00
Couple	654.12	654.12	654.12	654.12	260.00
Family	654.12	654.12	654.12	654.12	260.00
Family C-R	654.12	654.12	654.12	654.12	260.00

Schedule E continued ...

Under Age 65 Retiree Plan Cost Contribution: A contribution according to the table below is required to be paid by retirees under the age of 65 based upon the plan elected:

Under Age 65 Plan Cost Contribution*
Effective January 1, 2016

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 47.98	$ 79.98	$ 47.98	$ 12.98
Parent Plus**	313.06	368.92	309.24	276.22
Couple**	648.62	910.08	820.72	775.14
Family**	799.82	1,084.28	986.72	937.40
Family C-R**	155.88	211.52	160.60	138.78

* *Does not include the additional contribution required to be paid by retirees under the age of 65 who smoke ($40 for Single or Family Cross-Reference, and $80 for Parent Plus, Couple or Family).*
** *Contribution for Parent Plus, Couple, Family and Family Cross-Reference tiers is offset by the State Under Age 65 Spouse/Dependent Subsidy.*

The Under Age 65 Plan Cost Contribution is reduced by subtracting the State Under Age 65 Spouse/Dependent Subsidy multiplied by 100% less the appropriate percentage in the Retiree Percentage Contribution table on the previous page, from the Under Age 65 Plan Cost Contribution.

State Under Age 65 Spouse/Dependent Subsidy
Effective January 1, 2016

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Parent Plus	$ 190.08	$ 140.94	$ 186.26	$ 216.24
Couple	360.64	397.10	532.74	525.16
Family	461.84	441.30	648.74	637.42
Family C-R	77.90	58.54	82.62	110.80

Spouse Contributions: 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Spouses of post-65 retirees, as well as surviving spouses of deceased retirees on or after July 1, 2002, pay 100% of the full contribution. Spouses of active members who died while eligible to retire prior to July 1, 2002, are provided the same subsidy by KTRS that would have been provided to the retiree for the lifetime of the spouse, or until remarriage. Spouses of active members who die while eligible to retire July 1, 2002, and later, pay 100% of the full contribution.

Surviving Spouse Monthly Contribution
Effective January 1, 2016
Under Age 65 (KEHP)

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Age 65 & Over (MEHP)
Single	$ 708.68	$ 727.72	$ 684.32	$ 670.26	$ 260.00
Parent Plus	973.76	1,029.62	969.94	936.92	n/a

Schedule E continued ...

System Retiree Medical Plan Contributions: The System Contribution Rate Basis is determined annually by KTRS; and the full cost is projected based on historical claims data. For retirees, the following percentages are based on years of service at retirement and are then applied to the System Contribution Rate Basis:

Percentage of System Contribution Rate Provided to Retirees*

Years of Service	Entered KTRS Before 7/1/2002: Age 65 or Older & Covered Before 1/1/2005	Entered KTRS Before 7/1/2002: Age 65 After or Covered After 12/31/2004	Entered KTRS After 6/30/2002 and Before 7/1/2008	Entered KTRS After 6/30/2008
5 - 9.99	70 %	25 %	10 %	Not Eligible
10 - 14.99	80	50	25	Not Eligible
15 - 19.99	90	75	45	45%
20 - 24.99	100	100	65	65
25 - 25.99	100	100	90	90
26 - 26.99	100	100	95	95
27 or more	100	100	100	100

** 100% for disabled retirees that retired prior to 1/1/2002.*

System Monthly Contribution Rate Basis
Effective January 1, 2016
Under Age 65 (KEHP)

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Ages 65 and Older (MEHP)
Single	$ 654.12	$ 641.16	$ 629.76	$ 650.70	$ 260.00
Parent Plus	654.12	654.12	654.12	654.12	260.00
Couple	654.12	654.12	654.12	654.12	260.00
Family	654.12	654.12	654.12	654.12	260.00
Family C-R	654.12	654.12	654.12	654.12	260.00

Active Member Retiree Medical Plan Contributions: Actively employed members make payroll contributions to the Medical Insurance Fund based upon the following schedule:

Active Member Percentage of Payroll Contribution Made to Medical Insurance Fund

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
Fiscal Year Ending	Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008
2016 & Later	2.775 %	2.775 %	3.750 %	3.750%	3.750 %	3.750 %

Schedule E continued ...

Life Insurance Plan Benefits:
(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Members employed on a substitute or part-time basis and working at least 69% of a full contract year in a single fiscal year will be eligible for a life insurance benefit for the balance of the fiscal year or the immediately succeeding fiscal year under certain conditions. For non-vested members employed on a substitute or part-time basis, the life insurance benefit is provided if death occurs as the result of a physical injury on the job. For vested members employed on a substitute or part-time basis, death does not have to be the result of a physical injury on the job for life insurance benefits to be provided.

SCHEDULE F
Table 1 – Service Table
Distribution of Active Members as of June 30, 2015
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,213	2							2,215
Total Pay	41,947,049	43,502							41,990,551
Avg. Pay	18,955	21,751							18,957
25 to 29	6,199	1,397	1						7,597
Total Pay	204,011,920	66,904,762	43,050						270,959,732
Avg. Pay	32,910	47,892	43,050						35,667
30 to 34	3,056	4,991	1,307	3					9,357
Total Pay	95,321,748	249,144,319	73,460,486	153,055					418,079,608
Avg. Pay	31,192	49,919	56,205	51,018					44,681
35 to 39	2,213	2,424	4,578	962	4				10,181
Total Pay	62,011,160	121,552,831	267,069,504	61,448,344	254,485				512,336,324
Avg. Pay	28,021	50,146	58,338	63,876	63,621				50,323
40 to 44	1,926	1,566	2,269	4,007	797	1			10,566
Total Pay	48,076,172	78,903,638	133,000,641	260,740,328	54,050,935	64,650			574,836,364
Avg. Pay	24,962	50,385	58,616	65,071	67,818	64,650			54,404
45 to 49	1,436	1,228	1,510	2,120	3,065	762	3		10,124
Total Pay	35,812,710	60,907,248	87,807,089	136,589,683	209,991,357	53,758,353	291,877		585,158,317
Avg. Pay	24,939	49,599	58,150	64,429	68,513	70,549	97,292		57,799
50 to 54	1,197	750	1,085	1,254	1,534	1,754	320	1	7,895
Total Pay	26,138,213	37,365,255	62,125,573	80,091,516	106,724,424	126,744,365	24,411,479	51,329	463,652,154
Avg. Pay	21,836	49,820	57,259	63,869	69,573	72,260	76,286	51,329	58,727
55 to 59	1,417	464	754	984	1,095	865	395	33	6,007
Total Pay	25,813,988	21,457,280	44,157,300	63,512,149	76,152,402	66,191,587	33,976,083	2,927,726	334,188,515
Avg. Pay	18,217	46,244	58,564	64,545	69,546	76,522	86,015	88,719	55,633
60 to 64	1,965	372	400	624	611	451	120	92	4,635
Total Pay	26,415,228	15,272,685	24,733,514	41,330,777	44,908,769	35,340,649	10,764,337	8,630,293	207,396,252
Avg. Pay	13,443	41,056	61,834	66,235	73,500	78,361	89,703	93,808	44,746
65 & over	2,198	484	191	237	220	197	58	84	3,669
Total Pay	19,925,732	12,980,171	11,414,848	16,368,292	16,473,814	15,983,130	4,964,889	8,404,433	106,515,309
Avg. Pay	9,065	26,819	59,764	69,065	74,881	81,133	85,602	100,053	29,031
Total	23,820	13,678	12,095	10,191	7,326	4,030	896	210	72,246
Total Pay	585,473,920	664,531,691	703,812,005	660,234,144	508,556,186	298,082,734	74,408,665	20,013,781	3,515,113,126
Avg. Pay	24,579	48,584	58,190	64,786	69,418	73,966	83,045	95,304	48,655

Average Age: 43.5 **Average Service: 10.8**

Schedule F continued ...

Table 2 – Total Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage Increase in Average Pay
6/30/2015	72,246	$ 3,515,113,126	$ 48,655	2.45 %
6/30/2014	73,407	3,486,326,799	47,493	2.12
6/30/2013	74,831	3,480,066,406	46,506	1.51
6/30/2012	75,951	3,479,567,004	45,813	1.33
6/30/2011	76,349	3,451,756,288	45,210	3.97
6/30/2010	76,387	3,321,614,223	43,484	1.51
6/30/2009	75,937	3,253,076,600	42,839	1.43

Table 3 – Eligible Deferred Vested Members as of June 30, 2015 Medical Insurance Fund

Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	0	5	5
30-34	73	329	402
35-39	191	631	822
40-44	229	708	937
45-49	225	750	975
50-54	225	683	908
55-59	188	606	794
60 & Over	170	417	587
Total	**1,301**	**4,129**	**5,430**

Table 3 – Eligible Deferred Vested Members as of June 30, 2015 Life Insurance Fund

Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	3	29	32
30-34	66	343	409
35-39	133	516	649
40-44	183	579	762
45-49	178	584	762
50-54	178	532	710
55-59	149	453	602
60 & Over	96	273	369
Total	**986**	**3,309**	**4,295**

Schedule F continued ...

Table 4 – All Retirees & Spouses Receiving Health Care Benefits as of June 30, 2015 Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 40	4	10	14
40-44	22	37	59
45-49	151	124	275
50-54	662	822	1,484
55-59	1,546	2,949	4,495
60-64	2,276	6,389	8,665
65-69	3,762	7,831	11,593
70-74	2,814	4,842	7,656
75-79	1,771	2,996	4,767
80-84	1,163	1,958	3,121
85-89	565	1,417	1,982
90-94	201	629	830
95-99	34	180	214
100	2	13	15
101	2	14	16
102	0	5	5
103	1	3	4
104	0	5	5
105 & Over	0	4	4
Total	**14,976**	**30,228**	**45,204**

Table 5 – Retirees, Beneficiaries and Survivors Added To and Removed From Rolls * Medical Insurance Fund

Fiscal Year Ending June 30	Number of Members Added to Rolls	Number of Spouses** Added to Rolls	Total Number Added to Rolls	Number of Members Removed from Rolls	Number of Spouses** Removed from Rolls	Total Number Removed from Rolls	Number of Members on Rolls at the End of the Year	Number of Spouses** on Rolls at the End of the Year	Total Number on Rolls at the End of the Year
2010	1,710	555	2,265	876	529	1,405	34,315	6,834	41,149
2011	1,770	629	2,399	1,052	541	1,593	35,033	6,922	41,955
2012	1,996	702	2,698	1,029	616	1,645	36,000	7,008	43,008
2013	1,853	664	2,517	1,076	619	1,695	36,777	7,053	43,830
2014	1,663	638	2,301	1,165	660	1,825	37,275	7,031	44,306
2015	1,990	731	2,721	1,190	633	1,823	38,075	7,129	45,204

* *Reflects members, spouses, and beneficiaries participating in a health care plan.*
** *Includes spouses, beneficiaries, and surviving spouses.*

Schedule F continued ...

Table 6 – Retirees, Beneficiaries and Survivors Added To and Removed From Rolls *
Life Insurance Fund

Fiscal Year Ending June 30	Number Added to Rolls	Life Insurance Benefit ($1,000's)	Number Removed from Rolls	Life Insurance Benefit ($1,000's)	Number on Rolls at the End of the Year	Life Insurance Benefit ($1,000's)	Increase in Life Insurance Benefit	Average Life Insurance Benefit
2010	1,799	$ 8,995	806	$ 4,030	39,951	$ 199,755	2.55 %	$ 5,000
2011	2,025	10,125	858	4,290	41,118	205,590	2.92	5,000
2012	2,364	11,820	880	4,400	42,602	213,010	3.61	5,000
2013	2,195	10,975	952	4,760	43,845	219,225	2.92	5,000
2014	1,964	9,820	954	4,770	44,855	224,275	2.30	5,000
2015	2,270	11,350	1,641	8,205	45,484	227,420	1.40	5,000

** The life insurance benefit is payable upon the death of only members retired for service or disability. Numbers do not include life insurance benefits payable upon the death of an active contributing member.*

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Kentucky Teachers' Retirement System

2015

Actuarial Section

Additional Report on

GASB Statement Number 67

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 4, 2015

Board of Trustees
Teachers' Retirement System
of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Presented in this report is information to assist the Teachers' Retirement System of the State of Kentucky (KTRS), in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. This report has been prepared as of June 30, 2015 (the Measurement Date) to assist KTRS in better understanding the requirements of GASB 67 and to identify the information to be provided by KTRS's actuary, Cavanaugh Macdonald Consulting (CMC).

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2014. The valuation was based upon data, furnished by the Executive Secretary and KTRS staff, concerning active, inactive and retired members along with pertinent financial information.

To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 67.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the

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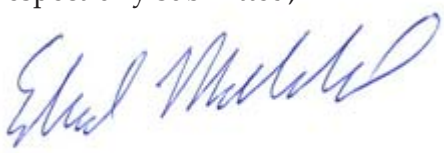
calculations were completed in compliance with the laws governing the System. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Respectfully submitted,



Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel EA, FCA, MAAA
Principal and Consulting Actuary

REPORT OF THE ANNUAL GASB STATEMENT NO. 67 REQUIRED INFORMATION FOR THE TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY PREPARED AS OF JUNE 30, 2015

Section 1: Introduction

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), *"Financial Reporting For Pension Plans"*, in June 2012. This report, prepared as of June 30, 2015 (the Measurement Date), presents information to assist the Teachers' Retirement System of the State of Kentucky (KTRS), in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of KTRS as of June 30, 2014. The results of that valuation were detailed in a report dated December 12, 2014.

GASB 67 requires a measurement of the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. If the valuation date at which the TPL is determined is before the measurement date, as is the case here, the TPL must be rolled forward to the measurement date. The Net Pension Liability (NPL) is then set equal to the rolled forward TPL minus the System's Fiduciary Net Position (FNP) (basically the market values of assets) as of the Measurement Date. The benefit provisions recognized in the calculation of the TPL are summarized in Schedule B. The development of the roll-forward of the TPL is shown in the table on page 148.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR) as described by GASB 67. To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the membership and beneficiaries of the System on the Measurement Date. We have projected future employer contributions to be made based on the amounts required by statute. Although the KTRS Board of Trustees adopted a funding policy, shown in Schedule E, on December 16, 2013, the State has not funded the actuarially determined contributions since 2009. On this basis, if the FNP is not projected to be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. Our calculations indicated that the FNP is projected to be depleted, so a bond rate is used in the determination of the SEIR. On this basis, we have determined that a discount rate of 4.88 percent meets the requirements of GASB 67.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information.

Section 2: Financial Statement Notes

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30(a) (1)-(3): The information required is to be supplied by the System.

Paragraph 30(a) (4): The data required regarding the membership of the KTRS were furnished by the System office. The following table summarizes the membership of the System as of June 30, 2014, the actuarial valuation date.

Membership

	Number
Retirees And Survivors Currently Receiving Benefits	48,576
Terminated Vested Employees Entitled To But Not Yet Receiving Benefits	7,762
Inactive Non-vested Members	27,689
Active Members	73,407
TOTAL	**157,434**

Paragraphs 30(a)(5)-(6) and Paragraphs 30(b)-(f): The information required is to be supplied by the System.

Paragraphs 31(a) (1)-(4): The information is provided in the following table. As stated on the previous page, the Net Pension Liability (NPL) is equal to the Total Pension Liability (TPL) minus the Fiduciary Net Position (FNP). That result as of June 30, 2015 is presented in the table below ($ thousands).

	Fiscal Year Ending 6/30/2015
Total Pension Liability (TPL)	$ 42,476,699
Fiduciary Net Position (FNP)	18,049,131
Net Pension Liability (NPL)	$ 24,427,568
Ratio of FNP to TPL	42.49%

Paragraph 31(b) (1)(a)-(f): This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The set of actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The total pension liability was determined by an actuarial valuation as of June 30, 2014, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.50 percent
Salary increases	4.00 - 8.20 percent, including inflation
Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation
Municipal Bond Index Rate	3.82%
Single Equivalent Interest Rate	4.88%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale AA to 2020 with a set back of 1 year for females.

The actuarial assumptions used in the June 30, 2014 valuation were based on the results of an actuarial experience study for the period July 1, 2005 - June 30, 2010 adopted by the Board on December 19, 2011.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by KTRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	45.0%	6.4%
Non U.S. Equity	17.0%	6.5%
Fixed Income	24.0%	1.6%
High Yield Bonds	4.0%	3.1%
Real Estate	4.0%	5.8%
Alternatives	4.0%	6.8%
Cash	2.0%	1.5%
Total	100.0%	

Section 2: Financial Statement Notes continued ...

Discount rate. The discount rate used to measure the total pension liability was 4.88 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that Employer contributions will be made at statutorily required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2039 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2038 and a municipal bond index rate of 3.82 percent was applied to all periods of projected benefit payments after 2038. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

Paragraph 31(b) (1) (g): This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 4.88 percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.88 percent) or 1-percentage-point higher (5.88 percent) than the current rate ($ thousands):

(in thousands)	1% Decrease (3.88%)	Current Discount Rate (4.88%)	1% Increase (5.88%)
System's net pension liability	$ 30,402,796	$ 24,427,568	$ 19,482,972

Paragraph 31(c): June 30, 2014 is the actuarial valuation date upon which the TPL is based. The TPL as of June 30, 2014 was determined using a discount rate of 4.88% which was based on a municipal bond index rate as of that date equal to 3.82%. An expected TPL is determined as of June 30, 2015 using standard roll forward techniques. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate (SEIR) for the year. This procedure is shown in the following table:

TPL Roll-Forward
(in thousands)

(a)	TPL based on June 30, 2014 Valuation (4.88%)	$ 41,167,140
(b)	Entry Age Normal Cost for the Year July 1, 2014 - June 30, 2015 (4.88%)	1,108,145
(c)	Actual Benefit Payments (including refunds) for the Year July 1, 2014 - June 30, 2015	1,764,489
(d)	TPL as of June 30, 2015 = [(a) x (1.0488)] + (b) - [(c) x (1.0244)]	$ 42,476,699

The following shows the development of the difference between expected and actual experience:

Determination of Experience Gain/(Loss)
(in thousands)

(a)	TPL as of June 30, 2014 (5.23%)	$ 39,684,776
(b)	Entry Age Normal Cost for the Year July 1, 2014 - June 30, 2015 (5.23%)	1,015,080
(c)	Actual Benefit Payments (including refunds) for the Year July 1, 2014 - June 30, 2015	1,764,489
(d)	Expected TPL as of June 30, 2015 = [(a) x (1.0523)] + (b) - [(c) x (1.02615)]	$ 40,964,739
(e)	Actual TPL as of June 30, 2015 (4.88%)	$ 42,476,699
(f)	Difference between expected and actual Experience as of June 30, 2015 = (d) - (e)	$ (1,511,960)

Section 3: Required Supplementary Information

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 32(a)-(c): The required tables are provided in Schedule A.

Paragraph 32(d): The money-weighted rates of return required are to be supplied by the System.

Paragraph 34: In addition the following should be noted regarding the RSI:

Changes of benefit terms. None

Changes of assumptions. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2011. In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation, the Board adopted an interest smoothing methodology to calculate liabilities for purposes of determining the actuarially determined contributions.

Methods and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported (as of June 30, 2012 for the fiscal year 2015 contributions). The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of that schedule:

Actuarial Cost Method	Amortization Method	Remaining Amortization Period	Asset Valuation Method	Inflation	Salary Increase	Ultimate Investment Rate of Return*
Entry Age	Level percent of pay, open	30 years	5-year smoothed market	3.50%	4.00 to 8.20 percent, including inflation	7.50 percent, net of pension plan investment expense, including inflation

** The actuarially determined contribution rates are determined using the interest smoothing methodology adopted by the Board.*

Schedule A
Required Supplementary Information
Schedule of Changes in the Net Pension Liability
GASB 67 Paragraph 32(a)
(In Thousands)

	2015	2014
Total Pension Liability		
Service Cost	$ 1,015,080	$ 1,002,338
Interest	2,029,372	1,956,610
Benefit Changes	0	0
Difference Between Expected and Actual Experience	1,511,960	0
Changes of Assumptions	0	(353,043)
Benefit Payments	(1,741,456)	(1,654,376)
Refunds of Contributions	(23,033)	(25,462)
Net Change in Total Pension Liability	2,791,923	926,067
Total Pension Liability-Beginning	39,684,776	38,758,709
Total Pension Liability-Ending (a)	$ 42,476,699	$ 39,684,776
Plan Net Position		
Contributions-State of KY	$ 480,073	$ 483,330
Contributions-Other Employers	79,506	79,996
Contributions-Member	308,160	304,982
Net Investment Income	862,179	2,803,249
Benefit Payments	(1,741,456)	(1,654,376)
Administrative Expense	(8,869)	(7,956)
Refunds of Contributions	(23,033)	(25,462)
Other	0	0
Net Change in Plan Net Position	(43,440)	1,983,763
Plan Net Position - Beginning	18,092,571	16,108,808
Plan Net Position - Ending (b)	$ 18,049,131	$ 18,092,571
Employers' Net Pension Liability - Ending (a) - (b)	$ 24,427,568	$ 21,592,205

Schedule A: Required Supplementary Information continued ...

Schedule A
Required Supplementary Information
Schedule of Net Pension Liability
GASB 67 Paragraph 32(b)
(In Thousands)

	2015	2014*
Total Pension Liability	$ 42,476,699	$ 39,684,776
Plan Net Position	18,049,131	18,092,571
Net Pension Liability	$ 24,427,568	$ 21,592,205
Ratio of Plan Net Position to Total Pension Liability	42.49%	45.59%
Covered-Employee Payroll	$ 3,455,008	$ 3,317,422
Net Pension Liability as a Percentage of Covered-Employee Payroll	707.02%	650.87%

** Revised from previous year to reflect actual covered-employee payroll.*

Schedule A
Required Supplementary Information
Schedule of Employer Contributions
GASB 67 Paragraph 32(c)
(In Thousands)

	2015	2014*	2013	2012	2011	2010	2009	2008	2007	2006
Covered-Employee Payroll	$ 3,455,008	$ 3,317,422	$ 3,310,710	$ 3,310,176	$ 3,283,749	$ 3,321,614	$ 3,253,077	$ 3,190,332	$ 2,975,289	$ 2,859,477
Actual Employer Contributions	$ 559,579	$ 563,326	$ 568,233	$ 557,340	$ 1,037,936	$ 479,805	$ 442,550	$ 466,248	$ 434,890	$ 406,107
Actuarially Determined Employer Contributions	913,654	823,446	802,985	757,822	678,741	633,938	600,283	563,789	494,565	406,107
Annual Contribution Excess (Deficiency)	$ (354,075)	$ (260,120)	$ (234,752)	$ (200,482)	$ 359,195	$ (154,133)	$ (157,733)	$ (97,541)	$ (59,675)	$ 0
Actual Contributions as a Percentage of Covered-Employee Payroll	16.20%	16.98%	17.16%	16.84%	31.61%	14.44%	13.60%	14.61%	14.62%	14.20%

** Revised from previous year to reflect actual covered-employee payroll.*

Schedule B

Summary of Main Benefit Provisions

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2014. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance for Members Before 7/1/2008
Condition for Retirement

- Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance

- The annual retirement allowance for non-university members is equal to:
  - (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
  - (b) 2.5% of final average salary multiplied by service after July 1, 1983.
  - (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
  - (d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance for Members on and after 7/1/2008
Condition for Retirement

- Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

- 1.7% of final average salary if service is 10 years or less.
- 2.0% of final average salary if service is greater than 10 years and no more than 20 years.
- 2.3% of final average salary if service is greater than 20 years but no more than 26 years.
- 2.5% of final average salary if service is greater than 26 years but no more than 30 years.
- 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

- 1.5% of final average salary if service is 10 years or less.
- 1.7% of final average salary if service is greater than 10 years and no more than 20 years.
- 1.85% of final average salary if service is greater than 20 years but less than 27 years.
- 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Section B: Summary of Main Benefit Provisions continued ...

Disability Retirement Allowance
Condition for Retirement

- Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance

- The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

- Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

- A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Section B: Summary of Main Benefit Provisions continued ...

Post-Retirement Adjustments
The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3- CONTRIBUTIONS

Member Contributions
University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

Schedule C

Statement of Actuarial Assumptions and Methods

Investment Rate of Return: 7.50% per annum, compounded annually.

Salary Increases: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.60%	4.50%	4.30%	4.20%	4.00%

Separations From Service: : Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Section C: Statement of Actuarial Assumptions and Methods continued ...

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Annual Rate of Death After . . .

AGE	SERVICE RETIREMENT MALE	SERVICE RETIREMENT FEMALE	DISABILITY RETIREMENT MALE	DISABILITY RETIREMENT FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Market Value

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

Schedule D

Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

Schedule E

Board Funding Policy

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("KTRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background

State law provides that the retirement benefits promised to members of KTRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in KTRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state-as plan guarantor-is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $520 million (Fiscal Year 2017). The following schedule details the growth of the annual retirement appropriations payable by the state:

Section E: Board Funding Policy continued ...

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	520,372,000

(Source: KTRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2014).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which-if paid-will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

    - Use the Entry Age Normal actuarial cost method;
    - Use a five-year asset smoothing method;
    - Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
    - Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
    - Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and KTRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

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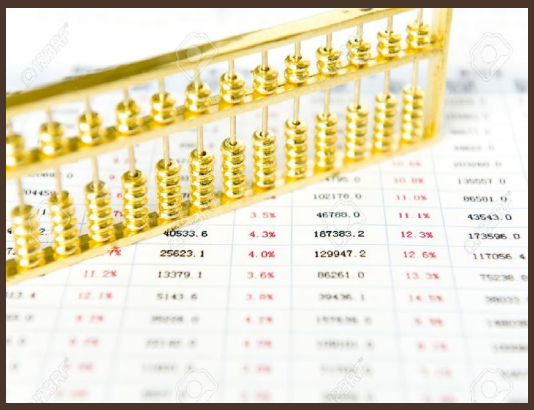
Kentucky Teachers' Retirement System

2015



Statistical Section

This section of the Kentucky Teachers' Retirement System Comprehensive Annual Financial Report (KTRS CAFR) presents detailed information as a context for understanding the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

CONTENTS

Financial Trends ..... page 161

These schedules contain trend information to help the reader understand how KTRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 163

These schedules offer demographic and economic indicators to help the reader understand the System's environment within which KTRS's financial activities take place.

Operating Information ..... page 168

These schedules contain benefits, service, and employer contribution data to help the reader understand how KTRS's financial report relates to KTRS's services and activities.

Defined Benefit Plan
Past Ten Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Position
2015	$ 559,579,290	$ 308,159,763	$ 862,178,759	$ 1,729,917,812
2014	563,326,249	304,981,620	2,803,247,956	3,671,555,825
2013	568,233,446	304,738,728	2,039,874,263	2,912,846,437
2012	557,339,552	309,729,924	309,696,252	1,176,765,728
2011	1,037,935,993	302,262,819	2,760,972,224	4,101,171,036
2010	479,805,088	297,613,965	1,509,785,381	2,287,204,434
2009	442,549,935	293,678,564	(2,020,682,522)	(1,284,454,023)
2008	466,247,782	291,423,948	(909,083,525)	(151,411,795)
2007	434,890,469	269,687,864	2,063,878,767	2,768,457,100
2006	410,920,969	258,464,856	717,308,002	1,386,693,827

Deductions by Type
(Including Benefits by Type)

Year	Service Retirants	Disability Retirants	Survivors	Life Insurance*	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Position
2015	$ 1,647,205,474	$ 76,912,574	$ 17,338,047	$	$ 1,741,456,095	$ 23,032,624	$ 8,868,971	$ 1,773,357,690
2014	1,563,634,993	73,501,441	17,239,266		1,654,375,700	25,461,843	7,955,972	1,687,793,515
2013	1,484,132,938	69,808,291	16,781,695		1,570,722,924	22,059,094	8,377,003	1,601,159,021
2012	1,401,380,816	65,297,491	16,260,858		1,482,939,165	19,549,073	7,762,880	1,510,251,118
2011	1,326,033,698	60,950,214	15,551,801		1,402,535,713	17,325,387	7,322,739	1,427,183,839
2010	1,249,272,057	57,782,651	14,754,062		1,321,808,770	15,310,680	8,830,054	1,345,949,504
2009	1,184,075,934	54,562,038	14,342,435		1,252,980,407	15,208,419	8,165,757	1,276,354,583
2008	1,105,078,345	51,842,271	14,048,485		1,170,969,101	15,965,083	7,551,936	1,194,486,120
2007	1,040,003,417	48,863,876	13,671,586		1,102,538,879	14,822,827	7,351,846	1,124,713,552
2006	972,018,057	46,750,585	12,943,639	3,894,000	1,035,606,281	12,834,222	6,839,859	1,055,280,362

* *Life Insurance Plan valued separately-- see page 153.*

Changes in Plan Net Position

Year	Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
2015	$ 1,729,917,812	$ 1,773,357,690	$ (43,439,878)
2014	3,671,555,825	1,687,793,515	1,983,762,310
2013	2,912,846,437	1,601,159,021	1,311,687,416
2012	1,176,765,728	1,510,251,118	(333,485,390)
2011	4,101,171,036	1,427,183,839	2,673,987,197
2010	2,287,204,434	1,345,949,504	941,254,930
2009	(1,284,454,023)	1,276,354,583	(2,560,808,606)
2008	(151,411,795)	1,194,486,120	(1,345,897,915)
2007	2,768,457,100	1,124,713,552	1,643,743,548
2006	1,386,693,827	1,055,280,362	331,413,465

Medical Insurance Plan

Past Ten Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions	Recovery Income	Net Investment Income	Total Additions to Plan Net Position
2015	$ 145,263,926	$ 157,467,680	$ 22,820,427	$ 7,354,704	$ 332,906,737
2014	157,688,414	135,190,891	4,879,981	67,741,063	365,500,349
2013	166,576,444	119,795,780	34,976	30,718,836	317,126,036
2012	173,966,623	100,346,070	3,781,222	(3,989,202))	274,104,713
2011	188,241,202	84,147,337	493,312	8,334,296	281,216,147
2010	158,761,433	63,805,573	14,618,348	12,312,999	249,498,353
2009	164,408,037	58,688,767	13,683,830	11,296,280	248,076,914
2008	148,929,322	55,402,830	11,936,887	8,128,179	224,397,218
2007	113,233,784	53,099,678	10,337,338	6,722,080	183,392,880
2006	89,319,498	51,697,167	6,117,979	6,804,286	153,938,930

Deductions by Type

(Including Benefits by Type)

	Insurance Benefit Expense					
Year	Under Age 65	Age 65 & Over	Administrative Expense	Total Insurance Benefits Expense	Refunds*	Total Deductions to Plan Net Position
2015	$ 131,396,480	$ 108,998,102	$ 1,545,235	$ 241,939,817	$	$ 241,939,817
2014	136,963,208	105,107,323	1,100,133	243,170,664		243,170,664
2013	142,170,438	98,761,180	1,275,206	242,206,824		242,206,824
2012	156,228,181	72,746,945	1,201,629	230,176,755		230,176,755
2011	145,544,405	80,890,958	1,186,029	227,621,392		227,621,392
2010	136,702,152	100,675,376		237,377,528		237,377,528
2009	123,819,475	81,037,647		204,857,122		204,857,122
2008	107,437,450	71,838,765		179,276,215	10,014	179,286,229
2007	104,828,254	69,400,843		174,229,097	5,834	174,234,931
2006	102,970,290	66,660,106		169,630,396	5,143	169,635,539

**Refunds are netted against member contributions beginning fiscal year 2009.*

Changes in Plan Net Position

Year	Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
2015	$ 332,906,737	$ 241,939,817	$ 90,966,920
2014	365,500,349	243,170,664	122,329,685
2013	317,126,036	242,206,824	74,919,212
2012	274,104,713	230,176,755	43,927,958
2011	281,216,147	227,621,392	53,594,755
2010	249,498,353	237,377,528	12,120,825
2009	248,076,914	204,857,122	43,219,792
2008	224,397,218	179,286,229	45,110,989
2007	183,392,880	174,234,931	9,157,949
2006	153,938,930	169,635,539	(15,696,609)

Life Insurance Plan
Past Nine Fiscal Years

Additions by Source

Year	Employer Contributions	Net Investment Income	Total Additions to Plan Net Position
2015	$ 1,019,519	$ 1,990,324	$ 3,009,843
2014	1,006,091	4,572,845	5,578,936
2013	1,680,495	674,760	2,355,255
2012	1,684,711	6,450,022	8,134,733
2011	1,668,822	3,094,776	4,763,598
2010	1,966,826	5,383,644	7,350,470
2009	5,455,473	5,282,958	10,738,431
2008	5,411,249	6,321,491	11,732,740
2007	5,022,137	(3,413,537)	1,608,600

Deductions by Type
(Including Benefits by Type)

Year	Life Insurance	Total Deductions to Plan Net Position
2015	$ 4,061,000	$ 4,086,306
2014	4,692,000	4,713,324
2013	4,614,718	4,639,143
2012	4,397,281	4,420,167
2011	4,120,000	4,141,511
2010	4,148,511	4,148,511
2009	3,694,000	3,694,000
2008	4,003,000	4,003,000
2007	4,245,000	4,245,000

Changes in Plan Net Position

Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
$ 3,009,843	$ 4,086,306	$ (1,076,463)
5,578,936	4,713,324	865,612
2,355,255	4,639,143	(2,283,888)
8,134,733	4,420,167	3,714,566
4,763,598	4,141,511	622,087
7,350,470	4,148,511	3,201,959
10,738,431	3,694,000	7,044,431
11,732,740	4,003,000	7,729,740
1,608,600	4,245,000	(2,636,400)

Distribution of Active Contributing Members as of June 30, 2015

By Age

Age	Male	Female
20-24	611	2,269
25-29	1,783	6,050
30-34	2,384	7,213
35-39	2,520	7,708
40-44	2,650	8,126
45-49	2,303	7,490
50-54	1,934	6,083
55-59	1,552	4,788
60-64	1,273	3,610
65 & over	1,121	2,569
TOTAL	**18,131**	**55,906**

By Service

Years of Service	Male	Female
Less than 1	2,511	8,085
1-4	4,200	12,650
5-9	3,326	10,255
10-14	2,805	9,019
15-19	2,380	7,456
20-24	1,659	4,996
25-29	954	2,737
30-34	228	588
35 or more	68	120
TOTAL	**18,131**	**55,906**

Principal Participating Employers
Current Year and Nine Years Ago

	2015			2006		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	10,300	1	13.91%	9,738	1	12.96%
Fayette County Public Schools	4,433	2	5.99	3,974	2	5.29
Boone County Schools	1,871	3	2.53	1,546	3	2.06
Hardin County Schools	1,318	4	1.78	1,325	4	1.76
Kenton County Schools	1,261	5	1.70	1,177	5	1.57
Warren County Schools	1,258	6	1.70	1,089	10	1.45
Bullitt County Schools	1,222	7	1.65	1,102	9	1.47
Oldham County Schools	1,192	8	1.61	1,055	11	1.40
Madison County Schools	1,109	9	1.50	1,125	7	1.50
Daviess County Schools	1,082	10	1.46	1,112	8	1.48
All Other*	48,993		66.17	51,896		69.07
TOTAL (208 Employers)	**74,039**		**100.00%**	**75,139**		**100.00%**

** In 2015, "all other" consisted of:*

Type	*Number*	*Employees*
Local School Districts	*163*	*43,395*
Higher Education	*6*	*3,510*
State Agencies	*15*	*1,647*
Regional Coops	*8*	*329*
Other	*6*	*112*
TOTAL	***198***	***48,993***

KTRS Schedule of Participating Employers
School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

KTRS Schedule of Participating Employers *(continued)*
School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Murray
36. Newport
37. Owensboro
38. Paducah
39. Paintsville
40. Paris
41. Pikeville
42. Pineville
43. Raceland
44. Russell
45. Russellville
46. Science Hill
47. Silver Grove
48. Somerset
48. Southgate
50. Walton-Verona
51. West Point
52. Williamsburg
53. Williamstown

Universities & Community/ Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/ Other Organizations

1. Education and Workforce Development Cabinet
2. Legislative Research Commission
3. Finance and Administration Cabinet

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative
13. Southeast South-Central Educational Cooperative

Number of Payments in United States

122	ALABAMA
1	ALASKA
86	ARIZONA
33	ARKANSAS
110	CALIFORNIA
60	COLORADO
8	CONNECTICUT
7	DELAWARE
1,090	FLORIDA
235	GEORGIA
5	HAWAII
9	IDAHO
102	ILLINOIS
685	INDIANA
16	IOWA
32	KANSAS
45	LOUISIANNA
16	MAINE
29	MARYLAND
20	MASSACHUSETTS
44	MICHIGAN
21	MINNESOTA
48	MISSISSIPPI
78	MISSOURI
6	MONTANA
7	NEBRASKA
26	NEVADA
4	NEW HAMPSHIRE
8	NEW JERSEY
16	NEW MEXICO
41	NEW YORK
248	NORTH CAROLINA
2	NORTH DAKOTA
610	OHIO
24	OKLAHOMA
30	OREGON
51	PENNSYLVANIA
	RHODE ISLAND
187	SOUTH CAROLINA
9	SOUTH DAKOTA
870	TENNESSEE
190	TEXAS
27	UTAH
1	VERMONT
151	VIRGINIA
41	WASHINGTON
100	WEST VIRGINIA
28	WISCONSIN
2	WYOMING

Distribution of Retirement and Medical Payments Worldwide

As of June 30, 2015

Number of Payments Outside United States

8	DISTRICT OF COLUMBIA
2	AMERICAN SAMOA
3	MILITARY APO
1	AUSTRALIA
1	BARBADOS
5	CANADA
1	NEW ZEALAND
1	PHILIPPINES
1	SWEDEN
1	SWITZERLAND
1	UNITED KINGDOM

TOTALS

Number of Out of State Payments	**5,606**
Out of State Payments	**$163,465,555**
Number of Payments	**51,401**
Amount of Payments	**$1,982,360,207**

Distribution of Retirement and Medical Payments Statewide as of June 30, 2015

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Adair	$ 8,051,476	215	Laurel	24,965,851	666
Allen	7,207,822	183	Lawrence	5,612,114	152
Anderson	8,312,377	231	Lee	2,876,287	82
Ballard	2,846,353	75	Leslie	6,259,012	160
Barren	16,575,934	426	Letcher	12,586,314	339
Bath	4,586,176	132	Lewis	7,267,067	193
Bell	14,701,232	378	Lincoln	11,506,090	295
Boone	38,859,347	925	Livingston	3,283,302	89
Bourbon	7,814,502	206	Logan	10,713,964	271
Boyd	21,533,538	527	Lyon	4,162,393	104
Boyle	18,387,992	462	Madison	54,276,319	1,360
Bracken	4,110,939	101	Magoffin	6,945,399	182
Breathitt	9,035,669	252	Marion	7,325,279	199
Breckinridge	6,993,374	175	Marshall	14,647,621	366
Bullitt	18,554,870	441	Martin	5,199,667	140
Butler	4,025,148	111	Mason	7,954,365	207
Caldwell	7,192,224	188	McCracken	30,743,119	776
Calloway	26,474,474	679	McCreary	8,025,963	215
Campbell	29,587,080	704	McLean	4,576,088	115
Carlisle	1,755,025	50	Meade	7,983,515	185
Carroll	3,613,058	90	Menifee	2,402,241	74
Carter	14,216,276	384	Mercer	9,673,232	271
Casey	5,825,376	161	Metcalfe	3,839,728	101
Christian	21,493,134	551	Monroe	5,958,839	156
Clark	13,385,076	352	Montgomery	12,987,504	329
Clay	11,780,301	291	Morgan	7,046,747	189
Clinton	5,631,234	154	Muhlenberg	12,781,466	340
Crittenden	2,499,917	74	Nelson	16,072,289	410
Cumberland	3,878,749	99	Nicholas	2,263,558	59
Daviess	44,510,989	1,111	Ohio	7,463,377	203
Edmonson	3,933,327	102	Oldham	19,928,793	460
Elliott	2,412,824	70	Owen	3,568,396	91
Estill	5,660,006	148	Owsley	4,223,122	115
Fayette	117,771,963	3,012	Pendleton	5,007,771	138
Fleming	6,855,210	185	Perry	15,202,722	395
Floyd	20,872,041	565	Pike	31,044,321	823
Franklin	29,503,298	916	Powell	4,959,645	127
Fulton	2,953,150	77	Pulaski	27,072,119	742
Gallatin	1,130,922	29	Robertson	1,008,370	25
Garrard	7,866,278	200	Rockcastle	7,709,623	194
Grant	7,736,540	177	Rowan	19,231,001	505
Graves	16,875,004	429	Russell	9,171,706	234
Grayson	10,417,691	269	Scott	16,166,441	411
Green	4,530,502	117	Shelby	18,851,659	463
Greenup	15,193,276	384	Simpson	6,515,984	167
Hancock	3,288,437	81	Spencer	5,876,715	138
Hardin	34,657,312	867	Taylor	12,199,724	322
Harlan	15,698,839	409	Todd	3,534,977	98
Harrison	7,942,295	204	Trigg	6,785,822	185
Hart	5,450,359	133	Trimble	2,148,374	51
Henderson	17,575,041	443	Union	4,511,538	121
Henry	7,246,667	193	Warren	64,862,197	1,667
Hickman	1,554,074	40	Washington	4,339,736	117
Hopkins	19,002,828	485	Wayne	8,847,022	232
Jackson	5,119,502	145	Webster	4,831,199	132
Jefferson	304,692,601	6,752	Whitley	25,729,245	682
Jessamine	14,677,948	393	Wolfe	4,242,350	118
Johnson	13,795,312	340	Woodford	11,844,470	298
Kenton	37,642,326	927			
Knott	9,313,632	245	**Total in Kentucky**	**$ 1,818,894,651**	**45,795**
Knox	10,444,306	292			
Larue	6,827,722	159			

Growth in Annuitants
as of June 30, 2015

Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Beneficiaries of Deceased Members Eligible to Retire	Survivors	Disabled Adult Child
2005-06	33,618	2,039	1,631	531	495	263
2006-07	34,462	2,086	1,722	549	466	267
2007-08	35,550	2,155	1,778	554	468	271
2008-09	36,684	2,209	1,837	559	448	283
2009-10	37,607	2,284	1,915	567	435	291
2010-11	38,705	2,379	2,003	584	430	296
2011-12	40,107	2,478	2,126	596	444	304
2012-13	41,255	2,582	2,207	601	432	303
2013-14	42,581	2,641	2,304	596	429	316
2014-15	43,634	2,691	2,442	653	349	328

Schedule of Annuitants by Type of Benefit
as of June 30, 2015

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Benefit*					
		1	2	3	4	5	6
1 - 500	3,630	2,738	10	166	41	347	328
501 - 1,000	2,774	2,201	175	303	95	0	0
1,001 - 1,500	3,023	2,132	289	484	116	2	0
1,501 - 2,000	3,573	2,709	391	390	83	0	0
2,001 - 2,500	5,165	4,170	579	311	105	0	0
2,501 - 3,000	8,456	7,394	691	291	80	0	0
3,001 - 3,500	7,957	7,401	327	177	52	0	0
3,501 - 4,000	5,607	5,316	133	129	29	0	0
4,001 - 4,500	3,643	3,488	53	82	20	0	0
4,501 - 5,000	2,325	2,246	27	40	12	0	0
5,001 & OVER	3,944	3,839	16	69	20	0	0
TOTAL	**50,097**	**43,634**	**2,691**	**2,442**	**653**	**349**	**328**

*Type of Benefit
1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Beneficiaries of Retired Members*
4-*Beneficiaries of Deceased Member Eligible to Retire*
5-Survivor Payments
6-Disabled Adult Child

Schedule of Annuitants by Option Selected
as of June 30, 2015

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,790	373	270	46	5	384	86	676
501 - 1,000	1,550	332	233	117	9	340	188	5
1,001 - 1,500	1,526	305	287	149	9	407	326	14
1,501 - 2,000	1,909	389	328	155	10	471	278	33
2,001 - 2,500	2,512	493	465	186	4	836	504	165
2,501 - 3,000	4,186	843	685	224	9	1,428	784	297
3,001 - 3,500	4,201	869	551	215	11	1,177	837	96
3,501 - 4,000	2,879	589	449	171	10	878	587	44
4,001 - 4,500	1,857	370	316	115	4	527	442	12
4,501 - 5,000	1,208	241	178	85	10	338	254	11
5,001 & OVER	2,028	358	405	187	16	480	464	6
TOTAL	**25,646**	**5,162**	**4,167**	**1,650**	**97**	**7,266**	**4,750**	**1,359**

***Option selected:**
1 - Straight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/2005 TO 06/30/2006								
Average monthly benefit	$202	$473	$1,019	$1,493	$2,037	$2,998	$4,063	**$2,827**
Average final average salary	$4,106	$3,253	$4,052	$4,117	$4,317	$4,721	$5,490	**$4,773**
Number of retired members	44	105	106	132	145	689	604	**1,873**
07/01/2006 TO 06/30/2007								
Average monthly benefit	$178	$514	$930	$1,559	$2,136	$3,140	$4,263	**$2,900**
Average final average salary	$4,102	$3,346	$3,590	$4,228	$4,537	$4,970	$5,758	**$4,916**
Number of retired members	48	113	90	109	193	534	514	**1,577**
07/01/2007 TO 06/30/2008								
Average monthly benefit	$199	$524	$1,117	$1,658	$2,276	$3,279	$4,319	**$2,984**
Average final average salary	$3,816	$3,066	$4,215	$4,412	$4,612	$5,067	$5,786	**$5,017**
Number of retired members	50	130	112	150	169	557	615	**1,831**
07/01/2008 TO 06/30/2009								
Average monthly benefit	$200	$573	$1,005	$1,725	$2,436	$3,368	$4,496	**$2,941**
Average final average salary	$4,617	$3,942	$3,873	$4,686	$4,983	$5,278	$5,960	**$5,164**
Number of retired members	72	168	137	115	217	505	585	**1,824**
07/01/2009 TO 06/30/2010								
Average monthly benefit	$185	$525	$1,104	$1,700	$2,427	$3,468	$4,670	**$3,222**
Average final average salary	$3,654	$3,637	$4,124	$4,508	$4,974	$5,383	$6,102	**$5,316**
Number of retired members	28	133	98	103	242	442	601	**1,647**
07/01/2010 TO 06/30/2011								
Average monthly benefit	$149	$519	$1,225	$1,781	$2,513	$3,621	$4,827	**$3,240**
Average final average salary	$3,570	$3,640	$4,423	$4,825	$5,184	$5,574	$6,235	**$5,392**
Number of retired members	45	157	144	112	242	544	617	**1,854**
07/01/2011 TO 06/30/2012								
Average monthly benefit	$175	$507	$1,170	$1,897	$2,613	$3,674	$4,726	**$3,148**
Average final average salary	$3,292	$3,759	$4,307	$4,898	$5,219	$5,605	$6,109	**$5,331**
Number of retired members	45	197	146	162	303	778	569	**2,200**
07/01/2012 TO 06/30/2013								
Average monthly benefit	$161	$475	$1,186	$1,963	$2,781	$3,811	$5,162	**$3,149**
Average final average salary	$3,362	$3,660	$4,498	$4,956	$5,518	$5,799	$6,632	**$5,476**
Number of retired members	44	234	156	154	294	685	447	**2,014**
07/01/2013 TO 06/30/2014								
Average monthly benefit	$192	$484	$1,270	$2,068	$2,797	$3,847	$5,362	**$3,126**
Average final average salary	$4,148	$3,677	$4,751	$5,364	$5,600	$5,902	$6,860	**$5,589**
Number of retired members	56	211	161	145	258	678	344	**1,853**
07/01/2014 TO 06/30/2015								
Average monthly benefit	$157	$472	$1,282	$2,038	$2,890	$3,898	$5,124	**$3,173**
Average final average salary	$3,331	$3,577	$4,892	$5,266	$5,709	$5,948	$6,552	**$5,577**
Number of retired members	60	231	183	206	314	806	456	**2,256**
Ten Years Ended June 30, 2015								
Average monthly benefit	**$181**	**$504**	**$1,151**	**$1,814**	**$2,575**	**$3,537**	**$4,651**	**$3,076**
Average final average salary	**$3,845**	**$3,594**	**$4,341**	**$4,776**	**$5,206**	**$5,458**	**$6,095**	**$5,269**
Number of retired members	**492**	**1,679**	**1,333**	**1,388**	**2,467**	**6,218**	**5,352**	**18,929**

Medical Insurance Plan
Average Insurance Premium Supplements for the Last Five Years
By Years of Service Credit

Retirement Effective Dates	00-9.99	10-14.99	15-19.99	20>=	TOTAL
07/01/2010 to 06/30/2011					
Average monthly supplement	$ 167.03	$ 311.93	$ 438.84	$ 597.41	
Number of retired members	30	71	109	1360	1,570
07/01/2011 to 06/30/2012					
Average monthly supplement	$ 164.12	$ 302.19	$ 433.25	$ 579.29	
Number of retired members	29	81	121	1568	1,799
07/01/2012 to 06/30/2013					
Average monthly supplement	$ 80.23	$ 227.32	$ 366.98	$ 499.25	
Number of retired members	29	90	104	1373	1,596
07/01/2013 to 06/30/2014					
Average monthly supplement	$ 51.99	$ 189.59	$ 335.34	$ 483.65	
Number of retired members	15	82	100	1227	1,424
07/01/2014 to 06/30/2015					
Average monthly supplement	$ 78.48	$ 204.26	$ 369.27	$ 492.30	
Number of retired members	24	101	176	1411	1,712

Summary of Fiscal Year 2014-2015

Retiree Sick Leave Payments

ACTUARIAL RATE

Total Members Retiring		2,428
Total members receiving sick leave payments		1,727
Total amount of sick leave payments @12.105% contribution rate	$	22,207,337
Average payment per retiree	$	12,866
Total increase in final 3/5 Yr average salary base	$	6,171,007
Average increase in FAS	$	3,233
Total service credit of 1,727 retirees		44,522
Average service credit of 1,727 retirees		25.78

ANTICIPATED LIFETIME PAYOUT OF ADDITIONAL ANNUITY

Actuarial cost of sick leave as salary credit	$	51,290,488

Funding of Additional Payments

Member contributions 9.105% x $22,207,337 =	$ 2,021,978
Employer contributions 12.305% x $22,207,337 =	2,732,613
Total Contributions	$ 4,754,591
DEFICIT:	
Anticipated additional payout	$ 51,290,488
Less total member & state contributions	4,754,591
Subtotal unfunded debt	46,535,897
Less current year appropriation	4,527,300
TOTAL DEFICIT (overpayment)*	$ 42,008,597

* *NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. Sick leave deficits are amortized over 20 year periods.*

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Teachers' Retirement System of the State of Kentucky

The 76th Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Year Ended June 30, 2016

Teachers' Retirement System
of the State of Kentucky
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN, CPA
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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Teachers' Retirement System of the State of Kentucky

2016

Introductory Section

Chairperson's Letter

Teachers' Retirement System of the State of Kentucky

GARY L. HARBIN, CPA
Executive Secretary

BOARD OF TRUSTEES

ARTHUR GREEN
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ALI WRIGHT
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December 19, 2016

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2016, the 76th year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

TRS closed the 2015-2016 fiscal year with $17.6 billion net assets. The active membership totaled 71,848 and the retired membership was 51,563 with an annual annuity and medical insurance benefits of $2.1 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. Every effort will be made to ensure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Arthur Green
Chairperson
Board of Trustees

Letter of Transmittal

Teachers' Retirement System of the State of Kentucky

December 19, 2016

Honorable Matthew G. Bevin, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky

Dear Governor Bevin:

It is my pleasure to submit the 76th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky (TRS), a component unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2016. Allow me to begin this year's transmittal letter with another expression of my thanks for your work and the work of the General Assembly in approving a biennial budget for the commonwealth that provides $973 million in additional funding for TRS. The initial installments of that funding already are being invested to fulfill the promise made by the state to teachers.

TRS produced this annual report, which is required by state law along with an annual audit and actuarial valuation of the retirement system, that provides you, the General Assembly and the public with information necessary to better understand TRS, which is the largest financial institution in the commonwealth. Contained within are numerous examples of how Kentucky teachers' future well-being is being provided for at a low cost with a great economic benefit for those educators and the state's businesses that receive many of the retirement dollars spent by the 89 percent of retirees who live in Kentucky.

This report conforms with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with TRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of TRS for the year ended June 30, 2016. Discussion and analysis of net assets and related additions and deductions are presented in Management's Discussion and Analysis beginning on page 18.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are executed accurately and financial statements are fairly presented. Limits are inherent in all systems of internal control based on the recognition that the costs of such systems should be related to the benefits to be derived. Management believes the system's controls provide this appropriate balance. The system of internal controls includes policies and procedures and an internal audit department that reports to the Board of Trustees.

Profile of TRS

TRS began operations on July 1, 1940, as a cost-sharing, multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state. TRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 29. Also, the summary of the plan provisions, which starts on page 110, is useful in understanding benefit and contribution provisions. The population of TRS membership is stated in the preceding board chair's letter.

An annual operating budget is prepared for the administration of the retirement system and approved by the Board of Trustees. Biennial budget requests also are submitted to the Kentucky General Assembly for adoption. TRS's investment earnings pay for the agency's administrative expenses, which are among the lowest of its peers.

Major Initiatives

The system continually seeks better to serve its membership as the highest levels of professionalism, integrity, performance and teamwork are required at all levels of the

organization. TRS is an organization that "does it right." As such, during the past year, TRS has continued work on several major initiatives concerning funding and cost containment for retiree health care, the investment program and information technology.

Implementation of the "Shared Responsibility" Solution for Funding Retiree Health Care and Careful Management of Medical Insurance Costs

Kentucky is a national leader in prefunding retiree health care benefits. June 30, 2016, marked the end of the six-year phase in of the "shared responsibility" solution for prefunding retired teacher health care. The Board of Trustees and staff are very pleased to report that $3.1 billion in actuarial liability has been eliminated from the retired teacher health care plan through implementation of this solution. Another $1.9 billion savings in actuarial liability was accomplished through careful management of health care costs. Thus, since implementing "shared responsibility" and other cost control measures, more than $5 billion in actuarial accrued liability has been eliminated from the TRS Medical Insurance Fund.

Elected officials have commended Kentucky's education community for its strong leadership and hard work in developing and implementing the solution. Constituent groups – representing retired teachers, active teachers, school boards, school superintendents and the state – all worked on the consensus funding solution. The solution provides that all the groups share in the solution by investing a little more now to receive substantial returns later. After six years and $3.1 billion in lowered liabilities by converting to a prefunded plan and other cost-saving measures, the "shared responsibility" solution is truly a significant accomplishment on the road to retirement security for current and future retired teachers.

TRS is efficient, effective and always working to improve the retirement security of Kentucky's teachers. Eliminating more than $5 billion in liability helps the financial condition of the commonwealth and eases burdens on taxpayers.

The Board of Trustees regularly reviews the health care plan to contain costs and maintain a meaningful benefit for retired teachers. The move to Medicare Advantage, now in the 10th year, continues to be stable and financially feasible for our members and the TRS medical plan. The cost of coverage for 2017 is a reduction from the 2016 cost.

Some recent cost-saving initiatives include moving the TRS-sponsored Medicare drug plan from fully insured to a self-funded plan to achieve the greatest amount of federal subsidies. Additionally, TRS joined the KY Rx Coalition in 2012, which is spearheaded by the University of Kentucky. By joining the coalition, TRS achieves annual savings through leveraging greater prescription purchasing power and deeper drug discounts. As an added benefit, a dedicated staff of pharmacists with the KY Rx Coalition can help each member with their prescriptions and how to maximize their prescription dollars.

The Board contracts with Edumedics for disease management services for Medicare-eligible retirees with diabetes, hypertension and hyperlipidemia. Edumedics is a Kentucky-based company spun out from the University of Louisville. Edumedics is educating retirees with these conditions about nutrition, drug regime, exercise and other matters. These educational efforts are ongoing, involving routine face-to-face checkups with participating retirees. It is anticipated that this trial will continue beyond fiscal year 2016, when the original pilot period was to conclude.

TRS continued development and implementation of a system for reconciling reciprocal health insurance costs between TRS and KRS and other state plans monthly. Pathway was built to calculate the reconciliation, which is in production. TRS's system has been adopted by the state's other pension plans for reconciling reciprocal accounts.

Investment Program

For the 12-month period ended June 30, 2016, the market value of TRS's investment program fell a net 1.3 percent in what was a difficult year for institutional investors. However, during the last five years, TRS's investment returns rank in the top 10 percent of plans with more than $1 billion under management. Moreover, during the last 30 years, TRS investment returns have exceeded the long-term assumed rate of return of 7.5 percent.

A multiyear program of diversifying the portfolio continued in line with TRS's focus on fundamental value and risk control. These

ongoing efforts are a continuation of a disciplined investment process and long-term focus on retirement security. This focus has generated exceptionally stable returns through the system's history, and we have every confidence that it will do so in the future. TRS's investment program continues to be recognized as a leader in the public pension community for governance structure, trustee education and cost effectiveness.

TRS regularly obtains independent reviews and always is seeking to improve its investment program and continue the tradition of adhering to best governance practices that lead to sound investment returns.

Information Technology

TRS completed the Pathway information technology system project on time, under budget and meeting expectations. Members now can access account information online - available anytime from anywhere. The members' portal was the final phase of a multiyear effort to modernize TRS's information technology infrastructure. The vendor authorized by the board to build and install the new system has worked with staff onsite at TRS since September 2011. In July 2013, member enrollment, employer reporting, service credit purchases and related accounting functions were put into production. In January 2015, new modules for member benefits, insurance and retiree payroll went live.

The objective of Pathway is to make it easier for members to answer their own questions about their retirement and insurance accounts while streamlining retirement processes and improving staff efficiency in providing services to retirees and active members. The new pension administration system includes an upgraded imaging system for storage of member account information and other business records. Staff is currently working with the Kentucky Department for Libraries and Archives to update TRS's records retention schedule consistent with Pathway's data and document storage capabilities.

As an extension of this project, TRS created and now offers a mobile application for Pathway that allows members to access the same account information on mobile devices as is available through the Pathway website.

Communications

To reach members more easily, TRS created Facebook and Twitter accounts to communicate information about the system on a more timely basis. In less than a year, the Facebook account received more than 1,200 likes, and posts often reach more than 1,000 users - led by 7,600 users who saw a post congratulating this year's retirees and almost 4,600 who saw a post expressing appreciation for the additional funding in the budget. The social media accounts frequently link to information on the TRS website, which was revamped during the year to be more user friendly.

Internal and External Reviews

TRS responds to legislative and administration inquiries and mandates throughout the year. Voluminous records were turned over to the Office of State Budget Director and the team performing the performance review. TRS also coordinated development of a report, with the cooperation of leaders from the other Kentucky public pension plans, as mandated by HB 271 (RS 2016), that shows what individuals in any Kentucky state pension are to receive annually, including listing combined amounts for what members who have reciprocity receive and protecting the confidentiality of the recipients as mandated by statute.

I undertook a detailed review of actuarial service purchases with the assistance of the board's independent actuary. The purchase methodology from this review has been built into Pathway. The revised methodology has improved, and will continue to improve, the understanding of service purchases for both staff and the membership.

Economic Condition

The economic condition of the system is based primarily on investment earnings. The Investment Section of this report starting on page 63 contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules, among others.

The fiscal year was a very challenging year for TRS's active managers causing a lag in performance. Also, TRS's investing was limited by negative cash flow - selling assets to pay benefits -

as a result of prior underfunding. However, TRS continues to have strong relative performance compared to plans with more than $1 billion under management. For example, TRS registered top 10 percent performance compared to peers over the prior five-year period. Over the prior 30-year period, TRS's portfolio returned 8 percent (gross), exceeding the 7.5 percent assumed rate of return.

According to KRS 161.430, the TRS Board of Trustees is responsible for investing the assets of the system. The Board of Trustees delegates investment authority to the Investment Committee. The Investment Committee works closely with experienced investment counselors and the system's professional staff in evaluating and selecting investment allocations.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the plan and its trust funds. The investment program shall also provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets.

The investment portfolio experienced a decrease in value during the 2015-2016 fiscal year as the portfolio's market value went from $18,447,494,794 to $17,405,060,831. The decrease in value of the portfolio was the result of challenging market conditions, negative cash flow for the pension fund and the compounded impact of lost opportunity due to underfunding. This decrease was offset partially by investment income that included interest income and dividends. Employer and employee contributions also provided significant income to the portfolio.

Net investment income was negative at $249,661,104 for 2015-2016 compared to adding $871,554,710 in 2014-2015. The major contributing factor of the decrease in return from the system's investment portfolio resulted from the net depreciation in fair value of investments of $598,818,560 at June 30, 2016, compared to a net appreciation of $428,758,194 at June 30, 2015.

As mentioned earlier, it should be noted that TRS annuities bolster the Commonwealth of Kentucky's economy, as approximately 89 percent of retired teachers reside within the state. TRS paid more than $2 billion in total benefits (retirement, medical ... etc.) during the fiscal year.

Funding

The commonwealth, through the actions of Gov. Bevin and the General Assembly, took a huge first step in addressing an unfunded liability that built up over the last decade. Education groups, teachers (both current and retired) and TRS officials repeatedly have expressed thanks for the $973 million in funding provided through the budget (HB 303, RS 2016), representing 94 percent of the actuarially determined employer contribution.

Based on recommendations of the Board of Trustees, the General Assembly establishes, by statute, the contribution levels that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

Since fiscal year 2008, the state has not paid the full recommended annual employer contribution necessary to prefund the benefit requirements of members of the retirement system as determined by the actuary. Over this period, because of not making the additional appropriation beyond salary-based contributions, the actuary says the state's annual additionally required employer contributions have grown significantly from $60.5 million (fiscal year 2009) to $553.6 million (fiscal year 2019). The following schedule details the growth of the additional annual employer contributions payable by the state:

Fiscal Year	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88%	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	520,372,000
2018	13.49	512,883,000
2019	14.61	553,597,000

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2016).

The board always has acted as required by state law and recommended annual employer contributions payable by the state that would ensure that the state meets the contractual obligations to members.

The latest actuarial valuation was for the period ending June 30, 2016. This report reflects the system's actuarial value of assets totaling $17.5 billion and actuarial determined liabilities totaling $32 billion. The funded ratio of actuarial assets to liabilities is 54.6 percent, which is a decrease from the previous year and is primarily due to market depreciation of investments and smoothing of investment returns. The actuary reports: "In our opinion, the system has not been funded on an actuarially sound basis since the full actuarially determined contributions were not made by the employer. If contributions by the employer to the system in subsequent fiscal years are less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the system are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated. It is our understanding that the state budget includes additional appropriations of $973 million to fund the required contribution for the 2016-18 biennium."

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions (on page 54). Based on the 2016 valuation report, the actuary recommends a cumulative increase in employer contributions of 14.61 percent of pay for the 2018-2019 fiscal year (as detailed on page 96). Annual required employer contributions for the Medical Insurance Fund are provided in the schedule of employer contributions (on page 56). Past contribution shortfalls created a net OPEB obligation of $1,394,141,069 (as detailed on page 130).

TRS Medical Insurance Plan

The shared responsibility solution for funding retiree health care, which went into effect on July 1, 2010, provides a method of prefunding retiree health care over a 30-year period. The system believes that the shared responsibility solution for funding retiree health care will help ensure the retirement security of the state's teachers. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2016, indicated that the fund has an unfunded liability of $2.84 billion. The funded ratio of actuarial assets to liabilities is 21.9 percent, which is trending upward from past years. The actuary's opinion is: "… if the contributions to the Medical Insurance Fund (MIF) continue at the current statutorily required levels, the funded ratio of the Retiree Medical Plan will continue to increase, and the ability of the MIF to fund the benefits called for under the Retiree Medical Plan will improve."

Additionally, the system believes continued steps must be taken to realize true cost containment through legislation on both the state and national levels. TRS will continue to take measures to contain costs and increase revenues to the Medical Insurance Fund or may adjust coverage to meet existing revenues.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of TRS. Certifications from the board's external auditor and independent actuary are enclosed in this report. The system's consultants who are appointed by the board are listed on pages 57, 58, 85 and 91 of this report.

National Recognition

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2015. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

To be awarded a Certificate of Achievement, a government unit must publish an easily readable

and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for one year. TRS has received the Certificate of Achievement for the last 28 consecutive years (fiscal years ended 1988-2015). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council (PPCC) awarded a Certificate of Achievement to the Teachers' Retirement of the State of Kentucky for 2016 for implementing and maintaining high professional standards in administering the affairs of the system. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure. Those principles are widely acknowledged to be marks of excellence in the public pension industry.

The PPCC is a coalition of three national associations that represent public retirement systems and administrators. Combined, these associations serve retirement systems that provide pension coverage for most of the nation's 16 million employees of state and local government. The associations that form the PPCC are the National Association of State Retirement Administrators; the National Council on Teacher Retirement; and the National Conference on Public Employee Retirement Systems.

NCTR Executive Committee

I am past-president of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 69 state, territorial, local and university pension systems with combined assets in excess of $2 trillion, serving more than 18 million active and retired teachers, non-teaching personnel and other public employees.

Public Sector HealthCare Roundtable

Additionally, I serve on the Board of Directors and as president of the Public Sector HealthCare Roundtable. The roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector are represented properly during the formulation, debate and implementation of federal health care policies. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

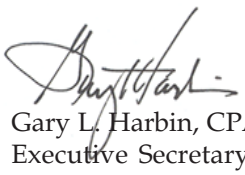
Acknowledgements

The preparation of this report reflects the combined efforts of the TRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It also is used to determine responsible stewardship of the assets contributed by TRS members and their employers.

This report is located at the TRS web address https://trs.ky.gov/financial-reports-information/#CAFR and is made available to all system employer members, whose cooperation continues to contribute significantly to our success, and who form the vital link between TRS and its active members.

TRS management and staff are committed to the continued operation of an actuarially sound retirement system. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



Gary L. Harbin, CPA
Executive Secretary

BOARD OF TRUSTEES

Arthur Green
Chairperson
Retired Teacher Trustee
Elkton

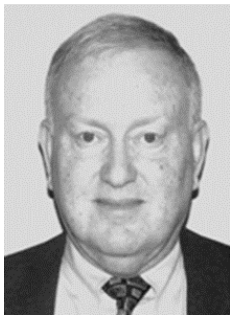
Jay Morgan, Ph.D.
Vice Chairperson
Teacher Trustee
Murray

Mary Adams
Active Teacher Trustee
Brodhead

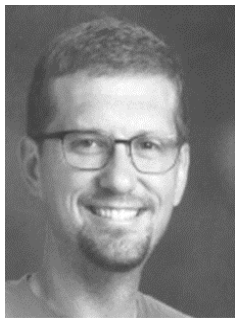
Allison Ball
Ex Officio Trustee
State Treasurer

Hollis Gritton
Lay Trustee
Union

Stephen Pruitt, Ph.D.
Ex Officio Trustee
Commissioner,
Dept. of Education



Ron Sanders
Lay Trustee
Hodgenville



Josh Underwood
Active Teacher Trustee
Eddyville

Ali Wright
Active Teacher Trustee
Georgetown

Teachers' Retirement System
of the State of Kentucky
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

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Executive Secretary

ROBERT B. BARNES, JD
General Counsel and
Deputy Executive Secretary
Operations

J. ERIC WAMPLER, JD
Deputy Executive Secretary
Finance & Administration

TOM SIDEREWICZ, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

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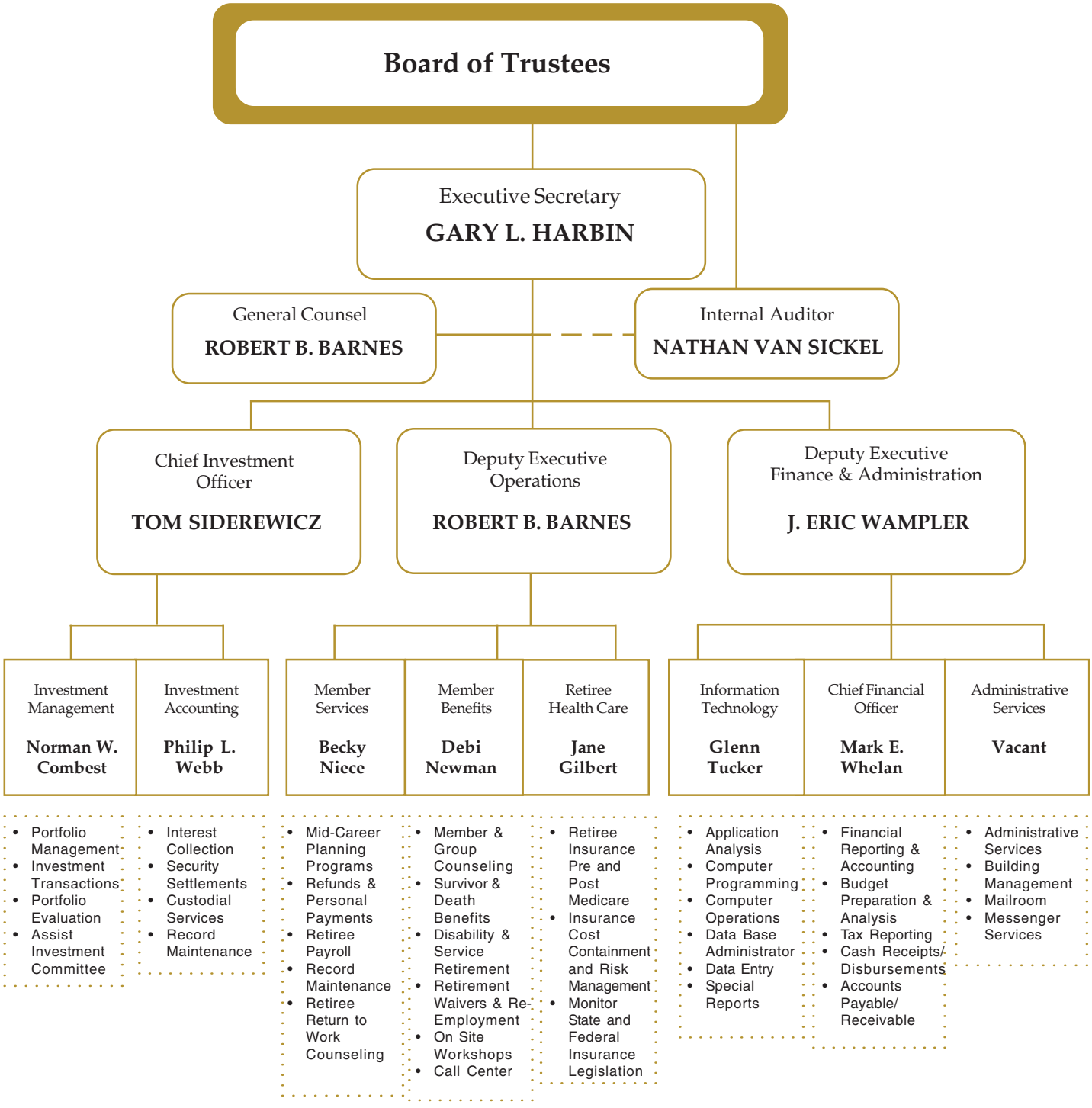
3550 Busbee Parkway, Suite 250
Kennesaw, GA 30144

AUDITOR

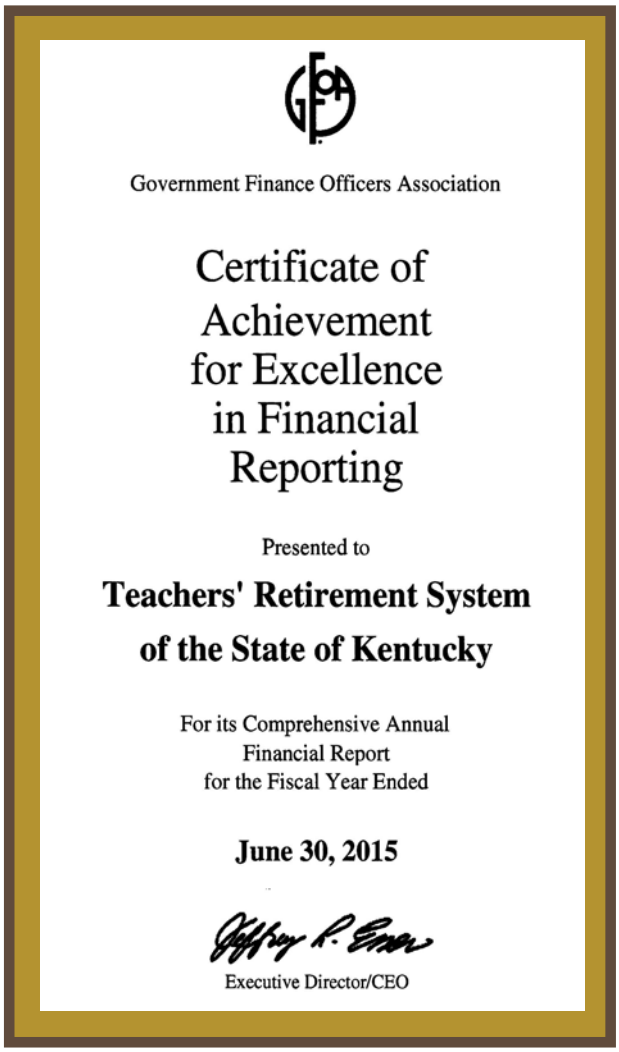
Mountjoy Chilton Medley LLP
1000 Bluegrass Corporate Center
333 West Vine Street
Lexington, KY 40507

** See pages 85 and 91 of the Investment Section for investment consultants.*

Teachers' Retirement System
Organizational Chart



GOVERNMENT FINANCE OFFICERS ASSOCIATION (GFOA)



The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last twenty-eight consecutive years (fiscal years ended 1988-2015).

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS

Public Pension Coordinating Council
Public Pension Standards
2016 Award

Presented to

Kentucky Teachers' Retirement System

In recognition of meeting professional standards for
plan design and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of state Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2016 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

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Teachers' Retirement System
of the State of Kentucky

2016

Financial Section

Independent Auditor's Report

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

Report on the Financial Statements

We have audited the accompanying statement of fiduciary net position of the Teachers' Retirement System of the State of Kentucky as of June 30, 2016 and 2015, and the related statement of changes in fiduciary net position for the years then ended, and the related notes to the financial statements, which collectively comprise the component unit financial statements of the Teachers' Retirement System of the State of Kentucky as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of June 30, 2016 and 2015, and the respective changes in its fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Kentucky
Indiana
Ohio

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Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 18 through 21 and the Schedule of Changes in Net Pension Liability (page 53), Schedule of Net Pension Liability and Schedule of Employer Contributions (page 54). Schedule of Investment Returns (page 55), Medical Insurance Plan Schedule of Funding Progress (page 55) and Schedule of Employer Contributions (page 56), and Life Insurance Plan Schedule of Funding Progress and Schedule of Employer Contributions (page 56) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Kentucky Teachers' Retirement System's basic financial statements. The additional supporting schedules (pages 57 through 59) are presented for purposes of additional analysis and are not a required part of the basic financial statements. The Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 21, 2016, on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and compliance.

/s/ Mountjoy Chilton Medley LLP

Lexington, Kentucky
November 21, 2016

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of the Teachers' Retirement System of the State of Kentucky (TRS, System, or Plan) financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2016. Please read it in conjunction with the respective financial statements, which begin on page 22.

USING THIS FINANCIAL REPORT

Because of the long-term nature of the defined benefit retirement annuity plan, and the medical and life insurance plans, financial statements alone cannot provide sufficient information to properly reflect the ongoing perspective of the System. The Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position (on pages 22-25) provide information about the activities of the defined benefit retirement annuity plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Teachers' Retirement System of the State of Kentucky is the fiduciary of funds held in trust for its members.

The Required Supplementary Information includes historical trend information about the funded status of the defined benefit retirement annuity plan. The Additional Supporting Schedules section includes historical trend information about the actuarial funded status of the medical insurance and life insurance plans from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of Employer Contributions present historical trend information about the required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2016, the System's combined fiduciary net position decreased by $1,128.3 million – from $18,766.8 million in 2015 to $17,638.5 million in 2016. In 2014, the combined net position totaled $18,720.4 million. The following summaries focus on the fiduciary net position and changes in fiduciary net position of the System's defined benefit retirement annuity plan, medical insurance plan, and life insurance plan.

Summary of Fiduciary Net Position
(In millions of dollars)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2016	2015	2014	2016	2015	2014	2016	2015	2014
Cash & Investments	$ 17,149.0	$ 18,428.9	$ 18,426.8	$ 681.4	$ 609.7	$ 536.2	$ 90.1	$ 88.6	$ 89.7
Receivables	119.5	295.4	310.5	58.3	29.1	12.4	1.2	1.1	1.1
Capital Assets	17.0	14.9	11.5						
Total Assets	17,285.5	18,739.2	18,748.8	739.7	638.8	548.6	91.3	89.7	90.8
Total Liabilities	(472.7)	(690.1)	(656.2)	(5.9)	(11.8)	(12.6)	(0.4)		
Net Position	$ 16,812.8	$ 18,049.1	$ 18,092.6	$ 733.8	$ 627.0	$ 536.0	$ 90.9	$ 89.7	$ 90.8

*TOTALS	2016	2015	2014
Cash & Investments	$ 17,920.5	$ 19,127.2	$ 19,052.7
Receivables	179.0	325.6	324.0
Capital Assets	17.0	14.9	11.5
Total Assets	18,117.0	19,467.7	19,388.2
Total Liabilities	(479.0)	(701.9)	(668.8)
Net Position	$ 17,637.5	$ 18,765.8	$ 18,719.4

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had a combined fiduciary net position of $1.0 million for years ended 2016, 2015 and 2014.*

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

The fiduciary net position of the defined benefit retirement annuity plan decreased by 6.85 percent ($16,812.8 million compared to $18,049.1 million) and in 2014, the fiduciary net position of the defined benefit plan totaled $18,092.6 million. The decrease is primarily due to deteriorations in market conditions which resulted in a net investment income decrease of $1.1 billion less than 2015. The 2015 amount was $1.9 billion less than 2014. The defined benefit retirement annuity plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries. The fiduciary net position of the medical insurance plan increased by 17.03 percent ($733.8 million compared to $627 million) primarily due to contributions from members and employers exceeding insurance expenses due to legislation passed in 2010. This compares to 2014 where fiduciary net position of the medical insurance fund totaled $536 million. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

Summary of Changes in Fiduciary Net Position
(In millions of dollars)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2016	2015	2014	2016	2015	2014	2016	2015	2014
ADDITIONS									
Member Contributions	$ 313.0	$ 308.2	$ 305.0	$ 184.4	$ 157.5	$ 135.2	$	$	$
Employer Contributions	565.5	559.6	563.3	178.6	145.3	157.7	1.0	1.0	1.0
Net Investment Income/(Loss)	(245.2)	862.2	2,803.2	(9.3)	7.4	67.7	4.8	2.0	4.6
Other Income				43.3	22.8	4.9			
TOTAL ADDITIONS	633.0	1,730.0	3,671.5	397.0	333.0	365.5	6.0	3.0	5.6
DEDUCTIONS									
Benefit Payments	1,833.0	1,741.5	1,654.4				5.0	4.1	4.7
Refunds	27.8	23.1	25.5						
Administrative Expense	8.6	8.9	7.9	1.7	1.6	1.1			
Insurance Expenses				288.5	240.4	242.1			
TOTAL DEDUCTIONS	1,869.6	1,773.5	1,687.8	290.2	242.0	243.2	4.6	4.1	4.7
Increase/(Decrease) in Net Position	$ (1,236.3)	$ (43.5)	$ 1,983.7	$ 106.8	$ 91.0	$ 122.3	$ 1.2	$ (1.1)	$ 0.9

***TOTALS**

	2016	2015	2014
ADDITIONS			
Member Contributions	$ 497.4	$ 465.7	$ 440.2
Employer Contributions	745.1	705.9	722.0
Net Investment Income/(Loss)	(249.7)	871.6	2,875.5
Other Income	43.3	22.8	4.9
TOTAL ADDITIONS	1,036.0	2,066.0	4,042.6
DEDUCTIONS			
Benefit Payments	1,838.0	1,745.6	1,659.1
Refunds	27.8	23.1	25.5
Administrative Expense	10.3	10.5	9.0
Insurance Expenses	288.5	240.4	242.1
TOTAL DEDUCTIONS	2,164.0	2,019.6	1,935.7
Increase/(Decrease) in Net Position	$ (1,128.3)	$ 46.4	$ 2,106.9

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had a combined change in fiduciary net position of $1.0 million for years ended 2016, 2015 and 2014.*

DEFINED BENEFIT RETIREMENT ANNUITY PLAN ACTIVITIES

Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY MANAGEMENT'S DISCUSSIONAND ALALYSIS (Continued)

In 2016, Employer contributions totaled $565.5 million, a net increase of $5.9 million from the prior fiscal year. The increase was due to a repayment of prior year shortfalls. In 2015, Employer contributions decreased $3.7 million compared to the prior fiscal year due to declining amortization payments from the State on prior benefit improvements.

In 2016, the System experienced a decrease in net investment income compared to the previous year (negative $245.2 million compared to $862.2 million). For 2014, net investment income totaled $2,803.2 million. The decrease in net investment income is mainly due to unfavorable market conditions for the year ended June 30, 2016 compared to 2015. Total deductions in 2016 increased $96.1 million. The increase was caused principally by an increase of $91.7 million in defined benefit payments. Members who were drawing benefits as of June 2015 received an increase of one and one-half percent to their retirement allowances in July 2015. Also, there was an increase of 1,741 members and beneficiaries on the retired payroll as of June 30, 2016.

OTHER POSTEMPLOYMENT BENEFIT ACTIVITIES

During the 2016 fiscal year, the medical insurance plan member contributions increased $26.9 million and employer contributions increased $33.3 million from fiscal year 2015. The member, employer and state contributions increased primarily due to the implementation of the Shared Responsibility Plan beginning July 1, 2010 which includes increased contributions from active and retired members, employers and the state.

Net investment income for the medical insurance plan decreased $16.7 million from $7.4 million in 2015 to negative $9.3 million in 2016. In 2014, net investment income totaled $67.7 million.

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2016, 2015 and 2014 were $4.6, $4.1 and $4.7 million respectively.

FUNDING

Since fiscal year 2008, the State has not paid all of the annual required contribution (ARC), as determined by the actuary, necessary to prefund the pension benefit requirements of members of the System. Over this period of time, because of the failure to fund the full ARC, the State's additional annual employer contributions have grown significantly from $60.5 million (Fiscal Year 2009) to $553 million (Fiscal Year 2019). The latest actuarial valuation was for the period ending June 30, 2016. This report reflects the System's actuarial value of assets totaling $17.5 billion and actuarial determined liabilities totaling $32 billion. The funded ratio of actuarial assets to liabilities is 54.6%. Based upon these circumstances, the actuary opines the pension system is not being funded on an actuarially sound basis. Because a plan to address the unfunded liability is not in place, the State's credit rating has been downgraded. Moreover, taxpayers pay higher ultimate pension costs as liability grows compounded.

For the 2016-2018 biennium, the State budgeted $973 million of additional employer contributions for the unfunded liability of the System. Assuming that contributions to the System are made by the state from year to year in the future as recommended by the actuary, the System should have sufficient assets to provide the benefits defined by law.

The actuarial funding of the medical insurance and life insurance plans is provided in the Schedule of Funding Progress presented in the Required Supplementary Information. The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the entry age cost method. Although the medical insurance plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding. Effective July 1, 2010 the Shared Responsibility Plan for funding retiree health benefits requires members, retirees, participating employers and the state to make contributions for pre-funding retiree medical benefits. Annual required contributions of the medical insurance plan are provided in the Schedule of Employer Contributions presented in the Required Supplementary Information. Past shortfalls of employer contributions has resulted in an accumulated net Other Post Employment Benefit obligation of $1,394,141,069 as of June 30, 2016.

HISTORICAL TRENDS

Accounting standards require that the Statement of Fiduciary Net Position present asset values at fair value and include only benefits and refunds due to plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Detailed information regarding the funded status, including the key actuarial assumptions, target allocations and the sensitivity of the blended discount rate of the pension plan can be found in Note 4 of the financial statements. The blended discount rate mandated by accounting standards result in a lower funding level when compared to the actuarially determined funded levels reported in past years. The Schedule of Employer Contributions is provided in the Required Supplementary Information.

The System's independent consulting actuaries are members of the American Academy of Actuaries and experienced in performing valuations for public retirement systems. As mandated by state law, the valuations of the retirement annuity and health care plans are prepared in accordance with principles of practice prescribed by the Actuarial Standards Board consistent with accepted actuarial procedures. Actuarial assumptions used in the valuations are internally consistent and reasonable based on the actual experience of the plans. An actuarial audit was completed in 2015, which confirmed the accuracy of actuarial procedures and the reasonableness of assumptions. A five-year experience study was completed in 2016, which also confirmed the reasonableness of assumptions based upon the actual experience of the plans. The actuarial assumptions reflected in the results may be reasonably relied upon. However, projections using other assumptions may produce significantly different results.

This financial report is designed to provide citizens, participating employers, plan members, and other users with an overview of the Kentucky Teachers' Retirement System's fiscal practices and responsibility. If you have questions or need additional information, please contact Mark Whelan, Chief Financial Officer, Kentucky Teachers' Retirement System at 479 Versailles Road, Frankfort, Kentucky 40601.

STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2016

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 15,156,496	$ 59,843,503	$	$ 481	$ 75,000,480
Prepaid Expenses	89,235				89,235
Receivables					
Contributions	34,664,070	21,525,458	95,285		56,284,813
Due From Other Trust Funds	3,719,997				3,719,997
State of Kentucky	22,766,523	1,359,808	54,392		24,180,723
Investment Income	39,619,872	1,333,953	1,090,402	2,417	42,046,644
Investment Sales Receivable	18,182,733	633,642			18,816,375
Other Receivables	559,913	33,481,047			34,040,960
Total Receivables	119,513,108	58,333,908	1,240,079	2,417	179,089,512
Investments at Fair Value (See Note 5)					
Short-Term Investments	507,724,996	18,186,502	913,077	410,590	527,235,165
Bonds and Mortgages	2,734,474,510	62,555,400	89,200,103	290,132	2,886,520,145
Equities	10,267,066,002	354,369,798		242,351	10,621,678,151
Alternative Investments	932,813,350	23,931,317			956,744,667
Real Estate	940,860,202	25,433,241			966,293,443
Additional Categories	1,309,513,418	137,075,842			1,446,589,260
Total Investments, at fair value	16,692,452,478	621,552,100	90,113,180	943,073	17,405,060,831
Invested Security Lending Collateral	441,380,830				441,380,830
Capital Assets, at cost net of accumulated depreciation of $6,022,382 (See Note 2)	16,973,670				16,973,670
Total Assets	17,285,565,817	739,729,511	91,353,259	945,971	18,117,594,558
LIABILITIES					
Accounts Payable	1,917,838	19,811	325,494		2,263,143
Due to Other Trust Funds	1,935,385	1,747,115	36,837	660	3,719,997
Revenues Collected in Advance		2,047,051			2,047,051
Investment Purchases Payable	27,499,881	2,134,567			29,634,448
Obligations Under Securities Lending	441,380,830				441,380,830
Total Liabilities	472,733,934	5,948,544	362,331	660	479,045,469
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 16,812,831,883	$ 733,780,967	$ 90,990,928	$ 945,311	$ 17,638,549,089

The "Combining Statement of Fiduciary Net Position - Other Funds" is presented on page 26.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2015

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 153,403,413	$ 27,608,169	$ $688,739	$ $66,698	$ 181,767,019
Prepaid Expenses	109,881	1,000			110,881
Receivables					
Contributions	50,495,681	7,531,532	67,162		58,094,375
Due From Other Trust Funds	4,312,155				4,312,155
State of Kentucky	26,885,159	2,580,839	61,789		29,527,787
Investment Income	40,683,260	1,289,669	999,217	2,434	42,974,580
Investment Sales Receivable	172,483,377	673,686			173,157,063
Other Receivables	588,560	16,979,307			17,567,867
Total Receivables	295,448,192	29,055,033	1,128,168	2,434	325,633,827
Investments at Fair Value (See Note 5)					
Short-Term Investments	611,762,670	35,611,846	2,374,735	439,079	650,188,330
Bonds and Mortgages	2,945,268,960	42,746,464	85,589,214	250,032	3,073,854,670
Equities	11,163,565,280	355,702,555		226,083	11,519,493,918
Alternative Investments	844,688,096	11,698,357			856,386,453
Real Estate	825,335,346	1,762,328			827,097,674
Additional Categories	1,385,897,391	134,576,358			1,520,473,749
Total Investments, at fair value	17,776,517,743	582,097,908	87,963,949	915,194	18,447,494,794
Invested Security Lending Collateral	498,859,702				498,859,702
Capital Assets, at cost net of accumulated depreciation of $4,486,539 (See Note 2)	14,906,438				14,906,438
Total Assets	18,739,245,369	638,762,110	89,780,856	984,326	19,468,772,661
LIABILITIES					
Accounts Payable	1,666,331	20,094	360	4	1,686,789
Due to Other Trust Funds		4,277,470	33,989	696	4,312,155
Revenues Collected in Advance		4,914,365			4,914,365
Investment Purchases Payable	189,588,599	2,587,811			192,176,410
Obligations Under Securities Lending	498,859,702				498,859,702
Total Liabilities	690,114,632	11,799,740	34,349	700	701,949,421
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 18,049,130,737	$ 626,962,370	$ 89,746,507	$ 983,626	$ 18,766,823,240

The "Combining Statement of Fiduciary Net Position - Other Funds" is presented on page 26.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For the Fiscal Year Ended June 30, 2016

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
State of Kentucky	$ 484,986,954	$ 74,367,250	$ 872,990	$	$ 560,227,194
Other Employers	80,467,636	104,271,120	164,779		184,903,535
Members	313,044,226	184,365,215			497,409,441
Total Contributions	878,498,816	363,003,585	1,037,769		1,242,540,170
Other Income					
Recovery Income		43,328,335			43,328,335
Total Other Income		43,328,335			43,328,335
Investment Income/(Loss)					
Net Appreciation/(Depreciation) in Fair Value of Investments	(584,310,367)	(16,291,780)	1,742,044	41,543	(598,818,560)
Interest	162,339,804	8,029,465	3,095,887	10,013	173,475,169
Dividends	194,570,308	1,207,958		5,187	195,783,453
Rental Income, Net	28,039,967				28,039,967
Securities Lending, Gross Earnings	2,767,119		3,550	404	2,771,073
Gross Investment Income/(Loss)	(196,593,169)	(7,054,357)	4,841,481	57,147	(198,748,898)
Less: Investment Expense	(47,791,624)	(2,278,133)	(11,080)	(116)	(50,080,953)
Less: Securities Lending Expense	(830,067)		(1,065)	(121)	(831,253)
Net Investment Income/(Loss)	(245,214,860)	(9,332,490)	4,829,336	56,910	(249,661,104)
Total Additions	633,283,956	396,999,430	5,867,105	56,910	1,036,207,401
DEDUCTIONS					
Benefits	1,833,198,630		4,595,489	94,665	1,837,888,784
Refunds of Contributions	27,747,742				27,747,742
Insurance Expenses		288,494,763			288,494,763
Administrative Expense	8,636,438	1,686,070	27,195	560	10,350,263
Total Deductions	1,869,582,810	290,180,833	4,622,684	95,225	2,164,481,552
Net Increase (Decrease)	(1,236,298,854)	106,818,597	1,244,421	(38,315)	(1,128,274,151)
Net Position - Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	18,049,130,737	626,962,370	89,746,507	983,626	18,766,823,240
End of Year	$ 16,812,831,883	$ 733,780,967	$ 90,990,928	$ 945,311	$ 17,638,549,089

The "Combining Statement of Changes in Fiduciary Net Position - Other Funds" is presented on page 27.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For the Fiscal Year Ended June 30, 2015

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
State of Kentucky	$ 480,073,445	$ 67,608,148	$ 855,012	$	$ 548,536,605
Other Employers	79,505,845	77,655,778	164,507	80,000	157,406,130
Members	308,159,763	157,467,680			465,627,443
Total Contributions	867,739,053	302,731,606	1,019,519	80,000	1,171,570,178
Other Income					
Recovery Income		22,820,427			22,820,427
Total Other Income		22,820,427			22,820,427
Investment Income					
Net Appreciation/(Depreciation) in Fair Value of Investments	429,089,219	783,495	(1,131,703)	17,183	428,758,194
Interest	242,306,932	7,901,793	3,130,146	9,317	253,348,188
Dividends	204,861,024			4,391	204,865,415
Rental Income, Net	28,785,045				28,785,045
Securities Lending, Gross Earnings	2,661,499		204	172	2,661,875
Gross Investment Income	907,703,719	8,685,288	1,998,647	31,063	918,418,717
Less: Investment Expense	(44,726,561)	(1,330,584)	(8,262)	(89)	(46,065,496)
Less: Securities Lending Expense	(798,399)		(61)	(51)	(798,511)
Net Investment Income	862,178,759	7,354,704	1,990,324	30,923	871,554,710
Total Additions	1,729,917,812	332,906,737	3,009,843	110,923	2,065,945,315
DEDUCTIONS					
Benefits	1,741,456,095		4,061,000	97,230	1,745,614,325
Refunds of Contributions	23,032,624				23,032,624
Insurance Expenses		240,394,582			240,394,582
Administrative Expense	8,868,971	1,545,235	25,306	606	10,440,118
Total Deductions	1,773,357,690	241,939,817	4,086,306	97,836	2,019,481,649
Net Increase (Decrease)	(43,439,878)	90,966,920	(1,076,463)	13,087	46,463,666
Net Position - Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	18,092,570,615	535,995,450	90,822,970	970,539	18,720,359,574
End of Year	$ 18,049,130,737	$ 626,962,370	$ 89,746,507	$ 983,626	$ 18,766,823,240

The "Combining Statement of Changes in Fiduciary Net Position - Other Funds" is presented on page 28.
The accompanying notes are an integral part of these financial statements.

Combining Statement of Fiduciary Net Position - Other Funds
As of June 30, 2016

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 481	$	$ 481
Receivables				
Investment Income	111		2,306	2,417
Investments at Fair Value				
Short Term Investments	352,773		57,817	410,590
Bonds and Mortgages			290,132	290,132
Equities			242,351	242,351
Total Investments	352,773		590,300	943,073
Total Assets	352,884	481	592,606	945,971
Liabilities				
Due to Other Trust Funds	110	389	161	660
Total Liabilities	110	389	161	660
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 352,774	$ 92	$ 592,445	$ 945,311

Combining Statement of Fiduciary Net Position - Other Funds
As of June 30, 2015

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 66,698	$	$ 66,698
Receivables				
Investment Income	26		2,408	2,434
Investments at Fair Value				
Short Term Investments	363,978		75,101	439,079
Bonds and Mortgages			250,032	250,032
Equities			226,083	226,083
Total Investments	363,978		551,216	915,194
Total Assets	364,004	66,698	553,624	984,326
Liabilities				
Accounts Payable	2		2	4
Due to Other Trust Funds	119	410	167	696
Total Liabilities	121	410	169	700
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 363,883	$ 66,288	$ 553,455	$ 983,626

The accompanying notes are an integral part of these financial statements.

Combining Statement of Changes in Fiduciary Net Position - Other Funds
For the Fiscal Year Ended June 30, 2016

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Investment Income				
Net Appreciation in Fair Value of Investments	$	$	$ 41,543	$ 41,543
Interest	863		9,150	10,013
Dividends			5,187	5,187
Securities Lending, Gross			404	404
Gross Investment Income	863		56,284	57,147
Less Investment Expense	(43)		(73)	(116)
Less Securities Lending Expense			(121)	(121)
Net Investment Income	820		56,090	56,910
Total Additions	820		56,090	56,910
Deductions				
Benefits	11,858	65,807	17,000	94,665
Administrative Expense	71	389	100	560
Total Deductions	11,929	66,196	17,100	95,225
Net Increase (Decrease)	(11,109)	(66,196)	38,990	(38,315)
Net Position - Restricted for Pension and Other Postemployment Benefits Beginning of Year	363,883	66,288	553,455	983,626
End of Year	$ 352,774	$ 92	$ 592,445	$ 945,311

The accompanying notes are an integral part of these financial statements.

Combining Statement of Changes in Fiduciary Net Position - Other Funds
For the Fiscal Year Ended June 30, 2015

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Contributions				
Other Employers	$	$ 80,000	$	$ 80,000
Investment Income				
Net Appreciation in Fair Value of Investments			17,183	17,183
Interest	261		9,056	9,317
Dividends			4,391	4,391
Securities Lending, Gross			172	172
Gross Investment Income	261		30,802	31,063
Less Investment Expense	(37)		(52)	(89)
Less Securities Lending Expense			(51)	(51)
Net Investment Income	224		30,699	30,923
Total Additions	224	80,000	30,699	110,923
Deductions				
Benefits	13,423	65,807	18,000	97,230
Administrative Expense	84	410	112	606
Total Deductions	13,507	66,217	18,112	97,836
Net Increase (Decrease)	(13,283)	13,783	12,587	13,087
Net Position - Restricted for Pension and Other Postemployment Benefits				
Beginning of Year	377,166	52,505	540,868	970,539
End of Year	$ 363,883	$ 66,288	$ 553,455	$ 983,626

The accompanying notes are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS

Note 1: Description of Retirement Annuity Plan

A. REPORTING ENTITY

The Kentucky Teachers' Retirement System (TRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). TRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. TRS is a cost-sharing multiple-employer defined benefit plan with a special funding situation established to provide retirement annuity plan coverage for local school districts and other public educational agencies in the Commonwealth.

KRS 161.250 provides that the general administration and management of TRS, and the responsibility for its proper operation, is vested in a board of trustees. The board of trustees consists of the chief state school officer, the State Treasurer, and seven elected trustees. Four of the elected trustees are active teachers, two are not members of the teaching profession, and one is an annuitant of the System.

B. PARTICIPANTS

As of June 30, 2016 a total of 208 employers participated in the plan. Employers are comprised of local school districts, Department of Education Agencies, universities, the Kentucky Community and Technical College System, and other educational organizations. The State under the Governmental Accounting Standards Board (GASB) No. 67 is recognized as a non-employer contributing entity providing the employer matching contributions for members employed by the local school districts and regional educational cooperatives.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

	2016	2015
Active contributing members:		
Vested	48,292	48,426
Non-vested	23,556	23,820
Inactive members, vested	9,240	8,051
Retirees and beneficiaries currently receiving benefits	51,563	49,822
Total members, retirees, and beneficiaries	**132,651**	**130,119**

C. BENEFIT PROVISIONS

For Members Before July 1, 2008:

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete twenty-seven (27) years of Kentucky service.

Non-university members receive monthly payments equal to two percent (2%) (service prior to July 1, 1983) and two and one-half percent (2.5%) (service after July 1, 1983) of their final average salaries for each year of credited service. Non-university members who became members on or after July 1, 2002 will receive monthly benefits equal to two percent (2%) of their final average salary for each year of service if, upon retirement, their total service is less than ten (10) years. New members after July 1, 2002 who retire with ten (10) or more years of total service will receive monthly benefits equal to two and one-half percent (2.5%) of their final average salary for each year of service, including the first ten (10) years. In addition, non-university members who retire July 1, 2004 and later with more than thirty (30) years of service will have their multiplier increased for all years over thirty (30) from two and one-half

Note 1: Description of Retirement Annuity Plan continued . . .

percent (2.5%) to three percent (3%) to be used in their benefit calculation.

University employees receive monthly benefits equal to two percent (2%) of their final average salary for each year of credited service.

The final average salary is the member's five (5) highest annual salaries except members at least age fifty-five (55) with twenty-seven (27) or more years of service may use their three (3) highest annual salaries. For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service. The minimum annual service allowance for all members is $440 multiplied by credited service.

For Members On or After July 1, 2008:

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age sixty (60) and complete five (5) years of Kentucky service, or

2.) Complete twenty-seven (27) years of Kentucky service, or

3.) Attain age fifty-five (55) and complete ten (10) years of Kentucky service.

The annual retirement allowance for non-university members is equal to: (a) one and seven tenths percent (1.7%) of final average salary for each year of credited service if their service is 10 years or less; (b) two percent (2.0%) of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) two and three tenths percent (2.3%) of final average salary for each year of credited service if their service is greater than 20 years but no more than 26 years; (d) two and one half percent (2.5%) of final average salary for each year of credited service if their service is greater than 26 years but no more than 30 years; (e) three percent (3.0%) of final average salary for years of credited service greater than 30 years.

The annual retirement allowance for university members is equal to: (a) one and one-half percent (1.5%) of final average salary for each year of credited service if their service is 10 years or less; (b) one and seven tenths percent (1.7%) of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) one and eighty five hundredths percent (1.85%) of final average salary for each year of credited service if their service is greater than 20 years but less than 27years; (d) two percent (2.0%) of final average salary for each year of credited service if their service is greater than or equal to 27 years.

The final average salary is the member's five (5) highest annual salaries except members at least age fifty-five (55) with twenty-seven (27) or more years of service may use their three (3) highest annual salaries. For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Other Benefits:

TRS provides post-employment medical benefits to retirees as fully described in Note 8. The Retirement System also provides disability benefits for vested members at the rate of sixty percent (60%) of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half percent (1.5%) annually. Additional ad hoc increases and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching contributions are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

TRS has seven cash accounts. At June 30, 2016, the retirement annuity cash account totaled a negative $11,989,861, the control cash account totaled $24,299,653 and the administrative expense fund cash account was $2,846,704 for a total of $15,156,496 as carrying value of cash in the defined benefit plan. The medical insurance trust cash account totaled $37,716,487, the medical insurance 401(h) cash account totaled $22,013,449 and the medical insurance claims cash account totaled $113,567 for a total of $59,843,503 as carrying value of cash in the medical insurance plan. The excess benefit fund cash account contained $481. Therefore, the carrying value of cash was $75,000,480 and the bank balance was $78,232,834 and funds controlled by the Commonwealth of Kentucky of $5,895,564. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2016.

C. CAPITAL ASSETS

Property and equipment are carried at cost, less accumulated depreciation. All costs of property and equipment $5,000 (actual dollars) or greater are capitalized. Expenditures for maintenance and repairs are charged to operations as incurred. Depreciation is calculated using the straight-line method, with estimated lives ranging from five to forty years in the following major classes: office furniture and equipment, five years; other equipment, five years; computer software, ten years; TRS office buildings, forty years. The Pathway System will replace TRS's legacy computer system and be TRS's primary line of business information technology system. The Pathway System will be capitalized and amortized or depreciated over ten years. As of June 30, 2016, the project to build and implement the Pathway System was substantially complete.

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers. Alternative investments such as private equity, timberland, and other additional categories, such as opportunistic credit, high yield bonds, and direct lending are valued using the most recent general partner statement of fair value based on independent appraisals, updated for any subsequent partnership interests' cash flows.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in fiduciary net position. Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by TRS's employees are recorded when earned. Upon termination or retirement, employees of TRS are paid for accumulated vacation time limited to sixty (60) days and accumulated compensatory time limited to two hundred-forty (240) hours. As of June 30, 2016 and 2015 accrued compensated absences were included in the accounts payable on the balance sheet amounting to $1,166,764 and $1,135,872, respectively.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which TRS is exposed. In order to cover such risks TRS carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

Note 2: Summary of Significant Accounting Policies continued . . .

G. OTHER RECEIVABLES

TRS allows qualified purchases of service credit to be made by installment payments not to exceed a five (5) year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2016 and 2015 installment contract receivables were $559,913 and $588,560, respectively.

H. USE OF ESTIMATES

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates. The most significant estimates impacting the financial statements relate to the actuarial assumptions.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The System's management believes that it has operated the plans within the constraints imposed by federal tax law.

J. RECENT PRONOUNCEMENTS

In February 2015, GASB issued Statement No. 72, Fair Value Measurement and Application. This pronouncement clarifies the definition of fair value for financial reporting purposes, establishes general principles for measuring fair value, providing additional fair value guidance, and enhancing disclosures about fair value measurements. GASB Statement No. 72 is effective for fiscal years beginning after June 15, 2015. Accordingly, TRS adopted the statement for the fiscal year ended June 30, 2016.

In June 2015, GASB issued Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans and Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits other Than Pensions. GASB Statement No. 74 replaces GASB Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. GASB Statement No. 75 replaces GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefit Plans Other Than Pensions. GASB Statement No. 74 is effective for fiscal years beginning after June 15, 2016, and GASB Statement No. 75 is effective for fiscal years beginning after June 15, 2017. At this time, management is reviewing the recently issued pronouncements to determine the impact on TRS's financial statements.

In March 2016, GASB issued Statement No. 82, Pension Issues. This Statement clarifies issues raised with respect to GASB Statements No. 67, 68 and 73. Specifically, Statement No. 82 addresses issues regarding the presentation of payroll-related measures in required supplementary information, the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes and the classification of payments made by employers to satisfy plan member contribution requirements. GASB Statement No. 82 is effective for fiscal years beginning after June 15, 2016. TRS early adopted the statement during, fiscal year ended June 30, 2016, which did not have a significant impact.

Note 3: Contributions and Funds of the System

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Non-university members are required to contribute 12.855 percent of their salaries to the System effective July 1, 2015; university members are required to contribute 10.40 percent of their salaries effective July 1, 2015. KRS 161.565 allows each university to reduce the contribution of its members by 2.215 percent; therefore, university members contribute 8.185 percent of their salary to TRS. For members employed by local school districts, the State, as a non-employer contributing entity, contributes 13.105 percent of salary for those who joined before July 1, 2008 and 14.105 percent for those who joined thereafter.

Other participating employers are required to contribute the percentage contributed by members plus an additional 3.25 percent of members' gross salaries.

The member and employer contributions consist of retirement annuity contributions and other post-employment benefit contributions to the medical and life insurance plans. The member post-employment medical contribution is 3.75 percent. The employer post-employment medical contribution is .75 percent of member gross salaries. Also, after July 1, 2015 employers (other than the state) contribute 3.0 percent of members' salaries and the state contributes the net cost of health insurance premiums for new retirees after June 30, 2010 in the non-Medicare eligible group. If a member leaves covered employment before accumulating five (5) years of credited service, accumulated member contributions to the retirement annuity plan plus interest are refunded upon the member's request.

B. FUNDS OF THE SYSTEM

Teacher Savings Fund

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from the Guarantee Fund. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Allowance Reserve Fund, the fund from which retirement benefits are paid.

State Accumulation Fund

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky.

Allowance Reserve Fund

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of TRS. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from the Guarantee Fund.

Guarantee Fund

This fund was established by KRS 161.420(6) as the Guarantee Fund, to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of TRS, and deficiencies not covered by the other funds.

Administrative Expense

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from the Guarantee Fund is used to pay the administrative expenses of TRS. Administrative expenses are allocated among the funds based on benefits paid.

Note 4: Net Pension Liability of Employers

A. NET PENSION LIABILITY OF EMPLOYERS

The net pension liability (i.e., the System's liability determined in accordance with GASB No. 67 less the fiduciary net position) as of June 30, 2016 is shown below.

Net Pension Liability of Employers
(In thousands of dollars)

Fiscal Year Ending June 30	Total Pension Liability	Plan Fiduciary Net Position	Employers Net Liability	Plan Fiduciary Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
	A	B	(A-B)	(B/A)	C	[A-B/C]
2016	$ 47,736,901	$ 16,812,832	$ 30,924,069	35.2 %	$ 3,390,539	912.07 %

B. SUMMARY OF ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below.

Valuation Date	6/30/2015
Actuarial cost method	Entry Age
Actuarial Assumptions:	
Investment rate of return	7.50%, net of pension plan investment expense, including inflation.
Projected salary increases	4.00 - 8.20%, including inflation
Inflation rate	3.50%
Municipal Bond Index Rate	3.01%
Single Equivalent Interest Rate	4.20%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale AA to 2020 with a setback of 1 year for females. The results of the experience study for the period July 1, 2010 - June 30, 2015 will be reflected in the June 30, 2016 valuation and the June 30, 2017 GASB 67 report.

C. TARGET ALLOCATIONS

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	45.0 %	6.4 %
Non U.S. Equity	17.0	6.5
Fixed Income	24.0	1.6
High Yield Bonds	4.0	3.1
Real Estate	4.0	5.8
Alternatives	4.0	6.8
Cash	2.0	1.5
Total	100.0 %	

Note 4: Net Pension Liability of Employers continued ...

D. DISCOUNT RATE

The discount rate used to measure the total pension liability was 4.20%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the Employer contributions will be made at statutorily required rates, and the additional amounts appropriated for fiscal years 2017 and 2018. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2040 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2039 and a municipal bond index rate of 3.01% was applied to all periods of projected benefit payments after 2039. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

The following table presents the net pension liability of the System, calculated using the discount rate of 4.20%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.20%) or 1-percentage-point higher (5.20%) than the current rate:

(in thousands)	1% Decrease (3.20%)	Current Discount Rate (4.20%)	1% Increase (5.20%)
System's net pension liability	$ 37,937,230	$ 30,924,069	$ 25,168,197

June 30, 2015 is the actuarial valuation date upon which the TPL is based. The TPL from this valuation was determined using a discount rate of 4.20% which was based on a municipal bond index rate as of that date equal to 3.01%. The TPL used last year was determined using a discount rate equal to 4.88%, which was based on a municipal bond index rate of 3.82%. These two amounts are rolled forward to June 30, 2016 using standard roll forward techniques. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate (SEIR) for the year. The difference between the two roll-forward amounts as of June 30, 2016 is the gain or loss due to changes in assumptions and other inputs.

In addition, we have determined an expected TPL as of June 30, 2016 based on the TPL roll-forward in the June 30, 2015 GASB 67 report. The difference between this amount and the roll-forward of the actual TPL based on the 4.88% interest rate is reflected as an experience gain or loss for the year. These procedures are shown in the following table:

TPL Roll-Forward *(In thousands of dollars)*	Expected	Actual Before Assumption Change	Actual After Assumption Change
(a) Interest Rate	4.88%	4.88%	4.20%
(b) TPL as of June 30, 2015	$ 42,476,699	$ 42,421,364	$ 46,355,565
(c) Entry Age Normal Cost for the Year July 1, 2015 - June 30, 2016	1,120,893	1,120,893	1,334,428
(d) Actual Benefit Payments (including refunds) For the year July 1, 2015 - June 30, 2016	1,860,946	1,860,946	1,860,946
(e) TPL as of June 30, 2016 (b) x (1 + (a)) + (c) - (d) x (1 + 0.5 x (a))	43,764,102	43,706,067	47,736,901
(f) Difference between Expected and Actual Experience (Gain)/Loss		(58,035)	
(g) Difference due to change in Assumptions and Other Inputs (Gain)/Loss			4,030,834

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of TRS' financial statements assess the risks TRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430.

TRS administers a retirement annuity trust fund and a health insurance trust fund in accordance with state and federal law. TRS provides service and disability retirement benefits, death and survivor benefits, health insurance benefits, and life insurance benefits for Kentucky public education employees and their beneficiaries. The trust funds managed by TRS shall be referred to collectively as the "System" unless the context requires a specific reference to a particular fund.

The asset allocation parameters for the retirement annuity trust fund are set forth in Title 102, Chapter 1:175, Section 2 and Section 3 of the Kentucky Administrative Regulations as follows:

- There shall be no limit on the amount of investments owned by the retirement annuity trust fund if the investments are guaranteed by the United States government.
- Not more than thirty-five percent (35%) of the assets of the retirement annuity trust fund at fair value shall be invested in corporate debt obligations.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in foreign debt.
- Not more than sixty-five percent (65%) of the assets of the retirement annuity trust fund at fair value shall be invested in common stocks or preferred stocks.
- Not more than twenty-five percent (25%) of the assets of the retirement annuity trust fund at fair value shall be invested in a stock portfolio designed to replicate a general stock index.
- Not more than thirty percent (30%) of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in alternative investments. This category may include private equity, venture capital, timberland, and infrastructure investments.
- Not more than fifteen percent (15%) of the assets of the retirement annuity trust fund at fair value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

The asset allocation parameters for the health insurance trust fund are set forth in Title 102, Chapter 1:178, Section 2 of the Kentucky Administrative Regulations as follows:

- In order to preserve the assets of the health insurance trust fund and produce the required rate of return while minimizing risk, assets shall be prudently diversified among various classes of investments.
- In determining asset allocation policy, the investment committee and the board shall be mindful of the health insurance trust fund's liquidity and its capability of meeting both short and long-term obligations.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the System's deposits may not be returned to the System. The System's total cash balance held at J.P. Morgan Chase Bank in noninterest-bearing accounts on June 30, 2016 was $78,232,834. In addition to these funds, an amount of $5,895,564 represents funds transferred to and controlled by the Commonwealth of Kentucky.

On November 9, 2010, the FDIC issued a Final Rule implementing Section 343 of the Dodd-Frank Wall Street Reform and Consumer Protection Act that provides for unlimited insurance coverage of noninterest-bearing transaction accounts. Beginning January 1, 2013, all cash balances at J.P. Morgan Chase Bank were insured up to $250,000 and the remaining balances fully collateralized with securities held by the Federal Reserve Bank of New York in the name of the Commonwealth of Kentucky-Teachers' Retirement.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,
b. collateralized with securities held by the pledging financial institution, or
c. collateralized with securities held by the pledging financial institution's trust department or agent

but not in the depositor-government's name.

As of June 30, 2016, the System's cash balance in the amount of $78,232,834 was not exposed to custodial credit risk since this amount was fully insured by the FDIC limit of $250,000 and the remaining balances collateralized with securities valued at $153,685,487.

C. INVESTMENTS

All of the System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, alternative investments, and additional categories as permitted by regulation. These assets are reported at fair value.

Investments are governed by the Board of Trustees' policies while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following chart represents the fair values of the investments of the Teachers' Retirement System of the State of Kentucky for June 30, 2016 and 2015.

Schedule of Investments
Retirement Annuity Trust

	Fair Value June 30, 2016	Fair Value June 30, 2015
Money Market Fund*	$ 508,661,966	$ 614,434,346
STIFF (BNYM)	386,697	142,138
Total Cash Equivalents	**509,048,663**	**614,576,484**
U.S. Government	797,819,019	769,355,884
Agency Bonds	55,607,806	82,898,405
Mortgage Backed Securities	90,812,117	103,213,170
Asset Backed Securities	62,625,012	82,126,975
Commercial Mtg Backed Securities	61,720,221	118,318,341
Collateralized Mtg Obligations	27,572,453	12,884,110
Municipal Bonds	405,755,392	444,405,813
Corporate Bonds	1,322,052,725	1,417,905,508
Total Fixed Income	**2,823,964,745**	**3,031,108,206**
International Equity	3,681,811,400	3,964,258,297
U.S. Equity	6,585,496,953	7,199,533,066
Total Equities	**10,267,308,353**	**11,163,791,363**
Real Estate Equity	940,860,202	825,335,346
Total Real Estate Equity	**940,860,202**	**825,335,346**
Private Equity	731,560,317	636,890,428
Timberland	201,253,033	207,797,668
Total Alternative Investments	**932,813,350**	**844,688,096**
Opportunistic Credit	512,173,863	524,212,360
Corporate Bonds	411,948,487	308,659,155
Corporate Loans	385,391,068	463,525,551
International Bonds		89,500,325
Total Additional Categories	**1,309,513,418**	**1,385,897,391**
TOTAL INVESTMENTS	**$ 16,783,508,731**	**$ 17,865,396,886**

** Money Market Funds consist of the Life Insurance Plan, 403(b) Tax Shelter Plan, and Losey Scholarship fund.*

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments
Health Insurance Trust

	Fair Value June 30, 2016	Fair Value June 30, 2015
Money Market Fund	$ 18,186,502	$ 36,640,065
STIFF (BNYM)		(1,028,219)
Total Cash Equivalents	**18,186,502**	**35,611,846**
Agency Bonds	6,380,550	1,000,830
Corporate Bonds	56,174,850	41,745,634
Total Fixed Income	**62,555,400**	**42,746,464**
Global Equities	354,369,798	355,702,555
Total Equities	**354,369,798**	**355,702,555**
Real Estate Equity	25,433,241	1,762,328
Total Real Estate Equity	**25,433,241**	**1,762,328**
Private Equity	23,931,317	11,698,357
Total Alternative Investments	**23,931,317**	**11,698,357**
Opportunistic Credit	45,955,526	43,821,956
Corporate Bonds	64,192,800	65,525,790
Corporate Loans	26,927,516	25,228,612
Total Additional Categories	**137,075,842**	**134,576,358**
TOTAL INVESTMENTS	**$ 621,552,100**	**$ 582,097,908**

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the System, and are held by either:

a. the counterparty or
b. the counterparty's trust department or agent, but not in the System's name.

The cash reserve of the System is primarily maintained in high quality short term investments through the Dreyfus Institutional Cash Advantage Fund. This fund invests in a diversified portfolio of high quality, short-term debt securities and the Fund is rated AAA by S&P, Moody's, and Fitch, Inc. The Fund's portfolio is structured within the confines of Rule 2a-7 under the Investment Company Act of 1940, as amended. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, bankers' acceptances, repurchase agreements, time deposits, etc. are all permissible investments within this Fund.

Whenever repurchase agreements are ordered by TRS under the terms of Master Repurchase Agreements with various brokers, the terms are dictated by TRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and TRS' nominee name. This account is unique to TRS. The Master Repurchase Agreements require that the supporting collateral have a fair value of at least 102 percent of the value of the repurchase agreements.

As of June 30, 2016, cash collateral reinvestment securities acquired through securities lending for the retirement annuity trust fund by TRS's custodian, who is also the lending agent/counterparty, amounted to $441,380,830 related to $435,403,965 securities lent consistent with the lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the System's investments. In general, the longer the period until an investment matures, the greater the risk of a negative impact on fair value resulting from changes in interest rates.

As of June 30, 2016, the retirement annuity trust and health insurance trusts had the following investment fair values and weighted average maturities:

Retirement Annuity Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
U.S. Government	$ 797,819,019	$	8.34
Agency	55,607,806		8.61
MBS	90,812,117		12.24
CMO	27,572,453		12.67
ABS	62,625,012		14.31
CMBS	61,720,221		20.55
Muni	405,755,392		12.47
Corporate Bonds	1,322,052,725	411,948,488	7.83
Corporate Loans*	-	380,989,944	4.56
TOTAL	**$ 2,823,964,745**	**$ 792,938,432**	**8.61**

** Does not include 4,401,124 in cash held directly at Babson Capital Management.*

Health Insurance Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
U.S. Government	$ 6,380,550	$	11.53
Corporate Bonds	56,174,849	64,192,800	4.49
Corporate Loans		26,927,516	5.04
TOTAL	**$ 62,555,399**	**$ 91,120,316**	**4.88**

In addition to the above securities, the System held short-term cash investments in the Dreyfus Institutional Cash Advantage Fund and STIF, held at the Bank of New York Mellon, with a total fair value of $527,235,165 and had a weighted average maturity of twenty-four (24) days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology to quantify the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of changes in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the System manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

the System were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The retirement annuity trust held $90.8 million in mortgage-backed securities as of June 30, 2016, compared to $103.2 million as of June 30, 2015.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The retirement annuity trust held $27.6 million in collateralized mortgage obligations as of June 30, 2016, compared to $12.9 million as of June 30, 2015.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivables originated by banks, credit card companies, or other credit providers, and are considered to be moderately sensitive to changes in interest rates. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The retirement annuity trust held $62.6 million as of June 30, 2016, compared to $82.1 million as of June 30, 2015.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The System's commercial mortgage-backed securities investments consist of highly rated relatively senior tranches. The average maturity of the System's commercial mortgage-backed securities holdings in the schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The retirement annuity trust held $61.7 million in commercial mortgage-backed securities investments as of June 30, 2016, compared to $118.3 million as of June 30, 2015.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedules list the Retirement System's fixed income investment fair values (net of cash equivalents) according to credit ratings as of June 30, 2016:

Retirement Annuity Trust

Rating	Bonds & Mortgages	Additional Categories	Total	%
U.S. Government	$ 797,819,019	$	$ 797,819,019	22.06%
AAA	246,954,820		246,954,820	6.83%
AA	640,674,139		640,674,139	17.71%
A	517,571,569		517,571,569	14.31%
BBB	574,578,935	47,754,834	622,333,769	17.21%
BB	21,968,709	287,254,645	309,223,354	8.55%
B	13,654,700	267,438,487	281,093,187	7.77%
CCC	3,151,610	17,517,637	20,669,247	0.57%
CC		1,271,750	1,271,750	0.04%
D		836,481	836,481	0.02%
Not Rated	7,591,244	170,864,598	178,455,842	4.93%
TOTAL	**$ 2,823,964,745**	**$ 792,938,432**	**$ 3,616,903,177**	**100.00%**

Health Insurance Trust

Rating	Bonds & Mortgages	Additional Categories	Total	%
AAA	$ 5,042,219	$	$ 5,042,219	3.28%
AA	17,465,602		17,465,602	11.37%
A	26,633,606		26,633,606	17.33%
BBB	13,413,972	7,489,048	20,903,020	13.60%
BB		42,642,309	42,642,309	27.75%
B		34,663,206	34,663,206	22.56%
CCC		2,537,454	2,537,454	1.65%
D		194,842	194,842	0.13%
Not Rated		3,593,457	3,593,457	2.34%
TOTAL	**$ 62,555,399**	**$ 91,120,316**	**$ 153,675,715**	**100.00%**

Total fair value of the retirement annuity trust's fixed income portfolio was $3,616,903,177 on June 30, 2016. The health insurance trust's fixed income portfolio was valued at $153,675,715. The rating system used in the above charts is the Standard and Poor's rating system. For securities where a Standard and Poor's rating is not provided, another nationally recognized system is used and translated to the Standard and Poor's rating system.

In addition to the above categories, the retirement annuity trust held $523,351,505 in short term investments through the Dreyfus Institutional Cash Advantage Fund. The health insurance trust held $3,883,660 in the Dreyfus Institutional Cash Advantage Fund. The credit risk associated with this Fund is minimal as the securities held are required to maintain the highest possible short-term credit ratings by Moody's and Standard & Poor's. In addition, investments in US Government and Agency securities are also highly rated securities since they are backed by the US Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The retirement annuity trust fund's policy on credit rating is set forth in 102 KAR 1:175 and reads as follows:

"A fixed income investment shall be rated at the time of purchase as investment grade by at least one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. The fixed income investment portfolio as a whole shall maintain an average rating of investment grade by at least one (1) of the major rating services."

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the retirement annuity trust fund is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the System."

"The System's position in a single stock shall not exceed two and one-half (2.5) percent of the System's assets. The System's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program."

TRS has not invested greater than five percent (5%) of the retirement annuity trust fund's assets at fair value in any single issuer and is in compliance with investment policy.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. As of June 30, 2016, the System's exposure to foreign currency risk consisted of $4,226,815,771 and $210,884,648 in the retirement annuity trust and health insurance trust funds respectively.

The following tables respresent the fair values of investments that are subject to foreign currency as a result of cash contributions to each portfolio manager:

Retirement Annuity Trust

Commingled Funds		
Babson Capital European Loan Fd	$	83,723,731
Baillie Gifford Intrntl EAFE		734,894,403
Baring All Country World ex US		496,968,194
Black Rock ACWI EX-US IMI		600,737,023
UBS All Country World ex US		576,221,719
Alternative Funds		
Carlyle Europe Partners IV, L.P.		17,509,391
KKR & Co European Fund III		49,515,576
KKR & European Fund IV		16,088,979
Oaktree European Principal III		24,409,242
ADRs (Equities)		458,137,096
Cross-Listed Equities		718,502,718
Bonds (Fixed Income)		247,293,462
Additional Categories (Fixed Income)		83,423,983
Additional Categories (Opportunistic)		119,390,254
TOTAL	**$**	**4,226,815,771**

Health Insurance Trust

Commingled Funds		
Medical Ins. Black Rock Fund B	$	173,166,422
Alternative Funds		
Medical Ins. Carlyle Europe IV		3,501,879
Medical Ins. KKR European IV		3,217,797
Bonds (Fixed Income)		7,090,460
Additional Categories (Fixed Income)		12,602,739
Additional Categories (Opportunistic)		11,305,351
TOTAL	**$**	**210,884,648**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following tables reflect the various foreign currencies associated with the Retirement System's investments in the funds outlined previously:

Retirement Annuity Trust

Currency	Fair Value
Argentine Peso	$ 7,929,600
Austrailian Dollar	117,642,969
Bermudian Dollar	51,636,166
Brazilian Real	29,642,858
British Pound Sterling	542,857,180
Bulgarian Lev	325,816
Canadian Dollar	305,265,009
Cayman Islands Dollar	82,711,544
Chilean Peso	5,099,683
Chinese Yuan	149,888,039
Colombian Peso	6,919,734
Czech Crown	275,888
Danish Krone	69,964,944
Egyptian Pound	340,728
Euro	1,431,414,303
Hong Kong Dollar	148,792,516
Hungarian Forint	349,215
Indian Rupee	53,386,927
Indonesian Rupiah	7,086,814
Israeli New Shekel	50,530,727
Japanese Yen	504,456,061
Korean Won	39,837,403
Liberian Dollar	2,717,693
Malaysian Ringgit	8,375,874
Mexican Peso	60,042,605
Netherlands Antillean Guilder	31,869,794
New Zealand Dollar	1,468,579
Norwegian Krone	19,279,653
Panamanian Balboa	29,110,068
Peruvian Nuevo Sol	71,390
Philippine Peso	3,795,486
Polish Zloty	5,239,446
Qatari Rial	1,148,933
Russian Ruble	43,832,381
Singapore Dollar	14,630,090
South African Rand	35,391,881
Swedish Krona	109,926,460
Swiss Franc	143,631,290
Taiwan Dollar	73,906,720
Thai Baht	6,106,618
Turkish Lira	7,940,689
UAE Dirham	17,657,398
Various	4,318,599
TOTAL	**$ 4,226,815,771**

Health Insurance Trust

Currency	Fair Value
Austrailian Dollar	$ 10,520,315
Bermudian Dollar	1,766,016
Brazilian Real	2,477,384
British Pound Sterling	25,478,499
Canadian Dollar	18,803,103
Cayman Islands Dollar	2,812,299
Chilean Peso	447,558
Chinese Yuan	141,703
Colombian Peso	168,485
Czech Crown	59,152
Danish Krone	2,228,544
Egyptian Pound	85,907
Euro	62,852,767
Hong Kong Dollar	10,982,771
Hungarian Forint	92,975
Indian Rupee	3,416,016
Indonesian Rupiah	995,857
Israeli New Shekel	925,797
Japanese Yen	28,521,314
Korean Won	5,712,246
Liberian Dollar	223,243
Malaysian Ringgit	1,121,622
Mexican Peso	1,486,499
New Zealand Dollar	397,301
Norwegian Krone	866,284
Panamanian Balboa	168,383
Peruvian Nuevo Sol	19,342
Philippine Peso	564,995
Polish Zloty	401,767
Qatari Rial	309,925
Russian Ruble	826,876
Singapore Dollar	2,447,734
South African Rand	2,596,781
Swedish Krona	3,650,524
Swiss Franc	10,815,063
Taiwan Dollar	4,749,926
Thai Baht	921,116
Turkish Lira	498,876
UAE Dirham	326,765
Various	2,918
TOTAL	**$ 210,884,648**

The majority of foreign investments are held in commingled funds managed by Babson Capital Management, UBS Global Asset Management, Baillie Gifford, Baring Asset Management, and Black Rock. In addition to the commingled funds investing in foreign securities, the retirement annuity trust fund held $458,137,096 associated with foreign interests in American Depositary Receipt investments. These American Depositary Receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. American Depositary Receipts are denominated in U.S. currency. Also, the cross listed equities, in the amount of $718,502,718, represent securities domiciled in foreign countries, but are listed and traded on

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

U.S. exchanges. Other foreign securities and investments consisted of debt securities and alternative investment opportunities. Foreign holdings, including investment receivables/payables, that were not readably identifiable to a specific country were listed in the "various" category pertaining to currency type.

The retirement annuity trust fund's policy regarding foreign equities is that not more than thirty percent (30%) of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

Fair Value Measurement

TRS categorizes its fair value measurements within the fair value hierarchy established by GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date. Level 2 inputs are inputs - other than quoted prices included within Level 1 - that are observable for an asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for an asset or liability. The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. The following tables depict the following recurring fair value measurements as of June 30, 2016.

Retirement Annuity Trust

Investments	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash Equivalents	$ 509,048,663	$	$	$ 509,048,663
Fixed Income				
ABS		57,155,175	5,469,837	62,625,012
Agency		55,607,806		55,607,806
CMBS		61,720,221		61,720,221
CMO		27,572,453		27,572,453
Corporate Bonds	2,611,579	1,315,197,986	4,243,160	1,322,052,725
MBS		88,464,701	2,347,416	90,812,117
Muni		398,730,802	7,024,590	405,755,392
US Government	791,216,358	6,602,661	-	797,819,019
Total Fixed Income	793,827,937	2,011,051,805	19,085,003	2,823,964,745
Equities				
International	1,207,010,018	2,474,801,382		3,681,811,400
US Equity	6,389,949,438	195,547,351	164	6,585,496,953
Total Equity	7,596,959,456	2,670,348,733	164	10,267,308,353
Real Estate			940,860,202	940,860,202
Alternative Investments				
Private Equity			731,560,317	731,560,317
Timberland			201,253,033	201,253,033
Total Alternative Investments			932,813,350	932,813,350
Additional Categories				
Corporate Bonds	1,454,239	410,494,248		411,948,487
Corporate Loans		599,745	384,791,323	385,391,068
Opportunistic Credit			512,173,863	512,173,863
Total Additional Categories	1,454,239	411,093,993	896,965,186	1,309,513,418
TOTAL INVESTMENTS	**$ 8,901,290,295**	**$ 5,092,494,531**	**$ 2,789,723,905**	**$ 16,783,508,731**

Health Insurance Trust

Investments	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash Equivalents	$ 18,186,502	$	$	$ 18,186,502
Fixed Income				
Corporate Bonds		56,174,850		56,174,850
US Government	6,380,550			6,380,550
Total Fixed Income	6,380,550	56,174,850		62,555,400
Equities				
Global		354,369,798		354,369,798
Total Equity		354,369,798		354,369,798
Real Estate			25,433,241	25,433,241
Alternative Investments				
Private Equity			23,931,317	23,931,317
Total Alternative Investments			23,931,317	23,931,317
Additional Categories				
Corporate Bonds	87,780	64,105,020		64,192,800
Corporate Loans			26,927,516	26,927,516
Opportunistic Credit			45,955,526	45,955,526
Total Additional Categories	87,780	64,105,020	72,883,042	137,075,842
Total Investments	**$ 24,654,832**	**$ 474,649,668**	**$ 122,247,600**	**$ 621,552,100**

Cash Equivalents

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Cash equivalents can be valued with inputs from quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date and therefore are classified as Level 1 assets.

Equity and Fixed Income Securities

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors for these securities. Debt and equity securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique that values securities based on their relationship to benchmark quoted prices. Debt and equity securities classified in Level 3 are securities whose stated market price is unobservable by the market place and are instead priced by the issuers or industry groups for these securities.

Real Estate

Real Estate falls into the level 3 classification of the fair value hierarchy. Much of our real estate is comprised of owned properties leased to various commercial enterprises. The fair value measurement for real estate is determined by professional appraisals recurring every five years. Real Estate also includes some Limited Partnerships that are valued the same as Alternative Investments

Alternative Investments

Alternative Investments are comprised of Private Equity investments classified as Level 3 assets. Private equity funds invest in equity and debt securities issued by private and publicly-held companies in connection with leveraged buyouts, recapitalizations and expansion opportunities. These investments do not allow redemptions. Alternatively, we receive distributions as the underlying assets of the fund liquidate. These are investments for which exchange quotations are not readily available. Therefore, private equity investments are valued at an estimated fair value determined in good faith by the General Partner ("GP"). A GP is an owner of a partnership that has unlimited liability and is a managing partner that is active in the day to day business of a Limited Partnership. These investments are

initially valued at cost with subsequent adjustments that reflect third party transactions, financial operating results and other factors deemed relevant by the GP.

The GP values each investment by applying generally accepted valuations methods including the market approach and the income approach. The determination of fair value using these methodologies takes into consideration a range of factors, including but not limited to, the price at which the investment was acquired, the nature of the investment, local market conditions, trading values on public exchanges for comparable securities, current and projected operating performance and financing transactions subsequent to the acquisition of the investment. Because of the subjective nature of estimated fair value of the private investments, such values may differ significantly from the values that would have been used had a ready market existed for these investments.

Timberland Investments

Timberland investments are managed investments regarding the acquiring, growing and disposing of timber on timberlands owned by the System. Fair value determinations for Level 3 measurements of investments are the responsibility of the Advisor, The Molpus Woodlands Group, LLC. The Advisor contracts with outside appraisors to generate fair value estimates on an annual basis. The outside appraisors utilized the cost, sales comparison and income capitalization approaches to estimate the fair value of the timber and timberlands. The Advisor challenges the reasonableness of the assumptions used and reviews the methodology to ensure the estimated fair value complies with accounting standards generally accepted in the United States of America.

Additional Categories

Investments in this category do not fit the regular parameters for the retirement annuity trust fund set forth in Title 102, Chapter 1:175 of the Kentucky Administrative Regulations. Rather, they fall into the allowable 15% of assets of the retirement annuity trust fund invested in any additional category or categories of investments approved by the Board of Trustees. Debt securities in this category classified as Level 1 are valued using prices quoted in active markets for those securities. Debt securities in the Additional Categories classified as Level 2 are valued using a matrix pricing technique that values securities based on their relationship to benchmark quoted prices. Opportunistic credits classified as Level 3 in the fair value hierarchy are valued using consensus pricing.

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the System. The System operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international stocks are the types of securities that are lent. The System's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the fair value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the System.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. During the fiscal year ended June 30, 2016, only the retirement annuity trust fund had securities lending transactions. The following section details the net income earned in the retirement annuity trust fund from securities lending for the fiscal year ended June 30, 2016 and 2015:

Item	2016 Earnings	2015 Earnings
Gross Earnings (Interest and Fees)	$ 687,380	$ 338,644
Gross Borrower Rebates	2,083,693	2,323,231
Bank Fees	(831,253)	(798,511)
Net Earnings	**$ 1,939,820**	**$ 1,863,364**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy.

As of June 30, 2016, the loan average days to maturity in the retirement annuity trust fund was one (1) day and the weighted average investment maturity of cash collateral investments was one (1) day. At fiscal year end, the retirement annuity trust fund had no credit risk exposure to borrowers, since the amounts the retirement annuity trust fund owes the borrowers exceeds the amounts the borrowers owe the retirement annuity trust fund and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The System minimizes interest rate risk by limiting the term of cash collateral investments to several days.

The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2016 and 2015:

Type of Securities Lent	Fair Value	Cash Collateral Received	Non-Cash Collateral Received	Total Collateral Received 2016	Total Collateral Received 2015
Fixed Income	$ 132,768,889	$ 4,089,710	$ 131,652,562	$ 135,742,272	$ 347,416,026
Equities	302,635,076	140,493,387	165,145,171	305,638,558	151,443,676
TOTAL	**$ 435,403,965**	**$ 144,583,097**	**$ 296,797,733**	**$ 441,380,830**	**$ 498,859,702**

E. ANNUAL MONEY-WEIGHTED RATE OF RETURN

A money-weighted rate of return is an expression of investment performance that is net of the plan's investment expenses (net the plan's administrative expenses). The following tables reflect the money-weighted rate of return for both the retirement annuity trust fund and the health insurance trust fund:

Annual Rate of Return Net of Investment Expense			
	2016	2015	2014
Retirement Annuity Trust	-1.32 %	4.96 %	17.95 %
Health Insurance Trust	-2.20 %	1.38 %	15.38 %

Note 6: Retirement Plan for Employees of the Retirement System

Full-time employees of TRS participate in either TRS or Kentucky Employees Retirement System (KERS). Both plans are multiple-employer cost sharing defined benefit retirement annuity plans. All TRS employees in positions requiring a four-year degree are covered under TRS. The contribution rates and required employer matching are the same as state agency employers in the System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for TRS employee members for the fiscal years 2016, 2015 and 2014 were $820,077, $767,958 and $656,152, respectively. TRS contributed one hundred percent (100%) of the required contribution each year.

All other TRS employees are covered under KERS in the Non-Hazardous Employees' Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. TRS's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS who joined prior to July 1, 2008, are required to contribute five percent (5%) of their annual creditable compensation and members who joined on or after July 1, 2008 contribute an additional one percent (1%). As the employer, TRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2016, 2015 and 2014 were 38.77 percent, 38.77 percent and 26.79 percent and TRS's annual required contributions to KERS were $547,105, $552,133 and $365,610, respectively. TRS contributed one hundred percent (100%) of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement Systems, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: Other Funds

A. 403(B) TAX-SHELTERED ANNUITY PLAN

Plan Description

TRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by TRS's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2016, the eight members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan; therefore, there are no receivables to be recognized.

Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

C. SUPPLEMENTAL BENEFIT FUND

The Supplemental Retirement Benefit Fund is a qualified governmental excess benefit arrangement as described in Section 415 of the Internal Revenue Code. In accordance with KRS 161.611 and KRS 161.420(8), TRS is authorized to provide a supplemental retirement benefit fund for the sole purpose of enabling the employer to apply the same formula for determining benefits payable to all members of the System employed by the employer, whose benefits under the System are limited by Section 415 of the Internal Revenue Code of 1986, as amended from time to time.

Note 7: Other Funds continued . . .

Funding of benefits payable under this fund are provided by the state, as employer, and are segregated from funds that are maintained by TRS for payment of the regular benefits provided by the System.

D. JUNITA LOSEY SCHOLARSHIP BEQUEST

Junita Losey, a retired teacher, designated TRS as a residuary beneficiary of her estate and expressed a desire that TRS establish a scholarship program for Kentucky students studying to be teachers. Ms. Losey died in 1997 and thereafter her estate provided a scholarship bequest to TRS. The scholarship bequest has at all times been segregated from funds that are maintained by TRS for payment of the regular benefits provided by the System. The Scholarship Committee of the System's Board of Trustees meets each December to consider scholarship standards and administration of the scholarship bequest.

Note 8: Medical Insurance Plan & Post-employment Benefits

A. PLAN DESCRIPTION

In addition to the retirement annuity plan described in Note 1, Kentucky Revised Statute 161.675 requires TRS to provide access to post-employment healthcare benefits for eligible members and dependents. The TRS medical plan is funded by employer and member contributions. Changes made to the medical plan may be made by the TRS Board of Trustees, the Kentucky Department of Employee Insurance and the General Assembly.

The TRS medical plan is funded by employee contributions to an account established pursuant to 26 U.S.C. sec. 401(h). Additional funding is derived from the Kentucky Teachers' Retirement System insurance trust fund that went into effect on July 1, 2010. The insurance trust fund provides a trust separate from the account established pursuant to 26 U.S.C. sec. 401(h). The insurance trust fund includes employer and retired member contributions required under KRS 161.550 and KRS 161.675(4)(b).

To be eligible for medical benefits, the member must have retired either for service or disability. The TRS medical plan offers coverage to members under the age of 65 through the Kentucky Employees Health Plan administered by the Kentucky Department of Employee Insurance. TRS retired members are given a supplement to be used for payment of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the TRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The Commonwealth of Kentucky bears risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the TRS Medicare Eligible Health Plan.

At June 30, 2016, TRS insurance covered 38,815 retirees and 7,181 dependents. There are 208 participating employers and 71,848 active members contributing to the medical plan.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The TRS medical plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

Method Used to Value Investments

All of the System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, alternative investments, and additional categories as permitted by regulation. These assets are reported at fair value.

C. CONTRIBUTIONS

The post-employment medical benefit provided by TRS is financed on a pre-funded basis beginning July 1, 2010 with the implementation of the "Shared Responsibility" legislation. In order to fund medical benefits, active member contributions are matched by the state at .75% of members' gross salaries. Beginning July 1, 2010 member contributions to the TRS medical plan increased incrementally to 3.75% on July 1, 2015 under the Shared Responsibility Plan. Also, the premiums collected from retirees and investment income contributes to funding the plan.

Note 8: Medical Insurance Plan & Postemployment Benefits continued . . .

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Medical Insurance Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(In thousands of dollars)

Valuation Year Ending June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[B-A/C]
2016	$ 795,055	$ 3,634,073	$ 2,839,018	21.9 %	$ 3,537,226	80.3 %

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedule of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the Annual Required Contribution, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The Annual Required Contribution represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methodologies and assumptions employed as of the June 30, 2016 valuation date include the following:

Actuarial Cost Method	Actuarial Value of Assets	Assumed Inflation Rate	Investment Rate of Return	Amortization Method	Remaining Amortization Period
Entry Age	Fair value of assets	3.00%	8.00%	Level percent of pay, open	30 years

Medical Trend Assumption	Pre-Medicare	Medicare
Fiscal Year Ending 6/30/2016	7.75%	5.75%
Fiscal Year Ending 6/30/2017	7.00%	5.50%
Ultimate Trend Rate	5.00%	5.00%
Year of Ultimate Trend Rate	2023	2020

Note 9: Life Insurance Plan

A. PLAN DESCRIPTON

TRS administers the Life Insurance Plan as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 208 participating employers. The benefit is $5,000 for members who are retired for service or disability, and $2,000 for active contributing members.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Life Insurance Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized in the fiscal year due.

Method Used to Value Investments

Life Insurance Plan investments are reported at fair value. The short-term securities are carried at cost, which approximates fair value. Fixed income is generally valued based on published market prices and quotations from national security exchanges and securities pricing services.

C. CONTRIBUTIONS

To finance the life insurance benefit a portion of the employer contribution rate is directed to the plan as recommended by the TRS's actuary. The contribution rate of active members' payroll recommended by the actuary was .03% for fiscal years 2016 and 2015.

D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Life Insurance Plan as of the most recent actuarial valuation date is as follows:

Schedule of Funding Progress
(In thousands of dollars)

Valuation Year June 30	Actuarial Value of Assets A	Actuarial Accrued Liabilities B	Unfunded Actuarial Accrued Liabilities (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL as a % of Covered Payroll [B-A/C]
2016	$ 97,269	$ 106,059	$ 8,790	91.7%	$ 3,537,226	0.25%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The required supplementary schedules following the notes to the financial section contain more actuarial information. Significant actuarial methodologies and assumptions employed as of the June 30, 2016 valuation date include the following:

Actuarial Cost Method	Actuarial Value of Assets	Assumed Inflation Rate	Investment Rate of Return	Projected Salary Increases	Amortization Method	Remaining Amortization Period
Entry Age	Fair value of assets	3.00%	7.50%	3.50%	Level percent of pay, open	30 years

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in the Net Pension Liability

(In thousands of dollars)

Change in the Total Pension Liability	2016	2015	2014
Total pension liability			
Service Cost	$ 1,120,893	$ 1,015,080	$ 1,002,338
Interest	2,027,457	2,029,372	1,956,610
Difference between expected and actual experience	(58,035)		
Changes of assumptions	4,030,834	1,511,960	(353,043)
Benefit payments	(1,833,199)	(1,741,456)	(1,654,376)
Refunds of contributions	(27,748)	(23,033)	(25,462)
Net change in total pension liability	5,260,202	2,791,923	926,067
Total pension liability - beginning	42,476,699	39,684,776	38,758,709
Total pension liability - ending (a)	$ 47,736,901	$ 42,476,699	$ 39,684,776
Plan Net Position			
Contributions - State of Kentucky	$ 484,987	$ 480,073	$ 483,330
Contributions - Other Employers	80,468	79,506	79,996
Contributions - Members	313,044	308,160	304,982
Net investment income	(245,215)	862,179	2,803,248
Benefit payments	(1,833,199)	(1,741,456)	(1,654,375)
Administrative expense	(8,636)	(8,869)	(7,956)
Refunds of contributions	(27,748)	(23,033)	(25,462)
Net change in plan net position	(1,236,299)	(43,440)	1,983,763
Plan net position - beginning	18,049,131	18,092,571	16,108,808
Plan net position - ending (b)	16,812,832	18,049,131	18,092,571
Net pension liability - ending (a) - (b)	**$ 30,924,069**	**$ 24,427,568**	**$ 21,592,205**

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

NOTE 1
Schedule of Changes in the Net Pension Liability

The total pension liability contained in this schedule was provided by TRS's actuary, Cavanaugh Macdonald Consulting, LLC. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the System.

Changes of Benefit Terms. None

Changes of assumptions. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2011.

In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation, the Board adopted an interest smoothing methodology to calculate liabilities for purposes of determining the actuarially determined contributions. Beginning with the 2014 valuation, the interest smoothing methodology is no longer used.

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

Schedule of Net Pension Liability

(In thousands of dollars)

	2016	2015	2014
Total pension liability	$ 47,736,901	$ 42,476,699	$ 39,684,776
Plan net position	16,812,832	18,049,131	18,092,571
Net pension liability	$ 30,924,069	$ 24,427,568	$ 21,592,205
Ratio of plan net position to total pension liability	35.22%	42.49%	45.59%
Covered-employee payroll	$ 3,390,539	$ 3,455,008	$ 3,317,422
Net pension liability as a percentage of covered-employee payroll	912.07%	707.02%	650.87%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule of Employer Contributions

(In thousands of dollars)

Fiscal Year Ended June 30	Covered Payroll	Actual Employer Contributions	Actuarially Determined Employer Contributions	Annual Contribution Excess (Deficiency)	Actual Contributions as a Percentage of Covered Payroll
2016	$ 3,390,539	$ 565,455	$ 999,270	$ (433,815)	16.68 %
2015	3,455,008	559,579	913,654	(354,075)	16.20
2014 *	3,317,422	563,326	823,446	(260,120)	16.98
2013	3,310,710	568,233	802,985	(234,752)	17.16
2012	3,310,176	557,340	757,822	(200,482)	16.84
2011	3,283,749	1,037,936	678,741	359,195	31.61
2010	3,321,614	479,805	633,938	(154,133)	14.44
2009	3,253,077	442,550	600,283	(157,733)	13.60
2008	3,190,332	466,248	563,789	(97,541)	14.61
2007	2,975,289	434,890	494,565	(59,675)	14.62

** Revised from previous year to reflect actual covered-employee payroll.*

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

NOTE 2
Schedule of Employer Contributions

The required employer contributions and percent of those contributions actually made are presented in the schedule.

NOTE 3
Actuarial Methods and Assumptions

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of the schedule:

Actuarial Cost Method	Amortization Period	Remaining Amortization Period	Asset Valuation Method	Inflation	Salary Increase	Ultimate Investment Rate of Return*
Entry Age	Level percentage of payroll, open	30 Years	5-year smoothed market	3.50%	4.00 to 8.20%, including inflation	7.50 percent, net of pension plan investment expense, including inflation

**The actuarially determined contribution rates are determined using the interest smoothing methodology adopted by the Board.*

Schedule of Investment Returns

	2016	2015	2014
Annual money weighted rate of return, net of investment expense	-1.32%	4.96%	17.95%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Medical Insurance Plan – Schedule of Funding Progress
(In millions of dollars)

Valuation Year June 30	Actuarial Value of Assets A	Actuarial Accrued Liabilities (AAL) B	Unfunded Actuarial Accrued Liabilities (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL as a % of Covered Payroll [(B-A)/C]
2016	$ 795.1	$ 3,634.1	$ 2,839.0	21.9 %	$ 3,537.2	80.3 %
2015	637.8	3,525.6	2,887.8	18.1	3,515.1	82.2
2014	508.9	3,194.7	2,685.8	15.9	3,486.3	77.0
2013	412.2	3,521.1	3,108.9	11.7	3,480.0	89.3
2012	338.7	3,594.5	3,255.8	9.4	3,479.6	93.6
2011	294.8	3,423.1	3,128.3	8.6	3,451.8	90.6
2010	241.2	3,206.8	2,965.6	7.5	3,321.6	89.3
2009	229.1	6,454.7	6,225.6	3.5	3,253.1	191.4

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

Medical Insurance Plan – Schedule of Employer Contributions

Valuation Year June 30	Annual Required Contribution (ARC) (A)	Actual Employer Contribution (B)	Retiree Drug Subsidy Contribution (C)	Total Contribution (B) + (C)	Percentage of ARC Contributed [(B) + (C)]/(A)
2016	$ 97,982,580	$ 221,966,705	$	$ 221,966,705	226.5 %
2015	106,606,132	168,084,353		168,084,353	157.7
2014	159,583,400	162,568,395		162,568,395	101.9
2013	186,725,823	166,611,420		166,611,420	89.2
2012	470,217,067	177,450,206	297,639	177,747,845	37.8
2011	477,723,070	188,453,929	280,585	188,734,514	39.5
2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9
2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1

Life Insurance Plan – Schedule of Funding Progress

(In thousands of dollars)

Valuation Year June 30	Actuarial Value of Assets A	Actuarial Accrued Liabilities (AAL) B	Unfunded AAL (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll C	UAAL as a % of Covered Payroll [(B-A)/C]
2016	$ 97,269	$ 106,059	$ 8,790	91.7 %	$ 3,537,226	0.25 %
2015	97,186	98,739	1,553	98.4	3,515,113	0.04
2014	96,130	97,354	1,224	98.7	3,486,327	0.04
2013	94,863	94,325	(538)	100.6	3,480,066	(0.02)
2012	92,241	91,398	(843)	100.9	3,479,567	(0.02)
2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)
2010	87,905	92,091	4,186	95.5	3,321,614	0.13
2009	84,703	90,334	5,631	93.8	3,253,077	0.17

The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or medical insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.

Life Insurance Plan – Schedule of Employer Contributions

Valuation Year June 30	Annual Required Contribution (ARC) (A)	Actual Employer Contribution (B)	Percentage of ARC Contributed (B) / (A)
2016	$ 1,057,851	$ 1,037,769	98.1 %
2015	1,050,216	1,019,519	97.1
2014	1,044,959	1,006,091	96.3
2013	1,739,908	1,680,495	96.6
2012	1,732,831	1,684,711	97.2
2011	1,725,878	1,668,822	96.7
2010	1,992,969	1,966,826	98.7
2009	1,498,076	5,455,473	364.2

See accompanying independent auditor's report.

ADDITIONAL SUPPORTING SCHEDULES

Schedule of Administrative Expenses
For the Year Ended June 30,

Expense	2016	2015
Salaries	$ 5,808,287	$ 6,207,452
Other Personnel Costs	696,933	891,855
Professional Services and Contracts	647,708	459,012
Utilities	93,633	93,144
Rentals	20,991	25,546
Maintenance	93,521	150,180
Postage & Related Services	442,610	417,187
Printing	199,837	175,972
Insurance	183,329	172,849
Miscellaneous Services	164,405	136,523
Telecommunications	22,126	22,875
Computer Services	151,789	155,391
Supplies	51,059	56,168
Depreciation	1,535,843	1,093,167
Travel	45,221	45,910
Dues & Subscriptions	63,752	43,337
Miscellaneous Commodities	12,724	25,169
Furniture, Fixtures, & Equipment not Capitalized	85,604	190,969
Compensated Absences	30,891	77,412
Total Administrative Expenses	**$ 10,350,263**	**$ 10,440,118**

Schedule of Professional Services and Contracts
For the Year Ended June 30,

Professional	Nature of Service	2016	2015
Cavanaugh Macdonald Consulting	Actuarial Services	$ 284,189	$ 207,431
Segal Consulting	Actuarial Services	89,017	
Auditor of Public Accounts	Auditing Services	32,200	70,005
Mountjoy Chilton Medley	Auditing Services	45,000	
International Claim Specialist	Investigative Services	2,176	960
Ice Miller	Attorney Services	46,798	45,191
Reinhart, Boerner VanDeuren	Attorney Services	6,125	1,384
Stoll, Keenon, and Ogden	Attorney Services	21,672	14,041
Attorney General	Attorney Services	531	
Peritus	Communications	120,000	120,000
Total Professional Services and Contracts		**$ 647,708**	**$ 459,012**

See accompanying independent auditor's report.

Additional Supporting Schedules continued . . .

Schedule of Contracted Investment Management Expenses
Year Ended June 30, 2016

	Pension	Medical	Total
Equity Managers			
Baillie Gifford	$ 2,800,298	$	$ 2,800,298
Baring Asset Management, Inc.	2,419,271		2,419,271
Black Rock	265,816	191,346	457,162
GE Asset Management	800,000		800,000
Todd-Veredus Asset Management LLC	1,295,310		1,295,310
UBS Global Asset Management	2,980,341		2,980,341
Wellington Management Company	2,917,720		2,917,720
Total Equity Managers	13,478,756	191,346	13,670,102
Fixed Income Managers			
Fort Washington Investment Advisors	150,088		150,088
Galliard Capital Management	229,226		229,226
Total Fixed Income Managers	379,314		379,314
Real Estate	7,010,123	503,596	7,513,719
Additional Categories	8,701,619	683,241	9,384,860
Alternative Investments	14,469,348	794,844	15,264,192
Custodian			
The Bank of New York Mellon	380,233	30,275	410,508
Consultant			
Hewitt Ennis Knupp, Inc.	358,850		358,850
Bevis Longstreth	50,137		50,137
George Philip	38,962		38,962
Total Consultants	447,949		447,949
Legal & Research			
Reinhart, Boerner Van Deuren	5,560		5,560
Ice Miller	84,697		84,697
Total Legal & Research	90,257		90,257
Other			
Administrative and Operational (includes Personnel)	2,845,221	74,831	2,920,052
Total Contracted Investment Management Expenses	**$ 47,802,820**	**$ 2,278,133**	**$ 50,080,953**

See accompanying independent auditor's report.

Additional Supporting Schedules continued . . .

Schedule of Contracted Investment Management Expenses
Year Ended June 30, 2015

	Pension	Medical	Total
Equity Managers			
Baillie Gifford	$ 3,083,458	$	$ 3,083,458
Baring Asset Management, Inc.	2,463,293		2,463,293
Black Rock	235,529	187,274	422,803
GE Asset Management	800,000		800,000
Todd-Veredus Asset Management LLC	1,377,639		1,377,639
UBS Global Asset Management	4,529,001		4,529,001
Wellington Management Company	3,107,897		3,107,897
Total Equity Managers	15,596,817	187,274	15,784,091
Fixed Income Managers			
Fort Washington Investment Advisors	157,680		157,680
Galliard Capital Management	245,252		245,252
Total Fixed Income Managers	402,932		402,932
Real Estate	5,862,636	264,176	6,126,812
Additional Categories	8,043,331	518,978	8,562,309
Alternative Investments	11,478,820	299,357	11,778,177
Custodian			
The Bank of New York Mellon	335,800	8,263	344,063
Consultant			
Hewitt Ennis Knupp, Inc.	358,850		358,850
Bevis Longstreth	55,262		55,262
George Philip	34,134		34,134
Total Consultants	448,246		448,246
Legal & Research			
Ice Miller	84,131		84,131
Total Legal & Research	84,131		84,131
Other			
Administrative and Operational (includes Personnel)	2,473,848	52,536	2,526,384
Total Contracted Investment Management Expenses	**$ 44,726,561**	**$ 1,330,584**	**$ 46,057,145**

See accompanying independent auditor's report.

CPAs & ADVISORS

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Independent Auditor's Report

To the Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, KY

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Teachers' Retirement System of the State of Kentucky, which comprise the statement of fiduciary net position as of June 30, 2016, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, which collectively comprise the Teachers' Retirement System of the State of Kentucky's basic financial statements, and have issued our report thereon dated November 21, 2016.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control. Accordingly, we do not express an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Kentucky
Indiana
Ohio

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Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Teachers' Retirement System of the State of Kentucky's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Teachers' Retirement System of the State of Kentucky's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

/s/ Mountjoy Chilton Medley LLP

Lexington, KY
November 21, 2016

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Teachers' Retirement System of the State of Kentucky

2016

Investment Section

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Teachers' Retirement System of Kentucky.

Mr. Tom Siderewicz, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

INVESTMENT COMMITTEE

Mr. Ronald L. Sanders
Chairperson

Mr. Arthur Green
Vice-Chairperson

Mr. Hollis Gritton
Member

Dr. Jay Morgan
Member

Ms. Ali Wright
Member

Mr. Bevis Longstreth
Investment Advisor to TRS Kentucky Investment Committee

Mr. George Philip
Investment Advisor to TRS Kentucky Investment Committee

EXECUTIVE INVESTMENT STAFF

Mr. Gary L. Harbin, CPA
Executive Secretary

Mr. Tom Siderewicz, CFA
Chief Investment Officer

AON

December 1, 2016

To the members of the Board of Trustees and participants of the Teachers' Retirement System of Kentucky:

The Teacher Retirement System of Kentucky (TRS) investment program produced a total return of -1.0% in the twelve-month period ended June 30, 2016 and underperformed the policy benchmark by 2.5 percentage points. The relative performance was mainly driven by the U.S. equity managers' returns relative to their given benchmarks. It was a challenging fiscal year for active stock management as approximately 90% of public fund U.S. equity portfolios failed to outperform the broad U.S. stock market. Partially offsetting these detractors was the strong absolute and relative performance of the fixed income and real estate portfolios. The relative performance of the real estate portfolio was particularly favorable as it outperformed the benchmark by more than double (13.1% vs. 6.3% for the benchmark).

Despite the short-term underperformance, the investment program ranked in the top quartile, relative to public pensions with assets greater than $1 billion, over the trailing three-, five-, and ten-year periods. Favorable asset allocation strategy and implementation, specifically a meaningful allocation to U.S. equity, propelled TRS to near the top of its peer universe.

Over the past fiscal year, the equity markets experienced volatility due to China's economic slowdown, fickle energy prices, and the decision by the United Kingdom to leave the European Union. The global macroeconomic concerns caused the central banks to continue easing and maintain accommodative monetary policy positions. In the bond market, the 10-year U.S. Treasury yield ended the fiscal year at 1.49%, 86 basis points lower than the beginning of the fiscal year.

Equities, which represented 62.1% of the system's assets as of June 30, 2016, returned -4.7%. Domestic equities returned -1.8% versus 3.6% for the S&P 1500 Index. International equities returned -10.9% versus -9.8% for the MSCI All Country World (ex-U.S.) Index. Fixed income, which composed 17.1% of assets, returned 6.9% versus 6.7% for the Barclays Government/Credit Index.

The system's other asset classes, including real estate, private equity, and alternative credit strategies, rose to 19.1% of total assets over the fiscal year, up from 17.2% a year earlier. Real estate was one of the top performing asset classes over the trailing one year as fundamentals remained positive and continued to support above average income growth across most property types.

Over the trailing five-year period, TRS' investment returns rank in the top 9% of the pension fund universe cited earlier. We believe the consistently strong relative returns achieved over the past several years have been the result of the successful implementation of a sound investment philosophy and a high degree of professionalism.

The retirement annuity trust fund's returns were calculated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

We would like to thank the Board of Trustees, Investment Committee, and Investment Staff for their confidence. We appreciate the opportunity to assist the retirement system in meeting its investment goals.

Respectfully,

Patrick J. Kelly, CFA, CAIA
Partner

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RETIREMENT ANNUITY TRUST FUND

INVESTMENT POLICY SUMMARY

The TRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principles that guide investment–related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the System. This broad summary is a reference point for management of retirement assets and outlines the investment philosophy and practice of TRS.

INVESTMENT OBJECTIVES

TRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them. Generally, the retirement system's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, TRS holdings can withstand some short-term volatility. The retirement annuity trust fund's long-term investment objective is to achieve an annualized rate of return of 7.5%.

RISK CONTROLS

The TRS investment program faces various risks; however, the primary risk to TRS is that the assets will not support liabilities over long periods of time. In order to control this risk and any other risks, the board has taken the following steps on an ongoing basis:

- Actuarial valuations are performed each year to evaluate the funding objectives of the retirement system. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the System.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the retirement system.
- The TRS Investment Committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

ASSET ALLOCATION

Operating within relevant regulatory limitations, the System's investment consultant, on an annual basis, presents to the Investment Committee for approval target percentages and ranges for the System's various asset classes. Annually approved asset allocation parameters serve to balance the retirement system's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The System's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the retirement system's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as liability requirements, the level of funding, and statutory investment restrictions are important considerations within the context of the asset allocation decision making process. Consequently, asset allocations may differ markedly between various pension plans due to their unique circumstances.

The information below shows the System's asset allocation by fair value as of June 30, 2016, and June 30, 2015, as well as the target and strategic range for each asset class for fiscal year 2016.

Retirement Annuity Trust

	June 30,2016*	%	June 30,2015**	%
Cash Equivalents***	$ 294,405,676	1.7	$ 477,398,294	2.6
Fixed Income	2,878,918,409	17.1	3,103,821,351	17.4
Domestic Equities	7,210,451,881	42.9	7,798,497,485	43.6
International Equities	3,220,445,062	19.2	3,439,336,257	19.2
Real Estate	940,860,202	5.6	825,335,346	4.6
Private Equity	731,560,317	4.4	636,890,428	3.6
Timberland	201,253,033	1.2	207,797,668	1.1
Additional Categories	1,319,326,624	7.9	1,404,919,549	7.9
TOTALS	**$ 16,797,221,204**	**100.0**	**$ 17,893,996,378**	**100.0**

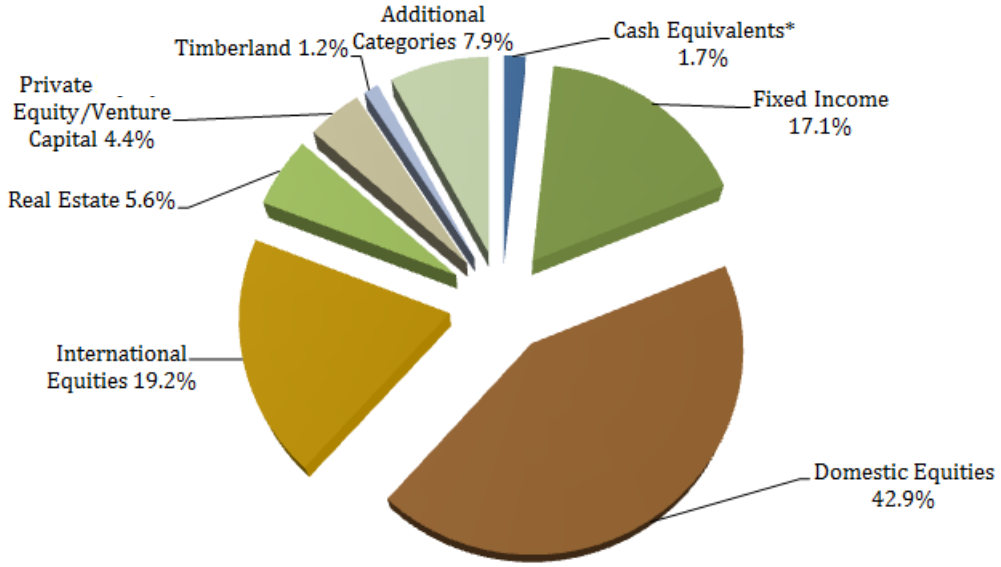
* *Includes Life Insurance Trust values of $90,113,180, Tax Shelter Annuity value of $352,773, and 401(h) value of 14,302,842.*

** *Includes Life Insurance Trust values of $87,963,949, Tax Shelter Annuity value of $363,978, and 401(h) value of $29,150,708.*

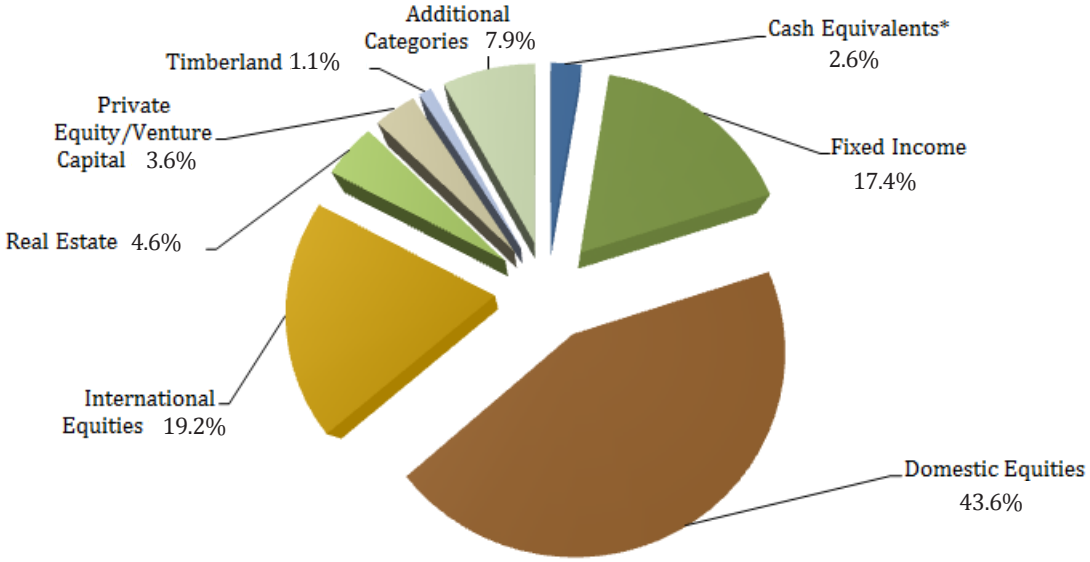
*** *Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

Distribution of Investments
Retirement Annuity Trust**
Fair Values

June 30, 2016



June 30, 2015



* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

** Includes Life Insurance Trust values.

Strategic Weightings by Asset Class

Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2016 (Mkt)**
Cash		1 - 3%	2.0%	**1.7%**
Fixed Income		13 - 19	16.0	**17.1**
Government/Agency/Other	Unlimited			9.2
Corporate	35%			7.9
Equity	65%	58 - 65	62.0	**62.1**
Domestic Large Cap		33 - 41	37.0	36.5
Domestic Mid Cap		1 - 5	3.0	4.0
Domestic Small Cap		1 - 3	2.0	2.4
International* **	30%	17 - 23	20.0	19.2
Real Estate	10%	3 - 7	5.0	**5.6**
Alternative Investments*	10%	3 - 9	6.0	**5.6**
Additional Categories	15%	6 - 12	9.0	**7.9**
TOTAL			**100.0%**	**100.0%**

* Includes private equity, venture capital, timberland, and infrastructure investments

** Starting with 7/2008, Cash is only the unallocated cash balance. Manager cash balances will be included with the asset type of the managers investments.

*** As of 6/30/16, 19.0% of Total International Equities was invested in Emerging Markets.

PORTFOLIO RETURNS

For the fiscal year, the retirement annuity trust fund's portfolio generated a total return of -1.0%, trailing the policy benchmark return of 1.5%. Domestic equities returned -1.8% versus 3.6% for the Standard & Poor's 1500 Index, while international equities returned -10.9% versus -9.8% for the MSCI All Country World (Ex-US) Index. Fixed income investments outperformed, returning 6.9% versus 6.7% for the Barclays Government/Credit Index. Less traditional asset classes such as real estate, private equity, timberland, and alternative credit are beginning to contribute meaningfully to total return as those programs are expanded.

The following table details historical performance for the retirement annuity trust fund and its component asset classes for the period ended June 30, 2016. The retirement annuity trust fund's returns were generated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon market values.

Portfolio Returns continued ...

SCHEDULE OF INVESTMENT RETURNS - RETIREMENT ANNUITY TRUST - GROSS

	1 Yr[2]	3 Yr[2]	5 Yr[2]	10 Yr[2]	20 Yr[2]
Total Fund					
TRS	-1.0	7.1	7.5	6.3	6.9
Policy Index [1]	1.5	7.2	7.5	-	-
Equities					
Domestic Equities	-1.8	10.6	11.2	7.3	8.2
S & P Blended Index [3]	3.6	11.5	11.9	7.5	7.9
International Equities [4]	-10.9	2.5	1.6	2.9	-
MSCI AC World (Ex US)	-9.8	1.6	0.6	2.3	-
Total Equities	-4.7	8.1	8.5	6.0	7.5
Fixed Income					
Total Fixed Income	6.9	4.6	4.8	6.1	6.3
Barclays Govt/Credit Index	6.7	4.2	4.1	5.2	5.8
Real Estate					
Non-Core Real Estate	19.1	18.8	19.0	-	-
NCREIF Property Index	10.6	11.6	11.5	-	-
Core Real Estate	14.2	14.1	13.3	-	-
NCREIF ODCE	11.8	13.0	12.7	-	-
Triple Net Lease Real Estate	9.4	8.0	8.1	8.2	8.8
CPI plus 2%	3.1	3.1	3.3	3.8	4.2
Alternative Investments					
Private Equity [5]	5.0	11.6	10.7	-	-
Timberland	2.0	5.3	5.2	-	-
NCREIF Timberland Index	3.4	7.7	6.7	-	-
Cash					
Cash(Unallocated)	0.3	0.1	0.1	1.3	2.6
90 Day Treasury Bill	0.1	0.1	0.1	1.0	2.3
Additional Categories					
Additional Categories	-1.3	3.3	5.4	-	-
B of A Merrill Lynch High Yield Master II	1.7	4.2	5.7	-	-

(1) Prior to July 1, 2008, TRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.

(2) Annualized.

(3) Total Domestic Equity is benchmarked to a S&P Blended Index. Total domestic equity was benchmarked to the S&P 500 through the fiscal year ending 6/30/2007. As of 7/1/2007, domestic equity is benchmarked to the S&P 1500 Index since the System's domestic stock mix is most comparable to this index.

(4) As of 06/30/16 19.0% of Total International Equities were invested in emerging markets.

(5) For a period of five years private equity investments will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the first capital call, investments in this class shall be benchmarked versus theS & P 500 plus 3%, which is the System's long-term expected return for this asset class.

SCHEDULE OF INVESTMENT RETURNS - RETIREMENT ANNUITY TRUST

2016	Annual Rate of Return Net of Investment Expense	-1.32%
2015	Annual Rate of Return Net of Investment Expense	4.96%
2014	Annual Rate of Return Net of Investment Expense	17.95%

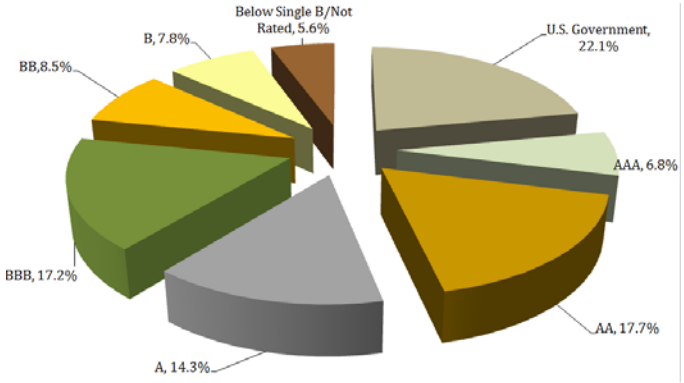
FIXED INCOME INVESTMENTS

As of June 30, 2016, the retirement annuity trust fund had approximately $2.9 billion, 17.1% of total assets, in the fixed income category of investments. The retirement annuity trust fund's fixed income investments maintained the average investment grade rating required by administrative regulation as of June 30, 2016.

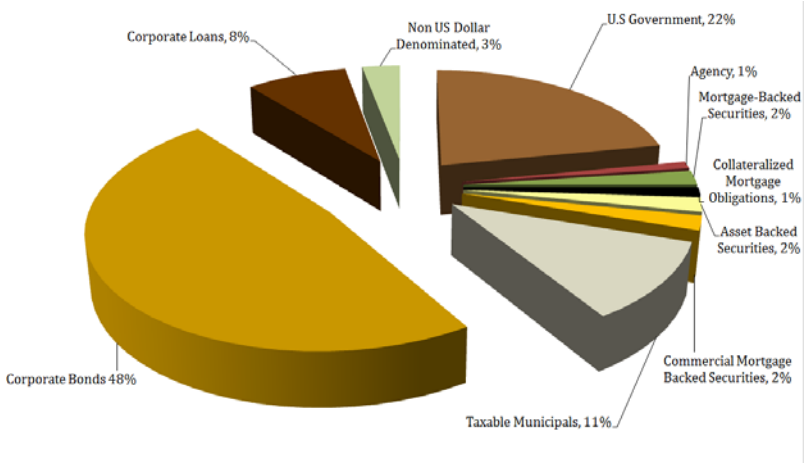
In addition, the retirement annuity trust fund had $1.3 billion, 7.9% of total assets, in other debt related investments under a regulatory provision which allows for up to 15% of assets in "additional categories of investments" approved by the Board of Trustees. Investments under this authorization included two high yield bond portfolios, an international fixed income portfolio, and two syndicated bank loan portfolios. Also under this provision are several alternative credit portfolios including a multi - strategy opportunistic credit portfolio as well as distressed debt and specialty lending funds.

The credit quality distribution for the retirement annuity trust fund is illustrated below. This chart includes the fixed income category of investments as well as the high yield bonds, international fixed income, and the syndicated bank loan portfolios included in "additional categories of investments". Also illustrated below is the distribution of fixed income assets by sector, again including the high yield bonds, international fixed income, and the syndicated bank loan portfolios held under "additional categories of investments".

FIXED INCOME QUALITY DISTRIBUTION



FIXED INCOME SECTOR DISTRIBUTION



FIXED INCOME MARKET OVERVIEW

The retirement annuity trust fund's investment grade fixed income portfolios returned 6.9% for the fiscal year ending June 30, 2016. This compares favorably to the trust fund's fixed income benchmark, the Barclays U.S. Government / Credit Index, which returned 6.7%. The outperformance was driven by the system's overweighting in corporate bonds which provided higher coupon interest than government bonds of similar duration.

The Federal Reserve finally pulled the trigger and increased the Federal Funds Rate by 25 basis points to 0.25% - 0.50% in December, the first increase in almost ten years. As for the future, the Fed's statement in December read "The committee expects that economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate." At year-end, the median projection of the Fed officials was for four more 25 basis points moves in 2016 which would bring the funds rate up to 1.25% to 1.50%. However, federal - funds futures, which are an indicator of market expectations, were priced for only two 25 basis points moves in 2016. There were no more rate increases in fiscal year 2016 because economic conditions (mainly inflation expectations) did not warrant any more rate increased via the fed.

There were several events that drove interest rates lower in fiscal year 2016. The labor market showed surprising weakness with only 184,000 non-farm jobs added. Gains over 200,000 are considered to be representative of a healthy economy. This led to a rally in Treasury prices and pushed rate hikes further into the future. Dollar strength and weaker than anticipated global demand contributed to broad declines for rates across the U. S treasury curve. The Brexit vote that took place on June 23rd 2016, led to more financial market volatility, a temporary flight to quality, and increased uncertainty about the future. One of the largest catalyst for low U.S. rates this fiscal year has been negative rates around the world. In the Eurozone, in Denmark, Sweden, Switzerland and Japan, central banks have decided to have a negative rate on commercial banks' excess funds held on deposit at the central bank. In effect, private sector banks have to pay to deposit their money. The aim in the Eurozone is to stimulate economic growth and to raise inflation, which is also below zero and even further adrift of the European Central Bank's target of below but close to 2%. In the case of Sweden, the central bank has gone below zero on the rate it lends money to the banks, as its main policy tool. The 10-year U.S. treasury bond saw yields fall from 2.42% July 1st 2015 to 1.47% June 30, 2016 as a result of some of the aforementioned items detailed above. This is a key indicator for the economy as most consumer debt is priced from this bond.

One of the most volatile times of this fiscal year for spread products was January-mid February. This time frame began with Investment Grade (IG) Corporates at +172 to comparable treasuries and got to +220 as of February 11th 2016. This time frame was a total risk off trade in all spread products. High Yield went from +707 to +897 in this time frame. By the end of March 2016 levels were +167 for IG corporates and +700 for High Yield. This was just a snapshot of the increased volatility experienced in the 1st quarter of 2016. Spreads for Investment Grade Corporates ended fiscal year 2016 +162.

With U.S. Treasury rates and risk premiums on corporate bonds both still near the low end of their historical range, investment grade fixed income is an asset class with moderately unfavorable risk / reward characteristics and below average upside potential. The retirement system continues to adjust the structure of its fixed income portfolio to control risk and maintain required liquidity. Specifically, the retirement system continues to increase exposure to nontraditional debt-related investments, reduce exposure to investment grade fixed income, and limit our interest rate risk by being slightly short benchmark durations.

EQUITY INVESTMENTS

As of June 30, 2016 the retirement annuity trust fund's public equity investments had a market value of $10.43 billion, representing 62.1% of total assets. Negative equity returns over the fiscal year coupled with several rebalancing sales to raise cash to fund pension benefits explains the year over year reduced market value. The retirement annuity trust fund divides its public equity into two broad categories: domestic and international.

The domestic portfolio had a market value of $7.21 billion as of June 30, representing 42.9% of total assets. This is a $590 million decrease from last year due mainly to the rebalancing sales. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of three well known component indices based upon market capitalization: the S&P 500 large cap, S&P 400 mid cap, and the S&P 600 small cap. The retirement annuity trust fund's domestic equity holdings are comprised of eleven portfolios. Three of the portfolios are internal passively managed index portfolios benchmarked to the S&P 400, 500, and 600. The other eight portfolios are managed externally by four different asset managers, with each portfolio representing a specific strategy and measured against an appropriate benchmark. The collective array of portfolios provides diversification by capitalization, manager, style, and strategy.

The market value of the international equity holdings as of June 30, 2016 was $3.22 billion, representing 19.2% of total assets. While the percentage of total assets remained the same, the market value decreased by $220 million year over year. This was the result of slight negative returns in the International portfolio. The benchmark for international equities is the Morgan Stanley Capital International All Country World Index ex US (MSCI ACWI ex US), which represents the markets of 22 developed countries and 23 emerging market countries. Five external asset managers manage the retirement annuity trust fund's international equities, one of which is a passively managed international index fund. The retirement annuity trust fund plans to continue incremental increases in the international equity exposure during the coming fiscal year.

EQUITY MARKET OVERVIEW

Public Equities maintained mostly flat levels throughout fiscal year 2016, despite increased volatility. The flat returns were the result of the polarizing returns of both domestic and international equities. Domestic returns saw moderate gains, while international equities had significant headwinds throughout the year. Returns of domestic stocks as measured by the S&P 1500 and Wilshire 5000 were 3.6% and 3.0%, respectively. Within the S&P 1500, small (S&P 600) and mid-cap (S&P 400) stocks were mostly flat at 0.0% and 1.3%, while the large-cap S&P 500 led the gains at 4.0%. The performance of International stocks was a drag on overall equity returns. The Morgan Stanley Capital International (MSCI) All Country World (ex-U.S.) Index returned -9.8%. The MSCI Emerging Markets Index was down -11.7%, with both indices showing volatile returns across international markets.

The domestic markets advanced slightly overall throughout the fiscal year. Domestic large cap stocks led the way, while small and mid-cap names remained mostly flat. The first half of the fiscal year saw major pullbacks in August and September, then rallied in October. Weaker than anticipated global demand and a sharp strengthening of the US Dollar were the main contributors to the equity pullbacks. Weak global demand provided the headwind for all global markets, although the US domestic market stayed strong relative to its international counterpart. Biotech and small cap names were the biggest drag on domestic equities. In the first quarter of our fiscal year several economic indicators showed weakening growth and inflation. The labor market showed weakness as the non-farm payroll average gains saw significant declines in the quarter. The strengthening of the US Dollar was due mainly to the People's Bank of China (PBOC) decision to devalue the Chinese Yaun vs. the US Dollar. This not only devalued US exports, but also directly contributed to weakening global demand. Fortunately, domestic equities rallied back in the second quarter of our fiscal year. This rally was led almost solely by large cap stocks. More specifically, mega-cap names were the main drivers of the rally, as the top 10 names in terms of capitalization in the S&P 500 accounted for all its gains. On the heels of this rally, the US Central Bank (FOMC) voted to raise the federal funds rate by .25% in December. The FOMC cited stronger economic conditions and declining unemployment numbers as support for their gradual firming of monetary policy.

The second half of the fiscal year continued the overall slightly upward trend domestically, but started with severe declines in January and February followed by a sharp recovery, then steady returns to end the fiscal year. The Market sell off in January and February were mostly attributed to negative investor sentiment and economic uncertainty. After the FOMC raised the Federal Funds target rate in December for the first time in over nine years, investors reacted negatively to the equity markets over concerns for further tightening of rates. At the same time the Bank of Japan (BoJ) and the European central Bank (ECB) both announced further quantitative easing programs. As interest rates lowered internationally with rising rates domestically, the US Dollar continued to strengthen. This, again, hurt the US export and commodity economy. In March, the FOMC communicated a more dovish policy stance. They chose to keep rates steady for the near future, citing asymmetric risks in further tightening of rates. The US Dollar reacted accordingly, reversing a prolonged strengthening trend. This provided price support to dollar-based commodities, and served as a tailwind for equity and debt assets. This broad-based rally continued through the end of June. The UK surprise referendum vote to leave the European Union (commonly known as Brexit) caused a sudden flight to safety and sharp, albeit brief, decline in the market. The equity markets rallied quickly to end the fiscal year on a high note, following a series of dovish statement from several central banks worldwide.

Internationally, markets lagged the US as non-US equities produced negative returns for the fiscal year. The main drivers of this were the economic slowdowns in Europe and China. China was the focus internationally throughout the first half of the fiscal year. A country's economic ties with China was directly correlated to its underperformance. This was further exasperated by the Chinese Yaun devaluation causing the US dollar to strengthen, as international investors fled Europe and Asia to invest in US markets. The Chinese economy grew at its slowest pace in seven years as energy prices stagnated. Emerging markets were consequently hit the hardest at first but rebounded in the second quarter as China accelerated its domestic consumption as retail sales grew much faster than its overall economy. The second half of the fiscal year focused more on Europe and Japan. The ECB and BoJ's quantitative easing programs

proved to be detractors as European and Japanese stocks lagged. This came to a head in the infamous Brexit vote, where the UK voted to leave the European Union over concerns of its economic viability. This all led to International markets serving as a severe drag on equity returns for the fiscal year.

In summary, we experienced a mostly flat equity market for the fiscal year. Domestic large caps were the drivers, while mid and small caps experienced flat to slight gains on the year. International and emerging markets were the drag on equity performance this year. Domestic and International monetary policies provided the headwinds for equities, while growing geopolitical tension and an economic slowdown in China provided headwinds internationally. Softening Domestic monetary policies and the performance of the mega cap stocks provided the tailwinds for the year. Investor sentiment expects the FOMC to continue its dovish stance on its monetary policy although another small rate hike is not off the table for the coming fiscal year. However, the main driver will be the pending presidential election in the US as all eyes internationally will wait to see who takes command of the largest economy in the world.

REAL ESTATE

The retirement annuity trust fund's real estate investments had a market value of $940.9 million as of June 30, 2016, representing 5.6% of total assets. The retirement annuity trust fund's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow, and provide diversification, thereby reducing the volatility of the overall investment portfolio.

The retirement annuity trust fund's real estate exposure is currently provided through nine portfolios. The retirement annuity trust fund maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high credit quality tenants. The retirement annuity trust fund is also invested in a commingled real estate fund (PRISA Fund), which is managed by Prudential Real Estate Investors. This fund is a core real estate equity fund which invests primarily in existing income-producing properties with strong cash flows and the potential for capital appreciation. The fund is diversified across several property types including office, retail, industrial, apartment, self-storage and hotel.

Additionally, the retirement annuity trust fund is invested in nine real estate limited partnerships: Carlyle Realty Partners VI, Carlyle Realty Partners VII, Blackstone Real Estate Partners VII, Blackstone Real Estate Partners VIII, Rockwood Capital Real Estate Fund IX, TA Realty Associates Fund X, TA Realty Associates Fund XI, AG Net Lease Realty Fund III, and Landmark Real Estate Partners VII. Going forward, investment staff will continue to opportunistically add to the annuity trust fund's real estate investments.

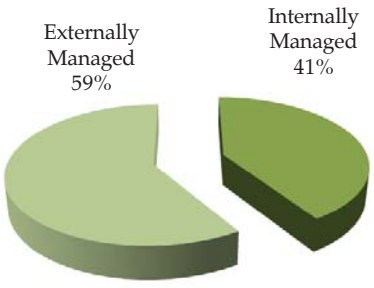
REAL ESTATE OVERVIEW

Due to the prolonged low-interest rate environment occurring globally the real estate sector proved to be an attractive option during the fiscal year ending June 30, 2016.

In the U.S., real estate fundamentals remain solid. Occupancy rates remain strong across property types. In the apartment sector, occupancy is near the structural vacancy rate. Retail and office occupancies are forecasted to continue strengthening amid low new inventories. New construction also remains low relative to historical levels, excluding the apartment sector. In the retail and office sectors, new development is forecasted to increase, but positive net absorption is expected to outpace development. Annual rent growth is above historical averages for all property types, with apartments and industrial leading the way with growth rates near all-time highs. The retail recovery has been uneven but is viewed as having a promising outlook amid the strengthening economy and limited new supply. Increasing rents, occupancy, and limited supply have driven solid cash flow growth.

Private core real estate returns are normalizing. The trend since 2010 of steady returns in core and domestic real estate, continued, though the proportion of gains attributed to appreciation relative to income have declined in the third and fourth quarters. Despite slowing return growth in domestic real estate, capital from foreign investors is flowing into the U.S. in increasing proportions. Valuations are surpassing pre-crisis peaks in some sectors, and investors continue to be attracted to the strong fundamentals of the US real estate market, such as low vacancy rates and consistent rent growth.

Real Estate Investments
$940.9 Million Fair Value
As of June 30, 2016

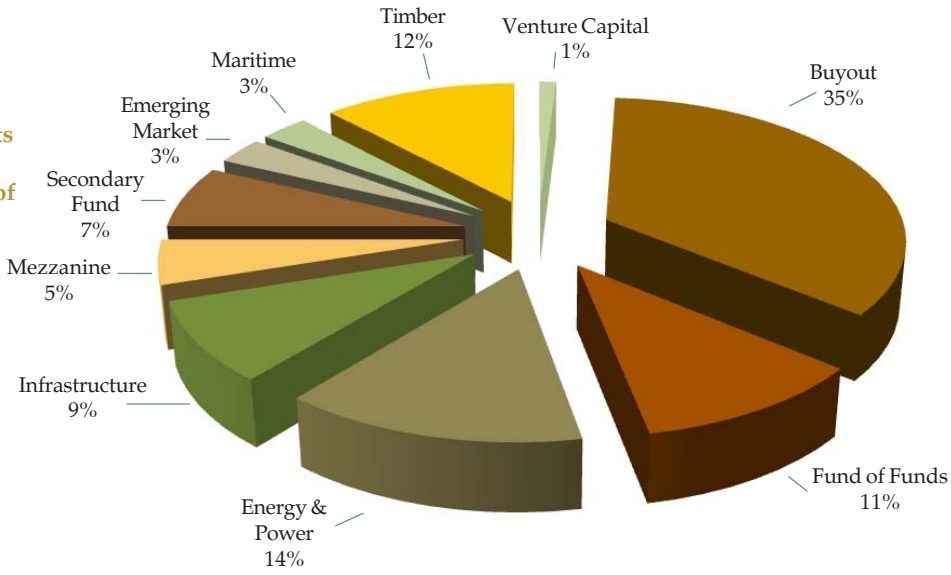


Regarding non-core real estate (value-add and opportunistic strategies), according to NEPC LLC, a real estate consultant, non-core real estate remains attractive with the firm continuing to favor "cash flow-driven managers who are attentive to duration risk at the current stage of the expansion cycle." NEPC believes that the flight to quality will continue to favor U.S. real estate markets, and that select opportunities will remain in Europe and the emerging markets to capitalize on distress and/or capital markets inefficiencies.

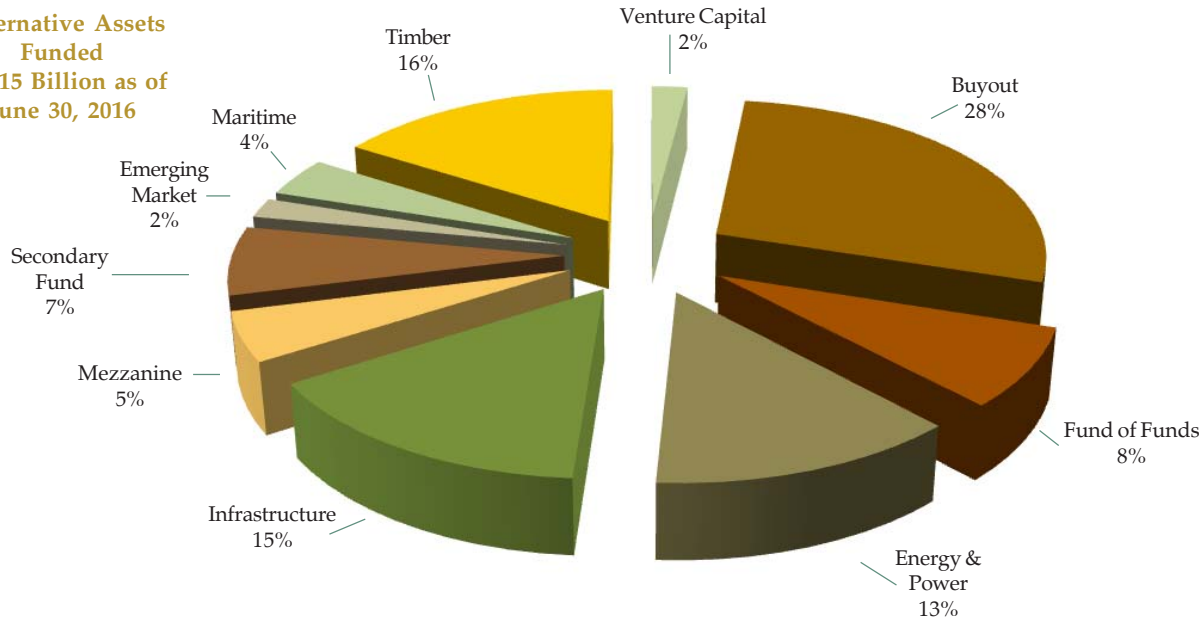
ALTERNATIVE ASSETS

As of June 30, 2016, the retirement annuity trust fund had committed $1.660 billion to alternative investments and had funded $1.015 billion of those commitments. The percentage of the retirement annuity trust fund's portfolio invested in alternative assets was 4.0%. The retirement annuity trust fund's current alternative asset portfolio consists of private equity investments and timberland.

Alternative Assets Committed $1.660 Billion as of June 30, 2016



Alternative Assets Funded $1.015 Billion as of June 30, 2016



PRIVATE EQUITY

The retirement annuity trust fund has exposure to venture, buyout, infrastructure, energy, mezzanine and several other private equity sectors via participation in limited partnerships as well as investments in funds of funds. The retirement annuity trust fund has a young private equity investment program, which it intends to continue to grow with a disciplined plan of commitments each year. The retirement annuity trust fund looks to diversify its private equity portfolio by manager, country, strategy, and vintage year. Vintage year diversification is achieved by building out the portfolio with disciplined levels of commitments over time. A commitment to any given partnership shall not exceed 20% of the partnership's total commitments.

The Board and staff understand that private equity (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with other publicly traded assets, this asset class can help to diversify and reduce risk for the retirement annuity trust fund's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence, during the harvesting period.

PRIVATE EQUITY MARKET OVERVIEW

Private equity markets are positively affected by the strong public equity markets. When public markets are strong more private equity deals are completed and more IPOs brought to market. The pull back in the public equity markets and the increased volatility in beginning of the fiscal year caused a slowdown in announced deals exits during this time. As the public markets recovered more deals were announced and exits were made. However, many older funds are still struggling with limited exit avenues and we have seen many older funds need to extend the life of their fund(s).

The bifurcation in the private equity market continues with the top tier funds raising capital much easier than less desirable funds. This should, over the long term, provide a shakeup in this space as the weaker firms are forced to exit. The past fiscal year has also seen large buyout funds returning to the marketplace. While there is a decrease in the number of funds coming to market, there is an increase in the capital raised by these funds which can be partially attributed to investors increasing committed capital while reducing their number of fund relationships. We have begun to see more opportunity in the large cap buyout space while continuing to see opportunity in the middle market space and in other niche areas such as infrastructure and distressed credit. Additionally, the stress in the European markets should continue to present investment opportunities in the private equity space over the next fiscal year.

TIMBERLAND

In addition to private equity, the retirement annuity trust fund has invested in timberland in the alternative asset class. As of June 30, 2016 the retirement annuity trust fund owns approximately 73,000 acres of timberland outright, has a 7.15% interest in a commingled fund that holds approximately 98,000 acres of timberland and is a member of a joint venture that purchased an interest in approximately 124,000 acres of timberland located across seven southern states. Timberland is, by nature, a long term investment as our anticipated time horizon in this asset category is generally a minimum of ten to fifteen years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the retirement annuity trust fund's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long-term.

The retirement annuity trust fund diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are primarily driven from net cash flow generated from the sale of trees (referred to as stumpage sales) and capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of forest commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland from the conversion of timberland into higher and better uses, such as vacation property sales.

TIMBERLAND MARKET OVERVIEW

U.S. timber markets have been lackluster. Housing starts were expected to show further marked improvement, but have been only slightly positive thus far this year. Most recently, U.S. housing starts rose more than expected in June 2016 as construction activity increased broadly, but a downward revision to the prior month's data pointed to a housing sector treading water in the second quarter. Although lumber exports increased, this improvement was overshadowed by a significant decrease in log exports which were down 25 percent in the first quarter. As a result, many more domestically produced logs were pushed into the U.S. market. This oversupply issue was further exasperated by Canadian imports which were up around 30 percent from this time last year.

Delivered prices for timber followed a general downward trend for the first half of 2016. Together with the drivers mentioned above, favorable weather conditions and low fuel costs during the last four months have freed up supply and nudged prices lower. Wood-using facilities are carrying excess inventories and are managing purchases through tight quotas. With only a few localized exceptions, timber supply has not been an issue on a national basis.

On a positive note, the wood products industry continues to expand and consumption is increasing. In fact, the first new paper mill to be built in the South in 30 years was announced in the spring. One of China's largest private companies, Sun Paper, will invest in excess of $1 billion to build a facility in south Arkansas. Also, the Timber Innovation Act was passed earlier this year and should help to accelerate the use of wood in buildings, especially tall wood buildings, and for other purposes.

RETIREMENT ANNUITY TRUST
PORTFOLIOS
FAIR VALUES *
June 30, 2016

INTERNALLY MANAGED		
Cash Equivalents		
Cash Collections Fund (Unallocated)	$	294,405,676
Fixed Income		
Intermediate Bond Fund		692,345,445
Long Term Bond Fund		548,224,590
Broad Market Bond Fund		542,084,933
Internal Bond Fund		180,562,499
Life Insurance Trust		90,113,180
Tax Shelter Fund		352,815
Equity		
S & P 500 Stock Index Fund (Large Cap)		2,406,731,643
S & P 400 Stock Index Fund (Mid Cap)		361,784,512
S & P 600 Stock Index Fund (Small Cap)		229,830,842
Real Estate		
Internally Managed Fund		389,654,372
Subtotal		5,736,090,507
EXTERNALLY MANAGED		
Fixed Income		
Galliard Capital Management		418,746,771
Ft. Washington Broad Market		406,488,176
Domestic Equity		
Todd Asset Management (Large Cap Core)		1,004,830,831
UBS (Large Cap Value)		903,782,941
GE Asset Management (Large Cap Growth)		678,762,725
Wellington (Large Cap Core)		583,196,968
Todd Asset Management Opportunity Fund		378,914,768
Wellington (Mid Cap Core)		304,410,348
UBS (130/30)		192,349,447
Wellington (Small Cap Core)		165,856,856
International Equity		
Baillie Gifford EAFE Alpha		749,089,275
Todd Asset Management International		663,698,403
UBS All Country World ex US		608,147,824
Baring All Country World ex US		607,968,740
BlackRock All Country World ex US IMI		509,595,543
Todd Asset Management International Intrinsic Value		81,945,276
Real Estate		
Prudential PRISA Fund		291,091,846
Blackstone Partners VII, LP		50,631,618
The Realty Associates Fund X		50,138,220
Rockwood Capital Real Estate Fund IX		37,778,398
Carlyle Realty Partners VI, LP		28,135,149
Landmark Real Estate Partners, VII		23,973,100
Blackstone Partners VIII, LP		19,615,611
Carlyle Realty Partners VII, LP		19,391,605
AG Net Lease Realty Fund III, LP		17,950,284
The Realty Associates Fund XI		12,500,000
Alternative Investments		
Molpus Woodlands Group Lake Superior Timberlands LLC		110,505,232
IFM Global Infrastructure LP		108,485,743
Molpus Seven States LLC		59,064,471
Alinda Infrastructure Fund II		57,421,125
KKR & Co European Fund III		49,515,576
Hellman & Friedman Fund VII		48,637,997
APAX VIII, LP		34,282,505
Ft. Washington Fund VI		33,450,093
Hancock Bluegrass LLC - Oregon		31,683,330
Actis Global Fund IV		28,716,419
NGP Natural Resources X, LP		28,455,869
J. P. Morgan Maritime Fund		25,630,815
Riverstone/Carlyle E & P Fund IV		24,571,146
Oaktree European Principal Fund III		24,409,242
Chrysalis Venture Fund III		21,257,684
Audax Private Equity Fund IV, LP		20,902,268
Stepstone Pioneer Capital Fund III, LP		19,450,659
Carlyle Europe Partners IV, LP		17,509,391
Carlyle Global Financial Services Partners II		16,769,688
Riverstone E & P Fund V		16,199,016
KKR & Co European Fund IV		16,088,979
Lexington Capital Partners Fund VII		15,564,046
KKR & Co Fund 2006		14,731,716
Landmark Equity Partners Fund XIV, LP		14,316,746
Audax Mezzanine Fund III		13,519,936
Ft. Washington Fund VIII		12,876,469
Ft. Washington Fund V		10,990,341
NGP Natural Resources XI, LP		9,714,513
Oaktree Mezzanine Fund III		9,033,176
Oaktree Mezzanine Fund IV		8,676,647
Lexington Capital Partners Fund VIII		8,495,883
Landmark Equity Partners Fund XV, LP		7,987,506
Gavea Investments Fund V, LP		4,945,296
Public Pension Capital LLC		4,426,191
Ft. Washington Fund IX		1,414,530
Ft. Washington Fund IX-K		1,400,000
CapitalSouth Partners Fund III		961,143
Audax Private Equity Fund V, LP		751,963
Additional Categories		
Ft. Washington High Yield Bond Fund		310,775,328
Marathon KTRS/Credit Fund LP		242,345,595
Shenkman Capital Management		163,232,647
Golub Capital Pearls 11, LLC		131,600,059
Babson Capital European Loan Fund		100,840,000
Columbia High Yield Fund		100,704,727
Marathon European Credit Opp Fund II		62,615,746
Avenue Special Situations Fund VI		53,517,812
Oaktree Opportunities IX, LP		47,824,358
Highbridge Principal Strategies III		44,109,300
Marathon European Credit Opp Fund III		34,220,234
Oaktree European Capital Solutions Fund		12,925,533
Oaktree European Dislocation Fund, LP		9,628,741
Oaktree Opportunities X, LP		3,974,545
AG Select Partners Advantage Fund		1,011,999
Subtotal	**$**	**11,061,130,697**
TOTAL ASSETS	**$**	**16,797,221,204**

Externally Managed continued ...

* *Detailed information concerning the market values of all TRS investments is available upon request.*

Investment Summary
Fair Value – Retirement Annuity Trust*
June 30, 2016

Type of Investment	Fair Value 06/30/15	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/16
Cash Equivalents	$ 643,652,091	$ 3,867,185,161	$ -	$ 3,987,543,633	$ 523,293,619
Fixed Income	3,030,858,174	2,683,578,622	94,068,587	2,984,830,771	2,823,674,612
Real Estate	825,335,346	116,449,192	61,249,243	62,173,579	940,860,202
Alternative	844,688,096	210,047,434	30,980,210	152,902,389	932,813,351
Equities	11,163,565,280	2,909,339,458	(691,799,072)	3,114,039,664	10,267,066,002
Additional Categories	1,385,897,391	478,497,727	(77,067,292)	477,814,408	1,309,513,418
TOTAL	**$ 17,893,996,378**	**$ 10,265,097,594**	**$ (582,568,325)**	**$ 10,779,304,444**	**$ 16,797,221,204**

* *Includes Life Insurance Trust Values of $90,113,180, Tax Shelter Annuity value of $352,815, and 401(h) value of $14,302,842.*

Contracted Investment Management Expenses
Fiscal Year 2015-16
(In thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 7,432,550	$ 13,479	18.1
Fixed Income Manager(s)	825,235	379	4.6
Real Estate	551,206	7,010	127.2
Additional Categories	1,319,327	8,702	66.0
Alternative Investments [2]	932,813	14,469	155.1
TOTAL	**$ 11,061,131**	**$ 44,039**	**39.8**
Administrative and Operation Expenses			
Custodian Fees [3]	$ 16,797,812	$ 380	0.2
Consultant Fees		448	0.3
Legal & Research		90	0.1
Other Administrative and Operational		2,846	1.7
TOTAL	**$ 16,797,812**	**$ 3,764**	**2.2**
GRAND TOTAL		**$ 47,803**	**28.5**

(1) – One basis point is one hundredth of one percent or the equivalent of .0001.
(2) – Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.
(3) – Includes J. Losey Scholarship Fund.

Schedule of Contracted and Administrative Investment Expenses
Retirement Annuity Trust
June 30, 2016

INVESTMENT COUNSELOR FEES

EQUITY MANAGERS		
Baillie Gifford	$	2,800,298
Baring Asset Management, Inc.		2,419,271
GE Asset Management		800,000
Todd-Veredus Asset Management LLC		1,295,310
UBS Global Asset Management		2,980,341
Wellington Management Company		2,917,720
Blackrock		265,816
Total Equity Managers	**$**	**13,478,756**
FIXED INCOME MANAGERS		
Fort Washington Investment Broad Market		150,088
Galliard Capital Mangement		229,226
Total Fixed Income Managers	**$**	**379,314**
REAL ESTATE		
Prudential PRISA		1,814,682
Angelo Gordon Net Lease Fund III		456,007
Blackstone Partners Fund VII, L.P.		557,515
Blackstone Partners Fund VIII, L.P.		666,667
Carlyle Realty Partners Fund VI, L.P.		381,472
Carlyle Realty Partners Fund VII, L.P.		652,867
Landmark Real Estate Fund VII		490,087
Rockwood Capital Real Estate Fund IX, L.P.		513,750
Rockwood Capital Real Estate Fund X, L.P.		366,694
TA Realty Associates Fund X, L.P.		1,047,882
TA Realty Associates Fund XI, L.P.		62,500
Total Real Estate Managers	**$**	**7,010,123**
ADDITIONAL CATEGORIES		
Angelo Gordon Select Partners Advantage Fund		22,704
Avenue Capital Special Situations Fund VI, L.P.		256,879
Babson European Capital		464,860
Columbia High Yield Fund		113,586
Ft. Washington Investments High Yield		581,271
Golub Capital - Pearls 11, LLC		1,077,023
Highbridge Principle Strategies Fund III, L.P.		760,027
Marathon Credit Fund		2,309,805
Marathon European Credit Fund II		798,839
Marathon European Credit Fund III		111,952
Oaktree European Capital Solutions Fund, L.P.		39,873
Oaktree European Dislocation Fund, L.P.		304,448
Oaktree Opportunities Fund IX, L.P.		795,406
Oaktree Opportunities Fund X, L.P.		215,459
Rogge Global International Fund		70,924
Shenkman Capital		778,563
Total Additional Category Managers	**$**	**8,701,619**
ALTERNATIVE INVESTMENTS		
Actis Global Fund IV, L.P.		995,000
Alinda Infrastructure Fund II, L.P.		589,702
APAX Fund VIII, L.P.		338,829
Audax Mezzanine Fund III, L.P.		253,149
Audax Private Equity Fund IV, L.P.		0
Audax Private Equity Fund V, L.P.		94,556
Capital South Fund III, L.P.		0
Carlyle Europe Parners IV, L.P.		1,723,472
Carlyle Global Finacial Services Fund II, L.P.		615,441
Chrysalis Fund III, L.P.		313,469
Ft. Washington Fund V, L.P.		80,315
ALTERNATIVE INVESTMENTS continued ...		
Ft. Washington Fund VI, L.P.		200,070
Ft. Washington Fund VIII, L.P.		115,938
Ft. Washington Fund IX, L.P.		958
Ft. Washington Fund IX-K, L.P.		1,838
Gavea V		600,000
Hancock Bluegrass LLC Oregon		237,592
Hellman and Friedman Fund VII, L.P.		736,473
IFM Global		1,006,503
JP Morgan Maritime Fund , L.P.		493,870
KKR Fund 2006, L.P.		-31,692
KKR European Fund III, L.P.		247,351
KKR European Fund IV, L.P.		433,593
Landmark Equity Partners Fund XIV, L.P.		298,400
Landmark Equity Partners Fund XV, L.P.		283,366
Lexington Capital Partners Fund VII, L.P.		191,609
Lexington Capital Partners Fund VIII, L.P.		192,032
Molpus Lake Superior Michigan		897,165
Molpus Lake Superior Hiwassee		67,171
Molpus Seven States		563,282
NGP Natural Resources Fund X, L.P.		567,649
NGP Natural Resources Fund XI, L.P.		376,697
Oaktree European Principal Fund III, L.P.		390,698
Oaktree Mezzanine Fund III, L.P.		125,263
Oaktree Mezzanine Fund IV, L.P.		69,602
Stepstone Partners Fund III, L.P.		173,715
Public Pension Capital		914,973
Riverstone/Carlyle Energy and Power Fund IV, L.P.		168,757
Riverstone Energy and Power Fund V, L.P.		142,542
Total Alternative Managers	**$**	**14,469,348**

ADMINISTRATIVE & OPERATIONAL EXPENSES

CUSTODIAN		
The Bank of New York Mellon		380,233
Total Custodian Fees	**$**	**380,233**
CONSULTANT		
Aon Hewitt		358,850
Bevis Longstreth		50,137
George Philip		38,962
Total Consultant Fees	**$**	**447,979**
LEGAL & RESEARCH		
Reinhart Boerner Van Deuren		5,560
Ice Miller		84,697
Total Legal & Research	**$**	**90,257**
OTHER		
Other Administrative and Operational (includes Personnel, Subscription services, etc…)	$	2,845,221
Total Other Expenses	**$**	**2,845,221**
TOTAL INVESTMENT EXPENSES	**$**	**47,802,820**

Ten Largest Stock Holdings Ranked [1] [2] by Fair Value June 30, 2016

Rank	Description	Fair Value	Percentage of Equities
1	Apple Inc	123,973,889	1.631
2	Amazon.com Inc	107,449,627	1.413
3	Microsoft	92,025,100	1.210
4	Facebook Inc	84,358,182	1.109
5	JP Morgan Chase	83,134,496	1.093
6	UnitedHealth Group	75,045,541	0.987
7	Pepsico Inc	73,974,618	0.973
8	Allergan PLC	71,560,023	0.941
9	Philip Morris Inc	70,135,940	0.922
10	Alphabet Inc/Ca	67,436,840	0.887

Top Ten Fixed Income Holdings [2] by Fair Value June 30, 2016

Rank	Description	Maturity	Coupon	Par Value	Fair Value	Percent of Fixed Income
1	U S Treasury	6/30/2019	1.630	45,000,000	46,200,600	1.636
2	U S Treasury Bonds	8/15/2023	6.250	31,900,000	42,757,165	1.514
3	U S Treasury	5/15/2024	2.500	31,000,000	33,670,030	1.192
4	U S Treasury Bonds	8/15/2029	6.130	22,000,000	33,657,360	1.192
5	U S Treasury	2/15/2025	2.000	32,000,000	33,480,000	1.186
6	U S Treasury	6/30/2018	0.630	30,790,000	30,804,471	1.091
7	U S Treasury	11/30/2019	1.500	30,000,000	30,698,400	1.087
8	U S Treasury	7/31/2019	1.630	28,800,000	29,577,312	1.047
9	U S Treasury	2/15/2046	2.500	23,089,000	24,042,345	0.851
10	U S Treasury Bonds	11/15/2026	6.500	16,000,000	23,696,320	0.839

(1) Includes only actively managed separate accounts.
(2) Detailed information concerning these values along with book values and cost of all TRS investments is available upon request.

Transaction Commissions Fiscal Year 2015-2016

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Abel Noser	10,185,856.00	$ 89,661.92	$ 0.009	5.43 %
Allen & Co	9,154.00	357.41	0.039	0.02
B. Riley & Co. LLC	9,716.00	340.07	0.035	0.02
Barclays Capital, London	8,152.00	327.00	0.040	0.02
Barclays	109,932.00	3,523.79	0.032	0.21
Bass / Baypoint Trading	5,800.00	261.00	0.045	0.02
BB & T Capital Markets	4,451.00	155.79	0.035	0.01
Blair, William & Co	109,852.00	5,042.37	0.046	0.31
BMO Capital Markets	89,898.00	3,681.83	0.041	0.22
BNY ConvergEX Group	72,070.00	2,797.67	0.039	0.17
Brean Murray, Carret & Co., LLC	27,363.00	957.72	0.035	0.06
Broadpoint Capital	5,300.00	185.50	0.035	0.01
BTIG	229,747.00	8,727.07	0.038	0.53
Burke & Quick Partners LLC	390.00	13.65	0.035	0.00
Canaccord Genuity, Inc.	24,784.00	885.56	0.036	0.05
Cantor Fitzgerald & Co	1,100.00	49.50	0.045	0.00
CIBC Worldmarket	62,391.00	2,338.69	0.037	0.14
Citigroup Global	123,867.00	2,234.81	0.018	0.14
Collins Stewart LLC	3,512.00	122.92	0.035	0.01
ConvergEx - Algos	30,482,035.00	152,746.27	0.005	9.25
ConvergEx - FS	4,492,580.00	44,925.80	0.010	2.72
ConvergEx - Transitions	5,248,220.00	26,241.12	0.005	1.59
ConvergEx ADR Conversions	7,775,315.00	148,485.29	0.019	9.00
Cornerstone	1,132,536.00	33,976.08	0.030	2.06
Cowen & Co	66,073.00	2,387.66	0.036	0.14
Credit Agricole Securities	23,888.00	836.08	0.035	0.05
Credit Research & Trading LLC	18,732.00	750.48	0.040	0.05
Credit Suisse Sec. LLC	1,622,834.00	49,498.33	0.031	3.00
Cuttone & Co Inc	6,700.00	234.50	0.035	0.01
Default broker	6,300.00	393.00	0.062	0.02
Depfa First Albany Sec. LLC	17,561.00	693.66	0.040	0.04
Deutsche Bank	443,641.00	12,429.92	0.028	0.75
Evercore Group LLC	7,334.00	73.34	0.010	0.00
First Kentucky Securities Corp	308,849.00	9,265.47	0.030	0.56
Freidman Billings	27,499.00	1,009.78	0.037	0.06
Goldman Sachs	1,898,348.00	54,018.12	0.028	3.27
Instinet	157,378.00	1,573.70	0.010	0.10
Investment Tech Grp Transition	11,024,101.00	101,917.26	0.009	6.17
Investment Technology Grp	16,033,396.00	159,873.29	0.010	9.69
ISI Algos	1,900,825.00	19,008.25	0.010	1.15
ISI Group	1,416,033.00	38,396.58	0.027	2.33
J.J.B. Hilliard, W.L. Lyons	757,078.00	22,712.34	0.030	1.38
Janney Montgomery Scott Inc	13,303.00	468.41	0.035	0.03
Jefferies & Co.	302,597.00	8,355.07	0.028	0.51
JMP Securities	18,738.00	817.91	0.044	0.05
Jones & Associates	32,649.00	1,448.41	0.044	0.09
JP Morgan & Chase	473,299.00	8,454.02	0.018	0.51
Keefe Bruyette & Woods	41,347.00	1,473.20	0.036	0.09
Keybanc Capital	13,894.00	508.54	0.037	0.03
King, CL, & Associates, Inc.	200.00	7.00	0.035	0.00
Knight Equity Markets	5,095.00	197.63	0.039	0.01
Leerink Swann & Co.	10,338.00	367.59	0.036	0.02
Lexington Investment Co.	139,380.00	4,181.40	0.030	0.25
Liquidnet Inc - Transition	9,386,870.00	59,395.78	0.006	3.60
Liquidnet Inc	15,128,658.00	141,605.95	0.009	8.58
Longbow Securities LLC	18,408.00	644.28	0.035	0.04
Luminex Trading	2,009.00	5.03	0.003	0.00

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
MacQuarie Securities Inc	108,500.00	3,087.65	0.028	0.19
Merrill Lynch ADR Conversions	781,950.00	7,819.50	0.010	0.47
Merrill Lynch	2,608,422.00	79,070.39	0.030	4.79
Merrill Lynch, Pierce, Fenner	56,384.00	1,973.46	0.035	0.12
Mizuho Securities, USA	24,360.00	895.61	0.037	0.05
MKM Partners	33,235.00	1,163.23	0.035	0.07
Morgan Stanley Smith Barney-Huntington	460,600.00	13,818.00	0.030	0.84
Morgan Stanley Smith Barney-Louisville	672,166.00	20,164.98	0.030	1.22
Morgan Stanley Smith Barney-NKY	687,500.00	20,625.00	0.030	1.25
Morgan Stanley	348,333.00	12,901.58	0.037	0.78
Pershing LLC	65,796.00	2,312.54	0.035	0.14
Piper Jaffray	75,145.00	2,632.53	0.035	0.16
Pulse Trading	73,996.00	739.96	0.010	0.04
R W Baird	149,683.00	5,303.08	0.035	0.32
Raymond James & Assoc	2,716,670.00	82,206.74	0.030	4.98
RBC Capital Markets	85,218.00	2,250.94	0.026	0.14
Ross Sinclaire & Assoc	161,334.00	4,840.02	0.030	0.29
Sandler O'Neill	50,219.00	1,757.67	0.035	0.11
Sanford C Bernstein	346,062.00	4,946.63	0.014	0.30
Scotia Capital, USA	58,742.00	1,726.98	0.029	0.10
State Street Global	3,196.00	112.32	0.035	0.01
Stephens Inc.	100,013.00	3,540.37	0.035	0.21
Stifel, Nicolaus & Co	1,093,242.00	33,315.12	0.030	2.02
Stifel, Nicolaus & Co-Louisville	132,800.00	3,984.00	0.030	0.24
Suntrust Robinson	43,192.00	1,513.01	0.035	0.09
Susquehanna Brokerage	14,965.00	595.70	0.040	0.04
Tradebook	1,490,262.00	7,451.34	0.005	0.45
UBS/Paine Webber Securities	280,309.00	6,303.88	0.022	0.38
UBS/Paine Webber-Louisville	1,122,123.00	33,663.69	0.030	2.04
Wedbush Morgan Securities	13,430.00	503.55	0.037	0.03
Weeden & Co	1,860,483.00	56,561.86	0.030	3.43
Wells Fargo Securities, LLC	49,534.00	1,900.85	0.038	0.12
TOTAL	**137,305,240.00**	**$ 1,650,722.99**	**$ 0.012**	**100%**

The acquisition of initial public offerings (IPOs)represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate; however, the security issuers and not the investors pay the commissions. In 2015-16, the retirement annuity trust fund bought small capitalization IPOs that generated $150,809 in commissions. Although these commissions were not paid by the retirement system, they resulted from the retirement annuity trust fund's investment activities and are included in the total commissions of $1,650,723. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.03 per share or less. Investment companies usually provide investment research for brokerage clients.

PROXY VOTING AND CORPORATE BEHAVIOR

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The Board has adopted the following position on corporate behavior:

The Board's stated fiduciary duty is to obtain the highest return for the Fund commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the Fund as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the Fund has invested.

The Board expects the managements of the companies whose equity securities are held in the Fund's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the Board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the Board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission, and others which are covered by the laws of the United States Government or the State of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the System's holdings in the company, if the sale is consistent with sound investment policy.

SECURITY LENDING

The System operates a security lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and select stocks and bonds are the types of securities loaned. The System's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral, at the time of the loan, has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral consists of cash, marketable U.S. Government securities, and selected marketable U.S. Government agency securities approved by the System.

Cash collateral is invested in short term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities unless the borrower defaults. The lending agent also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. The weighted average maturity of cash collateral investments is typically two days. The System has no credit risk exposure to borrowers, since the amounts the System owes borrowers exceeds the amounts the borrowers owe the System.

Security lending programs can entail considerable interest rate risk and credit risk. The System has structured its program to minimize these two main categories of risk. The interest rate risk is managed, as mentioned above, by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the creditworthiness of lent securities.

KENTUCKY INVESTMENTS

The System is always cognizant of its significant role in the Commonwealth's economy. Over $1.8 billion in benefits are distributed to members and annuitants living in Kentucky annually. Approximately $300 million of the retirement annuity trust fund's investments directly impact the Commonwealth. These investments include: commercial real estate; bonds issued by public agencies of the Commonwealth and those of local municipalities; pools of single-family mortgages in Kentucky; financing for multi-family housing, and; investments in companies which have an impact on the Commonwealth's economy but receive earnings from global operations. Fiduciary duty requires that investments be made solely for the benefit of the System's members and annuitants. Investments which benefit the Commonwealth's economy are made only when fully consistent with this fiduciary duty.

PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
Aon Hewitt

Investment Custodian
The Bank of New York Mellon

Fixed Income Managers
Galliard Capital Management
Ft. Washington Investment Advisors

Domestic Equity Managers
Todd Asset Management LLC
UBS Global Asset Management
Wellington Management Company
GE Asset Management

International Equity Managers
Todd Asset Management LLC
UBS Global Asset Management
Baring Asset Management, Inc.
Baillie Gifford
BlackRock Institutional Trust Company

Real Estate Managers
Prudential Real Estate Investors
Carlyle Realty Partners
Blackstone Real Estate Partners
Rockwood Capital Real Estate
TA Associates Realty
Angelo Gordon & Co.
Landmark Real Estate Partners

Alternative Investment Managers
Molpus Woodlands Group
Hancock Natural Resources Group
Kohlberg Kravis Roberts & Co.
Chrysalis Ventures
Ft. Washington Private Equity Investors
Alinda Capital Partners, LLC
Riverstone Holdings, LLC
CapitalSouth Partners
Landmark Partners
Lexington Partners
Oaktree Capital Management
Stepstone Pioneer Capital
Audax Group
J.P. Morgan Asset Management
Hellman & Friedman Capital Partners
Natural Gas Partners
Apax Partners
Actis LLP
Carlyle Global Partners
Public Pension Capital
IFM Investors
Gavea Investimentos

Additional Categories Investment Managers
Avenue Capital Group
Marathon Asset Management
Ft. Washington Investment Advisors
Oaktree Capital Management
Shenkman Capital Management, Inc
Highbridge Principal Strategies, LLC
Angelo Gordon & Co.
Golub Capital
Babson Capital Management
Columbia Threadneedle Investments

Attorney
Ice Miller LLP

HEALTH INSURANCE TRUST FUND

INVESTMENT POLICY SUMMARY

The statute that created the health insurance trust fund on July 1, 2010, KRS 161.677, obliges the Board to "manage the assets of the fund in the same general manner in which it administers the retirement funds, except that the asset allocation may differ and separate accounting and financial reporting shall be maintained for the trust fund." KRS 161.430, which governs the investment of funds for the retirement funds, requires that members' assets be managed in a manner consistent with fiduciary standards set forth in the "prudent person rule." Subject to this statute, administrative regulation 102 KAR 1:178 establishes investment policies for the health insurance trust fund. This regulation requires the Board and Investment Committee to prudently diversify assets and to consider the fund's "liquidity and its capability of meeting both short and long-term obligations" in setting asset allocation policy.

Due to an imbalance of required distributions over contributions early in the fund's existence, liquidity needs have dominated investment policy. This will evolve as contribution rate increases provided in statute improve cash flow in future years. As near-term liquidity needs recede in importance, the focus will increasingly be on establishing an investment policy which achieves the required rate of return and matches the health insurance liability.

INVESTMENT OBJECTIVES

The definitive objective of the health insurance trust fund is to provide for beneficiaries' health insurance benefit obligations, both short and long-term. In support of this objective, investment policy will be designed, on an ongoing basis, to: (1) meet all liquidity needs, (2) achieve the actuarially assumed 8.0% rate of return over the long-term, and (3) do so within appropriate risk levels.

RISK CONTROLS

Any investment program faces various risks; as with the retirement funds, the primary risk is that the assets will not support liabilities over the long-term. Risk control measures for the health insurance trust fund mirror those of the retirement annuity trust fund, but are customized to reflect the fund's unique liability. Primary risk control measures include the following steps:

- Actuarial valuations are performed each year to evaluate the funding objectives of the health insurance trust fund. Every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the fund.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the fund.
- In accordance with administrative regulation 102 KAR 1:178, which governs investment policies for the fund, the KTRS Investment Committee adopts and regularly reviews an asset allocation policy designed to meet the fund's needs.

ASSET ALLOCATION

As of June 30, 2016, the health insurance trust fund had approximately $607.2 million in total assets. This included $63 million in short-term high quality bonds for liquidity purposes. This trust fund also had $64.6 million in high yield bonds, $354.3 million in a global stock index fund, $23.9 million in private equity investments, $28.4 million in bank loan investments, and $46 million in an alternative credit funds, and $25.4 million in real estate funds.

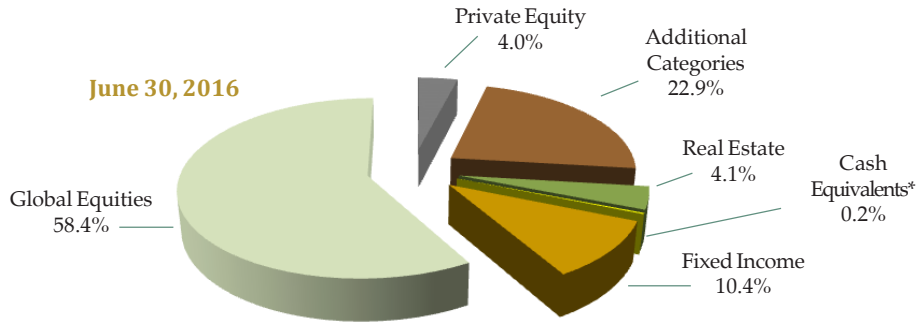
Asset allocation will be adjusted annually by the Investment Committee to reflect changing liquidity needs and actuarial funding status. Due to upcoming contribution rate increases enacted in statute, liquidity needs are expected to decline in coming years while funding status improves. The information below shows the health insurance trust fund's asset allocation by market value as of June 30, 2016 and June 30, 2015.

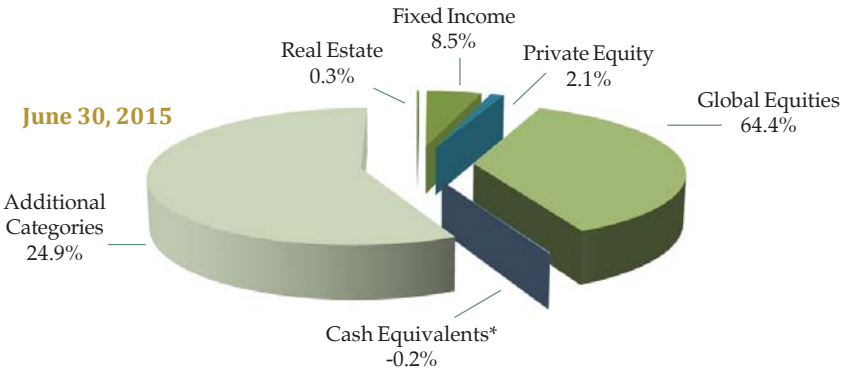
Health Insurance Trust

	June 30,2016	%	June 30,2015	%
Cash Equivalents*	$ 1,426,565	0.2	$ -1,034,005	-0.2
Fixed Income	63,053,784	10.4	47,019,105	8.5
Global Equities	354,369,798	58.4	355,702,555	64.4
Real Estate	25,433,241	4.1	1,762,328	0.3
Additional Categories	139,034,552	22.9	137,798,860	24.9
Private Equity	23,931,317	4.0	11,698,357	2.1
TOTALS	**$ 607,249,257**	**100.0**	**$ 552,947,200**	**100.0**

* *Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

Distribution of Investments Health Insurance Trust Fair Values





* *Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

HEALTH INSURANCE TRUST
PORTFOLIO RETURNS

For the fiscal year 2016, the health insurance trust fund's portfolio returned -1.8% versus a policy index of -0.3%. The fund's global equities returned -3.4% versus -3.9% for the MSCI All Country World IMI Index. A high quality bond fund held returned 5.4% versus 6.7% for the Barclays Government/Credit Index. This was the first full year of managing the bond fund against this index. In the previous years it was managed against 90-day T-bills. We are working to extend duration but given the historically low interest rates we are being very selective at our extension points. A high yield bond fund returned -0.5% versus 1.7% for its benchmark.

Prior to July 1,2015 TRS did not benchmark overall fund performance. Effective July 1, 2015 the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year. Returns were generated by the Segal Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon market values.

	1 Yr[1]	3 Yr[1]	5 Yr[1]	10 Yr[1]	20 Yr[1]
Total Fund					
KTRS Health Insurance Trust	-1.8	4.8	4.6	-	-
Policy Index[3]	-0.3	-	-		
Equities					
Global Equities	-3.4	6.6	5.9	-	-
MSCI AC World IMI	-3.9	6.1	5.4	-	-
Fixed Income					
Internal Bond Fund	5.4	2.4	1.6	-	-
Barclays Govt/Credit Index	6.7	4.2	4.1	-	-
Alternative Investments					
Private Equity[2]	10.7	13.4	-	-	-
Additional Categories					
Additional Categories	-2.9	2.6	5.1	-	-
B of A Merrill Lynch High Yield Master II	1.7	4.2	5.7	-	-
Real Estate					
Non-Core Real Estate	20.3	-	-	-	-
NCREIF Index	10.6	-	-	-	-
Cash					
Cash(Unallocated)	0.3	0.1	0.1	-	-
90 Day Treasury Bill	0.1	0.1	0.1	-	-

(1) Annualized.

(2) For a period of five years private equity investments will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the first capital call, investments in this class shall be benchmarked versus theS & P 500 plus 3%, which is the System's long-term expected return for this asset class.

(3) Prior to July 1, 2015, TRS did not benchmark overall fund performance. Effective July 1, 2015, the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.

SCHEDULE OF INVESTMENT RETURNS - HEALTH INSURANCE TRUST

2016	Annual Rate of Return Net of Investment Expense	-2.20%
2015	Annual Rate of Return Net of Investment Expense	1.38%
2014	Annual Rate of Return Net of Investment Expense	15.38%

HEALTH INSURANCE TRUST
PORTFOLIOS
FAIR VALUES *
June 30, 2016

INTERNALLY MANAGED

Cash Equivalents	
Cash Collections Fund (Unallocated)	$ 1,426,565
Fixed Income	
Internal Bond Fund	63,053,784
Subtotal	**$ 64,480,349**

EXTERNALLY MANAGED

Global Equities	
BlackRock Fund B	354,369,798
Alternative Investments	
Ft. Washington Fund VII	4,016,966
Ft. Washington Fund VIII	3,678,991
Carlyle Europe Fund IV	3,501,879
KKR European Fund IV	3,217,797
Actis Global Fund IV	2,870,842
Ft. Washington PE Opp III	2,321,061
NGP Natural Resources XI	1,942,905
Landmark Equity XV	1,331,252
Ft. Washington Fund IX-K	400,000
Ft. Washington Fund IX	398,970
Audax PE Fund V	250,654
Additional Categories	
Ft. Washington High Yield Bond Fund	35,077,675
Marathon/KTRS Credit Fund	30,239,245
Columbia High Yield Fund	29,556,833
Shenkman Capital Management	28,444,518
Marathon European Credit Opp Fund III	4,562,698
Highbridge Principal Strategies III	4,410,930
Marathon European Credit Opp Fund II	4,174,383
Oaktree European Capital Solutions	2,568,270
Real Estate	
Prudential PRISA Fund	10,337,178
Landmark Real Estate VII	4,794,620
Blackstone Realty Fund VIII	3,923,122
Carlyle Realty VII	3,878,321
TA Realty Fund XI	2,500,000
Subtotal	**$ 542,768,908**
TOTAL ASSETS	**$ 607,249,257**

** Detailed information concerning the market values of all TRS investments is available upon request.*

Investment Summary
Fair Value – Health Insurance Trust
June 30, 2016

Type of Investment	Fair Value 06/30/15	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/16
Cash Equivalents	$ 6,461,138	$ 162,385,333	$ -	$ 164,962,810	$ 3,883,661
Fixed Income	42,746,464	31,478,277	2,071,309	13,740,651	62,555,399
Real Estate	1,762,328	22,766,686	2,085,678	1,181,451	25,433,241
Equities	355,702,555	10,007,721	(11,340,478)	-	354,369,798
Alternative	11,698,357	14,571,616	1,590,099	3,928,756	23,931,316
Additional Categories	134,576,358	86,105,600	(10,698,388)	72,907,728	137,075,842
TOTAL	**$ 552,947,200**	**$ 327,315,233**	**$ (16,291,780)**	**$ 256,721,396**	**$ 607,249,257**

Health Insurance Trust Fund
Contracted Investment Management Expenses
Fiscal Year 2015-16
(In thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 354,370	$ 191	54.0
Fixed Income Manager(s)	-	-	
Real Estate [2]	25,433	504	198.2
Additional Categories	139,035	683	49.1
Alternative Investments [3]	23,931	795	332.2
TOTAL	**$ 542,769**	**$ 2,173**	**40.0**
Other Investment Services			
Custodian Fees	607,249	$ 30	0.5
Consultant Fees		-	0.0
Legal & Research		-	0.0
Other Administrative and Operational		75	1.2
TOTAL	**$ 607,249**	**$ 105**	**1.7**
GRAND TOTAL		**$ 2,278**	37.5

1 - One basis point is one hundredth of one percent or the equivalent of .0001.
2 - Accrual of fees payable as of June 30, 2016.
3 - Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.

Schedule of Contracted and Administrative Investment Expenses
Health Insurance Trust Fund
June 30, 2016

INVESTMENT COUNSELOR FEES

EQUITY MANAGERS	
BlackRock	191,346
Total Equity Managers	**$ 191,346**
REAL ESTATE	
Blackstone VIII	133,333
Carlyle VII	130,574
Landmark VII	98,017
Rockwood Capital X	76,078
TA Realty XI	12,499
Prudential	53,095
Total Real Estate	**$ 503,596**
ADDITIONAL CATEGORIES	
Highbridge Principal Strategies Find III,L.P.	76,002
Columbia High Yield Fund	12,755
Ft. Washington Investments High Yield	109,151
Marathon Credit Fund	288,632
Marathon European Credit Fund II	53,256
Marathon European Credit Fund III	14,927
Oaktree European Capital Solutions	13,613
Shenkman Capital	114,905
Total Additional Category Managers	**$ 683,241**
ALTERNATIVE INVESTMENTS	
Actis Global Fund IV, L.P.	100,000
Audax Private Equity Fund V	31,519
Carlyle Europe IV, L.P.	345,034
Ft. Washington Private Equity III, L.P.	37,500
Ft. Washington Fund VII, L.P.	37,500
Ft. Washington Fund VIII, L.P.	33,125
Ft. Washington Fund IX, L.P.	270
Ft. Washington Fund IX-K, L.P.	525
KKR European IV, L.P.	86,721
Landmark Fund XV ,L.P.	47,311
NGP Natural Resources XI, L.P.	75,339
Total Alternative Managers	**$ 794,844**

ADMINISTRATIVE AND OPERATIONAL EXPENSES

CUSTODIAN	
The Bank of New York Mellon	30,275
Total Custodian	**$ 30,275**
LEGAL & RESEARCH	
Ice Miller	
Total Legal & Research	
OTHER	
Other Administrative and Operational (includes Personnel, Subscription services, etc…)	74,831
Total Other	**$ 74,831**
TOTAL INVESTMENT EXPENSES	**$ 2,278,133**

HEALTH INSURANCE TRUST PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
AON Hewitt

Investment Custodian
The Bank of New York Mellon

Additional Categories Managers
Ft. Washington Investment Advisors
Shenkman Capital Management, Inc.
Highbridge Principal Strategies, LLC
Marathon Asset Management
Oaktree Capital Management
Columbia Threadneedle Investments

Global Equity Manager
BlackRock Institutional Trust Company

Real Estate
Carlyle Realty Partners
Landmark Real Estate Partners
Blackstone Real Estate Partners
TA Associates Realty
Prudential Real Estate Investors

Alternative Investment Managers
Ft. Washington Private Equity Investors
Actis LLP
Landmark Partners
Kohlberg Kravis Roberts & Co.
Natural Gas Partners
Carlyle Global Partners
Audax Group

Attorney
Ice Miller LLP

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Teachers' Retirement System

of the State of Kentucky

2016

Actuarial Section

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 21, 2016

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2016. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contribution rates as a percentage of payroll for the fiscal year ending June 30, 2019 required to support the total benefits of the System are as follows:

Group	Combined Member and State Contribution Requirement
University members hired before July 1, 2008	35.90%
University members hired on or after July 1, 2008	36.90%
Non-University members hired before July 1, 2008	38.86%
Non-University members hired on or after July 1, 2008	39.86%

These rates represent an increase since the previous valuation in the Pension actuarially determined employer contribution rate of 1.00% of payroll for the fiscal year ending June 30, 2019. In addition, there has been a net decrease in the expected state special appropriation from 2.94% to 2.83%, or 0.11% of payroll and an increase of 0.01% in the amount required for life insurance benefits.

For the fiscal year ending June 30, 2019, in addition to the State statutory contribution rates and the state special appropriation, there is an additional employer contribution rate of 14.61% of payroll required in order to amortize the unfunded accrued liability according to the funding policy adopted by the Board. This is 1.12% greater than the 13.49% determined in the previous valuation.

Since the previous valuation, various economic and demographic assumptions have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2015. These revised changes were adopted by the Board on September 19, 2016 and are discussed on page 97 of the report. The valuation takes into account the effect of membership to the System enacted through the most recent Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the total unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of

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payroll in accordance with the funding policy adopted by the Board, on the assumption that payroll will increase by 3.5% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund from 2005 to 2010 were allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund. No additional contributions were allocated during the 2016 fiscal year.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This actuarial valuation was performed to determine the recommended funding amount for the System. The asset values used to determine unfunded liabilities and funded ratios are not market values but less volatile market related values. A smoothing technique is applied to market values to determine the market related values. The unfunded liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return of assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

In our opinion, the System has not been funded on an actuarially sound basis since the full actuarially determined contributions were not made by the employer. If contributions by the employer to the System in subsequent fiscal years are less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated. It is our understanding that the State budget includes additional appropriations of $973 million to fund the required contribution for the 2016-2018 biennium.

Respectfully submitted,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Eric H. Gary, FSA, FCA, MAAA
Chief Health Actuary

Cathy Turcot
Principal and Managing Director

Report of Actuary on the Valuation Prepared as of June 30, 2016 Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (dollar amounts in thousands):

Valuation Date	June 30, 2016	June 30, 2015
Number of active members	71,848	72,246
Annual salaries	$ 3,537,226	$ 3,515,113
Number of annuitants and beneficiaries	51,563	49,822
Annual allowances	$ 1,868,875	$ 1,767,637
Assets		
Market value	$ 16,812,832	$ 18,049,131
Actuarial value	17,496,894	17,219,520
Unfunded actuarial accrued liability	$ 14,531,333	$ 13,930,442
Funded Ratio	54.6 %	55.3 %
Amortization period (years)	28.1	29.3

Contribution rates are shown separately for university and non-university members on the following pages.

Contribution Rates for University Members

Valuation Date	June 30, 2016		June 30, 2015	
For Fiscal Year Ending	June 30, 2019		June 30, 2018	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	11.030 %	11.030 %	12.340 %	12.340 %
Accrued liability	24.870	25.870	22.560	23.560
Total	35.900 %	36.900 %	34.900 %	35.900 %
Member	7.625 %	7.625 %	7.625 %	7.625 %
State (ARC)	28.275	29.275	27.275	28.275
Total	35.900 %	36.900 %	34.900 %	35.900 %
Life Insurance Fund:				
State	0.040 %	0.040 %	0.030 %	0.030 %
Medical Insurance Fund:				
Member	2.775 %	2.775 %	2.775 %	2.775 %
State Match	2.775	1.775	2.775	1.775
Total	5.550 %	4.550 %	5.550 %	4.550 %
Total Contributions	41.490%	41.490%	40.480%	40.480%
Member Statutory	10.400 %	10.400 %	10.400 %	10.400 %
State Statutory	13.650	13.650	13.650	13.650
Required Increase	14.610	14.610	13.490	13.490
State Special	2.830	2.830	2.940	2.940
Total	41.490 %	41.490 %	40.480 %	40.480 %

Contribution Rates for Non-University Members

Valuation Date	June 30, 2016		June 30, 2015	
For Fiscal Year Ending	June 30, 2019		June 30, 2018	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	14.940 %	14.940 %	16.720 %	16.720 %
Accrued liability	23.920	24.920	21.140	22.140
Total	38.860 %	39.860 %	37.860 %	38.860 %
Member	9.105 %	9.105 %	9.105 %	9.105 %
State (ARC)	29.755	30.755	28.755	29.755
Total	38.860 %	39.860 %	37.860 %	38.860 %
Life Insurance Fund:				
State	0.040 %	0.040 %	0.030 %	0.030 %
Medical Insurance Fund:				
Member	3.750 %	3.750 %	3.750 %	3.750 %
State Match	3.750	2.750	3.750	2.750
Total	7.500 %	6.500 %	7.500 %	6.500 %
Total Contributions	46.400 %	46.400 %	45.390 %	45.390 %
Member Statutory	12.855 %	12.855 %	12.855 %	12.855 %
State Statutory	16.105	16.105	16.105	16.105
Required Increase	14.610	14.610	13.490	13.490
State Special	2.830	2.830	2.940	2.940
Total	46.400 %	46.400 %	45.390 %	45.390 %

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2016 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Since the previous valuation, various economic and demographic assumptions have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2015. The changes adopted by the Board on September 19, 2016, include various demographic and economic assumptions summarized below:
   - Price Inflation changed assumed rate from 3.50% to 3.00%,
   - Wage Inflation changed assumed rate from 4.00% to 3.50%,
   - Assumed Salary Scale adjusted to reflect a decrease of 0.25% in merit & promotion for all ages, and
   - Assumed rates of Withdrawal, Disability, Retirement, and Mortality have been adjusted to more closely reflect experience.

5. Schedule B shows the development of the actuarial value of assets. The assumed investment rate of return is 7.50%. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.

6. The funding policy is shown in Schedule H of the Report.

7. Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. There have been no changes since the previous valuation.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2016 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
University hired before 7/1/2008	1,883	$ 137,213
University hired after 7/1/2008	1,453	72,056
Non-University Full Time hired before 7/1/2008	38,065	2,429,982
Non-University Full Time hired after 7/1/2008	18,846	826,256
Non-University Part Time hired before 7/1/2008	2,797	24,219
Non-University Part Time hired after 7/1/2008	8,804	47,500
TOTAL	**71,848**	**$ 3,537,226**

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2016

Group	Number	Annual Retirement Allowances[1] ($1,000's)
Service Retirements	44,970	$ 1,704,041
Disability Retirements	2,751	80,652
Beneficiaries of Deceased Members	3,842	84,182
TOTAL	**51,563**	**$ 1,868,875**

[1] *Includes cost-of-living adjustments effective through July 1, 2016.*

3. Table 1 of Schedule G shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2016 the market value of Pension Plan assets for valuation purposes held by the System amounted to $16,812,831,883. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes. The estimated market investment return for the plan year was (1.0)%. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2016 was $17,496,894,437. The estimated investment return for the plan year ending June 30, 2016 on an actuarial value of assets basis was 7.58%, compared to the assumed investment rate of return for the period of 7.50% Schedule B shows the development of the actuarial value of assets as of June 30, 2016.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2016. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.

2. The valuation balance sheet shows that the System has total prospective liabilities of $16,231,288,904 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $20,002,749,810 of which $781,756,333 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $413,616,742. The total prospective liabilities of the System amounts to $36,647,655,456. Against these liabilities, the System has present assets for valuation purposes of $17,496,894,437. When this amount is deducted from the total liabilities of $36,647,655,456, there remains $19,150,761,019 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 11.03% of payroll for University and 14.94% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,619,427,935. When this amount is subtracted from $19,150,761,019, which is the present value of the total future contributions to be made by the employer, there remains $14,531,333,084 as the amount of future unfunded accrued liability contributions.

5. The unfunded accrued liability increased by approximately $601 million for the plan year ending June 30, 2016 and the funding ratio decreased from 55.3% to 54.6%. The increase in the unfunded accrued liability was primarily due to the contribution shortfall for the plan year and demographic losses due to turnover, retirement and mortality. Offsetting these losses were a gain due to the assumption changes from the experience study and small gains for the investment return on an actuarial value basis that was greater than expected and salary increases that were less than assumed. See Section VII for a complete breakdown of the experience of the System.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 10.400% of annual salary to the System and each non-university member contribute 12.855% of annual salary. Of this amount, for each university member, 2.775% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.75% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by

statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.04% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 14.61% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan based on the funding policy adopted by the Board. An additional special appropriation of 2.83% of total payroll will be made by the State. Therefore, the total actuarially determined employer contribution rate to the Pension Plan is 28.275% for university members who become members before July 1, 2008 and 29.275% for university members who become members on or after July 1, 2008. The total actuarially determined employer contribution rate to the Pension Plan is 29.755% for non-university members who become members before July 1, 2008 and 30.755% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source
University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	10.400 %	10.400 %
Statutory Medical Insurance Fund	(2.775)	(2.775)
Contribution to Pension Plan	7.625 %	7.625 %
Employer		
Statutory Matching Total	10.400 %	10.400 %
Statutory Medical Insurance Fund	(2.775)	(1.775)
Supplemental Funding	3.250	3.250
Subtotal	10.875 %	11.875 %
Life Insurance	(0.040) %	(0.040) %
Additional to Comply with Board Funding Policy	14.610	14.610
Special Appropriation	2.830	2.830
Contribution to Pension Plan	28.275 %	29.275 %
Total Contribution to Pension Plan	**35.900 %**	**36.900 %**

Contribution Rates by Source
Non-University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	12.855 %	12.855 %
Statutory Medical Insurance Fund	(3.750)	(3.750)
Contribution to Pension Plan	9.105 %	9.105 %
Employer		
Statutory Matching Total	12.855 %	12.855 %
Statutory Medical Insurance Fund	(3.750)	(2.750)
Supplemental Funding	3.250	3.250
Subtotal	12.355 %	13.355 %
Life Insurance	(0.040) %	(0.040) %
Additional to Comply with Board Funding Policy	14.610	14.610
Special Appropriation	2.830	2.830
Contribution to Pension Plan	29.755 %	30.755 %
Total Contribution to Pension Plan	**38.860**	**39.860 %**

4. The valuation indicates that normal contributions at the rate of 11.03% of active university members' salaries and 14.94% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded accrued liability. This accrued liability rate is 24.87% for university members hired before July 1, 2008, 25.87% for university members hired on and after July 1, 2008, 23.92% for non-university members hired before July 1, 2008, and 24.92% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 2.83% of payroll to be made by the State. These rates are shown in the following table:

Actuarially Determined Contribution Rates

Rate	Percentage of Active Members' Salaries			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	11.03 %	11.03 %	14.94 %	14.94 %
Accrued Liability *	24.87	25.87	23.92	24.92
Total	**35.90%**	**36.90%**	**38.86 %**	**39.86 %**

** Includes special appropriations of 2.83% of payroll to be made by the State.*

5. The following table shows the components of the total UAAL and the derivation of the UAAL contribution rate in accordance with the funding policy:

Total UAAL and UAAL Contribution Rate
(In thousands of dollars)

	UAAL	Remaining Amortization Period (years)	Amortization Payment
Legacy	$ 14,543,130	28	$ 859,217
New Incremental 6/30/2015	(352,563)	19	(26,536)
New Incremental 6/30/2016	340,766	20	24,775
Total UAAL	$ 14,531,333		$ 857,456
Blended Amortization Period (years)			28.1

Section VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 14.61%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded accrued liability in accordance with the Board funding policy. However, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2010, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. Beginning with the 2011 fiscal year, there have been no further loans for Stabilization Funding. In addition, there were no loans for single-subsidy funding for fiscal years 2013 through 2015. The table on the following page shows the amounts borrowed, annual payments and remaining balances for the non-single subsidy funding as of June 30, 2016:

Medical Insurance Fund
Stabilization Funding

FISCAL YEAR	LOAN AMOUNT	ANNUAL PAYMENT	BALANCES AS OF JUNE 30, 2016
2008/2009	$ 8,400,000	$ 1,228,900	$ 3,274,213
2009/2010	9,200,000	1,345,200	4,611,791
2010/2011	10,700,000	1,564,500	6,473,479
2011/2012	12,300,000	1,798,700	8,627,015
TOTAL	**$ 40,600,000**	**$ 5,937,300**	**$ 22,986,498**

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 14.61% of payroll for the fiscal year ending June 30, 2019, as shown in the following table:

VALUATION DATE	FISCAL YEAR	INCREASE (DECREASE)	CUMULATIVE INCREASE	AMOUNT
June 30, 2004	June 30, 2007	0.11%	0.11%	$ 3,174,600
June 30, 2005	June 30, 2008	1.21	1.32	38,965,900
June 30, 2006	June 30, 2009	0.56	1.88	60,499,800
June 30, 2007	June 30, 2010	0.58	2.46	82,331,200
June 30, 2008	June 30, 2011	1.13	3.59	121,457,000
June 30, 2009	June 30, 2012	2.22	5.81	208,649,000
June 30, 2010	June 30, 2013	1.46	7.27	260,980,000
June 30, 2011	June 30, 2014	0.75	8.02	299,420,000
June 30, 2012	June 30, 2015	2.40	10.42	386,400,000
June 30, 2013	June 30, 2016	2.55	12.97	487,400,000
June 30, 2014	June 30, 2017	0.83	13.80	520,372,000
June 30, 2015	June 30, 2018	(0.31)	13.49	512,883,000
June 30, 2016	June 30, 2019	1.12	14.61	553,597,000

In addition, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll, in order to amortize the unfunded actuarial accrued liability in accordance with the Board funding policy. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $600,891,107 in the unfunded accrued liability from $13,930,441,977 to $14,531,333,084 during the year ending June 30, 2016.

Analysis of Financial Experience
(In thousands of dollars)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 1,044,783
Expected accrued liability contribution	(784,659)
Loss due to Contribution Shortfall and Timing	472,425
Experience:	
Valuation asset growth	(14,160)
Pensioners' mortality	71,058
Turnover and retirements	135,219
New entrants	37,907
Salary increases	(64,476)
Amendments	0
Assumption changes	(297,206)
Method changes	0
Total	**$ 600,891**

Section VIII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board (GASB) has issued Statements No. 67 and 68 which replace Statement No. 25 and 27. The information required under the new GASB Statements will be issued in separate reports. The following information is provided for informational purposes only.

1. The following is a distribution of the number of employees by type of membership.

Number of Active and Retired Members as of June 30, 2016

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	51,563
Terminated vested employees entitled to benefits but not yet receiving benefits	9,240
Inactive non-vested members	46,055
Active plan members	71,848
Total	**178,706**

2. The schedule of funding progress is shown below.

Schedule of Funding Progress
(In thousands of dollars)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2011*	$ 14,908,138	$ 25,968,693	$ 11,060,554	57.4 %	$ 3,451,756	320.4 %
6/30/2012	14,691,371	26,973,853	12,282,483	54.5	3,479,567	353.0
6/30/2013	14,962,758	28,817,232	13,854,474	51.9	3,480,066	398.1
6/30/2014**	16,174,199	30,184,404	14,010,205	53.6	3,486,327	401.9
6/30/2015	17,219,520	31,149,962	13,930,442	55.3	3,515,113	396.3
6/30/2016**	17,496,894	32,028,227	14,531,333	54.6	3,537,226	410.8

* *Reflects change in assumptions and methods.*
** *Reflects change in assumption.*

3. The information presented above was determined as part of the actuarial valuation at June 30, 2016. Additional information as of the latest actuarial valuation follows.

Valuation date	06/30/2016
Actuarial cost method	Entry age
Amortization method	Level percent of pay, closed
Remaining amortization period	28.1 years
Asset valuation method	5-year smoothed market

Actuarial Assumptions:
Investment rate of return*
7.50%
Projected salary increases**
3.50 - 7.30%

Cost-of-living adjustments
1.50% Annually

**Includes price inflation at 3.00%*
***Includes wage inflation at 3.50%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Actuarial Determined Employer Contributions	Actual Employer Contributions	Percentage Contributed
2011	$ 678,741,428	$ 1,037,935,993*	153 %
2012	757,822,190	557,339,552	74
2013	802,984,644	568,233,446	71
2014	823,446,156	563,326,249	68
2015	913,653,854	559,579,290	61
2016	999,270,174	565,454,590	57

** Includes Pension Obligation Bond proceeds of $465,384,165.*

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2016
(In thousands of dollars)

ACTUARIAL LIABILITIES

(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 15,144,582	
	- Disability retirement benefits	711,697	
	- Death and survivor benefits	127,458	
	- Refunds of member contributions	247,552	
	Total		$ 16,231,289
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits		
	- Service retirement benefits	$ 18,488,211	
	- Disability retirement benefits	787,689	
	- Death and survivor benefits	726,850	
	Total		$ 20,002,750
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 413,616
(4)	TOTAL ACTUARIAL LIABILITIES		$ 36,647,655

PRESENT AND PROSPECTIVE ASSETS

(5)	Actuarial value of assets		$ 17,496,894
(6)	Present value of total future contributions = (4)-(5)	$ 19,150,761	
(7)	Present value of future member contributions and employer normal contributions		4,619,428
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		14,531,333
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 36,647,655

Schedule A continued ...

Solvency Test

(In millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation of Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2011	$ 3,325.7	$ 15,557.9	$ 7,085.1	$ 14,908.1	100%	74 %	0 %
6/30/2012	3,415.2	16,472.2	7,086.4	14,691.4	100	68	0
6/30/2013	3,514.4	17,716.4	7,586.5	14,962.8	100	65	0
6/30/2014	3,629.7	18,676.3	7,878.3	16,174.2	100	67	0
6/30/2015	3,700.6	19,522.5	7,926.8	17,219.5	100	69	0
6/30/2016	3,756.0	20,416.4	7,855.8	17,496.9	100	67	0

SCHEDULE B

Development of Actuarial Value of Assets as of June 30, 2016

(1)	Actuarial Value of Assets Beginning of Year		$ 17,219,519,677
(2)	Market Value of Assets End of Year		16,812,831,883
(3)	Market Value of Assets Beginning of Year		18,049,130,737
(4)	Cash Flow		
	a.	Contributions	878,498,816
	b.	Benefit Payments	1,860,946,372
	c.	Administrative Expense	8,636,438
	d.	Net: (4)a - (4)b - (4)c	(991,083,994)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	(245,214,860)
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,316,519,156
	d.	Amount for Phased-In Recognition: (5)a - (5)c	(1,561,734,016)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	(312,346,803)
	b.	First Prior Year	(92,160,668)
	c.	Second Prior Year	325,163,609
	d.	Third Prior Year	191,479,441
	e.	Fourth Prior Year	(160,195,981)
	f.	Total Recognized Investment Gain	(48,060,402)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 17,496,894,437
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ (684,062,554)
(9)	Rate of Return on Actuarial Value:		7.58%

SCHEDULE C

PENSION PLAN ASSETS
Summary of Receipts & Disbursaements*
(Market Value)

	For the Year Ending June 30, 2016	For the Year Ending June 30, 2015
Receipts for the Year		
Contributions		
Members	$ 313,044,226	$ 308,159,763
Employers	565,454,590	559,579,290
Total	878,498,816	867,739,053
Net Investment Income	(245,214,860)	862,178,759
Total	633,283,956	1,729,917,812
Disbursements for the Year		
Benefit Payments	1,833,198,630	1,741,456,095
Refunds to Members	27,747,742	23,032,624
Miscellaneous, including expenses	8,636,438	8,868,971
Total	1,869,582,810	1,773,357,690
Deficiency of Receipts over Disbursements	(1,236,298,854)	(43,439,878)
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	18,049,130,737	18,092,570,615
Excess of Receipts over Disbursements	(1,236,298,854)	(43,439,878)
Asset Balance as of the End of the Year	$ 16,812,831,883	$ 18,049,130,737
Rate of Return on Market Value	(1.0)%	5.1%

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE D
Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually, including price inflation at 3.00% per annum.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.50% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	7.20%	6.40%	5.40%	4.70%	4.20%	3.80%	3.70%	3.50%	3.50%	3.50%

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.019 %	0.01%	11.00 %				
25	0.021	0.01	11.00	3.00%			
30	0.025	0.01	11.00	3.00	3.00%		
35	0.043	0.04	12.00	3.50	1.40		
40	0.060	0.09	12.00	4.50	1.40		
45	0.084	0.20	12.00	4.50	1.30		17.0%
50	0.119	0.30	14.00	4.50	1.90		17.0
55	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	1.556	0.75	20.00	0.00	0.00	100.0	100.0

**Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.*

Schedule D continued ...

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.007 %	0.01 %	9.00 %				
25	0.008	0.01	9.00	4.00 %			
30	0.010	0.03	12.00	4.00	1.65 %		
35	0.018	0.06	12.00	4.00	1.50		
40	0.026	0.12	12.00	4.00	1.30		
45	0.042	0.25	13.00	4.00	1.20		15.0 %
50	0.062	0.44	13.00	5.00	1.50		18.0
55	0.096	0.65	15.00	5.00	2.00	5.5 %	50.0
60	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	0.831	0.85	15.00	0.00	0.00	100.0	100.0

**Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.*

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

Annual Rate of Death After . . .

AGE	SERVICE RETIREMENT MALE	SERVICE RETIREMENT FEMALE	DISABILITY RETIREMENT MALE	DISABILITY RETIREMENT FEMALE
45	0.1609 %	0.1135 %	2.3306 %	1.2482 %
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability.

SCHEDULE E

Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently at 7.50%), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE F

Summary of Main System Provisions as Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2016. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance for Members Before 7/1/2008
Condition for Allowance

- Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance

- The annual retirement allowance for non-university members is equal to:
  - (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
  - (b) 2.5% of final average salary multiplied by service after July 1, 1983.
  - (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
  - (d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

Schedule F continued ...

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance for Members on and after 7/1/2008
Condition for Allowance

- Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

- 1.7% of final average salary if service is 10 years or less.
- 2.0% of final average salary if service is greater than 10 years and no more than 20 years.
- 2.3% of final average salary if service is greater than 20 years but no more than 26 years.
- 2.5% of final average salary if service is greater than 26 years but no more than 30 years.
- 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

- 1.5% of final average salary if service is 10 years or less.
- 1.7% of final average salary if service is greater than 10 years and no more than 20 years.
- 1.85% of final average salary if service is greater than 20 years but less than 27 years.
- 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance
Condition for Allowance

- Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance

- The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

- Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

- A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased TRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance

Schedule F continued ...

will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3- CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE G
Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2016
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 35	>= 35	TOTAL
24 & under	2,355								2,355
Total Pay	45,330,040								45,330,040
Avg. Pay	19,248								19,248
25 to 29	5,983	1,390	6						7,379
Total Pay	203,433,582	67,448,815	290,024						271,172,421
Avg. Pay	34,002	48,524	48,337						36,749
30 to 34	3,012	4,867	1,237	5					9,121
Total Pay	95,202,602	245,417,243	70,031,584	254,892					410,906,321
Avg. Pay	31,608	50,425	56,614	50,978					45,051
35 to 39	2,269	2,377	4,756	984	4				10,390
Total Pay	63,198,818	122,108,596	281,358,005	63,149,812	239,758				530,054,989
Avg. Pay	27,853	51,371	59,159	64,177	59,940				51,016
40 to 44	1,785	1,520	2,196	4,060	746	1			10,308
Total Pay	45,830,416	77,450,441	131,391,508	267,885,302	52,046,889	53,664			574,658,220
Avg. Pay	25,675	50,954	59,832	65,982	69,768	53,664			55,749
45 to 49	1,483	1,177	1,593	2,266	3,343	750	3		10,615
Total Pay	39,361,503	60,147,545	93,765,291	147,455,842	233,185,542	54,299,673	169,293		628,384,689
Avg. Pay	26,542	51,102	58,861	65,073	69,753	72,400	56,431		59,198
50 to 54	1,196	717	1,039	1,272	1,534	1,826	286	2	7,872
Total Pay	25,260,952	36,290,570	61,397,451	82,245,956	106,693,617	134,430,589	21,213,845	131,648	467,664,628
Avg. Pay	21,121	50,614	59,093	64,659	69,553	73,620	74,174	65,824	59,409
55 to 59	1,345	467	678	996	1,069	818	352	19	5,744
Total Pay	21,138,039	21,468,016	39,649,701	64,095,061	75,667,783	62,721,524	30,314,021	1,529,398	316,583,543
Avg. Pay	15,716	45,970	58,480	64,352	70,784	76,677	86,119	80,495	55,116
60 to 64	1,837	341	387	608	577	412	102	65	4,329
Total Pay	23,796,325	13,577,768	22,772,409	40,965,044	42,005,811	32,467,970	9,324,712	5,479,043	190,389,082
Avg. Pay	12,954	39,818	58,843	67,377	72,800	78,806	91,419	84,293	43,980
65 & over	2,291	524	181	227	214	169	65	64	3,735
Total Pay	20,398,952	12,356,675	11,463,858	15,532,839	16,369,811	14,008,597	5,681,398	6,270,288	102,082,418
Avg. Pay	8,904	23,581	63,336	68,427	76,494	82,891	87,406	97,973	27,331
Total	23,556	13,380	12,073	10,418	7,487	3,976	808	150	71,848
Total Pay	582,951,229	656,265,669	712,119,831	681,584,748	526,209,211	297,982,017	66,703,269	13,410,377	3,537,226,351
Avg. Pay	24,747	49,048	58,984	65,424	70,283	74,945	82,554	89,403	49,232

Average Age: 43.5 **Average Service:** 10.8

Schedule G continued ...

Table 2: Number of Retired Members and Beneficiaries and their Benefits by Age as of June 30, 2016

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	848	$ 11,407,720	$ 13,453
50 - 54	1,322	51,147,401	38,689
55 - 59	4,074	174,702,723	42,882
60 - 64	8,959	364,324,086	40,666
65 - 69	13,703	520,359,554	37,974
70 - 74	9,332	336,374,000	36,045
75 - 79	5,933	201,434,460	33,952
80 - 84	3,715	114,780,225	30,896
85 - 89	2,315	62,949,170	27,192
90 & Over	1,362	31,395,212	23,051
TOTAL	51,563	$ 1,868,874,551	$ 36,244

Average Age: 69.2 **Average Age at Retirement:** 55.9

Table 3: Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

Fiscal Year Ending June 30	ADD TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase In Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)		
2007	2,050	$ 82.1	1,041	$ 20.7	39,506	$ 1,135.6	5.7%	$ 28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4	33,089
2013	2,303	105.7	991	22.2	47,406	1,608.7	5.5	33,934
2014	2,146	99.6	976	23.4	48,576	1,684.9	4.7	34,685
2015	2,917	119.1	1,671	36.3	49,822	1,767.6	4.9	35,479
2016	2,753	128.2	1,012	26.9	51,563	1,868.9	5.7	36,244

Schedule H

Board Funding Policy

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Teachers' Retirement System ("TRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background

State law provides that the retirement benefits promised to members of TRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in TRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state-as plan guarantor-is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $487 million (Fiscal Year 2016). The following schedule details the growth of the annual retirement appropriations payable by the state:

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88 %	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2013).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

Section H: Board Funding Policy continued ...

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which—if paid—will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

    - Use the Entry Age Normal actuarial cost method;
    - Use a five-year asset smoothing method;
    - Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
    - Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
    - Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and TRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

After valuation

Teachers' Retirement System of Kentucky
Sensitivitiy Analysis

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate and the rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, and 7.50% together with a decrease in the discount rate to 6.50% and an increase in the discount rate to 8.50%. Under this scenario, the underlying inflation rate assumption is held constant at 3.00% and the payroll growth assumption is held constant at 3.50%.
- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.00%, together with decreases in the inflation rate to 2.75% and 2.50%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption and the assumed rates of salary increase for active members.
- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 3.50%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

Assumed Discount Rate Sensitivity Analysis
(In thousands of dollars)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 35,774,968	$ 32,028,227	$ 28,888,441
Actuarial Value of Assets	17,496,894	17,496,894	17,496,894
Unfunded Liability	$ 18,278,074	$ 14,531,333	$ 11,391,547
Funded Ratio	48.9%	54.6%	60.6%
Employer ADEC - University*	37.685%	29.275%	22.015%
Employer ADEC - Non-University*	39.165%	30.755%	23.495%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	3.50%	3.50%	3.50%
Inflation Rate	3.00%	3.00%	3.00%

** Less 1% for members hired before July 1, 2008.*

Inflation Assumption Sensitivity Analysis

(In thousands of dollars)

	Valuation Results	Decrease Inflation Rate 25 Basis Points	Decrease Inflation Rate 50 Basis Points
Actuarial Accrued Liability	$ 32,028,227	$ 32,783,305	$ 33,569,703
Actuarial Value of Assets	17,496,894	17,496,894	17,496,894
Unfunded Liability	$ 14,531,333	$ 15,286,411	$ 16,072,809
Funded Ratio	54.6%	53.4%	52.1%
Employer ADEC - University*	29.275%	31.305%	33.435%
Employer ADEC - Non-University*	30.755%	32.785%	34.915%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	3.50%	3.25%	3.00%
Inflation Rate	3.00%	2.75%	2.50%

** Less 1% for members hired before July 1, 2008.*

Payroll Growth Assumption Sensitivity Analysis

(In thousands of dollars)

	Valuation Results	Decrease Payroll Growth 2%	No Payroll Growth
Actuarial Accrued Liability	$ 32,028,227	$ 32,028,227	$ 32,028,227
Actuarial Value of Assets	17,496,894	17,496,894	17,496,894
Unfunded Liability	$ 14,531,333	$ 14,531,333	$ 14,531,333
Funded Ratio	54.6%	54.6%	54.6%
Employer ADEC - University*	29.275%	33.765%	40.505%
Employer ADEC - Non-University*	30.755%	35.245%	41.985%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	3.50%	2.00%	0.00%
Inflation Rate	3.00%	3.00%	3.00%

** Less 1% for members hired before July 1, 2008.*

Teachers' Retirement System

of the State of Kentucky

2016

Actuarial Section

Report of the Actuary
Annual Valuation
of the Retiree Medical Plan
and the Life Insurance Plan

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 21, 2016

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require the Teachers' Retirement System of the State of Kentucky (the System) to conduct actuarial valuations of the System's retiree medical and other post-employment benefit plans. This report covers the Retiree Medical Plan funded by the Medical Insurance Fund (MIF) and OPEB liabilities related to the Life Insurance Plan funded by the Life Insurance Fund (LIF). Cavanaugh Macdonald Consulting, LLC (CMC) has submitted the results of the annual actuarial valuation prepared as of June 30, 2016. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total annual required contribution of 6.59% of active member payroll for the MIF payable for the fiscal year ending June 30, 2017 is required to support the benefits of the Kentucky Employees' Health Plan (KEHP) and the Medicare Eligible Health Plan (MEHP). Of this amount, 2.775% of payroll is estimated to be paid by University members and 3.750% of payroll is estimated to be paid by all other members, leaving 3.815% and 2.840% respectively, as the remaining annual required contribution. This annual required contribution reflects the actuarial value of assets of the MIF and an 8.00% discount rate for valuing liabilities.

Since the previous valuation, various economic and demographic assumptions have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2015. These revised changes were adopted by the Board on September 19, 2016 and are discussed on page 123 of the report. Additionally, the results of the valuation include a change to the KEHP dependent subsidies offered to retirees who retired prior to July 1, 2010. Finally, the initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised since the previous valuation to reflect recent experience and revised expectations.

The Life Insurance Plan valuation indicates a total annual required contribution of 0.04% of active member payroll payable for the fiscal year ending June 30, 2019 is required to support the benefits of the LIF. This annual required contribution reflects the actuarial value of assets of the LIF and a 7.50% discount rate for valuing liabilities.

The promised benefits of the Retiree Medical and Life Insurance Plans are included in the actuarially calculated contribution rates that are developed using the entry age normal actuarial cost method. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 3.50% annually. The assumptions recommended by the actuary and adopted by the Board are in aggregate reasonably related to the experience under the Retiree Medical and Life Insurance Plans and to reasonable expectations of anticipated experience under the Retiree Medical and Life Insurance Plans and meet the parameters for the disclosures under GASB 43 and 45.

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CMC has prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Section VII shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Retiree Medical and Life Insurance Plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This actuarial valuation was performed to determine the recommended funding amount for the System. The asset values used to determine unfunded liabilities and funded ratios are not market values, but less volatile market-related values. A smoothing technique is applied to market values to determine the market-related values. The unfunded liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return of assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

In our opinion, if the contributions to the Medical Insurance Fund continue at the current statutorily required levels, the funded ratio of the Retiree Medical Plan will continue to increase, and the ability of the MIF to fund the benefits called for under the Retiree Medical Plan will improve.

Respectfully submitted,

Eric Gary, FSA, FCA, MAAA
Chief Health Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Report of Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans Prepared as of June 30, 2016
Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (dollar amounts are in thousands):

Medical Insurance Fund

Valuation Date	June 30, 2016	June 30, 2015
Number of active members	71,848	72,246
Annual salaries	$ 3,537,226	$ 3,515,113
Number of deferred vested members	8,145	5,430
Number of annuitants in medical plans	38,815	38,075
Number of spouses and beneficiaries in medical plans*	7,181	7,129
Total	45,996	45,204
Assets:		
Market value	$ 733,781	$ 626,962
Actuarial value	$ 795,055	$ 637,839
Unfunded actuarial accrued liability	$ 2,839,018	$ 2,887,745
Amortization period (years)	30	30
Discount rate	8.00%	8.00%

* *Spouses of post-65 retirees, as well as surviving spouses of deceased retirees on or after July 1, 2002, pay 100% of the full contribution. 100% of the full contribution for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.*

Medical Insurance Fund Contribution Rates for University Members

Valuation Date	June 30, 2016		June 30, 2015	
Contribution For Fiscal Year Ending	June 30, 2017		June 30, 2016	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.95 %	1.95 %	1.95 %	1.95 %
Accrued liability	4.64	4.64	4.49	4.49
Total	6.59 %	6.59 %	6.44 %	6.44 %
Member	2.775 %	2.775 %	2.775 %	2.775 %
Employer (ARC)	2.775	1.775	2.775	1.775
State (ARC)	1.040	2.040	0.890	1.890
Total	6.590 %	6.590 %	6.440 %	6.440 %

Medical Insurance Fund Contribution Rates for School District Employees (Non-Federal)

Valuation Date	June 30, 2016		June 30, 2015	
Contribution For Fiscal Year Ending	June 30, 2017		June 30, 2016	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.95 %	1.95 %	1.95 %	1.95 %
Accrued liability	4.64	4.64	4.49	4.49
Total	6.59 %	6.59 %	6.44 %	6.44 %
Member	3.750 %	3.750 %	3.750 %	3.750 %
Employer (ARC)	3.000	3.000	3.000	3.000
State (ARC)	(0.160)	(0.160)	(0.310)	(0.310)
Total	6.590 %	6.590 %	6.440 %	6.440 %

Medical Insurance Fund Contribution Rates for Other Employees

Valuation Date	June 30, 2016		June 30, 2015	
Contribution For Fiscal Year Ending	June 30, 2017		June 30, 2016	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.95 %	1.95 %	1.95 %	1.95 %
Accrued liability	4.64	4.64	4.49	4.49
Total	6.59 %	6.59 %	6.44 %	6.44 %
Member	3.750 %	3.750 %	3.750 %	3.750 %
Employer (ARC)	3.750	2.750	3.750	2.750
State (ARC)	(0.910)	(0.090)	(1.060)	(0.060)
Total	6.590 %	6.590 %	6.440 %	6.440 %

Life Insurance Fund

(In thousands of dollars)

Valuation Date	June 30, 2016	June 30, 2015
Number of active members	71,848	72,246
Annual salaries	$ 3,537,226	$ 3,515,113
Number of vested former members	9,058	4,295
Number of retirees in Life Insurance Plan	47,071	45,484
Assets:		
Market value	$ 90,991	$ 89,747
Actuarial value	97,269	97,186
Unfunded actuarial accrued liability*	$ 8,790	$ 1,553
Amortization period (years)	30	30
Discount rate	7.50%	7.50 %

Contribution for fiscal year ending	June 30, 2019	June 30, 2018
Normal	0.03 %	0.03 %
Accrued liability	0.01	0.00
Total	0.04 %	0.03 %

* *Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post-employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45.*

2. The valuation indicates combined member, employer, and State contributions of 6.59% of active member payroll would be sufficient to support the current benefits of the Retiree Medical Plan and State contributions of 0.04% of active member payroll would be sufficient to support the current benefits of the Life Insurance Plan. Comments on the valuation results as of June 30, 2016 are given in Section IV and further discussion of the contribution levels is set out in Sections VI and VII.

3. Since the previous valuation, various economic and demographic assumptions have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2015. The changes adopted by the Board on September 19, 2016, include various demographic and economic assumptions summarized below:

   - Price Inflation changed assumed rate from 3.50% to 3.00%,
   - Wage Inflation changed assumed rate from 4.00% to 3.50%,
   - Assumed Salary Scale adjusted to reflect a decrease of 0.25% in merit & promotion for all ages, and

Report of Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans continued ...

- Assumed rates of Withdrawal, Disability, Retirement, and Mortality have been adjusted to reflect experience more closely.
- Assumed rates of Retiree Medical Plan coverage election, spouse coverage by the Retiree Medical Plan, terminated and vested withdrawal, and terminated and vested participation in the Retiree Medical Plan have been adjusted to reflect experience more closely.
- The assumed age difference between covered male and female spouses has been adjusted to reflect experience more closely.

Additionally, the initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised to reflect recent experience.

4. Since the previous valuation, there has been a change to the KEHP dependent subsidies offered to retirees. KEHP-participating members who retired prior to July 1, 2010 will no longer be provided a premium subsidy for dependent coverage after June 30, 2016.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the Retiree Medical and Life Insurance Plans for use as a basis of the valuation were furnished by the System's office. The following tables summarize the membership of the System as of June 30, 2016, upon which the valuation was based. Detailed tabulations of the data are given in Schedule F.

Active Members as of June 30, 2016

Group	Number	Annual Salaries ($1,000's)
University Full Time hired before 7/1/2008	1,883	$ 137,213
University Full Time hired after 7/1/2008	1,453	72,056
Non-University Full Time hired before 7/1/2008	38,065	2,429,982
Non-University Full Time hired after 7/1/2008	18,846	826,256
Non-University Part Time hired before 7/1/2008	2,797	24,219
Non-University Part Time hired after 7/1/2008	8,804	47,500
TOTAL	71,848	$ 3,537,226

2. The following tables show the number of retired members and their beneficiaries receiving health care as of the valuation date as well as average ages.

Retirees Receiving Health Benefits as of June 30, 2016

	Under Age 65	Age 65 and Over	TOTAL
Number	11,813	27,002	38,815
Average Age	60.3	73.9	69.8

Spouses Receiving Health Benefits as of June 30, 2016

Number	2,790	4,391	7,181
Average Age	59.2	74.9	68.8

3. The Retiree Medical Plan valuation includes 8,145 deferred vested members eligible for health care at age 60 and the Life Insurance Plan valuation includes 9,058 deferred vested members eligible for retiree life insurance at age 60.

Section III - ASSETS

1. As of June 30, 2016, the market value of MIF assets held by the Retiree Medical Plan amounted to $733,780,967 and the market value of LIF assets held by the Life Insurance Plan amounted to $90,990,928.

2. The five-year market related value of MIF assets used for valuation purposes as of June 30, 2016 was $795,055,116 and the five-year market related value of LIF assets used for valuation purposes as of June 30, 2016 was $97,268,990. Schedule B shows the development of the actuarial value of assets as of June 30, 2016.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the MIF and the LIF.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows the Retiree Medical Plan has an actuarial accrued liability of $1,683,152,725 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $47,229,083. The liability on account of benefits payable to retirees and covered spouses amounts to $1,903,691,219. The total actuarial accrued liability of the Retiree Medical Plan amounts to $3,634,073,027. Against these liabilities, the Retiree Medical Plan has present assets for valuation purposes of $795,055,116. When this amount is deducted from the actuarial accrued liability of $3,634,073,027, there remains $2,839,017,911 as the unfunded actuarial accrued liability for the Retiree Medical Plan.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the Retiree Medical Plan is determined to be $69,042,666, or 1.95% of payroll.

4. The valuation shows that the Life Insurance Plan has an actuarial accrued liability of $17,050,108 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $3,470,026. The liability on account of benefits payable to retirees amounts to $85,538,672. The total actuarial accrued liability of the Life Insurance Plan amounts to $106,058,806. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for active and post-employment purposes. As this could be administratively burdensome and, as death in active service liabilities can be considered de minimis, it is viewed to be acceptable to consider the entire liability an OPEB liability under GASB 43 and 45. Against these liabilities, the Life Insurance Plan has present assets for valuation purposes of $97,268,990. When this amount is deducted from the actuarial accrued liability of $106,058,806, there remains $8,789,816 as the unfunded actuarial accrued liability for the life insurance plan.

5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $992,606, or 0.03% of payroll.

Section V - DERIVATION OF EXPERIENCE GAINS AND LOSSES

1. Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2016 is shown below ($1,000's).

	EXPERIENCE GAIN/(LOSS) OF THE:	MEDICAL INSURANCE FUND	LIFE INSURANCE FUND
(1)	UAAL* as of 6/30/2015	$ 2,887,745	$ 1,553
(2)	Normal cost from last valuation	68,409	1,038
(3)	Expected employer contributions	226,232	1,024
(4)	Interest accrual: [(1) + (2) - (3)] x interest**	218,394	118
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	2,948,316	1,685
(6)	Change due to benefit provisions	(8,264)	0
(7)	Change due to new actuarial assumptions	218,842	3,927
(8)	Change due to claims experience	(269,249)	0
(9)	Expected UAAL after changes: (5) + (6) + (7) + (8)	2,889,645	5,612
(10)	Actual UAAL as of 6/30/2016	2,839,018	8,790
(11)	Total gain/(loss): (9) - (10)	50,627	(3,178)
	(a) Contribution excess and investment gain/(loss)	113,260	(3,507)
	(b) Experience gain/(loss) (11) - (11a)	(62,633)	329
(12)	Accrued liabilities as of 6/30/2015	$ 3,525,584	$ 98,739
(13)	Experience gain/(loss) as percent of actuarial accrued liabilities at start of year (11b) / (12)	(1.8%)	0.3%

* *Unfunded Actuarial Accrued Liability*
** *Interest is 8.0% for the Medical Insurance Fund and 7.5% for the Life Insurance Fund*

Section VI - CONTRIBUTIONS PAYABLE UNDER THE PLANS

1. Sections 161.420 and 161.550 of the Kentucky Revised Statutes provide the amounts employers and the State are required to contribute to the Medical Insurance Fund. These contribution amounts vary by date of membership and employee type.

Employer Percentage of Payroll Contributions Made to Medical Insurance Fund

Fiscal Year Ending	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
2016 and Later	2.775 %	1.775 %	3.000 %	3.000 %	3.750 %	2.750 %

* *In addition to the amounts contributed by School Districts on behalf of Non-Federal employees, the State contributes 0.75%.*

For the fiscal year ending June 30, 2017, member contributions will be 2.775% for University employees and 3.750% for all other members. Based upon the amortization of the unfunded accrued liability over a 30-year period as a level percentage of payroll, the valuation indicates employer and State contributions of 3.815% of payroll for University employees and 2.840% of payroll for all other members. The State is scheduled to contribute 0.03% of salary to the Life Insurance Fund for the fiscal year ending June 30, 2018. CMC's valuation indicates a contribution of 0.04% for the fiscal year ending June 30, 2019 is required to support sufficiently the benefits of the Life Insurance Plan.

Required Contribution Rates For Fiscal Year Ending June 30, 2017 Medical Insurance Fund

Normal	1.95 %
Accrued liability	4.64
Total	6.59 %

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
Member	2.775 %	2.775 %	3.750 %	3.750 %	3.750 %	3.750 %
Employer (ARC)	2.775	1.775	3.000	3.000	3.750	2.750
State (ARC)	1.040	2.040	(0.160)	(0.160)	(0.910)	0.090
Total	6.590 %	6.590 %	6.590 %	6.590 %	6.590%	6.590%

Required Contribution Rates Life Insurance Fund For Fiscal Year Ending June 30, 2019

Normal	0.03 %
Accrued liability	0.01
Total	0.04%
Member	0.00 %
State (ARC)	0.04
Total	0.04 %

2. The valuation indicates that a total normal contribution of 1.95% of payroll is required to meet the cost of benefits currently accruing under the Retiree Medical Plan and 0.03% of payroll is required to meet the cost of benefits currently accruing under the Life Insurance Plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 4.64% of payroll for the Retiree Medical Plan and 0.01% of payroll for the Life Insurance Plan.

3. The unfunded actuarial accrued liability amounts to $2,839,017,911 for the Retiree Medical Plan and $8,594,846 for the Life Insurance Plan as of the valuation date. An accrued liability contribution of 4.64% of payroll for the Retiree Medical Plan and 0.01% of payroll for the Life Insurance Plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 30-year period, based on the assumption that the payroll will increase by 3.50% annually.

Section VII - COMMENTS ON LEVEL OF FUNDING

1. The System's monthly contribution for retirees who opt into the Retiree Medical Plan is based upon date of hire, date of attaining age 65, and years of service at retirement. Additionally, beneficiary contributions may vary by date of hire, date of attaining age 65, years of service at retirement, plan election, Medicare eligibility, and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State on a current disbursement basis. Current employer and State contributions have been determined to be sufficient to fund the cost of the benefits to be provided. Benefits for university, school district (non-Federal), and other members are identical, although active employee contributions collected from university, school district (non-Federal), and other members differ. A listing of active member Retiree Medical Plan contributions by fiscal year, date of membership, and employer type is provided in Schedule E.

2. This valuation provides the contributions required to fund sufficiently the Retiree Medical Plan and to ensure the future solvency of the Medical Insurance Fund. For University employees, a member contribution of 2.775% of payroll together with employer and State contributions of 3.815% of payroll are required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. For the remaining membership, a member contribution of 3.750% of payroll together with employer and State contributions of 2.840% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the Retiree Medical and Life Insurance Plans and the employer.

Number of Active and Retired Members in Medical Plan as of June 30, 2016

GROUP	NUMBER
Retirees currently receiving health benefits	38,815
Spouses of retirees currently receiving health benefits	7,181
Terminated employees entitled to benefits but not yet receiving benefits	8,145
Active plan members	71,848
Total	**125,989**

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2016

GROUP	NUMBER
Retirees	47,071
Terminated employees	9,058
Active plan members	71,848
Total	**127,977**

Schedule of Funding Progress
Medical Insurance Fund
(In thousands of dollars)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL)	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2011 [1]	$ 294,819	$ 3,423,149	$ 3,128,330	8.6 %	$ 3,451,756	90.6 %
6/30/2012	338,746	3,594,540	3,255,794	9.4	3,479,567	93.6
6/30/2013	412,185	3,521,073	3,108,888	11.7	3,480,066	89.3
6/30/2014	508,913	3,194,689	2,685,776	15.9	3,486,327	77.0
6/30/2015	637,839	3,525,584	2,887,745	18.1	3,515,113	82.2
6/30/2016 [1]	795,055	3,634,073	2,839,018	21.9	3,537,226	80.3

[1] *Reflects change in decrement and participation assumptions.*

Schedule of Funding Progress
Life Insurance Fund
(In thousands of dollars)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL)	UNFUNDED AAL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2011 [1]	$ 88,527	$ 88,088	$ (439)	100.5 %	$ 3,451,756	(0.01) %
6/30/2012	92,241	91,398	(843)	100.9	3,479,567	(0.02)
6/30/2013	94,863	94,325	(538)	100.6	3,480,066	(0.02)
6/30/2014	96,130	97,354	1,224	98.7	3,486,327	0.04
6/30/2015	97,186	98,739	1,553	98.4	3,515,113	0.04
6/30/2016 [1]	97,269	106,059	8,790	91.7	3,537,226	0.25

[1] *Reflects change in decrement and participation assumptions.*

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2016. Additional information as of the latest actuarial valuation follows.

Valuation Date	Actuarial Cost Method	Amortization Method	Remaining Amortization Period	Asset Valuation Method	Actuarial Assumptions: Investment Rate of Return*	Actuarial Assumptions: Investment Rate of Return*
06/30/2016	Entry age	Level percent of pay, open	30 years	5-Year Smoothed Market	8.00%-Retiree Medical Plan	7.50%-Retiree Life Insurance Plan

Medical Trend Assumption	Pre-Medicare**	Medicare
Fiscal Year Ending 6/30/2017	7.75 %	5.75 %
Fiscal Year Ending 6/30/2018	7.00 %	5.50 %
Ultimate Trend Rate	5.00 %	5.00 %
Year of Ultimate Trend Rate	2023	2020

* *Includes price inflation at 3.00%.*
***Alternate trend rates were used for Medicare Part B premiums and are disclosed in Schedule D.*

Schedule of Employer Contributions
Medical Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	RDS CONTRIBUTION	TOTAL CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(A)	(B)	(C)	(B) + (C)	[(B) + (C)]/(A)
6/30/2011	$ 477,723,070	$ 188,453,929	$ 280,585	$ 188,734,514	39.5 %
6/30/2012	470,217,067	177,450,206	297,639	177,747,845	37.8
6/30/2013	186,725,823	166,611,420	0	166,611,420	89.2
6/30/2014	159,583,400	162,568,395	0	162,568,395	101.9
6/30/2015	106,606,132	168,084,353	0	168,084,353	157.7
6/30/2016	97,982,580	221,966,705	0	221,966,705	226.5

Schedule of Employer Contributions
Life Insurance Fund

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(A)	(B)	(B) / (A)
6/30/2011	$ 1,725,878	$ 1,668,822	96.7 %
6/30/2012	1,732,831	1,684,711	97.2
6/30/2013	1,739,908	1,680,495	96.6
6/30/2014	1,044,959	1,006,091	96.3
6/30/2015	1,050,216	1,019,519	97.1
6/30/2016	1,057,851	1,037,769	98.1

3. Following is the calculation of the Annual OPEB Cost (AOC) and the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2016. As the Retiree Medical and Life Insurance Plans are cost-sharing multiple-employer plans, GASB Statement 45 does not require the participating employers to disclose this information.

Annual OPEB Cost and Net OPEB Obligation
for the Medical Insurance Fund for Fiscal Year Ending June 30, 2016

(a) Employer Annual Required Contribution	$ 97,982,580
(b) Interest on Net OPEB Obligation	118,447,672
(c) Adjustment to Annual Required Contribution	80,918,376
(d) Annual OPEB Cost: (a) + (b) - (c)	$ 135,511,876
(e) Employer Contributions for Fiscal Year 2016	221,966,705
(f) Increase (decrease) in Net OPEB Obligation: (d) - (e)	$ (86,454,829)
(g) Net OPEB Obligation at beginning of Fiscal Year	1,480,595,898
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ 1,394,141,069

Trend Information for the Medical Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2011	$ 485,294,173	38.9 %	$ 1,110,938,699
6/30/2012	480,545,219	37.0	1,413,736,073
6/30/2013	222,560,394	74.9	1,469,685,047
6/30/2014	196,836,134	82.6	1,503,952,786
6/30/2015	144,727,465	116.1	1,480,595,898
6/30/2016	135,511,876	163.8	1,394,141,069

Annual OPEB Cost and Net OPEB Obligation for the Life Insurance Fund for Fiscal Year Ending June 30, 2016

(a) Employer Annual Required Contribution	$ 1,057,851
(b) Interest on Net OPEB Obligation	(628,174)
(c) Adjustment to Annual Required Contribution	(433,171)
(d) Annual OPEB Cost: (a) + (b) - (c)	862,848
(e) Employer contributions for Fiscal Year 2016	1,037,769
(f) Increase (decrease) in Net OPEB Obligation: (d) - (e)	(174,921)
(g) Net OPEB Obligation at beginning of Fiscal Year	(8,375,658)
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ (8,550,579)

Trend Information for the Life Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
6/30/2011	$ 1,546,950	107.9 %	$ (7,807,049)
6/30/2012	1,551,065	108.6	(7,940,695)
6/30/2013	1,555,031	108.1	(8,066,159)
6/30/2014	857,161	117.4	(8,215,089)
6/30/2015	858,950	118.7	(8,375,658)
6/30/2016	862,848	120.3	(8,550,579)

4. On June 2, 2015, GASB Statement No. 74 and GASB Statement No. 75 (GASB 74 and 75) were unanimously adopted by the GASB Board. The disclosure requirements of GASB 74 and 75 will be similar to the disclosure requirements for pension benefits under GASB Statement No. 67 and GASB Statement No. 68. GASB 74 relates to accounting disclosures for plan sponsors and, as such, replaces GASB 43 beginning with fiscal years ending June 30, 2017. GASB 75 relates to accounting disclosures for contributing employers and, as such, replaces GASB 45 beginning with fiscal years ending June 30, 2018. GASB 74 and 75 will require applicable OPEB plan sponsors and contributing employers to disclose the net OPEB liability on the statement of financial position and book an accounting expense based upon the entry age normal actuarial cost method. Beyond the use of a specified actuarial cost method, GASB's new disclosure standards will also require the discount rate used to calculate liabilities to be based upon the yield of 20-year, tax-exempt municipal bonds and the expected rate of return on plan assets, to the extent plan assets are projected to be available for the payment of future benefits. Additionally, GASB 74 and 75 will bring about many other changes in the liability valuation and accounting disclosure processes currently in place which are expected to significantly impact data collection, timing, and effort. As details for the new GASB OPEB disclosure standards emerge, planning and coordination between plan sponsors, contributing employers, actuaries, and auditors is recommended.

SCHEDULE A

RESULTS OF THE VALUATION AS OF JUNE 30, 2016

(In thousands of dollars)

		Medical Insurance Fund	Life Insurance Fund
PAYROLL		$ 3,537,226	$ 3,537,226
ACTUARIAL ACCRUED LIABILITY			
Present value of prospective benefits payable in respect of:			
(a)	Present active members	1,683,153	17,050
(b)	Present terminated vested members	47,229	3,470
(c)	Present retired members and covered spouses	1,903,691	85,539
(d)	Total actuarial accrued liability	3,634,073	106,059
PRESENT ASSETS FOR VALUATION PURPOSES		795,055	97,269
UNFUNDED ACTUARIAL ACCRUED LIABILITY		$ 2,839,018	$ 8,790
CONTRIBUTIONS		Fiscal Year Ending June 30, 2017	Fiscal Year Ending June 30, 2019
	Normal	1.95%	0.03%
	Accrued Liability	4.64	0.01
	Total	6.59%	0.04%
	Member	3.69%	0.00%
	Employer (ARC)	2.97	0.00
	State (ARC)	(0.07)	0.04
	Total	6.59%	0.04%

MEDICAL INSURANCE FUND
Solvency Test

(In millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2011	n/a	$ 1,910.1	$ 1,513.1	$ 294.8	n/a	15%	0%
6/30/2012	n/a	2,046.7	1,547.9	338.7	n/a	17	0
6/30/2013	n/a	2,001.8	1,519.3	412.2	n/a	21	0
6/30/2014	n/a	1,771.9	1,422.8	508.9	n/a	29	0
6/30/2015	n/a	1,982.2	1,543.4	637.8	n/a	32	0
6/30/2016	n/a	1,950.9	1,683.2	795.1	n/a	41	0

Schedule A continued ...

LIFE INSURANCE FUND
Solvency Test
(In millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2011	n/a	$ 72.2	$ 15.9	$ 88.5	n/a	100%	103 %
6/30/2012	n/a	75.2	16.2	92.2	n/a	100	105
6/30/2013	n/a	78.1	16.2	94.9	n/a	100	104
6/30/2014	n/a	81.0	16.3	96.1	n/a	100	93
6/30/2015	n/a	82.7	16.0	97.2	n/a	100	91
6/30/2016	n/a	89.0	17.1	97.3	n/a	100	49

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
MEDICAL INSURANCE FUND
AS OF JUNE 30, 2016

(1)	Actuarial Value of Assets Beginning of Year	$	637,838,912
(2)	Market Value of Assets End of Year		733,780,967
(3)	Market Value of Assets Beginning of Year		626,962,370
(4)	Cash Flow		
	a. Contributions		406,331,920
	b. Benefit Payments		288,494,763
	c. Administrative Expense		1,686,070
	d. Net: (4)a - (4)b - (4)c		116,151,087
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)d		(9,332,490)
	b. Assumed Rate		8.00%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]		54,803,033
	d. Amount for Phased-In Recognition: (5)a - (5)c		(64,135,523)
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d		(12,827,105)
	b. First Prior Year		(7,773,884)
	c. Second Prior Year		6,492,851
	d. Third Prior Year		370,219
	e. Fourth Prior Year		3
	f. Total Recognized Investment Gain		(13,737,916)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		795,055,116
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	(61,274,149)
(9)	Rate of Return on Actuarial Value:		5.90%

Schedule B continued ...

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
LIFE INSURANCE FUND
AS OF JUNE 30, 2016

(1)	Actuarial Value of Assets Beginning of Year	$	97,185,537
(2)	Market Value of Assets End of Year		90,990,928
(3)	Market Value of Assets Beginning of Year		89,746,507
(4)	Cash Flow		
	a. Contributions		1,037,769
	b. Benefit Payments		4,595,489
	c. Administrative Expense		27,195
	d. Net: (4)a - (4)b - (4)c		(3,584,915)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)d		4,829,336
	b. Assumed Rate		7.50%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]		6,596,554
	d. Amount for Phased-In Recognition: (5)a - (5)c		(1,767,218)
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d		(353,444)
	b. First Prior Year		(941,279)
	c. Second Prior Year		(406,987)
	d. Third Prior Year		(1,226,477)
	e. Fourth Prior Year		1
	f. Total Recognized Investment Gain		(2,928,186)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		97,268,990
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	(6,278,062)
(9)	Rate of Return on Actuarial Value:		3.85%

SCHEDULE C

MEDICAL INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2016	June 30, 2015
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 128,068,782	$ 100,622,991
Payment by Retired Members	56,296,433	56,844,689
TOTAL MEMBERS	184,365,215	157,467,680
State Statutory Contributions	21,824,740	21,375,292
Employer Contributions	104,271,120	77,655,778
State Statutory - Transition Fund/KEHP	52,542,510	46,232,856
TOTAL EMPLOYER	178,638,370	145,263,926
GRAND TOTAL	363,003,585	302,731,606
Recovery Income	43,328,335	22,820,427
Net Investment Income	(9,332,490)	7,354,704
TOTAL	396,999,430	332,906,737
DISBURSEMENTS FOR THE YEAR		
Administrative Expense	1,686,070	1,545,235
Medical Insurance Expense	288,494,763	240,394,582
TOTAL	290,180,833	241,939,817
Excess of Receipts over Disbursements	106,818,597	90,966,920
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	626,962,370	535,995,450
Excess of Receipts over Disbursements	106,818,597	90,966,920
Asset Balance as of the End of the Year	$ 733,780,967	$ 626,962,370

Schedule C continued ...

LIFE INSURANCE FUND
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2016	For the Year Ending June 30, 2015
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 0	$ 0
State	872,990	855,012
Employer	164,779	164,507
TOTAL	$ 1,037,769	$ 1,019,519
Net Investment Income	4,829,336	1,990,324
TOTAL	$ 5,867,105	$ 3,009,843
DISBURSEMENTS FOR THE YEAR		
Benefit Payments	$ 4,595,489	$ 4,061,000
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	27,195	25,306
TOTAL	$ 4,622,684	$ 4,086,306
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ 1,244,421	$ (1,076,463)
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 89,746,507	$ 90,822,970
Excess of Receipts over Disbursements	1,244,421	(1,076,463)
Asset Balance as of the End of the Year	$ 90,990,928	$ 89,746,507

SCHEDULE D
Statement of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, termination, salary increases, and rates of future benefit participation used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016. The health care cost trend rates, and expected plan costs were determined by the actuary based on recent experience.

Valuation Date: June 30, 2016

Discount Rate: 8.0% per annum, compounded annually for Medical Insurance Fund.
7.5% per annum, compounded annually for Life Insurance Fund.

Schedule D continued ...

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

Annual Trend Rate

Fiscal Year Ended	Medicare Part B	Under Age 65	Age 65 and Over
2017	1.02 %	7.75%	5.75%
2018	(0.93)	7.00	5.50
2019	5.66	6.50	5.25
2020	4.84	6.00	5.00
2021	4.23	5.50	5.00
2022	5.04	5.25	5.00
2023	5.44	5.00	5.00
2024	5.10	5.00	5.00
2025	5.42	5.00	5.00
2026	5.62	5.00	5.00
2027	5.37	5.00	5.00
2028	5.12	5.00	5.00
2029 and beyond	5.00	5.00	5.00

Age Related Morbidity: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred health care claims is assumed to be:

Participant Age	Annual Increases
65 – 69	3.0 %
70 – 74	2.5
75 – 79	2.0
80 – 84	1.0
85 - 89	0.5
90 and over	0.0

For the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the health care trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP. Under Actuarial Standard of Practice No. 6 (ASOP No. 6), aging subsidies (or implicit rate subsidies) should be recognized, as the differences in health care utilization and cost due to age have been demonstrated and well quantified. The impact of aging on a valuation's results can be as significant as the use of mortality, trend, and discounting. It has been the long-standing position that the responsibility for compliance with GASB Statement No. 43, when it relates to KEHP implicit subsidies, rests with KEHP, not the System, as the System has no operational authority over KEHP. As such, KEHP implicit subsidies are excluded from the OPEB valuation process of the Retiree Medical Plan. As GASB 74 and 75 prohibit such a deviation from ASOP No. 6, additional consideration to the current treatment of KEHP implicit rate subsidies may be needed in the future. The estimated impact of KEHP implicit subsidies to the actuarial accrued liability is an increase of $630,058,164.

Retiree Medical Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that the System pays as the full contribution amount. The amounts include medical and drug costs. An additional $7.14 per month is paid to the Department of Employee Insurance (DEI) and is not included in the under age 65 costs listed below. For retirees ages 65 and older, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

Under Age 65 (KEHP) Full Costs as of January 1, 2017

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 702.10	$ 721.14	$ 678.22	$ 663.80
Parent Plus	967.18	1,023.04	964.58	930.94
Couple	1,302.74	1,564.20	1,477.72	1,431.76
Family	1,453.94	1,738.40	1,644.22	1,594.52
Family C-R	810.00	865.64	815.50	793.18

Schedule D continued ...

Average Monthly TRS Full Costs & Contributions

Calendar Year	Under Age 65 (KEHP) Contributions	Age 65 & Over (MEHP) Full Costs	Age 65 & Over (MEHP) Contributions
2007	$ 458	$ 283	$ 283
2008	484	278	278
2009	545	301[1]	285
2010	594	373[1]	342
2011	626	289	289
2012	622	270[2]	270
2013	635	294[2]	290
2014	679	290[2]	290
2015	669	240[2]	240
2016	681	260[2]	260
2017	680	252[2]	252

[1] *Under GASB 43 and 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy cannot be taken into account in the gross cost calculations.*

[2] *2,183 current, Medicare-eligible benefit recipients have been identified by the client to be ineligible for premium-free Medicare Part A benefits. For these individuals, the full cost of coverage is, on average, $589 per month. It is assumed 9% of current retirees under the age of 65 who were hired prior to 4/1/1986 will be ineligible for premium-free Medicare Part A benefits upon reaching Medicare eligibility (age 65) and 0% of these retirees will cover a spouse. All active members are assumed to have begun contributing to Medicare as of 4/1/1986 and are assumed eligible for premium-free Medicare Part A benefits.*

Current Retiree Medical Plan Participation: Actual census data and current plan elections (including waivers) provided by the System were used for those retirees currently participating in the Retiree Medical Plan. Current participants are assumed to maintain their current Retiree Medical Plan coverage until they are no longer eligible.

Anticipated Retireee Medical Plan Participation: The assumed annual rates of health care plan participation for future retirees are as follows:

Member Participation

Years of Service	Entered TRS Before 7/1/2002	Entered TRS After 6/30/2002 & Before 7/1/2008	Entered TRS After 6/30/2008
5-9.99	20 %	20%	Not Eligible
10-14.99	49	20	Not Eligible
15-19.99	70	41	41%
20-24.99	91	61	61
25-25.99	91	76	76
26-26.99	91	84	84
27 or more	91	91	91

Anticipated Retiree Medical Plan Elections: The assumed rates of plan election for future retirees participating in the KEHP plans are provided in the following table. As the assumed plan election rates are estimates and actual results may be materially different, this assumption will need to be revised as experience evolves.

LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
40%	45%	7%	8%

Schedule D continued ...

Spouse Coverage in Medical Plans: Actual census data and current plan elections were used for MEHP and KEHP covered spouses (including beneficiaries) of current retirees. For spouses of future retirees, 25% of future male retirees are assumed to cover their spouse and 15% of future female retirees are assumed to cover their spouse. Male retirees are assumed to be three years older than their spouse and female retirees are assumed to be one year younger than their spouse.

Disabled Dependent Children in Retiree Medical Plan: The liability associated with disabled dependent children was determined to be de minimis and was therefore excluded from this valuation.

Withdrawal Assumption: Future vested members who terminate employment prior to retirement are assumed to elect to withdraw their contributions based upon their age and service at termination of employment as follows:

Rates of Withdrawal Upon Termination of Employment

Age at Termination of Employment	Years of Service 5 - 10	10 - 15	15+
Under Age 55	20%	15%	10%
Ages 55+	10%	10%	10%

All vested members who terminate employment prior to retirement are assumed to elect to withdraw their contributions prior to receiving a pension benefit based upon their service as follows:

Rates of Withdrawal Prior to Receiving a Pension Benefit

Years of Service 5 - 10	10 - 15	15 - 27	27+
25%	15%	**10%**	25%

All vested members who terminate employment prior to retirement and who are assumed to elect to receive a pension benefit are assumed to begin receiving their benefit at age 60.

Payroll Growth: 3.50% per annum, compounded annually.

Price Inflation: 3.00% per annum, compounded annually.

Affordable Care Act (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2020 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the Retiree Medical Plan's liability will be required.

Asset Valuation Method: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The ultimate assumed valuation rate of return is assumed to be 8.00% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

Actuarial Cost Method: The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his/her age, service, and gender. The calculations take into account the probability of a

Schedule D continued ...

member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and deferred vested members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his/her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his/her behalf.

The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

Separation From Service: Representative values of the assumed annual rates of salary increases, death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

				WITHDRAWAL			RETIREMENT	
				SERVICE				
AGE	SALARY*	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service**
20	7.20%	0.019%	0.01%	11.00%				
25	6.40	0.021	0.01	11.00	3.00%			
30	5.40	0.025	0.01	11.00	3.00	3.00%		
35	4.70	0.043	0.04	12.00	3.50	1.40		
40	4.20	0.060	0.09	12.00	4.50	1.40		
45	3.80	0.084	0.20	12.00	4.50	1.30		17.0%
50	3.70	0.119	0.30	14.00	4.50	1.90		17.0
55	3.50	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	3.50	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	3.50	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	3.50	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	3.50	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	3.50	1.556	0.75	20.00	0.00	0.00	100.0	100.0

FEMALES: Annual Rate of . . .

				WITHDRAWAL			RETIREMENT	
				SERVICE				
AGE	SALARY*	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service**
20	7.20%	0.007%	0.01%	9.00%				
25	6.40	0.008	0.01	9.00	4.00%			
30	5.40	0.010	0.03	12.00	4.00	1.65%		
35	4.70	0.018	0.06	12.00	4.00	1.50		
40	4.20	0.026	0.12	12.00	4.00	1.30		
45	3.80	0.042	0.25	13.00	4.00	1.20		15.0%
50	3.70	0.062	0.44	13.00	5.00	1.50		18.0
55	3.50	0.096	0.65	15.00	5.00	2.00	5.5%	50.0
60	3.50	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	3.50	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	3.50	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	3.50	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	3.50	0.831	0.85	15.00	0.00	0.00	100.0	100.0

* *Includees inflation at 3.5% per annum.*

** *Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.*

Schedule D continued ...

Deaths After Retirement: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1609%	0.1135%	2.3306%	1.2482%
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074

SCHEDULE E
Summary of Main Plan Provisions as Interpreted for Valuation Purposes

ELIGIBILITY FOR ACCESS TO RETIREE MEDICAL COVERAGE

Service Retirement: For employees hired prior to July 1, 2008, Retiree Medical Plan coverage eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. For employees hired on or after July 1, 2008, employees may retire after the completion of 27 years of service, the attainment of age 55 and 10 years of service, or the attainment of age 60 and 5 years of service, but must complete a minimum of 15 years of service to be eligible for Retiree Medical Plan coverage.

Disability Retirement: Disabled employees hired prior to July 1, 2008 with at least 5 years of service, who are totally and permanently incapable of being employed as a teacher, are eligible for Retiree Medical Plan coverage. Disabled employees hired after July 1, 2008 must have 15 years of service to be eligible for Retiree Medical Plan coverage.

Members and dependents under age 65 and eligible for Medicare due to a disability after January 1, 2013 are required to be covered under MEHP. Under age 65 members who retired prior to Jan. 1, 2013, are grandfathered from this requirement and allowed a choice of KEHP or MEHP coverage. Actual census data and current plan elections were used for current disabled retirees. Until sufficient experience emerges, the valuation conservatively assumes all future disabled members under the age of 65 will be covered under KEHP.

Survivors: Spouses of employees who die in service while eligible to retire, as well as survivors of service and disabled retirees, are eligible for Retiree Medical Plan coverage.

Termination: For employees hired prior to July 1, 2008 and who terminated with at least 5 years of service, Retiree Medical Plan coverage eligibility is attained at age 60. For employees hired on or after July 1, 2008 and who terminated with at least 15 years of service, Retiree Medical Plan coverage eligibility is attained at age 60.

Reemployed Retirees: Retirees who return to work in an agency that participates in KEHP are required to terminate their coverage through the System. Additionally, if a retiree returns to work somewhere that does not participate in the KEHP, but offers health insurance, the retiree must terminate System coverage unless the employer coverage is of lesser value. For valuation purposes, active employees identified as currently receiving retiree health care through the System are valued as retirees.

Schedule E continued ...

COVERED MEMBER MEDICAL PLAN CONTRIBUTIONS

Under Age 65 Retiree Shared Responsibility Contribution: Effective July 1, 2010, retirees under the age of 65 began a three-year phase-in of the Shared Responsibility Contribution. This contribution reduces the applicable amount of the full contribution provided by the System to retirees, by adjusting the Shared Responsibility Contribution amount by 100% less the appropriate percentage from the Retiree Percentage Contribution table below. Effective July 1, 2012, the full Shared Responsibility Contribution equals the Standard Medicare Part B premium paid by retirees ages 65 and older.

Under Age 65 Shared Responsibility Contribution Timeline

Effective Date	Medicare Part B Monthly Cost	Formula	Shared Responsibility Contribution
July 1, 2010	$ 110.50	(1/3 x $110.50)	$ 37.00
January 1, 2011	115.40	(1/3 x 115.40)	39.00
July 1, 2011	115.40	(2/3 x 115.40)	77.00
January 1, 2012	99.90	(2/3 x 99.90)	66.00
July 1, 2012	99.90	99.90	99.90
January 1, 2013	104.90	104.90	104.90
January 1, 2014	104.90	104.90	104.90
January 1, 2015	104.90	104.90	104.90
January 1, 2016	121.80	121.80	121.80
January 1, 2017	134.00	134.00	134.00

Retiree Years of Service Percentage Contribution: Retirees contribute the following percentages based on years of service at retirement, which are then applied to the Retiree Contribution Rate Basis:

Retiree Percentage Contribution*

Years of Service	Hired before 7/1/2002: Age 65 or Older and Covered Before 1/1/2005	Hired before 7/1/2002: Age 65 After or Covered After 12/31/2004	Entered TRS After 6/30/2002 and Before 7/1/2008	Entered TRS After 6/30/2008
5 - 9.99	30%	75%	90%	Not Eligible
10 - 14.99	20	50	75	Not Eligible
15 - 19.99	10	25	55	55%
20 - 24.99	0	0	35	35
25 - 25.99	0	0	10	10
26 - 26.99	0	0	5	5
27 or more	0	0	0	0

** 0% for disabled retirees that retired prior to 1/1/2002.*

Retiree Contribution Rate Basis Effective January 1, 2017

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Ages 65 and Older (MEHP)
Single	$ 654.12	$ 641.16	$ 629.76	$ 650.70	$ 252.00
Parent Plus*	844.20	795.06	840.38	870.36	n/a
Couple*	1,014.76	1,051.22	1,186.86	1,179.28	n/a
Family*	1,115.96	1,095.42	1,302.86	1,291.54	n/a
Family C-R*	732.02	712.66	736.74	764.92	n/a

**For members who retired prior to July 1, 2010, the monthly Retiree Contribution Rate Basis is $654.12*

Schedule E continued ...

Under Age 65 Retiree Plan Cost Contribution: An additional contribution according to the table below is required to be paid by retirees under the age of 65 based upon the plan elected and the date of retirement:

Under Age 65 Plan Cost Contribution*
Effective January 1, 2017

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
	Retired Prior to July 1, 2010			
Single	$ 47.98	$ 79.98	$ 48.46	$ 13.10
Parent Plus	313.06	368.92	310.46	276.82
Couple	648.62	910.08	823.60	777.64
Family	799.82	1,084.28	990.10	940.40
Family C-R	155.88	211.52	161.38	139.06
	Retired After June 30, 2010			
Single	$ 47.98	$ 79.98	$ 48.46	$ 13.10
Parent Plus	122.98	227.98	124.20	60.58
Couple	287.98	512.98	290.86	252.48
Family	337.98	642.98	341.36	302.98
Family C-R	77.98	152.98	78.76	28.26

* *Does not include the additional contribution required to be paid by retirees under the age of 65 who use tobacco ($40 for Single or Family Cross-Reference, and $80 for Parent Plus, Couple or Family).*

Spouse Contributions: 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Spouses of current post-65 retirees and surviving spouses of deceased retirees with a date of death on or after July 1, 2002 pay 100% of the full contribution. Spouses of active members who died while eligible to retire prior to July 1, 2002, are provided the same subsidy by the System that would have been provided to the retiree for the lifetime of the spouse, or until remarriage. Spouses of active members who die while eligible to retire on or after July 1, 2002 later pay 100% of the full contribution.

Monthly Surviving Spouse Contribution
Effective January 1, 2017

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Age 65 and Older (MEHP)
Single	$ 709.24	$ 728.28	$ 685.36	$ 670.94	$ 252.00
Parent Plus	974.32	1,030.18	971.72	938.08	n/a

Schedule E continued ...

System Retiree Medical Plan Contributions: The System Contribution Rate Basis is determined annually by the System; and the full cost is projected based on historical claims data. For retirees, the following percentages are based on years of service at retirement and are then applied to the System Contribution Rate Basis:

Percentage of System Contribution Rate Provided to Retirees*

Years of Service	Entered TRS Before 7/1/2002: Age 65 or Older & Covered Before 1/1/2005	Entered TRS Before 7/1/2002: Age 65 After or Covered After 12/31/2004	Entered TRS After 6/30/2002 and Before 7/1/2008	Entered TRS After 6/30/2008
5 - 9.99	70 %	25 %	10 %	Not Eligible
10 - 14.99	80	50	25	Not Eligible
15 - 19.99	90	75	45	45%
20 - 24.99	100	100	65	65
25 - 25.99	100	100	90	90
26 - 26.99	100	100	95	95
27 or more	100	100	100	100

** 100% for disabled retirees that retired prior to 1/1/2002.*

System Monthly Contribution Rate Basis
Effective January 1, 2017
Under Age 65 (KEHP)

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Ages 65 and Older (MEHP)
Single	$ 654.12	$ 641.16	$ 629.76	$ 650.70	$ 252.00
Parent Plus**	844.20	795.06	840.38	870.36	n/a
Couple**	1,014.76	1,051.22	1,186.86	1,179.28	n/a
Family**	1,115.96	1,095.42	1,302.86	1,291.54	n/a
Family C-R**	732.02	712.66	736.74	764.92	n/a

** Irrespective of a participating retiree's service, an additional $7.14 per month is paid by the System to the Department of Employee Insurance (DEI) for KEHP coverage.*
*** For members who retired prior to July 1, 2010, the monthly Retiree Contribution Rate Basis is $654.12.*

Active Member Retiree Medical Plan Contributions: Actively employed members make payroll contributions to the Medical Insurance Fund based upon the following schedule:

Active Member Percentage of Payroll Contribution Made to Medical Insurance Fund

UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008
2.775 %	2.775 %	3.750 %	3.750%	3.750 %	3.750 %

Schedule E continued ...

Life Insurance Plan Benefits:
(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Members employed on a substitute or part-time basis and working at least 69% of a full contract year in a single fiscal year will be eligible for a life insurance benefit for the balance of the fiscal year or the immediately succeeding fiscal year under certain conditions. For non-vested members employed on a substitute or part-time basis, the life insurance benefit is provided if death occurs as the result of a physical injury on the job. For vested members employed on a substitute or part-time basis, death does not have to be the result of a physical injury on the job for life insurance benefits to be provided.

SCHEDULE F
Table 1 – Service Table
Distribution of Active Members as of June 30, 2016
by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	2,355								2,355
Total Pay	45,330,040								45,330,040
Avg. Pay	19,248								19,248
25 to 29	5,983	1,390	6						7,379
Total Pay	203,433,582	67,448,815	290,024						271,172,421
Avg. Pay	34,002	48,524	48,337						36,749
30 to 34	3,012	4,867	1,237	5					9,121
Total Pay	95,202,602	245,417,243	70,031,584	254,892					410,906,321
Avg. Pay	31,608	50,425	56,614	50,978					45,051
35 to 39	2,269	2,377	4,756	984	4				10,390
Total Pay	63,198,818	122,108,596	281,358,005	63,149,812	239,758				530,054,989
Avg. Pay	27,853	51,371	59,159	64,177	59,940				51,016
40 to 44	1,785	1,520	2,196	4,060	746	1			10,308
Total Pay	45,830,416	77,450,441	131,391,508	267,885,302	52,046,889	53,664			574,658,220
Avg. Pay	25,675	50,954	59,832	65,982	69,768	53,664			55,749
45 to 49	1,483	1,177	1,593	2,266	3,343	750	3		10,615
Total Pay	39,361,503	60,147,545	93,765,291	147,455,842	233,185,542	54,299,673	169,293		628,384,689
Avg. Pay	26,542	51,102	58,861	65,073	69,753	72,400	56,431		59,198
50 to 54	1,196	717	1,039	1,272	1,534	1,826	286	2	7,872
Total Pay	25,260,952	36,290,570	61,397,451	82,245,956	106,693,617	134,430,589	21,213,845	131,648	467,664,628
Avg. Pay	21,121	50,614	59,093	64,659	69,553	73,620	74,174	65,824	59,409
55 to 59	1,345	467	678	996	1,069	818	352	19	5,744
Total Pay	21,138,039	21,468,016	39,649,701	64,095,061	75,667,783	62,721,524	30,314,021	1,529,398	316,583,543
Avg. Pay	15,716	45,970	58,480	64,352	70,784	76,677	86,119	80,495	55,116
60 to 64	1,837	341	387	608	577	412	102	65	4,329
Total Pay	23,796,325	13,577,768	22,772,409	40,965,044	42,005,811	32,467,970	9,324,712	5,479,043	190,389,082
Avg. Pay	12,954	39,818	58,843	67,377	72,800	78,806	91,419	84,293	43,980
65 & over	2,291	524	181	227	214	169	65	64	3,735
Total Pay	20,398,952	12,356,675	11,463,858	15,532,839	16,369,811	14,008,597	5,681,398	6,270,288	102,082,418
Avg. Pay	8,904	23,581	63,336	68,427	76,494	82,891	87,406	97,973	27,331
Total	23,556	13,380	12,073	10,418	7,487	3,976	808	150	71,848
Total Pay	582,951,229	656,265,669	712,119,831	681,584,748	526,209,211	297,982,017	66,703,269	13,410,377	3,537,226,351
Avg. Pay	24,747	49,048	58,984	65,424	70,283	74,945	82,554	89,403	49,232

Average Age: 43.5 **Average Service: 10.8**

Schedule F continued ...

Table 2 – Total Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage Increase in Average Pay
6/30/2016	71,848	$ 3,537,226,348	$ 49,232	1.19 %
6/30/2015	72,246	3,515,113,126	48,655	2.45
6/30/2014	73,407	3,486,326,799	47,493	2.12
6/30/2013	74,831	3,480,066,406	46,506	1.51
6/30/2012	75,951	3,479,567,004	45,813	1.33
6/30/2011	76,349	3,451,756,288	45,210	3.97

Table 3 – Eligible Deferred Vested Members as of June 30, 2016 Medical Insurance Fund

Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	3	9	12
30-34	125	534	659
35-39	338	1,021	1,359
40-44	340	1,067	1,407
45-49	326	1,191	1,517
50-54	301	1,010	1,311
55-59	221	807	1,028
60 & Over	236	616	852
Total	**1,890**	**6,255**	**8,145**

Table 3 – Eligible Deferred Vested Members as of June 30, 2016 Life Insurance Fund

Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	18	66	84
30-34	215	752	967
35-39	377	1,135	1,512
40-44	374	1,154	1,528
45-49	343	1,275	1,618
50-54	325	1,070	1,395
55-59	240	843	1,083
60 & Over	239	632	871
Total	**2,131**	**6,927**	**9,058**

Schedule F continued ...

Table 4 – All Retirees & Spouses Receiving Health Care Benefits as of June 30, 2016 Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 40	3	18	21
40-44	15	54	69
45-49	66	203	269
50-54	367	974	1,341
55-59	1,169	2,908	4,077
60-64	2,758	6,068	8,826
65-69	3,939	8,236	12,175
70-74	2,843	4,937	7,780
75-79	1,869	3,231	5,100
80-84	1,216	2,010	3,226
85-89	601	1,399	2,000
90-94	196	645	841
95-99	49	179	228
100	1	15	16
101	0	9	9
102	1	11	12
103	0	1	1
104	0	1	1
105 & Over	0	4	4
Total	**15,093**	**30,903**	**45,996**

Table 5 – Retirees, Beneficiaries and Survivors Added To and Removed From Rolls * Medical Insurance Fund

Fiscal Year Ending June 30	Number of Members Added to Rolls	Number of Spouses** Added to Rolls	Total Number Added to Rolls	Number of Members Removed from Rolls	Number of Spouses** Removed from Rolls	Total Number Removed from Rolls	Number of Members on Rolls at the End of the Year	Number of Spouses** on Rolls at the End of the Year	Total Number on Rolls at the End of the Year
2011	1,770	629	2,399	1,052	541	1,593	35,033	6,922	41,955
2012	1,996	702	2,698	1,029	616	1,645	36,000	7,008	43,008
2013	1,853	664	2,517	1,076	619	1,695	36,777	7,053	43,830
2014	1,663	638	2,301	1,165	660	1,825	37,275	7,031	44,306
2015	1,990	731	2,721	1,190	633	1,823	38,075	7,129	45,204
2016	2,045	726	2,771	1,305	674	1,979	38,815	7,181	45,996

* *Reflects members, spouses, and beneficiaries participating in a health care plan.*
** *Includes spouses, beneficiaries, and surviving spouses.*

Schedule F continued ...

Table 6 – Retirees, Beneficiaries and Survivors Added To and Removed From Rolls *
Life Insurance Fund

Fiscal Year Ending June 30	Number Added to Rolls	Life Insurance Benefit ($1,000's)	Number Removed from Rolls	Life Insurance Benefit ($1,000's)	Number on Rolls at the End of the Year	Life Insurance Benefit ($1,000's)	Increase in Life Insurance Benefit	Average Life Insurance Benefit
2011	2,025	$ 10,125	858	$ 4,290	41,118	$ 205,590	2.92 %	$ 5,000
2012	2,364	11,820	880	4,400	42,602	213,010	3.61	5,000
2013	2,195	10,975	952	4,760	43,845	219,225	2.92	5,000
2014	1,964	9,820	954	4,770	44,855	224,275	2.30	5,000
2015	2,270	11,350	1,641	8,205	45,484	227,420	1.40	5,000
2016	2,394	11,970	807	4,035	47,071	235,355	3.49	5,000

** The life insurance benefit is payable upon the death of only members retired for service or disability. Numbers do not include life insurance benefits payable upon the death of an active contributing member.*

Teachers' Retirement System of Kentucky
Sensitivitiy Analysis

The June 30, 2016 valuation results of the Medical Insurance Fund (MIF) are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate, the assumed rate of payroll growth, and the assumed rates of health care inflation (trend). The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 8.00%, together with a decrease in the discount rate to 7.00% and an increase in the discount rate to 9.00%. Under this scenario, the underlying inflation rate assumption is held constant at 3.00% and the payroll growth assumption is held constant at 3.50%.
- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.00%, together with decreases in the inflation rate to 2.75% and 2.50%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption, and the assumed rates of salary increase for active members. The assumed decreases in inflation are not assumed to impact the assumed rates of health care inflation (trend).
- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 3.50%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.
- The health care inflation (trend) assumption sensitivity analysis shows the valuation results with the baseline trend assumption along with a 1.00% increase in all assumed trend rates and a 1.00% decrease in all assumed trend rates.

Medical Insurance Fund
Assumed Discount Rate Sensitivity Analysis

(In thousands of dollars)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 4,133,195	$ 3,634,073	$ 3,222,555
Actuarial Value of Assets	795,055	795,055	795,055
Unfunded Liability	$ 3,338,140	$ 2,839,018	$ 2,427,500
Funded Ratio	19.2%	21.9%	24.7%
Contributions			
Normal Cost	2.57%	1.95%	1.49%
Accrued Liability	4.89%	4.64%	4.39%
Total	7.46%	6.59%	5.88%
Member	(3.69%)	(3.69%)	(3.69%)
Employer/State	3.77%	2.90%	2.19%
Discount Rate	7.00%	8.00%	9.00%
Payroll Growth	3.50%	3.50%	3.50%
Inflation Rate	3.00%	3.00%	3.00%

Medical Insurance Fund
Inflation Assumption Sensitivity Analysis

(In thousands of dollars)

	Valuation Results	Decrease Inflation Rate 25 Basis Points	Decrease Inflation Rate 50 Basis Points
Actuarial Accrued Liability	$ 3,634,073	$ 3,764,727	$ 3,903,231
Actuarial Value of Assets	795,055	795,055	795,055
Unfunded Liability	$ 2,839,018	$ 2,969,672	$ 3,108,176
Funded Ratio	21.9%	21.1%	20.4%
Contributions			
Normal Cost	1.95%	2.07%	2.20%
Accrued Liability	4.64%	4.86%	5.09%
Total	6.59%	6.93%	7.29%
Member	(3.69%)	(3.69%)	(3.69%)
Employer/State	2.90%	3.24%	3.60%
Discount Rate	8.00%	7.75%	7.50%
Payroll Growth	3.50%	3.25%	3.00%
Inflation Rate	3.00%	2.75%	2.50%

Medical Insurance Fund
Payroll Growth Sensitivity Analysis

(In thousands of dollars)

	Valuation Results	Decrease Payroll Growth 150 Basis Points	No Payroll Growth
Actuarial Accrued Liability	$ 3,634,073	$ 3,634,073	$ 3,634,073
Actuarial Value of Assets	795,055	795,055	795,055
Unfunded Liability	$ 2,839,018	$ 2,839,018	$ 2,839,018
Funded Ratio	21.9%	21.9%	21.9%
Contributions			
Normal Cost	1.95%	1.95%	1.95%
Accrued Liability	4.64%	5.44%	6.60%
Total	6.59%	7.39%	8.55%
Member	(3.69%)	(3.69%)	(3.69%)
Employer/State	2.90%	3.70%	4.86%
Discount Rate	8.00%	8.00%	8.00%
Payroll Growth	3.50%	2.00%	0.00%
Inflation Rate	3.00%	3.00%	3.00%

Medical Insurance Fund
Health Care Trend Sensitivity Analysis

(In thousands of dollars)

	Decrease Trend Rates 100 Basis Points	Valuation Results	Increase Trend Rates 100 Basis Points
Actuarial Accrued Liability	$ 3,182,056	$ 3,634,073	$ 4,193,972
Actuarial Value of Assets	795,055	795,055	795,055
Unfunded Liability	$ 2,387,001	$ 2,839,018	$ 3,398,917
Funded Ratio	25.0%	21.9%	19.0%
Contributions			
Normal Cost	1.54%	1.95%	2.50%
Accrued Liability	3.90%	4.64%	5.55%
Total	5.44%	6.59%	8.05%
Member	(3.69%)	(3.69%)	(3.69%)
Employer/State	1.75%	2.90%	4.36%
Discount Rate	8.00%	8.00%	8.00%
Payroll Growth	3.50%	3.50%	3.50%
Inflation Rate	3.00%	3.00%	3.00%

Teachers' Retirement System of Kentucky
Life Insurance Fund
Sensitivitiy Analysis

The June 30, 2016 valuation results of the Life Insurance Fund (LIF) are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate, and the assumed rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, and 7.50% together with a decrease in the discount rate to 6.50% and an increase in the discount rate to 8.50%. Under this scenario, the underlying inflation rate assumption is held constant at 3.00% and the payroll growth assumption is held constant at 3.50%.
- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.00%, together with decreases in the inflation rate to 2.75% and 2.50%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption, and the assumed rates of salary increase for active members.
- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 3.50%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

Life Insurance Fund
Assumed Discount Rate Sensitivity Analysis

(In thousands of dollars)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 120,369	$ 106,059	$ 94,354
Actuarial Value of Assets	97,269	97,269	97,269
Unfunded Liability	$ 23,100	$ 8,790	$ (2,915)
Funded Ratio	80.8%	91.7%	103.1%
Contributions			
Normal Cost	0.04%	0.03%	0.02%
Accrued Liability	0.03%	0.01%	(0.01%)
Total	0.07%	0.04%	0.01%
Member	(0.00%)	(0.00%)	(0.00%)
Employer/State	0.07%	0.04%	0.01%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	3.50%	3.50%	3.50%
Inflation Rate	3.00%	3.00%	3.00%

Life Insurance Fund
Inflation Assumption Sensitivity Analysis

(In thousands of dollars)

	Valuation Results	Decrease Inflation Rate 25 Basis Points	Decrease Inflation Rate 50 Basis Points
Actuarial Accrued Liability	$ 106,059	$ 109,535	$ 113,210
Actuarial Value of Assets	97,269	97,269	97,269
Unfunded Liability	$ 8,790	$ 12,266	$ 15,941
Funded Ratio	91.7%	88.8%	85.9%
Contributions			
Normal Cost	0.03%	0.03%	0.03%
Accrued Liability	0.01%	0.02%	0.02%
Total	0.04%	0.05%	0.05%
Member	(0.00%)	(0.00%)	(0.00%)
Employer/State	0.04%	0.05%	0.05%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	3.50%	3.25%	3.00%
Inflation Rate	3.00%	2.75%	2.50%

Life Insurance Fund
Payroll Growth Sensitivity Analysis

(In thousands of dollars)

	Valuation Results	Decrease Payroll Growth 150 Basis Points	No Payroll Growth
Actuarial Accrued Liability	$ 106,059	$ 106,059	$ 106,059
Actuarial Value of Assets	97,269	97,269	97,269
Unfunded Liability	$ 8,790	$ 8,790	$ 8,790
Funded Ratio	91.7%	91.7%	91.7%
Contributions			
Normal Cost	0.03%	0.03%	0.03%
Accrued Liability	0.01%	0.02%	0.02%
Total	0.04%	0.05%	0.05%
Member	(0.00%)	(0.00%)	(0.00%)
Employer/State	0.04%	0.05%	0.05%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	3.50%	2.00%	0.00%
Inflation Rate	7.50%	7.50%	7.50%

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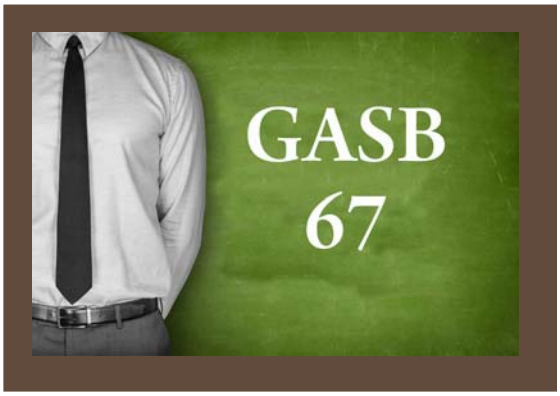
Teachers' Retirement System
of the State of Kentucky

2016



Actuarial Section

Additional Report on

GASB Statement Number 67

November 21, 2016

Board of Trustees
Teachers' Retirement System
of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Presented in this report is information to assist the Teachers' Retirement System of the State of Kentucky (TRS), in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. This report has been prepared as of June 30, 2016 (the Measurement Date) to assist TRS in better understanding the requirements of GASB 67 and to identify the information to be provided by TRS's actuary, Cavanaugh Macdonald Consulting (CMC).

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2015. The valuation was based upon data, furnished by the Executive Secretary and TRS staff, concerning active, inactive and retired members along with pertinent financial information.

To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 67.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the

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System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Respectfully submitted,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Eric H. Gary, FSA, FCA, MAAA
Principal and Chief Health Actuary

Cathy Turcot
Principal and Managing Director

REPORT OF THE ANNUAL GASB STATEMENT NO. 67 REQUIRED INFORMATION FOR THE TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY PREPARED AS OF JUNE 30, 2016

Section 1: Introduction

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "Financial Reporting For Pension Plans", in June 2012. This report, prepared as of June 30, 2016 (the Measurement Date), presents information to assist the Teachers' Retirement System of the State of Kentucky (TRS), in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of TRS as of June 30, 2015. The results of that valuation were detailed in a report dated December 7, 2015.

GASB 67 requires a measurement of the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. If the valuation date at which the TPL is determined is before the measurement date, as is the case here, the TPL must be rolled forward to the measurement date. The Net Pension Liability (NPL) is then set equal to the rolled forward TPL minus the System's Fiduciary Net Position (FNP) (basically the market values of assets) as of the Measurement Date. The benefit provisions recognized in the calculation of the TPL are summarized in Schedule B. The development of the roll-forward of the TPL is shown in the table on page 160.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR) as described by GASB 67. To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the membership and beneficiaries of the System on the Measurement Date. We have projected future employer contributions to be made based on the amounts required by statute. Although the TRS Board of Trustees adopted a funding policy, shown in Schedule E, on December 16, 2013, the State has not funded the actuarially determined contributions since 2009. However, it is our understanding that the State budget includes additional appropriations to the pension plan for fiscal years 2017 and 2018, which have been taken into account. On this basis, if the FNP is not projected to be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. Our calculations indicated that the FNP is projected to be depleted, so the bond rate is used in the determination of the SEIR. On this basis, we have determined that a discount rate of 4.20 percent meets the requirements of GASB 67.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information.

Section 2: Financial Statement Notes

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30(a) (1)-(3): The information required is to be supplied by the System.

Paragraph 30(a) (4): The data required regarding the membership of the TRS were furnished by the System office. The following table summarizes the membership of the System as of June 30, 2015, the actuarial valuation date.

Membership

	Number
Retirees And Survivors Currently Receiving Benefits	49,822
Terminated Vested Employees Entitled To But Not Yet Receiving Benefits	8,051
Inactive Non-vested Members	19,720
Active Members	72,246
TOTAL	**149,839**

Paragraphs 30(a)(5)-(6) and Paragraphs 30(b)-(f): The information required is to be supplied by the System.

Paragraphs 31(a) (1)-(4): The information is provided in the following table. As stated on the previous page, the Net Pension Liability (NPL) is equal to the Total Pension Liability (TPL) minus the Fiduciary Net Position (FNP). That result as of June 30, 2016 is presented in the table below ($ thousands).

	Fiscal Year Ending 6/30/2016
Total Pension Liability (TPL)	$ 47,736,901
Fiduciary Net Position (FNP)	16,812,832
Net Pension Liability (NPL)	$ 30,924,069
Ratio of FNP to TPL	35.22%

Paragraph 31(b) (1)(a)-(f): This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The set of actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The total pension liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.50 percent
Salary increases	4.00 - 8.20 percent, including inflation
Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation
Municipal Bond Index Rate	3.01%
Single Equivalent Interest Rate	4.20%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale AA to 2020 with a set back of 1 year for females.

The actuarial assumptions used in the June 30, 2015 valuation were based on the results of an actuarial experience study for the period July 1, 2005 - June 30, 2010 adopted by the Board on December 19, 2011. The results of the experience study for the period July 1, 2010 - June 30, 2015 will be reflected in the June 30, 2016 valuation and the June 30, 2017 GASB 67 report.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	45.0%	6.4%
Non U.S. Equity	17.0%	6.5%
Fixed Income	24.0%	1.6%
High Yield Bonds	4.0%	3.1%
Real Estate	4.0%	5.8%
Alternatives	4.0%	6.8%
Cash	2.0%	1.5%
Total	100.0%	

Section 2: Financial Statement Notes continued ...

Discount rate. The discount rate used to measure the total pension liability was 4.20 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that Employer contributions will be made at statutorily required rates, and the additional amounts appropriated for fiscal years 2017 and 2018. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2040 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2039 and a municipal bond index rate of 3.01 percent was applied to all periods of projected benefit payments after 2039. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

Paragraph 31(b) (1) (g): This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 4.20 percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.20 percent) or 1-percentage-point higher (5.20 percent) than the current rate ($ thousands):

(In thousands of dollars)	1% Decrease (3.20%)	Current Discount Rate (4.20%)	1% Increase (5.20%)
System's net pension liability	$ 37,937,230	$ 30,924,069	$ 25,168,197

Paragraph 31(c): June 30, 2015 is the actuarial valuation date upon which the TPL is based. The TPL from this valuation was determined using a discount rate of 4.20%, which was based on a municipal bond index rate as of that date equal to 3.01%. The TPL used last year was determined using a discount rate equal to 4.88%, which was based on a municipal bond index rate of 3.82%. These two amounts are rolled forward to June 30, 2016 using standard roll forward techniques. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate (SEIR) for the year. The difference between the two roll-forward amounts as of June 30, 2016 is the gain or loss due to changes in assumptions and other inputs.

In addition, we have determined an expected TPL as of June 30, 2016 based on the TPL roll-forward in the June 30, 2015 GASB 67 report. The difference between this amount and the roll-forward of the actual TPL based on the 4.88% interest rate is reflected as an experience gain or loss for the year. These procedures are shown in the following table:

TPL Roll-Forward
(In thousands of dollars)

		Expected	Actual Before Assumption Change	Actual After Assumption Change
(a)	Interest rate	4.88%	4.88%	4.20%
(b)	TPL as of June 30, 2015	$ 42,476,699	$ 42,421,364	$ 46,355,565
(c)	Entry Age Normal Cost for the Year July 1, 2015 - June 30, 2016	1,120,893	1,120,893	1,334,428
(d)	Actual Benefit Payments (including refunds) For the year July 1, 2015 - June 30, 2016	1,860,946	1,860,946	1,860,946
(e)	TPL as of June 30, 2016 (b) x (1 + (a)) + (c) - (d) x (1 + 0.5 x (a))	$ 43,764,102	$ 43,706,067	$ 47,736,901
(f)	Difference between Expected and Actual Experience (Gain)/Loss		$ (58,035)	
(g)	Difference due to change in Assumptions and Other Inputs (Gain)/Loss			$ 4,030,834

Section 3: Required Supplementary Information

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 32(a)-(c): The required tables are provided in Schedule A.

Paragraph 32(d): The money-weighted rates of return required are to be supplied by the System.

Paragraph 34: In addition the following should be noted regarding the RSI:

Changes of benefit terms. None

Changes of assumptions. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2011. In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation, the Board adopted an interest smoothing methodology to calculate liabilities for purposes of determining the actuarially determined contributions. Beginning with the 2014 valuation, the interest smoothing methodology is no longer used.

Methods and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported (as of June 30, 2013 for the fiscal year 2016 contributions). The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of that schedule:

Actuarial Cost Method	Amortization Method	Remaining Amortization Period	Asset Valuation Method	Inflation	Salary Increase	Ultimate Investment Rate of Return*
Entry Age	Level percentage of payroll, open	30 years	5-year smoothed market	3.50%	4.00 to 8.20 percent, including inflation	7.50 percent, net of pension plan investment expense, including inflation

** The actuarially determined contribution rates are determined using the interest smoothing methodology adopted by the Board.*

Schedule A
Required Supplementary Information
Schedule of Changes in the Net Pension Liability
GASB 67 Paragraph 32(a)
(In thousands of dollars)

	2016	2015	2014
Total Pension Liability			
Service Cost	$ 1,120,893	$ 1,015,080	$ 1,002,338
Interest	2,027,457	2,029,372	1,956,610
Benefit Changes	0	0	0
Difference Between Expected and Actual Experience	(58,035)	0	0
Changes of Assumptions	4,030,834	1,511,960	(353,043)
Benefit Payments	(1,833,199)	(1,741,456)	(1,654,376)
Refunds of Contributions	(27,748)	(23,033)	(25,462)
Net Change in Total Pension Liability	5,260,202	2,791,923	926,067
Total Pension Liability-Beginning	42,476,699	39,684,776	38,758,709
Total Pension Liability-Ending (a)	$ 47,736,901	$ 42,476,699	$ 39,684,776
Plan Net Position			
Contributions-State of KY	$ 484,987	$ 480,073	$ 483,330
Contributions-Other Employers	80,468	79,506	38,445
Contributions-Member	313,044	308,160	304,982
Net Investment Income	(245,215)	862,179	2,803,249
Benefit Payments	(1,833,199)	(1,741,456)	(1,654,376)
Administrative Expense	(8,636)	(8,869)	(7,956)
Refunds of Contributions	(27,748)	(23,033)	(25,462)
Other	0	0	41,551
Net Change in Plan Net Position	(1,236,299)	(43,440)	1,983,763
Plan Net Position - Beginning	18,049,131	18,092,571	16,108,808
Plan Net Position - Ending (b)	$ 16,812,832	$ 18,049,131	$ 18,092,571
Employers' Net Pension Liability - Ending (a) - (b)	$ 30,924,069	$ 24,427,568	$ 21,592,205

Schedule A: Required Supplementary Information continued ...

Schedule A
Required Supplementary Information
Schedule of Net Pension Liability
GASB 67 Paragraph 32(b)
(In thousands of dollars)

	2016	2015	2014
Total Pension Liability	$ 47,736,901	$ 42,476,699	$ 39,684,776
Plan Net Position	16,812,832	18,049,131	18,092,571
Net Pension Liability	$ 30,924,069	$ 24,427,568	$ 21,592,205
Ratio of Plan Net Position to Total Pension Liability	35.22%	42.49%	45.59%
Covered-Employee Payroll	$ 3,390,539	$ 3,455,008	$ 3,317,422
Net Pension Liability as a Percentage of Covered-Employee Payroll	912.07%	707.02%	650.87%

Schedule A
Required Supplementary Information
Schedule of Employer Contributions
GASB 67 Paragraph 32(c)
(In thousands of dollars)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Covered-Employee Payroll	$ 3,390,539	$ 3,455,008	$ 3,317,422	$ 3,310,710	$ 3,310,176	$ 3,283,749	$ 3,321,614	$ 3,253,077	$ 3,190,332	$ 2,975,289
Actual Employer Contributions	565,455	559,579	563,326	568,233	557,340	1,037,936	479,805	442,550	466,248	434,890
Actuarially Determined Employer Contributions	999,270	913,654	823,446	802,985	757,822	678,741	633,938	600,283	563,789	494,565
Annual Contribution Excess (Deficiency)	$ (433,815)	$ (354,075)	$ (260,120)	$ (234,752)	$ (200,482)	$ 359,195	$ (154,133)	$ (157,733)	$ (97,541)	$ (59,675)
Actual Contributions as a Percentage of Covered-Employee Payroll	16.68%	16.20%	16.98%	17.16%	16.84%	31.61%	14.44%	13.60%	14.61%	14.62%

Schedule B

Summary of Main Benefit Provisions

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2015. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance for Members Before 7/1/2008
Condition for Retirement

- Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance

- The annual retirement allowance for non-university members is equal to:
  - (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
  - (b) 2.5% of final average salary multiplied by service after July 1, 1983.
  - (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
  - (d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance for Members on and after 7/1/2008
Condition for Retirement

- Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

- 1.7% of final average salary if service is 10 years or less.
- 2.0% of final average salary if service is greater than 10 years and no more than 20 years.
- 2.3% of final average salary if service is greater than 20 years but no more than 26 years.
- 2.5% of final average salary if service is greater than 26 years but no more than 30 years.
- 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

- 1.5% of final average salary if service is 10 years or less.
- 1.7% of final average salary if service is greater than 10 years and no more than 20 years.
- 1.85% of final average salary if service is greater than 20 years but less than 27 years.
- 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Section B: Summary of Main Benefit Provisions continued ...

Disability Retirement Allowance
Condition for Retirement

- Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance

- The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

- Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

- A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Section B: Summary of Main Benefit Provisions continued ...

Post-Retirement Adjustments
The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3- CONTRIBUTIONS

Member Contributions
University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

Schedule C

Statement of Actuarial Assumptions and Methods

Investment Rate of Return: 7.50% per annum, compounded annually.

Salary Increases: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.60%	4.50%	4.30%	4.20%	4.00%

Separations From Service: : Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Section C: Statement of Actuarial Assumptions and Methods continued ...

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

**Plus 10% in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Annual Rate of Death After . . .

AGE	SERVICE RETIREMENT MALE	SERVICE RETIREMENT FEMALE	DISABILITY RETIREMENT MALE	DISABILITY RETIREMENT FEMALE
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Market Value

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

Schedule D
Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

Schedule E
Board Funding Policy

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Teachers' Retirement System of Kentucky ("TRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background

State law provides that the retirement benefits promised to members of TRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in TRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state-as plan guarantor-is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $520 million (Fiscal Year 2017). The following schedule details the growth of the annual retirement appropriations payable by the state:

Section E: Board Funding Policy continued ...

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	520,372,000

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2014).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which-if paid-will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

    - Use the Entry Age Normal actuarial cost method;
    - Use a five-year asset smoothing method;
    - Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
    - Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
    - Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and TRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

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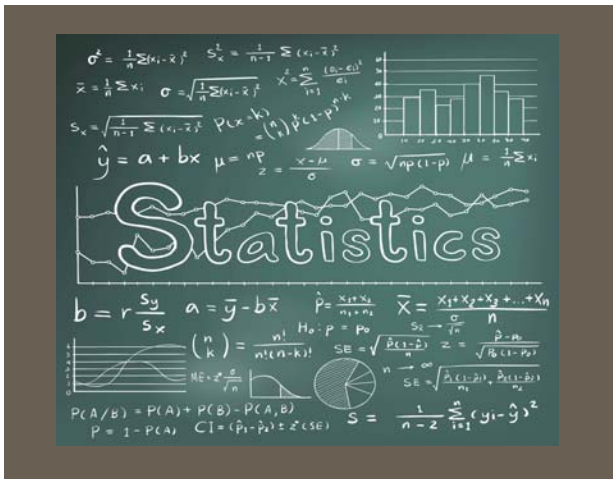
Teachers' Retirement System

of the State of Kentucky

2016



Statistical Section

This section of the Teachers' Retirement System of the State of Kentucky's Comprehensive Annual Financial Report (TRS CAFR) presents detailed information as a context for understanding the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

CONTENTS

Financial Trends ..... page 173

These schedules contain trend information to help the reader understand how TRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 175

These schedules offer demographic and economic indicators to help the reader understand the System's environment within which TRS's financial activities take place.

Operating Information ..... page 180

These schedules contain benefits, service, and employer contribution data to help the reader understand how TRS's financial report relates to TRS's services and activities.

Defined Benefit Plan
Past Ten Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions	Net Investment Income (Loss)	Total Additions to Plan Net Position
2016	$ 565,454,590	$ 313,044,226	$ (245,214,860)	$ 633,283,956
2015	559,579,290	308,159,763	862,178,759	1,729,917,812
2014	563,326,249	304,981,620	2,803,247,956	3,671,555,825
2013	568,233,446	304,738,728	2,039,874,263	2,912,846,437
2012	557,339,552	309,729,924	309,696,252	1,176,765,728
2011	1,037,935,993	302,262,819	2,760,972,224	4,101,171,036
2010	479,805,088	297,613,965	1,509,785,381	2,287,204,434
2009	442,549,935	293,678,564	(2,020,682,522)	(1,284,454,023)
2008	466,247,782	291,423,948	(909,083,525)	(151,411,795)
2007	434,890,469	269,687,864	2,063,878,767	2,768,457,100

Deductions by Type
(Including Benefits by Type)

Year	Service Retirants	Disability Retirants	Survivors	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Position
2016	$ 1,735,374,416	$ 79,808,432	$ 18,015,782	1,833,198,630	$ 27,747,742	$ 8,636,438	$ 1,869,582,810
2015	1,647,205,474	76,912,574	17,338,047	1,741,456,095	23,032,624	8,868,971	1,773,357,690
2014	1,563,634,993	73,501,441	17,239,266	1,654,375,700	25,461,843	7,955,972	1,687,793,515
2013	1,484,132,938	69,808,291	16,781,695	1,570,722,924	22,059,094	8,377,003	1,601,159,021
2012	1,401,380,816	65,297,491	16,260,858	1,482,939,165	19,549,073	7,762,880	1,510,251,118
2011	1,326,033,698	60,950,214	15,551,801	1,402,535,713	17,325,387	7,322,739	1,427,183,839
2010	1,249,272,057	57,782,651	14,754,062	1,321,808,770	15,310,680	8,830,054	1,345,949,504
2009	1,184,075,934	54,562,038	14,342,435	1,252,980,407	15,208,419	8,165,757	1,276,354,583
2008	1,105,078,345	51,842,271	14,048,485	1,170,969,101	15,965,083	7,551,936	1,194,486,120
2007	1,040,003,417	48,863,876	13,671,586	1,102,538,879	14,822,827	7,351,846	1,124,713,552

Changes in Plan Net Position

Year	Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
2016	$ 633,283,956	$ 1,869,582,810	$ (1,236,298,854)
2015	1,729,917,812	1,773,357,690	(43,439,878)
2014	3,671,555,825	1,687,793,515	1,983,762,310
2013	2,912,846,437	1,601,159,021	1,311,687,416
2012	1,176,765,728	1,510,251,118	(333,485,390)
2011	4,101,171,036	1,427,183,839	2,673,987,197
2010	2,287,204,434	1,345,949,504	941,254,930
2009	(1,284,454,023)	1,276,354,583	(2,560,808,606)
2008	(151,411,795)	1,194,486,120	(1,345,897,915)
2007	2,768,457,100	1,124,713,552	1,643,743,548

Medical Insurance Plan
Past Ten Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions	Recovery Income	Net Investment Income (Loss)	Total Additions to Plan Net Position
2016	$ 178,638,370	$ 184,365,215	$ 43,328,335	$ (9,332,490)	$ 396,999,430
2015	145,263,926	157,467,680	22,820,427	7,354,704	332,906,737
2014	157,688,414	135,190,891	4,879,981	67,741,063	365,500,349
2013	166,576,444	119,795,780	34,976	30,718,836	317,126,036
2012	173,966,623	100,346,070	3,781,222	(3,989,202)	274,104,713
2011	188,241,202	84,147,337	493,312	8,334,296	281,216,147
2010	158,761,433	63,805,573	14,618,348	12,312,999	249,498,353
2009	164,408,037	58,688,767	13,683,830	11,296,280	248,076,914
2008	148,929,322	55,402,830	11,936,887	8,128,179	224,397,218
2007	113,233,784	53,099,678	10,337,338	6,722,080	183,392,880

Deductions by Type
(Including Benefits by Type)

Year	Insurance Benefit Expense: Under Age 65	Insurance Benefit Expense: Age 65 & Over	Administrative Expense	Total Insurance Benefits Expense	Refunds*	Total Deductions to Plan Net Position
2016	$ 127,673,325	$ 160,821,438	$ 1,686,070	$ 290,180,833	$	$ 290,180,833
2015	131,396,480	108,998,102	1,545,235	241,939,817		241,939,817
2014	136,963,208	105,107,323	1,100,133	243,170,664		243,170,664
2013	142,170,438	98,761,180	1,275,206	242,206,824		242,206,824
2012	156,228,181	72,746,945	1,201,629	230,176,755		230,176,755
2011	145,544,405	80,890,958	1,186,029	227,621,392		227,621,392
2010	136,702,152	100,675,376		237,377,528		237,377,528
2009	123,819,475	81,037,647		204,857,122		204,857,122
2008	107,437,450	71,838,765		179,276,215	10,014	179,286,229
2007	104,828,254	69,400,843		174,229,097	5,834	174,234,931

**Refunds are netted against member contributions beginning fiscal year 2009.*

Changes in Plan Net Position

Year	Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
2016	$ 396,999,430	$ 290,180,833	$ 106,818,597
2015	332,906,737	241,939,817	90,966,920
2014	365,500,349	243,170,664	122,329,685
2013	317,126,036	242,206,824	74,919,212
2012	274,104,713	230,176,755	43,927,958
2011	281,216,147	227,621,392	53,594,755
2010	249,498,353	237,377,528	12,120,825
2009	248,076,914	204,857,122	43,219,792
2008	224,397,218	179,286,229	45,110,989
2007	183,392,880	174,234,931	9,157,949

Life Insurance Plan
Past Ten Fiscal Years

Additions by Source

Year	Employer Contributions	Net Investment Income (Loss)	Total Additions to Plan Net Position
2016	$ 1,037,769	$ 4,829,336	$ 5,867,105
2015	1,019,519	1,990,324	3,009,843
2014	1,006,091	4,572,845	5,578,936
2013	1,680,495	674,760	2,355,255
2012	1,684,711	6,450,022	8,134,733
2011	1,668,822	3,094,776	4,763,598
2010	1,966,826	5,383,644	7,350,470
2009	5,455,473	5,282,958	10,738,431
2008	5,411,249	6,321,491	11,732,740
2007	5,022,137	(3,413,537)	1,608,600

Deductions by Type
(Including Benefits by Type)

Year	Life Insurance	Total Deductions to Plan Net Position
2016	$ 4,595,489	$ 4,622,684
2015	4,061,000	4,086,306
2014	4,692,000	4,713,324
2013	4,614,718	4,639,143
2012	4,397,281	4,420,167
2011	4,120,000	4,141,511
2010	4,148,511	4,148,511
2009	3,694,000	3,694,000
2008	4,003,000	4,003,000
2007	4,245,000	4,245,000

Changes in Plan Net Position

Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
$ 5,867,105	$ 4,622,684	$ 1.244.421
3,009,843	4,086,306	(1,076,463)
5,578,936	4,713,324	865,612
2,355,255	4,639,143	(2,283,888)
8,134,733	4,420,167	3,714,566
4,763,598	4,141,511	622,087
7,350,470	4,148,511	3,201,959
10,738,431	3,694,000	7,044,431
11,732,740	4,003,000	7,729,740
1,608,600	4,245,000	(2,636,400)

Distribution of Active Contributing Members as of June 30, 2016

By Age

Age	Male	Female
20-24	631	2,406
25-29	1,806	5,878
30-34	2,297	7,097
35-39	2,596	7,857
40-44	2,563	7,903
45-49	2,414	7,962
50-54	1,973	6,060
55-59	1,509	4,648
60-64	1,209	3,427
65 & over	1,153	2,667
TOTAL	**18,151**	**55,905**

By Service

Years of Service	Male	Female
Less than 1	2,895	8,924
1-4	4,124	12,572
5-9	3,206	9,909
10-14	2,820	8,949
15-19	2,357	7,680
20-24	1,679	4,908
25-29	843	2,435
30-34	191	455
35 or more	36	73
TOTAL	**18,151**	**55,905**

Principal Participating Employers
Current Year and Nine Years Ago

	2016			2007		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	10,288	1	13.89%	9,822	1	12.90%
Fayette County Public Schools	4,480	2	6.05	4,039	2	5.30
Boone County Schools	1,908	3	2.58	1,619	3	2.13
Warren County Schools	1,331	4	1.80	1,130	8	1.48
Hardin County Schools	1,308	5	1.77	1,368	4	1.80
Bullitt County Schools	1,272	6	1.72	1,155	6	1.52
Kenton County Schools	1,259	7	1.70	1,251	5	1.64
Oldham County Schools	1,198	8	1.62	1,103	10	1.45
Daviess County Schools	1,126	9	1.52	1,128	9	1.48
Madison County Schools	1,088	10	1.47	1,138	7	1.49
All Other*	48,798		65.89	52,408		68.81
TOTAL (208 Employers)	**74,056**		**100.00%**	**76,161**		**100.00%**

** In 2016, "all other" consisted of:*

Type	*Number*	*Employees*
Local School Districts	*163*	*43,309*
Higher Education	*6*	*3,454*
State Agencies	*15*	*1,576*
Regional Coops	*8*	*343*
Other	*6*	*116*
TOTAL	***198***	***48,798***

TRS Schedule of Participating Employers
School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

TRS Schedule of Participating Employers *(continued)*
School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Murray
36. Newport
37. Owensboro
38. Paducah
39. Paintsville
40. Paris
41. Pikeville
42. Pineville
43. Raceland
44. Russell
45. Russellville
46. Science Hill
47. Silver Grove
48. Somerset
48. Southgate
50. Walton-Verona
51. West Point
52. Williamsburg
53. Williamstown

Universities & Community/ Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/ Other Organizations

1. Education and Workforce Development Cabinet
2. Department of Corrections

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative
13. Southeast South-Central Educational Cooperative

Distribution of Retirement and Medical Payments Worldwide

As of June 30, 2016

Number of Payments in United States

131	Alabama
2	Alaska
76	Arizona
34	Arkansas
101	California
65	Colorado
10	Connecticut
13	Delaware
1,194	Florida
252	Georgia
6	Hawaii
8	Idaho
102	Illinois
694	Indiana
17	Iowa
32	Kansas
45	Louisiana
17	Maine
35	Maryland
22	Massachusetts
51	Michigan
25	Minnesota
48	Mississippi
86	Missouri
6	Montana
8	Nebraska
25	Nevada
5	New Hampshire
7	New Jersey
18	New Mexico
46	New York
264	North Carolina
3	North Dakota
632	Ohio
27	Oklahoma
33	Oregon
54	Pennsylvania
199	South Carolina
7	South Dakota
920	Tennessee
196	Texas
25	Utah
1	Vermont
163	Virginia
45	Washington
101	West Virginia
29	Wisconsin
4	Wyoming

Number of Payments Outside United States

2	AMERICAN SAMOA
4	MILITARY APO
2	AUSTRALIA
1	BARBADOS
5	CANADA
1	CHILE
1	MEXICO
1	NEW ZEALAND
1	PHILIPPINES
1	SWEDEN
1	SWITZERLAND
1	UNITED KINGDOM

TOTALS

Number of Out of State Payments	**5,913**
Out of State Payments	**$179,660,987**
Number of Payments	**53,034**
Amount of Payments	**$2,123,092,985**

Distribution of Retirement and Medical Payments Statewide as of June 30, 2016

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Adair	$ 8,492,553	217	Laurel	26,733,555	666
Allen	7,305,284	181	Lawrence	5,514,389	148
Anderson	8,608,129	231	Lee	3,104,522	82
Ballard	2,905,995	75	Leslie	6,450,110	155
Barren	17,601,142	431	Letcher	13,119,907	345
Bath	4,717,656	131	Lewis	7,412,707	191
Bell	15,231,838	381	Lincoln	12,015,090	292
Boone	42,499,939	979	Livingston	3,615,436	92
Bourbon	8,188,811	213	Logan	11,408,895	277
Boyd	22,959,392	544	Lyon	4,618,960	115
Boyle	19,138,838	464	Madison	58,305,153	1396
Bracken	4,359,254	105	Magoffin	7,491,649	188
Breathitt	9,481,396	248	Marion	7,733,260	198
Breckinridge	7,383,048	178	Marshall	15,317,658	371
Bullitt	19,833,081	451	Martin	5,535,489	142
Butler	4,283,332	110	Mason	8,513,356	215
Caldwell	7,649,543	192	McCracken	32,360,445	786
Calloway	28,222,154	695	McCreary	8,424,656	220
Campbell	31,209,327	728	McLean	5,035,784	119
Carlisle	1,854,657	51	Meade	8,170,630	184
Carroll	3,873,290	92	Menifee	2,592,937	77
Carter	15,088,572	399	Mercer	10,114,442	279
Casey	6,300,693	163	Metcalfe	3,963,154	97
Christian	22,773,204	567	Monroe	6,125,564	153
Clark	14,622,206	371	Montgomery	13,643,858	335
Clay	12,638,377	297	Morgan	7,225,836	190
Clinton	5,725,090	154	Muhlenberg	15,280,179	357
Crittenden	2,347,844	70	Nelson	17,041,518	430
Cumberland	3,903,160	95	Nicholas	2,447,207	63
Daviess	47,167,559	1147	Ohio	8,159,850	216
Edmonson	4,329,718	110	Oldham	21,153,832	473
Elliott	2,551,012	70	Owen	4,045,148	100
Estill	6,398,192	161	Owsley	4,516,548	118
Fayette	128,704,198	3131	Pendleton	5,435,166	136
Fleming	7,282,945	194	Perry	16,462,690	415
Floyd	21,850,733	562	Pike	32,725,070	829
Franklin	31,177,864	934	Powell	5,032,326	124
Fulton	3,007,930	77	Pulaski	29,305,878	756
Gallatin	1,226,979	34	Robertson	1,073,432	27
Garrard	8,411,939	207	Rockcastle	8,385,536	200
Grant	8,130,417	179	Rowan	20,230,778	513
Graves	17,509,158	432	Russell	9,852,171	242
Grayson	11,116,183	278	Scott	18,296,345	452
Green	5,027,757	122	Shelby	20,938,575	486
Greenup	16,079,672	403	Simpson	7,043,311	178
Hancock	3,248,252	78	Spencer	6,239,848	141
Hardin	37,603,144	910	Taylor	12,699,684	321
Harlan	16,233,891	418	Todd	3,643,774	98
Harrison	8,376,155	210	Trigg	7,320,866	190
Hart	5,698,025	138	Trimble	2,444,092	55
Henderson	18,728,367	458	Union	4,773,232	124
Henry	7,631,913	200	Warren	70,239,020	1727
Hickman	1,567,035	38	Washington	4,929,896	128
Hopkins	19,857,440	487	Wayne	9,298,046	232
Jackson	5,539,830	151	Webster	4,955,786	130
Jefferson	325,984,204	7002	Whitley	27,370,603	709
Jessamine	16,930,866	424	Wolfe	4,515,375	118
Johnson	14,658,283	351	Woodford	12,912,815	320
Kenton	40,421,172	964			
Knott	9,944,295	252	**Total in Kentucky**	**1,943,431,998**	**47,121**
Knox	11,247,677	301			
Larue	7,275,350	164			

Growth in Annuitants
as of June 30, 2016

Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Beneficiaries of Deceased Members Eligible to Retire	Survivors	Disabled Adult Child
2015-16	45,096	2,762	2,544	652	370	327
2014-15	43,634	2,691	2,442	653	349	328
2013-14	42,581	2,641	2,304	596	429	316
2012-13	41,255	2,582	2,207	601	432	303
2011-12	40,107	2,478	2,126	596	444	304
2010-11	38,705	2,379	2,003	584	430	296
2009-10	37,607	2,284	1,915	567	435	291
2008-09	36,684	2,209	1,837	559	448	283
2007-08	35,550	2,155	1,778	554	468	271
2006-07	34,462	2,086	1,722	549	466	267

Schedule of Annuitants by Type of Benefit
as of June 30, 2016

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Benefit*					
		1	2	3	4	5	6
1 - 500	3,741	2,833	11	170	32	368	327
501 - 1,000	2,835	2,282	165	294	94	0	0
1,001 - 1,500	3,024	2,130	300	476	116	2	0
1,501 - 2,000	3,517	2,650	398	397	72	0	0
2,001 - 2,500	4,967	3,976	555	329	107	0	0
2,501 - 3,000	8,305	7,190	724	312	79	0	0
3,001 - 3,500	8,234	7,619	348	205	62	0	0
3,501 - 4,000	6,067	5,750	147	137	33	0	0
4,001 - 4,500	3,929	3,740	69	96	24	0	0
4,501 - 5,000	2,642	2,558	24	47	13	0	0
5,001 & OVER	4,490	4,368	21	81	20	0	0
TOTAL	**51,751**	**45,096**	**2,762**	**2,544**	**652**	**370**	**327**

*Type of Benefit
1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Beneficiaries of Retired Members*
4-*Beneficiaries of Deceased Member Eligible to Retire*
5-Survivor Payments
6-Disabled Adult Child

Schedule of Annuitants by Option Selected
as of June 30, 2016

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,849	386	282	43	5	390	88	698
501 - 1,000	1,594	348	233	112	6	347	188	7
1,001 - 1,500	1,504	308	289	146	15	407	322	33
1,501 - 2,000	1,836	381	321	154	7	474	282	62
2,001 - 2,500	2,414	486	441	179	3	784	491	169
2,501 - 3,000	4,013	811	689	218	9	1,438	788	339
3,001 - 3,500	4,315	936	579	221	11	1,232	828	112
3,501 - 4,000	3,143	637	458	180	9	945	639	56
4,001 - 4,500	1,996	393	330	118	5	593	475	19
4,501 - 5,000	1,372	277	203	91	9	377	305	8
5,001 & OVER	2,281	418	453	210	16	580	522	10
TOTAL	**26,317**	**5,381**	**4,278**	**1,672**	**95**	**7,567**	**4,928**	**1,513**

***Option selected:**
1 - Straight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/2006 TO 06/30/2007								
Average monthly benefit	$178	$514	$930	$1,559	$2,136	$3,140	$4,263	**$2,900**
Average final average salary	$4,102	$3,346	$3,590	$4,228	$4,537	$4,970	$5,758	**$4,916**
Number of retired members	48	113	90	109	193	534	514	**1,577**
07/01/2007 TO 06/30/2008								
Average monthly benefit	$199	$524	$1,117	$1,658	$2,276	$3,279	$4,319	**$2,984**
Average final average salary	$3,816	$3,066	$4,215	$4,412	$4,612	$5,067	$5,786	**$5,017**
Number of retired members	50	130	112	150	169	557	615	**1,831**
07/01/2008 TO 06/30/2009								
Average monthly benefit	$200	$573	$1,005	$1,725	$2,436	$3,368	$4,496	**$2,941**
Average final average salary	$4,617	$3,942	$3,873	$4,686	$4,983	$5,278	$5,960	**$5,164**
Number of retired members	72	168	137	115	217	505	585	**1,824**
07/01/2009 TO 06/30/2010								
Average monthly benefit	$185	$525	$1,104	$1,700	$2,427	$3,468	$4,670	**$3,222**
Average final average salary	$3,654	$3,637	$4,124	$4,508	$4,974	$5,383	$6,102	**$5,316**
Number of retired members	28	133	98	103	242	442	601	**1,647**
07/01/2010 TO 06/30/2011								
Average monthly benefit	$149	$519	$1,225	$1,781	$2,513	$3,621	$4,827	**$3,240**
Average final average salary	$3,570	$3,640	$4,423	$4,825	$5,184	$5,574	$6,235	**$5,392**
Number of retired members	45	157	144	112	242	544	617	**1,854**
07/01/2011 TO 06/30/2012								
Average monthly benefit	$175	$507	$1,170	$1,897	$2,613	$3,674	$4,726	**$3,148**
Average final average salary	$3,292	$3,759	$4,307	$4,898	$5,219	$5,605	$6,109	**$5,331**
Number of retired members	45	197	146	162	303	778	569	**2,200**
07/01/2012 TO 06/30/2013								
Average monthly benefit	$161	$475	$1,186	$1,963	$2,781	$3,811	$5,162	**$3,149**
Average final average salary	$3,362	$3,660	$4,498	$4,956	$5,518	$5,799	$6,632	**$5,476**
Number of retired members	44	234	156	154	294	685	447	**2,014**
07/01/2013 TO 06/30/2014								
Average monthly benefit	$192	$484	$1,270	$2,068	$2,797	$3,847	$5,362	**$3,126**
Average final average salary	$4,148	$3,677	$4,751	$5,364	$5,600	$5,902	$6,860	**$5,589**
Number of retired members	56	211	161	145	258	678	344	**1,853**
07/01/2014 TO 06/30/2015								
Average monthly benefit	$157	$472	$1,282	$2,038	$2,890	$3,898	$5,124	**$3,173**
Average final average salary	$3,331	$3,577	$4,892	$5,266	$5,709	$5,948	$6,552	**$5,577**
Number of retired members	60	231	183	206	314	806	456	**2,256**
07/01/2015 TO 06/30/2016								
Average monthly benefit	$177	$519	$1,316	$1,998	$2,934	$3,935	$5,389	$3,195
Average final average salary	$3,364	$3,791	$4,847	$5,188	$5,777	$6,019	$6,858	$5,664
Number of retired members	61	254	194	217	356	807	448	2,337
Ten Years Ended June 30, 2016								
Average monthly benefit	**$178**	**$507**	**$1,183**	**$1,870**	**$2,656**	**$3,646**	**$4,783**	**$3,114**
Average final average salary	**$3,798**	**$3,641**	**$4,432**	**$4,896**	**$5,333**	**$5,609**	**$6,232**	**$5,365**
Number of retired members	**509**	**1,828**	**1,421**	**1,473**	**2,630**	**6,336**	**5,196**	**19,393**

Medical Insurance Plan
Average Insurance Premium Supplements for the Last Five Years
By Years of Service Credit

Retirement Effective Dates	00-9.99	10-14.99	15-19.99	20>=	TOTAL
07/01/2011 to 06/30/2012					
Average monthly supplement	$ 164.12	$ 302.19	$ 433.25	$ 579.29	
Number of retired members	29	81	121	1,568	1,799
07/01/2012 to 06/30/2013					
Average monthly supplement	$ 80.23	$ 227.32	$ 366.98	$ 499.25	
Number of retired members	29	90	104	1,373	1,596
07/01/2013 to 06/30/2014					
Average monthly supplement	$ 51.99	$ 189.59	$ 335.34	$ 483.65	
Number of retired members	15	82	100	1,227	1,424
07/01/2014 to 06/30/2015					
Average monthly supplement	$ 78.48	$ 204.26	$ 369.27	$ 492.30	
Number of retired members	24	101	176	1,411	1,712
07/01/2015 to 06/30/2016					
Average monthly supplement	$ 86.82	$ 182.41	$ 323.14	$ 483.93	1,751
Number of retired members	68	98	178	1,407	

Summary of Fiscal Year 2015-2016

Retiree Sick Leave Payments

ACTUARIAL RATE

Total members retiring	2,386
Total members receiving sick leave payments	1,597
Total amount of sick leave payments @12.855% contribution rate	$ 20,890,558
Average sick leave payment per retiree	$ 13,081
Total increase in final 3/5 year average salary base	$ 5,676,069
Average increase in Final Average Salary	$ 3,554
Total service credit of 1,597 retirees	40,763
Average service credit of 1,597 retirees	25.52

ANTICIPATED LIFETIME PAYOUT OF ADDITIONAL ANNUITY

Actuarial cost of sick leave as salary credit	$ 46,160,679

Funding of Additional Payments

Member Contributions ($20,890,558 x 9.105%)=	$ 1,902,085
Employer Contributions ($20,890,558 x 12.325%) =	2,574,761
Total Contributions	$ 4,476,847
DEFICIT:	
Anticipated additional payout	$ 46,160,679
Less total member & state contributions	4,476,847
Subtotal unfunded debt	41,683,832
Less current year appropriation	4,920,700
TOTAL UNFUNDED COST OF SICK LEAVE PAYMENTS*	$ 36,763,132

* *This amount will be amortized over a twenty year period.*

NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. The unfunded cost of sick leave payments are amortized over 20 year periods per KRS 161.553.

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Teachers' Retirement System of the State of Kentucky

The 77th Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Years Ended June 30, 2017 and 2016

Teachers' Retirement System
of the State of Kentucky
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN, CPA
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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Teachers' Retirement System of the State of Kentucky

2017

Introductory Section

Chair's Letter

Teachers' Retirement System of the State of Kentucky

December 18, 2017

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State Treasurer

STEPHEN PRUITT, Ph.D.
Education Commissioner

GARY L. HARBIN, CPA
Executive Secretary

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2017, the 77th year of operation of the system. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

TRS closed the 2016-2017 fiscal year with $19.8 billion net assets. The active membership totaled 72,130 and the retired membership was 52,966 with an annual annuity and medical insurance benefits of $2.1 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. Every effort will be made to ensure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the governor and the legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Ron Sanders
Chair
Board of Trustees

Letter of Transmittal

Teachers' Retirement System
of the State of Kentucky

December 18, 2017

Honorable Matthew G. Bevin, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky

Dear Governor Bevin:

It is my pleasure to submit the 77th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky (TRS), a component unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2017. Allow me to begin again this transmittal letter with an expression of my thanks for your work and the work of the General Assembly in approving a biennial budget for the commonwealth that provides $973 million in additional funding for TRS. The first year of that funding resulted in TRS receiving 99 percent of the actuarially determined employer contribution (ADEC) for the period - a dramatic increase over prior budgets that already is being invested to fulfill the promise made by the state to teachers. The importance of the consistent full funding of the retirement plan for Kentucky's teachers cannot be overstated.

TRS produced this annual report, which is required by state law and contains the annual audit and actuarial valuation of the retirement system, that provides you, the General Assembly and the public with information necessary to better understand TRS, which is the largest financial institution in the commonwealth. Contained within are numerous examples of how Kentucky teachers' future well-being is being provided for at a low cost with a great economic benefit for those educators and the state's businesses that receive many of the retirement dollars spent by the 89 percent of retirees who live in Kentucky.

This report conforms with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with TRS management. To the best of management's knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of TRS for the year ended June 30, 2017. Discussion and analysis of net assets and related additions and deductions are presented in Management's Discussion and Analysis in the Financial Section of this report.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are executed accurately and financial statements are presented fairly. Limits are inherent in all systems of internal control based on the recognition that the costs of such systems should be related to the benefits to be derived. Management believes the system's controls provide this appropriate balance. The system of internal controls includes policies and procedures and an internal audit department that reports to the Board of Trustees.

Profile of TRS

TRS began operations on July 1, 1940, as a cost-sharing, multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state. TRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the Notes to Financial Statements in the Financial Section of this report. Also, the Summary of Main System Provisions as Interpreted for Valuation Purposes in the Actuarial Section, is useful in understanding benefit and contribution provisions. The number of TRS active and retired members is contained in the preceding board chair's letter.

An annual operating budget is prepared for the administration of the retirement system and approved by the Board of Trustees. Biennial budget requests also are submitted to the General Assembly for adoption. TRS's investment earnings pay for the agency's administrative expenses, which are among the lowest of its peers.

During fiscal year 2017, the enactment of Senate Bill 2 (2017 RS) expanded the Board of Trustees

from its longstanding makeup of nine members to 11; the additional two members are appointed by the governor with the requirement that both appointees have financial experience.

Major Initiatives

The system continually seeks better to serve its membership as the highest levels of professionalism, integrity, performance and teamwork are required at all levels of the organization. TRS is an organization that "does it right." As such, during the past year, TRS has continued work on several major initiatives concerning funding and cost containment for retiree health care, the investment program and information technology.

Implementation of the "Shared Responsibility" Solution for Funding Retiree Health Care and Careful Management of Medical Insurance Costs

Kentucky continues to be a national leader in prefunding retiree health care benefits as a result of the shared responsibility solution enacted in 2010 through the collective efforts of the Board of Trustees, the education community and elected officials. The plan immediately eliminated $3.1 billion in actuarial liability from the retired teacher health care plan. Combined with other cost control measures, more than $5 billion in actuarial accrued liability has been eliminated from the TRS Medical Insurance Fund. In only seven years, the medical insurance fund has reached 26.7 percent funding compared to pay-as-you-go status before the law took effect. With the six-year phase-in period having ended in 2016, the medical plan saw a one-year funding ratio increase in 2017 of 4.8 percentage points. This remarkable improvement confirms that the medical insurance fund is on schedule to be funded fully in 23 years. The shared responsibility solution is truly a significant accomplishment for the retirement security of current and future retired teachers.

TRS is efficient, effective and always working to improve the retirement security of Kentucky's teachers. The latest such initiative is the addition of a new personalized medicine pilot project under TRS's Medicare Eligible Health Plan. Personalized medicine uses DNA testing to help a patient's doctor make more effective treatment decisions for better health outcomes. This pilot, which has been months in development and began in fall 2017, is focused on making sure that a retiree's medications are safe and will be beneficial. Without this testing, medicines may be prescribed that won't work with a retiree's individual physiology (as shown through DNA testing) and that, in some cases, may be fatal. Coriell Life Sciences, which has been providing clinical research services for more than 64 years, is TRS's partner in the pilot. Besides the health benefit to retirees, the pilot is expected to provide significant cost savings to the plan by reducing adverse drug reactions and the trial-and-error period that some patients see.

The Board of Trustees regularly reviews the health care plan to contain costs and maintain a meaningful benefit for retired teachers. The move to Medicare Advantage, now in the 11th year, continues to be stable and financially feasible for our members and the TRS medical plan. The cost of coverage for 2018 is a reduction from the 2017 cost.

Some recent cost-saving initiatives include moving the TRS-sponsored Medicare Part D Employer Group Waiver drug plan from fully insured to a self-funded plan to achieve the greatest federal subsidies. Additionally, TRS is part of the Know Your Rx Coalition, which it joined in 2012. Through the coalition, TRS saves money leveraging greater prescription purchasing power, obtaining deeper drug discounts and increasing the rate at which prescriptions are filled with generic drugs from 73 percent to 88 percent. Additionally, coalition pharmacists work with retired teachers and their physicians to maximize prescription dollars both for the retiree and the medical plan.

Implementation of Senate Bill 2

In June 2017, the board adopted an investment procurement policy, which built upon and centralized existing TRS investing procurement practices, to comply with the provisions of SB 2. TRS was the first of the state's retirement systems to have its policy certified by the secretary of the Finance and Administration Cabinet. Implementation of the other provisions of SB 2 continues.

Investment Program

For the fiscal year ended June 30, 2017, the market value of TRS's investment program increased a net 15.0 percent for retirement and

14.4 percent for the medical insurance trust pushing total plan assets to a record of $19.9 billion. While a one-year period is not determinative for a long-term investor such as TRS, it should be noted that the gross return of 15.37 percent was among the top 8 percent of public plans with more than $1 billion under management. During the last 10 years, TRS's investment returns rank in the top 9 percent of those plans. Moreover, during the last 30 years, TRS investment returns of 8.18 percent have met the long-term assumed rate of return of 7.5 percent.

A multiyear program of diversifying the portfolio continued in line with TRS's focus on fundamental value and risk control. These ongoing efforts are a continuation of a disciplined investment process and long-term focus on retirement security. This focus has generated exceptionally stable returns through the system's history, and we have every confidence that it will do so in the future. TRS's investment program continues to be recognized as a leader in the public pension community for governance structure, trustee education and cost effectiveness.

TRS regularly obtains independent reviews and always is seeking to improve its investment program and continue the tradition of adhering to best governance practices that lead to sound investment returns. For example, with the additional funding provided in the 2016-18 biennial budget, TRS conducted an asset liability modeling study and reviewed actuarial assumptions. The studies confirmed TRS's approach and the importance of the consistent full funding of the ADEC.

Information Technology

The Pathway information technology system continues to be a success, allowing members to access account information online - available anytime from anywhere. The member self-service portal in Pathway, its mobile device application and the TRS website continued to be updated. A site index was added to the website. Staff currently is working with the Kentucky Department for Libraries and Archives to update TRS's records retention schedule consistent with Pathway's data and document storage capabilities.

Communications

To reach members more easily, TRS continued using Facebook and Twitter accounts to communicate information about the system on a more timely basis. In less than two years, the Facebook account has received almost 2,100 likes, and posts often reach more than 1,000 users - led by 33,239 users who saw a post on the system's investment performance for fiscal year 2017.

Also, TRS revamped and added informational seminar offerings for members. The new TRS On The Road takes place on Saturdays three times per year in different parts of the state. Additionally, under the direction of the Member Services division, webinars of popular seminars are being offered and videos of popular informational seminars began being posted to the TRS website. The Insurance division expanded the offerings of its Turning 65 presentation for retirees about to enroll in the Medicare Eligible Health Plan.

Internal and External Reviews

TRS responds to legislative and administration inquiries and mandates throughout the year. In connection with possible pension reform, TRS received - and responded to - numerous requests from legislators, the executive branch, constituent groups and others to provide accurate information about the experience of the system.

Economic Condition

The economic condition of the system is based primarily on investment earnings. The Investment Section of this report contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules, among others.

As of June 30, 2017, the retirement system's total funds reached $19.8 billion in market value. The retirement system's investment performance has been strong in recent years relative to its peers. As of June 30, 2017, TRS achieved one-year gross returns of 15.37 percent with top 8 percent investment performance. The fiscal year was characterized by increasing global economic growth. This favorable environment produced strong returns for domestic and international equities, the system's two largest asset classes.

TRS has beaten the independent investment consultant's public fund index in the one-, three-,

five- and 10-year periods, achieving top 9 percent performance over the 10-year period. This record validates policy changes adopted by the board and implemented by the Investment Committee over the last several years. TRS's commitment to best practices, stringent risk controls and fundamental value philosophy in investing helps ensure long-term retirement security for Kentucky's teachers.

According to KRS 161.430, the TRS Board of Trustees is responsible for investing the assets of the system. The Board of Trustees delegates investment authority to the Investment Committee. The Investment Committee works closely with experienced investment counselors and the system's professional staff in evaluating and selecting investment allocations.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the plan and its trust funds. The investment program shall also provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets.

The investment portfolio experienced an increase in value during the 2016-2017 fiscal year as the market value went from $17,405,060,831 to $19,433,790,384. The increase in value of the portfolio was the result of favorable market conditions, additional funding provided by the governor and General Assembly for the pension fund. Interest income, dividends and employer and employee contributions also provided significant income to the portfolio.

Net investment income totaled $2,572,143,912 for 2016-2017 compared to negative $249,661,104 for 2015-2016. The major contributing factor of the increase in return from the system's investment portfolio resulted from the net appreciation in fair value of investments of $2,254,023,748 at June 30, 2017 compared to net depreciation of $598,818,560 at June 30, 2016.

As mentioned earlier, it should be noted that TRS annuities bolster the Commonwealth of Kentucky's economy, as 89 percent of retired teachers reside within the state. TRS paid more than $2 billion in total benefits (retirement, medical, etc.) during the fiscal year.

Funding

The first benefits from the additional funding in the 2016-18 state budget (2016 RS HB 303) were seen as TRS received 99 percent of the ADEC in the biennium's initial year.

Based on recommendations of the Board of Trustees, the General Assembly establishes, by statute, the contribution levels that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

Since fiscal year 2008, the state has not paid the full recommended annual employer contribution necessary to prefund the benefit requirements of members of the retirement system as determined by the actuary. Over this period, because of not making the additional appropriation beyond salary-based contributions, the actuary says the state's annual additionally required employer contributions have grown significantly from $60.5 million (fiscal year 2009) to $538.3 million (fiscal year 2020). The following schedule details the growth of the additional annual employer contributions payable by the state:

Fiscal Year	Cumulative Increase as a % of Payroll	Cumulative Increase in Annual Retirement Appropriations Payable by the State
2009	1.88%	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	520,372,000
2018	13.49	512,883,000
2019	14.61	553,597,000
2020	14.10	538,253,000

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2017).

The board always has acted as required by state law and recommended annual employer contributions payable by the state that would ensure that the state meets the contractual obligations to members.

The latest actuarial valuation was for the period ending June 30, 2017. This report reflects the

system's actuarial value of assets totaling $18.5 billion and actuarially determined liabilities totaling $32.8 billion. The funded ratio of actuarial assets to liabilities is 56.4 percent, which is an increase from the previous year and is due primarily to market appreciation of investments and smoothing of investment returns. The actuary reports: "In our opinion, the system has not been funded on an actuarially sound basis since the full actuarially determined contributions were not made by the employer. However, an additional appropriation of $498.5 million was made during fiscal year 2017 and an additional appropriation of $474.7 million is expected to be made during fiscal year 2018. If contributions by the employer to the system in subsequent fiscal years are less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the system are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated."

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions in the Required Supplemental Information of the Financial Section of this report. Based on the 2017 valuation report, the actuary recommends a cumulative increase in employer contributions of 14.10 percent of pay for the 2019-2020 fiscal year as detailed in the Contribution Rates tables in the Summary of Principal Results in the Actuarial Section of this report.

TRS Medical Insurance Plan

The shared responsibility solution for funding retiree health care, which went into effect on July 1, 2010, provides a method of prefunding retiree health care over the next 23 years. In only seven years, the medical insurance fund has reached 26.7 percent funding compared to pay-as-you-go status before the law took effect (with the most recent year being a gain of 4.8 percentage points). The results confirm that the medical insurance fund is on schedule to be funded fully in 23 years and that the 2010 solution is working. The shared responsibility solution for funding retiree health care will help ensure the retirement security of the state's teachers. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2017, indicated that the fund has an unfunded liability of $2.71 billion. Annual required employer contributions for the Medical Insurance Fund are provided in the Schedule of Employer Contributions in the Required Supplemental Information of the Financial Section.

The actuary's opinion is: "… if the contributions to the Medical Insurance Fund (MIF) continue at the current statutorily required levels, the funded ratio of the Retiree Medical Plan will continue to increase, and the ability of the MIF to fund the benefits called for under the Retiree Medical Plan will improve."

Additionally, the system believes continued steps must be taken to realize true cost containment through legislation on both the state and national levels and TRS will continue taking advantage of those measures.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform services that are essential to the effective and efficient operation of TRS. Certifications from the board's external auditor and independent actuary are enclosed in this report. The system's consultants, which are appointed by the board, are listed in the Additional Supporting Schedules of the Financial Section and in the Investment Section's Professional Service Providers table and Health Insurance Trust Professional Service Providers table.

National Recognition

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2016. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

To be awarded a Certificate of Achievement, a government unit must publish an easily readable

and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFRs must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for one year. TRS has received the Certificate of Achievement for the last 29 consecutive years (fiscal years ended 1988-2016). TRS believes the current report continues to conform to the Certificate of Achievement program requirements, and is being submitted to GFOA.

PPCC Achievement Award

The Public Pension Coordinating Council (PPCC) awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2017 for implementing and maintaining high professional standards in administering the affairs of the system. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure. Those principles widely are acknowledged to be marks of excellence in the public pension industry.

The PPCC is a coalition of three national associations that represent public retirement systems and administrators. Combined, these associations serve retirement systems that provide pension coverage for most of the nation's 16 million employees of state and local government. The associations that form the PPCC are the National Association of State Retirement Administrators; the National Council on Teacher Retirement; and the National Conference on Public Employee Retirement Systems.

NCTR Executive Committee

I am past-president of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization with a mission to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 69 state, territorial, local and university pension systems with combined assets in excess of $2 trillion, serving more than 18 million active and retired teachers, non-teaching personnel and other public employees.

Public Sector HealthCare Roundtable

Additionally, I serve on the Board of Directors and as president of the Public Sector HealthCare Roundtable. The roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector are represented properly during the formulation, debate and implementation of federal health care policies. Membership in the roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

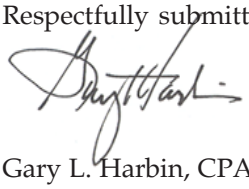
Acknowledgements

The preparation of this report reflects the combined efforts of the TRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It also is used to determine responsible stewardship of the assets contributed by TRS members and their employers.

This report is located at the TRS web address https://trs.ky.gov/financial-reports-information/#CAFR and is made available to all system employer members, whose cooperation continues to contribute significantly to TRS's success, and who form the vital link between TRS and its active members.

TRS management and staff are committed to the continued operation of an actuarially sound and efficient retirement system. Again, thanks to you and the General Assembly for the additional budget funding that is ensuring retirement security for teachers. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



Gary L. Harbin, CPA
Executive Secretary

Board of Trustees

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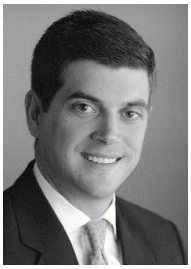
Chair
Lay Trustee
Hodgenville

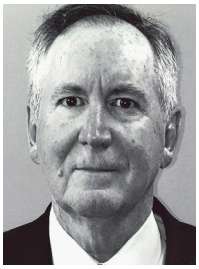
Alison Wright
Vice Chair
Active Teacher Trustee
Georgetown

Mary Adams
Active Teacher Trustee
Brodhead

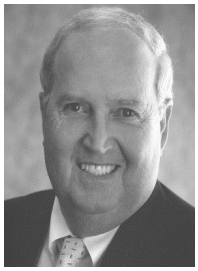
Allison Ball
Ex Officio Trustee
State Treasurer



John Boardman
Appointed
Trustee
Lexington



Frank Collecchia
Appointed
Trustee
Louisville



Hollis Gritton
Lay Trustee
Union

Brenda McGown
Retired Teacher Trustee
Bowling Green

Stephen Pruitt, Ph.D.
Ex Officio Trustee
Commissioner,
Dept. of Education

Laura Schneider
Active Teacher Trustee
Walton

Josh Underwood
Active Teacher Trustee
Tollesboro

Teachers' Retirement System
of the State of Kentucky
479 Versailles Road
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

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Executive Secretary

ROBERT B. BARNES, JD
General Counsel and
Deputy Executive Secretary
Operations

J. ERIC WAMPLER, JD
Deputy Executive Secretary
Finance & Administration

TOM SIDEREWICZ, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

ACTUARY

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AUDITOR

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462 South Fourth Street
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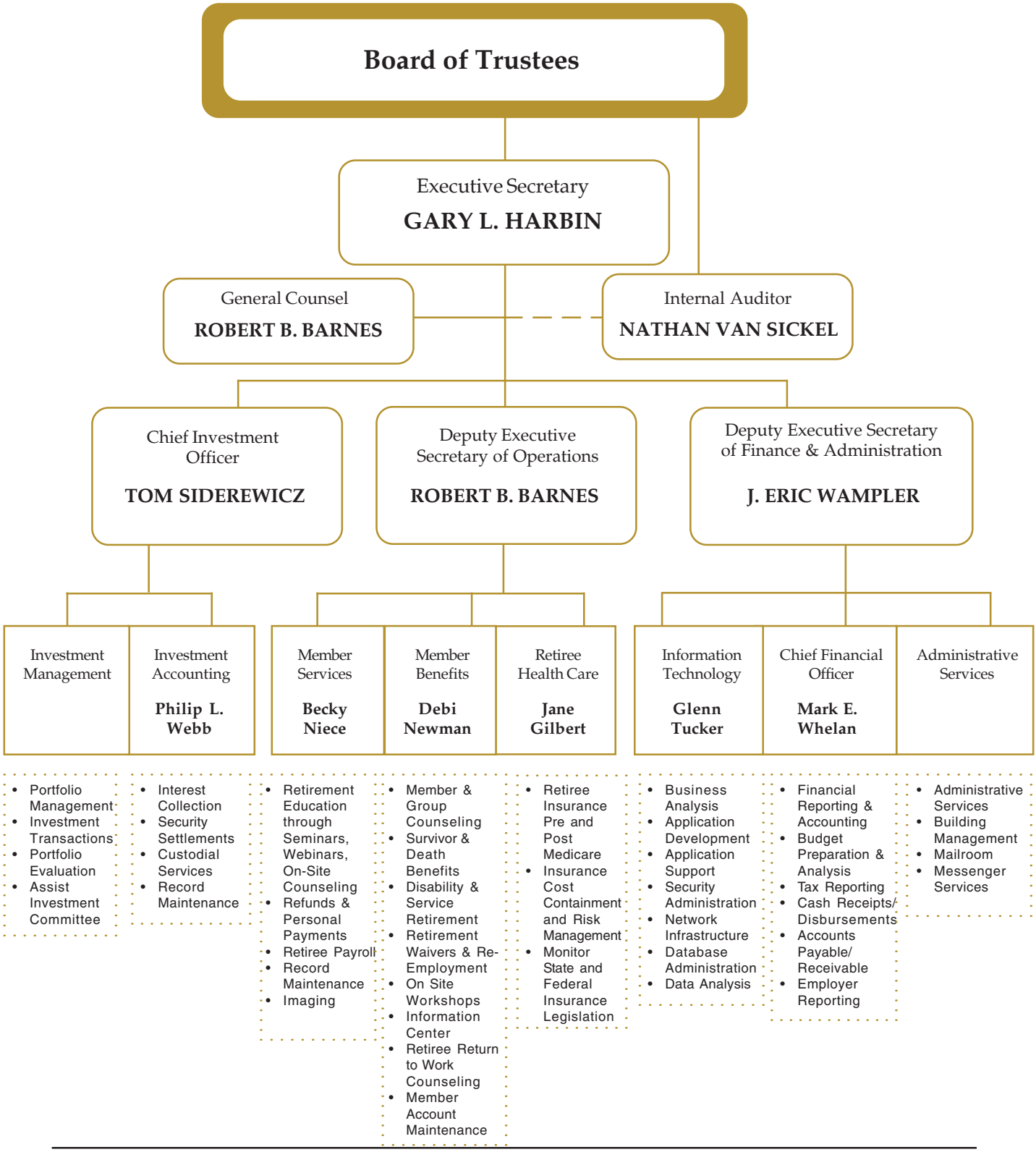
Louisville, Kentucky 40202

See the Schedules of Contracted Investment Management Expenses, Transaction Commissions and Professional Service Providers in the Investment Section for a list of investment fees and external asset managers.

Teachers' Retirement System
Organizational Chart



GOVERNMENT FINANCE OFFICERS ASSOCIATION (GFOA)

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Teachers' Retirement System of the State of Kentucky

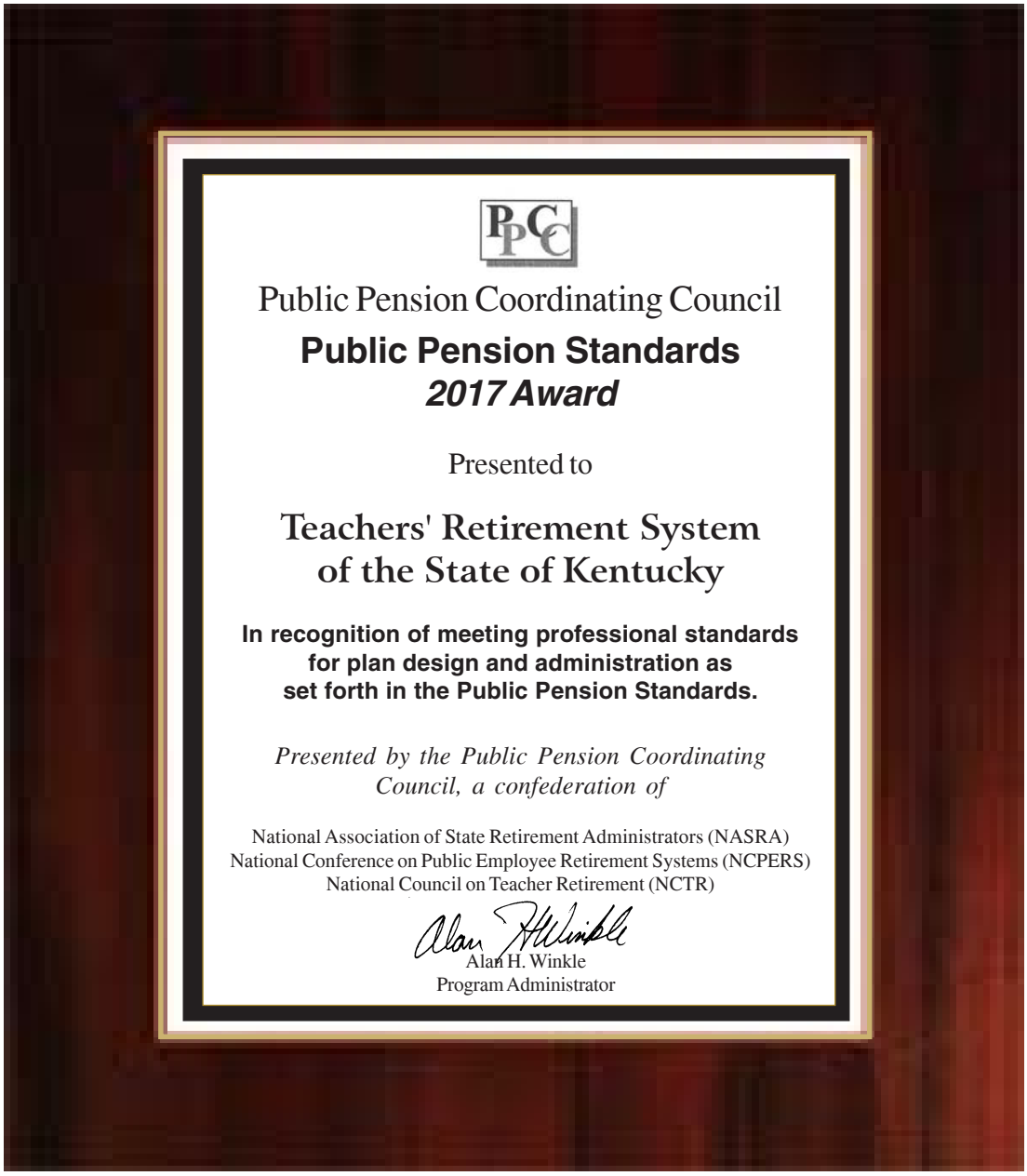
For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2016

Executive Director/CEO

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The TRS has received the Certificate of Achievement for the last 29 consecutive years (fiscal years ended 1988-2016).

PUBLIC PENSION COORDINATING COUNCIL
PUBLIC PENSION STANDARDS



Public Pension Coordinating Council

Public Pension Standards
2017 Award

Presented to

Teachers' Retirement System of the State of Kentucky

In recognition of meeting professional standards for plan design and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2017 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are acknowledged widely to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

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Teachers' Retirement System
of the State of Kentucky

2017

Financial Section

CPAs & ADVISORS

Independent Auditor's Report

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

Report on the Financial Statements

We have audited the accompanying statements of fiduciary net position of the Teachers' Retirement System of the State of Kentucky as of June 30, 2017 and 2016, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements which collectively comprise the component unit financial statements of the Teachers' Retirement System of the State of Kentucky as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion of the effectiveness of the entity's internal control. Accordingly we do not express such an opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall financial statement presentation.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, at June 30, 2017 and 2016 and the respective changes in its fiduciary net position for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Kentucky
Indiana
Ohio

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Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 18 through 21 and the Schedule of Changes in Net Pension Liability (page 59), Schedule of Net Pension Liability (page 60), Schedule of Employer Contributions (page 60) Schedule of Investment Returns (page 61), Medical Insurance Plan Schedule of Changes in Net OPEB Liability (page 62), Medical Insurance Plan Schedule of Net OPEB Liability (page 63), Medical Insurance Plan Schedule of Employer Contributions (page 63), Schedule of Investment Returns (page 64), Life Insurance Plan Schedule of Changes in Net OPEB Liability (page 64), Life Insurance Plan Schedule of Net OPEB Liability (page 65), Life Insurance Plan Schedule of Employer Contributions (page 65), and Schedule of Investment Returns (page 66) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Kentucky Teachers' Retirement System's basic financial statements. The additional supporting schedules (pages 67 through 69) are presented for purposes of additional analysis and are not a required part of the basic financial statements. The Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections have not been subjected to auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with Government Auditing Standards, we have also issued our report dated November 14, 2017, on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and compliance.

/s/ Mountjoy Chilton Medley LLP

Louisville, Kentucky
November 14, 2017

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of the Teachers' Retirement System of the State of Kentucky (TRS, System, or Plan) financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2017. Please read it in conjunction with the respective financial statements, which begin on page 22.

USING THIS FINANCIAL REPORT

Because of the long-term nature of the defined benefit retirement annuity plan, and the medical and life insurance plans, financial statements alone cannot provide sufficient information to properly reflect the ongoing perspective of the System. The Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position (on pages 22-25) provide information about the activities of the defined benefit retirement annuity plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Teachers' Retirement System of the State of Kentucky is the fiduciary of funds held in trust for its members.

The Required Supplementary Information includes historical trend information about the funded status of the defined benefit retirement annuity plan, the medical insurance plan and life insurance plan presented as required by accounting standards. The Schedules of Employer Contributions present historical trend information about the required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans. Separate reports prepared by the actuary using board adopted funding methodology provide a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due.

KENTUCKY TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2017, the System's combined fiduciary net position increased by $2,116.3 million - from $17,638.5 million in 2016 to $19,754.8 million in 2017. In 2015, the combined net position totaled $18,766.8 million. The following summaries focus on the fiduciary net position and changes in fiduciary net position of the System's defined benefit retirement annuity plan, medical insurance plan, and life insurance plan.

Summary of Fiduciary Net Position
(In millions of dollars)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Plan		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
Cash & Investments	$ 18,649.0	$ 16,707.7	$ 17,930.0	$ 922.6	$ 681.4	$ 609.7	$ 86.6	$ 90.1	$ 88.6
Receivables	135.0	119.5	295.5	44.6	58.3	29.1	1.2	1.2	1.1
Capital Assets	18.1	17.0	14.9						
Total Assets	18,802.1	16,844.2	18,240.4	967.2	739.7	638.8	87.8	91.3	89.7
Total Liabilities	(94.4)	(31.4)	(191.3)	(8.8)	(5.9)	(11.8)		(0.4)	
Net Position	$ 18,707.7	$ 16,812.8	$ 18,049.1	$ 958.4	$ 733.8	$ 627.0	$ 87.8	$ 90.9	$ 89.7

*TOTALS	2017	2016**	2015**
Cash & Investments	$ 19,658.2	$ 17,479.2	$ 18,628.3
Receivables	180.8	179.0	325.7
Capital Assets	18.1	17.0	14.9
Total Assets	19,857.1	17,675.2	18,968.9
Total Liabilities	(103.2)	(37.7)	(203.1)
Net Position	$ 19,753.9	$ 17,637.5	$ 18,765.8

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had a combined fiduciary net position of $1.0 million for years ended 2017, 2016 and 2015.*

** *Reflects revised amounts reported for both 2016 and 2015 as described in Note 2*

Management's Discussion and Analysis (continued)

The fiduciary net position of the defined benefit retirement annuity plan increased by 11.3 percent ($18,707.7 million compared to $16,812.8 million) and in 2015, the fiduciary net position of the defined benefit plan totaled $18,049.1 million. The increase is primarily due to additional employer contributions from the state and improvements in market conditions which resulted in a net investment income increase of $2.7 billion more than 2016. The 2016 amount was $1.1 billion less than 2015. The defined benefit retirement annuity plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries.

The fiduciary net position of the medical insurance plan increased by 30.6 percent ($958.4 million compared to $733.8 million) primarily due to contributions from members and employers exceeding insurance expenses due to legislation passed in 2010. This compares to 2015 where fiduciary net position of the medical insurance fund totaled $627 million. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

Summary of Changes in Fiduciary Net Position

(In millions of dollars)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Plan		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
ADDITIONS									
Member Contributions	$ 313.6	$ 313.0	$ 308.2	$ 128.8	$ 128.1	$ 100.6	$	$	$
Employer Contributions	1,060.7	565.5	559.6	180.3	178.6	145.3	1.0	1.0	1.0
Net Investment Income/(Loss)	2,475.8	(245.2)	862.2	95.5	(9.3)	7.4	1.0	4.8	2.0
TOTAL ADDITIONS	3,850.1	633.3	1,730.0	404.6	297.4	253.3	2.0	5.8	3.0
DEDUCTIONS									
Benefit Payments	1,918.6	1,833.2	1,741.5				5.2	4.6	4.1
Refunds	26.3	27.8	23.1						
Administrative Expense	10.3	8.6	8.9	1.5	1.7	1.6			
Insurance Expenses				178.5	188.9	160.7			
TOTAL DEDUCTIONS	1,955.2	1,869.6	1,773.5	180.0	190.6	162.3	5.2	4.6	4.1
Increase/(Decrease) in Net Position	$ 1,894.9	$ (1,236.3)	$ (43.5)	$ 224.6	$ 106.8	$ 91.0	$ (3.2)	$ 1.2	$ (1.1)

***TOTALS**

	2017	2016**	2015**
ADDITIONS			
Member Contributions	$ 442.4	$ 441.1	$ 408.8
Employer Contributions	1,242.0	745.1	705.9
Net Investment Income/(Loss)	2,572.3	(249.7)	871.6
Other Income			
TOTAL ADDITIONS	4,256.7	936.5	1,986.3
DEDUCTIONS			
Benefit Payments	1,923.8	1,837.8	1,745.6
Refunds	26.3	27.8	23.1
Administrative Expense	11.8	10.3	10.5
Insurance Expenses	178.5	188.9	160.7
TOTAL DEDUCTIONS	2,140.4	2,064.8	1,939.9
Increase/(Decrease) in Net Position	$ 2,116.3	$ (1,128.3)	$ 46.4

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had a combined change in fiduciary net position of $1.0 million for years ended 2017, 2016 and 2015.*

** *Reflects revised amounts reported for both 2016 and 2015 as described in Note 2.*

DEFINED BENEFIT RETIREMENT ANNUITY PLAN ACTIVITIES

Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Management's Discussion and Analysis (continued) . . .

In 2017, Employer contributions totaled $1,060.7 million, a net increase of $495.2 million from the prior fiscal year. The increase was due to additional employer contributions paid by the state. In 2016, Employer contributions increased $5.9 million compared to the prior fiscal year.

In 2017, the defined benefit plan experienced an increase in net investment income compared to the previous year ($2,475.8 million compared to negative $245.2 million). For 2015, net investment income totaled $862.2 million. The increase in net investment income is mainly due to favorable market conditions for the year ended June 30, 2017 compared to 2016. Total deductions in 2017 increased $85.6 million. The increase was caused principally by an increase of $86.0 million in defined benefit payments. Members who were drawing benefits as of June 2016 received an increase of one and one-half percent to their retirement allowances in July 2016. Also, there was an increase of 1,403 members and beneficiaries on the retired payroll as of June 30, 2017.

OTHER POSTEMPLOYMENT BENEFIT ACTIVITIES

During the 2017 fiscal year, the medical insurance plan member contributions increased $0.7 million and employer contributions increased $1.7 million from fiscal year 2016. The member, employer and state contributions increased primarily due to the implementation of the Shared Responsibility Plan beginning July 1, 2010 which includes increased contributions from active and retired members, employers and the state.

Net investment income for the medical insurance plan increased $104.8 million from negative $9.3 million in 2016 to $95.5 million in 2017. In 2015, net investment income totaled $7.4 million.

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2017, 2016 and 2015 were $5.2, $4.6 and $4.1 million respectively.

FUNDING

For the 2016-2018 biennium, the State budgeted $973 million of additional employer contributions for the unfunded liability of the System. The latest actuarial valuation was for the period ending June 30, 2017. This report reflects the System's actuarial value of assets totaling $18.5 billion and actuarial determined liabilities totaling $32.8 billion. The funded ratio of actuarial assets to liabilities is 56.4%. The additional funding provided in the budget resulted in 99% of the Actuarially Determined Employer Contribution being made for fiscal year 2017. Assuming that contributions to the System are made by the State from year to year in the future as recommended by the actuary, the System should have sufficient assets to provide the benefits defined by law.

The actuarial funding of the medical insurance and life insurance plans is provided in the Schedule of Funding Progress presented in the Required Supplementary Information. The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the entry age cost method. Although the medical insurance plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding. Effective July 1, 2010 the Shared Responsibility Plan for funding retiree health benefits requires members, retirees, participating employers and the state to make contributions for pre-funding retiree medical benefits. Annual required contributions of the medical insurance plan are provided in the Schedule of Employer Contributions presented in the Required Supplementary Information.

HISTORICAL TRENDS

Accounting standards require that the Statement of Fiduciary Net Position present asset values at fair value and include only benefits and refunds due to plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Detailed information regarding the funded status, including the key actuarial assumptions, target allocations and the sensitivity of the discount rate can be found in Note 4 of the financial statements for the defined benefit plan, Note 8 for the medical health plan, and Note 9 for the life insurance plan. The blended discount rate mandated by accounting standards result in a lower funding level when compared to the actuarially determined funded levels reported in past years. The Schedule of Employer Contributions is provided in the Required Supplementary Information.

Management's Discussion and Analysis (continued) . . .

The System's independent consulting actuaries are members of the American Academy of Actuaries and experienced in performing valuations for public retirement systems. As mandated by state law, the valuations of the retirement annuity and health care plans are prepared in accordance with principles of practice prescribed by the Actuarial Standards Board consistent with accepted actuarial procedures. Actuarial assumptions used in the valuations are internally consistent and reasonable based on the actual experience of the plans. An actuarial audit was completed in 2015, which confirmed the accuracy of actuarial procedures and the reasonableness of assumptions. A five-year experience study was completed in 2016, which also confirmed the reasonableness of assumptions based upon the actual experience of the plans. The actuarial assumptions reflected in the results may be reasonably relied upon. However, projections using other assumptions may produce significantly different results.

The Finance and Administration Cabinet commissioned a study of the state's retirement systems, including the Teachers' Retirement System. The resulting report from this study was issued in August 2017 and is the basis for ongoing discussions that may lead to legislative change to the System.

This financial report is designed to provide citizens, participating employers, plan members, and other users with an overview of the Kentucky Teachers' Retirement System's fiscal practices and responsibility. If you have questions or need additional information, please contact Mark Whelan, Chief Financial Officer, Teachers' Retirement System at 479 Versailles Road, Frankfort, Kentucky 40601.

STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2017

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 137,274,752	$ 87,841,753	$ 187,657	$ 23,852	$ 225,328,014
Prepaid Expenses	100,838				100,838
Receivables					
Contributions	28,779,827	18,456,779	105,264		47,341,870
Due From Other Trust Funds	1,567,472				1,567,472
State of Kentucky	13,640,427	5,580,025	32,617		19,253,069
Investment Income	40,623,372	1,685,597	1,036,228	2,693	43,347,890
Investment Sales Receivable	49,973,750	915,100			50,888,850
Other Receivables	438,303	17,958,624			18,396,927
Total Receivables	135,023,151	44,596,125	1,174,109	2,693	180,796,078
Investments at Fair Value (See Note 5)					
Short-Term Investments	521,348,977	46,008,715	4,150,029	398,093	571,905,814
Bonds and Mortgages	2,871,403,201	70,283,077	82,293,300	258,962	3,024,238,540
Equities	11,589,656,638	473,274,401		280,104	12,063,211,143
Alternative Investments	1,062,855,562	42,340,364			1,105,195,926
Real Estate	1,046,760,134	42,701,494			1,089,461,628
Additional Categories	1,419,607,158	160,170,175			1,579,777,333
Total Investments	18,511,631,670	834,778,226	86,443,329	937,159	19,433,790,384
Capital Assets, at cost net of accumulated depreciation of $8,019,203 (See Note 2)	18,046,639				18,046,639
Total Assets	18,802,077,050	967,216,104	87,805,095	963,704	19,858,061,953
LIABILITIES					
Accounts Payable	2,201,644	10,300			2,211,944
Due to Other Trust Funds		1,538,574	27,690	1,208	1,567,472
Revenues Collected in Advance		3,437,483			3,437,483
Investment Purchases Payable	92,176,381	3,840,074			96,016,455
Total Liabilities	94,378,025	8,826,431	27,690	1,208	103,233,354
Net Position - Restricted for Pension and Other Post-Employment Benefits	$ 18,707,699,025	$ 958,389,673	$ 87,777,405	$ 962,496	$ 19,754,828,599

The "Combining Statement of Fiduciary Net Position - Other Funds" is presented on page 26.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2016

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 15,156,496	$ 59,843,503	$	$ 481	$ 75,000,480
Prepaid Expenses	89,235				89,235
Receivables					
Contributions	34,664,070	21,525,458	95,285		56,284,813
Due From Other Trust Funds	3,719,997				3,719,997
State of Kentucky	22,766,523	1,359,808	54,392		24,180,723
Investment Income	39,619,872	1,333,953	1,090,402	2,417	42,046,644
Investment Sales Receivable	18,182,733	633,642			18,816,375
Other Receivables	559,913	33,481,047			34,040,960
Total Receivables	119,513,108	58,333,908	1,240,079	2,417	179,089,512
Investments at Fair Value (See Note 5)					
Short-Term Investments	507,724,996	18,186,502	913,077	410,590	527,235,165
Bonds and Mortgages	2,734,474,510	62,555,400	89,200,103	290,132	2,886,520,145
Equities	10,267,066,002	354,369,798		242,351	10,621,678,151
Alternative Investments	932,813,350	23,931,317			956,744,667
Real Estate	940,860,202	25,433,241			966,293,443
Additional Categories	1,309,513,418	137,075,842			1,446,589,260
Total Investments, at fair value	16,692,452,478	621,552,100	90,113,180	943,073	17,405,060,831
Capital Assets, at cost net of accumulated depreciation of $6,022,382 (See Note 2)	16,973,670				16,973,670
Total Assets	16,844,184,987	739,729,511	91,353,259	945,971	17,676,213,728
LIABILITIES					
Accounts Payable	1,917,838	19,811	325,494		2,263,143
Due to Other Trust Funds	1,935,385	1,747,115	36,837	660	3,719,997
Revenues Collected in Advance		2,047,051			2,047,051
Investment Purchases Payable	27,499,881	2,134,567			29,634,448
Total Liabilities	31,353,104	5,948,544	362,331	660	37,664,639
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 16,812,831,883	$ 733,780,967	$ 90,990,928	$ 945,311	$ 17,638,549,089

The "Combining Statement of Fiduciary Net Position - Other Funds" is presented on page 26.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For the Fiscal Year Ended June 30, 2017

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
State of Kentucky	$ 981,417,089	$ 75,496,731	$ 881,703	$	$ 1,057,795,523
Other Employers	79,302,904	104,879,255	167,980	220,001	184,570,140
Members	313,625,434	128,819,243			442,444,677
Total Contributions	1,374,345,427	309,195,229	1,049,683	220,001	1,684,810,340
Investment Income/(Loss)					
Net Appreciation/(Depreciation) in Fair Value of Investments	2,167,046,581	89,058,380	(2,087,797)	6,584	2,254,023,748
Interest	153,207,310	5,777,776	3,011,187	10,920	162,007,193
Dividends	180,297,227	3,787,309		5,468	184,090,004
Rental Income, Net	30,477,797				30,477,797
Securities Lending, Gross Earnings	3,656,565		3,692	231	3,660,488
Gross Investment Income/(Loss)	2,534,685,480	98,623,465	927,082	23,203	2,634,259,230
Less: Investment Expense	(57,836,050)	(3,170,868)	(10,478)	(114)	(61,017,510)
Less: Securities Lending Expense	(1,096,632)		(1,107)	(69)	(1,097,808)
Net Investment Income/(Loss)	2,475,752,798	95,452,597	915,497	23,020	2,572,143,912
Total Additions	3,850,098,225	404,647,826	1,965,180	243,021	4,256,954,252
DEDUCTIONS					
Benefits	1,918,612,128		5,151,013	224,628	1,923,987,769
Refunds of Contributions	26,305,240				26,305,240
Insurance Expenses		178,500,546			178,500,546
Administrative Expense	10,313,715	1,538,574	27,690	1,208	11,881,187
Total Deductions	1,955,231,083	180,039,120	5,178,703	225,836	2,140,674,742
Net Increase/(Decrease)	1,894,867,142	224,608,706	(3,213,523)	17,185	2,116,279,510
Net Position - Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	16,812,831,883	733,780,967	90,990,928	945,311	17,638,549,089
End of Year	$ 18,707,699,025	$ 958,389,673	$ 87,777,405	$ 962,496	$ 19,754,828,599

The "Combining Statement of Changes in Fiduciary Net Position - Other Funds" is presented on page 27.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For the Fiscal Year Ended June 30, 2016

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
State of Kentucky	$ 484,986,954	$ 74,367,250	$ 872,990	$	$ 560,227,194
Other Employers	80,467,636	104,271,120	164,779		184,903,535
Members	313,044,226	128,068,781			441,113,007
Total Contributions	878,498,816	306,707,151	1,037,769		1,186,243,736
Investment Income/(Loss)					
Net Appreciation/(Depreciation) in Fair Value of Investments	(584,310,367)	(16,291,780	1,742,044	41,543	(598,818,560)
Interest	162,339,804	8,029,465	3,095,887	10,013	173,475,169
Dividends	194,570,308	1,207,958		5,187	195,783,453
Rental Income, Net	28,039,967				28,039,967
Securities Lending, Gross Earnings	2,767,119		3,550	404	2,771,073
Gross Investment Income/(Loss)	(196,593,169)	(7,054,357)	4,841,481	57,147	(198,748,898)
Less: Investment Expense	(47,791,624)	(2,278,133)	(11,080)	(116)	(50,080,953)
Less: Securities Lending Expense	(830,067)		(1,065)	(121)	(831,253)
Net Investment Income/(Loss)	(245,214,860)	(9,332,490)	4,829,336	56,910	(249,661,104)
Total Additions	633,283,956	297,374,661	5,867,105	56,910	936,582,632
DEDUCTIONS					
Benefits	1,833,198,630		4,595,489	94,665	1,837,888,784
Refunds of Contributions	27,747,742				27,747,742
Insurance Expenses		188,869,994			188,869,994
Administrative Expense	8,636,438	1,686,070	27,195	560	10,350,263
Total Deductions	1,869,582,810	190,556,064	4,622,684	95,225	2,064,856,783
Net Increase/(Decrease)	(1,236,298,854)	106,818,597	1,244,421	(38,315)	(1,128,274,151)
Net Position - Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	18,049,130,737	626,962,370	89,746,507	983,626	18,766,823,240
End of Year	$ 16,812,831,883	$ 733,780,967	$ 90,990,928	$ 945,311	$ 17,638,549,089

The "Combining Statement of Changes in Fiduciary Net Position - Other Funds" is presented on page 28.
The accompanying notes are an integral part of these financial statements.

Combining Statement of Fiduciary Net Position - Other Funds
As of June 30, 2017

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 23,852	$	$ 23,852
Receivables				
Investment Income	233		2,460	2,693
Investments at Fair Value				
Short Term Investments	343,750		54,343	398,093
Bonds and Mortgages			258,962	258,962
Equities			280,104	280,104
Total Investments	343,750		593,409	937,159
Total Assets	393,983	23,852	595,869	963,704
Liabilities				
Due to Other Trust Funds	56	1,055	97	1,208
Total Liabilities	56	1,055	97	1,208
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 343,927	$ 22,797	$ 595,772	$ 962,496

Combining Statement of Fiduciary Net Position - Other Funds
As of June 30, 2016

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 481	$	$ 481
Receivables				
Investment Income	111		2,306	2,417
Investments at Fair Value				
Short Term Investments	352,773		57,817	410,590
Bonds and Mortgages			290,132	290,132
Equities			242,351	242,351
Total Investments	352,773		590,300	943,073
Total Assets	352,884	481	592,606	945,971
Liabilities				
Accounts Payable	110	389	161	660
Due to Other Trust Funds				
Total Liabilities	110	389	161	660
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 352,774	$ 92	$ 592,445	$ 945,311

The accompanying notes are an integral part of these financial statements.

Combining Statement of Changes in Fiduciary Net Position - Other Funds
For the Fiscal Year Ended June 30, 2017

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Other Employers	$	$ 220,001	$	$ 220,001
Investment Income				
Net Appreciation in Fair Value of Investments			6,584	6,584
Interest	1,638		9,282	10,920
Dividends			5,468	5,468
Securities Lending, Gross			231	231
Gross Investment Income	1,638		21,565	23,203
Less Investment Expense	(42)		(72)	(114)
Less Securities Lending Expense			(69)	(69)
Net Investment Income	1,596		21,424	23,020
Total Additions	1,596	220,001	21,424	243,021
Deductions				
Benefits	10,387	196,241	18,000	224,628
Administrative Expense	56	1,055	97	1,208
Total Deductions	10,443	197,296	18,097	225,836
Net Increase/(Decrease)	(8,847)	22,705	3,327	17,185
Net Position - Restricted for Pension and Other Postemployment Benefits				
Beginning of Year	352,774	92	592,445	945,311
End of Year	$ 343,927	$ 22,797	$ 595,772	$ 962,496

The accompanying notes are an integral part of these financial statements.

Combining Statement of Changes in Fiduciary Net Position - Other Funds
For the Fiscal Year Ended June 30, 2016

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Investment Income				
Net Appreciation in Fair Value of Investments	$	$	$ 41,543	$ 41,543
Interest	863		9,150	10,013
Dividends			5,187	5,187
Securities Lending, Gross			404	404
Gross Investment Income	863		56,284	57,147
Less Investment Expense	(43)		(73)	(116)
Less Securities Lending Expense			(121)	(121)
Net Investment Income	820		56,090	56,910
Total Additions	820		56,090	56,910
Deductions				
Benefits	11,858	65,807	17,000	94,665
Administrative Expense	71	389	100	560
Total Deductions	11,929	66,196	17,100	95,225
Net Increase/(Decrease)	(11,109)	(66,196)	38,990	(38,315)
Net Position - Restricted for Pension and Other Postemployment Benefits Beginning of Year	363,883	66,288	553,455	983,626
End of Year	$ 352,774	$ 92	$ 592,445	$ 945,311

The accompanying notes are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS

Note 1: Description of Retirement Annuity Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (TRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). TRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. TRS is a cost-sharing multiple-employer defined benefit plan with a special funding situation established to provide retirement annuity plan coverage for local school districts and other public educational agencies in the Commonwealth.

KRS 161.250 provides that the general administration and management of TRS, and the responsibility for its proper operation, is vested in a board of trustees. The board of trustees consists of the chief state school officer, the State Treasurer, two trustees appointed by the Governor and seven elected trustees. Four of the elected trustees are active teachers, two are not members of the teaching profession, and one is an annuitant of the System.

B. PARTICIPANTS

As of June 30, 2017 a total of 207 employers participated in the plan. Employers are comprised of local school districts, Department of Education Agencies, universities, the Kentucky Community and Technical College System, and other educational organizations. The State under the Governmental Accounting Standards Board (GASB) No. 67 is recognized as a non-employer contributing entity providing the employer matching contributions for members employed by the local school districts and regional educational cooperatives.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

	2017	2016
Active contributing members:		
Vested	48,211	48,292
Non-vested	23,919	23,556
Inactive members, vested	8,624	9,240
Retirees and beneficiaries currently receiving benefits	52,966	51,563
Total members, retirees, and beneficiaries	**133,720**	**132,651**

C. BENEFIT PROVISIONS

For Members Before July 1, 2008:

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete twenty-seven (27) years of Kentucky service.

Non-university members receive monthly payments equal to two percent (2%) (service prior to July 1, 1983) and two and one-half percent (2.5%) (service after July 1, 1983) of their final average salaries for each year of credited service. Non-university members who became members on or after July 1, 2002 will receive monthly benefits equal to two percent (2%) of their final average salary for each year of service if, upon retirement, their total service is less than ten (10) years. New members after July 1, 2002 who retire with ten (10) or more years of total service will receive monthly benefits equal to two and one-half percent (2.5%) of their final average salary for each year of service, including the first ten (10) years. In addition, non-university members who retire July 1, 2004 and later with more than thirty (30) years of service will have their multiplier increased for all years over thirty (30) from two and one-half

Note 1: Description of Retirement Annuity Plan continued . . .

percent (2.5%) to three percent (3%) to be used in their benefit calculation.

University employees receive monthly benefits equal to two percent (2%) of their final average salary for each year of credited service.

The final average salary is the member's five (5) highest annual salaries except members at least age fifty-five (55) with twenty-seven (27) or more years of service may use their three (3) highest annual salaries. For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service. The minimum annual service allowance for all members is $440 multiplied by credited service.

For Members On or After July 1, 2008:

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age sixty (60) and complete five (5) years of Kentucky service, or

2.) Complete twenty-seven (27) years of Kentucky service, or

3.) Attain age fifty-five (55) and complete ten (10) years of Kentucky service.

The annual retirement allowance for non-university members is equal to: (a) one and seven tenths percent (1.7%) of final average salary for each year of credited service if their service is 10 years or less; (b) two percent (2.0%) of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) two and three tenths percent (2.3%) of final average salary for each year of credited service if their service is greater than 20 years but no more than 26 years; (d) two and one half percent (2.5%) of final average salary for each year of credited service if their service is greater than 26 years but no more than 30 years; (e) three percent (3.0%) of final average salary for years of credited service greater than 30 years.

The annual retirement allowance for university members is equal to: (a) one and one-half percent (1.5%) of final average salary for each year of credited service if their service is 10 years or less; (b) one and seven tenths percent (1.7%) of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) one and eighty five hundredths percent (1.85%) of final average salary for each year of credited service if their service is greater than 20 years but less than 27years; (d) two percent (2.0%) of final average salary for each year of credited service if their service is greater than or equal to 27 years.

The final average salary is the member's five (5) highest annual salaries except members at least age fifty-five (55) with twenty-seven (27) or more years of service may use their three (3) highest annual salaries. For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Other Benefits:

TRS provides post-employment medical benefits to retirees as fully described in Note 8. The Retirement System also provides disability benefits for vested members at the rate of sixty percent (60%) of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half percent (1.5%) annually. Additional ad hoc increases and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching contributions are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

TRS has seven cash accounts. At June 30, 2017, the retirement annuity cash account totaled $105,013,741, the control cash account totaled $32,163,714 and the administrative expense fund cash account was $97,297 for a total of $137,274,752 as carrying value of cash in the defined benefit plan. The medical insurance trust cash account totaled $80,806,325, the medical insurance 401(h) cash account totaled $6,921,861 and the medical insurance claims cash account totaled $113,567 for a total of $87,841,753 as carrying value of cash in the medical insurance plan. The life insurance plan cash account totaled $187,657. The excess benefit fund cash account contained $23,852. Therefore, the carrying value of cash was $225,328,014 and the bank balance was $222,173,747 and funds controlled by the Commonwealth of Kentucky of $5,245,371. The variance is primarily due to outstanding checks and items not processed by the bank as of June 30, 2017.

C. CAPITAL ASSETS

Property and equipment are carried at cost, less accumulated depreciation. All costs of property and equipment $5,000 (actual dollars) or greater are capitalized. Expenditures for maintenance and repairs are charged to operations as incurred. Depreciation is calculated using the straight-line method, with estimated lives ranging from five to forty years in the following major classes: office furniture and equipment, five years; other equipment, five years; computer software, ten years; TRS office buildings, forty years. The Pathway System replaced TRS's legacy computer system and is TRS's primary line of business information technology system. The Pathway System was capitalized and is being amortized or depreciated over ten years. As of June 30, 2016, the project to build and implement the Pathway System was substantially complete.

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers. Alternative investments such as private equity, timberland, and other additional categories, such as opportunistic credit, high yield bonds, and direct lending are valued using the most recent general partner statement of fair value based on independent appraisals, updated for any subsequent partnership interests' cash flows.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in fiduciary net position. Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by TRS's employees are recorded when earned. Upon termination or retirement, employees of TRS are paid for accumulated vacation time limited to sixty (60) days and accumulated compensatory time limited to two hundred-forty (240) hours. As of June 30, 2017 and 2016 accrued compensated absences were included in the accounts payable on the balance sheet amounting to $1,272,405 and $1,166,764, respectively.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which TRS is exposed. In order to cover such risks TRS carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

Note 2: Summary of Significant Accounting Policies continued . . .

G. OTHER RECEIVABLES

TRS allows qualified purchases of service credit to be made by installment payments not to exceed a five (5) year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2017 and 2016 installment contract receivables were $438,303 and $559,913, respectively.

H. USE OF ESTIMATES

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates. The most significant estimates impacting the financial statements relate to the actuarial assumptions.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The System's management believes that it has operated the plans within the constraints imposed by federal tax law.

J. RECENT PRONOUNCEMENTS

GASB Statement No. 74 which was adopted during the year ended June 30, 2017, addresses accounting and financial reporting requirements for postemployment benefits other than pensions (OPEB). The requirements for GASB No. 74 requires changes in presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes include an actuarial calculation of total and net OPEB liability. It also includes comprehensive footnote disclosures regarding the OPEB liability, the sensitivity of the OPEB liability to the discount rate, and increased investment activity disclosures. The implementation of GASB No. 74 did not significantly impact the accounting for accounts receivable and investment balances. The total OPEB liability, determined in accordance with GASB No. 74 is presented in Note 8 for the Medical Insurance Plan, Note 9 for the Life Insurance Plan and in the Required Supplementary Information.

GASB Statement No. 75 replaces GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefit Plans Other Than Pensions and is effective for fiscal years beginning after June 15, 2017. TRS will issue a report in the Summer of 2018 that will help employers implement GASB No. 75 for their June 30, 2018 financial statements.

K. RECLASSIFICATIONS

Due to the implementation of GASB Statement No. 74, certain 2016 amounts have been reclassified in conformity with the 2017 presentation regarding amounts paid by retirees for medical insurance premiums and amounts received from Medicare and formulary rebates on the Statement of Changes in Fiduciary Net Position. Previously these payments were reported as additions to net assets and have been reclassified to be reported as a reduction to insurance expenses on the Statement of Changes in Fiduciary Net Position. The reclassification had no effect on total net position.

In order to comply with GASB Statement No. 28, amounts TRS has received as collateral from securities lending transactions have been removed from the balance sheet because the System does not have the ability to pledge or sell the securities unless the borrower defaults. Previously these amounts were recorded as an asset and a corresponding liability. The reclassification had no effect on total net position.

Note 3: Contributions and Funds of the System

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Non-university members are required to contribute 12.855 percent of their salaries to the System effective July 1, 2015; university members are required to contribute 10.40 percent of their salaries effective July 1, 2015. KRS 161.565 allows each university to reduce the contribution of its members by 2.215 percent; therefore, university members contribute 8.185 percent of their salary to TRS. For members employed by local school districts, the State, as a non-employer contributing entity, contributes 13.105 percent of salary for those who joined before July 1, 2008 and 14.105 percent for those who joined thereafter.

Other participating employers are required to contribute the percentage contributed by members plus an additional 3.25 percent of members' gross salaries.

The member and employer contributions consist of retirement annuity contributions and other post-employment benefit contributions to the medical and life insurance plans. The member post-employment medical contribution is 3.75 percent of salary. The employer post-employment medical contribution is .75 percent of member salaries. Also, employers (other than the state) contribute 3.0 percent of members' salaries and the state contributes the net cost of health insurance premiums for new retirees after June 30, 2010 in the non-Medicare eligible group. If a member leaves covered employment before accumulating five (5) years of credited service, accumulated member contributions to the retirement annuity plan plus interest are refunded upon the member's request.

B. FUNDS OF THE SYSTEM

Teacher Savings Fund

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from the Guarantee Fund. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Allowance Reserve Fund, the fund from which retirement benefits are paid.

State Accumulation Fund

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky.

Allowance Reserve Fund

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of TRS. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from the Guarantee Fund.

Guarantee Fund

This fund was established by KRS 161.420(6) as the Guarantee Fund, to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of TRS, and deficiencies not covered by the other funds.

Administrative Expense

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from the Guarantee Fund is used to pay the administrative expenses of TRS. Administrative expenses are allocated among the funds based on benefits paid.

Note 4: Net Pension Liability of Employers

A. NET PENSION LIABILITY OF EMPLOYERS

The net pension liability (i.e., the System's liability determined in accordance with GASB No. 67 less the fiduciary net position) as of June 30, 2017 and June 30, 2016 is shown below.

Net Pension Liability of Employers
(In thousands of dollars)

Fiscal Year Ending June 30	Total Pension Liability	Plan Fiduciary Net Position	Employers Net Pension Liability	Plan Fiduciary Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
	A	B	(A-B)	(B/A)	C	[A-B/C]
2017	$ 46,966,822	$ 18,707,699	$ 28,259,123	39.8 %	$ 3,415,432	827.40 %
2016	47,736,901	16,812,832	30,924,069	35.2	3,390,539	912.07

B. SUMMARY OF ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below.

Valuation Date	6/30/2016
Actuarial cost method	Entry Age
Actuarial Assumptions:	
Investment rate of return	7.50%, net of pension plan investment expense, including inflation.
Projected salary increases	3.50 - 7.30%, including inflation
Inflation rate	3.00%
Municipal Bond Index Rate	3.56%
Single Equivalent Interest Rate	4.49%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale BB to 2025, set forward two years for males and one year for females. The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2010 - June 30, 2015 adopted by the Board on September 19, 2016.

C. TARGET ALLOCATIONS

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	42.0%	4.4%
International Equity	20.0	5.3
Fixed Income	16.0	1.5
Additional Categories*	9.0	3.6
Real Estate	5.0	4.4
Alternatives	6.0	6.7
Cash	2.0	0.8
Total	100.0%	

** Includes Hedge Funds, High Yield and Non-U.S. Developed Bonds.*

Note 4: Net Pension Liability of Employers continued ...

D. DISCOUNT RATE

The discount rate used to measure the total pension liability was 4.49%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the Employer contributions will be made at statutorily required rates, and the additional amount appropriated for fiscal year 2018. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2038 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2037 and a municipal bond index rate of 3.56% was applied to all periods of projected benefit payments after 2037. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

The following tables present the net pension liability of the System for 2017 and 2016. The 2017 net pension liability of the System is calculated using the discount rate of 4.49%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.49%) or 1-percentage-point higher (5.49%) than the current rate:

2017

(in thousands)	1% Decrease (3.49%)	Current Discount Rate (4.49%)	1% Increase (5.49%)
System's net pension liability	$ 35,029,551	$ 28,259,123	$ 22,702,413

2016

(in thousands)	1% Decrease (3.20%)	Current Discount Rate (4.20%)	1% Increase (5.20%)
System's net pension liability	$ 37,937,230	$ 30,924,069	$ 25,168,197

June 30, 2016 is the actuarial valuation date upon which the TPL is based. An expected TPL is determined as of June 30, 2017 using standard roll forward techniques for the TPL based on the assumptions from the June 30, 2015 experience study using a discount rate of 4.49%, which was based on a municipal bond index rate as of that date equal to 3.56%. An expected TPL was also determined based on the assumptions prior to the June 30, 2015 experience study using the prior year discount rate of 4.20%, which was based on a municipal bond index rate of 3.01%. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate (SEIR) for the year. The difference between the two roll-forward amounts as of June 30, 2017 is the gain or loss due to changes in assumptions and other inputs.

In addition, we have determined an expected TPL as of June 30, 2017 based on the TPL roll-forward in the June 30, 2016 GASB 67 report. The difference between this amount and the roll-forward of the actual TPL using last year's assumptions is reflected as an experience gain or loss for the year. These procedures are shown in the following table:

TPL Roll-Forward *(In thousands of dollars)*	Expected	Actual Before Assumption Change	Actual After Assumption Change
(a) Interest Rate	4.20%	4.20%	4.49%
(b) TPL as of June 30, 2016	$ 47,736,901	$ 47,928,332	$ 45,781,405
(c) Entry Age Normal Cost for the Year July 1, 2016 - June 30, 2017	1,332,587	1,332,587	1,118,412
(d) Actual Benefit Payments (including refunds) For the year July 1, 2016 - June 30, 2017	1,944,917	1,944,917	1,944,917
(e) TPL as of June 30, 2017 (b) x (1 + (a)) + (c) - (d) x (1 + 0.5 x (a))	49,088,678	49,288,149	46,966,822
(f) Difference between Expected and Actual Experience (Gain)/Loss		199,471	
(g) Difference due to change in Assumptions and Other Inputs (Gain)/Loss			(2,321,327)

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of TRS' financial statements assess the risks TRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430.

TRS administers a retirement annuity trust fund and a health insurance trust fund in accordance with state and federal law. TRS provides service and disability retirement benefits, death and survivor benefits, health insurance benefits, and life insurance benefits for Kentucky public education employees and their beneficiaries. The trust funds managed by TRS shall be referred to collectively as the "System" unless the context requires a specific reference to a particular fund.

The asset allocation parameters for the retirement annuity trust fund are set forth in Title 102, Chapter 1:175, Section 2 and Section 3 of the Kentucky Administrative Regulations as follows:

- There shall be no limit on the amount of investments owned by the retirement annuity trust fund if the investments are guaranteed by the United States government.
- Not more than thirty-five percent (35%) of the assets of the retirement annuity trust fund at fair value shall be invested in corporate debt obligations.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in foreign debt.
- Not more than sixty-five percent (65%) of the assets of the retirement annuity trust fund at fair value shall be invested in common stocks or preferred stocks.
- Not more than twenty-five percent (25%) of the assets of the retirement annuity trust fund at fair value shall be invested in a stock portfolio designed to replicate a general stock index.
- Not more than thirty percent (30%) of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.
- Not more than ten percent (10%) of the assets of the retirement annuity trust fund at fair value shall be invested in alternative investments. This category may include private equity, venture capital, timberland, and infrastructure investments.
- Not more than fifteen percent (15%) of the assets of the retirement annuity trust fund at fair value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

The asset allocation parameters for the health insurance trust fund are set forth in Title 102, Chapter 1:178, Section 2 of the Kentucky Administrative Regulations as follows:

- In order to preserve the assets of the health insurance trust fund and produce the required rate of return while minimizing risk, assets shall be prudently diversified among various classes of investments.
- In determining asset allocation policy, the investment committee and the board shall be mindful of the health insurance trust fund's liquidity and its capability of meeting both short and long-term obligations.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the System's deposits may not be returned to the System. The System's total cash balance held at J.P. Morgan Chase Bank in noninterest-bearing accounts on June 30, 2017 was $222,173,747. In addition to these funds, an amount of $5,245,371 represents funds transferred to and controlled by the Commonwealth of Kentucky.

On November 9, 2010, the FDIC issued a Final Rule implementing Section 343 of the Dodd-Frank Wall Street Reform and Consumer Protection Act that provides for unlimited insurance coverage of noninterest-bearing transaction accounts. Beginning January 1, 2013, all cash balances at J.P. Morgan Chase Bank were insured up to $250,000 and the remaining balances fully collateralized with securities held by the Federal Reserve Bank of New York in the name of the Commonwealth of Kentucky-Teachers' Retirement.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,
b. collateralized with securities held by the pledging financial institution, or
c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2017, the System's cash balance in the amount of $222,173,747 was not exposed to custodial credit risk since this amount was fully insured by the FDIC limit of $250,000 and the remaining balances collateralized with securities valued at $221,955,776.

C. INVESTMENTS

All of the System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, alternative investments, and additional categories as permitted by regulation. These assets are reported at fair value.

Investments are governed by the Board of Trustees' policies while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following chart represents the fair values of the investments of the Teachers' Retirement System of the State of Kentucky for June 30, 2017 and 2016.

Schedule of Investments
Retirement Annuity Trust

	Fair Value June 30, 2017	Fair Value June 30, 2016
Money Market Fund	$ $525,897,099	$ 508,661,966
STIFF (BNYM)		386,697
Total Cash Equivalents	**525,897,099**	**509,048,663**
U.S. Government	1,001,683,231	797,819,019
Agency Bonds	48,416,092	55,607,806
Mortgage Backed Securities	78,747,979	90,812,117
Asset Backed Securities	52,576,134	62,625,012
Commercial Mtg Backed Securities	40,167,581	61,720,221
Collateralized Mtg Obligations	27,820,939	27,572,453
Municipal Bonds	384,589,168	405,755,392
Corporate Bonds	1,319,954,339	1,322,052,725
Total Fixed Income	**2,953,955,463**	**2,823,964,745**
International Equity	4,460,064,917	3,681,811,400
U.S. Equity	7,129,871,825	6,585,496,953
Total Equities	**11,589,936,742**	**10,267,308,353**
Real Estate Equity	1,046,760,134	940,860,202
Total Real Estate Equity	**1,046,760,134**	**940,860,202**
Private Equity	854,635,619	731,560,317
Timberland	208,219,943	201,253,033
Total Alternative Investments	**1,062,855,562**	**932,813,350**
Opportunistic Credit	539,082,990	512,173,863
Corporate Bonds	491,088,604	411,948,487
Corporate Loans	389,435,564	385,391,068
Total Additional Categories	**1,419,607,158**	**1,309,513,418**
TOTAL INVESTMENTS*	**$ 18,599,012,158**	**$ 16,783,508,731**

**This schedule includes the Life Insurance Plan, 403(b) Tax Shelter Plan, and Losey Scholarship fund.*

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments
Health Insurance Trust

	Fair Value June 30, 2017	Fair Value June 30, 2016
Money Market Fund	$ 46,008,715	$ 18,186,502
Total Cash Equivalents	**46,008,715**	**18,186,502**
Agency Bonds		6,380,550
U.S. Government	20,457,755	
Corporate Bonds	49,825,322	56,174,850
Total Fixed Income	**70,283,077**	**62,555,400**
Global Equities	442,726,237	354,369,798
U.S. Equity	30,548,164	
Total Equities	**473,274,401**	**354,369,798**
Real Estate Equity	42,701,494	25,433,241
Total Real Estate Equity	**42,701,494**	**25,433,241**
Private Equity	42,340,364	23,931,317
Total Alternative Investments	**42,340,364**	**23,931,317**
Opportunistic Credit	49,620,098	45,955,526
Corporate Bonds	81,742,713	64,192,800
Corporate Loans	28,807,364	26,927,516
Total Additional Categories	**160,170,175**	**137,075,842**
TOTAL INVESTMENTS	**$ 834,778,226**	**$ 621,552,100**

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the System, and are held by either:

a. the counterparty or
b. the counterparty's trust department or agent, but not in the System's name.

The cash reserve of the System is primarily maintained in high quality short term investments through the Dreyfus Institutional Cash Advantage Fund. This fund invests in a diversified portfolio of high quality, short-term debt securities and the Fund is rated AAA by S&P, Moody's, and Fitch, Inc. The Fund's portfolio is structured within the confines of Rule 2a-7 under the Investment Company Act of 1940, as amended. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, bankers' acceptances, repurchase agreements, time deposits, etc. are all permissible investments within this Fund.

Whenever repurchase agreements are ordered by TRS under the terms of Master Repurchase Agreements with various brokers, the terms are dictated by TRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and TRS' nominee name. This account is unique to TRS. The Master Repurchase Agreements require that the supporting collateral have a fair value of at least 102 percent of the value of the repurchase agreements.

As of June 30, 2017, cash collateral reinvestment securities acquired through securities lending for the retirement annuity trust fund by TRS's custodian, who is also the lending agent/counterparty, amounted to $1,404,968,291 related to $1,371,172,509 securities lent consistent with the lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the System's investments. In general, the longer the period until an investment matures, the greater the risk of a negative impact on fair value resulting from changes in interest rates.

As of June 30, 2017 and 2016, the retirement annuity trust and health insurance trusts had the following investment fair values and weighted average maturities:

2017 Retirement Annuity Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
U.S. Government	$ 1,001,683,231	$	8.69
Agency	48,416,092		7.42
MBS	78,747,979		14.63
CMO	27,820,939		13.00
ABS	52,576,134		13.46
CMBS	40,167,581		20.58
Muni	384,589,168		11.92
Corporate Bonds	1,319,954,339	491,088,604	8.14
Corporate Loans*		381,101,026	4.53
TOTAL	**$ 2,953,955,463**	**$ 872,189,630**	**8.67**

** Does not include 8,335,538 in cash held directly at Barings European Loan Fd.*

2016 Retirement Annuity Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
U.S. Government	$ 797,819,019	$	8.34
Agency	55,607,806		8.61
MBS	90,812,117		12.24
CMO	27,572,453		12.67
ABS	62,625,012		14.31
CMBS	61,720,221		20.55
Muni	405,755,392		12.47
Corporate Bonds	1,322,052,725	411,948,488	7.83
Corporate Loans*	-	380,989,944	4.56
TOTAL	**$ 2,823,964,745**	**$ 792,938,432**	**8.61**

** Does not include 4,401,123 in cash held directly at Babson Capital Management.*

Health Insurance Trust

	2017			2016		
Investment Type	Fixed Income	Additional Categories	Average Maturity (years)	Fixed Income	Additional Categories	Average Maturity (years)
U.S. Government	$ 20,457,755	$	8.44	$ 6,380,550	$	11.53
Corporate Bonds	49,825,322	81,742,713	5.99	56,174,849	64,192,800	4.49
Corporate Loans		28,807,364	5.37		26,927,516	5.04
TOTAL	**$ 70,283,077**	**$ 110,550,077**	**6.17**	**$ 62,555,399**	**$ 91,120,316**	**4.88**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

In addition to the above securities, the System held short-term cash investments in the Dreyfus Institutional Cash Advantage Fund and STIF, held at the Bank of New York Mellon, with a total fair value of $571,905,814 and had a weighted average maturity of twenty-two (22) days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology to quantify the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of changes in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the System manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by the System were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The retirement annuity trust held $78.7 million in mortgage-backed securities as of June 30, 2017, compared to $90.8 million as of June 30, 2016.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The retirement annuity trust held $27.8 million in collateralized mortgage obligations as of June 30, 2017, compared to $27.6 million as of June 30, 2016.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivables originated by banks, credit card companies, or other credit providers, and are considered to be moderately sensitive to changes in interest rates. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The retirement annuity trust held $52.6 million as of June 30, 2017, compared to $62.6 million as of June 30, 2016.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The System's commercial mortgage-backed securities investments consist of highly rated relatively senior tranches. The average maturity of the System's commercial mortgage-backed securities holdings in the schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The retirement annuity trust held $40.2 million in commercial mortgage-backed securities investments as of June 30, 2017, compared to $61.7 million as of June 30, 2016.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedules list the System's fixed income investment fair values (net of cash equivalents) according to credit ratings as of June 30, 2017 and 2016:

2017 Retirement Annuity Trust

Rating	Bonds & Mortgages	Additional Categories	Total	%
U.S. Government	$ 1,001,683,231	$	$ 1,001,683,231	26.18%
AAA	219,844,883		219,844,883	5.74%
AA	603,818,809		603,818,809	15.78%
A	539,635,824	1,131,449	540,767,273	14.13%
BBB	545,712,370	37,033,244	582,745,614	15.23%
BB	24,210,493	329,217,429	353,427,922	9.24%
B	4,048,200	329,149,508	333,197,708	8.71%
CCC		22,858,417	22,858,417	0.60%
CC				0.00%
D	1,045,762	46,000	1,091,762	0.03%
Not Rated	13,955,891	152,753,583	166,709,474	4.36%
TOTAL	**$ 2,953,955,463**	**$ 872,189,630**	**$ 3,826,145,093**	**100.00%**

2016 Retirement Annuity Trust

Rating	Bonds & Mortgages	Additional Categories	Total	%
U.S. Government	$ 797,819,019	$	$ 797,819,019	22.06%
AAA	246,954,820		246,954,820	6.83%
AA	640,674,139		640,674,139	17.71%
A	517,571,569		517,571,569	14.31%
BBB	574,578,935	47,754,834	622,333,769	17.21%
BB	21,968,709	287,254,645	309,223,354	8.55%
B	13,654,700	267,438,487	281,093,187	7.77%
CCC	3,151,610	17,517,637	20,669,247	0.57%
CC		1,271,750	1,271,750	0.04%
D		836,481	836,481	0.02%
Not Rated	7,591,244	170,864,598	178,455,842	4.93%
TOTAL	**$ 2,823,964,745**	**$ 792,938,432**	**$ 3,616,903,177**	**100.00%**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

2017 Health Insurance Trust

Investment Type	Bonds & Mortgages	Additional Categories	Total	%
U.S. Government	$ 20,457,755	$	$ 20,457,755	11.31%
AAA	6,427,010		6,427,010	3.55%
AA	11,828,664		11,828,664	6.55%
A	21,162,730		21,162,730	11.70%
BBB	9,938,418	5,546,635	15,485,053	8.56%
BB	468,500	52,006,671	52,475,171	29.02%
B		47,612,272	47,612,272	26.33%
CCC		3,693,471	3,693,471	2.04%
D				0.00%
Not Rated		1,691,028	1,691,028	0.94%
TOTAL	**$ 70,283,077**	**$ 110,550,077**	**$ 180,833,154**	**100.00%**

2016 Health Insurance Trust

Investment Type	Bonds & Mortgages	Additional Categories	Total	%
U.S. Government	$ 6,380,550	$	$ 6,380,550	4.15%
AAA	5,042,219		5,042,219	3.28%
AA	11,085,052		11,085,052	7.21%
A	26,633,606		26,633,606	17.33%
BBB	13,413,972	7,489,048	20,903,020	13.60%
BB		42,642,309	42,642,309	27.75%
B		34,663,206	34,663,206	22.56%
CCC		2,537,454	2,537,454	1.65%
D		194,842	194,842	0.13%
Not Rated		3,593,457	3,593,457	2.34%
TOTAL	**$ 62,555,399**	**$ 91,120,316**	**$ 153,675,715**	**100.00%**

Total fair value of the retirement annuity trust's fixed income portfolio was $3,826,145,093 on June 30, 2017. The health insurance trust's fixed income portfolio was valued at $180,833,154 on June 30, 2017. The rating system used in the above charts is the Standard and Poor's rating system. For securities where a Standard and Poor's rating is not provided, another nationally recognized system is used and translated to the Standard and Poor's rating system.

In addition to the above categories, the retirement annuity trust held $545,368,716 in short term investments through the Dreyfus Institutional Cash Advantage Fund. The health insurance trust held $26,537,097 in the Dreyfus Institutional Cash Advantage Fund. The credit risk associated with this Fund is minimal as the securities held are required to maintain the highest possible short-term credit ratings by Moody's and Standard & Poor's. In addition, investments in US Government and Agency securities are also highly rated securities since they are backed by the US Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The retirement annuity trust fund's policy on credit rating is set forth in 102 KAR 1:175 and reads as follows:

"A fixed income investment shall be rated at the time of purchase as investment grade by at least one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. The fixed income investment portfolio as a whole shall maintain an average rating of investment grade by at least one (1) of the major rating services."

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the retirement annuity trust fund is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the System."

"The System's position in a single stock shall not exceed two and one-half (2.5) percent of the System's assets. The System's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program."

TRS has not invested greater than five percent (5%) of the retirement annuity trust fund's assets at fair value in any single issuer and is in compliance with investment policy.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. As of June 30, 2017, the System's exposure to foreign currency risk consisted of $4,752,209,518 and $248,950,831 in the retirement annuity trust and health insurance trust funds respectively.

The following tables represent the fair values of investments that are subject to foreign currency as a result of cash contributions to each portfolio manager as of June 30, 2017 and 2016:

2017 Retirement Annuity Trust		2016 Retirement Annuity Trust	
Commingled Funds		**Commingled Funds**	
Babson Capital European Loan Fd	$ 83,529,164	Babson Capital European Loan Fd	$ 83,723,731
Baillie Gifford Intrntl EAFE	826,304,923	Baillie Gifford Intrntl EAFE	734,894,403
Baring All Country World ex US	576,106,295	Baring All Country World ex US	496,968,194
Black Rock ACWI EX-US IMI	712,902,870	Black Rock ACWI EX-US IMI	600,737,023
UBS All Country World ex US	704,979,730	UBS All Country World ex US	576,221,719
Alternative Funds		**Alternative Funds**	
Carlyle Europe Partners IV, L.P.	19,731,527	Carlyle Europe Partners IV, L.P.	17,509,391
KKR & Co European Fund III	33,809,458	KKR & Co European Fund III	49,515,576
KKR & Co European Fund IV	26,265,452	KKR & Co European Fund IV	16,088,979
Oaktree European Principal III	22,839,529	Oaktree European Principal III	24,409,242
ADRs (Equities)	658,341,208	**ADRs (Equities)**	458,137,096
Cross-Listed Equities	688,122,140	**Cross-Listed Equities**	718,502,718
Bonds (Fixed Income)	206,555,302	**Bonds (Fixed Income)**	247,293,462
Additional Categories (Fixed Income)	83,459,203	**Additional Categories (Fixed Income)**	83,423,983
Additional Categories (Opportunistic)	109,262,717	**Additional Categories (Opportunistic)**	119,390,254
Total	**$ 4,752,209,518**	**Total**	**$ 4,226,815,771**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

2017 Health Insurance Trust

Commingled Funds	
Medical Ins. Black Rock Fund B	$ 206,320,676
Alternative Funds	
Medical Ins. Carlyle Europe IV	3,946,307
Medical Ins. KKR European IV	5,253,090
Bonds (Fixed Income)	4,503,370
ADRs (Equities)	3,658,163
Additional Categories (Fixed Income)	15,306,108
Additional Categories (Opportunistic)	9,963,117
Total	**$ 248,950,831**

2016 Health Insurance Trust

Commingled Funds	
Medical Ins. Black Rock Fund B	$ 173,166,422
Alternative Funds	
Medical Ins. Carlyle Europe IV	3,501,879
Medical Ins. KKR European IV	3,217,797
Bonds (Fixed Income)	7,090,460
Additional Categories (Fixed Income)	12,602,739
Additional Categories (Opportunistic)	11,305,351
Total	**$ 210,884,648**

The following tables reflect the various foreign currencies associated with the System's investments in the funds outlined previously:

2017 Retirement Annuity Trust

Currency	Fair Value	Currency	Fair Value
Australian Dollar	$ 116,620,840	Mexican Peso	70,822,257
Bermudian Dollar	66,974,641	Netherlands Antillean Guilder	24,156,367
Brazilian Real	36,631,654	New Zealand Dollar	1,600,934
British Pound Sterling	651,726,435	Norwegian Krone	26,977,335
Canadian Dollar	297,523,837	Omani Rial	1,045,762
Cayman Islands Dollar	54,684,123	Pakastani Rupee	426,623
Chilean Peso	14,187,093	Panamanian Balboa	35,045,435
Chinese Yuan	72,872,379	Peruvian Nuevo Sol	19,274
Colombian Peso	6,717,571	Philippine Peso	3,568,672
Czech Koruna	266,000	Polish Zloty	3,811,229
Danish Krone	77,878,375	Qatari Rial	1,127,736
Egyptian Pound	320,624	Russian Ruble	4,174,638
Euro	1,665,892,188	Singapore Dollar	29,311,066
Hong Kong Dollar	231,547,001	South African Rand	33,764,272
Hungarian Forint	483,670	Swedish Krona	147,404,707
Indian Rupee	71,413,664	Swiss Franc	165,092,155
Indonesian Rupiah	8,323,019	Taiwan Dollar	62,467,815
Israeli New Shekel	18,361,613	Thai Baht	4,953,021
Japanese Yen	627,530,830	Turkish Lira	4,346,512
Korean Won	77,277,317	UAE Dirham	10,010,413
Liberian Dollar	2,086,293	Various	8,114,544
Malaysian Ringgit	14,649,584		
		TOTAL	**$ 4,752,209,518**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

2016 Retirement Annuity Trust

Currency	Fair Value	Currency	Fair Value
Argentine Peso	$ 7,929,600	Liberian Dollar	2,717,693
Australian Dollar	117,642,969	Malaysian Ringgit	$8,375,874
Bermudian Dollar	51,636,166	Mexican Peso	60,042,605
Brazilian Real	29,642,858	Netherlands Antillean Guilder	31,869,794
British Pound Sterling	542,857,180	New Zealand Dollar	1,468,579
Bulgarian Lev	325,816	Norwegian Krone	19,279,653
Canadian Dollar	305,265,009	Panamanian Balboa	29,110,068
Cayman Islands Dollar	82,711,544	Peruvian Nuevo Sol	71,390
Chilean Peso	5,099,683	Philippine Peso	3,795,486
Chinese Yuan	149,888,039	Polish Zloty	5,239,446
Colombian Peso	6,919,734	Qatari Rial	1,148,933
Czech Crown	275,888	Russian Ruble	43,832,381
Danish Krone	69,964,944	Singapore Dollar	14,630,090
Egyptian Pound	340,728	South African Rand	35,391,881
Euro	1,431,414,303	Swedish Krona	109,926,460
Hong Kong Dollar	148,792,516	Swiss Franc	143,631,290
Hungarian Forint	349,215	Taiwan Dollar	73,906,720
Indian Rupee	53,386,927	Thai Baht	6,106,618
Indonesian Rupiah	7,086,814	Turkish Lira	7,940,689
Israeli New Shekel	50,530,727	UAE Dirham	17,657,398
Japanese Yen	504,456,061	Various	4,318,599
Korean Won	39,837,403		
		TOTAL	**$ 4,226,815,771**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

2017 Health Insurance Trust

Currency	Fair Value
Australian Dollar	$ 12,204,361
Bermudian Dollar	1,006,412
Brazilian Real	3,139,989
British Pound Sterling	28,771,704
Canadian Dollar	20,587,815
Cayman Islands Dollar	117,062
Chilean Peso	526,286
Chinese Yuan	497,440
Colombian Peso	209,996
Czech Koruna	82,136
Danish Krone	2,465,213
Egyptian Pound	107,526
Euro	74,200,106
Hong Kong Dollar	14,669,785
Hungarian Forint	149,091
Indian Rupee	4,713,176
Indonesian Rupiah	1,222,441
Israeli New Shekel	564,024
Japanese Yen	36,155,429
Korean Won	7,793,916
Malaysian Ringgit	1,235,840
Mexican Peso	1,800,372
New Zealand Dollar	486,228
Norwegian Krone	453,325
Pakastani Rupee	1,168,560
Panamanian Balboa	121,971
Peruvian Nuevo Sol	592,818
Philippine Peso	5,171
Polish Zloty	584,439
Qatari Rial	647,019
Russian Ruble	331,098
Singapore Dollar	885,415
South African Rand	2,024,219
Swedish Krona	3,339,571
Swiss Franc	4,739,818
Taiwan Dollar	12,797,324
Thai Baht	6,542,493
Turkish Lira	1,173,463
UAE Dirham	517,208
Various	320,571
TOTAL	**$ 248,950,831**

2016 Health Insurance Trust

Currency	Fair Value
Australian Dollar	$ 10,520,315
Bermudian Dollar	1,766,016
Brazilian Real	2,477,384
British Pound Sterling	25,478,499
Canadian Dollar	18,803,103
Cayman Islands Dollar	2,812,299
Chilean Peso	447,558
Chinese Yuan	141,703
Colombian Peso	168,485
Czech Crown	59,152
Danish Krone	2,228,544
Egyptian Pound	85,907
Euro	62,852,767
Hong Kong Dollar	10,982,771
Hungarian Forint	92,975
Indian Rupee	3,416,016
Indonesian Rupiah	995,857
Israeli New Shekel	925,797
Japanese Yen	28,521,314
Korean Won	5,712,246
Liberian Dollar	223,243
Malaysian Ringgit	1,121,622
Mexican Peso	1,486,499
New Zealand Dollar	397,301
Norwegian Krone	866,284
Panamanian Balboa	168,383
Peruvian Nuevo Sol	19,342
Philippine Peso	564,995
Polish Zloty	401,767
Qatari Rial	309,925
Russian Ruble	826,876
Singapore Dollar	2,447,734
South African Rand	2,596,781
Swedish Krona	3,650,524
Swiss Franc	10,815,063
Taiwan Dollar	4,749,926
Thai Baht	921,116
Turkish Lira	498,876
UAE Dirham	326,765
Various	2,918
TOTAL	**$ 210,884,648**

The majority of foreign investments are held in commingled funds managed by Babson Capital Management, UBS Global Asset Management, Baillie Gifford, Baring Asset Management, and Black Rock. In addition to the commingled funds investing in foreign securities, the retirement annuity trust fund held $658,341,208 associated with foreign interests in American Depositary Receipt investments. These American Depositary Receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. American Depositary Receipts are denominated in U.S. currency. Also, the cross listed equities, in the amount of $688,122,140, represent securities domiciled in foreign countries, but are listed and traded on U.S. exchanges. Other foreign securities and investments consisted of debt securities and alternative investment

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

opportunities. Foreign holdings, including investment receivables/payables, that were not readably identifiable to a specific country were listed in the "various" category pertaining to currency type.

The retirement annuity trust fund's policy regarding foreign equities is that not more than thirty percent (30%) of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

Fair Value Measurement

A retiree pension defined benefit plan holds significant amounts of investments that are measured at fair value on a recurring basis. In Fiscal Year 2016, TRS adopted GASB Statement No. 72 ("GASB 72"), Fair Value Measurement and Application. The Governmental Accounting Standards Board issued GASB 72 to address accounting and financial reporting issues related to fair value measurements.

TRS categorizes its fair value measurements within the fair value hierarchy established by GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date. Level 2 inputs are inputs - other than quoted prices included within Level 1 - that are observable for an asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for an asset or liability. The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. The following tables depict the following recurring fair value measurements as of June 30, 2017.

Retirement Annuity Trust

Investments	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash Equivalents	$ 525,897,099	$	$	$ 525,897,099
Fixed Income				
ABS		47,346,318	5,229,816	52,576,134
Agency		48,416,092		48,416,092
CMBS		40,167,581		40,167,581
CMO		27,820,939		27,820,939
Corporate Bonds	4,109,212	1,314,766,807	1,078,320	1,319,954,339
MBS		76,896,293	1,851,686	78,747,979
Muni		379,365,052	5,224,116	384,589,168
US Government	992,472,191	9,211,040		1,001,683,231
Total Fixed Income	996,581,403	1,943,990,122	13,383,938	2,953,955,463
Equities				
International	1,326,738,184	3,133,326,733		4,460,064,917
US Equity	6,888,437,450	241,434,211	164	7,129,871,825
Total Equity	8,215,175,634	3,374,760,944	164	11,589,936,742
Real Estate Equity			1,046,760,134	1,046,760,134
Alternative Investments				
Private Equity			854,635,619	854,635,619
Timberland			208,219,943	208,219,943
Total Alternative Investments			1,062,855,562	1,062,855,562
Additional Categories				
Corporate Bonds	19,262	491,069,342		491,088,604
Corporate Loans		388,091	389,047,473	389,435,564
Opportunistic Credit			539,082,990	539,082,990
Total Additional Categories	19,262	491,457,433	928,130,463	1,419,607,158
TOTAL INVESTMENTS	**$ 9,737,673,398**	**$ 5,810,208,499**	**$ 3,051,130,261**	**$ 18,599,012,158**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Health Insurance Trust

Investments	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash Equivalents	$ 46,008,715	$	$	$ 46,008,715
Fixed Income				
Corporate Bonds		49,825,322		49,825,322
US Government	19,464,425	993,330		20,457,755
Total Fixed Income	19,464,425	50,818,652		70,283,077
Equities				
Global		442,726,237		442,726,237
US Equity	30,548,164			30,548,164
Total Equity	30,548,164	442,726,237		473,274,401
Real Estate Equity			42,701,494	42,701,494
Alternative Investments				
Private Equity			42,340,364	42,340,364
Total Alternative Investments			42,340,364	42,340,364
Additional Categories				
Corporate Bonds	5,253	81,586,060	151,400	81,742,713
Corporate Loans		182,662	28,624,72	28,807,364
Opportunistic Credit			49,620,098	49,620,098
Total Additional Categories	5,253	81,768,722	78,396,200	160,170,175
Total Investments	**$ 96,026,557**	**$ 575,313,611**	**$ 163,438,058**	**$ 834,778,226**

Cash Equivalents

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Cash equivalents can be valued with inputs from quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date and therefore are classified as Level 1 assets.

Equity and Fixed Income Securities

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors for these securities. Debt and equity securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique that values securities based on their relationship to benchmark quoted prices. Debt and equity securities classified in Level 3 are securities whose stated market price is unobservable by the market place and are instead priced by the issuers or industry groups for these securities.

Real Estate

Real Estate falls into the level 3 classification of the fair value hierarchy. Much of our real estate is comprised of owned properties leased to various commercial enterprises. The fair value measurement for real estate is determined by professional appraisals recurring every five years. Real Estate also includes some Limited Partnerships that are valued the same as Alternative Investments

Alternative Investments

Alternative Investments are comprised of Private Equity and Timberland investments classified as Level 3 assets. Private equity funds invest in equity and debt securities issued by private and publicly-held companies in connection with leveraged buyouts, recapitalizations and expansion opportunities. These investments do not allow redemptions. Alternatively, we receive distributions as the underlying assets of the fund liquidate. These are investments for which exchange quotations are not readily available. Therefore, private equity investments are valued at an estimated fair

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

value determined in good faith by the General Partner ("GP"). A GP is an owner of a partnership that has unlimited liability and is a managing partner that is active in the day to day business of a Limited Partnership. These investments are initially valued at cost with subsequent adjustments that reflect third party transactions, financial operating results and other factors deemed relevant by the GP.

The GP values each investment by applying generally accepted valuations methods including the market approach and the income approach. The determination of fair value using these methodologies takes into consideration a range of factors, including but not limited to, the price at which the investment was acquired, the nature of the investment, local market conditions, trading values on public exchanges for comparable securities, current and projected operating performance and financing transactions subsequent to the acquisition of the investment. Because of the subjective nature of estimated fair value of the private investments, such values may differ significantly from the values that would have been used had a ready market existed for these investments.

Timberland investments are managed investments regarding the acquiring, growing and disposing of timber on timberlands owned by the System. Fair value determinations for Level 3 measurements of investments are the responsibility of the Advisor, The Molpus Woodlands Group, LLC. The Advisor contracts with outside appraisers to generate fair value estimates on an annual basis. The outside appraisers utilized the cost, sales comparison and income capitalization approaches to estimate the fair value of the timber and timberlands. The Advisor challenges the reasonableness of the assumptions used and reviews the methodology to ensure the estimated fair value complies with accounting standards generally accepted in the United States of America.

Additional Categories

Investments in this category do not fit the regular parameters for the retirement annuity trust fund set forth in Title 102, Chapter 1:175 of the Kentucky Administrative Regulations. Rather, they fall into the allowable 15% of assets of the retirement annuity trust fund invested in any additional category or categories of investments approved by the Board of Trustees. Debt securities in this category classified as Level 1 are valued using prices quoted in active markets for those securities. Debt securities in the Additional Categories classified as Level 2 are valued using a matrix pricing technique that values securities based on their relationship to benchmark quoted prices. Opportunistic credits classified as Level 3 in the fair value hierarchy are valued using consensus pricing classified as Level 3 in the fair value hierarchy are valued using consensus pricing.

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the System. The System operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international stocks are the types of securities that are lent. The System's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the fair value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the System.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. During the fiscal year ended June 30, 2017, only the retirement annuity trust fund had securities lending transactions. The following section details the net income earned in the retirement annuity trust fund from securities lending for the fiscal year ended June 30, 2017 and 2016:

Item	2017 Earnings	2016 Earnings
Gross Earnings (Interest and Fees)	$ 5,799,152	$ 687,380
Gross Borrower Rebates	(2,138,664)	2,083,693
Bank Fees	(1,097,808)	(831,253)
Net Earnings	**$ 2,562,680**	**$ 1,939,820**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. As per GASB 28, securities lending transaction collateralized by letters of credit or by securities that the governmental entity does not have the ability to pledge or sell unless the borrower defaults are not reported as assets and liabilities on the Statement of Fiduciary Net Position.

As of June 30, 2017, the loan average days to maturity in the retirement annuity trust fund was one (1) day and the weighted average investment maturity of cash collateral investments was one (1) day. At fiscal year end, the retirement annuity trust fund had no credit risk exposure to borrowers, since the amounts the retirement annuity trust fund owes the borrowers exceeds the amounts the borrowers owe the retirement annuity trust fund and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The System minimizes interest rate risk by limiting the term of cash collateral investments to several days.

The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2017 and 2016:

Type of Securities Lent	Fair Value	Cash Collateral Received	Non-Cash Collateral Value Received	Total Collateral Received 2017	Total Collateral Received 2016
Fixed Income	$ 309,194,938	$ 37,740,812	$ 282,265,094	$ 320,005,906	$ 135,742,272
Equities	1,061,977,571	926,925,925	158,036,460	1,084,962,385	305,638,558
TOTAL	**$ 1,371,172,509**	**$ 964,666,737**	**$ 440,301,554**	**$ 1,404,968,291**	**$ 441,380,830**

E. ANNUAL MONEY-WEIGHTED RATE OF RETURN

A money-weighted rate of return is an expression of investment performance that is net of the plan's investment expenses (net the plan's administrative expenses). The following tables reflect the money-weighted rate of return for both the retirement annuity trust fund and the health insurance trust fund:

Annual Rate of Return Net of Investment Expense

	2017	2016
Retirement Annuity Trust	15.00 %	-1.32 %
Health Insurance Trust	14.37 %	-2.20 %

Note 6: Retirement Plan for Employees of the Retirement System

Full-time employees of TRS participate in either TRS or Kentucky Employees Retirement System (KERS). Both plans are multiple-employer cost sharing defined benefit retirement annuity plans. All TRS employees in positions requiring a four-year degree are covered under TRS. The contribution rates and required employer matching are the same as state agency employers in the System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for TRS employee members for the fiscal years 2017, 2016 and 2015 were $893,635, $820,077 and $767,958, respectively. TRS contributed one hundred percent of the required contribution each year.

All other TRS employees are covered under KERS in the Non-Hazardous Employees' Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. TRS's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS who joined prior to July 1, 2008, are required to contribute five percent of their annual creditable compensation and members who joined on or after July 1, 2008 contribute an additional one percent. As the employer, TRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2017, 2016 and 2015 were 48.59 percent, 38.77 percent and 38.77 percent and TRS's annual required contributions to KERS were $675,300, $547,105 and $552,133, respectively. TRS contributed one hundred percent of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: Other Funds

A. 403(B) TAX-SHELTERED ANNUITY PLAN

Plan Description

TRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by TRS's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2017, the eight members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

B. SUMMARY OF SIGNIFICANT POLICIES

Basis of Accounting

The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan; therefore, there are no receivables to be recognized.

Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

C. SUPPLEMENTAL BENEFIT FUND

The Supplemental Retirement Benefit Fund is a qualified governmental excess benefit arrangement as described in Section 415 of the Internal Revenue Code. In accordance with KRS 161.611 and KRS 161.420(8), TRS is authorized to provide a supplemental retirement benefit fund for the sole purpose of enabling the employer to apply the same formula for determining benefits payable to all members of the System employed by the employer, whose benefits under the System are limited by Section 415 of the Internal Revenue Code of 1986, as amended from time to time. Funding of benefits payable under this fund are provided by the state, as employer, and are segregated from funds that are maintained by TRS for payment of the regular benefits provided by the System.

Note 7: Other Funds continued . . .

D. JUNITA LOSEY SCHOLARSHIP BEQUEST

Junita Losey, a retired teacher, designated TRS as a residuary beneficiary of her estate and expressed a desire that TRS establish a scholarship program for Kentucky students studying to be teachers. Ms. Losey died in 1997 and thereafter her estate provided a scholarship bequest to TRS. The scholarship bequest has at all times been segregated from funds that are maintained by TRS for payment of the regular benefits provided by the System. The Scholarship Committee of the System's Board of Trustees meets each December to consider scholarship standards and administration of the scholarship bequest.

Note 8: Other Post-Employment Benefits - Medical Insurance Plan

A. PLAN DESCRIPTION

In addition to the retirement annuity plan described in Note 1, Kentucky Revised Statute 161.675 requires TRS to provide access to postemployment healthcare benefits for eligible members and dependents. The TRS medical plan (MIF) is funded by employer and member contributions. Changes made to the medical plan may be made by the TRS Board of Trustees, the Kentucky Department of Employee Insurance and the General Assembly.

The TRS medical plan is funded by employee contributions to an account established pursuant to 26 U.S.C. sec. 401(h). Additional funding is derived from the Kentucky Teachers' Retirement System insurance trust fund that went into effect on July 1, 2010. The insurance trust fund provides a trust separate from the account established pursuant to 26 U.S.C. sec. 401(h). The insurance trust fund includes employer and retired member contributions required under KRS 161.550 and KRS 161.675(4)(b).

To be eligible for medical benefits, the member must have retired either for service or disability. The TRS medical plan offers coverage to members under the age of 65 through the Kentucky Employees Health Plan (KEHP) administered by the Kentucky Department of Employee Insurance. TRS retired members are given a supplement to be used for payment of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the TRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The amount of insurance premiums paid by retirees for fiscal years 2017 and 2016 were $57,941,968 and $56,296,433, respectively. The Commonwealth of Kentucky bears risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the TRS Medicare Eligible Health Plan.

At June 30, 2017, TRS insurance covered 39,497 retirees and 7,189 dependents. There are 207 participating employers and 72,130 active members contributing to the medical plan.

B. NET OPEB LIABILITY OF EMPLOYERS

The net OPEB liability (i.e., the System's liability determined in accordance with GASB No. 74 less the fiduciary net position) for the medical insurance plan as of June 30, 2017 is shown below.

Net OPEB Liability of Employers
(In thousands of dollars)

Fiscal Year Ending June 30	Total OPEB Liability (TOL)	Plan Fiduciary Net Position	Employers Net OPEB Liability (NOL)	Plan Fiduciary Net Position (FNP) as a % of Total OPEB Liability	Covered Payroll	Net OPEB Liability as a % of Covered Payroll
	A	B	(A-B)	(B/A)	C	[A-B/C]
2017	$ 4,524,172	$ 958,390	$ 3,565,782	21.2 %	$ 3,415,432	104.40 %

Note 8: Other Post-Employment Benefits - Medical Insurance Plan continued . . .

C. SUMMARY OF ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below.

Valuation Date	6/30/2016
Actuarial Assumptions:	
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of Payroll
Amortization Period	30 years, open
Asset Valuation Method	Five-year smoothed value
Investment Rate of Return	8.00%, net of OPEB plan investment expense, including inflation.
Projected Salary Increases	3.50 - 7.20%, including wage inflation
Inflation Rate	3.00%
Real Wage Growth	0.50%
Wage Inflation	3.50%
Municipal Bond Index Rate	3.56%
Discount Rate	8.00%
Single Equivalent Interest Rate	8.00%, net of OPEB plan investment expense, including price inflation

Mortality rates were based on the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB, and set forward two years for males and one year for females is used for the period after service retirement and for dependent beneficiaries. The RP-2000 Disabled Mortality Table set forward two years for males and seven years for females is used for the period after disability retirement. The demographic actuarial assumptions for retirement, disability incidence, withdrawal, rates of plan participation, and rates of plan election used in the June 30, 2016 valuation were based on the results of the most recent actuarial experience studies for the System, which covered the five-year period ending June 30, 2015. The remaining actuarial assumptions used in the June 30, 2017 valuation of the MIF were based on a review of recent plan experience done concurrently with the June 30, 2016 valuation.

D. TARGET ALLOCATIONS

The long-term expected rate of return on OPEB investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	30-Year Expected Geometric Real Rate of Return
Global Equity	60.0%	5.1%
Fixed Income	9.0%	1.2%
Real Estate	4.5%	4.0%
Private Equity	5.5%	6.6%
High Yield	10.0%	4.3%
Other Additional Categories*	10.0%	3.3%
Cash	1.0%	0.5%
Total	**100.0%**	

** Modeled as 50% High Yield and 50% Bank Loans*

Note 8: Other Post-Employment Benefits - Medical Insurance Plan continued . . .

E. DISCOUNT RATE

The discount rate used to measure the TOL as of the Measurement Date was 8.00%. The projection of cash flows used to determine the discount rate was performed in accordance with GASB 74. The projection's basis was an actuarial valuation performed as of June 30, 2016. In addition to the actuarial methods and assumptions of the June 30, 2016 actuarial valuation, the following actuarial methods and assumptions were used in the projection of cash flows:

- Total payroll for the initial projection year consists of the payroll of the active membership present on the Valuation Date. In subsequent projection years, total payroll was assumed to increase annually at a rate of 3.50%.
- For the retiree health care costs of those beneficiaries under age 65, the KEHP implicit rate subsidies were assumed to be paid in all years by the employer directly to plan members as the benefits come due.
- As administrative expenses were assumed to be paid in all years by the employer as they come due, they were not considered.
- Cash flows occur mid-year.
- Future contributions to the MIF were based upon the contribution rates defined in statute and the projected payroll of active employees. Per KRS 161.540(1)(c).3 and 161.550(5), when the MIF achieves a sufficient prefunded status, as determined by the retirement system's actuary, the following MIF statutory contributions are to be decreased, suspended, or eliminated:
    - Employee contributions
    - School District/University Contributions
    - State Contributions for KEHP premium subsidies payable to retirees who retire after June 30, 2010

  To reflect these adjustments, open group projections were used and assumed an equal, pro rata reduction to the current statutory amounts in the years if/when the MIF is projected to achieve a Funded Ratio of 100% or more. Here, the current statutory amounts are adjusted to achieve total contributions equal to the Actuarially Determined Contribution (ADC), as determined by the prior year's valuation and in accordance with the MIF's funding policy (Schedule E). As the specific methodology to be used for the adjustments has yet to be determined, there may be differences between the projected results and future experience. This may also include any changes to retiree contributions for KEHP coverage pursuant to KRS 161.675(4)(b).
- In developing the adjustments to the statutory contributions in future years, the following was assumed:
    - Liabilities and cash flows are net of expected retiree contributions and any implicit subsidies attributable to coverage while participating in KEHP.
    - A 0% active member growth rate was assumed for the purposes of developing estimates for new entrants (membership dates beyond June 30, 2016).

Based on these assumptions, the MIF's FNP was not projected to be depleted.

The FNP projections are based upon the MIF's financial status on the Valuation Date, the indicated set of methods and assumptions, and the requirements of GASB 74. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing basis, reflecting the impact of future members. Therefore, the results of these tests do not necessarily indicate whether or not the MIF will actually run out of money, the financial condition of the MIF, or the MIF's ability to make benefit payments in future years.

These paragraphs require disclosure of the sensitivity of the NOL to changes in the health care cost trend rates for the MIF and the discount rate for the MIF. The following exhibit presents the NOL of the MIF, calculated using the health care cost trend rates, as well as what the MIF's NOL would be if it were calculated using a health care cost trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate. Similarly, the exhibit presents the NOL of the MIF, calculated using the Single Equivalent Interest Rate, as well as what the MIF's NOL would be if it were calculated using a Discount Rate that is 1-percentage-point lower or 1-percentage-point higher than the current Single Equivalent Interest Rate:

System's Net OPEB Liability
(In thousands of dollars)

	Health Care Cost Trends		
Discount Rate	**1% Decrease**	**Current**	**1% Increase**
1% Increase (8.50%)	$	$ 3,077,710	$
Current (7.50%)	2,986,442	3,565,977	4,281,487
1% Decrease (6.50%)		4,152,539	

Note 8: Other Post-Employment Benefits - Medical Insurance Plan continued . . .

The TOL of the MIF is based upon an actuarial valuation performed as of the Valuation Date, June 30, 2016. An expected TOL is determined as of June 30, 2017 using standard roll-forward techniques. The roll-forward calculation begins with the TOL, as of June 30, 2016, subtracts the actual benefit payments (net of retiree contributions, if applicable) for the year, applies interest at the discount rate for the year, and then adds the annual normal cost (also called the Service Cost). If applicable, actuarial gains and losses arising from the difference between estimates and actual experience (excluding amounts related to benefit changes and changes in assumptions or other inputs) are reconciled to the TOL as of the Measurement Date. Last, any changes of assumptions or other inputs are reflected. The procedure used to determine the TOL of the MIF, as of June 30, 2017, is shown in the following table:

TOL Roll-Forward
(In thousands of dollars)

(a)	TOL as of June 30, 2016*	$ 4,264,131
(b)	Actual Benefit Payments and Refunds for the Year July 1, 2016 - June 30, 2017	(178,500)
(c)	Interest on TOL = [(a) x (0.080)] + [(b) x (0.0400]	333,990
(d)	Service Cost for the Year July 1, 2016 - June 30, 2017 at the End of the Year	95,625
(e)	Changes of Benefit Terms	8,926
(f)	Difference between Expected and Actual Experience at the End of the Year	
(g)	Changes of Assumptions or Other Inputs	
(h)	TOL Rolled Forward to June 30, 2017 = (a) + (b) + (c) + (d) + (e) + (f) + (g)	**$ 4,524,172**

** The TOL used in the roll-forward as of June 30, 2016 is calculated using the discount rate as of the Prior Measurement Date.*

Note 9: Other Post-Employment Benefits - Life Insurance Plan

A. PLAN DESCRIPTON

TRS administers the Life Insurance Plan as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 207 participating employers. The benefit is $5,000 for members who are retired for service or disability, and $2,000 for active contributing members.

B. NET OPEB LIABILITY OF EMPLOYERS

The net OPEB liability (i.e., the System's liability determined in accordance with GASB No. 74 less the fiduciary net position) for the life insurance fund as of June 30, 2017 is shown below.

Net OPEB Liability of Employers
(In thousands of dollars)

Fiscal Year Ending June 30	Total OPEB Liability (TOL)	Plan Fiduciary Net Position	Employers Net OPEB Liability (NOL)	Plan Fiduciary Net Position (FNP) as a % of Total OPEB Liability	Covered Payroll	Net OPEB Liability as a % of Covered Payroll
	A	B	(A-B)	(B/A)	C	[A-B/C]
2017	$ 109,736	$ 87,777	$ 21,959	80.0 %	$ 3,415,432	0.64 %

Note 9: Other Post-Employment Benefits - Life Insurance Plan continued . . .

C. SUMMARY OF ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below.

Valuation Date	6/30/2016
Actuarial Assumptions:	
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of Payroll
Amortization Period	30 years, open
Asset Valuation Method	Market Value
Investment Rate of Return	7.50%, net of OPEB plan investment expense, including inflation.
Projected Salary Increases	4.00 - 8.10%, including wage inflation
Inflation Rate	3.50%
Real Wage Growth	0.50%
Wage Inflation	4.00%
Municipal Bond Index Rate	3.56%
Discount Rate	7.50%
Single Equivalent Interest Rate	7.50%, net of OPEB plan investment expense, including price inflation

Mortality rates were based on the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB, and set forward two years for males and one year for females is used for the period after service retirement and for dependent beneficiaries. The RP-2000 Disabled Mortality Table set forward two years for males and seven years for females is used for the period after disability retirement. The demographic actuarial assumptions for retirement, disability incidence, withdrawal, rates of plan participation, and rates of plan election used in the June 30, 2016 valuation were based on the results of the most recent actuarial experience studies for the System, which covered the five-year period ending June 30, 2015.

D. TARGET ALLOCATIONS

The long-term expected rate of return on OPEB investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	30-Year Expected Geometric Real Rate of Return
U.S. Large Cap Equity	38.4%	4.3%
U.S. Small Cap Equity	2.6%	4.8%
Developed Int'l Equity	15.8%	5.2%
Emerging Markets Equity	4.2%	5.4%
Fixed Income - Inv. Grade	16.0%	1.2%
Real Estate	6.0%	4.0%
Private Equity	7.0%	6.6%
High Yield	2.0%	4.3%
Other Additional Categories**	7.0%	3.3%
Cash	2.0%	0.5%
Total	**100.0%**	

* *As the LIF investment policy is to change, the above table reflects the pension allocation and returns that achieve the targeted 7.50% long-term rate of return.*

** *Modeled as 50% High Yield and 50% Bank Loans*

Note 9: Other Post-Employment Benefits - Life Insurance Plan continued . . .

E. DISCOUNT RATE

The discount rate used to measure the TOL as of the Measurement Date was 7.50%. The projection of cash flows used to determine the discount rate was performed in accordance with GASB 74. The projection's basis was an actuarial valuation performed as of June 30, 2016. In addition to the actuarial methods and assumptions of the June 30, 2016 actuarial valuation, the following actuarial methods and assumptions were used in the projection of the LIF's cash flows:

- Total payroll for the initial projection year consists of the payroll of the active membership present on the Valuation Date. In subsequent projection years, total payroll was assumed to increase annually at a rate of 3.50%.
- The employer will contribute the Actuarially Determined Contribution (ADC) in accordance with the LIF's funding policy (Schedule E) determined by a valuation performed on a date two years prior to the beginning of the fiscal year in which the ADC applies.
- As administrative expenses were assumed to be paid in all years by the employer as they come due, they were not considered.
- Active employees do not explicitly contribute to the plan.
- Cash flows occur mid-year.

Based on these assumptions, the LIF's FNP was not projected to be depleted.

The FNP projections are based upon the LIF's financial status on the Valuation Date, the indicated set of methods and assumptions, and the requirements of GASB 74. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing basis, reflecting the impact of future members. Therefore, the results of these tests do not necessarily indicate whether or not the LIF will actually run out of money, the financial condition of the LIF, or the LIF's ability to make benefit payments in future years.

These paragraphs require disclosure of the sensitivity of the NOL to changes the discount rate for the LIF. The schedule below presents the NOL of the LIF, calculated using the Single Equivalent Interest Rate, as well as what the LIF's NOL would be if it were calculated using a Discount Rate that is 1-percentage-point lower or 1-percentage-point higher than the current Single Equivalent Interest Rate:

System's Net OPEB Liability
(In thousands of dollars)

1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
$ 36,497	$ 21,959	$ 10,055

The TOL of the LIF is based upon an actuarial valuation performed as of the Valuation Date, June 30, 2016. An expected TOL is determined as of June 30, 2017 using standard roll-forward techniques. The roll-forward calculation begins with the TOL, as of June 30, 2016, subtracts the actual benefit payments (net of retiree contributions, if applicable) for the year, applies interest at the discount rate for the year, and then adds the annual normal cost (also called the Service Cost). If applicable, actuarial gains and losses arising from the difference between estimates and actual experience (excluding amounts related to benefit changes and changes in assumptions or other inputs) are reconciled to the TOL as of the Measurement Date. Last, any changes of assumptions or other inputs are reflected. The procedure used to determine the TOL of the LIF, as of June 30, 2017, is shown in the following table:

Note 9: Other Post-Employment Benefits - Life Insurance Plan continued . . .

TOL Roll-Forward
(In thousands of dollars)

(a)	TOL as of June 30, 2016*	$ 106,059
(b)	Actual Benefit Payments and Refunds for the Year July 1, 2016 - June 30, 2017	(5,151)
(c)	Interest on TOL = [(a) x (0.075)] + [(b) x (0.0375]	7,761
(d)	Service Cost for the Year July 1, 2016 - June 30, 2017 at the End of the Year	1,067
(e)	Changes of Benefit Terms	
(f)	Difference between Expected and Actual Experience at the End of the Year	
(g)	Changes of Assumptions or Other Inputs	
(h)	TOL Rolled Forward to June 30, 2017 = (a) + (b) + (c) + (d) + (e) + (f) + (g)	**$ 109,736**

** The TOL used in the roll-forward as of June 30, 2016 is calculated using the discount rate as of the Prior Measurement Date.*

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in the Net Pension Liability
(In thousands of dollars)

	2017	2016	2015	2014
Total pension liability				
Service Cost	$ 1,332,587	$ 1,120,893	$ 1,015,080	$ 1,002,338
Interest	1,964,107	2,027,457	2,029,372	1,956,610
Difference between expected and actual experience	199,471	(58,035)		
Changes of assumptions	(2,321,327)	4,030,834	1,511,960	(353,043)
Benefit payments	(1,918,612)	(1,833,199)	(1,741,456)	(1,654,376)
Refunds of contributions	(26,305)	(27,748)	(23,033)	(25,462)
Net change in total pension liability	(770,079)	5,260,202	2,791,923	926,067
Total pension liability - beginning	47,736,901	42,476,699	39,684,776	38,758,709
Total pension liability - ending (a)	$ 46,966,822	$ 47,736,901	$ 42,476,699	$ 39,684,776
Plan Net Position				
Contributions - State of Kentucky	$ 981,417	$ 484,987	$ 480,073	$ 483,330
Contributions - Other Employers	79,303	80,468	79,506	79,996
Contributions - Members	313,625	313,044	308,160	304,982
Net investment income	2,475,753	(245,215)	862,179	2,803,249
Benefit payments	(1,918,612)	(1,833,199)	(1,741,456)	(1,654,376)
Administrative expense	(10,314)	(8,636)	(8,869)	(7,956)
Refunds of contributions	(26,305)	(27,748)	(23,033)	(25,462)
Net change in plan net position	1,894,867	(1,236,299)	(43,440)	1,983,763
Plan net position - beginning	16,812,832	18,049,131	18,092,571	16,108,808
Plan net position - ending (b)	18,707,699	16,812,832	18,049,131	18,092,571
Net pension liability - ending (a) - (b)	**$ 28,259,123**	**$ 30,924,069**	**$ 24,427,568**	**$ 21,592,205**

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Required Supplementary Information continued . . .

NOTE 1
Schedule of Changes in the Net Pension Liability

The total pension liability contained in this schedule was provided by TRS's actuary, Cavanaugh Macdonald Consulting, LLC. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the System.

Changes of Benefit Terms. None

Changes of assumptions. In the 2016 valuation, rates of withdrawal, retirement, disability, mortality and rates of salary increase were adjusted to more closely reflect actual experience. In the 2016 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables projected to 2025 with projection scale BB, set forward two year for males and one year for females rather than the RP-2000 Mortality Tables projected to 2020 with projection scale AA, which was used prior to 2016.

In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables projected to 2020 with projection scale AA, set back one year for females rather than the 1994 Group Annuity Mortality Tables which was used prior to 2016. For the 2011 valuation through the 2013 valuation, an interest smoothing methodology was used to calculate liabilities for purposes of determining the actuarially determined contributions.

Schedule of Net Pension Liability
(In thousands of dollars)

	2017	2016	2015	2014
Total pension liability	$ 46,966,822	$ 47,736,901	$ 42,476,699	$ 39,684,776
Plan net position	18,707,699	16,812,832	18,049,131	18,092,571
Net pension liability	$ 28,259,123	$ 30,924,069	$ 24,427,568	$ 21,592,205
Ratio of plan net position to total pension liability	39.83 %	35.22 %	42.49 %	45.59%
Covered-employee payroll	$ 3,415,432	$ 3,390,539	$ 3,455,008	$ 3,317,422
Net pension liability as a percentage of covered-employee payroll	827.40 %	912.07 %	707.02 %	650.87%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule of Employer Contributions
(In thousands of dollars)

Fiscal Year Ended June 30	Covered Payroll	Actual Employer Contributions	Actuarially Determined Employer Contributions	Annual Contribution Excess (Deficiency)	Actual Contributions as a Percentage of Covered Payroll
2017	$ 3,415,432	$ 1,060,720	$ 1,076,617	$ (15,897)	31.06 %
2016	3,390,539	565,455	999,270	(433,815)	16.68
2015	3,455,008	559,579	913,654	(354,075)	16.20
2014 *	3,317,422	563,326	823,446	(260,120)	16.98
2013	3,310,710	568,233	802,985	(234,752)	17.16
2012	3,310,176	557,340	757,822	(200,482)	16.84
2011	3,283,749	1,037,936	678,741	359,195	31.61
2010	3,321,614	479,805	633,938	(154,133)	14.44
2009	3,253,077	442,550	600,283	(157,733)	13.60
2008	3,190,332	466,248	563,789	(97,541)	14.61

** Revised from previous year to reflect actual covered-employee payroll.*

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

NOTE 2
Schedule of Employer Contributions

The required employer contributions and percent of those contributions actually made are presented in the schedule.

NOTE 3
Actuarial Methods and Assumptions

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of the schedule:

Actuarial cost method	Entry age
Amortization period	Level percentage of payroll, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Inflation	3.50 percent
Salary increase	4.00 to 8.20 percent, including inflation
Ultimate Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation

Schedule of Investment Returns

	2017	2016	2015	2014
Annual money weighted rate of return, net of investment expense	15.00%	-1.32%	4.96%	17.95%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

Medical Insurance Plan
Schedule of Changes in the Net OPEB Liability
(In thousands of dollars)

	2017
Total OPEB liability	
Service Cost	$ 95,625
Interest	333,990
Changes of benefit terms	8,926
Difference between expected and actual experience	
Changes of assumptions	
Benefit payments	(178,500)
Net change in OPEB liability	260,041
Total OPEB liability - beginning	4,264,131
Total OPEB liability - ending (a)	$ 4,524,172
Plan Net Position	
Contributions - State of Kentucky	$ 75,497
Contributions - Other Employers	104,879
Contributions - Active Members	128,819
Net investment income	95,453
Benefit payments	(178,500)
Administrative expense	(1,539)
Other	
Net change in plan net position	224,609
Plan net position - beginning	733,781
Plan net position - ending (b)	958,390
Net OPEB liability - ending (a) - (b)	**$ 3,565,782**

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

NOTE 1
Schedule of Changes in the Net OPEB Liability

The net OPEB liability contained in this schedule was provided by TRS's actuary, Cavanaugh Macdonald Consulting, LLC. The net OPEB liability is measured as the total OPEB liability less the amount of the fiduciary net position of the System.

Changes of Benefit Terms. With the passage of House Bill 471, the eligibility for non-single subsidies (NSS) for the KEHP-participating members who retired prior to July 1, 2010 is restored, but the State will only finance, via its KEHP "shared responsibility" contributions, the costs of the NSS related to those KEHP-participating members who retired on or after July 1, 2010.

Changes of assumptions. None

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

Medical Insurance Plan
Schedule of Net OPEB Liability
(In thousands of dollars)

Fiscal Year Ending June 30	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability	Plan Fiduciary Net Position as a % of Total OPEB Liability	Covered Payroll	Net OPEB Liability as a % of Covered Payroll
2017	$ 4,524,172	$ 958,390	$ 3,565,782	21.18 %	$ 3,415,432	104.40 %

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Medical Insurance Plan – Schedule of Employer Contributions

Valuation Year June 30	Actuarially Determined Employer Contribution	Contributions in Relation to the Actuarially Determined Contribution	Annual Contribution Deficiency/ (Excess)	Covered Payroll	Actual Contributions as a Percentage of Covered Payroll
2017	$ 102,854	$ 180,376	$ (77,522)	$ 3,415,432	5.28%
2016	97,983	221,967	(123,984)	3,390,539	6.55
2015	106,606	168,084	(61,478)	3,455,008	4.86
2014	159,583	162,568	(2,985)	3,317,422	4.90
2013	186,726	166,611	20,115	3,310,710	5.03
2012	470,217	177,748	292,469	3,310,176	5.37
2011	477,723	188,735	288,988	3,283,749	5.75
2010	457,054	173,380	283,674	3,321,614	5.22
2009	467,313	178,092	289,221	3,253,077	5.47
2008	395,282	160,866	234,416	3,190,322	5.04

NOTE 2
Schedule of Employer Contributions

The required employer contributions and percent of those contributions actually made are presented in the schedule.

NOTE 3
Actuarial Methods and Assumptions

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of the schedule:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll
Amortization period	30 years, open
Asset valuation method	5-year smoothed value
Inflation	3.00 percent
Real wage growth	0.50 percent
Wage inflation	3.50 percent
Salary increase	3.50 to 7.20 percent, including wage inflation
Discount rate	8.00 percent

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

MIF health care cost trends	
Under age 65	7.75 percent FYE 2017, decreasing to an ultimate rate of 5.00 percent by FYE 2023
Ages 65 and older	5.75 percent FYE 2017, decreasing to an ultimate rate of 5.00 percent by FYE 2020
Medicare part B premiums	1.02 percent FYE 2017 with an ultimate rate of 5.00 percent by FYE 2029
MIF under age 65 claims	The current premium charged by KEHP is used as the base cost and is projected forward using only the health care trend

Schedule of Investment Returns
Health Insurance Trust

	2017	2016	2015	2014
Annual money weighted rate of return, net of investment expense	14.37 %	-2.20 %	1.38 %	15.38 %

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Life Insurance Plan
Schedule of Changes in the Net OPEB Liability
(In thousands of dollars)

	2017
Total OPEB liability	
Service Cost	$ 1,067
Interest	7,761
Changes of benefit terms	
Difference between expected and actual experience	
Changes of assumptions	
Benefit payments	(5,151)
Net change in OPEB liability	3,677
Total OPEB liability - beginning	106,059
Total OPEB liability - ending (a)	$ 109,736
Plan Net Position	
Contributions - State of Kentucky	$ 882
Contributions - Other Employers	168
Contributions - Active Members	
Net investment income	915
Benefit payments	(5,151)
Administrative expense	(28)
Other	
Net change in plan net position	(3,214)
Plan net position - beginning	90,991
Plan net position - ending (b)	87,777
Net OPEB liability - ending (a) - (b)	$ 21,959

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

NOTE 1
Schedule of Changes in the Net OPEB Liability

The net OPEB liability contained in this schedule was provided by TRS's actuary, Cavanaugh Macdonald Consulting, LLC. The net OPEB liability is measured as the total OPEB liability less the amount of the fiduciary net position of the System.

Changes of Benefit Terms. None

Changes of assumptions. None

Life Insurance Plan
Schedule of Net OPEB Liability
(In thousands of dollars)

Fiscal Year Ending June 30	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability	Plan Fiduciary Net Position as a % of Total OPEB Liability	Covered Payroll	Net OPEB Liability as a % of Covered Payroll
2017	$ 109,736	$ 87,777	$ 21,959	79.99 %	$ 3,415,432	0.64%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Life Insurance Plan – Schedule of Employer Contributions

Valuation Year June 30	Actuarially Determined Employer Contribution	Contributions in Relation to the Actuarially Determined Contribution	Annual Contribution Deficiency/(Excess)	Covered Payroll	Actual Contributions as a % of Covered Payroll
2017	$ 1,065	$ 1,050	$ 15	$ 3,415,432	0.03 %
2016	1,058	1,038	20	3,390,539	0.03
2015	1,050	1,020	30	3,455,008	0.03
2014	1,045	1,006	39	3,317,422	0.03
2013	1,740	1,680	60	3,310,710	0.05
2012	1,733	1,685	48	3,310,176	0.05
2011	1,726	1,669	57	3,283,749	0.05
2010	1,993	1,967	26	3,321,614	0.06
2009	1,498	5,455	(3,957)	3,253,077	0.17
2008	1,914	5,411	(3,497)	3,190,322	0.17

NOTE 2
Schedule of Employer Contributions

The required employer contributions and percent of those contributions actually made are presented in the schedule.

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

NOTE 3
Actuarial Methods and Assumptions

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of the schedule:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll
Amortization period	30 years, open
Asset valuation method	Market value
Inflation	3.50 percent
Real wage growth	0.50 percent
Wage inflation	4.00 percent
Salary increase	4.00 to 8.10 percent, including wage inflation
Discount rate	7.50 percent

Schedule of Investment Returns
Life Insurance Trust

	2017	
Annual money weighted rate of return, net of investment expense	1.02 %	*Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.*

See accompanying independent auditor's report.

ADDITIONAL SUPPORTING SCHEDULES

Schedule of Administrative Expenses
For the Year Ended June 30, 2017 and 2016

Expense	2017	2016
Salaries	$ 7,291,328	$ 5,808,287
Other Personnel Costs	735,748	696,933
Professional Services and Contracts	395,216	647,708
Utilities	100,641	93,633
Rentals	23,607	20,991
Maintenance	56,520	93,521
Postage & Related Services	300,813	442,610
Printing	188,135	199,837
Insurance	175,768	183,329
Miscellaneous Services	159,272	164,405
Telecommunications	20,958	22,126
Computer Services	145,252	151,789
Supplies	63,097	51,059
Depreciation	1,996,821	1,535,843
Travel	40,734	45,221
Dues & Subscriptions	65,361	63,752
Miscellaneous Commodities	11,095	12,724
Furniture, Fixtures, & Equipment not Capitalized	110,821	85,604
Compensated Absences		30,891
Total Administrative Expenses	**$ 11,881,187**	**$ 10,350,263**

Schedule of Professional Services and Contracts
For the Year Ended June 30, 2017 and 2016

Professional	Nature of Service	2017	2016
Cavanaugh Macdonald Consulting	Actuarial Services	$ 157,089	$ 284,189
Segal Consulting	Actuarial Services		89,017
Auditor of Public Accounts	Auditing Services		32,200
Mountjoy Chilton Medley	Auditing Services	89,214	45,000
International Claim Specialist	Investigative Services	1,512	2,176
Ice Miller	Attorney Services	24,233	46,798
Reinhart, Boerner VanDeuren	Attorney Services		6,125
Stoll, Keenon, and Ogden	Attorney Services	3,168	21,672
Attorney General	Attorney Services		531
Peritus	Communications	120,000	120,000
Total Professional Services and Contracts		**$ 395,216**	**$ 647,708**

See accompanying independent auditor's report.

Additional Supporting Schedules continued . . .

Schedule of Contracted Investment Management Expenses
Year Ended June 30, 2017

	Pension	Medical	Total
Equity Managers			
Baillie Gifford	$ 3,114,384	$	$ 3,114,384
Baring Asset Management, Inc.	2,473,839		2,473,839
Black Rock	336,647	217,848	554,495
Fort Washington Focused Equity	425,662	57,734	483,396
GE Asset Management	786,682		786,682
Todd Asset Management LLC	1,325,541		1,325,541
UBS Global Asset Management	5,980,296		5,980,296
Wellington Management Company	3,168,837		3,168,837
Total Equity Managers	17,611,888	275,582	17,887,470
Fixed Income Managers			
Fort Washington Investment Broad Market	160,777		160,777
Galliard Capital Management	222,920		222,920
Total Fixed Income Managers	383,697		383,697
Real Estate	8,812,597	731,349	9,543,946
Additional Categories	9,454,366	849,061	10,303,427
Alternative Investments	17,428,907	1,162,667	18,591,574
Custodian			
The Bank of New York Mellon	481,653	53,386	535,039
Consultant			
Hewitt Ennis Knupp, Inc.	413,850		413,850
Bevis Longstreth	51,660		51,660
George Philip	33,965		33,965
Total Consultants	499,475		499,475
Legal & Research			
Reinhart, Boerner Van Deuren	5,936		5,936
Ice Miller	51,266		51,266
Total Legal & Research	57,202		57,202
Other			
Administrative and Operational (includes Personnel)	3,116,857	98,822	3,215,679
Total Contracted Investment Management Expenses	**$ 57,846,642**	**$ 3,170,867**	**$ 61,017,509**

See accompanying independent auditor's report.

Additional Supporting Schedules continued . . .

Schedule of Contracted Investment Management Expenses
Year Ended June 30, 2016

	Pension	Medical	Total
Equity Managers			
Baillie Gifford	$ 2,800,298	$	$ 2,800,298
Baring Asset Management, Inc.	2,419,271		2,419,271
Black Rock	265,816	191,346	457,162
GE Asset Management	800,000		800,000
Todd Asset Management LLC	1,295,310		1,295,310
UBS Global Asset Management	2,980,341		2,980,341
Wellington Management Company	2,917,720		2,917,720
Total Equity Managers	13,478,756	191,346	13,670,102
Fixed Income Managers			
Fort Washington Investment Advisors	150,088		150,088
Galliard Capital Management	229,226		229,226
Total Fixed Income Managers	379,314		379,314
Real Estate	7,010,123	503,596	7,513,719
Additional Categories	8,701,619	683,241	9,384,860
Alternative Investments	14,469,348	794,844	15,264,192
Custodian			
The Bank of New York Mellon	380,233	30,275	410,508
Consultant			
Hewitt Ennis Knupp, Inc.	358,850		358,850
Bevis Longstreth	50,137		50,137
George Philip	38,962		38,962
Total Consultants	447,949		447,949
Legal & Research			
Reinhart, Boerner Van Deuren	5,560		5,560
Ice Miller	84,697		84,697
Total Legal & Research	90,257		90,257
Other			
Administrative and Operational (includes Personnel)	2,845,221	74,831	2,920,052
Total Contracted Investment Management Expenses	**$ 47,802,820**	**$ 2,278,133**	**$ 50,080,953**

See accompanying independent auditor's report.

CPAs & ADVISORS

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Independent Auditor's Report

To the Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, KY

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Teachers' Retirement System of the State of Kentucky, which comprise the statement of fiduciary net position as of June 30, 2017, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, which collectively comprise the Teachers' Retirement System of the State of Kentucky's basic financial statements, and have issued our report thereon dated November 14, 2017.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control. Accordingly, we do not express an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control.

A *deficiency* in internal control exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Kentucky
Indiana
Ohio

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Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Teachers' Retirement System of the State of Kentucky's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Teachers' Retirement System of the State of Kentucky's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

/s/ Mountjoy Chilton Medley LLP

Louisville, KY
November 14, 2017

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Teachers' Retirement System of the State of Kentucky

2017

Investment Section

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the Teachers' Retirement System of Kentucky.

Mr. Tom Siderewicz, CFA
Chief Investment Officer

Mr. Philip L. Webb
Director of Investment Accounting

INVESTMENT COMMITTEE

Mr. Ronald L. Sanders
Chair

Mr. Arthur Green
Vice-Chair

Mr. Hollis Gritton
Member

Dr. Jay Morgan
Member

Ms. Alison Wright
Member

Mr. Bevis Longstreth
Investment Advisor to TRS Kentucky Investment Committee

Mr. George Philip
Investment Advisor to TRS Kentucky Investment Committee

EXECUTIVE INVESTMENT STAFF

Mr. Gary L. Harbin, CPA
Executive Secretary

Mr. Tom Siderewicz, CFA
Chief Investment Officer

AON

December 1, 2017

To the members of the Board of Trustees and participants of the Teachers' Retirement System of Kentucky:

The Teacher Retirement System of Kentucky (TRS) investment program produced a total return of 15.37% for the twelve-month period ended June 30, 2017, more than double the actuarial assumed rate of return of 7.5%. This return exceeded that of the Policy Benchmark by 1.3 percentage points and ranked near the top of a universe of public pension funds with assets in excess of $1 billion (8th percentile ranking). Impressively, TRS also outperformed the Policy Benchmark and ranked within or near the top-decile of the public pension fund universe for the three-, five-, and ten-year periods. Each of the asset classes, with the exception of the additional categories group, contributed to relative performance during the fiscal year. On an absolute basis, the equity portfolio fueled results with a return slightly below 22%, while the fixed income allocation was a slight drag on performance as this was one of the lowest returning asset classes during the fiscal year.

Notable manager contributions were Todd and UBS Large Cap U.S. equity and Baillie Gifford International equity portfolios, all of which outperformed their respective benchmarks by wide margins. This is in contrast to FY 2016 where most active equity managers struggled to outperform. This is a testament to maintaining long-term strategy and not overemphasizing short-term performance in monitoring.

Over the past fiscal year, equity markets performed strongly driven by strong economic and corporate fundamentals. The top performing regions were Europe (excluding the United Kingdom) and emerging markets. In the bond market, the 10-year U.S. Treasury yield ended the fiscal year at 2.31%, 82 basis points higher than the beginning of the fiscal year.

TRS's efforts to diversify away from traditional fixed income proved particularly beneficial during FY 2017 as rising interest rates led to a slightly negative return for the U.S. Government/Credit Index whereas the additional categories asset class, which is generally comprised of alternative fixed income, private credit and below investment grade bonds, produced an absolute return in excess of 10% for the fiscal year. The active management efforts with the fixed income asset class also proved fruitful as the in-house managed portfolios added value overall as did each of the externally managed portfolios. Overall, the fixed income portfolio outperformed the benchmark by 50 basis points for the fiscal year.

TRS's initiatives to diversify the real estate allocation also benefitted performance as the value added and opportunistic portfolios produced double digit gains as the returns on core and triple net lease real estate moderated during the fiscal year. In addition to real estate, TRS has diversified its alternatives portfolio across different private equity and infrastructure strategies over the past 10 years, resulting in a fiscal year return of 11.7% on a time-weighted basis.

We would like to thank the Board of Trustees, Investment Committee, and Investment Staff for their confidence. We appreciate the opportunity to assist the retirement system in meeting its investment goals.

Respectfully,

Patrick J. Kelly, CFA, CAIA
Partner

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Investment advice and consulting services provided by Aon Hewitt Investment Consulting, Inc., an Aon Company

RETIREMENT ANNUITY TRUST FUND

INVESTMENT POLICY SUMMARY

The TRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principles that guide investment-related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the System. This broad summary is a reference point for management of retirement assets and outlines the investment philosophy and practice of TRS.

INVESTMENT OBJECTIVES

TRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them. Generally, the retirement system's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, TRS holdings can withstand some short-term volatility. The retirement annuity trust fund's long-term investment objective is to achieve an annualized rate of return of 7.5%.

RISK CONTROLS

The TRS investment program faces various risks; however, the primary risk to TRS is that the assets will not support liabilities over long periods of time. In order to control this risk and any other risks, the board has taken the following steps on an ongoing basis:

- Actuarial valuations are performed each year to evaluate the funding objectives of the retirement system. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the System.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the retirement system.
- The TRS Investment Committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

ASSET ALLOCATION

Operating within relevant regulatory limitations, the System's investment consultant, on an annual basis, presents to the Investment Committee for approval target percentages and ranges for the System's various asset classes. Annually approved asset allocation parameters serve to balance the retirement system's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The System's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the retirement system's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as liability requirements, the level of funding, and statutory investment restrictions are important considerations within the context of the asset allocation decision making process. Consequently, asset allocations may differ markedly between various pension plans due to their unique circumstances.

The information below shows the System's asset allocation by fair value as of June 30, 2017, and June 30, 2016, as well as the target and strategic range for each asset class for fiscal year 2017.

Retirement Annuity Trust

	June 30,2017*	%	June 30,2016**	%
Cash Equivalents***	$ 366,129,983	2.0	$ 294,405,676	1.7
Fixed Income	3,020,457,273	16.2	2,878,918,409	17.1
Domestic Equities	7,682,590,280	41.3	7,210,451,881	42.9
International Equities	4,003,953,513	21.5	3,220,445,062	19.2
Real Estate	1,046,760,134	5.6	940,860,202	5.6
Private Equity	854,635,619	4.6	731,560,317	4.4
Timberland	208,219,943	1.1	201,253,033	1.2
Additional Categories	1,435,143,550	7.7	1,319,326,624	7.9
TOTALS	**$ 18,617,890,295**	**100.0**	**$ 16,797,221,204**	**100.0**

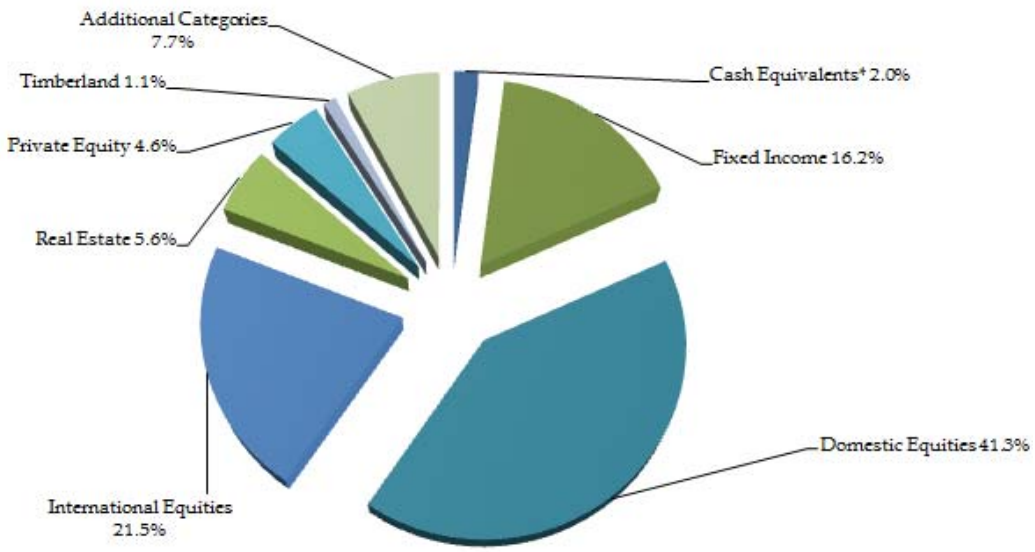
* *Includes Life Insurance Trust values of $86,443,328, Tax Shelter Annuity value of $343,792, and 401(h) value of 19,471,617.*

** *Includes Life Insurance Trust values of $90,113,180, Tax Shelter Annuity value of $352,815, and 401(h) value of 14,302,842.*

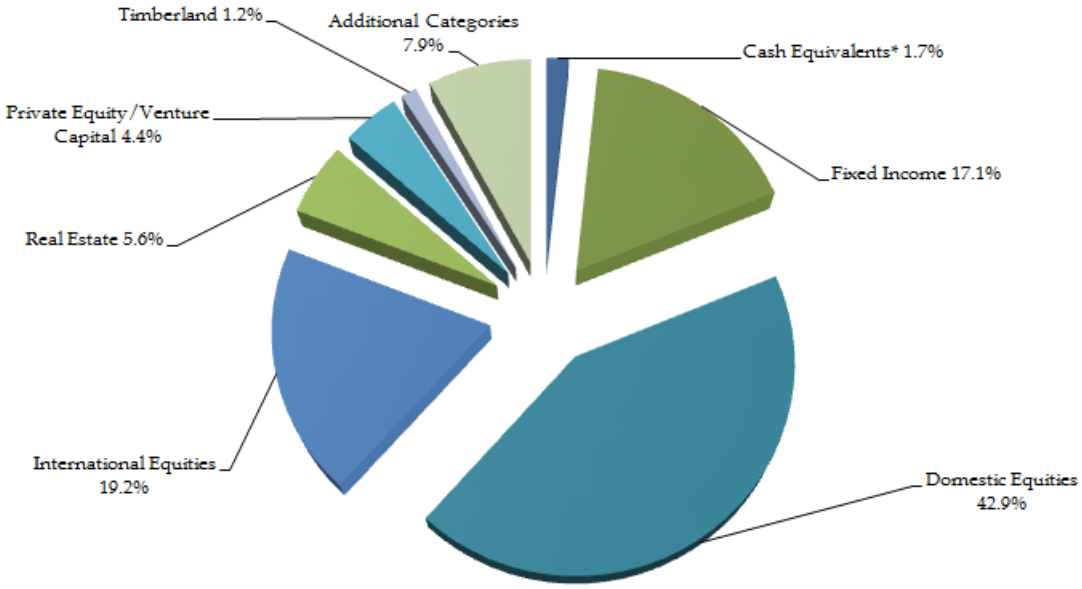
*** *Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

Distribution of Investments
Retirement Annuity Trust**
Fair Values

June 30, 2017



June 30, 2016



* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

** Includes Life Insurance Trust values.

Strategic Weightings by Asset Class

Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2017 (Mkt)**
Cash		1 - 3%	2.0%	**2.0%**
Fixed Income		12 - 19	15.0	**16.2**
Government/Agency/Other	Unlimited			9.1
Corporate	35%			7.1
Equity	65%	57 - 65	61.0	**62.8**
Domestic All Cap				1.3
Domestic Large Cap		32 - 40	36.0	34.0
Domestic Mid Cap		1 - 5	3.0	3.7
Domestic Small Cap		1 - 3	2.0	2.3
International* **	30%	17 - 23	20.0	21.5
Real Estate	10%	4 - 8	6.0	**5.6**
Alternative Investments*	10%	4 - 10	7.0	**5.7**
Additional Categories	15%	6 - 12	9.0	**7.7**
TOTAL			**100.0%**	**100.0%**

* Includes private equity, venture capital, timberland, and infrastructure investments.
** Starting with 7/2008, Cash is only the unallocated cash balance. Manager cash balances will be included with the asset type of the managers investments.
*** As of 6/30/17, 20.1% of Total International Equities were invested in Emerging Markets.

PORTFOLIO RETURNS

For the fiscal year, the retirement annuity trust fund's portfolio generated a total return of 15.37%, surpassing the policy benchmark return of 14.04%. Domestic equities returned 21.93% versus 21.17% for the Standard & Poor's 1500 Index, while international equities returned 23.32% versus 21.0% for the MSCI All Country World (Ex-US) Index. Fixed income investments outperformed, returning 0.12% versus -0.41% for the Barclays Government/Credit Index. Less traditional asset classes such as real estate, private equity, timberland, and alternative credit are beginning to contribute meaningfully to total return as those programs are expanded.

The table below details historical performance for the retirement annuity trust fund and its component asset classes for the period ended June 30, 2017. The retirement annuity trust fund's returns were generated by the Segal Marco Adivisors performance reporting system using a time-weighted rate of return calculation based upon market values.

Portfolio Returns continued ...

Schedule of Investment Returns - Retirement Annuity Trust - Gross

		Market Value	Last Qtr	FYTD	1 Yr	3 Yr*	5 Yr*	10 Yr*	20 Yr*
TOTAL PLAN	$	18,617,890,295	3.57	15.37	15.37	6.27	10.09	6.29	6.67
Policy Benchmark**			*3.21*	*14.04*	*14.04*	*6.16*	*9.69*		
Total Equity	$	11,686,543,794	4.56	21.93	21.93	7.12	13.14	6.14	7.02
Domestic Equity	$	7,682,590,281	3.19	21.17	21.17	9.04	14.97	7.45	7.64
S&P 1500 Index			*2.96*	*18.09*	*18.09*	*9.51*	*14.68*	*7.34*	
All-Cap Equities	$	232,768,027	2.43						
Russell 3000			*3.02*						
Large-Cap Equities	$	6,336,231,065	3.16	21.27	21.27	9.05	14.82	7.31	
S&P 500 Index			*3.09*	*17.90*	*17.90*	*9.61*	*14.63*	*7.18*	
Mid-Cap Equities	$	679,277,573	4.03	20.89	20.89	8.99	15.94	7.88	
S&P 400 Index			*1.97*	*18.57*	*18.57*	*8.53*	*14.92*	*8.56*	
Small-Cap Equities	$	434,313,616	2.67	22.98	22.98	9.53	15.99	8.62	
S&P 600 Index			*1.71*	*22.47*	*22.47*	*9.32*	*15.47*	*8.44*	
International Equity***	$	4,003,953,513	7.46	23.32	23.32	2.57	8.74	2.44	
MSCI AC World Ex US			*5.99*	*21.00*	*21.00*	*1.27*	*7.70*	*1.59*	
Fixed Income	$	3,020,457,273	1.56	0.12	0.12	3.01	2.90	5.46	5.86
Barclay's Govt./Credit Index			*1.69*	*-0.41*	*-0.41*	*2.62*	*2.29*	*4.57*	*5.33*
Real Estate									
Inhouse Triple Net Lease	$	392,640,022	1.96	8.93	8.93	8.75	8.22	8.28	8.78
CPI plus 2%			*0.51*	*3.68*	*3.68*	*2.96*	*3.33*	*3.67*	*4.12*
Core Real Estate:	$	358,090,905	1.54	7.93	7.93	12.08	11.93		
NCREIF ODCE (VW)			*1.70*	*7.87*	*7.87*	*11.34*	*11.79*		
Non-Core Real Estate:	$	296,029,206	3.48	11.21	11.21	16.87	18.26		
NCREIF Property Index			*1.75*	*6.97*	*6.97*	*10.17*	*10.49*		
Alternative Investments									
Private Equity	$	854,635,619	4.75	11.70	11.70	9.40	11.00	7.11	
Mature Private Equity	$	356,671,963	4.10	6.73	6.73	*7.05*	*8.55*		
S&P 500 plus 3%			*3.85*	*21.43*	*21.43*	*12.90*	*18.07*		
Private Equity < 5 Years	$	497,963,656	5.09	15.98	15.98	11.08			
Timberland:	$	208,219,943	1.31	5.99	5.99	7.73	5.85		
NCREIF Timberland Index			*0.70*	*3.35*	*3.35*	*5.54*	*7.16*		
Additional Categories	$	1,435,143,550	1.25	10.13	10.13	3.07	6.75		
B of A Merrill Lynch High Yield Master II			*2.14*	*12.75*	*12.75*	*4.48*	*6.92*		
Cash (Unallocated)	$	366,129,983	0.20	0.55	0.55	0.30	0.22	0.66	2.38
90 Day T-Bill			*0.20*	*0.44*	*0.44*	*0.20*	*0.15*	*0.55*	*2.04*

Total Plan Gross Return for 30-year period* 8.18

* *Returns are annualized for periods longer than one year.*

** *Prior to July 1, 2008, TRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index that represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.*

*** *As of 6/30/17, 20.1% of Total International Equities were invested in Ermerging Markets.*

Schedule of Investment Returns - Retirement Annuity Trust

2017	Annual Rate of Return Net of Investment Expense	15.00%
2016	Annual Rate of Return Net of Investment Expense	-1.32%
2015	Annual Rate of Return Net of Investment Expense	4.96%
2014	Annual Rate of Return Net of Investment Expense	17.95%

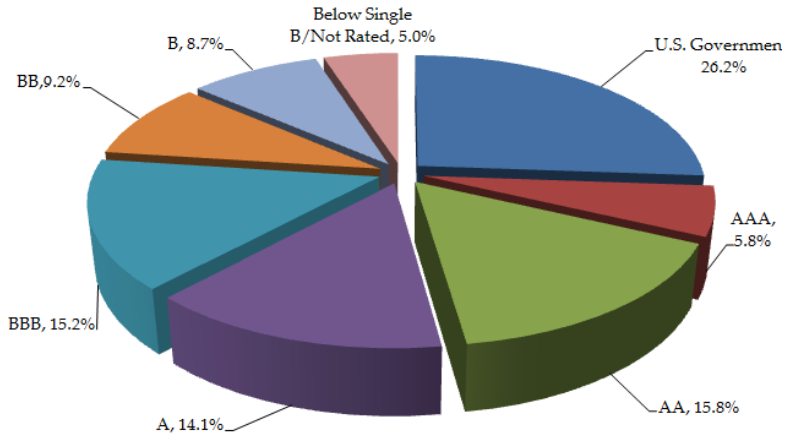
FIXED INCOME INVESTMENTS

As of June 30, 2017, the retirement annuity trust fund had approximately $3.0 billion, 16.2% of total assets, in the fixed income category of investments. The retirement annuity trust fund's fixed income investments maintained the average investment grade rating required by administrative regulation as of June 30, 2017.

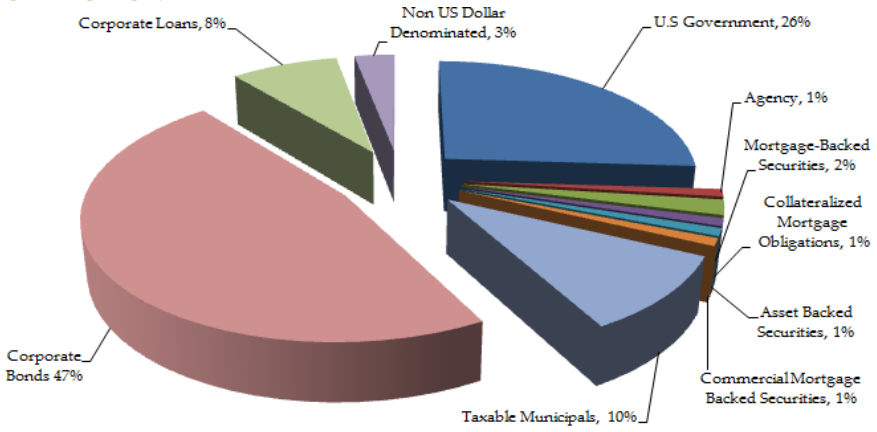
In addition, the retirement annuity trust fund had $1.4 Billion, 7.7% of total assets, in other debt related investments under a regulatory provision which allows for up to 15% of assets in "additional categories of investments" approved by the Board of Trustees. Investments under this authorization included two high yield bond portfolios and two syndicated bank loan portfolios. Also under this provision are several alternative credit portfolios including a multi - strategy opportunistic credit portfolio as well as distressed debt and specialty lending funds.

The credit quality distribution for the retirement annuity trust fund is illustrated below. This chart includes the fixed income category of investments as well as the high yield bonds, international fixed income, and the syndicated bank loan portfolios included in "additional categories of investments". Also illustrated below is the distribution of fixed income assets by sector, again including the high yield bonds, international fixed income, and the syndicated bank loan portfolios held under "additional categories of investments".

FIXED INCOME QUALITY DISTRIBUTION



FIXED INCOME SECTOR DISTRIBUTION



FIXED INCOME MARKET OVERVIEW

The retirement annuity trust fund's investment grade fixed income portfolios returned .12% for the fiscal year ending June 30, 2017. This compares favorably to the trust fund's fixed income benchmark, the Bloomberg Barclays U.S. Government / Credit Index, which returned -.41%. The outperformance was driven by the system's overweighting in corporate bonds which provided higher coupon interest than government bonds of similar duration.

The Federal Reserve (Fed) targets an overall annual inflation rate of 2%, a pace it views as appropriate for economic growth and price stability. Current inflation, as measured by the year-over-year Consumer Price Index (CPI) and Producer Price Index (PPI), were mixed with CPI lower and PPI higher during the last quarter of fiscal year 2017. The CPI was up only +1.9% year-over-year. The PPI has increased 2.4% over the past year. The CPI numbers were driven lower partly due to falling telecom prices and some declines in medical care. For overall CPI, oil prices bottomed in February of 2016, so the jump in overall CPI due to energy faded in February of 2017 and has since declined. The Fed's preferred measure is the price index for Personal Consumption Expenditures (PCE). This measure has moved lower and is now well below the Fed's target, with an overall year-over-year increase of 1.4%. The Federal Funds rate is now at 1.00% to 1.25%. The yield curve flattened significantly in FY 2017, with shorter maturities rising in yield due to the rate hikes while long rates were held down by lower inflation expectations. In summary, inflation has recently declined, and it is important to monitor and see if the data moves higher and closer to target for future Federal Funds rate increases.

The United States has now gone eleven straight years without 3 percent growth in real Gross Domestic Product (GDP), a record. The recession ended in June 2009. In the eight calendar years since then, real annual GDP growth has never exceeded the 2.6% it hit in 2015. Retail sales and consumer spending data were moderate, but disappointing given the strong employment and consumer confidence data. Consumer confidence moved much higher over the year and has reached the highest level since 2000. Housing has been a slight positive source of growth, but it has not been particularly strong since before the recession. Housing prices are up +5.7% over the past year as measured by the S&P/ Case-Shiller Home Price Index, the highest year-over-year gain in 2 ½ years. Measures of manufacturing activity were mixed, with strength in aircraft manufacturing, but no significant signs of overall strength.

Global risk assets (non-US treasuries) rallied during fiscal year 2017, driven largely by continued positive expectations for US fiscal policy, as well as continued improvements in global economic growth and inflation. Gains across most risk assets occurred despite persistent political divisiveness in the US, heightened geopolitical risks (most notably in North Korea), and a range of other international issues. However, the market is becoming more accustomed to expectations of a low growth/ low inflation environment as realized volatility in the treasury market has gradually fallen in 2017.

Investment grade corporates tightened by 10 basis points during the last quarter of fiscal year 2017 to +111 basis points over U.S. Treasuries of same duration, and are trading tighter than long-term averages. Spreads for Investment Grade Corporates ended fiscal year 2016 +162. Utilities and industrials performed slightly better than financials while longer duration corporates had higher returns than shorter duration corporates. In mortgages, Commercial Mortgage Backed Securities (CMBS) outperformed mortgage pass-throughs and ABS. Better global economic growth, rising equity prices and the continued search for yield all led investors to buy higher yielding fixed income for fiscal year 2017.

With U.S. Treasury rates and risk premiums on corporate bonds both still relatively near the low end of their historical range, investment grade fixed income is an asset class with moderately unfavorable risk / reward characteristics and below average upside potential. The retirement system continues to adjust the structure of its fixed income portfolio to control risk and maintain required liquidity. Specifically, the retirement system continues to increase exposure to nontraditional debt-related investments, reduce exposure to investment grade fixed income, and limit our interest rate risk by being slightly short benchmark durations.

EQUITY INVESTMENTS

As of June 30, 2017, the retirement annuity trust fund's public equity investments had a market value of $11.7 billion, representing 62.8% of total assets. The Pension Plan's U.S. equity portfolio returned 21.2% for the fiscal year and outperformed its policy benchmark by 3%. Positive equity returns over the fiscal year explains the year over year increase in market value. The retirement annuity trust fund divides its public equity into two broad categories: domestic and international.

The domestic portfolio had a market value of $7.7 billion as of June 30, representing 41.3% of total assets. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of three well known component indices based upon market capitalization: the S&P 500 large cap, S&P 400 mid cap, and the S&P 600 small cap. The

retirement annuity trust fund's domestic equity holdings are comprised of twelve portfolios. Three of the portfolios are internal passively managed index portfolios benchmarked to the S&P 400, 500, and 600. The other nine portfolios are managed externally by five different asset managers, with each portfolio representing a specific strategy and measured against an appropriate benchmark. The collective array of portfolios provides diversification by capitalization, manager, style, and strategy.

The market value of the international equity holdings as of June 30, 2017 was $4.0 billion, representing 21.5% of total assets. The Pension Plan's international equity portfolio returned 23.3% for the fiscal year and outperformed its policy benchmark (MSCI All Country World ex-U.S. Index) by 2.3% points. The benchmark for international equities is the Morgan Stanley Capital International All Country World Index ex US (MSCI ACWI ex US), which represents the markets of 22 developed countries and 23 emerging market countries. Six external asset managers manage the retirement annuity trust fund's international equities, one of which is a passively managed international index fund.

EQUITY INVESTMENTS OVERVIEW

US equity markets finished the first quarter of the fiscal year with positive returns across all market capitalizations and styles. US economic data released during the quarter continued to indicate moderate economic expansion but many remained cautious with continued evidence of slack in labor markets. Investors experienced low levels of volatility in what would be a recurring theme for fiscal year 2017. There was a notable reversal in sector performance as defensive, income-oriented stocks posted negative returns while more economically sensitive sectors outperformed. More specifically, sectors like Financials, Industrials, and Materials outperformed while Utilities and Telecommunication Services declined the most. Consumer Staples and Real Estate stocks also declined while Consumer Discretionary, Energy, and Health Care stocks lagged slightly. Growth moderately outperformed value for the quarter and small-caps in general performed with micro-caps having the greatest outperformance.

US equity markets started the second fiscal quarter with a slight decline, fueled largely by uncertainty surrounding the presidential election. While many initially feared a stock market correction, results swiftly shifted post-election and all major US equity indices finished the first half of the fiscal year in positive territory. Post-election, equity markets were characterized by increased risk appetite driven by expectations that the Trump administration could enact fiscal change. Financial stocks led the market higher, rising more than 20% during the quarter. Infrastructure based sectors like Industrials, Energy, and Materials also outperformed the broader index. Health Care, Real Estate, and Consumer Staples declined in value during the quarter while Utilities and Information Technology also underperformed. Small-cap indices substantially outperformed large-cap counterparts and value stocks outperformed growth stocks

Developed international markets saw strong, positive returns in the first quarter on both an absolute basis and relative to the broad U.S. equity market. In the UK, the Bank of England ("BOE") announced preemptive measures to counteract potential negative effects of the Brexit vote, while the rest of Europe took a more measured response to Brexit. Country returns were largely positive with only a few in the red. During the first quarter the style trend reversed, with value outperforming growth stocks and small-cap outperforming large-caps. Emerging markets continued their rally and outperformed all other equity regions. OPEC agreed to limit output, providing short-term support for emerging market countries heavily tied to the price of oil. In contrast to developed markets, small-cap stocks in emerging markets could not keep pace with the rally in larger stocks and growth outperformed value for the quarter.

Developed international markets ended the second quarter slightly negative. In Europe, the European Central Bank announced a moderation in the pace of asset purchases but also extended the duration of the purchase program. By country, there were few bright spots, with only a few European countries posting positive returns in the fourth quarter. Cyclical sectors, such as Financials and Energy, provided positive contributions for the quarter. There was an inflection point for value stocks during the quarter, producing strong, absolute returns. Growth stocks continued to lag and remained in negative territory for the year and small-cap stocks underperformed large-cap stocks. Emerging Markets underperformed developed markets by a significant margin. Poor performance in emerging markets during the quarter stemmed from fears that stimulus programs in the US could lead to higher bond yields and a stronger dollar, which could draw significant capital to the currency. Emerging market small-cap stocks underperformed large- cap stocks, and value stocks outperformed growth stocks for the quarter.

The second half of the fiscal year began with US equity markets in positive territory and the stock market, again, reached a new high as the Russell 3000 Index increased 5.7%. This was largely a result of expectations for improved corporate earnings driven by continued improvements in US fundamentals and continued muted volatility. For the time being, businesses and consumers were optimistic about the U.S. economy's prospects, but so-called soft data (sentiment)

did not appear to translate into accelerated growth as reflected in hard (quantifiable) data. The post-election rally paused in March when the House Republicans could not agree on a replacement for Obamacare. Performance was driven primarily by Technology and Health Care stocks while Consumer Discretionary, Utilities, and Materials also outperformed the broader index. Energy stocks declined the most during the quarter, driven by a decline in global oil prices. Telecommunication Services, Financials, Real Estate, and Industrials also lagged the index. Investors preferred growth stocks at the expense of value and despite a general slowdown across market caps and styles, markets favored large cap, growth-oriented names, as well as momentum and quality factors.

Domestic equity markets continued to rally during the second half of the fiscal year, albeit at a slower rate, but still reaching record highs across major indices. Low volatility and expectations of strong profit growth continued to be the key drivers of the market. Consumer and business confidence remained high despite stalled healthcare legislation that delayed passage of a tax bill. Expectations for fiscal stimulus were again supportive given the positive tone from the Federal Open Market Committee ("FOMC") regarding near-term economic growth and inflation expectations. The Unemployment rate fell to cycle low of 4.2% but this was against a backdrop of a very low labor participation rate. In some ways, US equity performance for the second half of fiscal 2017 represented a reversal of the trend experienced during the second half of fiscal 2016 as low volatility sectors and securities viewed as "bond proxies" performed well. In contrast, this period proved to be more favorable to high momentum, high growth areas of the market. Facebook, Amazon, Netflix and Google (FANG) stocks continued their outperformance which at year-end accounted for a larger percent of the S&P than all energy stocks combined. The sector that led the market higher was Health Care while Information Technology, Industrials, and Financials increased more than the broader index. Equities provided positive returns across all market caps and styles, but with significant dispersion across sectors and market factors. Large-cap stocks continued to outpace small-cap stocks, with the exception of micro-caps.

International equity growth stocks outperformed value in both developed and emerging markets for the third quarter. Underpinning the positive international equity performance was the expectation, supported by improving economic fundamentals, that the global economy was on more stable footing than previously believed. This was especially true in the UK, where recent economic data showed a steady expansion in the face of potentially leaving the EU Common Market. From a regional standpoint, emerging markets outperformed developed markets with India, Korea, and Mexico all posting mid-teen returns while commodity sensitive economies such as Canada and Norway lagged notably. Similarly, sector leadership rotated from Energy to Technology, Healthcare, and Consumer Discretionary largely for the same reason as US equities.

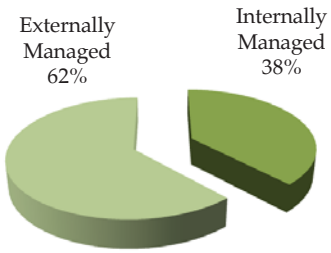
During the fourth quarter, International equity markets continued to react positively to signs of strengthening economic growth across both developed and emerging markets, driving equities higher. Supportive developments include reduced political uncertainty and positive indicators of GDP and earnings growth. This, coupled with more reasonable valuations in comparison to the US, supported the ACWI ex US Index's quarterly outperformance versus the Russell 3000 for the end of the fiscal year. Geopolitical risks (including North Korea, French elections, and US fiscal policy) temporarily drove higher volatility. From a country perspective, political developments drove a generally risk-on repricing of assets. As would be expected during periods of growth leadership, Healthcare and Technology led performance from a sector standpoint, with Materials, Energy, and Telecom lagging. As in the US, international growth equity broadly outperformed value. Developed small-cap equities outperformed large-cap equities, while emerging markets equities narrowly edged out developed markets equities.

In summary, the US equity markets hit record highs in each quarter as the US continued its recovery from the Great Recession with the lowest real GDP growth of the post war period. The continued expansion in global fundamentals provided a steady backdrop for equity markets in general. Global monetary policy was still accommodative but less so than in prior years. Inflation remained near the low end of the Fed's stated goals driven by low commodities and wages. Fiscal year 2017 was a period of heighted geopolitical risks but volatility remained extremely low. Global equity valuations ended the year more attractive than domestic equities but that divergence was somewhat diminished after global fundamentals and valuations improved.

REAL ESTATE

The retirement annuity trust fund's real estate investments had a market value of $1.05 billion as of June 30, 2017, representing 5.6% of total assets. The retirement annuity trust fund's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow, and provide diversification, thereby reducing the volatility of the overall investment portfolio.

Real Estate Investments
$1.05 Billion Fair Value
As of June 30, 2017



The retirement annuity trust fund's real estate exposure is currently provided through thirteen portfolios. The fund maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high credit quality tenants. TRS Kentucky is also invested in a commingled real estate fund (PRISA Fund), which is managed by Prudential Real Estate Investors. This fund is a core real estate equity fund which invests primarily in existing income-producing properties with strong cash flows and the potential for capital appreciation. The fund is diversified across several property types including office, retail, industrial, apartment, self-storage and hotel.

Additionally, the retirement annuity trust fund is invested in Carlyle Property Investors, a core-plus commingled fund and ten real estate limited partnerships: Carlyle Realty Partners VI, Carlyle Realty Partners VII, Blackstone Real Estate Partners VII, Blackstone Real Estate Partners VIII, Rockwood Capital Real Estate Fund IX, Rockwood Capital Real Estate Fund X, TA Realty Associates Fund X, TA Realty Associates Fund XI, AG Net Lease Realty Fund III, and Landmark Real Estate Partners VII. Going forward, investment staff will continue to opportunistically add to the annuity trust fund's real estate investments.

REAL ESTATE OVERVIEW

As the economic recovery continues, market consensus is that we are deeper into the real estate cycle. That said, in a slow-growth environment with continuing low interest rates, the market has presented attractive investment in various real estate sectors and markets through the fiscal year ended June 30, 2017.

Evaluating general business conditions, as we are 7-8 years into a recovery, we constantly evaluate the general possibility of a recession at this stage. If one occurs, however, it is likely that a recession would not be real estate-led, as was the case in the Global Financial Crisis, for two main reasons. First, real estate lending activity and the amount of outstanding commercial debt remain relatively restrained when compared to prior cycles; there is no large sign of over-heating in the debt markets. Further, construction activity remains generally muted when compared to prior recoveries.

As a result, from the perspective of operating fundamentals, the markets present a reliable underpinning. In this cycle, multifamily (apartment) fundamentals have shown among the most robust reliable demand characteristics of any sector. That said, the multifamily sector has seen the most corresponding new construction. Even so, net absorption has kept up with new construction activity in most markets. Nationally, it appears that the growth of new deliveries is decelerating. With continued growth among expected renters, it appears that vacancy rates will drop again toward their prior lows of 2H 2016.

In other sectors, operating fundamentals remained generally steady. The commercial retail sector, however, saw vacancies increase as e-commerce and fundamental changes took hold. We expect commercial retail to continue to be a headwind for real estate. As businesses become increasingly reliant on online sales growth, their brick and mortar stores become costly and less efficient. All leading to an oversupply of retail space and lower valuations.

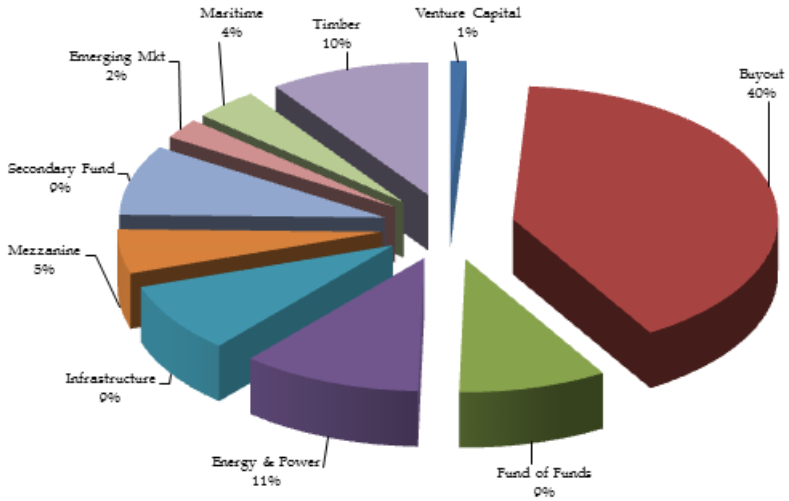
In the capital markets, lending remained relatively disciplined, especially compared to prior recoveries. In particular, construction lending activity remained very much in check. Returns among core managers continued to decrease over the fiscal year. The core index showed quarterly returns of over 2.0% in the first half of the fiscal year; in the second half, we show that rent growth had decelerated, dropping to a level of approximately 1.70% in the 4th quarter of the fiscal year.

In summary, due to current operating fundamentals and low lending rate, core real estate investments continued to drive equity real estate returns. However, opportunistic and non-core real estate investments began leading the sector in the 4th quarter and have been a solid contributor throughout the year. As we find opportunities, we will continue to invest in the real estate sector to enhance returns and serve as a diversifier to our other holdings.

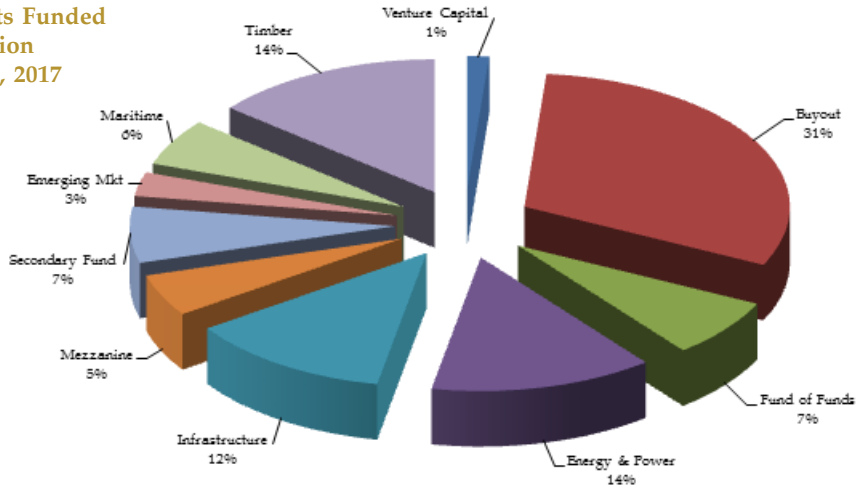
ALTERNATIVE ASSETS

As of June 30, 2017, the retirement annuity trust fund had committed $2.045 billion to alternative investments and had funded $1.186 billion of those commitments. The percentage of the retirement annuity trust fund's portfolio invested in alternative assets was 5.7%. The retirement annuity trust fund's current alternative asset portfolio consists of private equity investments and timberland.

Alternative Assets Committed
$2.045 Billion
as of June 30, 2017



Alternative Assets Funded
$1.186 Billion
as of June 30, 2017



PRIVATE EQUITY

The retirement annuity trust fund has exposure to venture, buyout, infrastructure, energy, mezzanine and several other private equity sectors via participation in limited partnerships as well as investments in funds of funds. The retirement annuity trust fund has a relatively young private equity investment program, which it intends to continue to grow with a disciplined plan of commitments each year. The retirement annuity trust fund looks to diversify its private equity portfolio by manager, country, strategy, and vintage year. Vintage year diversification is achieved by building out the portfolio with disciplined levels of commitments over time. A commitment to any given partnership shall not exceed 20% of the partnership's total commitments.

The Board and staff understand that private equity investments (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with other publicly traded assets, this asset class can help to diversify and reduce risk for the retirement annuity trust fund's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence, during the harvesting period.

PRIVATE EQUITY MARKET OVERVIEW

Private equity markets are positively affected by strong public equity markets. When public markets are strong more private equity portfolio companies are sold. The past fiscal year has seen an active IPO market as the public markets grind higher. However, as result of the strong public equity markets the entry price for private equity portfolio companies has risen forcing many managers to pay higher multiples for underlying portfolio companies or to put their dry powder to work at a much slower pace that in the past.

The past fiscal year was a period of elevated interest in the private equity market as investors continue to increase their commitment amounts but pare down their fund relationships to only the most high-quality managers. The past fiscal year has also seen large buyout funds returning to the marketplace. We have begun to see more opportunity in the large cap buyout space while continuing to see opportunity in the middle market space and in other niche areas such as infrastructure and distressed credit. Additionally, the European markets continue to present investment opportunities in the private equity space.

TIMBERLAND

In addition to private equity, the retirement annuity trust fund has invested in timberland in the alternative asset class. As of June 30, 2017 the retirement annuity trust fund owns approximately 73,000 acres of timberland outright, has a 7.15% interest in a commingled fund that holds approximately 98,000 acres of timberland and is a member of a joint venture that purchased an interest in approximately 124,000 acres of timberland located across seven southern states. Timberland is, by nature, a long term investment as our anticipated time horizon in this asset category is generally a minimum of ten to fifteen years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the retirement annuity trust fund's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long-term.

The retirement annuity trust fund diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are primarily driven from net cash flow generated from the sale of trees (referred to as stumpage sales) and capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of forest commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland from the conversion of timberland into higher and better uses, such as vacation property sales.

TIMBERLAND MARKET OVERVIEW

U.S. timber markets have been weak across most timber-growing regions throughout the fiscal year, with the only exception being the Pacific Northwest. An oversupply of timber has allowed wood-using mills to maintain sizeable inventories, pushing timber prices lower through the first part of the fiscal year. While widespread, this oversupply issue has been more problematic in the U.S. South than other U.S. timber growing regions.

After hitting an 8-month low in May of 2017, U.S. housing starts for June 2017, jumped approximately 8 percent from the previous month. It was the strongest construction activity in four months and approximately 7 percent higher than June of 2016. The price of lumber soared through the first half of 2017, reflecting a 17 percent year-over-year increase. This positive jump was due primarily to a reduced level of Canadian lumber exports to the U.S., driven lower by the British Columbia wildfires and tariff uncertainty relating the Softwood Lumber Agreement.

Significant demand growth is expected for timber products. Many forest product manufacturers have announced or completed capital investments relating to new mills, expansions, and improvements. An increasing demand, both domestic and foreign, for softwood logs and lumber is anticipated to drain the oversupply of logs within the next several years. Historically, lumber prices and timber stumpage prices have been closely correlated, as such, the lagging timber markets are expected to regain lost ground on the increasing lumber prices as the oversupply of timber diminishes.

Retirement Annuity Trust
Portfolios Fair Values *
June 30, 2017

INTERNALLY MANAGED	
Cash Equivalents	
Cash Collections Fund (Unallocated)	$ 366,129,983
Fixed Income	
Intermediate Bond Fund	704,741,921
Long Term Bond Fund	549,720,953
Broad Market Bond Fund	548,178,766
Internal Bond Fund	173,967,739
Life Insurance Trust	86,443,328
Tax Shelter Fund	343,792
Equity	
S & P 500 Stock Index Fund (Large Cap)	2,295,781,492
S & P 400 Stock Index Fund (Mid Cap)	347,038,280
S & P 600 Stock Index Fund (Small Cap)	251,837,025
Real Estate	
Internally Managed Fund	392,640,022
Subtotal	**$ 5,716,823,301**
EXTERNALLY MANAGED	
Fixed Income	
Galliard Capital Management	504,330,367
Ft. Washington Broad Market	452,730,406
Domestic Equity	
Todd Asset Management (Large Cap Core)	1,111,030,934
UBS (Large Cap Value)	953,513,471
Wellington (Large Cap Core)	672,382,208
GE Asset Management (Large Cap Growth)	628,650,762
Todd Asset Management Opportunity Fund	433,437,988
Wellington (Mid Cap Core)	332,239,292
UBS (130/30)	241,434,211
Ft. Washington Focused Equity (All Cap Core)	232,768,027
Wellington (Small Cap Core)	182,476,591
International Equity	
Baillie Gifford EAFE Alpha	977,419,949
UBS All Country World ex US	799,681,143
Todd Asset Management International	778,615,779
Blackrock All Country World ex US IMI	734,761,148
Baring All Country World ex US	621,464,493
Todd Asset Management International Intrinsic Value	92,011,001
Real Estate	
Prudential PRISA Fund	312,737,352
Carlyle Property Advisors	45,353,554
Rockwood Capital Real Estate Fund IX	43,752,117
Blackstone Partners VII, LP	43,041,226
The Realty Associates Fund X	41,781,817
AG Net Lease Realty Fund III, LP	36,464,149
Carlyle Realty Partners VII, LP	33,693,430
Landmark Real Estate Partners, VII	24,842,936
Blackstone Partners VIII, LP	22,708,607
The Realty Associates Fund XI	19,914,072
Carlyle Realty Partners VI, LP	18,309,058
Rockwood Capital Real Estate Fund X	11,521,794
Alternative Investments	
IFM Global Infrastructure LP	116,075,860
Molpus Woodlands Group Lake Superior Timberlands LLC	111,822,137

Externally Managed continued ...	
Molpus Seven States LLC	63,114,118
Hellman & Friedman Fund VII	58,145,419
Public Pension Capital LLC	45,763,588
Alinda Infrastructure Fund II	40,559,460
APAX VIII, LP	36,885,163
KKR & Co European Fund III	33,809,458
Actis Global Fund IV	33,783,888
Hancock Bluegrass LLC - Oregon	33,283,688
NGP Natural Resources XI, LP	29,531,128
J. P. Morgan Maritime Fund	28,958,495
Riverstone/Carlyle E & P Fund IV	26,902,427
KKR & Co European Fund IV	26,265,452
Ft. Washington Fund VI	25,815,503
Carlyle Global Financial Services Partners II	24,829,478
NGP Natural Resources X, LP	23,185,643
Oaktree European Principal Fund III	22,839,529
Riverstone E & P Fund VI	20,608,230
Carlyle Europe Partners IV, LP	19,731,527
Audax Private Equity Fund IV, LP	19,652,144
Ft. Washington Fund VIII	19,511,120
Stepstone Pioneer Capital Fund III, LP	19,258,745
J. P. Morgan Maritime Fund II	16,863,863
Gavea Investments Fund V, LP	16,285,430
Riverstone E & P Fund V	15,854,256
Oaktree Mezzanine Fund IV	14,951,354
Chrysalis Venture Fund III	14,691,809
Audax Mezzanine Fund III	12,369,189
Lexington Capital Partners Fund VII	11,690,390
KKR & Co Fund 2006	11,127,779
Landmark Equity Partners Fund XIV, LP	10,850,416
Landmark Equity Partners Fund XV, LP	10,792,308
Ft. Washington Fund V	9,208,619
Lexington Capital Partners Fund VIII	8,587,280
Audax Private Equity Fund V, LP	8,229,847
Oaktree Mezzanine Fund III	6,367,478
Ft. Washington Fund IX-K	3,839,985
Ft. Washington Fund IX	3,418,374
Audax Mezzanine Fund IV	2,840,438
Hellman & Friedman Fund VIII	2,834,423
CapitalSouth Partners Fund III	891,604
APAX IX, LP	828,520
Additional Categories	
Ft. Washington High Yield Bond Fund	330,130,219
Marathon TRS/Credit Fund LP	323,865,814
Shenkman Capital Management	175,979,332
Columbia High Yield Fund	163,719,768
Golub Capital Pearls 11, LLC	123,061,241
Baarings European Loan Fund (Babson)	103,170,000
Marathon European Credit Opp Fund II	60,730,585
Oaktree Opportunities IX, LP	44,345,399
Marathon European Credit Opp Fund III	34,061,480
Highbridge Principal Strategies III	29,828,126
Avenue Special Situations Fund VI	20,914,355
Oaktree Opportunities X, LP	9,847,616
Oaktree European Dislocation Fund, LP	7,532,944
Oaktree European Capital Solutions Fund	6,937,708
AG Select Partners Advantage Fund	1,018,963
Subtotal	**$ 12,901,066,994**
TOTAL ASSETS	**$ 18,617,890,295****

* *Detailed information concerning the market values of all TRS investments is available upon request.*

** *Includes Life Insurance Trust values of $86,443,328, Tax Shelter Annuity value of $343,792, and 401(h) value of $19,471,617. This does not include the J. Losey Scholarship Fund.*

Investment Summary
Fair Value – Retirement Annuity Trust
June 30, 2017

Type of Investment	Fair Value 06/30/16	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/17*
Cash Equivalents	$ 523,293,619	$ 3,735,654,179	$	$ 3,713,633,496	$ 545,314,302
Fixed Income	2,823,674,612	2,967,443,502	(90,404,509)	2,747,017,104	2,953,696,501
Real Estate	940,860,202	158,240,822	37,946,168	90,287,058	1,046,760,134
Alternative	932,813,350	265,295,943	87,017,966	222,271,697	1,062,855,562
Equities	10,267,066,002	3,382,373,692	2,054,391,373	4,114,174,429	11,589,656,638
Additional Categories	1,309,513,418	539,702,681	76,007,789	505,616,730	1,419,607,158
TOTAL	**$ 16,797,221,203**	**$ 11,048,710,819**	**$ 2,164,958,787**	**$ 11,393,000,514**	**$ 18,617,890,295**

* *Includes Life Insurance Trust values of $86,443,328, Tax Shelter Annuity value of $343,792, and 401(h) value of $19,471,617. This does not include the J. Losey Scholarship Fund.*

Retirement Annuity Trust
Contracted Investment Management Expenses
Fiscal Year 2016-17
(In thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 8,791,888	$ 17,612	20.0
Fixed Income Manager(s)	957,060	384	4.0
Real Estate	654,120	8,813	134.7
Additional Categories	1,435,144	9,454	65.9
Alternative Investments [2]	1,062,856	17,429	164.0
TOTAL	**$ 12,901,068**	**$ 53,692**	**41.6**
Administrative and Operation Expenses			
Custodian Fees	$ 18,618,484	$ 482	0.3
Consultant Fees		499	0.3
Legal & Research		57	0.0
Other Administrative and Operational		3,117	1.7
TOTAL	**$ 18,618,484**	**$ 4,155**	**2.2**
GRAND TOTAL		**$ 57,847**	**31.1**

(1) – One basis point is one hundredth of one percent or the equivalent of .0001.
(2) – Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.

Schedule of Contracted and Administrative Investment Expenses
Retirement Annuity Trust
June 30, 2017

INVESTMENT COUNSELOR FEES

EQUITY MANAGERS		
Baillie Gifford		3,114,384
Baring Asset Management, Inc.		2,473,839
Fort Washington Focused Equity		425,662
GE Asset Management		786,682
Todd Asset Management LLC		1,325,541
UBS Global Asset Management		5,980,296
Wellington Management Company		3,168,837
Blackrock		336,647
Total Equity Managers	**$**	**17,611,888**
FIXED INCOME MANAGERS		
Fort Washington Investment Broad Market		160,777
Galliard Capital Management		222,920
Total Fixed Income Managers	**$**	**383,697**
REAL ESTATE		
Prudential PRISA		2,380,988
Angelo Gordon Net Lease Fund III		598,738
Blackstone Partners Fund VII, L.P.		496,154
Blackstone Partners Fund VIII, L.P.		750,000
Carlyle Realty Partners Fund VI, L.P.		273,328
Carlyle Realty Partners Fund VII, L.P.		698,083
Carlyle Property Investors		84,124
Landmark Real Estate Fund VII		500,000
Landmark Real Estate Fund VIII		273,098
Rockwood Capital Real Estate Fund IX, L.P.		856,250
Rockwood Capital Real Estate Fund X, L.P.		298,052
TA Realty Associates Fund X, L.P.		992,424
TA Realty Associates Fund XI, L.P.		611,358
Total Real Estate Managers	**$**	**8,812,597**
ADDITIONAL CATEGORIES		
Angelo Gordon Select Partners Advantage Fund		12,613
Avenue Capital Special Situations Fund VI, L.P.		178,981
Barings European Loan Fund		402,478
Columbia High Yield Fund		597,234
Fort Washington Investments High Yield		650,178
Golub Capital - Pearls 11, LLC		1,052,994
Highbridge Principle Strategies Fund III, L.P.		716,902
Marathon Credit Fund		2,552,521
Marathon European Credit Fund II		740,629
Marathon European Credit Fund III		433,519
Oaktree European Capital Solutions Fund, L.P.		(4,460)
Oaktree European Dislocation Fund, L.P.		228,174
Oaktree Opportunities Fund IX, L.P.		786,258
Oaktree Opportunities Fund X, L.P.		399,831
Shenkman Capital		706,514
Total Additional Category Managers	**$**	**9,454,366**
ALTERNATIVE INVESTMENTS		
Actis Global Fund IV, L.P.		994,000
Alinda Infrastructure Fund II, L.P.		607,098
APAX Fund VIII, L.P.		435,385
APAX Fund IX, L.P.		794,486
Audax Mezzanine Fund III, L.P.		125,504
Audax Mezzanine Fund IV, L.P.		443,335
Audax Private Equity Fund IV, L.P.		
Audax Private Equity Fund V, L.P.		100,037
Capital South Fund III, L.P.		93,487
Carlyle Europe Partners IV, L.P.		634,085
ALTERNATIVE INVESTMENTS continued ...		
Carlyle Global Financial Services Fund II, L.P.		609,560
Chrysalis Fund III, L.P.		238,628
Fort Washington Fund V, L.P.		72,312
Fort Washington Fund VI, L.P.		180,064
Fort Washington Fund VIII, L.P.		126,000
Fort Washington Fund IX, L.P.		38,608
Fort Washington Fund IX-K, L.P.		38,588
Gavea V		600,000
Hancock Bluegrass LLC Oregon		242,332
Hellman and Friedman Fund VII, L.P.		241,322
Hellman and Friedman Fund VIII, L.P.		566,765
IFM Global		1,066,848
JP Morgan Maritime Fund , L.P.		540,562
JP Morgan Maritime Fund II, L.P.		230,959
KKR Fund 2006, L.P.		(22,227)
KKR European Fund III, L.P.		30,418
KKR European Fund IV, L.P.		304,564
KKR Americas Fund XII, L.P.		326,388
Landmark Equity Partners Fund XIV, L.P.		300,000
Landmark Equity Partners Fund XV, L.P.		300,000
Lexington Capital Partners Fund VII, L.P.		154,246
Lexington Capital Partners Fund VIII, L.P.		319,487
Molpus Lake Superior Michigan		864,015
Molpus Lake Superior Hiwassee		70,606
Molpus Seven States		591,339
NGP Natural Resources Fund X, L.P.		478,796
NGP Natural Resources Fund XI, L.P.		660,075
Oaktree European Principal Fund III, L.P.		308,573
Oaktree Mezzanine Fund III, L.P.		94,328
Oaktree Mezzanine Fund IV, L.P.		182,021
Stepstone Partners Fund III, L.P.		175,816
Public Pension Capital		1,432,854
Riverstone/Carlyle Energy and Power Fund IV, L.P.		171,319
Riverstone/Carlyle Energy and Power Fund V, L.P.		164,306
Riverstone Energy and Power Fund VI, L.P.		1,502,018
Total Alternative Managers	**$**	**17,428,907**

ADMINISTRATIVE & OPERATIONAL EXPENSES

CUSTODIAN		
The Bank of New York Mellon		481,653
Total Custodian Fees	**$**	**481,653**
CONSULTANT		
Aon Hewitt		413,850
Bevis Longstreth		51,660
George Philip		33,965
Total Consultant Fees	**$**	**499,475**
LEGAL & RESEARCH		
Reinhart Boerner Van Deuren		5,936
Ice Miller		51,266
Total Legal & Research	**$**	**57,202**
OTHER		
Other Administrative and Operational (includes Personnel, Subscription services, etc.)		3,116,857
Total Other	**$**	**3,116,857**
TOTAL INVESTMENT EXPENSES	**$**	**57,846,642**

Ten Largest Stock Holdings Ranked [1] [2] by Fair Value June 30, 2017

Rank	Description	Fair Value	Percentage of Equities
1	Apple Inc	181,213,021	1.55
2	Amazon.com Inc	121,056,144	1.04
3	Facebook Inc	113,267,612	0.97
4	JP Morgan Chase & Co	111,105,383	0.95
5	Microsoft Corp	92,586,914	0.79
6	UnitedHealth Group Inc	86,350,836	0.74
7	Allergan PLC	84,855,426	0.73
8	Alphabet Inc/CL C	77,283,852	0.66
9	Alphabet Inc/CL A	71,857,756	0.61
10	Bank of America Corp	69,889,130	0.60

Top Ten Fixed Income Holdings [2] by Fair Value June 30, 2017

Rank	Description	Maturity	Coupon	Par Value	Fair Value	Percent of Fixed Income
1	U S Treasury-CPI Inflation	1/15/2027	0.375	81,311,215	79,858,915	2.64
2	U S Treasury Note	6/30/2019	1.625	45,000,000	45,200,385	1.50
3	U S Treasury Note	5/15/2026	1.625	45,000,000	42,662,115	1.41
4	U S Treasury Note	5/15/2020	1.500	40,000,000	39,954,680	1.32
5	U S Treasury Bond	8/15/2023	6.250	31,900,000	39,699,295	1.31
6	U S Treasury Note	5/15/2024	2.500	31,000,000	31,761,670	1.05
7	U S Treasury Note	2/15/2025	2.000	32,000,000	31,561,248	1.05
8	U S Treasury Bond	2/15/2047	3.000	29,750,000	30,688,970	1.02
9	U S Treasury Bond	8/15/2029	6.125	22,000,000	30,651,324	1.01
10	U S Treasury Note	11/30/2019	1.500	30,000,000	30,028,140	0.99

(1) Includes only actively managed separate accounts.
(2) Detailed information concerning these values along with book values and cost of all TRS investments is available upon request.

Transaction Commissions Fiscal Year 2016-17

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Abel Noser	4,872,893.00	46,279.83	0.009	2.78 %
Allen & Co	1,500.00			0.00
Apex Clearing	2,192.00	76.72	0.035	0.00
Avondale Partners, LLC	10,027.00	350.95	0.035	0.02
Barclays	363,505.00	9,841.81	0.027	0.59
Blair, William & Co	50,454.00	1,652.51	0.033	0.10
BMO Capital Markets	104,249.00	3,901.83	0.037	0.23
BNY ConvergEX Group	27,719.00	1,065.49	0.038	0.06
BTIG	158,424.00	6,143.68	0.039	0.37
Burke & Quick Partners LLC	11,540.00	403.93	0.035	0.02
Canaccord Genuity, Inc.	32,070.00	1,122.48	0.035	0.07
Cantor Fitzgerald & Co	57,247.00	1,470.81	0.026	0.09
CIBC Worldmarket	39,782.00	1,507.51	0.038	0.09
Citigroup Global	201,757.00	4,148.50	0.021	0.25
ConvergEx - Algos	17,901,753.00	89,508.85	0.005	5.38
ConvergEx - FS	4,409,964.00	44,099.64	0.010	2.65
ConvergEx - Transitions	11,625,956.00	58,129.80	0.005	3.50
ConvergEx ADR Conversions	11,574,906.00	160,890.62	0.014	9.68
Cornerstone	338,950.00	11,754.50	0.035	0.71
Cowen & Co	267,756.00	10,489.39	0.039	0.63
Credit Suisse Sec. LLC	1,512,829.00	35,134.99	0.023	2.11
Cuttone & Co Inc	22,785.00	455.70	0.020	0.03
D A Davidson & Co	9,527.00	333.45	0.035	0.02
Deutsche Bank	251,622.00	5,287.53	0.021	0.32
Evercore Group LLC	11,187.00	344.04	0.031	0.02
Fidelity Capital Markets	6,231.00	218.09	0.035	0.01
First Kentucky Securities Corp	132,737.00	1,644.00	0.012	0.10
Freidman Billings	112,106.00	4,433.29	0.040	0.27
Goldman Sachs	790,169.00	25,579.05	0.032	1.54
Guggenheim Capital Markets	17,657.00	607.24	0.034	0.04
HSBC	600.00	25.20	0.042	0.00
Instinet	325,721.00	3,431.57	0.011	0.21
Investment Tech Grp Transition	29,266,195.00	220,835.43	0.008	13.28
Investment Technology Grp	25,624,350.00	237,643.02	0.009	14.29
ISI Algos	3,123,665.00	31,236.65	0.010	1.88
ISI Group	1,014,727.00	25,076.47	0.025	1.51
J.J.B. Hilliard, W.L. Lyons	606,548.00	18,196.44	0.030	1.09
Janney Montgomery Scott Inc	26,107.00	938.44	0.036	0.06
Jefferies & Co.	380,284.00	11,700.06	0.031	0.70
JMP Securities	4,288.00	80.08	0.019	0.00
Jones & Associates	163,501.00	6,789.56	0.042	0.41
JP Morgan & Chase	612,570.00	9,231.50	0.015	0.56
Keefe Bruyette & Woods	30,964.00	1,153.76	0.037	0.07
Keybanc Capital	52,625.00	1,869.14	0.036	0.11
Knight Equity Markets	8,206.00	287.22	0.035	0.02
Leerink Swann & Co.	64,845.00	1,886.84	0.029	0.11
Liquidnet Inc	8,577,848.00	85,630.08	0.010	5.15
Liquidnet Inc - Transition	5,136,768.00	36,979.34	0.007	2.22
Loop Capital Markets, LLC	1,500.00	67.50	0.045	0.00
Luminex Trading	20,826.00	52.07	0.003	0.00
MacQuarie Securities Inc	22,795.00	822.96	0.036	0.05
Merrill Lynch	3,133,004.00	83,737.00	0.027	5.04
Merrill Lynch ADR Conversions	68,600.00	2,058.00	0.030	0.12
Merrill Lynch, Pierce, Fenner	26,369.00	793.42	0.030	0.05
Miller Tabak & Co. LLC	4,687.00	164.05	0.035	0.01
Mizuho Securities, USA	31,764.00	1,207.33	0.038	0.07
MKM Partners	59,544.00	2,110.24	0.035	0.13

Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Morgan Stanley	916,712.00	15,783.25	0.017	0.95
Morgan Stanley Smith Barney-Louisville	140,000.00	4,200.00	0.030	0.25
Morgan Stanley Smith Barney-NKY	515,496.00	15,464.88	0.030	0.93
Needham	9,498.00	285.84	0.030	0.02
Pershing LLC	191,287.00	4,816.71	0.025	0.29
Pickering Energy Partners Inc.	8,531.00	298.59	0.035	0.02
Piper Jaffray	70,669.00	2,486.03	0.035	0.15
Pulse Trading	47,286.00	472.86	0.010	0.03
R W Baird	159,196.00	5,231.29	0.033	0.31
Raymond James & Assoc	2,899,933.00	88,050.83	0.030	5.30
RBC Capital Markets	372,916.00	9,098.96	0.024	0.55
Rosenblatt Securities LLC	1,592.00	71.64	0.045	0.00
Sandler O'Neill	27,300.00	955.49	0.035	0.06
Sanford C Bernstein	340,922.00	4,936.61	0.014	0.30
Scotia Capital, USA	37,480.00	1,311.81	0.035	0.08
Seaport	6,746.00	247.58	0.037	0.01
Sidoti & Company LLC	15,065.00	527.29	0.035	0.03
State Street Global	4,567.00	165.85	0.036	0.01
Stephens Inc.	36,499.00	1,419.34	0.039	0.09
Stifel, Nicolaus & Co	604,536.00	19,426.11	0.032	1.17
Suntrust Robinson	62,949.00	2,247.24	0.036	0.14
Susquehanna Brokerage	32,665.00	1,157.52	0.035	0.07
Telsey Advisory Group LLC	6,343.00	222.02	0.035	0.01
Tradebook	16,819,981.00	84,100.17	0.005	5.06
UBS/Paine Webber Securities	393,973.00	11,855.13	0.030	0.71
UBS/Paine Webber-Louisville	899,782.00	26,993.46	0.030	1.62
Wall Street Access	194,069.00	1,531.46	0.008	0.09
Wedbush Morgan Securities	19,974.00	702.44	0.035	0.04
Weeden & Co	1,405,926.00	43,266.66	0.031	2.60
Wells Fargo Securities, LLC	135,329.00	4,558.98	0.034	0.27
Wunderlich Securities Inc	400.00			0.00
TOTALS	**159,686,017.00**	**$ 1,662,765.64**	**0.010**	**100.00%**

The acquisition of initial public offerings (IPOs)represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate; however, the security issuers and not the investors pay the commissions. In 2016-17, the retirement annuity trust fund bought small capitalization IPOs that generated $157,730 in commissions. Although these commissions were not paid by the retirement system, they resulted from the retirement annuity trust fund's investment activities and are included in the total commissions of $1,662,766. Typical stock transactions occur at lower commission rates than IPO transactions, frequently $.03 per share or less. Investment companies usually provide investment research for brokerage clients.

PROXY VOTING AND CORPORATE BEHAVIOR

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The Board has adopted the following position on corporate behavior:

The Board's stated fiduciary duty is to obtain the highest return for the Fund commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the Fund as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the Fund has invested.

The Board expects the managements of the companies whose equity securities are held in the Fund's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the Board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the Board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission, and others which are covered by the laws of the United States Government or the State of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the System's holdings in the company, if the sale is consistent with sound investment policy.

SECURITY LENDING

The System operates a security lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and select stocks and bonds are the types of securities loaned. The System's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral, at the time of the loan, has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral consists of cash, marketable U.S. Government securities, and selected marketable U.S. Government agency securities approved by the System.

Cash collateral is invested in short term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities unless the borrower defaults. The lending agent also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. The weighted average maturity of cash collateral investments is typically two days. The System has no credit risk exposure to borrowers, since the amounts the System owes borrowers exceeds the amounts the borrowers owe the System.

Security lending programs can entail considerable interest rate risk and credit risk. The System has structured its program to minimize these two main categories of risk. The interest rate risk is managed, as mentioned above, by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the creditworthiness of lent securities.

KENTUCKY INVESTMENTS

The System is always cognizant of its significant role in the Commonwealth's economy. Over $2 billion in benefits are distributed to members and annuitants living in Kentucky annually. Approximately $300 million of the retirement annuity trust fund's investments directly impact the Commonwealth. These investments include: commercial real estate; bonds issued by public agencies of the Commonwealth and those of local municipalities; pools of single-family mortgages in Kentucky; financing for multi-family housing, and; investments in companies which have an impact on the Commonwealth's economy but receive earnings from global operations. Fiduciary duty requires that investments be made solely for the benefit of the System's members and annuitants. Investments which benefit the Commonwealth's economy are made only when fully consistent with this fiduciary duty.

Professional Service Providers

Investment Consultant
Aon Hewitt

Investment Custodian
The Bank of New York Mellon

Fixed Income Managers
Galliard Capital Management
Ft. Washington Investment Advisors

Domestic Equity Managers
Todd Asset Management LLC
UBS Global Asset Management
Wellington Management Company
GE Asset Management
Ft. Washington Investment Advisors

International Equity Managers
Todd Asset Management LLC
UBS Global Asset Management
Baring Asset Management, Inc.
Baillie Gifford
BlackRock Institutional Trust Company

Real Estate Managers
Prudential Real Estate Investors
Carlyle Realty Partners
Blackstone Real Estate Partners
Rockwood Capital Real Estate
TA Associates Realty
Angelo Gordon & Co.
Landmark Real Estate Partners

Alternative Investment Managers
Molpus Woodlands Group
Hancock Natural Resources Group
Kohlberg Kravis Roberts & Co.
Chrysalis Ventures
Ft. Washington Private Equity Investors
Alinda Capital Partners, LLC
Riverstone Holdings, LLC
CapitalSouth Partners
Landmark Partners
Lexington Partners
Oaktree Capital Management
Stepstone Pioneer Capital
Audax Group
J.P. Morgan Asset Management
Hellman & Friedman Capital Partners
Natural Gas Partners
Apax Partners
Actis LLP
Carlyle Global Partners
Public Pension Capital
IFM Investors
Gavea Investimentos

Additional Categories Investment Managers
Avenue Capital Group
Marathon Asset Management
Ft. Washington Investment Advisors
Oaktree Capital Management
Shenkman Capital Management, Inc
Highbridge Principal Strategies, LLC
Angelo Gordon & Co.
Golub Capital
Barings Asset Management, Inc.
Columbia Threadneedle Investments

Attorney
Ice Miller LLP
Reinhert, Boerner, Van Deuren

HEALTH INSURANCE TRUST FUND

INVESTMENT POLICY SUMMARY

The statute that created the health insurance trust fund on July 1, 2010, KRS 161.677, obliges the Board to "manage the assets of the fund in the same general manner in which it administers the retirement funds, except that the asset allocation may differ and separate accounting and financial reporting shall be maintained for the trust fund." KRS 161.430, which governs the investment of funds for the retirement funds, requires that members' assets be managed in a manner consistent with fiduciary standards set forth in the "prudent person rule." Subject to this statute, administrative regulation 102 KAR 1:178 establishes investment policies for the health insurance trust fund. This regulation requires the Board and Investment Committee to prudently diversify assets and to consider the fund's "liquidity and its capability of meeting both short and long-term obligations" in setting asset allocation policy.

Due to an imbalance of required distributions over contributions early in the fund's existence, liquidity needs have dominated investment policy. This will evolve as contribution rate increases provided in statute improve cash flow in future years. As near-term liquidity needs recede in importance, the focus will increasingly be on establishing an investment policy which achieves the required rate of return and matches the health insurance liability.

INVESTMENT OBJECTIVES

The definitive objective of the health insurance trust fund is to provide for beneficiaries' health insurance benefit obligations, both short and long-term. In support of this objective, investment policy will be designed, on an ongoing basis, to: (1) meet all liquidity needs, (2) achieve the actuarially assumed 8.0% rate of return over the long-term, and (3) do so within appropriate risk levels.

RISK CONTROLS

Any investment program faces various risks; as with the retirement funds, the primary risk is that the assets will not support liabilities over the long-term. Risk control measures for the health insurance trust fund mirror those of the retirement annuity trust fund, but are customized to reflect the fund's unique liability. Primary risk control measures include the following steps:

- Actuarial valuations are performed each year to evaluate the funding objectives of the health insurance trust fund. Every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the fund.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the fund.
- In accordance with administrative regulation 102 KAR 1:178, which governs investment policies for the fund, the TRS Investment Committee adopts and regularly reviews an asset allocation policy designed to meet the fund's needs.

ASSET ALLOCATION

As of June 30, 2017, the health insurance trust fund had approximately $815.3 million in total assets. This included $73.2 million in investment grade bonds. This trust fund also had $83.5 million in high yield bonds, $474.4 million in public equity investments, $42.3 million in private equity investments, $30 million in bank loan investments, and $49.6 million in alternative credit funds, and $42.7 million in real estate funds.

Asset allocation will be adjusted annually by the Investment Committee to reflect changing liquidity needs and actuarial funding status. Due to upcoming contribution rate increases enacted in statute, liquidity needs are expected to decline in coming years while funding status improves. The information below shows the health insurance trust fund's asset allocation by market value as of June 30, 2017 and June 30, 2016.

Health Insurance Trust

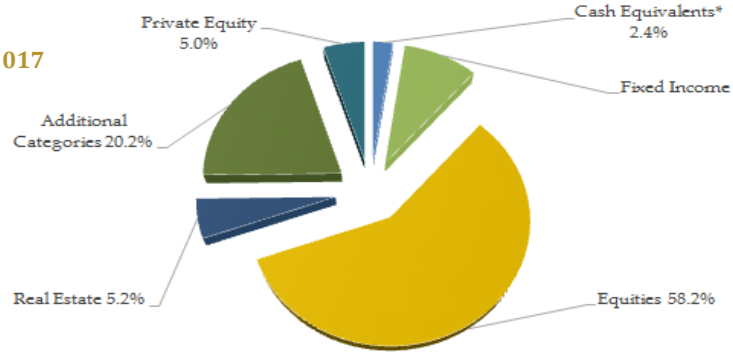
	June 30,2017**	%	June 30,2016	%
Cash Equivalents*	$ 19,312,440	2.4	$ 1,426,565	0.2
Fixed Income	73,252,237	9.0	63,053,784	10.4
Global Equities	474,453,790	58.2	354,369,798	58.4
Real Estate	42,701,494	5.2	25,433,241	4.1
Additional Categories	163,246,284	20.2	139,034,552	22.9
Private Equity	42,340,364	5.0	23,931,317	4.0
TOTALS	**$ 815,306,609**	**100.0**	**$ 607,249,257**	**100.0**

* *Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

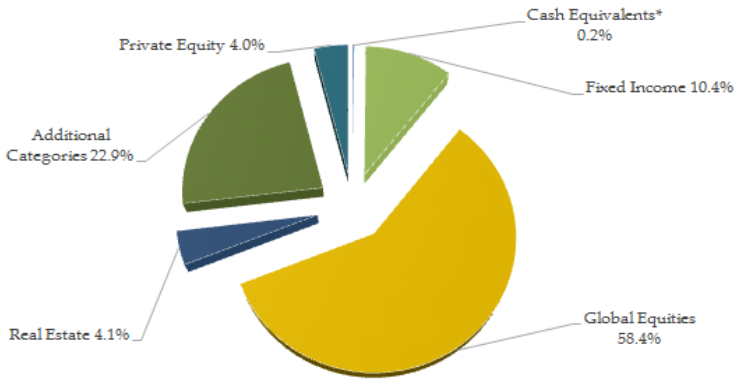
** *Does not include 401(h) value of $19,471,617.*

Distribution of Investments Health Insurance Trust Fair Values

June 30, 2017



June 30, 2016



** Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

HEALTH INSURANCE TRUST
PORTFOLIO RETURNS

For the fiscal year 2017, the health insurance trust fund's portfolio returned 14.88% versus a policy index of 15.00%. The fund's global equities returned 19.38% versus 19.01% for the MSCI All Country World IMI Index. A high-quality bond fund returned -.3% versus -.41% for the Barclays Government/Credit Index. This was the second year of managing the bond fund against this index. In the previous years it was managed against 90-day T-bills. We are working to extend duration but given the historically low interest rates we are being very selective at our extension points. The additional categories returned 12.0% versus 12.75% for its benchmark (Bank of America Merrill Lynch High Yield Master II).

Prior to July 1, 2015 TRS did not benchmark overall fund performance. Effective July 1, 2015 the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year. Returns were generated by the Segal Marco Advisors performance reporting system using a time-weighted rate of return calculation based upon market values.

		Market Value	Last Qtr	FYTD	1 Yr	3 Yr*	5 Yr*	10 Yr	20 Yr
TOTAL PLAN	$	815,306,609	3.18	14.88	14.88	4.62	7.80		
Policy Benchmark***			*3.37*	*15.00*	*15.00*				
Total Equity	$	474,453,789	4.16	18.87	18.87	5.19	11.13		
All Cap Equities	$	31,727,552	2.42						
Russell 3000			*3.02*						
Global Equities	$	442,726,237	4.30	19.38	19.38	5.34	11.22		
MSCI AC World IMI (Net)			*4.25*	*19.01*	*19.01*	*4.87*	*10.74*		
Fixed Income	$	73,252,237	0.99	-0.30	-0.30	2.01	1.39		
Barclays Government Credit			*1.69*	*-0.41*	*-0.41*	*2.62*	*2.29*		
Core Real Estate	$	20,164,331	1.69	7.70	7.70				
NCREIF ODCE (VW)			*1.70*	*7.87*	*7.87*				
Non-Core Real Estate	$	22,537,164	3.15	11.91	11.91				
NCREIF Property Index			*1.75*	*6.97*	*6.97*				
Private Equity	$	42,340,364	3.92	20.90	20.90	14.89	16.54		
Mature Private Equity	$	4,165,331	4.57	14.19	14.19	13.67	12.74		
S&P 500 plus 3%			*3.85*	*21.43*	*21.43*	*12.90*	*18.07*		
Private Equity < 5 Years	$	38,175,033	4.07	21.08	21.08	14.95			
Additional Categories:	$	163,246,284	1.67	12.00	12.00	3.27	5.81		
B of A Merrill Lynch High Yield Master II			*2.14*	*12.75*	*12.75*	*4.48*	*6.92*		
Cash (Unallocated)	$	19,312,440	0.20	0.50	0.50	0.28	0.21		
90 Day T-Bill			*0.20*	*0.44*	*0.44*	*0.20*	*0.15*		

* *Returns are annualized for periods longer than one year.*

** *Prior to July 1, 2015, TRS did not benchmark overall fund performance. Effective July 1, 2015, the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.*

SCHEDULE OF INVESTMENT RETURNS - HEALTH INSURANCE TRUST

2017	Annual Rate of Return Net of Investment Expense	14.37%
2016	Annual Rate of Return Net of Investment Expense	-2.20%
2015	Annual Rate of Return Net of Investment Expense	1.38%
2014	Annual Rate of Return Net of Investment Expense	15.38%

HEALTH INSURANCE TRUST
PORTFOLIOS
FAIR VALUES *
June 30, 2017

INTERNALLY MANAGED

Cash Equivalents	
Cash Collections Fund (Unallocated)	$ 19,312,440
Fixed Income	
Internal Bond Fund	73,252,237
Subtotal	**$ 92,564,677**

EXTERNALLY MANAGED

Global Equities	
BlackRock Fund B	442,726,237
Ft. Washington Focused Equity	31,727,552
Alternative Investments	
NGP Natural Resources XI	5,906,232
Ft. Washington Fund VIII	5,574,607
KKR European Fund IV	5,253,090
Ft. Washington Fund VII	4,165,331
Riverstone E & P Fund VI	4,121,649
Carlyle Europe Fund IV	3,946,307
Actis Global Fund IV	3,378,889
Ft. Washington PE Opp III	3,212,860
Audax PE Fund V	2,743,283
Landmark Equity XV	1,798,715
Ft. Washington Fund IX-K	1,097,139
Ft. Washington Fund IX	976,558
Apax IX	165,704
Additional Categories	
Columbia High Yield Fund	43,942,569
Ft. Washington High Yield Bond Fund	39,613,988
Marathon/TRS Credit Fund	36,674,167
Shenkman Capital Management	30,069,629
Marathon European Credit Opp Fund III	4,541,531
Marathon European Credit Opp Fund II	4,048,706
Highbridge Principal Strategies III	2,982,813
Oaktree European Capital Solutions	1,372,881
Real Estate	
Prudential PRISA Fund	11,093,620
Carlyle Property Investors	9,070,711
Carlyle Realty VII	6,738,686
Landmark Real Estate VII	4,968,586
Blackstone Realty Fund VIII	4,541,719
TA Realty Fund XI	3,982,814
Rockwood Real Estate X	2,305,359
Subtotal	**$ 722,741,932**
TOTAL ASSETS	**$ 815,306,609**

** Detailed information concerning the market values of all TRS investments is available upon request.*

Investment Summary
Fair Value – Health Insurance Trust
June 30, 2017

Type of Investment	Fair Value 6/30/16	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 6/30/17*
Cash Equivalents	$ 3,883,661	$ 245,782,777	$	$ 223,129,340	$ 26,537,098
Fixed Income	62,555,399	23,275,237	(1,526,759)	14,020,800	70,283,077
Real Estate	25,433,241	20,197,646	2,906,132	5,835,525	42,701,494
Equities	354,369,798	88,052,253	69,851,382	38,999,031	473,274,401
Alternative	23,931,316	17,458,295	7,351,346	6,400,595	42,340,364
Additional Categories	137,075,842	119,762,687	10,476,279	107,144,634	160,170,175
TOTAL	**$ 607,249,257**	**$ 514,528,895**	**$ 89,058,380**	**$ 395,529,925**	**$ 815,306,609**

* *Does not include 401(h) value of $19,471,617.*

Health Insurance Trust Fund
Contracted Investment Management Expenses
Fiscal Year 2016-17
(In thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points [1]
Equity Manager(s)	$ 474,454	$ 276	5.8
Real Estate [2]	42,701	731	171.2
Additional Categories	163,246	849	52.0
Alternative Investments [2] [3]	42,340	1,163	274.7
TOTAL	**$ 722,741**	**$ 3,019**	**41.8**
Other Investment Services			
Custodian Fees	$ 815,307	$ 53	0.7
Consultant Fees			0.0
Legal & Research			0.0
Other Administrative and Operational		99	1.2
TOTAL	**$ 815,307**	**$ 152**	**1.9**
GRAND TOTAL		**$ 3,171**	**38.9**

1 - One basis point is one hundredth of one percent or the equivalent of .0001.
2 - Accrual of fees payable as of June 30, 2017.
3 - Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.

Schedule of Contracted and Administrative Investment Expenses
Health Insurance Trust Fund
June 30, 2017

INVESTMENT COUNSELOR FEES

EQUITY MANAGERS		
BlackRock		217,848
Fort Washington Focused Equity		57,734
Total Equity Managers	**$**	**275,582**
REAL ESTATE		
Blackstone VIII		150,000
Carlyle VII		139,616
Carlyle Property Investors		16,826
Landmark VII		100,000
Landmark VIII		54,620
Rockwood Capital X		63,610
TA Realty XI		122,272
Prudential		84,405
Total Real Estate	**$**	**731,349**
ADDITIONAL CATEGORIES		
Highbridge Principal Strategies Find III,L.P.		71,693
Columbia High Yield Fund		159,447
Fort Washington Investments High Yield		76,041
Marathon Credit Fund		320,432
Marathon European Credit Fund II		49,375
Marathon European Credit Fund III		57,803
Oaktree European Capital Solutions		(9,044)
Shenkman Capital		123,314
Total Additional Category Managers	**$**	**849,061**
ALTERNATIVE INVESTMENTS		
Actis Global Fund IV, L.P.		99,000
APAX Fund IX, L.P.		158,897
Audax Private Equity Fund V		33,346
ALTERNATIVE INVESTMENTS continued ...		
Carlyle Europe IV, L.P.		133,508
Fort Washington Private Equity III, L.P.		37,500
Fort Washington Fund VII, L.P.		33,749
Fort Washington Fund VIII, L.P.		36,000
Fort Washington Fund IX, L.P.		11,034
Fort Washington Fund IX-K, L.P.		11,025
KKR European IV, L.P.		60,911
KKR Americas XII, L.P.		65,278
Landmark Fund XV ,L.P.		50,000
NGP Natural Resources XI, L.P.		132,015
Riverstone Energy and Power Fund VI, L.P.		300,404
Total Alternative Managers	**$**	**1,162,667**

ADMINISTRATIVE AND OPERATIONAL EXPENSES

CUSTODIAN		
The Bank of New York Mellon		53,386
Total Custodian	**$**	**53,386**
OTHER		
Other Administrative and Operational (includes Personnel, Subscription services, etc…)		98,822
Total Other	**$**	**98,822**
TOTAL INVESTMENT EXPENSES	**$**	**3,170,867**

HEALTH INSURANCE TRUST PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
AON Hewitt

Investment Custodian
The Bank of New York Mellon

Additional Categories Managers
Ft. Washington Investment Advisors
Shenkman Capital Management, Inc.
Highbridge Principal Strategies, LLC
Marathon Asset Management
Oaktree Capital Management
Columbia Threadneedle Investments

Real Estate
Carlyle Realty Partners
Landmark Real Estate Partners
Blackstone Real Estate Partners
TA Associates Realty
Prudential Real Estate Investors
Rockwood Capital Real Estate

Alternative Investment Managers
Ft. Washington Private Equity Investors
Actis LLP
Landmark Partners
Kohlberg Kravis Roberts & Co.
Natural Gas Partners
Carlyle Global Partners
Audax Group
Riverstone Holdings, LLC
Apax Partners

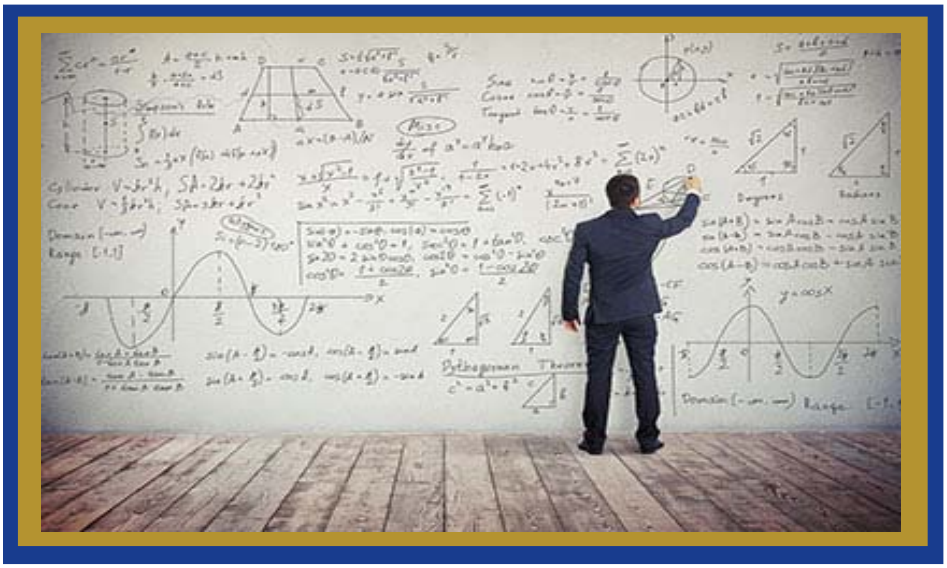
Equity Manager
BlackRock Institutional Trust Company
Ft. Washington Investment Advisors

Attorney
Ice Miller LLP

Teachers' Retirement System

of the State of Kentucky

2017



Actuarial Section

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 14, 2017

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the system. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2017. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contribution rates as a percentage of payroll for the fiscal year ending June 30, 2020 required to support the total benefits of the system are as follows:

Group	Combined Member and State Contribution Requirement
University members hired before July 1, 2008	35.55%
University members hired on or after July 1, 2008	36.55%
Non-University members hired before July 1, 2008	38.51%
Non-University members hired on or after July 1, 2008	39.51%

These rates represent a decrease since the previous valuation in the total Pension actuarially determined employer contribution rates (ADEC) of 0.35% of payroll for the fiscal year ending June 30, 2020.

A breakdown of the changes in the components of the ADEC are as follows:

- an increase in the expected state special appropriation from 2.83% to 3.00%, or 0.17% of payroll
- an increase in the amount required for life insurance benefits from 0.04% to 0.05%, or 0.01% of payroll
- a reduction in the additional required increase of 0.51%, from 14.61% to 14.10%

The financing objective of the system is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the system are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the total unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll in accordance with the funding policy adopted by the Board, on the assumption that payroll will increase by 3.5% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the system and to reasonable expectations of anticipated experience under the system.

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We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund from 2005 to 2010 were allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund. No additional contributions were allocated during the 2017 fiscal year.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the system.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This actuarial valuation was performed to determine the recommended funding amount for the system. The asset values used to determine unfunded liabilities and funded ratios are not market values but less volatile market related values. A smoothing technique is applied to market values to determine the market related values. The unfunded liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return of assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

In our opinion, the system has not been funded on an actuarially sound basis since historically the full actuarially determined contributions were not made by the employer. However, an additional appropriation of $498.5 million was made during fiscal year 2017 and an additional appropriation of $474.7 million is expected to be made during fiscal year 2018. If contributions by the employer to the system in subsequent fiscal years are less than those required, the assets are expected to become insufficient to pay promised benefits. Assuming that contributions to the system are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the system may be safely anticipated.

Respectfully submitted,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Cathy Turcot
Principal and Managing Director

Report of Actuary on the Valuation
Prepared as of June 30, 2017
Section I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (dollar amounts in thousands):

Valuation Date	June 30, 2017	June 30, 2016
Number of active members	72,130	71,848
Annual salaries	$ 3,563,584	$ 3,537,226
Number of annuitants and beneficiaries	52,966	51,563
Annual allowances	$ 1,953,464	$ 1,868,875
Assets		
Market value	$ 18,707,699	$ 16,812,832
Actuarial value	18,514,638	17,496,894
Unfunded actuarial accrued liability (UAAL)	$ 14,305,248	$ 14,531,333
Funded Ratio	56.4 %	54.6 %
Amortization period (years)	27.4	28.1

Contribution rates are shown separately for university and non-university members on the following pages.

Contribution Rates for University Members

Valuation Date	June 30, 2017		June 30, 2016	
For Fiscal Year Ending	June 30, 2020		June 30, 2019	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	10.800 %	10.800 %	11.030 %	11.030 %
Accrued liability	24.750	25.750	24.870	25.870
Total	35.550 %	36.550 %	35.900 %	36.900 %
Member	7.625 %	7.625 %	7.625 %	7.625 %
State (ARC)	27.925	28.925	28.275	29.275
Total	35.550 %	36.550 %	35.900 %	36.900 %
Life Insurance Fund:				
State	0.050 %	0.050 %	0.040 %	0.040 %
Medical Insurance Fund:				
Member	2.775 %	2.775 %	2.775 %	2.775 %
State Match	2.775	1.775	2.775	1.775
Total	5.550 %	4.550 %	5.550 %	4.550 %
Total Contributions	41.150 %	41.150 %	41.490 %	41.490 %
Member Statutory	10.400 %	10.400 %	10.400 %	10.400 %
State Statutory	13.650	13.650	13.650	13.650
Required Increase	14.100	14.100	14.610	14.610
State Special	3.000	3.000	2.830	2.830
Total	41.150 %	41.150 %	41.490 %	41.490 %

Contribution Rates for Non-University Members

Valuation Date	June 30, 2017		June 30, 2016	
For Fiscal Year Ending	June 30, 2020		June 30, 2019	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	14.840 %	14.840 %	14.940 %	14.940 %
Accrued liability	23.670	24.670	23.920	24.920
Total	38.510 %	39.510 %	38.860 %	39.860 %
Member	9.105 %	9.105 %	9.105 %	9.105 %
State (ARC)	29.405	30.405	29.755	30.755
Total	38.510 %	39.510 %	38.860 %	39.860 %
Life Insurance Fund:				
State	0.050 %	0.050 %	0.040 %	0.040 %
Medical Insurance Fund:				
Member	3.750 %	3.750 %	3.750 %	3.750 %
State Match	3.750	2.750	3.750	2.750
Total	7.500 %	6.500 %	7.500 %	6.500 %
Total Contributions	46.060 %	46.060 %	46.400 %	46.400 %
Member Statutory	12.855 %	12.855 %	12.855 %	12.855 %
State Statutory	16.105	16.105	16.105	16.105
Required Increase	14.100	14.100	14.610	14.610
State Special	3.000	3.000	2.830	2.830
Total	46.060 %	46.060 %	46.400 %	46.400 %

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2017 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. The assumed investment rate of return is 7.50%. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation.

5. The current funding policy is shown in Schedule H of the Report. The funding policy has been revised since the previous valuation, but has not yet been adopted by the Board.

6. Provisions of the system, as summarized in Schedule F, were taken into account in the current valuation. There have been no changes since the previous valuation.

7. The funded ratio shown in the Summary of Principal Results, is the ratio of actuarial value of assets to the actuarial accrued liability. The funded status would be different based on the market value of assets. The funding ratio is an indication of progress in funding the promised benefits. Since the ratio is less than 100%, there is a need for additional contributions toward the payment of the unfunded accrued liability. In addition, this funding ratio does not have any relationship to measuring the sufficiency if the plan had to settle its liabilities.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the system for use as a basis of the valuation were furnished by the retirement system office. The following table shows the number of active members and their annual salaries as of June 30, 2017 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
University hired before 7/1/2008	1,724	$ 127,690
University hired after 7/1/2008	1,493	77,914
Non-University Full Time hired before 7/1/2008	36,025	2,339,663
Non-University Full Time hired after 7/1/2008	20,897	947,285
Non-University Part Time hired before 7/1/2008	2,438	20,770
Non-University Part Time hired after 7/1/2008	9,553	50,262
TOTAL	**72,130**	**$ 3,563,584**

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the retirement system as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2017

Group	Number	Annual Retirement Allowances[1] ($1,000's)
Service Retirements	46,222	$ 1,780,450
Disability Retirements	2,778	82,585
Beneficiaries of Deceased Members	3,966	90,429
TOTAL	**52,966**	**$ 1,953,464**

[1] *Includes cost-of-living adjustments effective through July 1, 2017.*

3. Table 1 of Schedule G shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 3 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2017, the market value of Pension Plan assets for valuation purposes held by the system amounted to $18,707,699,025. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes. The estimated market investment return for the plan year was 15.02%. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2017 was $18,514,638,263. The estimated investment return for the plan year ending June 30, 2017 on an actuarial value of assets basis was 9.29%, compared to the assumed investment rate of return for the period of 7.50%. Schedule B shows the development of the actuarial value of assets as of June 30, 2017.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the system as of June 30, 2017. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.

2. The valuation balance sheet shows that the system has total prospective liabilities of $16,320,896,707 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $20,726,391,156 of which $798,963,061 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $381,559,301. The total prospective liabilities of the system amounts to $37,428,847,164. Against these liabilities, the system has present assets for valuation purposes of $18,514,638,263. When this amount is deducted from the total liabilities of $37,428,847,164, there remains $18,914,208,901 as the present value contributions to be made in the future.

3. The employer's contributions to the system consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 10.80% of payroll for University and 14.84% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,608,960,570. When this amount is subtracted from $18,914,208,901, which is the present value of the total future contributions to be made by the employer, there remains $14,305,248,331 as the amount of future unfunded accrued liability contributions.

5. The unfunded accrued liability decreased by approximately $226 million for the plan year ending June 30, 2017 and the funding ratio increased from 54.6% to 56.4%. See Section VII for a complete breakdown of the experience of the system.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 10.400% of annual salary to the system and each non-university member contribute 12.855% of annual salary. Of this amount, for each university member, 2.775% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.75% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the state will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the system's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the

Pension Plan and Life Insurance Fund. Of these amounts, 0.05% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 14.10% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan based on the funding policy adopted by the Board. An additional special appropriation of 3.00% of total payroll will be made by the State. Therefore, the total actuarially determined employer contribution rate to the Pension Plan is 27.925% for university members who become members before July 1, 2008 and 28.925% for university members who become members on or after July 1, 2008. The total actuarially determined employer contribution rate to the Pension Plan is 29.405% for non-university members who become members before July 1, 2008 and 30.405% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown on the following table:

Contribution Rates by Source
University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	10.400 %	10.400 %
Statutory Medical Insurance Fund	(2.775)	(2.775)
Contribution to Pension Plan	7.625 %	7.625 %
Employer		
Statutory Matching Total	10.400 %	10.400 %
Statutory Medical Insurance Fund	(2.775)	(1.775)
Supplemental Funding	3.250	3.250
Subtotal	10.875 %	11.875 %
Life Insurance	(0.050) %	(0.050) %
Additional to Comply with Board Funding Policy	14.100	14.100
Special Appropriation	3.000	3.000
Contribution to Pension Plan	27.925 %	28.925 %
Total Contribution to Pension Plan	**35.550 %**	**36.550 %**

Contribution Rates by Source
Non-University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	12.855 %	12.855 %
Statutory Medical Insurance Fund	(3.750)	(3.750)
Contribution to Pension Plan	9.105 %	9.105 %
Employer		
Statutory Matching Total	12.855 %	12.855 %
Statutory Medical Insurance Fund	(3.750)	(2.750)
Supplemental Funding	3.250	3.250
Subtotal	12.355 %	13.355 %
Life Insurance	(0.050) %	(0.050) %
Additional to Comply with Board Funding Policy	14.100	14.100
Special Appropriation	3.000	3.000
Contribution to Pension Plan	29.405 %	30.405 %
Total Contribution to Pension Plan	**38.510 %**	**39.510 %**

4. The valuation indicates that normal contributions at the rate of 10.80% of active university members' salaries and 14.84% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded accrued liability. This accrued liability rate is 24.75% for university members hired before July 1, 2008, 25.75% for university members hired on and after July 1, 2008, 23.67% for non-university members hired before July 1, 2008, and 24.67% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.00% of payroll to be made by the State. These rates are shown in the following table:

Actuarially Determined Contribution Rates

Rate	Percentage of Active Members' Salaries			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	10.80 %	10.80 %	14.84 %	14.84 %
Accrued Liability *	24.75	25.75	23.67	24.67
Total	**35.55 %**	**36.55 %**	**38.51 %**	**39.51 %**

** Includes special appropriations of 3.00% of payroll to be made by the State.*

5. The following table shows the components of the total UAAL and the derivation of the UAAL contribution rate in accordance with the funding policy:

Total UAAL and UAAL Contribution Rate
(In thousands of dollars)

	UAAL	Remaining Amortization Period (years)	Amortization Payment
Legacy	$ 14,744,575	27	$ 889,290
New Incremental 6/30/2015	(351,541)	18	(27,465)
New Incremental 6/30/2016	340,682	19	25,642
New Incremental 6/30/2017	(428,468)	20	(31,151)
Total UAAL	$ 14,305,248		$ 856,316
Blended Amortization Period (years)			27.4

Section VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the system, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 14.10%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded accrued liability in accordance with the Board funding policy. However, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll.

3. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 14.10% of payroll for the fiscal year ending June 30, 2020, as shown in the following table:

VALUATION DATE	FISCAL YEAR	INCREASE/ (DECREASE)	CUMULATIVE INCREASE	AMOUNT
June 30, 2004	June 30, 2007	0.11%	0.11%	$ 3,174,600
June 30, 2005	June 30, 2008	1.21	1.32	38,965,900
June 30, 2006	June 30, 2009	0.56	1.88	60,499,800
June 30, 2007	June 30, 2010	0.58	2.46	82,331,200
June 30, 2008	June 30, 2011	1.13	3.59	121,457,000
June 30, 2009	June 30, 2012	2.22	5.81	208,649,000
June 30, 2010	June 30, 2013	1.46	7.27	260,980,000
June 30, 2011	June 30, 2014	0.75	8.02	299,420,000
June 30, 2012	June 30, 2015	2.40	10.42	386,400,000
June 30, 2013	June 30, 2016	2.55	12.97	487,400,000
June 30, 2014	June 30, 2017	0.83	13.80	520,372,000
June 30, 2015	June 30, 2018	(0.31)	13.49	512,883,000
June 30, 2016	June 30, 2019	1.12	14.61	553,597,000
June 30, 2017	June 30, 2020	(0.51)	14.10	538,253,000

In addition, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll, in order to amortize the unfunded actuarial accrued liability in accordance with the Board funding policy. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in a decrease of $226,084,753 in the unfunded accrued liability from $14,531,333,084 to $14,305,248,331 during the year ending June 30, 2017. The decrease in the unfunded accrued liability was primarily due to gains for the investment return on an actuarial value basis that was greater than expected and salary increases that were less than assumed. In addition to these gains were small demographic gains and losses due to turnover, retirement and mortality.

Analysis of Financial Experience
(In thousands of dollars)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 1,089,850
Expected accrued liability contribution	(887,467)
Loss due to Contribution Shortfall and Timing	704
Experience:	
Valuation asset growth	(308,146)
Pensioners' mortality	11,181
Turnover and retirements	(11,667)
New entrants	39,218
Salary increases	(159,758)
Amendments	0
Assumption changes	0
Method changes	0
Total	**$ (226,085)**

Section VIII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board (GASB) has issued Statements No. 67 and 68 which replace Statement No. 25 and 27. The information required under the new GASB Statements will be issued in separate reports. The following information is provided for informational purposes only.

1. The following is a distribution of the number of employees by type of membership.

Number of Active and Retired Members as of June 30, 2017

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	52,966
Terminated vested employees entitled to benefits but not yet receiving benefits	8,624
Inactive non-vested members	42,798
Active plan members	72,130
Total	**176,518**

2. The schedule of funding progress is shown below.

Schedule of Funding Progress
(In thousands of dollars)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2008	$ 15,321,325	$ 22,460,304	$ 7,138,979	68.2 %	$ 3,190,332	223.8 %
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8
6/30/2011*	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4
6/30/2012	14,691,371	26,973,854	12,282,483	54.5	3,479,567	353.0
6/30/2013	14,962,758	28,817,232	13,854,474	51.9	3,480,066	398.1
6/30/2014**	16,174,199	30,184,404	14,010,205	53.6	3,486,327	401.9
6/30/2015	17,219,520	31,149,962	13,930,442	55.3	3,515,113	396.3
6/30/2016**	17,496,894	32,028,227	14,531,333	54.6	3,537,226	410.8
6/30/2017	18,514,638	32,819,887	14,305,248	56.4	3,563,584	401.4

* *Reflects change in assumptions and methods.* ** *Reflects change in assumptions.*

3. The information presented above was determined as part of the actuarial valuation at June 30, 2017. Additional information as of the latest actuarial valuation follows.

Valuation date	06/30/2017
Actuarial cost method	Entry age
Amortization method	Level percent of pay, closed
Remaining amortization period	27.4 years
Asset valuation method	5-year smoothed market

Actuarial Assumptions:

Investment rate of return*
7.50%

Projected salary increases**
3.50 - 7.30%

Cost-of-living adjustments
1.50% Annually

**Includes price inflation at 3.00%*
***Includes wage inflation at 3.50%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Actuarially Determined Employer Contributions	Actual Employer Contributions	Percentage Contributed
2008	$ 563,789,483	$ 466,274,783	83 %
2009	600,282,735	442,549,935	74
2010	633,938,088	479,805,088	76
2011	678,741,428	1,037,935,993 *	153
2012	757,822,190	557,339,552	74
2013	802,984,644	568,233,446	71
2014	823,446,156	563,326,249	68
2015	913,653,854	559,579,290	61
2016	999,270,174	565,454,590	57
2017	1,076,617,093	1,060,719,993	99

* *Includes Pension Obligation Bond proceeds of $465,384,165.*

SCHEDULE A

Valuation Balance Sheet
Showing the Present and Prospective Assets and Liabilities
As of June 30, 2017
(In thousands of dollars)

Actuarial Liabilities

(1)	Present value of prospective benefits payable on account of present active members			
	-	Service retirement benefits	$ 15,308,828	
	-	Disability retirement benefits	631,781	
	-	Death and survivor benefits	127,145	
	-	Refunds of member contributions	253,143	
		Total		$ 16,320,897
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits			
	-	Service retirement benefits	$ 19,152,047	
	-	Disability retirement benefits	802,232	
	-	Death and survivor benefits	772,112	
		Total		$ 20,726,391
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits			$ 381,559
(4)	TOTAL ACTUARIAL LIABILITIES			$ 37,428,847

Present and Prospective Assets

(5)	Actuarial value of assets		$ 18,514,638
(6)	Present value of total future contributions = (4)-(5)	$ 18,914,209	
(7)	Present value of future member contributions and employer normal contributions		4,608,961
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		14,305,248
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 37,428,847

Schedule A continued ...

Solvency Test

(In millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation of Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2008	$ 2,899.0	$ 13,585.8	$ 5,975.5	$ 15,321.3	100 %	91 %	0 %
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0
6/30/2012	3,415.2	16,472.2	7,086.4	14,691.4	100	68	0
6/30/2013	3,514.4	17,716.4	7,586.5	14,962.8	100	65	0
6/30/2014	3,629.7	18,676.3	7,878.3	16,174.2	100	67	0
6/30/2015	3,700.6	19,522.5	7,926.8	17,219.5	100	69	0
6/30/2016	3,756.0	20,416.4	7,855.8	17,496.9	100	67	0
6/30/2017	3,849.9	21,108.0	7,862.1	18,514.6	100	69	0

SCHEDULE B

Development of Actuarial Value of Assets as of June 30, 2017

(1)	Actuarial Value of Assets Beginning of Year		$ 17,496,894,437
(2)	Net Position at Market Value at End of Year		18,707,699,025
(3)	Net Position at Market Value at Beginning of Year		16,812,831,883
(4)	Cash Flow		
	a.	Contributions	1,374,345,427
	b.	Benefit Payments	1,944,917,368
	c.	Administrative Expense	10,313,715
	d.	Net: (4)a - (4)b - (4)c	(580,885,656)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	2,475,752,798
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,239,179,179
	d.	Amount for Phased-In Recognition: (5)a - (5)c	1,236,573,619
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	247,314,724
	b.	First Prior Year	(312,346,803)
	c.	Second Prior Year	(92,160,668)
	d.	Third Prior Year	325,163,609
	e.	Fourth Prior Year	191,479,441
	f.	Total Recognized Investment Gain	359,450,303
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 18,514,638,263
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ 193,060,762
(9)	Net Investment Rate of Return on Actuarial Value		9.29%

SCHEDULE C

Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2017	For the Year Ending June 30, 2016
Receipts for the Year		
Contributions		
Members	$ 313,625,434	$ 313,044,226
Employers	1,060,719,993	565,454,590
Total	1,374,345,427	878,498,816
Net Investment Income	2,475,752,798	(245,214,860)
Total	3,850,098,225	633,283,956
Disbursements for the Year		
Benefit Payments	1,918,612,128	1,833,198,630
Refunds to Members	26,305,240	27,747,742
Miscellaneous, including expenses	10,313,715	8,636,438
Total	1,955,231,083	1,869,582,810
Excess of Receipts over Disbursements	1,894,867,142	(1,236,298,854)
Reconciliation of Net Position		
Net Position as of the Beginning of the Year	16,812,831,883	18,049,130,737
Excess of Receipts over Disbursements	1,894,867,142	(1,236,298,854)
Net Position as of the End of the Year	$ 18,707,699,025	$ 16,812,831,883
Net Investment Rate of Return on Market Value	15.0%	(1.0)%

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE D
Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually, including price inflation at 3.00% per annum.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.50% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	7.20%	6.40%	5.40%	4.70%	4.20%	3.80%	3.70%	3.50%	3.50%	3.50%

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.019 %	0.01%	11.00 %				
25	0.021	0.01	11.00	3.00%			
30	0.025	0.01	11.00	3.00	3.00%		
35	0.043	0.04	12.00	3.50	1.40		
40	0.060	0.09	12.00	4.50	1.40		
45	0.084	0.20	12.00	4.50	1.30		17.0%
50	0.119	0.30	14.00	4.50	1.90		17.0
55	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	1.556	0.75	20.00	0.00	0.00	100.0	100.0

**Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.*

Schedule D continued ...

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.007 %	0.01 %	9.00 %				
25	0.008	0.01	9.00	4.00 %			
30	0.010	0.03	12.00	4.00	1.65 %		
35	0.018	0.06	12.00	4.00	1.50		
40	0.026	0.12	12.00	4.00	1.30		
45	0.042	0.25	13.00	4.00	1.20		15.0 %
50	0.062	0.44	13.00	5.00	1.50		18.0
55	0.096	0.65	15.00	5.00	2.00	5.5 %	50.0
60	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	0.831	0.85	15.00	0.00	0.00	100.0	100.0

**Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.*

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the system. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown in this table:

Annual Rate of Death After . . .

AGE	SERVICE RETIREMENT MALE	SERVICE RETIREMENT FEMALE	DISABILITY RETIREMENT MALE	DISABILITY RETIREMENT FEMALE
45	0.1609 %	0.1135 %	2.3306 %	1.2482 %
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability.

SCHEDULE E

Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently at 7.50%), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the system on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the system are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the system.

SCHEDULE F

Summary of Main System Provisions as Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the system effective through June 30, 2017. The following summary describes the main benefit and contribution provisions of the system as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance for Members Before 7/1/2008
Condition for Allowance

- Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance

- The annual retirement allowance for non-university members is equal to:
  - (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
  - (b) 2.5% of final average salary multiplied by service after July 1, 1983.
  - (c) For individuals who become members of the retirement system on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
  - (d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

Schedule F continued ...

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance for Members on and after 7/1/2008
Condition for Allowance

- Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

- 1.7% of final average salary if service is 10 years or less.
- 2.0% of final average salary if service is greater than 10 years and no more than 20 years.
- 2.3% of final average salary if service is greater than 20 years but no more than 26 years.
- 2.5% of final average salary if service is greater than 26 years but no more than 30 years.
- 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

- 1.5% of final average salary if service is 10 years or less.
- 1.7% of final average salary if service is greater than 10 years and no more than 20 years.
- 1.85% of final average salary if service is greater than 20 years but less than 27 years.
- 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance
Condition for Allowance

- Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance

- The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

- Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the system may be continued in the membership of the system after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

- A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased TRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance

Schedule F continued ...

will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3- CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the retirement system. Non-university members contribute 9.105% of salary to the retirement system. Member contributions are picked up by the employer.

SCHEDULE G
Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2017
by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	3,124	1							3,125
Total Pay	68,700,220	36,417							68,736,637
Avg. Pay	21,991	36,417							21,996
25 to 29	5,751	1,743	7						7,501
Total Pay	198,454,302	85,098,224	334,900						283,887,426
Avg. Pay	34,508	48,823	47,843						37,847
30 to 34	2,848	4,611	1,634	4					9,097
Total Pay	90,403,505	233,923,522	94,411,429	227,633					418,966,089
Avg. Pay	31,743	50,732	57,779	56,908					46,055
35 to 39	2,295	2,148	4,704	1,350	5				10,502
Total Pay	65,212,518	109,964,711	281,588,809	86,949,175	337,006				544,052,219
Avg. Pay	28,415	51,194	59,862	64,407	67,401				51,805
40 to 44	1,760	1,437	2,082	4,055	1,030	3			10,367
Total Pay	46,610,992	74,259,161	124,959,603	269,604,678	72,709,546	214,424			588,358,404
Avg. Pay	26,484	51,677	60,019	66,487	70,592	71,475			56,753
45 to 49	1,436	1,141	1,563	2,184	3,465	995	1		10,785
Total Pay	36,545,406	58,561,919	92,906,582	141,902,471	242,973,570	73,378,613	87,283		646,355,844
Avg. Pay	25,449	51,325	59,441	64,974	70,122	73,747	87,283		59,931
50 to 54	1,218	666	987	1,260	1,491	1,787	368	2	7,779
Total Pay	25,538,756	33,551,742	59,055,800	81,571,155	103,905,594	133,441,307	27,737,810	137,175	464,939,339
Avg. Pay	20,968	50,378	59,834	64,739	69,689	74,673	75,374	68,588	59,769
55 to 59	1,510	441	637	905	1,009	761	252	30	5,545
Total Pay	22,703,041	19,579,701	37,444,127	57,909,611	71,553,184	59,400,531	22,546,672	2,780,424	293,917,291
Avg. Pay	15,035	44,398	58,782	63,989	70,915	78,056	89,471	92,681	53,006
60 to 64	1,801	339	319	535	513	341	88	48	3,984
Total Pay	22,241,812	13,685,508	19,054,170	35,872,033	37,662,676	26,514,686	8,020,781	4,303,664	167,355,330
Avg. Pay	12,350	40,370	59,731	67,051	73,417	77,756	91,145	89,660	42,007
65 & over	2,176	505	146	186	175	137	68	52	3,445
Total Pay	18,334,805	11,267,510	8,493,619	12,919,583	12,962,784	11,860,877	6,223,797	4,952,788	87,015,763
Avg. Pay	8,426	22,312	58,175	69,460	74,073	86,576	91,526	95,246	25,259
Total	23,919	13,032	12,079	10,478	7,689	4,024	777	132	72,130
Total Pay	594,745,357	639,928,415	718,249,039	686,956,339	542,104,360	304,810,438	64,616,343	12,174,051	3,563,584,342
Avg. Pay	24,865	49,104	59,463	65,562	70,504	75,748	83,161	92,228	49,405

Average Age: 43.5 **Average Service: 10.8**

Schedule G continued ...

Table 2: Schedule of Active Member Valuation Data
as of June 30, 2017

Valuation Date June 30	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
2017	72,130	$ 3,563,584,342	$ 49,405	0.35%
2016	71,848	3,537,226,348	49,232	1.19
2015	72,246	3,515,113,127	48,655	2.45
2014	73,407	3,486,326,799	47,493	2.12
2013	74,831	3,480,066,406	46,506	1.51
2012	75,951	3,479,567,004	45,813	1.33
2011	76,349	3,451,756,287	45,210	3.97
2010	76,387	3,321,614,223	43,484	1.51
2009	75,937	3,253,076,600	42,839	1.43
2008	75,539	3,190,332,239	42,234	6.67

Table 3: Number of Retired Members, Beneficiaries and their Benefits by Age
as of June 30, 2017

Attained Age	Number of Members	Total Annual Payments	Average Annual Benefits
49 & Under	839	$ 11,271,278	$ 13,434
50 - 54	1,355	53,461,765	39,455
55 - 59	4,100	177,488,529	43,290
60 - 64	8,441	346,499,640	41,050
65 - 69	13,307	516,625,458	38,824
70 - 74	10,572	389,151,744	36,810
75 - 79	6,570	229,669,782	34,957
80 - 84	3,969	127,197,393	32,048
85 - 89	2,373	67,342,576	28,379
90 & Over	1,440	34,755,811	24,136
TOTAL	52,966	$ 1,953,463,976	$ 36,881

Average Current Age:	69.5
Average Age at Retirement for All Retirees and Beneficiaries:	56.0

Schedule G continued ...

Table 4: Schedule of Retirees, Beneficiaries and Survivors Added to and Removed from Rolls

Fiscal Year Ending June 30	ADD TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase In Annual Allowances	Average Annual Allowances
	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)		
2008	2,183	$ 90.6	950	$ 19.4	40,739	$ 1,206.8	6.3 %	$ 29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4	33,089
2013	2,303	105.7	991	22.2	47,406	1,608.7	5.5	33,934
2014	2,146	99.6	976	23.4	48,576	1,684.9	4.7	34,685
2015	2,917	119.1	1,671	36.3	49,822	1,767.6	4.9	35,479
2016	2,753	128.2	1,012	26.9	51,563	1,868.9	5.7	36,244
2017	2,638	119.8	1,235	35.2	52,966	1,953.5	4.5	36,881

Schedule H
Board Funding Policy

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("TRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background:

State law provides that the retirement benefits promised to members of TRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in TRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state-as plan guarantor-is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $520 million (Fiscal Year 2017). The following schedule details the growth of the annual retirement appropriations payable by the state:

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88 %	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	520,372,000

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2014).

The board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

Schedule H continued ...

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which-if paid-will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

- Use the Entry Age Normal actuarial cost method;
- Use a five-year asset smoothing method;
- Use a 30-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
- Use a 20-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
- Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and TRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

Schedule I
Sensitivity Analysis
as of June 30, 2017

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate and the rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, and 7.50% together with a decrease in the discount rate to 6.50% and an increase in the discount rate to 8.50%. Under this scenario, the underlying inflation rate assumption is held constant at 3.00% and the payroll growth assumption is held constant at 3.50%.

- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.00%, together with decreases in the inflation rate to 2.75% and 2.50%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption and the assumed rates of salary increase for active members.

- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 3.50%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

Schedule I continued ...

Assumed Discount Rate Sensitivity Analysis
as of June 30, 2017
(In thousands of dollars)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 36,634,863	$ 32,819,886	$ 29,621,499
Actuarial Value of Assets	18,514,638	18,514,638	18,514,638
Unfunded Liability	$ 18,120,225	$ 14,305,248	$ 11,106,861
Funded Ratio	50.5%	56.4%	62.5%
Employer ADEC - University*	37.325%	28.925%	21.645%
Employer ADEC - Non-University*	38.805%	30.405%	23.125%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	3.50%	3.50%	3.50%
Inflation Rate	3.00%	3.00%	3.00%

* *Less 1% for members hired before July 1, 2008.*

Inflation Assumption Sensitivity Analysis
as of June 30, 2017
(In thousands of dollars)

	Valuation Results	Decrease Inflation Rate 25 Basis Points	Decrease Inflation Rate 50 Basis Points
Actuarial Accrued Liability	$ 32,819,886	$ 33,592,160	$ 34,397,184
Actuarial Value of Assets	18,514,638	18,514,638	18,514,638
Unfunded Liability	$ 14,305,248	$ 15,077,522	$ 15,882,546
Funded Ratio	56.4%	55.1%	53.8%
Employer ADEC - University*	28.925%	30.945%	33.075%
Employer ADEC - Non-University*	30.405%	32.425%	34.555%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	3.50%	3.25%	3.00%
Inflation Rate	3.00%	2.75%	2.50%

* *Less 1% for members hired before July 1, 2008.*

Schedule I continued ...

Payroll Growth Assumption Sensitivity Analysis
as of June 30, 2017
(In thousands of dollars)

	Valuation Results	Decrease Payroll Growth to 2%	No Payroll Growth
Actuarial Accrued Liability	$ 32,819,886	$ 32,819,886	$ 32,819,886
Actuarial Value of Assets	18,514,638	18,514,638	18,514,638
Unfunded Liability	$ 14,305,248	$ 14,305,248	$ 14,305,248
Funded Ratio	56.4%	56.4%	56.4%
Employer ADEC - University*	28.925%	33.285%	39.815%
Employer ADEC - Non-University*	30.405%	34.765%	41.295%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	3.50%	2.00%	0.00%
Inflation Rate	3.00%	3.00%	3.00%

* *Less 1% for members hired before July 1, 2008.*

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Teachers' Retirement System

of the State of Kentucky

2017

Actuarial Section

Report of the Actuary
Annual Valuation
of the Retiree Medical Plan
and the Life Insurance Plan

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 10, 2017

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

This report covers the Retiree Medical Plan funded by the Medical Insurance Fund (MIF) and OPEB liabilities related to the Life Insurance Plan funded by the Life Insurance Fund (LIF). Cavanaugh Macdonald Consulting, LLC (CMC) has submitted the results of the annual actuarial valuation prepared as of June 30, 2017. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total annual required contribution of 7.01% of active member payroll for the MIF payable for the fiscal year ending June 30, 2018 is required to support the benefits of the Kentucky Employees' Health Plan (KEHP) and the Medicare Eligible Health Plan (MEHP). Of this amount, 2.775% of payroll is estimated to be paid by University members and 3.750% of payroll is estimated to be paid by all other members, leaving 4.235% and 3.260% respectively, as the remaining annual required contribution. This annual required contribution reflects the actuarial value of assets of the MIF and an 8.00% discount rate for valuing liabilities.

The initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised since the previous valuation to reflect recent experience and revised expectations. Additionally, the results of the valuation include a change to the KEHP dependent subsidies offered to retirees who retired prior to July 1, 2010.

The Life Insurance Plan valuation indicates a total annual required contribution of 0.05% of active member payroll payable for the fiscal year ending June 30, 2020 is required to support the benefits of the LIF. This annual required contribution reflects the actuarial value of assets of the LIF and a 7.50% discount rate for valuing liabilities.

The promised benefits of the Retiree Medical and Life Insurance Plans are included in the actuarially calculated contribution rates that are developed using the entry age normal actuarial cost method. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 23-year period for the Retiree Medical Plan and a 27-year period for the Life Insurance Plan, on the assumption that payroll will increase by 3.50% annually. The assumptions recommended by the actuary and adopted by the Board are in aggregate reasonably related to the experience under the Retiree Medical and Life Insurance Plans and to reasonable expectations of anticipated experience under the Retiree Medical and Life Insurance Plans and meet the parameters for the disclosures under GASB 45.

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CMC has prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Section VII shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Retiree Medical and Life Insurance Plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This actuarial valuation was performed to determine the recommended funding amount for the system. The asset values used to determine unfunded liabilities and funded ratios are not market values, but less volatile market-related values. A smoothing technique is applied to market values to determine the market-related values. The unfunded liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return of assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

In our opinion, if the contributions to the Medical Insurance Fund continue at the current statutorily required levels, the funded ratio of the Retiree Medical Plan will continue to increase, and the ability of the MIF to fund the benefits called for under the Retiree Medical Plan will improve.

Respectfully submitted,

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Report of Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans Prepared as of June 30, 2017
Section I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (dollar amounts are in thousands):

Medical Insurance Fund

Valuation Date	June 30, 2017	June 30, 2016
Number of active members	72,130	71,848
Annual salaries	$ 3,563,584	$ 3,537,226
Number of deferred vested members	7,410	8,145
Number of annuitants in medical plans	39,497	38,815
Number of spouses and beneficiaries in medical plans*	7,189	7,181
Total	46,686	45,996
Assets:		
Market value	$ 963,269	$ 733,781
Actuarial value	$ 985,694	$ 795,055
Unfunded actuarial accrued liability	$ 2,706,025	$ 2,839,018
Amortization period (years)	23	30
Discount rate	8.00%	8.00%

* *Spouses of post-65 retirees, as well as surviving spouses of deceased retirees on or after July 1, 2002, pay 100% of the full contribution. The full contribution for non-Medicare-eligible dependents is paid through a combination of payments from beneficiaries and the state.*

Medical Insurance Fund Contribution Rates for University Members

Valuation Date	June 30, 2017		June 30, 2016	
Contribution For Fiscal Year Ending	June 30, 2018		June 30, 2017	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.94 %	1.94 %	1.95 %	1.95 %
Accrued liability	5.07	5.07	4.64	4.64
Total	7.01 %	7.01 %	6.59 %	6.59 %
Member	2.775 %	2.775 %	2.775 %	2.775 %
Employer (ARC)	2.775	1.775	2.775	1.775
State (ARC)	1.460	2.460	1.040	2.040
Total	7.010 %	7.010 %	6.590 %	6.590 %

Medical Insurance Fund Contribution Rates for School District Employees (Non-Federal)

Valuation Date	June 30, 2017		June 30, 2016	
Contribution For Fiscal Year Ending	June 30, 2018		June 30, 2017	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.94 %	1.94 %	1.95 %	1.95 %
Accrued liability	5.07	5.07	4.64	4.64
Total	7.01 %	7.01 %	6.59 %	6.59 %
Member	3.750 %	3.750 %	3.750 %	3.750 %
Employer (ARC)	3.000	3.000	3.000	3.000
State (ARC)	0.260	0.260	(0.160)	(0.160)
Total	7.010 %	7.010 %	6.590 %	6.590%

Medical Insurance Fund Contribution Rates for Other Employees

Valuation Date	June 30, 2017		June 30, 2016	
Contribution For Fiscal Year Ending	June 30, 2018		June 30, 2017	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.94 %	1.94 %	1.95 %	1.95 %
Accrued liability	5.07	5.07	4.64	4.64
Total	7.01 %	7.01 %	6.59 %	6.59 %
Member	3.750 %	3.750 %	3.750 %	3.750 %
Employer (ARC)	3.750	2.750	3.750	2.750
State (ARC)	(0.490)	0.510	(0.910)	0.090
Total	7.010 %	7.010 %	6.590 %	6.590 %

Life Insurance Fund

(In thousands of dollars)

Valuation Date	June 30, 2017	June 30, 2016
Number of active members	72,130	71,848
Annual salaries	$ 3,563,584	$ 3,537,226
Number of vested former members	8,525	9,058
Number of retirees in Life Insurance Plan	48,225	47,071
Assets:		
Market value	$ 87,777	$ 90,991
Actuarial value	95,730	97,269
Unfunded actuarial accrued liability*	$ 13,339	$ 8,790
Amortization period (years)	27	30
Discount rate	7.50%	7.50 %

Contribution for fiscal year ending	June 30, 2020	June 30, 2019
Normal	0.03 %	0.03 %
Accrued liability	0.02	0.01
Total	0.05 %	0.04 %

* *Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post-employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45.*

2. The valuation indicates combined member, employer, and state contributions of 7.01% of active member payroll would be sufficient to support the current benefits of the Retiree Medical Plan and state contributions of 0.05% of active member payroll would be sufficient to support the current benefits of the Life Insurance Plan. Comments on the valuation results as of June 30, 2017 are given in Section IV and further discussion of the contribution levels is set out in Sections VI and VII.

3. Since the previous valuation, the amortization period of the unfunded accrued liability has been changed from a 30-year period to a 23-year period for the Retiree Medical Plan and from a 30-year period to a 27-year period for the Life Insurance Plan.

4. Since the previous valuation, the initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised to reflect recent experience.

Report of Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans continued ...

5. Since the previous valuation, there has been a change to the KEHP dependent subsidies offered to retirees. The premium subsidy for KEHP-participating members who retired prior to July 1, 2010 has been restored.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the Retiree Medical and Life Insurance Plans for use as a basis of the valuation were furnished by the system's office. The following tables summarize the membership of the system as of June 30, 2017, upon which the valuation was based. Detailed tabulations of the data are given in Schedule F.

Active Members as of June 30, 2017

Group	Number	Annual Salaries ($1,000's)
University Full Time hired before 7/1/2008	1,724	$ 127,690
University Full Time hired after 7/1/2008	1,493	77,914
Non-University Full Time hired before 7/1/2008	36,025	2,339,663
Non-University Full Time hired after 7/1/2008	20,897	947,285
Non-University Part Time hired before 7/1/2008	2,438	20,770
Non-University Part Time hired after 7/1/2008	9,553	50,262
TOTAL	72,130	$ 3,563,584

2. The following tables show the number of retired members and their beneficiaries receiving health care as of the valuation date as well as average ages.

Retirees Receiving Health Benefits as of June 30, 2017

	Under Age 65	Age 65 and Over	TOTAL
Number	11,094	28,403	39,497
Average Age	60.2	74.0	70.1

Spouses Receiving Health Benefits as of June 30, 2017

Number	2,618	4,571	7,189
Average Age	59.0	74.8	69.1

3. The Retiree Medical Plan valuation includes 7,410 deferred vested members eligible for health care at age 60 and the Life Insurance Plan valuation includes 8,525 deferred vested members eligible for retiree life insurance at age 60.

Section III - ASSETS

1. As of June 30, 2017, the market value of MIF assets held by the Retiree Medical Plan amounted to $963,269,031 and the market value of LIF assets held by the Life Insurance Plan amounted to $87,777,405.

2. The five-year market related value of MIF assets used for valuation purposes as of June 30, 2017 was $985,694,300 and the five-year market related value of LIF assets used for valuation purposes as of June 30, 2017 was $95,730,467. Schedule B shows the development of the actuarial value of assets as of June 30, 2017.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the MIF and the LIF.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows the Retiree Medical Plan has an actuarial accrued liability of $1,706,563,670 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $47,985,652. The liability on account of benefits payable to retirees and covered spouses amounts to $1,937,169,564. The total actuarial accrued liability of the Retiree Medical Plan amounts to $3,691,718,886. Against these liabilities, the Retiree Medical Plan has present assets for valuation purposes of $985,694,300. When this amount is deducted from the actuarial accrued liability of $3,691,718,886, there remains $2,706,024,586 as the unfunded actuarial accrued liability for the Retiree Medical Plan.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the Retiree Medical Plan is determined to be $69,127,577, or 1.94% of payroll.

4. The valuation shows that the Life Insurance Plan has an actuarial accrued liability of $17,002,363 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $3,416,394. The liability on account of benefits payable to retirees amounts to $88,650,542. The total actuarial accrued liability of the Life Insurance Plan amounts to $109,069,299. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for active and post-employment purposes. As this could be administratively burdensome and, as death in active service liabilities can be considered de minimis, it is viewed to be acceptable to consider the entire liability an OPEB liability under GASB 43 and 45. Against these liabilities, the Life Insurance Plan has present assets for valuation purposes of $95,730,467. When this amount is deducted from the actuarial accrued liability of $109,069,299, there remains $13,338,832 as the unfunded actuarial accrued liability for the life insurance plan.

5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $993,357, or 0.03% of payroll.

Section V - DERIVATION OF EXPERIENCE GAINS AND LOSSES

1. Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2017 is shown below ($1,000's).

	EXPERIENCE GAIN/(LOSS)* OF THE:	MEDICAL INSURANCE FUND	LIFE INSURANCE FUND
(1)	UAAL** as of 6/30/2016	$ 2,839,018	$ 8,790
(2)	Normal cost from last valuation	69,043	993
(3)	Expected employer contributions	233,094	1,474
(4)	Interest accrual: [(1) + (2) - (3)] x interest***	213,997	623
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	2,888,964	8,932
(6)	Change due to benefit provisions	0	0
(7)	Change due to new actuarial assumptions	0	0
(8)	Change due to claims experience	(153,125)	0
(9)	Expected UAAL after changes: (5) + (6) + (7) + (8)	2,735,839	8,932
(10)	Actual UAAL as of 6/30/2017	2,706,025	13,339
(11)	Total gain/(loss): (9) - (10)	29,814	(4,407)
	(a) Contribution and investment gain/(loss)	65,870	(4,566)
	(b) Experience gain/(loss) (11) - (11a)	(36,056)	159
(12)	Accrued liabilities as of 6/30/2016	$ 3,634,073	$ 106,059
(13)	Experience gain/(loss) as percent of actuarial accrued liabilities at start of year (11b) / (12)	(1.0%)	0.1%

* *Rows labeled as a change, rather than a gain/(loss), are expressed as negative if the UAAL is decreased and positive if the UAAL is increased.*

** *Unfunded Actuarial Accrued Liability*

*** *Interest is 8.0% for the Medical Insurance Fund and 7.5% for the Life Insurance Fund.*

Section VI - CONTRIBUTIONS PAYABLE UNDER THE PLANS

1. Sections 161.420 and 161.550 of the Kentucky Revised Statutes provide the amounts employers and the state are required to contribute to the Medical Insurance Fund. These contribution amounts vary by date of membership and employee type.

Employer Percentage of Payroll Contributions Made to Medical Insurance Fund

UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES	
Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
2.775 %	1.775 %	3.000 %	3.000 %	3.750 %	2.750 %

* *In addition to the amounts contributed by school districts on behalf of non-federal employees, the state contributes 0.75%.*

For the fiscal year ending June 30, 2018, member contributions will be 2.775% for University employees and 3.750% for all other members. Based upon the amortization of the unfunded accrued liability over a 23-year period as a level percentage of payroll, the valuation indicates employer and state contributions of 4.235% of payroll for University employees and 3.260% of payroll for all other members. The state is scheduled to contribute 0.04% of salary to the Life Insurance Fund for the fiscal year ending June 30, 2019. Based upon the amortization of the unfunded accrued liability over a 27-year period as a level percentage of payroll, CMC's valuation indicates a contribution of 0.05% for the fiscal year ending June 30, 2020 is required to support sufficiently the benefits of the Life Insurance Plan.

Required Contribution Rates For Fiscal Year Ending June 30, 2018 Medical Insurance Fund

Normal	1.94 %
Accrued liability	5.07
Total	7.01 %

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
Member	2.775 %	2.775 %	3.750 %	3.750 %	3.750 %	3.750 %
Employer (ARC)	2.775	1.775	3.000	3.000	3.750	2.750
State (ARC)	1.460	2.460	0.260	0.260	(0.490)	0.510
Total	7.010 %	7.010 %	7.010 %	7.010 %	7.010 %	7.010 %

Required Contribution Rates Life Insurance Fund For Fiscal Year Ending June 30, 2020

Normal	0.03 %
Accrued liability	0.02
Total	0.05%
Member	0.00 %
State (ARC)	0.05
Total	0.05 %

2. The valuation indicates that a total normal contribution of 1.94% of payroll is required to meet the cost of benefits currently accruing under the Retiree Medical Plan and 0.03% of payroll is required to meet the cost of benefits currently accruing under the Life Insurance Plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 5.07% of payroll for the Retiree Medical Plan and 0.02% of payroll for the Life Insurance Plan.

3. The unfunded actuarial accrued liability amounts to $2,706,024,586 for the Retiree Medical Plan and $13,338,832 for the Life Insurance Plan as of the valuation date. An accrued liability contribution of 5.07% of payroll for the Retiree Medical Plan and 0.02% of payroll for the Life Insurance Plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 23-year period for the Retiree Medical Plan and a 27-year period for the Life Insurance Plan, based on the assumption that the payroll will increase by 3.50% annually.

Section VII - COMMENTS ON LEVEL OF FUNDING

1. The system's monthly contribution for retirees who opt into the Retiree Medical Plan is based upon date of hire, date of attaining age 65, and years of service at retirement. Additionally, beneficiary contributions may vary by date of hire, date of attaining age 65, years of service at retirement, plan election, Medicare eligibility, and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the state on a current disbursement basis. Current employer and state contributions have been determined to be sufficient to fund the cost of the benefits to be provided. Benefits for university, school district (non-Federal), and other members are identical, although active employee contributions collected from university, school district (non-Federal), and other members differ. A listing of active member Retiree Medical Plan contributions by fiscal year, date of membership, and employer type is provided in Schedule E.

2. This valuation provides the contributions required to fund sufficiently the Retiree Medical Plan and to ensure the future solvency of the Medical Insurance Fund. For University employees, a member contribution of 2.775% of payroll together with employer and state contributions of 4.235% of payroll are required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 23 years. For the remaining membership, a member contribution of 3.750% of payroll together with employer and state contributions of 3.260% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 23 years.

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statement 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the Retiree Medical and Life Insurance Plans and the employer.

Number of Active and Retired Members in Medical Plan as of June 30, 2017

GROUP	NUMBER
Retirees currently receiving health benefits	39,497
Spouses of retirees currently receiving health benefits	7,189
Terminated employees entitled to benefits but not yet receiving benefits	7,410
Active plan members	72,130
Total	**126,226**

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2017

GROUP	NUMBER
Retirees	48,225
Terminated employees	8,525
Active plan members	72,130
Total	**128,880**

Schedule of Funding Progress
Medical Insurance Fund
(In thousands of dollars)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2008	$ 185,883	$ 6,434,522	$ 6,248,639	2.9 %	$ 3,190,332	195.9 %
6/30/2009 *	229,103	6,454,733	6,225,630	3.5	3,253,077	191.4
6/30/2010 **	241,224	3,206,806	2,965,582	7.5	3,321,614	89.3
6/30/2011 ***	294,819	3,423,149	3,128,330	8.6	3,451,756	90.6
6/30/2012	338,746	3,594,540	3,255,794	9.4	3,479,567	93.6
6/30/2013	412,185	3,521,073	3,108,888	11.7	3,480,066	89.3
6/30/2014	508,913	3,194,689	2,685,776	15.9	3,486,327	77.0
6/30/2015	637,839	3,525,584	2,887,745	18.1	3,515,113	82.2
6/30/2016 ****	795,055	3,634,073	2,839,018	21.9	3,537,226	80.3
6/30/2017	985,694	3,691,719	2,706,025	26.7	3,563,584	75.9

* *Reflects change in participation assumptions and plan design.*
** *Reflects change in discount rate to 8%, change in plan design and updating medical trend.*
*** *Reflects change in decrement assumptions and updating medical trend.*
**** *Reflects change in decrement and participation assumptions.*

Schedule of Funding Progress
Life Insurance Fund
(In thousands of dollars)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2008	$ 77,658	$ 84,265	$ 6,607	92.2 %	$ 3,190,332	0.21 %
6/30/2009	84,703	90,334	5,631	93.8	3,253,077	0.17
6/30/2010	87,905	92,091	4,186	95.5	3,321,614	0.13
6/30/2011	88,527	88,088	(439)	100.5	3,451,756	(0.01)
6/30/2012	92,241	91,398	(843)	100.9	3,479,567	(0.02)
6/30/2013	94,863	94,325	(538)	100.6	3,480,066	(0.02)
6/30/2014	96,130	97,354	1,224	98.7	3,486,327	0.04
6/30/2015	97,186	98,739	1,553	98.4	3,515,113	0.04
6/30/2016 [1]	97,269	106,059	8,790	91.7	3,537,226	0.25
6/30/2017	95,730	109,069	13,339	87.8	3,563,584	0.37

[1] *Reflects change in decrement and participation assumptions.*

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2017. Additional information as of the latest actuarial valuation follows.

Valuation Date	Actuarial Cost Method	Amortization Method	Remaining Amortization Period	Asset Valuation Method	Actuarial Assumptions: Investment Rate of Return*	Actuarial Assumptions: Investment Rate of Return*
06/30/2017	Entry age	Level percent of pay, open	23 Years Retiree Medical Plan 27 Years Life Insurance Plan	5-Year Smoothed Market	8.00%-Retiree Medical Plan	7.50%-Retiree Life Insurance Plan

Medical Trend Assumption	Pre-Medicare**	Medicare
Fiscal Year Ending 6/30/2018	7.75 %	5.75 %
Fiscal Year Ending 6/30/2019	7.00 %	5.50 %
Ultimate Trend Rate	5.00 %	5.00 %
Year of Ultimate Trend Rate	2024	2021

** Includes price inflation at 3.00%.*

***Alternate trend rates were used for Medicare Part B premiums and are disclosed in Schedule D.*

Schedule of Employer Contributions
Medical Insurance Fund

Fiscal Year Ending	Annual Required Contribution (ARC)	Actual Employer Contribution	Retiree Drug Subsidy Contribution	TOTAL Contribution	Percentage of ARC Contributed
	(A)	(B)	(C)	(B) + (C)	[(B) + (C)]/(A)
6/30/2008	$ 395,282,164	$ 148,954,644	$ 11,911,565	$ 160,866,209	40.7 %
6/30/2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1
6/30/2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9
6/30/2011	477,723,070	188,453,929	280,585	188,734,514	39.5
6/30/2012	470,217,067	177,450,206	297,639	177,747,845	37.8
6/30/2013	186,725,823	166,611,420	0	166,611,420	89.2
6/30/2014	159,583,400	162,568,395	0	162,568,395	101.9
6/30/2015	106,606,132	168,084,353	0	168,084,353	157.7
6/30/2016	97,982,580	221,966,705	0	221,966,705	226.5
6/30/2017	102,854,017	180,375,986	0	180,375,986	175.4

Schedule of Employer Contributions
Life Insurance Fund

Fiscal Year Ending	Annual Required Contribution (ARC)	Actual Employer Contribution	Percentage of ARC Contributed
	(A)	(B)	(B) / (A)
6/30/2008	$ 1,914,199	$ 5,411,249	282.7 %
6/30/2009	1,498,076	5,455,473	364.2
6/30/2010	1,992,969	1,966,826	98.7
6/30/2011	1,725,878	1,668,822	96.7
6/30/2012	1,732,831	1,684,711	97.2
6/30/2013	1,739,908	1,680,495	96.6
6/30/2014	1,044,959	1,006,091	96.3
6/30/2015	1,050,216	1,019,519	97.1
6/30/2016	1,057,851	1,037,769	98.1
6/30/2017	1,065,122	1,049,683	98.6

3. Following is the calculation of the Annual OPEB Cost (AOC) and the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2017. As the Retiree Medical and Life Insurance Plans are cost-sharing multiple-employer plans, GASB Statement 45 does not require the participating employers to disclose this information.

Annual OPEB Cost and Net OPEB Obligation for the Medical Insurance Fund for Fiscal Year Ending June 30, 2017

(a) Employer Annual Required Contribution	$ 102,854,017
(b) Interest on Net OPEB Obligation	111,531,286
(c) Adjustment to Annual Required Contribution	80,560,112
(d) Annual OPEB Cost: (a) + (b) - (c)	133,825,191
(e) Employer Contributions for Fiscal Year 2017	180,375,986
(f) Increase (decrease) in Net OPEB Obligation: (d) - (e)	(46,550,795)
(g) Net OPEB Obligation at beginning of Fiscal Year	1,394,141,069
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ 1,347,590,274

Trend Information for the Medical Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation
6/30/2012	$ 480,545,219	37.0%	$ 1,413,736,073
6/30/2013	222,560,394	74.9	1,469,685,047
6/30/2014	196,836,134	82.6	1,503,952,786
6/30/2015	144,727,465	116.1	1,480,595,898
6/30/2016	135,511,876	163.8	1,394,141,069
6/30/2017	133,825,191	134.8	1,347,590,274

Annual OPEB Cost and Net OPEB Obligation
for the Life Insurance Fund for Fiscal Year Ending June 30, 2017

(a) Employer Annual Required Contribution	$ 1,065,122
(b) Interest on Net OPEB Obligation	(641,293)
(c) Adjustment to Annual Required Contribution	(468,294)
(d) Annual OPEB Cost: (a) + (b) - (c)	892,123
(e) Employer contributions for Fiscal Year 2017	1,049,683
(f) Increase (decrease) in Net OPEB Obligation: (d) - (e)	(157,560)
(g) Net OPEB Obligation at beginning of Fiscal Year	(8,550,579)
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	$ (8,708,139)

Trend Information for the Life Insurance Fund

Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation
6/30/2012	$ 1,551,065	108.6 %	$ (7,940,695)
6/30/2013	1,555,031	108.1	(8,066,159)
6/30/2014	857,161	117.4	(8,215,089)
6/30/2015	858,950	118.7	(8,375,658)
6/30/2016	862,848	120.3	(8,550,579)
6/30/2017	892,123	117.7	(8,708,139)

4. On June 2, 2015, GASB Statement No. 74 and GASB Statement No. 75 (GASB 74 and 75) were unanimously adopted by the GASB Board. The disclosure requirements of GASB 74 and 75 will be similar to the disclosure requirements for pension benefits under GASB Statement No. 67 and GASB Statement No. 68. GASB 74 relates to accounting disclosures for plan sponsors and, as such, replaces GASB 43 beginning with fiscal years ending June 30, 2017. GASB 75 relates to accounting disclosures for contributing employers and, as such, replaces GASB 45 beginning with fiscal years ending June 30, 2018. GASB 74 and 75 will require applicable OPEB plan sponsors and contributing employers to disclose the net OPEB liability on the statement of financial position and book an accounting expense based upon the entry age normal actuarial cost method. Beyond the use of a specified actuarial cost method, GASB's new disclosure standards will also require the discount rate used to calculate liabilities to be based upon the yield of 20-year, tax-exempt municipal bonds and the expected rate of return on plan assets, to the extent plan assets are projected to be available for the payment of future benefits. Additionally, GASB 74 and 75 will bring about many other changes in the liability valuation and accounting disclosure processes currently in place which are expected to significantly impact data collection, timing, and effort. As details for the new GASB OPEB disclosure standards emerge, planning and coordination between plan sponsors, contributing employers, actuaries, and auditors is recommended.

SCHEDULE A

Results of the Valuation
June 30, 2017
(In thousands of dollars)

		Medical Insurance Fund	Life Insurance Fund
PAYROLL		$ 3,563,584	$ 3,563,584
ACTUARIAL ACCRUED LIABILITY			
Present value of prospective benefits payable in respect of:			
(a)	Present active members	1,706,564	17,002
(b)	Present terminated vested members	47,986	3,416
(c)	Present retired members and covered spouses	1,937,169	88,651
(d)	Total actuarial accrued liability	3,691,719	109,069
PRESENT ASSETS FOR VALUATION PURPOSES		985,694	95,730
UNFUNDED ACTUARIAL ACCRUED LIABILITY		$ 2,706,025	$ 13,339
CONTRIBUTIONS		Fiscal Year Ending June 30, 2018	Fiscal Year Ending June 30, 2020
	Normal	1.94%	0.03%
	Accrued Liability	5.07	0.02
	Total	7.01%	0.05%
	Member	3.69%	0.00%
	Employer (ARC)	2.97	0.00
	State (ARC)	0.35	0.05
	Total	7.01%	0.05%

Medical Insurance Fund
Solvency Test
(In millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2008	n/a	$ 3,084.4	$ 3,350.2	$ 185.9	n/a	6 %	0 %
6/30/2009	n/a	3,203.7	3,251.0	229.1	n/a	7	0
6/30/2010	n/a	1,948.6	1,258.2	241.2	n/a	12	0
6/30/2011	n/a	1,910.1	1,513.1	294.8	n/a	15	0
6/30/2012	n/a	2,046.7	1,547.9	338.7	n/a	17	0
6/30/2013	n/a	2,001.8	1,519.3	412.2	n/a	21	0
6/30/2014	n/a	1,771.9	1,422.8	508.9	n/a	29	0
6/30/2015	n/a	1,982.2	1,543.4	637.8	n/a	32	0
6/30/2016	n/a	1,950.9	1,683.2	795.1	n/a	41	0
6/30/2017	n/a	1,985.1	1,706.6	985.7	n/a	50	0

Schedule A continued ...

Life Insurance Fund
Solvency Test
(In millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2008	n/a	$ 66.9	$ 17.4	$ 77.7	n/a	100%	62 %
6/30/2009	n/a	72.0	18.4	84.7	n/a	100	69
6/30/2010	n/a	74.4	17.7	87.9	n/a	100	76
6/30/2011	n/a	72.2	15.9	88.5	n/a	100	103
6/30/2012	n/a	75.2	16.2	92.2	n/a	100	105
6/30/2013	n/a	78.1	16.2	94.9	n/a	100	104
6/30/2014	n/a	81.0	16.3	96.1	n/a	100	93
6/30/2015	n/a	82.7	16.0	97.2	n/a	100	91
6/30/2016	n/a	89.0	17.1	97.3	n/a	100	49
6/30/2017	n/a	92.1	17.0	95.7	n/a	100	21

SCHEDULE B

Development of the Actuarial Value of Assets
Medical Insurance Fund
June 30, 2017

(1)	Actuarial Value of Assets Beginning of Year		$ 795,055,116
(2)	Market Value of Assets End of Year		963,269,031
(3)	Market Value of Assets Beginning of Year		733,780,967
(4)	Cash Flow		
	a.	Contributions	367,137,197
	b.	Benefit Payments	231,563,156
	c.	Administrative Expense	1,538,574
	d.	Net: (4)a - (4)b - (4)c	134,035,467
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	95,452,597
	b.	Assumed Rate	8.00%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	64,063,896
	d.	Amount for Phased-In Recognition: (5)a - (5)c	31,388,701
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	6,277,740
	b.	First Prior Year	(12,827,105)
	c.	Second Prior Year	(7,773,884)
	d.	Third Prior Year	6,492,851
	e.	Fourth Prior Year	370,219
	f.	Total Recognized Investment Gain	(7,460,179)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		985,694,300
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ (22,425,269)
(9)	Rate of Return on Actuarial Value		6.57%

Schedule B continued ...

Development of the Actuarial Value of Assets
Life Insurance Fund
June 30, 2017

(1)	Actuarial Value of Assets Beginning of Year	$	97,268,990
(2)	Market Value of Assets End of Year		87,777,405
(3)	Market Value of Assets Beginning of Year		90,990,928
(4)	Cash Flow		
	a. Contributions		1,049,683
	b. Benefit Payments		5,151,013
	c. Administrative Expense		27,690
	d. Net: (4)a - (4)b - (4)c		(4,129,020)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)d		915,497
	b. Assumed Rate		7.50%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]		6,669,481
	d. Amount for Phased-In Recognition: (5)a - (5)c		(5,753,984)
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d		(1,150,797)
	b. First Prior Year		(353,444)
	c. Second Prior Year		(941,279)
	d. Third Prior Year		(406,987)
	e. Fourth Prior Year		(1,226,477)
	f. Total Recognized Investment Gain		(4,078,984)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		95,730,467
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	(7,953,062)
(9)	Rate of Return on Actuarial Value		2.72%

SCHEDULE C

Medical Insurance Fund
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2017	For the Year Ending June 30, 2016
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 128,819,243	$ 128,068,782
Payment by Retired Members	57,941,968	56,296,433
TOTAL MEMBERS	186,761,211	184,365,215
State Statutory Contributions	22,042,563	21,824,740
Employer Contributions	104,879,255	104,271,120
State Statutory - Transition Fund/KEHP	53,454,168	52,542,510
TOTAL EMPLOYER	180,375,986	178,638,370
GRAND TOTAL	367,137,197	363,003,585
Recovery Income	0	43,328,335
Net Investment Income	95,452,597	(9,332,490)
TOTAL	462,589,794	396,999,430
DISBURSEMENTS FOR THE YEAR		
Administrative Expense	1,538,574	1,686,070
Medical Insurance Expense	231,563,156	288,494,763
TOTAL	233,101,730	290,180,833
EXCESS OF RECEIPTS OVER DISBURSEMENTS	229,488,064	106,818,597
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	733,780,967	626,962,370
Excess of Receipts over Disbursements	229,488,064	106,818,597
Asset Balance as of the End of the Year	$ 963,269,031	$ 733,780,967

Schedule C continued ...

Life Insurance Fund
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2017	For the Year Ending June 30, 2016
RECEIPTS FOR THE YEAR		
Contributions		
Members	0	0
State	881,703	872,990
Employer	167,980	164,779
TOTAL	1,049,683	1,037,769
Net Investment Income	915,497	4,829,336
TOTAL	1,965,180	5,867,105
DISBURSEMENTS FOR THE YEAR		
Benefit Payments	5,151,013	4,595,489
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	27,690	27,195
TOTAL	5,178,703	4,622,684
EXCESS OF RECEIPTS OVER DISBURSEMENTS	(3,213,523)	1,244,421
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	90,990,928	89,746,507
Excess of Receipts over Disbursements	(3,213,523)	1,244,421
Asset Balance as of the End of the Year	$ 87,777,405	$ 90,990,928

SCHEDULE D
Statement of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, termination, salary increases, and rates of future benefit participation used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016. The health care cost trend rates, and expected plan costs were determined by the actuary based on recent experience.

Valuation Date: June 30, 2017

Discount Rate: 8.0% per annum, compounded annually for Medical Insurance Fund.
7.5% per annum, compounded annually for Life Insurance Fund.

Schedule D continued ...

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

Annual Trend Rate

Fiscal Year Ended	Medicare Part B	Under Age 65	Age 65 and Over
2018	0.00%	7.75%	5.75%
2019	1.87	7.00	5.50
2020	4.29	6.50	5.25
2021	4.39	6.00	5.00
2022	4.88	5.50	5.00
2023	5.68	5.25	5.00
2024	5.19	5.00	5.00
2025	6.06	5.00	5.00
2026	6.49	5.00	5.00
2027	5.62	5.00	5.00
2028	5.37	5.00	5.00
2029	5.12	5.00	5.00
2030 and beyond	5.00	5.00	5.00

Age Related Morbidity: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred health care claims is assumed to be:

Participant Age	Annual Increase
65 – 69	3.0 %
70 – 74	2.5
75 – 79	2.0
80 – 84	1.0
85 - 89	0.5
90 and over	0.0

For the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the health care trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP. Under Actuarial Standard of Practice No. 6 (ASOP No. 6), aging subsidies (or implicit rate subsidies) should be recognized, as the differences in health care utilization and cost due to age have been demonstrated and well quantified. The impact of aging on a valuation's results can be as significant as the use of mortality, trend, and discounting. It has been the long-standing position that the responsibility for compliance with GASB Statement No. 43, when it relates to KEHP implicit subsidies, rests with KEHP, not the system, as the system has no operational authority over KEHP. As such, KEHP implicit subsidies are excluded from the OPEB valuation process of the Retiree Medical Plan. As GASB 74 and 75 prohibit such a deviation from ASOP No. 6, additional consideration to the current treatment of KEHP implicit rate subsidies may be needed in the future. The estimated impact of KEHP implicit subsidies to the actuarial accrued liability is an increase of $687,878,632.

Retiree Medical Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that the system pays as the full contribution amount. The amounts include medical and drug costs. An additional $7.44 per month is paid to the Department of Employee Insurance (DEI) and is not included in the under age 65 costs listed below. For retirees ages 65 and older, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

Monthly Under Age 65 (KEHP) Full Costs as of January 1, 2018

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 709.46	$ 729.34	$ 685.38	$ 682.80
Parent Plus	978.50	1,037.08	975.91	940.64
Couple	1,325.64	1,589.10	1,497.18	1,450.02
Family	1,479.76	1,767.60	1,666.26	1,615.30
Family C-R	818.96	876.68	824.54	800.94

Schedule D continued ...

Average Monthly TRS Full Costs & Contributions

Calendar Year	Under Age 65 (KEHP) Contributions	Age 65 & Over (MEHP) Full Costs	Age 65 & Over (MEHP) Contributions
2008	$ 484	$ 278	$ 278
2009	545	301[1]	301
2010	594	373[1]	373
2011	626	289[1]	289
2012	622	270[2]	270
2013	635	294[2]	294
2014	679	290[2]	290
2015	669	240[2]	240
2016	681	260[2]	260
2017	680	252[2]	252
2018	688	258[2]	258

[1] *Under GASB 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy cannot be taken into account in the gross cost calculations.*

[2] *2,257 current, Medicare-eligible benefit recipients have been identified by the client to be ineligible for premium-free Medicare Part A benefits. For these individuals, the full cost of coverage is, on average, $575 per month. It is assumed 9% of current retirees under the age of 65 who were hired prior to 4/1/1986 will be ineligible for premium-free Medicare Part A benefits upon reaching Medicare eligibility (age 65) and 0% of these retirees will cover a spouse. All active members are assumed to have begun contributing to Medicare as of 4/1/1986 and are assumed eligible for premium-free Medicare Part A benefits.*

Current Retiree Medical Plan Participation: Actual census data and current plan elections (including waivers) provided by the system were used for those retirees currently participating in the Retiree Medical Plan. Current participants are assumed to maintain their current Retiree Medical Plan coverage until they are no longer eligible.

Anticipated Retireee Medical Plan Participation: The assumed annual rates of health care plan participation for future retirees are as follows:

Member Participation

Years of Service	Entered TRS Before 7/1/2002	Entered TRS After 6/30/2002 & Before 7/1/2008	Entered TRS After 6/30/2008
5-9.99	20 %	20%	Not Eligible
10-14.99	49	20	Not Eligible
15-19.99	70	41	41%
20-24.99	91	61	61
25-25.99	91	76	76
26-26.99	91	84	84
27 or more	91	91	91

Anticipated Retiree Medical Plan Elections: The assumed rates of plan election for future retirees participating in the KEHP plans are provided in the following table. As the assumed plan election rates are estimates and actual results may be materially different, this assumption will need to be revised as experience evolves.

LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
42%	43%	12%	3%

Schedule D continued ...

Spouse Coverage in Medical Plans: Actual census data and current plan elections were used for MEHP and KEHP covered spouses (including beneficiaries) of current retirees. For spouses of future retirees, 25% of future male retirees are assumed to cover their spouse and 15% of future female retirees are assumed to cover their spouse. Male retirees are assumed to be three years older than their spouse and female retirees are assumed to be one year younger than their spouse.

Disabled Dependent Children in Retiree Medical Plan: The liability associated with disabled dependent children was determined to be de minimis and was therefore excluded from this valuation.

Withdrawal Assumption: Future vested members who terminate employment prior to retirement are assumed to elect to withdraw their contributions based upon their age and service at termination of employment as follows:

Rates of Withdrawal Upon Termination of Employment

Age at Termination of Employment	Years of Service 5 - 10	10 - 15	15+
Under Age 55	20%	15%	10%
Ages 55+	10%	10%	10%

All vested members who terminate employment prior to retirement are assumed to elect to withdraw their contributions prior to receiving a pension benefit based upon their service as follows:

Rates of Withdrawal Prior to Receiving a Pension Benefit

Years of Service 5 - 10	10 - 15	15 - 27	27+
25%	15%	10%	25%

All vested members who terminate employment prior to retirement and who are assumed to elect to receive a pension benefit are assumed to begin receiving their benefit at age 60.

Payroll Growth: 3.50% per annum, compounded annually.

Price Inflation: 3.00% per annum, compounded annually.

Affordable Care Act (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2020 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the Retiree Medical Plan's liability will be required.

Asset Valuation Method: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The ultimate assumed valuation rate of return is assumed to be 8.00% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

Actuarial Cost Method: The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his/her age, service, and gender. The calculations take into account the probability of a

Schedule D continued ...

member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and deferred vested members to obtain the present value of all expected benefits payable from the system on account of the present group of members and beneficiaries.

The employer contributions required to support the benefits of the system are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his/her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his/her behalf.

The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the system.

Separations from Service: Representative values of the assumed annual rates of salary increases, death, disability, withdrawal, service retirement and early retirement are as follows:

Males: Annual Rate of . . .

				WITHDRAWAL			RETIREMENT	
				YEARS OF SERVICE				
AGE	SALARY*	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service**
20	7.20%	0.019%	0.01%	11.00%				
25	6.40	0.021	0.01	11.00	3.00%			
30	5.40	0.025	0.01	11.00	3.00	3.00%		
35	4.70	0.043	0.04	12.00	3.50	1.40		
40	4.20	0.060	0.09	12.00	4.50	1.40		
45	3.80	0.084	0.20	12.00	4.50	1.30		17.0%
50	3.70	0.119	0.30	14.00	4.50	1.90		17.0
55	3.50	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	3.50	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	3.50	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	3.50	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	3.50	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	3.50	1.556	0.75	20.00	0.00	0.00	100.0	100.0

Females: Annual Rate of . . .

				WITHDRAWAL			RETIREMENT	
				YEARS OF SERVICE				
AGE	SALARY*	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service**
20	7.20%	0.007%	0.01%	9.00%				
25	6.40	0.008	0.01	9.00	4.00%			
30	5.40	0.010	0.03	12.00	4.00	1.65%		
35	4.70	0.018	0.06	12.00	4.00	1.50		
40	4.20	0.026	0.12	12.00	4.00	1.30		
45	3.80	0.042	0.25	13.00	4.00	1.20		15.0%
50	3.70	0.062	0.44	13.00	5.00	1.50		18.0
55	3.50	0.096	0.65	15.00	5.00	2.00	5.5%	50.0
60	3.50	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	3.50	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	3.50	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	3.50	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	3.50	0.831	0.85	15.00	0.00	0.00	100.0	100.0

* *Includes wage inflation at 3.5% per annum.*

** *Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.*

Schedule D continued ...

Deaths After Retirement: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the system. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown here:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1609%	0.1135%	2.3306%	1.2482%
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074

SCHEDULE E
Summary of Main Plan Provisions as Interpreted for Valuation Purposes

Eligibility for Access to Retiree Medical Coverage

Service Retirement: For employees hired prior to July 1, 2008, Retiree Medical Plan coverage eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. For employees hired on or after July 1, 2008, employees may retire after the completion of 27 years of service, the attainment of age 55 and 10 years of service, or the attainment of age 60 and 5 years of service, but must complete a minimum of 15 years of service to be eligible for Retiree Medical Plan coverage.

Disability Retirement: Disabled employees hired prior to July 1, 2008 with at least 5 years of service, who are totally and permanently incapable of being employed as a teacher, are eligible for Retiree Medical Plan coverage. Disabled employees hired after July 1, 2008 must have 15 years of service to be eligible for Retiree Medical Plan coverage.

Members and dependents under age 65 and eligible for Medicare due to a disability after January 1, 2013 are required to be covered under MEHP. Under age 65 members who retired prior to Jan. 1, 2013, are grandfathered from this requirement and allowed a choice of KEHP or MEHP coverage. Actual census data and current plan elections were used for current disabled retirees. Until sufficient experience emerges, the valuation conservatively assumes all future disabled members under the age of 65 will be covered under KEHP.

Survivors: Spouses of employees who die in service while eligible to retire, as well as survivors of service and disabled retirees, are eligible for Retiree Medical Plan coverage.

Termination: For employees hired prior to July 1, 2008 and who terminated with at least 5 years of service, Retiree Medical Plan coverage eligibility is attained at age 60. For employees hired on or after July 1, 2008 and who terminated with at least 15 years of service, Retiree Medical Plan coverage eligibility is attained at age 60.

Reemployed Retirees: Retirees who return to work in an agency that participates in KEHP are required to terminate their coverage through the system. Additionally, if a retiree returns to work somewhere that does not participate in the KEHP, but offers health insurance, the retiree must terminate system coverage unless the employer coverage is of lesser value. For valuation purposes, active employees identified as currently receiving retiree health care through the system are valued as retirees.

Schedule E continued ...

COVERED MEMBER RETIREE MEDICAL PLAN CONTRIBUTIONS

Under Age 65 Retiree Shared Responsibility Contribution: Effective July 1, 2010, retirees under the age of 65 began a three-year phase-in of the Shared Responsibility Contribution. This contribution reduces the applicable amount of the full contribution provided by the system to retirees, by adjusting the Shared Responsibility Contribution amount by 100% less the appropriate percentage from the Retiree Percentage Contribution table below. Effective July 1, 2012, the full Shared Responsibility Contribution equals the Standard Medicare Part B premium paid by retirees ages 65 and older.

Monthly Under Age 65 Shared Responsibility Contribution Timeline

Effective Date	Medicare Part B Monthly Cost	Formula	Shared Responsibility Contribution
July 1, 2010	$ 110.50	(1/3 x $110.50)	$ 37.00
January 1, 2011	115.40	(1/3 x 115.40)	39.00
July 1, 2011	115.40	(2/3 x 115.40)	77.00
January 1, 2012	99.90	(2/3 x 99.90)	66.00
July 1, 2012	99.90	99.90	99.90
January 1, 2013	104.90	104.90	104.90
January 1, 2014	104.90	104.90	104.90
January 1, 2015	104.90	104.90	104.90
January 1, 2016	121.80	121.80	121.80
January 1, 2017	134.00	134.00	134.00
January 1, 2018	134.00	134.00	134.00

Retiree Years of Service Percentage Contribution: Retirees contribute the following percentages based on years of service at retirement, which are then applied to the Retiree Contribution Rate Basis:

Retiree Percentage Contribution*

Years of Service	Hired before 7/1/2002: Age 65 or Older and Covered Before 1/1/2005	Hired before 7/1/2002: Age 65 After or Covered After 12/31/2004	Entered TRS After 6/30/2002 and Before 7/1/2008	Entered TRS After 6/30/2008
5 - 9.99	30%	75%	90%	Not Eligible
10 - 14.99	20	50	75	Not Eligible
15 - 19.99	10	25	55	55%
20 - 24.99	0	0	35	35
25 - 25.99	0	0	10	10
26 - 26.99	0	0	5	5
27 or more	0	0	0	0

** 0% for disabled retirees that retired prior to 1/1/2002.*

Monthly Retiree Contribution Rate Basis Effective January 1, 2018 Under Age 65 (KEHP)

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Ages 65 and Older (MEHP)
Single	$ 660.04	$ 646.96	$ 635.46	$ $ 656.60	$ 258.00
Parent Plus	851.84	802.26	847.99	878.24	n/a
Couple	1,029.02	1,060.74	1,197.60	1,189.96	n/a
Family	1,131.64	1,105.34	1,314.66	1,303.24	n/a
Family Cross-Reference	738.64	719.12	743.42	771.84	n/a

Schedule E continued ...

Under Age 65 Retiree Plan Cost Contribution: An additional contribution according to the table below is required to be paid by retirees under the age of 65 based upon the plan elected and the date of retirement:

Monthly Under Age 65 Plan Cost Contribution*
Effective January 1, 2018

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP
Single	$ 49.42	$ 82.38	$ 49.92	$ 26.20
Parent Plus	126.66	234.82	127.92	62.40
Couple	296.62	528.36	299.58	260.06
Family	348.12	662.26	351.60	312.06
Family Cross-Reference	80.32	157.56	81.12	29.10

* *Does not include the additional contribution required to be paid by retirees under the age of 65 who use tobacco ($40 for Single or Family Cross-Reference, and $80 for Parent Plus, Couple or Family).*

Spouse Contributions: 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the state. Spouses of current post-65 retirees and surviving spouses of deceased retirees with a date of death on or after July 1, 2002 pay 100% of the full contribution. Spouses of active members who died while eligible to retire prior to July 1, 2002, are provided the same subsidy by the system that would have been provided to the retiree for the lifetime of the spouse, or until remarriage. Spouses of active members who die while eligible to retire on or after July 1, 2002 later pay 100% of the full contribution.

Monthly Surviving Spouse Contribution
Effective January 1, 2018
Under Age 65 (KEHP)

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Age 65 and Older (MEHP)
Single	$ 716.90	$ 736.78	$ 692.82	$ 690.24	$ 258.00
Parent Plus	985.94	1,044.52	983.35	948.08	n/a

System Retiree Medical Plan Contributions: The system contribution rate basis is determined annually by the system; and the full cost is projected based on historical claims data. For retirees, the following percentages are based on years of service at retirement and are then applied to the contribution rate basis:

Percentage of System Contribution Rate Provided to Retirees*

Years of Service	Entered TRS Before 7/1/2002: Age 65 or Older & Covered Before 1/1/2005	Entered TRS Before 7/1/2002: Age 65 After or Covered After 12/31/2004	Entered TRS After 6/30/2002 and Before 7/1/2008	Entered TRS After 6/30/2008
5 - 9.99	70 %	25 %	10 %	Not Eligible
10 - 14.99	80	50	25	Not Eligible
15 - 19.99	90	75	45	45%
20 - 24.99	100	100	65	65
25 - 25.99	100	100	90	90
26 - 26.99	100	100	95	95
27 or more	100	100	100	100

** 100% for disabled retirees that retired prior to 1/1/2002.*

Schedule E continued ...

Monthly System Contribution Rate Basis
Effective January 1, 2018
Under Age 65 (KEHP)*

Tier Elected	LivingWell CDHP	LivingWell PPO	Standard PPO	Standard CDHP	Ages 65 and Older (MEHP)
Single	$ 660.04	$ 646.96	$ 635.46	$ 656.60	$ 258.00
Parent Plus	851.84	802.26	847.99	878.24	n/a
Couple	1,029.02	1,060.74	1,197.60	1,189.96	n/a
Family	1,131.64	1,105.34	1,314.66	1,303.24	n/a
Family Cross-Reference	738.64	719.12	743.42	771.84	n/a

* *Irrespective of a participating retiree's service, an additional $7.44 per month is paid by the system to the Department of Employee Insurance (DEI) for KEHP coverage.*

Active Member Retiree Medical Plan Contributions: Actively employed members make payroll contributions to the Medical Insurance Fund based upon the following schedule:

Active Member Percentage of Payroll Contribution Made to Medical Insurance Fund

UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008
2.775 %	2.775 %	3.750 %	3.750%	3.750 %	3.750 %

Life Insurance Plan Benefits:
(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Members employed on a substitute or part-time basis and working at least 69% of a full contract year in a single fiscal year will be eligible for a life insurance benefit for the balance of the fiscal year or the immediately succeeding fiscal year under certain conditions. For non-vested members employed on a substitute or part-time basis, the life insurance benefit is provided if death occurs as the result of a physical injury on the job. For vested members employed on a substitute or part-time basis, death does not have to be the result of a physical injury on the job for life insurance benefits to be provided.

SCHEDULE F
Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2017
by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	3,124	1							3,125
Total Pay	68,700,220	36,417							68,736,637
Avg. Pay	21,991	36,417							21,996
25 to 29	5,751	1,743	7						7,501
Total Pay	198,454,302	85,098,224	334,900						283,887,426
Avg. Pay	34,508	48,823	47,843						37,847
30 to 34	2,848	4,611	1,634	4					9,097
Total Pay	90,403,505	233,923,522	94,411,429	227,633					418,966,089
Avg. Pay	31,743	50,732	57,779	56,908					46,055
35 to 39	2,295	2,148	4,704	1,350	5				10,502
Total Pay	65,212,518	109,964,711	281,588,809	86,949,175	337,006				544,052,219
Avg. Pay	28,415	51,194	59,862	64,407	67,401				51,805
40 to 44	1,760	1,437	2,082	4,055	1,030	3			10,367
Total Pay	46,610,992	74,259,161	124,959,603	269,604,678	72,709,546	214,424			588,358,404
Avg. Pay	26,484	51,677	60,019	66,487	70,592	71,475			56,753
45 to 49	1,436	1,141	1,563	2,184	3,465	995	1		10,785
Total Pay	36,545,406	58,561,919	92,906,582	141,902,471	242,973,570	73,378,613	87,283		646,355,844
Avg. Pay	25,449	51,325	59,441	64,974	70,122	73,747	87,283		59,931
50 to 54	1,218	666	987	1,260	1,491	1,787	368	2	7,779
Total Pay	25,538,756	33,551,742	59,055,800	81,571,155	103,905,594	133,441,307	27,737,810	137,175	464,939,339
Avg. Pay	20,968	50,378	59,834	64,739	69,689	74,673	75,374	68,588	59,769
55 to 59	1,510	441	637	905	1,009	761	252	30	5,545
Total Pay	22,703,041	19,579,701	37,444,127	57,909,611	71,553,184	59,400,531	22,546,672	2,780,424	293,917,291
Avg. Pay	15,035	44,398	58,782	63,989	70,915	78,056	89,471	92,681	53,006
60 to 64	1,801	339	319	535	513	341	88	48	3,984
Total Pay	22,241,812	13,685,508	19,054,170	35,872,033	37,662,676	26,514,686	8,020,781	4,303,664	167,355,330
Avg. Pay	12,350	40,370	59,731	67,051	73,417	77,756	91,145	89,660	42,007
65 & over	2,176	505	146	186	175	137	68	52	3,445
Total Pay	18,334,805	11,267,510	8,493,619	12,919,583	12,962,784	11,860,877	6,223,797	4,952,788	87,015,763
Avg. Pay	8,426	22,312	58,175	69,460	74,073	86,576	91,526	95,246	25,259
Total	23,919	13,032	12,079	10,478	7,689	4,024	777	132	72,130
Total Pay	594,745,357	639,928,415	718,249,039	686,956,339	542,104,360	304,810,438	64,616,343	12,174,051	3,563,584,342
Avg. Pay	24,865	49,104	59,463	65,562	70,504	75,748	83,161	92,228	49,405

Average Age: 43.5 **Average Service: 10.8**

Schedule F continued ...

Table 2 – Schedule of Active Member Valuation Data

Valuation Date June 30	Number	Annual Payroll	Annual Average Pay	Percentage Increase in Average Pay
2017	72,130	$ 3,563,584,342	$ 49,405	0.35 %
2016	71,848	3,537,226,348	49,232	1.19
2015	72,246	3,515,113,127	48,655	2.45
2014	73,407	3,486,326,799	47,493	2.12
2013	74,831	3,480,066,406	46,506	1.51
2012	75,951	3,479,567,004	45,813	1.33
2011	76,349	3,451,756,287	45,210	3.97
2010	76,387	3,321,614,223	43,484	1.51
2009	75,937	3,253,076,600	42,839	1.43
2008	75,539	3,190,332,239	42,234	6.67

Table 3 – Eligible Deferred Vested Members as of June 30, 2017 Medical Insurance Fund

Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	1	0	1
30-34	79	354	433
35-39	288	900	1,188
40-44	294	940	1,234
45-49	322	1,116	1,438
50-54	282	974	1,256
55-59	204	782	986
60 & Over	248	626	874
Total	**1,718**	**5,692**	**7,410**

Table 4 – Eligible Deferred Vested Members as of June 30, 2017 Life Insurance Fund

Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	16	46	62
30-34	169	645	814
35-39	341	1,030	1,371
40-44	338	1,051	1,389
45-49	345	1,216	1,561
50-54	310	1,045	1,355
55-59	222	833	1,055
60 & Over	262	656	918
Total	**2,003**	**6,522**	**8,525**

Schedule F continued ...

Table 5 – All Retirees & Spouses Receiving Health Care Benefits as of June 30, 2017 Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 40	3	16	19
40-44	22	46	68
45-49	77	194	271
50-54	398	952	1,350
55-59	1,136	2,818	3,954
60-64	2,461	5,585	8,046
65-69	3,777	8,189	11,966
70-74	3,227	5,739	8,966
75-79	1,993	3,485	5,478
80-84	1,271	2,114	3,385
85-89	607	1,409	2,016
90-94	211	677	888
95-99	50	187	237
100	1	11	12
101	1	6	7
102	0	5	5
103	1	11	12
104	0	1	1
105 & Over	0	5	5
Total	**15,236**	**31,450**	**46,686**

Table 6 – Retirees, Beneficiaries and Survivors Added To and Removed From Rolls * Medical Insurance Fund

Fiscal Year Ending June 30	Number of Members Added to Rolls	Number of Spouses** Added to Rolls	Total Number Added to Rolls	Number of Members Removed from Rolls	Number of Spouses** Removed from Rolls	Total Number Removed from Rolls	Number of Members on Rolls at the End of the Year	Number of Spouses** on Rolls at the End of the Year	Total Number on Rolls at the End of the Year
2012	1,996	702	2,698	1,029	616	1,645	36,000	7,008	43,008
2013	1,853	664	2,517	1,076	619	1,695	36,777	7,053	43,830
2014	1,663	638	2,301	1,165	660	1,825	37,275	7,031	44,306
2015	1,990	731	2,721	1,190	633	1,823	38,075	7,129	45,204
2016	2,045	726	2,771	1,305	674	1,979	38,815	7,181	45,996
2017	1,835	699	2,534	1,153	691	1,844	39,497	7,189	46,686

* *Reflects members, spouses, and beneficiaries participating in a health care plan.*
** *Includes spouses, beneficiaries, and surviving spouses.*

Schedule F continued ...

Table 7 – Retirees, Beneficiaries and Survivors Added To and Removed From Rolls *
Life Insurance Fund

Fiscal Year Ending June 30	Number Added to Rolls	Life Insurance Benefit ($1,000's)	Number Removed from Rolls	Life Insurance Benefit ($1,000's)	Number on Rolls at the End of the Year	Life Insurance Benefit ($1,000's)	Increase in Life Insurance Benefit	Average Life Insurance Benefit
2012	2,364	$ 11,820	880	$ 4,400	42,602	$ 213,010	3.61 %	$ 5,000
2013	2,195	10,975	952	4,760	43,845	219,225	2.92	5,000
2014	1,964	9,820	954	4,770	44,855	224,275	2.30	5,000
2015	2,270	11,350	1,641	8,205	45,484	227,420	1.40	5,000
2016	2,394	11,970	807	4,035	47,071	235,355	3.49	5,000
2017	2,175	10,875	1,021	5,105	48,225	241,125	2.45	5,000

** The life insurance benefit is payable upon the death of only members retired for service or disability. Numbers do not include life insurance benefits payable upon the death of an active contributing member.*

Sensitivity Analysis
Medical Insurance Fund
as of June 30, 2017

The June 30, 2017 valuation results of the Medical Insurance Fund (MIF) are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate, the assumed rate of payroll growth, and the assumed rates of health care inflation (trend). The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 8.00%, together with a decrease in the discount rate to 7.00% and an increase in the discount rate to 9.00%. Under this scenario, the underlying inflation rate assumption is held constant at 3.00% and the payroll growth assumption is held constant at 3.50%.

- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.00%, together with decreases in the inflation rate to 2.75% and 2.50%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption, and the assumed rates of salary increase for active members. The assumed decreases in inflation are not assumed to impact the assumed rates of health care inflation (trend).

- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 3.50%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

- The health care inflation (trend) assumption sensitivity analysis shows the valuation results with the baseline trend assumption along with a 1.00% increase in all assumed trend rates and a 1.00% decrease in all assumed trend rates.

Sensitivity Analysis continued ...

Assumed Discount Rate Sensitivity Analysis
as of June 30, 2017
(In thousands of dollars)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 4,197,201	$ 3,691,719	$ 3,274,929
Actuarial Value of Assets	985,694	985,694	985,694
Unfunded Liability	$ 3,211,507	$ 2,706,025	$ 2,289,235
Funded Ratio	23.5%	26.7%	30.1%
Contributions			
Normal Cost	2.56%	1.94%	1.48%
Accrued Liability	5.51%	5.07%	4.66%
Total	8.07%	7.01%	6.14%
Member	(3.69%)	(3.69%)	(3.69%)
Employer/State	4.38%	3.32%	2.45%
Discount Rate	7.00%	8.00%	9.00%
Payroll Growth	3.50%	3.50%	3.50%
Inflation Rate	3.00%	3.00%	3.00%

Inflation Assumption Sensitivity Analysis
as of June 30, 2017
(In thousands of dollars)

	Valuation Results	Decrease Inflation Rate 25 Basis Points	Decrease Inflation Rate 50 Basis Points
Actuarial Accrued Liability	$ 3,691,719	$ 3,823,936	$ 3,964,092
Actuarial Value of Assets	985,694	985,694	985,694
Unfunded Liability	$ 2,706,025	$ 2,838,242	$ 2,978,398
Funded Ratio	26.7%	25.8%	24.9%
Contributions			
Normal Cost	1.94%	2.06%	2.19%
Accrued Liability	5.07%	5.32%	5.59%
Total	7.01%	7.38%	7.78%
Member	(3.69%)	(3.69%)	(3.69%)
Employer/State	3.32%	3.69%	4.09%
Discount Rate	8.00%	7.75%	7.50%
Payroll Growth	3.50%	3.25%	3.00%
Inflation Rate	3.00%	2.75%	2.50%

Sensitivity Analysis continued ...

Payroll Growth Assumption Sensitivity Analysis
as of June 30, 2017
(In thousands of dollars)

	Valuation Results	Decrease Payroll Growth to 2%	No Payroll Growth
Actuarial Accrued Liability	$ 3,691,719	$ 3,691,719	$ 3,691,719
Actuarial Value of Assets	985,694	985,694	985,694
Unfunded Liability	$ 2,706,025	$ 2,706,025	$ 2,706,025
Funded Ratio	26.7%	26.7%	26.7%
Contributions			
Normal Cost	1.94%	1.94%	1.94%
Accrued Liability	5.07%	5.77%	6.78%
Total	7.01%	7.71%	8.72%
Member	(3.69%)	(3.69%)	(3.69%)
Employer/State	3.32%	4.02%	5.03%
Discount Rate	8.00%	8.00%	8.00%
Payroll Growth	3.50%	2.00%	0.00%
Inflation Rate	3.00%	3.00%	3.00%

Health Care Trend Assumption Sensitivity Analysis
as of June 30, 2017
(In thousands of dollars)

	Decrease Trend Rates 100 Basis Points	Valuation Results	Increase Trend Rates 100 Basis Points
Actuarial Accrued Liability	$ 3,234,273	$ 3,691,719	$ 4,258,265
Actuarial Value of Assets	985,694	985,694	985,694
Unfunded Liability	$ 2,248,579	$ 2,706,025	$ 3,272,571
Funded Ratio	30.5%	26.7%	23.1%
Contributions			
Normal Cost	1.53%	1.94%	2.49%
Accrued Liability	4.21%	5.07%	6.13%
Total	5.74%	7.01%	8.62%
Member	(3.69%)	(3.69%)	(3.69%)
Employer/State	2.05%	3.32%	4.93%
Discount Rate	8.00%	8.00%	8.00%
Payroll Growth	3.50%	3.50%	3.50%
Inflation Rate	3.00%	3.00%	3.00%

Sensitivity Analysis
Life Insurance Fund
as of June 30, 2017

The June 30, 2017 valuation results of the Life Insurance Fund (LIF) are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate, and the assumed rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, and 7.50% together with a decrease in the discount rate to 6.50% and an increase in the discount rate to 8.50%. Under this scenario, the underlying inflation rate assumption is held constant at 3.00% and the payroll growth assumption is held constant at 3.50%.

- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.00%, together with decreases in the inflation rate to 2.75% and 2.50%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption, and the assumed rates of salary increase for active members.

- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 3.50%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

Assumed Discount Rate Sensitivity Analysis
as of June 30, 2017
(In thousands of dollars)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 123,588	$ 109,069	$ 97,172
Actuarial Value of Assets	95,730	95,730	95,730
Unfunded Liability	$ 27,858	$ 13,339	$ 1,442
Funded Ratio	77.5%	87.8%	98.5%
Contributions			
Normal Cost	0.04%	0.03%	0.02%
Accrued Liability	0.04%	0.02%	0.00%
Total	0.08%	0.05%	0.02%
Member	(0.00%)	(0.00%)	(0.00%)
Employer/State	0.08%	0.05%	0.02%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	3.50%	3.50%	3.50%
Inflation Rate	3.00%	3.00%	3.00%

Inflation Assumption Sensitivity Analysis
as of June 30, 2017
(In thousands of dollars)

	Valuation Results	Decrease Inflation Rate 25 Basis Points	Decrease Inflation Rate 50 Basis Points
Actuarial Accrued Liability	$ 109,069	$ 112,596	$ 116,322
Actuarial Value of Assets	95,730	95,730	95,730
Unfunded Liability	$ 13,339	$ 16,866	$ 20,592
Funded Ratio	87.8%	85.0%	82.3%
Contributions			
Normal Cost	0.03%	0.03%	0.03%
Accrued Liability	0.02%	0.03%	0.03%
Total	0.05%	0.06%	0.06%
Member	(0.00%)	(0.00%)	(0.00%)
Employer/State	0.05%	0.06%	0.06%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	3.50%	3.25%	3.00%
Inflation Rate	3.00%	2.75%	2.50%

Payroll Growth Sensitivity Analysis
as of June 30, 2017
(In thousands of dollars)

	Valuation Results	Decrease Payroll Growth to 2%	No Payroll Growth
Actuarial Accrued Liability	$ 109,069	$ 109,069	$ 109,069
Actuarial Value of Assets	95,730	95,730	95,730
Unfunded Liability	$ 13,339	$ 13,339	$ 13,339
Funded Ratio	87.8%	87.8%	87.8%
Contributions			
Normal Cost	0.03%	0.03%	0.03%
Accrued Liability	0.02%	0.03%	0.03%
Total	0.05%	0.06%	0.06%
Member	(0.00%)	(0.00%)	(0.00%)
Employer/State	0.05%	0.06%	0.06%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	3.50%	2.00%	0.00%
Inflation Rate	3.00%	7.50%	7.50%

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Teachers' Retirement System

of the State of Kentucky

2017

Statistical Section

This section of the Teachers' Retirement System of the State of Kentucky's Comprehensive Annual Financial Report presents detailed information as a context for understanding the information in the financial statements, note disclosures, and required supplementary information regarding the system's overall financial health.

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Financial Trends ..... page 169

These schedules contain trend information to help the reader understand how TRS's financial performance and well-being have changed over time.

Demographic & Economic Information ..... page 171

These schedules offer demographic and economic indicators to help the reader understand the system's environment within which TRS's financial activities take place.

Operating Information ..... page 176

These schedules contain benefits, service and employer contribution data to help the reader understand how TRS's financial report relates to TRS's services and activities.

Defined Benefit Plan
Past 10 Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions	Net Investment Income (Loss)	Total Additions to Plan Net Position
2017	$ 1,060,719,993	$ 313,625,434	$ 2,475,752,798	$ 3,850,098,225
2016	565,454,590	313,044,226	(245,214,860)	633,283,956
2015	559,579,290	308,159,763	862,178,759	1,729,917,812
2014	563,326,249	304,981,620	2,803,247,956	3,671,555,825
2013	568,233,446	304,738,728	2,039,874,263	2,912,846,437
2012	557,339,552	309,729,924	309,696,252	1,176,765,728
2011	1,037,935,993	302,262,819	2,760,972,224	4,101,171,036
2010	479,805,088	297,613,965	1,509,785,381	2,287,204,434
2009	442,549,935	293,678,564	(2,020,682,522)	(1,284,454,023)
2008	466,247,782	291,423,948	(909,083,525)	(151,411,795)

Deductions by Type
(Including Benefits by Type)

Year	Service Retirants	Disability Retirants	Survivors	Total Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Position
2017	$ 1,817,594,617	$ 82,466,114	$ 18,551,397	$ 1,918,612,128	$ 26,305,240	$10,313,715	$ 1,955,231,083
2016	1,735,374,416	79,808,432	18,015,782	1,833,198,630	27,747,742	8,636,438	1,869,582,810
2015	1,647,205,474	76,912,574	17,338,047	1,741,456,095	23,032,624	8,868,971	1,773,357,690
2014	1,563,634,993	73,501,441	17,239,266	1,654,375,700	25,461,843	7,955,972	1,687,793,515
2013	1,484,132,938	69,808,291	16,781,695	1,570,722,924	22,059,094	8,377,003	1,601,159,021
2012	1,401,380,816	65,297,491	16,260,858	1,482,939,165	19,549,073	7,762,880	1,510,251,118
2011	1,326,033,698	60,950,214	15,551,801	1,402,535,713	17,325,387	7,322,739	1,427,183,839
2010	1,249,272,057	57,782,651	14,754,062	1,321,808,770	15,310,680	8,830,054	1,345,949,504
2009	1,184,075,934	54,562,038	14,342,435	1,252,980,407	15,208,419	8,165,757	1,276,354,583
2008	1,105,078,345	51,842,271	14,048,485	1,170,969,101	15,965,083	7,551,936	1,194,486,120

Changes in Plan Net Position

Year	Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
2017	$ 3,850,098,225	$ 1,955,231,083	$ 1,894,867,142
2016	633,283,956	1,869,582,810	(1,236,298,854)
2015	1,729,917,812	1,773,357,690	(43,439,878)
2014	3,671,555,825	1,687,793,515	1,983,762,310
2013	2,912,846,437	1,601,159,021	1,311,687,416
2012	1,176,765,728	1,510,251,118	(333,485,390)
2011	4,101,171,036	1,427,183,839	2,673,987,197
2010	2,287,204,434	1,345,949,504	941,254,930
2009	(1,284,454,023)	1,276,354,583	(2,560,808,606)
2008	(151,411,795)	1,194,486,120	(1,345,897,915)

Medical Insurance Plan
Past 10 Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions*	Recovery Income*	Net Investment Income (Loss)	Total Additions to Plan Net Position
2017	$ 180,375,986	$ 128,819,243	$	$ 95,452,597	$ 404,647,826
2016	178,638,370	128,068,781		(9,332,490)	297,374,661
2015	145,263,926	157,467,680	22,820,427	7,354,704	332,906,737
2014	157,688,414	135,190,891	4,879,981	67,741,063	365,500,349
2013	166,576,444	119,795,780	34,976	30,718,836	317,126,036
2012	173,966,623	100,346,070	3,781,222	(3,989,202)	274,104,713
2011	188,241,202	84,147,337	493,312	8,334,296	281,216,147
2010	158,761,433	63,805,573	14,618,348	12,312,999	249,498,353
2009	164,408,037	58,688,767	13,683,830	11,296,280	248,076,914
2008	148,929,322	55,402,830	11,936,887	8,128,179	224,397,218

** Amounts paid by retirees and recovery income is netted against insurance expenses beginning fiscal year 2016.*

Deductions by Type
(Including Benefits by Type)

	Insurance Benefit Expense					
Year	Under Age 65	Age 65 & Over	Administrative Expense	Total Insurance Benefits Expense	Refunds*	Total Deductions to Plan Net Position
2017	$ 124,079,802	$ 54,420,744	$ 1,538,574	$ 180,039,120	$	$ 180,039,120
2016	127,673,325	61,196,669	1,686,070	190,556,064		190,556,064
2015	131,396,480	108,998,102	1,545,235	241,939,817		241,939,817
2014	136,963,208	105,107,323	1,100,133	243,170,664		243,170,664
2013	142,170,438	98,761,180	1,275,206	242,206,824		242,206,824
2012	156,228,181	72,746,945	1,201,629	230,176,755		230,176,755
2011	145,544,405	80,890,958	1,186,029	227,621,392		227,621,392
2010	136,702,152	100,675,376		237,377,528		237,377,528
2009	123,819,475	81,037,647		204,857,122		204,857,122
2008	107,437,450	71,838,765		179,276,215	10,014	179,286,229

**Refunds are netted against member contributions beginning fiscal year 2009.*

Changes in Plan Net Position

Year	Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
2017	$ 404,647,826	$ 180,039,120	$ 224,608,706
2016	297,374,661	190,556,064	106,818,597
2015	332,906,737	241,939,817	90,966,920
2014	365,500,349	243,170,664	122,329,685
2013	317,126,036	242,206,824	74,919,212
2012	274,104,713	230,176,755	43,927,958
2011	281,216,147	227,621,392	53,594,755
2010	249,498,353	237,377,528	12,120,825
2009	248,076,914	204,857,122	43,219,792
2008	224,397,218	179,286,229	45,110,989

Life Insurance Plan
Past 10 Fiscal Years

Additions by Source

Year	Employer Contributions	Net Investment Income (Loss)	Total Additions to Plan Net Position
2017	$ 1,049,683	$ 915,497	$ 1,965,180
2016	1,037,769	4,829,336	5,867,105
2015	1,019,519	1,990,324	3,009,843
2014	1,006,091	4,572,845	5,578,936
2013	1,680,495	674,760	2,355,255
2012	1,684,711	6,450,022	8,134,733
2011	1,668,822	3,094,776	4,763,598
2010	1,966,826	5,383,644	7,350,470
2009	5,455,473	5,282,958	10,738,431
2008	5,411,249	6,321,491	11,732,740

Deductions by Type
(Including Benefits by Type)

Year	Life Insurance	Administrative Expense	Total Deductions to Plan Net Position
2017	$ 5,151,013	$ 27,690	$ 5,178,703
2016	4,595,489	27,195	4,622,684
2015	4,061,000	25,306	4,086,306
2014	4,692,000	21,324	4,713,324
2013	4,614,718	24,425	4,639,143
2012	4,397,281	22,886	4,420,167
2011	4,120,000	21,511	4,141,511
2010	4,148,511		4,148,511
2009	3,694,000		3,694,000
2008	4,003,000		4,003,000

Changes in Plan Net Position

Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
$ 1,965,180	$ 5,178,703	$ (3,213,523)
5,867,105	4,622,684	1,244,421
3,009,843	4,086,306	(1,076,463)
5,578,936	4,713,324	865,612
2,355,255	4,639,143	(2,283,888)
8,134,733	4,420,167	3,714,566
4,763,598	4,141,511	622,087
7,350,470	4,148,511	3,201,959
10,738,431	3,694,000	7,044,431
11,732,740	4,003,000	7,729,740

Distribution of Active Contributing Members as of June 30, 2017

By Age

Age	Male	Female
20-24	620	2,556
25-29	1,763	5,821
30-34	2,218	6,965
35-39	2,560	8,014
40-44	2,592	7,822
45-49	2,570	8,307
50-54	1,993	6,105
55-59	1,467	4,673
60-64	1,135	3,299
65 & over	1,151	2,722
Total	**18,069**	**56,284**

By Service

Years of Service	Male	Female
Less than 1	2,408	7,476
1-4	4,000	12,636
5-9	3,208	9,782
10-14	2,854	9,086
15-19	2,394	7,920
20-24	1,824	5,360
25-29	1,063	3,191
30-34	274	738
35 or more	44	95
Total	**18,069**	**56,284**

Principal Participating Employers
Current Year and Nine Years Ago

	2017			2008		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	10,532	1	14.16%	9,950	1	12.96%
Fayette County Public Schools	4,616	2	6.21	4,102	2	5.34
Boone County Schools	1,979	3	2.66	1,671	3	2.18
Warren County Schools	1,368	4	1.84	1,186	7	1.54
Hardin County Schools	1,347	5	1.81	1,359	4	1.77
Kenton County Schools	1,283	6	1.73	1,308	5	1.70
Bullitt County Schools	1,266	7	1.70	1,230	6	1.60
Oldham County Schools	1,221	8	1.64	1,167	8	1.52
Daviess County Schools	1,117	9	1.50	1,156	9	1.51
Madison County Schools	1,089	10	1.46	1,136	10	1.48
All Other*	48,535		65.29	52,512		68.40
Total (207 Employers)	**74,353**		**100.00%**	**76,777**		**100.00%**

* In 2017, "all other" consisted of:

Type	Number	Employees
Local School Districts	163	43,221
Higher Education	6	3,319
State Agencies	14	1,508
Educational Cooperatives	8	366
Other	6	121
Total	**197**	**48,535**

TRS Schedule of Participating Employers
School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

TRS Schedule of Participating Employers *(continued)*
School Districts: City Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Murray
36. Newport
37. Owensboro
38. Paducah
39. Paintsville
40. Paris
41. Pikeville
42. Pineville
43. Raceland
44. Russell
45. Russellville
46. Science Hill
47. Silver Grove
48. Somerset
48. Southgate
50. Walton-Verona
51. West Point
52. Williamsburg
53. Williamstown

Universities & Community/ Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/ Other Organizations

1. Education and Workforce Development Cabinet
2. Department of Corrections

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative
13. Southeast South-Central Educational Cooperative

Distribution of Retirement and Medical Payments Worldwide as of June 30, 2017

Number of Recipients in United States Outside Kentucky

143	Alabama
4	Alaska
89	Arizona
38	Arkansas
104	California
62	Colorado
8	Connecticut
12	Delaware
1,275	Florida
260	Georgia
7	Hawaii
8	Idaho
114	Illinois
729	Indiana
17	Iowa
33	Kansas
38	Louisiana
17	Maine
37	Maryland
23	Massachusetts
52	Michigan
26	Minnesota
57	Mississippi
94	Missouri
8	Montana
9	Nebraska
26	Nevada
6	New Hampshire
8	New Jersey
17	New Mexico
46	New York
276	North Carolina
2	North Dakota
662	Ohio
29	Oklahoma
30	Oregon
61	Pennsylvania
216	South Carolina
8	South Dakota
985	Tennessee
214	Texas
27	Utah
1	Vermont
171	Virginia
49	Washington
112	West Virginia
31	Wisconsin
5	Wyoming

Number of Recipients Outside United States

7	District Of Columbia
5	Military APO
2	Australia
1	Barbados
6	Canada
1	Mexico
1	New Zealand
1	Philippines
1	Poland
1	Sweden
1	Switzerland
1	United Kingdom

TOTALS

Number of Recipients Outside of Kentucky	Amount of Payments Outside of Kentucky	Total Number of Recipients	Total Amount of Payments
6,274	**$ 180,867,715**	**55,075**	**$ 2,097,112,674**

Distribution of Retirement and Medical Payments Statewide as of June 30, 2017

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Adair	$ 8,349,473	230	Laurel	26,062,905	693
Allen	7,387,091	188	Lawrence	5,245,298	147
Anderson	8,651,904	246	Lee	3,149,476	88
Ballard	4,506,608	130	Leslie	5,992,621	151
Barren	16,846,637	438	Letcher	12,997,960	356
Bath	4,781,565	143	Lewis	7,286,404	198
Bell	14,558,770	384	Lincoln	11,822,733	299
Boone	42,764,869	1,022	Livingston	3,364,524	91
Bourbon	7,814,913	213	Logan	11,244,369	295
Boyd	22,631,086	561	Lyon	4,454,845	116
Boyle	19,089,930	490	Madison	57,363,760	1,453
Bracken	4,252,385	110	Magoffin	7,599,350	199
Breathitt	9,187,818	257	Marion	7,347,853	196
Breckinridge	7,090,130	179	Marshall	14,968,501	385
Bullitt	19,020,789	453	Martin	5,307,464	144
Butler	4,149,760	109	Mason	8,328,948	219
Caldwell	7,546,683	201	McCracken	29,674,284	768
Calloway	28,078,894	712	McCreary	8,328,283	224
Campbell	30,294,774	739	McLean	4,969,513	124
Carlisle	1,837,245	54	Meade	8,072,912	186
Carroll	3,934,024	98	Menifee	2,376,989	79
Carter	15,220,505	421	Mercer	10,167,707	293
Casey	6,156,389	168	Metcalfe	3,818,954	100
Christian	22,013,754	590	Monroe	6,097,439	158
Clark	14,231,424	372	Montgomery	13,314,627	345
Clay	12,186,629	313	Morgan	7,129,266	196
Clinton	5,408,627	150	Muhlenberg	15,097,469	374
Crittenden	2,216,144	69	Nelson	16,862,220	440
Cumberland	3,679,684	97	Nicholas	2,351,104	63
Daviess	47,330,145	1,217	Ohio	7,964,079	229
Edmonson	4,065,473	109	Oldham	21,481,720	500
Elliott	2,373,484	70	Owen	4,104,891	107
Estill	6,259,419	164	Owsley	4,460,850	119
Fayette	126,384,525	3,258	Pendleton	5,511,512	142
Fleming	7,271,037	200	Perry	16,223,636	427
Floyd	21,371,330	585	Pike	31,227,858	822
Franklin	30,809,551	960	Powell	5,175,946	133
Fulton	2,894,486	77	Pulaski	28,230,623	761
Gallatin	1,256,602	34	Robertson	1,054,841	29
Garrard	8,671,214	229	Rockcastle	7,996,672	198
Grant	8,227,001	186	Rowan	20,026,627	528
Graves	16,882,948	436	Russell	9,518,952	246
Grayson	10,640,731	281	Scott	18,757,885	480
Green	4,881,320	127	Shelby	20,941,742	510
Greenup	15,945,630	417	Simpson	6,565,048	178
Hancock	2,902,497	75	Spencer	6,271,919	149
Hardin	37,993,753	945	Taylor	12,383,957	331
Harlan	15,896,423	433	Todd	3,479,555	99
Harrison	8,109,601	215	Trigg	7,063,534	198
Hart	5,500,427	144	Trimble	2,541,481	61
Henderson	18,226,145	467	Union	4,662,063	132
Henry	7,385,345	211	Warren	69,979,995	1,814
Hickman	1,489,552	40	Washington	4,889,627	132
Hopkins	19,508,885	496	Wayne	8,981,150	238
Jackson	5,357,605	154	Webster	5,063,236	144
Jefferson	325,973,164	7,289	Whitley	26,642,898	728
Jessamine	17,242,752	456	Wolfe	4,570,660	123
Johnson	14,370,755	371	Woodford	12,892,052	346
Kenton	40,429,928	1,004			
Knott	9,617,287	260	**Total in Kentucky**	**$ 1,916,244,959**	**48,801**
Knox	10,648,695	302			
Larue	6,975,948	168			

Growth in Annuitants
as of June 30, 2017

Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Beneficiaries of Deceased Members Eligible to Retire	Survivors	Disabled Adult Child
2007-08	35,550	2,155	1,778	554	468	271
2008-09	36,684	2,209	1,837	559	448	283
2009-10	37,607	2,284	1,915	567	435	291
2010-11	38,705	2,379	2,003	584	430	296
2011-12	40,107	2,478	2,126	596	444	304
2012-13	41,255	2,582	2,207	601	432	303
2013-14	42,581	2,641	2,304	596	429	316
2014-15	43,634	2,691	2,442	653	349	328
2015-16	45,096	2,762	2,544	652	370	327
2016-17	46,356	2,806	2,675	655	349	333

Schedule of Annuitants by Type of Benefit
as of June 30, 2017

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Benefit*					
		1	2	3	4	5	6
1 - 500	3,847	2,951	13	171	32	347	333
501 - 1,000	2,893	2,348	161	292	92	0	0
1,001 - 1,500	2,998	2,105	293	489	109	2	0
1,501 - 2,000	3,514	2,629	389	422	74	0	0
2,001 - 2,500	4,799	3,822	544	334	99	0	0
2,501 - 3,000	7,967	6,822	721	335	89	0	0
3,001 - 3,500	8,586	7,904	396	223	63	0	0
3,501 - 4,000	6,367	6,026	161	148	32	0	0
4,001 - 4,500	4,237	4,027	76	106	28	0	0
4,501 - 5,000	2,943	2,846	24	60	13	0	0
5,001 & OVER	5,023	4,876	28	95	24	0	0
Total	**53,174**	**46,356**	**2,806**	**2,675**	**655**	**349**	**333**

*Type of Benefit
1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Beneficiaries of Retired Members*
4-*Beneficiaries of Deceased Member Eligible to Retire*
5-Survivor Payments
6-Disabled Adult Child

Schedule of Annuitants by Option Selected
as of June 30, 2017

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	8
1 - 500	1,929	415	286	44	2	395	94	682
501 - 1,000	1,632	376	231	96	8	358	187	5
1,001 - 1,500	1,489	320	296	148	17	387	326	15
1,501 - 2,000	1,802	403	325	155	7	489	306	27
2,001 - 2,500	2,370	479	433	173	3	753	459	129
2,501 - 3,000	3,808	801	664	223	9	1,427	758	277
3,001 - 3,500	4,472	998	607	221	9	1,317	859	103
3,501 - 4,000	3,307	685	472	181	10	994	671	47
4,001 - 4,500	2,191	427	338	121	5	636	502	17
4,501 - 5,000	1,525	320	231	96	9	422	338	2
5,001 & OVER	2,564	481	491	225	16	664	573	9
TOTAL	27,089	**5,705**	**4,374**	**1,683**	**95**	**7,842**	**5,073**	**1,313**

***Option selected:**
1 - Straight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with "pop-up" option
7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option
8 - Disability, survivors and disabled adult children - set by statute

Defined Benefit Plan
Average Benefit Payments for the Past Ten Years
By Years of Service Credit

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/2007 TO 06/30/2008								
Average monthly benefit	$199	$524	$1,117	$1,658	$2,436	$3,279	$4,319	**$2,984**
Average final average salary	$3,816	$3,066	$4,215	$4,412	$4,983	$5,067	$5,786	**$5,017**
Number of retired members	50	130	112	150	217	557	615	**1,831**
07/01/2008 TO 06/30/2009								
Average monthly benefit	$200	$573	$1,005	$1,725	$2,427	$3,368	$4,496	**$2,941**
Average final average salary	$4,617	$3,942	$3,873	$4,686	$4,974	$5,278	$5,960	**$5,164**
Number of retired members	72	168	137	115	242	505	585	**1,824**
07/01/2009 TO 06/30/2010								
Average monthly benefit	$185	$525	$1,104	$1,700	$2,513	$3,468	$4,670	**$3,222**
Average final average salary	$3,654	$3,637	$4,124	$4,508	$5,184	$5,383	$6,102	**$5,316**
Number of retired members	28	133	98	103	242	442	601	**1,647**
07/01/2010 TO 06/30/2011								
Average monthly benefit	$149	$519	$1,225	$1,781	$2,529	$3,621	$4,827	**$3,240**
Average final average salary	$3,570	$3,640	$4,423	$4,825	$5,143	$5,574	$6,235	**$5,392**
Number of retired members	45	157	144	112	235	544	617	**1,854**
07/01/2011 TO 06/30/2012								
Average monthly benefit	$175	$507	$1,170	$1,897	$2,613	$3,674	$4,726	**$3,148**
Average final average salary	$3,292	$3,759	$4,307	$4,898	$5,219	$5,605	$6,109	**$5,331**
Number of retired members	45	197	146	162	303	778	569	**2,200**
07/01/2012 TO 06/30/2013								
Average monthly benefit	$161	$475	$1,186	$1,963	$2,781	$3,811	$5,162	**$3,149**
Average final average salary	$3,362	$3,660	$4,498	$4,956	$5,518	$5,799	$6,632	**$5,476**
Number of retired members	44	234	156	154	294	685	447	**2,014**
07/01/2013 TO 06/30/2014								
Average monthly benefit	$192	$484	$1,270	$2,068	$2,797	$3,847	$5,362	**$3,126**
Average final average salary	$4,148	$3,677	$4,751	$5,364	$5,600	$5,902	$6,860	**$5,589**
Number of retired members	56	211	161	145	258	678	344	**1,853**
07/01/2014 TO 06/30/2015								
Average monthly benefit	$157	$472	$1,282	$2,038	$2,890	$3,898	$5,124	**$3,173**
Average final average salary	$3,331	$3,577	$4,892	$5,266	$5,709	$5,948	$6,552	**$5,577**
Number of retired members	60	231	183	206	314	806	456	**2,256**
07/01/2015 TO 06/30/2016								
Average monthly benefit	$177	$519	$1,316	$1,998	$2,934	$3,935	$5,389	$3,195
Average final average salary	$3,364	$3,791	$4,847	$5,188	$5,777	$6,019	$6,858	$5,664
Number of retired members	61	254	194	217	356	807	448	2,337
07/01/2016 TO 06/30/2017								
Average monthly benefit	$176	$473	$1,235	$2,039	$2,902	$3,935	$5,179	$3,040
Average final average salary	$3,691	$3,506	$4,588	$5,208	$5,722	$6,024	$6,666	$5,514
Number of retired members	53	259	162	212	346	766	320	2,118
Ten Years Ended June 30, 2017								
Average monthly benefit	**$178**	**$503**	**$1,204**	**$1,914**	**$2,710**	**$3,721**	**$4,862**	**$3,123**
Average final average salary	**$3,759**	**$3,640**	**$4,500**	**$4,984**	**$5,424**	**$5,709**	**$6,308**	**$5,416**
Number of retired members	**514**	**1,974**	**1,493**	**1,576**	**2,807**	**6,568**	**5,002**	**19,934**

Medical Insurance Plan
Average Insurance Premium Supplements for the Last Five Years
By Years of Service Credit

Retirement Effective Dates	00-9.99	10-14.99	15-19.99	20>=	TOTAL
07/01/2012 to 06/30/2013					
Average monthly supplement	$ 80.23	$ 227.32	$ 366.98	$ 499.25	
Number of retired members	29	90	104	1,373	1,596
07/01/2013 to 06/30/2014					
Average monthly supplement	$ 51.99	$ 189.59	$ 335.34	$ 483.65	
Number of retired members	15	82	100	1,227	1,424
07/01/2014 to 06/30/2015					
Average monthly supplement	$ 78.48	$ 204.26	$ 369.27	$ 492.30	
Number of retired members	24	101	176	1,411	1,712
07/01/2015 to 06/30/2016					
Average monthly supplement	$ 86.82	$ 182.41	$ 323.14	$ 483.93	
Number of retired members	68	98	178	1,407	1,751
07/01/2016 to 06/30/2017					
Average monthly supplement	$ 74.65	$ 192.30	$ 333.08	$476.86	
Number of retired members	62	71	194	1,291	1,618

Summary of Fiscal Year 2016-17
Retiree Sick Leave Payments

Total members retiring		2,325
Total members receiving sick leave payments		1,500
Total amount of sick leave payments @12.855% contribution rate	$	19,914,607
Average sick leave payment per retiree	$	13,276
Total increase in final 3 or 5 year average salary base	$	5,356,914
Average increase in final average salary	$	3,571
Total service credit of 1,500 retirees		38,832
Average service credit of 1,500 retirees		25.89

ANTICIPATED LIFETIME PAYOUT OF ADDITIONAL ANNUITY

Actuarial cost of sick leave as salary credit	$	43,962,241

Funding of Additional Payments

Member Contributions ($19,914,607 x 9.105%) =	$	1,813,225
Employer Contributions ($19,914,607 x 12.325%) =		2,454,475
TOTAL CONTRIBUTIONS	$	4,267,700
DEFICIT:		
Anticipated additional payout	$	43,962,241
Less: total member and state contributions		4,267,700
Subtotal unfunded debt	$	39,694,541
Less: current year appropriation		5,623,500
TOTAL UNFUNDED COST OF SICK LEAVE PAYMENTS*	$	34,071,041

* *This amount will be amortized over a 20-year period.*

NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998. The unfunded cost of sick leave payments are amortized over 20-year periods per KRS 161.553.

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Teachers' Retirement System of the State of Kentucky

The 78th Comprehensive Annual Financial Report

A Component Unit of the Commonwealth of Kentucky
Fiscal Years Ended June 30, 2018 and 2017

Teachers' Retirement System
of the State of Kentucky
479 Versailles Road
Frankfort, Kentucky 40601-3800

GARY L. HARBIN, CPA
Executive Secretary

This report was prepared by the
Teachers' Retirement System staff.

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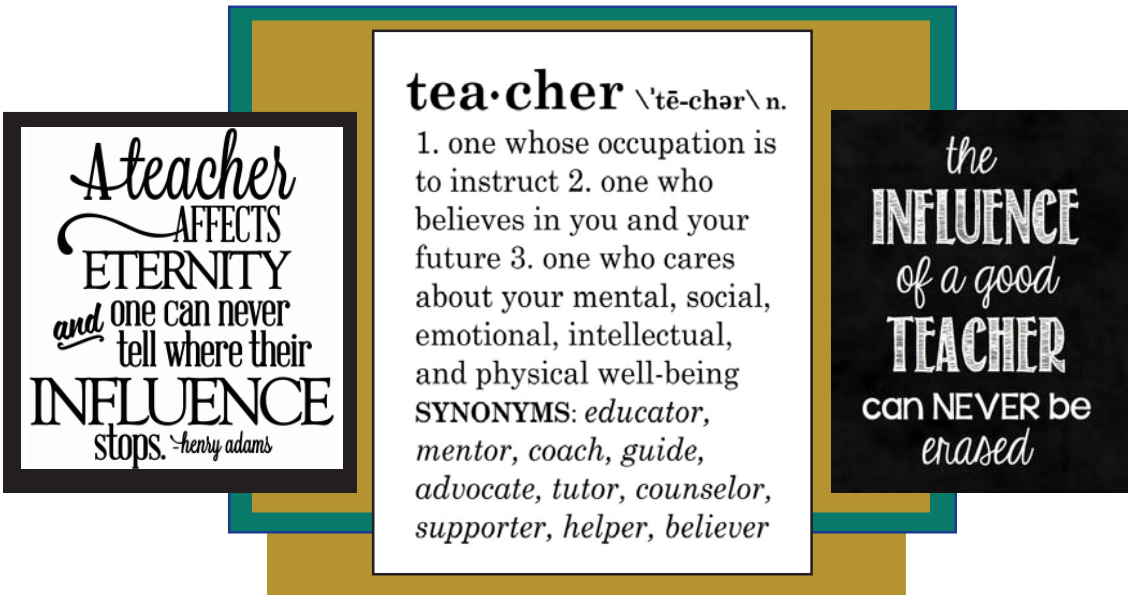
Teachers' Retirement System of the State of Kentucky

2018



Introductory Section

BOARD OF TRUSTEES

RON SANDERS
Chair, Hodgenville

ALISON WRIGHT
Vice Chair, Georgetown

ALLISON BALL
State Treasurer

JOHN BOARDMAN
Lexington

FRANK COLLECCHIA
Louisville

HOLLIS GRITTON
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Murray

LAURA SCHNEIDER
Walton

JOSH UNDERWOOD
Tollesboro

GARY L. HARBIN, CPA
Executive Secretary

CHAIR'S LETTER

Teachers' Retirement System of the State of Kentucky

December 17, 2018

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2018 and 2017, the 78th year of operation of the system. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

TRS closed the 2018 fiscal year with $21.3 billion net assets. The active membership totaled 72,565 and the retired membership was 54,377 with annual annuity and medical insurance benefits of $2.2 billion.

The Board of Trustees is committed totally to managing the retirement system funds in a prudent, professional manner. Every effort will be made to ensure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the governor and the legislature. This cooperation allows the system to meet not only current challenges but, to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Ron Sanders
Chair
Board of Trustees

LETTER OF TRANSMITTAL

Teachers' Retirement System
of the State of Kentucky

December 17, 2018

Honorable Matthew G. Bevin, Governor
Commonwealth of Kentucky
Capitol Building
Frankfort, Kentucky

Dear Governor Bevin:

It is my pleasure to submit the 78th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky (TRS), a component unit of the Commonwealth of Kentucky, for the fiscal years ended June 30, 2018 and 2017. Allow me to begin again this transmittal letter with an expression of my thanks for your work and the work of the General Assembly in approving a biennial budget that provides full pension funding for TRS of the actuarially determined employer contribution (ADEC) for the period. The importance of the consistent full funding of the retirement plan for Kentucky's teachers cannot be overstated.

TRS produced this annual report, which is required by state law and contains the annual audit and actuarial valuations of the retirement system, that provides you, the General Assembly and the public with information necessary to better understand TRS, which is the largest financial institution in the commonwealth. Contained within are numerous examples of how Kentucky teachers' future well-being is being provided for at a low cost with a great economic benefit for those educators and the state's businesses that receive many of the retirement dollars spent by the 89 percent of retirees who live in Kentucky and receive 91 percent of the retirement benefits paid by TRS.

This report conforms with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with TRS management. To the best of management's knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of TRS for the years ended June 30, 2018 and 2017. Discussion and analysis of net assets and related additions and deductions are presented in Management's Discussion and Analysis in the Financial Section of this report.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are executed accurately, and financial statements are presented fairly. Limits are inherent in all systems of internal control based on the recognition that the costs of such systems should be related to the benefits to be derived. Management believes TRS's controls provide this appropriate balance. The system of internal controls includes policies and procedures and an internal audit department that reports to the Board of Trustees.

PROFILE OF TRS

TRS began operations on July 1, 1940, as a cost-sharing, multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement annuity plan coverage for local school districts and other public educational agencies in the state. TRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the Notes to Financial Statements in the Financial Section of this report. Also, the Summary of Main System Provisions as Interpreted for Valuation Purposes in the Actuarial Section is useful in understanding benefit and contribution provisions. The number of TRS active and retired members is contained in the preceding board chair's letter. For most TRS retirees, the average annuity of $37,581 replaces Social Security. TRS usually provides a higher benefit at a normal cost that roughly is commensurate with the federal program.

An annual operating budget is prepared for the administration of the retirement system and approved by the 11-member Board of Trustees. Biennial budget requests also are submitted to the General Assembly for adoption. TRS's investment earnings pay for the agency's administrative expenses, which are among the lowest of its peers.

MAJOR INITIATIVES

The system continually seeks better to serve its membership as the highest levels of

professionalism, integrity, performance and teamwork are required at all levels of the organization. TRS is an organization that does it right. As such, during the past year, TRS has continued work on several major initiatives concerning funding and cost containment for retiree health care, the investment program and information technology.

Implementation of the "Shared Responsibility" Solution for Funding Retiree Health Care and Careful Management of Medical Insurance Costs

Kentucky continues to be a national leader in prefunding retiree health care benefits as a result of the shared responsibility solution enacted in 2010 through the collective efforts of the Board of Trustees, the education community and elected officials. The plan immediately eliminated $3.1 billion in actuarial liability from the retired teacher health care plan. Combined with other cost control measures, more than $5 billion in actuarial accrued liability has been eliminated from the TRS Medical Insurance Fund. In only eight years, the medical insurance fund has reached 36.3 percent funding compared to pay-as-you-go status before the law took effect. With the six-year phase-in period having ended in 2016, the medical plan saw a one-year funding ratio increase in 2018 of 9.6 percentage points. This remarkable improvement confirms that the medical insurance fund is on schedule to be funded fully in 22 years. The shared responsibility solution is truly a significant accomplishment for the retirement security of current and future retired teachers.

TRS is efficient, effective and always working to improve the retirement security of Kentucky's teachers. The latest such initiative is the addition of a new personalized medicine pilot project under TRS's Medicare Eligible Health Plan. Personalized medicine uses DNA testing to help a patient's doctor make more effective treatment decisions for better health outcomes. This pilot, which began in fall 2017, is focused on making sure that a retiree's medications are safe and will be beneficial. Without this testing, medicines may be prescribed that won't work with a retiree's individual physiology (as shown through DNA testing) and that, in some cases, may be fatal. Coriell Life Sciences, which has been providing clinical research services for more than 65 years, is TRS's partner in the pilot. Besides the health benefit to retirees, the pilot is expected to provide significant cost savings to the plan by reducing adverse drug reactions and the trial-and-error period that some patients see. The effort won a national award in May from the State and Local Government Benefits Association (SALGBA).

The Board of Trustees regularly reviews the health care plan to contain costs and maintain a meaningful benefit for retired teachers. The move to Medicare Advantage, now in the 12th year, continues to be stable and financially feasible for TRS's members and the medical plan. The cost of coverage for 2019 is a reduction from the 2018 cost.

Some recent cost-saving initiatives include moving the TRS-sponsored Medicare Part D Employer Group Waiver drug plan from fully insured to a self-funded plan to achieve the greatest federal subsidies. Additionally, TRS is part of the Know Your Rx Coalition, which it joined in 2012.Through the coalition, TRS saves money leveraging greater prescription purchasing power, obtaining deeper drug discounts and increasing the rate at which prescriptions are filled with generic drugs from 73 percent to 88 percent. Additionally, coalition pharmacists work with retired teachers and their physicians to maximize prescription dollars both for the retiree and the medical plan, including supporting the personalized medicine pilot.

Implementation of Senate Bill 2

In June 2017, the board adopted an investment procurement policy, which built upon and centralized existing TRS investing procurement practices, to comply with the provisions of Senate Bill 2 (RS 2017). TRS was the first of the state's retirement systems to have its policy certified by the secretary of the Finance and Administration Cabinet. TRS operated the full fiscal year under that new policy. Additionally, TRS conducted several procurements through a request for proposals as required by KRS 45A, which SB 2 made applicable to TRS.

Investment Program

For the fiscal year ended June 30, 2018, the market value of TRS's investment program increased a net 10.51 percent in the retirement annuity fund pushing total plan assets to a record of $21.3 billion. While a one-year period is not determinative for a long-term investor such as TRS, it should be noted that the gross return of

10.81 percent was among the top 4 percent of public plans with more than $1 billion under management. During the last 10 years, TRS's investment returns rank in the top 2 percent of those plans. Moreover, during the last 30 years, TRS investment returns of 8.39 percent have bettered the long-term assumed rate of return of 7.5 percent. Net returns exceeded the assumed rate as well for the one-, three-, five- and 10-year periods.

A multiyear program of diversifying the portfolio continued in line with TRS's focus on fundamental value and risk control. These ongoing efforts are a continuation of a disciplined investment process and long-term focus on retirement security. This focus has generated exceptionally stable returns through the system's history, and management has every confidence that it will do so in the future. TRS's investment program continues to be recognized as a leader in the public pension community for governance structure, trustee education and cost effectiveness.

TRS regularly obtains independent reviews and always is seeking to improve its investment program and continue the tradition of adhering to best governance practices that lead to sound investment returns. As recently as a year ago, with the additional funding provided in the just-concluded 2016-18 biennial budget, TRS conducted an asset liability modeling study and reviewed actuarial assumptions. The studies confirmed TRS's approach and the importance of the consistent full funding of the ADEC.

Information Technology

The Pathway information technology system continues to be a success, allowing members to access account information online - available anytime from anywhere. The member self-service portal in Pathway, its mobile device application and the TRS website continued to be updated. A site index was added to the website. Staff worked with the Kentucky Department for Libraries and Archives to update TRS's records retention schedule consistent with Pathway's data and document storage capabilities.

Communications

To reach members more easily, TRS continued using Facebook and Twitter accounts to communicate information about the system on a timelier basis. In less than three years, the Facebook account has received almost 2,600 likes, and posts often reach more than 1,000 users - led by 33,239 users who saw a post on the system's investment performance for fiscal year 2017.

Also, TRS continued informational offerings for members, about 750 of whom attended seminars in addition to more than 660 people who participated in webinars. More than 360 members were seen at locations around the state for retirement counseling sessions. The 16 TRS counselors saw more than 8,055 visitors in the office and completed 26,917 retirement estimates.

Internal and External Reviews

TRS responds to legislative and administration inquiries and mandates throughout the year. In connection with pension legislation, TRS received - and responded to - numerous requests from legislators, the executive branch, constituent groups and others to provide accurate information about the experience of TRS. Among those were presentations on actuarial assumptions and responding to questions regarding compliance with Senate Bill 2 (2017 RS), both for the Public Pension Oversight Board. TRS also filed responses in a case that stemmed from one of those bills.

ECONOMIC CONDITION

The economic condition of the system is based primarily on investment earnings. The Investment Section of this report contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules, among others.

As of June 30, 2018, the retirement system's total funds reached $21.3 billion in market value. The retirement system's investment performance has been strong in recent years relative to its peers. As of June 30, 2018, TRS achieved one-year gross returns of 10.81 percent with top 4 percent investment performance. The fiscal year was characterized by robust U.S. equity markets that benefitted from strong economic and corporate fundamentals.

TRS has beaten the independent investment consultant's public fund index in the one-, three-, five- and 10-year periods, achieving top 4 percent performance over the one-year period and top 2 percent for the 10-year period. This record validates policy changes adopted by the board and implemented by the Investment Committee over

the last several years. TRS's commitment to best practices, stringent risk controls and fundamental value philosophy in investing helps ensure long-term retirement security for Kentucky's teachers.

According to KRS 161.430, the TRS Board of Trustees is responsible for investing the assets of the system. The board delegates investment authority to the Investment Committee. The committee works closely with experienced investment counselors and the system's professional staff in evaluating and selecting investment allocations.

The investment objectives of the board are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the plan and its trust funds. The investment program shall also provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets.

TRS's investment portfolio experienced an increase in value during the 2017-2018 fiscal year as the market value went from $19,433,790,384 to $20,947,875,299. The increase in value of the portfolio was the result of favorable market conditions and additional funding provided by the governor and General Assembly for the pension fund. Interest income, dividends and employer and employee contributions also provided significant income to the portfolio.

Investment income totaled $2,031,190,545 for 2017-2018 compared to $2,572,143,912 for 2016-2017. The major contributing factor of the increase in total return from TRS's investment portfolio resulted from the net appreciation in fair value of investments of $1,641,761,365 at June 30, 2018, compared to net appreciation of $2,254,023,748 at June 30, 2017.

As mentioned earlier, it should be noted that TRS annuities bolster the Commonwealth of Kentucky's economy, as 89 percent of retired teachers reside within the state while 91 percent of the pension benefits paid remain in the commonwealth. TRS paid about $2.2 billion in total benefits (retirement, medical, etc.) during the fiscal year.

FUNDING

The continued benefits from the additional funding in the 2016-18 state budget contained in HB 303 (2016 RS) were seen as TRS received 97 percent of the ADEC in the biennium's final year after 99 percent in the first year.

Based on recommendations of the Board of Trustees, the General Assembly establishes, by statute, the contribution levels that are to be made by members and employers to fund the liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

From fiscal year 2009 through the end of the most recent biennium, the state had not paid the full recommended annual employer contribution necessary to prefund the benefit requirements of members of the retirement system as determined by the actuary. Over this period, because of not making the additional appropriation beyond salary-based contributions, the actuary says the state's annual additionally required employer contributions have grown significantly from $60.5 million (fiscal year 2009) to $551.1 million (fiscal year 2021). The following schedule details the growth of the additional annual employer contributions payable by the state:

Fiscal Year	Cumulative Increase as a % of Payroll	Cumulative Increase in Annual Retirement Appropriations Payable by the State
2009	1.88%	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	520,372,000
2018	13.49	512,883,000
2019	14.61	553,597,000
2020	14.10	538,253,000
2021	14.27	551,092,000

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2018).

The board always has acted as required by state law and recommended annual employer contributions payable by the state that would ensure that the state meets the contractual obligations to members. Again, management is

appreciative, and teachers can be as well, of the full funding provided in the 2018-2020 budget.

The latest actuarial valuation was for the period ending June 30, 2018. This report reflects the system's actuarial value of assets totaling $19.5 billion and actuarially determined liabilities totaling $33.8 billion. The funded ratio of actuarial assets to liabilities is 57.7 percent, which is an increase from the previous year and is due primarily to market appreciation of investments, smoothing of investment returns and additional legislative appropriations. The actuary reports: "In our opinion, the system has not been funded on an actuarially sound basis since, historically, the full actuarially determined contributions were not made by the employer. However, an additional appropriation of $474.7 million was made during fiscal year 2018, and it is our understanding that the state budget includes additional appropriations to the pension plan for fiscal years 2019 and 2020. If contributions by the employer to the System in subsequent fiscal years are less than those required, the assets are expected to become insufficient to pay promised benefits. However, assuming that contributions to the System are made by the employer and state from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated."

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions in the Required Supplemental Information of the Financial Section of this report. Based on the 2018 valuation report, the actuary recommends a cumulative increase in employer contributions of 14.27 percent of pay for the 2020-2021 fiscal year as detailed in the Contribution Rates tables in the Summary of Principal Results in the Actuarial Section of this report.

TRS MEDICAL INSURANCE PLAN

The shared responsibility solution for funding retiree health care, which went into effect on July 1, 2010, provides a method of prefunding retiree health care over the next 22 years. In only eight years, the medical insurance fund has reached 36.3 percent funding compared to pay-as-you-go status before the law took effect (with the most recent year being a gain of 9.6 percentage points). The results confirm that the medical insurance fund is on schedule to be funded fully in 22 years and that the 2010 solution is working. The shared responsibility solution for funding retiree health care will help ensure the retirement security of the state's teachers. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2018, indicated that the fund has an unfunded liability of $2.1 billion. Annual required employer contributions for the Medical Insurance Fund are provided in the Schedule of Employer Contributions in the Required Supplemental Information of the Financial Section.

The actuary's opinion is that "if the contributions to the Medical Insurance Fund (MIF) continue at the current statutorily required levels, the funded ratio of the retiree medical plan will continue to increase, and the ability of the MIF to fund the benefits called for under the retiree medical plan will improve."

Additionally, the board is pursuing steps to realize true cost containment at both the state and national levels, and teachers and taxpayers will continue to benefit from those efforts.

PROFESSIONAL SERVICES

Professional consultants are appointed by the Board of Trustees to perform services that are essential to the effective and efficient operation of TRS. Certifications from the board's external auditor and independent actuary are enclosed in this report. The system's consultants, which are appointed by the board, are listed in the Additional Supporting Schedules of the Financial Section and in the Investment Section's Professional Service Providers table and Health Insurance Trust Professional Service Providers table.

NATIONAL RECOGNITION

The System was honored by two national professional organizations in regard to the administration of the retirement program.

GFOA Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2017. The Certificate of Achievement is a prestigious national award recognizing conformance with the

highest standards for preparation of state and local government financial reports.

To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFRs must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for one year. TRS has received the Certificate of Achievement for the last 30 consecutive years (fiscal years ended 1988-2017). TRS believes the current report, which is being submitted to GFOA, continues to conform to the Certificate of Achievement program requirements.

PPCC Achievement Award

The Public Pension Coordinating Council (PPCC) awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2018 for implementing and maintaining high professional standards in administering the affairs of the system. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments, funding and disclosure. Those principles widely are acknowledged to be marks of excellence in the public pension industry.

The PPCC is a coalition of three national associations that represent public retirement systems and administrators. Combined, these associations serve retirement systems that provide pension coverage for most of the nation's 16 million employees of state and local government. The associations that form the PPCC are the National Association of State Retirement Administrators, the National Council on Teacher Retirement and the National Conference on Public Employee Retirement Systems.

NCTR Executive Committee

I am past-president of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization with a mission to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 69 state, territorial, local and university pension systems with combined assets in excess of $2 trillion, serving more than 18 million active and retired teachers, non-teaching personnel and other public employees.

Public Sector HealthCare Roundtable

Additionally, I serve on the Board of Directors and as president of the Public Sector HealthCare Roundtable. The roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector are represented properly during the formulation, debate and implementation of federal health care policies. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

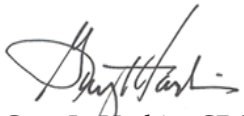
ACKNOWLEDGEMENTS

The preparation of this report reflects the combined efforts of the TRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It also is used to determine responsible stewardship of the assets contributed by TRS members and their employers.

This report is located at the TRS web address https://trs.ky.gov/financial-reports-information/#CAFR and is made available to all system employer members, whose cooperation continues to contribute significantly to TRS's success, and who form the vital link between TRS and its active members.

TRS management and staff are committed to the continued operation of an actuarially sound and efficient retirement system. Again, thanks to you and the General Assembly for the full pension funding in the budget that is ensuring retirement security for teachers. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



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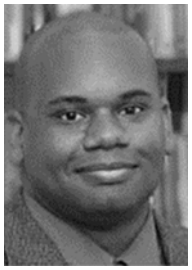

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Active Teacher Trustee
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Teachers' Retirement System
of the State of Kentucky
479 Versailles Road
Frankfort, Kentucky 40601-3800

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General Counsel and
Deputy Executive Secretary
Operations

ERIC WAMPLER, JD
Deputy Executive Secretary
Finance & Administration

TOM SIDEREWICZ, CFA
Chief Investment Officer

PROFESSIONAL CONSULTANTS

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Cavanaugh Macdonald Consulting, LLC
3550 Busbee Parkway, Suite 250
Kennesaw, GA 30144

AUDITOR

Blue & Co., LLC
250 West Main Street
Suite 2900
Lexington, KY 4057

See the Schedules of Contracted Investment Management Expenses, Transaction Commissions and Professional Service Providers on pages 105, 108, 109, 116 and 117 for a list of investment fees and external asset managers.

Teachers' Retirement System
Organizational Chart

BOARD OF TRUSTEES
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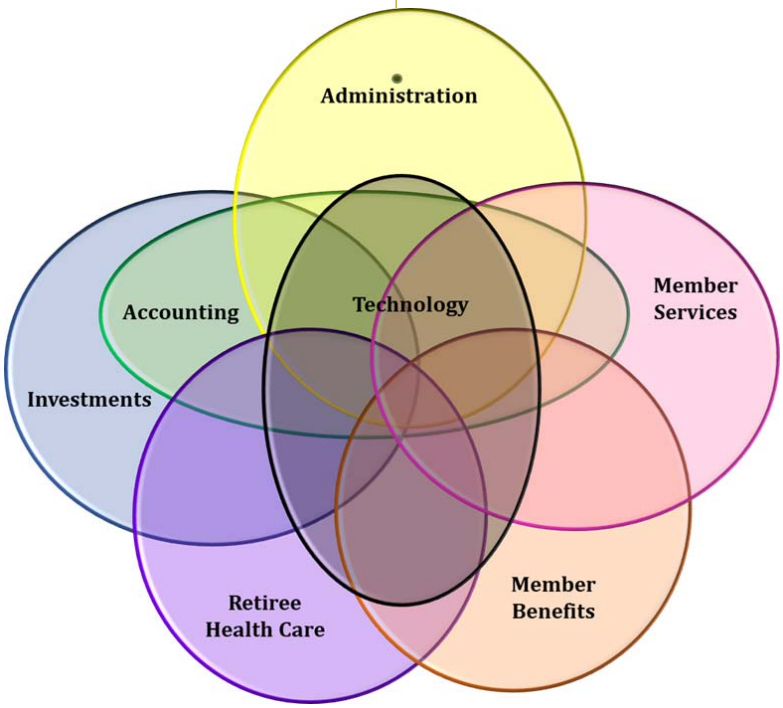

ADMINISTRATION

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Gary L. Harbin, CPA

DEPUTY EXECUTIVE SECRETARY OF FINANCE
Eric Wampler, JD

DEPUTY EXECUTIVE SECRETARY OF OPERATIONS and **GENERAL COUNSEL**
Robert B. Barnes, JD

INTERNAL AUDITOR
Nate Van Sickel

INVESTMENTS
Tom Siderewicz, CFA

ACCOUNTING
Mark Whelan, CPA

RETIREE HEALTH CARE
Jane C. Gilbert, CPA

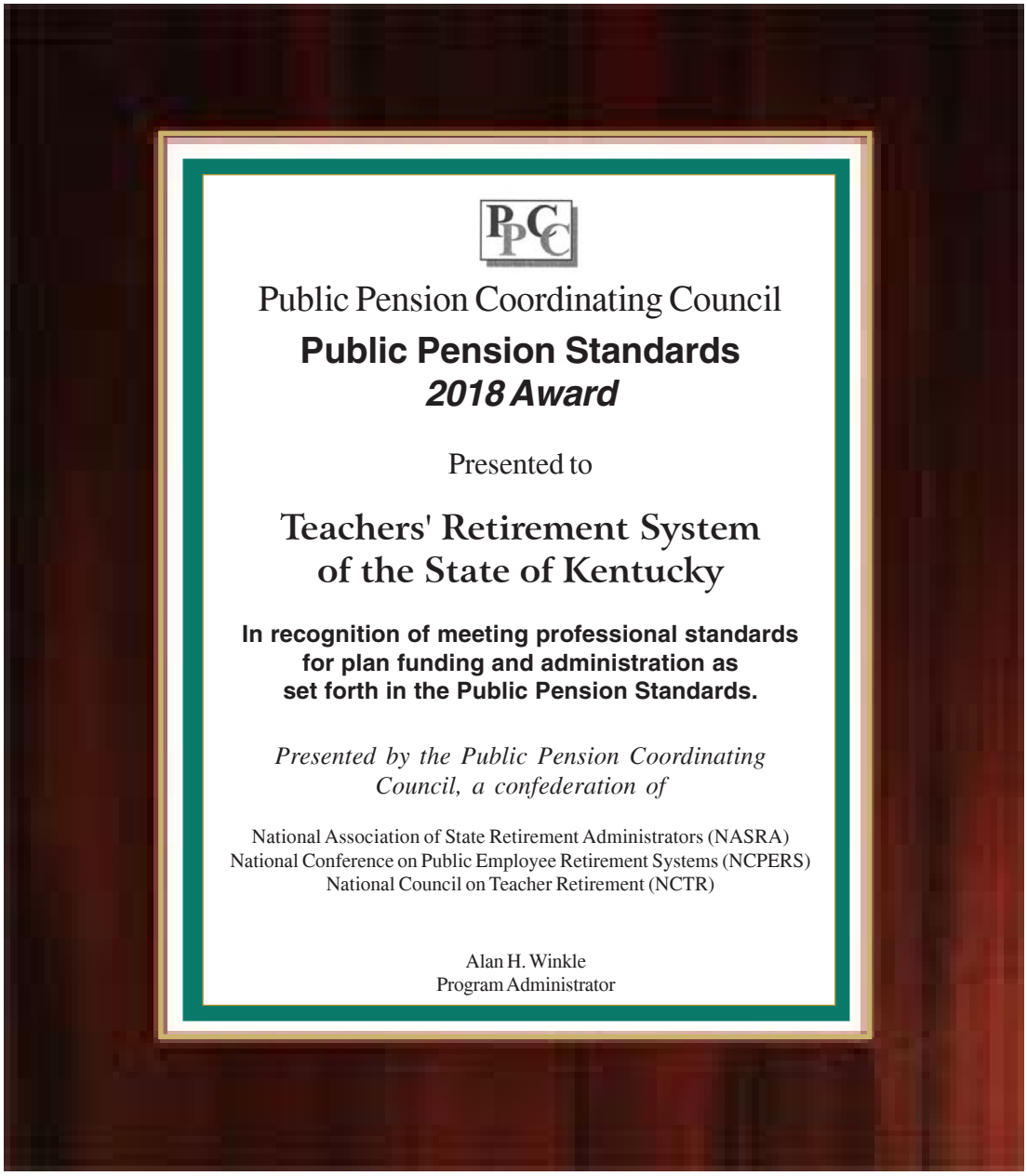
TECHNOLOGY
Jon Cordray

MEMBER SERVICES
MEMBER BENEFITS
Becky Niece

GFOA CERTIFICATE OF ACHIEVEMENT

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The TRS has received the Certificate of Achievement for the last 30 consecutive years (fiscal years ended 1988-2017).

PPCC ACHIEVEMENT AWARD



Public Pension Coordinating Council

Public Pension Standards
2018 Award

Presented to

Teachers' Retirement System of the State of Kentucky

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2018 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure. Those principles widely are acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.

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Teachers' Retirement System of the State of Kentucky

2018

Financial Section

CPAs / ADVISORS

blue

Blue & Co., LLC / 250 West Main Street, Suite 2900 / Lexington, KY 40507
main 859.253.1100 *fax* 859.253.1384 *email* blue@blueandco.com

Independent Auditor's Report

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

Report on the Financial Statements

We have audited the accompanying financial statements of the Teachers' Retirement System of the State of Kentucky (TRS), a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the component unit financial statements on pages 22 through 28.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to TRS's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of TRS's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Teachers' Retirement System of the State of Kentucky as of June 30, 2018, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

The financial statements of the Teachers' Retirement System of the State of Kentucky for the year ended June 30, 2017, were audited by other auditors whose report dated November 14, 2017, expressed unmodified opinions on those statements.

Report on Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis on pages 4 through 8, and the defined benefit pension plan and other postemployment benefit plan supplemental schedules on pages 68 through 77, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise TRS's basic financial statements. The 2018 information on the additional supporting schedules (pages 78 through 80) is presented for purposes of additional analysis and is not a required part of the basic financial statements. The Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are fairly stated, in all material respects, in relation to the basic financial statements as a whole. The 2017 information on the additional supporting schedules (pages 78 through 80) was subjected to the auditing procedures applied in the 2017 audit of the basic financial statement by other auditors, whose report on such information stated that it was fairly statement in all material respects in relation to the 2017 basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections have not been subjected to auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with Government Auditing Standards, we have also issued our report dated November 15, 2018 on our consideration of the TRS's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the TRS's internal control over financial reporting and compliance.

Blue & Co., LLC

Lexington, Kentucky

November 15, 2018

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of the Teachers' Retirement System of the State of Kentucky (TRS, System, or Plan) financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2018. Please read it in conjunction with the respective financial statements, which begin on page 22.

USING THIS FINANCIAL REPORT

Because of the long-term nature of the defined benefit retirement annuity plan, and the medical and life insurance plans, financial statements alone cannot provide sufficient information to properly reflect the ongoing perspective of the System. The Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position (on pages 22-25) provide information about the activities of the defined benefit retirement annuity plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Teachers' Retirement System of the State of Kentucky is the fiduciary of funds held in trust for its members.

The Required Supplementary Information includes historical trend information about the funded status of the defined benefit retirement annuity plan, the medical insurance plan and life insurance plan presented as required by accounting standards. The Schedules of Employer Contributions present historical trend information about the required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans. Separate reports prepared by the actuary using board adopted funding methodology provide a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due.

TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2018, the System's combined fiduciary net position increased by $1,502.7 million - from $19,754.8 million in 2017 to $21,257.5 million in 2018. In 2016, the combined net position totaled $17,638.5 million. The following summaries focus on the fiduciary net position and changes in fiduciary net position of the System's defined benefit retirement annuity plan, medical insurance plan, and life insurance plan.

Summary of Fiduciary Net Position
(In millions of dollars)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Plan		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Cash & Investments	$ 19,885.8	$ 18,649.0	$ 16,707.7	$ 1,140.7	$ 922.6	$ 681.4	$ 83.7	$ 86.6	$ 90.1
Receivables	110.8	135.0	119.5	59.0	44.6	58.3	0.8	1.2	1.2
Capital Assets	16.3	18.1	17.0						
Total Assets	20,012.9	18,802.1	16,844.2	1,199.7	967.2	739.7	84.5	87.8	91.3
Total Liabilities	(31.3)	(94.4)	(31.4)	(9.4)	(8.8)	(5.9)			(0.4)
Net Position	$ 19,981.6	$ 18,707.7	$ 16,812.8	$ 1,190.3	$ 958.4	$ 733.8	$ 84.5	$ 87.8	$ 90.9

*TOTALS	2018	2017	2016**
Cash & Investments	$ 21,110.2	$ 19,658.2	$ 17,479.2
Receivables	170.6	180.8	179.0
Capital Assets	16.3	18.1	17.0
Total Assets	21,297.1	19,857.1	17,675.2
Total Liabilities	(40.7)	(103.2)	(37.7)
Net Position	$ 21,256.4	$ 19,753.9	$ 17,637.5

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had a combined fiduciary net position of $1.1 million for the year ended 2018 and $1.0 million for years ended 2017 and 2016.*

** *Reflects revised amounts reported for 2016 as described in Note 2 in the 2017 report.*

Management's Discussion and Analysis (continued) ...

The fiduciary net position of the defined benefit retirement annuity plan increased by 6.8 percent ($19,981.6 million compared to $18,707.7 million) and in 2016, the fiduciary net position of the defined benefit plan totaled $16,812.8 million. The increases are primarily due to additional employer contributions from the state and improvements in market conditions. Net investment income increased net position by approximately $2 billion in 2018 and the 2017 net investment income was $2.7 billion more than 2016. The defined benefit retirement annuity plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries.

The fiduciary net position of the medical insurance plan increased by 24.2 percent ($1,190.3 million compared to $958.4 million) primarily due to increased contributions from members and employers due to legislation passed in 2010. This compares to 2016 where fiduciary net position of the medical insurance fund totaled $733.8 million. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.

Summary of Changes in Fiduciary Net Position

(In millions of dollars)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Plan		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
ADDITIONS									
Member Contributions	$ 319.1	$ 313.6	$ 313.0	$ 130.8	$ 128.8	$ 128.1	$	$	$
Employer Contributions	1,048.7	1,060.7	565.5	187.1	180.3	178.6	1.1	1.0	1.0
Net Investment Income/(Loss)	1,953.2	2,475.8	(245.2)	76.8	95.5	(9.3)	1.1	1.0	4.8
TOTAL ADDITIONS	3,321.0	3,850.1	633.3	394.7	404.6	297.4	2.2	2.0	5.8
DEDUCTIONS									
Benefit Payments	2,004.6	1,918.6	1,833.2				5.5	5.2	4.6
Refunds	31.1	26.3	27.8						
Administrative Expense	11.4	10.3	8.6	1.7	1.5	1.7			
Insurance Expenses				161.1	178.5	188.9			
TOTAL DEDUCTIONS	2,047.1	1,955.2	1,869.6	162.8	180.0	190.6	5.5	5.2	4.6
Increase/(Decrease) in Net Position	$ 1,273.9	$ 1,894.9	$ (1,236.3)	231.9	$ 224.6	$ 106.8	$ (3.3)	$ (3.2)	$ 1.2

*TOTALS

	2018	2017	2016**
ADDITIONS			
Member Contributions	$ 449.9	$ 442.4	$ 441.1
Employer Contributions	1,236.9	1,242.0	745.1
Net Investment Income/(Loss)	2,031.1	2,572.3	(249.7)
Other Income			
TOTAL ADDITIONS	3,717.9	4,256.7	936.5
DEDUCTIONS			
Benefit Payments	2,010.1	1,923.8	1,837.8
Refunds	31.1	26.3	27.8
Administrative Expense	13.1	11.8	10.3
Insurance Expenses	161.1	178.5	188.9
TOTAL DEDUCTIONS	2,215.4	2,140.4	2,064.8
Increase/(Decrease) in Net Position	$ 1,502.5	$ 2,116.3	$ (1,128.3)

* *Other Funds consisting of the 403(b) Tax Shelter Plan, the Excess Benefit Fund and the Losey Scholarship fund had a combined change in fiduciary net position of $0.1 million for the year ended 2018 and $0 for years ended 2017 and 2016.*

** *Reflects revised amounts reported for 2016 as described in Note 2 in the 2017 report.*

DEFINED BENEFIT RETIREMENT ANNUITY PLAN ACTIVITIES

Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Management's Discussion and Analysis (continued) . . .

In 2018, Employer contributions totaled $1,048.7 million, a net decrease of $12 million from the prior fiscal year. The decrease was due to employer contributions recommended by the actuary and paid by the state being less than the prior year. In 2017, Employer contributions recommended by the actuary and paid by the state increased $495.2 million compared 2016.

In 2018, the defined benefit plan experienced net investment income of $1,953.2 million compared to the previous year of $2,475.8 million. For 2016, net investment income totaled negative $245.2 million. The increases in net investment income are due to favorable market conditions for the years ended June 30, 2018 and 2017 compared to 2016. Total deductions in 2018 increased $91.9 million compared to 2017 and also increased $85.6 million in 2017 compared to 2016. The increases can be attributed to increases in the number of benefit recipients. There was an increase of 1,411 members and beneficiaries on the retired payroll as of June 30, 2018. Also, there was an increase of 1,403 members and beneficiaries on the retired payroll as of June 30, 2017.

OTHER POSTEMPLOYMENT BENEFIT ACTIVITIES

During the 2018 fiscal year, the medical insurance plan member contributions increased $2 million from 2017 and $0.7 million from 2016. Also during the 2018 fiscal year, employer contributions increased $6.8 million from 2017 and $1.7 million from 2016. The member, employer and state contributions increased primarily due to the implementation of the Shared Responsibility Plan beginning July 1, 2010 which includes increased contributions from active and retired members, employers and the state.

In 2018, the medical insurance plan experienced net investment income of $76.8 million compared to the previous year of $95.5 million. For 2016, net investment income totaled negative $9.3 million. The increases in net investment income are due to favorable market conditions for the years ended June 30, 2018 and 2017 compared to 2016.

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2018, 2017 and 2016 were $5.5, $5.2 and $4.6 million respectively.

FUNDING

For the 2016-2018 biennium, the State budgeted $973 million of additional employer contributions for the unfunded liability of the System. The latest actuarial valuation was for the period ending June 30, 2018. This report reflects the System's actuarial value of assets totaling $19.5 billion and $18.5 billion at the end of fiscal year 2018 and 2017. The actuarial determined liabilities totalled $33.8 billion and $32.8 billion at June 30, 2018 and 2017. The funded ratio of actuarial assets to liabilities is 57.7% and 56.4% at fiscal year end 2018 and 2017. The additional funding provided in the budget resulted in 97% of the Actuarially Determined Employer Contribution being made for fiscal year 2018 and 99% for fiscal year 2017. Assuming that contributions to the System are made by the State from year to year in the future as recommended by the actuary, the System should have sufficient assets to provide the benefits defined by law.

The funding of the medical insurance and life insurance plans is presented in the Required Supplementary Information in accordance with Governmental Accounting Standards Board (GASB) Statement No. 74. Although the medical insurance plan continues to have a large net Other Post Employment Benefits (OPEB) liability, the current obligations are being met by current funding. Effective July 1, 2010, the Shared Responsibility Plan for funding retiree health benefits requires members, retirees, participating employers and the state to make contributions for pre-funding retiree medical benefits. The Actuarially Determined Employer Contribution of the medical and life insurance plans are provided in the Schedule of Employer Contributions presented in the Required Supplementary Information.

HISTORICAL TRENDS

Accounting standards require that the Statement of Fiduciary Net Position present asset values at fair value and include only benefits and refunds due to plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Detailed information regarding the funded status, including the key actuarial assumptions, target allocations and the sensitivity of the discount rate can be found in Note 4 of the financial statements for the defined benefit plan, Note 8 for the medical health plan, and Note 9 for the life insurance plan. The Schedule of Employer Contributions is provided in the Required Supplementary Information.

Management's Discussion and Analysis (continued) . . .

The System's independent consulting actuaries are members of the American Academy of Actuaries and experienced in performing valuations for public retirement systems. As mandated by state law, the valuations of the retirement annuity and health care plans are prepared in accordance with principles of practice prescribed by the Actuarial Standards Board consistent with accepted actuarial procedures. Actuarial assumptions used in the valuations are internally consistent and reasonable based on the actual experience of the plans. An actuarial audit was completed in 2015, which confirmed the accuracy of actuarial procedures and the reasonableness of assumptions. A five-year experience study was completed in 2016, which also confirmed the reasonableness of assumptions based upon the actual experience of the plans. The actuarial assumptions reflected in the results may be reasonably relied upon. However, projections using other assumptions may produce significantly different results.

This financial report is designed to provide citizens, participating employers, plan members, and other users with an overview of the Kentucky Teachers' Retirement System's fiscal practices and responsibility. If you have questions or need additional information, please contact Mark Whelan, Chief Financial Officer, Teachers' Retirement System at 479 Versailles Road, Frankfort, Kentucky 40601.

STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2018

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 104,214,766	$ 58,452,151	$ 432,786	$ 186,882	$ 163,286,585
Prepaid Expenses	105,795	19,600			125,395
Receivables					
Contributions	30,237,329	18,012,814	13,374		48,263,517
Due From Other Trust Funds	1,779,623				1,779,623
State of Kentucky	16,199,596	10,277,791	35,965		26,513,352
Investment Income	44,151,888	2,061,568	732,657	3,043	46,949,156
Investment Sales Receivable	18,104,128	424,710			18,528,838
Other Receivables	361,346	28,260,451			28,621,797
Total Receivables	110,833,910	59,037,334	781,996	3,043	170,656,283
Investments at Fair Value (See Note 5)					
Short-Term Investments	403,309,780	56,993,634	3,724,036	373,549	464,400,999
Fixed Income	2,983,975,575	89,681,931	47,825,436	247,914	3,121,730,856
Equities	12,544,141,125	605,705,867	29,895,479	312,013	13,180,054,484
Alternative Investments	1,282,830,325	81,232,638			1,364,062,963
Real Estate	1,150,694,282	62,962,565	541,107		1,214,197,954
Additional Categories	1,416,514,873	185,613,170	1,300,000		1,603,428,043
Total Investments	19,781,465,960	1,082,189,805	83,286,058	933,476	20,947,875,299
Capital Assets	26,513,139				26,513,139
Accumulated Depreciation	(10,188,492)				(10,188,492)
Net Capital Assets	16,324,647				16,324,647
Total Assets	20,012,945,078	1,199,698,890	84,500,840	1,123,401	21,298,268,209
LIABILITIES					
Accrued Expenses and Other Liabilities	2,280,864	5,177,013	7,605		7,465,482
Due To Other Trust Funds		1,747,561	30,979	1,083	1,779,623
Investment Purchases Payable	29,031,118	2,493,508			31,524,626
Total Liabilities	31,311,982	9,418,082	38,584	1,083	40,769,731
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 19,981,633,096	$ 1,190,280,808	$ 84,462,256	$ 1,122,318	$ 21,257,498,478

The Combining Statement of Fiduciary Net Position - Other Funds is presented on page 26.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2017

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ASSETS					
Cash	$ 137,274,752	$ 87,841,753	$ 187,657	$ 23,852	$ 225,328,014
Prepaid Expenses	100,838				100,838
Receivables					
Contributions	28,779,827	18,456,779	105,264		47,341,870
Due From Other Trust Funds	1,567,472				1,567,472
State of Kentucky	13,640,427	5,580,025	32,617		19,253,069
Investment Income	40,623,372	1,685,597	1,036,228	2,693	43,347,890
Investment Sales Receivable	49,973,750	915,100			50,888,850
Other Receivables	438,303	17,996,752			18,435,055
Total Receivables	135,023,151	44,634,253	1,174,109	2,693	180,834,206
Investments at Fair Value (See Note 5)					
Short-Term Investments	521,348,977	46,008,715	4,150,029	398,093	571,905,814
Fixed Income	2,871,403,201	70,283,077	82,293,300	258,962	3,024,238,540
Equities	11,589,656,638	473,274,401		280,104	12,063,211,143
Alternative Investments	1,062,855,562	42,340,364			1,105,195,926
Real Estate	1,046,760,134	42,701,494			1,089,461,628
Additional Categories	1,419,607,158	160,170,175			1,579,777,333
Total Investments	18,511,631,670	834,778,226	86,443,329	937,159	19,433,790,384
Capital Assets	26,065,842				26,065,842
Accumulated Depreciation	(8,019,203)				(8,019,203)
Net Capital Assets	18,046,639				18,046,639
Total Assets	18,802,077,050	967,254,232	87,805,095	963,704	19,858,100,081
LIABILITIES					
Accrued Expenses and Other Liabilities	2,201,644	3,485,911			5,687,555
Due To Other Trust Funds		1,538,574	27,690	1,208	1,567,472
Investment Purchases Payable	92,176,381	3,840,074			96,016,455
Total Liabilities	94,378,025	8,864,559	27,690	1,208	103,271,482
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 18,707,699,025	$ 958,389,673	$ 87,777,405	$ 962,496	$ 19,754,828,599

The Combining Statement of Fiduciary Net Position - Other Funds is presented on page 26.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For the Fiscal Year Ended June 30, 2018

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
State of Kentucky	$ 969,698,496	$ 80,959,003	$ 896,974	$	$ 1,051,554,473
Other Employers	78,972,705	106,143,410	161,355	325,950	185,603,420
Members	319,127,087	130,777,471			449,904,558
Total Contributions	1,367,798,288	317,879,884	1,058,329	325,950	1,687,062,451
Investment Income/(Loss)					
Net Appreciation/(Depreciation) in Fair Value of Investments	1,574,056,951	68,954,490	(1,270,937)	20,861	1,641,761,365
Interest	138,027,758	6,195,753	2,446,305	14,895	146,684,711
Dividends	262,669,598	5,633,011	40,895	5,898	268,349,402
Rental Income, Net	29,957,783				29,957,783
Securities Lending, Gross Earnings	16,275,779		42,020	1,246	16,319,045
Gross Investment Income/(Loss)	2,020,987,869	80,783,254	1,258,283	42,900	2,103,072,306
Less: Investment Expense	(55,500,376)	(3,942,742)	(113,453)	(16,346)	(59,572,917)
Less: Securities Lending Expense	(12,273,462)		(34,409)	(973)	(12,308,844)
Net Investment Income/(Loss)	1,953,214,031	76,840,512	1,110,421	25,581	2,031,190,545
Total Additions	3,321,012,319	394,720,396	2,168,750	351,531	3,718,252,996
DEDUCTIONS					
Benefits	2,004,617,334		5,452,920	190,626	2,010,260,880
Refunds of Contributions	31,072,421				31,072,421
Insurance Expenses		161,081,700			161,081,700
Administrative Expense	11,388,493	1,747,561	30,979	1,083	13,168,116
Total Deductions	2,047,078,248	162,829,261	5,483,899	191,709	2,215,583,117
Net Increase/(Decrease)	1,273,934,071	231,891,135	(3,315,149)	159,822	1,502,669,879
Net Position - Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	18,707,699,025	958,389,673	87,777,405	962,496	19,754,828,599
End of Year	$ 19,981,633,096	$1,190,280,808	$ 84,462,256	$ 1,122,318	$ 21,257,498,478

The Combining Statement of Changes in Fiduciary Net Position - Other Funds is presented on page 27.
The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For the Fiscal Year Ended June 30, 2017

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	TOTAL
ADDITIONS					
Contributions					
State of Kentucky	$ 981,417,089	$ 75,496,731	$ 881,703	$	$ 1,057,795,523
Other Employers	79,302,904	104,879,255	167,980	220,001	184,570,140
Members	313,625,434	128,819,243			442,444,677
Total Contributions	1,374,345,427	309,195,229	1,049,683	220,001	1,684,810,340
Investment Income/(Loss)					
Net Appreciation/(Depreciation) in Fair Value of Investments	2,167,046,581	89,058,380	(2,087,797)	6,584	2,254,023,748
Interest	153,207,310	5,777,776	3,011,187	10,920	162,007,193
Dividends	180,297,227	3,787,309		5,468	184,090,004
Rental Income, Net	30,477,797				30,477,797
Securities Lending, Gross Earnings	5,794,696		3,965	491	5,799,152
Gross Investment Income/(Loss)	2,536,823,611	98,623,465	927,355	23,463	2,636,397,894
Less: Investment Expense	(57,836,050)	(3,170,868)	(10,478)	(114)	(61,017,510)
Less: Securities Lending Expense	(3,234,763)		(1,380)	(329)	(3,236,472)
Net Investment Income/(Loss)	2,475,752,798	95,452,597	915,497	23,020	2,572,143,912
Total Additions	3,850,098,225	404,647,826	1,965,180	243,021	4,256,954,252
DEDUCTIONS					
Benefits	1,918,612,128		5,151,013	224,628	1,923,987,769
Refunds of Contributions	26,305,240				26,305,240
Insurance Expenses		178,500,546			178,500,546
Administrative Expense	10,313,715	1,538,574	27,690	1,208	11,881,187
Total Deductions	1,955,231,083	180,039,120	5,178,703	225,836	2,140,674,742
Net Increase/(Decrease)	1,894,867,142	224,608,706	(3,213,523)	17,185	2,116,279,510
Net Position - Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	16,812,831,883	733,780,967	90,990,928	945,311	17,638,549,089
End of Year	$ 18,707,699,025	$ 958,389,673	$ 87,777,405	$ 962,496	$ 19,754,828,599

The Combining Statement of Changes in Fiduciary Net Position - Other Funds is presented on page 28.
The accompanying notes are an integral part of these financial statements.

Combining Statement of Fiduciary Net Position - Other Funds
As of June 30, 2018

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 186,882	$	$ 186,882
Receivables				
Investment Income	481		2,562	3,043
Investments at Fair Value				
Short Term Investments	324,303		49,246	373,549
Fixed Income			247,914	247,914
Equities			312,013	312,013
Total Investments	324,303		609,173	933,476
Total Assets	324,784	186,882	611,735	1,123,401
Liabilities				
Due to Other Trust Funds	54	927	102	1,083
Total Liabilities	54	927	102	1,083
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 324,730	$ 185,955	$ 611,633	$ 1,122,318

Combining Statement of Fiduciary Net Position - Other Funds
As of June 30, 2017

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Assets				
Cash	$	$ 23,852	$	$ 23,852
Receivables				
Investment Income	233		2,460	2,693
Investments at Fair Value				
Short Term Investments	343,750		54,343	398,093
Fixed Income			258,962	258,962
Equities			280,104	280,104
Total Investments	343,750		593,409	937,159
Total Assets	343,983	23,852	595,869	963,704
Liabilities				
Due to Other Trust Funds	56	1,055	97	1,208
Total Liabilities	56	1,055	97	1,208
Net Position - Restricted for Pension and Other Postemployment Benefits	$ 343,927	$ 22,797	$ 595,772	$ 962,496

The accompanying notes are an integral part of these financial statements.

Combining Statement of Changes in Fiduciary Net Position - Other Funds
For the Fiscal Year Ended June 30, 2018

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Other Employers	$	$ 325,950	$	$ 325,950
Investment Income				
Net Appreciation in Fair Value of Investments			20,861	20,861
Interest	4,101	1,109	9,685	14,895
Dividends			5,898	5,898
Securities Lending, Gross			1,246	1,246
Gross Investment Income	4,101	1,109	37,690	42,900
Less Investment Expense	(13,592)		(2,754)	(16,346)
Less Securities Lending Expense			(973)	(973)
Net Investment Income	(9,491)	1,109	33,963	25,581
Total Additions	(9,491)	327,059	33,963	351,531
Deductions				
Benefits	9,651	162,975	18,000	190,626
Administrative Expense	55	926	102	1,083
Total Deductions	9,706	163,901	18,102	191,709
Net Increase/(Decrease)	(19,197)	163,158	15,861	159,822
Net Position - Restricted for Pension and Other Postemployment Benefits				
Beginning of Year	343,927	22,797	595,772	962,496
End of Year	$ 324,730	$ 185,955	$ 611,633	$ 1,122,318

The accompanying notes are an integral part of these financial statements.

Combining Statement of Changes in Fiduciary Net Position - Other Funds
For the Fiscal Year Ended June 30, 2017

	403(b) Tax Shelter	Supplemental Benefit Fund	Losey Scholarship	TOTAL
Additions				
Other Employers	$	$ 220,001	$	$ 220,001
Investment Income				
Net Appreciation in Fair Value of Investments			6,584	6,584
Interest	1,638		9,282	10,920
Dividends			5,468	5,468
Securities Lending, Gross			491	491
Gross Investment Income	1,638		21,825	23,463
Less Investment Expense	(42)		(72)	(114)
Less Securities Lending Expense			(329)	(329)
Net Investment Income	1,596		21,424	23,020
Total Additions	1,596	220,001	21,424	243,021
Deductions				
Benefits	10,387	196,241	18,000	224,628
Administrative Expense	56	1,055	97	1,208
Total Deductions	10,443	197,296	18,097	225,836
Net Increase/(Decrease)	(8,847)	22,705	3,327	17,185
Net Position - Restricted for Pension and Other Postemployment Benefits				
Beginning of Year	352,774	92	592,445	945,311
End of Year	$ 343,927	$ 22,797	$ 595,772	$ 962,496

The accompanying notes are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS

Note 1: Description of Retirement Annuity Plan

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (TRS or the System) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). TRS is a blended component unit of the Commonwealth of Kentucky (the Commonwealth or the State) and therefore is included in the Commonwealth's financial statements. TRS is a cost-sharing multiple-employer defined benefit plan with a special funding situation established to provide retirement annuity plan coverage for local school districts and other public educational agencies in the Commonwealth.

KRS 161.250 provides that the general administration and management of TRS, and the responsibility for its proper operation, is vested in a board of trustees. The Board of Trustees consists of the chief state school officer, the state treasurer, two trustees appointed by the governor and seven elected trustees. Four of the elected trustees are active teachers, two are not members of the teaching profession, and one is an annuitant of the System.

B. PARTICIPANTS

As of June 30, 2018, a total of 207 employers participated in the plan. Employers are comprised of local school districts, Department of Education Agencies, universities, the Kentucky Community and Technical College System, and other educational organizations. The State under the Governmental Accounting Standards Board (GASB) No. 67 and No. 74 is recognized as a non-employer contributing entity providing the employer matching contributions for members employed by the local school districts and regional educational cooperatives.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

	2018	2017
Active contributing members:		
Vested	47,375	48,211
Non-vested	24,830	23,919
Inactive members, vested	8,814	8,624
Retirees and beneficiaries currently receiving benefits	54,377	52,966
Total members, retirees, and beneficiaries	**135,396**	**133,720**

C. BENEFIT PROVISIONS

For Members Before July 1, 2008:

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or

2.) Complete twenty-seven (27) years of Kentucky service.

Non-university members receive monthly payments equal to two percent (2%) (service prior to July 1, 1983) and two and one-half percent (2.5%) (service after July 1, 1983) of their final average salaries for each year of credited service. Non-university members who became members on or after July 1, 2002 will receive monthly benefits equal to two percent (2%) of their final average salary for each year of service if, upon retirement, their total service is less than ten (10) years. New members after July 1, 2002 who retire with ten (10) or more years of total service will receive monthly benefits equal to two and one-half percent (2.5%) of their final average salary for each year of service, including the first ten (10) years. In addition, non-university members who retire July 1, 2004 and later with more than thirty (30) years of service will have their multiplier increased for all years over thirty (30) from two and one-half

Note 1: Description of Retirement Annuity Plan continued . . .

percent (2.5%) to three percent (3%) to be used in their benefit calculation.

University employees receive monthly benefits equal to two percent (2%) of their final average salary for each year of credited service.

The final average salary is the member's five (5) highest annual salaries except members at least age fifty-five (55) with twenty-seven (27) or more years of service may use their three (3) highest annual salaries. For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service. The minimum annual service allowance for all members is $440 multiplied by credited service.

For Members On or After July 1, 2008:

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1.) Attain age sixty (60) and complete five (5) years of Kentucky service, or

2.) Complete twenty-seven (27) years of Kentucky service, or

3.) Attain age fifty-five (55) and complete ten (10) years of Kentucky service.

The annual retirement allowance for non-university members is equal to: (a) one and seven tenths percent (1.7%) of final average salary for each year of credited service if their service is 10 years or less; (b) two percent (2.0%) of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) two and three tenths percent (2.3%) of final average salary for each year of credited service if their service is greater than 20 years but no more than 26 years; (d) two and one half percent (2.5%) of final average salary for each year of credited service if their service is greater than 26 years but no more than 30 years; (e) three percent (3.0%) of final average salary for years of credited service greater than 30 years.

The annual retirement allowance for university members is equal to: (a) one and one-half percent (1.5%) of final average salary for each year of credited service if their service is 10 years or less; (b) one and seven tenths percent (1.7%) of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) one and eighty five hundredths percent (1.85%) of final average salary for each year of credited service if their service is greater than 20 years but less than 27years; (d) two percent (2.0%) of final average salary for each year of credited service if their service is greater than or equal to 27 years.

The final average salary is the member's five (5) highest annual salaries except members at least age fifty-five (55) with twenty-seven (27) or more years of service may use their three (3) highest annual salaries. For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Other Benefits:

TRS provides postemployment medical benefits to retirees as fully described in Note 8. The Retirement System also provides disability benefits for vested members at the rate of sixty percent (60%) of the final average salary. A life insurance benefit, payable upon the death of a member, is $2,000 for active contributing members and $5,000 for retired or disabled members.

Cost of living increases are one and one-half percent (1.5%) annually. Additional ad hoc increases and any other benefit amendments must be authorized by the General Assembly.

Note 2: Summary of Significant Accounting Policies

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching contributions are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

TRS has seven cash accounts. At June 30, 2018, the retirement annuity cash account totaled $54,859,888, the control cash account totaled $49,354,878 for a total of $104,214,766 as carrying value of cash in the defined benefit plan. The medical insurance trust cash account totaled $41,705,664, the medical insurance 401(h) cash account totaled $16,632,595 and the medical insurance claims cash account totaled $113,892 for a total of $58,452,151 as carrying value of cash in the medical insurance plan. The life insurance plan cash account totaled $432,786. The supplemental benefit fund cash account contained $186,882. Therefore, the carrying value of cash was $163,286,585 and the bank balance was $161,372,064. The variance is primarily due to outstanding checks and items not processed by the bank as of June 30, 2018.

At June 30, 2017, the retirement annuity cash account totaled $105,013,741, the control cash account totaled $32,163,714 and the administrative expense fund cash account was $97,297 for a total of $137,274,752 as carrying value of cash in the defined benefit plan. The medical insurance trust cash account totaled $80,806,325, the medical insurance 401(h) cash account totaled $6,921,861 and the medical insurance claims cash account totaled $113,567 for a total of $87,841,753 as carrying value of cash in the medical insurance plan. The life insurance plan cash account totaled $187,657. The supplemental benefit fund cash account contained $23,852. Therefore, the carrying value of cash was $225,328,014 and the bank balance was $222,173,747. The variance is primarily due to outstanding checks and items not processed by the bank as of June 30, 2017.

C. CAPITAL ASSETS

Property and equipment are carried at cost, less accumulated depreciation. All costs of property and equipment $5,000 (actual dollars) or greater are capitalized. Expenditures for maintenance and repairs are charged to operations as incurred. Depreciation is calculated using the straight-line method, with estimated lives ranging from five to forty years in the following major classes: office furniture and equipment, five years; other equipment, five years; computer software, ten years; TRS office buildings, forty years. The Pathway System replaced TRS's legacy computer system and is TRS's primary line of business information technology system. The Pathway System was capitalized and is being amortized or depreciated over ten years.

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers. Other investments such as private equity, timberland, real estate funds and other additional categories, such as opportunistic credit, high yield bonds, and direct lending are valued using the most recent general partner statement at net asset value.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in fiduciary net position. Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by TRS's employees are recorded when earned. Upon termination or retirement, employees of TRS are paid for accumulated vacation time limited to sixty (60) days and accumulated compensatory time limited to two hundred-forty (240) hours. As of June 30, 2018 and 2017, accrued compensated absences were included in accrued expenses and other liabilities on the statements of fiduciary net position amounting to $1,189,181 and $1,272,405, respectively.

Note 2: Summary of Significant Accounting Policies continued . . .

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries and court challenges to administrative policy are among the various risks to which TRS is exposed. In order to cover such risks, TRS carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation and equipment insurance.

G. OTHER RECEIVABLES

TRS allows qualified purchases of service credit to be made by installment payments not to exceed a five-year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2018 and 2017 installment contract receivables were $361,346 and $438,303, respectively.

H. USE OF ESTIMATES

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates. The most significant estimates impacting the financial statements relate to the actuarial assumptions.

I. INCOME TAXES

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The 403(b) Tax Sheltered Annuity Plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The System's management believes that it has operated the plans within the constraints imposed by federal tax law.

J. RECENT PRONOUNCEMENTS

TRS implemented the provisions of GASB Statement No. 85, "Omnibus 2017," for the year ended June 30, 2018. GASB 85 addresses several issues identified during the implementation and application of certain GASB pronouncements. OPEB related issues applicable to TRS's medical and life insurance funds addressed in this new standard include the presentation of payroll-related measures in the schedules of Required Supplementary Information by other postemployement benefits (OPEB) plans.

In January 2017, GASB issued Statement No. 84, "Fiduciary Activities," that establishes criteria for identifying fiduciary activities and guidance on reporting those activities. This Statement provides guidance on four fiduciary funds that should be reported if applicable: pension (and other employee benefit) trust funds, investment trust funds, private purpose trust funds, and custodial funds. GASB 84 will be effective for periods beginning after December 15, 2018. TRS has not adopted GASB 84 and has not yet determined the impact of this standard on its financial statements and disclosures.

K. RECLASSIFICATIONS

In accordance with GASB Statement No. 28, additions and deductions related to securities lending transactions should be reported at their gross amounts. Previously, amounts related to gross borrower rebate expenses were reported net of securities lending gross earnings and have been reclassified to be reported as securities lending expense on the Statement of Changes in Fiduciary Net Position. The reclassification had no effect on total net position and change in net position.

Note 3: Contributions and Funds of the Plan

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. Non-university members are required to contribute 12.855 percent of their salaries to the System effective July 1, 2015; university members are required to contribute 10.40 percent of their salaries effective July 1, 2015. KRS 161.565 allows each university to reduce the contribution of its members by 2.215 percent; therefore, university members contribute 8.185 percent of their salary to TRS. For members employed by local school districts, the State, as a non-employer contributing entity, contributes 13.105 percent of salary for those who joined before July 1, 2008 and 14.105 percent for those who joined thereafter.

Other participating employers are required to contribute the percentage contributed by members plus an additional 3.25 percent of members' gross salaries.

The member and employer contributions consist of retirement annuity contributions and other postemployment benefit contributions to the medical and life insurance plans. The member postemployment medical contribution is 3.75 percent of salary. The employer postemployment medical contribution is .75 percent of member salaries. Also, employers (other than the state) contribute 3.0 percent of members' salaries and the state contributes the net cost of health insurance premiums for new retirees after June 30, 2010 in the non-Medicare eligible group. If a member leaves covered employment before accumulating five (5) years of credited service, accumulated member contributions to the retirement annuity plan plus interest are refunded upon the member's request.

B. FUNDS OF THE PLAN

Teacher Savings Fund

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from the Guarantee Fund. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Allowance Reserve Fund, the fund from which retirement benefits are paid.

State Accumulation Fund

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky.

Allowance Reserve Fund

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of TRS. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from the Guarantee Fund.

Guarantee Fund

This fund was established by KRS 161.420(6) as the Guarantee Fund, to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of TRS, and deficiencies not covered by the other funds.

Administrative Expense

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from the Guarantee Fund is used to pay the administrative expenses of TRS. Administrative expenses are allocated among the funds based on benefits paid.

Note 4: Net Pension Liability of Employers

A. NET PENSION LIABILITY OF EMPLOYERS

The net pension liability (i.e., the System's liability determined in accordance with GASB No. 67 less the fiduciary net position) as of June 30, 2018 and 2017 is shown below.

Net Pension Liability of Employers
(In thousands of dollars)

Fiscal Year Ending June 30	Total Pension Liability	Plan Fiduciary Net Position	Employers Net Pension Liability	Plan Fiduciary Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
	A	B	(A-B)	(B/A)	C	[A-B/C]
2018	$ 33,708,555	$ 19,981,633	$ 13,726,922	59.3%	$ 3,455,660	397.23%
2017	46,966,822	18,707,699	28,259,123	39.8	3,415,432	827.40

B. SUMMARY OF ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below.

Valuation Date	6/30/2017
Actuarial cost method	Entry Age
Actuarial Assumptions:	
Investment rate of return	7.50%, net of pension plan investment expense, including inflation.
Projected salary increases	3.50 - 7.30%, including inflation
Inflation rate	3.00%
Municipal Bond Index Rate	3.89%
Single Equivalent Interest Rate	7.50%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale BB to 2025, set forward two years for males and one year for females. The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period July 1, 2010 - June 30, 2015 adopted by the Board on September 19, 2016.

C. TARGET ALLOCATIONS

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	40.0%	4.2%
International Equity	22.0	5.2
Fixed Income	15.0	1.2
Additional Categories	8.0	3.3
Real Estate	6.0	3.8
Private Equity	7.0	6.3
Cash	2.0	0.9
Total	100.0%	

Note 4: Net Pension Liability of Employers continued ...

D. DISCOUNT RATE

For 2018, the discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the employer contributions will be made at the Actuarially Determined Contribution rates, adjusted by 95%, for all fiscal years in the future. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The following table presents the net pension liability of the System for 2018. The 2018 net pension liability of the System is calculated using the discount rate of 7.50%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

2018

(in thousands)	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
System's net pension liability	$ 17,595,452	$ 13,726,922	$ 10,472,071

For 2017, the discount rate used to measure the total pension liability was 4.49%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the employer contributions will be made at statutorily required rates, and the additional amount appropriated for fiscal year 2018. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2038 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2037 and a municipal bond index rate of 3.56% was applied to all periods of projected benefit payments after 2037. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

The following table presents the net pension liability of the System for 2017. The 2017 net pension liability of the System is calculated using the discount rate of 4.49%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.49%) or 1-percentage-point higher (5.49%) than the current rate:

2017

(in thousands)	1% Decrease (3.49%)	Current Discount Rate (4.49%)	1% Increase (5.49%)
System's net pension liability	$ 35,029,551	$ 28,259,123	$ 22,702,413

For 2018, June 30, 2017 is the actuarial valuation date upon which the total pension liability (TPL) is based. An expected TPL is determined as of June 30, 2018 using standard roll forward techniques for the TPL using a discount rate of 7.50%. An expected TPL was also determined using the prior year discount rate of 4.49%, which was based on a municipal bond index rate of 3.56%. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate (SEIR) for the year. The difference between the two roll-forward amounts as of June 30, 2018 is the gain or loss due to changes in assumptions and other inputs.

In addition, we have determined an expected TPL as of June 30, 2018 based on the TPL roll-forward in the June 30, 2017 GASB 67 report. The difference between this amount and the roll-forward of the actual TPL using last year's assumptions is reflected as an experience gain or loss for the year. These procedures are shown in the following table:

Note 4: Net Pension Liability of Employers continued ...

TPL Roll-Forward 2018 *(In thousands of dollars)*	Expected	Actual Before Assumption Change	Actual After Assumption Change
(a) Interest Rate	4.49%	4.49%	7.50%
(b) TPL as of June 30, 2017	$ 46,966,822	$ 46,753,909	$ 32,819,887
(c) Entry Age Normal Cost for the Year July 1, 2017 - June 30, 2018	1,104,102	1,104,102	539,205
(d) Actual Benefit Payments (including refunds) For the year July 1, 2017 - June 30, 2018	2,035,690	2,035,690	2,035,690
(e) TPL as of June 30, 2018 (b) x (1 + (a)) + (c) - (d) x (1 + 0.5 x (a))	48,098,343	47,875,870	33,708,555
(f) Difference between Expected and Actual Experience (Gain)/Loss		(222,473)	
(g) Difference due to change in Assumptions and Other Inputs (Gain)/Loss			(14,167,315)

For 2017, June 30, 2016 is the actuarial valuation date upon which the TPL is based. An expected TPL is determined as of June 30, 2017 using standard roll forward techniques for the TPL based on the assumptions from the June 30, 2015 experience study using a discount rate of 4.49%, which was based on a municipal bond index rate as of that date equal to 3.56%. An expected TPL was also determined based on the assumptions prior to the June 30, 2015 experience study using the prior year discount rate of 4.20%, which was based on a municipal bond index rate of 3.01%. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate (SEIR) for the year. The difference between the two roll-forward amounts as of June 30, 2017 is the gain or loss due to changes in assumptions and other inputs.

In addition, we have determined an expected TPL as of June 30, 2017 based on the TPL roll-forward in the June 30, 2016 GASB 67 report. The difference between this amount and the roll-forward of the actual TPL using last year's assumptions is reflected as an experience gain or loss for the year. These procedures are shown in the following table:

TPL Roll-Forward 2017 *(In thousands of dollars)*	Expected	Actual Before Assumption Change	Actual After Assumption Change
(a) Interest Rate	4.20%	4.20%	4.49%
(b) TPL as of June 30, 2016	$ 47,736,901	$ 47,928,332	$ 45,781,405
(c) Entry Age Normal Cost for the Year July 1, 2016 - June 30, 2017	1,332,587	1,332,587	1,118,412
(d) Actual Benefit Payments (including refunds) For the year July 1, 2016 - June 30, 2017	1,944,917	1,944,917	1,944,917
(e) TPL as of June 30, 2017 (b) x (1 + (a)) + (c) - (d) x (1 + 0.5 x (a))	49,088,678	49,288,149	46,966,822
(f) Difference between Expected and Actual Experience (Gain)/Loss		199,471	
(g) Difference due to change in Assumptions and Other Inputs (Gain)/Loss			(2,321,327)

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of TRS' financial statements assess the risks TRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430.

TRS administers a retirement annuity trust fund and a health insurance trust fund in accordance with state and federal law. TRS provides service and disability retirement benefits, death and survivor benefits, health insurance benefits, and life insurance benefits for Kentucky public education employees and their beneficiaries. The trust funds managed by TRS shall be referred to collectively as the "System" unless the context requires a specific reference to a particular fund.

The asset allocation parameters for the retirement annuity trust fund are set forth in Title 102, Chapter 1:175, Section 2 and Section 3 of the Kentucky Administrative Regulations as follows:

- There shall be no limit on the amount of investments owned by the retirement annuity trust fund if the investments are guaranteed by the United States government.
- Not more than 35 percent of the assets of the retirement annuity trust fund at fair value shall be invested in corporate debt obligations.
- Not more than 10 percent of the assets of the retirement annuity trust fund at fair value shall be invested in foreign debt.
- Not more than 65 percent of the assets of the retirement annuity trust fund at fair value shall be invested in common stocks or preferred stocks.
- Not more than 25 percent of the assets of the retirement annuity trust fund at fair value shall be invested in a stock portfolio designed to replicate a general stock index.
- Not more than 30 percent of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the 65 percent limitation for total stocks.
- Not more than 10 percent of the assets of the retirement annuity trust fund at fair value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.
- Not more than 10 percent of the assets of the retirement annuity trust fund at fair value shall be invested in alternative investments. This category may include private equity, venture capital, timberland, and infrastructure investments.
- Not more than 15 percent of the assets of the retirement annuity trust fund at fair value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

The asset allocation parameters for the health insurance trust fund are set forth in Title 102, Chapter 1:178, Section 2 of the Kentucky Administrative Regulations as follows:

- In order to preserve the assets of the health insurance trust fund and produce the required rate of return while minimizing risk, assets shall be prudently diversified among various classes of investments.
- In determining asset allocation policy, the investment committee and the board shall be mindful of the health insurance trust fund's liquidity and its capability of meeting both short and long-term obligations.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the System's deposits may not be returned to the System. The System's total cash balance held at J.P. Morgan Chase Bank on June 30, 2018 was $161,372,064. The System's total cash balance held at J.P. Morgan Chase Bank in noninterest-bearing accounts on June 30, 2017 was $222,173,747.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

a. uncollateralized,
b. collateralized with securities held by the pledging financial institution, or
c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2018, the System's cash balance in the amount of $161,372,064 was not exposed to custodial credit risk because this amount was fully insured by the FDIC limit of $250,000 and collateralized with a Letter of Credit in the amount of $200,000,000 as well as securities held by the Federal Reserve Bank of New York in the name of the Commonwealth of Kentucky-Teachers' Retirement valued at $52,303,290.

As of June 30, 2017, the System's cash balance in the amount of $222,173,747 was not exposed to custodial credit risk because this amount was fully insured by the FDIC limit of $250,000 and collateralized with a Letter of Credit in the amount of $189,000,000 as well as securities held by the Federal Reserve Bank of New York in the name of the Commonwealth of Kentucky-Teachers' Retirement valued at $32,955,776.

C. INVESTMENTS

All of the System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, alternative investments, and additional categories as permitted by regulation. These assets are reported at fair value.

Investments are governed by the Board of Trustees' policies while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the prudent person rule, as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

The following charts represents the fair values of the investments of the Teachers' Retirement System of the State of Kentucky for June 30, 2018 and 2017.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments
Retirement Annuity Trust

	Fair Value June 30, 2018	Fair Value June 30, 2017
Money Market Fund	$ 403,683,329	$ 521,747,070
Total Cash Equivalents	**403,683,329**	**521,747,070**
U.S. Government	1,145,850,222	992,857,941
Agency Bonds	47,262,531	48,416,092
Mortgage Backed Securities	90,483,215	77,624,095
Asset Backed Securities	34,611,394	52,576,134
Commercial Mtg Backed Securities	40,736,773	40,167,581
Collateralized Mtg Obligations	17,929,295	27,820,939
Municipal Bonds	335,376,929	359,500,198
Corporate Bonds	1,271,973,130	1,272,699,183
Total Fixed Income	**2,984,223,489**	**2,871,662,163**
International Equity	4,891,933,955	4,460,064,917
U.S. Equity	7,652,519,183	7,129,871,825
Total Equities	**12,544,453,138**	**11,589,936,742**
Real Estate Equity	1,150,694,282	1,046,760,134
Total Real Estate Equity	**1,150,694,282**	**1,046,760,134**
Private Equity	1,095,289,506	854,635,619
Timberland	187,540,819	208,219,943
Total Alternative Investments	**1,282,830,325**	**1,062,855,562**
Opportunistic Credit	553,448,443	539,082,990
Corporate Securities	158,697,881	
Corporate Bonds	327,919,948	491,088,604
Corporate Loans	376,448,601	389,435,564
Total Additional Categories	**1,416,514,873**	**1,419,607,158**
TOTAL INVESTMENTS*	**$ 19,782,399,436**	**$ 18,512,568,829**

**This schedule includes the 403(b) Tax Shelter fund, and Losey Scholarship fund.*

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Schedule of Investments
Health Insurance Trust

	Fair Value June 30, 2018	Fair Value June 30, 2017
Money Market Fund	$ 56,993,634	$ 46,008,715
Total Cash Equivalents	**56,993,634**	**46,008,715**
Municipal Bonds	3,013,547	
U.S. Government	28,274,922	20,457,755
Corporate Bonds	58,393,462	49,825,322
Total Fixed Income	**89,681,931**	**70,283,077**
Global Equities	571,646,533	442,726,237
U.S. Equity	34,059,334	30,548,164
Total Equities	**605,705,867**	**473,274,401**
Real Estate Equity	62,962,565	42,701,494
Total Real Estate Equity	**62,962,565**	**42,701,494**
Private Equity	81,232,638	42,340,364
Total Alternative Investments	**81,232,638**	**42,340,364**
Opportunistic Credit	58,388,152	49,620,098
Corporate Securities	42,477,060	
Corporate Bonds	46,908,752	81,742,713
Corporate Loans	37,839,206	28,807,364
Total Additional Categories	**185,613,170**	**160,170,175**
TOTAL INVESTMENTS	**$1,082,189,805**	**$ 834,778,226**

Schedule of Investments
Life Insurance Fund

	Fair Value June 30, 2018	Fair Value June 30, 2017
Money Market Fund	$ 3,724,036	$ 4,150,029
Total Short Term Investments	**3,724,036**	**4,150,029**
U. S. Government	17,296,920	8,825,290
Mortgage Backed Securities	752,789	1,123,884
Municipal Bonds	8,720,060	25,088,970
Corporate Bonds	21,055,667	47,255,156
Total Fixed Income	**47,825,436**	**82,293,300**
International Equity	7,884,256	
U.S. Equity	22,011,223	
Total Equities	**29,895,479**	
Real Estate Equity	541,107	
Total Real Estate Equity	**541,107**	
Opportunistic Credit	1,300,000	
Total Additional Categories	**1,300,000**	
TOTAL INVESTMENTS	**$ 83,286,058**	**$ 86,443,329**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the System, and are held by either:

a. the counterparty or
b. the counterparty's trust department or agent, but not in the System's name.

The cash reserve of the System is primarily maintained in high quality short term investments through the Dreyfus Institutional Cash Advantage Fund. This fund invests in a diversified portfolio of high quality, short-term debt securities and the Fund is rated AAA by S&P, Moody's, and Fitch, Inc. The Fund's portfolio is structured within the confines of Rule 2a-7 under the Investment Company Act of 1940, as amended. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, bankers' acceptances, repurchase agreements, time deposits, etc. are all permissible investments within this Fund.

Whenever repurchase agreements are ordered by TRS under the terms of Master Repurchase Agreements with various brokers, the terms are dictated by TRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and TRS' nominee name. This account is unique to TRS. The Master Repurchase Agreements require that the supporting collateral have a fair value of at least 102 percent of the value of the repurchase agreements.

As of June 30, 2018, cash collateral reinvestment securities acquired through securities lending for the retirement annuity trust fund by TRS's custodian, who is also the lending agent/counterparty, amounted to $1,297,943,833 related to $1,268,089,422 securities lent consistent with the lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Interest Rate Risk

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the System's investments. In general, the longer the period until an investment matures, the greater the risk of a negative impact on fair value resulting from changes in interest rates.

As of June 30, 2018 and 2017, the retirement annuity trust and health insurance trusts had the following investment fair values and weighted average maturities. Life Insurance Fund was broken out into a separate entity in February 2018:

2018 Retirement Annuity Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
U.S. Government	$ 1,145,850,222	$	8.79
Agency	47,262,531		6.89
MBS	90,483,214		16.95
CMO	17,929,295		9.26
ABS	34,611,394		15.20
CMBS	40,736,773		21.54
Muni	335,376,929		12.21
Corporate Bonds and Securities	1,271,973,131	486,617,830	7.85
Corporate Loans*		369,365,652	4.60
TOTAL	**$ 2,984,223,489**	**$ 855,983,482**	**8.60**

** Does not include $7,082,948 in cash held directly at Barings European Loan Fund*

2017 Retirement Annuity Trust

Investment Type	Fixed Income	Additional Categories	Average Maturity (years)
U.S. Government	$ 992,857,941	$	10.81
Agency	48,416,092		8.06
MBS	77,624,096		11.67
CMO	27,820,939		13.05
ABS	52,576,134		11.99
CMBS	40,167,581		20.92
Muni	359,500,198		11.93
Corporate Bonds	1,272,699,183	491,088,604	8.13
Corporate Loans*		381,101,026	4.76
TOTAL	**$ 2,871,662,164**	**$ 872,189,630**	**7.72**

** Does not include $8,335,538 in cash held directly at Barings European Loan Fund*

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Health Insurance Trust

Investment Type	2018 Fixed Income	2018 Additional Categories	2018 Average Maturity (years)	2017 Fixed Income	2017 Additional Categories	2017 Average Maturity (years)
U.S. Government	$ 28,274,923	$	9.32	$ 20,457,755	$	8.44
Muni	3,013,547		8.35			
Corporate Bonds and Securities	58,393,462	89,385,812	6.30	49,825,322	81,742,713	5.99
Corporate Loans		37,839,206	5.27		28,807,364	5.37
TOTAL	**$ 89,681,932**	**$ 127,225,018**	**6.54**	**$ 70,283,077**	**$ 110,550,077**	**6.17**

Life Insurance Trust

Investment Type	2018 Fixed Income	2018 Additional Categories	2018 Average Maturity (years)	2017 Fixed Income	2017 Additional Categories	2017 Average Maturity (years)
U.S. Government	$ 17,296,920		8.86	$ 8,825,290		9.62
Muni	8,720,060		14.64	25,088,970		12.74
MBS	752,789		13.50	1,123,884		11.28
Corporate Bonds	21,055,667		5.29	47,255,156		5.42
TOTAL	**$ 47,825,436**		**8.42**	**$ 82,293,300**		**8.25**

In addition to the above securities, the System held short-term cash investments in the Dreyfus Institutional Cash Advantage Fund and STIF, held at the Bank of New York Mellon, with a total fair value of $464,400,624 and had a weighted average maturity of seventeen (17) days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology to quantify the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of changes in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the System manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by the System were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The retirement annuity trust held $90.4 million in mortgage-backed securities as of June 30, 2018, compared to $77.6 million as of June 30, 2017.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The retirement annuity trust held $17.9 million in collateralized mortgage obligations as of June 30, 2018, compared to $27.8 million as of June 30, 2017.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivables originated by banks, credit card companies, or other credit providers, and are considered to be moderately sensitive to changes in interest rates. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The retirement annuity trust held $34.6 million as of June 30, 2018, compared to $52.6 million as of June 30, 2017.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The System's commercial mortgage-backed securities investments consist of highly rated relatively senior tranches. The average maturity of the System's commercial mortgage-backed securities holdings in the schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The retirement annuity trust held $40.7 million in commercial mortgage-backed securities investments as of June 30, 2018, compared to $40.2 million as of June 30, 2017.

Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedules list the System's fixed income investment fair values (net of cash equivalents) according to credit ratings as of June 30, 2018 and 2017:

2018 Retirement Annuity Trust

Rating	Fixed Income	Additional Categories	Total	%
U.S. Government	$ 1,145,850,222	$	$ 1,145,850,222	29.84%
AAA	253,972,006	(91,711)	253,880,295	6.60%
AA	474,173,415		474,173,415	12.35%
A	569,839,193		569,839,193	14.84%
BBB	522,885,079	38,886,604	561,771,683	14.63%
BB	6,899,630	302,177,281	309,076,911	8.05%
B		381,391,910	381,391,910	9.93%
CCC		25,168,121	25,168,121	0.66%
CC		2,032,593	2,032,593	0.05%
D		63,853	63,853	0.00%
Not Rated	10,603,944	106,354,831	116,958,775	3.05%
TOTAL	**$ 2,984,223,489**	**$ 855,983,482**	**$ 3,840,206,971**	**100.00%**

2017 Retirement Annuity Trust

Rating	Fixed Income	Additional Categories	Total	%
U.S. Government	$ 992,857,941	$	$ 992,857,941	26.52%
AAA	208,371,963		208,371,963	5.56%
AA	574,902,212		574,902,212	15.36%
A	530,984,214	1,131,449	532,115,663	14.21%
BBB	523,726,097	37,033,244	560,759,341	14.98%
BB	22,804,994	329,217,429	352,022,423	9.40%
B	4,048,200	329,149,508	333,197,708	8.90%
CCC		22,858,417	22,858,417	0.61%
CC				0.00%
D	1,045,762	46,000	1,091,762	0.03%
Not Rated	12,920,781	152,753,583	165,674,364	4.43%
TOTAL	**$ 2,871,662,164**	**$ 872,189,630**	**$ 3,743,851,794**	**100.00%**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

2018 Health Insurance Trust

Investment Type	Fixed Income	Additional Categories	Total	%
U.S. Government	$ 28,274,923	$	$ 28,274,923	13.04%
AAA	5,287,825	(25,195)	5,262,630	2.43%
AA	18,339,237		18,339,237	8.45%
A	25,897,007		25,897,007	11.94%
BBB	11,434,235	6,338,732	17,772,967	8.19%
BB	448,705	56,379,687	56,828,392	26.20%
B		59,084,935	59,084,935	27.24%
CCC		3,725,529	3,725,529	1.72%
CC		93,982	93,982	0.04%
D		4,115	4,115	0.00%
Not Rated		1,623,233	1,623,233	0.75%
TOTAL	**$ 89,681,932**	**$ 127,225,018**	**$ 216,906,950**	**100.00%**

2017 Health Insurance Trust

Investment Type	Fixed Income	Additional Categories	Total	%
U.S. Government	$ 20,457,755	$	$ 20,457,755	11.31%
AAA	6,427,010		6,427,010	3.55%
AA	11,828,663		11,828,663	6.55%
A	21,162,730		21,162,730	11.70%
BBB	9,938,419	5,546,635	15,485,054	8.56%
BB	468,500	52,006,671	52,475,171	29.02%
B		47,612,272	47,612,272	26.33%
CCC		3,693,471	3,693,471	2.04%
Not Rated		1,691,028	1,691,028	0.94%
TOTAL	**$ 70,283,077**	**$ 110,550,077**	**$ 180,833,154**	**100.00%**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

2018 Life Insurance Fund

Investment Type	Fixed Income	Additional Categories	Total	%
U.S. Government	$ 17,296,920		$ 17,296,920	36.17%
AAA	6,594,675		6,594,675	13.79%
AA	12,120,689		12,120,689	25.34%
A	3,932,440		3,932,440	8.22%
BBB	5,548,537		5,548,537	11.60%
BB	1,346,115		1,346,115	2.82%
Not Rated	986,060		986,060	2.06%
TOTAL	**$ 47,825,436**		**$ 47,825,436**	**100.00%**

2017 Life Insurance Fund

Investment Type	Fixed Income	Additional Categories	Total	%
U.S. Government	$ 8,825,290		$ 8,825,290	10.72%
AAA	11,472,920		11,472,920	13.94%
AA	28,916,597		28,916,597	35.14%
A	8,651,610		8,651,610	10.51%
BBB	21,986,273		21,986,273	26.72%
BB	1,405,500		1,405,500	1.71%
Not Rated	1,035,110		1,035,110	1.26%
TOTAL	**$ 82,293,300**		**$ 82,293,300**	**100.00%**

Total fair value of the retirement annuity trust's fixed income portfolio was $3,840,206,971 on June 30, 2018. The health insurance trust's fixed income portfolio was valued at $216,906,950 on June 30, 2018. The life insurance trust was broken into a separate entity as of February 2018. Total fair value of the life insurance trust's fixed income portfolio was $47,825,436 on June 30, 2018. The rating system used in the above charts is the Standard and Poor's rating system. For securities where a Standard and Poor's rating is not provided, another nationally recognized system is used and translated to the Standard and Poor's rating system.

In addition to the above categories, the retirement annuity trust held $403,682,956 in short term investments through the Dreyfus Institutional Cash Advantage Fund. The health insurance trust held $56,993,634 in the Dreyfus Institutional Cash Advantage Fund. The life insurance fund held $3,724,034 in the Dreyfus Institutional Cash Advantage Fund. The credit risk associated with this Fund is minimal as the securities held are required to maintain the highest possible short-term credit ratings by Moody's and Standard & Poor's. In addition, investments in US Government and Agency securities are also highly rated securities since they are backed by the US Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

The retirement annuity trust fund's policy on credit rating is set forth in 102 KAR 1:175 and reads as follows: "A fixed income investment shall be rated at the time of purchase as investment grade by at least one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. The fixed income investment portfolio as a whole shall maintain an average rating of investment grade by at least one (1) of the major rating services."

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the retirement annuity trust fund is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the System."

"The System's position in a single stock shall not exceed two and one-half (2.5) percent of the System's assets. The System's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program."

TRS has not invested greater than five percent (5%) of the retirement annuity trust fund's assets at fair value in any single issuer and is in compliance with investment policy.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. As of June 30, 2018, the System's exposure to foreign currency risk consisted of $5,069,506,319 in the retirement annuity trust, $330,759,576 in the health insurance trust and $10,751,475 in the life insurance fund.

The following tables represent the fair values of investments that are subject to foreign currency as a result of cash contributions to each portfolio manager as of June 30, 2018 and 2017:

Retirement Annuity Trust

	2018	2017
Commingled Funds		
Babson Capital European Loan Fd	$ 83,937,661	$ 83,529,164
Baillie Gifford Intrntl EAFE	985,849,831	826,304,923
Baring All Country World ex US	590,455,660	576,106,295
BlackRock ACWI EX-US IMI	787,140,750	712,902,870
UBS All Country World ex US	819,861,910	704,979,730
Alternative Funds		
Carlyle Europe Partners IV, L.P.	39,101,810	19,731,527
KKR & Co European Fund III	24,592,112	33,809,458
KKR & Co European Fund IV	38,790,070	26,265,452
Oaktree European Principal III	21,295,962	22,839,529
ADRs (Equities)	783,159,050	658,341,208
Cross-Listed Equities	539,646,891	688,122,140
Bonds (Fixed Income)	143,961,909	206,555,302
Additional Categories (Fixed Income)	83,826,303	83,459,203
Additional Categories (Opportunistic)	127,886,400	109,262,717
Total	**$ 5,069,506,319**	**$ 4,752,209,518**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Health Insurance Trust

	2018	2017
CCommingled Funds		
Black Rock Fund B	$ 275,988,587	$ 206,320,676
Alternative Funds		
Carlyle Europe IV	7,820,364	3,946,307
KKR European IV	7,758,012	5,253,090
Bonds (Fixed Income)	5,363,945	4,503,370
ADRs (Equities)	3,562,059	3,658,163
Additional Categories (Fixed Income)	15,875,004	15,306,108
Additional Categories (Opportunistic)	14,391,605	9,963,117
Total	**$ 330,759,576**	**$ 248,950,831**

Life Insurance Trust

	2018	2017
Commingled Funds		
BlackRock Fund B	$ 7,812,225	$
Bonds (Fixed Income)	2,939,250	9,003,670
Total	**$ 10,751,475**	**$ 9,003,670**

The following tables reflect the fair values of the various foreign currencies associated with the System's investments in the categories outlined above:

Retirement Annuity Trust

Currency	2018	2017
Australian Dollar	$ 80,056,199	$ 116,620,840
Bermudian Dollar	82,563,565	66,974,641
Brazilian Real	30,670,609	36,631,654
British Pound Sterling	542,534,671	651,726,435
Canadian Dollar	235,825,292	297,523,837
Cayman Islands Dollar	43,991,379	54,684,123
Chilean Peso	17,492,964	14,187,093
Chinese Yuan	139,954,752	72,872,379
Columbian Peso	16,129,857	6,717,571
Czech Koruna	326,311	266,000
Danish Krone	70,488,935	77,878,375
Egyptian Pound	447,034	320,624
Euro	1,840,824,814	1,665,892,188
Guernsey Pound	13,630,804	
Hong Kong Dollar	264,619,956	231,547,001
Hungarian Forint	524,979	483,670
Indian Rupee	79,415,592	71,413,664
Indonesian Rupiah	9,063,489	8,323,019
Israeli New Shekel	7,585,527	18,361,613
Japanese Yen	713,224,851	627,530,830
Jersey Pound	73,558,462	
Korean Won	72,938,027	77,277,317
Liberian Dollar	1,968,400	2,086,293
Macanese Pataca	662,798	
Malaysian Ringgit	15,668,077	14,649,584
Mexican Peso	78,431,730	70,822,257
Netherlands Antillean Guilder	26,993,189	24,156,367

Currency	2018	2017
New Zealand Dollar	1,706,541	1,600,934
Norwegian Krone	40,615,351	26,977,335
Omani Rial		1,045,762
Pakastani Rupee	294,114	426,623
Panamanian Balboa	27,813,694	35,045,435
Papua New Guinean Kina	288,958	
Peruvian Nuevo Sol		19,274
Philippine Peso	3,301,664	3,568,672
Polish Zloty	3,614,767	3,811,229
Qatari Rial	1,473,771	1,127,736
Russian Ruble	34,420,677	4,174,638
Singapore Dollar	29,249,156	29,311,066
Sol	101,565	
South African Rand	48,035,919	33,764,272
Swedish Krona	137,087,835	147,404,707
Swiss Franc	201,063,978	165,092,155
Taiwan New Dollar	49,926,329	62,467,815
Thai Baht	9,857,556	4,953,021
Trinidadian Dollar	580,613	
Turkish Lira	10,651,999	4,346,512
UAE Dirham	1,152,862	10,010,413
Uruguayan Peso	1,627,660	
Various	7,049,047	8,114,544
Total	**$ 5,069,506,319**	**$ 4,752,209,518**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Health InsuranceTrust

Currency	2018	2017
Argentine Peso	$ 135,555	$
Australian Dollar	14,952,558	12,204,361
Bermudian Dollar	2,086,554	1,006,412
Brazilian Real	3,688,755	3,139,989
British Pound Sterling	33,230,738	28,771,704
Canadian Dollar	24,439,457	20,587,815
Cayman Islands Dollar	994,258	117,062
Chilean Peso	745,806	526,286
Chinese Yuan	18,830,555	497,440
Columbian Peso	296,733	209,996
Czech Koruna	106,784	82,136
Danish Krone	3,168,754	2,465,213
Egyptian Pound	146,934	107,526
Euro	104,404,801	74,200,106
Guernsey Pound	62,516	
Hong Kong Dollar	8,146,300	14,669,785
Hungarian Forint	168,560	149,091
Indian Rupee	6,048,862	4,713,176
Indonesian Rupiah	1,266,203	1,222,441
Israeli New Shekel	1,364,123	564,024
Japanese Yen	45,957,033	36,155,429
Jersey Pound	253,049	
Korean Won	9,730,528	7,793,916
Liberian Dollar	192,830	
Macanese Pataca	223,455	
Malaysian Ringgit	$ 1,577,332	$ 1,235,840
Mexican Peso	1,929,849	1,800,372
Netherlands Antillean Guilder	589,060	
New Zealand Dollar	579,374	486,228
Norwegian Krone	1,598,858	453,325
Pakastani Rupee	94,341	1,168,560
Panamanian Balboa	597,706	121,971
Papua New Guinean Kina	97,332	
Peruvian Nuevo Sol		592,818
Philippine Peso	617,753	5,171
Polish Zloty	696,247	584,439
Qatari Rial	508,713	647,019
Russian Ruble	2,079,235	331,098
Singapore Dollar	2,549,367	885,415
Sol	33,943	
South African Rand	4,046,539	2,024,219
Swedish Krona	5,504,183	3,339,571
Swiss Franc	16,421,811	4,739,818
Taiwan New Dollar	8,036,220	12,797,324
Thai Baht	1,514,111	6,542,493
Trinidadian Dollar	119,100	
Turkish Lira	533,627	1,173,463
UAE Dirham	393,174	517,208
Various		320,571
Total	**$ 330,759,576**	**$ 248,950,831**

Life Insurance Fund

Currency	2018	2017
Australian Dollar	$ 2,328,511	$ 2,003,620
Bermudian Dollar	11,322	
Brazilian Real	109,096	
British Pound Sterling	1,808,287	1,000,790
Canadian Dollar	524,742	4,000,040
Cayman Islands Dollar	1,159	
Chilean Peso	21,887	
Chinese Yuan	514,591	
Columbian Peso	8,629	
Czech Koruna	3,238	
Danish Krone	91,546	
Egyptian Pound	4,437	
Euro	1,811,311	
Guernsey Pound	1,862	
Hong Kong Dollar	239,681	
Hungarian Forint	5,210	
Indian Rupee	178,964	
Indonesian Rupiah	37,499	
Israeli New Shekel	38,914	
Japanese Yen	1,353,133	
Jersey Pound	4,038	
Korean Won	287,376	
Macanese Pataca	6,578	
Malaysian Ringgit	$ 46,475	
Mexican Peso	57,007	
New Zealand Dollar	16,936	
Norwegian Krone	44,961	
Pakastani Rupee	2,919	
Panamanian Balboa	96	
Papua New Guinean Kina	2,868	
Philippine Peso	17,896	
Polish Zloty	20,423	
Qatari Rial	14,626	
Russian Ruble	61,397	
Singapore Dollar	72,064	
Sol	1,008	
South African Rand	119,374	
Swedish Krona	158,408	1,999,220
Swiss Franc	414,458	
Taiwan New Dollar	237,004	
Thai Baht	44,335	
Turkish Lira	15,313	
UAE Dirham	11,441	
Various	455	
Total	**$ 10,751,475**	**$ 9,003,670**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The majority of foreign investments are held in commingled funds managed by Babson Capital Management, UBS Global Asset Management, Baillie Gifford, Baring Asset Management, and Black Rock. In addition to the commingled funds investing in foreign securities, the retirement annuity trust fund held $783,159,050 associated with foreign interests in American Depositary Receipt investments. These American Depositary Receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. American Depositary Receipts are denominated in U.S. currency. Also, the cross listed equities, in the amount of $539,646,891, represent securities domiciled in foreign countries, but are listed and traded on U.S. exchanges. Other foreign securities and investments consisted of debt securities and alternative investment opportunities. Foreign holdings, including investment receivables/payables, that were not readably identifiable to a specific country were listed in the "various" category pertaining to currency type.

The retirement annuity trust fund's policy regarding foreign equities is that not more than thirty percent (30%) of the assets of the retirement annuity trust fund at fair value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

Fair Value Measurement

A retiree pension defined benefit plan holds significant amounts of investments that are measured at fair value on a recurring basis. TRS categorizes its fair value measurements within the fair value hierarchy established by accounting principles generally accepted in the United States of America (GAAP). The hierarchy is based on the valuation inputs used to measure the fair value of the asset and is not necessarily indicative of risk.

Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date. Level 2 inputs - inputs other than quoted prices included within Level 1 - that are observable for an asset or liability. Level 2 inputs may include quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets of liabilities in non-active markets; and inputs other than quoted prices that are observable for the assets or liabilities, either directly or indirectly. Level 3 inputs are unobservable inputs for an asset or liability such as property appraisals, third party valuations, and public market comparables of similar assets where applicable. Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy. The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following tables depict the following recurring fair value measurements as of June 30, 2018:

2018 Retirement Annuity Trust

Investments	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash Equivalents	$ 403,683,329	$	$	$ 403,683,329
Fixed Income				
Asset Backed Securities		34,611,394		34,611,394
Agency Bonds		47,262,531		47,262,531
Commercial Mtg Backed Securities		40,736,773		40,736,773
Collateralized Mtg Obligations		17,929,295		17,929,295
Corporate Bonds	2,404,473	1,269,568,657		1,271,973,130
Mortgage Backed Securities		89,105,435	1,377,780	90,483,215
Municipal Bonds		335,376,929		335,376,929
US Government	1,139,006,569	6,843,653		1,145,850,222
Total Fixed Income	1,141,411,042	1,841,434,667	1,377,780	2,984,223,489
Equities				
International	1,306,678,614	1,999,811,083		3,306,489,697
US Equity	7,387,805,408	33,688		7,387,839,096
Total Equity	8,694,484,022	1,999,844,771		10,694,328,793
Real Estate			420,940,001	420,940,001
Timberland			153,111,010	153,111,010
Additional Categories				
Corporate Bonds and Securities	(91,711)	486,709,541		486,617,830
Corporate Loans			186,153,181	186,153,181
Total Additional Categories	(91,711)	486,709,541	186,153,181	672,771,011
Total Investments by Fair Value Level	**$ 10,239,486,682**	**$ 4,327,988,979**	**$ 761,581,972**	**$ 15,329,057,633**
Investments Measured at the NAV				
Commingled European Loan Fund				$ 102,070,000
Commingled International Equity Funds				1,585,444,258
Commingled Domestic Equity Funds				264,680,086
Private Equity Funds				1,095,289,506
Private Loan Fund				88,225,420
Private Real Estate Funds				729,754,281
Private Timber Funds				34,429,809
Private Opportunistic Credit Funds				553,448,443
Total Investments Measured at the NAV				**$ 4,453,341,803**
Total Investments at Fair Value				**$ 19,782,399,436**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

2017 Retirement Annuity Trust

Investments	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash Equivalents	$ 521,747,070	$	$	$ 521,747,070
Fixed Income				
Asset Backed Securities		47,346,318	5,229,816	52,576,134
Agency Bonds		48,416,092		48,416,092
Commercial Mtg Backed Securities		40,167,581		40,167,581
Collateralized Mtg Obligations		27,820,939		27,820,939
Corporate Bonds	4,109,212	1,267,511,651	1,078,320	1,272,699,183
Mortgage Backed Securities		75,772,409	1,851,686	77,624,095
Municipal Bonds		354,276,082	5,224,116	359,500,198
US Government	983,646,901	9,211,040		992,857,941
Total Fixed Income	987,756,113	1,870,522,112	13,383,938	2,871,662,163
Equities				
International	1,326,738,184	1,712,181,097		3,038,919,281
US Equity	6,888,437,450		164	6,888,437,614
Total Equity	8,215,175,634	1,712,181,097	164	9,927,356,895
Real Estate			392,640,022	392,640,022
Timberland			174,936,255	174,936,255
Additional Categories				
Corporate Bonds and Securities	19,262	491,069,342		491,088,604
Corporate Loans		388,090	162,816,233	163,204,323
Total Additional Categories	19,262	491,457,432	162,816,233	654,292,927
Total Investments by Fair Value Level	**$ 9,724,698,079**	**$ 4,074,160,641**	**$ 743,776,612**	**$ 14,542,635,332**

Investments Measured at the NAV	
Commingled European Loan Fund	$ 103,170,000
Commingled International Equity Funds	1,421,145,636
Commingled Domestic Equity Funds	241,434,211
Private Equity Funds	854,635,619
Private Loan Fund	123,061,241
Private Real Estate Funds	654,120,112
Private Timber Funds	33,283,688
Private Opportunistic Credit Funds	539,082,990
Total Investments Measured at the NAV	**$ 3,969,933,497**
Total Investments at Fair Value	**$ 18,512,568,829**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Investments Measured at the Net Asset Value (NAV)
Retirement Annuity Trust

Investments	6/30/2018	Unfunded Commitments	Redemption Frequency	Redemption Notice
Commingled European Loan Fund	$ 102,070,000		Daily	30 days
Commingled International Equity Fund	1,585,444,258		Daily	1-30 days
Commingled Domestic Equity Fund	264,680,086		Daily	1-30 days
Private Equity Funds:				
Open Ended Funds	209,885,810	71,168,561	Quarterly, Annually	90 days
Closed Ended Funds	885,403,696	553,049,047	N/A	N/A
Private Loan Fund	88,225,420		Quarterly	30 days
Private Real Estate Funds:				
Open Ended*	417,556,034	22,944,664	Quarterly	45-90 days
Closed Ended Funds	312,198,247	239,906,810	N/A	N/A
Private Timber Funds	34,429,809		Biennial	90 days
Private Opportunistic Credit Funds:				
Open Ended Funds	336,849,775		Semi-Annual	75 Days
Closed Ended Funds	216,598,668	203,145,926	N/A	N/A
Total Investments Measured at the NAV	$ 4,453,341,803			

* *Regarding the Open Ended Private Real Estate Funds, there are a few restrictions remaining that would prevent redemption at this time. One fund currently valued at $53,988,311 in the Retirement Annuity Trust and $10,797,661 in the Health Insurance Trust has a 2-year lock-up period that expires January 2019. Another fund currently valued at $27,055,336 in the Retirement Annuity Trust, $5,411,067 in the Health Insurance Trust, and $541,107 in the Life Insurance Fund has a 180 day lock-up period that expires October of 2018.*

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

2018 Health Insurance Trust

Investments at Fair Value Level	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash Equivalents	$ 56,993,634	$	$	$ 56,993,634
Fixed Income				
Corporate Bonds		58,393,462		58,393,462
Municipal Bonds		3,013,547		3,013,547
US Government	27,301,552	973,370		28,274,922
Total Fixed Income	27,301,552	62,380,379		89,681,931
Equities				
Global Equity		571,646,533		571,646,533
US Equity	34,059,334			34,059,334
Total Equity	34,059,334	571,646,533		605,705,867
Additional Categories				
Corporate Bonds and Securities	(25,195)	89,411,007		89,385,812
Corporate Loans		252,711	37,586,495	37,839,206
Total Additional Categories	(25,195)	89,663,718	37,586,495	127,225,018
Total Investments by Fair Value Level	**$ 118,329,325**	**$ 723,690,630**	**$ 37,586,495**	**$ 879,606,450**
Investments Measured at the NAV				
Private Equity Funds				$ 81,232,638
Private Real Estate Funds				62,962,565
Private Opportunistic Credit Funds				58,388,152
Total Investments Measured at the NAV				**$ 202,583,355**
Total Investments Measured at Fair Value				**$ 1,082,189,805**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

2017 Health Insurance Trust

Investments at Fair Value Level	Level 1	Level 2	Level 3	Fair Value
Cash Equivalents	$ 46,008,715	$	$	$ 46,008,715
Fixed Income				
Corporate Bonds		49,825,322		49,825,322
US Government	19,464,425	993,330		20,457,755
Total Fixed Income	19,464,425	50,818,652		70,283,077
Equities				
Global Equity		442,726,237		442,726,237
US Equity	30,548,164			30,548,164
Total Equity	30,548,164	442,726,237		473,274,401
Additional Categories				
Corporate Bonds	5,253	81,586,060	151,400	81,742,713
Corporate Loans		182,662	28,624,702	28,807,364
Total Additional Categories	5,253	81,768,722	28,776,102	110,550,077
Total Investments by Fair Value Level	**$ 96,026,557**	**$ 575,313,611**	**$ 28,776,102**	**$ 700,116,270**
Investments Measured at the NAV				
Private Equity Funds				$ 42,340,364
Private Real Estate Funds				42,701,494
Private Opportunistic Credit Funds				49,620,098
Total Investments Measured at the NAV				**$ 134,661,956**
Total Investments Measured at Fair Value				**$ 834,778,226**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

Investments Measured at the Net Asset Value (NAV)
Health Insurance Trust

	6/30/2018	Unfunded Commitments	Redemption Frequency	Redemption Notice
Private Real Estate Funds:	$ 28,142,915	$ 4,588,933	Quarterly	45-90 days
Open Ended	34,819,650	30,271,003	N/A	N/A
Closed Ended Funds				
Private Equity Funds:				
Closed Ended Funds	81,232,638	76,482,322	N/A	N/A
Private Opportunistic Credit Funds:				
Open Ended Funds	41,599,592		Semi-Annual	75 days
Closed Ended Funds	16,788,560	11,778,187	N/A	N/A
Total Investments Measured at the NAV	**$ 202,583,355**			

2018 Life Insurance Trust

Investments at Fair Value Level	Level 1	Level 2	Level 3	Fair Value
				$ 3,724,036
Cash Equivalents	$ 3,724,036	$		
Fixed Income:				
Corporate Bonds		21,055,667		21,055,667
Mortgage Backed Securities		752,789		752,789
Municipal Bonds		8,720,060		8,720,060
US Government	17,296,920			17,296,920
Total Fixed Income	17,296,920	30,528,516		47,825,436
Equities:				
International Equity		7,884,256		7,884,256
US Equity	22,011,223			22,011,223
Total Equity	22,011,223	7,884,256		29,895,479
Total Investments by Fair Value Level	**$ 43,032,179**	**$ 38,412,772**		**$ 81,444,951**
Investments Measured at the NAV				
Private Real Estate Funds				$ 541,107
Private Opportunistic Credit Funds				1,300,000
Total Investments Measured at the NAV				**$ 1,841,107**
Total Investments Measured at Fair Value				**$ 83,286,058**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

2017 Life Insurance Fund

Investments at Fair Value Level	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash Equivalents	$ 4,150,028	$	$	$ 4,150,028
Fixed Income				
Corporate Bonds		47,255,156		47,255,156
Mortgage Backed Securities		1,123,884		1,123,884
Municipal Bonds		25,088,970		25,088,970
US Government	8,825,290			8,825,290
Total Fixed Income	8,825,290	73,468,010		82,293,300
Total Investments by Fair Value Level	**$ 12,975,318**	**$ 73,468,010**	$	**$ 86,443,328**
Investments Measured at the NAV				N/A
Total Investments Measured at Fair Value				**$ 86,443,328**

Investments Measured at the Net Asset Value (NAV)
Life Insurance Fund

	6/30/2018	Unfunded Commitments	Redemption Frequency	Redemption Notice
Private Real Estate Funds:				
Open Ended	$ 541,107	$ 458,893	Quarterly	45 days
Private Opportunistic Credit Funds:				
Open Ended	1,300,000		Semi-Annual	75 days
Total Investments Measured at the NAV	**$ 1,841,107**			

Cash Equivalents

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Cash equivalents can be valued with inputs from quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date and therefore are classified as Level 1 assets.

Equity and Fixed Income Securities

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors for these securities. Debt and equity securities classified in Level 2 of the fair value hierarchy may use inputs such as market quotations, yields, maturities, call features and ratings or may be valued using a matrix pricing technique that values securities based on their relationship to benchmark quoted prices. Debt securities classified in Level 3 are securities whose stated market price is unobservable by the market place and are instead priced by the issuers or industry groups for these securities.

Real Estate

Real Estate falls into the Level 3 classification of the fair value hierarchy. Much of our real estate is comprised of owned properties leased to various commercial enterprises. The fair value measurement for real estate is determined by professional appraisals recurring every five years.

Timberland

Timberland investments are managed investments regarding the acquiring, growing and disposing of timber on timberlands owned by the System. Fair value determinations for Level 3 measurements of investments are the responsibility of the Advisor, The Molpus Woodlands Group, LLC. The Advisor contracts with outside appraisers to generate fair value estimates on an annual basis. The outside appraisers utilized the cost, sales comparison and income

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

capitalization approaches to estimate the fair value of the timber and timberlands. The Advisor challenges the reasonableness of the assumptions used and reviews the methodology to ensure the estimated fair value complies with accounting standards generally accepted in the United States of America. These funds are not available for redemption. Rather, these funds make distributions to TRS as the underlying assets are sold.

Additional Categories

Investments in this category do not fit the regular parameters for the retirement annuity trust fund set forth in Title 102, Chapter 1:175 of the Kentucky Administrative Regulations. Rather, they fall into the allowable 15% of assets of the retirement annuity trust fund invested in any additional category or categories of investments approved by the Board of Trustees. Corporate Bonds falling within Level 1 classification are valued using prices quoted in active markets issued by pricing vendors for these securities. Corporate Bonds listed in Level 2 of the fair value hierarchy may use inputs such as market quotations, yields, maturities, call features and rating or may be valued using a matrix pricing technique that values securities based on their relationship to benchmark quoted prices. Corporate Loans at level 3 of the fair value hierarchy are valued by third-party pricing vendors such as Markit or Reuters.

Commingled Funds

These funds hold European loans, international equities, and domestic equities. Commingled funds are valued at the net asset value held at the end of the period based upon the fair value of the underlying investments.

Private Equity Funds

Private equity funds invest in equity and debt securities issued by private and publicly-held companies in connection with leveraged buyouts, recapitalizations and expansion opportunities. Two of these funds are redeemable, but the majority of these investments do not allow redemptions. Alternatively, TRS receives distributions as the underlying assets of the funds liquidate, usually over a 5-10 year liquidation period. These are investments for which exchange quotations are not readily available. The fair value for most of these funds is determined using net asset value.

Private Loan Fund

TRS is the sole investor in a private loan fund. The majority of these loans are valued using a multiple analysis technique in which loans are first reviewed to determine which loans might be credit impaired. Credit impaired loans are valued using the enterprise value analysis or liquidation basis analysis to determine fair value. For debt investments that are not determined to be credit impaired, management uses a market interest rate yield analysis to determine fair value. Debt investments without readily available market quotations are subject to review by an independent valuation party, with each portfolio investment reviewed at least once during a rolling twelve-month period. This fund is valued at the net asset value held at the end of the period based upon the fair value of the underlying investments.

Private Real Estate Funds

There are three open-ended private real estate investments. The remaining private real estate investments are not redeemable. Rather, TRS receives distributions as the underlying assets of the fund liquidate, usually over a 5-10 year liquidation period. These are investments for which exchange quotations are not readily available. The fair value for most of these funds is determined using net assets valued one quarter in arrears plus current quarter cash flows.

Private Timber Funds

TRS has one Private Timberland fund that is valued using the net asset value practical expedient method. Like most Private Funds, the fair value for this fund is determined using net assets valued one quarter in arrears plus current quarter cash flows.

Private Opportunistic Credit Funds

There is one private opportunistic credit fund that is redeemable. The remainder of the private opportunistic credit funds are closed funds that issue distributions as the underlying assets of the fund liquidate, usually over a 5-10 year liquidation period. Like most of the other Private Funds, the fair value for these funds is determined using net assets valued one month to one quarter in arrears plus current period cash flows.

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

D. SECURITIES LENDING

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the System. The System operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international stocks are the types of securities that are lent. The System's custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the fair value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the System.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. During the fiscal year ended June 30, 2018, only the retirement annuity trust fund had securities lending transactions. The following section details the net income earned in the retirement annuity trust fund from securities lending for the fiscal year ended June 30, 2018 and 2017:

Item	2018 Earnings	2017 Earnings
Gross Earnings (Interest and Fees)	$ 16,319,045	$ 5,799,152
Gross Borrower Rebates	(10,590,816)	(2,138,664)
Bank Fees	(1,718,028)	(1,097,808)
Net Earnings	$ 4,010,201	$ 2,562,680

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. As per GASB 28, securities lending transaction collateralized by letters of credit or by securities that the governmental entity does not have the ability to pledge or sell unless the borrower defaults are not reported as assets and liabilities on the Statement of Fiduciary Net Position.

As of June 30, 2018, the loan average days to maturity in the retirement annuity trust fund was one (1) day and the weighted average investment maturity of cash collateral investments was two (2) day. At fiscal year end, the retirement annuity trust fund had no credit risk exposure to borrowers, since the amounts the retirement annuity trust fund owes the borrowers exceeds the amounts the borrowers owe the retirement annuity trust fund and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The System minimizes interest rate risk by limiting the term of cash collateral investments to several days.

The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2018 and 2017:

2018

Type of Securities Lent	Fair Value	Cash Collateral Received	Non-Cash Collateral Value Received	Total Collateral Received
Fixed Income	$ 121,361,471	$ 35,699,643	$ 88,466,188	$ 124,165,831
Equities	1,146,727,951	846,169,120	327,608,882	1,173,778,002
TOTAL	**$ 1,268,089,422**	**$ 881,868,763**	**$ 416,075,070**	**$ 1,297,943,833**

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

2017

Type of Securities Lent	Fair Value	Cash Collateral Received	Non-Cash Collateral Value Received	Total Collateral Received
Fixed Income	$ 309,194,938	$ 37,740,812	$ 282,265,094	$ 320,005,906
Equities	1,061,977,571	926,925,925	158,036,460	1,084,962,385
TOTAL	**$ 1,371,172,509**	**$ 964,666,737**	**$ 440,301,554**	**$ 1,404,968,291**

E. ANNUAL MONEY-WEIGHTED RATE OF RETURN

A money-weighted rate of return is an expression of investment performance that is net of the plan's investment expenses (net the plan's administrative expenses). The following tables reflect the money-weighted rate of return for both the retirement annuity trust fund and the health insurance trust fund:

Annual Rate of Return Net of Investment Expense

	2018	2017
Retirement Annuity Trust	10.50 %	15.00 %
Health Insurance Trust	8.44 %	14.37 %

Note 6: Retirement Plan for Employees of the Retirement System

Full-time employees of TRS participate in either TRS or Kentucky Employees Retirement System (KERS). Both plans are multiple-employer cost sharing defined benefit retirement annuity and other postemployment benefits plans. All TRS employees in positions requiring a four-year degree are covered under TRS. The contribution rates and required employer matching are the same as state agency employers in the System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for TRS employee members for the fiscal years 2018, 2017 and 2016 were $961,413, $893,635 and $820,077, respectively. TRS contributed 100 percent of the required contribution each year.

All other TRS employees are covered under KERS in the Non-Hazardous Employees' Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the KRS board as needed. TRS's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS who joined prior to July 1, 2008, are required to contribute five percent of their annual creditable compensation and members who joined on or after July 1, 2008 contribute an additional one percent. As the employer, TRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2018, 2017 and 2016 were 49.47 percent, 48.59 percent and 38.77 percent and TRS's annual required contributions to KERS were $673,457, $675,300 and $547,105, respectively. TRS contributed 100 percent of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

Note 7: Other Funds

A. 403(B) TAX SHELTERED ANNUITY PLAN

Plan Description

TRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by TRS's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2018, the six members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

Basis of Accounting

The Tax Sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan; therefore, there are no receivables to be recognized.

Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

B. SUPPLEMENTAL BENEFIT FUND

The Supplemental Retirement Benefit Fund is a qualified governmental excess benefit arrangement as described in Section 415 of the Internal Revenue Code. In accordance with KRS 161.611 and KRS 161.420(8), TRS is authorized to provide a supplemental retirement benefit fund for the sole purpose of enabling the employer to apply the same formula for determining benefits payable to all members of the System employed by the employer, whose benefits under the System are limited by Section 415 of the Internal Revenue Code of 1986, as amended from time to time. Funding of benefits payable under this fund are provided by the state, as employer, and are segregated from funds that are maintained by TRS for payment of the regular benefits provided by the System.

C. JUNITA LOSEY SCHOLARSHIP BEQUEST

Junita Losey, a retired teacher, designated TRS as a residuary beneficiary of her estate and expressed a desire that TRS establish a scholarship program for Kentucky students studying to be teachers. Ms. Losey died in 1997 and thereafter her estate provided a scholarship bequest to TRS. The scholarship bequest has at all times been segregated from funds that are maintained by TRS for payment of the regular benefits provided by the System. The Scholarship Committee of the System's Board of Trustees meets each December to consider scholarship standards and administration of the scholarship bequest.

Note 8: Other Postemployment Benefits - Medical Insurance Plan

A. PLAN DESCRIPTION

In addition to the retirement annuity plan described in Note 1, Kentucky Revised Statute 161.675 requires TRS to provide access to postemployment healthcare benefits for eligible members and dependents. The TRS medical plan (MIF) is funded by employer and member contributions. Changes made to the medical plan may be made by the TRS Board of Trustees, the Kentucky Department of Employee Insurance and the General Assembly.

The TRS medical plan is funded by employee contributions to an account established pursuant to 26 U.S.C. sec. 401(h). Additional funding is derived from the Kentucky Teachers' Retirement System insurance trust fund that went into effect on July 1, 2010. The insurance trust fund provides a trust separate from the account established pursuant to 26 U.S.C. sec. 401(h). The insurance trust fund includes employer and retired member contributions required under KRS 161.550 and KRS 161.675(4)(b).

To be eligible for medical benefits, the member must have retired either for service or disability. The TRS medical plan offers coverage to members under the age of 65 through the Kentucky Employees Health Plan (KEHP) administered by the Kentucky Department of Employee Insurance. TRS retired members are given a supplement to be

Note 8: Other Postemployment Benefits - Medical Insurance Plan continued . . .

used for payment of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the TRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The amount of insurance premiums paid by retirees for fiscal years 2018 and 2017 were $57,683,452 and $57,941,968, respectively. The Commonwealth of Kentucky bears risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the TRS Medicare Eligible Health Plan.

At June 30, 2018, TRS insurance covered 40,230 retirees and 7,595 dependents and at June 30, 2017, TRS insurance covered 39,497 retirees and 7,189 dependents. There are 207 participating employers with 72,205 and 72,130 active members contributing to the medical plan at June 30, 2018 and 2017, respectively.

Retiree health care premiums received reduce the amount of benefit payments reported in the deductions section in the Statement of Changes in Fiduciary Net Position for the Medical Insurance Plan. The Medical Insurance Expenditures are summarized in the following table:

	2018	2017
65 and Over Group Expenditures	$ 186,856,718	$ 167,013,299
Under 65 Group Expenditures	120,519,991	124,079,802
Subtotal	307,376,709	291,093,101
Less: Amounts Paid by Retirees	(57,683,452)	(57,941,968)
Less: Medicare Subsidies and Formulary Rebates	(88,611,557)	(54,650,587)
Total Insurance Expenditures	**$ 161,081,700**	**$ 178,500,546**

B. NET OPEB LIABILITY OF EMPLOYERS

The net OPEB liability (i.e., the System's liability determined in accordance with GASB No. 74 less the fiduciary net position) for the medical insurance plan as of June 30, 2018 and 2017 is shown in the following table.

Net OPEB Liability of Employers
(In thousands of dollars)

Fiscal Year Ending June 30	Total OPEB Liability (TOL)* A	Plan Fiduciary Net Position B	Employers Net OPEB Liability (NOL) (A-B)	Plan Fiduciary Net Position (FNP) as a % of Total OPEB Liability (B/A)	Covered Payroll C	Net OPEB Liability as a % of Covered Payroll [A-B/C]
2018	$ 4,659,996	$ 1,190,281	$ 3,469,715	25.5 %	$ 3,455,660	100.41%
2017	4,524,172	958,390	3,565,782	21.2	3,415,432	104.40

** The TOL includes the additional consideration for the current treatment of KEHP implicit subsidies that may be needed in the future. This is an additional liability from our funding MIF accrued liabilities.*

Note 8: Other Postemployment Benefits - Medical Insurance Plan continued . . .

C. SUMMARY OF ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below.

Valuation Date	6/30/2017
Actuarial Assumptions:	
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of Payroll
Amortization Period	23 years, closed
Asset Valuation Method	Five-year smoothed value
Investment Rate of Return	8.00%, net of OPEB plan investment expense, including inflation.
Projected Salary Increases	3.50 - 7.20%, including wage inflation
Inflation Rate	3.00%
Real Wage Growth	0.50%
Wage Inflation	3.50%
Municipal Bond Index Rate	3.89%
Discount Rate	8.00%
Single Equivalent Interest Rate	8.00%, net of OPEB plan investment expense, including price inflation
Health Care Cost Trends	
Under Age 65	7.75% for fiscal year 2018 decreasing to an ultimate rate of 5.00% by fiscal year 2024
Ages 65 and Older	5.75% fiscal year 2018 decreasing to an ultimate rate of 5.00% by fiscal year 2021
Medicare Part B Premiums	0.00% for fiscal year 2018 with an ultimate rate of 5.00% by 2030

Mortality rates were based on the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB, and set forward two years for males and one year for females is used for the period after service retirement and for dependent beneficiaries. The RP-2000 Disabled Mortality Table set forward two years for males and seven years for females is used for the period after disability retirement. The demographic actuarial assumptions for retirement, disability incidence, withdrawal, rates of plan participation, and rates of plan election used in the June 30, 2017 valuation were based on the results of the most recent actuarial experience studies for the System, which covered the five-year period ending June 30, 2015. The remaining actuarial assumptions used in the June 30, 2017 valuation of the MIF were based on a review of recent plan experience done concurrently with the June 30, 2017 valuation. The health care cost trend rate assumption was updated for the June 30, 2017 valuation and was shown as an assumption change in the TOL roll forward while the change in initial per capita claims costs were included with experience in the TOL roll forward.

D. TARGET ALLOCATIONS

The long-term expected rate of return on OPEB investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.
The target allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	30-Year Expected Geometric Real Rate of Return
Global Equity	58.0 %	4.6 %
Fixed Income	9.0	1.2
Real Estate	5.5	3.8
Private Equity	6.5	6.3
Additional Categories	20.0	3.3
Cash	1.0	0.9
Total	**100.0** %	

Note 8: Other Postemployment Benefits - Medical Insurance Plan continued . . .

E. DISCOUNT RATE

The discount rate used to measure the TOL as of the Measurement Date was 8.00%. The projection of cash flows used to determine the discount rate was performed in accordance with GASB 74. The projection's basis was an actuarial valuation performed as of June 30, 2017. In addition to the actuarial methods and assumptions of the June 30, 2017 actuarial valuation, the following actuarial methods and assumptions were used in the projection of cash flows:

- Total payroll for the initial projection year consists of the payroll of the active membership present on the Valuation Date. In subsequent projection years, total payroll was assumed to increase annually at a rate of 3.50%.
- The retiree health care costs of members under age 65 who retired on or after July 1, 2010 were assumed to be paid by either the state or the retirees themselves in all years except in fiscal year 2020. If these costs are not paid by the state or the retirees themselves and are instead paid by the TRS Medical Fund for all future years, we have calculated that the FNP would be projected to be depleted in 2040 and the SEIR of 4.88% would need to be used in the determination of the TOL as of the measurement date.
- As administrative expenses were assumed to be paid in all years by the employer as they come due, they were not considered.
- Cash flows occur mid-year.
- Future contributions to the MIF were based upon the contribution rates defined in statute and the projected payroll of active employees. Per KRS 161.540(1)(c).3 and 161.550(5), when the MIF achieves a sufficient prefunded status, as determined by the retirement system's actuary, the following MIF statutory contributions are to be decreased, suspended, or eliminated:
    - Employee contributions
    - School District/University Contributions
    - State Contributions for KEHP premium subsidies payable to retirees who retire after June 30, 2010

  To reflect these adjustments, open group projections were used and assumed an equal, pro rata reduction to the current statutory amounts in the years if/when the MIF is projected to achieve a Funded Ratio of 100% or more. Here, the current statutory amounts are adjusted to achieve total contributions equal to the Actuarially Determined Contribution (ADC), as determined by the prior year's valuation and in accordance with the MIF's funding policy (Schedule E). As the specific methodology to be used for the adjustments has yet to be determined, there may be differences between the projected results and future experience. This may also include any changes to retiree contributions for KEHP coverage pursuant to KRS 161.675(4)(b).
- In developing the adjustments to the statutory contributions in future years, the following was assumed:
    - Liabilities and cash flows are net of expected retiree contributions and any implicit subsidies attributable to coverage while participating in KEHP.
    - A 0% active member growth rate was assumed for the purposes of developing estimates for new entrants (membership dates beyond June 30, 2017).

Based on these assumptions, the MIF's FNP was <u>not</u> projected to be depleted.

The FNP projections are based upon the MIF's financial status on the valuation date, the indicated set of methods and assumptions, and the requirements of GASB 74. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing basis, reflecting the impact of future members. Therefore, the results of these tests do not necessarily indicate whether or not the MIF will actually run out of money, the financial condition of the MIF, or the MIF's ability to make benefit payments in future years.

These paragraphs require disclosure of the sensitivity of the NOL to changes in the health care cost trend rates for the MIF and the discount rate for the MIF. The following exhibits present the NOL of the MIF, calculated using the health care cost trend rates, as well as what the MIF's NOL would be if it were calculated using a health care cost trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate. Similarly, the exhibits present the NOL of the MIF, calculated using the Single Equivalent Interest Rate, as well as what the MIF's NOL would be if it were calculated using a Discount Rate that is 1-percentage-point lower or 1-percentage-point higher than the current Single Equivalent Interest Rate:

Note 8: Other Postemployment Benefits - Medical Insurance Plan continued . . .

System's Net OPEB Liability 2018
(In thousands of dollars)

Health Care Cost Trend Rates

Discount Rate	1% Decrease	Current	1% Increase
1% Increase (9.00%)	$	$ 2,970,711	$
Current (8.00%)	2,877,113	3,469,715	4,200,835
1% Decrease (7.00%)		4,068,745	

System's Net OPEB Liability 2017
(In thousands of dollars)

Health Care Cost Trend Rates

Discount Rate	1% Decrease	Current	1% Increase
1% Increase (9.00%)	$	$ 3,077,710	$
Current (8.00%)	2,986,442	3,565,782	4,281,487
1% Decrease (7.0%)		4,152,539	

The TOL of the MIF for 2018 is based upon an actuarial valuation performed as of the Valuation Date, June 30, 2017. An expected TOL is determined as of June 30, 2018 using standard roll-forward techniques. The roll-forward calculation begins with the TOL, as of June 30, 2017, subtracts the actual benefit payments (net of retiree contributions, if applicable) for the year, applies interest at the discount rate for the year, and then adds the annual normal cost (also called the Service Cost). If applicable, actuarial gains and losses arising from the difference between estimates and actual experience (excluding amounts related to benefit changes and changes in assumptions or other inputs) are reconciled to the TOL as of the Measurement Date. Last, any changes of assumptions or other inputs are reflected. The procedure used to determine the TOL of the MIF, as of June 30, 2018, is shown in the following table:

TOL Roll-Forward 2018
(In thousands of dollars)

		Actual	Expected
(a)	TOL as of June 30, 2017*	$ 4,524,172	$ 4,329,311
(b)	Actual Benefit Payments and Refunds for the Year July 1, 2017 - June 30, 2018	(161,082)	(161,082)
(c)	Interest on TOL = [(a) x (0.080)] + [(b) x (0.0400]	355,491	339,902
(d)	Service Cost for the Year July 1, 2017 - June 30, 2018 at the End of the Year	95,382	95,382
(e)	Changes of Benefit Terms		
(f)	Changes of Assumptions (updated health care trend)	56,483	56,483
(g)	TOL Rolled Forward to June 30, 2018 = (a) + (b) + (c) + (d) + (e) + (f) + (g)	$ 4,870,446	$ 4,659,996
(h)	Difference between Expected and Actual Experience		**$ (210,450)**

* *The TOL used in the roll-forward as of June 30, 2017 is calculated using the discount rate as of the Prior Measurement Date.*

Note 8: Other Postemployment Benefits - Medical Insurance Plan continued . . .

The TOL of the MIF for 2017 is based upon an actuarial valuation performed as of the Valuation Date, June 30, 2016. An expected TOL is determined as of June 30, 2017 using standard roll-forward techniques. The roll-forward calculation begins with the TOL, as of June 30, 2016, subtracts the actual benefit payments (net of retiree contributions, if applicable) for the year, applies interest at the discount rate for the year, and then adds the annual normal cost (also called the Service Cost). If applicable, actuarial gains and losses arising from the difference between estimates and actual experience (excluding amounts related to benefit changes and changes in assumptions or other inputs) are reconciled to the TOL as of the Measurement Date. Last, any changes of assumptions or other inputs are reflected. The procedure used to determine the TOL of the MIF, as of June 30, 2017, is shown in the following table:

TOL Roll-Forward 2017
(In thousands of dollars)

(a)	TOL as of June 30, 2016*	$ 4,264,131
(b)	Actual Benefit Payments and Refunds for the Year July 1, 2016 - June 30, 2017	(178,500)
(c)	Interest on TOL = [(a) x (0.080)] + [(b) x (0.0400]	333,990
(d)	Service Cost for the Year July 1, 2016 - June 30, 2017 at the End of the Year	95,625
(e)	Changes of Benefit Terms	8,926
(f)	Difference between Expected and Actual Experience at the End of the Year	
(g)	Changes of Assumptions or Other Inputs	
(h)	TOL Rolled Forward to June 30, 2017 = (a) + (b) + (c) + (d) + (e) + (f) + (g)	**$ 4,524,172**

** The TOL used in the roll-forward as of June 30, 2016 is calculated using the discount rate as of the Prior Measurement Date.*

Note 9: Other Postemployment Benefits - Life Insurance Plan

A. PLAN DESCRIPTON

TRS administers the Life Insurance Plan (LIF) as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 207 participating employers. The benefit is $5,000 for members who are retired for service or disability, and $2,000 for active contributing members.

B. NET OPEB LIABILITY OF EMPLOYERS

The net OPEB liability (i.e., the System's liability determined in accordance with GASB No. 74 less the fiduciary net position) for the life insurance fund as of June 30, 2018 and 2017 is shown below.

Net OPEB Liability of Employers
(In thousands of dollars)

Fiscal Year Ending June 30	Total OPEB Liability (TOL) A	Plan Fiduciary Net Position B	Employers Net OPEB Liability (NOL) (A-B)	Plan Fiduciary Net Position (FNP) as a % of Total OPEB Liability (B/A)	Covered Payroll C	Net OPEB Liability as a % of Covered Payroll [A-B/C]
2018	$ 112,660	$ 84,462	$ 28,198	75.0%	$ 3,455,660	0.82%
2017	109,736	87,777	21,959	80.0	3,415,432	0.64

Note 9: Other Postemployment Benefits - Life Insurance Plan continued . . .

C. SUMMARY OF ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below.

Valuation Date	6/30/2017
Actuarial Assumptions:	
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of Payroll
Amortization Period	30 years, closed
Asset Valuation Method	Market Value
Investment Rate of Return	7.50%, net of OPEB plan investment expense, including inflation.
Projected Salary Increases	4.00 - 8.10%, including wage inflation
Inflation Rate	3.50%
Real Wage Growth	0.50%
Wage Inflation	4.00%
Municipal Bond Index Rate	3.89%
Discount Rate	7.50%
Single Equivalent Interest Rate	7.50%, net of OPEB plan investment expense, including price inflation

Mortality rates were based on the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB, and set forward two years for males and one year for females is used for the period after service retirement and for dependent beneficiaries. The RP-2000 Disabled Mortality Table set forward two years for males and seven years for females is used for the period after disability retirement. The demographic actuarial assumptions for retirement, disability incidence, withdrawal, rates of plan participation, and rates of plan election used in the June 30, 2017 valuation were based on the results of the most recent actuarial experience studies for the System, which covered the five-year period ending June 30, 2015.

D. TARGET ALLOCATIONS

The long-term expected rate of return on OPEB investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Expected Geometric Real Rate of Return
U.S. Equity	40.0%	4.2%
International Equity	23.0	5.2
Fixed Income	18.0	1.2
Real Estate	6.0	3.8
Private Equity	5.0	6.3
Additional Categories	6.0	3.3
Cash	2.0	0.9
Total	**100.0%**	

Note 9: Other Postemployment Benefits - Life Insurance Plan continued . . .

E. DISCOUNT RATE

The discount rate used to measure the TOL as of the Measurement Date was 7.50%. The projection of cash flows used to determine the discount rate was performed in accordance with GASB 74. The projection's basis was an actuarial valuation performed as of June 30, 2017. In addition to the actuarial methods and assumptions of the June 30, 2017 actuarial valuation, the following actuarial methods and assumptions were used in the projection of the LIF's cash flows:

- Total payroll for the initial projection year consists of the payroll of the active membership present on the Valuation Date. In subsequent projection years, total payroll was assumed to increase annually at a rate of 3.50%.
- The employer will contribute the Actuarially Determined Contribution (ADC) in accordance with the LIF's funding policy (Schedule E) determined by a valuation performed on a date two years prior to the beginning of the fiscal year in which the ADC applies.
- As administrative expenses were assumed to be paid in all years by the employer as they come due, they were not considered.
- Active employees do not explicitly contribute to the plan.
- Cash flows occur mid-year.

Based on these assumptions, the LIF's FNP was not projected to be depleted.

The FNP projections are based upon the LIF's financial status on the Valuation Date, the indicated set of methods and assumptions, and the requirements of GASB 74. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing basis, reflecting the impact of future members. Therefore, the results of these tests do not necessarily indicate whether or not the LIF will actually run out of money, the financial condition of the LIF, or the LIF's ability to make benefit payments in future years.

These paragraphs require disclosure of the sensitivity of the NOL to changes the discount rate for the LIF. The schedules below presents the NOL of the LIF, calculated using the Single Equivalent Interest Rate, as well as what the LIF's NOL would be if it were calculated using a Discount Rate that is 1-percentage-point lower or 1-percentage-point higher than the current Single Equivalent Interest Rate:

System's Net OPEB Liability 2018
(In thousands of dollars)

1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
$ 42,929	$ 28,198	$ 16,114

System's Net OPEB Liability 2017
(In thousands of dollars)

1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
$ 36,497	$ 21,959	$ 10,055

The TOL of the LIF for 2018 is based upon an actuarial valuation performed as of the Valuation Date, June 30, 2017. An expected TOL is determined as of June 30, 2018 using standard roll-forward techniques. The roll-forward calculation begins with the TOL, as of June 30, 2017, subtracts the actual benefit payments (net of retiree contributions, if applicable) for the year, applies interest at the discount rate for the year, and then adds the annual normal cost (also called the Service Cost). If applicable, actuarial gains and losses arising from the difference between estimates and actual experience (excluding amounts related to benefit changes and changes in assumptions or other inputs) are reconciled to the TOL as of the Measurement Date. Last, any changes of assumptions or other inputs are reflected. The procedure used to determine the TOL of the LIF, as of June 30, 2018, is shown in the following table:

Note 9: Other Postemployment Benefits - Life Insurance Plan continued . . .

TOL Roll-Forward 2018
(In thousands of dollars)

		Expected	Actual
(a)	TOL as of June 30, 2017*	$ 109,736	$ 109,069
(b)	Actual Benefit Payments and Refunds for the Year July 1, 2017 - June 30, 2018	(5,453)	(5,453)
(c)	Interest on TOL = [(a) x (0.080)] + [(b) x (0.0400]	8,026	7,976
(d)	Service Cost for the Year July 1, 2017 - June 30, 2018 at the End of the Year	1,068	1,068
(e)	Changes of Benefit Terms		
(f)	Changes of Assumptions (updated health care trend)		
(g)	TOL Rolled Forward to June 30, 2018 = (a) + (b) + (c) + (d) + (e) + (f) + (g)	$ 113,377	$ 112,660
(h)	Difference between Expected and Actual Experience		$ (717)

* *The TOL used in the roll-forward as of June 30, 2017 is calculated using the discount rate as of the Prior Measurement Date.*

The TOL of the LIF for 2017 is based upon an actuarial valuation performed as of the Valuation Date, June 30, 2016. An expected TOL is determined as of June 30, 2017 using standard roll-forward techniques. The roll-forward calculation begins with the TOL, as of June 30, 2016, subtracts the actual benefit payments (net of retiree contributions, if applicable) for the year, applies interest at the discount rate for the year, and then adds the annual normal cost (also called the Service Cost). If applicable, actuarial gains and losses arising from the difference between estimates and actual experience (excluding amounts related to benefit changes and changes in assumptions or other inputs) are reconciled to the TOL as of the Measurement Date. Last, any changes of assumptions or other inputs are reflected. The procedure used to determine the TOL of the LIF, as of June 30, 2017, is shown in the following table:

TOL Roll-Forward 2017
(In thousands of dollars)

(a)	TOL as of June 30, 2016*	$ 106,059
(b)	Actual Benefit Payments and Refunds for the Year July 1, 2016 - June 30, 2017	(5,151)
(c)	Interest on TOL = [(a) x (0.075)] + [(b) x (0.0375)	7,761
(d)	Service Cost for the Year July 1, 2016 - June 30, 2017 at the End of the Year	1,067
(e)	Changes of Benefit Terms	
(f)	Difference between Expected and Actual Experience at the End of the Year	
(g)	Changes of Assumptions or Other Inputs	
(h)	TOL Rolled Forward to June 30, 2017 = (a) + (b) + (c) + (d) + (e) + (f) + (g)	**$ 109,736**

* *The TOL used in the roll-forward as of June 30, 2016 is calculated using the discount rate as of the Prior Measurement Date.*

Note 10: Commitments and Contingencies

During the 2018 legislative session, the Kentucky General Assembly passed significant pension changes with SB 151 and was signed into law by the Governor on April 10, 2018. TRS has been enjoined from implementing SB 151 by the Franklin Circuit Court in a ruling dated June 20, 2018. The case is pending before the Kentucky Supreme Court.

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in Net Pension Liability
(In thousands of dollars)

Change in the total pension liability	2018	2017	2016	2015	2014
Total pension liability					
Service Cost	$ 1,104,102	$ 1,332,587	$ 1,120,893	$ 1,015,080	$ 1,002,338
Interest	2,063,109	1,964,107	2,027,457	2,029,372	1,956,610
Difference between expected and actual experience	(222,473)	199,471	(58,035)		
Changes of assumptions	(14,167,315)	(2,321,327)	4,030,834	1,511,960	(353,043)
Benefit payments	(2,004,617)	(1,918,612)	(1,833,199)	(1,741,456)	(1,654,376)
Refunds of contributions	(31,073)	(26,305)	(27,748)	(23,033)	(25,462)
Net change in total pension liability	(13,258,267)	(770,079)	5,260,202	2,791,923	926,067
Total pension liability - beginning	46,966,822	47,736,901	42,476,699	39,684,776	38,758,709
Total pension liability - ending (a)	$ 33,708,555	$ 46,966,822	$ 47,736,901	$ 42,476,699	$ 39,684,776
Plan Net Position					
Contributions - State of Kentucky	$ 969,698	$ 981,417	$ 484,987	$ 480,073	$ 483,330
Contributions - Other Employers	78,973	79,303	80,468	79,506	79,996
Contributions - Members	319,127	313,625	313,044	308,160	304,982
Net investment income	1,953,214	2,475,753	(245,215)	862,179	2,803,249
Benefit payments	(2,004,617)	(1,918,612)	(1,833,199)	(1,741,456)	(1,654,376)
Administrative expense	(11,388)	(10,314)	(8,636)	(8,869)	(7,956)
Refunds of contributions	(31,073)	(26,305)	(27,748)	(23,033)	(25,462)
Net change in plan net position	1,273,934	1,894,867	(1,236,299)	(43,440)	1,983,763
Plan net position - beginning	18,707,699	16,812,832	18,049,131	18,092,571	16,108,808
Plan net position - ending (b)	19,981,633	18,707,699	16,812,832	18,049,131	18,092,571
Net pension liability - ending (a) - (b)	$ 13,726,922	$ 28,259,123	$ 30,924,069	$ 24,427,568	$ 21,592,205

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

Note 1
Schedule of Changes in the Net Pension Liability

The total pension liability contained in this schedule was provided by TRS's actuary, Cavanaugh Macdonald Consulting, LLC. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the System.

Changes of Benefit Terms. None.

Changes of assumptions. In the 2016 valuation, rates of withdrawal, retirement, disability, mortality and rates of salary increase were adjusted to more closely reflect actual experience. In the 2016 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables projected to 2025 with projection scale BB, set forward two year for males and one year for females rather than the RP-2000 Mortality Tables projected to 2020 with projection scale AA, which was used prior to 2016.

In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables projected to 2020 with projection scale AA, set back one year for females rather than the 1994 Group Annuity Mortality Tables which was used prior to 2016. For the 2011 valuation through the 2013 valuation, an interest smoothing methodology was used to calculate liabilities for purposes of determining the actuarially determined contributions.

Schedule of Net Pension Liability
(In thousands of dollars)

	2018	2017	2016	2015	2014
Total pension liability	$ 33,708,555	$ 46,966,822	$ 47,736,901	$ 42,476,699	$ 39,684,776
Plan net position	19,981,633	18,707,699	16,812,832	18,049,131	18,092,571
Net pension liability	$ 13,726,922	$ 28,259,123	$ 30,924,069	$ 24,427,568	$ 21,592,205
Ratio of plan net position to total pension liability	59.28 %	39.83 %	35.22 %	42.49 %	45.59 %
Covered payroll	$ 3,455,660	$ 3,415,432	$ 3,390,539	$ 3,455,008	$ 3,317,422
Net pension liability as a percentage of covered payroll	397.23 %	827.40 %	912.07 %	707.02 %	650.87 %

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

Schedule of Employer Contributions
(In thousands of dollars)

Fiscal Year Ended June 30	Covered Payroll	Actual Employer Contributions	Actuarially Determined Employer Contributions	Annual Contribution Excess (Deficiency)	Actual Contributions as a Percentage of Covered Payroll
2018	$ 3,455,660	$ 1,048,671	$ 1,083,466	$ (34,795)	30.35 %
2017	3,415,432	1,060,720	1,076,617	(15,897)	31.06
2016	3,390,539	565,455	999,270	(433,815)	16.68
2015	3,455,008	559,579	913,654	(354,075)	16.20
2014*	3,317,422	563,326	823,446	(260,120)	16.98
2013	3,310,710	568,233	802,985	(234,752)	17.16
2012	3,310,176	557,340	757,822	(200,482)	16.84
2011	3,283,749	1,037,936	678,741	359,195	31.61
2010	3,321,614	479,805	633,938	(154,133)	14.44
2009	3,253,077	442,550	600,283	(157,733)	13.60

** Revised from previous year to reflect actual covered-employee payroll.*

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

Note 2
Schedule of Employer Contributions

The required employer contributions and percent of those contributions actually made are presented in the schedule on the preceeding page.

Note 3
Actuarial Methods and Assumptions

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of the schedule:

Actuarial cost method	Entry age
Amortization period	Level percentage of payroll, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Inflation	3.50 percent
Salary increase	4.00 to 8.20 percent, including inflation
Ultimate Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation

Schedule of Investment Returns
Retirement Annuity Trust

	2018	2017	2016	2015	2014
Annual money weighted rate of return, net of investment expense	10.50%	15.00%	-1.32%	4.96%	17.95%

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

Medical Insurance Plan
Schedule of Changes in the Net OPEB Liability
(In thousands of dollars)

	2018	2017
Total OPEB liability		
Service Cost	$ 95,382	$ 95,625
Interest	355,491	333,990
Changes of benefit terms		8,926
Difference between expected and actual experience	(210,450)	
Changes of assumptions	56,483	
Benefit payments	(161,082)	(178,500)
Net change in OPEB liability	135,824	260,041
Total OPEB liability - beginning	4,524,172	4,264,131
Total OPEB liability - ending (a)	$ 4,659,996	$ 4,524,172
Plan Net Position		
Contributions - State of Kentucky	$ 80,959	$ 75,497
Contributions - Other Employers	106,143	104,879
Contributions - Active Members	130,778	128,819
Net investment income	76,841	95,453
Benefit payments	(161,082)	(178,500)
Administrative expense	(1,748)	(1,539)
Other		
Net change in plan net position	231,891	224,609
Plan net position - beginning	958,390	733,781
Plan net position - ending (b)	1,190,281	958,390
Net OPEB liability - ending (a) - (b)	**$ 3,469,715**	**$ 3,565,782**

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

Note 1
Schedule of Changes in the Net OPEB Liability

The net OPEB liability contained in this schedule was provided by TRS's actuary, Cavanaugh Macdonald Consulting, LLC. The net OPEB liability is measured as the total OPEB liability less the amount of the fiduciary net position of the System.

Changes of Benefit Terms. With the passage of House Bill 471 (RS 2017), the eligibility for non-single subsidies (NSS) for the KEHP-participating members who retired prior to July 1, 2010 is restored, but the State will only finance, via its KEHP "shared responsibility" contributions, the costs of the NSS related to those KEHP-participating members who retired on or after July 1, 2010.

Changes of assumptions. None

Medical Insurance Plan
Schedule of Net OPEB Liability
(In thousands of dollars)

Valuation Year June 30	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability	Plan Fiduciary Net Position as a % of Total OPEB Liability	Covered Payroll	Net OPEB Liability as a % of Covered Payroll
2018	$ 4,659,996	$ 1,190,281	$ 3,469,715	25.54%	$ 3,455,660	100.41%
2017	4,524,172	958,390	3,565,782	21.18	3,415,432	104.40

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

Medical Insurance Plan – Schedule of Employer Contributions

Valuation Year June 30	Actuarially Determined Employer Contribution	Contributions in Relation to the Actuarially Determined Contribution	Annual Contribution Deficiency/ (Excess)	Covered Payroll	Actual Contributions as a Percentage of Covered Payroll
2018	$ 118,837	$ 187,102	$ (68,265)	$ 3,455,660	5.41%
2017	102,854	180,376	(77,522)	3,415,432	5.28
2016	97,983	221,967	(123,984)	3,390,539	6.55
2015	106,606	168,084	(61,478)	3,455,008	4.86
2014	159,583	162,568	(2,985)	3,317,422	4.90
2013	186,726	166,611	20,115	3,310,710	5.03
2012	470,217	177,748	292,469	3,310,176	5.37
2011	477,723	188,735	288,988	3,283,749	5.75
2010	457,054	173,380	283,674	3,321,614	5.22
2009	467,313	178,092	289,221	3,253,077	5.47

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

Note 2
Schedule of Employer Contributions

The required employer contributions and percent of those contributions actually made are presented in the schedule on the preceeding page.

Note 3
Actuarial Methods and Assumptions

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of the schedule:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll
Amortization period	23 years, closed
Asset valuation method	5-year smoothed value
Inflation	3.00 percent
Real wage growth	0.50 percent
Wage inflation	3.50 percent
Salary increase	3.50 to 7.20 percent, including wage inflation
Discount rate	8.00 percent
MIF health care cost trends	
Under age 65	7.75 percent FYE 2017, decreasing to an ultimate rate of 5.00 percent by FYE 2023
Ages 65 and older	5.75 percent FYE 2017, decreasing to an ultimate rate of 5.00 percent by FYE 2020
Medicare part B premiums	1.02 percent FYE 2017 with an ultimate rate of 5.00 percent by FYE 2029
MIF under age 65 claims	The current premium charged by KEHP is used as the base cost and is projected forward using only the health care trend assumption (no implicit rate subsidy is recognized).

Schedule of Investment Returns
Health Insurance Trust

	2018	2017	2016	2015	2014
Annual money weighted rate of return, net of investment expense	8.44 %	14.37 %	-2.20 %	1.38 %	15.38 %

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

Life Insurance Plan
Schedule of Changes in the Net OPEB Liability
(In thousands of dollars)

	2018	2017
Total OPEB liability		
Service Cost	$ 1,068	$ 1,067
Interest	8,026	7,761
Changes of benefit terms		
Difference between expected and actual experience	(717)	
Changes of assumptions		
Benefit payments	(5,453)	(5,151)
Net change in OPEB liability	2,924	3,677
Total OPEB liability - beginning	109,736	106,059
Total OPEB liability - ending (a)	$ 112,660	$ 109,736
Plan Net Position		
Contributions - State of Kentucky	$ 897	$ 882
Contributions - Other Employers	161	168
Contributions - Active Members		
Net investment income	1,111	915
Benefit payments	(5,453)	(5,151)
Administrative expense	(31)	(28)
Other		
Net change in plan net position	(3,315)	(3,214)
Plan net position - beginning	87,777	90,991
Plan net position - ending (b)	84,462	87,777
Net OPEB liability - ending (a) - (b)	**$ 28,198**	**$ 21,959**

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

Note 1
Schedule of Changes in the Net OPEB Liability

The net OPEB liability contained in this schedule was provided by TRS's actuary, Cavanaugh Macdonald Consulting, LLC. The net OPEB liability is measured as the total OPEB liability less the amount of the fiduciary net position of the System.

Changes of Benefit Terms. None

Changes of assumptions. None

Life Insurance Plan
Schedule of Net OPEB Liability
(In thousands of dollars)

Valuation Year June 30	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability	Plan Fiduciary Net Position as a % of Total OPEB Liability	Covered Payroll	Net OPEB Liability as a % of Covered Payroll
2018	$ 112,660	$ 84,462	$ 28,198	74.97%	$ 3,455,660	0.82%
2017	109,736	87,777	21,959	79.99	3,415,432	0.64

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

See accompanying independent auditor's report.

Required Supplementary Information continued . . .

Life Insurance Plan – Schedule of Employer Contributions

Valuation Year June 30	Actuarially Determined Employer Contribution	Contributions in Relation to the Actuarially Determined Contribution	Annual Contribution Deficiency/(Excess)	Covered Payroll	Actual Contributions as a % of Covered Payroll
2018	$ 1,075	$ 1,058	$ 17	$ 3,455,660	0.03 %
2017	1,065	1,050	15	3,415,432	0.03
2016	1,058	1,038	20	3,390,539	0.03
2015	1,050	1,020	30	3,455,008	0.03
2014	1,045	1,006	39	3,317,422	0.03
2013	1,740	1,680	60	3,310,710	0.05
2012	1,733	1,685	48	3,310,176	0.05
2011	1,726	1,669	57	3,283,749	0.05
2010	1,993	1,967	26	3,321,614	0.06
2009	1,498	5,455	(3,957)	3,253,077	0.17

Note 2
Schedule of Employer Contributions

The required employer contributions and percent of those contributions actually made are presented in the schedule above.

Note 3
Actuarial Methods and Assumptions

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of the schedule:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll
Amortization period	30 years, open
Asset valuation method	Market value
Inflation	3.50 percent
Real wage growth	0.50 percent
Wage inflation	4.00 percent
Salary increase	4.00 to 8.10 percent, including wage inflation
Discount rate	7.50 percent

Schedule of investment returns – TRS began separate reporting of its life insurance fund effective February 1, 2018 as it was previously reported as part of the pension fund's gross and net performance. Gross and net of fees returns for the life insurance fund are being constructed for publication in the June 30, 2019 financial reports.

See accompanying independent auditor's report.

ADDITIONAL SUPPORTING SCHEDULES

Schedule of Administrative Expenses
For the Year Ended June 30, 2018 and 2017

Expense	2018	2017
Salaries	$ 7,362,335	$ 7,185,686
Other Personnel Costs	669,764	735,748
Professional Services and Contracts	796,286	395,216
Utilities	106,115	100,641
Rentals	25,175	23,607
Maintenance	66,229	56,520
Postage & Related Services	321,972	300,813
Printing	211,541	188,135
Insurance	190,420	175,768
Miscellaneous Services	162,597	159,272
Telecommunications	21,002	20,958
Computer Services	171,465	145,252
Supplies	40,962	63,097
Depreciation	2,168,364	1,996,821
Travel	45,427	40,734
Dues & Subscriptions	82,987	65,361
Miscellaneous Commodities	11,914	11,095
Office Systems and Equipment	796,885	110,821
Compensated Absences	(83,324)	105,642
Total Administrative Expenses	**$ 13,168,116**	**$ 11,881,187**

See accompanying independent auditor's report.

Additional Supporting Schedules continued . . .

Schedule of Professional Services and Contracts
For the Year Ended June 30, 2018 and 2017

Professional	Nature of Service	2018	2017
Cavanaugh Macdonald Consulting	Actuarial	$ 292,886	$ 157,089
Mountjoy Chilton Medley	Auditing	69,704	89,214
International Claim Specialist	Investigative		1,512
Ice Miller	Attorney	111,020	24,233
Attorney General	Attorney	313	
Stoll, Keenon, and Ogden	Attorney	9,063	3,168
Aon Hewitt	Consulting	193,300	
Peritus	Communications	120,000	120,000
Total Professional Services and Contracts		**$ 796,286**	**$ 395,216**

Additional Supporting Schedules continued . . .

Schedule of Contracted Investment Management Expenses
Year Ended June 30, 2018

	Defined Benefit Plan*	Medical	Life	Total
Equity Managers				
Baillie Gifford	$ 4,160,155	$	$	$ 4,160,155
Baring Asset Management, Inc.	2,852,707			2,852,707
Black Rock	402,156	194,711		596,867
Fort Washington Focused Equity	881,923	120,165		1,002,088
GE Asset Management				
State Street	799,463			799,463
Todd-Veredus Asset Management LLC	1,394,388			1,394,388
UBS Global Asset Management	805,403			805,403
Wellington Management Company	3,397,200			3,397,200
Total Equity Managers	14,693,395	314,876		15,008,271
Fixed Income Managers				
Fort Washington Investment Advisors	184,885			184,885
Galliard Capital Management	258,151			258,151
Total Fixed Income Managers	443,036			443,036
Real Estate	10,106,962	997,685	1,027	11,105,674
Additional Categories	9,256,358	977,406	2,167	10,235,931
Alternative Investments	17,051,168	1,313,059		18,364,227
Custodian				
The Bank of New York Mellon	517,884	84,018	4,412	606,314
Consultant				
Hewitt Ennis Knupp, Inc.	419,789			419,789
Bevis Longstreth	52,905			52,905
George Philip	33,399			33,399
Total Consultants	506,093			506,093
Legal & Research				
Reinhart, Boerner Van Deuren				
Ice Miller	59,131			59,131
Total Legal & Research	59,131			59,131
Other				
Administrative and Operational (includes Personnel)	2,882,695	255,698	105,847	3,244,240
Total Contracted Investment Management Expenses	**$ 55,516,722**	**$ 3,942,742**	**$ 113,453**	**$ 59,572,917**

* *Includes expenses for the 403(b) Tax Sheltered and Losey Scholarship funds.*

See accompanying independent auditor's report.

Additional Supporting Schedules continued . . .

Schedule of Contracted Investment Management Expenses
Year Ended June 30, 2017

	Defined Benefit Plan*	Medical	Life	Total
Equity Managers				
Baillie Gifford	$ 3,114,384	$	$	$ 3,114,384
Baring Asset Management, Inc.	2,473,839			2,473,839
Black Rock	336,647	217,848		554,495
Fort Washington Focused Equity	425,662	57,734		483,396
GE Asset Management	786,682			786,682
Todd Asset Management LLC	1,325,541			1,325,541
UBS Global Asset Management	5,980,296			5,980,296
Wellington Management Company	3,168,837			3,168,837
Total Equity Managers	17,611,888	275,582		17,887,470
Fixed Income Managers				
Fort Washington Investment Broad Market	160,777			160,777
Galliard Capital Management	222,920			222,920
Total Fixed Income Managers	383,697			383,697
Real Estate	8,812,597	731,349		9,543,946
Additional Categories	9,454,366	849,061		10,303,427
Alternative Investments	17,428,907	1,162,667		18,591,574
Custodian				
The Bank of New York Mellon	481,653	53,386		535,039
Consultant				
Hewitt Ennis Knupp, Inc.	413,850			413,850
Bevis Longstreth	51,660			51,660
George Philip	33,965			33,965
Total Consultants	499,475			499,475
Legal & Research				
Reinhart, Boerner Van Deuren	5,936			5,936
Ice Miller	51,266			51,266
Total Legal & Research	57,202			57,202
Other				
Administrative and Operational (includes Personnel)	3,106,379	98,823	10,478	3,215,680
Total Contracted Investment Management Expenses	**$ 57,836,164**	**$ 3,170,868**	**$ 10,478**	**$ 61,017,510**

* *Includes expenses for the 403(b) Tax Sheltered and Losey Scholarship funds.*

See accompanying independent auditor's report.

CPAs / ADVISORS

blue

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main 859.253.1100 *fax* 859.253.1384 *email* blue@blueandco.com

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Independent Auditor's Report

To the Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, KY

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the financial statements of the Kentucky Teachers Retirement System, which comprise the statement of fiduciary net position as of June 30, 2018, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, which collectively comprise the Kentucky Teachers Retirement System's basic financial statements, and have issued our report thereon dated November 15, 2018.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Kentucky Teachers Retirement System's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Kentucky Teachers Retirement System's internal control. Accordingly, we do not express an opinion on the effectiveness of the Kentucky Teachers Retirement System's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Kentucky Teachers Retirement System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Kentucky Teachers Retirement System's internal control or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Kentucky Teachers Retirement System's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Blue & Co., LLC

Blue & Co., LLC

Lexington, Kentucky
November 15, 2018

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Teachers' Retirement System of the State of Kentucky

2018

Investment Section

REPORT ON INVESTMENT ACTIVITY

This report is prepared by the investment staff of the Teachers' Retirement System of the State of Kentucky.

INVESTMENT COMMITTEE

Ronald L. Sanders
Chair

Hollis Gritton
Vice-Chair

John Boardman, III
Member

Frank Collecchia
Member

Brenda McGown
Member

Josh Underwood
Member

Alison Wright
Member

Bevis Longstreth
Investment Advisor to TRS
Kentucky Investment Committee

George Philip
Investment Advisor to TRS
Kentucky Investment Committee

EXECUTIVE INVESTMENT STAFF

Gary L. Harbin, CPA
Executive Secretary

Tom Siderewicz, CFA
Chief Investment Officer

Philip L. Webb
Director of Investment Accounting

AON

CONSULTANT'S LETTER

October1, 2018

To the members of the Board of Trustees and participants of the Teachers' Retirement System of Kentucky:

The Teachers' Retirement System of Kentucky (TRS) investment program produced a total return of 10.8% for the twelve-month period ended June 30, 2018, exceeding the return of the Policy Benchmark by a meaningful margin of 1.7 percentage points. This return also far exceeded the actuarial assumed rate of return of 7.5% which is the discount rate the TRS actuary uses to calculate the liabilities of the pension fund. Impressively, the fiscal year return ranked near the top of a universe of public pension funds with assets in excess of $1 billion (4th percentile ranking). Each of the TRS asset classes contributed to relative performance during the fiscal year. On an absolute basis, the public equity portfolio fueled results with a return slightly above 14%, while the fixed income allocation was a slight drag on performance as this was one of the lowest returning asset classes during the fiscal year.

Over the past fiscal year, equity markets performed strongly driven by strong economic and corporate fundamentals. The top performing regions in the equity market were United States and Japan. From a style perspective, growth stocks performed better than their value counterparts, led by the information technology sector. Notable TRS equity manager contributions were the Wellington Mid Cap U.S. equity (+20.2%) and Baillie Gifford International equity (+23.4%) portfolios, both of which outperformed their respective benchmarks by wide margins and produced impressive absolute returns in excess of 20%.

In the bond market, the 10-year U.S. Treasury yield ended the fiscal year at 2.85%, 54 basis points higher than the beginning of the fiscal year. TRS's efforts to diversify away from traditional fixed income proved particularly beneficial during FY 2018 as rising interest rates led to a negative return for the U.S. Government/Credit Index whereas the additional categories asset class, which is generally comprised of alternative fixed income, private credit and below investment grade bonds, produced an absolute return in excess of 4% for the fiscal year. The active management efforts within the fixed income asset class also proved fruitful as the in-house managed portfolios added value overall as did each of the externally managed portfolios. Overall, the fixed income portfolio outperformed the benchmark by approximately 70 basis points for the fiscal year.

TRS's initiatives to diversify the real estate allocation also benefitted performance as the value added and opportunistic portfolios produced double digit gains as the returns on core and triple net lease real estate continued to moderate during the fiscal year. In addition to real estate, TRS has diversified its alternatives portfolio across different private equity and infrastructure strategies over the past 10 years, resulting in a fiscal year return of 15.8% on a time-weighted basis.

We would like to thank the Board of Trustees, Investment Committee, and Investment Staff for their confidence. We appreciate the opportunity to assist the retirement system in meeting its investment goals.

Respectfully,

Patrick J. Kelly, CFA, CAIA
Partner

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Investment advice and consulting services provided by Aon Hewitt Investment Consulting, Inc., an Aon Company

RETIREMENT ANNUITY TRUST FUND

INVESTMENT POLICY SUMMARY

The TRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principles that guide investment-related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the System. This broad summary is a reference point for management of retirement assets and outlines the investment philosophy and practice of TRS.

INVESTMENT OBJECTIVES

TRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them. Generally, the retirement system's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, TRS holdings can withstand some short-term volatility. The retirement annuity trust fund's long-term investment objective is to achieve an annualized rate of return of 7.5%.

RISK CONTROLS

The TRS investment program faces various risks; however, the primary risk to TRS is that the assets will not support liabilities over long periods of time. In order to control this risk and any other risks, the board has taken the following steps on an ongoing basis:

- Actuarial valuations are performed each year to evaluate the funding objectives of the retirement system. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the System.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the retirement system.
- The TRS Investment Committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

ASSET ALLOCATION

Operating within relevant regulatory limitations, the System's investment consultant, on an annual basis, presents to the Investment Committee for approval target percentages and ranges for the System's various asset classes. These regulatory limitations include both the retirement annuity trust fund and the life insurance fund. Annually approved asset allocation parameters serve to balance the retirement system's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The System's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the retirement system's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as liability requirements, the level of funding, and statutory investment restrictions are important considerations within the context of the asset allocation decision making process. Consequently, asset allocations may differ markedly between various pension plans due to their unique circumstances.

The information below shows the System's asset allocation by fair value for the retirement annuity trust fund and the life insurance fund as of June 30, 2018, and June 30, 2017, as well as the target and strategic range for each asset class for fiscal year 2018.

Retirement Annuity Trust

	June 30, 2018*	%	June 30, 2017**	%
Cash Equivalents***	$ 236,645,496	1.2	$ 366,129,983	2.0
Fixed Income	3,036,033,540	15.3	2,934,013,945	15.9
Domestic Equities	8,164,946,090	41.3	7,682,590,280	41.5
International Equities	4,502,791,612	22.7	4,003,953,513	21.6
Real Estate	1,150,694,282	5.8	1,046,760,134	5.6
Private Equity	1,095,289,506	5.5	854,635,619	4.6
Timberland	187,540,820	1.0	208,219,943	1.1
Additional Categories	1,428,742,753	7.2	1,435,143,550	7.7
TOTALS	**$ 19,802,684,099**	**100.0**	**$ 18,531,446,967**	**100.0**

* *Includes Tax Shelter Annuity value of $337,897 and 401(h) value of $20,896,588.*
** *Includes Tax Shelter Annuity value of $343,792 and 401(h) value of $19,471,617.*
*** *Reflects only cash balances not allocated to other asset classes. Any uninvested manager cash balances are represented in the asset class of the respective managers.*

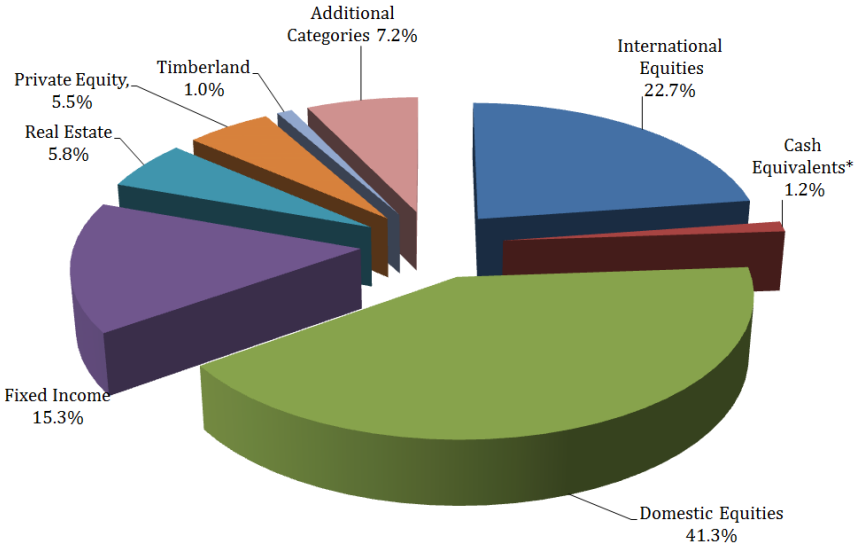
Life Insurance Fund

	June 30, 2018	%	June 30, 2017	%
Cash Equivalents*	$ 3,110,722	3.7	$	
Fixed Income	48,373,370	58.1	86,443,328	100.00
Equities	29,960,859	36.0		
Real Estate	541,107	0.6		
Additional Categories	1,300,000	1.6		
TOTALS	**$ 83,286,058**	**100.0**	**$ 86,443,328**	**100.0**

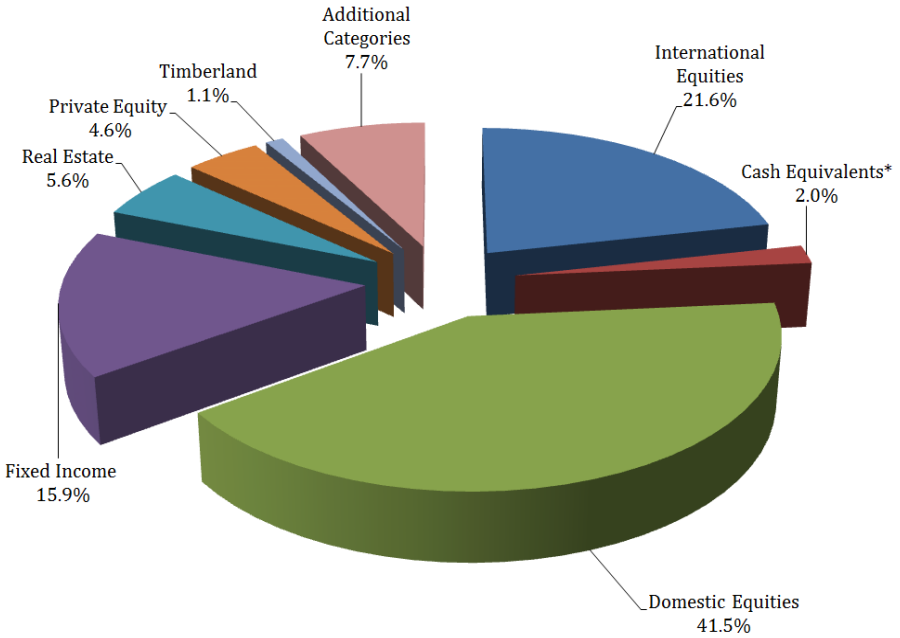
* *Reflects only cash balances not allocated to other asset classes. Any uninvested manager cash balances are represented in the asset class of the respective managers.*

Distribution of Investments
Retirement Annuity Trust
Fair Values

June 30, 2018



June 30, 2017



* *Reflects only cash balances not allocated to other asset classes. Any uninvested manager cash balances are represented in the asset class of the respective managers.*

Strategic Weightings by Asset Class

Asset Class	Regulatory Limits (Market Value)	Strategic Range (Market)	Target (Market)	June 30, 2018 (Market)**
Cash		1 - 3%	2.0%	1.2%
Fixed Income		12 - 19	15.0	15.3
Government/Agency/Other	Unlimited			8.9
Corporate	35%			6.4
Equity	65%	57 - 65	62.0	64.0
Domestic Large Cap		32 - 40	35.0	35.2
Domestic Mid Cap		1 - 5	3.0	3.7
Domestic Small Cap		1 - 3	2.0	2.4
International* **	30%	18 - 25	22.0	22.7
Real Estate	10%	4 - 8	6.0	5.8
Alternative Investments*	10%	4 - 10	7.0	6.5
Additional Categories	15%	5 - 11	8.0	7.2
TOTAL			**100.0%**	**100.0%**

* *Includes private equity, venture capital, timberland, and infrastructure investments.*
** *Beginning in July 2008, manager cash balances included with the asset type of the investment manager.*
*** *As of June 30, 2018, 21.7% of total international equities were invested in emerging markets.*

PORTFOLIO RETURNS

For the fiscal year, the retirement annuity trust fund's portfolio generated a total return of 10.81%, surpassing the policy benchmark return of 9.30%. Domestic equities returned 14.74% versus 14.50% for the Standard & Poor's 1500 Index, while international equities returned 13.07% versus 7.79% for the MSCI All Country World (Ex-US) Index. Fixed income investments outperformed, returning 0.08% versus -0.63% for the Barclays Government/Credit Index. Less traditional asset classes such as real estate, private equity, timberland and alternative credit are beginning to contribute meaningfully to total return as those programs are expanded.

The table below details historical performance for the retirement annuity trust fund and its component asset classes for the period ended June 30, 2018. The retirement annuity trust fund's returns were generated by the Segal Marco Advisors performance reporting system using a time-weighted rate of return calculation based upon market values. TRS began separate reporting of its Life Insurance Fund effective Feb. 1, 2018. Previously, it was reported as part of the pension fund's gross and net performance. Gross and net of fee performance reports for the Life Insurance Fund are being constructed for publication for the next comprehensive annual financial report.

Portfolio Returns continued

Schedule of Investment Returns
Retirement Annuity Trust Gross

		Market Value	1-year	3-year*	5-year*	10-year*	20-year*
TOTAL PLAN	$	19,802,684,099	10.81	8.16	9.44	8.02	6.27
Policy Benchmark**			9.30	*8.15*	*8.98*	*7.48*	
Total Equity	$	12,667,737,702	14.08	9.87	11.90	8.98	6.35
Domestic Equity	$	8,164,946,090	14.74	10.92	13.44	10.40	7.00
S&P 1500 Index			*14.50*	*11.90*	*13.40*	*10.29*	
All-Cap Equities	$	260,570,118	11.76				
Russell 3000			14.78				
Large-Cap Equities	$	6,714,678,931	14.45	10.75	13.34	10.24	
S&P 500 Index			*14.37*	*11.93*	*13.42*	*10.17*	*6.45*
Mid-Cap Equities	$	718,936,929	16.74	12.35	14.22	10.56	
S&P 400 Index			*13.50*	*10.89*	*12.69*	*10.78*	
Small-Cap Equities	$	470,760,112	17.77	12.75	14.37	12.39	
S&P 600 Index			*20.50*	*13.84*	*14.60*	*12.25*	
International Equity***	$	4,502,791,612	13.07	7.52	8.44	4.95	
MSCI AC World Ex US			*7.79*	*5.56*	*6.48*	*3.01*	
Fixed Income	$	3,036,033,540	0.08	2.32	2.78	4.73	5.28
Barclay's Govt./Credit Index			*-0.63*	*1.83*	*2.29*	*3.78*	*4.74*
Real Estate							
TRS Real Estate Equity	$	420,940,001	15.30	11.18	9.59	9.01	9.05
CPI plus 2%			*4.85*	*3.86*	*3.57*	*3.47*	*4.18*
Core Real Estate:	$	417,556,035	8.08	10.04	11.60	4.27	
NCREIF ODCE (VW)			*8.44*	*9.37*	*11.04*	*5.29*	
Non-Core Real Estate:	$	312,198,246	14.71	14.95	16.40		
NCREIF Property Index			*7.19*	*8.25*	*9.77*		
Alternative Investments							
Private Equity	$	1,095,289,506	20.74	12.29	13.39	10.91	
Mature Private Equity	$	428,356,408	*18.56*	*9.11*	*11.25*		
S&P 500 plus 3%			17.81	15.29	16.82		
Private Equity < 5 Years	$	666,933,098	23.15	15.08	14.72	11.95	
Timberland:	$	187,540,819	-5.39	0.76	3.21	3.27	
NCREIF Timberland Index			*3.57*	*3.43*	*6.00*	*4.01*	
Additional Categories	$	1,428,742,753	4.28	4.25	4.83		
B of A Merrill Lynch High Yield Master II			*2.53*	*5.55*	*5.51*		
Cash (Unallocated)	$	236,645,496	1.44	0.75	0.48	0.40	2.15
90 Day T-Bill			*1.36*	*0.64*	*0.40*	*0.33*	*1.86*

Total Plan Gross Return for 30-year period* 8.39

* *Returns are annualized for periods longer than one year.*

** *Prior to July 1, 2008, TRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a policy index that represents the returns of appropriate benchmarks for the various asset classes weighted by the midpoint of the strategic range for the current fiscal year.*

*** *As of June 30, 2018, 21.7% of total international equities were invested in emerging markets.*

Schedule of Investment Returns
Retirement Annuity Trust—Net Investment of Expense

2018	10.50%
2017	15.00
2016	-1.32
2015	4.96
2014	17.95

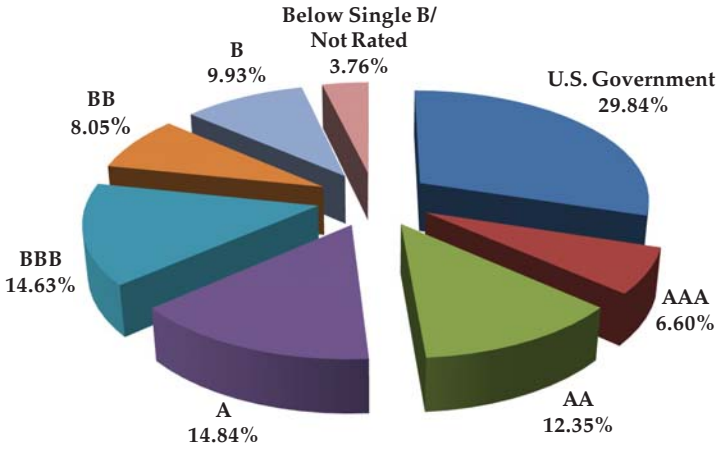
FIXED INCOME INVESTMENTS

As of June 30, 2018, the Retirement Annuity Trust Fund had approximately $3.03 billion, 15.3% of total assets, in the fixed income category of investments. The Retirement Annuity Trust Fund's fixed income investments as of June 30, 2018, maintained the average investment grade rating required by administrative regulation.

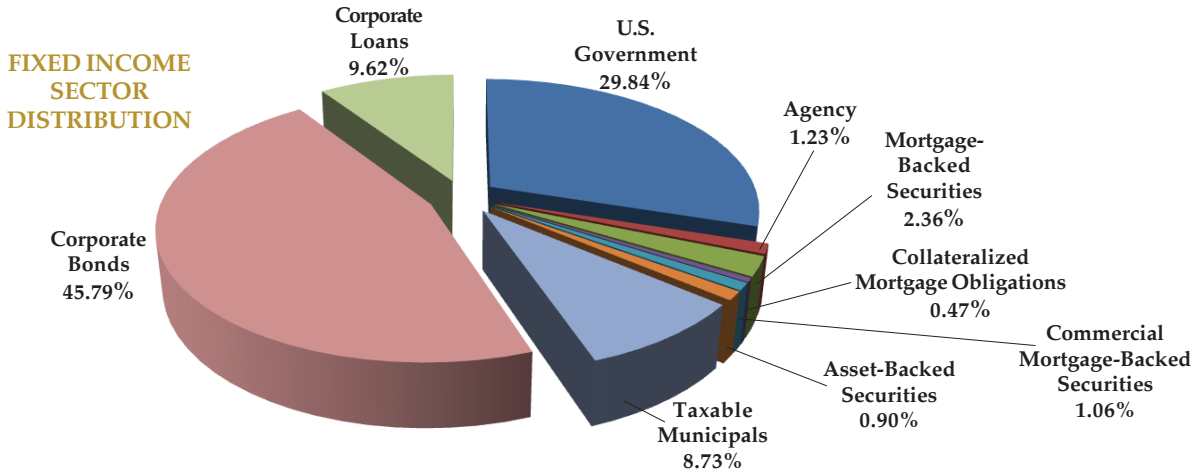
In addition, the Retirement Annuity Trust Fund had $1.43 billion, 7.2% of total assets, in other debt-related investments under a regulatory provision that allows for up to 15% of assets in additional categories of investments approved by the Board of Trustees. Investments under this authorization included two high-yield bond portfolios and two syndicated bank loan portfolios. Also under this provision are several alternative credit portfolios, including a multi-strategy opportunistic credit portfolio as well as distressed debt and specialty lending funds.

The credit quality distribution for the retirement annuity trust fund is illustrated below. This chart includes the fixed income category of investments as well as the high-yield bonds, international fixed income and the syndicated bank loan portfolios included in additional categories of investments. Also illustrated below is the distribution of fixed income assets by sector, again including the high yield bonds, international fixed income, and the syndicated bank loan portfolios held under additional categories of investments.

FIXED INCOME QUALITY DISTRIBUTION BY RATING



FIXED INCOME SECTOR DISTRIBUTION



FIXED INCOME MARKET OVERVIEW

The retirement annuity trust fund's investment-grade fixed income portfolios returned 0.08% for the year ended June 30, 2018. This compares favorably to the trust fund's fixed income benchmark, the Bloomberg Barclays U.S. Government/Credit index, which returned -0.63%. The outperformance was driven by TRS's overweighting in corporate bonds that provided a higher coupon than government bonds of similar duration.

The Federal Reserve targets an overall annual inflation rate of 2%, a pace it views as appropriate for economic growth and price stability. Current inflation, as measured by the year-over-year Consumer Price Index (CPI) and Produce Price Index (PPI), was higher during the last quarter of fiscal year 2018. The CPI was up 2.8% year over year. The PPI has increased 3.1% over the last year. The increase in CPI was driven higher due to strong economic expansion in the United States, fueled by an increase in consumer spending due to new tax cuts, strong labor markets and slightly higher wages. Oil prices also increased $10 a barrel to $74.50 during the last quarter of the fiscal year. The Fed's preferred measure of inflation is the price index for Personal Consumption Expenditures (PCE). This measure has moved higher and hit the Federal Funds target, with a year-over-year increase of 2.3%. The Fed hiked the Funds Rate 25 basis points in June, of this year bringing the rate up to 1.75% to 2.00%. In summary, inflation has moved higher and is now at the Fed's target. It is important to monitor this and see if the rate continues to move higher for future Federal Funds rate increases.

Coming out of 2017, expectations were widespread that a synchronized global expansion lay ahead in 2018. This was due to 3% growth the last nine months of 2017; however, growth in the first quarter of 2018 was 2.0%. The second quarter of 2018 bounced back, nearly doubling the first quarter's growth, with 4.1% GDP growth. Retail sales and consumer spending data ended the quarter strong, after a weak start, fueled by the new tax cuts, high consumer confidence and a strong labor market. Housing data was mixed with weaker existing home sales and stronger new home sales. Housing prices were up 6.4% as measured by the S&P/Case-Shiller Home Price index. The combination of high home prices and higher mortgages due to rising rates could soften the housing market over the next year. Measures of manufacturing were mixed, as the potential for a trade war had companies being cautious in the short term.

Global risk assets (non-U.S. Treasurys) spreads continued to widen from very tight levels at the beginning of the year. Gains across most risk assets occurred despite higher volatility, weaker economic growth in Europe and Japan, higher U.S. interest rates, concerns over a possible trade-war and country specific-problems, such as Argentina and Turkey.

Investment-grade corporate spreads widened by 13 basis points during the last quarter of the fiscal year 2018 to +126 basis points over U.S. Treasurys of same duration and are trading tighter than long-term averages. Spreads for investment-grade corporates ended fiscal year 2017 +111. Investment-grade corporate bonds were the biggest laggards in the second quarter of 2018, as anticipation of higher rates put downward pressure on prices within the segment, returning -0.98% as measured by the Bloomberg Barclays U.S. Investment Grade Corporate index. Financials performed better than industrials and utilities, while longer duration corporates had much weaker returns than shorter duration corporates. In mortgages, most sectors had similar returns with asset-backed securities posting the highest return.

With U.S. Treasury rates and risk premiums on corporate bonds both still relatively near the low end of their historical range, investment-grade fixed income is an asset class with moderately unfavorable risk/reward characteristics and below-average upside potential. TRS continues to adjust the structure of its fixed income portfolio to control risk and maintain required liquidity. Specifically, TRS continues to increase exposure to nontraditional debt-related investments and limit its interest rate risk by being slightly short in benchmark durations.

EQUITY INVESTMENTS

As of June 30, 2018, the retirement annuity trust fund's public equity investments had a market value of $12.66 billion, representing 64% of total assets. The pension plan's U.S. equity portfolio returned 14.74% for the fiscal year and outperformed its policy benchmark by 24 basis points. Positive equity returns over the fiscal year explain the year over year increase in market value. The retirement annuity trust fund divides its public equity into two broad categories: domestic and international.

The domestic portfolio had a market value of $8.16 billion as of June 30, 2018, representing 41.3% of total assets. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of three well known component indices based upon market capitalization: the S&P 500 large cap, S&P 400 mid cap, and the S&P 600 small cap. The retirement annuity trust fund's domestic equity holdings are comprised of twelve portfolios. Three of the portfolios are

internal passively managed index portfolios benchmarked to the S&P 400, 500, and 600. The other nine portfolios are managed externally by five different asset managers, with each portfolio representing a specific strategy and measured against an appropriate benchmark. The collective array of portfolios provides diversification by market capitalization, manager, style and strategy.

The market value of the international equity holdings as of June 30, 2018, was $4.50 billion, representing 22.7% of total assets. The pension plan's international equity portfolio returned 13.07% for the fiscal year and outperformed its policy benchmark, the Morgan Stanley Capital International (MSCI) All Country World ex U.S. index (MSCI ACWI ex U.S.), by 5.28%. This benchmark for international equities represents the markets of 22 developed countries and 24 emerging market countries. Six external asset managers manage the retirement annuity trust fund's international equities, one of which is a passively managed international index fund.

EQUITY INVESTMENTS OVERVIEW

Expectations for continued global growth, as well as U.S. fiscal policy stimulus, again were cited as the primary factors driving equity markets to record levels. The first quarter was a period of synchronized global expansion amid low inflation and low volatility. In the first fiscal quarter, the S&P 500 index returned nearly 4.5% while the MSCI ACW Ex US index rose approximately 6.2%. Oil markets also traded higher during the period, with West Texas Intermediate (WTI) crude reaching $52 per barrel. U.S. small-cap stocks outperformed large-cap stocks, with the Russell 2000 index returning 5.7% versus the Russell 1000 index return of 4.5% and, across all market capitalizations, growth stocks continuing to outperform value. Within the large-cap growth segment, information technology, health care and financial stocks outperformed other sectors over the period.

U.S. equity markets delivered strong broad-based performance during the second fiscal quarter with continued low volatility and inflation. The S&P 500 index posted its ninth consecutive positive calendar year dating back to 2009. U.S. growth stocks led value stocks and large-cap stocks similarly outpaced small-cap stocks during this period. Value managers generally outperformed with the weaker returns from their respective indices acting as lower hurdles. In contrast, active growth managers faced headwinds due to underweight exposure to a range of high-performing stocks and sectors as biotechnology and pharmaceuticals continued to drive growth-equity index performance in small caps. Strong performance in technology drove growth equity index performance in large caps. Information technology broadly led all sectors during the second quarter, as the S&P 500 Information Technology Index returned 9.0% for the quarter. FAANG (Facebook, Amazon, Apple, Netflix, and Google) stocks disproportionately drove market returns and as a result, many active managers with light exposure to these companies underperformed their respective benchmarks.

The third quarter began with a substantial global equity market rally in January driven by improving global economic fundamentals, a continuation of generally accommodative monetary policies among global central banks and continued corporate earnings growth. Following a period of unprecedented market calm in 2017, the third quarter was characterized by higher levels of volatility as investors reacted to the prospect of higher future inflation, rising interest rates and a potential trade war between the United States and China. At their peaks, U.S. and developed international equity markets traded up 7% with emerging-market equity indices up nearly 10%. However, the market rally reversed sharply in February in response to an increase in inflation expectations and a dramatic spike in equity market volatility. The correction resulted in a drawdown in broad U.S. equity indices of just over 10%.

The quarter ended with developed equity markets in negative territory and a weakening dollar. These stock market gyrations lead to mixed results across market cap and style. The S&P 500 index's return of -0.8% marked the first negative quarter for the index since the quarter ending March 31, 2015. Declines were relatively widespread, with nine of 11 sectors producing negative returns. Small-cap stocks outperformed large cap stocks, and growth continued to outperform value. Active managers delivered a wide spread of results due to the increased volatility, but growth managers fared the best with higher success rates across the market cap spectrum. Further, active managers with a high-quality bias benefitted from the market's increased sensitivity to rising interest rates, which negatively impacted companies with higher debt levels.

In the fourth quarter, non-U.S. equities led a global stock market rally for the third quarter in a row, driven by a weaker dollar and a strengthened economic backdrop. Developed international stocks performed well on an absolute and relative basis when compared to their domestic counterparts but underperformed relative to emerging markets. Value stocks outperformed growth in developed markets while underperforming in emerging markets, however, performance varied across market cap. Small caps continued to outperform large in developed markets, while large outperformed small cap in emerging markets. This rally was broad based, with only two developed countries within the MSCI EAFE index returning negative performance. European market returns heavily influenced performance, as ECB policymakers announced the reduction of accommodative monetary policy.

Developed international markets performed well and outpaced the domestic market for the second straight quarter. The outperformance of value stocks in the prior year did not persist, with growth stocks solidly outperforming for the quarter. Small cap also outperformed large cap for the second straight quarter. The European Central Bank announced that it will taper its bond purchase program starting in 2018. In Japan, the multi-year stimulus program appears to be taking hold, with the core consumer price index rising 0.9% in November from a year earlier. However, the stimulus still trails its initial expectations, as inflation remains below Japan's 2% target.

The domestic economy bolstered U.S. stocks in the fourth quarter, particularly small caps and real estate investment trusts (REITs), which typically have less exposure to global trends and trade risk. The dollar increased, and the S&P 500 index returned 3.4%, buoyed by strong performance in the energy sector as oil prices continued to rise throughout the fourth quarter. Continuing a third quarter trend, the technology and consumer discretionary sectors also drove market performance as the S&P 500 Technology and Consumer Discretionary indices returned 7.1% and 8.2%, respectively. Increasing global trade tension pushed investors away from large caps and toward the more domestically oriented small and micro-cap segments of U.S. equity markets, while multinational companies and the global cycle appeared to become less synchronized. Passive retail flows into the small-cap space increased upon global trade concerns as investors sought protection, as well as the opportunity to take advantage of the recent tax reform. As a result, active management in the small cap space faced challenges during the quarter as low-quality, lower-capitalized, non-earning stocks outperformed. Despite positive performance across large-cap indices, macroeconomic headwinds weighed on returns during the quarter. Active large-cap growth and value managers performed well in general as secular growth trends and continued strong corporate earnings provided a favorable stock-picking environment. Value outperformed growth in small cap, while growth continued to outperform value in large cap. Momentum and growth continued their third quarter leadership, while low-volatility and high-dividend stocks notably reversed as the S&P 500 Low Volatility High Dividend index returned 5.1% versus its first quarter return of -1.1%.

In summary, the U.S. equity markets performed well as the United States continued its recovery from the Great Recession with the lowest real GDP growth of the post-war period. The continued expansion in global fundamentals provided a steady backdrop for equity markets in general. Global monetary policy still was accommodative, but less so than in prior years. Inflation remained near the low end of the Fed's stated goals driven by low commodities and wages. Fiscal year 2018 was a period of heightened geopolitical risks, but volatility remained extremely low except for the February spike. Domestic equity valuations ended the year more attractive than global equities, but that divergence was somewhat diminished after global fundamentals and valuations improved.

REAL ESTATE

The Retirement Annuity Trust Fund's real estate investments had a market value of $1.15 billion as of June 30, 2018, representing 5.8% of total assets. The annuity fund's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow and provide diversification, thereby reducing the volatility of the overall investment portfolio.

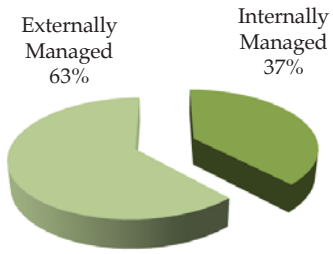
The retirement annuity trust fund's real estate exposure currently is provided through 16 portfolios. The fund maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high-credit quality tenants. TRS Kentucky also is invested in two commingled, evergreen real estate funds managed by Prudential Real Estate Investors (PRISA) and TA Realty (TA Core Property Fund). These funds are core real estate equity funds that invest primarily in existing income-producing properties with strong cash flows and the potential for capital appreciation. The funds are diversified across several property types including office, retail, industrial, apartment, self-storage and hotel.

Additionally, the annuity fund is invested in Carlyle Property Investors, a core-plus commingled fund and 12 real estate limited partnerships: Carlyle Realty Partners VI, Carlyle Realty Partners VII, Carlyle Realty Partners VIII, Blackstone Real Estate Partners VII, Blackstone Real Estate Partners VIII, Rockwood Capital Real Estate Fund IX, Rockwood Capital Real Estate Fund X, TA Realty Associates Fund X, TA Realty Associates Fund XI, AG Net Lease Realty Fund III, Landmark Real Estate Partners VII and Landmark Real Estate Partners VIII. Going forward, investment staff will continue opportunistically to add to the annuity trust fund's real estate investments.

REAL ESTATE OVERVIEW

The real estate market generally has continued to present steady strength. Investment staff is conscious of the risks present at this stage in the cycle and specifically conscious of the general risk of recession. Even so, the growth rate of GDP has accelerated in recent quarters, above the levels that were present prior to fiscal year 2018. If a recession were to occur, it most likely would not be led by the real estate sector. There are a couple of key reasons. First, construction levels remain generally muted. Total construction activity remains at lower levels at this stage of the cycle compared to almost any prior recovery. Commercial construction remains 8% below the long-term average and 33% below peak 2006 levels. Second, debt levels remain below prior peaks in 2007. As a percentage of GDP, no material growth in commercial real estate debt has been seen during the 2010-2018 period. The conditions were starkly different in two prior real estate-led recessions (1990 and 2007) when commercial real estate outstanding grew dramatically.

Real Estate Investments
$1.15 Billion Fair Value
As of June 30, 2018



Deep into the recovery, it can be prudent to focus on shorter-duration assets. These are properties that would allow TRS to maintain our real estate allocation while increasing its exposure to higher-quality, income-producing properties with higher levels of liquidity and shorter commitment periods. To this end, TRS has added a core and core-plus fund to its portfolio in recent months.

In terms of sectors, demographic-based sectors present compelling risk-return characteristics at this point. By contrast, GDP-driven sectors (except for industrial) generally do not present demand factors that are reliable and accelerating.

With respect to demographic-based sectors, it is essential to target specific areas that attract specific demographic types, such as certain-age cohorts within the various sectors. The multifamily and "active adult" (senior apartments with services, activities, and associated amenities) sectors still present reliable accelerating demographics and corresponding potential growth in specific submarkets around the country. Specialty sectors in the demographic-based realm, such as self-storage, manufactured housing, student housing, senior housing and lab sectors, also present above-standard growth. Deeper into the cycle, these still present the ability to generate strong, above-standard growth in a status quo environment. These asset classes generally present lower volatility as well. As a result, these assets have the potential to be properly defensive considering the risks of investing later in the cycle.

On the GDP-driven sectors, the office market continues to face fundamental headwinds. While certain markets have seen marginal decreases in vacancy, demand factors generally remain unreliable and difficult to predict. Changing methods of using office space have led to lower levels of net absorption in many markets. Examples include the introduction of more open-plan space and technology allowing for more mobility among workers. In short, national vacancy rates remain higher today when compared to prior recoveries.

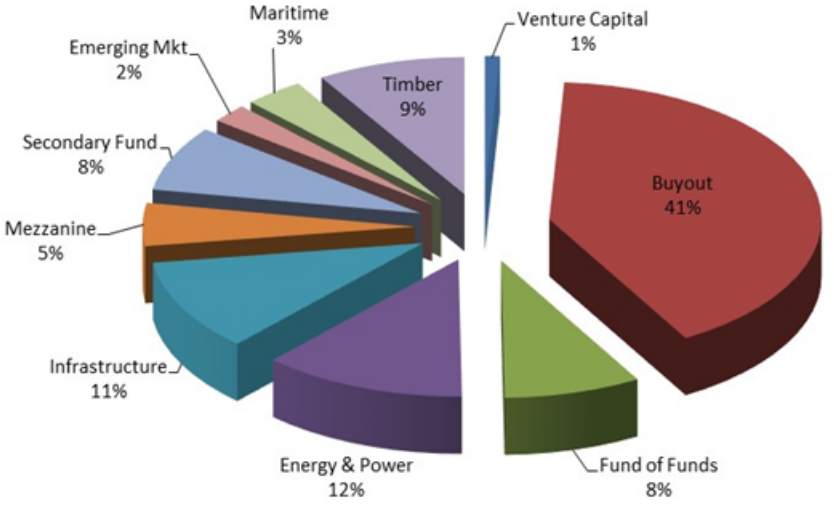
Lastly, the capital markets generally remain steady. Core managers are generally seeing steady demand and gradually increasing queues over the past six to nine months. Transaction volumes in the United States declined 4.2% in 2017, with a downward trend forecasted through 2020. There is a potential associated volume premium in the market where larger transactions seem to be attracting a deep, fully-priced bid.

Compared to other asset classes, real estate returns appear to be normalizing. For instance, core real estate returns were in the high single digits over the past 12 months while the broader stock markets were up by over 14%. Real estate is an important diversifier to the overall investment portfolio and expectations are to continue to build further the real estate allocation.

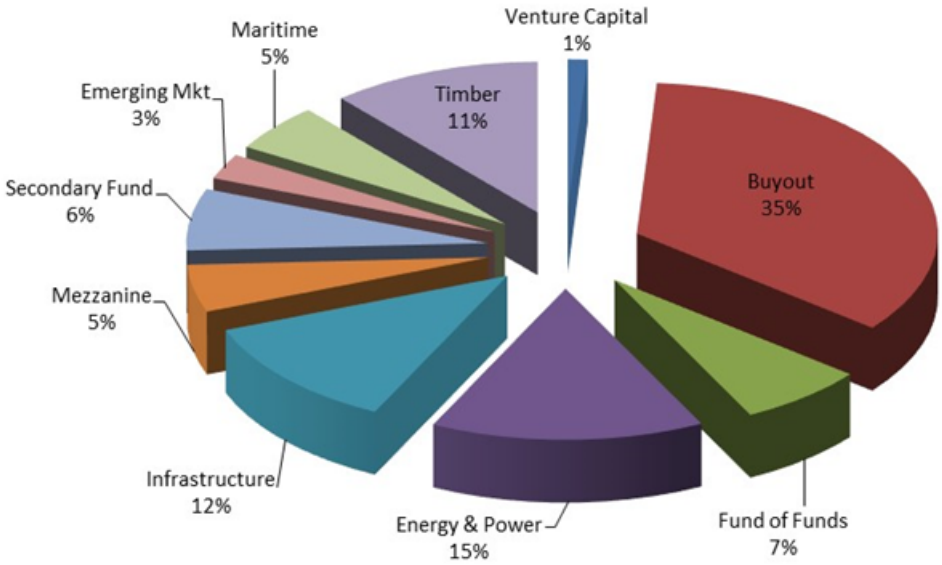
ALTERNATIVE ASSETS

As of June 30, 2018, the retirement annuity trust fund had $2.273 billion committed to alternative investments and had funded $1.471 billion of those commitments. The percentage of the retirement annuity trust fund's portfolio invested in alternative assets was 6.5%. The retirement annuity trust fund's current alternative asset portfolio consists of private equity investments and timberland.

Alternative Assets Committed
$2.273 Billion
as of June 30, 2018



Alternative Assets Funded
$1.471 Billion
as of June 30, 2017



PRIVATE EQUITY

The retirement annuity trust fund has exposure to venture, buyout, infrastructure, energy, mezzanine and several other private equity sectors via participation in limited partnerships as well as investments in funds of funds. The retirement annuity trust fund has a relatively young private equity investment program, which it intends to continue to grow with a disciplined plan of commitments each year. The retirement annuity trust fund looks to diversify its private equity portfolio by manager, country, strategy and vintage year. Vintage year diversification is achieved by building out the portfolio with disciplined levels of commitments over time. A commitment to any given partnership shall not exceed 20% of the partnership's total commitments.

The board and staff understand that private equity investments (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with other publicly traded assets, this asset class can help to diversify and reduce risk for the retirement annuity trust fund's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence, during the harvesting period.

PRIVATE EQUITY MARKET OVERVIEW

Private equity markets are positively affected by strong public equity markets. When public markets are strong more private equity portfolio companies are sold. The past fiscal year has seen an active initial public offering (IPO) market as the public markets grind higher. However, as result of the strong public equity markets the entry price for private equity portfolio companies has risen forcing many managers to pay higher multiples for underlying portfolio companies or to put their dry powder to work at a much slower pace that in the past.

The past fiscal year was a period of continued heightened interest in the private equity markets as investors continue to search for return in a lower rate environment. Investors continued to increase their commitment amounts while also paring down the number of managers in their portfolios, investing with only the highest quality managers. The past fiscal year also has seen large buyout funds returning to the marketplace. TRS has begun to see more opportunity in the large-cap buyout space while continuing to see opportunity in the middle-market space and in other niche areas such as infrastructure. Additionally, the European markets continue to present investment opportunities in the private equity space.

TIMBERLAND

In addition to private equity, the retirement annuity trust fund has invested in timberland in the alternative asset class. As of June 30, 2018, the retirement annuity trust fund owned approximately 73,000 acres of timberland outright, had a 7.15% interest in a commingled fund that holds approximately 98,000 acres of timberland and was a member of a joint venture that purchased an interest in approximately 124,000 acres of timberland located across seven southern states. Timberland is, by nature, a long-term investment as TRS's anticipated time horizon in this asset category generally is a minimum of 10 to 15 years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the retirement annuity trust fund's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long term.

The Retirement Annuity Trust Fund diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are driven primarily from net cash flow generated from the sale of trees (referred to as stumpage sales) and capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of forest commodity prices (paper goods and lumber products). There also can be gains from the timely sale of timberland from the conversion of timberland into higher and better uses, such as vacation property sales.

TIMBERLAND MARKET OVERVIEW

U.S. timber markets have been weak across most timber-growing regions throughout the fiscal year, with the only exception being the Pacific Northwest. An oversupply of timber has allowed wood-using mills to maintain sizeable inventories and, while demand for cut timber has pushed up lumber prices, uncut timber prices have continued to fall. While widespread, this oversupply issue has been more problematic in the U.S. South than other U.S. timber-growing regions.

It is expected that this current oversupply of harvested timber will work its way through the market over the next several years as there had been approximately 5 billion board feet of new mill capacity or expansion announced for the U.S. South. Additionally, due to the oversupply in uncut timber, the number of timberland transactions that have been executed over the past fiscal year has fallen. This reduction in transaction has had the effect of reducing the appraisals for most timberland across the United States apart from the Pacific Northwest. As the aforementioned mills come on line it is expected that demand for uncut timber will increase and the timberland transaction market will normalize, putting upward pressure on timberland prices.

Retirement Annuity Trust
Portfolios Fair Values *
June 30, 2018

INTERNALLY MANAGED

Cash Equivalents		
Cash Collections Fund (Unallocated)	$	236,645,496
Fixed Income		
Broad Market Bond Fund		587,584,821
Intermediate Bond Fund		661,972,338
Internal Bond Fund		168,603,284
Long Term Bond Fund		631,765,673
Tax Shelter Fund		337,897
Equity		
S & P 500 Stock Index Fund (Large Cap)		370,313,886
S & P 400 Stock Index Fund (Mid Cap)		2,546,405,952
S & P 600 Stock Index Fund (Small Cap)		261,165,270
Real Estate		
Internally Managed Fund		420,940,001
Subtotal	**$**	**5,885,734,619**

EXTERNALLY MANAGED

Fixed Income	
Galliard Capital Management Core Fixed Income	517,343,359
Fort Washington Core Fixed Income	468,426,168
Domestic Equity	
Fort Washington Focused Equity	260,570,118
State Street US Premier Growth Equity	685,871,177
Todd Asset Intrinsic Value Opportunity (Alpha)	462,061,714
Todd Asset Large Cap Intrinsic Value	1,113,927,168
UBS Alpha Equity	264,680,086
UBS Value Oriented (Global)	933,194,588
Wellington Large Cap Equity	708,538,245
Wellington Mid Cap Equity	348,623,043
Wellington Small Cap Equity	209,594,842
International Equity	
Baillie Gifford EAFE Fund	1,205,412,258
Barings All Country World Ex US	686,422,526
Black Rock MSCI ACWI Ex US IMI Index	794,398,825
Todd Asset International Intrinsic Value	824,882,569
Todd Asset International Intrinsic Value Opportunity	92,653,702
UBS All Country World Ex US Equity	899,021,732
Real Estate	
Angelo Gordon Net Lease Realty Fund III	36,290,999
Blackstone Partners VII	40,114,102
Blackstone Partners VIII	29,717,814
Carlyle Realty Partners VI	9,111,840
Carlyle Realty Partners VII	33,446,357
Carlyle Realty Partners VIII	1
Carlyle Property Advisors	53,988,311
Landmark Real Estate Partners VII	32,572,288
Landmark Real Estate Partners VIII	6,252,584
Prudential PRISA Fund	336,512,387
Rockwood Capital Real Estate IX	21,144,837
Rockwood Capital Real Estate X	20,678,616
The Realty Associates Fund X	31,443,210
The Realty Associates Fund XI	51,425,598
TA REalty Core Property Fund	27,055,336
Alternative Investments	
Actis Global Fund IV	40,352,277
Alinda Infrastructure Fund II	25,909,250
APAX VIII	39,695,801
APAX IX	23,102,777
Audax Mezzanine Fund III	7,621,103
Audax Mezzanine Fund IV	6,074,350

Externally Managed continued ...

Audax Private Equity Fund IV	17,032,158
Audax Private Equity Fund V	17,729,954
CapitalSouth Partners III	901,981
Carlyle Europe Partners IV	39,101,810
Carlyle Global Financial Services Partners II	26,361,736
Carlyle Global Financial Services Partners III	9,092,057
Chrysalis Venture Fund III	13,936,430
Fort Washington Fund V	6,500,964
Fort Washington Fund VI	22,895,354
Fort Washington Fund VIII	25,581,043
Fort Washington Fund IX	8,733,790
Fort Washington Fund IX-K	7,255,065
Gavea Investments Fund V	8,209,479
Hancock Bluegrass LLC - Oregon	34,429,809
Hellman & Friedman Fund VII	64,821,351
Hellman & Friedman Fund VIII	35,930,839
IFM Global Infrastructure	139,482,163
J. P. Morgan Maritime Fund	33,041,661
J. P. Morgan Maritime Fund II	24,435,184
J.P. Morgan Global Transport Income Fund	4,000,000
KKR & Co Fund 2006	6,934,267
KKR & Co European III	24,592,112
KKR & Co European IV	38,790,070
KKR Americas Fund XII	7,262,272
Landmark Equity Partners Fund XIV	7,676,092
Landmark Equity Partners Fund XV	13,804,340
Lexington Capital Partners Fund VII	9,936,823
Lexington Capital Partners Fund VIII	19,889,784
Molpus Woodlands Group Lake Superior Timberlands LLC	99,862,904
Molpus Seven States LLC	53,248,106
NGP Natural Resources X	24,463,205
NGP Natural Resources XI	48,764,310
NGP Natural Resources XII	9,697,845
Oaktree European Principal Fund III	21,295,962
Oaktree European Principal Fund IV	30,417,025
Oaktree Mezzanine Fund III	1,184,565
Oaktree Mezzanine Fund IV	17,499,538
Public Pension Capital LLC	70,403,647
Riverstone/Carlyle E & P Fund IV	22,884,151
Riverstone E & P Fund V	17,405,930
Riverstone E & P Fund VI	35,314,019
Stepstone Pioneer Capital III	19,274,972
Additional Categories	
Angelo Gordon Select Partners Advantage Fund	63,819
Avenue Capital Special Situations Fund VI	8,575,194
Barings European Loan Fund	102,070,000
Columbia High Yield Bond Fund	164,312,064
Fort Washington High Yield Bond Fund	316,269,811
Golub Capital Pearls 11, LLC	88,225,420
Highbridge Principal Strategies III	21,469,553
Marathon European Credit Opp Fund II	52,250,211
Marathon European Credit Opp Fund III	49,828,882
Marathon TRS/Credit Fund	336,849,775
Oaktree European Capital Solutions Fund	21,334,426
Oaktree European Dislocation Fund	4,472,882
Oaktree Opportunities Fund IX	38,697,468
Oaktree Opportunities Fund X	18,656,234
Oaktree Opportunities Fund Xb	1,250,000
Shenkman Capital Management	204,417,015
Subtotal	**$ 13,916,949,480**

TOTAL ASSETS	**$**	**19,802,684,099** **

* *Detailed information concerning the market values of all TRS investments is available upon request.*

** *Includes 403(b) Tax Shelter Fund of $337,897, and 401(h) value of $20,896,588. This does not include the Losey Scholarship Fund.*

Life Insurance Fund
Portfolios Fair Values*
June 30, 2018

Internally Managed	
Cash Equivalents	
Cash Collections Fund (Unallocated)	$ 3,110,722
Fixed Income	
Broad Market Bond Fund	48,373,370
Equity	
S & P 400 Stock Index Fund (Mid Cap)	2,107,116
S & P 500 Stock Index Fund (Large Cap)	19,580,994
S & P 600 Stock Index Fund (Small Cap)	388,493
Subtotal	**$ 73,560,695**
Externally Managed	
International Equity	
Blackrock All Country World ex US IMI	$ 7,884,256
Real Estate	
TA Realty Core Property Fund	541,107
Additional Categories	
Marathon TRS/Credit Fund	1,300,000
Total Assets	**$ 83,286,058**

* *Detailed information concerning the market values of all TRS investments is available upon request.*

Investment Summary
Fair Values – Retirement Annuity Trust
June 30, 2018

Type of Investment	Fair Value June 30, 2017	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value June 30, 2018*
Cash Equivalents	$ 541,164,274	$ 4,528,116,452	$	$ 4,644,752,807	$ 424,527,919
Fixed Income	2,871,403,201	3,153,929,131	(97,126,176)	2,944,230,582	2,983,975,575
Real Estate	1,046,760,134	171,956,602	85,329,027	153,351,480	1,150,694,282
Alternative	1,062,855,562	393,387,210	178,485,001	351,897,448	1,282,830,325
Equities	11,589,656,638	3,050,282,959	1,410,249,468	3,506,047,940	12,544,141,125
Additional Categories	1,419,607,158	458,139,279	(2,880,369)	458,351,194	1,416,514,873
TOTAL	**$ 18,531,446,967**	**$ 11,755,811,633**	**$ 1,574,056,951**	**$ 12,058,631,451**	**$ 19,802,684,099**

* *Includes Tax Shelter Annuity of $337,897, and 401(h) value of $20,896,588. This does not include the Juanita Losey Scholarship Fund.*

Investment Summary
Fair Values – Life Insurance Fund
June 30, 2018

Type of Investment	Fair Value June 30, 2017	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value June 30, 2018
Cash Equivalents	$ 4,150,028	$ 80,701,766	$	$ 81,127,758	$ 3,724,036
Fixed Income	82,293,300	86,466,014	(1,698,456)	119,235,422	47,825,436
Equities		29,518,423	427,519	50,463	29,895,479
Real Estate		541,107			541,107
Additional Categories		1,300,000			1,300,000
TOTAL	**$ 86,443,328**	**$ 198,527,310**	**$ (1,270,937)**	**$ 200,413,643**	**$ 83,286,058**

Retirement Annuity Trust
Contracted Investment Management Expenses
Fiscal Year Ended June 30, 2018
(In thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points *
Equity Manager(s)	$ 9,489,853	$ 14,694	15.5
Fixed Income Manager(s)	985,770	443	4.5
Real Estate **	729,754	10,107	138.5
Additional Categories	1,428,743	9,256	64.8
Alternative Investments **	1,282,830	17,051	132.9
TOTAL	**$ 13,916,950**	**$ 51,551**	**37.0**
Administrative and Operation Expenses* **			
Custodian Fees	$ 19,803,296	$ 518	0.3
Consultant Fees		506	0.3
Legal & Research		59	0.0
Other Administrative and Operational		2,883	1.5
TOTAL	**$ 19,803,296**	**$ 3,966**	**2.0**
GRAND TOTAL		**$ 55,517**	**28.0**

* *One basis point is one hundredth of 1 percent or the equivalent of .0001.*
** *Depending on contract terms, private equity fees are withheld either from the fund operations or paid by direct disbursement.*
*** *Includes the Juanita Losey Scholarship Fund.*

Life Insurance Fund
Contracted Investment Management Expenses
Fiscal Year Ended June 30, 2018
(In thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points*
Equity Manager(s)	$ 7,884	$	0.0
Fixed Income Manager(s)			
Real Estate	541	1	18.5
Additional Categories	1,300	2	15.4
TOTAL	**$ 9,725**	**$ 3**	**3.1**
Administrative and Operation Expenses			
Custodian Fees	$ 83,286	$ 4	0.5
Consultant Fees			0.0
Legal & Research			0.0
Other Administrative and Operational		106	12.7
TOTAL	**$ 83,286**	**$ 110**	**13.2**
GRAND TOTAL		**$ 113**	**13.6**

* *One basis point is one hundredth of 1 percent or the equivalent of .0001.*

Schedule of Contracted and Administrative Investment Expenses
Retirement Annuity Trust
Fiscal Year Ended June 30, 2018

INVESTMENT COUNSELOR FEES

FIXED INCOME MANAGERS		
Galliard Capital Management Core Fixed Income		258,151
Fort Washington Core Fixed Income		184,885
Total Fixed Income Managers	**$**	**443,036**
DOMESTIC EQUITY MANAGERS		
State Street US Premier Growth Equity		799,463
Fort Washington Focused Equity		881,923
Todd Asset Management LLC		879,794
UBS Global Asset Management		(514,597)
Wellington Management Company		3,397,200
Total Domestic Equity Managers	**$**	**5,443,783**
INTERNATIONAL EQUITY MANAGERS		
State Street US Premier Growth Equity		4,160,155
Fort Washington Focused Equity		2,852,707
Todd Asset Management LLC		402,156
UBS Global Asset Management		514,594
Wellington Management Company		1,320,000
Total International Equity Managers	**$**	**9,249,612**
REAL ESTATE MANAGERS		
Angelo Gordon Net Lease Realty Fund III		853,602
Blackstone Partners VII		427,157
Blackstone Partners VIII		750,000
Carlyle Realty Partners VI		177,558
Carlyle Realty Partners VII		629,726
Carlyle Realty Partners VIII		568,645
Carlyle Property Advisors		270,713
Landmark Real Estate Partners VII		500,000
Landmark Real Estate Partners VIII		582,132
Prudential PRISA Fund		2,521,713
Rockwood Capital Real Estate Fund IX		685,000
Rockwood Capital Real Estate Fund X		639,302
The Realty Associates Fund X		751,766
The Realty Associates Fund XI		698,277
TA Core Property Fund		51,371
Total Real Estate Managers	**$**	**10,106,962**
ALTERNATIVE INVESTMENTS MANAGERS		
Actis Global Fund IV		644,000
Alinda Infrastructure Fund II		496,559
APAX VIII		324,599
APAX IX		589,543
Audax Mezzanine Fund III		134,845
Audax Mezzanine Fund IV		355,814
Audax Private Equity Fund IV		
Audax Private Equity Fund V		
CapitalSouth Partners Fund III		2,006
Carlyle Europe Partners IV		671,088
Carlyle Global Financial Services Partners II		527,767
Carlyle Global Financial Services Partners III		397,603
Chrysalis Venture Fund III		153,971
Fort Washington Fund V		65,105
Fort Washington Fund VI		162,058
Fort Washington Fund VIII		126,000
Fort Washington Fund IX		60,448
Fort Washington Fund IX-K		59,589
Gavea Investments Fund V		390,617
Hancock Bluegrass LLC - Oregon		248,800
Hellman & Friedman Fund VII		175,872
Hellman & Friedman Fund VIII		492,112
IFM Global Infrastructure		1,298,206

Alternative Investment Managers continued…

J. P. Morgan Maritime Fund		497,558
J. P. Morgan Maritime Fund II		288,730
J. P. Morgan Global Transport Income Fund		
KKR & Co Fund 2006		10,675
KKR & Co European Fund III		102,121
KKR & Co European Fund IV		665,811
KKR Americas Fund XII		512,596
Landmark Equity Partners Fund XIV		202,810
Landmark Equity Partners Fund XV		300,000
Lexington Capital Partners Fund VII		125,722
Lexington Capital Partners Fund VIII		253,199
Molpus Woodlands Group Lake Superior Timberlands LLC		864,608
Molpus Seven States LLC		574,933
NGP Natural Resources X		422,727
NGP Natural Resources XI		706,307
NGP Natural Resources XII		573,631
Oaktree European Principal Fund III		315,097
Oaktree European Principal Fund IV		785,215
Oaktree Mezzanine Fund III		68,406
Oaktree Mezzanine Fund IV		269,831
Public Pension Capital LLC		1,087,292
Riverstone/Carlyle E & P Fund IV		59,729
Riverstone E & P Fund V		147,495
Riverstone E & P Fund VI		689,275
Stepstone Pioneer Capital Fund III		150,798
Total Alternative Investments	**$**	**17,051,168**
ADDITIONAL CATEGORY MANAGERS		
Angelo Gordon Select Partners Advantage Fund		5,906
Avenue Special Situations Fund VI		20,658
Barings European Loan Fund		461,096
Columbia High Yield Fund		626,657
Fort Washington High Yield Bond Fund		646,874
Golub Capital Pearls 11, LLC		444,073
Highbridge Principal Strategies III		480,798
Marathon European Credit Opp Fund II		789,999
Marathon European Credit Opp Fund III		501,928
Marathon TRS/Credit Fund		3,102,620
Oaktree European Capital Solutions Fund		175,254
Oaktree European Dislocation Fund		86,832
Oaktree Opportunities IX		678,294
Oaktree Opportunities X		399,645
Shenkman Capital Management		835,724
Total Additional Category Managers	**$**	**9,256,358**

ADMINISTRATIVE & OPERATIONAL EXPENSES

CUSTODIAN		
The Bank of New York Mellon		517,884
Total Custodian Fees	**$**	**517,884**
CONSULTANT		
Aon Hewitt		419,789
Bevis Longstreth		52,905
George Philip		33,399
Total Consultant Fees	**$**	**506,093**
LEGAL & RESEARCH		
Ice Miller		59,131
Total Legal & Research	**$**	**59,131**
OTHER		
Other Administrative and Operational		2,882,696
Total Other Fees	**$**	**2,882,695**
TOTAL INVESTMENT EXPENSES	**$**	**55,516,722**

Schedule of Contracted and Administrative Investment Expenses
Life Insurance Fund
Fiscal Year Ended June 30, 2018

INVESTMENT COUSELOR FEES		
International Equity		
Blackrock All Country World ex US IMI	$	
Real Estate		
TA Realty Core Property Fund		1,027
Additional Categories		
Marathon TRS/Credit Fund LP		2,167
ADMINISTRATIVE AND OPERATIONAL EXPENSES		
CUSTODIAN		
The Bank of New York Mellon		4,412
Total Custodian Fees	**$**	**4,412**
OTHER		
Other Administrative and Operational		105,847
Total Other Fees	**$**	**105,847**
Total Investment Expenses	**$**	**113,453**

Ten Largest Stock Holdings Ranked * **
by Fair Values
June 30, 2018

Rank	Description	Fair Value	Percentage of Equities
1	Apple Inc	$ 202,567,539	1.60 %
2	Amazon.com Inc	186,765,525	1.47
3	Microsoft Corp	146,875,848	1.16
4	Facebook Inc	137,293,298	1.08
5	JP Morgan Chase & Co	113,547,574	0.90
6	United Health Group Inc	100,765,063	0.80
7	Alphabet Inc-CL C	92,907,985	0.73
8	Alphabet Inc-CL A	88,998,239	0.70
9	Visa Inc	79,317,683	0.63
10	Bank of America Corp	79,138,464	0.62

* *Includes only actively managed separate accounts.*

** *Detailed information concerning these values along with book values and cost of all TRS investments is available upon request.*

Top Ten Fixed Income Holdings *
by Fair Values
June 30, 2018

Rank	Description	Maturity	Coupon	Par Value	Fair Value	Percent of Fixed Income
1	U.S. Treasury Note	11/15/2027	2.250	89,500,000	$ 85,077,442	2.80%
2	U.S. Treasury Note	1/15/2021	2.000	73,830,000	72,751,389	2.40
3	U.S. Treasury Note	5/15/2028	2.875	64,975,000	65,104,443	2.14
4	U.S. Treasury Note	3/31/2023	2.500	64,205,000	63,562,950	2.09
5	U.S. Treasury Note	5/15/2026	1.625	45,000,000	41,162,695	1.36
6	U.S. Treasury Bond	8/15/2023	6.250	31,900,000	37,224,559	1.23
7	U.S. Treasury Note	12/31/2022	2.125	37,500,000	36,558,105	1.20
8	U.S. Treasury Note	6/30/2022	1.750	34,870,000	33,619,583	1.11
9	U.S. Treasury Bond	2/15/2048	3.000	33,224,000	33,335,612	1.10
10	U.S. Treasury Note	5/15/2024	2.500	31,000,000	30,513,203	1.01

* *Detailed information concerning these values along with book values and cost of all TRS investments is available upon request.*

Transaction Commissions Fiscal Year Ended June 30, 2018

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Abel Noser	6,541,550.00	57,723.60	0.009	4.22 %
Allen & Co.	14,400.00	268.00	0.019	0.02
Barclays Capital, London	1,400.00	10.50	0.008	0.00
Barclays	338,661.00	6,549.54	0.019	0.48
Blair, William & Co.	31,135.00	921.11	0.030	0.07
BMO Capital Markets	193,515.00	1,973.28	0.010	0.14
BTIG	167,435.00	5,824.06	0.035	0.43
Burke & Quick Partners LLC	3,724.00	130.36	0.035	0.01
Canaccord Genuity, Inc.	18,372.00	387.57	0.021	0.03
Cantor Fitzgerald & Co.	7,165.00	265.28	0.037	0.02
CIBC Worldmarket	39,648.00	1,397.44	0.035	0.10
Citigroup Global	442,997.00	7,627.47	0.017	0.56
Collins Stewart LLC	100.00	3.50	0.035	0.00
ConvergEx - Algos	16,537,180.00	82,685.97	0.005	6.05
ConvergEx - FS	3,368,876.00	33,688.76	0.010	2.46
ConvergEx - Transitions	4,410,100.00	35,656.86	0.008	2.61
ConvergEx ADR Conversions	20,070,833.00	258,025.49	0.013	18.88
Cornerstone	491,054.00	14,728.92	0.030	1.08
Cowen & Co.	95,438.00	2,400.69	0.025	0.18
Credit Suisse Sec. LLC	1,146,368.00	30,800.93	0.027	2.25
Cuttone & Co Inc	28,530.00	328.30	0.012	0.02
D A Davidson & Co.	400.00	14.00	0.035	0.00
Default broker	39,089,030.87	149.34	0.000	0.01
Deutsche Bank	311,611.00	4,464.72	0.014	0.33
Evercore Group LLC	9,172.00	112.63	0.012	0.01
Fidelity Capital Markets	38,648.00	828.96	0.021	0.06
First Kentucky Securities Corp	121,000.00	3,630.00	0.030	0.27
Freidman Billings	40,314.00	875.93	0.022	0.06
Goldman Sachs	249,571.00	6,906.40	0.028	0.51
Green Street Advisors	3,900.00	102.00	0.026	0.01
Guggenheim Capital Markets	838.00	25.14	0.030	0.00
ICBC Financial Services	29,983.00	977.86	0.033	0.07
Instinet	294,150.00	2,375.55	0.008	0.17
Internal	3,386.00			0.00
Investment Tech Grp Transition	32,787,240.00	245,905.65	0.008	17.99
Investment Technology Grp.	12,415,535.00	119,469.49	0.010	8.74
ISI Algos	2,765,515.00	27,655.15	0.010	2.02
ISI Group	1,146,358.00	28,079.04	0.024	2.05
J.J.B. Hilliard, W.L. Lyons	437,217.00	13,116.51	0.030	0.96
Janney Montgomery Scott Inc.	13,766.00	386.49	0.028	0.03
Jefferies & Co.	240,466.00	5,091.25	0.021	0.37
JMP Securities	7,900.00	228.00	0.029	0.02
Jones & Associates	43,617.00	1,443.57	0.033	0.11
JP Morgan & Chase	534,702.00	9,108.37	0.017	0.67
Keefe Bruyette & Woods	22,296.00	804.18	0.036	0.06
Keybanc Capital Total	14,137.00	502.74	0.036	0.04
Leerink Swann & Co.	30,488.00	574.50	0.019	0.04
Liquidnet Inc - Transition	401,762.00	3,013.25	0.008	0.22
Liquidnet Inc.	6,381,388.00	63,443.56	0.010	4.64
Longbow Securities LLC	2,400.00	84.00	0.035	0.01
Luminex Trading	2,600.00	6.50	0.003	0.00
MacQuarie Securities Inc.	6,224.00	201.72	0.032	0.01
Merrill Lynch ADR Conversions	108,029.00	3,240.87	0.030	0.24
Merrill Lynch	2,188,291.00	50,405.50	0.023	3.69
Miller Tabak & Co. LLC	1,685.00	33.70	0.020	0.00
Mizuho Securities, USA	4,652.00	162.82	0.035	0.01
MKM Partners	7,796.00	272.86	0.035	0.02

continued on next page

Transaction Commissions continued

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE	% OF TOTAL
Morgan Stanley	372,556.00	9,294.55	0.025	0.68
National Financial Services Corp.	3,600.00	27.00	0.008	0.00
Needham	4,734.00	122.93	0.026	0.01
Pershing LLC	117,512.00	2,500.09	0.021	0.18
Piper Jaffray	25,140.00	752.08	0.030	0.06
Pulse Trading	11,474.00	114.74	0.010	0.01
R W Baird	75,585.00	2,334.58	0.031	0.17
Raymond James & Assoc.	1,760,287.00	52,976.40	0.030	3.88
RBC Capital Markets	5,928,599.00	35,041.07	0.006	2.56
RBC Dain Rauscher Inc.	300.00	2.40	0.008	0.00
Renaissance Macro Securities	8,100.00	162.00	0.020	0.01
Sandler O'Neill	5,959.00	154.53	0.026	0.01
Sanford C Bernstein	400,297.00	3,360.64	0.008	0.25
Scotia Capital, USA	13,745.00	383.86	0.028	0.03
Sidoti & Company LLC	6,529.00	151.88	0.023	0.01
State Street Global	9,320.00	376.86	0.040	0.03
Stephens Inc.	20,030.00	459.68	0.023	0.03
Stifel, Nicolaus & Co.	704,637.00	21,428.31	0.030	1.57
Suntrust Robinson	30,450.00	1,003.13	0.033	0.07
Susquehanna Brokerage	18,173.00	636.06	0.035	0.05
Telsey Advisory Group LLC	21,430.00	732.07	0.034	0.05
Tradebook	6,835,955.00	34,179.85	0.005	2.50
UBS/Paine Webber Securities	270,791.00	6,741.90	0.025	0.49
UBS/Paine Webber-Louisville	570,162.00	17,104.86	0.030	1.25
Virtu Americas LLC	2,722.00	97.67	0.036	0.01
Wall Street Access	229,398.00	1,269.28	0.006	0.09
Wedbush Morgan Securities	8,536.00	277.72	0.033	0.02
Weeden & Co.	1,159,317.00	35,235.24	0.030	2.58
Wells Fargo Securities, LLC	62,329.00	1,833.98	0.029	0.13
Williams Capital Group	63,746.00	2,231.11	0.035	0.16
Wolfe Research Securities	20,343.00	595.86	0.029	0.04
Zacks & Company	4,000.00	92.00	0.023	0.01
TOTALS	**172,470,304.87**	**$ 1,366,764.21**	**0.008**	**100.00%**

The acquisition of initial public offerings (IPOs) represented a portion of small-capitalization stock purchases. IPOs usually have a high commission rate; however, the security issuers and not the investors pay the commissions. In Fiscal Year 2018, the retirement annuity trust fund bought small capitalization IPOs that gerenerated $279,303 in commissions. Although these commissions were not paid by tTRS, they resulted from the retirement annuity trust fund's investment activities and are included in the total commissions of $1,366,764. Typical stock transactions occur at lower commission rates than IPO transactions, frequently at $0.03 per share or less. Investment companies usually provide investment research for brokerage clients.

PROXY VOTING AND CORPORATE BEHAVIOR

TRS regularly votes proxy statements associated with its equity ownership. The positions assumed by TRS are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of TRS to social or political protests. At the same time, TRS expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The board has adopted the following position on corporate behavior:

The board's stated fiduciary duty is to obtain the highest return for the fund commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the fund as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the fund has invested.

The board expects the managements of the companies whose equity securities are held in the fund's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission and others that are covered by the laws of the U.S. Government or the state of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the System's holdings in the company, if the sale is consistent with sound investment policy.

SECURITY LENDING

TRS operates its security lending program through its custodian, Bank of New York Mellon (BNYM), under contract. Securities lending occurs when TRS transfers a security to the borrower, such as a broker-dealer or bank, for cash collateral pursuant to an agreement to return the identical security in the future. Securities are borrowed for a variety of reasons including: settlement of short sales and to cover hedges, options, arbitrage positions and settlement fails. Consequently, the borrower receives custody of the transferred security. The borrower, however, is obligated to return the exact same security at the end of the loan period and to make the retirement system whole for dividends, interest and other distributions as if the security remained in the retirement system's portfolio.

The restrictions applying to loanable securities are as follows:

- There is no limit on the amount of government securities that can be loaned.
- There will be a limit of 30% of the equity portfolio. Securities may be loaned from any equity portfolio.
- A maximum of 50 corporate bonds may be on loan at any time.

TRS maintains with BNYM an approved borrowers list to which TRS will lend securities. The approved borrowers list is comprised of large, high-quality brokers, and TRS has discretion to add or remove names from the list.

BNYM acts as lending agent in exchanging securities for collateral. The collateral provided in exchange for securities may include cash or non-cash collateral. For a loan of U.S. securities, collateralization of 102% or greater of the market value of the securities lent is required. For a loan of foreign securities, collateralization of 105% or greater of the market value of the securities lent is required. BNYM bears the risk of loss of any cash or non-cash collateral.

Cash collateral may be invested in any of the following:

- Government securities
- Repurchase and reverse repurchase transactions with approved counterparties

Staff closely monitors the lending program to make sure that BNYM is in compliance with lending restrictions. BNYM provides a detailed listing of all securities that are on loan on a daily basis. They also provide a summary report that lists the market value of securities on loan with a particular borrower and the collateral value that the borrower has provided to cover the loan. The collateralization percentage for each broker also is listed.

KENTUCKY INVESTMENTS

TRS always is cognizant of its significant role in the commonwealth's economy. Over $2 billion in benefits are distributed to members and annuitants living in Kentucky annually. Approximately $275 million of the retirement annuity trust fund's investments directly impact the commonwealth. These investments include: commercial real estate; bonds issued by public agencies of the commonwealth and those of local municipalities; pools of single-family mortgages in Kentucky; financing for multi-family housing; and investments in companies that have an impact on the commonwealth's economy but receive earnings from global operations. Fiduciary duty requires that investments be made solely for the benefit of TRS's members and annuitants. Investments that benefit the commonwealth's economy are made only when fully consistent with this fiduciary duty.

Professional Service Providers

Investment Consultant
Aon Hewitt

Investment Custodian
The Bank of New York Mellon

Fixed Income Managers
Galliard Capital Management
Fort Washington Investment Advisors

Domestic Equity Managers
Todd Asset Management
UBS Global Asset Management
Wellington Management Co.
GE Asset Management
Fort Washington Investment Advisors

International Equity Managers
Todd Asset Management
UBS Global Asset Management
Baring Asset Management Inc.
Baillie Gifford
BlackRock Institutional Trust Co.

Real Estate Managers
Prudential Real Estate Investors
Carlyle Realty Partners
Blackstone Real Estate Partners
Rockwood Capital Real Estate
The Realty Associates
Angelo Gordon & Co.
Landmark Real Estate Partners

Alternative Investment Managers
Molpus Woodlands Group
Hancock Natural Resources Group
Kohlberg Kravis Roberts & Co.
Chrysalis Ventures
Fort Washington Private Equity Investors
Alinda Capital Partners
Riverstone Holdings
CapitalSouth Partners
Landmark Partners
Lexington Partners
Oaktree Capital Management
Stepstone Pioneer Capital
Audax Group
J.P. Morgan Asset Management
Hellman & Friedman Capital Partners
Natural Gas Partners
Apax Partners
Actis
Carlyle Global Partners
Public Pension Capital
IFM Investors
Gavea Investimentos

Additional Categories Investment Managers
Avenue Capital Group
Marathon Asset Management
Fort Washington Investment Advisors
Oaktree Capital Management
Shenkman Capital Management Inc.
Highbridge Principal Strategies
Angelo Gordon & Co.
Golub Capital
Barings Asset Management Inc.
Columbia Threadneedle Investments

Attorney
Ice Miller
Reinhert, Boerner, Van Deuren

HEALTH INSURANCE TRUST FUND

INVESTMENT POLICY SUMMARY

The statute that created the Health Insurance Trust Fund on July 1, 2010, KRS 161.677, obliges the board to "manage the assets of the fund in the same general manner in which it administers the retirement funds, except that the asset allocation may differ and separate accounting and financial reporting shall be maintained for the trust fund." KRS 161.430, which governs the investment of funds for the retirement funds, requires that members' assets be managed in a manner consistent with fiduciary standards set forth in the prudent person rule. Subject to this statute, administrative regulation 102 KAR 1:178 establishes investment policies for the health insurance trust fund. This regulation requires the board and Investment Committee to diversify assets prudently and to consider the fund's "liquidity and its capability of meeting both short and long-term obligations" in setting asset allocation policy.

Due to an imbalance of required distributions over contributions early in the fund's existence, liquidity needs have dominated investment policy. This will evolve as contribution rate increases provided in statute improve cash flow in future years. As near-term liquidity needs recede in importance, the focus will increasingly be on establishing an investment policy which achieves the required rate of return and matches the health insurance liability.

INVESTMENT OBJECTIVES

The definitive objective of the Health Insurance Trust Fund is to provide for beneficiaries' health insurance benefit obligations, both short and long term. In support of this objective, investment policy will be designed, on an ongoing basis, to: meet all liquidity needs, achieve the actuarially assumed 8.0% rate of return over the long term, and do so within appropriate risk levels.

RISK CONTROLS

Any investment program faces various risks; as with the retirement fund, the primary risk is that the assets will not support liabilities over the long-term. Risk control measures for the Health Insurance Trust Fund mirror those of the Retirement Annuity Trust Fund, but are customized to reflect the fund's unique liability. Primary risk-control measures include the following steps:

- Actuarial valuations are performed each year to evaluate the funding objectives of the health insurance trust fund. Every 10 years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the fund.
- Asset/liability studies are conducted approximately every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the fund.
- In accordance with administrative regulation 102 KAR 1:178, which governs investment policies for the fund, the TRS Investment Committee adopts and regularly reviews an asset allocation policy designed to meet the fund's needs.

ASSET ALLOCATION

As of June 30, 2018, the Health Insurance Trust Fund had approximately $1,061.2 billion in total assets. This included $92.4 million in investment-grade bonds. This trust fund also had $88.7 million in high-yield bonds, $607.1 million in public equity investments, $81.2 million in private equity investments, $41.4 million in bank loan investments, $57.8 million in alternative credit funds and $62.9 million in real estate funds.

Asset allocation will be adjusted annually by the Investment Committee to reflect changing liquidity needs and actuarial funding status. Due to upcoming contribution rate increases enacted in statute, liquidity needs are expected to decline in coming years while funding status improves. The information below shows the health insurance trust fund's asset allocation by market value as of June 30, 2018 and 2017.

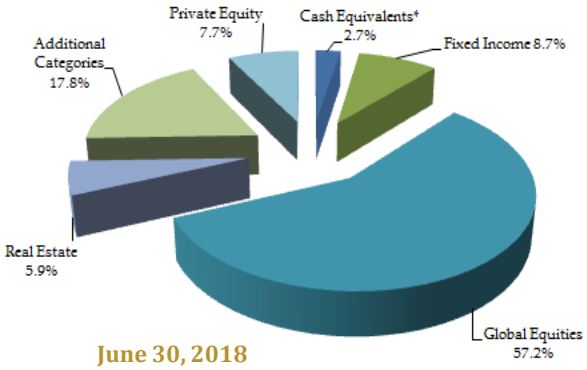
Health Insurance Trust

	June 30, 2018 **	%	June 30, 2017	%
Cash Equivalents*	$ 28,906,910	2.7	$ 19,312,440	2.4
Fixed Income	92,417,014	8.7	73,252,237	9.0
Global Equities	607,134,943	57.2	474,453,790	58.2
Real Estate	62,962,565	5.9	42,701,494	5.2
Additional Categories	81,232,638	17.8	163,246,284	20.2
Private Equity	188,639,147	7.7	42,340,364	5.0
TOTALS	**$ 1,061,293,217**	**100.0**	**$ 815,306,609**	**100.0**

* *Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

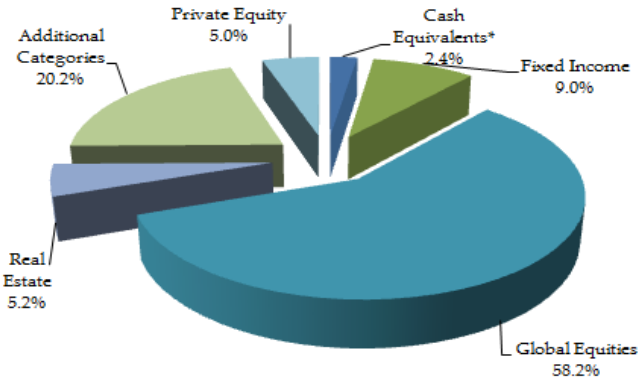
** *Does not include 401(h) value of $20,896,588.*

Distribution of Investments Health Insurance Trust Fair Values



June 30, 2018

June 30, 2017



** Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.*

HEALTH INSURANCE TRUST
PORTFOLIO RETURNS

For the fiscal year 2018, the health insurance trust fund's portfolio returned 8.86% versus a policy index of 8.70%. The fund's global equities returned 11.54% versus 11.14% for the MSCI All Country World IMI Index. All cap equities returned 11.66% versus 14.78% for the Russell 3000 Index. A high-quality bond fund returned -0.60% versus -0.63% for the Barclays Government/Credit Index. This was the third year of managing the bond fund against this index. In the previous years it was managed against 90-day T-bills. TRS is working to extend duration but given the historically low interest rates TRS is being very selective at our extension points. The additional categories returned 3.12% versus 2.53% for its benchmark (Bank of America Merrill Lynch High Yield Master II).

Prior to July 1, 2015 TRS did not benchmark overall fund performance. Effective July 1, 2015 the Board of Trustees approved a policy index that represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year. Returns were generated by the Segal Marco Advisors performance reporting system using a time-weighted rate of return calculation based upon market values.

Schedule of Investment Returns – Health Insurance Trust – Gross

		Market Value	1-year	3-year*	5-year*	10-year	20-year
TOTAL PLAN	$	1,061,293,216	8.86	7.10	7.56		
Policy Benchmark**				*8.70*	*7.61*		
Total Equity	$	607,134,943	11.53	8.60	9.95		
All Cap Equities	$	35,488,410	11.66				
Russell 3000			*14.78*				
Global Equities	$	571,646,533	11.54	8.76	10.05		
MSCI AC World IMI (Net)			*11.14*	*8.34*	*9.60*		
Fixed Income	$	92,417,014	-0.60	1.48	1.24		
Barclays Government Credit			*-0.63*	*1.83*	*2.29*		
Core Real Estate	$	28,142,914	7.24				
NCREIF ODCE (VW)			*8.44*				
Non-Core Real Estate	$	34,819,650	13.95	15.34			
NCREIF Property Index			*7.19*	*8.25*			
Private Equity	$	81,232,638	19.76	17.03	16.12		
Mature Private Equity	$	8,214,217	13.64	15.29	14.15		
S&P 500 plus 3%			*17.81*	*15.29*	*16.82*		
Private Equity < 5 Years	$	73,018,421	20.86	17.44	16.37		
Additional Categories:	$	188,639,147	3.12	3.92	4.52		
B of A Merrill Lynch High Yield Master II			*2.53*	*5.55*	*5.51*		
Cash (Unallocated)	$	28,906,910	1.41	0.72	0.46		
90 Day T-Bill			*1.36*	*0.64*	*0.40*		

* *Returns are annualized for periods longer than one year.*

** *Prior to July 1, 2015, TRS did not benchmark overall fund performance. Effective July 1, 2015, the Board of Trustees approved a policy index that represents the returns of appropriate benchmarks for the various asset classes weighted by the midpoint of the strategic range for the current fiscal year.*

SCHEDULE OF INVESTMENT RETURNS – HEALTH INSURANCE TRUST

Annual Rate of Return Net of Investment Expense

2018	8.44%
2017	14.37
2016	-2.20
2015	1.38
2014	15.38

HEALTH INSURANCE TRUST
PORTFOLIOS FAIR VALUES *
June 30, 2018

INTERNALLY MANAGED	
Cash Equivalents	
Cash Collections Fund (Unallocated)	$ 28,906,910
Fixed Income	
Internal Bond Fund	92,417,014
Subtotal	**$ 121,323,924**

EXTERNALLY MANAGED	
Domestic Equity	
Ft. Washington Focused Equity	35,488,411
International Equity	
Blackrock Fund B	571,646,533
Real Estate	
Blackstone Partners VIII	5,943,555
Carlyle Realty Partners VII	6,689,277
Carlyle Realty Partners VIII	1
Carlyle Property Advisors	10,797,661
Landmark Real Estate Partners Fund VII	6,514,456
Landmark Real Estate Partners Fund VIII	1,250,519
Prudential PRISA Fund	11,934,186
Rockwood Capital Real Estate Fund X	4,136,723
The Realty Associates Fund XI	10,285,119
TA Realty Core Property Fund	5,411,067

Externally Managed continued	
Alternative Investments	
Actis Global Fund IV	4,034,928
APAX IX	4,620,556
Audax Private Equity Fund V	5,909,985
Carlyle Europe Partners IV	7,820,364
Carlyle Global Financial Services Partners III	1,818,412
Fort Washington PE Opportunities Fund III	4,618,511
Fort Washington Fund VII	4,179,289
Fort Washington Fund VIII	7,308,871
Fort Washington Fund IX	2,495,226
Fort Washington Fund IX-K	2,072,875
KKR & Co European Fund IV	7,758,012
KKR Americas Fund XII	1,452,451
Landmark Equity Partners Fund XV	2,300,715
NGP Natural Resources XI	9,756,664
NGP Natural Resources XII	1,939,568
Oaktree European Principal Fund IV	6,083,406
Riverstone E & P Fund VI	7,062,805
Additional Categories	
Columbia High Yield Fund	43,902,504
Fort Washington High Yield Bond Fund	44,873,033
Highbridge Principal Strategies III	2,146,955
Marathon European Credit Opp Fund II	3,483,347
Marathon European Credit Opp Fund III	6,643,851
Marathon TRS/Credit Fund	41,599,592
Oaktree European Capital Solutions Fund	4,264,407
Oaktree Opportunities Xb	250,000
Shenkman Capital Management	41,475,458
Subtotal	**$ 939,969,293**

TOTAL ASSETS **$ 1,061,293,217** **

* *Detailed information concerning the market values of all TRS investments is available upon request.*

** *Does not include 401(h) value of $20,896,588.*

Investment Summary
Fair Values – Health Insurance Trust
June 30, 2018

Type of Investment	Fair Value June 30, 2017	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value June 30, 2018
Cash Equivalents	$ 26,537,098	$ 417,376,976	$	$ 407,817,028	$ 36,097,046
Fixed Income	70,283,077	38,239,097	(2,758,890))	16,081,353	89,681,931
Real Estate	42,701,494	24,984,288	5,085,890	9,809,108	62,962,565
Equities	473,274,401	80,784,054	56,040,467	4,393,055	605,705,867
Alternative	42,340,364	41,065,841	12,994,803	15,168,369	81,232,638
Additional Categories	160,170,175	84,517,119	(2,407,780)	56,666,343	185,613,170
TOTAL	**$ 815,306,609**	**$ 686,967,375**	**$ 68,954,490**	**$ 509,935,256**	**$ 1,061,293,217**

Does not include 401(h) value of $20,896,588.

Health Insurance Trust Fund
Contracted Investment Management Expenses
Fiscal Year Ended June 30, 2018
(In thousands of dollars)

Investment Counselor Fees	Assets Under Management	Expense	Basis Points *
Equity Manager(s)			
Fixed Income Manager(s)	$ 607,135	$ 315	5.2
Real Estate **			
Additional Categories	62,963	998	158.5
Alternative Investments **	188,639	977	51.8
	81,233	1,313	161.6
TOTAL	**$ 939,970**	**$ 3,603**	**38.3**
Other Investment Services			
Custodian Fees	$ 1,061,293	$ 84	0.8
Consultant Fees			0.0
Legal & Research			0.0
Other Administrative and Operational		256	2.4
TOTAL	**$ 1,061,293**	**340**	**3.2**
GRAND TOTAL		**$ 3,943**	**37.2**

* *One basis point is one hundredth of one percent or the equivalent of .0001.*
** *Depending on contract terms, private equity fees are either withheld from the fund operations or paid by direct disbursement.*

Schedule of Contracted and Administrative Investment Expenses
Health Insurance Trust Fund
Fiscal Year Ended June 30, 2018

INVESTMENT COUNSELOR FEES

DOMESTIC EQUITY	
Fort Washington Focused Equity	120,165
Total Equity Managers	**$ 120,165**
INTERNATIONAL EQUITY	
Blackrock Fund B	194,711
Total International Managers	**$ 194,711**
REAL ESTATE	
Blackstone Partners VIII	150,000
Carlyle Realty Partners VII	125,946
Carlyle Realty Partners VIII	113,729
Carlyle Property Advisors	54,142
Landmark Real Estate Partners Fund VII	100,000
Landmark Real Estate Partners Fund VIII	116,426
Prudential PRISA Fund	89,402
Rockwood Capital Real Estate Fund X	98,110
The Realty Associates Fund XI	139,656
TA Realty Core Property Fund	10,274
Total Real Estate Managers	**$ 997,685**
ALTERNATIVE INVESTMENTS	
Actis Global Fund IV	64,000
APAX IX	117,909
Audax Private Equity Fund V	
Carlyle Europe Partners IV	98,840
Carlyle Global Financial Services Parnters III	79,521
Fort Washington PE Opportunities Fund III	15,549
Fort Washington Fund VII	30,377
Fort Washington Fund VIII	36,000
Fort Washington Fund IX	17,271
Fort Washington Fund IX-K	17,025
Alternative Investment Managers continued	
KKR Americas Fund XII	102,520
KKR & Co European Fund IV	133,162
Landmark Equity Partners Fund XV	50,000
NGP Natural Resources XI	141,262
NGP Natural Resources XII	114,726
Oaktree European Principal Fund IV	157,043
Riverstone E & P Fund VI	137,854
Total Alternative Investment Managers	**$ 1,313,059**
ADDITIONAL CATEGORIES	
Columbia High Yield Fund	167,497
Fort Washington High Yield Bond Fund	82,245
Highbridge Principal Strategies III	48,080
Marathon European Credit Opp Fund II	52,667
Marathon European Credit Opp Fund III	66,924
Marathon TRS/Credit Fund	356,815
Oaktree European Capital Solutions Fund	35,051
Shenkman Capital Management	168,127
Total Additional Category Managers	**$ 977,406**

ADMINISTRATIVE AND OPERATIONAL EXPENSES

CUSTODIAN	
The Bank of New York Mellon	84,018
Total Custodian	**$ 84,018**
OTHER	
Other Administrative and Operational (includes Personnel, Subscription services, etc…)	255,698
Total Other	**$ 255,698**
TOTAL INVESTMENT EXPENSES	**$ 3,942,742**

HEALTH INSURANCE TRUST PROFESSIONAL SERVICE PROVIDERS

Investment Consultant
Aon Hewitt

Investment Custodian
The Bank of New York Mellon

Additional Categories Managers
Fort Washington Investment Advisors
Shenkman Capital Management Inc.
Highbridge Principal Strategies
Marathon Asset Management
Oaktree Capital Management
Columbia Threadneedle Investments

Real Estate
Carlyle Realty Partners
Landmark Real Estate Partners
Blackstone Real Estate Partners
The Realty Associates
Prudential Real Estate Investors
Rockwood Capital Real Estate

Alternative Investment Managers
Fort Washington Private Equity Investors
Actis
Landmark Partners
Kohlberg Kravis Roberts & Co.
Natural Gas Partners
Carlyle Global Partners
Audax Group
Riverstone Holdings
Apax Partners

Equity Manager
BlackRock Institutional Trust Co.
Fort Washington Investment Advisors

Attorney
Ice Miller

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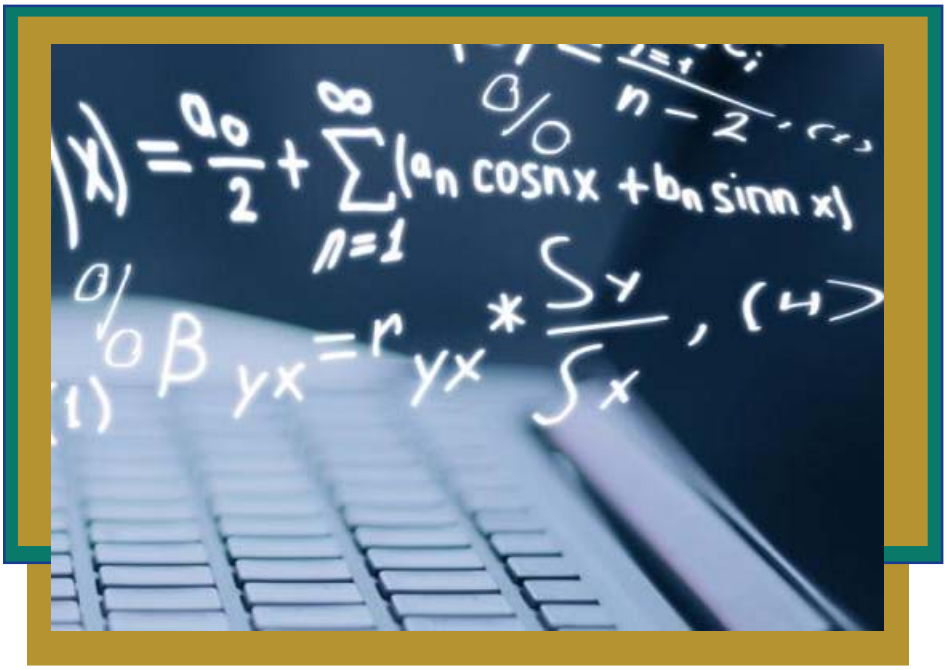
Teachers' Retirement System of the State of Kentucky

2018



Actuarial Section

Report of the Actuary
Annual Valuation
of the Defined Benefit Plan

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 12, 2018

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2018. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contribution rates as a percentage of payroll for the fiscal year ending June 30, 2021 required to support the total benefits of the System are as follows:

Group	Combined Member and State Contribution Requirement
University members hired before July 1, 2008	35.60%
University members hired on or after July 1, 2008	36.60%
Non-University members hired before July 1, 2008	38.56%
Non-University members hired on or after July 1, 2008	39.56%

These rates represent an increase since the previous valuation in the total Pension actuarially determined employer contribution rates (ADEC) of 0.05% of payroll for the fiscal year ending June 30, 2021.

A breakdown of the changes in the components of the ADEC are as follows:

- a decrease in the expected state special appropriation from 3.00% to 2.89%, or 0.11% of payroll
- an increase in the amount required for life insurance benefits from 0.05% to 0.06%, or 0.01% of payroll
- the additional required increase of 0.17%, from 14.10% to 14.27%

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the total unfunded actuarial accrued liability that is being amortized by regular annual contributions as a level percentage of payroll in accordance with the funding policy adopted by the Board, on the assumption that payroll will increase by 3.5% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System.

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We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This actuarial valuation was performed to determine the recommended funding amount for the System. The asset values used to determine unfunded actuarial accrued liabilities and funded ratios are not market values but less volatile market related values. A smoothing technique is applied to market values to determine the market-related values. The unfunded actuarial accrued liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return of assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

In our opinion, the System has not been funded on an actuarially sound basis since, historically, the full actuarially determined contributions were not made by the employer. However, an additional appropriation of $474.7 million was made during fiscal year 2018 and it is our understanding that the state budget includes additional appropriations to the pension plan for fiscal years 2019 and 2020. If contributions by the employer to the System in subsequent fiscal years are less than those required, the assets are expected to become insufficient to pay promised benefits. However, assuming that contributions to the System are made by the employer and state from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Cathy Turcot
Principal and Managing Director

Report of Actuary on the Valuation
Prepared as of June 30, 2018
Section I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (dollar amounts in thousands):

Valuation Date	June 30, 2018	June 30, 2017
Number of active members	72,205	72,130
Annual salaries	$ 3,605,116	$ 3,563,584
Number of annuitants and beneficiaries	54,377	52,966
Annual allowances	$ 2,043,518	$ 1,953,464
Assets		
Market value	$ 19,981,633	$ 18,707,699
Actuarial value	19,496,056	18,514,638
Actuarial Accrued Liability	$ 33,795,671	$ 32,819,887
Unfunded actuarial accrued liability (UAAL)	$ 14,299,615	$ 14,305,248
Funded Ratio	57.7 %	56.4 %
Amortization period (years)	26.5	27.4

Contribution Rates for University Members

Valuation Date	June 30, 2018		June 30, 2017	
For Fiscal Year Ending	June 30, 2021		June 30, 2020	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	10.690 %	10.690 %	10.800 %	10.800 %
Actuarial Accrued liability	24.910	25.910	24.750	25.750
Total	35.600 %	36.600 %	35.550 %	36.550 %
Member	7.625 %	7.625 %	7.625 %	7.625 %
State (ARC)	27.975	28.975	27.925	28.925
Total	35.600 %	36.600 %	35.550 %	36.550 %
Life Insurance Fund:				
State	0.060 %	0.060 %	0.050 %	0.050 %
Medical Insurance Fund:				
Member	2.775 %	2.775 %	2.775 %	2.775 %
State Match	2.775	1.775	2.775	1.775
Total	5.550 %	4.550 %	5.550 %	4.550 %
Total Contributions	41.210 %	41.210 %	41.150 %	41.150%
Member Statutory	10.400 %	10.400 %	10.400 %	10.400 %
State Statutory	13.650	13.650	13.650	13.650
Required Increase	14.270	14.270	14.100	14.100
State Special	2.890	2.890	3.000	3.000
Total	41.210 %	41.210 %	41.150 %	41.150 %

Contribution Rates for Non-University Members

Valuation Date	June 30, 2018		June 30, 2017	
For Fiscal Year Ending	June 30, 2021		June 30, 2020	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan:				
Normal	14.760 %	14.760 %	14.840 %	14.840 %
Accrued liability	23.800	24.800	23.670	24.670
Total	38.560 %	39.560 %	38.510 %	39.510 %
Member	9.105 %	9.105 %	9.105 %	9.105 %
State (ARC)	29.455	30.455	29.405	30.405
Total	38.560 %	39.560 %	38.510 %	39.510 %
Life Insurance Fund:				
State	0.060 %	0.060 %	0.050 %	0.050 %
Medical Insurance Fund:				
Member	3.750 %	3.750 %	3.750 %	3.750 %
State Match	3.750	2.750	3.750	2.750
Total	7.500 %	6.500 %	7.500 %	6.500 %
Total Contributions	46.120 %	46.120 %	46.060 %	46.060 %
Member Statutory	12.855 %	12.855 %	12.855 %	12.855 %
State Statutory	16.105	16.105	16.105	16.105
Required Increase	14.270	14.270	14.100	14.100
State Special	2.890	2.890	3.000	3.000
Total	46.120%	46.120%	46.060 %	46.060 %

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2018 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. The assumed investment rate of return is 7.50%. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation.

5. Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. There have been no changes since the previous valuation.

6. The funded ratio shown in the Summary of Principal Results, is the ratio of actuarial value of assets to the actuarial accrued liability. The funded status would be different based on the market value of assets. The funded ratio is an indication of progress in funding the promised benefits. Since the ratio is less than 100%, there is a need for additional contributions toward the payment of the unfunded actuarial accrued liability. In addition, this funded ratio does not have any relationship to measuring the sufficiency if the plan had to settle its liabilities.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the system for use as a basis of the valuation were furnished by the retirement system office. The following table shows the number of active members and their annual salaries as of June 30, 2018 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000's)
University hired before 7/1/2008	1,578	$ 118,570
University hired after 7/1/2008	1,579	83,582
Non-University Full Time hired before 7/1/2008	34,000	2,259,772
Non-University Full Time hired after 7/1/2008	22,526	1,065,810
Non-University Part Time hired before 7/1/2008	2,098	18,041
Non-University Part Time hired after 7/1/2008	10,424	59,341
TOTAL	**72,205**	**$ 3,605,116**

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the retirement system as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2018

Group	Number	Annual Retirement Allowances[1] ($1,000's)
Service Retirements	47,495	$ 1,863,635
Disability Retirements	2,831	85,270
Beneficiaries of Deceased Members	4,051	94,613
TOTAL	**54,377**	**$ 2,043,518**

[1] *Includes cost-of-living adjustments effective through July 1, 2018.*

In addition, there are 8,814 terminated vested employees entitled to benefits in the future and 44,031 inactive non-vested members.

3. Table 1 of Schedule G shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2018, the market value of Pension Plan assets for valuation purposes held by the System amounted to $19,981,633,096. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes. The estimated market investment return for the plan year was 10.50%. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2018 was $19,496,055,514. The estimated investment return for the plan year ending June 30, 2018 on an actuarial value of assets basis was 9.14%, compared to the assumed investment rate of return for the period of 7.50%. Schedule B shows the development of the actuarial value of assets as of June 30, 2018.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2018. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.

2. The valuation balance sheet shows that the System has total prospective liabilities of $16,515,254,593 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $21,525,543,928 of which $720,598,026 is for special appropriations remaining to be made toward funding ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $396,936,901. The total prospective liabilities of the System amounts to $38,437,735,422. Against these liabilities, the System has present assets for valuation purposes of $19,496,055,514. When this amount is deducted from the total liabilities of $38,437,735,422, there remains $18,941,679,908 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and actuarial accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 10.69% of payroll for University and 14.76% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,642,064,420. When this amount is subtracted from $18,941,679,908, which is the present value of the total future contributions to be made by the employer, there remains $14,299,615,488 as the amount of future unfunded actuarial accrued liability contributions.

5. The unfunded actuarial accrued liability decreased by approximately $5.6 million for the plan year ending June 30, 2018 and the funding ratio increased from 56.4% to 57.7%. See Section VII for a complete breakdown of the experience of the System.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member contribute 10.400% of annual salary to the System and each non-university member contribute 12.855% of annual salary. Of this amount, for each university member, 2.775% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.75% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of

active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.06% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 14.27% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded actuarial accrued liability of the Pension Plan based on the funding policy adopted by the Board. An additional special appropriation of 2.89% of total payroll will be made by the State. Therefore, the total actuarially determined employer contribution rate to the Pension Plan is 27.975% for university members who become members before July 1, 2008 and 28.975% for university members who become members on or after July 1, 2008. The total actuarially determined employer contribution rate to the Pension Plan is 29.455% for non-university members who become members before July 1, 2008 and 30.455% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown on the following table:

Contribution Rates by Source
University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	10.400 %	10.400 %
Statutory Medical Insurance Fund	(2.775)	(2.775)
Contribution to Pension Plan	7.625 %	7.625 %
Employer		
Statutory Matching Total	10.400 %	10.400 %
Statutory Medical Insurance Fund	(2.775)	(1.775)
Supplemental Funding	3.250	3.250
Subtotal	10.875 %	11.875 %
Life Insurance	(0.060) %	(0.060) %
Additional to Comply with Board Funding Policy	14.270	14.270
Special Appropriation	2.890	2.890
Contribution to Pension Plan	27.975 %	28.975 %
Total Contribution to Pension Plan	**35.600 %**	**36.600 %**

Contribution Rates by Source
Non-University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Member		
Statutory Total	12.855 %	12.855 %
Statutory Medical Insurance Fund	(3.750)	(3.750)
Contribution to Pension Plan	9.105 %	9.105 %
Employer		
Statutory Matching Total	12.855 %	12.855 %
Statutory Medical Insurance Fund	(3.750)	(2.750)
Supplemental Funding	3.250	3.250
Subtotal	12.355 %	13.355 %
Life Insurance	(0.060) %	(0.060) %
Additional to Comply with Board Funding Policy	14.270	14.270
Special Appropriation	2.890	2.890
Contribution to Pension Plan	29.455 %	30.455 %
Total Contribution to Pension Plan	**38.560 %**	**39.560 %**

4. The valuation indicates that normal contributions at the rate of 10.69% of active university members' salaries and 14.76% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This actuarial accrued liability rate, based on the assumptions set forth in the Board's funding policy, is 24.91% for university members hired before July 1, 2008, 25.91% for university members hired on and after July 1, 2008, 23.80% for non-university members hired before July 1, 2008, and 24.80% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 2.89% of payroll to be made by the State. These rates are shown in the following table:

Actuarially Determined Contribution Rates

	Percentage of Active Members' Salaries			
	UNIVERSITY		NON-UNIVERSITY	
Rate	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	10.69 %	10.69 %	14.76 %	14.76 %
Accrued Liability *	24.91	25.91	23.80	24.80
Total	**35.60 %**	**36.60 %**	**38.56 %**	**39.56 %**

** Includes special appropriations of 2.89% of payroll to be made by the State.*

5. The following table shows the components of the total UAAL and the derivation of the UAAL contribution rate in accordance with the funding policy:

Total UAAL and UAAL Contribution Payment
(In thousands of dollars)

	Original UAAL	Current UAAL	Remaining Amortization Period (years)	Amortization Payment
Legacy	$ 14,010,205	$ 14,930,003	26	$ 920,415
New Incremental 6/30/2015	(351,610)	(349,480)	17	(28,426)
New Incremental 6/30/2016	340,766	339,694	18	26,539
New Incremental 6/30/2017	(428,468)	(428,362)	19	(32,241)
New Incremental 6/30/2018	(192,240)	(192,240)	20	(13,976)
Total UAAL		$ 14,299,615		$ 872,311
Blended Amortization Period (years)				26.5

Section VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 14.27%, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability in accordance with the Board funding policy. However, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll.

3. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 14.27% of payroll for the fiscal year ending June 30, 2021, as shown in the following table:

VALUATION DATE	FISCAL YEAR	INCREASE/ (DECREASE)	CUMULATIVE INCREASE	AMOUNT
June 30, 2004	June 30, 2007	0.11%	0.11%	$ 3,174,600
June 30, 2005	June 30, 2008	1.21	1.32	38,965,900
June 30, 2006	June 30, 2009	0.56	1.88	60,499,800
June 30, 2007	June 30, 2010	0.58	2.46	82,331,200
June 30, 2008	June 30, 2011	1.13	3.59	121,457,000
June 30, 2009	June 30, 2012	2.22	5.81	208,649,000
June 30, 2010	June 30, 2013	1.46	7.27	260,980,000
June 30, 2011	June 30, 2014	0.75	8.02	299,420,000
June 30, 2012	June 30, 2015	2.40	10.42	386,400,000
June 30, 2013	June 30, 2016	2.55	12.97	487,400,000
June 30, 2014	June 30, 2017	0.83	13.80	520,372,000
June 30, 2015	June 30, 2018	(0.31)	13.49	512,883,000
June 30, 2016	June 30, 2019	1.12	14.61	553,597,000
June 30, 2017	June 30, 2020	(0.51)	14.10	538,253,000
June 30, 2018	June 30, 2021	0.17	14.27	551,092,000

In addition, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll, in order to amortize the unfunded actuarial accrued liability in accordance with the Board funding policy. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in a decrease of $5,632,843 in the unfunded actuarial accrued liability from $14,305,248,331 to $14,299,615,488 during the year ending June 30, 2018. The decrease in the unfunded actuarial accrued liability was primarily due to gains for the investment return on an actuarial value basis that was greater than expected and salary increases that were less than assumed. In addition to these gains were small demographic gains and losses due to turnover, retirement and mortality.

Analysis of Financial Experience
(In thousands of dollars)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 1,072,894
Expected accrued liability contribution	(888,427)
Loss due to Contribution Shortfall and Timing	8,540
Experience:	
Valuation asset growth	(297,572)
Pensioners' mortality	58,828
Turnover and retirements	72,847
New entrants	40,380
Salary increases	(73,123)
Amendments	0
Assumption changes	0
Method changes	0
Total	**$ (5,633)**

Section VIII - ACCOUNTING INFORMATION

The information required under Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 will be issued in separate reports. The following information is provided for informational purposes only.

1. The following is a distribution of the number of employees by type of membership.

Number of Active and Retired Members as of June 30, 2018

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	54,377
Terminated vested employees entitled to benefits but not yet receiving benefits	8,814
Inactive non-vested members	44,031
Active plan members	72,205
Total	**179,427**

2. The schedule of funding progress is shown below.

Schedule of Funding Progress
(In thousands of dollars)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2013	$ 14,962,758	$ 28,817,232	$ 13,854,474	51.9 %	$ 3,480,066	398.1 %
6/30/2014*	16,174,199	30,184,404	14,010,205	53.6	3,486,327	401.9
6/30/2015	17,219,520	31,149,962	13,930,442	55.3	3,515,113	396.3
6/30/2016*	17,496,894	32,028,227	14,531,333	54.6	3,537,226	410.8
6/30/2017	18,514,638	32,819,887	14,305,249	56.4	3,563,584	401.4
6/30/2018	19,496,056	33,795,671	14,299,615	57.7	3,605,116	396.6

* *Reflects change in assumptions and methods.*

3. The information presented above was determined as part of the actuarial valuation at June 30, 2018. Additional information as of the latest actuarial valuation follows.

Valuation date	06/30/2018
Actuarial cost method	Entry age
Amortization method	Level percent of pay, closed
Remaining amortization period	26.5 years
Asset valuation method	5-year smoothed market

Actuarial Assumptions:

Investment rate of return*
7.50%

Projected salary increases**
3.50 - 7.30%

Cost-of-living adjustments
1.50% Annually

**Includes price inflation at 3.00%*
***Includes wage inflation at 3.50%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Actuarially Determined Employer Contributions	Actual Employer Contributions	Percentage Contributed
2013	$ 802,984,644	$ 568,233,446	71%
2014	823,446,156	563,326,249	68
2015	913,653,854	559,579,290	61
2016	999,270,174	565,454,590	57
2017	1,076,617,093	1,060,719,993	99
2018	1,080,892,201	1,048,671,201	97

Section IX - SENSITIVITY ANALYSIS

The valuation results are a projection of expected benefit payments based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing liabilities and valuation results. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes in the assumed discount rate, the assumed price inflation rate and the rate of wage inflation. The charts show the actuarial accrued liability, the unfunded actuarial accrued liability, the funded ratio and the employer contribution rate under each of the following scenarios:

- TABLE 1 - The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 7.50%, together with an increase and a decrease of 1.00% in the discount rate. Under this scenario, the underlying price inflation rate assumption is held constant at 3.00% and the wage inflation assumption is held constant at 3.50%.

- TABLE 2 - The price inflation assumption sensitivity analysis shows the valuation results with the baseline underlying price inflation rate assumption, 3.00%, together with decreases in the price inflation rate to 2.75% and 2.50%. Under this scenario, the decrease in the underlying price inflation rate assumption leads to corresponding decreases in the discount rate (7.25% and 7.00%, respectively), the wage inflation assumption (3.25% and 3.00%, respectively), and the assumed rates of salary increase for active members.

- TABLE 3 - The wage inflation assumption sensitivity analysis shows the valuation results with the baseline underlying wage inflation assumption, 3.50%, together with decreases in the wage inflation assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded actuarial accrued liability, leading to higher employer contribution rates.

TABLE 1
Assumed Discount Rate Sensitivity Analysis
as of June 30, 2018
(In thousands of dollars)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 37,702,021	$ 33,795,671	$ 30,519,411
Actuarial Value of Assets	19,496,056	19,496,056	19,496,056
Unfunded Actuarial Accrued Liability	$ 18,205,965	$ 14,299,615	$ 11,023,355
Funded Ratio	51.7%	57.7%	63.9%
Employer ADEC - University*	37.505%	28.975%	21.575%
Employer ADEC - Non-University*	38.985%	30.455%	23.055%
Discount Rate	6.50%	7.50%	8.50%
Wage Inflation Rate	3.50%	3.50%	3.50%
Price Inflation Rate	3.00%	3.00%	3.00%

* *Less 1% for members hired before July 1, 2008*

TABLE 2
Assumed Discount Rate Sensitivity Analysis
As of June 30, 2018
(In thousands of dollars)

	Valuation Results	Decrease Inflation Rate 25 Basis Points	Decrease Inflation Rate 50 Basis Points
Actuarial Accrued Liability	$ 33,795,671	$ 34,587,658	$ 35,413,014
Actuarial Value of Assets	19,496,056	19,496,056	19,496,056
Unfunded Actuarial Accrued Liability	$ 14,299,615	$ 15,091,602	$ 15,916,958
Funded Ratio	57.7%	56.4%	55.1%
Employer ADEC - University*	28.975%	31.035%	33.175%
Employer ADEC - Non-University*	30.455%	32.515%	34.655%
Discount Rate	7.50%	7.25%	7.00%
Wage Inflation Rate	3.50%	3.25%	3.00%
Price Inflation Rate	3.00%	2.75%	2.50%

* *Less 1% for members hired before July 1, 2008*

TABLE 3
Wage Inflation Assumption Sensitivity Analysis
as of June 30, 2018
(In thousands of dollars)

	Valuation Results	Decrease Inflation to 2%	No Wage Inflation
Actuarial Accrued Liability	$ 33,795,671	$ 33,795,671	$ 32,795,671
Actuarial Value of Assets	19,496,056	19,496,056	19,496,056
Unfunded Actuarial Accrued Liability	$ 14,299,615	$ 14,299,615	$ 14,299,615
Funded Ratio	57.7%	57.7%	57.7%
Employer ADEC - University*	28.975%	33.255%	39.655%
Employer ADEC - Non-University*	30.455%	34.735%	41.135%
Discount Rate	7.50%	7.50%	7.50%
Wage Inflation Rate	3.50%	2.00%	0.00%
Price Inflation Rate	3.00%	3.00%	3.00%

* *Less 1% for members hired before July 1, 2008*

SCHEDULE A

Valuation Balance Sheet and Solvency Test
Showing the Present and Prospective Assets and Liabilities
As of June 30, 2018
(In thousands of dollars)

Actuarial Liabilities

(1)	Present value of prospective benefits payable on account of present active members			
	-	Service retirement benefits	$ 15,493,983	
	-	Disability retirement benefits	636,767	
	-	Death and survivor benefits	127,040	
	-	Refunds of member contributions	257,464	
		Total		$ 16,515,254
(2)	Present value of prospective benefits payable on account of present retired and disabled members, and beneficiaries of deceased members			
	-	Service retirement benefits	$ 19,903,893	
	-	Disability retirement benefits	824,297	
	-	Death and survivor benefits	797,354	
		Total		$ 21,525,544
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits			$ 396,937
(4)	TOTAL ACTUARIAL LIABILITIES			$ 38,437,735

Present and Prospective Assets

(5)	Actuarial value of assets		$ 19,496,056
(6)	Present value of total future contributions = (4)-(5)	$ 18,941,679	
(7)	Present value of future member contributions and employer normal contributions		$ 4,642,064
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		$ 14,299,615
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 38,437,735

Schedule A continued ...

Solvency Test

(In millions of dollars)

Valuation Date	Aggregate Actuarial Accrued Liability for (1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2013	$ 3,514.4	$ 17,716.4	$ 7,586.5	$ 14,962.8	100 %	65 %	0 %
6/30/2014	3,629.7	18,676.3	7,878.3	16,174.2	100	67	0
6/30/2015	3,700.6	19,522.5	7,926.8	17,219.5	100	69	0
6/30/2016	3,756.0	20,416.4	7,855.8	17,496.9	100	67	0
6/30/2017	3,849.9	21,108.0	7,862.1	18,514.6	100	69	0
6/30/2018	3,927.8	21,922.5	7,945.4	19,496.1	100	71	0

SCHEDULE B

Development of Actuarial Value of Assets as of June 30, 2018

(1)	Actuarial Value of Assets Beginning of Year		$ 18,514,638,263
(2)	Net Position at Market Value at End of Year		19,981,633,096
(3)	Net Position at Market Value at Beginning of Year		18,707,699,025
(4)	Cash Flow		
	a.	Contributions	1,367,798,288
	b.	Benefit Payments	2,035,689,755
	c.	Administrative Expense	11,388,493
	d.	Net: (4)a - (4)b - (4)c	(679,279,960)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	1,953,214,031
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	1,377,604,428
	d.	Amount for Phased-In Recognition: (5)a - (5)c	575,609,603
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	115,121,921
	b.	First Prior Year	247,314,724
	c.	Second Prior Year	(312,346,803)
	d.	Third Prior Year	(92,160,668)
	e.	Fourth Prior Year	325,163,609
	f.	Total Recognized Investment Gain	283,092,783
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 19,496,055,514
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ 485,577,582
(9)	Net Investment Rate of Return on Actuarial Value		9.14%

SCHEDULE C

Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2018	For the Year Ending June 30, 2017
Receipts for the Year		
Contributions		
Members	$ 319,127,087	$ 313,625,434
Employers	1,048,671,201	1,060,719,993
Total	1,367,798,288	1,374,345,427
Net Investment Income	1,953,214,031	2,475,752,798
Total	3,321,012,319	3,850,098,225
Disbursements for the Year		
Benefit Payments	2,004,617,334	1,918,612,128
Refunds to Members	31,072,421	26,305,240
Miscellaneous, including expenses	11,388,493	10,313,715
Total	2,047,078,248	1,955,231,083
Excess of Receipts over Disbursements	1,273,934,071	1,894,867,142
Reconciliation of Net Position		
Net Position as of the Beginning of the Year	18,707,699,025	16,812,831,883
Excess of Receipts over Disbursements	1,273,934,071	1,894,867,142
Net Position as of the End of the Year	$ 19,981,633,096	$ 18,707,699,025
Net Investment Rate of Return on Market Value	10.5%	15.0%

* *Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE D
Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually, including price inflation at 3.00% per annum.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.50% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	7.20%	6.40%	5.40%	4.70%	4.20%	3.80%	3.70%	3.50%	3.50%	3.50%

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

			WITHDRAWAL			RETIREMENT	
			SERVICE				
AGE	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	0.019 %	0.01%	11.00 %				
25	0.021	0.01	11.00	3.00%			
30	0.025	0.01	11.00	3.00	3.00%		
35	0.043	0.04	12.00	3.50	1.40		
40	0.060	0.09	12.00	4.50	1.40		
45	0.084	0.20	12.00	4.50	1.30		17.0%
50	0.119	0.30	14.00	4.50	1.90		17.0
55	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	1.556	0.75	20.00	0.00	0.00	100.0	100.0

**Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.*

Schedule D continued ...

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL SERVICE 0 - 4	WITHDRAWAL SERVICE 5 - 9	WITHDRAWAL SERVICE 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.007%	0.01%	9.00%				
25	0.008	0.01	9.00	4.00%			
30	0.010	0.03	12.00	4.00	1.65%		
35	0.018	0.06	12.00	4.00	1.50		
40	0.026	0.12	12.00	4.00	1.30		
45	0.042	0.25	13.00	4.00	1.20		15.0%
50	0.062	0.44	13.00	5.00	1.50		18.0
55	0.096	0.65	15.00	5.00	2.00	5.5%	50.0
60	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	0.831	0.85	15.00	0.00	0.00	100.0	100.0

**Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.*

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown in this table:

Annual Rate of Death After . . .

AGE	SERVICE RETIREMENT MALE	SERVICE RETIREMENT FEMALE	DISABILITY RETIREMENT MALE	DISABILITY RETIREMENT FEMALE
45	0.1609 %	0.1135 %	2.3306 %	1.2482 %
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability.

SCHEDULE E

Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently at 7.50%), of each active member's expected benefit at retirement or death is determined, based on his/her age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an actuarial accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his/her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his/her behalf.

4. The unfunded actuarial accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE F

Summary of Main System Provisions as Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2018. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance for Members Before 7/1/2008
Condition for Allowance

- Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance

- The annual retirement allowance for non-university members is equal to:
  - (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
  - (b) 2.5% of final average salary multiplied by service after July 1, 1983.
  - (c) For individuals who become members of the retirement system on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
  - (d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

Schedule F continued ...

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Service Retirement Allowance for Members on and after 7/1/2008
Condition for Allowance

- Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance
The annual retirement allowance for non-university members is equal to:

- 1.7% of final average salary if service is 10 years or less.
- 2.0% of final average salary if service is greater than 10 years and no more than 20 years.
- 2.3% of final average salary if service is greater than 20 years but no more than 26 years.
- 2.5% of final average salary if service is greater than 26 years but no more than 30 years.
- 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

- 1.5% of final average salary if service is 10 years or less.
- 1.7% of final average salary if service is greater than 10 years and no more than 20 years.
- 1.85% of final average salary if service is greater than 20 years but less than 27 years.
- 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance
Condition for Allowance

- Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance

- The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

- Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the system may be continued in the membership of the system after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

- A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased TRS active and retired members.

Death Benefits
A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance

Schedule F continued ...

will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3- CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the retirement system. Non-university members contribute 9.105% of salary to the retirement system. Member contributions are picked up by the employer.

Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2018
by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	3,356								3,356
Total Pay	73,197,998								73,197,998
Avg. Pay	21,811								21,811
25 to 29	5,728	1,663	5						7,396
Total Pay	203,495,638	82,568,556	187,852						286,252,046
Avg. Pay	35,526	49,650	37,570						38,704
30 to 34	2,675	4,547	1,612	3					8,837
Total Pay	86,293,957	232,507,874	93,615,745	171,059					412,588,635
Avg. Pay	32,259	51,134	58,074	57,020					46,689
35 to 39	2,254	2,127	4,670	1,452	8				10,511
Total Pay	66,909,314	110,685,191	282,452,313	94,329,491	434,996				554,811,305
Avg. Pay	29,685	52,038	60,482	64,965	54,375				52,784
40 to 44	1,783	1,360	2,099	4,041	1,099	6			10,388
Total Pay	50,536,837	70,800,804	127,327,260	271,875,642	78,592,555	466,037			599,599,135
Avg. Pay	28,344	52,059	60,661	67,279	71,513	77,673			57,720
45 to 49	1,481	1,082	1,507	2,140	3,650	1,019	4		10,883
Total Pay	38,192,866	57,257,531	91,642,244	141,344,490	258,449,408	75,036,251	337,145		662,259,935
Avg. Pay	25,789	52,918	60,811	66,049	70,808	73,637	84,286		60,853
50 to 54	1,235	656	968	1,242	1,603	1,883	341	9	7,937
Total Pay	26,561,350	32,743,609	58,414,733	82,215,623	112,128,856	141,021,748	26,428,299	771,555	480,285,773
Avg. Pay	21,507	49,914	60,346	66,196	69,949	74,892	77,502	85,728	60,512
55 to 59	1,517	465	610	913	1,003	726	265	33	5,532
Total Pay	25,011,517	20,976,754	35,767,841	58,954,988	70,939,328	56,218,141	23,218,735	2,581,322	293,668,626
Avg. Pay	16,487	45,111	58,636	64,573	70,727	77,435	87,618	78,222	53,085
60 to 64	1,679	344	305	482	483	390	106	47	3,836
Total Pay	21,246,589	12,139,654	17,529,572	31,791,751	34,076,493	28,894,613	8,938,762	3,162,631	157,780,065
Avg. Pay	12,654	35,290	57,474	65,958	70,552	74,089	84,328	67,290	41,131
65 & over	2,137	525	189	194	199	147	76	62	3,529
Total Pay	18,319,211	10,686,323	8,081,622	12,048,328	13,626,663	11,374,461	5,370,666	5,164,995	84,672,269
Avg. Pay	8,572	20,355	42,760	62,105	68,476	77,377	70,667	83,306	23,993
Total	23,845	12,769	11,965	10,467	8,045	4,171	792	151	72,205
Total Pay	609,765,277	630,366,296	715,019,182	692,731,372	568,248,299	313,011,251	64,293,607	11,680,503	3,605,115,787
Avg. Pay	25,572	49,367	59,759	66,182	70,634	75,045	81,179	77,354	49,929

Average Age: 43.5 **Average Service: 10.9**

Schedule G continued ...

Table 2: Schedule of Active Member Valuation Data
as of June 30, 2018

Valuation Date June 30	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
2018	72,205	$ 3,605,115,787	$ 49,929	0.01%
2017	72,130	3,563,584,342	49,405	0.35
2016	71,848	3,537,226,348	49,232	1.19
2015	72,246	3,515,113,127	48,655	2.45
2014	73,407	3,486,326,799	47,493	2.12
2013	74,831	3,480,066,406	46,506	1.51
2012	75,951	3,479,567,004	45,813	1.33
2011	76,349	3,451,756,287	45,210	3.97
2010	76,387	3,321,614,223	43,484	1.51
2009	75,937	3,253,076,600	42,839	1.43

Table 3: Number of Retired Members, Beneficiaries and their Benefits by Age
as of June 30, 2018

Attained Age	Number of Members	Total Annual Payments	Average Annual Benefits
49 & Under	833	$ 10,962,632	$ 13,160
50 - 54	1,466	59,000,557	40,246
55 - 59	4,140	180,263,981	43,542
60 - 64	7,967	332,177,567	41,694
65 - 69	12,885	510,187,288	39,595
70 - 74	11,706	440,901,296	37,665
75 - 79	7,212	259,248,784	35,947
80 - 84	4,199	139,521,951	33,227
85 - 89	2,471	73,501,434	29,746
90 & Over	1,498	37,752,626	25,202
TOTAL	54,377	$ 2,043,518,116	$ 37,581

Average Current Age:	69.8
Average Age at Retirement for All Retirees and Beneficiaries:	56.1

Schedule G continued ...

Table 4: Schedule of Retirees, Beneficiaries and Survivors Added to and Removed from Rolls

Fiscal Year Ending June 30	ADD TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase In Annual Allowances	Average Annual Allowances
	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)		
2009	2,351	$ 96.2	1,040	$ 22.7	42,050	$ 1,280.3	6.1 %	$ 30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4	33,089
2013	2,303	105.7	991	22.2	47,406	1,608.7	5.5	33,934
2014	2,146	99.6	976	23.4	48,576	1,684.9	4.7	34,685
2015	2,917	119.1	1,671	36.4	49,822	1,767.6	4.9	35,479
2016	2,753	128.2	1,012	26.9	51,563	1,868.9	5.7	36,244
2017	2,638	119.8	1,235	35.2	52,966	1,953.5	4.5	36,881
2018	2,499	120.0	1,088	30.0	54,377	2,043.5	4.6	37,581

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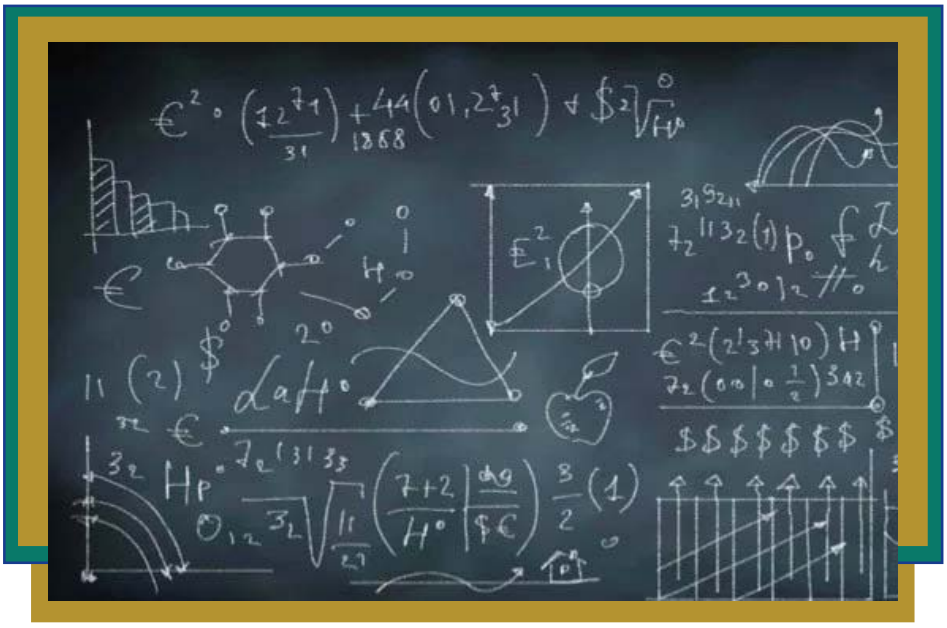
Teachers' Retirement System of the State of Kentucky

2018



Actuarial Section

Report of the Actuary
Annual Valuation
of the Retiree Medical Plan
and the Life Insurance Plan

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 12, 2018

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

This report covers the Retiree Medical Plan funded by the Medical Insurance Fund (MIF) and OPEB liabilities related to the Life Insurance Plan funded by the Life Insurance Fund (LIF). Cavanaugh Macdonald Consulting, LLC (CMC) has submitted the results of the annual actuarial valuation prepared as of June 30, 2018. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total actuarially determined contribution of 5.82% as of percentage of active member payroll for the MIF payable for the fiscal year ending June 30, 2019 is required to support the benefits of the Kentucky Employees' Health Plan (KEHP) and the Medicare Eligible Health Plan (MEHP). Of this amount, 2.775% of payroll is estimated to be paid by University members and 3.750% of payroll is estimated to be paid by all other members, leaving 3.045% and 2.070% respectively, as the remaining actuarially determined contribution. This actuarially determined contribution reflects the actuarial value of assets of the MIF and an 8.00% discount rate for valuing liabilities.

The initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised since the previous valuation to reflect recent experience and revised expectations. Additionally, the results of the valuation include a change to the KEHP dependent subsidies offered to retirees who retired prior to July 1, 2010.

The Life Insurance Plan valuation indicates a total actuarially determined contribution of 0.06% of active member payroll payable for the fiscal year ending June 30, 2021 is required to support the benefits of the LIF. This actuarially determined contribution reflects the actuarial value of assets of the LIF and a 7.50% discount rate for valuing liabilities.

The promised benefits of the Retiree Medical and Life Insurance Plans are included in the actuarially calculated contribution rates that are developed using the entry age normal actuarial cost method. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded actuarial accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 22-year period for the Retiree Medical Plan and a 26-year period for the Life Insurance Plan, on the assumption that payroll will increase by 3.50% annually. The assumptions recommended by the actuary and adopted by the Board are in aggregate reasonably related to the experience under the Retiree Medical and Life Insurance Plans and to reasonable expectations of anticipated experience under the Retiree Medical and Life Insurance Plans.

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CMC has prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Section VII shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Retiree Medical and Life Insurance Plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This actuarial valuation was performed to determine the recommended funding amount for the System. The asset values used to determine unfunded liabilities and funded ratios are not market values, but less volatile market-related values. A smoothing technique is applied to market values to determine the market-related values. The unfunded liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return of assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

In our opinion, if the contributions to the Medical Insurance Fund continue at the current statutorily required levels, the funded ratio of the Retiree Medical Plan will continue to increase, and the ability of the MIF to fund the benefits called for under the Retiree Medical Plan will improve.

Respectfully submitted,

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Report of Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans Prepared as of June 30, 2018
Section I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (dollar amounts are in thousands):

Medical Insurance Fund

Valuation Date	June 30, 2018	June 30, 2017
Number of active members	72,205	72,130
Annual salaries	$ 3,605,116	$ 3,563,584
Number of deferred vested members	7,337	7,410
Number of annuitants in medical plans	40,230	39,497
Number of spouses and beneficiaries in medical plans*	7,595	7,189
Total	47,825	46,686
Assets:		
Market value	$ 1,190,281	$ 963,269
Actuarial value	$ 1,213,918	$ 985,694
Unfunded actuarial accrued liability	$ 2,126,791	$ 2,706,025
Funded ratio based on actuarial value of assets	36.3%	26.7%
Amortization period (years)	22	23
Discount rate	8.00%	8.00%

* *Spouses of post-65 retirees, as well as surviving spouses of deceased retirees on or after July 1, 2002, pay 100% of the full contribution. The full contribution for non-Medicare-eligible dependents is paid through a combination of payments from beneficiaries and the state. The non-Medicare dependent subsidy amount drops to two thirds in 2019 and one third in 2020.*

Medical Insurance Fund Contribution Rates for University Members

Valuation Date	June 30, 2018		June 30, 2017	
Contribution For Fiscal Year Ending	June 30, 2019		June 30, 2018	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.78 %	1.78 %	1.94 %	1.94 %
Accrued liability	4.04	4.04	5.07	5.07
Total	5.82 %	5.82 %	7.01 %	7.01 %
Member	2.775 %	2.775 %	2.775 %	2.775 %
Employer (ARC)	2.775	1.775	2.775	1.775
State (ARC)	0.270	1.270	1.460	2.460
Total	5.820 %	5.820 %	7.010 %	7.010 %

Medical Insurance Fund Contribution Rates for School District Employees (Non-Federal)

Valuation Date	June 30, 2018		June 30, 2017	
Contribution For Fiscal Year Ending	June 30, 2019		June 30, 2018	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.78 %	1.78 %	1.94 %	1.94 %
Accrued liability	4.04	4.04	5.07	5.07
Total	5.82 %	5.82 %	7.01 %	7.01 %
Member	3.750 %	3.750 %	3.750 %	3.750 %
Employer (ARC)	3.000	3.000	3.000	3.000
State (ARC)	(0.930)	(0.930)	0.260	0.260
Total	5.820 %	5.820 %	7.010 %	7.010 %

Medical Insurance Fund Contribution Rates for Other Employees

Valuation Date	June 30, 2018		June 30, 2017	
Contribution For Fiscal Year Ending	June 30, 2019		June 30, 2018	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Normal	1.78 %	1.78 %	1.94 %	1.94 %
Accrued liability	4.04	4.04	5.07	5.07
Total	5.82 %	5.82 %	7.01 %	7.01 %
Member	3.750 %	3.750 %	3.750 %	3.750 %
Employer (ARC)	3.750	2.750	3.750	2.750
State (ARC)	(1.680)	(0.680)	(0.490)	0.510
Total	5.820 %	5.820 %	7.010 %	7.010 %

Life Insurance Fund

(In thousands of dollars)

Valuation Date	June 30, 2018	June 30, 2017
Number of active members	72,205	72,130
Annual salaries	$ 3,605,116	$ 3,563,584
Number of vested former members	8,814	8,525
Number of retirees in Life Insurance Plan	49,422	48,225
Assets:		
Market value	$ 84,462	$ 87,777
Actuarial value	93,808	95,730
Unfunded actuarial accrued liability*	$ 18,663	$ 13,339
Funded ratio based on actuarial value of assets	83.4%	87.8 %
Amortization period (years)	26	27
Discount rate	7.50%	7.50 %
Contribution for fiscal year ending	**June 30, 2021**	**June 30, 2020**
Normal	0.03 %	0.03 %
Accrued liability	0.03	0.02
Total	0.06 %	0.05 %

* *Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post-employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, we will consider the entire liability an OPEB liability under GASB 74 and 75.*

2. The valuation indicates combined member, employer, and State contributions of 5.82% of active member payroll would be sufficient to support the current benefits of the Retiree Medical Plan and State contributions of 0.06% of active member payroll would be sufficient to support the current benefits of the Life Insurance Plan. Comments on the valuation results as of June 30, 2018 are given in Section IV and further discussion of the contribution levels is set out in Sections VI and VII.

3. Schedule B shows the development of the actuarial value of assets. The assumed investment rate of return is 8.00% for MIF and 7.50% for LIF.

4. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. Since the previous valuation, the initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised to reflect recent experience.

5. Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. Since the previous valuation, there has been a change to the KEHP dependent subsidies offered to retirees. The

Report of Actuary on the Annual Valuation of the Retiree Medical and Life Insurance Plans continued ...

premium subsidy for KEHP-participating members who retired prior to July 1, 2010 was restored for the June 30, 2017 valuation. In 2019, TRS will contribute two-thirds of the non-single premium and in 2020, TRS will contribute one-third of the non-single premium.

6. The funded ratio shown in the Summary of Principal Results, is the ratio of actuarial value of assets to the actuarial accrued liability. The funded status would be different based on the market value of assets. The funded ratio is an indication of progress in funding the promised benefits. Since the ratio is less than 100%, there is a need for additional contributions toward the payment of the unfunded actuarial accrued liability. In addition, this funded ratio does not have any relationship to measuring the sufficiency if the plan had to settle its liabilities.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the Retiree Medical and Life Insurance Plans for use as a basis of the valuation were furnished by the System's office. The following tables summarize the membership of the System as of June 30, 2018, upon which the valuation was based. Detailed tabulations of the data are given in Schedule F.

Active Members as of June 30, 2018

Group	Number	Annual Salaries ($1,000's)
University Full Time hired before 7/1/2008	1,578	$ 118,570
University Full Time hired after 7/1/2008	1,579	83,582
Non-University Full Time hired before 7/1/2008	34,000	2,259,772
Non-University Full Time hired after 7/1/2008	22,526	1,065,810
Non-University Part Time hired before 7/1/2008	2,098	18,041
Non-University Part Time hired after 7/1/2008	10,424	59,341
TOTAL	**72,205**	**$ 3,605,116**

2. The following tables show the number of retired members and their beneficiaries receiving health care as of the valuation date as well as average ages.

Retirees Receiving Health Benefits as of June 30, 2018

	Under Age 65	Age 65 and Over	TOTAL
Number	10,707	29,523	40,230
Average Age	60.0	74.0	70.3

Spouses Receiving Health Benefits as of June 30, 2018

Number	2,813	4,782	7,595
Average Age	59.0	74.9	69.0

3. The Retiree Medical Plan valuation 7,337 deferred vested members eligible for health care at age 60 and the Life Insurance Plan valuation includes 8,814 deferred vested members eligible for retiree life insurance at age 60.

Section III - ASSETS

1. As of June 30, 2018, the market value of MIF assets held by the Retiree Medical Plan amounted to $1,190,280,808 and the market value of LIF assets held by the Life Insurance Plan amounted to $84,462,256.

2. The five-year market related value of MIF assets used for valuation purposes as of June 30, 2018 was $1,213,917,592 and the five-year market related value of LIF assets used for valuation purposes as of June 30, 2018 was $93,466,093. Schedule B shows the development of the actuarial value of assets as of June 30, 2018.

3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the MIF and the LIF.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows the Retiree Medical Plan has an actuarial accrued liability of $1,648,393,959 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $38,605,041. The liability on account of benefits payable to retirees and covered spouses amounts to $1,653,709,895. The total actuarial accrued liability of the Retiree Medical Plan amounts to $3,340,708,895. Against these liabilities, the Retiree Medical Plan has present assets for valuation purposes of $1,213,917,592. When this amount is deducted from the actuarial accrued liability of $3,340,708,895, there remains $2,126,791,303 as the unfunded actuarial accrued liability for the Retiree Medical Plan.

3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the Retiree Medical Plan is determined to be $64,032,400, or 1.78% of payroll.

4. The valuation shows that the Life Insurance Plan has an actuarial accrued liability of $18,254,598 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $3,708,587. The liability on account of benefits payable to retirees amounts to $90,507,319. The total actuarial accrued liability of the Life Insurance Plan amounts to $112,470,504. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for active and post-employment purposes. As this could be administratively burdensome and, as death in active service liabilities can be considered de minimis, we will consider the entire liability an OPEB liability under GASB 75 and 75. Against these liabilities, the Life Insurance Plan has present assets for valuation purposes of $93,808,352. When this amount is deducted from the actuarial accrued liability of $112,470,504, there remains $18,662,152 as the unfunded actuarial accrued liability for the life insurance plan.

5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $1,182,249, or 0.03% of payroll.

Section V - DERIVATION OF EXPERIENCE GAINS AND LOSSES

1. Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2018 is shown below ($1,000's).

	EXPERIENCE GAIN/(LOSS)* OF THE:	MEDICAL INSURANCE FUND	LIFE INSURANCE FUND
(1)	UAAL** as of 6/30/2017	$ 2,706,025	$ 13,339
(2)	Normal cost from last valuation	69,128	994
(3)	Expected employer contributions	249,742	1,768
(4)	Interest accrual: [(1) + (2) - (3)] x interest***	202,033	942
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 2,727,444	$ 13,507
(6)	Change due to benefit provisions	0	0
(7)	Change due to new actuarial assumptions	0	0
(8)	Change due to claims experience	(659,751)	0
(9)	Expected UAAL after changes: (5) + (6) + (7) + (8)	$ 2,067,692	$ 13,507
(10)	Actual UAAL as of 6/30/2018	2,126,791	18,663
(11)	Total gain/(loss): (9) - (10)	(59,099)	(5,156)
	(a) Contribution and investment gain/(loss)	57,161	(5,748)
	(b) Experience gain/(loss) (11) - (11a)	(116,260)	592
(12)	Accrued liabilities as of 6/30/2017	$ 3,691,719	$ 109,069
(13)	Experience gain/(loss) as percent of actuarial accrued liabilities at start of year (11b) / (12)	(3.1%)	0.5%

* *Rows labeled as a change, rather than a gain/(loss), are expressed as negative if the UAAL is decreased and positive if the UAAL is increased.*

** *Unfunded actuarial accrued liability.*

*** *Interest is 8% for the Medical Insurance Fund and 7.5% for the Life Insurance Fund.*

Section VI - CONTRIBUTIONS PAYABLE UNDER THE PLANS

1. Sections 161.420 and 161.550 of the Kentucky Revised Statutes provide the amounts employers and the state are required to contribute to the Medical Insurance Fund. These contribution amounts vary by date of membership and employee type.

Employer Percentage of Payroll Contributions Made to Medical Insurance Fund

UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES	
Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
2.775 %	1.775 %	3.000 %	3.000 %	3.750 %	2.750 %

* *In addition to the amounts contributed by school districts on behalf of non-federal employees, the state contributes 0.75%.*

2. For the fiscal year ending June 30, 2019, member contributions will be 2.775% for University employees and 3.750% for all other members. Based upon the amortization of the unfunded actuarial accrued liability over a 22-year period as a level percentage of payroll, the valuation indicates employer and State contributions of 3.045% of payroll for University employees and 2.070% of payroll for all other members.

3. The State is scheduled to contribute 0.05% of salary to the Life Insurance Fund for the fiscal year ending June 30, 2020. Based upon the amortization of the unfunded actuarial liability over a 26-year period as a level percentage of payroll, CMC's valuation indicates a contribution of 0.06% for the fiscal year ending June 30, 2021 is required to support sufficiently the benefits of the Life Insurance Plan.

Required Contribution Rates For Fiscal Year Ending June 30, 2019 Medical Insurance Fund

Normal	1.78 %
Accrued Liability	4.04
Total	5.82 %

	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
Member	2.775 %	2.775 %	3.750 %	3.750 %	3.750 %	3.750 %
Employer (ARC)	2.775	1.775	3.000	3.000	3.750	2.750
State (ARC)	0.270	1.270	(0.930)	(0.930)	(1.680)	(0.680)
Total	5.820 %	5.820 %	5.820 %	5.820 %	5.820 %	5.820 %

Required Contribution Rates Life Insurance Fund For Fiscal Year Ending June 30, 2021

Normal	0.03 %
Accrued Liability	0.03
Total	0.06%
Member	0.00 %
Accrued liability	0.06
Total	0.06%

4. The valuation indicates that a total normal contribution of 1.78% of payroll is required to meet the cost of benefits currently accruing under the Retiree Medical Plan and 0.03% of payroll is required to meet the cost of benefits currently accruing under the Life Insurance Plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 4.04% of payroll for the Retiree Medical Plan and 0.03% of payroll for the Life Insurance Plan.

5. The unfunded actuarial accrued liability amounts to $2,126,791,303 for the Retiree Medical Plan and $18,662,152 for the Life Insurance Plan as of the valuation date. An accrued liability contribution rate of 5.07% of payroll for the Retiree Medical Plan and 0.03% of payroll for the Life Insurance Plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 22-year period for the Retiree Medical Plan and a 26-year period for the Life Insurance Plan, based on the assumption that the payroll will increase by 3.50% annually.

Section VII - COMMENTS ON LEVEL OF FUNDING

1. The System's monthly contribution for retirees who opt into the Retiree Medical Plan is based upon date of hire, date of attaining age 65, and years of service at retirement. Additionally, beneficiary contributions may vary by date of hire, date of attaining age 65, years of service at retirement, plan election, Medicare eligibility, and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims and/or insured premiums for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State on a current disbursement basis. Current employer and State contributions have been determined to be sufficient to fund the cost of the benefits to be provided. Benefits for university, school district (non-Federal), and other members are identical, although active employee contributions collected from university, school district (non-Federal), and other members differ. A listing of active member Retiree Medical Plan contributions by fiscal year, date of membership, and employer type is provided in Schedule E.

2. This valuation provides the contributions required to fund sufficiently the Retiree Medical Plan and to ensure the future solvency of the Medical Insurance Fund. For University employees, a member contribution of 2.775% of payroll together with employer and State contributions of 3.045% of payroll are required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 22 years. For the remaining membership, a member contribution of 3.750% of payroll together with employer and State contributions of 2.070% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 22 years.

Section VIII - ACCOUNTING INFORMATION

1. The information required under Governmental Accounting Standards Board (GASB) Statements No. 74 and 75 will be issued in separate reports. The following information is provided for informational purposes only.

Number of Active and Retired Members in Medical Plan as of June 30, 2018

GROUP	NUMBER
Retirees currently receiving health benefits	40,230
Spouses of retirees currently receiving health benefits	7,595
Terminated employees entitled to benefits but not yet receiving benefits	7,337
Active plan members	72,205
Total	**127,367**

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2018

GROUP	NUMBER
Retirees	49,422
Terminated employees	8,814
Active plan members	72,205
Total	**130,441**

Schedule of Funding Progress
Medical Insurance Fund
(In thousands of dollars)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2012	$ 338,746	$ 3,594,540	$ 3,255,794	9.4 %	$ 3,479,567	93.6 %
6/30/2013	412,185	3,521,073	3,108,888	11.7	3,480,066	89.3
6/30/2014	508,913	3,194,689	2,685,776	15.9	3,486,327	77.0
6/30/2015	637,839	3,525,584	2,887,745	18.1	3,515,113	82.2
6/30/2016*	795,055	3,634,073	2,839,018	21.9	3,537,226	80.3
6/30/2017	985,694	3,691,719	2,706,025	26.7	3,563,584	75.9
6/30/2018	1,213,918	3,340,709	2,126,791	36.3	3,605,116	58.9

* *Reflects change in participation assumptions and plan design.*

Schedule of Funding Progress
Life Insurance Fund
(In thousands of dollars)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	(B-A)	(A/B)	C	[(B-A)/C]
6/30/2012	$ 92,241	$ 91,398	$ (843)	100.9	$ 3,479,567	(0.02)
6/30/2013	94,863	94,325	(538)	100.6	3,480,066	(0.02)
6/30/2014	96,130	97,354	1,224	98.7	3,486,327	0.04
6/30/2015	97,186	98,739	1,553	98.4	3,515,113	0.04
6/30/2016*	97,269	106,059	8,790	91.7	3,537,226	0.25
6/30/2017	95,730	109,069	13,339	87.8	3,563,584	0.37
6/30/2018	93,808	112,471	18,663	83.4	3,605,116	0.52

* *Reflects change in decrement and participation assumptions.*

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2018. Additional information as of the latest actuarial valuation follows.

Valuation Date	Actuarial Cost Method	Amortization Method	Remaining Amortization Period	Asset Valuation Method	Actuarial Assumptions: Investment Rate of Return*	Actuarial Assumptions: Investment Rate of Return*
06/30/2018	Entry age	Level percent of pay, closed	22 Years Retiree Medical Plan 26 Years Life Insurance Plan	5-Year Smoothed Market	8.00%-Retiree Medical Plan	7.50%-Retiree Life Insurance Plan

Medical Trend Assumption	Pre-Medicare**	Medicare
Ultimate Trend Rate	7.50 %	5.50 %
Year of Ultimate Trend Rate	5.00 %	5.00 %
	2024	2021

* *Includes price inflation at 3.00%.*

** *Alternate trend rates were used for Medicare Part B premiums and are disclosed in Schedule D.*

Schedule of Employer Contributions
Medical Insurance Fund

Fiscal Year Ending	Annual Required Contribution (ARC)	Actual Employer Contribution	Retiree Drug Subsidy Contribution	TOTAL Contribution	Percentage of ARC Contributed
	(A)	(B)	(C)	(B) + (C)	[(B) + (C)]/(A)
6/30/2013	$ 186,725,823	$ 166,611,420	$ 0	$ 166,611,420	89.2 %
6/30/2014	159,583,400	162,568,395	0	162,568,395	101.9
6/30/2015	106,606,132	168,084,353	0	168,084,353	157.7
6/30/2016	97,982,580	221,966,705	0	221,966,705	226.5
6/30/2017	102,854,017	180,375,986	0	180,375,986	175.4
6/30/2018	118,837,620	187,102,413	0	187,102,413	157.4

Schedule of Employer Contributions
Life Insurance Fund

Fiscal Year Ending	Annual Required Contribution (ARC)	Actual Employer Contribution	Percentage of ARC Contributed
	(A)	(B)	(B) / (A)
6/30/2013	$ 1,739,908	$ 1,680,495	96.6 %
6/30/2014	1,044,959	1,006,091	96.3
6/30/2015	1,050,216	1,019,519	97.1
6/30/2016	1,057,851	1,037,769	98.1
6/30/2017	1,065,122	1,049,683	98.6
6/30/2018	1,075,305	1,058,329	98.4

SCHEDULE A

Results of the Valuation
June 30, 2018
(In thousands of dollars)

		Medical Insurance Fund	Life Insurance Fund
PAYROLL		$ 3,605,116	$ 3,605,116
ACTUARIAL ACCRUED LIABILITY			
Present value of prospective benefits payable in respect of:			
(a)	Present active members	$ 1,648,394	$ 18,255
(b)	Present terminated vested members	38,605	3,709
(c)	Present retired members and covered spouses	1,653,710	90,507
(d)	Total actuarial accrued liability	$ 3,340,709	$ 112,471
PRESENT ASSETS FOR VALUATION PURPOSES		$ 1,213,918	$ 93,808
UNFUNDED ACTUARIAL ACCRUED LIABILITY		**$ 2,126,791**	**$ 18,663**
CONTRIBUTIONS		Fiscal Year Ending June 30, 2019	Fiscal Year Ending June 30, 2021
	Normal	1.78%	0.03%
	Accrued Liability	4.04	0.03
	Total	5.82%	0.06%

Medical Insurance Fund
Solvency Test
(In millions of dollars)

	Aggregate Actuarial Accrued Liability for				Portion of Accrued Liabilities Covered by Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	(1)	(2)	(3)
6/30/2013	n/a	$ 2,001.8	$ 1,519.3	$ 412.2	n/a	21%	0%
6/30/2014	n/a	1,771.9	1,422.8	508.9	n/a	29	0
6/30/2015	n/a	1,982.2	1,543.4	637.8	n/a	32	0
6/30/2016	n/a	1,950.9	1,683.2	795.1	n/a	41	0
6/30/2017	n/a	1,985.1	1,706.6	985.7	n/a	50	0
6/30/2018	n/a	1,692.3	1,648.4	1,213.9	n/a	72	0

Schedule A continued ...

Life Insurance Fund
Solvency Test
(In millions of dollars)

Valuation Date	Aggregate Actuarial Accrued Liability for (1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2012	n/a	$ 75.2	$ 16.2	$ 92.2	n/a	100 %	105 %
6/30/2013	n/a	78.1	16.2	94.9	n/a	100	104
6/30/2014	n/a	81.0	16.3	96.1	n/a	100	93
6/30/2015	n/a	82.7	16.0	97.2	n/a	100	91
6/30/2016	n/a	89.0	17.1	97.3	n/a	100	49
6/30/2017	n/a	92.1	17.0	95.7	n/a	100	21
6/30/2018	n/a	94.2	18.3	93.8	n/a	99	0

SCHEDULE B

Development of the Actuarial Value of Assets
Medical Insurance Fund
June 30, 2018

(1)	Actuarial Value of Assets Beginning of Year		$ 985,694,300
(2)	Market Value of Assets End of Year		1,190,280,808
(3)	Market Value of Assets Beginning of Year		963,269,031
(4)	Cash Flow		
	a.	Contributions	375,563,335
	b.	Benefit Payments	218,765,152
	c.	Administrative Expense	1,747,561
	d.	Net: (4)a - (4)b - (4)c	155,050,622
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)d	71,961,155
	b.	Assumed Rate	8.00%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	83,263,547
	d.	Amount for Phased-In Recognition: (5)a - (5)c	(11,302,392)
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	(2,260,479)
	b.	First Prior Year	6,277,740
	c.	Second Prior Year	(12,827,105)
	d.	Third Prior Year	(7,773,884)
	e.	Fourth Prior Year	6,492,851
	f.	Total Recognized Investment Gain	(10,090,877)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		1,213,917,592
(8)	Difference Between Market & Actuarial Values: (2) - (7)		$ (23,636,784)
(9)	Rate of Return on Actuarial Value		6.71%

Schedule B continued ...

Development of the Actuarial Value of Assets
Life Insurance Fund
June 30, 2018

(1)	Actuarial Value of Assets Beginning of Year	$	95,730,467
(2)	Market Value of Assets End of Year		84,462,256
(3)	Market Value of Assets Beginning of Year		87,777,405
(4)	Cash Flow		
	a. Contributions		1,058,329
	b. Benefit Payments		5,452,920
	c. Administrative Expense		30,979
	d. Net: (4)a - (4)b - (4)c		(4,425,570)
(5)	Investment Income		
	a. Market total: (2) - (3) - (4)d		1,110,421
	b. Assumed Rate		7.50%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]		6,417,347
	d. Amount for Phased-In Recognition: (5)a - (5)c		(5,306,926)
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d		(1,061,385)
	b. First Prior Year		(1,150,797)
	c. Second Prior Year		(353,444)
	d. Third Prior Year		(941,279)
	e. Fourth Prior Year		(406,987)
	f. Total Recognized Investment Gain		(3,913,892)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		93,808,352
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	(9,346,096)
(9)	Rate of Return on Actuarial Value		2.64%

SCHEDULE C

Medical Insurance Fund
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2018	For the Year Ending June 30, 2017
RECEIPTS FOR THE YEAR		
Contributions		
Members Statutory	$ 130,777,471	$ 128,819,243
Payment by Retired Members	57,683,452	57,941,968
TOTAL MEMBERS	188,460,923	186,761,211
State Statutory Contributions	22,424,350	22,042,563
Employer Contributions	106,143,410	104,879,255
State Statutory - Transition Fund/KEHP	58,534,652	53,454,168
TOTAL EMPLOYER	187,102,412	180,375,986
GRAND TOTAL	375,563,335	367,137,197
Recovery Income	0	0
Net Investment Income	76,840,513	95,452,597
TOTAL	452,403,848	462,589,794
DISBURSEMENTS FOR THE YEAR		
Administrative Expense	1,747,561	1,538,574
Medical Insurance Expense	218,765,152	236,442,514
TOTAL	220,512,713	237,981,088
EXCESS OF RECEIPTS OVER DISBURSEMENTS	231,891,135	224,608,706
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	958,389,673	733,780,967
Excess of Receipts over Disbursements	231,891,135	224,608,706
Asset Balance as of the End of the Year	$ 1,190,280,808	$ 958,389,673

Schedule C continued ...

Life Insurance Fund
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending June 30, 2018	June 30, 2017
RECEIPTS FOR THE YEAR		
Contributions		
Members	0	0
State	896,974	881,703
Employer	161,355	167,980
TOTAL	1,058,329	1,049,683
Net Investment Income	1,110,421	915,497
TOTAL	2,168,750	1,965,180
DISBURSEMENTS FOR THE YEAR		
Benefit Payments	5,452,920	5,151,013
Refunds to Members	0	0
Miscellaneous, including expenses	30,979	27,690
TOTAL	5,483,899	5,178,703
EXCESS OF RECEIPTS OVER DISBURSEMENTS	(3,315,149)	(3,213,523)
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	87,777,405	90,990,928
Excess of Receipts over Disbursements	(3,315,149)	(3,213,523)
Asset Balance as of the End of the Year	$ 84,462,256	$ 87,777,405

SCHEDULE D
Statement of Actuarial Assumptions and Methods

The rates of retirement, disability, mortality, termination, salary increases, and rates of future benefit participation used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016. The health care cost trend rates, and expected plan costs were determined by the actuary based on recent experience.

Valuation Date: June 30, 2018

Discount Rate: 8.0% per annum, compounded annually for Medical Insurance Fund.
7.50% per annum, compounded annually for Life Insurance Fund.

Schedule D continued ...

Health Care Cost Trend Rates: Following is a chart detailing trend assumptions.

Annual Trend Rate

Fiscal Year Ended	Medicare Part B	Under Age 65	Age 65 and Over
2019	2.63%	7.50%	5.50%
2020	4.70	7.00	5.25
2021	4.63	6.50	5.00
2022	4.88	6.00	5.00
2023	5.88	5.50	5.00
2024	5.71	5.00	5.00
2025	5.00	5.00	5.00
2026	5.41	5.00	5.00
2027	5.93	5.00	5.00
2028	5.62	5.00	5.00
2029	5.37	5.00	5.00
2030	5.12	5.00	5.00
2031 and beyond	5.00	5.00	5.00

Age Related Morbidity: For retirees ages 65 and older, per capita health care costs are adjusted to reflect expected health care cost changes related to age. The increase to the net incurred health care claims is assumed to be:

Participant Age	Annual Increase
65 – 69	3.0 %
70 – 74	2.5
75 – 79	2.0
80 – 84	1.0
85 - 89	0.5
90 and over	0.0

For the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the health care trend assumption. No implicit rate subsidy is calculated or recognized as the implicit rate subsidy is deemed the responsibility of the KEHP. Under Actuarial Standard of Practice No. 6 (ASOP No. 6), aging subsidies (or implicit rate subsidies) should be recognized, as the differences in health care utilization and cost due to age have been demonstrated and well quantified. The impact of aging on a valuation's results can be as significant as the use of mortality, trend, and discounting. It has been the long-standing position that the responsibility for compliance with GASB Statement No. 43, when it relates to KEHP implicit subsidies, rests with KEHP, not the System, as the System has no operational authority over KEHP. As such, KEHP implicit subsidies are excluded from the OPEB valuation process of the Retiree Medical Plan. As GASB 74 and 75 prohibit such a deviation from ASOP No. 6, additional consideration to the current treatment of KEHP implicit rate subsidies may be needed in the future. Valuing the KEHP implicit subsidies will increase the actuarial accrued liability for GASB 74 and 75 purposes.

Retiree Medical Plan Costs: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that the System pays as the full contribution amount. An additional $7.44 per month is paid to the Department of Employee Insurance (DEI) and is not included in the under age 65 costs listed below. For retirees ages 65 and older, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

Monthly Under Age 65 (KEHP) Full Costs as of January 1, 2019

Tier Elected	LivingWell CDHP	LivingWell PPO	LivingWell Basic CDHP	LivingWell Limited HDP
Single	$ 709.46	$ 729.34	$ 682.80	$ 607.54
Parent Plus	978.50	1,037.08	940.64	865.08
Couple	1,333.64	1,589.10	1,450.02	1,327.16
Family	1,489.76	1,767.60	1,615.30	1,477.04
Family C-R	818.96	876.68	800.94	730.90

Schedule D continued ...

Average Monthly TRS Full Costs & Contributions

Calendar Year	Under Age 65 (KEHP) Contributions	Age 65 & Over (MEHP) Full Costs	Age 65 & Over (MEHP) Contributions
2008	$ 484	$ 278	$ 278
2009	545	301[1]	301
2010	594	373[1]	373
2011	626	289[1]	289
2012	622	270[2]	270
2013	635	294[2]	294
2014	679	290[2]	290
2015	669	240[2]	240
2016	681	260[2]	260
2017	680	252[2]	252
2018	688	258[2]	258
2019	691	226[3]	226

1 *Under GASB 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy could not be taken into account in the gross cost calculations.*

2 *2,257 current, Medicare-eligible benefit recipients have been identified by the client to be ineligible for premium-free Medicare Part A benefits. For these individuals, the full cost of coverage is, on average, $575 per month. It is assumed 9% of current retirees under the age of 65 who were hired prior to 4/1/1986 will be ineligible for premium-free Medicare Part A benefits upon reaching Medicare eligibility (age 65) and 0% of these retirees will cover a spouse. All active members are assumed to have begun contributing to Medicare as of 4/1/1986 and are assumed eligible for premium-free Medicare Part A benefits.*

3 *Blended basis, includes increased costs for retirees without premium-free Medicare Part A. All active members are assumed to have begun contributing to Medicare as of 4/1/1986 and are assumed eligible for premium-free Medicare Part A benefits.*

Current Retiree Medical Plan Participation: Actual census data and current plan elections (including waivers) provided by the System were used for those retirees currently participating in the Retiree Medical Plan. Current participants are assumed to maintain their current Retiree Medical Plan coverage until they are no longer eligible.

Anticipated Retireee Medical Plan Participation: The assumed annual rates of health care plan participation for future retirees are as follows:

Member Participation

Years of Service	Entered TRS Before 7/1/2002	Entered TRS After 6/30/2002 & Before 7/1/2008	Entered TRS After 6/30/2008
5-9.99	20 %	20%	Not Eligible
10-14.99	49	20	Not Eligible
15-19.99	70	41	41%
20-24.99	91	61	61
25-25.99	91	76	76
26-26.99	91	84	84
27 or more	91	91	91

Anticipated Retiree Medical Plan Elections: The assumed rates of plan election for future retirees participating in the KEHP plans are provided in the following table. As the assumed plan election rates are estimates and actual results may be materially different, this assumption will need to be revised as experience evolves.experience evolves.

LivingWell CDHP	LivingWell PPO	LivingWell Basic CDHP	LivingWell Limited HDP
42%	50%	5%	3%

Schedule D continued ...

Spouse Coverage in Medical Plans: Actual census data and current plan elections were used for MEHP and KEHP covered spouses (including beneficiaries) of current retirees. For spouses of future retirees, 25% of future male retirees are assumed to cover their spouse and 15% of future female retirees are assumed to cover their spouse. Male retirees are assumed to be three years older than their spouse and female retirees are assumed to be one year younger than their spouse.

Disabled Dependent Children in Retiree Medical Plan: The liability associated with disabled dependent children was determined to be de minimis and was therefore excluded from this valuation.

Withdrawal Assumption: Future vested members who terminate employment prior to retirement are assumed to elect to withdraw their contributions based upon their age and service at termination of employment as follows:

Rates of Withdrawal Upon Termination of Employment

Age at Termination of Employment	Years of Service 5 - 10	10 - 15	15+
Under Age 55	20%	15%	10%
Ages 55+	10%	10%	10%

All vested members who terminate employment prior to retirement are assumed to elect to withdraw their contributions prior to receiving a pension benefit based upon their service as follows:

Rates of Withdrawal Prior to Receiving a Pension Benefit

Years of Service 5 - 10	10 - 15	15 - 27	27+
25%	15%	10%	25%

All vested members who terminate employment prior to retirement and who are assumed to elect to receive a pension benefit are assumed to begin receiving their benefit at age 60.

Payroll Growth: 3.50% per annum, compounded annually.

Price Inflation: 3.00% per annum, compounded annually.

Affordable Care Act (ACA): The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the potential future implementation of the excise tax on high-value health insurance plans (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by the assumed rate of health care inflation (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the Retiree Medical Plan's liability will be required.

Asset Valuation Method: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The ultimate assumed valuation rate of return is assumed to be 8.00% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

Actuarial Cost Method: The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death

Schedule D continued ...

is determined, based on his/her age, service, and gender. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and deferred vested members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his/her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his/her behalf.

The unfunded actuarial accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

Separations from Service: Representative values of the assumed annual rates of salary increases, death, disability, withdrawal, service retirement and early retirement are as follows:

Males: Annual Rate of . . .

				WITHDRAWAL			RETIREMENT	
				YEARS OF SERVICE				
AGE	SALARY*	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service**
20	7.20%	0.019%	0.01%	11.00%				
25	6.40	0.021	0.01	11.00	3.00%			
30	5.40	0.025	0.01	11.00	3.00	3.00%		
35	4.70	0.043	0.04	12.00	3.50	1.40		
40	4.20	0.060	0.09	12.00	4.50	1.40		
45	3.80	0.084	0.20	12.00	4.50	1.30		17.0%
50	3.70	0.119	0.30	14.00	4.50	1.90		17.0
55	3.50	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	3.50	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	3.50	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	3.50	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	3.50	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	3.50	1.556	0.75	20.00	0.00	0.00	100.0	100.0

Females: Annual Rate of . . .

				WITHDRAWAL			RETIREMENT	
				YEARS OF SERVICE				
AGE	SALARY*	DEATH	DISABILITY	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Years of Service**
20	7.20%	0.007%	0.01%	9.00%				
25	6.40	0.008	0.01	9.00	4.00%			
30	5.40	0.010	0.03	12.00	4.00	1.65%		
35	4.70	0.018	0.06	12.00	4.00	1.50		
40	4.20	0.026	0.12	12.00	4.00	1.30		
45	3.80	0.042	0.25	13.00	4.00	1.20		15.0%
50	3.70	0.062	0.44	13.00	5.00	1.50		18.0
55	3.50	0.096	0.65	15.00	5.00	2.00	5.5%	50.0
60	3.50	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	3.50	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	3.50	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	3.50	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	3.50	0.831	0.85	15.00	0.00	0.00	100.0	100.0

* *Includes wage inflation at 3.5% per annum.*

** *Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.*

Schedule D continued ...

Deaths After Retirement: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown here:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1609%	0.1135%	2.3306%	1.2482%
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074

SCHEDULE E
Summary of Main Plan Provisions as Interpreted for Valuation Purposes

Eligibility for Access to Retiree Medical Coverage

Service Retirement: For employees hired prior to July 1, 2008, Retiree Medical Plan coverage eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. For employees hired on or after July 1, 2008, employees may retire after the completion of 27 years of service, the attainment of age 55 and 10 years of service, or the attainment of age 60 and 5 years of service, but must complete a minimum of 15 years of service to be eligible for Retiree Medical Plan coverage.

Disability Retirement: Disabled employees hired prior to July 1, 2008 with at least 5 years of service, who are totally and permanently incapable of being employed as a teacher, are eligible for Retiree Medical Plan coverage. Disabled employees hired after July 1, 2008 must have 15 years of service to be eligible for Retiree Medical Plan coverage.

Members and dependents under age 65 and eligible for Medicare due to a disability after January 1, 2013 are only eligible to enroll in the MEHP. Under age 65 members who retired prior to Jan. 1, 2013, are grandfathered from this requirement and allowed a choice of KEHP or MEHP coverage. Actual census data and current plan elections were used for current disabled retirees. All future disabled members under the age of 65 with Medicare are placed on the MEHP and not the KEHP. This has been consistently applied since 2013.

Survivors: Spouses of employees who die in service while eligible to retire, as well as survivors of service and disabled retirees, are eligible for Retiree Medical Plan coverage if elected within 30 days of the employee's/retiree's death with no future remarriage. Otherwise, survivor is not eligible for Retiree Medical Plan coverage.

Spousal Shared Risk Waiver for MEHP: Beginning in 2013, eligible spouses who waive the MEHP coverage, will no longer have the opportunity to enroll during any annual MEHP open enrollment so most spousal waivers on the MEHP are now permanent waivers unless a KTRS specific qualifying event is met. This does not apply to the KEHP. This MEHP eligibility rule became necessary to mitigate spousal adverse selection with zero premium Medicare Advantage plans on the individual and open market.

Termination: For employees hired prior to July 1, 2008 and who terminated with at least 5 years of service, Retiree Medical Plan coverage eligibility is attained at age 60, with unreduced pension benefits. For employees hired on or after

Schedule E continued ...

July 1, 2008 and who terminated with at least 15 years of service, Retiree Medical Plan coverage eligibility is attained at age 60 with unreduced pension benefits.

Reemployed Retirees: Retirees who return to work in an agency that participates in KEHP are required to terminate their coverage through the System. Additionally, if a retiree returns to work somewhere that does not participate in the KEHP, but offers health insurance, the retiree must terminate System coverage unless the employer coverage is of lesser value. For valuation purposes, active employees identified as currently receiving retiree health care through the System are valued as retirees.

Covered Member Retiree Medical Plan Contributions

Under Age 65 Retiree Shared Responsibility Contribution: Effective July 1, 2010, retirees under the age of 65 began a three-year phase-in of the Shared Responsibility Contribution. This contribution reduces the applicable amount of the full contribution provided by the System to retirees, by adjusting the Shared Responsibility Contribution amount by 100% less the appropriate percentage from the Retiree Percentage Contribution table below. Effective July 1, 2012, the full Shared Responsibility Contribution equals the Standard Medicare Part B premium paid by retirees ages 65 and older.

Monthly Under Age 65 Shared Responsibility Contribution Timeline

Effective Date	Medicare Part B Monthly Cost	Formula	Shared Responsibility Contribution
July 1, 2010	$ 110.50	(1/3 x $110.50)	$ 37.00
January 1, 2011	115.40	(1/3 x 115.40)	39.00
July 1, 2011	115.40	(2/3 x 115.40)	77.00
January 1, 2012	99.90	(2/3 x 99.90)	66.00
July 1, 2012	99.90	99.90	99.90
January 1, 2013	104.90	104.90	104.90
January 1, 2014	104.90	104.90	104.90
January 1, 2015	104.90	104.90	104.90
January 1, 2016	121.80	121.80	121.80
January 1, 2017	134.00	134.00	134.00
January 1, 2018	134.00	134.00	134.00
January 1, 2019	135.50	135.50	135.50

Retiree Years of Service Percentage Contribution: Retirees contribute the following percentages based on years of service at retirement, which are then applied to the Retiree Contribution Rate Basis:

Retiree Percentage Contribution*

Years of Service	Hired before 7/1/2002: Age 65 or Older and Covered Before 1/1/2005	Hired before 7/1/2002: Age 65 After or Covered After 12/31/2004	Entered TRS After 6/30/2002 and Before 7/1/2008	Entered TRS After 6/30/2008
5 - 9.99	30%	75%	90%	Not Eligible
10 - 14.99	20	50	75	Not Eligible
15 - 19.99	10	25	55	55%
20 - 24.99	0	0	35	35
25 - 25.99	0	0	10	10
26 - 26.99	0	0	5	5
27 or more	0	0	0	0

** 0% for disabled retirees that retired prior to 1/1/2002.*

Schedule E continued ...

Monthly Retiree Contribution Rate Basis
Effective January 1, 2019
Under Age 65 (KEHP)

Tier Elected	LivingWell CDHP	LivingWell PPO	LivingWell Basic CDHP	LivingWell Limited HDP	Ages 65 and Older (MEHP)
Single	$ 660.04	$ 646.96	$ 656.60	$ 583.96	$ 226.00
Parent Plus	851.84	802.26	878.24	808.92	n/a
Couple	1,029.02	1,060.74	1,189.96	1,093.10	n/a
Family	1,131.64	1,105.34	1,303.24	1,196.18	n/a
Family Cross-Reference	738.64	719.12	771.84	704.70	n/a

Under Age 65 Retiree Plan Cost Contribution: An additional contribution according to the table below is required to be paid by retirees under the age of 65 based upon the plan elected and the date of retirement:

Monthly Under Age 65 Plan Cost Contribution*
Effective January 1, 2019

Tier Elected	LivingWell CDHP	LivingWell PPO	LivingWell Basic CDHP	LivingWell Limited HDP
Single	$ 49.42	$ 82.38	$ 26.20	$ 23.58
Parent Plus	126.66	234.82	62.40	56.16
Couple	304.62	528.36	260.06	234.06
Family	358.12	662.26	312.06	280.86
Family Cross-Reference	80.32	157.56	29.10	26.20

* *Does not include the additional contribution required to be paid by retirees under the age of 65 who use tobacco ($40 for Single or Family Cross-Reference, and $80 for Parent Plus, Couple or Family). Also, this does not include the additional contribution required to be paid by retirees und the age of 65 who do not complete their LivingWell Promise, which is an additional $40 per month for all levels of coverage-single, parent +, couple, and family. Approximately 600 retirees did not complete their LivingWell Promise for 2017.*

Schedule E continued ...

Spouse Contributions: 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Spouses of current post-65 retirees and surviving spouses of deceased retirees with a date of death on or after July 1, 2002 pay 100% of the full contribution. Spouses of active members who died while eligible to retire prior to July 1, 2002, are provided the same subsidy by the System that would have been provided to the retiree for the lifetime of the spouse, or until remarriage. Spouses of active members who die while eligible to retire on or after July 1, 2002 or later pay 100% of the full contribution.

Survivors: Spouses of employees who die in service while eligible to retire, as well as survivors of service and disabled retirees, are eligible for Retiree Medical Plan coverage if elected within 30 days of the employee's/retiree's death with no future remarriage. Otherwise, survivor is not eligible for Retiree Medical Plan coverage.

Spousal Shared Risk Waiver for MEHP: Beginning in 2013, eligible spouses who waive the MEHP coverage, will no longer have the opportunity to enroll during any annual MEHP open enrollment so most spousal waivers on the MEHP are now permanent waivers unless a KTRS specific qualifying event is met. This does not apply to the KEHP. This MEHP eligibility rule became necessary to mitigate spousal adverse selection with zero premium Medicare Advantage plans on the individual and open market.

Monthly Surviving Spouse Contribution Effective January 1, 2019 Under Age 65 (KEHP)

Tier Elected by Surviving Spouse	LivingWell CDHP	LivingWell PPO	LivingWell Basic CDHP	LivingWell Limited HDP	Age 65 and Older (MEHP)
Single	$ 716.90	$ 736.78	$ 690.24	$ 614.98	$ 226.00
Parent Plus	985.94	1,044.52	948.08	872.52	n/a

System Retiree Medical Plan Contributions: The System Contribution Rate Basis is determined annually by the System; and the full cost is projected based on historical claims data. For retirees, the following percentages are based on years of service at retirement and are then applied to the System Contribution Rate Basis:

Percentage of System Contribution Rate Provided to Retirees*

Years of Service	Entered TRS Before 7/1/2002: Age 65 or Older & Covered Before 1/1/2005	Entered TRS Before 7/1/2002: Age 65 After or Covered After 12/31/2004	Entered TRS After 6/30/2002 and Before 7/1/2008	Entered TRS After 6/30/2008
5 - 9.99	70 %	25 %	10 %	Not Eligible
10 - 14.99	80	50	25	Not Eligible
15 - 19.99	90	75	45	45%
20 - 24.99	100	100	65	65
25 - 25.99	100	100	90	90
26 - 26.99	100	100	95	95
27 or more	100	100	100	100

** 100% for disabled retirees that retired prior to 1/1/2002.*

Schedule E continued ...

Monthly System Contribution Rate Basis
Effective January 1, 2019
Under Age 65 (KEHP)*

Tier Elected	LivingWell CDHP	LivingWell PPO	LivingWell Basic CDHP	LivingWell Limited HDP	Ages 65 and Older (MEHP)
Single	$ 660.04	$ 646.96	$ 656.60	$ 583.96	$ 226.00
Parent Plus	851.84	802.26	878.24	808.92	n/a
Couple	1,029.02	1,060.74	1,189.96	1,093.10	n/a
Family	1,131.64	1,105.34	1,303.24	1,196.18	n/a
Family Cross-Reference	738.64	719.12	771.84	704.70	n/a

* *Irrespective of a participating retiree's service, an additional $7.44 per month is paid by the system to the Department of Employee Insurance (DEI) for KEHP coverage.*

Active Member Retiree Medical Plan Contributions: Actively employed members make payroll contributions to the Medical Insurance Fund based upon the following schedule:

Active Member Percentage of Payroll Contribution Made to Medical Insurance Fund

UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)		OTHER EMPLOYEES	
Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008	Hired Before 7/1/2008	Hired on or After 7/1/2008
2.775 %	2.775 %	3.750 %	3.750%	3.750 %	3.750 %

Life Insurance Plan Benefits:

(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Members employed on a substitute or part-time basis and working at least 69% of a full contract year in a single fiscal year will be eligible for a life insurance benefit for the balance of the fiscal year or the immediately succeeding fiscal year under certain conditions. For non-vested members employed on a substitute or part-time basis, the life insurance benefit is provided if death occurs as the result of a physical injury on the job. For vested members employed on a substitute or part-time basis, death does not have to be the result of a physical injury on the job for life insurance benefits to be provided.

SCHEDULE F
Table 1: Age - Service Table
Distribution of Active Members as of June 30, 2018
by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under	3,356								3,356
Total Pay	73,197,998								73,197,998
Avg. Pay	21,811								21,811
25 to 29	5,728	1,663	5						7,396
Total Pay	203,495,638	82,568,556	187,852						286,252,046
Avg. Pay	35,526	49,650	37,570						38,704
30 to 34	2,675	4,547	1,612	3					8,837
Total Pay	86,293,957	232,507,874	93,615,745	171,059					412,588,635
Avg. Pay	32,259	51,134	58,074	57,020					46,689
35 to 39	2,254	2,127	4,670	1,452	8				10,511
Total Pay	66,909,314	110,685,191	282,452,313	94,329,491	434,996				554,811,305
Avg. Pay	29,685	52,038	60,482	64,965	54,375				52,784
40 to 44	1,783	1,360	2,099	4,041	1,099	6			10,388
Total Pay	50,536,837	70,800,804	127,327,260	271,875,642	78,592,555	466,037			599,599,135
Avg. Pay	28,344	52,059	60,661	67,279	71,513	77,673			57,720
45 to 49	1,481	1,082	1,507	2,140	3,650	1,019	4		10,883
Total Pay	38,192,866	57,257,531	91,642,244	141,344,490	258,449,408	75,036,251	337,145		662,259,935
Avg. Pay	25,789	52,918	60,811	66,049	70,808	73,637	84,286		60,853
50 to 54	1,235	656	968	1,242	1,603	1,883	341	9	7,937
Total Pay	26,561,350	32,743,609	58,414,733	82,215,623	112,128,856	141,021,748	26,428,299	771,555	480,285,773
Avg. Pay	21,507	49,914	60,346	66,196	69,949	74,892	77,502	85,728	60,512
55 to 59	1,517	465	610	913	1,003	726	265	33	5,532
Total Pay	25,011,517	20,976,754	35,767,841	58,954,988	70,939,328	56,218,141	23,218,735	2,581,322	293,668,626
Avg. Pay	16,487	45,111	58,636	64,573	70,727	77,435	87,618	78,222	53,085
60 to 64	1,679	344	305	482	483	390	106	47	3,836
Total Pay	21,246,589	12,139,654	17,529,572	31,791,751	34,076,493	28,894,613	8,938,762	3,162,631	157,780,065
Avg. Pay	12,654	35,290	57,474	65,958	70,552	74,089	84,328	67,290	41,131
65 & over	2,137	525	189	194	199	147	76	62	3,529
Total Pay	18,319,211	10,686,323	8,081,622	12,048,328	13,626,663	11,374,461	5,370,666	5,164,995	84,672,269
Avg. Pay	8,572	20,355	42,760	62,105	68,476	77,377	70,667	83,306	23,993
Total	23,845	12,769	11,965	10,467	8,045	4,171	792	151	72,205
Total Pay	609,765,277	630,366,296	715,019,182	692,731,372	568,248,299	313,011,251	64,293,607	11,680,503	3,605,115,787
Avg. Pay	25,572	49,367	59,759	66,182	70,634	75,045	81,179	77,354	49,929

Average Age: 43.5 **Average Service: 10.9**

Schedule F continued ...

Table 2 – Schedule of Total Active Member Valuation Data

Valuation Date June 30	Number	Annual Payroll	Annual Average Pay	Percentage Increase in Average Pay
2018	72,205	$ 3,605,115,787	$ 49,929	1.06 %
2017	72,130	3,563,584,342	49,405	0.35
2016	71,848	3,537,226,348	49,232	1.19
2015	72,246	3,515,113,127	48,655	2.45
2014	73,407	3,486,326,799	47,493	2.12
2013	74,831	3,480,066,406	46,506	1.51
2012	75,951	3,479,567,004	45,813	1.33

Table 3 – Eligible Deferred Vested Members as of June 30, 2018 Medical Insurance Fund

Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	1	0	1
30-34	51	195	246
35-39	284	904	1,188
40-44	300	876	1,176
45-49	327	1,147	1,474
50-54	264	975	1,239
55-59	230	823	1,053
60 & Over	253	707	960
Total	**1,710**	**5,627**	**7,337**

Eligible Deferred Vested Members as of June 30, 2018 Life Insurance Fund

Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 30	15	26	41
30-34	158	570	728
35-39	378	1,071	1,449
40-44	350	1,024	1,374
45-49	361	1,298	1,659
50-54	287	1,071	1,358
55-59	254	884	1,138
60 & Over	294	773	1,067
Total	**2,097**	**6,717**	**8,814**

Schedule F continued ...

Table 4 – All Retirees & Spouses Receiving Health Care Benefits as of June 30, 2018 Male & Female Demographic Breakdown

Attained Age	Number of Males	Number of Females	Total Number
Under 40	7	6	13
40-44	25	26	51
45-49	101	165	266
50-54	446	1,075	1,521
55-59	954	3,109	4,063
60-64	1,688	5,918	7,606
65-69	2,962	8,757	11,719
70-74	3,092	6,598	9,690
75-79	2,073	4,013	6,086
80-84	1,257	2,340	3,597
85-89	602	1,412	2,014
90-94	210	712	922
95-99	37	197	234
100 and over	2	41	43
Total	**13,456**	**34,369**	**47,825**

Table 5 – Schedule of Retirees, Beneficiaries and Survivors Added To and Removed From Rolls * Medical Insurance Fund

Fiscal Year Ending June 30	Number of Members Added to Rolls	Number of Spouses** Added to Rolls	Total Number Added to Rolls	Number of Members Removed from Rolls	Number of Spouses** Removed from Rolls	Total Number Removed from Rolls	Number of Members on Rolls at the End of the Year	Number of Spouses** on Rolls at the End of the Year	Total Number on Rolls at the End of the Year
2009	1,777	640	2,417	887	510	1,397	33,481	6,808	40,289
2010	1,710	555	2,265	876	529	1,405	34,315	6,834	41,149
2011	1,770	629	2,399	1,052	541	1,593	35,033	6,922	41,955
2012	1,996	702	2,698	1,029	616	1,645	36,000	7,008	43,008
2013	1,853	664	2,517	1,076	619	1,695	36,777	7,053	43,830
2014	1,663	638	2,301	1,165	660	1,825	37,275	7,031	44,306
2015	1,990	731	2,721	1,190	633	1,823	38,075	7,129	45,204
2016	2,045	726	2,771	1,305	674	1,979	38,815	7,181	45,996
2017	1,835	699	2,534	1,153	691	1,844	39,497	7,189	46,686
2018	1,903	828	2,731	1,170	422	1,592	40,230	7,595	47,825

* *Reflects members, spouses, and beneficiaries participating in a health care plan.*
** *Includes spouses, beneficiaries, and surviving spouses.*

Schedule F continued ...

Table 6 – Schedule of Retirees, Beneficiaries and Survivors Added To and Removed From Rolls * Life Insurance Fund

Fiscal Year Ending June 30	Number Added to Rolls	Life Insurance Benefit ($1,000's)	Number Removed from Rolls	Life Insurance Benefit ($1,000's)	Number on Rolls at the End of the Year	Life Insurance Benefit ($1,000's)	Increase in Life Insurance Benefit	Average Life Insurance Benefit
2009	1,949	$ $9,745	769	$ 3,845	38,958	$ 194,790	3.12 %	$ 5,000
2010	1,799	8,995	806	4,030	39,951	199,755	2.55	5,000
2011	2,025	10,125	858	4,290	41,118	205,590	2.92	5,000
2012	2,364	11,820	880	4,400	42,602	213,010	3.61	5,000
2013	2,195	10,975	952	4,760	43,845	219,225	2.92	5,000
2014	1,964	9,820	954	4,770	44,855	224,275	2.30	5,000
2015	2,270	11,350	1,641	8,205	45,484	227,420	1.40	5,000
2016	2,394	11,970	807	4,035	47,071	235,355	3.49	5,000
2017	2,175	10,875	1,021	5,105	48,225	241,125	2.45	5,000
2018	2,605	13,025	1,408	7,040	49,422	247,110	2.48	5,000

** The life insurance benefit is payable upon the death of only members retired for service or disability. Numbers do not include life insurance benefits payable upon the death of an active contributing member.*

Sensitivity Analysis
Medical Insurance Fund
as of June 30, 2018

The June 30, 2018 valuation results of the Medical Insurance Fund (MIF) are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate, the assumed rate of payroll growth, and the assumed rates of health care inflation (trend). The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 8.00%, together with a decrease in the discount rate to 7.00% and an increase in the discount rate to 9.00%. Under this scenario, the underlying inflation rate assumption is held constant at 3.00% and the payroll growth assumption is held constant at 3.50%.

- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.00%, together with decreases in the inflation rate to 2.75% and 2.50%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption, and the assumed rates of salary increase for active members. The assumed decreases in inflation are not assumed to impact the assumed rates of health care inflation (trend).

- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 3.50%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

- The health care inflation (trend) assumption sensitivity analysis shows the valuation results with the baseline trend assumption along with a 1.00% increase in all assumed trend rates and a 1.00% decrease in all assumed trend rates.

Sensitivity Analysis continued ...

Assumed Discount Rate Sensitivity Analysis
Medical Insurance Fund
as of June 30, 2018
(In thousands of dollars)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 3,792,234	$ 3,340,709	$ 2,967,365
Actuarial Value of Assets	1,213,918	1,213,918	1,213,918
Unfunded Liability	$ 2,578,316	$ 2,126,791	$ 1,753,447
Funded Ratio	32.01%	36.34%	40.91%
Contributions			
Normal Cost	2.33%	1.78%	1.36%
Accrued Liability	4.51%	4.04%	3.61%
Total	6.84%	5.82%	4.97%
Member	(3.70%)	(3.70%)	(3.70%)
Employer/State	3.14%	2.12%	1.27%
Discount Rate	7.00%	8.00%	9.00%
Payroll Growth	3.50%	3.50%	3.50%
Inflation Rate	3.00%	3.00%	3.00%

Inflation Assumption Sensitivity Analysis
Medical Insurance Fund
as of June 30, 2018
(In thousands of dollars)

	Valuation Results	Decrease Inflation Rate 25 Basis Points	Decrease Inflation Rate 50 Basis Points
Actuarial Accrued Liability	$ 3,340,709	$ 3,459,825	$ 3,586,056
Actuarial Value of Assets	1,213,918	1,213,918	1,213,918
Unfunded Liability	$ 2,126,791	$ 2,245,907	$ 2,372,138
Funded Ratio	36.34%	35.09%	33.85%
Contributions			
Normal Cost	1.78%	1.88%	2.00%
Accrued Liability	4.04%	4.27%	4.52%
Total	5.82%	6.15%	6.52%
Member	(3.70%)	(3.70%)	(3.70%)
Employer/State	2.12%	2.45%	2.82%
Discount Rate	8.00%	7.75%	7.50%
Payroll Growth	3.50%	3.25%	3.00%
Inflation Rate	3.00%	2.75%	2.50%

Sensitivity Analysis continued ...

Payroll Growth Assumption Sensitivity Analysis
Medical Insurance Fund
as of June 30, 2018
(In thousands of dollars)

	Valuation Results	Decrease Payroll Growth 150 Basis Points	No Payroll Growth
Actuarial Accrued Liability	$ 3,340,709	$ 3,340,709	$ 3,340,709
Actuarial Value of Assets	1,213,918	1,213,918	1,213,918
Unfunded Liability	$ 2,126,791	$ 2,126,791	$ 2,126,791
Funded Ratio	36.34%	36.34%	36.34%
Contributions			
Normal Cost	1.78%	1.78%	1.78%
Accrued Liability	4.04%	4.58%	5.35%
Total	5.82%	6.36%	7.13%
Member	(3.70%)	(3.70%)	(3.70%)
Employer/State	2.12%	2.66%	3.43%
Discount Rate	8.00%	8.00%	8.00%
Payroll Growth	3.50%	2.00%	0.00%
Inflation Rate	3.00%	3.00%	3.00%

Health Care Trend Assumption Sensitivity Analysis
Medical Insurance Fund
as of June 30, 2018
(In thousands of dollars)

	Decrease Trend Rates 100 Basis Points	Valuation Results	Increase Trend Rates 100 Basis Points
Actuarial Accrued Liability	$ 2,928,353	$ 3,340,709	$ 3,850,814
Actuarial Value of Assets	1,213,918	1,213,918	1,213,918
Unfunded Liability	$ 1,714,435	2,126,791	$ 2,636,896
Funded Ratio	41.45%	36.34%	31.52%
Contributions			
Normal Cost	1.41%	1.78%	2.27%
Accrued Liability	3.26%	4.04%	5.01%
Total	4.67%	5.82%	7.28%
Member	(3.70%)	(3.70%)	(3.70%)
Employer/State	0.97%	2.12%	3.58%
Discount Rate	8.00%	8.00%	8.00%
Payroll Growth	3.50%	3.50%	3.50%
Inflation Rate	3.00%	3.00%	3.00%

Sensitivity Analysis
Life Insurance Fund
as of June 30, 2018

The June 30, 2018 valuation results of the Life Insurance Fund (LIF) are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate, and the assumed rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, and 7.50% together with a decrease in the discount rate to 6.50% and an increase in the discount rate to 8.50%. Under this scenario, the underlying inflation rate assumption is held constant at 3.00% and the payroll growth assumption is held constant at 3.50%.

- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 3.00%, together with decreases in the inflation rate to 2.75% and 2.50%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption, and the assumed rates of salary increase for active members.

- The payroll growth assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 3.50%, together with decreases in the payroll growth assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

Assumed Discount Rate Sensitivity Analysis
Life Insurance Fund
as of June 30, 2018
(In thousands of dollars)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 127,104	$ 112,471	$ 100,452
Actuarial Value of Assets	93,808	93,808	93,808
Unfunded Liability	$ 33,296	$ 18,663	$ 6,644
Funded Ratio	73.80%	83.41%	93.39%
Contributions			
Normal Cost	0.04%	0.03%	0.03%
Accrued Liability	0.05%	0.03%	0.01%
Total	0.09%	0.06%	0.04%
Member	(0.00%)	(0.00%)	(0.00%))
Employer/State	0.09%	0.06%	0.04%
Discount Rate	6.50%	7.50%	8.50%
Payroll Growth	3.50%	3.50%	3.50%
Inflation Rate	3.00%	3.00%	3.00%

Sensitivity Analysis continued ...

Inflation Assumption Sensitivity Analysis
Life Insurance Fund
as of June 30, 2018

(In thousands of dollars)

	Valuation Results	Decrease Inflation Rate 25 Basis Points	Decrease Inflation Rate 50 Basis Points
Actuarial Accrued Liability	$ 112,471	$ 116,035	$ 119,798
Actuarial Value of Assets	93,808	93,808	93,808
Unfunded Liability	$ 18,663	22,227	25,990
Funded Ratio	83.41%	80.85%	78.31%
Contributions			
Normal Cost	0.03%	0.03%	0.04%
Accrued Liability	0.03%	0.04%	0.04%
Total	0.06%	0.07%	0.08%
Member	(0.00%)	(0.00%)	(0.00%)
Employer/State	0.06%	0.07%	0.08%
Discount Rate	7.50%	7.25%	7.00%
Payroll Growth	3.50%	3.25%	3.00%
Inflation Rate	3.00%	2.75%	2.50%

Payroll Growth Assumption Sensitivity Analysis
Life Insurance Fund
as of June 30, 2018

(In thousands of dollars)

	Valuation Results	Decrease Payroll Growth to 2%	No Payroll Growth
Actuarial Accrued Liability	$ 112,471	$ 112,471	$ 112,471
Actuarial Value of Assets	93,808	93,808	93,808
Unfunded Liability	$ 18,663	$ 18,663	$ 18,663
Funded Ratio	83.41%	83.41%	83.41%
Contributions			
Normal Cost	0.03%	0.03%	0.03%
Accrued Liability	0.03%	0.03%	0.04%
Total	0.06%	0.06%	0.07%
Member	(0.00%)	(0.00%)	(0.00%)
Employer/State	0.06%	0.06%	0.07%
Discount Rate	7.50%	7.50%	7.50%
Payroll Growth	3.50%	2.00%	0.00%
Inflation Rate	3.00%	3.00%	3.00%

Teachers' Retirement System of the State of Kentucky

2018

Statistical Section

This section of the Teachers' Retirement System of the State of Kentucky's Comprehensive Annual Financial Report presents detailed information as a context for understanding the information in the financial statements, note disclosures and required supplementary information regarding TRS's overall financial health.

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Financial Trends ..... page 181

These schedules contain trend information to help the reader understand how TRS's financial performance and well-being have changed over time.

Demographic & Economic Information ..... page 183

These schedules offer demographic and economic indicators to help the reader understand the environment within which TRS's financial activities take place.

Operating Information ..... page 188

These schedules contain benefits, service and employer contribution data to help the reader understand how TRS's financial report relates to TRS's services and activities.

Defined Benefit Plan
Past 10 Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions	Net Investment Income (Loss)	Total Additions to Plan Net Position
2018	$ 1,048,671,201	$ 319,127,087	$ 1,953,214,031	$ 3,321,012,319
2017	1,060,719,993	313,625,434	2,475,752,798	3,850,098,225
2016	565,454,590	313,044,226	(245,214,860)	633,283,956
2015	559,579,290	308,159,763	862,178,759	1,729,917,812
2014	563,326,249	304,981,620	2,803,247,956	3,671,555,825
2013	568,233,446	304,738,728	2,039,874,263	2,912,846,437
2012	557,339,552	309,729,924	309,696,252	1,176,765,728
2011	1,037,935,993	302,262,819	2,760,972,224	4,101,171,036
2010	479,805,088	297,613,965	1,509,785,381	2,287,204,434
2009	442,549,935	293,678,564	(2,020,682,522)	(1,284,454,023)

Deductions by Type
(Including Benefits by Type)

Year	Service Retirants	Disability Retirants	Survivors	Total Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Position
2018	$ 1,901,237,575	$ 84,500,330	$ 18,879,429	$ 2,004,617,334	$ 31,072,421	$ 11,388,493	$ 2,047,078,248
2017	1,817,594,617	82,466,114	18,551,397	1,918,612,128	26,305,240	10,313,715	1,955,231,083
2016	1,735,374,416	79,808,432	18,015,782	1,833,198,630	27,747,742	8,636,438	1,869,582,810
2015	1,647,205,474	76,912,574	17,338,047	1,741,456,095	23,032,624	8,868,971	1,773,357,690
2014	1,563,634,993	73,501,441	17,239,266	1,654,375,700	25,461,843	7,955,972	1,687,793,515
2013	1,484,132,938	69,808,291	16,781,695	1,570,722,924	22,059,094	8,377,003	1,601,159,021
2012	1,401,380,816	65,297,491	16,260,858	1,482,939,165	19,549,073	7,762,880	1,510,251,118
2011	1,326,033,698	60,950,214	15,551,801	1,402,535,713	17,325,387	7,322,739	1,427,183,839
2010	1,249,272,057	57,782,651	14,754,062	1,321,808,770	15,310,680	8,830,054	1,345,949,504
2009	1,184,075,934	54,562,038	14,342,435	1,252,980,407	15,208,419	8,165,757	1,276,354,583

Changes in Plan Net Position

Year	Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
2018	$ 3,321,012,319	$ 2,047,078,248	$ 1,273,934,071
2017	3,850,098,225	1,955,231,083	1,894,867,142
2016	633,283,956	1,869,582,810	(1,236,298,854)
2015	1,729,917,812	1,773,357,690	(43,439,878)
2014	3,671,555,825	1,687,793,515	1,983,762,310
2013	2,912,846,437	1,601,159,021	1,311,687,416
2012	1,176,765,728	1,510,251,118	(333,485,390)
2011	4,101,171,036	1,427,183,839	2,673,987,197
2010	2,287,204,434	1,345,949,504	941,254,930
2009	(1,284,454,023)	1,276,354,583	(2,560,808,606)

Medical Insurance Plan
Past 10 Fiscal Years

Additions by Source

Year	Employer Contributions	Member Contributions*	Recovery Income*	Net Investment Income (Loss)	Total Additions to Plan Net Position
2018	$ 187,102,413	$ 130,777,471	$	$ 76,840,512	$ 394,720,396
2017	180,375,986	128,819,243		95,452,597	404,647,826
2016	178,638,370	128,068,781		(9,332,490)	297,374,661
2015	145,263,926	157,467,680	22,820,427	7,354,704	332,906,737
2014	157,688,414	135,190,891	4,879,981	67,741,063	365,500,349
2013	166,576,444	119,795,780	34,976	30,718,836	317,126,036
2012	173,966,623	100,346,070	3,781,222	(3,989,202)	274,104,713
2011	188,241,202	84,147,337	493,312	8,334,296	281,216,147
2010	158,761,433	63,805,573	14,618,348	12,312,999	249,498,353
2009	164,408,037	58,688,767	13,683,830	11,296,280	248,076,914

** Amounts paid by retirees and recovery income is netted against insurance expenses beginning fiscal year 2016.*

Deductions by Type
(Including Benefits by Type)

Year	Insurance Benefit Expense: Under Age 65	Insurance Benefit Expense: Age 65 & Over	Administrative Expense	Total Insurance Benefits Expense	Total Deductions to Plan Net Position
2018	$ 120,519,991	$ 40,561,709	$ 1,747,561	$ 162,829,261	$ 162,829,261
2017	124,079,802	54,420,744	1,538,574	180,039,120	180,039,120
2016	127,673,325	61,196,669	1,686,070	190,556,064	190,556,064
2015	131,396,480	108,998,102	1,545,235	241,939,817	241,939,817
2014	136,963,208	105,107,323	1,100,133	243,170,664	243,170,664
2013	142,170,438	98,761,180	1,275,206	242,206,824	242,206,824
2012	156,228,181	72,746,945	1,201,629	230,176,755	230,176,755
2011	145,544,405	80,890,958	1,186,029	227,621,392	227,621,392
2010	136,702,152	100,675,376		237,377,528	237,377,528
2009	123,819,475	81,037,647		204,857,122	204,857,122

Changes in Plan Net Position

Year	Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
2018	$ 394,720,396	$ 162,829,261	$ 231,891,135
2017	404,647,826	180,039,120	224,608,706
2016	297,374,661	190,556,064	106,818,597
2015	332,906,737	241,939,817	90,966,920
2014	365,500,349	243,170,664	122,329,685
2013	317,126,036	242,206,824	74,919,212
2012	274,104,713	230,176,755	43,927,958
2011	281,216,147	227,621,392	53,594,755
2010	249,498,353	237,377,528	12,120,825
2009	248,076,914	204,857,122	43,219,792

Life Insurance Plan
Past 10 Fiscal Years

Additions by Source

Year	Employer Contributions	Net Investment Income (Loss)	Total Additions to Plan Net Position
2018	$ 1,058,329	$ 1,110,421	$ 2,168,750
2017	1,049,683	915,497	1,965,180
2016	1,037,769	4,829,336	5,867,105
2015	1,019,519	1,990,324	3,009,843
2014	1,006,091	4,572,845	5,578,936
2013	1,680,495	674,760	2,355,255
2012	1,684,711	6,450,022	8,134,733
2011	1,668,822	3,094,776	4,763,598
2010	1,966,826	5,383,644	7,350,470
2009	5,455,473	5,282,958	10,738,431

Deductions by Type
(Including Benefits by Type)

Year	Life Insurance	Administrative Expense	Total Deductions to Plan Net Position
2018	$ 5,452,920	$ 30,979	$ 5,483,899
2017	5,151,013	27,690	5,178,703
2016	4,595,489	27,195	4,622,684
2015	4,061,000	25,306	4,086,306
2014	4,692,000	21,324	4,713,324
2013	4,614,718	24,425	4,639,143
2012	4,397,281	22,886	4,420,167
2011	4,120,000	21,511	4,141,511
2010	4,148,511		4,148,511
2009	3,694,000		3,694,000

Changes in Plan Net Position

Total Additions to Plan Net Position	Total Deductions to Plan Net Position	Changes in Plan Net Position
$ 2,168,750	$ 5,483,899	$ (3,315,149)
1,965,180	5,178,703	(3,213,523)
5,867,105	4,622,684	1,244,421
3,009,843	4,086,306	(1,076,463)
5,578,936	4,713,324	865,612
2,355,255	4,639,143	(2,283,888)
8,134,733	4,420,167	3,714,566
4,763,598	4,141,511	622,087
7,350,470	4,148,511	3,201,959
10,738,431	3,694,000	7,044,431

Distribution of Active Contributing Members as of June 30, 2018

By Age

Age	Male	Female
20-24	649	2,762
25-29	1,730	5,733
30-34	2,132	6,799
35-39	2,545	8,055
40-44	2,623	7,833
45-49	2,648	8,344
50-54	1,970	6,304
55-59	1,510	4,606
60-64	1,086	3,193
65 & over	1,202	2,834
Total	**18,095**	**56,463**

By Service

Years of Service	Male	Female
Less than 1	2,453	7,653
1-4	4,070	12,750
5-9	3,085	9,618
10-14	2,817	8,979
15-19	2,365	7,894
20-24	1,934	5,585
25-29	1,069	3,219
30-34	262	683
35 or more	40	82
Total	**18,095**	**56,463**

Principal Participating Employers
Current Year and Nine Years Ago

Employer	2018 Covered Employees	2018 Rank	2018 Percentage of Total System	2009 Covered Employees	2009 Rank	2009 Percentage of Total System
Jefferson County	10,743	1	14.41%	9,999	1	13.02%
Fayette County Public	4,764	2	6.39	4,272	2	5.56
Boone County	2,012	3	2.70	1,802	3	2.35
Warren County	1,425	4	1.91	1,206	8	1.57
Hardin County	1,392	5	1.87	1,348	4	1.75
Bullitt County	1,270	6	1.70	1,216	7	1.58
Kenton County	1,260	7	1.69	1,280	5	1.67
Oldham County	1,220	8	1.64	1,217	6	1.58
Daviess County	1,105	9	1.48	1,165	10	1.52
Madison County	1,105	10	1.48	1,180	9	1.54
All Other*	48,262		64.73	52,141		67.86
Total (207 Employers)	**74,558**		**100.00%**	**76,826**		**100.00%**

* In 2018, All Other consisted of:

Type	Number	Employees
Local School Districts	163	43,119
Higher Education	6	3,270
State Agencies	14	1,416
Educational Cooperatives	8	335
Other	6	122
Total	**197**	**48,262**

TRS Schedule of Participating Employers
School Districts: County Schools

1. Adair
2. Allen
3. Anderson
4. Ballard
5. Barren
6. Bath
7. Bell
8. Boone
9. Bourbon
10. Boyd
11. Boyle
12. Bracken
13. Breathitt
14. Breckinridge
15. Bullitt
16. Butler
17. Caldwell
18. Calloway
19. Campbell
20. Carlisle
21. Carroll
22. Carter
23. Casey
24. Christian
25. Clark
26. Clay
27. Clinton
28. Crittenden
29. Cumberland
30. Daviess
31. Edmonson
32. Elliott
33. Estill
34. Fayette
35. Fleming
36. Floyd
37. Franklin
38. Fulton
39. Gallatin
40. Garrard
41. Grant
42. Graves
43. Grayson
44. Green
45. Greenup
46. Hancock
47. Hardin
48. Harlan
49. Harrison
50. Hart
51. Henderson
52. Henry
53. Hickman
54. Hopkins
55. Jackson
56. Jefferson
57. Jessamine
58. Johnson
59. Kenton
60. Knott
61. Knox
62. Larue
63. Laurel
64. Lawrence
65. Lee
66. Leslie
67. Letcher
68. Lewis
69. Lincoln
70. Livingston
71. Logan
72. Lyon
73. Madison
74. Magoffin
75. Marion
76. Marshall
77. Martin
78. Mason
79. McCracken
80. McCreary
81. McLean
82. Meade
83. Menifee
84. Mercer
85. Metcalfe
86. Monroe
87. Montgomery
88. Morgan
89. Muhlenberg
90. Nelson
91. Nicholas
92. Ohio
93. Oldham
94. Owen
95. Owsley
96. Pendleton
97. Perry
98. Pike
99. Powell
100. Pulaski
101. Robertson
102. Rockcastle
103. Rowan
104. Russell
105. Scott
106. Shelby
107. Simpson
108. Spencer
109. Taylor
110. Todd
111. Trigg
112. Trimble
113. Union
114. Warren
115. Washington
116. Wayne
117. Webster
118. Whitley
119. Wolfe
120. Woodford

continued on next page ...

TRS Schedule of Participating Employers *(continued)*
School Districts: Independent Schools

1. Anchorage
2. Ashland
3. Augusta
4. Barbourville
5. Bardstown
6. Beechwood
7. Bellevue
8. Berea
9. Bowling Green
10. Burgin
11. Campbellsville
12. Caverna
13. Cloverport
14. Corbin
15. Covington
16. Danville
17. Dawson Springs
18. Dayton
19. East Bernstadt
20. Elizabethtown
21. Eminence
22. Erlanger-Elsmere
23. Fairview
24. Fort Thomas
25. Frankfort
26. Fulton
27. Glasgow
28. Harlan
29. Hazard
30. Jackson
31. Jenkins
32. Ludlow
33. Mayfield
34. Middlesboro
35. Murray
36. Newport
37. Owensboro
38. Paducah
39. Paintsville
40. Paris
41. Pikeville
42. Pineville
43. Raceland
44. Russell
45. Russellville
46. Science Hill
47. Silver Grove
48. Somerset
48. Southgate
50. Walton-Verona
51. West Point
52. Williamsburg
53. Williamstown

Universities & Community/ Technical Colleges

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

State of Kentucky/ Other Organizations

1. Education and Workforce Development Cabinet
2. Department of Corrections

Other Organizations

1. Education Professional Standards Board
2. Kentucky Education Association
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative
13. Southeast South-Central Educational Cooperative

Distribution of Retirement and Medical Payments Worldwide as of June 30, 2018

Number of Recipients in United States Outside Kentucky

149	Alabama
4	Alaska
86	Arizona
39	Arkansas
98	California
64	Colorado
10	Connecticut
13	Delaware
8	District of Columbia
1,333	Florida
272	Georgia
7	Hawaii
9	Idaho
119	Illinois
787	Indiana
20	Iowa
31	Kansas
40	Louisiana
18	Maine
41	Maryland
30	Massachusetts
55	Michigan
31	Minnesota
57	Mississippi
92	Missouri
8	Montana
9	Nebraska
24	Nevada
7	New Hampshire
9	New Jersey
15	New Mexico
39	New York
297	North Carolina
1	North Dakota
669	Ohio
31	Oklahoma
34	Oregon
67	Pennsylvania
1	Rhode Island
240	South Carolina
6	South Dakota
1,003	Tennessee
220	Texas
30	Utah
3	Vermont
178	Virginia
42	Washington
114	West Virginia
31	Wisconsin
6	Wyoming

Number of Recipients Outside United States

3	Military APO
2	Australia
1	Barbados
5	Canada
1	Mexico
1	New Zealand
1	Philippines
1	Poland
1	Spain
1	Sweden
1	Switzerland

	Number of Recipients	Amount of Payments
Inside Kentucky	**49,575**	**$ 1,975,398,180**
Outside Kentucky	**6,515**	**190,300,854**
TOTAL	**56,090**	**$ 2,165,699,034**

Distribution of Retirement and Medical Payments Statewide
Fiscal Year Ended June 30, 2018

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Adair	$ 8,397,232	235	Laurel	27,149,115	702
Allen	7,563,988	190	Lawrence	5,577,998	150
Anderson	8,728,901	253	Lee	3,235,217	89
Ballard	4,824,851	132	Leslie	6,536,833	158
Barren	17,671,108	463	Letcher	13,233,643	358
Bath	5,105,946	149	Lewis	7,391,563	201
Bell	14,891,893	386	Lincoln	12,150,359	306
Boone	44,595,929	1,060	Livingston	3,279,640	86
Bourbon	8,302,269	219	Logan	11,849,914	303
Boyd	22,947,479	564	Lyon	4,676,157	116
Boyle	19,592,920	482	Madison	59,630,569	1,490
Bracken	4,435,412	115	Magoffin	7,840,827	202
Breathitt	9,725,194	261	Marion	7,622,622	207
Breckinridge	7,689,703	193	Marshall	15,524,995	390
Bullitt	19,559,652	454	Martin	5,427,668	140
Butler	4,200,203	106	Mason	8,508,178	229
Caldwell	7,673,801	201	McCracken	29,165,674	762
Calloway	27,908,432	715	McCreary	8,567,016	229
Campbell	31,749,006	749	McLean	4,957,985	128
Carlisle	1,856,113	56	Meade	8,132,182	189
Carroll	4,117,298	99	Menifee	2,526,749	75
Carter	15,740,483	429	Mercer	10,533,828	292
Casey	6,418,356	165	Metcalfe	3,836,292	103
Christian	22,398,455	585	Monroe	6,322,307	164
Clark	14,994,318	384	Montgomery	13,809,497	355
Clay	12,598,956	322	Morgan	7,455,626	204
Clinton	5,797,643	159	Muhlenberg	15,110,234	371
Crittenden	2,460,042	73	Nelson	17,506,179	450
Cumberland	3,761,493	93	Nicholas	2,414,142	65
Daviess	47,790,837	1,202	Ohio	8,192,940	226
Edmonson	4,358,845	117	Oldham	22,250,065	524
Elliott	2,326,421	68	Owen	4,289,920	106
Estill	6,413,637	171	Owsley	4,437,831	118
Fayette	129,883,528	3,322	Pendleton	5,595,662	140
Fleming	7,282,589	199	Perry	16,524,408	424
Floyd	21,962,016	591	Pike	31,422,919	837
Franklin	30,877,091	958	Powell	5,528,039	138
Fulton	2,945,005	81	Pulaski	29,382,626	776
Gallatin	1,369,824	38	Robertson	1,016,037	26
Garrard	8,798,106	229	Rockcastle	8,040,737	194
Grant	8,308,775	187	Rowan	20,324,537	548
Graves	16,918,210	435	Russell	9,853,006	251
Grayson	11,258,751	294	Scott	19,970,715	511
Green	5,147,321	133	Shelby	21,777,836	515
Greenup	16,359,610	418	Simpson	6,637,318	174
Hancock	2,821,491	73	Spencer	6,788,619	159
Hardin	39,944,857	977	Taylor	13,358,300	351
Harlan	16,355,100	432	Todd	3,504,479	97
Harrison	7,955,517	210	Trigg	7,248,438	193
Hart	5,765,334	145	Trimble	2,756,010	64
Henderson	18,499,526	478	Union	4,676,140	129
Henry	7,594,755	203	Warren	73,213,205	1,856
Hickman	1,501,048	36	Washington	4,984,498	133
Hopkins	20,104,428	503	Wayne	9,223,565	244
Jackson	5,728,597	158	Webster	5,201,363	141
Jefferson	335,714,774	7,408	Whitley	27,301,418	731
Jessamine	18,469,992	477	Wolfe	4,838,053	131
Johnson	14,616,967	367	Woodford	13,637,185	350
Kenton	41,837,061	1,024			
Knott	10,236,698	268	**Total in Kentucky**	**$ 1,975,398,180**	**49,575**
Knox	11,286,539	308			
Larue	7,308,975	172			

Growth in Annuitants
as of June 30, 2018

Fiscal Year	Service Retirees	Disability Retirees	Beneficiaries of Retired Members	Beneficiaries of Deceased Members Eligible to Retire	Survivors	Disabled Adult Child
2009	36,684	2,209	1,837	559	448	283
2010	37,607	2,284	1,915	567	435	291
2011	38,705	2,379	2,003	584	430	296
2012	40,107	2,478	2,126	596	444	304
2013	41,255	2,582	2,207	601	432	303
2014	42,265	2,641	2,304	596	429	316
2015	43,634	2,691	2,442	653	349	328
2016	45,096	2,762	2,544	652	370	327
2017	46,356	2,806	2,675	655	349	333
2018	47,606	2,831	2,757	648	353	339

Schedule of Annuitants by Type of Benefit
as of June 30, 2018

Amount of Monthly Benefit ($)	Number of Annuitants	Type of Benefit*					
		1	2	3	4	5	6
1 - 500	3,976	3,059	11	187	29	351	339
501 - 1,000	2,903	2,388	153	281	81	0	0
1,001 - 1,500	2,967	2,090	290	479	106	2	0
1,501 - 2,000	3,471	2,570	393	431	77	0	0
2,001 - 2,500	4,594	3,631	534	334	95	0	0
2,501 - 3,000	7,681	6,531	714	342	94	0	0
3,001 - 3,500	8,839	8,101	424	249	65	0	0
3,501 - 4,000	6,779	6,408	170	169	32	0	0
4,001 - 4,500	4,526	4,297	85	114	30	0	0
4,501 - 5,000	3,185	3,079	27	66	13	0	0
5,001 & OVER	5,613	5,452	30	105	26	0	0
Total	**54,534**	**47,606**	**2,831**	**2,757**	**648**	**353**	**339**

*** Type of Benefit**
1-*Normal Retirement for Age & Service*
2-*Disability Retirement*
3-*Beneficiaries of Retired Members*
4-*Beneficiaries of Deceased Member Eligible to Retire*
5-Survivor Payments
6-Disabled Adult Child

Schedule of Annuitants by Option Selected
as of June 30, 2018

Amount of Monthly Benefit ($)	Option Selected*							
	1	2	3	4	5	6	7	8
1 - 500	1,989	445	299	49	2	405	97	690
501 - 1,000	1,638	400	227	96	8	362	165	7
1,001 - 1,500	1,459	333	289	146	18	387	319	16
1,501 - 2,000	1,772	384	320	144	6	494	326	25
2,001 - 2,500	2,303	485	418	155	2	708	423	100
2,501 - 3,000	3,661	768	633	227	11	1,396	734	251
3,001 - 3,500	4,597	1,040	637	214	8	1,381	870	92
3,501 - 4,000	3,529	769	480	194	7	1,041	710	49
4,001 - 4,500	2,336	469	363	124	9	671	536	18
4,501 - 5,000	1,653	349	262	106	8	463	343	1
5,001 & OVER	2,872	554	534	237	16	755	640	5
TOTAL	**27,809**	**5,996**	**4,462**	**1,692**	**95**	**8,063**	**5,163**	**1,254**

***Option selected:**
1 - Straight-life annuity with refundable balance
2 - Period certain benefit and life thereafter
3 - Joint-survivor annuity
4 - Joint-survivor annuity, one-half benefit to beneficiary
5 - Other payment - special option
6 - Joint-survivor annuity with pop-up option
7 - Joint-survivor annuity, one-half benefit to beneficiary with pop-up option
8 - Disability, survivors and disabled adult children - set by statute

Defined Benefit Plan
Average Initial Benefit Payments for the Past 10 Years
By Years of Service Credit

Retirement Effective Dates	0-4.99	5-9.99	10-14.99	15-19.99	20-24.99	25-29.99	≥30	TOTAL
07/01/2008 TO 06/30/2009								
Average monthly benefit	$200	$573	$1,005	$1,725	$2,427	$3,368	$4,496	**$2,941**
Average final average salary	$4,617	$3,942	$3,873	$4,686	$4,974	$5,278	$5,960	**$5,164**
Number of retired members	72	168	137	115	242	505	585	**1,824**
07/01/2009 TO 06/30/2010								
Average monthly benefit	$185	$525	$1,104	$1,700	$2,513	$3,468	$4,670	**$3,222**
Average final average salary	$3,654	$3,637	$4,124	$4,508	$5,184	$5,383	$6,102	**$5,316**
Number of retired members	28	133	98	103	242	442	601	**1,647**
07/01/2010 TO 06/30/2011								
Average monthly benefit	$149	$519	$1,225	$1,781	$2,529	$3,621	$4,827	**$3,240**
Average final average salary	$3,570	$3,640	$4,423	$4,825	$5,143	$5,574	$6,235	**$5,392**
Number of retired members	45	157	144	112	235	544	617	**1,854**
07/01/2011 TO 06/30/2012								
Average monthly benefit	$175	$507	$1,170	$1,897	$2,613	$3,674	$4,726	**$3,148**
Average final average salary	$3,292	$3,759	$4,307	$4,898	$5,219	$5,605	$6,109	**$5,331**
Number of retired members	45	197	146	162	303	778	569	**2,200**
07/01/2012 TO 06/30/2013								
Average monthly benefit	$161	$475	$1,186	$1,963	$2,781	$3,811	$5,162	**$3,149**
Average final average salary	$3,362	$3,660	$4,498	$4,956	$5,518	$5,799	$6,632	**$5,476**
Number of retired members	44	234	156	154	294	685	447	**2,014**
07/01/2013 TO 06/30/2014								
Average monthly benefit	$192	$484	$1,270	$2,068	$2,797	$3,847	$5,362	**$3,126**
Average final average salary	$4,148	$3,677	$4,751	$5,364	$5,600	$5,902	$6,860	**$5,589**
Number of retired members	56	211	161	145	258	678	344	**1,853**
07/01/2014 TO 06/30/2015								
Average monthly benefit	$157	$472	$1,282	$2,038	$2,890	$3,898	$5,124	**$3,173**
Average final average salary	$3,331	$3,577	$4,892	$5,266	$5,709	$5,948	$6,552	**$5,577**
Number of retired members	60	231	183	206	314	806	456	**2,256**
07/01/2015 TO 06/30/2016								
Average monthly benefit	$177	$519	$1,316	$1,998	$2,934	$3,935	$5,389	**$3,195**
Average final average salary	$3,642	$3,791	$4,847	$5,188	$5,777	$6,019	$6,858	**$5,664**
Number of retired members	61	254	194	217	356	807	448	**2,337**
07/01/2016 TO 06/30/2017								
Average monthly benefit	$176	$473	$1,235	$2,039	$2,902	$3,935	$5,179	**$3,040**
Average final average salary	$3,691	$3,506	$4,588	$5,208	$5,722	$6,024	$6,666	**$5,514**
Number of retired members	53	259	162	212	346	766	320	**2,118**
07/01/2017 TO 06/30/2018								
Average monthly benefit	$152	$486	$1,254	$2,098	$2,990	$4,002	$5,412	**$3,175**
Average final average salary	$3,760	$3,668	$4,702	$5,397	$5,883	$6,068	$6,980	**$5,677**
Number of retired members	64	255	147	193	356	844	330	**2,189**
Ten Years Ended June 30, 2018								
Average monthly benefit	**$173**	**$499**	**$1,215**	**$1,960**	**$2,764**	**$3,791**	**$4,971**	**$3,142**
Average final average salary	**$3,754**	**$3,679**	**$4,540**	**$5,086**	**$5,512**	**$5,806**	**$6,423**	**$5,481**
Number of retired members	**528**	**2,099**	**1,528**	**1,619**	**2,946**	**6,855**	**4,717**	**20,292**

The annuity for most TRS retirees is in lieu of Social Security.

Medical Insurance Plan
Average Insurance Premium Supplements for the Last Five Years
By Years of Service Credit

Retirement Effective Dates	0-9.99	10-14.99	15-19.99	≥20	TOTAL
07/01/2013 to 06/30/2014					
Average monthly supplement	$ 51.99	$ 189.59	$ 335.34	$ 483.65	
Number of retired members	15	82	100	1,227	1,424
07/01/2014 to 06/30/2015					
Average monthly supplement	$ 78.48	$ 204.26	$ 369.27	$ 492.30	
Number of retired members	24	101	176	1,411	1,712
07/01/2015 to 06/30/2016					
Average monthly supplement	$ 86.82	$ 182.41	$ 323.14	$ 483.93	
Number of retired members	68	98	178	1,407	1,751
07/01/2016 to 06/30/2017					
Average monthly supplement	$ 74.65	$ 192.30	$ 333.08	$ 476.86	
Number of retired members	62	71	194	1,291	1,618
07/01/2017 to 06/30/2018					
Average monthly supplement	$ 85.14	$ 122.23	$ 299.1	$ 464.17	
Number of retired members	59	71	169	1,375	1,674

Retiree Sick Leave Payments
Summary of Fiscal Year Ended June 30, 2018

Total members retiring	2,398
Total members receiving sick leave payments	1,646
Total amount of sick leave payments at 12.855% contribution rate	$ 21,981,330
Average sick leave payment per retiree	$ 13,354
Total increase in final three or five year average salary base	$ 5,821,290
Average increase in final average salary	$ 3,537
Total service credit of 1,646 retirees	42,325
Average service credit of 1,646 retirees	25.71

ANTICIPATED LIFETIME PAYOUT OF ADDITIONAL ANNUITY

Actuarial cost of sick leave as salary credit	$ 47,717,321

Funding of Additional Payments

Member Contributions ($21,981,330 x 9.105%) =	$ 2,001,400
Employer Contributions ($21,981,330 x 12.325%) =	2,709,199
TOTAL CONTRIBUTIONS	$ 4,710,599
DEFICIT:	
Anticipated additional payout	$ 47,717,321
Less: total member and state contributions	4,710,599
Subtotal unfunded debt	$ 43,006,722
Less: current year appropriation	6,036,700
TOTAL UNFUNDED COST OF SICK LEAVE PAYMENTS*	$ 36,970,022

* *This amount will be amortized over a 20-year period per KRS 161.553.*

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GASB STATEMENT NO. 67 REPORT

FOR THE

TEACHERS' RETIREMENT SYSTEM

OF THE STATE OF KENTUCKY

PREPARED AS OF JUNE 30, 2014

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December 11, 2014

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Presented in this report is information to assist the Teachers' Retirement System of the State of Kentucky (KTRS), in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. This report has been prepared as of June 30, 2014 (the Measurement Date) to assist KTRS in better understanding the requirements of GASB 67 and to identify the information to be provided by KTRS's actuary, Cavanaugh Macdonald Consulting (CMC).

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2013. The valuation was based upon data, furnished by the Executive Secretary and KTRS staff, concerning active, inactive and retired members along with pertinent financial information.

To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 67.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

EAM/EJK

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REPORT OF THE ANNUAL GASB STATEMENT NO. 67
REQUIRED INFORMATION FOR THE
TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
PREPARED AS OF JUNE 30, 2014

SECTION I – INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "*Financial Reporting For Pension Plans*", in June 2012. GASB 67's effective date is for plan years beginning after June 15, 2013. This report, prepared as of June 30, 2014 (the Measurement Date), presents information to assist the Teachers' Retirement System of the State of Kentucky (KTRS), in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of KTRS as of June 30, 2013. The results of that valuation were detailed in a report dated December 6, 2013.

GASB 67 replaces GASB 25, and represents a significant departure from the requirements of that older statement. GASB 25 was issued as a funding friendly statement that required pension plans to report items consistent with the results of the plan's actuarial valuations, as long as those valuations met certain parameters. GASB 67 basically separates accounting from funding by creating disclosure and reporting requirements that may or may not be consistent with the basis used for funding the System.

GASB 67 requires us to determine the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. If the valuation date at which the TPL is determined is before the measurement date, as is the case here, the TPL must be rolled forward to the measurement date. The Net Pension Liability (NPL) is then set equal to the rolled forward TPL minus the System's Fiduciary Net Position (FNP) (basically the market values of assets) as of the Measurement Date. The benefit provisions recognized in the calculation of the TPL are summarized in Schedule B. The development of the roll-forward of the TPL is shown in the table on page 6.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR) as described by GASB 67. To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the membership and beneficiaries of the System on the Measurement Date. We have projected future employer contributions to be made based on the amounts required by statute. Although the KTRS Board of Trustees adopted a funding policy, shown in Schedule E, on December 16, 2013, the State has not funded the actuarially determined contributions since 2009. On this basis, if the FNP is not projected to be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. Our calculations indicated that the FNP is projected to be depleted, so a bond rate is used in the determination of the SEIR. On this basis, we have determined that a discount rate of 5.23 percent meets the requirements of GASB 67.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information.

SECTION II – FINANCIAL STATEMENT NOTES

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30(a) (1)-(3): The information required is to be supplied by the System.

Paragraph 30(a) (4): The data required regarding the membership of the KTRS were furnished by the System office. The following table summarizes the membership of the System as of June 30, 2013, the actuarial valuation date.

Membership

	Number
Retirees And Survivors Currently Receiving Benefits	47,406
Terminated Vested Employees Entitled To But Not Yet Receiving Benefits	7,194
Inactive Non-vested Members	22,848
Active Members	74,831
Total	152,279

Paragraphs 30(a)(5)-(6) and Paragraphs 30(b)-(f): The information required is to be supplied by the System.

Paragraphs 31(a) (1)-(4): The information is provided in the following table. As stated on the previous page, the Net Pension Liability (NPL) is equal to the Total Pension Liability (TPL) minus the Fiduciary Net Position (FNP). That result as of June 30, 2014 is presented in the table below ($ thousands).

	Fiscal Year Ending 6/30/2014
Total Pension Liability (TPL)	$39,684,776
Fiduciary Net Position (FNP)	18,092,619
Net Pension Liability (NPL)	$21,592,157
Ratio of FNP to TPL	45.59%

Paragraph 31(b) (1)(a)-(f): This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The set of actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The total pension liability was determined by an actuarial valuation as of June 30, 2013, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.50 percent
Salary increases	4.00 – 8.20 percent, including inflation
Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation
Municipal Bond Index Rate	4.35%
Single Equivalent Interest Rate	5.23%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale AA to 2020 with a set back of 1 year for females.

The actuarial assumptions used in the June 30, 2013 valuation were based on the results of an actuarial experience study for the period July 1, 2005 – June 30, 2010 adopted by the Board on December 19, 2011.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by KTRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	45.0%	6.4%
Non U.S. Equity	17.0%	6.5%
Fixed Income	24.0%	1.6%
High Yield Bonds	4.0%	3.1%
Real Estate	4.0%	5.8%
Alternatives	4.0%	6.8%
Cash	2.0%	1.5%
Total	100.00%	

Discount rate. The discount rate used to measure the total pension liability was 5.23 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that Employer contributions will be made at statutorily required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2036 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2035 and a municipal bond index rate of 4.35 percent was applied to all periods of projected benefit payments after 2035. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

Paragraph 31(b) (1) (g): This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 5.23 percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (4.23 percent) or 1-percentage-point higher (6.23 percent) than the current rate ($ thousands):

	1% Decrease (4.23%)	Current Discount Rate (5.23%)	1% Increase (6.23%)
System's net pension liability	$27,122,640	$21,592,157	$17,027,992

Paragraph 31(c): June 30, 2013 is the actuarial valuation date upon which the TPL is based. The TPL as of June 30, 2013 was determined using a discount rate of 5.16% which was based on a municipal bond index rate as of that date equal to 4.27%. An expected TPL is determined as of June 30, 2014 using standard roll forward techniques. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate for the year. The final TPL as of June 30, 2014 reflects that the assumed municipal bond index rate increased from 4.27% to 4.35%, resulting in a change in the SEIR from 5.16% to 5.23%. The impact of this change in the discount rate is a change in assumptions that is added to the expected TPL to determine the final TPL as of June 30, 2014. This procedure is shown in the following table:

TPL Roll-Forward ($ in thousands)	
(a) TPL as of June 30, 2013	$38,758,709
(b) Entry Age Normal Cost for the Year July 1, 2013 – June 30, 2014	1,002,338
(c) Actual Benefit Payments (including refunds) for the Year July 1, 2013 – June 30, 2014	1,679,838
(d) Expected TPL as of June 30, 2014 = [(a) x (1.0516)] + (b) - [(c) x (1.0258)]	$40,037,820
(e) Change in Assumptions (Discount Rate from 5.16% to 5.23%)	(353,043)
(f) Final TPL as of June 30, 2014 = (d) + (e)	$39,864,776

SECTION III – REQUIRED SUPPLEMENTARY INFORMATION

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 32(a)-(c): The required tables are provided in Schedule A.

Paragraph 32(d): The money-weighted rates of return required are to be supplied by the System.

Paragraph 34: In addition the following should be noted regarding the RSI:

Changes of benefit terms. None

Changes of assumptions. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2011. In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation, the Board adopted an interest smoothing methodology to calculate liabilities for purposes of determining the actuarially determined contributions.

Methods and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of that schedule:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Inflation	3.50 percent
Salary increase	4.00 to 8.20 percent, including inflation
Ultimate Investment rate of return*	7.50 percent, net of pension plan investment expense, including inflation

*****The actuarially determined contribution rates are determined using the interest smoothing methodology adopted by the Board

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)
($ in Thousands)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total pension liability										
Service Cost	$ 1,002,338									
Interest	1,956,610									
Benefit changes	0									
Difference between expected and actual experience	0									
Changes of assumptions	(353,043)									
Benefit payments	(1,654,376)									
Refunds of contributions	(25,462)									
Net change in total pension liability	926,067									
Total pension liability - beginning	38,758,709									
Total pension liability - ending (a)	$39,684,776									
Plan net position										
Contributions - State of Kentucky	$ 483,330									
Contributions - Other Employers	79,996									
Contributions - member	304,982									
Net investment income	2,803,249									
Benefit payments	(1,654,376)									
Administrative expense	(7,956)									
Refunds of contributions	(25,462)									
Other	0									
Net change in plan net position	1,983,763									
Plan net position - beginning	16,108,808									
Plan net position - ending (b)	$18,092,571									
Net pension liability - ending (a) - (b)	$21,592,205									

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF THE NET PENSION LIABILITY
GASB 67 Paragraph 32(b)
($ in Thousands)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total pension liability	$ 39,684,776									
Plan net position	18,092,571									
Net pension liability	$ 21,592,205									
Ratio of plan net position to total pension liability	45.59%									
Covered-employee payroll	$ 3,443,138									
Net pension liability as a percentage of covered-employee payroll	627.11%									

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 67 Paragraph 32(c)
($ in Thousands)

	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Covered-employee payroll	$3,443,138	$3,310,710	$3,310,176	$3,283,749	$3,321,614	$3,253,077	$3,190,332	$2,975,289	$2,859,477	$2,703,430
Actual employer contributions	$ 563,326	$ 568,233	$ 557,340	$1,037,936	$ 479,805	$ 442,550	$ 466,248	$ 434,890	$ 406,107	$ 383,777
Actuarially determined employer contributions	823,446	802,985	757,822	678,741	633,938	600,283	563,789	494,565	406,107	383,777
Annual contribution excess (deficiency)	$ (260,120)	$ (234,752)	$ (200,482)	$ 359,195	$ (154,133)	$ (157,733)	$ (97,541)	$ (59,675)	$ -	$ -
Actual contributions as a percentage of covered-employee payroll	16.36%	17.16%	16.84%	31.61%	14.44%	13.60%	14.61%	14.62%	14.20%	14.20%

SCHEDULE B

SUMMARY OF MAIN BENEFIT PROVISIONS

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2013. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.
.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments	The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions	University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.60
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before 27 Years	After 27 Years
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	of Service	of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Market Value

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

SCHEDULE D

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE E

BOARD FUNDING POLICY

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("KTRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background:

State law provides that the retirement benefits promised to members of KTRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in KTRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state—as plan guarantor—is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $487 million (Fiscal Year 2016). The following schedule details the growth of the annual retirement appropriations payable by the state:

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000

(Source: KTRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2013).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which—if paid—will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

- Use the Entry Age Normal actuarial cost method;
- Use a five-year asset smoothing method;
- Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
- Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
- Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and KTRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

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GASB STATEMENT NO. 67 REPORT

FOR THE

TEACHERS' RETIREMENT SYSTEM

OF THE STATE OF KENTUCKY

PREPARED AS OF JUNE 30, 2015

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December 4, 2015

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Presented in this report is information to assist the Teachers' Retirement System of the State of Kentucky (KTRS), in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. This report has been prepared as of June 30, 2015 (the Measurement Date) to assist KTRS in better understanding the requirements of GASB 67 and to identify the information to be provided by KTRS's actuary, Cavanaugh Macdonald Consulting (CMC).

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2014. The valuation was based upon data, furnished by the Executive Secretary and KTRS staff, concerning active, inactive and retired members along with pertinent financial information.

To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 67.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

EAM/EJK

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REPORT OF THE ANNUAL GASB STATEMENT NO. 67
REQUIRED INFORMATION FOR THE
TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
PREPARED AS OF JUNE 30, 2015

SECTION I – INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "*Financial Reporting For Pension Plans*", in June 2012. This report, prepared as of June 30, 2015 (the Measurement Date), presents information to assist the Teachers' Retirement System of the State of Kentucky (KTRS), in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of KTRS as of June 30, 2014. The results of that valuation were detailed in a report dated December 12, 2014.

GASB 67 requires a measurement of the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. If the valuation date at which the TPL is determined is before the measurement date, as is the case here, the TPL must be rolled forward to the measurement date. The Net Pension Liability (NPL) is then set equal to the rolled forward TPL minus the System's Fiduciary Net Position (FNP) (basically the market values of assets) as of the Measurement Date. The benefit provisions recognized in the calculation of the TPL are summarized in Schedule B. The development of the roll-forward of the TPL is shown in the table on page 5.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR) as described by GASB 67. To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the membership and beneficiaries of the System on the Measurement Date. We have projected future employer contributions to be made based on the amounts required by statute. Although the KTRS Board of Trustees adopted a funding policy, shown in Schedule E, on December 16, 2013, the State has not funded the actuarially determined contributions since 2009. On this basis, if the FNP is not projected to be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. Our calculations indicated that the FNP is projected to be depleted, so a bond rate is used in the determination of the SEIR. On this basis, we have determined that a discount rate of 4.88 percent meets the requirements of GASB 67.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information.

SECTION II – FINANCIAL STATEMENT NOTES

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30(a) (1)-(3): The information required is to be supplied by the System.

Paragraph 30(a) (4): The data required regarding the membership of the KTRS were furnished by the System office. The following table summarizes the membership of the System as of June 30, 2014, the actuarial valuation date.

Membership

	Number
Retirees And Survivors Currently Receiving Benefits	48,576
Terminated Vested Employees Entitled To But Not Yet Receiving Benefits	7,762
Inactive Non-vested Members	27,689
Active Members	73,407
Total	157,434

Paragraphs 30(a)(5)-(6) and Paragraphs 30(b)-(f): The information required is to be supplied by the System.

Paragraphs 31(a) (1)-(4): The information is provided in the following table. As stated on the previous page, the Net Pension Liability (NPL) is equal to the Total Pension Liability (TPL) minus the Fiduciary Net Position (FNP). That result as of June 30, 2015 is presented in the table below ($ thousands).

	Fiscal Year Ending 6/30/2015
Total Pension Liability (TPL)	$42,476,699
Fiduciary Net Position (FNP)	18,049,131
Net Pension Liability (NPL)	$24,427,568
Ratio of FNP to TPL	42.49%

Paragraph 31(b) (1)(a)-(f): This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The set of actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The total pension liability was determined by an actuarial valuation as of June 30, 2014, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.50 percent
Salary increases	4.00 – 8.20 percent, including inflation
Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation
Municipal Bond Index Rate	3.82%
Single Equivalent Interest Rate	4.88%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale AA to 2020 with a set back of 1 year for females.

The actuarial assumptions used in the June 30, 2014 valuation were based on the results of an actuarial experience study for the period July 1, 2005 – June 30, 2010 adopted by the Board on December 19, 2011.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by KTRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	45.0%	6.4%
Non U.S. Equity	17.0%	6.5%
Fixed Income	24.0%	1.6%
High Yield Bonds	4.0%	3.1%
Real Estate	4.0%	5.8%
Alternatives	4.0%	6.8%
Cash	2.0%	1.5%
Total	100.00%	

Discount rate. The discount rate used to measure the total pension liability was 4.88 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that Employer contributions will be made at statutorily required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2039 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2038 and a municipal bond index rate of 3.82 percent was applied to all periods of projected benefit payments after 2038. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

Paragraph 31(b) (1) (g): This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 4.88 percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.88 percent) or 1-percentage-point higher (5.88 percent) than the current rate ($ thousands):

	1% Decrease (3.88%)	Current Discount Rate (4.88%)	1% Increase (5.88%)
System's net pension liability	$30,402,796	$24,427,568	$19,482,972

Paragraph 31(c): June 30, 2014 is the actuarial valuation date upon which the TPL is based. The TPL as of June 30, 2014 was determined using a discount rate of 4.88% which was based on a municipal bond index rate as of that date equal to 3.82%. An expected TPL is determined as of June 30, 2015 using standard roll forward techniques. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate (SEIR) for the year. This procedure is shown in the following table:

TPL Roll-Forward ($ in thousands)	
(a) TPL based on June 30, 2014 Valuation (4.88%)	$41,167,140
(b) Entry Age Normal Cost for the Year July 1, 2014 – June 30, 2015 (4.88%)	1,108,145
(c) Actual Benefit Payments (including refunds) for the Year July 1, 2014 – June 30, 2015	1,764,489
(d) TPL as of June 30, 2015 = [(a) x (1.0488)] + (b) - [(c) x (1.0244)]	$42,476,699

The following shows the development of the difference between expected and actual experience:

Determination of Experience Gain/(Loss) ($ in thousands)	
(a) TPL as of June 30, 2014 (5.23%)	$39,684,776
(b) Entry Age Normal Cost for the Year July 1, 2014 – June 30, 2015 (5.23%)	1,015,080
(c) Actual Benefit Payments (including refunds) for the Year July 1, 2014 – June 30, 2015	1,764,489
(d) Expected TPL as of June 30, 2015 = [(a) x (1.0523)] + (b) - [(c) x (1.02615)]	$40,964,739
(e) Actual TPL as of June 30, 2015 (4.88%)	$42,476,699
(f) Difference between expected and actual Experience as of June 30, 2015 = (d) - (e)	($1,511,960)

SECTION III – REQUIRED SUPPLEMENTARY INFORMATION

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 32(a)-(c): The required tables are provided in Schedule A.

Paragraph 32(d): The money-weighted rates of return required are to be supplied by the System.

Paragraph 34: In addition the following should be noted regarding the RSI:

Changes of benefit terms. None

Changes of assumptions. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2011. In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation, the Board adopted an interest smoothing methodology to calculate liabilities for purposes of determining the actuarially determined contributions.

Methods and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported (as of June 30, 2012 for the fiscal year 2015 contributions). The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of that schedule:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Inflation	3.50 percent
Salary increase	4.00 to 8.20 percent, including inflation
Ultimate Investment rate of return*	7.50 percent, net of pension plan investment expense, including inflation

*****The actuarially determined contribution rates are determined using the interest smoothing methodology adopted by the Board

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)
($ in Thousands)

	2015	2014
Total Pension Liability		
Service Cost	$ 1,015,080	$ 1,002,338
Interest	2,029,372	1,956,610
Benefit Changes	0	0
Difference between expected and actual experience	1,511,960	0
Changes of Assumption	0	(353,043)
Benefit Payments	(1,741,456)	(1,654,376)
Refund of Contributions	(23,033)	(25,462)
Net Change in Total Pension Liability	2,791,923	926,067
Total Pension Liability – Beginning	39,684,776	38,758,709
Total Pension Liability – Ending (a)	$42,476,699	$39,684,776
Plan Net Position		
Contributions – State of Kentucky	$ 480,073	$ 483,330
Contributions – Other Employers	79,506	79,996
Contributions – Member	308,160	304,982
Net Investment Income	862,179	2,803,249
Benefit Payments	(1,741,456)	(1,654,376)
Administrative Expense	(8,869)	(7,956)
Refund of Contributions	(23,033)	(25,462)
Other	0	0
Net Change in Plan Net Position	(43,440)	1,983,763
Plan Net Position – Beginning	18,092,571	16,108,808
Plan Net Position – Ending (b)	$18,049,131	$18,092,571
Net Pension Liability – Ending (a) – (b)	$24,427,568	$21,592,205

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF THE NET PENSION LIABILITY
GASB 67 Paragraph 32(b)
($ in Thousands)

	2015	2014*
Total Pension Liability	$42,476,699	$39,684,776
Plan Net Position	18,049,131	18,092,571
Net Pension Liability	$24,427,568	$21,592,205
Ratio of Plan Net Position to Total Pension Liability	42.49%	45.59%
Covered-Employee Payroll	$3,455,008	$3,317,422
Net Pension Liability as a Percentage of Covered-Employee Payroll	707.02%	650.87%

* Revised from previous year to reflect actual covered-employee payroll.

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 67 Paragraph 32(c)
($ in Thousands)

	2015	2014*	2013	2012	2011	2010	2009	2008	2007	2006
Covered-Employee Payroll	$ 3,455,008	$ 3,317,422	$ 3,310,710	$ 3,310,176	$ 3,283,749	$ 3,321,614	$ 3,253,077	$ 3,190,332	$ 2,975,289	$ 2,859,477
Actual Employer Contributions	$ 559,579	$ 563,326	$ 568,233	$ 557,340	$ 1,037,936	$ 479,805	$ 442,550	$ 466,248	$ 434,890	$ 406,107
Actuarially Determined Employer Contributions	913,654	823,446	802,985	757,822	678,741	633,938	600,283	563,789	494,565	406,107
Annual Contribution Excess (Deficiency)	$ (354,075)	$ (260,120)	$ (234,752)	$ (200,482)	$ 359,195	$ (154,133)	$ (157,733)	$ (97,541)	$ (59,675)	$ 0
Actual Contribution as a Percentage of Covered-Employee Payroll	16.20%	16.98%	17.16%	16.84%	31.61%	14.44%	13.60%	14.61%	14.62%	14.20%

* Revised from previous year to reflect actual covered-employee payroll.

SCHEDULE B

SUMMARY OF MAIN BENEFIT PROVISIONS

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2014. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments	The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions	University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.60
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before 27 Years	After 27 Years
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	of Service	of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before 27 Years	After 27 Years
	DEATH	DISABILITY	0 – 4	5 – 9	10+	of Service	of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After			
	Service Retirement		Disability Retirement	
	Male	Female	Male	Female
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Market Value

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

SCHEDULE D

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE E

BOARD FUNDING POLICY

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("KTRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background:

State law provides that the retirement benefits promised to members of KTRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in KTRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state—as plan guarantor—is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $520 million (Fiscal Year 2017). The following schedule details the growth of the annual retirement appropriations payable by the state:

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	520,372,000

(Source: KTRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2014).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which—if paid—will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

- Use the Entry Age Normal actuarial cost method;
- Use a five-year asset smoothing method;
- Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
- Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
- Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and KTRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

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GASB STATEMENT NO. 67 REPORT

FOR THE

TEACHERS' RETIREMENT SYSTEM

OF THE STATE OF KENTUCKY

PREPARED AS OF JUNE 30, 2016

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November 21, 2016

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Presented in this report is information to assist the Teachers' Retirement System of the State of Kentucky (TRS), in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. This report has been prepared as of June 30, 2016 (the Measurement Date) to assist TRS in better understanding the requirements of GASB 67 and to identify the information to be provided by TRS's actuary, Cavanaugh Macdonald Consulting (CMC).

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2015. The valuation was based upon data, furnished by the Executive Secretary and TRS staff, concerning active, inactive and retired members along with pertinent financial information.

To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 67.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Respectfully submitted,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Eric H. Gary, FSA, FCA, MAAA
Principal and Chief Health Actuary

Cathy Turcot
Principal and Managing Director

EJK/EHG/CT

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REPORT OF THE ANNUAL GASB STATEMENT NO. 67
REQUIRED INFORMATION FOR THE
TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
PREPARED AS OF JUNE 30, 2016

SECTION I – INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "*Financial Reporting For Pension Plans*", in June 2012. This report, prepared as of June 30, 2016 (the Measurement Date), presents information to assist the Teachers' Retirement System of the State of Kentucky (TRS), in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of TRS as of June 30, 2015. The results of that valuation were detailed in a report dated December 7, 2015.

GASB 67 requires a measurement of the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. If the valuation date at which the TPL is determined is before the measurement date, as is the case here, the TPL must be rolled forward to the measurement date. The Net Pension Liability (NPL) is then set equal to the rolled forward TPL minus the System's Fiduciary Net Position (FNP) (basically the market values of assets) as of the Measurement Date. The benefit provisions recognized in the calculation of the TPL are summarized in Schedule B. The development of the roll-forward of the TPL is shown in the table on page 5.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR) as described by GASB 67. To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the membership and beneficiaries of the System on the Measurement Date. We have projected future employer contributions to be made based on the amounts required by statute. Although the TRS Board of Trustees adopted a funding policy, shown in Schedule E, on December 16, 2013, the State has not funded the actuarially determined contributions since 2009. However, it is our understanding that the State budget includes additional appropriations to the pension plan for fiscal years 2017 and 2018, which have been taken into account. On this basis, if the FNP is not projected to be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. Our calculations indicated that the FNP is projected to be depleted, so the bond rate is used in the determination of the SEIR. On this basis, we have determined that a discount rate of 4.20 percent meets the requirements of GASB 67.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information.

SECTION II – FINANCIAL STATEMENT NOTES

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30(a) (1)-(3): The information required is to be supplied by the System.

Paragraph 30(a) (4): The data required regarding the membership of the TRS were furnished by the System office. The following table summarizes the membership of the System as of June 30, 2015, the actuarial valuation date.

Membership

	Number
Retirees And Survivors Currently Receiving Benefits	49,822
Terminated Vested Employees Entitled To But Not Yet Receiving Benefits	8,051
Inactive Non-vested Members	19,720
Active Members	72,246
Total	149,839

Paragraphs 30(a)(5)-(6) and Paragraphs 30(b)-(f): The information required is to be supplied by the System.

Paragraphs 31(a) (1)-(4): The information is provided in the following table. As stated on the previous page, the Net Pension Liability (NPL) is equal to the Total Pension Liability (TPL) minus the Fiduciary Net Position (FNP). That result as of June 30, 2016 is presented in the table below ($ thousands).

	Fiscal Year Ending 6/30/2016
Total Pension Liability (TPL)	$47,736,901
Fiduciary Net Position (FNP)	16,812,832
Net Pension Liability (NPL)	$30,924,069
Ratio of FNP to TPL	35.22%

Paragraph 31(b) (1)(a)-(f): This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The set of actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The total pension liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.50 percent
Salary increases	4.00 – 8.20 percent, including inflation
Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation
Municipal Bond Index Rate	3.01%
Single Equivalent Interest Rate	4.20%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale AA to 2020 with a set back of 1 year for females.

The actuarial assumptions used in the June 30, 2015 valuation were based on the results of an actuarial experience study for the period July 1, 2005 – June 30, 2010 adopted by the Board on December 19, 2011. The results of the experience study for the period July 1, 2010 – June 30, 2015 will be reflected in the June 30, 2016 valuation and the June 30, 2017 GASB 67 report.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	45.0%	6.4%
Non U.S. Equity	17.0%	6.5%
Fixed Income	24.0%	1.6%
High Yield Bonds	4.0%	3.1%
Real Estate	4.0%	5.8%
Alternatives	4.0%	6.8%
Cash	2.0%	1.5%
Total	100.00%	

Discount rate. The discount rate used to measure the total pension liability was 4.20 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that Employer contributions will be made at statutorily required rates, and the additional amounts appropriated for fiscal years 2017 and 2018. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2040 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2039 and a municipal bond index rate of 3.01 percent was applied to all periods of projected benefit payments after 2039. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

Paragraph 31(b) (1) (g): This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 4.20 percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.20 percent) or 1-percentage-point higher (5.20 percent) than the current rate ($ thousands):

	1% Decrease (3.20%)	Current Discount Rate (4.20%)	1% Increase (5.20%)
System's net pension liability	$37,937,230	$30,924,069	$25,168,197

Paragraph 31(c): June 30, 2015 is the actuarial valuation date upon which the TPL is based. The TPL from this valuation was determined using a discount rate of 4.20%, which was based on a municipal bond index rate as of that date equal to 3.01%. The TPL used last year was determined using a discount rate equal to 4.88%, which was based on a municipal bond index rate of 3.82%. These two amounts are rolled forward to June 30, 2016 using standard roll forward techniques. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate (SEIR) for the year. The difference between the two roll-forward amounts as of June 30, 2016 is the gain or loss due to changes in assumptions and other inputs.

In addition, we have determined an expected TPL as of June 30, 2016 based on the TPL roll-forward in the June 30, 2015 GASB 67 report. The difference between this amount and the roll-forward of the actual TPL based on the 4.88% interest rate is reflected as an experience gain or loss for the year. These procedures are shown in the following table:

TPL Roll-Forward (in thousands)			
	Expected	Actual Before Assumption Change	Actual After Assumption Change
(a) Interest rate	4.88%	4.88%	4.20%
(b) TPL as of June 30, 2015	$42,476,699	$42,421,364	$46,355,565
(c) Entry Age Normal Cost for the Year July 1, 2015 – June 30, 2016	1,120,893	1,120,893	1,334,428
(d) Actual Benefit Payments (including refunds) For the year July 1, 2015 – June 30, 2016	1,860,946	1,860,946	1,860,946
(e) TPL as of June 30, 2016 (b) x (1 + (a)) + (c) – (d) x (1 + 0.5 x (a))	$43,764,102	$43,706,067	$47,736,901
(f) Difference between Expected and Actual Experience (Gain)/Loss		$(58,035)	
(g) Difference due to change in Assumptions and Other Inputs (Gain)/Loss			$4,030,834

SECTION III – REQUIRED SUPPLEMENTARY INFORMATION

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 32(a)-(c): The required tables are provided in Schedule A.

Paragraph 32(d): The money-weighted rates of return required are to be supplied by the System.

Paragraph 34: In addition the following should be noted regarding the RSI:

Changes of benefit terms. None

Changes of assumptions. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2011. In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation, the Board adopted an interest smoothing methodology to calculate liabilities for purposes of determining the actuarially determined contributions. Beginning with the 2014 valuation, the interest smoothing methodology is no longer used.

Methods and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported (as of June 30, 2013 for the fiscal year 2016 contributions). The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of that schedule:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Inflation	3.50 percent
Salary increase	4.00 to 8.20 percent, including inflation
Ultimate Investment rate of return*	7.50 percent, net of pension plan investment expense, including inflation

*****The actuarially determined contribution rates are determined using the interest smoothing methodology adopted by the Board

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)
($ in Thousands)

	2016	2015	2014
Total Pension Liability			
Service Cost	$ 1,120,893	$ 1,015,080	$ 1,002,338
Interest	2,027,457	2,029,372	1,956,610
Benefit Changes	0	0	0
Difference between expected and actual experience	(58,035)	0	0
Changes of Assumption and other inputs	4,030,834	1,511,960	(353,043)
Benefit Payments	(1,833,199)	(1,741,456)	(1,654,376)
Refund of Contributions	(27,748)	(23,033)	(25,462)
Net Change in Total Pension Liability	5,260,202	2,791,923	926,067
Total Pension Liability – Beginning	42,476,699	39,684,776	38,758,709
Total Pension Liability – Ending (a)	$47,736,901	$42,476,699	$39,684,776
Plan Net Position			
Contributions – State of Kentucky	$ 484,987	$ 480,073	$ 483,330
Contributions – Other Employers	80,468	79,506	38,445
Contributions – Member	313,044	308,160	304,982
Net Investment Income	(245,215)	862,179	2,803,249
Benefit Payments	(1,833,199)	(1,741,456)	(1,654,376)
Administrative Expense	(8,636)	(8,869)	(7,956)
Refund of Contributions	(27,748)	(23,033)	(25,462)
Other	0	0	41,551
Net Change in Plan Net Position	(1,236,299)	(43,440)	1,983,763
Plan Net Position – Beginning	18,049,131	18,092,571	16,108,808
Plan Net Position – Ending (b)	$16,812,832	$18,049,131	$18,092,571
Net Pension Liability – Ending (a) – (b)	$30,924,069	$24,427,568	$21,592,205

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF THE NET PENSION LIABILITY
GASB 67 Paragraph 32(b)
($ in Thousands)

	2016	2015	2014
Total Pension Liability	$47,736,901	$42,476,699	$39,684,776
Plan Net Position	16,812,832	18,049,131	18,092,571
Net Pension Liability	$30,924,069	$24,427,568	$21,592,205
Ratio of Plan Net Position to Total Pension Liability	35.22%	42.49%	45.59%
Covered Payroll	$3,390,539	$3,455,008	$3,317,422
Net Pension Liability as a Percentage of Covered Payroll	912.07%	707.02%	650.87%

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 67 Paragraph 32(c)
($ in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Covered Payroll	$ 3,390,539	$ 3,455,008	$ 3,317,422	$ 3,310,710	$ 3,310,176	$ 3,283,749	$ 3,321,614	$ 3,253,077	$ 3,190,332	$ 2,975,289
Actual Employer Contributions	$ 565,455	$ 559,579	$ 563,326	$ 568,233	$ 557,340	$ 1,037,936	$ 479,805	$ 442,550	$ 466,248	$ 434,890
Actuarially Determined Employer Contributions	999,270	913,654	823,446	802,985	757,822	678,741	633,938	600,283	563,789	494,565
Annual Contribution Excess (Deficiency)	$ (433,815)	$ (354,075)	$ (260,120)	$ (234,752)	$ (200,482)	$ 359,195	$ (154,133)	$ (157,733)	$ (97,541)	$ (59,675)
Actual Contribution as a Percentage of Covered Payroll	16.68%	16.20%	16.98%	17.16%	16.84%	31.61%	14.44%	13.60%	14.61%	14.62%

SCHEDULE B

SUMMARY OF MAIN BENEFIT PROVISIONS

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2015. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased TRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments	The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions	University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 3.50% per annum:

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.60
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before 27 Years	After 27 Years
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	of Service	of Service*
20	0.012%	0.01%	9.00%				
25	0.015	0.01	9.00	3.00%			
30	0.020	0.02	9.00	3.00	3.00%		
35	0.035	0.05	10.00	3.25	1.75		
40	0.046	0.09	10.00	4.00	1.40		
45	0.058	0.18	11.00	4.00	1.50		17.0%
50	0.074	0.33	9.00	4.00	2.00		17.0
55	0.124	0.55	12.00	3.50	2.50	5.5%	35.0
60	0.244	0.70	12.00	3.50	2.50	13.0	24.0
62	0.324	0.70	12.00	3.50	2.50	15.0	25.0
65	0.480	0.70	12.00	3.50	2.50	21.0	26.0
70	0.821	0.70	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	7.00%				
25	0.008	0.02	8.50	4.00%			
30	0.010	0.04	9.00	4.00	1.65%		
35	0.017	0.08	9.00	3.75	1.85		
40	0.024	0.14	8.50	3.25	1.50		
45	0.037	0.32	7.50	3.25	1.25		15.0%
50	0.055	0.42	9.50	3.50	1.75		15.0
55	0.103	0.56	11.00	4.00	2.00	6.0%	35.0
60	0.201	0.85	11.00	4.00	2.00	14.0	30.0
62	0.263	0.85	11.00	4.00	2.00	12.0	25.0
65	0.390	0.85	11.00	4.00	2.00	22.0	30.0
70	0.672	0.85	0.00	0.00	0.00	100.0	100.0

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set forward five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Market Value

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

SCHEDULE D

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE E

BOARD FUNDING POLICY

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("TRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background:

State law provides that the retirement benefits promised to members of TRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in TRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state—as plan guarantor—is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $520 million (Fiscal Year 2017). The following schedule details the growth of the annual retirement appropriations payable by the state:

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	520,372,000

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2014).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which—if paid—will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

- Use the Entry Age Normal actuarial cost method;
- Use a five-year asset smoothing method;
- Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
- Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
- Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and TRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

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TEACHERS' Retirement System
TRS
KENTUCKY

GASB STATEMENT NO. 67 REPORT

FOR THE

TEACHERS' RETIREMENT SYSTEM

OF THE STATE OF KENTUCKY

PREPARED AS OF JUNE 30, 2017

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CONSULTING, LLC
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November 14, 2017

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Presented in this report is information to assist the Teachers' Retirement System of the State of Kentucky (TRS), in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. This report has been prepared as of June 30, 2017 (the Measurement Date) to assist TRS in better understanding the requirements of GASB 67 and to identify the information to be provided by TRS's actuary, Cavanaugh Macdonald Consulting (CMC).

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2016. The valuation was based upon data, furnished by the Executive Secretary and TRS staff, concerning active, inactive and retired members along with pertinent financial information.

To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 67.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Respectfully submitted,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Eric H. Gary, FSA, FCA, MAAA
Principal and Chief Health Actuary

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EJK/EHG/CT

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REPORT OF THE ANNUAL GASB STATEMENT NO. 67
REQUIRED INFORMATION FOR THE
TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
PREPARED AS OF JUNE 30, 2017

SECTION I – INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "*Financial Reporting For Pension Plans*", in June 2012. This report, prepared as of June 30, 2017 (the Measurement Date), presents information to assist the Teachers' Retirement System of the State of Kentucky (TRS), in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of TRS as of June 30, 2016. The results of that valuation were detailed in a report dated November 21, 2016.

GASB 67 requires a measurement of the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. If the valuation date at which the TPL is determined is before the measurement date, as is the case here, the TPL must be rolled forward to the measurement date. The Net Pension Liability (NPL) is then set equal to the rolled forward TPL minus the System's Fiduciary Net Position (FNP) (basically the market values of assets) as of the Measurement Date. The benefit provisions recognized in the calculation of the TPL are summarized in Schedule B. The development of the roll-forward of the TPL is shown in the table on page 5.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR) as described by GASB 67. To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the membership and beneficiaries of the System on the Measurement Date. For this determination, we have only projected future employer contributions to be made based on the amounts required by statute. Although the TRS Board of Trustees adopted a funding policy, shown in Schedule E, on December 16, 2013, the State has not funded the actuarially determined contributions since 2009. Additional appropriations were made in fiscal year 2017 and it is our understanding that the State budget includes additional appropriations to the pension plan for fiscal year 2018, which have been taken into account, but until there is a more consistent pattern of funding the plan at the actuarially determined contributions we will use only employer contributions required by statute. On this basis, if the FNP is not projected to be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. Our calculations indicated that the FNP is projected to be depleted, so the bond rate is used in the determination of the SEIR. On this basis, we have determined that a discount rate of 4.49 percent meets the requirements of GASB 67.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information.

SECTION II – FINANCIAL STATEMENT NOTES

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30(a) (1)-(3): The information required is to be supplied by the System.

Paragraph 30(a) (4): The data required regarding the membership of the TRS were furnished by the System office. The following table summarizes the membership of the System as of June 30, 2016, the actuarial valuation date.

Membership

	Number
Retirees And Survivors Currently Receiving Benefits	51,563
Terminated Vested Employees Entitled To But Not Yet Receiving Benefits	9,240
Inactive Non-vested Members	46,055
Active Members	71,848
Total	178,706

Paragraphs 30(a)(5)-(6) and Paragraphs 30(b)-(f): The information required is to be supplied by the System.

Paragraphs 31(a) (1)-(4): The information is provided in the following table. As stated on the previous page, the Net Pension Liability (NPL) is equal to the Total Pension Liability (TPL) minus the Fiduciary Net Position (FNP). That result as of June 30, 2017 is presented in the table below ($ thousands).

	Fiscal Year Ending 6/30/2017
Total Pension Liability (TPL)	$46,966,822
Fiduciary Net Position (FNP)	18,707,699
Net Pension Liability (NPL)	$28,259,123
Ratio of FNP to TPL	39.83%

Paragraph 31(b) (1)(a)-(f): This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The set of actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The total pension liability was determined by an actuarial valuation as of June 30, 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00 percent
Salary increases	3.50 – 7.30 percent, including inflation
Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation
Municipal Bond Index Rate	3.56%
Single Equivalent Interest Rate	4.49%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale BB to 2025, set forward two years for males and one year for females.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2010 – June 30, 2015 adopted by the Board on September 19, 2016.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	42.0%	4.4%
International Equity	20.0%	5.3%
Fixed Income	16.0%	1.5%
Additional Categories*	9.0%	3.6%
Real Estate	5.0%	4.4%
Private Equity	6.0%	6.7%
Cash	2.0%	0.8%
Total	100.00%	

**Includes Hedge Funds, High Yield and Non-US Developed Bonds*

Discount rate. The discount rate used to measure the total pension liability was 4.49 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that Employer contributions will be made at statutorily required rates, and the additional amount appropriated for fiscal year 2018. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the 2038 plan year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments through 2037 and a municipal bond index rate of 3.56 percent was applied to all periods of projected benefit payments after 2037. The Single Equivalent Interest Rate (SEIR) that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability.

Paragraph 31(b) (1) (g): This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 4.49 percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.49 percent) or 1-percentage-point higher (5.49 percent) than the current rate ($ thousands):

	1% Decrease (3.49%)	Current Discount Rate (4.49%)	1% Increase (5.49%)
System's net pension liability	$35,029,551	$28,259,123	$22,702,413

Paragraph 31(c): June 30, 2016 is the actuarial valuation date upon which the TPL is based. An expected TPL is determined as of June 30, 2017 using standard roll forward techniques for the TPL based on the assumptions from the June 30, 2015 experience study using a discount rate of 4.49%, which was based on a municipal bond index rate as of that date equal to 3.56%. An expected TPL was also determined based on the assumptions prior to the June 30, 2015 experience study using the prior year discount rate of 4.20%, which was based on a municipal bond index rate of 3.01%. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate (SEIR) for the year. The difference between these two roll-forward amounts as of June 30, 2017 is the gain or loss due to changes in assumptions and other inputs.

In addition, we have determined an expected TPL as of June 30, 2017 based on the TPL roll forward in the June 30, 2016 GASB 67 report. The difference between this amount and the roll-forward of the actual TPL using last year's assumptions is reflected as an experience gain or loss for the year. These procedures are shown in the following table:

TPL Roll-Forward (in thousands)			
	Expected	Actual Before Assumption Changes	Actual After Assumption Changes
(a) Interest rate	4.20%	4.20%	4.49%
(b) TPL as of June 30, 2016	$47,736,901	$47,928,332	$45,781,405
(c) Entry Age Normal Cost for the Year July 1, 2016 – June 30, 2017	1,332,587	1,332,587	1,118,412
(d) Actual Benefit Payments (including refunds) For the year July 1, 2016 – June 30, 2017	1,944,917	1,944,917	1,944,917
(e) TPL as of June 30, 2017 (b) x (1 + (a)) + (c) – (d) x (1 + 0.5 x (a))	$49,088,678	$49,288,149	$46,966,822
(f) Difference between Expected and Actual Experience (Gain)/Loss		$199,471	
(g) Difference due to change in Assumptions and Other Inputs (Gain)/Loss			$(2,321,327)

SECTION III – REQUIRED SUPPLEMENTARY INFORMATION

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 32(a)-(c): The required tables are provided in Schedule A.

Paragraph 32(d): The money-weighted rates of return required are to be supplied by the System.

Paragraph 34: In addition the following should be noted regarding the RSI:

Changes of benefit terms. None

Changes of assumptions. In the 2016 valuation, rates of withdrawal, retirement, disability, mortality and rates of salary increase were adjusted to more closely reflect actual experience. In the 2016 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables projected to 2025 with projection scale BB, set forward two years for males and one year for females rather than the RP-2000 Mortality Tables projected to 2020 with projection scale AA, which was used prior to 2016.

In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables projected to 2020 with projection scale AA, set back one year for females rather than the1994 Group Annuity Mortality Tables which was used prior to 2016. For the 2011 valuation through the 2013 valuation, an interest smoothing methodology was used to calculate liabilities for purposes of determining the actuarially determined contributions.

Methods and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported (as of June 30, 2014 for the fiscal year 2017 contributions). The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of that schedule:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Inflation	3.50 percent
Salary increase	4.00 to 8.20 percent, including inflation
Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)
($ in Thousands)

	2017	2016	2015	2014
Total Pension Liability				
Service Cost	$ 1,332,587	$ 1,120,893	$ 1,015,080	$ 1,002,338
Interest	1,964,107	2,027,457	2,029,372	1,956,610
Benefit Changes	0	0	0	0
Difference between expected and actual experience	199,471	(58,035)	0	0
Changes of Assumption and other inputs	(2,321,327)	4,030,834	1,511,960	(353,043)
Benefit Payments	(1,918,612)	(1,833,199)	(1,741,456)	(1,654,376)
Refund of Contributions	(26,305)	(27,748)	(23,033)	(25,462)
Net Change in Total Pension Liability	(770,079)	5,260,202	2,791,923	926,067
Total Pension Liability – Beginning	47,736,901	42,476,699	39,684,776	38,758,709
Total Pension Liability – Ending (a)	$46,966,822	$47,736,901	$42,476,699	$39,684,776
Plan Net Position				
Contributions – State of Kentucky	$ 981,417	$ 484,987	$ 480,073	$ 483,330
Contributions – Other Employers	79,303	80,468	79,506	38,445
Contributions – Member	313,625	313,044	308,160	304,982
Net Investment Income	2,475,753	(245,215)	862,179	2,803,249
Benefit Payments	(1,918,612)	(1,833,199)	(1,741,456)	(1,654,376)
Administrative Expense	(10,314)	(8,636)	(8,869)	(7,956)
Refund of Contributions	(26,305)	(27,748)	(23,033)	(25,462)
Other	0	0	0	41,551
Net Change in Plan Net Position	1,894,867	(1,236,299)	(43,440)	1,983,763
Plan Net Position – Beginning	16,812,832	18,049,131	18,092,571	16,108,808
Plan Net Position – Ending (b)	$18,707,699	$16,812,832	$18,049,131	$18,092,571
Net Pension Liability – Ending (a) – (b)	$28,259,123	$30,924,069	$24,427,568	$21,592,205

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF THE NET PENSION LIABILITY
GASB 67 Paragraph 32(b)
($ in Thousands)

	2017	2016	2015	2014
Total Pension Liability	$46,966,822	$47,736,901	$42,476,699	$39,684,776
Plan Net Position	18,707,699	16,812,832	18,049,131	18,092,571
Net Pension Liability	$28,259,123	$30,924,069	$24,427,568	$21,592,205
Ratio of Plan Net Position to Total Pension Liability	39.83%	35.22%	42.49%	45.59%
Covered Payroll	$3,415,432	$3,390,539	$3,455,008	$3,317,422
Net Pension Liability as a Percentage of Covered Payroll	827.40%	912.07%	707.02%	650.87%

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 67 Paragraph 32(c)
($ in Thousands)

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Covered Payroll	$ 3,415,432	$ 3,390,539	$ 3,455,008	$ 3,317,422	$ 3,310,710	$ 3,310,176	$ 3,283,749	$ 3,321,614	$ 3,253,077	$ 3,190,332
Actual Employer Contributions	$ 1,060,720	$ 565,455	$ 559,579	$ 563,326	$ 568,233	$ 557,340	$ 1,037,936	$ 479,805	$ 442,550	$ 466,248
Actuarially Determined Employer Contributions	1,076,617	999,270	913,654	823,446	802,985	757,822	678,741	633,938	600,283	563,789
Annual Contribution Excess (Deficiency)	$ (15,807)	$ (433,815)	$ (354,075)	$ (260,120)	$ (234,752)	$ (200,482)	$ 359,195	$ (154,133)	$ (157,733)	$ (97,541)
Actual Contribution as a Percentage of Covered Payroll	31.06%	16.68%	16.20%	16.98%	17.16%	16.84%	31.61%	14.44%	13.60%	14.61%

SCHEDULE B

SUMMARY OF MAIN BENEFIT PROVISIONS

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2016. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased TRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments	The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions	University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually, including price inflation at 3.00% per annum.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.50% per annum:

Age	Annual Rate
20	7.20%
25	6.40
30	5.40
35	4.70
40	4.20
45	3.80
50	3.70
55	3.50
60	3.50
65	3.50

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before	After
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	27 Years of Service	27 Years of Service*
20	0.019%	0.01%	11.00%				
25	0.021	0.01	11.00	3.00%			
30	0.025	0.01	11.00	3.00	3.00%		
35	0.043	0.04	12.00	3.50	1.40		
40	0.060	0.09	12.00	4.50	1.40		
45	0.084	0.20	12.00	4.50	1.30		17.0%
50	0.119	0.30	14.00	4.50	1.90		17.0
55	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	1.556	0.75	20.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	9.00%				
25	0.008	0.01	9.00	4.00%			
30	0.010	0.03	12.00	4.00	1.65%		
35	0.018	0.06	12.00	4.00	1.50		
40	0.026	0.12	12.00	4.00	1.30		
45	0.042	0.25	13.00	4.00	1.20		15.0%
50	0.062	0.44	13.00	5.00	1.50		18.0
55	0.096	0.65	15.00	5.00	2.00	5.5%	50.0
60	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	0.831	0.85	15.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1609%	0.1135%	2.3306%	1.2482%
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074

ASSETS: Market Value

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

SCHEDULE D

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE E

BOARD FUNDING POLICY

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees ("Board") of the Kentucky Teachers' Retirement Systems ("TRS") is vested with the responsibility for the general administration and management of the retirement system. The Board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes ("state law") shall control if any inconsistency exists between state law and this policy.

Background:

State law provides that the retirement benefits promised to members of TRS are "…an inviolable contract of the Commonwealth…." (KRS 161.714.) To satisfy this solemn commitment, the Commonwealth of Kentucky ("state") is required to pay annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. All employers participating in TRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state—as plan guarantor—is solely responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits. (KRS 161.550(6).)

Since fiscal year 2008, the state has not paid the recommended annual retirement appropriations necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual retirement appropriations have grown significantly from $60.5 million (Fiscal Year 2009) to $520 million (Fiscal Year 2017). The following schedule details the growth of the annual retirement appropriations payable by the state:

	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000
2017	13.80	520,372,000

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2014).

The Board has always taken action as required by state law and recommended annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members. This policy confirms the Board's process for recommending annual retirement appropriations payable by the state and the primary actuarial assumptions and methodologies associated with calculating the annual retirement appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study, or resolutions adopted by the Board.

1. Annual Retirement Appropriations Payable by the State: In each biennial budget request, the Board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system. (KRS 161.550.) The recommended additional annual retirement appropriations payable by the state are calculated by the Board's actuary based upon the results of an annual valuation preceding the beginning of each biennium. (KRS 161.400.)

2. Calculation of Annual Retirement Appropriations Payable by the State: The Board will recommend annual retirement appropriations payable by the state, which—if paid—will meet the benefit requirements of the members of the retirement system consistent with generally accepted actuarial principles. Based upon technical advice from

the Board's actuary, the Board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

- Use the Entry Age Normal actuarial cost method;
- Use a five-year asset smoothing method;
- Use a thirty-year closed period to amortize legacy unfunded liability ("legacy unfunded liability" is that unfunded liability recognized as of the valuation prepared for June 30, 2014);
- Use a twenty-year closed period to amortize new sources of unfunded liability ("new sources of unfunded liability" is that unfunded liability consisting of all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation); and
- Reach a 100 percent minimum funded ratio within the thirty-year closed amortization period.

The Board also recognizes that, from time to time, the state may desire to contribute lump sum payments toward satisfaction of unfunded liability rather than amortization of the debt. Total unfunded liability is published in every annual valuation of the retirement system and TRS will work with the state to develop reasonable and appropriate plans for receipt of lump sum payments toward the satisfaction of unfunded liability.

This policy will be reviewed regularly and amended or revised as necessary.

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KENTUCKY

Teachers' Retirement System of the State of Kentucky Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2018

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November 12, 2018

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2018. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contribution rates as a percentage of payroll for the fiscal year ending June 30, 2021 required to support the total benefits of the System are as follows:

Group	Combined Member and State Contribution Requirement
University members hired before July 1, 2008	35.60%
University members hired on or after July 1, 2008	36.60%
Non-University members hired before July 1, 2008	38.56%
Non-University members hired on or after July 1, 2008	39.56%

These rates represent an increase since the previous valuation in the total Pension actuarially determined employer contribution rates (ADEC) of 0.05% of payroll for the fiscal year ending June 30, 2021.

A breakdown of the changes in the components of the ADEC are as follows:

- a decrease in the expected state special appropriation from 3.00% to 2.89%, or 0.11% of payroll
- an increase in the amount required for life insurance benefits from 0.05% to 0.06%, or 0.01% of payroll
- the additional required increase of 0.17%, from 14.10% to 14.27%

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the total unfunded actuarial accrued liability that is being amortized by regular annual contributions as a level percentage of payroll in accordance with the funding policy adopted by the Board, on the assumption that payroll will increase by 3.5% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This actuarial valuation was performed to determine the recommended funding amount for the System. The asset values used to determine unfunded actuarial accrued liabilities and funded ratios are not market values but less volatile market related values. A smoothing technique is applied to market values to determine the market-related values. The unfunded actuarial accrued liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return of assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

In our opinion, the System has not been funded on an actuarially sound basis since, historically, the full actuarially determined contributions were not made by the employer. However, an additional appropriation of $474.7 million was made during fiscal year 2018 and it is our understanding that the state budget includes additional appropriations to the pension plan for fiscal years 2019 and 2020. If contributions by the employer to the System in subsequent fiscal years are less than those required, the assets are expected to become insufficient to pay promised benefits. However, assuming that contributions to the System are made by the employer and state from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the assets to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Cathy Turcot
Principal and Managing Director

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Section I – Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2018	June 30, 2017
Number of active members	72,205	72,130
Annual salaries	$ 3,605,116	$ 3,563,584
Number of annuitants and beneficiaries	54,377	52,966
Annual allowances	$ 2,043,518	$ 1,953,464
Assets:		
Market value	$ 19,981,633	$ 18,707,699
Actuarial value	19,496,056	18,514,638
Actuarial Accrued Liability	$ 33,795,671	$ 32,819,887
Unfunded Actuarial Accrued Liability (UAAL)	$ 14,299,615	$ 14,305,249
Funded Ratio based on Actuarial Value of Assets	57.7%	56.4%
Amortization period (years)	26.5	27.4

Contribution rates are shown separately for university and non-university members on the following pages.

Section I – Summary of Principal Results

CONTRIBUTION RATES FOR UNIVERSITY MEMBERS

Valuation Date	June 30, 2018		June 30, 2017	
For fiscal year ending:	**June 30, 2021**		**June 30, 2020**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	10.690%	10.690%	10.800%	10.800%
Actuarial Accrued Liability	24.910	25.910	24.750	25.750
Total	35.600%	36.600%	35.550%	36.550%
Member	7.625%	7.625%	7.625%	7.625%
State	27.975	28.975	27.925	28.925
Total	35.600%	36.600%	35.550%	36.550%
Life Insurance Fund:				
State	0.060%	0.060%	0.050%	0.050%
Medical Insurance Fund:				
Member	2.775%	2.775%	2.775%	2.775%
State Match	2.775	1.775	2.775	1.775
Total	5.550%	4.550%	5.550%	4.550%
Total Contributions	41.210%	41.210%	41.150%	41.150%
Member Statutory	10.400%	10.400%	10.400%	10.400%
State Statutory	13.650	13.650	13.650	13.650
Required Increase	14.270	14.270	14.100	14.100
State Special	2.890	2.890	3.000	3.000
Total	41.210%	41.210%	41.150%	41.150%

Section I – Summary of Principal Results

CONTRIBUTION RATES FOR NON-UNIVERSITY MEMBERS

Valuation Date	June 30, 2018		June 30, 2017	
For fiscal year ending:	**June 30, 2021**		**June 30, 2020**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	14.760%	14.760%	14.840%	14.840%
Accrued liability	23.800	24.800	23.670	24.670
Total	38.560%	39.560%	38.510%	39.510%
Member	9.105%	9.105%	9.105%	9.105%
State	29.455	30.455	29.405	30.405
Total	38.560%	39.560%	38.510%	39.510%
Life Insurance Fund:				
State	0.060%	0.060%	0.050%	0.050%
Medical Insurance Fund:				
Member	3.750%	3.750%	3.750%	3.750%
State Match	3.750	2.750	3.750	2.750
Total	7.500%	6.500%	7.500%	6.500%
Total Contributions	46.120%	46.120%	46.060%	46.060%
Member Statutory	12.855%	12.855%	12.855%	12.855%
State Statutory	16.105	16.105	16.105	16.105
Required Increase	14.270	14.270	14.100	14.100
State Special	2.890	2.890	3.000	3.000
Total	46.120%	46.120%	46.060%	46.060%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2018 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Schedule B shows the development of the actuarial value of assets. The assumed investment rate of return is 7.50%. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been no changes since the previous valuation.

5. Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. There have been no changes since the previous valuation.

6. The funded ratio shown in the Summary of Principal Results, is the ratio of actuarial value of assets to the actuarial accrued liability. The funded status would be different based on the market value of assets. The funded ratio is an indication of progress in funding the promised benefits. Since the ratio is less than 100%, there is a need for additional contributions toward the payment of the unfunded actuarial accrued liability. In addition, this funded ratio does not have any relationship to measuring the sufficiency if the plan had to settle its liabilities.

Section II – Membership Data

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2018 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
University hired before 7/1/2008	1,578	$ 118,570
University hired after 7/1/2008	1,579	83,582
Non-University Full Time hired before 7/1/2008	34,000	2,259,772
Non-University Full Time hired after 7/1/2008	22,526	1,065,810
Non-University Part Time hired before 7/1/2008	2,098	18,041
Non-University Part Time hired after 7/1/2008	10,424	59,341
Total	72,205	$ 3,605,116

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2018

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	47,495	$ 1,863,635
Disability Retirements	2,831	85,270
Beneficiaries of Deceased Members	4,051	94,613
Total	54,377	$ 2,043,518

[1] Includes cost-of-living adjustments effective through July 1, 2018.

In addition, there are 8,814 terminated vested employees entitled to benefits in the future and 44,031 inactive non-vested members.

3. Table 1 of Schedule G shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III – Assets

1. As of June 30, 2018, the market value of Pension Plan assets for valuation purposes held by the System amounted to $19,981,633,096. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes. The estimated market investment return for the plan year was 10.50%. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2018 was $19,496,055,514. The estimated investment return for the plan year ending June 30, 2018 on an actuarial value of assets basis was 9.14%, compared to the assumed investment rate of return for the period of 7.50%. Schedule B shows the development of the actuarial value of assets as of June 30, 2018.

Section IV – Comments on Valuation

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2018. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D and Schedule E.

2. The valuation balance sheet shows that the System has total prospective liabilities of $16,515,254,593 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $21,525,543,928 of which $720,598,026 is for special appropriations remaining to be made toward funding ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $396,936,901. The total prospective liabilities of the System amounts to $38,437,735,422. Against these liabilities, the System has present assets for valuation purposes of $19,496,055,514. When this amount is deducted from the total liabilities of $38,437,735,422, there remains $18,941,679,908 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and actuarial accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 10.69% of payroll for University and 14.76% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,642,064,420. When this amount is subtracted from $18,941,679,908, which is the present value of the total future contributions to be made by the employer, there remains $14,299,615,488 as the amount of future unfunded actuarial accrued liability contributions.

5. The unfunded actuarial accrued liability decreased by approximately $5.6 million for the plan year ending June 30, 2018 and the funding ratio increased from 56.4% to 57.7%. See Section VII for a complete breakdown of the experience of the System.

Section V – Contributions Payable Under the System

1. Section 161.540 of the retirement law provides that each university member contribute 10.400% of annual salary to the System and each non-university member contribute 12.855% of annual salary. Of this amount, for each university member, 2.775% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 3.75% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match a portion of the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. Additional contributions are made to the Medical Insurance Fund as required under 161.550(3).

3. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.06% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 14.27% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded actuarial accrued liability of the Pension Plan based on the funding policy adopted by the Board. An additional special appropriation of 2.89% of total payroll will be made by the State. Therefore, the total actuarially determined employer contribution rate to the Pension Plan is 27.975% for university members who become members before July 1, 2008 and 28.975% for university members who become members on or after July 1, 2008. The total actuarially determined employer contribution rate to the Pension Plan is 29.455% for non-university members who become members before July 1, 2008 and 30.455% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following tables.

Section V – Contributions Payable Under the System

CONTRIBUTION RATES BY SOURCE

UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(2.775)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	10.400%	10.400%
Statutory Medical Insurance Fund	(2.775)	(1.775)
Supplemental Funding	3.250	3.250
Subtotal	10.875%	11.875%
Life Insurance	(0.060)%	(0.060)%
Additional to Comply with Board Funding Policy	14.270	14.270
Special Appropriation	2.890	2.890
Contribution to Pension Plan	27.975%	28.975%
Total Contribution to Pension Plan	35.600%	36.600%

Section V – Contributions Payable Under the System

CONTRIBUTION RATES BY SOURCE

NON-UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(3.750)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	12.855%	12.855%
Statutory Medical Insurance Fund	(3.750)	(2.750)
Supplemental Funding	3.250	3.250
Subtotal	12.355%	13.355%
Life Insurance	(0.060)%	(0.060)%
Additional to Comply with Board Funding Policy	14.270	14.270
Special Appropriation	2.890	2.890
Contribution to Pension Plan	29.455%	30.455%
Total Contribution to Pension Plan	38.560%	39.560%

4. The valuation indicates that normal contributions at the rate of 10.69% of active university members' salaries and 14.76% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This actuarial accrued liability rate, based on the assumptions set forth in the Board's funding policy, is 24.91% for university members hired before July 1, 2008, 25.91% for university members hired on and after July 1, 2008, 23.80% for non-university members hired before July 1, 2008, and 24.80% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 2.89% of payroll to be made by the State. These rates are shown in the following table:

Section V – Contributions Payable Under the System

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	10.69%	10.69%	14.76%	14.76%
Actuarial Accrued liability*	24.91	25.91	23.80	24.80
Total	35.60%	36.60%	38.56%	39.56%

* Includes special appropriations of 2.89% of payroll to be made by the State.

5. The following table shows the components of the total Unfunded Actuarial Accrued Liability (UAAL) and the derivation of the UAAL contribution rate in accordance with the funding policy:

TOTAL UAAL AND UAAL CONTRIBUTION PAYMENT
(Dollar amounts in thousands)

	ORIGINAL UAAL	CURRENT UAAL	REMAINING AMORTIZATION PERIOD (YEARS)	AMORTIZATION PAYMENT
Legacy	$14,010,205	$14,930,003	26	$920,415
New Incremental 6/30/2015	(351,610)	(349,480)	17	(28,426)
New Incremental 6/30/2016	340,766	339,694	18	26,539
New Incremental 6/30/2017	(428,468)	(428,362)	19	(32,241)
New Incremental 6/30/2018	(192,240)	(192,240)	20	(13,976)
Total UAAL		$14,299,615		$872,311
Blended amortization period (years)				26.5

Section VI – Comments on Level of Funding

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 14.27%, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability in accordance with the Board funding policy. However, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll.

Section VI – Comments on Level of Funding

3. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 14.27% of payroll for the fiscal year ending June 30, 2021, as shown in the following table:

Valuation Date	Fiscal Year	Increase/ (Decrease)	Cumulative Increase	Amount
June 30, 2004	June 30, 2007	0.11%	0.11%	$ 3,174,600
June 30, 2005	June 30, 2008	1.21	1.32	38,965,900
June 30, 2006	June 30, 2009	0.56	1.88	60,499,800
June 30, 2007	June 30, 2010	0.58	2.46	82,331,200
June 30, 2008	June 30, 2011	1.13	3.59	121,457,000
June 30, 2009	June 30, 2012	2.22	5.81	208,649,000
June 30, 2010	June 30, 2013	1.46	7.27	260,980,000
June 30, 2011	June 30, 2014	0.75	8.02	299,420,000
June 30, 2012	June 30, 2015	2.40	10.42	386,400,000
June 30, 2013	June 30, 2016	2.55	12.97	487,400,000
June 30, 2014	June 30, 2017	0.83	13.80	520,372,000
June 30, 2015	June 30, 2018	(0.31)	13.49	512,883,000
June 30, 2016	June 30, 2019	1.12	14.61	553,597,000
June 30, 2017	June 30, 2020	(0.51)	14.10	538,253,000
June 30, 2018	June 30, 2021	0.17	14.27	551,092,000

In addition, as existing special contributions expire, the statutory contributions or supplemental funding may be required to increase as an equal percentage of payroll, in order to amortize the unfunded actuarial accrued liability in accordance with the Board funding policy. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII – Analysis of Financial Experience

The following table shows the estimated gain or loss from various factors that resulted in a decrease of $5,632,843 in the unfunded actuarial accrued liability from $14,305,248,331 to $14,299,615,488 during the year ending June 30, 2018. The decrease in the unfunded actuarial accrued liability was primarily due to gains for the investment return on an actuarial value basis that was greater than expected and salary increases that were less than assumed. In addition to these gains were small demographic gains and losses due to turnover, retirement and mortality.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded actuarial accrued liability	$ 1,072,894
Expected actuarial accrued liability contribution	(888,427)
Loss due to Contribution Shortfall and Timing	8,540
Experience:	
Valuation asset growth	(297,572)
Pensioners' mortality	58,828
Turnover and retirements	72,847
New entrants	40,380
Salary increases	(73,123)
Amendments	0
Assumption changes	0
Method changes	0
Total	$ (5,633)

Section VIII – Accounting Information

The information required under Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 will be issued in separate reports. The following information is provided for informational purposes only.

1. The following is a distribution of the number of employees by type of membership.

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2018

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	54,377
Terminated vested employees entitled to benefits but not yet receiving benefits	8,814
Inactive non-vested members	44,031
Active plan members	72,205
Total	179,427

2. The schedule of funding progress is shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Annual Salaries (c)	UAAL as a Percentage of Annual Salaries ((b - a) / c)
6/30/2013	$14,962,758	$28,817,232	$ 13,854,474	51.9%	$3,480,066	398.1%
6/30/2014*	16,174,199	30,184,404	14,010,205	53.6	3,486,327	401.9
6/30/2015	17,219,520	31,149,962	13,930,442	55.3	3,515,113	396.3
6/30/2016*	17,496,894	32,028,227	14,531,333	54.6	3,537,226	410.8
6/30/2017	18,514,638	32,819,887	14,305,249	56.4	3,563,584	401.4
6/30/2018	19,496,056	33,795,671	14,299,615	57.7	3,605,116	396.6

* Reflects change in assumptions

3. The information presented above was determined as part of the actuarial valuation at June 30, 2018. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2018
Actuarial cost method	Entry Age
Amortization method	Level percent of pay, closed
Remaining amortization period	26.5 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment Rate of Return*	7.50%
Projected salary Increases**	3.50% - 7.30%
Cost-of-living adjustments	1.50% Annually
*Includes price inflation at	3.00%
**Includes wage inflation at	3.50%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Actuarially Determined Employer Contributions	Actual Employer Contributions	Percentage Contributed
2013	$ 802,984,644	$ 568,233,446	71%
2014	823,446,156	563,326,249	68
2015	913,653,854	559,579,290	61
2016	999,270,174	565,454,590	57
2017	1,076,617,093	1,060,719,993	99
2018	1,080,892,201	1,048,671,201	97

Section IX – Sensitivity Analysis

The valuation results are a projection of expected benefit payments based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing liabilities and valuation results. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes in the assumed discount rate, the assumed price inflation rate and the rate of wage inflation. The charts show the actuarial accrued liability, the unfunded actuarial accrued liability, the funded ratio and the employer contribution rate under each of the following scenarios:

- **TABLE 1** - The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 7.50%, together with an increase and a decrease of 1.00% in the discount rate. Under this scenario, the underlying price inflation rate assumption is held constant at 3.00% and the wage inflation assumption is held constant at 3.50%.

- **TABLE 2** - The price inflation assumption sensitivity analysis shows the valuation results with the baseline underlying price inflation rate assumption, 3.00%, together with decreases in the price inflation rate to 2.75% and 2.50%. Under this scenario, the decrease in the underlying price inflation rate assumption leads to corresponding decreases in the discount rate (7.25% and 7.00%, respectively), the wage inflation assumption (3.25% and 3.00%, respectively), and the assumed rates of salary increase for active members.

- **TABLE 3** - The wage inflation assumption sensitivity analysis shows the valuation results with the baseline underlying wage inflation assumption, 3.50%, together with decreases in the wage inflation assumption to 2.00% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded actuarial accrued liability, leading to higher employer contribution rates.

Section IX – Sensitivity Analysis

TABLE 1

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS AS OF JUNE 30, 2018 ($1,000's)	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 37,702,021	$ 33,795,671	$ 30,519,411
Actuarial Value of Assets	19,496,056	19,496,056	19,496,056
Unfunded Actuarial Accrued Liability	$ 18,205,965	$ 14,299,615	$ 11,023,355
Funded Ratio	51.7%	57.7%	63.9%
Employer ADEC – University*	37.505%	28.975%	21.575%
Employer ADEC – Non-University*	38.985%	30.455%	23.055%
Discount Rate	6.50%	7.50%	8.50%
Wage Inflation Rate	3.50%	3.50%	3.50%
Price Inflation Rate	3.00%	3.00%	3.00%

* Less 1% for members hired before July 1, 2008.

TABLE 2

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY PRICE INFLATION ASSUMPTION SENSITIVITY ANALYSIS AS OF JUNE 30, 2018 ($1,000's)	Valuation Results	Decrease Inflation Rate 25 basis points	Decrease Inflation Rate 50 basis points
Actuarial Accrued Liability	$ 33,795,671	$ 34,587,658	$ 35,413,014
Actuarial Value of Assets	19,496,056	19,496,056	19,496,056
Unfunded Actuarial Accrued Liability	$ 14,299,615	$ 15,091,602	$ 15,916,958
Funded Ratio	57.7%	56.4%	55.1%
Employer ADEC – University*	28.975%	31.035%	33.175%
Employer ADEC – Non-University*	30.455%	32.515%	34.655%
Discount Rate	7.50%	7.25%	7.00%
Wage Inflation Rate	3.50%	3.25%	3.00%
Price Inflation Rate	3.00%	2.75%	2.50%

* Less 1% for members hired before July 1, 2008.

Section IX – Sensitivity Analysis

TABLE 3

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY WAGE INFLATION ASSUMPTION SENSITIVITY ANALYSIS AS OF JUNE 30, 2018 ($1,000's)	Valuation Results	Decrease Wage Inflation to 2%	No Wage Inflation
Actuarial Accrued Liability	$ 33,795,671	$ 33,795,671	$ 32,795,671
Actuarial Value of Assets	19,496,056	19,496,056	19,496,056
Unfunded Actuarial Accrued Liability	$ 14,299,615	$ 14,299,615	$ 14,299,615
Funded Ratio	57.7%	57.7%	57.7%
Employer ADEC – University*	28.975%	33.255%	39.655%
Employer ADEC – Non-University*	30.455%	34.735%	41.135%
Discount Rate	7.50%	7.50%	7.50%
Wage Inflation Rate	3.50%	2.00%	0.00%
Price Inflation Rate	3.00%	3.00%	3.00%

* Less 1% for members hired before July 1, 2008.

Schedule A – Valuation Balance Sheet and Solvency Test

SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2018
(Dollar amounts in thousands)

	ACTUARIAL LIABILITIES		
(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 15,493,983	
	- Disability retirement benefits	636,767	
	- Death and survivor benefits	127,040	
	- Refunds of member contributions	257,464	
	Total		$ 16,515,254
(2)	Present value of prospective benefits payable on account of present retired and disabled members, and beneficiaries of deceased members		
	- Service retirement benefits	$ 19,903,893	
	- Disability retirement benefits	824,297	
	- Death and survivor benefits	797,354	
	Total		$ 21,525,544
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 396,937
(4)	TOTAL ACTUARIAL LIABILITIES		$ 38,437,735
	PRESENT AND PROSPECTIVE ASSETS		
(5)	Actuarial value of assets		$ 19,496,056
(6)	Present value of total future contributions = (4)-(5)	$ 18,941,679	
(7)	Present value of future member contributions and employer normal contributions		$ 4,642,064
(8)	Prospective unfunded actuarial accrued liability contributions = (6)-(7)		$ 14,299,615
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 38,437,735

Schedule A – Valuation Balance Sheet and Solvency Test

SOLVENCY TEST
(Dollar amounts in millions)

Valuation Date	Aggregate Actuarial Accrued Liability For (1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2013	$3,514.4	$17,716.4	$7,586.5	$14,962.8	100%	65%	0%
6/30/2014	3,629.7	18,676.3	7,878.3	16,174.2	100	67	0
6/30/2015	3,700.6	19,522.5	7,926.8	17,219.5	100	69	0
6/30/2016	3,756.0	20,416.4	7,855.8	17,496.9	100	67	0
6/30/2017	3,849.9	21,108.0	7,862.1	18,514.6	100	69	0
6/30/2018	3,927.8	21,922.5	7,945.4	19,496.1	100	71	0

Schedule B – Development of the Actuarial Value of Assets

AS OF JUNE 30, 2018

(1)	Actuarial Value of Assets Beginning of Year		$ 18,514,638,263
(2)	Net Position at Market Value at End of Year		$ 19,981,633,096
(3)	Net Position at Market Value at Beginning of Year		$ 18,707,699,025
(4)	Cash Flow		
	a.	Contributions	$ 1,367,798,288
	b.	Benefit Payments	2,035,689,755
	c.	Administrative Expense	11,388,493
	d.	Net: (4)a – (4)b – (4)c	$ (679,279,960)
(5)	Investment Income		
	a.	Market total: (2) – (3) – (4)d	$ 1,953,214,031
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	$ 1,377,604,428
	d.	Amount for Phased-In Recognition: (5)a – (5)c	$ 575,609,603
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	$ 115,121,921
	b.	First Prior Year	247,314,724
	c.	Second Prior Year	(312,346,803)
	d.	Third Prior Year	(92,160,668)
	e.	Fourth Prior Year	325,163,609
	f.	Total Recognized Investment Gain	$ 283,092,783
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f		$ 19,496,055,514
(8)	Difference Between Market & Actuarial Values: (2) – (7)		$ 485,577,582
(9)	Net Investment Rate of Return on Actuarial Value:		9.14%

Schedule C – Summary of Receipts and Disbursements

SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2018	June 30, 2017
Receipts for the Year		
Contributions		
Members	$ 319,127,087	$ 313,625,434
Employers	1,048,671,201	1,060,719,993
Total	1,367,798,288	1,374,345,427
Net Investment Income	1,953,214,031	2,475,752,798
TOTAL	$ 3,321,012,319	$ 3,850,098,225
Disbursements for the Year		
Benefit Payments	$ 2,004,617,334	$ 1,918,612,128
Refunds to Members	31,072,421	26,305,240
Miscellaneous, including expenses	11,388,493	10,313,715
TOTAL	$ 2,047,078,248	$ 1,955,231,083
Excess of Receipts over Disbursements	$ 1,273,934,071	$ 1,894,867,142
Reconciliation of Net Position		
Net Position as of the Beginning of the Year	$ 18,707,699,025	$ 16,812,831,883
Excess of Receipts over Disbursements	1,273,934,071	1,894,867,142
Net Position as of the End of the Year	$ 19,981,633,096	$ 18,707,699,025
Net Investment Rate of Return on Market Value	10.5%	15.0%

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

Schedule D – Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually, including price inflation at 3.00% per annum.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.50% per annum:

Age	Annual Rate
20	7.20%
25	6.40
30	5.40
35	4.70
40	4.20
45	3.80
50	3.70
55	3.50
60	3.50
65	3.50

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before	After
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	27 Years of Service	27 Years of Service*
20	0.019%	0.01%	11.00%				
25	0.021	0.01	11.00	3.00%			
30	0.025	0.01	11.00	3.00	3.00%		
35	0.043	0.04	12.00	3.50	1.40		
40	0.060	0.09	12.00	4.50	1.40		
45	0.084	0.20	12.00	4.50	1.30		17.0%
50	0.119	0.30	14.00	4.50	1.90		17.0
55	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	1.556	0.75	20.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.

Schedule D – Outline of Actuarial Assumptions and Methods

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	9.00%				
25	0.008	0.01	9.00	4.00%			
30	0.010	0.03	12.00	4.00	1.65%		
35	0.018	0.06	12.00	4.00	1.50		
40	0.026	0.12	12.00	4.00	1.30		
45	0.042	0.25	13.00	4.00	1.20		15.0%
50	0.062	0.44	13.00	5.00	1.50		18.0
55	0.096	0.65	15.00	5.00	2.00	5.5%	50.0
60	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	0.831	0.85	15.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Service Retirement Female	Disability Retirement Male	Disability Retirement Female
45	0.1609%	0.1135%	2.3306%	1.2482%
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074

Schedule D – Outline of Actuarial Assumptions and Methods

ASSETS: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

Schedule E – Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently at 7.50%), of each active member's expected benefit at retirement or death is determined, based on his/her age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an actuarial accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his/her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his/her behalf.
4. The unfunded actuarial accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

Schedule F – Summary of Main System Provisions

AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2018. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to: (a) 2.0% of final average salary multiplied by service before July 1, 1983, plus (b) 2.5% of final average salary multiplied by service after July 1, 1983. (c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.

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For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Schedule F – Summary of Main System Provisions

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under 27 years of service but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased TRS active and retired members.

Schedule F – Summary of Main System Provisions

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

Schedule G – Tables of Employee Data

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2018 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	3,356								3,356
Total Pay	73,197,998								73,197,998
Avg. Pay	21,811								21,811
25 to 29	5,728	1,663	5						7,396
Total Pay	203,495,638	82,568,556	187,852						286,252,046
Avg. Pay	35,526	49,650	37,570						38,704
30 to 34	2,675	4,547	1,612	3					8,837
Total Pay	86,293,957	232,507,874	93,615,745	171,059					412,588,635
Avg. Pay	32,259	51,134	58,074	57,020					46,689
35 to 39	2,254	2,127	4,670	1,452	8				10,511
Total Pay	66,909,314	110,685,191	282,452,313	94,329,491	434,996				554,811,305
Avg. Pay	29,685	52,038	60,482	64,965	54,375				52,784
40 to 44	1,783	1,360	2,099	4,041	1,099	6			10,388
Total Pay	50,536,837	70,800,804	127,327,260	271,875,642	78,592,555	466,037			599,599,135
Avg. Pay	28,344	52,059	60,661	67,279	71,513	77,673			57,720
45 to 49	1,481	1,082	1,507	2,140	3,650	1,019	4		10,883
Total Pay	38,192,866	57,257,531	91,642,244	141,344,490	258,449,408	75,036,251	337,145		662,259,935
Avg. Pay	25,789	52,918	60,811	66,049	70,808	73,637	84,286		60,853
50 to 54	1,235	656	968	1,242	1,603	1,883	341	9	7,937
Total Pay	26,561,350	32,743,609	58,414,733	82,215,623	112,128,856	141,021,748	26,428,299	771,555	480,285,773
Avg. Pay	21,507	49,914	60,346	66,196	69,949	74,892	77,502	85,728	60,512
55 to 59	1,517	465	610	913	1,003	726	265	33	5,532
Total Pay	25,011,517	20,976,754	35,767,841	58,954,988	70,939,328	56,218,141	23,218,735	2,581,322	293,668,626
Avg. Pay	16,487	45,111	58,636	64,573	70,727	77,435	87,618	78,222	53,085
60 to 64	1,679	344	305	482	483	390	106	47	3,836
Total Pay	21,246,589	12,139,654	17,529,572	31,791,751	34,076,493	28,894,613	8,938,762	3,162,631	157,780,065
Avg. Pay	12,654	35,290	57,474	65,958	70,552	74,089	84,328	67,290	41,131
65 & over	2,137	525	189	194	199	147	76	62	3,529
Total Pay	18,319,211	10,686,323	8,081,622	12,048,328	13,626,663	11,374,461	5,370,666	5,164,995	84,672,269
Avg. Pay	8,572	20,355	42,760	62,105	68,476	77,377	70,667	83,306	23,993
Total	23,845	12,769	11,965	10,467	8,045	4,171	792	151	72,205
Total Pay	609,765,277	630,366,296	715,019,182	692,731,372	568,248,299	313,011,251	64,293,607	11,680,503	3,605,115,787
Avg. Pay	25,572	49,367	59,759	66,182	70,634	75,045	81,179	77,354	49,929

Average Age: 43.5 Average Service: 10.9

Schedule G – Tables of Employee Data

TABLE 2

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
9/30/2018	72,205	$ 3,605,115,787	$ 49,929	0.01%
9/30/2017	72,130	3,563,584,342	49,405	0.35
9/30/2016	71,848	3,537,226,348	49,232	1.19
9/30/2015	72,246	3,515,113,127	48,655	2.45
9/30/2014	73,407	3,486,326,799	47,493	2.12
9/30/2013	74,831	3,480,066,406	46,506	1.51
9/30/2012	75,951	3,479,567,004	45,813	1.33
9/30/2011	76,349	3,451,756,287	45,210	3.97
9/30/2010	76,387	3,321,614,223	43,484	1.51
9/30/2009	75,937	3,253,076,600	42,839	1.43

Schedule G – Tables of Employee Data

TABLE 3

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE AS OF JUNE 30, 2018

Attained Age	Number of Members	Total Annual Payment	Average Annual Benefits
49 & Under	833	$ 10,962,632	$ 13,160
50 – 54	1,466	59,000,557	40,246
55 – 59	4,140	180,263,981	43,542
60 – 64	7,967	332,177,567	41,694
65 – 69	12,885	510,187,288	39,595
70 – 74	11,706	440,901,296	37,665
75 – 79	7,212	259,248,784	35,947
80 – 84	4,199	139,521,951	33,227
85 – 89	2,471	73,501,434	29,746
90 & Over	1,498	37,752,626	25,202
Total	54,377	$ 2,043,518,116	$ 37,581

Average Current Age: 69.8 Average Age at Retirement: 56.1

Schedule G – Tables of Employee Data

TABLE 4

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

Fiscal Year Ending June 30	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase In Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2009	2,351	$96.2	1,040	$22.7	42,050	$1,280.3	6.1%	$30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6%	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0%	32,270
2012	2,513	111.2	838	19.4	46,094	1,525.2	6.4%	33,089
2013	2,303	105.7	991	22.2	47,406	1,608.7	5.5%	33,934
2014	2,146	99.6	976	23.4	48,576	1,684.9	4.7%	34,685
2015	2,917	119.1	1,671	36.3	49,822	1,767.6	4.9%	35,479
2016	2,753	128.2	1,012	26.9	51,563	1,868.9	5.7%	36,244
2017	2,638	119.8	1,235	35.2	52,966	1,953.5	4.5%	36,881
2018	2,499	120.0	1,088	30.0	54,377	2,043.5	4.6%	37,581

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GASB STATEMENT NO. 67 REPORT

FOR THE

TEACHERS' RETIREMENT SYSTEM

OF THE STATE OF KENTUCKY

PREPARED AS OF JUNE 30, 2018

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November 6, 2018

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Presented in this report is information to assist the Teachers' Retirement System of the State of Kentucky (TRS), in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. This report has been prepared as of June 30, 2018 (the Measurement Date) to assist TRS in better understanding the requirements of GASB 67 and to identify the information to be provided by TRS's actuary, Cavanaugh Macdonald Consulting (CMC).

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2017. The valuation was based upon data, furnished by the Executive Secretary and TRS staff, concerning active, inactive and retired members along with pertinent financial information.

To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 67.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Respectfully submitted,

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Principal and Consulting Actuary

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REPORT OF THE ANNUAL GASB STATEMENT NO. 67
REQUIRED INFORMATION FOR THE
TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
PREPARED AS OF JUNE 30, 2018

SECTION I – INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "*Financial Reporting For Pension Plans*", in June 2012. This report, prepared as of June 30, 2018 (the Measurement Date), presents information to assist the Teachers' Retirement System of the State of Kentucky (TRS), in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of TRS as of June 30, 2017. The results of that valuation were detailed in a report dated November 14, 2017.

GASB 67 requires a measurement of the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. If the valuation date at which the TPL is determined is before the measurement date, as is the case here, the TPL must be rolled forward to the measurement date. The Net Pension Liability (NPL) is then set equal to the rolled forward TPL minus the System's Fiduciary Net Position (FNP) (basically the market values of assets) as of the Measurement Date. The benefit provisions recognized in the calculation of the TPL are summarized in Schedule B. The development of the roll-forward of the TPL is shown in the table on page 5.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR) as described by GASB 67. To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the membership and beneficiaries of the System on the Measurement Date. Additional appropriations by the State above the statutory employer contributions were made in fiscal years 2017 and 2018 and it is our understanding that the State budget includes additional appropriations to the pension plan for fiscal years 2019 and 2020. These appropriated contributions were approximately 95% of the Actuarial Determined Contribution (ADEC). In addition to these four years of additional appropriations, the intent by the State to fund TRS pensions in the future is evident from Senate Bill 151 (2018 RS), therefore, based on the four years and the intent, future contributions were projected to be made in accordance with the Board funding policy, adjusted by a factor of 95%.

On this basis, if the FNP is not projected to be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR. If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate.

Our calculations indicate that the FNP is not projected to be depleted, therefore, the long term expected rate of return on plan investments, of 7.50 percent, expected to be used to finance benefits may be used as the SEIR. This is a change in the SEIR rate for this Measurement Date from last year, where the FNP was calculated to be depleted and an SEIR rate of 4.49 percent was determined. The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information.

SECTION II – FINANCIAL STATEMENT NOTES

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30(a) (1)-(3): The information required is to be supplied by the System.

Paragraph 30(a) (4): The data required regarding the membership of the TRS were furnished by the System office. The following table summarizes the membership of the System as of June 30, 2017, the actuarial valuation date.

Membership

	Number
Retirees And Survivors Currently Receiving Benefits	52,966
Terminated Vested Employees Entitled To But Not Yet Receiving Benefits	8,624
Inactive Non-vested Members	42,798
Active Members	72,130
Total	176,518

Paragraphs 30(a)(5)-(6) and Paragraphs 30(b)-(f): The information required is to be supplied by the System.

Paragraphs 31(a) (1)-(4): The information is provided in the following table. As stated on the previous page, the Net Pension Liability (NPL) is equal to the Total Pension Liability (TPL) minus the Fiduciary Net Position (FNP). That result as of June 30, 2018 is presented in the table below ($ thousands).

	Fiscal Year Ending 6/30/2018
Total Pension Liability (TPL)	$33,708,555
Fiduciary Net Position (FNP)	19,981,633
Net Pension Liability (NPL)	$13,726,922
Ratio of FNP to TPL	59.28%

Paragraph 31(b) (1)(a)-(f): This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The set of actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The total pension liability was determined by an actuarial valuation as of June 30, 2017, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00 percent
Salary increases	3.50 – 7.30 percent, including inflation
Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation
Municipal Bond Index Rate	3.89%
Single Equivalent Interest Rate	7.50%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale BB to 2025, set forward two years for males and one year for females.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period July 1, 2010 – June 30, 2015 adopted by the Board on September 19, 2016.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	40.0%	4.2%
International Equity	22.0%	5.2%
Fixed Income	15.0%	1.2%
Additional Categories	8.0%	3.3%
Real Estate	6.0%	3.8%
Private Equity	7.0%	6.3%
Cash	2.0%	0.9%
Total	100.00%	

Discount rate. The discount rate used to measure the total pension liability was 7.50 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that Employer contributions will be made at the Actuarially Determined Contribution rates, adjusted by 95%, for all fiscal years in the future. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Paragraph 31(b) (1) (g): This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 7.50 percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50 percent) or 1-percentage-point higher (8.50 percent) than the current rate ($ thousands):

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
System's net pension liability	$17,595,452	$13,726,922	$10,472,071

Paragraph 31(c): June 30, 2017 is the actuarial valuation date upon which the TPL is based. An expected TPL is determined as of June 30, 2018 using standard roll forward techniques for the TPL using a discount rate of 7.50%. An expected TPL was also determined using the prior year discount rate of 4.49%, which was based on a municipal bond index rate of 3.56%. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the assumed interest rate (SEIR) for the year. The difference between these two roll-forward amounts as of June 30, 2018 is the gain or loss due to changes in assumptions and other inputs.

In addition, we have determined an expected TPL as of June 30, 2018 based on the TPL roll forward in the June 30, 2017 GASB 67 report. The difference between this amount and the roll-forward of the actual TPL using last year's assumptions is reflected as an experience gain or loss for the year. These procedures are shown in the following table:

TPL Roll-Forward (in thousands)			
	Expected	Actual Before Assumption Changes	Actual After Assumption Changes
(a) Interest rate	4.49%	4.49%	7.50%
(b) TPL as of June 30, 2017	$46,966,822	$46,753,909	$32,819,887
(c) Entry Age Normal Cost for the Year July 1, 2017 – June 30, 2018	1,104,102	1,104,102	539,205
(d) Actual Benefit Payments (including refunds) For the year July 1, 2017 – June 30, 2018	2,035,690	2,035,690	2,035,690
(e) TPL as of June 30, 2018 [(b) x (1 + (a))] + (c) – [(d) x (1 + (0.5 x (a)))]	$48,098,343	$47,875,870	$33,708,555
(f) Difference between Expected and Actual Experience (Gain)/Loss		$(222,473)	
(g) Difference due to change in Assumptions and Other Inputs (Gain)/Loss			$(14,167,315)

SECTION III – REQUIRED SUPPLEMENTARY INFORMATION

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 32(a)-(c): The required tables are provided in Schedule A.

Paragraph 32(d): The money-weighted rates of return required are to be supplied by the System.

Paragraph 34: In addition the following should be noted regarding the RSI:

Changes of benefit terms. None

Changes of assumptions. In the 2016 valuation, rates of withdrawal, retirement, disability, mortality and rates of salary increase were adjusted to more closely reflect actual experience. In the 2016 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables projected to 2025 with projection scale BB, set forward two years for males and one year for females rather than the RP-2000 Mortality Tables projected to 2020 with projection scale AA, which was used prior to 2016.

In the 2011 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables projected to 2020 with projection scale AA, set back one year for females rather than the1994 Group Annuity Mortality Tables which was used prior to 2016. For the 2011 valuation through the 2013 valuation, an interest smoothing methodology was used to calculate liabilities for purposes of determining the actuarially determined contributions.

Methods and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported (as of June 30, 2015 for the fiscal year 2018 contributions). The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of that schedule:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll, closed
Remaining amortization period	29.3 years
Asset valuation method	5-year smoothed market
Inflation	3.50 percent
Salary increase	4.00 to 8.20 percent, including inflation
Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)
($ in Thousands)

	2018	2017	2016	2015	2014
Total Pension Liability					
Service Cost	$ 1,104,102	$ 1,332,587	$ 1,120,893	$ 1,015,080	$ 1,002,338
Interest	2,063,109	1,964,107	2,027,457	2,029,372	1,956,610
Benefit Changes	0	0	0	0	0
Difference between expected and actual experience	(222,473)	199,471	(58,035)	0	0
Changes of Assumption and other inputs	(14,167,315)	(2,321,327)	4,030,834	1,511,960	(353,043)
Benefit Payments	(2,004,617)	(1,918,612)	(1,833,199)	(1,741,456)	(1,654,376)
Refund of Contributions	(31,073)	(26,305)	(27,748)	(23,033)	(25,462)
Net Change in Total Pension Liability	(13,258,267)	(770,079)	5,260,202	2,791,923	926,067
Total Pension Liability – Beginning	46,966,822	47,736,901	42,476,699	39,684,776	38,758,709
Total Pension Liability – Ending (a)	$33,708,555	$46,966,822	$47,736,901	$42,476,699	$39,684,776
Plan Net Position					
Contributions – State of Kentucky	$ 969,698	$ 981,417	$ 484,987	$ 480,073	$ 483,330
Contributions – Other Employers	78,973	79,303	80,468	79,506	79,996
Contributions – Member	319,127	313,625	313,044	308,160	304,982
Net Investment Income	1,953,214	2,475,753	(245,215)	862,179	2,803,249
Benefit Payments	(2,004,617)	(1,918,612)	(1,833,199)	(1,741,456)	(1,654,376)
Administrative Expense	(11,388)	(10,314)	(8,636)	(8,869)	(7,956)
Refund of Contributions	(31,073)	(26,305)	(27,748)	(23,033)	(25,462)
Other	0	0	0	0	0
Net Change in Plan Net Position	1,273,934	1,894,867	(1,236,299)	(43,440)	1,983,763
Plan Net Position – Beginning	18,707,699	16,812,832	18,049,131	18,092,571	16,108,808
Plan Net Position – Ending (b)	$19,981,633	$18,707,699	$16,812,832	$18,049,131	$18,092,571
Net Pension Liability – Ending (a) – (b)	$13,726,922	$28,259,123	$30,924,069	$24,427,568	$21,592,205

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF THE NET PENSION LIABILITY
GASB 67 Paragraph 32(b)
($ in Thousands)

	2018	2017	2016	2015	2014
Total Pension Liability	$33,708,555	$46,966,822	$47,736,901	$42,476,699	$39,684,776
Plan Net Position	19,981,633	18,707,699	16,812,832	18,049,131	18,092,571
Net Pension Liability	$13,726,922	$28,259,123	$30,924,069	$24,427,568	$21,592,205
Ratio of Plan Net Position to Total Pension Liability	59.28%	39.83%	35.22%	42.49%	45.59%
Covered Payroll	$3,455,660	$3,415,432	$3,390,539	$3,455,008	$3,317,422
Net Pension Liability as a Percentage of Covered Payroll	397.23%	827.40%	912.07%	707.02%	650.87%

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 67 Paragraph 32(c)
($ in Thousands)

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Covered Payroll	$ 3,455,660	$ 3,415,432	$ 3,390,539	$ 3,455,008	$ 3,317,422	$ 3,310,710	$ 3,310,176	$ 3,283,749	$ 3,321,614	$ 3,253,077
Actual Employer Contributions	$ 1,048,671	$ 1,060,720	$ 565,455	$ 559,579	$ 563,326	$ 568,233	$ 557,340	$ 1,037,936	$ 479,805	$ 442,550
Actuarially Determined Employer Contributions	1,083,466	1,076,617	999,270	913,654	823,446	802,985	757,822	678,741	633,938	600,283
Annual Contribution Excess (Deficiency)	$ (34,795)	$ (15,807)	$ (433,815)	$ (354,075)	$ (260,120)	$ (234,752)	$ (200,482)	$ 359,195	$ (154,133)	$ (157,733)
Actual Contribution as a Percentage of Covered Payroll	30.35%	31.06%	16.68%	16.20%	16.98%	17.16%	16.84%	31.61%	14.44%	13.60%

SCHEDULE B

SUMMARY OF MAIN BENEFIT PROVISIONS

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2017. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased TRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments	The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions	University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually, including price inflation at 3.00% per annum.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.50% per annum:

Age	Annual Rate
20	7.20%
25	6.40
30	5.40
35	4.70
40	4.20
45	3.80
50	3.70
55	3.50
60	3.50
65	3.50

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of						
			WITHDRAWAL			RETIREMENT	
			Service			Before	After
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	27 Years of Service	27 Years of Service*
20	0.019%	0.01%	11.00%				
25	0.021	0.01	11.00	3.00%			
30	0.025	0.01	11.00	3.00	3.00%		
35	0.043	0.04	12.00	3.50	1.40		
40	0.060	0.09	12.00	4.50	1.40		
45	0.084	0.20	12.00	4.50	1.30		17.0%
50	0.119	0.30	14.00	4.50	1.90		17.0
55	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	1.556	0.75	20.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.

Females

Age	Annual Rate of DEATH	DISABILITY	WITHDRAWAL Service 0 – 4	5 – 9	10+	RETIREMENT Before 27 Years of Service	After 27 Years of Service*
20	0.007%	0.01%	9.00%				
25	0.008	0.01	9.00	4.00%			
30	0.010	0.03	12.00	4.00	1.65%		
35	0.018	0.06	12.00	4.00	1.50		
40	0.026	0.12	12.00	4.00	1.30		
45	0.042	0.25	13.00	4.00	1.20		15.0%
50	0.062	0.44	13.00	5.00	1.50		18.0
55	0.096	0.65	15.00	5.00	2.00	5.5%	50.0
60	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	0.831	0.85	15.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After Service Retirement Male	Female	Disability Retirement Male	Female
45	0.1609%	0.1135%	2.3306%	1.2482%
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074

ASSETS: Market Value

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

SCHEDULE D

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

November 2004

Lexington Fayette Urban County Government Police and Firefighters' Pension Plan Valuation as of July 1, 2004

MERCER
Human Resource Consulting

LEXINGTON FAYETTE URBAN COUNTY GOVERNMENT
POLICE AND FIREFIGHTERS' PENSION FUND
VALUATION AS OF JULY 1, 2004

Section 1 - Introduction

At the request of the Board of Trustees, Mercer Human Resource Consulting has undertaken a valuation of the Lexington Fayette Urban County Government Pension Plan for Police and Firefighters' as of July 1, 2004. This Plan has been adopted pursuant to KRS 67A.360 to KRS 67A.690. KRS 67A.560(6) requires a valuation of this Plan at least once every two years. The most recent valuation was completed as of July 1, 2002.

Included in this report is a brief summary of the plan's provisions, an explanation of the actuarial assumptions used, an analysis of the results of the valuation and several tables showing detailed information with regard to the valuation of the plan and status of participants under the plan.

Section 2 - Summary of Plan Provisions

(a) Retirement Date

Anytime after completion of 20 years of service (including service purchased of up to 4 years).

(b) Retirement Income

2-1/2% of average salary times years of service (average salary is the highest average salary of the member for any three consecutive years of service.) Effective July 1, 2001, minimum annuity payable to any retiree or surviving spouse increased to $1,000.00 per month. The board shall increase this amount as provided by KRS 67A.690(1).

(c) Vesting

Rights in a service retirement annuity vest upon completion of 20 years of service.

(d) Occupational Death Benefits

Widow is entitled to immediate income equal to 60% of the member's last rate of pay regardless of the length of the employee's service. This income ceases at the widow's death or remarriage. In addition, 10% of the member's salary is payable to the widow for each minor child until each child attains age 18 (age 23 if involved in educational activities).

If no widow survives or if she remarries, then minor children will receive a benefit based on the following schedule:

One minor child	- 50% of salary
Two minor children	- 65% of salary
Three or more minor children	- 75% of salary

Maximum total payment to the widow and minor children is 75% of the member's salary.

If neither a widow nor minor children survive the member, then each dependent parent is entitled to 25% of the member's salary.

(e) Non-Occupational Death Benefits

If a member dies after completing at least five years of service, the surviving spouse is entitled to 1-1/2% of the member's average salary times years of service (minimum of 15%), subject to the following provisions:

1) The widow and member had been married at least six months prior to the member's death.

2) The widow's income ceases upon remarriage.

3) Widow's income is increased by 1/2 for the first minor child and by 1/4 for each additional child. Maximum total income to widow and minor children is 75% of average salary.

4) If no widow survives or if she remarries, then minor children will receive a benefit based on the following schedule:

One minor child	- 50% of salary
Two minor children	- 65% of salary
Three or more minor children	- 75% of salary

Maximum total payment is 75% of the member's salary.

Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity of 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member had elected an alternate actuarial equivalent form at time of retirement of either a joint and 75% or a joint and 100% survivor payment form.

(f) Occupational Disability Benefits

For disabling injuries occurring after July 15, 1994, the member receives income equal to a minimum of 60% of his final rate of pay. The percentage amount shall be increased above the 60% minimum by 1/2 of the amount by which the member's percentage of disability exceeds 20%, but in no event to exceed a total of 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". Upon his death, his survivors receive benefits under the occupational death benefit provision. If the member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference.

For disabling injuries occurring prior to July 15, 1994, the member receives income equal to a minimum of 75% of the final rate of pay.

(g) Non-Occupational Disability Benefits

If a member becomes disabled after completing at least five years of service, then he is entitled to a disability income equal to 2-1/2% of average salary times years of service subject to a minimum payment of 25% of average salary and a maximum payment of 75% of average salary. Benefits payable to the member's surviving spouse upon the member's death shall be as determined under KRS 67A.450 and KRS 67A.492.

(h) Employee Contributions

Each active member contributes 11% of current salary.

(i) Employer Contribution

The government shall make current contributions to the fund on an actuarially funded basis. Such contribution shall be equal to the sum of:

(1) An annual amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method (fixed by the board every two years), and

(2) An amount resulting from the application of a rate percent of salaries of active members which will provide each year regular interest on any remaining liability for prior service.

In any event, the total contribution of the government shall be at least 17% of salaries of active members participating in the fund.

The current amount of contribution by the government is 21% of salaries (effective July 1, 2004).

(j) Post-Retirement Cost-Of-Living Increase

Under the terms of the current statute, each retired member who has been retired for at least one year and who is at least age 47, will have his pension increased each year by an amount, to be determined by the board, of not less than 2% nor more than 5%, compounded annually, this increase shall also apply to beneficiaries of deceased members. Notwithstanding, any disabled member, or beneficiaries or dependents of such a member, shall receive an increase of 2% of the original annuity each year up to the time the retiree attains, or would have attained, age 47 and has been retired for one year. This increase shall be compounded.

Although the statute has not yet been amended to eliminate age 47 as the starting age for COLA's, operationally COLA increases are being given to all retirees and beneficiaries under the plan regardless of age. This is consistent with the elimination of the age 46 requirement to retire which was the original basis for the age 47 starting age for the COLA. Since age 46 is no longer required to retire, it is reasonable that COLA increases would also no longer be limited by an age requirement.

(k) Refund Of Employee Contributions

Upon termination, a member may receive a refund of his accumulated contributions to the Fund, without interest.

Section 3 - Actuarial Assumptions

The ultimate cost of any retirement system will be the amount of benefits paid out over the years, plus the expense of administration, minus the investment return of the fund. Under a formal retirement program, it is necessary to set aside funds in advance to provide for the benefits as they come due in order to avoid continual rapidly increasing pension costs. In addition to providing a much stronger financial basis for the fund, this advance funding also permits a sounder method of accounting, since the cost for any particular individual is spread over his active working lifetime rather than over his retirement years, when he is rendering no services to Urban County Government. Unfortunately for simplicity purposes, the need for advance funding also introduces many complications in attempting to determine the amount of funds that should be set aside annually to provide protection for future retirees and their beneficiaries. In fact, it is just as impossible to determine with certainty the annual cost of a retirement plan as it is to state definitely the total payroll of a group twenty years in the future. Thus, an actuarial valuation is, at best, an estimate based upon the experience of the actuary with the use of sophisticated mathematical tools.

In order to estimate annual pension costs, it is necessary to make judgments with regard to a number of future occurrences. These "actuarial assumptions" are used in conjunction with all of the data on pensioners, beneficiaries and active members to project the level of future benefit payments.

The following estimates must be made:

1) The expected rate of earnings on any monies set aside under the fund.

2) The approximate number of years that a retired employee will live after retirement.

3) The number of deaths, disabilities and withdrawals that will take place from the present working force.

4) The salary level of individuals 10, 20, 30 or more years in the future.

5) The approximate ages at which individuals will retire, and whether these retirements will be for disability or service.

6) The approximate number of employees married at retirement, and how many will be survived by a spouse.

7) The percentage of deaths and disabilities due to occupational causes.

Each of these assumptions is necessary if the ultimate costs of the plan are to be accurately determined and spread in an equitable manner in an advance funding scheme. Additional assumptions that are frequently ramifications of the ones indicated above must also be made. Obviously, no individual or group of individuals will be able to accurately estimate any one or all of these trends, so that the assumptions and funding methods used to prefund the plan are, at best, estimates as to future experience. For a plan covering thousands of employees rather elaborate experience studies are generally undertaken to be certain that the estimates are the best possible. For a plan the size of the Lexington Fayette Urban County Government Police and Firefighters' Pension Fund, the results of any such elaborate study would be of questionable statistical validity, so only a general examination is usually made. This was the procedure followed with regard to setting actuarial assumptions for this valuation. This analysis of recent plan experience resulted in several changes in actuarial assumptions effective in this valuation.

The following paragraphs discuss each of the assumptions independently:

(a) Rate of Return

The actuarial assumption that is probably most readily understood and most discussed is that of the assumed earnings rate for the fund. The higher the actual rate of return for the fund, the lower will be the ultimate level of contributions by the Urban County Government.

Valuations since 1986 have utilized an 8% assumption. This rate was chosen in 1986 after a review of investment experience. This assumption still is reasonable in view of current fund investments and target asset mix. As a result, we have continued to use the 8% assumption in this valuation. This rate should be continually monitored to assure that it remains reasonable based on target asset mix for the fund compiled with market return projections. Under our current portfolio return model, the 8% assumption falls just under the 60th percentile expected return. Further declines in expected return levels in future years would necessitate a decrease in this assumed rate.

Although, we have assumed that the fund will earn at the rate of 8% annually, it should be stressed that this 8% is not to be considered a goal for the fund, since the ultimate soundness of the fund depends not upon the actuarial assumption employed, but rather upon the actual earnings and expenses of the fund. Further, meeting this single assumption does not guarantee the accuracy of our results as experience in aggregate will determine this.

(b) Mortality

One of the most difficult assumptions is that of anticipated mortality under the system. Because of the relatively few people covered by the plan, it is impossible to obtain with any degree of statistical certainty an indication of the actual developing mortality experience. This assumption has been updated this valuation to use the UP 1994 Mortality Table projected to 2002 (separate for male and female lives). As in prior valuations, before retirement these rates were set forward three years to reflect the greater mortality risk for police and firefighters in general.

The number of expected deaths per 1,000 active male employees at sample ages is indicated below:

Pre-Retirement			Post-Retirement		
	Number of Deaths			Number of Deaths	
	Prior	Revised		Prior	Revised
Age	Assumption	Assumption	Age	Assumption	Assumption
20	0.4	0.6	60	9.2	7.5
30	0.7	0.9	70	27.5	22.6
40	1.7	1.3	80	74.1	61.5
50	5.2	3.3	90	166.3	159.3

For disabled lives, mortality was assumed to be consistent with rates issued by the IRS in Revenue Ruling 96-7 for use in determining current liability for disabled lives occurring prior to January 1, 1995. This is the same assumption as used in the 2002 valuation.

In computing liabilities for occupational vs. non-occupational death benefits, it was assumed that 20% of deaths were due to occupational causes, as has been the assumption used in prior valuations.

(c) Turnover

Because a retirement plan is funded on group basis, and because employees who terminate before completing 20 years of service receive only their own contributions without interest, termination by an employee prior to his retirement results in a gain to the fund, which in turn is indirectly used to fund benefits for the remaining individuals covered under the plan. For this reason, the actual rate of termination can have an important effect on the anticipated cost of the pension system. For example, if a plan were to experience complete turnover every five years, no one would reach retirement age, so that there would be no need to accumulate funds except for limited death and disability benefits. While this is obviously an extreme situation, it may not be generally recognized that the greater the turnover level among employees, the smaller percentage of total payroll generally required in order to provide pensions.

From all indications, turnover has been relatively low for longer service employees, where the potential gain is greatest. Thus, a relatively low termination rate was deemed appropriate. For this reason, we have assumed a termination rate according to Scale T-3 from the Actuary's Pension Handbook. Sample rates for 1,000 employees are shown as follows:

Age	Terminations Annually
20	65.8
30	48.3
40	38.4
50	15.2
60	0.0

This is the same table as used since the 1986 valuation. No change in this assumption was deemed necessary in this valuation.

(d) Salary Increases

The assumption relative to future salary increases was last revised in the 1989 valuation to assume that salary increases over the next 5 years would average 4% per year. Further, in consideration of the long term nature of our benefit projections and historical relationships between salary increase rates and investment return rates, it was further assumed that after the initial 5 year period, salaries would increase at 5% annually until the employee's retirement. This assumption has been retained in this valuation, with the 5 year period of 4% assumed salary increases now having expired, so that a 5% rate was used for all future years. No change in this assumption was deemed needed in this valuation.

(e) Normal Retirement Date

For most private industry plans, normal retirement age is easily established because benefits are actuarially reduced for commencement prior to age 65. Under this Plan full benefits without actuarial reduction are available if a member has completed 20 years of service, so that presumably this could be selected as the normal retirement age. Experience indicates that it is unlikely that most of the employees will actually retire at the first eligible retirement age.

Retirement experience as anticipated to reflect the "20 and out" eligibility now part of the plan has been assumed to be as follows:

Years of Service	Percentage of Remaining Actives Who Retire
20	25.0%
21	10.0%
22	11.1%
23	12.5%
24	14.3%
25	16.7%
26	20.0%
27	25.0%
28	33.3%
29	50.0%
30 (or age 65)	100.0%

This assumption has been revised effective with this valuation.

(f) Disability

Based on a review of disability experience in conjunction with the 1999 valuation, the disability assumption was revised to better reflect plan experience. This assumption has been retained for this valuation.

The disability rate and number of expected disabilities per 1000 employees at sample ages is indicated below:

Age	Disability Rate	Number per 1,000
30	.0140	14
40	.0200	20
50	.0300	30
60	.0300	30

As in recent valuations, it was assumed that 75% of disabilities would be due to occupational causes, and that for occupational disabilities, the average benefit percentage would be 67.5% (implies average impairment rating of 35%).

(g) Pre-Retirement Death Benefit

In order to value the liability for death benefits to employees who die before retirement, it was necessary to make an assumption as the number of employees survived by a spouse, dependent child or parent, and the approximate age of each. It was assumed that 75% of employees who die before retirement would be survived by a spouse and that the husband would be 3 years older than his wife. As mentioned in subsection (b), it was further assumed that 20% of deaths would be deemed due to occupational causes.

(h) Post-Retirement Death Benefit

In valuing the liability for death benefits to employees who die after retirement, actual spouse data was used for members already retired. In valuing the liability for this potential benefit for current active members, it was assumed that 85% would have a spouse at retirement, and that the husband would be 3 years older than his wife.

Section 4 - Funding Methods

(a) Valuation Cost Method

The method of valuation employed is the "entry age normal" cost method. Under this method, an annual service cost is established for each employee. This annual service cost is the level annual percent of pay which should have been contributed each year from the date of a member's employment until his retirement date in order to fully fund his benefits at retirement. The past service liability represents the sum of money which would have been accumulated had these annual service costs been contributed for each year in the past for each employee currently with Urban County Government, and for all retired employees and beneficiaries. The remainder of the liabilities is for future contributions of annual service cost. Because the plan has not always been in existence and because prior contributions have not always been at adequate levels, a portion of the past service liability is unfunded. The amount of this unfunded liability is the difference between the past service liability and the assets in the fund as of July 1, 2004.

It should be understood that the past service liability at any time cannot be finally determined because the plan is based upon final average compensation. Because salaries are changing, and the other actuarial assumptions are not being exactly met, no such exact calculation is possible.

(b) Asset Valuation

Prior to the 1996 report, assets were set at cost value. With the implementation of GASB Statement No. 25 in the 1996 valuation, pension fund assets are now disclosed at fair value as of the reporting date. Accordingly, valuation assets have been set at market value for all purposes in this valuation.

The preliminary (unaudited) balance sheet as of June 30, 2004 including receivables and payables showed a fund balance (less payables) of $329,683,295. This amount was used for valuation assets.

Section 5 - Results Of The Valuation

The valuation itself was complicated by the cost of living provision. The cost of living provision under the plan provides for a minimum increase of 2% and a maximum of 5% per year, compounded annually. As a result, we ran the valuation three ways -

1. 2% cost of living, compounded annually

2. 3% cost of living, compounded annually

3. 5% cost of living, compounded annually

The first set of costs shows the minimum end of the funding range if COLA's are kept at minimum levels, while the third set of numbers shows the maximum end of the funding range.

There were changes in the plan provisions since the 2002 valuation that had a material impact on valuation results --- in particular, the elimination of the age 46 requirement in order to retire.

With respect to the payment on the unfunded past service liability, KRS 67A.520(2) specifies that interest on the unfunded past service liability is to be paid each year. This is the basis used in this valuation.

The results of the valuation calculations are summarized below. Table 1 in the Appendix provides details of the calculations.

	2% Cost of Living	3% Cost of Living	5% Cost of Living
2004 Valuation Results			
• Employer Contribution	$12,365,811	$17,048,783	$29,627,364
• As % of Payroll	30.7%	42.3%	73.5%
2002 Valuation Results			
• Employer Contribution	$10,432,283	$14,314,388	$24,664,357
• As % of Payroll	25.3%	34.7%	59.7%
2000 Valuation Results			
• Employer Contribution	$8,493,627	$12,078,971	$21,670,991
• As % of Payroll	21.6%	30.8%	55.2%
1999 Valuation Results			
• Employer Contribution	$6,896,827	$9,895,934	$17,799,135
• As % of Payroll	18.6%	26.7%	48.1%

Section 6 - Analysis of Valuation Results

The funding level developed in this valuation has increased as a percentage of payroll from the 2002 level at all COLA levels. This is attributable to (1) the plan change eliminating the age 46 requirement to retire, (2) fluctuations in plan experience from valuation assumptions, (3) the relationship's of actual employer contributions to recommended amounts, and (4) the magnitude of retiree COLA's.

The table below shows the extent to which plan assets cover the liability for inactive members. This funded position is down from the 2002 valuation under all 3 different COLA levels.

	Coverage of Inactive Liability by Current Assets					
	2004 Valuation	2002 Valuation	2000 Valuation	1999 Valuation	1997 Valuation	1996 Valuation
Future COLA's of 2%	110%	115%	133%	149%	134%	120%
Future COLA's of 3%	99%	104%	120%	137%	122%	110%
Future COLA's of 5%	79%	84%	97%	113%	100%	90%

The funded ratio for total accrued liability (for both active and inactive participants) is summarized below:

	Coverage of Total Accrued Liability by Current Assets					
	2004 Valuation	2002 Valuation	2000 Valuation	1999 Valuation	1997 Valuation	1996 Valuation
Future COLA's of 2%	78%	81%	86%	92%	85%	78%
Future COLA's of 3%	71%	73%	78%	84%	78%	71%
Future COLA's of 5%	56%	58%	62%	68%	63%	58%

Most of this decline in funded position since 2002 can be attributed to the plan change in retirement eligibility. Temporary fluctuations in the plan's funded position can occur due to deviations in experience from assumed, but over time there should be a trend towards improvement in the plan's funded position.

The amount of any COLA should be supported by the funded position of the plan. In light of the funding levels developed in this valuation and the decline in funded position, it is our recommendation that COLA increases be limited to the 2% minimum level until such time as the funded position improved and actual funding is more in line with valuation funding levels.

Section 7 - Actuarial Certification

The information and valuation results shown in this report are, to the best of my knowledge, complete and accurate and are based upon:

1. Employee census data as of July 1, 2004 submitted by Lexington Fayette Urban County Government. This data was not audited by us, but appears to be sufficient and reliable for purposes of the report.

2. Financial data as of June 30, 2004, submitted by Lexington Fayette Urban County Government. This data was not audited by us, but appears to be sufficient and reliable for purposes of the report.

3. Actuarial assumptions as established by the Board, and which in the aggregate, appear to be reasonably related to the experience of the plan and to reasonable expectations, and which represent a reasonable estimate of anticipated experience under the plan.

4. Actuarial methods as stated in the report and my interpretation of plan provisions as summarized in the report.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Certified by:

Stephen A. Gagel, F.S.A.

11/18/2004
Date

Peer Reviewed by:

Stephen McElhaney, F.S.A.

11/18/2004
Date

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SECTION 8 - APPENDIX

TABLE 1

7/1/2004 VALUATION CALCULATIONS OF CURRENT PLAN

	2% Cost of Living Increase	3% Cost of Living Increase	5% Cost of Living Increase
1. Present Value of Benefits - Active Employees			
a. Retirement Benefits	133,501,828	150,032,429	194,708,275
b. Disability Benefits	53,850,033	60,991,553	81,061,186
c. Return of Employee Contributions	7,345,607	7,345,607	7,345,607
d. Vesting Benefits	0	0	0
e. Pre-Retirement Survivor Benefits	2,231,099	2,527,736	3,354,956
f. Total-Active Employees	196,928,567	220,897,325	286,470,024
2. Present Value of Benefits - Inactive Employees			
a. Retirees' Benefits & Contingent Survivor Benefits	286,474,258	317,248,884	397,881,558
b. Current Beneficiaries' Benefits	14,383,714	15,610,919	18,715,878
c. Vested Terminations	0	0	0
d. Total-Inactive Employees	300,857,972	332,859,803	416,597,436
3. Total Present Value of Benefits (1f)+(2d)	497,786,539	553,757,128	703,067,460
4. Present Value of Future Annual Service Costs			
a. City	42,930,459	52,424,318	79,271,496
b. Employee	33,947,237	33,947,237	33,947,237
c. Total	76,877,696	86,371,555	113,218,733
5. Accrued Liabilities (3)-(4c)	420,908,843	467,385,573	589,848,727
6. Valuation Assets (Market Value)	329,683,295	329,683,295	329,683,295
7. Unfunded Past Service Liability (5)-(6)	91,225,548	137,702,278	260,165,432
8. Present Value of Future Salaries	308,611,241	308,611,241	308,611,241
9. Annual Service Cost Accrual Rate (City Portion) (4a)/(8)	13.9109%	16.9872%	25.6865%
10. Annual Payroll for Pension Purposes	40,316,319	40,316,319	40,316,319
11. City Portion of Annual Service Cost (9)x(10)	5,608,363	6,848,614	10,355,851
12. Interest on Unfunded Past Service Liability	6,757,448	10,200,169	19,271,513
13. Total Minimum City Cost (11)+(12)	12,365,811	17,048,783	29,627,364
14. Total Minimum City Cost as Percentage of Pension Payroll (13)/(10)	30.7%	42.3%	73.5%

Note: Annual required contribution for GASB 27 purposes reflects 40 year amortization of unfunded past service liability under 2% COLA. This amount is $12,691,844.

TABLE 2

ACTIVE MEMBERS

Age Group	Number of Employees	Total Annual Earnings	Average Annual Earnings per Employee
Under 25	14	$ 434,790	$ 31,056
25-29	147	4,636,400	31,540
30-34	250	8,371,770	33,487
35-39	205	8,168,861	39,848
40-44	170	8,161,040	48,006
45-49	97	5,483,527	56,531
50-54	40	2,526,500	63,163
55-59	7	380,218	54,317
60-64	3	233,576	77,859
65 & Over	0	0	N/A
Total	933	$ 38,396,682	$ 41,154

COMPARISON TO PRIOR VALUATIONS

	2004	2002	2000	1999	1997	1996
Average Age	36.69	36.26	36.55	36.77	36.98	36.84
Average Service	9.73	9.73	10.27	10.61	10.85	10.98
Number of Members	933	959	909	870	835	807
Average Monthly Salary	$3,430	$3,423	$3,428	$3,377	$2,919	$2,843

TABLE 3

INACTIVE MEMEBERS

	2004	2002	2000	1999	1997	1996
Number of Retirees and Beneficiaries	796	720	662	636	581	563
Total Monthly Pensions in Pay Status	$2,047,040	$1,725,974	$1,399,887	$1,310,341	$1,115,896	$1,043,610
Number of Vested Terminations	0	0	0	0	0	1

TABLE 4
Schedule of Funding Progress For GASB Statement No. 25

Assumed Future Cost-of-Living Increases of 2% per Year						
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
7/1/2004	329,683,295	420,908,843	91,225,548	78.3%	40,316,319	226.3%
7/1/2003 *	288,541,052	393,568,673	105,027,621	73.3%	40,622,159	258.5%
7/1/2002	292,510,573	361,962,848	69,452,275	80.8%	41,309,602	168.1%
7/1/2001 *	294,632,299	340,954,000	46,321,701	86.4%	41,017,120	112.9%
7/1/2000	275,380,829	319,916,080	44,535,251	86.1%	39,260,250	113.4%
7/1/1999	274,004,727	299,060,483	25,055,756	91.6%	37,020,940	67.7%
7/1/1998 *	251,105,049	267,530,178	16,425,129	93.9%	34,837,475	47.1%
7/1/1997	215,244,180	252,013,407	36,769,227	85.4%	31,583,852	116.4%
7/1/1996	181,309,285	233,549,458	52,240,173	77.6%	28,904,134	180.7%
7/1/1995	144,713,360	215,910,330	71,196,970	67.0%	27,286,874	260.9%
11/1/1993	132,616,127	176,983,865	44,367,738	74.9%	23,978,172	185.0%
7/1/1991	99,258,648	148,882,717	49,624,069	66.7%	23,147,890	214.4%
7/1/1989	80,339,694	125,198,588	44,858,894	64.2%	21,144,864	212.2%
1/1/1986	48,996,039	79,195,267	30,199,228	61.9%	17,923,414	168.5%
6/1/1982	23,512,515	67,352,076	43,839,561	34.9%	12,317,867	355.9%
1/1/1978	10,746,039	39,117,251	28,371,212	27.5%	10,048,229	282.4%

Assumed Future Cost-of-Living Increases of 3% per Year						
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
7/1/2004	329,683,295	467,385,573	137,702,278	70.5%	40,316,319	341.6%
7/1/2003 *	288,541,052	436,508,177	147,967,125	66.1%	40,622,159	364.3%
7/1/2002	292,510,573	400,184,454	107,673,881	73.1%	41,309,602	260.7%
7/1/2001 *	294,632,299	379,910,000	85,277,701	77.6%	41,017,120	207.9%
7/1/2000	275,380,829	354,463,673	79,082,844	77.7%	39,260,250	201.4%
7/1/1999	274,004,727	327,753,558	53,748,831	83.6%	37,020,940	145.2%
7/1/1998 *	251,105,049	294,527,375	43,422,326	85.3%	34,837,475	124.6%
7/1/1997	215,244,180	276,344,035	61,099,855	77.9%	31,583,852	193.5%
7/1/1996	181,309,285	256,025,106	74,715,821	70.8%	28,904,134	258.5%
7/1/1995	144,713,360	237,331,372	92,618,012	61.0%	27,286,874	339.4%
11/1/1993	132,616,127	194,818,698	62,202,571	68.1%	23,978,172	259.4%
7/1/1991	99,258,648	163,899,643	64,640,995	60.6%	23,147,890	279.3%
7/1/1989	80,339,694	137,724,284	57,384,590	58.3%	21,144,864	271.4%

Assumed Future Cost-of-Living Increases of 5% per Year						
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
7/1/2004	329,683,295	589,848,727	260,165,432	55.9%	40,316,319	645.3%
7/1/2003 *	288,541,052	549,266,526	260,725,474	52.5%	40,622,159	641.8%
7/1/2002	292,510,573	500,252,436	207,741,863	58.5%	41,309,602	502.9%
7/1/2001 *	294,632,299	482,513,000	187,880,701	61.1%	41,017,120	458.1%
7/1/2000	275,380,829	445,210,365	169,829,536	61.9%	39,260,250	432.6%
7/1/1999	274,004,727	401,822,960	127,818,233	68.2%	37,020,940	345.3%
7/1/1998 *	251,105,049	364,271,932	113,166,883	68.9%	34,837,475	324.8%
7/1/1997	215,244,180	339,022,917	123,778,737	63.5%	31,583,852	391.9%
7/1/1996	181,309,285	313,971,110	132,661,825	57.7%	28,904,134	459.0%
7/1/1995	144,713,360	291,841,603	147,128,243	49.6%	27,286,874	539.2%
11/1/1993	132,616,127	240,414,482	107,798,355	55.2%	23,978,172	449.6%
7/1/1991	99,258,648	202,334,609	103,075,961	49.1%	23,147,890	445.3%
7/1/1989	80,339,694	169,842,689	89,502,995	47.3%	21,144,864	423.3%

Note: (1) Actuarial accrued liability based on the entry age normal cost funding method.

(2) Actuarial value of assets is equal to cost value for all valuations prior to 7/1/1996, except for the 6/1/1982 valuation which used market value. Beginning 7/1/1996, market value has been used.

(3) Information used in preparing this exhibit has been extracted from past valuation reports or a projection of prior valuation results (denoted by *). These past reports have were completed by Mercer Human Resource Consulting with the exception of the 6/1/1982 report which was completed by Professional Asministrators Limited.

TABLE 5
Determination of Annual Pension Cost Under GASB Statement No. 27

Fiscal Yr Ending (1)	Applicable Valuation Report Used	ARC (2)	Interest on NPO (3)	ARC Adustment (4)	Amort. Factor (5)	Pension Cost (6)	Contri-bution (7)	Change in NPO (8)	NPO Balance (9)
6/30/1988	1/1/1986	3,701,119				3,701,119	3,166,390	534,729	534,729
6/30/1989	1/1/1986	3,701,119	42,778	44,842	11.924613	3,699,055	3,169,536	529,519	1,064,248
6/30/1990	7/1/1989	5,585,170	85,140	89,248	11.924613	5,581,062	3,311,814	2,269,248	3,333,496
6/30/1991	7/1/1989	5,585,170	266,680	279,548	11.924613	5,572,302	3,992,133	1,580,169	4,913,665
6/30/1992	7/1/1991	6,626,542	393,093	412,061	11.924613	6,607,574	4,256,357	2,351,217	7,264,882
6/30/1993	7/1/1991	6,626,542	581,191	609,234	11.924613	6,598,499	4,459,124	2,139,375	9,404,257
6/30/1994	11/1/1993	6,414,571	752,341	788,643	11.924613	6,378,269	4,429,516	1,948,753	11,353,010
6/30/1995	11/1/1993	6,414,571	908,241	952,065	11.924613	6,370,747	4,609,103	1,761,644	13,114,654
6/30/1996	11/1/1996	6,414,571	1,049,172	1,099,797	11.924613	6,363,946	4,749,667	1,614,279	14,728,933
6/30/1997	7/1/1996	7,621,659	1,178,315	1,235,171	11.924613	7,564,803	5,363,231	2,201,572	16,930,505
6/30/1998	7/1/1997	6,838,801	1,354,440	1,419,795	11.924613	6,773,446	5,907,023	866,423	17,796,928
6/30/1999	7/1/1997	6,970,212	1,423,754	1,492,453	11.924613	6,901,513	6,781,764	119,749	17,916,677
6/30/2000	7/1/1999	6,986,374	1,433,334	1,502,495	11.924613	6,917,213	7,980,585	(1,063,372)	16,853,305
6/30/2001	7/1/2000	8,652,793	1,348,264	1,413,321	11.924613	8,587,736	9,222,902	(635,166)	16,218,139
6/30/2002	7/1/2000	8,652,793	1,297,451	1,360,056	11.924613	8,590,188	9,604,845	(1,014,657)	15,203,482
6/30/2003	7/1/2002	10,680,500	1,216,279	1,274,966	11.924613	10,621,813	10,027,620	594,193	15,797,675
6/30/2004	7/1/2002	10,680,500	1,263,814	1,324,796	11.924613	10,619,518	10,244,350	375,168	16,172,843

ARC = Annual Required Contribution
NPO = Net Pension Obligation

(1) Fiscal years beginning prior to December 15, 1986 have not been included pusuant to paragraph 32 of GASB Statement No. 27.

(2) ARC based on actuarial report as of most recent valuation date prior to end of fiscal year. Valuation report used for each fiscal year shown in column between (1) & (2). ARC amount shown is for minimum COLA valued, which is a 2% annual COLA.
... Prior to 7/1/1998 - interest on unfunded actuarial accrued liability
... 7/1/1998 & later - 40 year amortization

(3) Interest on NPO is based on assumed valuation interest rate assumption.
... 8.00% for all years

(4) ARC Adjustment equals prior year NPO ending balance divided by amortization factor.

(5) Amortization Factor is based on maximum allowable amortization period under GASB 27; 40 years for 10 after effective date of GASB 25; 30 years thereafter.

(6) Pension Cost = (2) + (3) - (4)

(7) Contribution based on fiscal year contribution information as provided by Urban County Government.

(8) Change in NPO = (6) - (7)

(9) NPO Balance = Prior year NPO balance + (8)

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LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT
Lexington, Kentucky

Policemen's & Firefighters' Retirement Fund

Report on the Valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Retirement Fund

Prepared as of July 1, 2006

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

September 29, 2006

Board of Trustees
Lexington Fayette Urban County Government
Policemen's and Firefighters' Retirement Fund
200 East Main Street
Lexington, KY 40507

Dear Members of the Board:

We are pleased to submit herewith the results of the bi-annual actuarial valuation of the Lexington Fayette Urban County Government Policemen's and Firefighters' Retirement Fund prepared as of July 1, 2006. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2006, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The promised benefits of the Plan are included in the actuarially calculated contribution rates which are developed using the entry age cost method. Actuarial value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions that are equal to regular interest on the unfunded accrued liability in perpetuity. The annual required employer contribution rate is 46.75% of payroll for the plan years ending July 1, 2007 and July 1, 2008. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

The valuation has been prepared in accordance with the parameters set forth in Statement Nos. 25 and 27 of the Governmental Accounting Standards Board. The annual required contribution (ARC) of the Government under GASB for the fiscal year ending June 30, 2008 is 46.75% of payroll, which will liquidate the unfunded accrued liability over a 23 year period on the assumption that payroll will increase 3% annually.

This is to certify that the independent consulting actuary is a Member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan.

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We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, EA, FCA, MAAA
Chief Executive Officer

TJC:sh

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LEXINGTON FATYETTE URBAN COUNTY GOVERNMENT
POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JULY 1, 2006

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	**July 1, 2006**	**July 1, 2004***
Active members:		
Number	1,065	933
Annualized compensation	$ 57,192,876	$ 40,316,319
Retired members and beneficiaries:		
Number	825	796
Annual benefits	$ 27,469,773	$ 24,564,480
Assets:		
Market Value	$ 370,945,480	$ 329,683,295
Actuarial Value	373,314,278	329,683,295
Unfunded actuarial accrued liability	$ 221,490,170	$ 91,225,548
Amortization Period	23 years	N/A
Fiscal Year Ending	**June 30, 2008**	**June 30, 2006**
Government annual required contribution rate (ARC):		
Normal	18.06%	13.91%
Accrued liability	28.69	16.76
Total	46.75%	30.67%
Member contribution rate	11.00%	11.00%

*Reported by prior actuarial firm.

2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. Since the previous valuation, the minimum monthly annuity payable to retirees and surviving spouses has been increased to $1,250. In addition, the actual cost-of-living allowances granted under Section 67A.690 through July 1, 2006 were reflected in the valuation.

3. Since the previous valuation, the method of determining assets for valuation purposes has been changed from market value to a smoothed market value. The development of the actuarial value of assets is shown in Schedule C. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.

4. The entry age actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method.

5. Comments on the valuation results as of July 1, 2006 are given in Section IV and further discussion of the contributions is set out in Section V. The valuation has been prepared with a future cost-of-living assumption of 3% per year, since historical cost-of-living increases have averaged 3% per year. The employer contribution rate on this basis is 46.75% of payroll. The contribution rate based on 2% assumed annual future cost-of-living increases is 35.98% of payroll and the contribution rates based on 5% assumed annual future cost-of-living increases is 75.61% of payroll.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Lexington Fayette Urban County Government. The valuation included 1,065 active members with annualized compensation totaling $57,192,876.

2. The following table shows the number of retired members and beneficiaries as of July 1, 2006 together with the amount of their annual retirement benefits payable under the Plan as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2006

GROUP	NUMBER*	ANNUAL RETIREMENT BENEFITS*
Service Retirements	427	$ 15,828,836
Disability Retirements	304	9,740,670
Beneficiaries of Deceased Members	94	1,900,267
Total	825	$ 27,469,773

*Does not reflect 5% COLA granted effective July 1, 2006. The results of the valuation have been adjusted to include this COLA.

3. Table 1 of Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III – ASSETS

As of July 1, 2006, the total market value of assets amounted to $370,945,480, including a contribution receivable for member service purchases of $186,920. The actuarial value of assets used for the current valuation was $373,314,278. Schedule C shows the development of the actuarial value of assets as of July 1, 2006. Schedule D shows the Summary of Receipts and Disbursements.

SECTION IV – COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Plan as of July 1, 2006. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.

2. The valuation balance sheet shows that the Plan has total prospective liabilities of $723,770,338 of which $398,398,341 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and $325,371,997 is for the prospective benefits payable on account of present active members. Against these liabilities, the Plan has a total present actuarial value of assets of $373,314,278 as of July 1, 2006. The difference of $350,456,060 between the total liabilities and the total present assets represents the present value of future contributions.

3. The contributions to the Plan consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 29.06% of payroll are required under the entry age method. Of this amount, 11.00% is paid by the members and the remaining 18.06% is required by the Government.

4. Prospective normal contributions at the rate of 29.06% have a present value of $128,965,890. When this amount is subtracted from $350,456,060, which is the present value of the total future contributions to be made, there remains $221,490,170 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V – CONTRIBUTIONS PAYABLE

1. Under Section 67A.520 of the law governing the Fund, the Government shall make current contributions to the Fund on an actuarially funded basis. The contributions shall be equal to an amount resulting from the application of a rate percent of salaries of active members determined by the entry age normal cost funding method (normal contribution). In addition, the Government shall contribute an amount resulting from the application of a rate percent of the salaries of active members which will provide each year regular interest on the remaining liability for prior service (accrued liability contribution). In any event the total contribution of the Government shall be at least seventeen percent of salaries of the active members participating in the fund.

2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 29.06%.

3. Each member shall contribute an amount equal to 11.00% of current salary each year.

4. The Government normal contribution rate is equal to the difference between the normal contribution rate of 29.06% and the member contribution rate of 11.00%, or 18.06% of payroll.

5. The annual accrued liability contribution rate is determined to be 28.69% of payroll. This amount is equal to the regular interest on the prior service liability in perpetuity. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 23 year period on the assumption that payroll will increase 3% annually.

6. The required employer contribution rate for the plan years ending June 30, 2008 and June 30, 2009 is, therefore, 46.75% of payroll.

7. The following table summarizes the employer contributions which were determined by the July 1, 2006 valuation and are recommended for use.

ANNUAL REQUIRED CONTRIBUTION RATE
FOR PLAN YEAR ENDING JUNE 30, 2008

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	18.06%
Accrued Liability	28.69
Total	46.75%

SECTION VI – ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the Plan and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JULY 1, 2006

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	825
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,065
Total	1,890

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
7/01/2001	$294,632,299	$379,910,000	$85,277,701	77.6%	$41,017,120	207.9%
7/01/2002	292,510,573	400,184,454	107,673,881	73.1	41,309,602	260.7
7/01/2003	288,541,052	436,508,177	147,967,125	66.1	40,622,159	364.3
7/01/2004	329,683,295	467,385,573	137,702,278	70.5	40,316,319	341.6
7/01/2005	355,459,416	520,683,849	165,224,433	68.3	51,726,085	319.4
7/01/2006	373,314,278	594,804,448	221,490,170	62.8	57,192,876	387.3

All figures prior to July 1, 2006 were reported by a prior actuarial firm and were based on a future annual COLA of 2%. The July 1, 2006 results are based on a future annual COLA of 3%.

3. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2006.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2006

(a)	Employer annual required contribution	$ 12,691,844
(b)	Interest on net pension obligation	1,369,055
(c)	Adjustment to annual required contribution	1,435,115
(d)	Annual pension cost (a) + (b) – (c)	$ 12,625,784
(e)	Employer contributions made for fiscal year ending June 30, 2006	14,114,178
(f)	Increase (decrease) in net pension obligation (d) – (e)	$ (1,488,394)
(g)	Net pension obligation beginning of fiscal year	17,113,189
(h)	Net pension obligation end of fiscal year (f) + (g)	$ 15,624,795

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2004*	$10,619,518	96.5%	$16,172,843
June 30, 2005*	12,629,414	92.6%	17,113,189
June 30, 2006	12,625,784	111.8%	15,624,795

*Reported by a prior actuarial firm.

4. The annual required contribution (ARC) as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below.

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)	FISCAL YEAR ENDING JUNE 30, 2008
Normal (including expenses)	18.06%
Accrued liability	28.69
Total	46.75%

5. Additional information as of July 1, 2006 follows:

Valuation date	7/01/2006
Actuarial cost method	Entry age
Amortization period	Level percent of payroll
Remaining amortization period	23 years
Asset valuation method	Market Related Value
Actuarial assumptions:	
Investment rate of return (includes inflation)	8.00%
Projected salary increases (includes inflation)	5.00%
Inflation	3.00%
Cost-of-living adjustments	3.00%

SECTION VII – EXPERIENCE

1.. The following table shows the estimated change in the unfunded accrued liability from various factors that resulted in an increase of $130,264,622 in the unfunded accrued liability from $91,225,548 as of July 1, 2004 to $221,490,170 as of July 1, 2006.

ANALYSIS OF FINANCIAL EXPERIENCE
CHANGE IN UNFUNDED ACCRUED LIABILITY

ITEM	AMOUNT OF INCREASE/(DECREASE)
Interest (8.00%) added to previous unfunded accrued liability	$ 15,179,931
Accrued Liability Contributions	(14,637,667)
Recognized Asset Gains	(9,473,578)
COLA Loss	27,091,087
Liability (Gain)/Loss	112,104,849
Increase in Unfunded Accrued Liability	$130,264,622

SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

(1)	Present value of prospective benefits:		
	(a)	Present active members	$ 325,371,997
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	398,398,341
	(c)	Total	$ 723,770,338
(2)	Present value of future Government and member normal contributions before expenses		128,965,890
(3)	Actuarial accrued liabilities 1(c) – (2)		$ 594,804,448
(4)	Actuarial value of assets		373,314,278
(5)	Unfunded actuarial accrued liability (3) – (4)		$ 221,490,170

SCHEDULE B

VALUATION BALANCE SHEET

ACTUARIAL LIABILITIES		
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits		$ 398,398,341
Present value of prospective benefits payable on account of present active members		$ 325,371,997
Total liabilities		$ 723,770,338
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		$ 373,314,278
Present value of future contributions		
Government and member normal contributions	128,965,890	
Unfunded accrued liability contributions	221,490,170	
Total prospective contributions		$ 350,456,060
Total assets		$ 723,770,338

SCHEDULE C

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

(1)	Actuarial Value of Assets on July 1, 2005 (Market Value)	$ 355,468,906
(2)	Market Value of Assets on July 1, 2006 (excluding receivable)	370,758,560
(3)	Market Value of Assets on July 1, 2005	355,468,906
(4)	Net Cash Flow During the Fiscal Year	
	a. Contributions	19,848,095
	b. Benefit Payments	29,542,642
	c. Administrative Expenses	100,512
	d. Investment Expenses	1,603,203
	e. Net Cash Flow (a. - b. - c. - d.)	(11,398,262)
(5)	Actual Investment Return ((2) - (3) - (4)e.)	26,687,916
(6)	Assumed Rate of Return on Assets	8.00%
(7)	Expected Investment Return ((1) * (6)) + (((4)a. - (4)b. -(4)c.) * .5 * (6)) + (4)d.	29,648,913
(8)	Investment Gain/(Loss) for the Fiscal Year ((5) - (7))	(2,960,997)
(9)	Phased-In Recognition of Investment Gain/(Loss)	
	a. Current Fiscal Year (.2 * (8))	(592,199)
	b. Prior Fiscal Year	0
	c. Second Prior Fiscal Year	0
	d. Third Prior Fiscal Year	0
	e. Fourth Prior Fiscal Year	0
	f. Total Recognized Investment Gain/(Loss) for Fiscal Year	(592,199)
(10)	Contribution Receivable	186,920
(11)	Actuarial Value of Assets on July 1, 2006 ((1) + (4)e. + (7) + (9)f.) + (10)	$ 373,314,278
(12)	Rate of Return on Actuarial Value of Assets	7.83%

SCHEDULE D

SUMMARY OF RECIEPTS AND DISBURSEMENTS

Receipts for the Period		
Contributions:		
Members	$	5,694,280
Employer		14,153,815
Total		19,848,095
Investment Income		25,084,713
TOTAL	$	44,932,808
Disbursements for the Period		
Benefit Payments		29,408,486
Refunds to Members		134,156
Administrative Expense		100,512
TOTAL	$	29,643,154
Excess of Receipts over Disbursements	$	15,289,654
Reconciliation of Asset Balances		
Market Value of Assets as of July 1, 2005	$	355,468,906
Excess of Receipts over Disbursements		15,289,654
Market Value of Assets as of July 1, 2006	$	370,758,560
Contribution Receivable		186,920
Market Value of Assets as of July 1, 2006 including Receivable		370,945,480
Rate of Return on Market Value of Assets		7.21%

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 8.00% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Age	Rate
20	5.00%
25	5.00
30	5.00
35	5.00
40	5.00
45	5.00
50	5.00
55	5.00

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the UP 1994 Mortality Table projected to 2002 set forward three years was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of			
	Withdrawal	Disability	Death	
Age			Male	Female
20	6.58%	1.00%	0.05%	0.03%
25	5.27	1.00	0.07	0.03
30	4.83	1.40	0.09	0.04
35	4.47	1.40	0.10	0.06
40	3.84	2.00	0.14	0.08
45	3.21	2.50	0.20	0.11
50	1.52	3.00	0.33	0.18
55	0.33	3.00	0.58	0.34

SERVICE RETIREMENT: Representative annual rates of assumed service retirement are as follows:

Service	Rate
20	25.0%
21	10.0
22	11.1
23	12.5
24	14.3
25	16.7
26	20.0
27	25.0
28	33.3
29	50.0
30	100.0

DEATHS AFTER RETIREMENT: The UP 1994 Mortality Table projected to 2002 is used for the period following service retirement and for beneficiaries of deceased members. For disabled lives, mortality was assumed to be consistent with rates issued by the IRS in Revenue Ruling 96-7 for use in determining current liability for disabled lives prior to January 1, 1995.

OCCUPATIONAL VS. NON OCCUPATIONAL DEATH: 20% of all deaths are assumed to be due to occupational causes.

OCCUPATIONAL VS. NON OCCUPATIONAL DISABILITY: 75% of disabilities are assumed to be due to occupational causes. For occupational disabilities the average benefit percentage is assumed to be 67.5%.

PERCENT MARRIED: 75% of employees who die before retirement are assumed to be married with the husband 3 years older than the wife. 85% of employees who die after retirement are assumed to be married with the husband 3 years older than the wife.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

VALUATION METHOD: Entry age actuarial cost method. See Schedule F for a brief description of this method.

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 8.00%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the entry age actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the Plan.

SCHEDULE G

SUMMARY OF MAIN PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

Member	Any member of the police and fire department who is included in the membership of the fund.
Membership Service	Service rendered on or after the date of establishment of the fund or the fund of a city existing within the boundaries of the government immediately prior to the establishment of the urban-county government.
Total Service	Prior service, membership service, and service credit purchased by a member as provided in KRS 67A.402.
Average Salary	The highest average salary of the member for any three consecutive years of service.
Retirement Annuity	
Eligibility	Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.
Occupational Disability Benefit	
Eligibility	No requirements.
Benefit	Annuity equal to a minimum of 60% of member's last rate of salary, increased above the 60% minimum by ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference.

	Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Non-Occupational Disability Benefit	
Eligibility	5 years of Total Service.
Benefit	2½% of Average Salary times years of Total Service subject to a minimum payment of 25% of Average Salary and a maximum payment of 75% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.
Termination Benefit	If a member is terminated with less than 20 years of total service credit, he is entitled to a return of his accumulated contributions, without interest.
Occupational Death Benefit	
Eligibility	No requirements.
Benefit	Surviving Spouse receives immediate annuity equal to 60% of the member's last rate of salary until death or remarriage. In addition, 10% of the member's last rate of salary is payable for each minor child until each child attains age 18 (age 23 if involved in educational activities). Maximum total income is 75% of final rate of salary.

If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule:

One minor child	50% of Salary
Two minor children	65% of Salary
Three of more minor children	75% of Salary

Non-Occupational Death Benefit

Eligibility

5 Years of Total Service, married 6 months prior to death.

Benefit

Surviving spouse received immediate annuity equal to 1½% of the Average Salary multiplied by years of Total Service, until death or remarriage. The minimum benefit is 15% of Average Salary. In addition, this annuity is increased by ½ for the first minor child and by ¼ for each additional child. Maximum total income is 75% of Average Salary.

If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule:

One minor child	50% of Salary
Two minor children	65% of Salary
Three of more minor children	75% of Salary

Member Contributions

Each active member contributes 11% of current salary.

Employer Contributions

The government shall make current contributions to the fund on an actuarially funded basis. Such contributions shall be equal to the sum of:

(1) An amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method (fixed by the board every two years), and

(2) An amount resulting from the application of a rate percent of salaries of active members which will provide each year regular interest on any remaining liability for prior service.

In any event, the total contribution of the government shall be at least 17% of salaries of active members participating in the fund.

Post Retirement Cost-Of-Living Increases

Each retired member will have his pension increased each year by an amount, to be determined by the board, of not less than 2.00% nor more than 5.00%, compounded annually. This increase shall also apply to beneficiaries of deceased members.

SCHEDULE H

TABLE 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS AS OF JULY 1, 2006

Attained Age	Completed Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	≥ 40	Total
Under 25	12	19									31
Avg. Pay	35,173	38,655									37,307
25 to 29	27	113	21								161
Avg. Pay	34,556	40,224	46,733								40,122
30 to 34	16	92	129	26	1						264
Avg. Pay	35,782	40,535	48,090	55,710	52,764						45,480
35 to 39	6	41	60	94	39	1					241
Avg. Pay	34,958	41,011	48,797	57,218	63,029	52,440					52,731
40 to 44	4	16	24	51	80	22					197
Avg. Pay	36,066	41,045	47,948	57,133	66,868	79,559					60,737
45 to 49		2	1	15	37	40	2				97
Avg. Pay		40,038	50,568	63,324	67,307	82,184	95,592				72,674
50 to 54		2	2	2	8	23	17	3			57
Avg. Pay		88,176	65,082	52,584	80,652	80,990	81,043	77,024			79,447
55 to 59		1	1	1		2	6	5			16
Avg. Pay		38,640	45,756	48,660		84,510	74,800	88,649			74,633
60 to 64									1		1
Avg. Pay									124,704		124,704
65 to 69											
Avg. Pay											
70 & up											
Avg. Pay											
Total	65	286	238	189	165	88	25	8	1	0	1,065
Avg. Pay	35,102	40,707	48,278	57,378	66,642	80,930	80,709	84,290	124,704	0	53,702

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES
AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 & Under	131	$ 3,811,672	$ 29,097
51 – 55	109	3,734,430	34,261
56 – 60	184	6,672,293	36,262
61 – 65	146	5,274,063	26,124
66 – 70	116	3,929,900	33,878
71 – 75	66	2,131,653	32,298
76 – 80	33	989,238	29,977
Over 80	40	926,524	23,163
Total	825	$ 27,469,773	$ 33,297

LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT
Lexington, Kentucky

Policemen's & Firefighters' Retirement Fund

Report on the Valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Retirement Fund

Prepared as of July 1, 2008

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

October 3, 2008

Board of Trustees
Lexington Fayette Urban County Government Policemen's and Firefighters' Pension Plan
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507

Dear Members of the Board:

We are pleased to submit herewith the results of the biennial actuarial valuation of the Lexington Fayette Urban County Government Policemen's and Firefighters' Pension Plan prepared as of July 1, 2008. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2008, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The promised benefits of the Plan are included in the actuarially calculated contribution rates which are developed using the entry age cost method. Actuarial value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions that are equal to regular interest on the unfunded accrued liability in perpetuity. The annual required employer contribution rate is 46.63% of payroll for the plan years ending June 30, 2010 and June 30, 2011. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

The valuation has been prepared in accordance with the parameters set forth in Statement Nos. 25 and 27 of the Governmental Accounting Standards Board. The annual required contribution (ARC) of the Government under GASB for the fiscal year ending June 30, 2010 is 46.63% of payroll, which will liquidate the unfunded accrued liability over a 23 year period on the assumption that payroll will increase 3% annually.

This is to certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan. The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Thomas J. Cavanaugh

Thomas J. Cavanaugh, FSA, FCA, MAAA, EA
Chief Executive Officer

TJC:bdm

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LEXINGTON FATYETTE URBAN COUNTY GOVERNMENT
POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JULY 1, 2008

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	**July 1, 2008**	**7/01/2006**
Active members:		
Number	1,052	1,065
Annualized compensation	$ 61,368,960	$ 57,192,876
Retired members and beneficiaries:		
Number	848	825
Annual benefits	$ 31,250,416	$ 27,469,773
Assets:		
Market Value	$ 398,527,961	$ 370,945,480
Actuarial Value	418,311,038	373,314,278
Unfunded actuarial accrued liability	$ 246,624,318	$ 221,490,170
Amortization Period	23	23
Fiscal Year Ending	**June 30, 2010**	**June 30, 2008**
Government annual required contribution rate (ARC):		
Normal	16.86%	18.06%
Accrued liability	29.77	28.69
Total	46.63%	46.75%
Member contribution rate	11.00%	11.00%

2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. The actual cost-of-living allowances granted under Section 67A.690 through July 1, 2008 were reflected in the valuation.

3. The development of the actuarial value of assets is shown in Schedule C. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.

4. The entry age actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method.

5. Comments on the valuation results as of July 1, 2008 are given in Section IV and further discussion of the contributions is set out in Section V. The valuation has been prepared with a future cost-of-living assumption of 3% per year, since historical cost-of-living increases have averaged 3% per year.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Government. The valuation included 1,052 active members with annualized compensation totaling $61,368,960.

2. The following table shows the number of retired members and beneficiaries as of July 1, 2008 together with the amount of their annual retirement benefits payable under the Plan as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2008

GROUP	NUMBER*	ANNUAL RETIREMENT BENEFITS*
Service Retirements	440	$ 17,961,929
Disability Retirements	312	11,155,884
Beneficiaries of Deceased Members	96	2,132,603
Total	848	$ 31,250,416

*Does not reflect 2% COLA granted effective July 1, 2008. The results of the valuation have been adjusted to include this COLA.

3. Table 1 of Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III – ASSETS

As of July 1, 2008, the total market value of assets amounted to $398,663,459, including a contribution receivable for member service purchases of $135,498. The actuarial value of assets used for the current valuation was $418,311,038. Schedule C shows the development of the actuarial value of assets as of July 1, 2008. Schedule D shows the Summary of Receipts and Disbursements.

SECTION IV – COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Plan as of July 1, 2008. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.

2. The valuation balance sheet shows that the Plan has total prospective liabilities of $790,621,483 of which $429,868,911 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and $360,752,572 is for the prospective benefits payable on account of present active members. Against these liabilities, the Plan has a total present actuarial value of assets of $418,311,038 as of July 1, 2008. The difference of $372,310,445 between the total liabilities and the total present assets represents the present value of future contributions.

3. The contributions to the Plan consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 27.86% of payroll are required under the entry age method. Of this amount, 11.00% is paid by the members and the remaining 16.86% is required by the Government.

4. Prospective normal contributions at the rate of 27.86% have a present value of $125,686,127. When this amount is subtracted from $372,310,445, which is the present value of the total future contributions to be made, there remains $246,624,318 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V – CONTRIBUTIONS PAYABLE

1. Under Section 67A.520 of the law governing the Fund, the Government shall make current contributions to the Fund on an actuarially funded basis. The contributions shall be equal to an amount resulting from the application of a rate percent of salaries of active members determined by the entry age normal cost funding method (normal contribution). In addition, the Government shall contribute an amount resulting from the application of a rate percent of the salaries of active members which will provide each year regular interest on the remaining liability for prior service (accrued liability contribution). In any event the total contribution of the Government shall be at least seventeen percent of salaries of the active members participating in the fund.

2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 27.86%.

3. Each member shall contribute an amount equal to 11.00% of current salary each year.

4. The Government's normal contribution rate is equal to the difference between the normal contribution rate of 27.86% and the member contribution rate of 11.00%, or 16.86% of payroll.

5. The annual accrued liability contribution rate is determined to be 29.77% of payroll. This amount is equal to the regular interest on the prior service liability in perpetuity. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 23 year period on the assumption that payroll will increase 3% annually.

6. The required employer contribution rate for the plan years ending June 30, 2010 and June 30, 2011 is, therefore, 46.63% of payroll.

7. The following table summarizes the employer contributions which were determined by the July 1, 2008 valuation and are recommended for use.

ANNUAL REQUIRED CONTRIBUTION RATE
FOR PLAN YEAR ENDING JUNE 30, 2010

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	16.86%
Accrued Liability	29.77
Total	46.63%

SECTION VI – ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the Plan and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JULY 1, 2008

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	848
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,052
Total	1,900

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
7/01/2003	$288,541,052	$436,508,177	$147,967,125	66.1%	$40,622,159	364.3%
7/01/2004	329,683,295	467,385,573	137,702,278	70.5	40,316,319	341.6
7/01/2005	355,459,416	520,683,849	165,224,433	68.3	51,726,085	319.4
7/01/2006	373,314,278	594,804,448	221,490,170	62.8	57,192,876	387.3
7/01/2007	397,712,302	627,939,926	230,227,624	63.3	57,717,156	398.9
7/01/2008	418,311,038	664,935,356	246,624,318	62.9	61,368,960	401.9

3. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2008.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2008

(a)	Employer annual required contribution	$ 26,980,795
(b)	Interest on net pension obligation	1,340,138
(c)	Adjustment to annual required contribution	1,239,986
(d)	Annual pension cost (a) + (b) – (c)	$ 27,080,947
(e)	Employer contributions made for fiscal year ending June 30, 2008	18,791,796
(f)	Increase (decrease) in net pension obligation (d) – (e)	$ 8,289,151
(g)	Net pension obligation beginning of fiscal year	16,751,720
(h)	Net pension obligation end of fiscal year (f) + (g)	$ 25,040,871

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2004*	$10,619,518	96.5%	$16,172,843
June 30, 2005*	12,629,414	82.6%	17,113,189
June 30, 2006	12,625,784	111.8%	15,624,795
June 30, 2007	17,633,647	93.6%	16,751,720
June 30, 2008	27,080,947	69.4%	25,040,871

*Reported by a prior actuarial firm.

4. The annual required contribution (ARC) as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below.

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)	FISCAL YEAR ENDING JUNE 30, 2010
Normal (including expenses)	16.86%
Accrued liability	29.77
Total	46.63%

5. Additional information as of July 1, 2008 follows:

Valuation date	7/01/2008
Actuarial cost method	Entry age
Amortization period	Level percent of payroll open
Remaining amortization period	23 years
Asset valuation method	Market Related Value
Actuarial assumptions:	
Investment rate of return (includes inflation)	8.00%
Projected salary increases (includes inflation)	5.00%
Inflation	3.00%
Cost-of-living adjustments	3.00%

SECTION VII – EXPERIENCE

1.. The following table shows the estimated change in the unfunded accrued liability from various factors that resulted in an increase of $25,134,148 in the unfunded accrued liability from $221,490,170 as of July 1, 2006 to $246,624,318 as of July 1, 2008.

ANALYSIS OF FINANCIAL EXPERIENCE
CHANGE IN UNFUNDED ACCRUED LIABILITY

ITEM	AMOUNT OF INCREASE/(DECREASE)
Interest (8.00%) added to previous unfunded accrued liability	$ 36,855,964
Accrued Liability Contributions	(10,006,996)
Recognized Asset Gains	(1,265,119)
COLA Loss	(4,141,337)
Liability (Gain)/Loss	3,691,636
Increase in Unfunded Accrued Liability	$25,134,148

SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

(1)	Present value of prospective benefits:		
	(a)	Present active members	$ 360,752,572
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	429,868,911
	(c)	Total	$ 790,621,483
(2)	Present value of future Government and member normal contributions before expenses		125,686,127
(3)	Actuarial accrued liabilities 1(c) – (2)		$ 664,935,356
(4)	Actuarial value of assets		418,311,038
(5)	Unfunded actuarial accrued liability (3) – (4)		$ 246,624,318

SCHEDULE B

VALUATION BALANCE SHEET

ACTUARIAL LIABILITIES		
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits		$ 429,868,911
Present value of prospective benefits payable on account of present active members		$ 360,752,572
Total liabilities		$ 790,621,483
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		$ 418,311,038
Present value of future contributions		
Government and member normal contributions	125,686,127	
Unfunded accrued liability contributions	246,624,318	
Total prospective contributions		$ 372,310,445
Total assets		$ 790,621,483

SCHEDULE C
Development of Actuarial Value of Assets
($ thousands)

	Valuation Date June 30:	2007	2008	2009	2010	2011	2012
A.	Actuarial Value Beginning of Year	$373,314	$397,712				
B.	Market Value End of Year	409,718	398,528				
C.	Market Value Beginning of Year	370,945	409,718				
D.	Cash Flow						
	D1. Contributions	23,259	25,759				
	D2. Other Revenue	0	0				
	D3. Benefit Payments	(31,153)	(33,316)				
	D4. Administrative Expenses	(107)	(104)				
	D5. Investment Expenses	(1,545)	(1,567)				
	D6. Net	(9,546)	(9,228)				
E.	Investment Income						
	E1. Market Total: B.-C.-D6.	48,318	(1,962)				
	E2. Assumed Rate	8.00%	8.00%				
	E3. Amount for Immediate Recognition	31,090	34,038				
	E4. Amount for Phased-In Recognition	17,227	(35,999)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	3,445	(7,200)				
	F2. First Prior Year	(592)	3,445	(7,200)			
	F3. Second Prior Year	0	(592)	3,445	(7,200)		
	F4. Third Prior Year	0	0	(592)	3,445	(7,200)	
	F5. Fourth Prior Year	0	0	0	(592)	3,445	(7,200)
	F6. Total Recognized Investment Gain	2,853	(4,347)	(4,347)	(4,347)	(3,755)	(7,200)
	Receivable		135				
G.	Actuarial Value End of Year:						
	A.+D6.+E3.+F6.	397,712	418,311				
H.	Difference Between Market & Actuarial Values	12,005	(19,783)				

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

* Actuarial value of assets was set equal to market value on July 1, 2005. Smoothing commenced in 2006 with an additional constraint that actuarial value of assets cannot be less than 80% nor more than 120% of market value.

SCHEDULE D

SUMMARY OF RECIEPTS AND DISBURSEMENTS

Receipts for the Period		
Contributions:		
Members	$	6,862,663
Employer		18,896,184
Total		25,758,847
Investment Income		(3,450,957)
TOTAL	$	22,307,890
Disbursements for the Period		
Benefit Payments		33,170,539
Refunds to Members		145,795
Administrative Expense		103,601
TOTAL	$	33,419,935
Excess of Receipts over Disbursements	$	(11,189,547)
Reconciliation of Asset Balances		
Market Value of Assets as of July 1, 2007	$	409,717,508
Excess of Receipts over Disbursements		(11,189,547)
Market Value of Assets as of July 1, 2008	$	398,527,961
Contribution Receivable		135,498
Market Value of Assets as of July 1, 2008 including Receivable		398,663,459
Rate of Return on Market Value of Assets		(0.87)%

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 8.00% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Age	Rate
20	5.00%
25	5.00
30	5.00
35	5.00
40	5.00
45	5.00
50	5.00
55	5.00

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the UP 1994 Mortality Table projected to 2002 set forward three years was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of			
	Withdrawal	Disability	Death	
Age			Male	Female
20	6.58%	1.00%	0.05%	0.03%
25	5.27	1.00	0.07	0.03
30	4.83	1.40	0.09	0.04
35	4.47	1.40	0.10	0.06
40	3.84	2.00	0.14	0.08
45	3.21	2.50	0.20	0.11
50	1.52	3.00	0.33	0.18
55	0.33	3.00	0.58	0.34

SERVICE RETIREMENT: Representative annual rates of assumed service retirement are as follows:

Service	Rate
20	25.0%
21	10.0
22	11.1
23	12.5
24	14.3
25	16.7
26	20.0
27	25.0
28	33.3
29	50.0
30	100.0

DEATHS AFTER RETIREMENT: The UP 1994 Mortality Table projected to 2002 is used for the period following service retirement and for beneficiaries of deceased members. For disabled lives, mortality was assumed to be consistent with rates issued by the IRS in Revenue Ruling 96-7 for use in determining current liability for disabled lives prior to January 1, 1995.

OCCUPATIONAL VS. NON OCCUPATIONAL DEATH: 20% of all deaths are assumed to be due to occupational causes.

OCCUPATIONAL VS. NON OCCUPATIONAL DISABILITY: 75% of disabilities are assumed to be due to occupational causes. For occupational disabilities the average benefit percentage is assumed to be 67.5%.

PERCENT MARRIED: 75% of employees who die before retirement are assumed to be married with the husband 3 years older than the wife. 85% of employees who die after retirement are assumed to be married with the husband 3 years older than the wife.

ASSETS: Actuarial value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

VALUATION METHOD: Entry age actuarial cost method. See Schedule F for a brief description of this method.

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 8.00%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of members and beneficiaries.

2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the entry age actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the Plan.

SCHEDULE G

SUMMARY OF MAIN PLAN PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

Member	Any member of the police and fire department who is included in the membership of the fund.
Membership Service	Service rendered on or after the date of establishment of the fund or the fund of a city existing within the boundaries of the government immediately prior to the establishment of the urban-county government.
Total Service	Prior service, membership service, and service credit purchased by a member as provided in KRS 67A.402.
Average Salary	The highest average salary of the member for any three consecutive years of service.
Retirement Annuity	
Eligibility	Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.
Occupational Disability Benefit	
Eligibility	No requirements.
Benefit	Annuity equal to a minimum of 60% of member's last rate of salary, increased above the 60% minimum by ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference.

	Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Non-Occupational Disability Benefit	
Eligibility	5 years of Total Service.
Benefit	2½% of Average Salary times years of Total Service subject to a minimum payment of 25% of Average Salary and a maximum payment of 75% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.
Termination Benefit	If a member is terminated with less than 20 years of total service credit, he is entitled to a return of his accumulated contributions, without interest.
Occupational Death Benefit	
Eligibility	No requirements.
Benefit	Surviving Spouse receives immediate annuity equal to 60% of the member's last rate of salary until death or remarriage. In addition, 10% of the member's last rate of salary is payable for each minor child until each child attains age 18 (age 23 if involved in educational activities). Maximum total income is 75% of final rate of salary.

If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule:

One minor child	50% of Salary
Two minor children	65% of Salary
Three of more minor children	75% of Salary

Non-Occupational Death Benefit

Eligibility

5 Years of Total Service, married 6 months prior to death.

Benefit

Surviving spouse received immediate annuity equal to 1½% of the Average Salary multiplied by years of Total Service, until death or remarriage. The minimum benefit is 15% of Average Salary. In addition, this annuity is increased by ½ for the first minor child and by ¼ for each additional child. Maximum total income is 75% of Average Salary.

If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule:

One minor child	50% of Salary
Two minor children	65% of Salary
Three of more minor children	75% of Salary

Member Contributions

Each active member contributes 11% of current salary.

Employer Contributions

The government shall make current contributions to the fund on an actuarially funded basis. Such contributions shall be equal to the sum of:

(1) An amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method (fixed by the board every two years), and

(2) An amount resulting from the application of a rate percent of salaries of active members which will provide each year regular interest on any remaining liability for prior service.

In any event, the total contribution of the government shall be at least 17% of salaries of active members participating in the fund.

Post Retirement Cost-Of-Living Increases

Each retired member will have his pension increased each year by an amount, to be determined by the board, of not less than 2.00% nor more than 5.00%, compounded annually. This increase shall also apply to beneficiaries of deceased members.

SCHEDULE H

TABLE 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS AS OF JULY 1, 2008

Attained Age	Completed Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	≥ 40	Total
Under 25	1	2									3
Avg. Pay	36,480	40,548									39,192
25 to 29	10	116	16								142
Avg. Pay	37,229	43,337	49,637								43,616
30 to 34	2	84	109	21	1						217
Avg. Pay	37,104	44,115	51,204	58,823	81,780						49,208
35 to 39	2	37	104	93	39	1					276
Avg. Pay	37,482	43,980	51,473	61,417	63,833	89,112					55,601
40 to 44		20	30	45	77	26					198
Avg. Pay		43,037	50,271	60,923	70,033	77,177					63,179
45 to 49		2	9	22	40	46	7				126
Avg. Pay		44,526	50,315	63,610	69,836	80,451	91,118				72,010
50 to 54			1	3	13	26	21	2			66
Avg. Pay			146,772	56,596	73,986	84,415	89,650	120,810			84,810
55 to 59		2	1	2		3	7	2	1		18
Avg. Pay		44,412	51,204	55,542		86,452	97,620	65,928	83,292		78,275
60 to 64				1			1	2	2		6
Avg. Pay				54,972			77,028	68,232	88,110		74,114
65 to 69											
Avg. Pay											
70 & up											
Avg. Pay											
Total	15	263	270	187	170	102	36	6	3		1,052
Avg. Pay	37,196	43,649	51,435	61,090	68,935	80,888	91,135	84,990	86,504		58,336

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 & Under	121	$ 3,893,419	$ 32,177
51 – 55	76	2,824,370	37,163
56 – 60	178	7,339,882	41,235
61 – 65	159	6,018,728	37,854
66 – 70	136	5,307,474	39,026
71 – 75	91	3,272,822	35,965
76 – 80	45	1,503,020	33,400
Over 80	42	1,090,701	25,969
Total	848	$ 31,250,416	$ 36,852

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LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT
Lexington, Kentucky

Policemen's & Firefighters'
Retirement Fund

Report on the Valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Retirement Fund

Prepared as of July 1, 2010

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November 23, 2010

Board of Trustees
Lexington Fayette Urban County Government Policemen's and Firefighters' Pension Plan
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507

Dear Members of the Board:

We are pleased to submit herewith the results of the biennial actuarial valuation of the Lexington Fayette Urban County Government Policemen's and Firefighters' Pension Plan prepared as of July 1, 2010. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2010, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). The Lexington Fayette County Government is solely responsible for the accuracy and comprehensiveness of the data.

The promised benefits of the Plan are included in the actuarially calculated contribution rates which are developed using the entry age cost method. Actuarial value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions that are equal to regular interest on the unfunded accrued liability in perpetuity. The annual required employer contribution rate is 44.67% of payroll for the plan years ending June 30, 2012 and June 30, 2013. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

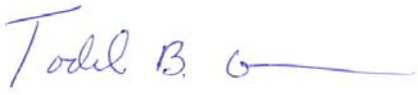
The valuation has been prepared in accordance with the parameters set forth in Statement Nos. 25 and 27 of the Governmental Accounting Standards Board. The annual required contribution (ARC) of the Government under GASB for the fiscal year ending June 30, 2012 is 44.67% of payroll, which will liquidate the unfunded accrued liability over a 23 year period on the assumption that payroll will increase 3% annually.

This is to certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan. The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Thomas J. Cavanaugh, FSA, FCA, MAAA, EA
Chief Executive Officer

Todd B. Green ASA, FCA, MAAA
Principal and Senior Actuary

TJC/TBG:bdm

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LEXINGTON FAYETTE URBAN COUNTY GOVERNMENT
POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JULY 1, 2010

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	July 1, 2010	July 1, 2008
Active members:		
Number	1,063	1,052
Annualized compensation	$ 60,512,412	$ 61,368,960
Retired members and beneficiaries:		
Number	895	848
Annual benefits	$ 35,456,635	$ 31,250,416
Assets:		
Market Value	$ 421,629,957	$ 398,527,961
Actuarial Value	502,259,967	418,311,038
Unfunded actuarial accrued liability	$ 221,880,771	$ 246,624,318
Amortization Period	23	23
Fiscal Year Ending	**June 30, 2012**	**June 30, 2010**
Government annual required contribution rate (ARC):		
Normal	17.51%	16.86%
Accrued liability	27.16	29.77
Total	44.67%	46.63%
Member contribution rate	11.00%	11.00%

2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. The actual cost-of-living allowances granted under Section 67A.690 through July 1, 2010 were reflected in the valuation.

3. The development of the actuarial value of assets is shown in Schedule C. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.

4. The entry age actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method.

5. Comments on the valuation results as of July 1, 2010 are given in Section IV and further discussion of the contributions is set out in Section V. The valuation has been prepared with a future cost-of-living assumption of 3% per year.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Government. The valuation included 1,063 active members with annualized compensation totaling $60,512,412.

2. The following table shows the number of retired members and beneficiaries as of July 1, 2010 together with the amount of their annual retirement benefits payable under the Plan as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2010

GROUP	NUMBER	ANNUAL RETIREMENT BENEFITS*
Service Retirements	483	$ 21,639,458
Disability Retirements	291	10,990,758
Beneficiaries of Deceased Members	121	2,826,419
Total	895	$ 35,456,635

*Does not reflect 2% COLA granted effective July 1, 2010. The results of the valuation have been adjusted to include this COLA.

3. Table 1 of Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III – ASSETS

As of July 1, 2010, the total market value of assets amounted to $421,629,957. The actuarial value of assets used for the current valuation was $502,259,967. Schedule C shows the development of the actuarial value of assets as of July 1, 2010. Schedule D shows the Summary of Receipts and Disbursements.

SECTION IV – COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Plan as of July 1, 2010. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.

2. The valuation balance sheet shows that the Plan has total prospective liabilities of $851,287,808 of which $485,742,457 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and $365,545,351 is for the prospective benefits payable on account of present active members. Against these liabilities, the Plan has a total present actuarial value of assets of $502,259,967 as of July 1, 2010. The difference of $349,027,841 between the total liabilities and the total present assets represents the present value of future contributions.

3. The contributions to the Plan consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 28.51% of payroll are required under the entry age method. Of this amount, 11.00% is paid by the members and the remaining 17.51% is required by the Government.

4. Prospective normal contributions at the rate of 28.51% have a present value of $127,147,070. When this amount is subtracted from $349,027,841, which is the present value of the total future contributions to be made, there remains $221,880,771 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V – CONTRIBUTIONS PAYABLE

1. Under Section 67A.520 of the law governing the Fund, the Government shall make current contributions to the Fund on an actuarially funded basis. The contributions shall be equal to an amount resulting from the application of a rate percent of salaries of active members determined by the entry age normal cost funding method (normal contribution). In addition, the Government shall contribute an amount resulting from the application of a rate percent of the salaries of active members which will provide each year regular interest on the remaining liability for prior service (accrued liability contribution). In any event the total contribution of the Government shall be at least seventeen percent of salaries of the active members participating in the fund.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 28.51%.
3. Each member shall contribute an amount equal to 11.00% of current salary each year.
4. The Government's normal contribution rate is equal to the difference between the normal contribution rate of 28.51% and the member contribution rate of 11.00%, or 17.51% of payroll.
5. The annual accrued liability contribution rate is determined to be 27.16% of payroll. This amount is equal to the regular interest on the prior service liability in perpetuity. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 23 year period on the assumption that payroll will increase 3% annually.
6. The required employer contribution rate for the plan years ending June 30, 2012 and June 30, 2013 is, therefore, 44.67% of payroll.
7. The following table summarizes the employer contributions which were determined by the July 1, 2010 valuation and are recommended for use.

ANNUAL REQUIRED CONTRIBUTION RATE
FOR PLAN YEARS ENDING JUNE 30, 2012 AND JUNE 30, 2013

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	17.51%
Accrued Liability	27.16
Total	44.67%

SECTION VI – ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the Plan and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JULY 1, 2010

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	895
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,063
Total	1,958

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
7/01/2005	$355,459,416	$520,683,849	$165,224,433	68.3%	$51,726,085	319.4%
7/01/2006	373,314,278	594,804,448	221,490,170	62.8	57,192,876	387.3
7/01/2007	397,712,302	627,939,926	230,227,624	63.3	57,717,156	398.9
7/01/2008	418,311,038	664,935,356	246,624,318	62.9	61,368,960	401.9
7/01/2009	441,772,820	699,851,128	258,078,308	63.1	65,765,448	392.4
7/01/2010	502,259,967	724,140,738	221,880,771	69.4	60,512,412	366.7

3. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2010.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2010		
(a)	Employer annual required contribution	$ 30,665,280
(b)	Interest on net pension obligation	(2,411,440)
(c)	Adjustment to annual required contribution	(2,231,227)
(d)	Annual pension cost (a) + (b) – (c)	$ 30,485,067
(e)	Employer contributions made for fiscal year ending June 30, 2010	49,469,806
(f)	Increase (decrease) in net pension obligation (d) – (e)	$ (18,984,739)
(g)	Net pension obligation beginning of fiscal year	(30,143,003)
(h)	Net pension obligation end of fiscal year (f) + (g)	$ (49,127,742)

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2008	27,080,947	69.4%	25,040,871
June 30, 2009	28,839,699	291.3%	(30,143,003)
June 30, 2010	30,485,067	162.3%	(49,127,742)

4. The annual required contribution (ARC) as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below.

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)	FISCAL YEARS ENDING JUNE 30, 2012 and 2013
Normal (including expenses)	17.51%
Accrued liability	27.16
Total	44.67%

5. Additional information as of July 1, 2010 follows:

Valuation date	7/01/2010
Actuarial cost method	Entry age
Amortization period	Level percent of payroll open
Remaining amortization period	23 years
Asset valuation method	Market Related Value
Actuarial assumptions:	
Investment rate of return (includes inflation)	8.00%
Projected salary increases (includes inflation)	5.00%
Inflation	3.00%
Cost-of-living adjustments	3.00%

SECTION VII – EXPERIENCE

1. The following table shows the estimated change in the unfunded accrued liability from various factors that resulted in a decrease of $24,631,439 in the unfunded accrued liability from $246,624,318 as of July 1, 2008 to $221,880,771 as of July 1, 2010.

ANALYSIS OF FINANCIAL EXPERIENCE
CHANGE IN UNFUNDED ACCRUED LIABILITY

ITEM	AMOUNT OF INCREASE/(DECREASE)
Interest (8.00%) added to previous unfunded accrued liability	$ 31,739,759
Accrued Liability Contributions	(113,966,380)
Recognized Asset (Gain)/Loss	68,500,820
COLA Gain	(5,309,868)
Liability (Gain)/Loss	(5,707,877)
Decrease in Unfunded Accrued Liability	$(24,743,546)

SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

			July 1, 2010
(1)	Present value of prospective benefits:		
	(a)	Present active members	$ 365,545,351
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	485,742,457
	(c)	Total	$ 851,287,808
(2)	Present value of future Government and member normal contributions before expenses		127,147,070
(3)	Actuarial accrued liabilities 1(c) – (2)		$ 724,140,738
(4)	Actuarial value of assets		502,259,967
(5)	Unfunded actuarial accrued liability (3) – (4)		$ 221,880,771

SCHEDULE B

VALUATION BALANCE SHEET

ACTUARIAL LIABILITIES		
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits		$ 485,742,457
Present value of prospective benefits payable on account of present active members		$ 365,545,351
Total liabilities		$ 851,287,808
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		$ 502,259,967
Present value of future contributions		
Government and member normal contributions	127,147,070	
Unfunded accrued liability contributions	221,880,771	
Total prospective contributions		$ 349,027,841
Total assets		$ 851,287,808

SCHEDULE C
Development of Actuarial Value of Assets

	Valuation date June 30:	2009	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	$ 418,311,038	$ 479,849,317				
B.	Market Value End of Year	368,144,017	421,629,957				
C.	Market Value Beginning of Year	398,663,459	368,144,017				
D.	Cash Flow						
	D1. Contributions	$ 91,164,399	$ 56,996,765				
	D2. Other Revenue	125,709	120,532				
	D3. Beginning of Year Market Value Adjustment	0	457,300				
	D4. Benefit Payments	(35,331,000)	(37,640,306)				
	D5. Administrative Expenses	(100,530)	(134,745)				
	D6. Investment Expenses	(2,088,369)	(1,647,379)				
	D7. Net	$ 53,770,209	$ 18,152,167				
E.	Investment Income						
	E1. Market Total: B.-C.-D7.	$ (84,289,651)	$ 35,333,773				
	E2. Assumed Rate (Net of Expenses)	8.00%	8.00%				
	E3. Amount for Immediate Recognition	36,215,789	32,049,309				
	E4. Amount for Phased-In Recognition	(120,505,440)	3,284,464				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20 * E4.	$ (24,101,088)	$ 656,893	$ -	$ -	$ -	$ -
	F2. First Prior Year	(7,199,883)	(24,101,088)	656,893	-	-	-
	F3. Second Prior Year	3,445,451	(7,199,883)	(24,101,088)	656,893	-	-
	F4. Third Prior Year	(592,199)	3,445,451	(7,199,883)	(24,101,088)	656,893	-
	F5. Fourth Prior Year	0	(592,199)	3,445,451	(7,199,883)	(24,101,088)	656,893
	F6. Total Recognized Investment Gain	$ (28,447,719)	$ (27,790,826)	$ (27,198,627)	$ (30,644,078)	$ (23,444,195)	$ 656,893
G.	Preliminary Actuarial Value End of Year						
	A.+D6.+E3.+F6.+G	$ 479,849,317	$ 502,259,967				
H.	Corridor						
	I1. 80% of Market Value	$ 294,515,214	$ 337,303,966				
	I2. 120% of Market Value	$ 441,772,820	$ 505,955,949				
I.	Actuarial Value End of Year						
	H. Not Less than I1. or Greater than I2	$ 441,772,820	$ 502,259,967				
J.	Difference Between Market & Actuarial Values	$ (73,628,803)	$ (80,630,010)	$ (53,431,380)	$ (22,787,302)	$ 656,893	$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 5 consecutive years, actuarial value will become equal to market value.

SCHEDULE D

SUMMARY OF RECIEPTS AND DISBURSEMENTS

Receipts for the Period		
Contributions:		
Members	$	7,647,491
Employer /Other		49,469,806
Total		57,117,297
Investment Income		33,686,393
TOTAL	$	90,803,690
Disbursements for the Period		
Benefit Payments		37,529,500
Refunds to Members		110,805
Administrative Expense		134,745
TOTAL	$	37,775,050
Excess of Receipts over Disbursements	$	53,028,640
Reconciliation of Asset Balances		
Market Value of Assets as of July 1, 2009	$	368,144,017
Excess of Receipts over Disbursements		53,028,640
Market Value of Assets as of July 1, 2010	$	421,172,657
Beginning of Year Market Value Adjustment		457,300
Market Value of Assets as of July 1, 2010 including Adjustment		421,629,957
Rate of Return on Market Value of Assets		8.87%

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 8.00% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Age	Rate
20	5.00%
25	5.00
30	5.00
35	5.00
40	5.00
45	5.00
50	5.00
55	5.00

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the UP 1994 Mortality Table projected to 2002 set forward three years was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of			
	Withdrawal	Disability	Death	
Age			Male	Female
20	6.58%	1.00%	0.05%	0.03%
25	5.27	1.00	0.07	0.03
30	4.83	1.40	0.09	0.04
35	4.47	1.40	0.10	0.06
40	3.84	2.00	0.14	0.08
45	3.21	2.50	0.20	0.11
50	1.52	3.00	0.33	0.18
55	0.33	3.00	0.58	0.34

SERVICE RETIREMENT: Representative annual rates of assumed service retirement are as follows:

Service	Rate
20	25.0%
21	10.0
22	11.1
23	12.5
24	14.3
25	16.7
26	20.0
27	25.0
28	33.3
29	50.0
30	100.0

.

DEATHS AFTER RETIREMENT: The UP 1994 Mortality Table projected to 2002 is used for the period following service retirement and for beneficiaries of deceased members. For disabled lives, mortality was assumed to be consistent with rates issued by the IRS in Revenue Ruling 96-7 for use in determining current liability for disabled lives prior to January 1, 1995.

OCCUPATIONAL VS. NON OCCUPATIONAL DEATH: 20% of all deaths are assumed to be due to occupational causes.

OCCUPATIONAL VS. NON OCCUPATIONAL DISABILITY: 75% of disabilities are assumed to be due to occupational causes. For occupational disabilities the average benefit percentage is assumed to be 67.5%.

PERCENT MARRIED: 75% of employees who die before retirement are assumed to be married with the husband 3 years older than the wife. 85% of employees who die after retirement are assumed to be married with the husband 3 years older than the wife.

ASSETS: Actuarial value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The actuarial value of assets cannot be more than 120% or less than 80% of the market value of assets.
VALUATION METHOD: Entry age actuarial cost method. See Schedule F for a brief description of this method.

POST-RETIREMENT BENEFIT INCREASES: 3% Annually

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 8.00%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the Plan.

SCHEDULE G

SUMMARY OF MAIN PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

Member	Any member of the police and fire department who is included in the membership of the fund.
Membership Service	Service rendered on or after the date of establishment of the fund or the fund of a city existing within the boundaries of the government immediately prior to the establishment of the urban-county government.
Total Service	Prior service, membership service, and service credit purchased by a member as provided in KRS 67A.402.
Average Salary	The highest average salary of the member for any three consecutive years of service.
Retirement Annuity	
Eligibility	Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.
Occupational Disability Benefit	
Eligibility	No requirements.
Benefit	Annuity equal to a minimum of 60% of member's last rate of salary, increased above the 60% minimum by ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference.

	Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Non-Occupational Disability Benefit	
Eligibility	5 years of Total Service.
Benefit	2½% of Average Salary times years of Total Service subject to a minimum payment of 25% of Average Salary and a maximum payment of 75% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.
Termination Benefit	If a member is terminated with less than 20 years of total service credit, he is entitled to a return of his accumulated contributions, without interest.
Occupational Death Benefit	
Eligibility	No requirements.
Benefit	Surviving Spouse receives immediate annuity equal to 60% of the member's last rate of salary until death or remarriage. In addition, 10% of the member's last rate of salary is payable for each minor child until each child attains age 18 (age 23 if involved in educational activities). Maximum total income is 75% of final rate of salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule:

One minor child	50% of Salary
Two minor children	65% of Salary
Three of more minor children	75% of Salary

Non-Occupational Death Benefit

Eligibility

5 Years of Total Service, married 6 months prior to death.

Benefit

Surviving spouse received immediate annuity equal to 1½% of the Average Salary multiplied by years of Total Service, until death or remarriage. The minimum benefit is 15% of Average Salary. In addition, this annuity is increased by ½ for the first minor child and by ¼ for each additional child. Maximum total income is 75% of Average Salary.

If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule:

One minor child	50% of Salary
Two minor children	65% of Salary
Three of more minor children	75% of Salary

Member Contributions

Each active member contributes 11% of current salary.

Employer Contributions

The government shall make current contributions to the fund on an actuarially funded basis. Such contributions shall be equal to the sum of:

(1) An amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method (fixed by the board every two years), and

(2) An amount resulting from the application of a rate percent of salaries of active members which will provide each year regular interest on any remaining liability for prior service.

In any event, the total contribution of the government shall be at least 17% of salaries of active members participating in the fund.

Post Retirement Cost-of-Living Increases

Each retired member will have his pension increased each year by an amount, to be determined by the board, of not less than 2.00% nor more than 5.00%, compounded annually. This increase shall also apply to beneficiaries of deceased members.

SCHEDULE H

TABLE 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS

AS OF JULY 1, 2010

Attained Age	Completed Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	≥ 40	Total
Under 25	5	3									8
Avg. Pay	36,464	39,277									37,519
25 to 29	16	56	45								117
Avg. Pay	35,392	43,042	46,274								43,239
30 to 34	17	51	115	23							206
Avg. Pay	38,481	41,699	49,089	55,482							47,098
35 to 39	11	29	101	95	34	2					272
Avg. Pay	36,562	42,984	49,477	58,105	67,621	72,123					53,710
40 to 44	3	13	43	61	73	36					229
Avg. Pay	36,871	42,037	49,249	62,650	67,279	75,822					62,172
45 to 49		5	11	21	39	55	9				140
Avg. Pay		45,496	49,106	59,618	70,077	74,334	85,832				68,668
50 to 54			1	3	13	24	25	4	1		71
Avg. Pay			47,150	55,618	70,461	73,516	85,309	96,121	123,650		77,961
55 to 59			1	3	1	1	6	4	1		17
Avg. Pay			43,516	57,195	55,780	81,068	85,312	76,741	124,282		76,180
60 to 64			1	1				1			3
Avg. Pay			47,096	52,871				60,789			53,586
65 to 69											
Avg. Pay											
70 & up											
Avg. Pay											
Total	52	157	318	207	160	118	40	9	2		1,063
Avg. Pay	36,838	42,518	48,806	59,232	68,220	74,641	85,427	83,582	123,966		56,926

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 & Under	116	$ 4,092,354	$ 35,279
51 – 55	88	3,965,848	45,066
56 – 60	138	5,953,658	43,142
61 – 65	199	8,259,030	41,503
66 – 70	136	5,578,568	41,019
71 – 75	113	4,306,966	38,115
76 – 80	58	2,071,883	35,722
Over 80	47	1,228,328	26,135
Total	895	$ 35,456,635	$ 39,616

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LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT
Lexington, Kentucky

Policemen's & Firefighters'
Retirement Fund

Report on the Valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Retirement Fund

Prepared as of July 1, 2012

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October 8, 2012

Board of Trustees
Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507

Dear Members of the Board:

We are pleased to submit herewith the results of the biennial actuarial valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan prepared as of July 1, 2012. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2012, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). The Lexington-Fayette County Government is solely responsible for the accuracy and comprehensiveness of the data.

The promised benefits of the Plan are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Actuarial value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions that are equal to regular interest on the unfunded accrued liability in perpetuity. The annual required employer contribution rate is 57.52% of payroll for the plan years ending June 30, 2014 and June 30, 2015. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

Since the previous valuation, revised rates of retirement, termination, disability, pre-retirement mortality and post-retirement mortality have been adopted by the Board based on information provided in an experience study for the five-year period ending June 30, 2010. In addition to revised decrements, the Board also adopted a lower assumed rate of return. The rate was lowered from 8.00% to 7.50% based on the analysis of the economic assumptions in the experience study.

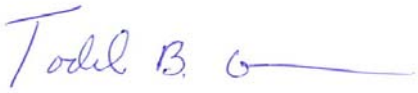
The valuation has been prepared in accordance with the parameters set forth in Statement Nos. 25 and 27 of the Governmental Accounting Standards Board. The annual required contribution (ARC) of the Government under GASB for the fiscal years ending June 30, 2014 and June 30, 2015 is 57.52% of payroll, which will liquidate the unfunded accrued liability over a 23 year period on the assumption that payroll will increase 3% annually.

This is to certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan. The undersigned are members of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Thomas J. Cavanaugh, FSA, FCA, MAAA, EA
Chief Executive Officer

Todd B. Green ASA, FCA, MAAA
Principal and Senior Actuary

TJC/TBG:jmy

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LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JULY 1, 2012

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	July 1, 2012	July 1, 2010
Active members:		
Number	1,014	1,063
Annualized compensation	$ 54,595,799	$ 60,512,412
Retired members and beneficiaries:		
Number	997	895
Annual benefits	$ 42,960,998	$ 35,456,635
Assets:		
Market Value	$ 509,409,641	$ 421,629,957
Actuarial Value	525,849,582	502,259,967
Unfunded actuarial accrued liability	$ 296,806,492	$ 221,880,771
Amortization Period	23	23
Fiscal Years Ending	**2015 & 2014**	**2013 & 2012**
Government annual required contribution rate (ARC):		
Normal	19.59%	17.51%
Accrued liability	37.93	27.16
Total	57.52%	44.67%
Member contribution rate	11.00%	11.00%

2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. The actual cost-of-living allowances granted under Section 67A.690 through July 1, 2012 were reflected in the valuation.

3. The development of the actuarial value of assets is shown in Schedule C. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.

   Since the previous valuation, revised rates of retirement, termination, disability, pre-retirement mortality and post-retirement mortality have been adopted by the Board based on information provided in an experience study for the five-year period ending June 30, 2010. In addition to revised decrements, the Board also adopted a lower assumed rate of return. The rate was lowered from 8.00% to 7.50% based upon the analysis of the economic assumptions in the experience study.

   The occupational disability benefit is equal to a minimum of 60% of a member's last rate of salary, increased by ½ the amount by which the member's average percentage of disability exceeds 20%, but not greater than 75%. For valuation purposes, the assumed average member disability percentage has been 35%. Based on data provided by staff for occupational disabilities that occurred from 1995 to 2011, the average disability percentage has been 12.5%. As a result of this information, we lowered the assumed averaged disability percentage from 35% to 12.5%. Based on this reduction in the assumed average disability percentage, the assumed average benefit percentage for occupational disabilities will be lowered from 67.5% to 60% of salaries.

4. The entry age normal actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method.

5. Comments on the valuation results as of July 1, 2012 are given in Section IV and further discussion of the contributions is set out in Section V. The valuation has been prepared with a future cost-of-living assumption of 3% per year.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Government. The valuation included 1,014 active members with annualized compensation totaling $54,595,799.

2. The following table shows the number of retired members and beneficiaries as of July 1, 2012 together with the amount of their annual retirement benefits payable under the Plan as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2012

GROUP	NUMBER	ANNUAL RETIREMENT BENEFITS*
Service Retirements	516	$ 25,109,779
Disability Retirements	348	14,566,600
Beneficiaries of Deceased Members	133	3,284,619
Total	997	$ 42,960,998

3. Table 1 of Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III – ASSETS

As of July 1, 2012, the total market value of assets amounted to $509,409,641. The actuarial value of assets used for the current valuation was $525,849,582. Schedule C shows the development of the actuarial value of assets as of July 1, 2012. Schedule D shows the Summary of Receipts and Disbursements.

SECTION IV – COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Plan as of July 1, 2012. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.

2. The valuation balance sheet shows that the Plan has total prospective liabilities of $996,459,020 of which $603,280,373 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and $393,178,647 is for the prospective benefits payable on account of present active members. Against these liabilities, the Plan has a total present actuarial value of assets of $525,849,582 as of July 1, 2012. The difference of $470,609,438 between the total liabilities and the total present assets represents the present value of future contributions.

3. The contributions to the Plan consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 30.59% of payroll are required under the entry age normal method. Of this amount, 11.00% is paid by the members and the remaining 19.59% is required by the Government.

4. Prospective normal contributions at the rate of 30.59% have a present value of $173,802,946. When this amount is subtracted from $470,609,438, which is the present value of the total future contributions to be made, there remains $296,806,492 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V – CONTRIBUTIONS PAYABLE

1. Under Section 67A.520 of the law governing the Fund, the Government shall make current contributions to the Fund on an actuarially funded basis. The contributions shall be equal to an amount resulting from the application of a rate percent of salaries of active members determined by the entry age normal cost funding method (normal contribution). In addition, the Government shall contribute an amount resulting from the application of a rate percent of the salaries of active members which will provide each year regular interest on the remaining liability for prior service (accrued liability contribution). In any event the total contribution of the Government shall be at least seventeen percent of salaries of the active members participating in the fund.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 30.59%.
3. Each member shall contribute an amount equal to 11.00% of current salary each year.
4. The Government's normal contribution rate is equal to the difference between the normal contribution rate of 30.59% and the member contribution rate of 11.00%, or 19.59% of payroll.
5. The annual accrued liability contribution rate is determined to be 37.93% of payroll. This amount is equal to the regular interest on the prior service liability in perpetuity. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 23 year period on the assumption that payroll will increase 3% annually.
6. The required employer contribution rate for the plan years ending June 30, 2014 and June 30, 2015 is, therefore, 57.52% of payroll.
7. The following table summarizes the employer contributions which were determined by the July 1, 2012 valuation and are recommended for use.

ANNUAL REQUIRED CONTRIBUTION RATE
FOR PLAN YEARS ENDING JUNE 30, 2014 AND JUNE 30, 2015

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	19.59%
Accrued Liability	37.93
Total	57.52%

SECTION VI – ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the Plan and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JULY 1, 2012

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	997
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,014
Total	2,011

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
7/01/2007	$397,712,302	$627,939,926	$230,227,624	63.3%	$57,717,156	398.9%
7/01/2008	418,311,038	664,935,356	246,624,318	62.9	61,368,960	401.9
7/01/2009	441,772,820	699,851,128	258,078,308	63.1	65,765,448	392.4
7/01/2010	502,259,967	724,140,738	221,880,771	69.4	60,512,412	366.7
7/01/2011	501,069,884	758,851,546	257,781,662	66.0	64,258,162	401.2
7/01/2012	525,849,582	822,656,074	296,806,492	63.9	54,595,799	543.6

3. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2014.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2012		
(a)	Employer annual required contribution	$ 30,665,280
(b)	Interest on net pension obligation	(2,671,000)
(c)	Adjustment to annual required contribution	(2,636,148)
(d)	Annual pension cost (a) + (b) – (c)	$ 28,668,786
(e)	Employer contributions made for fiscal year ending June 30, 2012	47,585,689
(f)	Increase (decrease) in net pension obligation (d) – (e)	$ (18,916,903)
(g)	Net pension obligation beginning of fiscal year	(35,613,328)
(h)	Net pension obligation end of fiscal year (f) + (g)	$ (54,530,231)

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2012	30,485,067	162.3%	(49,127,742)
June 30, 2013	27,923,223	51.6%	(35,613,328)
June 30, 2014	28,668,786	166.0%	(54,530,231)

4. The annual required contribution (ARC) as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below.

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)	FISCAL YEARS ENDING June 30, 2014 and 2015
Normal (including expenses)	19.59%
Accrued liability	37.93
Total	57.52%

5. Additional information as of July 1, 2012 follows:

Valuation date	7/1/2012
Actuarial cost method	Entry age normal
Amortization period	Level percent of payroll open
Remaining amortization period	23 years
Asset valuation method	Actuarial Related Value
Actuarial assumptions:	
Investment rate of return (includes inflation)	7.50%
Projected salary increases (includes inflation)	10.50% to 4.00%
Inflation	3.00%
Cost-of-living adjustments	3.00%

SECTION VII – EXPERIENCE

1. The following table shows the estimated change in the unfunded accrued liability from various factors that resulted in an increase of $74,925,721 in the unfunded accrued liability from $221,880,771 as of July 1, 2010 to $296,806,492 as of July 1, 2012.

ANALYSIS OF FINANCIAL EXPERIENCE
CHANGE IN UNFUNDED ACCRUED LIABILITY

ITEM	AMOUNT OF INCREASE/(DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 36,199,294
Accrued Liability Contributions	(43,410,985)
Recognized Asset (Gain)/Loss	51,633,178
COLA Gain	(2,366,645)
Assumption and Method Changes	54,222,853
Salary (Gain)/Loss	(18,629,082)
Liability (Gain)/Loss	(2,722,892)
Increase in Unfunded Accrued Liability	$74,925,721

SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

			July 1, 2012
(1)	Present value of prospective benefits:		
	(a)	Present active members	$ 393,178,647
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	603,280,373
	(c)	Total	$ 996,459,020
(2)	Present value of future Government and member normal contributions before expenses		173,802,946
(3)	Actuarial accrued liabilities 1(c) – (2)		$ 822,656,074
(4)	Actuarial value of assets		525,849,582
(5)	Unfunded actuarial accrued liability (3) – (4)		$ 296,806,492

SCHEDULE B

VALUATION BALANCE SHEET

ACTUARIAL LIABILITIES		
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits		$ 603,280,373
Present value of prospective benefits payable on account of present active members		$ 393,178,647
Total liabilities		$ 996,459,020
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		$ 525,849,582
Present value of future contributions		
Government and member normal contributions	173,802,946	
Unfunded accrued liability contributions	296,806,492	
Total prospective contributions		$ 470,609,438
Total assets		$ 996,459,020

SCHEDULE C
Development of Actuarial Value of Assets

	Valuation date June 30:	2011	2012	2013	2014	2015	2016
A.	Actuarial Value Beginning of Year	$ 502,259,969	$ 501,069,884				
B.	Market Value End of Year	491,370,669	509,409,641				
C.	Market Value Beginning of Year	421,629,959	491,370,669				
D.	Cash Flow						
	D1. Contributions	$ 22,251,294	$ 55,469,828				
	D2. Other Revenue	54,292	137,955				
	D3. Beginning of Year Market Value Adjustment	0	0				
	D4. Benefit Payments	(40,242,987)	(44,267,378)				
	D5. Administrative Expenses	(108,497)	(158,020)				
	D6. Investment Expenses	(2,543,556)	(2,624,274)				
	D7. Net	$ (20,589,454)	$ 8,558,111				
E.	Investment Income						
	E1. Market Total: B.-C.-D7.	$ 90,330,164	$ 9,480,861				
	E2. Assumed Rate (Net of Expenses)	8.00%	8.00%				
	E3. Amount for Immediate Recognition	35,664,954	42,545,564				
	E4. Amount for Phased-In Recognition	54,665,210	(33,064,703)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20 * E4.	$ 10,933,042	$ (6,612,941)	$ -	$ -	$ -	$ -
	F2. First Prior Year	656,893	10,933,042	(6,612,941)	-	-	-
	F3. Second Prior Year	(24,101,088)	656,893	10,933,042	(6,612,941)	-	-
	F4. Third Prior Year	(7,199,883)	(24,101,088)	656,893	10,933,042	(6,612,941)	-
	F5. Fourth Prior Year	3,445,451	(7,199,883)	(24,101,088)	656,893	10,933,042	(6,612,941)
	F6. Total Recognized Investment Gain	$ (16,265,585)	$ (26,323,977)	$ (19,124,094)	$ 4,976,994	$ 4,320,101	$ (6,612,941)
G.	Preliminary Actuarial Value End of Year						
	A.+D6.+E3.+F6.+G	$ 501,069,884	$ 525,849,582				
H.	Corridor						
	I1. 80% of Market Value	$ 393,096,535	$ 407,527,713				
	I2. 120% of Market Value	$ 589,644,803	$ 611,291,569				
I.	Actuarial Value End of Year						
	H. Not Less than I1. or Greater than I2	$ 501,069,884	$ 525,849,582				
J.	Difference Between Market & Actuarial Values	$ (9,699,215)	$ (16,439,941)	$ 2,684,156	$ (2,292,838)	$ (6,612,939)	$ 2

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 5 consecutive years, actuarial value will become equal to market value.

SCHEDULE D

SUMMARY OF RECIEPTS AND DISBURSEMENTS

Receipts for the Period		
Contributions:		
Members	$	8,022,094
Employer /Other		47,585,689
Total		55,607,783
Investment Income		6,856,588
TOTAL	$	62,464,371
Disbursements for the Period		
Benefit Payments		44,267,378
Refunds to Members		0
Administrative Expense		158,020
TOTAL	$	44,425,398
Excess of Receipts over Disbursements	$	18,038,973
Reconciliation of Asset Balances		
Market Value of Assets as of July 1, 2011	$	491,370,669
Excess of Receipts over Disbursements		18,038,973
Market Value of Assets as of July 1, 2012	$	509,409,641
Beginning of Year Market Value Adjustment		0
Market Value of Assets as of July 1, 2010 including Adjustment	$	509,409,641
Rate of Return on Market Value of Assets		1.35%

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Service	Wage Inflation	Merit Component	Total Rate
0	4.00%	6.50%	10.50%
1	4.00	5.50	9.50
2	4.00	3.50	7.50
3-5	4.00	3.00	7.00
6-8	4.00	2.50	6.50
9-12	4.00	2.00	6.00
13-16	4.00	1.50	5.50
16-19	4.00	1.00	5.00
20 or more	4.00	0.00	4.00

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the RP-2000 Combined Table projected to 2015 with scale AA was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of		
	Disability	Death	
Age		Male	Female
20	0.30%	0.03%	0.02%
25	0.30	0.03	0.02
30	0.30	0.04	0.02
35	0.60	0.07	0.04
40	1.00	0.10	0.06
45	2.00	0.12	0.09
50	4.00	0.16	0.13
55	5.00	0.27	0.24

Annual Rate of Termination			
Service	Rate	Service	Rate
0	1.91%	10	1.29%
1	1.85	11	1.23
2	1.79	12	1.17
3	1.73	13	1.08
4	1.67	14	1.00
5	1.61	15	0.94
6	1.55	16	0.88
7	1.47	17	0.82
8	1.41	18	0.76
9	1.35	19	0.70

SERVICE RETIREMENT: Representative annual rates of assumed service retirement are as follows:

Service	Rate
20	5.0%
21	6.0
22	7.0
23	8.0
24	9.0
25	10.0
26	12.0
27	14.0
28	15.0
29	20.0
30	100.0

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2015 using scale AA, with male mortality set forward 0 years and female mortality set forward 3 years is used for the period following service retirement and for beneficiaries of deceased members. For disabled lives, male mortality was assumed to be the RP-2000 table not projected with male mortality set forward 4 years. Female mortality was assumed to be consistent with rates issued by the IRS in Revenue Ruling 96-7 for use in determining current liability for disabled lives prior to January 1, 1995.

OCCUPATIONAL VS. NON OCCUPATIONAL DEATH: 20% of all deaths are assumed to be due to occupational causes.

OCCUPATIONAL VS. NON OCCUPATIONAL DISABILITY: 75% of disabilities are assumed to be due to occupational causes. For occupational disabilities the average benefit percentage is assumed to be 60.0%.

PERCENT MARRIED: 75% of employees who die before retirement are assumed to be married with the husband 3 years older than the wife. 85% of employees who die after retirement are assumed to be married with the husband 3 years older than the wife.

ASSETS: Actuarial value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The actuarial value of assets cannot be more than 120% or less than 80% of the market value of assets.

VALUATION METHOD: Entry age normal actuarial cost method. See Schedule F for a brief description of this method.

POST-RETIREMENT BENEFIT INCREASES: 3% Annually

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.50%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age normal actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the Plan.

SCHEDULE G

SUMMARY OF MAIN PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

Member	Sworn members of the Lexington-Fayette Urban County Government Division of Police and Division of Fire and Emergency Services.
Membership Service	Service rendered on or after the date of establishment of the fund or the fund of a city existing within the boundaries of the government immediately prior to the establishment of the urban-county government.
Total Service	Prior service, membership service, and service credit purchased by a member as provided in KRS 67A.402.
Average Salary	The highest average salary of the member for any three consecutive years of service.
Retirement Annuity	
Eligibility	Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.
Occupational Disability Benefit	
Eligibility	No requirements.
Benefit	Annuity equal to a minimum of 60% of member's last rate of salary, increased above the 60% minimum by ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference.

	Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Non-Occupational Disability Benefit	
Eligibility	5 years of Total Service.
Benefit	2½% of Average Salary times years of Total Service subject to a minimum payment of 25% of Average Salary and a maximum payment of 75% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.
Termination Benefit	If a member is terminated with less than 20 years of total service credit, he is entitled to a return of his accumulated contributions, without interest.
Occupational Death Benefit	
Eligibility	No requirements.
Benefit	Surviving Spouse receives immediate annuity equal to 60% of the member's last rate of salary until death or remarriage. In addition, 10% of the member's last rate of salary is payable for each minor child until each child attains age 18 (age 23 if involved in educational activities). Maximum total income is 75% of final rate of salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule:

One minor child	50% of Salary
Two minor children	65% of Salary
Three of more minor children	75% of Salary

Non-Occupational Death Benefit

Eligibility

5 Years of Total Service, married 6 months prior to death.

Benefit

Surviving spouse received immediate annuity equal to 1½% of the Average Salary multiplied by years of Total Service, until death or remarriage. The minimum benefit is 15% of Average Salary. In addition, this annuity is increased by ½ for the first minor child and by ¼ for each additional child. Maximum total income is 75% of Average Salary.

If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule:

One minor child	50% of Salary
Two minor children	65% of Salary
Three of more minor children	75% of Salary

Member Contributions

Each active member contributes 11% of current salary.

Employer Contributions

The government shall make current contributions to the fund on an actuarially funded basis. Such contributions shall be equal to the sum of:

(1) An amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method (fixed by the board every two years), and

(2) An amount resulting from the application of a rate percent of salaries of active members which will provide each year regular interest on any remaining liability for prior service.

In any event, the total contribution of the government shall be at least 17% of salaries of active members participating in the fund.

Post Retirement Cost-of-Living Increases

Each retired member will have his pension increased each year by an amount, to be determined by the board, of not less than 2.00% nor more than 5.00%, compounded annually. This increase shall also apply to beneficiaries of deceased members.

SCHEDULE H

TABLE 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS

AS OF JULY 1, 2012

Attained Age	Completed Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	> 40	Total
Under 25	5	1									6
Avg. Pay	31,344	30,241									31,160
25 to 29	19	39	17								75
Avg. Pay	33,180	37,524	46,227								38,396
30 to 34	13	59	124	21							217
Avg. Pay	32,582	37,085	45,104	54,539							43,087
35 to 39	4	25	92	119	15						255
Avg. Pay	35,034	36,440	45,586	56,252	66,949						50,758
40 to 44		12	38	81	93	12					236
Avg. Pay		36,328	46,119	56,332	66,922	74,013					58,743
45 to 49		1	20	20	50	41	9				141
Avg. Pay		33,305	47,834	55,904	65,791	79,359	84,565				66,755
50 to 54			1	9	14	15	21				60
Avg. Pay			52,814	55,982	64,156	71,834	83,411				71,400
55 to 59			2	1	4	4	5	4			20
Avg. Pay			39,566	57,873	72,746	72,581	82,995	76,948			72,054
60 to 64			1	1	1			1			4
Avg. Pay			51,024	56,215	51,042			77,031			58,828
65 to 69											
Avg. Pay											
70 & up											
Avg. Pay											
Total	41	137	295	252	177	72	35	5			1,014
Avg. Pay	32,948	36,948	45,644	56,104	66,428	76,524	83,648	76,964			53,842

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 & Under	153	$ 5,977,376	$ 39,068
51 – 55	115	5,740,686	49,919
56 – 60	120	6,213,191	51,777
61 – 65	197	8,791,735	44,628
66 – 70	154	6,547,664	42,517
71 – 75	125	5,080,495	40,644
76 – 80	73	2,762,631	37,844
Over 80	60	1,847,220	30,787
Total	997	$ 42,960,999	$ 43,090

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LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT
Lexington, Kentucky

Policemen's & Firefighters'
Retirement Fund

Report on the Valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Retirement Fund

Prepared as of July 1, 2013

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October 30, 2013

Board of Trustees
Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507

Dear Members of the Board:

We are pleased to submit herewith the results of the actuarial valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan prepared as of July 1, 2013. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2013, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). The Lexington-Fayette County Government is solely responsible for the accuracy and comprehensiveness of the data.

The promised benefits of the Plan reflecting the changes in HB 430 are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Actuarial value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized over a closed period on a level dollar basis. The annual required employer contribution rate is 36.53% of payroll for the plan years ending June 30, 2014. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

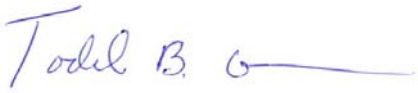
The valuation has been prepared in accordance with the parameters set forth in Statement Nos. 25 and 27 of the Governmental Accounting Standards Board. The annual required contribution (ARC) of the Government under GASB for the fiscal years ending June 30, 2014 is 36.53% of payroll, which will liquidate the unfunded accrued liability over a 30 year period on a level dollar basis.

This is to certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan. The undersigned are members of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Thomas J. Cavanaugh, FSA, FCA, MAAA, EA
Chief Executive Officer

Todd B. Green ASA, FCA, MAAA
Principal and Senior Actuary

TJC/TBG:jmy

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LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JULY 1, 2013

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	July 1, 2013	July 1, 2012
Active members:		
Number	1,064	1,014
Annualized compensation	$ 62,455,725	$ 54,595,799
Retired members and beneficiaries:		
Number	1,047	997
Annual benefits	$ 45,884,178	$ 42,960,998
Assets:		
Market Value	$ 556,723,810	$ 509,409,641
Actuarial Value	533,892,554	525,849,582
Unfunded actuarial accrued liability	$ 204,450,771	$ 161,824,250
Amortization Period	30	30
Fiscal Years Ending	**2014**	**2013**
Government annual required contribution rate (ARC):		
Normal	10.75%	12.23%
Accrued liability	25.78	23.35
Total	36.53%	35.58%
Member contribution rate	12.00%	11.00%

2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. The actual cost-of-living allowances granted through July 1, 2013 were reflected in the valuation.

3. The development of the actuarial value of assets is shown in Schedule C. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.

4. The entry age normal actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method. The cost method produces a contribution rate equal to the sum of the normal contribution rate and the actuarially accrued liability contribution rate which is sufficient to amortize the unfunded actuarially accrued liability over 30 years beginning July 1, 2013 on a level dollar basis. Effective July 1, 2013, and for each fiscal year thereafter, the Government contribution shall not be less than $20 million unless the Plan is 100% funded.

5. Comments on the valuation results as of July 1, 2013 are given in Section IV and further discussion of the contributions is set out in Section V.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Government. The valuation included 1,064 active members with annualized compensation totaling $62,455,725.

2. The following table shows the number of retired members and beneficiaries as of July 1, 2013 together with the amount of their annual retirement benefits payable under the Plan as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2013

GROUP	NUMBER	ANNUAL RETIREMENT BENEFITS
Service Retirements	535	$ 26,724,442
Disability Retirements	370	15,540,908
Beneficiaries of Deceased Members	142	3,618,828
Total	1,047	$ 45,884,178

3. Table 1 of Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III – ASSETS

As of July 1, 2013, the total market value of assets amounted to $556,723,810. The actuarial value of assets used for the current valuation was $533,892,554. Schedule C shows the development of the actuarial value of assets as of July 1, 2013. Schedule D shows the Summary of Receipts and Disbursements.

SECTION IV – COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Plan as of July 1, 2013. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.

2. The valuation balance sheet shows that the Plan has total prospective liabilities of $891,932,373 of which $549,781,272 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and $342,151,101 is for the prospective benefits payable on account of present active members. Against these liabilities, the Plan has a total present actuarial value of assets of $533,892,554 as of July 1, 2013. The difference of $358,039,819 between the total liabilities and the total present assets represents the present value of future contributions.

3. The contributions to the Plan consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 22.75% of payroll are required under the entry age normal method. Of this amount, 12.00% is paid by the members and the remaining 10.75% is required by the Government.

4. Prospective normal contributions at the rate of 22.75% have a present value of $153,589,048. When this amount is subtracted from $358,039,819, which is the present value of the total future contributions to be made, there remains $204,450,771 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V – CONTRIBUTIONS PAYABLE

1. Under Section 67A.520 of the law governing the Fund, the Government shall make current contributions to the Fund on an actuarially funded basis equal to the sum of the normal contribution rate and the actuarially accrued contribution rate that will be sufficient to amortize the total unfunded actuarial accrued liability over a period of thirty years beginning July 1, 2013 using the level-dollar amortization method.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 22.75%.
3. Each member shall contribute an amount equal to 12.00% of current salary.
4. The Government's normal contribution rate is equal to the difference between the normal contribution rate of 22.75% and the member contribution rate of 12.00%, or 10.75% of payroll.
5. The annual accrued liability contribution rate is determined to be 25.78% of payroll. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 30 year period on a level dollar basis.
6. The required employer contribution rate for the plan years ending June 30, 2014 is, therefore, 36.53% of payroll.
7. The following table summarizes the employer contributions which were determined by the July 1, 2013 valuation and are recommended for use.

ANNUAL REQUIRED CONTRIBUTION RATE
FOR PLAN YEARS ENDING JUNE 30, 2014

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	10.75%
Accrued Liability	25.78
Total	36.53%

SECTION VI – ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the Plan and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JULY 1, 2013

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	1,047
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,064
Total	2,111

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
7/01/2008	$418,311,038	$664,935,356	$246,624,318	62.9%	$61,368,960	401.9%
7/01/2009	441,772,820	699,851,128	258,078,308	63.1	65,765,448	392.4
7/01/2010	502,259,967	724,140,738	221,880,771	69.4	60,512,412	366.7
7/01/2011	501,069,884	758,851,546	257,781,662	66.0	64,258,162	401.2
7/01/2012	525,849,582	687,673,831	161,824,250	76.5	54,595,799	296.4
7/01/2013	533,892,554	738,343,325	204,450,771	72.3	62,455,725	327.4

3. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2013.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2013		
(a)	Employer annual required contribution	$ 22,322,068
(b)	Interest on net pension obligation	(4,089,767)
(c)	Adjustment to annual required contribution	(4,295,016)
(d)	Annual pension cost (a) + (b) – (c)	$ 22,527,317
(e)	Employer contributions made for fiscal year ending June 30, 2013	22,322,068
(f)	Increase (decrease) in net pension obligation (d) – (e)	$ 205,249
(g)	Net pension obligation beginning of fiscal year	(54,530,231)
(h)	Net pension obligation end of fiscal year (f) + (g)	$ (54,324,982)

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2011	27,923,223	51.6%	(35,613,328)
June 30, 2012	28,668,786	166.0%	(54,530,231)
June 30, 2013	22,527,317	99.1%	(54,324,982)

4. The annual required contribution (ARC) as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below.

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)	FISCAL YEARS ENDING JUNE 30, 2014
Normal (including expenses)	10.75%
Accrued liability	25.78
Total	36.53%

5. Additional information as of July 1, 2013 follows:

Valuation date	July 1, 2013
Actuarial cost method	Entry age normal
Amortization period	Level dollar, closed
Remaining amortization period	30 years
Asset valuation method	Actuarial Related Value
Actuarial assumptions:	
Investment rate of return (includes inflation)	7.50%
Projected salary increases (includes inflation)	10.50% to 4.00%
Inflation	3.00%
Cost-of-living adjustments	Refer to Schedule G

SECTION VII – EXPERIENCE

1. The following table shows the estimated change in the unfunded accrued liability from various factors that resulted in an increase of $42,626,522 in the unfunded accrued liability from $161,824,250 as of July 1, 2012 to $204,450,771 as of July 1, 2013 .

ANALYSIS OF FINANCIAL EXPERIENCE
CHANGE IN UNFUNDED ACCRUED LIABILITY

ITEM	AMOUNT OF INCREASE/(DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 11,976,386
Accrued Liability Contributions	(16,961,755)
Recognized Asset (Gain)/Loss	15,320,314
Assumption and Method Changes	0
Plan Changes	0
Salary (Gain)/Loss	14,960,342
Liability (Gain)/Loss	17,331,235
Increase in Unfunded Accrued Liability	$ 42,626,522

SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

			July 1, 2013
(1)	Present value of prospective benefits:		
	(a)	Present active members	$ 342,151,101
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	549,781,272
	(c)	Total	$ 891,932,373
(2)	Present value of future Government and member normal contributions before expenses		153,589,048
(3)	Actuarial accrued liabilities 1(c) – (2)		$ 738,343,325
(4)	Actuarial value of assets		533,892,554
(5)	Unfunded actuarial accrued liability (3) – (4)		$ 204,450,771

SCHEDULE B

VALUATION BALANCE SHEET

ACTUARIAL LIABILITIES		
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits		$ 549,781,272
Present value of prospective benefits payable on account of present active members		$ 342,151,101
Total liabilities		$ 891,932,373
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		$ 533,892,554
Present value of future contributions		
Government and member normal contributions	153,589,048	
Unfunded accrued liability contributions	204,450,771	
Total prospective contributions		$ 358,039,819
Total assets		$ 891,932,373

SCHEDULE C
Development of Actuarial Value of Assets

	Valuation date June 30:	2012	2013	2014	2015	2016	2017
A.	Actuarial Value Beginning of Year	$ 501,069,884	$ 525,849,582				
B.	Market Value End of Year	509,409,641	556,723,810				
C.	Market Value Beginning of Year	491,370,669	509,409,641				
D.	Cash Flow						
	D1. Contributions	$ 55,469,828	$ 33,721,166				
	D2. Other Revenue	137,955	81,122				
	D3. Beginning of Year Market Value Adjustment	0	0				
	D4. Benefit Payments	(44,267,378)	(49,296,681)				
	D5. Administrative Expenses	(158,020)	(596,907)				
	D6. Investment Expenses	(2,624,274)	(2,801,925)				
	D7. Net	$ 8,558,111	$ (18,893,225)				
E.	Investment Income						
	E1. Market Total: B.-C.-D7.	$ 9,480,861	$ 66,207,394				
	E2. Assumed Rate (Net of Expenses)	8.00%	7.50%				
	E3. Amount for Immediate Recognition	42,545,564	41,023,515				
	E4. Amount for Phased-In Recognition	(33,064,703)	25,183,879				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20 * E4.	$ (6,612,941)	$ 5,036,776	$ -	$ -	$ -	$ -
	F2. First Prior Year	10,933,042	(6,612,941)	5,036,776	-	-	-
	F3. Second Prior Year	656,893	10,933,042	(6,612,941)	5,036,776	-	-
	F4. Third Prior Year	(24,101,088)	656,893	10,933,042	(6,612,941)	5,036,776	-
	F5. Fourth Prior Year	(7,199,883)	(24,101,088)	656,893	10,933,042	(6,612,941)	5,036,776
	F6. Total Recognized Investment Gain	$ (26,323,977)	$ (14,087,318)	$ 10,013,770	$ 9,356,877	$ (1,576,165)	$ 5,036,776
G.	Preliminary Actuarial Value End of Year						
	A.+D7.+E3.+F6.	$ 525,849,582	$ 533,892,554				
H.	Corridor						
	I1. 80% of Market Value	$ 407,527,713	$ 445,379,048				
	I2. 120% of Market Value	$ 611,291,569	$ 668,068,572				
I.	Actuarial Value End of Year						
	H. Not Less than I1. or Greater than I2	$ 525,849,582	$ 533,892,554				
J.	Difference Between Market & Actuarial Values	$ (16,439,941)	$ 22,831,256	$ 12,817,484	$ 3,460,607	$ 5,036,773	$ 3

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 5 consecutive years, actuarial value will become equal to market value.

SCHEDULE D

SUMMARY OF RECIEPTS AND DISBURSEMENTS

Receipts for the Period		
Contributions:		
Members	$	7,242,128
Employer /Other		26,560,160
Total		33,802,288
Investment Income		63,405,469
TOTAL	$	97,207,757
Disbursements for the Period		
Benefit Payments		49,296,681
Refunds to Members		0
Administrative Expense		596,907
TOTAL	$	49,893,588
Excess of Receipts over Disbursements	$	47,314,169
Reconciliation of Asset Balances		
Market Value of Assets as of July 1, 2012	$	509,409,641
Excess of Receipts over Disbursements		47,314,169
Market Value of Assets as of July 1, 2013	$	556,723,810
Beginning of Year Market Value Adjustment		0
Market Value of Assets as of July 1, 2013 including Adjustment	$	556,723,810
Rate of Return on Market Value of Assets		12.52%

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Service	Wage Inflation	Merit Component	Total Rate
0	4.00%	6.50%	10.50%
1	4.00	5.50	9.50
2	4.00	3.50	7.50
3-5	4.00	3.00	7.00
6-8	4.00	2.50	6.50
9-12	4.00	2.00	6.00
13-16	4.00	1.50	5.50
16-19	4.00	1.00	5.00
20 or more	4.00	0.00	4.00

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the RP-2000 Combined Table projected to 2015 with scale AA was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of		
	Disability	Death	
Age		Male	Female
20	0.30%	0.03%	0.02%
25	0.30	0.03	0.02
30	0.30	0.04	0.02
35	0.60	0.07	0.04
40	1.00	0.10	0.06
45	2.00	0.12	0.09
50	4.00	0.16	0.13
55	5.00	0.27	0.24

Annual Rate of Termination			
Service	Rate	Service	Rate
0	1.91%	10	1.29%
1	1.85	11	1.23
2	1.79	12	1.17
3	1.73	13	1.08
4	1.67	14	1.00
5	1.61	15	0.94
6	1.55	16	0.88
7	1.47	17	0.82
8	1.41	18	0.76
9	1.35	19	0.70

SERVICE RETIREMENT: Representative annual rates of assumed service retirement are as follows:

Hired Prior to July 1, 2013		Hired on or after July 1, 2013	
Service	Rate	Service	Rate
20	5.0%		
21	6.0		
22	7.0		
23	8.0		
24	9.0		
25	10.0	25	25.0%
26	12.0	26	12.0
27	14.0	27	14.0
28	15.0	28	15.0
29	20.0	29	20.0
30	100.0	30	100.0

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2015 using scale AA, with male mortality set forward 0 years and female mortality set forward 3 years is used for the period following service retirement and for beneficiaries of deceased members. For disabled lives, male mortality was assumed to be the RP-2000 table not projected with male mortality set forward 4 years. Female mortality was assumed to be consistent with rates issued by the IRS in Revenue Ruling 96-7 for use in determining current liability for disabled lives prior to January 1, 1995.

OCCUPATIONAL VS. NON OCCUPATIONAL DEATH: 20% of all deaths are assumed to be due to occupational causes.

OCCUPATIONAL VS. NON OCCUPATIONAL DISABILITY: 75% of disabilities are assumed to be due to occupational causes. For occupational disabilities the average benefit percentage is assumed to be 50.0%.

PERCENT MARRIED: 75% of employees who die before retirement are assumed to be married with the husband 3 years older than the wife. 85% of employees who die after retirement are assumed to be married with the husband 3 years older than the wife.

ASSETS: Actuarial value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The actuarial value of assets cannot be more than 120% or less than 80% of the market value of assets.

VALUATION METHOD: Entry age normal actuarial cost method. See Schedule F for a brief description of this method.

AVERAGE DISABILITY IMPAIRMENT PERCENTAGE: 12.50%

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.50%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age normal actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the Plan.

SCHEDULE G

SUMMARY OF MAIN PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

Member	Sworn members of the Lexington-Fayette Urban County Government Division of Police and Division of Fire and Emergency Services.
Membership Service	Service rendered on or after the date of establishment of the fund or the fund of a city existing within the boundaries of the government immediately prior to the establishment of the urban-county government.
Total Service	Prior service, membership service, and service credit purchased by a member as provided in KRS 67A.402.
Average Salary	The highest average salary of the member for any three consecutive years of service.

Retirement Annuity

Hired prior to July 1, 2013 and for retirements commencing prior to July 1, 2013

Eligibility	Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired prior to July 1, 2013 and for retirements commencing on or after July 1, 2013

Eligibility	Anytime after obtaining age 41 and the completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired

member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired on or after July 1, 2013

Eligibility	Anytime after obtaining age 50 and the completion of 25 years of Total Service.
Benefit	Annuity is 2.25% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Occupational Disability Benefit

Eligibility	No requirements.

Occur Prior to July 1, 2013

Benefit	Annuity equal to a minimum of 60% of member's last rate of salary, increased above the 60% minimum by ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

	In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Occur on or after July 1, 2013	
Benefit	Annuity equal to a minimum of 50% of member's last rate of salary. If the member's percentage of disability exceeds 20% then the amount is equal to 60% of the member's last rate of salary plus ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Non-Occupational Disability Benefit	
Hired prior to July 1, 2013	
Eligibility	5 years of Total Service.
Benefit	2½% of Average Salary times years of Total Service subject to a minimum payment of 25% of Average Salary and a maximum payment of 75% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.

Hired on or after July 1, 2013

Eligibility	5 years of Total Service.
Benefit	2.25% of Average Salary times years of Total Service subject to a minimum payment of 22.5% of Average Salary and a maximum payment of 67.5% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.
Termination Benefit	If a member is terminated with less than 20 years of total service credit, he is entitled to a return of his accumulated contributions, without interest.

Occupational Death Benefit

Eligibility	No requirements.
Benefit	Surviving Spouse receives immediate annuity equal to 75% of the member's last rate of salary until death or remarriage. In addition, 10% of the member's last rate of salary is payable for each minor child until each child attains age 18 (age 23 if involved in educational activities). Maximum total income is 100% of final rate of salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule:

One minor child	50% of Salary
Two minor children	65% of Salary
Three of more minor children	75% of Salary

Non-Occupational Death Benefit

Eligibility	5 Years of Total Service, married 6 months prior to death.
Benefit	Surviving spouse received immediate annuity equal to 1½% of the Average Salary multiplied by years of Total Service, until death or remarriage. The minimum benefit is 15% of Average Salary. In addition, this annuity is increased by ½ for the first minor child and by ¼ for each additional child. Maximum total income is 75% of Average Salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule: One minor child — 50% of Salary Two minor children — 65% of Salary Three of more minor children — 75% of Salary
Member Contributions	Prior to July 1, 2013, active members contribute 11% of current salary. Effective July 1, 2013 active member contributions will increase from 11% to 12%.
Employer Contributions	The government shall make current contributions to the fund on an actuarially funded basis. Such contributions shall be equal to the sum of: (1) An amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method, and (2) An amount sufficient to amortize the total unfunded liability actuarial accrued liability for the fund over a period of thirty years, using the level dollar amortization method, for a period beginning July 1, 2013 and ending June 30, 2043. The total contribution of the government shall be at least $20,000,000 until the actuarial funding level is at least 100%.

Post Retirement Cost-of-Living Increases

COLAs will be granted on the following schedule for both current and future retirees commencing upon the earlier of a member turning age 50 or being retired for five years until the Plan, utilizing the current COLA provisions, is 85% funded. At that time, COLA's will be granted each year by an amount, determined by the Board, of not less than 2.00% nor more than 5.00% compounded annually. In addition, those receiving a pension over $100,000 will not be eligible to receive a COLA until the later of the proposed conditions or January 1, 2016.

Above $100,000	1.0%
$75,000 to $99,000	1.0%
$50,000 to $74,999	1.5%
$40,000 to $49,999	1.5%
$35,000 to $39,999	2.0%
$30,000 to $34,999	2.0%
Under $30,000	2.0%

SCHEDULE H

TABLE 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS

AS OF JULY 1, 2013

Attained Age	Completed Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	> 40	Total
Under 25	20	2									22
Avg. Pay	34,532	38,561									34,899
25 to 29	58	40	12								110
Avg. Pay	34,538	41,013	49,323								38,506
30 to 34	22	53	131	15							221
Avg. Pay	34,066	41,601	52,414	60,239							48,525
35 to 39	4	28	83	105	16						236
Avg. Pay	37,460	41,717	53,009	63,008	71,536						57,110
40 to 44		14	39	95	95	10					253
Avg. Pay		44,364	52,753	61,942	73,341	79,614					64,531
45 to 49		1	19	26	43	52	6				147
Avg. Pay		42,866	54,183	62,676	72,507	87,518	105,554				74,857
50 to 54			1	8	19	17	7	3			55
Avg. Pay			54,263	62,192	75,048	88,751	89,782	83,806			79,389
55 to 59				1	2	4	4	2			13
Avg. Pay				41,667	61,743	92,523	101,158	62,519			81,917
60 to 64			2	1	2			1			6
Avg. Pay			53,094	59,691	72,223			98,109			68,073
65 to 69								1			1
Avg. Pay								80,060			80,060
70 & up											
Avg. Pay											
Total	104	138	287	251	177	83	17	17			1,064
Avg. Pay	34,550	41,700	52,631	62,280	73,015	87,059	98,026	79,232			58,699

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 & Under	161	$ 6,049,322	$ 37,573
51 – 55	125	6,352,174	50,817
56 – 60	129	6,915,129	53,606
61 – 65	192	9,006,140	46,907
66 – 70	167	7,061,254	42,283
71 – 75	127	5,420,278	42,679
76 – 80	78	2,940,072	37,693
Over 80	68	2,139,809	31,468
Total	1047	$ 45,884,179	$ 43,824

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LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT
Lexington, Kentucky

Policemen's & Firefighters'
Retirement Fund

Report on the Valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Retirement Fund

Prepared as of July 1, 2014

www.CavMacConsulting.com

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CONSULTING, LLC
The experience and dedication you deserve

October 8, 2014

Board of Trustees
Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507

Dear Members of the Board:

We are pleased to submit herewith the results of the actuarial valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan prepared as of July 1, 2014. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2014, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). A separate report will be issued for reporting accounting information under GASB 67. The Lexington-Fayette County Government is solely responsible for the accuracy and comprehensiveness of the data.

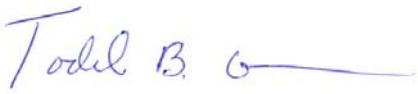
The promised benefits of the Plan reflecting the changes in HB 430 are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Actuarial value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized over a closed period on a level dollar basis. The annual required employer contribution rate is 33.78% of payroll for the plan year ending June 30, 2015. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

This is to certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan. The undersigned are members of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Thomas J. Cavanaugh, FSA, FCA, MAAA, EA
Chief Executive Officer

Todd B. Green ASA, FCA, MAAA
Principal and Senior Actuary

TJC/TBG:jmy

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LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JULY 1, 2014

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	July 1, 2014	July 1, 2013
Active members:		
Number	1,097	1,064
Annualized compensation	$ 63,248,485	$ 62,455,725
Retired members and beneficiaries:		
Number	1,070	1,047
Annual benefits	$ 47,747,052	$ 45,884,178
Assets:		
Market Value	$ 636,280,881	$ 556,723,810
Actuarial Value	579,749,633	533,892,554
Unfunded actuarial accrued liability	$ 180,634,396	$ 204,450,771
Amortization Period	29	30
Fiscal Years Ending	**2015**	**2014**
Government annual required contribution rate (ARC):		
Normal	11.07%	10.75%
Accrued liability	22.71	25.78
Total	33.78%	36.53%
Member contribution rate	12.00%	12.00%

2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. The actual cost-of-living allowances granted through July 1, 2014 were reflected in the valuation.

3. The development of the actuarial value of assets is shown in Schedule C. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.

4. The entry age normal actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method. The cost method produces a contribution rate equal to the sum of the normal contribution rate and the actuarially accrued liability contribution rate which is sufficient to amortize the unfunded actuarially accrued liability over 30 years beginning July 1, 2013 on a level dollar basis. Effective July 1, 2013, and for each fiscal year thereafter, the Government contribution shall not be less than $20 million unless the Plan is 100% funded.

5. Comments on the valuation results as of July 1, 2014 are given in Section IV and further discussion of the contributions is set out in Section V.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Government. The valuation included 1,097 active members with annualized compensation totaling $63,248,485.

2. The following table shows the number of retired members and beneficiaries as of July 1, 2014 together with the amount of their annual retirement benefits payable under the Plan as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2014

GROUP	NUMBER	ANNUAL RETIREMENT BENEFITS
Service Retirements	549	$ 27,967,929
Disability Retirements	374	15,852,837
Beneficiaries of Deceased Members	147	3,926,286
Total	1,070	$ 47,747,052

3. Table 1 of Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III – ASSETS

As of July 1, 2014, the total market value of assets amounted to $636,280,881. The actuarial value of assets used for the current valuation was $579,749,633. Schedule C shows the development of the actuarial value of assets as of July 1, 2014. Schedule D shows the Summary of Receipts and Disbursements.

SECTION IV – COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Plan as of July 1, 2014. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.

2. The valuation balance sheet shows that the Plan has total prospective liabilities of $915,182,319 of which $568,739,745 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and $346,442,574 is for the prospective benefits payable on account of present active members. Against these liabilities, the Plan has a total present actuarial value of assets of $579,749,633 as of July 1, 2014. The difference of $335,432,686 between the total liabilities and the total present assets represents the present value of future contributions.

3. The contributions to the Plan consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 23.07% of payroll are required under the entry age normal method. Of this amount, 12.00% is paid by the members and the remaining 11.07% is required by the Government.

4. Prospective normal contributions at the rate of 23.07% have a present value of $154,798,290. When this amount is subtracted from $335,432,686, which is the present value of the total future contributions to be made, there remains $180,634,396 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V – CONTRIBUTIONS PAYABLE

1. Under Section 67A.520 of the law governing the Fund, the Government shall make current contributions to the Fund on an actuarially funded basis equal to the sum of the normal contribution rate and the actuarially accrued contribution rate that will be sufficient to amortize the total unfunded actuarial accrued liability over a period of thirty years beginning July 1, 2013 using the level-dollar amortization method.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 23.07%.
3. Each member shall contribute an amount equal to 12.00% of current salary.
4. The Government's normal contribution rate is equal to the difference between the normal contribution rate of 23.07% and the member contribution rate of 12.00%, or 11.07% of payroll.
5. The annual accrued liability contribution rate is determined to be 22.71% of payroll. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 29 year period on a level dollar basis.
6. The required employer contribution rate for the plan years ending June 30, 2015 is, therefore, 33.78% of payroll.
7. The following table on the following page summarizes the employer contributions which were determined by the July 1, 2014 valuation and are recommended for use.

ANNUAL REQUIRED CONTRIBUTION RATE
FOR PLAN YEARS ENDING JUNE 30, 2015

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	11.07%
Accrued Liability	22.71
Total	33.78%

SECTION VI – ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the Plan and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JULY 1, 2014

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	1,070
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,097
Total	2,167

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
7/01/2009	$441,772,820	$699,851,128	$258,078,308	63.1%	$65,765,448	392.4%
7/01/2010	502,259,967	724,140,738	221,880,771	69.4	60,512,412	366.7
7/01/2011	501,069,884	758,851,546	257,781,662	66.0	64,258,162	401.2
7/01/2012	525,849,582	687,673,831	161,824,250	76.5	54,595,799	296.4
7/01/2013	533,892,554	738,343,325	204,450,771	72.3	62,455,725	327.4
7/01/2014	579,749,633	760,384,029	180,634,396	76.2	63,248,485	285.6

3. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2014.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2014		
(a)	Employer annual required contribution	$ 23,217,413
(b)	Interest on net pension obligation	(4,074,374)
(c)	Adjustment to annual required contribution	(4,278,850)
(d)	Annual pension cost (a) + (b) – (c)	$ 23,421,889
(e)	Employer contributions made for fiscal year ending June 30, 2014	23,217,413
(f)	Increase (decrease) in net pension obligation (d) – (e)	$ 204,476
(g)	Net pension obligation beginning of fiscal year	(54,324,982)
(h)	Net pension obligation end of fiscal year (f) + (g)	$ (54,120,506)

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2012	28,668,786	166.0%	(54,530,231)
June 30, 2013	22,527,317	99.1%	(54,324,982)
June 30, 2014	23,421,889	99.1%	(54,120,506)

4. The annual required contribution (ARC) as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below.

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)	FISCAL YEARS ENDING JUNE 30, 2015
Normal (including expenses)	11.07%
Accrued liability	22.71
Total	33.78%

5. Additional information as of July 1, 2014 follows:

Valuation date	July 1, 2014
Actuarial cost method	Entry age normal
Amortization period	Level dollar, closed
Remaining amortization period	29 years
Asset valuation method	Actuarial Related Value
Actuarial assumptions:	
Investment rate of return (includes inflation)	7.50%
Projected salary increases (includes inflation)	10.50% to 4.00%
Inflation	3.00%
Cost-of-living adjustments	Refer to Schedule G

SECTION VII – EXPERIENCE

1. The following table shows the change in the unfunded accrued liability from various factors that resulted in a decrease of $23,816,375 in the unfunded accrued liability from $204,450,771 as of July 1, 2013 to $180,634,396 as of July 1, 2014 .

ANALYSIS OF FINANCIAL EXPERIENCE
CHANGE IN UNFUNDED ACCRUED LIABILITY

ITEM	AMOUNT OF INCREASE/(DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 15,182,034
Accrued Liability Contributions	(18,852,799)
Recognized Asset (Gain)/Loss	(22,643,477)
Assumption and Method Changes	0
Plan Changes	0
Salary (Gain)/Loss	(8,631,273)
Liability (Gain)/Loss	11,129,140
Decrease in Unfunded Accrued Liability	$ (23,816,375)

SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

			July 1, 2014
(1)	Present value of prospective benefits:		
	(a)	Present active members	$ 346,442,574
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	568,739,745
	(c)	Total	$ 915,182,319
(2)	Present value of future Government and member normal contributions before expenses		154,798,290
(3)	Actuarial accrued liabilities 1(c) – (2)		$ 760,384,029
(4)	Actuarial value of assets		579,749,633
(5)	Unfunded actuarial accrued liability (3) – (4)		$ 180,634,396

SCHEDULE B

VALUATION BALANCE SHEET

ACTUARIAL LIABILITIES		
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits		$ 568,739,745
Present value of prospective benefits payable on account of present active members		$ 346,442,574
Total liabilities		$ 915,182,319
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		$ 579,749,633
Present value of future contributions		
Government and member normal contributions	154,798,290	
Unfunded accrued liability contributions	180,634,396	
Total prospective contributions		$ 335,432,686
Total assets		$ 915,182,319

SCHEDULE C
Development of Actuarial Value of Assets

	Valuation date June 30:	2013	2014	2015	2016	2017	2018
A.	Actuarial Value Beginning of Year	$ 525,849,582	$ 533,892,554				
B.	Market Value End of Year	556,723,810	636,280,881				
C.	Market Value Beginning of Year	509,409,641	556,723,810				
D.	Cash Flow						
	D1. Contributions	$ 33,721,166	$ 37,242,307				
	D2. Other Revenue	81,122	124,281				
	D3. Beginning of Year Market Value Adjustment	0	0				
	D4. Benefit Payments	(49,296,681)	(53,597,352)				
	D5. Administrative Expenses	(596,907)	(598,923)				
	D6. Investment Expenses	(2,801,925)	(3,315,350)				
	D7. Net	$ (18,893,225)	$ (20,145,037)				
E.	Investment Income						
	E1. Market Total: B.-C.-D7.	$ 66,207,394	$ 99,702,108				
	E2. Assumed Rate (Net of Expenses)	7.50%	7.50%				
	E3. Amount for Immediate Recognition	41,023,515	45,059,905				
	E4. Amount for Phased-In Recognition	25,183,879	54,642,203				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20 * E4.	$ 5,036,776	$ 10,928,441	$ -	$ -	$ -	$ -
	F2. First Prior Year	(6,612,941)	5,036,776	10,928,441	-	-	-
	F3. Second Prior Year	10,933,042	(6,612,941)	5,036,776	10,928,441	-	-
	F4. Third Prior Year	656,893	10,933,042	(6,612,941)	5,036,776	10,928,441	-
	F5. Fourth Prior Year	(24,101,088)	656,893	10,933,042	(6,612,941)	5,036,776	10,928,441
	F6. Total Recognized Investment Gain	$ (14,087,318)	$ 20,942,211	$ 20,285,318	$ 9,352,276	$ 15,965,217	$ 10,928,441
G.	Preliminary Actuarial Value End of Year						
	A.+D7.+E3.+F6.	$ 533,892,554	$ 579,749,633				
H.	Corridor						
	I1. 80% of Market Value	$ 445,379,048	$ 509,024,705				
	I2. 120% of Market Value	$ 668,068,572	$ 763,537,057				
I.	Actuarial Value End of Year						
	H. Not Less than I1. or Greater than I2	$ 533,892,554	$ 579,749,633				
J.	Difference Between Market & Actuarial Values	$ 22,831,256	$ 56,531,248	$ 36,245,931	$ 26,893,655	$ 10,928,438	$ 3

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 5 consecutive years, actuarial value will become equal to market value.

SCHEDULE D

SUMMARY OF RECIEPTS AND DISBURSEMENTS

Receipts for the Period		
Contributions:		
Members	$	9,730,115
Employer /Other		27,636,473
Total		37,366,588
Investment Income		96,386,758
TOTAL	$	133,753,346
Disbursements for the Period		
Benefit Payments		53,597,352
Refunds to Members		0
Administrative Expense		598,923
TOTAL	$	54,196,275
Excess of Receipts over Disbursements	$	79,557,071
Reconciliation of Asset Balances		
Market Value of Assets as of July 1, 2013	$	556,723,810
Excess of Receipts over Disbursements		79,557,071
Market Value of Assets as of July 1, 2014	$	636,280,881
Beginning of Year Market Value Adjustment		0
Market Value of Assets as of July 1, 2014 including Adjustment	$	636,280,881
Rate of Return on Market Value of Assets		17.46%

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Service	Wage Inflation	Merit Component	Total Rate
0	4.00%	6.50%	10.50%
1	4.00	5.50	9.50
2	4.00	3.50	7.50
3-5	4.00	3.00	7.00
6-8	4.00	2.50	6.50
9-12	4.00	2.00	6.00
13-16	4.00	1.50	5.50
16-19	4.00	1.00	5.00
20 or more	4.00	0.00	4.00

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the RP-2000 Combined Table projected to 2015 with scale AA was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of		
	Disability	Death	
Age		Male	Female
20	0.30%	0.03%	0.02%
25	0.30	0.03	0.02
30	0.30	0.04	0.02
35	0.60	0.07	0.04
40	1.00	0.10	0.06
45	2.00	0.12	0.09
50	4.00	0.16	0.13
55	5.00	0.27	0.24

Annual Rate of Termination			
Service	Rate	Service	Rate
0	1.91%	10	1.29%
1	1.85	11	1.23
2	1.79	12	1.17
3	1.73	13	1.08
4	1.67	14	1.00
5	1.61	15	0.94
6	1.55	16	0.88
7	1.47	17	0.82
8	1.41	18	0.76
9	1.35	19	0.70

SERVICE RETIREMENT: Representative annual rates of assumed service retirement are as follows:

Hired Prior to July 1, 2013		Hired on or after July 1, 2013	
Service	Rate	Service	Rate
20	5.0%		
21	6.0		
22	7.0		
23	8.0		
24	9.0		
25	10.0	25	25.0%
26	12.0	26	12.0
27	14.0	27	14.0
28	15.0	28	15.0
29	20.0	29	20.0
30	100.0	30	100.0

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2015 using scale AA, with male mortality set forward 0 years and female mortality set forward 3 years is used for the period following service retirement and for beneficiaries of deceased members. For disabled lives, male mortality was assumed to be the RP-2000 table not projected with male mortality set forward 4 years. Female mortality was assumed to be consistent with rates issued by the IRS in Revenue Ruling 96-7 for use in determining current liability for disabled lives prior to January 1, 1995. The assumed rates of mortality provide a margin for future mortality improvements.

OCCUPATIONAL VS. NON OCCUPATIONAL DEATH: 20% of all deaths are assumed to be due to occupational causes.

OCCUPATIONAL VS. NON OCCUPATIONAL DISABILITY: 75% of disabilities are assumed to be due to occupational causes. For occupational disabilities the average benefit percentage is assumed to be 50.0%.

PERCENT MARRIED: 75% of employees who die before retirement are assumed to be married with the husband 3 years older than the wife. 85% of employees who die after retirement are assumed to be married with the husband 3 years older than the wife.

ASSETS: Actuarial value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The actuarial value of assets cannot be more than 120% or less than 80% of the market value of assets.

VALUATION METHOD: Entry age normal actuarial cost method. See Schedule F for a brief description of this method.

AVERAGE DISABILITY IMPAIRMENT PERCENTAGE: 12.50%

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.50%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age normal actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the Plan.

SCHEDULE G

SUMMARY OF MAIN PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

Member	Sworn members of the Lexington-Fayette Urban County Government Division of Police and Division of Fire and Emergency Services.
Membership Service	Service rendered on or after the date of establishment of the fund or the fund of a city existing within the boundaries of the government immediately prior to the establishment of the urban-county government.
Total Service	Prior service, membership service, and service credit purchased by a member as provided in KRS 67A.402.
Average Salary	The highest average salary of the member for any three consecutive years of service.

Retirement Annuity

Hired prior to July 1, 2013 and for retirements commencing prior to July 1, 2013

Eligibility	Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired prior to July 1, 2013 and for retirements commencing on or after July 1, 2013

Eligibility	Anytime after obtaining age 41 and the completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired

member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired on or after July 1, 2013

Eligibility	Anytime after obtaining age 50 and the completion of 25 years of Total Service.
Benefit	Annuity is 2.25% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Occupational Disability Benefit

Eligibility	No requirements.

Occur Prior to July 1, 2013

Benefit	Annuity equal to a minimum of 60% of member's last rate of salary, increased above the 60% minimum by ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

	In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Occur on or after July 1, 2013	
Benefit	Annuity equal to a minimum of 50% of member's last rate of salary. If the member's percentage of disability exceeds 20% then the amount is equal to 60% of the member's last rate of salary plus ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Non-Occupational Disability Benefit	
Hired prior to July 1, 2013	
Eligibility	5 years of Total Service.
Benefit	2½% of Average Salary times years of Total Service subject to a minimum payment of 25% of Average Salary and a maximum payment of 75% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.

Hired on or after July 1, 2013

Eligibility	5 years of Total Service.
Benefit	2.25% of Average Salary times years of Total Service subject to a minimum payment of 22.5% of Average Salary and a maximum payment of 67.5% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.
Termination Benefit	If a member is terminated with less than 20 years of total service credit, he is entitled to a return of his accumulated contributions, without interest.

Occupational Death Benefit

Eligibility	No requirements.
Benefit	Surviving Spouse receives immediate annuity equal to 75% of the member's last rate of salary until death or remarriage. In addition, 10% of the member's last rate of salary is payable for each minor child until each child attains age 18 (age 23 if involved in educational activities). Maximum total income is 100% of final rate of salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule: One minor child 50% of Salary Two minor children 65% of Salary Three of more minor children 75% of Salary

Non-Occupational Death Benefit

Eligibility	5 Years of Total Service, married 6 months prior to death.
Benefit	Surviving spouse received immediate annuity equal to 1½% of the Average Salary multiplied by years of Total Service, until death or remarriage. The minimum benefit is 15% of Average Salary. In addition, this annuity is increased by ½ for the first minor child and by ¼ for each additional child. Maximum total income is 75% of Average Salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule: One minor child — 50% of Salary Two minor children — 65% of Salary Three of more minor children — 75% of Salary
Member Contributions	Prior to July 1, 2013, active members contribute 11% of current salary. Effective July 1, 2013 active member contributions will increase from 11% to 12%.
Employer Contributions	The government shall make current contributions to the fund on an actuarially funded basis. Such contributions shall be equal to the sum of: (1) An amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method, and (2) An amount sufficient to amortize the total unfunded liability actuarial accrued liability for the fund over a period of thirty years, using the level dollar amortization method, for a period beginning July 1, 2013 and ending June 30, 2043. The total contribution of the government shall be at least $20,000,000 until the actuarial funding level is at least 100%.

Post Retirement Cost-of-Living Increases

COLAs will be granted on the following schedule for both current and future retirees commencing upon the earlier of a member turning age 50 or being retired for five years until the Plan, utilizing the current COLA provisions, is 85% funded. At that time, COLA's will be granted each year by an amount, determined by the Board, of not less than 2.00% nor more than 5.00% compounded annually. In addition, those receiving a pension over $100,000 will not be eligible to receive a COLA until the later of the proposed conditions or January 1, 2016.

Above $100,000	1.0%
$75,000 to $99,000	1.0%
$50,000 to $74,999	1.5%
$40,000 to $49,999	1.5%
$35,000 to $39,999	2.0%
$30,000 to $34,999	2.0%
Under $30,000	2.0%

SCHEDULE H

TABLE 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS

AS OF JULY 1, 2014

Attained Age	Completed Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	> 40	Total
Under 25	14	11									25
Avg. Pay	33,100	39,572									35,948
25 to 29	46	75	10								131
Avg. Pay	33,341	40,684	47,585								38,632
30 to 34	20	78	101	21							220
Avg. Pay	32,673	41,581	51,967	55,202							46,840
35 to 39	2	37	67	110	15						231
Avg. Pay	37,322	41,418	52,241	60,957	69,882						55,674
40 to 44		10	37	99	102	7					255
Avg. Pay		44,378	51,387	61,772	72,531	71,230					64,146
45 to 49		1	17	35	43	48	8				152
Avg. Pay		43,267	52,777	61,994	71,772	87,663	104,284				73,938
50 to 54			1	12	18	16	12	1			60
Avg. Pay			49,575	63,457	72,910	82,503	96,812	124,477			78,828
55 to 59					3	5	6	1	1		16
Avg. Pay					64,228	83,535	104,487	61,819	61,819		85,057
60 to 64				4	2						6
Avg. Pay				52,322	72,600						59,081
65 to 69									1		1
Avg. Pay									82,564		82,564
70 & up											
Avg. Pay											
Total	82	212	233	281	183	76	26	2	2		1,097
Avg. Pay	33,234	41,271	51,815	60,927	72,037	84,792	100,882	93,148	72,192		57,656

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 & Under	155	$ 5,968,100	$ 38,504
51 – 55	139	6,944,968	49,964
56 – 60	134	7,399,774	55,222
61 – 65	168	8,041,712	47,867
66 – 70	188	8,322,036	44,266
71 – 75	125	5,260,350	42,083
76 – 80	87	3,443,569	39,581
Over 80	74	2,366,543	31,980
Total	1,070	$ 47,747,052	$ 44,623

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LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT
Lexington, Kentucky

Policemen's & Firefighters'
Retirement Fund

Report on the Valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Retirement Fund

Prepared as of July 1, 2015

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December 2, 2015

Board of Trustees
Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507

Dear Members of the Board:

We are pleased to submit herewith the results of the actuarial valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan prepared as of July 1, 2015. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2015, to recommend rates of contribution. A separate report will be issued for reporting accounting information under GASB 67. The Lexington-Fayette County Government is solely responsible for the accuracy and comprehensiveness of the data.

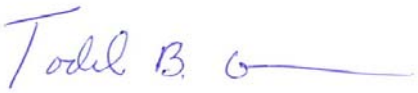
The promised benefits of the Plan reflecting the changes in HB 430 are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Actuarial value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized over a closed period on a level dollar basis. The annual required employer contribution rate is 34.93% of payroll for the plan year ending June 30, 2016. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

This is to certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan. The undersigned are members of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Todd B. Green ASA, FCA, MAAA
Principal & Consulting Actuary

TBG:jmy

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LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JULY 1, 2015

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	July 1, 2015	July 1, 2014
Active members:		
Number	1,111	1,097
Annualized compensation	$ 62,102,632	$ 63,248,485
Retired members and beneficiaries:		
Number	1,116	1,070
Annual benefits	$ 51,066,810	$ 47,747,052
Assets:		
Market Value	$ 634,715,718	$ 636,280,881
Actuarial Value	623,184,562	579,749,633
Unfunded actuarial accrued liability	$ 171,198,912	$ 180,634,396
Amortization Period	28	29
Fiscal Years Ending	**2016**	**2015**
Government annual required contribution rate (ARC):		
Normal	12.77%	11.07%
Accrued liability	22.16	22.71
Total	34.93%	33.78%
Member contribution rate	12.00%	12.00%

2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. The actual cost-of-living allowances granted through July 1, 2015 were reflected in the valuation.

3. The development of the actuarial value of assets is shown in Schedule C. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.

4. The entry age normal actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method. The cost method produces a contribution rate equal to the sum of the normal contribution rate and the actuarially accrued liability contribution rate which is sufficient to amortize the unfunded actuarially accrued liability over 30 years beginning July 1, 2013 on a level dollar basis. Effective July 1, 2013, and for each fiscal year thereafter, the Government contribution shall not be less than $20 million unless the Plan is 100% funded.

5. Any member who has at least five years of service as a member of the fund my purchase up to four years of service. The amount required to purchase service is based on an actuarial formula. Prior to the July 1, 2015 actuarial valuation, service purchases were not reported by Fund Staff. Service purchases were first reported by Fund Staff in the July 1, 2015 valuation.

6. Since the previous valuation a software update was released for Proval, the actuarial valuation software we license, which allows us to directly value the cost-of-living adjustment.

7. Comments on the valuation results as of July 1, 2015 are given in Section IV and further discussion of the contributions is set out in Section V.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Government. The valuation included 1,111 active members with annualized compensation totaling $62,102,632.

2. The following table shows the number of retired members and beneficiaries as of July 1, 2015 together with the amount of their annual retirement benefits payable under the Plan as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2015

GROUP	NUMBER	ANNUAL RETIREMENT BENEFITS
Service Retirements	577	$ 30,381,941
Disability Retirements	382	16,460,572
Beneficiaries of Deceased Members	157	4,224,297
Total	1,116	$ 51,066,810

3. Table 1 of Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III – ASSETS

As of July 1, 2015, the total market value of assets amounted to $634,715,718. The actuarial value of assets used for the current valuation was $623,184,562. Schedule C shows the development of the actuarial value of assets as of July 1, 2015. Schedule D shows the Summary of Receipts and Disbursements.

SECTION IV – COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Plan as of July 1, 2015. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.

2. The valuation balance sheet shows that the Plan has total prospective liabilities of $942,942,434 of which $594,160,436 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and $348,781,998 is for the prospective benefits payable on account of present active members. Against these liabilities, the Plan has a total present actuarial value of assets of $623,184,562 as of July 1, 2015. The difference of $319,757,872 between the total liabilities and the total present assets represents the present value of future contributions.

3. The contributions to the Plan consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 24.77% of payroll are required under the entry age normal method. Of this amount, 12.00% is paid by the members and the remaining 12.77% is required by the Government.

4. Prospective normal contributions at the rate of 24.77% have a present value of $148,558,960. When this amount is subtracted from $319,757,872, which is the present value of the total future contributions to be made, there remains $171,198,912 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V – CONTRIBUTIONS PAYABLE

1. Under Section 67A.520 of the law governing the Fund, the Government shall make current contributions to the Fund on an actuarially funded basis equal to the sum of the normal contribution rate and the actuarially accrued contribution rate that will be sufficient to amortize the total unfunded actuarial accrued liability over a period of thirty years beginning July 1, 2013 using the level-dollar amortization method.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 24.77%.
3. Each member shall contribute an amount equal to 12.00% of current salary.
4. The Government's normal contribution rate is equal to the difference between the normal contribution rate of 24.77% and the member contribution rate of 12.00%, or 12.77% of payroll.
5. The annual accrued liability contribution rate is determined to be 22.16% of payroll. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 28 year period on a level dollar basis.
6. The required employer contribution rate for the plan years ending June 30, 2016 is, therefore, 34.93% of payroll.
7. The following table on the following page summarizes the employer contributions which were determined by the July 1, 2015 valuation and are recommended for use.

ANNUAL REQUIRED CONTRIBUTION RATE
FOR PLAN YEARS ENDING JUNE 30, 2016

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	12.77%
Accrued Liability	22.16
Total	34.93%

SECTION VI – ACCOUNTING INFORMATION

1. The information required under the Governmental Accounting Standards (GASB) Statements No. 67 and 68 for the Plan and the City will be issued in separate reports. We are providing the following information for informational purposes only.

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JULY 1, 2015

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	1,116
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,111
Total	2,227

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
7/01/2010	$502,259,967	$724,140,738	$221,880,771	63.1%	$60,512,412	366.7%
7/01/2011	501,069,884	758,851,546	257,781,662	69.4	64,258,162	401.2
7/01/2012	525,849,582	687,673,831	161,824,250	66.0	54,595,799	296.4
7/01/2013	533,892,554	738,343,325	204,450,771	76.5	62,455,725	327.4
7/01/2014	579,749,633	760,384,029	180,634,396	72.3	63,248,485	285.6
7/01/2015	623,184,562	794,383,474	171,198,912	78.4	62,102,632	275.7

3. Additional information as of July 1, 2015 follows:

Valuation date	July 1, 2015
Actuarial cost method	Entry age normal
Amortization period	Level dollar, closed
Remaining amortization period	28 years
Asset valuation method	Actuarial Related Value
Actuarial assumptions:	
Investment rate of return (includes inflation)	7.50%
Projected salary increases (includes inflation)	10.50% to 4.00%
Inflation	3.00%
Cost-of-living adjustments	Refer to Schedule G

SECTION VII – EXPERIENCE

1. The following table shows the change in the unfunded accrued liability from various factors that resulted in a decrease of $9,435,484 in the unfunded accrued liability from $180,634,396 as of July 1, 2014 to $171,198,912 as of July 1, 2015 .

ANALYSIS OF FINANCIAL EXPERIENCE
CHANGE IN UNFUNDED ACCRUED LIABILITY

ITEM	AMOUNT OF INCREASE/(DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 13,441,833
Accrued Liability Contributions	(17,997,704)
Recognized Asset (Gain)/Loss	(18,334,450)
Assumption and Method Changes	14,275,399
Plan Changes	0
Salary (Gain)/Loss	(12,178,051)
Liability (Gain)/Loss	11,357,489
Decrease in Unfunded Accrued Liability	$ (9,435,484)

SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

			July 1, 2015
(1)	Present value of prospective benefits:		
	(a)	Present active members	$ 348,781,998
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	594,160,436
	(c)	Total	$ 942,942,434
(2)	Present value of future Government and member normal contributions before expenses		148,558,960
(3)	Actuarial accrued liabilities 1(c) – (2)		$ 794,383,474
(4)	Actuarial value of assets		623,184,562
(5)	Unfunded actuarial accrued liability (3) – (4)		$ 171,198,912

SCHEDULE B

VALUATION BALANCE SHEET

ACTUARIAL LIABILITIES		
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits		$ 594,160,436
Present value of prospective benefits payable on account of present active members		$ 348,781,998
Total liabilities		$ 942,942,434
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		$ 623,184,562
Present value of future contributions		
Government and member normal contributions	148,558,960	
Unfunded accrued liability contributions	171,198,912	
Total prospective contributions		$ 319,757,872
Total assets		$ 942,942,434

SCHEDULE C
Development of Actuarial Value of Assets

	Valuation date June 30:	2014	2015	2016	2017	2018	2019
A.	Actuarial Value Beginning of Year	$ 533,892,554	$ 579,749,633				
B.	Market Value End of Year	636,280,881	634,715,718				
C.	Market Value Beginning of Year	556,723,810	636,280,881				
D.	Cash Flow						
	D1. Contributions	$ 37,242,307	$ 32,505,019				
	D2. Other Revenue	124,281	81,355				
	D3. Beginning of Year Market Value Adjustment	0	0				
	D4. Benefit Payments	(53,597,352)	(50,314,337)				
	D5. Administrative Expenses	(598,923)	(665,175)				
	D6. Investment Expenses	(3,315,350)	(2,973,017)				
	D7. Net	$ (20,145,037)	$ (21,366,155)				
E.	Investment Income						
	E1. Market Total: B.-C.-D7.	$ 99,702,108	$ 19,800,992				
	E2. Assumed Rate (Net of Expenses)	7.50%	7.50%				
	E3. Amount for Immediate Recognition	45,059,905	50,694,459				
	E4. Amount for Phased-In Recognition	54,642,203	(30,893,467)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20 * E4.	$ 10,928,441	$ (6,178,693)	$ -	$ -	$ -	$ -
	F2. First Prior Year	5,036,776	10,928,441	(6,178,693)	-	-	-
	F3. Second Prior Year	(6,612,941)	5,036,776	10,928,441	(6,178,693)	-	-
	F4. Third Prior Year	10,933,042	(6,612,941)	5,036,776	10,928,441	(6,178,693)	-
	F5. Fourth Prior Year	656,893	10,933,042	(6,612,941)	5,036,776	10,928,441	(6,178,693)
	F6. Total Recognized Investment Gain	$ 20,942,211	$ 14,106,625	$ 3,173,583	$ 9,786,524	$ 4,749,748	$ (6,178,693)
G.	Preliminary Actuarial Value End of Year						
	A.+D7.+E3.+F6.	$ 579,749,633	$ 623,184,562				
H.	Corridor						
	I1. 80% of Market Value	$ 509,024,705	$ 507,772,574				
	I2. 120% of Market Value	$ 763,537,057	$ 761,658,862				
I.	Actuarial Value End of Year						
	H. Not Less than I1. or Greater than I2	$ 579,749,633	$ 623,184,562				
J.	Difference Between Market & Actuarial Values	$ 56,531,248	$ 11,531,156	$ 8,357,579	$ (1,428,945)	$ (6,178,693)	$ -

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 5 consecutive years, actuarial value will become equal to market value.

SCHEDULE D

SUMMARY OF RECIEPTS AND DISBURSEMENTS

Receipts for the Period		
Contributions:		
Members	$	9,881,338
Employer /Other		22,705,036
Total		32,586,373
Investment Income		16,827,976
TOTAL	$	49,414,350
Disbursements for the Period		
Benefit Payments		50,314,337
Refunds to Members		0
Administrative Expense		665,175
TOTAL	$	50,979,512
Excess of Receipts over Disbursements	$	(1,565,163)
Reconciliation of Asset Balances		
Market Value of Assets as of July 1, 2014	$	636,280,881
Excess of Receipts over Disbursements		(1,565,163)
Market Value of Assets as of July 1, 2015	$	634,715,718
Beginning of Year Market Value Adjustment		0
Market Value of Assets as of July 1, 2015 including Adjustment	$	634,715,718
Rate of Return on Market Value of Assets		2.58%

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Service	Wage Inflation	Merit Component	Total Rate
0	4.00%	6.50%	10.76%
1	4.00	5.50	9.72
2	4.00	3.50	7.64
3-5	4.00	3.00	7.12
6-8	4.00	2.50	6.60
9-12	4.00	2.00	6.08
13-16	4.00	1.50	5.56
16-19	4.00	1.00	5.04
20 or more	4.00	0.00	4.00

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the RP-2000 Combined Table projected to 2015 with scale AA was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of		
	Disability	Death	
Age		Male	Female
20	0.30%	0.03%	0.02%
25	0.30	0.03	0.02
30	0.30	0.04	0.02
35	0.60	0.07	0.04
40	1.00	0.10	0.06
45	2.00	0.12	0.09
50	4.00	0.16	0.13
55	5.00	0.27	0.24

Annual Rate of Termination			
Service	Rate	Service	Rate
0	1.91%	10	1.29%
1	1.85	11	1.23
2	1.79	12	1.17
3	1.73	13	1.08
4	1.67	14	1.00
5	1.61	15	0.94
6	1.55	16	0.88
7	1.47	17	0.82
8	1.41	18	0.76
9	1.35	19	0.70

SERVICE RETIREMENT: Representative annual rates of assumed service retirement are as follows:

Hired Prior to July 1, 2013		Hired on or after July 1, 2013	
Service	Rate	Service	Rate
20	5.0%		
21	6.0		
22	7.0		
23	8.0		
24	9.0		
25	10.0	25	25.0%
26	12.0	26	12.0
27	14.0	27	14.0
28	15.0	28	15.0
29	20.0	29	20.0
30	100.0	30	100.0

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2015 using scale AA, with male mortality set forward 0 years and female mortality set forward 3 years is used for the period following service retirement and for beneficiaries of deceased members. For disabled lives, male mortality was assumed to be the RP-2000 table not projected with male mortality set forward 4 years. Female mortality was assumed to be consistent with rates issued by the IRS in Revenue Ruling 96-7 for use in determining current liability for disabled lives prior to January 1, 1995. The assumed rates of mortality provide a margin for future mortality improvements.

OCCUPATIONAL VS. NON OCCUPATIONAL DEATH: 20% of all deaths are assumed to be due to occupational causes.

OCCUPATIONAL VS. NON OCCUPATIONAL DISABILITY: 75% of disabilities are assumed to be due to occupational causes. For occupational disabilities the average benefit percentage is assumed to be 50.0%.

PERCENT MARRIED: 75% of employees who die before retirement are assumed to be married with the husband 3 years older than the wife.

ASSETS: Actuarial value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The actuarial value of assets cannot be more than 120% or less than 80% of the market value of assets.

VALUATION METHOD: Entry age normal actuarial cost method. See Schedule F for a brief description of this method.

AVERAGE DISABILITY IMPAIRMENT PERCENTAGE: 12.50%

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.50%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age normal actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the Plan.

SCHEDULE G

SUMMARY OF MAIN PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

Member	Sworn members of the Lexington-Fayette Urban County Government Division of Police and Division of Fire and Emergency Services.
Membership Service	Service rendered on or after the date of establishment of the fund or the fund of a city existing within the boundaries of the government immediately prior to the establishment of the urban-county government.
Total Service	Prior service, membership service, and service credit purchased by a member as provided in KRS 67A.402.
Average Salary	The highest average salary of the member for any three consecutive years of service.

Retirement Annuity

Hired prior to July 1, 2013 and for retirements commencing prior to July 1, 2013

Eligibility	Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired prior to July 1, 2013 and for retirements commencing on or after July 1, 2013

Eligibility	Anytime after obtaining age 41 and the completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired

member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired on or after July 1, 2013

Eligibility	Anytime after obtaining age 50 and the completion of 25 years of Total Service.
Benefit	Annuity is 2.25% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Occupational Disability Benefit

Eligibility	No requirements.

Occur Prior to July 1, 2013

Benefit	Annuity equal to a minimum of 60% of member's last rate of salary, increased above the 60% minimum by ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

	In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Occur on or after July 1, 2013	
Benefit	Annuity equal to a minimum of 50% of member's last rate of salary. If the member's percentage of disability exceeds 20% then the amount is equal to 60% of the member's last rate of salary plus ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Non-Occupational Disability Benefit	
Hired prior to July 1, 2013	
Eligibility	5 years of Total Service.
Benefit	2½% of Average Salary times years of Total Service subject to a minimum payment of 25% of Average Salary and a maximum payment of 75% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.

Hired on or after July 1, 2013

Eligibility	5 years of Total Service.
Benefit	2.25% of Average Salary times years of Total Service subject to a minimum payment of 22.5% of Average Salary and a maximum payment of 67.5% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.
Termination Benefit	If a member is terminated with less than 20 years of total service credit, he is entitled to a return of his accumulated contributions, without interest.

Occupational Death Benefit

Eligibility	No requirements.
Benefit	Surviving Spouse receives immediate annuity equal to 75% of the member's last rate of salary until death or remarriage. In addition, 10% of the member's last rate of salary is payable for each minor child until each child attains age 18 (age 23 if involved in educational activities). Maximum total income is 100% of final rate of salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule: One minor child 50% of Salary Two minor children 65% of Salary Three of more minor children 75% of Salary

Non-Occupational Death Benefit

Eligibility	5 Years of Total Service, married 6 months prior to death.
Benefit	Surviving spouse received immediate annuity equal to 1½% of the Average Salary multiplied by years of Total Service, until death or remarriage. The minimum benefit is 15% of Average Salary. In addition, this annuity is increased by ½ for the first minor child and by ¼ for each additional child. Maximum total income is 75% of Average Salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule: One minor child — 50% of Salary Two minor children — 65% of Salary Three of more minor children — 75% of Salary
Member Contributions	Prior to July 1, 2013, active members contribute 11% of current salary. Effective July 1, 2013 active member contributions will increase from 11% to 12%.
Employer Contributions	The government shall make current contributions to the fund on an actuarially funded basis. Such contributions shall be equal to the sum of: (1) An amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method, and (2) An amount sufficient to amortize the total unfunded liability actuarial accrued liability for the fund over a period of thirty years, using the level dollar amortization method, for a period beginning July 1, 2013 and ending June 30, 2043. The total contribution of the government shall be at least $20,000,000 until the actuarial funding level is at least 100%.

Post Retirement Cost-of-Living Increases

COLAs will be granted on the following schedule for both current and future retirees commencing upon the earlier of a member turning age 50 or being retired for five years until the Plan, utilizing the current COLA provisions, is 85% funded. At that time, COLA's will be granted each year by an amount, determined by the Board, of not less than 2.00% nor more than 5.00% compounded annually. In addition, those receiving a pension over $100,000 will not be eligible to receive a COLA until the later of the proposed conditions or January 1, 2016.

Above $100,000	1.0%
$75,000 to $99,000	1.0%
$50,000 to $74,999	1.5%
$40,000 to $49,999	1.5%
$35,000 to $39,999	2.0%
$30,000 to $34,999	2.0%
Under $30,000	2.0%

SCHEDULE H

TABLE 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS

AS OF JULY 1, 2015

Attained Age	Completed Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	> 40	Total
Under 25	16	7									23
Avg. Pay	36,687	40,032									37,705
25 to 29	42	102	7								151
Avg. Pay	34,626	41,000	47,359								39,522
30 to 34	12	93	73	42							220
Avg. Pay	35,834	41,565	50,768	56,269							47,113
35 to 39	4	36	64	104	22						230
Avg. Pay	35,119	42,693	49,430	58,725	67,697						54,077
40 to 44			35	95	93	12					235
Avg. Pay			50,662	58,069	68,578	81,842					62,339
45 to 49			13	36	62	43	7				161
Avg. Pay			49,437	60,151	68,015	78,825	95,530				68,840
50 to 54			5	11	21	19	16				72
Avg. Pay			50,587	60,099	67,612	85,830	89,397				74,930
55 to 59				1	3	5	2	1	1		13
Avg. Pay				56,784	62,137	80,698	75,073	117,373	57,526		74,749
60 to 64				2	2						4
Avg. Pay				50,058	69,001						59,529
65 to 69				1					1		2
Avg. Pay				52,902					74,427		63,665
70 & up											
Avg. Pay											
Total	74	238	197	292	203	79	25	1	2		1,111
Avg. Pay	35,294	41,449	50,101	58,300	68,120	81,086	89,968	117,373	65,976		55,898

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 & Under	168	$ 6,683,962	$ 39,785
51 – 55	136	6,768,062	49,765
56 – 60	149	8,460,338	56,781
61 – 65	152	7,537,316	49,588
66 – 70	202	9,180,391	45,447
71 – 75	134	5,871,955	43,821
76 – 80	95	3,880,010	40,842
Over 80	80	2,684,776	33,560
Total	1,116	$ 51,066,809	$ 45,759

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LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT
Lexington, Kentucky

Policemen's & Firefighters'
Retirement Fund

Report on the Valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Retirement Fund

Prepared as of July 1, 2016

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December 13, 2016

Board of Trustees
Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507

Dear Members of the Board:

We are pleased to submit herewith the results of the actuarial valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan prepared as of July 1, 2016. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2016, to recommend rates of contribution. A separate report will be issued for reporting accounting information under GASB 67. The Lexington-Fayette County Government is solely responsible for the accuracy and comprehensiveness of the data.

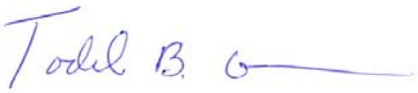
The promised benefits of the Plan reflecting the changes in HB 430 are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Actuarial value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized over a closed period on a level dollar basis. The annual required employer contribution rate is 35.85% of payroll for the plan year ending June 30, 2017. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

This is to certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan. The undersigned are members of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Todd B. Green ASA, FCA, MAAA
Principal & Consulting Actuary

TBG:jmy

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LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JULY 1, 2016

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	July 1, 2016	July 1, 2015
Active members:		
Number	1,123	1,111
Annualized compensation	$ 63,869,423	$ 62,102,632
Retired members and beneficiaries:		
Number	1,161	1,116
Annual benefits	$ 54,837,840	$ 51,066,810
Assets:		
Market Value	$ 619,901,142	$ 634,715,718
Actuarial Value	645,681,282	623,184,562
Unfunded actuarial accrued liability	$ 184,598,489	$ 171,198,912
Amortization Period	27	28
Fiscal Years Ending	**2017**	**2016**
Government annual required contribution rate (ARC):		
Normal	12.35%	12.77%
Accrued liability	23.50	22.16
Total	35.85%	34.93%
Member contribution rate	12.00%	12.00%

2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. The actual cost-of-living allowances granted through July 1, 2016 were reflected in the valuation.

3. The development of the actuarial value of assets is shown in Schedule C. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.

4. The entry age normal actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method. The cost method produces a contribution rate equal to the sum of the normal contribution rate and the actuarially accrued liability contribution rate which is sufficient to amortize the unfunded actuarially accrued liability over 30 years beginning July 1, 2013 on a level dollar basis. Effective July 1, 2013, and for each fiscal year thereafter, the Government contribution shall not be less than $20 million unless the Plan is 100% funded.

5. Any member who has at least five years of service as a member of the fund my purchase up to four years of service. The amount required to purchase service is based on an actuarial formula. Prior to the July 1, 2015 actuarial valuation, service purchases were not reported by Fund Staff. Service purchases were first reported by Fund Staff in the July 1, 2015 valuation.

6. Comments on the valuation results as of July 1, 2016 are given in Section IV and further discussion of the contributions is set out in Section V.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Government. The valuation included 1,123 active members with annualized compensation totaling $63,869,423.

2. The following table shows the number of retired members and beneficiaries as of July 1, 2016 together with the amount of their annual retirement benefits payable under the Plan as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2016

GROUP	NUMBER	ANNUAL RETIREMENT BENEFITS
Service Retirements	606	$ 32,878,698
Disability Retirements	399	17,550,548
Beneficiaries of Deceased Members	156	4,408,594
Total	1,161	$ 54,837,840

3. Table 1 of Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III – ASSETS

As of July 1, 2016, the total market value of assets amounted to $619,901,142. The actuarial value of assets used for the current valuation was $645,681,282. Schedule C shows the development of the actuarial value of assets as of July 1, 2016. Schedule D shows the Summary of Receipts and Disbursements.

SECTION IV – COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Plan as of July 1, 2016. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.

2. The valuation balance sheet shows that the Plan has total prospective liabilities of $981,590,906 of which $627,124,932 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and $354,465,974 is for the prospective benefits payable on account of present active members. Against these liabilities, the Plan has a total present actuarial value of assets of $645,681,282 as of July 1, 2016. The difference of $335,909,624 between the total liabilities and the total present assets represents the present value of future contributions.

3. The contributions to the Plan consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 24.35% of payroll are required under the entry age normal method. Of this amount, 12.00% is paid by the members and the remaining 12.35% is required by the Government.

4. Prospective normal contributions at the rate of 24.35% have a present value of $151,311,135. When this amount is subtracted from $335,909,624, which is the present value of the total future contributions to be made, there remains $184,598,489 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V – CONTRIBUTIONS PAYABLE

1. Under Section 67A.520 of the law governing the Fund, the Government shall make current contributions to the Fund on an actuarially funded basis equal to the sum of the normal contribution rate and the actuarially accrued contribution rate that will be sufficient to amortize the total unfunded actuarial accrued liability over a period of thirty years beginning July 1, 2013 using the level-dollar amortization method.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 24.35%.
3. Each member shall contribute an amount equal to 12.00% of current salary.
4. The Government's normal contribution rate is equal to the difference between the normal contribution rate of 24.35% and the member contribution rate of 12.00%, or 12.35% of payroll.
5. The annual accrued liability contribution rate is determined to be 23.50% of payroll. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 27 year period on a level dollar basis.
6. The required employer contribution rate for the plan years ending June 30, 2017 is, therefore, 35.85% of payroll.
7. The following table on the following page summarizes the employer contributions which were determined by the July 1, 2016 valuation and are recommended for use.

ANNUAL REQUIRED CONTRIBUTION RATE
FOR PLAN YEARS ENDING JUNE 30, 2017

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	12.35%
Accrued Liability	23.50
Total	35.85%

SECTION VI – ACCOUNTING INFORMATION

1. The information required under the Governmental Accounting Standards (GASB) Statements No. 67 and 68 for the Plan and the City will be issued in separate reports. We are providing the following information for informational purposes only.

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JULY 1, 2016

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	1,161
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,123
Total	2,284

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
7/01/2011	$501,069,884	$758,851,546	$257,781,662	69.4%	$64,258,162	401.2%
7/01/2012	525,849,582	687,673,831	161,824,250	66.0	54,595,799	296.4
7/01/2013	533,892,554	738,343,325	204,450,771	76.5	62,455,725	327.4
7/01/2014	579,749,633	760,384,029	180,634,396	72.3	63,248,485	285.6
7/01/2015	623,184,562	794,383,474	171,198,912	78.4	62,102,632	275.7
7/01/2016	645,681,282	830,279,771	184,598,489	77.8	63,869,423	289.0

3. Additional information as of July 1, 2016 follows:

Valuation date	July 1, 2016
Actuarial cost method	Entry age normal
Amortization period	Level dollar, closed
Remaining amortization period	27 years
Asset valuation method	Actuarial Related Value
Actuarial assumptions:	
Investment rate of return (includes inflation)	7.50%
Projected salary increases (includes inflation)	10.50% to 4.00%
Inflation	3.00%
Cost-of-living adjustments	Refer to Schedule G

SECTION VII – EXPERIENCE

The following table shows the change in the accrued actuarial liability and the actuarial value of assets from July 1, 2015 to July 1, 2016 .

DETERMINATION OF ACTUARIAL (GAIN) / LOSS

A. Accrued Actuarial Liability (Gain) / Loss Analysis	
1. Actual Accrued Actuarial Liability as of July 1, 2015	$794,383,474
2. Normal Cost	$14,461,035
3. Interest on items 1 and 2 [(1+2) x 7.5%]	$60,663,338
4. Benefit Payments	($53,360,681)
5. Interest on item [4 x 7.5% x .5]	($2,001,026)
6. Changes due to:	
a. Assumption changes	$0
b. Plan amendments	$0
c. Funding Method	$0
7. Expected Accrued Actuarial Liability as of July 1, 2016 (1. + 2. + 3. + 4. + 5. + 6.)	$814,146,140
8. Actual Accrued Actuarial Liability as of July 1, 2016	$830,279,771
9. Liability (Gain) / Loss [8. - 7.]	$16,133,631
10 Items Affecting Calculation of Accrued Actuarial Liability:	
a. Plan provisions reflected in the accrued liability (see Schedule G)	
b. Actuarial assumptions and methods used to determine actuarial accrued liability (see Schedule E and Schedule F)	
B. Asset (Gain) / Loss Analysis	
1. Actuarial Value of Assets as of July 1, 2015	$623,184,562
2. Interest on item [1 x 7.5%]	$46,738,842
3. Contributions and Other Revenue	$34,328,226
4. Interest on item [2 x 7.5% x .5]	$1,287,308
5. Benefit Payments	($53,360,681)
6. Interest on item [5 x 7.5% x .5]	($2,001,026)
7. Expected Actuarial Value of Assets as of July 1, 2016	$650,177,231
8. Actuarial Value of Assets as of July 1, 2016	$645,681,282
9. Asset (Gain) / Loss	$4,495,949
C. Total Actuarial (Gain) / Loss During 2015 / 2016 Plan Year (A.9 + B.9)	$20,629,580

ANALYSIS OF (GAIN) / LOSS

1.	Expected Unfunded Accrued Liability as of July 1, 2016: (Page 8: A.7 - B.7)		$163,968,909
2.	Change in Unfunded Accrued Liability During 2015/2016 Plan Year:		
	a. Due to Salary	$658,025	
	b. Due to Investment Performance	$4,495,949	
	c. Due to Turnover/Mortality	$4,625,140	
	d. Due to New Retirements	$9,830,724	
	e. Due to Data/Service Adjustments/Benefit Payments	$447,875	
	f. Due to New Members	$571,867	
	g. Due to Assumption Changes	$0	
	h. Due to Method Changes	$0	
	i. Due to Plan Changes	$0	
	j. Other	$0	
3.	Actuarial (Gain) / Loss During the 2015/2016 Plan Year (Sum of changes in item 2)		$20,629,580
4.	Unfunded Accrued Liability as of July 1, 2016: (1. + 3.)		$184,598,489

5. Comments on Change in Unfunded Accrued Liability Contribution Rate:
Salary/Service: Actual average salary increase of 5.9% compared to expected increases of 6.3%
Investment Performance: 6.8% actual vs. 7.5% expected return on the actuarial value of assets.
Turnover: Net effect on the valuation liabilities of actual deaths, terminations of employment and disabilities different from what was anticipated in the aggregate by the assumptions related to those events.
New retirements: Net effect of differences in expected vs. actual numbers of, and benefits for, new retirements and refund of employee contributions.
Due to Differences and Timing of Contributions: Due to the one year lag of when the required contribution is determined and when it is deposited into the fund.
Data/Service Adjustments: Effect of service adjustments, data adjustments, and the difference between actual and expected benefit payments.
Assumption Changes: None
Method Changes: None
Plan Changes: None

SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

			July 1, 2016
(1)	Present value of prospective benefits:		
	(a)	Present active members	$ 354,465,974
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	627,124,932
	(c)	Total	$ 981,590,906
(2)	Present value of future Government and member normal contributions before expenses		151,311,135
(3)	Actuarial accrued liabilities 1(c) – (2)		$ 830,279,771
(4)	Actuarial value of assets		645,681,282
(5)	Unfunded actuarial accrued liability (3) – (4)		$ 184,598,489

SCHEDULE B

VALUATION BALANCE SHEET

ACTUARIAL LIABILITIES		
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits		$ 627,124,932
Present value of prospective benefits payable on account of present active members		$ 354,465,974
Total liabilities		$ 981,590,906
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		$ 645,681,282
Present value of future contributions		
Government and member normal contributions	151,311,135	
Unfunded accrued liability contributions	184,598,489	
Total prospective contributions		$ 335,909,624
Total assets		$ 981,590,906

SCHEDULE C
Development of Actuarial Value of Assets

	Valuation date June 30:	2015	2016	2017	2018	2019	2020
A.	Actuarial Value Beginning of Year	$ 579,749,633	$ 623,184,562				
B.	Market Value End of Year	634,715,718	619,901,142				
C.	Market Value Beginning of Year	636,280,881	634,715,718				
D.	Cash Flow						
	D1. Contributions	$ 32,505,019	$ 34,248,997				
	D2. Other Revenue	81,355	79,229				
	D3. Benefit Payments	(50,314,337)	(53,360,681)				
	D4. Administrative Expenses	(665,175)	(178,943)				
	D5. Investment Expenses	(2,973,017)	(2,892,329)				
	D6. Net	$ (21,366,155)	$ (22,103,727)				
E.	Investment Income						
	E1. Market Total: B.-C.-D6.	$ 19,800,992	$ 7,289,151				
	E2. Assumed Rate (Net of Expenses)	7.50%	7.50%				
	E3. Amount for Immediate Recognition	50,694,459	49,961,292				
	E4. Amount for Phased-In Recognition	(30,893,467)	(42,672,141)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20 * E4.	$ (6,178,693)	$ (8,534,428)	$ -	$ -	$ -	$ -
	F2. First Prior Year	10,928,441	(6,178,693)	(8,534,428)	-	-	-
	F3. Second Prior Year	5,036,776	10,928,441	(6,178,693)	(8,534,428)	-	-
	F4. Third Prior Year	(6,612,941)	5,036,776	10,928,441	(6,178,693)	(8,534,428)	-
	F5. Fourth Prior Year	10,933,042	(6,612,941)	5,036,776	10,928,441	(6,178,693)	(8,534,428)
	F6. Total Recognized Investment Gain	$ 14,106,625	$ (5,360,845)	$ 1,252,096	$ (3,784,680)	$ (14,713,121)	$ (8,534,428)
G.	Preliminary Actuarial Value End of Year						
	A.+D6.+E3.+F6.	$ 623,184,562	$ 645,681,282				
H.	Corridor						
	I1. 80% of Market Value	$ 507,772,574	$ 495,920,914				
	I2. 120% of Market Value	$ 761,658,862	$ 743,881,370				
I.	Actuarial Value End of Year						
	H. Not Less than I1. or Greater than I2	$ 623,184,562	$ 645,681,282				
J.	Difference Between Market & Actuarial Values	$ 11,531,156	$ (25,780,140)	$ (27,032,229)	$ (23,247,549)	$ (8,534,428)	$ -
K.	Market Value of Asets Return	2.58%	0.67%				
L.	Actuarial Value of Assets Return	10.71%	6.77%				

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 5 consecutive years, actuarial value will become equal to market value.

SCHEDULE D

SUMMARY OF RECIEPTS AND DISBURSEMENTS

Receipts for the Period	
Contributions:	
Members	9,493,378
Employer	24,755,620
Other	79,229
Total	34,328,227
Investment Income	4,396,040
TOTAL	38,724,267
Disbursements for the Period	
Benefit Payments	53,360,681
Refunds to Members	0
Administrative Expense	178,943
TOTAL	53,539,624
Excess of Receipts over Disbursements	(14,815,357)
Reconciliation of Asset Balances	
Market Value of Assets as of BOY	634,715,718
Adjustment to opening fund balance	781
Excess of Receipts over Disbursements	(14,815,357)
Market Value of Assets as of EOY	619,901,142
Rate of Return on Market Value of Assets	0.67%

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Service	Wage Inflation	Merit Component	Total Rate
0	4.00%	6.50%	10.76%
1	4.00	5.50	9.72
2	4.00	3.50	7.64
3-5	4.00	3.00	7.12
6-8	4.00	2.50	6.60
9-12	4.00	2.00	6.08
13-16	4.00	1.50	5.56
16-19	4.00	1.00	5.04
20 or more	4.00	0.00	4.00

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the RP-2000 Combined Table projected to 2015 with scale AA was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of		
	Disability	Death	
Age		Male	Female
20	0.30%	0.03%	0.02%
25	0.30	0.03	0.02
30	0.30	0.04	0.02
35	0.60	0.07	0.04
40	1.00	0.10	0.06
45	2.00	0.12	0.09
50	4.00	0.16	0.13
55	5.00	0.27	0.24

Annual Rate of Termination			
Service	Rate	Service	Rate
0	1.91%	10	1.29%
1	1.85	11	1.23
2	1.79	12	1.17
3	1.73	13	1.08
4	1.67	14	1.00
5	1.61	15	0.94
6	1.55	16	0.88
7	1.47	17	0.82
8	1.41	18	0.76
9	1.35	19	0.70

SERVICE RETIREMENT: Representative annual rates of assumed service retirement are as follows:

Hired Prior to July 1, 2013		Hired on or after July 1, 2013	
Service	Rate	Service	Rate
20	5.0%		
21	6.0		
22	7.0		
23	8.0		
24	9.0		
25	10.0	25	25.0%
26	12.0	26	12.0
27	14.0	27	14.0
28	15.0	28	15.0
29	20.0	29	20.0
30	100.0	30	100.0

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2015 using scale AA, with male mortality set forward 0 years and female mortality set forward 3 years is used for the period following service retirement and for beneficiaries of deceased members. For disabled lives, male mortality was assumed to be the RP-2000 table not projected with male mortality set forward 4 years. Female mortality was assumed to be consistent with rates issued by the IRS in Revenue Ruling 96-7 for use in determining current liability for disabled lives prior to January 1, 1995. The assumed rates of mortality provide a margin for future mortality improvements.

OCCUPATIONAL VS. NON OCCUPATIONAL DEATH: 20% of all deaths are assumed to be due to occupational causes.

OCCUPATIONAL VS. NON OCCUPATIONAL DISABILITY: 75% of disabilities are assumed to be due to occupational causes. For occupational disabilities the average benefit percentage is assumed to be 50.0%.

PERCENT MARRIED: 75% of employees who die before retirement are assumed to be married with the husband 3 years older than the wife.

ASSETS: Actuarial value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The actuarial value of assets cannot be more than 120% or less than 80% of the market value of assets.

VALUATION METHOD: Entry age normal actuarial cost method. See Schedule F for a brief description of this method.

AVERAGE DISABILITY IMPAIRMENT PERCENTAGE: 12.50%

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.50%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age normal actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the Plan.

SCHEDULE G

SUMMARY OF MAIN PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

Member	Sworn members of the Lexington-Fayette Urban County Government Division of Police and Division of Fire and Emergency Services.
Membership Service	Service rendered on or after the date of establishment of the fund or the fund of a city existing within the boundaries of the government immediately prior to the establishment of the urban-county government.
Total Service	Prior service, membership service, and service credit purchased by a member as provided in KRS 67A.402.
Average Salary	The highest average salary of the member for any three consecutive years of service.

Retirement Annuity

Hired prior to July 1, 2013 and for retirements commencing prior to July 1, 2013

Eligibility	Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired prior to July 1, 2013 and for retirements commencing on or after July 1, 2013

Eligibility	Anytime after obtaining age 41 and the completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired

member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired on or after July 1, 2013

Eligibility	Anytime after obtaining age 50 and the completion of 25 years of Total Service.
Benefit	Annuity is 2.25% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Occupational Disability Benefit

Eligibility	No requirements.

Occur Prior to July 1, 2013

Benefit	Annuity equal to a minimum of 60% of member's last rate of salary, increased above the 60% minimum by ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

	In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Occur on or after July 1, 2013	
Benefit	Annuity equal to a minimum of 50% of member's last rate of salary. If the member's percentage of disability exceeds 20% then the amount is equal to 60% of the member's last rate of salary plus ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Non-Occupational Disability Benefit	
Hired prior to July 1, 2013	
Eligibility	5 years of Total Service.
Benefit	2½% of Average Salary times years of Total Service subject to a minimum payment of 25% of Average Salary and a maximum payment of 75% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.

Hired on or after July 1, 2013

Eligibility	5 years of Total Service.
Benefit	2.25% of Average Salary times years of Total Service subject to a minimum payment of 22.5% of Average Salary and a maximum payment of 67.5% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.
Termination Benefit	If a member is terminated with less than 20 years of total service credit, he is entitled to a return of his accumulated contributions, without interest.

Occupational Death Benefit

Eligibility	No requirements.
Benefit	Surviving Spouse receives immediate annuity equal to 75% of the member's last rate of salary until death or remarriage. In addition, 10% of the member's last rate of salary is payable for each minor child until each child attains age 18 (age 23 if involved in educational activities). Maximum total income is 100% of final rate of salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule: One minor child 50% of Salary Two minor children 65% of Salary Three of more minor children 75% of Salary

Non-Occupational Death Benefit

Eligibility	5 Years of Total Service, married 6 months prior to death.
Benefit	Surviving spouse received immediate annuity equal to 1½% of the Average Salary multiplied by years of Total Service, until death or remarriage. The minimum benefit is 15% of Average Salary. In addition, this annuity is increased by ½ for the first minor child and by ¼ for each additional child. Maximum total income is 75% of Average Salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule: One minor child — 50% of Salary Two minor children — 65% of Salary Three of more minor children — 75% of Salary
Member Contributions	Prior to July 1, 2013, active members contribute 11% of current salary. Effective July 1, 2013 active member contributions will increase from 11% to 12%.
Employer Contributions	The government shall make current contributions to the fund on an actuarially funded basis. Such contributions shall be equal to the sum of: (1) An amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method, and (2) An amount sufficient to amortize the total unfunded liability actuarial accrued liability for the fund over a period of thirty years, using the level dollar amortization method, for a period beginning July 1, 2013 and ending June 30, 2043. The total contribution of the government shall be at least $20,000,000 until the actuarial funding level is at least 100%.

Post Retirement Cost-of-Living Increases

COLAs will be granted on the following schedule for both current and future retirees commencing upon the earlier of a member turning age 50 or being retired for five years until the Plan, utilizing the current COLA provisions, is 85% funded. At that time, COLA's will be granted each year by an amount, determined by the Board, of not less than 2.00% nor more than 5.00% compounded annually. In addition, those receiving a pension over $100,000 will not be eligible to receive a COLA until the later of the proposed conditions or January 1, 2016.

Above $100,000	1.0%
$75,000 to $99,000	1.0%
$50,000 to $74,999	1.5%
$40,000 to $49,999	1.5%
$35,000 to $39,999	2.0%
$30,000 to $34,999	2.0%
Under $30,000	2.0%

SCHEDULE H

TABLE 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS

AS OF JULY 1, 2016

Attained Age	Completed Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	> 40	Total
Under 25	19	11									30
Avg. Pay	36,178	41,125									37,992
25 to 29	40	120	6								166
Avg. Pay	35,847	41,280	47,357								40,190
30 to 34	19	100	49	44							212
Avg. Pay	32,267	42,981	48,864	58,967							46,699
35 to 39	4	41	48	123	18						234
Avg. Pay	33,489	43,819	50,049	60,559	67,747						55,560
40 to 44		2	17	87	116	11					233
Avg. Pay		44,697	50,465	60,606	70,614	80,304					65,642
45 to 49			10	33	63	42	8				156
Avg. Pay			52,676	57,667	69,574	81,285	98,114				70,588
50 to 54				18	27	18	10				73
Avg. Pay				59,424	68,583	78,900	105,216				73,887
55 to 59				1	3	4	3	2			13
Avg. Pay				56,516	70,691	91,694	84,313	97,586			83,344
60 to 64				2	1						3
Avg. Pay				48,787	84,824						60,799
65 to 69				1	1				1		3
Avg. Pay				55,762	59,741				75,350		63,618
70 & up											
Avg. Pay											
Total	82	274	130	309	229	75	21	2	1		1,123
Avg. Pay	34,979	42,299	49,735	59,866	69,879	81,124	99,524	97,586	75,350		56,874

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 & Under	176	$ 6,957,279	$ 39,530
51 – 55	167	8,688,486	52,027
56 – 60	133	7,797,702	58,629
61 – 65	150	7,875,232	52,502
66 – 70	206	9,747,619	47,319
71 – 75	142	6,449,877	45,422
76 – 80	108	4,474,791	41,433
Over 80	79	2,846,855	36,036
Total	1,161	$ 54,837,840	$ 47,233

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LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT
Lexington, Kentucky

Policemen's & Firefighters'
Retirement Fund

Report on the Valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Retirement Fund

Prepared as of July 1, 2017

www.CavMacConsulting.com

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April 10, 2018

Board of Trustees
Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507

Dear Members of the Board:

We are pleased to submit herewith the results of the actuarial valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan prepared as of July 1, 2017. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2017 and to recommend contribution rates. A separate report will be issued for reporting accounting information under GASB 67. The Lexington-Fayette County Government is solely responsible for the accuracy and comprehensiveness of the data.

The promised benefits of the Plan reflecting the changes in HB 430 are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Actuarial value of plan assets is used for actuarial valuation purposes. The assumptions used for this valuation were developed in the experience study for the six-year period ending June 30, 2016 except for the investment rate of return. This valuation uses 7.50% as the investment rate of return. Gains and losses are reflected in the unfunded accrued liability that is being amortized over a closed period on a level dollar basis. The actuarially determined employer contribution rate is 35.85% of payroll for the plan year ending June 30, 2018 and 37.53% of payroll for the plan year ending June 30, 2019. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

This is to certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan. The investment return assumption, which was set by the Board, is a prescribed assumption defined by Actuarial Standard of Practice No. 27 (ASOP 27). Details and discussion regarding the return assumption are shown in the report of the experience study for the six-year period ending June 30, 2016.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan. The undersigned are members of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Todd B. Green ASA, FCA, MAAA
Principal & Consulting Actuary

Matthew Yonz ASA, FCA, MAAA
Actuary

TBG:jmy

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LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JULY 1, 2017

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	July 1, 2017	July 1, 2016
Active members:		
Number	1,144	1,123
Annualized compensation	$ 73,559,366	$ 63,869,423
Retired members and beneficiaries:		
Number	1,201	1,161
Annual benefits	$ 57,493,477	$ 54,837,840
Assets:		
Market Value	$ 695,183,216	$ 619,901,142
Actuarial Value	686,133,702	645,681,282
Unfunded actuarial accrued liability	$ 261,525,982	$ 184,598,489
Amortization Period	26	27
Fiscal Years Ending	**2019***	**2017 & 2018**
Actuarially determined contribution rate (ADC):		
Normal	11.27%	12.35%
Accrued liability	26.26	23.50
Total*	37.53%	35.85%
Member contribution rate	12.00%	12.00%

*The full funding rate, reflecting the results of the experience study, is 39.20% for the fiscal year ending 2019. This amount will be phased into over a two year period. The actuarially determined contribution rate is equal to 37.53% (the average of 35.85% and 39.20%). The actuarially determined contribution for the fiscal year ending 2020 will be determined by the July 1, 2018 valuation without adjustment.

2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. The actual cost-of-living allowances granted through July 1, 2017 were reflected in the valuation.

3. The development of the actuarial value of assets is shown in Schedule C. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.

4. The entry age normal actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method. The cost method produces a contribution rate equal to the sum of the normal contribution rate and the actuarially accrued liability contribution rate which is sufficient to amortize the unfunded actuarially accrued liability over 30 years beginning July 1, 2013 on a level dollar basis. Effective July 1, 2013, and for each fiscal year thereafter, the Government contribution shall not be less than $20 million unless the Plan is 100% funded.

5. Any member who has at least five years of service as a member of the fund my purchase up to four years of service. The amount required to purchase service is based on an actuarial formula. Prior to the July 1, 2015 actuarial valuation, service purchases were not reported by Fund Staff. Service purchases were first reported by Fund Staff in the July 1, 2015 valuation.

6. Comments on the valuation results as of July 1, 2017 are given in Section IV and further discussion of the contributions is set out in Section V.

7. The actuarial assumptions are outlined in Schedule E, and were updated since the prior valuation. The assumptions used for this valuation were developed in the experience study for the six-year period ending June 30, 2016 except for the investment rate of return. The investment return assumption, which was set by the Board, is a prescribed assumption defined by Actuarial Standard of Practice No. 27 (ASOP 27). Details and discussion regarding the return assumption are shown in the report of the experience study for the six-year period ending June 30, 2016.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Government. The valuation included 1,144 active members with annualized compensation totaling $73,559,366.

2. The following table shows the number of retired members and beneficiaries as of July 1, 2017 together with the amount of their annual retirement benefits payable under the Plan as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2017

GROUP	NUMBER	ANNUAL RETIREMENT BENEFITS
Service Retirements	632	$ 34,947,363
Disability Retirements	402	17,867,132
Beneficiaries of Deceased Members	167	4,678,982
Total	1,201	$ 57,493,477

3. Table 1 of Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III – ASSETS

As of July 1, 2017, the total market value of assets amounted to $695,183,216. The actuarial value of assets used for the current valuation was $686,133,702. Schedule C shows the development of the actuarial value of assets as of July 1, 2017. Schedule D shows the Summary of Receipts and Disbursements.

SECTION IV – COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Plan as of July 1, 2017. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.

2. The valuation balance sheet shows that the Plan has total prospective liabilities of $1,095,635,583 of which $691,861,458 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and $403,774,125 is for the prospective benefits payable on account of present active members. Against these liabilities, the Plan has a total present actuarial value of assets of $686,133,702 as of July 1, 2017. The difference of $409,501,881 between the total liabilities and the total present assets represents the present value of future contributions.

3. The contributions to the Plan consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 23.27% of payroll are required under the entry age normal method. Of this amount, 12.00% is paid by the members and the remaining 11.27% is required by the Government.

4. Prospective normal contributions at the rate of 23.27% have a present value of $147,975,899. When this amount is subtracted from $409,501,881, which is the present value of the total future contributions to be made, there remains $261,525,982 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V – CONTRIBUTIONS PAYABLE

1. Under Section 67A.520 of the law governing the Fund, the Government shall make current contributions to the Fund on an actuarially funded basis equal to the sum of the normal contribution rate and the actuarially accrued contribution rate that will be sufficient to amortize the total unfunded actuarial accrued liability over a period of thirty years beginning July 1, 2013 using the level-dollar amortization method.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 23.27%.
3. Each member shall contribute an amount equal to 12.00% of current salary.
4. The Government's normal contribution rate is equal to the difference between the normal contribution rate of 23.27% and the member contribution rate of 12.00%, or 11.27% of payroll.
5. The annual accrued liability contribution rate is determined to be 26.26% of payroll. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 26 year period on a level dollar basis.
6. The actuarially determined employer contribution rate for the plan years ending June 30, 2019 is 37.53% of payroll. The full funding rate, reflecting the results of the experience study, is 39.20% for the fiscal year ending 2019. This amount will be phased into over a two year period. The actuarially determined contribution rate is equal to 37.53% (the average of 35.85% and 39.20%). The actuarially determined contribution for the fiscal year ending 2020 will be determined by the July 1, 2018 valuation without adjustment.
7. The following table on the following page summarizes the employer contributions which were determined by the July 1, 2017 valuation and are recommended for use.

ANNUAL REQUIRED CONTRIBUTION RATE
FOR PLAN YEARS ENDING JUNE 30, 2019

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	11.27%
Accrued Liability	26.26
Total*	37.53%

* The full funding rate, reflecting the results of the experience study, is 39.20% for the fiscal year ending 2019. This amount will be phased into over a two year period. The actuarially determined contribution rate is equal to 37.53% (the average of 35.85% and 39.20%). The actuarially determined contribution for the fiscal year ending 2020 will be determined by the July 1, 2018 valuation without adjustment.

SECTION VI – OTHER DISCLOSURES

1. The information required under the Governmental Accounting Standards (GASB) Statements No. 67 and 68 for the Plan and the City will be issued in separate reports. We are providing the following information for informational purposes only.

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JULY 1, 2017

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	1,201
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,144
Total	2,345

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
7/01/2012	$525,849,582	$687,673,831	$257,781,662	69.4%	$54,595,799	296.4%
7/01/2013	533,892,554	738,343,325	161,824,250	66.0	62,455,725	327.4
7/01/2014	579,749,633	760,384,029	204,450,771	76.5	63,248,485	285.6
7/01/2015	623,184,562	794,383,474	180,634,396	72.3	62,102,632	275.7
7/01/2016	645,681,282	830,279,771	171,198,912	78.4	63,869,423	289.0
7/01/2017	686,133,702	947,659,684	261,525,982	72.4	73,559,366	355.5

3. Additional information as of July 1, 2017 follows:

Valuation date	July 1, 2017
Actuarial cost method	Entry age normal
Amortization period	Level dollar, closed
Remaining amortization period	26 years
Asset valuation method	Actuarial Related Value
Actuarial assumptions:	
Investment rate of return (includes inflation)	7.50%
Projected salary increases (includes inflation)	9.50% to 3.50%
Inflation	2.75%
Cost-of-living adjustments	Refer to Schedule G

SECTION VII – EXPERIENCE

The following table shows the change in the accrued actuarial liability and the actuarial value of assets from July 1, 2016 to July 1, 2017 .

DETERMINATION OF ACTUARIAL (GAIN) / LOSS

A. Accrued Actuarial Liability (Gain) / Loss Analysis

1. Actual Accrued Actuarial Liability as of July 1, 2016	$830,279,771
2. Normal Cost	$14,638,448
3. Interest on items 1 and 2 [(1+2) x 7.5%]	$63,368,866
4. Benefit Payments	($56,718,545)
5. Interest on item [4 x 7.5% x .5]	($2,126,945)
6. Expected Accrued Actuarial Liability as of July 1, 2017 (1. + 2. + 3. + 4. + 5.)	$849,441,595
7. Changes due to:	
a. Assumption changes	$61,521,011
b. Plan amendments	$0
c. Funding Method	$0
d. Other	$16,297,527
8. Actual Accrued Actuarial Liability as of July 1, 2017	$947,659,684
9. Liability (Gain) / Loss [8. - 7 - 6.]	$20,399,551
10 Items Affecting Calculation of Accrued Actuarial Liability:	
a. Plan provisions reflected in the accrued liability (see Schedule G)	
b. Actuarial assumptions and methods used to determine actuarial accrued liability (see Schedule E and Schedule F)	

B. Asset (Gain) / Loss Analysis

1. Actuarial Value of Assets as of July 1, 2016	$645,681,282
2. Interest on item [1 x 7.5%]	$48,426,096
3. Contributions and Other Revenue	$40,995,461
4. Interest on item [2 x 7.5% x .5]	$1,537,330
5. Benefit Payments	($56,718,545)
6. Interest on item [5 x 7.5% x .5]	($2,126,945)
7. Expected Actuarial Value of Assets as of July 1, 2017	$677,794,679
8. Actuarial Value of Assets as of July 1, 2017	$686,133,702
9. Asset (Gain) / Loss	($8,339,023)

C. Total Actuarial (Gain) / Loss During 2016 / 2017 Plan Year (A.9 + B.9)	$12,060,528

ANALYSIS OF (GAIN) / LOSS

1.	Expected Unfunded Accrued Liability as of July 1, 2017: (Page 8: A.6 - B.7)		$171,646,916
2.	Change in Unfunded Accrued Liability During 2016/2017 Plan Year:		
	a. Due to Salary	$2,867,240	
	b. Due to Investment Performance	($8,339,023)	
	c. Due to Turnover	$273,934	
	d. Due to New Retirements	$7,686,776	
	e. Due to Disability Retirements	$3,148,650	
	f. Due to Data/Service Adjustments/Benefit Payments	$3,189,383	
	g. Due to New Members	$660,299	
	h. Due to Mortality	$2,573,269	
	i. Other	$16,297,527	
	j. Due to Assumption Changes	$61,521,011	
	k. Due to Method Changes	$0	
	l. Due to Plan Changes	$0	
3.	Total (Gain) / Loss During the 2016/2017 Plan Year (Sum of changes in item 2)		$89,879,066
4.	Unfunded Accrued Liability as of July 1, 2017: (1. + 3.)		$261,525,982

5. Comments on Change in Unfunded Accrued Liability Contribution Rate:

Salary/Service: Actual average salary increase of 8.1% compared to expected increases of 6.2%

Investment Performance: 8.8% actual vs. 7.5% expected return on the actuarial value of assets.

Turnover: Net effect on the valuation liabilities of actual deaths, terminations of employment and disabilities different from what was anticipated in the aggregate by the assumptions related to those events.

New retirements: Net effect of differences in expected vs. actual numbers of, and benefits for, new retirements and refund of employee contributions.

Due to Differences and Timing of Contributions: Due to the one year lag of when the required contribution is determined and when it is deposited into the fund.

Data/Service Adjustments: Effect of service adjustments, data adjustments, and the difference between actual and expected benefit payments.

Assumption Changes: Adopted assumptions from the experience study for the six-year period ending 6/30/2016 except for the investment rate of return.

Method Changes: None

Plan Changes: None

SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

			July 1, 2017
(1)	Present value of prospective benefits:		
	(a)	Present active members	$ 403,774,125
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	691,861,458
	(c)	Total	$ 1,095,635,583
(2)	Present value of future Government and member normal contributions before expenses		147,975,899
(3)	Actuarial accrued liabilities 1(c) – (2)		$ 947,659,684
(4)	Actuarial value of assets		686,133,702
(5)	Unfunded actuarial accrued liability (3) – (4)		$ 261,525,982

SCHEDULE B

VALUATION BALANCE SHEET

ACTUARIAL LIABILITIES		
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits		$ 691,861,458
Present value of prospective benefits payable on account of present active members		$ 403,774,125
Total liabilities		$1,095,635,583
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		$ 686,133,702
Present value of future contributions		
Government and member normal contributions	147,975,899	
Unfunded accrued liability contributions	261,525,982	
Total prospective contributions		$ 409,501,881
Total assets		$1,095,635,583

SCHEDULE C
Development of Actuarial Value of Assets

	Valuation date June 30:	2016	2017	2018	2019	2020	2021
A.	Actuarial Value Beginning of Year	$ 623,184,562	$ 645,681,282				
B.	Market Value End of Year	619,901,142	695,183,216				
C.	Market Value Beginning of Year	634,715,718	619,901,142				
D.	Cash Flow						
	D1. Contributions	$ 34,248,997	$ 40,854,410				
	D2. Other Revenue	79,229	141,051				
	D3. Benefit Payments	(53,360,681)	(56,718,545)				
	D4. Administrative Expenses	(178,943)	(226,211)				
	D5. Investment Expenses	(2,892,329)	(3,005,555)				
	D6. Net	$ (22,103,727)	$ (18,954,850)				
E.	Investment Income						
	E1. Market Total: B.-C.-D6.	$ 7,289,151	$ 94,236,924				
	E2. Assumed Rate (Net of Expenses)	7.50%	7.50%				
	E3. Amount for Immediate Recognition	49,961,292	49,134,736				
	E4. Amount for Phased-In Recognition	(42,672,141)	45,102,188				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20 * E4.	$ (8,534,428)	$ 9,020,438	$ -	$ -	$ -	$ -
	F2. First Prior Year	(6,178,693)	(8,534,428)	9,020,438	-	-	-
	F3. Second Prior Year	10,928,441	(6,178,693)	(8,534,428)	9,020,438	-	-
	F4. Third Prior Year	5,036,776	10,928,441	(6,178,693)	(8,534,428)	9,020,438	-
	F5. Fourth Prior Year	(6,612,941)	5,036,776	10,928,441	(6,178,693)	(8,534,428)	9,020,438
	F6. Total Recognized Investment Gain	$ (5,360,845)	$ 10,272,534	$ 5,235,758	$ (5,692,683)	$ 486,010	$ 9,020,438
G.	Preliminary Actuarial Value End of Year						
	A.+D6.+E3.+F6.	$ 645,681,282	$ 686,133,702				
H.	Corridor						
	I1. 80% of Market Value	$ 495,920,914	$ 556,146,573				
	I2. 120% of Market Value	$ 743,881,370	$ 834,219,859				
I.	Actuarial Value End of Year						
	H. Not Less than I1. or Greater than I2	$ 645,681,282	$ 686,133,702				
J.	Difference Between Market & Actuarial Values	$ (25,780,140)	$ 9,049,514	$ 3,813,764	$ 9,506,448	$ 9,020,438	$ -
K.	Market Value of Asets Return	0.67%	14.87%				
L.	Actuarial Value of Assets Return	6.77%	8.81%				

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 5 consecutive years, actuarial value will become equal to market value.

SCHEDULE D

SUMMARY OF RECIEPTS AND DISBURSEMENTS

Receipts for the Period	
Contributions:	
Members	11,186,704
Employer	29,667,706
Other	141,051
Total	40,995,461
Investment Income	91,231,368
TOTAL	132,226,829
Disbursements for the Period	
Benefit Payments	56,718,545
Administrative Expense	226,211
TOTAL	56,944,756
Excess of Receipts over Disbursements	75,282,073
Reconciliation of Asset Balances	
Market Value of Assets as of BOY	619,901,142
Adjustment to opening fund balance	1
Excess of Receipts over Disbursements	75,282,073
Market Value of Assets as of EOY	695,183,216
Rate of Return on Market Value of Assets	14.87%

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Service	Wage Inflation	Merit Component	Total Rate
0	4.00%	6.50%	10.76%
1	4.00	5.50	9.72
2	4.00	3.50	7.64
3-5	4.00	3.00	7.12
6-8	4.00	2.50	6.60
9-12	4.00	2.00	6.08
13-16	4.00	1.50	5.56
16-19	4.00	1.00	5.04
20 or more	4.00	0.00	4.00

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the RP-2000 Combined Table projected to 2015 with scale AA was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of		
	Disability	Death	
Age		Male	Female
20	0.30%	0.03%	0.02%
25	0.30	0.03	0.02
30	0.30	0.04	0.02
35	0.60	0.07	0.04
40	1.00	0.10	0.06
45	2.00	0.12	0.09
50	4.00	0.16	0.13
55	5.00	0.27	0.24

Annual Rate of Termination			
Service	Rate	Service	Rate
0	1.91%	10	1.29%
1	1.85	11	1.23
2	1.79	12	1.17
3	1.73	13	1.08
4	1.67	14	1.00
5	1.61	15	0.94
6	1.55	16	0.88
7	1.47	17	0.82
8	1.41	18	0.76
9	1.35	19	0.70

SERVICE RETIREMENT: Representative annual rates of assumed service retirement are as follows:

Hired Prior to July 1, 2013		Hired on or after July 1, 2013	
Service	Rate	Service	Rate
20	5.0%		
21	6.0		
22	7.0		
23	8.0		
24	9.0		
25	10.0	25	25.0%
26	12.0	26	12.0
27	14.0	27	14.0
28	15.0	28	15.0
29	20.0	29	20.0
30	100.0	30	100.0

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2015 using scale AA, with male mortality set forward 0 years and female mortality set forward 3 years is used for the period following service retirement and for beneficiaries of deceased members. For disabled lives, male mortality was assumed to be the RP-2000 table not projected with male mortality set forward 4 years. Female mortality was assumed to be consistent with rates issued by the IRS in Revenue Ruling 96-7 for use in determining current liability for disabled lives prior to January 1, 1995. The assumed rates of mortality provide a margin for future mortality improvements.

OCCUPATIONAL VS. NON OCCUPATIONAL DEATH: 20% of all deaths are assumed to be due to occupational causes.

OCCUPATIONAL VS. NON OCCUPATIONAL DISABILITY: 75% of disabilities are assumed to be due to occupational causes. For occupational disabilities the average benefit percentage is assumed to be 50.0%.

PERCENT MARRIED: 75% of employees who die before retirement are assumed to be married with the husband 3 years older than the wife.

ASSETS: Actuarial value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The actuarial value of assets cannot be more than 120% or less than 80% of the market value of assets.

VALUATION METHOD: Entry age normal actuarial cost method. See Schedule F for a brief description of this method.

AVERAGE DISABILITY IMPAIRMENT PERCENTAGE: 12.50%

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.50%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age normal actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the Plan.

SCHEDULE G

SUMMARY OF MAIN PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

Member	Sworn members of the Lexington-Fayette Urban County Government Division of Police and Division of Fire and Emergency Services.
Membership Service	Service rendered on or after the date of establishment of the fund or the fund of a city existing within the boundaries of the government immediately prior to the establishment of the urban-county government.
Total Service	Prior service, membership service, and service credit purchased by a member as provided in KRS 67A.402.
Average Salary	The highest average salary of the member for any three consecutive years of service.

Retirement Annuity

Hired prior to July 1, 2013 and for retirements commencing prior to July 1, 2013

Eligibility	Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired prior to July 1, 2013 and for retirements commencing on or after July 1, 2013

Eligibility	Anytime after obtaining age 41 and the completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired

member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired on or after July 1, 2013

Eligibility	Anytime after obtaining age 50 and the completion of 25 years of Total Service.
Benefit	Annuity is 2.25% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Occupational Disability Benefit

Eligibility	No requirements.

Occur Prior to July 1, 2013

Benefit	Annuity equal to a minimum of 60% of member's last rate of salary, increased above the 60% minimum by ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.

Occur on or after July 1, 2013

Benefit

Annuity equal to a minimum of 50% of member's last rate of salary. If the member's percentage of disability exceeds 20% then the amount is equal to 60% of the member's last rate of salary plus ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference.

Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.

Non-Occupational Disability Benefit

Hired prior to July 1, 2013

Eligibility

5 years of Total Service.

Benefit

2½% of Average Salary times years of Total Service subject to a minimum payment of 25% of Average Salary and a maximum payment of 75% of Average Salary.

Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.

Hired on or after July 1, 2013

Eligibility	5 years of Total Service.
Benefit	2.25% of Average Salary times years of Total Service subject to a minimum payment of 22.5% of Average Salary and a maximum payment of 67.5% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.
Termination Benefit	If a member is terminated with less than 20 years of total service credit, he is entitled to a return of his accumulated contributions, without interest.

Occupational Death Benefit

Eligibility	No requirements.
Benefit	Surviving Spouse receives immediate annuity equal to 75% of the member's last rate of salary until death or remarriage. In addition, 10% of the member's last rate of salary is payable for each minor child until each child attains age 18 (age 23 if involved in educational activities). Maximum total income is 100% of final rate of salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule: One minor child 50% of Salary Two minor children 65% of Salary Three of more minor children 75% of Salary

Non-Occupational Death Benefit

Eligibility	5 Years of Total Service, married 6 months prior to death.
Benefit	Surviving spouse received immediate annuity equal to 1½% of the Average Salary multiplied by years of Total Service, until death or remarriage. The minimum benefit is 15% of Average Salary. In addition, this annuity is increased by ½ for the first minor child and by ¼ for each additional child. Maximum total income is 75% of Average Salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule: One minor child — 50% of Salary Two minor children — 65% of Salary Three of more minor children — 75% of Salary
Member Contributions	Prior to July 1, 2013, active members contribute 11% of current salary. Effective July 1, 2013 active member contributions will increase from 11% to 12%.
Employer Contributions	The government shall make current contributions to the fund on an actuarially funded basis. Such contributions shall be equal to the sum of: (1) An amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method, and (2) An amount sufficient to amortize the total unfunded liability actuarial accrued liability for the fund over a period of thirty years, using the level dollar amortization method, for a period beginning July 1, 2013 and ending June 30, 2043. The total contribution of the government shall be at least $20,000,000 until the actuarial funding level is at least 100%.

Post Retirement Cost-of-Living Increases

COLAs will be granted on the following schedule for both current and future retirees commencing upon the earlier of a member turning age 50 or being retired for five years until the Plan, utilizing the current COLA provisions, is 85% funded. At that time, COLA's will be granted each year by an amount, determined by the Board, of not less than 2.00% nor more than 5.00% compounded annually. In addition, those receiving a pension over $100,000 will not be eligible to receive a COLA until the later of the proposed conditions or January 1, 2016.

Above $100,000	1.0%
$75,000 to $99,000	1.0%
$50,000 to $74,999	1.5%
$40,000 to $49,999	1.5%
$35,000 to $39,999	2.0%
$30,000 to $34,999	2.0%
Under $30,000	2.0%

SCHEDULE H

TABLE 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS

AS OF JULY 1, 2017

Attained Age	Completed Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	> 40	Total
Under 25	25	15									40
Avg. Pay	40,104	45,832									42,252
25 to 29	35	139	7								181
Avg. Pay	41,169	48,542	51,381								47,226
30 to 34	13	115	54	16	1						199
Avg. Pay	34,197	48,919	56,686	70,217	90,488						51,986
35 to 39	4	37	50	114	37						242
Avg. Pay	37,969	50,109	56,556	68,375	75,536						63,732
40 to 44		3	21	56	102	37					219
Avg. Pay		51,605	56,983	70,538	76,446	82,289					73,716
45 to 49			8	28	52	71	15	1			175
Avg. Pay			59,760	67,538	74,102	88,344	98,819	124,139			80,578
50 to 54			1	14	19	22	8	1			65
Avg. Pay			56,573	70,516	73,102	84,420	119,613	164,676			83,255
55 to 59				1	6	4	4				15
Avg. Pay				66,757	81,381	82,661	100,877				85,946
60 to 64				1	2	1	1	1			6
Avg. Pay				66,028	61,503	95,077	106,400	84,494			79,167
65 to 69				1	1						2
Avg. Pay				64,451	67,675						66,063
70 & up											
Avg. Pay											
Total	77	309	141	231	220	135	28	3			1,144
Avg. Pay	39,480	48,768	56,594	69,021	75,473	85,926	105,325	124,436			64,300

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 & Under	179	$ 6,918,031	$ 38,648
51 – 55	167	8,596,576	51,477
56 – 60	157	9,059,927	57,707
61 – 65	140	7,854,094	56,101
66 – 70	198	9,671,759	48,847
71 – 75	154	7,078,485	45,964
76 – 80	120	5,087,876	42,399
Over 80	86	3,226,728	37,520
Total	1,201	$ 57,493,476	$ 47,871

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LEXINGTON-FAYETTE
URBAN COUNTY GOVERNMENT
Lexington, Kentucky

Policemen's & Firefighters'
Retirement Fund

Report on the Valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Retirement Fund

Prepared as of July 1, 2018

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December 7, 2018

Board of Trustees
Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507

Dear Members of the Board:

We are pleased to submit herewith the results of the actuarial valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan prepared as of July 1, 2018. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2018 and to recommend contribution rates. A separate report will be issued for reporting accounting information under GASB 67. The Lexington-Fayette County Government is solely responsible for the accuracy and comprehensiveness of the data.

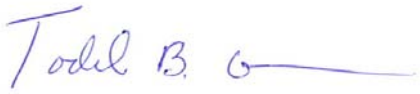
The promised benefits of the Plan reflecting the changes in HB 430 are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Actuarial value of plan assets is used for actuarial valuation purposes. The assumptions used for this valuation were developed in the experience study for the six-year period ending June 30, 2016 except for the investment rate of return. This valuation uses 7.50% as the investment rate of return. Gains and losses are reflected in the unfunded accrued liability that is being amortized over a closed period on a level dollar basis. The actuarially determined employer contribution rate is 38.99% of payroll for the plan year ending June 30, 2020. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

This is to certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan. The investment return assumption, which was set by the Board, is a prescribed assumption defined by Actuarial Standard of Practice No. 27 (ASOP 27). Details and discussion regarding the return assumption are shown in the report of the experience study for the six-year period ending June 30, 2016.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan. The undersigned are members of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Todd B. Green ASA, FCA, MAAA
Principal & Consulting Actuary

Beverly Bailey ASA, EA, FCA, MAAA
Senior Actuary

TBG:cc

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LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JULY 1, 2018

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	July 1, 2018	July 1, 2017
Active members:		
Number	1,180	1,144
Annualized compensation	$ 78,063,051	$ 73,559,366
Retired members and beneficiaries:		
Number	1,232	1,201
Annual benefits	$ 59,805,952	$ 57,493,477
Assets:		
Market Value	$ 745,170,974	$ 695,183,216
Actuarial Value	725,884,686	686,133,702
Unfunded actuarial accrued liability	$ 253,949,666	$ 261,525,982
Amortization Period	25	26
Fiscal Years Ending	**2020**	**2019***
Actuarially determined contribution rate (ADC):		
Normal	11.84%	11.27%
Accrued liability	27.15	26.26
Total	38.99%	37.53%
Member contribution rate	12.00%	12.00%

* The full funding rate, reflecting the results of the experience study, is 39.20% for the fiscal year ending 2019. This amount was phased in over a two year period. The actuarially determined contribution rate was equal to 37.53% (the average of 35.85% and 39.20%). The actuarially determined contribution for the fiscal year ending 2020 is unadjusted.

2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. The actual cost-of-living allowances granted through July 1, 2018 were reflected in the valuation.

3. The development of the actuarial value of assets is shown in Schedule C. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.

4. The entry age normal actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method. The cost method produces a contribution rate equal to the sum of the normal contribution rate and the actuarially accrued liability contribution rate which is sufficient to amortize the unfunded actuarially accrued liability over 30 years beginning July 1, 2013 on a level dollar basis. Effective July 1, 2013, and for each fiscal year thereafter, the Government contribution shall not be less than $20 million unless the Plan is 100% funded.

5. Any member who has at least five years of service as a member of the fund may purchase up to four years of service. The amount required to purchase service is based on an actuarial formula.

6. Comments on the valuation results as of July 1, 2018 are given in Section IV and further discussion of the contributions is set out in Section V.

7. The assumptions used for this valuation were developed in the experience study for the six-year period ending June 30, 2016 except for the investment rate of return. The investment return assumption, which was set by the Board, is a prescribed assumption defined by Actuarial Standard of Practice No. 27 (ASOP 27). Details and discussion regarding the return assumption are shown in the report of the experience study for the six-year period ending June 30, 2016.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Government. The valuation included 1,180 active members with annualized compensation totaling $78,063,051.

2. The following table shows the number of retired members and beneficiaries as of July 1, 2018 together with the amount of their annual retirement benefits payable under the Plan as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2018

GROUP	NUMBER	ANNUAL RETIREMENT BENEFITS
Service Retirements	652	$ 36,481,889
Disability Retirements	404	18,233,235
Beneficiaries of Deceased Members	176	5,090,828
Total	1,232	$ 59,805,952

3. Table 1 of Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III – ASSETS

As of July 1, 2018, the total market value of assets amounted to $745,170,974. The actuarial value of assets used for the current valuation was $725,884,686. Schedule C shows the development of the actuarial value of assets as of July 1, 2018. Schedule D shows the Summary of Receipts and Disbursements.

SECTION IV – COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Plan as of July 1, 2018. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.

2. The valuation balance sheet shows that the Plan has total prospective liabilities of $1,130,985,164 of which $718,004,795 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and $412,980,369 is for the prospective benefits payable on account of present active members. Against these liabilities, the Plan has a total present actuarial value of assets of $725,884,686 as of July 1, 2018. The difference of $405,100,478 between the total liabilities and the total present assets represents the present value of future contributions.

3. The contributions to the Plan consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 23.84% of payroll are required under the entry age normal method. Of this amount, 12.00% is paid by the members and the remaining 11.84% is required by the Government.

4. Prospective normal contributions at the rate of 23.84% have a present value of $151,150,812. When this amount is subtracted from $405,100,478, which is the present value of the total future contributions to be made, there remains $253,949,666 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V – CONTRIBUTIONS PAYABLE

1. Under Section 67A.520 of the law governing the Fund, the Government shall make current contributions to the Fund on an actuarially funded basis equal to the sum of the normal contribution rate and the actuarially accrued contribution rate that will be sufficient to amortize the total unfunded actuarial accrued liability over a period of thirty years beginning July 1, 2013 using the level-dollar amortization method.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 23.84%.
3. Each member shall contribute an amount equal to 12.00% of current salary.
4. The Government's normal contribution rate is equal to the difference between the normal contribution rate of 23.84% and the member contribution rate of 12.00%, or 11.84% of payroll.
5. The annual accrued liability contribution rate is determined to be 27.15% of payroll. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 25 year period on a level dollar basis.
6. The actuarially determined employer contribution rate for the plan years ending June 30, 2020 is, therefore, 38.99% of payroll.
7. The following table on the following page summarizes the employer contributions which were determined by the July 1, 2018 valuation and are recommended for use.

ANNUAL REQUIRED CONTRIBUTION RATE
FOR PLAN YEARS ENDING JUNE 30, 2020

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	11.84%
Accrued Liability	27.15
Total*	38.99%

SECTION VI – OTHER DISCLOSURES

1. The information required under the Governmental Accounting Standards (GASB) Statements No. 67 and 68 for the Plan and the City will be issued in separate reports. We are providing the following information for informational purposes only.

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JULY 1, 2018

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	1,232
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,180
Total	2,412

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
7/01/2013	$533,892,554	$738,343,325	$204,450,771	72.3%	$62,455,725	327.4%
7/01/2014	579,749,633	760,384,029	180,634,396	76.2	63,248,485	285.6
7/01/2015	623,184,562	794,383,474	171,198,912	78.4	62,102,632	275.7
7/01/2016	645,681,282	830,279,771	184,598,489	77.8	63,869,423	289.0
7/01/2017	686,133,702	947,659,684	261,525,982	72.4	73,559,366	355.5
7/01/2018	725,884,686	979,834,352	253,949,666	74.1	78,063,051	325.3

3. Additional information as of July 1, 2018 follows:

Valuation date	July 1, 2018
Actuarial cost method	Entry age normal
Amortization period	Level dollar, closed
Remaining amortization period	25 years
Asset valuation method	Actuarial Related Value
Actuarial assumptions:	
Investment rate of return (includes inflation)	7.50%
Projected salary increases (includes inflation)	9.50% to 3.50%
Inflation	2.75%
Cost-of-living adjustments	Refer to Schedule G

SECTION VII – EXPERIENCE

The following table shows the change in the accrued actuarial liability and the actuarial value of assets from July 1, 2017 to July 1, 2018 .

DETERMINATION OF ACTUARIAL (GAIN) / LOSS

A. Accrued Actuarial Liability (Gain) / Loss Analysis	
1. Actual Accrued Actuarial Liability as of July 1, 2017	$947,659,684
2. Normal Cost	$17,943,676
3. Interest on items 1 and 2 [(1+2) x 7.5%]	$72,420,252
4. Benefit Payments	($59,050,010)
5. Interest on item [4 x 7.5% x .5]	($2,214,375)
6. Expected Accrued Actuarial Liability as of July 1, 2018 (1. + 2. + 3. + 4. + 5.)	$976,759,227
7. Changes due to:	
a. Assumption changes	$1,738,504
b. Plan amendments	$0
c. Funding Method	$0
d. Other	$0
8. Actual Accrued Actuarial Liability as of July 1, 2018	$979,834,352
9. Liability (Gain) / Loss [8. - 7 - 6.]	$1,336,621
10 Items Affecting Calculation of Accrued Actuarial Liability:	
a. Plan provisions reflected in the accrued liability (see Schedule G)	
b. Actuarial assumptions and methods used to determine actuarial accrued liability (see Schedule E and Schedule F)	
B. Asset (Gain) / Loss Analysis	
1. Actuarial Value of Assets as of July 1, 2017	$686,133,702
2. Interest on item [1 x 7.5%]	$51,460,028
3. Contributions and Other Revenue	$38,335,168
4. Interest on item [2 x 7.5% x .5]	$1,437,569
5. Benefit Payments	($59,050,010)
6. Interest on item [5 x 7.5% x .5]	($2,214,375)
7. Expected Actuarial Value of Assets as of July 1, 2018	$716,102,082
8. Actuarial Value of Assets as of July 1, 2018	$725,884,686
9. Asset (Gain) / Loss	($9,782,604)
C. Total Actuarial (Gain) / Loss During 2017 / 2018 Plan Year (A.9 + B.9)	($8,445,983)

ANALYSIS OF (GAIN) / LOSS

1.	Expected Unfunded Accrued Liability as of July 1, 2018: (Page 8: A.6 - B.7)		$260,657,145
2.	Change in Unfunded Accrued Liability During 2017/2018 Plan Year:		
	a. Due to Salary	($5,476,716)	
	b. Due to Investment Performance	($9,782,604)	
	c. Due to Turnover	$498,495	
	d. Due to New Retirements	$5,971,679	
	e. Due to Disability Retirements	($1,958,178)	
	f. Due to Data/Service Adjustments/Benefit Payments	$2,892,063	
	g. Due to New Members	$892,722	
	h. Due to Mortality	$255,060	
	i. Other	$0	
	j. Due to Assumption Changes	$0	
	k. Due to Method Changes	$0	
	l. Due to Plan Changes	$0	
3.	Total (Gain) / Loss During the 2017/2018 Plan Year (Sum of changes in item 2)		($6,707,479)
4.	Unfunded Accrued Liability as of July 1, 2018: (1. + 3.)		$253,949,666

5. Comments on Change in Unfunded Accrued Liability Contribution Rate:
Salary/Service: Actual average salary increase of 2.7% compared to expected increases of 6.2%
Investment Performance: 9.0% actual vs. 7.5% expected return on the actuarial value of assets.
Turnover: Net effect on the valuation liabilities of actual deaths, terminations of employment and disabilities different from what was anticipated in the aggregate by the assumptions related to those events.
New retirements: Net effect of differences in expected vs. actual numbers of, and benefits for, new retirements and refund of employee contributions.
Due to Differences and Timing of Contributions: Due to the one year lag of when the required contribution is determined and when it is deposited into the fund.
Data/Service Adjustments: Effect of service adjustments, data adjustments, and the difference between actual and expected benefit payments.
Assumption Changes: None.
Method Changes: None
Plan Changes: None

SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

			July 1, 2018
(1)	Present value of prospective benefits:		
	(a)	Present active members	$ 412,980,369
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	718,004,795
	(c)	Total	$ 1,130,985,164
(2)	Present value of future Government and member normal contributions before expenses		151,150,812
(3)	Actuarial accrued liabilities 1(c) – (2)		$ 979,834,352
(4)	Actuarial value of assets		725,884,686
(5)	Unfunded actuarial accrued liability (3) – (4)		$ 253,949,666

SCHEDULE B

VALUATION BALANCE SHEET

ACTUARIAL LIABILITIES		
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits		$ 718,004,795
Present value of prospective benefits payable on account of present active members		$ 412,980,369
Total liabilities		$1,130,985,164
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		$ 725,884,686
Present value of future contributions		
Government and member normal contributions	151,150,812	
Unfunded accrued liability contributions	253,949,666	
Total prospective contributions		$ 405,100,478
Total assets		$1,130,985,164

SCHEDULE C
Development of Actuarial Value of Assets

	Valuation date June 30:	2017	2018	2019	2020	2021	2022
A.	Actuarial Value Beginning of Year	$ 645,681,282	$ 686,133,702				
B.	Market Value End of Year	695,183,216	745,170,974				
C.	Market Value Beginning of Year	619,901,142	695,183,216				
D.	Cash Flow						
	D1. Contributions	$ 40,854,410	$ 38,326,772				
	D2. Other Revenue	141,051	8,396				
	D3. Benefit Payments	(56,718,545)	(59,050,010)				
	D4. Administrative Expenses	(226,211)	(306,716)				
	D5. Investment Expenses	(3,005,555)	(3,172,768)				
	D6. Net	$ (18,954,850)	$ (24,194,326)				
E.	Investment Income						
	E1. Market Total: B.-C.-D6.	$ 94,236,924	$ 74,182,084				
	E2. Assumed Rate (Net of Expenses)	7.50%	7.50%				
	E3. Amount for Immediate Recognition	49,134,736	54,841,419				
	E4. Amount for Phased-In Recognition	45,102,188	19,340,665				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20 * E4.	$ 9,020,438	$ 3,868,133	$ -	$ -	$ -	$ -
	F2. First Prior Year	(8,534,428)	9,020,438	3,868,133	-	-	-
	F3. Second Prior Year	(6,178,693)	(8,534,428)	9,020,438	3,868,133	-	-
	F4. Third Prior Year	10,928,441	(6,178,693)	(8,534,428)	9,020,438	3,868,133	-
	F5. Fourth Prior Year	5,036,776	10,928,441	(6,178,693)	(8,534,428)	9,020,438	3,868,133
	F6. Total Recognized Investment Gain	$ 10,272,534	$ 9,103,891	$ (1,824,550)	$ 4,354,143	$ 12,888,571	$ 3,868,133
G.	Preliminary Actuarial Value End of Year						
	A.+D6.+E3.+F6.	$ 686,133,702	$ 725,884,686				
H.	Corridor						
	I1. 80% of Market Value	$ 556,146,573	$ 596,136,779				
	I2. 120% of Market Value	$ 834,219,859	$ 894,205,169				
I.	Actuarial Value End of Year						
	H. Not Less than I1. or Greater than I2	$ 686,133,702	$ 725,884,686				
J.	Difference Between Market & Actuarial Values	$ 9,049,514	$ 19,286,288	$ 21,110,846	$ 16,756,704	$ 3,868,133	$ -
K.	Market Value of Asets Return	14.87%	10.32%				
L.	Actuarial Value of Assets Return	8.81%	8.95%				

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 5 consecutive years, actuarial value will become equal to market value.

SCHEDULE D

SUMMARY OF RECEIPTS AND DISBURSEMENTS

Receipts for the Period	
Contributions:	
Members	10,750,008
Employer	27,576,764
Other	8,396
Total	38,335,168
Investment Income	71,009,316
TOTAL	109,344,484
Disbursements for the Period	
Benefit Payments	59,050,010
Administrative Expense	306,716
TOTAL	59,356,726
Excess of Receipts over Disbursements	49,987,758
Reconciliation of Asset Balances	
Market Value of Assets as of BOY	695,183,216
Adjustment to opening fund balance	0
Excess of Receipts over Disbursements	49,987,758
Market Value of Assets as of EOY	745,170,974
Rate of Return on Market Value of Assets	10.32%

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Service	Wage Inflation	Merit Component	Total Rate
0	3.50%	5.80%	9.50%
1	3.50	4.35	8.00
2	3.50	3.38	7.00
3	3.50	2.42	6.00
4	3.50	1.93	5.50
5-11	3.50	1.45	5.00
12 or more	3.50	0.00	3.50

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the RP-2000 Combined Table projected to the valuation date with scale BB was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of		
	Disability	Death	
Age		Male	Female
20	0.01%	0.03%	0.02%
25	0.01	0.04	0.02
30	0.55	0.04	0.03
35	1.21	0.08	0.05
40	1.91	0.11	0.07
45	2.71	0.15	0.11
50	3.67	0.21	0.17
55	4.77	0.36	0.27

Annual Rate of Termination	
Service	Rate
0	6.00%
1	5.00
2	4.00
3	4.00
4	2.25
5	2.25
6	2.25
7	2.25
8 or more	1.00

SERVICE RETIREMENT: Representative annual rates of assumed service retirement are as follows:

Hired Prior to July 1, 2013		Hired on or after July 1, 2013	
Service	Rate	Service	Rate
20	15.0%		
21	16.0		
22	17.0		
23	18.0		
24	19.0		
25	20.0	25	30.0%
26	30.0	26	30.0
27	30.0	27	30.0
28	30.0	28	30.0
29	30.0	29	30.0
30	100.0	30	100.0

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to the valuation date using scale BB for the period following service retirement, for beneficiaries of deceased members, and for disabled lives. The assumed rates of mortality provide a margin for future mortality improvements.

OCCUPATIONAL VS. NON OCCUPATIONAL DEATH: 20% of all deaths are assumed to be due to occupational causes.

OCCUPATIONAL VS. NON OCCUPATIONAL DISABILITY: 95% of disabilities are assumed to be due to occupational causes. For occupational disabilities the average benefit percentage is assumed to be 50.0%.

PERCENT MARRIED: 75% of employees who die before retirement are assumed to be married with the husband 3 years older than the wife.

ASSETS: Actuarial value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The actuarial value of assets cannot be more than 120% or less than 80% of the market value of assets.

VALUATION METHOD: Entry age normal actuarial cost method. See Schedule F for a brief description of this method.

AVERAGE DISABILITY IMPAIRMENT PERCENTAGE: 12.50%

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.50%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age normal actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the Plan.

SCHEDULE G

SUMMARY OF MAIN PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

Member	Sworn members of the Lexington-Fayette Urban County Government Division of Police and Division of Fire and Emergency Services.
Membership Service	Service rendered on or after the date of establishment of the fund or the fund of a city existing within the boundaries of the government immediately prior to the establishment of the urban-county government.
Total Service	Prior service, membership service, and service credit purchased by a member as provided in KRS 67A.402.
Average Salary	The highest average salary of the member for any three consecutive years of service.

Retirement Annuity

Hired prior to July 1, 2013 and for retirements commencing prior to July 1, 2013

Eligibility	Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired prior to July 1, 2013 and for retirements commencing on or after July 1, 2013

Eligibility	Anytime after obtaining age 41 and the completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired

member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Hired on or after July 1, 2013

Eligibility	Anytime after obtaining age 50 and the completion of 25 years of Total Service.
Benefit	Annuity is 2.25% of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $1,250. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

Occupational Disability Benefit

Eligibility	No requirements.

Occur Prior to July 1, 2013

Benefit	Annuity equal to a minimum of 60% of member's last rate of salary, increased above the 60% minimum by ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

	In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Occur on or after July 1, 2013	
Benefit	Annuity equal to a minimum of 50% of member's last rate of salary. If the member's percentage of disability exceeds 20% then the amount is equal to 60% of the member's last rate of salary plus ½ the amount by which the member's percentage of disability exceeds 20%, but not greater than 75%. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.
Non-Occupational Disability Benefit	
Hired prior to July 1, 2013	
Eligibility	5 years of Total Service.
Benefit	2½% of Average Salary times years of Total Service subject to a minimum payment of 25% of Average Salary and a maximum payment of 75% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form.

In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.

Hired on or after July 1, 2013

Eligibility	5 years of Total Service.
Benefit	2.25% of Average Salary times years of Total Service subject to a minimum payment of 22.5% of Average Salary and a maximum payment of 67.5% of Average Salary. Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to 60% of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and 75% or and joint and 100% survivor payment form. In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.
Termination Benefit	If a member is terminated with less than 20 years of total service credit, he is entitled to a return of his accumulated contributions, without interest.

Occupational Death Benefit

Eligibility	No requirements.
Benefit	Surviving Spouse receives immediate annuity equal to 75% of the member's last rate of salary until death or remarriage. In addition, 10% of the member's last rate of salary is payable for each minor child until each child attains age 18 (age 23 if involved in educational activities). Maximum total income is 100% of final rate of salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule: One minor child 50% of Salary Two minor children 65% of Salary Three of more minor children 75% of Salary

Non-Occupational Death Benefit

Eligibility	5 Years of Total Service, married 6 months prior to death.
Benefit	Surviving spouse received immediate annuity equal to 1½% of the Average Salary multiplied by years of Total Service, until death or remarriage. The minimum benefit is 15% of Average Salary. In addition, this annuity is increased by ½ for the first minor child and by ¼ for each additional child. Maximum total income is 75% of Average Salary. If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule: One minor child — 50% of Salary Two minor children — 65% of Salary Three of more minor children — 75% of Salary
Member Contributions	Prior to July 1, 2013, active members contribute 11% of current salary. Effective July 1, 2013 active member contributions will increase from 11% to 12%.
Employer Contributions	The government shall make current contributions to the fund on an actuarially funded basis. Such contributions shall be equal to the sum of: (1) An amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method, and (2) An amount sufficient to amortize the total unfunded liability actuarial accrued liability for the fund over a period of thirty years, using the level dollar amortization method, for a period beginning July 1, 2013 and ending June 30, 2043. The total contribution of the government shall be at least $20,000,000 until the actuarial funding level is at least 100%.

Post Retirement Cost-of-Living Increases

COLAs will be granted on the following schedule for both current and future retirees commencing upon the earlier of a member turning age 50 or being retired for five years until the Plan, utilizing the current COLA provisions, is 85% funded. At that time, COLA's will be granted each year by an amount, determined by the Board, of not less than 2.00% nor more than 5.00% compounded annually. In addition, those receiving a pension over $100,000 will not be eligible to receive a COLA until the later of the proposed conditions or January 1, 2016.

Above $100,000	1.0%
$75,000 to $99,000	1.0%
$50,000 to $74,999	1.5%
$40,000 to $49,999	1.5%
$35,000 to $39,999	2.0%
$30,000 to $34,999	2.0%
Under $30,000	2.0%

SCHEDULE H

TABLE 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS

AS OF JULY 1, 2018

Attained Age	Completed Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	> 40	Total
Under 25	25	20	1								46
Avg. Pay	39,071	45,088	12,019								41,099
25 to 29	41	143	20								204
Avg. Pay	37,862	46,699	50,431								45,289
30 to 34	18	89	84	12							203
Avg. Pay	34,754	47,622	54,234	64,175							50,195
35 to 39	4	35	56	109	35						239
Avg. Pay	32,004	48,449	55,793	67,787	75,266						62,641
40 to 44		2	20	55	98	30					205
Avg. Pay		51,543	57,436	69,216	79,030	82,971					74,599
45 to 49			11	27	56	76	16				186
Avg. Pay			59,861	69,447	71,151	86,743	99,242				79,023
50 to 54			1	13	21	24	13				72
Avg. Pay			57,794	70,589	75,310	84,013	115,945				84,452
55 to 59					6	8	5				19
Avg. Pay					79,461	86,071	105,502				89,097
60 to 64					1		1	1			3
Avg. Pay					55,581		107,661	86,456			83,232
65 to 69				2	1						3
Avg. Pay				63,267	68,956						65,163
70 & up											
Avg. Pay											
Total	88	289	193	218	218	138	35	1			1,180
Avg. Pay	37,304	47,117	54,744	68,280	75,902	85,409	106,581	86,456			63,136

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 & Under	184	$ 7,158,473	$ 38,905
51 – 55	163	8,450,553	51,844
56 – 60	161	9,185,135	57,051
61 – 65	146	8,414,860	57,636
66 – 70	195	10,006,873	51,317
71 – 75	167	7,579,323	45,385
76 – 80	119	5,346,182	44,926
Over 80	97	3,664,552	37,779
Total	1,232	$ 59,805,950	$ 48,544